ANALYTICAL REPORT

Job Number: 280-148902-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
3800 Centerpoint Drive, Suite 520
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Attention: Corey Schwabenlander



Approved for release.
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6/10/2021 4:02 AM

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The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

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

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

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

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-148902-1

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 5/21/2021 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.0º C, 1.4º C, 1.7º C, 1.7º C, 2.2º C and 3.3º C.

Receipt Exceptions

Both 250ml poly containers for this sample are both preserved with Zinc acetate & NaOH. One should have been unpreserved. G0076-21A (280-148902-8). Volume from the extra unpreserved 8330 container was used for methods requiring unpreserved sample.

DISSOLVED GASES (GC)

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 05/25/2021 and 05/26/2021.

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

NITROAROMATICS AND NITRAMINES (HPLC)

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 05/25/2021 and analyzed on 05/27/2021, 05/28/2021, 05/29/2021 and 05/30/2021.

2-Amino-4,6-dinitrotoluene, 2-Nitrotoluene, 3-Nitrotoluene and 4-Nitrotoluene failed the recovery criteria low for the MS of sample G0070-21AMS (280-148902-5) in batch 280-537964. 2-Nitrotoluene, 3-Nitrotoluene and 4-Nitrotoluene failed the recovery criteria low for the MSD of sample G0070-21AMSD (280-148902-5) in batch 280-537964. Refer to the QC report for details.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene, HMX and RDX for the following samples: G0081-21A (280-148902-1), G0090-21A (280-148902-7), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) in preparation batch 280-537382 and analytical batch 280-537871 .The results from both columns has been reported and qualified in accordance with the laboratory's SOP.

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

ALKALINITY

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 05/24/2021 and 06/01/2021.

Total Alkalinity as CaCO3 was detected in method blank MB 280-538151/5 at a level that was below one half the LOQ. The value should be considered an estimate, and has been flagged J.

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

AMMONIA

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/25/2021 and 05/26/2021.

Ammonia was detected in method blank MB 280-537549/20 at a level that was below one half the LOQ. The value should be considered an estimate, and has been flagged J.

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

TOTAL KJELDAHL NITROGEN

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 05/25/2021 and analyzed on 05/26/2021.

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

NITRATE-NITRITE AS NITROGEN

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/25/2021.

Sample NW071-21A (280-148902-4)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 05/24/2021 and 05/25/2021.

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

ANIONS (28 DAYS)

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 06/07/2021 and 06/09/2021.

Samples G0085-21A (280-148902-3)[5X] and G0076-21A (280-148902-8)[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.

DISSOLVED ORGANIC CARBON

Samples G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 06/02/2021.

The pH measured at the bench was >2, it was reduced to <2 using concentrated sulfuric acid after filtration prior to analysis. G0081-21A (280-148902-1), G0079-21A (280-148902-2), G0085-21A (280-148902-3), NW071-21A (280-148902-4), G0070-21A (280-148902-5), G0070-21A (280-148902-5[MS]), G0070-21A (280-148902-5[MSD]), G0089-21A (280-148902-6), G0090-21A (280-148902-7), G0076-21A (280-148902-8), G0075-21A (280-148902-9) and G0082-21A (280-148902-10)

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

Detection Summary

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

Job ID: 280-148902-1

Client Sample ID: G0081-21A — Lab Sample ID: 280-148902-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.076		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.082	J J1	0.10	0.094	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.27	M J1	0.10	0.094	0.048	ug/L	1		8330A	Total/NA
HMX	0.42	M	0.20	0.19	0.083	ug/L	1		8330A	Total/NA
RDX	0.30	M	0.20	0.19	0.049	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	3.6		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	140		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	280		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0079-21A — Lab Sample ID: 280-148902-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Total Kjeldahl	0.83	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	1.8		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	50		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0085-21A — Lab Sample ID: 280-148902-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.5		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.30		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.82	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.037	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	3.2	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	190	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	380		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW071-21A — Lab Sample ID: 280-148902-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	32		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	63		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	110		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0070-21A — Lab Sample ID: 280-148902-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	44		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	220		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	1.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-148902-1

Client Sample ID: G0089-21A — Lab Sample ID: 280-148902-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	2.1		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	3.1	M	0.25	0.24	0.10	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	2.3		0.13	0.12	0.054	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.85		0.13	0.12	0.060	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.1		0.18	0.14	0.069	ug/L	1		8330A	Total/NA
RDX	0.23	J M	0.25	0.24	0.061	ug/L	1		8330A	Total/NA
Ammonia	0.11		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.84	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	1.5		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	100		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	370		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0090-21A — Lab Sample ID: 280-148902-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.017		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.095	J J1	0.10	0.095	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.29	M J1	0.10	0.095	0.048	ug/L	1		8330A	Total/NA
HMX	0.62	M	0.20	0.19	0.083	ug/L	1		8330A	Total/NA
RDX	0.64	M	0.20	0.19	0.049	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	5.1		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	150		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0076-21A — Lab Sample ID: 280-148902-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.21		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.6		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.8		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	320	D	10	5.0	2.1	mg/L	2		9056A	Total/NA
Total Alkalinity as CaCO3	370		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0075-21A — Lab Sample ID: 280-148902-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.75		0.11	0.096	0.049	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.67		0.14	0.11	0.055	ug/L	1		8330A	Total/NA
HMX	2.0	M J1	0.20	0.19	0.084	ug/L	1		8330A	Total/NA
HMX	0.23	J1	0.20	0.19	0.084	ug/L	1		8330A	Total/NA
Ammonia	0.053	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	3.3		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	190		5.0	2.5	1.0	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0075-21A (Continued) — Lab Sample ID: 280-148902-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3	290		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0082-21A — Lab Sample ID: 280-148902-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.85		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	3.9	M	0.20	0.19	0.080	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.73		0.10	0.095	0.043	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.55		0.10	0.095	0.048	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.88		0.14	0.11	0.055	ug/L	1		8330A	Total/NA
RDX	0.43	M J1	0.20	0.19	0.049	ug/L	1		8330A	Total/NA
RDX	0.65	J1	0.20	0.19	0.049	ug/L	1		8330A	Total/NA
Ammonia	0.19		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.96	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.8		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	99		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	370		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0081-21A
Lab Sample ID: 280-148902-1

Date Collected: 05/20/21 09:20
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.076**		0.0050	0.0020	0.00063	mg/L		05/25/21 19:10	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.079	ug/L		05/27/21 21:40	1
1,3-Dinitrobenzene	0.094	U	0.10	0.094	0.035	ug/L		05/27/21 21:40	1
2,4,6-Trinitrotoluene	0.094	U	0.10	0.094	0.043	ug/L		05/27/21 21:40	1
2,4-Dinitrotoluene	0.076	U	0.094	0.076	0.026	ug/L		05/27/21 21:40	1
2,6-Dinitrotoluene	0.076	U	0.094	0.076	0.038	ug/L		05/27/21 21:40	1
2-Amino-4,6-dinitrotoluene	**0.082**	**J J1**	0.10	0.094	0.048	ug/L		05/27/21 21:40	1
2-Amino-4,6-dinitrotoluene	**0.27**	**M J1**	0.10	0.094	0.048	ug/L		05/28/21 21:19	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.081	ug/L		05/27/21 21:40	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.18	ug/L		05/27/21 21:40	1
4-Amino-2,6-dinitrotoluene	0.11	U M	0.14	0.11	0.055	ug/L		05/28/21 21:19	1
4-Nitrotoluene	0.38	U M	0.39	0.38	0.094	ug/L		05/27/21 21:40	1
HMX	**0.42**	**M**	0.20	0.19	0.083	ug/L		05/27/21 21:40	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		05/27/21 21:40	1
Nitrobenzene	0.19	U	0.20	0.19	0.086	ug/L		05/27/21 21:40	1
RDX	**0.30**	**M**	0.20	0.19	0.049	ug/L		05/27/21 21:40	1
Tetryl	0.094	U M	0.10	0.094	0.030	ug/L		05/27/21 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*05/25/21 17:25*	*05/27/21 21:40*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*05/25/21 17:25*	*05/28/21 21:19*	*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		05/25/21 13:28	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		05/26/21 16:58	1
Nitrate Nitrite as N	**3.6**		0.10	0.050	0.019	mg/L		05/25/21 15:29	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/24/21 13:47	1
Sulfate	**140**		5.0	2.5	1.0	mg/L		06/07/21 20:12	1
Total Alkalinity as CaCO3	**280**		10	6.4	3.1	mg/L		05/24/21 22:24	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.6**		1.0	0.80	0.35	mg/L		06/02/21 01:17	1

Client Sample ID: G0079-21A
Lab Sample ID: 280-148902-2

Date Collected: 05/20/21 09:05
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		05/25/21 19:22	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.079	ug/L		05/27/21 22:03	1
1,3-Dinitrobenzene	0.094	U	0.10	0.094	0.035	ug/L		05/27/21 22:03	1
2,4,6-Trinitrotoluene	0.094	U	0.10	0.094	0.042	ug/L		05/27/21 22:03	1

Client Sample ID: G0079-21A

Date Collected: 05/20/21 09:05
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.075	U	0.094	0.075	0.026	ug/L		05/27/21 22:03	1
2,6-Dinitrotoluene	0.075	U	0.094	0.075	0.038	ug/L		05/27/21 22:03	1
2-Amino-4,6-dinitrotoluene	0.094	U	0.10	0.094	0.048	ug/L		05/27/21 22:03	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.080	ug/L		05/27/21 22:03	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.18	ug/L		05/27/21 22:03	1
4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.054	ug/L		05/27/21 22:03	1
4-Nitrotoluene	0.38	U	0.39	0.38	0.094	ug/L		05/27/21 22:03	1
HMX	0.19	U	0.20	0.19	0.082	ug/L		05/27/21 22:03	1
MNX	0.38	U	1.9	0.38	0.14	ug/L		05/27/21 22:03	1
Nitrobenzene	0.19	U	0.20	0.19	0.086	ug/L		05/27/21 22:03	1
RDX	0.19	U	0.20	0.19	0.048	ug/L		05/27/21 22:03	1
Tetryl	0.094	U	0.10	0.094	0.030	ug/L		05/27/21 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*05/25/21 17:25*	*05/27/21 22:03*	*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		05/25/21 13:30	1
Nitrogen, Total Kjeldahl	**0.83**	**J**	1.0	1.0	0.69	mg/L		05/26/21 16:59	1
Nitrate Nitrite as N	**1.8**		0.10	0.050	0.019	mg/L		05/25/21 15:31	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**50**		5.0	2.5	1.0	mg/L		06/07/21 20:26	1
Total Alkalinity as CaCO3	**310**		10	6.4	3.1	mg/L		05/24/21 22:32	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.0**		1.0	0.80	0.35	mg/L		06/02/21 01:32	1

Client Sample ID: G0085-21A

Date Collected: 05/19/21 15:20
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-3

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.5**		0.0050	0.0020	0.00063	mg/L		05/25/21 15:13	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		05/27/21 22:26	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/27/21 22:26	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/28/21 21:55	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/27/21 22:26	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/27/21 22:26	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.051	ug/L		05/27/21 22:26	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		05/27/21 22:26	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		05/27/21 22:26	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/27/21 22:26	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.10	ug/L		05/27/21 22:26	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/27/21 22:26	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		05/27/21 22:26	1

Client Sample ID: G0085-21A

Lab Sample ID: 280-148902-3

Date Collected: 05/19/21 15:20

Matrix: Water

Date Received: 05/21/21 09:50

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/28/21 21:55	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		05/27/21 22:26	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/27/21 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*05/25/21 17:25*	*05/27/21 22:26*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*05/25/21 17:25*	*05/28/21 21:55*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.30**		0.10	0.050	0.022	mg/L		05/25/21 13:32	1
Nitrogen, Total Kjeldahl	**0.82**	**J**	1.0	1.0	0.69	mg/L		05/26/21 17:03	1
Nitrate Nitrite as N	**0.037**	**J**	0.10	0.050	0.019	mg/L		05/25/21 15:33	1
Sulfide	**3.2**	**J**	4.0	1.9	0.79	mg/L		05/24/21 11:19	1
Sulfate	**190**	**D**	25	13	5.2	mg/L		06/09/21 06:47	5
Total Alkalinity as CaCO3	**380**		10	6.4	3.1	mg/L		05/24/21 22:40	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.1**		1.0	0.80	0.35	mg/L		06/02/21 01:47	1

Client Sample ID: NW071-21A

Lab Sample ID: 280-148902-4

Date Collected: 05/19/21 14:55

Matrix: Water

Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U M	0.0050	0.0020	0.00063	mg/L		05/25/21 15:37	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080	ug/L		05/27/21 22:49	1
1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035	ug/L		05/27/21 22:49	1
2,4,6-Trinitrotoluene	0.095	U	0.10	0.095	0.043	ug/L		05/27/21 22:49	1
2,4-Dinitrotoluene	0.076	U	0.095	0.076	0.026	ug/L		05/27/21 22:49	1
2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038	ug/L		05/27/21 22:49	1
2-Amino-4,6-dinitrotoluene	0.095	U	0.10	0.095	0.048	ug/L		05/27/21 22:49	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.082	ug/L		05/27/21 22:49	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.19	ug/L		05/27/21 22:49	1
4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055	ug/L		05/27/21 22:49	1
4-Nitrotoluene	0.38	U M	0.39	0.38	0.095	ug/L		05/27/21 22:49	1
HMX	0.19	U	0.20	0.19	0.084	ug/L		05/27/21 22:49	1
MNX	0.38	U M	1.9	0.38	0.15	ug/L		05/27/21 22:49	1
Nitrobenzene	0.19	U	0.20	0.19	0.087	ug/L		05/27/21 22:49	1
RDX	0.19	U	0.20	0.19	0.049	ug/L		05/27/21 22:49	1
Tetryl	0.095	U	0.10	0.095	0.030	ug/L		05/27/21 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*05/25/21 17:25*	*05/27/21 22:49*	*1*

Client Sample ID: NW071-21A
Lab Sample ID: 280-148902-4
Date Collected: 05/19/21 14:55
Matrix: Water
Date Received: 05/21/21 09:50

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		05/25/21 13:34	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		05/26/21 17:04	1
Nitrate Nitrite as N	**32**		1.0	0.50	0.19	mg/L		05/25/21 15:35	10
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		05/24/21 11:19	1
Sulfate	**63**		5.0	2.5	1.0	mg/L		06/07/21 20:54	1
Total Alkalinity as CaCO3	**110**		10	6.4	3.1	mg/L		05/24/21 22:46	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.2**		1.0	0.80	0.35	mg/L		06/02/21 02:31	1

Client Sample ID: G0070-21A
Lab Sample ID: 280-148902-5
Date Collected: 05/20/21 12:50
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		05/25/21 18:20	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080	ug/L		05/27/21 23:58	1
1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035	ug/L		05/27/21 23:58	1
2,4,6-Trinitrotoluene	0.095	U	0.10	0.095	0.043	ug/L		05/27/21 23:58	1
2,4-Dinitrotoluene	0.076	U	0.095	0.076	0.026	ug/L		05/27/21 23:58	1
2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038	ug/L		05/27/21 23:58	1
2-Amino-4,6-dinitrotoluene	0.095	U J1	0.10	0.095	0.048	ug/L		05/27/21 23:58	1
2-Nitrotoluene	0.19	U J1	0.20	0.19	0.081	ug/L		05/27/21 23:58	1
3-Nitrotoluene	0.38	U J1	0.38	0.38	0.19	ug/L		05/27/21 23:58	1
4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055	ug/L		05/27/21 23:58	1
4-Nitrotoluene	0.38	U J1	0.39	0.38	0.095	ug/L		05/30/21 00:20	1
HMX	0.19	U	0.20	0.19	0.083	ug/L		05/27/21 23:58	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		05/27/21 23:58	1
Nitrobenzene	0.19	U M	0.20	0.19	0.086	ug/L		05/27/21 23:58	1
RDX	0.19	U M	0.20	0.19	0.049	ug/L		05/27/21 23:58	1
Tetryl	0.095	U	0.10	0.095	0.030	ug/L		05/27/21 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*		*83 - 119*	*05/25/21 17:25*	*05/27/21 23:58*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*05/25/21 17:25*	*05/30/21 00:20*	*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		05/26/21 10:45	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		05/26/21 16:53	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/25/21 16:03	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**44**		5.0	2.5	1.0	mg/L		06/07/21 21:08	1
Total Alkalinity as CaCO3	**220**		10	6.4	3.1	mg/L		05/24/21 22:53	1

Client Sample ID: G0070-21A
Lab Sample ID: 280-148902-5

Date Collected: 05/20/21 12:50
Matrix: Water
Date Received: 05/21/21 09:50

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**1.1**		1.0	0.80	0.35	mg/L		06/02/21 02:47	1

Client Sample ID: G0089-21A
Lab Sample ID: 280-148902-6

Date Collected: 05/20/21 13:20
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**2.1**		0.0050	0.0020	0.00063	mg/L		05/25/21 19:34	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**3.1**	**M**	0.25	0.24	0.10	ug/L		05/28/21 01:53	1
1,3-Dinitrobenzene	0.12	U	0.13	0.12	0.044	ug/L		05/29/21 02:34	1
2,4,6-Trinitrotoluene	**2.3**		0.13	0.12	0.054	ug/L		05/28/21 01:53	1
2,4-Dinitrotoluene	0.095	U M	0.12	0.095	0.033	ug/L		05/28/21 01:53	1
2,6-Dinitrotoluene	0.095	U	0.12	0.095	0.048	ug/L		05/28/21 01:53	1
2-Amino-4,6-dinitrotoluene	**0.85**		0.13	0.12	0.060	ug/L		05/28/21 01:53	1
2-Nitrotoluene	0.24	U	0.25	0.24	0.10	ug/L		05/28/21 01:53	1
3-Nitrotoluene	0.48	U	0.48	0.48	0.23	ug/L		05/28/21 01:53	1
4-Amino-2,6-dinitrotoluene	**1.1**		0.18	0.14	0.069	ug/L		05/28/21 01:53	1
4-Nitrotoluene	0.48	U M	0.49	0.48	0.12	ug/L		05/28/21 01:53	1
HMX	0.24	U	0.25	0.24	0.10	ug/L		05/28/21 01:53	1
MNX	0.48	U M	2.4	0.48	0.18	ug/L		05/28/21 01:53	1
Nitrobenzene	0.24	U	0.25	0.24	0.11	ug/L		05/28/21 01:53	1
RDX	**0.23**	**J M**	0.25	0.24	0.061	ug/L		05/28/21 01:53	1
Tetryl	0.12	U M	0.13	0.12	0.038	ug/L		05/28/21 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*05/25/21 17:25*	*05/28/21 01:53*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*05/25/21 17:25*	*05/29/21 02:34*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.11**		0.10	0.050	0.022	mg/L		05/25/21 14:08	1
Nitrogen, Total Kjeldahl	**0.84**	**J**	1.0	1.0	0.69	mg/L		05/26/21 17:06	1
Nitrate Nitrite as N	**1.5**		0.10	0.050	0.019	mg/L		05/25/21 15:37	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**100**		5.0	2.5	1.0	mg/L		06/07/21 22:04	1
Total Alkalinity as CaCO3	**370**		10	6.4	3.1	mg/L		05/24/21 23:01	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.5**		1.0	0.80	0.35	mg/L		06/02/21 03:32	1

Client Sample ID: G0090-21A
Lab Sample ID: 280-148902-7

Date Collected: 05/20/21 12:10
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.017**		0.0050	0.0020	0.00063	mg/L		05/26/21 12:50	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080	ug/L		05/28/21 02:16	1
1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035	ug/L		05/28/21 02:16	1
2,4,6-Trinitrotoluene	0.095	U	0.10	0.095	0.043	ug/L		05/28/21 02:16	1
2,4-Dinitrotoluene	0.076	U	0.095	0.076	0.026	ug/L		05/28/21 02:16	1
2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038	ug/L		05/28/21 02:16	1
2-Amino-4,6-dinitrotoluene	**0.095**	**J J1**	0.10	0.095	0.048	ug/L		05/28/21 02:16	1
2-Amino-4,6-dinitrotoluene	**0.29**	**M J1**	0.10	0.095	0.048	ug/L		05/29/21 03:09	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.081	ug/L		05/28/21 02:16	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.19	ug/L		05/28/21 02:16	1
4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055	ug/L		05/28/21 02:16	1
4-Nitrotoluene	0.38	U	0.39	0.38	0.095	ug/L		05/28/21 02:16	1
HMX	**0.62**	**M**	0.20	0.19	0.083	ug/L		05/28/21 02:16	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		05/28/21 02:16	1
Nitrobenzene	0.19	U	0.20	0.19	0.086	ug/L		05/28/21 02:16	1
RDX	**0.64**	**M**	0.20	0.19	0.049	ug/L		05/28/21 02:16	1
Tetryl	0.095	U M	0.10	0.095	0.030	ug/L		05/28/21 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*05/25/21 17:25*	*05/28/21 02:16*	*1*
1,2-Dinitrobenzene	*89*		*83 - 119*	*05/25/21 17:25*	*05/29/21 03:09*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		05/25/21 14:10	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		05/26/21 17:07	1
Nitrate Nitrite as N	**5.1**		0.10	0.050	0.019	mg/L		05/25/21 15:39	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**150**		5.0	2.5	1.0	mg/L		06/07/21 22:18	1
Total Alkalinity as CaCO3	**310**		10	6.4	3.1	mg/L		05/24/21 23:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.5**		1.0	0.80	0.35	mg/L		06/02/21 03:46	1

Client Sample ID: G0076-21A
Lab Sample ID: 280-148902-8

Date Collected: 05/20/21 11:10
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.21**		0.0050	0.0020	0.00063	mg/L		05/26/21 13:02	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.082	ug/L		05/28/21 02:39	1
1,3-Dinitrobenzene	0.097	U	0.11	0.097	0.036	ug/L		05/28/21 02:39	1
2,4,6-Trinitrotoluene	0.097	U	0.11	0.097	0.044	ug/L		05/28/21 02:39	1

Client Sample ID: G0076-21A

Date Collected: 05/20/21 11:10
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-8

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.078	U	0.097	0.078	0.027	ug/L		05/28/21 02:39	1
2,6-Dinitrotoluene	0.078	U	0.097	0.078	0.039	ug/L		05/28/21 02:39	1
2-Amino-4,6-dinitrotoluene	0.097	U	0.11	0.097	0.049	ug/L		05/28/21 02:39	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.083	ug/L		05/28/21 02:39	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		05/28/21 02:39	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.056	ug/L		05/28/21 02:39	1
4-Nitrotoluene	0.39	U M	0.40	0.39	0.097	ug/L		05/28/21 02:39	1
HMX	0.19	U M	0.20	0.19	0.085	ug/L		05/28/21 02:39	1
MNX	0.39	U	1.9	0.39	0.15	ug/L		05/28/21 02:39	1
Nitrobenzene	0.19	U	0.20	0.19	0.089	ug/L		05/28/21 02:39	1
RDX	0.19	U	0.20	0.19	0.050	ug/L		05/28/21 02:39	1
Tetryl	0.097	U	0.11	0.097	0.031	ug/L		05/28/21 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*05/25/21 17:25*	*05/28/21 02:39*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.6**		0.10	0.050	0.022	mg/L		05/25/21 14:32	1
Nitrogen, Total Kjeldahl	**1.8**		1.0	1.0	0.69	mg/L		05/26/21 17:08	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/25/21 15:53	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**320**	**D**	10	5.0	2.1	mg/L		06/07/21 23:14	2
Total Alkalinity as CaCO3	**370**		10	6.4	3.1	mg/L		06/01/21 15:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.4**		1.0	0.80	0.35	mg/L		06/02/21 04:01	1

Client Sample ID: G0075-21A

Date Collected: 05/20/21 10:00
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-9

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		05/26/21 13:14	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080	ug/L		05/28/21 03:02	1
1,3-Dinitrobenzene	0.096	U M	0.11	0.096	0.035	ug/L		05/28/21 03:02	1
2,4,6-Trinitrotoluene	0.096	U M	0.11	0.096	0.043	ug/L		05/28/21 03:02	1
2,4-Dinitrotoluene	0.077	U	0.096	0.077	0.026	ug/L		05/28/21 03:02	1
2,6-Dinitrotoluene	0.077	U	0.096	0.077	0.038	ug/L		05/28/21 03:02	1
2-Amino-4,6-dinitrotoluene	**0.75**		0.11	0.096	0.049	ug/L		05/28/21 03:02	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.082	ug/L		05/28/21 03:02	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.19	ug/L		05/28/21 03:02	1
4-Amino-2,6-dinitrotoluene	**0.67**		0.14	0.11	0.055	ug/L		05/28/21 03:02	1
4-Nitrotoluene	0.38	U M	0.39	0.38	0.096	ug/L		05/29/21 03:44	1
HMX	**2.0**	**M J1**	0.20	0.19	0.084	ug/L		05/28/21 03:02	1
HMX	**0.23**	**J1**	0.20	0.19	0.084	ug/L		05/29/21 03:44	1

Client Sample ID: G0075-21A
Lab Sample ID: 280-148902-9

Date Collected: 05/20/21 10:00
Matrix: Water
Date Received: 05/21/21 09:50

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.38	U M	1.9	0.38	0.15	ug/L		05/28/21 03:02	1
Nitrobenzene	0.19	U	0.20	0.19	0.087	ug/L		05/28/21 03:02	1
RDX	0.19	U M	0.20	0.19	0.049	ug/L		05/28/21 03:02	1
Tetryl	0.096	U M	0.11	0.096	0.030	ug/L		05/28/21 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*88*	*M*	*83 - 119*	*05/25/21 17:25*	*05/28/21 03:02*	*1*
1,2-Dinitrobenzene	*86*		*83 - 119*	*05/25/21 17:25*	*05/29/21 03:44*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.053**	**J**	0.10	0.050	0.022	mg/L		05/26/21 10:51	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		05/26/21 17:13	1
Nitrate Nitrite as N	**3.3**		0.10	0.050	0.019	mg/L		05/25/21 15:55	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**190**		5.0	2.5	1.0	mg/L		06/07/21 23:28	1
Total Alkalinity as CaCO3	**290**		10	6.4	3.1	mg/L		05/24/21 23:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.7**		1.0	0.80	0.35	mg/L		06/02/21 04:18	1

Client Sample ID: G0082-21A
Lab Sample ID: 280-148902-10

Date Collected: 05/20/21 10:40
Matrix: Water
Date Received: 05/21/21 09:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.85**		0.0050	0.0020	0.00063	mg/L		05/26/21 13:27	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**3.9**	**M**	0.20	0.19	0.080	ug/L		05/28/21 03:25	1
1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035	ug/L		05/29/21 04:19	1
2,4,6-Trinitrotoluene	**0.73**		0.10	0.095	0.043	ug/L		05/28/21 03:25	1
2,4-Dinitrotoluene	0.076	U M	0.095	0.076	0.026	ug/L		05/28/21 03:25	1
2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038	ug/L		05/28/21 03:25	1
2-Amino-4,6-dinitrotoluene	**0.55**		0.10	0.095	0.048	ug/L		05/28/21 03:25	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.082	ug/L		05/28/21 03:25	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.19	ug/L		05/28/21 03:25	1
4-Amino-2,6-dinitrotoluene	**0.88**		0.14	0.11	0.055	ug/L		05/28/21 03:25	1
4-Nitrotoluene	0.38	U M	0.39	0.38	0.095	ug/L		05/28/21 03:25	1
HMX	0.19	U	0.20	0.19	0.084	ug/L		05/28/21 03:25	1
MNX	0.38	U M	1.9	0.38	0.15	ug/L		05/28/21 03:25	1
Nitrobenzene	0.19	U	0.20	0.19	0.087	ug/L		05/28/21 03:25	1
RDX	**0.43**	**M J1**	0.20	0.19	0.049	ug/L		05/28/21 03:25	1
RDX	**0.65**	**J1**	0.20	0.19	0.049	ug/L		05/29/21 04:19	1
Tetryl	0.095	U M	0.10	0.095	0.030	ug/L		05/28/21 03:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*87*	*M*	*83 - 119*	*05/25/21 17:25*	*05/28/21 03:25*	*1*

Client Sample ID: G0082-21A
Lab Sample ID: 280-148902-10

Date Collected: 05/20/21 10:40
Matrix: Water
Date Received: 05/21/21 09:50

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*88*		*83 - 119*	*05/25/21 17:25*	*05/29/21 04:19*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.19**		0.10	0.050	0.022	mg/L		05/26/21 10:53	1
Nitrogen, Total Kjeldahl	**0.96**	**J**	1.0	1.0	0.69	mg/L		05/26/21 17:14	1
Nitrate Nitrite as N	**2.8**		0.10	0.050	0.019	mg/L		05/25/21 15:57	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		05/25/21 11:57	1
Sulfate	**99**		5.0	2.5	1.0	mg/L		06/07/21 23:42	1
Total Alkalinity as CaCO3	**370**		10	6.4	3.1	mg/L		05/24/21 23:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.9**		1.0	0.80	0.35	mg/L		06/02/21 04:32	1

Default Detection Limits

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

Job ID: 280-148902-1

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: 280-148902-1

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)								
280-148902-1	G0081-21A	95 M								
280-148902-2	G0079-21A	97 M								
280-148902-3	G0085-21A	98 M								
280-148902-4	NW071-21A	95 M								
280-148902-5	G0070-21A	98								
280-148902-6	G0089-21A	94 M								
280-148902-7	G0090-21A	93 M								
280-148902-8	G0076-21A	92 M								
280-148902-9	G0075-21A	88 M								
280-148902-10	G0082-21A	87 M								
LCS 280-537382/2-A	Lab Control Sample	93								
LCS 280-537382/3-A	Lab Control Sample	92								
MB 280-537382/1-A	Method Blank	97								

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)								
280-148902-1	G0081-21A	94								
280-148902-3	G0085-21A	94								
280-148902-5	G0070-21A	91								
280-148902-5 MS	G0070-21A	84								
280-148902-5 MSD	G0070-21A	84								
280-148902-6	G0089-21A	92								
280-148902-7	G0090-21A	89								
280-148902-9	G0075-21A	86								
280-148902-10	G0082-21A	88								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-537359/7
Matrix: Water
Analysis Batch: 537359

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		05/25/21 11:23	1

Lab Sample ID: LCS 280-537359/5
Matrix: Water
Analysis Batch: 537359

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.0730	0.0731		mg/L		100	73 - 125		

Lab Sample ID: LCSD 280-537359/6
Matrix: Water
Analysis Batch: 537359

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			0.0730	0.0796		mg/L		109	73 - 125	8	20

Lab Sample ID: 280-148902-3 DU
Matrix: Water
Analysis Batch: 537359

Client Sample ID: G0085-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Methane	6.5			6.97		mg/L				7	20

Lab Sample ID: MB 280-537486/7
Matrix: Water
Analysis Batch: 537486

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		05/26/21 10:54	1

Lab Sample ID: LCS 280-537486/5
Matrix: Water
Analysis Batch: 537486

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.0730	0.0689		mg/L		94	73 - 125		

Lab Sample ID: LCSD 280-537486/6
Matrix: Water
Analysis Batch: 537486

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			0.0730	0.0705		mg/L		97	73 - 125	2	20

Lab Sample ID: MB 280-537523/36
Matrix: Water
Analysis Batch: 537523

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		05/25/21 18:08	1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: LCS 280-537523/34
Matrix: Water
Analysis Batch: 537523

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.0730	0.0704		mg/L		96	73 - 125		

Lab Sample ID: LCSD 280-537523/35
Matrix: Water
Analysis Batch: 537523

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			0.0730	0.0697		mg/L		95	73 - 125	1	20

Lab Sample ID: 280-148902-5 MS
Matrix: Water
Analysis Batch: 537523

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	0.0020	U	0.0730	0.0534		mg/L		73	73 - 125		

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 537523

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0020	U	0.0730	0.0652		mg/L		89	73 - 125	20	20

Lab Sample ID: 280-148902-5 DU
Matrix: Water
Analysis Batch: 537523

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Methane	0.0020	U		0.0020	U	mg/L				NC	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-537382/1-A
Matrix: Water
Analysis Batch: 537692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537382

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		05/27/21 15:09	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/27/21 15:09	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/27/21 15:09	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/27/21 15:09	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/27/21 15:09	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/27/21 15:09	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/27/21 15:09	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		05/27/21 15:09	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/27/21 15:09	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/27/21 15:09	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/27/21 15:09	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		05/27/21 15:09	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/27/21 15:09	1

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

Lab Sample ID: MB 280-537382/1-A
Matrix: Water
Analysis Batch: 537692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537382

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.20	U M	0.21	0.20	0.052	ug/L		05/27/21 15:09	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/27/21 15:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*05/25/21 17:25*	*05/27/21 15:09*	*1*

Lab Sample ID: LCS 280-537382/2-A
Matrix: Water
Analysis Batch: 537692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	1.93		ug/L		97	73 - 125
1,3-Dinitrobenzene	2.00	1.88		ug/L		94	78 - 120
2,4,6-Trinitrotoluene	2.00	1.93		ug/L		97	71 - 123
2,4-Dinitrotoluene	2.00	1.79		ug/L		90	78 - 120
2,6-Dinitrotoluene	2.00	1.85		ug/L		92	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.76		ug/L		88	79 - 120
2-Nitrotoluene	2.00	1.42		ug/L		71	70 - 127
3-Nitrotoluene	2.00	1.56		ug/L		78	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.71		ug/L		85	76 - 125
4-Nitrotoluene	2.00	1.55		ug/L		77	71 - 127
HMX	2.00	1.86		ug/L		93	65 - 135
Nitrobenzene	2.00	1.61		ug/L		80	65 - 134
RDX	2.00	1.95		ug/L		98	68 - 130
Tetryl	2.00	1.90		ug/L		95	64 - 128

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

Lab Sample ID: LCS 280-537382/3-A
Matrix: Water
Analysis Batch: 537692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.18	M	ug/L		93	57 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*92*		*83 - 119*

Lab Sample ID: 280-148902-5 MS
Matrix: Water
Analysis Batch: 537692

Client Sample ID: G0070-21A
Prep Type: Total/NA
Prep Batch: 537382

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.19	U	1.93	1.75		ug/L		90	73 - 125
1,3-Dinitrobenzene	0.095	U	1.93	1.69		ug/L		88	78 - 120
2,4,6-Trinitrotoluene	0.095	U	1.93	1.76		ug/L		91	71 - 123
2,4-Dinitrotoluene	0.076	U	1.93	1.55		ug/L		80	78 - 120

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

Lab Sample ID: 280-148902-5 MS — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537692 — **Prep Batch: 537382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	0.076	U	1.93	1.61		ug/L		83	77 - 127
2-Amino-4,6-dinitrotoluene	0.095	U J1	1.93	1.50	J1	ug/L		78	79 - 120
2-Nitrotoluene	0.19	U J1	1.93	1.05	J1	ug/L		54	70 - 127
3-Nitrotoluene	0.38	U J1	1.93	1.18	J1	ug/L		61	73 - 125
4-Amino-2,6-dinitrotoluene	0.11	U	1.93	1.47		ug/L		76	76 - 125
HMX	0.19	U	1.93	1.80	M	ug/L		93	65 - 135
Nitrobenzene	0.19	U M	1.93	1.38		ug/L		71	65 - 134
RDX	0.19	U M	1.93	1.67	M	ug/L		86	68 - 130
Tetryl	0.095	U	1.93	1.79		ug/L		93	64 - 128

Lab Sample ID: 280-148902-5 MS — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537692 — **Prep Batch: 537382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.38	U	2.24	2.11	M	ug/L		95	57 - 132

Lab Sample ID: 280-148902-5 MS — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537964 — **Prep Batch: 537382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrotoluene	0.38	U J1	1.93	1.11	J1	ug/L		58	71 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*84*		*83 - 119*

Lab Sample ID: 280-148902-5 MSD — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537692 — **Prep Batch: 537382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.19	U	1.95	1.82		ug/L		93	73 - 125	4	30
1,3-Dinitrobenzene	0.095	U	1.95	1.78		ug/L		91	78 - 120	5	30
2,4,6-Trinitrotoluene	0.095	U	1.95	1.82		ug/L		93	71 - 123	3	30
2,4-Dinitrotoluene	0.076	U	1.95	1.64		ug/L		84	78 - 120	6	30
2,6-Dinitrotoluene	0.076	U	1.95	1.67		ug/L		85	77 - 127	4	30
2-Amino-4,6-dinitrotoluene	0.095	U J1	1.95	1.60		ug/L		82	79 - 120	7	30
2-Nitrotoluene	0.19	U J1	1.95	1.20	J1	ug/L		61	70 - 127	13	30
3-Nitrotoluene	0.38	U J1	1.95	1.27	J1	ug/L		65	73 - 125	7	30
4-Amino-2,6-dinitrotoluene	0.11	U	1.95	1.57		ug/L		80	76 - 125	7	30
HMX	0.19	U	1.95	1.82	M	ug/L		93	65 - 135	1	30
Nitrobenzene	0.19	U M	1.95	1.53		ug/L		78	65 - 134	11	30
RDX	0.19	U M	1.95	1.71	M	ug/L		88	68 - 130	3	30
Tetryl	0.095	U	1.95	1.82		ug/L		93	64 - 128	2	30

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

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 537692

Client Sample ID: G0070-21A
Prep Type: Total/NA
Prep Batch: 537382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.38	U	2.20	2.05	M	ug/L		93	57 - 132	3	30

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 537964

Client Sample ID: G0070-21A
Prep Type: Total/NA
Prep Batch: 537382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrotoluene	0.38	U J1	1.95	1.26	J1	ug/L		64	71 - 127	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*84*		*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-537405/20
Matrix: Water
Analysis Batch: 537405

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		05/25/21 12:12	1

Lab Sample ID: MB 280-537405/55
Matrix: Water
Analysis Batch: 537405

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		05/25/21 13:22	1

Lab Sample ID: LCS 280-537405/53
Matrix: Water
Analysis Batch: 537405

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	2.64		mg/L		105	90 - 110		

Lab Sample ID: LCSD 280-537405/54
Matrix: Water
Analysis Batch: 537405

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	2.60		mg/L		104	90 - 110	1	10

Lab Sample ID: 280-148902-4 MS
Matrix: Water
Analysis Batch: 537405

Client Sample ID: NW071-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.050	U	1.00	1.04		mg/L		104	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-148902-4 MSD — **Client Sample ID: NW071-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537405

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.050	U	1.00	1.02		mg/L		102	90 - 110	2	10

Lab Sample ID: MB 280-537549/20 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537549

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.0312	J	0.10	0.050	0.022	mg/L		05/26/21 10:07	1

Lab Sample ID: LCS 280-537549/18 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537549

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.45		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-537549/19 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537549

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia			2.50	2.54		mg/L		102	90 - 110	4	10

Lab Sample ID: 280-148902-5 MS — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537549

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.050	U	1.00	1.07		mg/L		107	90 - 110		

Lab Sample ID: 280-148902-5 MSD — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537549

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.050	U	1.00	1.06		mg/L		106	90 - 110	1	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-537419/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537579 — **Prep Batch: 537419**

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		05/26/21 16:52	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 280-537419/1-A
Matrix: Water
Analysis Batch: 537579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537419

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.68		mg/L		95	90 - 110		

Lab Sample ID: 280-148902-5 MS
Matrix: Water
Analysis Batch: 537579

Client Sample ID: G0070-21A
Prep Type: Total/NA
Prep Batch: 537419

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl	1.0	U	3.00	3.28		mg/L		109	90 - 110		

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 537579

Client Sample ID: G0070-21A
Prep Type: Total/NA
Prep Batch: 537419

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	3.00	3.13		mg/L		104	90 - 110	4	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-537429/106
Matrix: Water
Analysis Batch: 537429

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/25/21 16:01	1

Lab Sample ID: MB 280-537429/23
Matrix: Water
Analysis Batch: 537429

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/25/21 13:15	1

Lab Sample ID: MB 280-537429/62
Matrix: Water
Analysis Batch: 537429

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/25/21 14:33	1

Lab Sample ID: LCS 280-537429/105
Matrix: Water
Analysis Batch: 537429

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	5.09		mg/L		102	90 - 110		

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

Lab Sample ID: LCS 280-537429/60
Matrix: Water
Analysis Batch: 537429

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	5.08		mg/L		102	90 - 110		

Lab Sample ID: LCSD 280-537429/61
Matrix: Water
Analysis Batch: 537429

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
Nitrate Nitrite as N			5.00	4.89		mg/L		98	90 - 110	4	10

Lab Sample ID: 280-148902-5 MS
Matrix: Water
Analysis Batch: 537429

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	0.050	U	4.00	4.07		mg/L		102	90 - 110		

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 537429

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.050	U	4.00	4.08		mg/L		102	90 - 110	0	10

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

Lab Sample ID: MB 280-537217/3-A
Matrix: Water
Analysis Batch: 537223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537217

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		05/24/21 11:19	1

Lab Sample ID: LCS 280-537217/1-A
Matrix: Water
Analysis Batch: 537223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537217

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			18.6	15.2		mg/L		82	44 - 110		

Lab Sample ID: LCSD 280-537217/2-A
Matrix: Water
Analysis Batch: 537223

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 537217

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide			18.6	14.4		mg/L		77	44 - 110	5	20

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

Lab Sample ID: MB 280-537251/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537253 — **Prep Batch: 537251**

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		05/24/21 13:47	1

Lab Sample ID: LCS 280-537251/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537253 — **Prep Batch: 537251**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	18.6	13.6		mg/L		73	44 - 110

Lab Sample ID: MB 280-537318/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537372 — **Prep Batch: 537318**

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		05/25/21 11:57	1

Lab Sample ID: LCS 280-537318/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537372 — **Prep Batch: 537318**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	19.3	10.4		mg/L		54	44 - 110

Lab Sample ID: 280-148902-5 MS — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537372 — **Prep Batch: 537318**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.9	U	19.3	14.4		mg/L		75	44 - 110

Lab Sample ID: 280-148902-5 MSD — **Client Sample ID: G0070-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 537372 — **Prep Batch: 537318**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	19.3	12.8		mg/L		66	44 - 110	12	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-538883/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538883

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		06/07/21 14:17	1

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

Lab Sample ID: LCS 280-538883/4
Matrix: Water
Analysis Batch: 538883

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	99.4		mg/L		99	87 - 112		

Lab Sample ID: LCSD 280-538883/5
Matrix: Water
Analysis Batch: 538883

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			100	99.4		mg/L		99	87 - 112	0	10

Lab Sample ID: MRL 280-538883/3
Matrix: Water
Analysis Batch: 538883

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	4.54	J	mg/L		91	50 - 150		

Lab Sample ID: 280-148902-5 MS
Matrix: Water
Analysis Batch: 538883

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	44		50.0	93.6		mg/L		100	87 - 112		

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 538883

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	44		50.0	92.3		mg/L		97	87 - 112	1	10

Lab Sample ID: 280-148902-5 DU
Matrix: Water
Analysis Batch: 538883

Client Sample ID: G0070-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	44			43.6		mg/L				0.2	10

Lab Sample ID: MB 280-538974/6
Matrix: Water
Analysis Batch: 538974

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		06/08/21 11:14	1

Lab Sample ID: LCS 280-538974/4
Matrix: Water
Analysis Batch: 538974

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	94.6		mg/L		95	87 - 112		

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: LCSD 280-538974/5
Matrix: Water
Analysis Batch: 538974

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	94.7		mg/L		95	87 - 112	0	10

Lab Sample ID: MRL 280-538974/3
Matrix: Water
Analysis Batch: 538974

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	3.83	J	mg/L		77	50 - 150

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

Lab Sample ID: MB 280-538107/2-A
Matrix: Water
Analysis Batch: 538229

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		06/01/21 22:01	1

Lab Sample ID: LCS 280-538107/1-A
Matrix: Water
Analysis Batch: 538229

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	25.0	24.7		mg/L		99	88 - 112

Lab Sample ID: 280-148902-5 MS
Matrix: Water
Analysis Batch: 538229

Client Sample ID: G0070-21A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	1.1		25.0	25.9		mg/L		99	88 - 112

Lab Sample ID: 280-148902-5 MSD
Matrix: Water
Analysis Batch: 538229

Client Sample ID: G0070-21A
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	1.1		25.0	25.8		mg/L		99	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-537358/31
Matrix: Water
Analysis Batch: 537358

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	6.4	U	10	6.4	3.1	mg/L		05/24/21 17:52	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-537358/57
Matrix: Water
Analysis Batch: 537358

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	6.4	U	10	6.4	3.1	mg/L		05/24/21 20:45	1

Lab Sample ID: LCS 280-537358/56
Matrix: Water
Analysis Batch: 537358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	198		mg/L		99	89 - 109

Lab Sample ID: MB 280-538151/5
Matrix: Water
Analysis Batch: 538151

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	4.03	J	10	6.4	3.1	mg/L		06/01/21 13:19	1

Lab Sample ID: LCS 280-538151/4
Matrix: Water
Analysis Batch: 538151

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	197		mg/L		99	89 - 109

GC VOA

Analysis Batch: 537359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-3	G0085-21A	Total/NA	Water	RSK-175	
280-148902-4	NW071-21A	Total/NA	Water	RSK-175	
MB 280-537359/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-537359/5	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-537359/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-148902-3 DU	G0085-21A	Total/NA	Water	RSK-175	

Analysis Batch: 537486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-7	G0090-21A	Total/NA	Water	RSK-175	
280-148902-8	G0076-21A	Total/NA	Water	RSK-175	
280-148902-9	G0075-21A	Total/NA	Water	RSK-175	
280-148902-10	G0082-21A	Total/NA	Water	RSK-175	
MB 280-537486/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-537486/5	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-537486/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 537523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	RSK-175	
280-148902-2	G0079-21A	Total/NA	Water	RSK-175	
280-148902-5	G0070-21A	Total/NA	Water	RSK-175	
280-148902-6	G0089-21A	Total/NA	Water	RSK-175	
MB 280-537523/36	Method Blank	Total/NA	Water	RSK-175	
LCS 280-537523/34	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-537523/35	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-148902-5 MS	G0070-21A	Total/NA	Water	RSK-175	
280-148902-5 MSD	G0070-21A	Total/NA	Water	RSK-175	
280-148902-5 DU	G0070-21A	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 537382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	3535	
280-148902-2	G0079-21A	Total/NA	Water	3535	
280-148902-3	G0085-21A	Total/NA	Water	3535	
280-148902-4	NW071-21A	Total/NA	Water	3535	
280-148902-5	G0070-21A	Total/NA	Water	3535	
280-148902-6	G0089-21A	Total/NA	Water	3535	
280-148902-7	G0090-21A	Total/NA	Water	3535	
280-148902-8	G0076-21A	Total/NA	Water	3535	
280-148902-9	G0075-21A	Total/NA	Water	3535	
280-148902-10	G0082-21A	Total/NA	Water	3535	
MB 280-537382/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-537382/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-537382/3-A	Lab Control Sample	Total/NA	Water	3535	
280-148902-5 MS	G0070-21A	Total/NA	Water	3535	
280-148902-5 MS	G0070-21A	Total/NA	Water	3535	
280-148902-5 MSD	G0070-21A	Total/NA	Water	3535	
280-148902-5 MSD	G0070-21A	Total/NA	Water	3535	

HPLC/IC

Analysis Batch: 537692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	8330A	537382
280-148902-2	G0079-21A	Total/NA	Water	8330A	537382
280-148902-3	G0085-21A	Total/NA	Water	8330A	537382
280-148902-4	NW071-21A	Total/NA	Water	8330A	537382
280-148902-5	G0070-21A	Total/NA	Water	8330A	537382
280-148902-6	G0089-21A	Total/NA	Water	8330A	537382
280-148902-7	G0090-21A	Total/NA	Water	8330A	537382
280-148902-8	G0076-21A	Total/NA	Water	8330A	537382
280-148902-9	G0075-21A	Total/NA	Water	8330A	537382
280-148902-10	G0082-21A	Total/NA	Water	8330A	537382
MB 280-537382/1-A	Method Blank	Total/NA	Water	8330A	537382
LCS 280-537382/2-A	Lab Control Sample	Total/NA	Water	8330A	537382
LCS 280-537382/3-A	Lab Control Sample	Total/NA	Water	8330A	537382
280-148902-5 MS	G0070-21A	Total/NA	Water	8330A	537382
280-148902-5 MS	G0070-21A	Total/NA	Water	8330A	537382
280-148902-5 MSD	G0070-21A	Total/NA	Water	8330A	537382
280-148902-5 MSD	G0070-21A	Total/NA	Water	8330A	537382

Analysis Batch: 537871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	8330A	537382
280-148902-3	G0085-21A	Total/NA	Water	8330A	537382
280-148902-6	G0089-21A	Total/NA	Water	8330A	537382
280-148902-7	G0090-21A	Total/NA	Water	8330A	537382
280-148902-9	G0075-21A	Total/NA	Water	8330A	537382
280-148902-10	G0082-21A	Total/NA	Water	8330A	537382

Analysis Batch: 537964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-5	G0070-21A	Total/NA	Water	8330A	537382
280-148902-5 MS	G0070-21A	Total/NA	Water	8330A	537382
280-148902-5 MSD	G0070-21A	Total/NA	Water	8330A	537382

General Chemistry

Prep Batch: 537217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-3	G0085-21A	Total/NA	Water	9030B	
280-148902-4	NW071-21A	Total/NA	Water	9030B	
MB 280-537217/3-A	Method Blank	Total/NA	Water	9030B	
LCS 280-537217/1-A	Lab Control Sample	Total/NA	Water	9030B	
LCSD 280-537217/2-A	Lab Control Sample Dup	Total/NA	Water	9030B	

Analysis Batch: 537223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-3	G0085-21A	Total/NA	Water	9034	537217
280-148902-4	NW071-21A	Total/NA	Water	9034	537217
MB 280-537217/3-A	Method Blank	Total/NA	Water	9034	537217
LCS 280-537217/1-A	Lab Control Sample	Total/NA	Water	9034	537217
LCSD 280-537217/2-A	Lab Control Sample Dup	Total/NA	Water	9034	537217

General Chemistry

Prep Batch: 537251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	9030B	
MB 280-537251/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-537251/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 537253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	9034	537251
MB 280-537251/2-A	Method Blank	Total/NA	Water	9034	537251
LCS 280-537251/1-A	Lab Control Sample	Total/NA	Water	9034	537251

Prep Batch: 537318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-2	G0079-21A	Total/NA	Water	9030B	
280-148902-5	G0070-21A	Total/NA	Water	9030B	
280-148902-6	G0089-21A	Total/NA	Water	9030B	
280-148902-7	G0090-21A	Total/NA	Water	9030B	
280-148902-8	G0076-21A	Total/NA	Water	9030B	
280-148902-9	G0075-21A	Total/NA	Water	9030B	
280-148902-10	G0082-21A	Total/NA	Water	9030B	
MB 280-537318/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-537318/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-148902-5 MS	G0070-21A	Total/NA	Water	9030B	
280-148902-5 MSD	G0070-21A	Total/NA	Water	9030B	

Analysis Batch: 537358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	SM 2320B	
280-148902-2	G0079-21A	Total/NA	Water	SM 2320B	
280-148902-3	G0085-21A	Total/NA	Water	SM 2320B	
280-148902-4	NW071-21A	Total/NA	Water	SM 2320B	
280-148902-5	G0070-21A	Total/NA	Water	SM 2320B	
280-148902-6	G0089-21A	Total/NA	Water	SM 2320B	
280-148902-7	G0090-21A	Total/NA	Water	SM 2320B	
280-148902-9	G0075-21A	Total/NA	Water	SM 2320B	
280-148902-10	G0082-21A	Total/NA	Water	SM 2320B	
MB 280-537358/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-537358/57	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-537358/56	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 537372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-2	G0079-21A	Total/NA	Water	9034	537318
280-148902-5	G0070-21A	Total/NA	Water	9034	537318
280-148902-6	G0089-21A	Total/NA	Water	9034	537318
280-148902-7	G0090-21A	Total/NA	Water	9034	537318
280-148902-8	G0076-21A	Total/NA	Water	9034	537318
280-148902-9	G0075-21A	Total/NA	Water	9034	537318
280-148902-10	G0082-21A	Total/NA	Water	9034	537318
MB 280-537318/2-A	Method Blank	Total/NA	Water	9034	537318
LCS 280-537318/1-A	Lab Control Sample	Total/NA	Water	9034	537318
280-148902-5 MS	G0070-21A	Total/NA	Water	9034	537318

General Chemistry (Continued)

Analysis Batch: 537372 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-5 MSD	G0070-21A	Total/NA	Water	9034	537318

Analysis Batch: 537405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	350.1	
280-148902-2	G0079-21A	Total/NA	Water	350.1	
280-148902-3	G0085-21A	Total/NA	Water	350.1	
280-148902-4	NW071-21A	Total/NA	Water	350.1	
280-148902-6	G0089-21A	Total/NA	Water	350.1	
280-148902-7	G0090-21A	Total/NA	Water	350.1	
280-148902-8	G0076-21A	Total/NA	Water	350.1	
MB 280-537405/20	Method Blank	Total/NA	Water	350.1	
MB 280-537405/55	Method Blank	Total/NA	Water	350.1	
LCS 280-537405/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-537405/54	Lab Control Sample Dup	Total/NA	Water	350.1	
280-148902-4 MS	NW071-21A	Total/NA	Water	350.1	
280-148902-4 MSD	NW071-21A	Total/NA	Water	350.1	

Prep Batch: 537419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	351.2	
280-148902-2	G0079-21A	Total/NA	Water	351.2	
280-148902-3	G0085-21A	Total/NA	Water	351.2	
280-148902-4	NW071-21A	Total/NA	Water	351.2	
280-148902-5	G0070-21A	Total/NA	Water	351.2	
280-148902-6	G0089-21A	Total/NA	Water	351.2	
280-148902-7	G0090-21A	Total/NA	Water	351.2	
280-148902-8	G0076-21A	Total/NA	Water	351.2	
280-148902-9	G0075-21A	Total/NA	Water	351.2	
280-148902-10	G0082-21A	Total/NA	Water	351.2	
MB 280-537419/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-537419/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-148902-5 MS	G0070-21A	Total/NA	Water	351.2	
280-148902-5 MSD	G0070-21A	Total/NA	Water	351.2	

Analysis Batch: 537429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	353.2	
280-148902-2	G0079-21A	Total/NA	Water	353.2	
280-148902-3	G0085-21A	Total/NA	Water	353.2	
280-148902-4	NW071-21A	Total/NA	Water	353.2	
280-148902-5	G0070-21A	Total/NA	Water	353.2	
280-148902-6	G0089-21A	Total/NA	Water	353.2	
280-148902-7	G0090-21A	Total/NA	Water	353.2	
280-148902-8	G0076-21A	Total/NA	Water	353.2	
280-148902-9	G0075-21A	Total/NA	Water	353.2	
280-148902-10	G0082-21A	Total/NA	Water	353.2	
MB 280-537429/106	Method Blank	Total/NA	Water	353.2	
MB 280-537429/23	Method Blank	Total/NA	Water	353.2	
MB 280-537429/62	Method Blank	Total/NA	Water	353.2	
LCS 280-537429/105	Lab Control Sample	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 537429 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-537429/60	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-537429/61	Lab Control Sample Dup	Total/NA	Water	353.2	
280-148902-5 MS	G0070-21A	Total/NA	Water	353.2	
280-148902-5 MSD	G0070-21A	Total/NA	Water	353.2	

Analysis Batch: 537549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-5	G0070-21A	Total/NA	Water	350.1	
280-148902-9	G0075-21A	Total/NA	Water	350.1	
280-148902-10	G0082-21A	Total/NA	Water	350.1	
MB 280-537549/20	Method Blank	Total/NA	Water	350.1	
LCS 280-537549/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-537549/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-148902-5 MS	G0070-21A	Total/NA	Water	350.1	
280-148902-5 MSD	G0070-21A	Total/NA	Water	350.1	

Analysis Batch: 537579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	351.2	537419
280-148902-2	G0079-21A	Total/NA	Water	351.2	537419
280-148902-3	G0085-21A	Total/NA	Water	351.2	537419
280-148902-4	NW071-21A	Total/NA	Water	351.2	537419
280-148902-5	G0070-21A	Total/NA	Water	351.2	537419
280-148902-6	G0089-21A	Total/NA	Water	351.2	537419
280-148902-7	G0090-21A	Total/NA	Water	351.2	537419
280-148902-8	G0076-21A	Total/NA	Water	351.2	537419
280-148902-9	G0075-21A	Total/NA	Water	351.2	537419
280-148902-10	G0082-21A	Total/NA	Water	351.2	537419
MB 280-537419/2-A	Method Blank	Total/NA	Water	351.2	537419
LCS 280-537419/1-A	Lab Control Sample	Total/NA	Water	351.2	537419
280-148902-5 MS	G0070-21A	Total/NA	Water	351.2	537419
280-148902-5 MSD	G0070-21A	Total/NA	Water	351.2	537419

Filtration Batch: 538107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Dissolved	Water	FILTRATION	
280-148902-2	G0079-21A	Dissolved	Water	FILTRATION	
280-148902-3	G0085-21A	Dissolved	Water	FILTRATION	
280-148902-4	NW071-21A	Dissolved	Water	FILTRATION	
280-148902-5	G0070-21A	Dissolved	Water	FILTRATION	
280-148902-6	G0089-21A	Dissolved	Water	FILTRATION	
280-148902-7	G0090-21A	Dissolved	Water	FILTRATION	
280-148902-8	G0076-21A	Dissolved	Water	FILTRATION	
280-148902-9	G0075-21A	Dissolved	Water	FILTRATION	
280-148902-10	G0082-21A	Dissolved	Water	FILTRATION	
MB 280-538107/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-538107/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-148902-5 MS	G0070-21A	Dissolved	Water	FILTRATION	
280-148902-5 MSD	G0070-21A	Dissolved	Water	FILTRATION	

General Chemistry

Analysis Batch: 538151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-8	G0076-21A	Total/NA	Water	SM 2320B	
MB 280-538151/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-538151/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 538229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Dissolved	Water	9060A	538107
280-148902-2	G0079-21A	Dissolved	Water	9060A	538107
280-148902-3	G0085-21A	Dissolved	Water	9060A	538107
280-148902-4	NW071-21A	Dissolved	Water	9060A	538107
280-148902-5	G0070-21A	Dissolved	Water	9060A	538107
280-148902-6	G0089-21A	Dissolved	Water	9060A	538107
280-148902-7	G0090-21A	Dissolved	Water	9060A	538107
280-148902-8	G0076-21A	Dissolved	Water	9060A	538107
280-148902-9	G0075-21A	Dissolved	Water	9060A	538107
280-148902-10	G0082-21A	Dissolved	Water	9060A	538107
MB 280-538107/2-A	Method Blank	Dissolved	Water	9060A	538107
LCS 280-538107/1-A	Lab Control Sample	Dissolved	Water	9060A	538107
280-148902-5 MS	G0070-21A	Dissolved	Water	9060A	538107
280-148902-5 MSD	G0070-21A	Dissolved	Water	9060A	538107

Analysis Batch: 538883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-1	G0081-21A	Total/NA	Water	9056A	
280-148902-2	G0079-21A	Total/NA	Water	9056A	
280-148902-4	NW071-21A	Total/NA	Water	9056A	
280-148902-5	G0070-21A	Total/NA	Water	9056A	
280-148902-6	G0089-21A	Total/NA	Water	9056A	
280-148902-7	G0090-21A	Total/NA	Water	9056A	
280-148902-8	G0076-21A	Total/NA	Water	9056A	
280-148902-9	G0075-21A	Total/NA	Water	9056A	
280-148902-10	G0082-21A	Total/NA	Water	9056A	
MB 280-538883/6	Method Blank	Total/NA	Water	9056A	
LCS 280-538883/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-538883/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-538883/3	Lab Control Sample	Total/NA	Water	9056A	
280-148902-5 MS	G0070-21A	Total/NA	Water	9056A	
280-148902-5 MSD	G0070-21A	Total/NA	Water	9056A	
280-148902-5 DU	G0070-21A	Total/NA	Water	9056A	

Analysis Batch: 538974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-148902-3	G0085-21A	Total/NA	Water	9056A	
MB 280-538974/6	Method Blank	Total/NA	Water	9056A	
LCS 280-538974/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-538974/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-538974/3	Lab Control Sample	Total/NA	Water	9056A	

Client Sample ID: G0081-21A

Date Collected: 05/20/21 09:20
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	537523	05/25/21 19:10	CAS	TAL DEN
Total/NA	Prep	3535			529.3 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/27/21 21:40	JZ	TAL DEN
Total/NA	Prep	3535			529.3 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537871	05/28/21 21:19	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 13:28	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 16:58	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:29	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537251	05/24/21 13:44	SAH	TAL DEN
Total/NA	Analysis	9034		1			537253	05/24/21 13:47	SAH	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 20:12	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 01:17	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 22:24	QJB	TAL DEN

Client Sample ID: G0079-21A

Date Collected: 05/20/21 09:05
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	537523	05/25/21 19:22	CAS	TAL DEN
Total/NA	Prep	3535			531.6 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/27/21 22:03	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 13:30	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 16:59	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:31	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 20:26	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 01:32	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 22:32	QJB	TAL DEN

Client Sample ID: G0085-21A

Date Collected: 05/19/21 15:20
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	537359	05/25/21 15:13	CAS	TAL DEN
Total/NA	Prep	3535			500.3 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/27/21 22:26	JZ	TAL DEN

Client Sample ID: G0085-21A
Lab Sample ID: 280-148902-3

Date Collected: 05/19/21 15:20
Matrix: Water
Date Received: 05/21/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			500.3 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537871	05/28/21 21:55	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 13:32	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:03	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:33	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537217	05/24/21 10:30	SAH	TAL DEN
Total/NA	Analysis	9034		1			537223	05/24/21 11:19	SAH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	538974	06/09/21 06:47	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 01:47	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 22:40	QJB	TAL DEN

Client Sample ID: NW071-21A
Lab Sample ID: 280-148902-4

Date Collected: 05/19/21 14:55
Matrix: Water
Date Received: 05/21/21 09:50

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	18 mL	18 mL	537359	05/25/21 15:37	CAS	TAL DEN
Total/NA	Prep	3535			524.3 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/27/21 22:49	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 13:34	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:04	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	537429	05/25/21 15:35	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537217	05/24/21 10:30	SAH	TAL DEN
Total/NA	Analysis	9034		1			537223	05/24/21 11:19	SAH	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 20:54	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 02:31	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 22:46	QJB	TAL DEN

Client Sample ID: G0070-21A
Lab Sample ID: 280-148902-5

Date Collected: 05/20/21 12:50
Matrix: Water
Date Received: 05/21/21 09:50

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	18 mL	18 mL	537523	05/25/21 18:20	CAS	TAL DEN
Total/NA	Prep	3535			526.5 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/27/21 23:58	JZ	TAL DEN
Total/NA	Prep	3535			526.5 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537964	05/30/21 00:20	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537549	05/26/21 10:45	RKD	TAL DEN

Client Sample ID: G0070-21A
Lab Sample ID: 280-148902-5

Date Collected: 05/20/21 12:50
Matrix: Water
Date Received: 05/21/21 09:50

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	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 16:53	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 16:03	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 21:08	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 02:47	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 22:53	QJB	TAL DEN

Client Sample ID: G0089-21A
Lab Sample ID: 280-148902-6

Date Collected: 05/20/21 13:20
Matrix: Water
Date Received: 05/21/21 09:50

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	18 mL	18 mL	537523	05/25/21 19:34	CAS	TAL DEN
Total/NA	Prep	3535			420.5 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/28/21 01:53	JZ	TAL DEN
Total/NA	Prep	3535			420.5 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537871	05/29/21 02:34	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 14:08	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:06	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:37	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 22:04	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 03:32	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 23:01	QJB	TAL DEN

Client Sample ID: G0090-21A
Lab Sample ID: 280-148902-7

Date Collected: 05/20/21 12:10
Matrix: Water
Date Received: 05/21/21 09:50

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	18 mL	18 mL	537486	05/26/21 12:50	CAS	TAL DEN
Total/NA	Prep	3535			526.9 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/28/21 02:16	JZ	TAL DEN
Total/NA	Prep	3535			526.9 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537871	05/29/21 03:09	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 14:10	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:07	SVC	TAL DEN

Client Sample ID: G0090-21A

Date Collected: 05/20/21 12:10
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:39	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 22:18	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 03:46	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 23:08	QJB	TAL DEN

Client Sample ID: G0076-21A

Date Collected: 05/20/21 11:10
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	537486	05/26/21 13:02	CAS	TAL DEN
Total/NA	Prep	3535			513.6 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/28/21 02:39	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537405	05/25/21 14:32	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:08	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:53	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		2	10 mL	10 mL	538883	06/07/21 23:14	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 04:01	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538151	06/01/21 15:49	QJB	TAL DEN

Client Sample ID: G0075-21A

Date Collected: 05/20/21 10:00
Date Received: 05/21/21 09:50

Lab Sample ID: 280-148902-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	537486	05/26/21 13:14	CAS	TAL DEN
Total/NA	Prep	3535			522.6 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/28/21 03:02	JZ	TAL DEN
Total/NA	Prep	3535			522.6 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537871	05/29/21 03:44	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537549	05/26/21 10:51	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:13	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:55	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 23:28	CJ	TAL DEN

Client Sample ID: G0075-21A
Lab Sample ID: 280-148902-9

Date Collected: 05/20/21 10:00
Matrix: Water
Date Received: 05/21/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 04:18	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 23:15	QJB	TAL DEN

Client Sample ID: G0082-21A
Lab Sample ID: 280-148902-10

Date Collected: 05/20/21 10:40
Matrix: Water
Date Received: 05/21/21 09:50

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	18 mL	18 mL	537486	05/26/21 13:27	CAS	TAL DEN
Total/NA	Prep	3535			524.2 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537692	05/28/21 03:25	JZ	TAL DEN
Total/NA	Prep	3535			524.2 mL	5 mL	537382	05/25/21 17:25	DCL	TAL DEN
Total/NA	Analysis	8330A		1			537871	05/29/21 04:19	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	537549	05/26/21 10:53	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	537419	05/25/21 16:18	SVC	TAL DEN
Total/NA	Analysis	351.2		1			537579	05/26/21 17:14	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	537429	05/25/21 15:57	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	537318	05/25/21 07:12	SAH	TAL DEN
Total/NA	Analysis	9034		1			537372	05/25/21 11:57	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	538883	06/07/21 23:42	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	538107	06/01/21 10:30		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	538229	06/02/21 04:32	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			537358	05/24/21 23:23	QJB	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: 280-148902-1
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	10-31-21

Method Summary

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

Job ID: 280-148902-1

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
Job ID: 280-148902-1
Project/Site: Cornhusker (CHAAP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-148902-1	G0081-21A	Water	05/20/21 09:20	05/21/21 09:50	
280-148902-2	G0079-21A	Water	05/20/21 09:05	05/21/21 09:50	
280-148902-3	G0085-21A	Water	05/19/21 15:20	05/21/21 09:50	
280-148902-4	NW071-21A	Water	05/19/21 14:55	05/21/21 09:50	
280-148902-5	G0070-21A	Water	05/20/21 12:50	05/21/21 09:50	
280-148902-6	G0089-21A	Water	05/20/21 13:20	05/21/21 09:50	
280-148902-7	G0090-21A	Water	05/20/21 12:10	05/21/21 09:50	
280-148902-8	G0076-21A	Water	05/20/21 11:10	05/21/21 09:50	
280-148902-9	G0075-21A	Water	05/20/21 10:00	05/21/21 09:50	
280-148902-10	G0082-21A	Water	05/20/21 10:40	05/21/21 09:50	

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499937

Lab Sample ID: IC 280-499937/1 Client Sample ID:

Date Analyzed: 06/24/20 10:08 Lab File ID: 06242001.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.27	Peak not integrated	meierg	06/24/20 11:04

Lab Sample ID: IC 280-499937/1 Client Sample ID:

Date Analyzed: 06/24/20 10:08 Lab File ID: 06242001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.37	Shouldering	meierg	06/24/20 11:03
Acetylene	2.49	Peak not integrated	meierg	06/24/20 11:03

Lab Sample ID: IC 280-499937/2 Client Sample ID:

Date Analyzed: 06/24/20 10:20 Lab File ID: 06242002.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:05

Lab Sample ID: IC 280-499937/3 Client Sample ID:

Date Analyzed: 06/24/20 10:33 Lab File ID: 06242003.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:08

Lab Sample ID: ICRT 280-499937/4 Client Sample ID:

Date Analyzed: 06/24/20 10:45 Lab File ID: 06242004.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:01

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499937

Lab Sample ID: IC 280-499937/5 Client Sample ID:

Date Analyzed: 06/24/20 10:57 Lab File ID: 06242005.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:09

Lab Sample ID: IC 280-499937/6 Client Sample ID:

Date Analyzed: 06/24/20 11:09 Lab File ID: 06242006.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.22	Peak not integrated	meierg	06/24/20 11:22

Lab Sample ID: IC 280-499937/6 Client Sample ID:

Date Analyzed: 06/24/20 11:09 Lab File ID: 06242006.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Peak not integrated	meierg	06/24/20 11:22

Lab Sample ID: ICV 280-499937/11 Client Sample ID:

Date Analyzed: 06/24/20 12:11 Lab File ID: 06242011.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.48	Shouldering	meierg	06/24/20 12:29

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 537359

Lab Sample ID: CCVRT 280-537359/4 Client Sample ID:

Date Analyzed: 05/25/21 10:46 Lab File ID: 004F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.03	Peak not integrated	sciannac	05/26/21 09:38

Lab Sample ID: CCVRT 280-537359/4 Client Sample ID:

Date Analyzed: 05/25/21 10:46 Lab File ID: 004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.39	Split Peak	robertstr	05/25/21 11:22
Acetylene	2.51	Split Peak	robertstr	05/25/21 11:22

Lab Sample ID: CCV 280-537359/21 Client Sample ID:

Date Analyzed: 05/25/21 15:00 Lab File ID: 021F2101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.02	Split Peak	sciannac	05/26/21 09:45

Lab Sample ID: CCV 280-537359/21 Client Sample ID:

Date Analyzed: 05/25/21 15:00 Lab File ID: 021F2101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Split Peak	sciannac	05/26/21 09:46
Acetylene	2.49	Split Peak	sciannac	05/26/21 09:46

Lab Sample ID: 280-148902-4 Client Sample ID: NW071-21A

Date Analyzed: 05/25/21 15:37 Lab File ID: 024F2401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.17	Split Peak	sciannac	05/26/21 09:48

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 537359

Lab Sample ID: 280-148902-4 Client Sample ID: NW071-21A

Date Analyzed: 05/25/21 15:37 Lab File ID: 024F2401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.58	Split Peak	sciannac	05/26/21 09:48

Lab Sample ID: CCV 280-537359/33 Client Sample ID:

Date Analyzed: 05/25/21 17:27 Lab File ID: 033F3301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.02	Split Peak	sciannac	05/26/21 09:57

Lab Sample ID: CCV 280-537359/33 Client Sample ID:

Date Analyzed: 05/25/21 17:27 Lab File ID: 033F3301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Split Peak	sciannac	05/26/21 09:58
Acetylene	2.50	Split Peak	sciannac	05/26/21 09:57

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 537486

Lab Sample ID: CCVRT 280-537486/4 Client Sample ID:

Date Analyzed: 05/26/21 10:17 Lab File ID: 004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.40	Shouldering	robertstr	05/26/21 10:54
Acetylene	2.52	Split Peak	robertstr	05/26/21 10:52

Lab Sample ID: CCV 280-537486/21 Client Sample ID:

Date Analyzed: 05/26/21 14:16 Lab File ID: 021F2101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.17	Incomplete Integration	sciannac	05/26/21 15:04
Ethane	1.43	Incomplete Integration	sciannac	05/26/21 15:03
Ethylene	1.71	Incomplete Integration	sciannac	05/26/21 15:02
Acetylene	4.02	Split Peak	sciannac	05/26/21 15:01

Lab Sample ID: CCV 280-537486/21 Client Sample ID:

Date Analyzed: 05/26/21 14:16 Lab File ID: 021F2101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.37	Split Peak	sciannac	05/26/21 15:01
Acetylene	2.49	Split Peak	sciannac	05/26/21 15:01

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 537523

Lab Sample ID: CCVRT 280-537523/4 Client Sample ID:

Date Analyzed: 05/25/21 10:46 Lab File ID: 004F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.03	Peak not integrated	sciannac	05/26/21 09:38

Lab Sample ID: CCVRT 280-537523/4 Client Sample ID:

Date Analyzed: 05/25/21 10:46 Lab File ID: 004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.39	Split Peak	robertstr	05/25/21 11:22
Acetylene	2.51	Split Peak	robertstr	05/25/21 11:22

Lab Sample ID: CCV 280-537523/33 Client Sample ID:

Date Analyzed: 05/25/21 17:27 Lab File ID: 033F3301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.02	Split Peak	sciannac	05/26/21 09:57

Lab Sample ID: CCV 280-537523/33 Client Sample ID:

Date Analyzed: 05/25/21 17:27 Lab File ID: 033F3301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Split Peak	sciannac	05/26/21 09:58
Acetylene	2.50	Split Peak	sciannac	05/26/21 09:57

Lab Sample ID: CCV 280-537523/50 Client Sample ID:

Date Analyzed: 05/25/21 21:00 Lab File ID: 050F5001.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.02	Peak assignment corrected	sciannac	05/26/21 10:21

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 537523

Lab Sample ID: CCV 280-537523/50 Client Sample ID:

Date Analyzed: 05/25/21 21:00 Lab File ID: 050F5001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Peak not integrated	sciannac	05/26/21 10:21
Acetylene	2.50	Peak not integrated	sciannac	05/26/21 10:21
Ethane	2.77	Incomplete Integration	sciannac	05/26/21 10:22

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

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.: 280-148902-1

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.: 280-148902-1

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.: 280-148902-1

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.: 280-148902-1

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.: 280-148902-1

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.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 537692

Lab Sample ID: CCV 280-537692/9 Client Sample ID:

Date Analyzed: 05/27/21 14:46 Lab File ID: 05270009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.50	Baseline	zhangji	05/27/21 15:30
DNX	6.82	Baseline	zhangji	05/27/21 15:30
MNX	7.23	Baseline	zhangji	05/27/21 15:30

Lab Sample ID: MB 280-537382/1-A Client Sample ID:

Date Analyzed: 05/27/21 15:09 Lab File ID: 05270011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX		Invalid Compound ID	zhangji	05/27/21 15:35

Lab Sample ID: LCS 280-537382/3-A Client Sample ID:

Date Analyzed: 05/27/21 15:55 Lab File ID: 05270013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.23	Baseline	zhangji	05/27/21 16:24

Lab Sample ID: CCV 280-537692/21 Client Sample ID:

Date Analyzed: 05/27/21 18:59 Lab File ID: 05270021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.62	Baseline	zhangji	05/27/21 20:51

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 537692

Lab Sample ID: CCV 280-537692/22 Client Sample ID:

Date Analyzed: 05/27/21 19:22 Lab File ID: 05270022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.50	Baseline	zhangji	05/27/21 20:51
DNX	6.82	Baseline	zhangji	05/27/21 20:51

Lab Sample ID: 280-148902-1 Client Sample ID: G0081-21A

Date Analyzed: 05/27/21 21:40 Lab File ID: 05270028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	05/28/21 12:43
RDX	7.60	Baseline	zhangji	05/28/21 12:43
1,2-Dinitrobenzene	8.55	Baseline	zhangji	05/28/21 12:43
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:43
Tetryl		Invalid Compound ID	zhangji	05/28/21 12:43

Lab Sample ID: 280-148902-2 Client Sample ID: G0079-21A

Date Analyzed: 05/27/21 22:03 Lab File ID: 05270029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	05/28/21 12:44

Lab Sample ID: 280-148902-3 Client Sample ID: G0085-21A

Date Analyzed: 05/27/21 22:26 Lab File ID: 05270030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/28/21 12:44
Nitrobenzene	9.71	Baseline	zhangji	05/28/21 12:44
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:44
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:44

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 537692

Lab Sample ID: 280-148902-4 Client Sample ID: NW071-21A

Date Analyzed: 05/27/21 22:49 Lab File ID: 05270031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/28/21 12:44
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:44
MNX		Invalid Compound ID	zhangji	05/28/21 12:44

Lab Sample ID: CCV 280-537692/33 Client Sample ID:

Date Analyzed: 05/27/21 23:35 Lab File ID: 05270033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	05/28/21 12:45
DNX	6.81	Baseline	zhangji	05/28/21 12:45

Lab Sample ID: 280-148902-5 Client Sample ID: G0070-21A

Date Analyzed: 05/27/21 23:58 Lab File ID: 05270034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene		Invalid Compound ID	zhangji	05/28/21 12:45
RDX		Invalid Compound ID	zhangji	05/28/21 12:45
4-Nitrotoluene	13.11	Baseline	zhangji	05/28/21 12:45

Lab Sample ID: 280-148902-5 MS Client Sample ID: G0070-21A MS

Date Analyzed: 05/28/21 00:21 Lab File ID: 05270035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	05/28/21 12:45
RDX	7.60	Baseline	zhangji	05/28/21 12:45

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 537692

Lab Sample ID: 280-148902-5 MSD Client Sample ID: G0070-21A MSD

Date Analyzed: 05/28/21 00:44 Lab File ID: 05270036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	05/28/21 12:46
RDX	7.60	Baseline	zhangji	05/28/21 12:46

Lab Sample ID: 280-148902-5 MS Client Sample ID: G0070-21A MS

Date Analyzed: 05/28/21 01:07 Lab File ID: 05270037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	05/28/21 12:46

Lab Sample ID: 280-148902-5 MSD Client Sample ID: G0070-21A MSD

Date Analyzed: 05/28/21 01:30 Lab File ID: 05270038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.23	Baseline	zhangji	05/28/21 12:46

Lab Sample ID: 280-148902-6 Client Sample ID: G0089-21A

Date Analyzed: 05/28/21 01:53 Lab File ID: 05270039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.59	Baseline	zhangji	05/28/21 12:47
1,2-Dinitrobenzene	8.53	Baseline	zhangji	05/28/21 12:47
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	05/28/21 12:47
1,3-Dinitrobenzene	9.32	Baseline	zhangji	05/28/21 12:47
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:47
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:47
MNX		Invalid Compound ID	zhangji	05/28/21 12:46
Tetryl		Invalid Compound ID	zhangji	05/28/21 12:46

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 537692

Lab Sample ID: 280-148902-7 Client Sample ID: G0090-21A

Date Analyzed: 05/28/21 02:16 Lab File ID: 05270040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	05/28/21 12:47
RDX	7.59	Baseline	zhangji	05/28/21 12:47
1,2-Dinitrobenzene	8.53	Baseline	zhangji	05/28/21 12:48
Tetryl		Invalid Compound ID	zhangji	05/28/21 12:47

Lab Sample ID: 280-148902-8 Client Sample ID: G0076-21A

Date Analyzed: 05/28/21 02:39 Lab File ID: 05270041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	05/28/21 12:48
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:48
HMX		Invalid Compound ID	zhangji	05/28/21 12:48

Lab Sample ID: 280-148902-9 Client Sample ID: G0075-21A

Date Analyzed: 05/28/21 03:02 Lab File ID: 05270042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	zhangji	05/28/21 12:48
1,2-Dinitrobenzene	8.52	Baseline	zhangji	05/28/21 12:48
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/28/21 12:48
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:48
MNX		Invalid Compound ID	zhangji	05/28/21 12:48
RDX		Invalid Compound ID	zhangji	05/28/21 12:48
Tetryl		Invalid Compound ID	zhangji	05/28/21 12:48

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 537692

Lab Sample ID: 280-148902-10 Client Sample ID: G0082-21A

Date Analyzed: 05/28/21 03:25 Lab File ID: 05270043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.59	Baseline	zhangji	05/28/21 12:49
1,2-Dinitrobenzene	8.53	Baseline	zhangji	05/28/21 12:49
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	05/28/21 12:49
1,3-Dinitrobenzene	9.31	Baseline	zhangji	05/28/21 12:49
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:49
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/21 12:49
MNX		Invalid Compound ID	zhangji	05/28/21 12:49
Tetryl		Invalid Compound ID	zhangji	05/28/21 12:49

Lab Sample ID: CCV 280-537692/45 Client Sample ID:

Date Analyzed: 05/28/21 04:11 Lab File ID: 05270045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	05/28/21 12:49
DNX	6.81	Baseline	zhangji	05/28/21 12:49

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

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.: 280-148902-1

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.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 537871

Lab Sample ID: 280-148902-1 Client Sample ID: G0081-21A

Date Analyzed: 05/28/21 21:19 Lab File ID: 05280014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	zhangji	05/29/21 15:21
RDX	8.83	Baseline Smoothing	zhangji	05/29/21 15:21
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	05/29/21 15:21
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:20
2-Amino-4,6-dinitrotoluene	18.31	Baseline Smoothing	zhangji	05/29/21 15:21

Lab Sample ID: 280-148902-3 Client Sample ID: G0085-21A

Date Analyzed: 05/28/21 21:55 Lab File ID: 05280015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	zhangji	05/29/21 15:21
MNX	7.40	Baseline Smoothing	zhangji	05/29/21 15:21
2-Nitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:21
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:21

Lab Sample ID: 280-148902-6 Client Sample ID: G0089-21A

Date Analyzed: 05/29/21 02:34 Lab File ID: 05280023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.66	Baseline Smoothing	zhangji	05/29/21 15:23
RDX	8.83	Baseline Smoothing	zhangji	05/29/21 15:23
2-Nitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:23

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 537871

Lab Sample ID: 280-148902-7 Client Sample ID: G0090-21A

Date Analyzed: 05/29/21 03:09 Lab File ID: 05280024.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	zhangji	05/29/21 15:23
2-Amino-4,6-dinitrotoluene	18.34	Split Peak	zhangji	05/29/21 15:23

Lab Sample ID: 280-148902-9 Client Sample ID: G0075-21A

Date Analyzed: 05/29/21 03:44 Lab File ID: 05280025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.83	Baseline Smoothing	zhangji	05/29/21 15:23
2-Nitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:23
4-Nitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:23

Lab Sample ID: 280-148902-10 Client Sample ID: G0082-21A

Date Analyzed: 05/29/21 04:19 Lab File ID: 05280026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.66	Baseline Smoothing	zhangji	05/29/21 15:24
MNX	7.38	Baseline Smoothing	zhangji	05/29/21 15:24
2-Nitrotoluene		Invalid Compound ID	zhangji	05/29/21 15:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 537964

Lab Sample ID: CCV 280-537964/63 Client Sample ID:

Date Analyzed: 05/29/21 23:10 Lab File ID: 05280047.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.75	Peak assignment corrected	zhangji	06/02/21 19:43

Lab Sample ID: CCV 280-537964/70 Client Sample ID:

Date Analyzed: 05/30/21 02:05 Lab File ID: 007-2401.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.75	Peak assignment corrected	zhangji	06/02/21 19:43

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 538116

Lab Sample ID: STD1 280-538116/2 IC Client Sample ID:

Date Analyzed: 06/01/21 12:35 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.82	Baseline Smoothing	battilloj	06/01/21 15:30
Chloride	3.94	Baseline Smoothing	battilloj	06/01/21 15:26
Bromide	5.74	Baseline Smoothing	battilloj	06/01/21 15:27
Sulfate	9.15	Baseline Smoothing	battilloj	06/01/21 15:26

Lab Sample ID: STD2 280-538116/3 IC Client Sample ID:

Date Analyzed: 06/01/21 12:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Baseline Smoothing	battilloj	06/01/21 15:28
Bromide	5.74	Baseline Smoothing	battilloj	06/01/21 15:28
Sulfate	9.16	Baseline Smoothing	battilloj	06/01/21 15:29

Lab Sample ID: STD3 280-538116/4 IC Client Sample ID:

Date Analyzed: 06/01/21 13:03 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Baseline Smoothing	battilloj	06/01/21 15:29

Lab Sample ID: STD4 280-538116/5 IC Client Sample ID:

Date Analyzed: 06/01/21 13:17 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Baseline Smoothing	battilloj	06/01/21 15:30

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 538116

Lab Sample ID: STD5 280-538116/6 IC Client Sample ID:

Date Analyzed: 06/01/21 13:31 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.84	Baseline Smoothing	battilloj	06/01/21 15:33

Lab Sample ID: STD6 280-538116/7 IC Client Sample ID:

Date Analyzed: 06/01/21 13:45 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.12	Baseline Smoothing	battilloj	06/01/21 15:34

Lab Sample ID: STD7 280-538116/8 IC Client Sample ID:

Date Analyzed: 06/01/21 13:59 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.09	Baseline Smoothing	battilloj	06/01/21 15:35

Lab Sample ID: ICB 280-538116/9 Client Sample ID:

Date Analyzed: 06/01/21 14:13 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.18	Baseline Smoothing	battilloj	06/01/21 15:36

Lab Sample ID: ICV 280-538116/10 Client Sample ID:

Date Analyzed: 06/01/21 14:27 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Baseline Smoothing	battilloj	06/01/21 15:39

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 538883

Lab Sample ID: CCB 280-538883/2 Client Sample ID:

Date Analyzed: 06/07/21 13:22 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.21	Peak not integrated	jindaratc	06/07/21 19:56

Lab Sample ID: MB 280-538883/6 Client Sample ID:

Date Analyzed: 06/07/21 14:17 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.24	Peak not integrated	jindaratc	06/07/21 19:56

Lab Sample ID: CCB 280-538883/18 Client Sample ID:

Date Analyzed: 06/07/21 19:58 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.36	Peak not integrated	jindaratc	06/08/21 13:29

Lab Sample ID: CCB 280-538883/30 Client Sample ID:

Date Analyzed: 06/07/21 22:46 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.33	Baseline Smoothing	jindaratc	06/08/21 13:30

Lab Sample ID: CCB 280-538883/42 Client Sample ID:

Date Analyzed: 06/08/21 01:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.32	Baseline Smoothing	jindaratc	06/08/21 13:30

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 538716

Lab Sample ID: STD 280-538716/2 IC Client Sample ID:

Date Analyzed: 06/05/21 12:31 Lab File ID: 05.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.44	Baseline Smoothing	battilloj	06/05/21 20:48
Chloride	3.63	Baseline Smoothing	battilloj	06/05/21 20:49
Sulfate	10.00	Baseline Smoothing	battilloj	06/05/21 20:50

Lab Sample ID: STD 280-538716/3 IC Client Sample ID:

Date Analyzed: 06/05/21 12:46 Lab File ID: 06.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.45	Baseline Smoothing	battilloj	06/05/21 20:50
Chloride	3.63	Baseline Smoothing	battilloj	06/05/21 20:51
Bromide	5.38	Baseline Smoothing	battilloj	06/05/21 20:52
Sulfate	10.01	Baseline Smoothing	battilloj	06/05/21 20:52

Lab Sample ID: STD 280-538716/4 IC Client Sample ID:

Date Analyzed: 06/05/21 13:02 Lab File ID: 13.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.44	Baseline Smoothing	battilloj	06/05/21 20:53

Lab Sample ID: STD 280-538716/5 IC Client Sample ID:

Date Analyzed: 06/05/21 13:16 Lab File ID: 14.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.46	Baseline Smoothing	battilloj	06/05/21 20:54
Chloride	3.68	Baseline Smoothing	battilloj	06/05/21 20:54
Bromide	5.38	Baseline Smoothing	battilloj	06/05/21 20:54

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 538716

Lab Sample ID: STD 280-538716/6 IC Client Sample ID:

Date Analyzed: 06/05/21 13:31 Lab File ID: 15.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	3.73	Baseline Smoothing	battilloj	06/05/21 20:55
Bromide	5.38	Baseline Smoothing	battilloj	06/05/21 20:55

Lab Sample ID: STD 280-538716/7 IC Client Sample ID:

Date Analyzed: 06/05/21 13:46 Lab File ID: 16.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	3.76	Baseline Smoothing	battilloj	06/05/21 20:57
Bromide	5.38	Baseline Smoothing	battilloj	06/05/21 20:57

Lab Sample ID: ICV 280-538716/8 Client Sample ID:

Date Analyzed: 06/05/21 15:02 Lab File ID: 11.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.47	Baseline Smoothing	battilloj	06/05/21 20:57
Chloride	3.72	Baseline Smoothing	battilloj	06/05/21 20:58
Bromide	5.41	Baseline Smoothing	battilloj	06/05/21 20:58

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 538974

Lab Sample ID: CCV 280-538974/1 Client Sample ID:

Date Analyzed: 06/08/21 10:00 Lab File ID: 01.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.44	Baseline Smoothing	battilloj	06/09/21 13:17

Lab Sample ID: CCV 280-538974/17 Client Sample ID:

Date Analyzed: 06/08/21 17:33 Lab File ID: 17.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.45	Shouldering	battilloj	06/09/21 13:43

Lab Sample ID: CCB 280-538974/18 Client Sample ID:

Date Analyzed: 06/08/21 17:48 Lab File ID: 18.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.10	Baseline Smoothing	battilloj	06/09/21 13:44

Lab Sample ID: CCB 280-538974/54 Client Sample ID:

Date Analyzed: 06/09/21 02:48 Lab File ID: 54.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.08	Baseline Smoothing	battilloj	06/09/21 15:18

Lab Sample ID: CCB 280-538974/66 Client Sample ID:

Date Analyzed: 06/09/21 05:48 Lab File ID: 66.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.07	Baseline Smoothing	battilloj	06/09/21 15:26

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00467	06/01/21	05/25/21	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_00455	06/01/21	05/25/21	na, Lot na	100 mL	NH3 ICV STD_00029	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00029	08/01/21		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 LCS_00108	09/02/21	03/31/21	Acetonitrile, Lot Acetonitrile_00050	100 mL	8330_NG_Stk_00101	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00102	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00104	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00105	1 mL	PETN	100 ug/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
					PicricARestek_00097	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00101	05/31/23		Restek, Lot A0161120		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00102	05/31/23		Restek, Lot A0161120		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00104	12/31/23		Restek, Lot A0167376		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00105	12/31/23		Restek, Lot A0167376		(Purchased Reagent)		PETN	5000 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.PicricARestek_00097	09/30/25		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	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
					MNX,TNX,DNX_00053	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00052	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
.MNX,TNX,DNX_00053	05/31/21		Agilent, Lot 0006535619		(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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00068	10/30/21	04/30/21	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00188	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00192	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00193	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00185	05/31/25	Restek, Lot A0160559			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00188	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00192	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00193	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_00964	05/25/21	05/18/21	Di Water, Lot na	1000 mL	Alk stk std_00019	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00019	08/31/21	Fischer, Lot 194904			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Alk daily lcs_00966	06/04/21	05/28/21	Di Water, Lot na	1000 mL	Alk stk std_00019	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00019	08/31/21		Fischer, Lot 194904		(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00368	06/08/21	06/01/21	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 low_00583	06/08/21	06/01/21	Di Water, Lot NA	100 mL	IC BR ICV_00020	5 mL	Bromide	50 mg/L
					IC FL cal_00017	5 mL	Fluoride	50 mg/L
.IC BR ICV_00020	04/01/22		ricca, Lot 4010N41		(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00017	01/31/22		Ricca, Lot 2008B18		(Purchased Reagent)		Fluoride	1000 mg/L
IC Cal5_00003	06/08/21	06/01/21	ELGA Water, Lot N/A	100 mL	IC BR ICV_00020	10 mL	Bromide	100 mg/L
					IC FL cal_00016	5 mL	Fluoride	50 mg/L
.IC BR ICV_00020	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 CL cal_00067	04/30/22		SPEX CertiPrep, Lot 5-67CL-2X		(Purchased Reagent)		Chloride	1000 mg/L
IC LCS_01813	06/08/21	06/01/21	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 LCS_01814	06/15/21	06/08/21	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_00021	08/31/21		ERA, Lot 100819m		(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00022	07/06/22		ERA, Lot 060720m		(Purchased Reagent)		Sulfate	1000 mg/L
IC sulfatecal_00063	02/28/22		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00705	06/08/21	06/01/21	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00023	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00023	09/29/21	09/29/20	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00006	09/29/23		FISHER, Lot 147276		(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00578	05/27/21	05/20/21	Di Water, Lot NA	100 mL	NOXT Cal STD_00024	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00024	11/30/21		RICCA, Lot 2005e97		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00554	05/27/21	05/20/21	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_00027	10/24/20		Matheson, Lot 9308634170		(Purchased Reagent)		Methane	6570.3 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
SFD ICV INT_01914	08/26/21	04/26/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.4907 g	Sulfide	932.017 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_01916	08/26/21	04/26/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.6105 g	Sulfide	964.004 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.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_00820	06/03/21	05/03/21	Di Water, Lot 1	100 mL	TKN 100PPM_00133	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00133	06/03/21	05/03/21	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_00106	06/03/21	05/03/21	DI water, Lot 1	100 mL	TKN ICV 100_00095	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00095	06/03/21	05/03/21	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_00046	08/31/21	Ricca, Lot 1008G17			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00051	03/31/23	Agilent, Lot 0006588597			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

Reagent

50% NaOH_00022

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

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

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

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

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

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

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

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

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

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

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



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

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

Reagent

8330 LCS_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 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.

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Matrix: acetonitrile

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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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Composition

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)

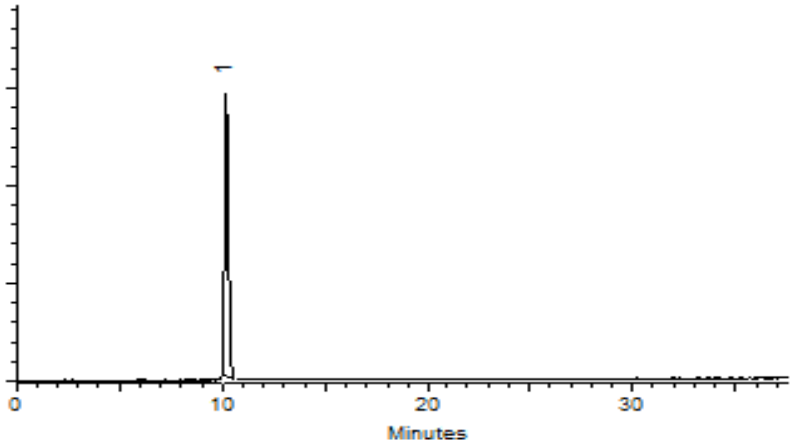
Flow Rate:
1.0 ml/min.

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_00101

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

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.:** A0161120

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, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin **CAS #** 55-63-0 **Purity** 99% (Lot 200507JLM)	5,024.0 µg/mL	+/- 46.7205 µg/mL +/- 277.5676 µg/mL +/- 322.9521 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

8330_NG_Stk_00102

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
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Certificate #3222.02

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

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Expiration Date : May 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
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Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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_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

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

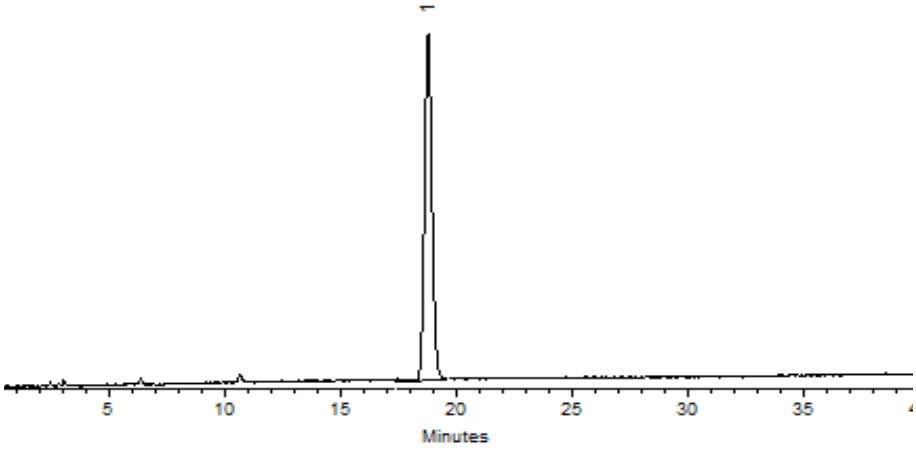
Flow Rate:
1.0 ml/min.

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_00104

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

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CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Composition

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.:** A0167376

Description : Custom PETN Standard

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

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

Expiration Date : December 31, 2023 **Storage:** 10°C or colder

Ship: Ambient

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	5,020.0 µg/mL	+/- 46.6833 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 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)

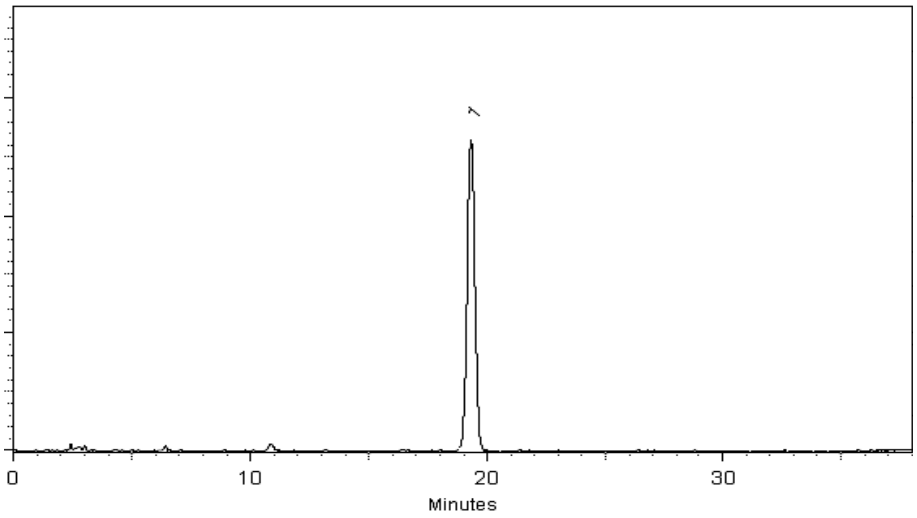
Flow Rate:
1.0 ml/min.

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.

Tom Suckar - Mix Technician

Date Mixed: 18-Dec-2020 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 29-Dec-2020

REVIEWED
By Jennifer Pollino at 2:34 pm, Dec 29, 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_PETN_Stk_00105

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

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CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Composition

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.:** A0167376

Description : Custom PETN Standard

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

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

Expiration Date : December 31, 2023 **Storage:** 10°C or colder

Ship: Ambient

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	5,020.0 µg/mL	+/- 46.6833 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 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)

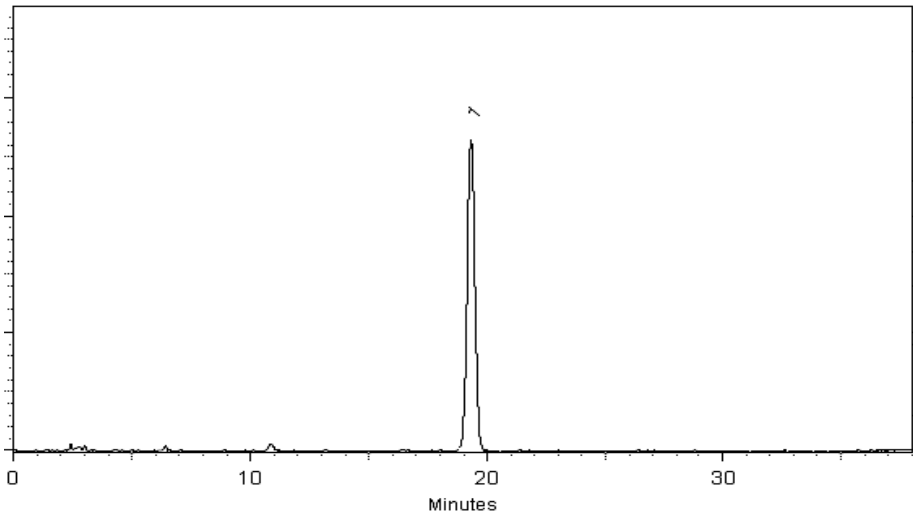
Flow Rate:
1.0 ml/min.

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.

Tom Suckar - Mix Technician

Date Mixed: 18-Dec-2020 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 29-Dec-2020

REVIEWED
By Jennifer Pollino at 2:34 pm, Dec 29, 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

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)

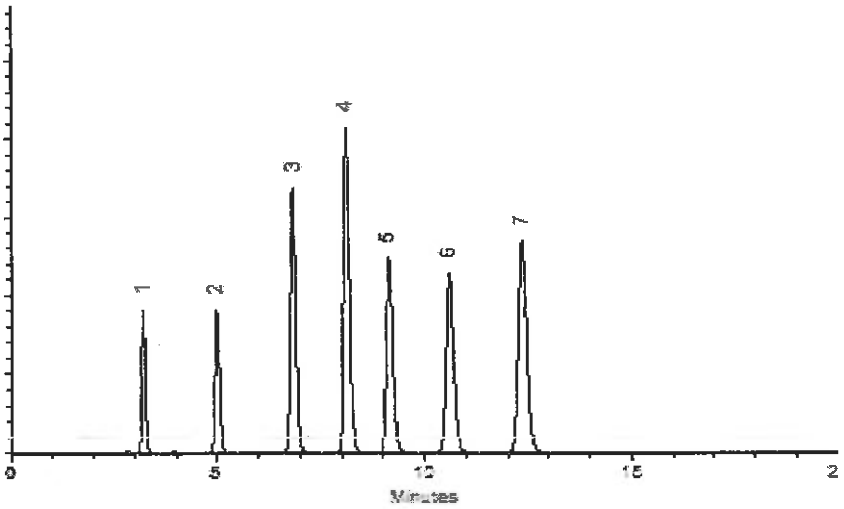
Flow Rate:
1.0 ml/min.

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

8330LCSmix2_00023

Rec 1/22/21 at 2 vials

RESTEK®
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ilac-MRA

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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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

8330SurrStkSS_00185

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** 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 (Lot MKCH6067) **Purity** 99%	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)

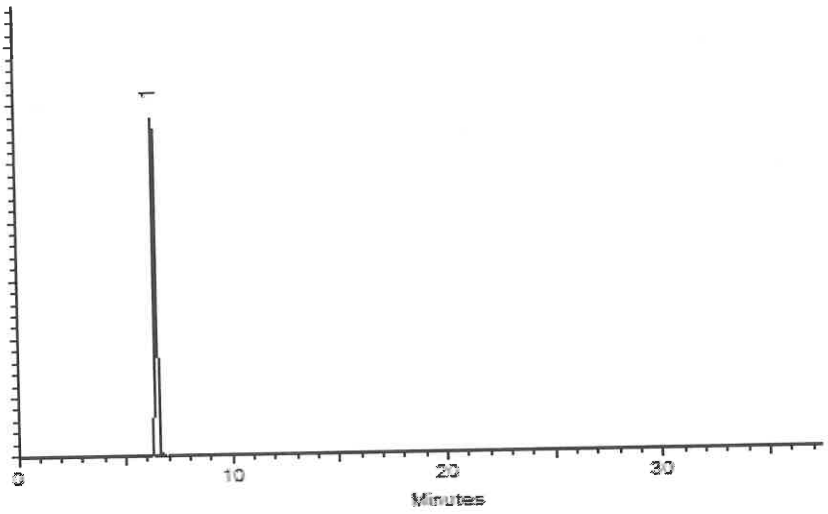
Flow Rate:
1.0 ml/min.

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_00188

Rec 1/22/21 @ 2 vials

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00192

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00193

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

8330SurrStock_00164

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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

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

See reverse side for additional information

Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

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

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

Reagent

8330SurrStock_00168

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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.

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

Reagent

Alk stk std_00019

ThermoFisher SCIENTIFIC

Certificate of Analysis

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

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

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. Thermo Fisher Scientific 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 humans or animals. It is the responsibility of the final formulator and end user 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	SS148	Quality Test / Release Date	08/02/2019
Lot Number	194904	Expiration Date	Aug/2021
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
COLOR	APHA	<= 5	<5
NORMALITY		Inclusive Between 0.995 - 1.000	0.997
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

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.

SPEX CertiPrep
Your Science is Our Passion®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

IC FL cal_00016

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Fluoride Standard, 1000 ppm F

Lot Number: 2007C85 **Product Number:** 3173

Manufacture Date: JUL 17, 2020
Expiration Date: JAN 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.
The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Fluoride	7681-49-4	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Fluoride (F)	995-1005 ppm	1000 ppm

Specification	Reference
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5542)
Fluoride Stock Solution (1.00 mL = 1.00 mg F-)	EPA (SW-846) (9056)
Fluoride Calibration Stock Solution (1,000 mg/L F-)	EPA (SW-846) (9214)
Stock Solution, 1.0 mL = 1.0 mg F	EPA (340.3)
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5996)
Fluoride Stock Solution (1.00 mL = 1.00 mg F?)	ASTM (D 4327)
Fluoride Stock Standard Solution (1 mg of F in 1 mL)	ACS (N/A)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3173-16	500 mL natural poly	18 months
3173-32	1 L natural poly	18 months
3173-4	120 mL natural poly	18 months

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

Reagent

IC FL cal_00017

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: 2008D03 **Product Number:** 5459

Manufacture Date: AUG 14, 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
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

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

Chris Collins (08/14/2020)
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 MS/MSD S04_00006

Fisher Scientific

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

Certificate of Analysis

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

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

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

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



Lab Manager Fair Lawn

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

Reagent

IC SO4 ICV_00021

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Sulfate (SO_4)
CATALOG NUMBER:	062 -125 mL; 995 - 500 mL
LOT NUMBER:	100819m
ISSUE DATE:	August 23, 2019
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Sulfate (K_2SO_4)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9986 ± 0.0010 g/mL at 19.7°C and 757 mm Hg
TRACEABILITY[3]:	97.6%
NIST/SRM:	3181 Sulfate
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 08/06/2021**. 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

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

© 2019 SPEX Certiprep, LLC

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*

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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.

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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

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.

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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:

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Phone: 1-800-[illegible] Fax: 732-603-9647

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.

Reagent

MNX,TNX,DNX_00049

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

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

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

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

Hazards:

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

Expiration of Certification:

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

Reagent

MNX,TNX,DNX_00050

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

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

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

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

Hazards:

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

Expiration of Certification:

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

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.

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_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

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_00029

300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com
tel: 800.669.6799 · 540.585.3030
fax: 540.585.3017
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 (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ 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 (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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.

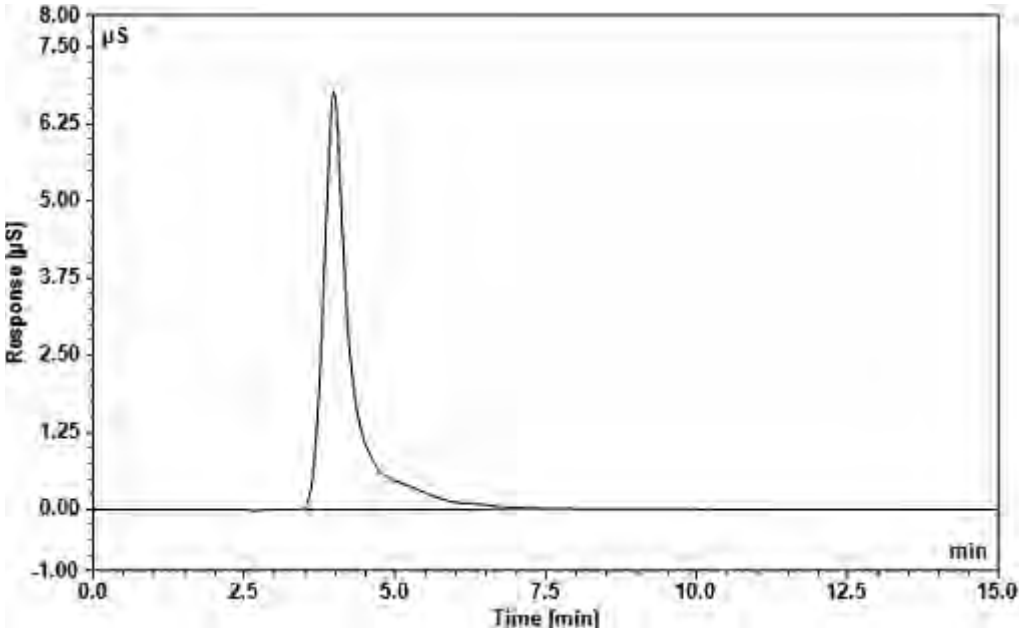
4.2 Balance Calibration

- 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

PicricARestek_00097

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0164473

Description : Picric Acid Standard

Picric Acid Standard 1000µg/mL, Methanol, 1mL/1000µg/mL *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid **CAS #** 88-89-1 **Purity** 97% (Lot 06130CU)	1,006.9 µg/mL	+/- 5.9804 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)

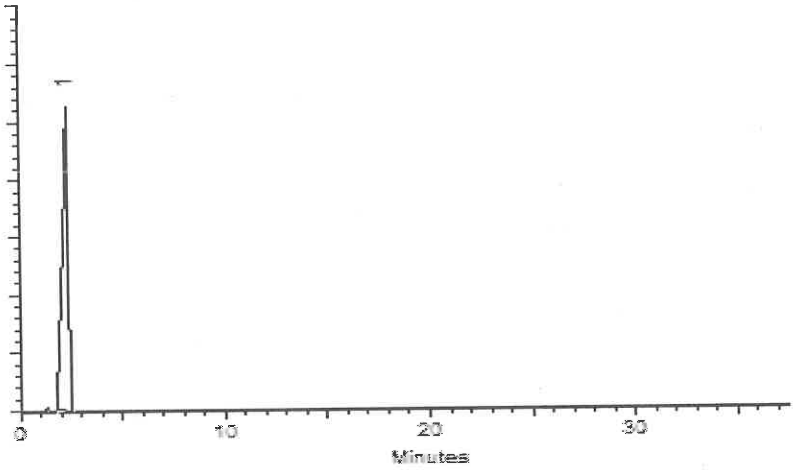
Flow Rate:
1.0 ml/min.

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_00027

MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
200 ALESSIO DR
JOLIET, IL 60433

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)
*DL955755

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	0.995	%	±10%	±2%
Acetylene	1.00	0.995	%	±10%	±2%
Isobutylene	1.00	0.995	%	±10%	±2%
Propane	1.00	0.995	%	±10%	±2%
Ethene	1.00	0.996	%	±10%	±2%
Ethylene	1.00	0.996	%	±10%	±2%
Methane	1.00	0.999	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

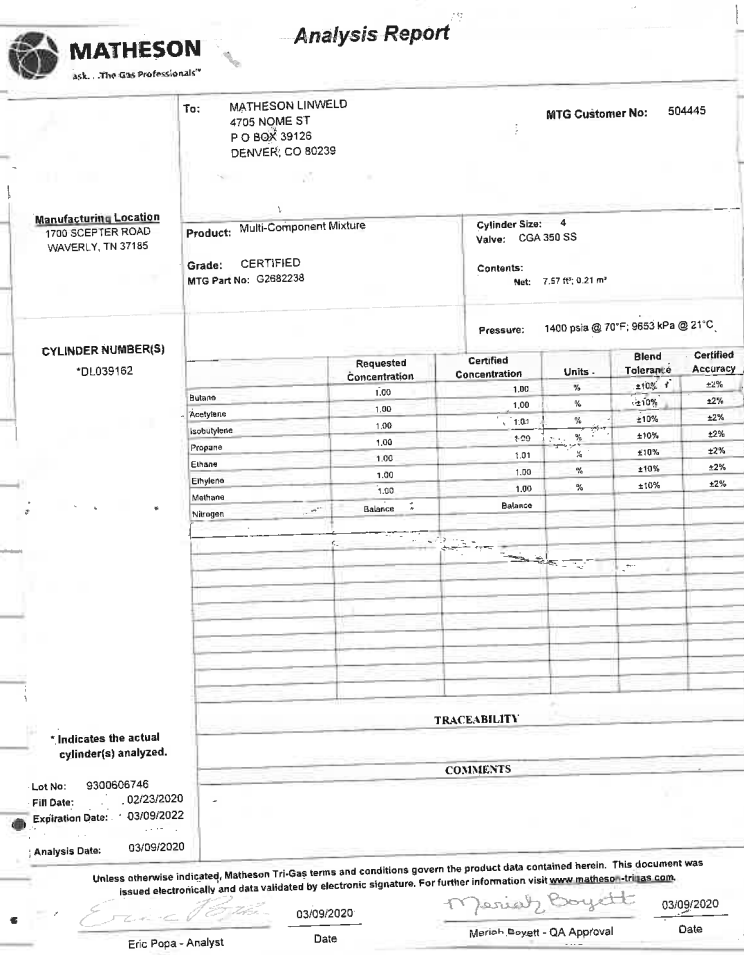
Lot No: 1029602081C
Fill Date: 09/04/2019
Expiration Date: 09/09/2021
Analysis Date: 09/09/2019

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

Jennifer Fender - Analyst	09/09/2019 Date	Jennifer Fender - QA Approval	09/09/2019 Date

Reagent

RSK7gasMathes_00031



MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture
Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS
Contents:
Net: 7.57 ft³; 0.21 m³

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

CYLINDER NUMBER(S)
*DI.039162

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

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

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

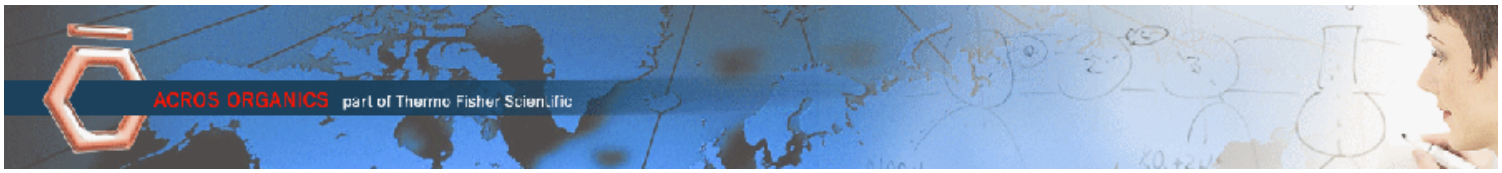
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 — Date

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

Reagent

SFD ICV STK_00008



Version	1
Molecular weight	240.18
Molecular formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear formula	Na2S.9H2O
Flash point (°C)	

Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied

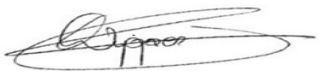
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	38706	**Quality Test / Release Date**	22 April 2021
Lot Number	A0412804	**Suggested Retest Date**	April 2024
Description	Sodium sulfide nonahydrate,98+%,extra pure		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

Origin Comment	

Result Name	Specifications	Test Value
Appearance (Color)	Colorless to light yellow	Light yellow
Appearance (Form)	Adhering crystals and/or chunks	Adhering crystals
Titration Iodimetric	32.0 to 38.0 % (Na2S)	32.3 % (Na2S)
Total nitrogen (as N)	=<0.005 %	=<0.005 %
Sulfite (as SO2)	=<2000 ppm	=<1000 ppm
Thiosulphate (S2O3)	=<5000 ppm	=<1000 ppm





C. Wygaerts, QA Manager Issued: 27 April 2021

Acros Organics
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

Reagent

TKN CAL STD_00019

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Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

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

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

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

Packaging, Storage, Instructions For Use

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

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

Traceability Information

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

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

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

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

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

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an 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_00046

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 1008G17 **Product Number:** 1847

Manufacture Date: AUG 28, 2020
Expiration Date: AUG 2021

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
1847-8	250 mL amber glass	12 months

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



Israel Alamudun (08/28/2020)
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

TOC LCS Std_00051

Agilent

Certificate of Analysis

Product Name: Total Organic Carbon (TOC) Standard

Product Number: IQC-106 **Lot Issue Date:** 09-Feb-2021

Lot Number: 0006588597 **Expiration Date:** 31-Mar-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	RM14981	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

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

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 005F0501.D

Lab ID: LCS 280-537359/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0731	100	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 005F0501.D

Lab ID: LCS 280-537486/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0689	94	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 034F3401.D

Lab ID: LCS 280-537523/34 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0704	96	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 006F0601.D

Lab ID: LCSD 280-537359/6 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0796	109	8	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 006F0601.D

Lab ID: LCSD 280-537486/6 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0705	97	2	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 035F3501.D

Lab ID: LCSD 280-537523/35 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0697	95	1	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 039F3901.D

Lab ID: 280-148902-5 MS Client ID: G0070-21A MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0730	0.0020 U	0.0534	73	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 040F4001.D

Lab ID: 280-148902-5 MSD Client ID: G0070-21A MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0652	89	20	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.: 280-148902-1

SDG No.:

Lab Sample ID: MB 280-537359/7

Matrix: Water Date Extracted:

Lab File ID:(1) 007F0701.D Lab File ID:(2) 007F0701.D

Date Analyzed:(1) 05/25/2021 11:23 Date Analyzed:(2) 05/25/2021 11:23

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 280-537359/5	05/25/2021 10:59	05/25/2021 10:59
	LCSD 280-537359/6	05/25/2021 11:11	05/25/2021 11:11
G0085-21A	280-148902-3	05/25/2021 15:13	05/25/2021 15:13
G0085-21A DU	280-148902-3 DU	05/25/2021 15:25	05/25/2021 15:25
NW071-21A	280-148902-4	05/25/2021 15:37	05/25/2021 15:37

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: MB 280-537523/36

Matrix: Water Date Extracted:

Lab File ID:(1) 036F3601.D Lab File ID:(2) 036F3601.D

Date Analyzed:(1) 05/25/2021 18:08 Date Analyzed:(2) 05/25/2021 18:08

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 280-537523/34	05/25/2021 17:40	05/25/2021 17:40
	LCSD 280-537523/35	05/25/2021 17:55	05/25/2021 17:55
G0070-21A	280-148902-5	05/25/2021 18:20	05/25/2021 18:20
G0070-21A DU	280-148902-5 DU	05/25/2021 18:32	05/25/2021 18:32
G0070-21A MS	280-148902-5 MS	05/25/2021 18:45	05/25/2021 18:45
G0070-21A MSD	280-148902-5 MSD	05/25/2021 18:57	05/25/2021 18:57
G0081-21A	280-148902-1	05/25/2021 19:10	05/25/2021 19:10
G0079-21A	280-148902-2	05/25/2021 19:22	05/25/2021 19:22
G0089-21A	280-148902-6	05/25/2021 19:34	05/25/2021 19:34

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: MB 280-537486/7

Matrix: Water Date Extracted:

Lab File ID:(1) 007F0701.D Lab File ID:(2) 007F0701.D

Date Analyzed:(1) 05/26/2021 10:54 Date Analyzed:(2) 05/26/2021 10:54

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 280-537486/5	05/26/2021 10:30	05/26/2021 10:30
	LCSD 280-537486/6	05/26/2021 10:42	05/26/2021 10:42
G0090-21A	280-148902-7	05/26/2021 12:50	05/26/2021 12:50
G0076-21A	280-148902-8	05/26/2021 13:02	05/26/2021 13:02
G0075-21A	280-148902-9	05/26/2021 13:14	05/26/2021 13:14
G0082-21A	280-148902-10	05/26/2021 13:27	05/26/2021 13:27

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0081-21A Lab Sample ID: 280-148902-1

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

Date Analyzed (1): 05/25/2021 19:10 Date Analyzed (2): 05/25/2021 19:10

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.55	1.63	0.076		3.6
	2		1.17	1.14	1.22	0.079		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0085-21A Lab Sample ID: 280-148902-3

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

Date Analyzed (1): 05/25/2021 15:13 Date Analyzed (2): 05/25/2021 15:13

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		1.57	1.55	1.63	6.5		2.4
	2		1.17	1.14	1.22	6.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0085-21A DU Lab Sample ID: 280-148902-3 DU

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

Date Analyzed (1): 05/25/2021 15:25 Date Analyzed (2): 05/25/2021 15:25

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.57	1.55	1.63	6.97		2.2
	2		1.17	1.14	1.22	7.12		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MS Lab Sample ID: 280-148902-5 MS

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

Date Analyzed (1): 05/25/2021 18:45 Date Analyzed (2): 05/25/2021 18:45

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.55	1.63	0.0534		2.1
	2		1.18	1.14	1.22	0.0545		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MSD Lab Sample ID: 280-148902-5 MSD

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

Date Analyzed (1): 05/25/2021 18:57 Date Analyzed (2): 05/25/2021 18:57

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.55	1.63	0.0652		2.3
	2		1.17	1.14	1.22	0.0667		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0089-21A Lab Sample ID: 280-148902-6

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

Date Analyzed (1): 05/25/2021 19:34 Date Analyzed (2): 05/25/2021 19:34

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		1.57	1.55	1.63	2.1		4.1
	2		1.17	1.14	1.22	2.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0090-21A Lab Sample ID: 280-148902-7

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

Date Analyzed (1): 05/26/2021 12:50 Date Analyzed (2): 05/26/2021 12:50

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	0.017		3.2
	2		1.17	1.15	1.23	0.018		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0076-21A Lab Sample ID: 280-148902-8

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

Date Analyzed (1): 05/26/2021 13:02 Date Analyzed (2): 05/26/2021 13:02

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	0.21		3.9
	2		1.17	1.15	1.23	0.22		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0082-21A Lab Sample ID: 280-148902-10

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

Date Analyzed (1): 05/26/2021 13:27 Date Analyzed (2): 05/26/2021 13:27

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		1.57	1.56	1.64	0.85		5.2
	2		1.17	1.15	1.23	0.89		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537359/5

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

Date Analyzed (1): 05/25/2021 10:59 Date Analyzed (2): 05/25/2021 10:59

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		1.59	1.55	1.63	0.0731		0.4
	2		1.18	1.14	1.22	0.0729		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-537359/6

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

Date Analyzed (1): 05/25/2021 11:11 Date Analyzed (2): 05/25/2021 11:11

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.59	1.55	1.63	0.0796		0.5
	2		1.18	1.14	1.22	0.0792		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537486/5

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

Date Analyzed (1): 05/26/2021 10:30 Date Analyzed (2): 05/26/2021 10:30

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.60	1.56	1.64	0.0689		0.2
	2		1.19	1.15	1.23	0.0688		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-537486/6

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

Date Analyzed (1): 05/26/2021 10:42 Date Analyzed (2): 05/26/2021 10:42

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		1.59	1.56	1.64	0.0705		0.2
	2		1.18	1.15	1.23	0.0704		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537523/34

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

Date Analyzed (1): 05/25/2021 17:40 Date Analyzed (2): 05/25/2021 17:40

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		1.58	1.55	1.63	0.0704		0.1
	2		1.17	1.14	1.22	0.0705		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-537523/35

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

Date Analyzed (1): 05/25/2021 17:55 Date Analyzed (2): 05/25/2021 17:55

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		1.58	1.55	1.63	0.0697		0.1
	2		1.18	1.14	1.22	0.0696		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0081-21A Lab Sample ID: 280-148902-1

Matrix: Water Lab File ID: 041F4101.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 09:20

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 19:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.076		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\041F4101.D
Lims ID: 280-148902-I-1
Client ID: G0081-21A
Sample Type: Client
Inject. Date: 25-May-2021 19:10:01 ALS Bottle#: 41 Worklist Smp#: 41
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-i-1
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:06:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.174	1.181	-0.007	9400379	79.2	
2	1.581	1.589	-0.008	8263517	76.4	
					RPD = 3.56	
3 Ethane						
1		1.446			ND	
2		2.779				
4 Ethylene						
1		1.729			ND	
2		2.393				
5 Propane						
1		2.534			ND	
2		4.626				
6 Acetylene						
1		4.032			ND	
2		2.513				
7 Butane						
1		4.381			ND	
2		6.091				
8 isobutylene						
1		5.232			ND	
2		5.934				

QC Flag Legend

Processing Flags

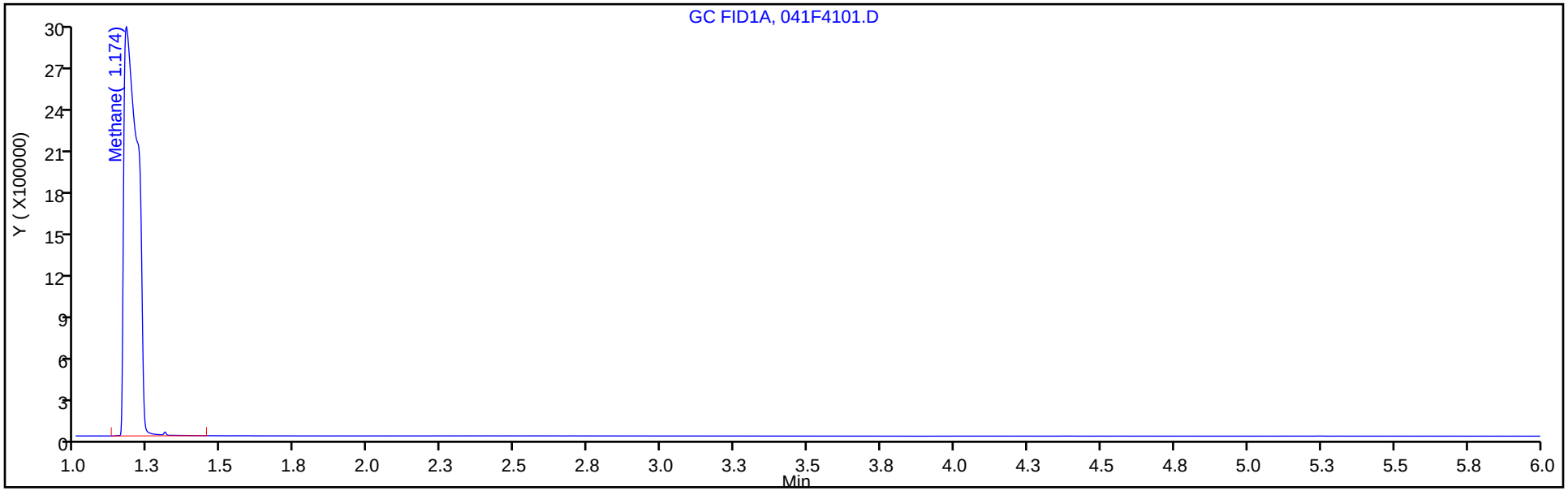
Report Date: 26-May-2021 13:09:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

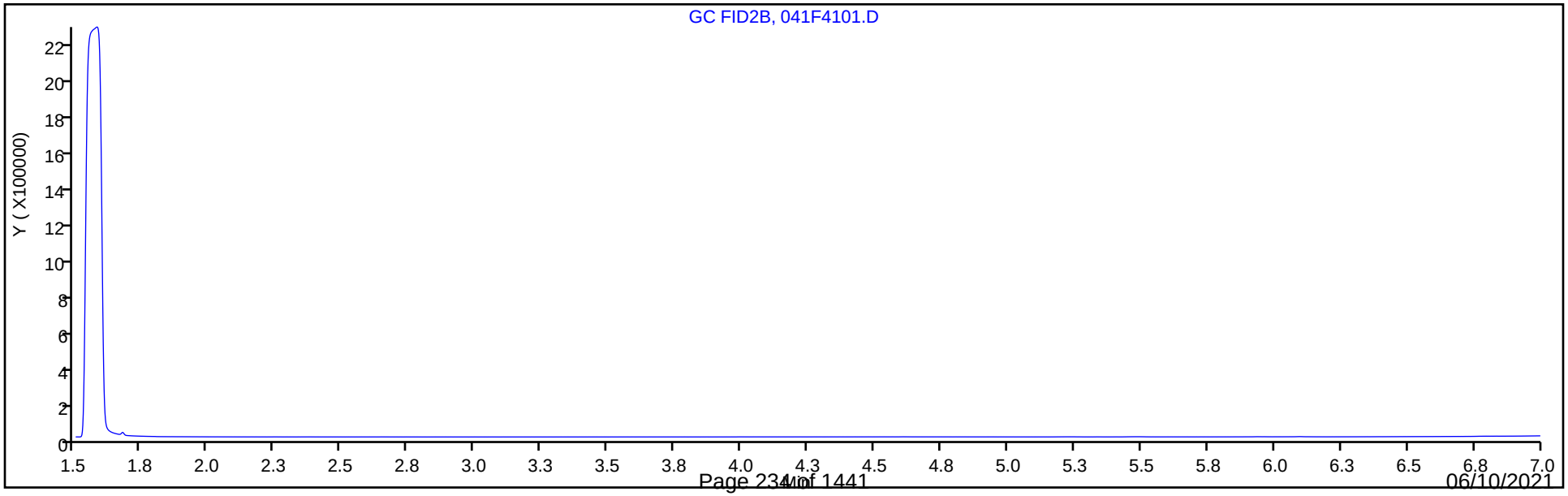
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\041F4101.D

Injection Date:	25-May-2021 19:10:01	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-1	Lab Sample ID:	280-148902-1	Worklist Smp#:	41
Client ID:	G0081-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	41
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.: 280-148902-1

SDG No.:

Client Sample ID: G0079-21A Lab Sample ID: 280-148902-2

Matrix: Water Lab File ID: 042F4201.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 09:05

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 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.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\042F4201.D
Lims ID: 280-148902-I-2
Client ID: G0079-21A
Sample Type: Client
Inject. Date: 25-May-2021 19:22:30 ALS Bottle#: 42 Worklist Smp#: 42
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-i-2
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:06:33

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		1.181			ND	
2		1.589				
3 Ethane						
1		1.446			ND	
2		2.779				
4 Ethylene						
1		1.729			ND	
2		2.393				
5 Propane						
1		2.534			ND	
2		4.626				
6 Acetylene						
1		4.032			ND	
2		2.513				
7 Butane						
1		4.381			ND	
2		6.091				
8 isobutylene						
1		5.232			ND	
2		5.934				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

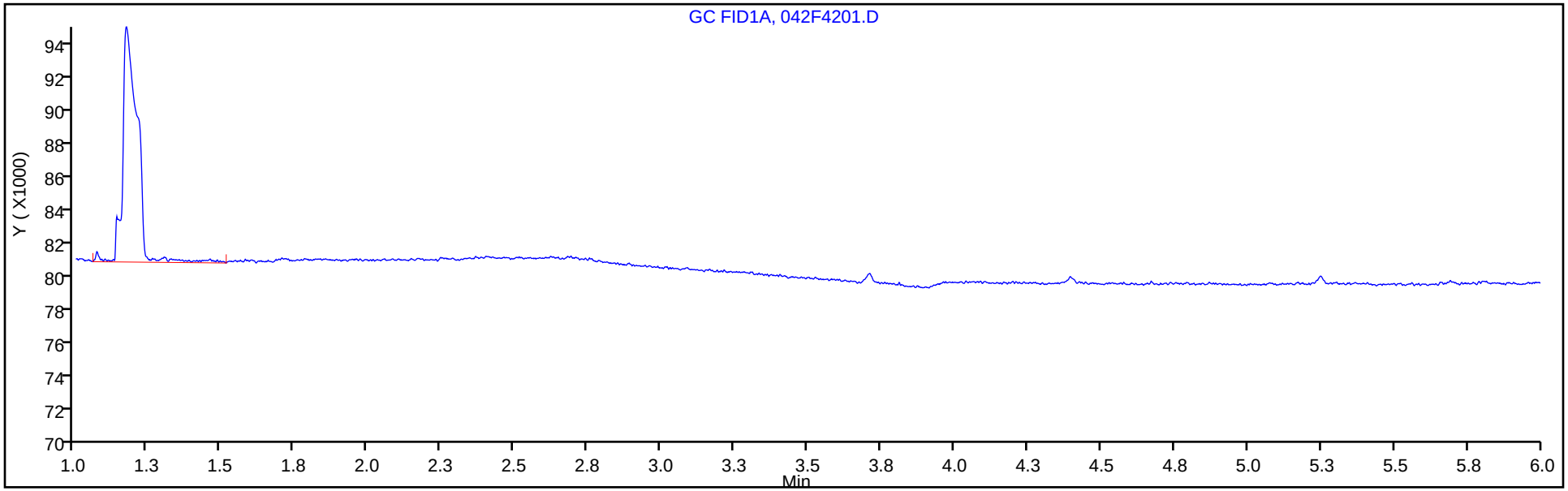
Report Date: 26-May-2021 13:09:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

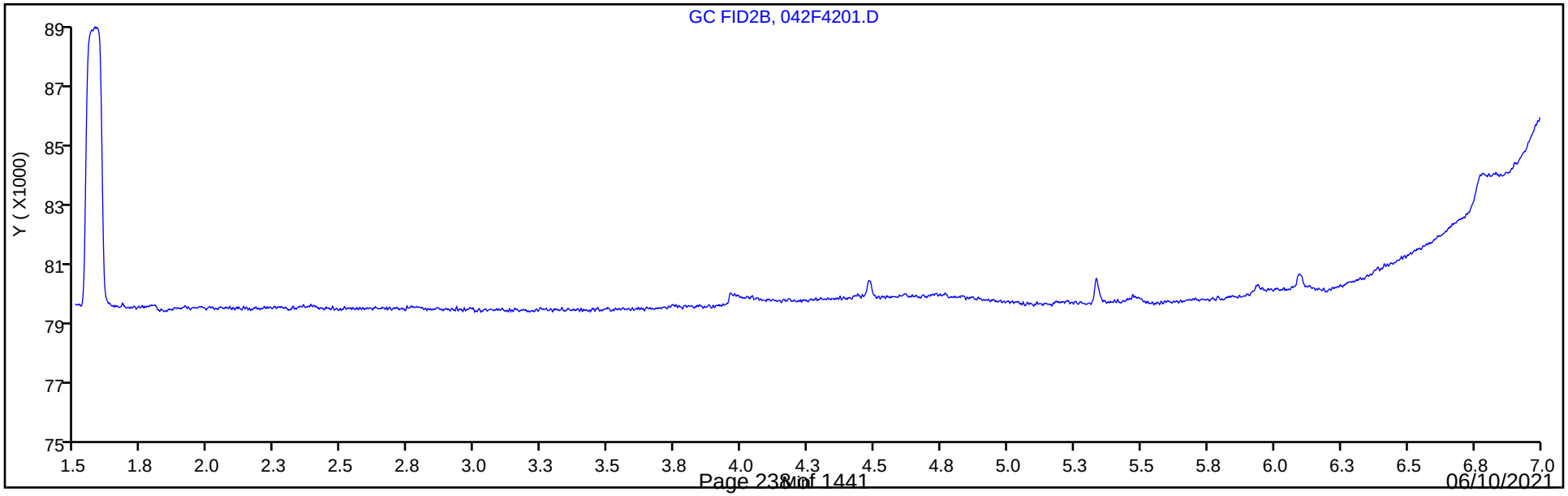
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\042F4201.D

Injection Date:	25-May-2021 19:22:30	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-2	Lab Sample ID:	280-148902-2	Worklist Smp#:	42
Client ID:	G0079-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	42
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.: 280-148902-1

SDG No.:

Client Sample ID: G0085-21A Lab Sample ID: 280-148902-3

Matrix: Water Lab File ID: 022F2201.D

Analysis Method: RSK-175 Date Collected: 05/19/2021 15:20

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 15:13

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.: 537359 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.5		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\022F2201.D
Lims ID: 280-148902-I-3
Client ID: G0085-21A
Sample Type: Client
Inject. Date: 25-May-2021 15:13:05 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-i-3
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:14 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:47:45

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	1.169	1.181	-0.012	785100256	6649.5	
2	1.567	1.589	-0.022	699350023	6492.8	
					RPD = 2.38	
3 Ethane						
1		1.446			ND	
2		2.779				
4 Ethylene						
1		1.729			ND	
2		2.393				
5 Propane						
1		2.534			ND	
2		4.626				
6 Acetylene						
1		4.032			ND	
2		2.513				
7 Butane						
1		4.381			ND	
2		6.091				
8 isobutylene						
1		5.232			ND	
2		5.934				

QC Flag Legend

Processing Flags

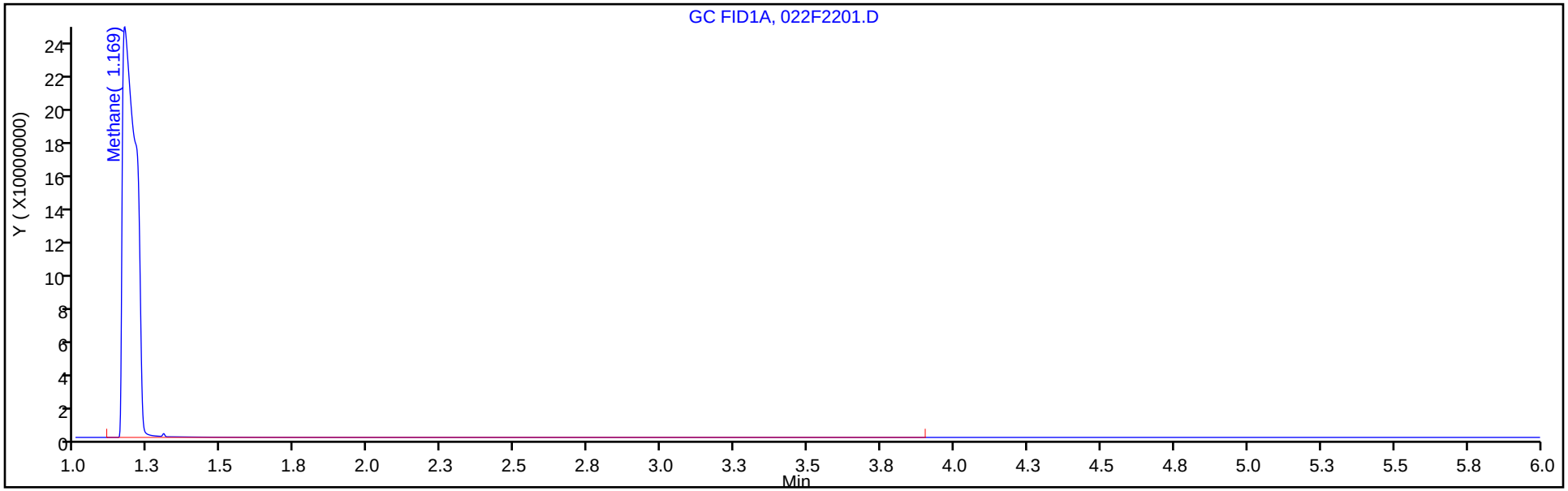
Report Date: 26-May-2021 13:51:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

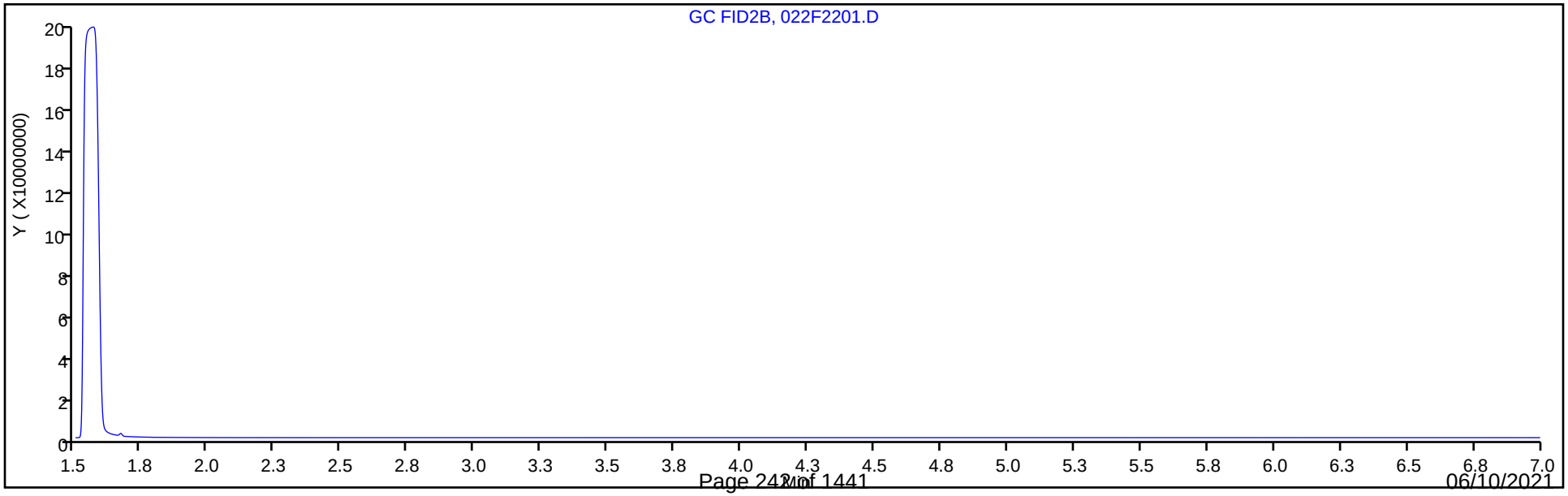
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\022F2201.D

Injection Date:	25-May-2021 15:13:05	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-3	Lab Sample ID:	280-148902-3	Worklist Smp#:	22
Client ID:	G0085-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: NW071-21A Lab Sample ID: 280-148902-4

Matrix: Water Lab File ID: 024F2401.D

Analysis Method: RSK-175 Date Collected: 05/19/2021 14:55

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 15:37

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537359 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\024F2401.D
Lims ID: 280-148902-G-4
Client ID: NW071-21A
Sample Type: Client
Inject. Date: 25-May-2021 15:37:36 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-g-4
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:14 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:49:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						7Ma
1	1.171	1.181	-0.010	44487	-0.0356	M
2	1.576	1.589	-0.013	32928	0.0254	M
					RPD = -1196.21	
LOD = 0.6300						
3 Ethane						
1		1.446			ND	
2		2.779				
4 Ethylene						
1		1.729			ND	
2		2.393				
5 Propane						
1		2.534			ND	
2		4.626				
6 Acetylene						
1		4.032			ND	
2		2.513				
7 Butane						
1		4.381			ND	
2		6.091				
8 isobutylene						
1		5.232			ND	
2		5.934				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

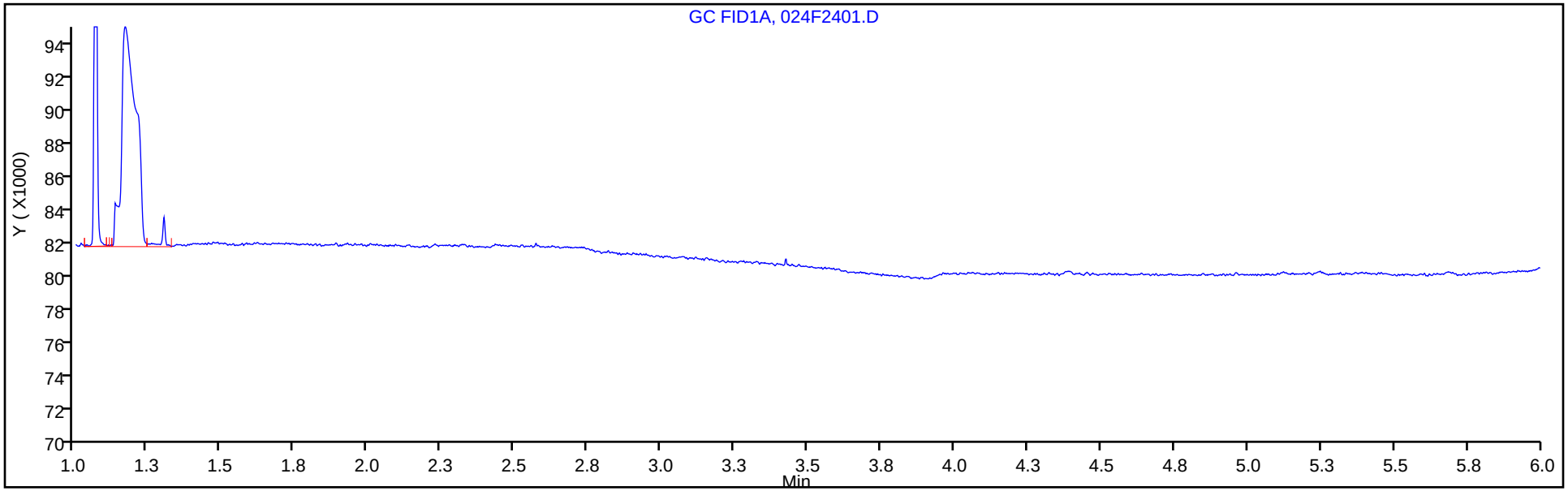
a - User Assigned ID

Report Date: 26-May-2021 13:51:16 Chrom Revision: 2.3 13-May-2021 07:57:40

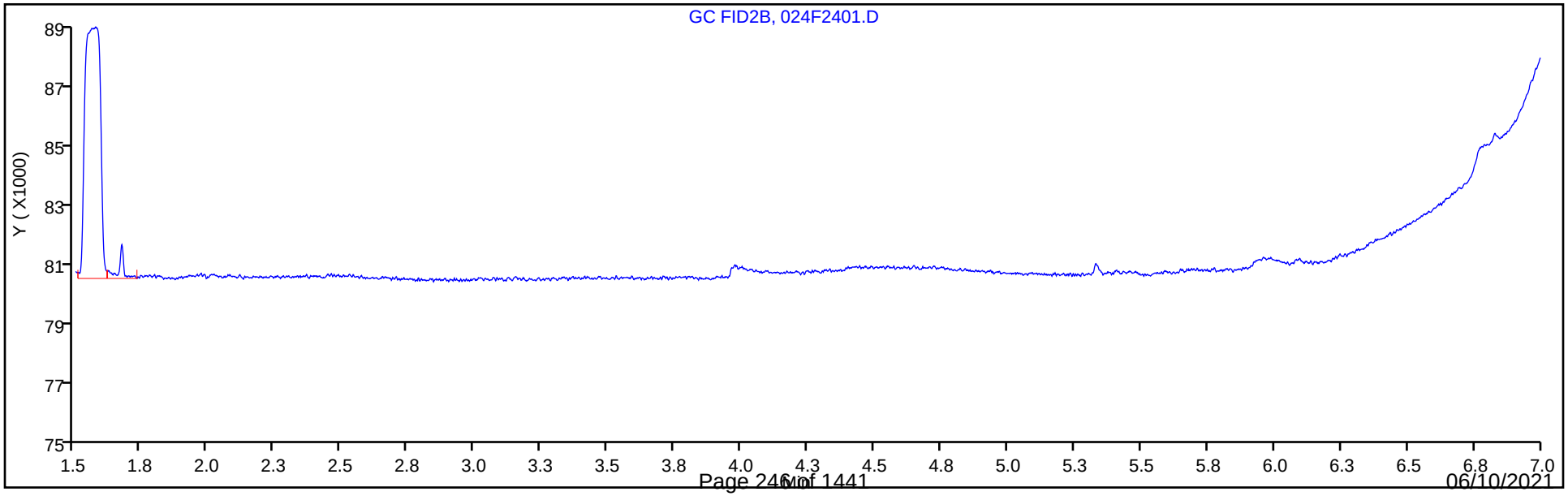
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\024F2401.D				
Injection Date:	25-May-2021 15:37:36	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-G-4	Lab Sample ID:	280-148902-4	Worklist Smp#:	24
Client ID:	NW071-21A				
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

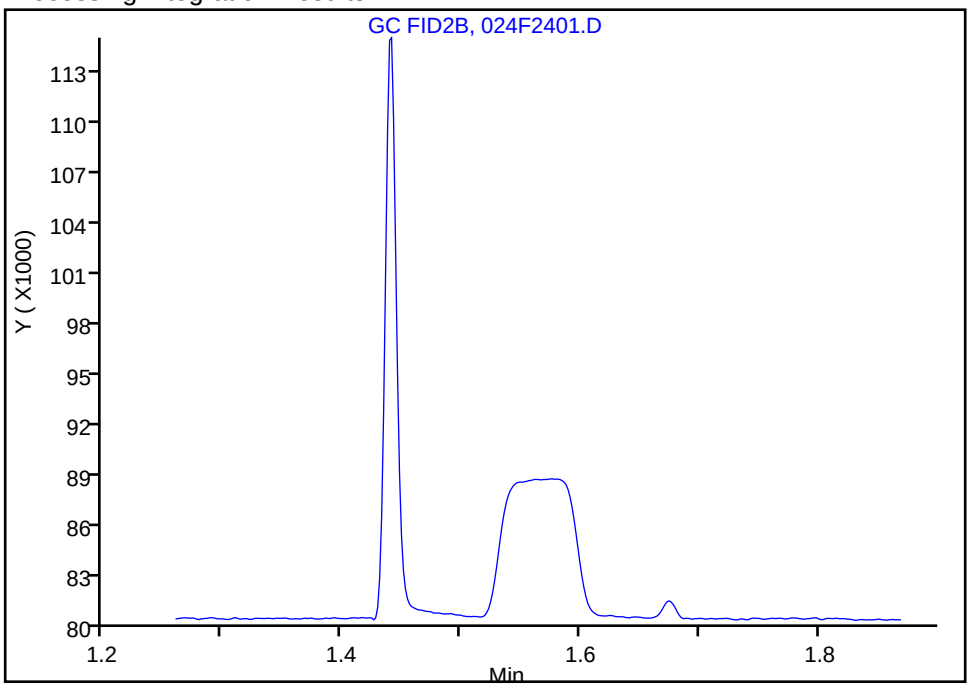
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\024F2401.D				
Injection Date:	25-May-2021 15:37:36	Instrument ID:	VGC_J		
Lims ID:	280-148902-G-4	Lab Sample ID:	280-148902-4		
Client ID:	NW071-21A				
Operator ID:	robertstr	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	18.000 mL	Dil. Factor:	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

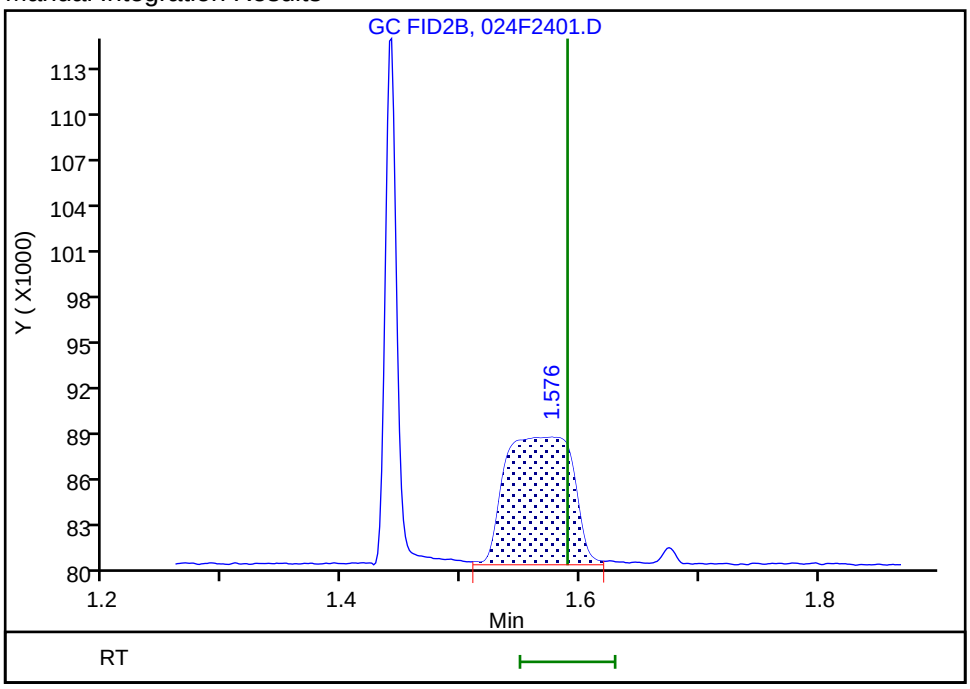
Not Detected
Expected RT: 1.59

Processing Integration Results



Manual Integration Results

RT: 1.58
Area: 32928
Amount: 0.025372
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:48:40
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A Lab Sample ID: 280-148902-5

Matrix: Water Lab File ID: 037F3701.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 12:50

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 18:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\037F3701.D				
Lims ID:	280-148902-I-5				
Client ID:	G0070-21A				
Sample Type:	Client				
Inject. Date:	25-May-2021 18:20:33	ALS Bottle#:	37	Worklist Smp#:	37
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-148902-i-5				
Operator ID:	robertstr	Instrument ID:	VGC_J		
Method:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	26-May-2021 13:09:25	Calib Date:	24-Jun-2020 11:46:32		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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:	CTX1675				

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		1.181			ND	
2		1.589				
3 Ethane						
1		1.446			ND	
2		2.779				
4 Ethylene						
1		1.729			ND	
2		2.393				
5 Propane						
1		2.534			ND	
2		4.626				
6 Acetylene						
1		4.032			ND	
2		2.513				
7 Butane						
1		4.381			ND	
2		6.091				
8 isobutylene						
1		5.232			ND	
2		5.934				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

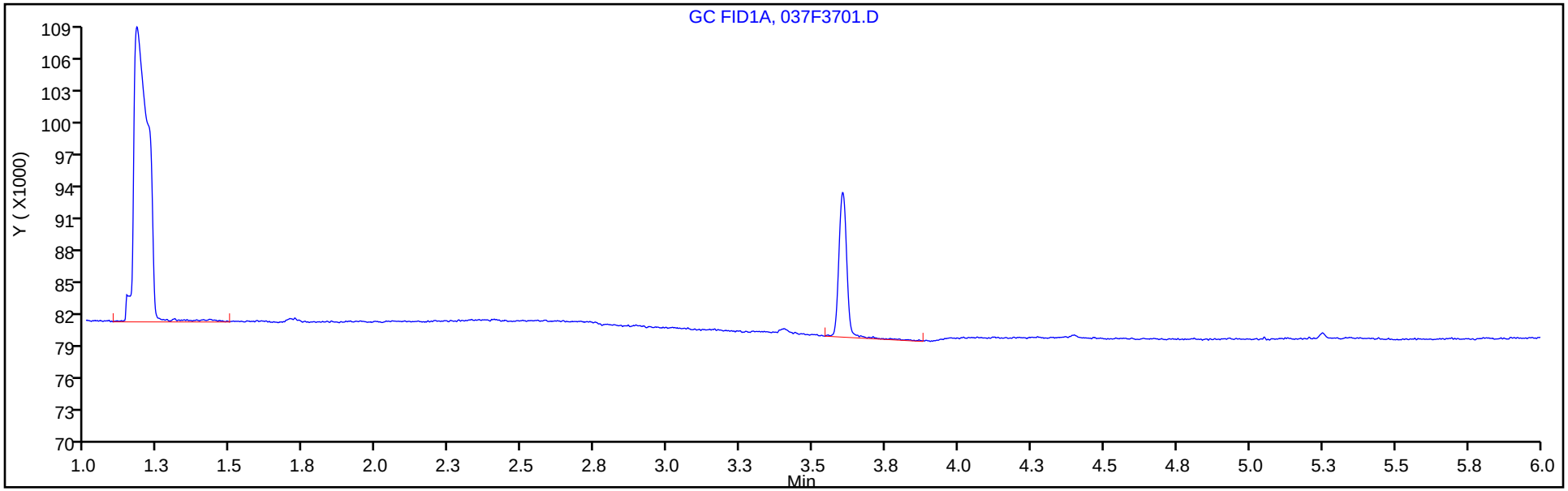
Report Date: 26-May-2021 13:09:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

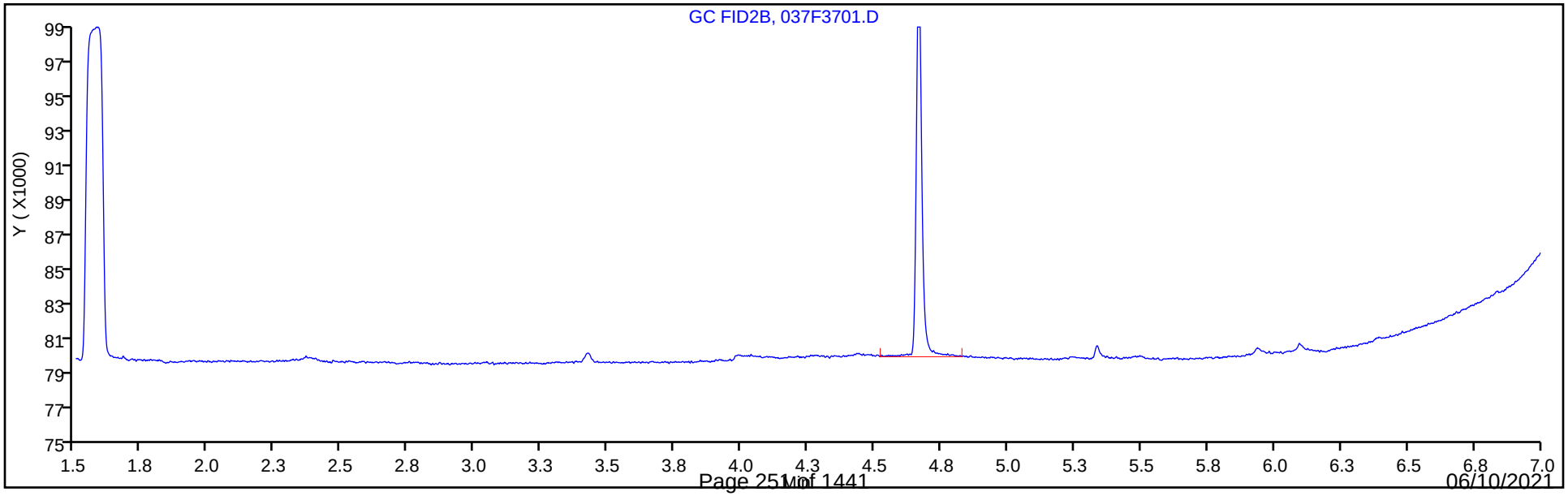
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\037F3701.D

Injection Date:	25-May-2021 18:20:33	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-5	Lab Sample ID:	280-148902-5	Worklist Smp#:	37
Client ID:	G0070-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	37
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.: 280-148902-1

SDG No.:

Client Sample ID: G0089-21A Lab Sample ID: 280-148902-6

Matrix: Water Lab File ID: 043F4301.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 13:20

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 19:34

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.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	2.1		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\043F4301.D
Lims ID: 280-148902-I-6
Client ID: G0089-21A
Sample Type: Client
Inject. Date: 25-May-2021 19:34:39 ALS Bottle#: 43 Worklist Smp#: 43
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-i-6
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:06:41

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.172	1.181	-0.009	260348235	2204.8	
2	1.573	1.589	-0.016	227990155	2116.5	
					RPD = 4.09	
3 Ethane						
1		1.446			ND	
2		2.779				
4 Ethylene						
1		1.729			ND	
2		2.393				
5 Propane						
1		2.534			ND	
2		4.626				
6 Acetylene						
1		4.032			ND	
2		2.513				
7 Butane						
1		4.381			ND	
2		6.091				
8 isobutylene						
1		5.232			ND	
2		5.934				

QC Flag Legend

Processing Flags

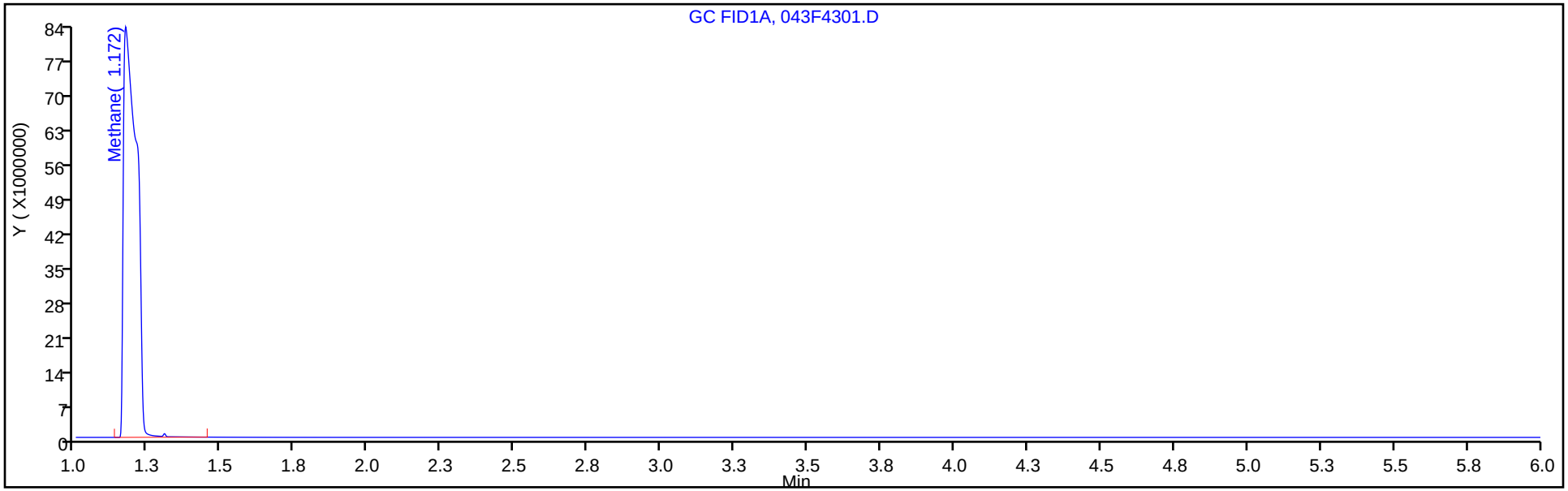
Report Date: 26-May-2021 13:09:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

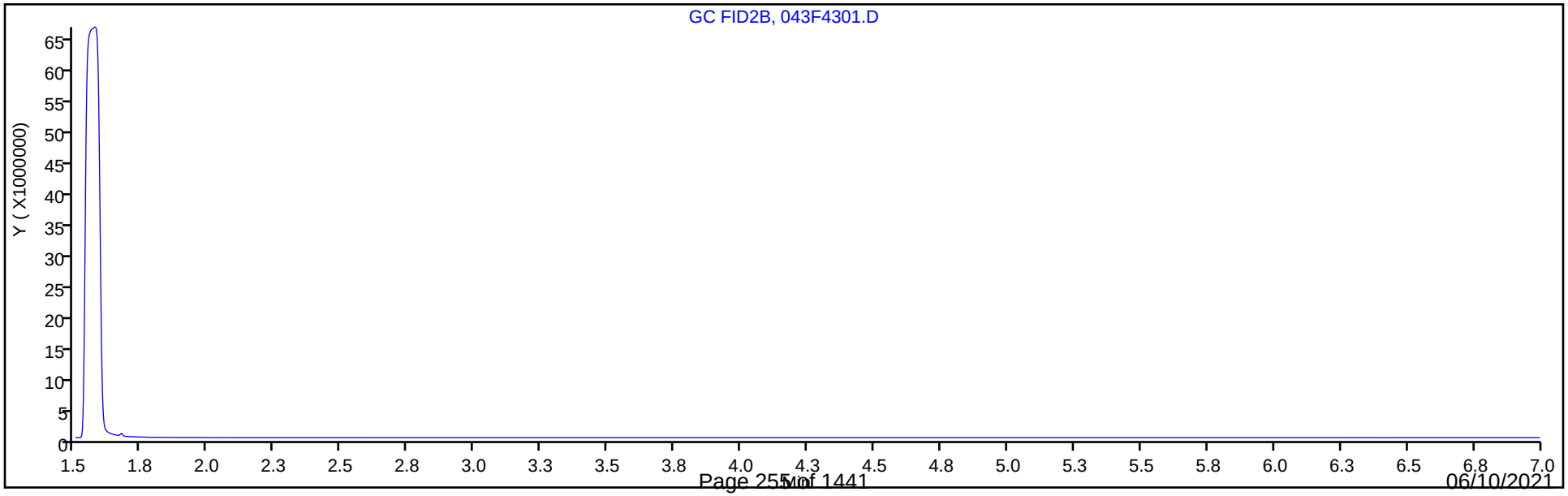
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\043F4301.D

Injection Date:	25-May-2021 19:34:39	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-6	Lab Sample ID:	280-148902-6	Worklist Smp#:	43
Client ID:	G0089-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	43
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.: 280-148902-1

SDG No.:

Client Sample ID: G0090-21A Lab Sample ID: 280-148902-7

Matrix: Water Lab File ID: 014F1401.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 12:10

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 12:50

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.017		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\014F1401.D
Lims ID: 280-148902-H-7
Client ID: G0090-21A
Sample Type: Client
Inject. Date: 26-May-2021 12:50:32 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-h-7
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 27-May-2021 09:13:53

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	1.174	1.187	-0.013	2173022	18.0	
2	1.579	1.598	-0.019	1907010	17.4	
					RPD = 3.21	
3 Ethane						
1		1.452			ND	
2		2.789				
4 Ethylene						
1		1.739			ND	
2		2.403				
5 Propane						
1		2.546			ND	
2		4.631				
6 Acetylene						
1		4.036			ND	
2		2.523				
7 Butane						
1		4.387			ND	
2		6.096				
8 isobutylene						
1		5.236			ND	
2		5.939				

QC Flag Legend

Processing Flags

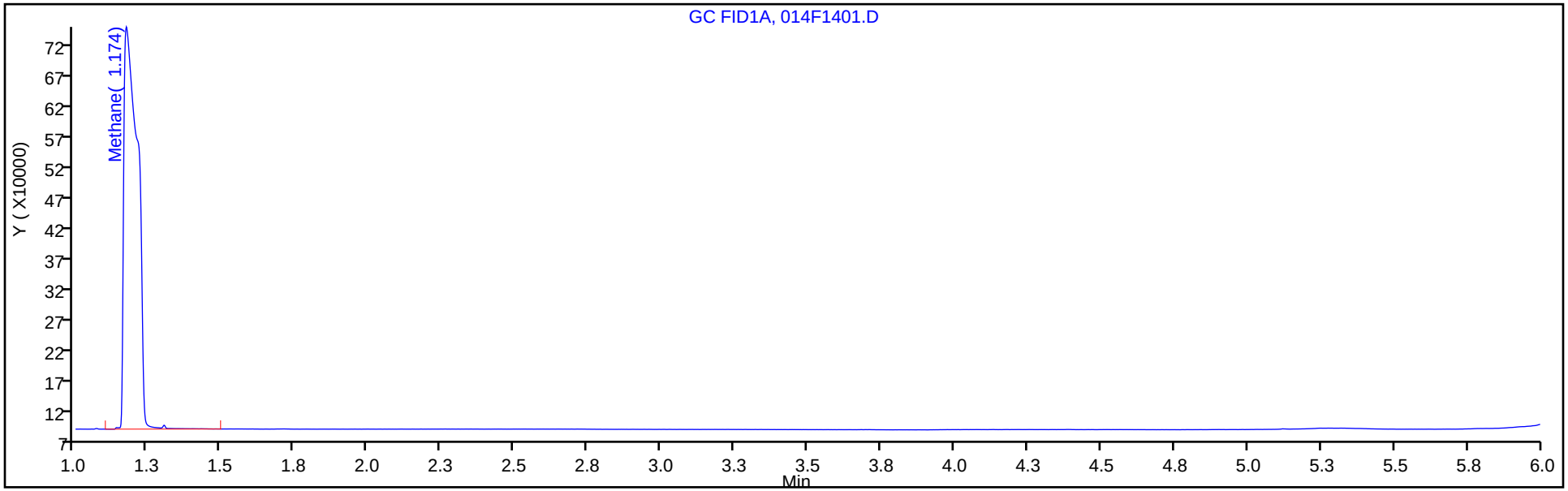
Report Date: 27-May-2021 10:24:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

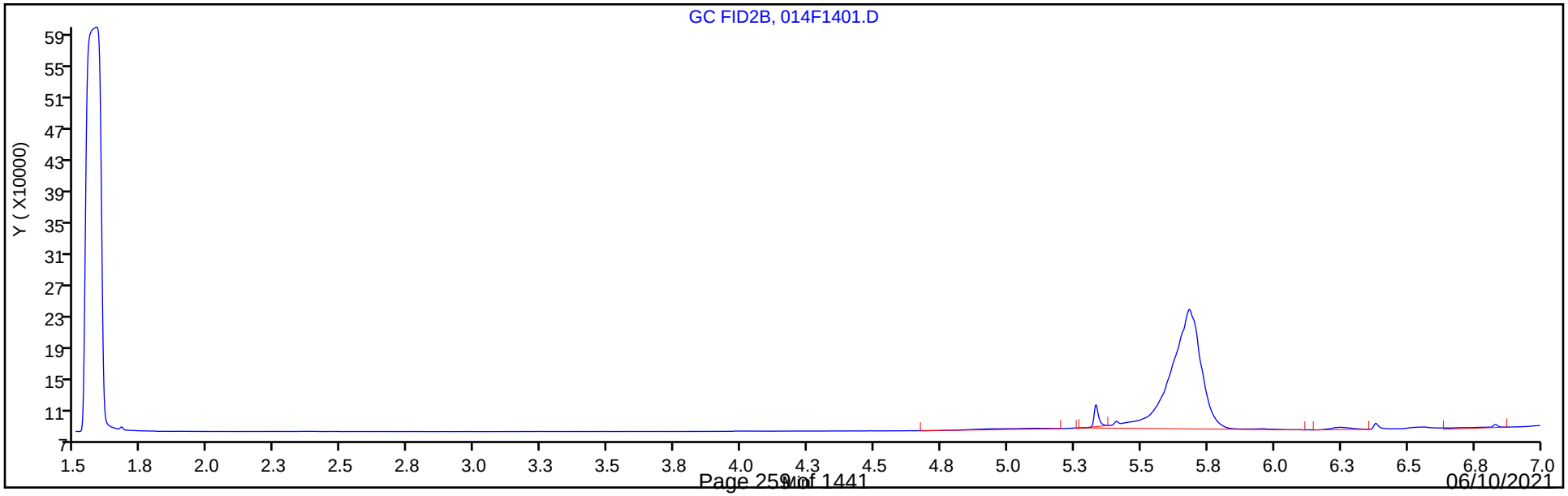
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\014F1401.D

Injection Date:	26-May-2021 12:50:32	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-H-7	Lab Sample ID:	280-148902-7	Worklist Smp#:	14
Client ID:	G0090-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0076-21A Lab Sample ID: 280-148902-8

Matrix: Water Lab File ID: 015F1501.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 11:10

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 13:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.21		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\015F1501.D
Lims ID: 280-148902-G-8
Client ID: G0076-21A
Sample Type: Client
Inject. Date: 26-May-2021 13:02:44 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-g-8
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 27-May-2021 09:14:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.173	1.187	-0.014	26058514	220.3	
2	1.578	1.598	-0.020	22859305	212.0	
					RPD = 3.86	
3 Ethane						
1		1.452			ND	
2		2.789				
4 Ethylene						
1		1.739			ND	
2		2.403				
5 Propane						7a
1	0.000	2.546	0.000	0	0	
2	4.663	4.631	0.032	49681	0.4966	a
					RPD = 200.00	
LOD = 0.5500						
6 Acetylene						
1		4.036			ND	
2		2.523				
7 Butane						
1		4.387			ND	
2		6.096				
8 isobutylene						
1		5.236			ND	
2		5.939				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

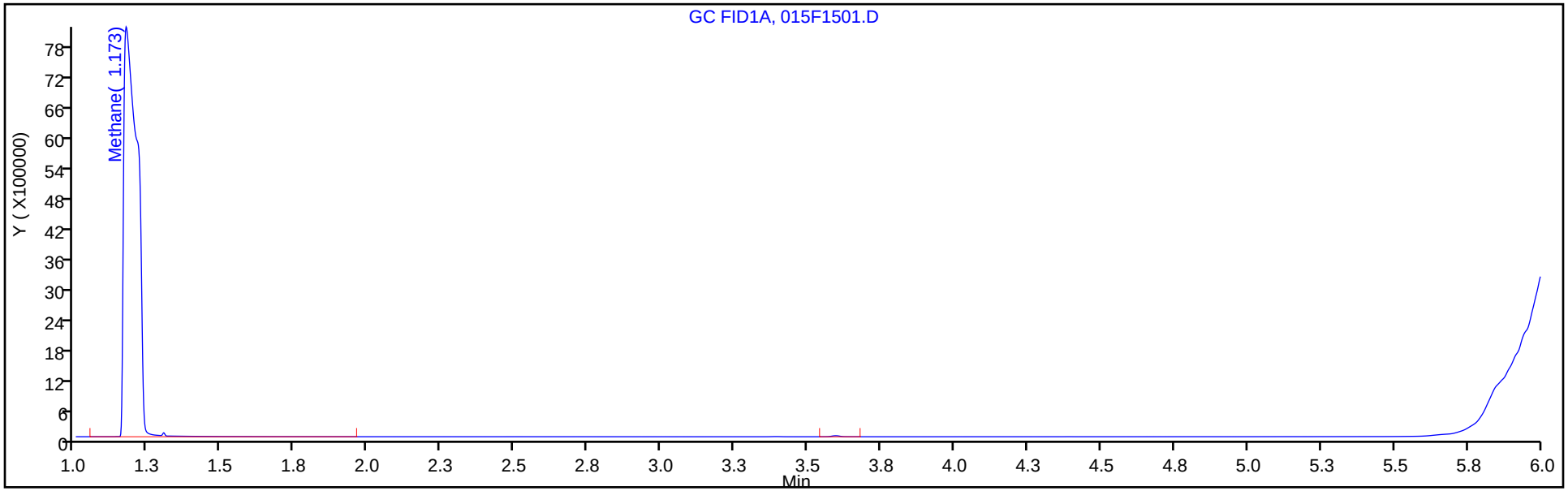
Report Date: 27-May-2021 10:24:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

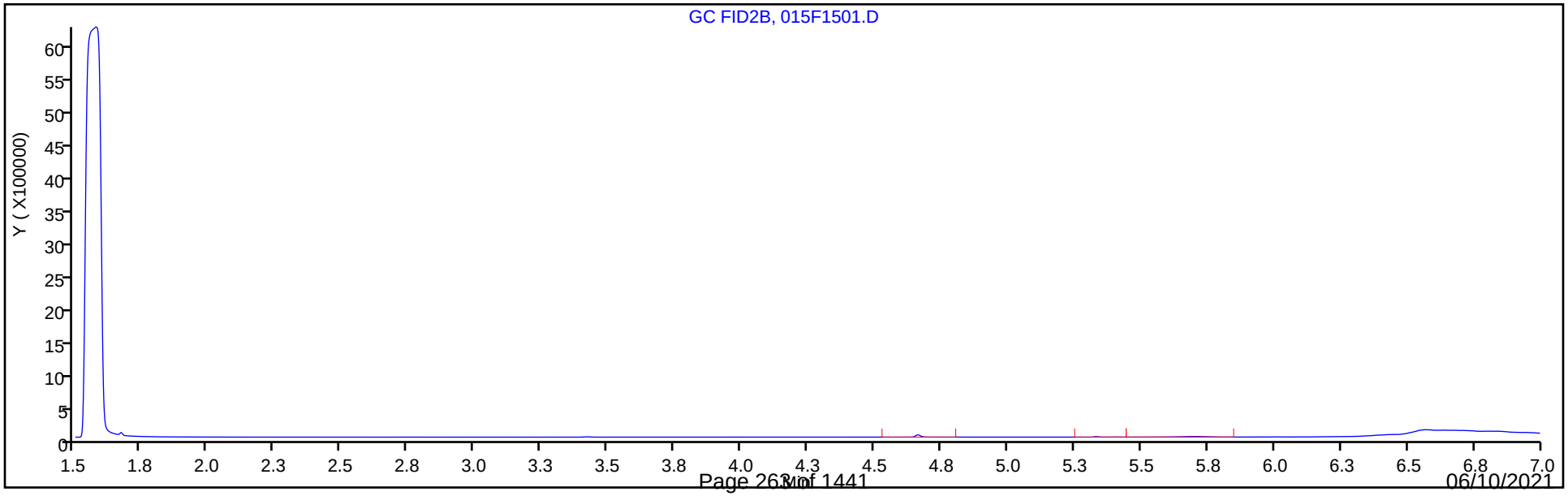
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\015F1501.D

Injection Date:	26-May-2021 13:02:44	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-G-8	Lab Sample ID:	280-148902-8	Worklist Smp#:	15
Client ID:	G0076-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0075-21A Lab Sample ID: 280-148902-9

Matrix: Water Lab File ID: 016F1601.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 10:00

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 13:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\016F1601.D
Lims ID: 280-148902-G-9
Client ID: G0075-21A
Sample Type: Client
Inject. Date: 26-May-2021 13:14:56 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-g-9
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 27-May-2021 09:34:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						7
1		1.187			ND	
2		1.598				
3 Ethane						
1		1.452			ND	
2		2.789				
4 Ethylene						
1		1.739			ND	
2		2.403				
5 Propane						
1		2.546			ND	
2		4.631				
6 Acetylene						
1		4.036			ND	
2		2.523				
7 Butane						
1		4.387			ND	
2		6.096				
8 isobutylene						
1		5.236			ND	
2		5.939				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

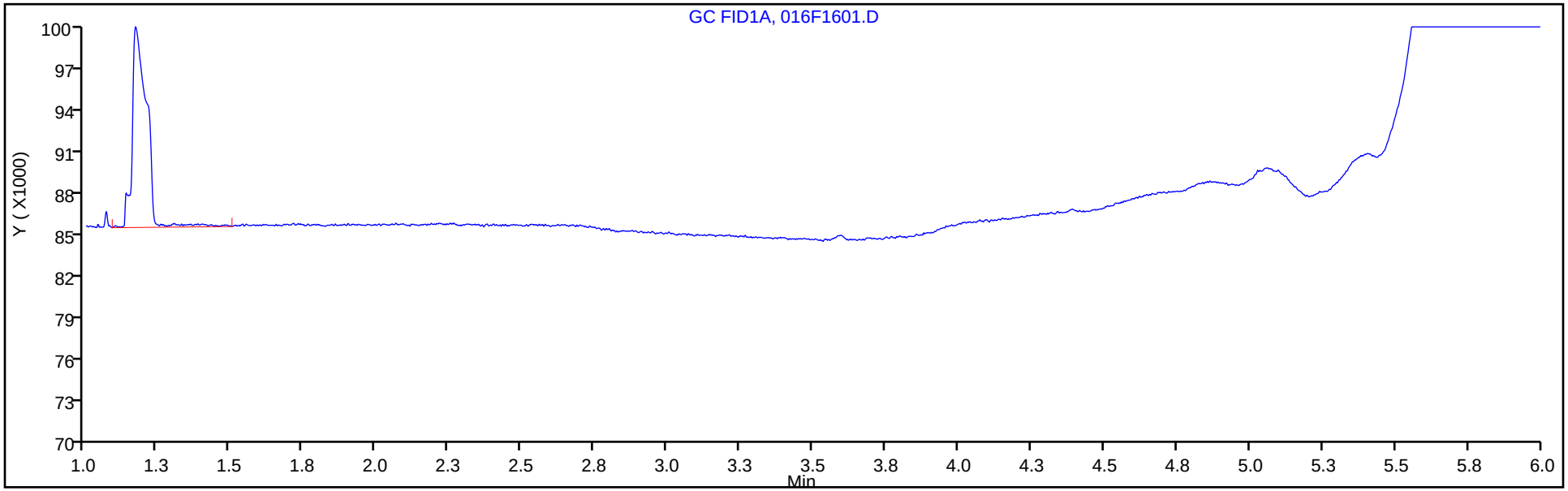
Report Date: 27-May-2021 10:24:41 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

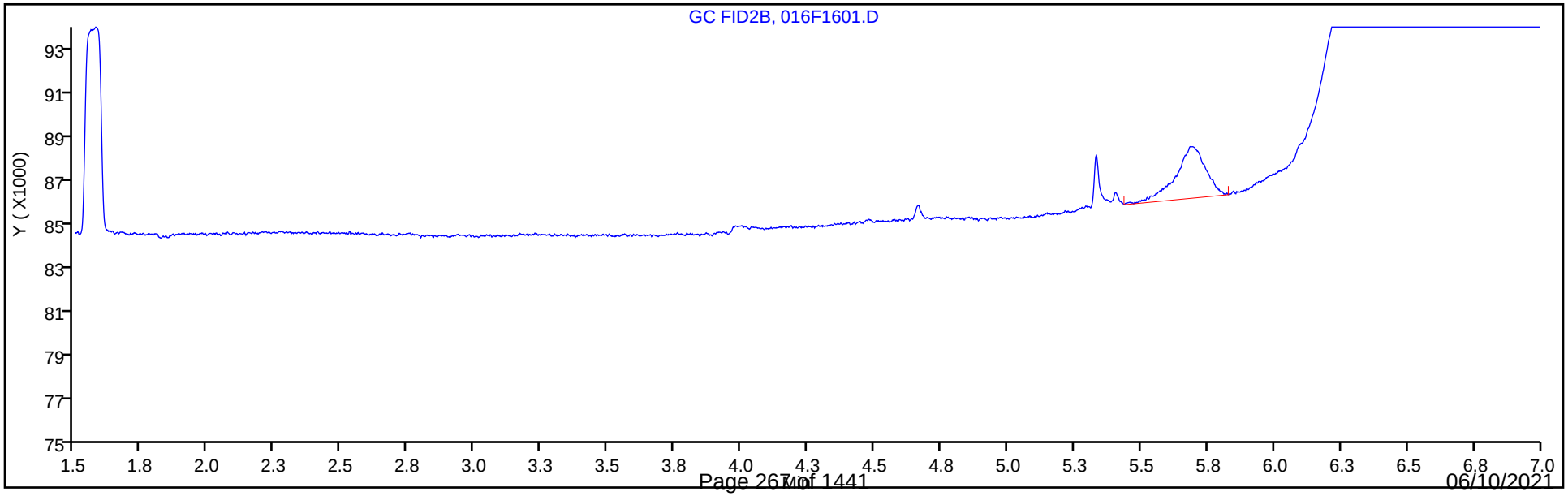
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\016F1601.D

Injection Date:	26-May-2021 13:14:56	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-G-9	Lab Sample ID:	280-148902-9	Worklist Smp#:	16
Client ID:	G0075-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0082-21A Lab Sample ID: 280-148902-10

Matrix: Water Lab File ID: 017F1701.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 10:40

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 13:27

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.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.85		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\017F1701.D
Lims ID: 280-148902-G-10
Client ID: G0082-21A
Sample Type: Client
Inject. Date: 26-May-2021 13:27:10 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-g-10
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 27-May-2021 09:34:45

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	1.169	1.187	-0.018	105226676	890.9	
2	1.573	1.598	-0.025	91159587	846.1	
					RPD = 5.16	
3 Ethane						
1		1.452			ND	
2		2.789				
4 Ethylene						
1		1.739			ND	
2		2.403				
5 Propane						
1		2.546			ND	
2		4.631				
6 Acetylene						
1		4.036			ND	
2		2.523				
7 Butane						
1		4.387			ND	
2		6.096				
8 isobutylene						
1		5.236			ND	
2		5.939				

QC Flag Legend

Processing Flags

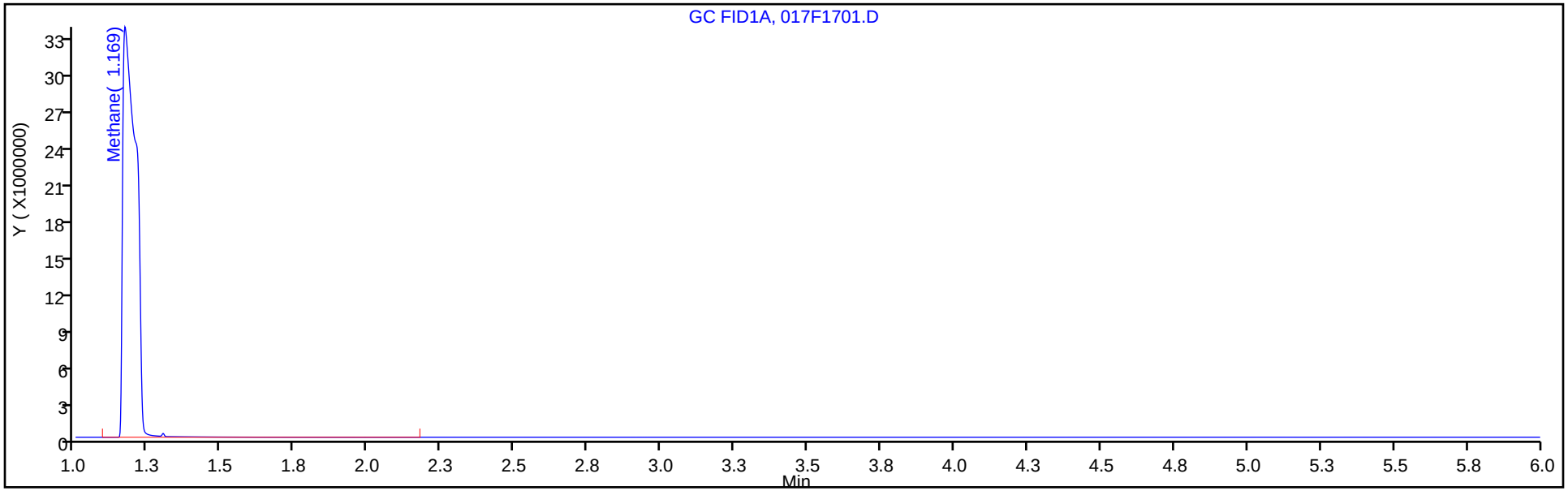
Report Date: 27-May-2021 10:24:41 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

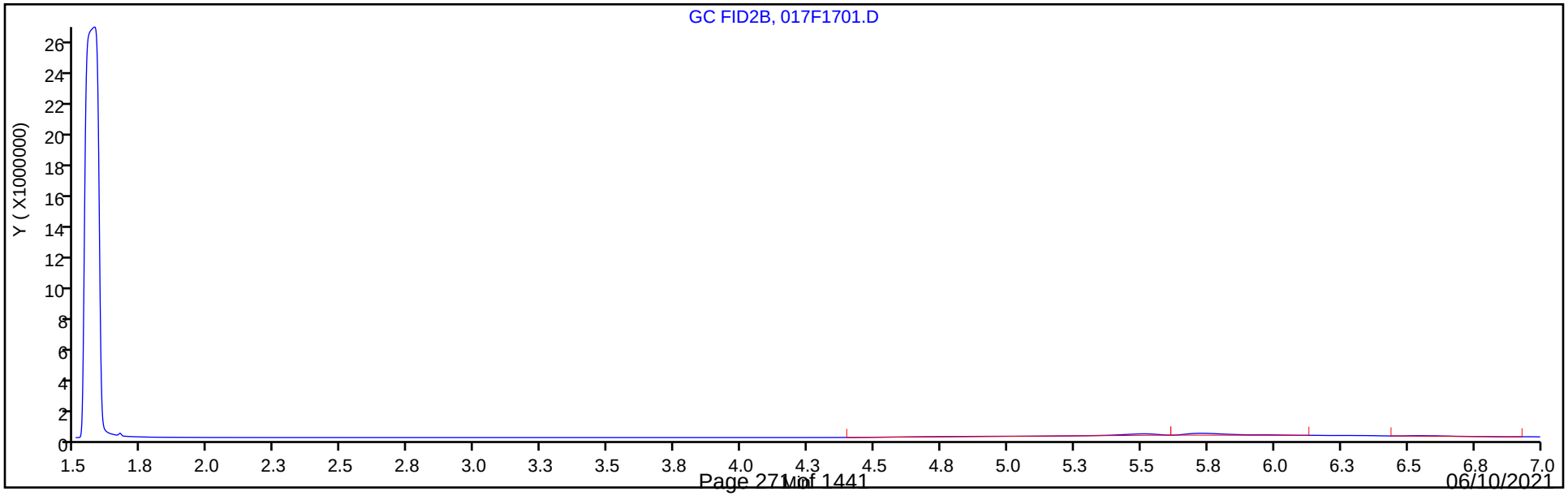
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\017F1701.D

Injection Date:	26-May-2021 13:27:10	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-G-10	Lab Sample ID:	280-148902-10	Worklist Smp#:	17
Client ID:	G0082-21A				
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 VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45322

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	1.174	1.173	1.175	1.172	1.172	1.168	1.172	1.169	1.163		1.132 - 1.212	1.171
Ethane	1.462	1.463	1.460	1.457	1.462	1.458					1.412 - 1.512	1.460
Ethylene	1.781	1.778	1.782	1.779	1.779	1.771					1.729 - 1.829	1.778
Acetylene	4.272	4.269	4.262	4.244	4.234	4.216					4.154 - 4.314	4.250

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45322

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	170762 119639 105834	144481 119186	132564 115371	124543 114737	Lin2	48685.2680	118061.221							0.9970		0.9900
Ethane	105903 112915	109698 115182	123636	120380	Ave		114619.149				5.8		20.0			
Ethylene	85223 93883	88022 91460	96848	95242	Ave		91779.7559				4.9		20.0			
Acetylene	22999 26292	25177 26445	27007	27739	Ave		25942.9894				6.4		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.: 280-148902-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45322

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	155827 34804015	263689 208468313	1935518 829291020	9092065 2294825441	17468122	0.913 292	1.83 1807	14.6 7228	73.0 21683	146
Ethane	Ave	181168 63053378	375320	3384056	16474689	30906100	1.71 547	3.42	27.4	137	274
Ethylene	Ave	136002 46705608	280938	2472852	12159201	23971500	1.60 511	3.19	25.5	128	255
Acetylene	Ave	34073 12537110	74600	640190	3287680	6232354	1.48 474	2.96	23.7	119	237

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2020 10:08:41 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 280-0092709-001
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 10:23:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.172	0.002	155827	0.9125	0.9075	
2	1.578	1.577	0.001	127907	0.9125	0.9072	
						RPD = 0.03	
3 Ethane							
1	1.462	1.462	0.000	181168	1.71	1.58	
2	2.754	2.756	-0.002	152683	1.71	1.57	
						RPD = 0.50	
4 Ethylene							M
1	1.781	1.779	0.002	136002	1.60	1.48	
2	2.369	2.372	-0.003	107572	1.60	1.47	M
						RPD = 0.62	
5 Propane							
1	2.692	2.676	0.016	276461	2.51	2.34	
2	4.616	4.609	0.007	230434	2.51	2.30	
						RPD = 1.64	
6 Acetylene							Ma
1	4.272	4.234	0.038	34073	1.48	1.31	M
2	2.486	2.486	0.000	46871	1.48	1.37	M
						RPD = 3.88	
7 Butane							Ma
1	4.581	4.541	0.040	302314	3.31	3.44	M
2	6.089	6.076	0.013	280641	3.31	3.45	M
						RPD = 0.36	
8 isobutylene							
1	5.414	5.381	0.033	210574	3.19	2.94	
2	5.929	5.921	0.008	184181	3.19	2.94	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

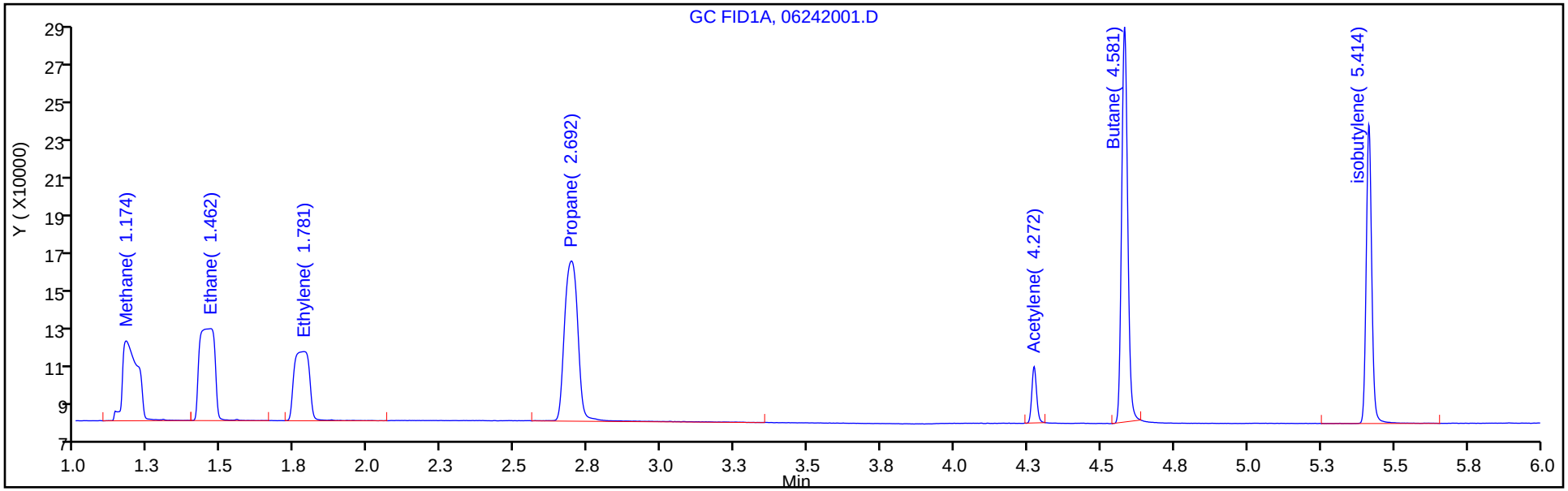
Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

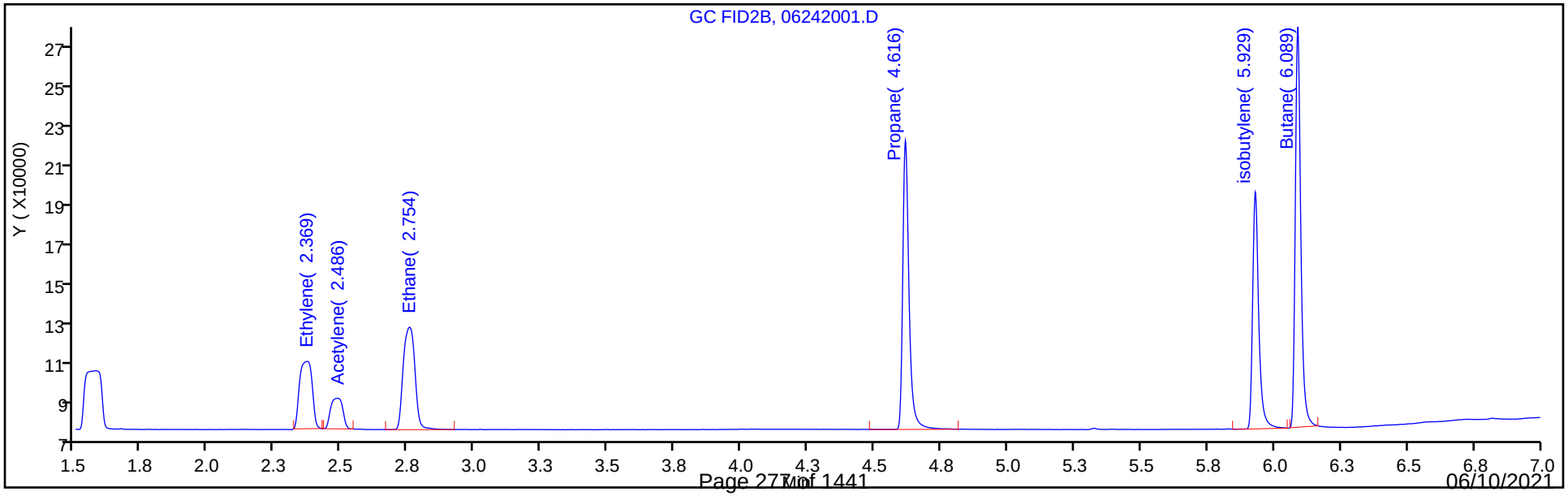
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D

Injection Date:	24-Jun-2020 10:08:41	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L1			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

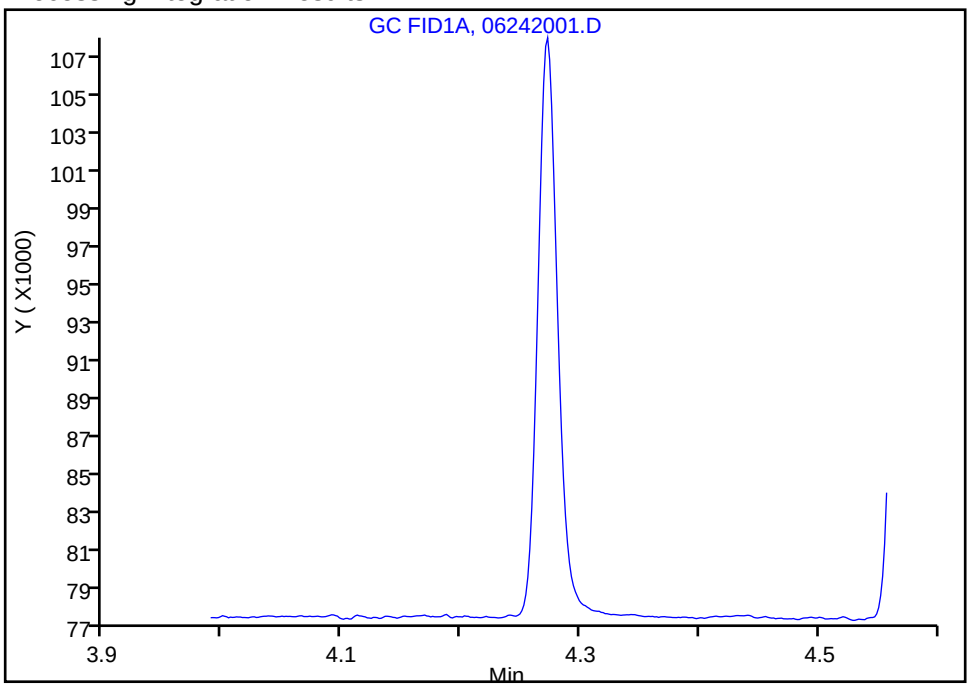
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D				
Injection Date:	24-Jun-2020 10:08:41	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

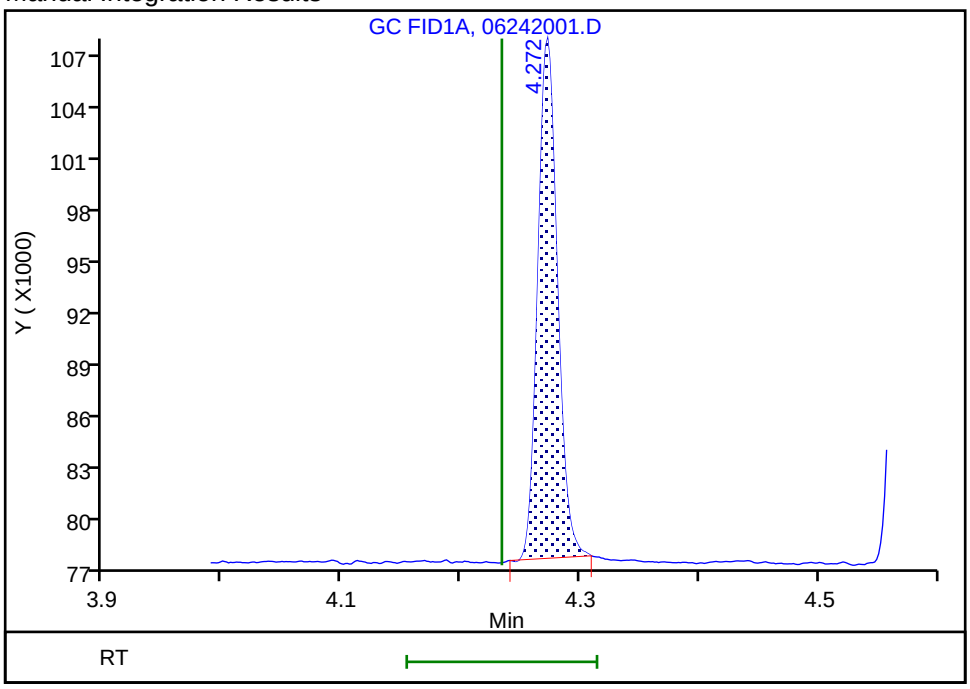
Processing Integration Results

RT: 4.24
Area: 0
Amount: 1.272887
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 34073
Amount: 1.313380
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:04:01
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2020 10:20:49 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 280-0092709-002
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:58 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:05:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.173	1.172	0.001	263689	1.83	1.82	
2	1.576	1.577	-0.001	226430	1.83	1.82	
						RPD = 0.04	
3 Ethane							
1	1.463	1.462	0.001	375320	3.42	3.27	
2	2.759	2.756	0.003	317897	3.42	3.27	
						RPD = 0.00	
4 Ethylene							
1	1.778	1.779	-0.001	280938	3.19	3.06	
2	2.373	2.372	0.001	225225	3.19	3.08	
						RPD = 0.72	
5 Propane							
1	2.693	2.676	0.017	552814	5.02	4.68	
2	4.619	4.609	0.010	470455	5.02	4.70	
						RPD = 0.44	
6 Acetylene							M
1	4.269	4.234	0.035	74600	2.96	2.88	
2	2.486	2.486	0.000	96395	2.96	2.81	M
						RPD = 2.38	
7 Butane							Ma
1	4.578	4.541	0.037	587119	6.61	6.04	M
2	6.089	6.076	0.013	535944	6.61	5.99	M
						RPD = 0.75	
8 isobutylene							
1	5.413	5.381	0.032	406845	6.38	5.68	
2	5.931	5.921	0.010	356829	6.38	5.69	
						RPD = 0.17	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

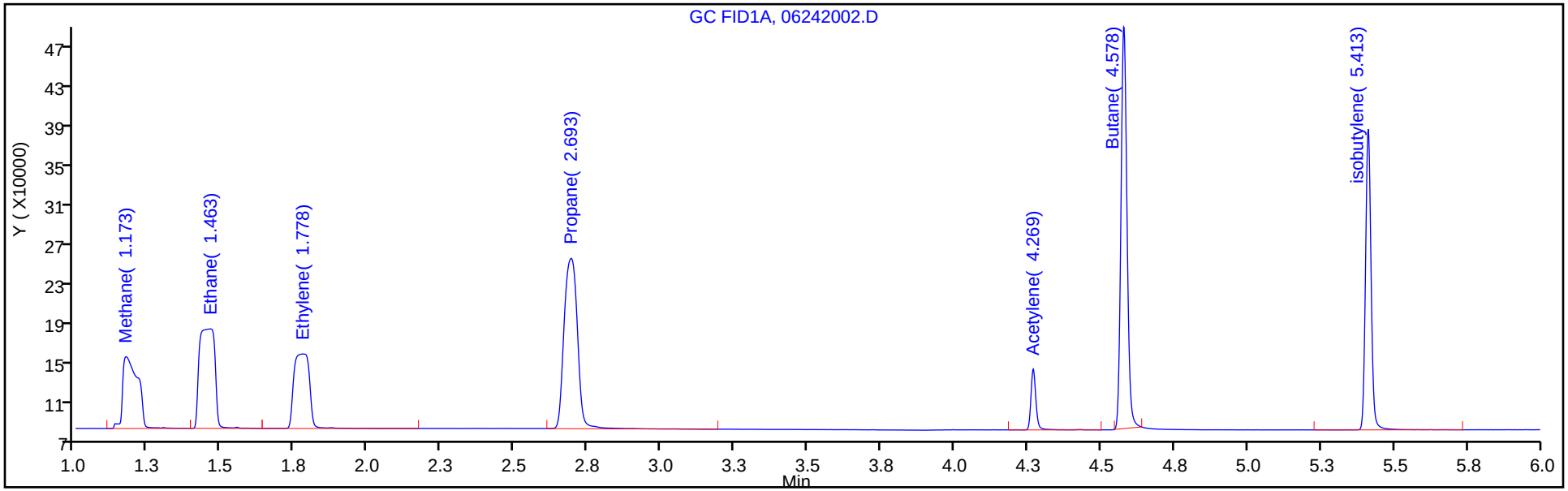
Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

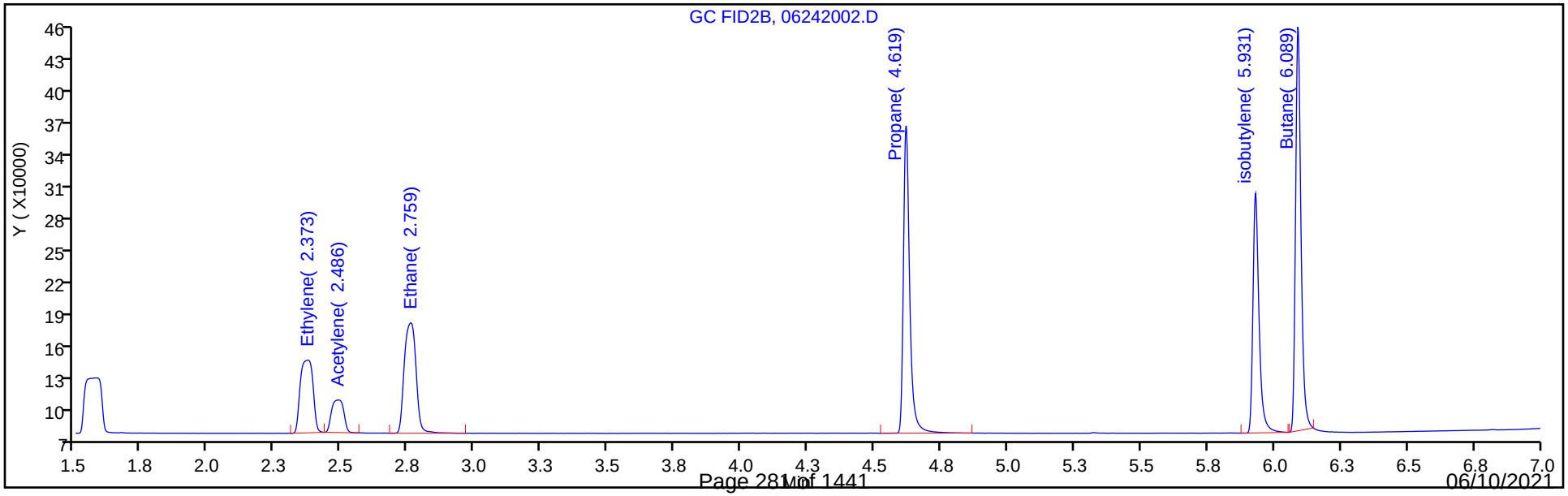
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D

Injection Date:	24-Jun-2020 10:20:49	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L2			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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jun-2020 10:33:02 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 280-0092709-003
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:08:41

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.175	1.172	0.003	1935518	14.6	16.0	
2	1.582	1.577	0.005	1760038	14.6	16.1	
						RPD = 0.49	
3 Ethane							
1	1.460	1.462	-0.002	3384056	27.4	29.5	
2	2.760	2.756	0.004	2873171	27.4	29.6	
						RPD = 0.24	
4 Ethylene							
1	1.782	1.779	0.003	2472852	25.5	26.9	
2	2.375	2.372	0.003	1992619	25.5	27.3	
						RPD = 1.23	
5 Propane							
1	2.690	2.676	0.014	5082003	40.1	43.0	
2	4.618	4.609	0.009	4318201	40.1	43.2	
						RPD = 0.29	
6 Acetylene							M
1	4.262	4.234	0.028	640190	23.7	24.7	
2	2.488	2.486	0.002	841585	23.7	24.5	M
						RPD = 0.66	
7 Butane							M
1	4.572	4.541	0.031	5935156	52.9	54.8	
2	6.088	6.076	0.012	5391164	52.9	54.3	M
						RPD = 0.94	
8 isobutylene							Ma
1	5.405	5.381	0.024	3773741	51.1	52.7	M
2	5.928	5.921	0.007	3291654	51.1	52.5	M
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

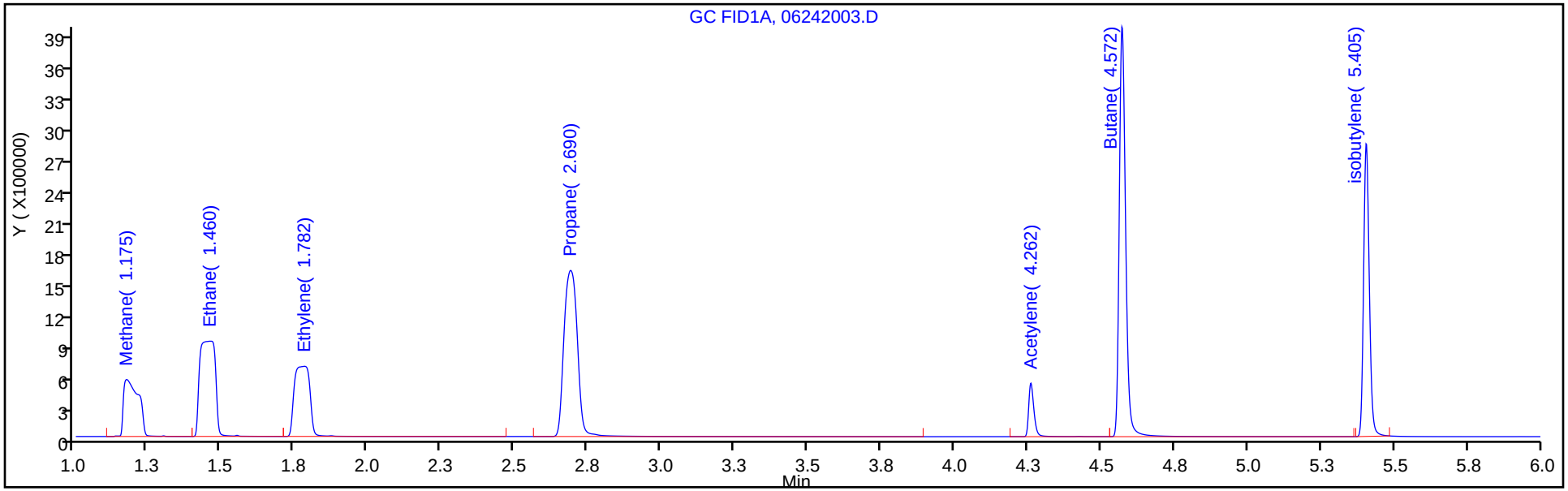
Report Date: 24-Jun-2020 12:39:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

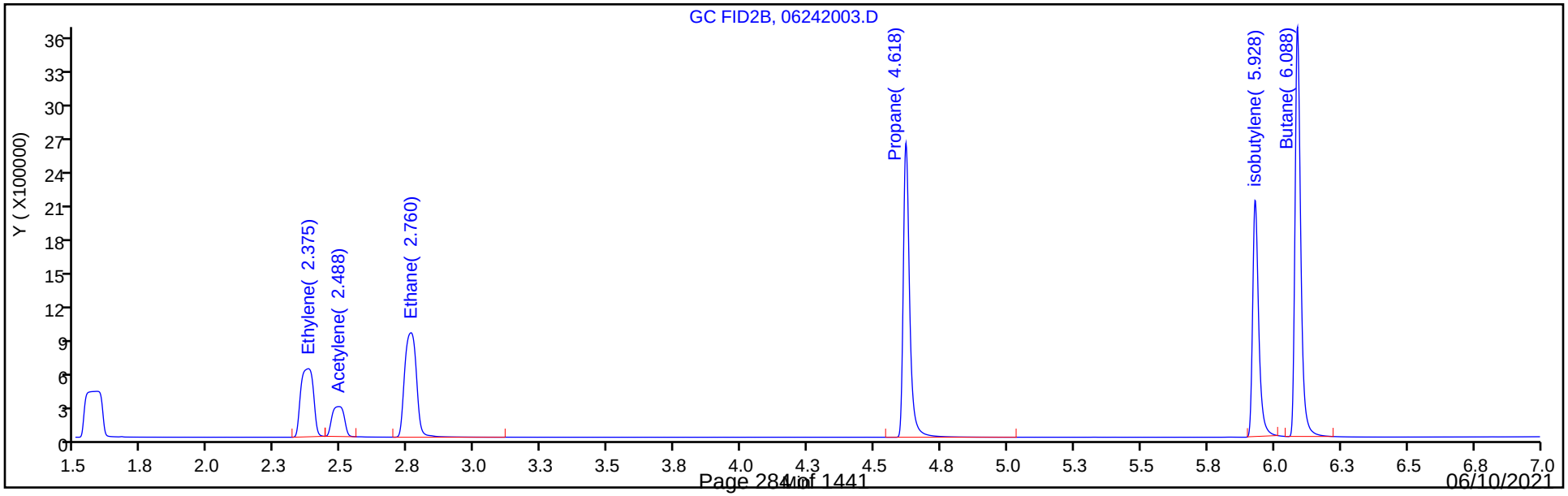
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D

Injection Date:	24-Jun-2020 10:33:02	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L3			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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D
Lims ID: ICRT L4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 24-Jun-2020 10:45:14 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT L4
Misc. Info.: 280-0092709-004
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:02:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	9092065	73.0	76.6	
2	1.578	1.578	0.000	8241315	73.0	76.2	
						RPD = 0.48	
3 Ethane							
1	1.457	1.457	0.000	16474689	136.9	143.7	
2	2.756	2.756	0.000	13906890	136.9	143.2	
						RPD = 0.34	
4 Ethylene							
1	1.779	1.779	0.000	12159201	127.7	132.5	
2	2.373	2.373	0.000	9735448	127.7	133.3	
						RPD = 0.59	
5 Propane							
1	2.682	2.682	0.000	25071225	200.7	212.3	
2	4.614	4.614	0.000	21208455	200.7	212.0	
						RPD = 0.16	
6 Acetylene							M
1	4.244	4.244	0.000	3287680	118.5	126.7	
2	2.488	2.488	0.000	4312506	118.5	125.6	M
						RPD = 0.87	
7 Butane							
1	4.554	4.554	0.000	29907332	264.5	273.2	
2	6.083	6.083	0.000	28030666	264.5	279.3	
						RPD = 2.20	
8 isobutylene							
1	5.392	5.392	0.000	19808714	255.4	276.5	
2	5.926	5.926	0.000	17460732	255.4	278.4	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

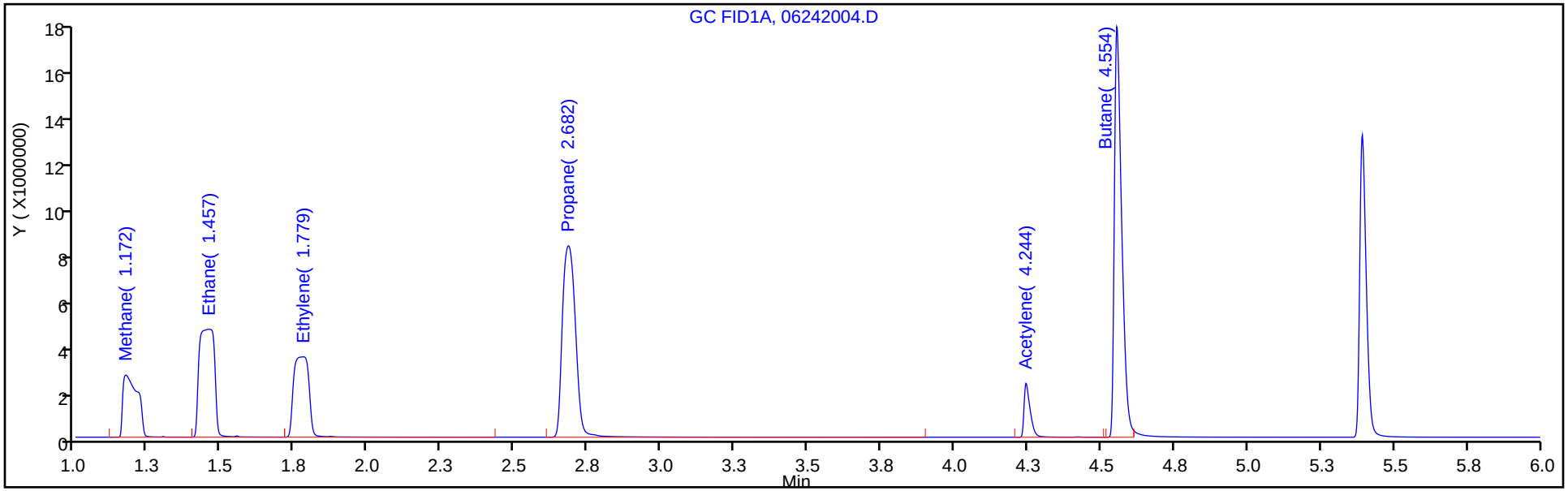
Report Date: 24-Jun-2020 12:39:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

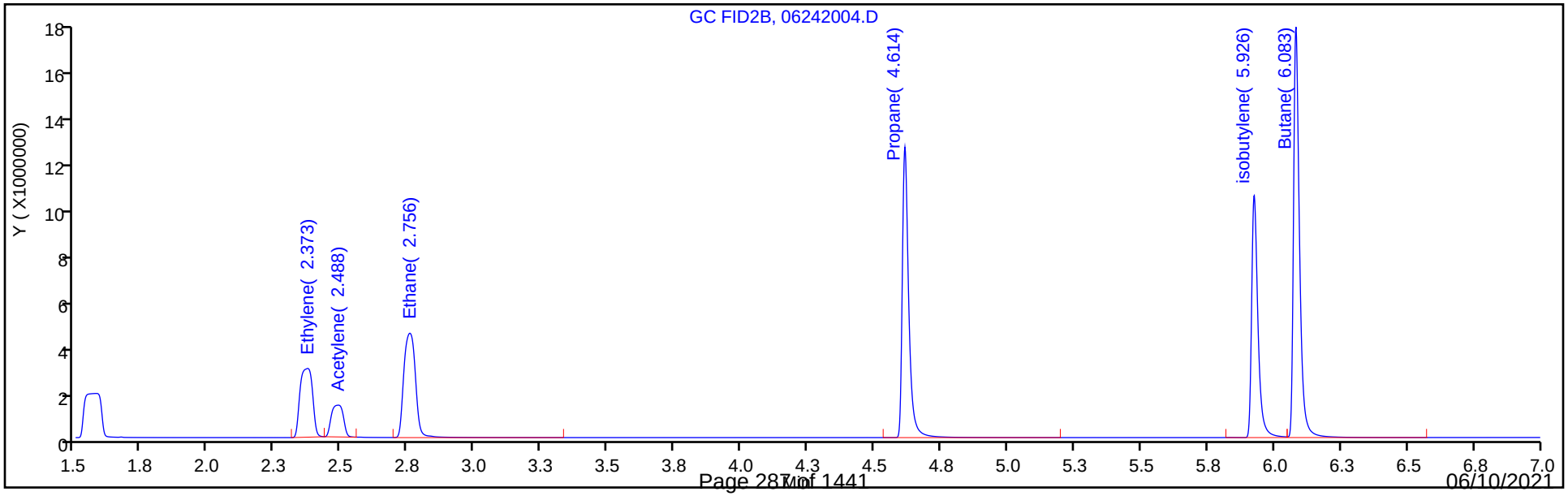
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D

Injection Date:	24-Jun-2020 10:45:14	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ICRT L4			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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jun-2020 10:57:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 280-0092709-005
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:00 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:10:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	17468122	146.0	147.5	
2	1.577	1.577	0.000	15578914	146.0	144.4	
						RPD = 2.18	
3 Ethane							
1	1.462	1.462	0.000	30906100	273.7	269.6	
2	2.756	2.756	0.000	26361358	273.7	271.5	
						RPD = 0.70	
4 Ethylene							
1	1.779	1.779	0.000	23971500	255.3	261.2	
2	2.372	2.372	0.000	18569939	255.3	254.2	
						RPD = 2.71	
5 Propane							
1	2.676	2.676	0.000	46992293	401.4	398.0	
2	4.609	4.609	0.000	40116354	401.4	401.0	
						RPD = 0.76	
6 Acetylene							M
1	4.234	4.234	0.000	6232354	237.0	240.2	
2	2.486	2.486	0.000	8203389	237.0	239.0	M
						RPD = 0.53	
7 Butane							
1	4.541	4.541	0.000	57396046	529.0	523.6	
2	6.076	6.076	0.000	52957196	529.0	527.0	
						RPD = 0.64	
8 isobutylene							
1	5.381	5.381	0.000	37720673	510.8	526.6	
2	5.921	5.921	0.000	33259110	510.8	530.3	
						RPD = 0.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

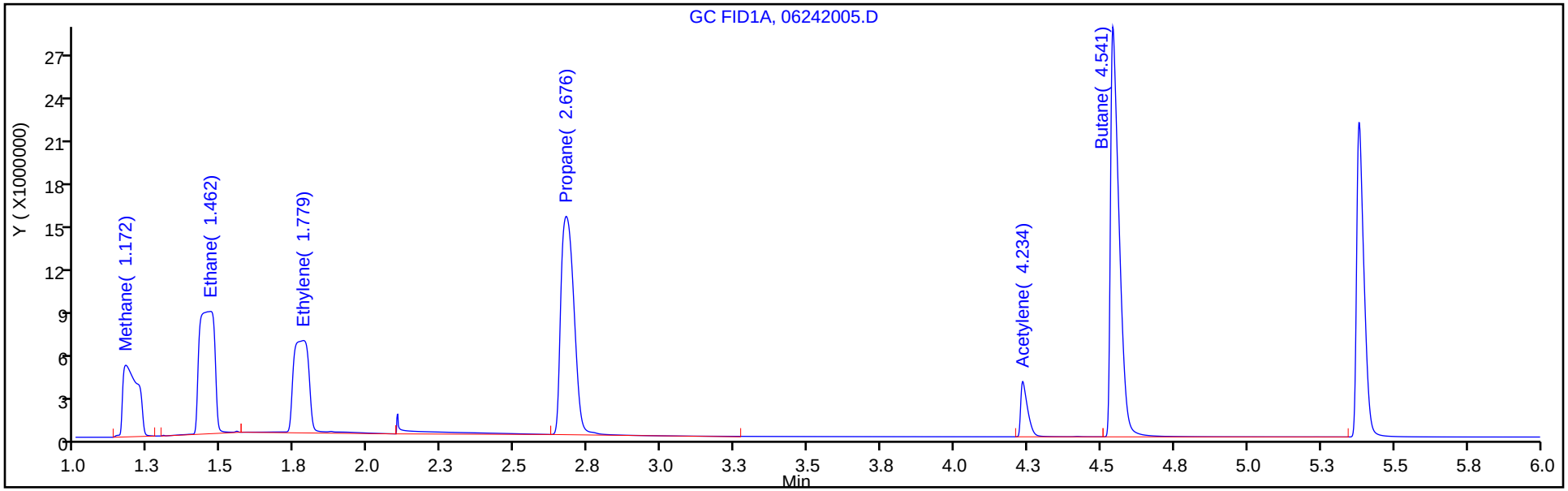
Report Date: 24-Jun-2020 12:40:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

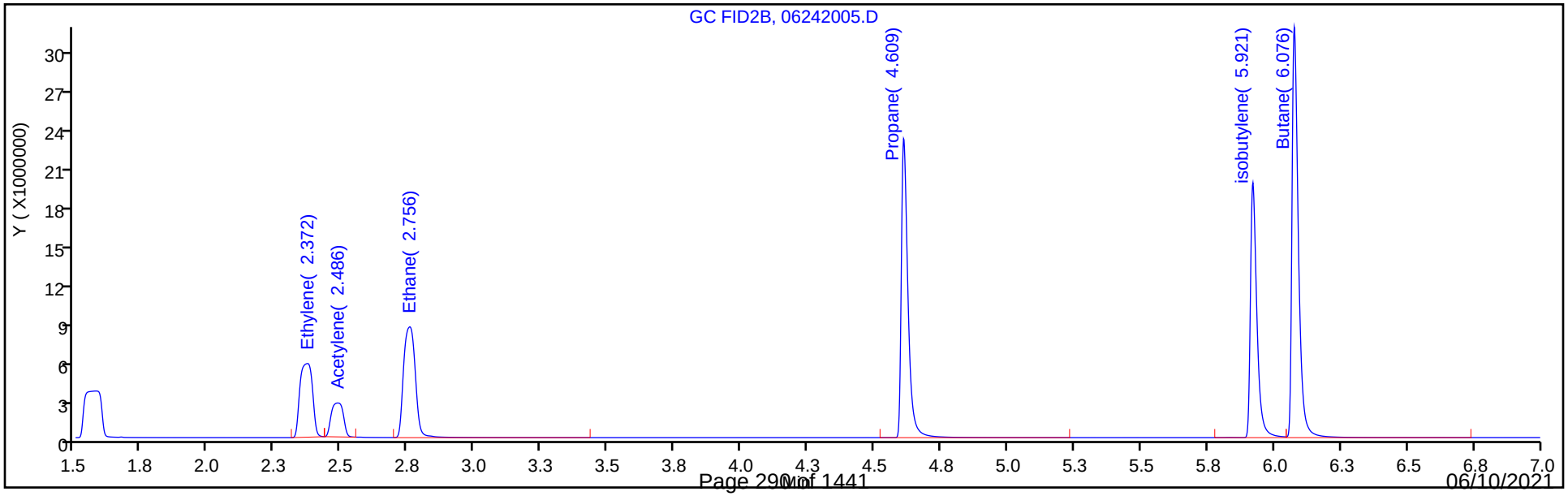
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D

Injection Date:	24-Jun-2020 10:57:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L5			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jun-2020 11:09:45 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 280-0092709-006
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:22:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.168	1.172	-0.004	34804015	292.0	294.4	
2	1.576	1.577	-0.001	31463322	292.0	291.8	
						RPD = 0.87	
3 Ethane							
1	1.458	1.462	-0.004	63053378	547.4	550.1	
2	2.750	2.756	-0.006	53331817	547.4	549.4	
						RPD = 0.14	
4 Ethylene							
1	1.771	1.779	-0.008	46705608	510.7	508.9	
2	2.366	2.372	-0.006	37428833	510.7	512.4	
						RPD = 0.68	
5 Propane							
1	2.658	2.676	-0.018	95948907	802.8	812.6	
2	4.601	4.609	-0.008	81456479	802.8	814.2	
						RPD = 0.20	
6 Acetylene							Ma
1	4.216	4.234	-0.018	12537110	474.1	483.3	M
2	2.485	2.486	-0.001	16738973	474.1	487.6	M
						RPD = 0.90	
7 Butane							Ma
1	4.521	4.541	-0.020	114699787	1058.1	1045.8	M
2	6.066	6.076	-0.010	103377764	1058.1	1028.2	M
						RPD = 1.70	
8 isobutylene							M
1	5.365	5.381	-0.016	76413104	1021.5	1066.7	
2	5.913	5.921	-0.008	66173382	1021.5	1055.1	M
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

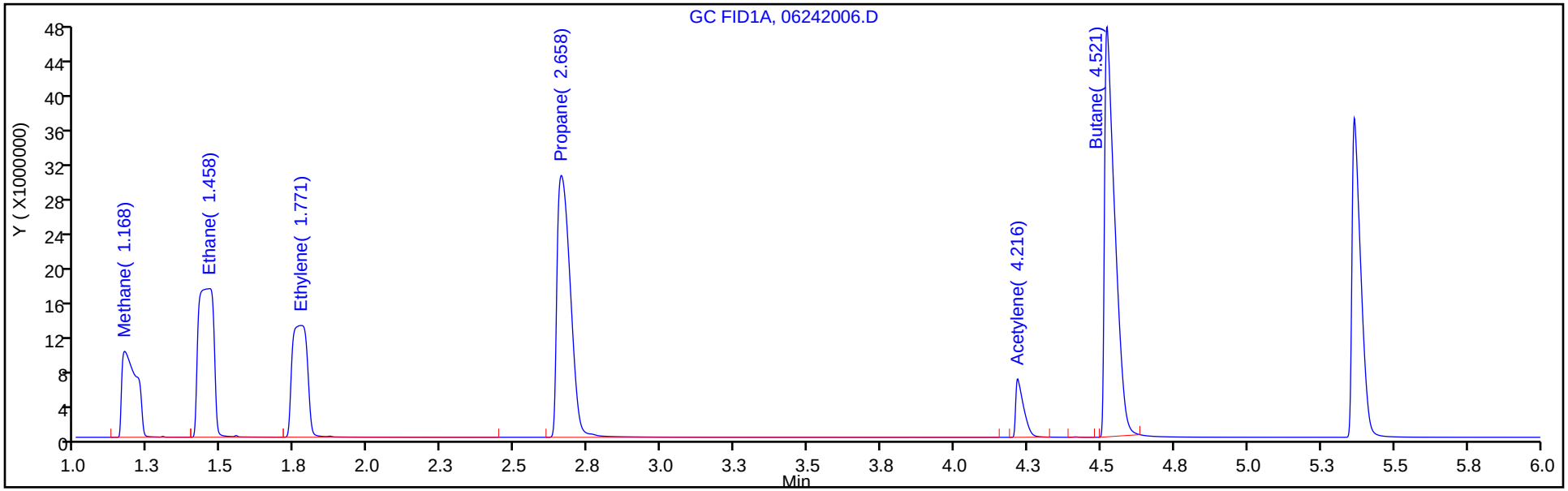
Report Date: 24-Jun-2020 12:40:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

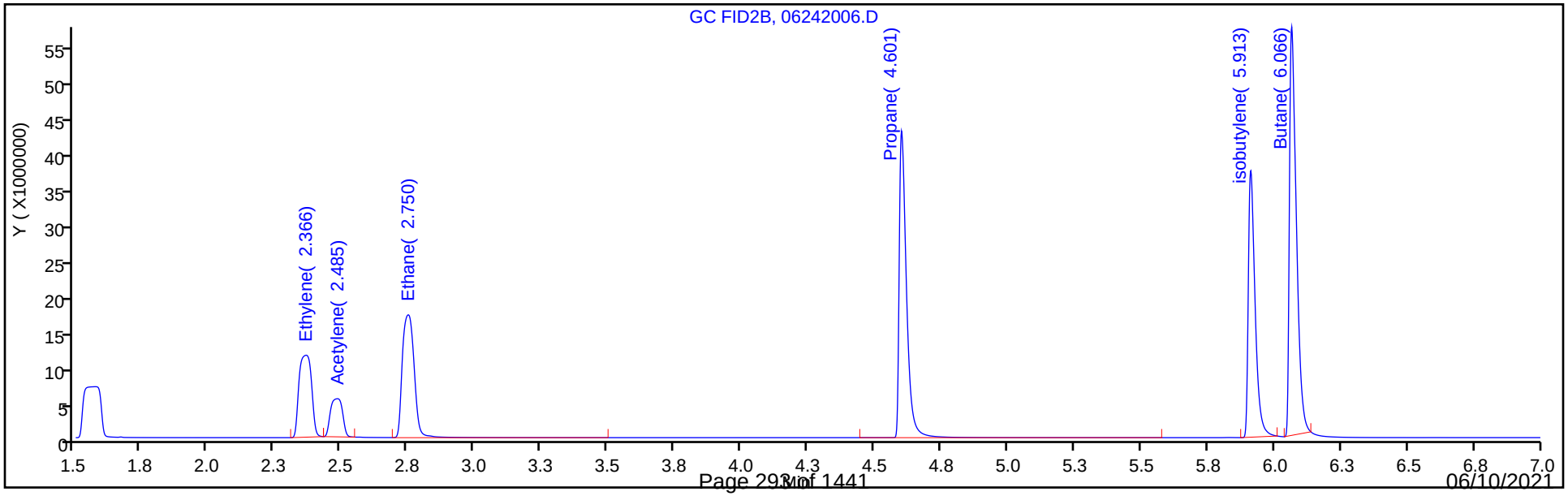
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D

Injection Date:	24-Jun-2020 11:09:45	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L6			Worklist Smp#:	6
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

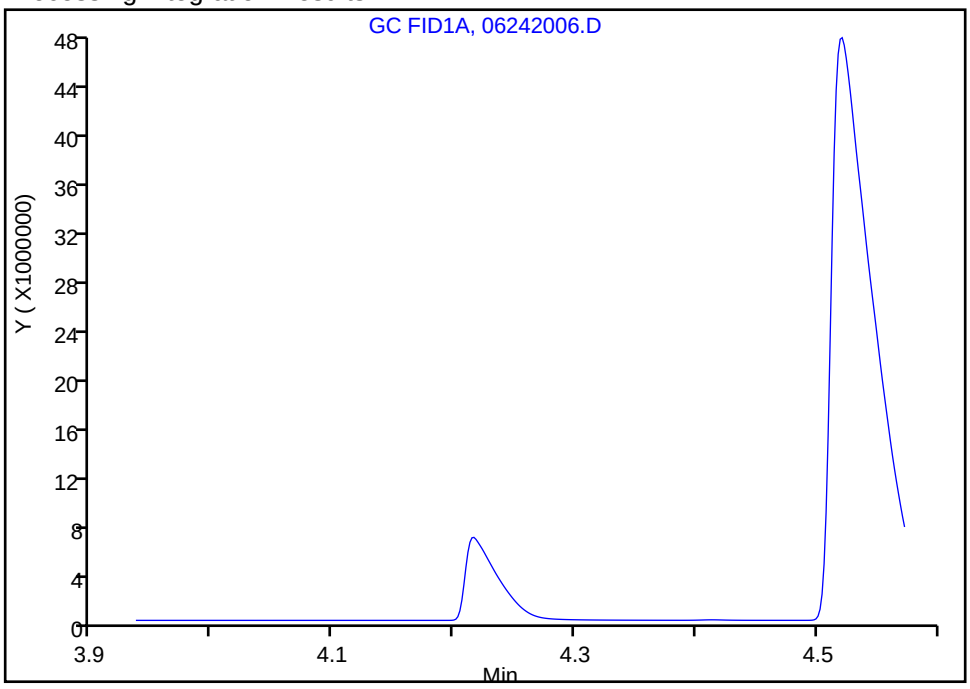
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D				
Injection Date:	24-Jun-2020 11:09:45	Instrument ID:	VGC_J		
Lims ID:	IC L6				
Client ID:					
Operator ID:	gm	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

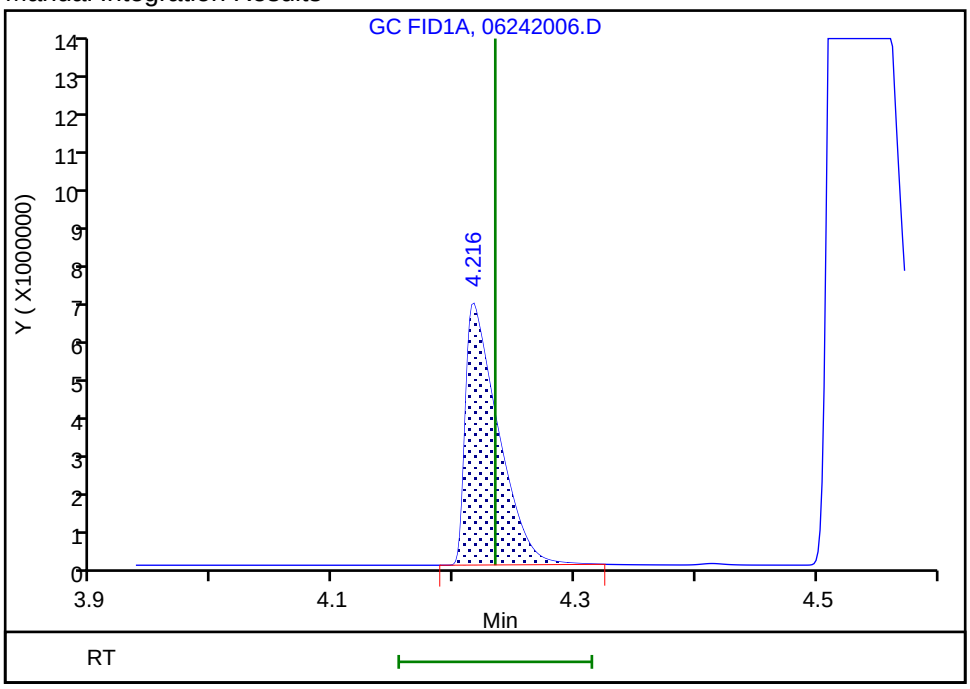
Processing Integration Results

RT: 4.23
Area: 0
Amount: 487.6074
Amount Units: ug/l



Manual Integration Results

RT: 4.22
Area: 12537110
Amount: 483.2562
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:22:47

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jun-2020 11:22:02 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 280-0092709-007
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:34:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	208468313	1806.9	1765.4	
2	1.576	1.577	-0.001	189546256	1806.9	1759.6	
						RPD = 0.33	

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

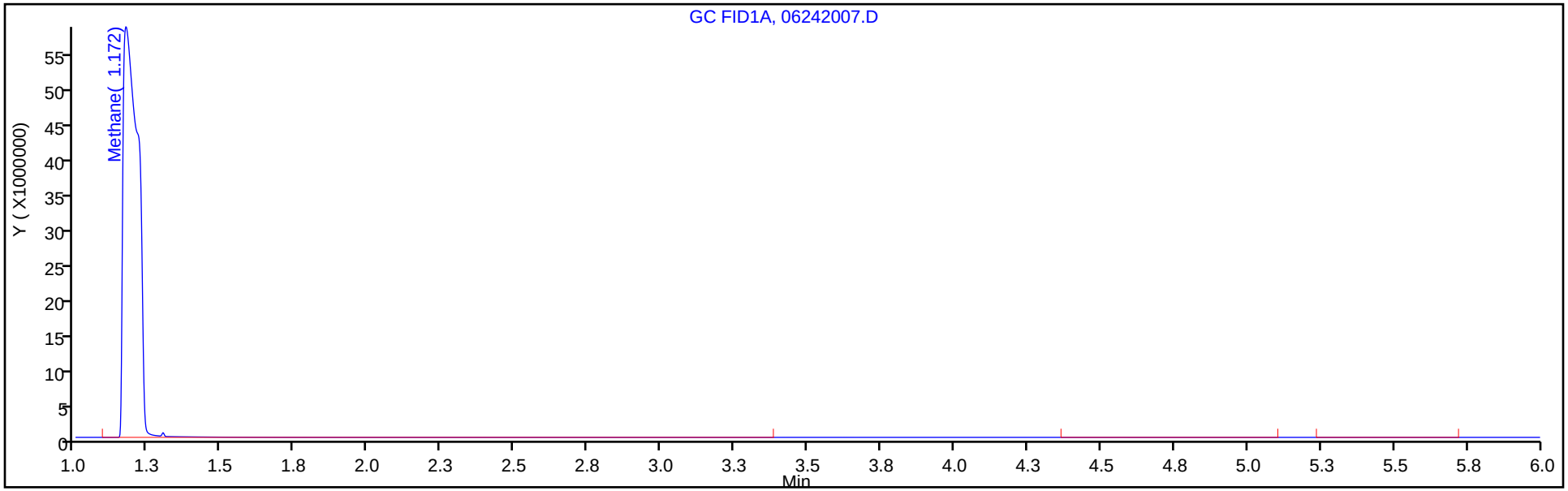
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

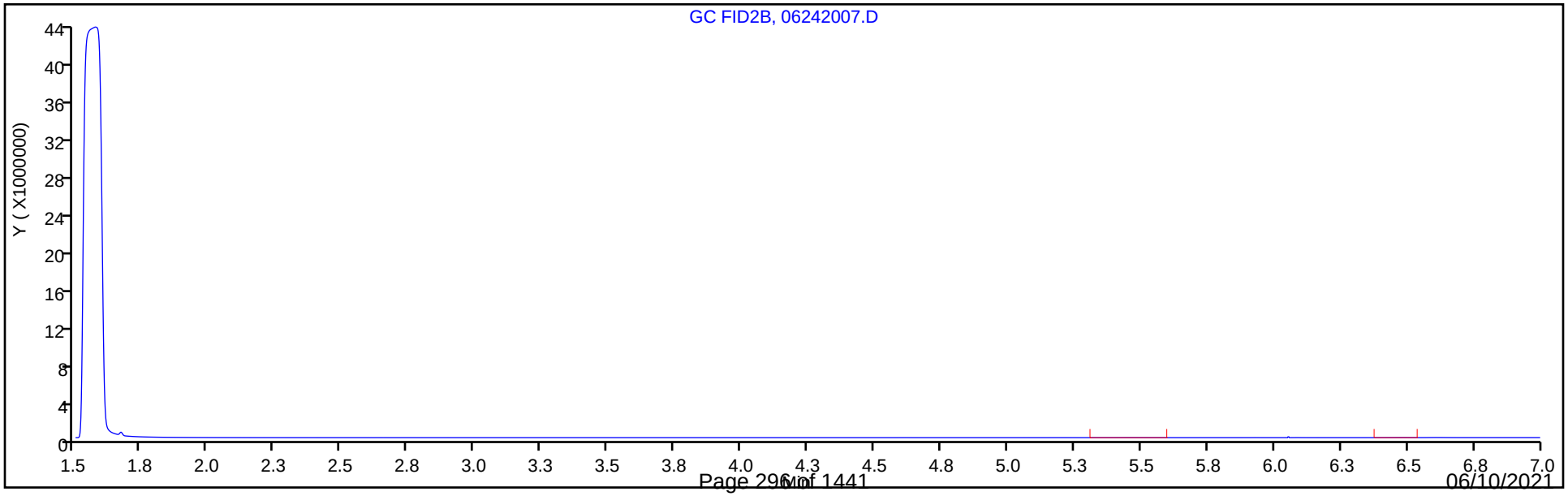
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D

Injection Date:	24-Jun-2020 11:22:02	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L7			Worklist Smp#:	7
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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D				
Lims ID:	IC L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	24-Jun-2020 11:34:17	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC L8				
Misc. Info.:	280-0092709-008				
Operator ID:	gm	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	24-Jun-2020 12:40:02	Calib Date:	24-Jun-2020 11:46:32		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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:	CTX1017				

First Level Reviewer: meierg Date: 24-Jun-2020 11:49:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	829291020	7227.8	7023.8	
2	1.571	1.577	-0.006	768036307	7227.8	7130.5	
						RPD = 1.51	

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

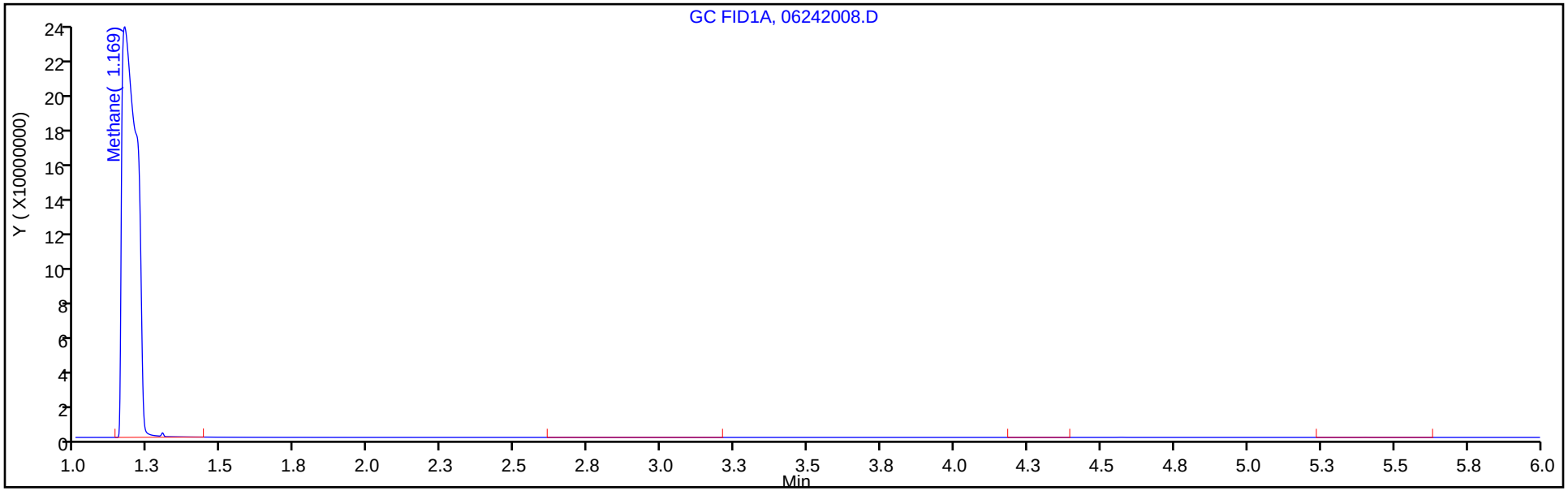
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

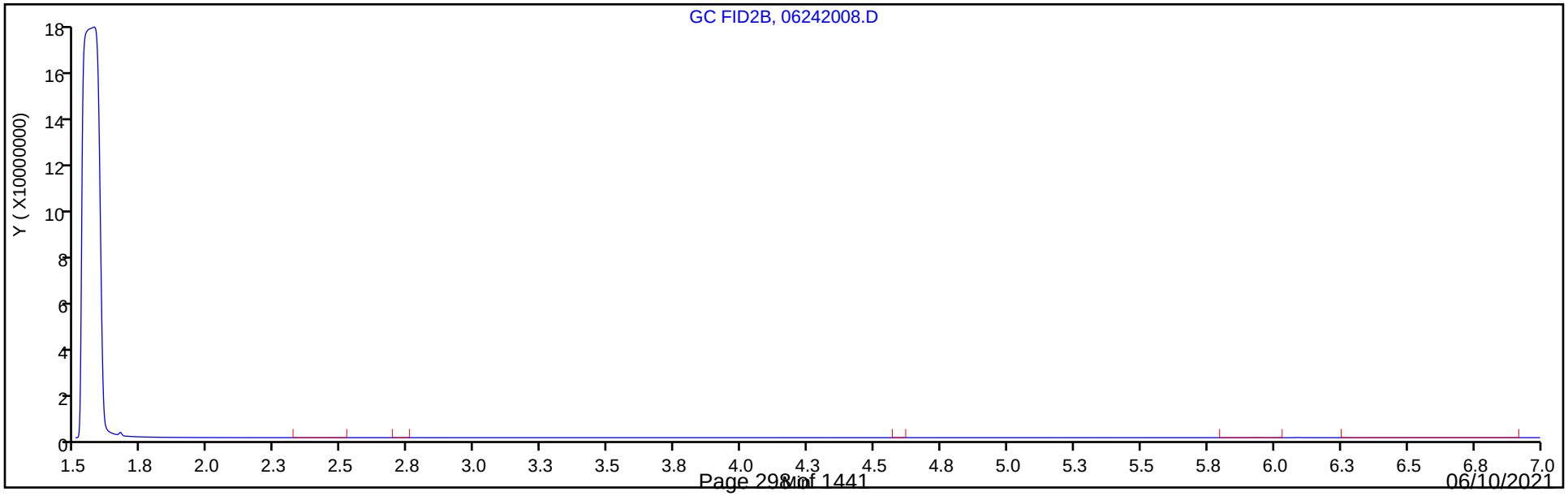
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D

Injection Date:	24-Jun-2020 11:34:17	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L8			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Jun-2020 11:46:32 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: 280-0092709-009
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:03 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:58:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.163	1.172	-0.009	2294825441	21683	19437	
2	1.560	1.577	-0.017	2136573736	21683	19837	
						RPD = 2.03	

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

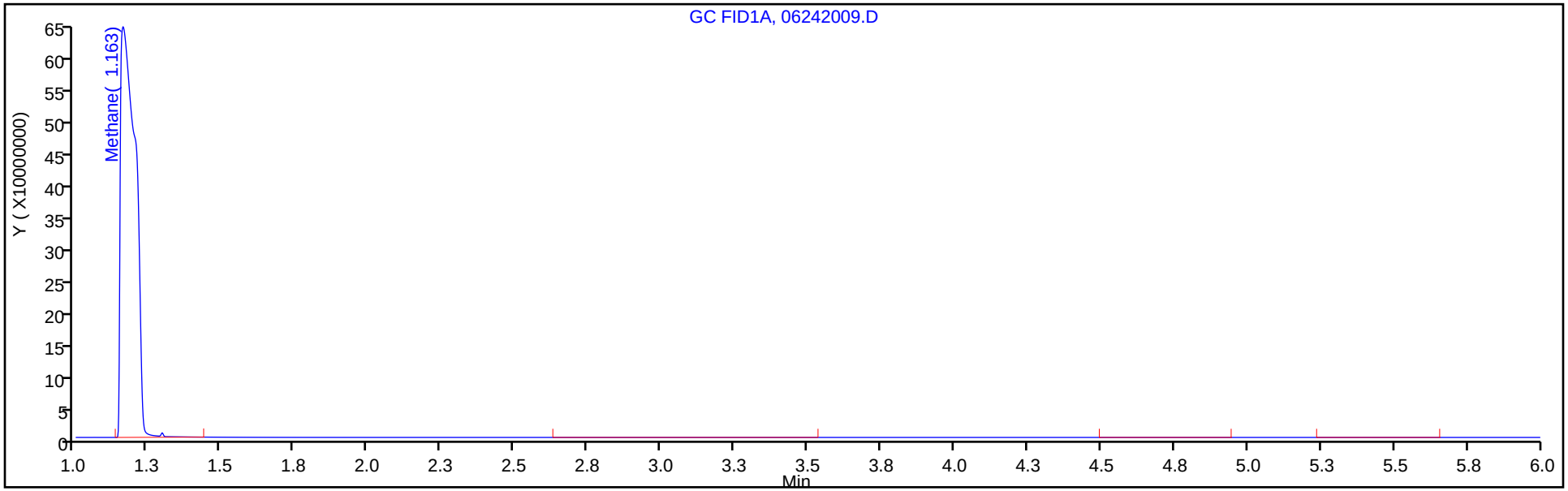
Report Date: 24-Jun-2020 12:40:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

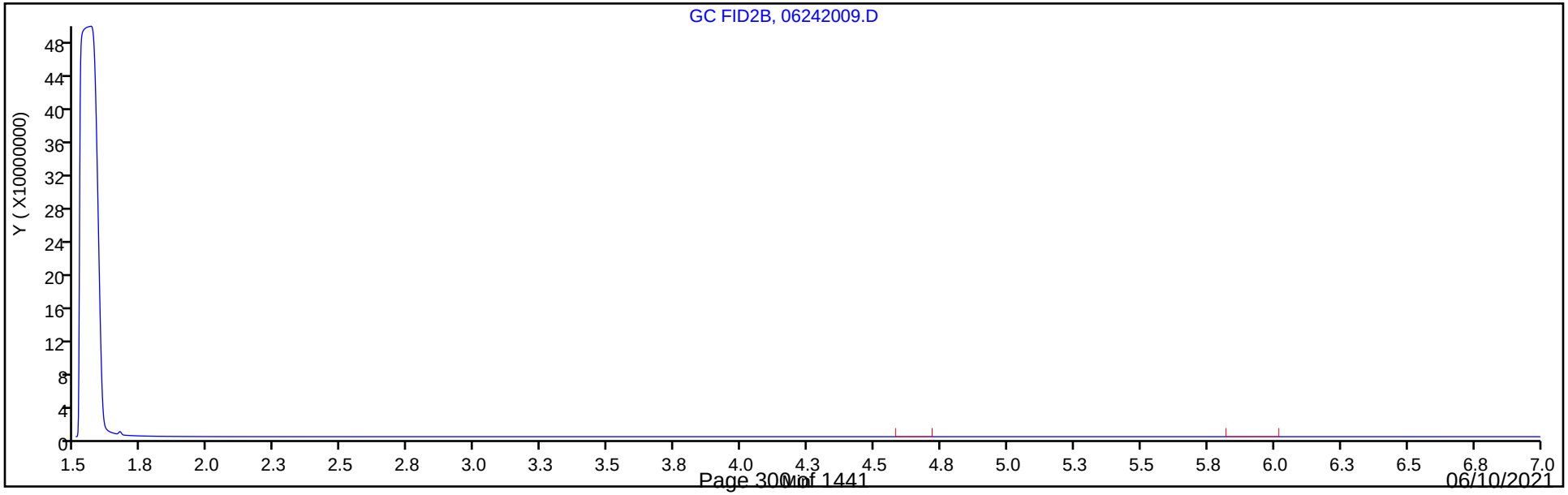
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Injection Date:	24-Jun-2020 11:46:32	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L9			Worklist Smp#:	9
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



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45323

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	1.578	1.576	1.582	1.578	1.577	1.576	1.576	1.571	1.560		1.537 - 1.617	1.575
Ethylene	2.369	2.373	2.375	2.373	2.372	2.366					2.322 - 2.422	2.371
Acetylene	2.486	2.486	2.488	2.488	2.486	2.485					2.406 - 2.566	2.487
Ethane	2.754	2.759	2.760	2.756	2.756	2.750					2.706 - 2.806	2.756

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45323

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	140166 106700 98535	124066 107746	120545 104899	112890 106262	Lin2	30195.2183	107706.664							0.9970		0.9900
Ethylene	67408 72728	70567 73294	78040	76257	Ave		73048.9305				5.2		20.0			
Acetylene	31637 34607	32532 35308	35503	36386	Ave		34328.7927				5.4		20.0			
Ethane	89252 96311	92915 97424	104971	101617	Ave		97081.5518				5.9		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.: 280-148902-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45323

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	127907 31463322	226430 189546256	1760038 768036307	8241315 2136573736	15578914	0.913 292	1.83 1807	14.6 7228	73.0 21683	146
Ethylene	Ave	107572 37428833	225225	1992619	9735448	18569939	1.60 511	3.19	25.5	128	255
Acetylene	Ave	46871 16738973	96395	841585	4312506	8203389	1.48 474	2.96	23.7	119	237
Ethane	Ave	152683 53331817	317897	2873171	13906890	26361358	1.71 547	3.42	27.4	137	274

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2020 10:08:41 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 280-0092709-001
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 10:23:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.172	0.002	155827	0.9125	0.9075	
2	1.578	1.577	0.001	127907	0.9125	0.9072	
						RPD = 0.03	
3 Ethane							
1	1.462	1.462	0.000	181168	1.71	1.58	
2	2.754	2.756	-0.002	152683	1.71	1.57	
						RPD = 0.50	
4 Ethylene							M
1	1.781	1.779	0.002	136002	1.60	1.48	
2	2.369	2.372	-0.003	107572	1.60	1.47	M
						RPD = 0.62	
5 Propane							
1	2.692	2.676	0.016	276461	2.51	2.34	
2	4.616	4.609	0.007	230434	2.51	2.30	
						RPD = 1.64	
6 Acetylene							Ma
1	4.272	4.234	0.038	34073	1.48	1.31	M
2	2.486	2.486	0.000	46871	1.48	1.37	M
						RPD = 3.88	
7 Butane							Ma
1	4.581	4.541	0.040	302314	3.31	3.44	M
2	6.089	6.076	0.013	280641	3.31	3.45	M
						RPD = 0.36	
8 isobutylene							
1	5.414	5.381	0.033	210574	3.19	2.94	
2	5.929	5.921	0.008	184181	3.19	2.94	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

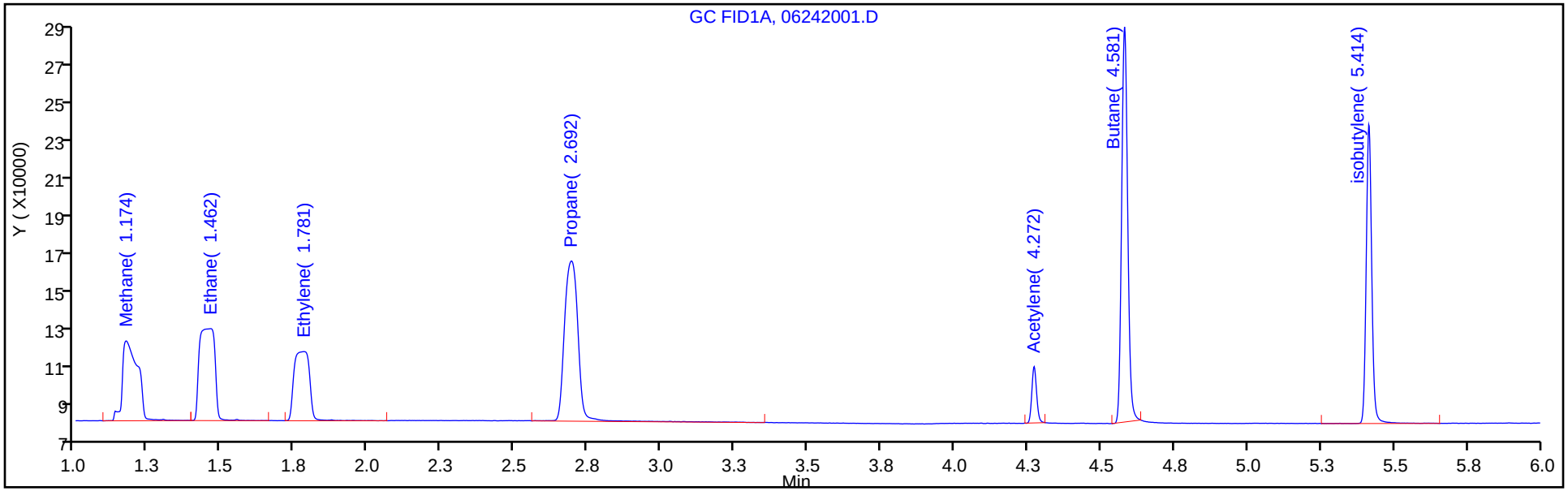
Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

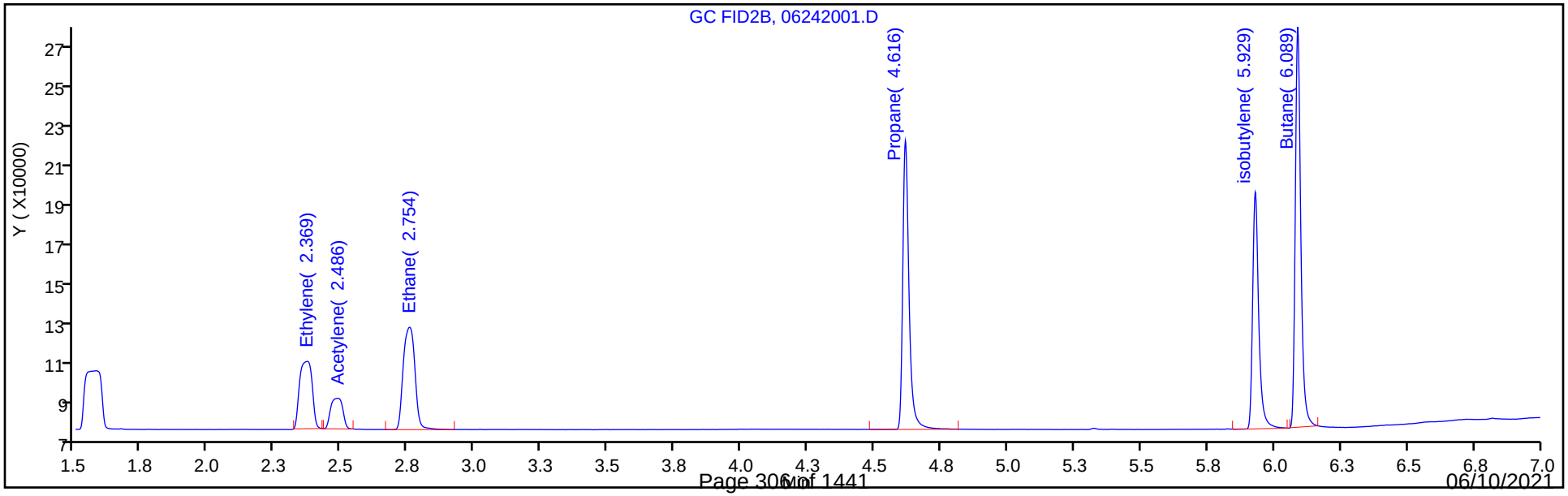
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D

Injection Date:	24-Jun-2020 10:08:41	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L1			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

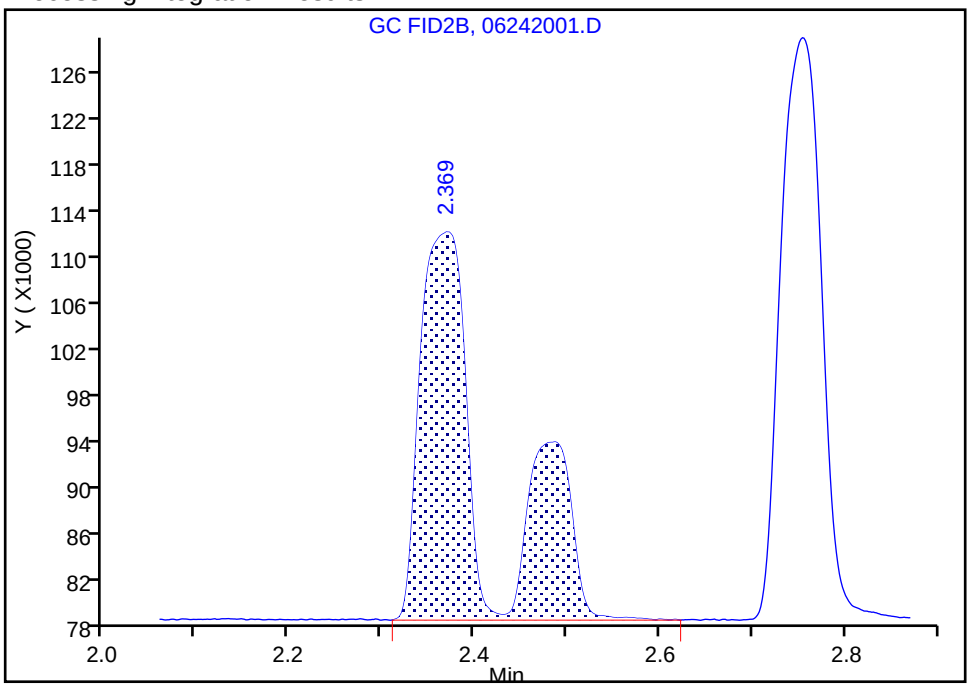
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Injection Date: 24-Jun-2020 10:08:41 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

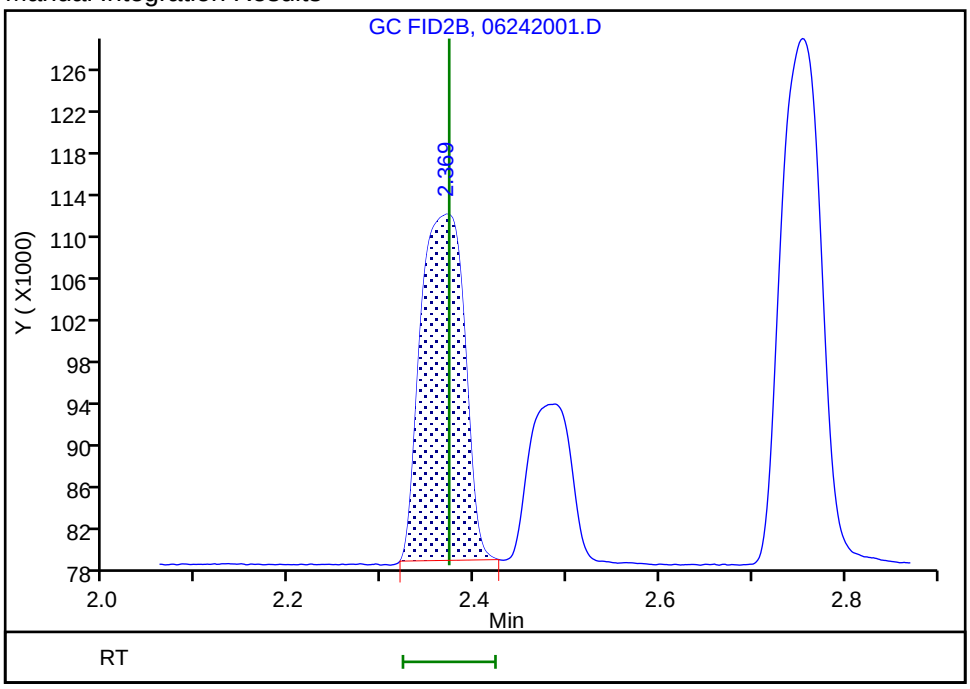
Processing Integration Results

RT: 2.37
Area: 160626
Amount: 1.973798
Amount Units: ug/l



Manual Integration Results

RT: 2.37
Area: 107572
Amount: 1.472602
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:03:38
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

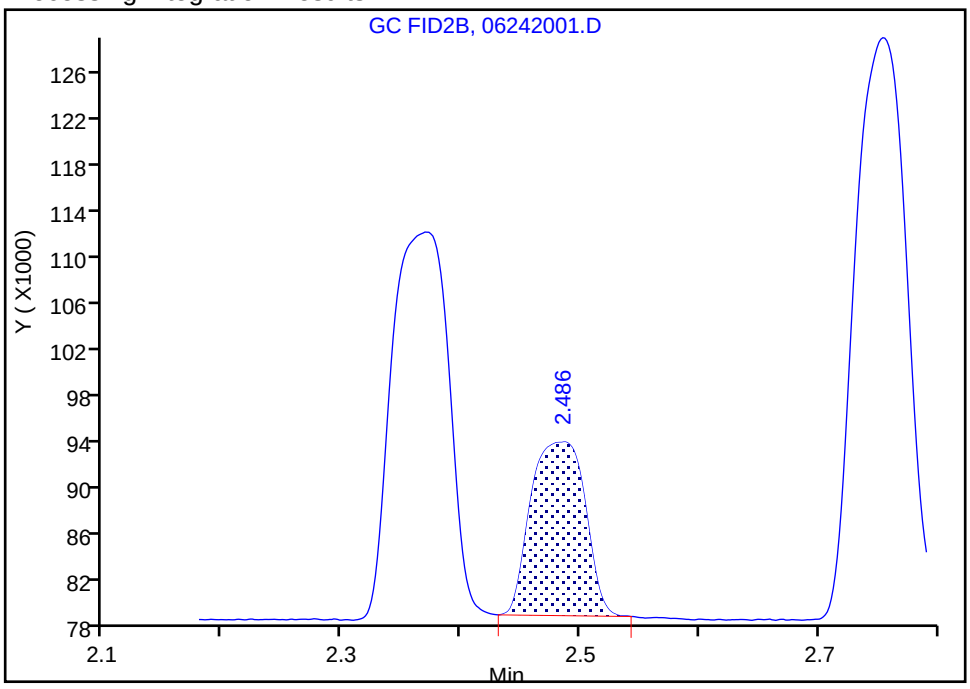
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D				
Injection Date:	24-Jun-2020 10:08:41	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

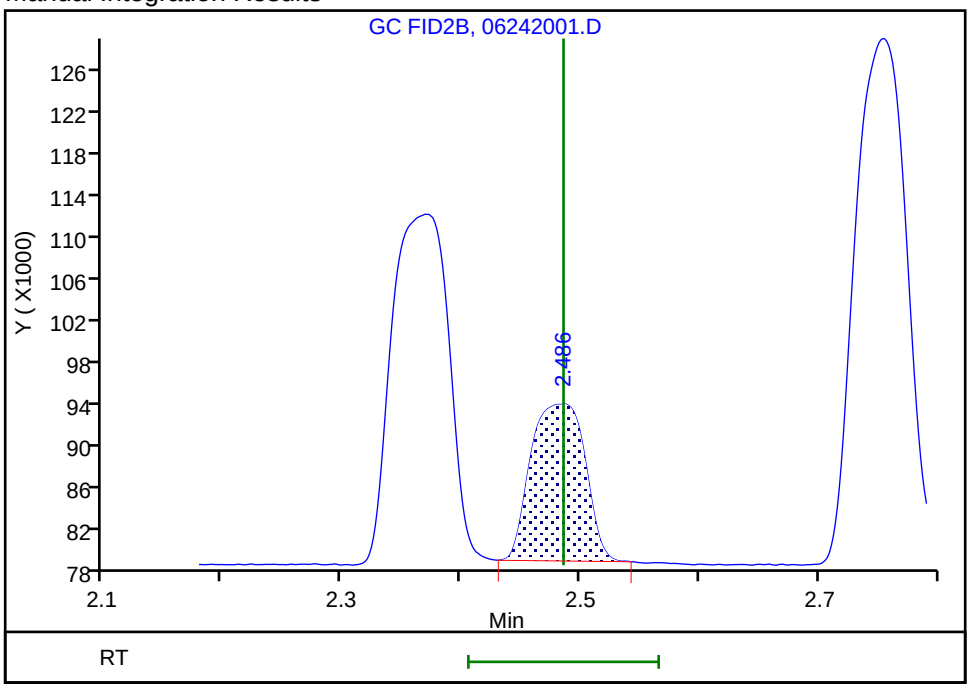
Processing Integration Results

RT: 2.49
Area: 46871
Amount: 1.272887
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 46871
Amount: 1.365355
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:03:56

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2020 10:20:49 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 280-0092709-002
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:58 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:05:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.173	1.172	0.001	263689	1.83	1.82	
2	1.576	1.577	-0.001	226430	1.83	1.82	
						RPD = 0.04	
3 Ethane							
1	1.463	1.462	0.001	375320	3.42	3.27	
2	2.759	2.756	0.003	317897	3.42	3.27	
						RPD = 0.00	
4 Ethylene							
1	1.778	1.779	-0.001	280938	3.19	3.06	
2	2.373	2.372	0.001	225225	3.19	3.08	
						RPD = 0.72	
5 Propane							
1	2.693	2.676	0.017	552814	5.02	4.68	
2	4.619	4.609	0.010	470455	5.02	4.70	
						RPD = 0.44	
6 Acetylene							M
1	4.269	4.234	0.035	74600	2.96	2.88	
2	2.486	2.486	0.000	96395	2.96	2.81	M
						RPD = 2.38	
7 Butane							Ma
1	4.578	4.541	0.037	587119	6.61	6.04	M
2	6.089	6.076	0.013	535944	6.61	5.99	M
						RPD = 0.75	
8 isobutylene							
1	5.413	5.381	0.032	406845	6.38	5.68	
2	5.931	5.921	0.010	356829	6.38	5.69	
						RPD = 0.17	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

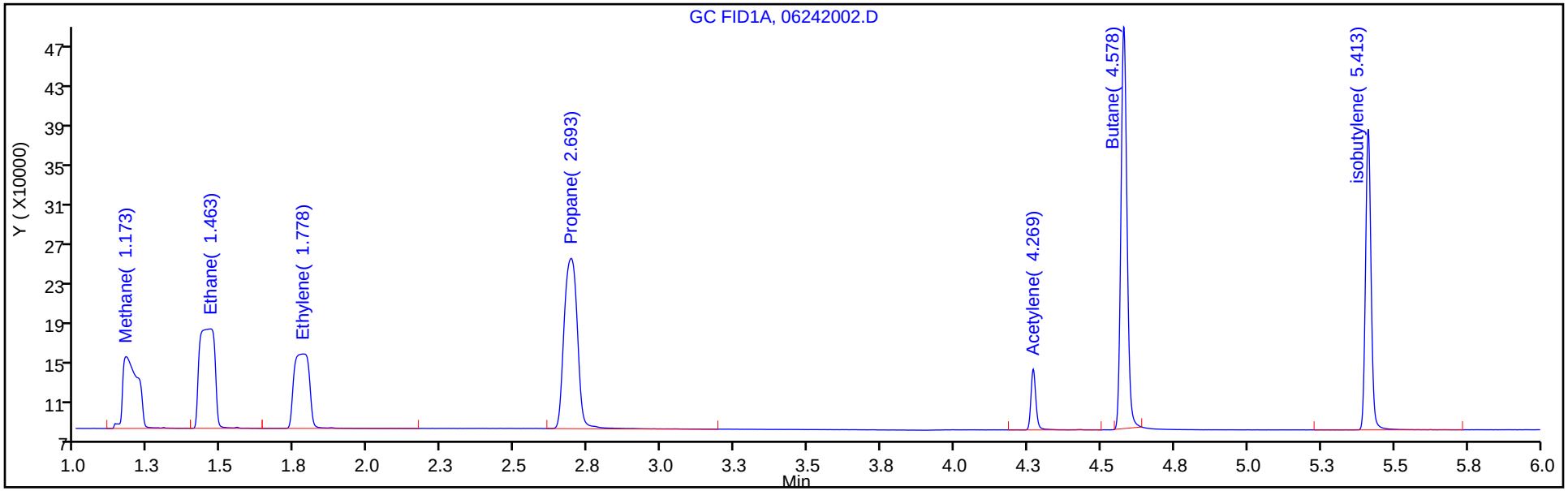
Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

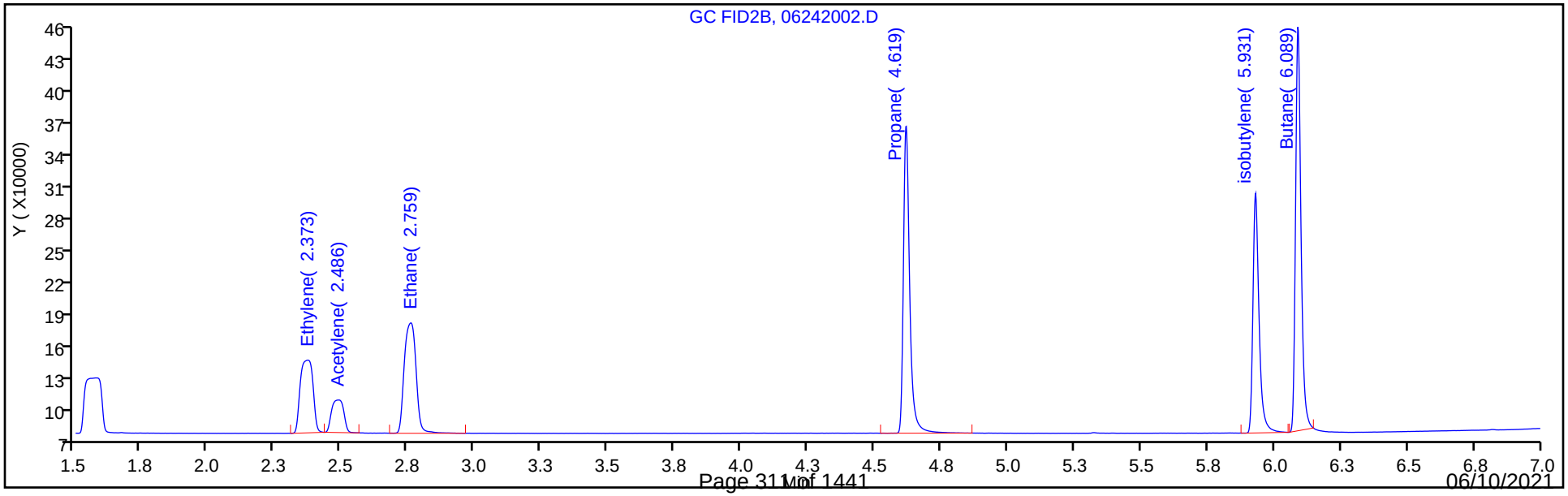
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D

Injection Date:	24-Jun-2020 10:20:49	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L2			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

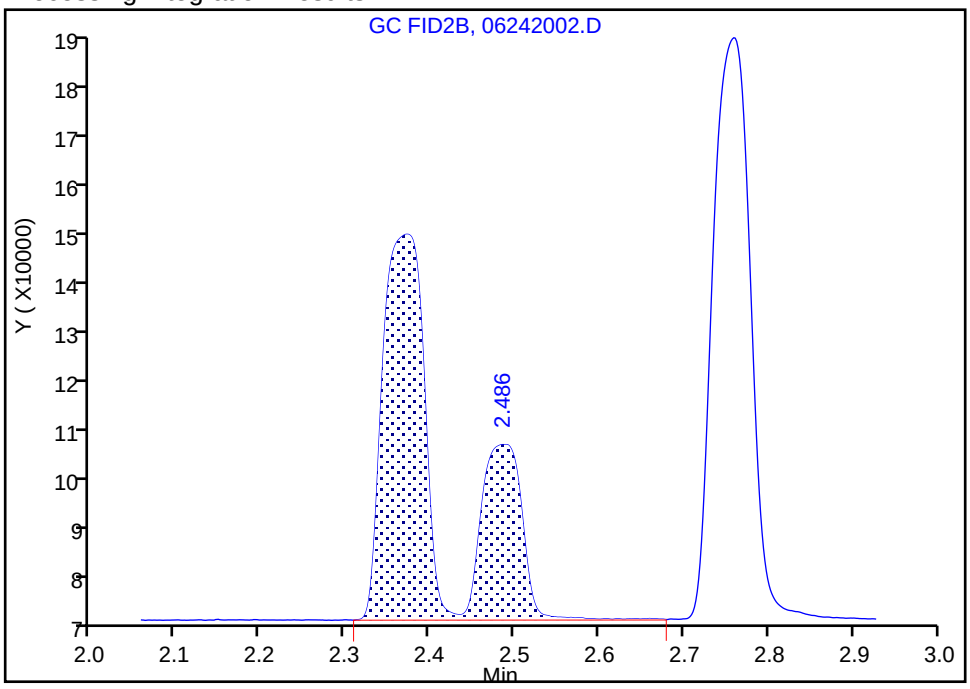
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D
Injection Date: 24-Jun-2020 10:20:49 Instrument ID: VGC_J
Lims ID: IC L2
Client ID:
Operator ID: gm ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

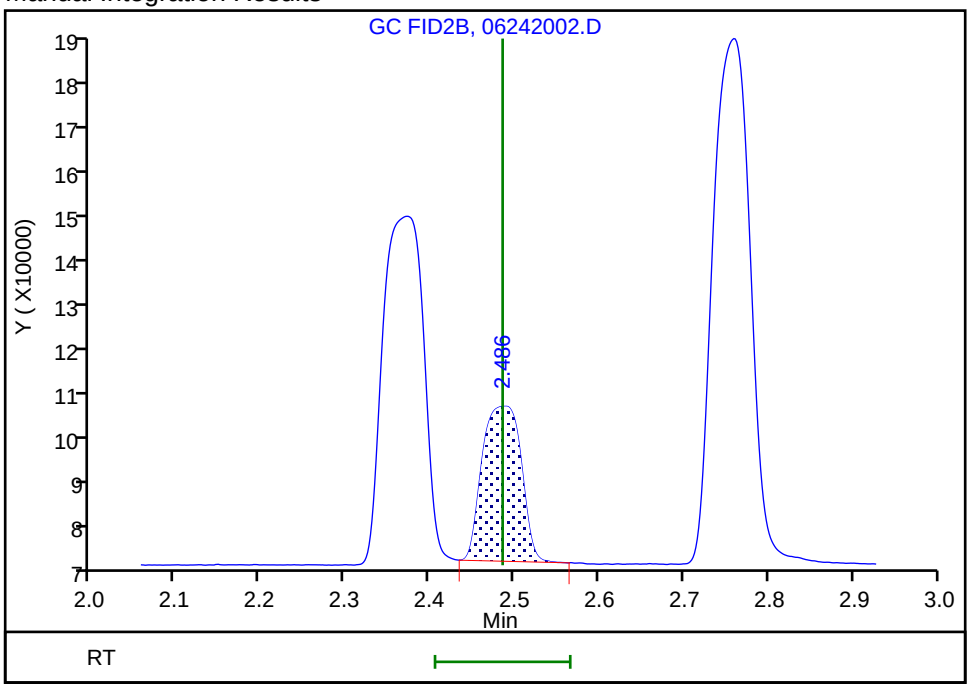
Processing Integration Results

RT: 2.49
Area: 331861
Amount: 3.194563
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 96395
Amount: 2.807993
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:05:18
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jun-2020 10:33:02 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 280-0092709-003
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:08:41

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.175	1.172	0.003	1935518	14.6	16.0	
2	1.582	1.577	0.005	1760038	14.6	16.1	
						RPD = 0.49	
3 Ethane							
1	1.460	1.462	-0.002	3384056	27.4	29.5	
2	2.760	2.756	0.004	2873171	27.4	29.6	
						RPD = 0.24	
4 Ethylene							
1	1.782	1.779	0.003	2472852	25.5	26.9	
2	2.375	2.372	0.003	1992619	25.5	27.3	
						RPD = 1.23	
5 Propane							
1	2.690	2.676	0.014	5082003	40.1	43.0	
2	4.618	4.609	0.009	4318201	40.1	43.2	
						RPD = 0.29	
6 Acetylene							M
1	4.262	4.234	0.028	640190	23.7	24.7	
2	2.488	2.486	0.002	841585	23.7	24.5	M
						RPD = 0.66	
7 Butane							M
1	4.572	4.541	0.031	5935156	52.9	54.8	
2	6.088	6.076	0.012	5391164	52.9	54.3	M
						RPD = 0.94	
8 isobutylene							Ma
1	5.405	5.381	0.024	3773741	51.1	52.7	M
2	5.928	5.921	0.007	3291654	51.1	52.5	M
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

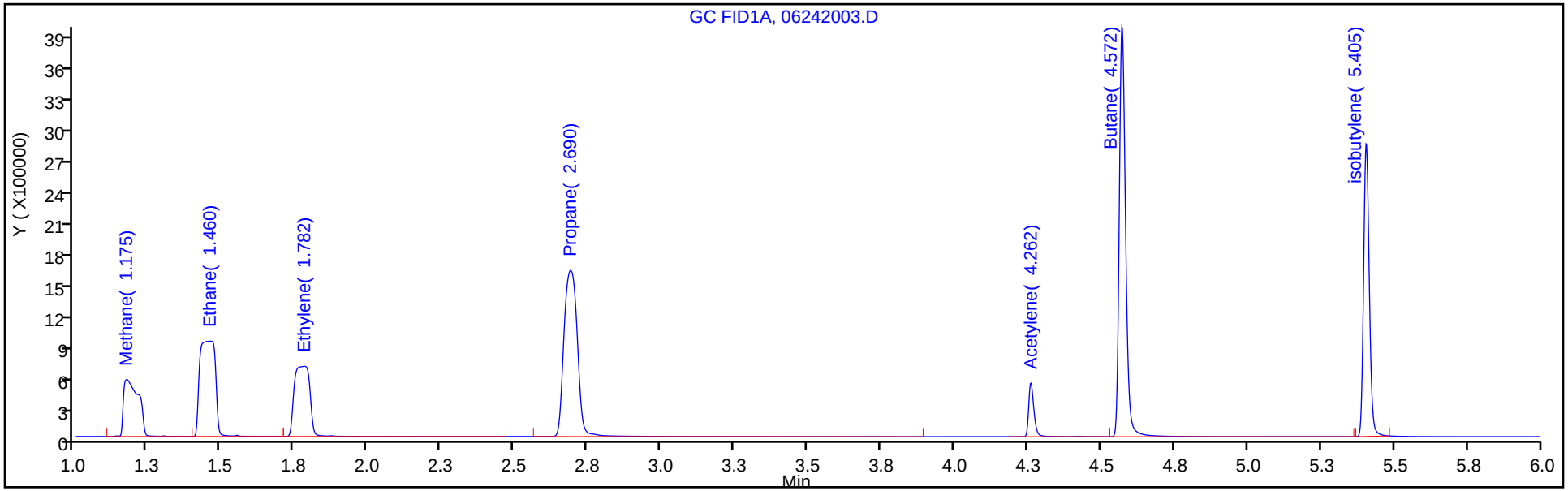
Report Date: 24-Jun-2020 12:39:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

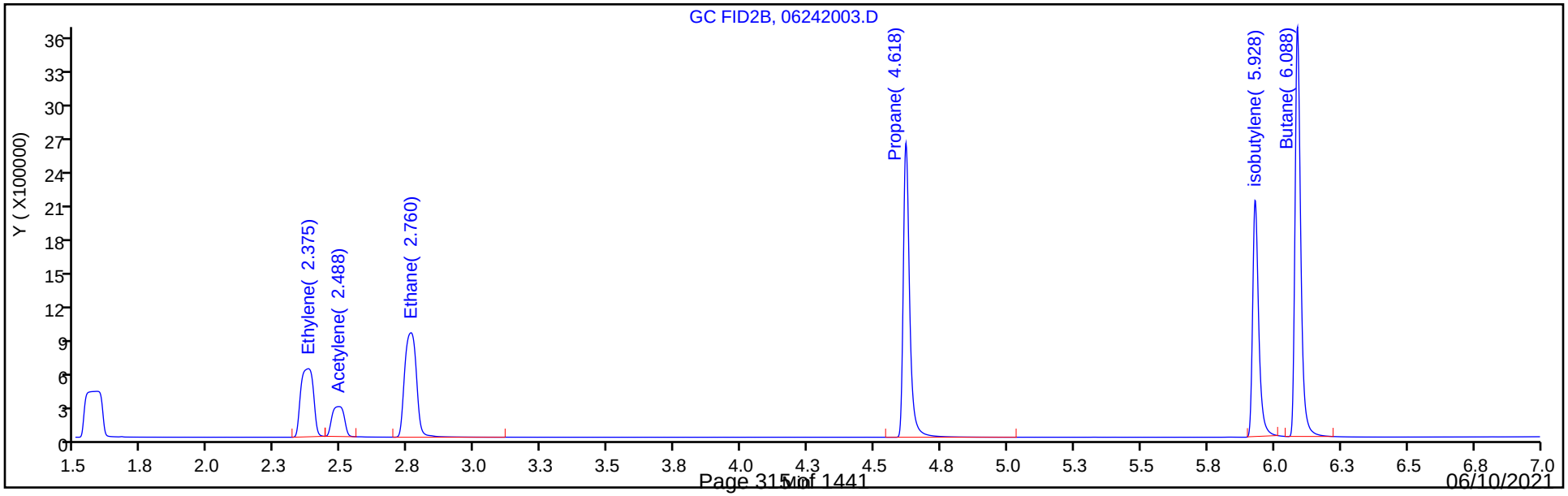
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D

Injection Date:	24-Jun-2020 10:33:02	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L3			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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

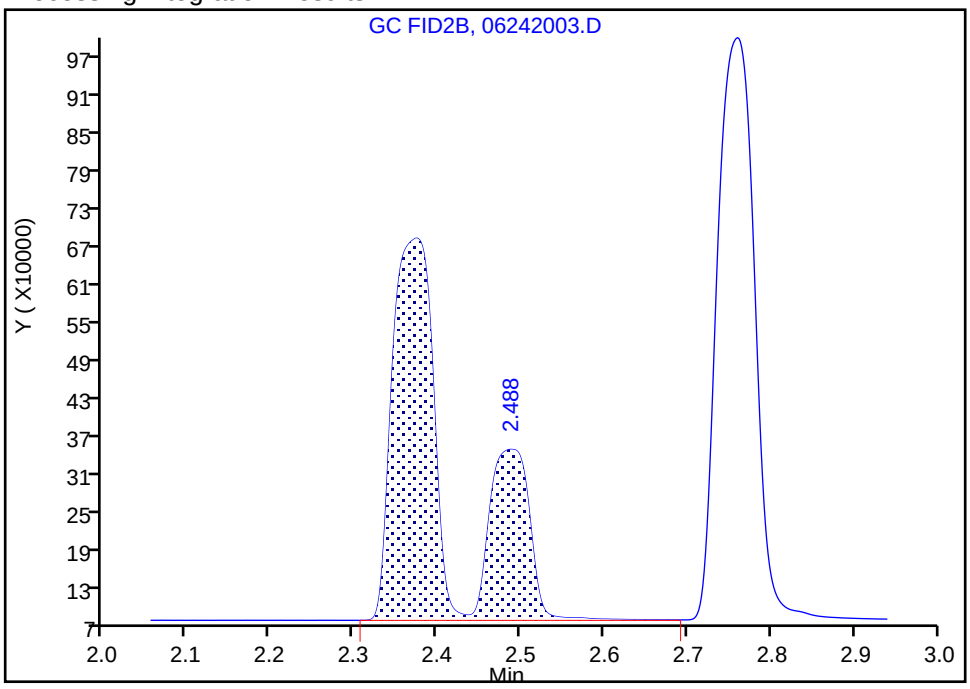
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D				
Injection Date:	24-Jun-2020 10:33:02	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	gm	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

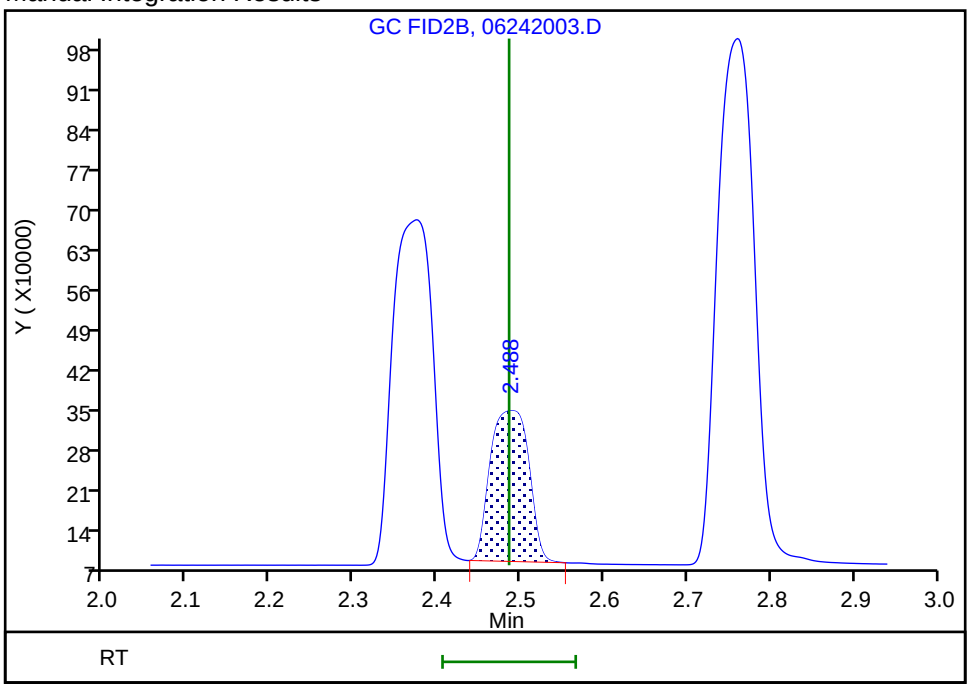
Processing Integration Results

RT: 2.49
Area: 2924290
Amount: 42.965365
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 841585
Amount: 24.515427
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:08:01

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D
Lims ID: ICRT L4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 24-Jun-2020 10:45:14 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT L4
Misc. Info.: 280-0092709-004
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:02:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	9092065	73.0	76.6	
2	1.578	1.578	0.000	8241315	73.0	76.2	
						RPD = 0.48	
3 Ethane							
1	1.457	1.457	0.000	16474689	136.9	143.7	
2	2.756	2.756	0.000	13906890	136.9	143.2	
						RPD = 0.34	
4 Ethylene							
1	1.779	1.779	0.000	12159201	127.7	132.5	
2	2.373	2.373	0.000	9735448	127.7	133.3	
						RPD = 0.59	
5 Propane							
1	2.682	2.682	0.000	25071225	200.7	212.3	
2	4.614	4.614	0.000	21208455	200.7	212.0	
						RPD = 0.16	
6 Acetylene							M
1	4.244	4.244	0.000	3287680	118.5	126.7	
2	2.488	2.488	0.000	4312506	118.5	125.6	M
						RPD = 0.87	
7 Butane							
1	4.554	4.554	0.000	29907332	264.5	273.2	
2	6.083	6.083	0.000	28030666	264.5	279.3	
						RPD = 2.20	
8 isobutylene							
1	5.392	5.392	0.000	19808714	255.4	276.5	
2	5.926	5.926	0.000	17460732	255.4	278.4	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

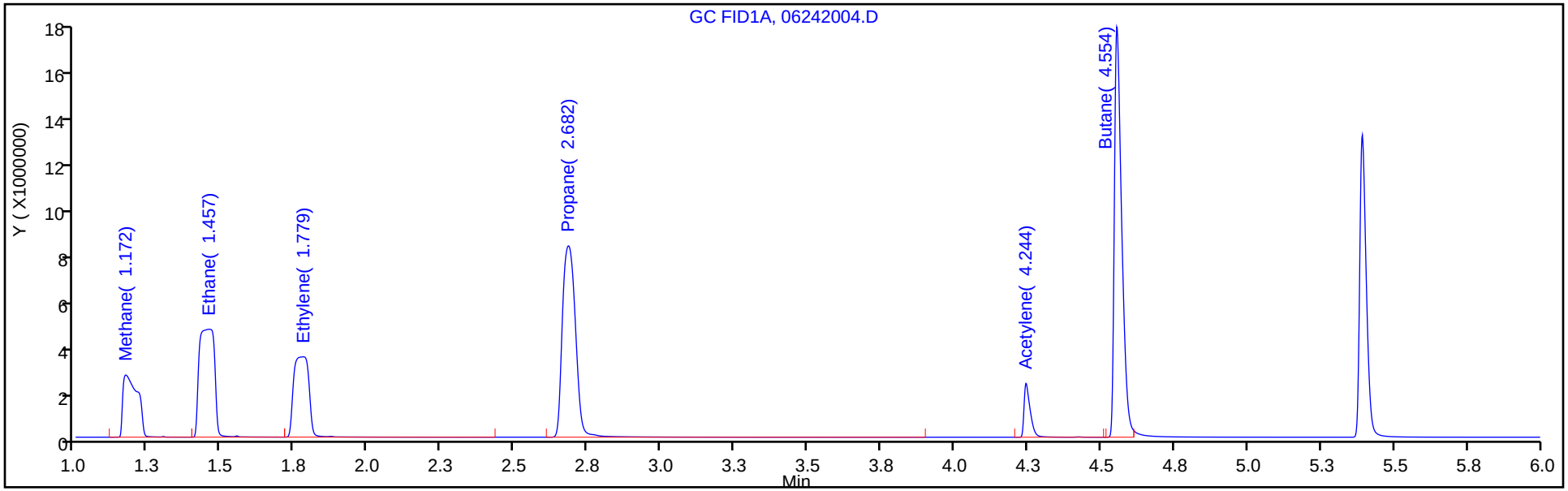
Report Date: 24-Jun-2020 12:40:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

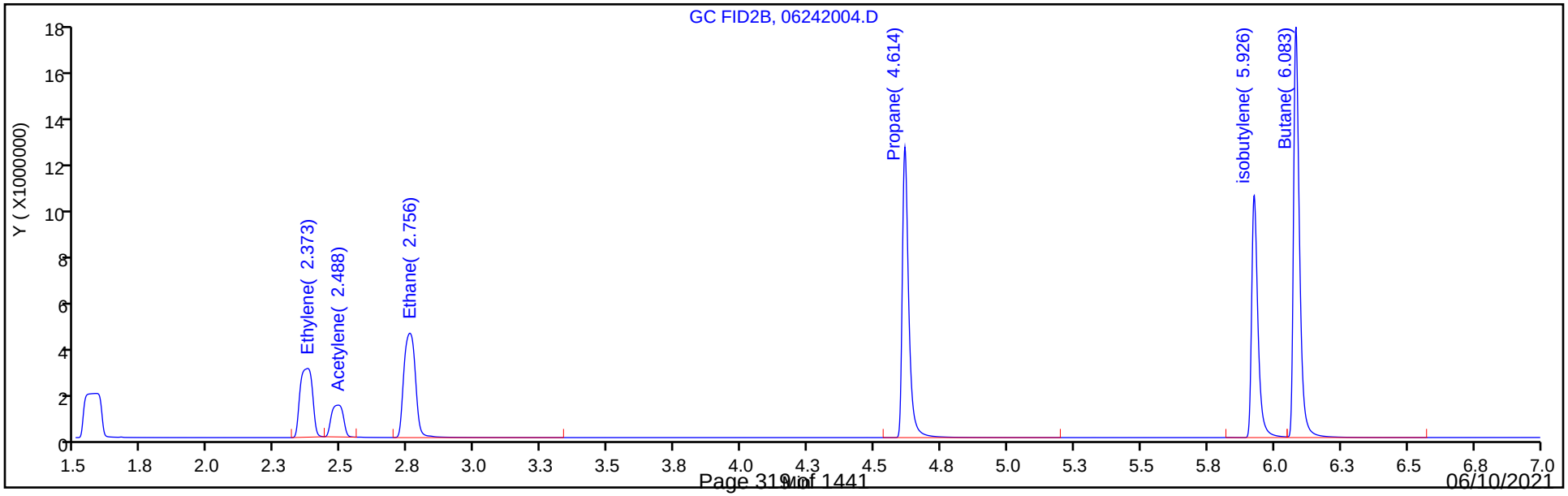
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D

Injection Date:	24-Jun-2020 10:45:14	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ICRT L4			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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

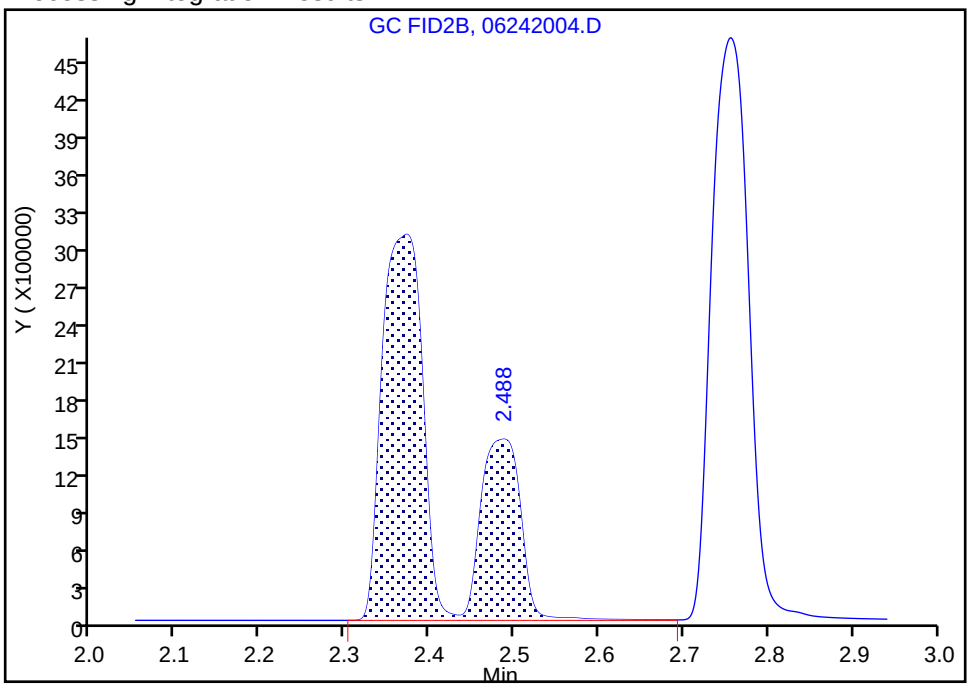
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D
Injection Date: 24-Jun-2020 10:45:14 Instrument ID: VGC_J
Lims ID: ICRT L4
Client ID:
Operator ID: gm ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

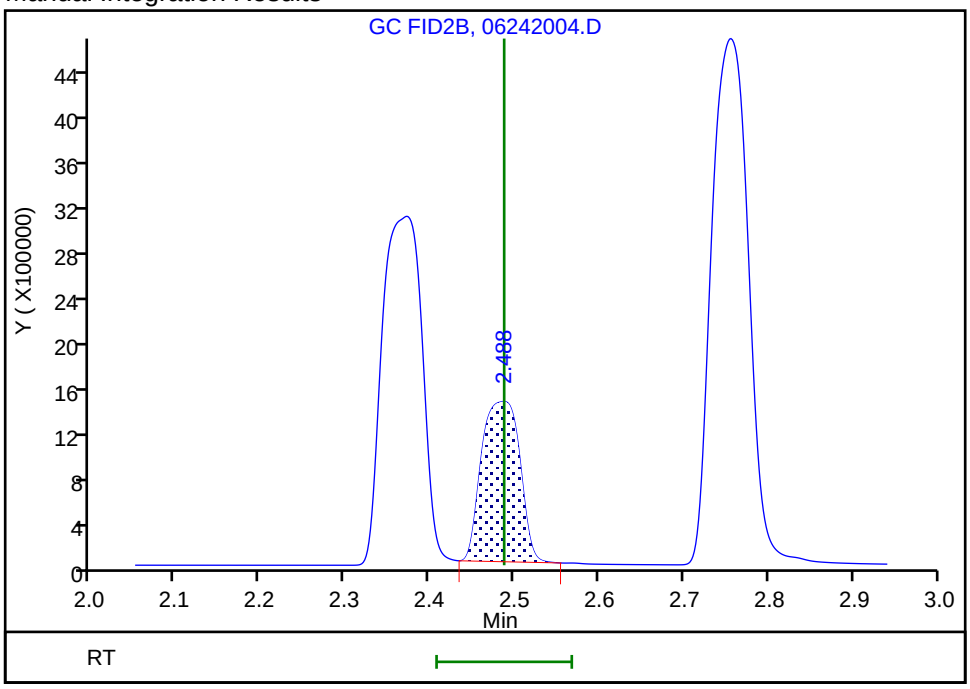
Processing Integration Results

RT: 2.49
Area: 14469565
Amount: 121.4408
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 4312506
Amount: 125.6236
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:01:33
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jun-2020 10:57:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 280-0092709-005
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:00 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:10:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	17468122	146.0	147.5	
2	1.577	1.577	0.000	15578914	146.0	144.4	
						RPD = 2.18	
3 Ethane							
1	1.462	1.462	0.000	30906100	273.7	269.6	
2	2.756	2.756	0.000	26361358	273.7	271.5	
						RPD = 0.70	
4 Ethylene							
1	1.779	1.779	0.000	23971500	255.3	261.2	
2	2.372	2.372	0.000	18569939	255.3	254.2	
						RPD = 2.71	
5 Propane							
1	2.676	2.676	0.000	46992293	401.4	398.0	
2	4.609	4.609	0.000	40116354	401.4	401.0	
						RPD = 0.76	
6 Acetylene							M
1	4.234	4.234	0.000	6232354	237.0	240.2	
2	2.486	2.486	0.000	8203389	237.0	239.0	M
						RPD = 0.53	
7 Butane							
1	4.541	4.541	0.000	57396046	529.0	523.6	
2	6.076	6.076	0.000	52957196	529.0	527.0	
						RPD = 0.64	
8 isobutylene							
1	5.381	5.381	0.000	37720673	510.8	526.6	
2	5.921	5.921	0.000	33259110	510.8	530.3	
						RPD = 0.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

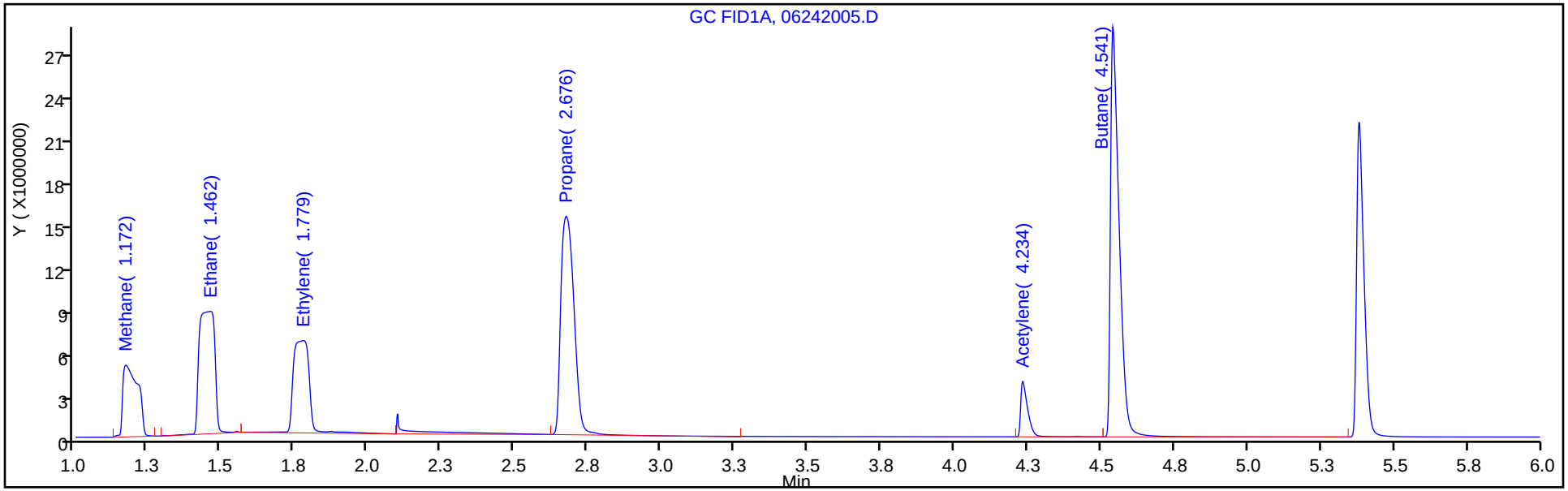
Report Date: 24-Jun-2020 12:40:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

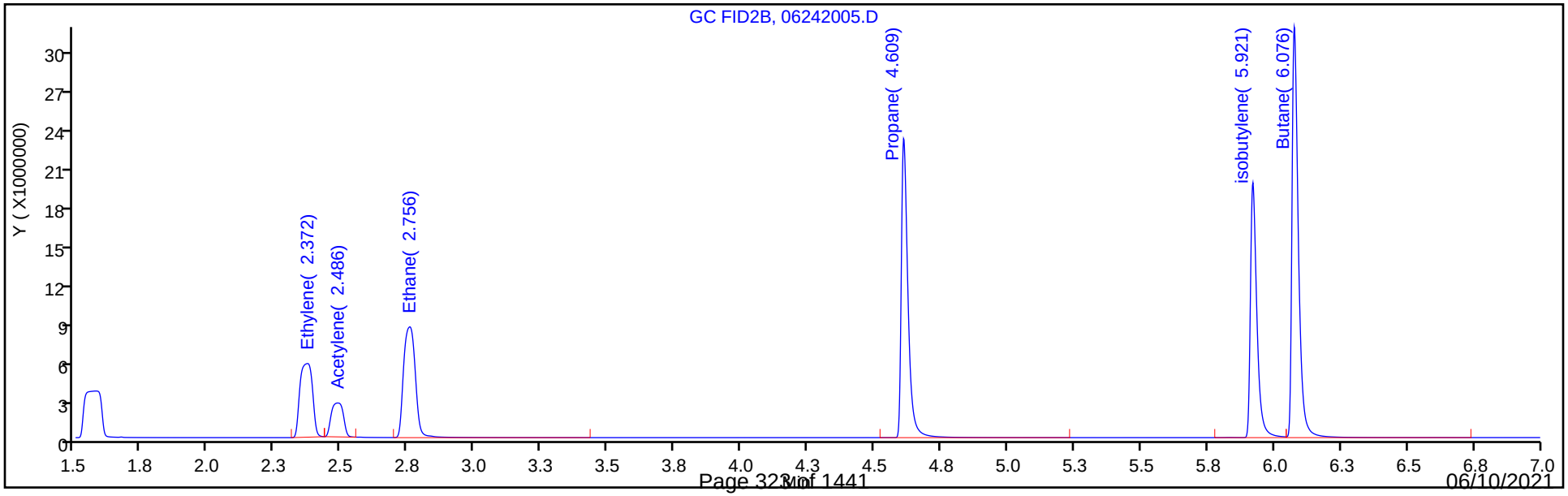
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D

Injection Date:	24-Jun-2020 10:57:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L5			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

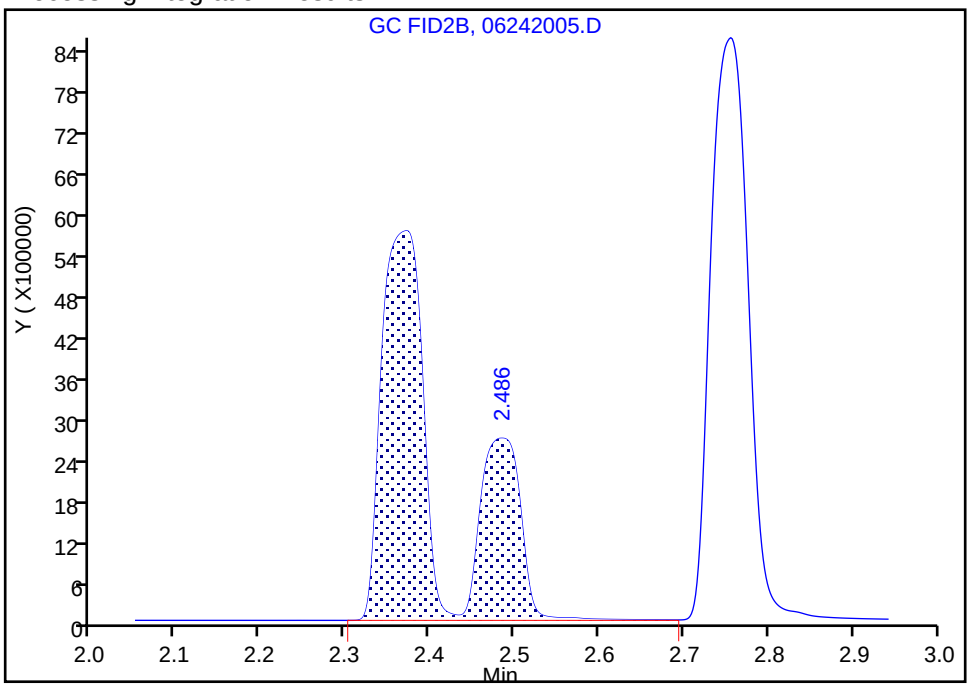
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D
Injection Date: 24-Jun-2020 10:57:30 Instrument ID: VGC_J
Lims ID: IC L5
Client ID:
Operator ID: gm ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

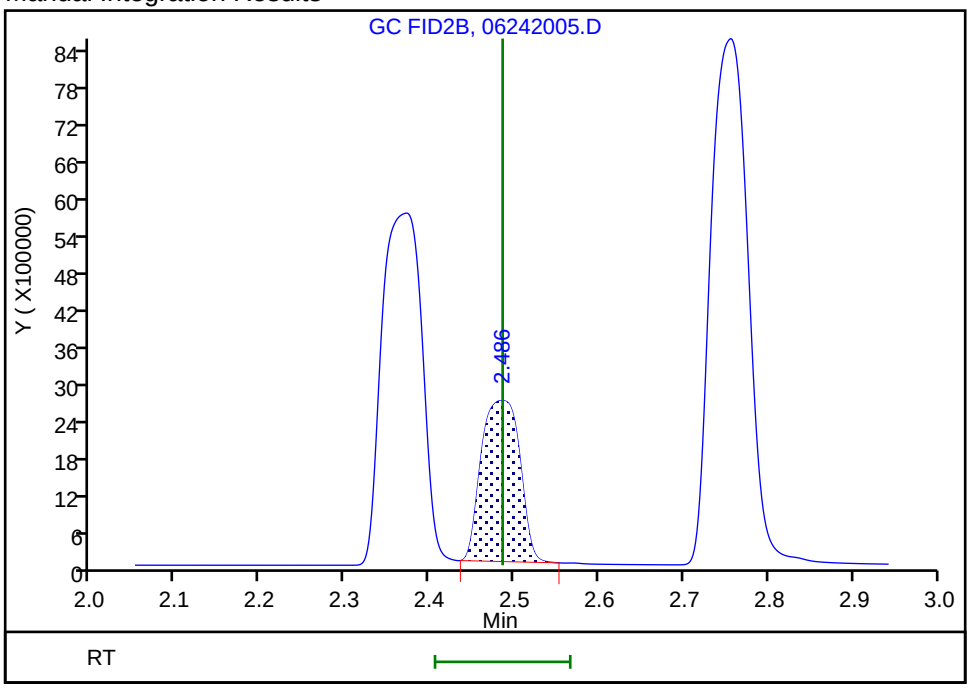
Processing Integration Results

RT: 2.49
Area: 27589208
Amount: 237.3114
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 8203389
Amount: 238.9653
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:09:21
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jun-2020 11:09:45 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 280-0092709-006
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:22:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.168	1.172	-0.004	34804015	292.0	294.4	
2	1.576	1.577	-0.001	31463322	292.0	291.8	
						RPD = 0.87	
3 Ethane							
1	1.458	1.462	-0.004	63053378	547.4	550.1	
2	2.750	2.756	-0.006	53331817	547.4	549.4	
						RPD = 0.14	
4 Ethylene							
1	1.771	1.779	-0.008	46705608	510.7	508.9	
2	2.366	2.372	-0.006	37428833	510.7	512.4	
						RPD = 0.68	
5 Propane							
1	2.658	2.676	-0.018	95948907	802.8	812.6	
2	4.601	4.609	-0.008	81456479	802.8	814.2	
						RPD = 0.20	
6 Acetylene							Ma
1	4.216	4.234	-0.018	12537110	474.1	483.3	M
2	2.485	2.486	-0.001	16738973	474.1	487.6	M
						RPD = 0.90	
7 Butane							Ma
1	4.521	4.541	-0.020	114699787	1058.1	1045.8	M
2	6.066	6.076	-0.010	103377764	1058.1	1028.2	M
						RPD = 1.70	
8 isobutylene							M
1	5.365	5.381	-0.016	76413104	1021.5	1066.7	
2	5.913	5.921	-0.008	66173382	1021.5	1055.1	M
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

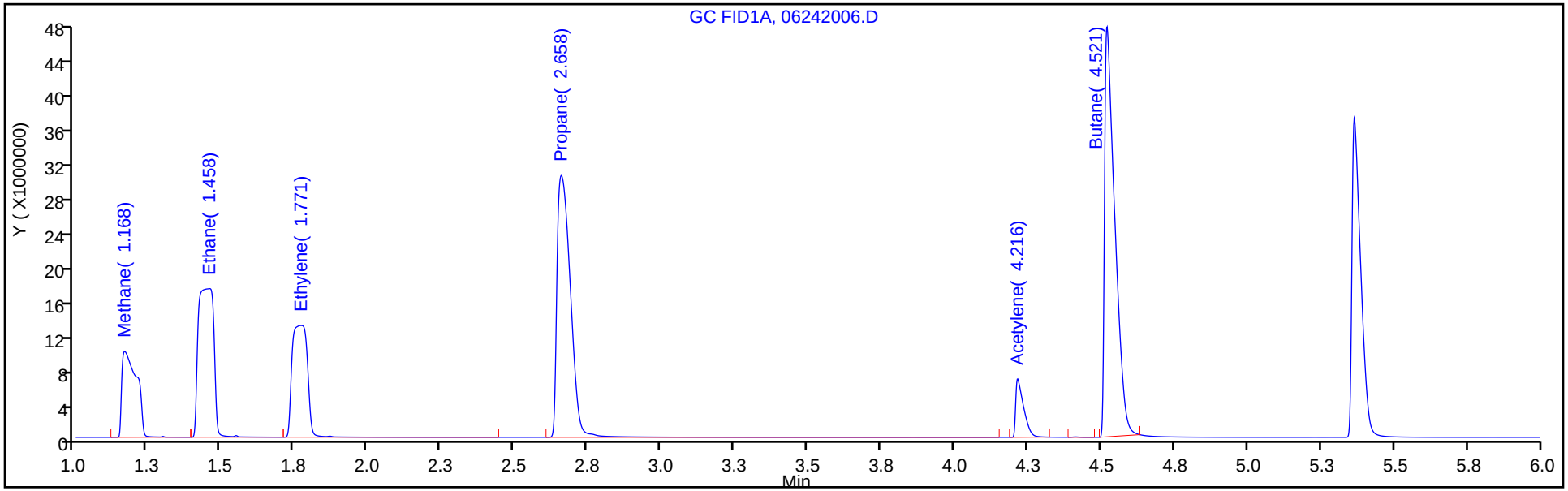
Report Date: 24-Jun-2020 12:40:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

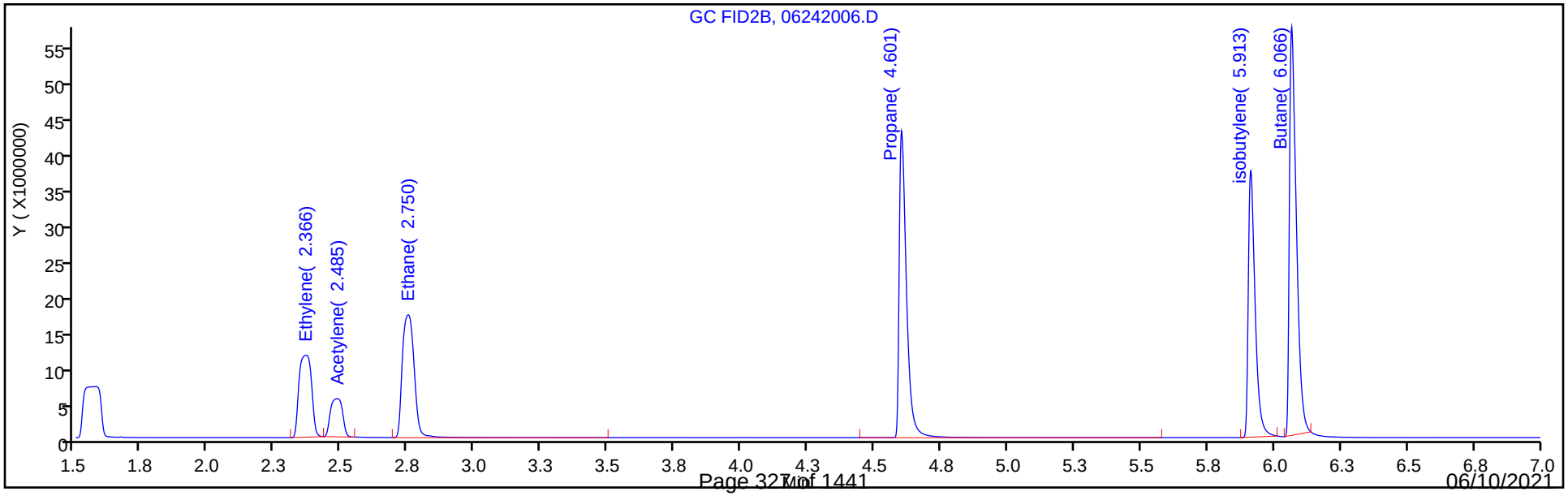
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D

Injection Date:	24-Jun-2020 11:09:45	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L6			Worklist Smp#:	6
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

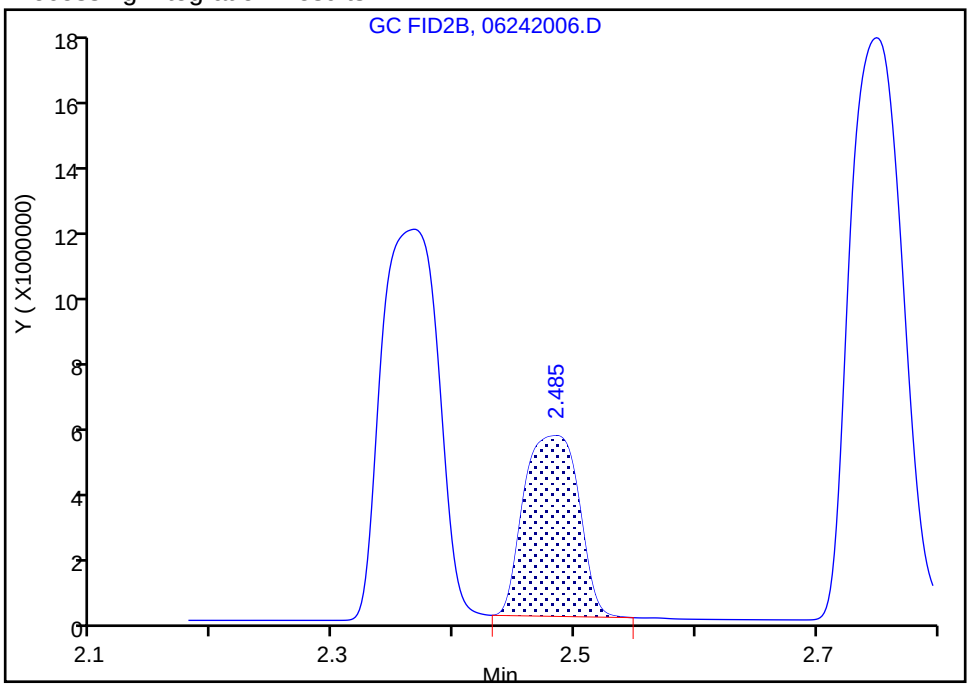
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D				
Injection Date:	24-Jun-2020 11:09:45	Instrument ID:	VGC_J		
Lims ID:	IC L6				
Client ID:					
Operator ID:	gm	ALS Bottle#:	6	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

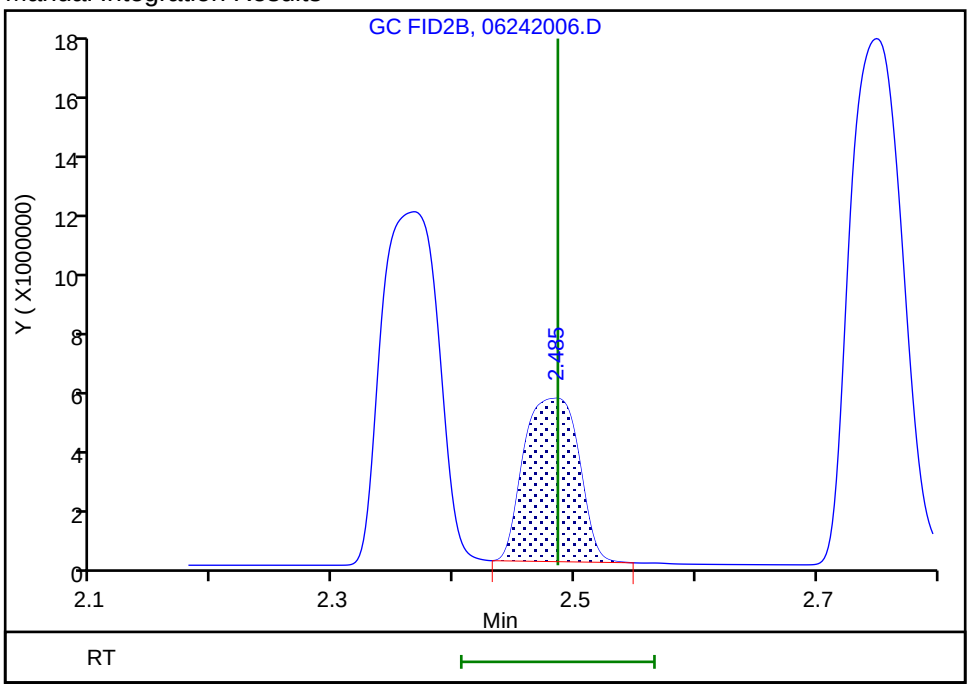
Processing Integration Results

RT: 2.48
Area: 16738973
Amount: 487.6074
Amount Units: ug/l



Manual Integration Results

RT: 2.48
Area: 16738973
Amount: 487.6074
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:22:42

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jun-2020 11:22:02 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 280-0092709-007
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:34:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	208468313	1806.9	1765.4	
2	1.576	1.577	-0.001	189546256	1806.9	1759.6	
						RPD = 0.33	

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

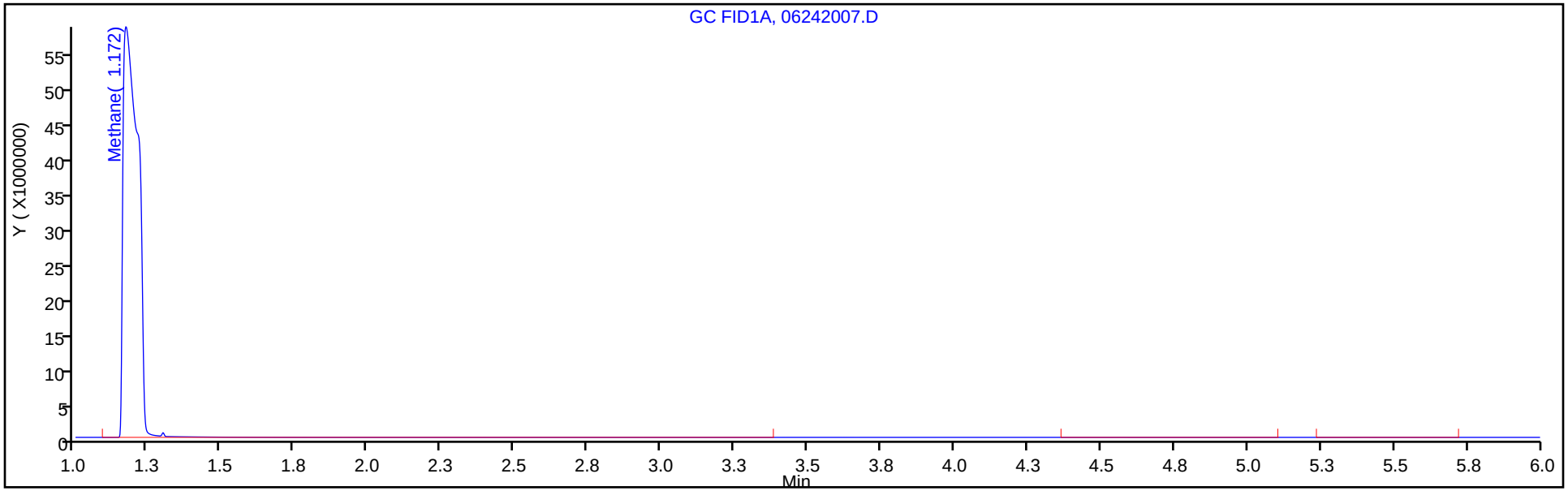
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

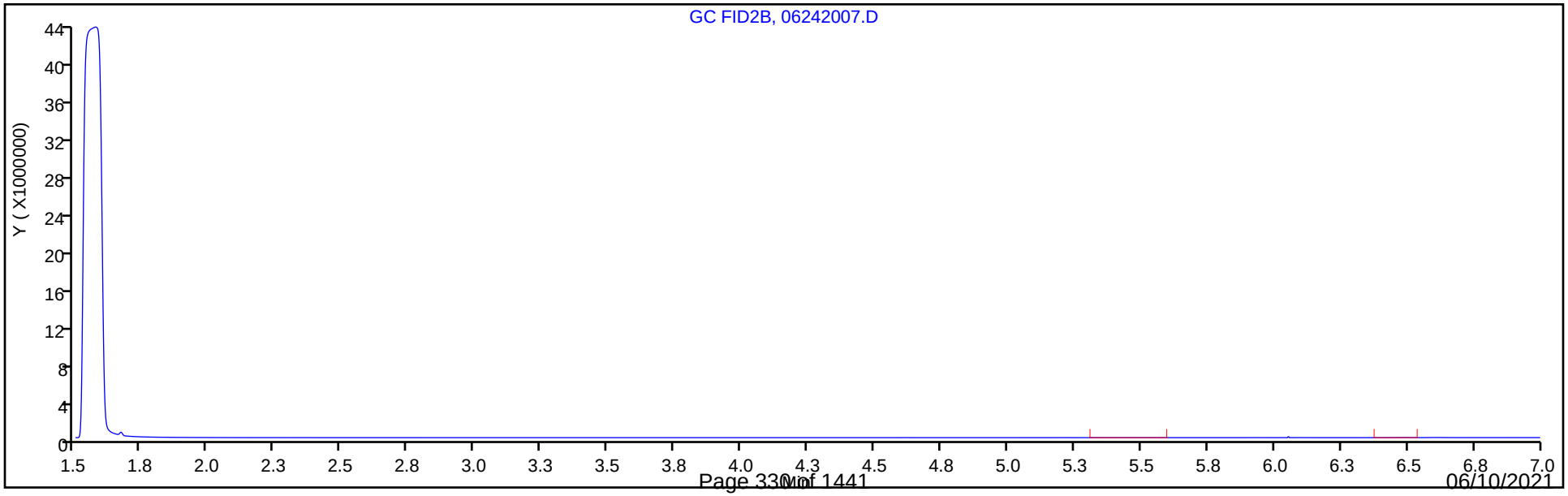
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D

Injection Date:	24-Jun-2020 11:22:02	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L7			Worklist Smp#:	7
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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Jun-2020 11:34:17 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 280-0092709-008
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:49:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	829291020	7227.8	7023.8	
2	1.571	1.577	-0.006	768036307	7227.8	7130.5	
						RPD = 1.51	

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

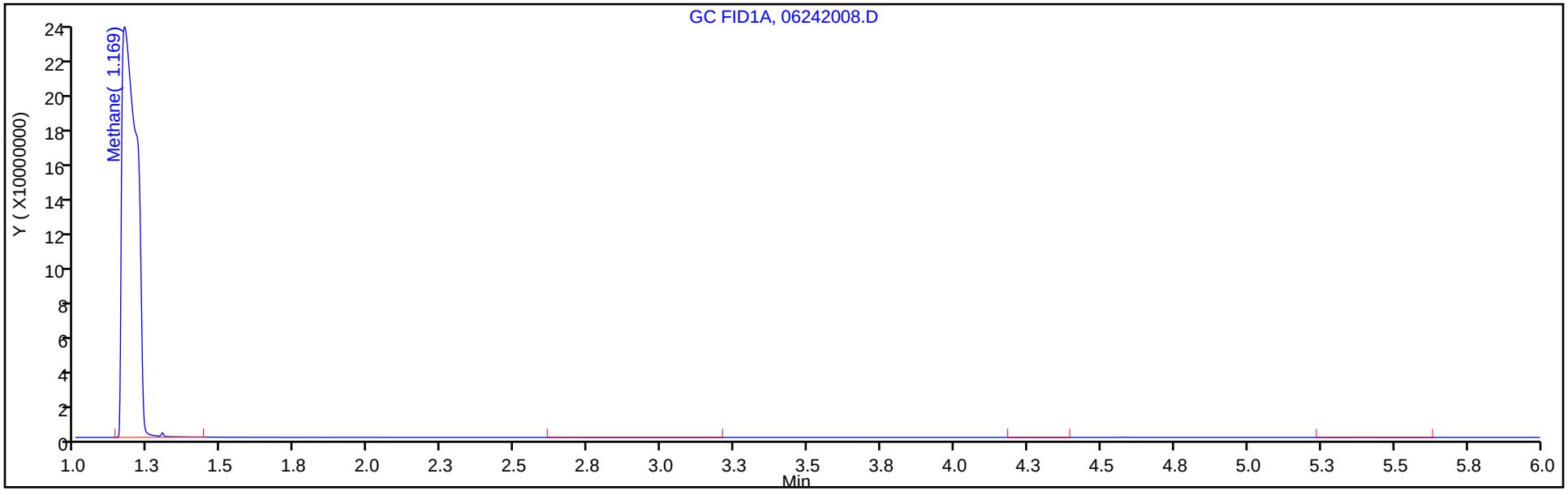
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

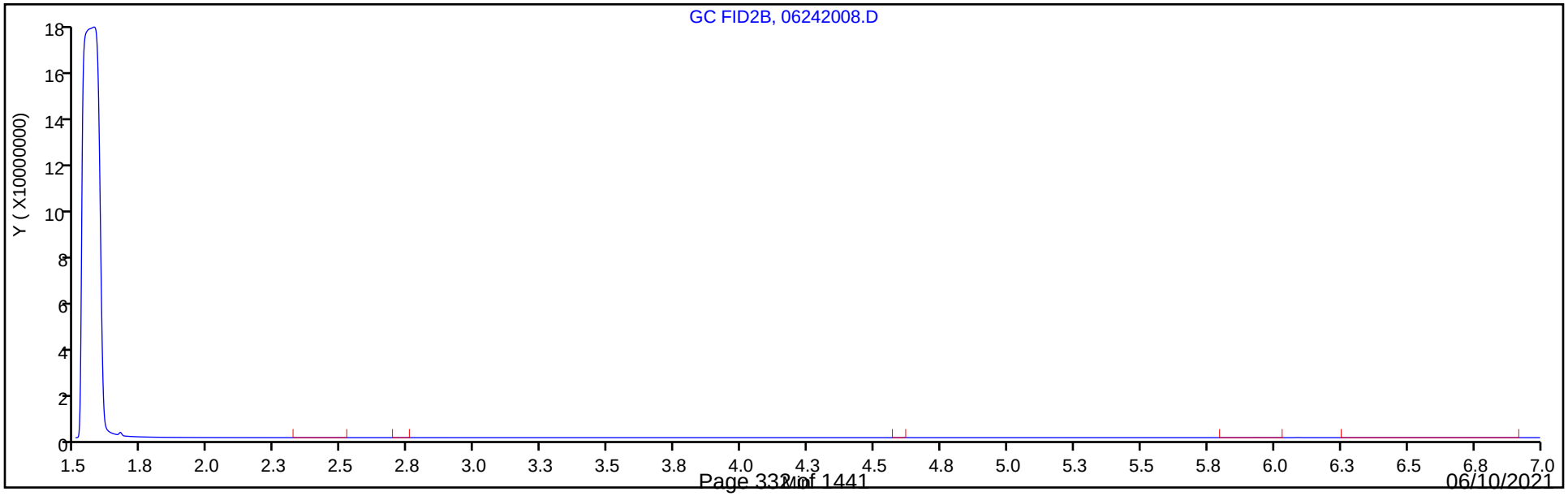
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D

Injection Date:	24-Jun-2020 11:34:17	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L8			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Jun-2020 11:46:32 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: 280-0092709-009
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:03 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:58:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.163	1.172	-0.009	2294825441	21683	19437	
2	1.560	1.577	-0.017	2136573736	21683	19837	
						RPD = 2.03	

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

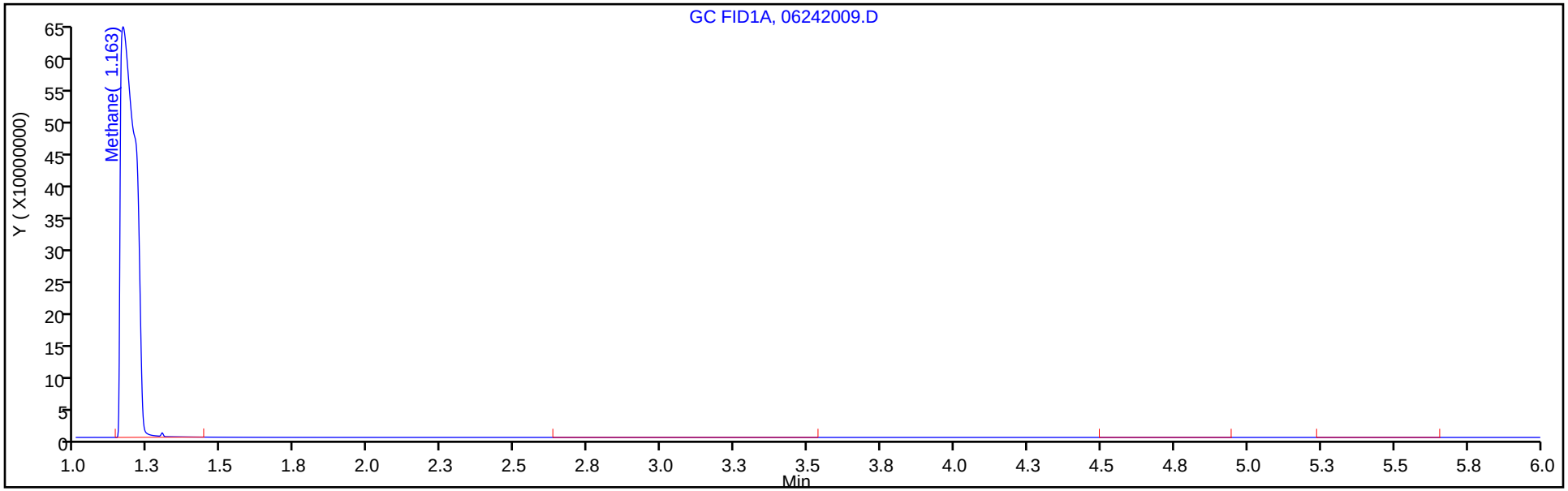
Report Date: 24-Jun-2020 12:40:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

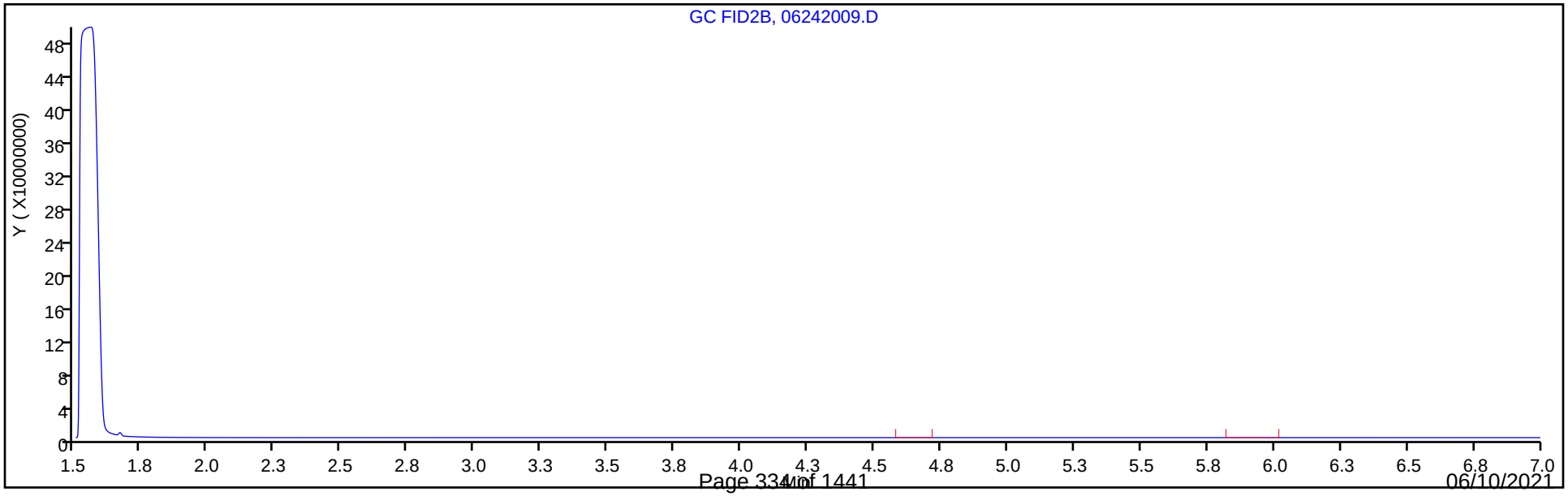
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Injection Date:	24-Jun-2020 11:46:32	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC L9			Worklist Smp#:	9
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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.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		106034		65.2	73.0	-10.8	20.0
Ethane	Ave	114619	103590		124	137	-9.6	20.0
Ethylene	Ave	91780	85095		118	128	-7.3	20.0
Acetylene	Ave	25943	27039		124	119	4.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.17	1.13	1.21
Ethane	1.45	1.41	1.51
Ethylene	1.77	1.73	1.83
Acetylene	4.23	4.15	4.31

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Jun-2020 12:11:02 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0092709-011
Operator ID: gm Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:48:56 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 12:48:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	7740803	73.0	65.2	
2	1.574	1.577	-0.003	7044681	73.0	65.1	
						RPD = 0.04	
3 Ethane							
1	1.452	1.462	-0.010	14176818	136.9	123.7	
2	2.753	2.756	-0.003	11975757	136.9	123.4	
						RPD = 0.27	
4 Ethylene							
1	1.772	1.779	-0.007	10863846	127.7	118.4	
2	2.368	2.372	-0.004	8712711	127.7	119.3	
						RPD = 0.76	
5 Propane							
1	2.672	2.676	-0.004	21556737	200.7	182.6	
2	4.613	4.609	0.004	18266394	200.7	182.6	
						RPD = 0.01	
6 Acetylene							M
1	4.232	4.234	-0.002	3204718	118.5	123.5	
2	2.483	2.486	-0.003	4204612	118.5	122.5	M
						RPD = 0.85	
7 Butane							M
1	4.547	4.541	0.006	25888359	264.5	236.6	M
2	6.083	6.076	0.007	24281133	264.5	242.0	
						RPD = 2.27	
8 isobutylene							
1	5.382	5.381	0.001	18103424	255.4	252.7	
2	5.924	5.921	0.003	15917479	255.4	253.8	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

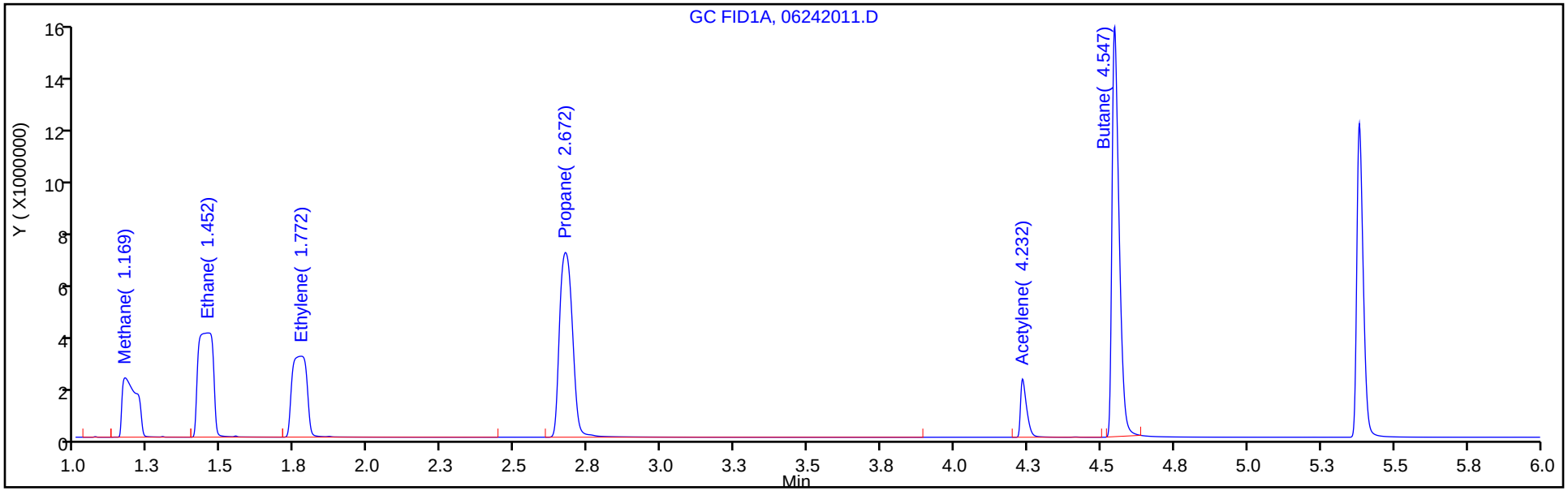
Report Date: 24-Jun-2020 12:48:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

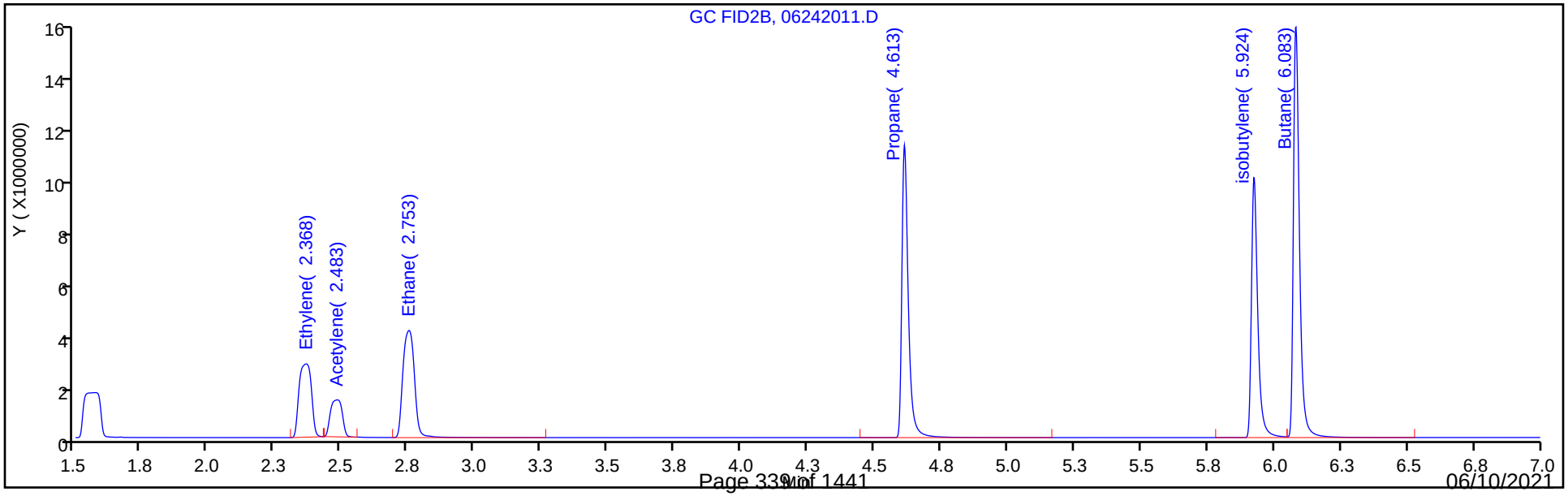
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D

Injection Date:	24-Jun-2020 12:11:02	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ICV			Worklist Smp#:	11
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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.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		96498		65.1	73.0	-10.8	20.0
Ethylene	Ave	73049	68246		119	128	-6.6	20.0
Acetylene	Ave	34329	35475		122	119	3.3	20.0
Ethane	Ave	97082	87507		123	137	-9.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.57	1.54	1.62
Ethylene	2.37	2.32	2.42
Acetylene	2.48	2.41	2.57
Ethane	2.75	2.71	2.81

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Jun-2020 12:11:02 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0092709-011
Operator ID: gm Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:48:56 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 12:48:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	7740803	73.0	65.2	
2	1.574	1.577	-0.003	7044681	73.0	65.1	
						RPD = 0.04	
3 Ethane							
1	1.452	1.462	-0.010	14176818	136.9	123.7	
2	2.753	2.756	-0.003	11975757	136.9	123.4	
						RPD = 0.27	
4 Ethylene							
1	1.772	1.779	-0.007	10863846	127.7	118.4	
2	2.368	2.372	-0.004	8712711	127.7	119.3	
						RPD = 0.76	
5 Propane							
1	2.672	2.676	-0.004	21556737	200.7	182.6	
2	4.613	4.609	0.004	18266394	200.7	182.6	
						RPD = 0.01	
6 Acetylene							M
1	4.232	4.234	-0.002	3204718	118.5	123.5	
2	2.483	2.486	-0.003	4204612	118.5	122.5	M
						RPD = 0.85	
7 Butane							M
1	4.547	4.541	0.006	25888359	264.5	236.6	M
2	6.083	6.076	0.007	24281133	264.5	242.0	
						RPD = 2.27	
8 isobutylene							
1	5.382	5.381	0.001	18103424	255.4	252.7	
2	5.924	5.921	0.003	15917479	255.4	253.8	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

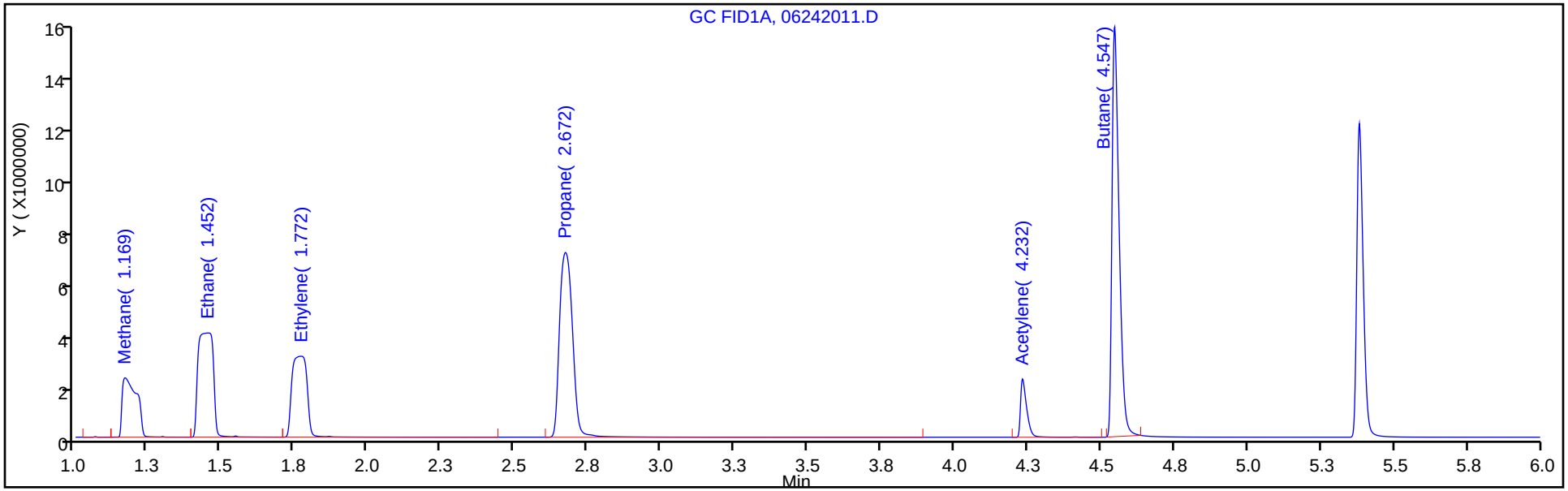
Report Date: 24-Jun-2020 12:48:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

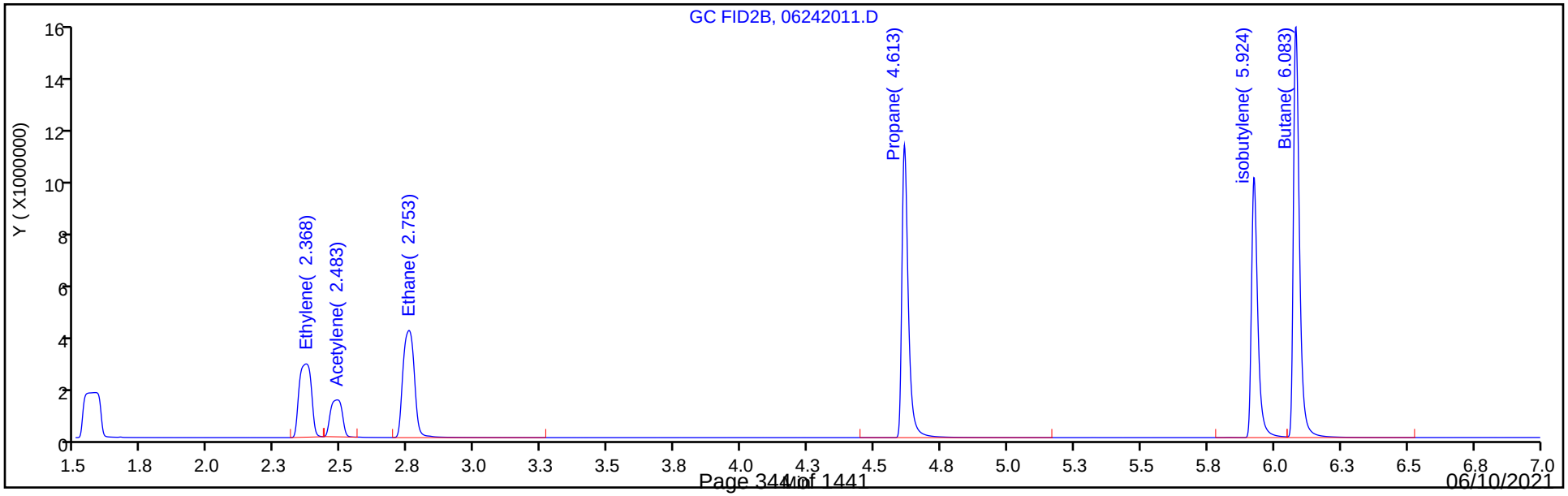
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D

Injection Date:	24-Jun-2020 12:11:02	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ICV			Worklist Smp#:	11
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

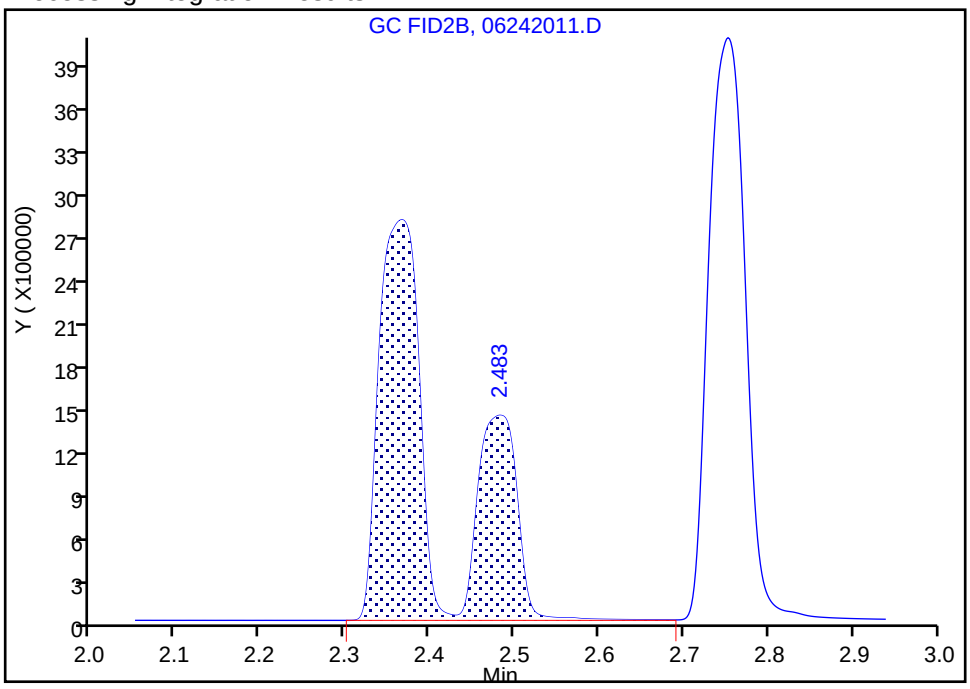
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D
Injection Date: 24-Jun-2020 12:11:02 Instrument ID: VGC_J
Lims ID: ICV
Client ID:
Operator ID: gm ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

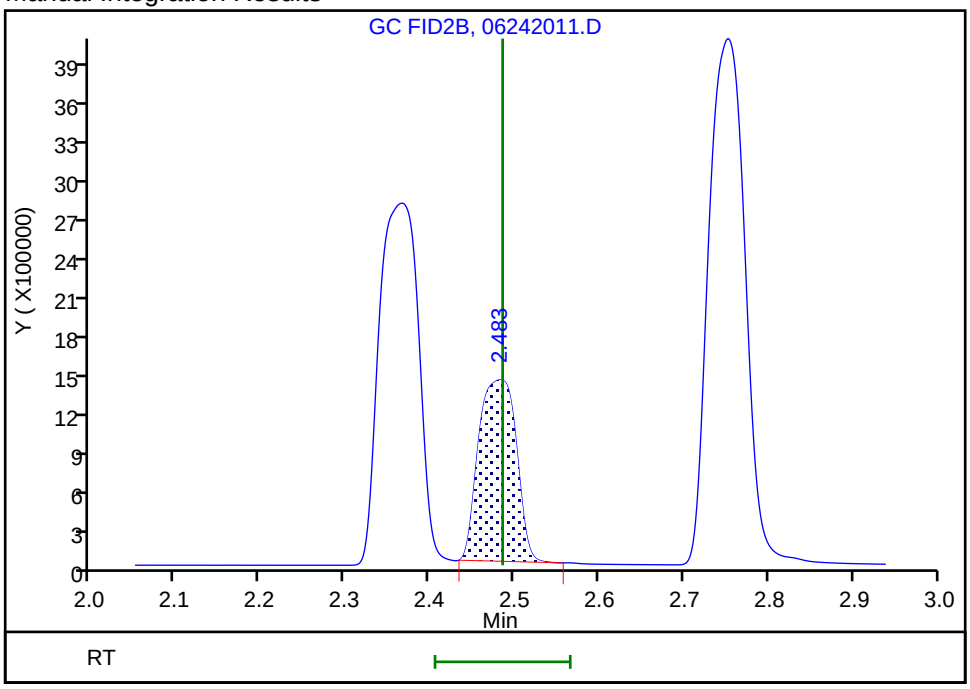
Processing Integration Results

RT: 2.48
Area: 13313502
Amount: 387.8232
Amount Units: ug/l



Manual Integration Results

RT: 2.48
Area: 4204612
Amount: 122.4806
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 12:29:59
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537359/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.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		122407		75.3	73.0	3.1	20.0
Ethane	Ave	114619	119406		143	137	4.2	20.0
Ethylene	Ave	91780	101063		141	128	10.1	20.0
Acetylene	Ave	25943	26190		120	119	1.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537523/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.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		122407		75.3	73.0	3.1	20.0
Ethane	Ave	114619	119406		143	137	4.2	20.0
Ethylene	Ave	91780	101063		141	128	10.1	20.0
Acetylene	Ave	25943	26190		120	119	1.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537359/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.14	1.22
Ethane	1.45	1.40	1.50
Ethylene	1.73	1.68	1.78
Acetylene	4.03	3.95	4.11

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537523/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.14	1.22
Ethane	1.45	1.40	1.50
Ethylene	1.73	1.68	1.78
Acetylene	4.03	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 25-May-2021 10:46:55 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: robertstr Date: 25-May-2021 11:28:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.181	0.000	8936112	73.0	75.3	
2	1.589	1.589	0.000	8173940	73.0	75.6	
						RPD = 0.44	
3 Ethane							
1	1.446	1.446	0.000	16341332	136.9	142.6	
2	2.779	2.779	0.000	13856748	136.9	142.7	
						RPD = 0.11	
4 Ethylene							Ma
1	1.729	1.729	0.000	12902404	127.7	140.6	
2	2.393	2.393	0.000	10551015	127.7	144.4	M
						RPD = 2.71	
5 Propane							
1	2.534	2.534	0.000	25376247	200.7	214.9	
2	4.626	4.626	0.000	21533799	200.7	215.3	
						RPD = 0.16	
6 Acetylene							Ma
1	4.032	4.032	0.000	3104084	118.5	119.7	M
2	2.513	2.513	0.000	4546484	118.5	132.4	M
						RPD = 10.15	
7 Butane							Ma
1	4.381	4.381	0.000	30405722	264.5	277.7	M
2	6.091	6.091	0.000	28301432	264.5	282.0	M
						RPD = 1.52	
8 isobutylene							Ma
1	5.232	5.232	0.000	22658133	255.4	316.3	M
2	5.934	5.934	0.000	20109832	255.4	320.6	M
						RPD = 1.36	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 25-May-2021 10:46:55 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: robertstr Date: 25-May-2021 11:28:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.181	0.000	8936112	73.0	75.3	
2	1.589	1.589	0.000	8173940	73.0	75.6	
						RPD = 0.44	
3 Ethane							
1	1.446	1.446	0.000	16341332	136.9	142.6	
2	2.779	2.779	0.000	13856748	136.9	142.7	
						RPD = 0.11	
4 Ethylene							Ma
1	1.729	1.729	0.000	12902404	127.7	140.6	
2	2.393	2.393	0.000	10551015	127.7	144.4	M
						RPD = 2.71	
5 Propane							
1	2.534	2.534	0.000	25376247	200.7	214.9	
2	4.626	4.626	0.000	21533799	200.7	215.3	
						RPD = 0.16	
6 Acetylene							Ma
1	4.032	4.032	0.000	3104084	118.5	119.7	M
2	2.513	2.513	0.000	4546484	118.5	132.4	M
						RPD = 10.15	
7 Butane							Ma
1	4.381	4.381	0.000	30405722	264.5	277.7	M
2	6.091	6.091	0.000	28301432	264.5	282.0	M
						RPD = 1.52	
8 isobutylene							Ma
1	5.232	5.232	0.000	22658133	255.4	316.3	M
2	5.934	5.934	0.000	20109832	255.4	320.6	M
						RPD = 1.36	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

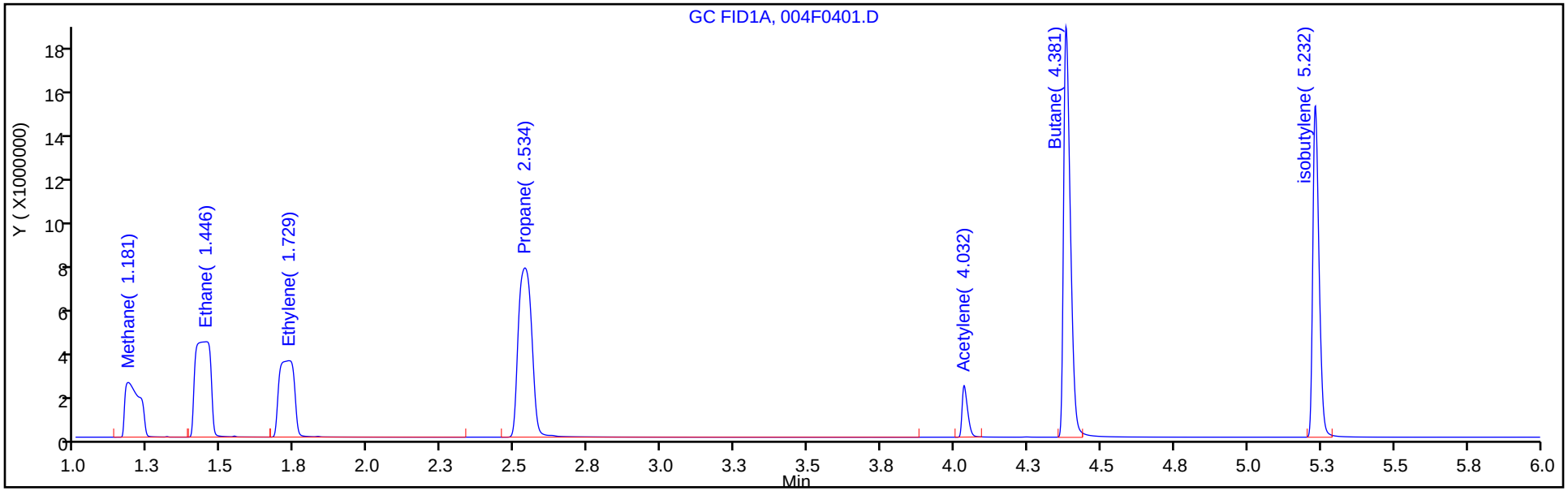
Report Date: 26-May-2021 13:51:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

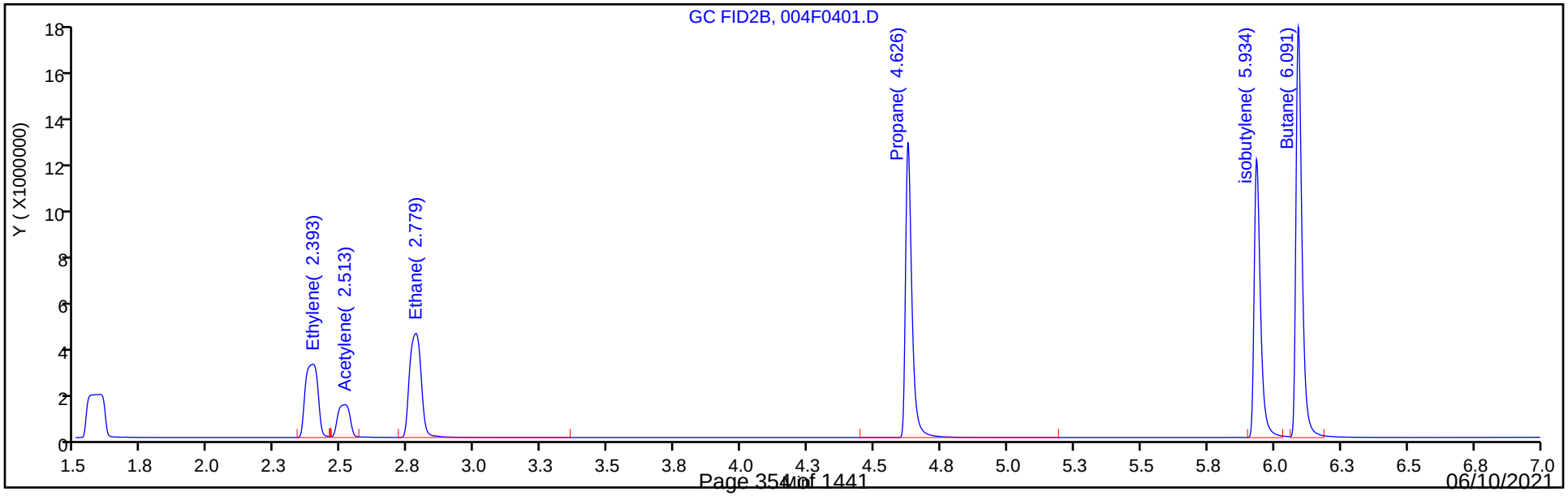
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D

Injection Date:	25-May-2021 10:46:55	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			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



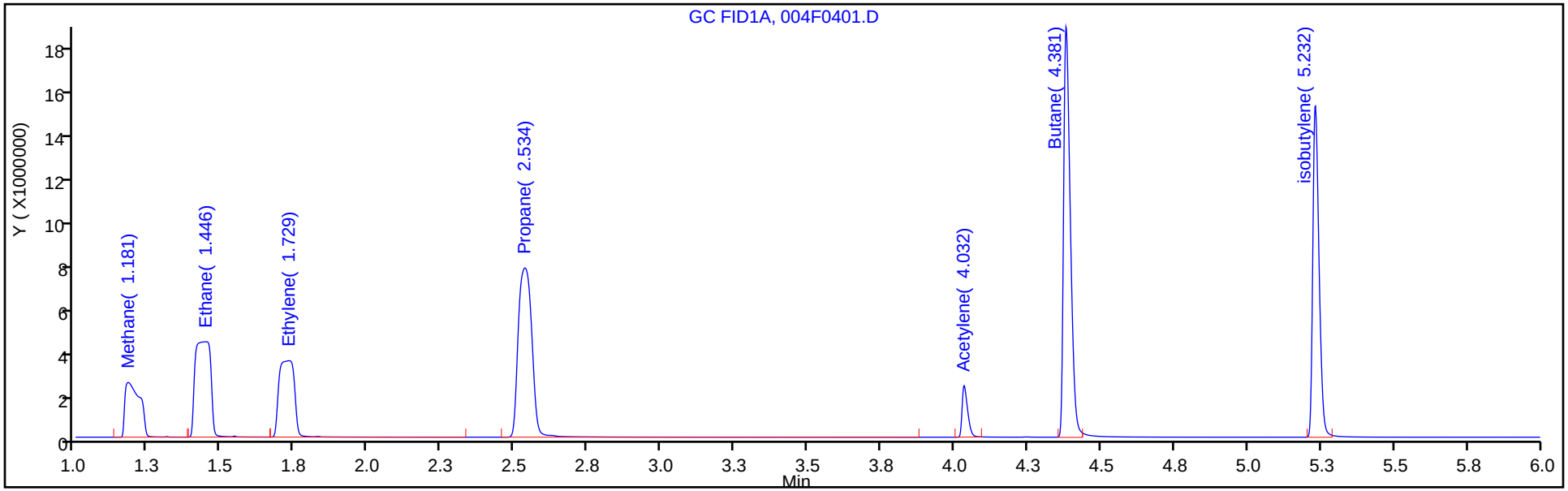
Report Date: 26-May-2021 13:51:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

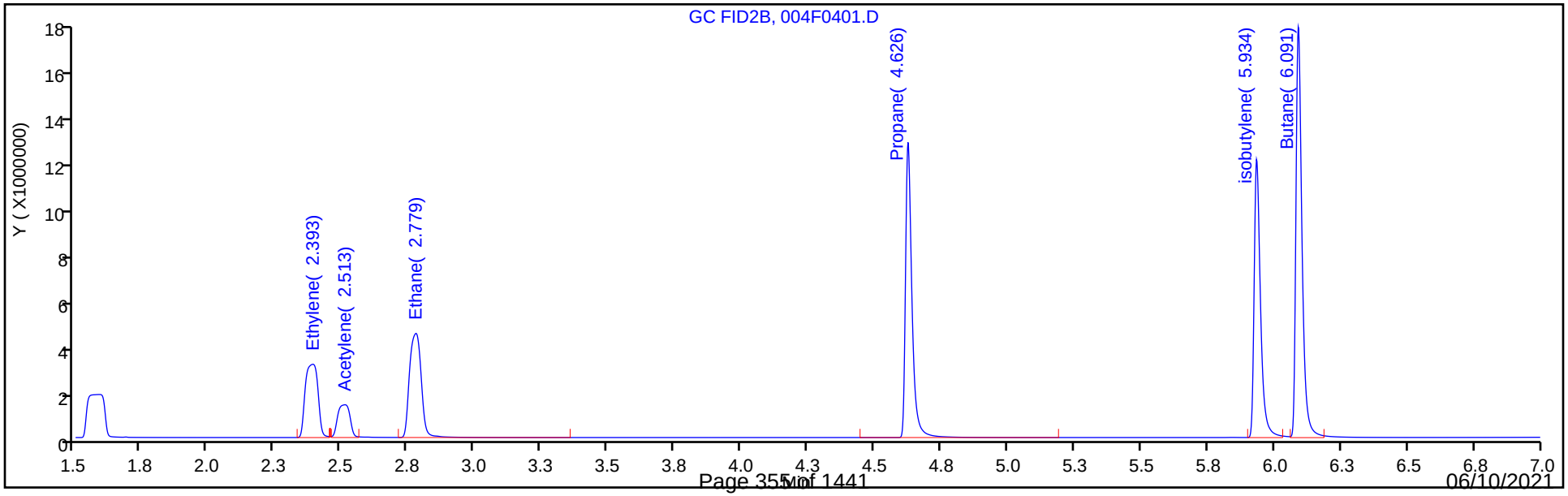
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D

Injection Date:	25-May-2021 10:46:55	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

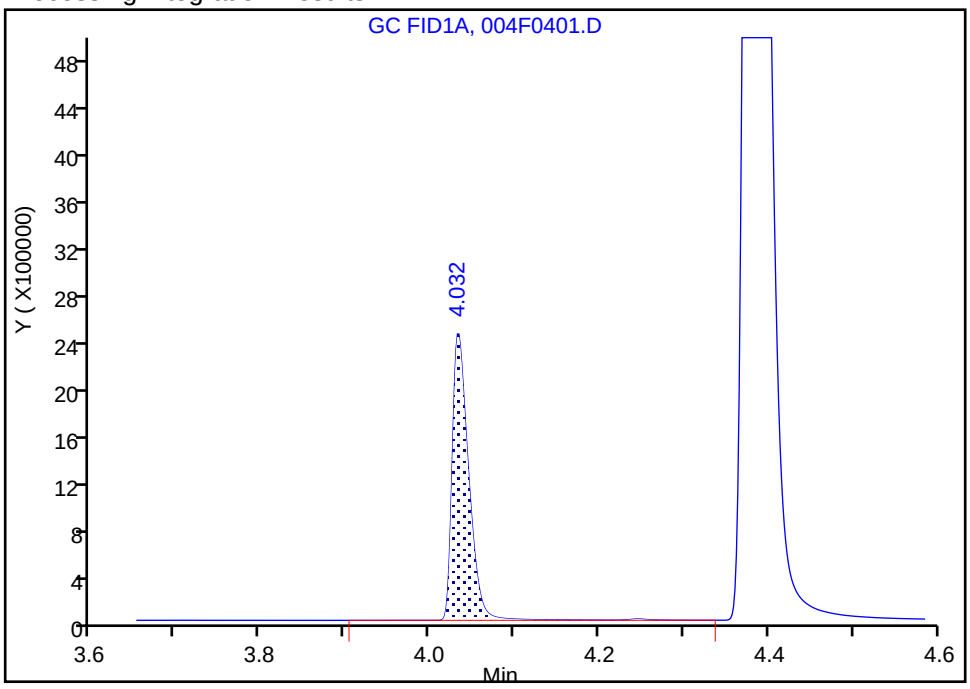
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Injection Date: 25-May-2021 10:46:55 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

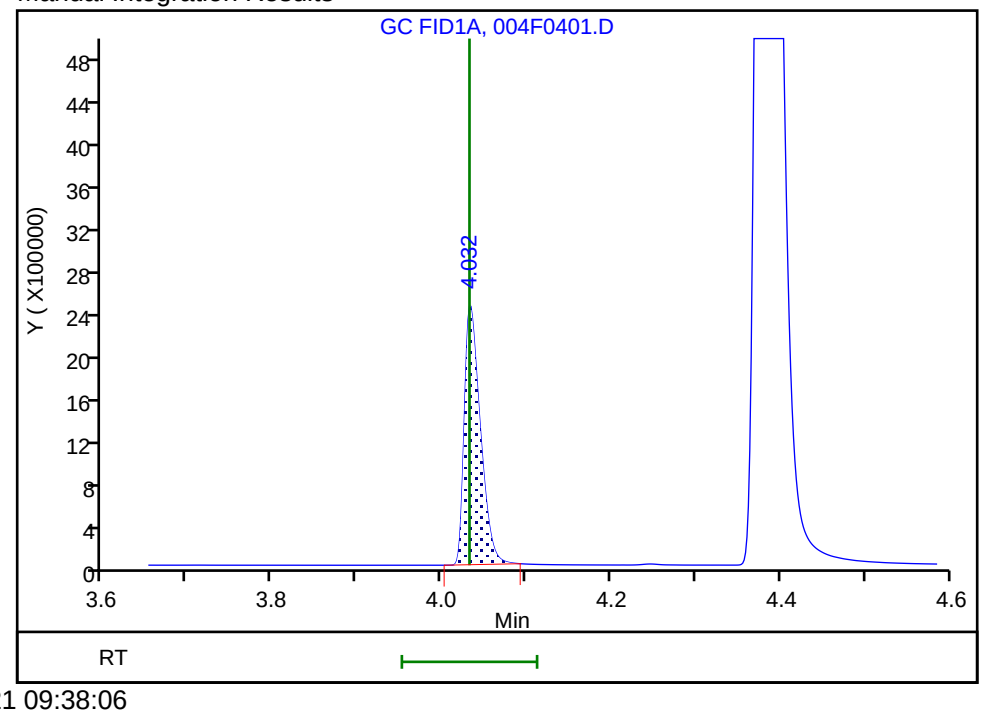
Processing Integration Results

RT: 4.03
Area: 3189801
Amount: 122.9543
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 3104084
Amount: 119.6502
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:38:06
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

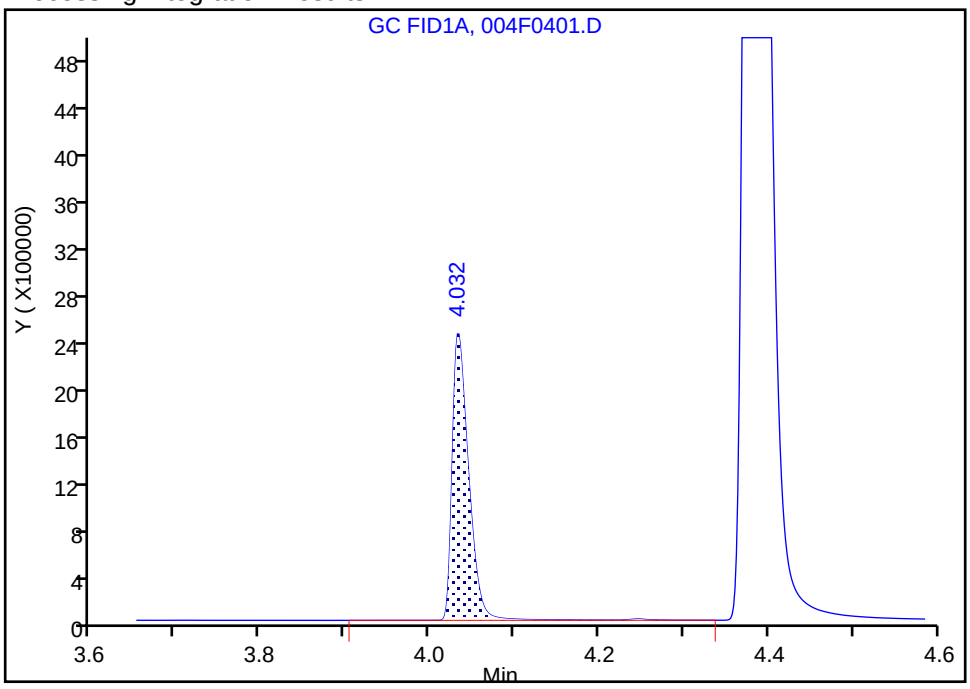
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Injection Date: 25-May-2021 10:46:55 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

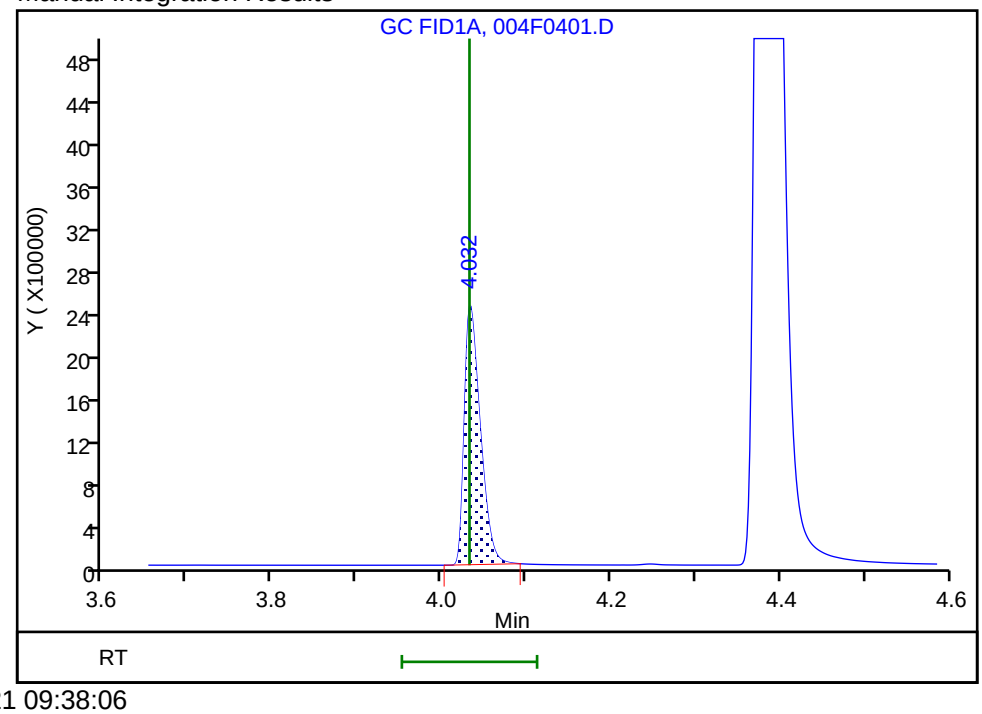
Processing Integration Results

RT: 4.03
Area: 3189801
Amount: 122.9543
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 3104084
Amount: 119.6502
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:38:06
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537359/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.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		111967		75.6	73.0	3.6	20.0
Ethylene	Ave	73049	82645		144	128	13.1	20.0
Acetylene	Ave	34329	38360		132	119	11.7	20.0
Ethane	Ave	97082	101251		143	137	4.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537523/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.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		111967		75.6	73.0	3.6	20.0
Ethylene	Ave	73049	82645		144	128	13.1	20.0
Acetylene	Ave	34329	38360		132	119	11.7	20.0
Ethane	Ave	97082	101251		143	137	4.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537359/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.55	1.63
Ethylene	2.39	2.34	2.44
Acetylene	2.51	2.43	2.59
Ethane	2.78	2.73	2.83

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537523/4 Calibration Date: 05/25/2021 10:46

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.55	1.63
Ethylene	2.39	2.34	2.44
Acetylene	2.51	2.43	2.59
Ethane	2.78	2.73	2.83

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 25-May-2021 10:46:55 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: robertstr Date: 25-May-2021 11:28:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.181	0.000	8936112	73.0	75.3	
2	1.589	1.589	0.000	8173940	73.0	75.6	
						RPD = 0.44	
3 Ethane							
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2	2.393	2.393	0.000	10551015	127.7	144.4	M
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2	4.626	4.626	0.000	21533799	200.7	215.3	
						RPD = 0.16	
6 Acetylene							Ma
1	4.032	4.032	0.000	3104084	118.5	119.7	M
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						RPD = 10.15	
7 Butane							Ma
1	4.381	4.381	0.000	30405722	264.5	277.7	M
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						RPD = 1.52	
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1	5.232	5.232	0.000	22658133	255.4	316.3	M
2	5.934	5.934	0.000	20109832	255.4	320.6	M
						RPD = 1.36	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 25-May-2021 10:46:55 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: robertstr Date: 25-May-2021 11:28:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.181	0.000	8936112	73.0	75.3	
2	1.589	1.589	0.000	8173940	73.0	75.6	
						RPD = 0.44	
3 Ethane							
1	1.446	1.446	0.000	16341332	136.9	142.6	
2	2.779	2.779	0.000	13856748	136.9	142.7	
						RPD = 0.11	
4 Ethylene							Ma
1	1.729	1.729	0.000	12902404	127.7	140.6	
2	2.393	2.393	0.000	10551015	127.7	144.4	M
						RPD = 2.71	
5 Propane							
1	2.534	2.534	0.000	25376247	200.7	214.9	
2	4.626	4.626	0.000	21533799	200.7	215.3	
						RPD = 0.16	
6 Acetylene							Ma
1	4.032	4.032	0.000	3104084	118.5	119.7	M
2	2.513	2.513	0.000	4546484	118.5	132.4	M
						RPD = 10.15	
7 Butane							Ma
1	4.381	4.381	0.000	30405722	264.5	277.7	M
2	6.091	6.091	0.000	28301432	264.5	282.0	M
						RPD = 1.52	
8 isobutylene							Ma
1	5.232	5.232	0.000	22658133	255.4	316.3	M
2	5.934	5.934	0.000	20109832	255.4	320.6	M
						RPD = 1.36	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

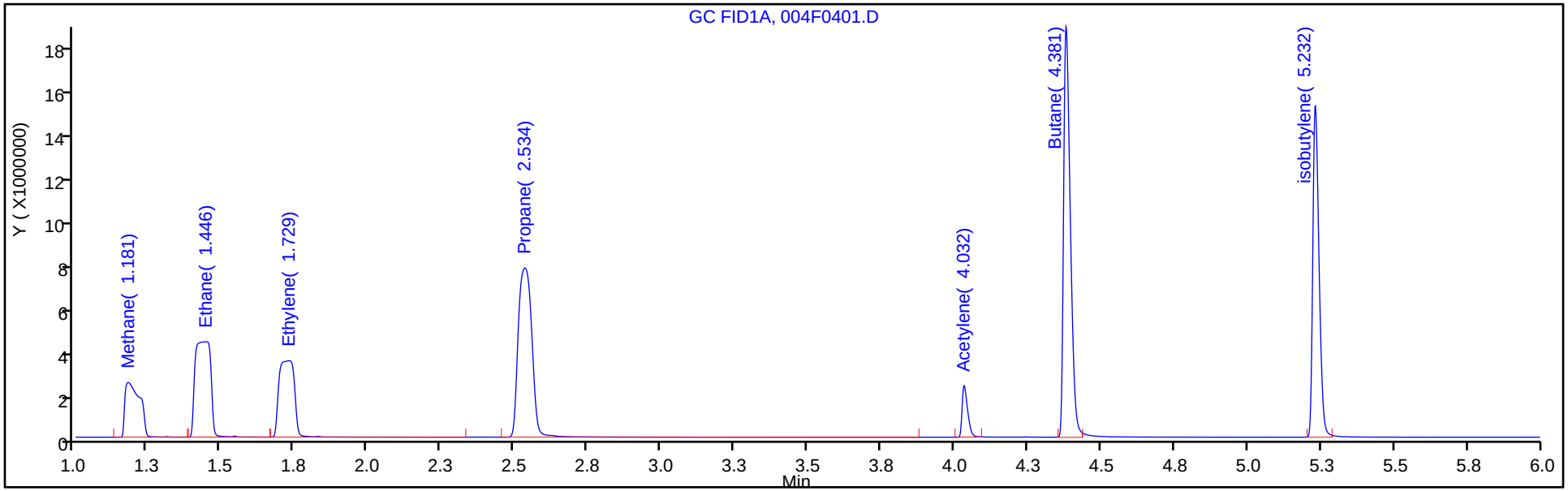
Report Date: 26-May-2021 13:51:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

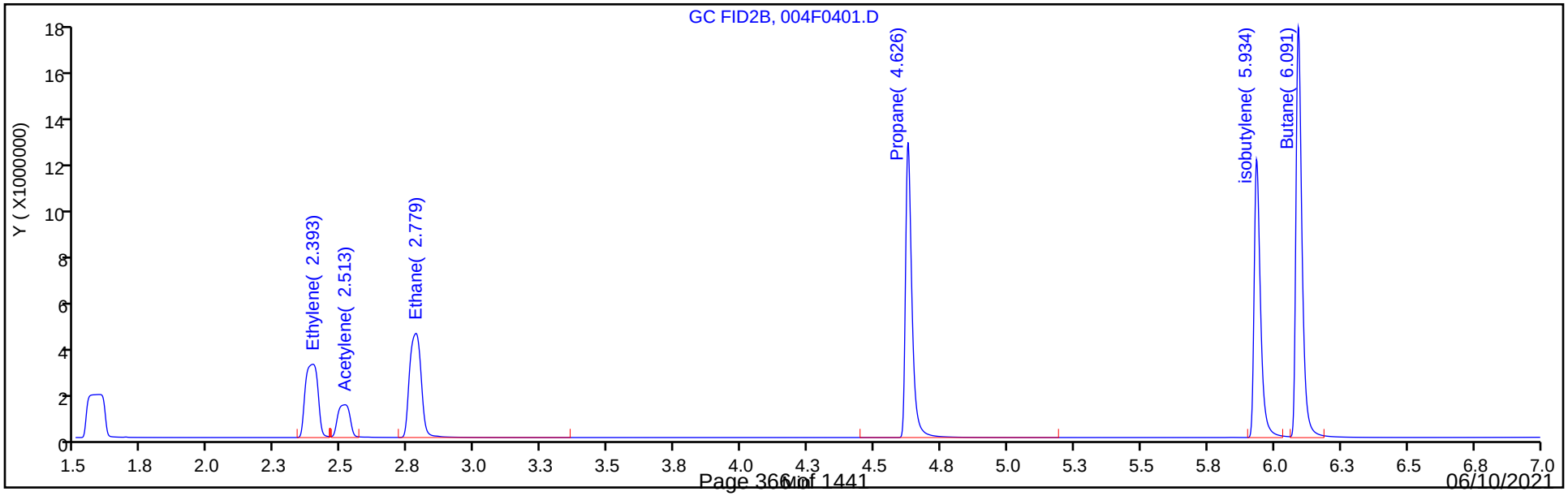
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D

Injection Date:	25-May-2021 10:46:55	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			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



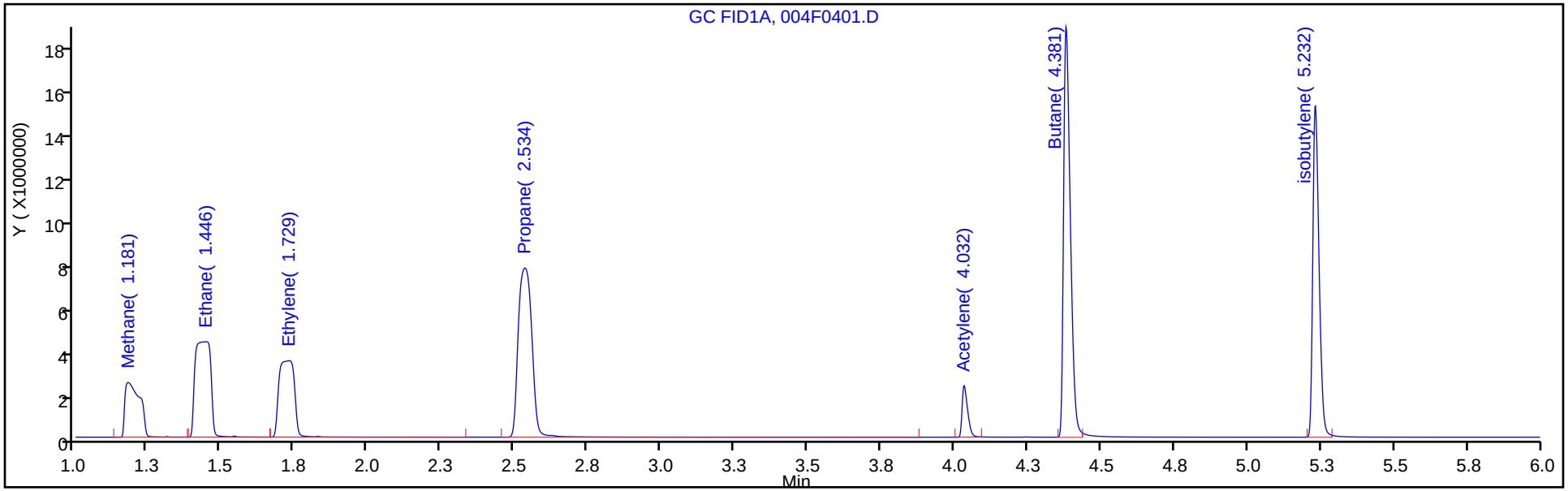
Report Date: 26-May-2021 13:51:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

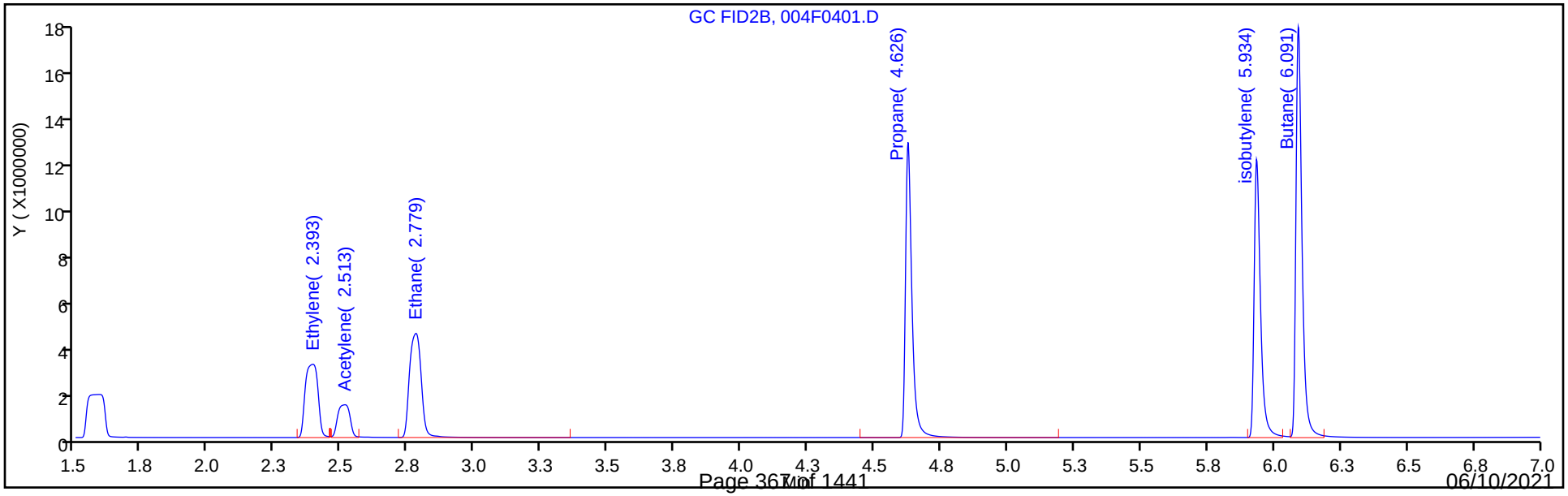
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D

Injection Date:	25-May-2021 10:46:55	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

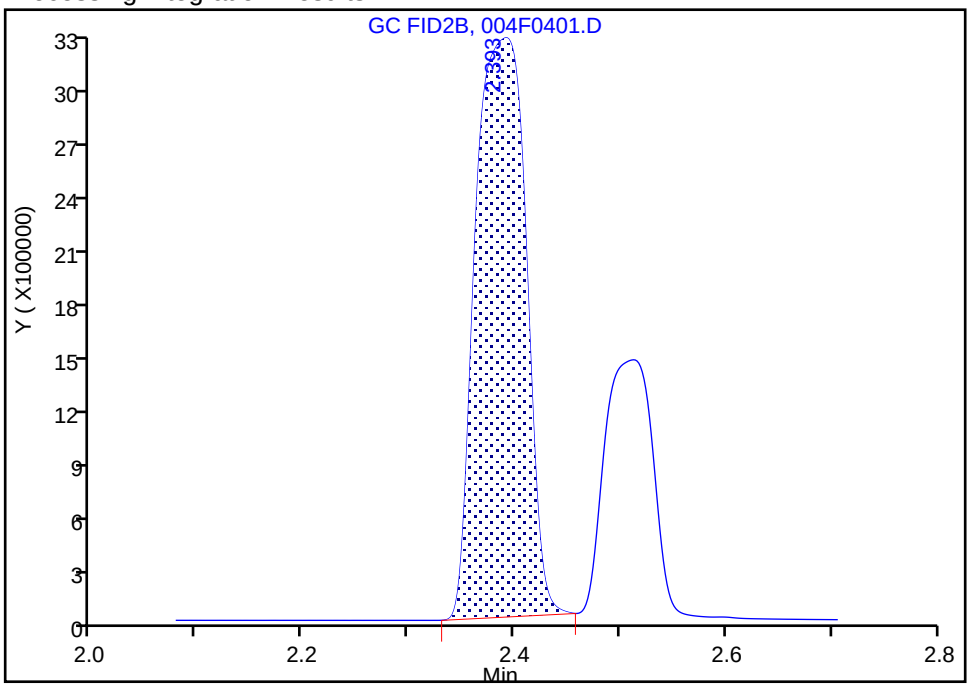
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Injection Date: 25-May-2021 10:46:55 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

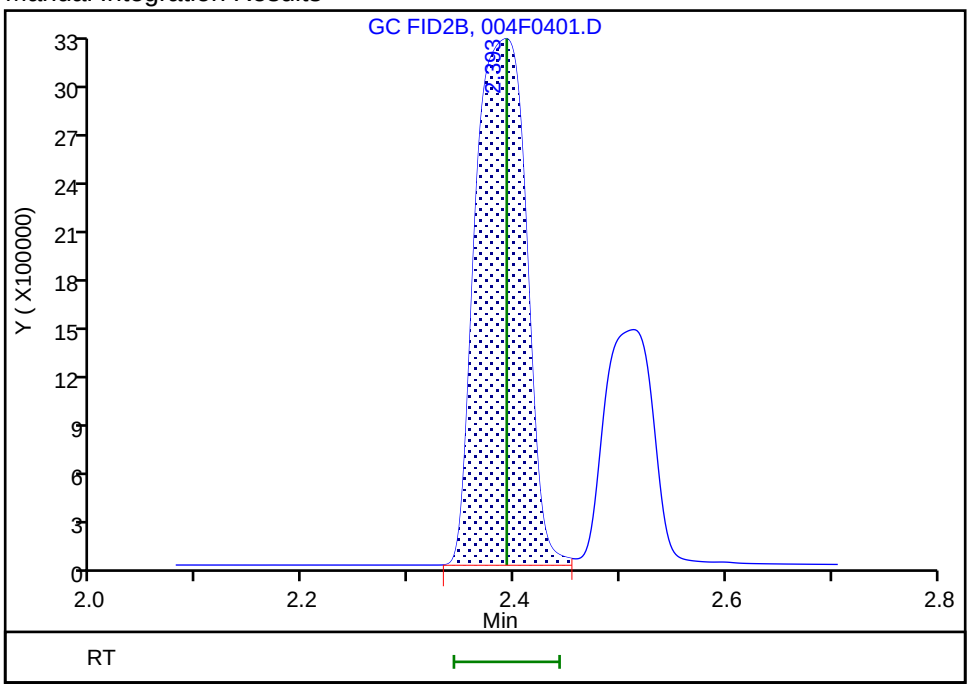
Processing Integration Results

RT: 2.39
Area: 10408908
Amount: 142.4923
Amount Units: ug/l



Manual Integration Results

RT: 2.39
Area: 10551015
Amount: 144.4376
Amount Units: ug/l



Reviewer: robertstr, 25-May-2021 11:22:49
Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

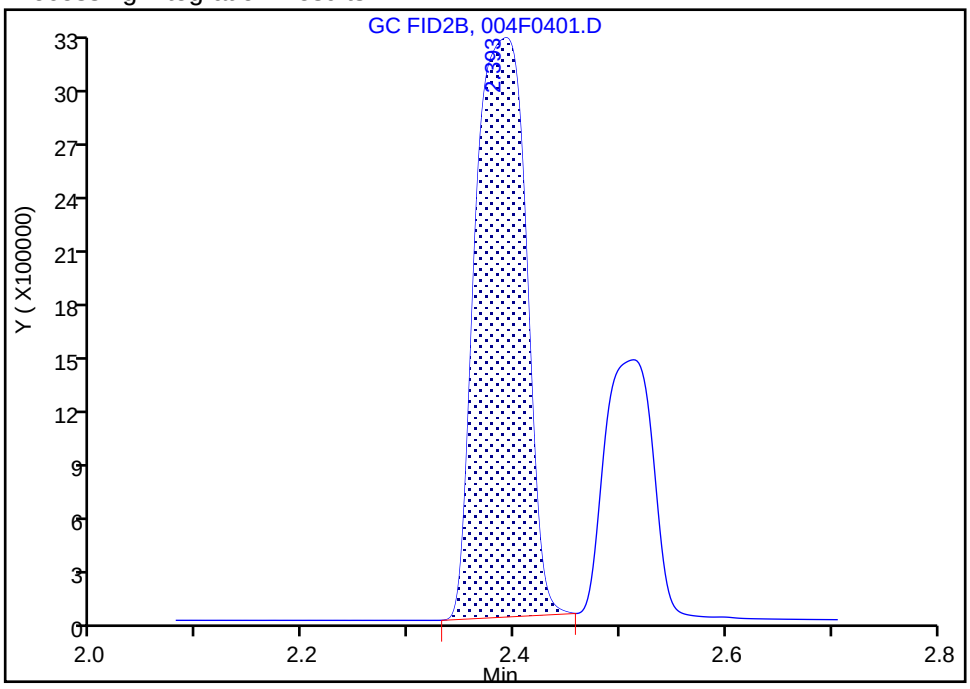
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Injection Date: 25-May-2021 10:46:55 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

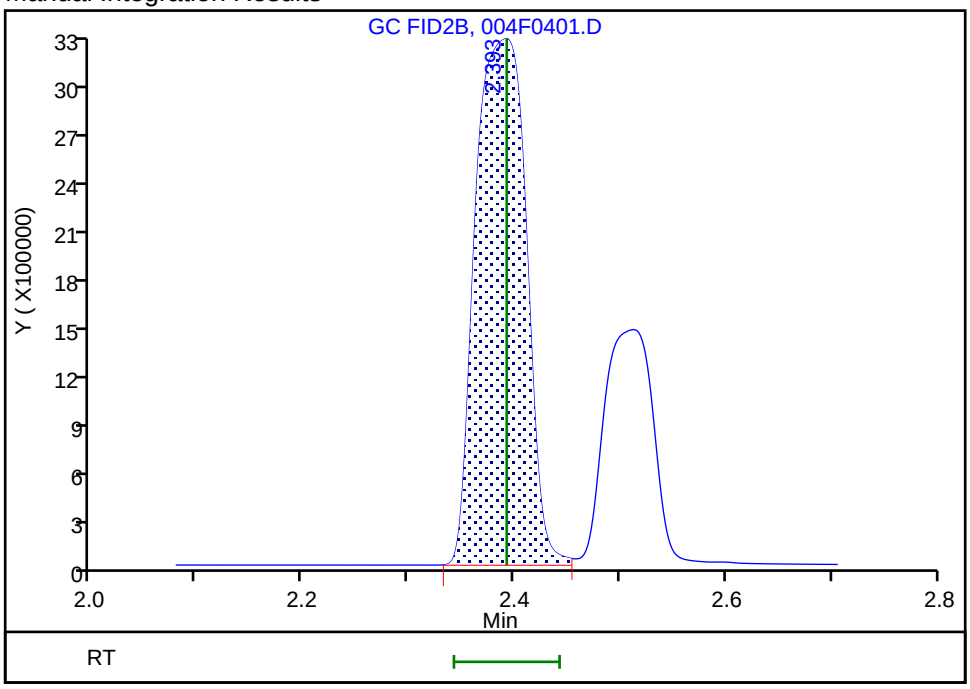
Processing Integration Results

RT: 2.39
Area: 10408908
Amount: 142.4923
Amount Units: ug/l



Manual Integration Results

RT: 2.39
Area: 10551015
Amount: 144.4376
Amount Units: ug/l



Reviewer: robertstr, 25-May-2021 11:22:49
Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

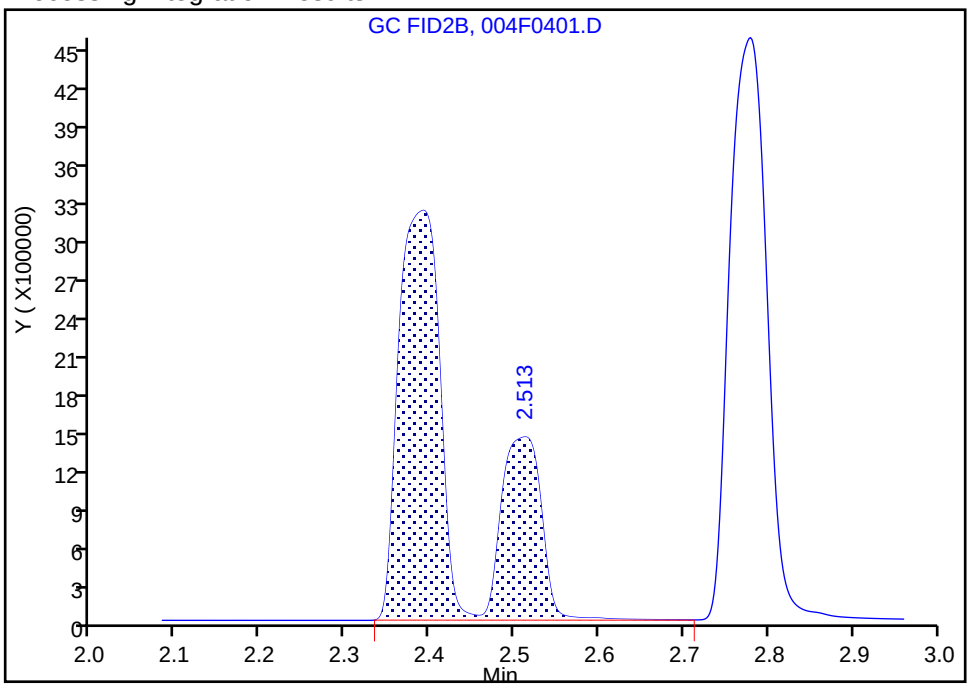
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Injection Date: 25-May-2021 10:46:55 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

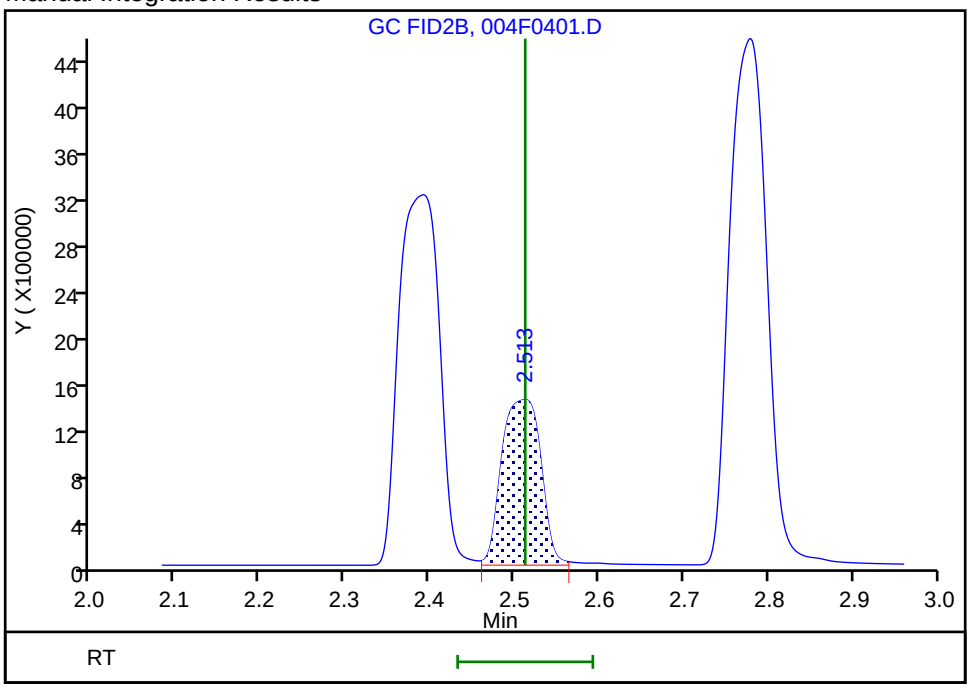
Processing Integration Results

RT: 2.51
Area: 15163031
Amount: 441.7001
Amount Units: ug/l



Manual Integration Results

RT: 2.51
Area: 4546484
Amount: 132.4394
Amount Units: ug/l



Reviewer: robertstr, 25-May-2021 11:22:05
Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

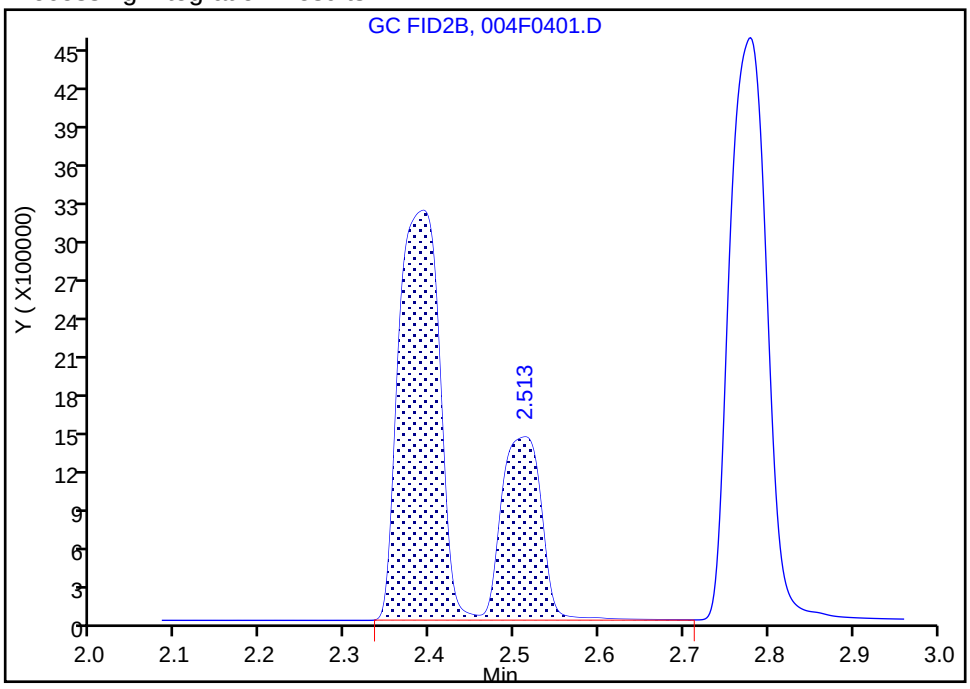
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\004F0401.D
Injection Date: 25-May-2021 10:46:55 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

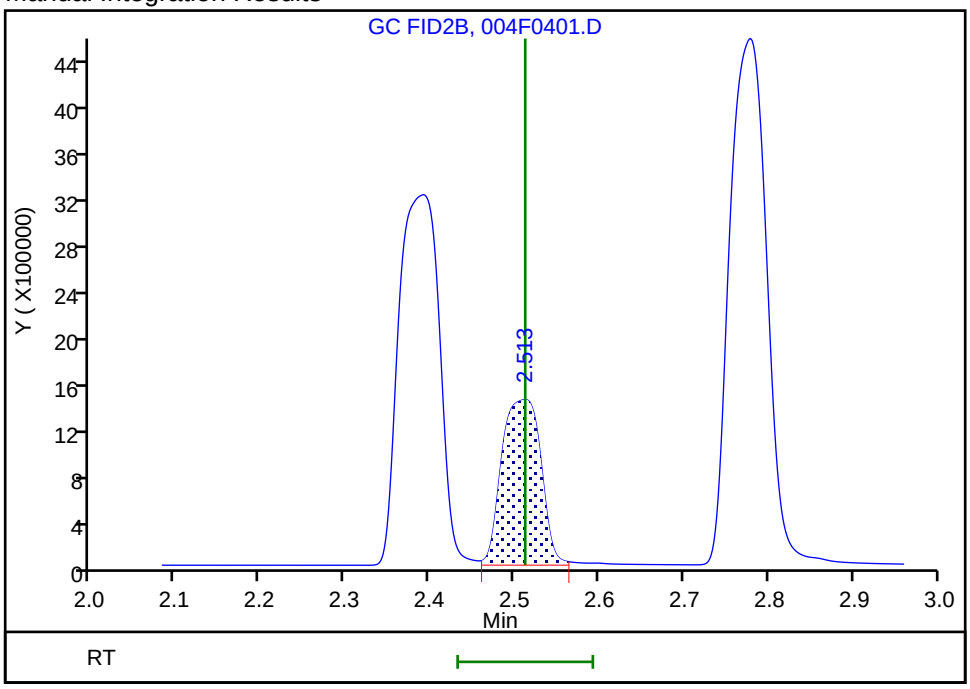
Processing Integration Results

RT: 2.51
Area: 15163031
Amount: 441.7001
Amount Units: ug/l



Manual Integration Results

RT: 2.51
Area: 4546484
Amount: 132.4394
Amount Units: ug/l



Reviewer: robertstr, 25-May-2021 11:22:05
Audit Action: Assigned New Baseline Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/21 Calibration Date: 05/25/2021 15:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.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		122446		75.3	73.0	3.1	20.0
Ethane	Ave	114619	119252		142	137	4.0	20.0
Ethylene	Ave	91780	98575		137	128	7.4	20.0
Acetylene	Ave	25943	27128		124	119	4.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/21 Calibration Date: 05/25/2021 15:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.17	1.14	1.22
Ethane	1.44	1.40	1.50
Ethylene	1.72	1.68	1.78
Acetylene	4.02	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 15:00:50 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:14 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:46:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.181	-0.009	8938949	73.0	75.3	
2	1.581	1.589	-0.008	8155254	73.0	75.4	
						RPD = 0.18	
3 Ethane							
1	1.437	1.446	-0.009	16320349	136.9	142.4	
2	2.761	2.779	-0.018	13758783	136.9	141.7	
						RPD = 0.47	
4 Ethylene							Ma
1	1.717	1.729	-0.012	12584694	127.7	137.1	
2	2.376	2.393	-0.017	10305648	127.7	141.1	M
						RPD = 2.85	
5 Propane							
1	2.517	2.534	-0.017	25532462	200.7	216.2	
2	4.617	4.626	-0.009	21606331	200.7	216.0	
						RPD = 0.12	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3215314	118.5	123.9	a
2	2.494	2.513	-0.019	4600112	118.5	134.0	M
						RPD = 7.80	
7 Butane							Ma
1	4.372	4.381	-0.009	31055179	264.5	283.6	a
2	6.086	6.091	-0.005	28850192	264.5	287.4	M
						RPD = 1.32	
8 isobutylene							Ma
1	5.226	5.232	-0.006	22506136	255.4	314.2	
2	5.929	5.934	-0.005	19767203	255.4	315.2	M
						RPD = 0.32	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

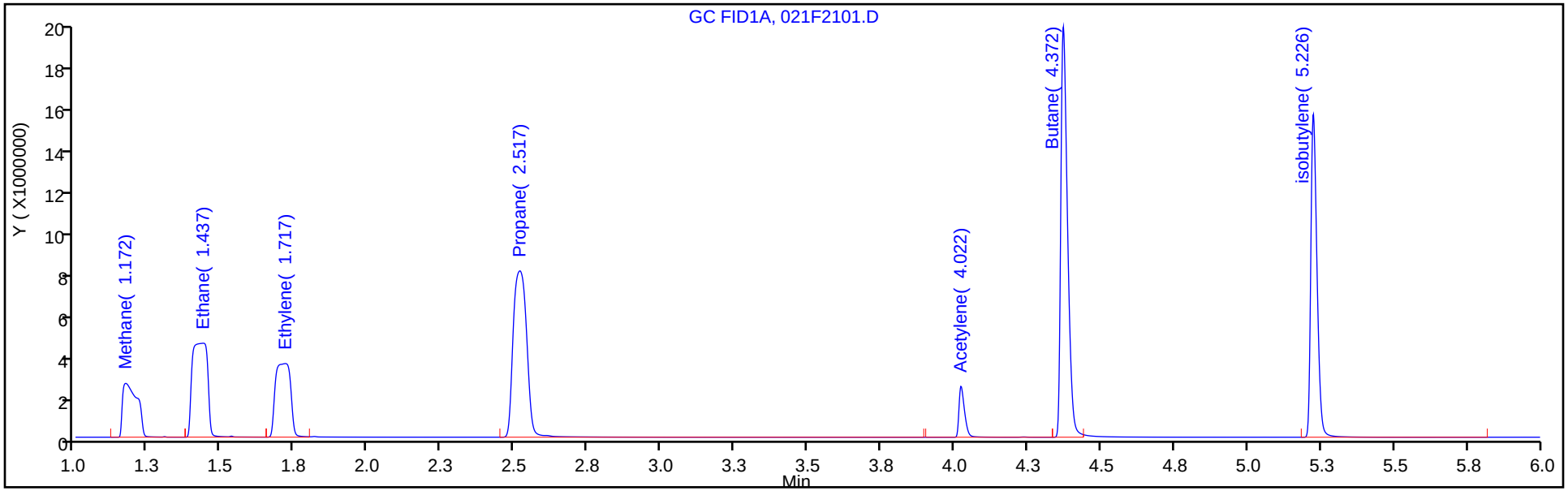
Report Date: 26-May-2021 13:51:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

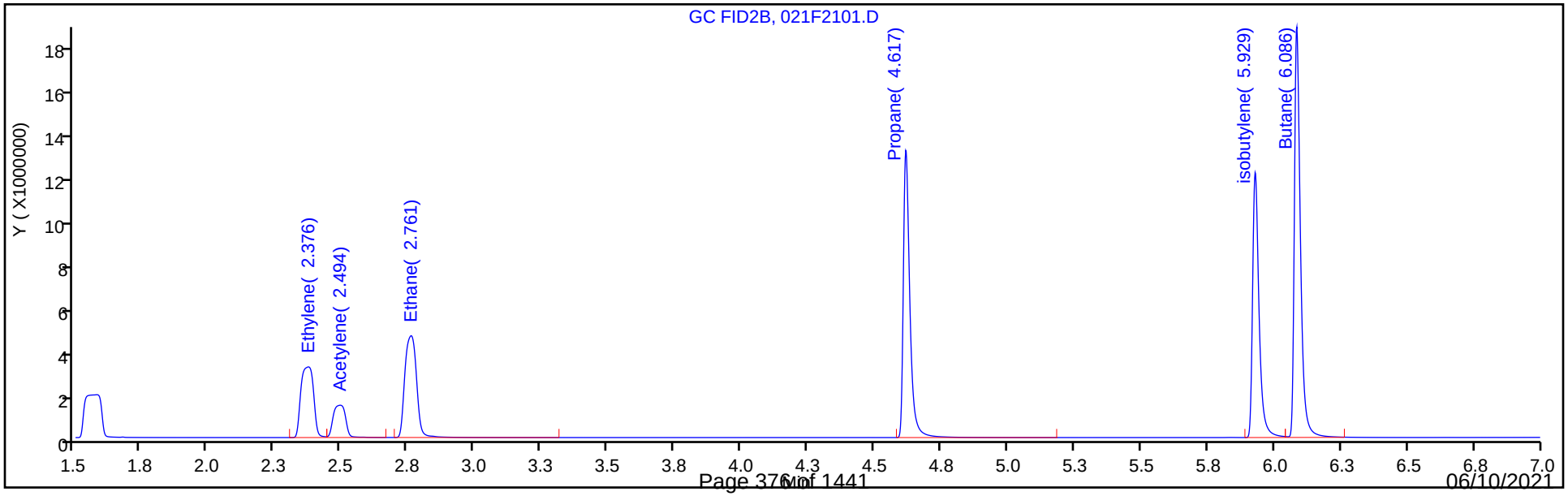
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D

Injection Date:	25-May-2021 15:00:50	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

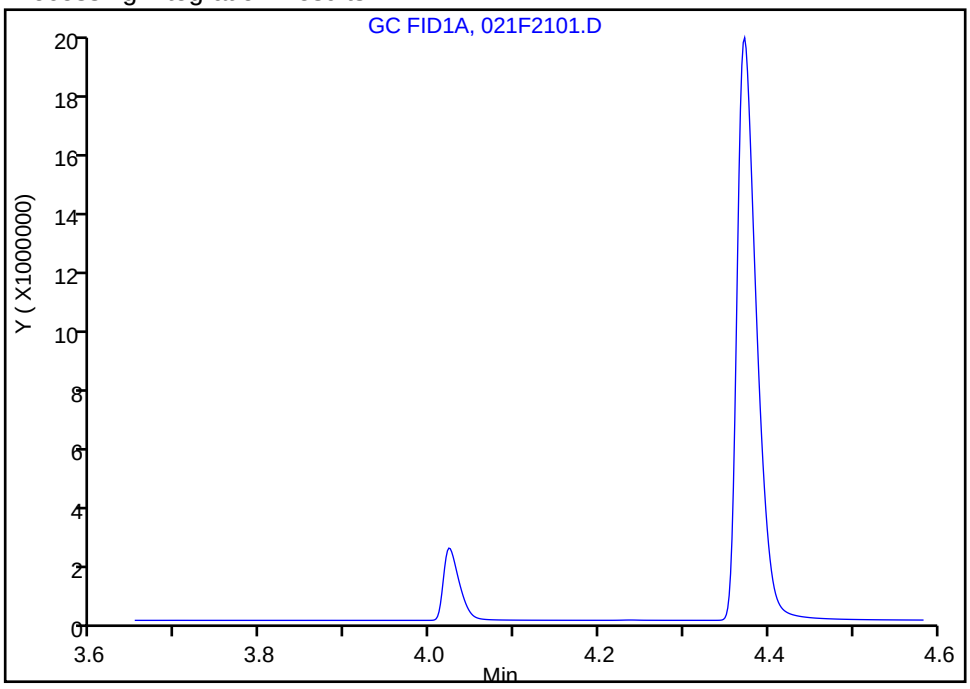
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D				
Injection Date:	25-May-2021 15:00:50	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

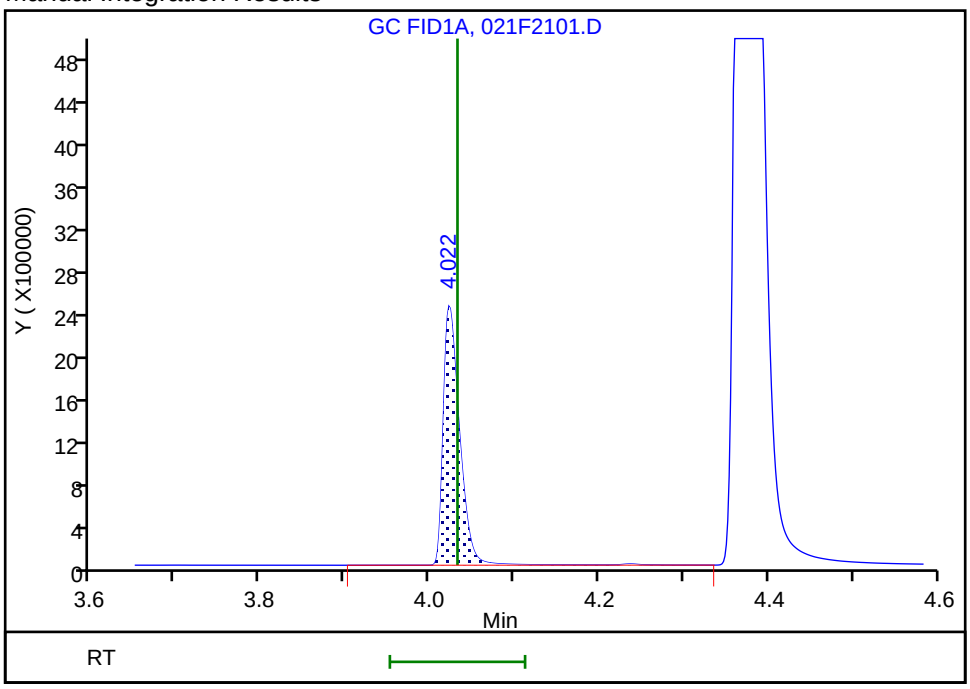
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 3215314
Amount: 123.9377
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:45:55
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/21 Calibration Date: 05/25/2021 15:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.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		111711		75.4	73.0	3.3	20.0
Ethylene	Ave	73049	80723		141	128	10.5	20.0
Acetylene	Ave	34329	38812		134	119	13.1	20.0
Ethane	Ave	97082	100535		142	137	3.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/21 Calibration Date: 05/25/2021 15:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.58	1.55	1.63
Ethylene	2.38	2.34	2.44
Acetylene	2.49	2.43	2.59
Ethane	2.76	2.73	2.83

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 15:00:50 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:14 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:46:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.181	-0.009	8938949	73.0	75.3	
2	1.581	1.589	-0.008	8155254	73.0	75.4	
						RPD = 0.18	
3 Ethane							
1	1.437	1.446	-0.009	16320349	136.9	142.4	
2	2.761	2.779	-0.018	13758783	136.9	141.7	
						RPD = 0.47	
4 Ethylene							Ma
1	1.717	1.729	-0.012	12584694	127.7	137.1	
2	2.376	2.393	-0.017	10305648	127.7	141.1	M
						RPD = 2.85	
5 Propane							
1	2.517	2.534	-0.017	25532462	200.7	216.2	
2	4.617	4.626	-0.009	21606331	200.7	216.0	
						RPD = 0.12	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3215314	118.5	123.9	a
2	2.494	2.513	-0.019	4600112	118.5	134.0	M
						RPD = 7.80	
7 Butane							Ma
1	4.372	4.381	-0.009	31055179	264.5	283.6	a
2	6.086	6.091	-0.005	28850192	264.5	287.4	M
						RPD = 1.32	
8 isobutylene							Ma
1	5.226	5.232	-0.006	22506136	255.4	314.2	
2	5.929	5.934	-0.005	19767203	255.4	315.2	M
						RPD = 0.32	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

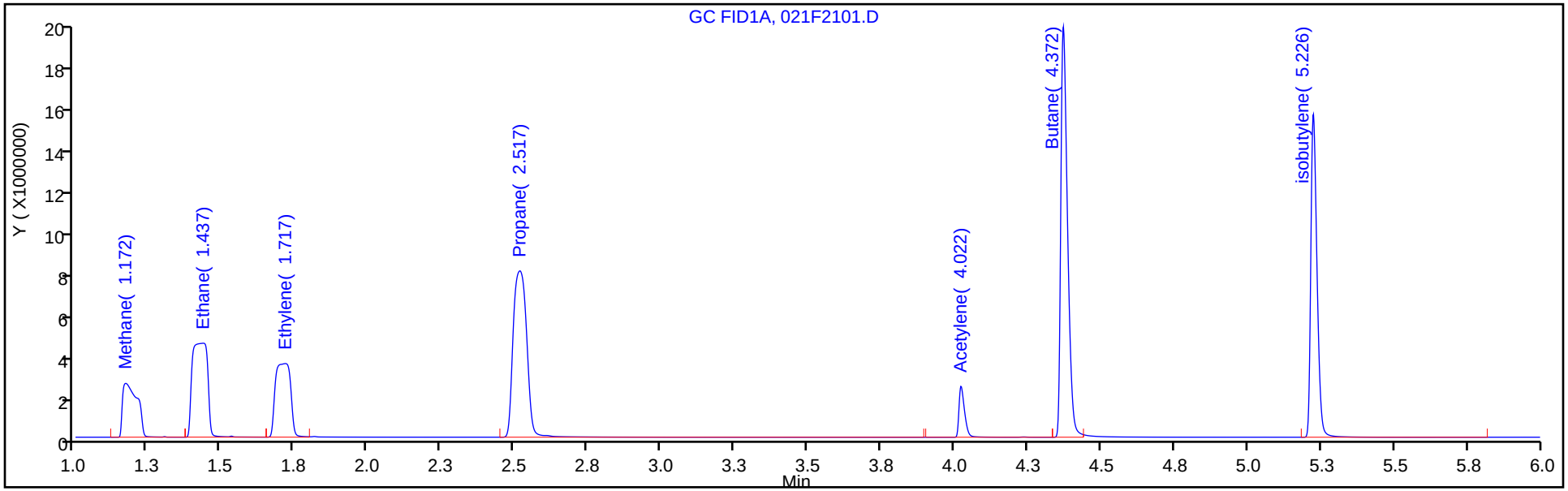
Report Date: 26-May-2021 13:51:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

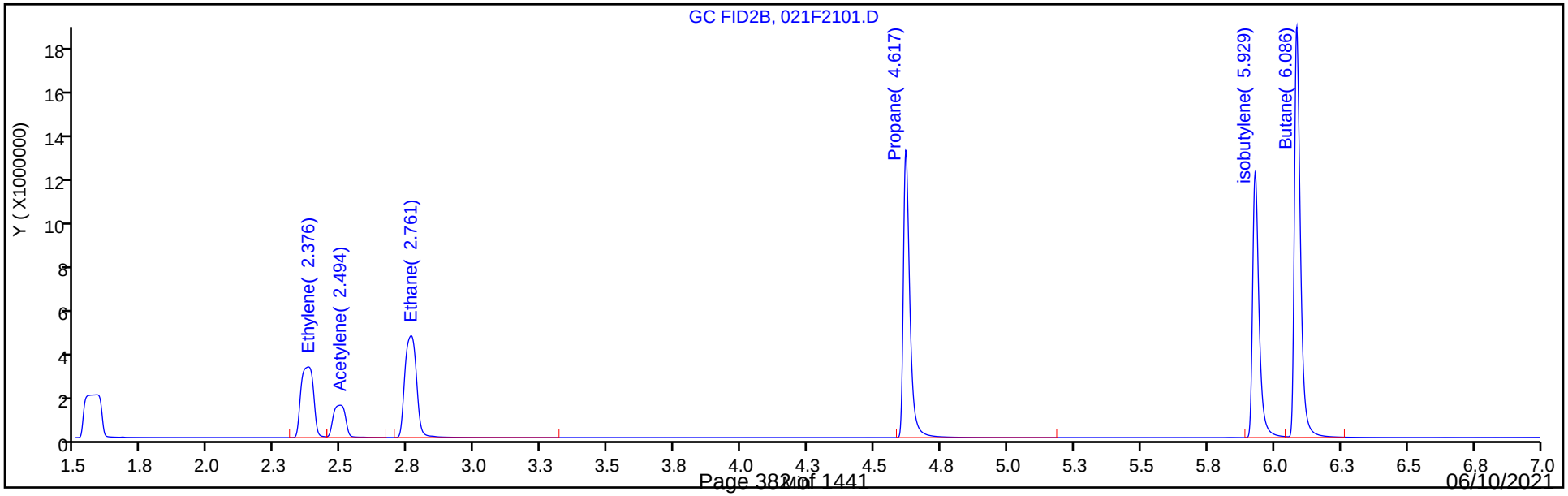
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D

Injection Date:	25-May-2021 15:00:50	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

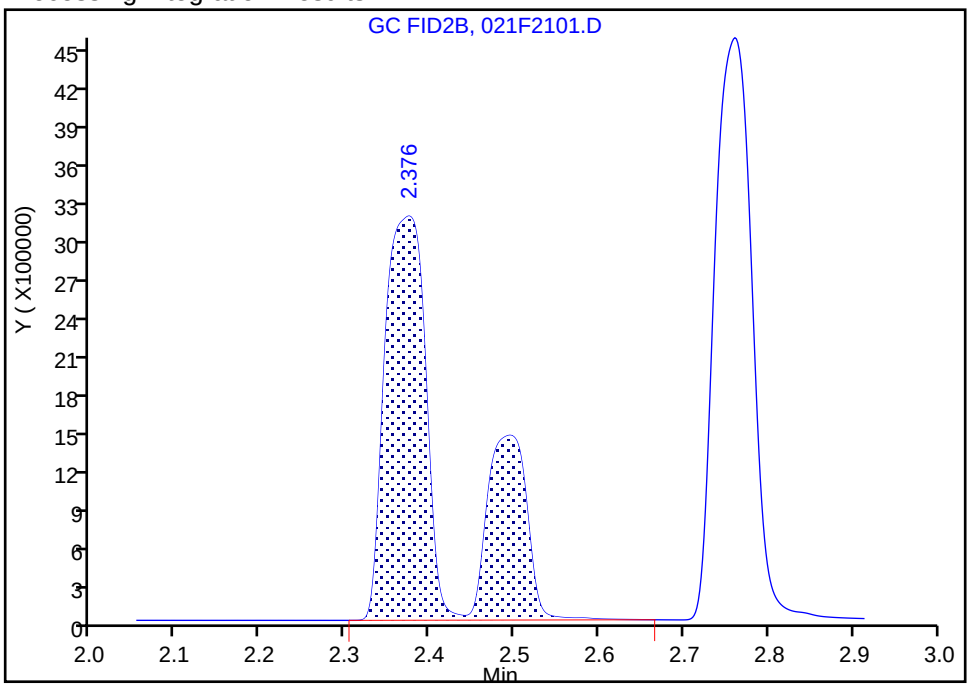
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D
Injection Date: 25-May-2021 15:00:50 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

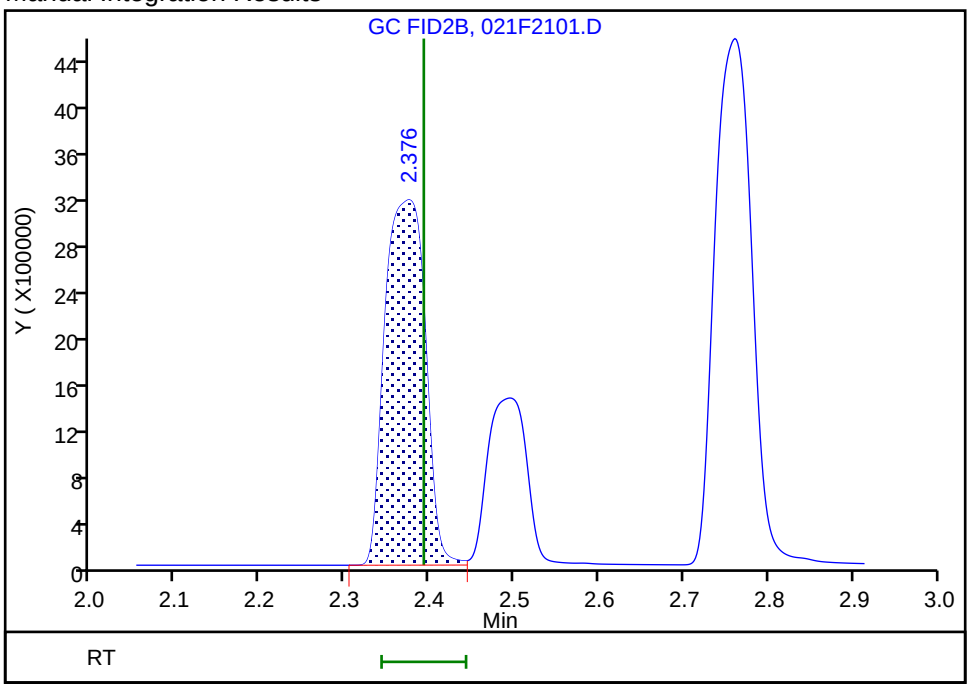
Processing Integration Results

RT: 2.38
Area: 14905822
Amount: 204.0526
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 10305648
Amount: 141.0787
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:46:09
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

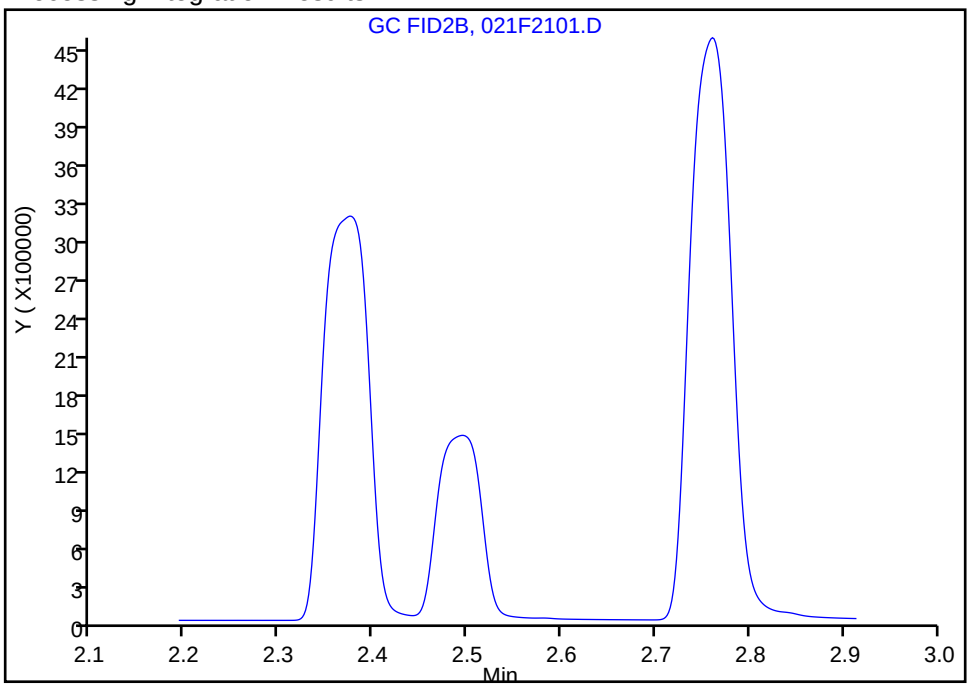
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\021F2101.D
Injection Date: 25-May-2021 15:00:50 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

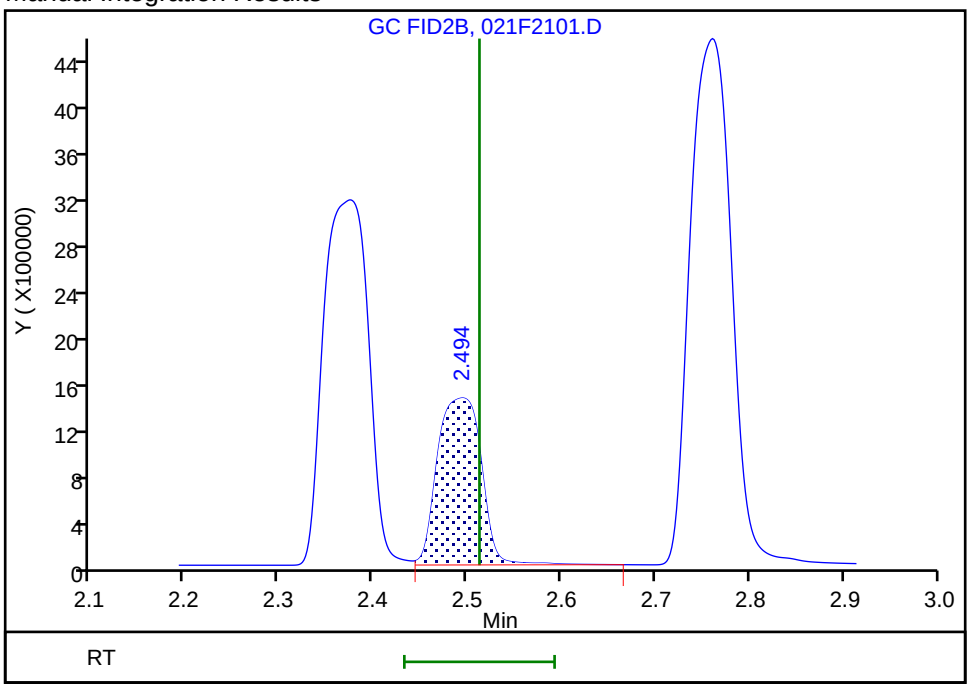
Not Detected
Expected RT: 2.51

Processing Integration Results



Manual Integration Results

RT: 2.49
Area: 4600112
Amount: 134.0016
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:46:04
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.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		120408		74.0	73.0	1.4	20.0
Ethane	Ave	114619	116140		139	137	1.3	20.0
Ethylene	Ave	91780	94146		131	128	2.6	20.0
Acetylene	Ave	25943	27551		126	119	6.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.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		120408		74.0	73.0	1.4	20.0
Ethane	Ave	114619	116140		139	137	1.3	20.0
Ethylene	Ave	91780	94146		131	128	2.6	20.0
Acetylene	Ave	25943	27551		126	119	6.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.17	1.14	1.22
Ethane	1.44	1.40	1.50
Ethylene	1.72	1.68	1.78
Acetylene	4.02	3.95	4.11

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.17	1.14	1.22
Ethane	1.44	1.40	1.50
Ethylene	1.72	1.68	1.78
Acetylene	4.02	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 17:27:34 ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:23 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:58:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.181	-0.007	8790216	73.0	74.0	
2	1.581	1.589	-0.008	7996729	73.0	74.0	
						RPD = 0.10	
3 Ethane							
1	1.436	1.446	-0.010	15894423	136.9	138.7	
2	2.764	2.779	-0.015	12497340	136.9	128.7	
						RPD = 7.44	
4 Ethylene							Ma
1	1.721	1.729	-0.008	12019306	127.7	131.0	
2	2.378	2.393	-0.015	9764652	127.7	133.7	M
						RPD = 2.05	
5 Propane							
1	2.521	2.534	-0.013	24901053	200.7	210.9	
2	4.621	4.626	-0.005	21023343	200.7	210.1	
						RPD = 0.35	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3265431	118.5	125.9	a
2	2.501	2.513	-0.012	4645710	118.5	135.3	M
						RPD = 7.24	
7 Butane							Ma
1	4.374	4.381	-0.007	30098182	264.5	274.9	M
2	6.088	6.091	-0.003	27944464	264.5	278.4	M
						RPD = 1.26	
8 isobutylene							Ma
1	5.226	5.232	-0.006	20917513	255.4	292.0	
2	5.931	5.934	-0.003	18280327	255.4	291.5	M
						RPD = 0.18	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 17:27:34 ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:23 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:58:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.181	-0.007	8790216	73.0	74.0	
2	1.581	1.589	-0.008	7996729	73.0	74.0	
						RPD = 0.10	
3 Ethane							
1	1.436	1.446	-0.010	15894423	136.9	138.7	
2	2.764	2.779	-0.015	12497340	136.9	128.7	
						RPD = 7.44	
4 Ethylene							Ma
1	1.721	1.729	-0.008	12019306	127.7	131.0	
2	2.378	2.393	-0.015	9764652	127.7	133.7	M
						RPD = 2.05	
5 Propane							
1	2.521	2.534	-0.013	24901053	200.7	210.9	
2	4.621	4.626	-0.005	21023343	200.7	210.1	
						RPD = 0.35	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3265431	118.5	125.9	a
2	2.501	2.513	-0.012	4645710	118.5	135.3	M
						RPD = 7.24	
7 Butane							Ma
1	4.374	4.381	-0.007	30098182	264.5	274.9	M
2	6.088	6.091	-0.003	27944464	264.5	278.4	M
						RPD = 1.26	
8 isobutylene							Ma
1	5.226	5.232	-0.006	20917513	255.4	292.0	
2	5.931	5.934	-0.003	18280327	255.4	291.5	M
						RPD = 0.18	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

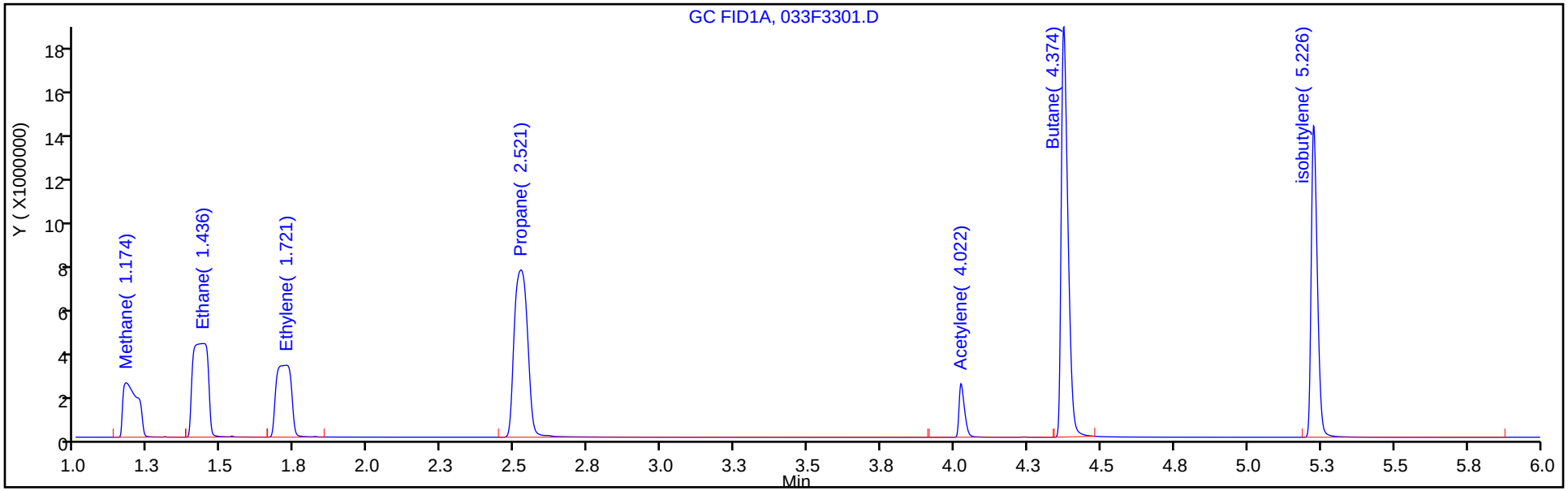
Report Date: 26-May-2021 13:51:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

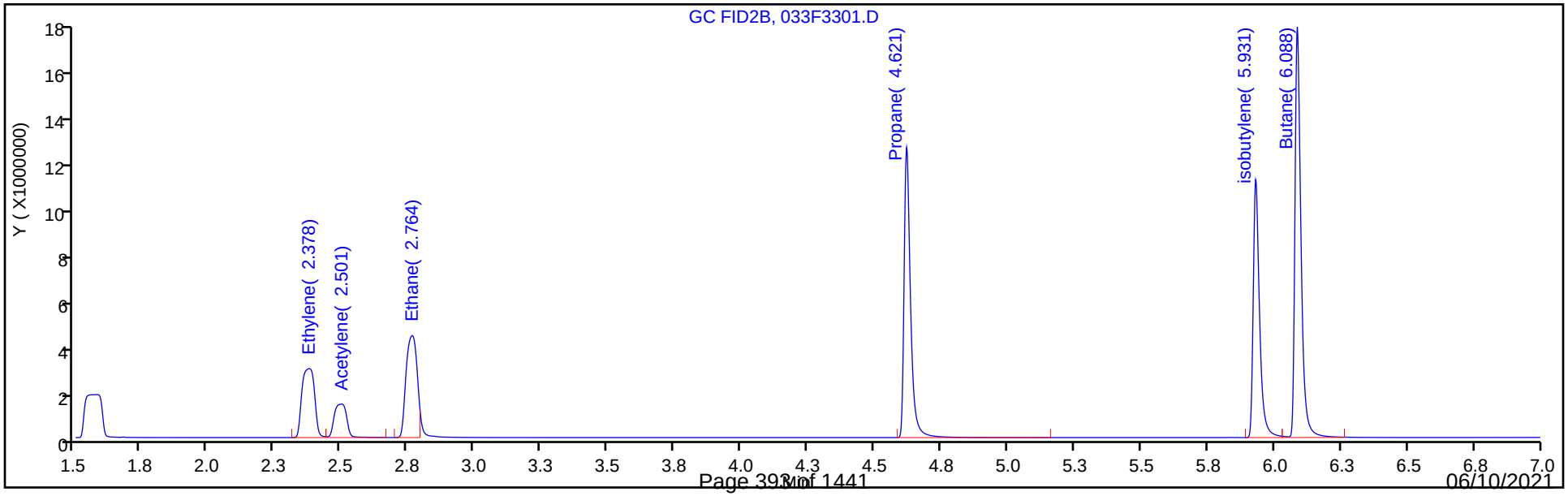
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D

Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
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



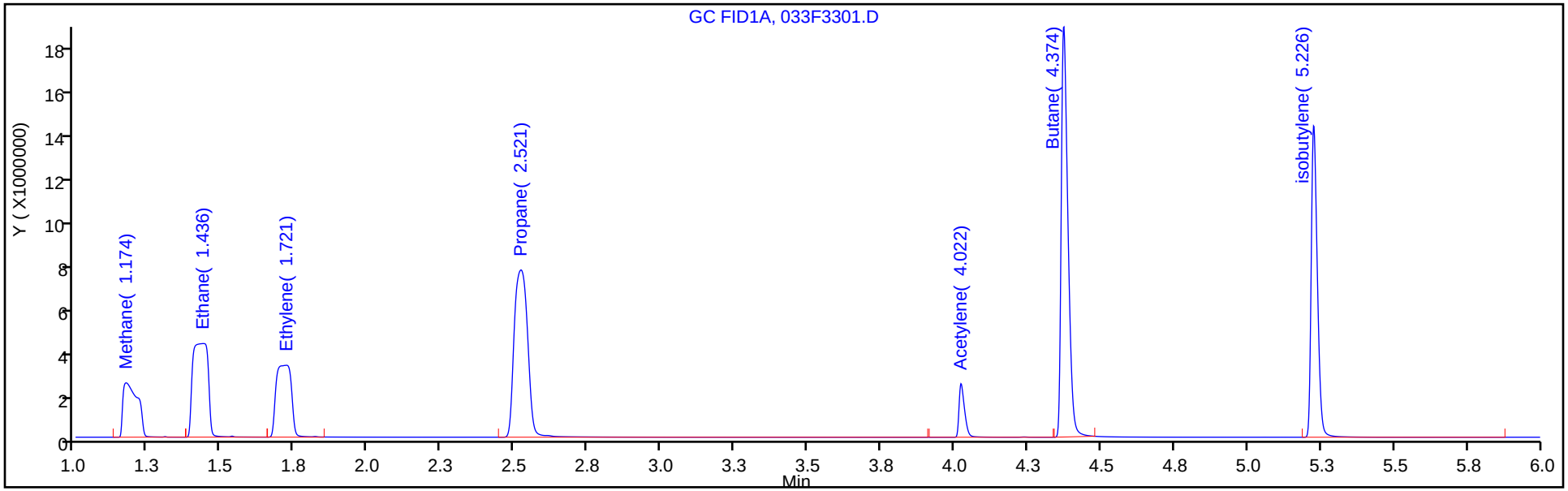
Report Date: 26-May-2021 13:51:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

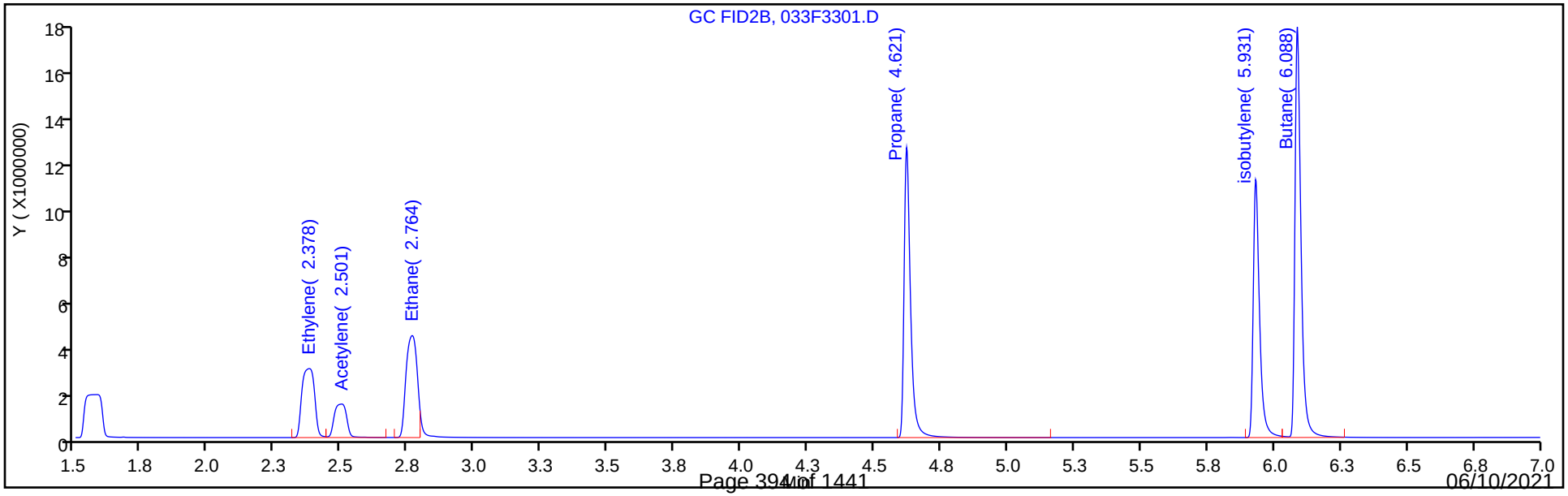
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D

Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
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

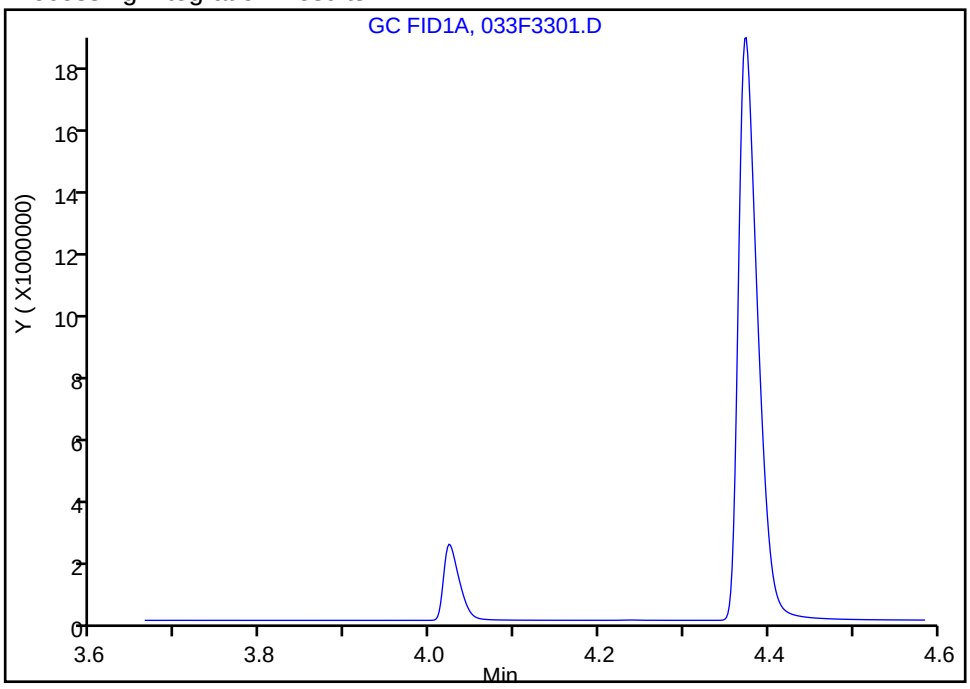
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D				
Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

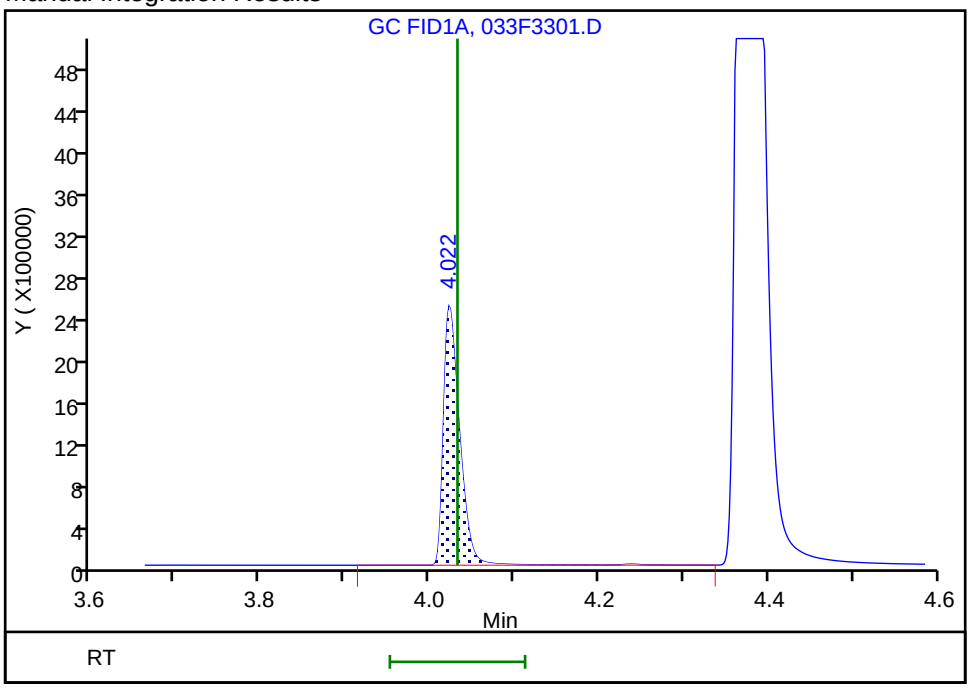
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 3265431
Amount: 125.8695
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:57:47
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

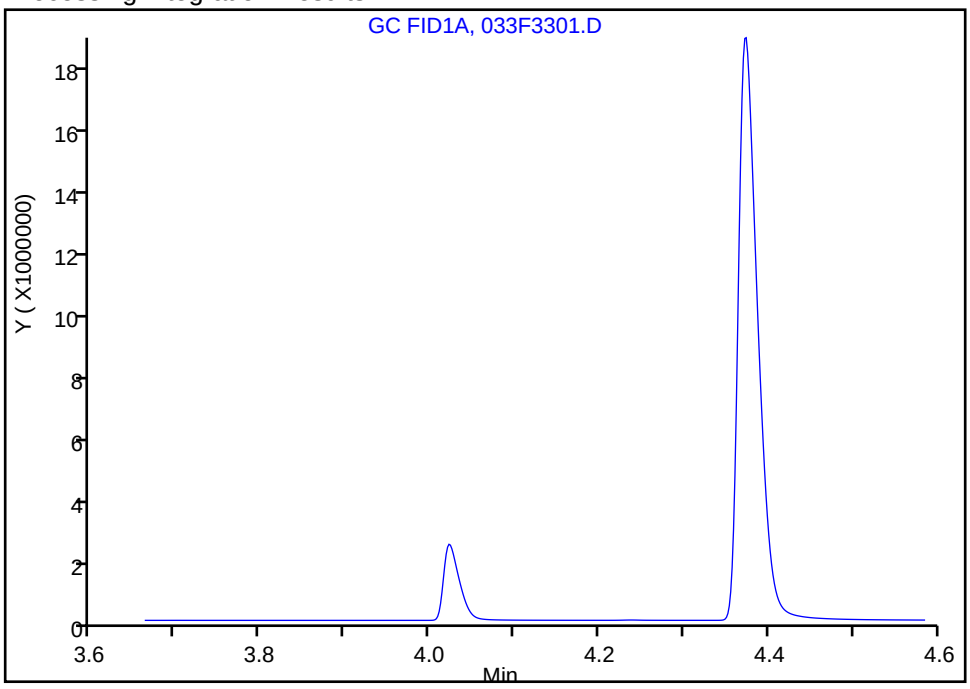
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D				
Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

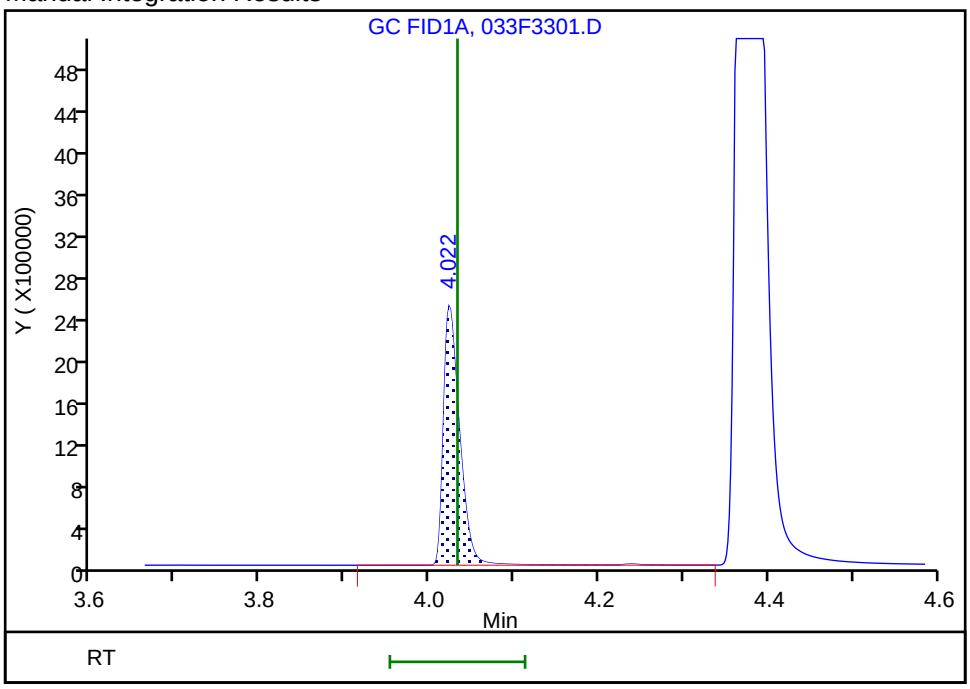
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 3265431
Amount: 125.8695
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:57:47
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.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		109539		74.0	73.0	1.3	20.0
Ethylene	Ave	73049	76486		134	128	4.7	20.0
Acetylene	Ave	34329	39197		135	119	14.2	20.0
Ethane	Ave	97082	91318		129	137	-5.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.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		109539		74.0	73.0	1.3	20.0
Ethylene	Ave	73049	76486		134	128	4.7	20.0
Acetylene	Ave	34329	39197		135	119	14.2	20.0
Ethane	Ave	97082	91318		129	137	-5.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537359/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.58	1.55	1.63
Ethylene	2.38	2.34	2.44
Acetylene	2.50	2.43	2.59
Ethane	2.76	2.73	2.83

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/33 Calibration Date: 05/25/2021 17:27

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 033F3301.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.58	1.55	1.63
Ethylene	2.38	2.34	2.44
Acetylene	2.50	2.43	2.59
Ethane	2.76	2.73	2.83

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 17:27:34 ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:23 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:58:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.181	-0.007	8790216	73.0	74.0	
2	1.581	1.589	-0.008	7996729	73.0	74.0	
						RPD = 0.10	
3 Ethane							
1	1.436	1.446	-0.010	15894423	136.9	138.7	
2	2.764	2.779	-0.015	12497340	136.9	128.7	
						RPD = 7.44	
4 Ethylene							Ma
1	1.721	1.729	-0.008	12019306	127.7	131.0	
2	2.378	2.393	-0.015	9764652	127.7	133.7	M
						RPD = 2.05	
5 Propane							
1	2.521	2.534	-0.013	24901053	200.7	210.9	
2	4.621	4.626	-0.005	21023343	200.7	210.1	
						RPD = 0.35	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3265431	118.5	125.9	a
2	2.501	2.513	-0.012	4645710	118.5	135.3	M
						RPD = 7.24	
7 Butane							Ma
1	4.374	4.381	-0.007	30098182	264.5	274.9	M
2	6.088	6.091	-0.003	27944464	264.5	278.4	M
						RPD = 1.26	
8 isobutylene							Ma
1	5.226	5.232	-0.006	20917513	255.4	292.0	
2	5.931	5.934	-0.003	18280327	255.4	291.5	M
						RPD = 0.18	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 17:27:34 ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:23 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:58:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.181	-0.007	8790216	73.0	74.0	
2	1.581	1.589	-0.008	7996729	73.0	74.0	
						RPD = 0.10	
3 Ethane							
1	1.436	1.446	-0.010	15894423	136.9	138.7	
2	2.764	2.779	-0.015	12497340	136.9	128.7	
						RPD = 7.44	
4 Ethylene							Ma
1	1.721	1.729	-0.008	12019306	127.7	131.0	
2	2.378	2.393	-0.015	9764652	127.7	133.7	M
						RPD = 2.05	
5 Propane							
1	2.521	2.534	-0.013	24901053	200.7	210.9	
2	4.621	4.626	-0.005	21023343	200.7	210.1	
						RPD = 0.35	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3265431	118.5	125.9	a
2	2.501	2.513	-0.012	4645710	118.5	135.3	M
						RPD = 7.24	
7 Butane							Ma
1	4.374	4.381	-0.007	30098182	264.5	274.9	M
2	6.088	6.091	-0.003	27944464	264.5	278.4	M
						RPD = 1.26	
8 isobutylene							Ma
1	5.226	5.232	-0.006	20917513	255.4	292.0	
2	5.931	5.934	-0.003	18280327	255.4	291.5	M
						RPD = 0.18	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

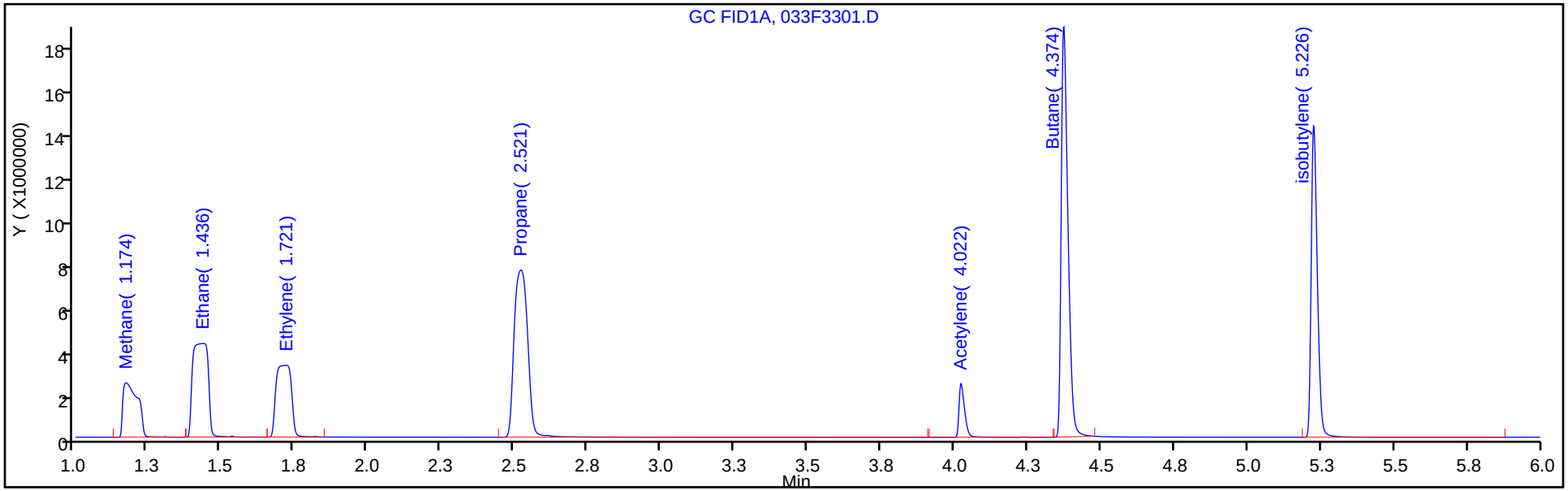
Report Date: 26-May-2021 13:51:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

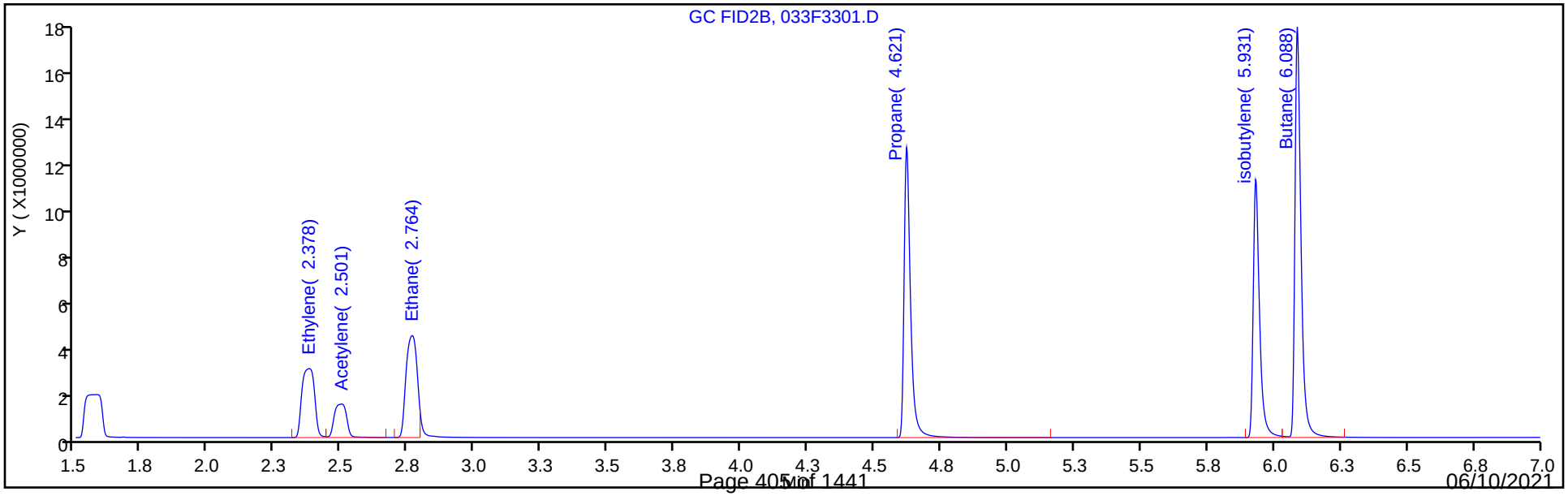
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D

Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
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



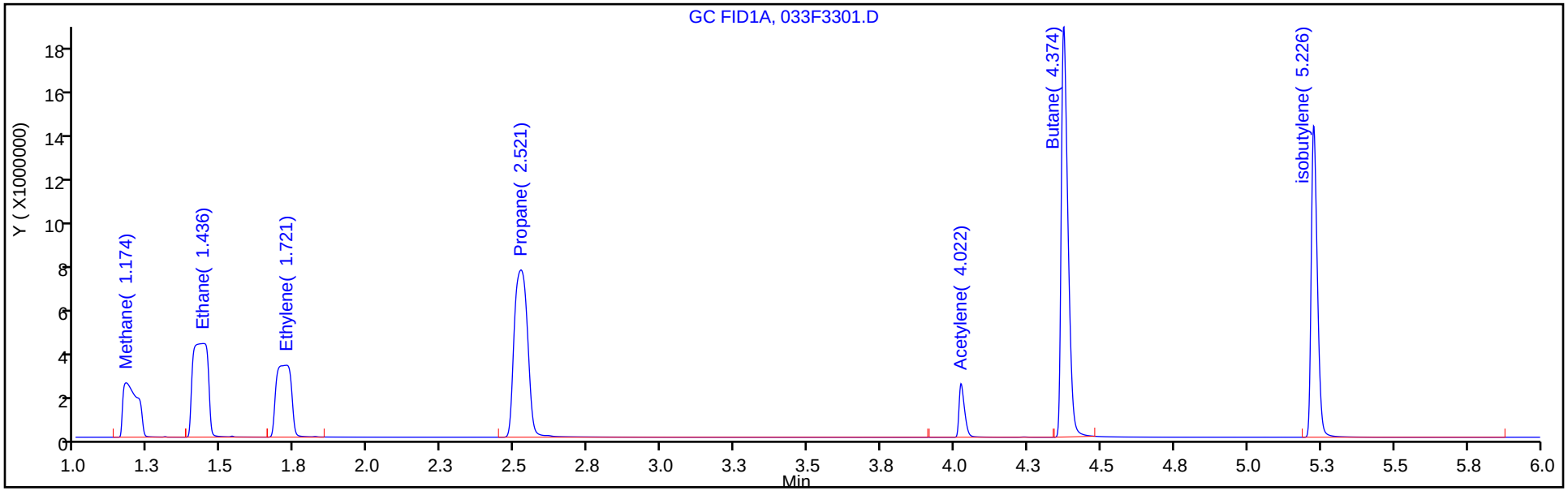
Report Date: 26-May-2021 13:51:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

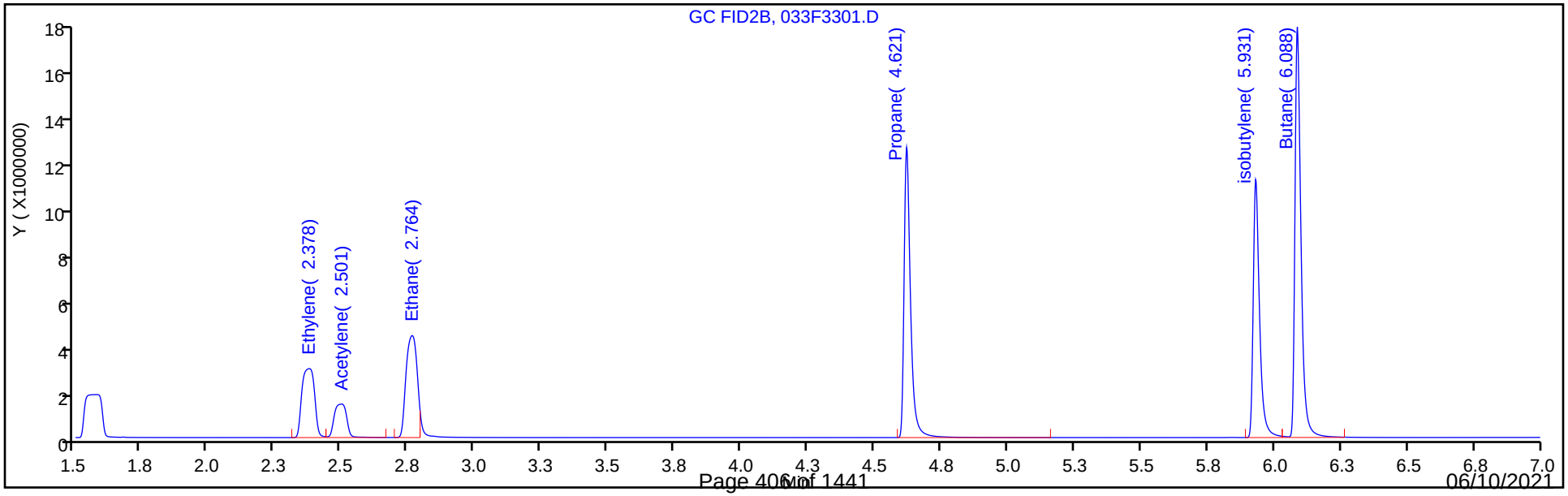
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D

Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
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

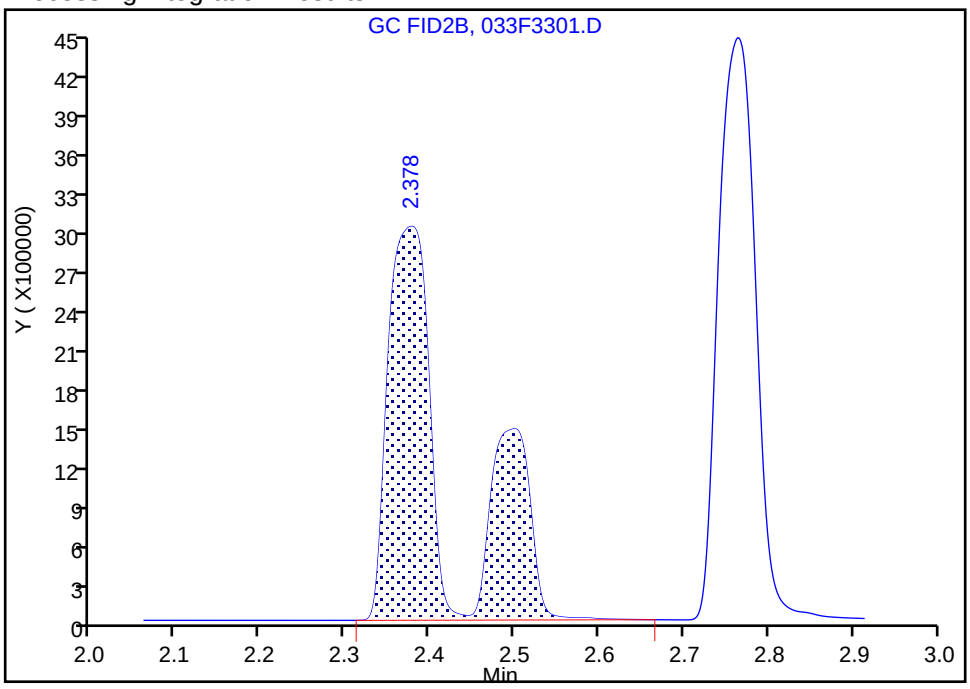
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D				
Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

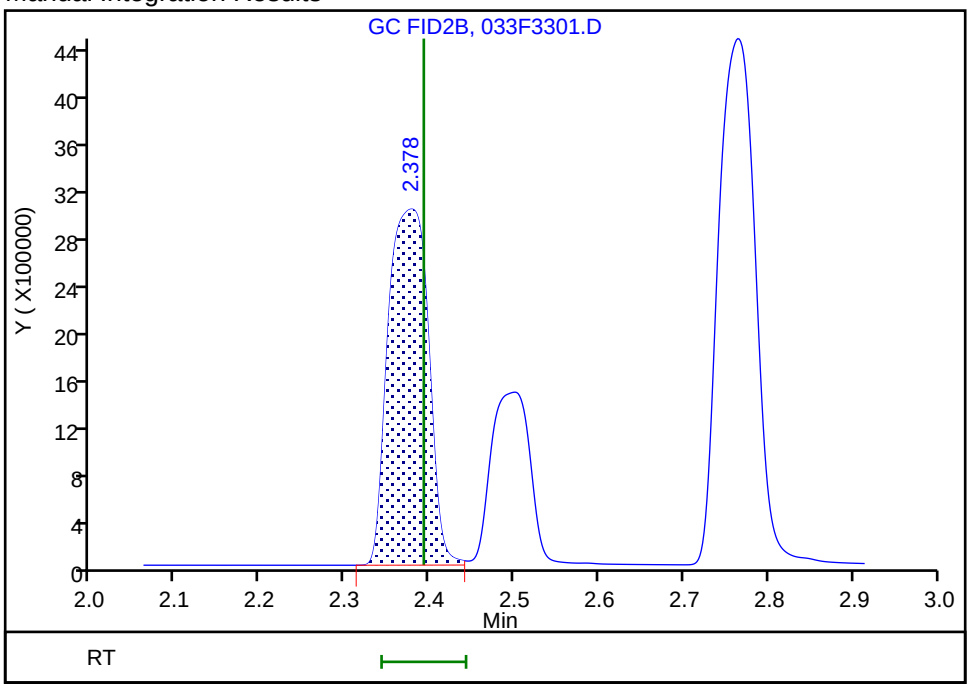
Processing Integration Results

RT: 2.38
Area: 14410439
Amount: 197.2710
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 9764652
Amount: 133.6728
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:58:03
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

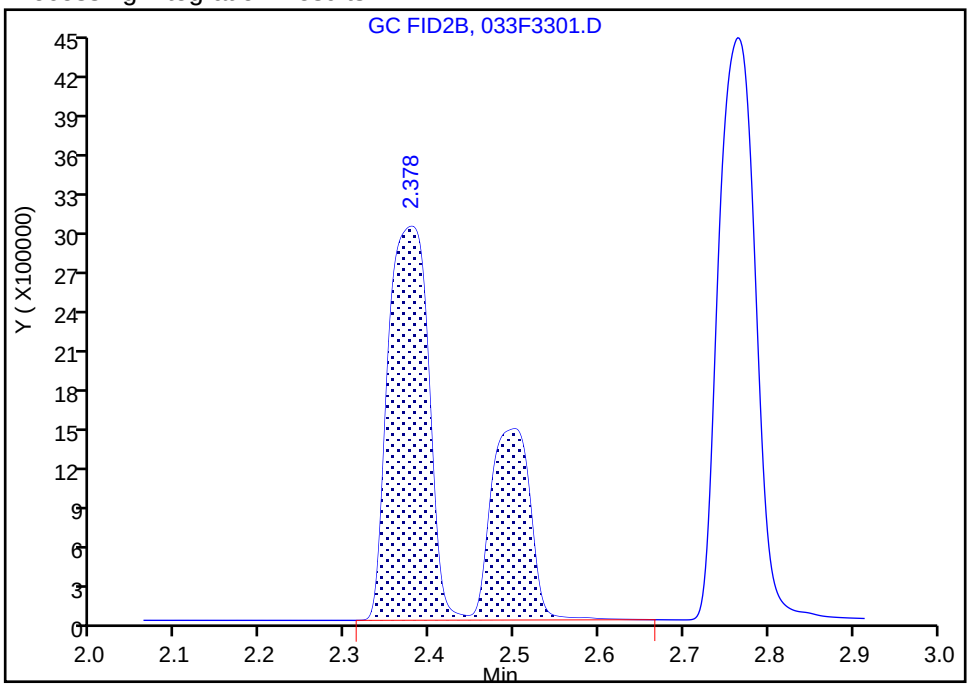
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D				
Injection Date:	25-May-2021 17:27:34	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	33	Worklist Smp#:	33
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

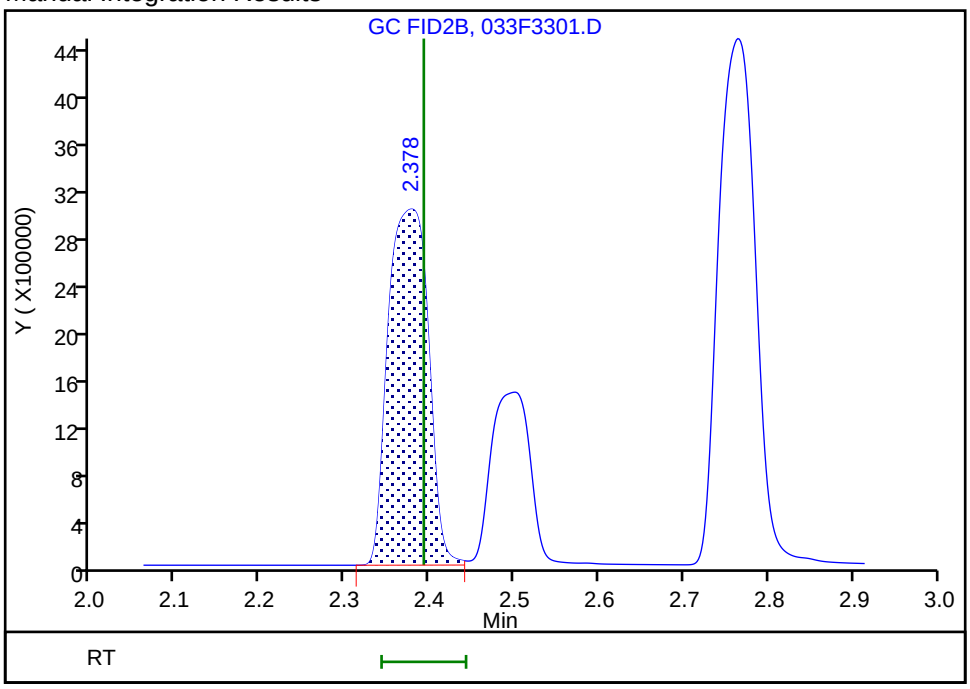
Processing Integration Results

RT: 2.38
Area: 14410439
Amount: 197.2710
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 9764652
Amount: 133.6728
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:58:03
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

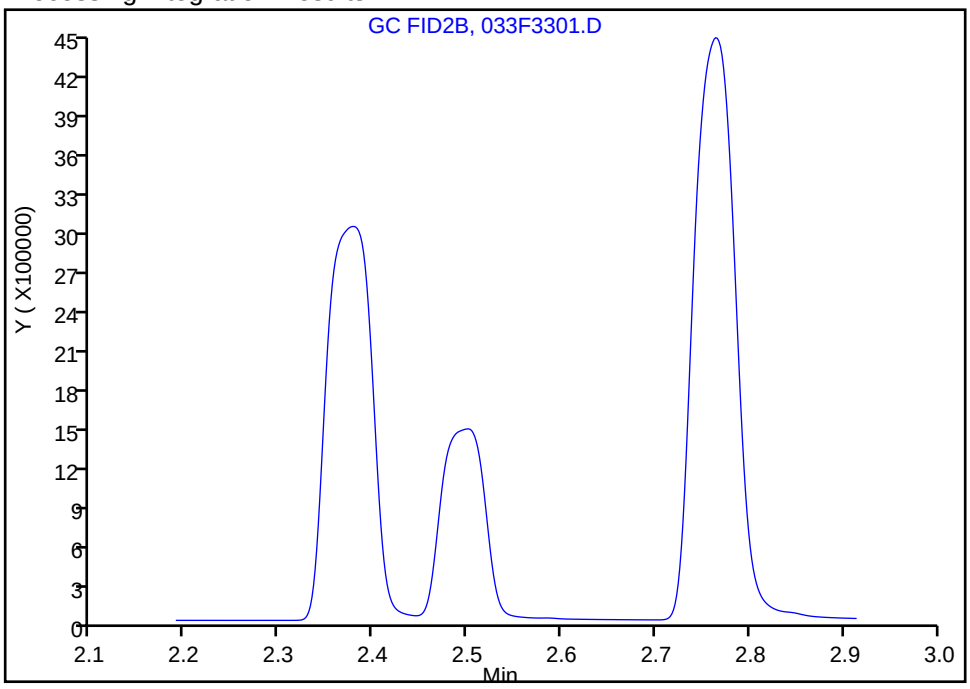
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D
Injection Date: 25-May-2021 17:27:34 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

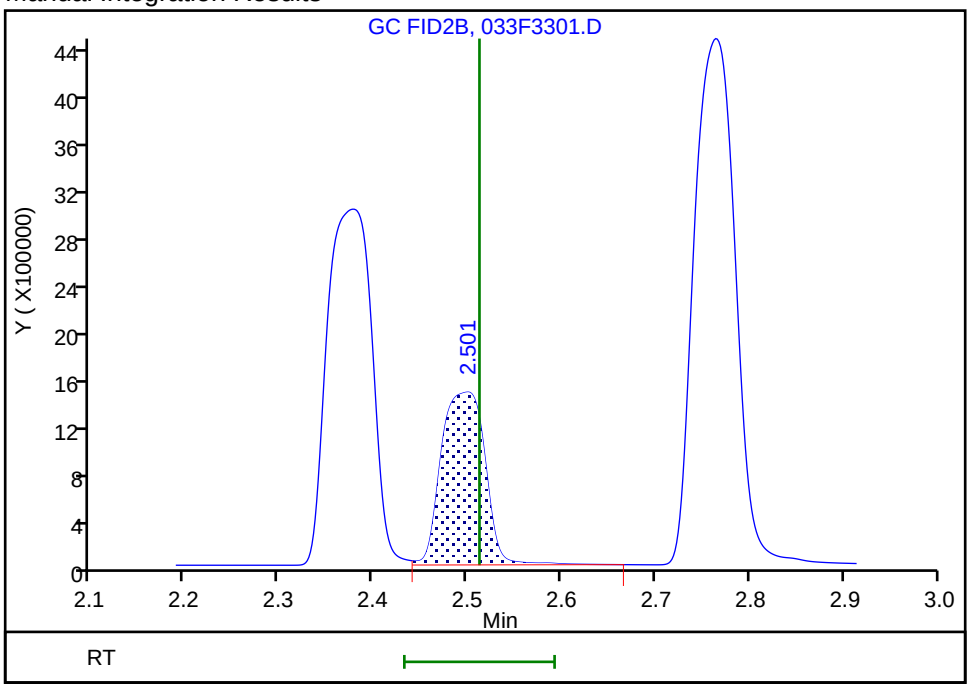
Not Detected
Expected RT: 2.51

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 4645710
Amount: 135.3298
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:57:56
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

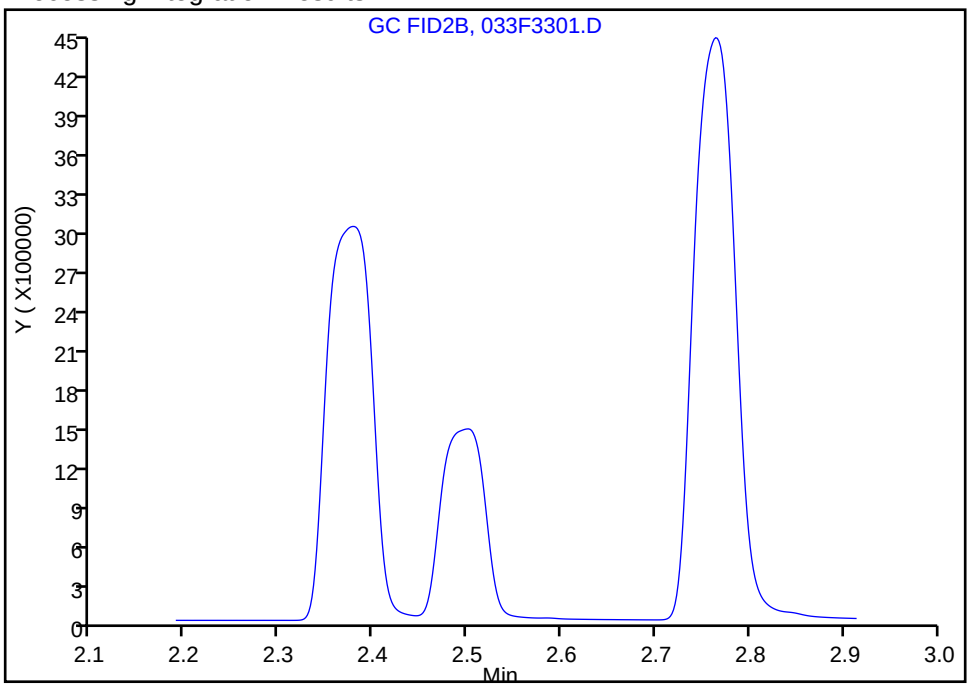
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\033F3301.D
Injection Date: 25-May-2021 17:27:34 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

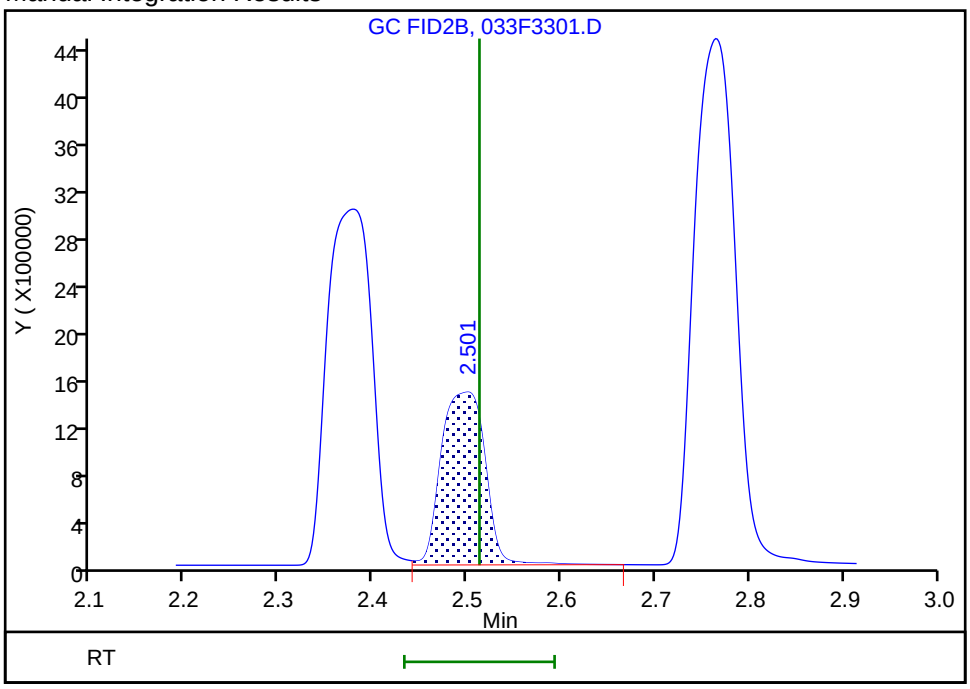
Not Detected
Expected RT: 2.51

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 4645710
Amount: 135.3298
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 09:57:56
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/50 Calibration Date: 05/25/2021 21:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 050F5001.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		119211		73.3	73.0	0.4	20.0
Ethane	Ave	114619	113923		136	137	-0.6	20.0
Ethylene	Ave	91780	91762		128	128	-0.0	20.0
Acetylene	Ave	25943	27197		124	119	4.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/50 Calibration Date: 05/25/2021 21:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 050F5001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.14	1.22
Ethane	1.44	1.40	1.50
Ethylene	1.72	1.68	1.78
Acetylene	4.02	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 21:00:19 ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:37 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:23:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.175	1.181	-0.006	8702824	73.0	73.3	
2	1.586	1.589	-0.003	7943487	73.0	73.5	
						RPD = 0.23	
3 Ethane							M
1	1.437	1.446	-0.009	15591013	136.9	136.0	
2	2.767	2.779	-0.012	12898886	136.9	132.9	M
						RPD = 2.35	
4 Ethylene							a
1	1.717	1.729	-0.012	11714984	127.7	127.6	
2	2.382	2.393	-0.011	9423481	127.7	129.0	a
						RPD = 1.06	
5 Propane							
1	2.522	2.534	-0.012	24326084	200.7	206.0	
2	4.622	4.626	-0.004	20611977	200.7	206.0	
						RPD = 0.01	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3223479	118.5	124.3	a
2	2.502	2.513	-0.011	4331367	118.5	126.2	M
						RPD = 1.53	
7 Butane							Ma
1	4.372	4.381	-0.009	29311292	264.5	267.8	a
2	6.087	6.091	-0.004	26920756	264.5	268.2	M
						RPD = 0.18	
8 isobutylene							Ma
1	5.225	5.232	-0.007	19813792	255.4	276.6	
2	5.932	5.934	-0.002	17453935	255.4	278.3	M
						RPD = 0.61	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

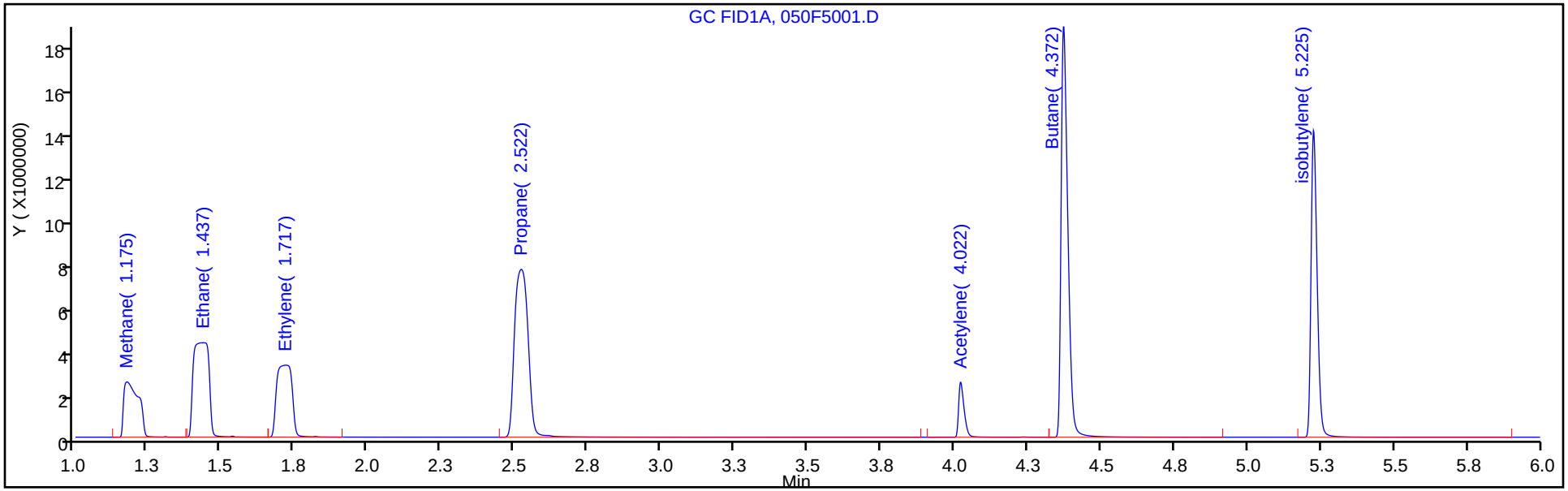
Report Date: 26-May-2021 13:09:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

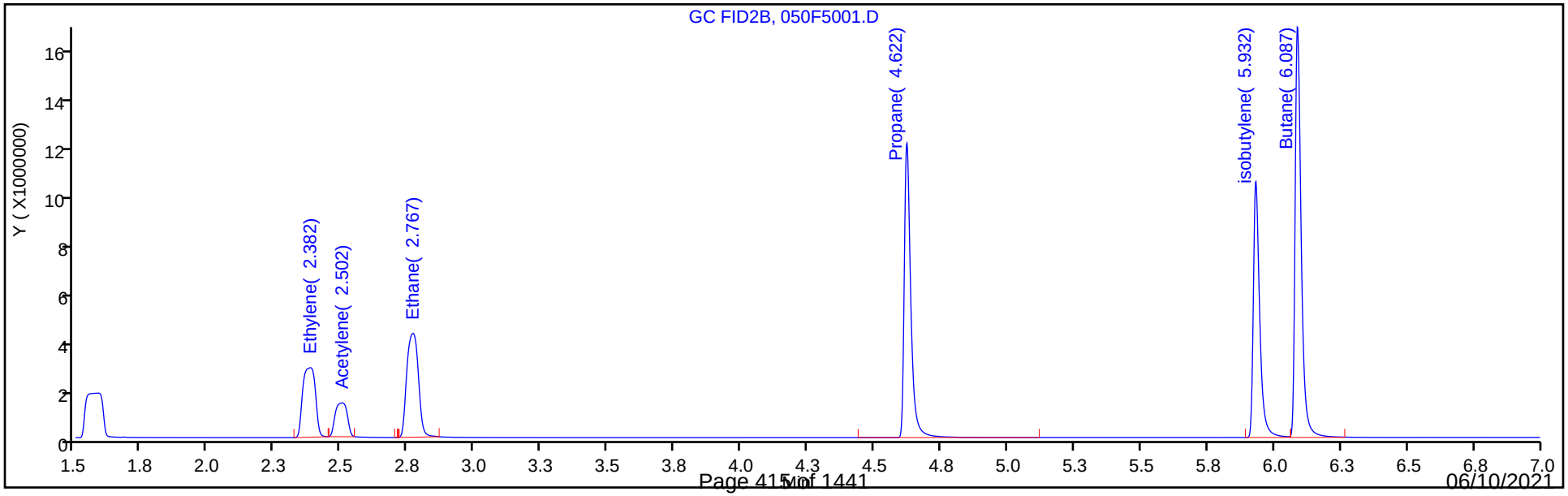
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D

Injection Date:	25-May-2021 21:00:19	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	50
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	50
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

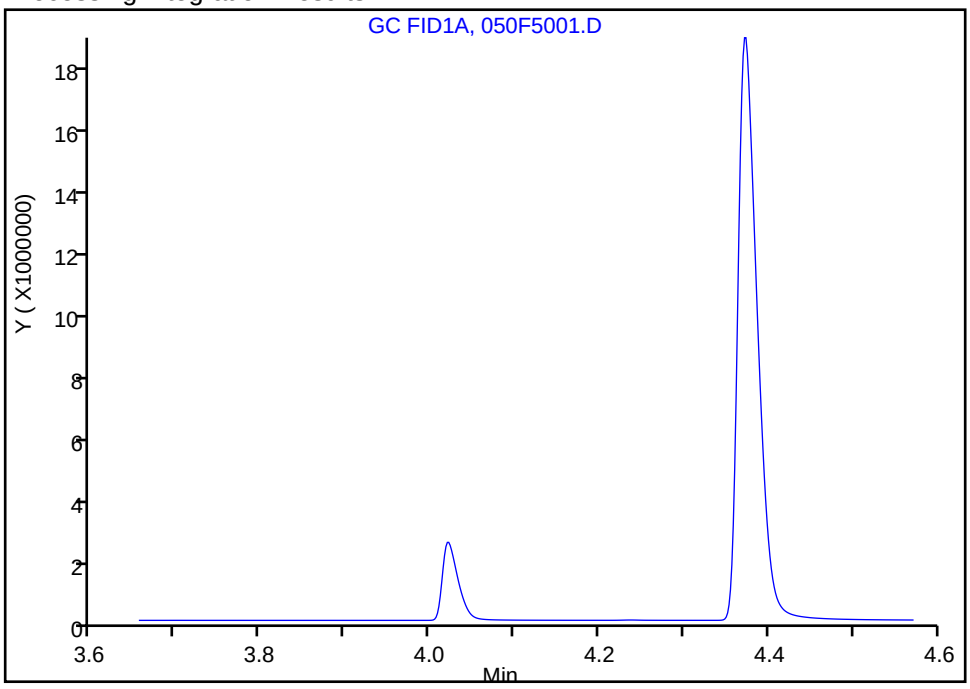
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D
Injection Date: 25-May-2021 21:00:19 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

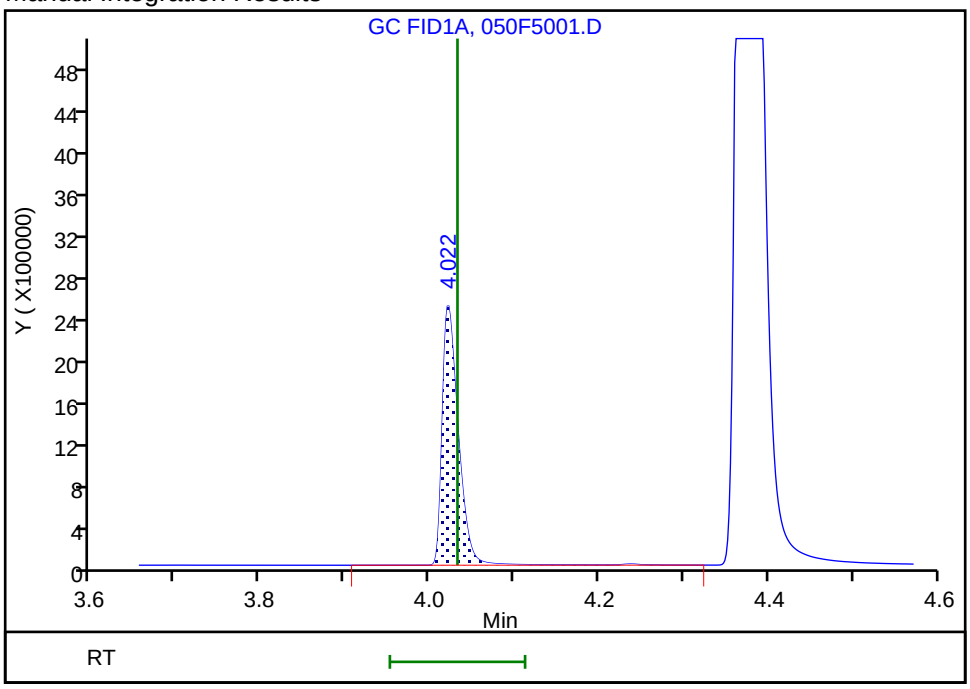
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 3223479
Amount: 124.2524
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 10:21:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/50 Calibration Date: 05/25/2021 21:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 050F5001.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		108810		73.5	73.0	0.6	20.0
Ethylene	Ave	73049	73813		129	128	1.0	20.0
Acetylene	Ave	34329	36545		126	119	6.5	20.0
Ethane	Ave	97082	94252		133	137	-2.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537523/50 Calibration Date: 05/25/2021 21:00

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 050F5001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.55	1.63
Ethylene	2.38	2.34	2.44
Acetylene	2.50	2.43	2.59
Ethane	2.77	2.73	2.83

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2021 21:00:19 ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:37 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:23:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.175	1.181	-0.006	8702824	73.0	73.3	
2	1.586	1.589	-0.003	7943487	73.0	73.5	
						RPD = 0.23	
3 Ethane							M
1	1.437	1.446	-0.009	15591013	136.9	136.0	
2	2.767	2.779	-0.012	12898886	136.9	132.9	M
						RPD = 2.35	
4 Ethylene							a
1	1.717	1.729	-0.012	11714984	127.7	127.6	
2	2.382	2.393	-0.011	9423481	127.7	129.0	a
						RPD = 1.06	
5 Propane							
1	2.522	2.534	-0.012	24326084	200.7	206.0	
2	4.622	4.626	-0.004	20611977	200.7	206.0	
						RPD = 0.01	
6 Acetylene							Ma
1	4.022	4.032	-0.010	3223479	118.5	124.3	a
2	2.502	2.513	-0.011	4331367	118.5	126.2	M
						RPD = 1.53	
7 Butane							Ma
1	4.372	4.381	-0.009	29311292	264.5	267.8	a
2	6.087	6.091	-0.004	26920756	264.5	268.2	M
						RPD = 0.18	
8 isobutylene							Ma
1	5.225	5.232	-0.007	19813792	255.4	276.6	
2	5.932	5.934	-0.002	17453935	255.4	278.3	M
						RPD = 0.61	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

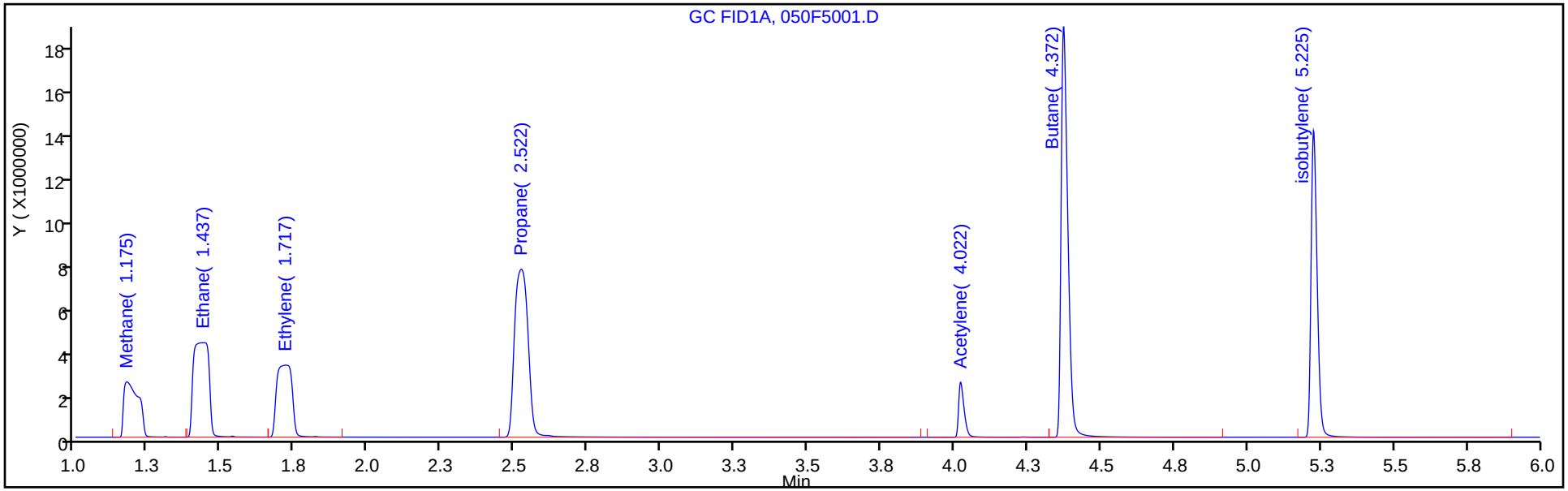
Report Date: 26-May-2021 13:09:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

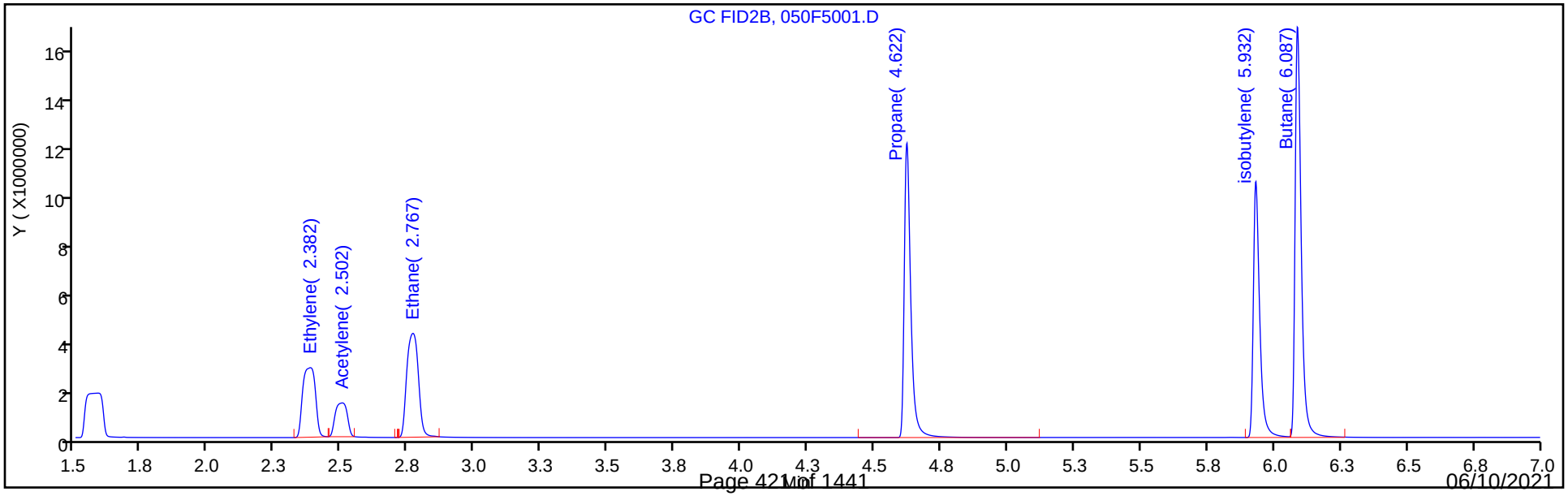
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D

Injection Date:	25-May-2021 21:00:19	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	50
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	50
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

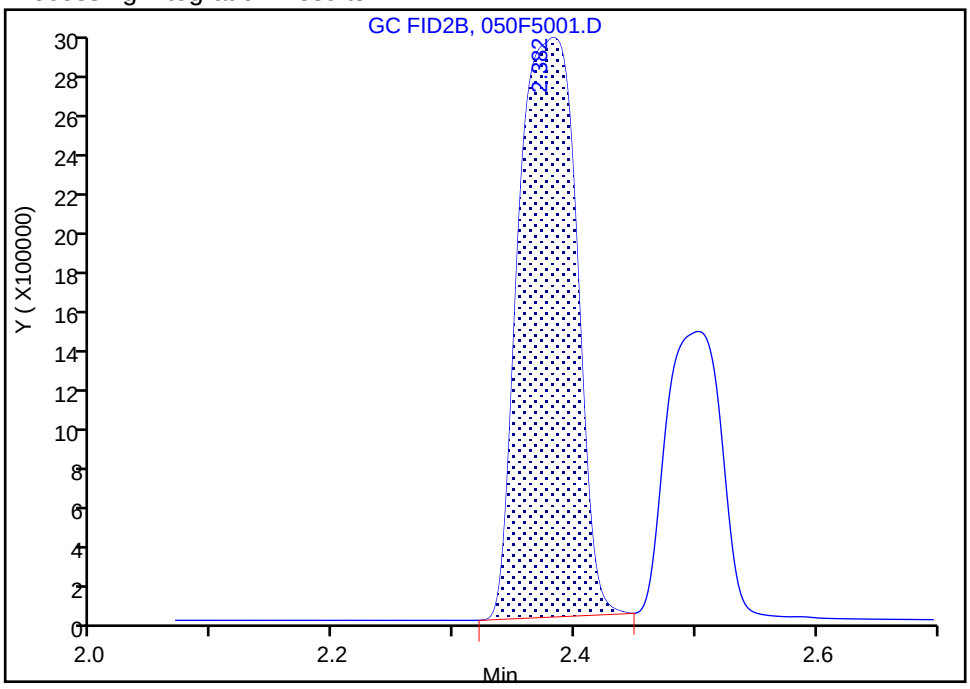
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D
Injection Date: 25-May-2021 21:00:19 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

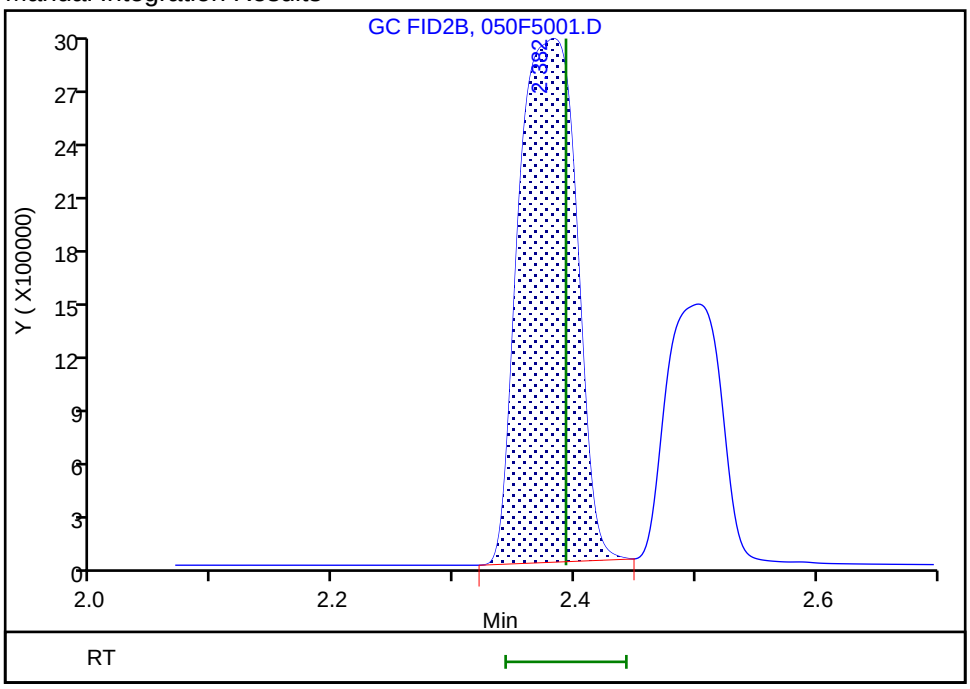
Processing Integration Results

RT: 2.38
Area: 9423481
Amount: 129.0023
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 9423481
Amount: 129.0023
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 10:21:57
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

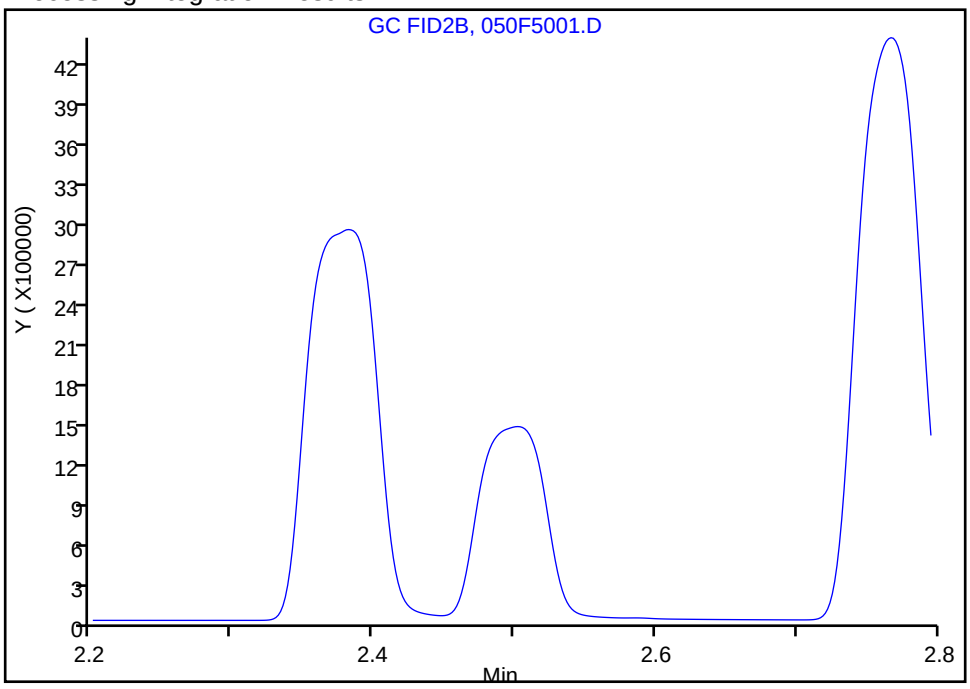
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D
Injection Date: 25-May-2021 21:00:19 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

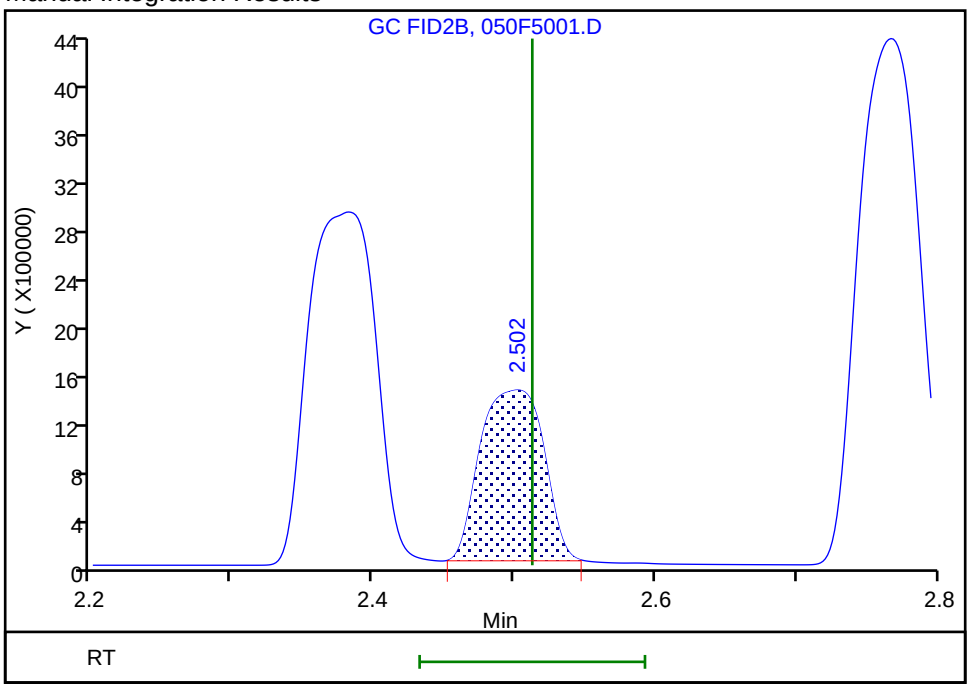
Not Detected
Expected RT: 2.51

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 4331367
Amount: 126.1730
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 10:21:50
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

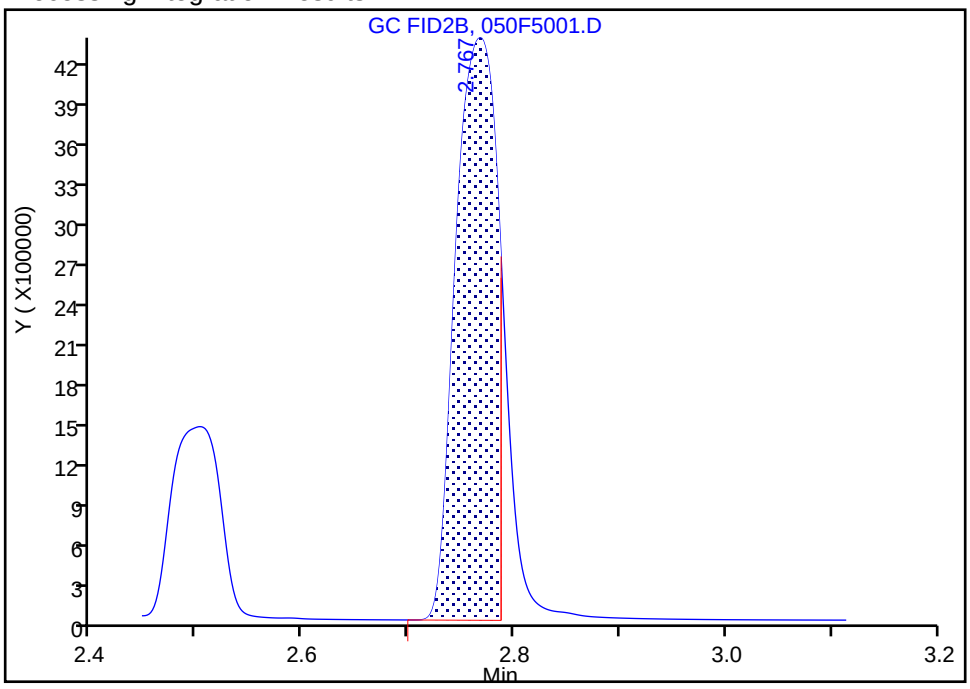
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\050F5001.D
Injection Date: 25-May-2021 21:00:19 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

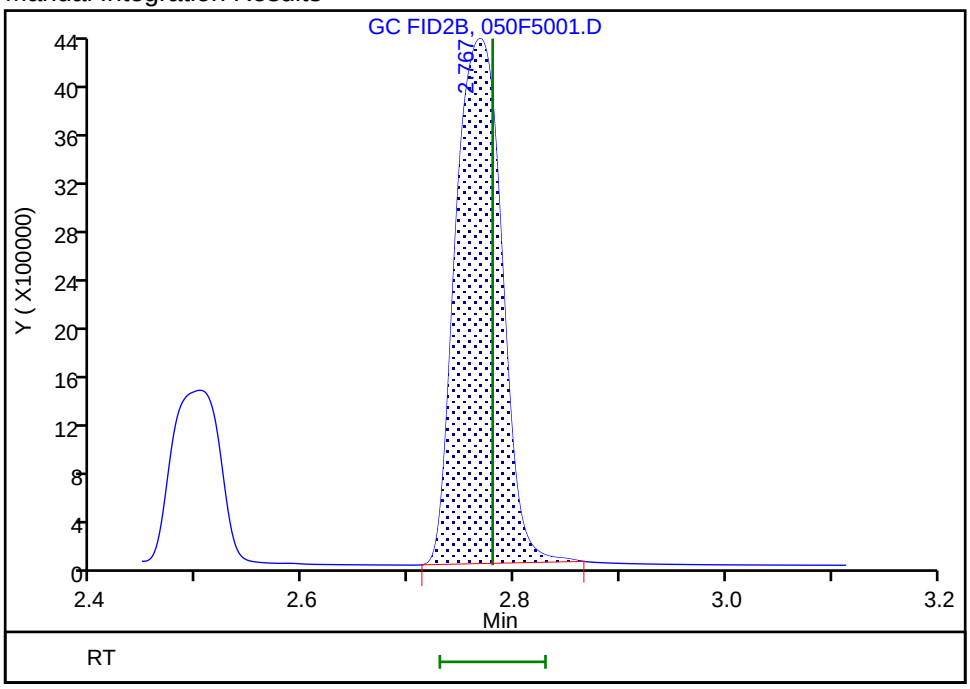
Processing Integration Results

RT: 2.77
Area: 11181432
Amount: 115.1757
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 12898886
Amount: 132.8665
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 10:22:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537486/4 Calibration Date: 05/26/2021 10:17

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.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		111586		68.6	73.0	-6.0	20.0
Ethane	Ave	114619	106254		127	137	-7.3	20.0
Ethylene	Ave	91780	87185		121	128	-5.0	20.0
Acetylene	Ave	25943	26897		123	119	3.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537486/4 Calibration Date: 05/26/2021 10:17

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.19	1.15	1.23
Ethane	1.45	1.40	1.50
Ethylene	1.74	1.69	1.79
Acetylene	4.04	3.96	4.12

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 26-May-2021 10:17:42 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: robertstr Date: 26-May-2021 10:54:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.187	1.187	0.000	8146186	73.0	68.6	
2	1.598	1.598	0.000	7425411	73.0	68.7	
						RPD = 0.11	
3 Ethane							
1	1.452	1.452	0.000	14541446	136.9	126.9	
2	2.789	2.789	0.000	12320875	136.9	126.9	
						RPD = 0.04	
4 Ethylene							Ma
1	1.739	1.739	0.000	11130615	127.7	121.3	
2	2.403	2.403	0.000	9052246	127.7	123.9	M
						RPD = 2.16	
5 Propane							
1	2.546	2.546	0.000	22580828	200.7	191.2	
2	4.631	4.631	0.000	19095314	200.7	190.9	
						RPD = 0.19	
6 Acetylene							M
1	4.036	4.036	0.000	3187929	118.5	122.9	
2	2.523	2.523	0.000	4551089	118.5	132.6	M
						RPD = 7.59	
7 Butane							Ma
1	4.387	4.387	0.000	27209680	264.5	248.6	a
2	6.096	6.096	0.000	24956679	264.5	248.7	M
						RPD = 0.05	
8 isobutylene							Ma
1	5.236	5.236	0.000	18595037	255.4	259.6	
2	5.939	5.939	0.000	16330224	255.4	260.4	M
						RPD = 0.30	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

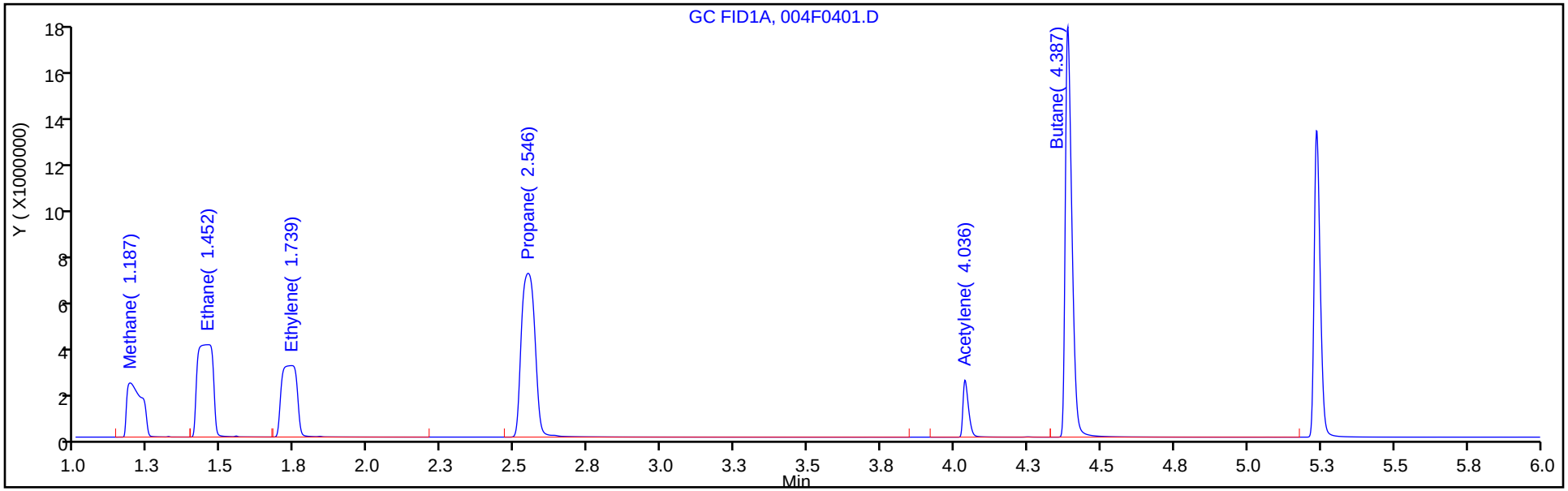
Report Date: 27-May-2021 10:24:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

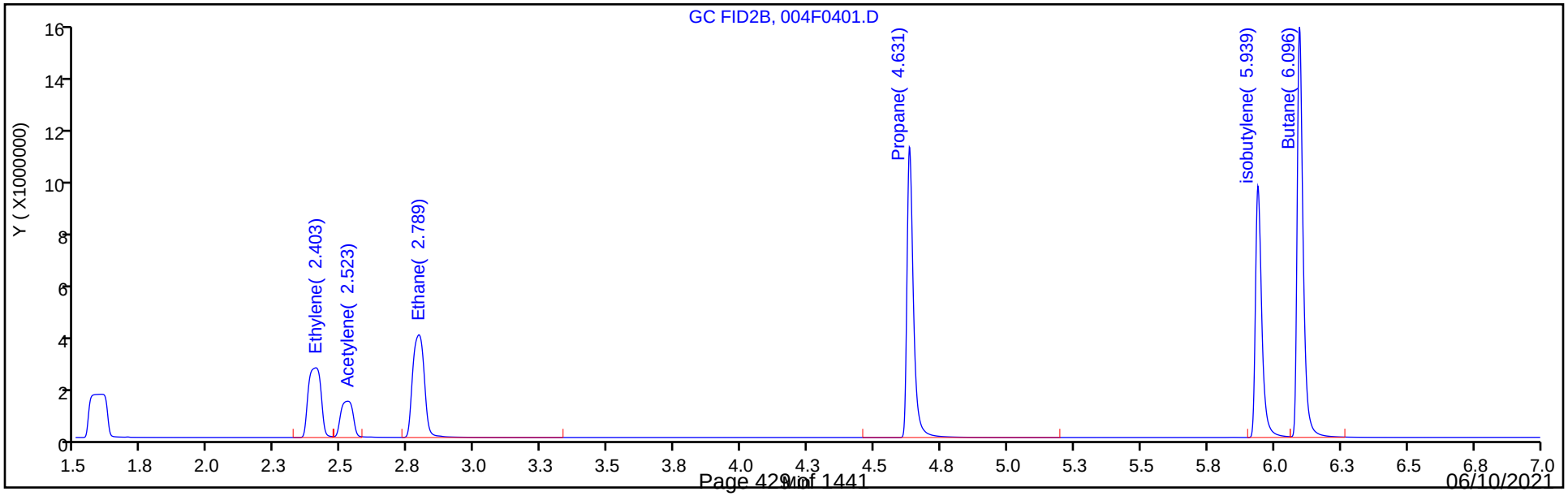
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\004F0401.D

Injection Date:	26-May-2021 10:17:42	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537486/4 Calibration Date: 05/26/2021 10:17

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.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		101713		68.7	73.0	-5.9	20.0
Ethylene	Ave	73049	70905		124	128	-2.9	20.0
Acetylene	Ave	34329	38399		133	119	11.9	20.0
Ethane	Ave	97082	90028		127	137	-7.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCVRT 280-537486/4 Calibration Date: 05/26/2021 10:17

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.60	1.56	1.64
Ethylene	2.40	2.35	2.45
Acetylene	2.52	2.44	2.60
Ethane	2.79	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 26-May-2021 10:17:42 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: robertstr Date: 26-May-2021 10:54:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.187	1.187	0.000	8146186	73.0	68.6	
2	1.598	1.598	0.000	7425411	73.0	68.7	
						RPD = 0.11	
3 Ethane							
1	1.452	1.452	0.000	14541446	136.9	126.9	
2	2.789	2.789	0.000	12320875	136.9	126.9	
						RPD = 0.04	
4 Ethylene							Ma
1	1.739	1.739	0.000	11130615	127.7	121.3	
2	2.403	2.403	0.000	9052246	127.7	123.9	M
						RPD = 2.16	
5 Propane							
1	2.546	2.546	0.000	22580828	200.7	191.2	
2	4.631	4.631	0.000	19095314	200.7	190.9	
						RPD = 0.19	
6 Acetylene							M
1	4.036	4.036	0.000	3187929	118.5	122.9	
2	2.523	2.523	0.000	4551089	118.5	132.6	M
						RPD = 7.59	
7 Butane							Ma
1	4.387	4.387	0.000	27209680	264.5	248.6	a
2	6.096	6.096	0.000	24956679	264.5	248.7	M
						RPD = 0.05	
8 isobutylene							Ma
1	5.236	5.236	0.000	18595037	255.4	259.6	
2	5.939	5.939	0.000	16330224	255.4	260.4	M
						RPD = 0.30	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

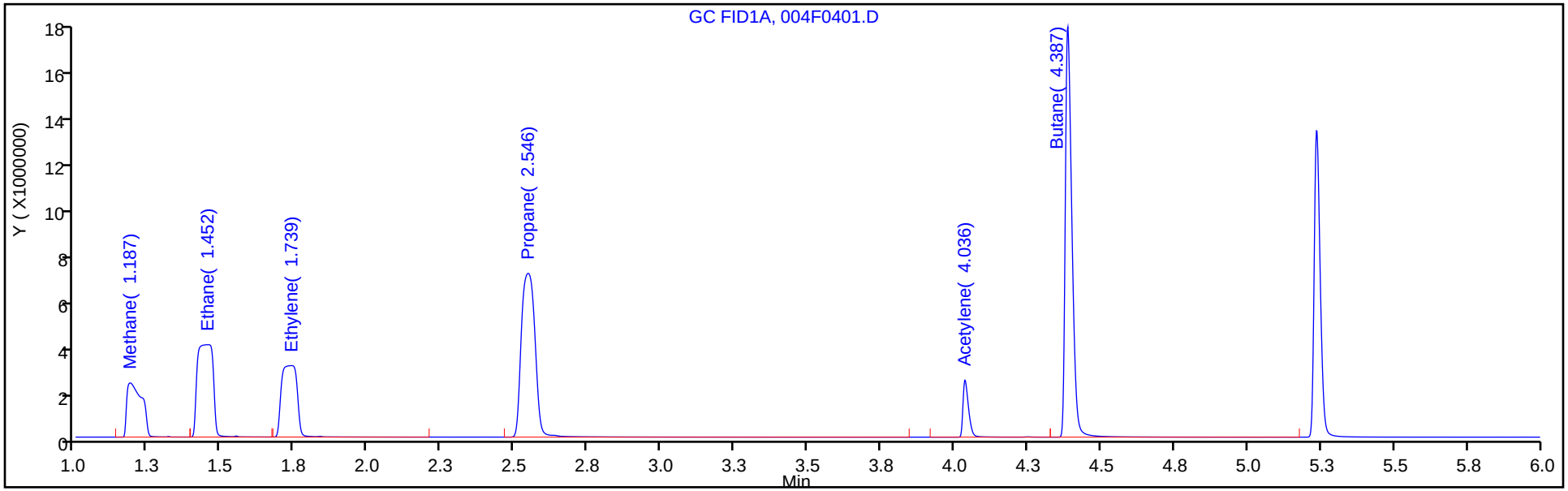
Report Date: 27-May-2021 10:24:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

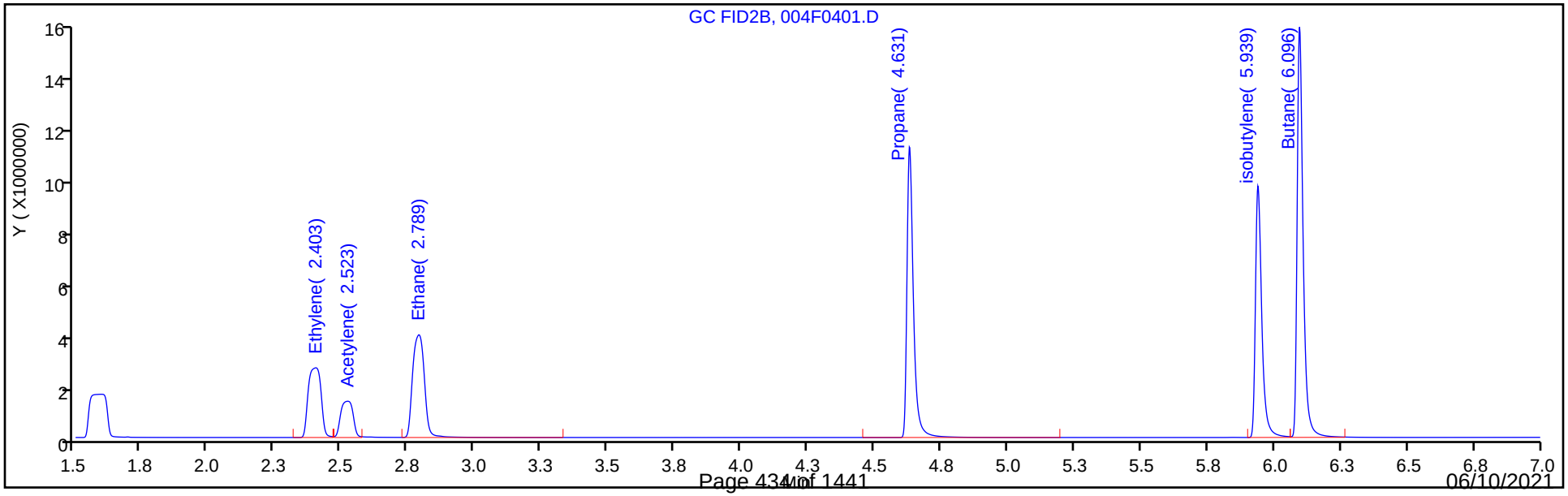
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\004F0401.D

Injection Date:	26-May-2021 10:17:42	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

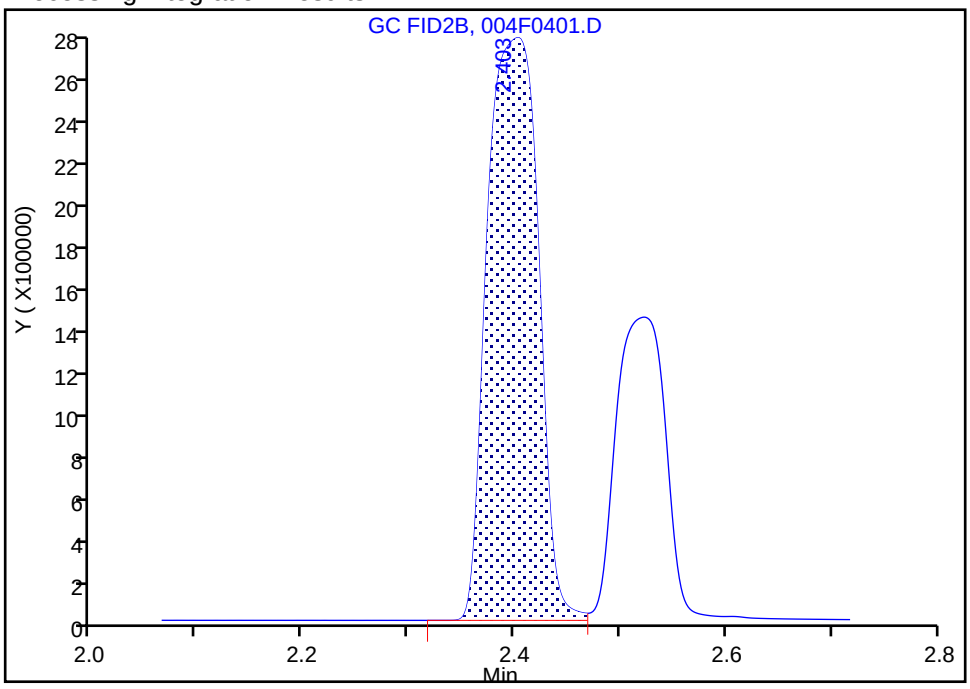
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\004F0401.D				
Injection Date:	26-May-2021 10:17:42	Instrument ID:	VGC_J		
Lims ID:	CCVRT				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

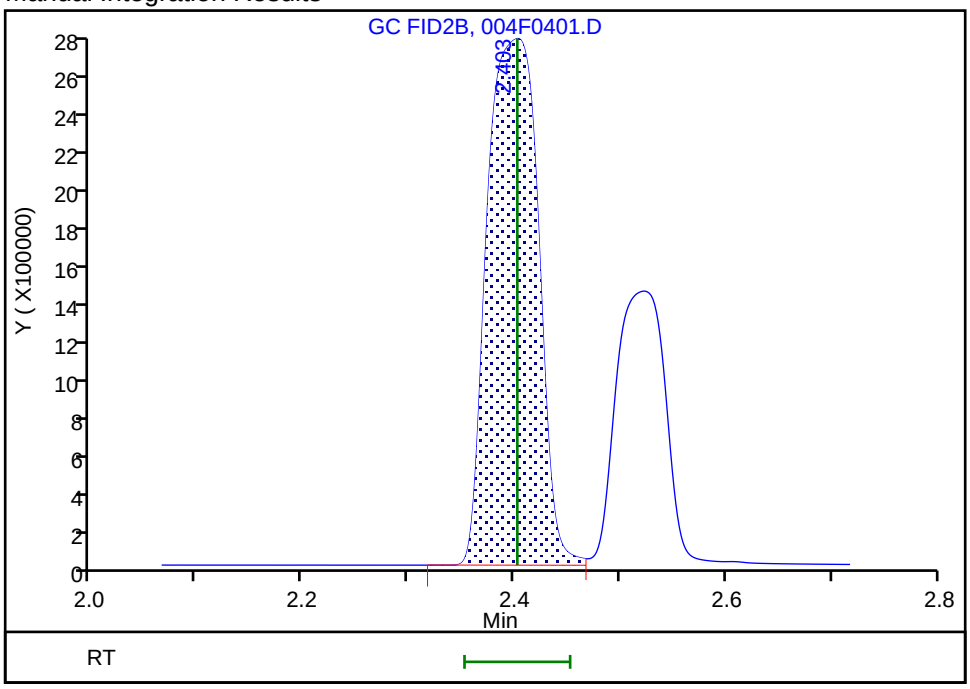
Processing Integration Results

RT: 2.40
Area: 9056189
Amount: 123.9743
Amount Units: ug/l



Manual Integration Results

RT: 2.40
Area: 9052246
Amount: 123.9203
Amount Units: ug/l



Reviewer: robertstr, 26-May-2021 10:54:00

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

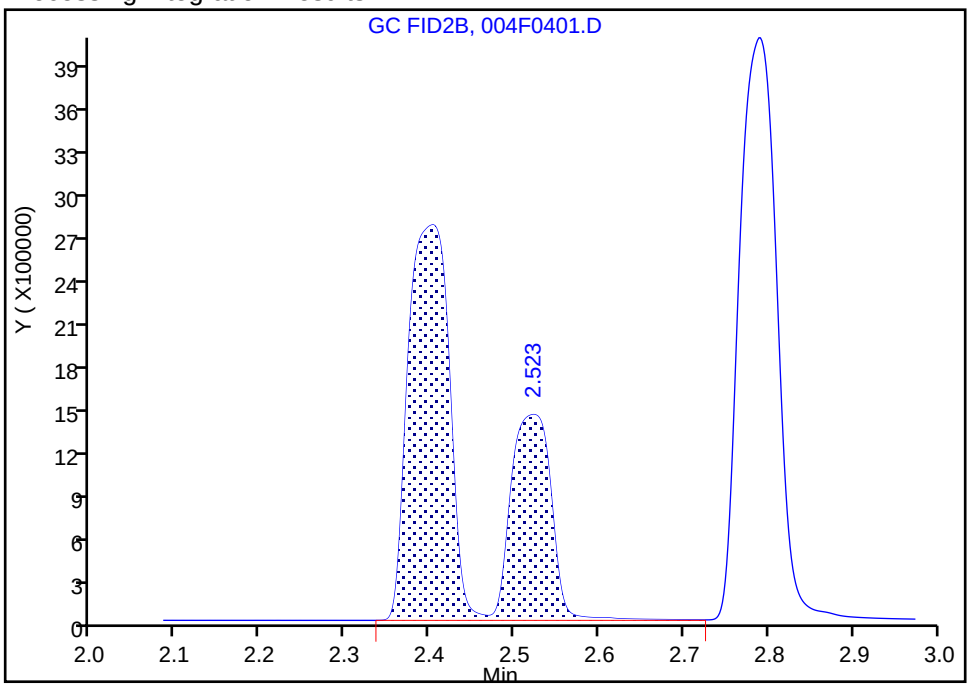
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\004F0401.D
Injection Date: 26-May-2021 10:17:42 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

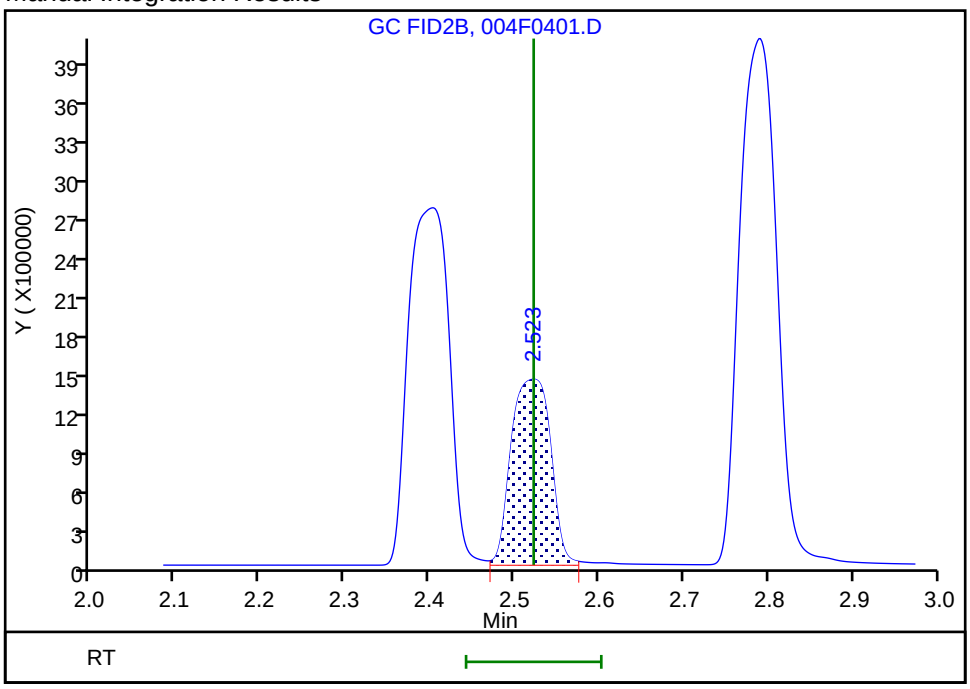
RT: 2.52
Area: 13695887
Amount: 398.9621
Amount Units: ug/l

Processing Integration Results



RT: 2.52
Area: 4551089
Amount: 132.5735
Amount Units: ug/l

Manual Integration Results



Reviewer: robertstr, 26-May-2021 10:52:33
Audit Action: Assigned New Baseline Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537486/21 Calibration Date: 05/26/2021 14:16

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.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		108477		66.7	73.0	-8.7	20.0
Ethane	Ave	114619	102407		122	137	-10.7	20.0
Ethylene	Ave	91780	84002		117	128	-8.5	20.0
Acetylene	Ave	25943	26440		121	119	1.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537486/21 Calibration Date: 05/26/2021 14:16

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.17	1.15	1.23
Ethane	1.43	1.40	1.50
Ethylene	1.71	1.69	1.79
Acetylene	4.02	3.96	4.12

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 26-May-2021 14:16:11 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:43 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 26-May-2021 15:02:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							Ma
1	1.172	1.187	-0.015	7919151	73.0	66.7	M
2	1.579	1.598	-0.019	7240356	73.0	66.9	
						RPD = 0.42	
3 Ethane							Ma
1	1.432	1.452	-0.020	14014962	136.9	122.3	M
2	2.759	2.789	-0.030	11888158	136.9	122.5	
						RPD = 0.15	
4 Ethylene							Ma
1	1.712	1.739	-0.027	10724227	127.7	116.8	M
2	2.374	2.403	-0.029	8777091	127.7	120.2	M
						RPD = 2.79	
5 Propane							
1	2.517	2.546	-0.029	22007545	200.7	186.4	
2	4.618	4.631	-0.013	18568367	200.7	185.6	
						RPD = 0.42	
6 Acetylene							Ma
1	4.024	4.036	-0.012	3133734	118.5	120.8	a
2	2.494	2.523	-0.029	4470207	118.5	130.2	M
						RPD = 7.51	
7 Butane							Ma
1	4.374	4.387	-0.013	26575352	264.5	242.8	a
2	6.086	6.096	-0.010	24336657	264.5	242.6	M
						RPD = 0.11	
8 isobutylene							Ma
1	5.227	5.236	-0.009	18017788	255.4	251.5	
2	5.929	5.939	-0.010	15823829	255.4	252.3	M
						RPD = 0.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

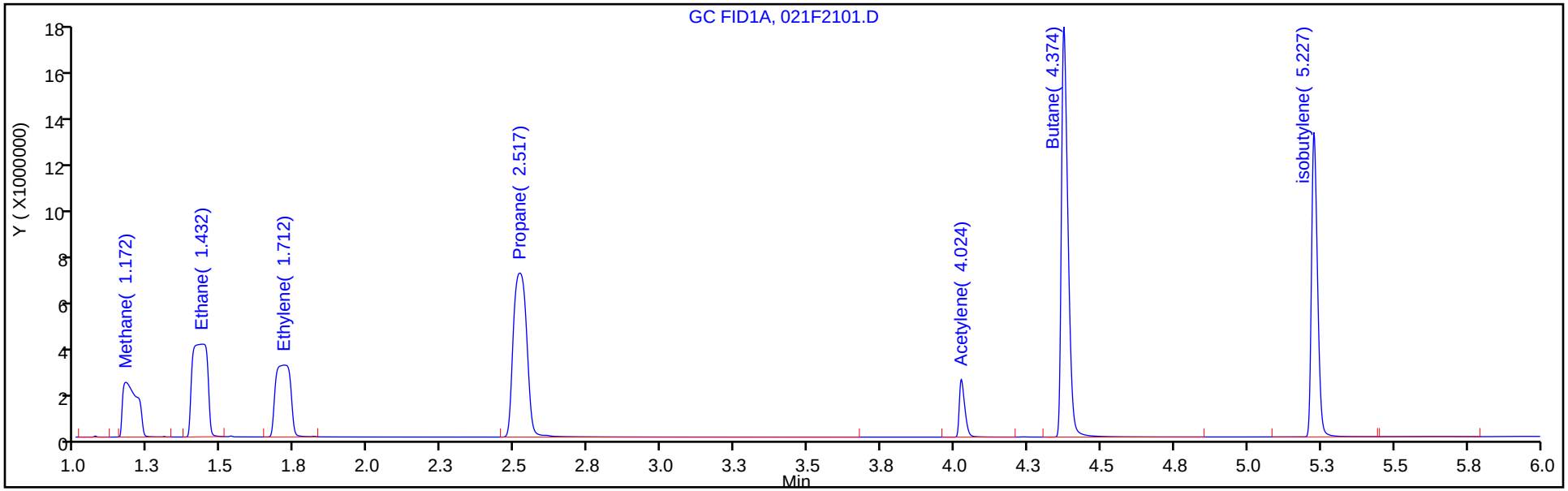
Report Date: 27-May-2021 10:24:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

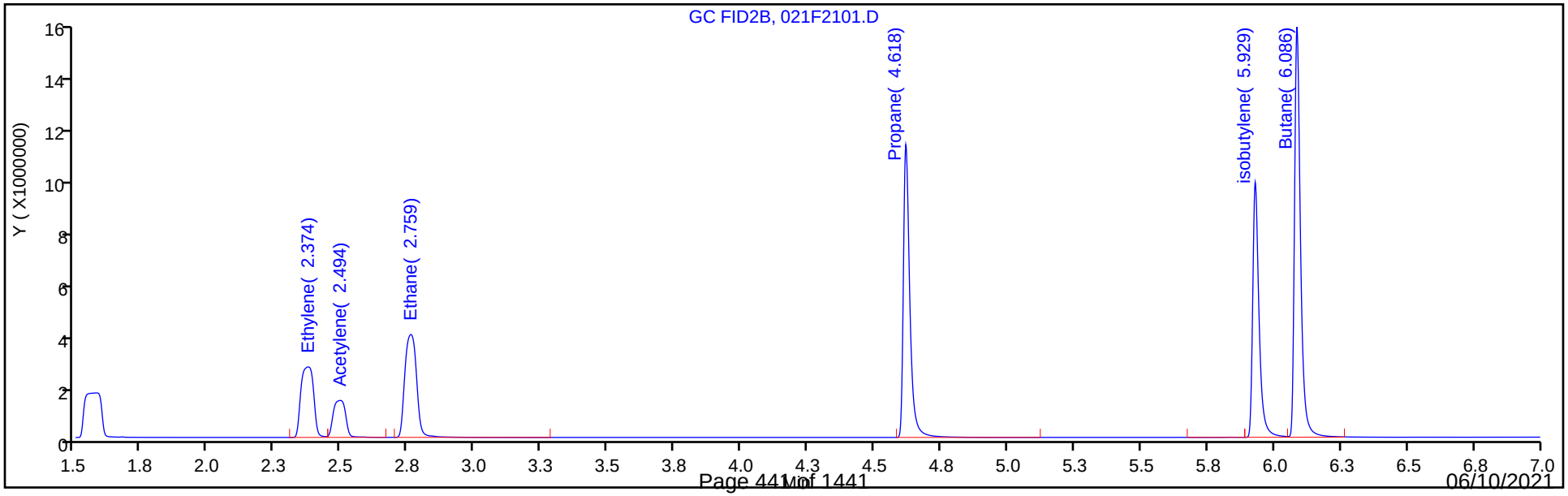
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D

Injection Date:	26-May-2021 14:16:11	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

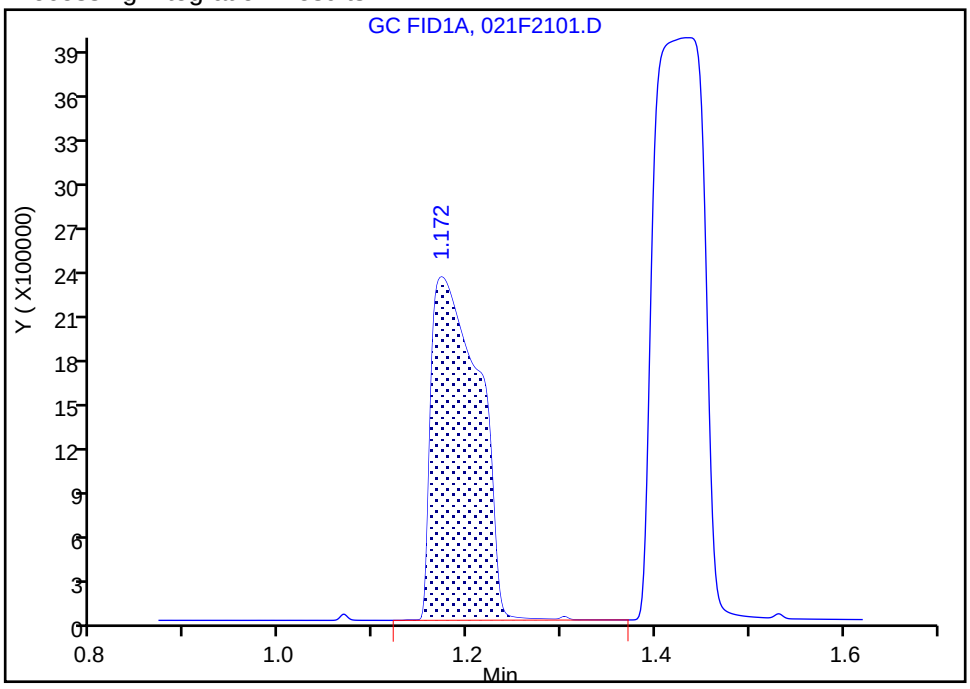
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D
Injection Date: 26-May-2021 14:16:11 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

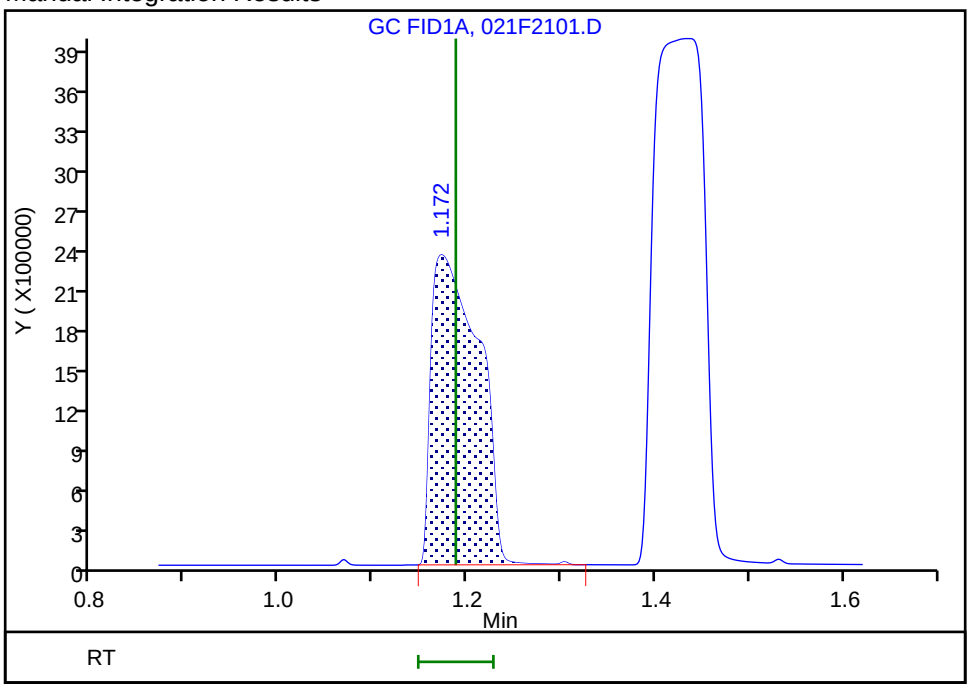
Processing Integration Results

RT: 1.17
Area: 7943477
Amount: 66.870321
Amount Units: ug/l



Manual Integration Results

RT: 1.17
Area: 7919151
Amount: 66.664275
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 15:04:02
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

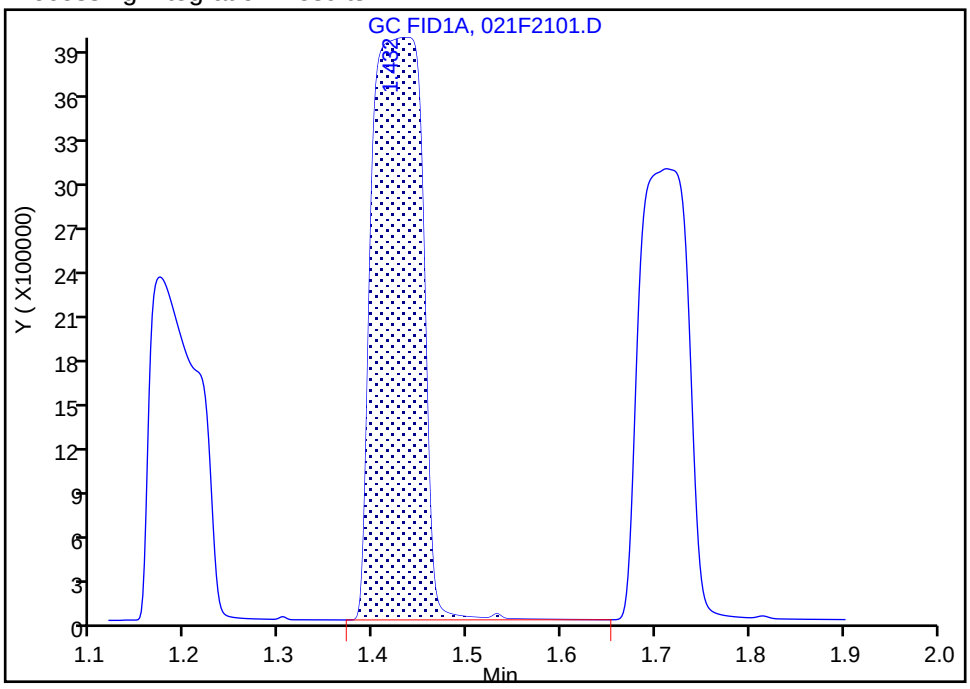
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D				
Injection Date:	26-May-2021 14:16:11	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

3 Ethane, CAS: 74-84-0

Signal: 1

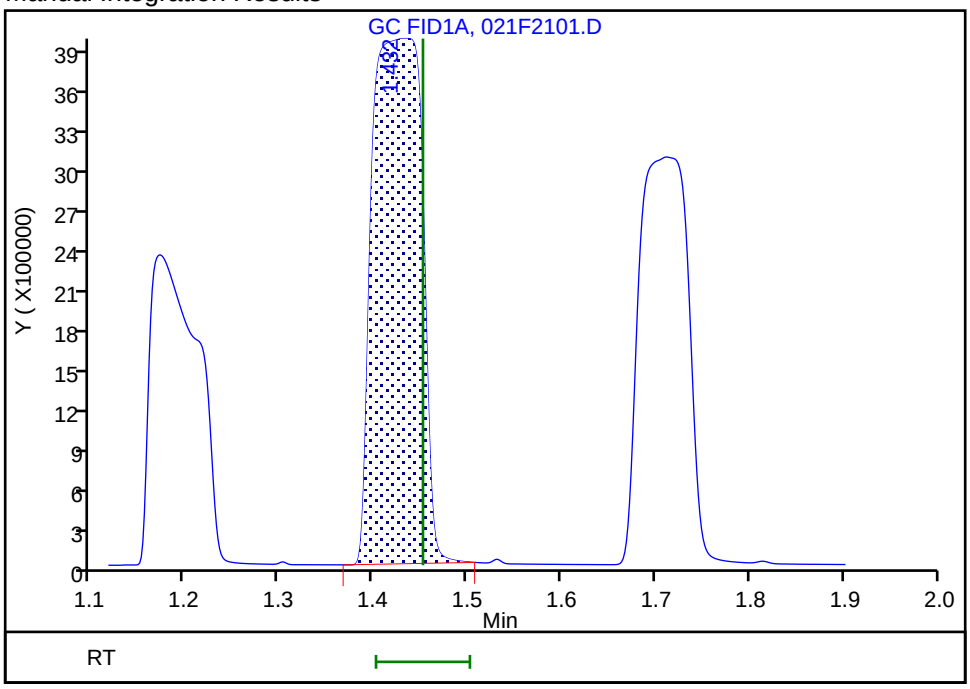
Processing Integration Results

RT: 1.43
Area: 14147129
Amount: 123.4273
Amount Units: ug/l



Manual Integration Results

RT: 1.43
Area: 14014962
Amount: 122.2742
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 15:03:49

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

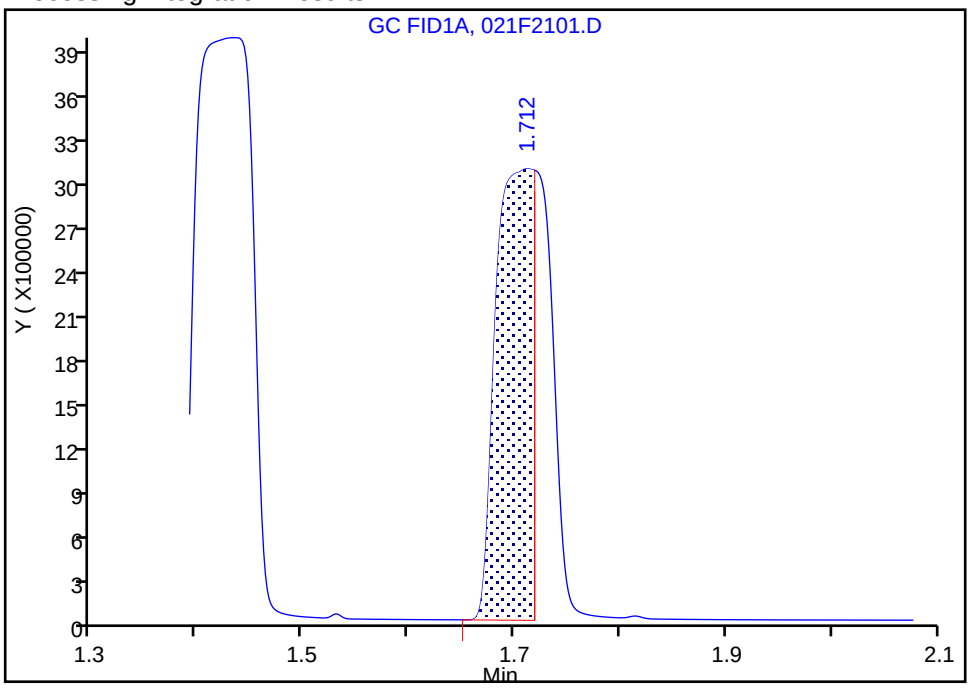
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D				
Injection Date:	26-May-2021 14:16:11	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

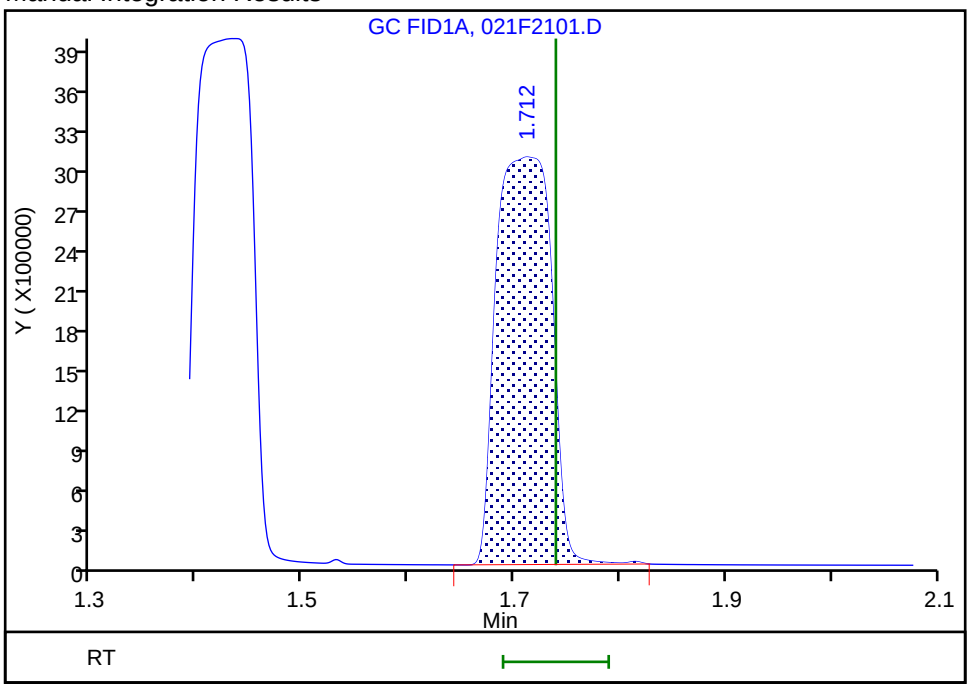
Processing Integration Results

RT: 1.71
Area: 7118319
Amount: 77.558705
Amount Units: ug/l



Manual Integration Results

RT: 1.71
Area: 10724227
Amount: 116.8474
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 15:02:59

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

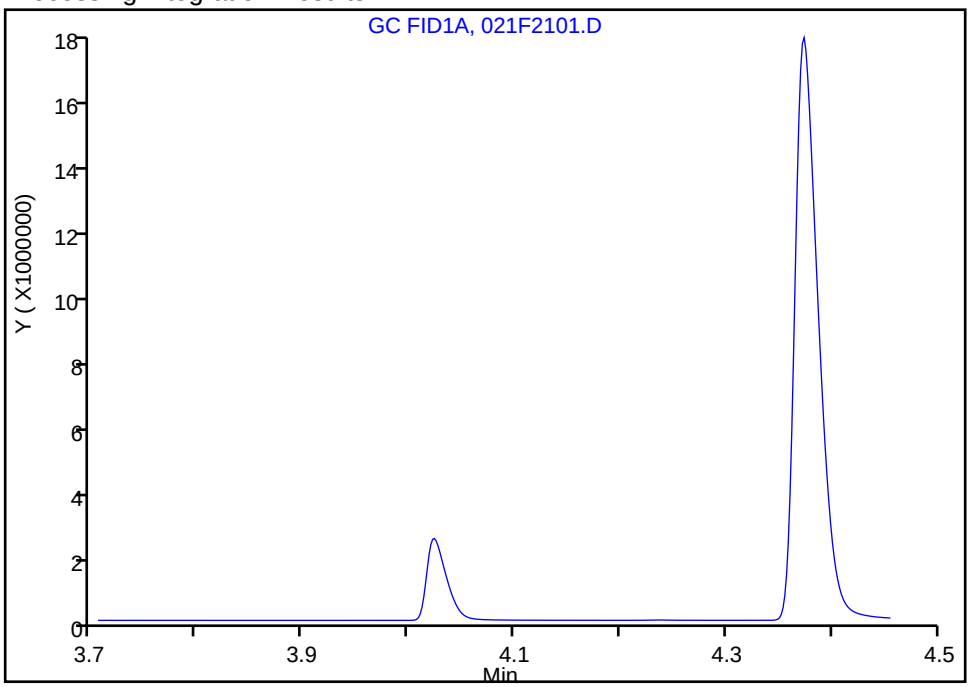
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D
Injection Date: 26-May-2021 14:16:11 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

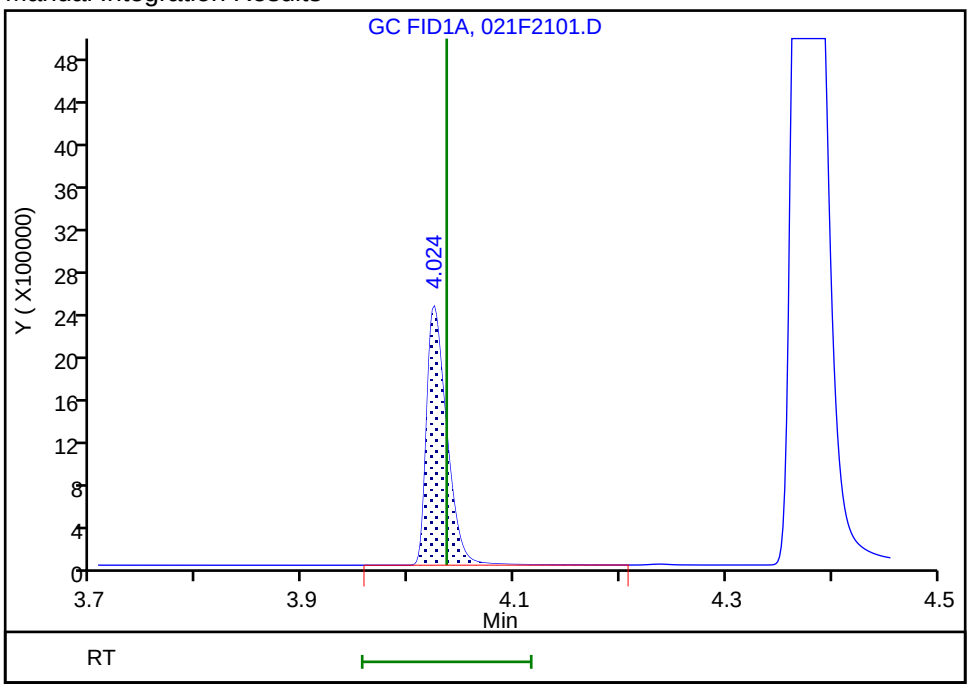
Not Detected
Expected RT: 4.04

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 3133734
Amount: 120.7931
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 15:01:06
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537486/21 Calibration Date: 05/26/2021 14:16

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.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		99178		66.9	73.0	-8.3	20.0
Ethylene	Ave	73049	68750		120	128	-5.9	20.0
Acetylene	Ave	34329	37716		130	119	9.9	20.0
Ethane	Ave	97082	86866		122	137	-10.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537486/21 Calibration Date: 05/26/2021 14:16

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.58	1.56	1.64
Ethylene	2.37	2.35	2.45
Acetylene	2.49	2.44	2.60
Ethane	2.76	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 26-May-2021 14:16:11 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:43 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 26-May-2021 15:02:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							Ma
1	1.172	1.187	-0.015	7919151	73.0	66.7	M
2	1.579	1.598	-0.019	7240356	73.0	66.9	
						RPD = 0.42	
3 Ethane							Ma
1	1.432	1.452	-0.020	14014962	136.9	122.3	M
2	2.759	2.789	-0.030	11888158	136.9	122.5	
						RPD = 0.15	
4 Ethylene							Ma
1	1.712	1.739	-0.027	10724227	127.7	116.8	M
2	2.374	2.403	-0.029	8777091	127.7	120.2	M
						RPD = 2.79	
5 Propane							
1	2.517	2.546	-0.029	22007545	200.7	186.4	
2	4.618	4.631	-0.013	18568367	200.7	185.6	
						RPD = 0.42	
6 Acetylene							Ma
1	4.024	4.036	-0.012	3133734	118.5	120.8	a
2	2.494	2.523	-0.029	4470207	118.5	130.2	M
						RPD = 7.51	
7 Butane							Ma
1	4.374	4.387	-0.013	26575352	264.5	242.8	a
2	6.086	6.096	-0.010	24336657	264.5	242.6	M
						RPD = 0.11	
8 isobutylene							Ma
1	5.227	5.236	-0.009	18017788	255.4	251.5	
2	5.929	5.939	-0.010	15823829	255.4	252.3	M
						RPD = 0.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

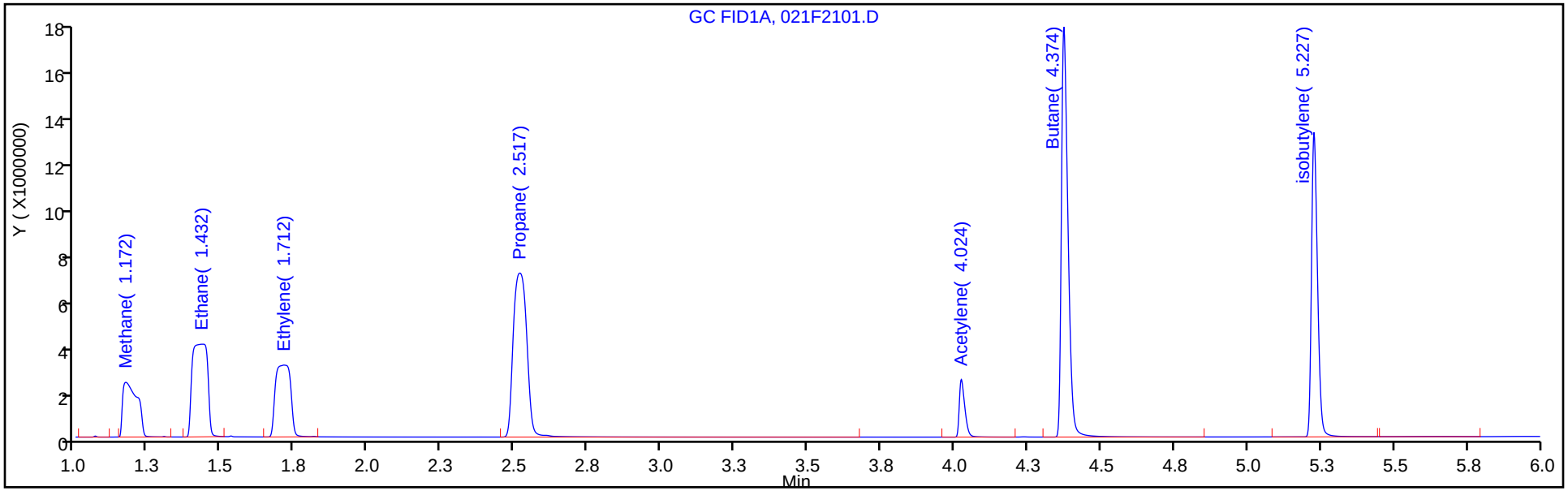
Report Date: 27-May-2021 10:24:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

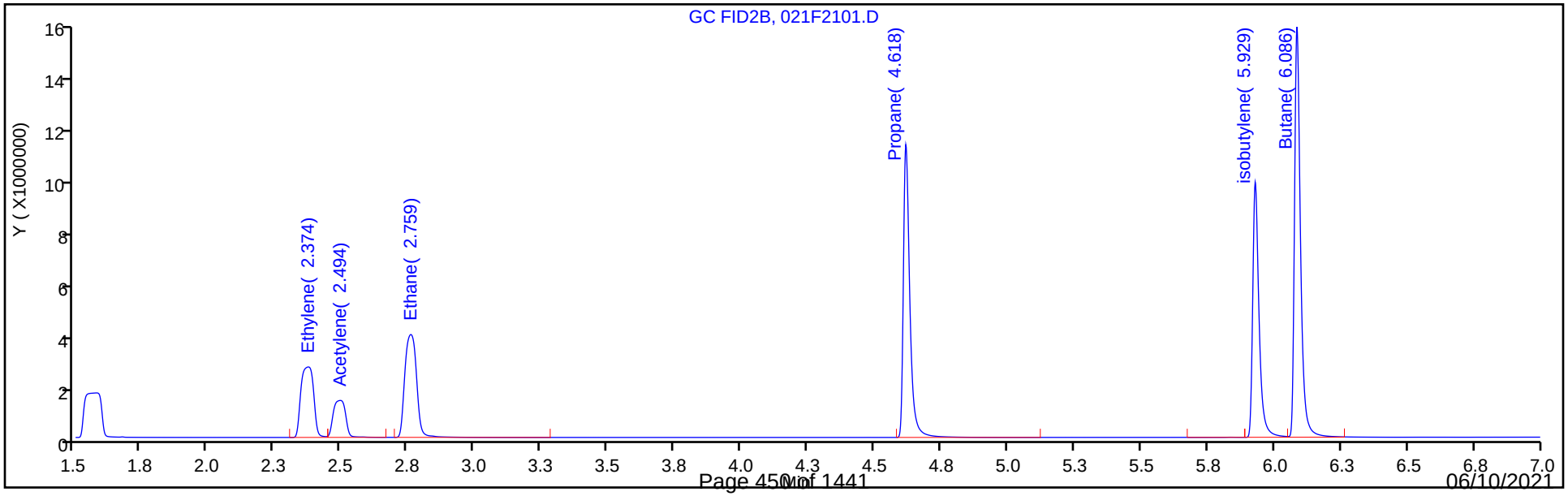
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D

Injection Date:	26-May-2021 14:16:11	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

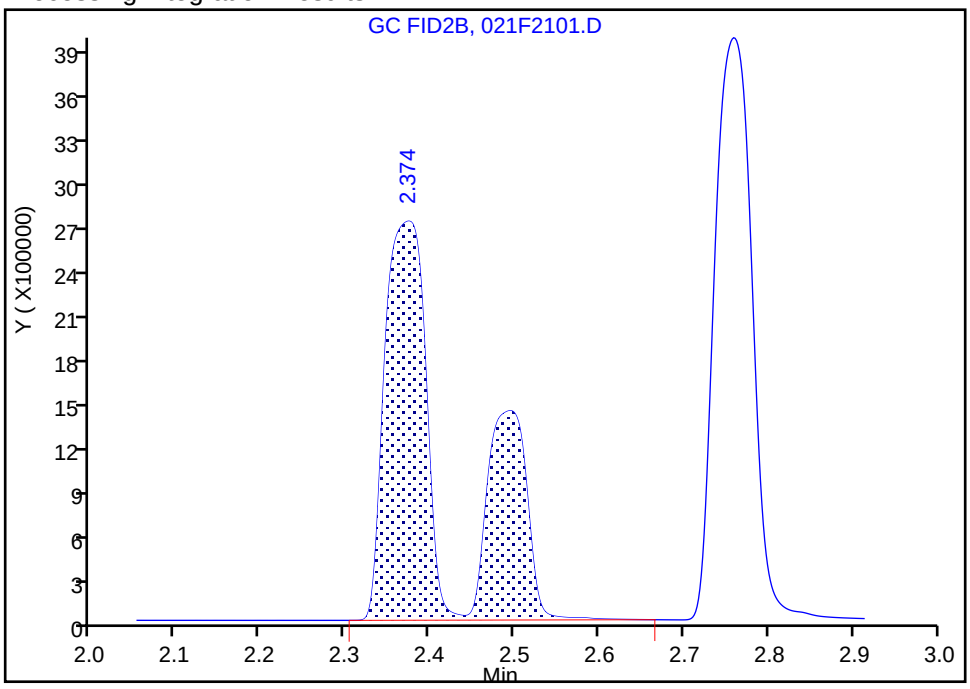
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D
Injection Date: 26-May-2021 14:16:11 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

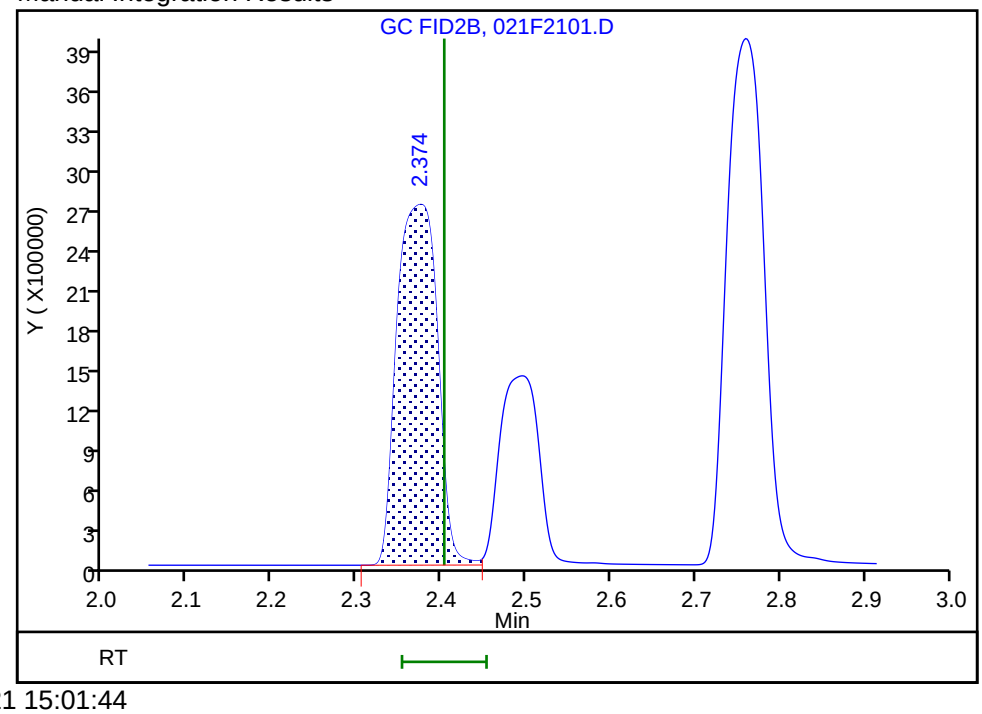
Processing Integration Results

RT: 2.37
Area: 13247310
Amount: 181.3484
Amount Units: ug/l



Manual Integration Results

RT: 2.37
Area: 8777091
Amount: 120.1536
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 15:01:44
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

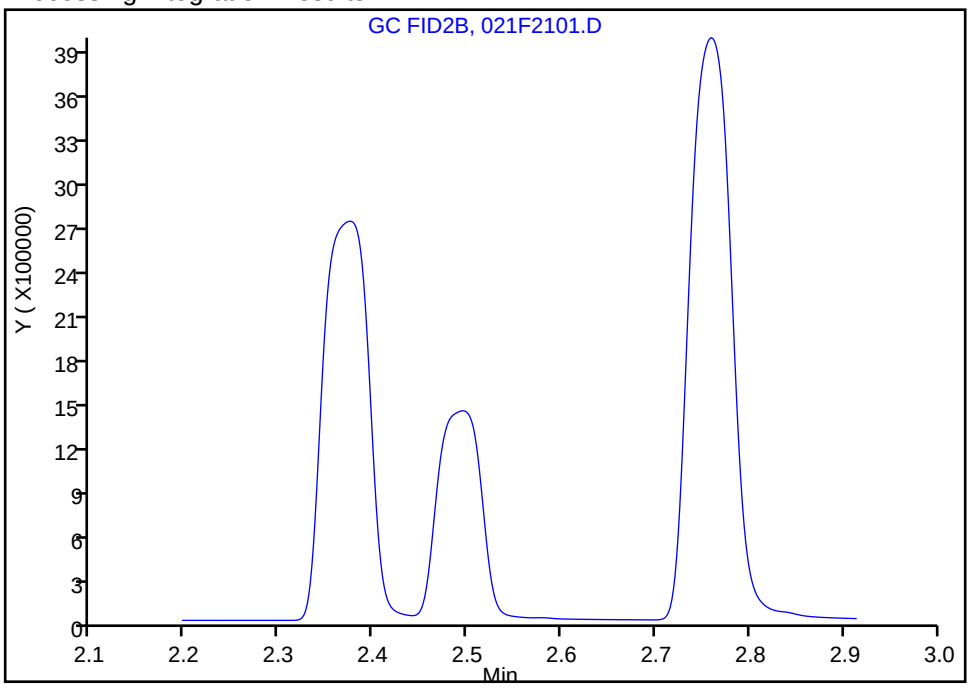
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\021F2101.D
Injection Date: 26-May-2021 14:16:11 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

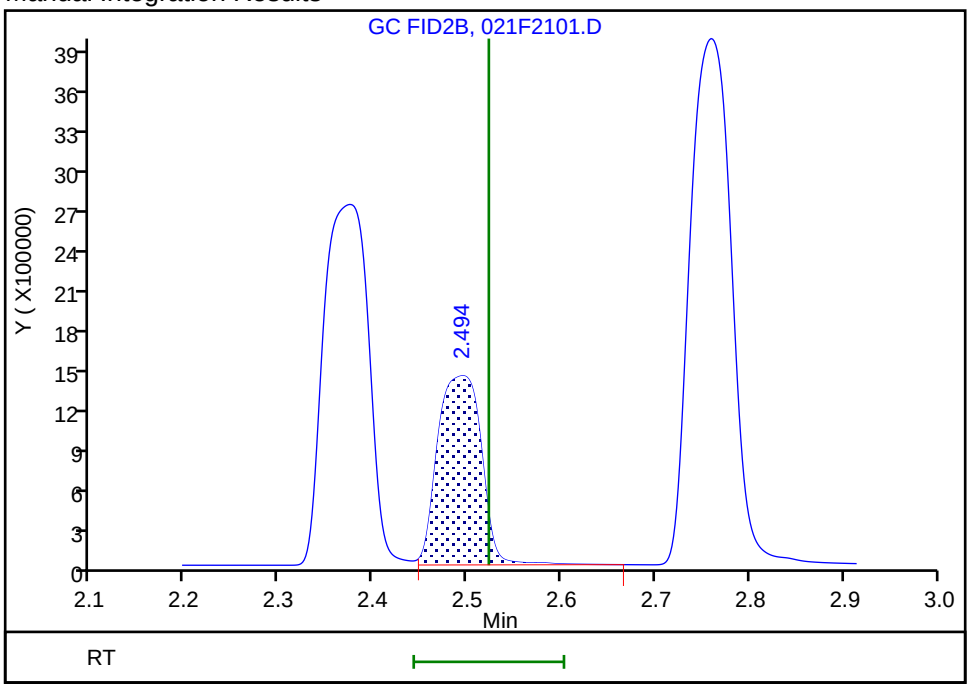
Not Detected
Expected RT: 2.52

Processing Integration Results



Manual Integration Results

RT: 2.49
Area: 4470207
Amount: 130.2174
Amount Units: ug/l



Reviewer: sciannac, 26-May-2021 15:01:36
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-537359/7

Matrix: Water Lab File ID: 007F0701.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 11:23

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537359 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\007F0701.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 25-May-2021 11:23:38 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 25-May-2021 12:36:08

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		1.181				ND	
2		1.589					
3 Ethane							
1		1.446				ND	
2		2.779					
4 Ethylene							
1		1.729				ND	
2		2.393					
5 Propane							
1		2.534				ND	
2		4.626					
6 Acetylene							
1		4.032				ND	
2		2.513					
7 Butane							
1		4.381				ND	
2		6.091					
8 isobutylene							
1		5.232				ND	
2		5.934					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

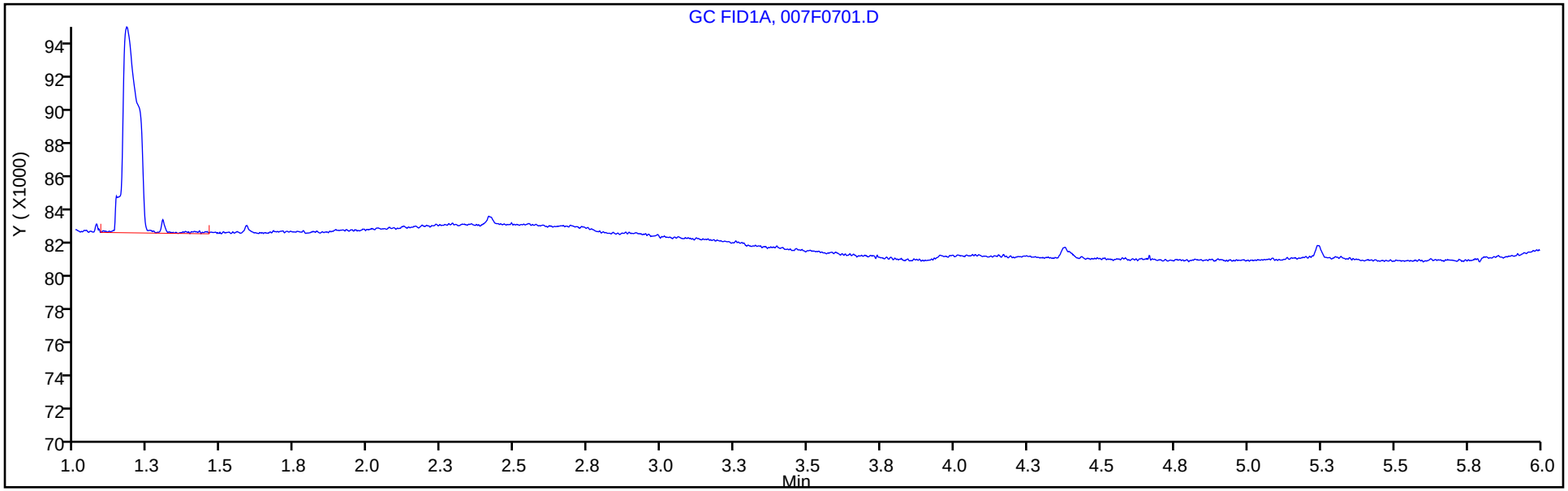
Report Date: 26-May-2021 13:51:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

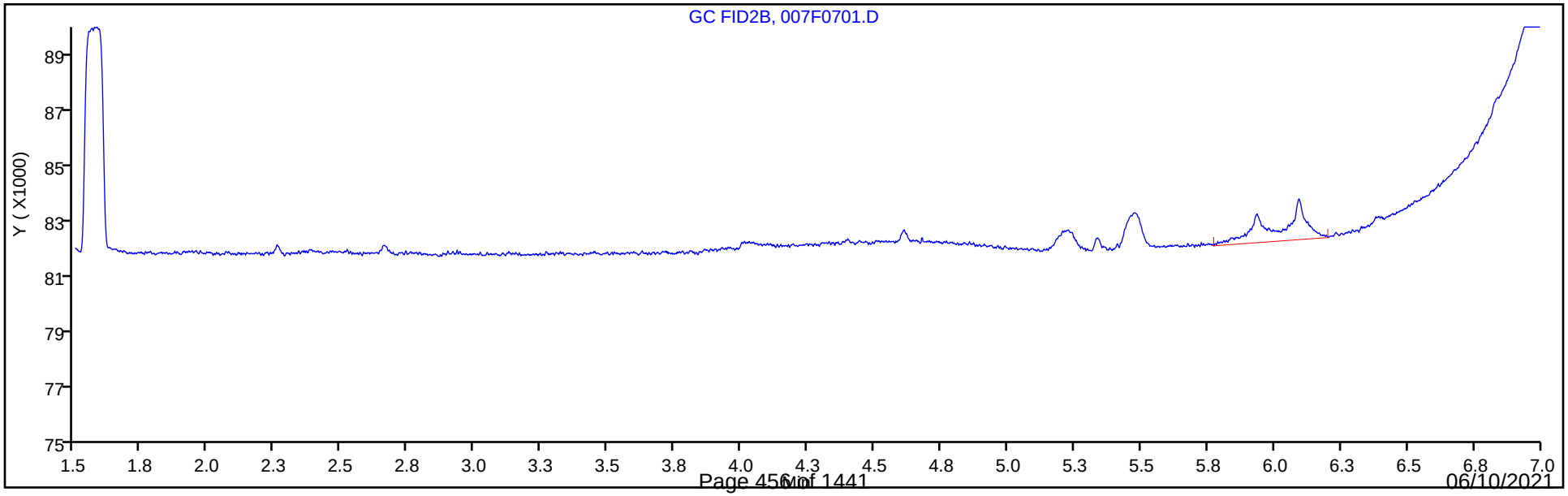
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\007F0701.D

Injection Date:	25-May-2021 11:23:38	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	mb			Worklist Smp#:	7
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-537486/7

Matrix: Water Lab File ID: 007F0701.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 10:54

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\007F0701.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-May-2021 10:54:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 27-May-2021 09:06:49

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		1.187				ND	
2		1.598					
3 Ethane							
1		1.452				ND	
2		2.789					
4 Ethylene							
1		1.739				ND	
2		2.403					
5 Propane							
1		2.546				ND	
2		4.631					
6 Acetylene							
1		4.036				ND	
2		2.523					
7 Butane							
1		4.387				ND	
2		6.096					
8 isobutylene							
1		5.236				ND	
2		5.939					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

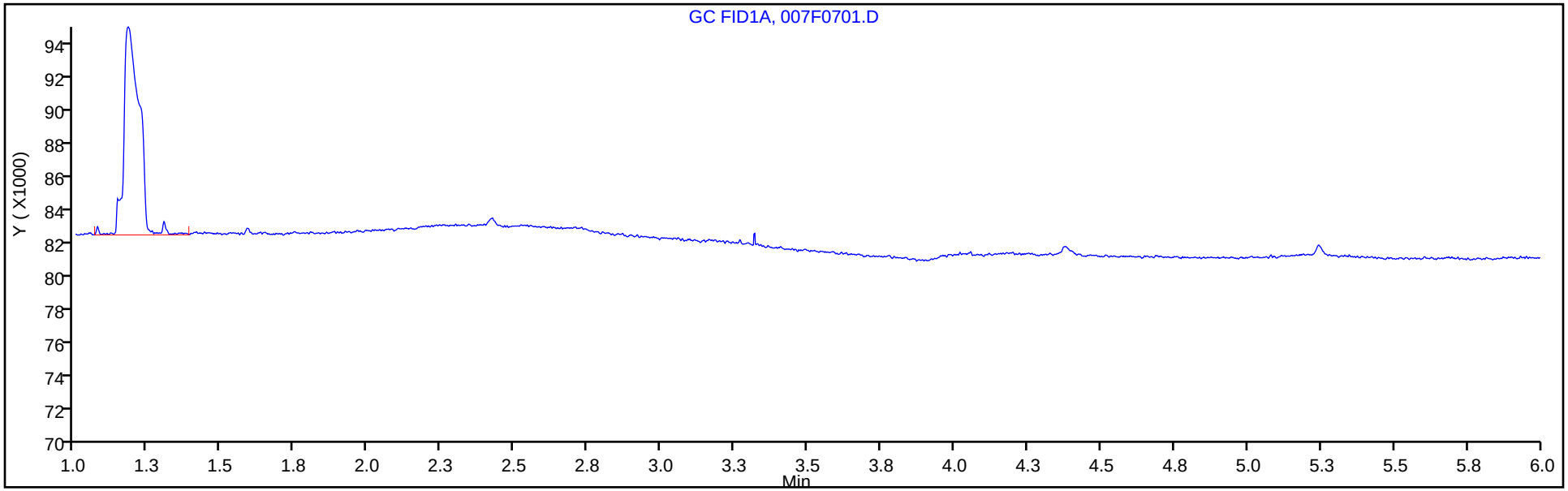
Report Date: 27-May-2021 10:24:35 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

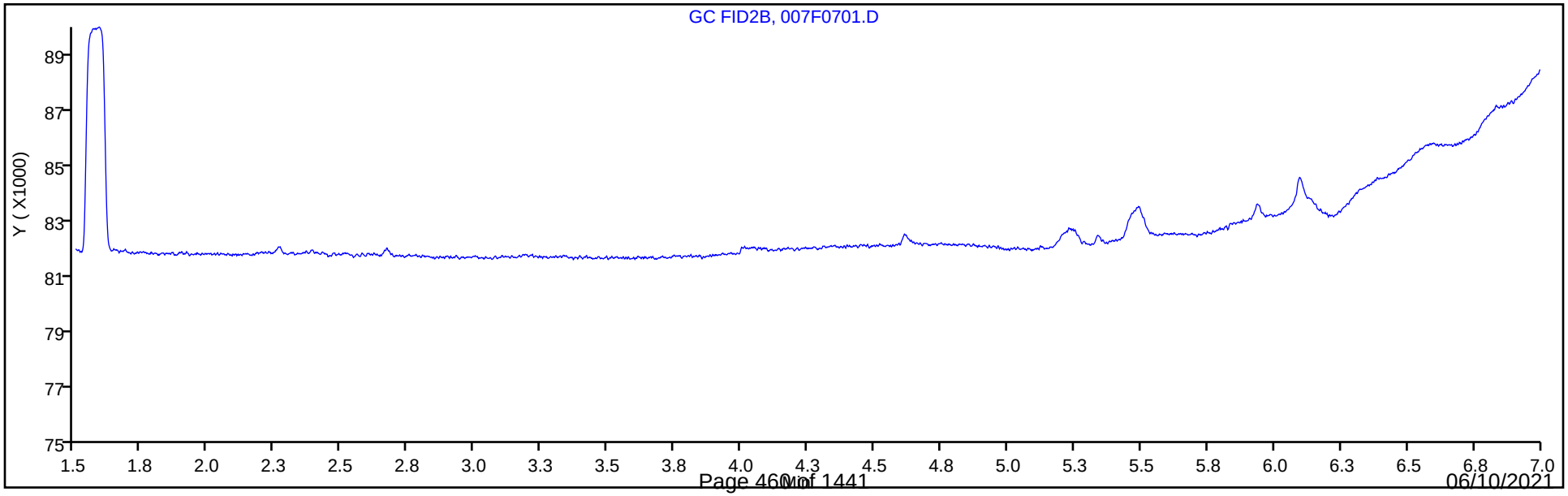
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\007F0701.D

Injection Date:	26-May-2021 10:54:30	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	mb			Worklist Smp#:	7
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-537523/36

Matrix: Water Lab File ID: 036F3601.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 18:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\036F3601.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 25-May-2021 18:08:06 ALS Bottle#: 36 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:02:23

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		1.181				ND	
2		1.589					
3 Ethane							
1		1.446				ND	
2		2.779					
4 Ethylene							
1		1.729				ND	
2		2.393					
5 Propane							
1		2.534				ND	
2		4.626					
6 Acetylene							
1		4.032				ND	
2		2.513					
7 Butane							
1		4.381				ND	
2		6.091					
8 isobutylene							
1		5.232				ND	
2		5.934					

QC Flag Legend

Processing Flags

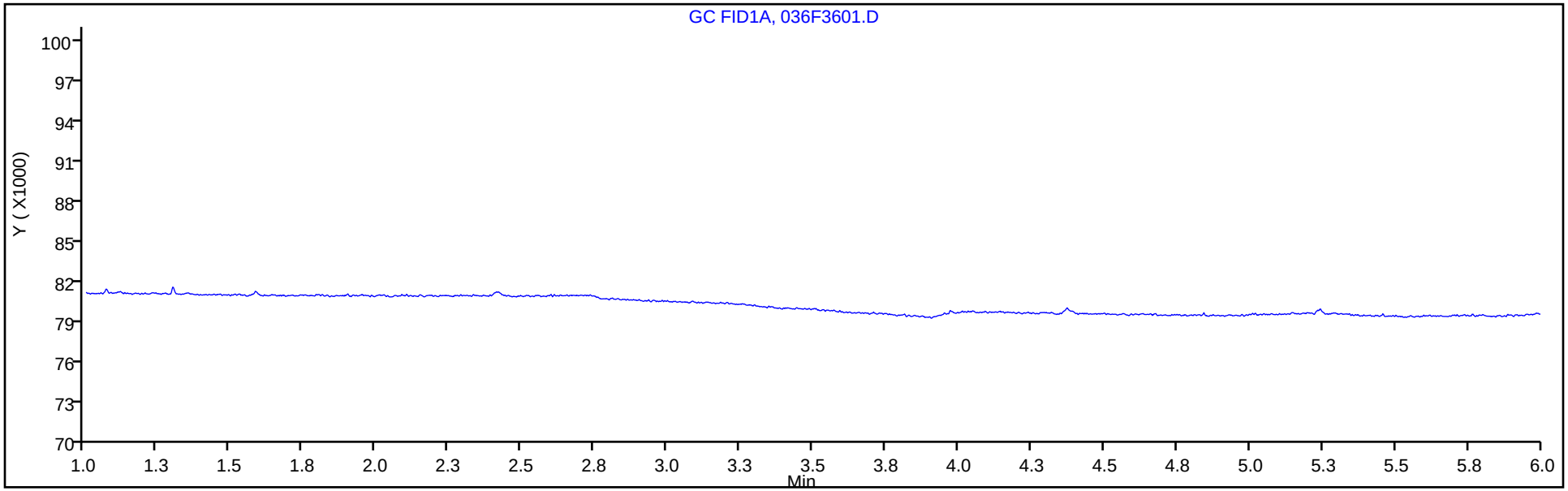
Report Date: 26-May-2021 13:09:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

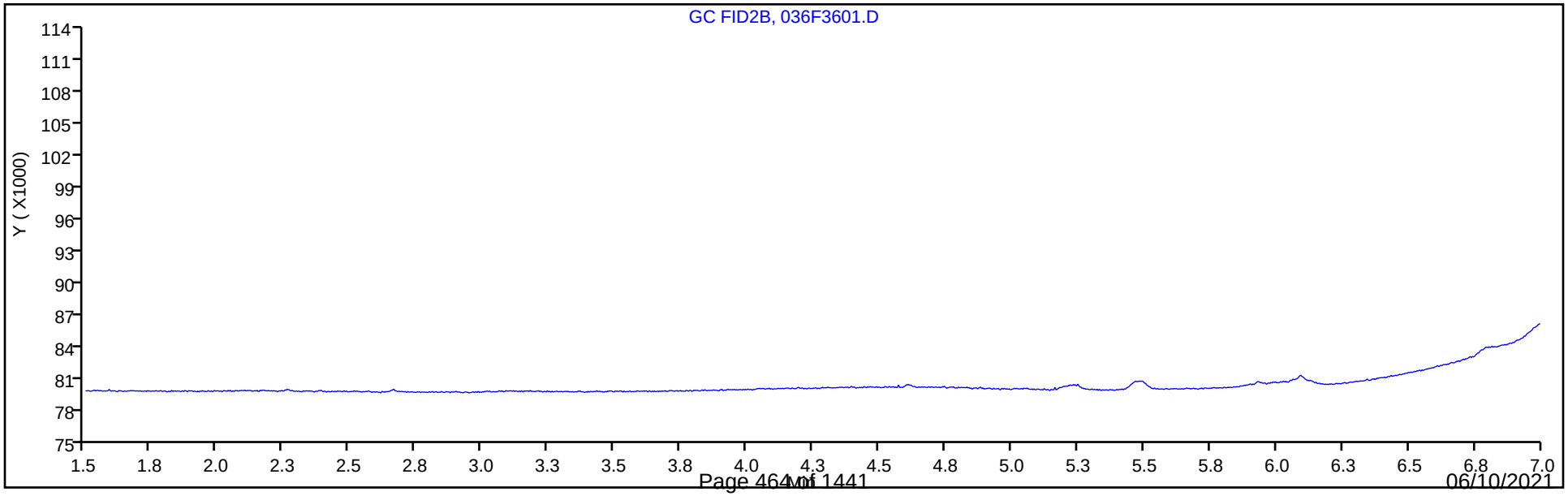
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\036F3601.D

Injection Date:	25-May-2021 18:08:06	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	mb			Worklist Smp#:	36
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
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.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537359/5

Matrix: Water Lab File ID: 005F0501.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 10:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537359 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0731		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\005F0501.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-May-2021 10:59:08 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: robertstr Date: 25-May-2021 11:35:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.180	1.181	-0.001	8650643	73.0	72.9	
2	1.590	1.589	0.001	7905267	73.0	73.1	
						RPD = 0.35	
3 Ethane							
1	1.446	1.446	0.000	15856408	136.9	138.3	
2	2.776	2.779	-0.003	13393861	136.9	138.0	
						RPD = 0.27	
4 Ethylene							Ma
1	1.728	1.729	-0.001	12523541	127.7	136.5	
2	2.388	2.393	-0.005	10293394	127.7	140.9	M
						RPD = 3.22	
5 Propane							M
1	2.533	2.534	-0.001	24641999	200.7	208.7	
2	4.625	4.626	-0.001	20748124	200.7	207.4	M
						RPD = 0.62	
6 Acetylene							Ma
1	4.033	4.032	0.001	3036741	118.5	117.1	
2	2.508	2.513	-0.005	4289987	118.5	125.0	M
						RPD = 6.54	
7 Butane							Ma
1	4.381	4.381	0.000	29750730	264.5	271.8	M
2	6.090	6.091	-0.001	27736202	264.5	276.3	M
						RPD = 1.67	
8 isobutylene							Ma
1	5.231	5.232	-0.001	22228733	255.4	310.3	M
2	5.933	5.934	-0.001	19738904	255.4	314.7	M
						RPD = 1.41	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

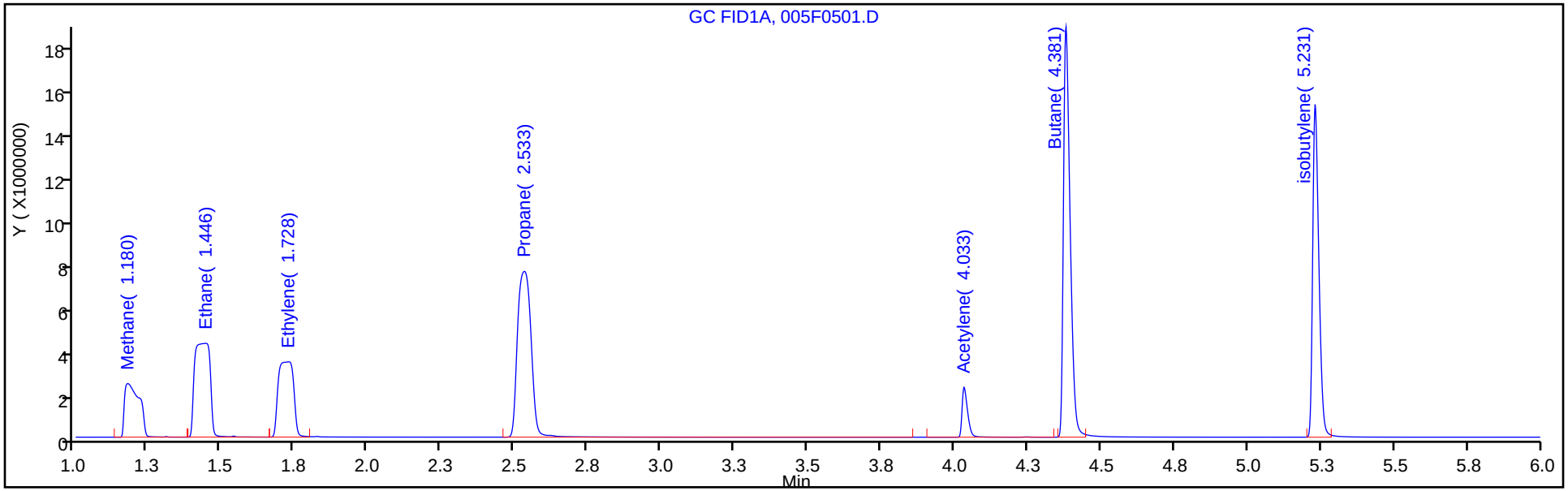
Report Date: 26-May-2021 13:51:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

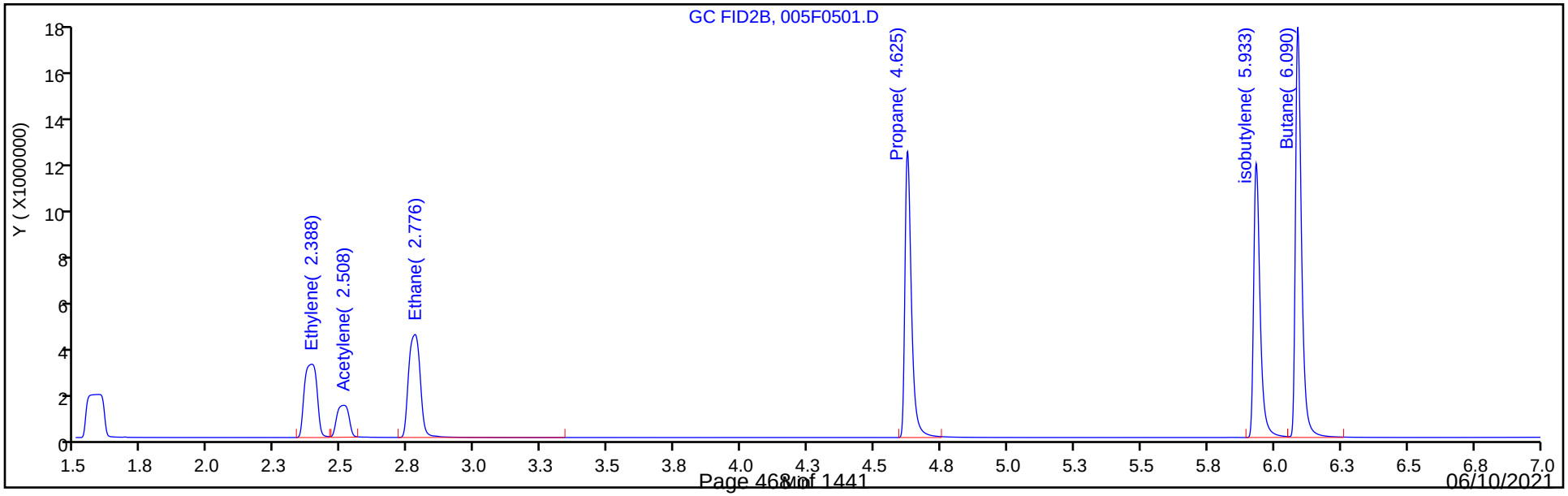
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\005F0501.D

Injection Date:	25-May-2021 10:59:08	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcs			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537486/5

Matrix: Water Lab File ID: 005F0501.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 10:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0689		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\005F0501.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 26-May-2021 10:30:09 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: robertstr Date: 26-May-2021 10:56:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.187	-0.001	8172243	73.0	68.8	
2	1.596	1.598	-0.002	7456079	73.0	68.9	
						RPD = 0.20	
3 Ethane							
1	1.454	1.452	0.002	14616886	136.9	127.5	
2	2.786	2.789	-0.003	12383448	136.9	127.6	
						RPD = 0.02	
4 Ethylene							M
1	1.736	1.739	-0.003	10899854	127.7	118.8	
2	2.398	2.403	-0.005	9037362	127.7	123.7	M
						RPD = 4.09	
5 Propane							
1	2.541	2.546	-0.005	22883585	200.7	193.8	
2	4.629	4.631	-0.002	19361760	200.7	193.5	
						RPD = 0.14	
6 Acetylene							M
1	4.034	4.036	-0.002	3066529	118.5	118.2	
2	2.518	2.523	-0.005	4408793	118.5	128.4	M
						RPD = 8.29	
7 Butane							Ma
1	4.384	4.387	-0.003	27803633	264.5	254.0	M
2	6.094	6.096	-0.002	25802834	264.5	257.1	M
						RPD = 1.22	
8 isobutylene							Ma
1	5.236	5.236	0.000	18853633	255.4	263.2	
2	5.938	5.939	-0.001	16567032	255.4	264.2	M
						RPD = 0.36	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

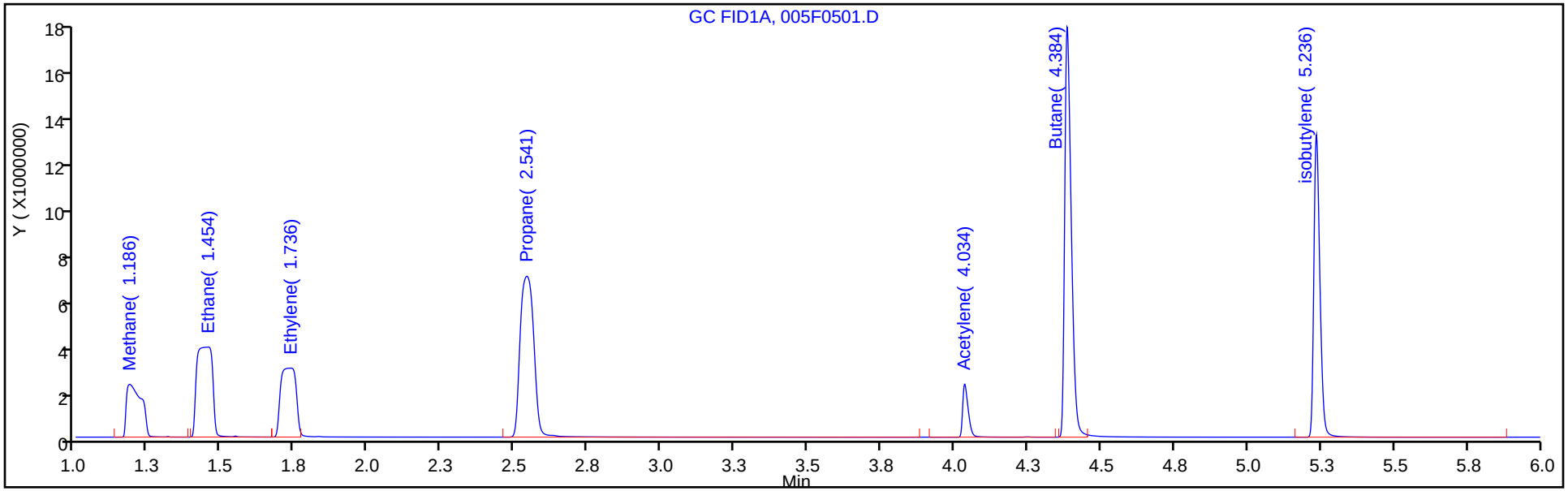
Report Date: 27-May-2021 10:24:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

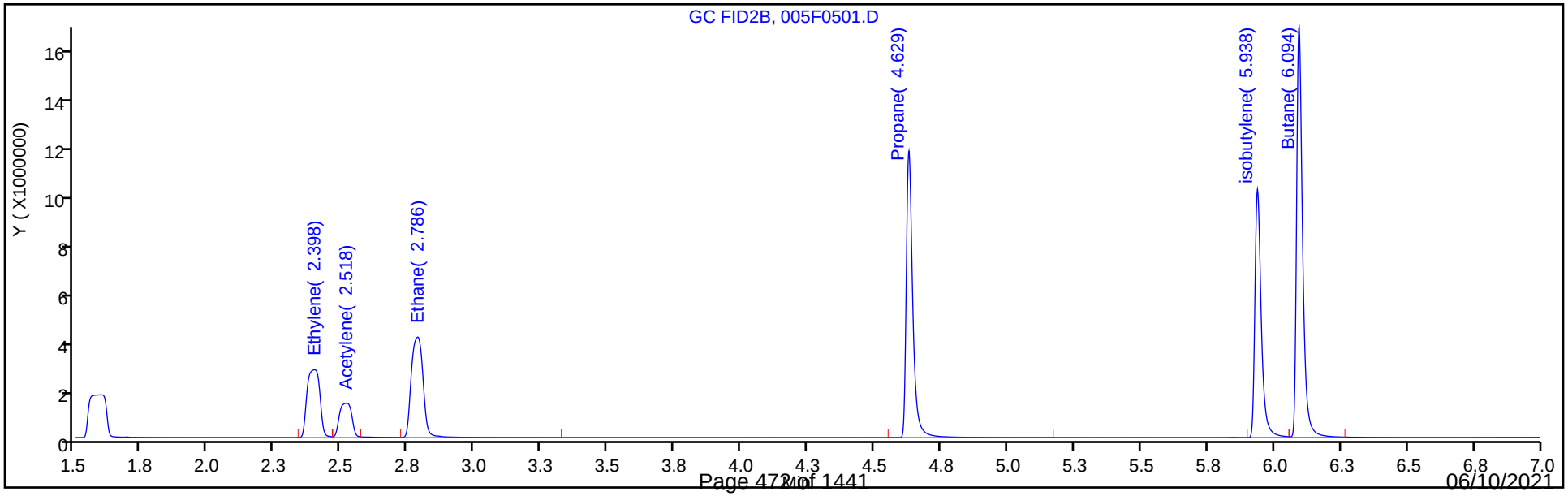
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\005F0501.D

Injection Date:	26-May-2021 10:30:09	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcs			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537523/34

Matrix: Water Lab File ID: 034F3401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 17:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0704		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\034F3401.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-May-2021 17:40:02 ALS Bottle#: 34 Worklist Smp#: 34
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:00:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.181	-0.007	8371344	73.0	70.5	
2	1.583	1.589	-0.006	7614388	73.0	70.4	
						RPD = 0.11	
3 Ethane							
1	1.439	1.446	-0.007	15200131	136.9	132.6	
2	2.766	2.779	-0.013	12767151	136.9	131.5	
						RPD = 0.84	
4 Ethylene							M
1	1.714	1.729	-0.015	11709103	127.7	127.6	
2	2.379	2.393	-0.014	9532523	127.7	130.5	M
						RPD = 2.26	
5 Propane							M
1	2.523	2.534	-0.011	23759888	200.7	201.2	
2	4.621	4.626	-0.005	19789514	200.7	197.8	M
						RPD = 1.71	
6 Acetylene							Ma
1	4.026	4.032	-0.006	3215491	118.5	123.9	a
2	2.499	2.513	-0.014	4609270	118.5	134.3	M
						RPD = 8.00	
7 Butane							Ma
1	4.376	4.381	-0.005	29134560	264.5	266.1	a
2	6.088	6.091	-0.003	26820656	264.5	267.2	M
						RPD = 0.41	
8 isobutylene							Ma
1	5.228	5.232	-0.004	20559794	255.4	287.0	
2	5.933	5.934	-0.001	18012899	255.4	287.2	M
						RPD = 0.07	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

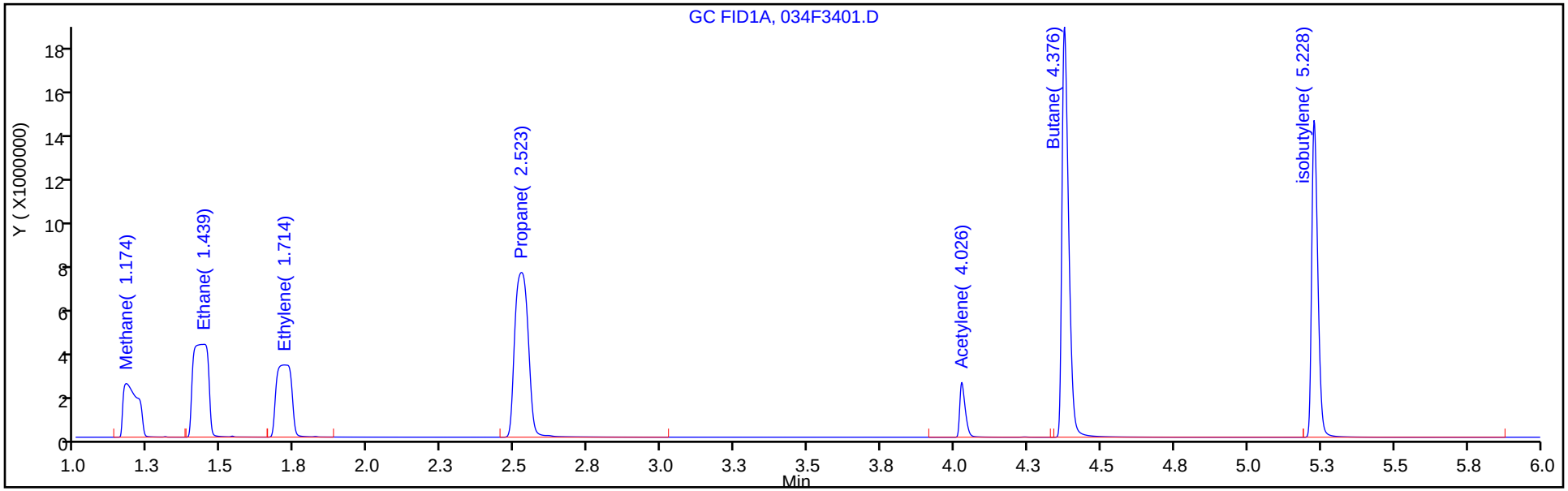
Report Date: 26-May-2021 13:09:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

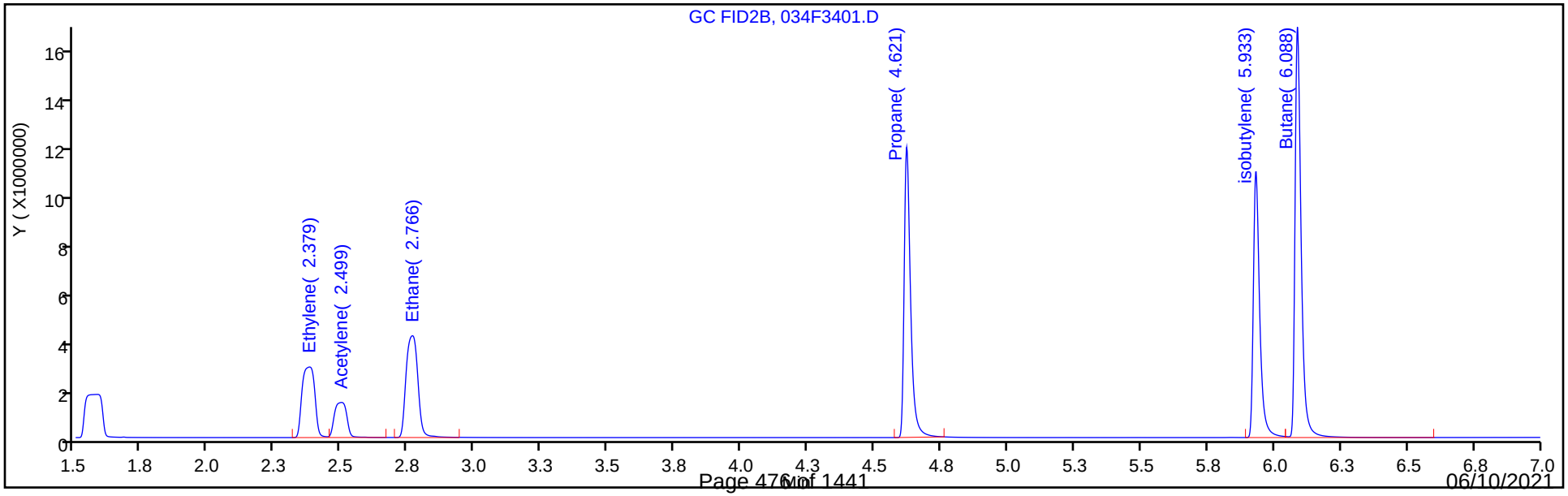
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\034F3401.D

Injection Date:	25-May-2021 17:40:02	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcs			Worklist Smp#:	34
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	34
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.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-537359/6

Matrix: Water Lab File ID: 006F0601.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 11:11

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.: 537359 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0796		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\006F0601.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 25-May-2021 11:11:22 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:41:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.176	1.181	-0.005	9398019	73.0	79.2	
2	1.586	1.589	-0.003	8600771	73.0	79.6	
						RPD = 0.48	
3 Ethane							
1	1.444	1.446	-0.002	17198514	136.9	150.0	
2	2.771	2.779	-0.008	14560081	136.9	150.0	
						RPD = 0.05	
4 Ethylene							Ma
1	1.726	1.729	-0.003	13302657	127.7	144.9	
2	2.384	2.393	-0.009	10737276	127.7	147.0	M
						RPD = 1.40	
5 Propane							
1	2.528	2.534	-0.006	26853233	200.7	227.4	
2	4.623	4.626	-0.003	22840257	200.7	228.3	
						RPD = 0.39	
6 Acetylene							M
1	4.033	4.032	0.001	3161216	118.5	121.9	
2	2.503	2.513	-0.010	4456012	118.5	129.8	M
						RPD = 6.32	
7 Butane							Ma
1	4.379	4.381	-0.002	32918015	264.5	300.6	a
2	6.088	6.091	-0.003	30362407	264.5	302.4	M
						RPD = 0.61	
8 isobutylene							Ma
1	5.229	5.232	-0.003	23674158	255.4	330.5	M
2	5.933	5.934	-0.001	21019488	255.4	335.1	M
						RPD = 1.40	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

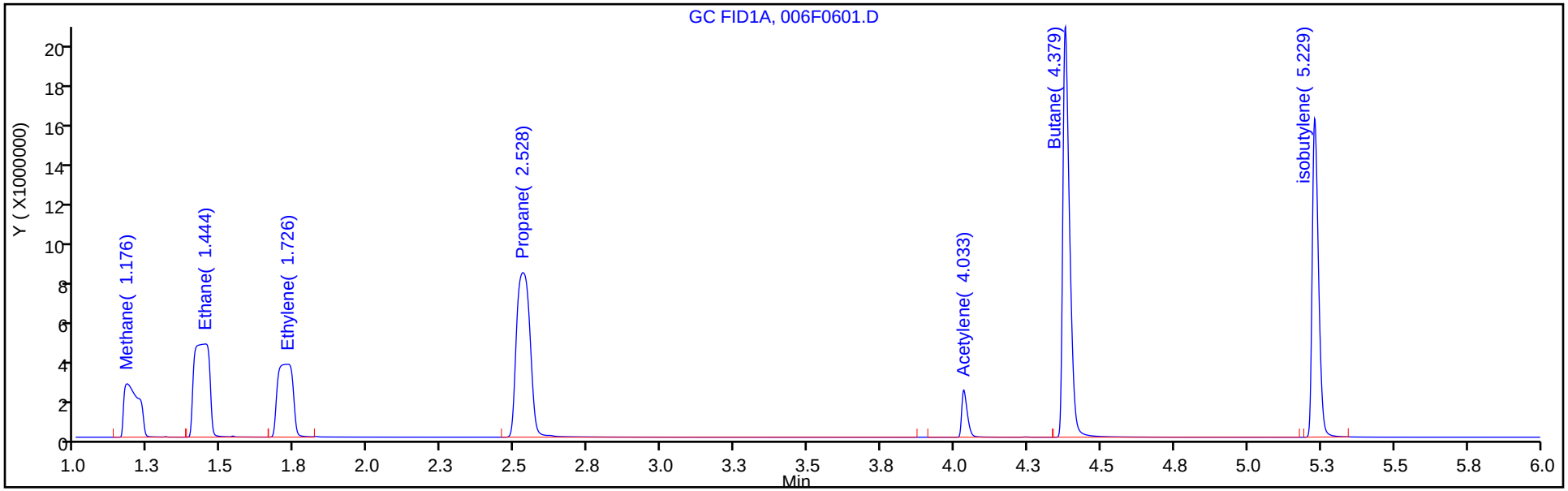
Report Date: 26-May-2021 13:51:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

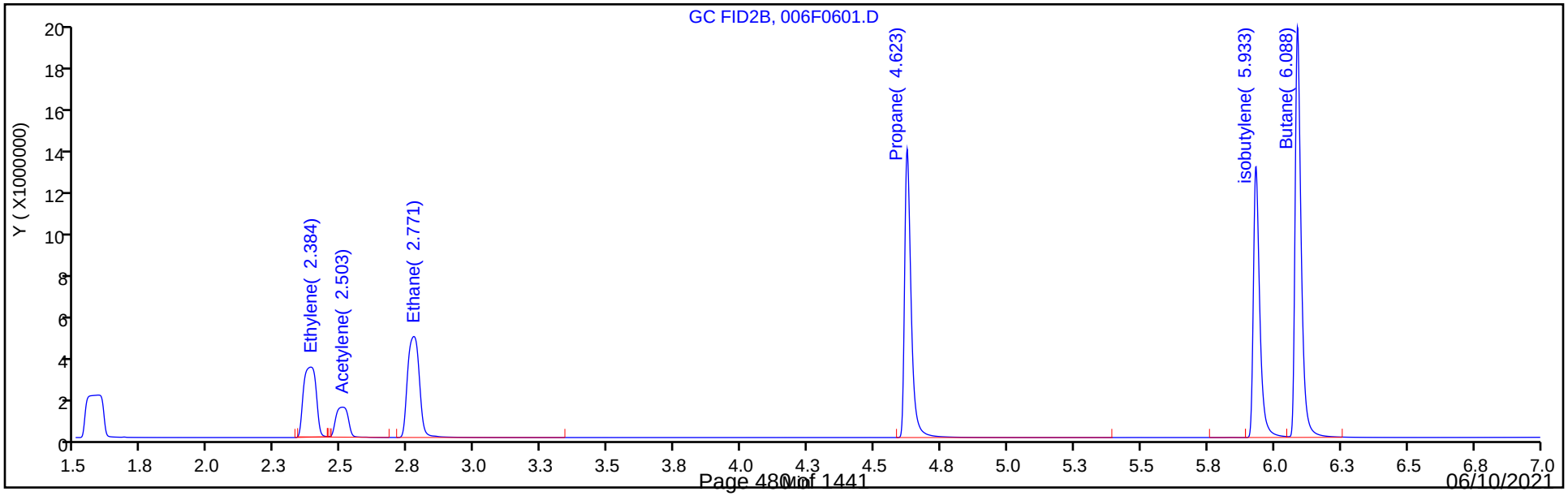
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\006F0601.D

Injection Date:	25-May-2021 11:11:22	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcsd			Worklist Smp#:	6
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-537486/6

Matrix: Water Lab File ID: 006F0601.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/26/2021 10:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537486 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0705		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\006F0601.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 26-May-2021 10:42:21 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 27-May-2021 10:24:33 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1622

First Level Reviewer: sciannac Date: 27-May-2021 09:06:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.182	1.187	-0.005	8361129	73.0	70.4	
2	1.593	1.598	-0.005	7627491	73.0	70.5	
						RPD = 0.18	
3 Ethane							
1	1.450	1.452	-0.002	14959774	136.9	130.5	
2	2.780	2.789	-0.009	12674880	136.9	130.6	
						RPD = 0.03	
4 Ethylene							
1	1.730	1.739	-0.009	11308273	127.7	123.2	
2	2.393	2.403	-0.010	9094147	127.7	124.5	
						RPD = 1.04	
5 Propane							
1	2.537	2.546	-0.009	23467772	200.7	198.8	
2	4.627	4.631	-0.004	19866633	200.7	198.6	
						RPD = 0.08	
6 Acetylene							M
1	4.033	4.036	-0.003	3153984	118.5	121.6	M
2	2.515	2.523	-0.008	4610696	118.5	134.3	M
						RPD = 9.95	
7 Butane							Ma
1	4.383	4.387	-0.004	28685090	264.5	262.0	M
2	6.092	6.096	-0.004	26700676	264.5	266.1	M
						RPD = 1.52	
8 isobutylene							Ma
1	5.233	5.236	-0.003	19342518	255.4	270.0	
2	5.935	5.939	-0.004	17007214	255.4	271.2	M
						RPD = 0.43	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

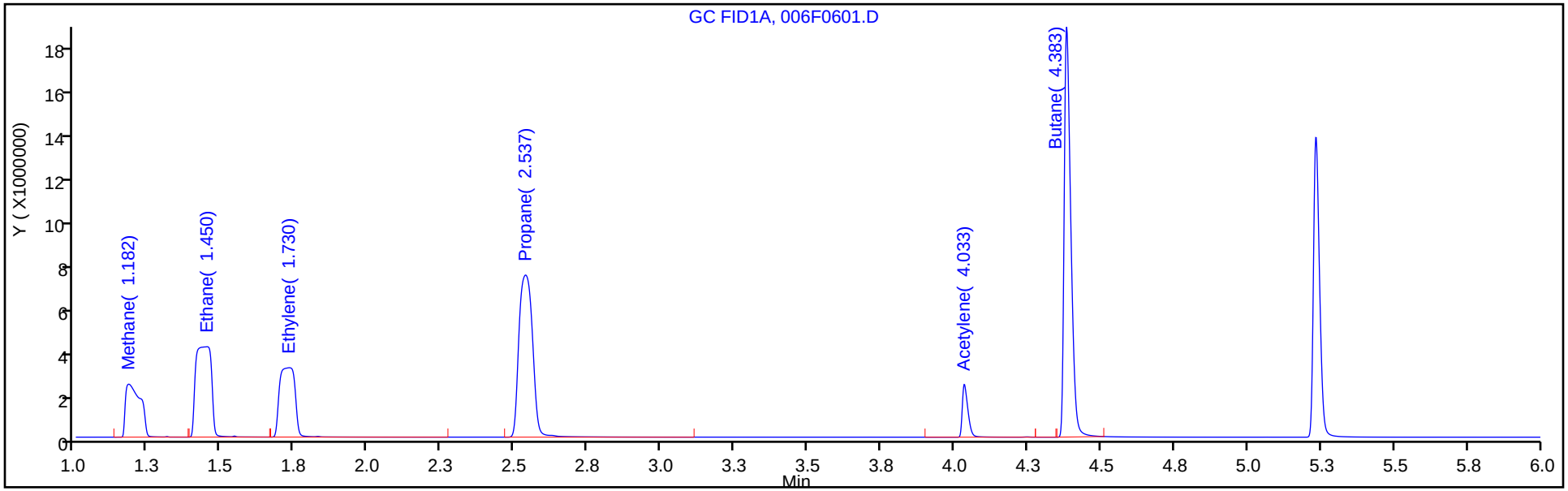
Report Date: 27-May-2021 10:24:35 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

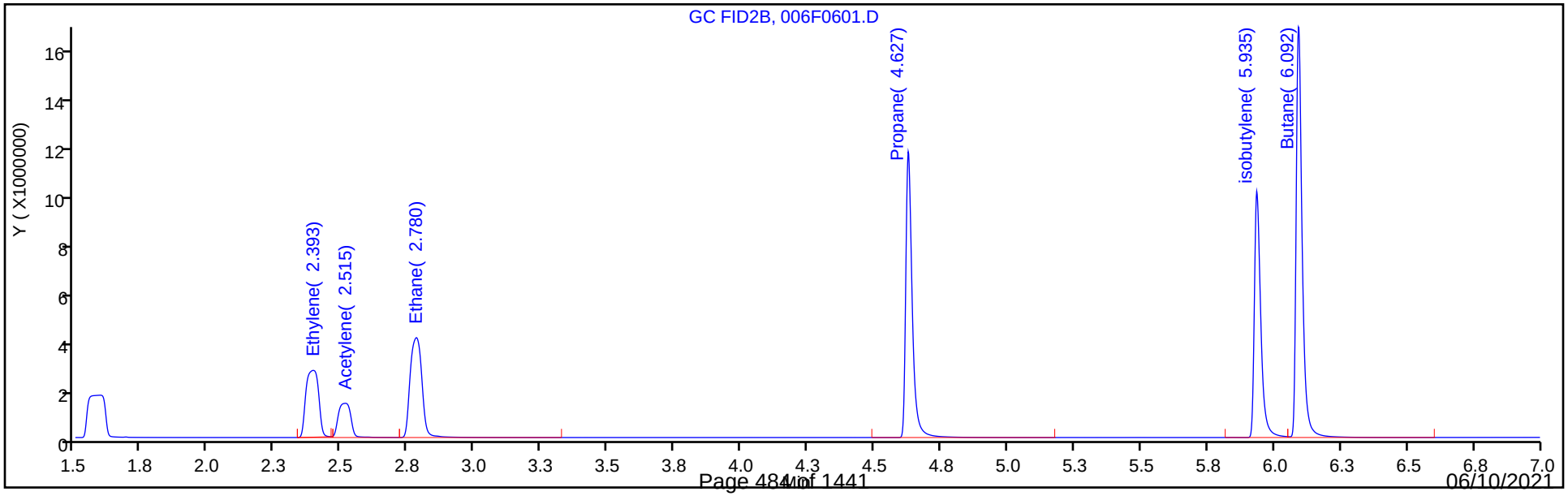
Data File: \\chromfs\Denver\ChromData\VGC_J\20210526-101798.b\006F0601.D

Injection Date:	26-May-2021 10:42:21	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcsd			Worklist Smp#:	6
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-537523/35

Matrix: Water Lab File ID: 035F3501.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 17:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0697		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\035F3501.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 25-May-2021 17:55:40 ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:02:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.176	1.181	-0.005	8269912	73.0	69.6	
2	1.584	1.589	-0.005	7536345	73.0	69.7	
						RPD = 0.08	
3 Ethane							
1	1.439	1.446	-0.007	14842973	136.9	129.5	
2	2.764	2.779	-0.015	12241061	136.9	126.1	
						RPD = 2.67	
4 Ethylene							Ma
1	1.722	1.729	-0.007	11277333	127.7	122.9	
2	2.377	2.393	-0.016	9238735	127.7	126.5	M
						RPD = 2.89	
5 Propane							
1	2.526	2.534	-0.008	22946060	200.7	194.3	
2	4.619	4.626	-0.007	19347603	200.7	193.4	
						RPD = 0.48	
6 Acetylene							Ma
1	4.027	4.032	-0.005	3055985	118.5	117.8	a
2	2.496	2.513	-0.017	4421543	118.5	128.8	M
						RPD = 8.92	
7 Butane							Ma
1	4.379	4.381	-0.002	27060468	264.5	247.2	a
2	6.087	6.091	-0.004	24809384	264.5	247.3	M
						RPD = 0.00	
8 isobutylene							Ma
1	5.231	5.232	-0.001	19023925	255.4	265.6	
2	5.931	5.934	-0.003	16631403	255.4	265.2	M
						RPD = 0.15	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

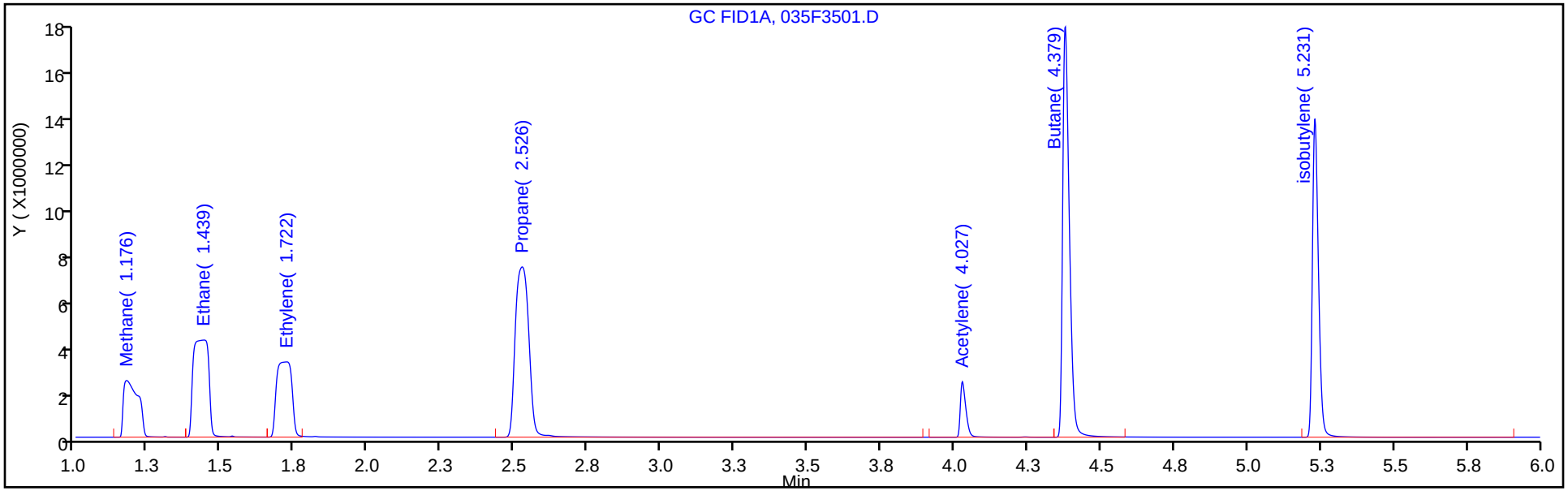
Report Date: 26-May-2021 13:09:28 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

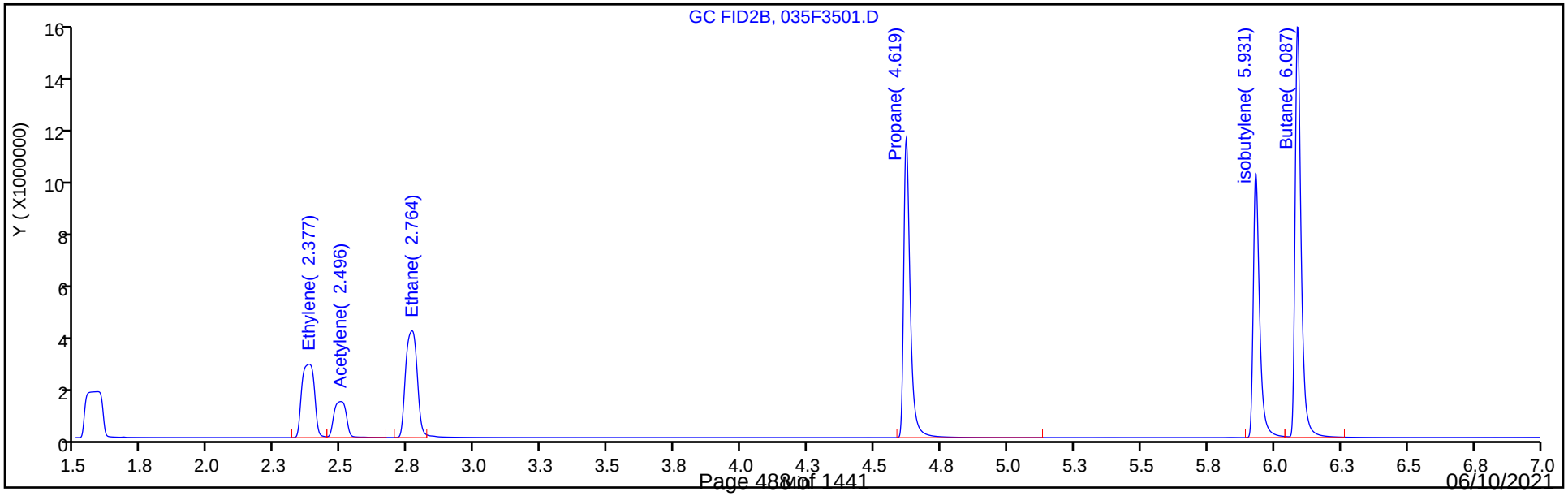
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\035F3501.D

Injection Date:	25-May-2021 17:55:40	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcsd			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
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.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MS Lab Sample ID: 280-148902-5 MS

Matrix: Water Lab File ID: 039F3901.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 12:50

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 18:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0534		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\039F3901.D
Lims ID: 280-148902-H-5 MS
Client ID: G0070-21A
Sample Type: MS
Inject. Date: 25-May-2021 18:45:09 ALS Bottle#: 39 Worklist Smp#: 39
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-h-5ms
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:03:53

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	1.175	1.181	-0.006	6485362	73.0	54.5	
2	1.582	1.589	-0.007	5783181	73.0	53.4	
						RPD = 2.05	
3 Ethane							
1	1.438	1.446	-0.008	11848117	136.9	103.4	
2	2.768	2.779	-0.011	9701291	136.9	99.9	
						RPD = 3.38	
4 Ethylene							Ma
1	1.716	1.729	-0.013	9773485	127.7	106.5	
2	2.382	2.393	-0.011	7884417	127.7	107.9	M
						RPD = 1.35	
5 Propane							
1	2.513	2.534	-0.021	18336140	200.7	155.3	
2	4.622	4.626	-0.004	15170347	200.7	151.6	
						RPD = 2.38	
6 Acetylene							Ma
1	4.026	4.032	-0.006	3139415	118.5	121.0	a
2	2.502	2.513	-0.011	4393691	118.5	128.0	M
						RPD = 5.60	
7 Butane							Ma
1	4.383	4.381	0.002	22265426	264.5	203.6	a
2	6.092	6.091	0.001	19997128	264.5	199.4	M
						RPD = 2.05	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.236	5.232	0.004	17312784	255.4	241.7	M
2	5.935	5.934	0.001	15012362	255.4	239.4	M
						RPD = 0.97	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

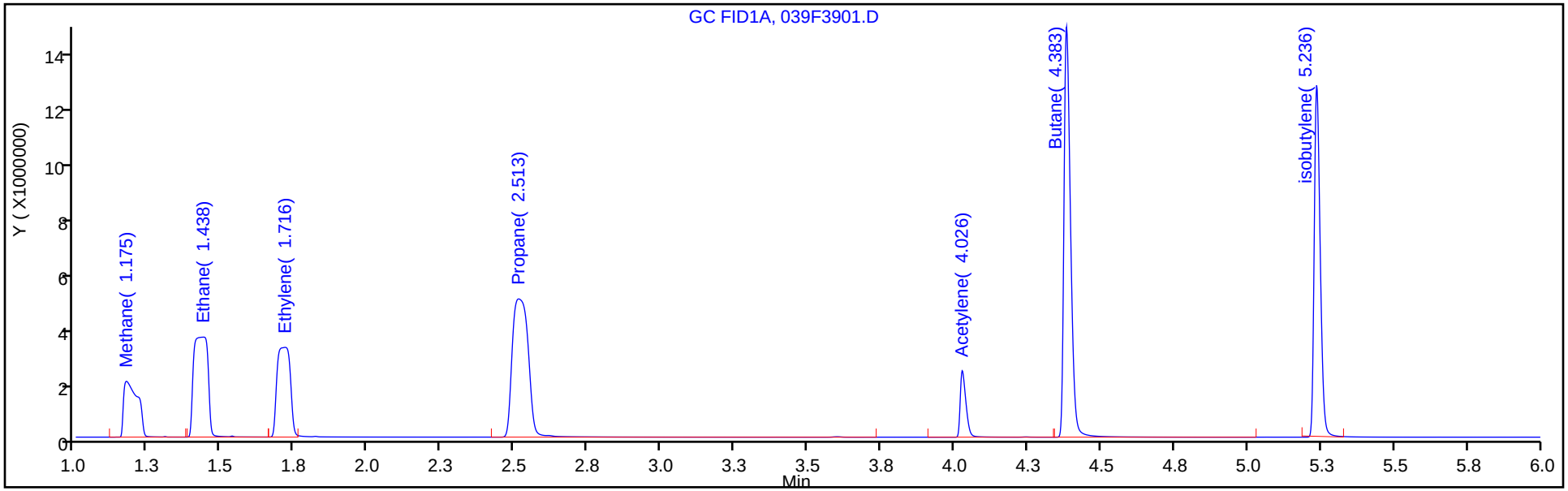
Report Date: 26-May-2021 13:09:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

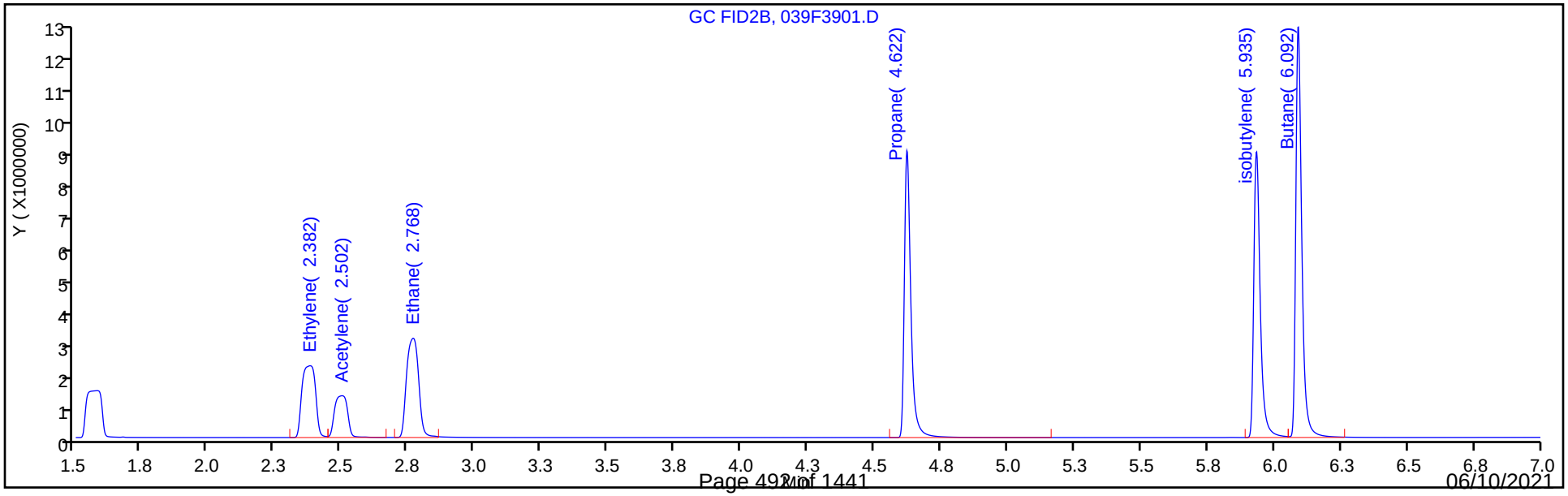
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\039F3901.D

Injection Date:	25-May-2021 18:45:09	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-H-5 MS			Worklist Smp#:	39
Client ID:	G0070-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	39
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.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MSD Lab Sample ID: 280-148902-5 MSD

Matrix: Water Lab File ID: 040F4001.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 12:50

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 18:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0652		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\040F4001.D
Lims ID: 280-148902-H-5 MSD
Client ID: G0070-21A
Sample Type: MSD
Inject. Date: 25-May-2021 18:57:34 ALS Bottle#: 40 Worklist Smp#: 40
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-h-5ms
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:06:21

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	1.173	1.181	-0.008	7924920	73.0	66.7	
2	1.581	1.589	-0.008	7052270	73.0	65.2	
						RPD = 2.30	
3 Ethane							M
1	1.438	1.446	-0.008	14387609	136.9	125.5	
2	2.768	2.779	-0.011	11686365	136.9	120.4	M
						RPD = 4.19	
4 Ethylene							Ma
1	1.713	1.729	-0.016	11387081	127.7	124.1	M
2	2.381	2.393	-0.012	9143943	127.7	125.2	M
						RPD = 0.89	
5 Propane							
1	2.511	2.534	-0.023	22401092	200.7	189.7	
2	4.623	4.626	-0.003	18517026	200.7	185.1	
						RPD = 2.47	
6 Acetylene							Ma
1	4.025	4.032	-0.007	3184661	118.5	122.8	a
2	2.501	2.513	-0.012	4489644	118.5	130.8	M
						RPD = 6.33	
7 Butane							Ma
1	4.380	4.381	-0.001	26992909	264.5	246.6	M
2	6.090	6.091	-0.001	24532187	264.5	244.5	M
						RPD = 0.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.235	5.232	0.003	20047446	255.4	279.9	M
2	5.933	5.934	-0.001	16970178	255.4	270.6	M
						RPD = 3.37	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

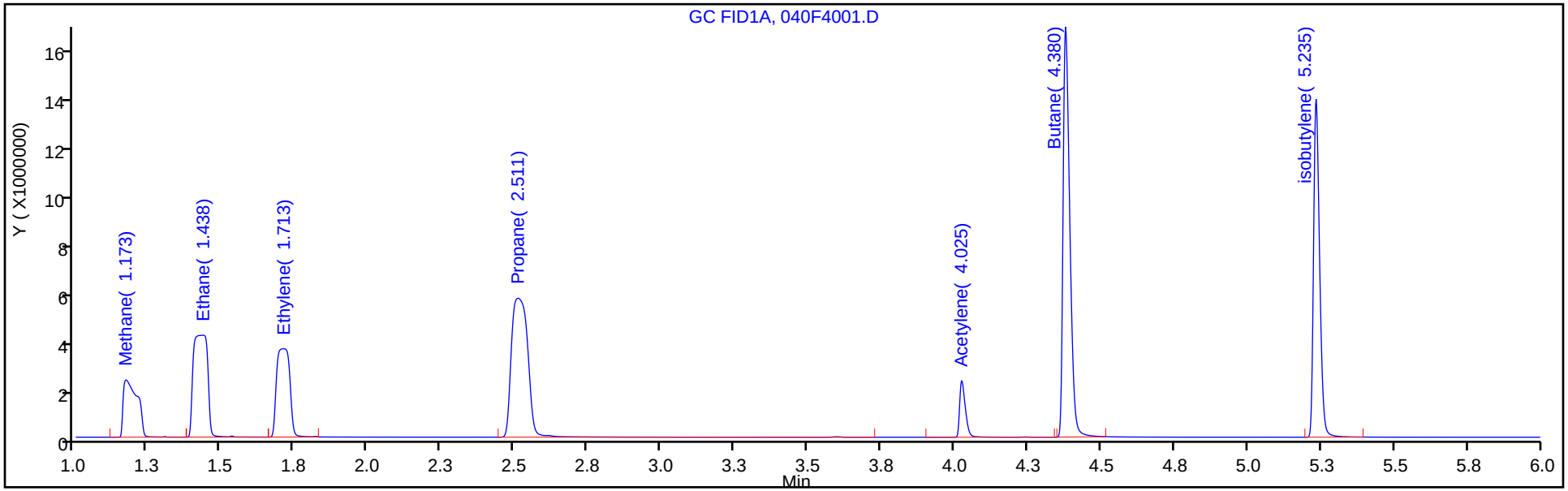
Report Date: 26-May-2021 13:09:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

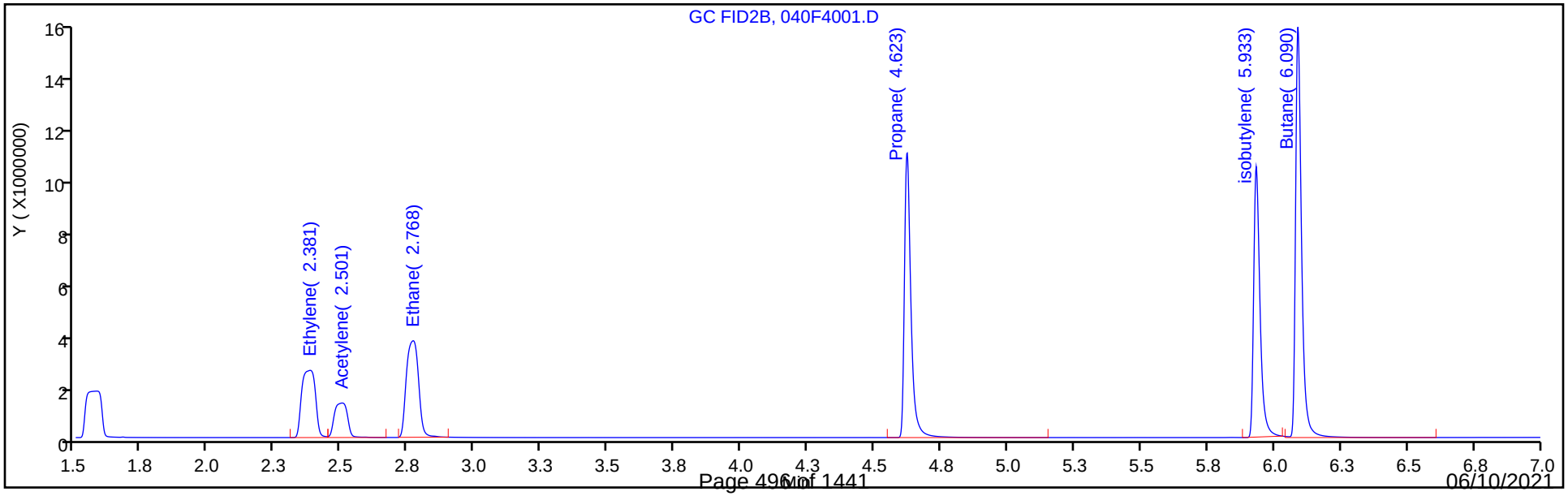
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\040F4001.D

Injection Date:	25-May-2021 18:57:34	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-H-5 MSD			Worklist Smp#:	40
Client ID:	G0070-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	40
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.: 280-148902-1

SDG No.:

Client Sample ID: G0085-21A DU Lab Sample ID: 280-148902-3 DU

Matrix: Water Lab File ID: 023F2301.D

Analysis Method: RSK-175 Date Collected: 05/19/2021 15:20

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 15:25

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537359 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.97		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\023F2301.D
Lims ID: 280-148902-I-3 DU
Client ID:
Sample Type: DU
Inject. Date: 25-May-2021 15:25:21 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-i-3D
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:51:14 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 09:47:51

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	1.168	1.181	-0.013	841049508		7123.4	
2	1.566	1.589	-0.023	750406204		6966.8	
						RPD = 2.22	
3 Ethane							
1		1.446				ND	
2		2.779					
4 Ethylene							
1		1.729				ND	
2		2.393					
5 Propane							
1		2.534				ND	
2		4.626					
6 Acetylene							
1		4.032				ND	
2		2.513					
7 Butane							
1		4.381				ND	
2		6.091					
8 isobutylene							
1		5.232				ND	
2		5.934					

QC Flag Legend

Processing Flags

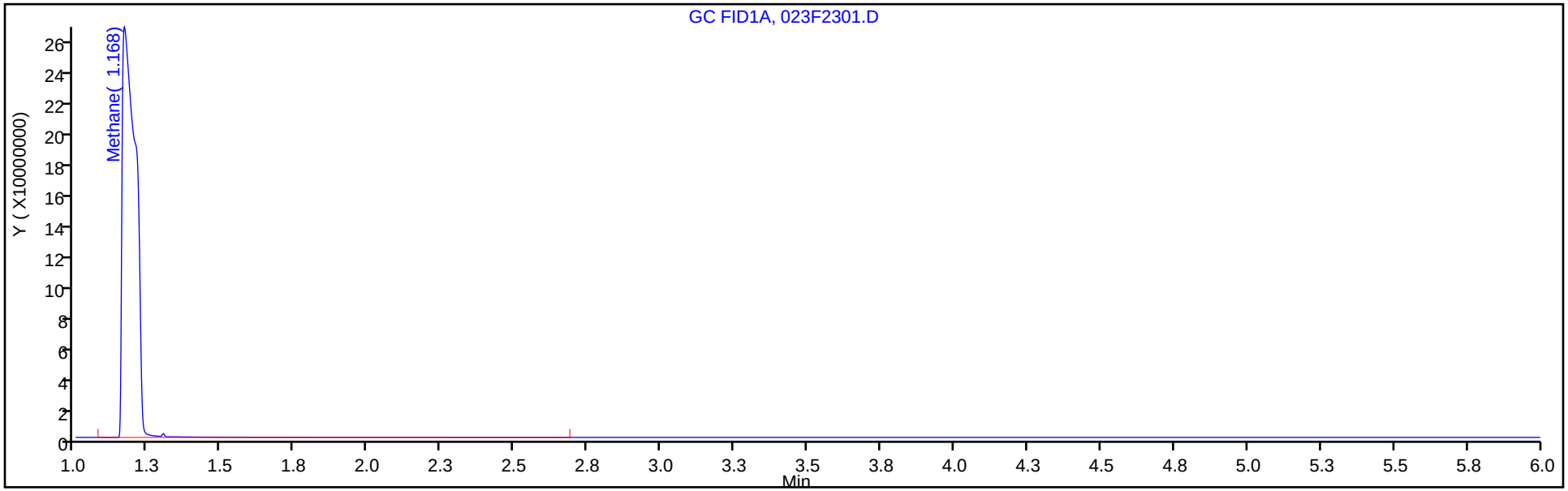
Report Date: 26-May-2021 13:51:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

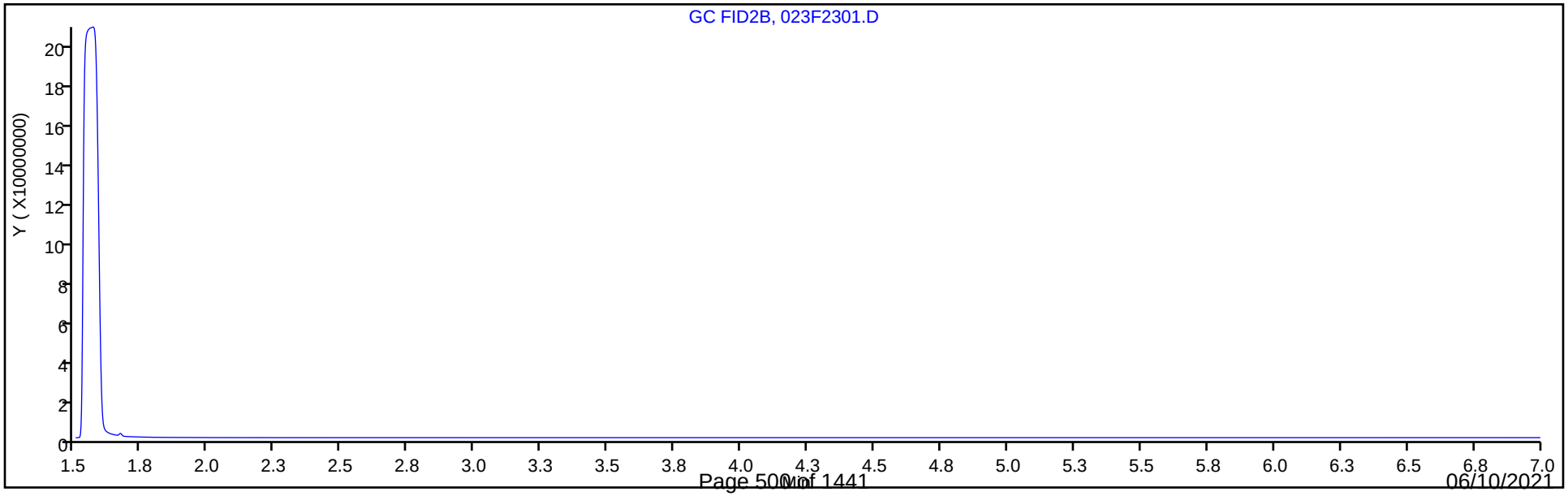
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\023F2301.D

Injection Date:	25-May-2021 15:25:21	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-3 DU			Worklist Smp#:	23
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A DU Lab Sample ID: 280-148902-5 DU

Matrix: Water Lab File ID: 038F3801.D

Analysis Method: RSK-175 Date Collected: 05/20/2021 12:50

Sample wt/vol: 18(mL) Date Analyzed: 05/25/2021 18:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 537523 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\038F3801.D
Lims ID: 280-148902-I-5 DU
Client ID:
Sample Type: DU
Inject. Date: 25-May-2021 18:32:42 ALS Bottle#: 38 Worklist Smp#: 38
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-148902-i-5D
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 26-May-2021 13:09:25 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.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: CTX1675

First Level Reviewer: sciannac Date: 26-May-2021 10:02:42

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		1.181				ND	
2		1.589					
3 Ethane							
1		1.446				ND	
2		2.779					
4 Ethylene							
1		1.729				ND	
2		2.393					
5 Propane							
1		2.534				ND	
2		4.626					
6 Acetylene							
1		4.032				ND	
2		2.513					
7 Butane							
1		4.381				ND	
2		6.091					
8 isobutylene							
1		5.232				ND	
2		5.934					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

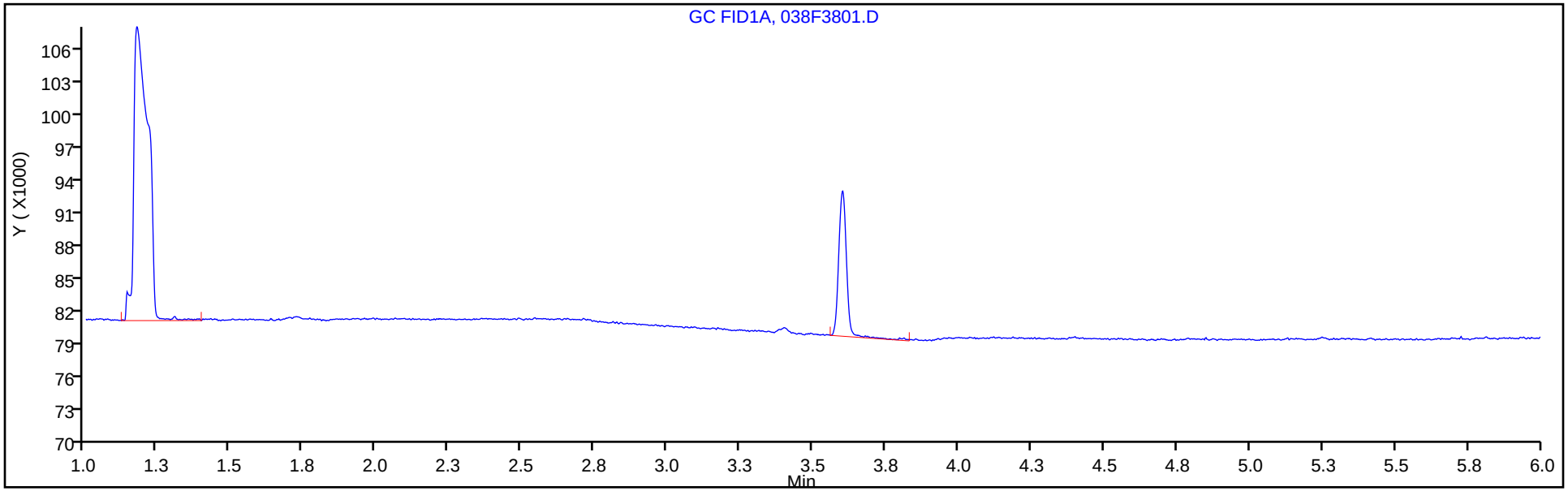
Report Date: 26-May-2021 13:09:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

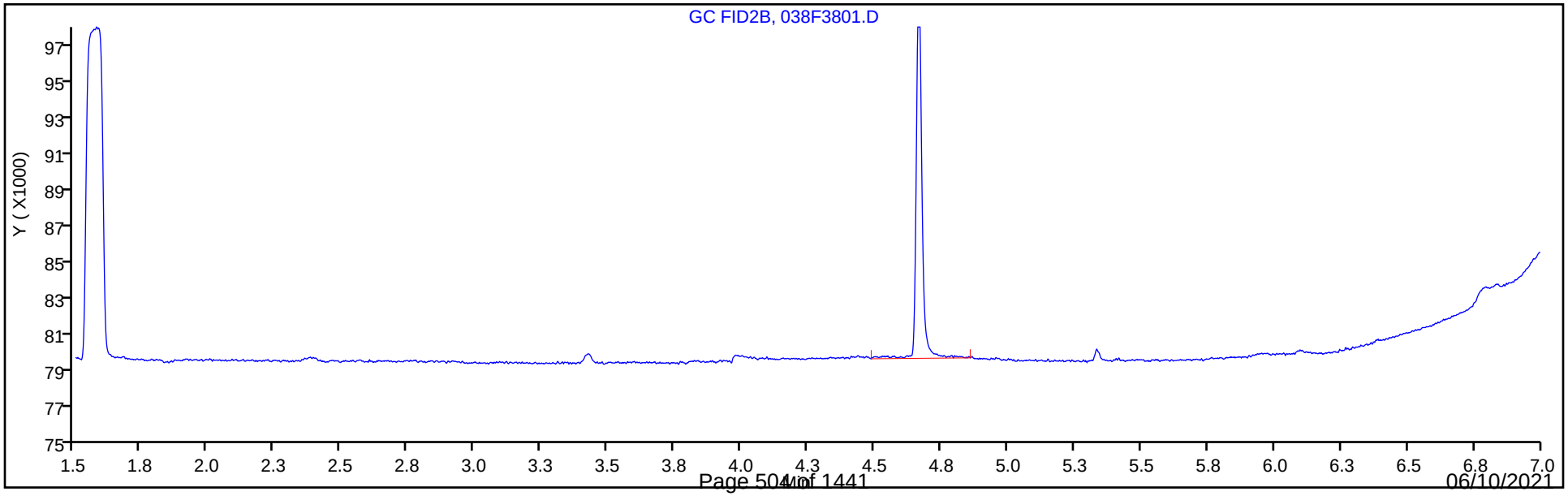
Data File: \\chromfs\Denver\ChromData\VGC_J\20210525-101759.b\038F3801.D

Injection Date:	25-May-2021 18:32:42	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-148902-I-5 DU			Worklist Smp#:	38
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	38
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.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/24/2020 10:08

Analysis Batch Number: 499937 End Date: 06/24/2020 12:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-499937/1		06/24/2020 10:08	1	06242001.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/1		06/24/2020 10:08	1	06242001.D	HP-Plot Q 0.53(mm)
IC 280-499937/2		06/24/2020 10:20	1	06242002.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/2		06/24/2020 10:20	1	06242002.D	HP-Plot Q 0.53(mm)
IC 280-499937/3		06/24/2020 10:33	1	06242003.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/3		06/24/2020 10:33	1	06242003.D	HP-Plot Q 0.53(mm)
ICRT 280-499937/4		06/24/2020 10:45	1	06242004.D	Rt-Alumina KCl 0.53(mm)
ICRT 280-499937/4		06/24/2020 10:45	1	06242004.D	HP-Plot Q 0.53(mm)
IC 280-499937/5		06/24/2020 10:57	1	06242005.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/5		06/24/2020 10:57	1	06242005.D	HP-Plot Q 0.53(mm)
IC 280-499937/6		06/24/2020 11:09	1	06242006.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/6		06/24/2020 11:09	1	06242006.D	HP-Plot Q 0.53(mm)
IC 280-499937/7		06/24/2020 11:22	1	06242007.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/7		06/24/2020 11:22	1	06242007.D	HP-Plot Q 0.53(mm)
IC 280-499937/8		06/24/2020 11:34	1	06242008.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/8		06/24/2020 11:34	1	06242008.D	HP-Plot Q 0.53(mm)
IC 280-499937/9		06/24/2020 11:46	1	06242009.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/9		06/24/2020 11:46	1	06242009.D	HP-Plot Q 0.53(mm)
ICV 280-499937/11		06/24/2020 12:11	1	06242011.D	Rt-Alumina KCl 0.53(mm)
ICV 280-499937/11		06/24/2020 12:11	1	06242011.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/25/2021 10:46

Analysis Batch Number: 537359 End Date: 05/25/2021 17:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-537359/4		05/25/2021 10:46	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-537359/4		05/25/2021 10:46	1	004F0401.D	HP-Plot Q 0.53(mm)
LCS 280-537359/5		05/25/2021 10:59	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
LCS 280-537359/5		05/25/2021 10:59	1	005F0501.D	HP-Plot Q 0.53(mm)
LCSD 280-537359/6		05/25/2021 11:11	1	006F0601.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-537359/6		05/25/2021 11:11	1	006F0601.D	HP-Plot Q 0.53(mm)
MB 280-537359/7		05/25/2021 11:23	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
MB 280-537359/7		05/25/2021 11:23	1	007F0701.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 12:21	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 12:21	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 12:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 12:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 12:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 12:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 12:57	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 12:57	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 13:10	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 13:10	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 13:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 13:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 13:34	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 13:34	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 13:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 13:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 13:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 13:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 14:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 14:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 14:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 14:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 14:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 14:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 14:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 14:48	1		HP-Plot Q 0.53(mm)
CCV 280-537359/21		05/25/2021 15:00	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-537359/21		05/25/2021 15:00	1	021F2101.D	HP-Plot Q 0.53(mm)
280-148902-3	G0085-21A	05/25/2021 15:13	1	022F2201.D	Rt-Alumina KCl 0.53(mm)
280-148902-3	G0085-21A	05/25/2021 15:13	1	022F2201.D	HP-Plot Q 0.53(mm)
280-148902-3 DU	G0085-21A DU	05/25/2021 15:25	1	023F2301.D	Rt-Alumina KCl 0.53(mm)
280-148902-3 DU	G0085-21A DU	05/25/2021 15:25	1	023F2301.D	HP-Plot Q 0.53(mm)
280-148902-4	NW071-21A	05/25/2021 15:37	1	024F2401.D	Rt-Alumina KCl 0.53(mm)
280-148902-4	NW071-21A	05/25/2021 15:37	1	024F2401.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 15:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 15:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 16:02	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/25/2021 10:46

Analysis Batch Number: 537359 End Date: 05/25/2021 17:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/25/2021 16:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 16:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 16:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 16:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 16:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 16:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 16:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 16:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 16:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 17:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 17:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 17:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 17:15	1		HP-Plot Q 0.53(mm)
CCV 280-537359/33		05/25/2021 17:27	1	033F3301.D	Rt-Alumina KCl 0.53(mm)
CCV 280-537359/33		05/25/2021 17:27	1	033F3301.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/26/2021 10:17

Analysis Batch Number: 537486 End Date: 05/26/2021 16:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-537486/4		05/26/2021 10:17	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-537486/4		05/26/2021 10:17	1	004F0401.D	HP-Plot Q 0.53(mm)
LCS 280-537486/5		05/26/2021 10:30	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
LCS 280-537486/5		05/26/2021 10:30	1	005F0501.D	HP-Plot Q 0.53(mm)
LCSD 280-537486/6		05/26/2021 10:42	1	006F0601.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-537486/6		05/26/2021 10:42	1	006F0601.D	HP-Plot Q 0.53(mm)
MB 280-537486/7		05/26/2021 10:54	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
MB 280-537486/7		05/26/2021 10:54	1	007F0701.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 11:37	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 11:37	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 11:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 11:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 12:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 12:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 12:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 12:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 12:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 12:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 12:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 12:38	1		HP-Plot Q 0.53(mm)
280-148902-7	G0090-21A	05/26/2021 12:50	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
280-148902-7	G0090-21A	05/26/2021 12:50	1	014F1401.D	HP-Plot Q 0.53(mm)
280-148902-8	G0076-21A	05/26/2021 13:02	1	015F1501.D	Rt-Alumina KCl 0.53(mm)
280-148902-8	G0076-21A	05/26/2021 13:02	1	015F1501.D	HP-Plot Q 0.53(mm)
280-148902-9	G0075-21A	05/26/2021 13:14	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-148902-9	G0075-21A	05/26/2021 13:14	1	016F1601.D	HP-Plot Q 0.53(mm)
280-148902-10	G0082-21A	05/26/2021 13:27	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
280-148902-10	G0082-21A	05/26/2021 13:27	1	017F1701.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 13:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 13:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 13:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 13:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 14:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 14:03	1		HP-Plot Q 0.53(mm)
CCV 280-537486/21		05/26/2021 14:16	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-537486/21		05/26/2021 14:16	1	021F2101.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 14:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 14:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 14:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 14:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 14:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 14:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 15:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 15:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 15:17	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/26/2021 10:17

Analysis Batch Number: 537486 End Date: 05/26/2021 16:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/26/2021 15:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 15:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 15:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 15:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 15:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 15:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 15:54	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 16:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 16:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 16:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 16:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/26/2021 16:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/26/2021 16:31	1		HP-Plot Q 0.53(mm)
CCV 280-537486/33		05/26/2021 16:43	1		Rt-Alumina KCl 0.53(mm)
CCV 280-537486/33		05/26/2021 16:43	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/25/2021 10:46

Analysis Batch Number: 537523 End Date: 05/25/2021 23:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-537523/4		05/25/2021 10:46	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-537523/4		05/25/2021 10:46	1	004F0401.D	HP-Plot Q 0.53(mm)
CCV 280-537523/33		05/25/2021 17:27	1	033F3301.D	Rt-Alumina KCl 0.53(mm)
CCV 280-537523/33		05/25/2021 17:27	1	033F3301.D	HP-Plot Q 0.53(mm)
LCS 280-537523/34		05/25/2021 17:40	1	034F3401.D	Rt-Alumina KCl 0.53(mm)
LCS 280-537523/34		05/25/2021 17:40	1	034F3401.D	HP-Plot Q 0.53(mm)
LCSD 280-537523/35		05/25/2021 17:55	1	035F3501.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-537523/35		05/25/2021 17:55	1	035F3501.D	HP-Plot Q 0.53(mm)
MB 280-537523/36		05/25/2021 18:08	1	036F3601.D	Rt-Alumina KCl 0.53(mm)
MB 280-537523/36		05/25/2021 18:08	1	036F3601.D	HP-Plot Q 0.53(mm)
280-148902-5	G0070-21A	05/25/2021 18:20	1	037F3701.D	Rt-Alumina KCl 0.53(mm)
280-148902-5	G0070-21A	05/25/2021 18:20	1	037F3701.D	HP-Plot Q 0.53(mm)
280-148902-5 DU	G0070-21A DU	05/25/2021 18:32	1	038F3801.D	Rt-Alumina KCl 0.53(mm)
280-148902-5 DU	G0070-21A DU	05/25/2021 18:32	1	038F3801.D	HP-Plot Q 0.53(mm)
280-148902-5 MS	G0070-21A MS	05/25/2021 18:45	1	039F3901.D	Rt-Alumina KCl 0.53(mm)
280-148902-5 MS	G0070-21A MS	05/25/2021 18:45	1	039F3901.D	HP-Plot Q 0.53(mm)
280-148902-5 MSD	G0070-21A MSD	05/25/2021 18:57	1	040F4001.D	Rt-Alumina KCl 0.53(mm)
280-148902-5 MSD	G0070-21A MSD	05/25/2021 18:57	1	040F4001.D	HP-Plot Q 0.53(mm)
280-148902-1	G0081-21A	05/25/2021 19:10	1	041F4101.D	Rt-Alumina KCl 0.53(mm)
280-148902-1	G0081-21A	05/25/2021 19:10	1	041F4101.D	HP-Plot Q 0.53(mm)
280-148902-2	G0079-21A	05/25/2021 19:22	1	042F4201.D	Rt-Alumina KCl 0.53(mm)
280-148902-2	G0079-21A	05/25/2021 19:22	1	042F4201.D	HP-Plot Q 0.53(mm)
280-148902-6	G0089-21A	05/25/2021 19:34	1	043F4301.D	Rt-Alumina KCl 0.53(mm)
280-148902-6	G0089-21A	05/25/2021 19:34	1	043F4301.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 19:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 19:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 19:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 19:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 20:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 20:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 20:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 20:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 20:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 20:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 20:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 20:48	1		HP-Plot Q 0.53(mm)
CCV 280-537523/50		05/25/2021 21:00	1	050F5001.D	Rt-Alumina KCl 0.53(mm)
CCV 280-537523/50		05/25/2021 21:00	1	050F5001.D	HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 21:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 21:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 21:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 21:24	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 21:37	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 21:37	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 21:49	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/25/2021 10:46

Analysis Batch Number: 537523 End Date: 05/25/2021 23:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/25/2021 21:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 22:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 22:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 22:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 22:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 22:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 22:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 22:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 22:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 22:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 22:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 23:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 23:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		05/25/2021 23:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		05/25/2021 23:15	1		HP-Plot Q 0.53(mm)
CCV 280-537523/62		05/25/2021 23:27	1		Rt-Alumina KCl 0.53(mm)
CCV 280-537523/62		05/25/2021 23:27	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 537359 Batch Start Date: 05/25/21 10:46 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 00031		
CCVRT 280-537359/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-537359/5		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-537359/6		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-537359/7		RSK-175		18 mL	18 mL	5 SU			
CCV 280-537359/21		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-148902-I-3	G0085-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-I-3 DU	G0085-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-G-4	NW071-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-537359/33		RSK-175		18 mL	18 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.: 280-148902-1

SDG No.:

Batch Number: 537486 Batch Start Date: 05/26/21 10:17 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 00031		
CCVRT 280-537486/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-537486/5		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-537486/6		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-537486/7		RSK-175		18 mL	18 mL	5 SU			
280-148902-H-7	G0090-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-G-8	G0076-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-G-9	G0075-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-G-10	G0082-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-537486/21		RSK-175		18 mL	18 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.: 280-148902-1

SDG No.:

Batch Number: 537523 Batch Start Date: 05/25/21 10:46 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 00031		
CCVRT 280-537523/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-537523/33		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-537523/34		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-537523/35		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-537523/36		RSK-175		18 mL	18 mL	5 SU			
280-148902-I-5	G0070-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-I-5 DU	G0070-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-H-5 MS	G0070-21A	RSK-175	T	18 mL	18 mL	< 2 SU	200 uL		
280-148902-H-5 MSD	G0070-21A	RSK-175	T	18 mL	18 mL	< 2 SU	200 uL		
280-148902-I-1	G0081-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-I-2	G0079-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-148902-I-6	G0089-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-537523/50		RSK-175		18 mL	18 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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): Luna-phenyl 4.6 (mm)

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
G0081-21A	280-148902-1	95 M	
G0081-21A	280-148902-1		94
G0079-21A	280-148902-2	97 M	
G0085-21A	280-148902-3	98 M	
G0085-21A	280-148902-3		94
NW071-21A	280-148902-4	95 M	
G0070-21A	280-148902-5	98	
G0070-21A	280-148902-5		91
G0089-21A	280-148902-6	94 M	
G0089-21A	280-148902-6		92
G0090-21A	280-148902-7	93 M	
G0090-21A	280-148902-7		89
G0076-21A	280-148902-8	92 M	
G0075-21A	280-148902-9	88 M	
G0075-21A	280-148902-9		86
G0082-21A	280-148902-10	87 M	
G0082-21A	280-148902-10		88
	MB 280-537382/1-A	97	
	LCS 280-537382/2-A	93	
	LCS 280-537382/3-A	92	
G0070-21A MS	280-148902-5 MS		84
G0070-21A MSD	280-148902-5 MSD		84

	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05270012.D

Lab ID: LCS 280-537382/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.93	97	73-125	
1,3-Dinitrobenzene	2.00	1.88	94	78-120	
2,4,6-Trinitrotoluene	2.00	1.93	97	71-123	
2,4-Dinitrotoluene	2.00	1.79	90	78-120	
2,6-Dinitrotoluene	2.00	1.85	92	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.76	88	79-120	
2-Nitrotoluene	2.00	1.42	71	70-127	
3-Nitrotoluene	2.00	1.56	78	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.71	85	76-125	
4-Nitrotoluene	2.00	1.55	77	71-127	
HMX	2.00	1.86	93	65-135	
Nitrobenzene	2.00	1.61	80	65-134	
RDX	2.00	1.95	98	68-130	
Tetryl	2.00	1.90	95	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.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05270013.D

Lab ID: LCS 280-537382/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.18	93	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05270035.D

Lab ID: 280-148902-5 MS Client ID: G0070-21A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	1.93	0.19 U	1.75	90	73-125	
1,3-Dinitrobenzene	1.93	0.095 U	1.69	88	78-120	
2,4,6-Trinitrotoluene	1.93	0.095 U	1.76	91	71-123	
2,4-Dinitrotoluene	1.93	0.076 U	1.55	80	78-120	
2,6-Dinitrotoluene	1.93	0.076 U	1.61	83	77-127	
2-Amino-4,6-dinitrotoluene	1.93	0.095 U	1.50	78	79-120	J1
2-Nitrotoluene	1.93	0.19 U	1.05	54	70-127	J1
3-Nitrotoluene	1.93	0.38 U	1.18	61	73-125	J1
4-Amino-2,6-dinitrotoluene	1.93	0.11 U	1.47	76	76-125	
HMX	1.93	0.19 U	1.80	93	65-135	M
Nitrobenzene	1.93	0.19 U	1.38	71	65-134	
RDX	1.93	0.19 U	1.67	86	68-130	M
Tetryl	1.93	0.095 U	1.79	93	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05270037.D

Lab ID: 280-148902-5 MS Client ID: G0070-21A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.24	0.38 U	2.11	95	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 052-2201.D

Lab ID: 280-148902-5 MS Client ID: G0070-21A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
4-Nitrotoluene	1.93	0.38 U	1.11	58	71-127	J1

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05270036.D

Lab ID: 280-148902-5 MSD Client ID: G0070-21A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	1.95	1.82	93	4	30	73-125	
1,3-Dinitrobenzene	1.95	1.78	91	5	30	78-120	
2,4,6-Trinitrotoluene	1.95	1.82	93	3	30	71-123	
2,4-Dinitrotoluene	1.95	1.64	84	6	30	78-120	
2,6-Dinitrotoluene	1.95	1.67	85	4	30	77-127	
2-Amino-4,6-dinitrotoluene	1.95	1.60	82	7	30	79-120	
2-Nitrotoluene	1.95	1.20	61	13	30	70-127	J1
3-Nitrotoluene	1.95	1.27	65	7	30	73-125	J1
4-Amino-2,6-dinitrotoluene	1.95	1.57	80	7	30	76-125	
HMX	1.95	1.82	93	1	30	65-135	M
Nitrobenzene	1.95	1.53	78	11	30	65-134	
RDX	1.95	1.71	88	3	30	68-130	M
Tetryl	1.95	1.82	93	2	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05270038.D

Lab ID: 280-148902-5 MSD Client ID: G0070-21A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.20	2.05	93	3	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 053-2301.D

Lab ID: 280-148902-5 MSD Client ID: G0070-21A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
4-Nitrotoluene	1.95	1.26	64	12	30	71-127	J1

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.: 280-148902-1

SDG No.:

Lab Sample ID: MB 280-537382/1-A

Matrix: Water Date Extracted: 05/25/2021 17:25

Lab File ID:(1) 05270011.D Lab File ID:(2)

Date Analyzed:(1) 05/27/2021 15:09 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 280-537382/2-A	05/27/2021 15:32	
	LCS 280-537382/3-A	05/27/2021 15:55	
G0081-21A	280-148902-1	05/27/2021 21:40	05/28/2021 21:19
G0079-21A	280-148902-2	05/27/2021 22:03	
G0085-21A	280-148902-3	05/27/2021 22:26	05/28/2021 21:55
NW071-21A	280-148902-4	05/27/2021 22:49	
G0070-21A	280-148902-5	05/27/2021 23:58	05/30/2021 00:20
G0070-21A MS	280-148902-5 MS	05/28/2021 00:21	05/30/2021 00:55
G0070-21A MSD	280-148902-5 MSD	05/28/2021 00:44	05/30/2021 01:30
G0070-21A MS	280-148902-5 MS	05/28/2021 01:07	
G0070-21A MSD	280-148902-5 MSD	05/28/2021 01:30	
G0089-21A	280-148902-6	05/28/2021 01:53	05/29/2021 02:34
G0090-21A	280-148902-7	05/28/2021 02:16	05/29/2021 03:09
G0076-21A	280-148902-8	05/28/2021 02:39	
G0075-21A	280-148902-9	05/28/2021 03:02	05/29/2021 03:44
G0082-21A	280-148902-10	05/28/2021 03:25	05/29/2021 04:19

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0081-21A Lab Sample ID: 280-148902-1

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/27/2021 21:40 Date Analyzed (2): 05/28/2021 21:19

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.61	6.47	6.77	0.42		10.3
	2		6.65	6.54	6.84	0.47		
RDX	1		7.60	7.45	7.75	0.30		16.2
	2		8.83	8.72	9.02	0.36		
2-Amino-4,6-dinitrotoluene	1		11.44	11.34	11.54	0.082		106.6
	2		18.31	18.18	18.48	0.27		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MS Lab Sample ID: 280-148902-5 MS

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/28/2021 00:21 Date Analyzed (2): 05/30/2021 00:55

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.61	6.47	6.77	1.80		0.0
	2		6.63	6.54	6.84	1.84		
RDX	1		7.60	7.45	7.75	1.67		0.0
	2		8.79	8.72	9.02	1.85		
1,3,5-Trinitrobenzene	1		8.66	8.52	8.82	1.75		0.0
	2		18.74	18.70	19.00	1.90		
1,3-Dinitrobenzene	1		9.29	9.15	9.45	1.69		0.0
	2		15.35	15.30	15.60	1.68		
Nitrobenzene	1		9.69	9.55	9.85	1.38		0.0
	2		11.82	11.77	12.07	1.24		
Tetryl	1		10.03	9.89	10.19	1.79		0.0
	2		24.05	24.04	24.34	1.81		
2,4,6-Trinitrotoluene	1		10.95	10.86	11.06	1.76		0.0
	2		25.03	25.02	25.32	1.84		
4-Amino-2,6-dinitrotoluene	1		11.17	11.08	11.28	1.47		0.0
	2		17.30	17.28	17.58	1.56		
2-Amino-4,6-dinitrotoluene	1		11.43	11.34	11.54	1.50		0.0
	2		18.20	18.18	18.48	1.72		
2,6-Dinitrotoluene	1		11.59	11.51	11.71	1.61		0.0
	2		19.97	19.95	20.25	1.62		
2,4-Dinitrotoluene	1		11.77	11.68	11.88	1.55		0.0
	2		20.44	20.42	20.72	1.50		
2-Nitrotoluene	1		12.65	12.52	12.82	1.05		0.0
	2		16.56	16.54	16.84	1.15		
4-Nitrotoluene	1		13.09	12.96	13.26	1.32		0.0
	2		16.84	16.82	17.12	1.11		
3-Nitrotoluene	1		13.69	13.56	13.86	1.18		0.0
	2		17.81	17.80	18.10	1.03		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MSD Lab Sample ID: 280-148902-5 MSD

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/28/2021 00:44 Date Analyzed (2): 05/30/2021 01:30

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		6.61	6.47	6.77	1.82		0.0
	2		6.63	6.54	6.84	1.85		
RDX	1		7.60	7.45	7.75	1.71		0.0
	2		8.79	8.72	9.02	1.87		
1,3,5-Trinitrobenzene	1		8.66	8.52	8.82	1.82		0.0
	2		18.75	18.70	19.00	1.92		
1,3-Dinitrobenzene	1		9.29	9.15	9.45	1.78		0.0
	2		15.35	15.30	15.60	1.76		
Nitrobenzene	1		9.68	9.55	9.85	1.53		0.0
	2		11.83	11.77	12.07	1.42		
Tetryl	1		10.02	9.89	10.19	1.82		0.0
	2		24.05	24.04	24.34	1.82		
2,4,6-Trinitrotoluene	1		10.94	10.86	11.06	1.82		0.0
	2		25.03	25.02	25.32	1.83		
4-Amino-2,6-dinitrotoluene	1		11.16	11.08	11.28	1.57		0.0
	2		17.31	17.28	17.58	1.65		
2-Amino-4,6-dinitrotoluene	1		11.42	11.34	11.54	1.60		0.0
	2		18.21	18.18	18.48	1.84		
2,6-Dinitrotoluene	1		11.59	11.51	11.71	1.67		0.0
	2		19.98	19.95	20.25	1.70		
2,4-Dinitrotoluene	1		11.76	11.68	11.88	1.64		0.0
	2		20.44	20.42	20.72	1.58		
2-Nitrotoluene	1		12.64	12.52	12.82	1.20		0.0
	2		16.57	16.54	16.84	1.31		
4-Nitrotoluene	1		13.09	12.96	13.26	1.46		0.0
	2		16.85	16.82	17.12	1.26		
3-Nitrotoluene	1		13.68	13.56	13.86	1.27		0.0
	2		17.82	17.80	18.10	1.18		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0089-21A Lab Sample ID: 280-148902-6

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/28/2021 01:53 Date Analyzed (2): 05/29/2021 02:34

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.59	7.45	7.75	0.23		36.1
	2		8.83	8.72	9.02	0.33		
1,3,5-Trinitrobenzene	1		8.65	8.52	8.82	3.1		6.4
	2		18.84	18.70	19.00	3.3		
2,4,6-Trinitrotoluene	1		10.95	10.86	11.06	2.3		2.3
	2		25.17	25.02	25.32	2.3		
4-Amino-2,6-dinitrotoluene	1		11.17	11.08	11.28	1.1		20.0
	2		17.40	17.28	17.58	1.3		
2-Amino-4,6-dinitrotoluene	1		11.43	11.34	11.54	0.85		33.8
	2		18.32	18.18	18.48	1.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0090-21A Lab Sample ID: 280-148902-7

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/28/2021 02:16 Date Analyzed (2): 05/29/2021 03:09

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		6.61	6.47	6.77	0.62		0.8
	2		6.67	6.54	6.84	0.62		
RDX	1		7.59	7.45	7.75	0.64		13.2
	2		8.85	8.72	9.02	0.73		
2-Amino-4,6-dinitrotoluene	1		11.42	11.34	11.54	0.095		100.1
	2		18.34	18.18	18.48	0.29		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0075-21A Lab Sample ID: 280-148902-9

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/28/2021 03:02 Date Analyzed (2): 05/29/2021 03:44

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.58	6.47	6.77	2.0		157.7
	2		6.67	6.54	6.84	0.23		
4-Amino-2,6-dinitrotoluene	1		11.16	11.08	11.28	0.67		19.7
	2		17.41	17.28	17.58	0.82		
2-Amino-4,6-dinitrotoluene	1		11.42	11.34	11.54	0.75		27.6
	2		18.33	18.18	18.48	0.99		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0082-21A Lab Sample ID: 280-148902-10

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/28/2021 03:25 Date Analyzed (2): 05/29/2021 04:19

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.59	7.45	7.75	0.43		40.6
	2		8.85	8.72	9.02	0.65		
1,3,5-Trinitrobenzene	1		8.65	8.52	8.82	3.9		6.8
	2		18.85	18.70	19.00	4.2		
2,4,6-Trinitrotoluene	1		10.94	10.86	11.06	0.73		2.4
	2		25.17	25.02	25.32	0.71		
4-Amino-2,6-dinitrotoluene	1		11.15	11.08	11.28	0.88		23.2
	2		17.41	17.28	17.58	1.1		
2-Amino-4,6-dinitrotoluene	1		11.41	11.34	11.54	0.55		38.5
	2		18.33	18.18	18.48	0.81		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0081-21A Lab Sample ID: 280-148902-1

Matrix: Water Lab File ID: 05270028.D

Analysis Method: 8330A Date Collected: 05/20/2021 09:20

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 529.3(mL) Date Analyzed: 05/27/2021 21:40

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.079
99-65-0	1,3-Dinitrobenzene	0.094	U	0.10	0.094	0.035
118-96-7	2,4,6-Trinitrotoluene	0.094	U	0.10	0.094	0.043
121-14-2	2,4-Dinitrotoluene	0.076	U	0.094	0.076	0.026
606-20-2	2,6-Dinitrotoluene	0.076	U	0.094	0.076	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.082	J J1	0.10	0.094	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.081
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.18
99-99-0	4-Nitrotoluene	0.38	U M	0.39	0.38	0.094
2691-41-0	HMX	0.42	M	0.20	0.19	0.083
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.086
121-82-4	RDX	0.30	M	0.20	0.19	0.049
479-45-8	Tetryl	0.094	U M	0.10	0.094	0.030

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\20210527-101842.b\05270028.D
Lims ID: 280-148902-A-1-A
Client ID: G0081-21A
Sample Type: Client
Inject. Date: 27-May-2021 21:40:30 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-1-A
Misc. Info.: 280-0101842-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:36 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: 28-May-2021 12:43:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.606	6.617	-0.011	3757	0.0445	M
6 MNX	1		7.232			ND	
7 RDX	1	7.599	7.604	-0.005	3419	0.0322	M
$ 9 1,2-Dinitrobenzene	1	8.546	8.544	0.002	24287	0.1894	M
10 1,3,5-Trinitrobenzene	1		8.670			ND	
11 1,3-Dinitrobenzene	1		9.304			ND	
12 Nitrobenzene	1		9.697			ND	
14 Tetryl	1		10.037			ND	U
16 2,4,6-Trinitrotoluene	1		10.964			ND	
17 4-Amino-2,6-dinitrotoluene	1	11.179	11.184	-0.005	1381	0.009040	
18 2-Amino-4,6-dinitrotoluene	1	11.439	11.437	0.002	1791	0.008655	
19 2,6-Dinitrotoluene	1		11.610			ND	
20 2,4-Dinitrotoluene	1		11.784			ND	
21 o-Nitrotoluene	1		12.670			ND	
22 p-Nitrotoluene	1		13.110			ND	U
23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

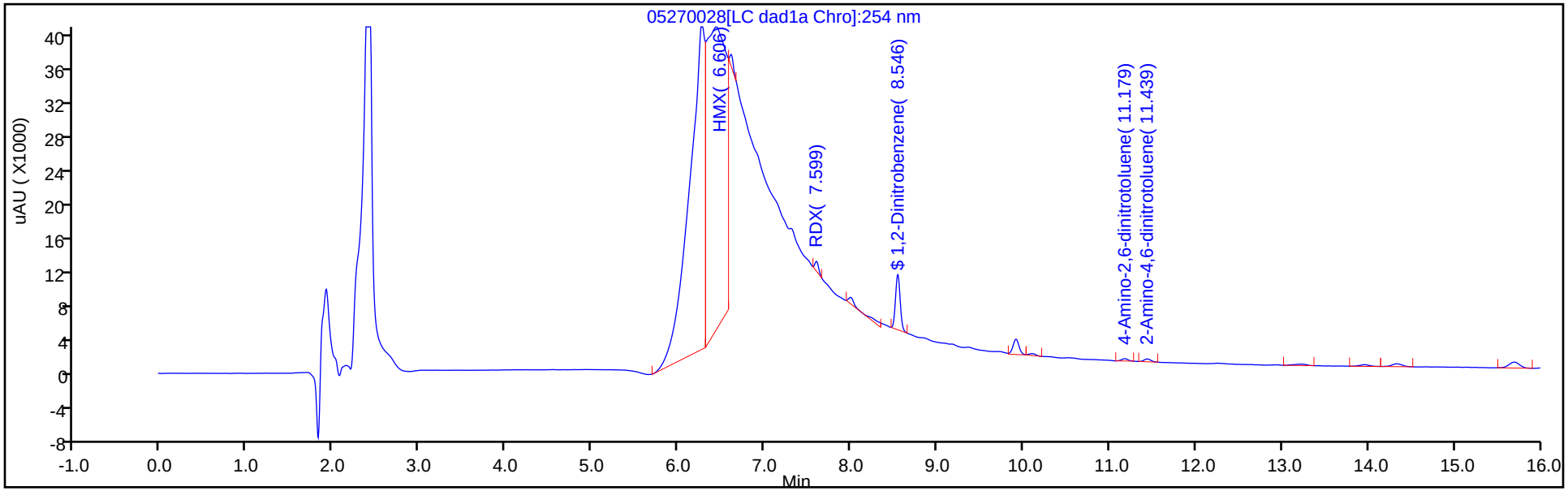
Report Date: 28-May-2021 14:38:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

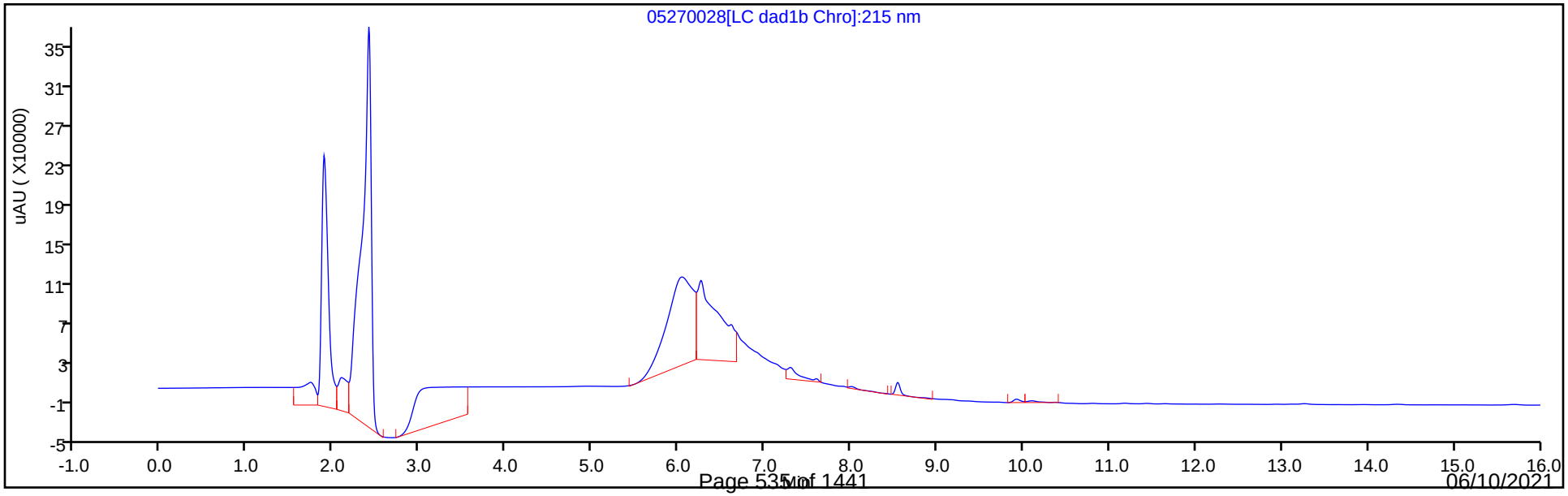
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270028.d

Injection Date:	27-May-2021 21:40:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1	Worklist Smp#:	28
Client ID:	G0081-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270028.D
Lims ID: 280-148902-A-1-A
Client ID: G0081-21A
Sample Type: Client
Inject. Date: 27-May-2021 21:40:30 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-1-A
Misc. Info.: 280-0101842-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:36 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: 28-May-2021 12:43:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1894	94.71

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

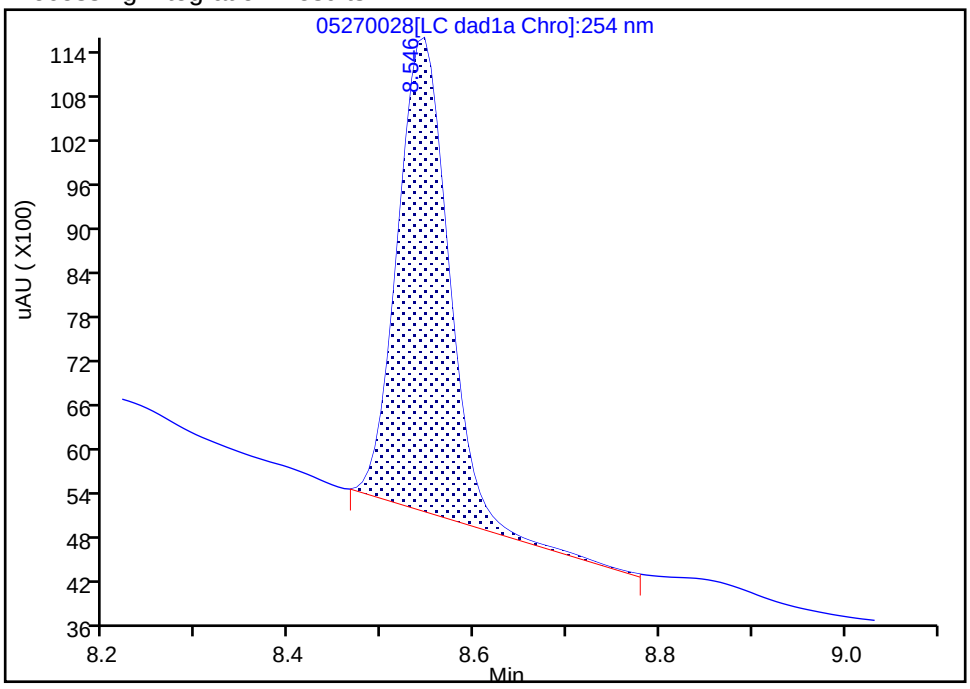
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270028.d				
Injection Date:	27-May-2021 21:40:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

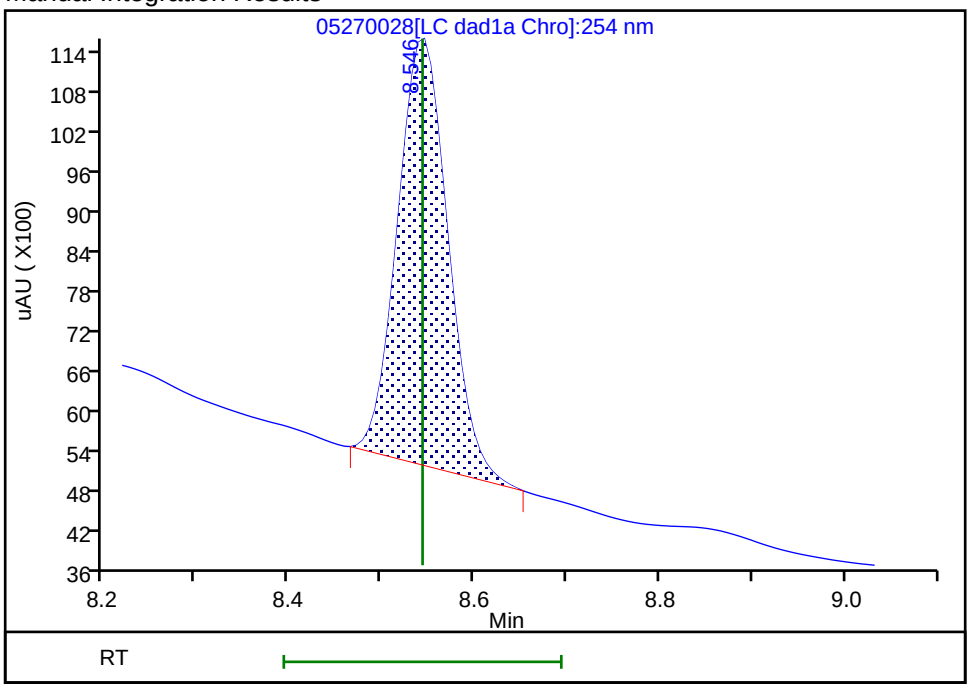
Processing Integration Results

RT: 8.55
Area: 24808
Amount: 0.193484
Amount Units: ug/mL



Manual Integration Results

RT: 8.55
Area: 24287
Amount: 0.189421
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:43:44

Audit Action: Manually Integrated Audit Reason: Baseline

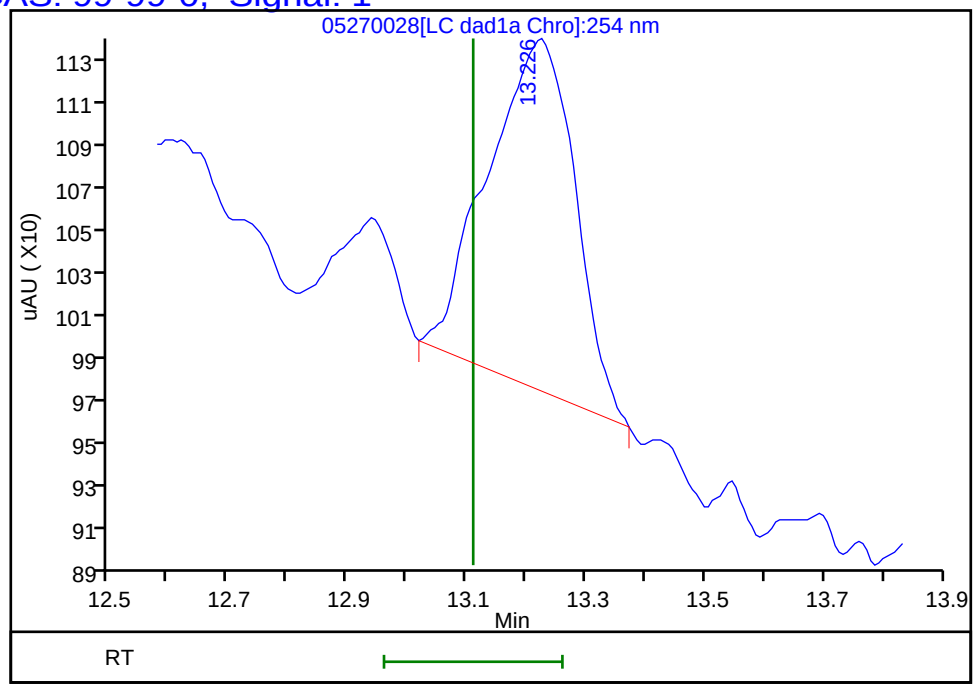
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270028.d				
Injection Date:	27-May-2021 21:40:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.23
Response: 1649
Amount: 0.014735



Reviewer: zhangji, 28-May-2021 12:43:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

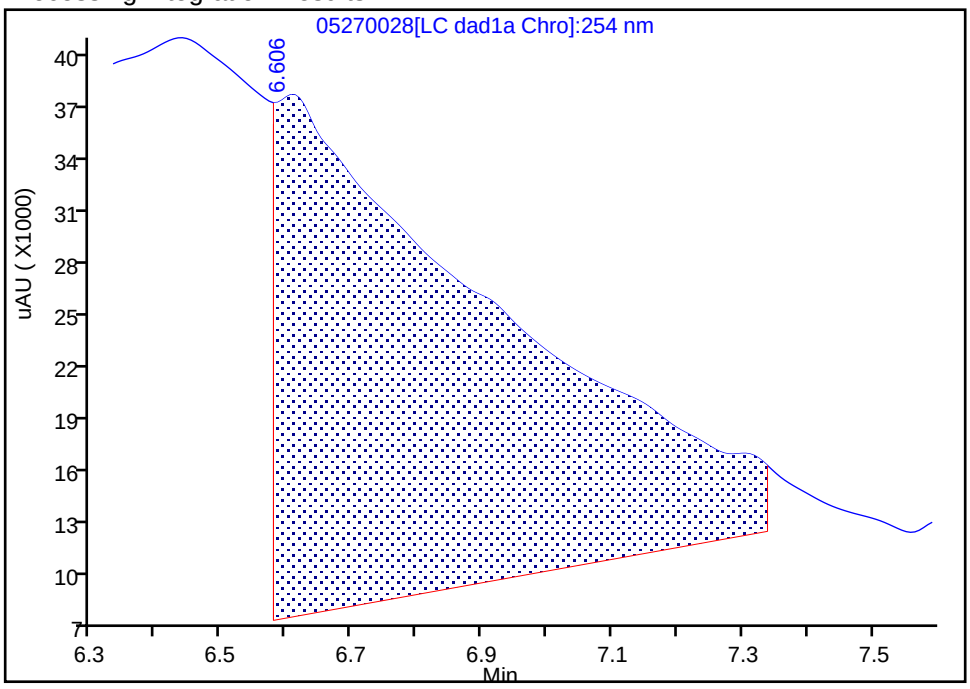
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270028.d				
Injection Date:	27-May-2021 21:40:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

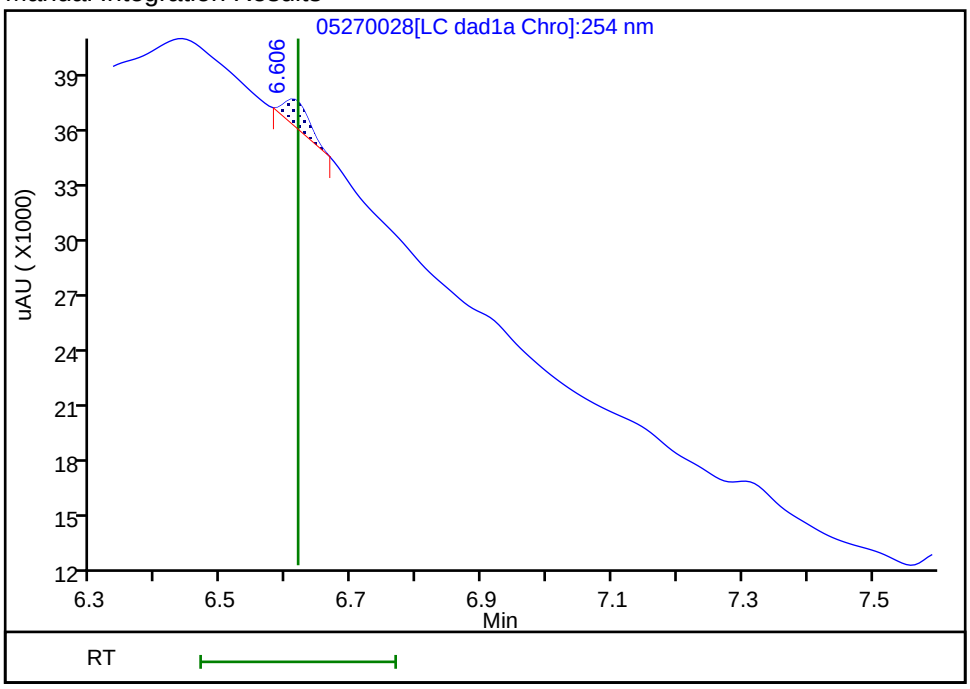
Processing Integration Results

RT: 6.61
Area: 681506
Amount: 8.072665
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 3757
Amount: 0.044503
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:43:33
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

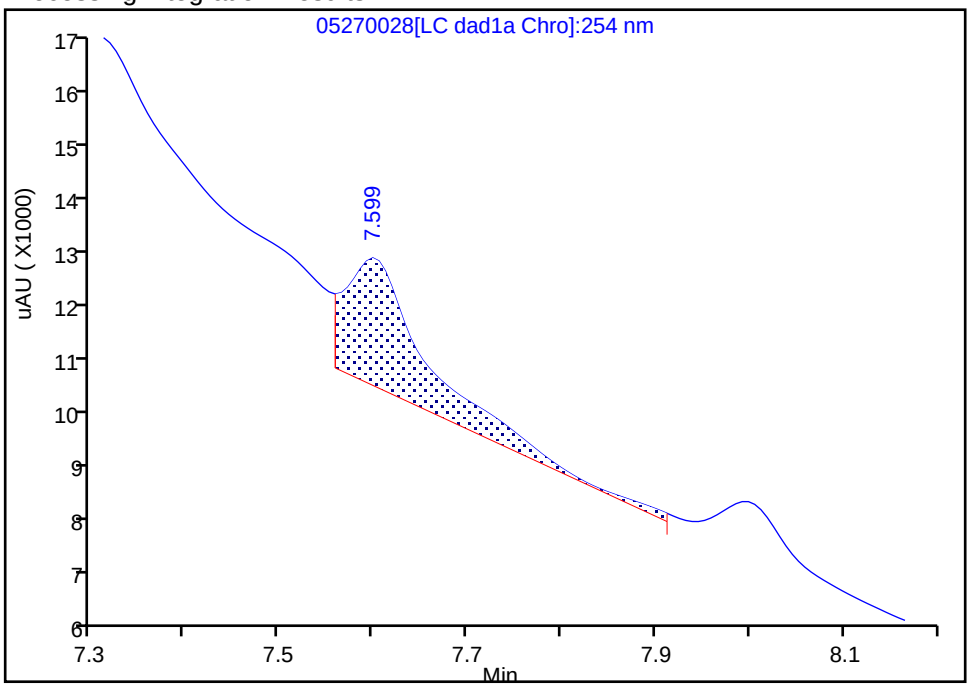
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270028.d				
Injection Date:	27-May-2021 21:40:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

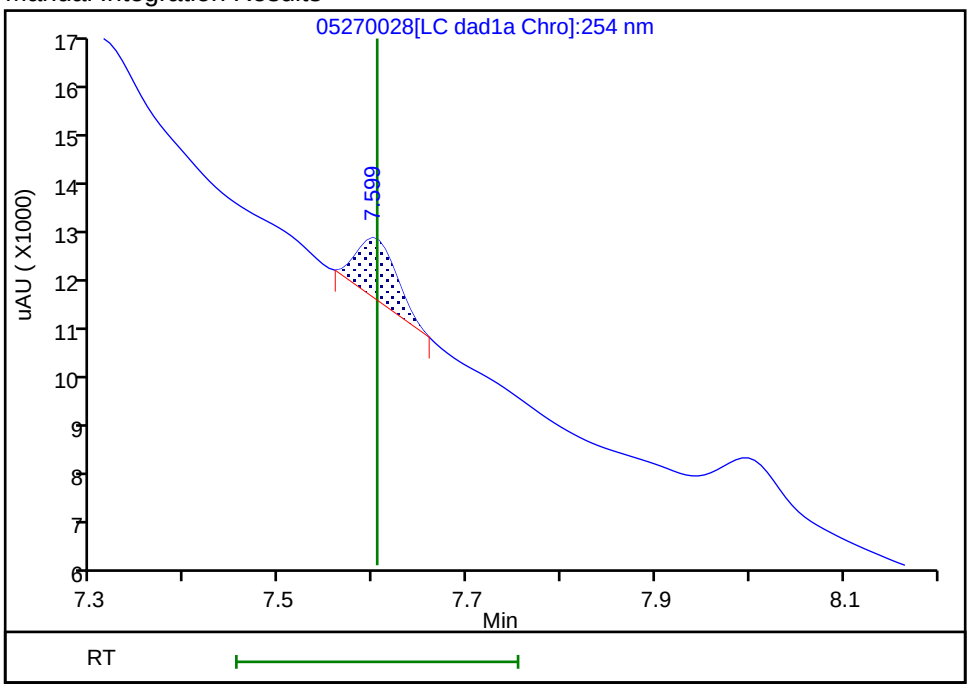
Processing Integration Results

RT: 7.60
Area: 13294
Amount: 0.125106
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 3419
Amount: 0.032175
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:43:40

Audit Action: Manually Integrated Audit Reason: Baseline

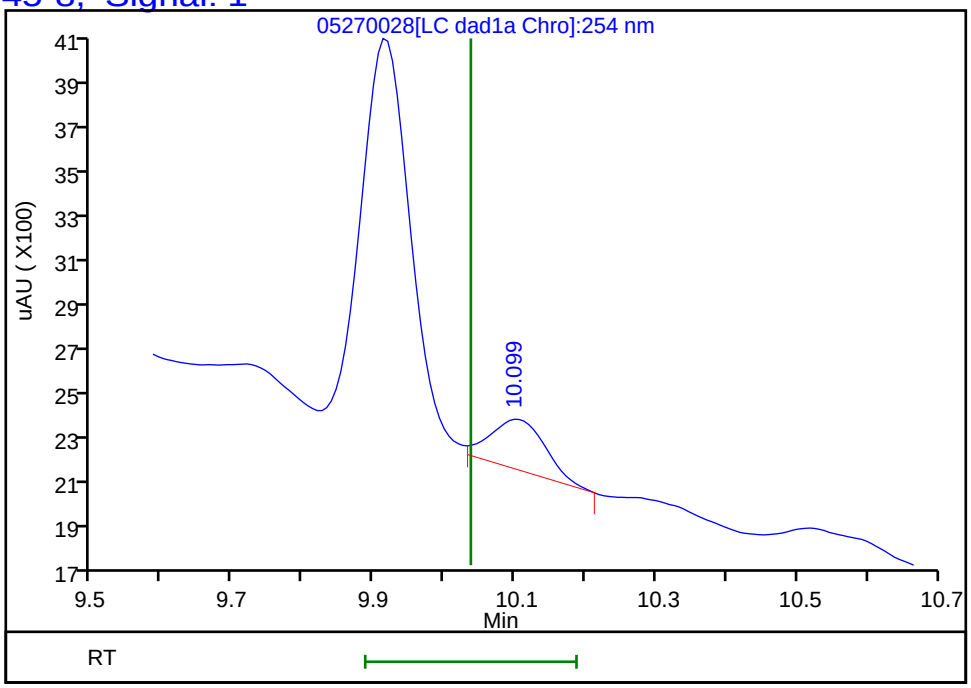
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270028.d				
Injection Date:	27-May-2021 21:40:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.10
Response: 1188
Amount: 0.006890



Reviewer: zhangji, 28-May-2021 12:43:49
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.: 280-148902-1

SDG No.:

Client Sample ID: G0081-21A Lab Sample ID: 280-148902-1

Matrix: Water Lab File ID: 05280014.D

Analysis Method: 8330A Date Collected: 05/20/2021 09:20

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 529.3(mL) Date Analyzed: 05/28/2021 21:19

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.: 537871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.27*	*M J1*	*0.10*	0.094	*0.048*
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U M	0.14	0.11	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D
Lims ID: 280-148902-A-1-A
Client ID: G0081-21A
Sample Type: Client
Inject. Date: 28-May-2021 21:19:59 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-1-A
Misc. Info.: 280-0101890-014
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:23 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: CTX1653

First Level Reviewer: zhangji Date: 29-May-2021 15:21:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.650	6.694	-0.044	8810	0.0493	M
7 MNX	1		7.424			ND	
8 RDX	1	8.830	8.868	-0.038	7732	0.0379	M
9 Nitrobenzene	1		11.921			ND	
$ 10 1,2-Dinitrobenzene	1	12.983	13.021	-0.038	49960	0.1881	
12 1,3-Dinitrobenzene	1		15.447			ND	
14 o-Nitrotoluene	1	16.703	16.687	0.016	2115	0.008495	
15 p-Nitrotoluene	1		16.974			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.427			ND	U
17 m-Nitrotoluene	1		17.947			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.309	18.327	-0.018	12330	0.0284	M
19 1,3,5-Trinitrobenzene	1		18.854			ND	MU
20 2,6-Dinitrotoluene	1		20.101			ND	
21 2,4-Dinitrotoluene	1		20.568			ND	
22 Tetryl	1		24.194			ND	
23 2,4,6-Trinitrotoluene	1		25.174			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

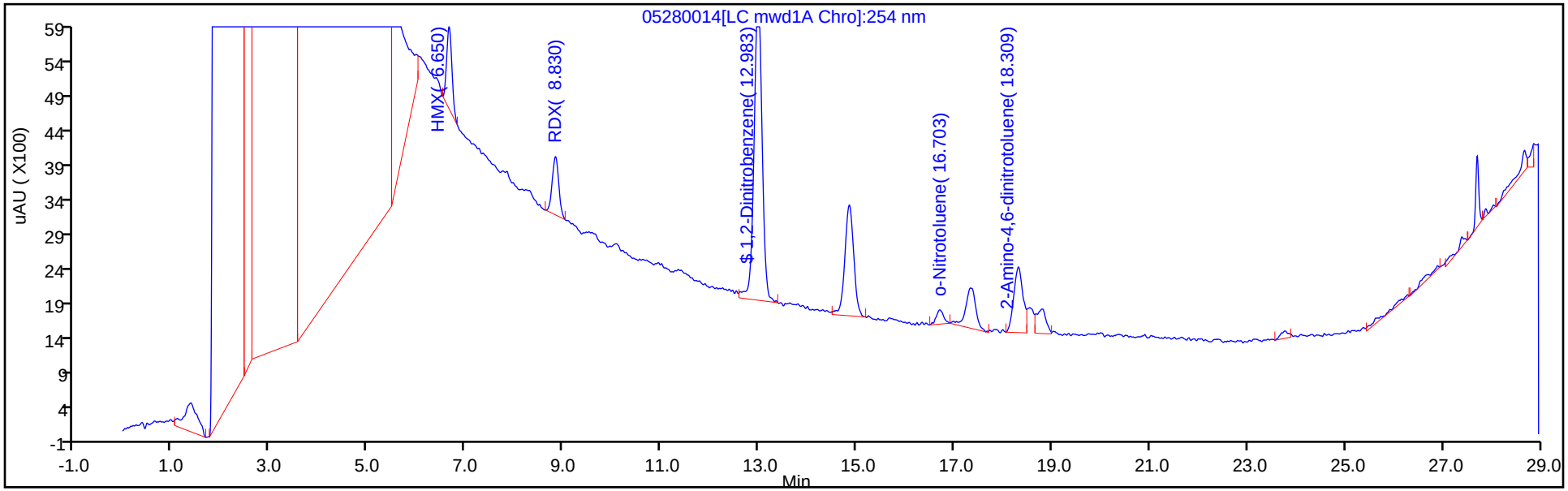
Report Date: 29-May-2021 15:25:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

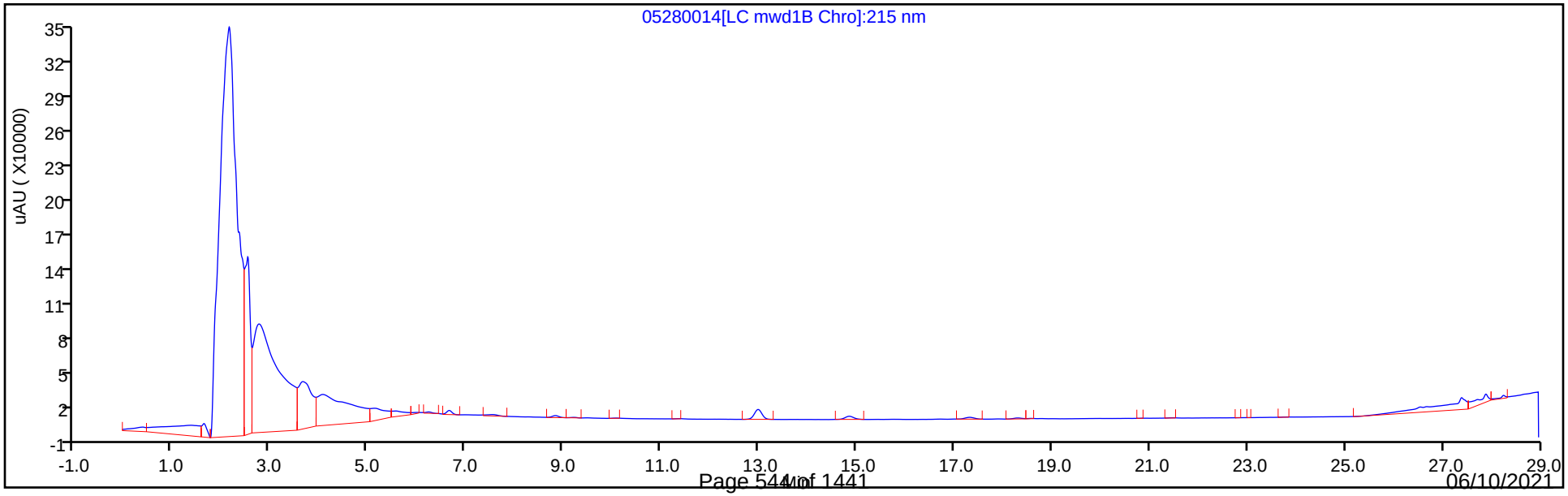
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D

Injection Date:	28-May-2021 21:19:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1	Worklist Smp#:	14
Client ID:	G0081-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D				
Lims ID:	280-148902-A-1-A				
Client ID:	G0081-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 21:19:59	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-1-A				
Misc. Info.:	280-0101890-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:23	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:21:18		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1881	94.03

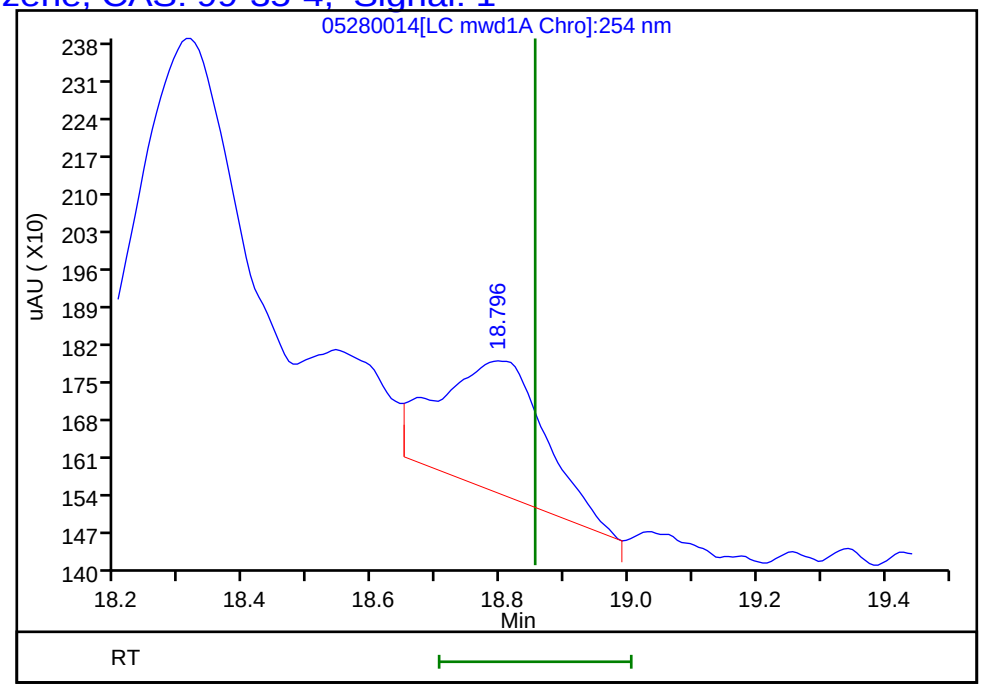
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D				
Injection Date:	28-May-2021 21:19:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 18.80
Response: 2801
Amount: -0.000201



Reviewer: zhangji, 29-May-2021 15:21:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

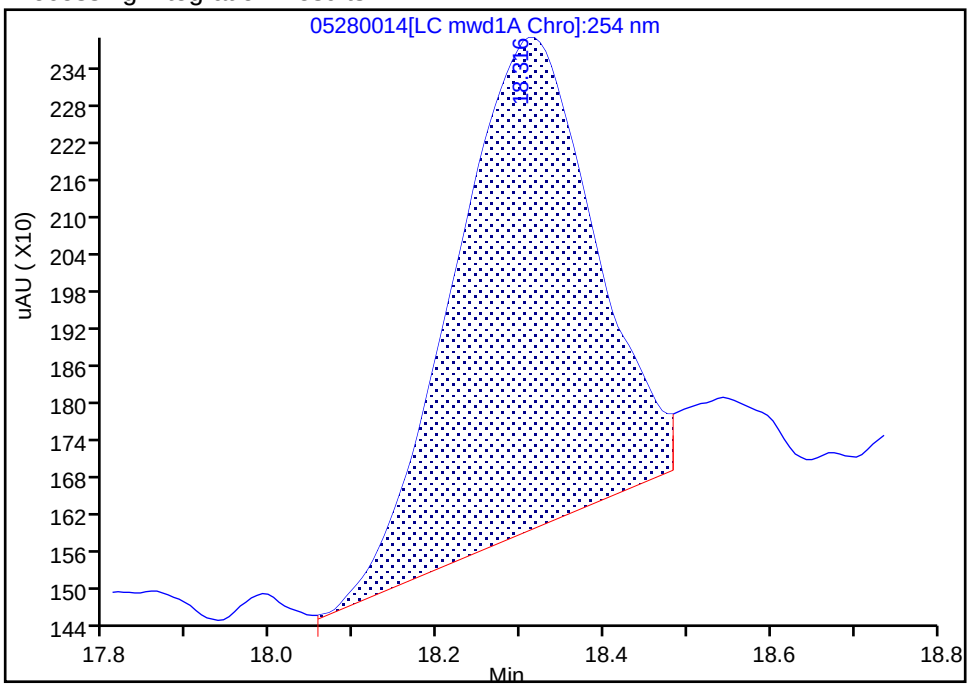
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D				
Injection Date:	28-May-2021 21:19:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

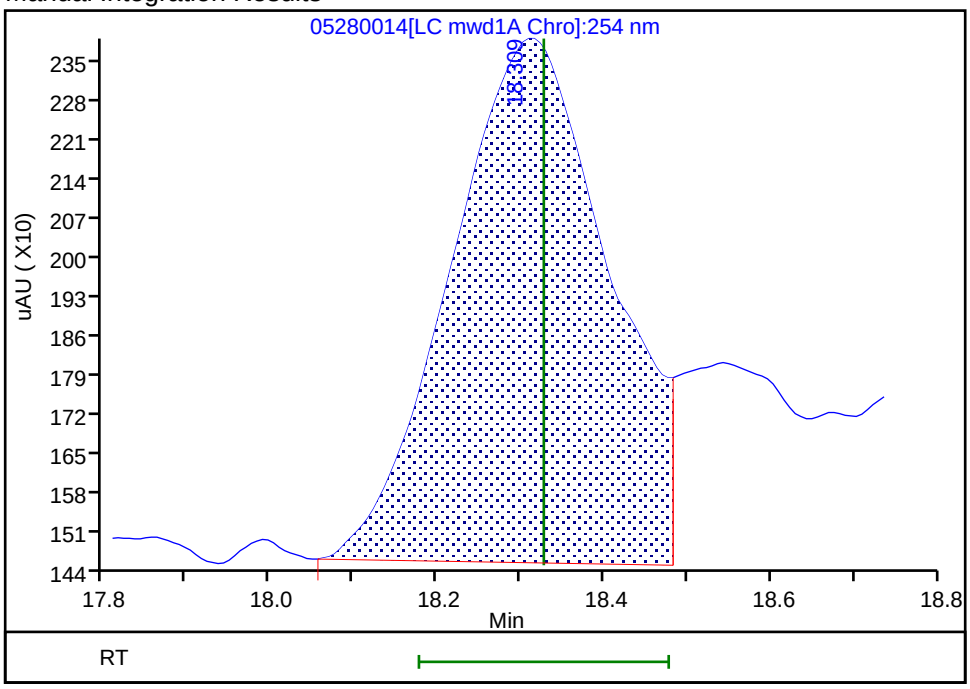
Processing Integration Results

RT: 18.32
Area: 9284
Amount: 0.020598
Amount Units: ug/ml



Manual Integration Results

RT: 18.31
Area: 12330
Amount: 0.028411
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:21:12

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

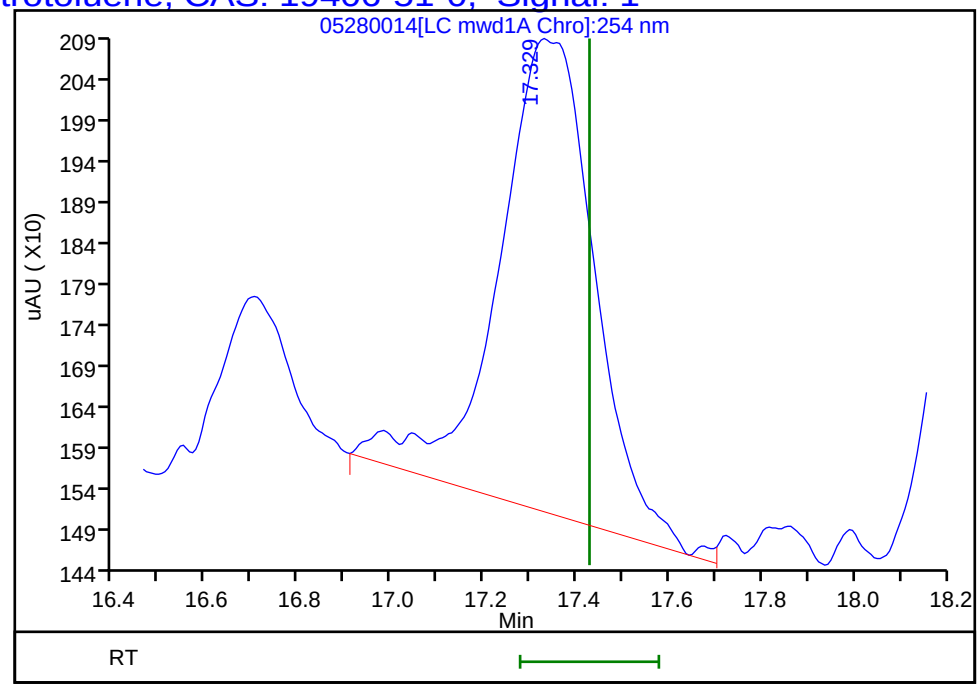
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D				
Injection Date:	28-May-2021 21:19:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.33
Response: 8404
Amount: 0.028324



Reviewer: zhangji, 29-May-2021 15:21:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

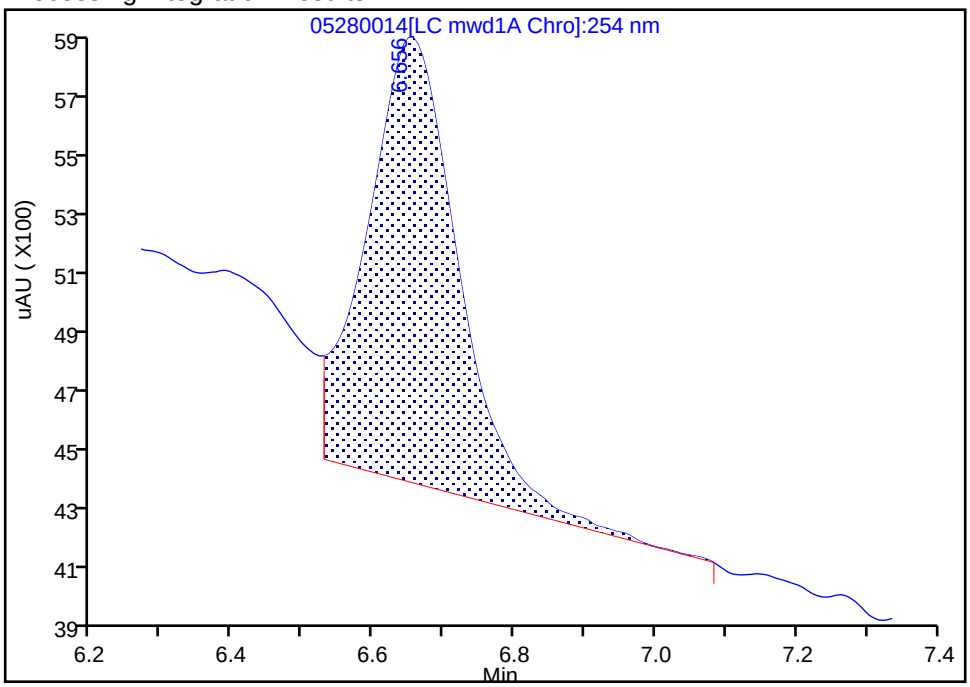
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D				
Injection Date:	28-May-2021 21:19:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

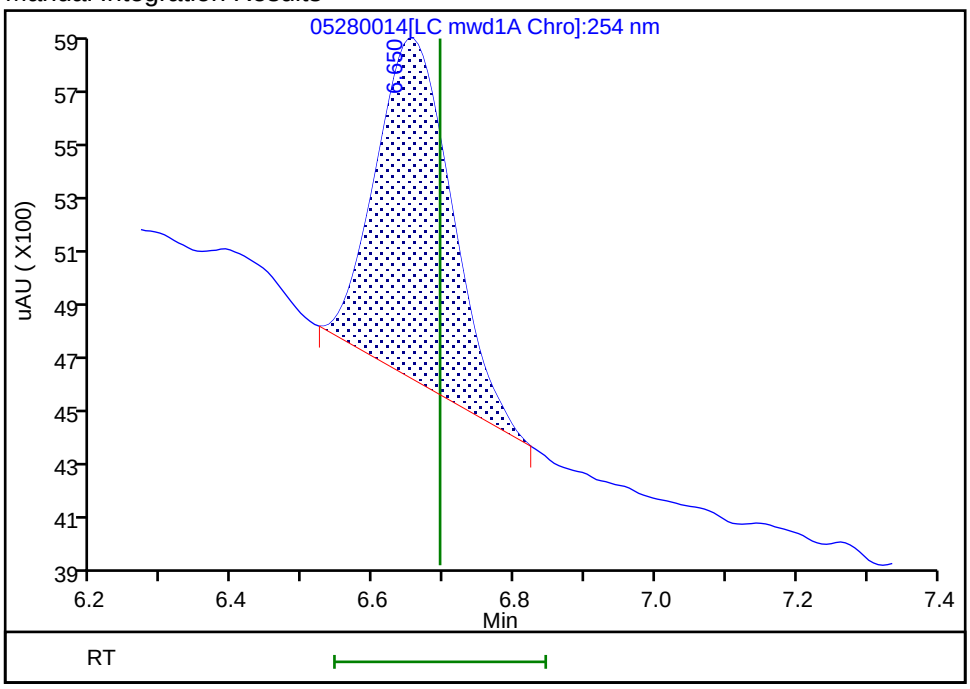
Processing Integration Results

RT: 6.66
Area: 12547
Amount: 0.072848
Amount Units: ug/ml



Manual Integration Results

RT: 6.65
Area: 8810
Amount: 0.049311
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:21:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

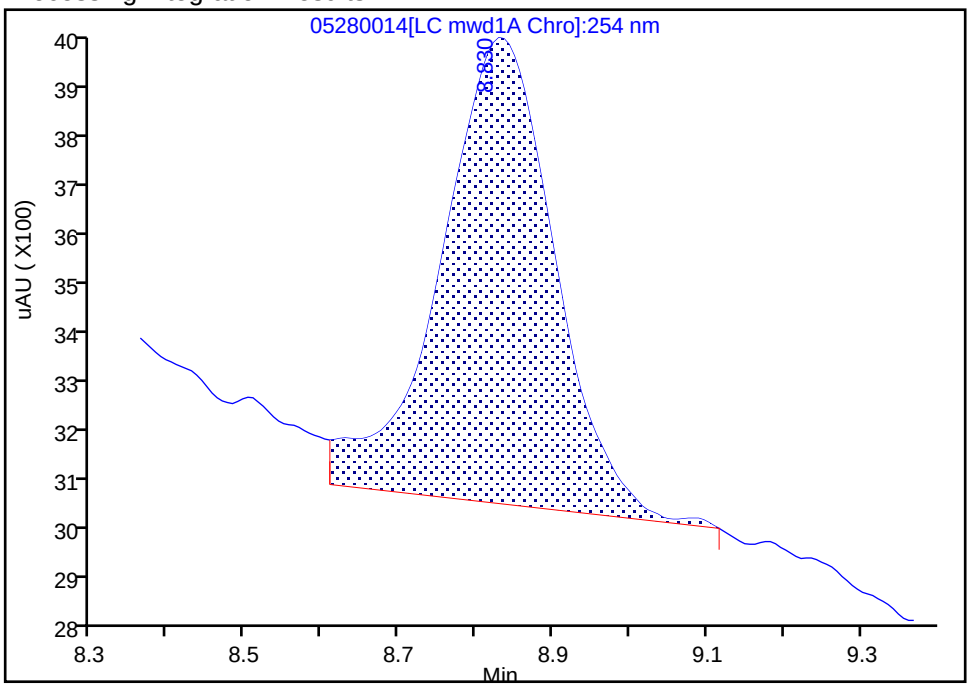
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280014.D				
Injection Date:	28-May-2021 21:19:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-1-A	Lab Sample ID:	280-148902-1		
Client ID:	G0081-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

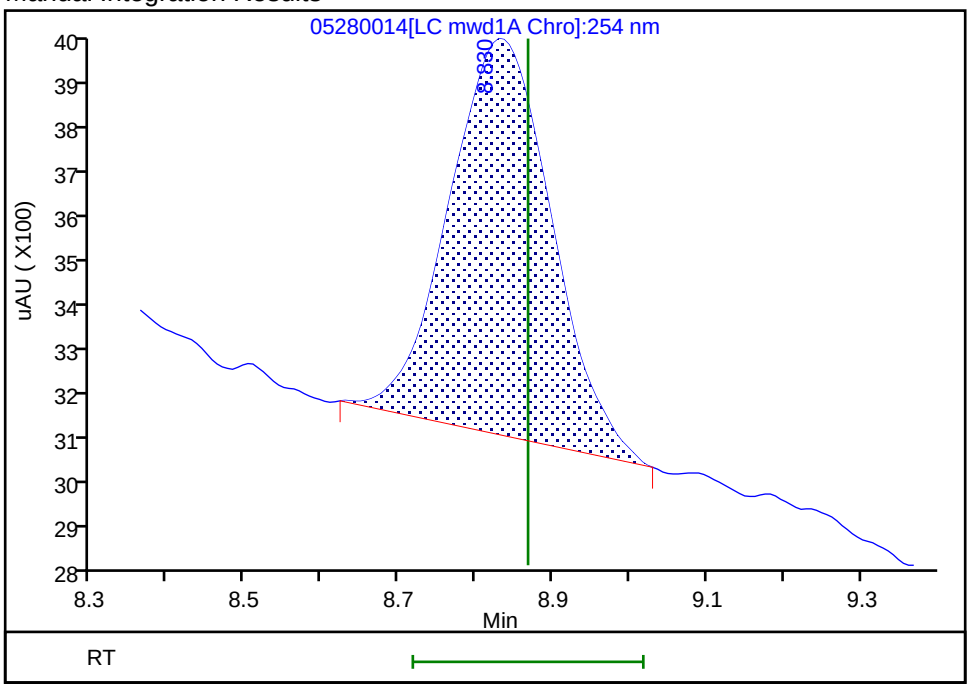
Processing Integration Results

RT: 8.83
Area: 9146
Amount: 0.044774
Amount Units: ug/ml



Manual Integration Results

RT: 8.83
Area: 7732
Amount: 0.037852
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:21:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0079-21A Lab Sample ID: 280-148902-2

Matrix: Water Lab File ID: 05270029.D

Analysis Method: 8330A Date Collected: 05/20/2021 09:05

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 531.6(mL) Date Analyzed: 05/27/2021 22:03

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.079
99-65-0	1,3-Dinitrobenzene	0.094	U	0.10	0.094	0.035
118-96-7	2,4,6-Trinitrotoluene	0.094	U	0.10	0.094	0.042
121-14-2	2,4-Dinitrotoluene	0.075	U	0.094	0.075	0.026
606-20-2	2,6-Dinitrotoluene	0.075	U	0.094	0.075	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.094	U	0.10	0.094	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.080
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.18
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.054
99-99-0	4-Nitrotoluene	0.38	U	0.39	0.38	0.094
2691-41-0	HMX	0.19	U	0.20	0.19	0.082
5755-27-1	MNX	0.38	U	1.9	0.38	0.14
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.086
121-82-4	RDX	0.19	U	0.20	0.19	0.048
479-45-8	Tetryl	0.094	U	0.10	0.094	0.030

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270029.D
Lims ID: 280-148902-B-2-A
Client ID: G0079-21A
Sample Type: Client
Inject. Date: 27-May-2021 22:03:30 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-2-A
Misc. Info.: 280-0101842-029
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:36 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: 28-May-2021 12:44:05

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.617			ND	
	6 MNX	1		7.232			ND	
	7 RDX	1		7.604			ND	
$	9 1,2-Dinitrobenzene	1	8.534	8.544	-0.010	24915	0.1943	M
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	
	16 2,4,6-Trinitrotoluene	1		10.964			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.184			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.437			ND	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

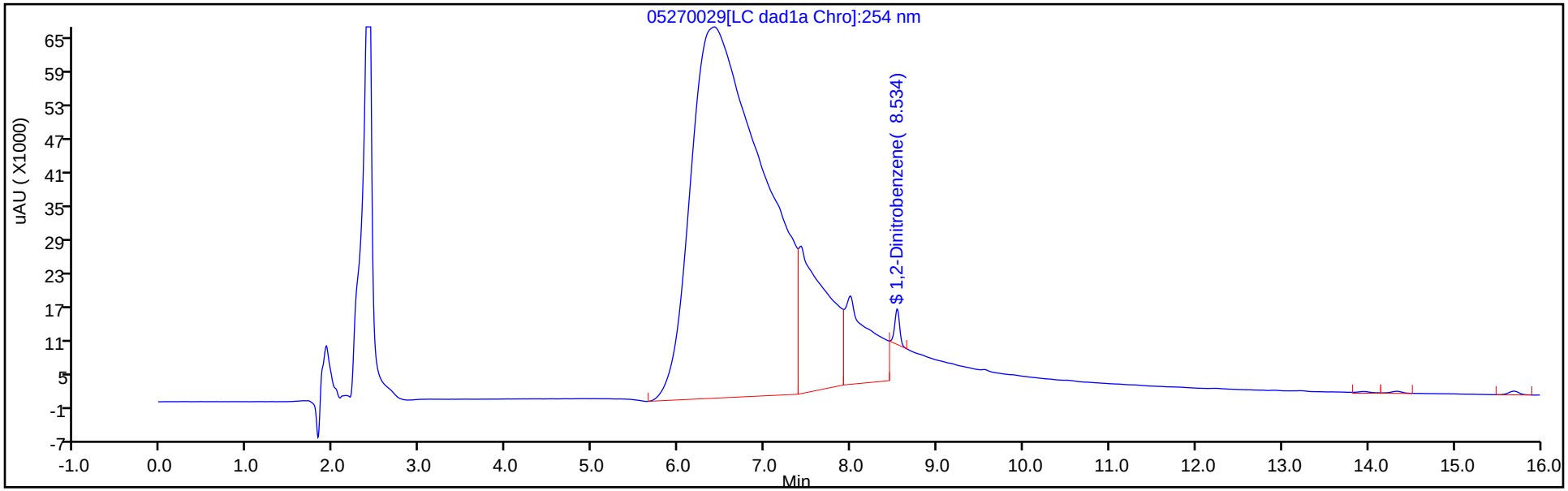
Report Date: 28-May-2021 14:38:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

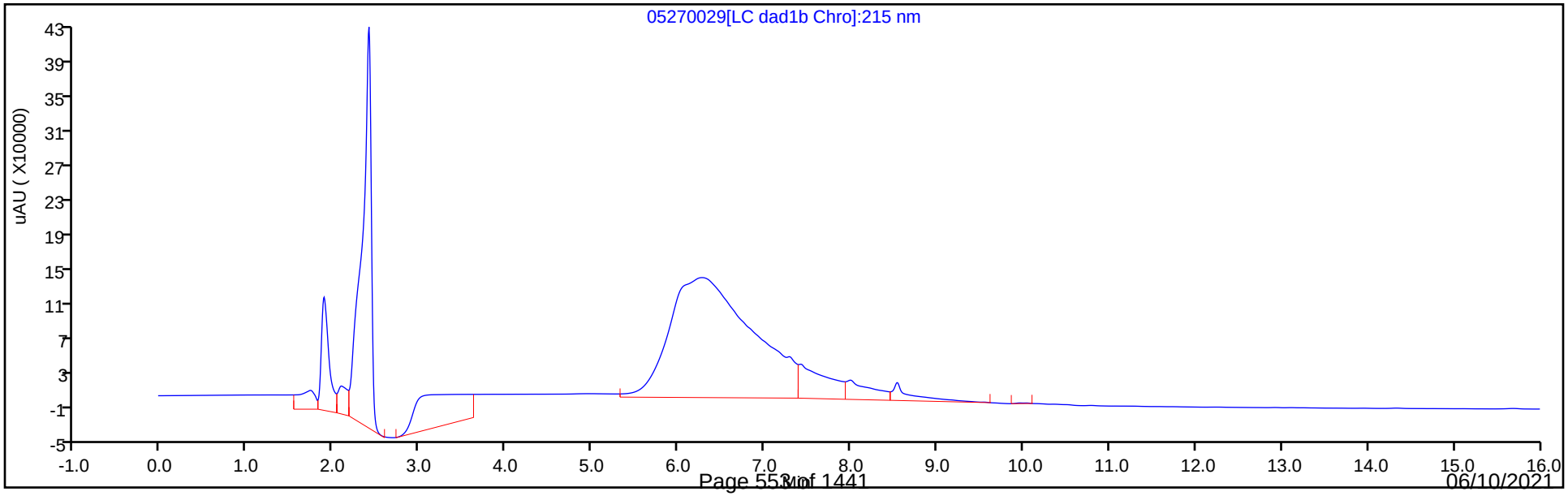
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270029.d

Injection Date:	27-May-2021 22:03:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-2-A	Lab Sample ID:	280-148902-2	Worklist Smp#:	29
Client ID:	G0079-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270029.D				
Lims ID:	280-148902-B-2-A				
Client ID:	G0079-21A				
Sample Type:	Client				
Inject. Date:	27-May-2021 22:03:30	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-2-A				
Misc. Info.:	280-0101842-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:36	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: 28-May-2021 12:44:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1943	97.16

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

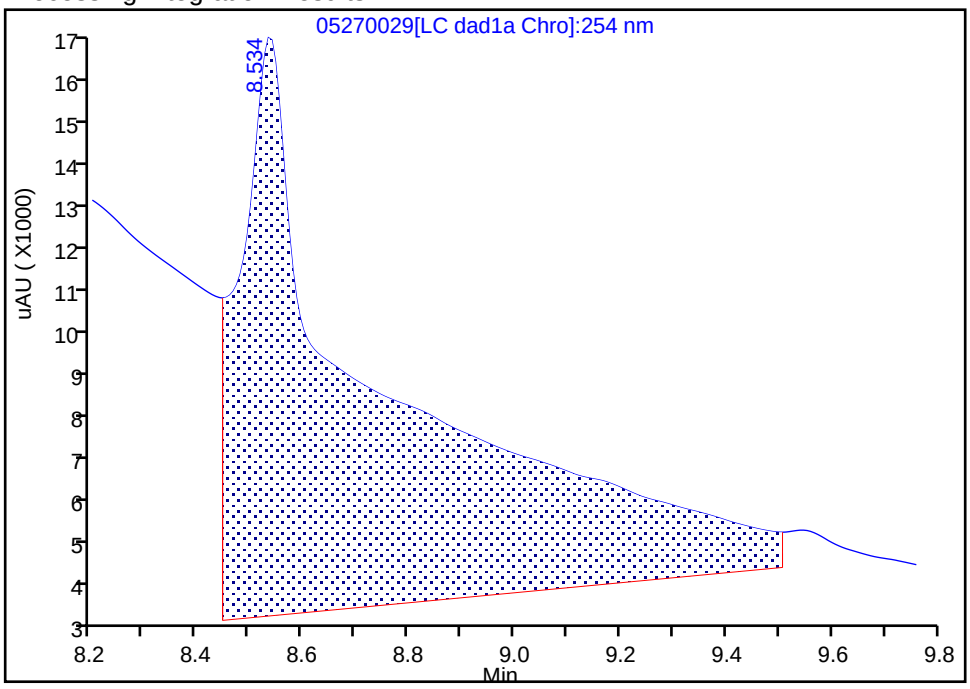
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270029.d				
Injection Date:	27-May-2021 22:03:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-2-A	Lab Sample ID:	280-148902-2		
Client ID:	G0079-21A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

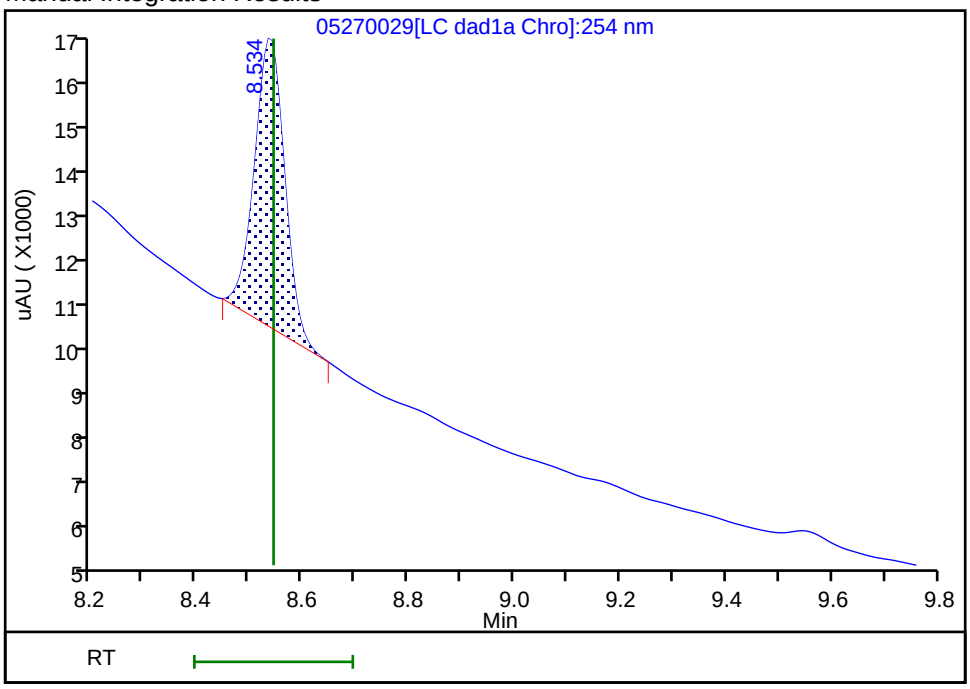
Processing Integration Results

RT: 8.53
Area: 242933
Amount: 1.894699
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24915
Amount: 0.194319
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:44:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0085-21A Lab Sample ID: 280-148902-3

Matrix: Water Lab File ID: 05270030.D

Analysis Method: 8330A Date Collected: 05/19/2021 15:20

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 500.3(mL) Date Analyzed: 05/27/2021 22:26

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 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
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 M	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U M	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
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270030.D
Lims ID: 280-148902-A-3-A
Client ID: G0085-21A
Sample Type: Client
Inject. Date: 27-May-2021 22:26:30 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-3-A
Misc. Info.: 280-0101842-030
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:36 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: 28-May-2021 12:44:36

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.617			ND	
	6 MNX	1		7.232			ND	
	7 RDX	1		7.604			ND	
$	9 1,2-Dinitrobenzene	1	8.540	8.544	-0.004	25094	0.1957	M
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	7
	12 Nitrobenzene	1	9.707	9.697	0.010	9494	0.0486	M
	14 Tetryl	1		10.037			ND	
	16 2,4,6-Trinitrotoluene	1	10.967	10.964	0.003	3192	0.0155	
	17 4-Amino-2,6-dinitrotoluene	1		11.184			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.437			ND	U
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	U
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

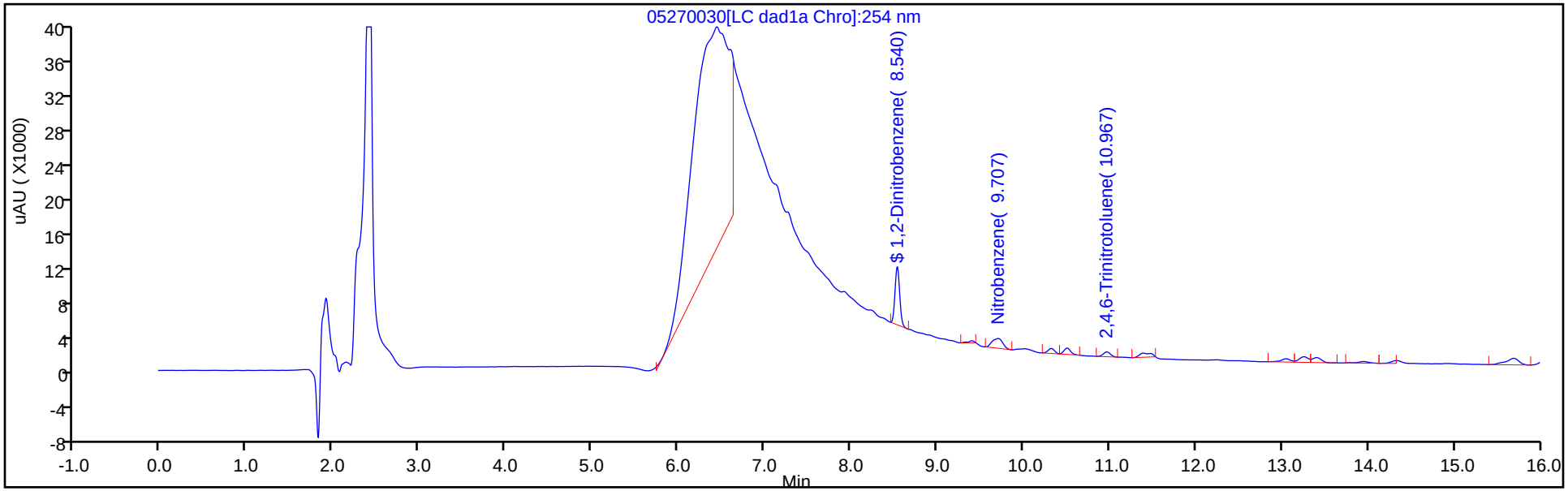
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 28-May-2021 14:38:40 Chrom Revision: 2.3 13-May-2021 07:57:40

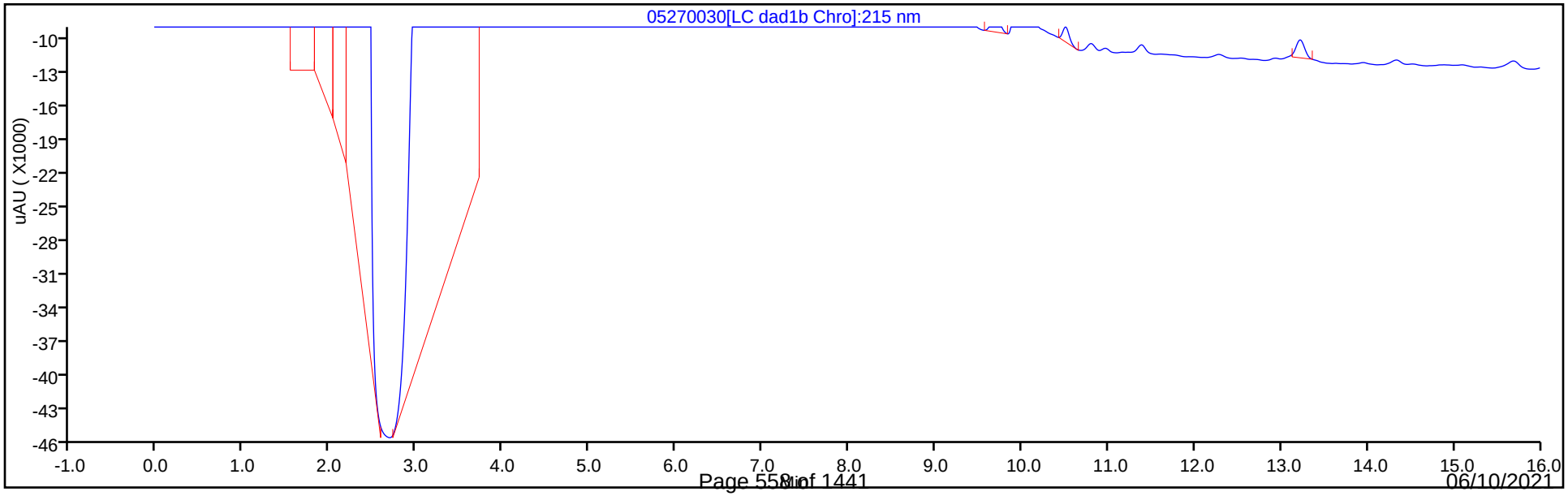
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270030.d				
Injection Date:	27-May-2021 22:26:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3	Worklist Smp#:	30
Client ID:	G0085-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270030.D				
Lims ID:	280-148902-A-3-A				
Client ID:	G0085-21A				
Sample Type:	Client				
Inject. Date:	27-May-2021 22:26:30	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-3-A				
Misc. Info.:	280-0101842-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:36	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: 28-May-2021 12:44:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1957	97.86

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

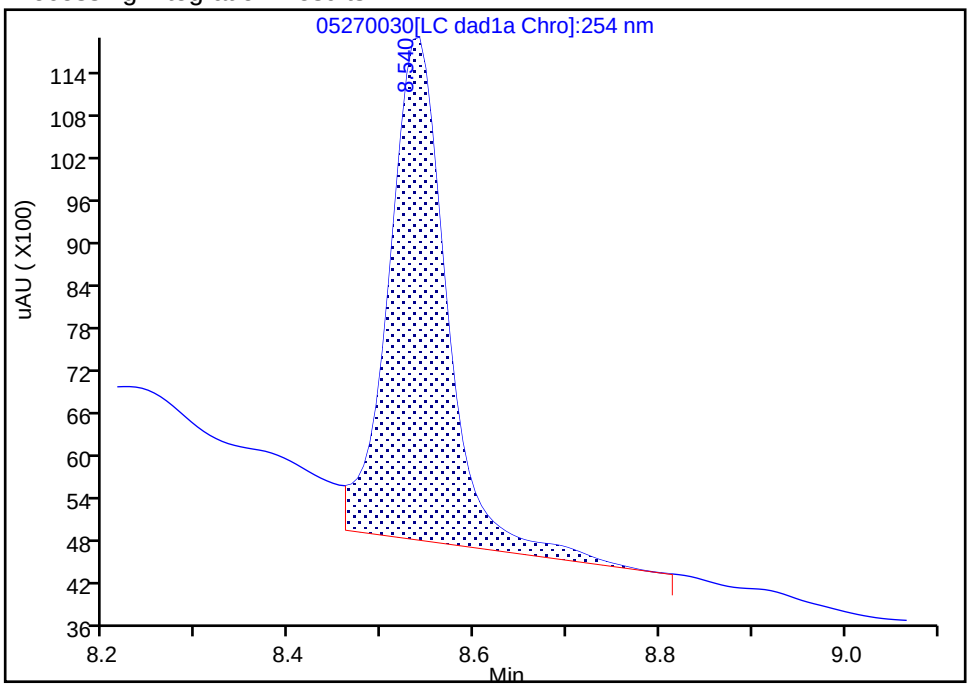
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270030.d				
Injection Date:	27-May-2021 22:26:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

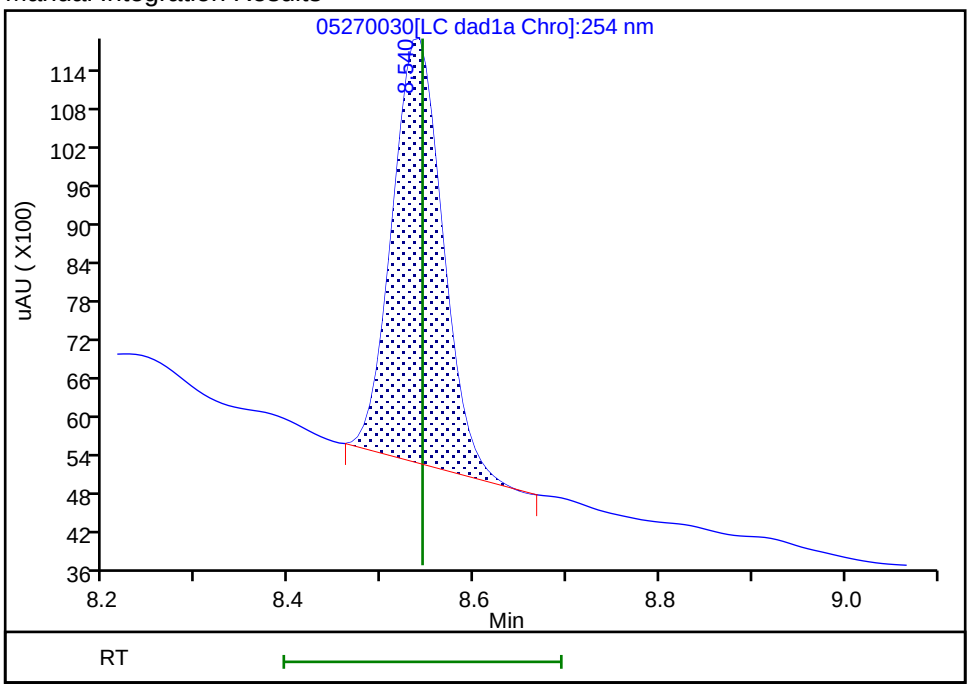
Processing Integration Results

RT: 8.54
Area: 30919
Amount: 0.241145
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 25094
Amount: 0.195715
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:44:25

Audit Action: Manually Integrated Audit Reason: Baseline

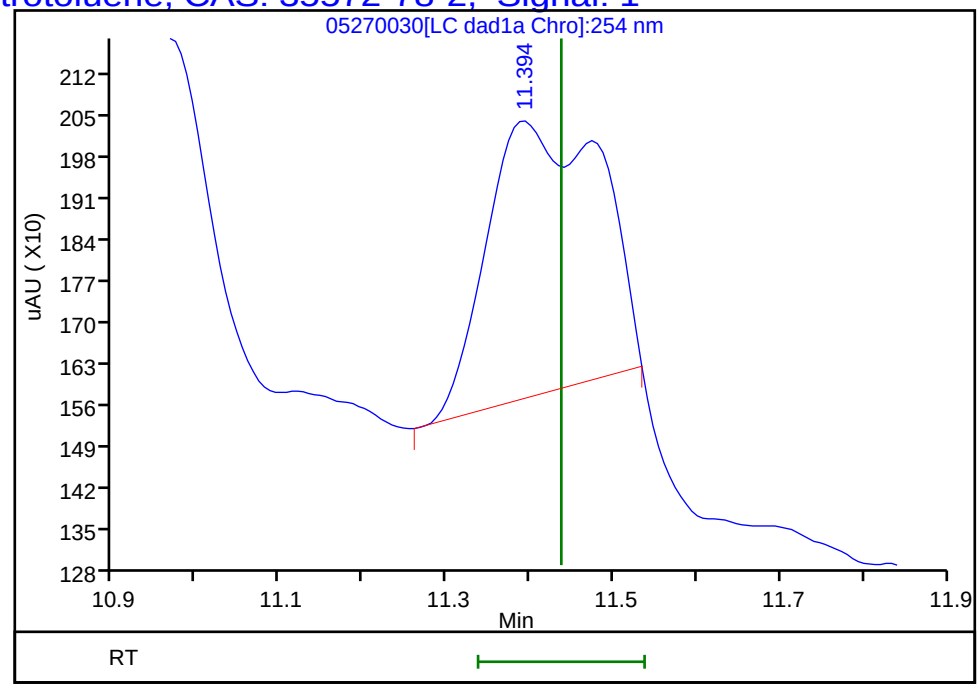
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270030.d				
Injection Date:	27-May-2021 22:26:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.39
Response: 4394
Amount: 0.021235



Reviewer: zhangji, 28-May-2021 12:44:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

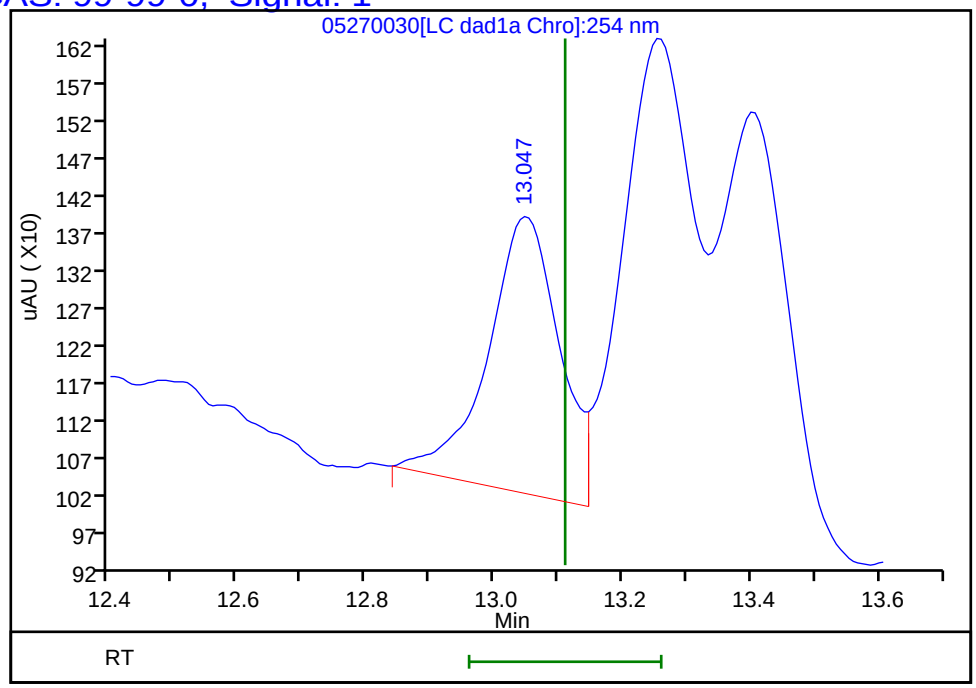
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270030.d				
Injection Date:	27-May-2021 22:26:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.05
Response: 2873
Amount: 0.025672



Reviewer: zhangji, 28-May-2021 12:44:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

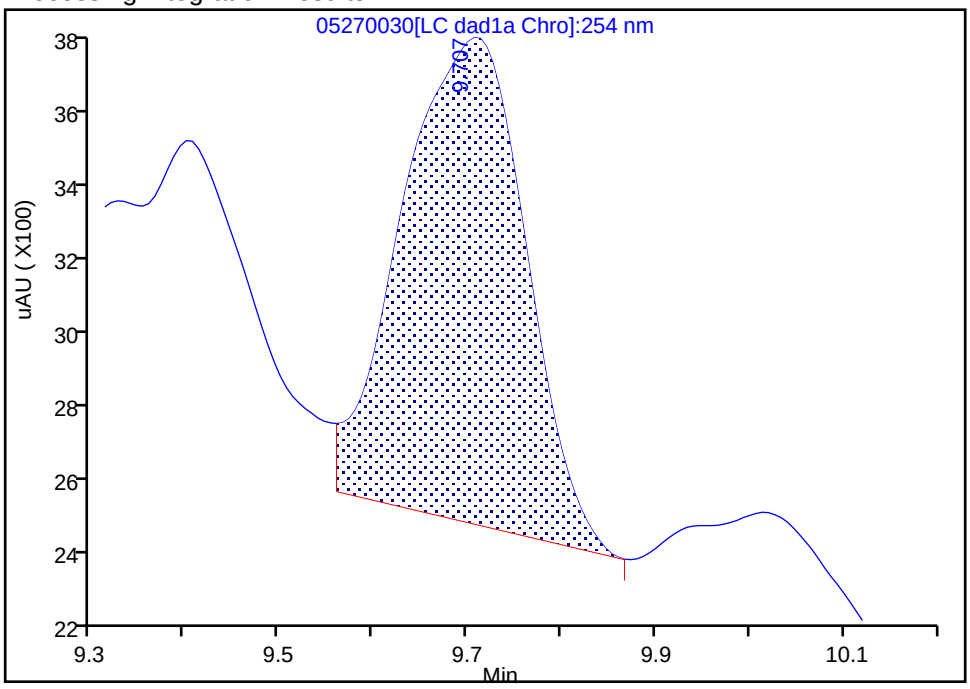
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270030.d				
Injection Date:	27-May-2021 22:26:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

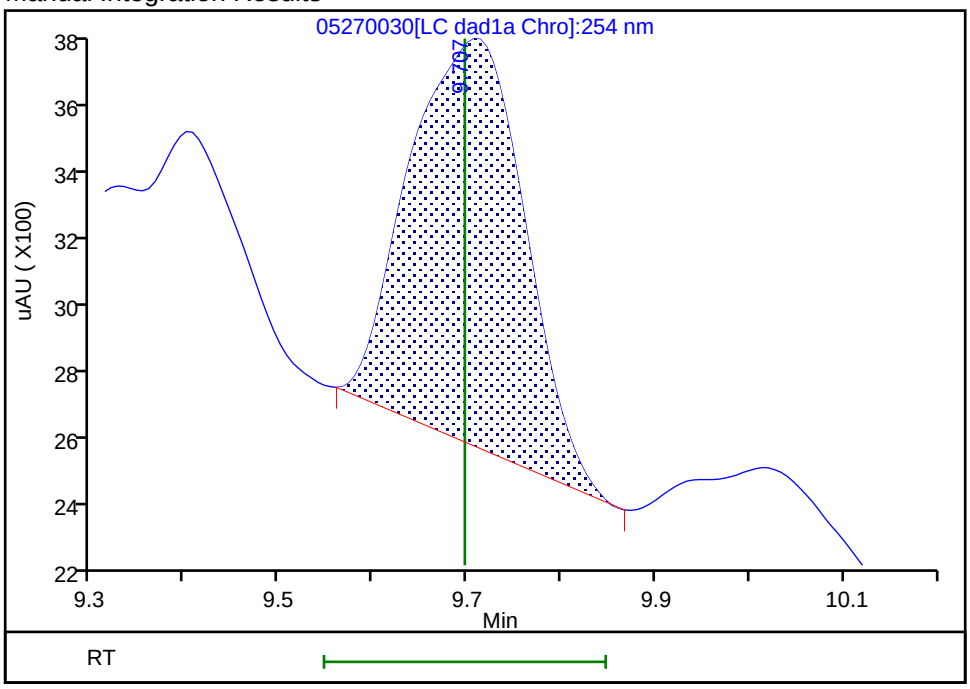
Processing Integration Results

RT: 9.71
Area: 11049
Amount: 0.056579
Amount Units: ug/mL



Manual Integration Results

RT: 9.71
Area: 9494
Amount: 0.048616
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:44:32

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0085-21A Lab Sample ID: 280-148902-3

Matrix: Water Lab File ID: 05280015.D

Analysis Method: 8330A Date Collected: 05/19/2021 15:20

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 500.3(mL) Date Analyzed: 05/28/2021 21:55

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.: 537871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D				
Lims ID:	280-148902-A-3-A				
Client ID:	G0085-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 21:55:03	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-3-A				
Misc. Info.:	280-0101890-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:23	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:21:52		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.665	6.694	-0.029	4627	0.0230	M
7 MNX	1	7.399	7.424	-0.025	9725	0.0367	M
8 RDX	1		8.868			ND	
9 Nitrobenzene	1		11.921			ND	
$ 10 1,2-Dinitrobenzene	1	13.012	13.021	-0.009	49972	0.1881	
12 1,3-Dinitrobenzene	1		15.447			ND	
14 o-Nitrotoluene	1		16.687			ND	U
15 p-Nitrotoluene	1		16.974			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.427			ND	U
17 m-Nitrotoluene	1		17.947			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.338	18.327	0.011	5146	0.0100	
19 1,3,5-Trinitrobenzene	1		18.854			ND	
20 2,6-Dinitrotoluene	1		20.101			ND	
21 2,4-Dinitrotoluene	1		20.568			ND	
22 Tetryl	1		24.194			ND	
23 2,4,6-Trinitrotoluene	1		25.174			ND	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

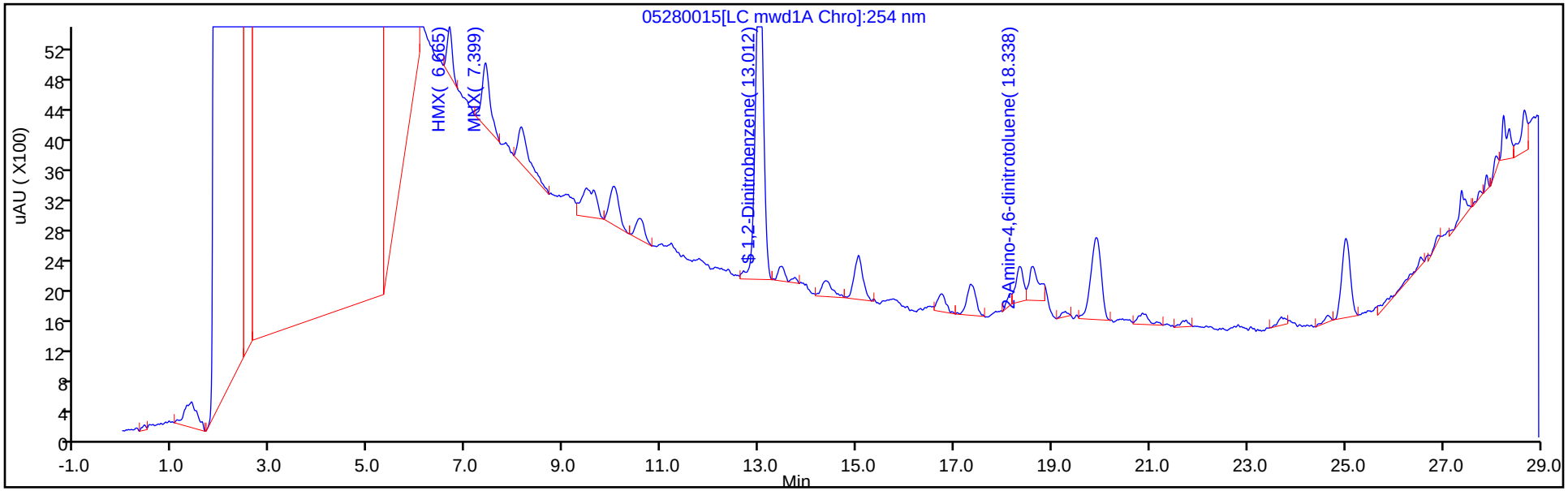
Report Date: 29-May-2021 15:25:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

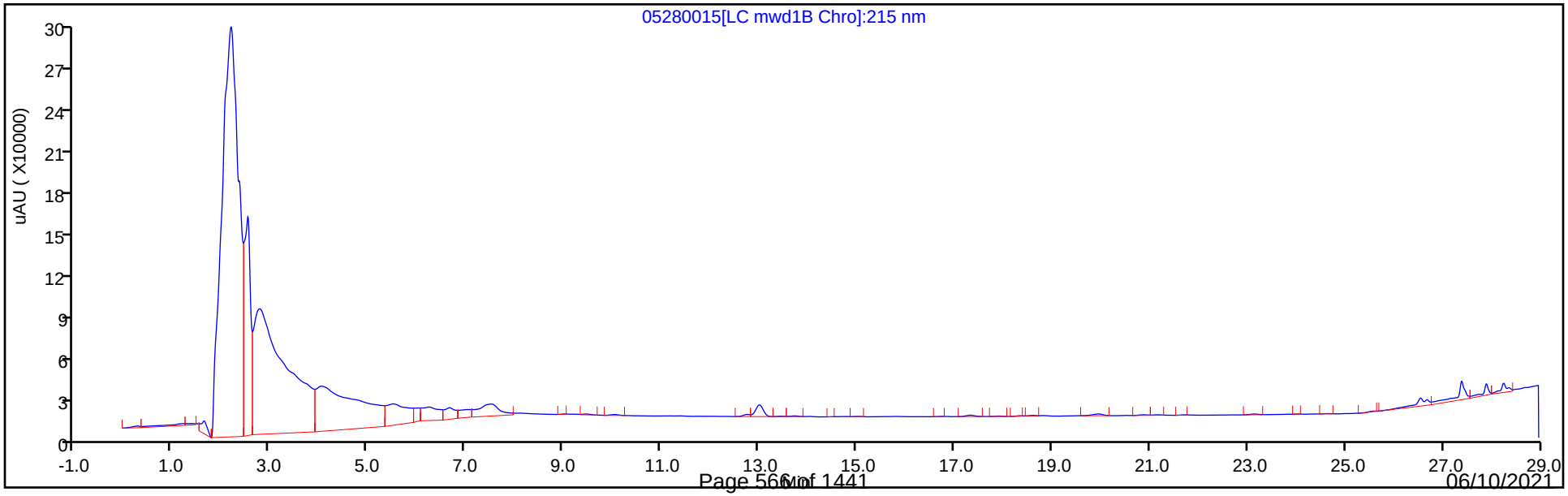
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D

Injection Date:	28-May-2021 21:55:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3	Worklist Smp#:	15
Client ID:	G0085-21A				
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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D				
Lims ID:	280-148902-A-3-A				
Client ID:	G0085-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 21:55:03	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-3-A				
Misc. Info.:	280-0101890-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:23	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:21:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1881	94.05

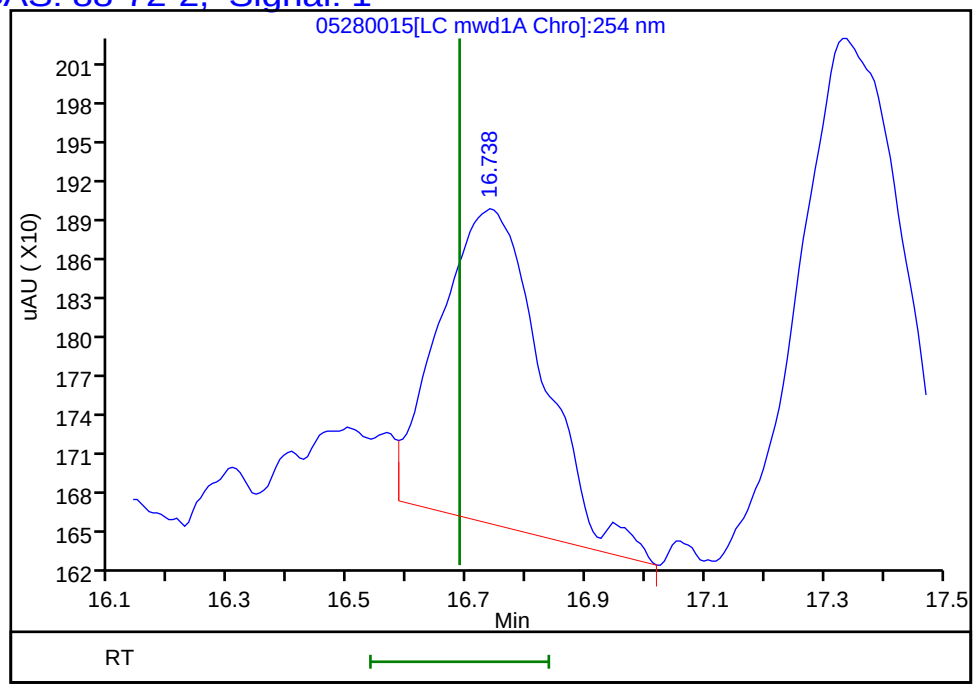
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D				
Injection Date:	28-May-2021 21:55:03	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.74
Response: 2849
Amount: 0.011443



Reviewer: zhangji, 29-May-2021 15:21:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

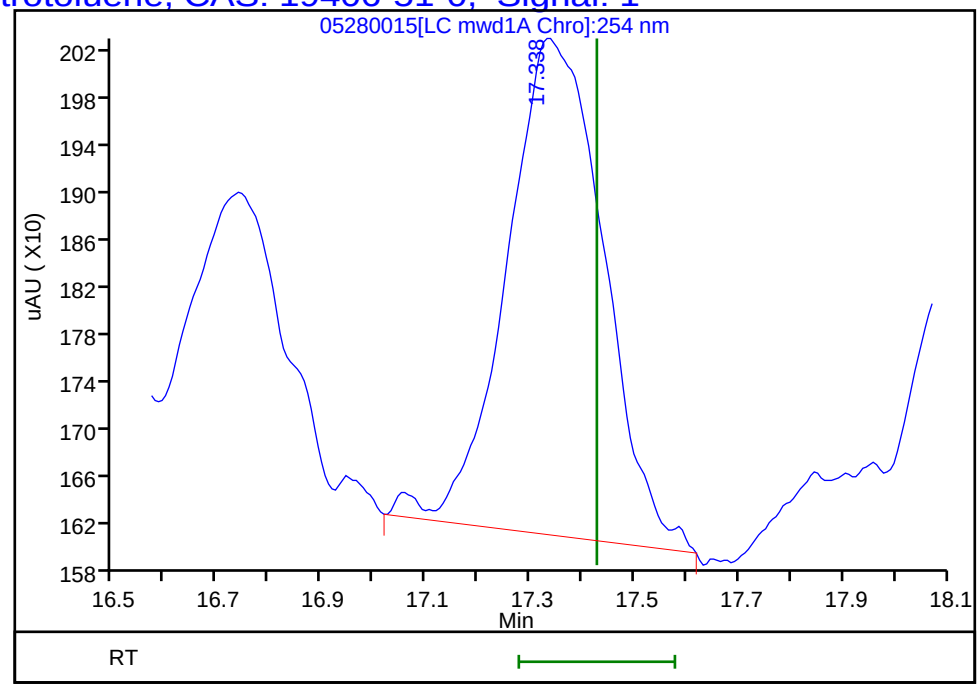
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D				
Injection Date:	28-May-2021 21:55:03	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.34
Response: 5343
Amount: 0.018008



Reviewer: zhangji, 29-May-2021 15:21:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

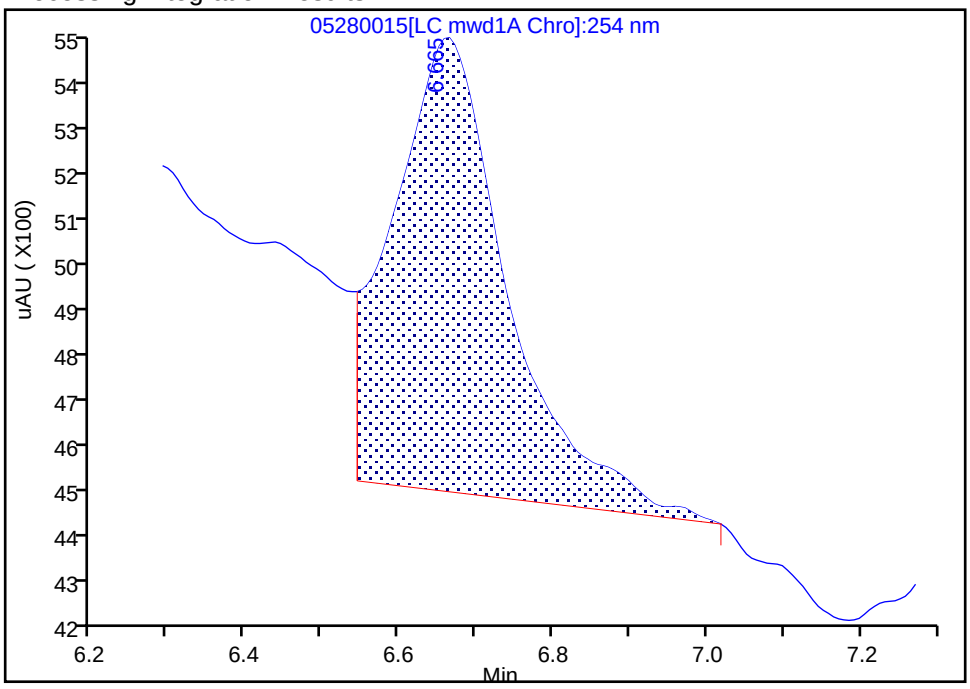
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D				
Injection Date:	28-May-2021 21:55:03	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

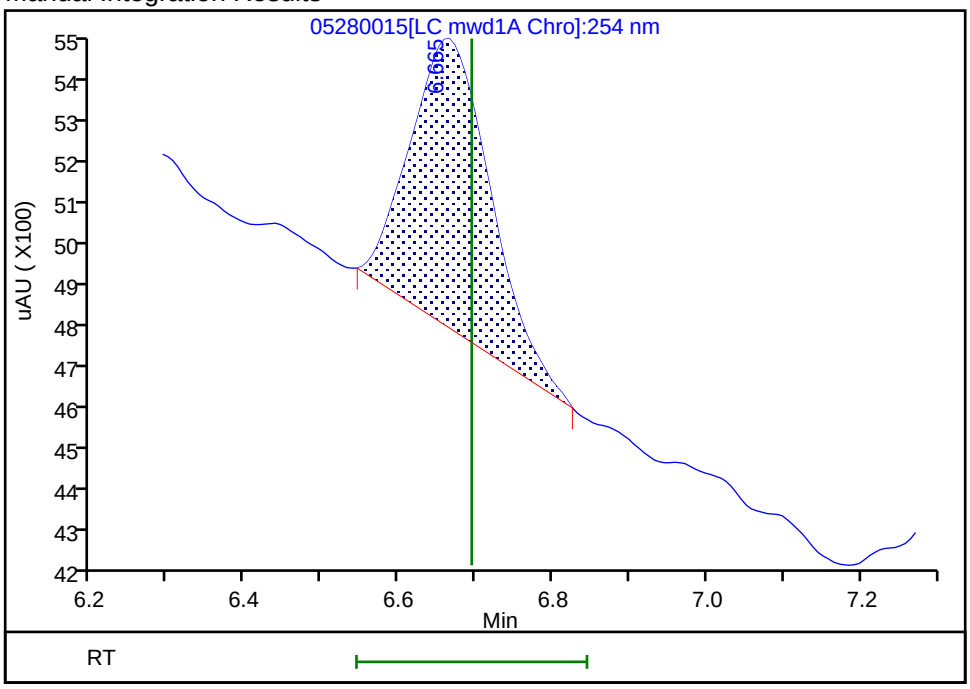
Processing Integration Results

RT: 6.67
Area: 9364
Amount: 0.052801
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 4627
Amount: 0.022966
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:21:31

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

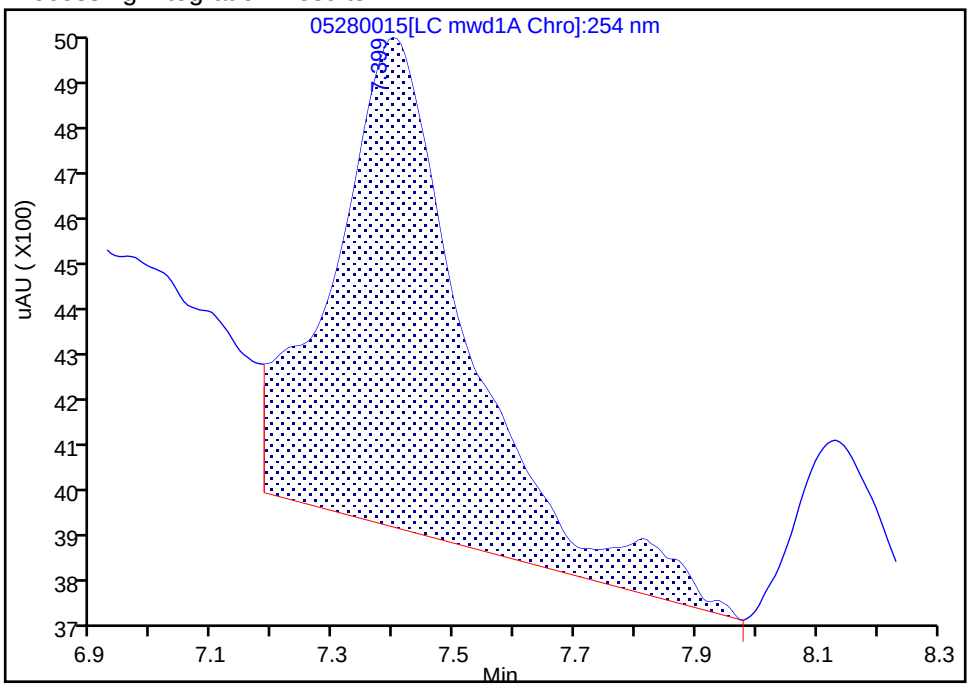
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280015.D				
Injection Date:	28-May-2021 21:55:03	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-3-A	Lab Sample ID:	280-148902-3		
Client ID:	G0085-21A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

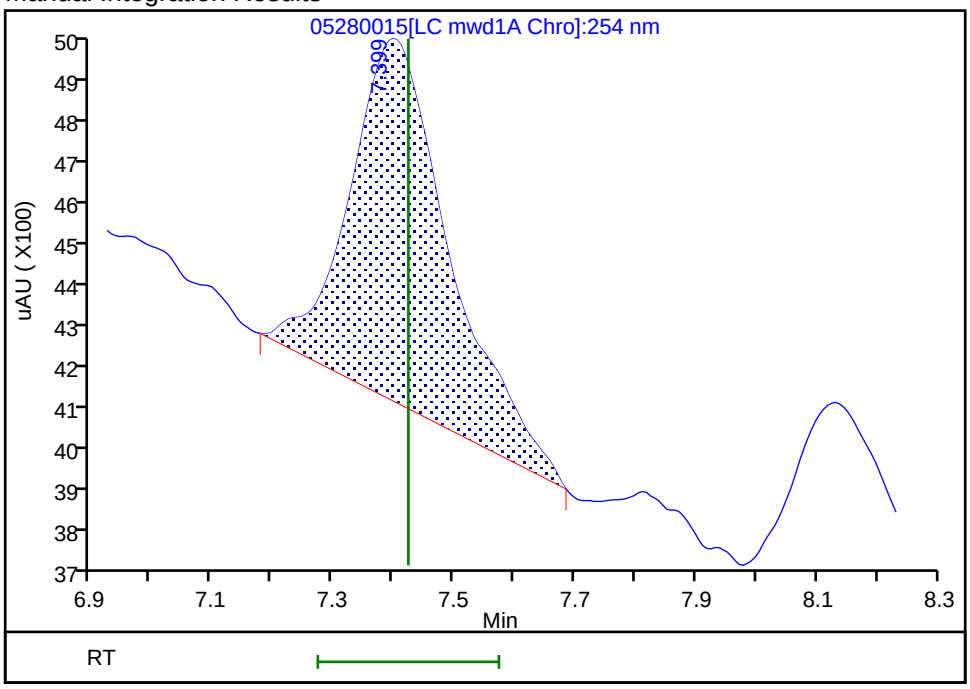
Processing Integration Results

RT: 7.40
Area: 16026
Amount: 0.060511
Amount Units: ug/ml



Manual Integration Results

RT: 7.40
Area: 9725
Amount: 0.036720
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:21:34

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: NW071-21A Lab Sample ID: 280-148902-4

Matrix: Water Lab File ID: 05270031.D

Analysis Method: 8330A Date Collected: 05/19/2021 14:55

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 524.3(mL) Date Analyzed: 05/27/2021 22:49

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080
99-65-0	1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035
118-96-7	2,4,6-Trinitrotoluene	0.095	U	0.10	0.095	0.043
121-14-2	2,4-Dinitrotoluene	0.076	U	0.095	0.076	0.026
606-20-2	2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.095	U	0.10	0.095	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.082
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055
99-99-0	4-Nitrotoluene	0.38	U M	0.39	0.38	0.095
2691-41-0	HMX	0.19	U	0.20	0.19	0.084
5755-27-1	MNX	0.38	U M	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.087
121-82-4	RDX	0.19	U	0.20	0.19	0.049
479-45-8	Tetryl	0.095	U	0.10	0.095	0.030

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\20210527-101842.b\05270031.D
Lims ID: 280-148902-A-4-A
Client ID: NW071-21A
Sample Type: Client
Inject. Date: 27-May-2021 22:49:31 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-4-A
Misc. Info.: 280-0101842-031
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:36 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: 28-May-2021 12:44:52

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.617			ND	
	6 MNX	1		7.232			ND	U
	7 RDX	1		7.604			ND	
$	9 1,2-Dinitrobenzene	1	8.539	8.544	-0.005	24362	0.1900	M
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	7
	16 2,4,6-Trinitrotoluene	1		10.964			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.184			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.437			ND	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	U
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

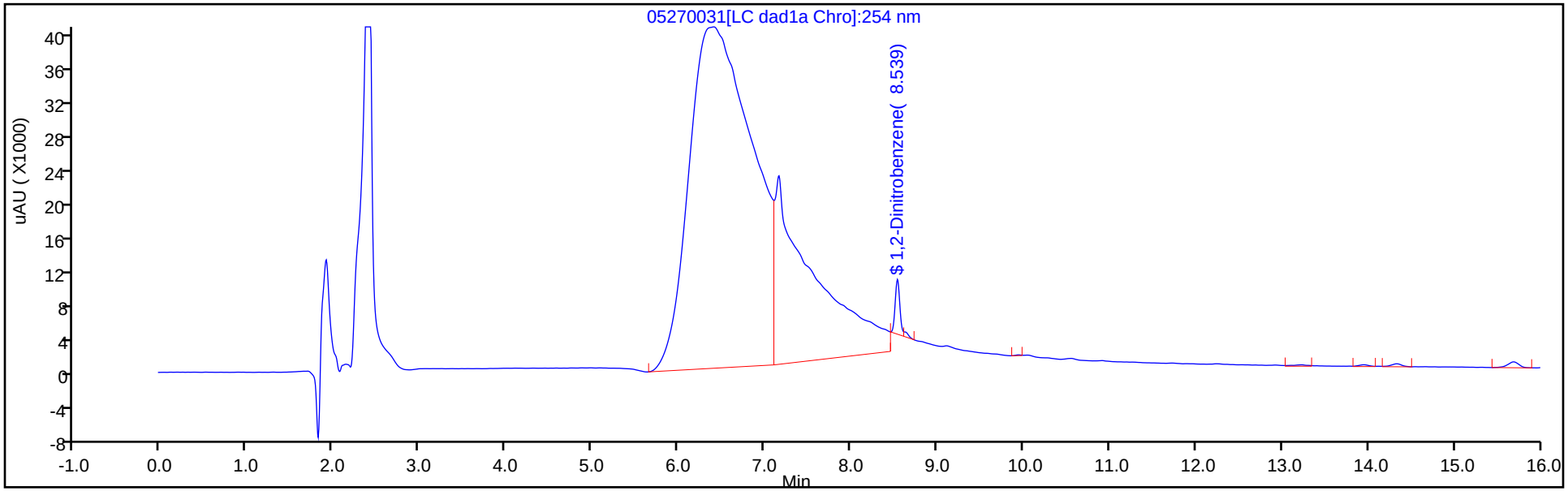
Report Date: 28-May-2021 14:38:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

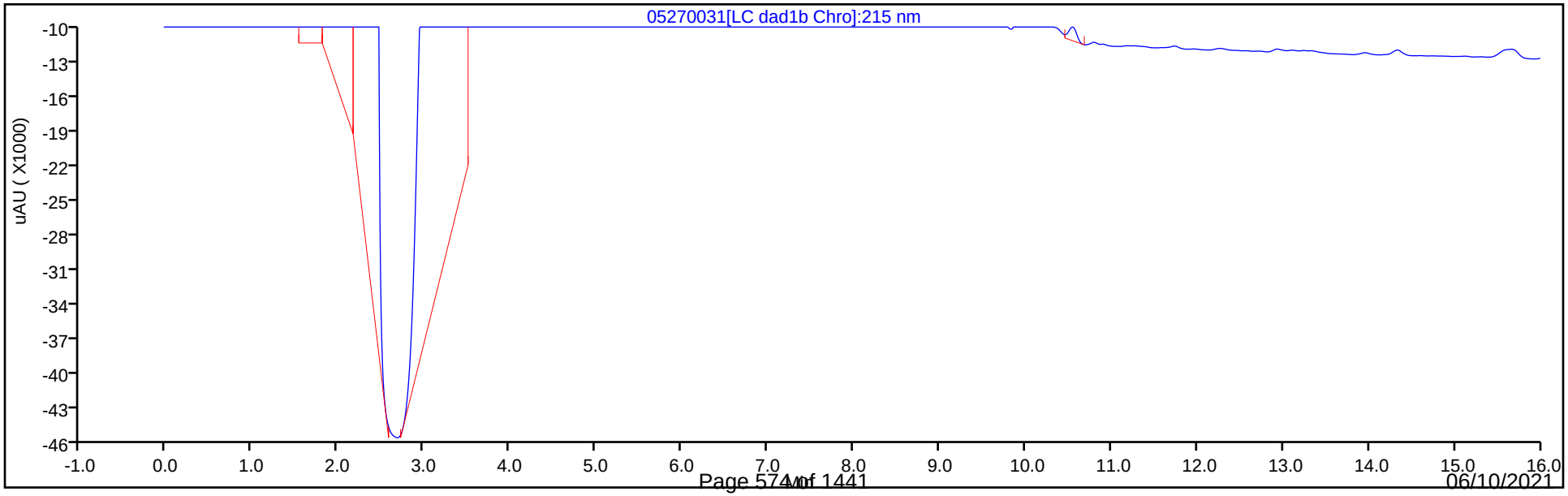
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270031.d

Injection Date:	27-May-2021 22:49:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-A-4-A	Lab Sample ID:	280-148902-4	Worklist Smp#:	31
Client ID:	NW071-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270031.D				
Lims ID:	280-148902-A-4-A				
Client ID:	NW071-21A				
Sample Type:	Client				
Inject. Date:	27-May-2021 22:49:31	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-4-A				
Misc. Info.:	280-0101842-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:36	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: 28-May-2021 12:44:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1900	95.00

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

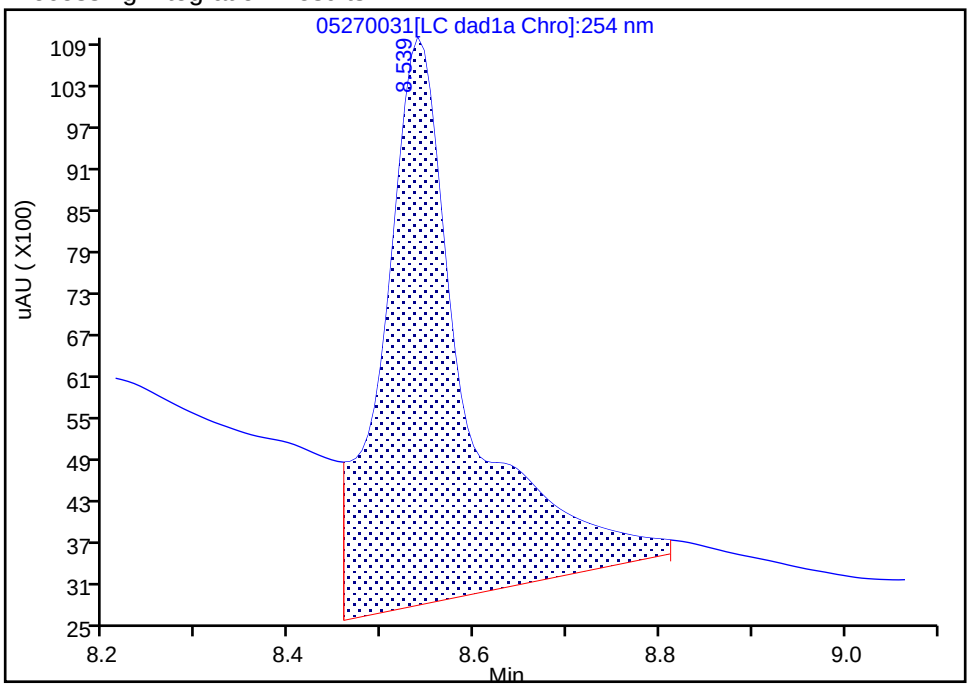
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270031.d				
Injection Date:	27-May-2021 22:49:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-4-A	Lab Sample ID:	280-148902-4		
Client ID:	NW071-21A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

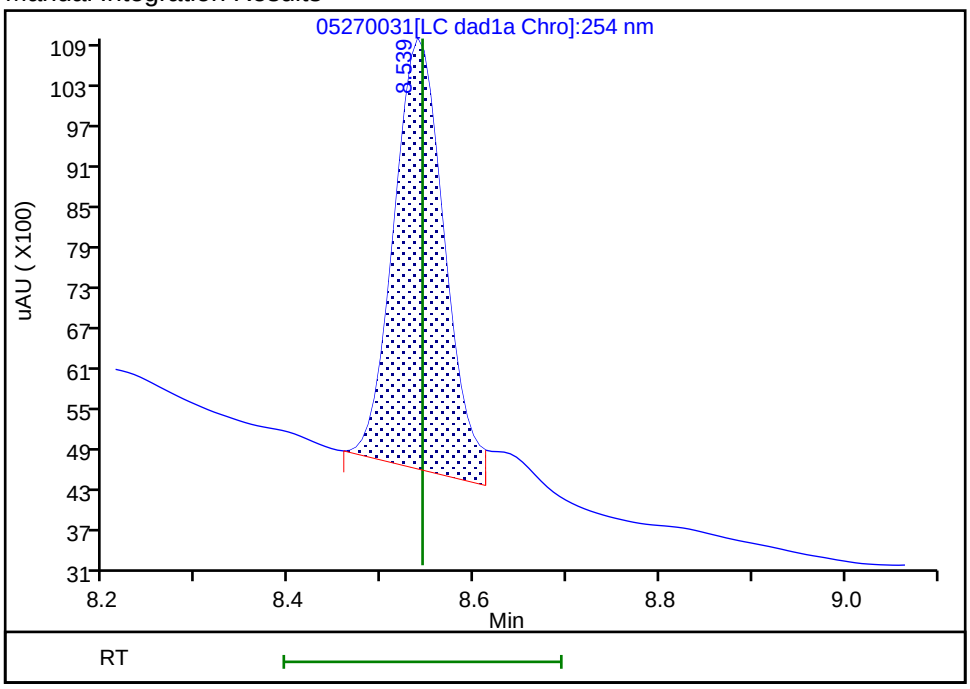
Processing Integration Results

RT: 8.54
Area: 52201
Amount: 0.407129
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 24362
Amount: 0.190006
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:44:50

Audit Action: Split an Integrated Peak Audit Reason: Baseline

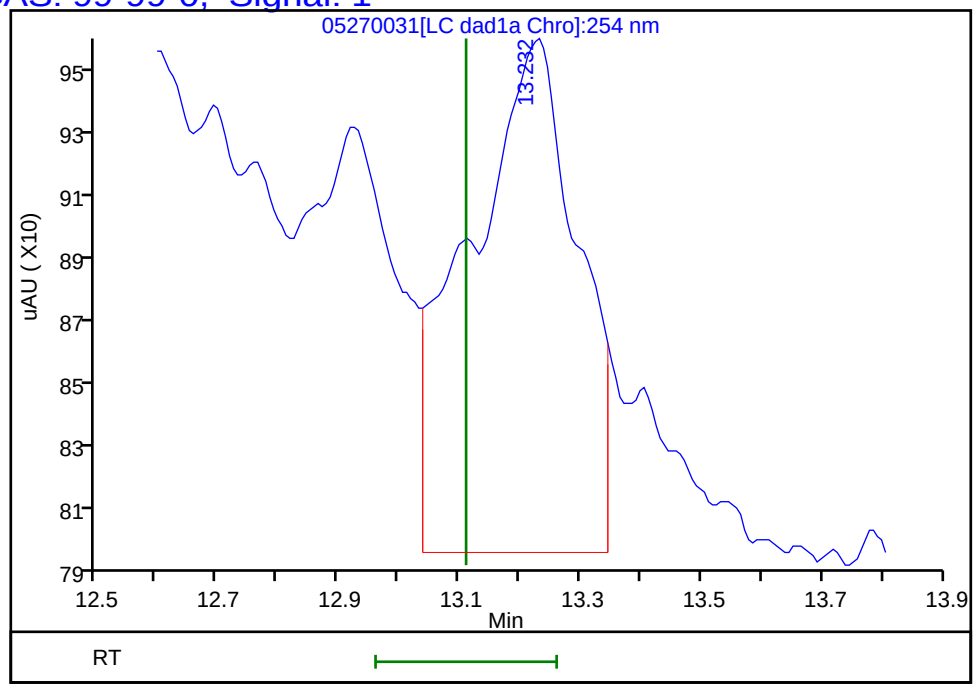
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270031.d				
Injection Date:	27-May-2021 22:49:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-4-A	Lab Sample ID:	280-148902-4		
Client ID:	NW071-21A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.23
Response: 2021
Amount: 0.018059



Reviewer: zhangji, 28-May-2021 12:44:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

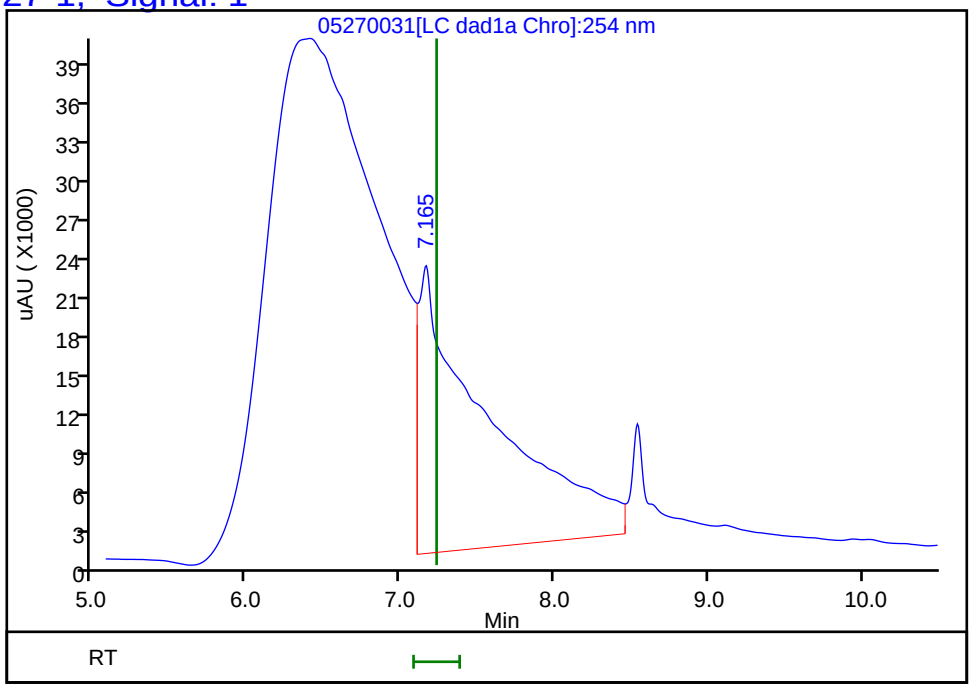
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270031.d				
Injection Date:	27-May-2021 22:49:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-4-A	Lab Sample ID:	280-148902-4		
Client ID:	NW071-21A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.17
Response: 698524
Amount: 5.359231



Reviewer: zhangji, 28-May-2021 12:44:52
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.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A Lab Sample ID: 280-148902-5

Matrix: Water Lab File ID: 05270034.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 526.5(mL) Date Analyzed: 05/27/2021 23:58

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080
99-65-0	1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035
118-96-7	2,4,6-Trinitrotoluene	0.095	U	0.10	0.095	0.043
121-14-2	2,4-Dinitrotoluene	0.076	U	0.095	0.076	0.026
606-20-2	2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.095	U J1	0.10	0.095	0.048
88-72-2	2-Nitrotoluene	0.19	U J1	0.20	0.19	0.081
99-08-1	3-Nitrotoluene	0.38	U J1	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055
2691-41-0	HMX	0.19	U	0.20	0.19	0.083
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U M	0.20	0.19	0.086
121-82-4	RDX	0.19	U M	0.20	0.19	0.049
479-45-8	Tetryl	0.095	U	0.10	0.095	0.030

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\20210527-101842.b\05270034.D
Lims ID: 280-148902-B-5-A
Client ID: G0070-21A
Sample Type: Client
Inject. Date: 27-May-2021 23:58:30 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-5-A
Misc. Info.: 280-0101842-034
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:45:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	26 Triamine Trinitrobenzene	1		2.474			ND	
	1 2,6-diamino-4-nitrotoluene	1		6.366			ND	U
	2 TNX	1		6.499			ND	U
	3 HMX	1		6.617			ND	
	4 2,4-diamino-6-nitrotoluene	1		6.678			ND	
	5 DNX	1		6.819			ND	
	6 MNX	1		7.232			ND	
	7 RDX	1		7.604			ND	U
	8 2,4,6-Trinitrophenol	1	7.992	7.977	0.015	16069	0.1943	
$	9 1,2-Dinitrobenzene	1	8.539	8.544	-0.005	25120	0.1959	
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	
	12 Nitrobenzene	1		9.697			ND	U
	13 3,5-Dinitroaniline	1		9.892			ND	
	14 Tetryl	1		10.037			ND	
	15 Nitroglycerin	2		10.497			ND	
	16 2,4,6-Trinitrotoluene	1		10.964			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.184			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.437			ND	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1	13.112	13.110	0.002	1159	0.0104	M
	23 m-Nitrotoluene	1		13.710			ND	
	24 PETN	2		14.844			ND	
	25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

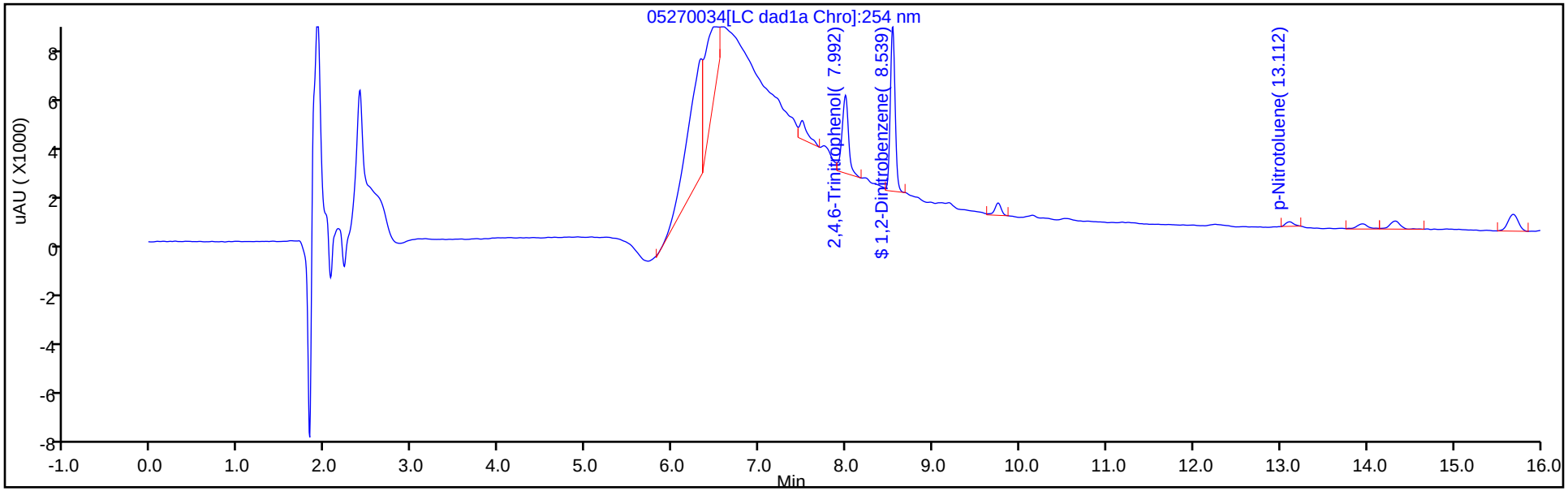
Report Date: 28-May-2021 14:38:42 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

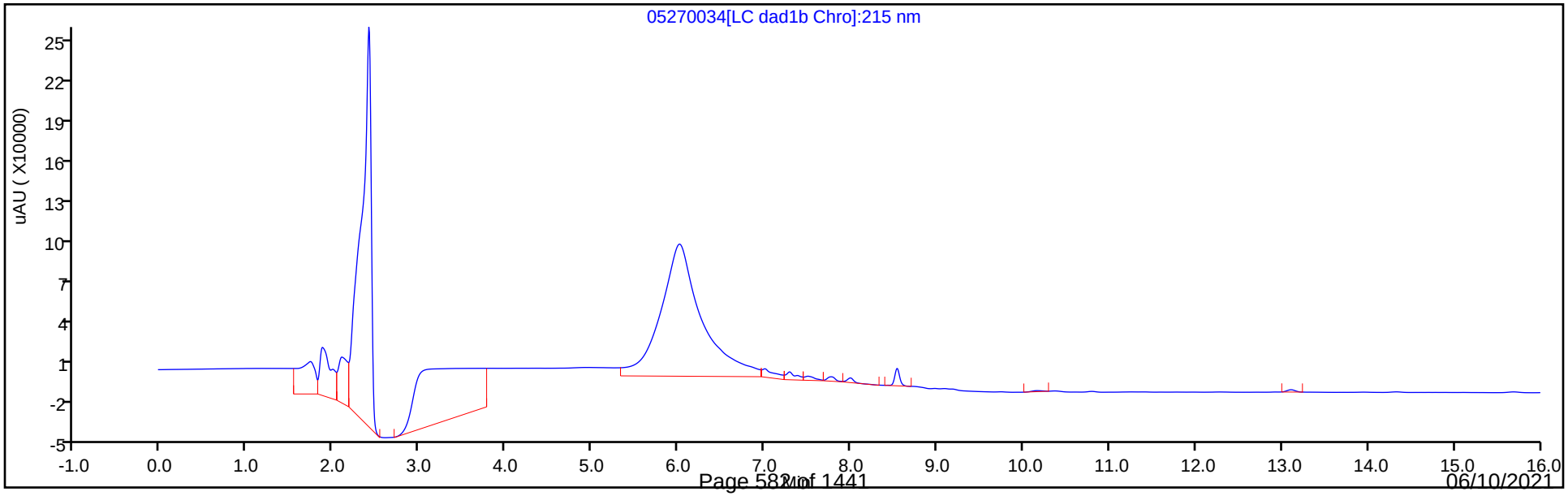
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270034.d

Injection Date:	27-May-2021 23:58:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-5-A	Lab Sample ID:	280-148902-5	Worklist Smp#:	34
Client ID:	G0070-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270034.D				
Lims ID:	280-148902-B-5-A				
Client ID:	G0070-21A				
Sample Type:	Client				
Inject. Date:	27-May-2021 23:58:30	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-5-A				
Misc. Info.:	280-0101842-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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:	28-May-2021 12:45:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1959	97.96

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

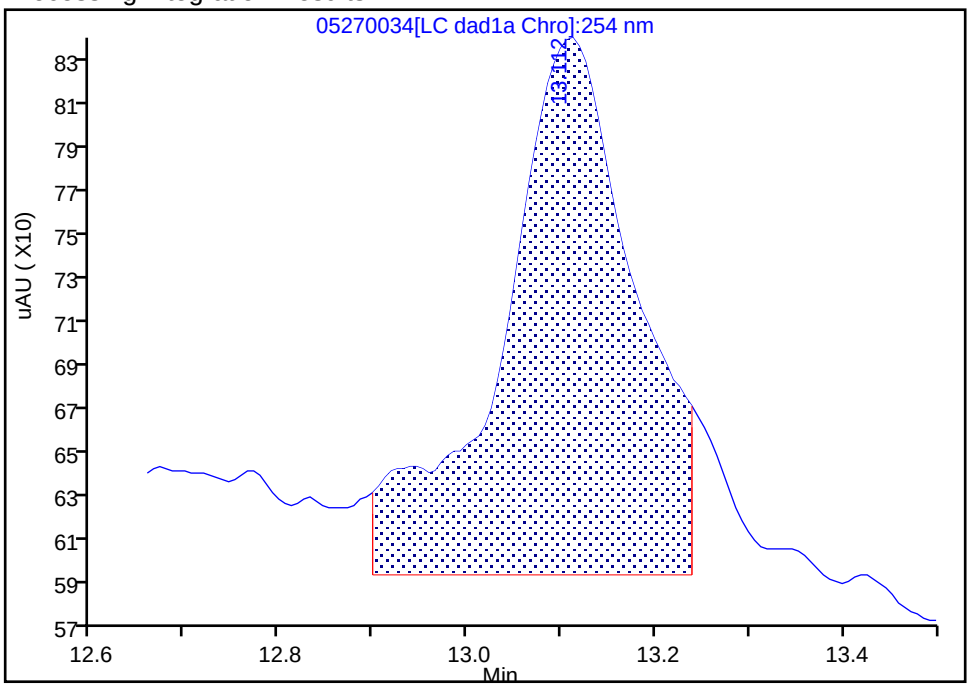
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270034.d				
Injection Date:	27-May-2021 23:58:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-5-A	Lab Sample ID:	280-148902-5		
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

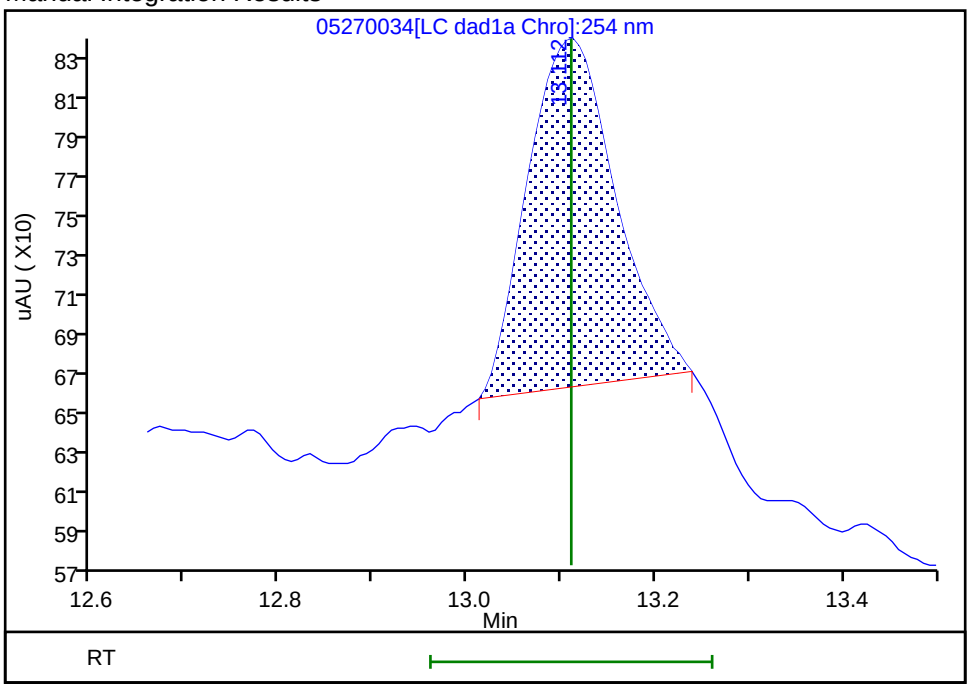
Processing Integration Results

RT: 13.11
Area: 2473
Amount: 0.022098
Amount Units: ug/mL



Manual Integration Results

RT: 13.11
Area: 1159
Amount: 0.010356
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:45:30

Audit Action: Manually Integrated Audit Reason: Baseline

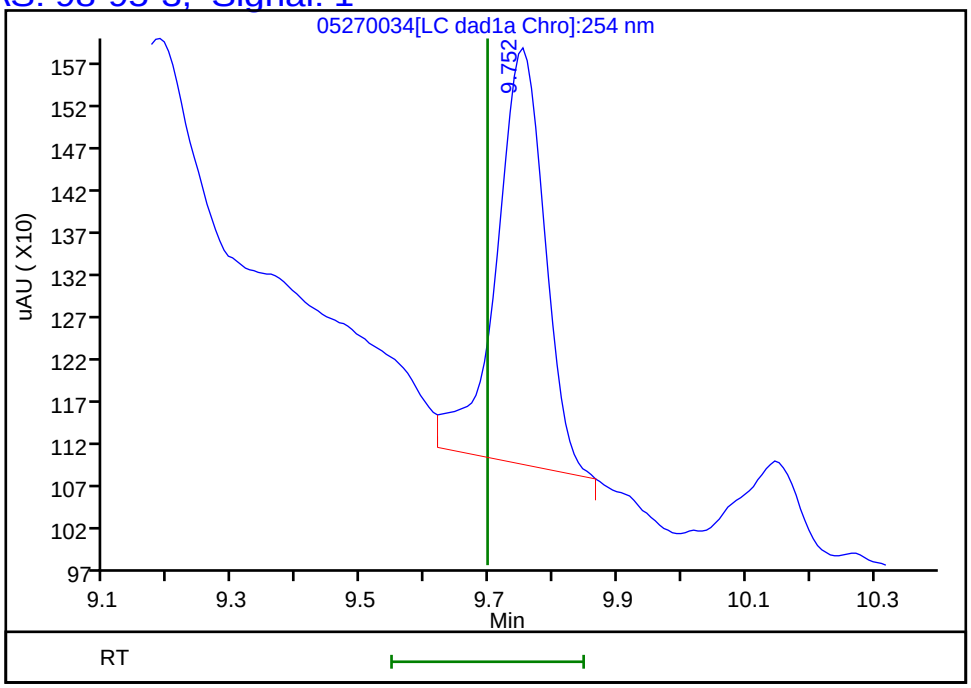
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270034.d				
Injection Date:	27-May-2021 23:58:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-5-A	Lab Sample ID:	280-148902-5		
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.75
Response: 2572
Amount: 0.013170



Reviewer: zhangji, 28-May-2021 12:45:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

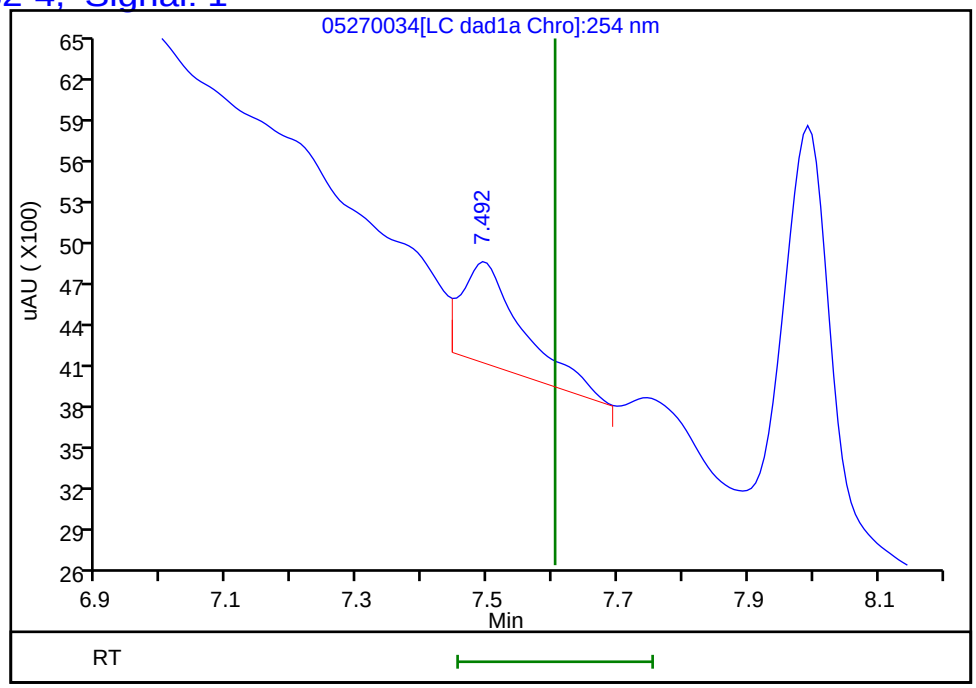
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270034.d				
Injection Date:	27-May-2021 23:58:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-5-A	Lab Sample ID:	280-148902-5		
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.49
Response: 4896
Amount: 0.046075



Reviewer: zhangji, 28-May-2021 12:45:32
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.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A Lab Sample ID: 280-148902-5

Matrix: Water Lab File ID: 051-2101.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 526.5(mL) Date Analyzed: 05/30/2021 00:20

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.: 537964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	0.38	U J1	0.39	0.38	0.095

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\051-2101.D
Lims ID: 280-148902-B-5-A
Client ID: G0070-21A
Sample Type: Client
Inject. Date: 30-May-2021 00:20:39 ALS Bottle#: 51 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-5-A
Misc. Info.: 280-0101890-018
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:24 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: CTX1661

First Level Reviewer: zhangji Date: 02-Jun-2021 19:43:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1		4.114			ND	
	2 2,4-diamino-6-nitrotoluene	1		4.634			ND	
	3 TNX	1		5.057			ND	
	4 DNX	1		5.884			ND	
	6 HMX	1		6.694			ND	
	7 MNX	1		7.424			ND	
	5 2,4,6-Trinitrophenol	1		7.908			ND	
	8 RDX	1		8.868			ND	
	9 Nitrobenzene	1		11.921			ND	7
$	10 1,2-Dinitrobenzene	1	12.924	13.021	-0.097	48261	0.1817	
	11 3,5-Dinitroaniline	1		14.887			ND	U
	12 1,3-Dinitrobenzene	1		15.447			ND	
	13 Nitroglycerin	2		15.861			ND	
	14 o-Nitrotoluene	1	16.610	16.687	-0.077	2822	0.0113	
	26 Triamine Trinitrobenzene	1		16.852			ND	
	15 p-Nitrotoluene	1		16.974			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.427			ND	
	17 m-Nitrotoluene	1		17.947			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.230	18.327	-0.097	8281	0.0180	
	19 1,3,5-Trinitrobenzene	1		18.854			ND	
	20 2,6-Dinitrotoluene	1		20.101			ND	
	21 2,4-Dinitrotoluene	1		20.568			ND	
	22 Tetryl	1		24.194			ND	
	23 2,4,6-Trinitrotoluene	1		25.174			ND	
	24 PETN	2		26.101			ND	
	25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

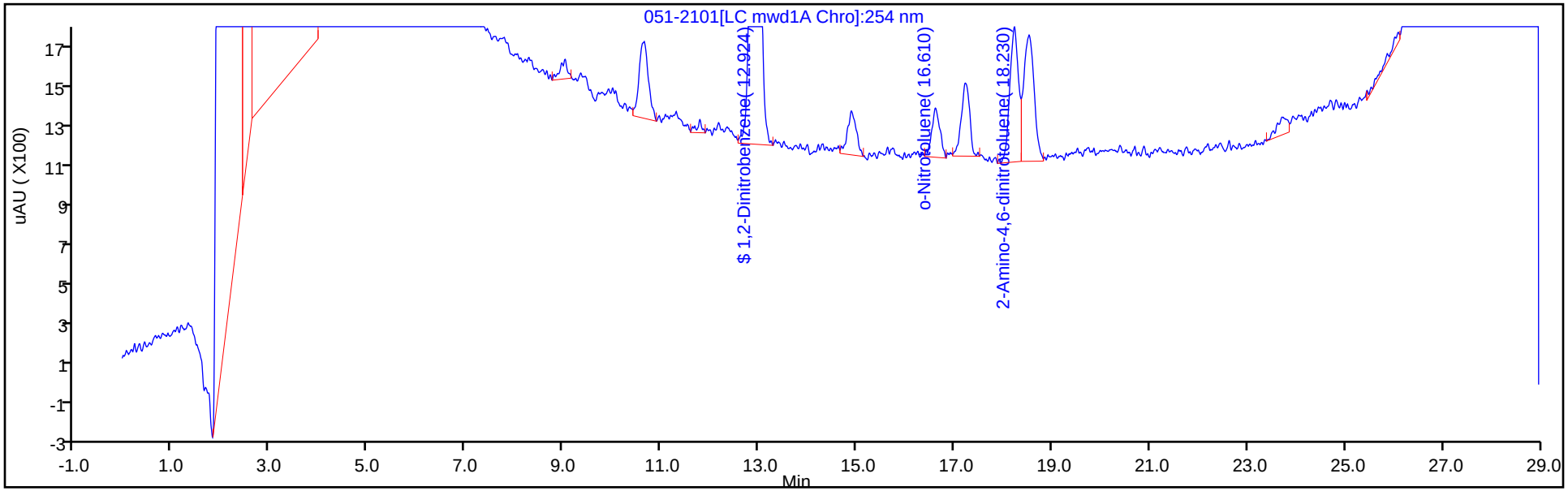
Report Date: 02-Jun-2021 19:44:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

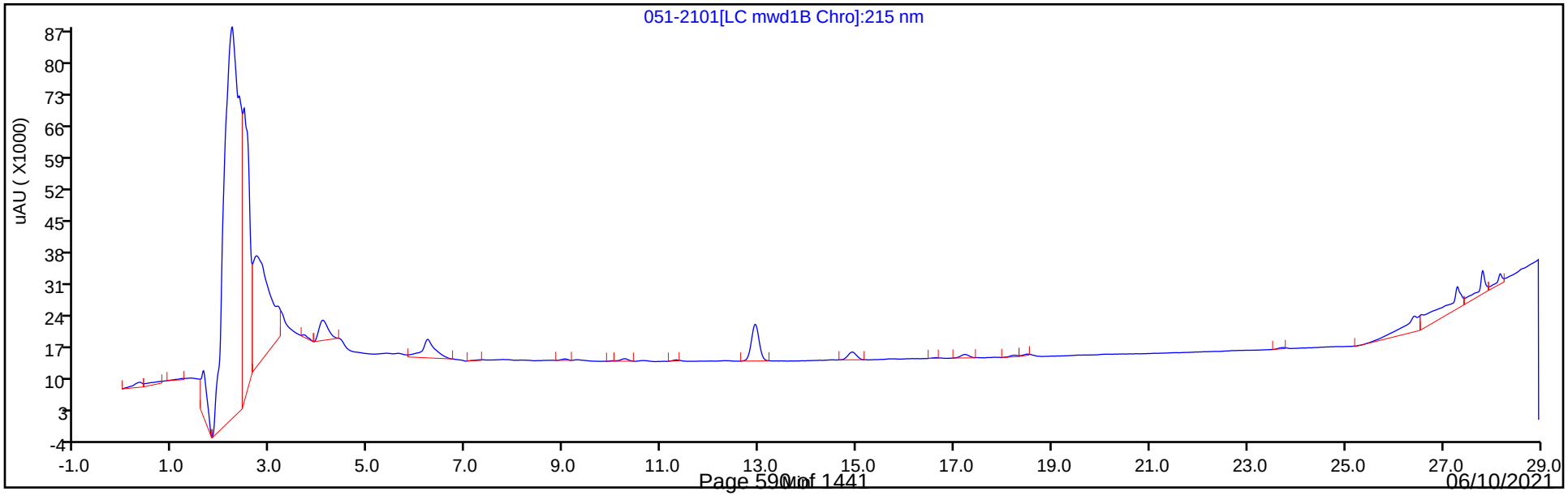
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\051-2101.D

Injection Date:	30-May-2021 00:20:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-B-5-A	Lab Sample ID:		Worklist Smp#:	65
Client ID:	G0070-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
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\20210528-101890.b\051-2101.D
Lims ID: 280-148902-B-5-A
Client ID: G0070-21A
Sample Type: Client
Inject. Date: 30-May-2021 00:20:39 ALS Bottle#: 51 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-5-A
Misc. Info.: 280-0101890-018
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:24 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: CTX1661

First Level Reviewer: zhangji Date: 02-Jun-2021 19:43:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1817	90.83

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0089-21A Lab Sample ID: 280-148902-6

Matrix: Water Lab File ID: 05270039.D

Analysis Method: 8330A Date Collected: 05/20/2021 13:20

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 420.5(mL) Date Analyzed: 05/28/2021 01:53

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.1	M	0.25	0.24	0.10
118-96-7	2,4,6-Trinitrotoluene	2.3		0.13	0.12	0.054
121-14-2	2,4-Dinitrotoluene	0.095	U M	0.12	0.095	0.033
606-20-2	2,6-Dinitrotoluene	0.095	U	0.12	0.095	0.048
35572-78-2	2-Amino-4,6-dinitrotoluene	0.85		0.13	0.12	0.060
88-72-2	2-Nitrotoluene	0.24	U	0.25	0.24	0.10
99-08-1	3-Nitrotoluene	0.48	U	0.48	0.48	0.23
19406-51-0	4-Amino-2,6-dinitrotoluene	1.1		0.18	0.14	0.069
99-99-0	4-Nitrotoluene	0.48	U M	0.49	0.48	0.12
2691-41-0	HMX	0.24	U	0.25	0.24	0.10
5755-27-1	MNX	0.48	U M	2.4	0.48	0.18
98-95-3	Nitrobenzene	0.24	U	0.25	0.24	0.11
121-82-4	RDX	0.23	J M	0.25	0.24	0.061
479-45-8	Tetryl	0.12	U M	0.13	0.12	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270039.D
Lims ID: 280-148902-A-6-A
Client ID: G0089-21A
Sample Type: Client
Inject. Date: 28-May-2021 01:53:23 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-6-A
Misc. Info.: 280-0101842-039
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:47:29

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.617			ND	
	6 MNX	1		7.232			ND	U
	7 RDX	1	7.585	7.604	-0.019	2061	0.0194	M
$	9 1,2-Dinitrobenzene	1	8.532	8.544	-0.012	24038	0.1875	M
	10 1,3,5-Trinitrobenzene	1	8.652	8.670	-0.018	57915	0.2629	M
	11 1,3-Dinitrobenzene	1	9.318	9.304	0.014	1680	0.005669	M
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	U
	16 2,4,6-Trinitrotoluene	1	10.951	10.964	-0.013	39163	0.1901	
	17 4-Amino-2,6-dinitrotoluene	1	11.165	11.184	-0.019	13781	0.0902	
	18 2-Amino-4,6-dinitrotoluene	1	11.425	11.437	-0.012	14744	0.0713	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	U
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	U
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

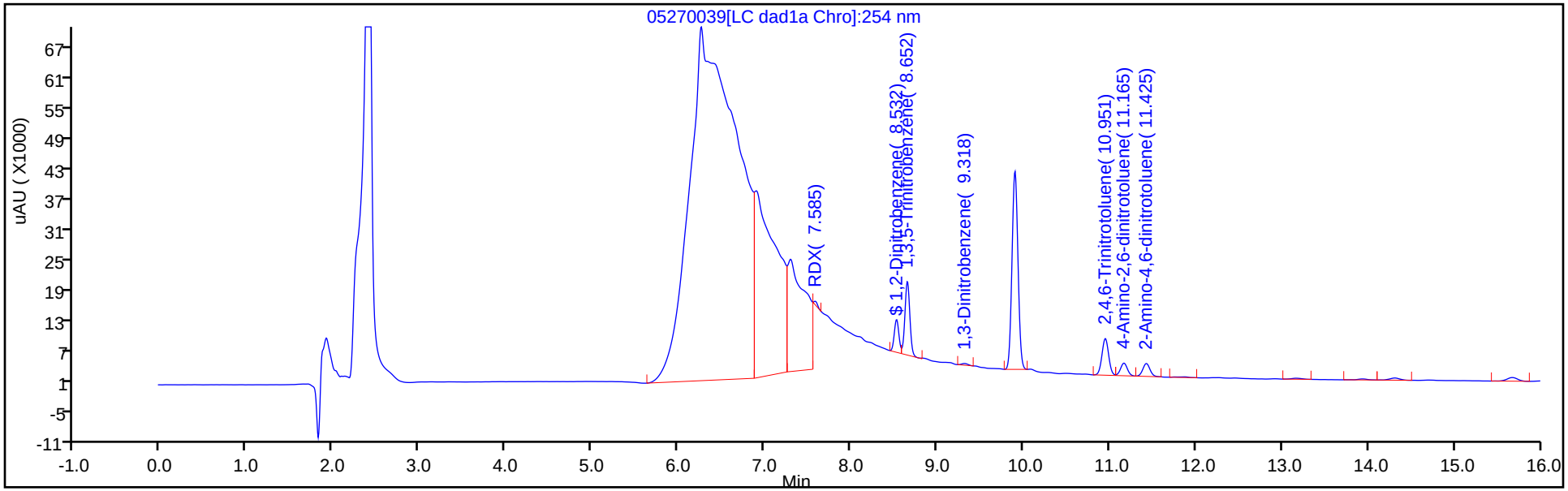
Report Date: 28-May-2021 14:38:44 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

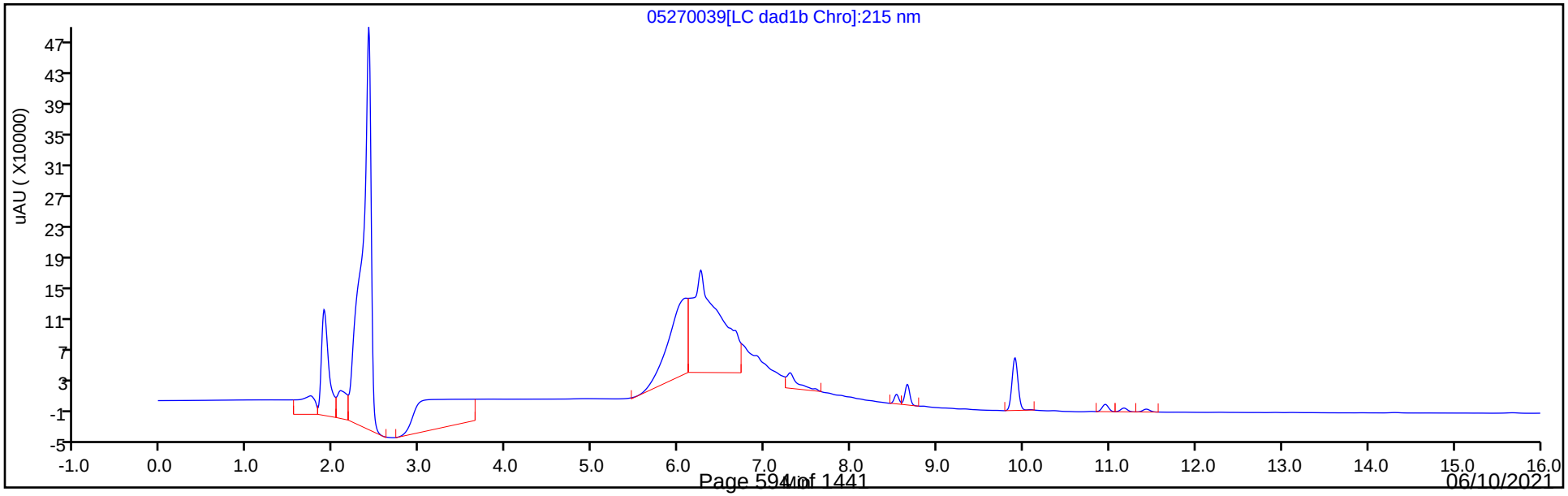
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d

Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6	Worklist Smp#:	39
Client ID:	G0089-21A				
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\20210527-101842.b\05270039.D				
Lims ID:	280-148902-A-6-A				
Client ID:	G0089-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 01:53:23	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-6-A				
Misc. Info.:	280-0101842-039				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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: 28-May-2021 12:47:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1875	93.74

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

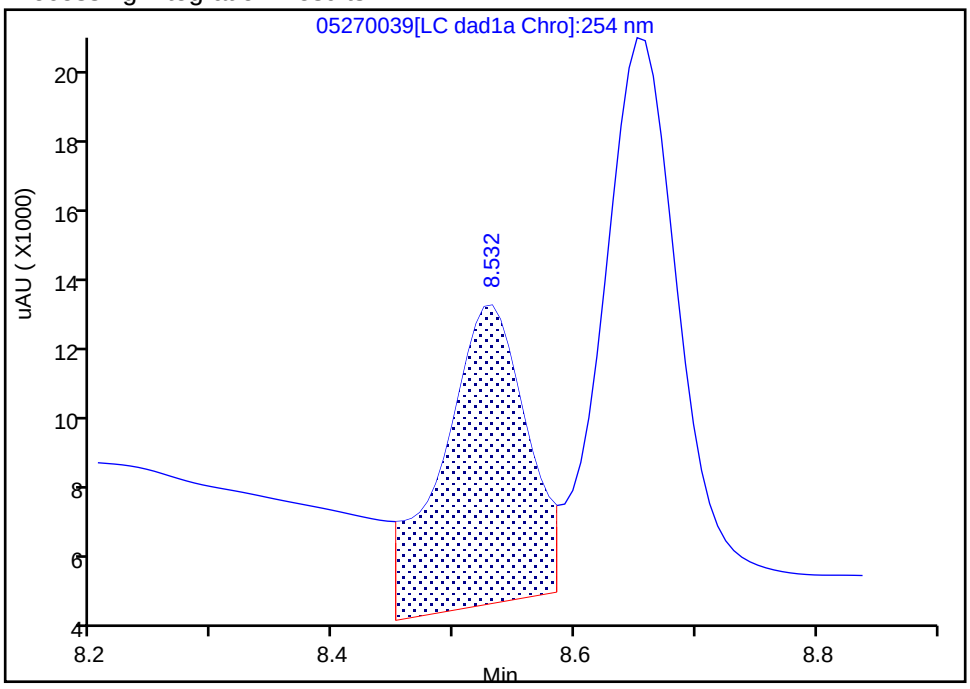
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

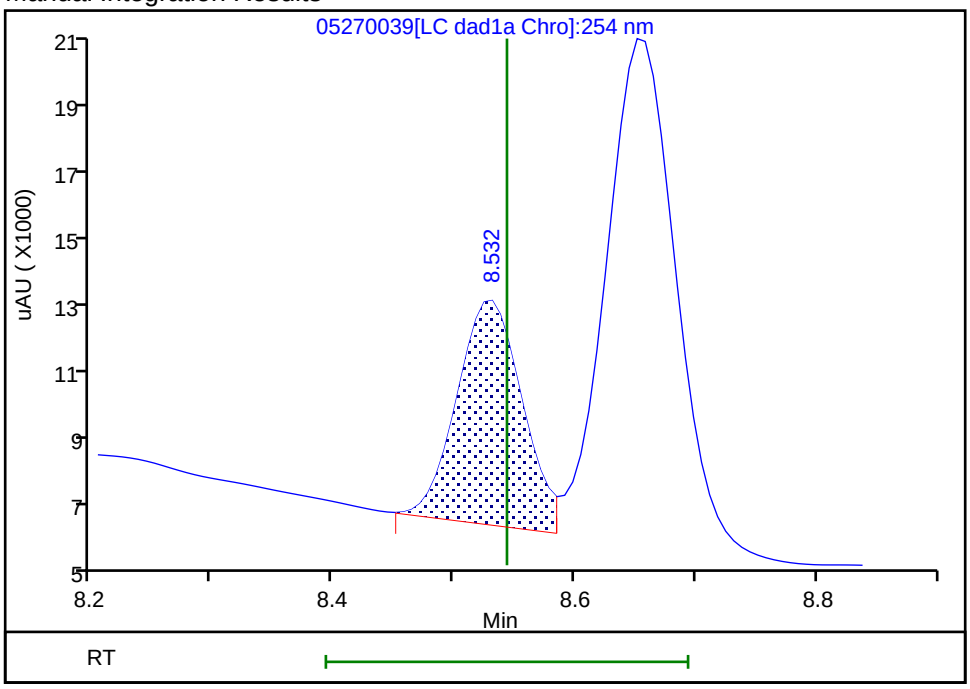
Processing Integration Results

RT: 8.53
Area: 40506
Amount: 0.315917
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24038
Amount: 0.187479
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:47:18
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

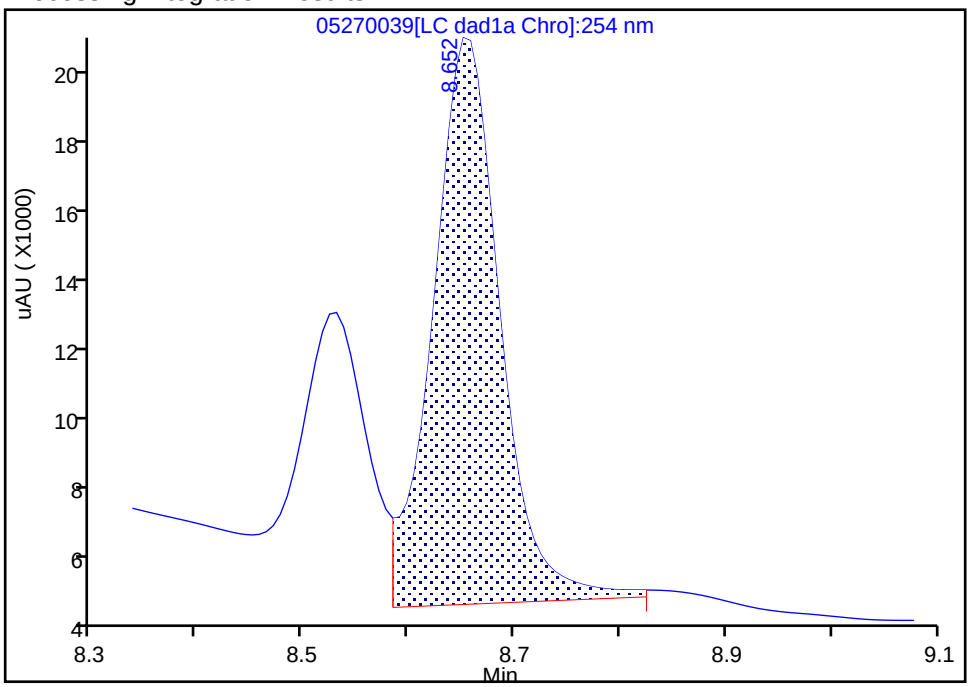
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

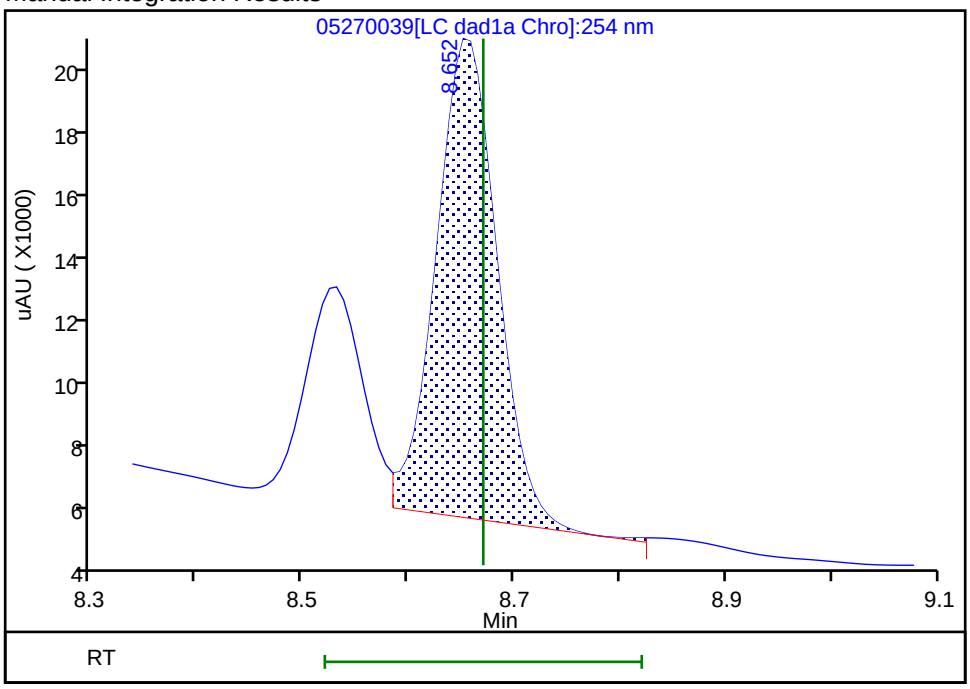
Processing Integration Results

RT: 8.65
Area: 68175
Amount: 0.309440
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 57915
Amount: 0.262871
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:47:18
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

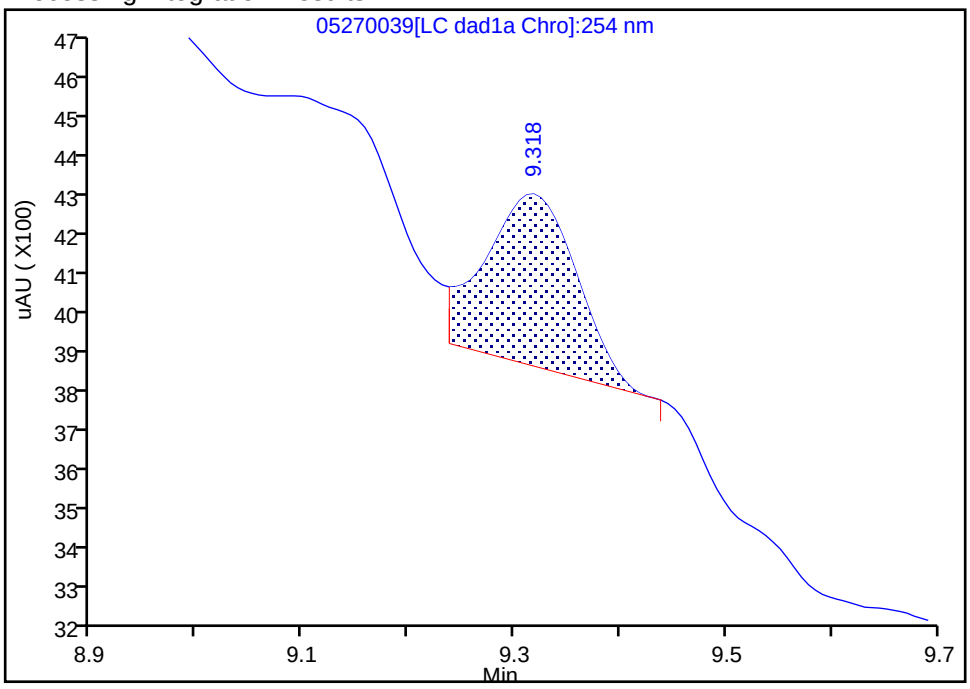
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

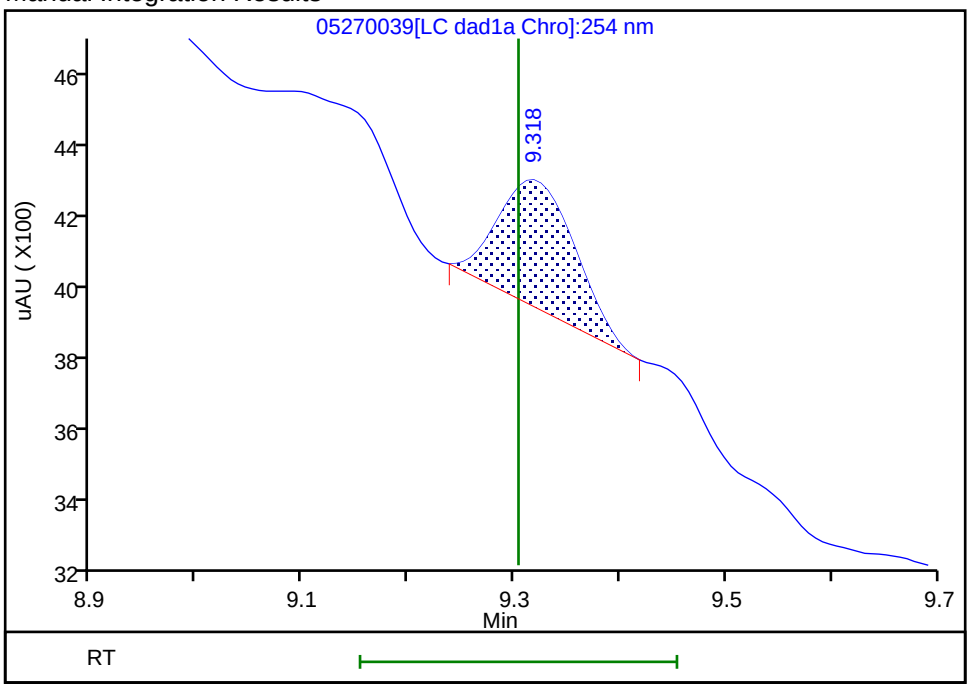
Processing Integration Results

RT: 9.32
Area: 2414
Amount: 0.008146
Amount Units: ug/mL



Manual Integration Results

RT: 9.32
Area: 1680
Amount: 0.005669
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:47:25
Audit Action: Manually Integrated Audit Reason: Baseline

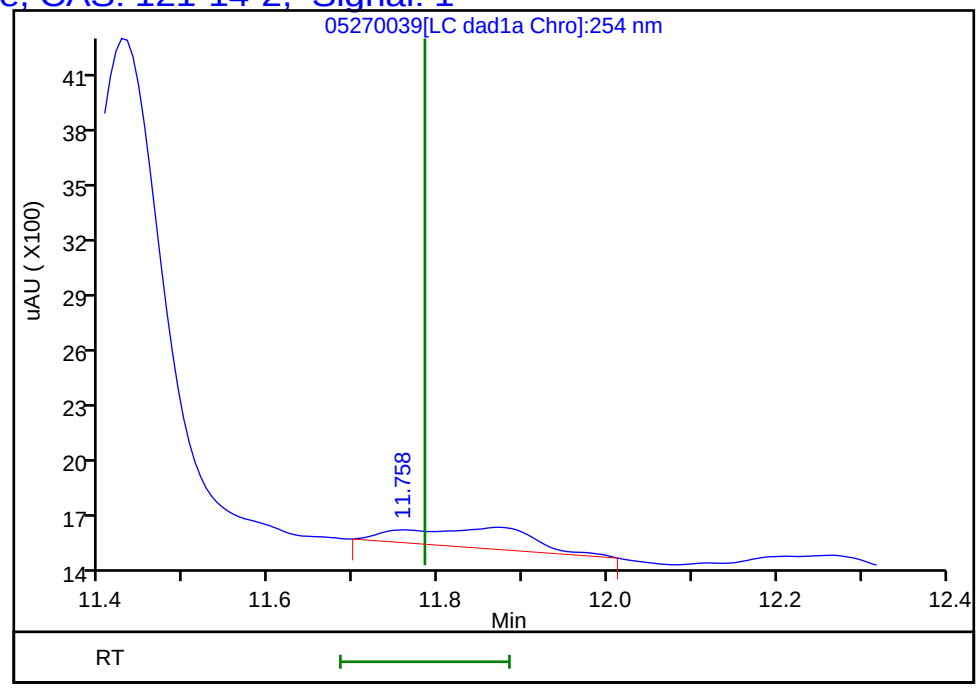
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
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		

20 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.76
Response: 1106
Amount: 0.003853



Reviewer: zhangji, 28-May-2021 12:47:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

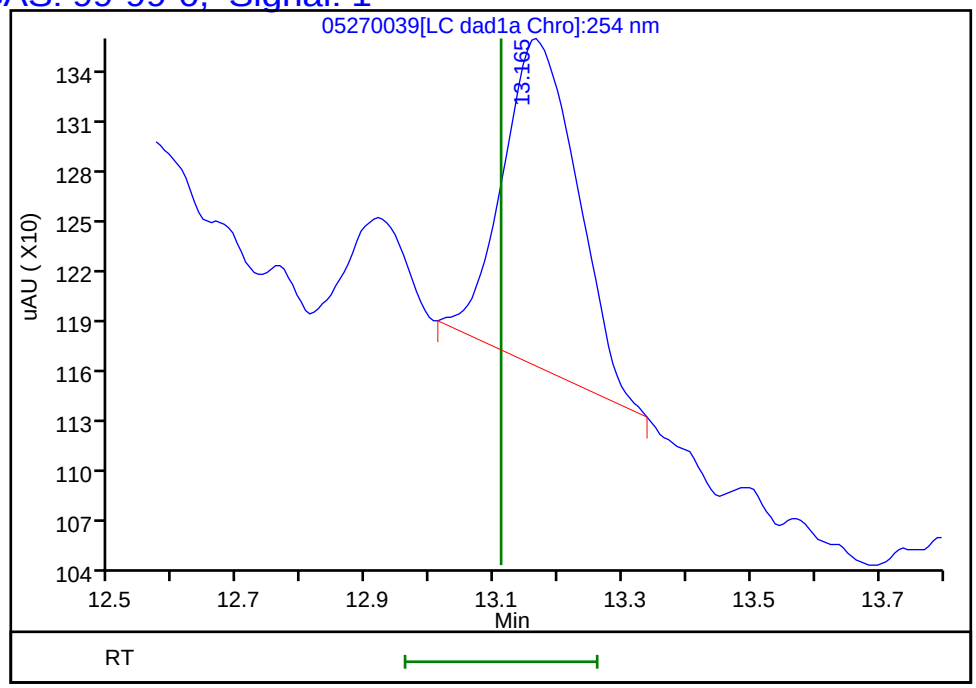
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.16
Response: 1554
Amount: 0.013886



Reviewer: zhangji, 28-May-2021 12:47:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

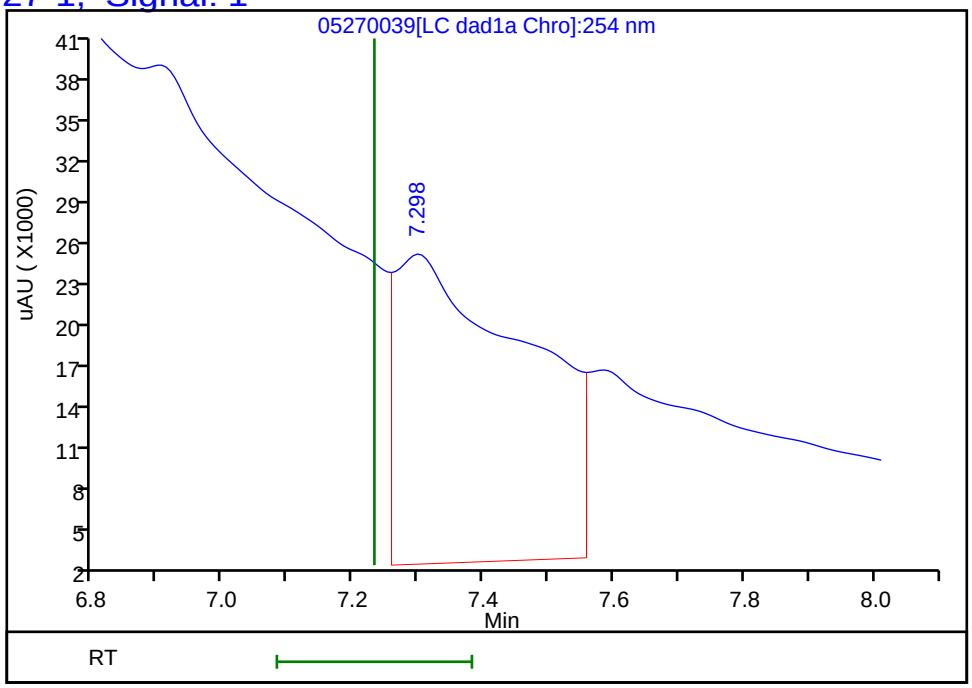
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
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		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 310370
Amount: 2.381228



Reviewer: zhangji, 28-May-2021 12:47:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

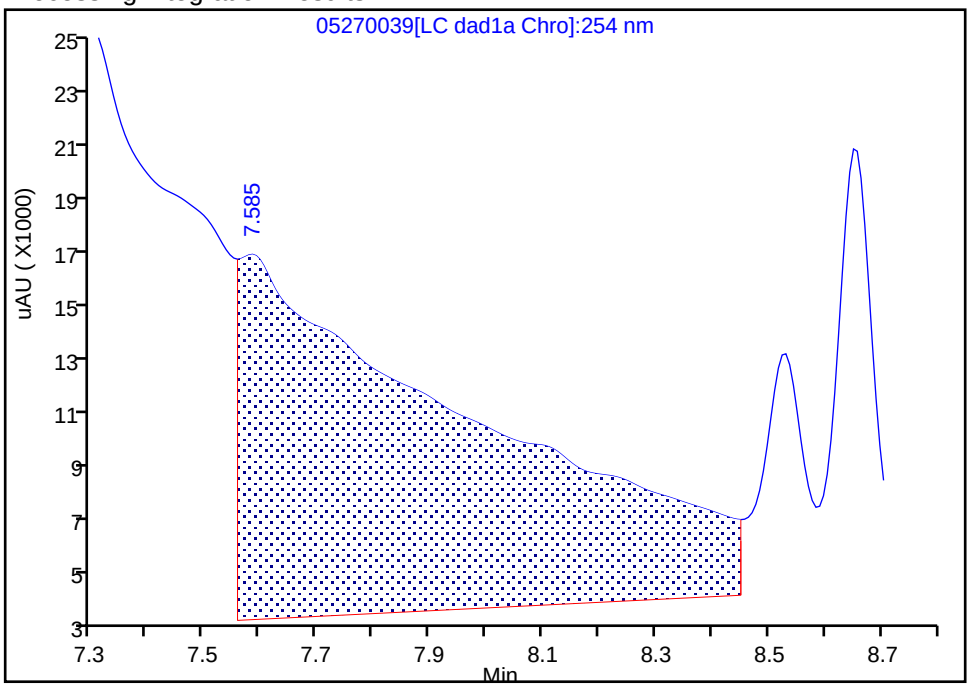
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

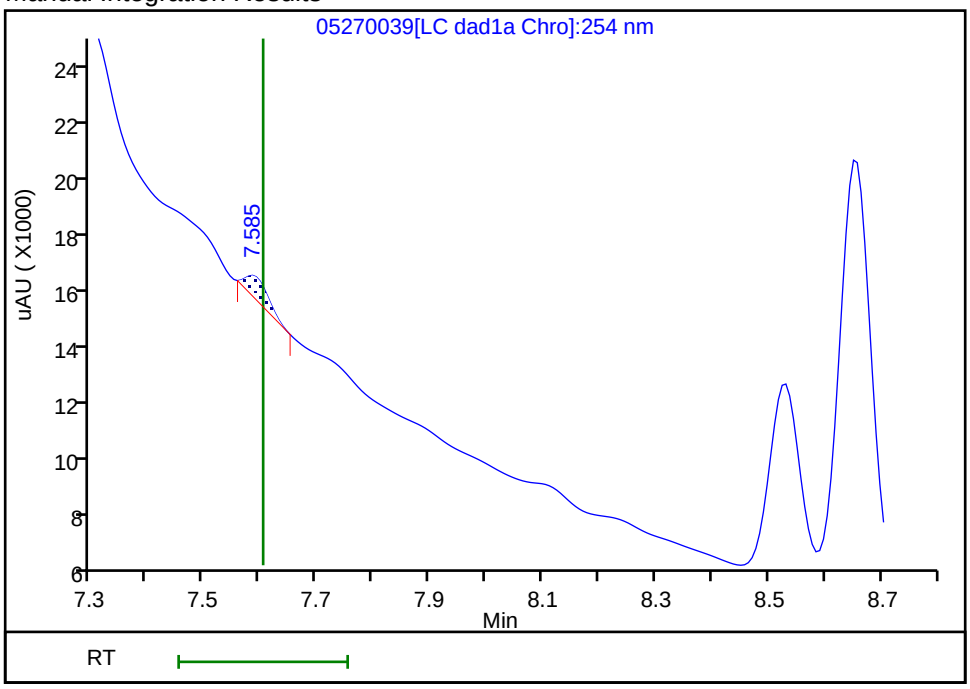
Processing Integration Results

RT: 7.58
Area: 378541
Amount: 3.562354
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 2061
Amount: 0.019396
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:47:10

Audit Action: Manually Integrated Audit Reason: Baseline

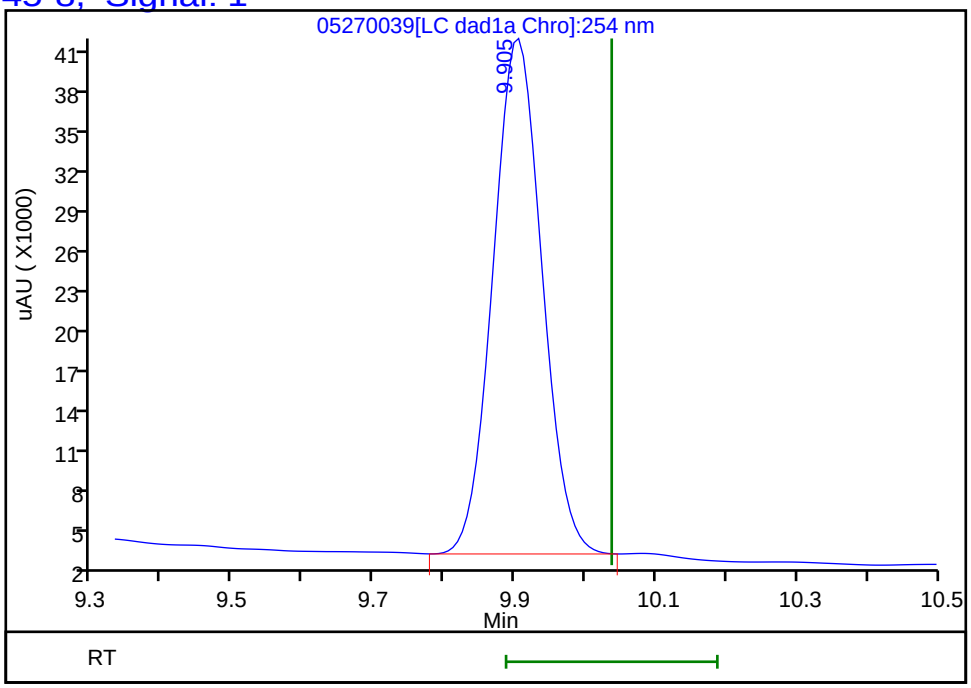
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270039.d				
Injection Date:	28-May-2021 01:53:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.90
Response: 188372
Amount: 1.092518



Reviewer: zhangji, 28-May-2021 12:47:29
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.: 280-148902-1

SDG No.:

Client Sample ID: G0089-21A Lab Sample ID: 280-148902-6

Matrix: Water Lab File ID: 05280023.D

Analysis Method: 8330A Date Collected: 05/20/2021 13:20

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 420.5(mL) Date Analyzed: 05/29/2021 02:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.12	U	0.13	0.12	0.044

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\20210528-101890.b\05280023.D
Lims ID: 280-148902-A-6-A
Client ID: G0089-21A
Sample Type: Client
Inject. Date: 29-May-2021 02:34:58 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-6-A
Misc. Info.: 280-0101890-023
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:27 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: CTX1653

First Level Reviewer: zhangji Date: 29-May-2021 15:23:19

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.659	6.694	-0.035	6234	0.0331	M
	7 MNX	1		7.424			ND	
	8 RDX	1	8.832	8.868	-0.036	5707	0.0279	M
	9 Nitrobenzene	1		11.921			ND	
$	10 1,2-Dinitrobenzene	1	13.005	13.021	-0.016	48951	0.1843	
	12 1,3-Dinitrobenzene	1		15.447			ND	
	14 o-Nitrotoluene	1		16.687			ND	U
	15 p-Nitrotoluene	1		16.974			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.398	17.427	-0.029	32717	0.1103	
	17 m-Nitrotoluene	1		17.947			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.318	18.327	-0.009	40343	0.1003	
	19 1,3,5-Trinitrobenzene	1	18.838	18.854	-0.016	117692	0.2803	
	20 2,6-Dinitrotoluene	1		20.101			ND	
	21 2,4-Dinitrotoluene	1		20.568			ND	
	22 Tetryl	1		24.194			ND	
	23 2,4,6-Trinitrotoluene	1	25.165	25.174	-0.009	73884	0.1946	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

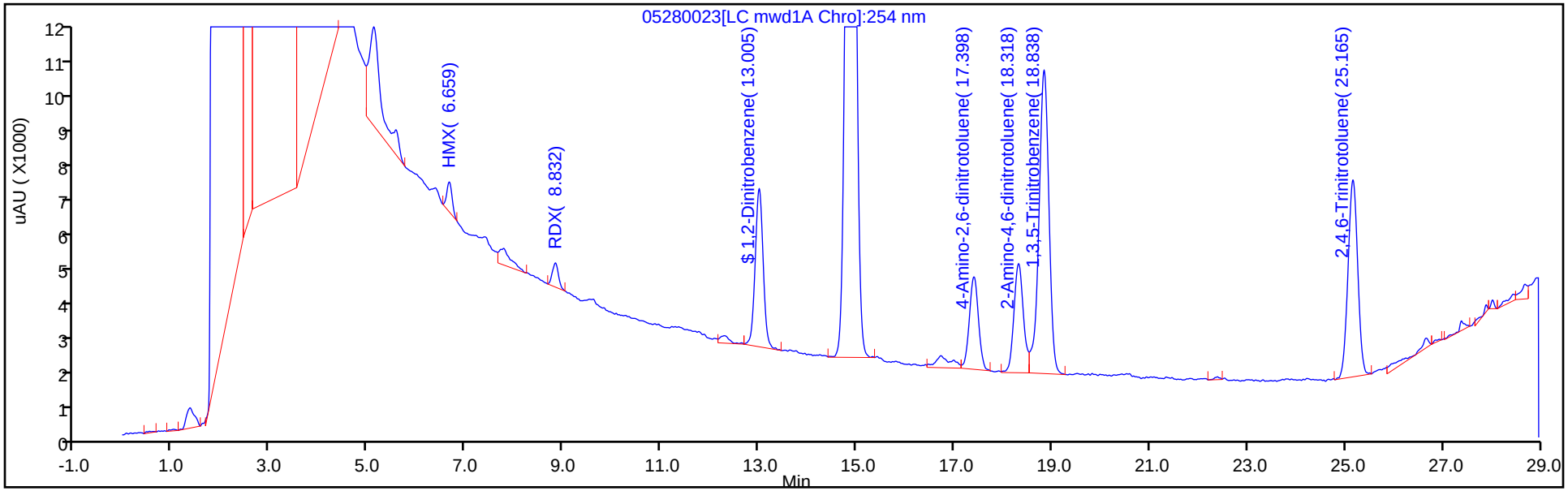
Report Date: 29-May-2021 15:25:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

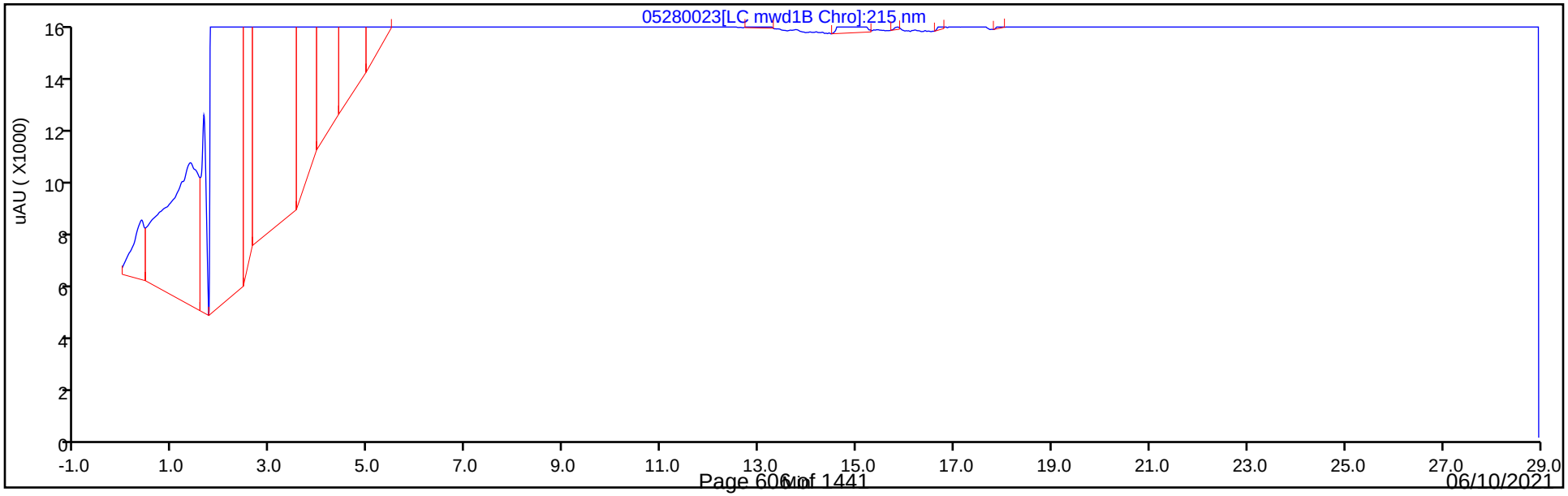
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280023.D

Injection Date:	29-May-2021 02:34:58	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6	Worklist Smp#:	23
Client ID:	G0089-21A				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280023.D				
Lims ID:	280-148902-A-6-A				
Client ID:	G0089-21A				
Sample Type:	Client				
Inject. Date:	29-May-2021 02:34:58	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-6-A				
Misc. Info.:	280-0101890-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:27	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:23:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1843	92.13

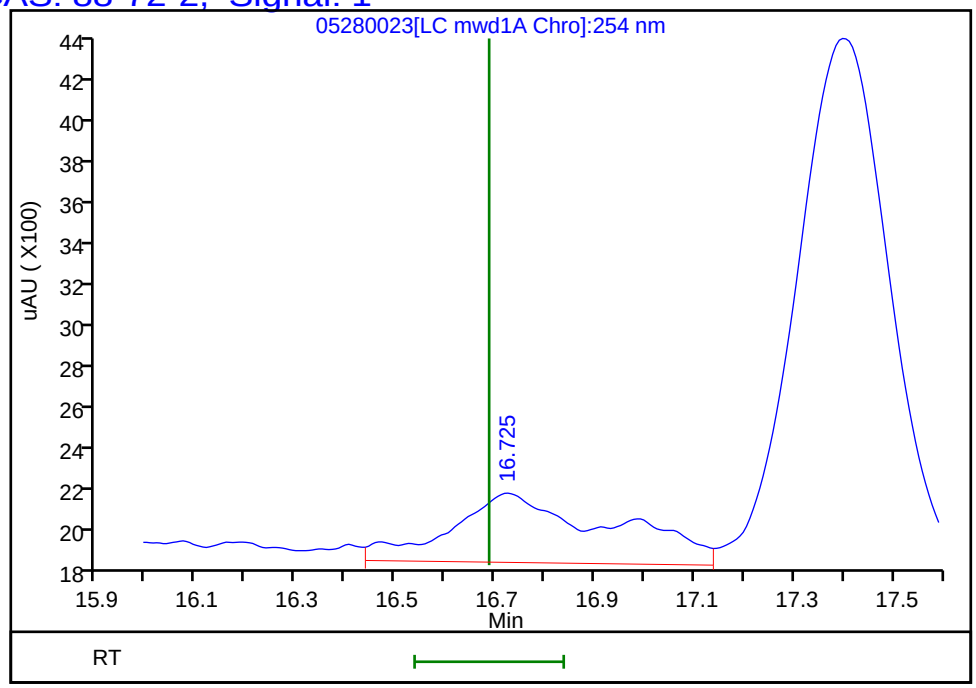
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280023.D				
Injection Date:	29-May-2021 02:34:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.73
Response: 7267
Amount: 0.029189



Reviewer: zhangji, 29-May-2021 15:23:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

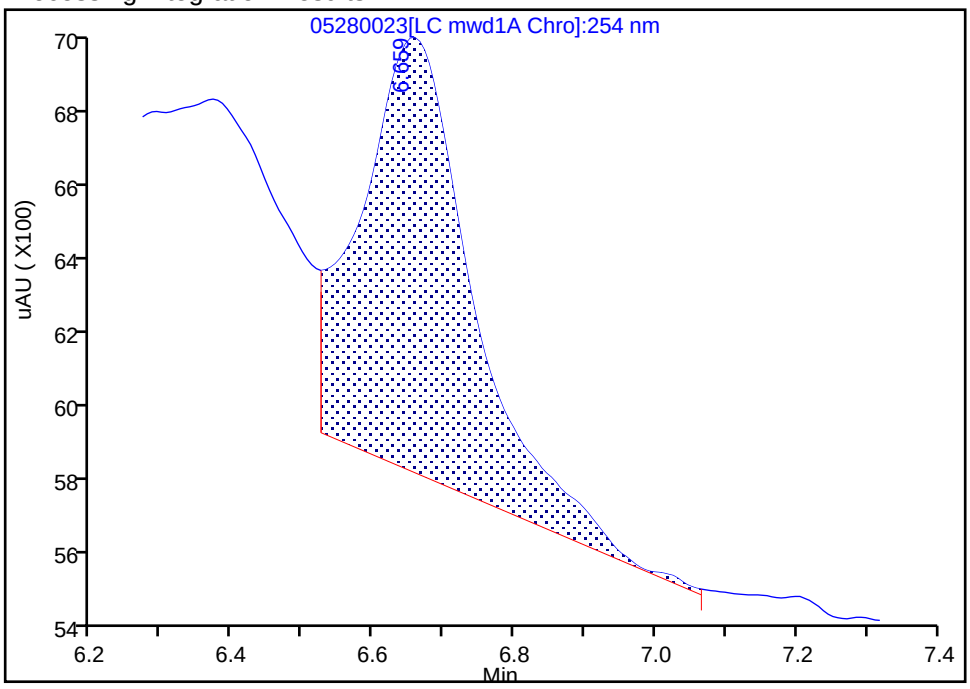
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280023.D				
Injection Date:	29-May-2021 02:34:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

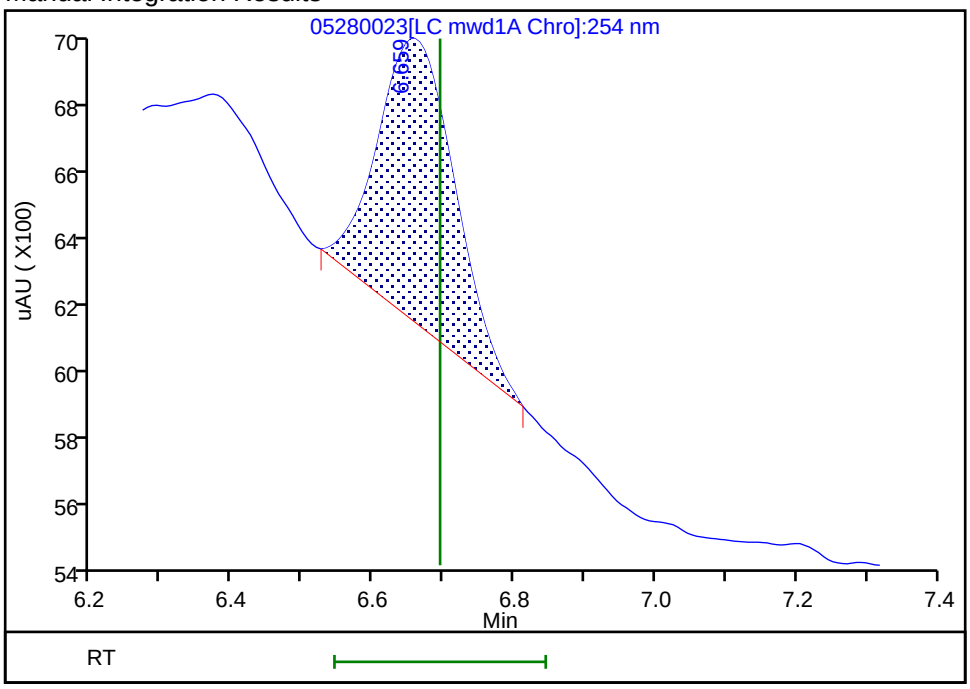
Processing Integration Results

RT: 6.66
Area: 12461
Amount: 0.072306
Amount Units: ug/ml



Manual Integration Results

RT: 6.66
Area: 6234
Amount: 0.033087
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:23:04

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

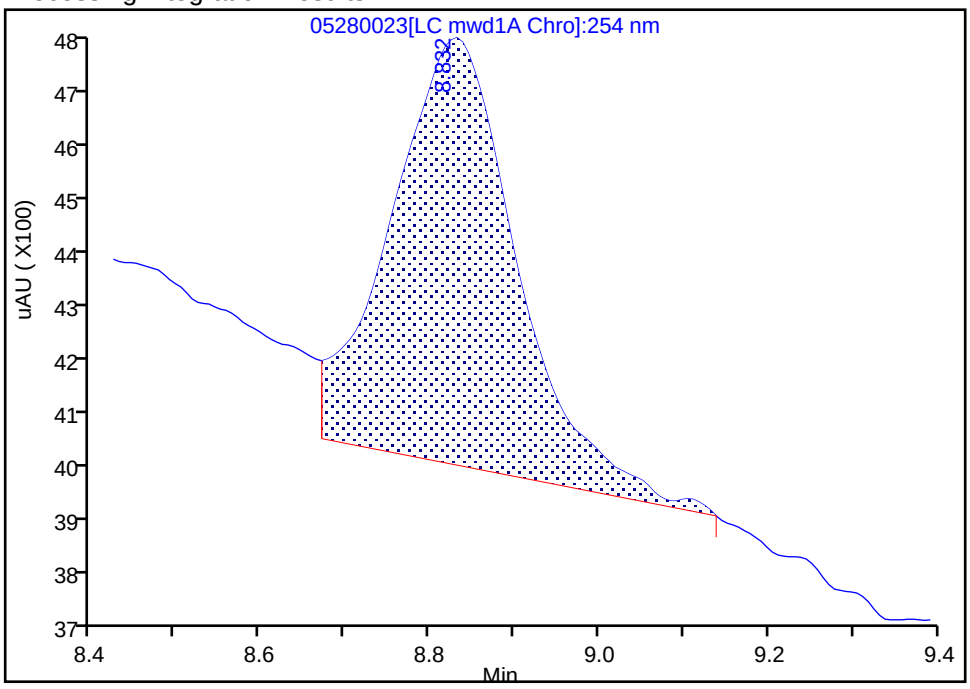
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280023.D				
Injection Date:	29-May-2021 02:34:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-A-6-A	Lab Sample ID:	280-148902-6		
Client ID:	G0089-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

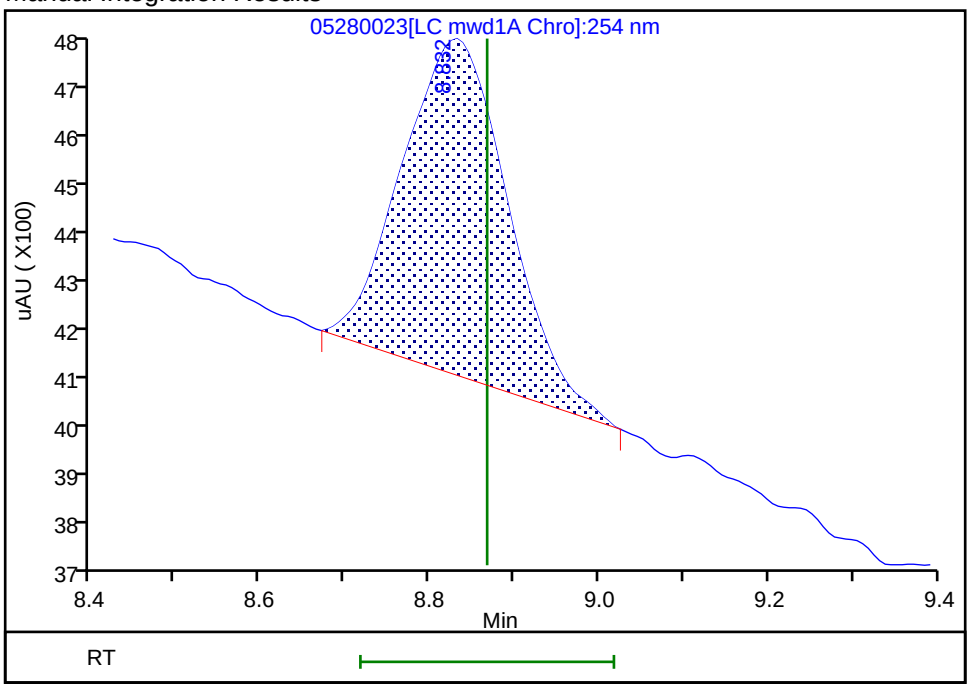
Processing Integration Results

RT: 8.83
Area: 7822
Amount: 0.038292
Amount Units: ug/ml



Manual Integration Results

RT: 8.83
Area: 5707
Amount: 0.027939
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:23:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0090-21A Lab Sample ID: 280-148902-7

Matrix: Water Lab File ID: 05270040.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:10

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 526.9(mL) Date Analyzed: 05/28/2021 02:16

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080
99-65-0	1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035
118-96-7	2,4,6-Trinitrotoluene	0.095	U	0.10	0.095	0.043
121-14-2	2,4-Dinitrotoluene	0.076	U	0.095	0.076	0.026
606-20-2	2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.095	J J1	0.10	0.095	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.081
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055
99-99-0	4-Nitrotoluene	0.38	U	0.39	0.38	0.095
2691-41-0	HMX	0.62	M	0.20	0.19	0.083
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.086
121-82-4	RDX	0.64	M	0.20	0.19	0.049
479-45-8	Tetryl	0.095	U M	0.10	0.095	0.030

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\20210527-101842.b\05270040.D
Lims ID: 280-148902-B-7-A
Client ID: G0090-21A
Sample Type: Client
Inject. Date: 28-May-2021 02:16:24 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-7-A
Misc. Info.: 280-0101842-040
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:48:08

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.612	6.617	-0.005	5534	0.0656	M
	6 MNX	1		7.232			ND	
	7 RDX	1	7.592	7.604	-0.012	7160	0.0674	M
$	9 1,2-Dinitrobenzene	1	8.532	8.544	-0.012	23735	0.1851	M
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	U
	16 2,4,6-Trinitrotoluene	1		10.964			ND	
	17 4-Amino-2,6-dinitrotoluene	1	11.165	11.184	-0.019	641	0.004196	
	18 2-Amino-4,6-dinitrotoluene	1	11.419	11.437	-0.018	2080	0.0101	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

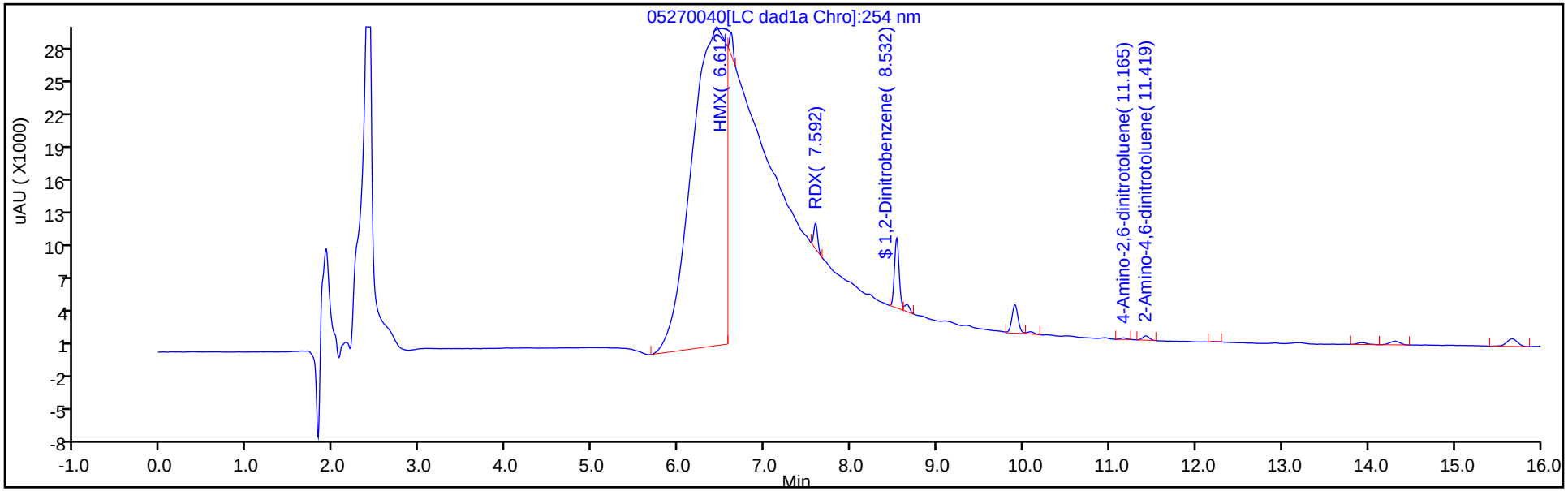
Report Date: 28-May-2021 14:38:45 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

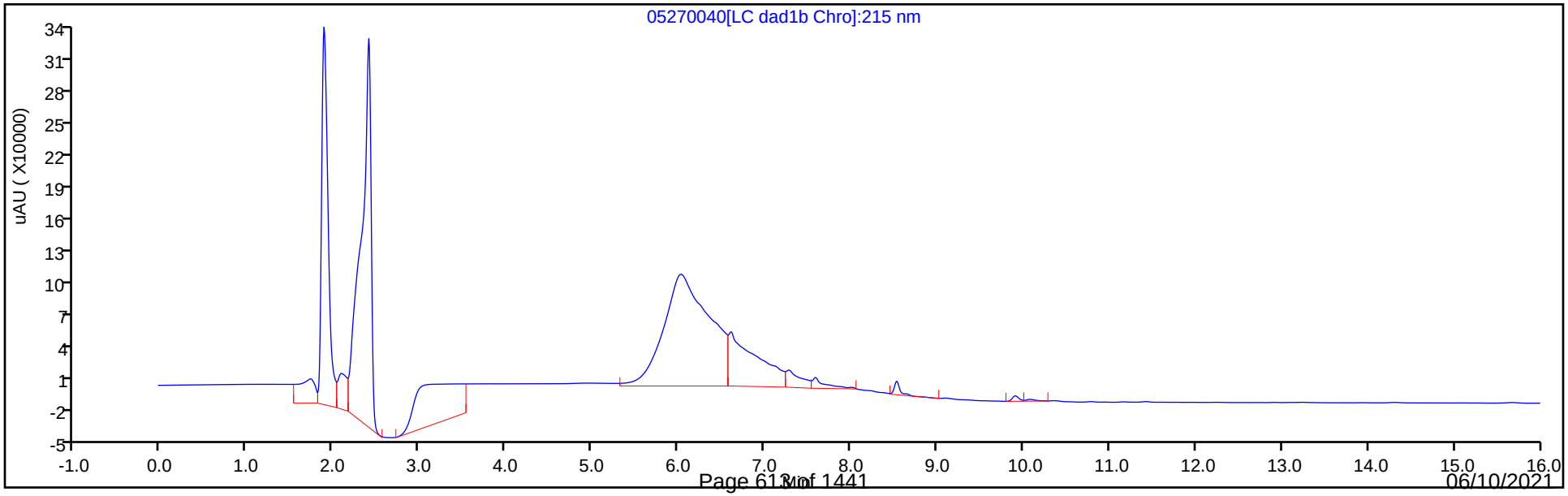
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270040.d

Injection Date:	28-May-2021 02:16:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7	Worklist Smp#:	40
Client ID:	G0090-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270040.D				
Lims ID:	280-148902-B-7-A				
Client ID:	G0090-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 02:16:24	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-7-A				
Misc. Info.:	280-0101842-040				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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:	28-May-2021 12:48:08		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1851	92.56

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

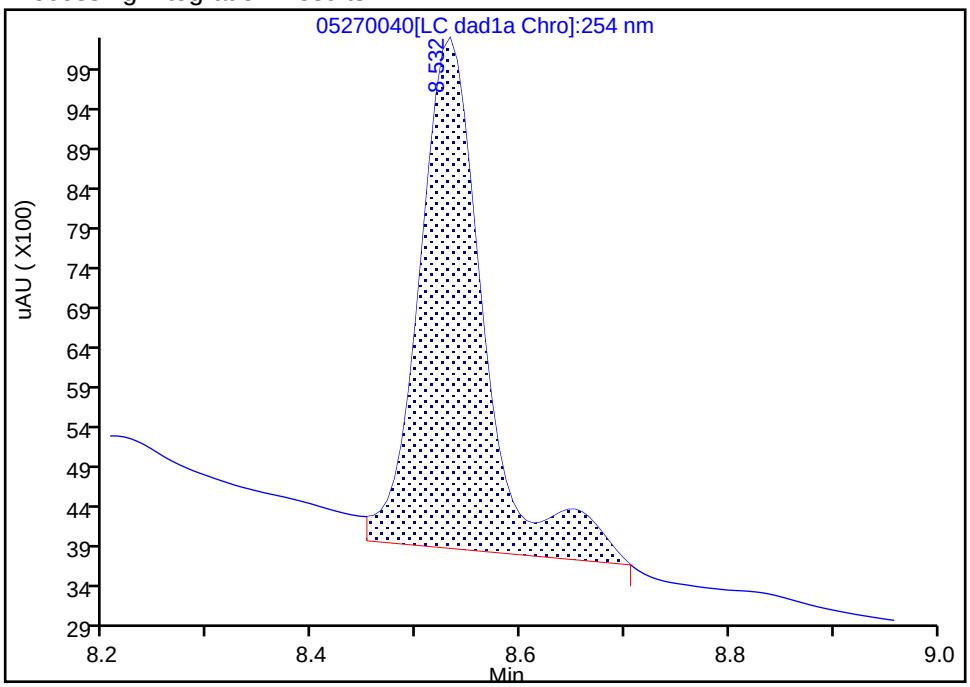
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270040.d				
Injection Date:	28-May-2021 02:16:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7		
Client ID:	G0090-21A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

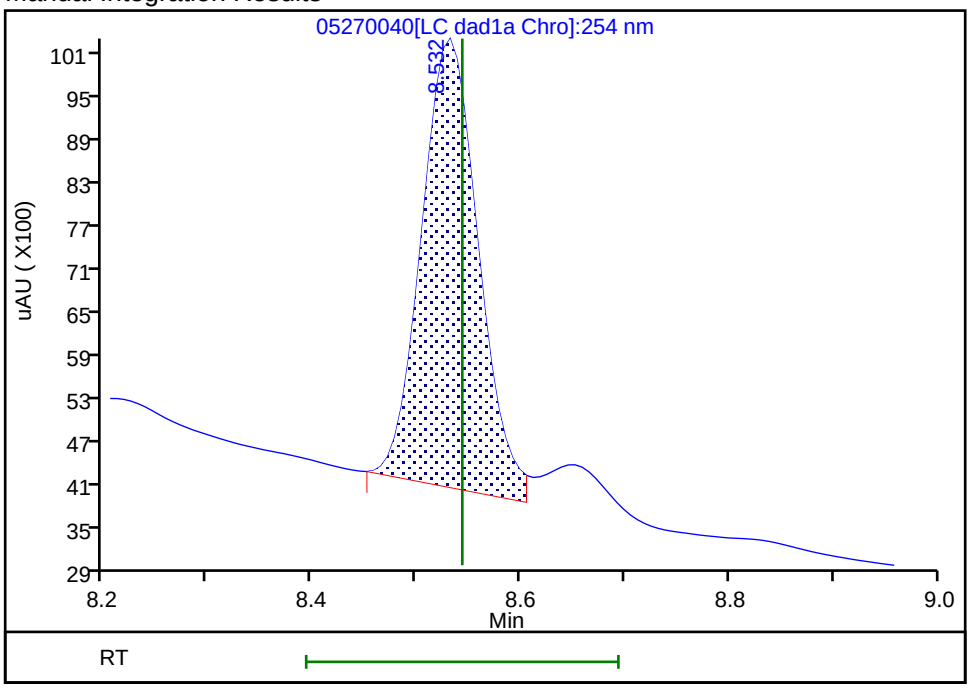
Processing Integration Results

RT: 8.53
Area: 27969
Amount: 0.218138
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23735
Amount: 0.185116
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:48:00

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

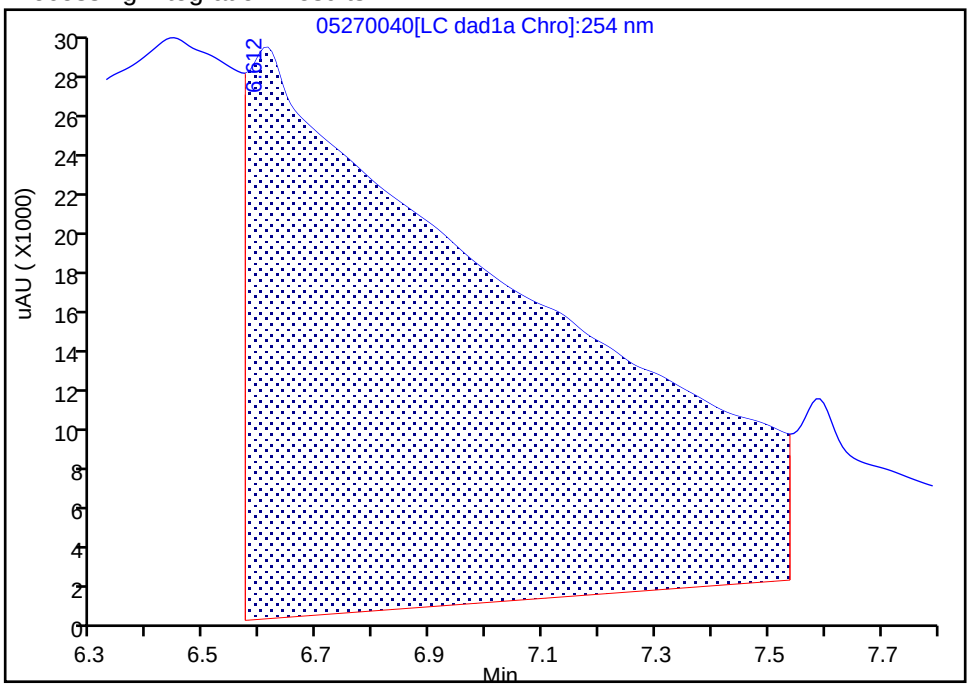
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270040.d				
Injection Date:	28-May-2021 02:16:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7		
Client ID:	G0090-21A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

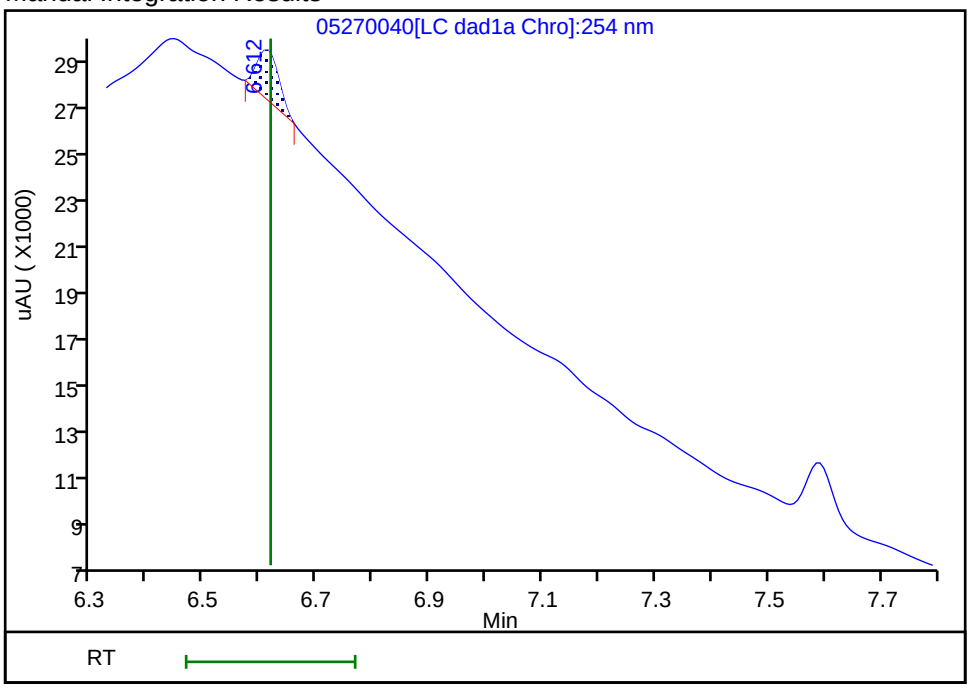
Processing Integration Results

RT: 6.61
Area: 920584
Amount: 10.904624
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 5534
Amount: 0.065552
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:47:46

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

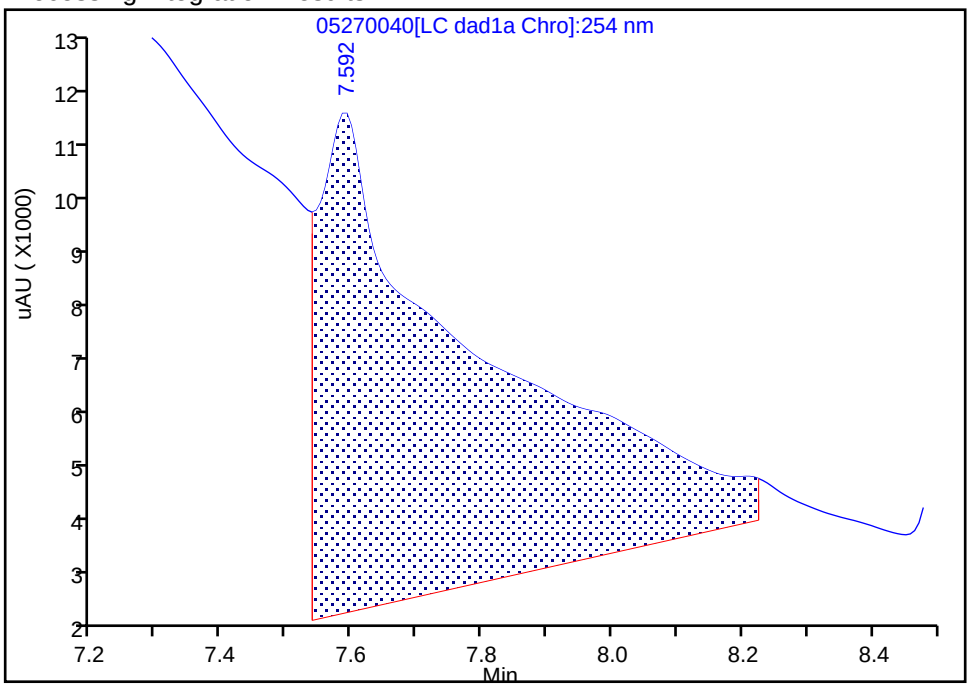
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270040.d				
Injection Date:	28-May-2021 02:16:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7		
Client ID:	G0090-21A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

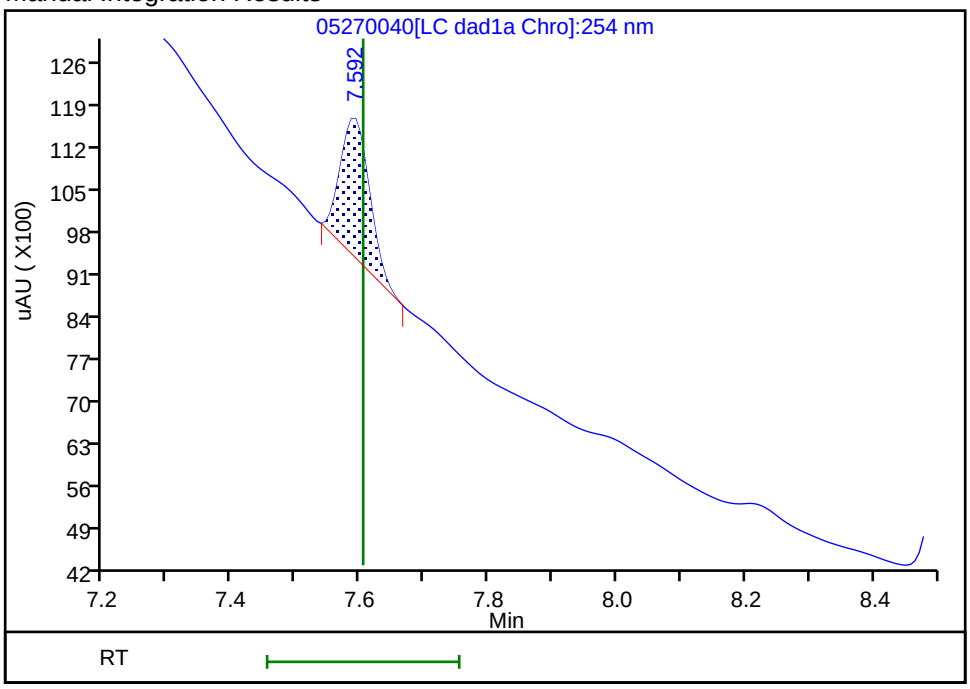
Processing Integration Results

RT: 7.59
Area: 149074
Amount: 1.402898
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 7160
Amount: 0.067381
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:47:50
Audit Action: Manually Integrated Audit Reason: Baseline

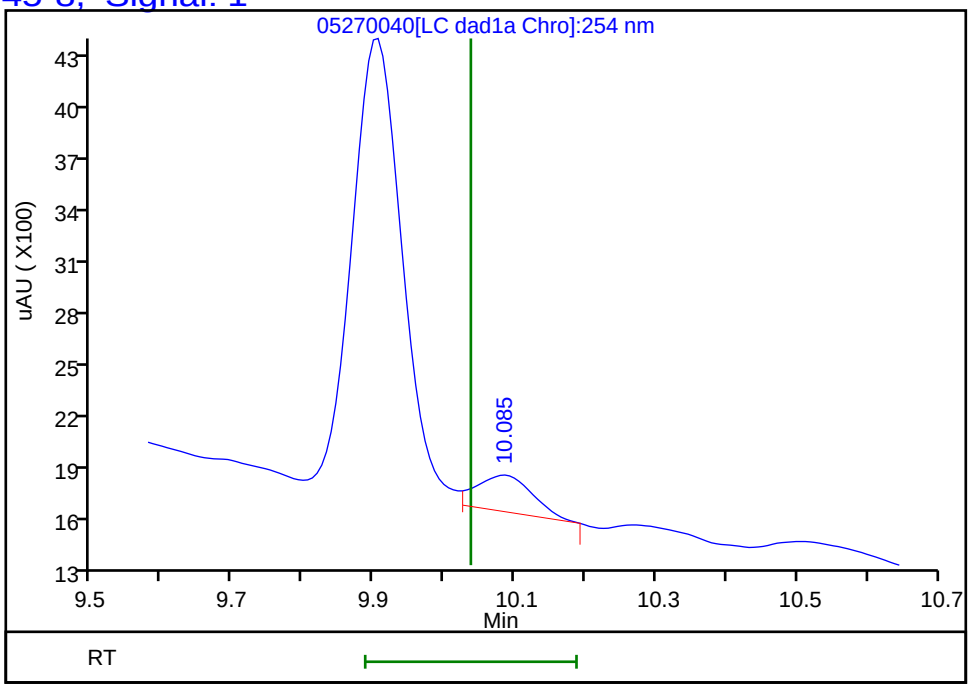
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270040.d				
Injection Date:	28-May-2021 02:16:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7		
Client ID:	G0090-21A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.09
Response: 1095
Amount: 0.006351



Reviewer: zhangji, 28-May-2021 12:48:08
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.: 280-148902-1

SDG No.:

Client Sample ID: G0090-21A Lab Sample ID: 280-148902-7

Matrix: Water Lab File ID: 05280024.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:10

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 526.9(mL) Date Analyzed: 05/29/2021 03:09

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.: 537871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.29*	*M J1*	*0.10*	0.095	*0.048*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280024.D
Lims ID: 280-148902-B-7-A
Client ID: G0090-21A
Sample Type: Client
Inject. Date: 29-May-2021 03:09:57 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-7-A
Misc. Info.: 280-0101890-024
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:27 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: CTX1653

First Level Reviewer: zhangji Date: 29-May-2021 15:23:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.668	6.694	-0.026	11305	0.0650	M
	7 MNX	1		7.424			ND	
	8 RDX	1	8.848	8.868	-0.020	15706	0.0769	
	9 Nitrobenzene	1		11.921			ND	
$	10 1,2-Dinitrobenzene	1	13.008	13.021	-0.013	47340	0.1782	
	12 1,3-Dinitrobenzene	1		15.447			ND	
	14 o-Nitrotoluene	1	16.708	16.687	0.021	2162	0.008684	
	15 p-Nitrotoluene	1		16.974			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.374	17.427	-0.053	6669	0.0225	
	17 m-Nitrotoluene	1		17.947			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.341	18.327	0.014	13022	0.0302	M
	19 1,3,5-Trinitrobenzene	1	18.828	18.854	-0.026	11245	0.0204	
	20 2,6-Dinitrotoluene	1		20.101			ND	
	21 2,4-Dinitrotoluene	1		20.568			ND	
	22 Tetryl	1		24.194			ND	
	23 2,4,6-Trinitrotoluene	1		25.174			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

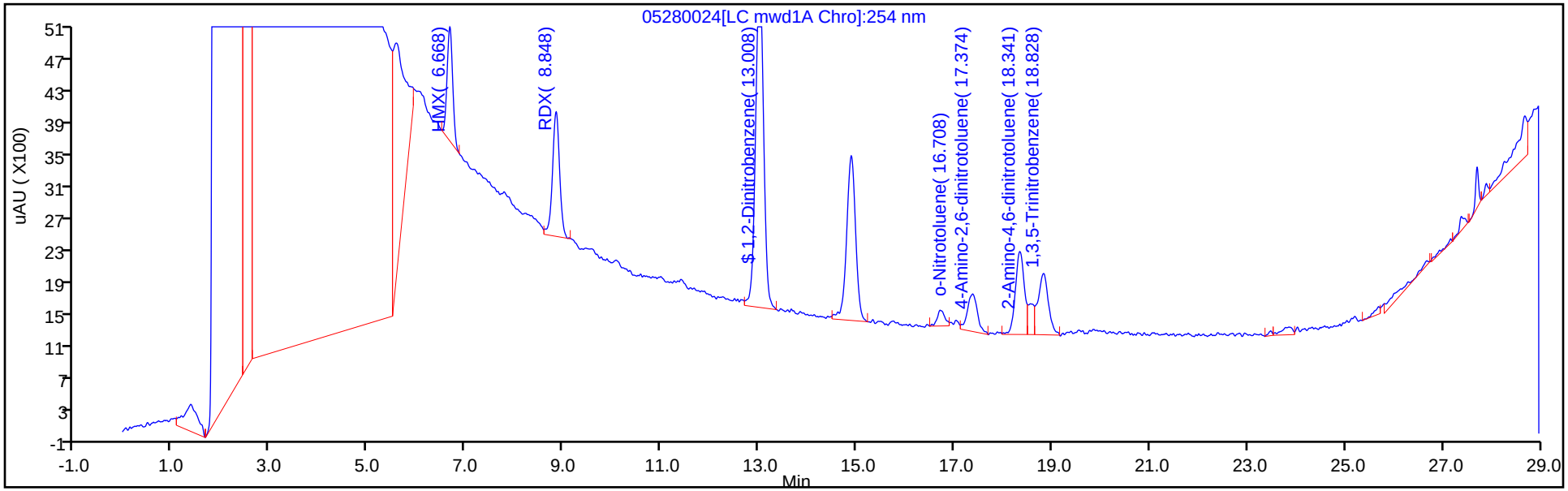
Report Date: 29-May-2021 15:25:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

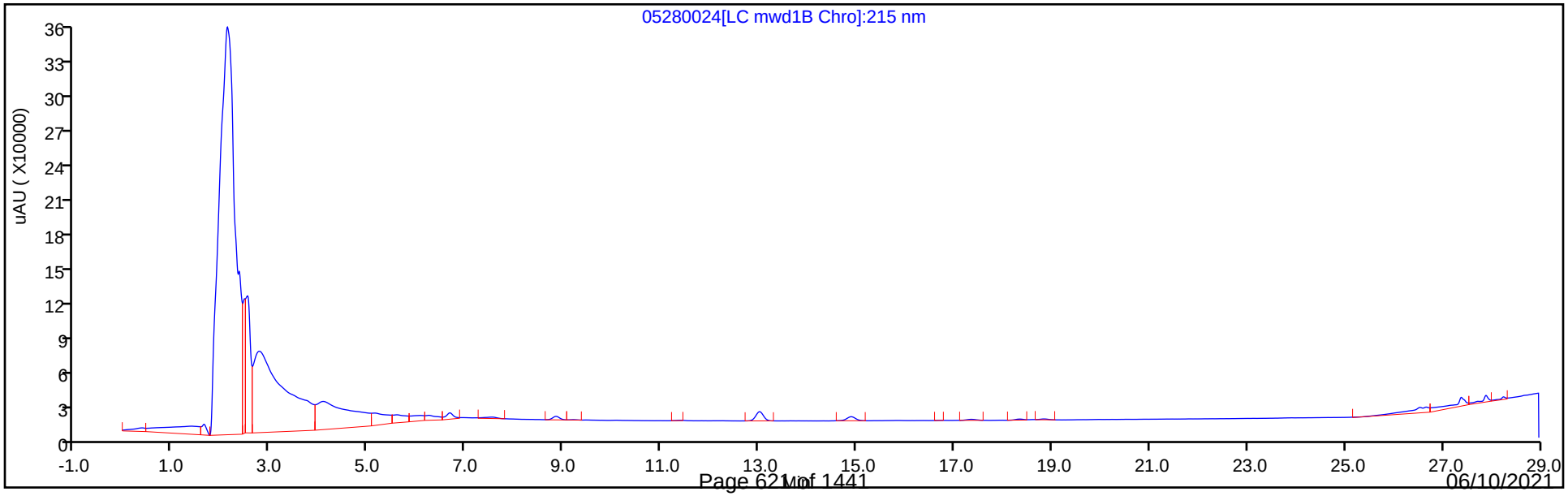
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280024.D

Injection Date:	29-May-2021 03:09:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7	Worklist Smp#:	24
Client ID:	G0090-21A				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280024.D				
Lims ID:	280-148902-B-7-A				
Client ID:	G0090-21A				
Sample Type:	Client				
Inject. Date:	29-May-2021 03:09:57	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-7-A				
Misc. Info.:	280-0101890-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:27	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:23:43		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1782	89.10

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

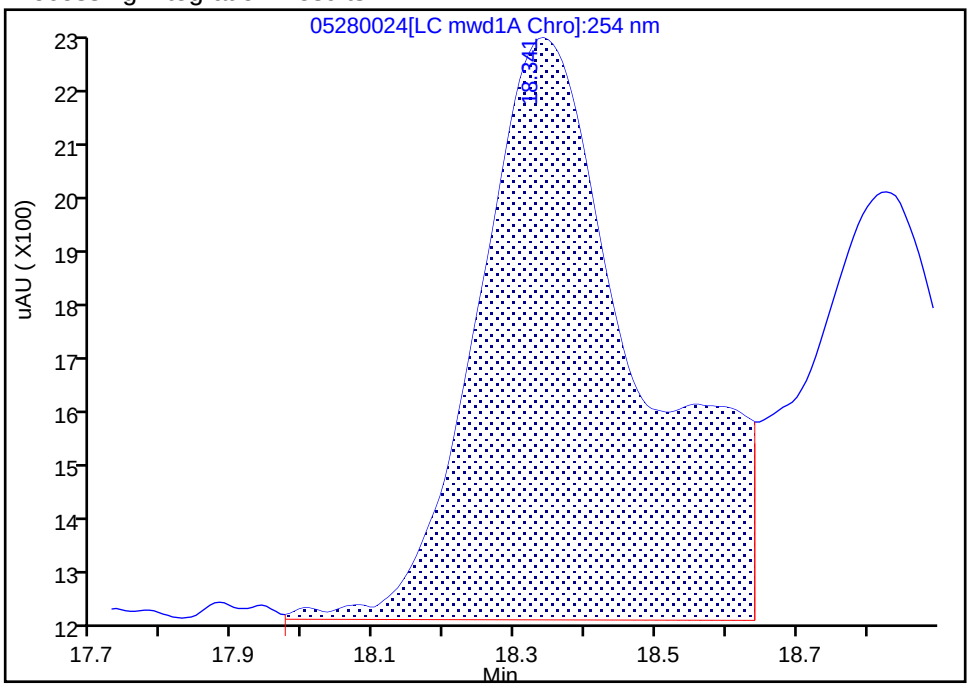
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280024.D				
Injection Date:	29-May-2021 03:09:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7		
Client ID:	G0090-21A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

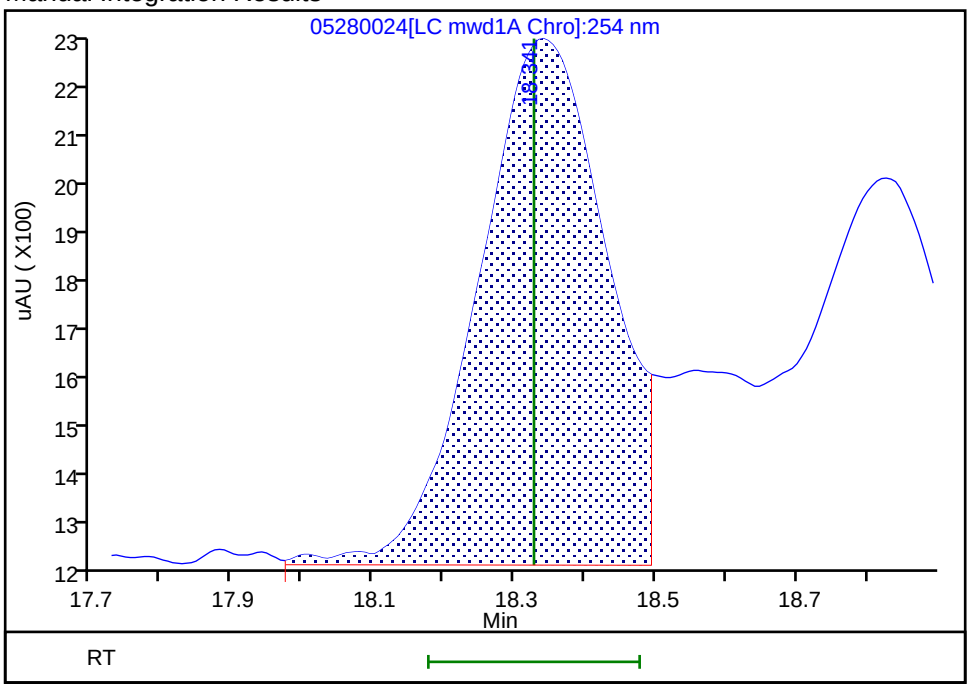
Processing Integration Results

RT: 18.34
Area: 16302
Amount: 0.038600
Amount Units: ug/ml



Manual Integration Results

RT: 18.34
Area: 13022
Amount: 0.030186
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:23:29

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

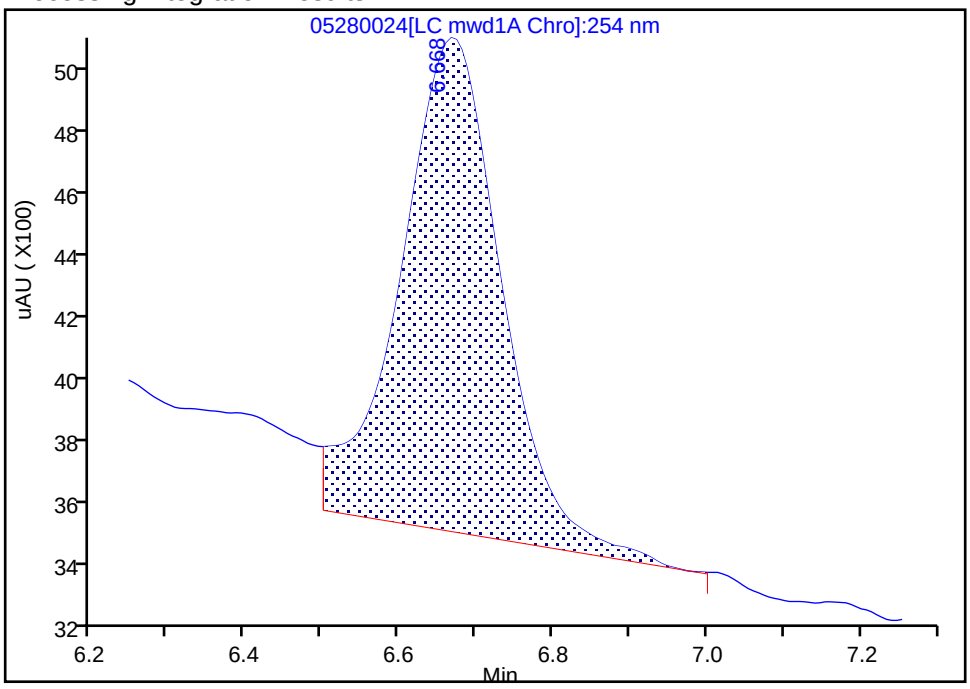
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280024.D				
Injection Date:	29-May-2021 03:09:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-7-A	Lab Sample ID:	280-148902-7		
Client ID:	G0090-21A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

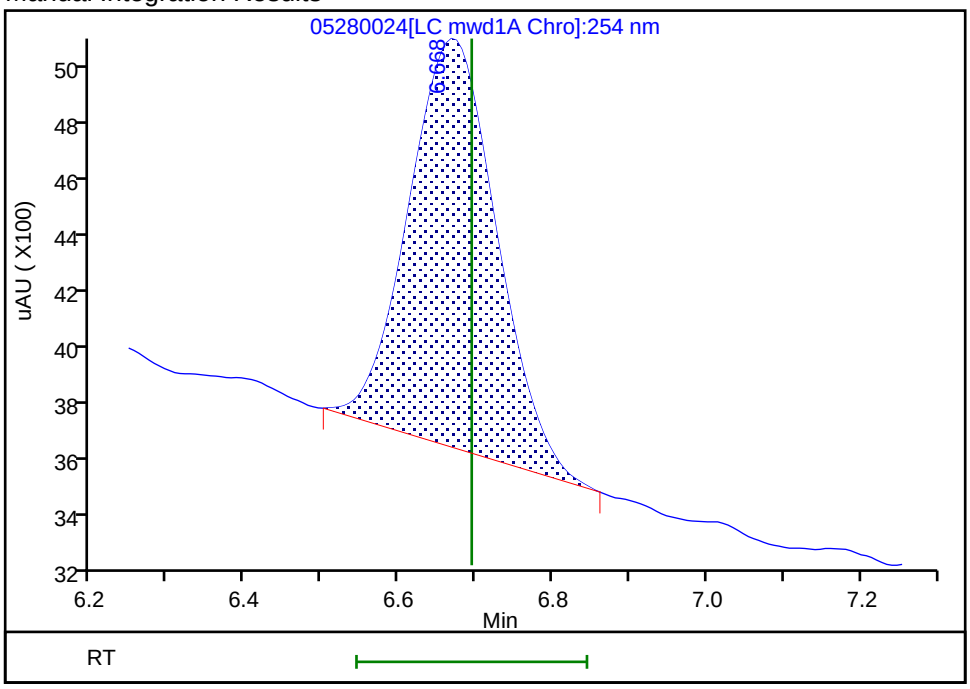
Processing Integration Results

RT: 6.67
Area: 14194
Amount: 0.083221
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 11305
Amount: 0.065026
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:23:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0076-21A Lab Sample ID: 280-148902-8

Matrix: Water Lab File ID: 05270041.D

Analysis Method: 8330A Date Collected: 05/20/2021 11:10

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 513.6(mL) Date Analyzed: 05/28/2021 02:39

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.082
99-65-0	1,3-Dinitrobenzene	0.097	U	0.11	0.097	0.036
118-96-7	2,4,6-Trinitrotoluene	0.097	U	0.11	0.097	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U	0.097	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U	0.097	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.097	U	0.11	0.097	0.049
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.083
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U M	0.40	0.39	0.097
2691-41-0	HMX	0.19	U M	0.20	0.19	0.085
5755-27-1	MNX	0.39	U	1.9	0.39	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.089
121-82-4	RDX	0.19	U	0.20	0.19	0.050
479-45-8	Tetryl	0.097	U	0.11	0.097	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270041.D
Lims ID: 280-148902-B-8-A
Client ID: G0076-21A
Sample Type: Client
Inject. Date: 28-May-2021 02:39:24 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-8-A
Misc. Info.: 280-0101842-041
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:48:21

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.617			ND	U
	6 MNX	1		7.232			ND	
	7 RDX	1		7.604			ND	
$	9 1,2-Dinitrobenzene	1	8.528	8.544	-0.016	23714	0.1850	M
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	
	16 2,4,6-Trinitrotoluene	1		10.964			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.184			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.437			ND	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	U
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

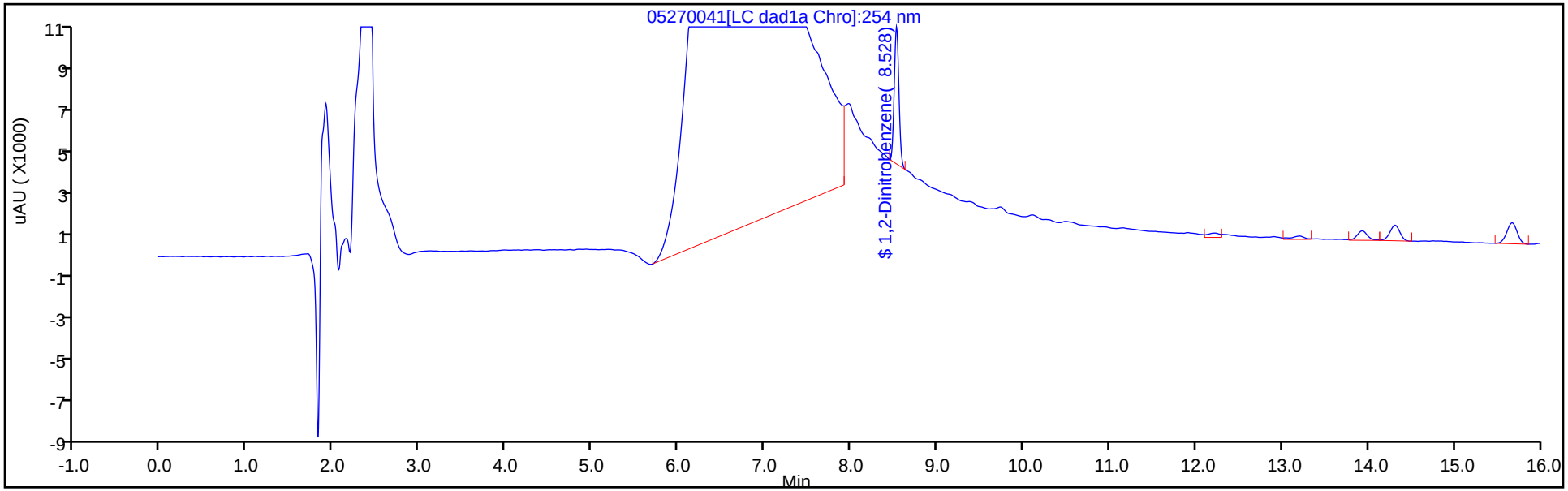
Report Date: 28-May-2021 14:38:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

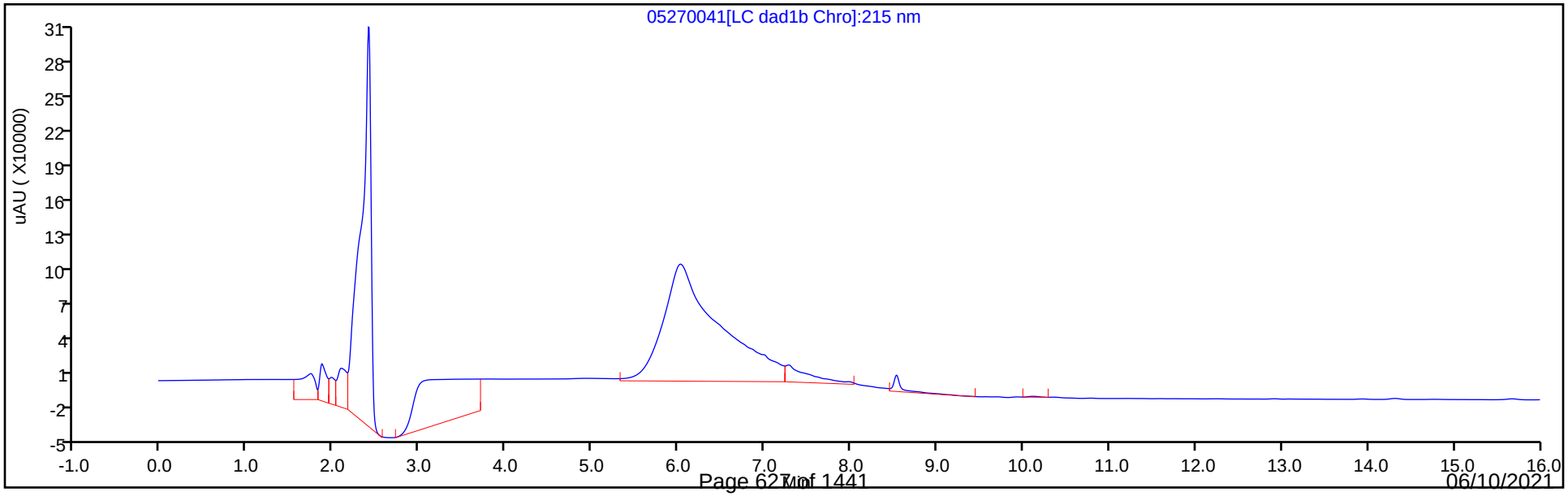
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270041.d

Injection Date:	28-May-2021 02:39:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-8-A	Lab Sample ID:	280-148902-8	Worklist Smp#:	41
Client ID:	G0076-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270041.D				
Lims ID:	280-148902-B-8-A				
Client ID:	G0076-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 02:39:24	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-8-A				
Misc. Info.:	280-0101842-041				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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: 28-May-2021 12:48:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1850	92.48

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

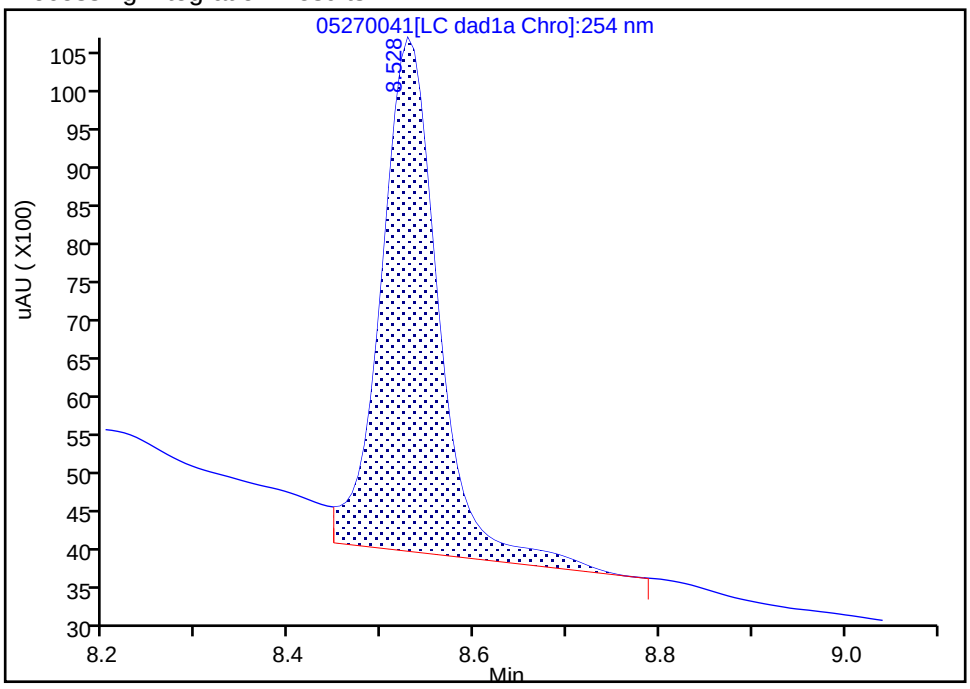
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270041.d				
Injection Date:	28-May-2021 02:39:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-8-A	Lab Sample ID:	280-148902-8		
Client ID:	G0076-21A				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

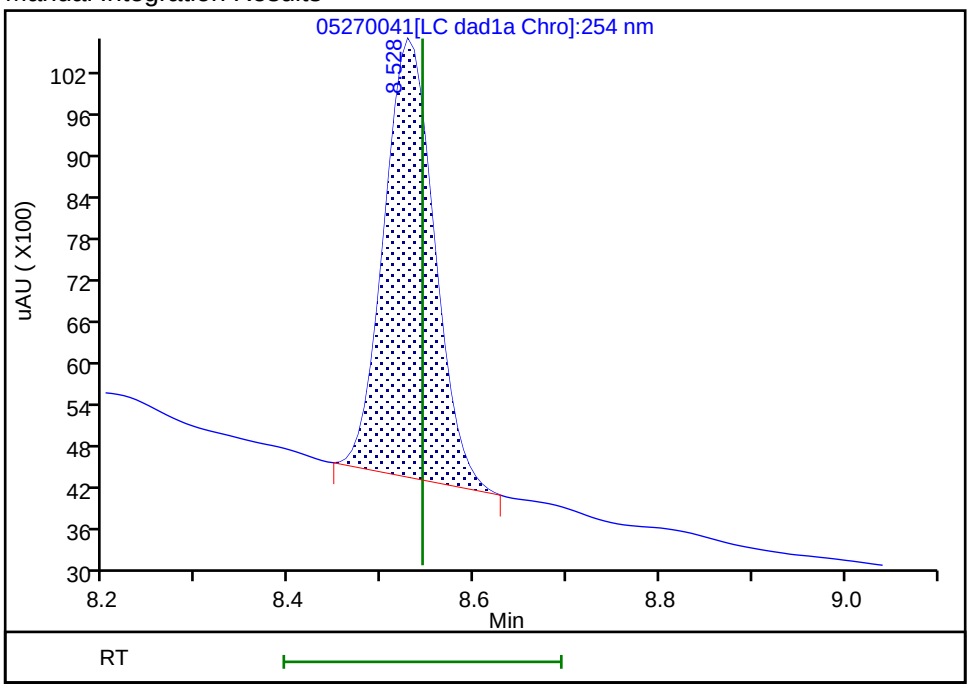
Processing Integration Results

RT: 8.53
Area: 28652
Amount: 0.223465
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23714
Amount: 0.184952
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:48:20

Audit Action: Manually Integrated Audit Reason: Baseline

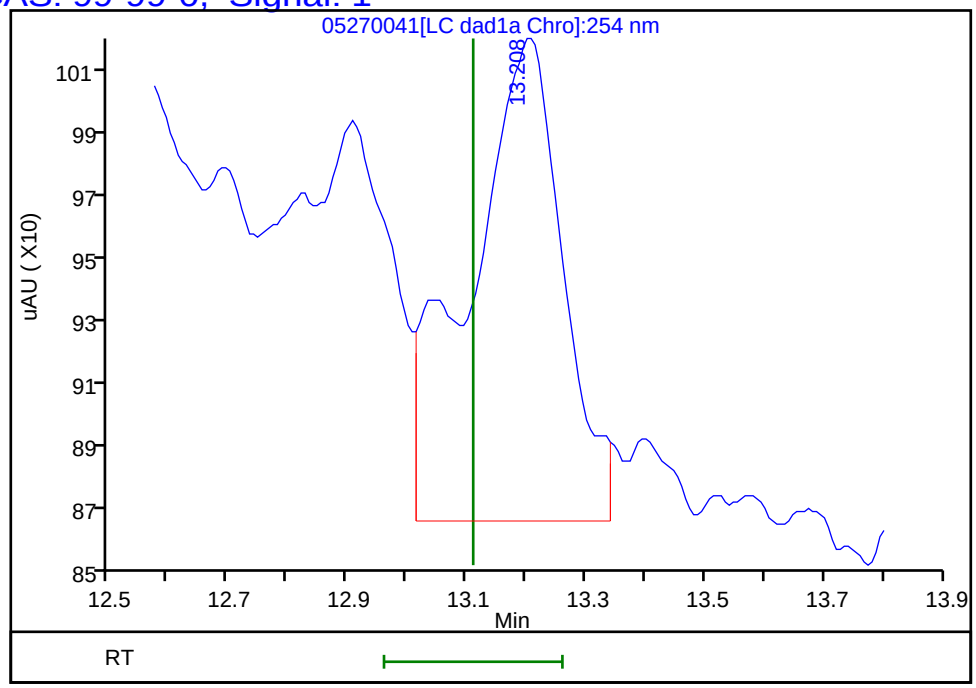
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270041.d				
Injection Date:	28-May-2021 02:39:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-8-A	Lab Sample ID:	280-148902-8		
Client ID:	G0076-21A				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.21
Response: 1662
Amount: 0.014851



Reviewer: zhangji, 28-May-2021 12:48:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

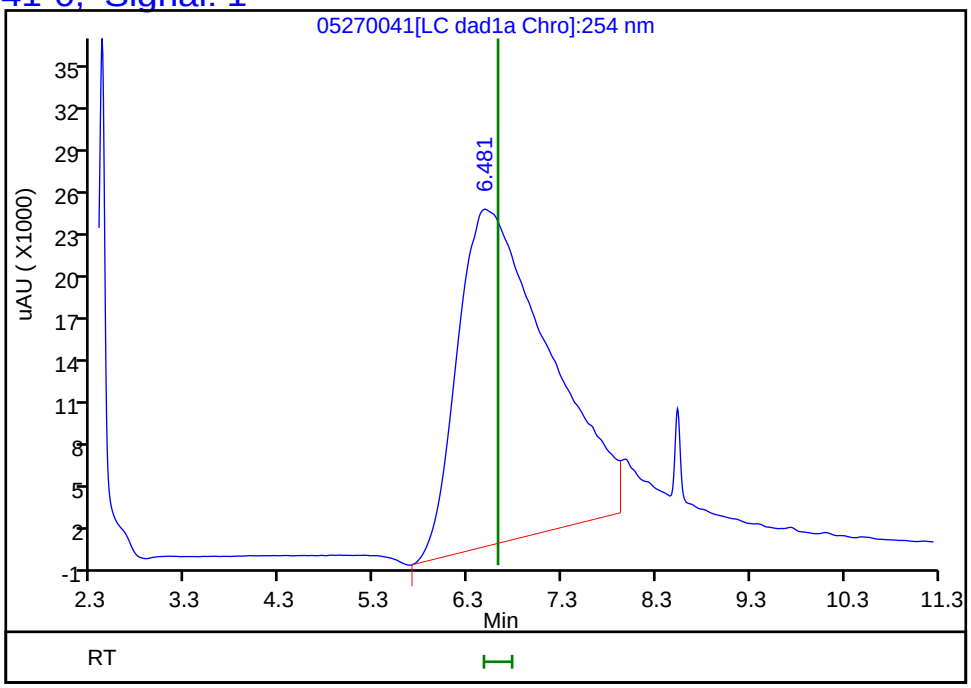
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270041.d				
Injection Date:	28-May-2021 02:39:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-8-A	Lab Sample ID:	280-148902-8		
Client ID:	G0076-21A				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.48
Response: 1579564
Amount: 18.710461



Reviewer: zhangji, 28-May-2021 12:48:21
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.: 280-148902-1

SDG No.:

Client Sample ID: G0075-21A Lab Sample ID: 280-148902-9

Matrix: Water Lab File ID: 05270042.D

Analysis Method: 8330A Date Collected: 05/20/2021 10:00

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 522.6(mL) Date Analyzed: 05/28/2021 03:02

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080
99-65-0	1,3-Dinitrobenzene	0.096	U M	0.11	0.096	0.035
118-96-7	2,4,6-Trinitrotoluene	0.096	U M	0.11	0.096	0.043
121-14-2	2,4-Dinitrotoluene	0.077	U	0.096	0.077	0.026
606-20-2	2,6-Dinitrotoluene	0.077	U	0.096	0.077	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.75		0.11	0.096	0.049
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.082
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.67		0.14	0.11	0.055
2691-41-0	HMX	2.0	M J1	0.20	0.19	0.084
5755-27-1	MNX	0.38	U M	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.087
121-82-4	RDX	0.19	U M	0.20	0.19	0.049
479-45-8	Tetryl	0.096	U M	0.11	0.096	0.030

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270042.D
Lims ID: 280-148902-B-9-A
Client ID: G0075-21A
Sample Type: Client
Inject. Date: 28-May-2021 03:02:23 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-9-A
Misc. Info.: 280-0101842-042
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:48:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.576	6.617	-0.041	17218	0.2040	M
	6 MNX	1		7.232			ND	U
	7 RDX	1		7.604			ND	U
$	9 1,2-Dinitrobenzene	1	8.522	8.544	-0.022	22640	0.1766	M
	10 1,3,5-Trinitrobenzene	1		8.670			ND	
	11 1,3-Dinitrobenzene	1		9.304			ND	U
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	U
	16 2,4,6-Trinitrotoluene	1		10.964			ND	U
	17 4-Amino-2,6-dinitrotoluene	1	11.155	11.184	-0.029	10710	0.0701	
	18 2-Amino-4,6-dinitrotoluene	1	11.415	11.437	-0.022	16299	0.0788	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1	13.095	13.110	-0.015	10312	0.0921	
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

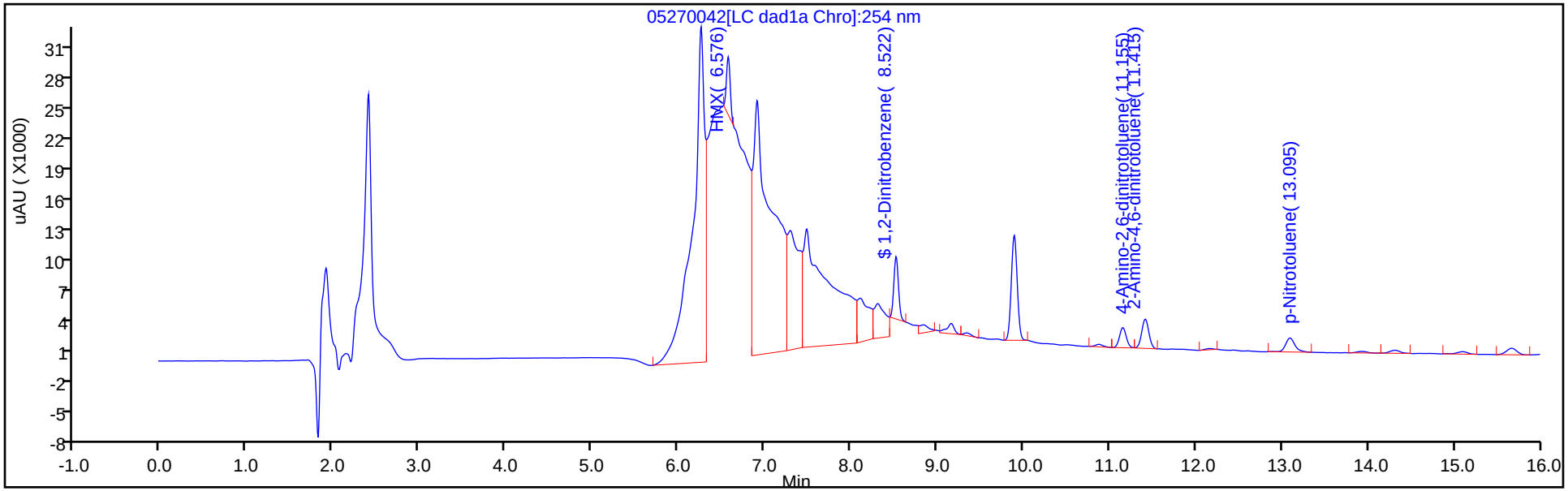
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 28-May-2021 14:38:46 Chrom Revision: 2.3 13-May-2021 07:57:40

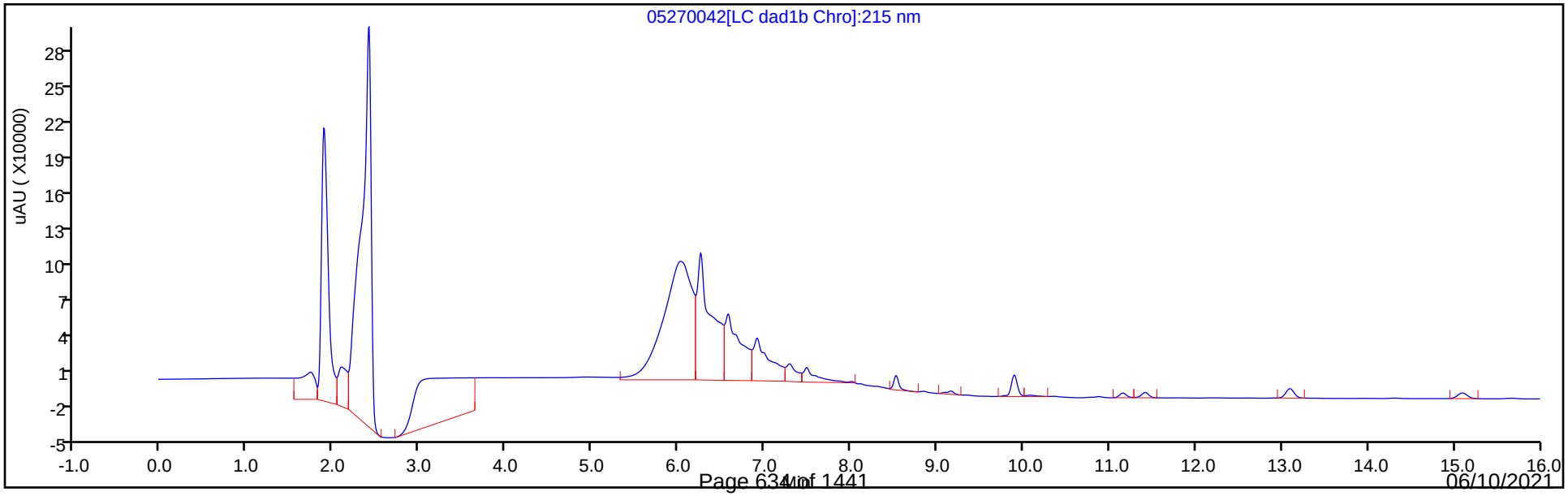
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9	Worklist Smp#:	42
Client ID:	G0075-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270042.D				
Lims ID:	280-148902-B-9-A				
Client ID:	G0075-21A				
Sample Type:	Client				
Inject. Date:	28-May-2021 03:02:23	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-9-A				
Misc. Info.:	280-0101842-042				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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:	28-May-2021 12:48:53		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1766	88.29

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

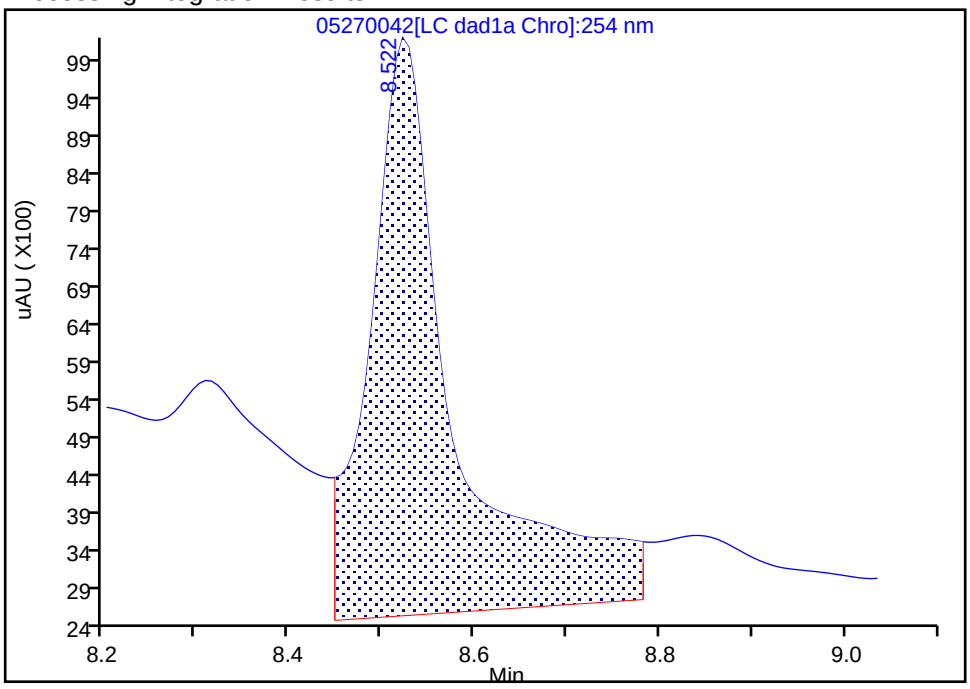
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

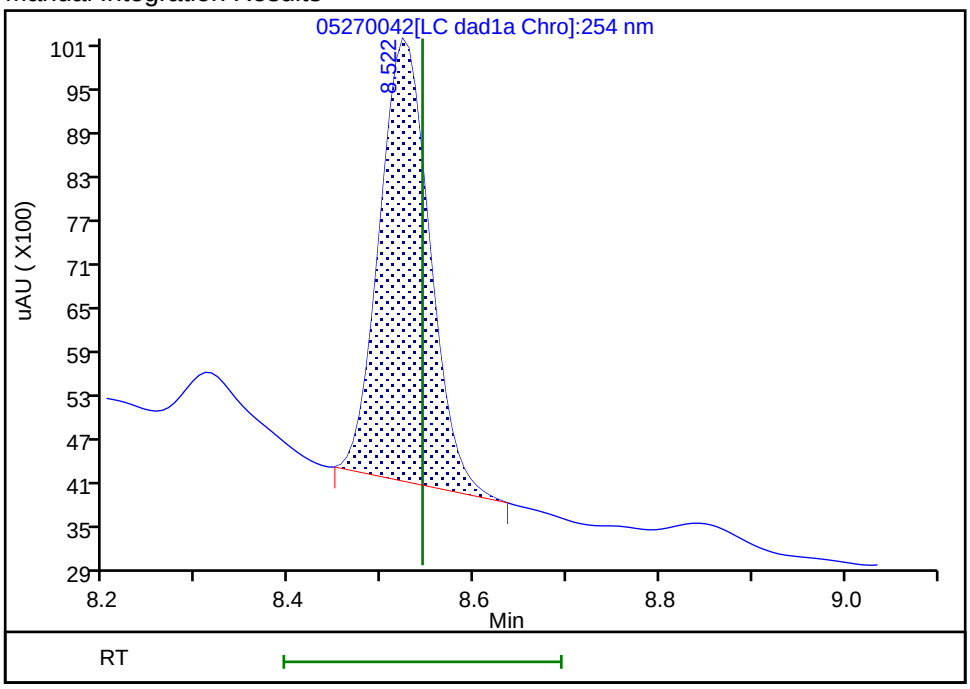
Processing Integration Results

RT: 8.52
Area: 48658
Amount: 0.379497
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 22640
Amount: 0.176575
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:48:52

Audit Action: Manually Integrated Audit Reason: Baseline

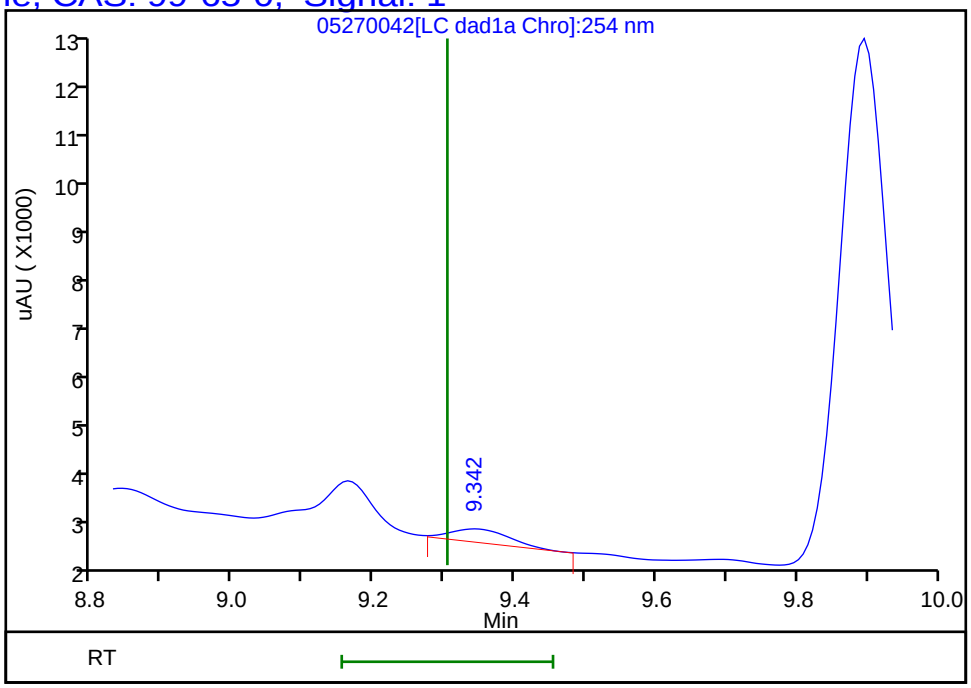
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.34
Response: 1482
Amount: 0.005001



Reviewer: zhangji, 28-May-2021 12:48:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

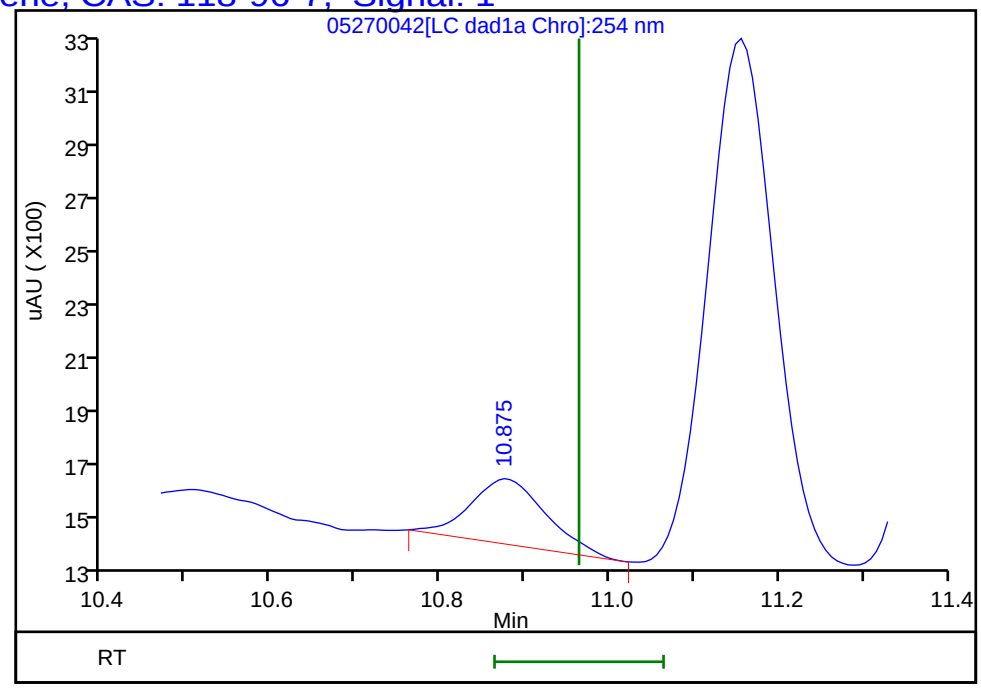
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 10.88
Response: 1483
Amount: 0.007198



Reviewer: zhangji, 28-May-2021 12:48:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

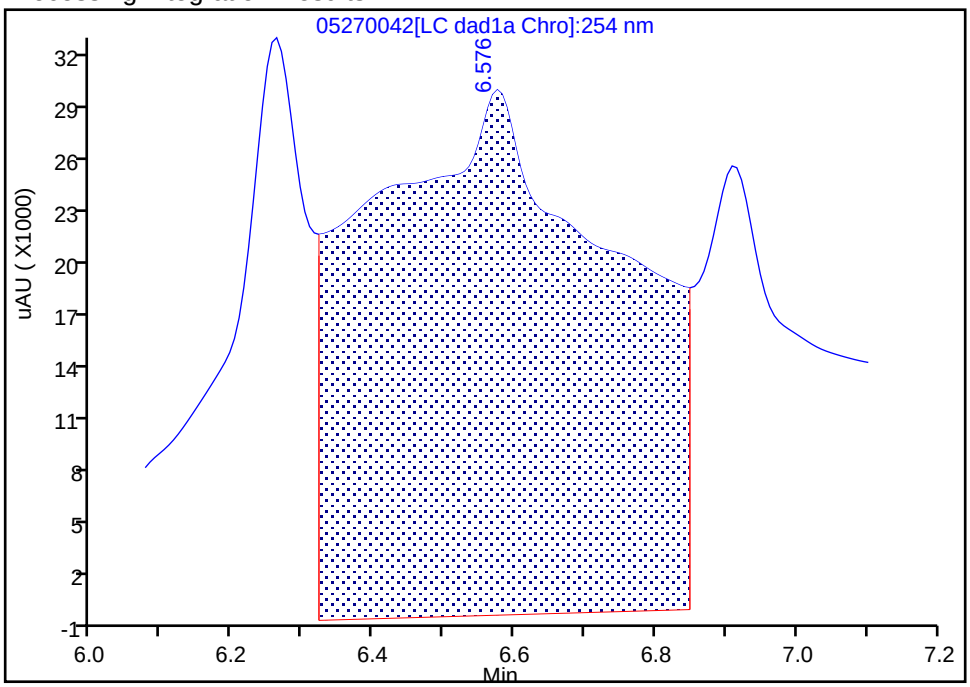
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

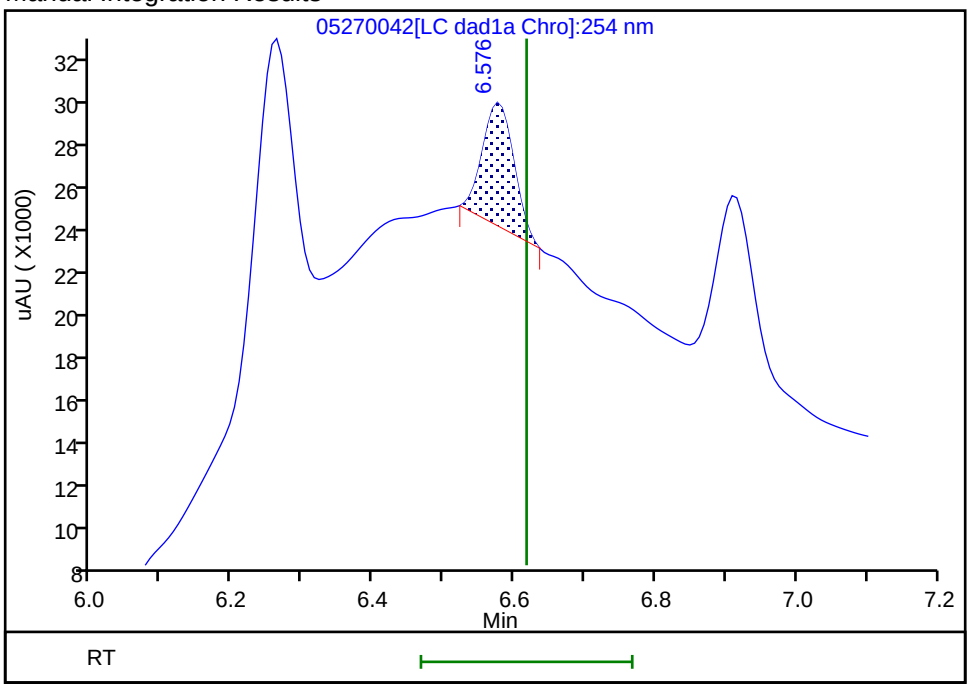
Processing Integration Results

RT: 6.58
Area: 713128
Amount: 8.447238
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 17218
Amount: 0.203953
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:48:48

Audit Action: Manually Integrated Audit Reason: Baseline

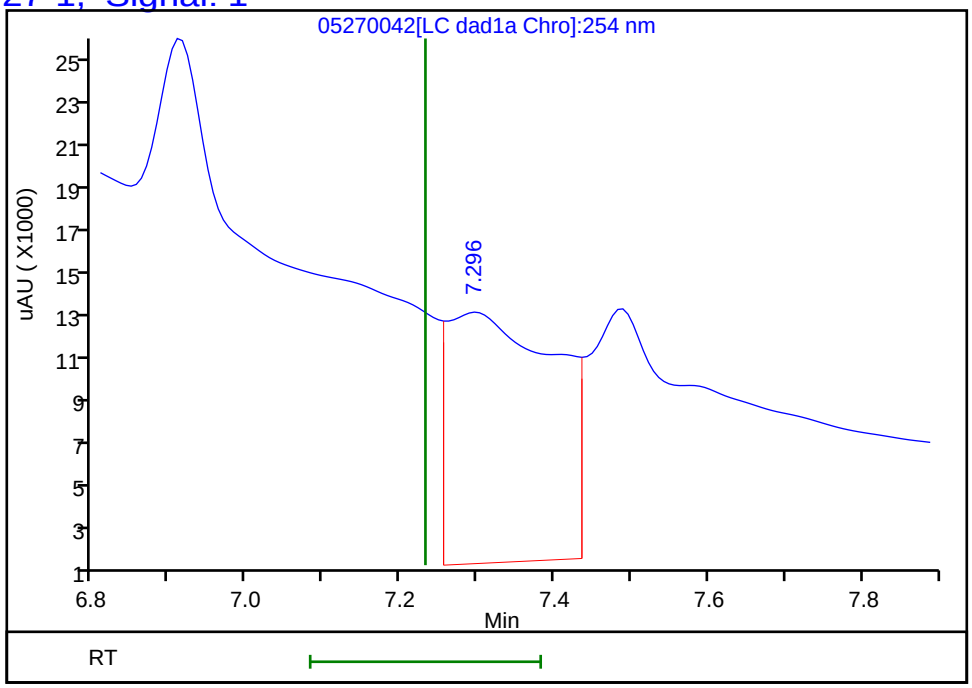
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 111300
Amount: 0.853918



Reviewer: zhangji, 28-May-2021 12:48:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

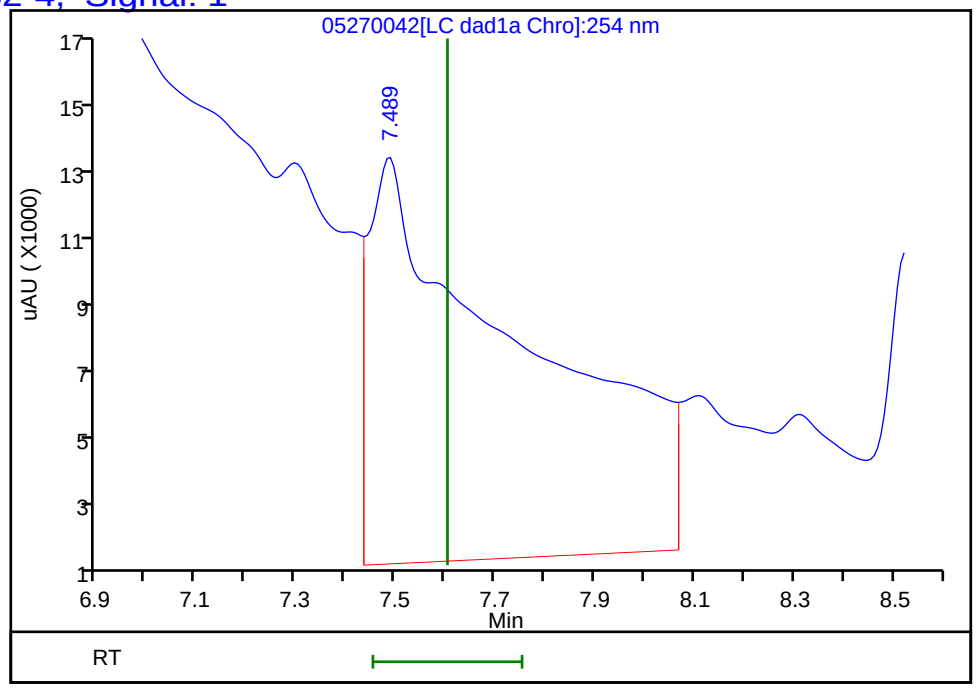
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d				
Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.49
Response: 246092
Amount: 2.315910



Reviewer: zhangji, 28-May-2021 12:48:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

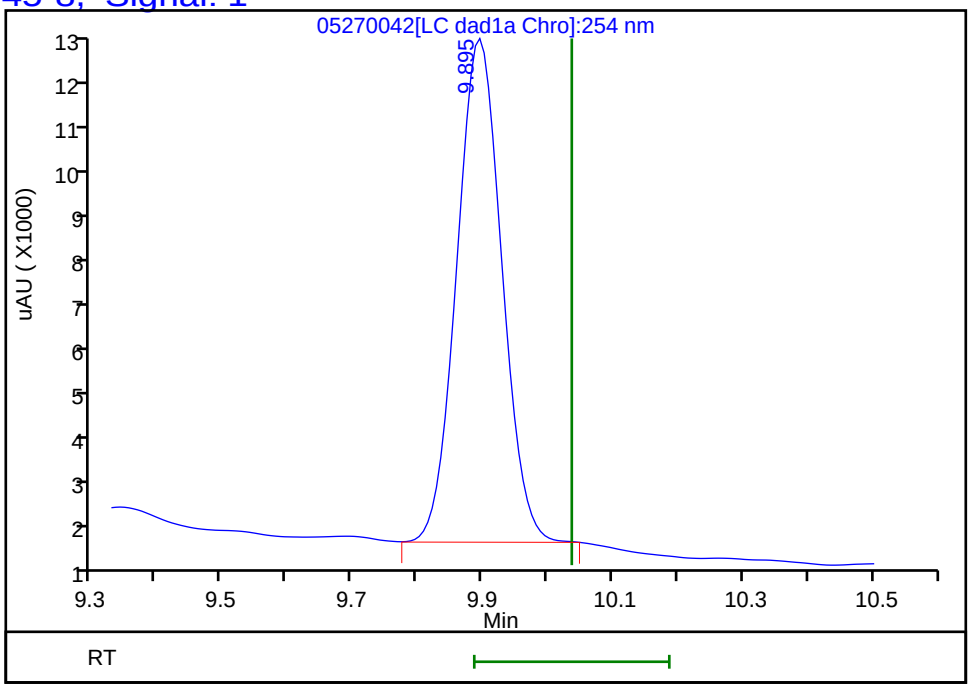
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270042.d

Injection Date:	28-May-2021 03:02:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.90
Response: 48662
Amount: 0.282229



Reviewer: zhangji, 28-May-2021 12:48:53
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.: 280-148902-1

SDG No.:

Client Sample ID: G0075-21A Lab Sample ID: 280-148902-9

Matrix: Water Lab File ID: 05280025.D

Analysis Method: 8330A Date Collected: 05/20/2021 10:00

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 522.6(mL) Date Analyzed: 05/29/2021 03:44

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	0.38	U M	0.39	0.38	0.096
2691-41-0	*HMX*	*0.23*	*J1*	*0.20*	0.19	*0.084*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280025.D
Lims ID: 280-148902-B-9-A
Client ID: G0075-21A
Sample Type: Client
Inject. Date: 29-May-2021 03:44:55 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-9-A
Misc. Info.: 280-0101890-025
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:27 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: CTX1653

First Level Reviewer: zhangji Date: 29-May-2021 15:23:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.665	6.694	-0.029	4812	0.0241	
7 MNX	1		7.424			ND	
8 RDX	1	8.832	8.868	-0.036	1578	0.007725	M
9 Nitrobenzene	1		11.921			ND	
$ 10 1,2-Dinitrobenzene	1	13.011	13.021	-0.010	45438	0.1710	
12 1,3-Dinitrobenzene	1		15.447			ND	
14 o-Nitrotoluene	1		16.687			ND	U
15 p-Nitrotoluene	1		16.974			ND	U
16 4-Amino-2,6-dinitrotoluene	1	17.411	17.427	-0.016	25341	0.0854	
17 m-Nitrotoluene	1	17.911	17.947	-0.036	2247	0.008071	
18 2-Amino-4,6-dinitrotoluene	1	18.325	18.327	-0.002	41793	0.1040	
19 1,3,5-Trinitrobenzene	1	18.805	18.854	-0.049	4916	0.004963	
20 2,6-Dinitrotoluene	1		20.101			ND	
21 2,4-Dinitrotoluene	1		20.568			ND	
22 Tetryl	1		24.194			ND	
23 2,4,6-Trinitrotoluene	1		25.174			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

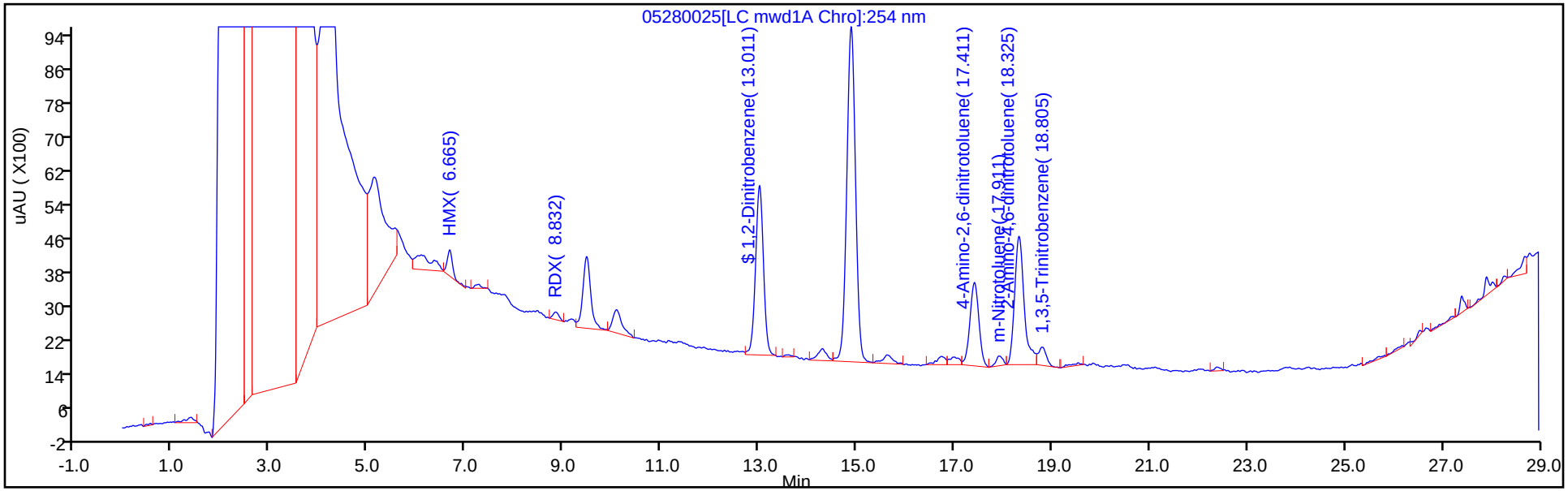
Report Date: 29-May-2021 15:25:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

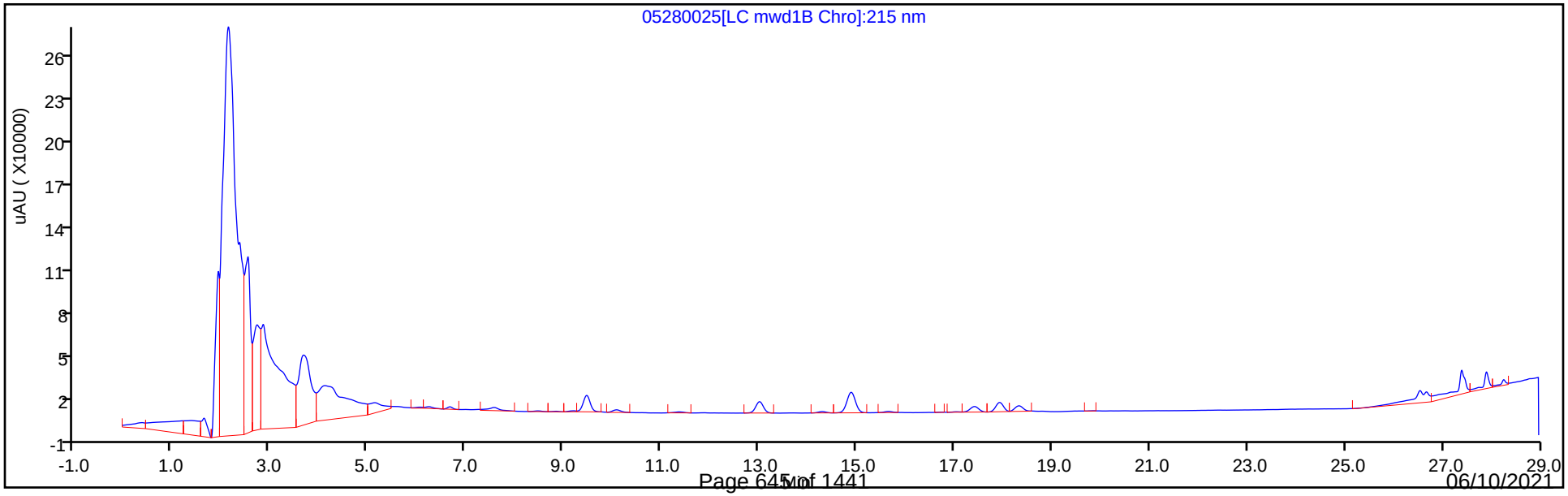
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280025.D

Injection Date:	29-May-2021 03:44:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9	Worklist Smp#:	25
Client ID:	G0075-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280025.D				
Lims ID:	280-148902-B-9-A				
Client ID:	G0075-21A				
Sample Type:	Client				
Inject. Date:	29-May-2021 03:44:55	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-9-A				
Misc. Info.:	280-0101890-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:27	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:23:58		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1710	85.52

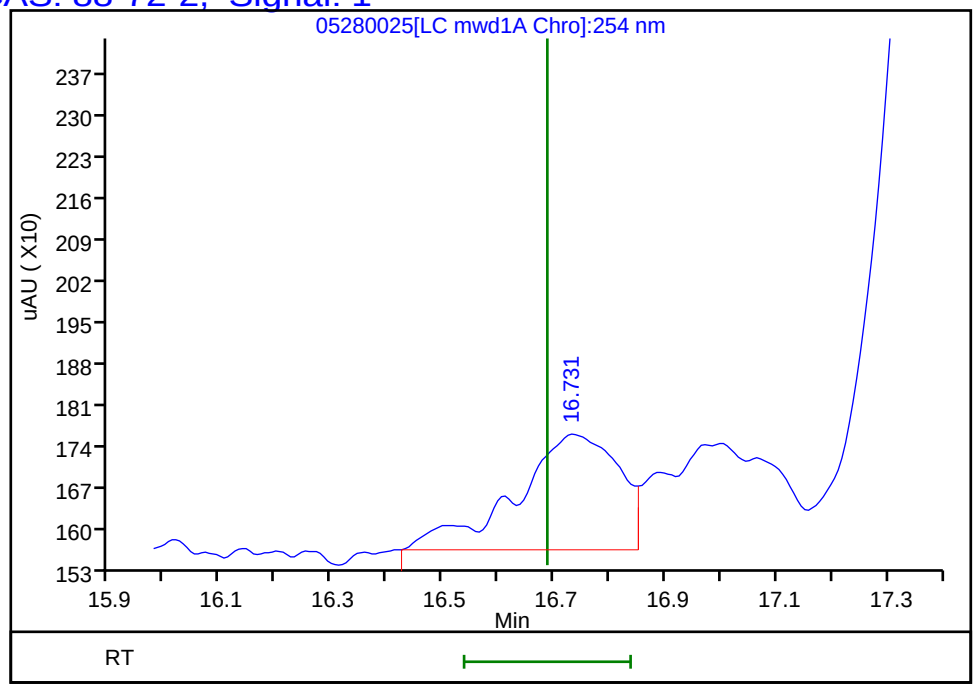
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280025.D				
Injection Date:	29-May-2021 03:44:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.73
Response: 2530
Amount: 0.010162



Reviewer: zhangji, 29-May-2021 15:23:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

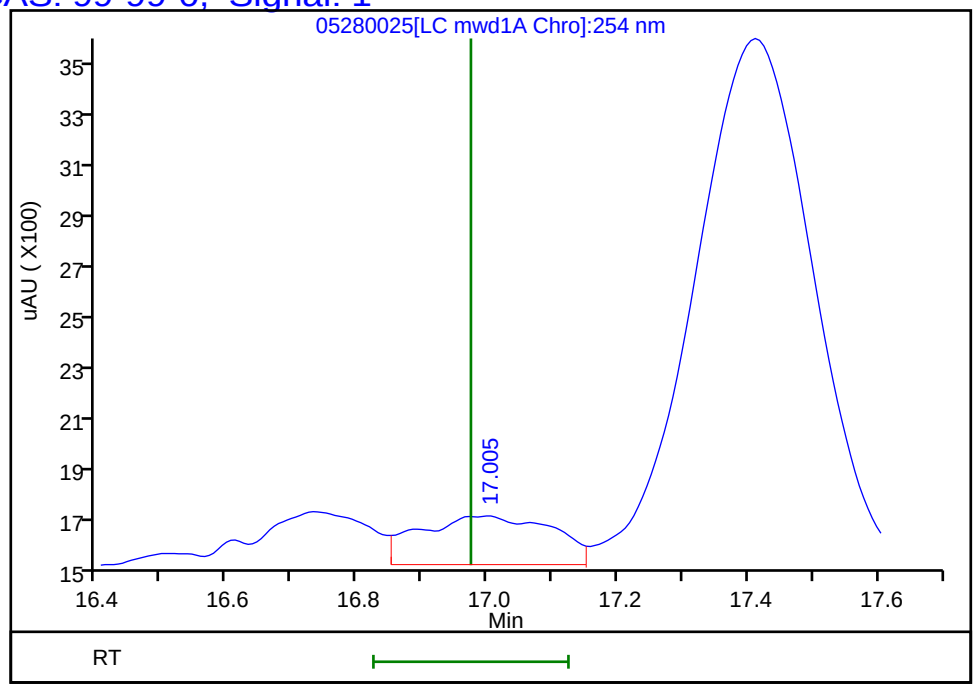
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280025.D				
Injection Date:	29-May-2021 03:44:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 17.00
Response: 2550
Amount: 0.011741



Reviewer: zhangji, 29-May-2021 15:23:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

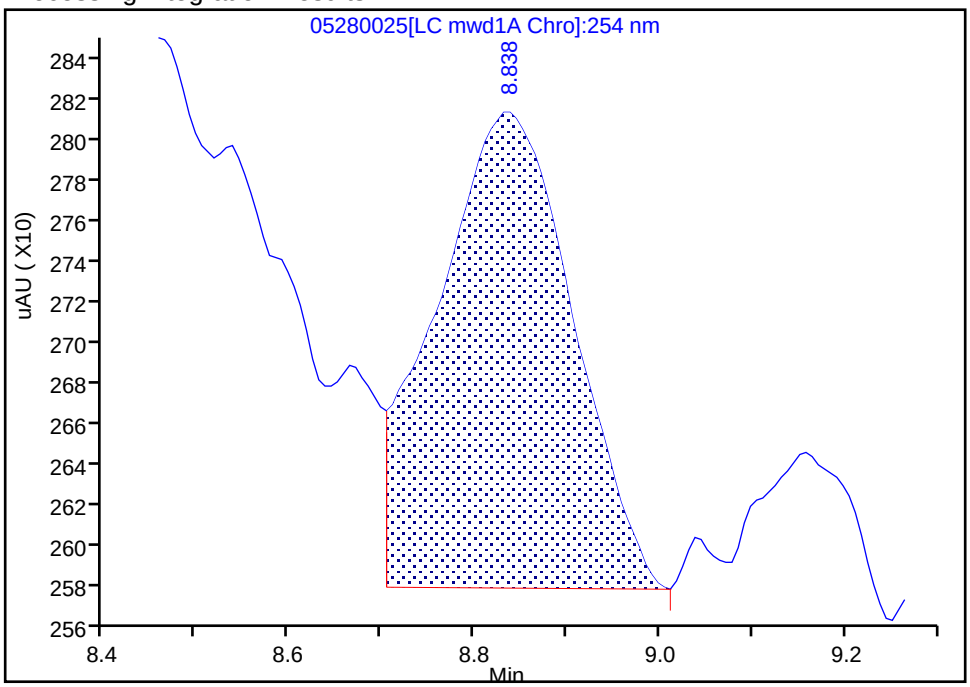
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280025.D				
Injection Date:	29-May-2021 03:44:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-9-A	Lab Sample ID:	280-148902-9		
Client ID:	G0075-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

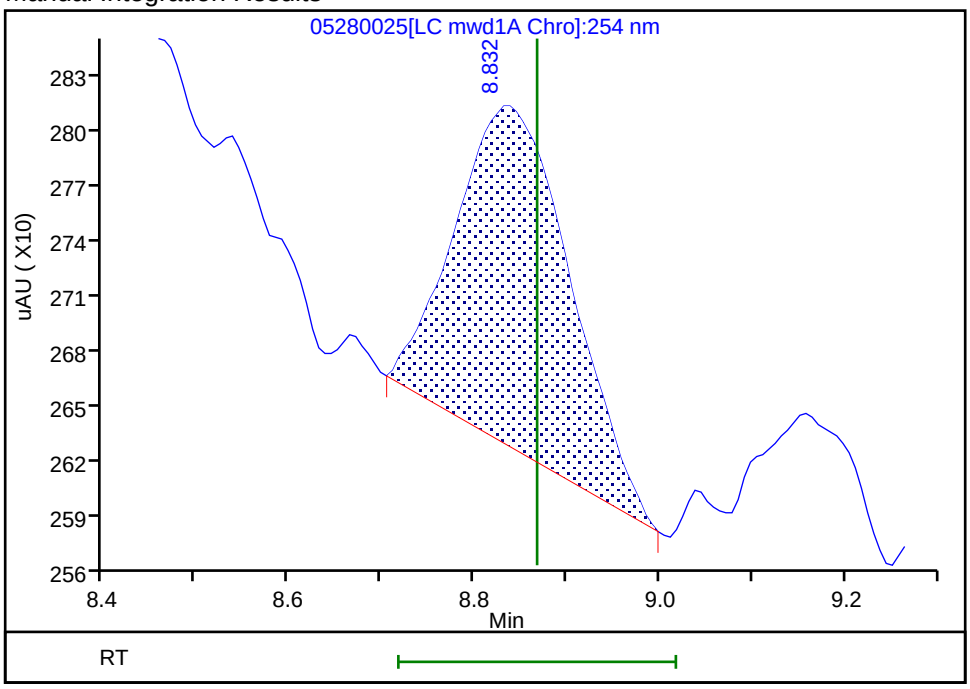
Processing Integration Results

RT: 8.84
Area: 2353
Amount: 0.011519
Amount Units: ug/ml



Manual Integration Results

RT: 8.83
Area: 1578
Amount: 0.007725
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:23:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0082-21A Lab Sample ID: 280-148902-10

Matrix: Water Lab File ID: 05270043.D

Analysis Method: 8330A Date Collected: 05/20/2021 10:40

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 524.2(mL) Date Analyzed: 05/28/2021 03:25

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.9	M	0.20	0.19	0.080
118-96-7	2,4,6-Trinitrotoluene	0.73		0.10	0.095	0.043
121-14-2	2,4-Dinitrotoluene	0.076	U M	0.095	0.076	0.026
606-20-2	2,6-Dinitrotoluene	0.076	U	0.095	0.076	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.55		0.10	0.095	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.082
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.88		0.14	0.11	0.055
99-99-0	4-Nitrotoluene	0.38	U M	0.39	0.38	0.095
2691-41-0	HMX	0.19	U	0.20	0.19	0.084
5755-27-1	MNX	0.38	U M	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.087
121-82-4	RDX	0.43	M J1	0.20	0.19	0.049
479-45-8	Tetryl	0.095	U M	0.10	0.095	0.030

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270043.D
Lims ID: 280-148902-B-10-A
Client ID: G0082-21A
Sample Type: Client
Inject. Date: 28-May-2021 03:25:21 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-10-
Misc. Info.: 280-0101842-043
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:49:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.617			ND	
	6 MNX	1		7.232			ND	U
	7 RDX	1	7.591	7.604	-0.013	4836	0.0455	M
$	9 1,2-Dinitrobenzene	1	8.531	8.544	-0.013	22420	0.1749	M
	10 1,3,5-Trinitrobenzene	1	8.651	8.670	-0.019	90063	0.4088	M
	11 1,3-Dinitrobenzene	1	9.311	9.304	0.007	1165	0.003931	7M
	12 Nitrobenzene	1		9.697			ND	
	14 Tetryl	1		10.037			ND	U
	16 2,4,6-Trinitrotoluene	1	10.938	10.964	-0.026	15701	0.0762	
	17 4-Amino-2,6-dinitrotoluene	1	11.151	11.184	-0.033	14128	0.0925	
	18 2-Amino-4,6-dinitrotoluene	1	11.411	11.437	-0.026	11830	0.0572	
	19 2,6-Dinitrotoluene	1		11.610			ND	
	20 2,4-Dinitrotoluene	1		11.784			ND	U
	21 o-Nitrotoluene	1		12.670			ND	
	22 p-Nitrotoluene	1		13.110			ND	U
	23 m-Nitrotoluene	1		13.710			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

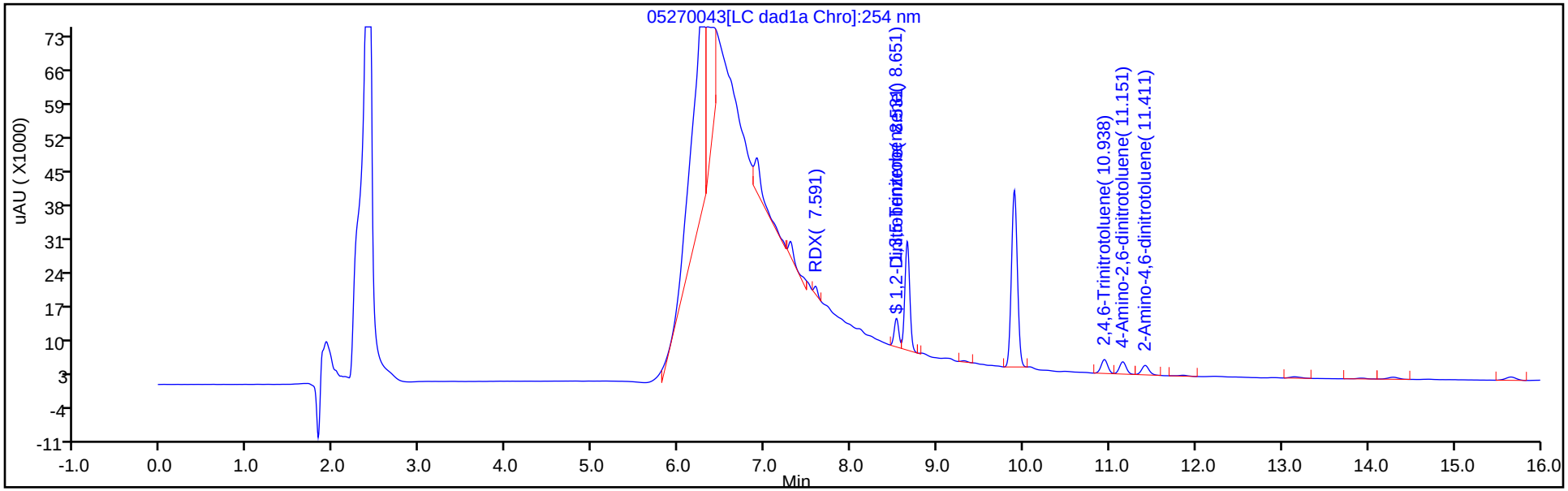
Report Date: 28-May-2021 14:38:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

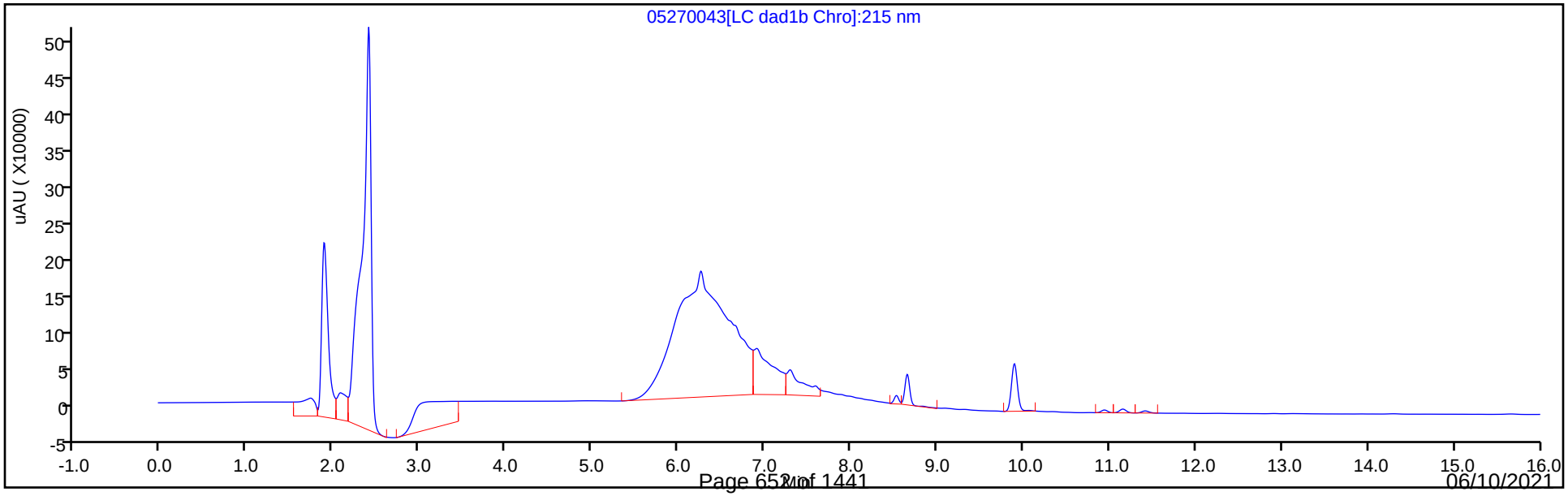
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d

Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10	Worklist Smp#:	43
Client ID:	G0082-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270043.D
Lims ID: 280-148902-B-10-A
Client ID: G0082-21A
Sample Type: Client
Inject. Date: 28-May-2021 03:25:21 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-10-
Misc. Info.: 280-0101842-043
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:49:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1749	87.43

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

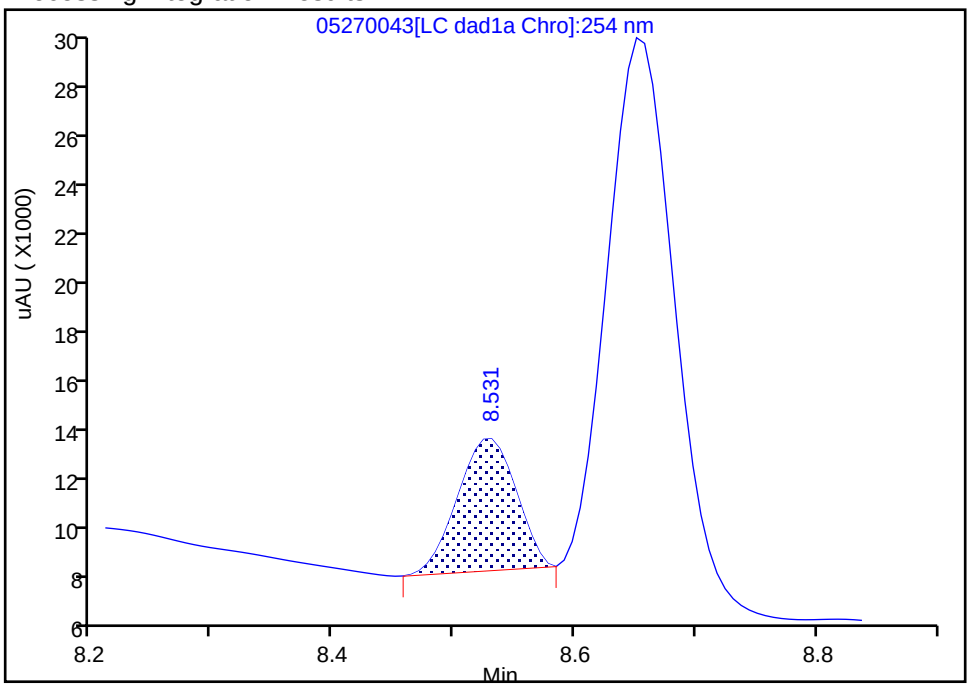
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d				
Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

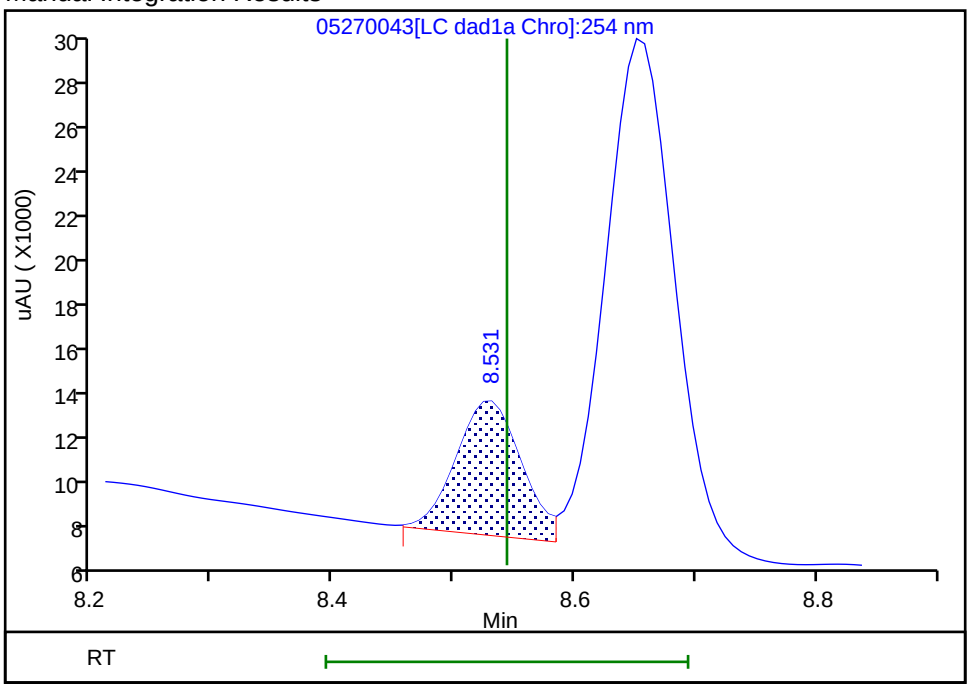
Processing Integration Results

RT: 8.53
Area: 17891
Amount: 0.139537
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 22420
Amount: 0.174860
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:49:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

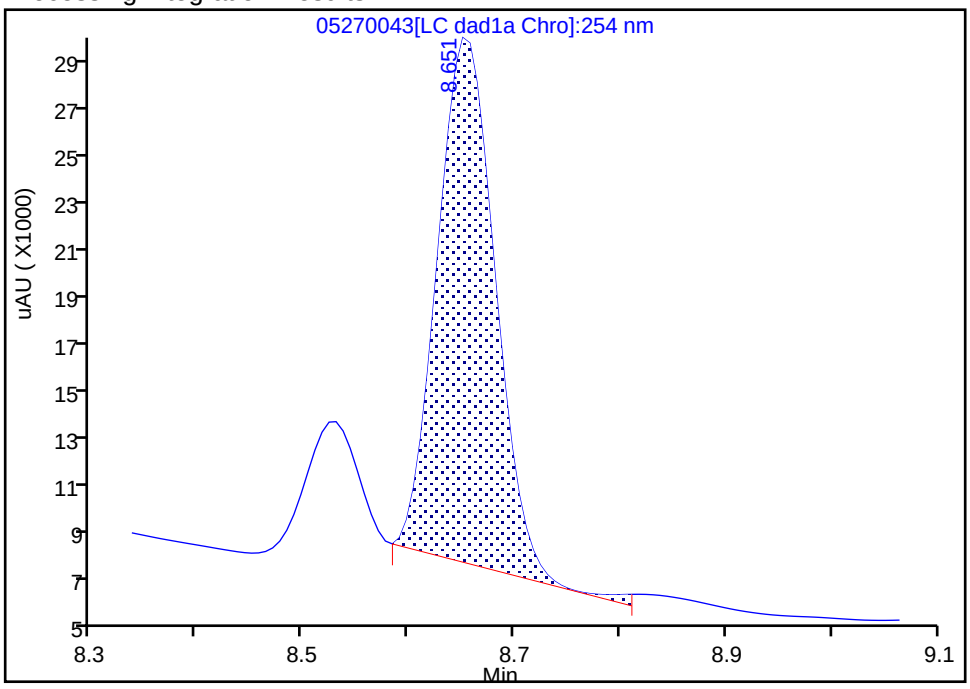
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d				
Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

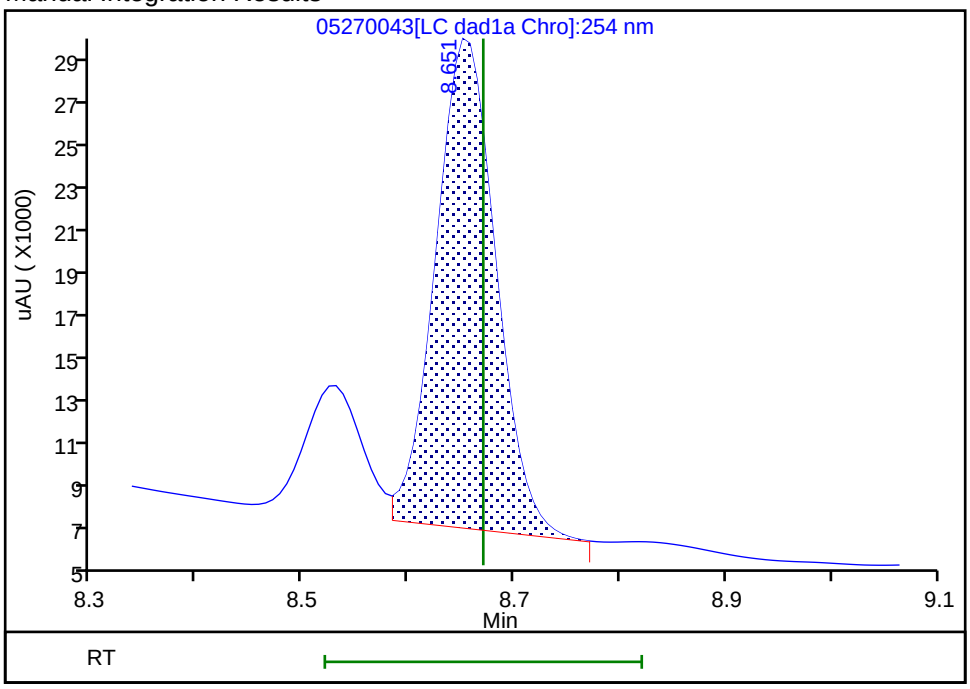
Processing Integration Results

RT: 8.65
Area: 84462
Amount: 0.383365
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 90063
Amount: 0.408788
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:49:08

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins TestAmerica, Denver

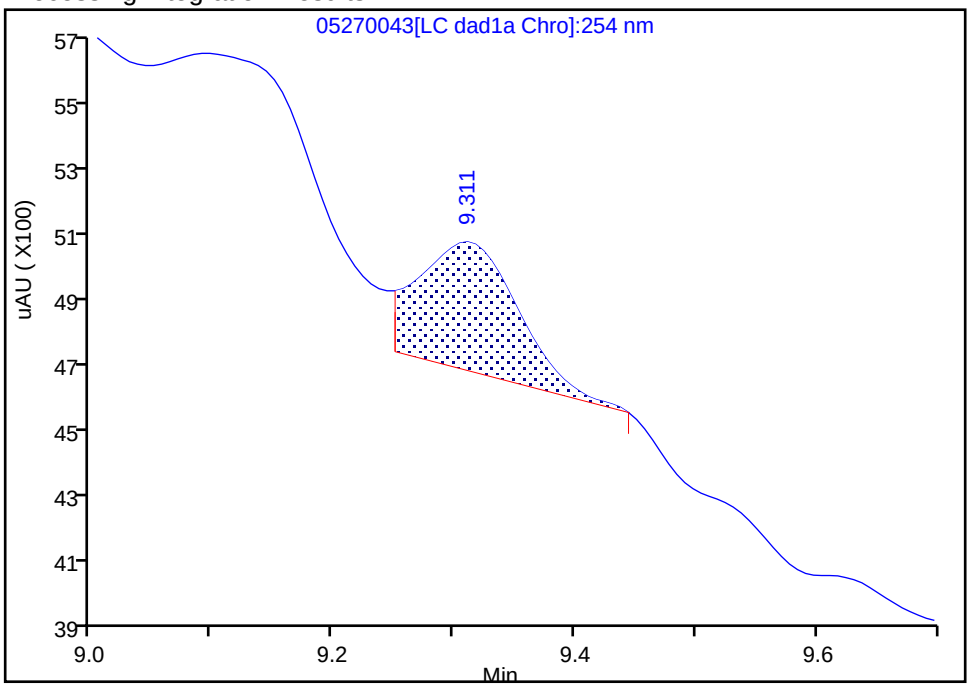
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d				
Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

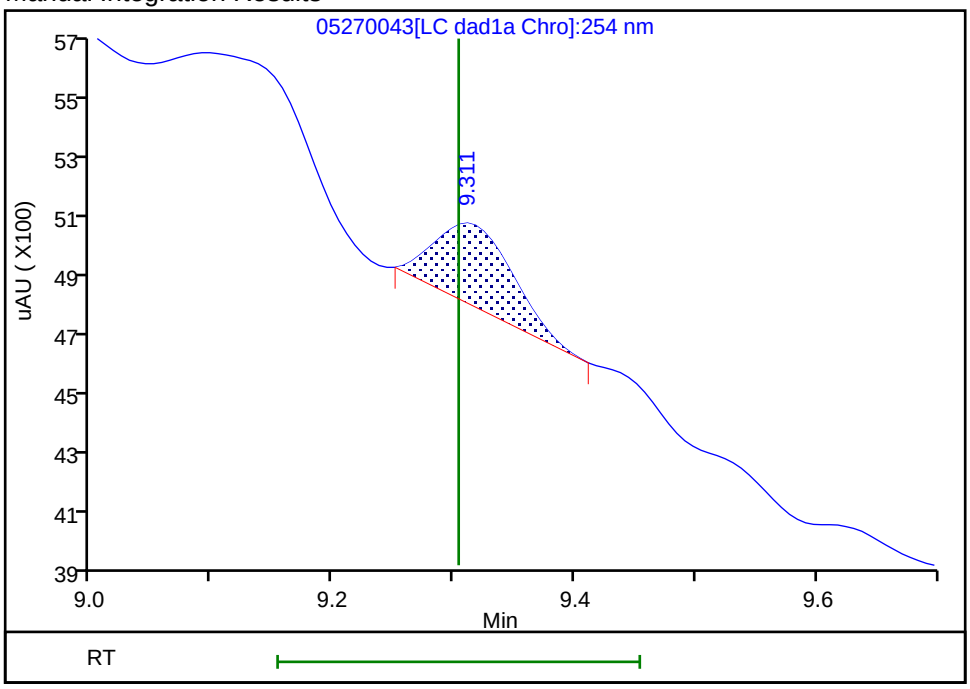
Processing Integration Results

RT: 9.31
Area: 2103
Amount: 0.007097
Amount Units: ug/mL



Manual Integration Results

RT: 9.31
Area: 1165
Amount: 0.003931
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:49:30
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

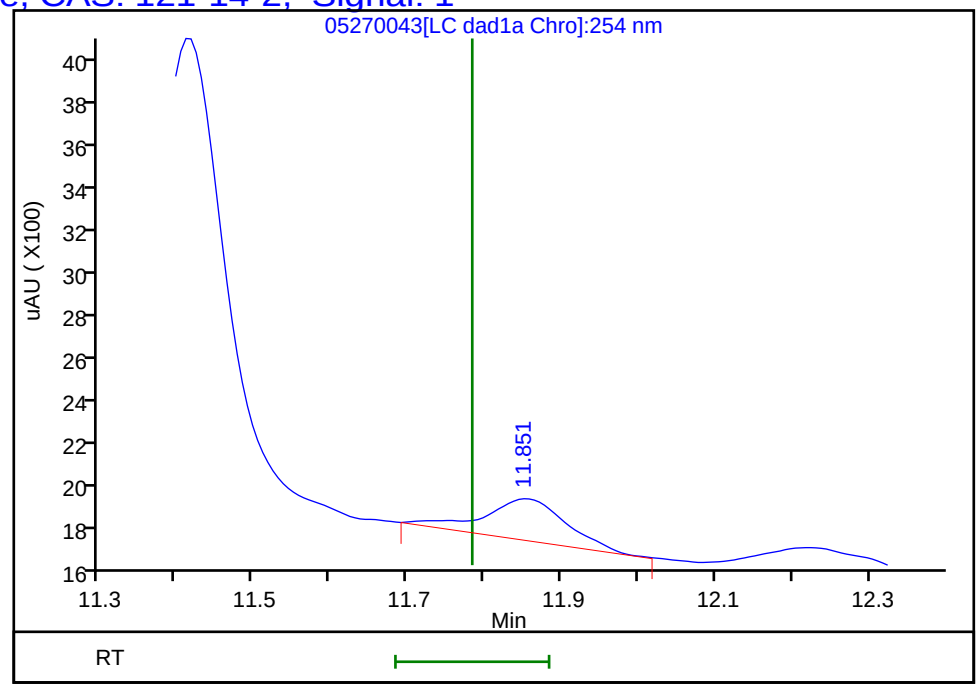
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d

Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.85
Response: 1387
Amount: 0.004833



Reviewer: zhangji, 28-May-2021 12:49:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

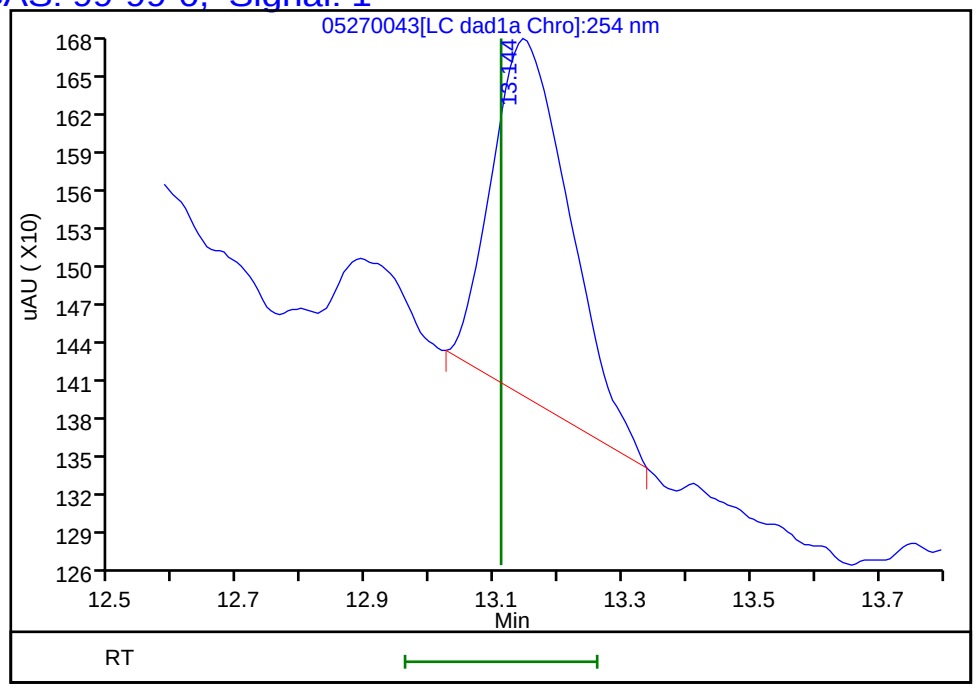
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d				
Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.14
Response: 2401
Amount: 0.021454



Reviewer: zhangji, 28-May-2021 12:49:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

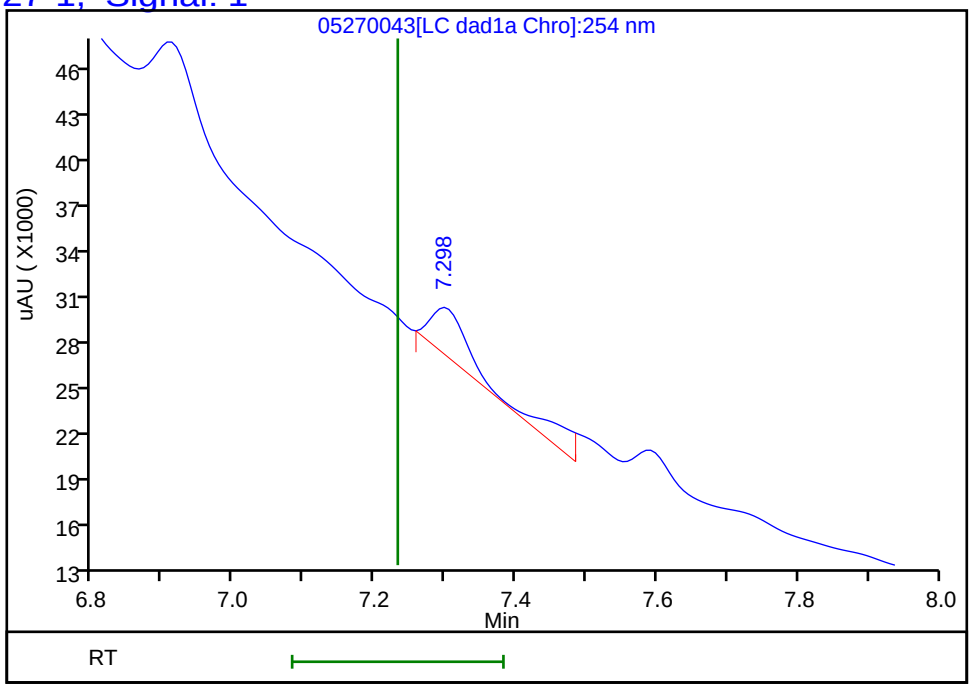
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d				
Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 16681
Amount: 0.127980



Reviewer: zhangji, 28-May-2021 12:49:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

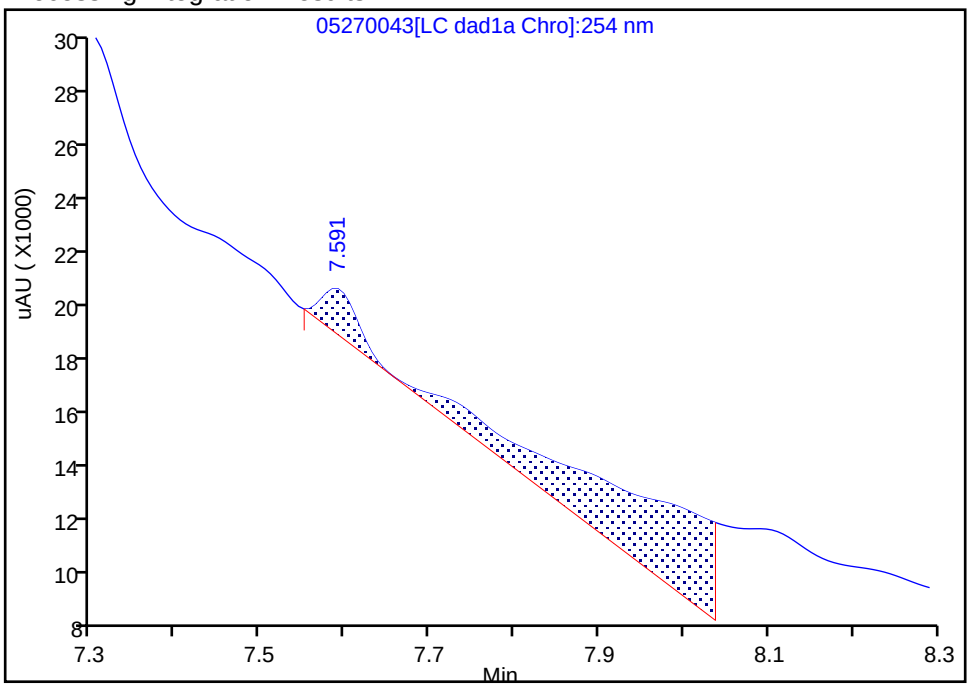
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d				
Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

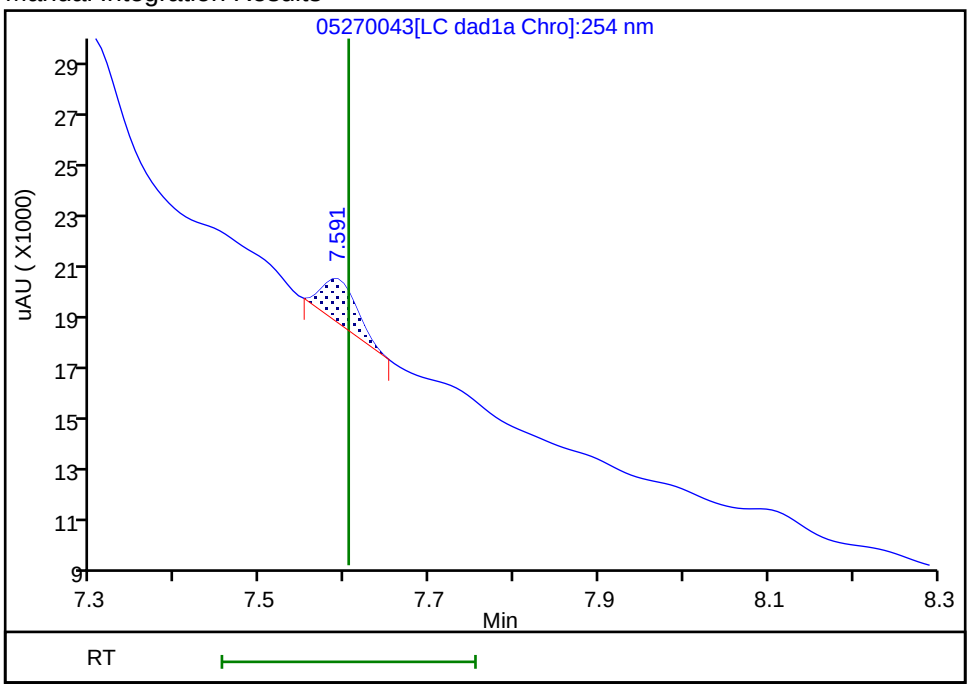
Processing Integration Results

RT: 7.59
Area: 41423
Amount: 0.389821
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 4836
Amount: 0.045510
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:49:24

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

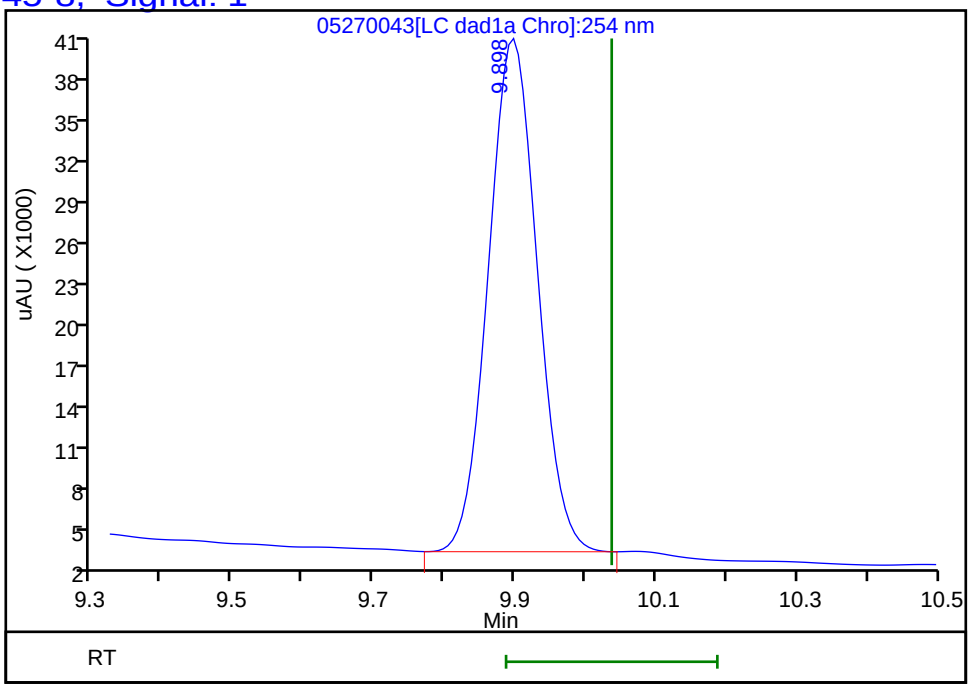
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270043.d

Injection Date:	28-May-2021 03:25:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.90
Response: 178139
Amount: 1.033169



Reviewer: zhangji, 28-May-2021 12:49:35
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.: 280-148902-1

SDG No.:

Client Sample ID: G0082-21A Lab Sample ID: 280-148902-10

Matrix: Water Lab File ID: 05280026.D

Analysis Method: 8330A Date Collected: 05/20/2021 10:40

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 524.2(mL) Date Analyzed: 05/29/2021 04:19

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.: 537871 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.095	U	0.10	0.095	0.035
121-82-4	*RDX*	*0.65*	*J1*	*0.20*	0.19	*0.049*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280026.D
Lims ID: 280-148902-B-10-A
Client ID: G0082-21A
Sample Type: Client
Inject. Date: 29-May-2021 04:19:51 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-10-A
Misc. Info.: 280-0101890-026
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:27 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: CTX1653

First Level Reviewer: zhangji Date: 29-May-2021 15:24:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.658	6.694	-0.036	6613	0.0355	M
7 MNX	1	7.378	7.424	-0.046	1837	0.006936	M
8 RDX	1	8.845	8.868	-0.023	14027	0.0687	
9 Nitrobenzene	1		11.921			ND	
$ 10 1,2-Dinitrobenzene	1	13.005	13.021	-0.016	46504	0.1751	
12 1,3-Dinitrobenzene	1		15.447			ND	
14 o-Nitrotoluene	1		16.687			ND	U
15 p-Nitrotoluene	1		16.974			ND	
16 4-Amino-2,6-dinitrotoluene	1	17.411	17.427	-0.016	34654	0.1168	
17 m-Nitrotoluene	1		17.947			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.325	18.327	-0.002	34160	0.0844	
19 1,3,5-Trinitrobenzene	1	18.845	18.854	-0.009	182089	0.4375	
20 2,6-Dinitrotoluene	1		20.101			ND	
21 2,4-Dinitrotoluene	1		20.568			ND	
22 Tetryl	1		24.194			ND	
23 2,4,6-Trinitrotoluene	1	25.165	25.174	-0.009	29222	0.0744	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

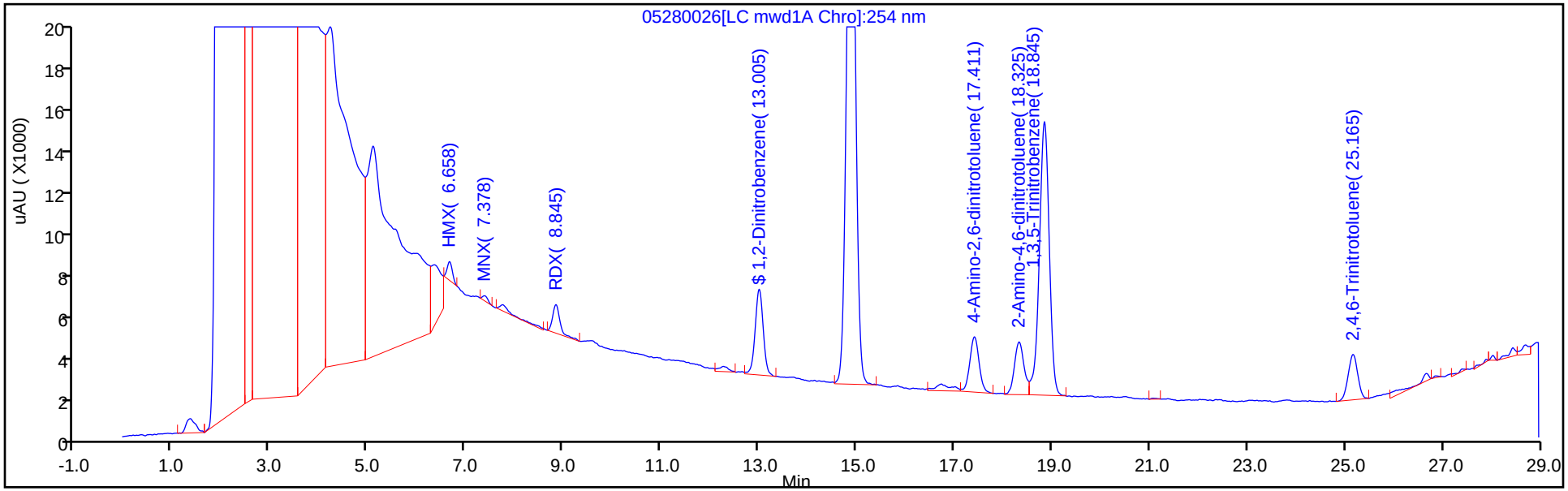
Report Date: 29-May-2021 15:25:28 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

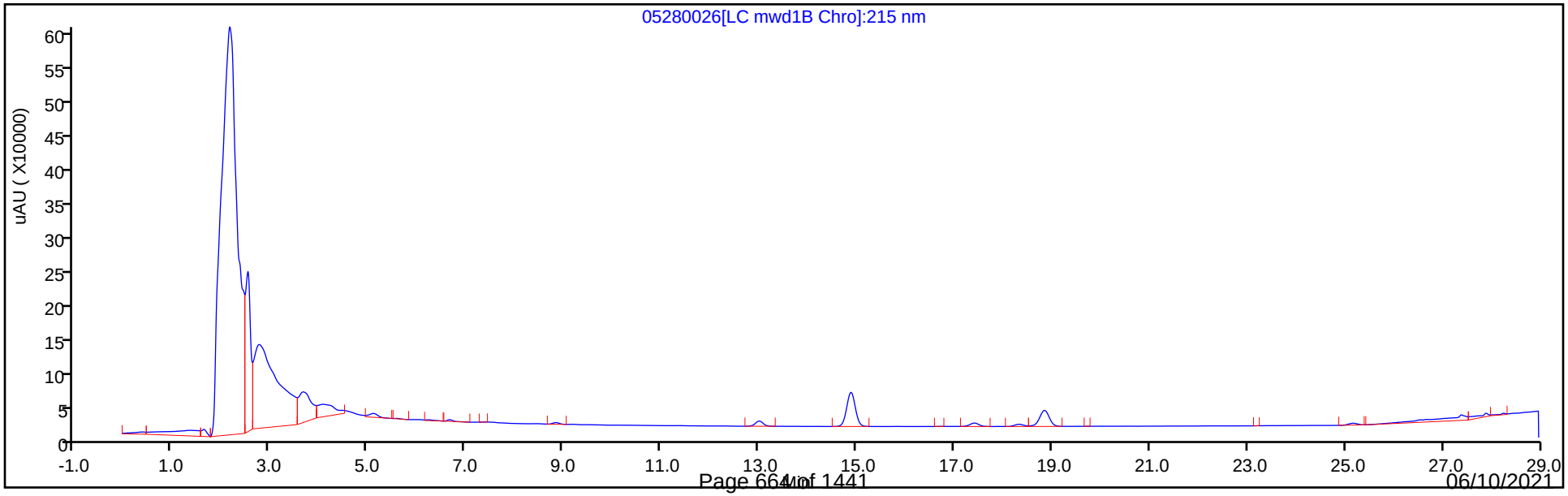
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280026.D

Injection Date:	29-May-2021 04:19:51	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10	Worklist Smp#:	26
Client ID:	G0082-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280026.D				
Lims ID:	280-148902-B-10-A				
Client ID:	G0082-21A				
Sample Type:	Client				
Inject. Date:	29-May-2021 04:19:51	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-10-A				
Misc. Info.:	280-0101890-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:27	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:	CTX1653				
First Level Reviewer: zhangji		Date:	29-May-2021 15:24:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1751	87.53

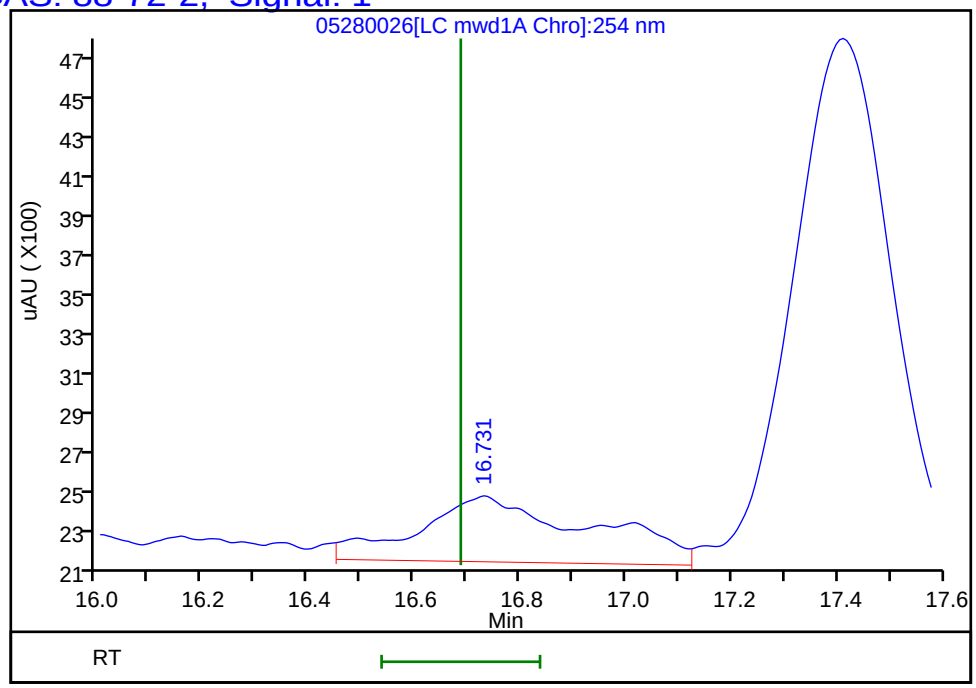
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280026.D				
Injection Date:	29-May-2021 04:19:51	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.73
Response: 7171
Amount: 0.028803



Reviewer: zhangji, 29-May-2021 15:24:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

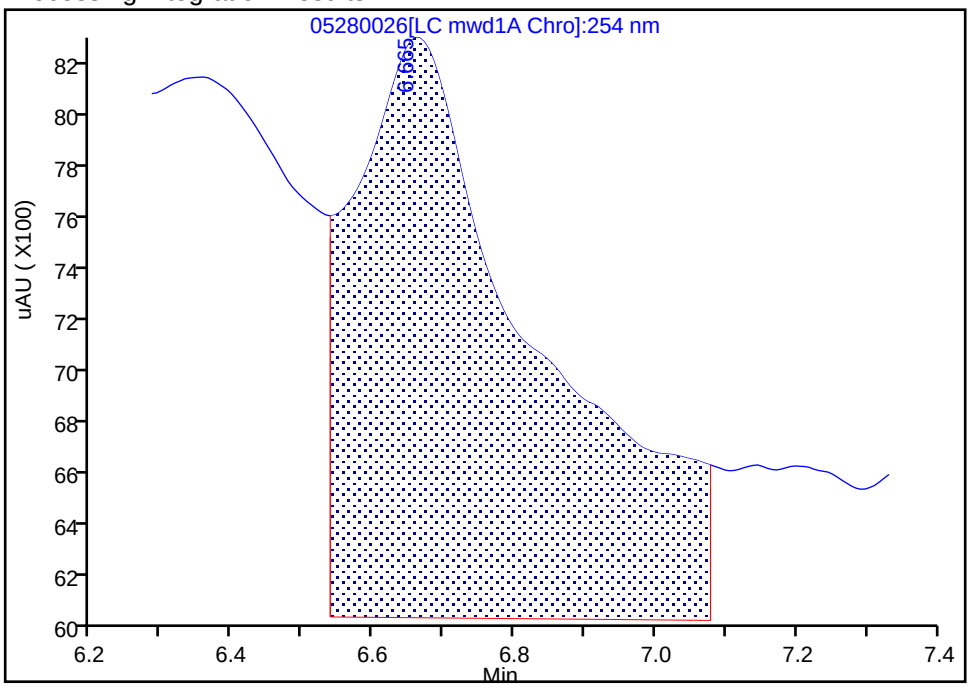
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280026.D				
Injection Date:	29-May-2021 04:19:51	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

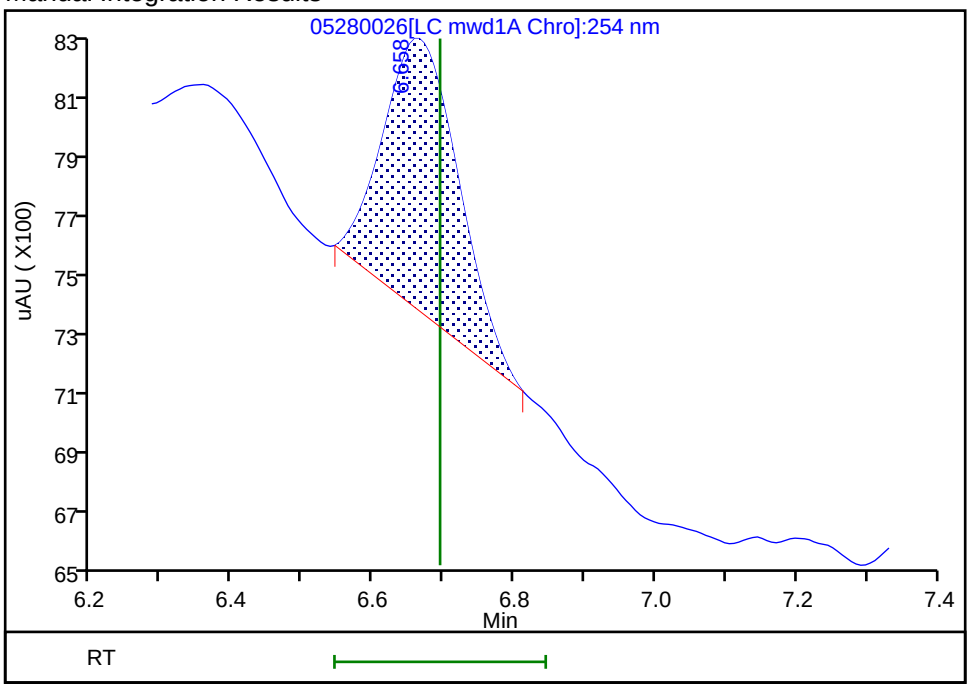
Processing Integration Results

RT: 6.66
Area: 40163
Amount: 0.246781
Amount Units: ug/ml



Manual Integration Results

RT: 6.66
Area: 6613
Amount: 0.035474
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:24:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

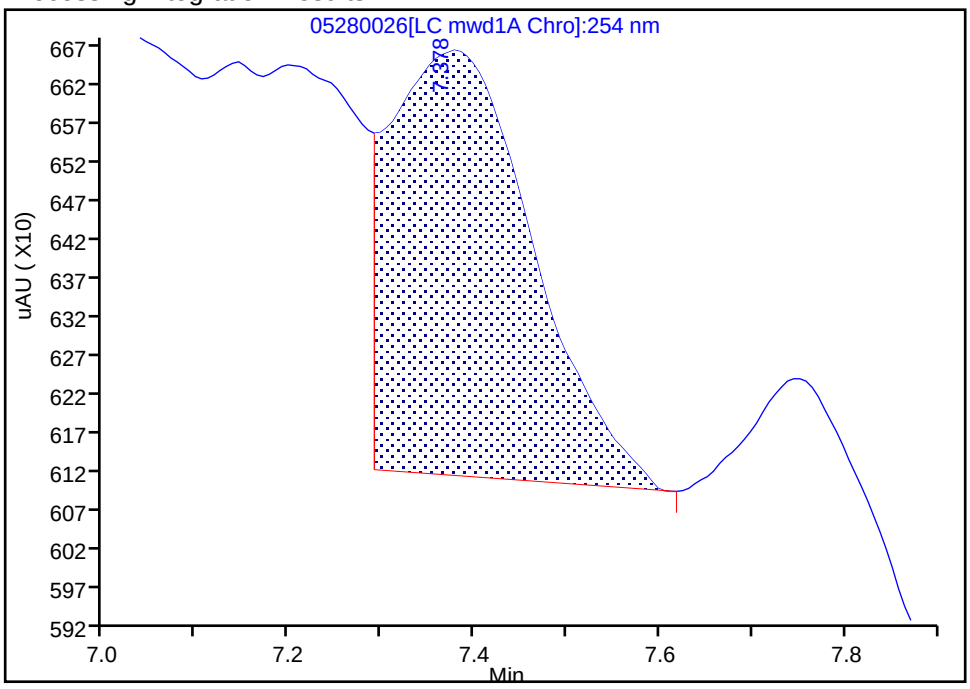
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280026.D				
Injection Date:	29-May-2021 04:19:51	Instrument ID:	CHHPLC_X5		
Lims ID:	280-148902-B-10-A	Lab Sample ID:	280-148902-10		
Client ID:	G0082-21A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

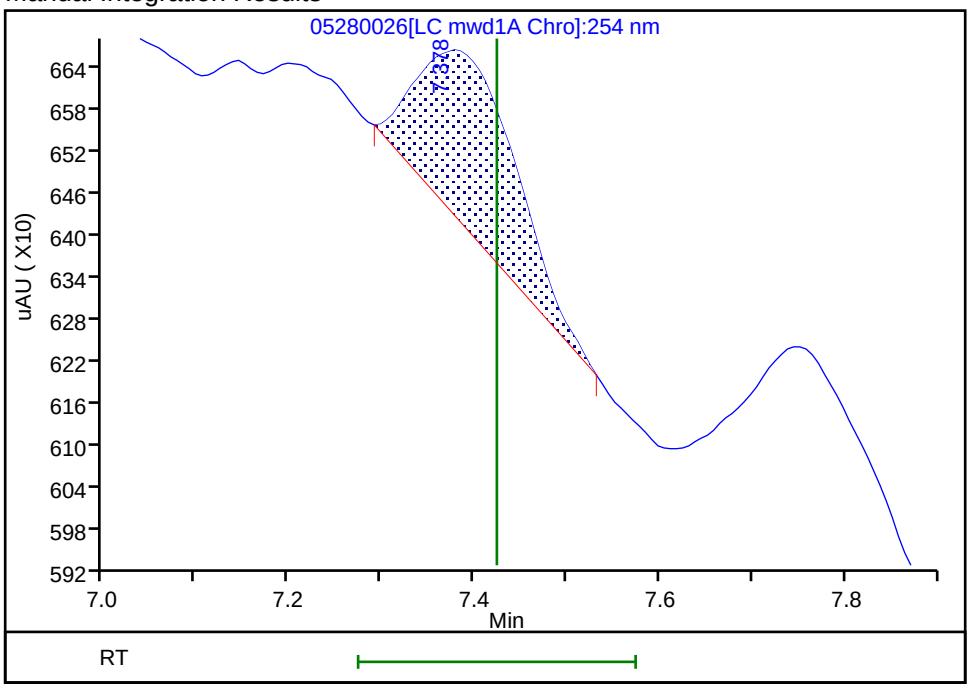
Processing Integration Results

RT: 7.38
Area: 5841
Amount: 0.022055
Amount Units: ug/ml



Manual Integration Results

RT: 7.38
Area: 1837
Amount: 0.006936
Amount Units: ug/ml



Reviewer: zhangji, 29-May-2021 15:24:13

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 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

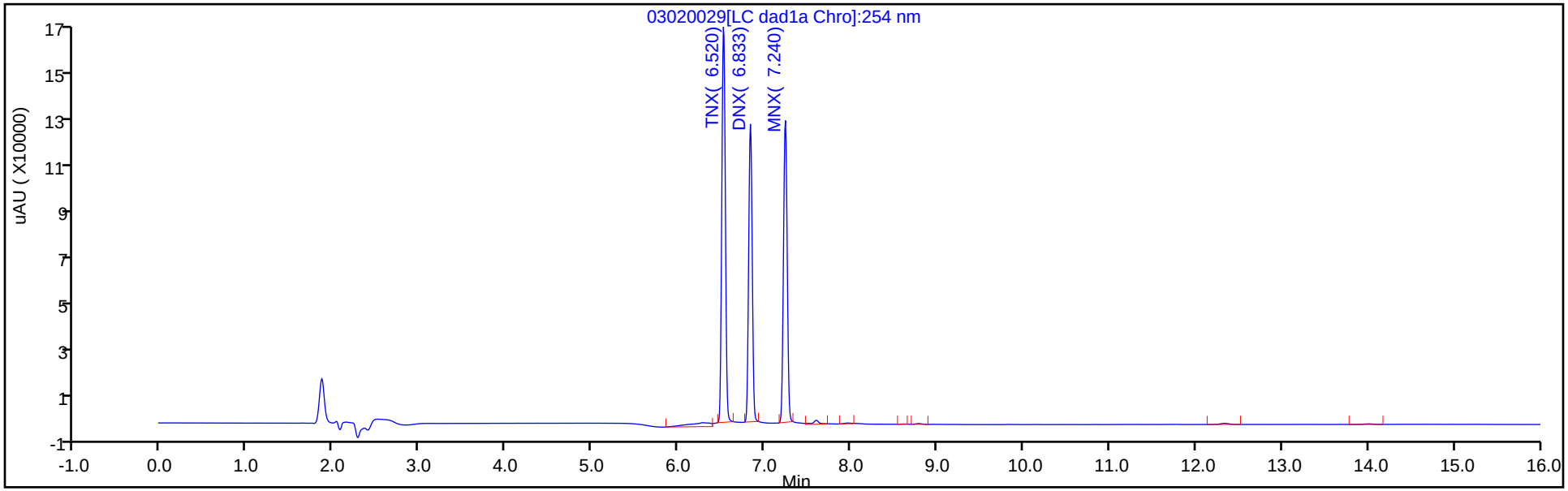
Report Date: 03-Mar-2021 13:32:24 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

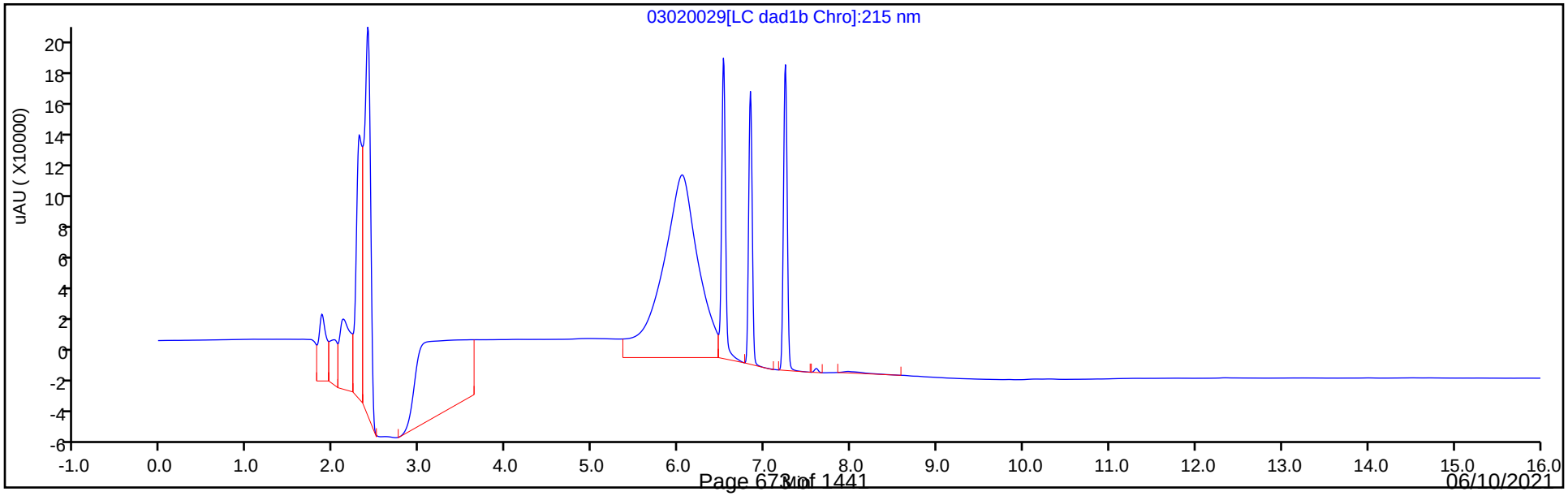
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d

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

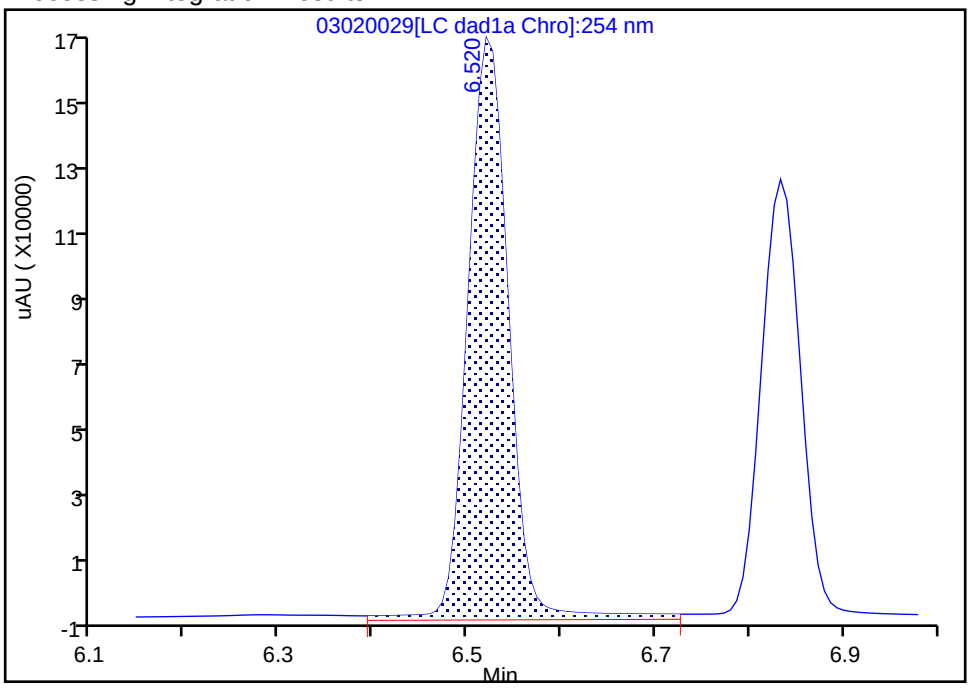
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

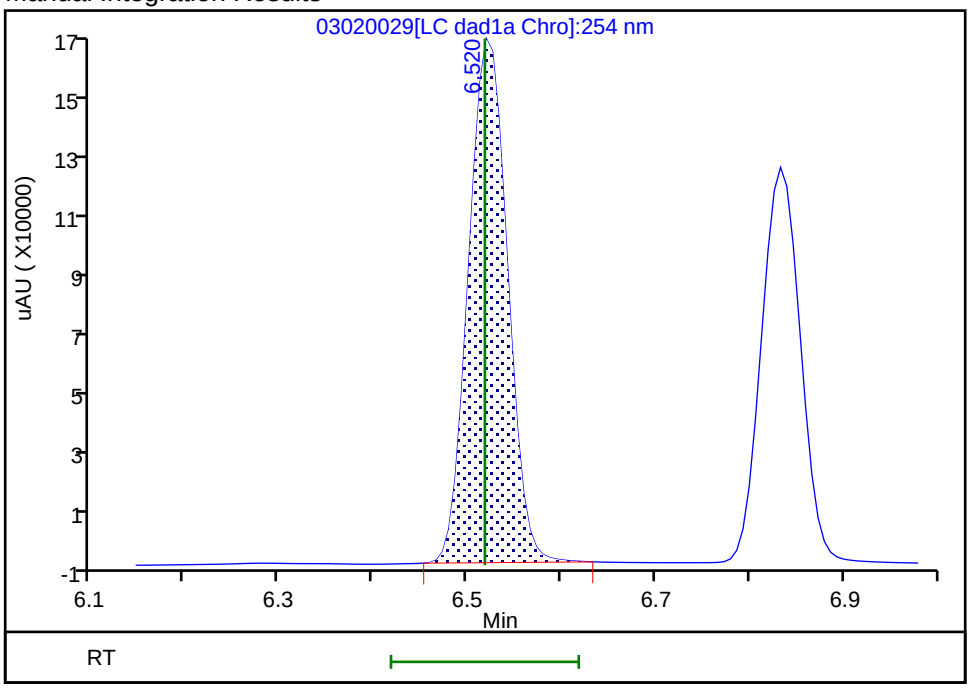
Processing Integration Results

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

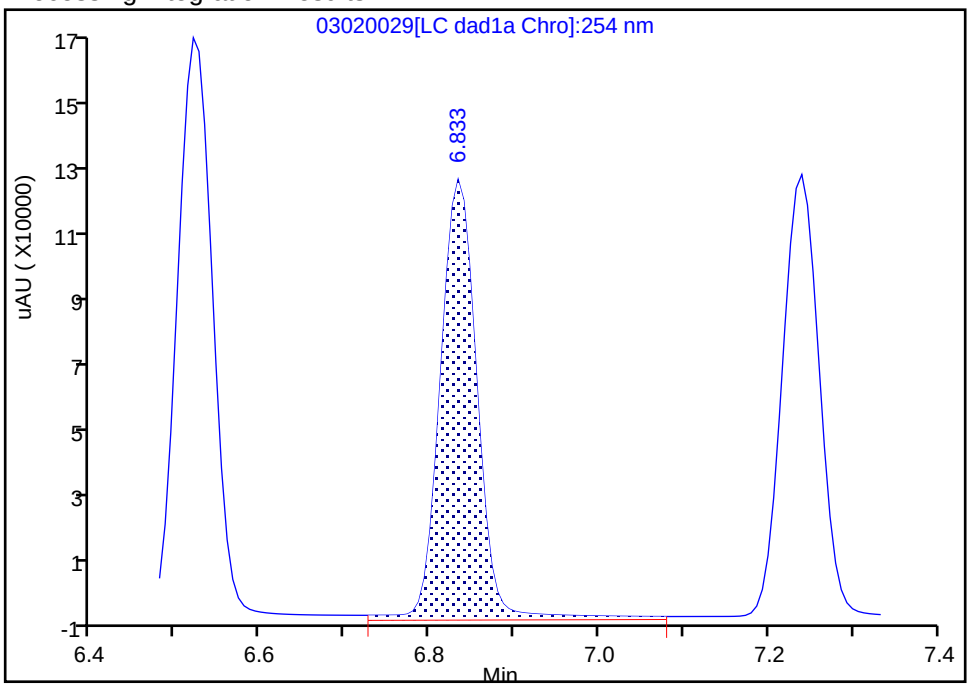
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

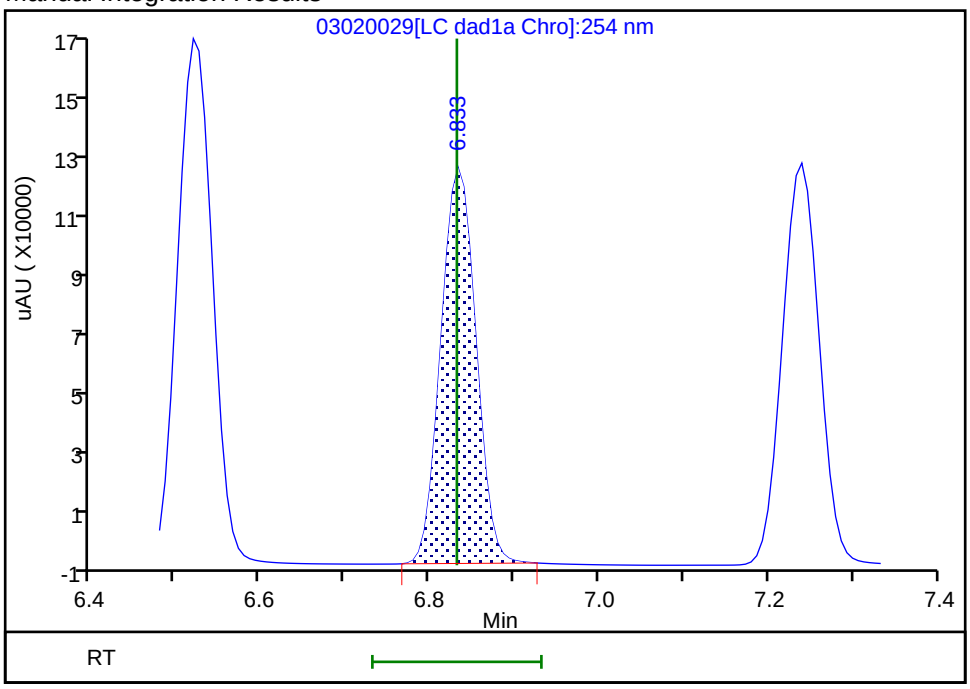
Processing Integration Results

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

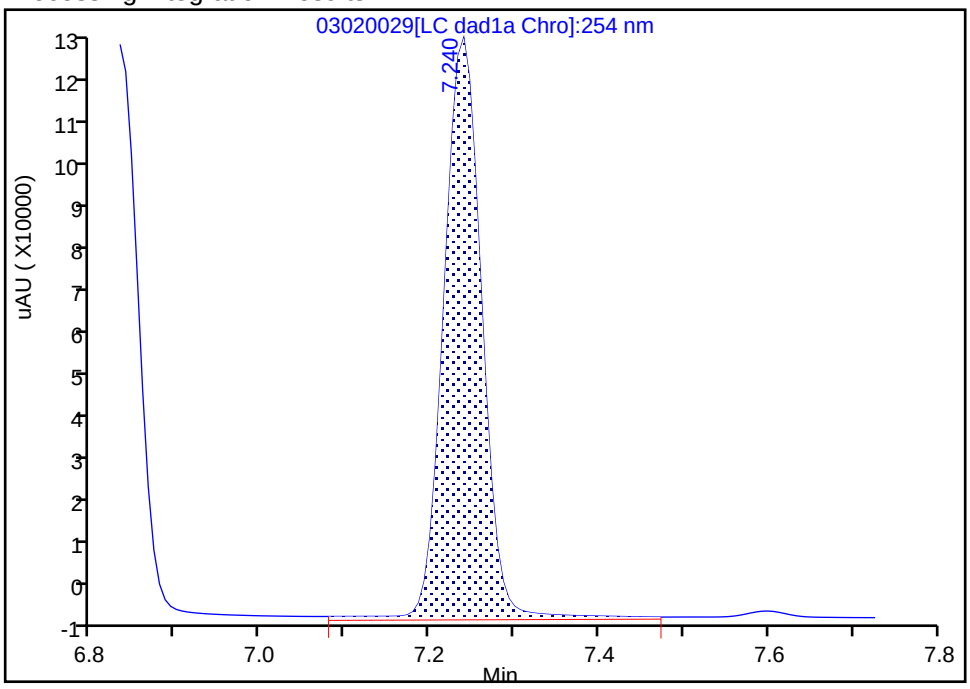
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

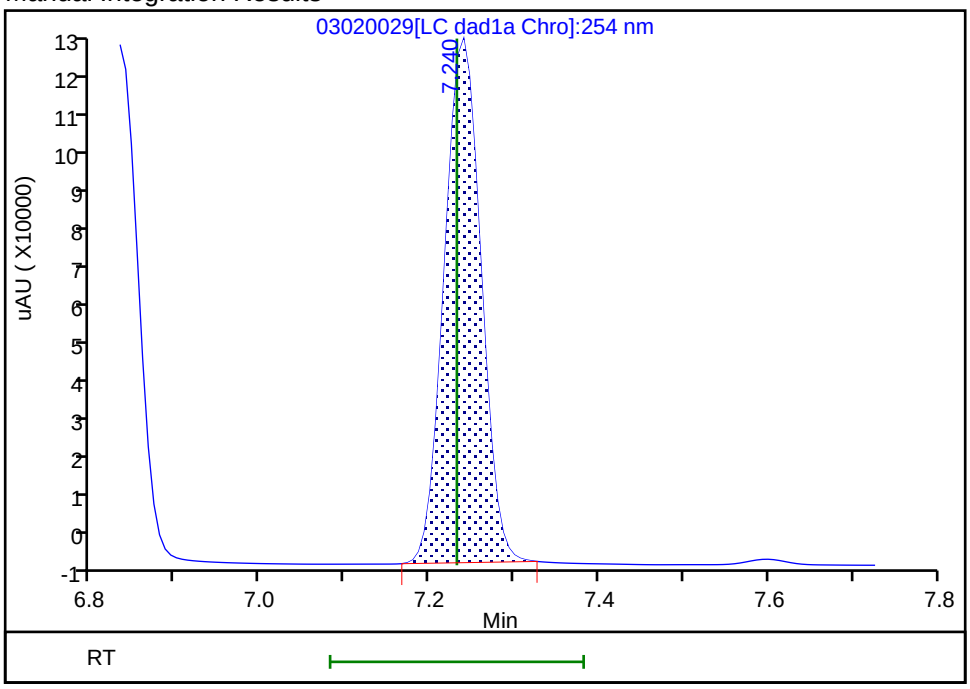
Processing Integration Results

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

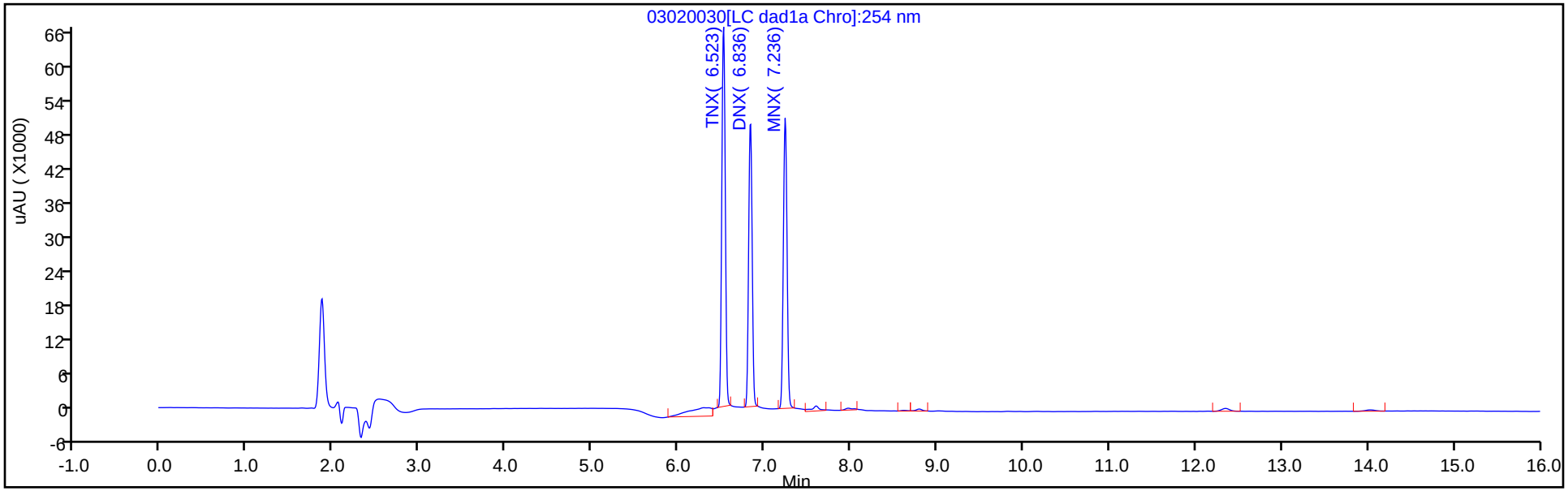
Report Date: 03-Mar-2021 13:32:25 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

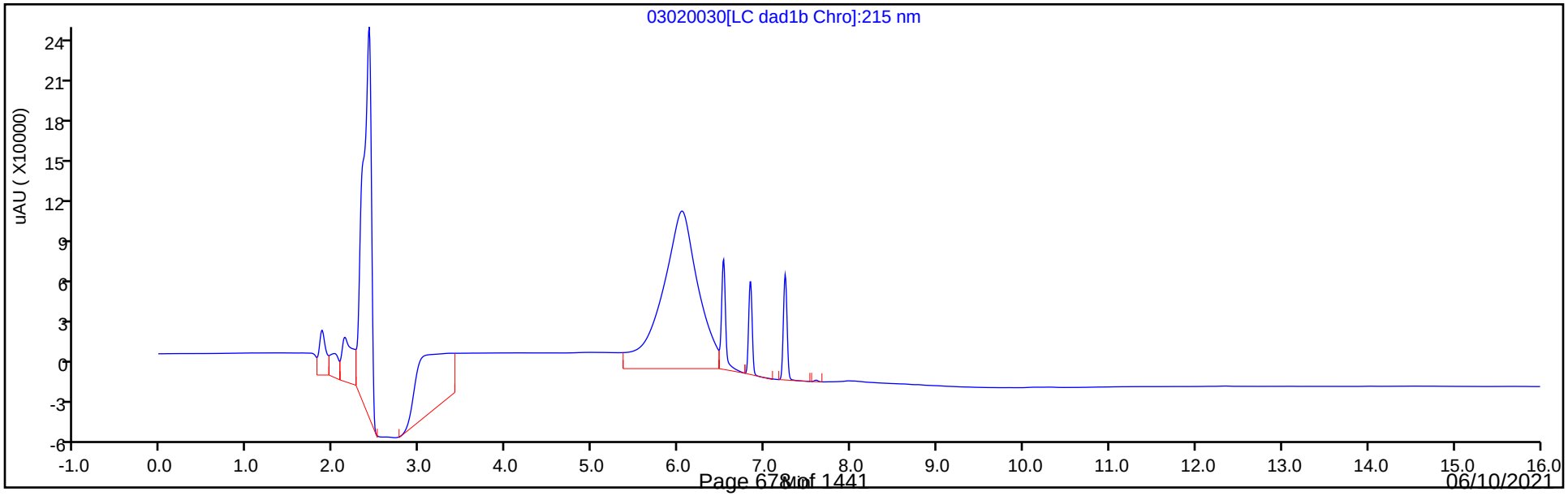
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d

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

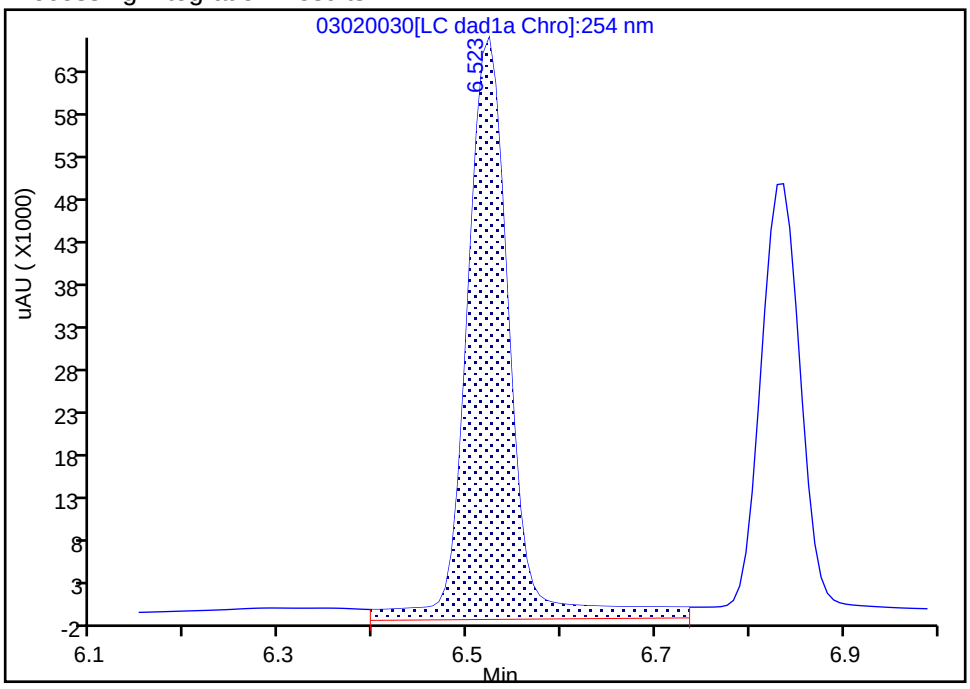
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

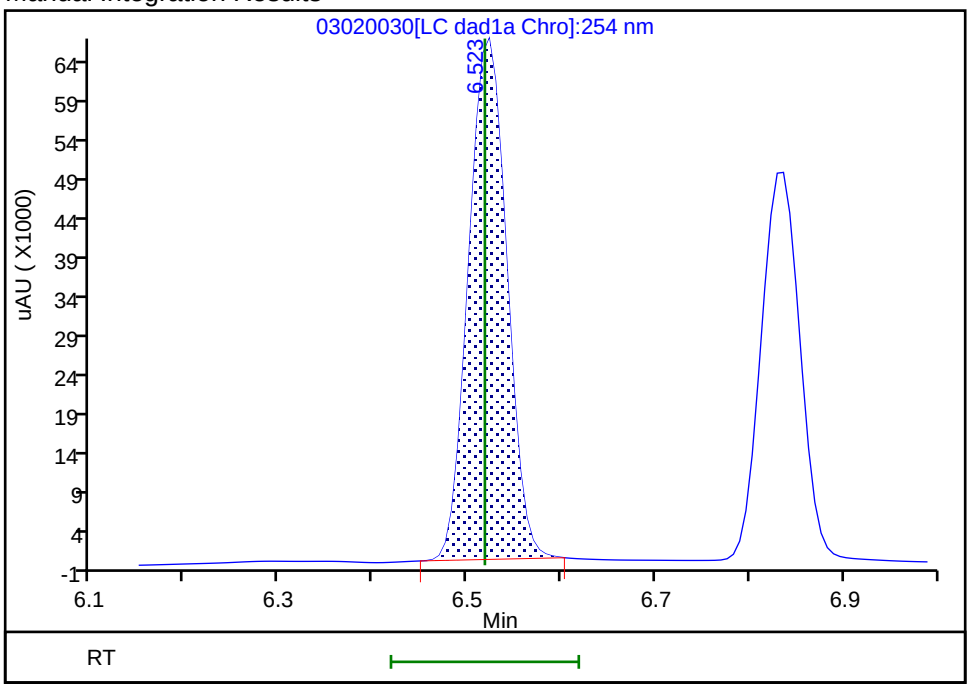
Processing Integration Results

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

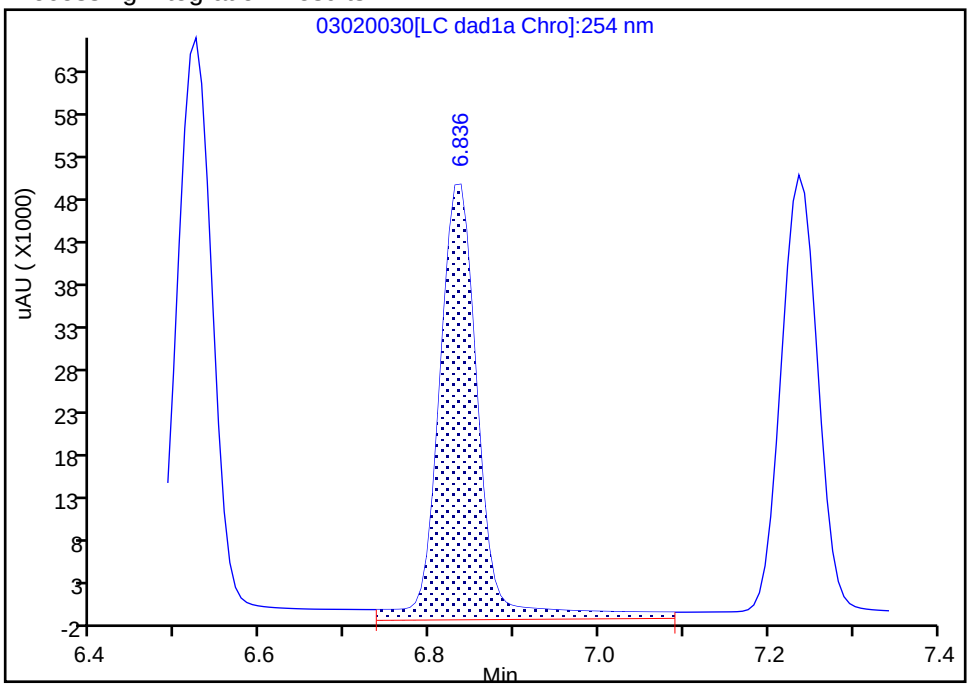
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

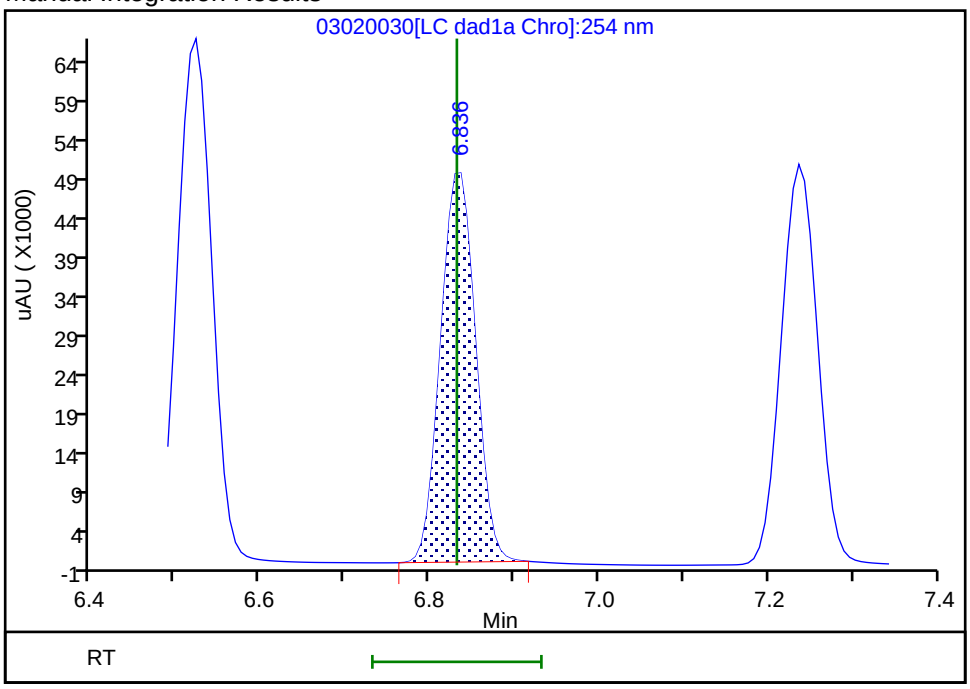
Processing Integration Results

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

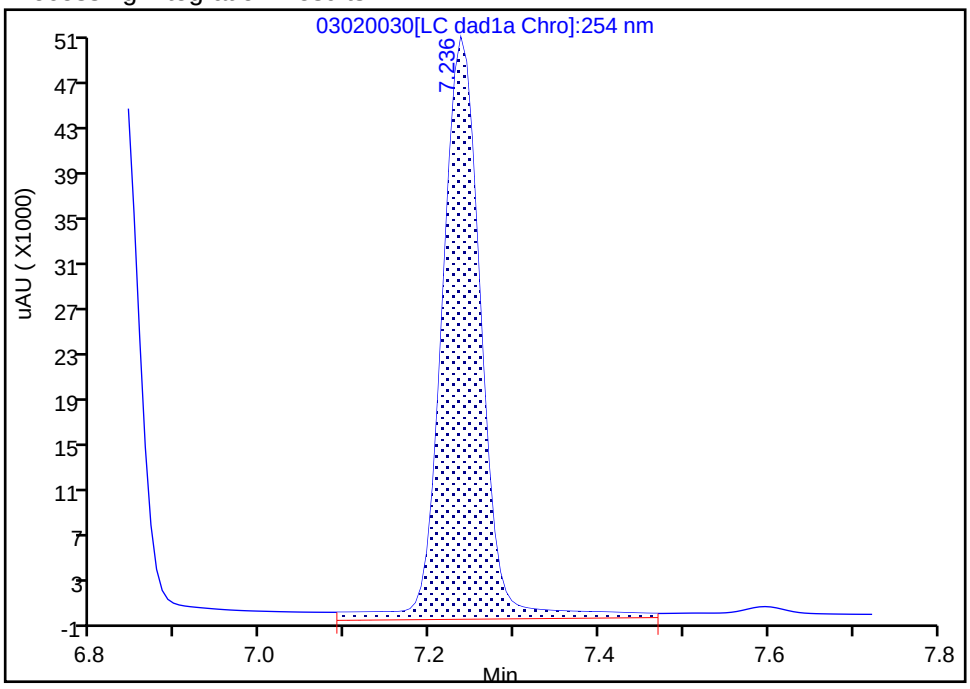
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

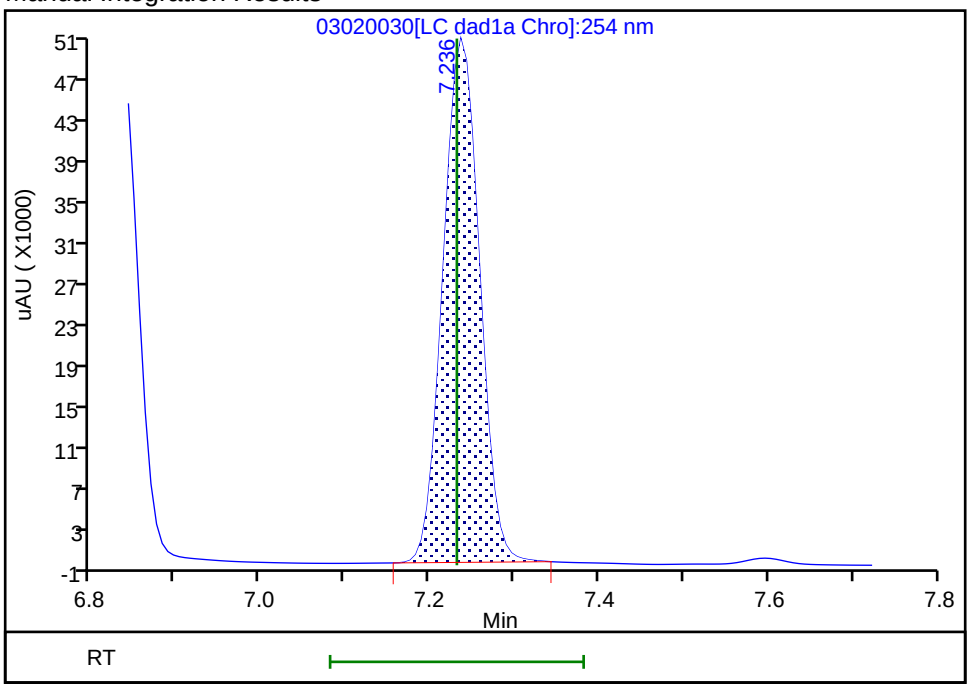
Processing Integration Results

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

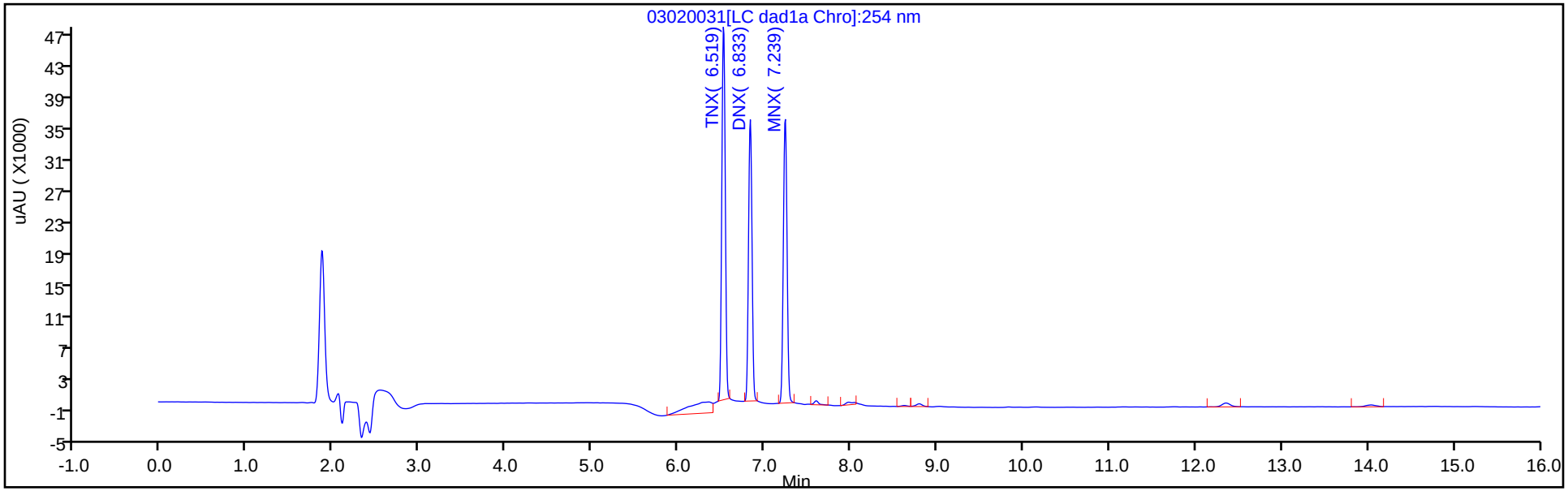
Report Date: 03-Mar-2021 13:32:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

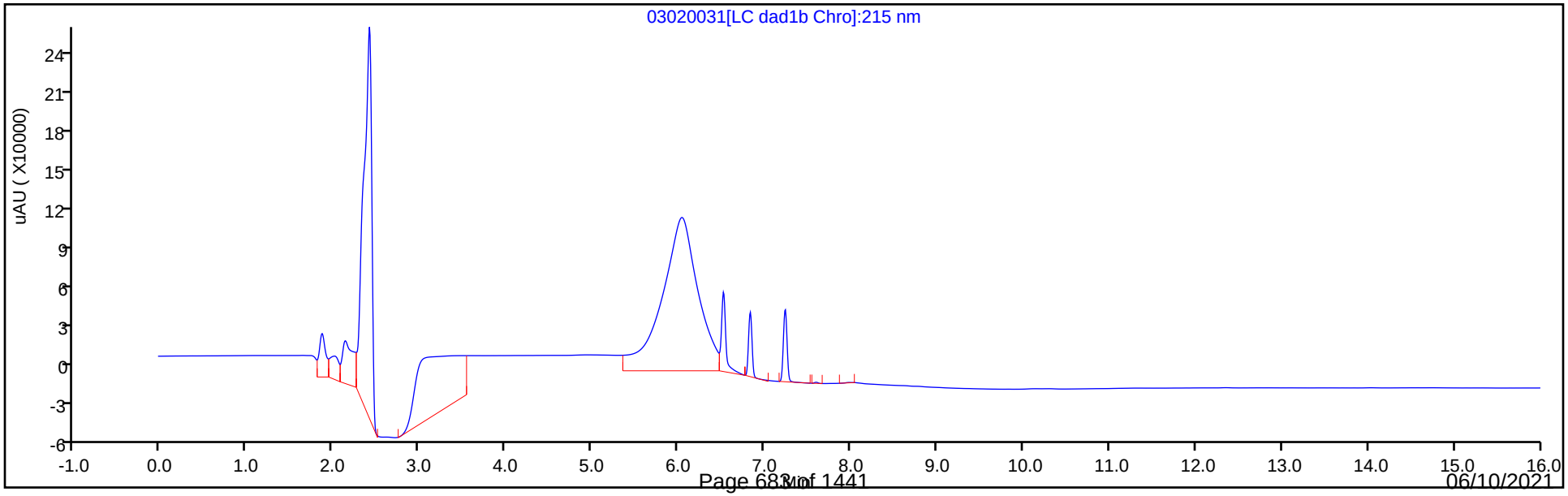
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d

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

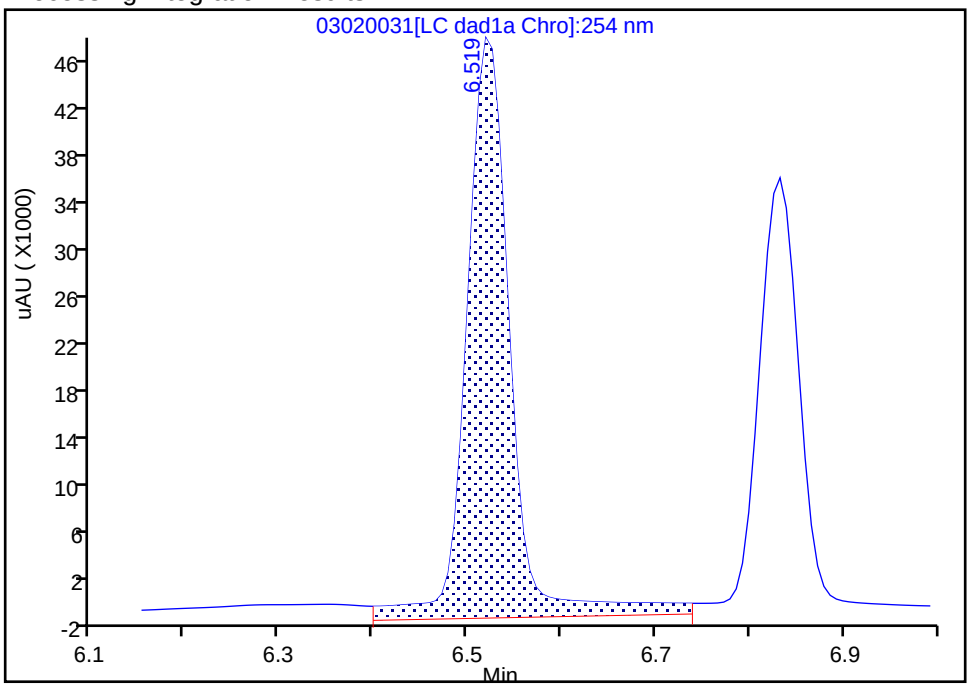
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

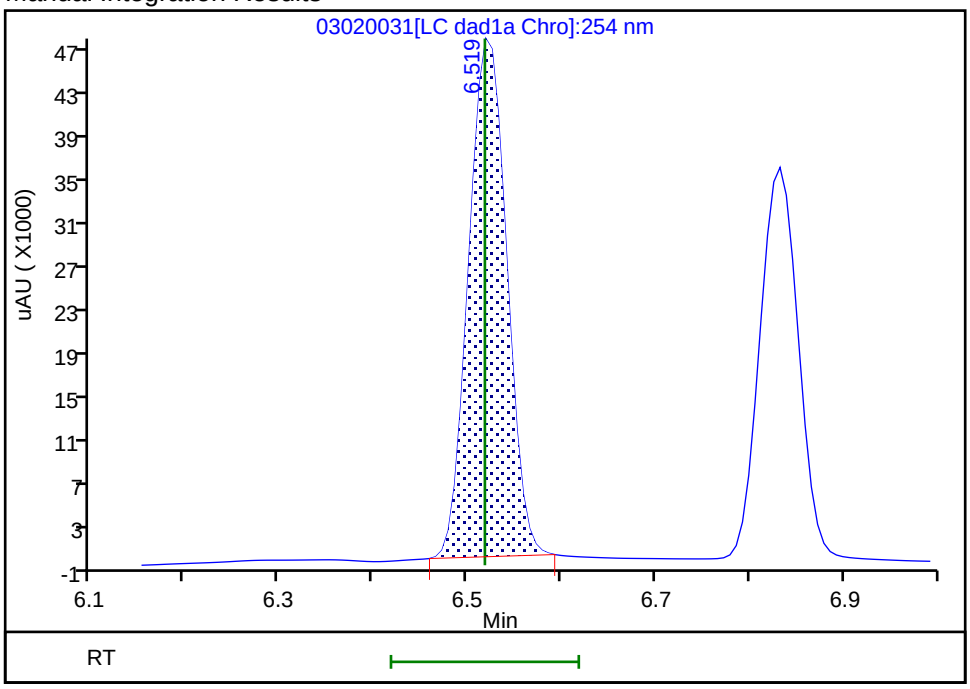
Processing Integration Results

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

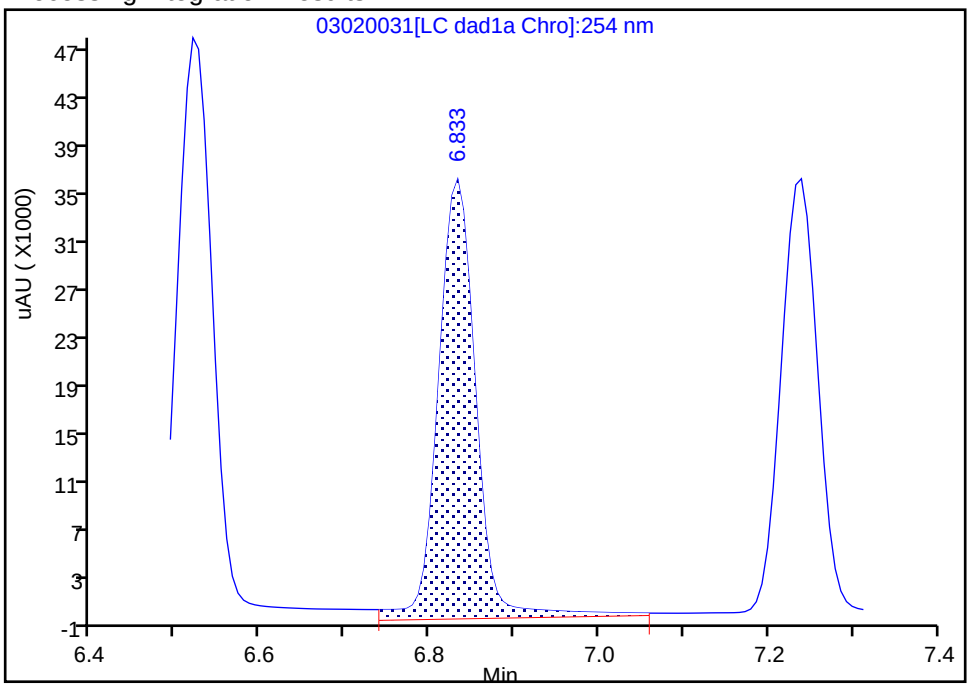
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

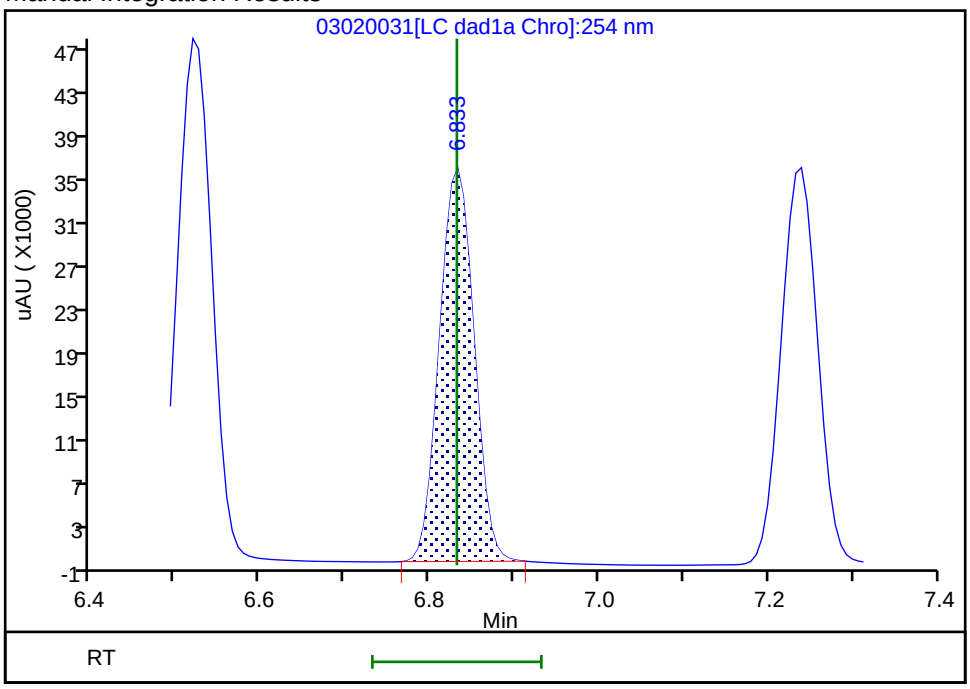
Processing Integration Results

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

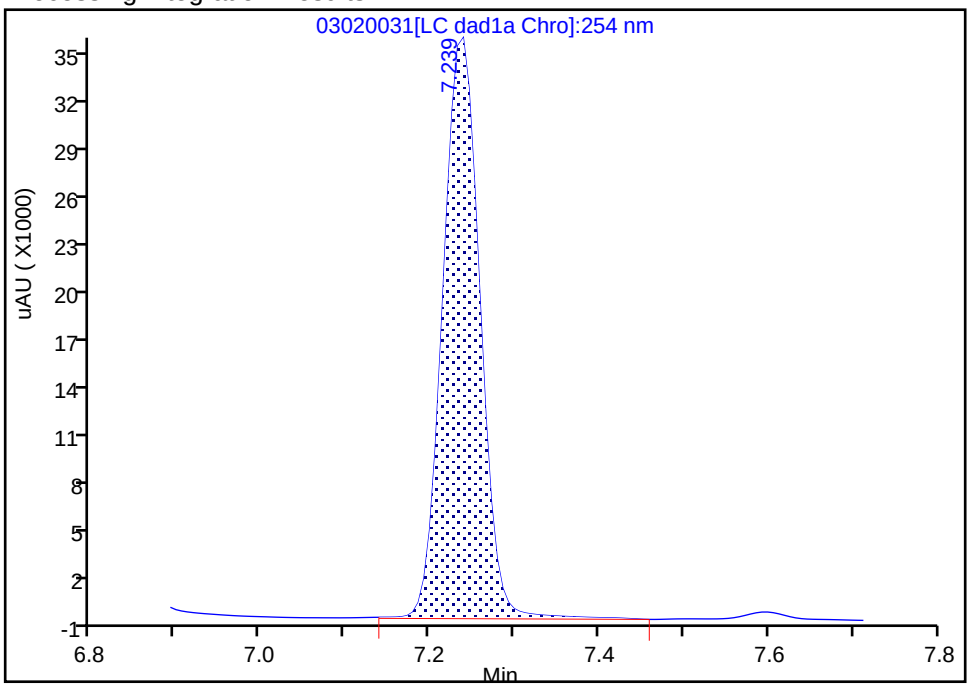
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

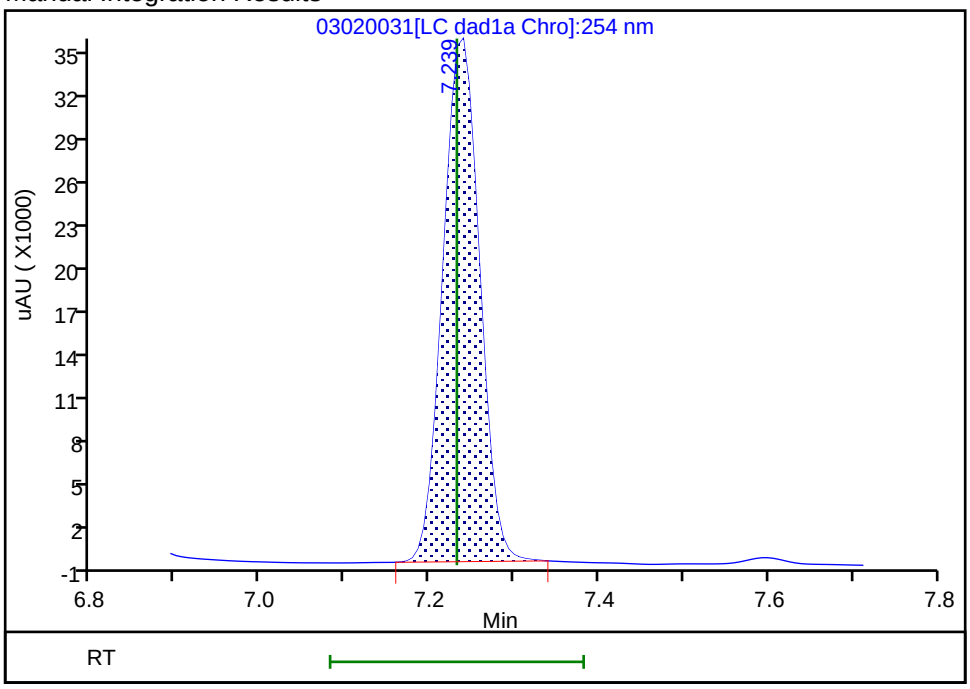
Processing Integration Results

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

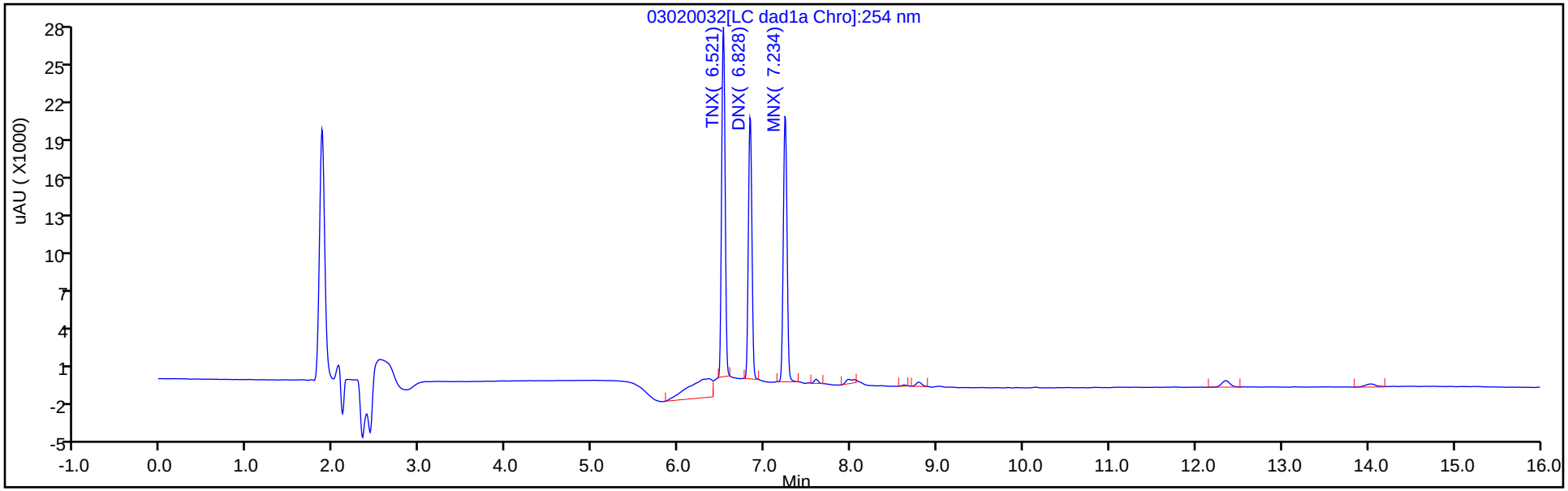
Report Date: 03-Mar-2021 13:32:27 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

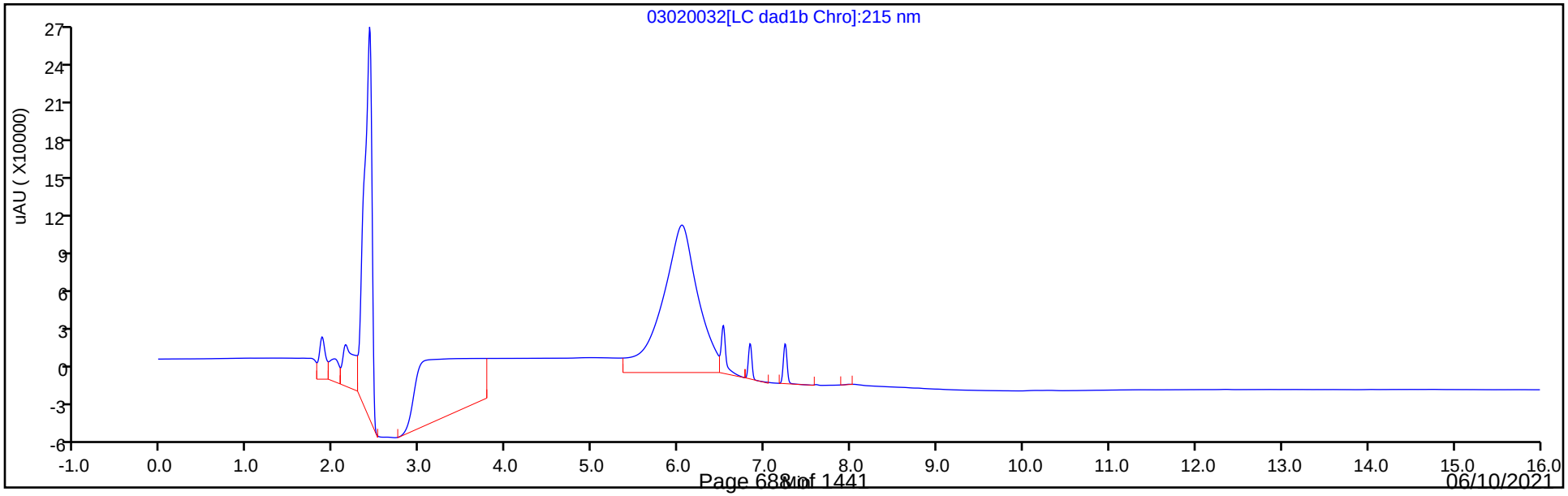
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d

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

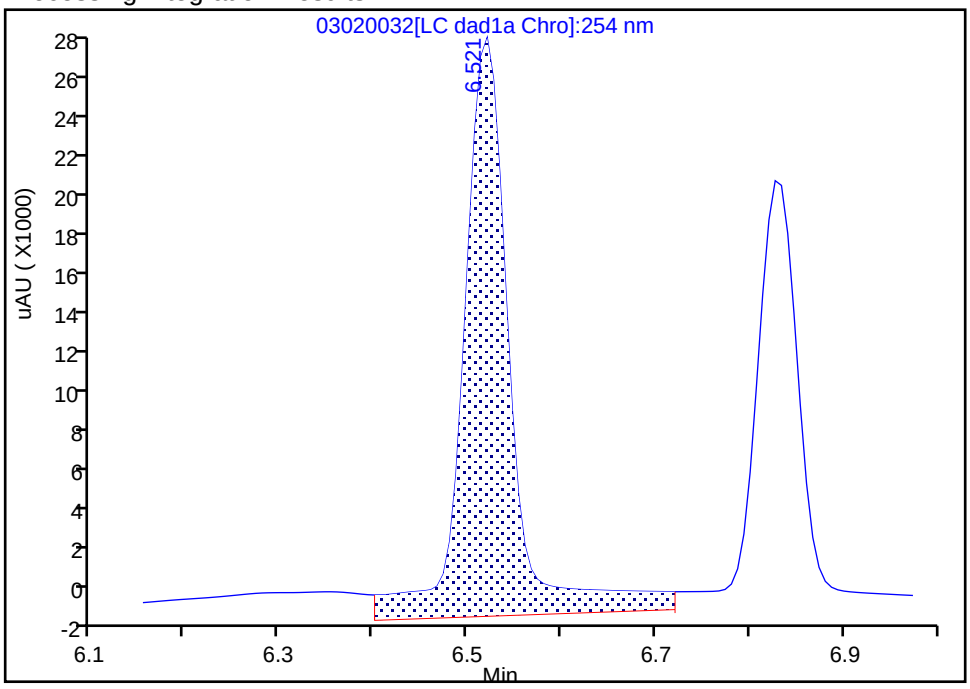
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d				
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

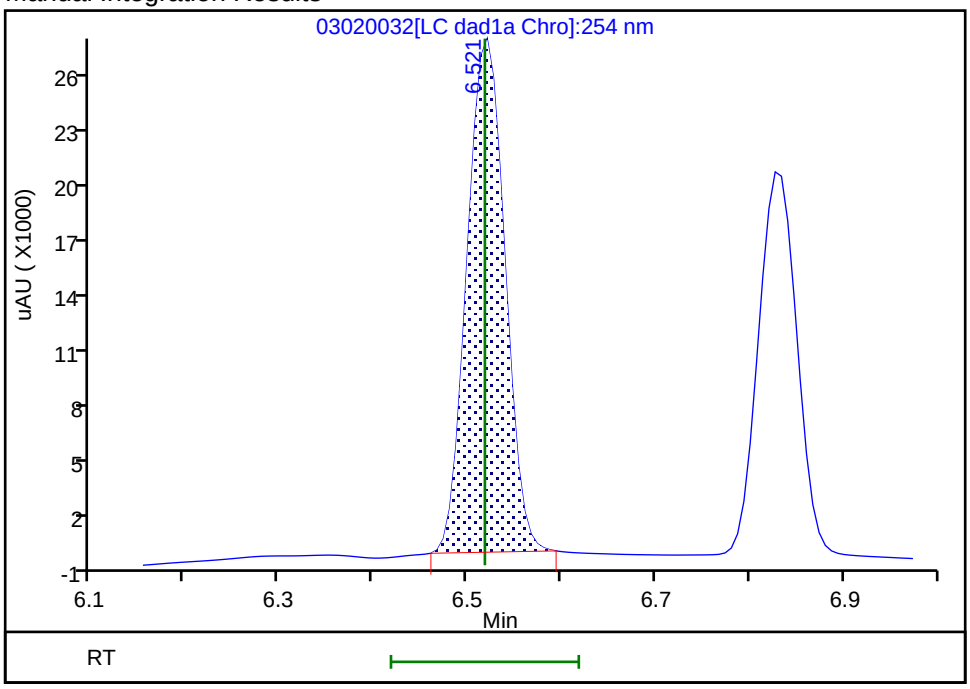
Processing Integration Results

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

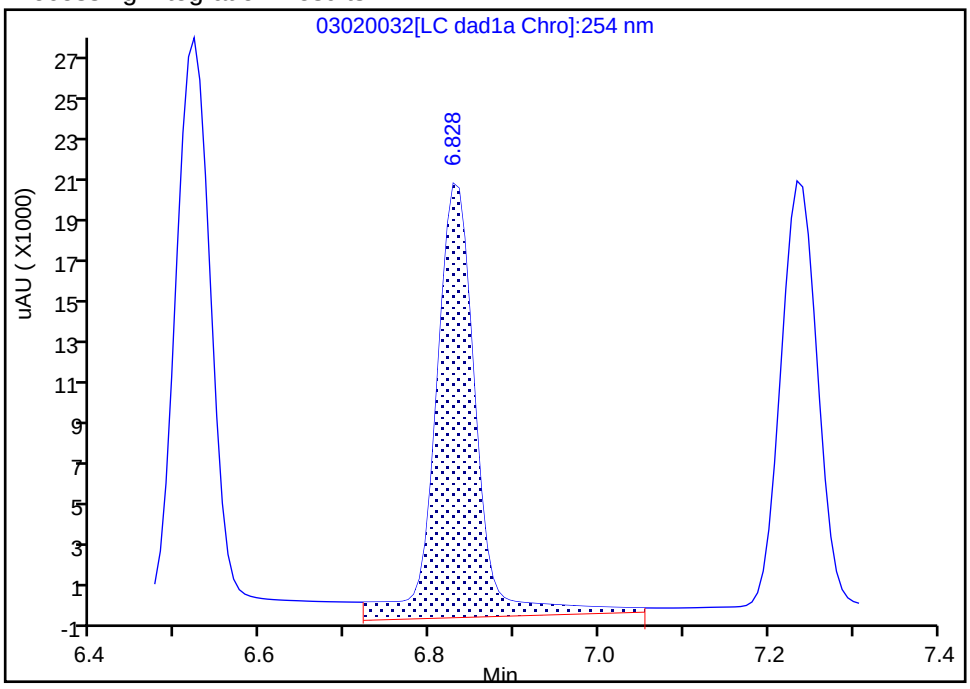
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d		
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 5		
Client ID:			
Operator ID:		ALS Bottle#:	32 Worklist Smp#: 32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

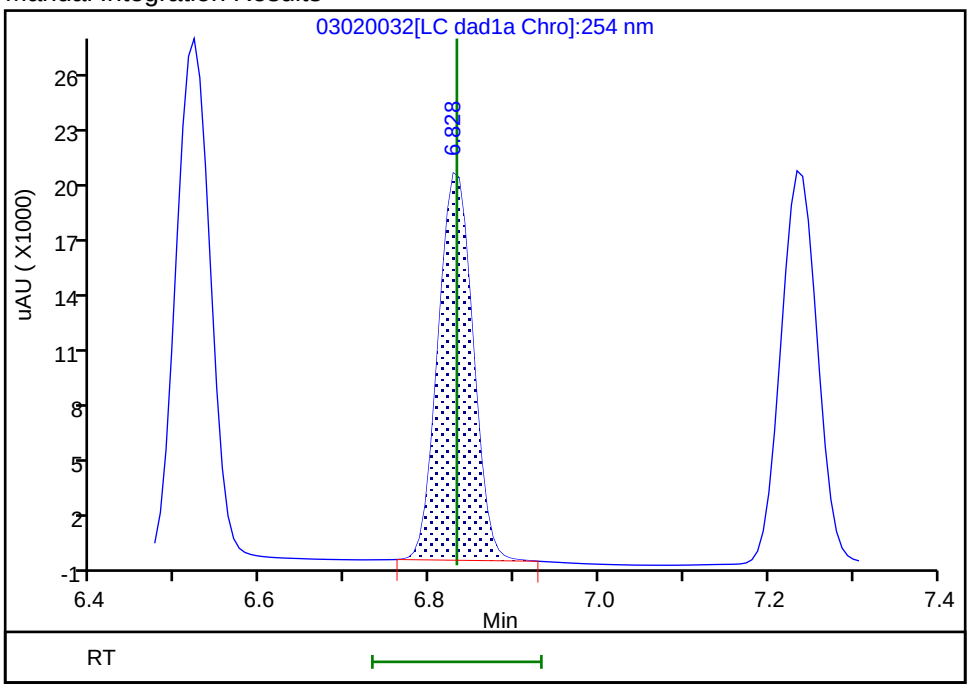
Processing Integration Results

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

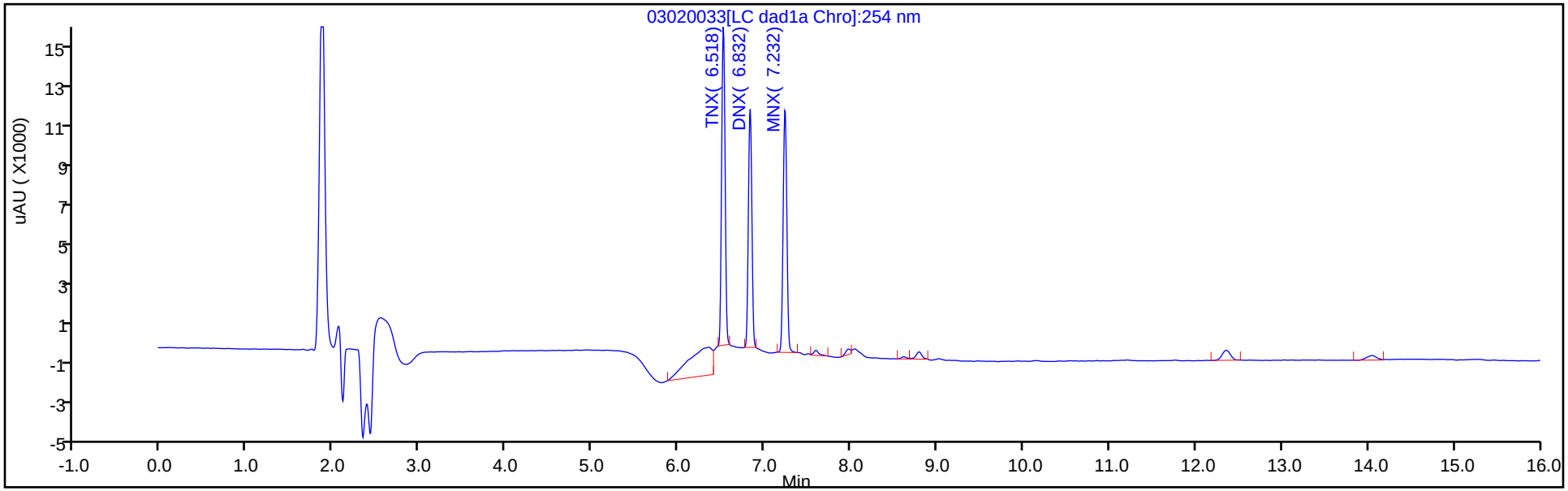
Report Date: 03-Mar-2021 13:32:28 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

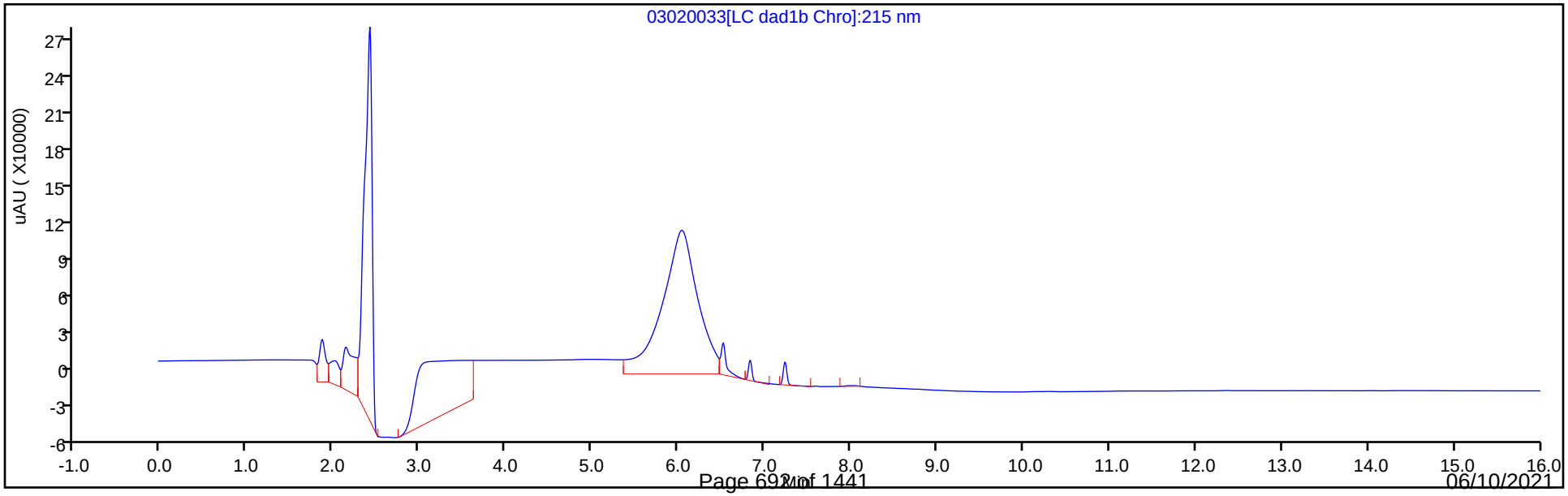
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d

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

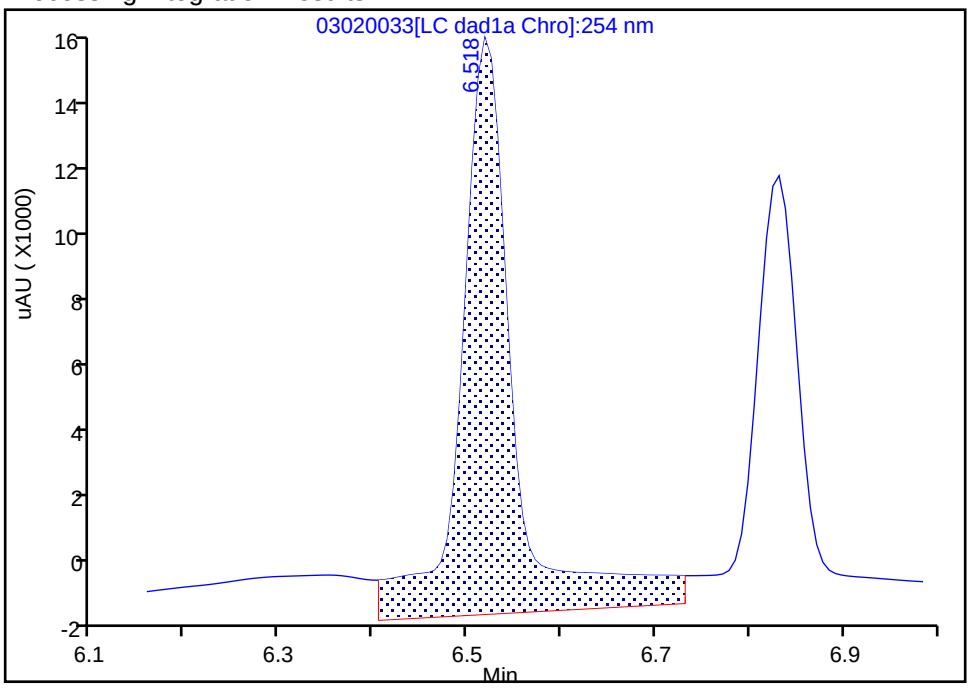
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

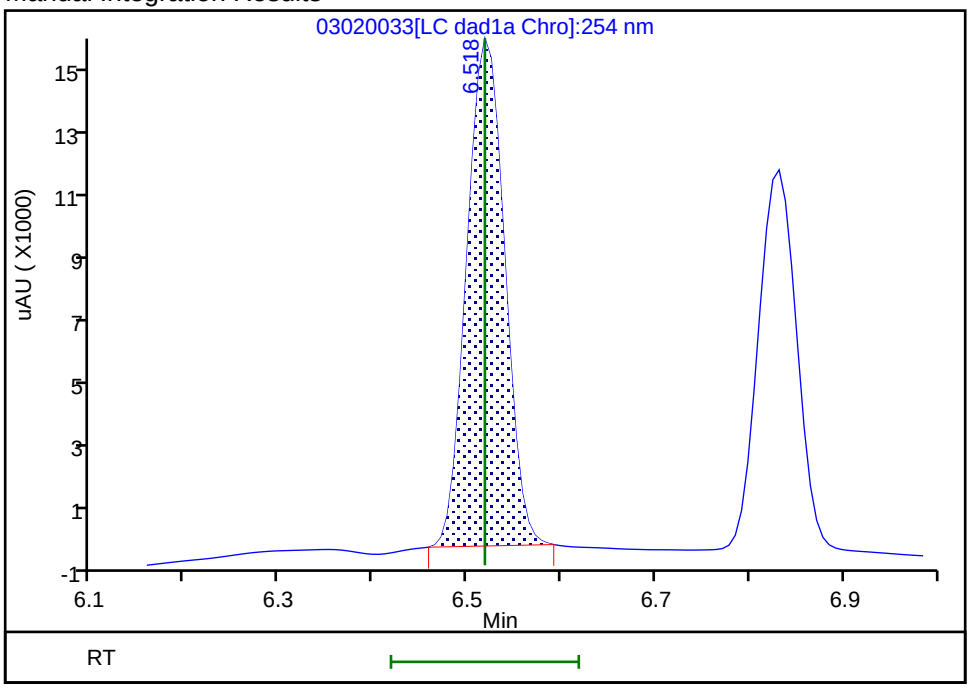
Processing Integration Results

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

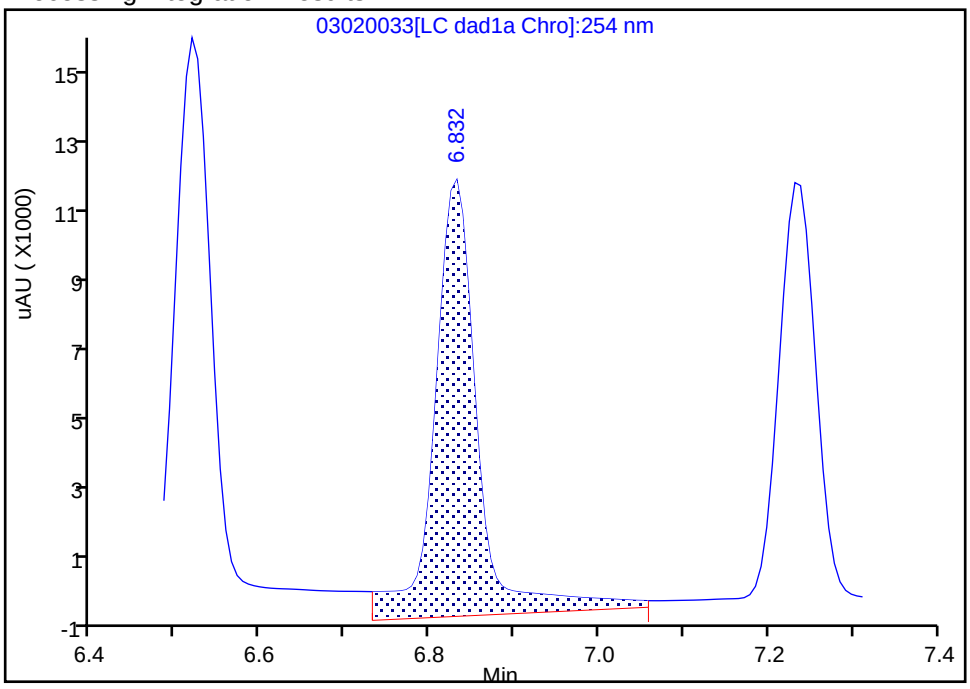
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

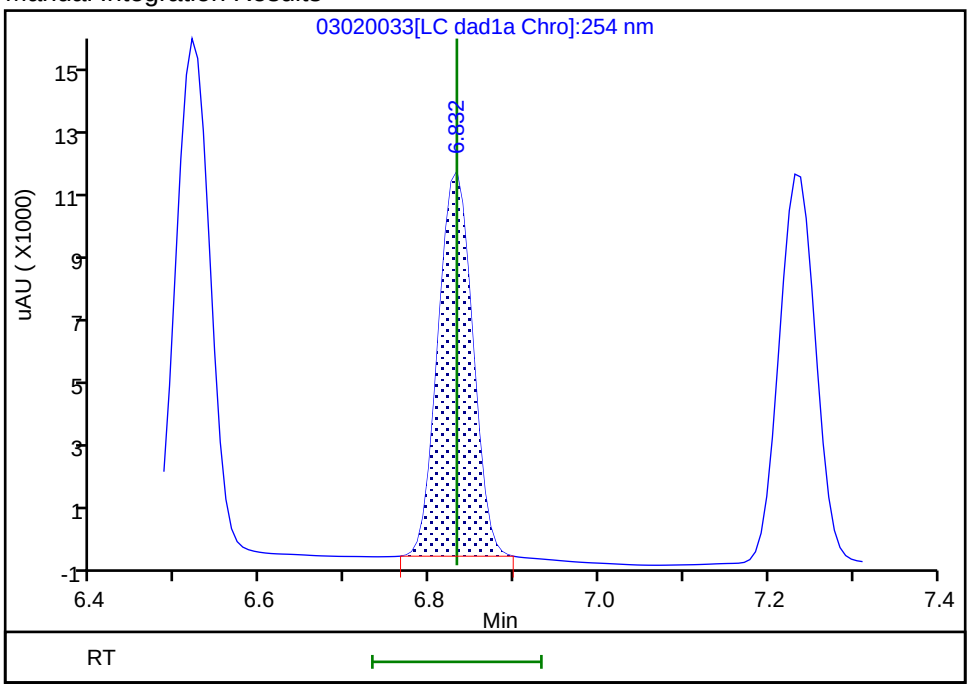
Processing Integration Results

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

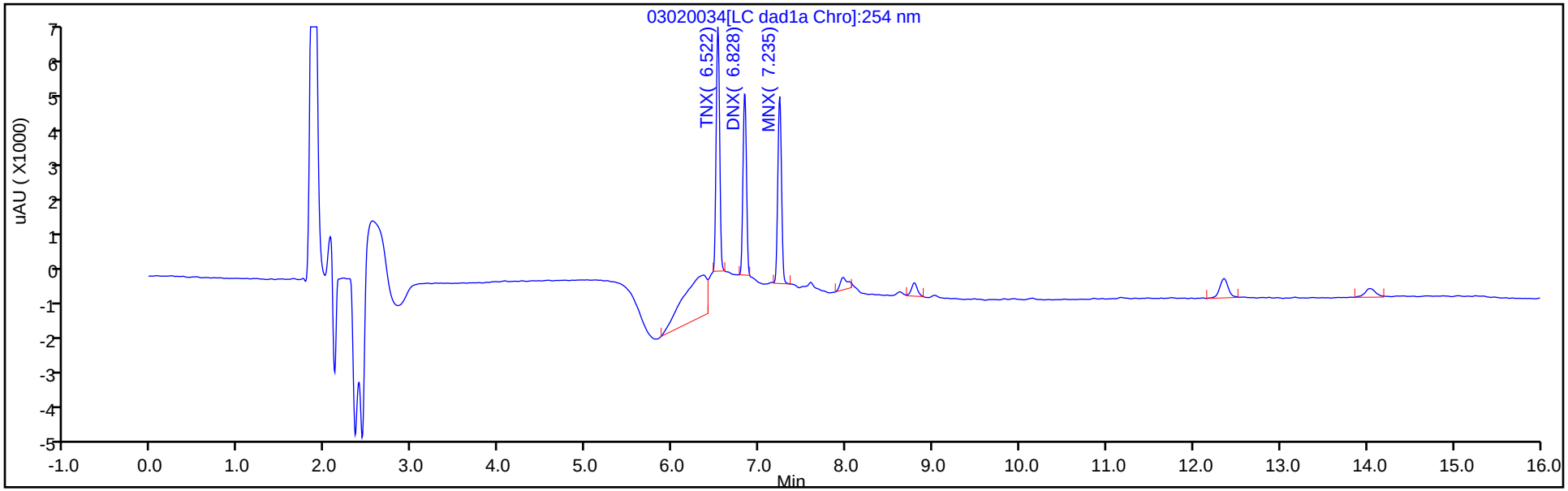
Report Date: 03-Mar-2021 13:32:29 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

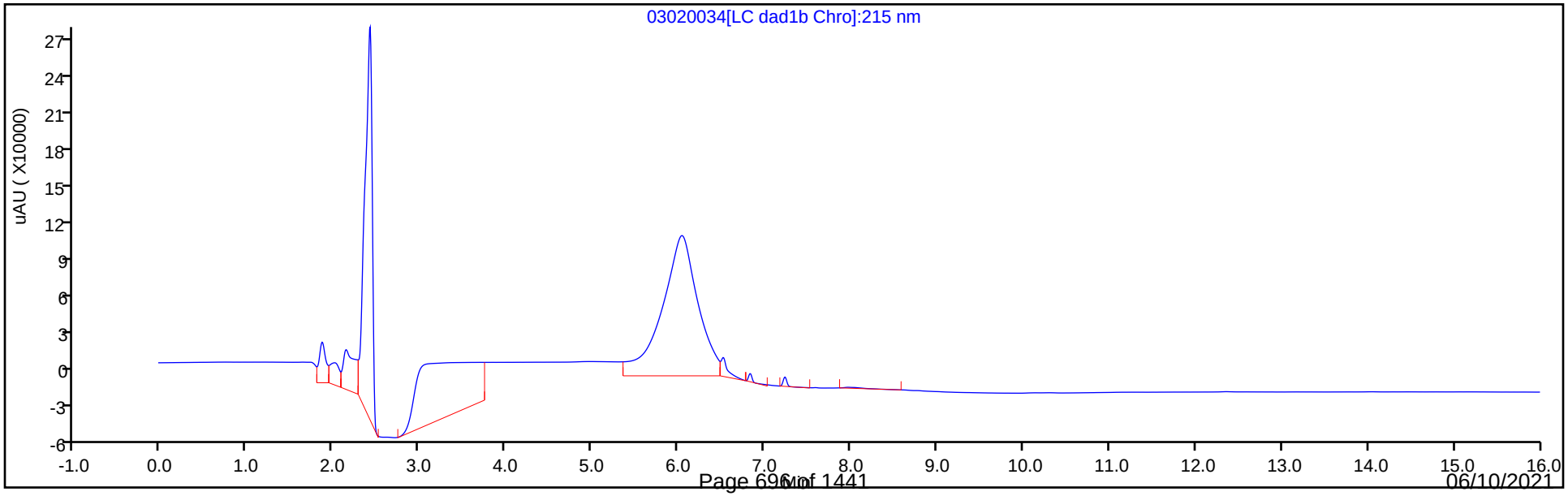
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d

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

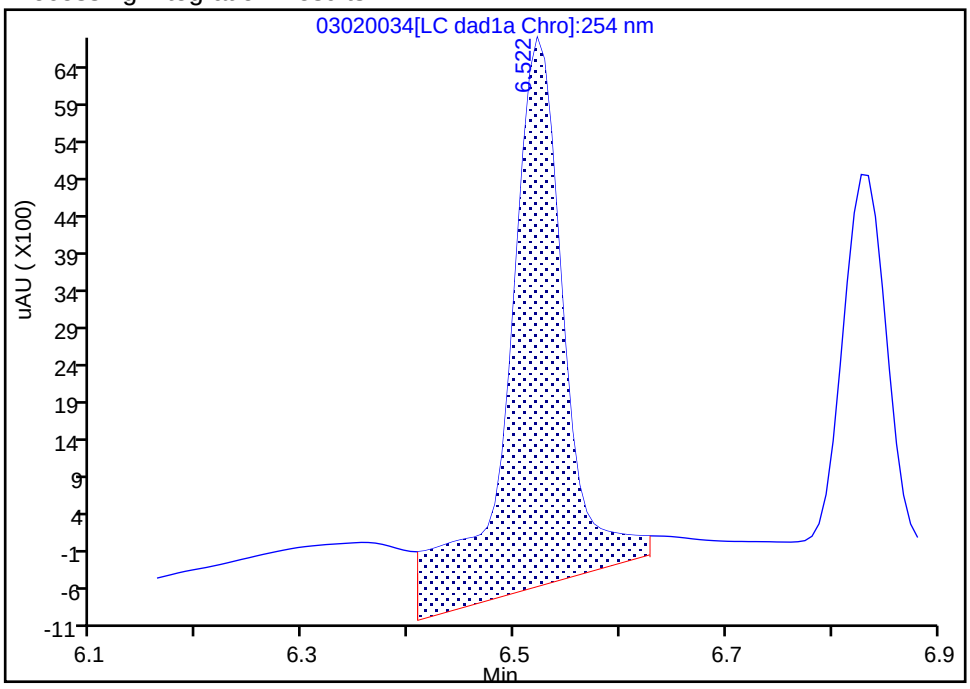
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d		
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 3		
Client ID:			
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

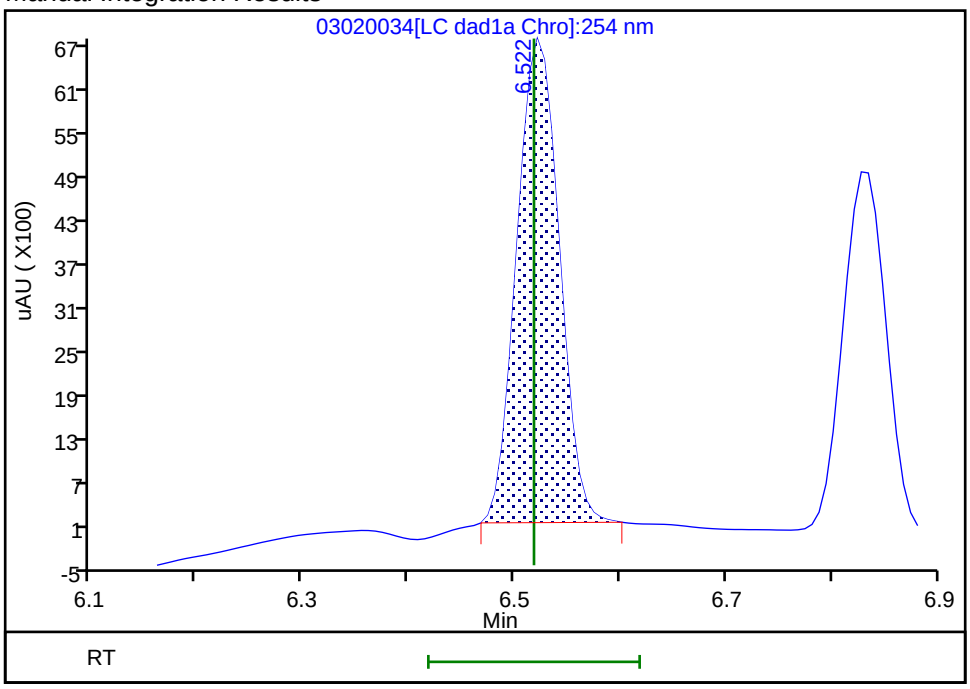
Processing Integration Results

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

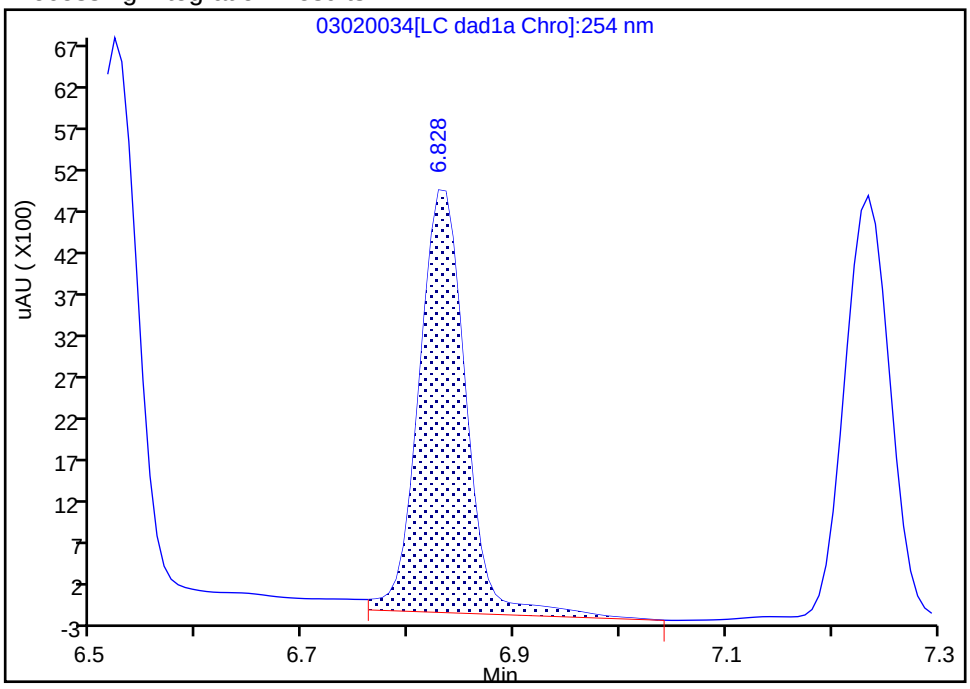
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d		
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 3		
Client ID:			
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

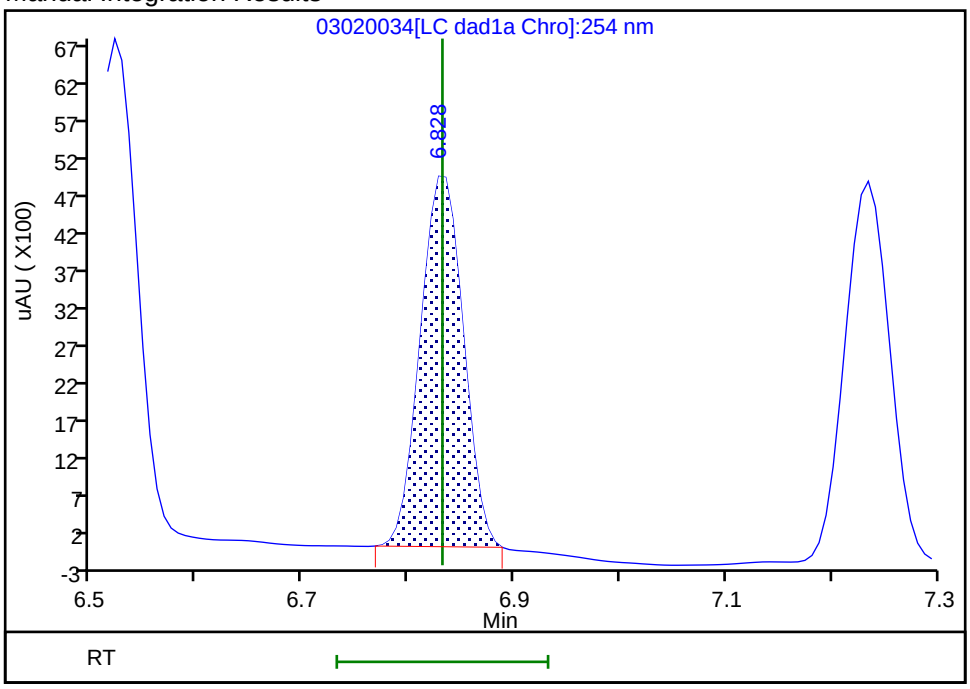
Processing Integration Results

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

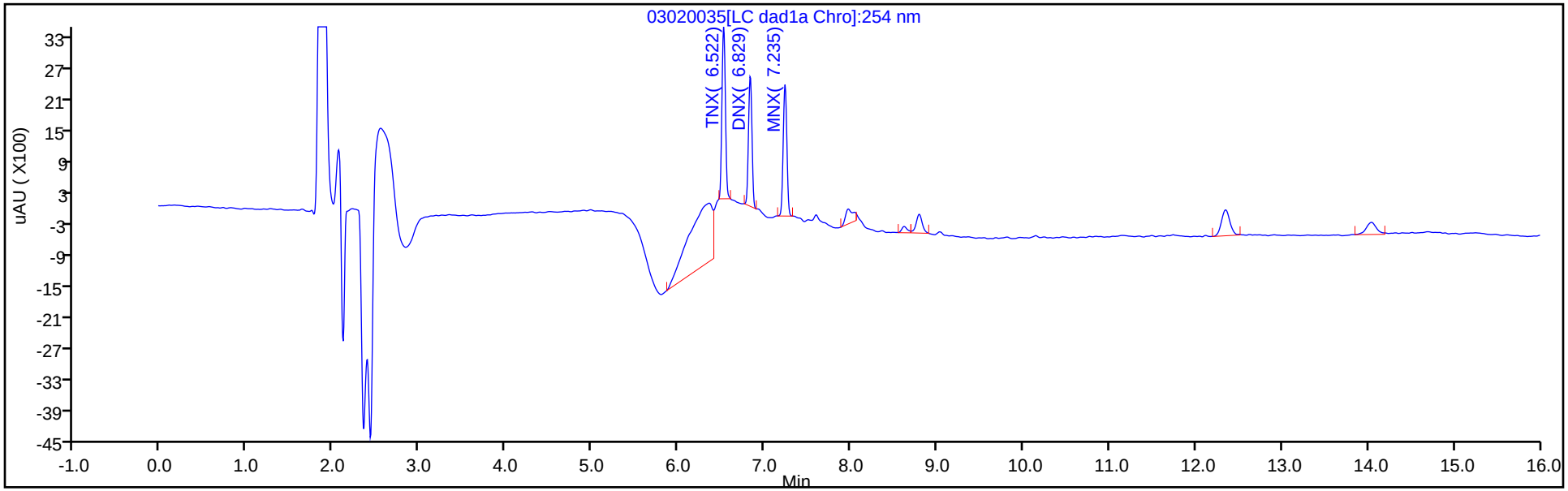
Report Date: 03-Mar-2021 13:32:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

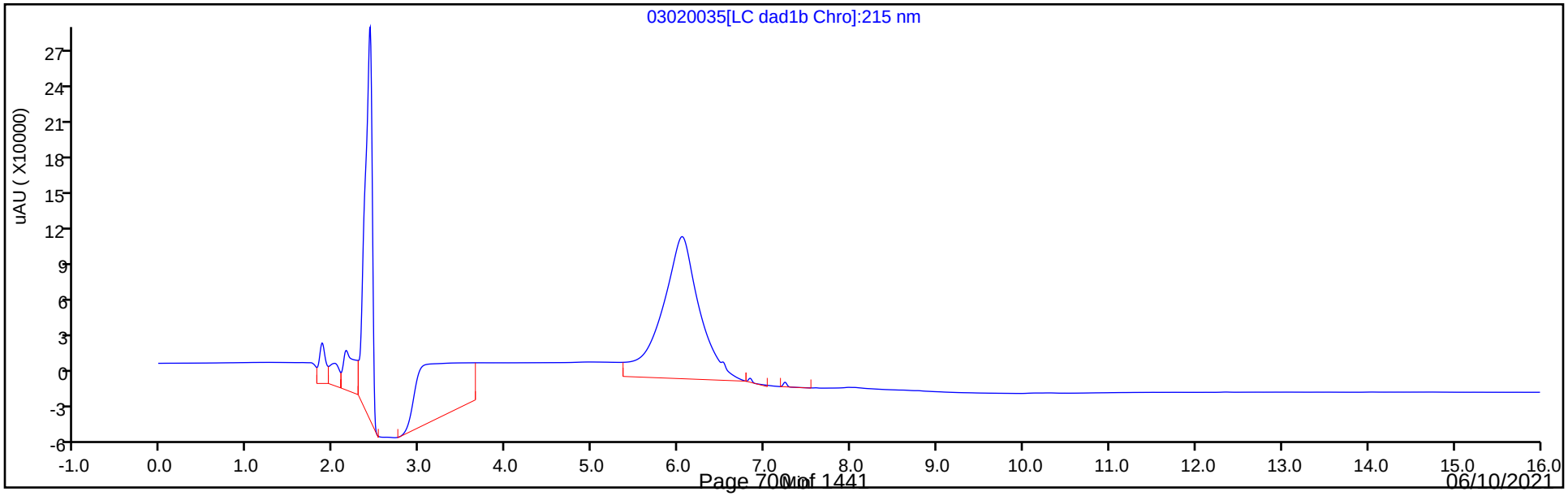
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d

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

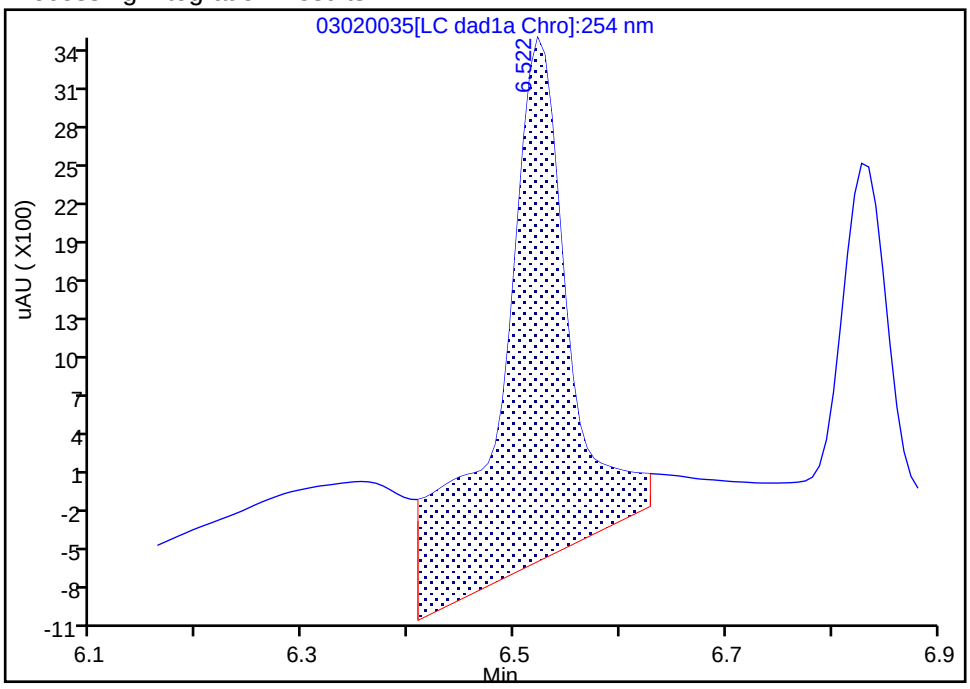
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d				
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:		ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

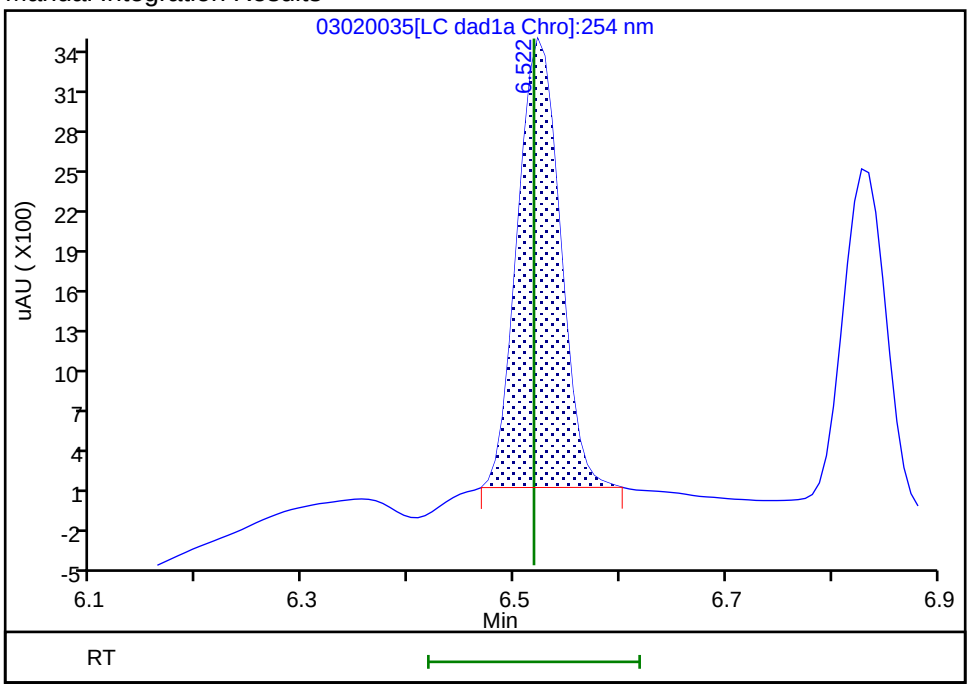
Processing Integration Results

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

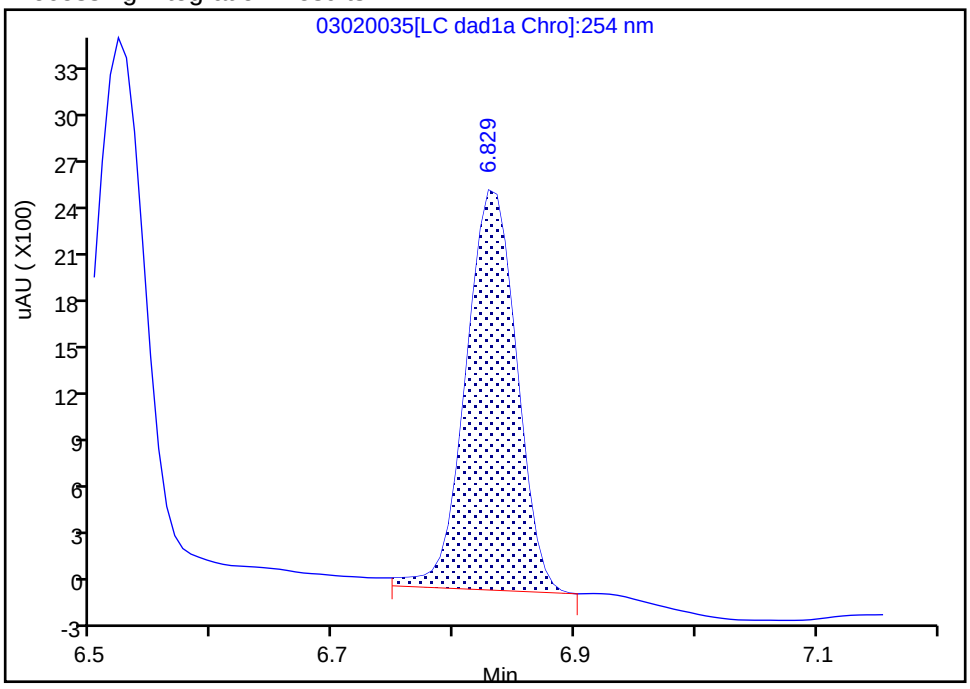
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d				
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:		ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

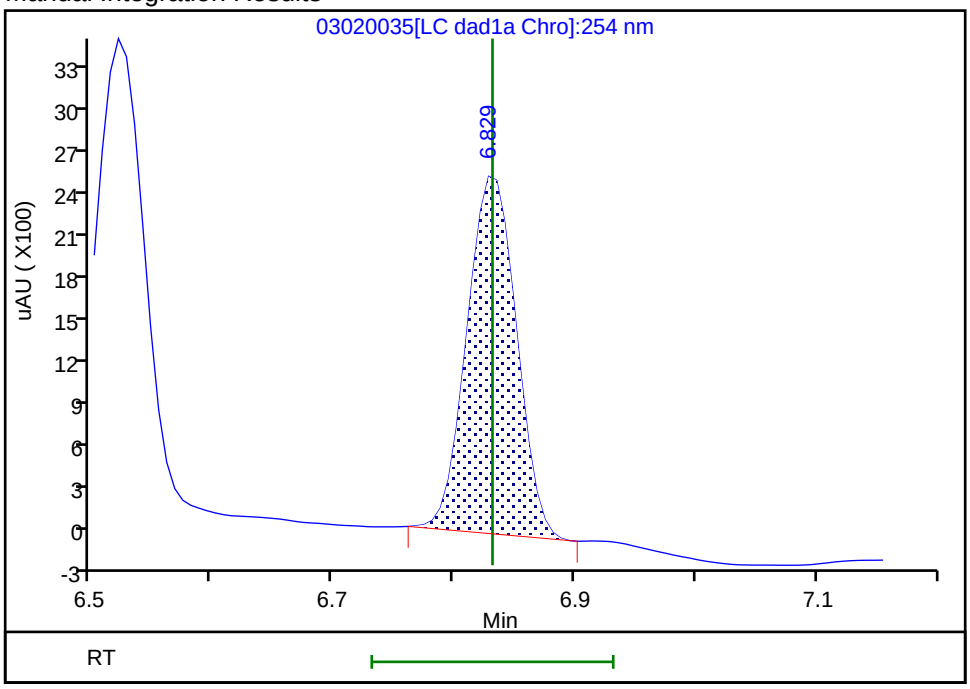
Processing Integration Results

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

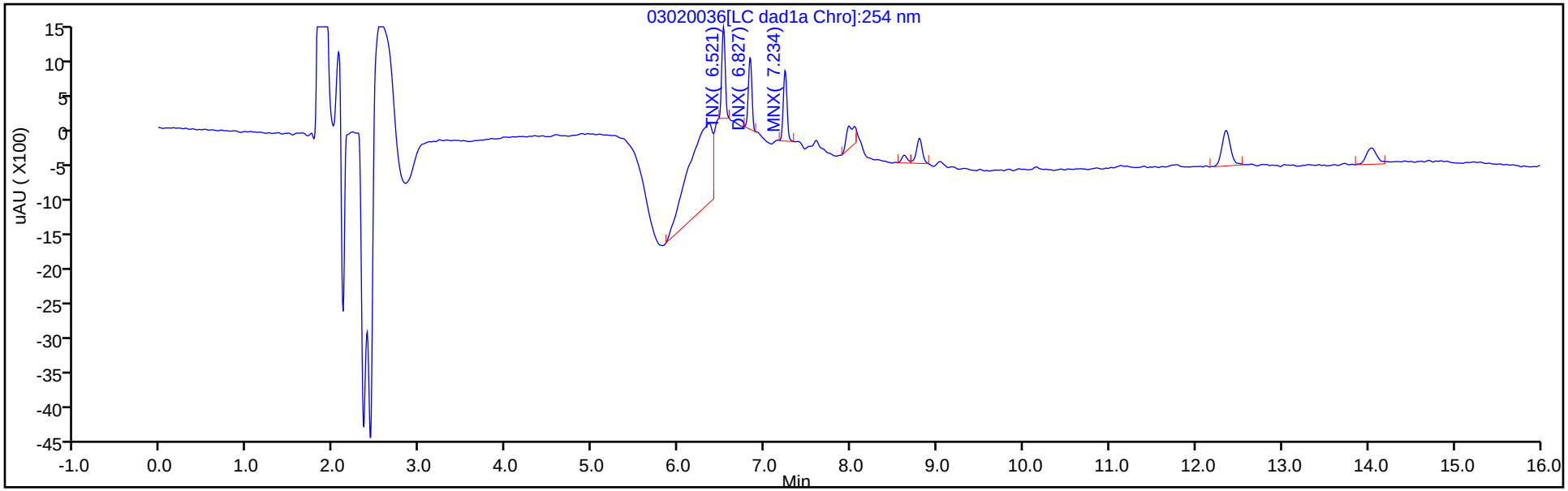
Report Date: 03-Mar-2021 13:32:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

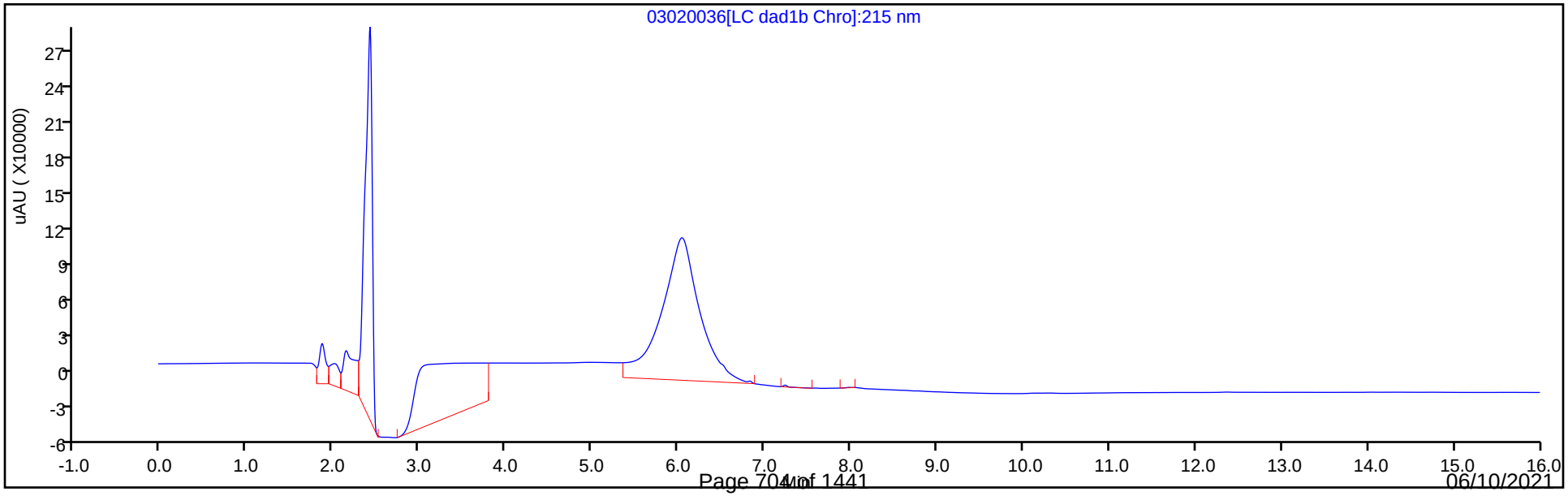
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d

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

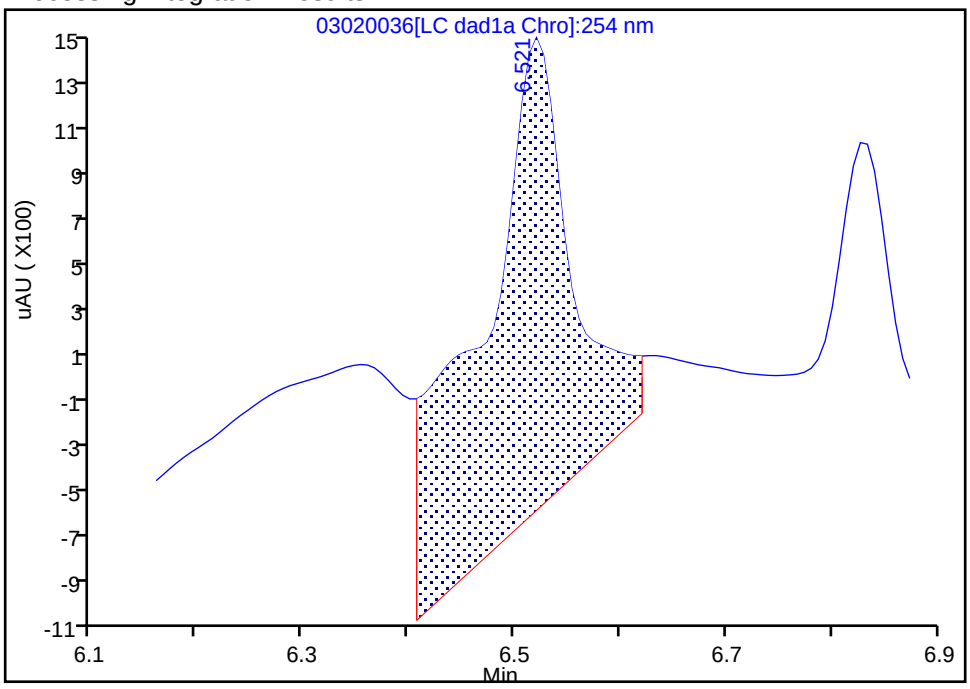
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d		
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 1		
Client ID:			
Operator ID:		ALS Bottle#:	36 Worklist Smp#: 36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

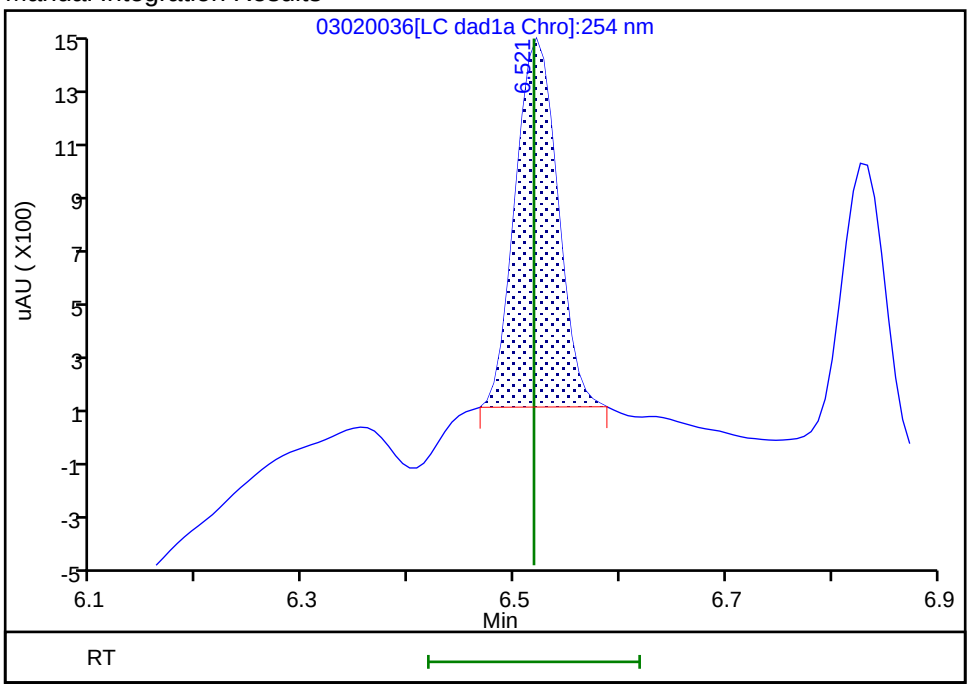
Processing Integration Results

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

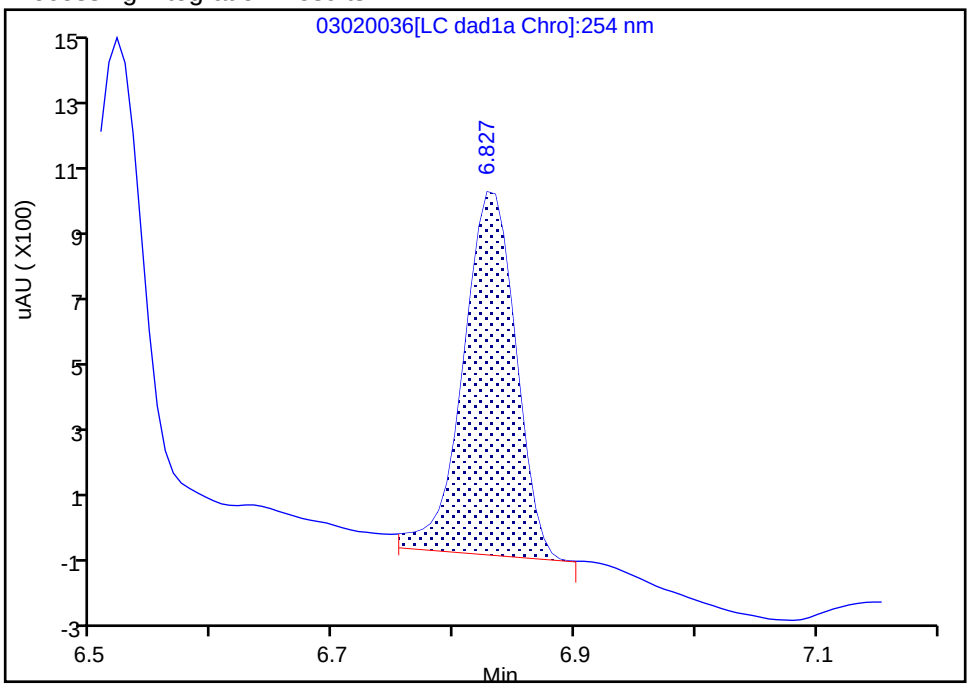
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d				
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:		ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

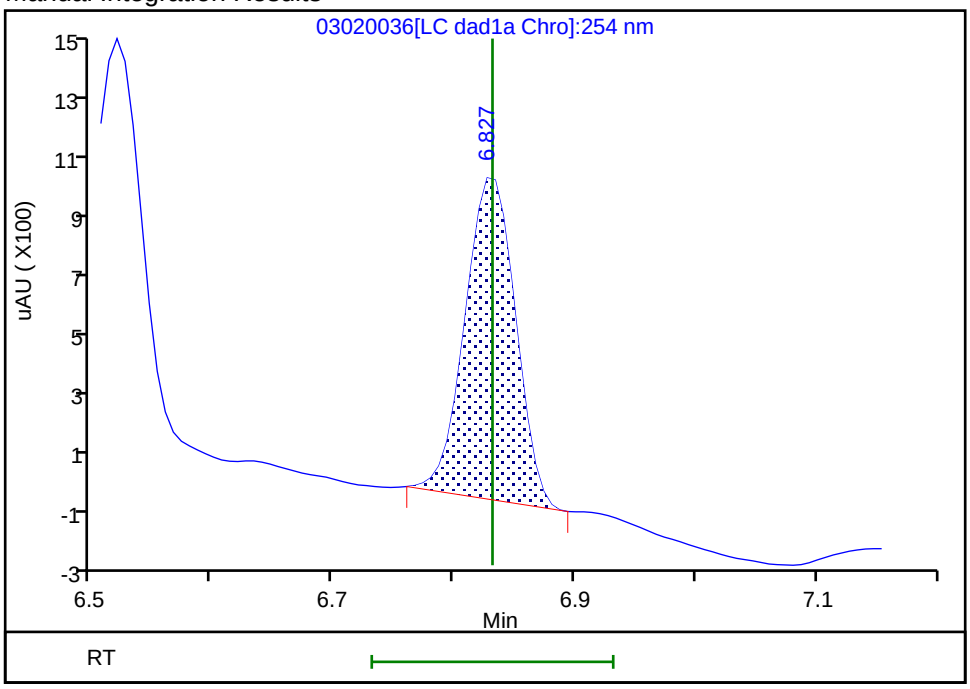
Processing Integration Results

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

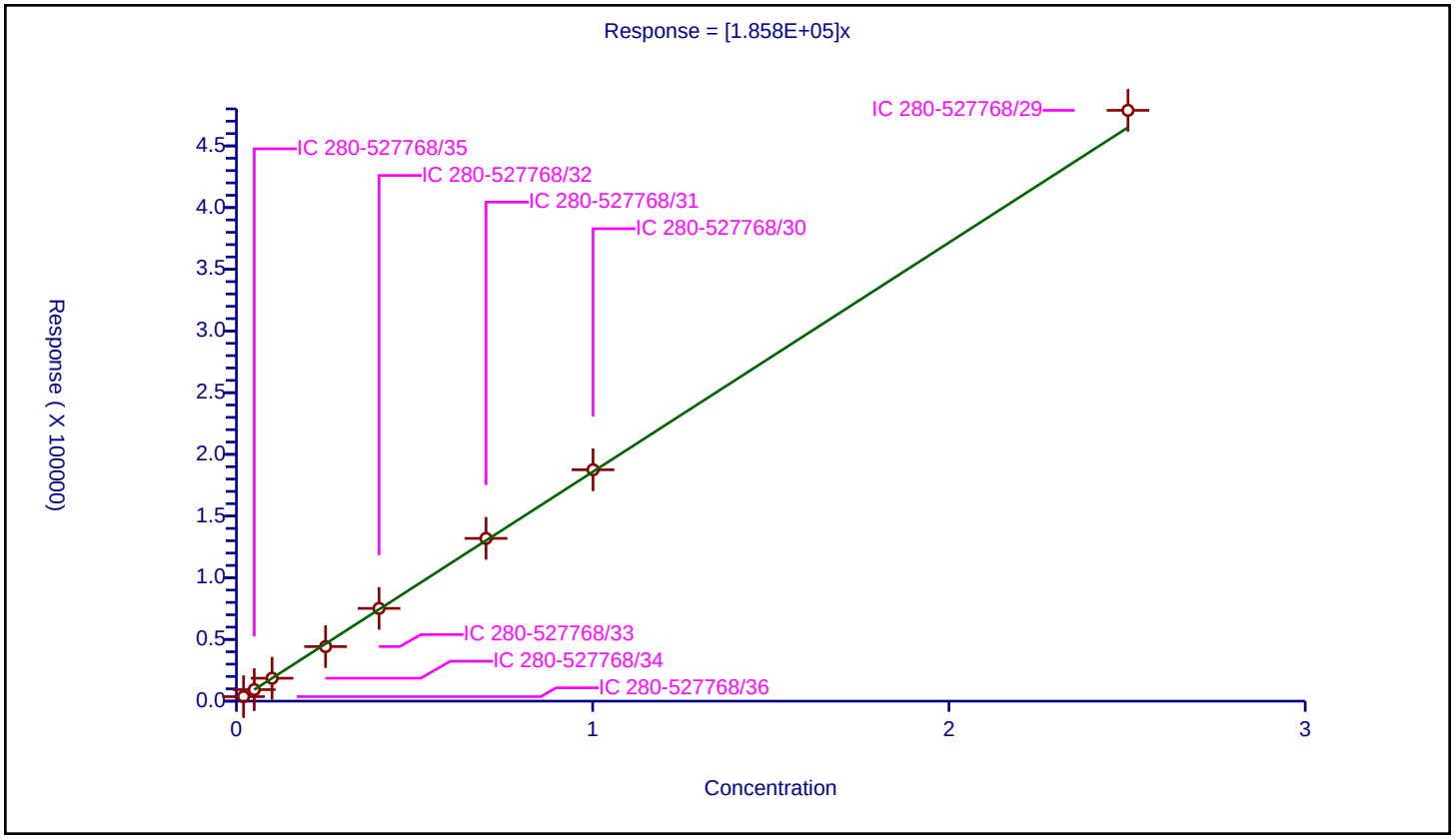
Curve Coefficients

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



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

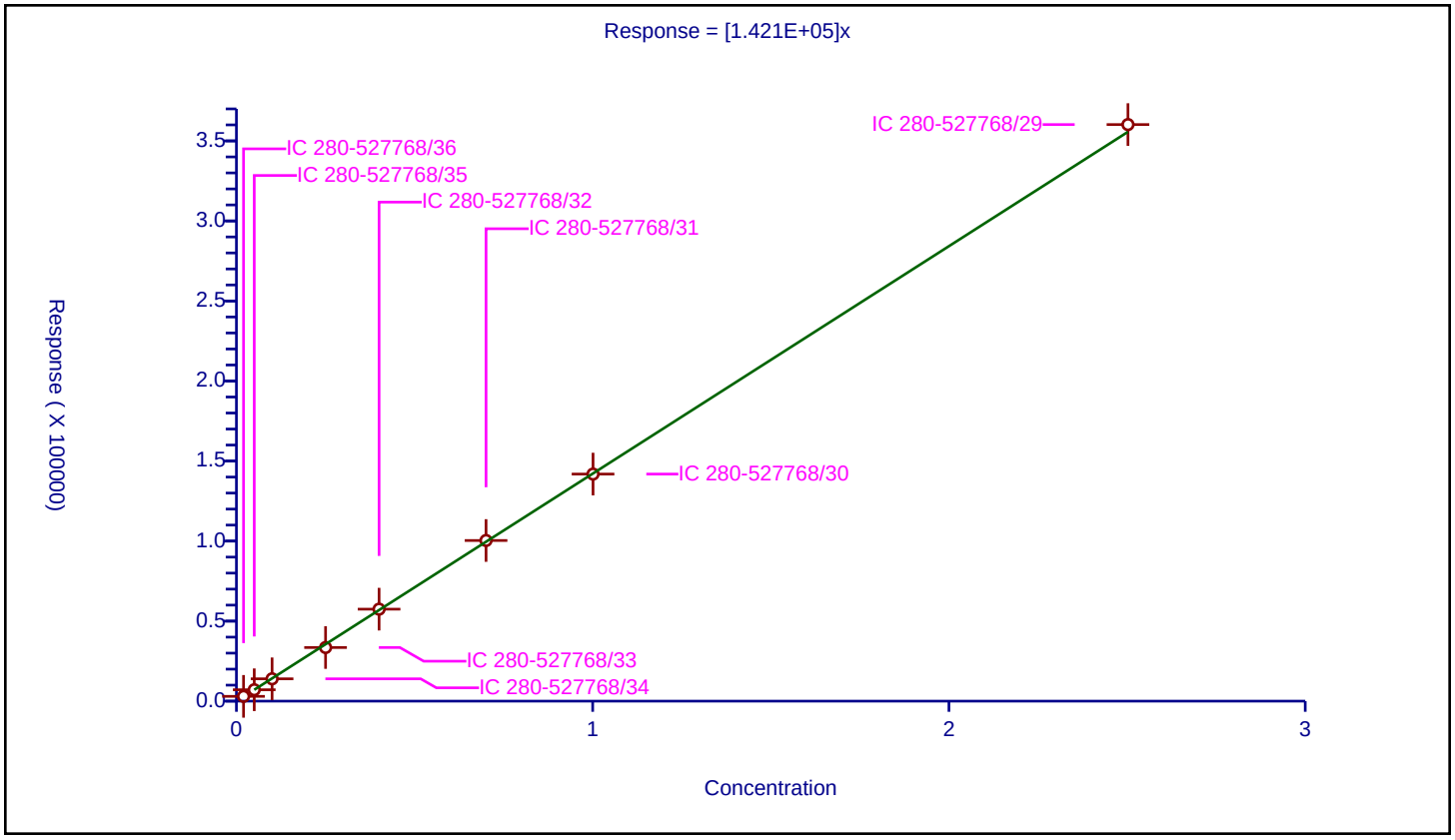
Curve Coefficients

Intercept:	0
Slope:	1.421E+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

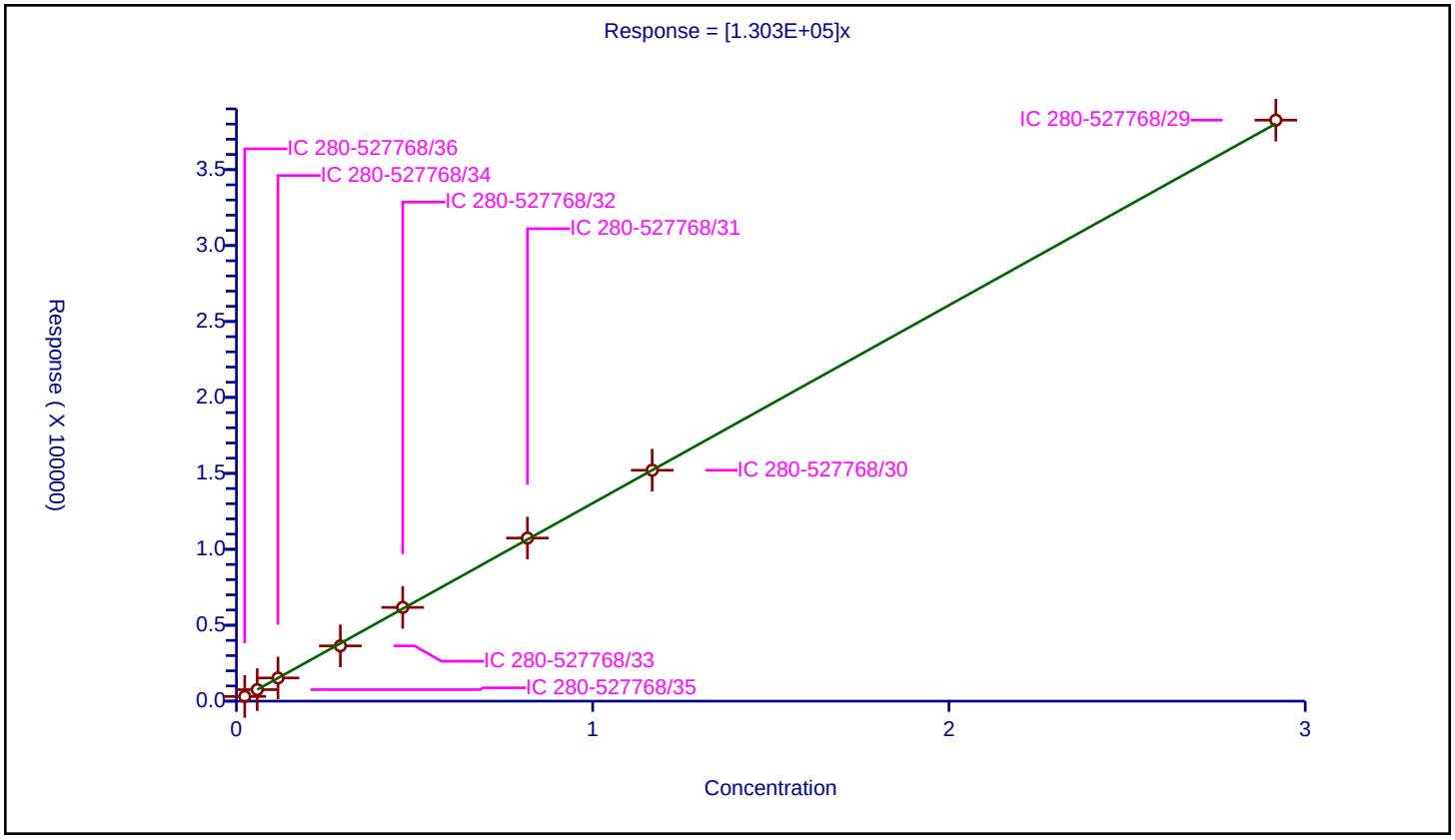
Curve Coefficients

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.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	906	1680	4242	8561	20261	0.0100	0.0200	0.0500	0.100	0.250
		33261	58367	83899	208165		0.400	0.700	1.00	2.50	
RDX	Ave	+++++	2207	6054	11245	25193	+++++	0.0200	0.0500	0.100	0.250
		40790	71020	101616	250979		0.400	0.700	1.00	2.50	
Picric acid	Ave	+++++	1840	4575	8317	19525	+++++	0.0200	0.0500	0.100	0.250
		31820	55582	79230	197040		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	2481	4038	11361	22114	53082	0.0100	0.0200	0.0501	0.100	0.251
		87233	154539	220037	543111		0.401	0.701	1.00	2.51	
1,3-Dinitrobenzene	Ave	3052	6019	14927	30099	71373	0.0100	0.0200	0.0501	0.100	0.251
		117621	206721	296509	738121		0.401	0.701	1.00	2.51	
Nitrobenzene	Ave	1995	3972	9892	20078	47122	0.0100	0.0201	0.0502	0.100	0.251
		77656	136648	194820	488061		0.402	0.703	1.00	2.51	
Tetryl	Ave	1712	3331	8870	17920	42079	0.0100	0.0200	0.0501	0.100	0.251
		69168	121126	173586	431686		0.401	0.701	1.00	2.51	
Nitroglycerin	Lin2	10778	16162	36983	71053	163334	0.100	0.200	0.500	1.00	2.50
		262320	434747	652752	1616536		4.00	7.00	10.0	25.0	
2,4,6-Trinitrotoluene	Ave	2128	4156	10514	21286	49667	0.0100	0.0201	0.0502	0.100	0.251
		81630	143142	205715	512679		0.402	0.703	1.00	2.51	
4-Amino-2,6-dinitrotoluene	Ave	1596	3532	7868	15505	35838	0.0100	0.0200	0.0501	0.100	0.250
		58412	102258	146728	363710		0.400	0.701	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	2126	4433	10789	21203	49194	0.0100	0.0201	0.0502	0.100	0.251
		81166	141712	204025	503909		0.402	0.703	1.00	2.51	
2,6-Dinitrotoluene	Ave	1404	2947	7360	14557	34973	0.0100	0.0201	0.0502	0.100	0.251
		56504	100565	144143	358451		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	2944	5945	14647	29362	68930	0.0100	0.0201	0.0502	0.100	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		114050	198852	285012	713254		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1346	2737	6616	13138	30342	0.0100	0.0200	0.0500	0.100	0.250
		49881	87294	124724	312191		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1177	2633	5724	11083	26060	0.0100	0.0200	0.0501	0.100	0.251
		43055	75212	107567	269197		0.401	0.701	1.00	2.51	
3-Nitrotoluene	Ave	1575	3121	7187	14179	33440	0.0100	0.0200	0.0501	0.100	0.250
		54796	95835	137092	344169		0.400	0.701	1.00	2.50	
PETN	Ave	7901	14944	37293	75747	179819	0.100	0.200	0.500	1.00	2.50
		296622	519589	746366	1849935		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1195	2399	6504	13218	31539	0.0100	0.0200	0.0500	0.100	0.250
		52377	91915	132080	329398		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\011-0501.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:01:04 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:06 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:15:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	208165	2.50	2.47	M
7 RDX	1	7.592	7.598	-0.006	250979	2.50	2.36	
8 2,4,6-Trinitrophenol	1	7.879	7.958	-0.079	197040	2.50	2.38	
$ 9 1,2-Dinitrobenzene	1	8.512	8.525	-0.013	329398	2.50	2.57	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	543111	2.51	2.47	
11 1,3-Dinitrobenzene	1	9.265	9.278	-0.013	738121	2.51	2.49	
12 Nitrobenzene	1	9.652	9.664	-0.012	488061	2.51	2.50	
14 Tetryl	1	9.972	9.978	-0.006	431686	2.51	2.50	
15 Nitroglycerin	2	10.425	10.438	-0.013	1616536	25.0	25.2	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	512679	2.51	2.49	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	363710	2.50	2.38	
18 2-Amino-4,6-dinitrotoluene	1	11.352	11.371	-0.019	503909	2.51	2.44	
19 2,6-Dinitrotoluene	1	11.519	11.531	-0.012	358451	2.51	2.51	
20 2,4-Dinitrotoluene	1	11.692	11.704	-0.012	713254	2.51	2.49	
21 o-Nitrotoluene	1	12.565	12.578	-0.013	312191	2.50	2.43	
22 p-Nitrotoluene	1	12.999	13.011	-0.012	269197	2.51	2.41	
23 m-Nitrotoluene	1	13.592	13.604	-0.012	344169	2.50	2.42	
24 PETN	2	14.679	14.684	-0.005	1849935	25.0	24.7	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

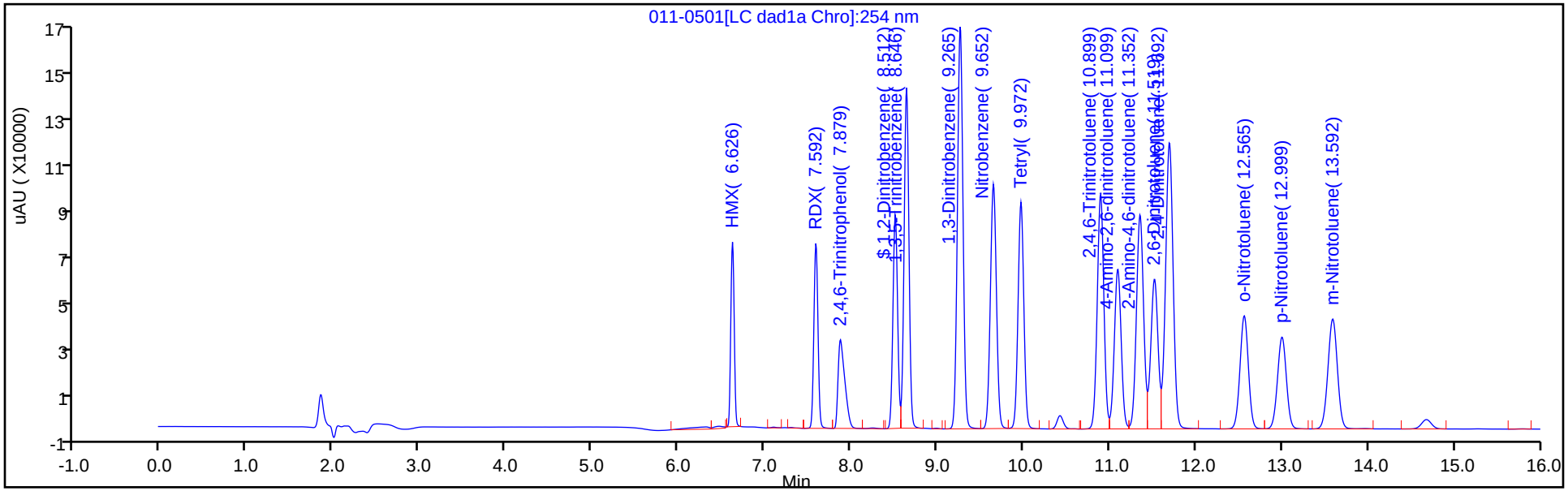
8330IntermStk_00067 Amount Added: 250.00 Units: uL

Report Date: 04-May-2021 13:25:06 Chrom Revision: 2.3 08-Apr-2021 17:17:48

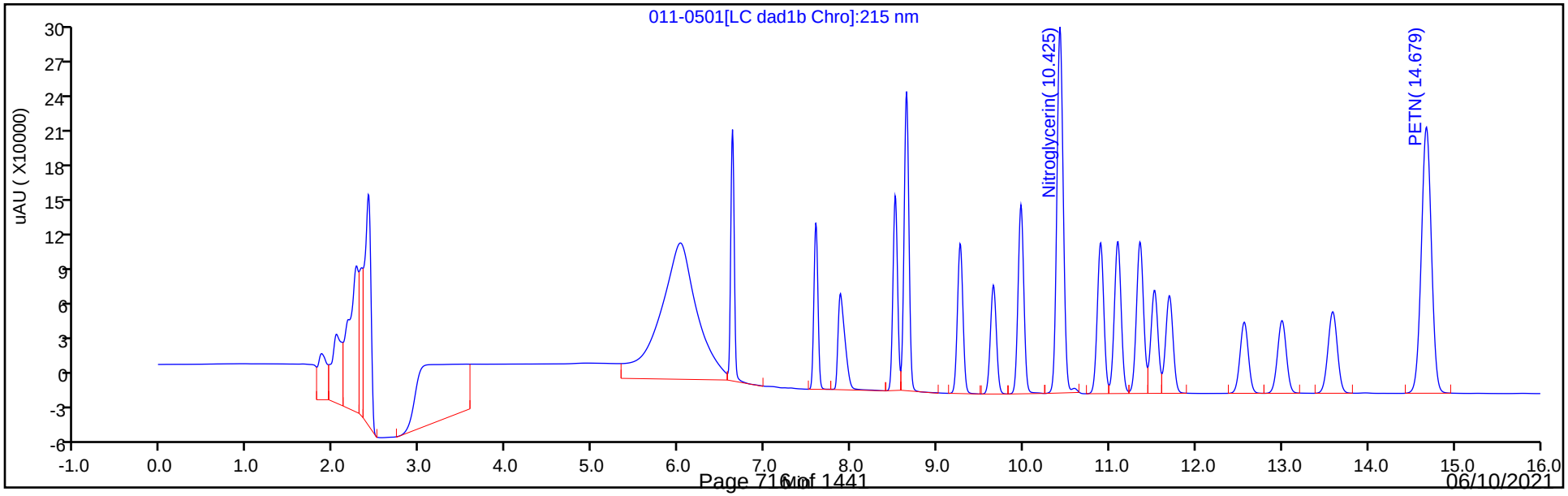
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d				
Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

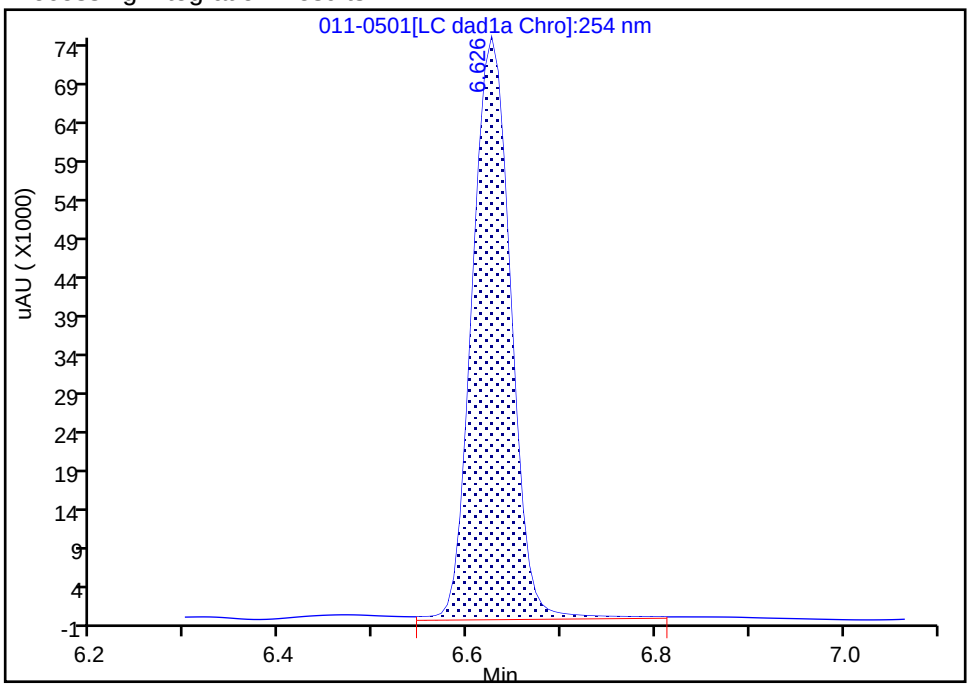
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d				
Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

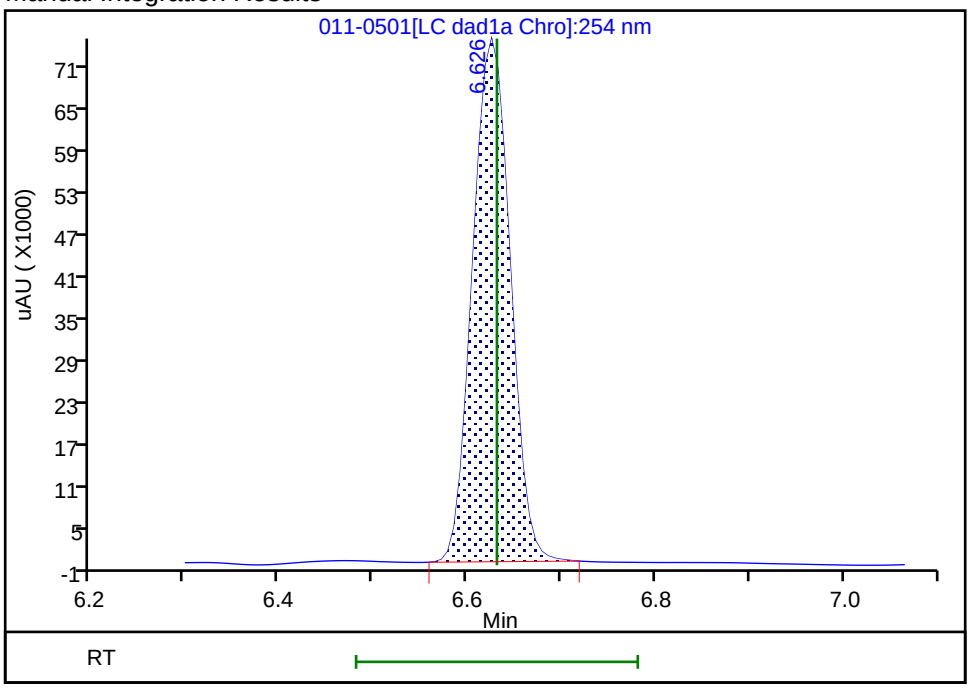
Processing Integration Results

RT: 6.63
Area: 214677
Amount: 2.481723
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 208165
Amount: 2.465784
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\012-0601.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 18:23:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	83899	1.00	0.99	M
7 RDX	1	7.593	7.598	-0.005	101616	1.00	0.9563	
8 2,4,6-Trinitrophenol	1	7.920	7.958	-0.038	79230	1.00	0.9578	
$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	132080	1.00	1.03	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	220037	1.00	1.00	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	296509	1.00	1.00	
12 Nitrobenzene	1	9.659	9.664	-0.005	194820	1.00	1.00	
14 Tetryl	1	9.973	9.978	-0.005	173586	1.00	1.01	
15 Nitroglycerin	2	10.433	10.438	-0.005	652752	10.0	10.1	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	205715	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	146728	1.00	0.9605	
18 2-Amino-4,6-dinitrotoluene	1	11.359	11.371	-0.012	204025	1.00	0.9860	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	144143	1.00	1.01	
20 2,4-Dinitrotoluene	1	11.699	11.704	-0.005	285012	1.00	0.99	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	124724	1.00	0.9714	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	107567	1.00	0.9612	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	137092	1.00	0.9638	
24 PETN	2	14.679	14.684	-0.005	746366	10.0	9.98	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 100.00 Units: uL

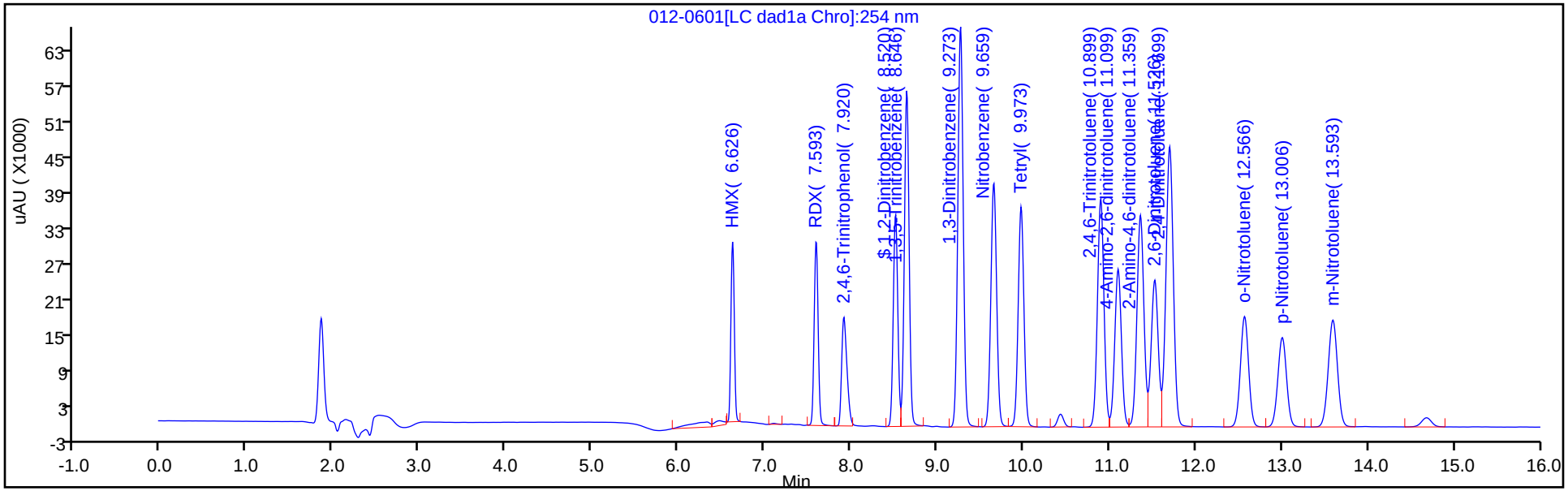
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

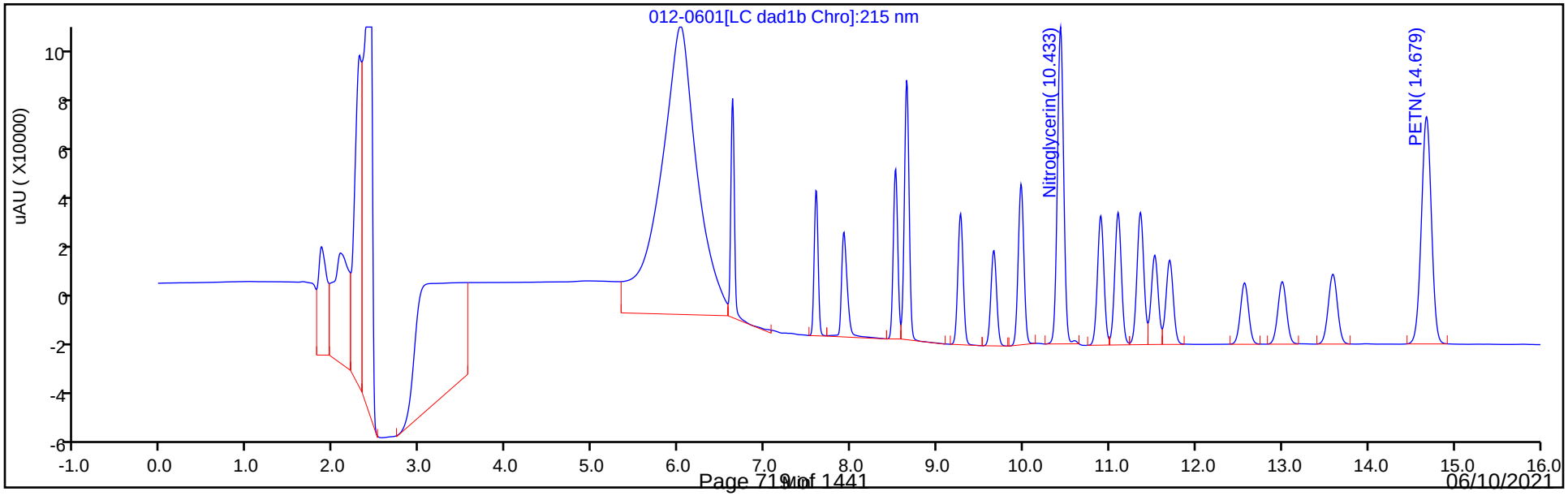
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d

Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

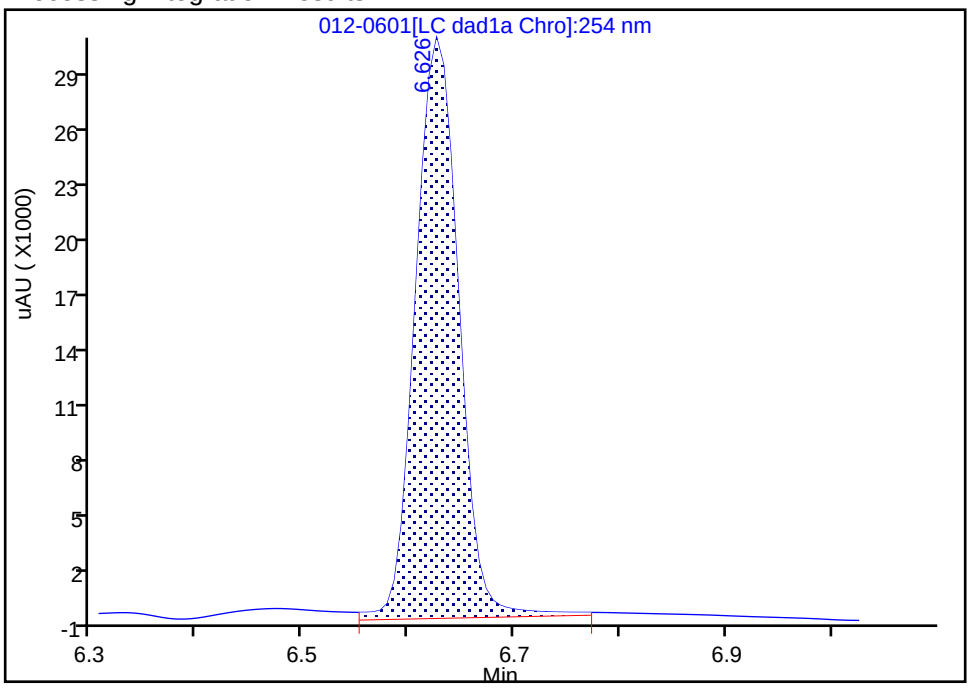
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d				
Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

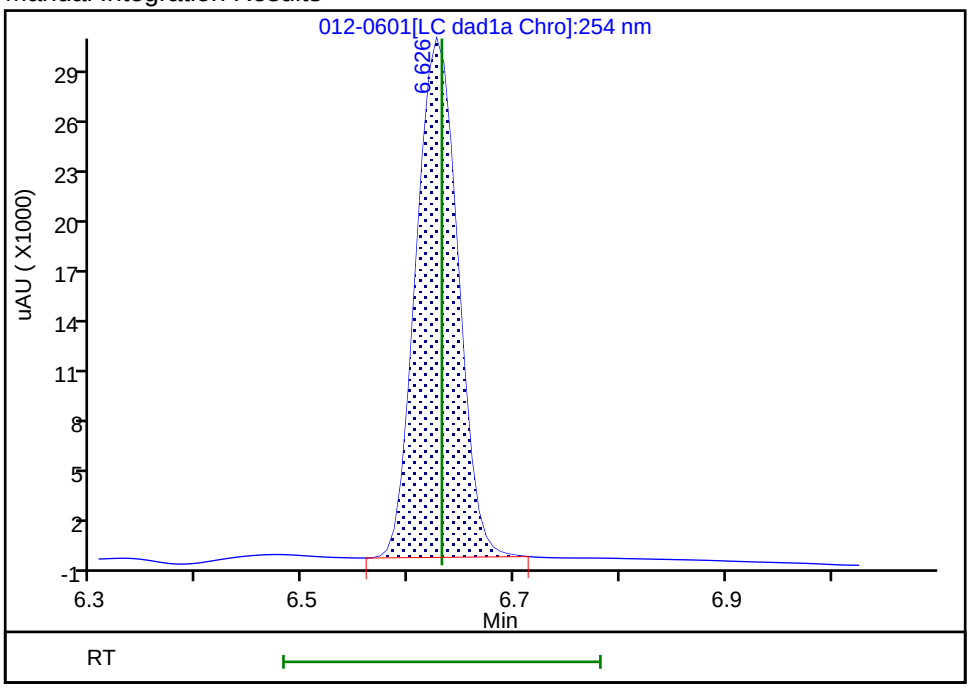
Processing Integration Results

RT: 6.63
Area: 88052
Amount: 1.025258
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 83899
Amount: 0.993812
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:59

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\013-0701.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 18:46:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	58367	0.7000	0.6914	M
7 RDX	1	7.604	7.598	0.006	71020	0.7000	0.6684	
8 2,4,6-Trinitrophenol	1	7.937	7.958	-0.021	55582	0.7000	0.6719	
$ 9 1,2-Dinitrobenzene	1	8.524	8.525	-0.001	91915	0.7000	0.7169	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	154539	0.7014	0.7014	
11 1,3-Dinitrobenzene	1	9.277	9.278	-0.001	206721	0.7014	0.6976	
12 Nitrobenzene	1	9.664	9.664	0.000	136648	0.7028	0.6997	
14 Tetryl	1	9.977	9.978	-0.001	121126	0.7014	0.7025	
15 Nitroglycerin	2	10.437	10.438	-0.001	434747	7.00	6.72	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	143142	0.7028	0.6947	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	102258	0.7007	0.6694	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	141712	0.7028	0.6848	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	100565	0.7028	0.7029	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	198852	0.7028	0.6928	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	87294	0.7000	0.6799	
22 p-Nitrotoluene	1	13.011	13.011	0.000	75212	0.7014	0.6721	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	95835	0.7007	0.6737	
24 PETN	2	14.684	14.684	0.000	519589	7.00	6.95	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 70.00 Units: uL

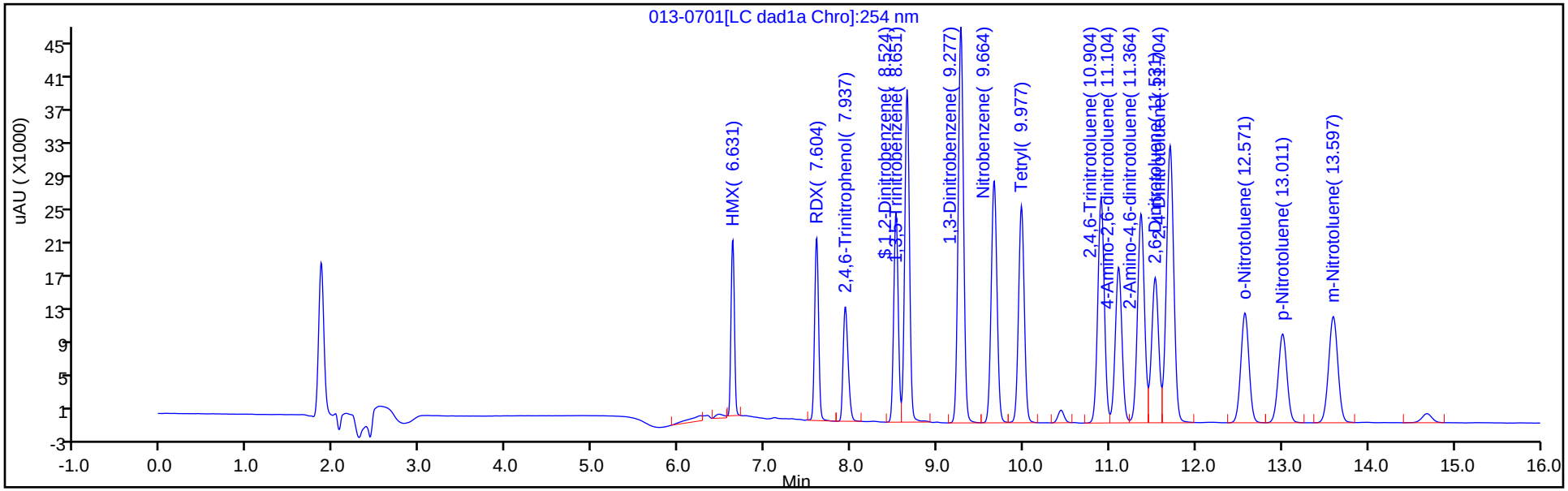
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

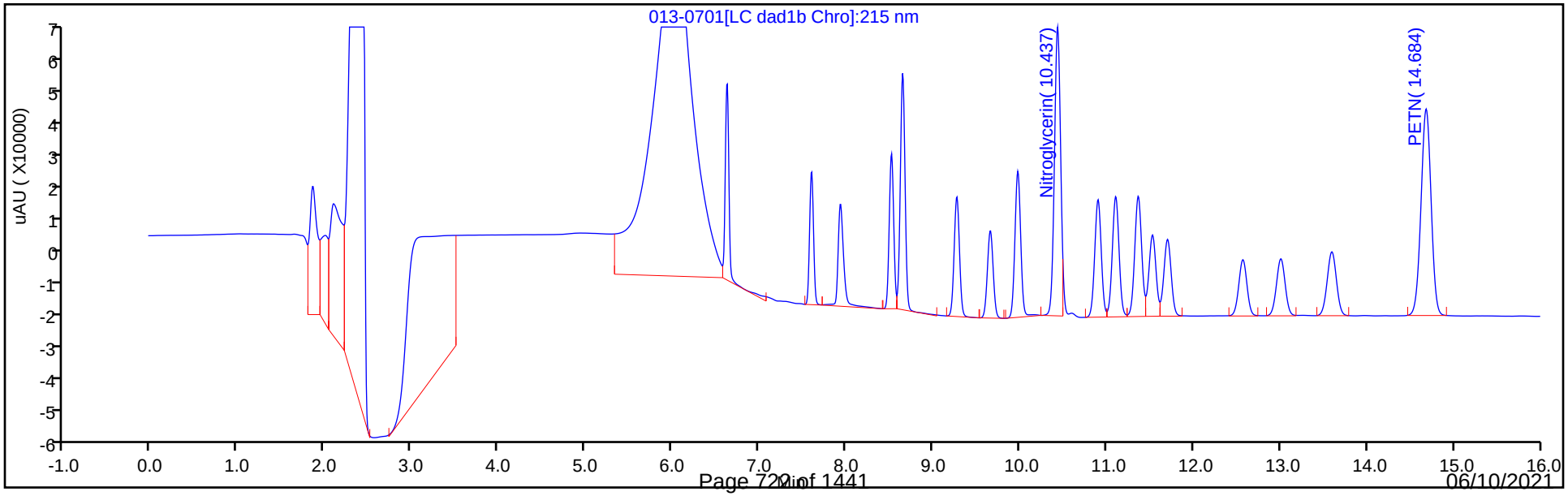
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d

Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 7			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

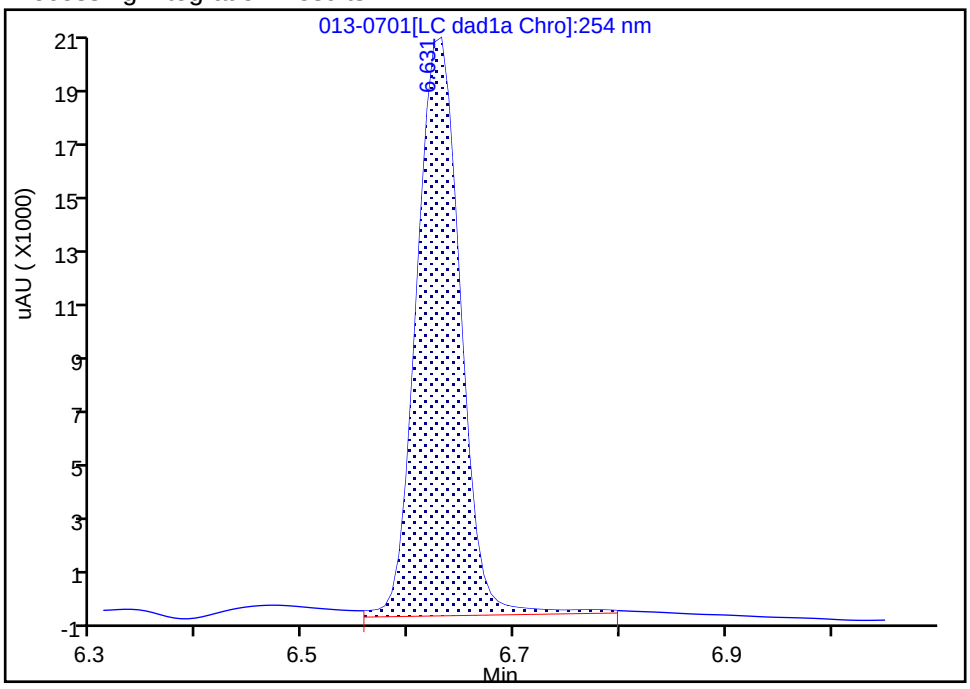
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d				
Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

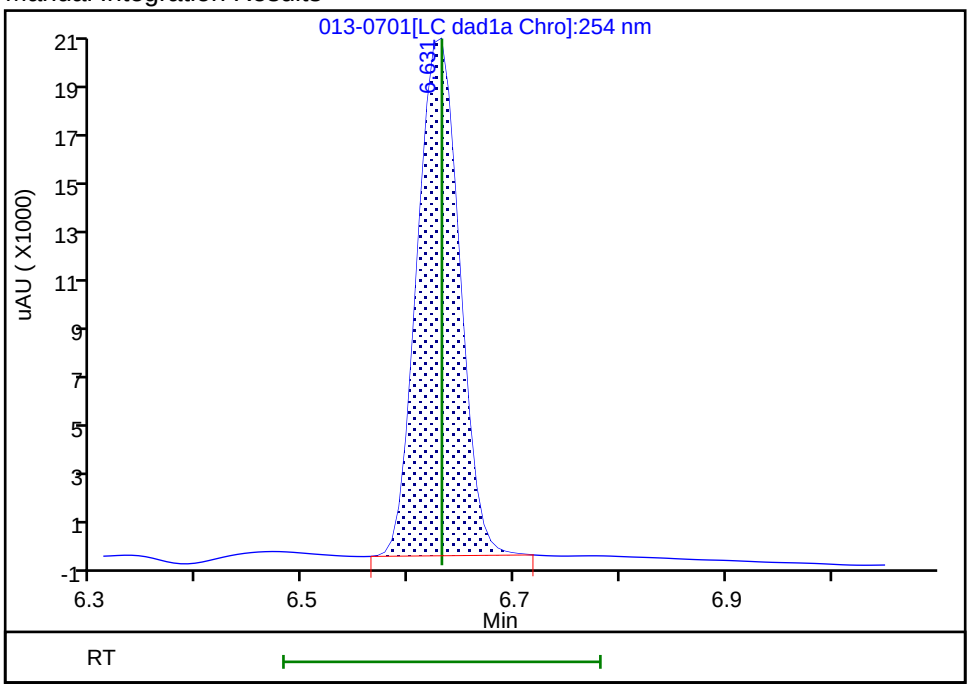
Processing Integration Results

RT: 6.63
Area: 61109
Amount: 0.713851
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 58367
Amount: 0.691377
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:10

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\014-0801.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 19:09:54 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:20

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.627	6.631	-0.004	33261	0.4000	0.3940	M
	7 RDX	1	7.601	7.598	0.003	40790	0.4000	0.3839	
	8 2,4,6-Trinitrophenol	1	7.947	7.958	-0.011	31820	0.4000	0.3847	
$	9 1,2-Dinitrobenzene	1	8.527	8.525	0.002	52377	0.4000	0.4085	
	10 1,3,5-Trinitrobenzene	1	8.654	8.651	0.003	87233	0.4008	0.3959	
	11 1,3-Dinitrobenzene	1	9.281	9.278	0.003	117621	0.4008	0.3969	
	12 Nitrobenzene	1	9.667	9.664	0.003	77656	0.4016	0.3977	
	14 Tetryl	1	9.981	9.978	0.003	69168	0.4008	0.4012	
	15 Nitroglycerin	2	10.441	10.438	0.003	262320	4.00	4.03	
	16 2,4,6-Trinitrotoluene	1	10.907	10.904	0.003	81630	0.4016	0.3962	
	17 4-Amino-2,6-dinitrotoluene	1	11.114	11.111	0.003	58412	0.4004	0.3824	
	18 2-Amino-4,6-dinitrotoluene	1	11.374	11.371	0.003	81166	0.4016	0.3922	
	19 2,6-Dinitrotoluene	1	11.541	11.531	0.010	56504	0.4016	0.3949	
	20 2,4-Dinitrotoluene	1	11.714	11.704	0.010	114050	0.4016	0.3974	
	21 o-Nitrotoluene	1	12.581	12.578	0.003	49881	0.4000	0.3885	
	22 p-Nitrotoluene	1	13.021	13.011	0.010	43055	0.4008	0.3847	
	23 m-Nitrotoluene	1	13.607	13.604	0.003	54796	0.4004	0.3852	
	24 PETN	2	14.694	14.684	0.010	296622	4.00	3.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 40.00 Units: uL

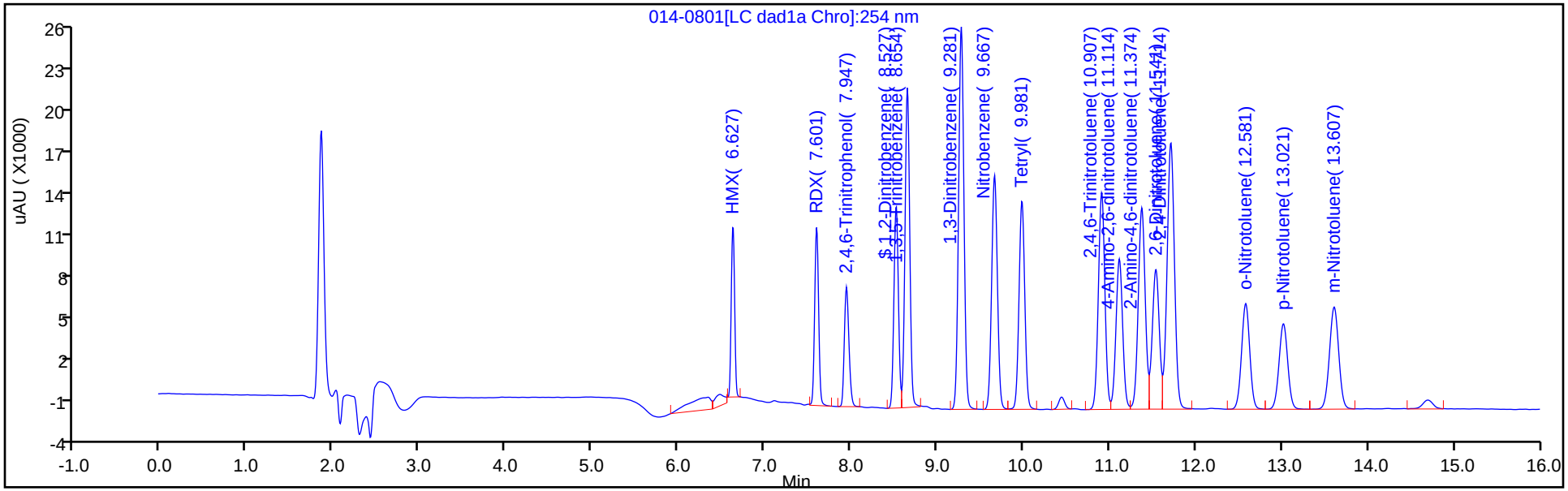
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

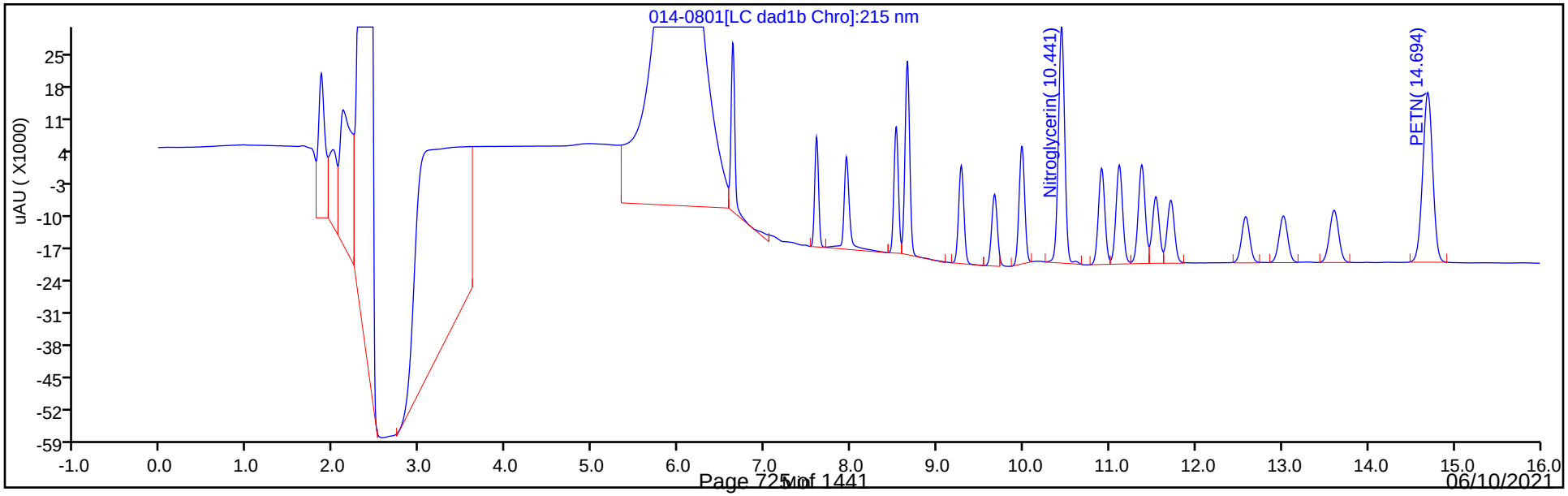
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d

Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 6			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

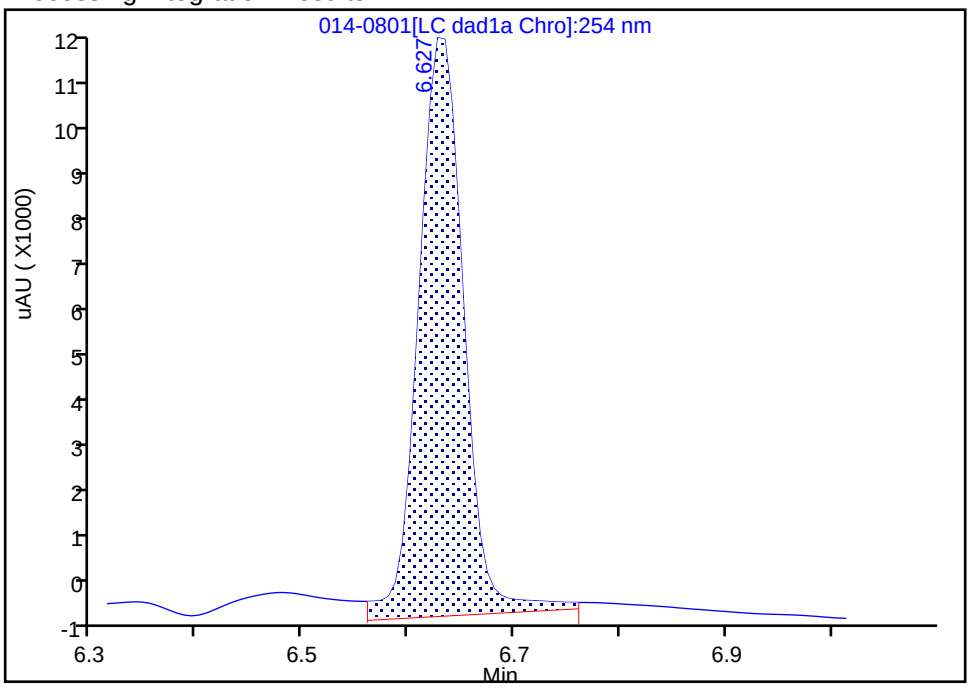
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d				
Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

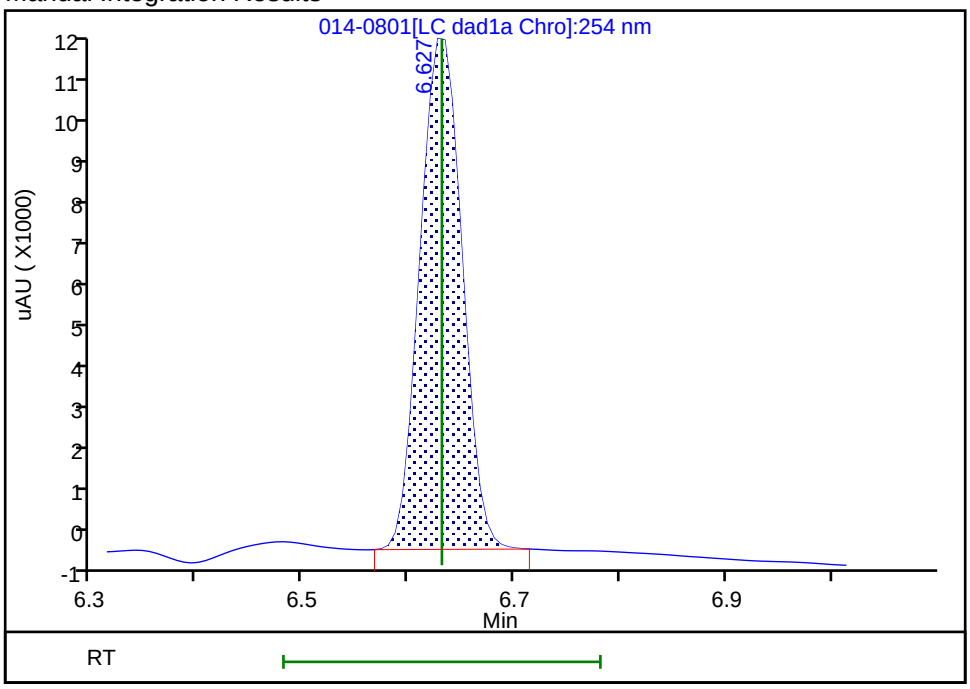
Processing Integration Results

RT: 6.63
Area: 36722
Amount: 0.425419
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 33261
Amount: 0.393988
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:17
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\015-0901.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 19:32:52 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	20261	0.2500	0.2400	M
7 RDX	1	7.597	7.598	-0.001	25193	0.2500	0.2371	
8 2,4,6-Trinitrophenol	1	7.951	7.958	-0.007	19525	0.2500	0.2360	
$ 9 1,2-Dinitrobenzene	1	8.517	8.525	-0.008	31539	0.2500	0.2460	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	53082	0.2505	0.2409	
11 1,3-Dinitrobenzene	1	9.271	9.278	-0.007	71373	0.2505	0.2409	
12 Nitrobenzene	1	9.657	9.664	-0.007	47122	0.2510	0.2413	
14 Tetryl	1	9.977	9.978	-0.001	42079	0.2505	0.2440	
15 Nitroglycerin	2	10.437	10.438	-0.001	163334	2.50	2.48	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	49667	0.2510	0.2411	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	35838	0.2503	0.2346	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	49194	0.2510	0.2377	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	34973	0.2510	0.2444	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	68930	0.2510	0.2402	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	30342	0.2500	0.2363	
22 p-Nitrotoluene	1	13.011	13.011	0.000	26060	0.2505	0.2329	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	33440	0.2503	0.2351	
24 PETN	2	14.684	14.684	0.000	179819	2.50	2.40	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 25.00 Units: uL

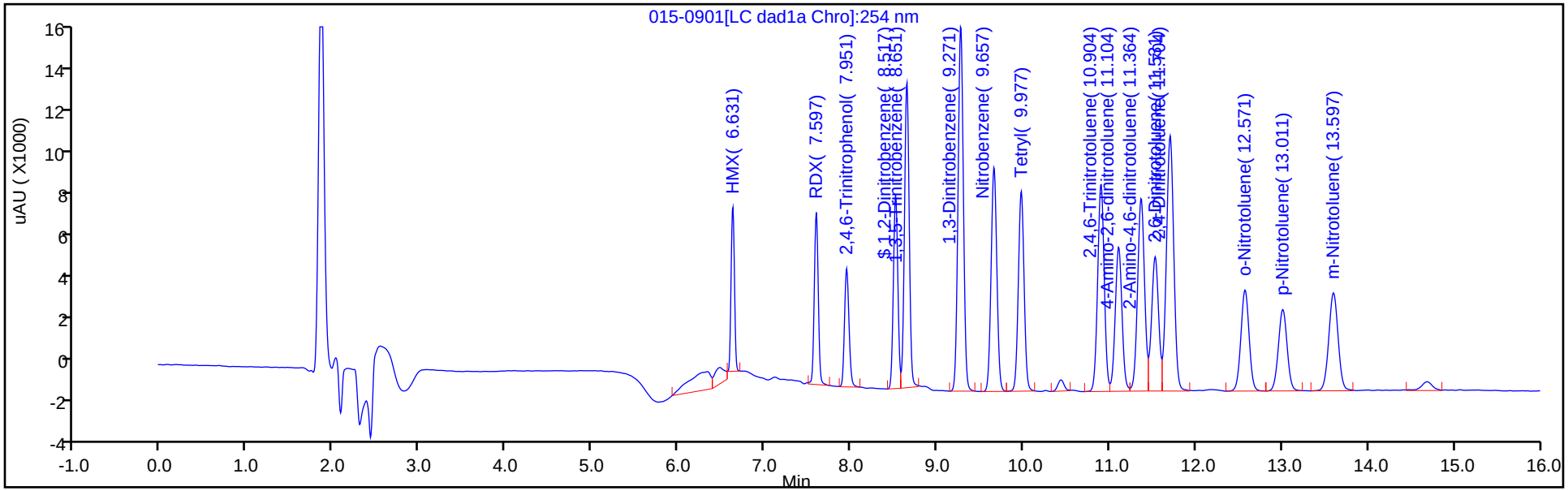
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

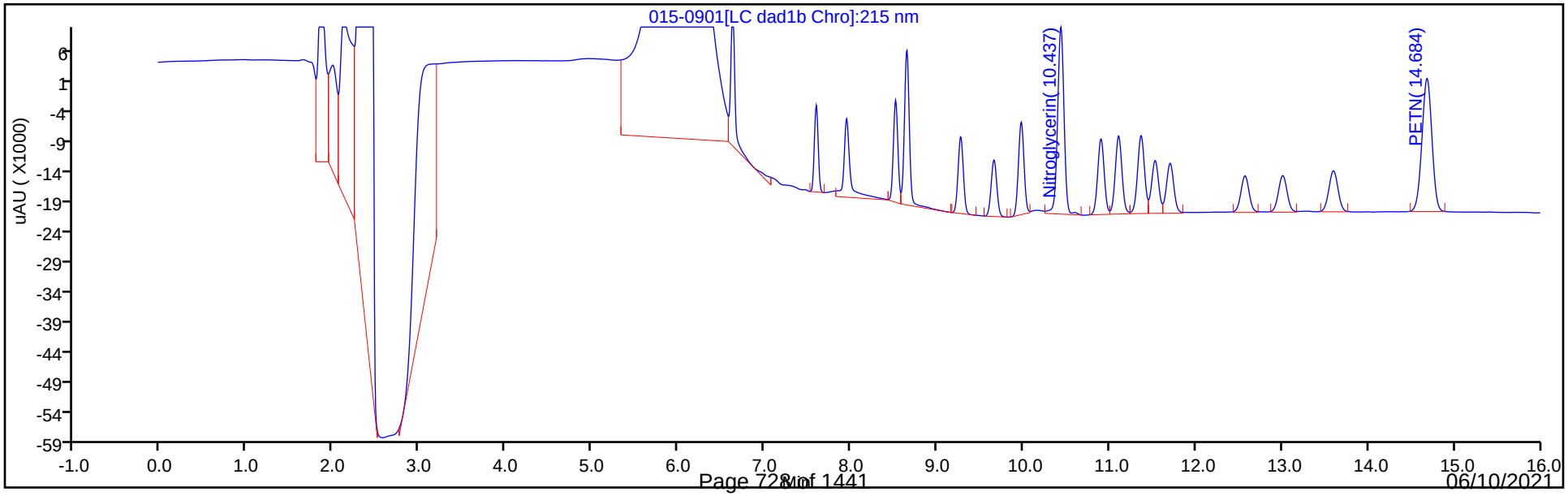
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d

Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 5			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

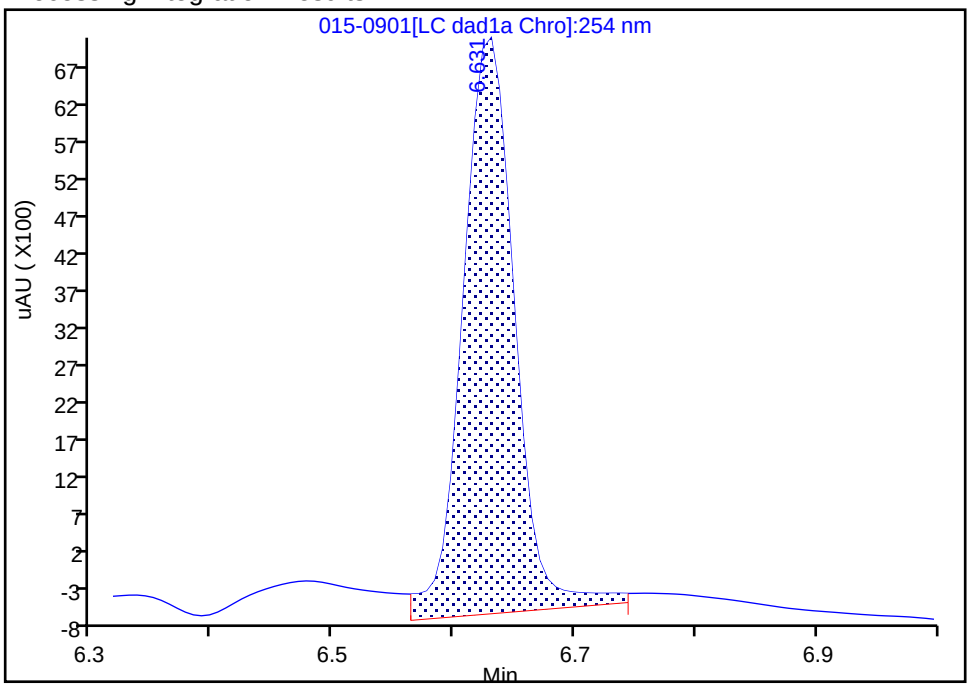
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d				
Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

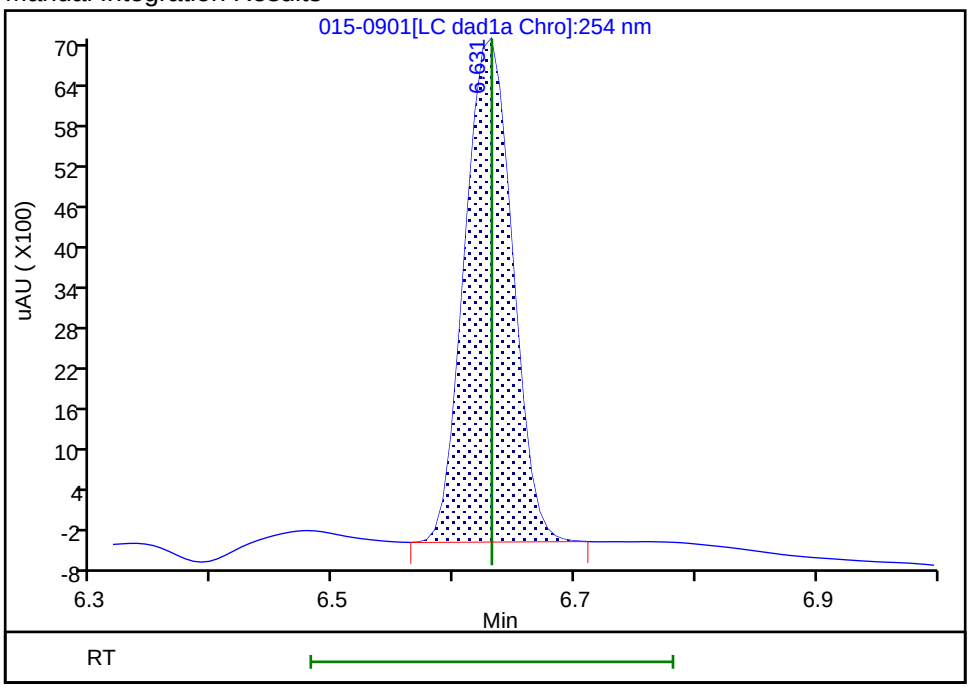
Processing Integration Results

RT: 6.63
Area: 22828
Amount: 0.260662
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 20261
Amount: 0.239998
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:27

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\016-1001.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 19:55:49 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:09 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	8561	0.1000	0.1014	M
7 RDX	1	7.598	7.598	0.000	11245	0.1000	0.1058	
8 2,4,6-Trinitrophenol	1	7.958	7.958	0.000	8317	0.1000	0.1005	
$ 9 1,2-Dinitrobenzene	1	8.525	8.525	0.000	13218	0.1000	0.1031	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	22114	0.1002	0.1004	
11 1,3-Dinitrobenzene	1	9.278	9.278	0.000	30099	0.1002	0.1016	
12 Nitrobenzene	1	9.664	9.664	0.000	20078	0.1004	0.1028	
14 Tetryl	1	9.978	9.978	0.000	17920	0.1002	0.1039	
15 Nitroglycerin	2	10.438	10.438	0.000	71053	1.00	1.04	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	21286	0.1004	0.1033	
17 4-Amino-2,6-dinitrotoluene	1	11.111	11.111	0.000	15505	0.1001	0.1015	
18 2-Amino-4,6-dinitrotoluene	1	11.371	11.371	0.000	21203	0.1004	0.1025	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	14557	0.1004	0.1017	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	29362	0.1004	0.1023	
21 o-Nitrotoluene	1	12.578	12.578	0.000	13138	0.1000	0.1023	
22 p-Nitrotoluene	1	13.011	13.011	0.000	11083	0.1002	0.0990	
23 m-Nitrotoluene	1	13.604	13.604	0.000	14179	0.1001	0.0997	
24 PETN	2	14.684	14.684	0.000	75747	1.00	1.01	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 10.00 Units: uL

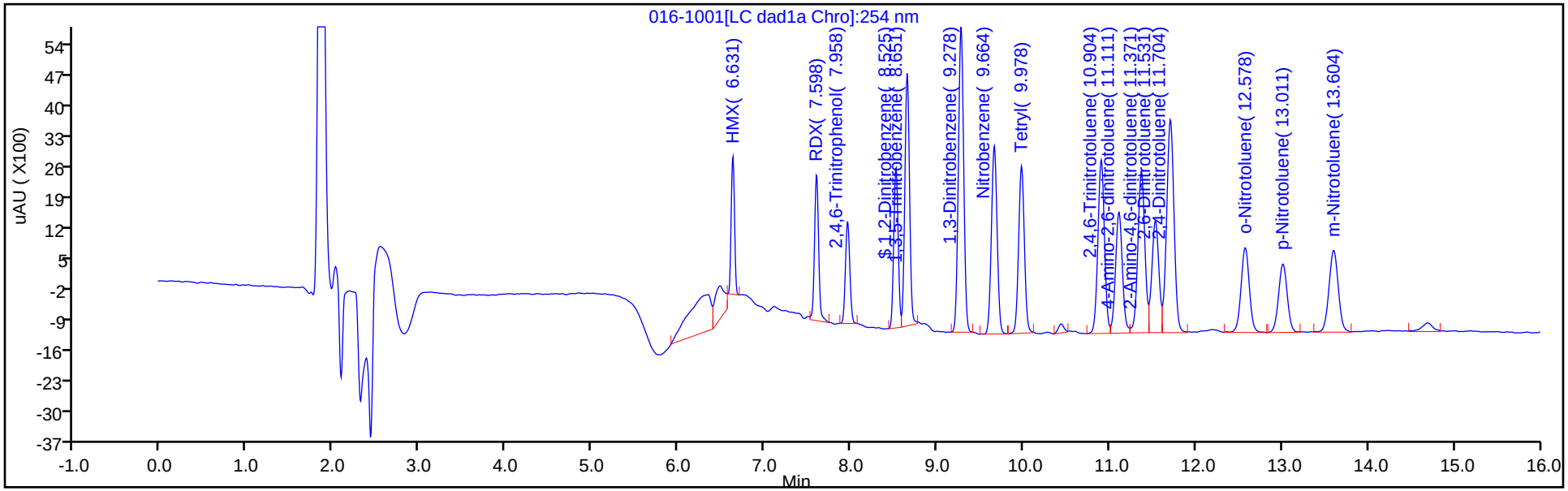
Report Date: 04-May-2021 13:25:09 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

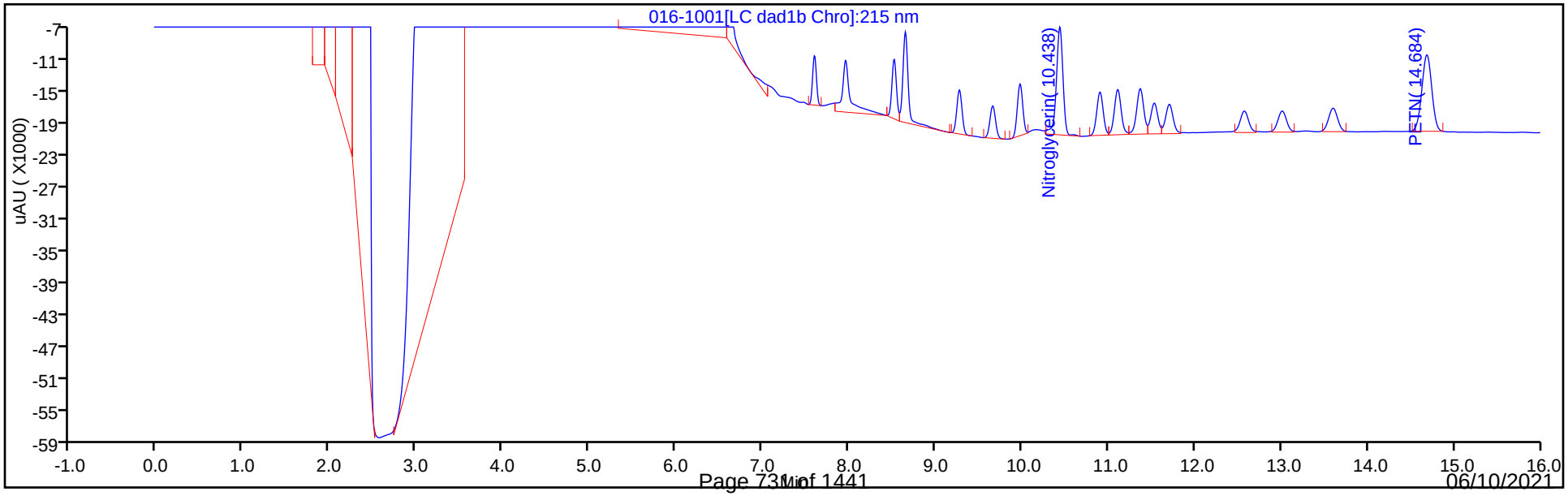
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d

Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

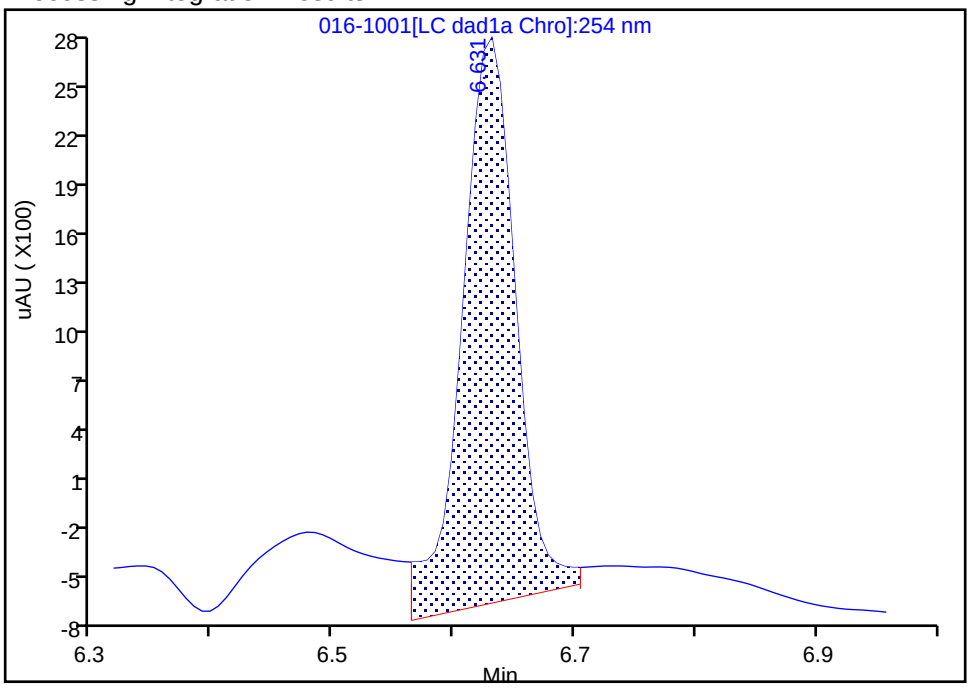
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d				
Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

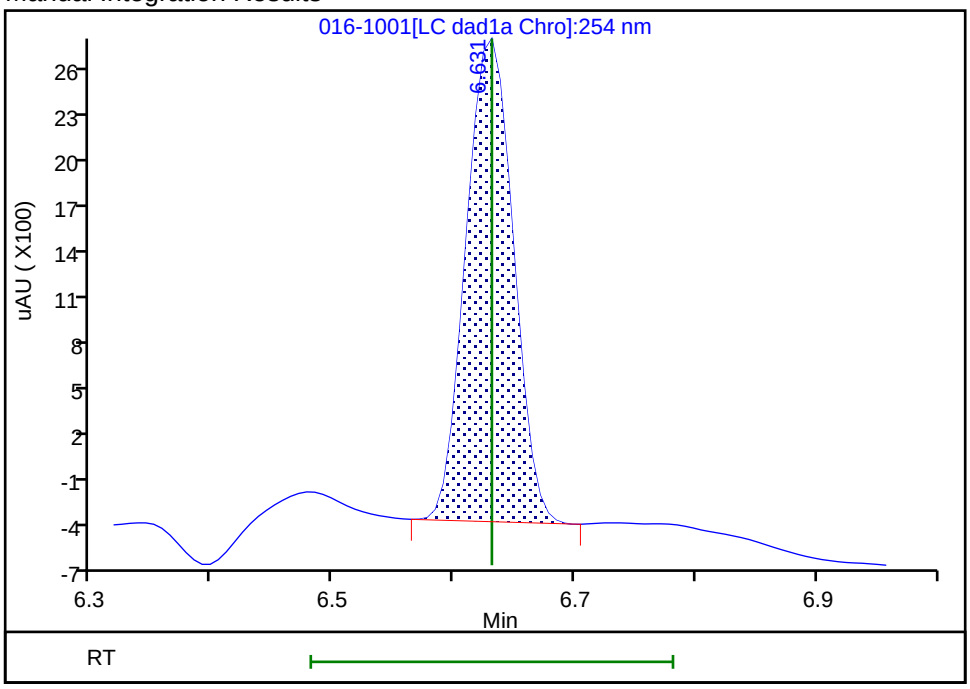
Processing Integration Results

RT: 6.63
Area: 10439
Amount: 0.111561
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 8561
Amount: 0.101408
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:35
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\017-1101.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 20:18:45 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.628	6.631	-0.003	4242	0.0500	0.0502	M
7 RDX	1	7.602	7.598	0.004	6054	0.0500	0.0570	
8 2,4,6-Trinitrophenol	1	7.968	7.958	0.010	4575	0.0500	0.0553	
$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	6504	0.0500	0.0507	
10 1,3,5-Trinitrobenzene	1	8.655	8.651	0.004	11361	0.0501	0.0516	
11 1,3-Dinitrobenzene	1	9.282	9.278	0.004	14927	0.0501	0.0504	
12 Nitrobenzene	1	9.662	9.664	-0.002	9892	0.0502	0.0507	
14 Tetryl	1	9.982	9.978	0.004	8870	0.0501	0.0514	
15 Nitroglycerin	2	10.442	10.438	0.004	36983	0.5000	0.5113	
16 2,4,6-Trinitrotoluene	1	10.908	10.904	0.004	10514	0.0502	0.0510	
17 4-Amino-2,6-dinitrotoluene	1	11.115	11.111	0.004	7868	0.0501	0.0515	
18 2-Amino-4,6-dinitrotoluene	1	11.375	11.371	0.004	10789	0.0502	0.0521	
19 2,6-Dinitrotoluene	1	11.535	11.531	0.004	7360	0.0502	0.0514	
20 2,4-Dinitrotoluene	1	11.708	11.704	0.004	14647	0.0502	0.0510	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	6616	0.0500	0.0515	
22 p-Nitrotoluene	1	13.015	13.011	0.004	5724	0.0501	0.0511	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	7187	0.0501	0.0505	
24 PETN	2	14.688	14.684	0.004	37293	0.5000	0.4987	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 5.00 Units: uL

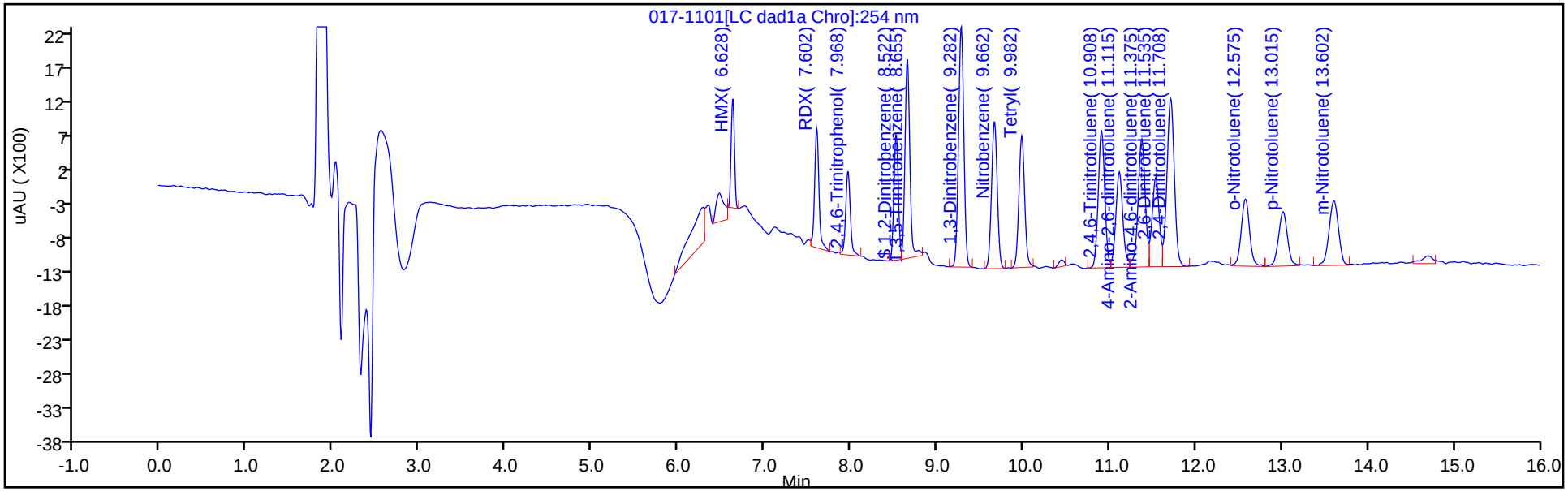
Report Date: 04-May-2021 13:25:10 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

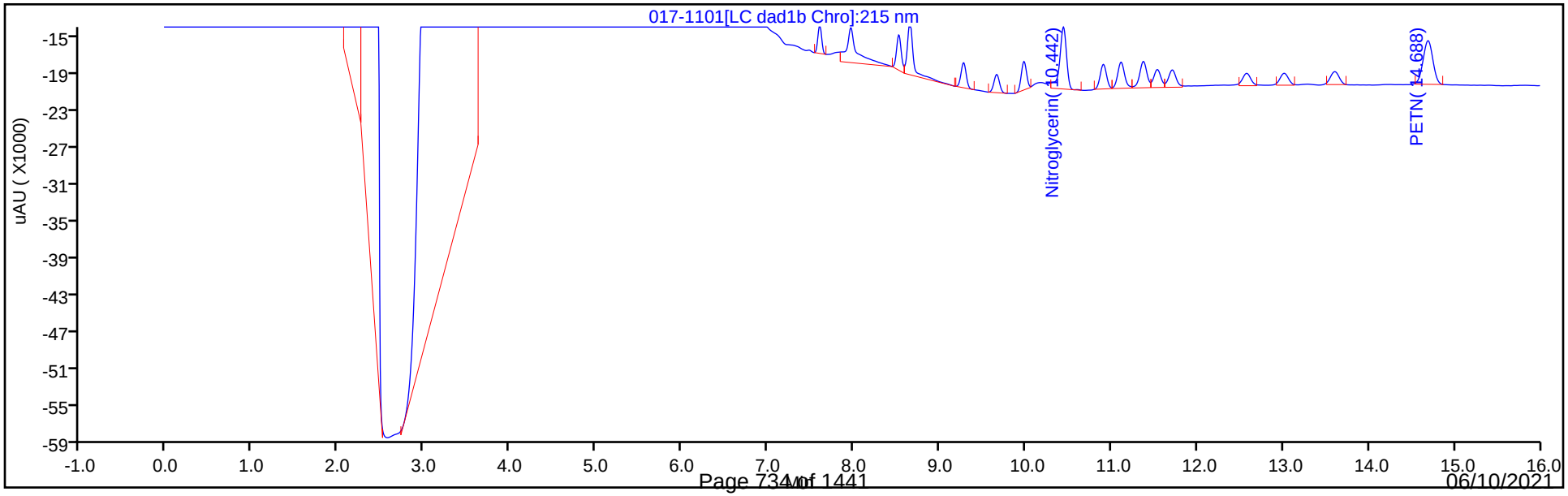
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d

Injection Date:	01-May-2021 20:18:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 3			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

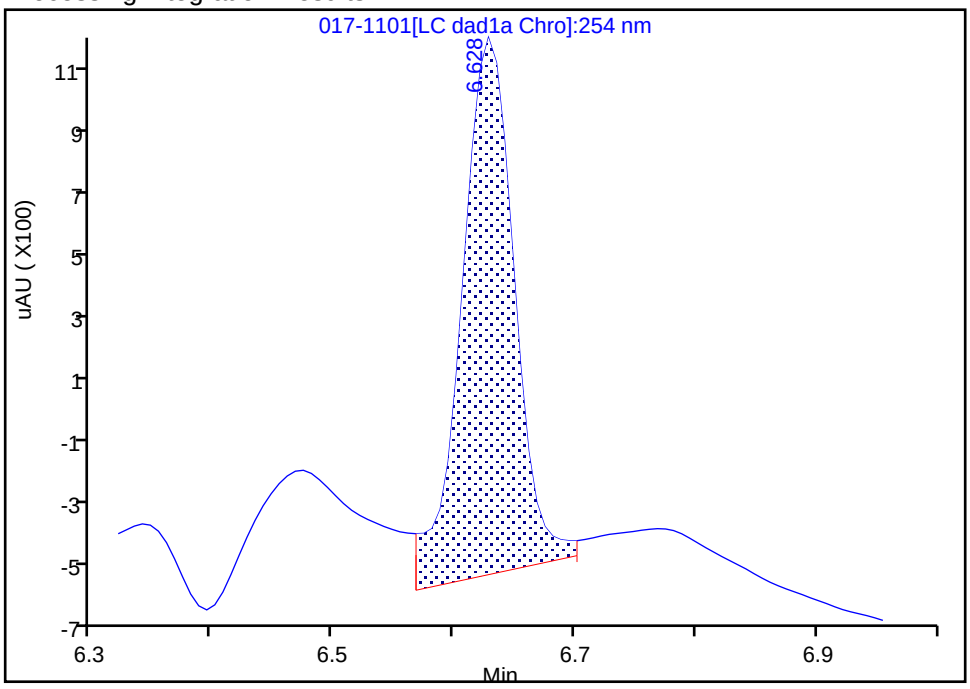
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d				
Injection Date:	01-May-2021 20:18:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

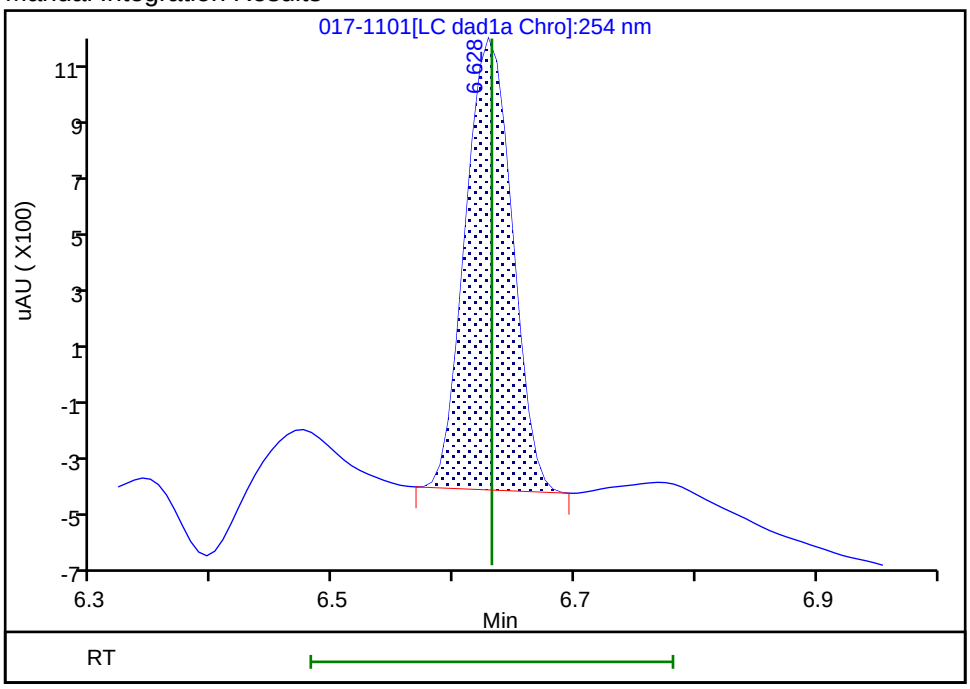
Processing Integration Results

RT: 6.63
Area: 5138
Amount: 0.048188
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 4242
Amount: 0.050248
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:49

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\018-1201.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 20:41:41 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:17:07

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.626	6.631	-0.005	1680	0.0200	0.0199	M
	7 RDX	1	7.606	7.598	0.008	2207	0.0200	0.0208	M
	8 2,4,6-Trinitrophenol	1	7.966	7.958	0.008	1840	0.0200	0.0222	
$	9 1,2-Dinitrobenzene	1	8.526	8.525	0.001	2399	0.0200	0.0187	
	10 1,3,5-Trinitrobenzene	1	8.653	8.651	0.002	4038	0.0200	0.0183	
	11 1,3-Dinitrobenzene	1	9.280	9.278	0.002	6019	0.0200	0.0203	
	12 Nitrobenzene	1	9.666	9.664	0.002	3972	0.0201	0.0203	
	14 Tetryl	1	9.980	9.978	0.002	3331	0.0200	0.0193	M
	15 Nitroglycerin	2	10.440	10.438	0.002	16162	0.2000	0.1865	
	16 2,4,6-Trinitrotoluene	1	10.906	10.904	0.002	4156	0.0201	0.0202	
	17 4-Amino-2,6-dinitrotoluene	1	11.106	11.111	-0.005	3532	0.0200	0.0231	
	18 2-Amino-4,6-dinitrotoluene	1	11.366	11.371	-0.005	4433	0.0201	0.0214	
	19 2,6-Dinitrotoluene	1	11.533	11.531	0.002	2947	0.0201	0.0206	
	20 2,4-Dinitrotoluene	1	11.706	11.704	0.002	5945	0.0201	0.0207	
	21 o-Nitrotoluene	1	12.573	12.578	-0.005	2737	0.0200	0.0213	
	22 p-Nitrotoluene	1	13.006	13.011	-0.005	2633	0.0200	0.0235	
	23 m-Nitrotoluene	1	13.600	13.604	-0.004	3121	0.0200	0.0219	
	24 PETN	2	14.680	14.684	-0.004	14944	0.2000	0.1998	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 2.00 Units: uL

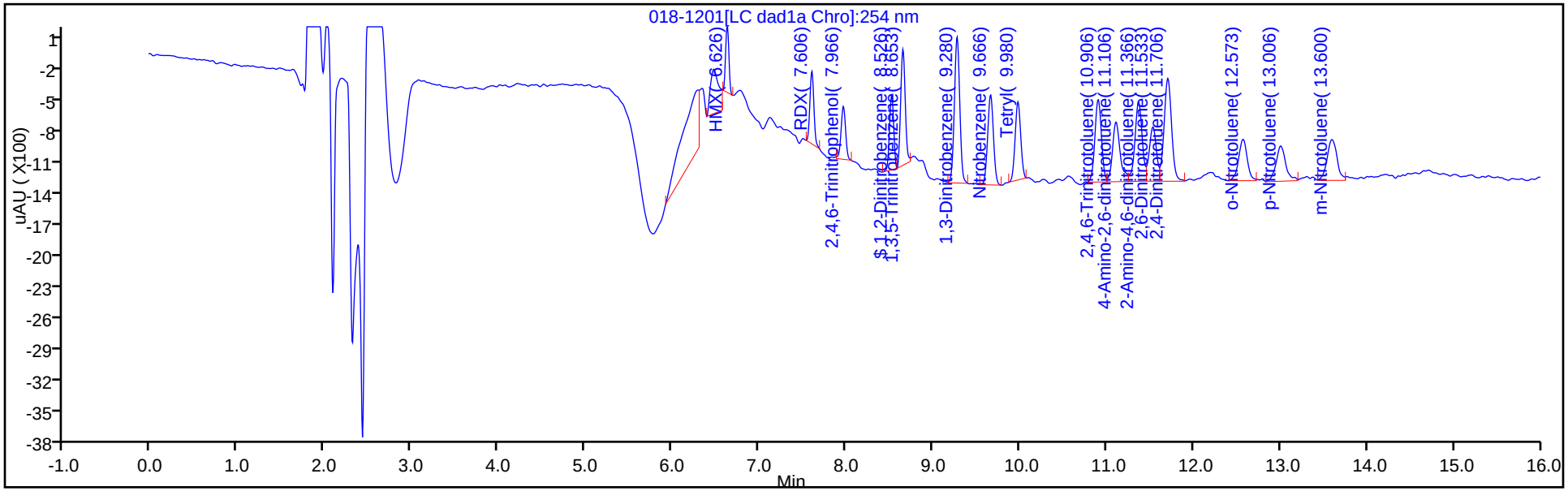
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

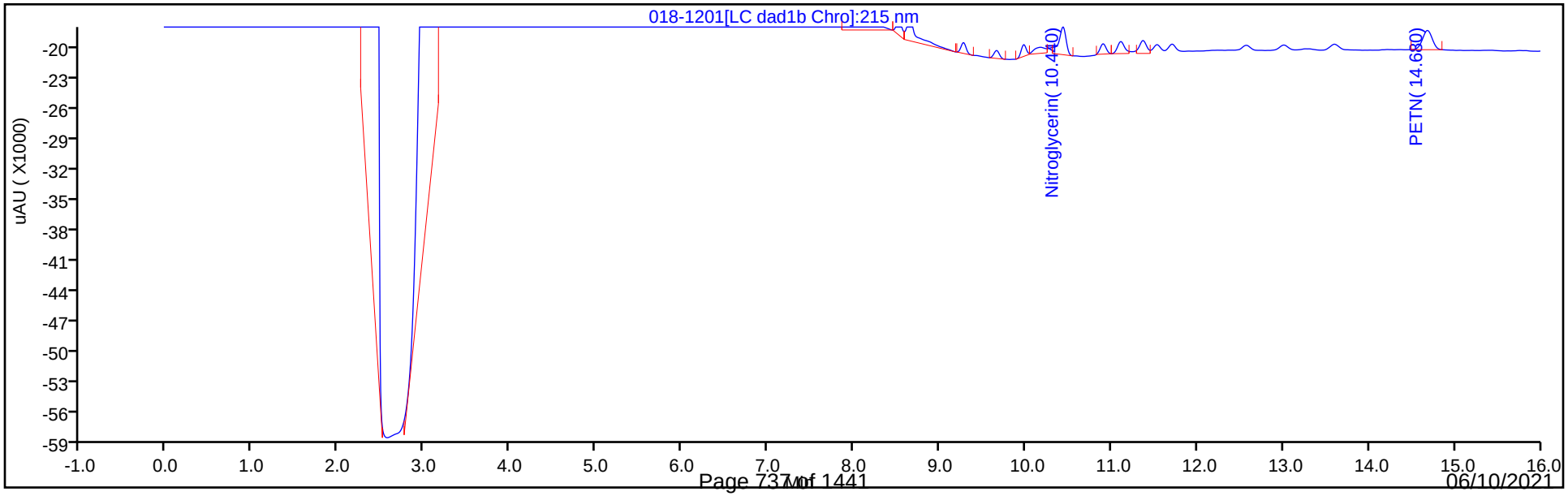
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d

Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 2			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

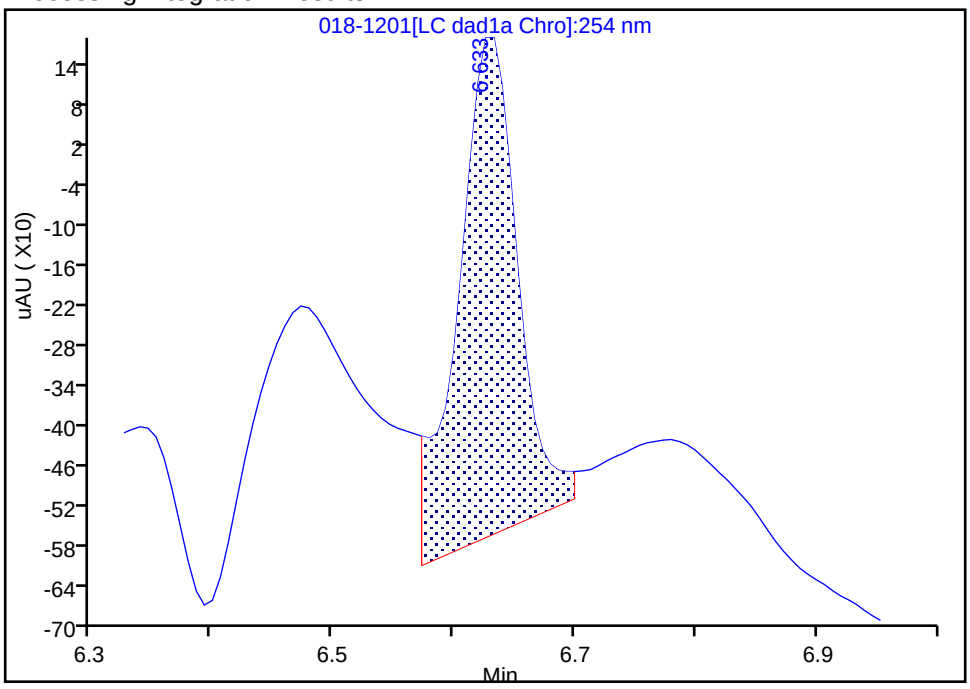
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

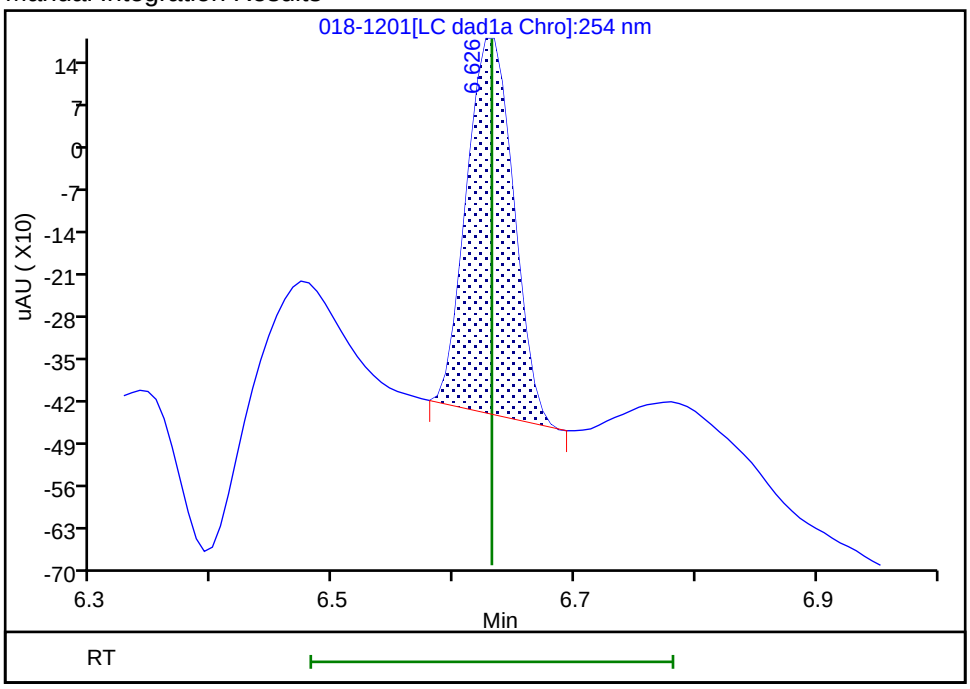
Processing Integration Results

RT: 6.63
Area: 2563
Amount: 0.017888
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 1680
Amount: 0.019900
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

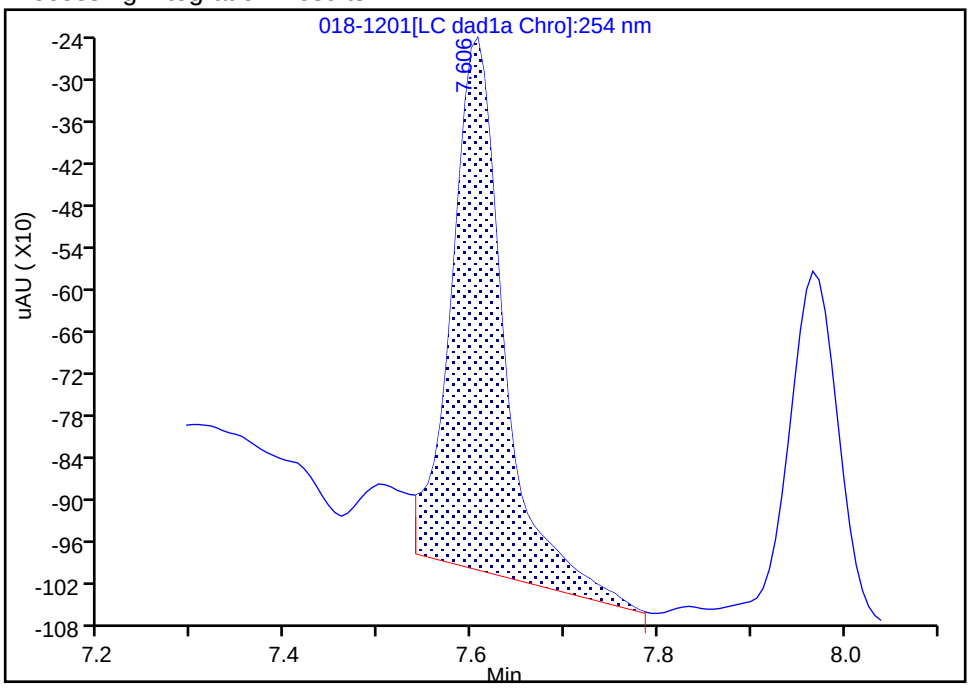
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

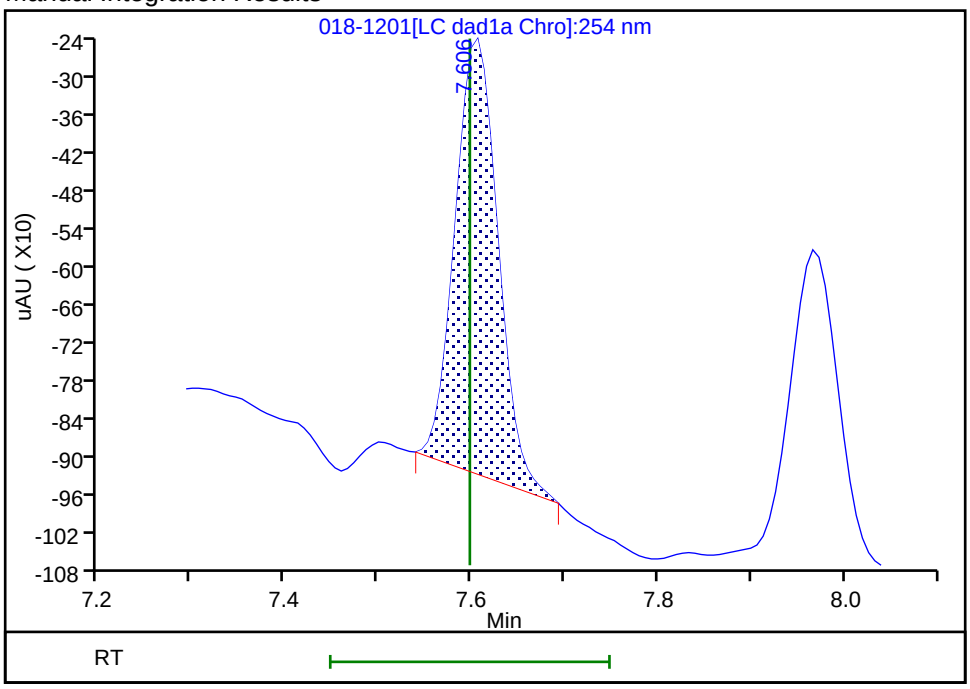
Processing Integration Results

RT: 7.61
Area: 2982
Amount: 0.020729
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 2207
Amount: 0.020770
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

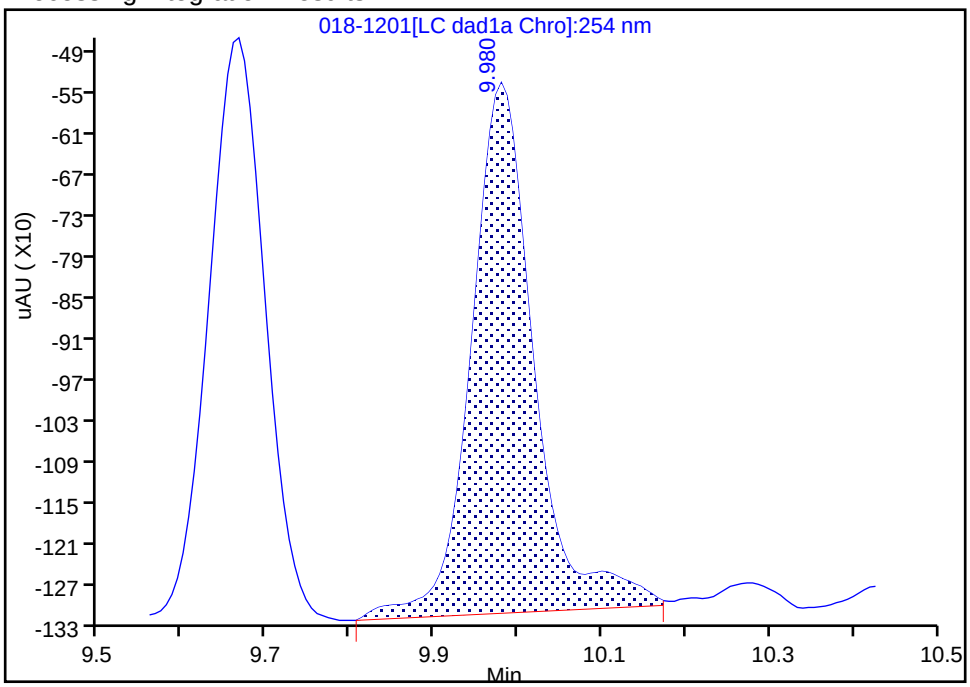
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

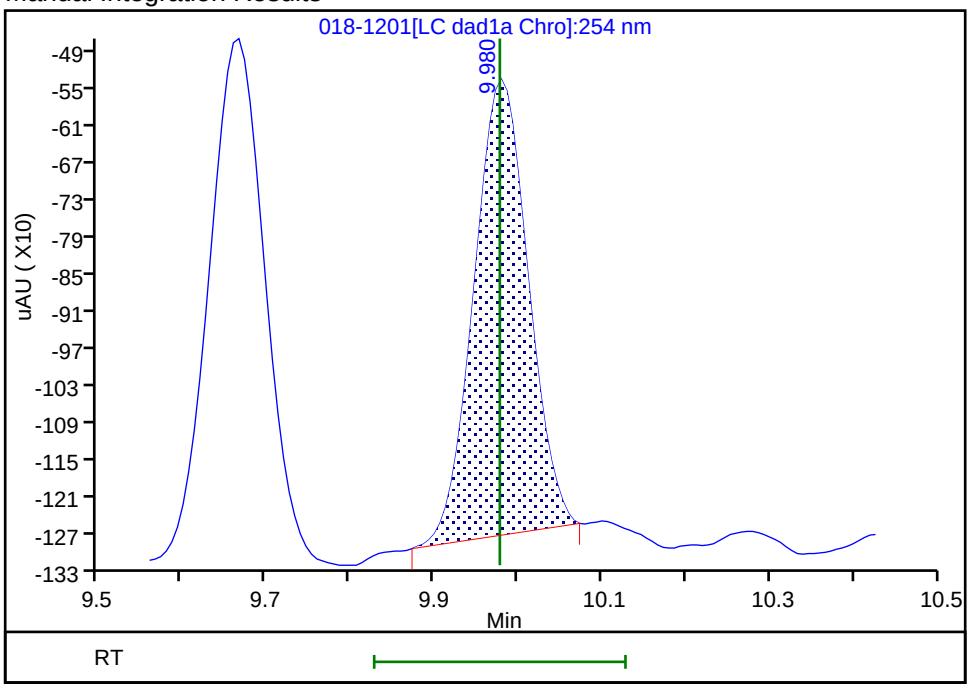
Processing Integration Results

RT: 9.98
Area: 4075
Amount: 0.022280
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 3331
Amount: 0.019319
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:23:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

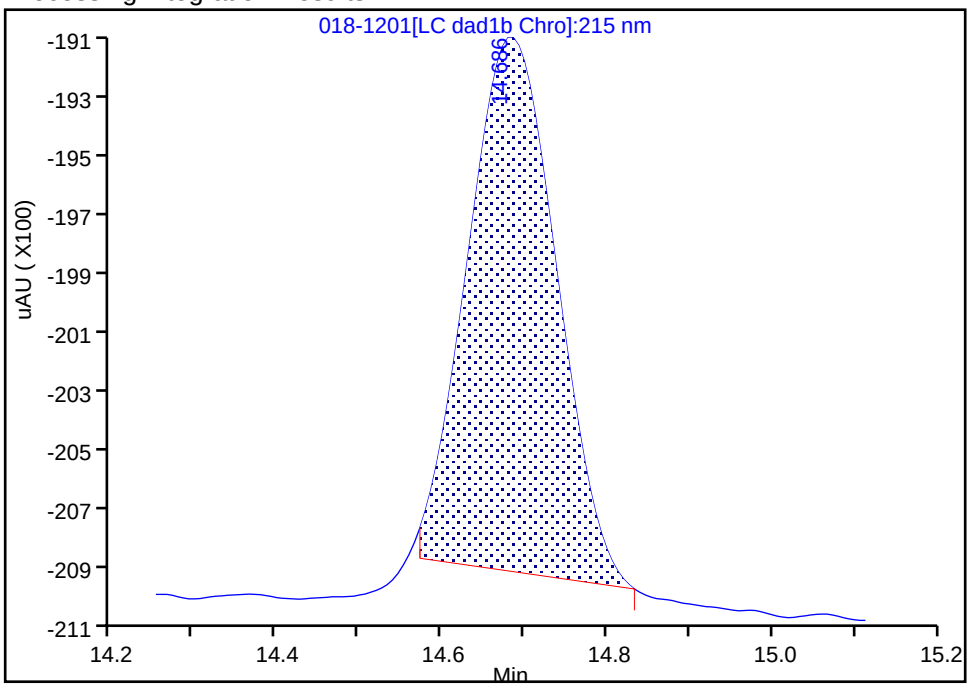
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

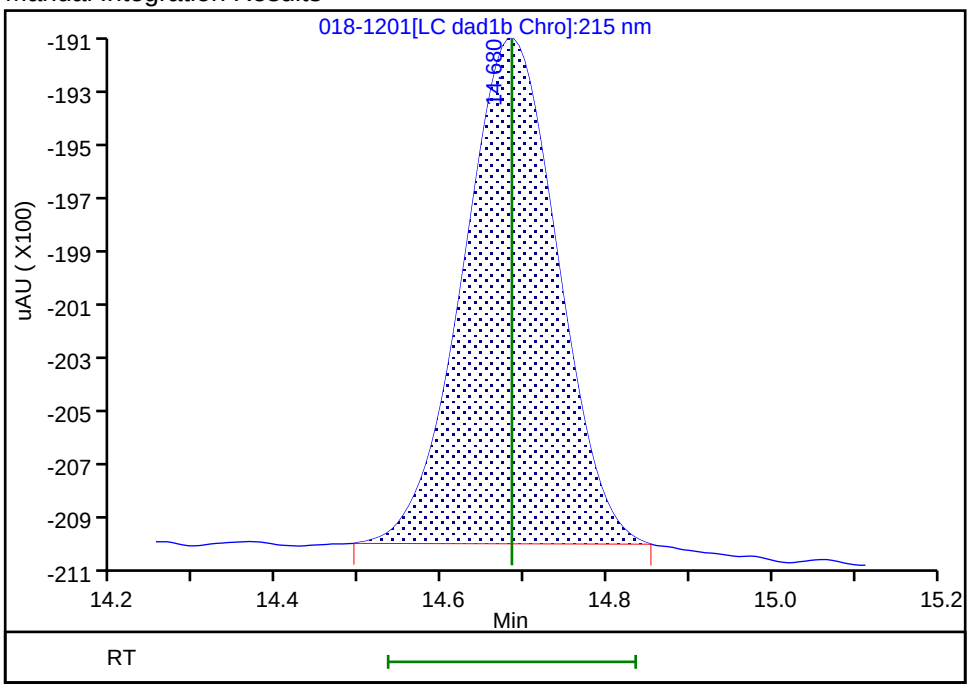
Processing Integration Results

RT: 14.69
Area: 13412
Amount: 0.181421
Amount Units: ug/mL



Manual Integration Results

RT: 14.68
Area: 14944
Amount: 0.199843
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:31
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 21:04:39 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:11 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:18:18

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.629	6.631	-0.002	906	0.0100	0.0107	M
	7 RDX	1	7.602	7.598	0.004	1876	0.0100	0.0177	
	8 2,4,6-Trinitrophenol	1	7.962	7.958	0.004	1003	0.0100	0.0121	
$	9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	1195	0.0100	0.009320	
	10 1,3,5-Trinitrobenzene	1	8.649	8.651	-0.002	2481	0.0100	0.0113	
	11 1,3-Dinitrobenzene	1	9.275	9.278	-0.003	3052	0.0100	0.0103	
	12 Nitrobenzene	1	9.662	9.664	-0.002	1995	0.0100	0.0102	
	14 Tetryl	1	9.975	9.978	-0.003	1712	0.0100	0.0099	M
	15 Nitroglycerin	2	10.435	10.438	-0.003	10778	0.1000	0.1025	M
	16 2,4,6-Trinitrotoluene	1	10.902	10.904	-0.002	2128	0.0100	0.0103	
	17 4-Amino-2,6-dinitrotoluene	1	11.109	11.111	-0.002	1596	0.0100	0.0104	
	18 2-Amino-4,6-dinitrotoluene	1	11.369	11.371	-0.002	2126	0.0100	0.0103	
	19 2,6-Dinitrotoluene	1	11.529	11.531	-0.002	1404	0.0100	0.009813	
	20 2,4-Dinitrotoluene	1	11.702	11.704	-0.002	2944	0.0100	0.0103	
	21 o-Nitrotoluene	1	12.575	12.578	-0.003	1346	0.0100	0.0105	
	22 p-Nitrotoluene	1	13.015	13.011	0.004	1177	0.0100	0.0105	
	23 m-Nitrotoluene	1	13.602	13.604	-0.002	1575	0.0100	0.0111	
	24 PETN	2	14.682	14.684	-0.002	7901	0.1000	0.1057	Ma

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00067 Amount Added: 1.00 Units: uL

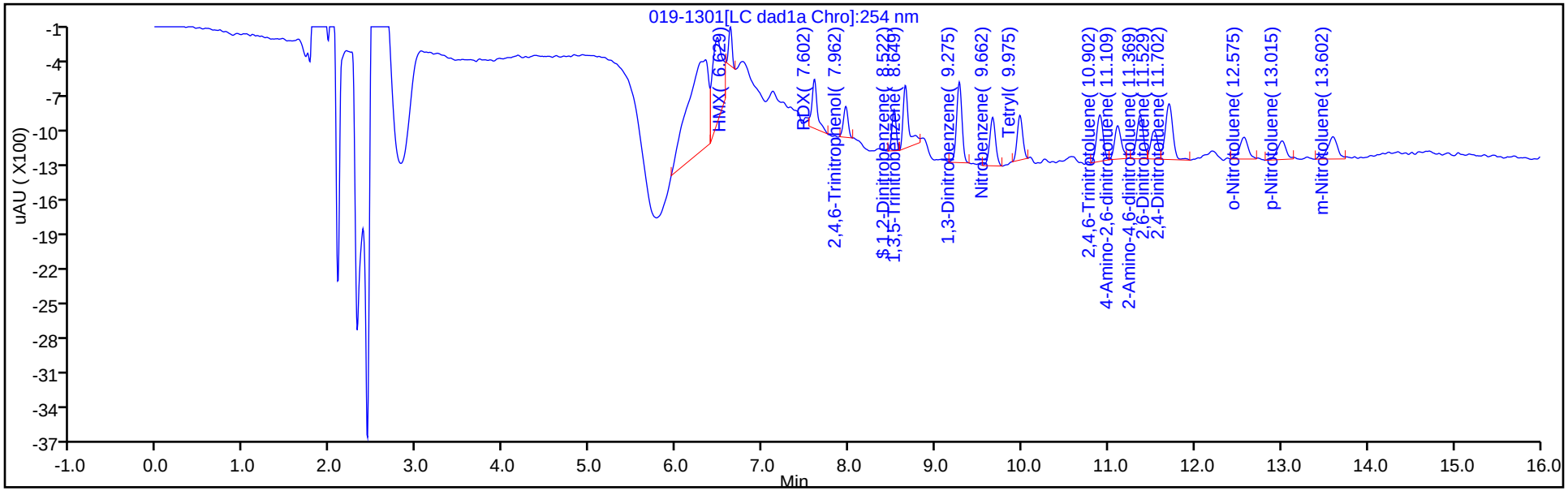
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

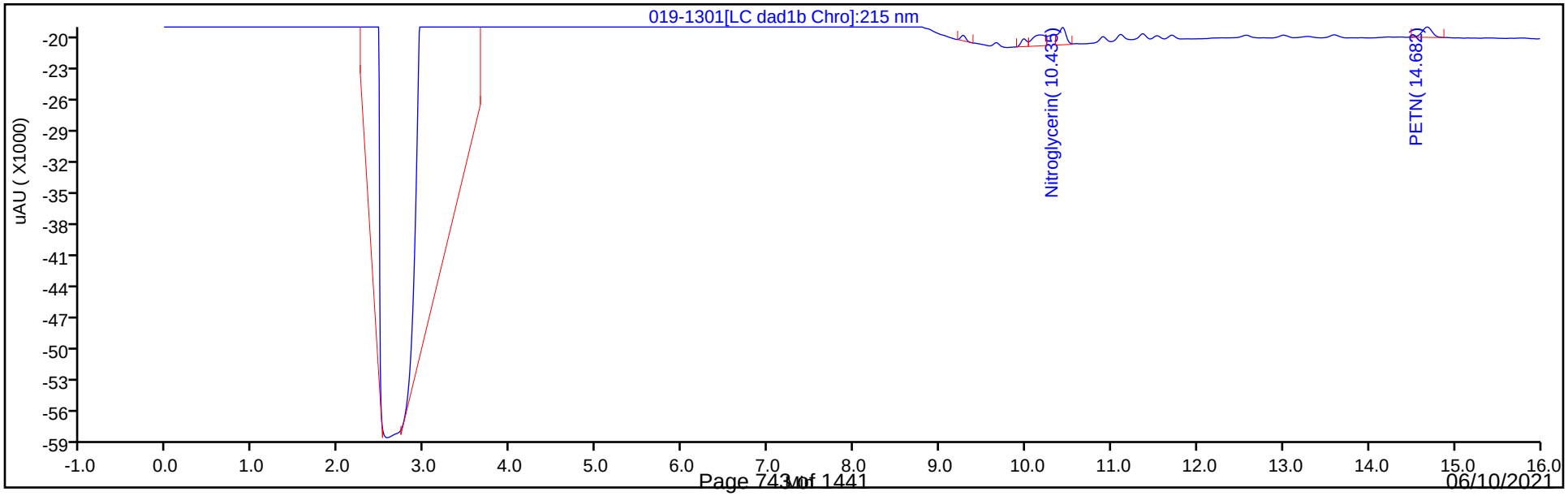
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d

Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 1			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

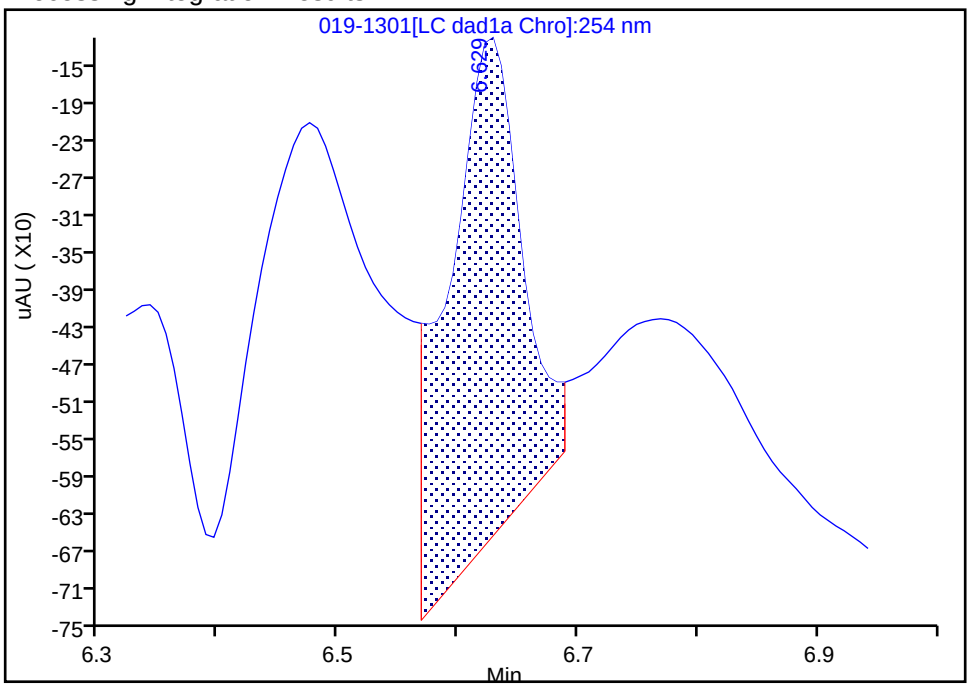
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d				
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

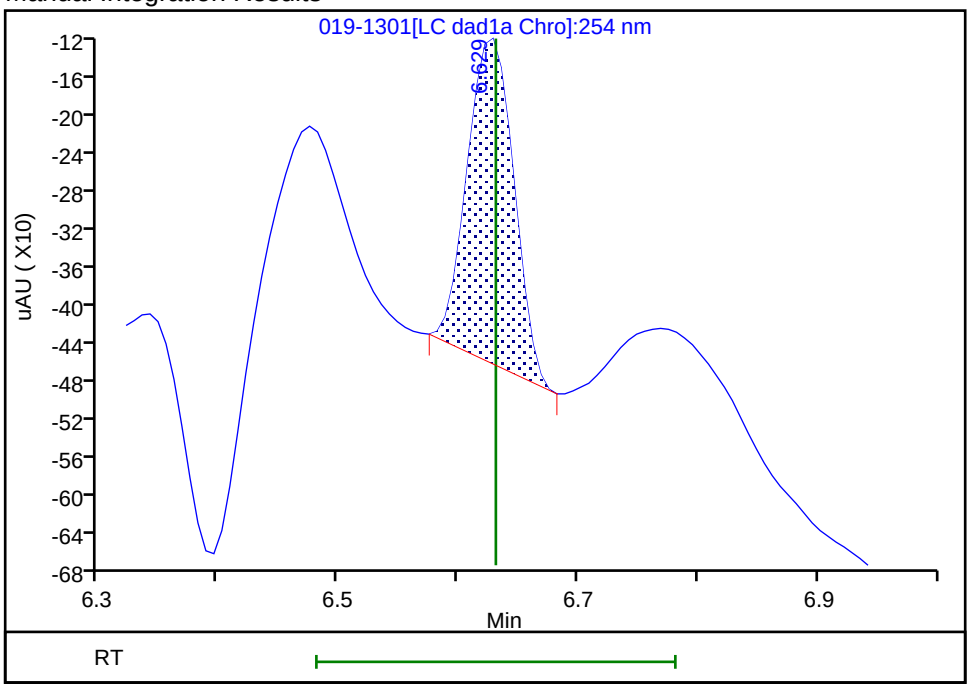
Processing Integration Results

RT: 6.63
Area: 2314
Amount: 0.023125
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 906
Amount: 0.010732
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:17:14
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

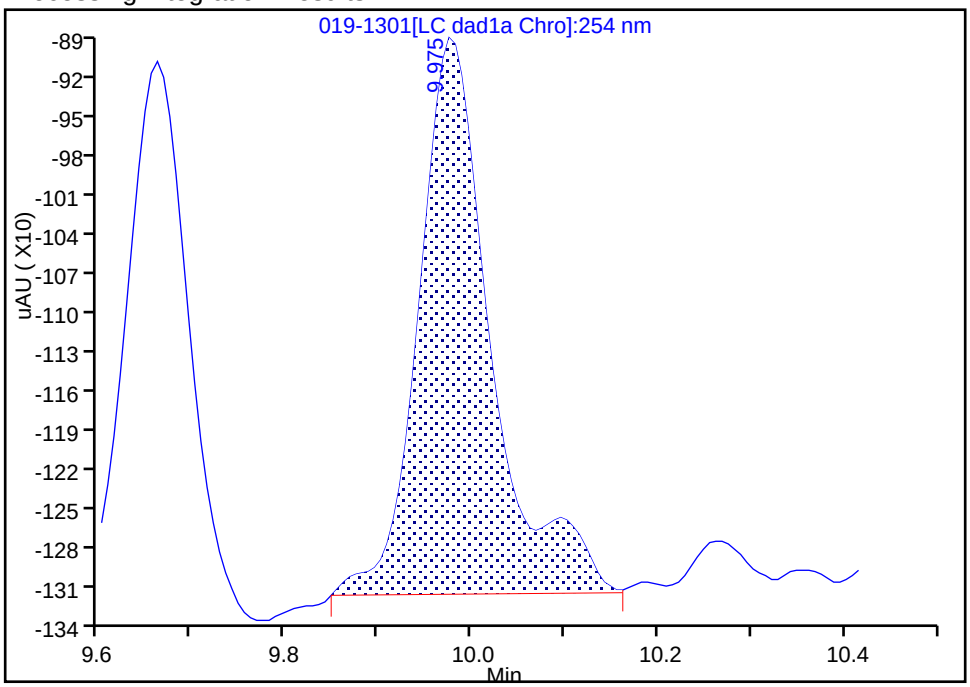
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

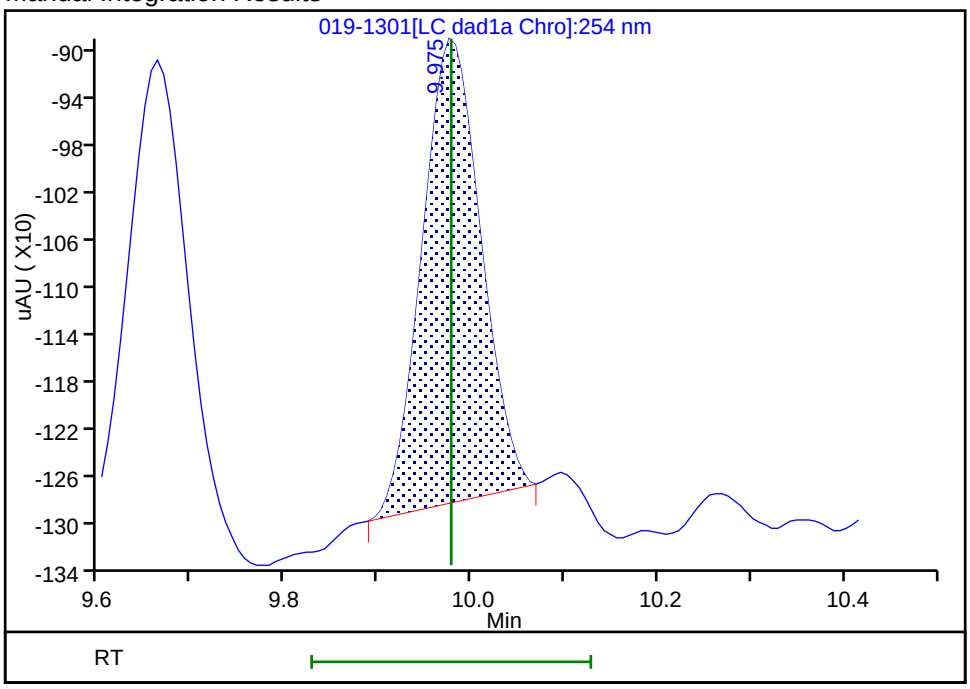
Processing Integration Results

RT: 9.98
Area: 2285
Amount: 0.012782
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 1712
Amount: 0.009929
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:23:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

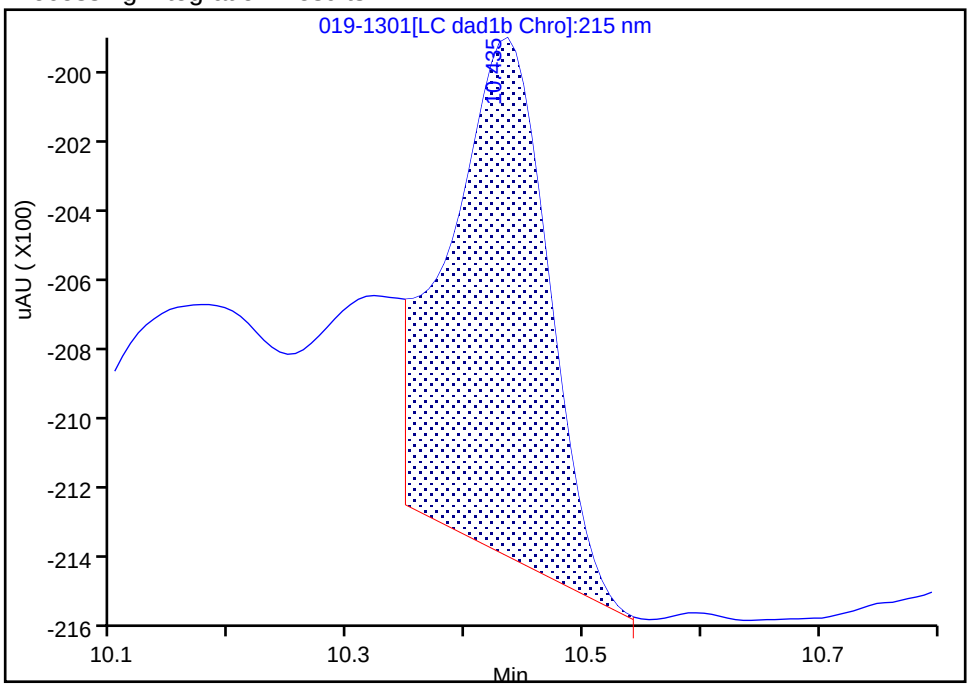
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

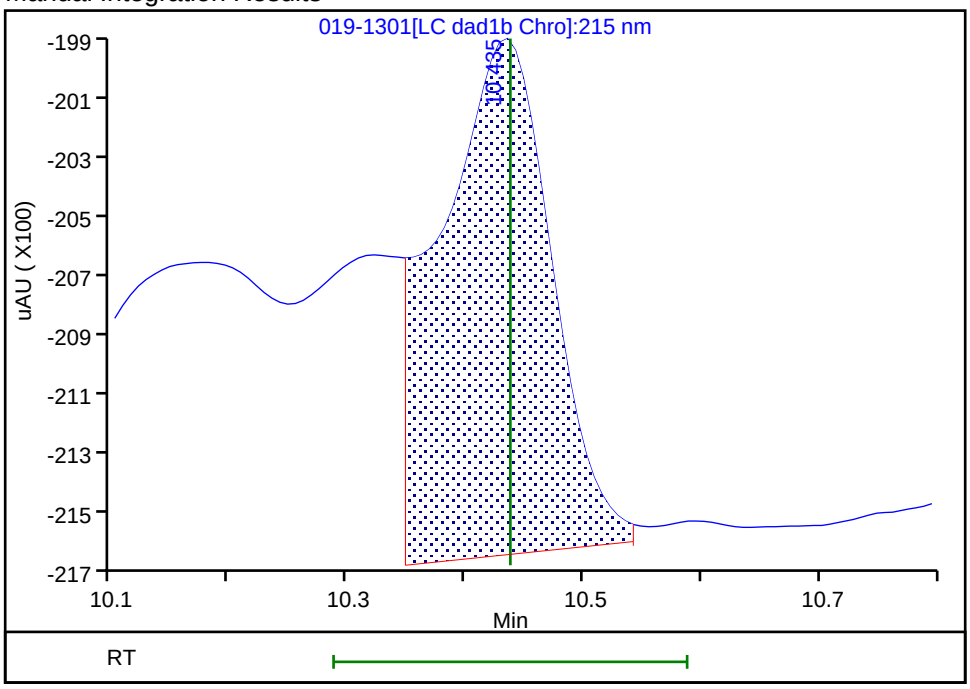
Processing Integration Results

RT: 10.44
Area: 8028
Amount: 0.114856
Amount Units: ug/mL



Manual Integration Results

RT: 10.44
Area: 10778
Amount: 0.102544
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:01
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

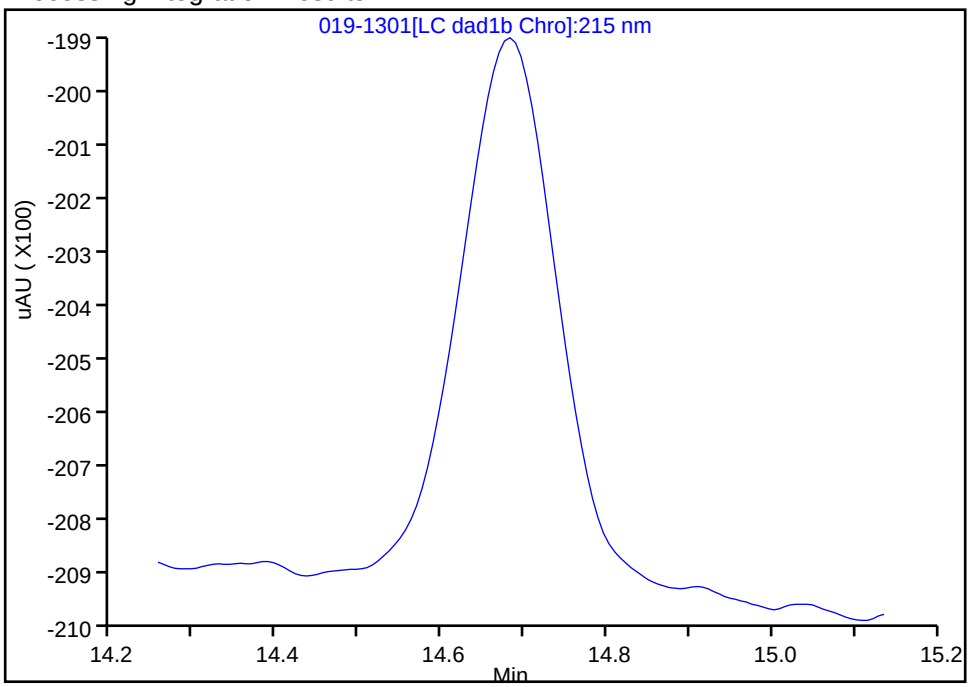
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

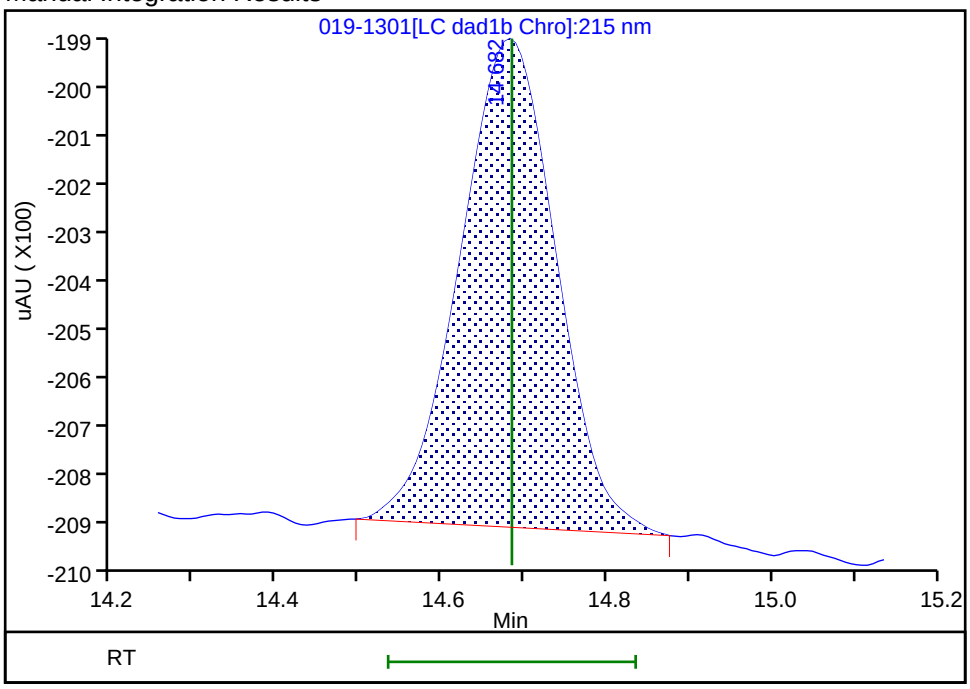
Not Detected
Expected RT: 14.68

Processing Integration Results



Manual Integration Results

RT: 14.68
Area: 7901
Amount: 0.105659
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:17:51
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

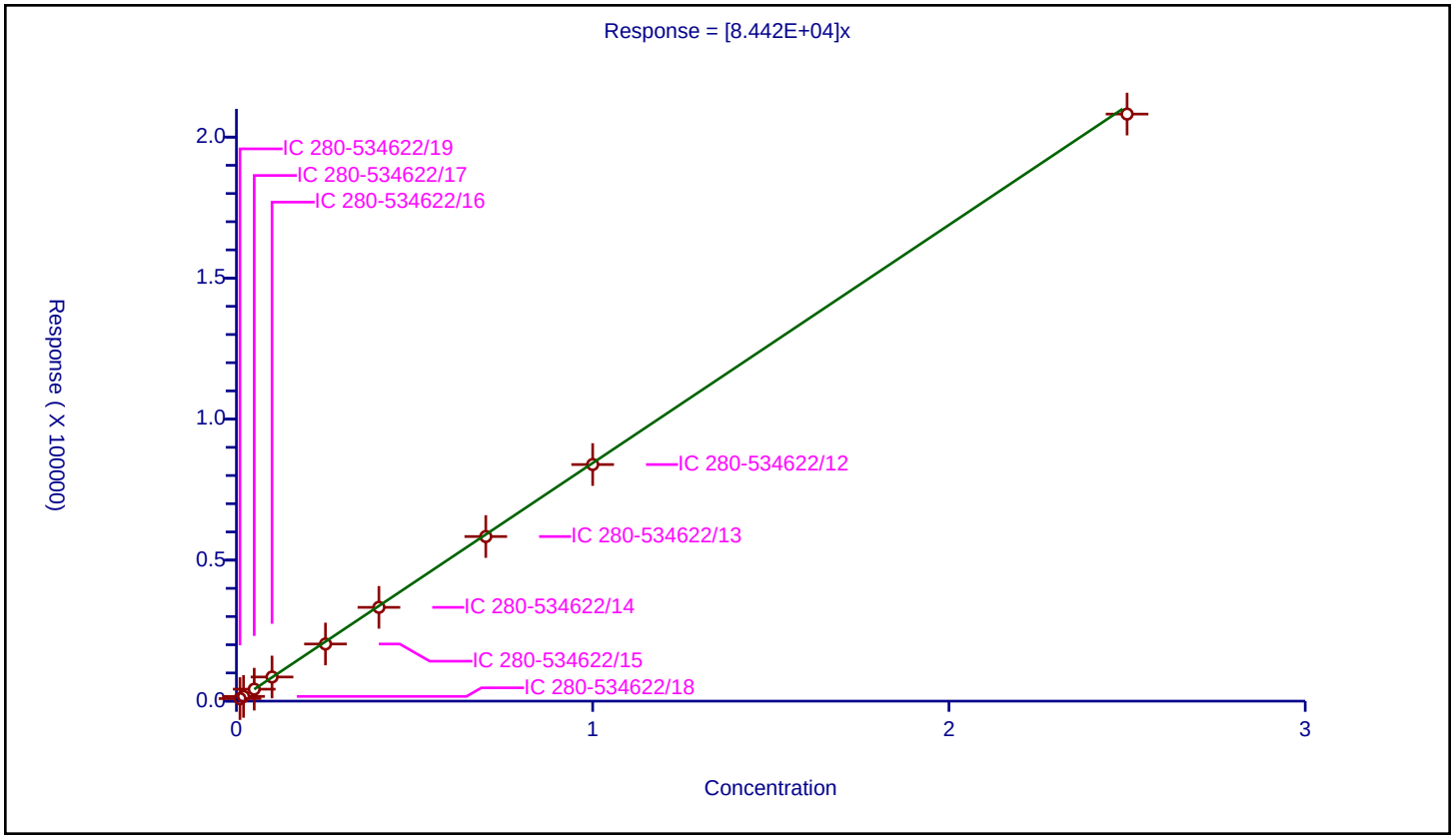
Curve Coefficients

Intercept:	0
Slope:	8.442E+04

Error Coefficients

Standard Error:	1130
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	906.0			90600.0	Y
2	IC 280-534622/18	0.02	1680.0			84000.0	Y
3	IC 280-534622/17	0.05	4242.0			84840.0	Y
4	IC 280-534622/16	0.1	8561.0			85610.0	Y
5	IC 280-534622/15	0.25	20261.0			81044.0	Y
6	IC 280-534622/14	0.4	33261.0			83152.5	Y
7	IC 280-534622/13	0.7	58367.0			83381.428571	Y
8	IC 280-534622/12	1.0	83899.0			83899.0	Y
9	IC 280-534622/11	2.5	208165.0			83266.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

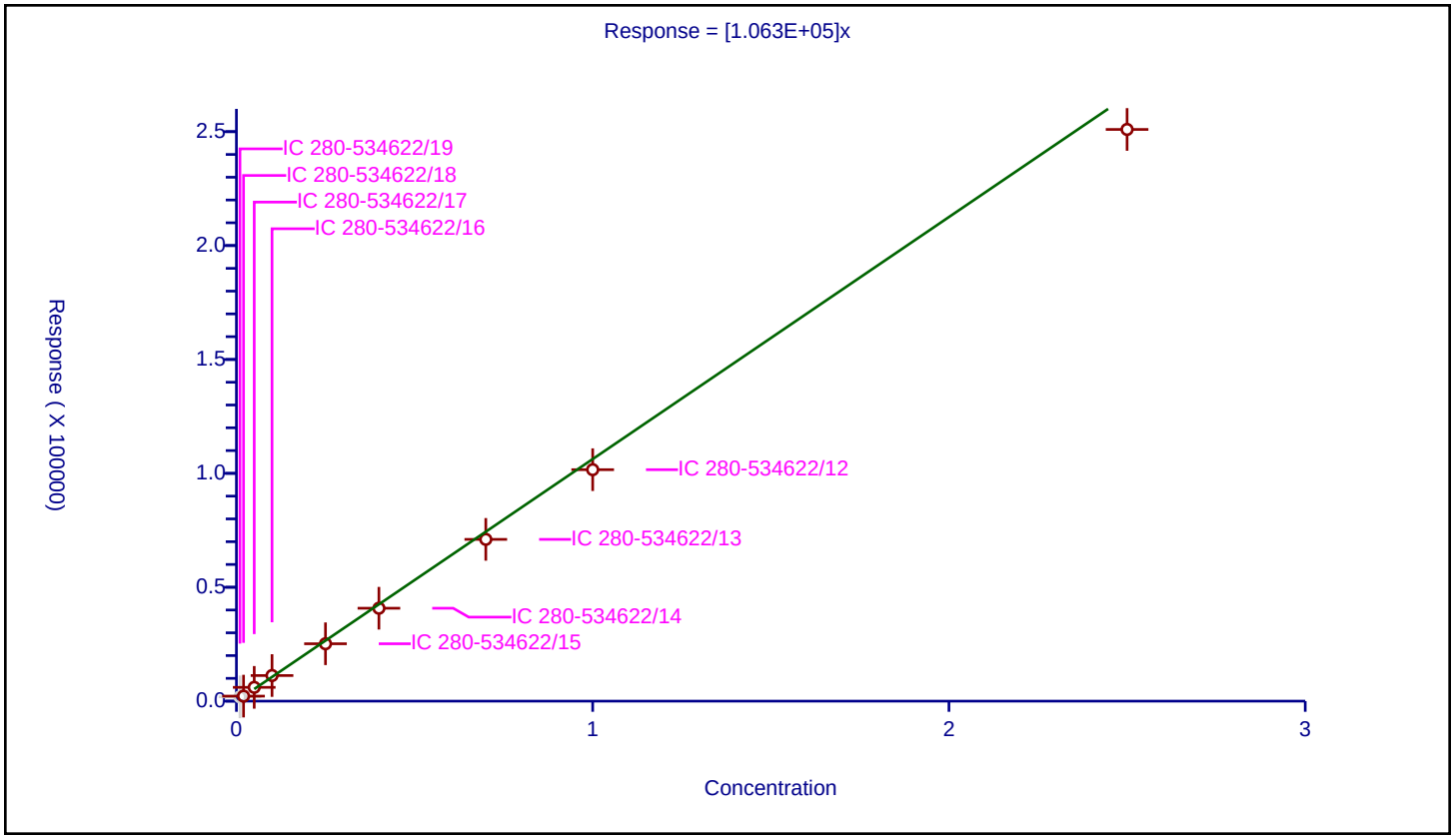
Curve Coefficients

Intercept:	0
Slope:	1.063E+05

Error Coefficients

Standard Error:	6020
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1876.0			187600.0	N
2	IC 280-534622/18	0.02	2207.0			110350.0	Y
3	IC 280-534622/17	0.05	6054.0			121080.0	Y
4	IC 280-534622/16	0.1	11245.0			112450.0	Y
5	IC 280-534622/15	0.25	25193.0			100772.0	Y
6	IC 280-534622/14	0.4	40790.0			101975.0	Y
7	IC 280-534622/13	0.7	71020.0			101457.142857	Y
8	IC 280-534622/12	1.0	101616.0			101616.0	Y
9	IC 280-534622/11	2.5	250979.0			100391.6	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

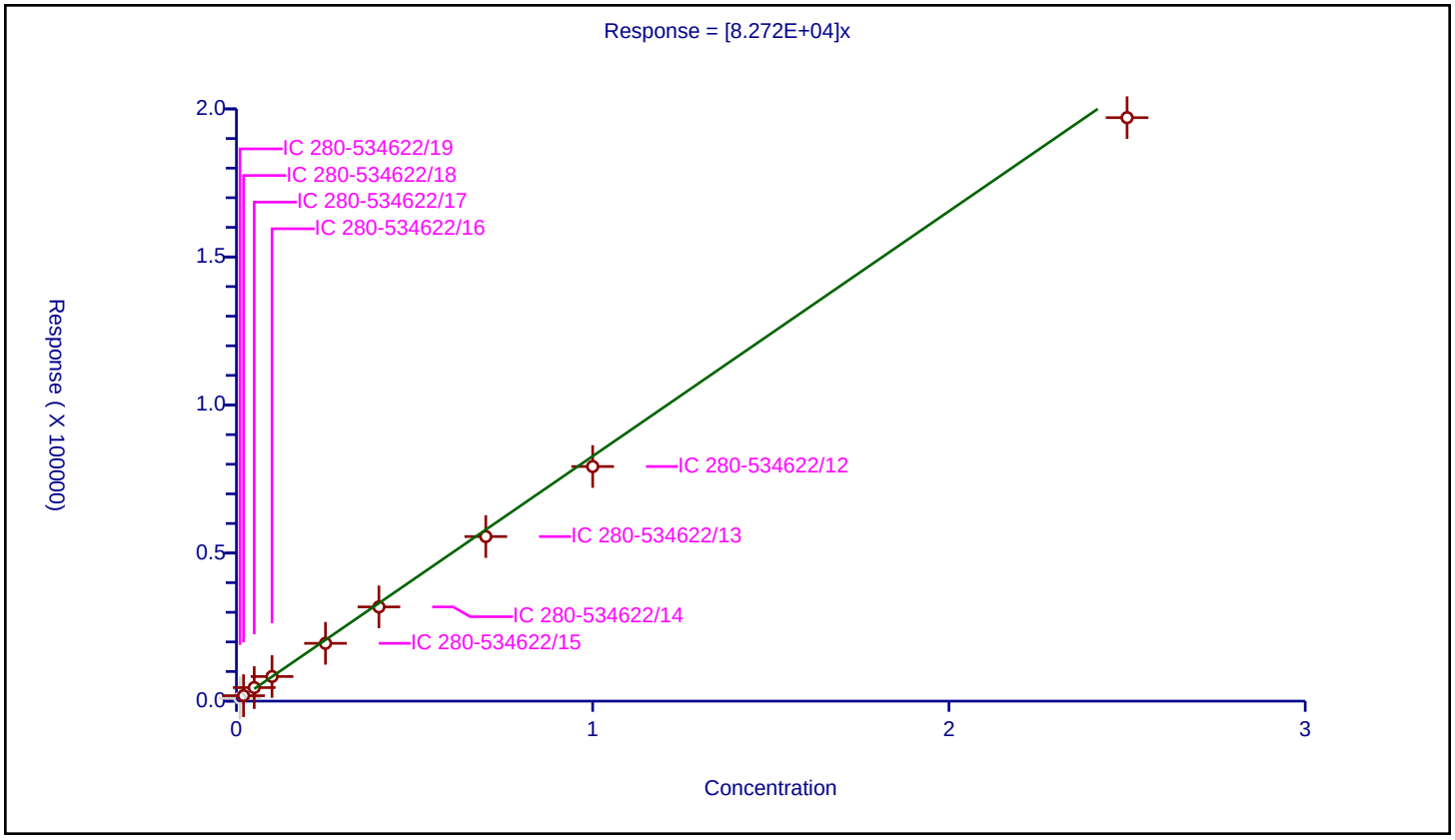
Curve Coefficients

Intercept:	0
Slope:	8.272E+04

Error Coefficients

Standard Error:	4070
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1003.0			100300.0	N
2	IC 280-534622/18	0.02	1840.0			92000.0	Y
3	IC 280-534622/17	0.05	4575.0			91500.0	Y
4	IC 280-534622/16	0.1	8317.0			83170.0	Y
5	IC 280-534622/15	0.25	19525.0			78100.0	Y
6	IC 280-534622/14	0.4	31820.0			79550.0	Y
7	IC 280-534622/13	0.7	55582.0			79402.857143	Y
8	IC 280-534622/12	1.0	79230.0			79230.0	Y
9	IC 280-534622/11	2.5	197040.0			78816.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

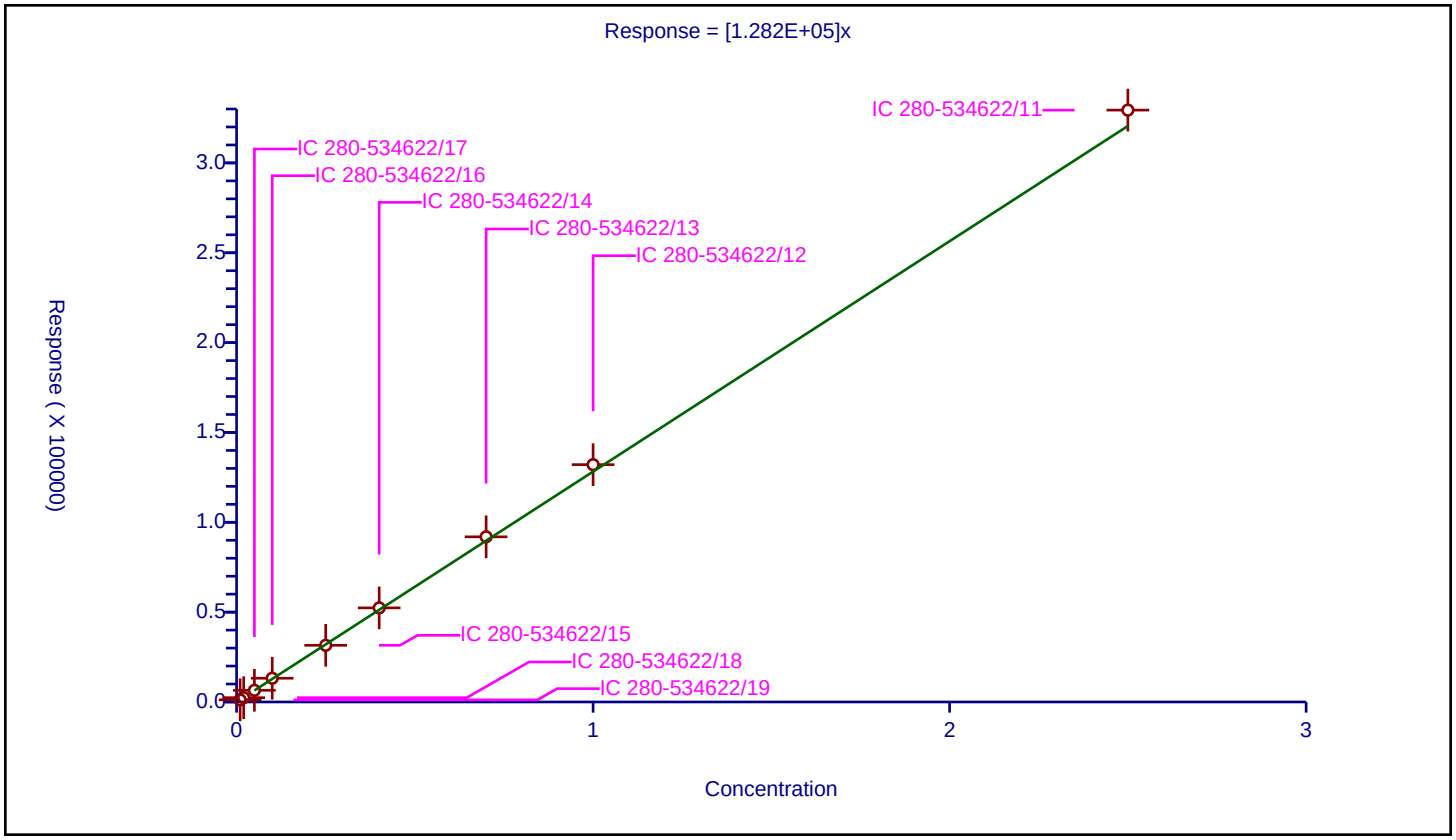
Curve Coefficients

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

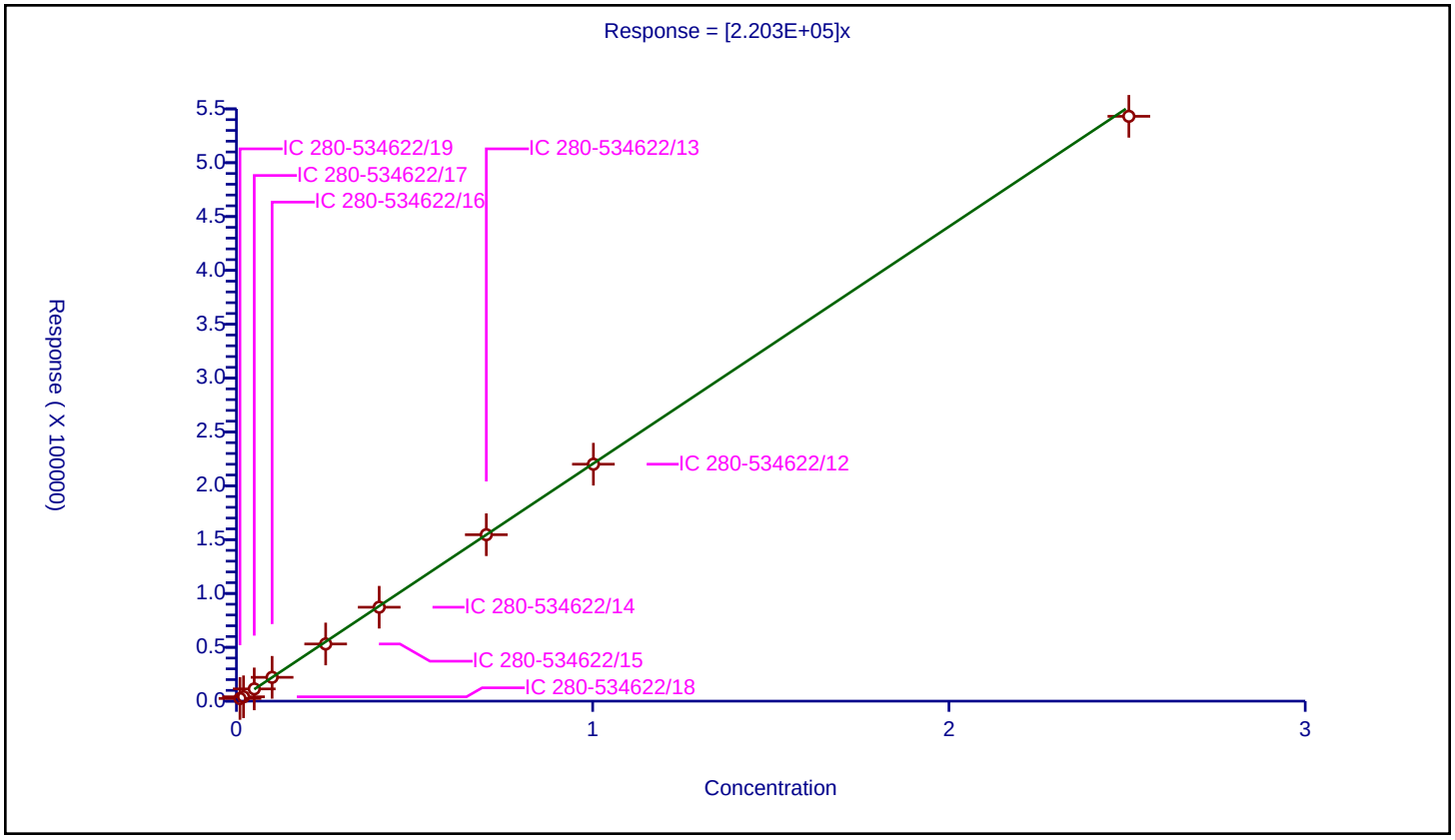
Curve Coefficients

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

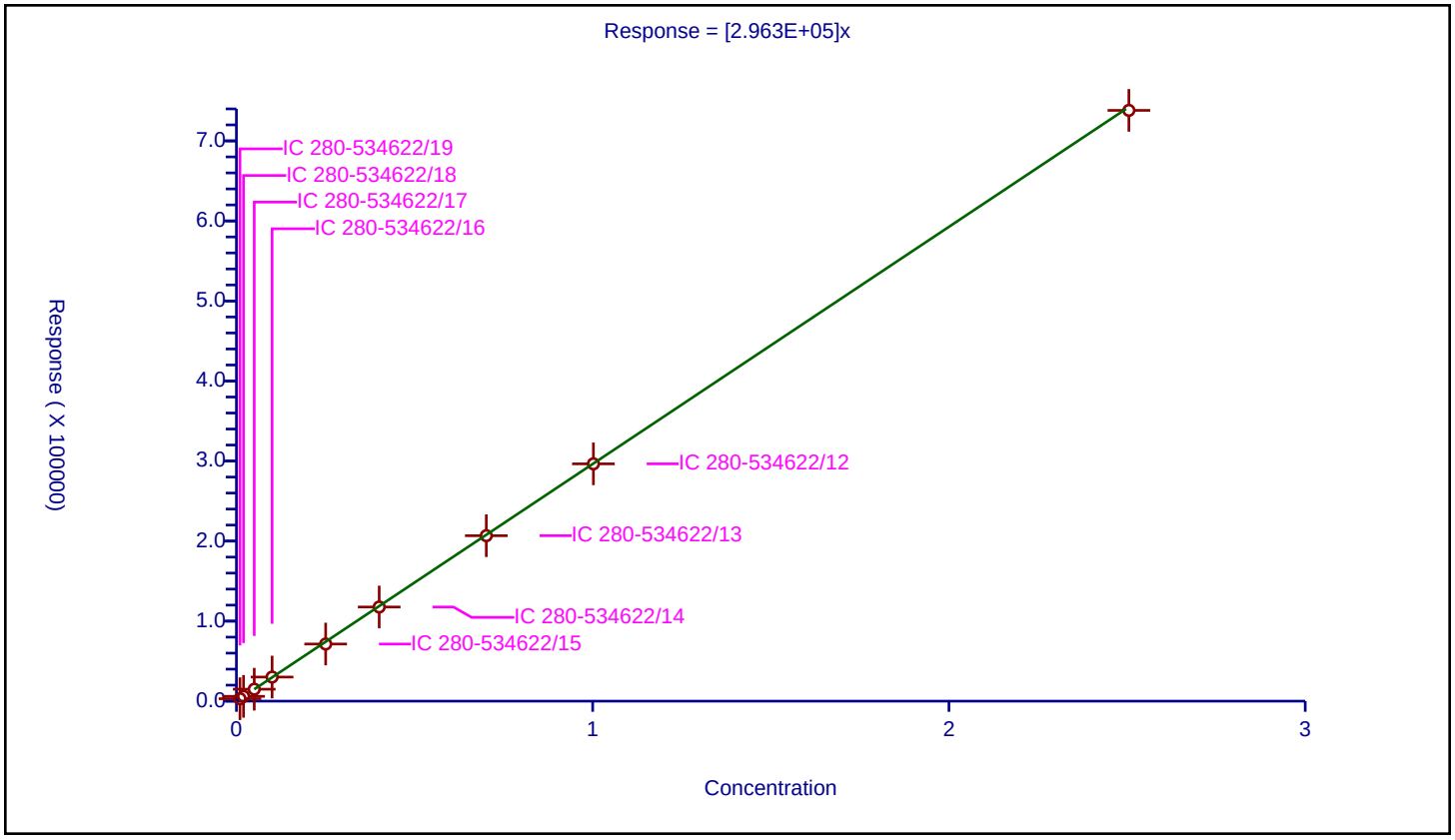
Curve Coefficients

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

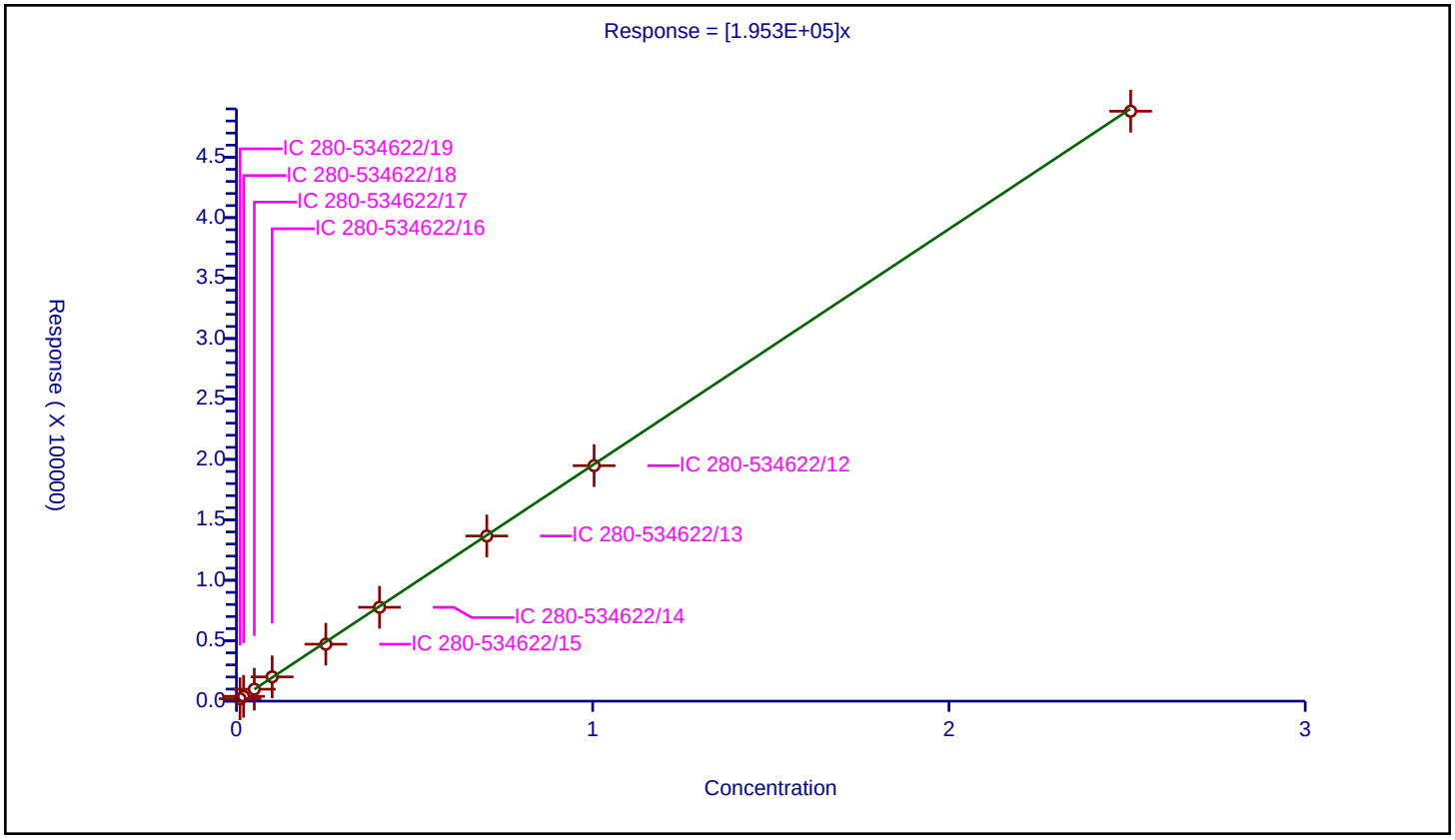
Curve Coefficients

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

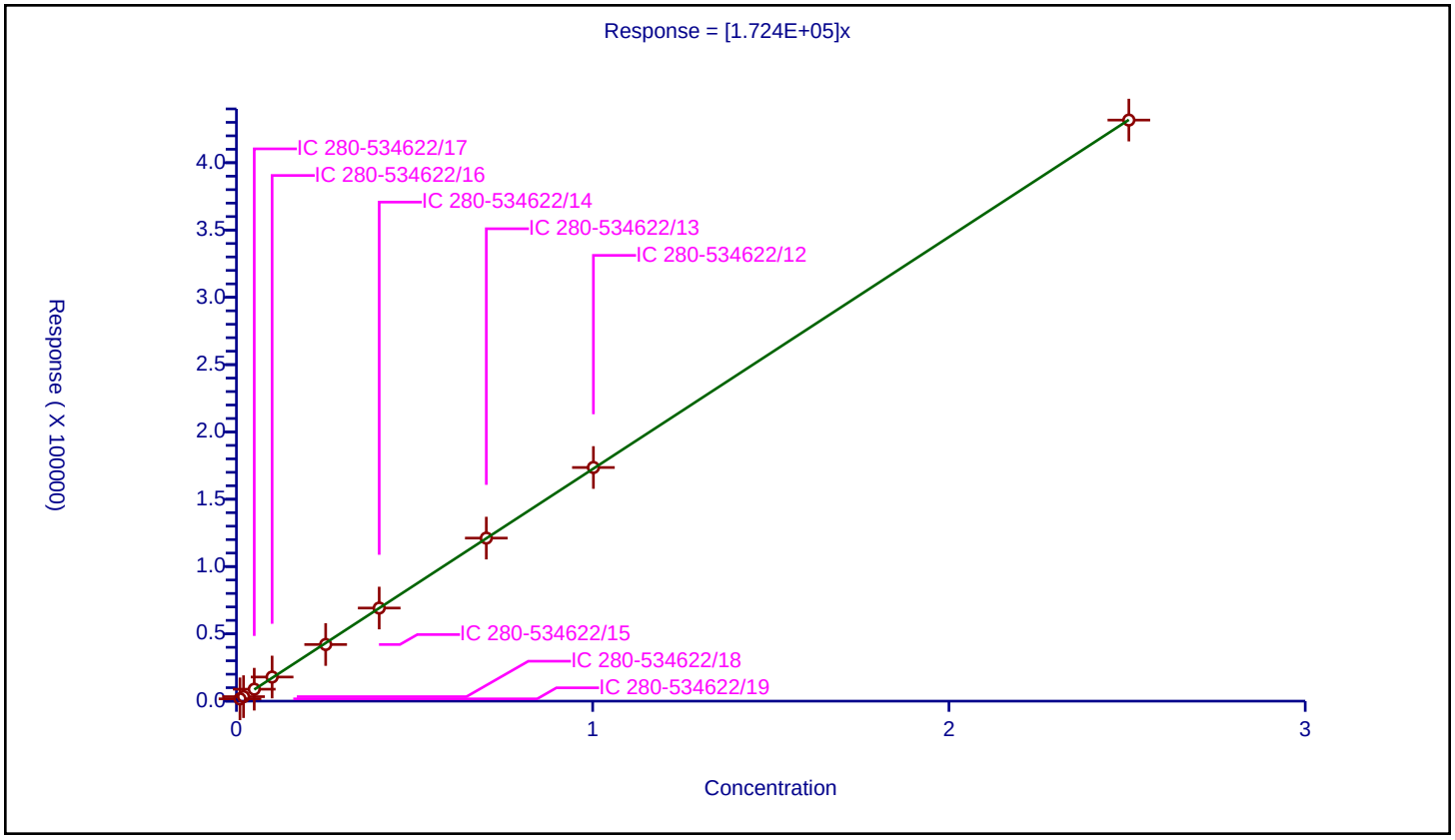
Curve Coefficients

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

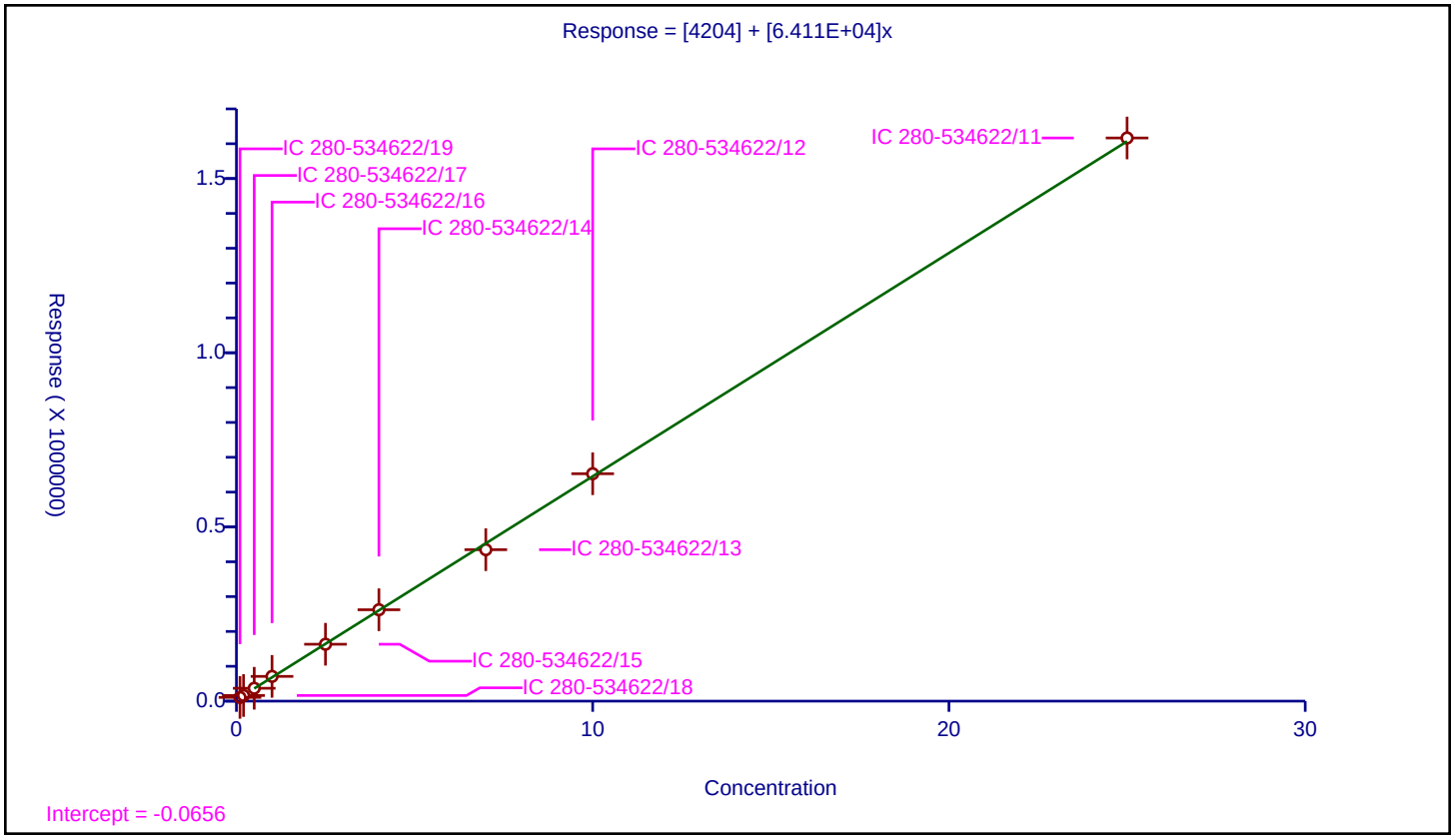
Curve Coefficients

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

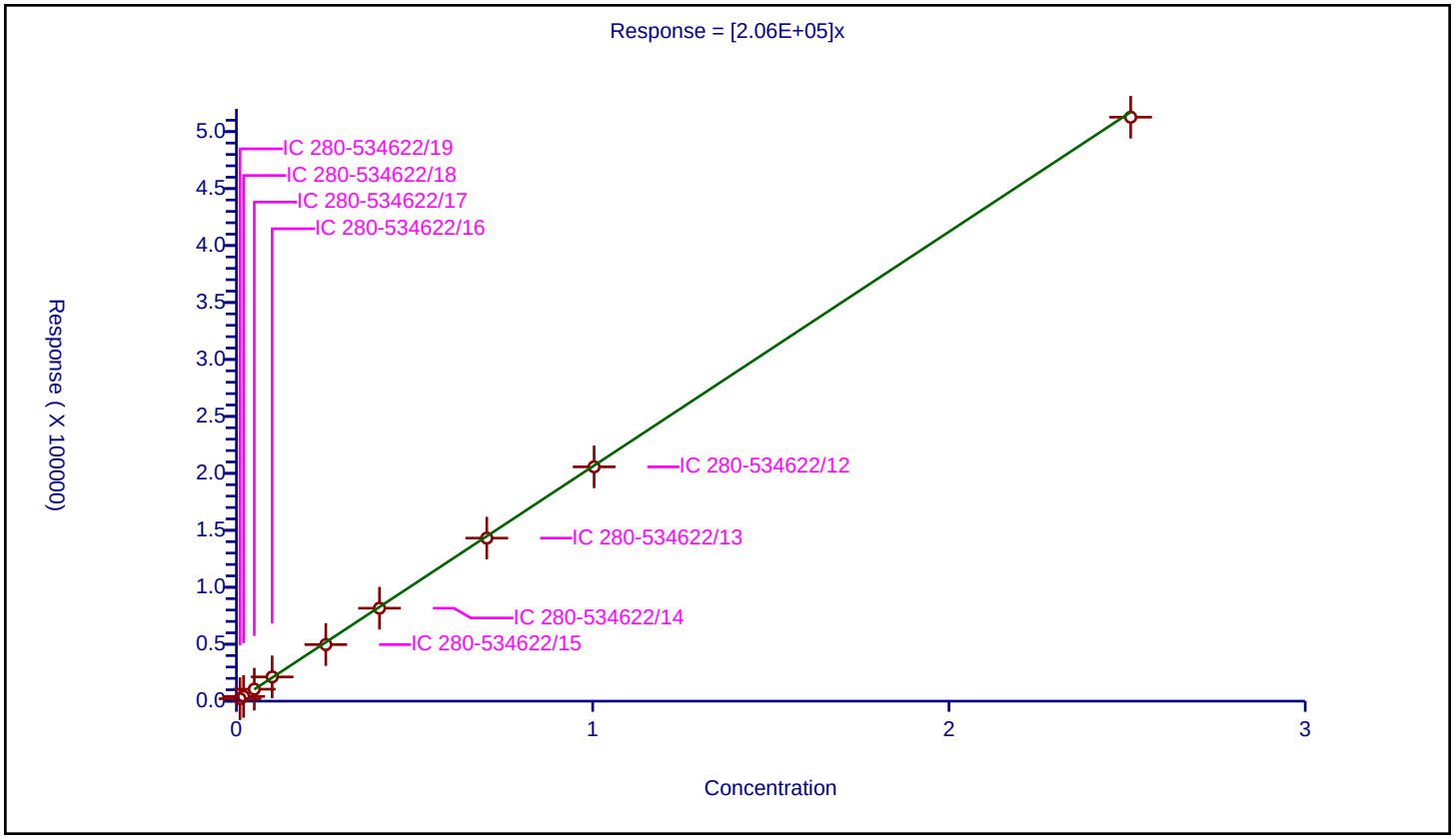
Curve Coefficients

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

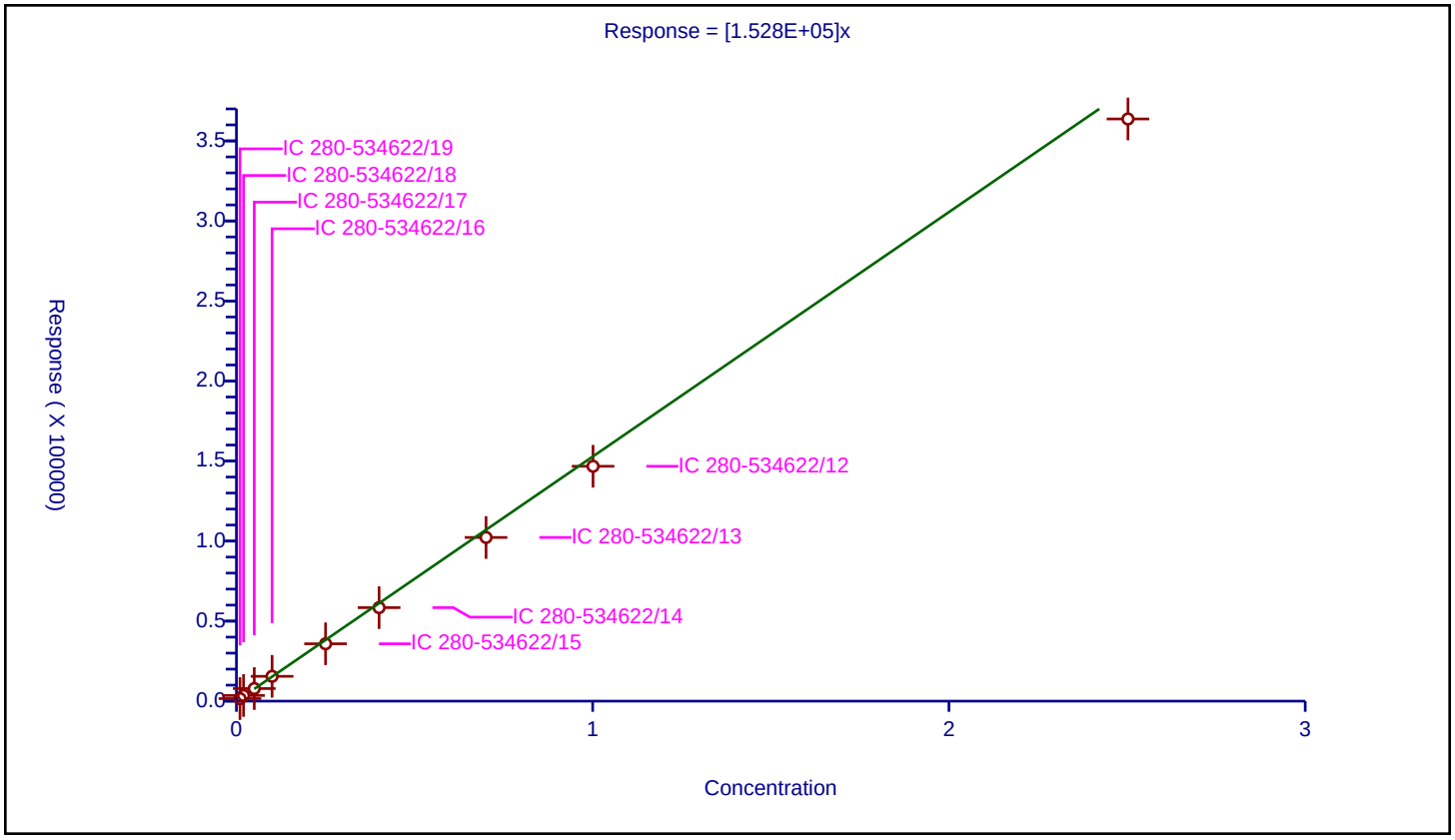
Curve Coefficients

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

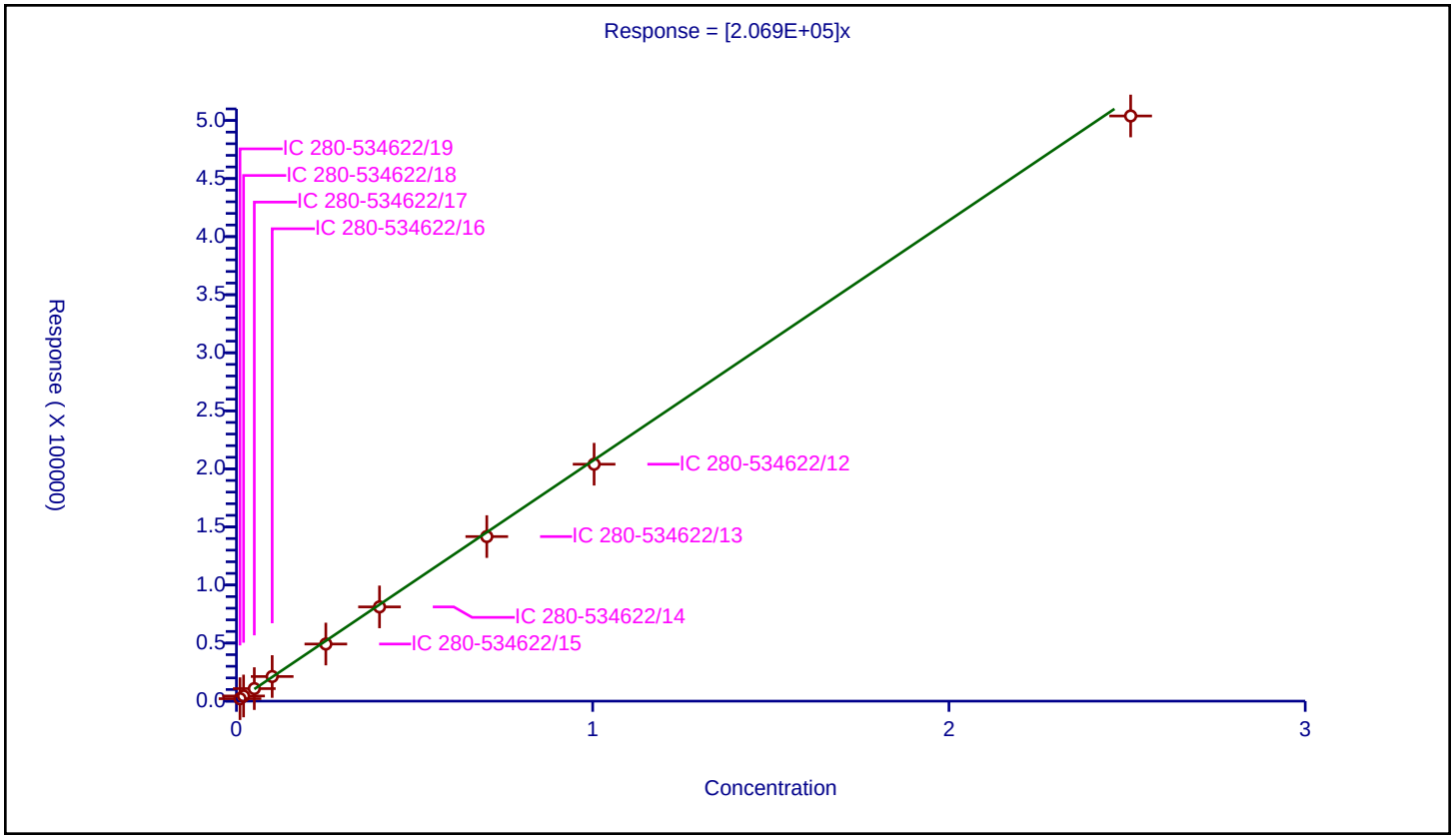
Curve Coefficients

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

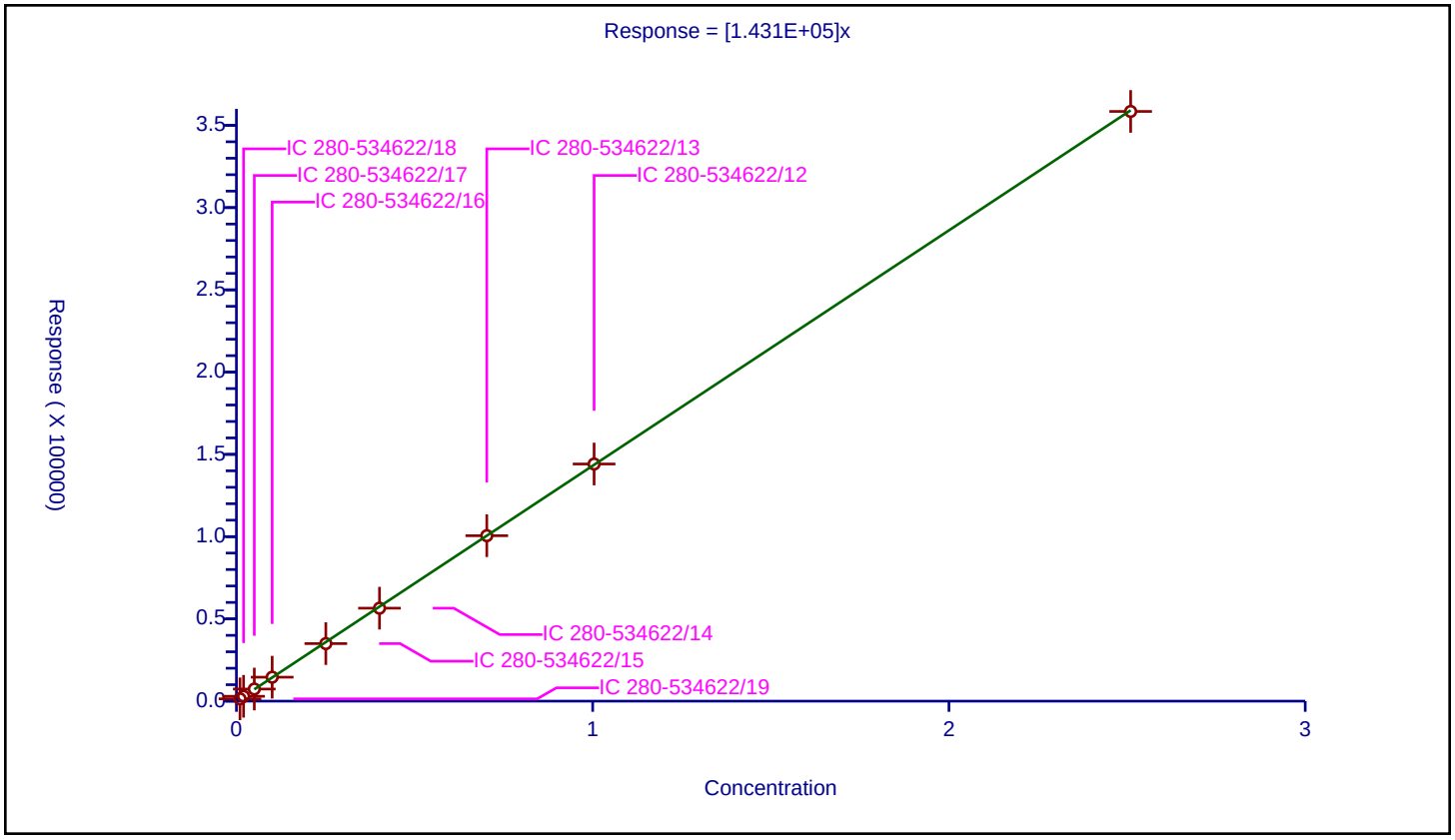
Curve Coefficients

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



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

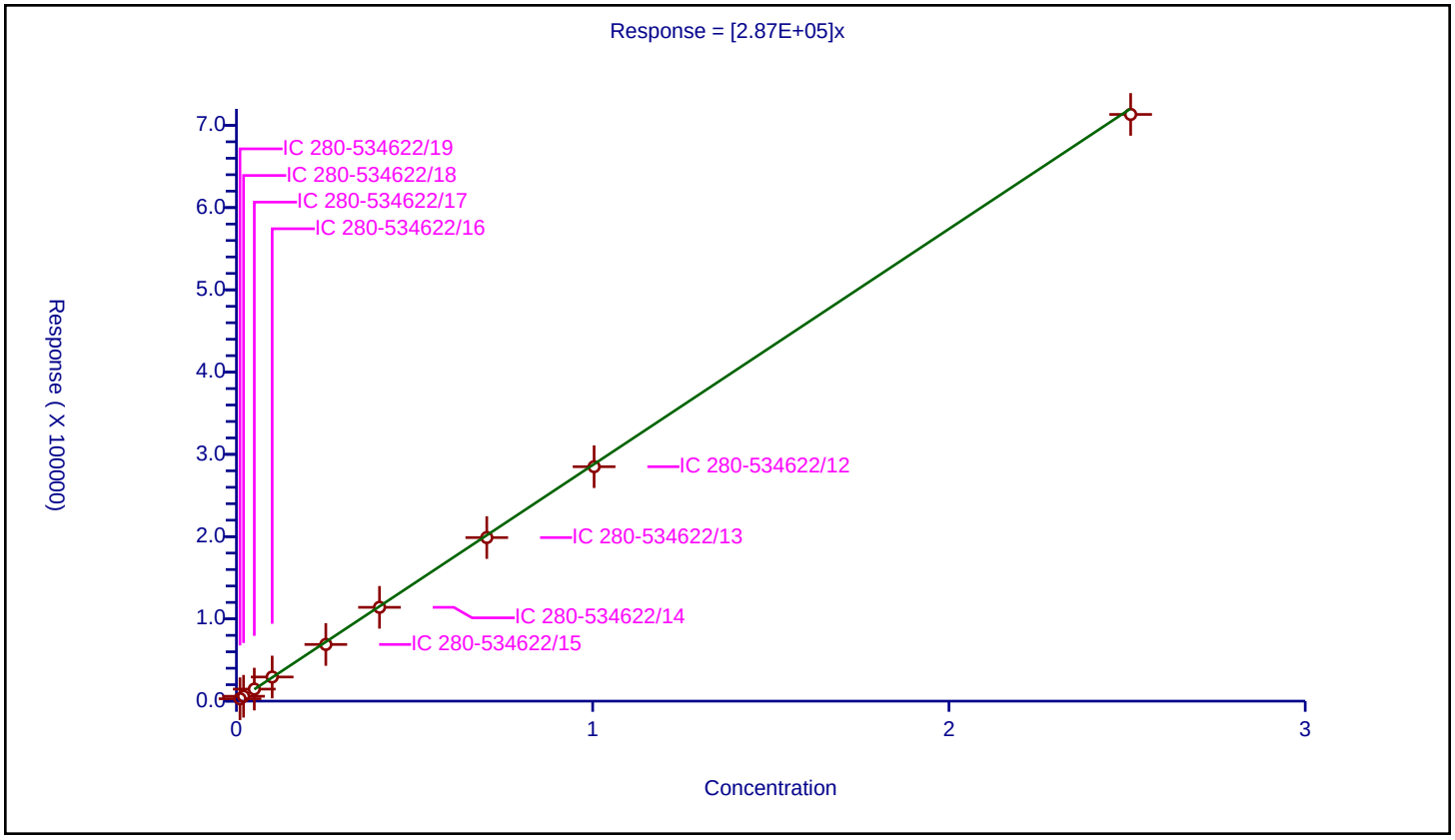
Curve Coefficients

Intercept:	0
Slope:	2.87E+05

Error Coefficients

Standard Error:	3180
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2944.0			293227.091633	Y
2	IC 280-534622/18	0.02008	5945.0			296065.737052	Y
3	IC 280-534622/17	0.0502	14647.0			291772.908367	Y
4	IC 280-534622/16	0.1004	29362.0			292450.199203	Y
5	IC 280-534622/15	0.251	68930.0			274621.513944	Y
6	IC 280-534622/14	0.4016	114050.0			283989.043825	Y
7	IC 280-534622/13	0.7028	198852.0			282942.515652	Y
8	IC 280-534622/12	1.004	285012.0			283876.494024	Y
9	IC 280-534622/11	2.51	713254.0			284164.940239	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

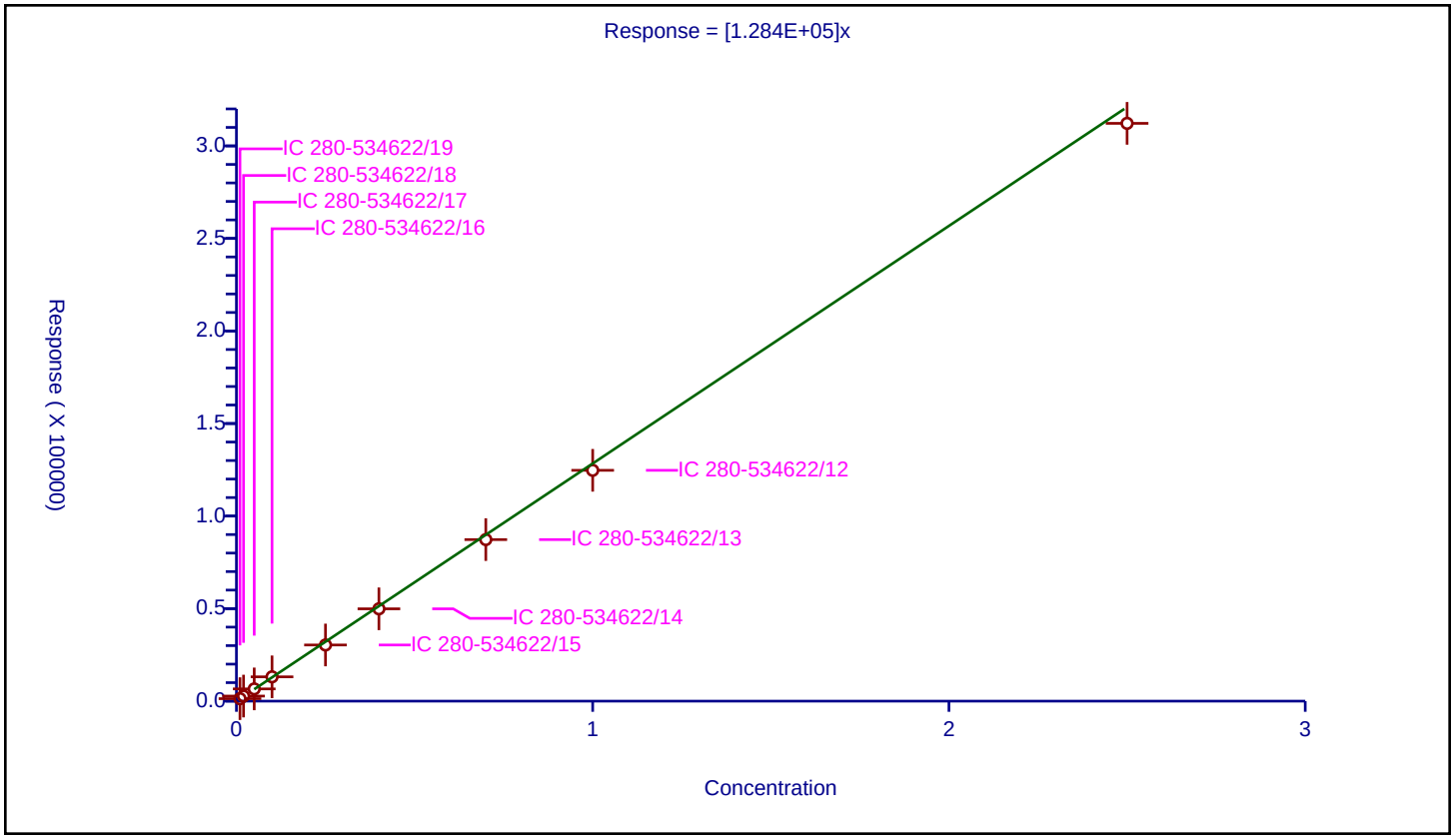
Curve Coefficients

Intercept:	0
Slope:	1.284E+05

Error Coefficients

Standard Error:	3580
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1346.0			134600.0	Y
2	IC 280-534622/18	0.02	2737.0			136850.0	Y
3	IC 280-534622/17	0.05	6616.0			132320.0	Y
4	IC 280-534622/16	0.1	13138.0			131380.0	Y
5	IC 280-534622/15	0.25	30342.0			121368.0	Y
6	IC 280-534622/14	0.4	49881.0			124702.5	Y
7	IC 280-534622/13	0.7	87294.0			124705.714286	Y
8	IC 280-534622/12	1.0	124724.0			124724.0	Y
9	IC 280-534622/11	2.5	312191.0			124876.4	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

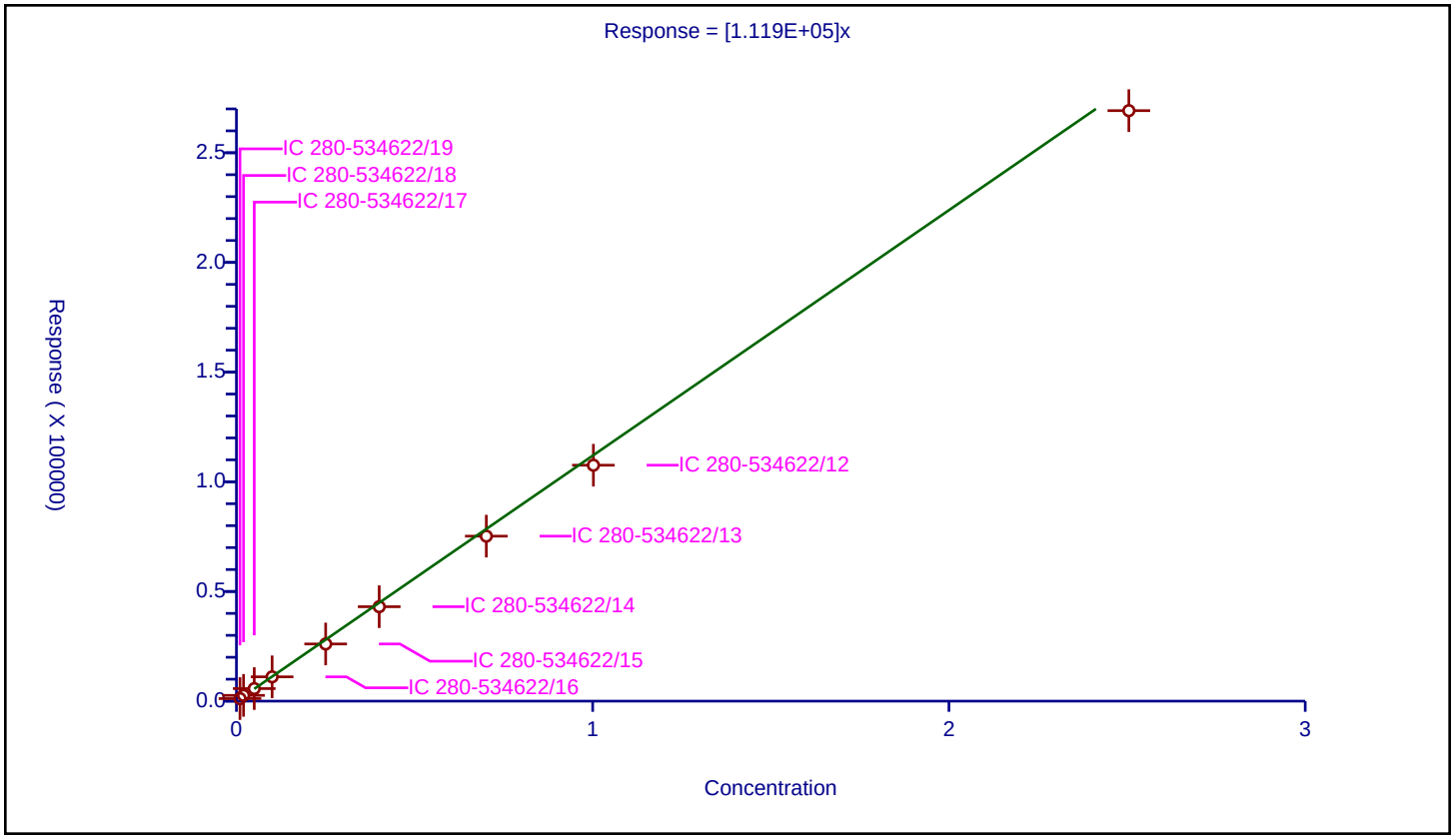
Curve Coefficients

Intercept:	0
Slope:	1.119E+05

Error Coefficients

Standard Error:	4520
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	1177.0			117465.06986	Y
2	IC 280-534622/18	0.02004	2633.0			131387.225549	Y
3	IC 280-534622/17	0.0501	5724.0			114251.497006	Y
4	IC 280-534622/16	0.1002	11083.0			110608.782435	Y
5	IC 280-534622/15	0.2505	26060.0			104031.936128	Y
6	IC 280-534622/14	0.4008	43055.0			107422.654691	Y
7	IC 280-534622/13	0.7014	75212.0			107231.251782	Y
8	IC 280-534622/12	1.002	107567.0			107352.295409	Y
9	IC 280-534622/11	2.505	269197.0			107463.872255	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

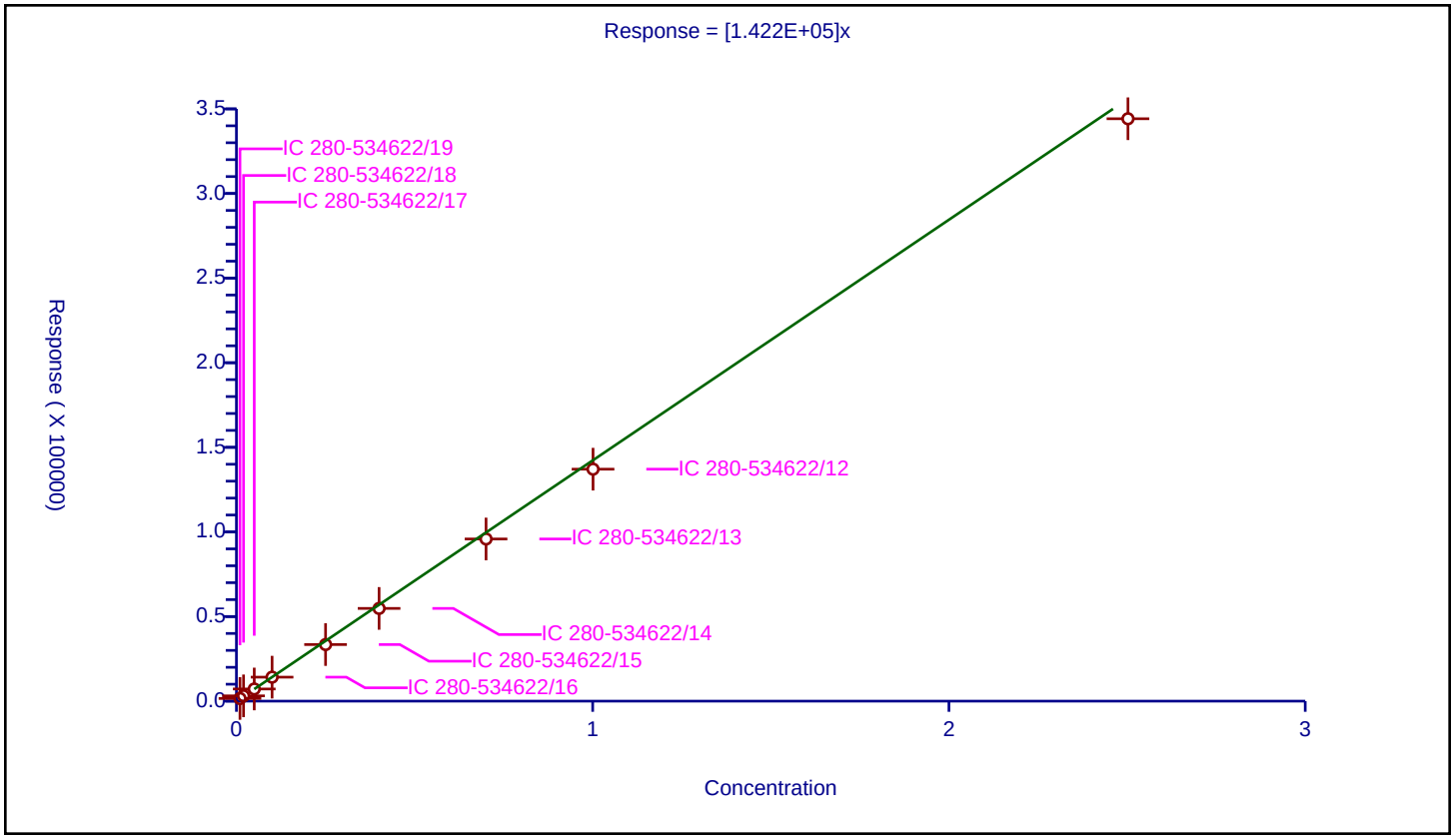
Curve Coefficients

Intercept:	0
Slope:	1.422E+05

Error Coefficients

Standard Error:	4890
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1575.0			157342.657343	Y
2	IC 280-534622/18	0.02002	3121.0			155894.105894	Y
3	IC 280-534622/17	0.05005	7187.0			143596.403596	Y
4	IC 280-534622/16	0.1001	14179.0			141648.351648	Y
5	IC 280-534622/15	0.25025	33440.0			133626.373626	Y
6	IC 280-534622/14	0.4004	54796.0			136853.146853	Y
7	IC 280-534622/13	0.7007	95835.0			136770.372485	Y
8	IC 280-534622/12	1.001	137092.0			136955.044955	Y
9	IC 280-534622/11	2.5025	344169.0			137530.06993	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

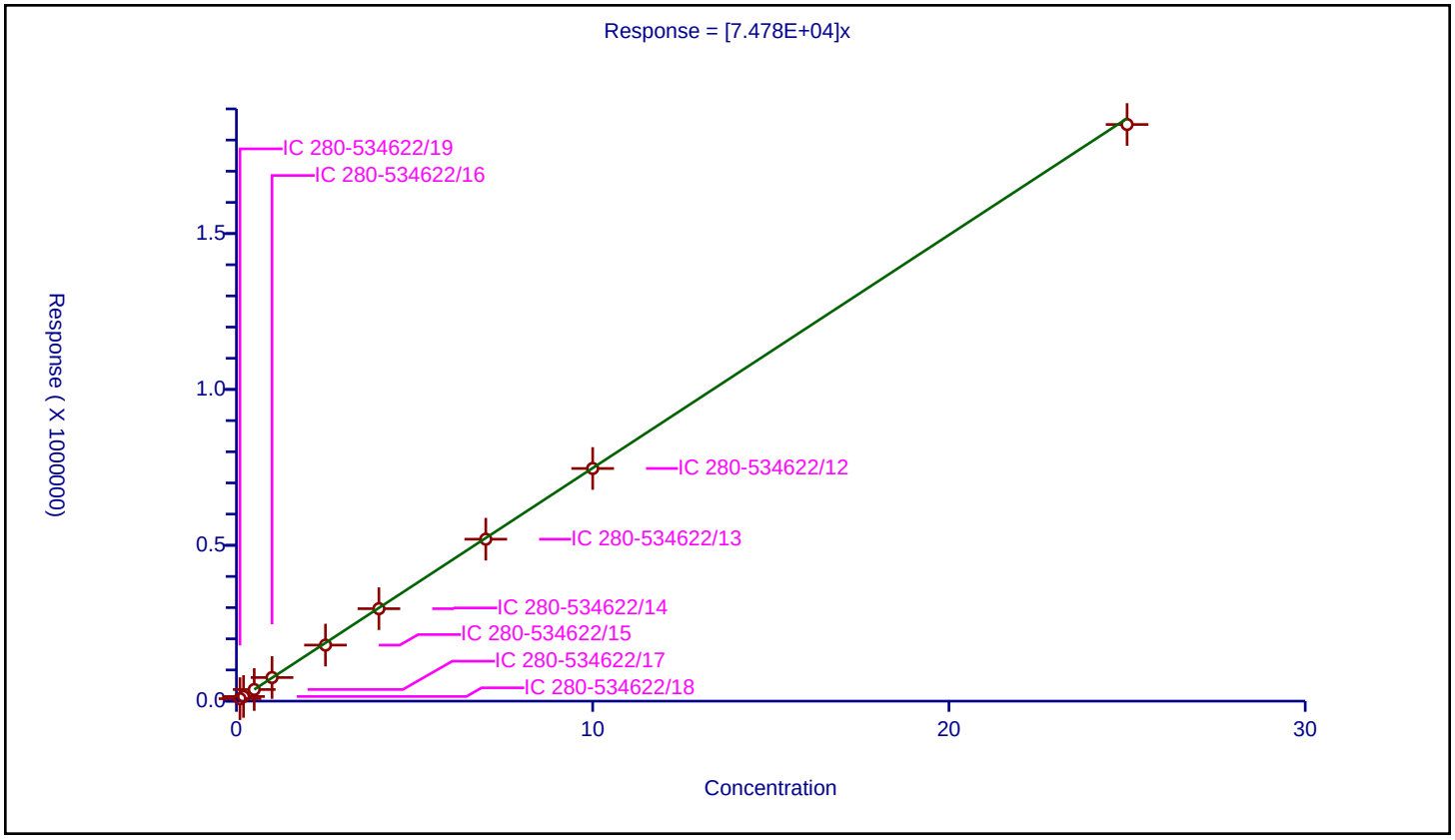
Curve Coefficients

Intercept:	0
Slope:	7.478E+04

Error Coefficients

Standard Error:	7550
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.1	7901.0			79010.0	Y
2	IC 280-534622/18	0.2	14944.0			74720.0	Y
3	IC 280-534622/17	0.5	37293.0			74586.0	Y
4	IC 280-534622/16	1.0	75747.0			75747.0	Y
5	IC 280-534622/15	2.5	179819.0			71927.6	Y
6	IC 280-534622/14	4.0	296622.0			74155.5	Y
7	IC 280-534622/13	7.0	519589.0			74227.0	Y
8	IC 280-534622/12	10.0	746366.0			74636.6	Y
9	IC 280-534622/11	25.0	1849935.0			73997.4	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		106452	187184	273958	669889		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	6619	12229	28396	55838	134163	0.0100	0.0201	0.0502	0.100	0.251
		215819	377631	552269	1360486		0.402	0.703	1.00	2.51	
Tetryl	Lin2	5245	7583	17573	34148	80996	0.0100	0.0200	0.0501	0.100	0.251
		129140	227001	329366	813489		0.401	0.701	1.00	2.51	
2,4,6-Trinitrotoluene	Lin2	5469	8548	19400	38740	93822	0.0100	0.0201	0.0502	0.100	0.251
		151709	266122	389102	959496		0.402	0.703	1.00	2.51	
PETN	Ave	15659	27436	69170	136676	330309	0.100	0.200	0.500	1.00	2.50
		531566	944599	1371986	3343027		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	+++++	6280	13836	26678	63081	+++++	0.0200	0.0500	0.100	0.250
		101248	176180	257324	633300		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:54:50 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.061	4.126	-0.065	1092989	2.50	2.67	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	538473	2.50	2.25	
6 HMX	1	6.635	6.713	-0.078	406565	2.50	2.55	
5 2,4,6-Trinitrophenol	1	7.801	7.933	-0.132	353462	2.50	2.22	
8 RDX	1	8.801	8.906	-0.105	488855	2.50	2.39	
9 Nitrobenzene	1	11.854	11.973	-0.119	939811	2.51	2.51	
$ 10 1,2-Dinitrobenzene	1	12.988	13.093	-0.105	633300	2.50	2.38	
11 3,5-Dinitroaniline	1	14.868	14.979	-0.111	1143420	2.50	2.54	
12 1,3-Dinitrobenzene	1	15.421	15.519	-0.098	1422490	2.51	2.52	
13 Nitroglycerin	2	15.861	15.939	-0.078	3131400	25.0	24.3	
14 o-Nitrotoluene	1	16.668	16.759	-0.091	604653	2.50	2.43	
15 p-Nitrotoluene	1	16.928	17.046	-0.118	510755	2.51	2.35	
16 4-Amino-2,6-dinitrotoluene	1	17.421	17.526	-0.105	690165	2.50	2.33	
17 m-Nitrotoluene	1	17.928	18.026	-0.098	655662	2.50	2.36	
18 2-Amino-4,6-dinitrotoluene	1	18.321	18.426	-0.105	983275	2.51	2.52	
19 1,3,5-Trinitrobenzene	1	18.861	18.939	-0.078	1035616	2.51	2.52	
20 2,6-Dinitrotoluene	1	20.114	20.199	-0.085	669889	2.51	2.53	
21 2,4-Dinitrotoluene	1	20.581	20.666	-0.085	1360486	2.51	2.40	
22 Tetryl	1	24.248	24.313	-0.065	813489	2.51	2.55	
23 2,4,6-Trinitrotoluene	1	25.221	25.280	-0.059	959496	2.51	2.58	
24 PETN	2	26.155	26.186	-0.031	3343027	25.0	24.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 250.00	Units: uL
8330_ADDs_00027	Amount Added: 125.00	Units: uL

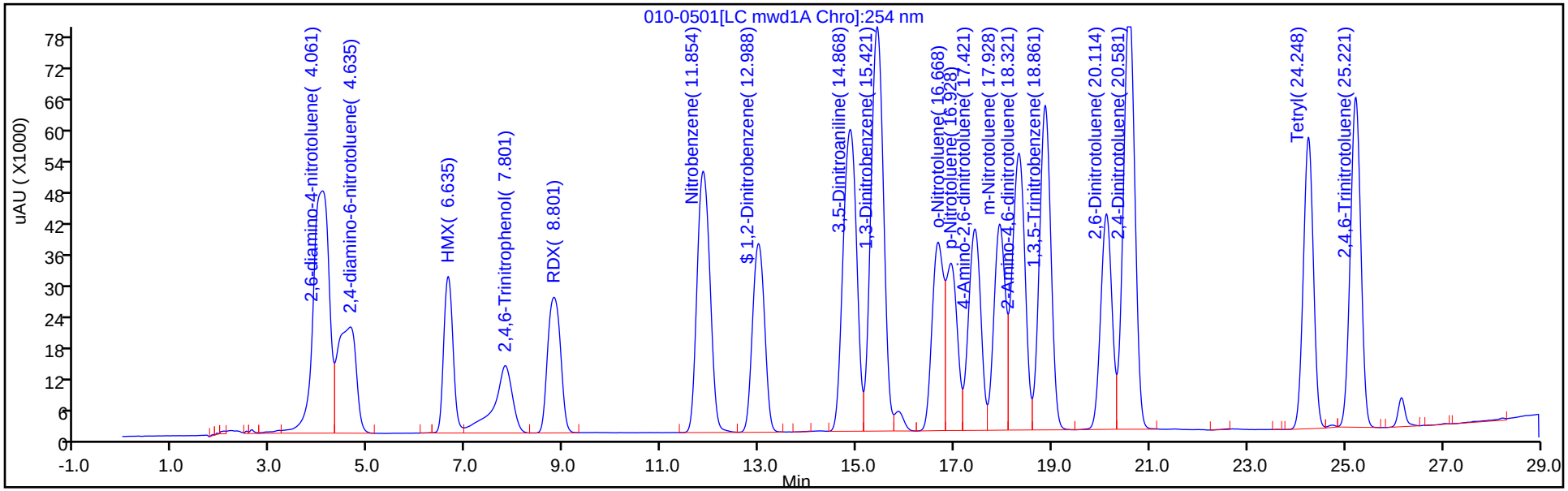
Report Date: 04-May-2021 13:43:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

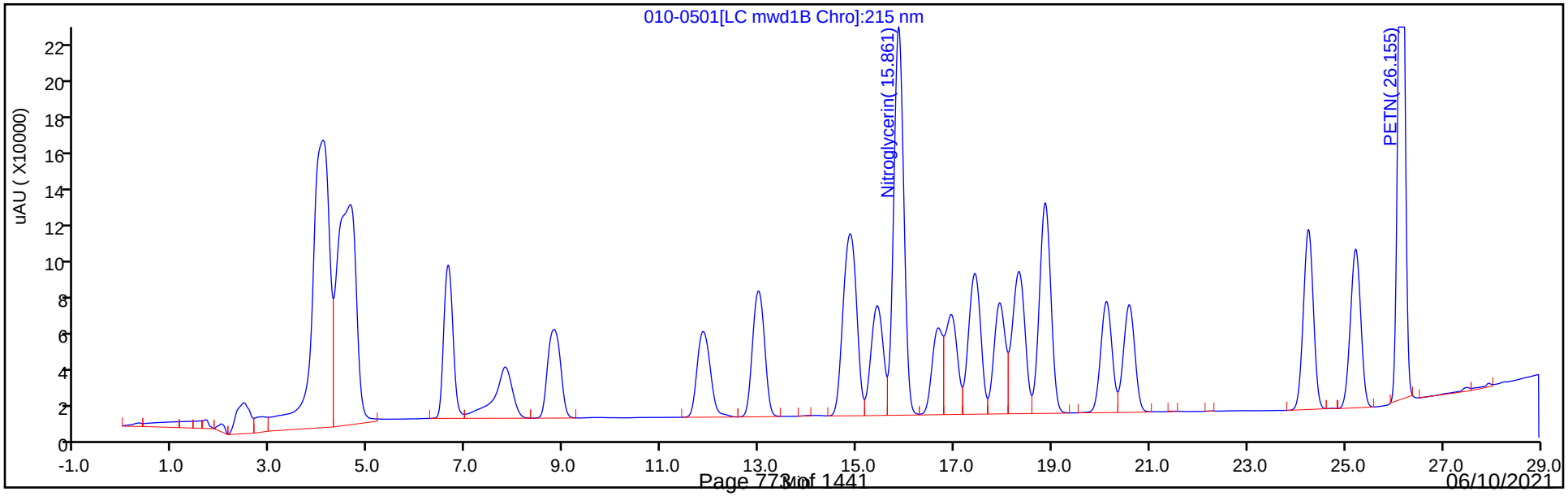
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D

Injection Date:	01-May-2021 18:54:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

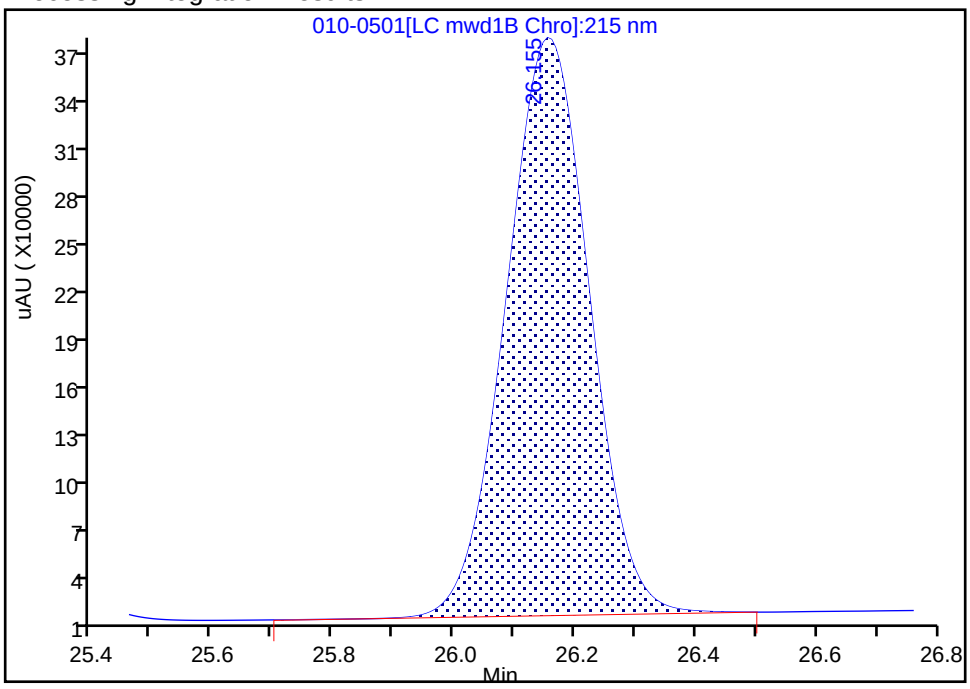
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D				
Injection Date:	01-May-2021 18:54:50	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

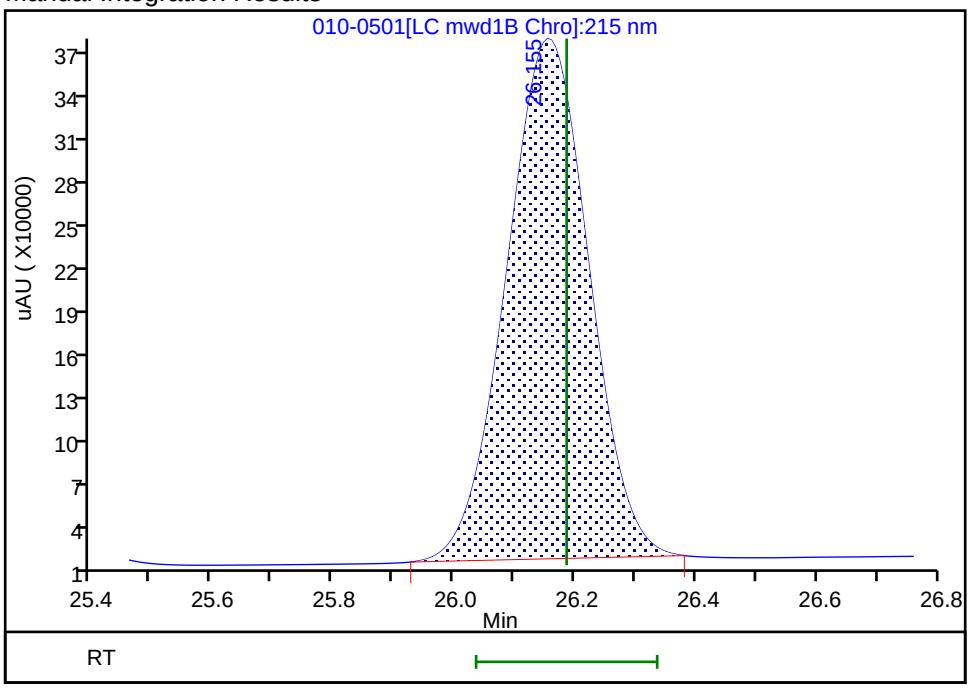
Processing Integration Results

RT: 26.15
Area: 3390696
Amount: 25.717777
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 3343027
Amount: 24.270492
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 19:29:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.085	4.126	-0.041	410324	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.598	4.653	-0.055	250474	1.00	1.04	
6 HMX	1	6.691	6.713	-0.022	161798	1.00	1.01	
5 2,4,6-Trinitrophenol	1	7.845	7.933	-0.088	155884	1.00	0.9771	
8 RDX	1	8.878	8.906	-0.028	199019	1.00	0.9743	
9 Nitrobenzene	1	11.924	11.973	-0.049	377310	1.00	1.01	
$ 10 1,2-Dinitrobenzene	1	13.044	13.093	-0.049	257324	1.00	0.9686	
11 3,5-Dinitroaniline	1	14.918	14.979	-0.061	457283	1.00	1.01	
12 1,3-Dinitrobenzene	1	15.471	15.519	-0.048	577120	1.00	1.02	
13 Nitroglycerin	2	15.891	15.939	-0.048	1273886	10.0	9.91	
14 o-Nitrotoluene	1	16.704	16.759	-0.055	240595	1.00	0.9664	
15 p-Nitrotoluene	1	16.991	17.046	-0.055	208929	1.00	0.9620	
16 4-Amino-2,6-dinitrotoluene	1	17.458	17.526	-0.068	280366	1.00	0.9449	
17 m-Nitrotoluene	1	17.964	18.026	-0.062	265803	1.00	0.9548	
18 2-Amino-4,6-dinitrotoluene	1	18.364	18.426	-0.062	397243	1.00	1.02	
19 1,3,5-Trinitrobenzene	1	18.884	18.939	-0.055	423869	1.00	1.03	
20 2,6-Dinitrotoluene	1	20.138	20.199	-0.061	273958	1.00	1.03	
21 2,4-Dinitrotoluene	1	20.605	20.666	-0.062	552269	1.00	0.9762	
22 Tetryl	1	24.245	24.313	-0.068	329366	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	25.218	25.280	-0.062	389102	1.00	1.04	
24 PETN	2	26.138	26.186	-0.048	1371986	10.0	9.96	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 100.00	Units: uL
8330_ADDs_00027	Amount Added: 50.00	Units: uL

Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

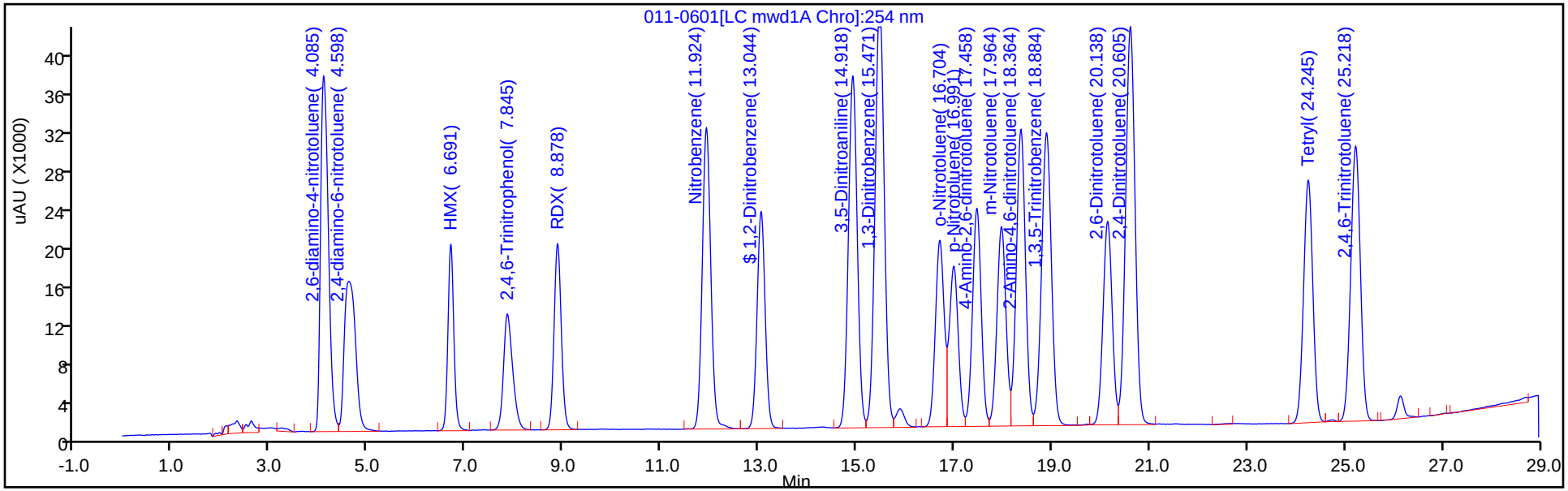
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D

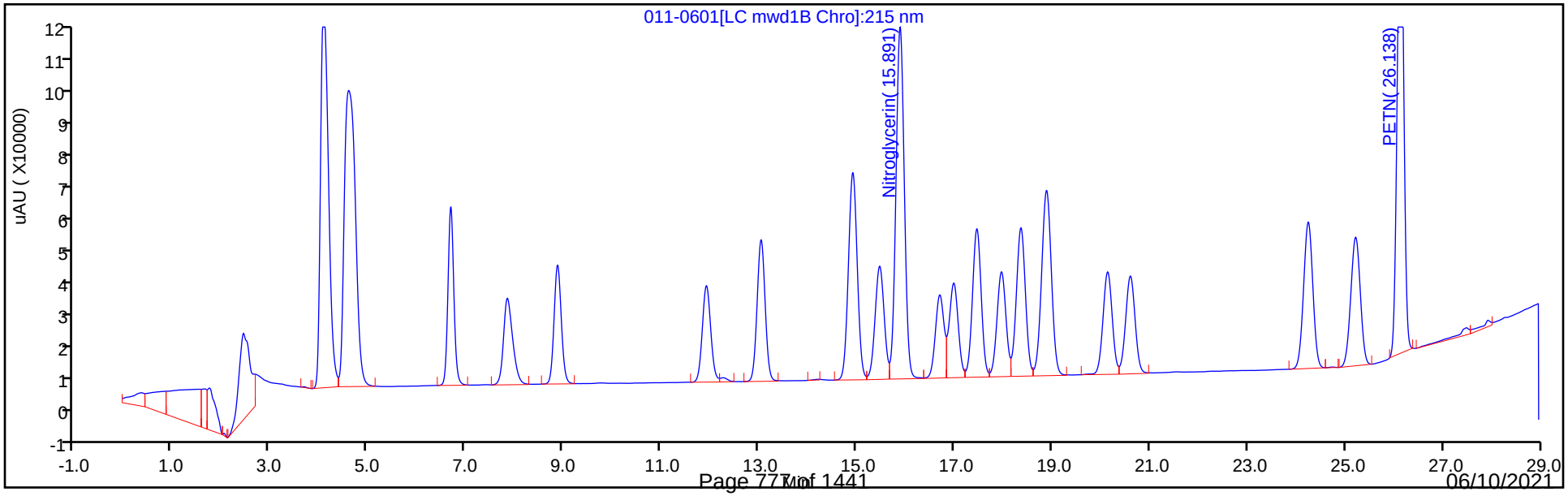
Injection Date:	01-May-2021 19:29:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

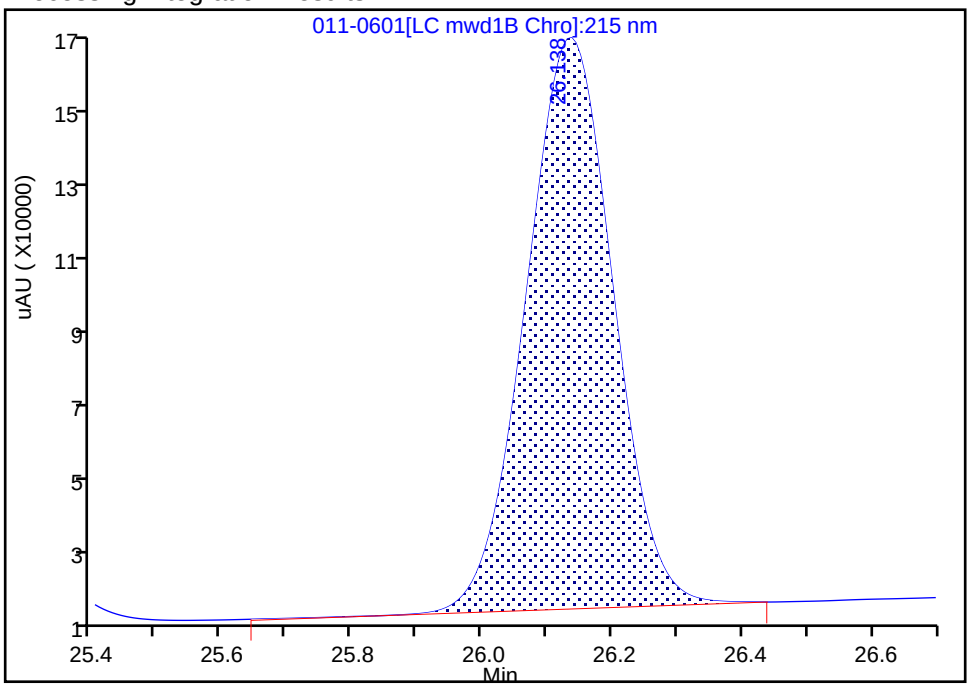
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D		
Injection Date:	01-May-2021 19:29:53	Instrument ID:	CHHPLC_X5
Lims ID:	IC INT/ADD 8		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	11 Worklist Smp#: 11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330
Column:		Detector	LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

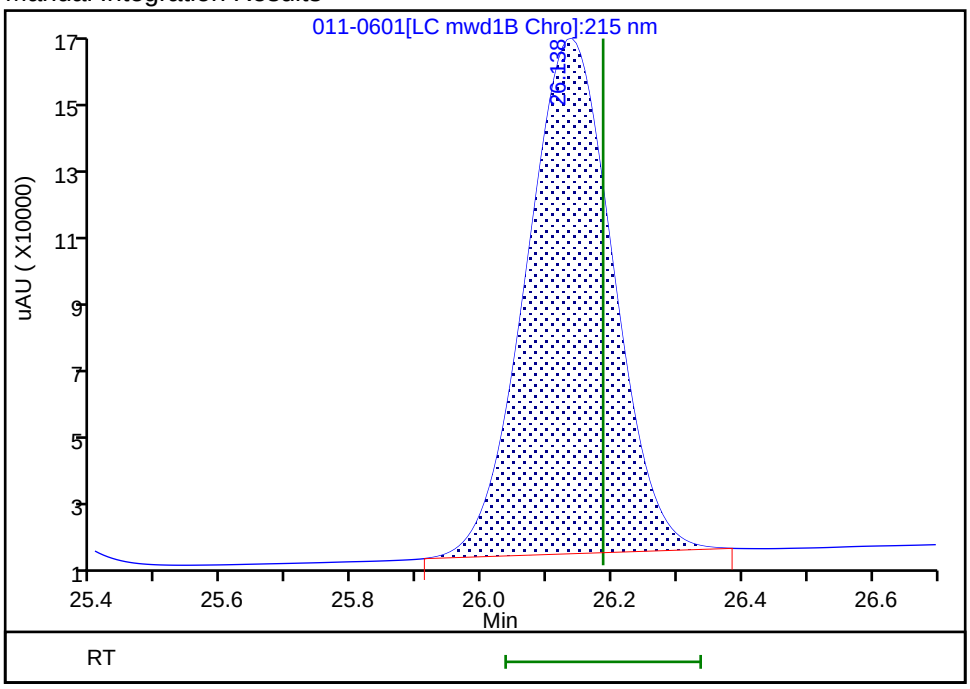
Processing Integration Results

RT: 26.14
Area: 1384511
Amount: 10.424343
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 1371986
Amount: 9.960666
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 20:04:53 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:12 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.104	4.126	-0.022	286797	0.7000	0.6941	
2 2,4-diamino-6-nitrotoluene	1	4.618	4.653	-0.035	172168	0.7000	0.7152	
6 HMX	1	6.698	6.713	-0.015	111120	0.7000	0.6937	
5 2,4,6-Trinitrophenol	1	7.878	7.933	-0.055	106987	0.7000	0.6706	
8 RDX	1	8.891	8.906	-0.015	136592	0.7000	0.6687	
9 Nitrobenzene	1	11.951	11.973	-0.022	256719	0.7028	0.6852	
$ 10 1,2-Dinitrobenzene	1	13.071	13.093	-0.022	176180	0.7000	0.6632	
11 3,5-Dinitroaniline	1	14.957	14.979	-0.022	318505	0.7000	0.7055	
12 1,3-Dinitrobenzene	1	15.504	15.519	-0.015	394975	0.7014	0.6992	
13 Nitroglycerin	2	15.924	15.939	-0.015	872941	7.00	6.79	
14 o-Nitrotoluene	1	16.744	16.759	-0.015	165863	0.7000	0.6662	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	143722	0.7014	0.6617	
16 4-Amino-2,6-dinitrotoluene	1	17.504	17.526	-0.022	192075	0.7007	0.6474	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	182587	0.7007	0.6559	
18 2-Amino-4,6-dinitrotoluene	1	18.411	18.426	-0.015	272718	0.7028	0.6963	
19 1,3,5-Trinitrobenzene	1	18.924	18.939	-0.015	290458	0.7014	0.7021	
20 2,6-Dinitrotoluene	1	20.184	20.199	-0.015	187184	0.7028	0.7036	
21 2,4-Dinitrotoluene	1	20.651	20.666	-0.015	377631	0.7028	0.6675	
22 Tetryl	1	24.304	24.313	-0.009	227001	0.7014	0.7086	
23 2,4,6-Trinitrotoluene	1	25.271	25.280	-0.009	266122	0.7028	0.7118	
24 PETN	2	26.184	26.186	-0.002	944599	7.00	6.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	70.00	Units: uL
8330_ADDs_00027	Amount Added:	35.00	Units: uL

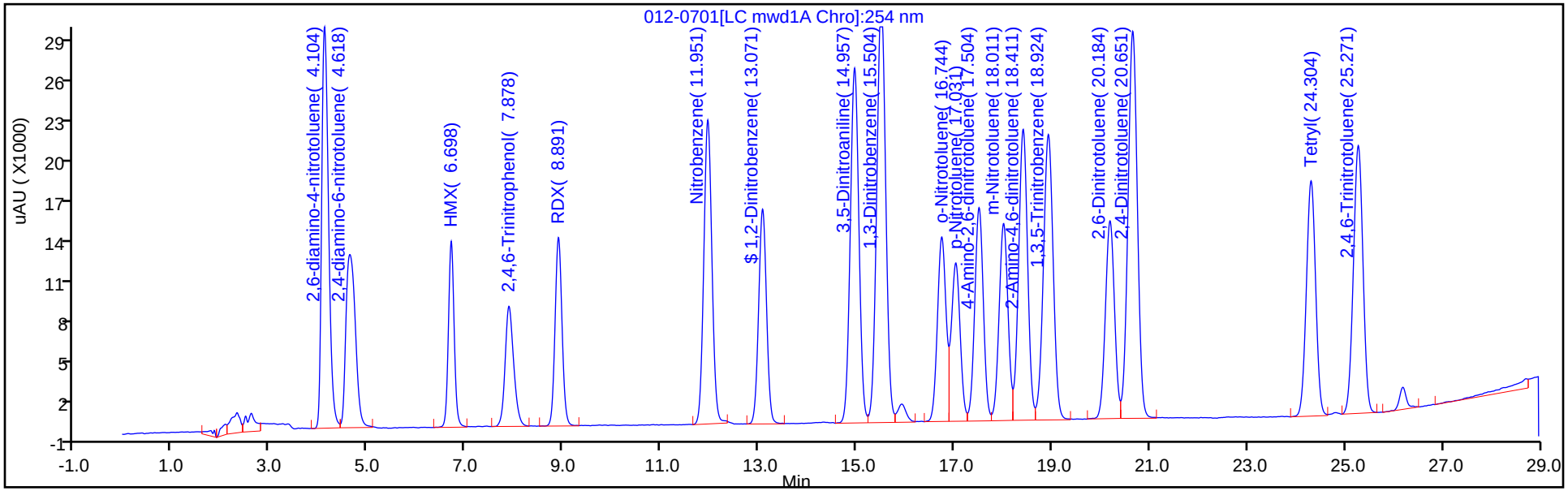
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

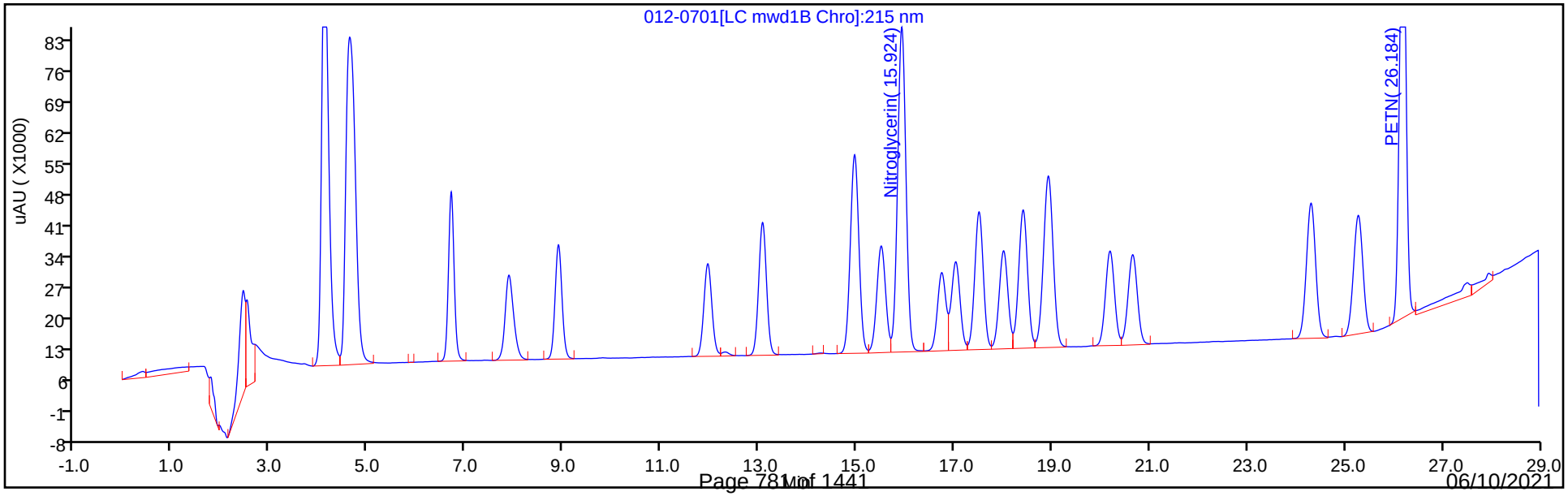
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D

Injection Date:	01-May-2021 20:04:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

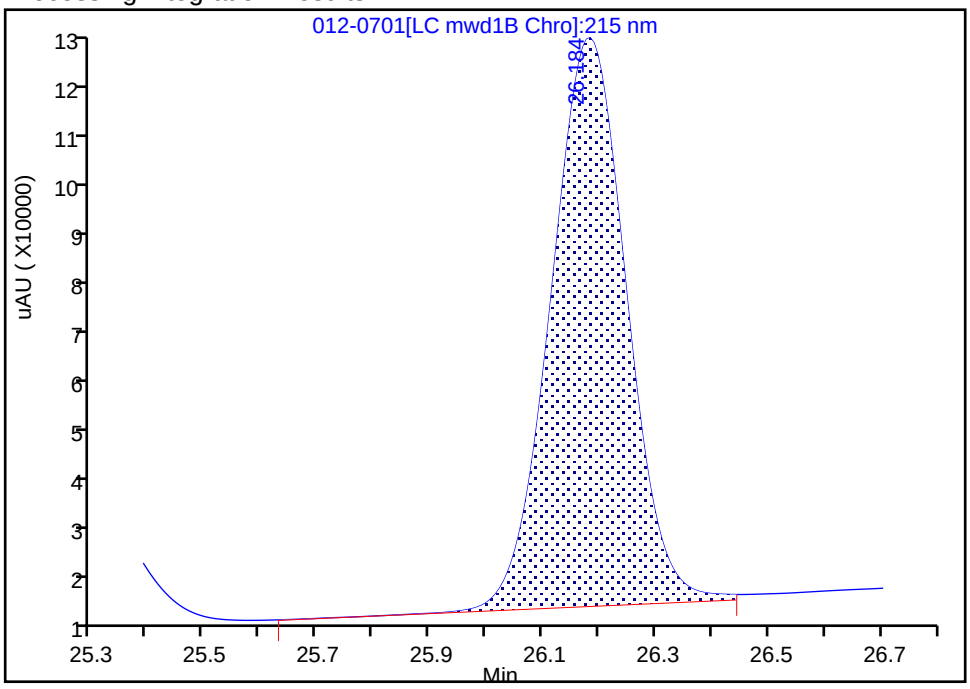
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Injection Date: 01-May-2021 20:04:53 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 7
Client ID:
Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

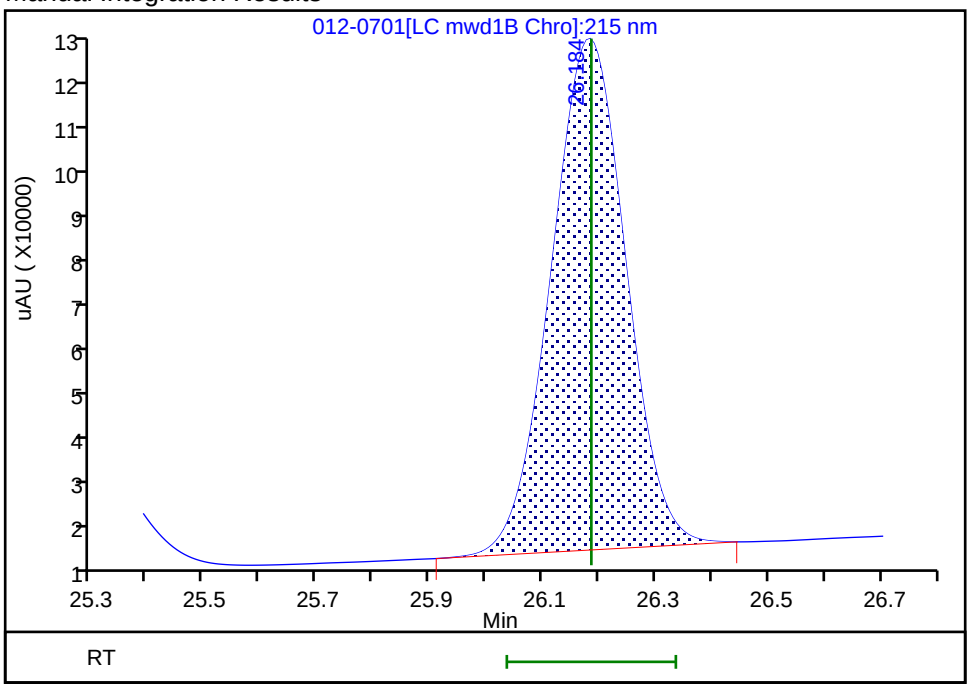
Processing Integration Results

RT: 26.18
Area: 962158
Amount: 7.202862
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 944599
Amount: 6.857822
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:24
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Lims ID: IC INT/ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 20:39:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 6
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.111	4.126	-0.015	166673	0.4000	0.3994	
2 2,4-diamino-6-nitrotoluene	1	4.631	4.653	-0.022	98867	0.4000	0.4084	
6 HMX	1	6.705	6.713	-0.008	64089	0.4000	0.3975	
5 2,4,6-Trinitrophenol	1	7.911	7.933	-0.022	62190	0.4000	0.3898	
8 RDX	1	8.898	8.906	-0.008	78185	0.4000	0.3828	
9 Nitrobenzene	1	11.951	11.973	-0.022	145926	0.4016	0.3895	
$ 10 1,2-Dinitrobenzene	1	13.065	13.093	-0.028	101248	0.4000	0.3811	
11 3,5-Dinitroaniline	1	14.951	14.979	-0.028	183549	0.4000	0.4057	
12 1,3-Dinitrobenzene	1	15.491	15.519	-0.028	226148	0.4008	0.3993	
13 Nitroglycerin	2	15.905	15.939	-0.034	498088	4.00	3.87	
14 o-Nitrotoluene	1	16.725	16.759	-0.034	94418	0.4000	0.3792	
15 p-Nitrotoluene	1	17.011	17.046	-0.035	82281	0.4008	0.3788	
16 4-Amino-2,6-dinitrotoluene	1	17.485	17.526	-0.041	109890	0.4004	0.3704	
17 m-Nitrotoluene	1	17.985	18.026	-0.041	104128	0.4004	0.3740	
18 2-Amino-4,6-dinitrotoluene	1	18.385	18.426	-0.041	155961	0.4016	0.3968	
19 1,3,5-Trinitrobenzene	1	18.905	18.939	-0.034	165828	0.4008	0.3978	
20 2,6-Dinitrotoluene	1	20.158	20.199	-0.041	106452	0.4016	0.3987	
21 2,4-Dinitrotoluene	1	20.625	20.666	-0.041	215819	0.4016	0.3815	
22 Tetryl	1	24.258	24.313	-0.055	129140	0.4008	0.4006	
23 2,4,6-Trinitrotoluene	1	25.231	25.280	-0.049	151709	0.4016	0.4040	
24 PETN	2	26.145	26.186	-0.041	531566	4.00	3.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	40.00	Units: uL
8330_ADDs_00027	Amount Added:	20.00	Units: uL

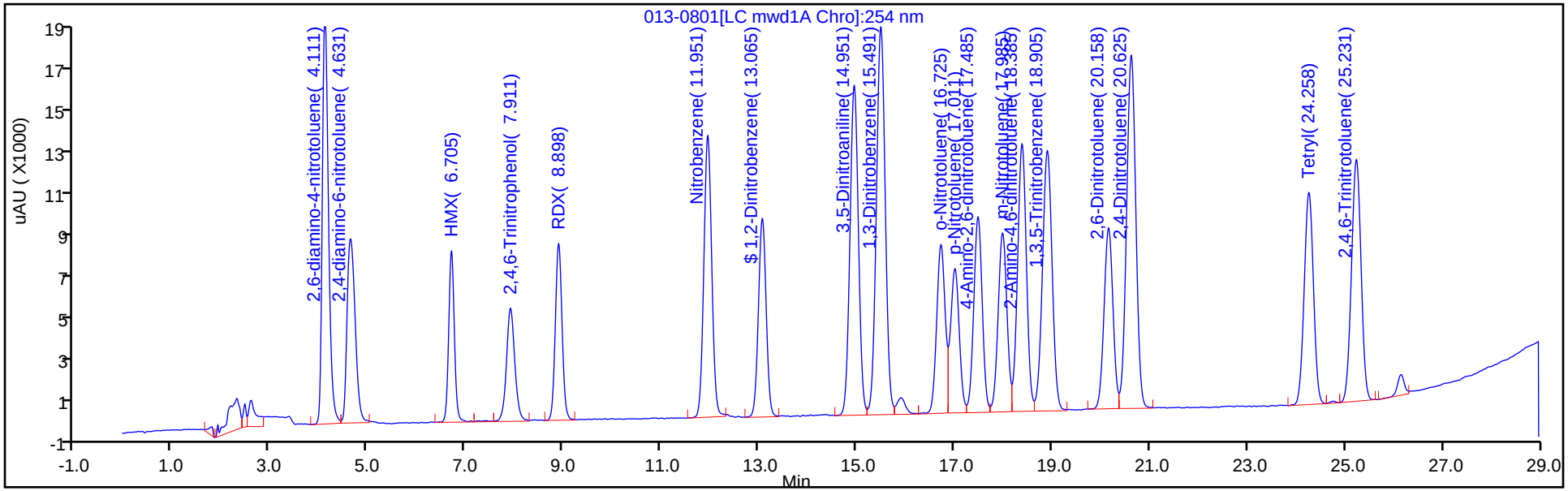
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

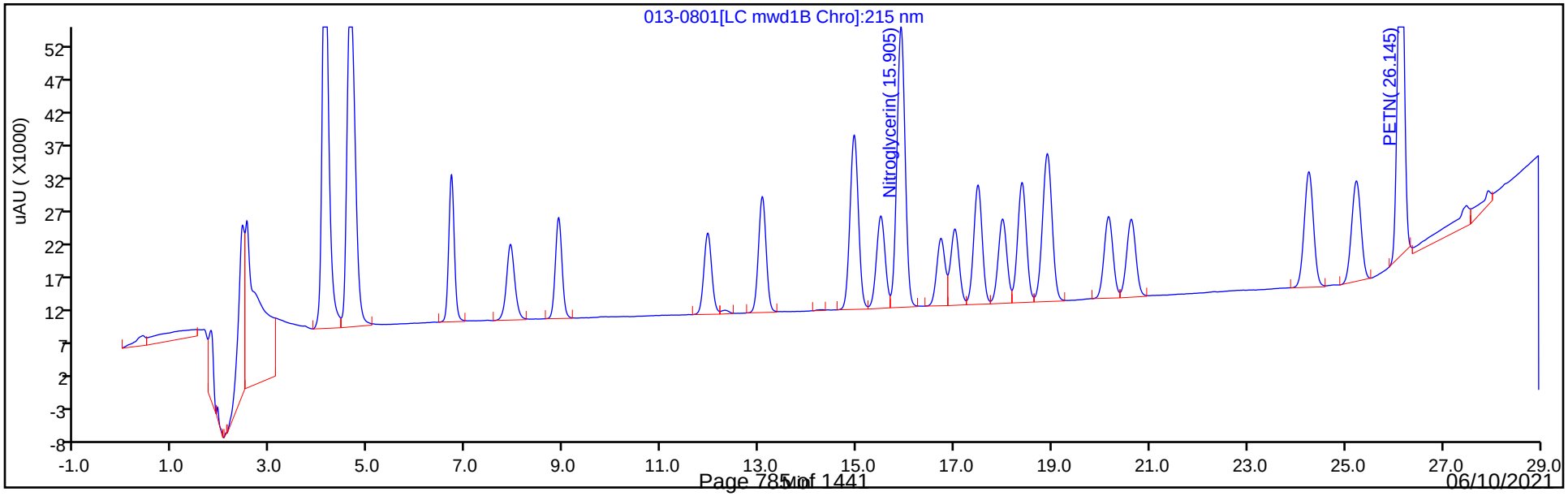
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D

Injection Date:	01-May-2021 20:39:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

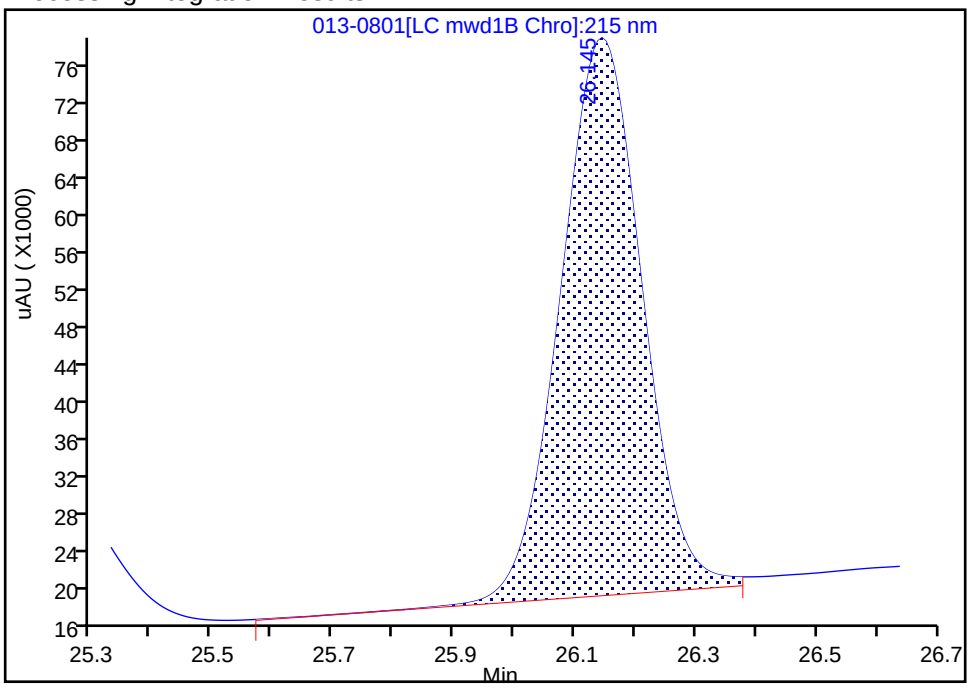
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Injection Date: 01-May-2021 20:39:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 6
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

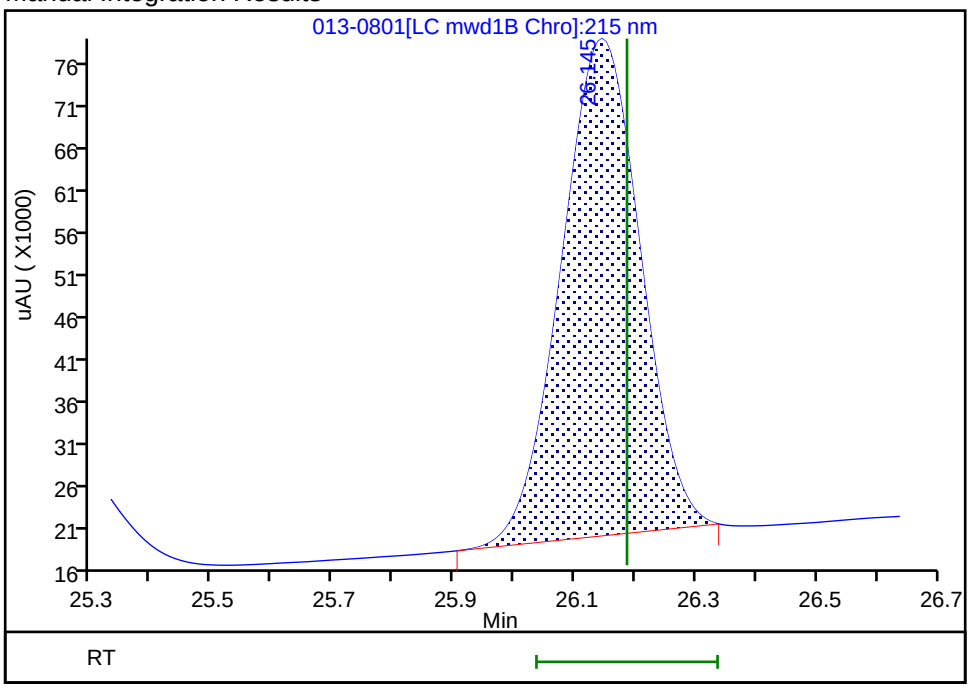
Processing Integration Results

RT: 26.14
Area: 555116
Amount: 4.095081
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 531566
Amount: 3.859188
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Lims ID: IC INT/ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 21:15:02 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 5
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:35:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.126	4.126	0.000	101396	0.2500	0.2392	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	59623	0.2500	0.2442	
6 HMX	1	6.713	6.713	0.000	39580	0.2500	0.2431	
5 2,4,6-Trinitrophenol	1	7.933	7.933	0.000	38222	0.2500	0.2396	
8 RDX	1	8.906	8.906	0.000	48606	0.2500	0.2379	
9 Nitrobenzene	1	11.973	11.973	0.000	90760	0.2510	0.2423	
$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	63081	0.2500	0.2375	
11 3,5-Dinitroaniline	1	14.979	14.979	0.000	110385	0.2500	0.2431	
12 1,3-Dinitrobenzene	1	15.519	15.519	0.000	140347	0.2505	0.2469	
13 Nitroglycerin	2	15.939	15.939	0.000	310480	2.50	2.41	
14 o-Nitrotoluene	1	16.759	16.759	0.000	58191	0.2500	0.2337	
15 p-Nitrotoluene	1	17.046	17.046	0.000	51245	0.2505	0.2359	
16 4-Amino-2,6-dinitrotoluene	1	17.526	17.526	0.000	68509	0.2503	0.2309	
17 m-Nitrotoluene	1	18.026	18.026	0.000	64933	0.2503	0.2332	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	97071	0.2510	0.2458	
19 1,3,5-Trinitrobenzene	1	18.939	18.939	0.000	104344	0.2505	0.2477	
20 2,6-Dinitrotoluene	1	20.199	20.199	0.000	66062	0.2510	0.2462	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	134163	0.2510	0.2372	
22 Tetryl	1	24.313	24.313	0.000	80996	0.2505	0.2490	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	93822	0.2510	0.2482	
24 PETN	2	26.186	26.186	0.000	330309	2.50	2.40	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

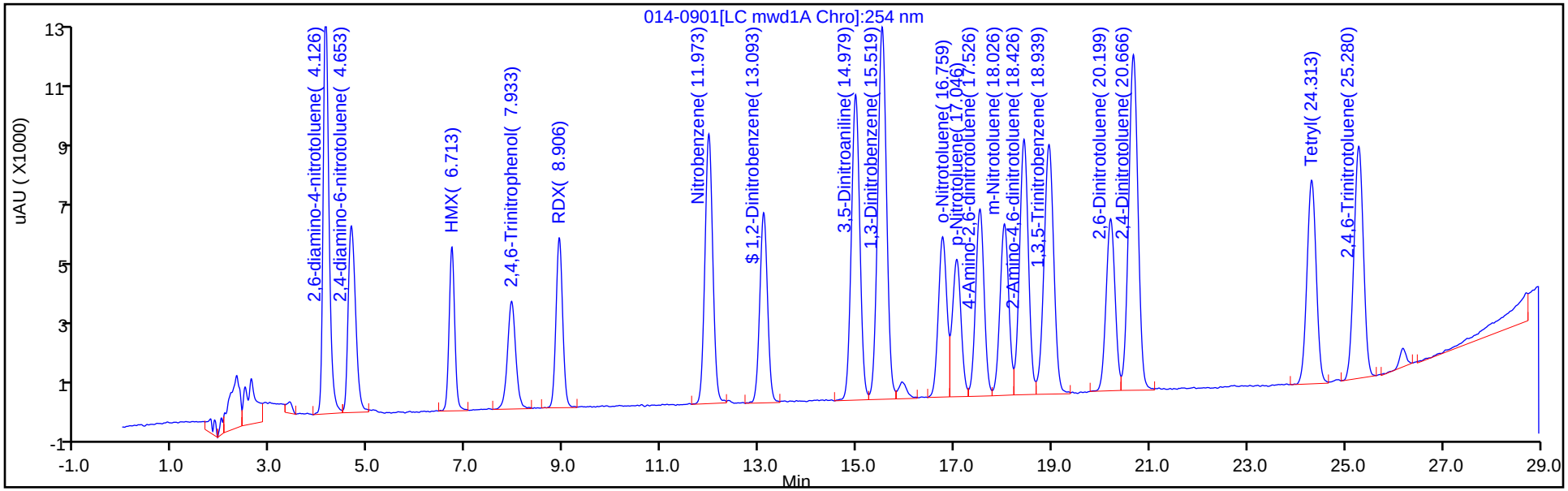
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

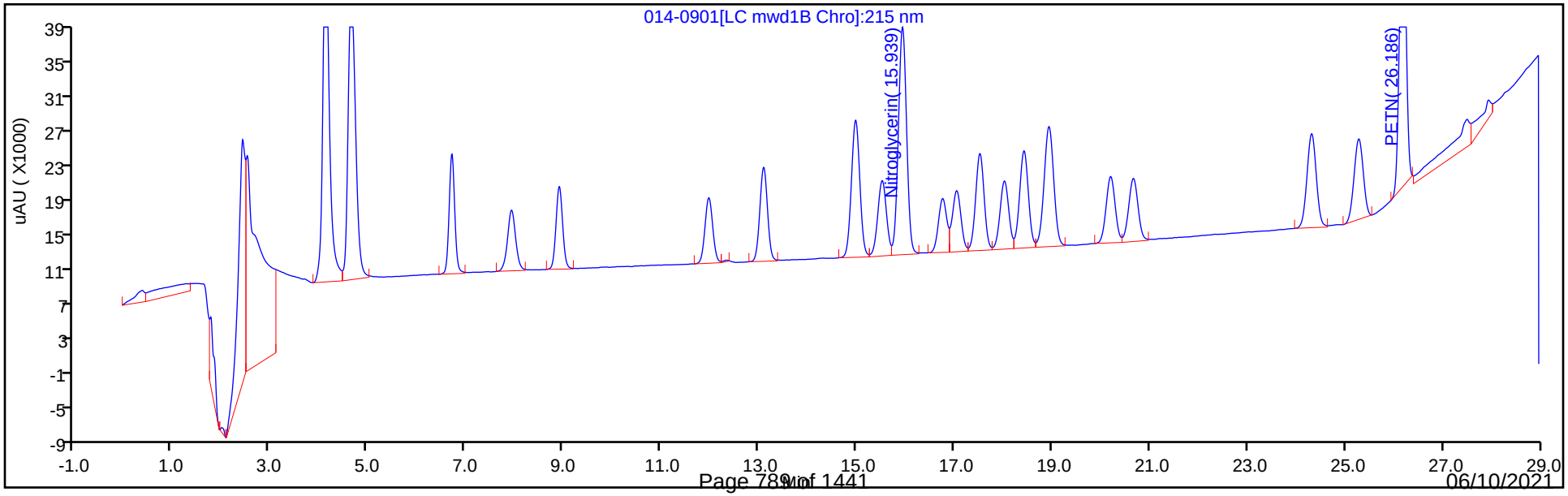
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D

Injection Date:	01-May-2021 21:15:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

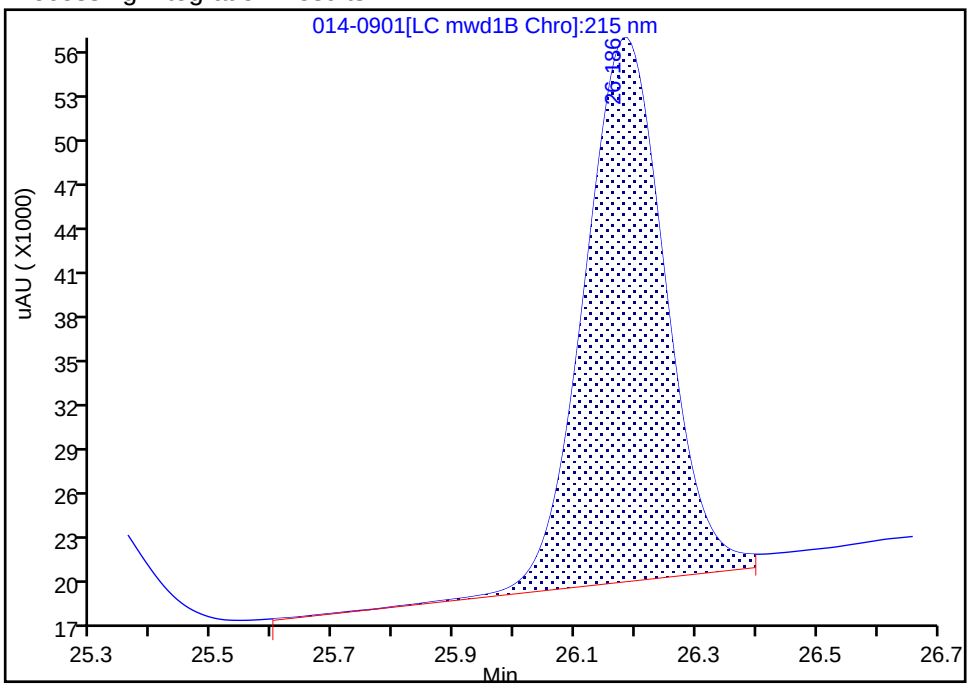
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Injection Date: 01-May-2021 21:15:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 5
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

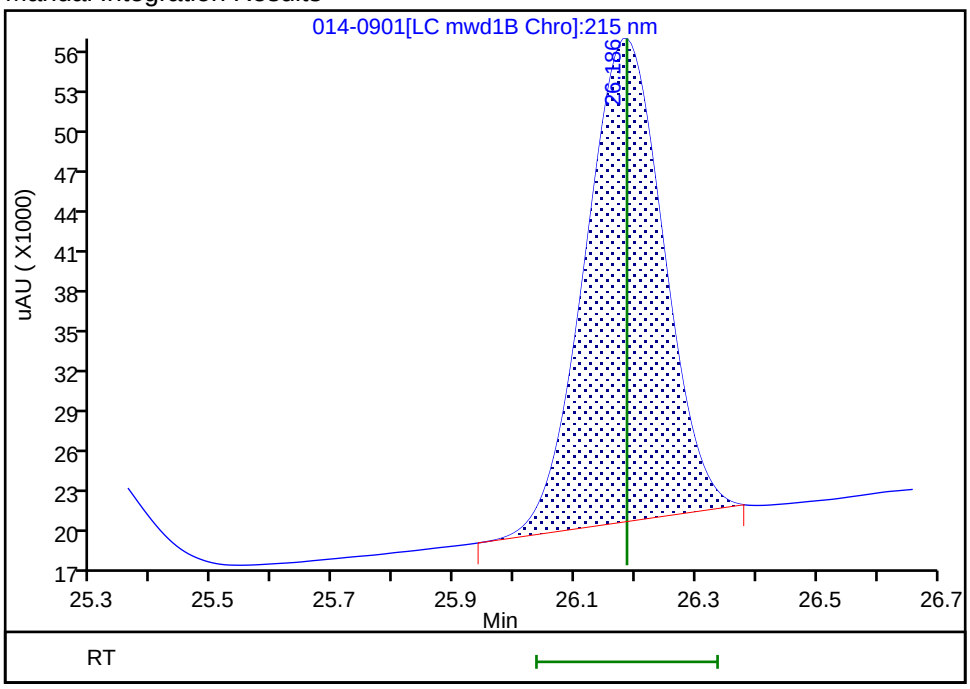
Processing Integration Results

RT: 26.19
Area: 348444
Amount: 2.522976
Amount Units: ug/ml



Manual Integration Results

RT: 26.19
Area: 330309
Amount: 2.398055
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D
Lims ID: IC INT/ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 21:50:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.132	4.126	0.006	44112	0.1000	0.0987	
2 2,4-diamino-6-nitrotoluene	1	4.658	4.653	0.005	25556	0.1000	0.1016	
6 HMX	1	6.718	6.713	0.005	16850	0.1000	0.0999	
5 2,4,6-Trinitrophenol	1	7.958	7.933	0.025	16340	0.1000	0.1024	
8 RDX	1	8.912	8.906	0.006	20661	0.1000	0.1011	
9 Nitrobenzene	1	11.971	11.973	-0.002	38085	0.1004	0.1017	
$ 10 1,2-Dinitrobenzene	1	13.091	13.093	-0.002	26678	0.1000	0.1004	
11 3,5-Dinitroaniline	1	14.971	14.979	-0.008	46817	0.1000	0.1019	
12 1,3-Dinitrobenzene	1	15.518	15.519	-0.001	58764	0.1002	0.1019	
13 Nitroglycerin	2	15.931	15.939	-0.008	130447	1.00	1.01	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	24528	0.1000	0.0985	
15 p-Nitrotoluene	1	17.038	17.046	-0.008	21221	0.1002	0.0977	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	28819	0.1001	0.0971	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	27212	0.1001	0.0977	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	40904	0.1004	0.1017	
19 1,3,5-Trinitrobenzene	1	18.931	18.939	-0.008	44594	0.1002	0.1018	
20 2,6-Dinitrotoluene	1	20.185	20.199	-0.014	27721	0.1004	0.1014	
21 2,4-Dinitrotoluene	1	20.652	20.666	-0.015	55838	0.1004	0.0987	
22 Tetryl	1	24.298	24.313	-0.015	34148	0.1002	0.1015	
23 2,4,6-Trinitrotoluene	1	25.265	25.280	-0.015	38740	0.1004	0.1000	
24 PETN	2	26.172	26.186	-0.014	136676	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	10.00	Units: uL
8330_ADDs_00027	Amount Added:	5.00	Units: uL

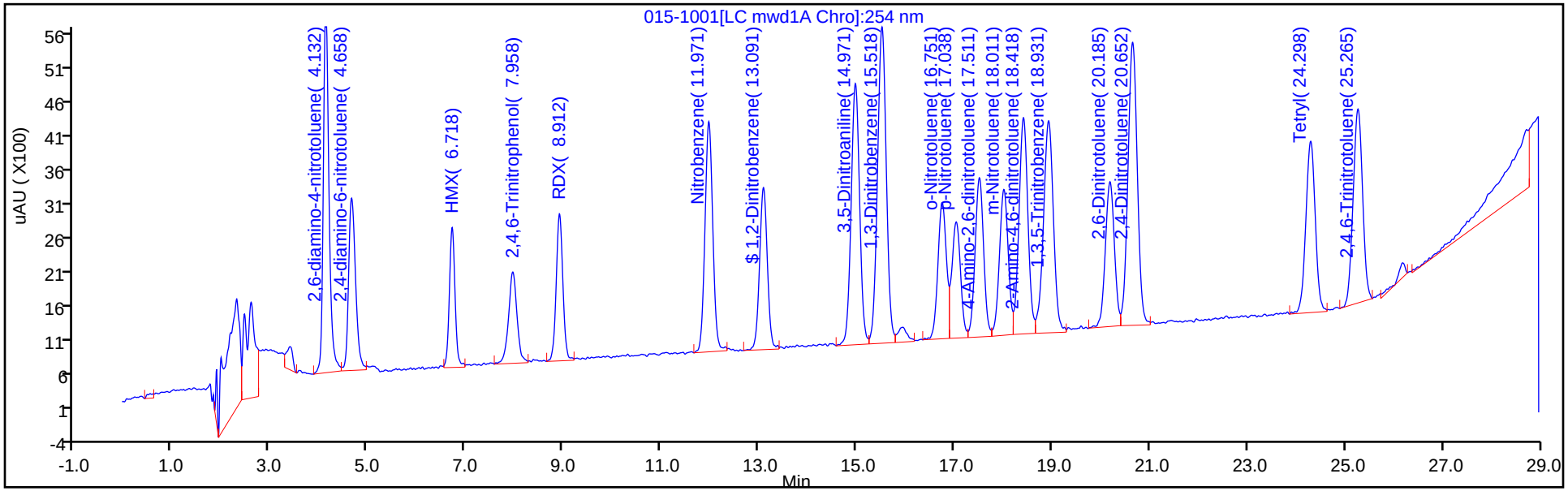
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

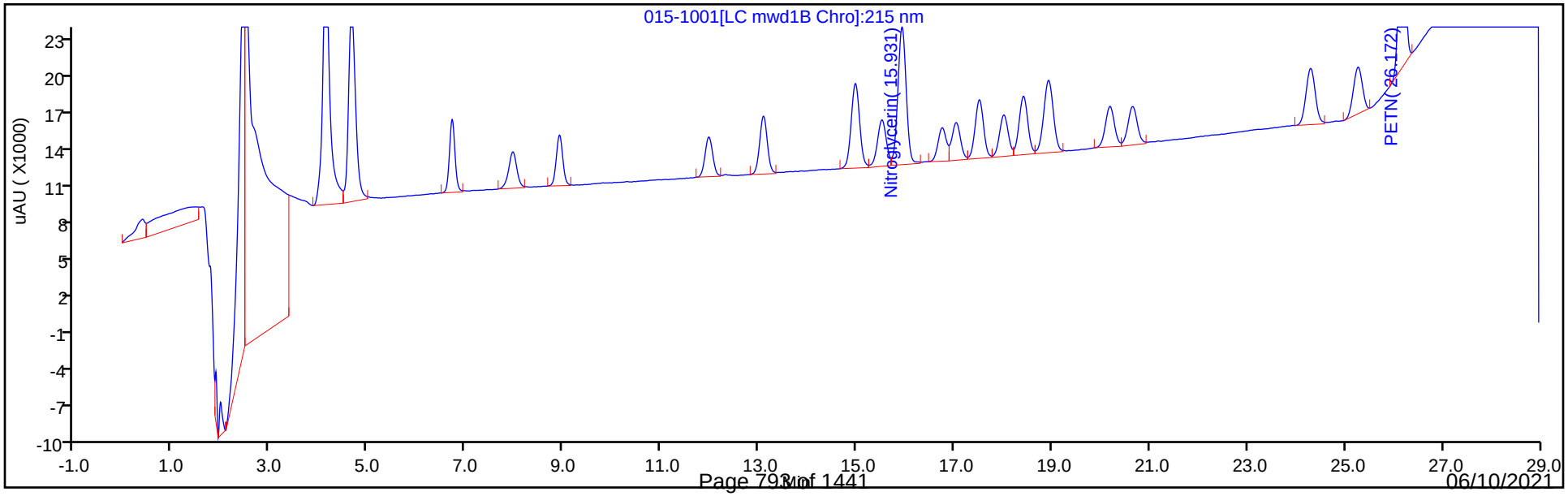
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D

Injection Date:	01-May-2021 21:50:04	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

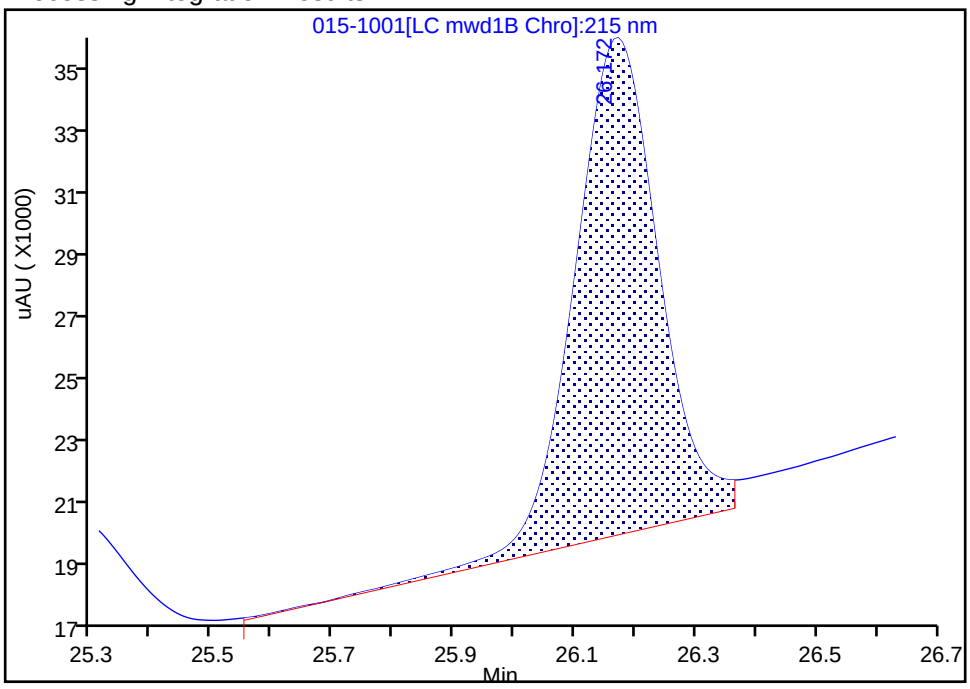
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D				
Injection Date:	01-May-2021 21:50:04	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

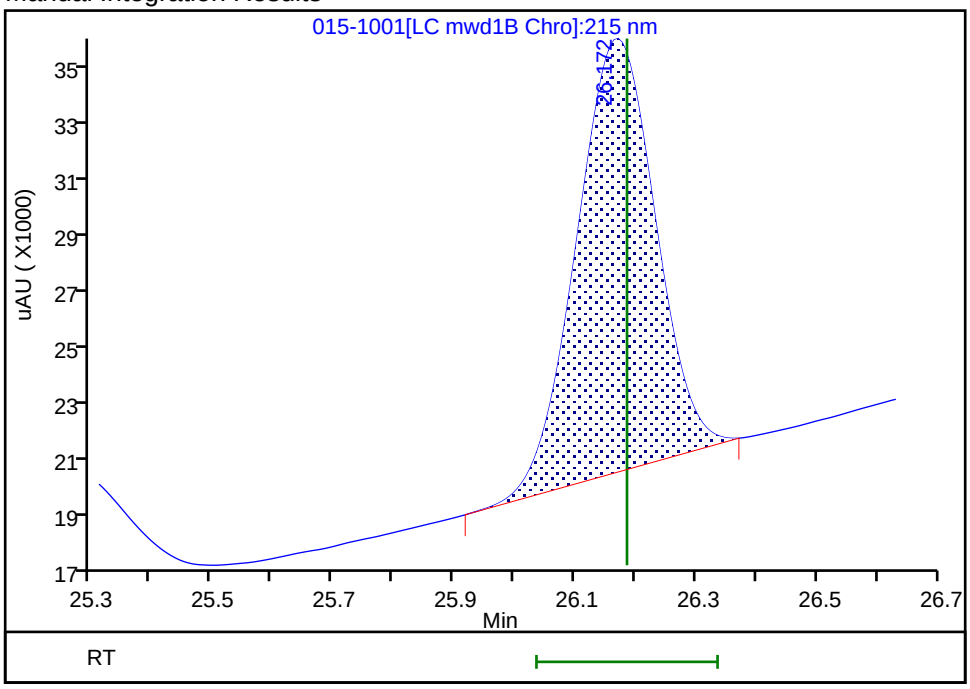
Processing Integration Results

RT: 26.17
Area: 151513
Amount: 1.005886
Amount Units: ug/ml



Manual Integration Results

RT: 26.17
Area: 136676
Amount: 0.992273
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Lims ID: IC INT/ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 22:25:05 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 3
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.134	4.126	0.008	24575	0.0500	0.0507	
2	2,4-diamino-6-nitrotoluene	1	4.667	4.653	0.014	13602	0.0500	0.0516	
6	HMX	1	6.734	6.713	0.021	8791	0.0500	0.0492	
5	2,4,6-Trinitrophenol	1	7.987	7.933	0.054	8578	0.0500	0.0538	
8	RDX	1	8.934	8.906	0.028	11066	0.0500	0.0542	
9	Nitrobenzene	1	11.994	11.973	0.021	19306	0.0502	0.0515	
$ 10	1,2-Dinitrobenzene	1	13.114	13.093	0.021	13836	0.0500	0.0521	
11	3,5-Dinitroaniline	1	15.007	14.979	0.028	23131	0.0500	0.0493	
12	1,3-Dinitrobenzene	1	15.547	15.519	0.028	29142	0.0501	0.0493	
13	Nitroglycerin	2	15.961	15.939	0.022	65416	0.5000	0.5087	
14	o-Nitrotoluene	1	16.781	16.759	0.022	12373	0.0500	0.0497	
15	p-Nitrotoluene	1	17.074	17.046	0.028	10760	0.0501	0.0495	
16	4-Amino-2,6-dinitrotoluene	1	17.541	17.526	0.015	14802	0.0501	0.0499	
17	m-Nitrotoluene	1	18.047	18.026	0.021	13943	0.0501	0.0501	
18	2-Amino-4,6-dinitrotoluene	1	18.441	18.426	0.015	21111	0.0502	0.0509	
19	1,3,5-Trinitrobenzene	1	18.954	18.939	0.015	23506	0.0501	0.0503	
20	2,6-Dinitrotoluene	1	20.201	20.199	0.002	14081	0.0502	0.0499	
21	2,4-Dinitrotoluene	1	20.674	20.666	0.008	28396	0.0502	0.0502	
22	Tetryl	1	24.287	24.313	-0.026	17573	0.0501	0.0494	
23	2,4,6-Trinitrotoluene	1	25.254	25.280	-0.026	19400	0.0502	0.0479	
24	PETN	2	26.154	26.186	-0.032	69170	0.5000	0.5022	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	5.00	Units: uL
8330_ADDs_00027	Amount Added:	2.50	Units: uL

Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

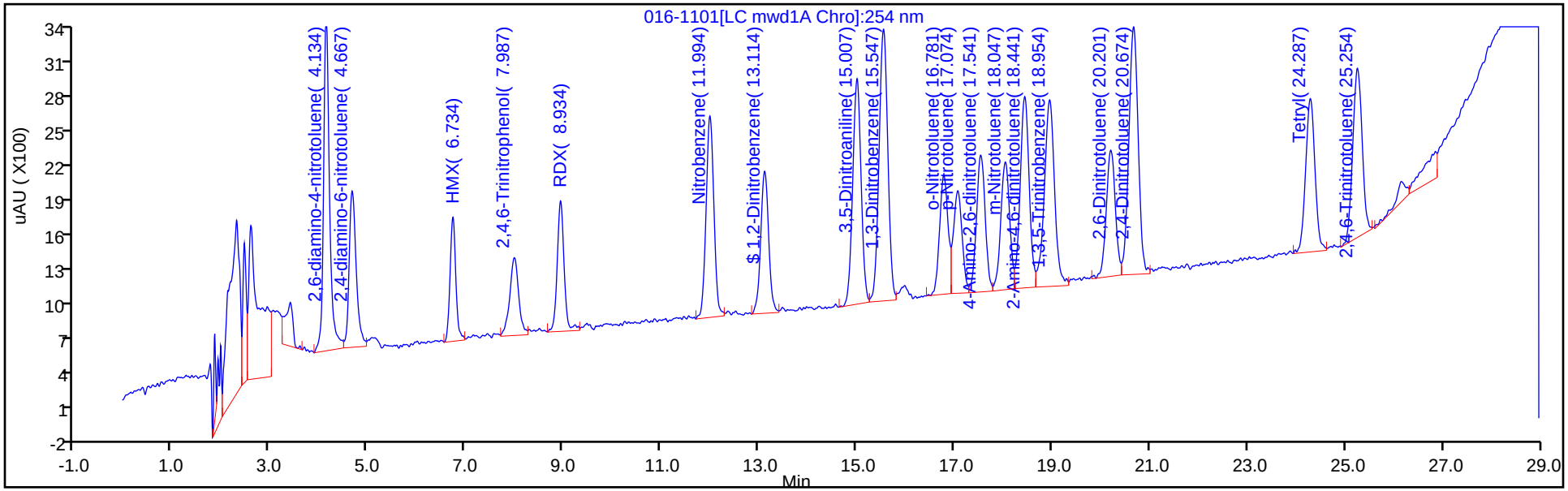
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D

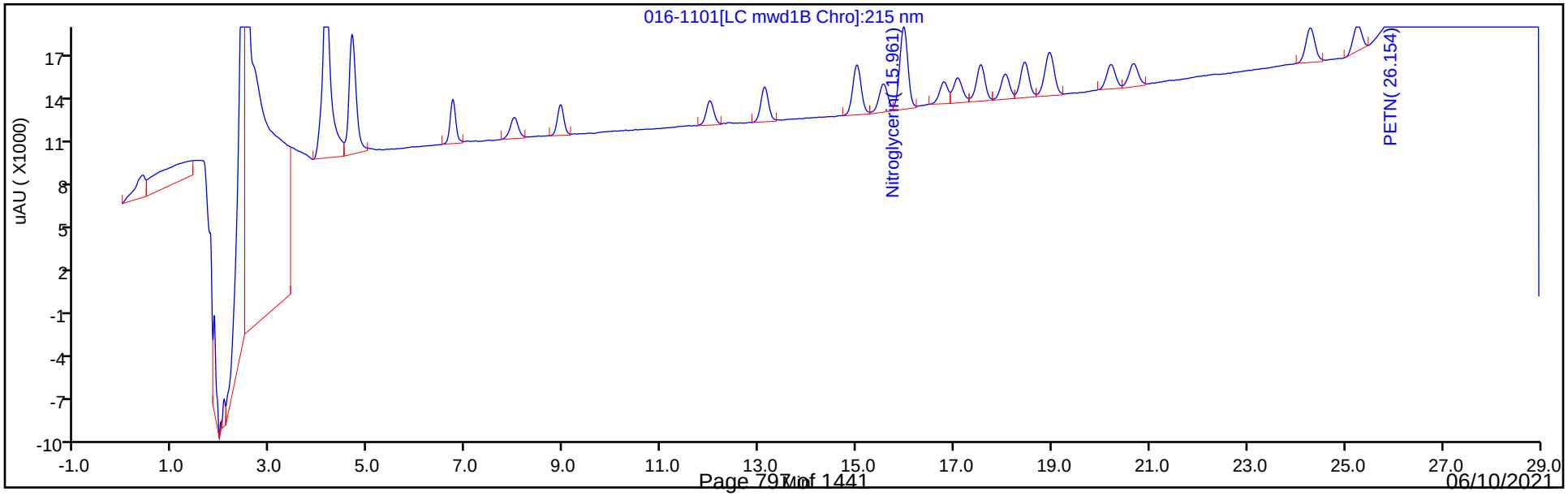
Injection Date:	01-May-2021 22:25:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

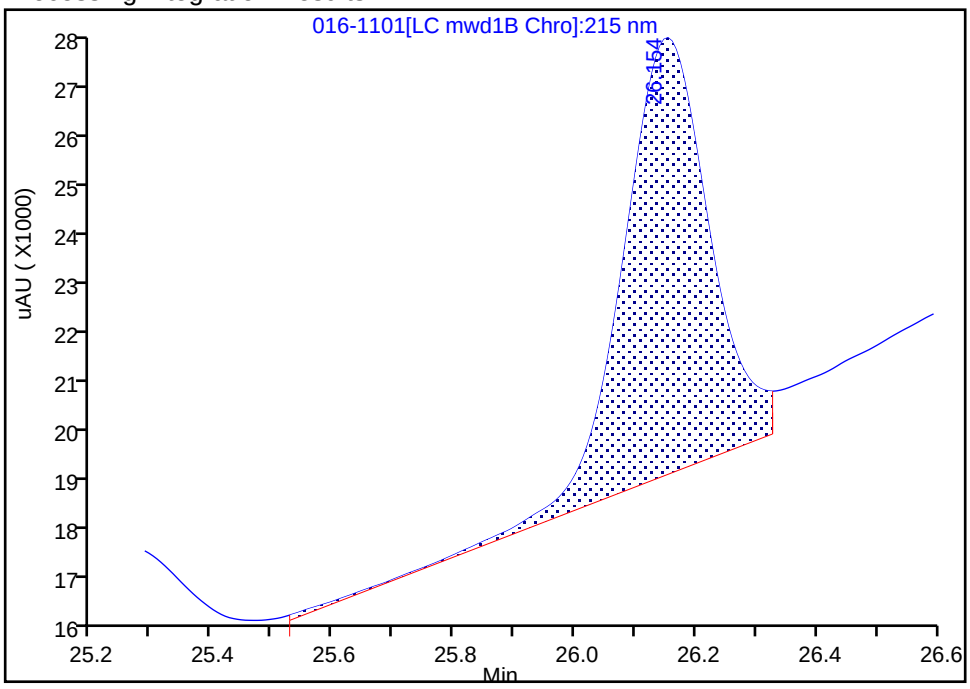
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Injection Date: 01-May-2021 22:25:05 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

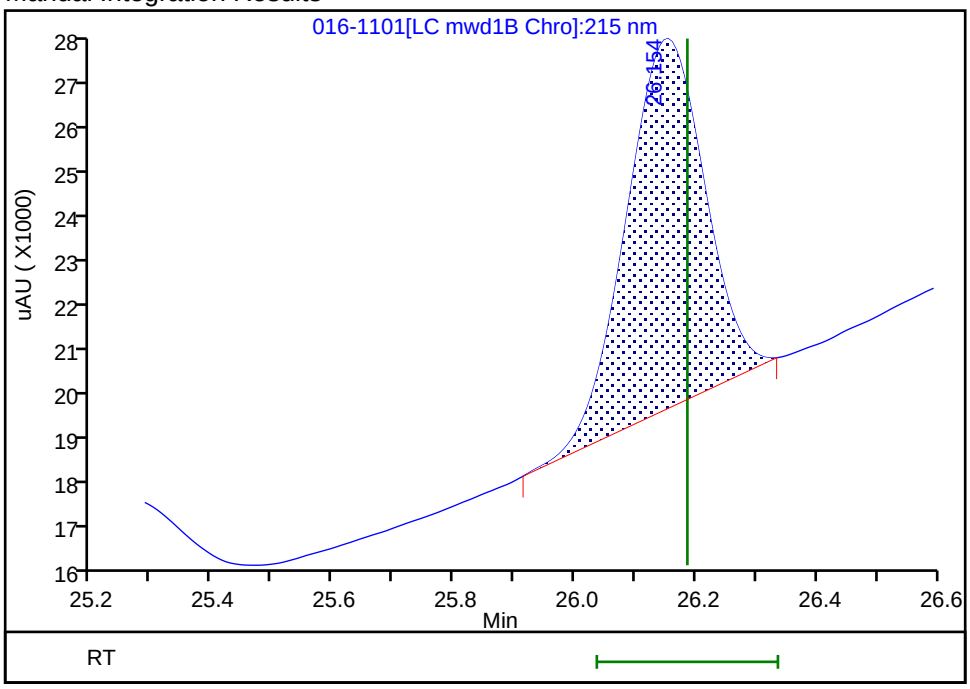
Processing Integration Results

RT: 26.15
Area: 81816
Amount: 0.467715
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 69170
Amount: 0.502177
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Lims ID: IC INT/ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 23:00:06 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.133	4.126	0.007	11811	0.0200	0.0194	
2 2,4-diamino-6-nitrotoluene	1	4.673	4.653	0.020	6051	0.0200	0.0200	
6 HMX	1	6.720	6.713	0.007	4286	0.0200	0.0208	
5 2,4,6-Trinitrophenol	1	7.980	7.933	0.047	3270	0.0200	0.0205	
8 RDX	1	8.926	8.906	0.020	4533	0.0200	0.0222	
9 Nitrobenzene	1	11.973	11.973	0.000	7888	0.0201	0.0211	
$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	6280	0.0200	0.0236	
11 3,5-Dinitroaniline	1	14.980	14.979	0.001	9417	0.0200	0.0188	
12 1,3-Dinitrobenzene	1	15.533	15.519	0.014	12411	0.0200	0.0196	
13 Nitroglycerin	2	15.940	15.939	0.001	28299	0.2000	0.2200	
14 o-Nitrotoluene	1	16.740	16.759	-0.019	5151	0.0200	0.0207	
15 p-Nitrotoluene	1	17.060	17.046	0.014	4823	0.0200	0.0222	
16 4-Amino-2,6-dinitrotoluene	1	17.520	17.526	-0.006	6276	0.0200	0.0212	
17 m-Nitrotoluene	1	18.033	18.026	0.007	5928	0.0200	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	9114	0.0201	0.0202	
19 1,3,5-Trinitrobenzene	1	18.946	18.939	0.007	10540	0.0200	0.0187	
20 2,6-Dinitrotoluene	1	20.200	20.199	0.001	6026	0.0201	0.0195	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	12229	0.0201	0.0216	
22 Tetryl	1	24.306	24.313	-0.007	7583	0.0200	0.0179	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	8548	0.0201	0.0187	
24 PETN	2	26.180	26.186	-0.006	27436	0.2000	0.1992	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	2.00	Units: uL
8330_ADDs_00027	Amount Added:	1.00	Units: uL

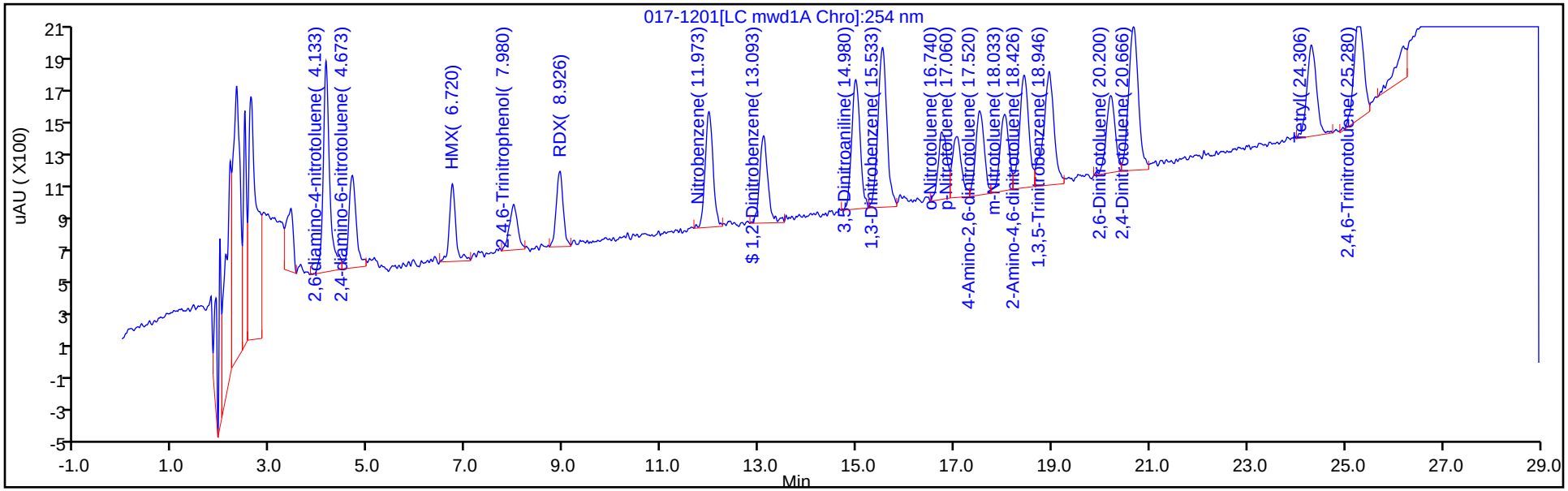
Report Date: 04-May-2021 13:43:15 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

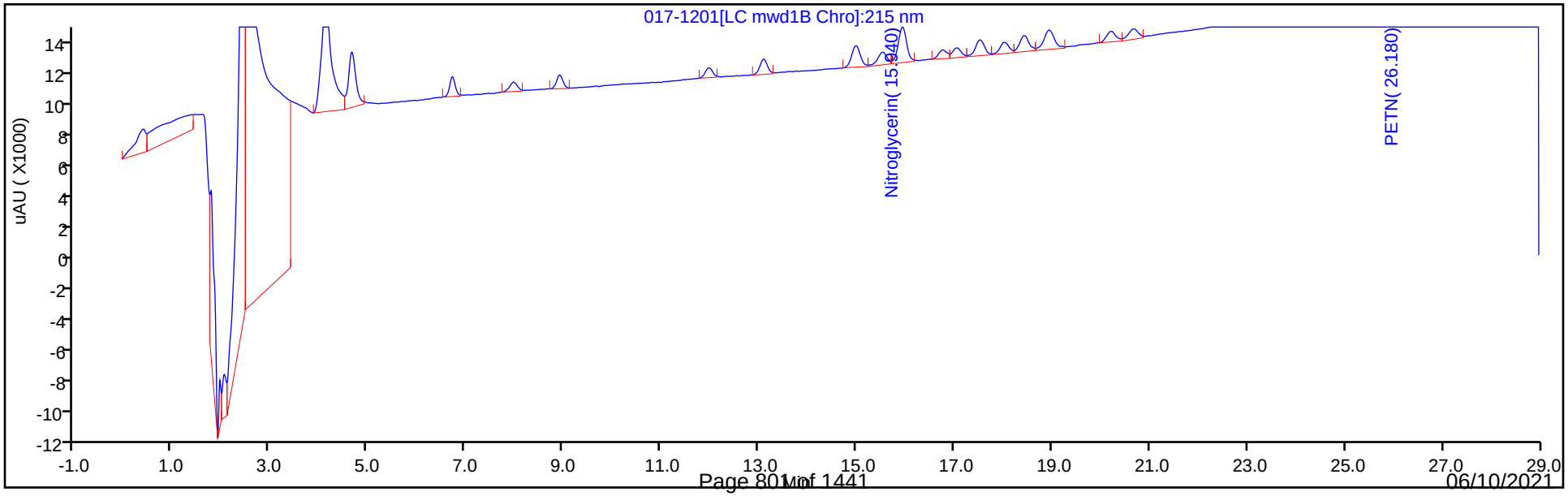
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D

Injection Date:	01-May-2021 23:00:06	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

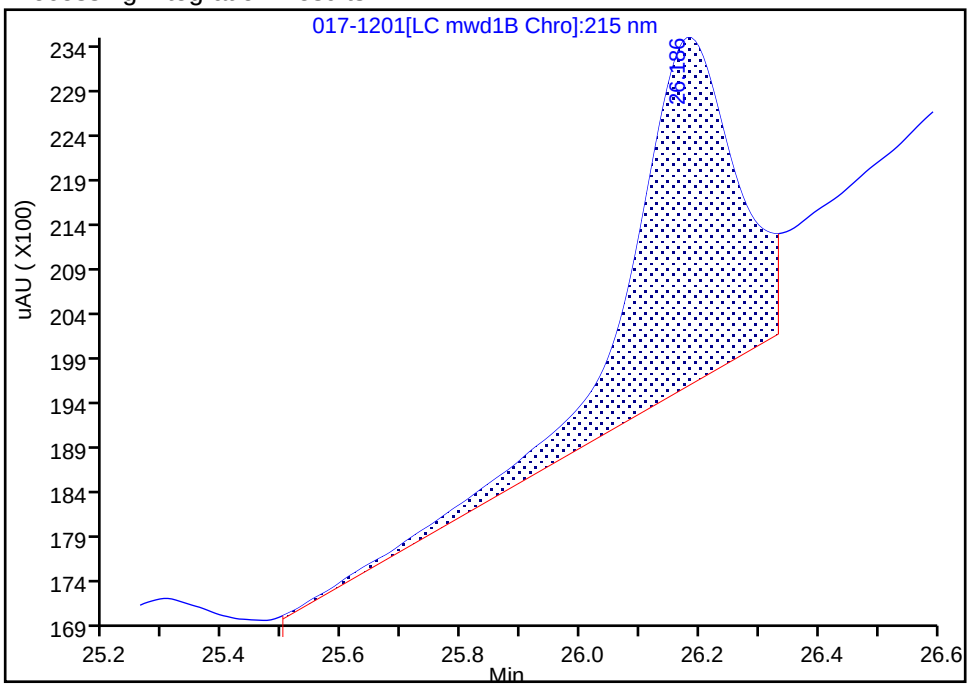
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D				
Injection Date:	01-May-2021 23:00:06	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

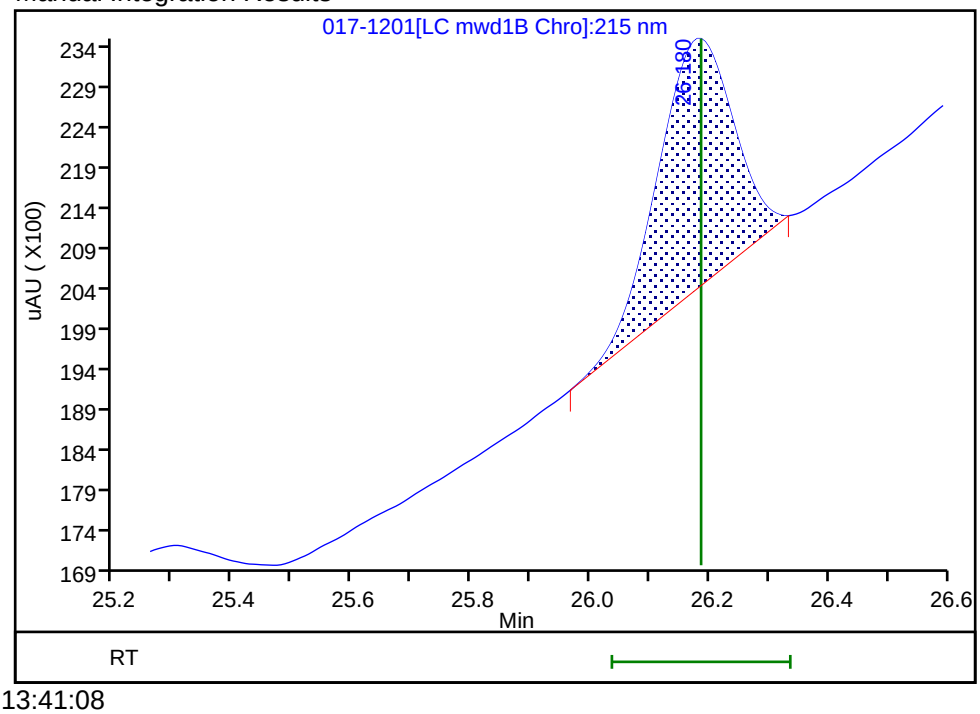
Processing Integration Results

RT: 26.19
Area: 47400
Amount: 0.217570
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 27436
Amount: 0.199186
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Lims ID: IC INT/ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 23:35:08 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 1
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:42:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.144	4.126	0.018	8029	0.0100	0.0101	
2 2,4-diamino-6-nitrotoluene	1	4.684	4.653	0.031	3655	0.0100	0.0099	
6 HMX	1	6.724	6.713	0.011	2543	0.0100	0.009840	
5 2,4,6-Trinitrophenol	1	8.004	7.933	0.071	1789	0.0100	0.0112	
8 RDX	1	8.918	8.906	0.012	2988	0.0100	0.0146	
9 Nitrobenzene	1	11.978	11.973	0.005	4507	0.0100	0.0120	
$ 10 1,2-Dinitrobenzene	1	13.104	13.093	0.011	4082	0.0100	0.0154	
11 3,5-Dinitroaniline	1	14.978	14.979	-0.001	5594	0.0100	0.0103	
12 1,3-Dinitrobenzene	1	15.524	15.519	0.005	7085	0.0100	0.0101	
13 Nitroglycerin	2	15.924	15.939	-0.015	16401	0.1000	0.1275	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	3022	0.0100	0.0121	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	2608	0.0100	0.0120	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	3954	0.0100	0.0133	
17 m-Nitrotoluene	1	17.978	18.026	-0.048	3517	0.0100	0.0126	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	5148	0.0100	0.0100	
19 1,3,5-Trinitrobenzene	1	18.904	18.939	-0.035	7116	0.0100	0.0103	
20 2,6-Dinitrotoluene	1	20.191	20.199	-0.008	3555	0.0100	0.0102	
21 2,4-Dinitrotoluene	1	20.644	20.666	-0.022	6619	0.0100	0.0117	
22 Tetryl	1	24.271	24.313	-0.042	5245	0.0100	0.0106	
23 2,4,6-Trinitrotoluene	1	25.258	25.280	-0.022	5469	0.0100	0.0105	
24 PETN	2	26.151	26.186	-0.035	15659	0.1000	0.1137	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	1.00	Units: uL
8330_ADDs_00027	Amount Added:	0.50	Units: uL

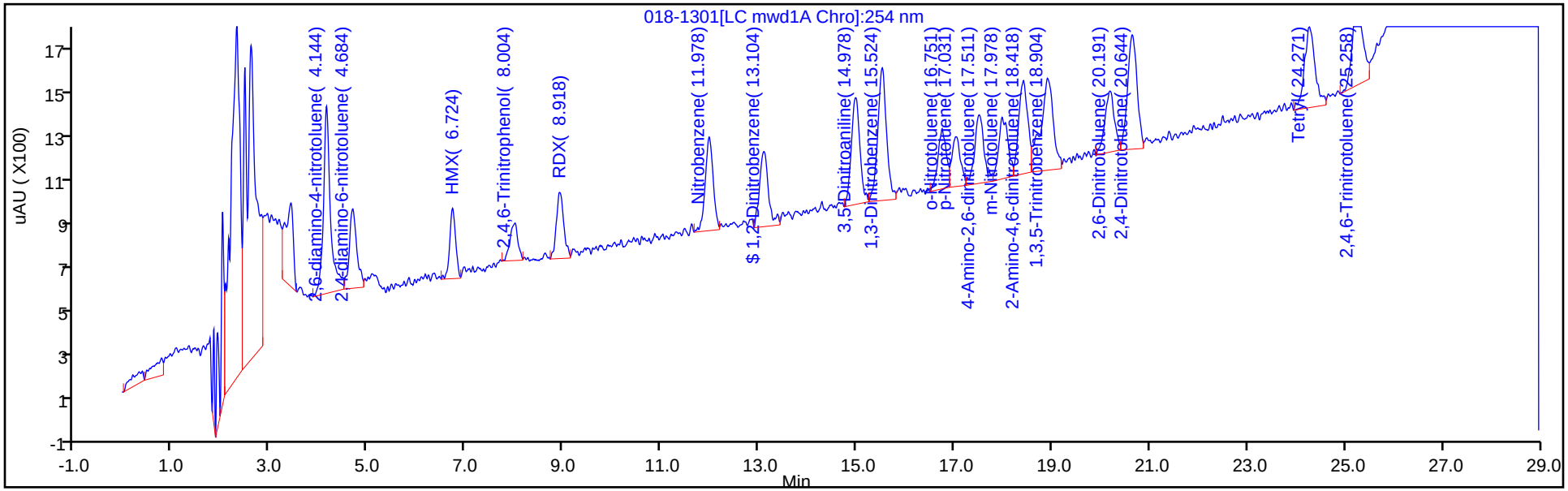
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

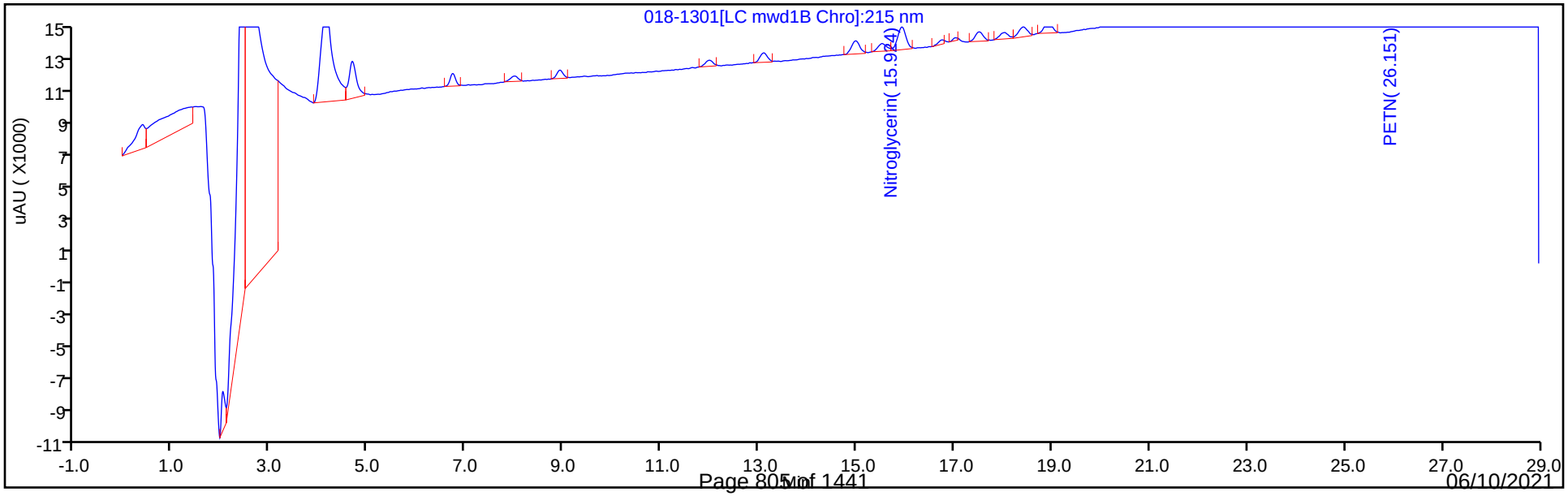
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

Injection Date:	01-May-2021 23:35:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

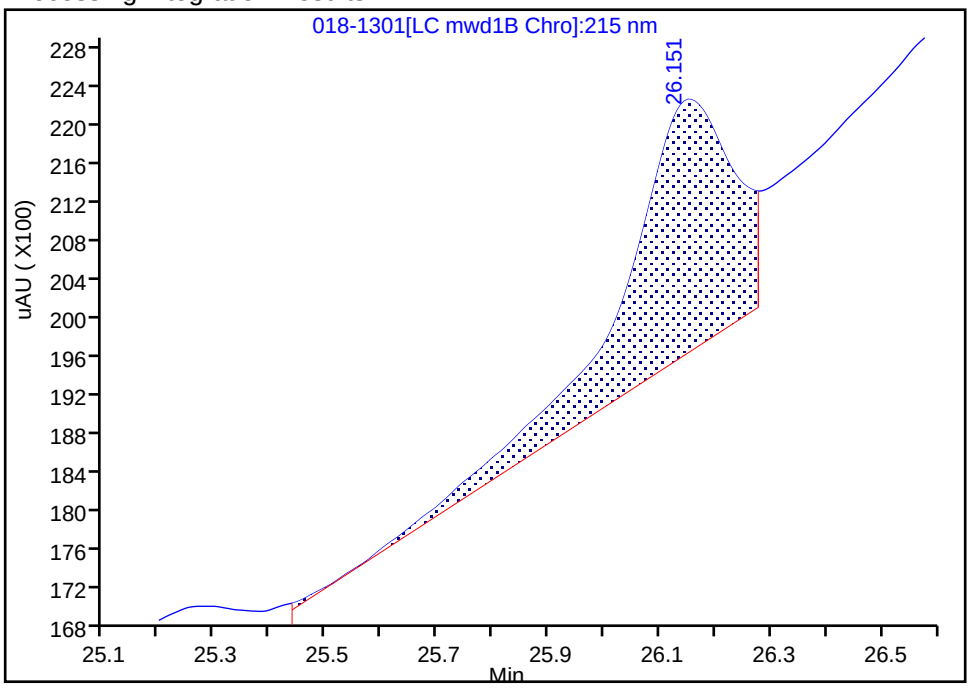
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Injection Date: 01-May-2021 23:35:08 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

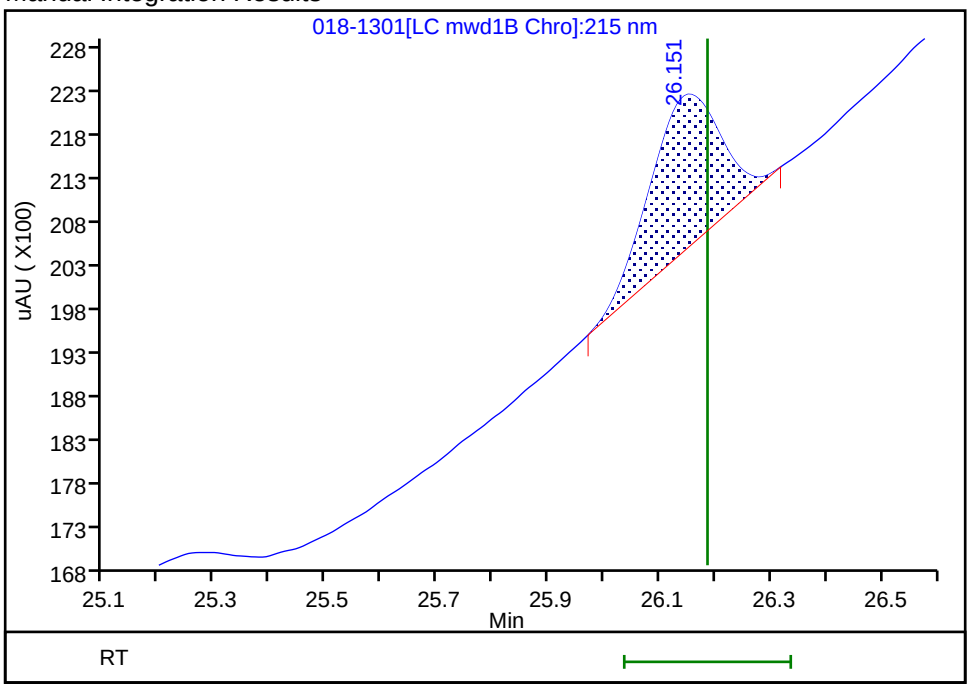
Processing Integration Results

RT: 26.15
Area: 35908
Amount: 0.224090
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 15659
Amount: 0.113685
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

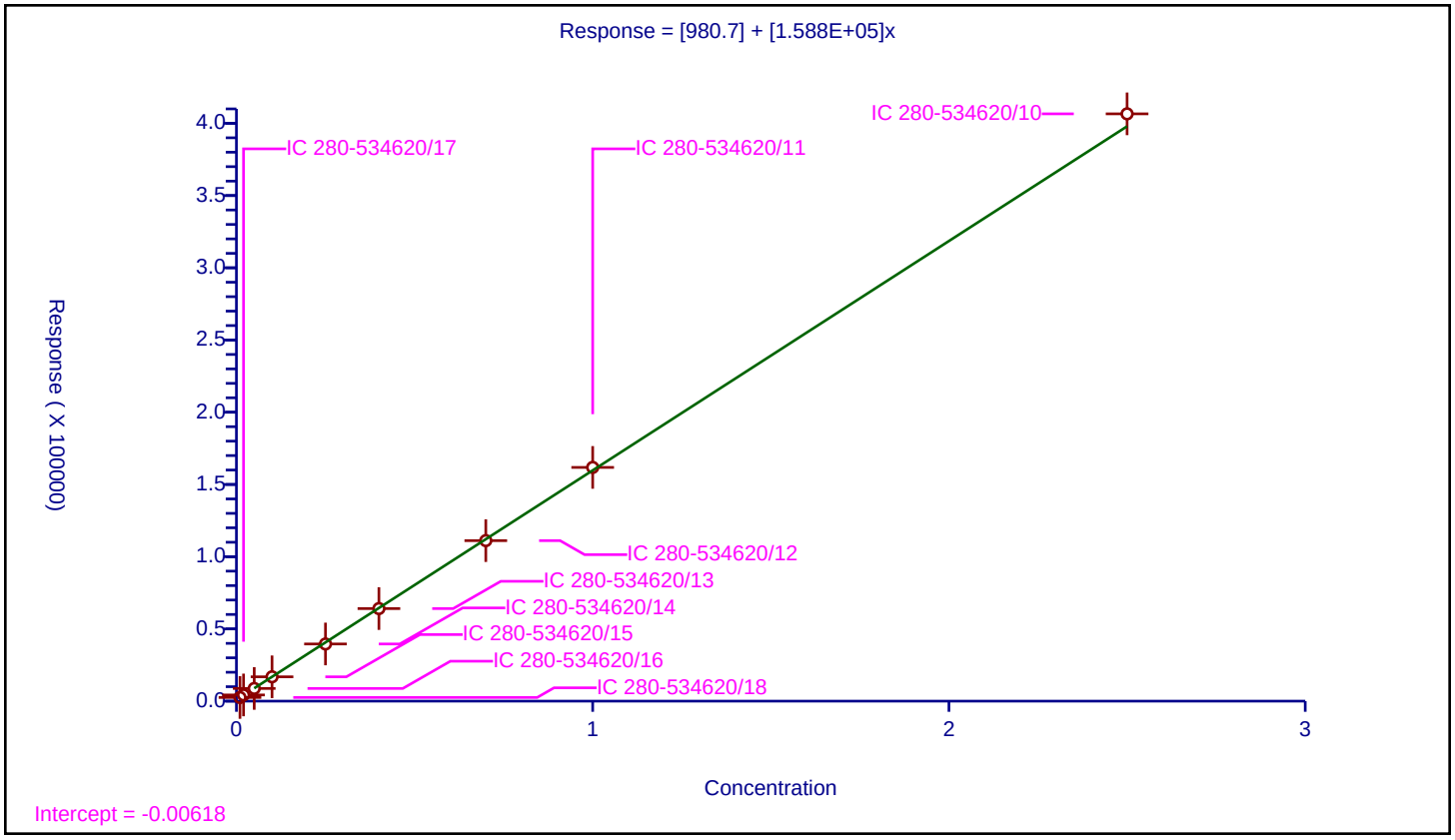
Curve Coefficients

Intercept:	980.7
Slope:	1.588E+05

Error Coefficients

Standard Error:	3410
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2543.0			254300.0	Y
2	IC 280-534620/17	0.02	4286.0			214300.0	Y
3	IC 280-534620/16	0.05	8791.0			175820.0	Y
4	IC 280-534620/15	0.1	16850.0			168500.0	Y
5	IC 280-534620/14	0.25	39580.0			158320.0	Y
6	IC 280-534620/13	0.4	64089.0			160222.5	Y
7	IC 280-534620/12	0.7	111120.0			158742.857143	Y
8	IC 280-534620/11	1.0	161798.0			161798.0	Y
9	IC 280-534620/10	2.5	406565.0			162626.0	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

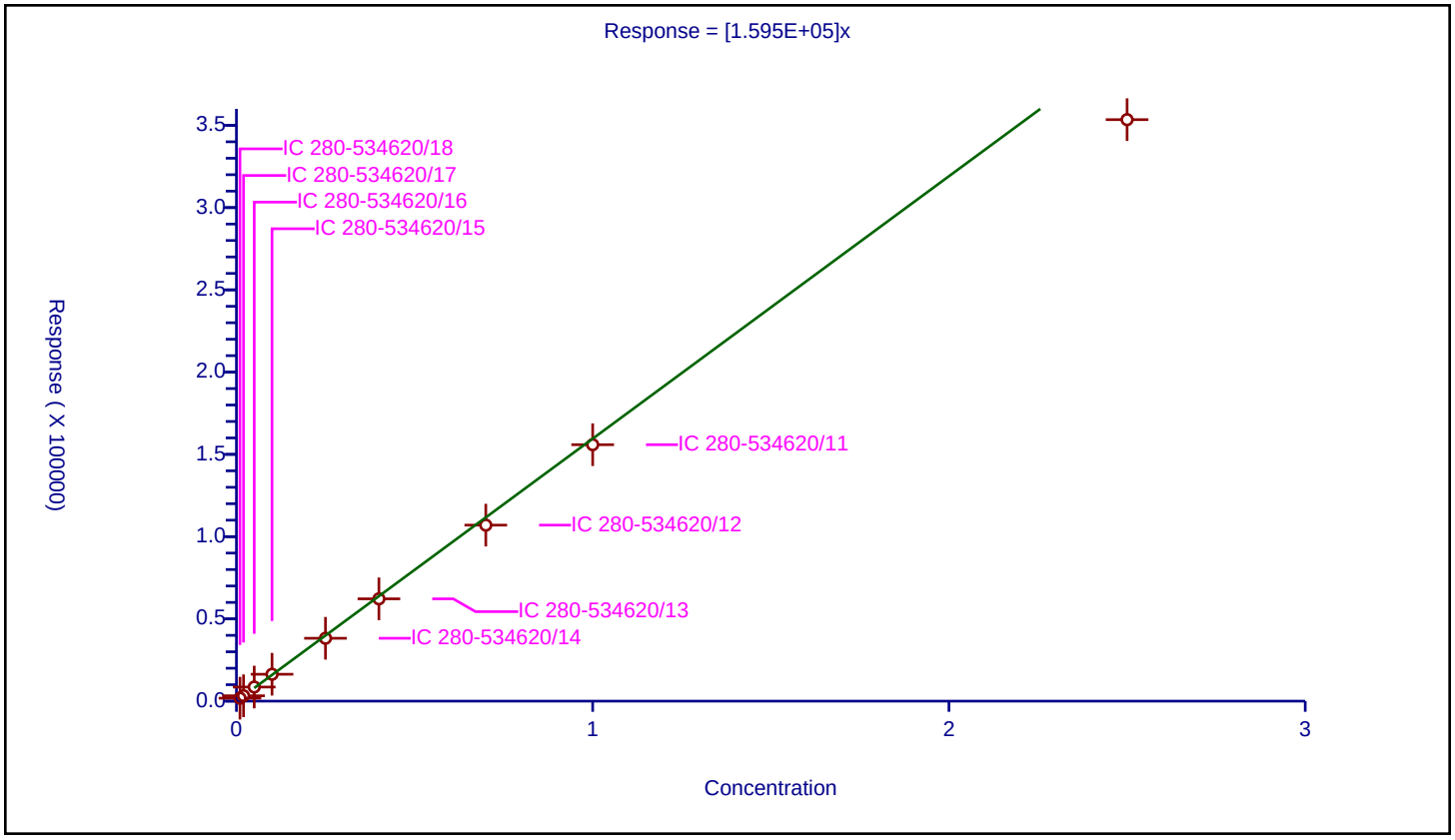
Curve Coefficients

Intercept:	0
Slope:	1.595E+05

Error Coefficients

Standard Error:	16200
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	1789.0			178900.0	Y
2	IC 280-534620/17	0.02	3270.0			163500.0	Y
3	IC 280-534620/16	0.05	8578.0			171560.0	Y
4	IC 280-534620/15	0.1	16340.0			163400.0	Y
5	IC 280-534620/14	0.25	38222.0			152888.0	Y
6	IC 280-534620/13	0.4	62190.0			155475.0	Y
7	IC 280-534620/12	0.7	106987.0			152838.571429	Y
8	IC 280-534620/11	1.0	155884.0			155884.0	Y
9	IC 280-534620/10	2.5	353462.0			141384.8	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

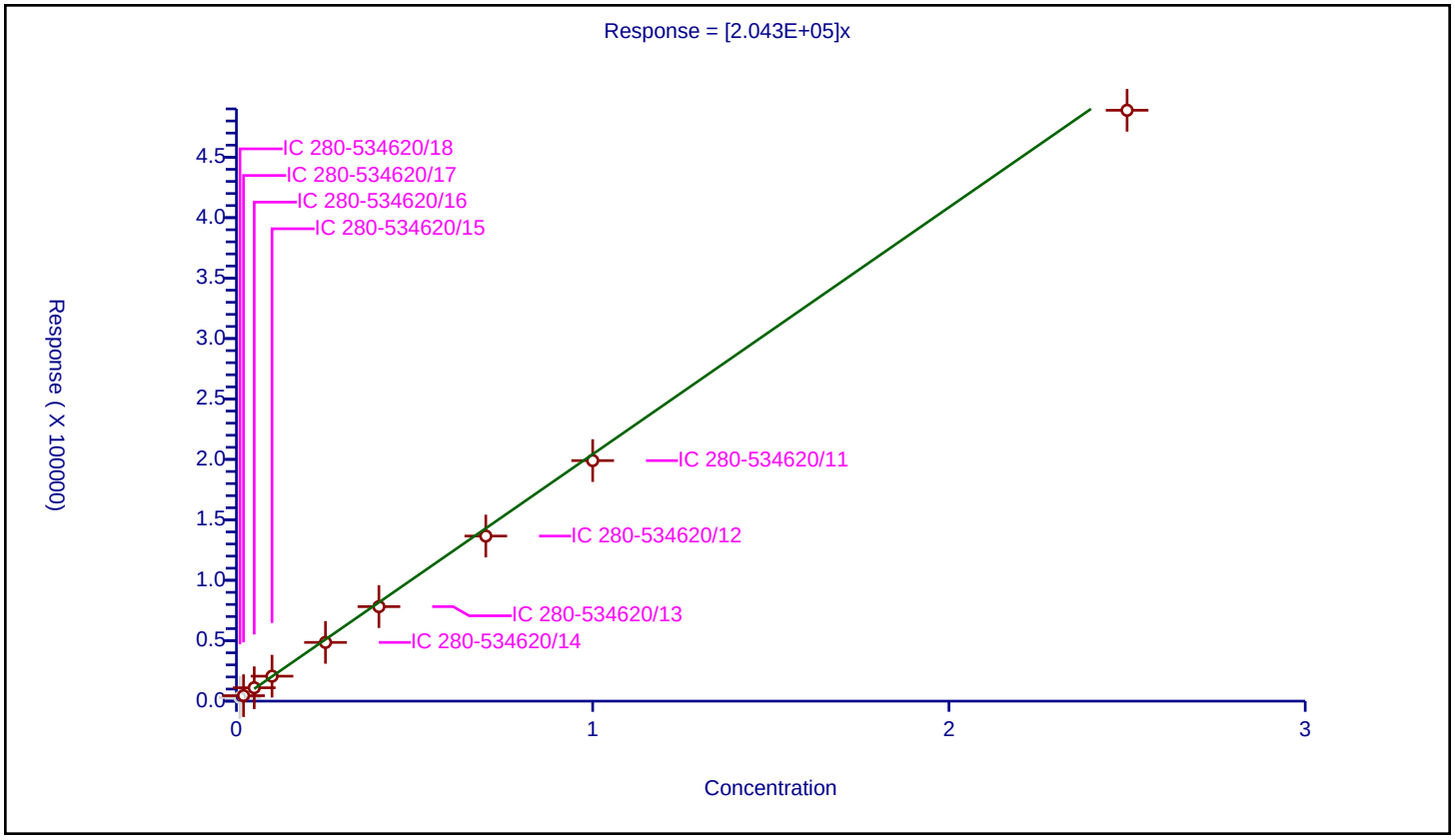
Curve Coefficients

Intercept:	0
Slope:	2.043E+05

Error Coefficients

Standard Error:	8980
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2988.0			298800.0	N
2	IC 280-534620/17	0.02	4533.0			226650.0	Y
3	IC 280-534620/16	0.05	11066.0			221320.0	Y
4	IC 280-534620/15	0.1	20661.0			206610.0	Y
5	IC 280-534620/14	0.25	48606.0			194424.0	Y
6	IC 280-534620/13	0.4	78185.0			195462.5	Y
7	IC 280-534620/12	0.7	136592.0			195131.428571	Y
8	IC 280-534620/11	1.0	199019.0			199019.0	Y
9	IC 280-534620/10	2.5	488855.0			195542.0	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

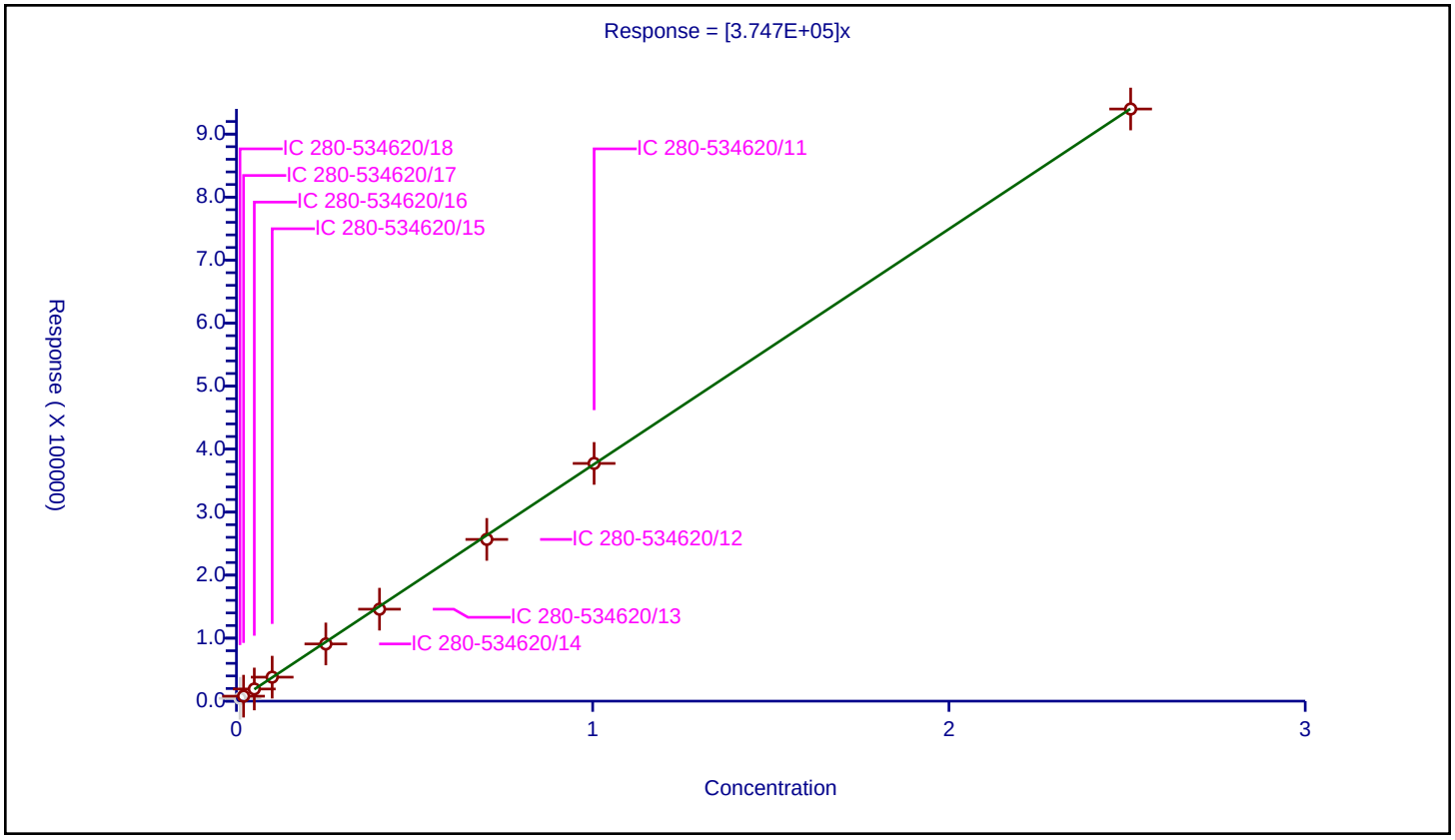
Curve Coefficients

Intercept:	0
Slope:	3.747E+05

Error Coefficients

Standard Error:	3320
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	4507.0			448904.38247	N
2	IC 280-534620/17	0.02008	7888.0			392828.685259	Y
3	IC 280-534620/16	0.0502	19306.0			384581.673307	Y
4	IC 280-534620/15	0.1004	38085.0			379332.669323	Y
5	IC 280-534620/14	0.251	90760.0			361593.625498	Y
6	IC 280-534620/13	0.4016	145926.0			363361.553785	Y
7	IC 280-534620/12	0.7028	256719.0			365280.307342	Y
8	IC 280-534620/11	1.004	377310.0			375806.772908	Y
9	IC 280-534620/10	2.51	939811.0			374426.693227	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

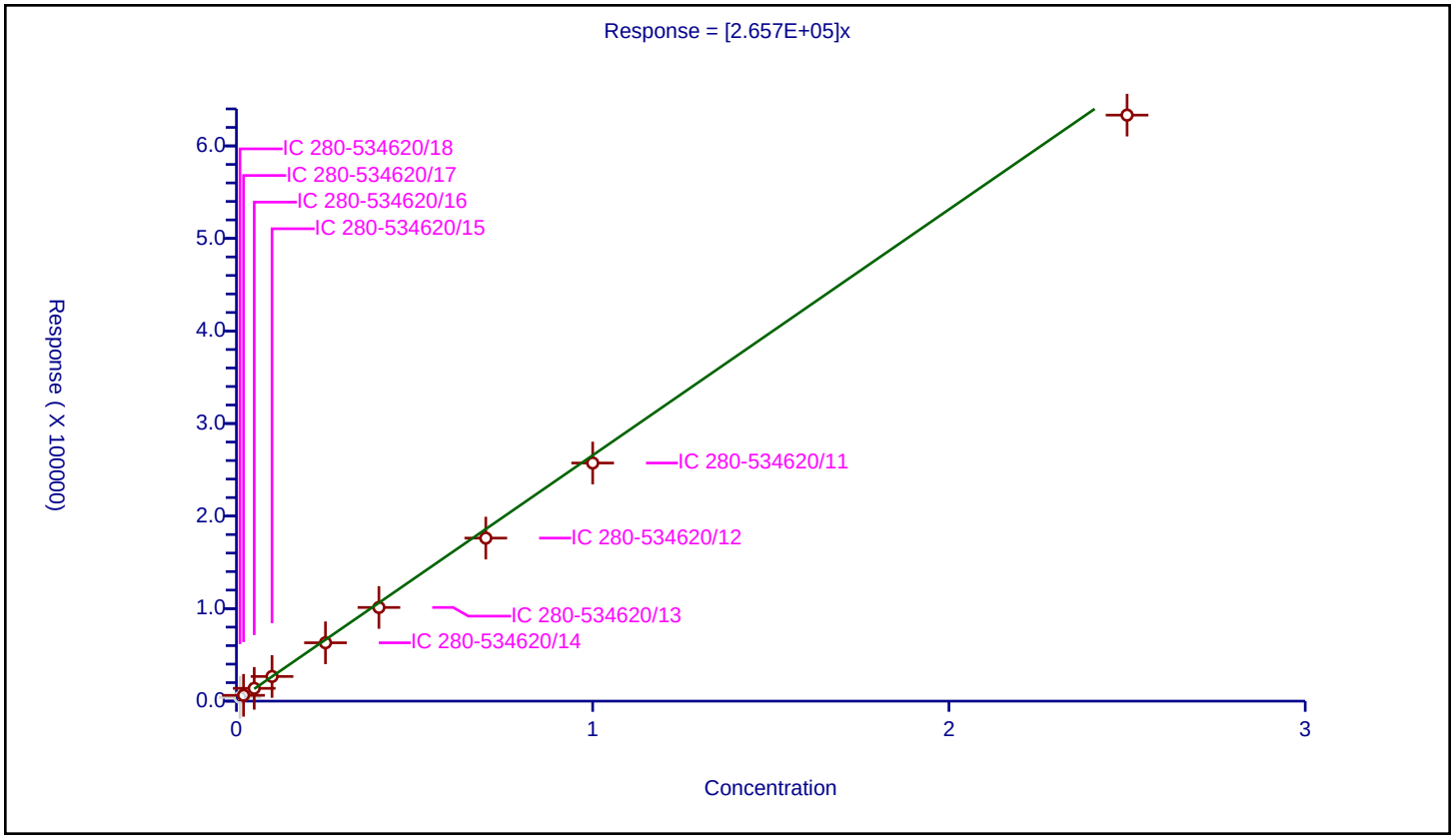
Curve Coefficients

Intercept:	0
Slope:	2.657E+05

Error Coefficients

Standard Error:	12800
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	4082.0			408200.0	N
2	IC 280-534620/17	0.02	6280.0			314000.0	Y
3	IC 280-534620/16	0.05	13836.0			276720.0	Y
4	IC 280-534620/15	0.1	26678.0			266780.0	Y
5	IC 280-534620/14	0.25	63081.0			252324.0	Y
6	IC 280-534620/13	0.4	101248.0			253120.0	Y
7	IC 280-534620/12	0.7	176180.0			251685.714286	Y
8	IC 280-534620/11	1.0	257324.0			257324.0	Y
9	IC 280-534620/10	2.5	633300.0			253320.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

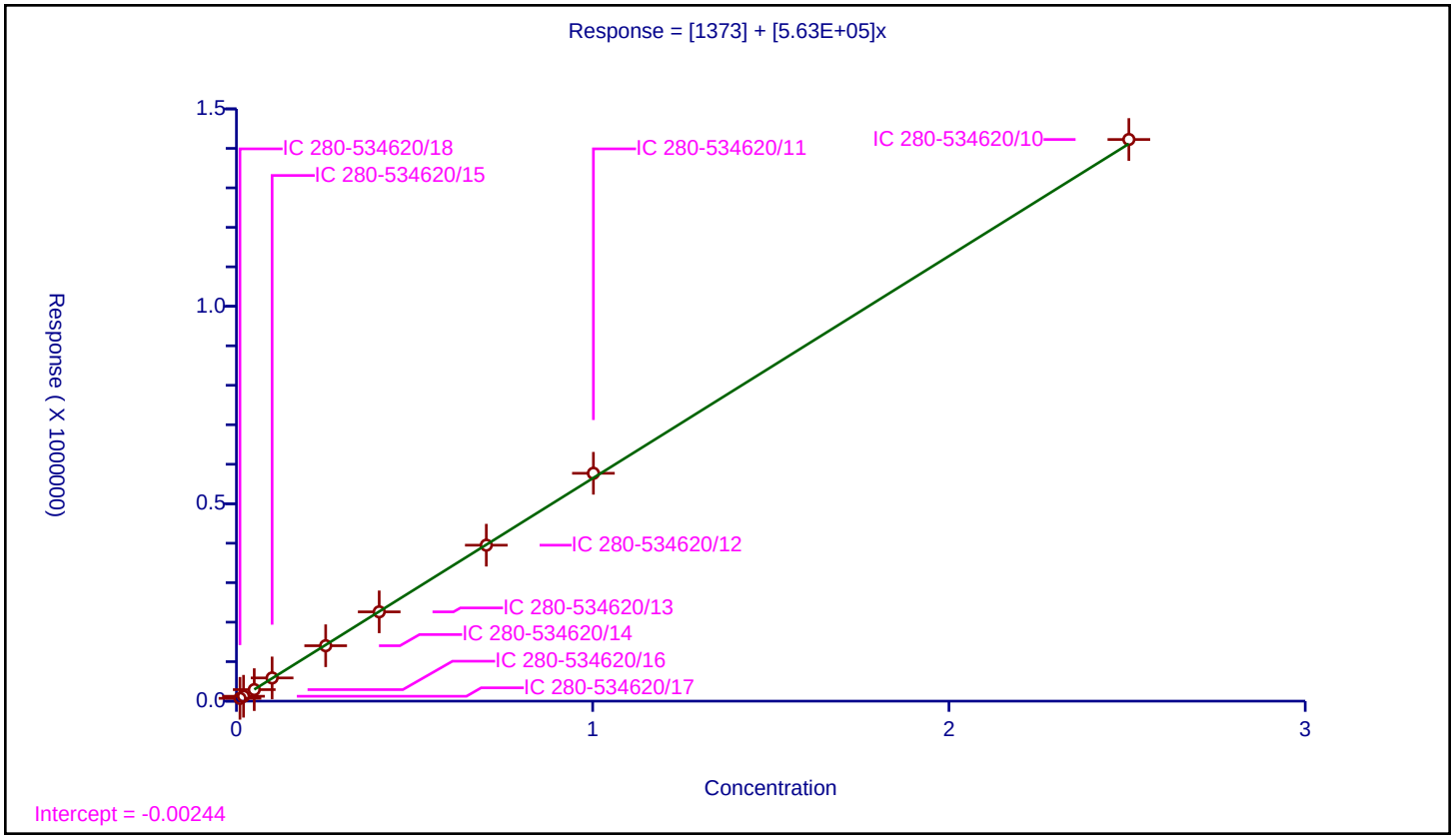
Curve Coefficients

Intercept:	1373
Slope:	5.63E+05

Error Coefficients

Standard Error:	6130
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7085.0			707085.828343	Y
2	IC 280-534620/17	0.02004	12411.0			619311.377246	Y
3	IC 280-534620/16	0.0501	29142.0			581676.646707	Y
4	IC 280-534620/15	0.1002	58764.0			586467.065868	Y
5	IC 280-534620/14	0.2505	140347.0			560267.46507	Y
6	IC 280-534620/13	0.4008	226148.0			564241.516966	Y
7	IC 280-534620/12	0.7014	394975.0			563123.752495	Y
8	IC 280-534620/11	1.002	577120.0			575968.063872	Y
9	IC 280-534620/10	2.505	1422490.0			567860.279441	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

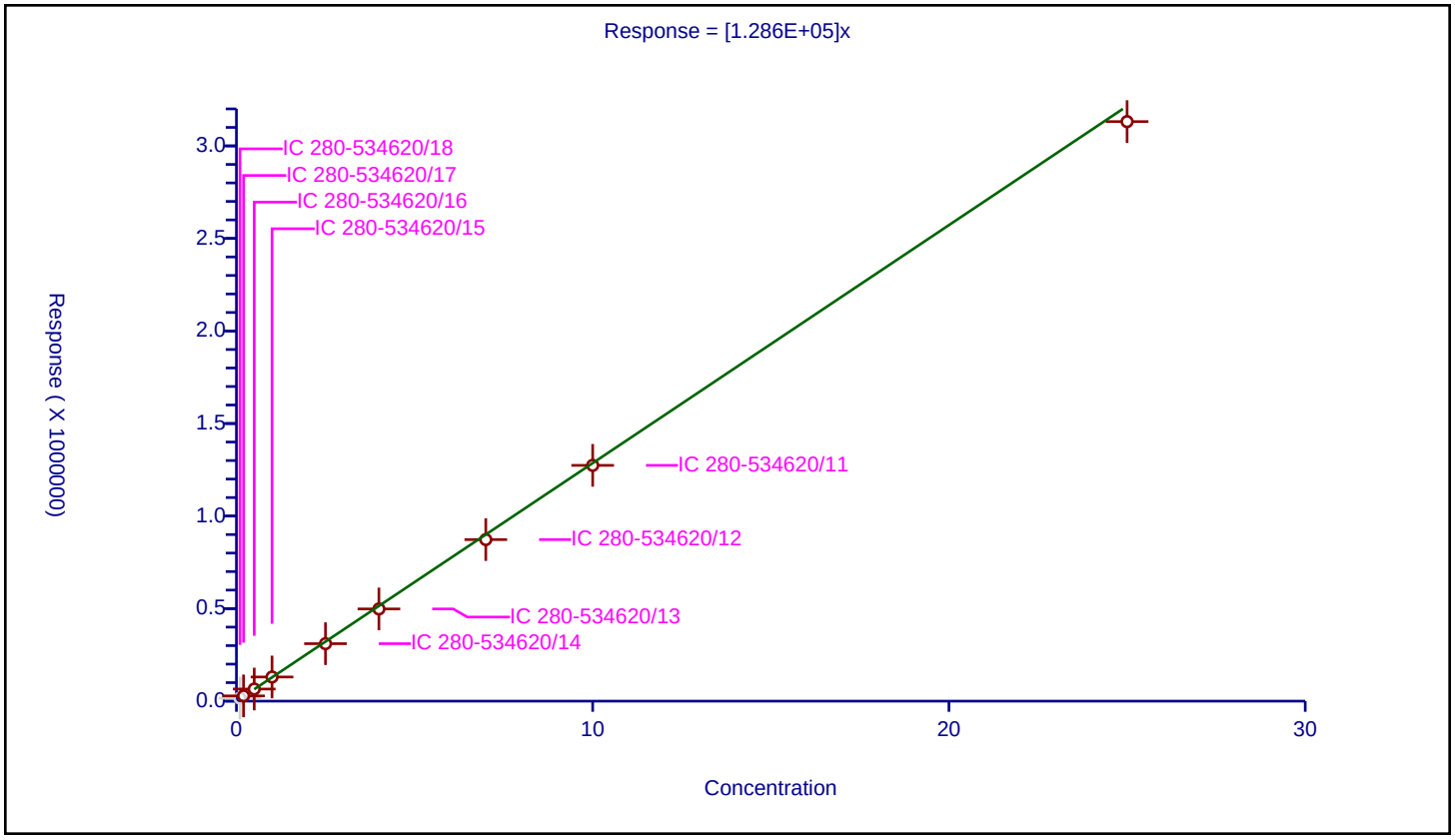
Curve Coefficients

Intercept:	0
Slope:	1.286E+05

Error Coefficients

Standard Error:	34400
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	16401.0			164010.0	N
2	IC 280-534620/17	0.2	28299.0			141495.0	Y
3	IC 280-534620/16	0.5	65416.0			130832.0	Y
4	IC 280-534620/15	1.0	130447.0			130447.0	Y
5	IC 280-534620/14	2.5	310480.0			124192.0	Y
6	IC 280-534620/13	4.0	498088.0			124522.0	Y
7	IC 280-534620/12	7.0	872941.0			124705.857143	Y
8	IC 280-534620/11	10.0	1273886.0			127388.6	Y
9	IC 280-534620/10	25.0	3131400.0			125256.0	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

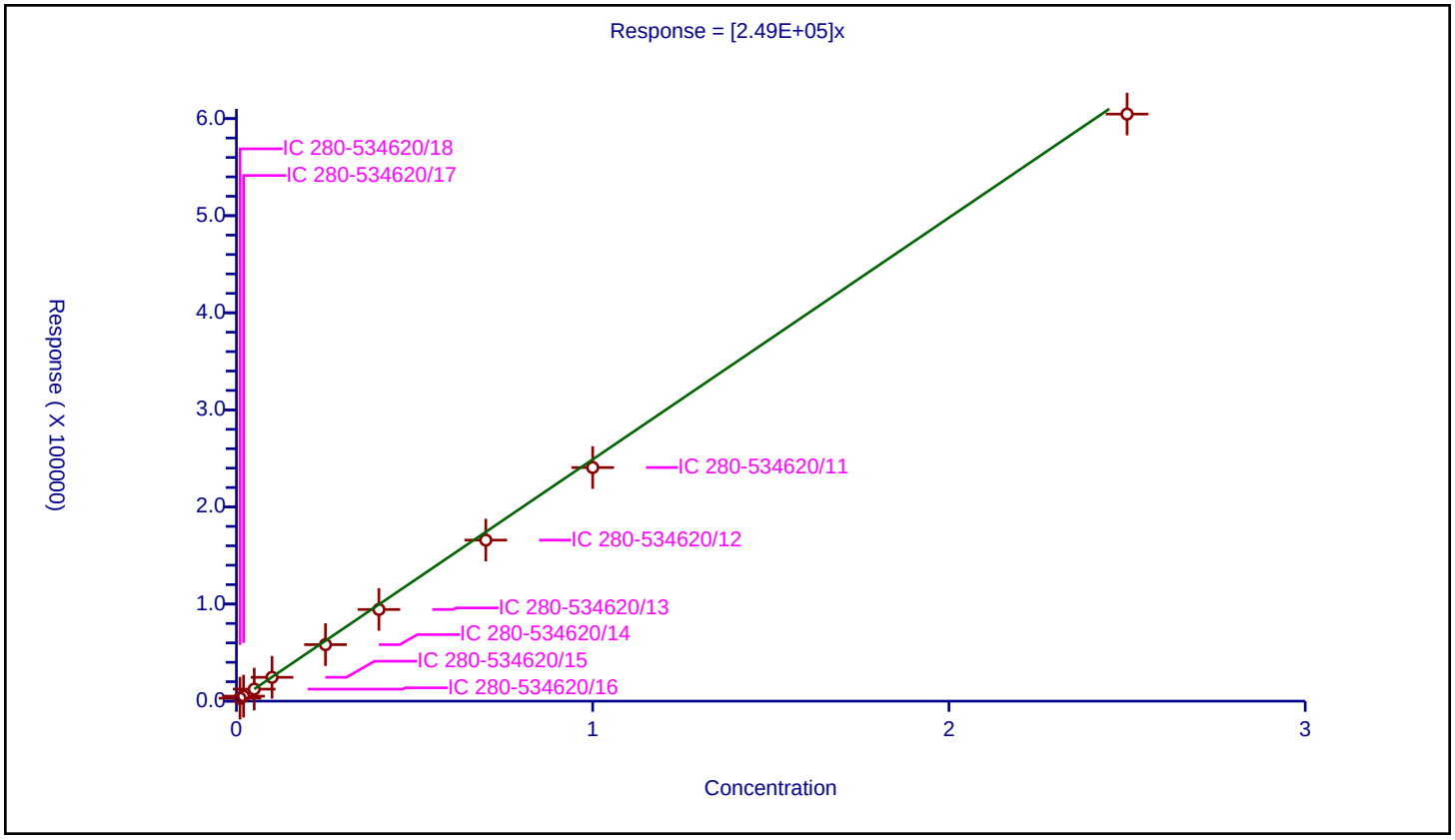
Curve Coefficients

Intercept:	0
Slope:	2.49E+05

Error Coefficients

Standard Error:	7910
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	3022.0			302200.0	Y
2	IC 280-534620/17	0.02	5151.0			257550.0	Y
3	IC 280-534620/16	0.05	12373.0			247460.0	Y
4	IC 280-534620/15	0.1	24528.0			245280.0	Y
5	IC 280-534620/14	0.25	58191.0			232764.0	Y
6	IC 280-534620/13	0.4	94418.0			236045.0	Y
7	IC 280-534620/12	0.7	165863.0			236947.142857	Y
8	IC 280-534620/11	1.0	240595.0			240595.0	Y
9	IC 280-534620/10	2.5	604653.0			241861.2	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

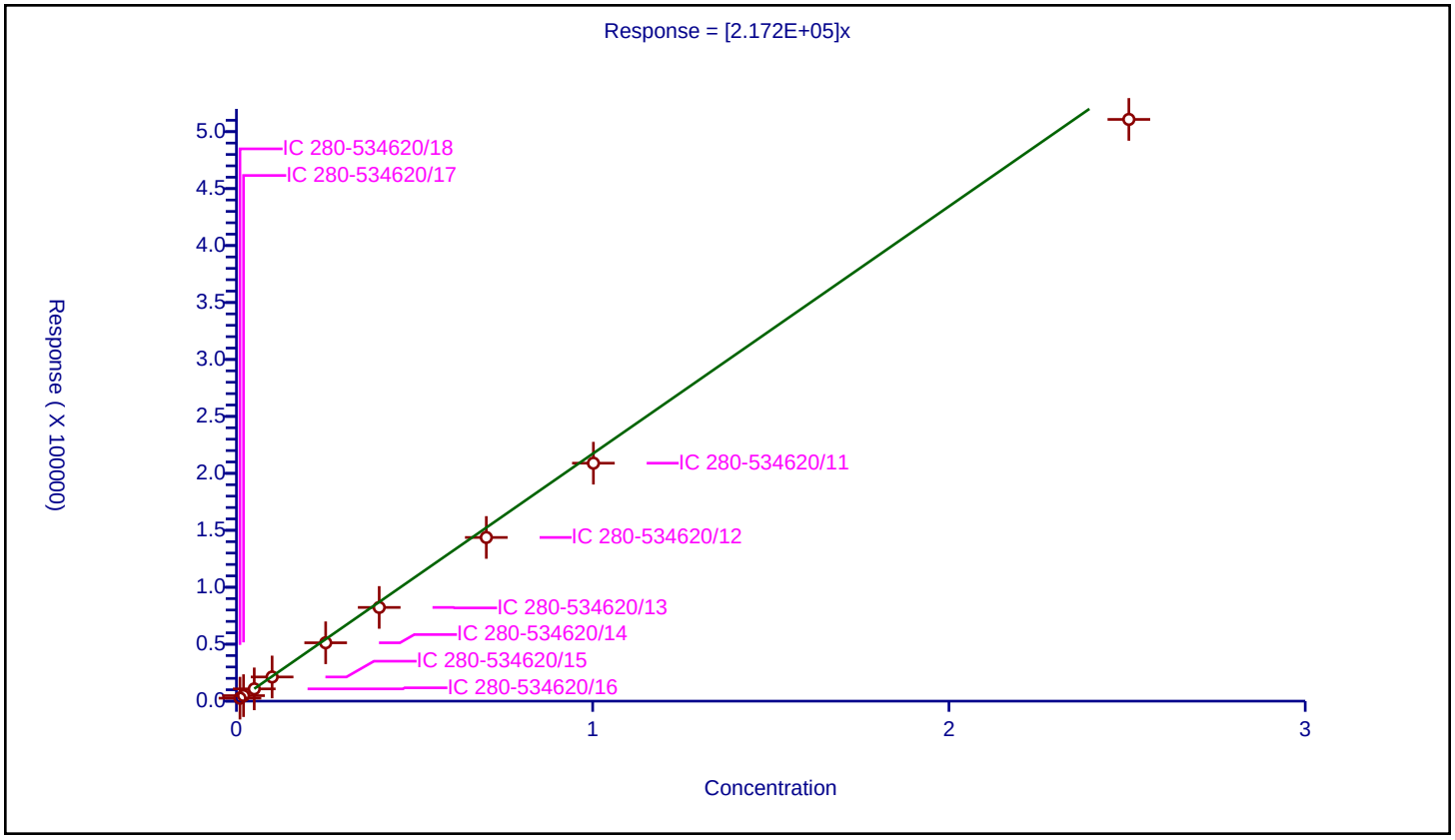
Curve Coefficients

Intercept:	0
Slope:	2.172E+05

Error Coefficients

Standard Error:	12700
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	2608.0			260279.441118	Y
2	IC 280-534620/17	0.02004	4823.0			240668.662675	Y
3	IC 280-534620/16	0.0501	10760.0			214770.459082	Y
4	IC 280-534620/15	0.1002	21221.0			211786.427146	Y
5	IC 280-534620/14	0.2505	51245.0			204570.858283	Y
6	IC 280-534620/13	0.4008	82281.0			205291.916168	Y
7	IC 280-534620/12	0.7014	143722.0			204907.328201	Y
8	IC 280-534620/11	1.002	208929.0			208511.976048	Y
9	IC 280-534620/10	2.505	510755.0			203894.211577	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

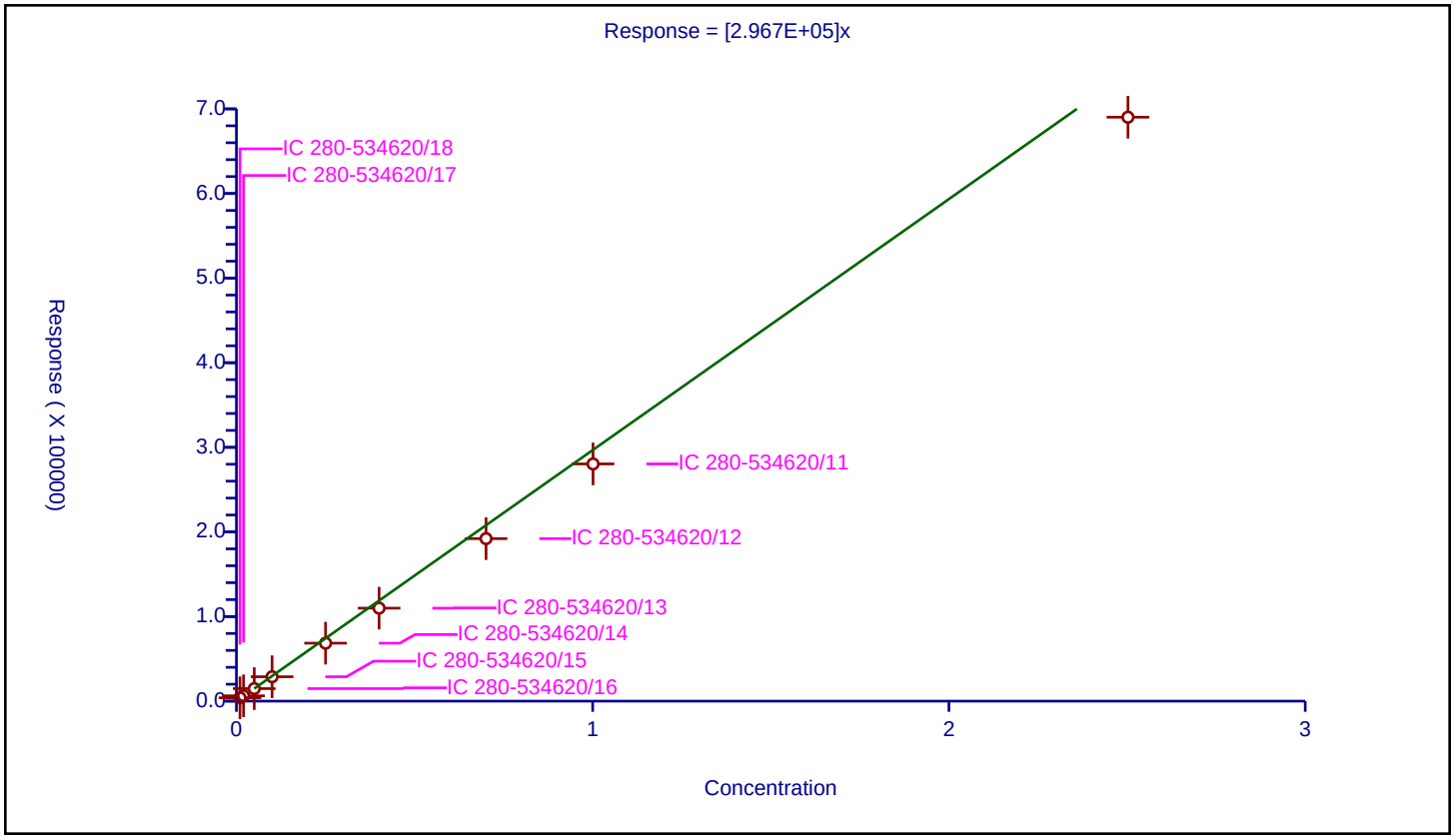
Curve Coefficients

Intercept:	0
Slope:	2.967E+05

Error Coefficients

Standard Error:	20600
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3954.0			395004.995005	Y
2	IC 280-534620/17	0.02002	6276.0			313486.513487	Y
3	IC 280-534620/16	0.05005	14802.0			295744.255744	Y
4	IC 280-534620/15	0.1001	28819.0			287902.097902	Y
5	IC 280-534620/14	0.25025	68509.0			273762.237762	Y
6	IC 280-534620/13	0.4004	109890.0			274450.549451	Y
7	IC 280-534620/12	0.7007	192075.0			274118.738404	Y
8	IC 280-534620/11	1.001	280366.0			280085.914086	Y
9	IC 280-534620/10	2.5025	690165.0			275790.20979	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

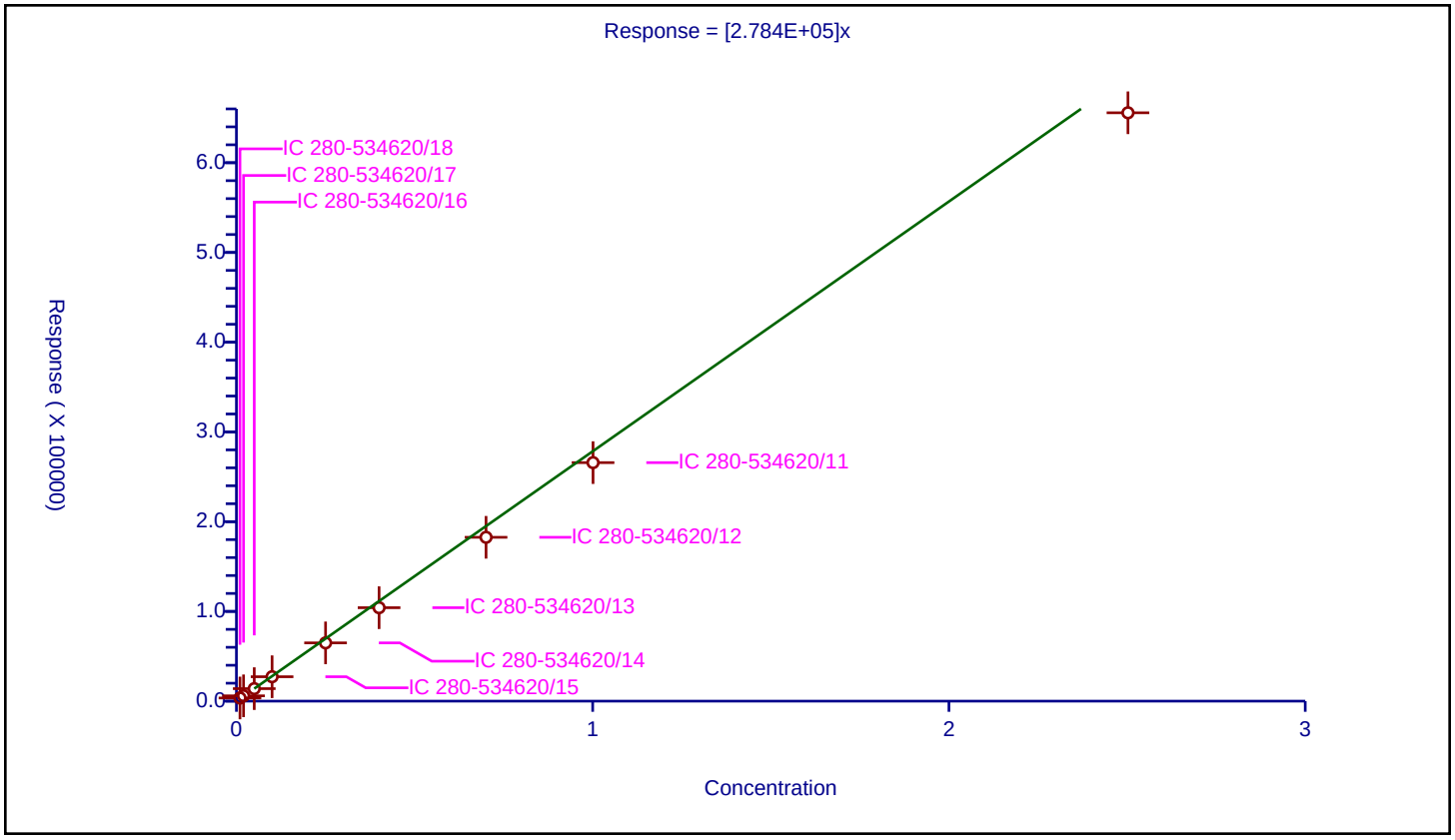
Curve Coefficients

Intercept:	0
Slope:	2.784E+05

Error Coefficients

Standard Error:	16100
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3517.0			351348.651349	Y
2	IC 280-534620/17	0.02002	5928.0			296103.896104	Y
3	IC 280-534620/16	0.05005	13943.0			278581.418581	Y
4	IC 280-534620/15	0.1001	27212.0			271848.151848	Y
5	IC 280-534620/14	0.25025	64933.0			259472.527473	Y
6	IC 280-534620/13	0.4004	104128.0			260059.94006	Y
7	IC 280-534620/12	0.7007	182587.0			260577.993435	Y
8	IC 280-534620/11	1.001	265803.0			265537.462537	Y
9	IC 280-534620/10	2.5025	655662.0			262002.797203	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

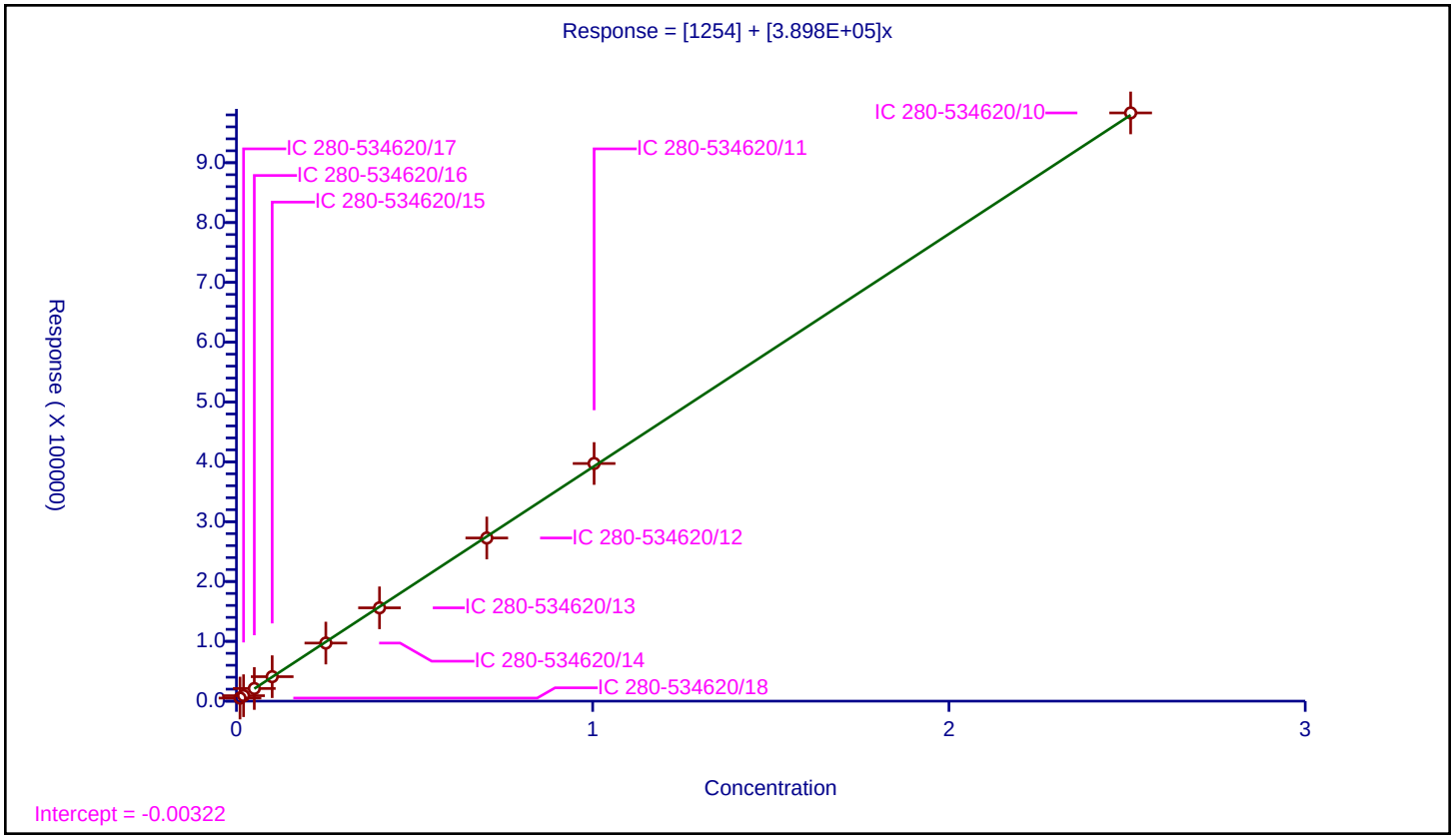
Curve Coefficients

Intercept:	1254
Slope:	3.898E+05

Error Coefficients

Standard Error:	2610
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5148.0			512749.003984	Y
2	IC 280-534620/17	0.02008	9114.0			453884.462151	Y
3	IC 280-534620/16	0.0502	21111.0			420537.848606	Y
4	IC 280-534620/15	0.1004	40904.0			407410.358566	Y
5	IC 280-534620/14	0.251	97071.0			386737.051793	Y
6	IC 280-534620/13	0.4016	155961.0			388349.103586	Y
7	IC 280-534620/12	0.7028	272718.0			388044.963005	Y
8	IC 280-534620/11	1.004	397243.0			395660.358566	Y
9	IC 280-534620/10	2.51	983275.0			391743.027888	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

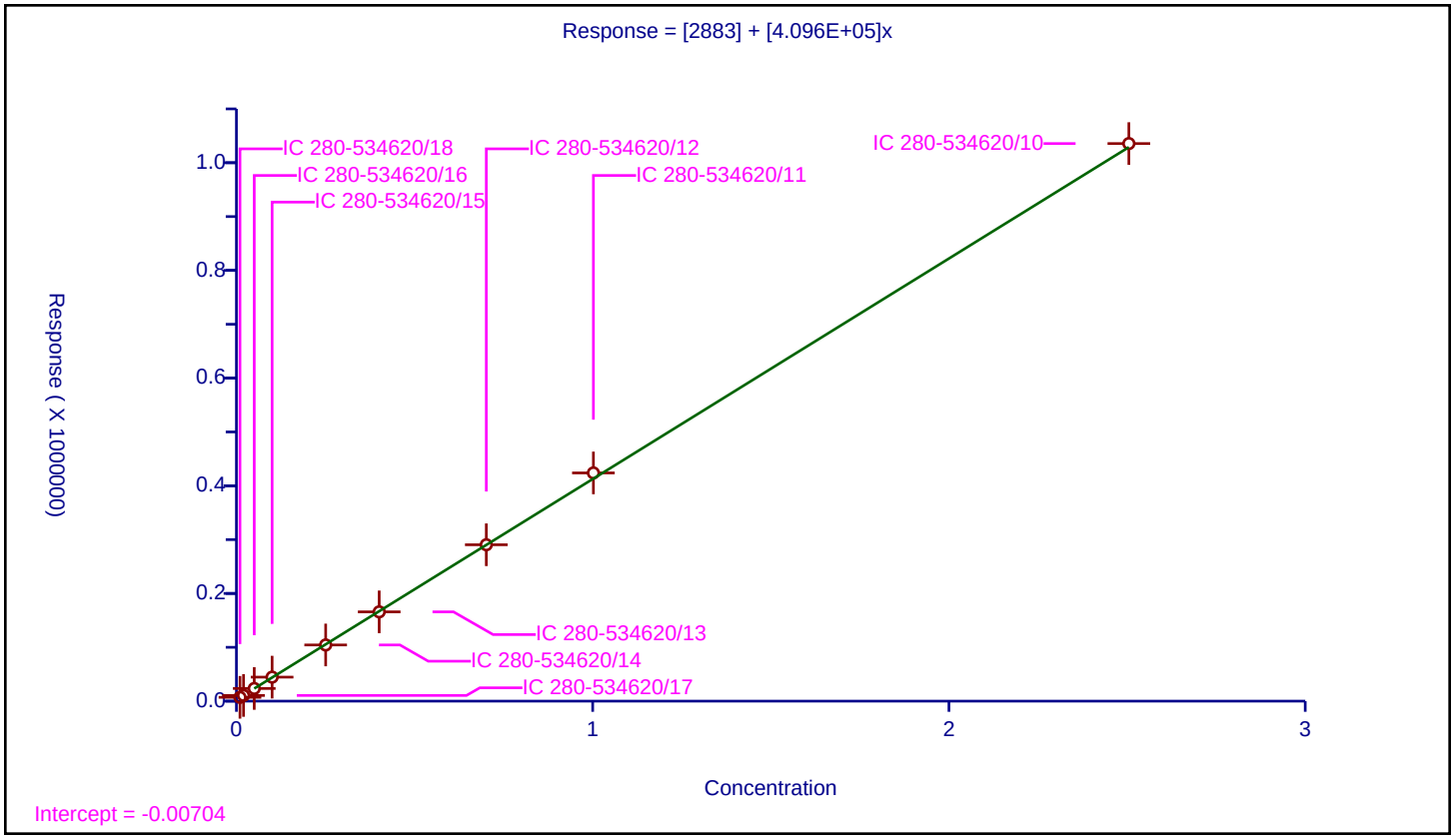
Curve Coefficients

Intercept:	2883
Slope:	4.096E+05

Error Coefficients

Standard Error:	4780
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7116.0			710179.640719	Y
2	IC 280-534620/17	0.02004	10540.0			525948.103792	Y
3	IC 280-534620/16	0.0501	23506.0			469181.636727	Y
4	IC 280-534620/15	0.1002	44594.0			445049.9002	Y
5	IC 280-534620/14	0.2505	104344.0			416542.914172	Y
6	IC 280-534620/13	0.4008	165828.0			413742.51497	Y
7	IC 280-534620/12	0.7014	290458.0			414111.776447	Y
8	IC 280-534620/11	1.002	423869.0			423022.954092	Y
9	IC 280-534620/10	2.505	1035616.0			413419.560878	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

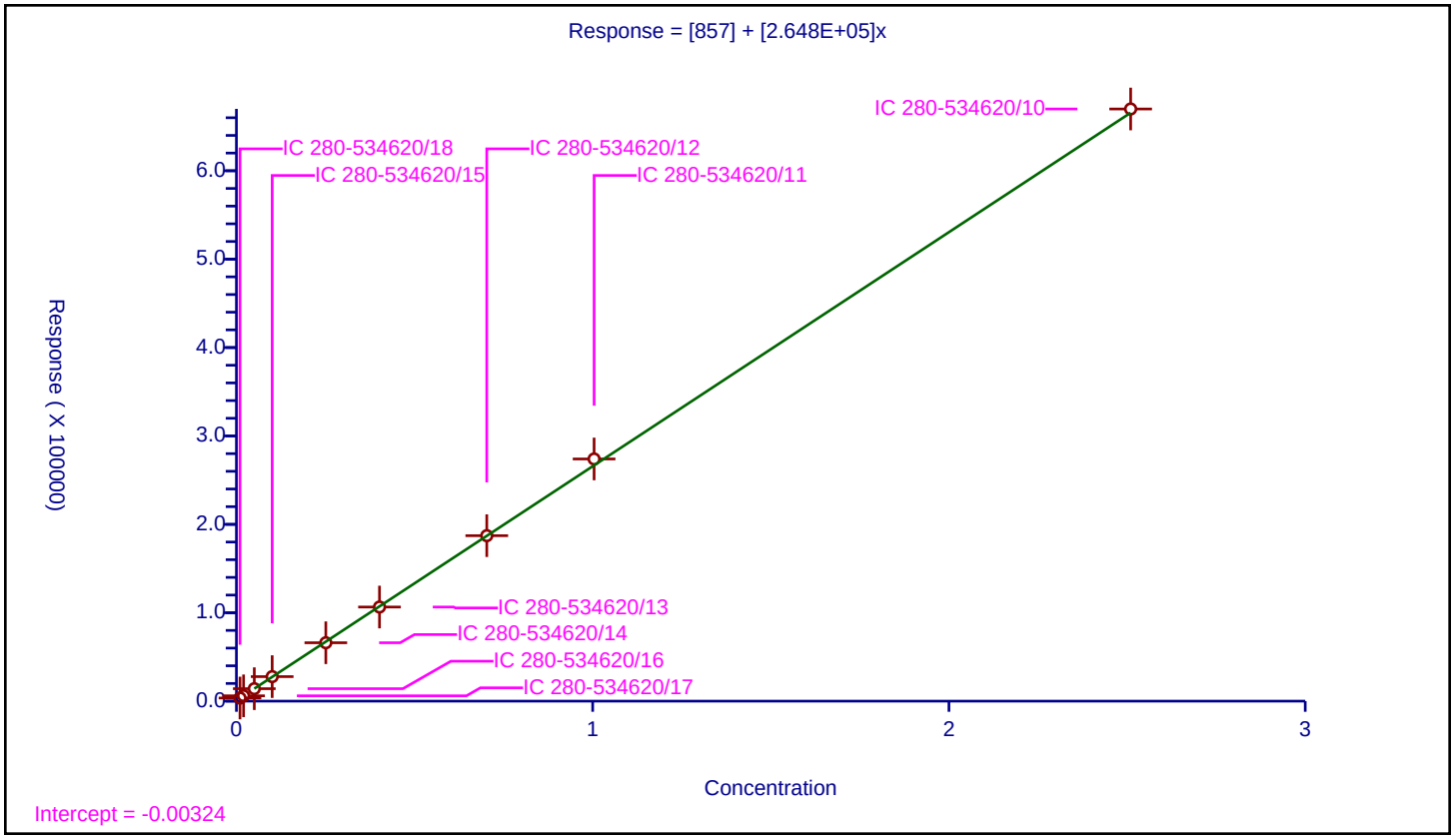
Curve Coefficients

Intercept:	857
Slope:	2.648E+05

Error Coefficients

Standard Error:	3220
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	3555.0			354083.665339	Y
2	IC 280-534620/17	0.02008	6026.0			300099.601594	Y
3	IC 280-534620/16	0.0502	14081.0			280498.007968	Y
4	IC 280-534620/15	0.1004	27721.0			276105.577689	Y
5	IC 280-534620/14	0.251	66062.0			263195.219124	Y
6	IC 280-534620/13	0.4016	106452.0			265069.721116	Y
7	IC 280-534620/12	0.7028	187184.0			266340.352874	Y
8	IC 280-534620/11	1.004	273958.0			272866.533865	Y
9	IC 280-534620/10	2.51	669889.0			266888.047809	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

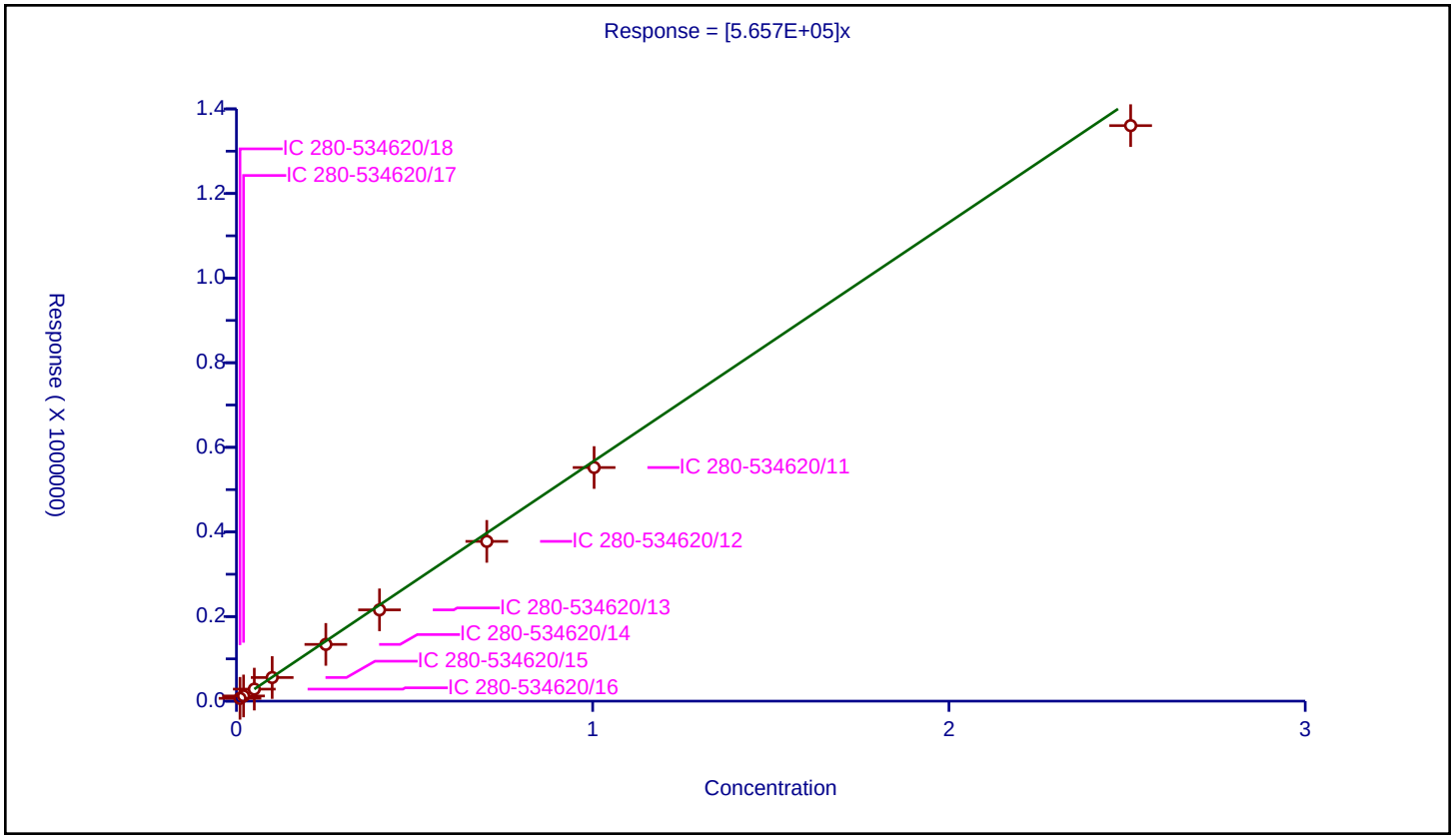
Curve Coefficients

Intercept:	0
Slope:	5.657E+05

Error Coefficients

Standard Error:	23400
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	6619.0			659262.948207	Y
2	IC 280-534620/17	0.02008	12229.0			609013.944223	Y
3	IC 280-534620/16	0.0502	28396.0			565657.370518	Y
4	IC 280-534620/15	0.1004	55838.0			556155.378486	Y
5	IC 280-534620/14	0.251	134163.0			534513.944223	Y
6	IC 280-534620/13	0.4016	215819.0			537397.908367	Y
7	IC 280-534620/12	0.7028	377631.0			537323.562891	Y
8	IC 280-534620/11	1.004	552269.0			550068.7251	Y
9	IC 280-534620/10	2.51	1360486.0			542026.294821	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

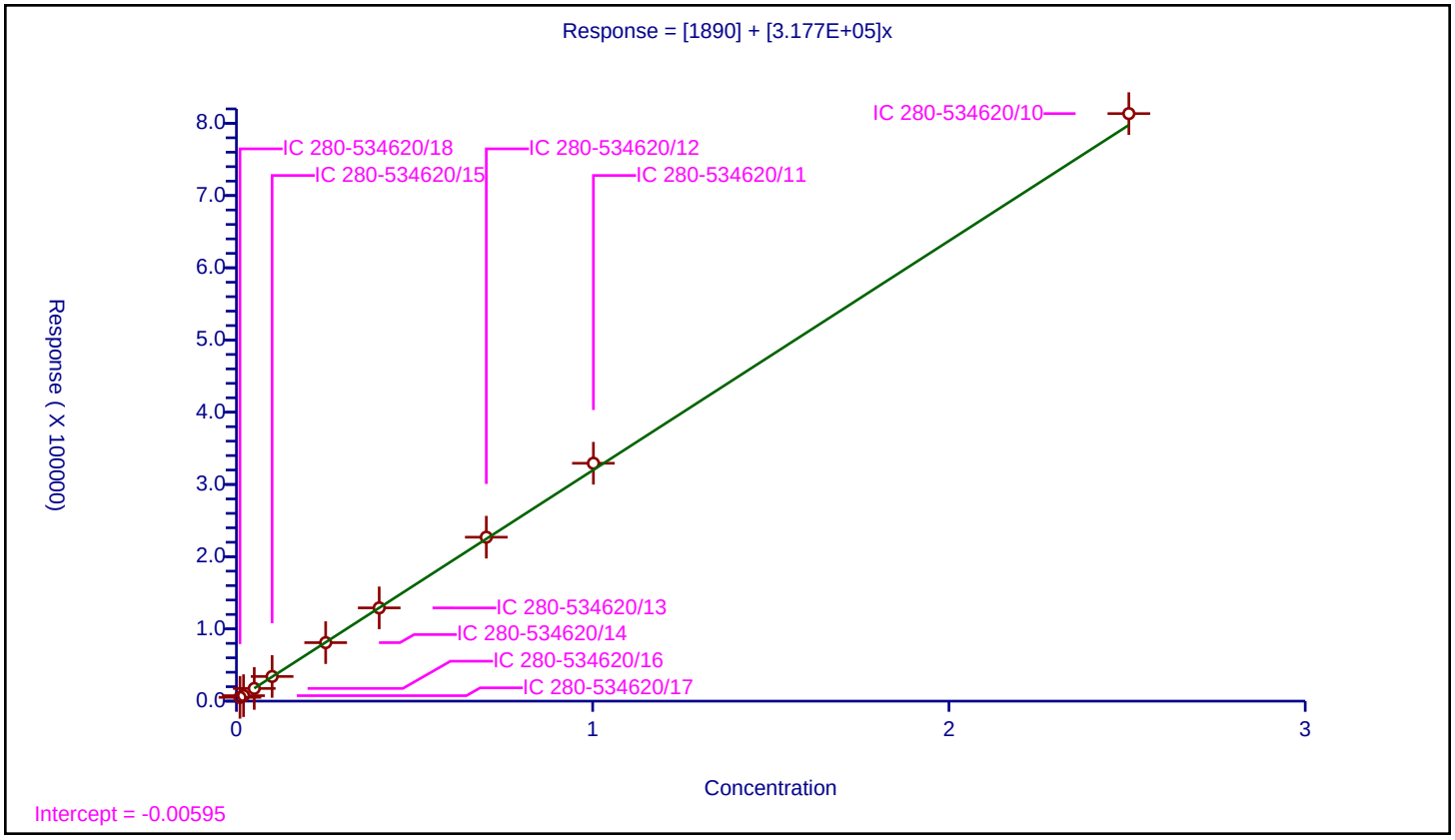
Curve Coefficients

Intercept:	1890
Slope:	3.177E+05

Error Coefficients

Standard Error:	6990
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	5245.0			523453.093812	Y
2	IC 280-534620/17	0.02004	7583.0			378393.213573	Y
3	IC 280-534620/16	0.0501	17573.0			350758.483034	Y
4	IC 280-534620/15	0.1002	34148.0			340798.403194	Y
5	IC 280-534620/14	0.2505	80996.0			323337.325349	Y
6	IC 280-534620/13	0.4008	129140.0			322205.588822	Y
7	IC 280-534620/12	0.7014	227001.0			323639.863131	Y
8	IC 280-534620/11	1.002	329366.0			328708.582834	Y
9	IC 280-534620/10	2.505	813489.0			324746.107784	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

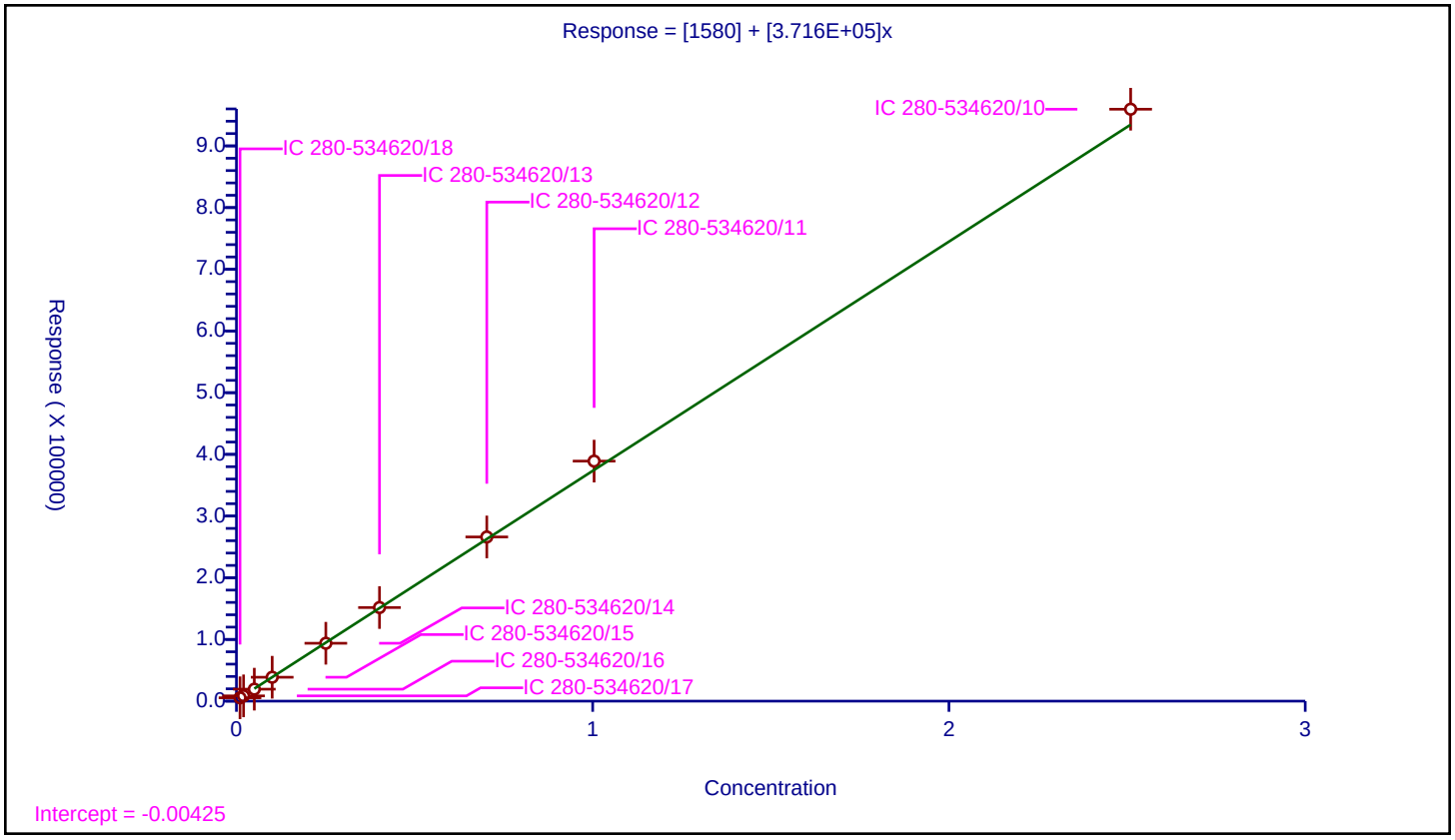
Curve Coefficients

Intercept:	1580
Slope:	3.716E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5469.0			544721.115538	Y
2	IC 280-534620/17	0.02008	8548.0			425697.211155	Y
3	IC 280-534620/16	0.0502	19400.0			386454.183267	Y
4	IC 280-534620/15	0.1004	38740.0			385856.573705	Y
5	IC 280-534620/14	0.251	93822.0			373792.828685	Y
6	IC 280-534620/13	0.4016	151709.0			377761.454183	Y
7	IC 280-534620/12	0.7028	266122.0			378659.647126	Y
8	IC 280-534620/11	1.004	389102.0			387551.792829	Y
9	IC 280-534620/10	2.51	959496.0			382269.322709	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

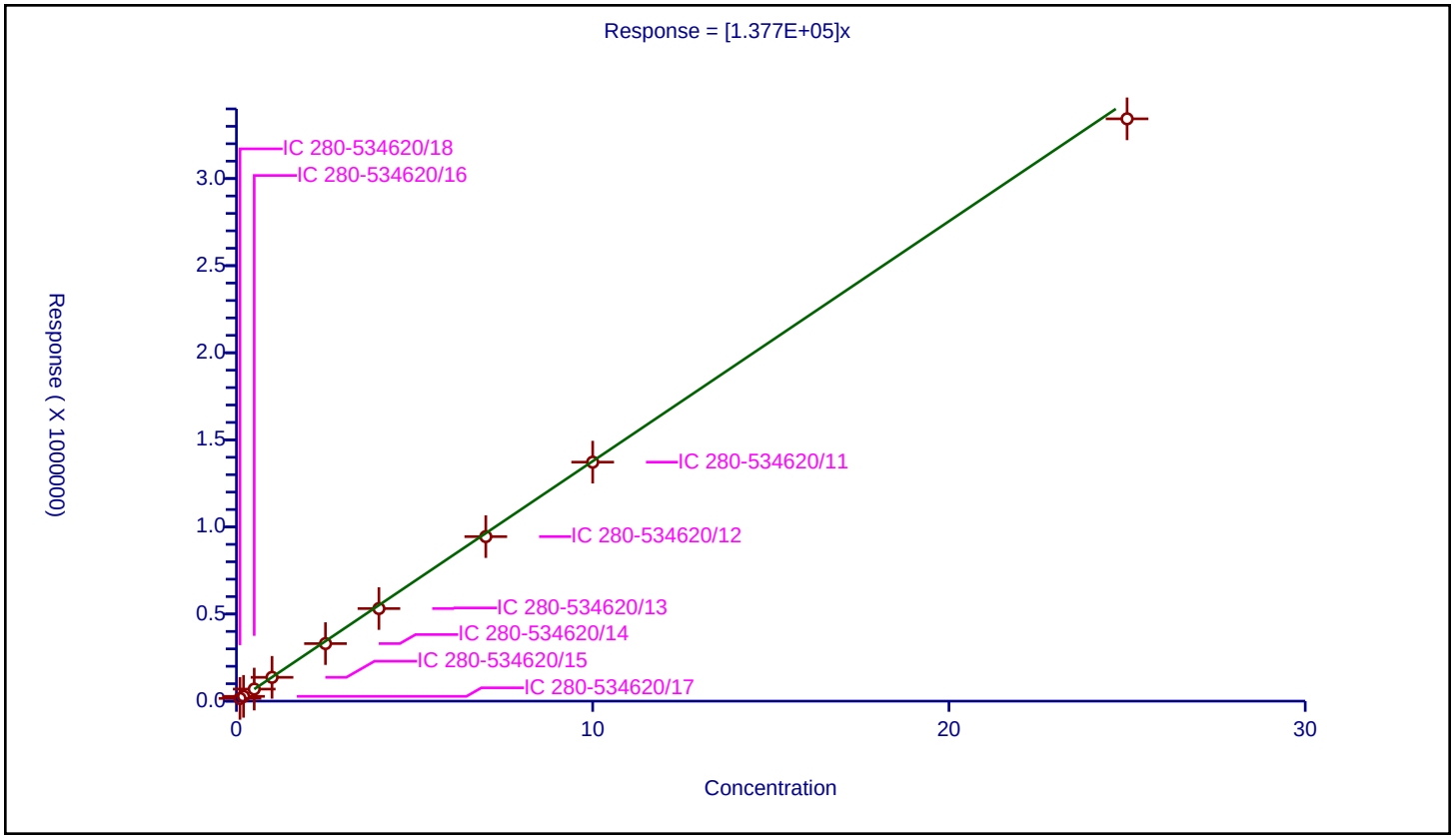
Curve Coefficients

Intercept:	0
Slope:	1.377E+05

Error Coefficients

Standard Error:	37200
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	15659.0			156590.0	Y
2	IC 280-534620/17	0.2	27436.0			137180.0	Y
3	IC 280-534620/16	0.5	69170.0			138340.0	Y
4	IC 280-534620/15	1.0	136676.0			136676.0	Y
5	IC 280-534620/14	2.5	330309.0			132123.6	Y
6	IC 280-534620/13	4.0	531566.0			132891.5	Y
7	IC 280-534620/12	7.0	944599.0			134942.714286	Y
8	IC 280-534620/11	10.0	1371986.0			137198.6	Y
9	IC 280-534620/10	25.0	3343027.0			133721.08	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1 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.: 280-148902-1 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.: 280-148902-1 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

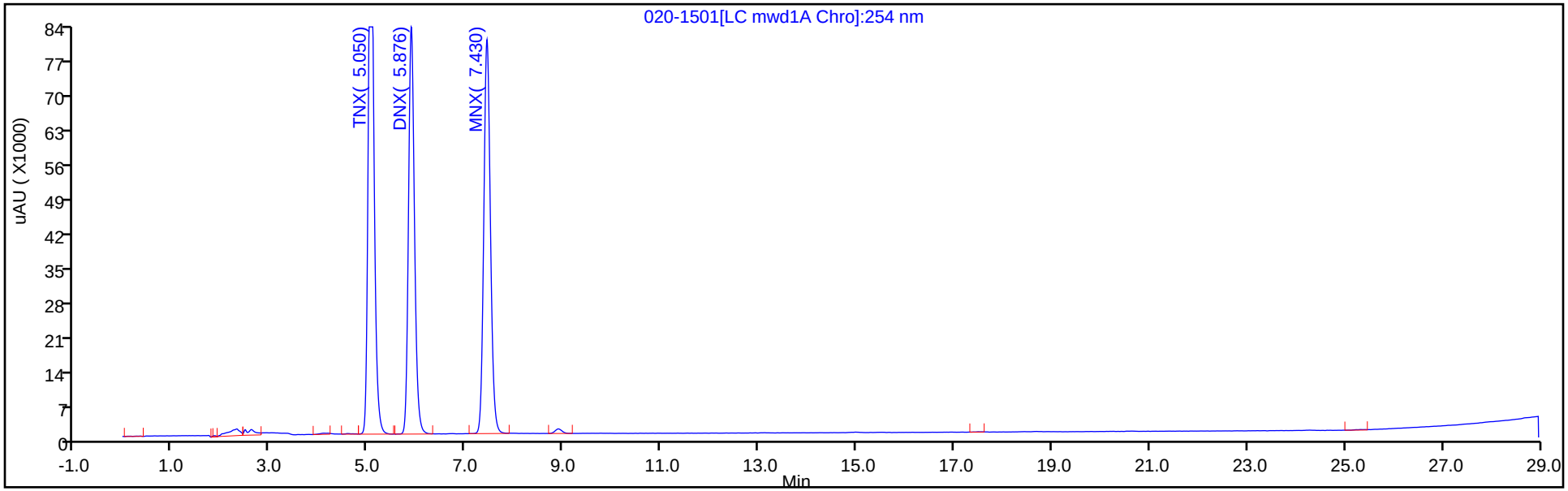
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

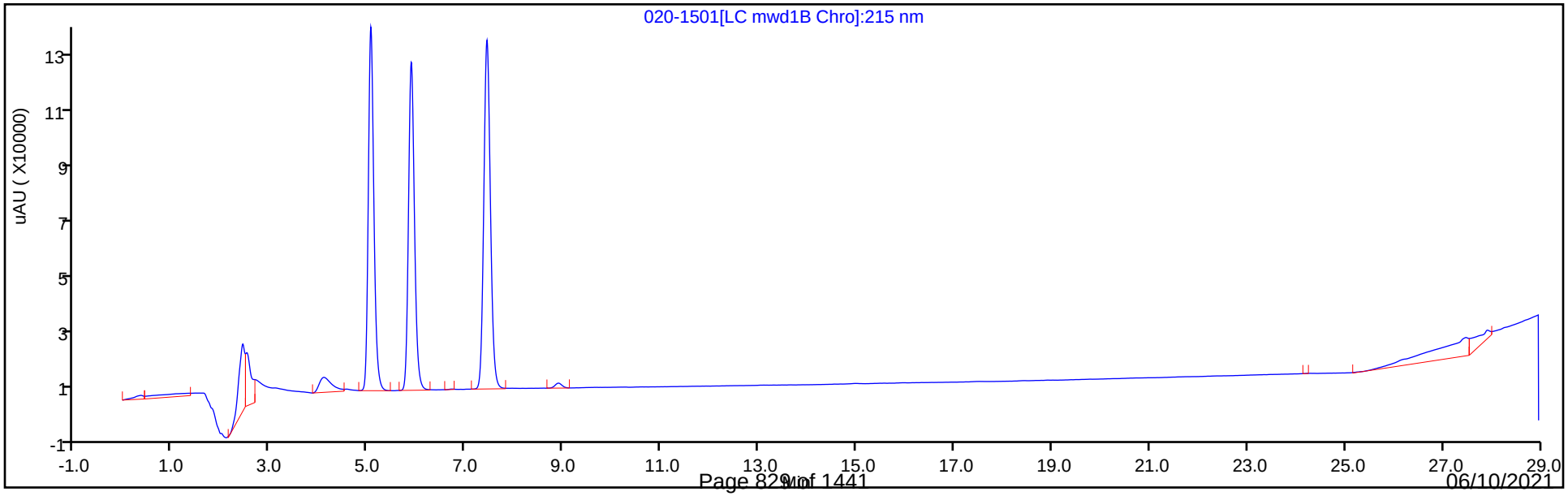
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\020-1501.D

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

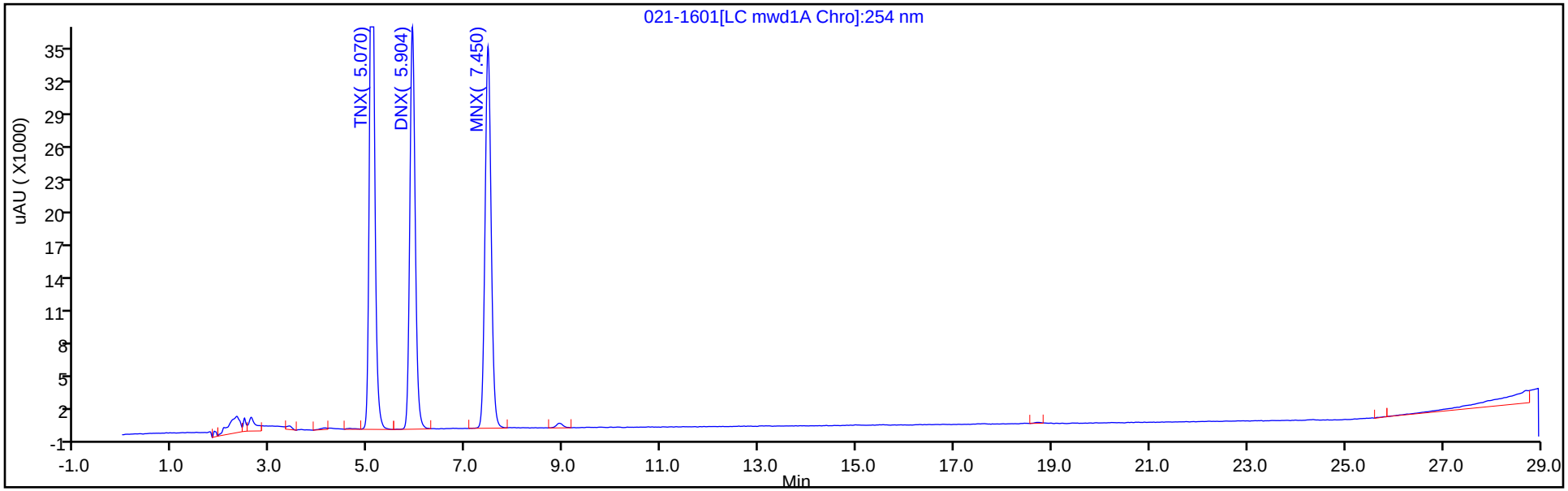
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

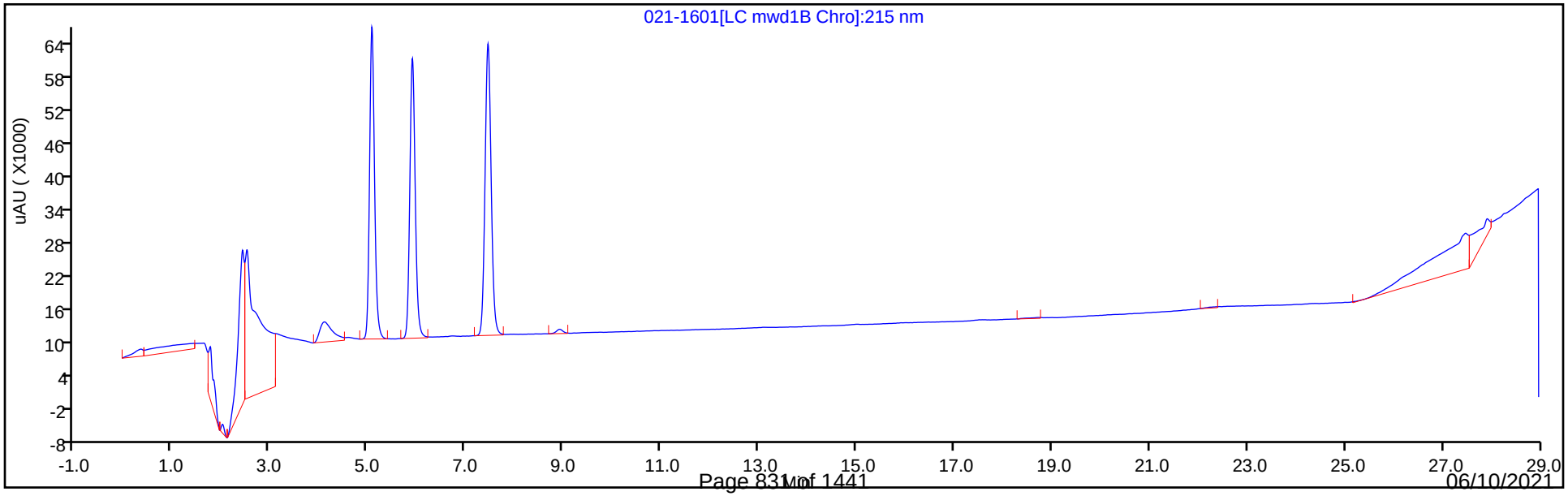
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D

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

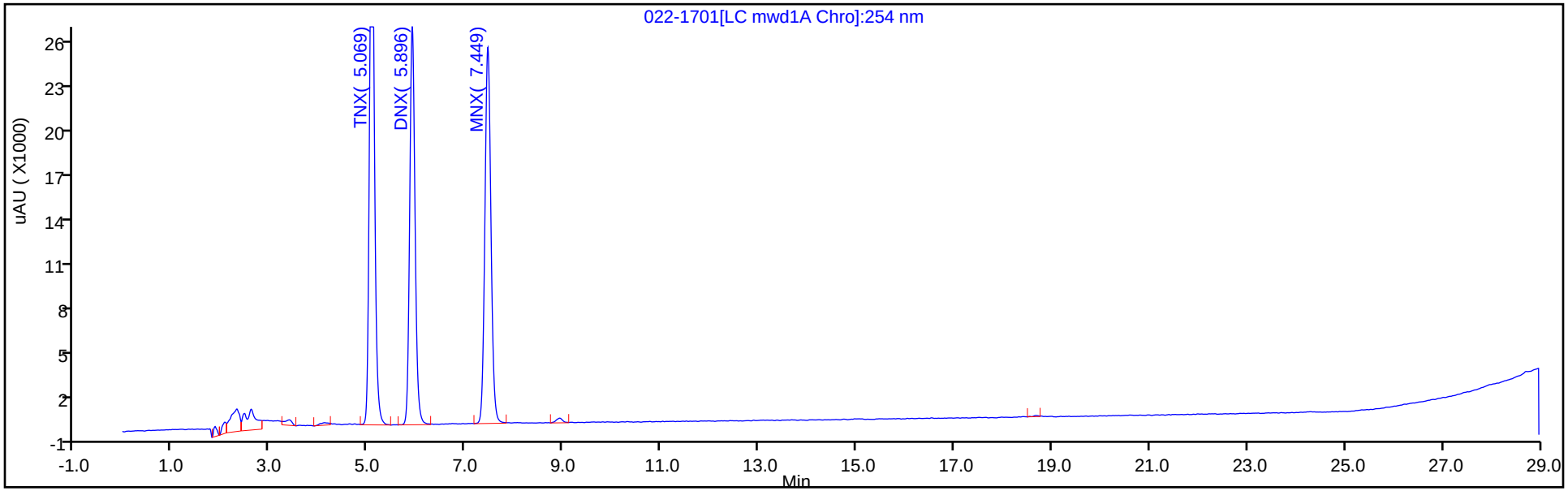
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

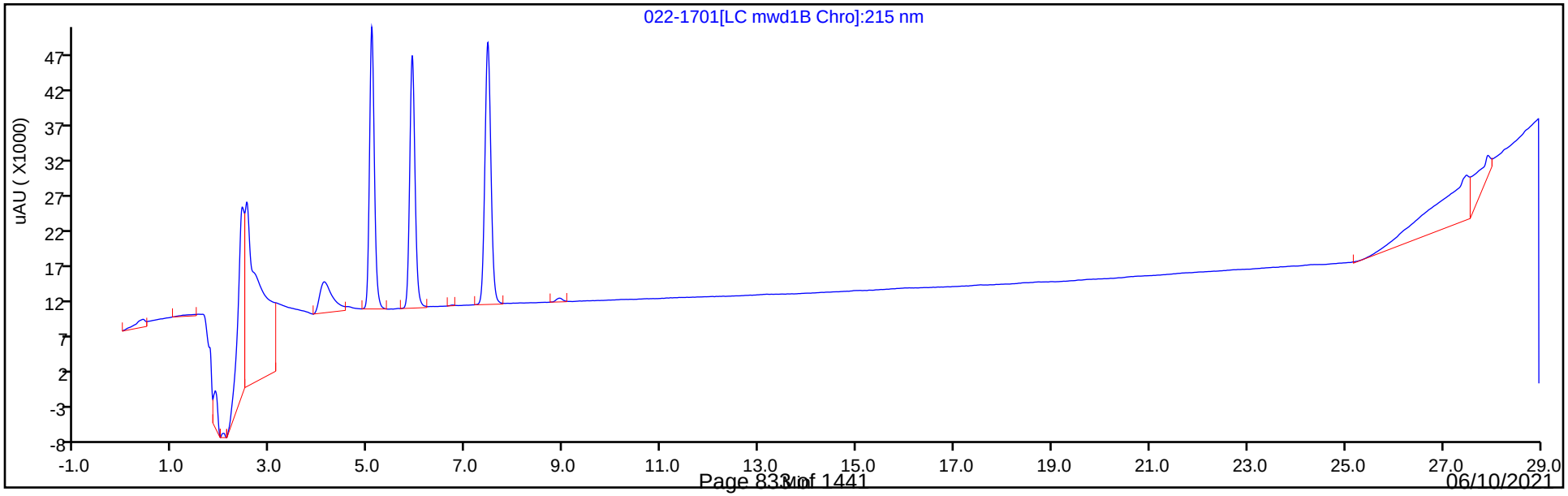
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D

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

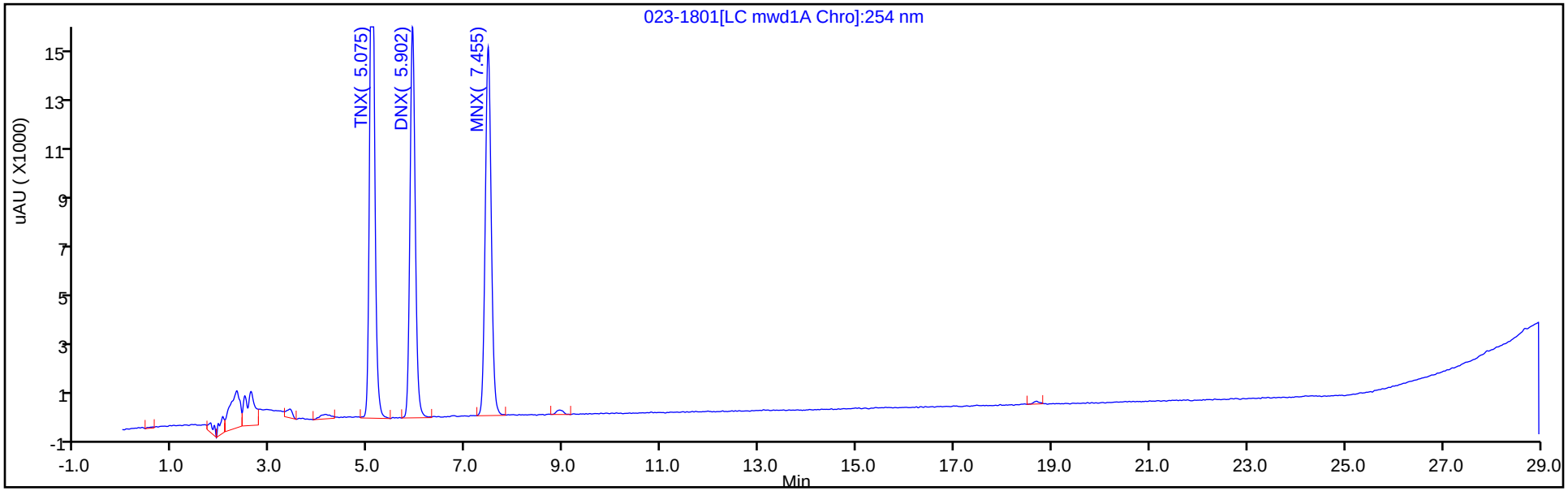
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

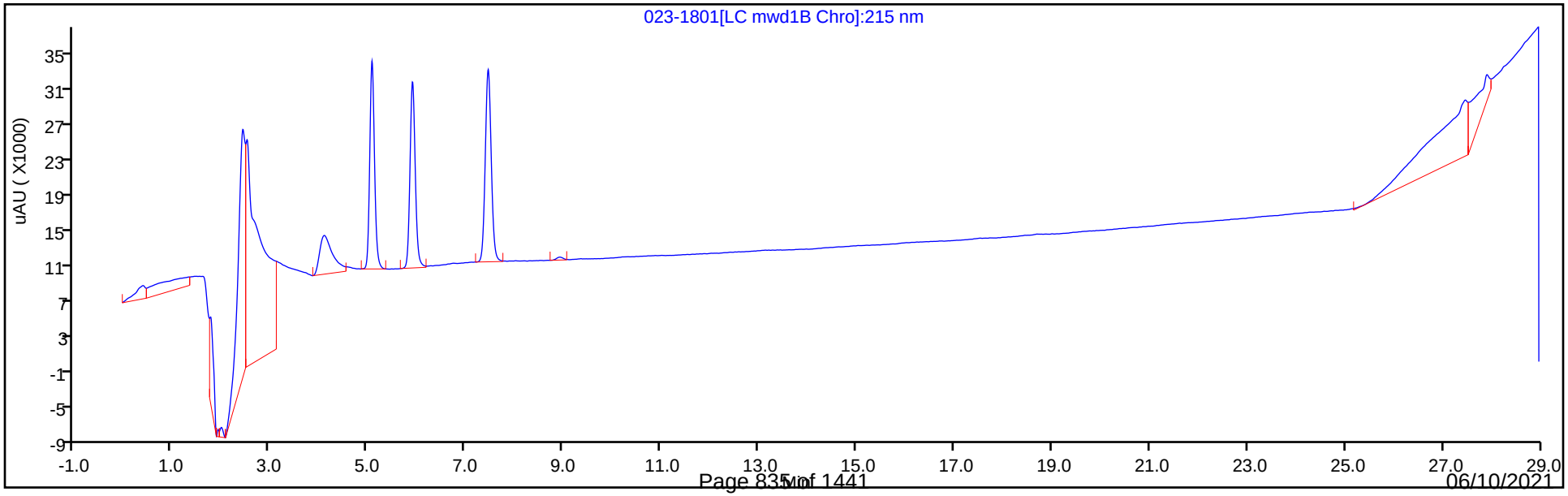
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D

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

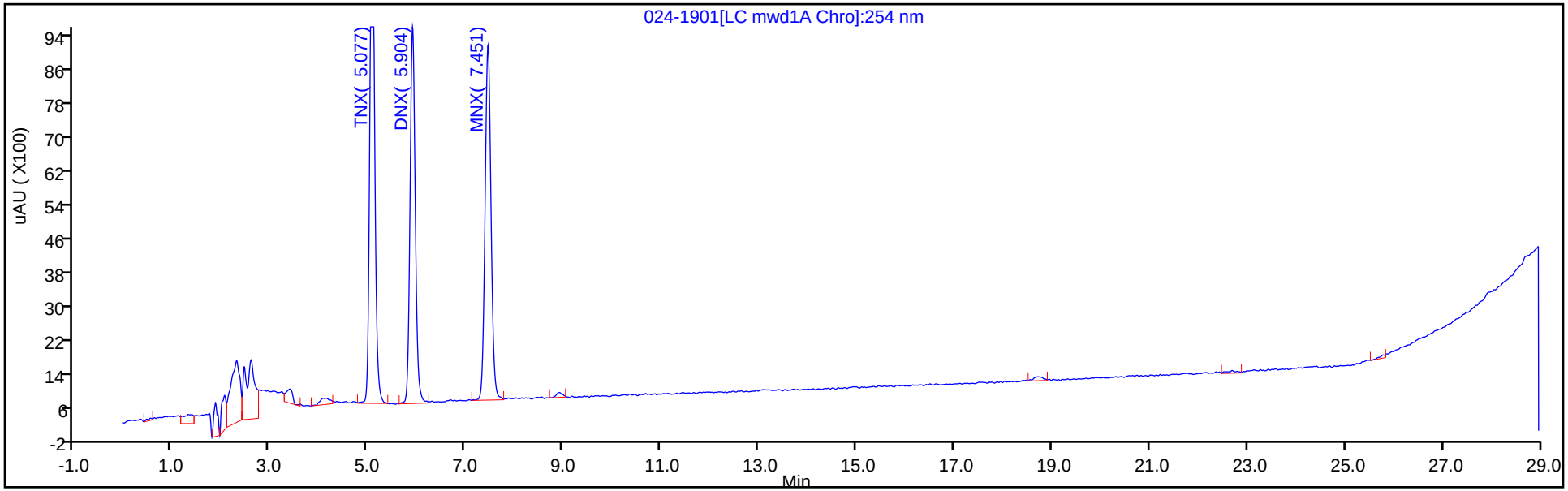
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

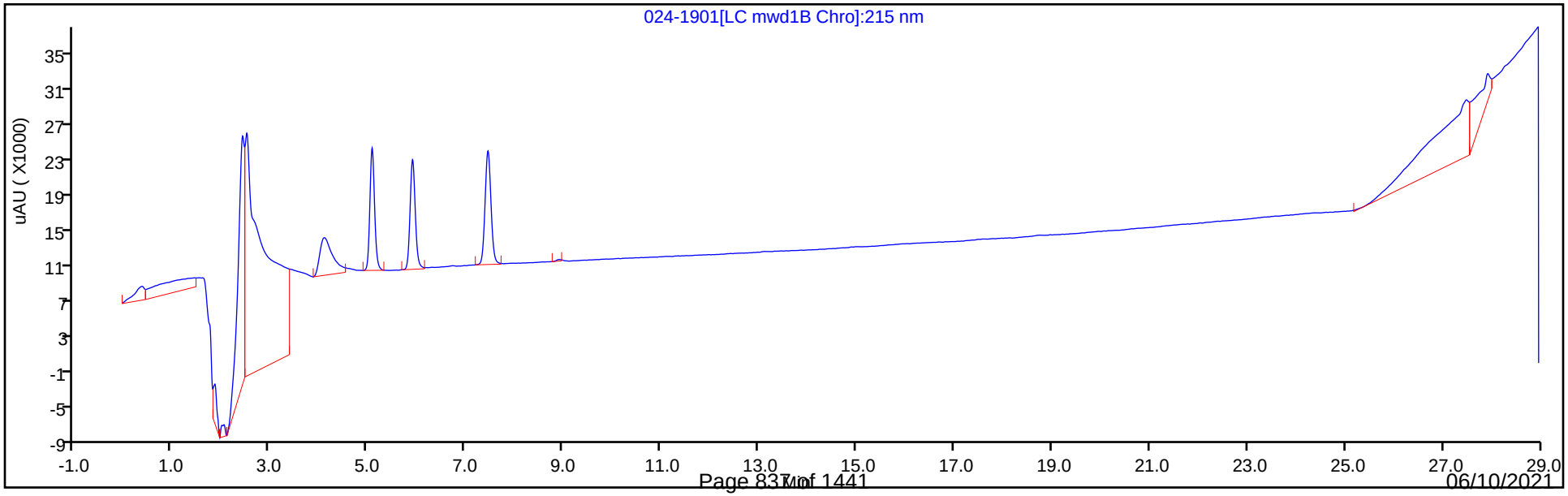
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D

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

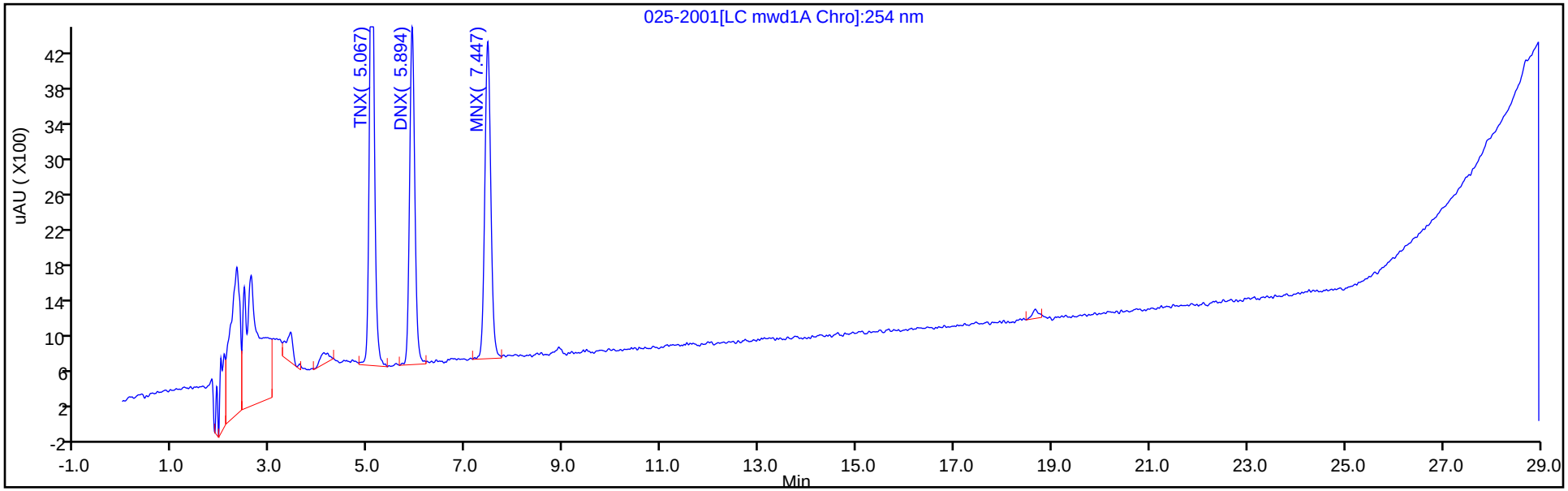
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

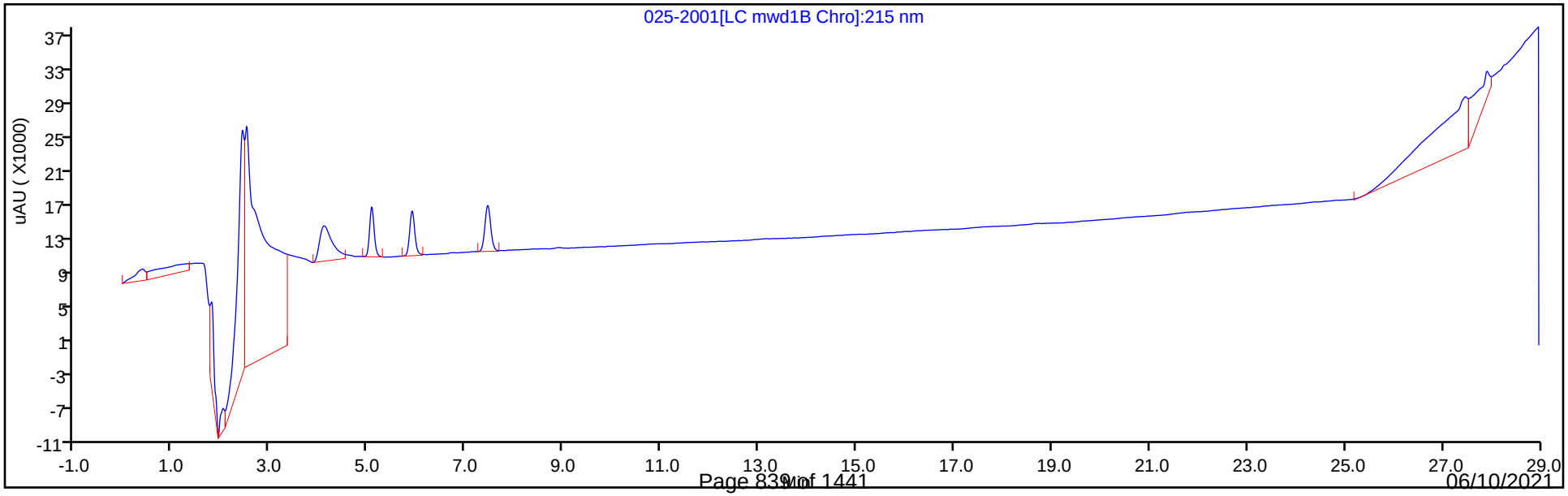
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D

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

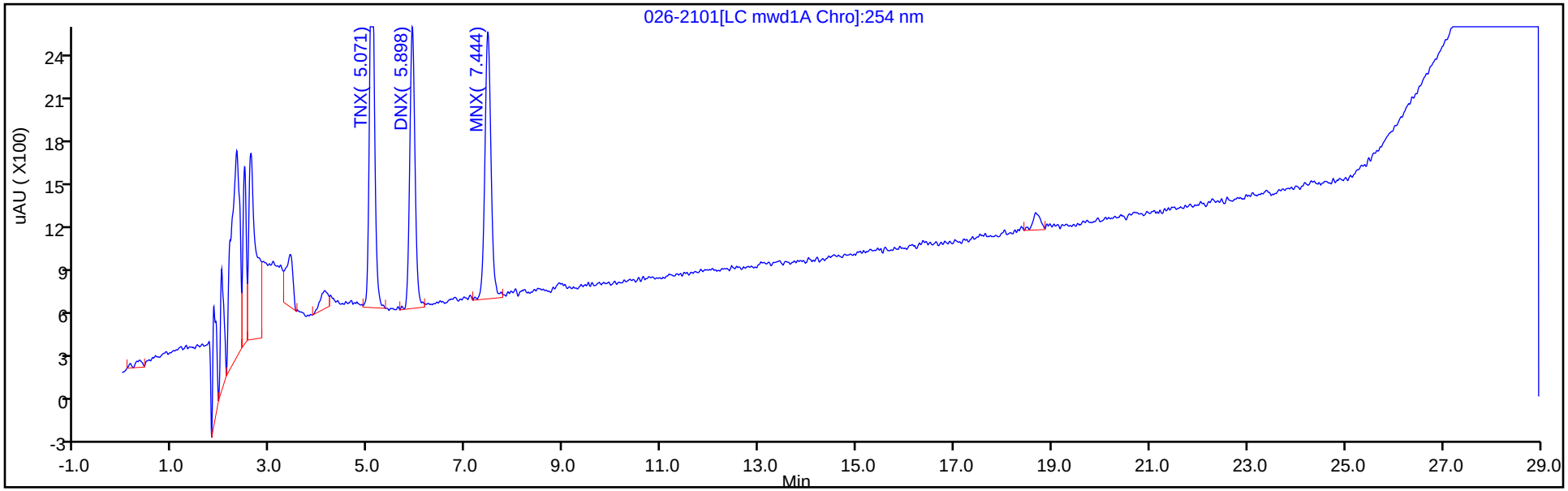
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

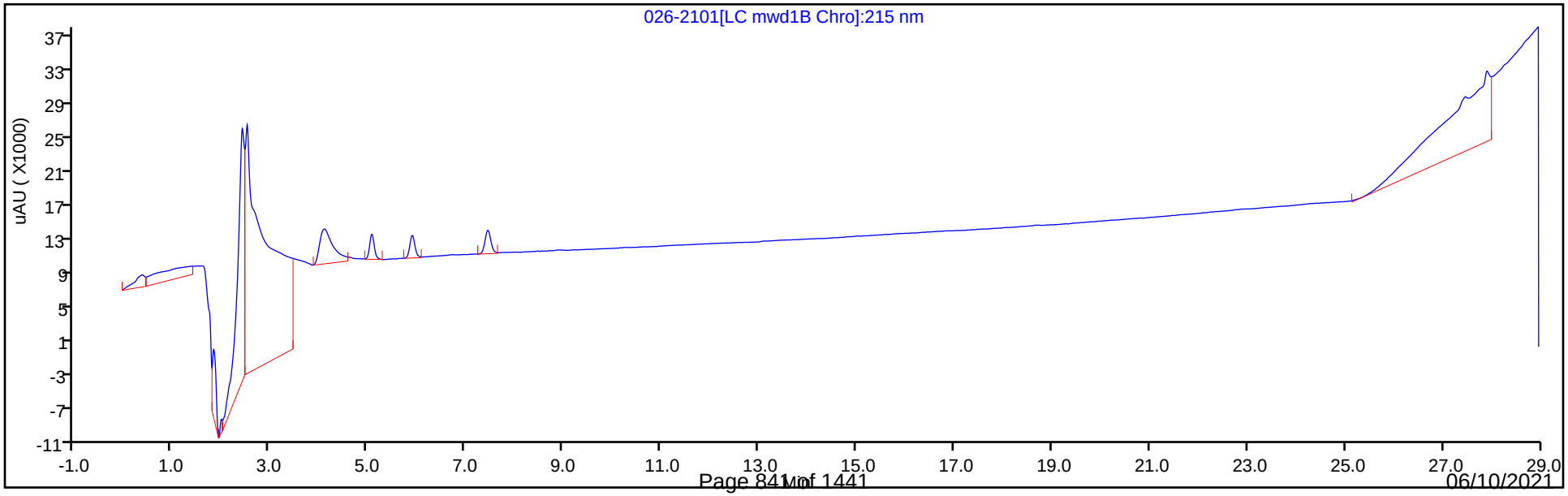
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D

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

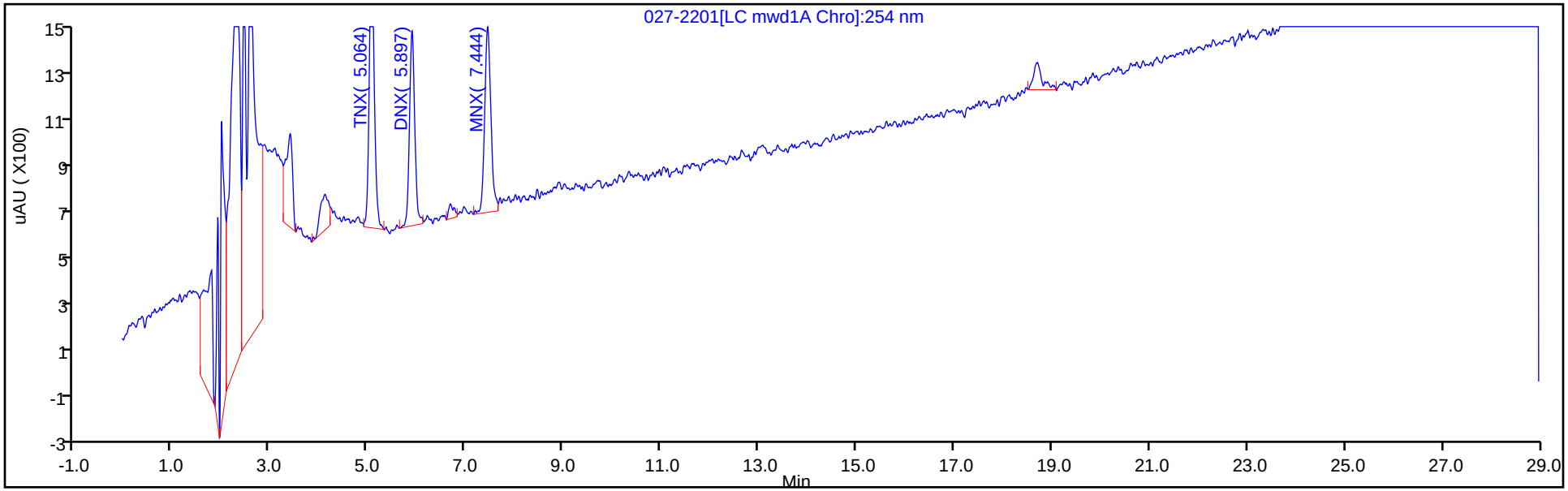
Report Date: 04-May-2021 13:43:20 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

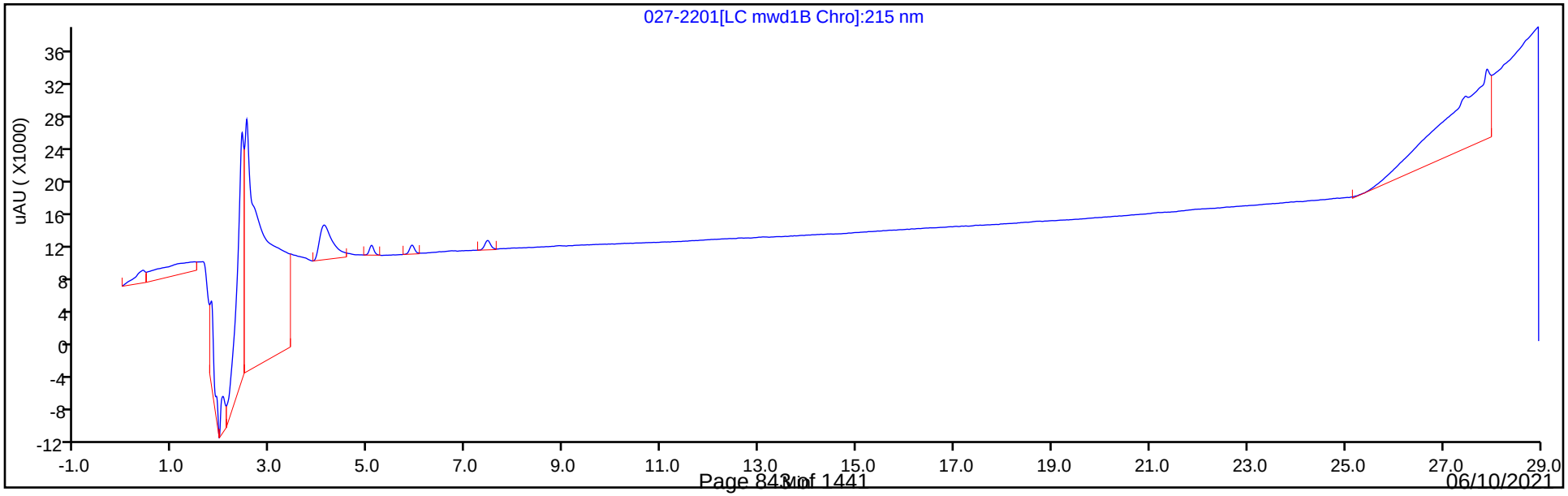
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

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

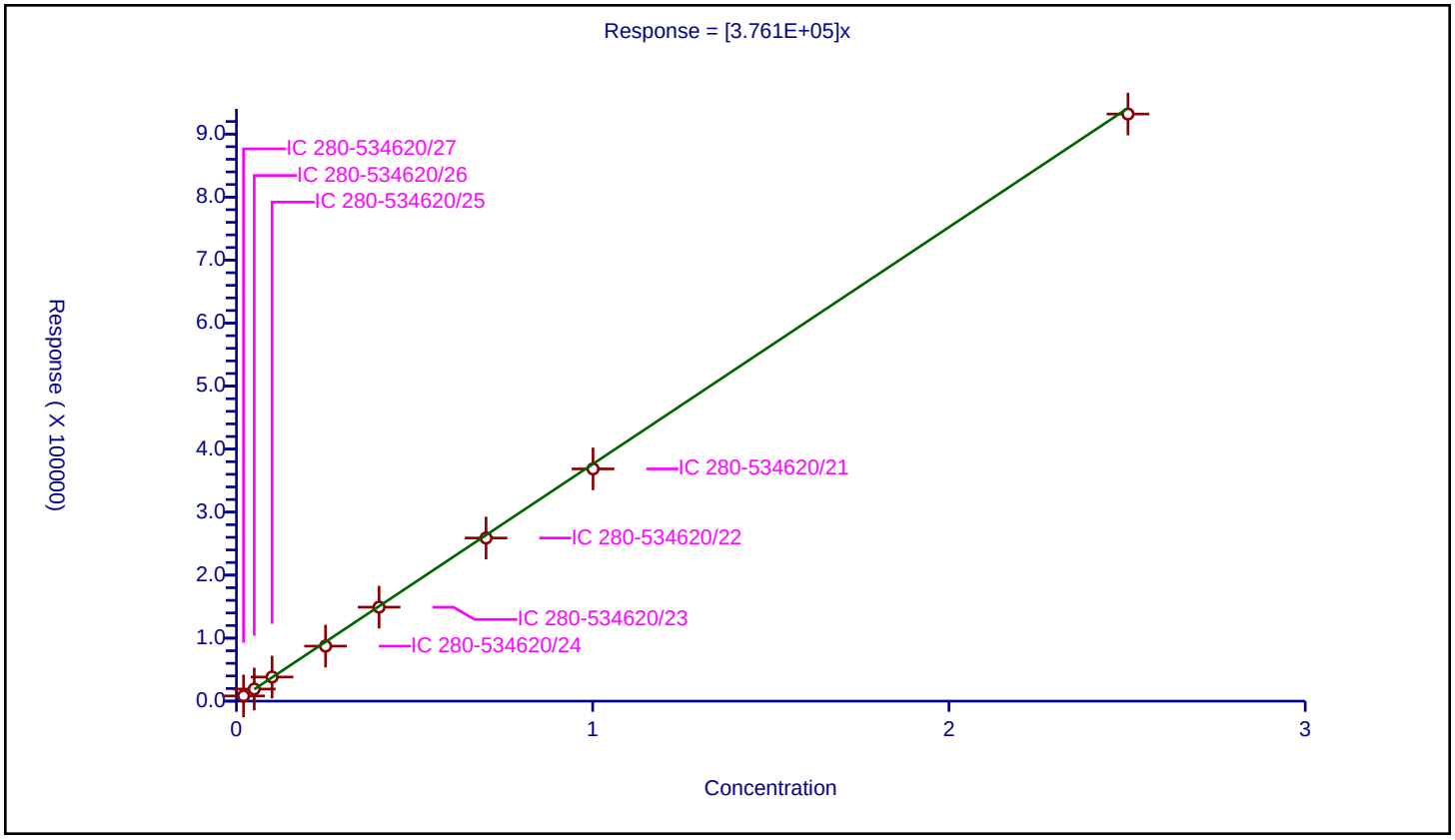
Curve Coefficients

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

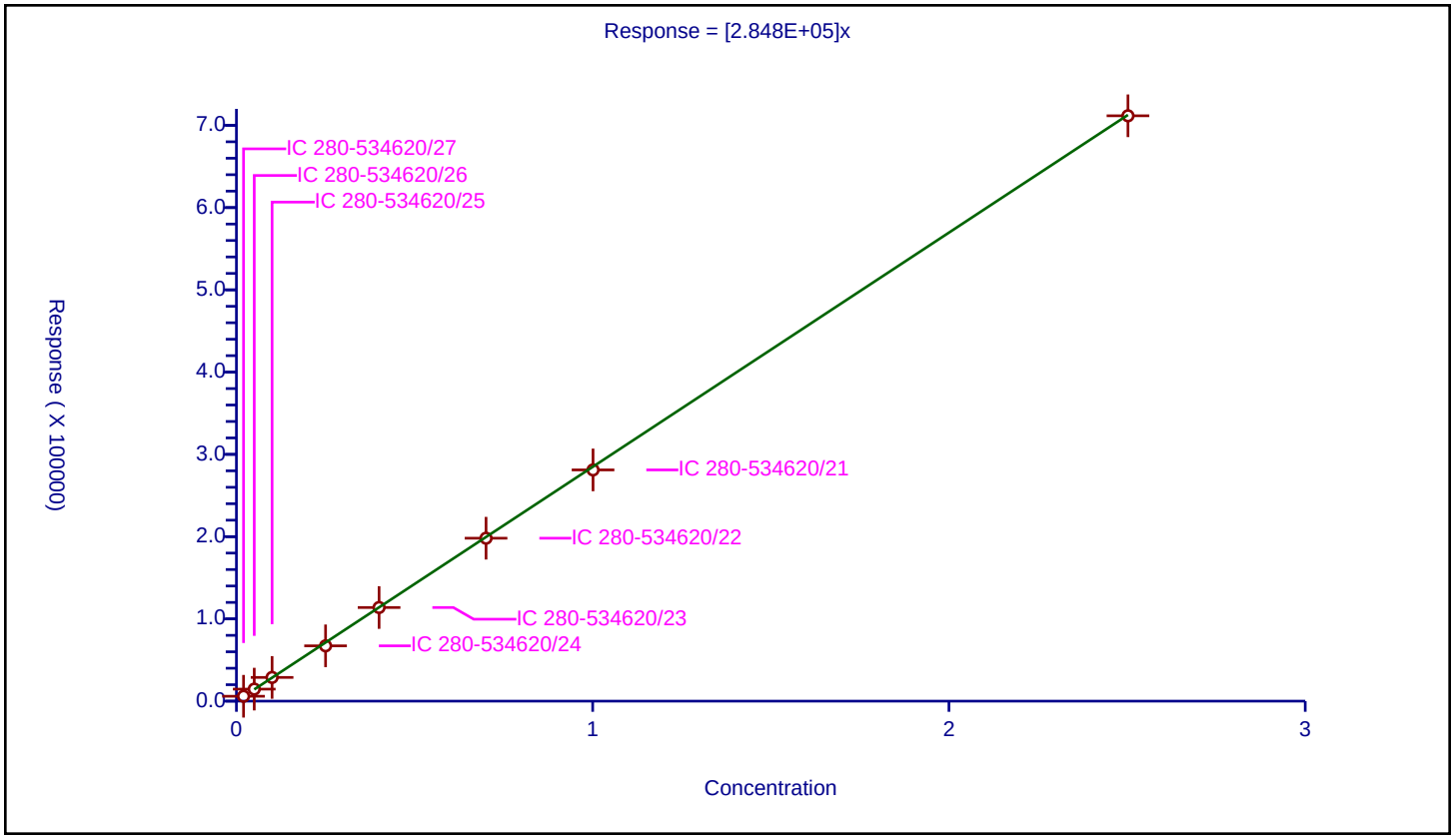
Curve Coefficients

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

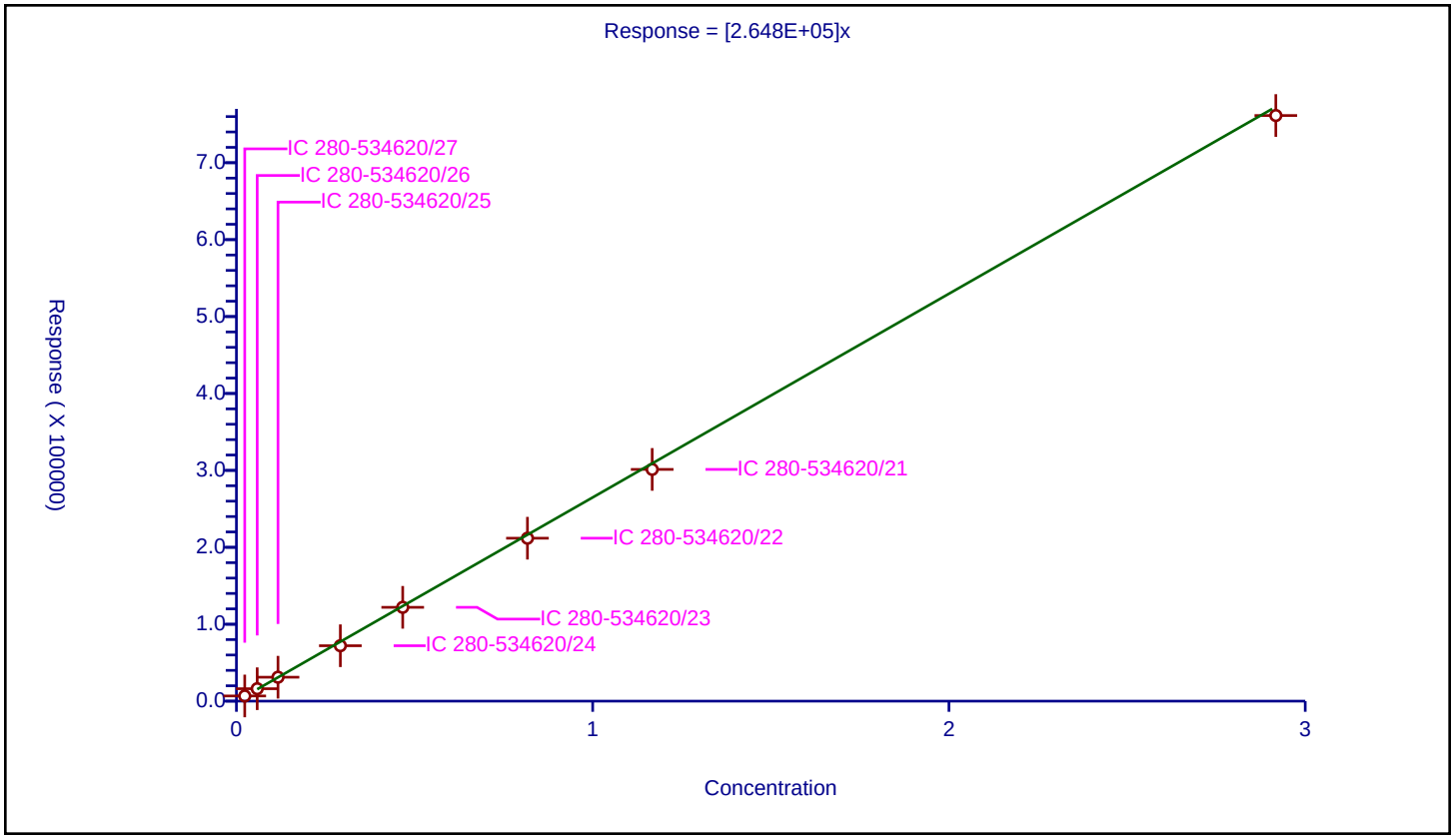
Curve Coefficients

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.: 280-148902-1

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.: 280-148902-1

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

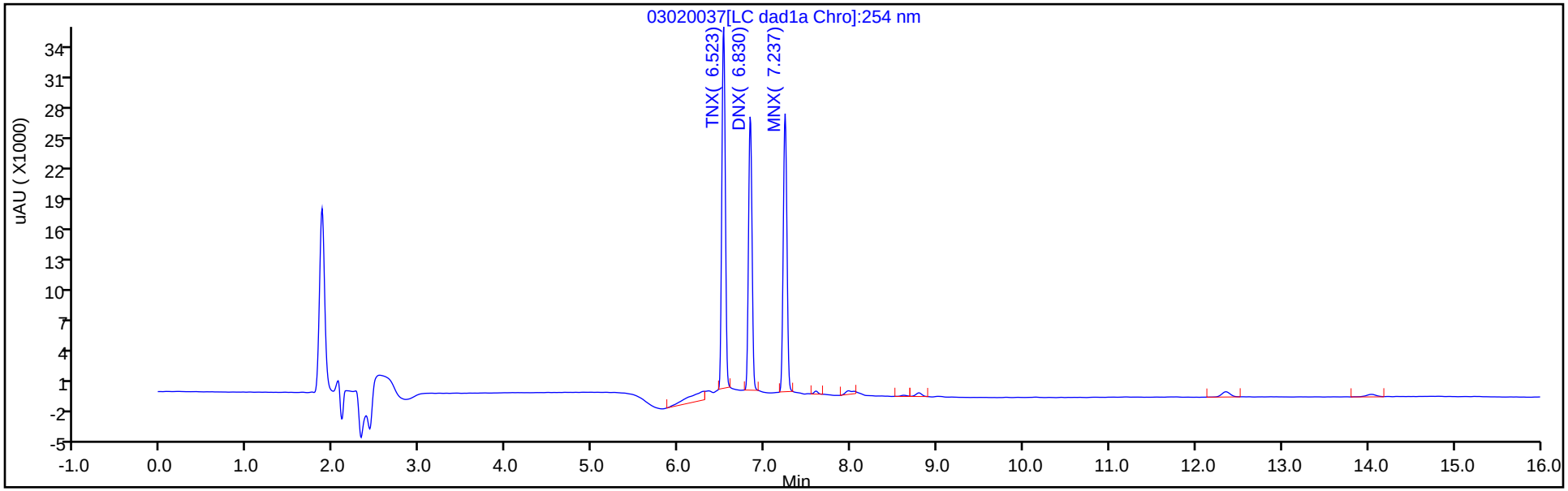
Report Date: 03-Mar-2021 13:36:35 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

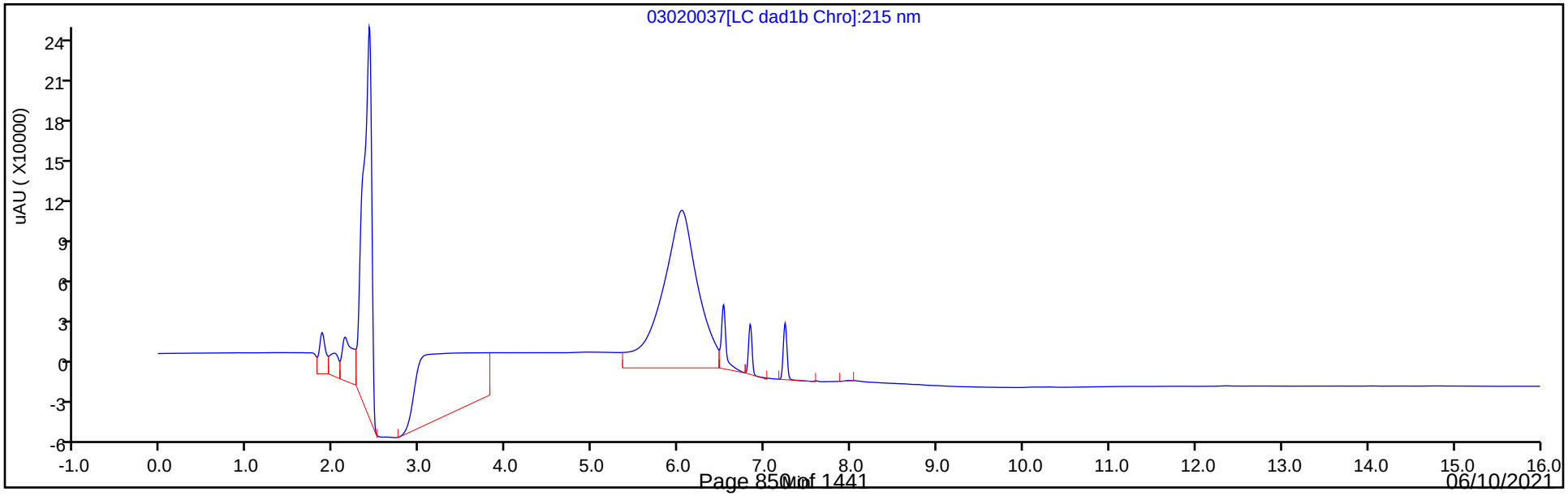
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d

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

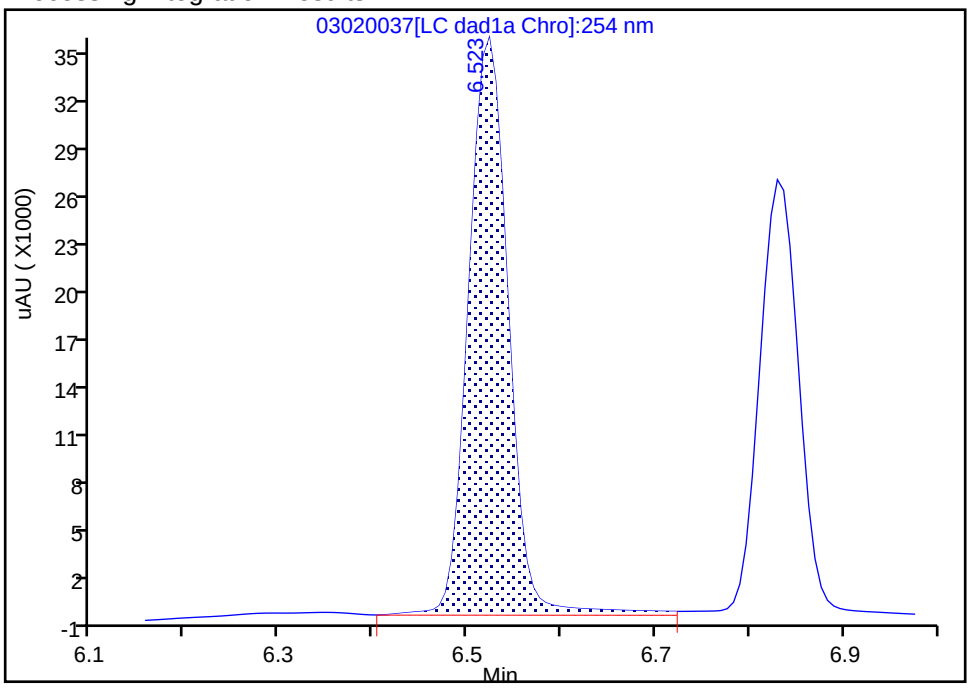
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

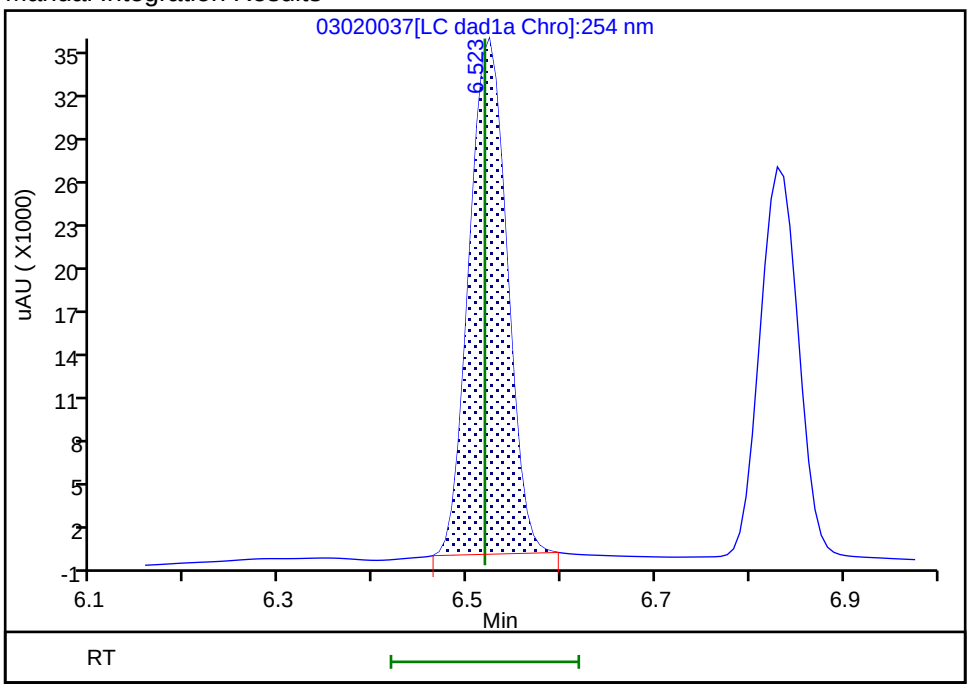
Processing Integration Results

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

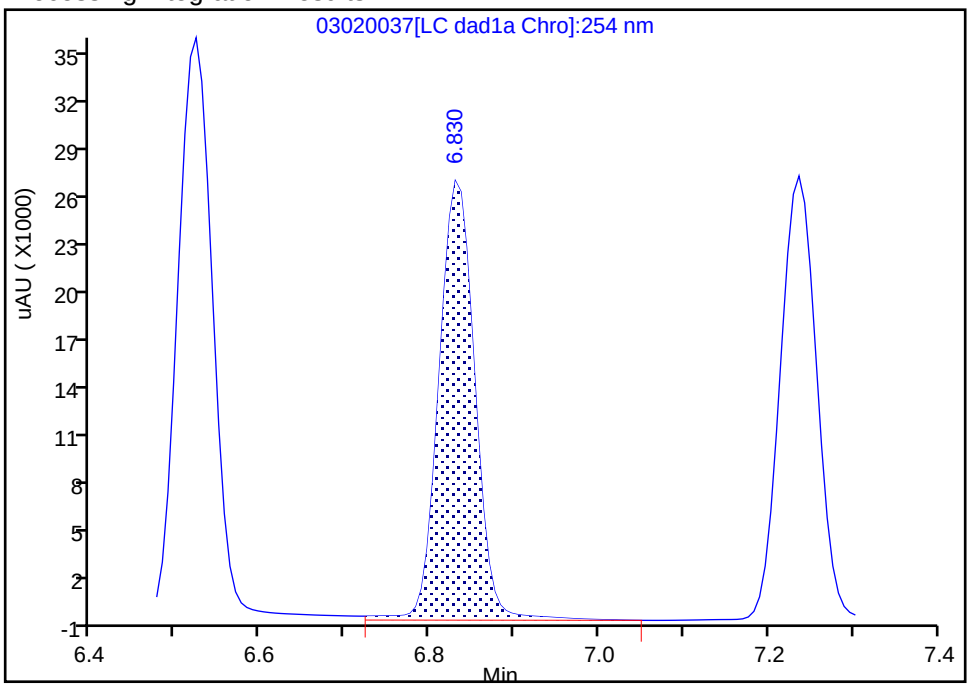
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

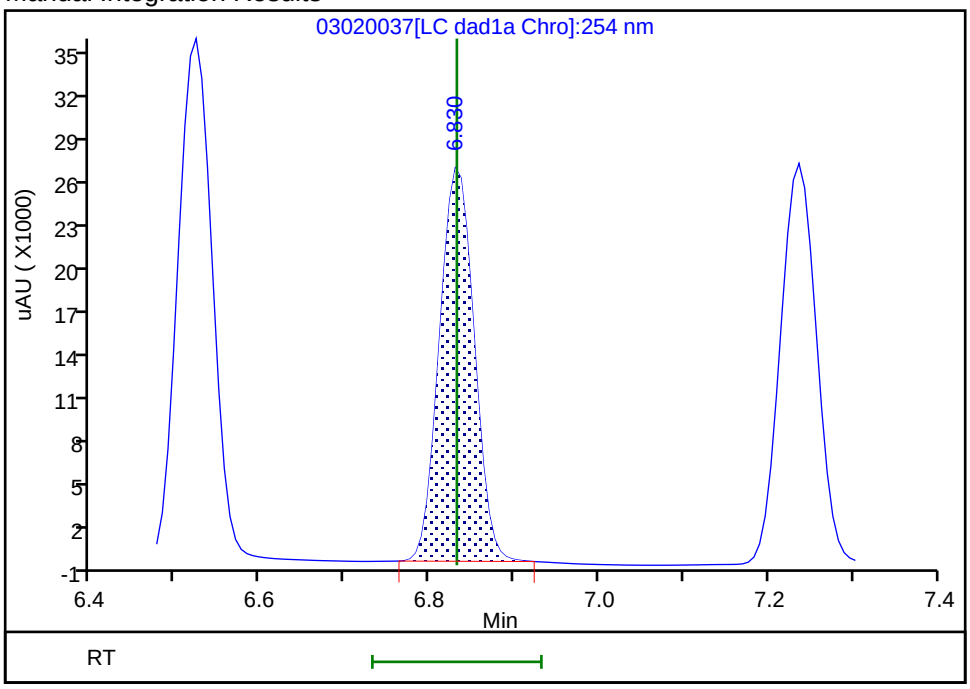
Processing Integration Results

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

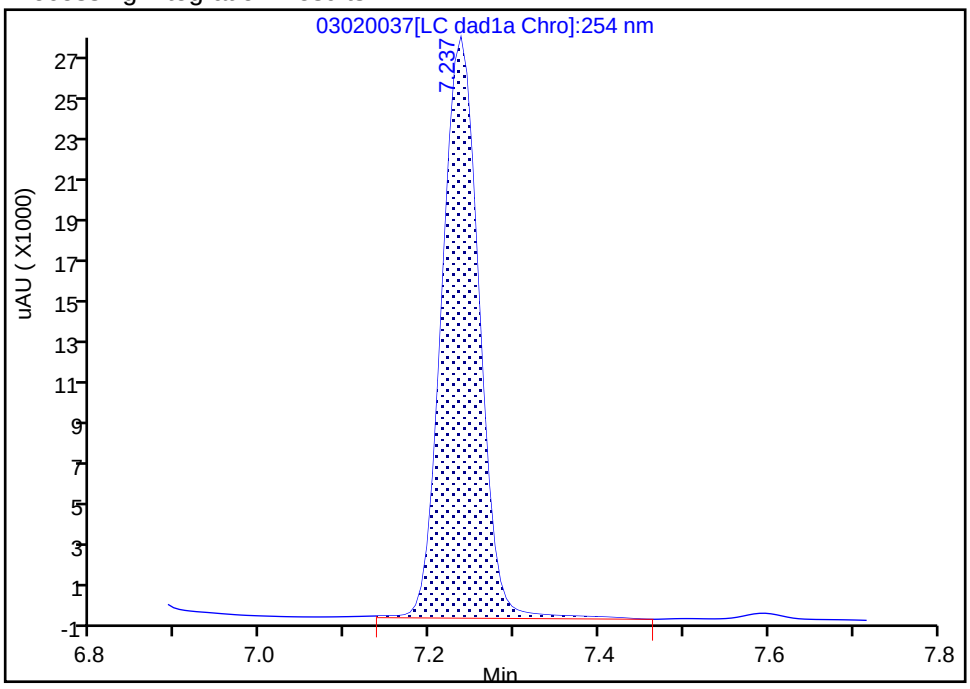
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

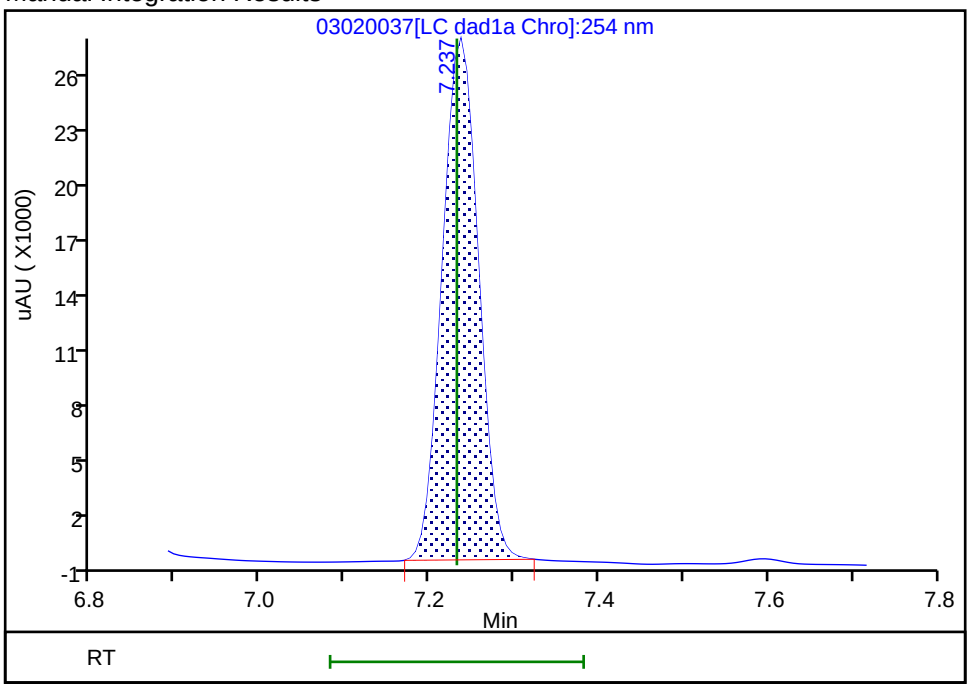
Processing Integration Results

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.: 280-148902-1

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.: 280-148902-1

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

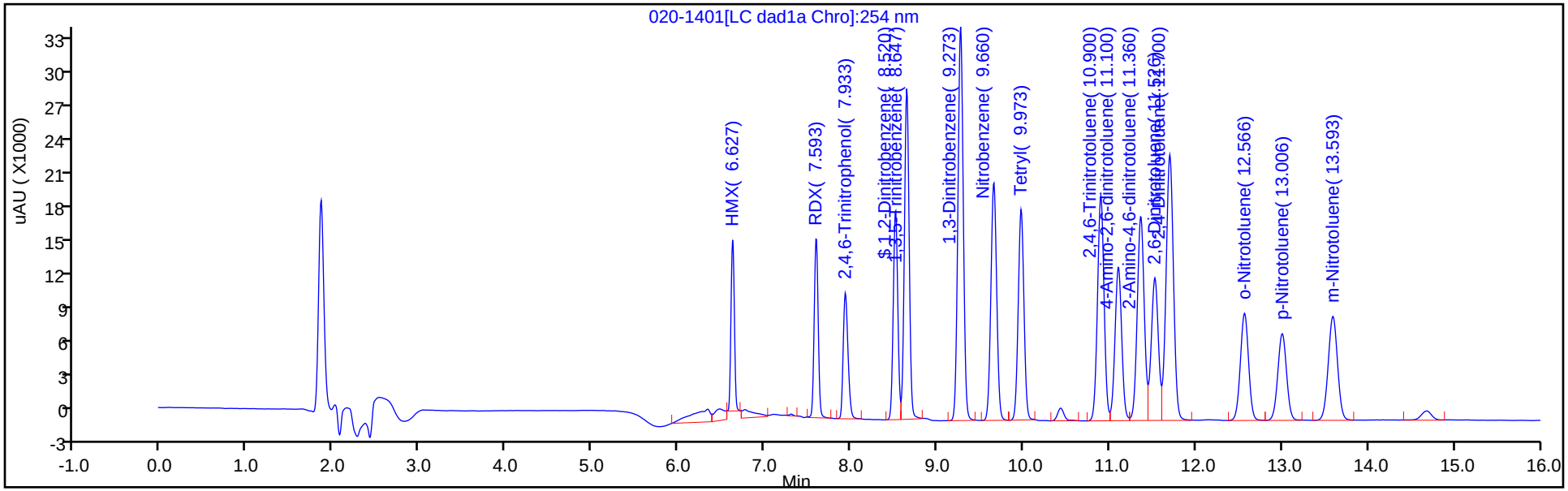
Report Date: 04-May-2021 13:29:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

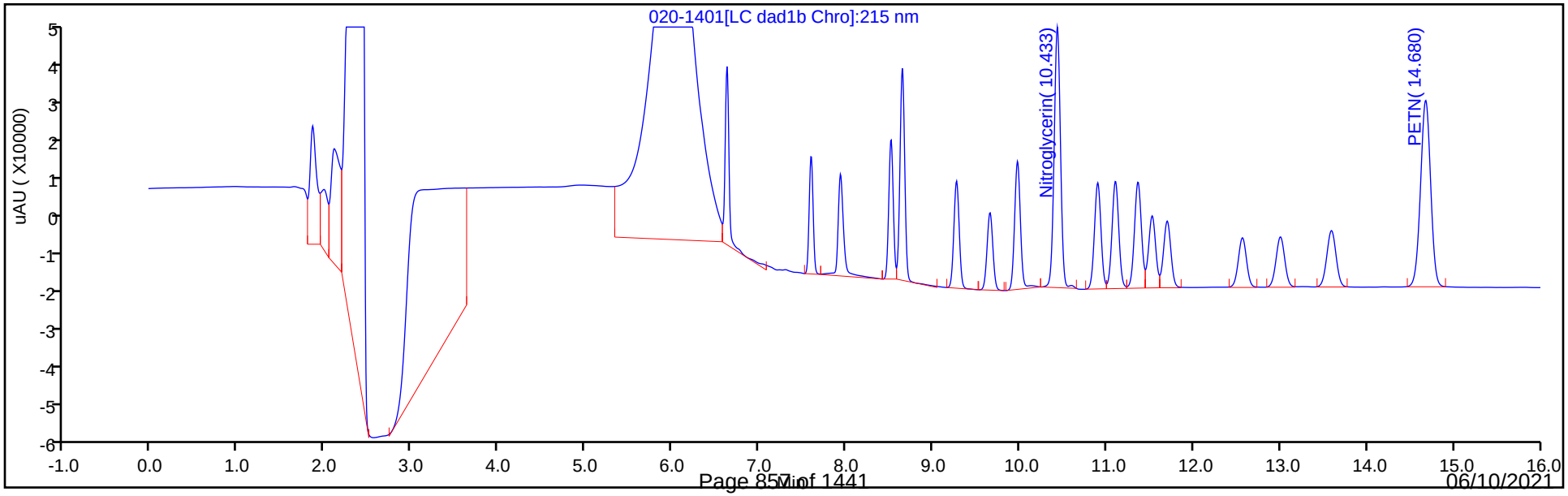
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d

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

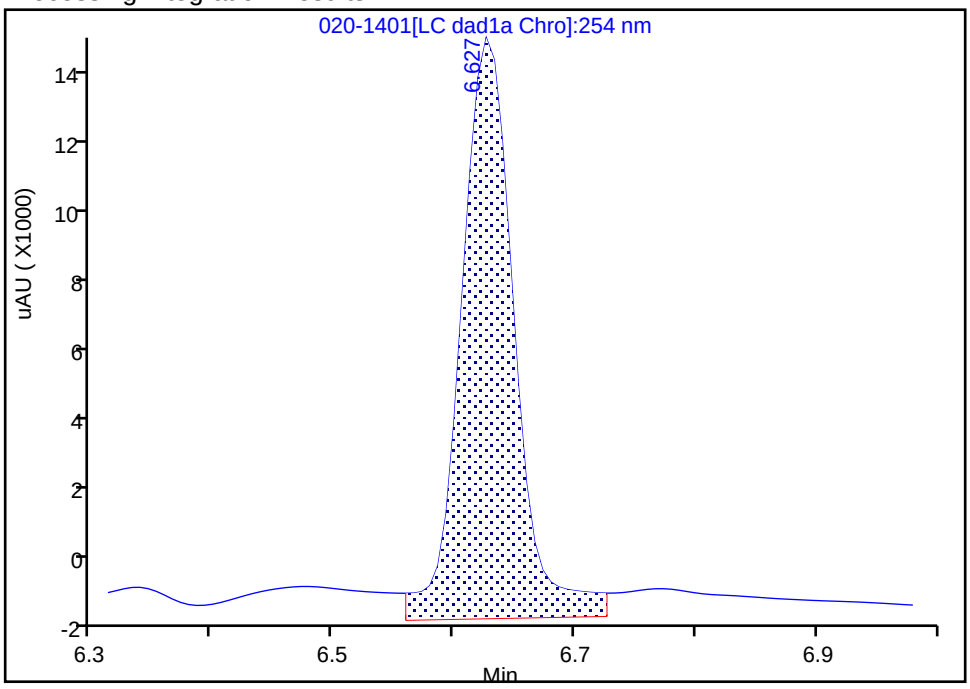
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d				
Injection Date:	01-May-2021 21:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

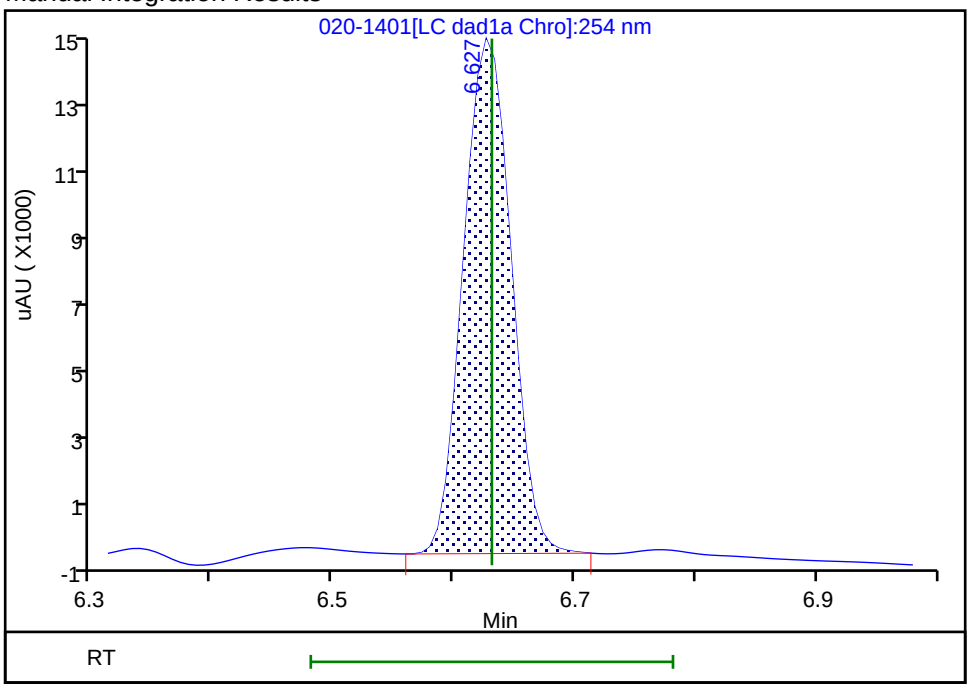
Processing Integration Results

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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/7 Calibration Date: 05/27/2021 14:23

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: 05270007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	83424		247	250	-1.2	15.0
RDX	Ave	106261	102884		242	250	-3.2	15.0
Picric acid	Ave	82721	77900		235	250	-5.8	15.0
1,3,5-Trinitrobenzene	Ave	220317	214124		243	251	-2.8	15.0
1,3-Dinitrobenzene	Ave	296329	287393		243	251	-3.0	15.0
Nitrobenzene	Ave	195286	189044		243	251	-3.2	15.0
Tetryl	Ave	172420	164491		239	251	-4.6	15.0
Nitroglycerin	Lin2		63361		2410	2500	-3.8	15.0
2,4,6-Trinitrotoluene	Ave	206038	198733		242	251	-3.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	142781		234	250	-6.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	196884		239	251	-4.9	15.0
2,6-Dinitrotoluene	Ave	143079	137418		241	251	-4.0	15.0
2,4-Dinitrotoluene	Ave	287012	279490		244	251	-2.6	15.0
2-Nitrotoluene	Ave	128392	122668		239	250	-4.5	15.0
4-Nitrotoluene	Ave	111913	105445		236	251	-5.8	15.0
3-Nitrotoluene	Ave	142246	134969		237	250	-5.1	15.0
PETN	Ave	74779	71362		2390	2500	-4.6	15.0
1,2-Dinitrobenzene	Ave	128217	127304		248	250	-0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/7 Calibration Date: 05/27/2021 14:23

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: 05270007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.62	6.47	6.77
RDX	7.60	7.45	7.75
Picric acid	7.98	7.83	8.13
1,3,5-Trinitrobenzene	8.67	8.52	8.82
1,3-Dinitrobenzene	9.30	9.15	9.45
Nitrobenzene	9.70	9.55	9.85
Tetryl	10.04	9.89	10.19
Nitroglycerin	10.50	10.35	10.65
2,4,6-Trinitrotoluene	10.96	10.86	11.06
4-Amino-2,6-dinitrotoluene	11.18	11.08	11.28
2-Amino-4,6-dinitrotoluene	11.44	11.34	11.54
2,6-Dinitrotoluene	11.61	11.51	11.71
2,4-Dinitrotoluene	11.78	11.68	11.88
2-Nitrotoluene	12.67	12.52	12.82
4-Nitrotoluene	13.11	12.96	13.26
3-Nitrotoluene	13.71	13.56	13.86
PETN	14.84	14.69	14.99
1,2-Dinitrobenzene	8.54	8.39	8.69

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2021 14:23:58 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0101842-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:28 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: 27-May-2021 15:29:58

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.617	6.617	0.000	20856	0.2500	0.2470	
	7 RDX	1	7.604	7.604	0.000	25721	0.2500	0.2421	
	8 2,4,6-Trinitrophenol	1	7.977	7.977	0.000	19475	0.2500	0.2354	
$	9 1,2-Dinitrobenzene	1	8.544	8.544	0.000	31826	0.2500	0.2482	
	10 1,3,5-Trinitrobenzene	1	8.670	8.670	0.000	53638	0.2505	0.2435	
	11 1,3-Dinitrobenzene	1	9.304	9.304	0.000	71992	0.2505	0.2429	
	12 Nitrobenzene	1	9.697	9.697	0.000	47450	0.2510	0.2430	
	14 Tetryl	1	10.037	10.037	0.000	41205	0.2505	0.2390	
	15 Nitroglycerin	2	10.497	10.497	0.000	158402	2.50	2.41	
	16 2,4,6-Trinitrotoluene	1	10.964	10.964	0.000	49882	0.2510	0.2421	
	17 4-Amino-2,6-dinitrotoluene	1	11.184	11.184	0.000	35731	0.2503	0.2339	
	18 2-Amino-4,6-dinitrotoluene	1	11.437	11.437	0.000	49418	0.2510	0.2388	
	19 2,6-Dinitrotoluene	1	11.610	11.610	0.000	34492	0.2510	0.2411	
	20 2,4-Dinitrotoluene	1	11.784	11.784	0.000	70152	0.2510	0.2444	
	21 o-Nitrotoluene	1	12.670	12.670	0.000	30667	0.2500	0.2389	
	22 p-Nitrotoluene	1	13.110	13.110	0.000	26414	0.2505	0.2360	
	23 m-Nitrotoluene	1	13.710	13.710	0.000	33776	0.2503	0.2374	
	24 PETN	2	14.844	14.844	0.000	178405	2.50	2.39	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00068 Amount Added: 25.00 Units: uL

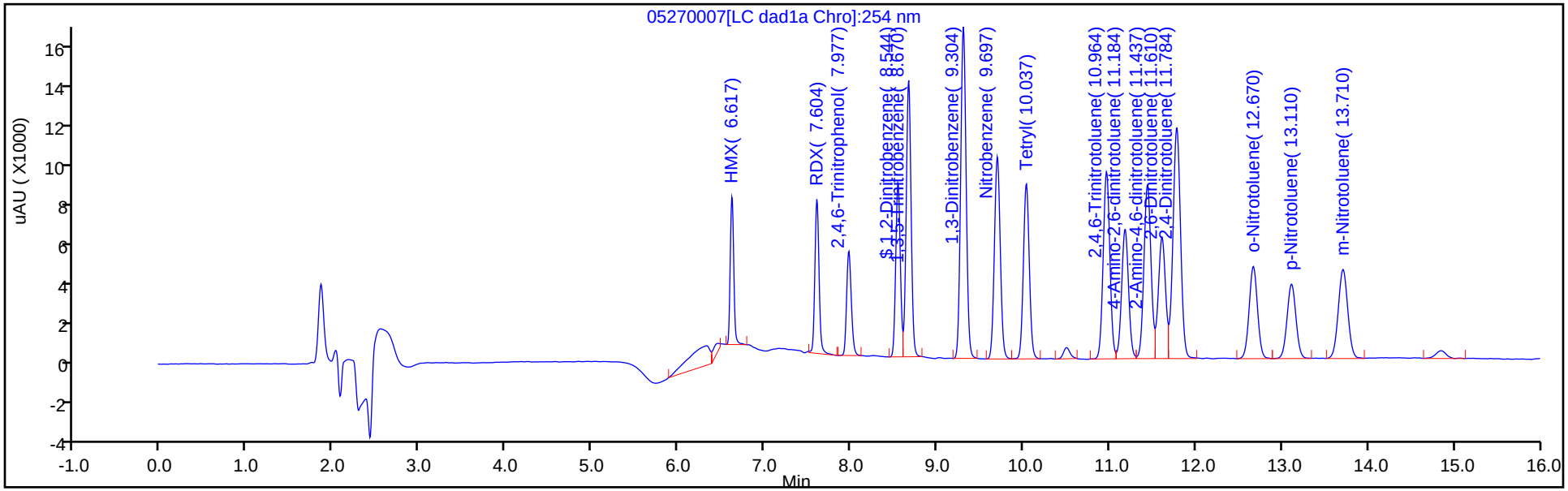
Report Date: 28-May-2021 14:38:28 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

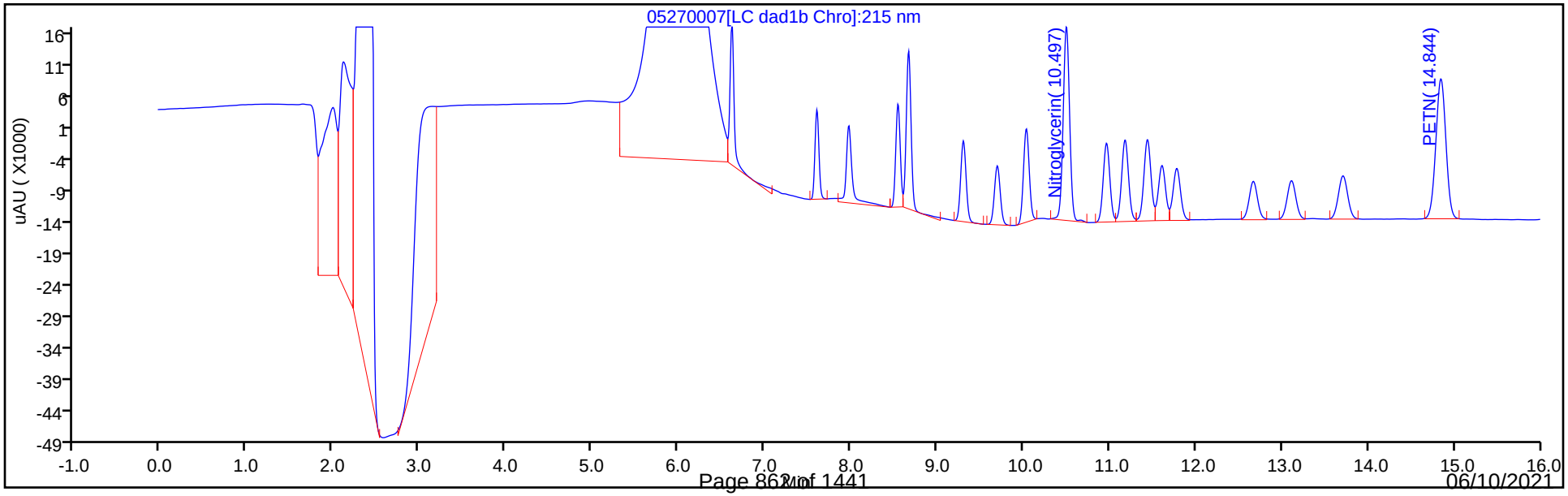
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270007.d

Injection Date:	27-May-2021 14:23:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/9 Calibration Date: 05/27/2021 14:46

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: 05270009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	194274		262	250	4.6	15.0
DNX	Ave	142119	147740		260	250	4.0	15.0
MNX	Ave	130340	134769		302	292	3.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/9 Calibration Date: 05/27/2021 14:46

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: 05270009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.50	6.40	6.60
DNX	6.82	6.72	6.92
MNX	7.23	7.08	7.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	27-May-2021 14:46:54	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0101842-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:29	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:	27-May-2021 15:30:02		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.499	6.499	0.000	48617	0.2503	0.2617	M
5 DNX	1	6.819	6.819	0.000	36972	0.2503	0.2601	M
6 MNX	1	7.232	7.232	0.000	39319	0.2918	0.3017	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

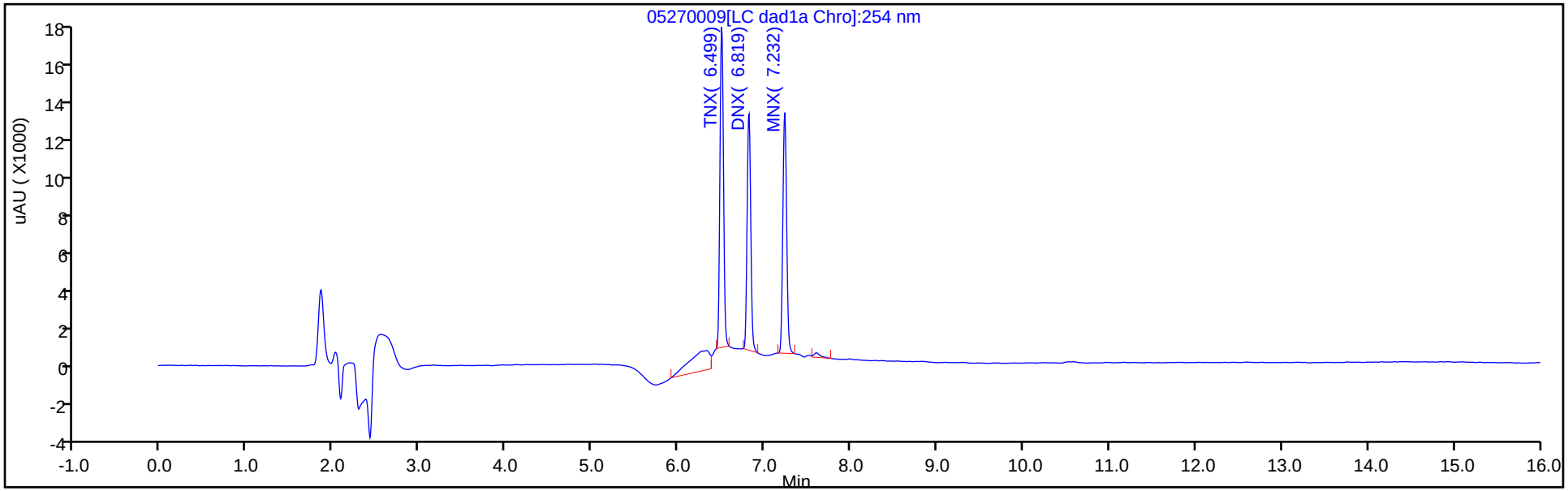
Report Date: 28-May-2021 14:38:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

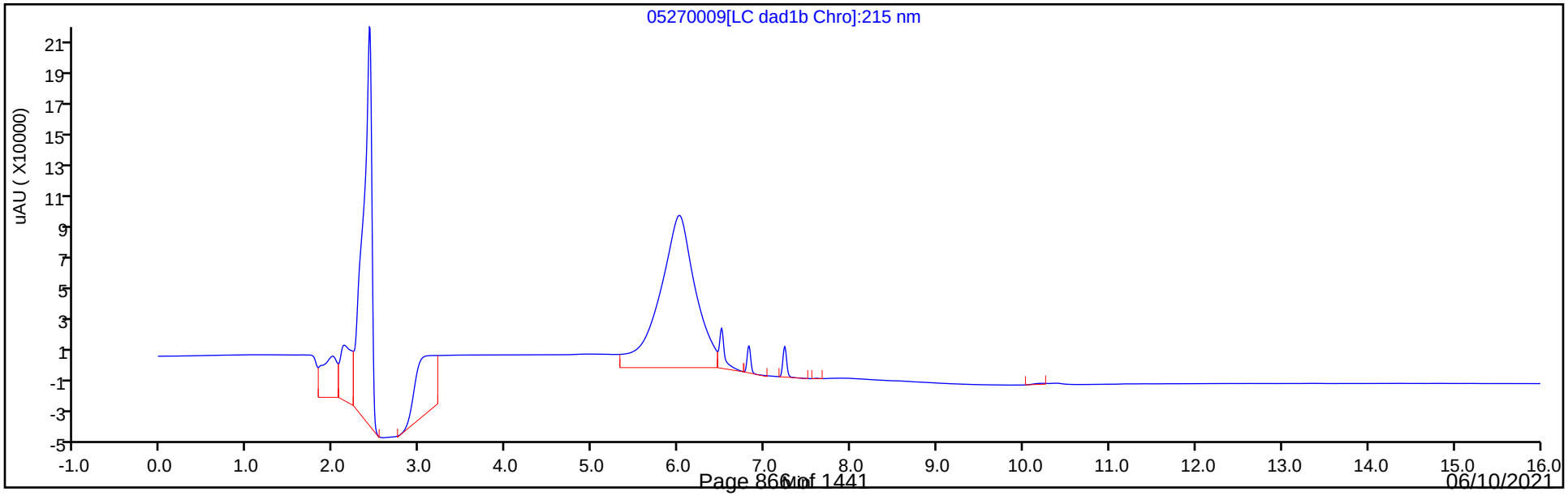
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270009.d

Injection Date:	27-May-2021 14:46:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

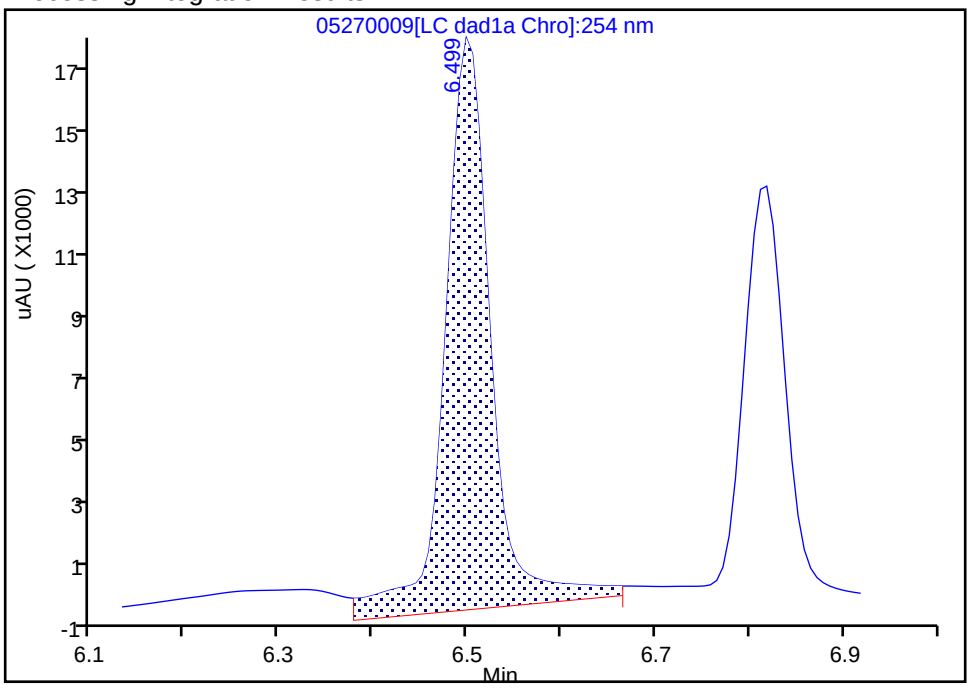
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270009.d				
Injection Date:	27-May-2021 14:46:54	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

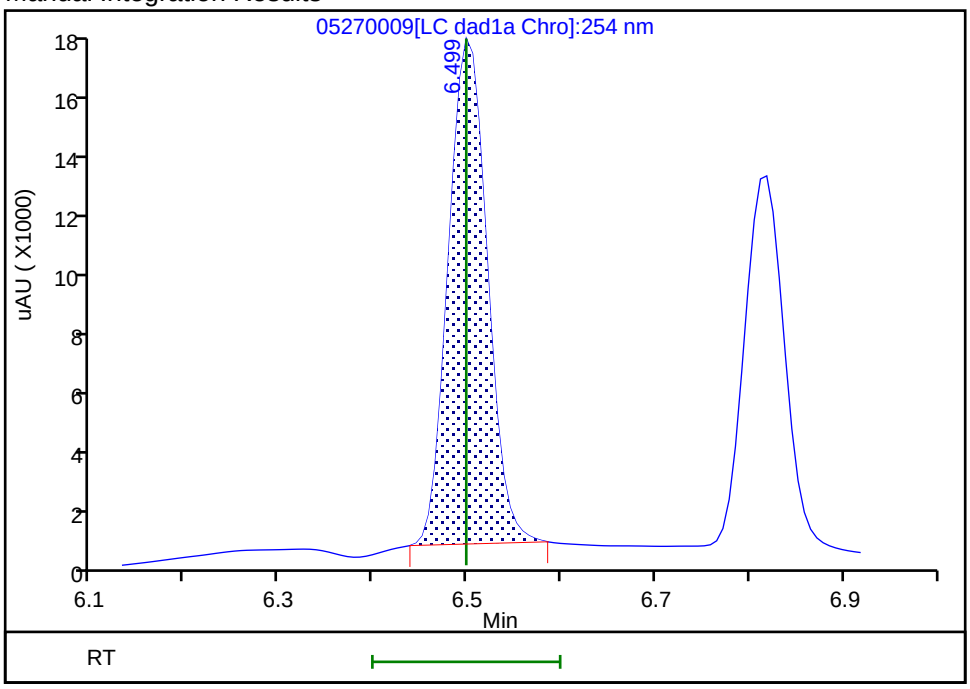
Processing Integration Results

RT: 6.50
Area: 60412
Amount: 0.325135
Amount Units: ug/mL



Manual Integration Results

RT: 6.50
Area: 48617
Amount: 0.261655
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 15:30:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

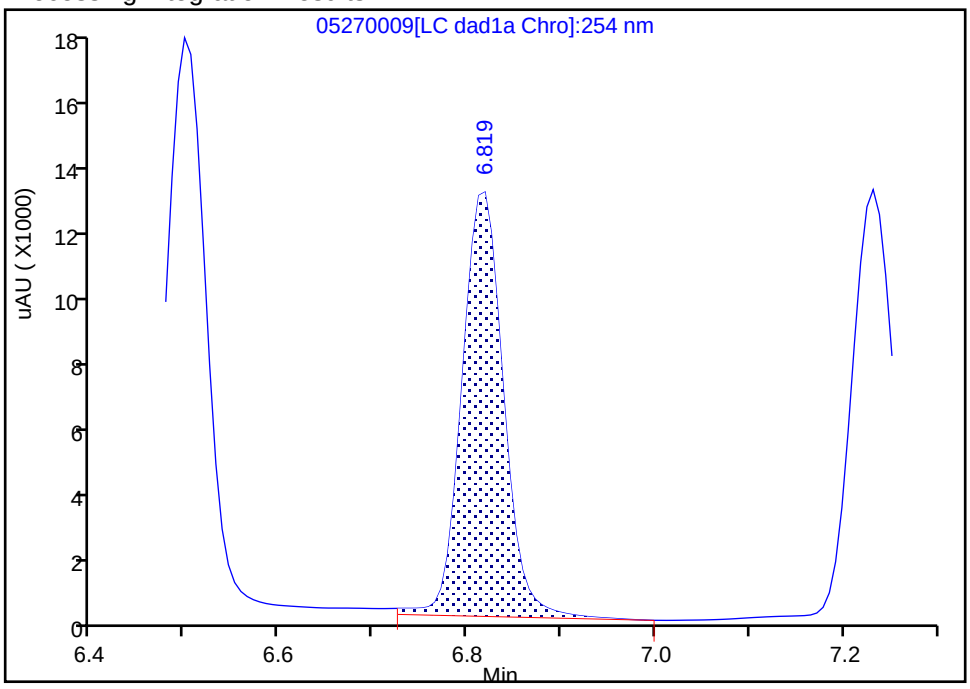
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270009.d				
Injection Date:	27-May-2021 14:46:54	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

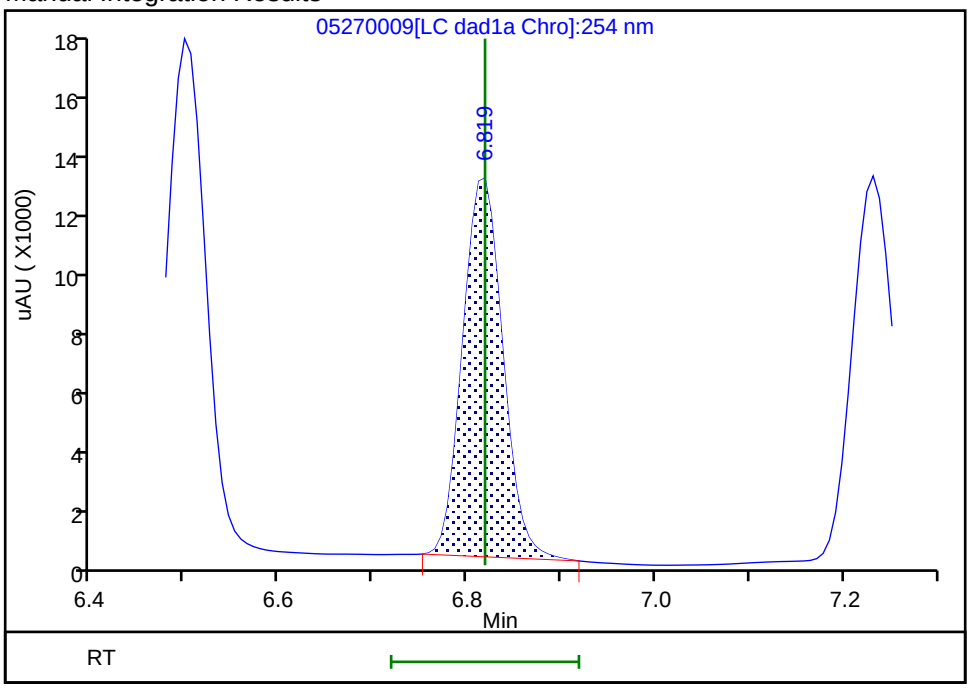
Processing Integration Results

RT: 6.82
Area: 38913
Amount: 0.273805
Amount Units: ug/mL



Manual Integration Results

RT: 6.82
Area: 36972
Amount: 0.260148
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 15:30:15
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

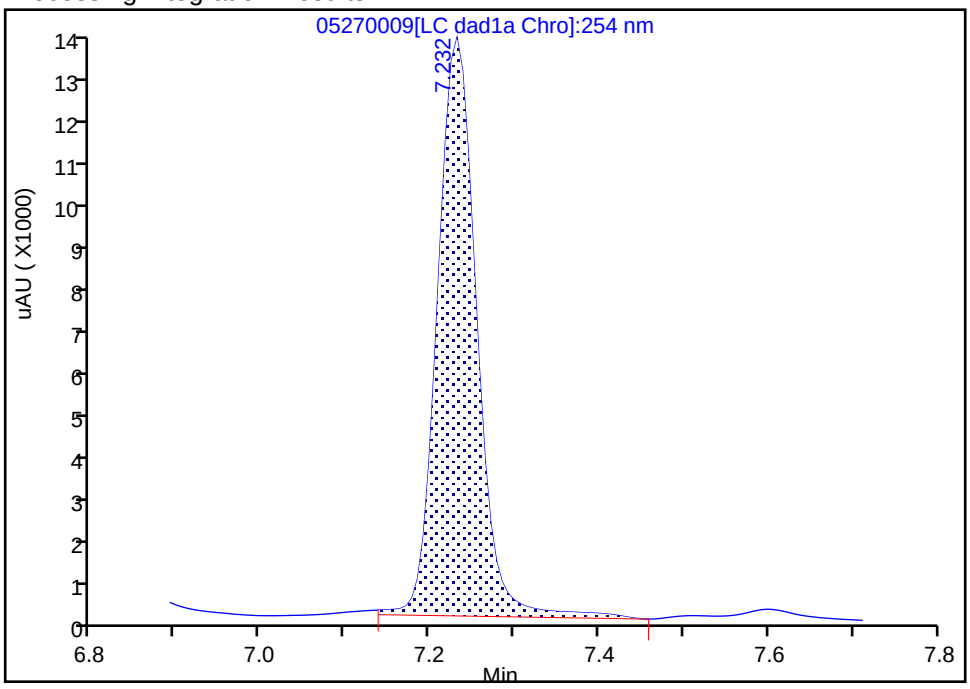
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270009.d				
Injection Date:	27-May-2021 14:46:54	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

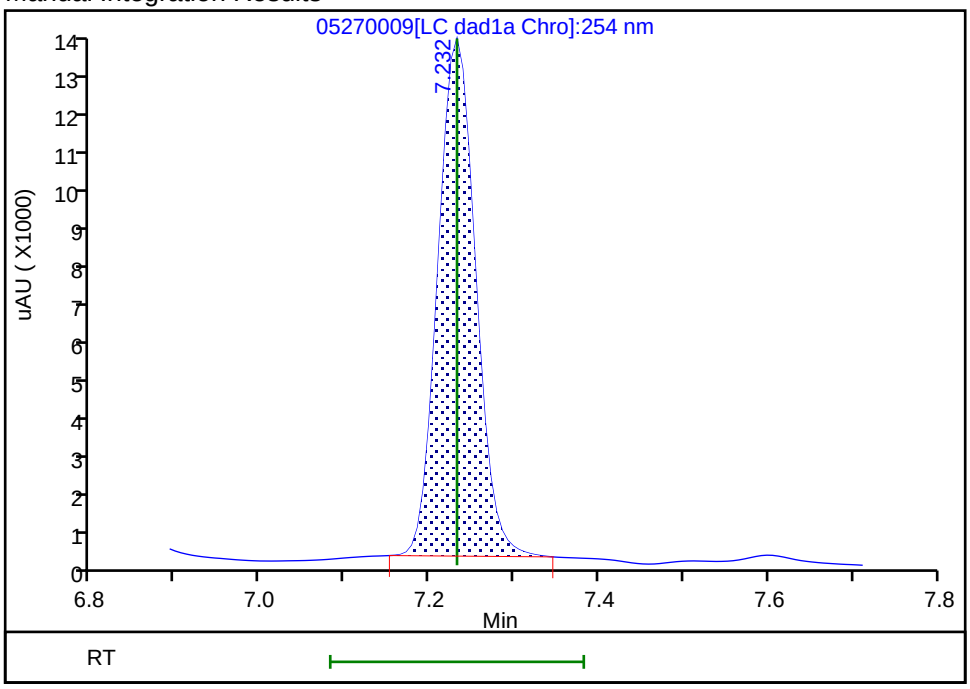
Processing Integration Results

RT: 7.23
Area: 41487
Amount: 0.318297
Amount Units: ug/mL



Manual Integration Results

RT: 7.23
Area: 39319
Amount: 0.301664
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 15:30:19

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/21 Calibration Date: 05/27/2021 18:59

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: 05270021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	81816		242	250	-3.1	15.0
RDX	Ave	106261	102796		242	250	-3.3	15.0
Picric acid	Ave	82721	78476		237	250	-5.1	15.0
1,3,5-Trinitrobenzene	Ave	220317	213924		243	251	-2.9	15.0
1,3-Dinitrobenzene	Ave	296329	288200		244	251	-2.7	15.0
Nitrobenzene	Ave	195286	185892		239	251	-4.8	15.0
Tetryl	Ave	172420	164028		238	251	-4.9	15.0
Nitroglycerin	Lin2		64968		2470	2500	-1.3	15.0
2,4,6-Trinitrotoluene	Ave	206038	198490		242	251	-3.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	142837		234	250	-6.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	196984		239	251	-4.8	15.0
2,6-Dinitrotoluene	Ave	143079	137530		241	251	-3.9	15.0
2,4-Dinitrotoluene	Ave	287012	280773		246	251	-2.2	15.0
2-Nitrotoluene	Ave	128392	120700		235	250	-6.0	15.0
4-Nitrotoluene	Ave	111913	104543		234	251	-6.6	15.0
3-Nitrotoluene	Ave	142246	133391		235	250	-6.2	15.0
PETN	Ave	74779	71715		2400	2500	-4.1	15.0
1,2-Dinitrobenzene	Ave	128217	128300		250	250	0.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/21 Calibration Date: 05/27/2021 18:59

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: 05270021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.62	6.47	6.77
RDX	7.61	7.45	7.75
Picric acid	7.97	7.83	8.13
1,3,5-Trinitrobenzene	8.67	8.52	8.82
1,3-Dinitrobenzene	9.31	9.15	9.45
Nitrobenzene	9.70	9.55	9.85
Tetryl	10.04	9.89	10.19
Nitroglycerin	10.50	10.35	10.65
2,4,6-Trinitrotoluene	10.97	10.86	11.06
4-Amino-2,6-dinitrotoluene	11.19	11.08	11.28
2-Amino-4,6-dinitrotoluene	11.45	11.34	11.54
2,6-Dinitrotoluene	11.61	11.51	11.71
2,4-Dinitrotoluene	11.79	11.68	11.88
2-Nitrotoluene	12.67	12.52	12.82
4-Nitrotoluene	13.12	12.96	13.26
3-Nitrotoluene	13.71	13.56	13.86
PETN	14.85	14.69	14.99
1,2-Dinitrobenzene	8.55	8.39	8.69

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2021 18:59:40 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0101842-021
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:35 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: 27-May-2021 20:51:25

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.619	6.617	0.002	20454	0.2500	0.2423	M
	7 RDX	1	7.605	7.604	0.001	25699	0.2500	0.2418	
	8 2,4,6-Trinitrophenol	1	7.965	7.977	-0.012	19619	0.2500	0.2372	
$	9 1,2-Dinitrobenzene	1	8.545	8.544	0.001	32075	0.2500	0.2502	
	10 1,3,5-Trinitrobenzene	1	8.665	8.670	-0.005	53588	0.2505	0.2432	
	11 1,3-Dinitrobenzene	1	9.305	9.304	0.001	72194	0.2505	0.2436	
	12 Nitrobenzene	1	9.698	9.697	0.001	46659	0.2510	0.2389	
	14 Tetryl	1	10.038	10.037	0.001	41089	0.2505	0.2383	
	15 Nitroglycerin	2	10.498	10.497	0.001	162419	2.50	2.47	
	16 2,4,6-Trinitrotoluene	1	10.965	10.964	0.001	49821	0.2510	0.2418	
	17 4-Amino-2,6-dinitrotoluene	1	11.185	11.184	0.001	35745	0.2503	0.2340	
	18 2-Amino-4,6-dinitrotoluene	1	11.445	11.437	0.008	49443	0.2510	0.2389	
	19 2,6-Dinitrotoluene	1	11.612	11.610	0.002	34520	0.2510	0.2413	
	20 2,4-Dinitrotoluene	1	11.785	11.784	0.001	70474	0.2510	0.2455	
	21 o-Nitrotoluene	1	12.672	12.670	0.002	30175	0.2500	0.2350	
	22 p-Nitrotoluene	1	13.118	13.110	0.008	26188	0.2505	0.2340	
	23 m-Nitrotoluene	1	13.712	13.710	0.002	33381	0.2503	0.2347	
	24 PETN	2	14.845	14.844	0.001	179288	2.50	2.40	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL

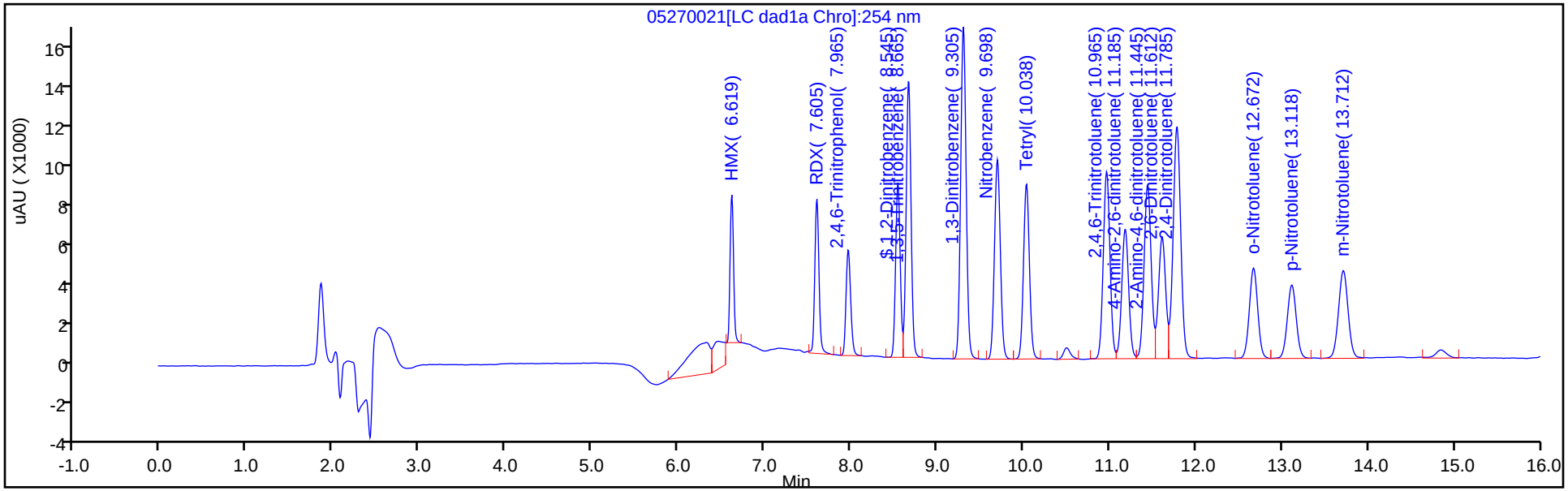
Report Date: 28-May-2021 14:38:35 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

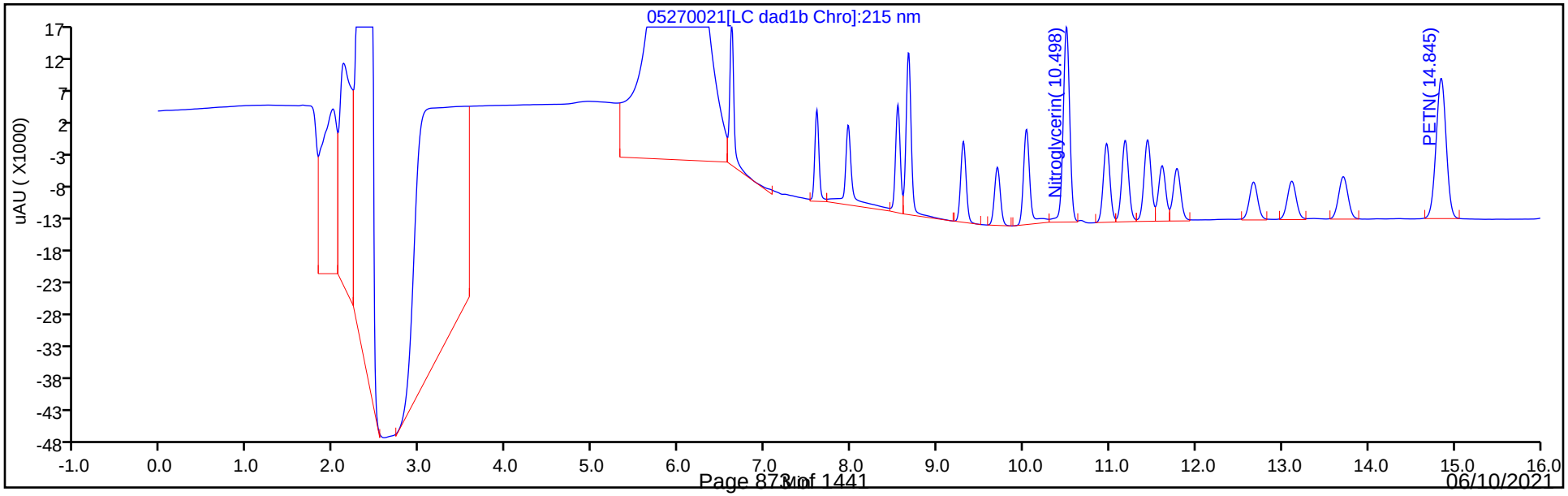
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270021.d

Injection Date:	27-May-2021 18:59:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

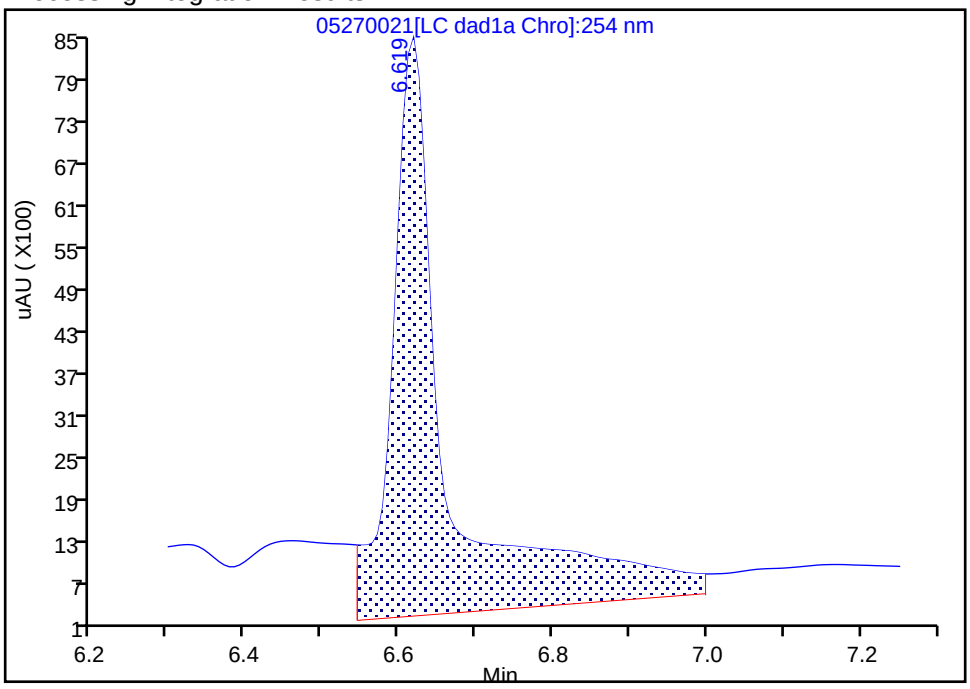
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270021.d				
Injection Date:	27-May-2021 18:59:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

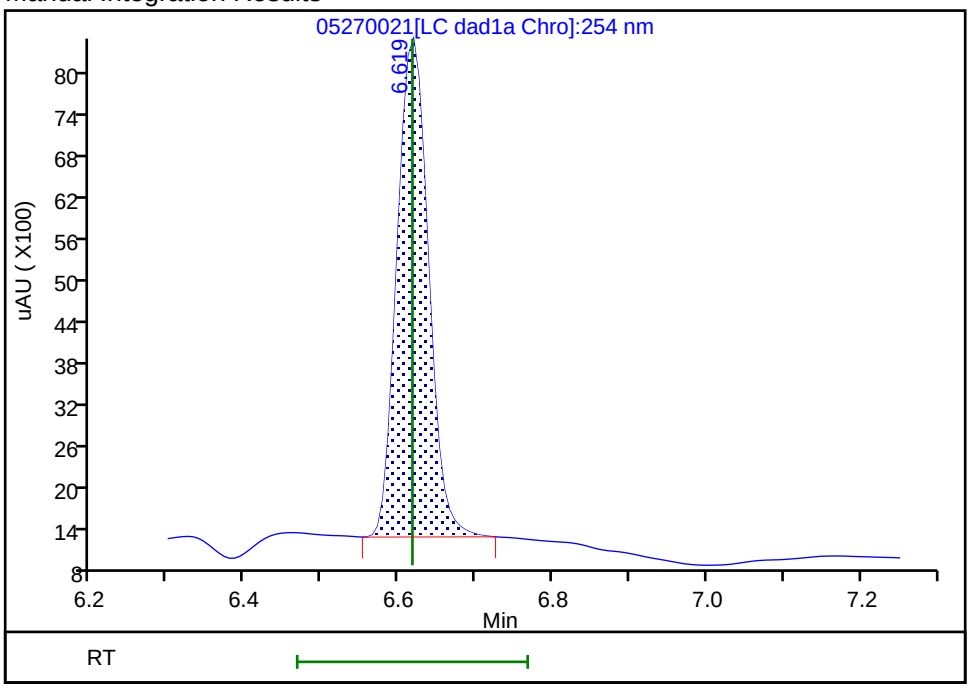
Processing Integration Results

RT: 6.62
Area: 41378
Amount: 0.490136
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 20454
Amount: 0.242284
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 20:51:24

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/22 Calibration Date: 05/27/2021 19:22

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: 05270022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	190605		257	250	2.6	15.0
DNX	Ave	142119	147205		259	250	3.6	15.0
MNX	Ave	130340	136566		306	292	4.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/22 Calibration Date: 05/27/2021 19:22

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: 05270022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.50	6.40	6.60
DNX	6.82	6.72	6.92
MNX	7.23	7.08	7.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270022.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2021 19:22:40 ALS Bottle#: 9 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0101842-022
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:36 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: 27-May-2021 20:51:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.499	6.499	0.000	47699	0.2503	0.2567	M
5 DNX	1	6.819	6.819	0.000	36838	0.2503	0.2592	M
6 MNX	1	7.232	7.232	0.000	39843	0.2918	0.3057	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

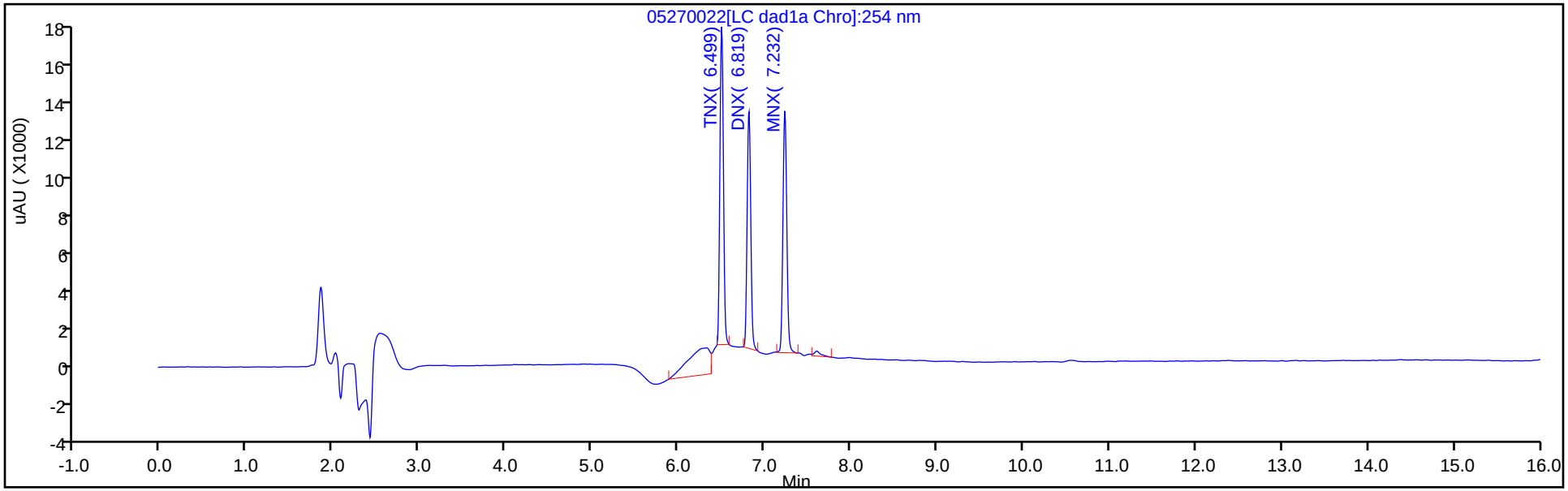
Report Date: 28-May-2021 14:38:36 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

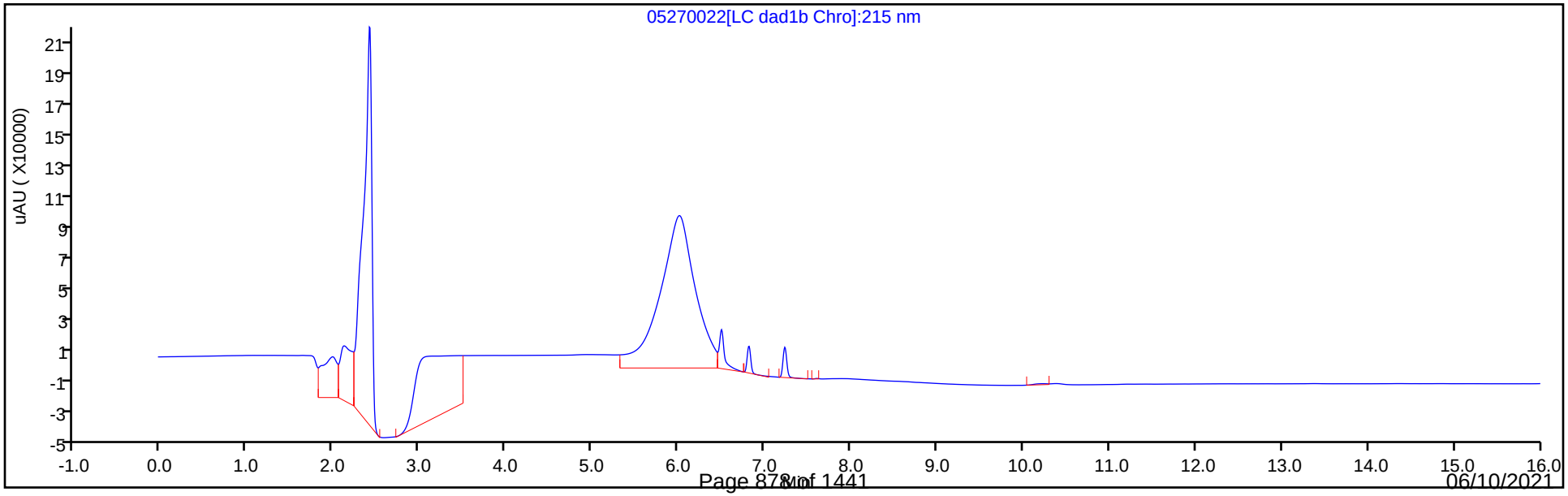
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270022.d

Injection Date:	27-May-2021 19:22:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

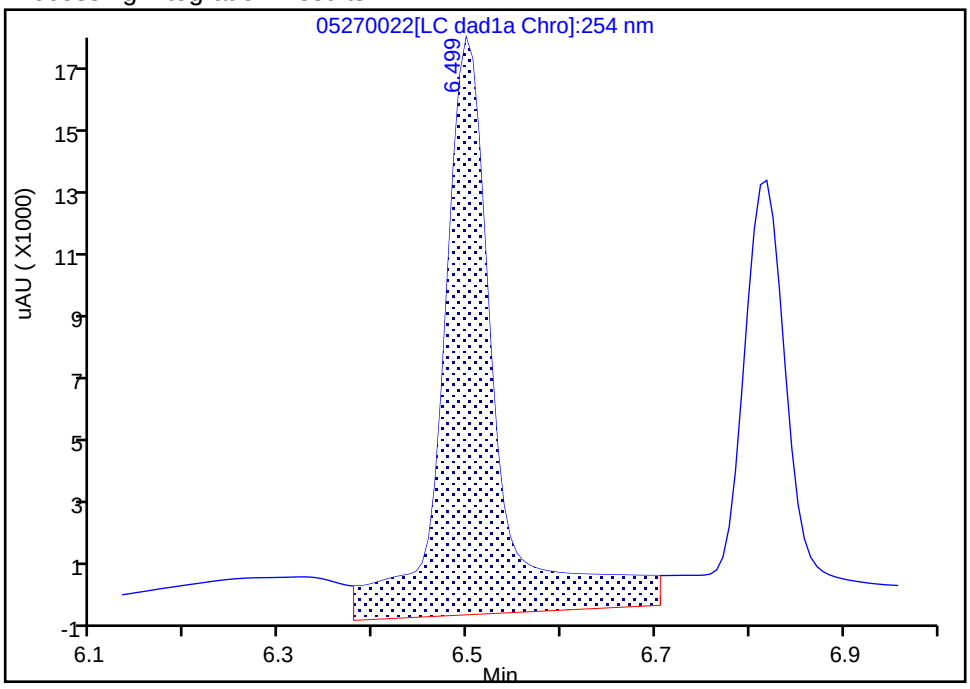
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270022.d				
Injection Date:	27-May-2021 19:22:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

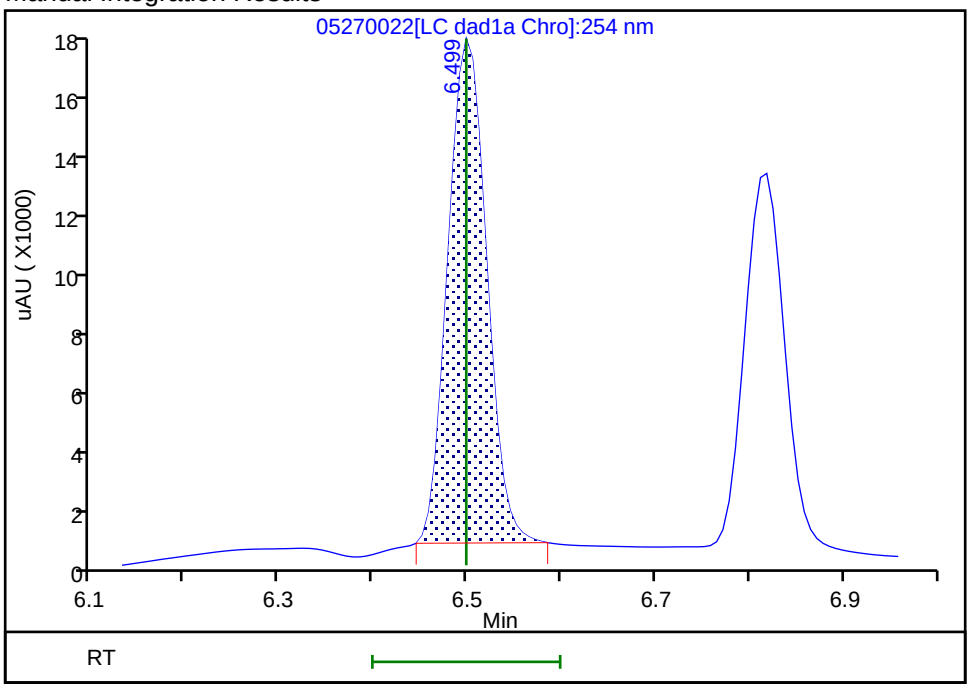
Processing Integration Results

RT: 6.50
Area: 71435
Amount: 0.384460
Amount Units: ug/mL



Manual Integration Results

RT: 6.50
Area: 47699
Amount: 0.256714
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 20:51:31

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

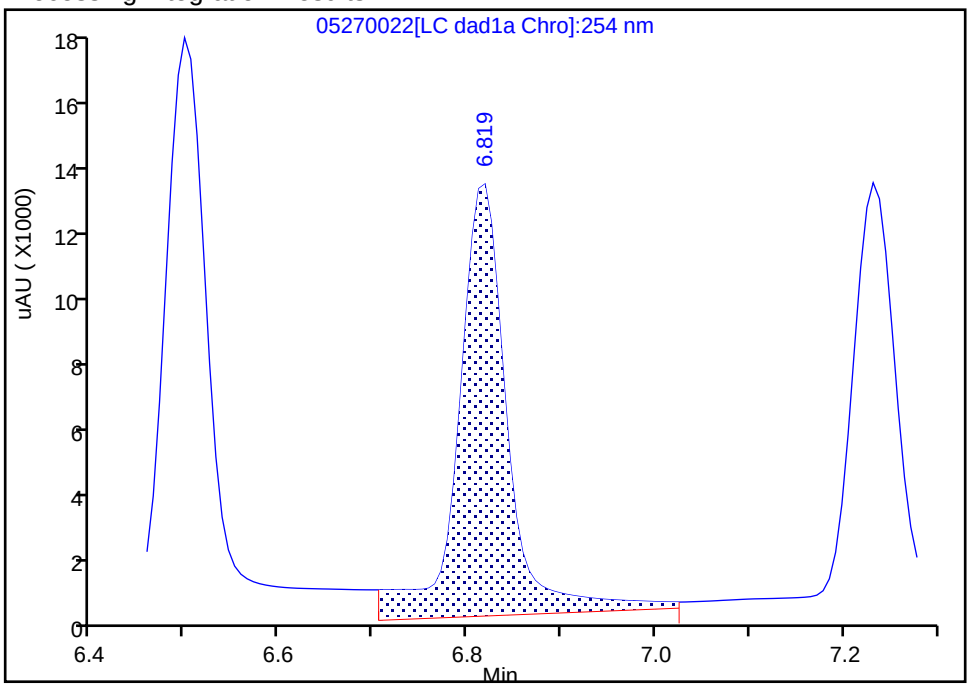
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270022.d				
Injection Date:	27-May-2021 19:22:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

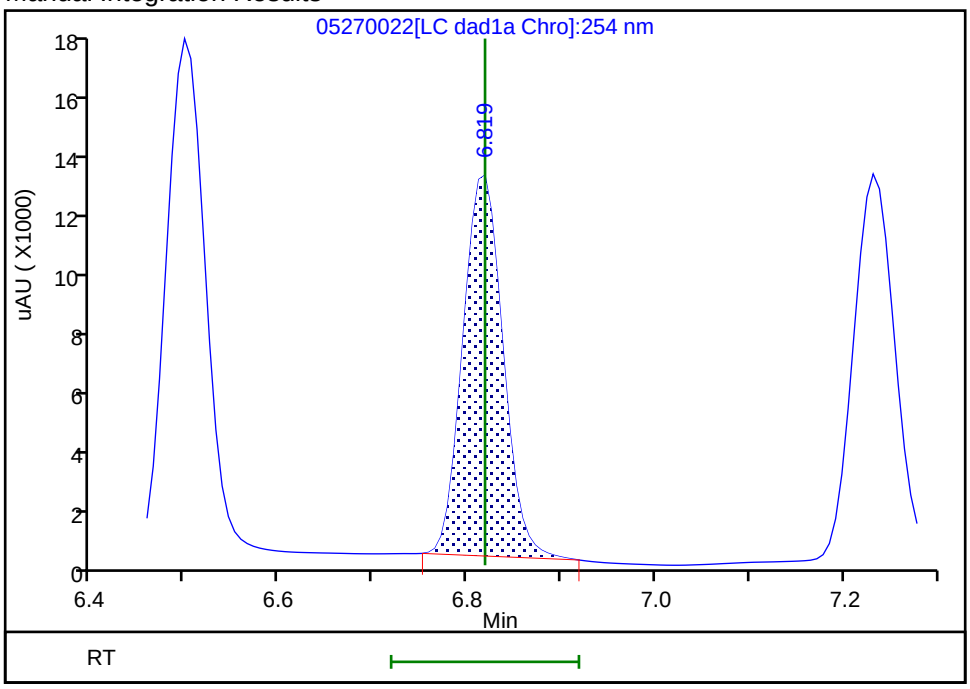
Processing Integration Results

RT: 6.82
Area: 48175
Amount: 0.338976
Amount Units: ug/mL



Manual Integration Results

RT: 6.82
Area: 36838
Amount: 0.259205
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 20:51:35
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/32 Calibration Date: 05/27/2021 23:12

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: 05270032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82472		244	250	-2.3	15.0
RDX	Ave	106261	102888		242	250	-3.2	15.0
Picric acid	Ave	82721	78580		237	250	-5.0	15.0
1,3,5-Trinitrobenzene	Ave	220317	214116		243	251	-2.8	15.0
1,3-Dinitrobenzene	Ave	296329	288451		244	251	-2.7	15.0
Nitrobenzene	Ave	195286	184566		237	251	-5.5	15.0
Tetryl	Ave	172420	164307		239	251	-4.7	15.0
Nitroglycerin	Lin2		67028		2550	2500	1.9	15.0
2,4,6-Trinitrotoluene	Ave	206038	198116		241	251	-3.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	143089		234	250	-6.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	196618		238	251	-5.0	15.0
2,6-Dinitrotoluene	Ave	143079	140155		246	251	-2.0	15.0
2,4-Dinitrotoluene	Ave	287012	278502		244	251	-3.0	15.0
2-Nitrotoluene	Ave	128392	118296		230	250	-7.9	15.0
4-Nitrotoluene	Ave	111913	103253		231	251	-7.7	15.0
3-Nitrotoluene	Ave	142246	130250		229	250	-8.4	15.0
PETN	Ave	74779	71775		2400	2500	-4.0	15.0
1,2-Dinitrobenzene	Ave	128217	128536		251	250	0.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/32 Calibration Date: 05/27/2021 23:12

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: 05270032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.62	6.47	6.77
RDX	7.60	7.45	7.75
Picric acid	7.97	7.83	8.13
1,3,5-Trinitrobenzene	8.67	8.52	8.82
1,3-Dinitrobenzene	9.30	9.15	9.45
Nitrobenzene	9.69	9.55	9.85
Tetryl	10.03	9.89	10.19
Nitroglycerin	10.49	10.35	10.65
2,4,6-Trinitrotoluene	10.96	10.86	11.06
4-Amino-2,6-dinitrotoluene	11.17	11.08	11.28
2-Amino-4,6-dinitrotoluene	11.43	11.34	11.54
2,6-Dinitrotoluene	11.60	11.51	11.71
2,4-Dinitrotoluene	11.77	11.68	11.88
2-Nitrotoluene	12.66	12.52	12.82
4-Nitrotoluene	13.10	12.96	13.26
3-Nitrotoluene	13.70	13.56	13.86
PETN	14.83	14.69	14.99
1,2-Dinitrobenzene	8.54	8.39	8.69

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270032.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2021 23:12:32 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0101842-032
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:44:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.619	6.617	0.002	20618	0.2500	0.2442	
7 RDX	1	7.599	7.604	-0.005	25722	0.2500	0.2421	
8 2,4,6-Trinitrophenol	1	7.966	7.977	-0.011	19645	0.2500	0.2375	
$ 9 1,2-Dinitrobenzene	1	8.539	8.544	-0.005	32134	0.2500	0.2506	
10 1,3,5-Trinitrobenzene	1	8.666	8.670	-0.004	53636	0.2505	0.2434	
11 1,3-Dinitrobenzene	1	9.299	9.304	-0.005	72257	0.2505	0.2438	
12 Nitrobenzene	1	9.693	9.697	-0.004	46326	0.2510	0.2372	
14 Tetryl	1	10.026	10.037	-0.011	41159	0.2505	0.2387	
15 Nitroglycerin	2	10.493	10.497	-0.004	167570	2.50	2.55	
16 2,4,6-Trinitrotoluene	1	10.959	10.964	-0.005	49727	0.2510	0.2413	
17 4-Amino-2,6-dinitrotoluene	1	11.173	11.184	-0.011	35808	0.2503	0.2344	
18 2-Amino-4,6-dinitrotoluene	1	11.433	11.437	-0.004	49351	0.2510	0.2385	
19 2,6-Dinitrotoluene	1	11.599	11.610	-0.011	35179	0.2510	0.2459	
20 2,4-Dinitrotoluene	1	11.773	11.784	-0.011	69904	0.2510	0.2436	
21 o-Nitrotoluene	1	12.659	12.670	-0.011	29574	0.2500	0.2303	
22 p-Nitrotoluene	1	13.099	13.110	-0.011	25865	0.2505	0.2311	
23 m-Nitrotoluene	1	13.699	13.710	-0.011	32595	0.2503	0.2291	
24 PETN	2	14.833	14.844	-0.011	179438	2.50	2.40	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00068 Amount Added: 25.00 Units: uL

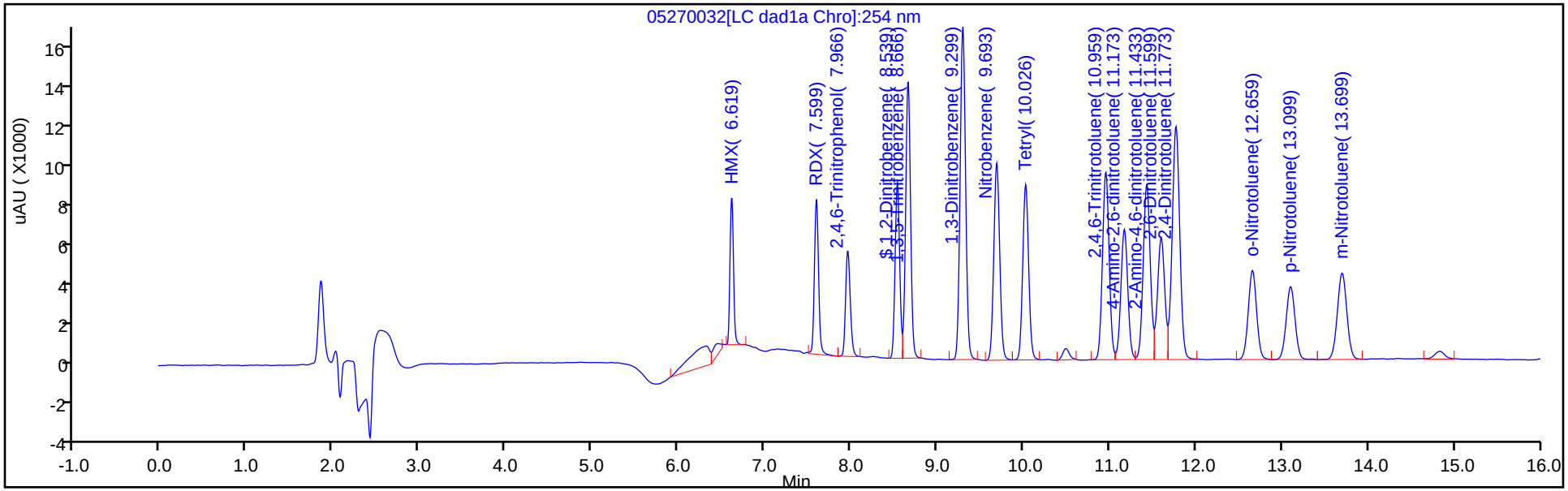
Report Date: 28-May-2021 14:38:41 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

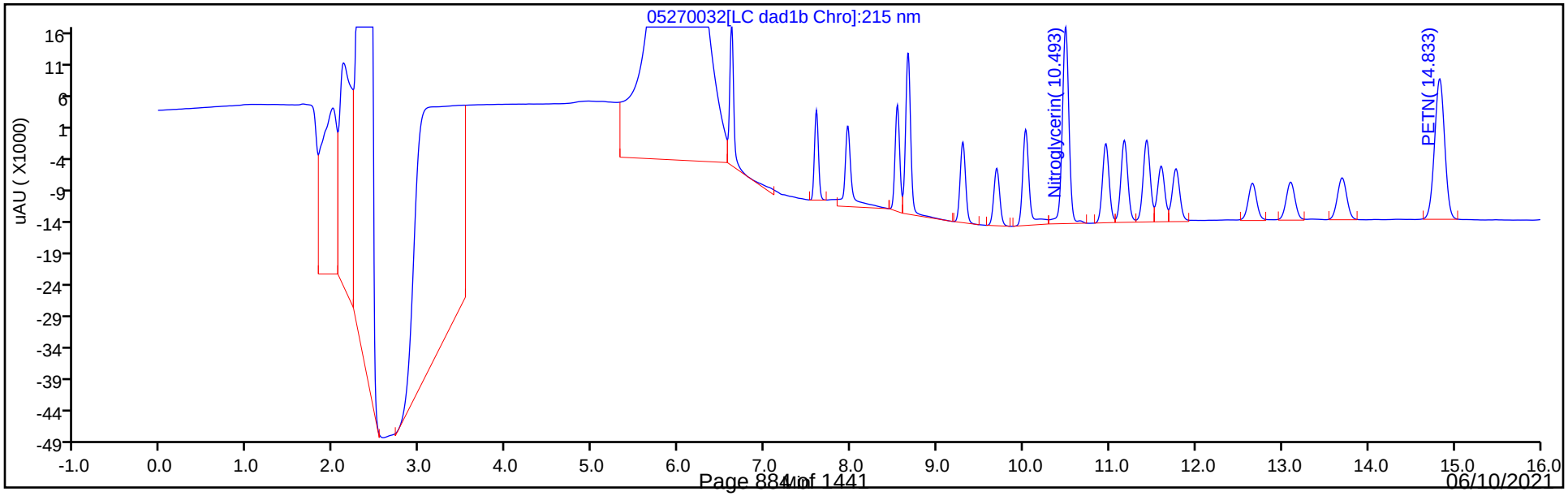
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270032.d

Injection Date:	27-May-2021 23:12:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	32
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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/33 Calibration Date: 05/27/2021 23:35

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: 05270033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	185702		250	250	-0.0	15.0
DNX	Ave	142119	145367		256	250	2.3	15.0
MNX	Ave	130340	135997		304	292	4.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/33 Calibration Date: 05/27/2021 23:35

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: 05270033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.40	6.60
DNX	6.81	6.72	6.92
MNX	7.23	7.08	7.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270033.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	27-May-2021 23:35:30	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0101842-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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:	28-May-2021 12:45:09		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.494	6.499	-0.005	46472	0.2503	0.2501	M
5 DNX	1	6.814	6.819	-0.005	36378	0.2503	0.2560	M
6 MNX	1	7.234	7.232	0.002	39677	0.2918	0.3044	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

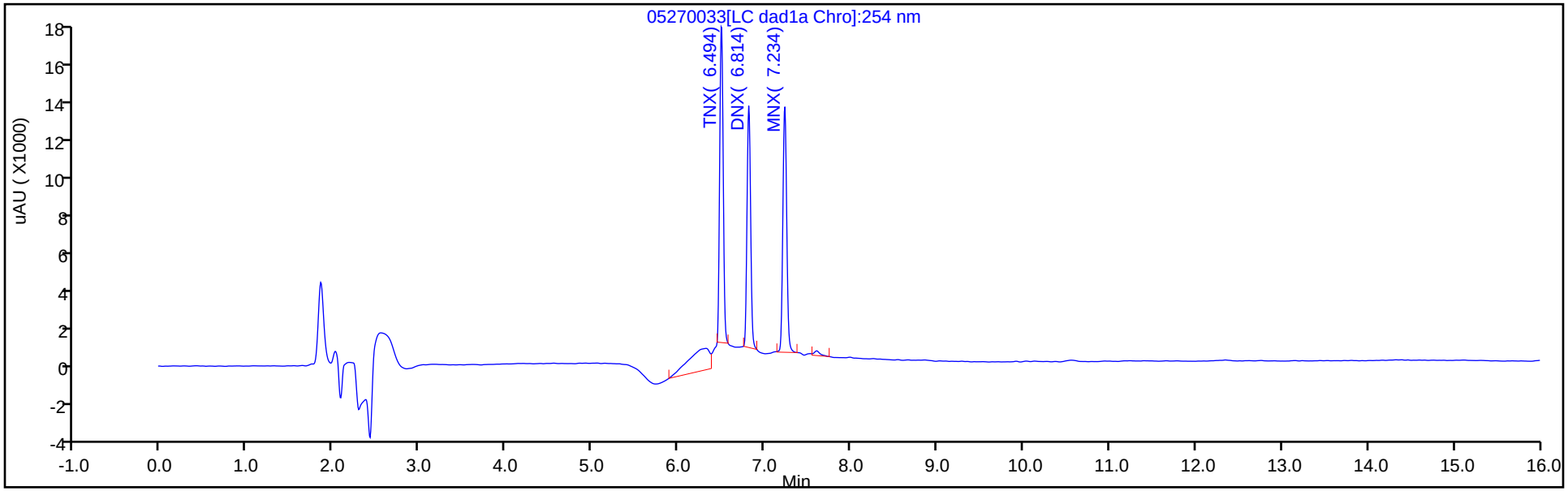
Report Date: 28-May-2021 14:38:41 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

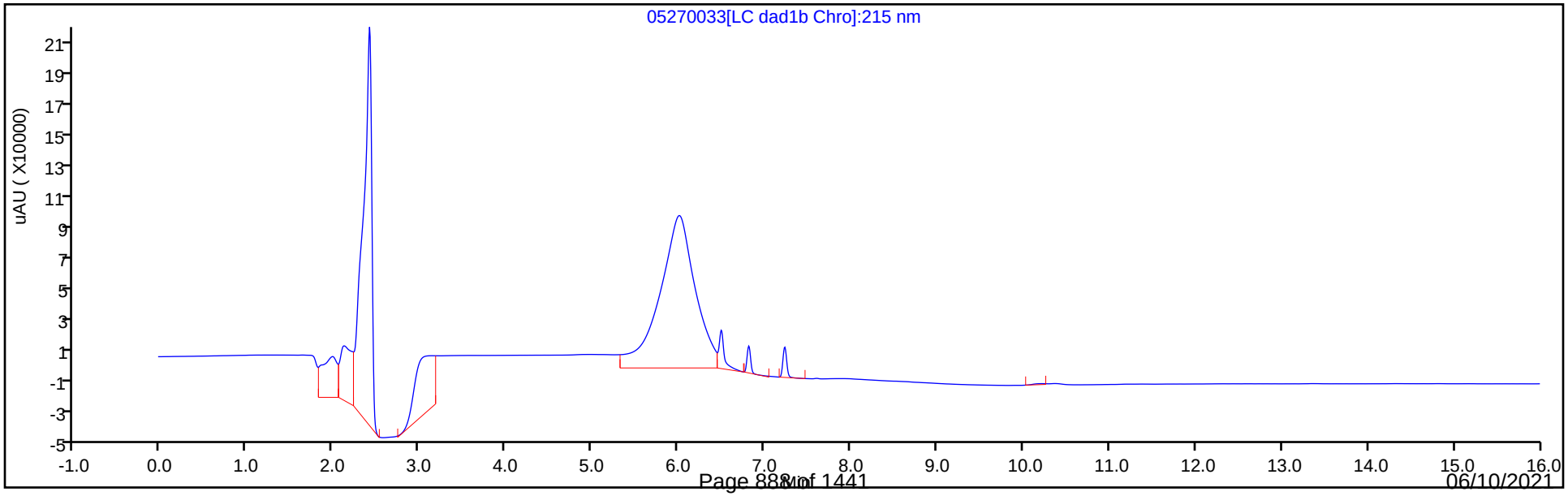
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270033.d

Injection Date:	27-May-2021 23:35:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	33
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

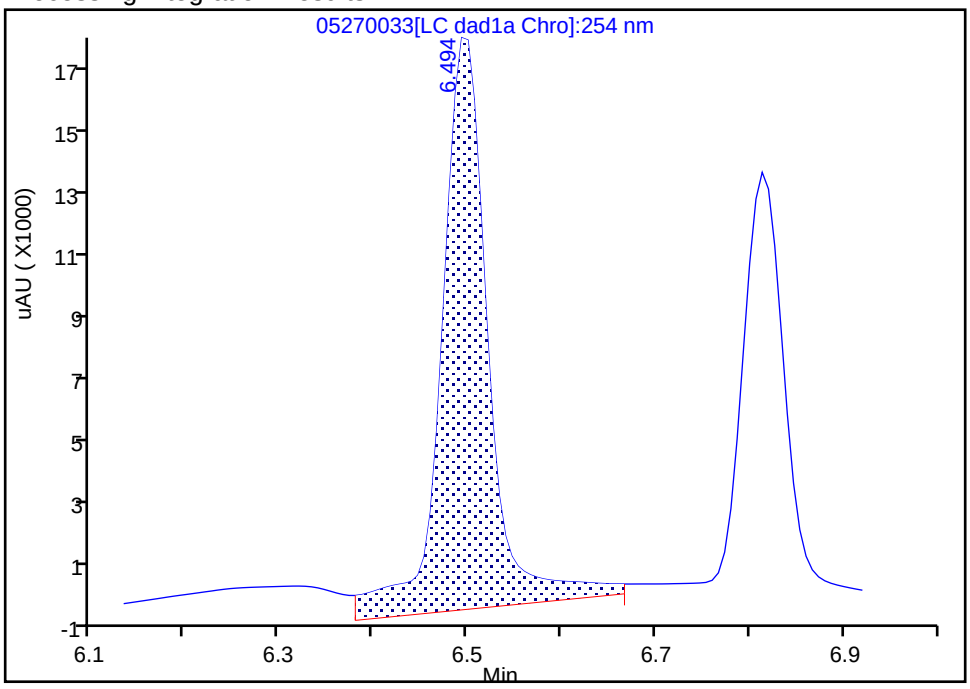
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270033.d				
Injection Date:	27-May-2021 23:35:30	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

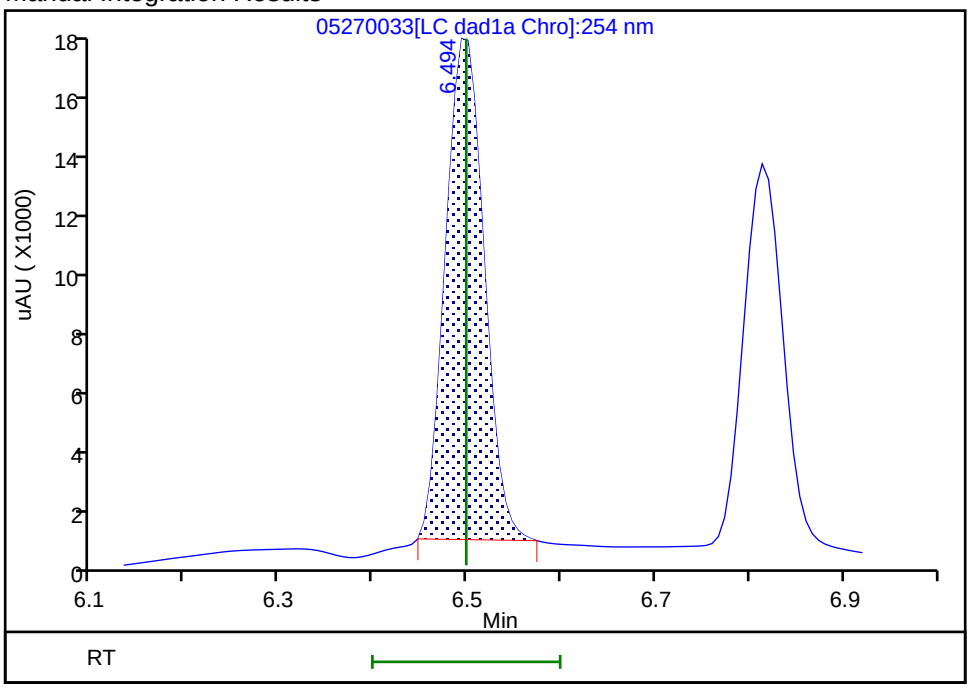
Processing Integration Results

RT: 6.49
Area: 60166
Amount: 0.323811
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 46472
Amount: 0.250110
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:45:04

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

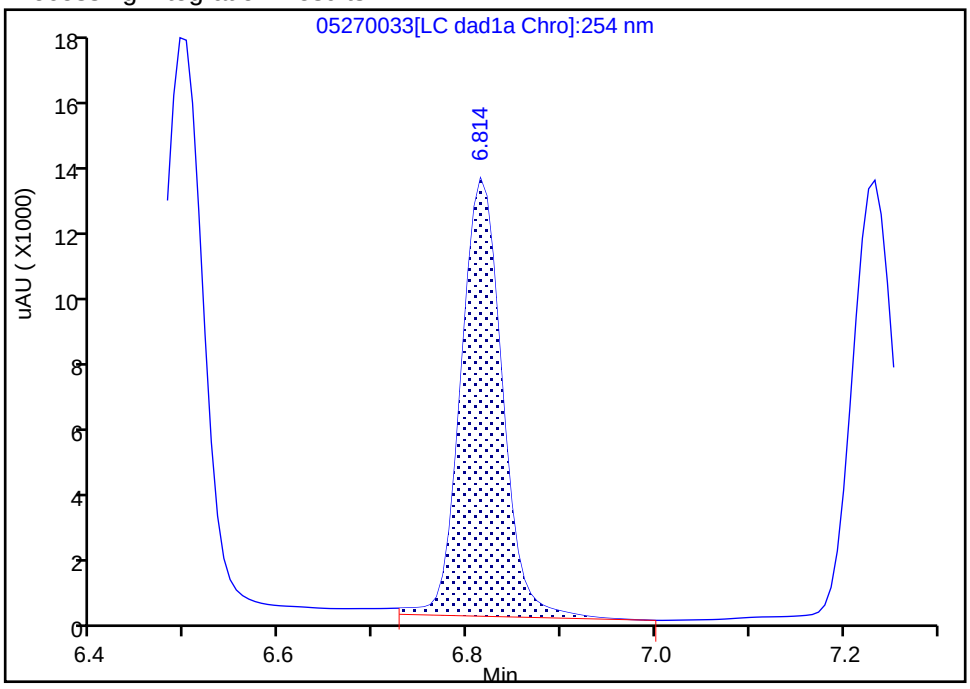
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270033.d				
Injection Date:	27-May-2021 23:35:30	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

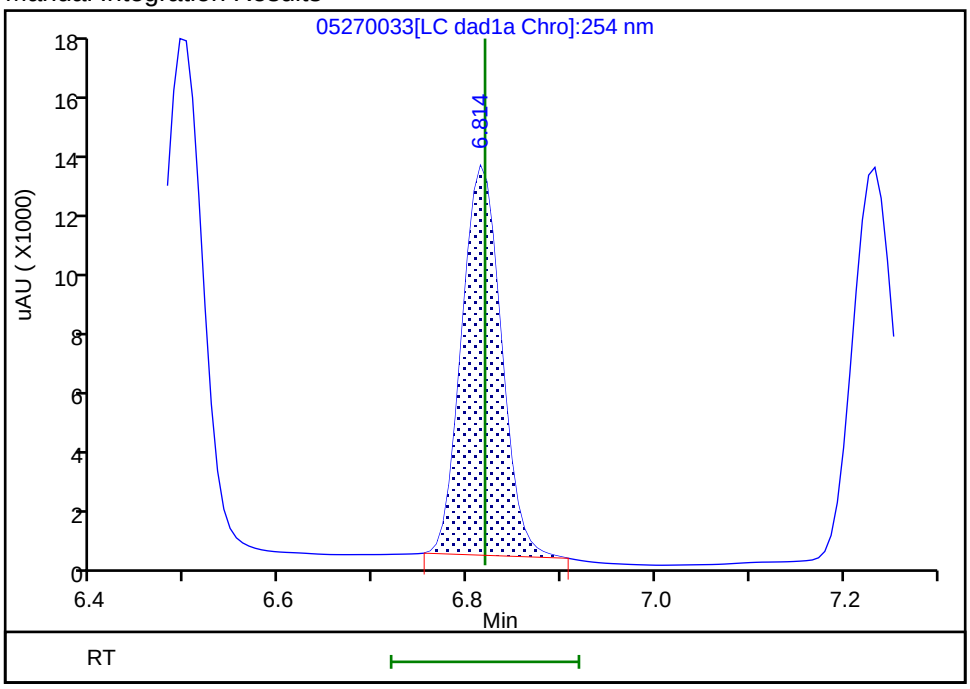
Processing Integration Results

RT: 6.81
Area: 38728
Amount: 0.272503
Amount Units: ug/mL



Manual Integration Results

RT: 6.81
Area: 36378
Amount: 0.255968
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:45:07
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/44 Calibration Date: 05/28/2021 03:48

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: 05270044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82960		246	250	-1.7	15.0
RDX	Ave	106261	101756		239	250	-4.2	15.0
Picric acid	Ave	82721	79408		240	250	-4.0	15.0
1,3,5-Trinitrobenzene	Ave	220317	214224		244	251	-2.8	15.0
1,3-Dinitrobenzene	Ave	296329	288495		244	251	-2.6	15.0
Nitrobenzene	Ave	195286	181251		233	251	-7.2	15.0
Tetryl	Ave	172420	164455		239	251	-4.6	15.0
Nitroglycerin	Lin2		64855		2460	2500	-1.5	15.0
2,4,6-Trinitrotoluene	Ave	206038	198367		242	251	-3.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	143433		235	250	-6.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	197008		239	251	-4.8	15.0
2,6-Dinitrotoluene	Ave	143079	137733		242	251	-3.7	15.0
2,4-Dinitrotoluene	Ave	287012	280096		245	251	-2.4	15.0
2-Nitrotoluene	Ave	128392	116076		226	250	-9.6	15.0
4-Nitrotoluene	Ave	111913	101437		227	251	-9.4	15.0
3-Nitrotoluene	Ave	142246	128004		225	250	-10.0	15.0
PETN	Ave	74779	71800		2400	2500	-4.0	15.0
1,2-Dinitrobenzene	Ave	128217	129148		252	250	0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/44 Calibration Date: 05/28/2021 03:48

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: 05270044.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.47	6.77
RDX	7.59	7.45	7.75
Picric acid	7.96	7.83	8.13
1,3,5-Trinitrobenzene	8.65	8.52	8.82
1,3-Dinitrobenzene	9.29	9.15	9.45
Nitrobenzene	9.68	9.55	9.85
Tetryl	10.01	9.89	10.19
Nitroglycerin	10.48	10.35	10.65
2,4,6-Trinitrotoluene	10.95	10.86	11.06
4-Amino-2,6-dinitrotoluene	11.16	11.08	11.28
2-Amino-4,6-dinitrotoluene	11.42	11.34	11.54
2,6-Dinitrotoluene	11.59	11.51	11.71
2,4-Dinitrotoluene	11.76	11.68	11.88
2-Nitrotoluene	12.64	12.52	12.82
4-Nitrotoluene	13.09	12.96	13.26
3-Nitrotoluene	13.68	13.56	13.86
PETN	14.81	14.69	14.99
1,2-Dinitrobenzene	8.53	8.39	8.69

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270044.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2021 03:48:22 ALS Bottle#: 7 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0101842-044
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:47 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

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.613	6.617	-0.004	20740	0.2500	0.2457	
	7 RDX	1	7.593	7.604	-0.011	25439	0.2500	0.2394	
	8 2,4,6-Trinitrophenol	1	7.960	7.977	-0.017	19852	0.2500	0.2400	
$	9 1,2-Dinitrobenzene	1	8.533	8.544	-0.011	32287	0.2500	0.2518	
	10 1,3,5-Trinitrobenzene	1	8.653	8.670	-0.017	53663	0.2505	0.2436	
	11 1,3-Dinitrobenzene	1	9.287	9.304	-0.017	72268	0.2505	0.2439	
	12 Nitrobenzene	1	9.680	9.697	-0.017	45494	0.2510	0.2330	
	14 Tetryl	1	10.013	10.037	-0.024	41196	0.2505	0.2389	
	15 Nitroglycerin	2	10.480	10.497	-0.017	162138	2.50	2.46	
	16 2,4,6-Trinitrotoluene	1	10.947	10.964	-0.017	49790	0.2510	0.2417	
	17 4-Amino-2,6-dinitrotoluene	1	11.160	11.184	-0.024	35894	0.2503	0.2350	
	18 2-Amino-4,6-dinitrotoluene	1	11.420	11.437	-0.017	49449	0.2510	0.2390	
	19 2,6-Dinitrotoluene	1	11.587	11.610	-0.023	34571	0.2510	0.2416	
	20 2,4-Dinitrotoluene	1	11.760	11.784	-0.024	70304	0.2510	0.2450	
	21 o-Nitrotoluene	1	12.640	12.670	-0.030	29019	0.2500	0.2260	
	22 p-Nitrotoluene	1	13.087	13.110	-0.023	25410	0.2505	0.2271	
	23 m-Nitrotoluene	1	13.680	13.710	-0.030	32033	0.2503	0.2252	
	24 PETN	2	14.807	14.844	-0.037	179499	2.50	2.40	

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL

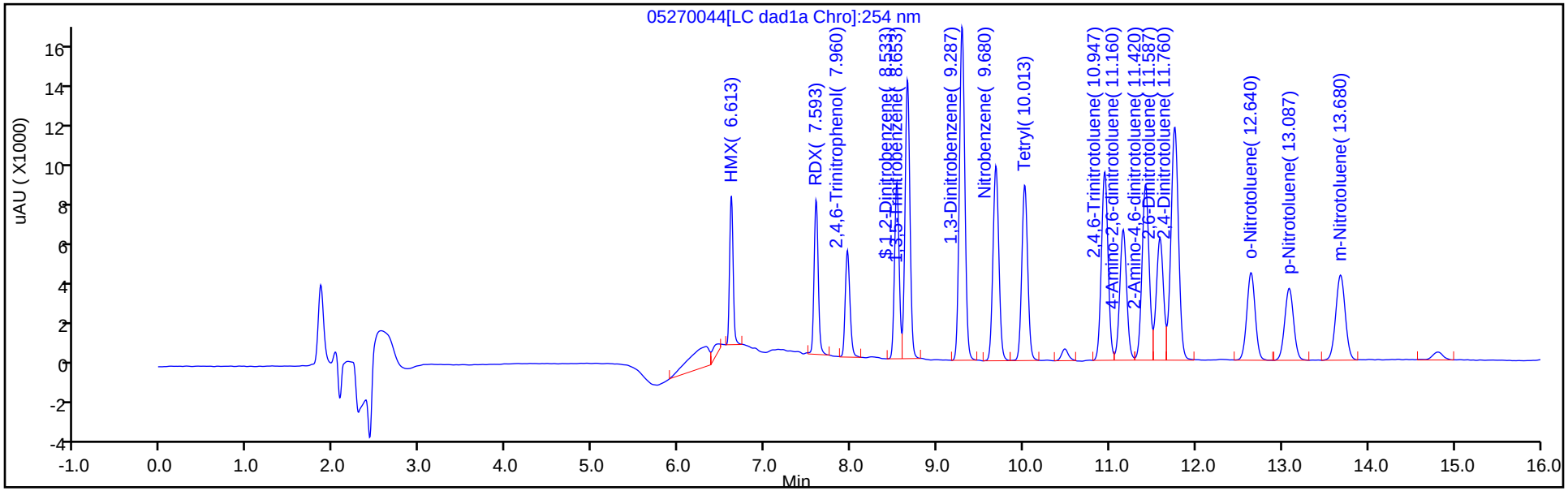
Report Date: 28-May-2021 14:38:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

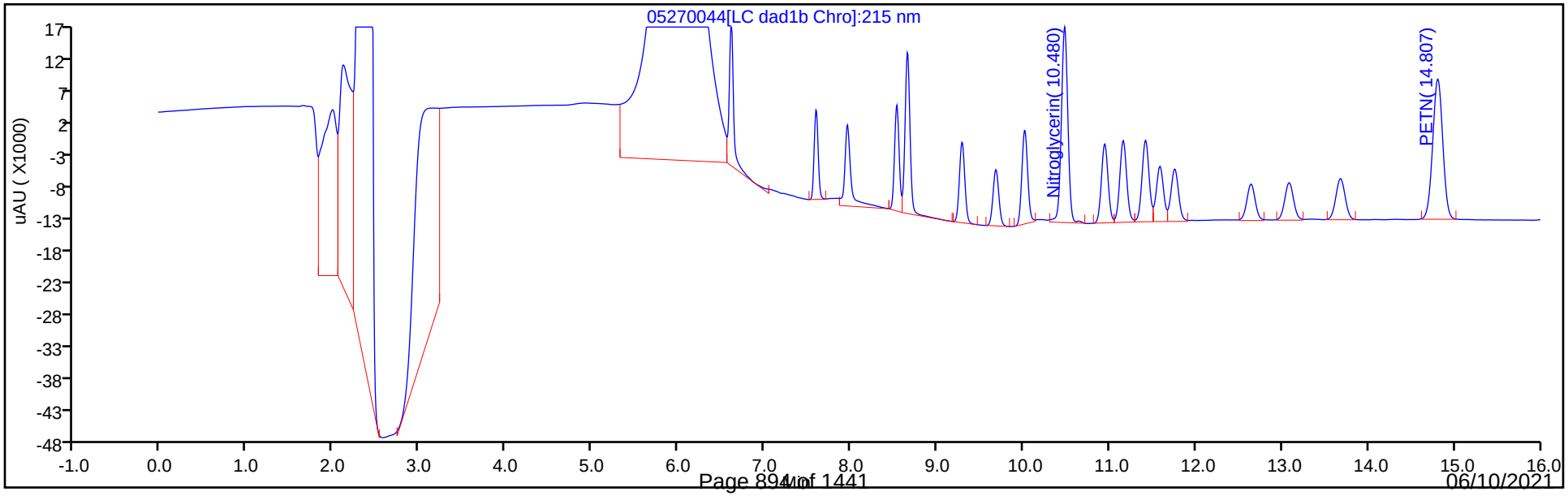
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270044.d

Injection Date:	28-May-2021 03:48:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	44
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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/45 Calibration Date: 05/28/2021 04:11

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: 05270045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	188108		253	250	1.2	15.0
DNX	Ave	142119	145383		256	250	2.3	15.0
MNX	Ave	130340	135637		304	292	4.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537692/45 Calibration Date: 05/28/2021 04:11

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: 05270045.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.40	6.60
DNX	6.81	6.72	6.92
MNX	7.23	7.08	7.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2021 04:11:21 ALS Bottle#: 9 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0101842-045
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:48 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: 28-May-2021 12:49:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.493	6.499	-0.006	47074	0.2503	0.2534	M
5 DNX	1	6.813	6.819	-0.006	36382	0.2503	0.2560	M
6 MNX	1	7.226	7.232	-0.006	39572	0.2918	0.3036	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

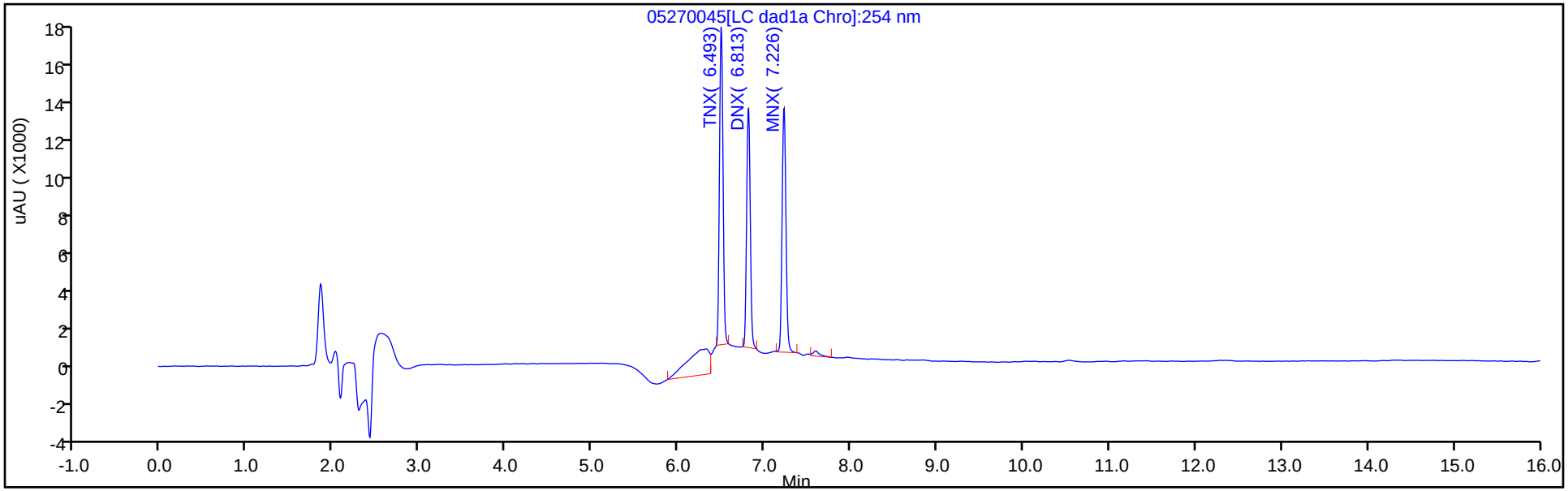
Report Date: 28-May-2021 14:38:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

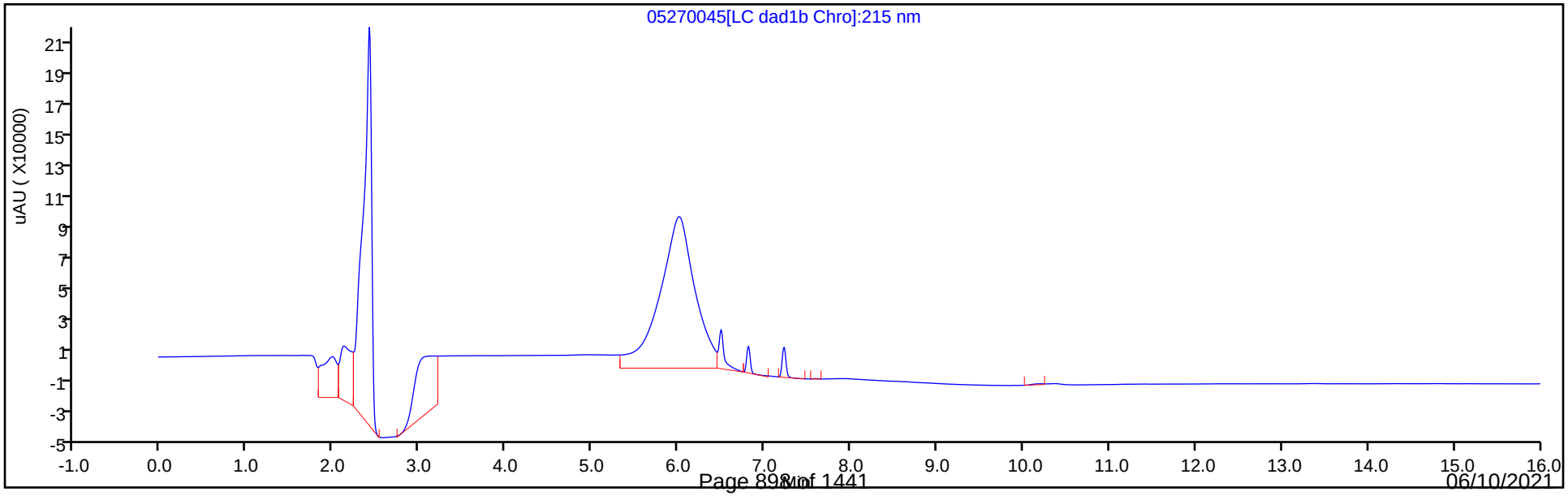
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270045.d

Injection Date:	28-May-2021 04:11:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	45
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

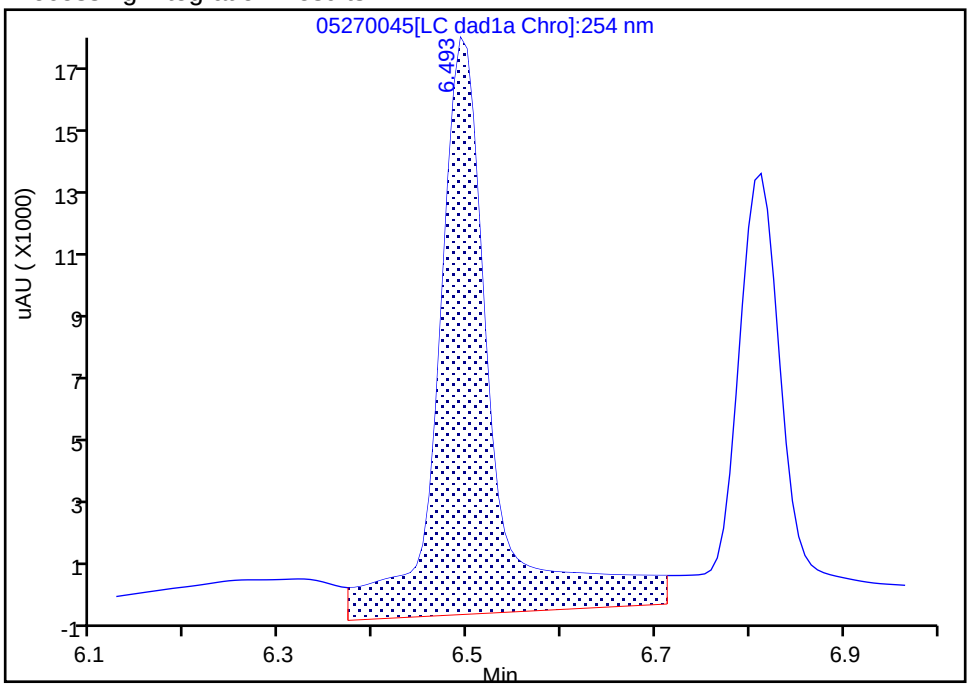
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270045.d				
Injection Date:	28-May-2021 04:11:21	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

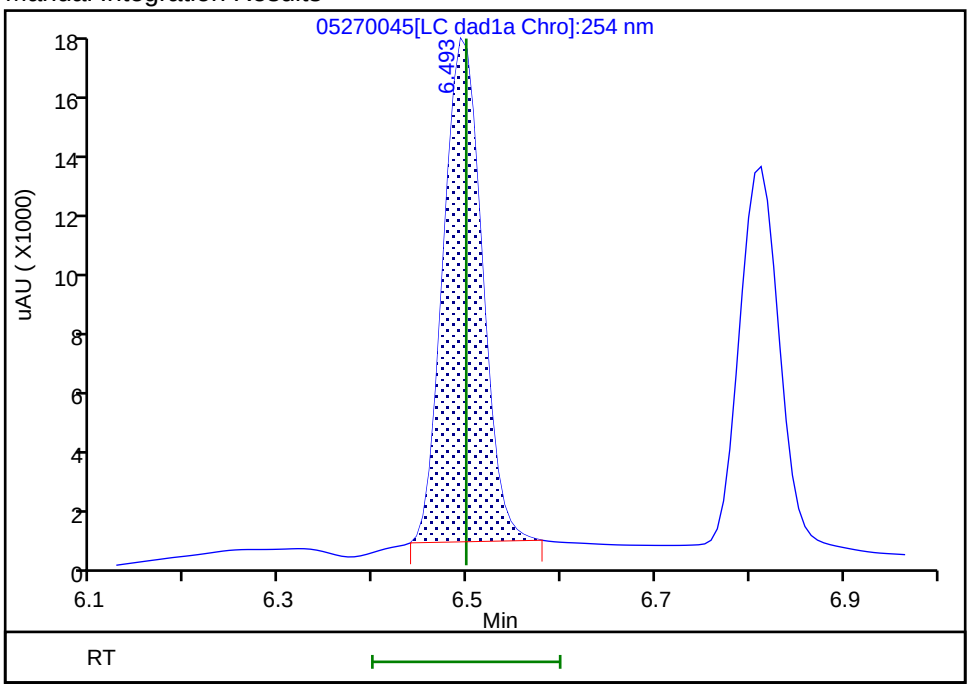
Processing Integration Results

RT: 6.49
Area: 70843
Amount: 0.381274
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 47074
Amount: 0.253350
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:49:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

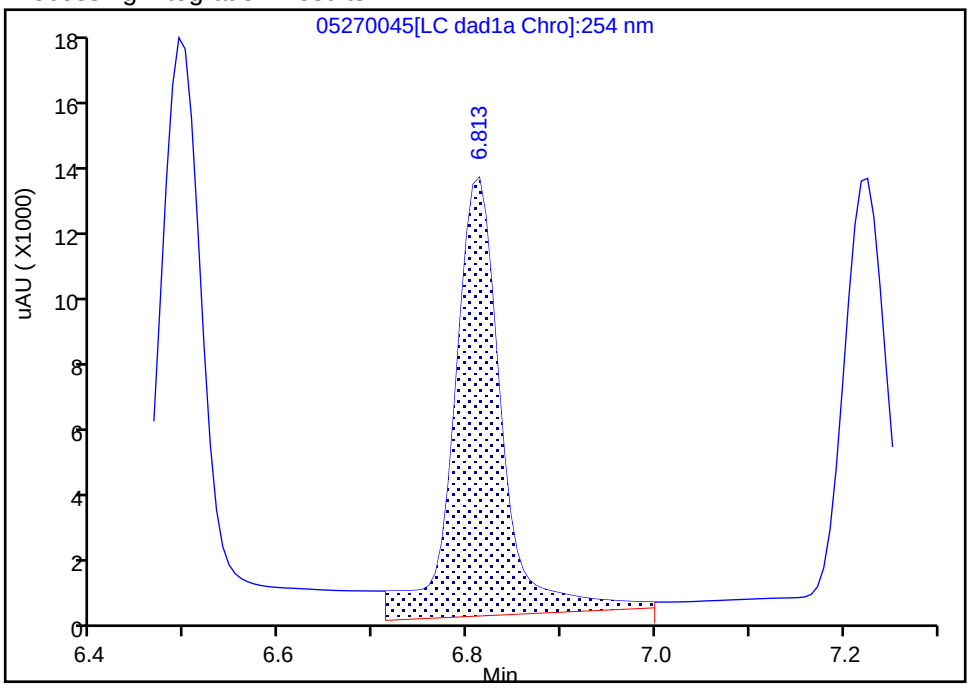
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270045.d				
Injection Date:	28-May-2021 04:11:21	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

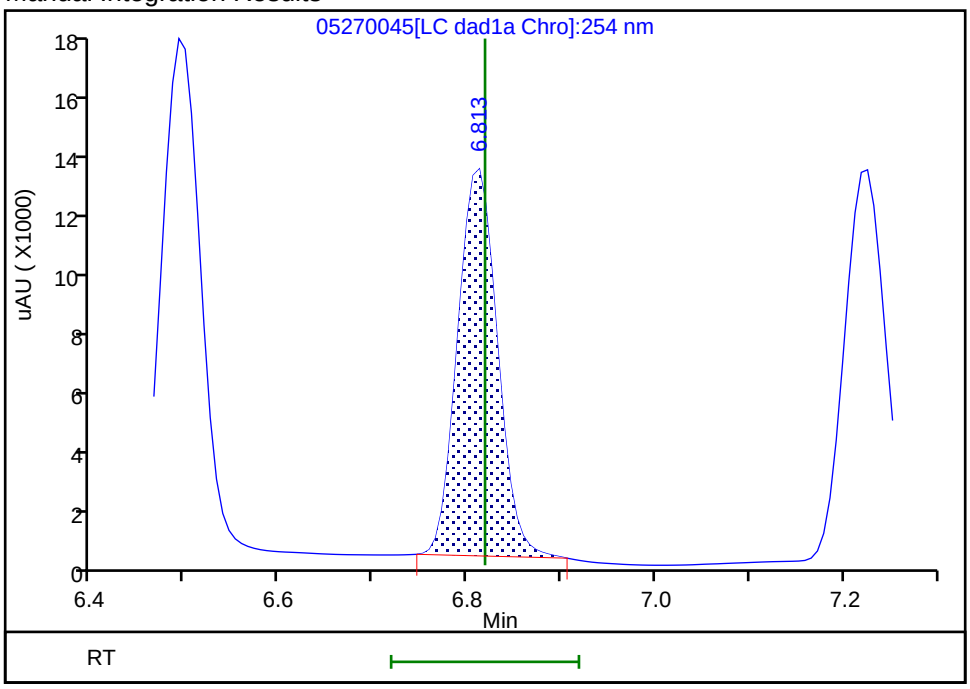
Processing Integration Results

RT: 6.81
Area: 46398
Amount: 0.326472
Amount Units: ug/mL



Manual Integration Results

RT: 6.81
Area: 36382
Amount: 0.255996
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:49:50
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

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.: 280-148902-1

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

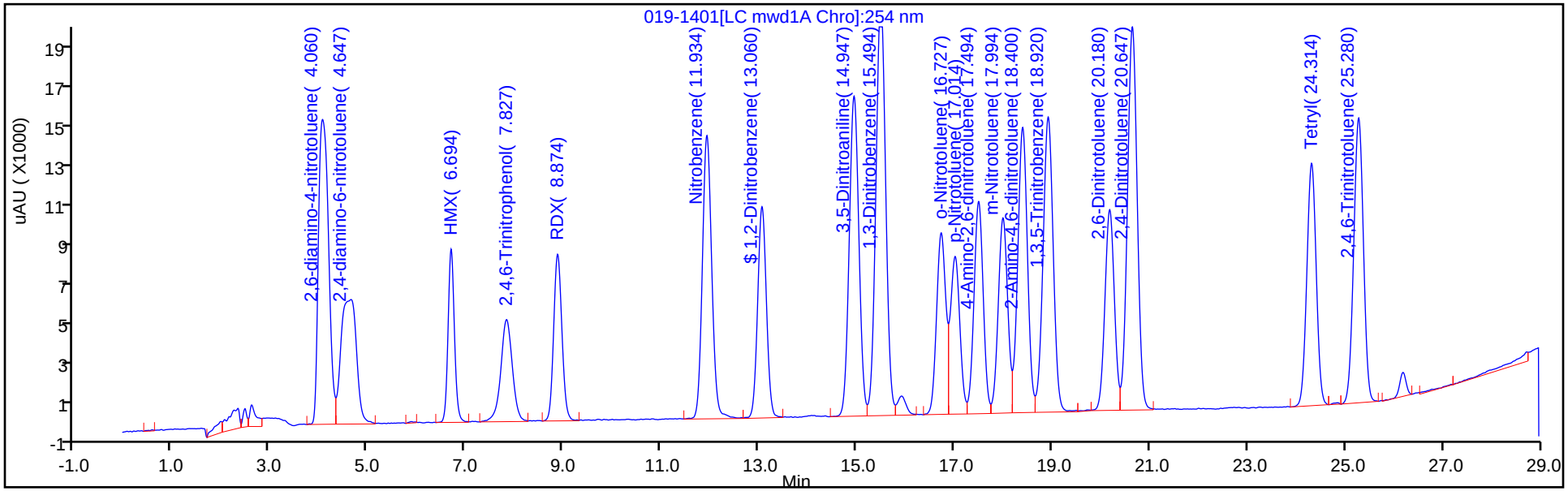
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

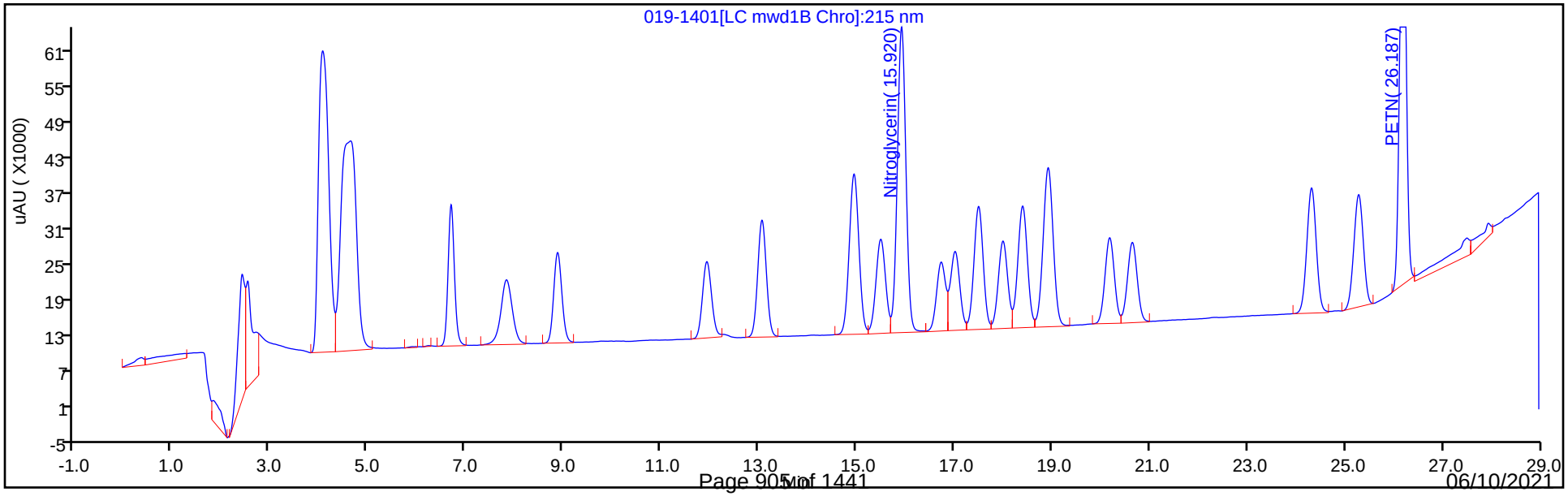
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D

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

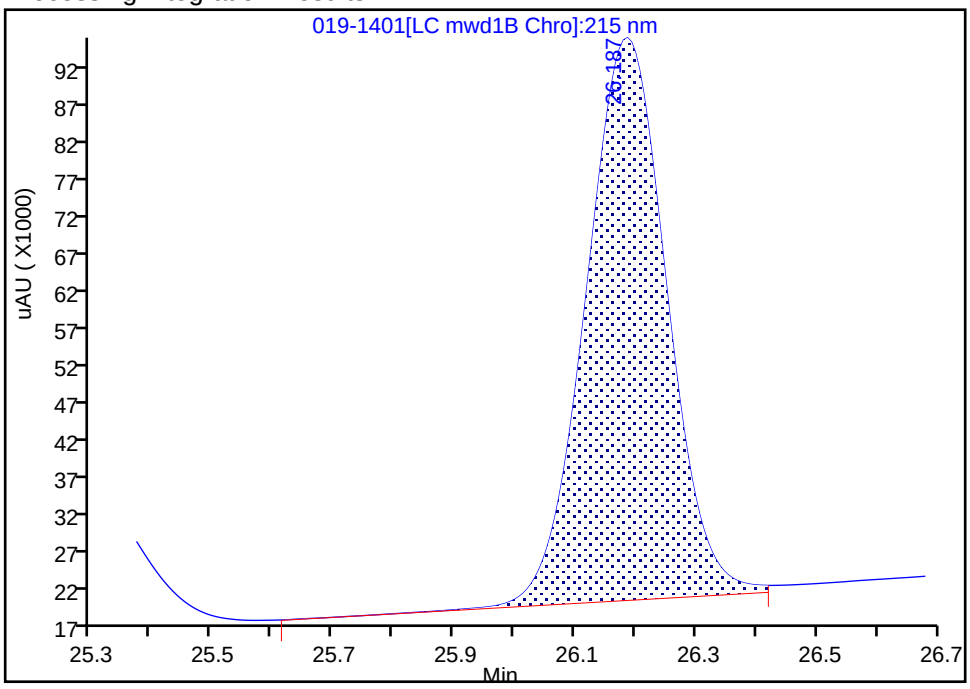
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D				
Injection Date:	02-May-2021 00:10:18	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT/ADD				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

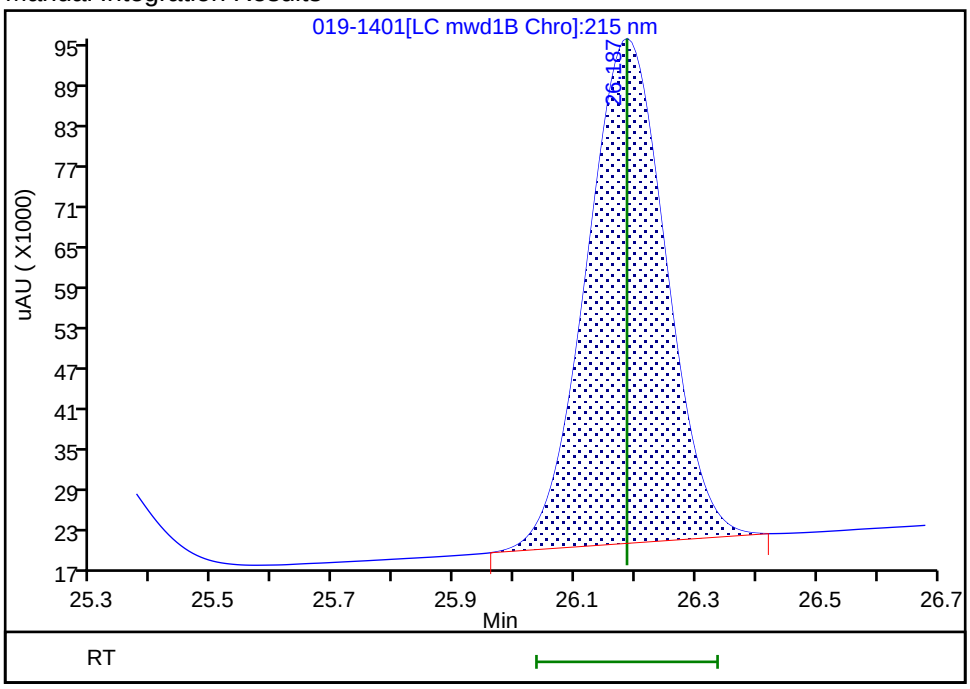
Processing Integration Results

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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/7 Calibration Date: 05/28/2021 17:50

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: 007-0601.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		160976		247	250	-1.1	15.0
Picric acid	Ave	159537	154856		243	250	-2.9	15.0
RDX	Ave	204270	199384		244	250	-2.4	15.0
Nitrobenzene	Ave	374651	370876		248	251	-1.0	15.0
1,3-Dinitrobenzene	Lin2		569186		251	251	0.1	15.0
Nitroglycerin	Ave	128605	127077		2470	2500	-1.2	15.0
2-Nitrotoluene	Ave	248967	241816		243	250	-2.9	15.0
4-Nitrotoluene	Ave	217187	208375		240	251	-4.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	278126		235	250	-6.3	15.0
3-Nitrotoluene	Ave	278393	265419		239	250	-4.7	15.0
2-Amino-4,6-dinitrotoluene	Lin2		392215		249	251	-0.7	15.0
1,3,5-Trinitrobenzene	Lin2		431246		257	251	2.5	15.0
2,6-Dinitrotoluene	Lin2		267458		250	251	-0.3	15.0
2,4-Dinitrotoluene	Ave	565713	542406		241	251	-4.1	15.0
Tetryl	Lin2		327317		252	251	0.7	15.0
2,4,6-Trinitrotoluene	Lin2		380104		252	251	0.6	15.0
PETN	Ave	137740	142207		2580	2500	3.2	15.0
1,2-Dinitrobenzene	Ave	265659	257812		243	250	-3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/7 Calibration Date: 05/28/2021 17:50

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: 007-0601.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.54	6.84
Picric acid	7.91	7.76	8.06
RDX	8.87	8.72	9.02
Nitrobenzene	11.92	11.77	12.07
1,3-Dinitrobenzene	15.45	15.30	15.60
Nitroglycerin	15.86	15.71	16.01
2-Nitrotoluene	16.69	16.54	16.84
4-Nitrotoluene	16.97	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.43	17.28	17.58
3-Nitrotoluene	17.95	17.80	18.10
2-Amino-4,6-dinitrotoluene	18.33	18.18	18.48
1,3,5-Trinitrobenzene	18.85	18.70	19.00
2,6-Dinitrotoluene	20.10	19.95	20.25
2,4-Dinitrotoluene	20.57	20.42	20.72
Tetryl	24.19	24.04	24.34
2,4,6-Trinitrotoluene	25.17	25.02	25.32
PETN	26.10	25.95	26.25
1,2-Dinitrobenzene	13.02	12.87	13.17

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\007-0601.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2021 17:50:03 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0101890-007
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:26 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: CTX1653

First Level Reviewer: zhangji Date: 28-May-2021 18:25:08

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	4.114	4.114	0.000	107925	0.2500	0.2552	
2 2,4-diamino-6-nitrotoluene	1	4.634	4.634	0.000	62900	0.2500	0.2579	
6 HMX	1	6.694	6.694	0.000	40244	0.2500	0.2473	
5 2,4,6-Trinitrophenol	1	7.908	7.908	0.000	38714	0.2500	0.2427	
8 RDX	1	8.868	8.868	0.000	49846	0.2500	0.2440	
9 Nitrobenzene	1	11.921	11.921	0.000	93090	0.2510	0.2485	
$ 10 1,2-Dinitrobenzene	1	13.021	13.021	0.000	64453	0.2500	0.2426	
11 3,5-Dinitroaniline	1	14.887	14.887	0.000	118223	0.2500	0.2606	
12 1,3-Dinitrobenzene	1	15.447	15.447	0.000	142581	0.2505	0.2508	
13 Nitroglycerin	2	15.861	15.861	0.000	317692	2.50	2.47	
14 o-Nitrotoluene	1	16.687	16.687	0.000	60454	0.2500	0.2428	
15 p-Nitrotoluene	1	16.974	16.974	0.000	52198	0.2505	0.2403	
16 4-Amino-2,6-dinitrotoluene	1	17.427	17.427	0.000	69601	0.2503	0.2346	
17 m-Nitrotoluene	1	17.947	17.947	0.000	66421	0.2503	0.2386	
18 2-Amino-4,6-dinitrotoluene	1	18.327	18.327	0.000	98446	0.2510	0.2493	
19 1,3,5-Trinitrobenzene	1	18.854	18.854	0.000	108027	0.2505	0.2567	
20 2,6-Dinitrotoluene	1	20.101	20.101	0.000	67132	0.2510	0.2502	
21 2,4-Dinitrotoluene	1	20.568	20.568	0.000	136144	0.2510	0.2407	
22 Tetryl	1	24.194	24.194	0.000	81993	0.2505	0.2522	
23 2,4,6-Trinitrotoluene	1	25.174	25.174	0.000	95406	0.2510	0.2525	
24 PETN	2	26.101	26.101	0.000	355518	2.50	2.58	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00068	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

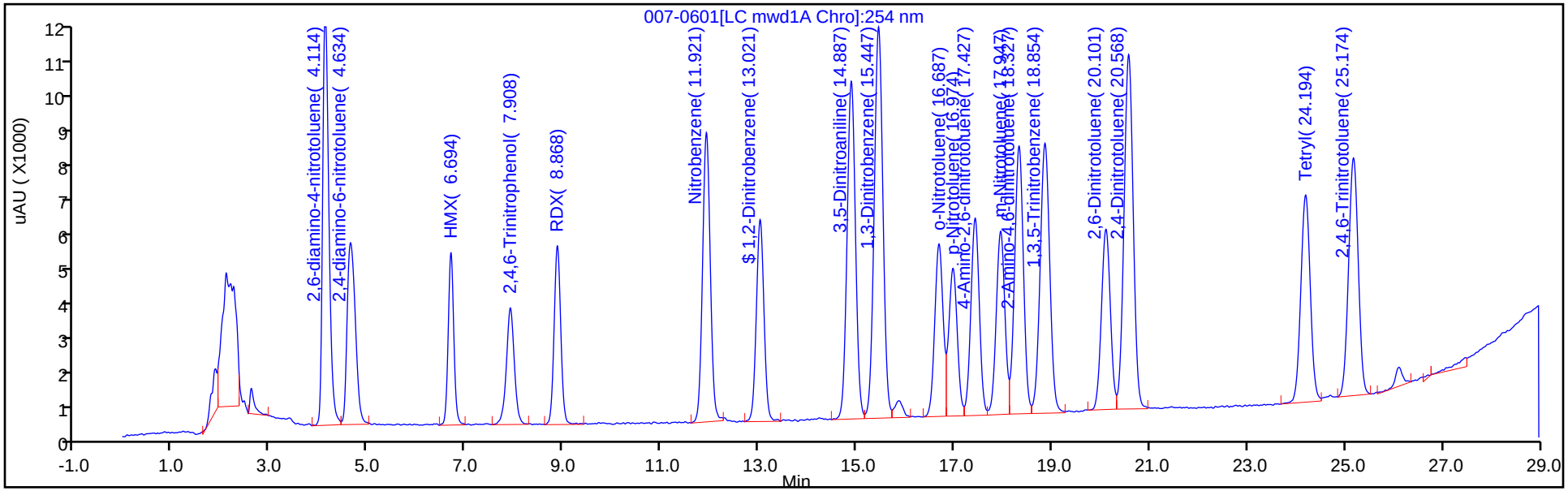
Report Date: 29-May-2021 15:25:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

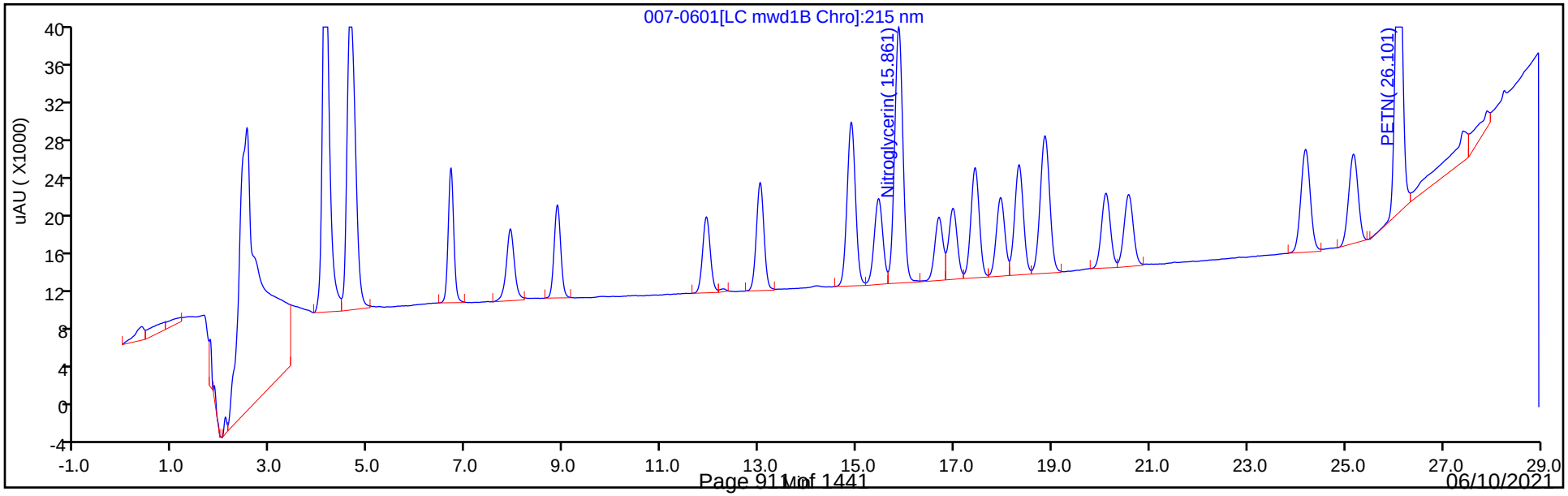
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\007-0601.D

Injection Date:	28-May-2021 17:50:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/8 Calibration Date: 05/28/2021 18:25

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: 008-0701.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	363916		242	250	-3.3	15.0
DNX	Ave	284791	276735		243	250	-2.8	15.0
MNX	Ave	264843	256470		283	292	-3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/8 Calibration Date: 05/28/2021 18:25

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: 008-0701.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.06	4.91	5.21
DNX	5.88	5.73	6.03
MNX	7.42	7.27	7.57

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\008-0701.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2021 18:25:00 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0101890-008
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:26 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: CTX1653

First Level Reviewer: zhangji Date: 28-May-2021 19:45:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.057	5.057	0.000	91070	0.2503	0.2421	
4 DNX	1	5.884	5.884	0.000	69253	0.2503	0.2432	
7 MNX	1	7.424	7.424	0.000	74825	0.2918	0.2825	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

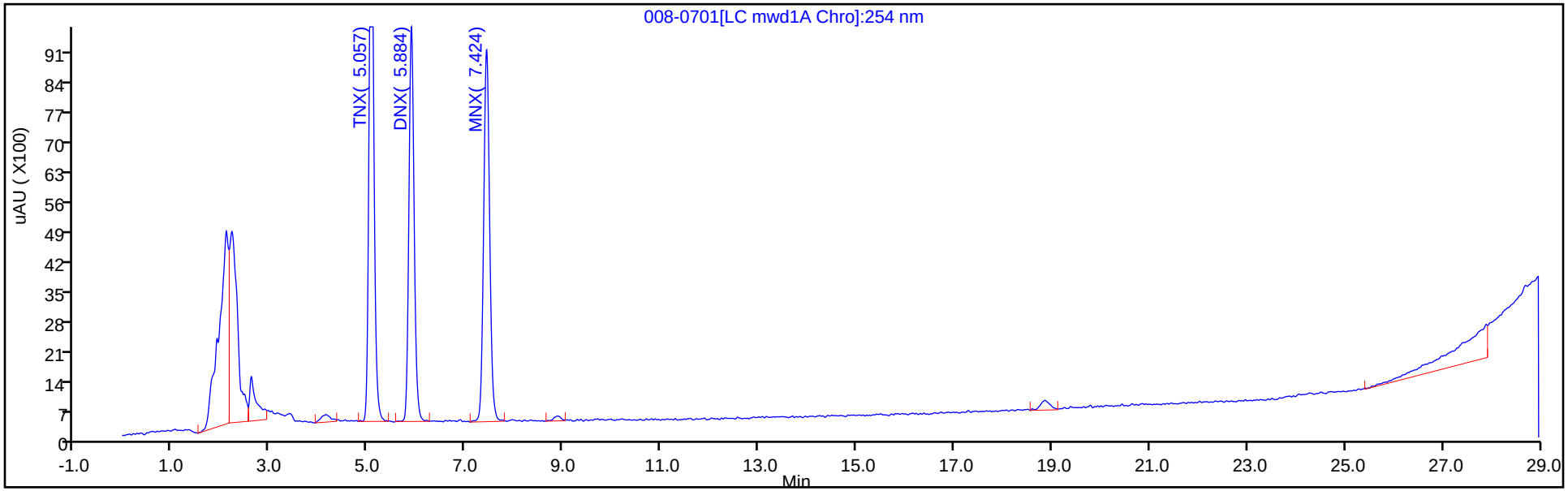
Report Date: 29-May-2021 15:25:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

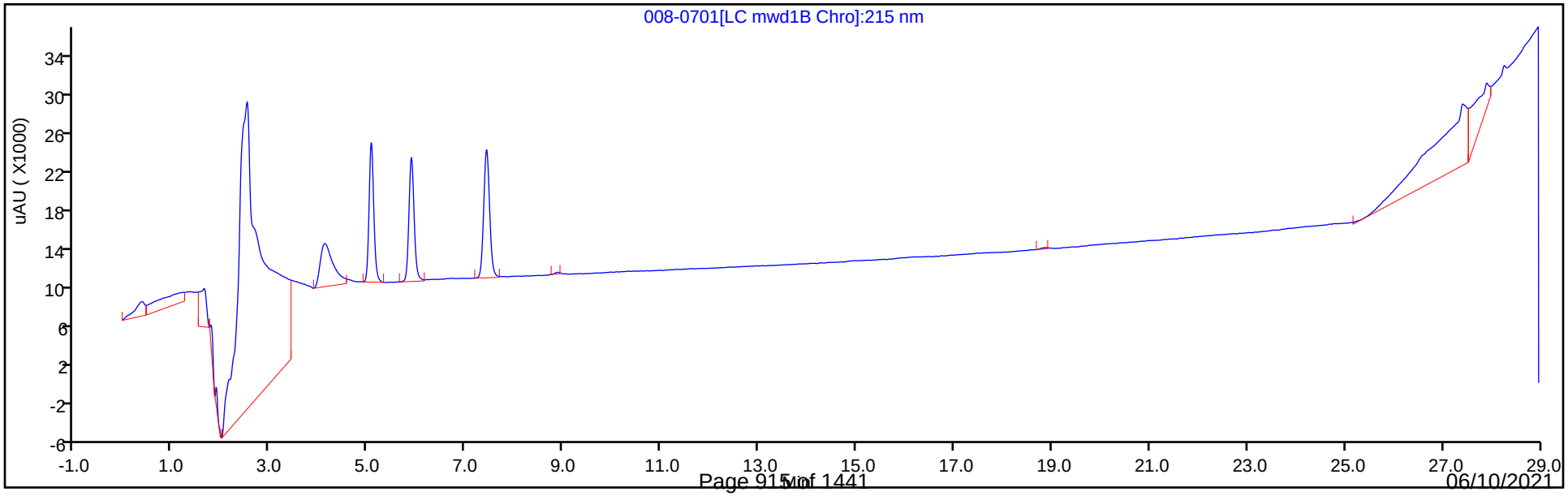
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\008-0701.D

Injection Date:	28-May-2021 18:25:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/16 Calibration Date: 05/28/2021 22:30

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: 05280016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		161296		248	250	-0.9	15.0
Picric acid	Ave	159537	154964		243	250	-2.9	15.0
RDX	Ave	204270	199796		245	250	-2.2	15.0
Nitrobenzene	Ave	374651	368032		247	251	-1.8	15.0
1,3-Dinitrobenzene	Lin2		571896		252	251	0.6	15.0
Nitroglycerin	Ave	128605	126734		2460	2500	-1.5	15.0
2-Nitrotoluene	Ave	248967	238156		239	250	-4.3	15.0
4-Nitrotoluene	Ave	217187	207729		240	251	-4.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	279856		236	250	-5.7	15.0
3-Nitrotoluene	Ave	278393	264272		238	250	-5.1	15.0
2-Amino-4,6-dinitrotoluene	Lin2		394749		251	251	-0.0	15.0
1,3,5-Trinitrobenzene	Lin2		436052		260	251	3.6	15.0
2,6-Dinitrotoluene	Lin2		267984		251	251	-0.1	15.0
2,4-Dinitrotoluene	Ave	565713	545072		242	251	-3.6	15.0
Tetryl	Lin2		327138		252	251	0.6	15.0
2,4,6-Trinitrotoluene	Lin2		381861		254	251	1.1	15.0
PETN	Ave	137740	140244		2550	2500	1.8	15.0
1,2-Dinitrobenzene	Ave	265659	254940		240	250	-4.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/16 Calibration Date: 05/28/2021 22:30

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: 05280016.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.67	6.54	6.84
Picric acid	7.87	7.76	8.06
RDX	8.85	8.72	9.02
Nitrobenzene	11.92	11.77	12.07
1,3-Dinitrobenzene	15.45	15.30	15.60
Nitroglycerin	15.85	15.71	16.01
2-Nitrotoluene	16.68	16.54	16.84
4-Nitrotoluene	16.97	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.42	17.28	17.58
3-Nitrotoluene	17.94	17.80	18.10
2-Amino-4,6-dinitrotoluene	18.31	18.18	18.48
1,3,5-Trinitrobenzene	18.85	18.70	19.00
2,6-Dinitrotoluene	20.09	19.95	20.25
2,4-Dinitrotoluene	20.55	20.42	20.72
Tetryl	24.17	24.04	24.34
2,4,6-Trinitrotoluene	25.16	25.02	25.32
PETN	26.09	25.95	26.25
1,2-Dinitrobenzene	13.02	12.87	13.17

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280016.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2021 22:30:02 ALS Bottle#: 7 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0101890-016
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:23 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: CTX1653

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	4.114	4.114	0.000	108532	0.2500	0.2567	
2 2,4-diamino-6-nitrotoluene	1	4.628	4.634	-0.006	63912	0.2500	0.2621	
6 HMX	1	6.674	6.694	-0.020	40324	0.2500	0.2478	
5 2,4,6-Trinitrophenol	1	7.868	7.908	-0.040	38741	0.2500	0.2428	
8 RDX	1	8.854	8.868	-0.014	49949	0.2500	0.2445	
9 Nitrobenzene	1	11.921	11.921	0.000	92376	0.2510	0.2466	
$ 10 1,2-Dinitrobenzene	1	13.021	13.021	0.000	63735	0.2500	0.2399	
11 3,5-Dinitroaniline	1	14.887	14.887	0.000	118826	0.2500	0.2619	
12 1,3-Dinitrobenzene	1	15.447	15.447	0.000	143260	0.2505	0.2520	
13 Nitroglycerin	2	15.854	15.861	-0.007	316834	2.50	2.46	
14 o-Nitrotoluene	1	16.681	16.687	-0.006	59539	0.2500	0.2391	
15 p-Nitrotoluene	1	16.967	16.974	-0.007	52036	0.2505	0.2396	
16 4-Amino-2,6-dinitrotoluene	1	17.421	17.427	-0.006	70034	0.2503	0.2360	
17 m-Nitrotoluene	1	17.941	17.947	-0.006	66134	0.2503	0.2376	
18 2-Amino-4,6-dinitrotoluene	1	18.314	18.327	-0.013	99082	0.2510	0.2509	
19 1,3,5-Trinitrobenzene	1	18.847	18.854	-0.007	109231	0.2505	0.2596	
20 2,6-Dinitrotoluene	1	20.094	20.101	-0.007	67264	0.2510	0.2507	
21 2,4-Dinitrotoluene	1	20.554	20.568	-0.013	136813	0.2510	0.2418	
22 Tetryl	1	24.174	24.194	-0.020	81948	0.2505	0.2520	
23 2,4,6-Trinitrotoluene	1	25.161	25.174	-0.013	95847	0.2510	0.2537	
24 PETN	2	26.088	26.101	-0.013	350610	2.50	2.55	

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL
8330_ADDs_00027 Amount Added: 12.50 Units: uL

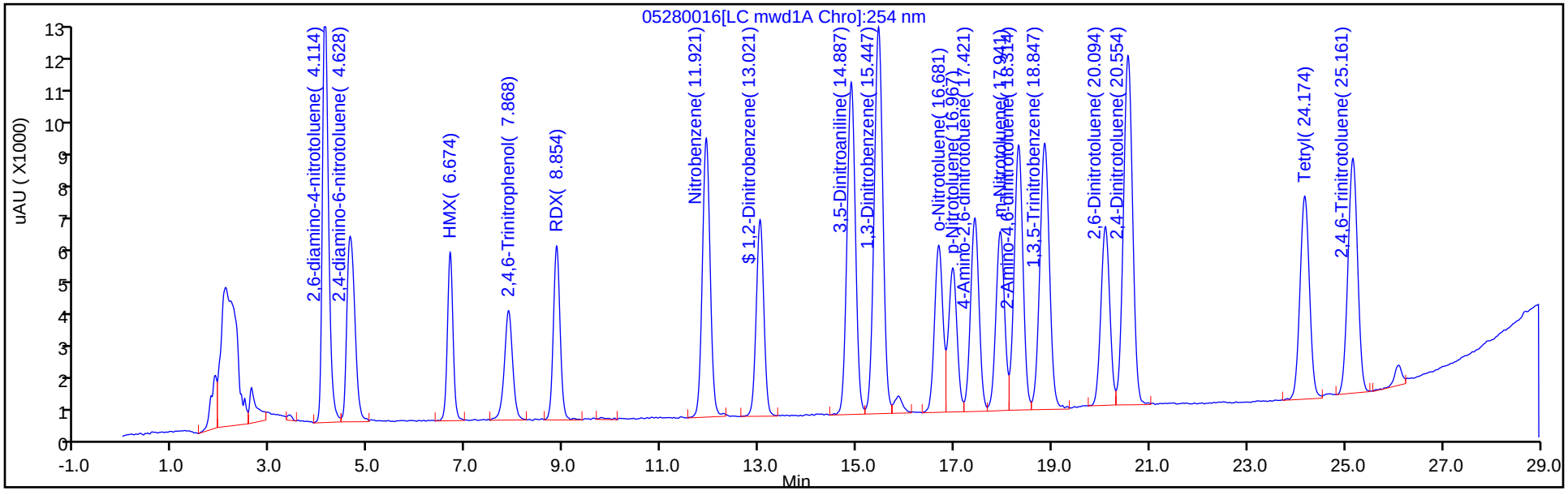
Report Date: 29-May-2021 15:25:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

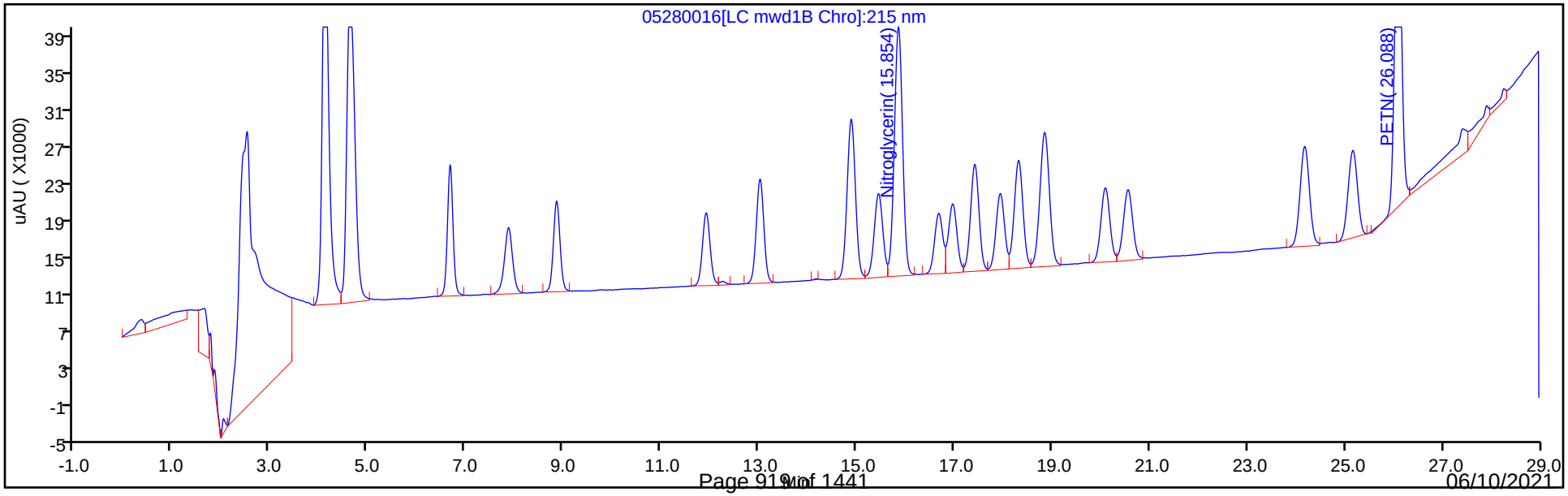
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280016.D

Injection Date:	28-May-2021 22:30:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	16
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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/17 Calibration Date: 05/28/2021 23:04

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: 05280017.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	360871		240	250	-4.1	15.0
DNX	Ave	284791	277886		244	250	-2.4	15.0
MNX	Ave	264843	255993		282	292	-3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/17 Calibration Date: 05/28/2021 23:04

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: 05280017.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.06	4.91	5.21
DNX	5.88	5.73	6.03
MNX	7.42	7.27	7.57

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280017.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	28-May-2021 23:04:59	ALS Bottle#:	8	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0101890-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-May-2021 15:25:23	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:	CTX1653				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.062	5.057	0.005	90308	0.2503	0.2401	
4 DNX	1	5.882	5.884	-0.002	69541	0.2503	0.2442	
7 MNX	1	7.415	7.424	-0.009	74686	0.2918	0.2820	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

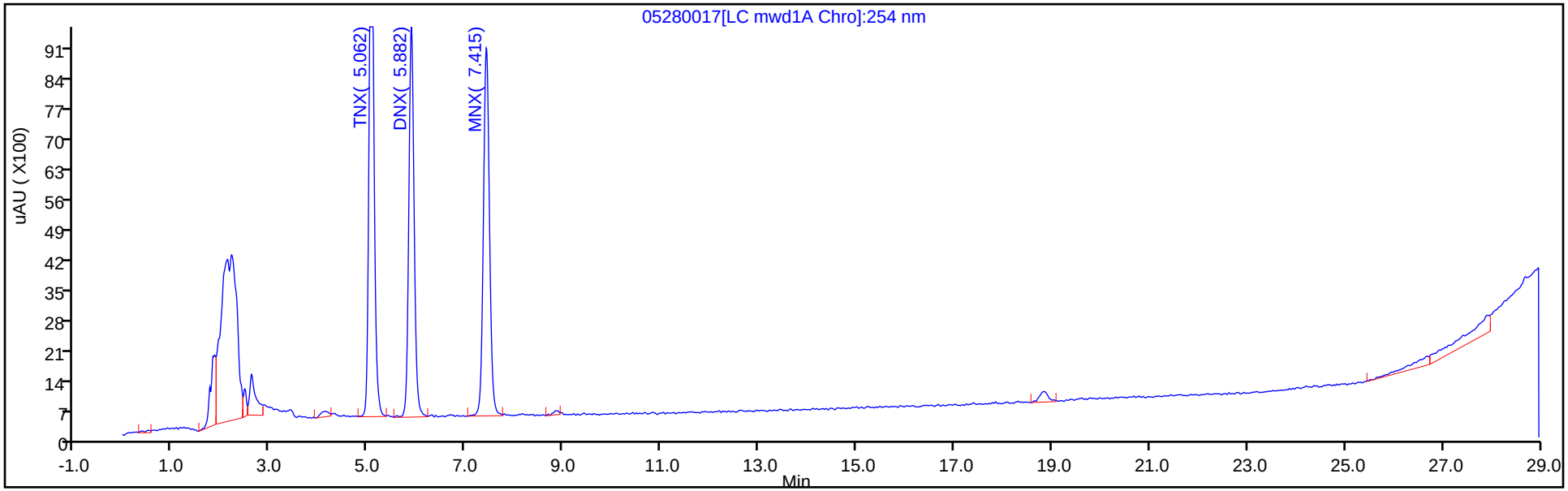
Report Date: 29-May-2021 15:25:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

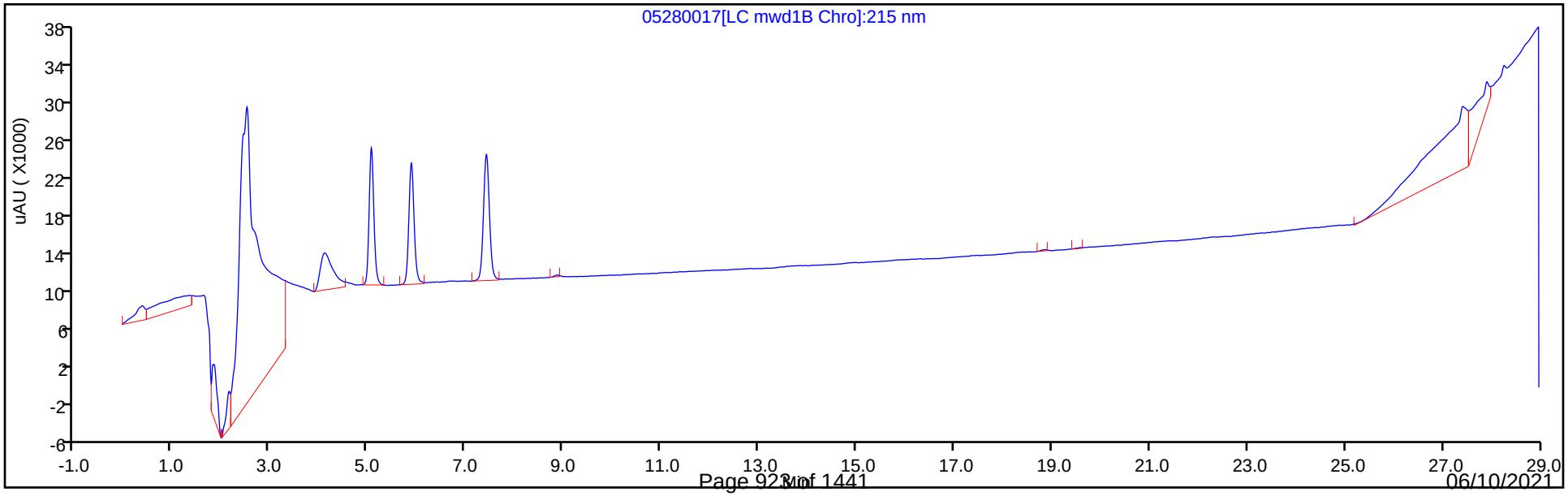
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280017.D

Injection Date:	28-May-2021 23:04:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	17
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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/27 Calibration Date: 05/29/2021 10:22

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: 03120032b.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		161732		248	250	-0.6	15.0
Picric acid	Ave	159537	157736		247	250	-1.1	15.0
RDX	Ave	204270	199072		244	250	-2.5	15.0
Nitrobenzene	Ave	374651	353869		237	251	-5.5	15.0
1,3-Dinitrobenzene	Lin2		573469		253	251	0.9	15.0
Nitroglycerin	Ave	128605	126610		2460	2500	-1.6	15.0
2-Nitrotoluene	Ave	248967	226244		227	250	-9.1	15.0
4-Nitrotoluene	Ave	217187	200148		231	251	-7.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	278705		235	250	-6.1	15.0
3-Nitrotoluene	Ave	278393	251616		226	250	-9.6	15.0
2-Amino-4,6-dinitrotoluene	Lin2		395614		251	251	0.2	15.0
1,3,5-Trinitrobenzene	Lin2		432471		257	251	2.8	15.0
2,6-Dinitrotoluene	Lin2		269992		253	251	0.7	15.0
2,4-Dinitrotoluene	Ave	565713	546797		243	251	-3.3	15.0
Tetryl	Lin2		321553		248	251	-1.2	15.0
2,4,6-Trinitrotoluene	Lin2		382761		254	251	1.3	15.0
PETN	Ave	137740	140553		2550	2500	2.0	15.0
1,2-Dinitrobenzene	Ave	265659	256520		241	250	-3.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/27 Calibration Date: 05/29/2021 10:22

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: 03120032b.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.54	6.84
Picric acid	7.88	7.76	8.06
RDX	8.88	8.72	9.02
Nitrobenzene	11.92	11.77	12.07
1,3-Dinitrobenzene	15.42	15.30	15.60
Nitroglycerin	15.84	15.71	16.01
2-Nitrotoluene	16.66	16.54	16.84
4-Nitrotoluene	16.94	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.39	17.28	17.58
3-Nitrotoluene	17.91	17.80	18.10
2-Amino-4,6-dinitrotoluene	18.28	18.18	18.48
1,3,5-Trinitrobenzene	18.81	18.70	19.00
2,6-Dinitrotoluene	20.06	19.95	20.25
2,4-Dinitrotoluene	20.52	20.42	20.72
Tetryl	24.14	24.04	24.34
2,4,6-Trinitrotoluene	25.12	25.02	25.32
PETN	26.06	25.95	26.25
1,2-Dinitrobenzene	13.02	12.87	13.17

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\03120032b.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-May-2021 10:22:02 ALS Bottle#: 7 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0099736-032
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:27 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: CTX1653

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.149	4.114	0.035	107351	0.2500	0.2538	
	2 2,4-diamino-6-nitrotoluene	1	4.675	4.634	0.041	63136	0.2500	0.2589	
	6 HMX	1	6.715	6.694	0.021	40433	0.2500	0.2485	
	5 2,4,6-Trinitrophenol	1	7.882	7.908	-0.026	39434	0.2500	0.2472	
	8 RDX	1	8.882	8.868	0.014	49768	0.2500	0.2436	
	9 Nitrobenzene	1	11.915	11.921	-0.006	88821	0.2510	0.2371	
$	10 1,2-Dinitrobenzene	1	13.015	13.021	-0.006	64130	0.2500	0.2414	
	11 3,5-Dinitroaniline	1	14.869	14.887	-0.018	118508	0.2500	0.2612	
	12 1,3-Dinitrobenzene	1	15.422	15.447	-0.025	143654	0.2505	0.2527	
	13 Nitroglycerin	2	15.835	15.861	-0.026	316526	2.50	2.46	
	14 o-Nitrotoluene	1	16.655	16.687	-0.032	56561	0.2500	0.2272	
	15 p-Nitrotoluene	1	16.942	16.974	-0.032	50137	0.2505	0.2308	
	16 4-Amino-2,6-dinitrotoluene	1	17.389	17.427	-0.038	69746	0.2503	0.2351	
	17 m-Nitrotoluene	1	17.909	17.947	-0.038	62967	0.2503	0.2262	
	18 2-Amino-4,6-dinitrotoluene	1	18.282	18.327	-0.045	99299	0.2510	0.2515	
	19 1,3,5-Trinitrobenzene	1	18.809	18.854	-0.045	108334	0.2505	0.2574	
	20 2,6-Dinitrotoluene	1	20.062	20.101	-0.039	67768	0.2510	0.2526	
	21 2,4-Dinitrotoluene	1	20.522	20.568	-0.045	137246	0.2510	0.2426	
	22 Tetryl	1	24.135	24.194	-0.059	80549	0.2505	0.2476	
	23 2,4,6-Trinitrotoluene	1	25.115	25.174	-0.059	96073	0.2510	0.2543	
	24 PETN	2	26.062	26.101	-0.039	351382	2.50	2.55	

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL
8330_ADDs_00027 Amount Added: 12.50 Units: uL

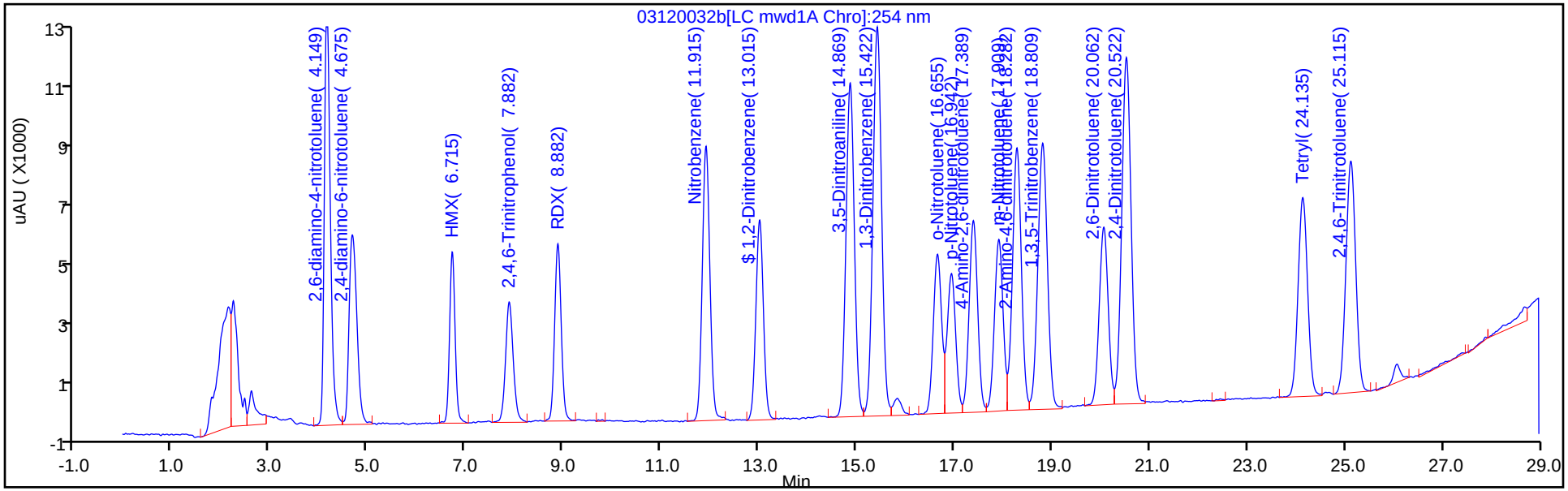
Report Date: 29-May-2021 15:25:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

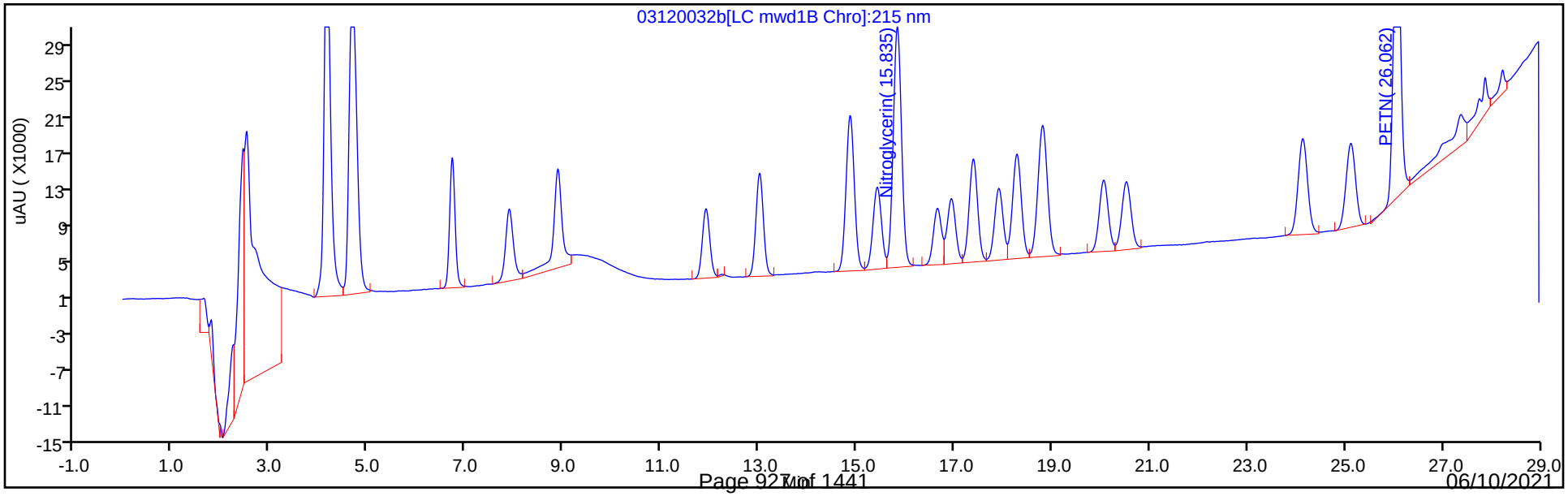
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\03120032b.D

Injection Date:	29-May-2021 10:22:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/28 Calibration Date: 05/29/2021 10:57

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: 03120033b.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	354142		236	250	-5.8	15.0
DNX	Ave	284791	275868		242	250	-3.1	15.0
MNX	Ave	264843	253299		279	292	-4.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537871/28 Calibration Date: 05/29/2021 10:57

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: 03120033b.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.06	4.91	5.21
DNX	5.88	5.73	6.03
MNX	7.41	7.27	7.57

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\03120033b.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 29-May-2021 10:57:02 ALS Bottle#: 8 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0099736-033
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-May-2021 15:25:27 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: CTX1653

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.056	5.057	-0.001	88624	0.2503	0.2356	
4 DNX	1	5.876	5.884	-0.008	69036	0.2503	0.2424	
7 MNX	1	7.409	7.424	-0.015	73900	0.2918	0.2790	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

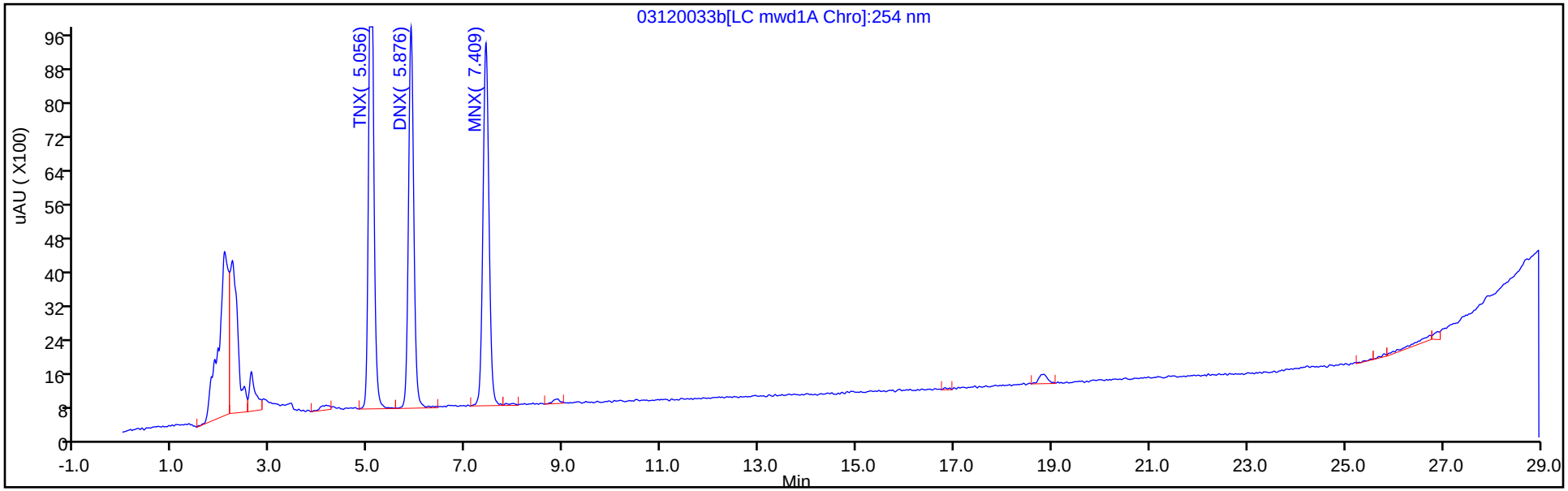
Report Date: 29-May-2021 15:25:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

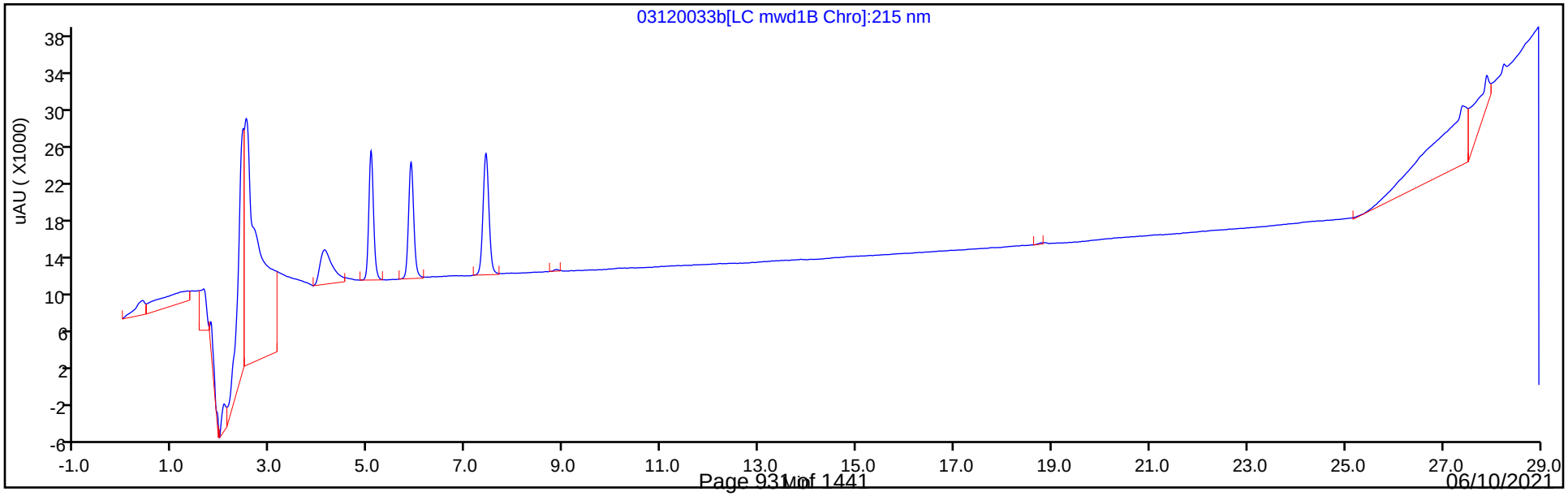
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\03120033b.D

Injection Date:	29-May-2021 10:57:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/63 Calibration Date: 05/29/2021 23:10

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: 05280047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		163416		251	250	0.5	15.0
Picric acid	Ave	159537	155580		244	250	-2.5	15.0
RDX	Ave	204270	201444		247	250	-1.4	15.0
Nitrobenzene	Ave	374651	373139		250	251	-0.4	15.0
1,3-Dinitrobenzene	Lin2		583118		257	251	2.6	15.0
Nitroglycerin	Ave	128605	128380		2500	2500	-0.2	15.0
2-Nitrotoluene	Ave	248967	238984		240	250	-4.0	15.0
4-Nitrotoluene	Ave	217187	207749		240	251	-4.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	281562		237	250	-5.1	15.0
3-Nitrotoluene	Ave	278393	264156		237	250	-5.1	15.0
2-Amino-4,6-dinitrotoluene	Lin2		398988		254	251	1.1	15.0
1,3,5-Trinitrobenzene	Lin2		440906		263	251	4.8	15.0
2,6-Dinitrotoluene	Lin2		274873		257	251	2.5	15.0
2,4-Dinitrotoluene	Ave	565713	554454		246	251	-2.0	15.0
Tetryl	Lin2		337146		260	251	3.8	15.0
2,4,6-Trinitrotoluene	Lin2		388151		258	251	2.7	15.0
PETN	Ave	137740	140146		2540	2500	1.7	15.0
1,2-Dinitrobenzene	Ave	265659	259480		244	250	-2.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/63 Calibration Date: 05/29/2021 23:10

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: 05280047.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.64	6.54	6.84
Picric acid	7.75	7.76	8.06
RDX	8.81	8.72	9.02
Nitrobenzene	11.85	11.77	12.07
1,3-Dinitrobenzene	15.37	15.30	15.60
Nitroglycerin	15.76	15.71	16.01
2-Nitrotoluene	16.58	16.54	16.84
4-Nitrotoluene	16.87	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.32	17.28	17.58
3-Nitrotoluene	17.84	17.80	18.10
2-Amino-4,6-dinitrotoluene	18.22	18.18	18.48
1,3,5-Trinitrobenzene	18.76	18.70	19.00
2,6-Dinitrotoluene	20.00	19.95	20.25
2,4-Dinitrotoluene	20.46	20.42	20.72
Tetryl	24.06	24.04	24.34
2,4,6-Trinitrotoluene	25.04	25.02	25.32
PETN	25.98	25.95	26.25
1,2-Dinitrobenzene	12.94	12.87	13.17

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280047.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 29-May-2021 23:10:33 ALS Bottle#: 7 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0101890-063
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:23 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: CTX1661

First Level Reviewer: zhangji Date: 02-Jun-2021 19:43:33

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	4.091	4.114	-0.023	105778	0.2500	0.2500	
2 2,4-diamino-6-nitrotoluene	1	4.604	4.634	-0.030	61247	0.2500	0.2510	
6 HMX	1	6.637	6.694	-0.057	40854	0.2500	0.2511	
5 2,4,6-Trinitrophenol	1	7.751	7.908	-0.157	38895	0.2500	0.2438	a
8 RDX	1	8.811	8.868	-0.057	50361	0.2500	0.2465	
9 Nitrobenzene	1	11.851	11.921	-0.070	93658	0.2510	0.2500	
$ 10 1,2-Dinitrobenzene	1	12.944	13.021	-0.077	64870	0.2500	0.2442	
11 3,5-Dinitroaniline	1	14.811	14.887	-0.076	118427	0.2500	0.2610	
12 1,3-Dinitrobenzene	1	15.371	15.447	-0.076	146071	0.2505	0.2570	
13 Nitroglycerin	2	15.757	15.861	-0.104	320949	2.50	2.50	
14 o-Nitrotoluene	1	16.584	16.687	-0.103	59746	0.2500	0.2400	
15 p-Nitrotoluene	1	16.871	16.974	-0.103	52041	0.2505	0.2396	
16 4-Amino-2,6-dinitrotoluene	1	17.324	17.427	-0.103	70461	0.2503	0.2375	
17 m-Nitrotoluene	1	17.837	17.947	-0.110	66105	0.2503	0.2375	
18 2-Amino-4,6-dinitrotoluene	1	18.217	18.327	-0.110	100146	0.2510	0.2537	
19 1,3,5-Trinitrobenzene	1	18.764	18.854	-0.090	110447	0.2505	0.2626	
20 2,6-Dinitrotoluene	1	19.997	20.101	-0.104	68993	0.2510	0.2573	
21 2,4-Dinitrotoluene	1	20.464	20.568	-0.103	139168	0.2510	0.2460	
22 Tetryl	1	24.057	24.194	-0.137	84455	0.2505	0.2599	
23 2,4,6-Trinitrotoluene	1	25.044	25.174	-0.130	97426	0.2510	0.2579	
24 PETN	2	25.977	26.101	-0.124	350364	2.50	2.54	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

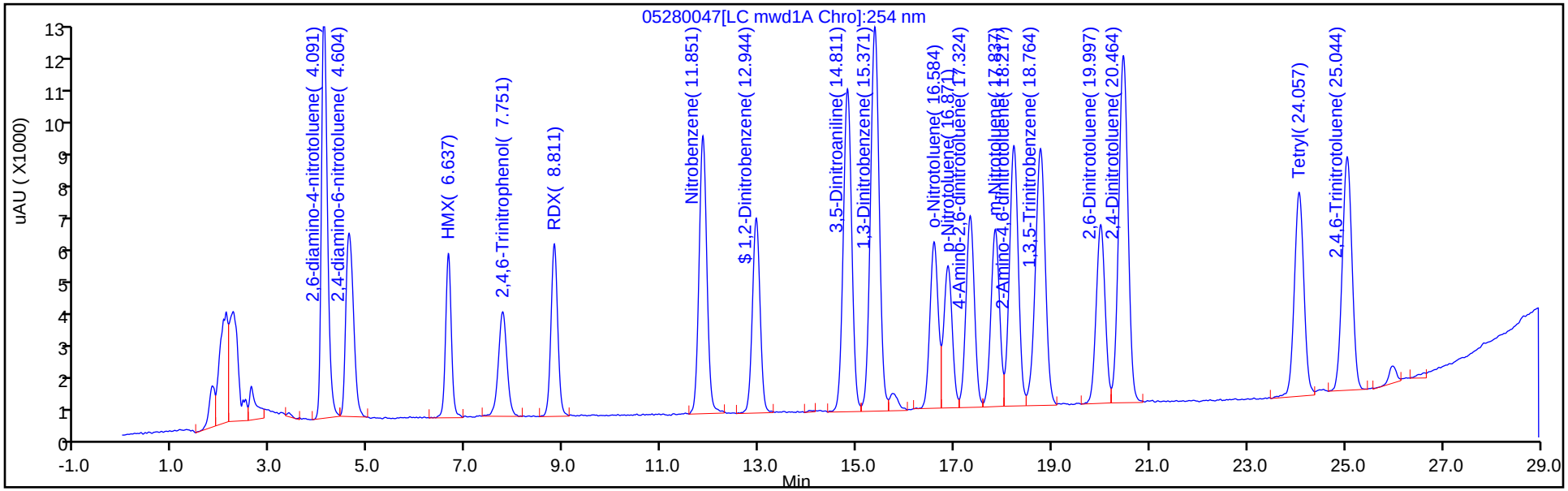
8330IntermStk_00068	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

Report Date: 02-Jun-2021 19:44:23 Chrom Revision: 2.3 13-May-2021 07:57:40

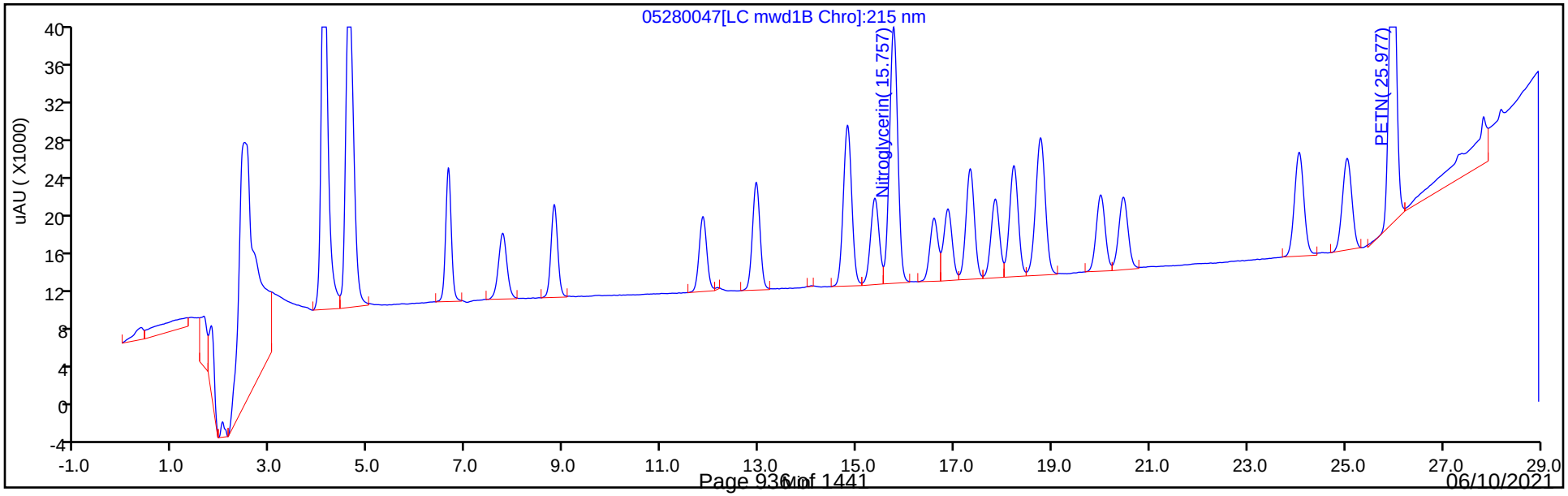
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280047.D				
Injection Date:	29-May-2021 23:10:33	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	63
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

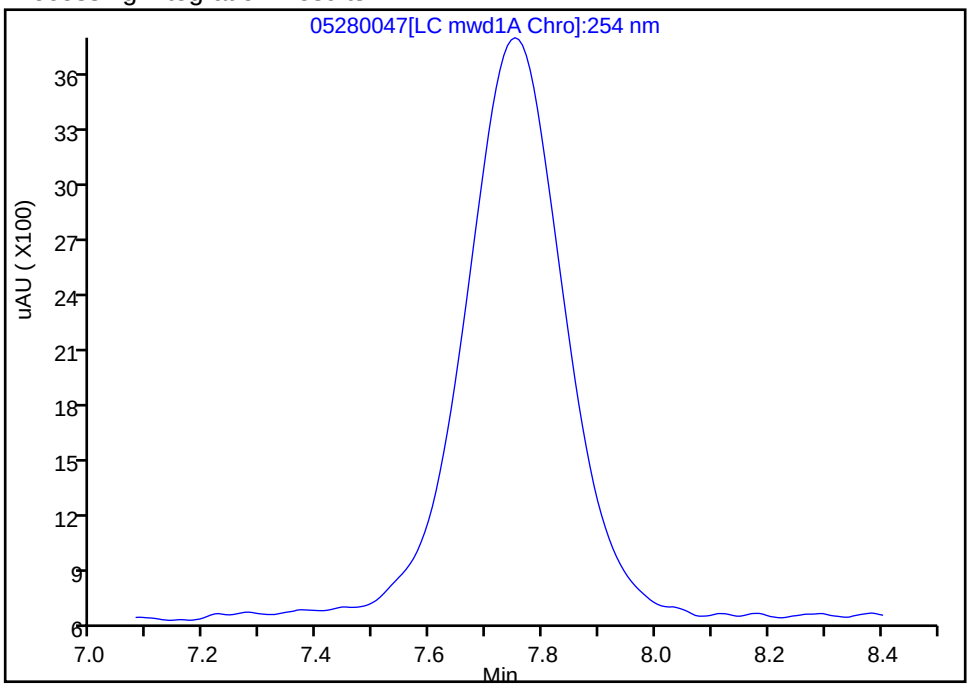
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280047.D				
Injection Date:	29-May-2021 23:10:33	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

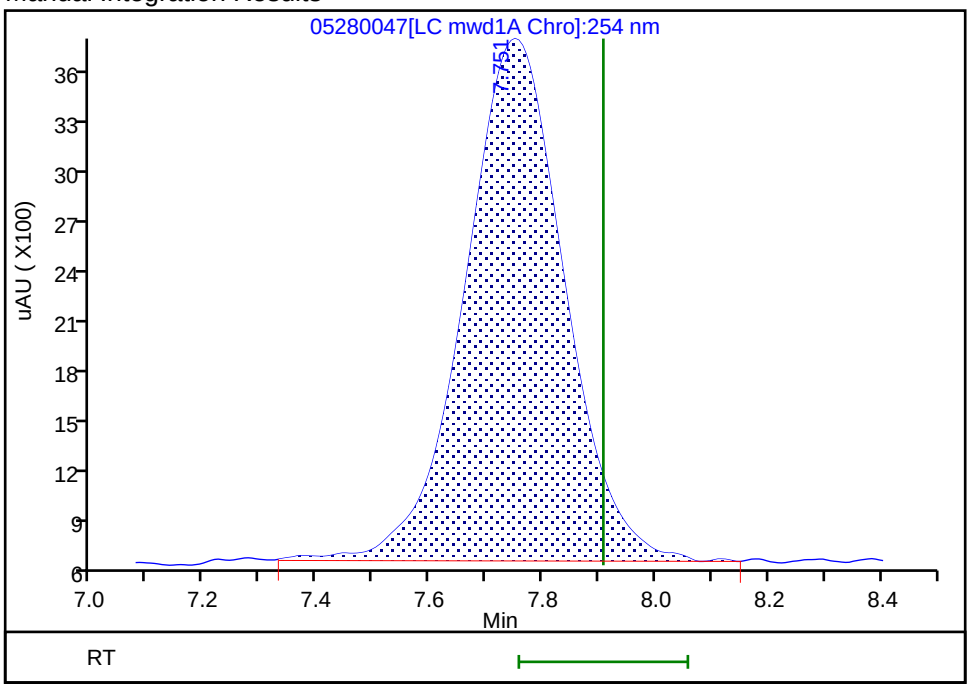
Not Detected
Expected RT: 7.91

Processing Integration Results



Manual Integration Results

RT: 7.75
Area: 38895
Amount: 0.243800
Amount Units: ug/ml



Reviewer: zhangji, 02-Jun-2021 19:43:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/62 Calibration Date: 05/29/2021 23:45

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: 05280048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	369027		246	250	-1.9	15.0
DNX	Ave	284791	281754		248	250	-1.1	15.0
MNX	Ave	264843	257889		284	292	-2.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/62 Calibration Date: 05/29/2021 23:45

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: 05280048.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.04	4.91	5.21
DNX	5.84	5.73	6.03
MNX	7.37	7.27	7.57

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280048.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	29-May-2021 23:45:33	ALS Bottle#:	8	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0101890-062				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jun-2021 19:44:24	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:	CTX1661				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.037	5.057	-0.020	92349	0.2503	0.2455	
4 DNX	1	5.843	5.884	-0.041	70509	0.2503	0.2476	
7 MNX	1	7.370	7.424	-0.054	75239	0.2918	0.2841	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

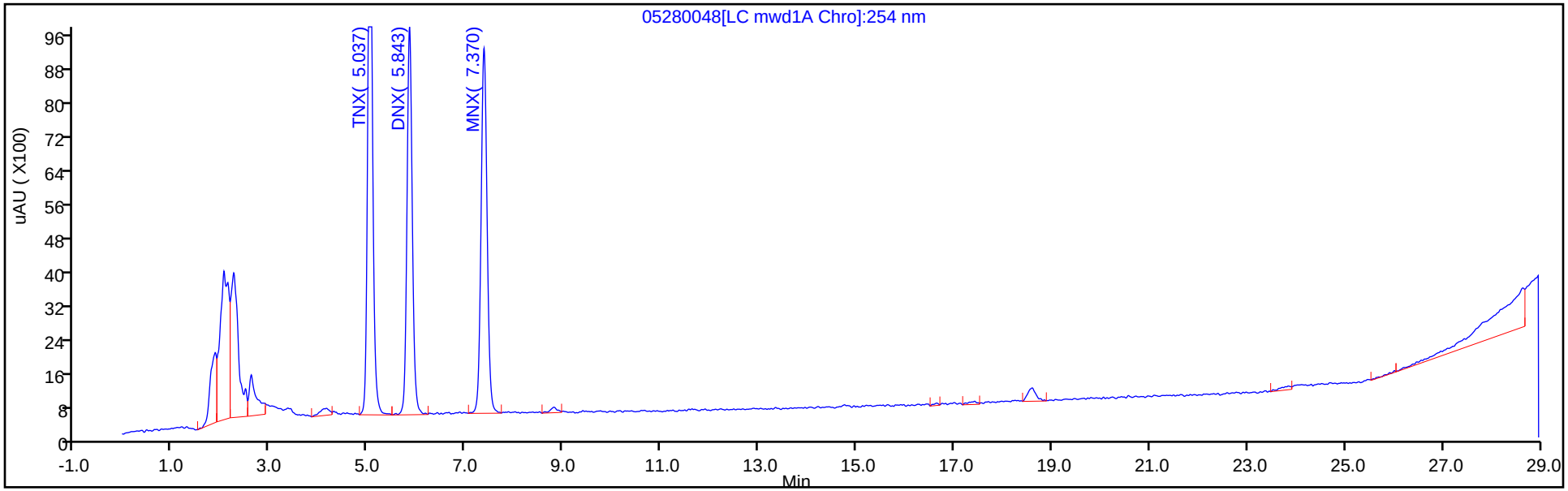
Report Date: 02-Jun-2021 19:44:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

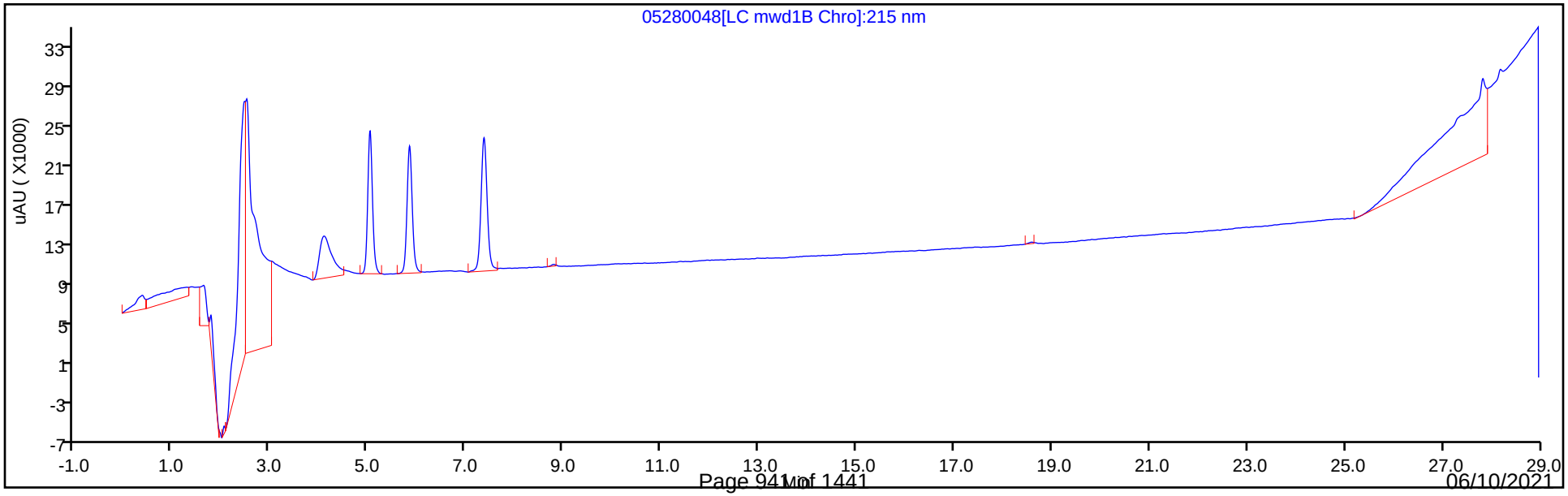
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\05280048.D

Injection Date:	29-May-2021 23:45:33	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	62
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.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/70 Calibration Date: 05/30/2021 02:05

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: 007-2401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		161992		249	250	-0.4	15.0
Picric acid	Ave	159537	155900		244	250	-2.3	15.0
RDX	Ave	204270	201728		247	250	-1.2	15.0
Nitrobenzene	Ave	374651	364980		245	251	-2.6	15.0
1,3-Dinitrobenzene	Lin2		579553		255	251	2.0	15.0
Nitroglycerin	Ave	128605	128123		2490	2500	-0.4	15.0
2-Nitrotoluene	Ave	248967	238536		240	250	-4.2	15.0
4-Nitrotoluene	Ave	217187	206355		238	251	-5.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	283089		239	250	-4.6	15.0
3-Nitrotoluene	Ave	278393	264523		238	250	-5.0	15.0
2-Amino-4,6-dinitrotoluene	Lin2		400112		254	251	1.4	15.0
1,3,5-Trinitrobenzene	Lin2		444687		265	251	5.8	15.0
2,6-Dinitrotoluene	Lin2		272988		255	251	1.8	15.0
2,4-Dinitrotoluene	Ave	565713	552968		245	251	-2.3	15.0
Tetryl	Lin2		335206		258	251	3.1	15.0
2,4,6-Trinitrotoluene	Lin2		389538		259	251	3.1	15.0
PETN	Ave	137740	138491		2510	2500	0.5	15.0
1,2-Dinitrobenzene	Ave	265659	260700		245	250	-1.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/70 Calibration Date: 05/30/2021 02:05

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: 007-2401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.64	6.54	6.84
Picric acid	7.75	7.76	8.06
RDX	8.80	8.72	9.02
Nitrobenzene	11.83	11.77	12.07
1,3-Dinitrobenzene	15.36	15.30	15.60
Nitroglycerin	15.74	15.71	16.01
2-Nitrotoluene	16.57	16.54	16.84
4-Nitrotoluene	16.85	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.32	17.28	17.58
3-Nitrotoluene	17.83	17.80	18.10
2-Amino-4,6-dinitrotoluene	18.21	18.18	18.48
1,3,5-Trinitrobenzene	18.75	18.70	19.00
2,6-Dinitrotoluene	19.99	19.95	20.25
2,4-Dinitrotoluene	20.45	20.42	20.72
Tetryl	24.06	24.04	24.34
2,4,6-Trinitrotoluene	25.03	25.02	25.32
PETN	25.96	25.95	26.25
1,2-Dinitrobenzene	12.93	12.87	13.17

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\007-2401.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 30-May-2021 02:05:46 ALS Bottle#: 7 Worklist Smp#: 70
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:26 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: CTX1661

First Level Reviewer: zhangji Date: 02-Jun-2021 19:44:04

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	4.081	4.114	-0.033	106952	0.2500	0.2529	
2 2,4-diamino-6-nitrotoluene	1	4.595	4.634	-0.039	64118	0.2500	0.2630	
6 HMX	1	6.635	6.694	-0.059	40498	0.2500	0.2489	
5 2,4,6-Trinitrophenol	1	7.748	7.908	-0.160	38975	0.2500	0.2443	a
8 RDX	1	8.801	8.868	-0.067	50432	0.2500	0.2469	
9 Nitrobenzene	1	11.834	11.921	-0.087	91610	0.2510	0.2445	
$ 10 1,2-Dinitrobenzene	1	12.934	13.021	-0.087	65175	0.2500	0.2453	
11 3,5-Dinitroaniline	1	14.808	14.887	-0.079	117557	0.2500	0.2591	
12 1,3-Dinitrobenzene	1	15.361	15.447	-0.086	145178	0.2505	0.2554	
13 Nitroglycerin	2	15.741	15.861	-0.120	320307	2.50	2.49	
14 o-Nitrotoluene	1	16.574	16.687	-0.113	59634	0.2500	0.2395	
15 p-Nitrotoluene	1	16.854	16.974	-0.120	51692	0.2505	0.2380	
16 4-Amino-2,6-dinitrotoluene	1	17.321	17.427	-0.106	70843	0.2503	0.2388	
17 m-Nitrotoluene	1	17.828	17.947	-0.119	66197	0.2503	0.2378	
18 2-Amino-4,6-dinitrotoluene	1	18.214	18.327	-0.113	100428	0.2510	0.2544	
19 1,3,5-Trinitrobenzene	1	18.754	18.854	-0.100	111394	0.2505	0.2649	
20 2,6-Dinitrotoluene	1	19.988	20.101	-0.113	68520	0.2510	0.2555	
21 2,4-Dinitrotoluene	1	20.454	20.568	-0.113	138795	0.2510	0.2453	
22 Tetryl	1	24.055	24.194	-0.139	83969	0.2505	0.2584	
23 2,4,6-Trinitrotoluene	1	25.028	25.174	-0.146	97774	0.2510	0.2588	
24 PETN	2	25.961	26.101	-0.140	346227	2.50	2.51	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330IntermStk_00068	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

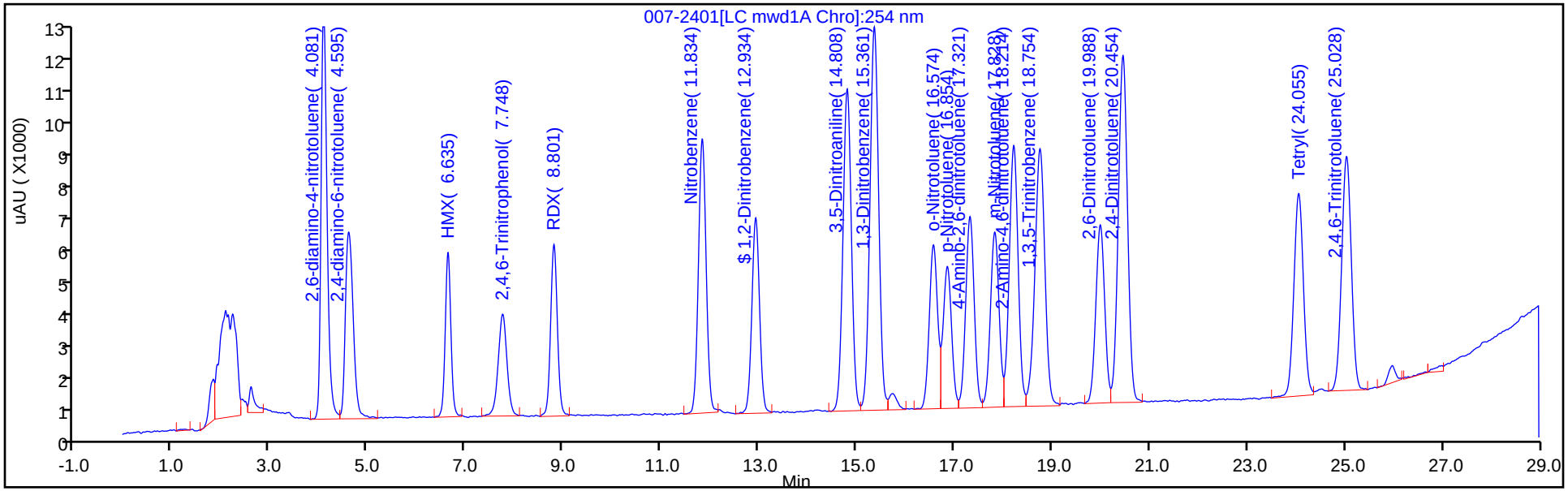
Report Date: 02-Jun-2021 19:44:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

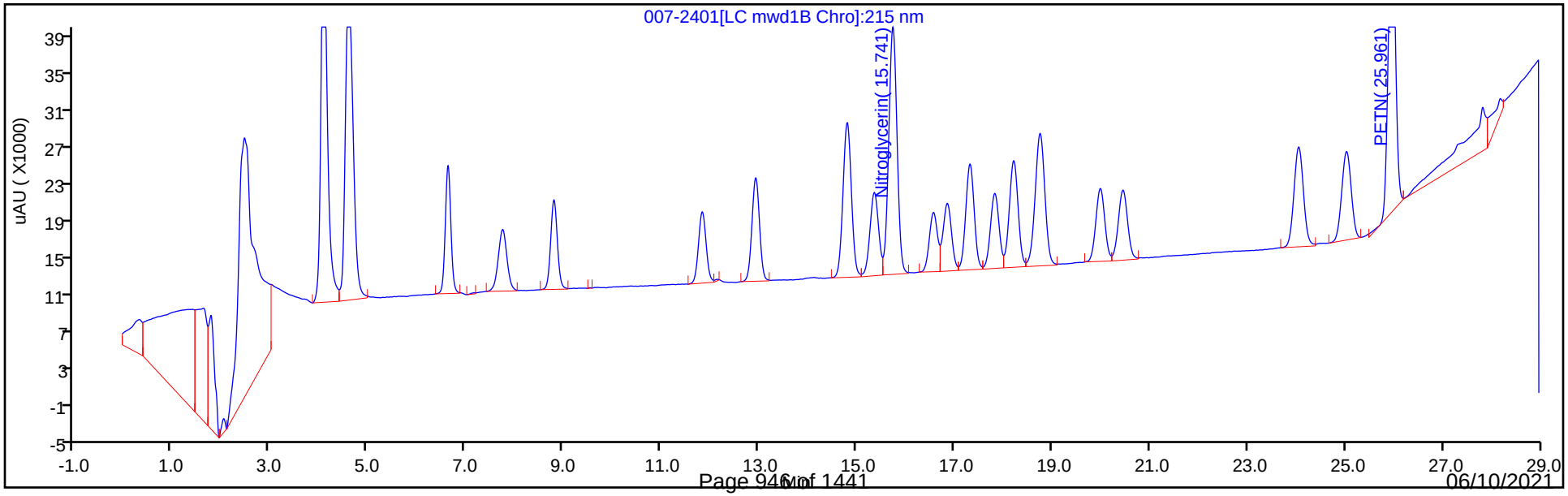
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\007-2401.D

Injection Date:	30-May-2021 02:05:46	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	70
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

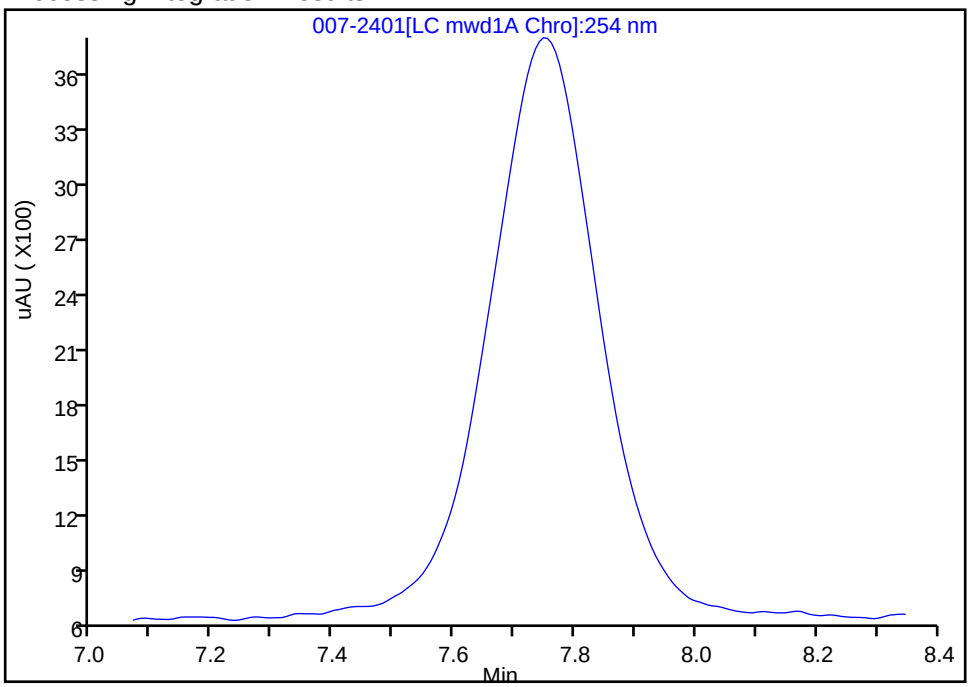
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\007-2401.D
Injection Date: 30-May-2021 02:05:46 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 70
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

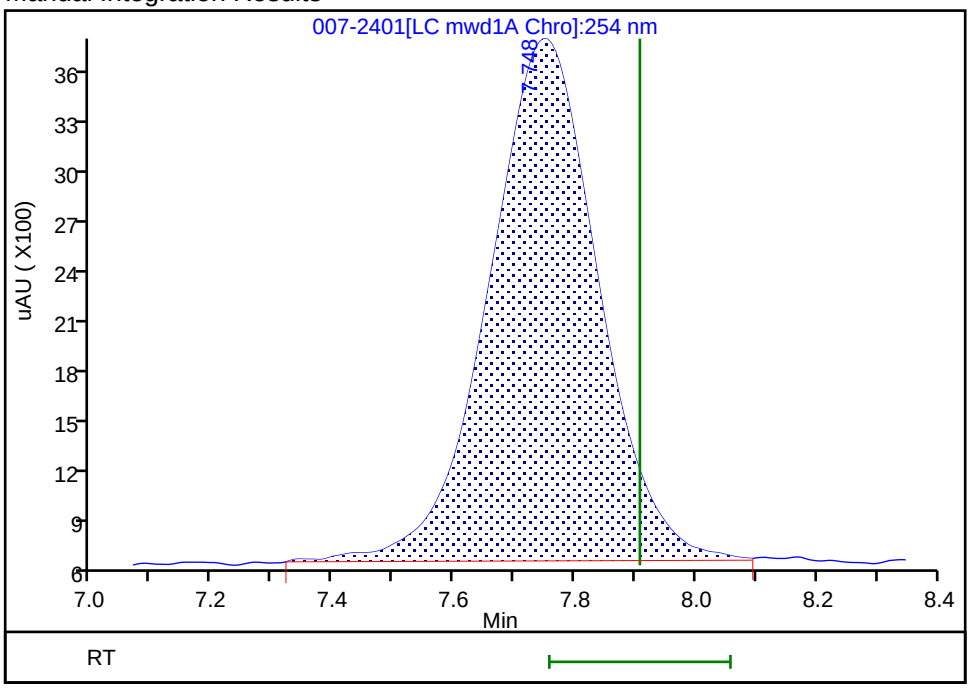
Not Detected
Expected RT: 7.91

Processing Integration Results



Manual Integration Results

RT: 7.75
Area: 38975
Amount: 0.244301
Amount Units: ug/ml



Reviewer: zhangji, 02-Jun-2021 19:43:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/71 Calibration Date: 05/30/2021 02:40

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: 008-2501.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	366569		244	250	-2.5	15.0
DNX	Ave	284791	282957		249	250	-0.6	15.0
MNX	Ave	264843	259195		286	292	-2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Lab Sample ID: CCV 280-537964/71 Calibration Date: 05/30/2021 02:40

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: 008-2501.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.03	4.91	5.21
DNX	5.85	5.73	6.03
MNX	7.37	7.27	7.57

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\008-2501.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 30-May-2021 02:40:44 ALS Bottle#: 8 Worklist Smp#: 71
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:26 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: CTX1661

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.032	5.057	-0.025	91734	0.2503	0.2439	
4 DNX	1	5.845	5.884	-0.039	70810	0.2503	0.2486	
7 MNX	1	7.372	7.424	-0.052	75620	0.2918	0.2855	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

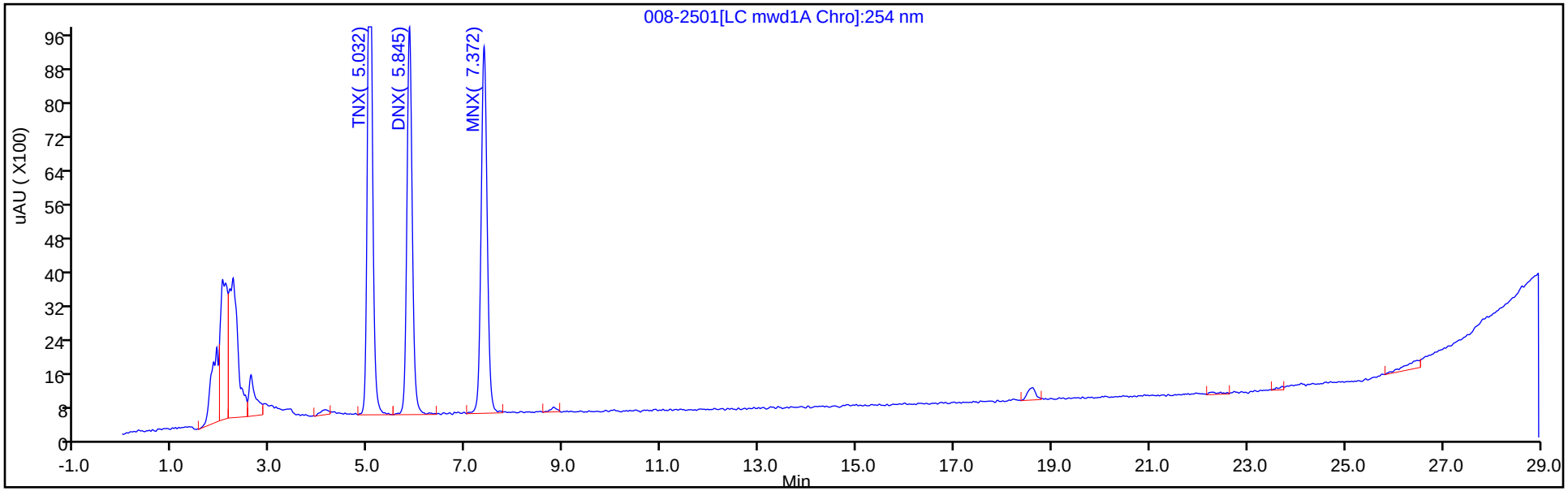
Report Date: 02-Jun-2021 19:44:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

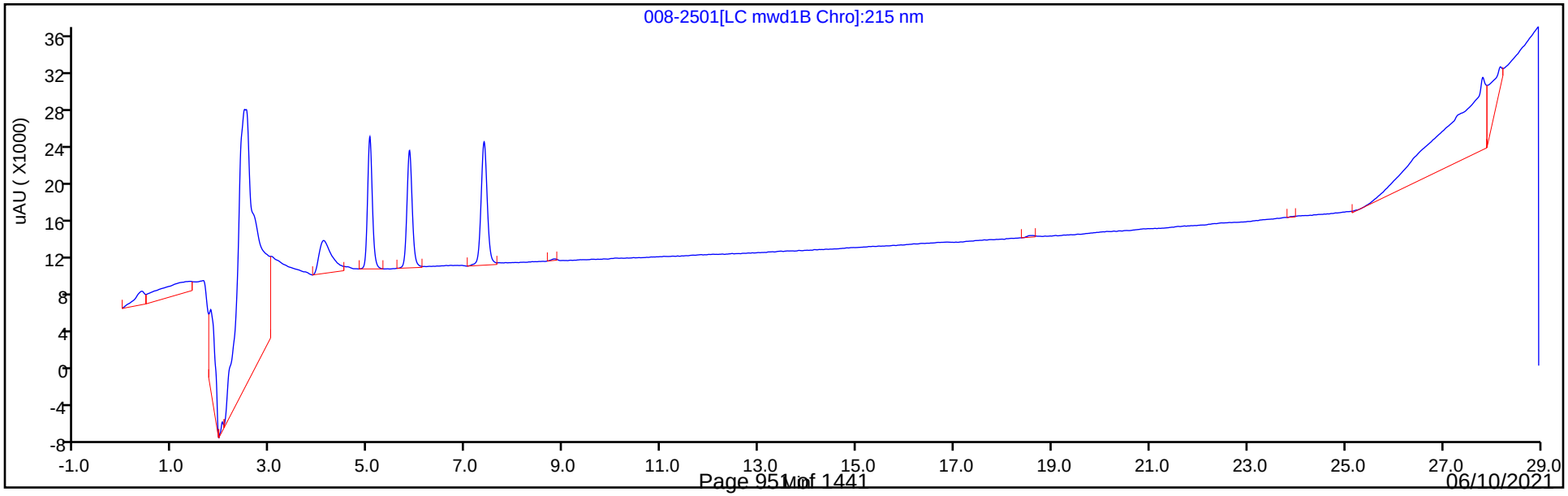
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\008-2501.D

Injection Date:	30-May-2021 02:40:44	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	71
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.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-537382/1-A

Matrix: Water Lab File ID: 05270011.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 500(mL) Date Analyzed: 05/27/2021 15:09

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.: 537692 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 M	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270011.D
Lims ID: MB 280-537382/1-A
Client ID:
Sample Type: MB
Inject. Date: 27-May-2021 15:09:55 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-537382/1-
Misc. Info.: 280-0101842-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:29 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: 27-May-2021 15:35:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
26 Triamine Trinitrobenzene	1		2.474				ND	
1 2,6-diamino-4-nitrotoluene	1		6.366				ND	U
2 TNX	1		6.499				ND	U
3 HMX	1		6.617				ND	
4 2,4-diamino-6-nitrotoluene	1		6.678				ND	
5 DNX	1		6.819				ND	U
6 MNX	1		7.232				ND	
7 RDX	1		7.604				ND	U
8 2,4,6-Trinitrophenol	1		7.977				ND	
$ 9 1,2-Dinitrobenzene	1	8.545	8.544	0.001	24955	0.2000	0.1946	
10 1,3,5-Trinitrobenzene	1		8.670				ND	
11 1,3-Dinitrobenzene	1		9.304				ND	
12 Nitrobenzene	1		9.697				ND	
13 3,5-Dinitroaniline	1		9.892				ND	
14 Tetryl	1		10.037				ND	
15 Nitroglycerin	2		10.497				ND	U
16 2,4,6-Trinitrotoluene	1		10.964				ND	
17 4-Amino-2,6-dinitrotoluene	1		11.184				ND	
18 2-Amino-4,6-dinitrotoluene	1		11.437				ND	
19 2,6-Dinitrotoluene	1		11.610				ND	
20 2,4-Dinitrotoluene	1		11.784				ND	
21 o-Nitrotoluene	1		12.670				ND	
22 p-Nitrotoluene	1		13.110				ND	
23 m-Nitrotoluene	1		13.710				ND	
24 PETN	2		14.844				ND	
25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
U - Marked Undetected

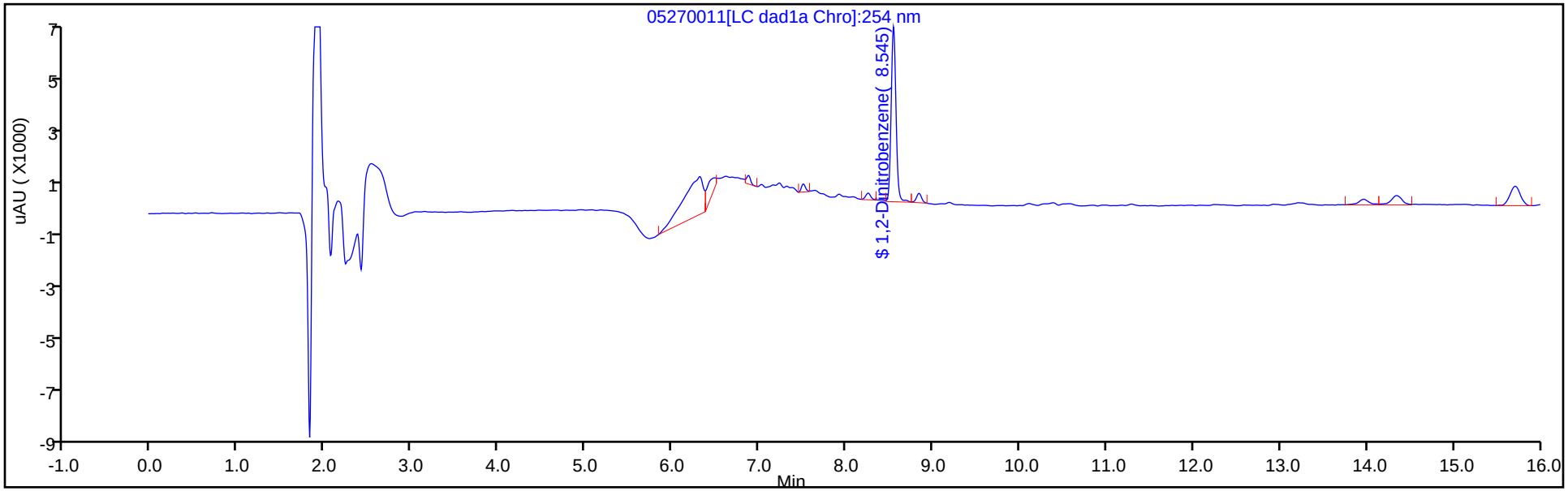
Report Date: 28-May-2021 14:38:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

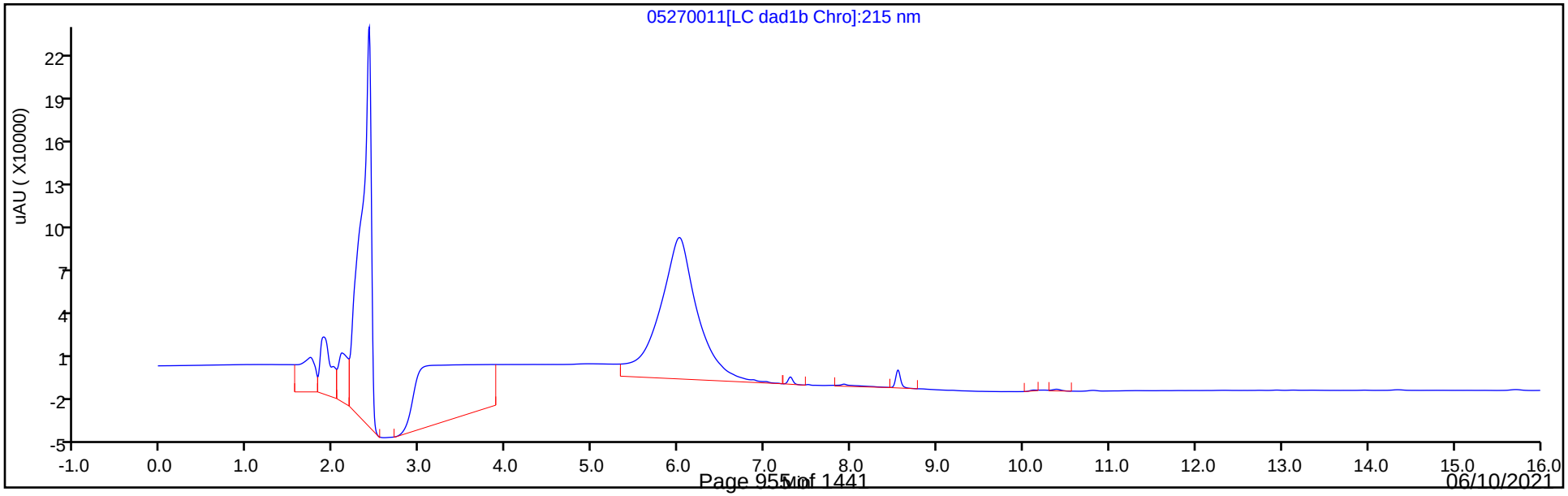
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270011.d

Injection Date:	27-May-2021 15:09:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-537382/1-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270011.D				
Lims ID:	MB 280-537382/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	27-May-2021 15:09:55	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-537382/1-				
Misc. Info.:	280-0101842-011				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:29	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: 27-May-2021 15:35:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1946	97.32

User Disabled Compound Report

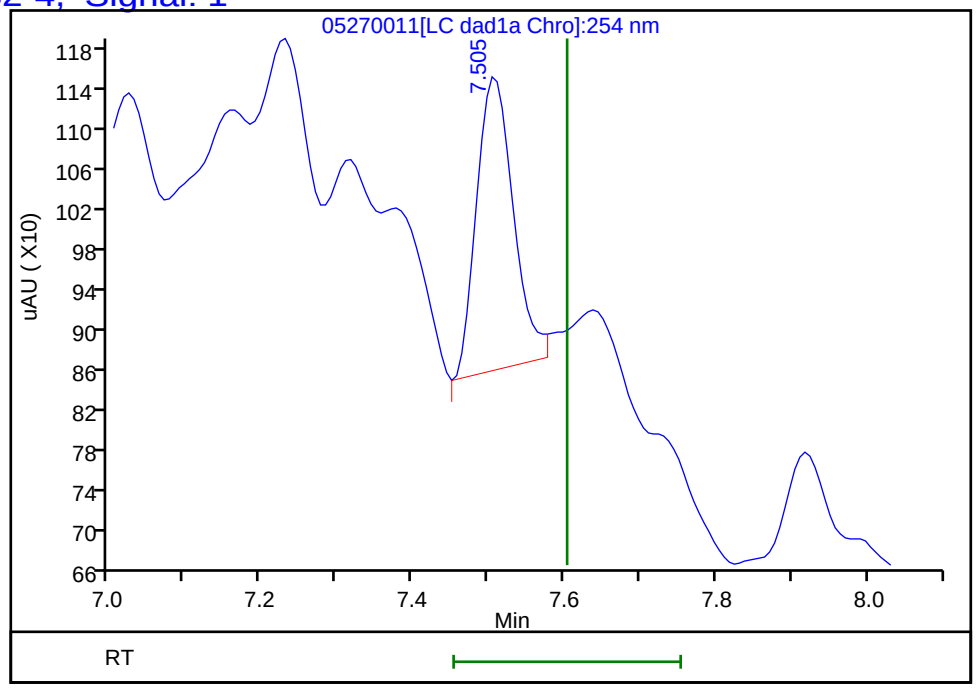
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270011.d
Injection Date: 27-May-2021 15:09:55 Instrument ID: CHHPLC_X3
Lims ID: MB 280-537382/1-A
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

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.50
Response: 980
Amount: 0.009223



Reviewer: zhangji, 27-May-2021 15:35:52
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.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537382/2-A

Matrix: Water Lab File ID: 05270012.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 500(mL) Date Analyzed: 05/27/2021 15:32

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.93		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.88		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.93		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.79		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.85		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.76		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.42		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.56		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.71		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.55		0.41	0.40	0.10
2691-41-0	HMX	1.86		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.61		0.21	0.20	0.091
121-82-4	RDX	1.95		0.21	0.20	0.052
479-45-8	Tetryl	1.90		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270012.D
Lims ID: LCS 280-537382/2-A
Client ID:
Sample Type: LCS
Inject. Date: 27-May-2021 15:32:50 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-537382/2
Misc. Info.: 280-0101842-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:29 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

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.613	6.617	-0.004	15714	0.2000	0.1861	
	7 RDX	1	7.600	7.604	-0.004	20767	0.2000	0.1954	
	8 2,4,6-Trinitrophenol	1	7.953	7.977	-0.024	17116	0.2000	0.2069	
$	9 1,2-Dinitrobenzene	1	8.540	8.544	-0.004	23759	0.2000	0.1853	
	10 1,3,5-Trinitrobenzene	1	8.667	8.670	-0.003	42532	0.2000	0.1930	
	11 1,3-Dinitrobenzene	1	9.300	9.304	-0.004	55792	0.2000	0.1883	
	12 Nitrobenzene	1	9.693	9.697	-0.004	31436	0.2000	0.1610	
	14 Tetryl	1	10.027	10.037	-0.010	32790	0.2000	0.1902	
	15 Nitroglycerin	2	10.493	10.497	-0.004	136843	2.00	2.07	
	16 2,4,6-Trinitrotoluene	1	10.960	10.964	-0.004	39780	0.2000	0.1931	
	17 4-Amino-2,6-dinitrotoluene	1	11.173	11.184	-0.011	26110	0.2000	0.1709	
	18 2-Amino-4,6-dinitrotoluene	1	11.433	11.437	-0.004	36446	0.2000	0.1761	
	19 2,6-Dinitrotoluene	1	11.600	11.610	-0.010	26407	0.2000	0.1846	
	20 2,4-Dinitrotoluene	1	11.773	11.784	-0.011	51499	0.2000	0.1794	
	21 o-Nitrotoluene	1	12.660	12.670	-0.010	18280	0.2000	0.1424	
	22 p-Nitrotoluene	1	13.100	13.110	-0.010	17302	0.2000	0.1546	
	23 m-Nitrotoluene	1	13.700	13.710	-0.010	22227	0.2000	0.1563	
	24 PETN	2	14.833	14.844	-0.011	142240	2.00	1.90	

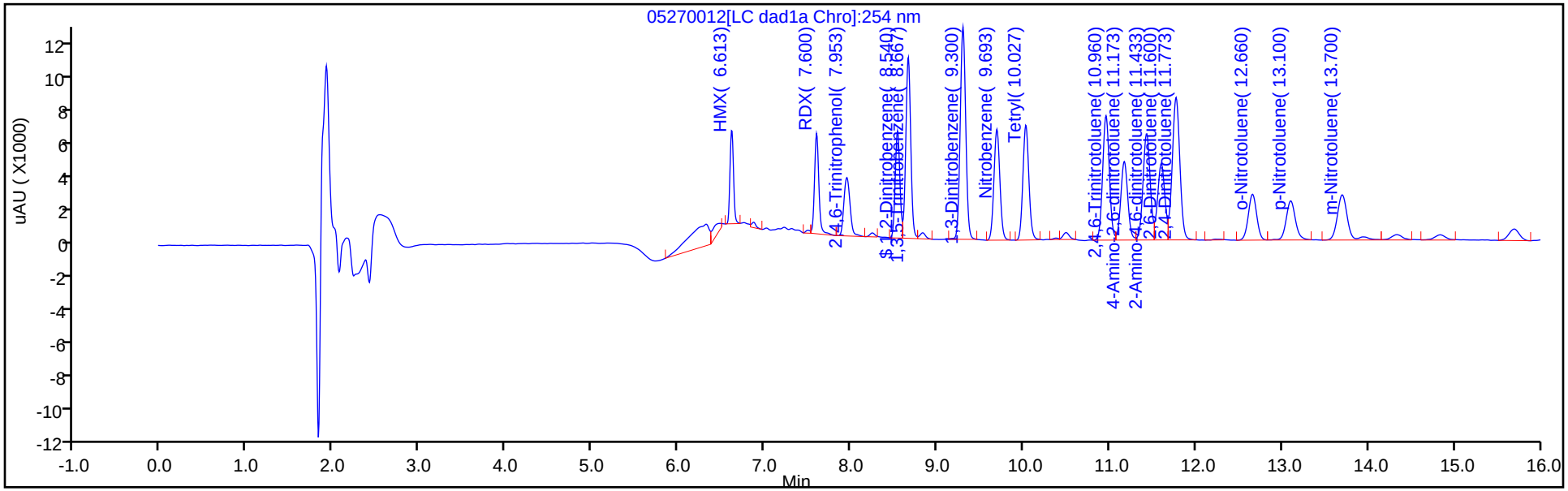
Report Date: 28-May-2021 14:38:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

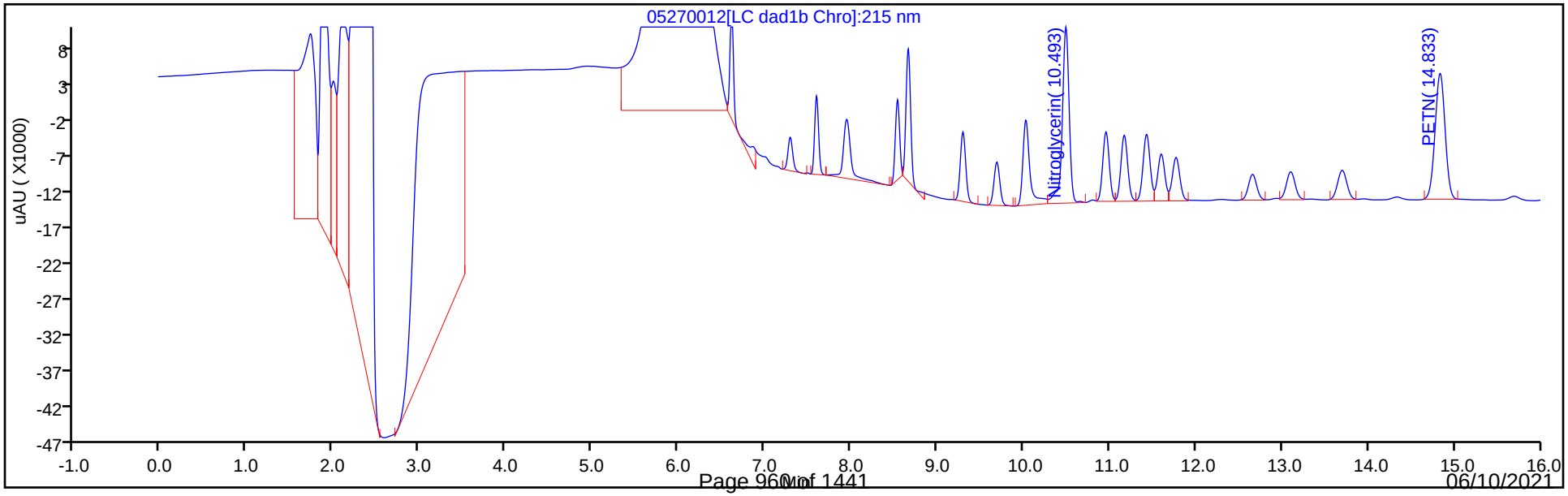
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270012.d

Injection Date:	27-May-2021 15:32:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-537382/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270012.D				
Lims ID:	LCS 280-537382/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	27-May-2021 15:32:50	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-537382/2				
Misc. Info.:	280-0101842-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:29	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				

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1853	92.65

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537382/3-A

Matrix: Water Lab File ID: 05270013.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 500(mL) Date Analyzed: 05/27/2021 15:55

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.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.18	M	2.0	0.40	0.15

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_X\20210527-101842.b\05270013.D
Lims ID: LCS 280-537382/3-A
Client ID:
Sample Type: LCS
Inject. Date: 27-May-2021 15:55:47 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-537382/3
Misc. Info.: 280-0101842-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:29 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: 27-May-2021 16:24:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.499	6.499	0.000	33432	0.2002	0.1799	M
5 DNX	1	6.812	6.819	-0.007	27822	0.2002	0.1958	M
6 MNX	1	7.226	7.232	-0.006	28389	0.2334	0.2178	M
$ 9 1,2-Dinitrobenzene	1	8.539	8.544	-0.005	23521	0.2000	0.1834	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

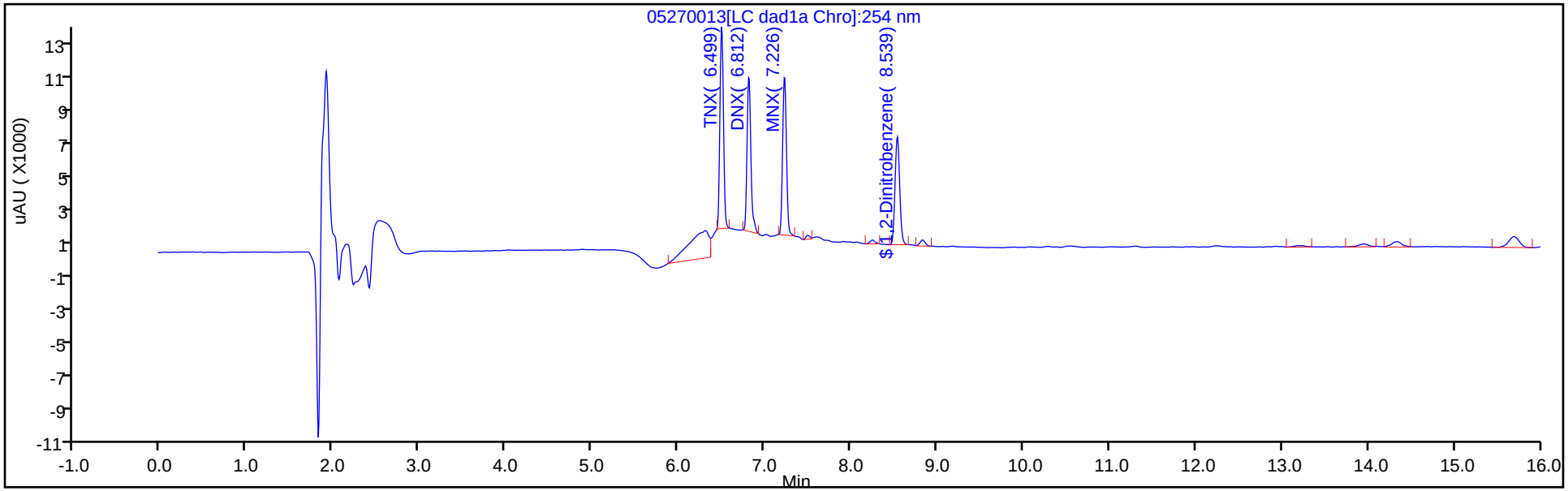
Report Date: 28-May-2021 14:38:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

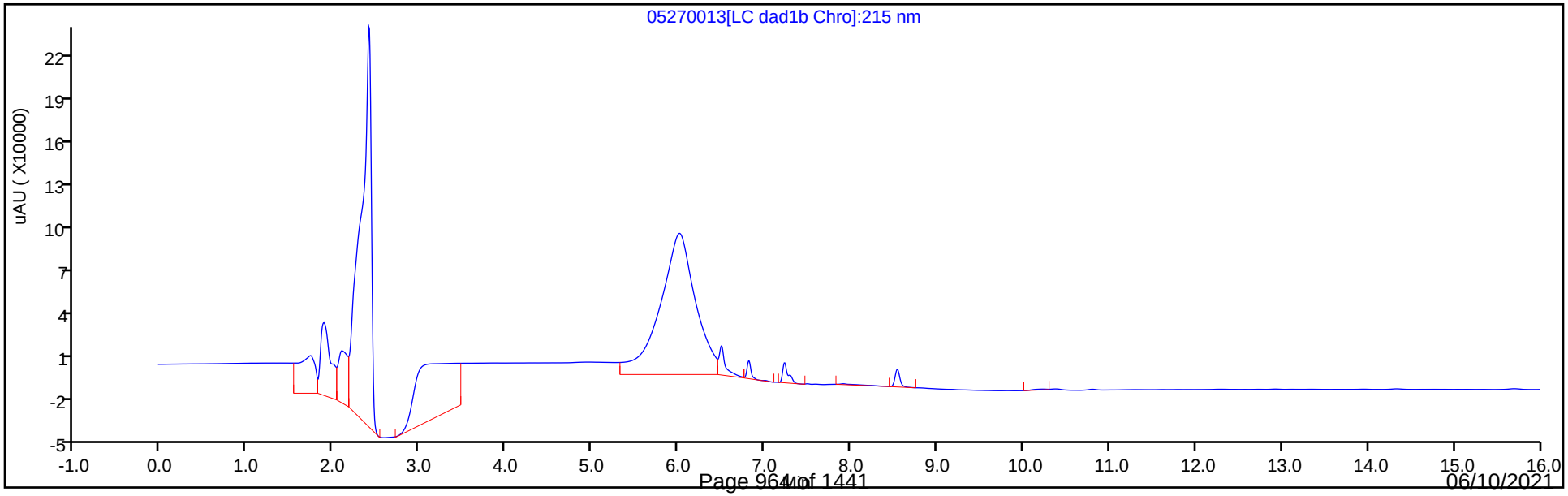
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270013.d

Injection Date:	27-May-2021 15:55:47	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-537382/3-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270013.D
Lims ID: LCS 280-537382/3-A
Client ID:
Sample Type: LCS
Inject. Date: 27-May-2021 15:55:47 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-537382/3
Misc. Info.: 280-0101842-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:29 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: 27-May-2021 16:24:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1834	91.72

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

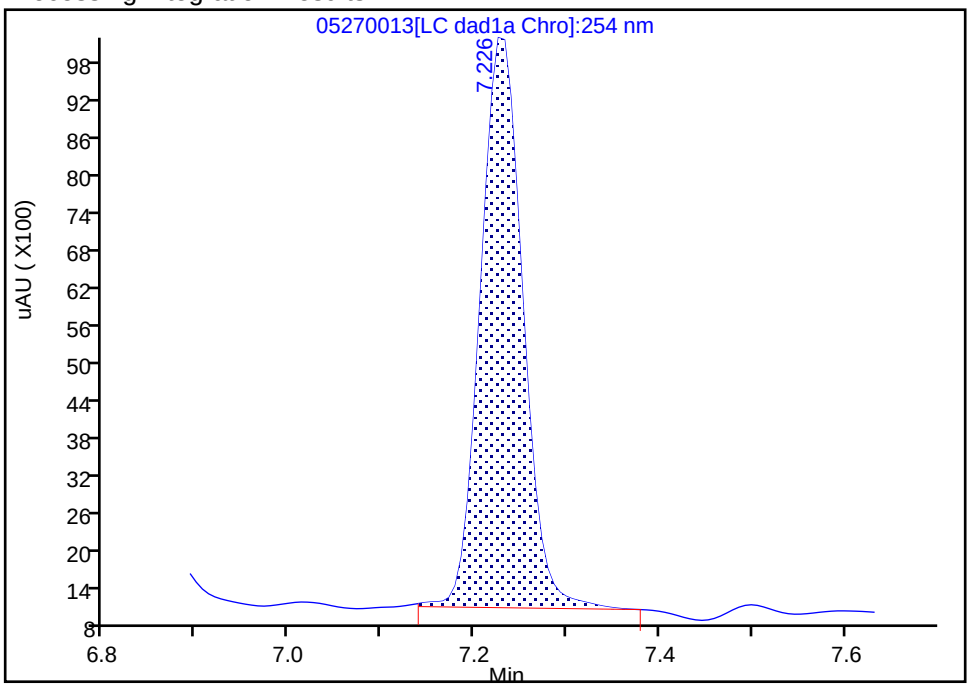
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270013.d				
Injection Date:	27-May-2021 15:55:47	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-537382/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

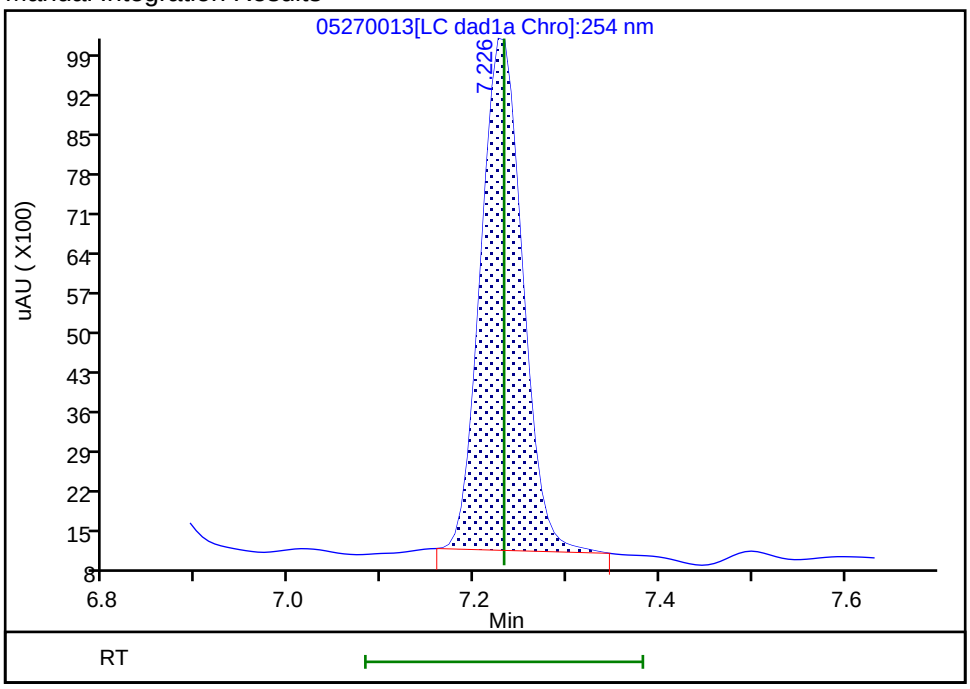
Processing Integration Results

RT: 7.23
Area: 29110
Amount: 0.223338
Amount Units: ug/mL



Manual Integration Results

RT: 7.23
Area: 28389
Amount: 0.217807
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2021 16:24:31

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MS Lab Sample ID: 280-148902-5 MS

Matrix: Water Lab File ID: 05270035.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 517.8(mL) Date Analyzed: 05/28/2021 00:21

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.75		0.20	0.19	0.081
99-65-0	1,3-Dinitrobenzene	1.69		0.11	0.097	0.036
118-96-7	2,4,6-Trinitrotoluene	1.76		0.11	0.097	0.043
121-14-2	2,4-Dinitrotoluene	1.55		0.097	0.077	0.026
606-20-2	2,6-Dinitrotoluene	1.61		0.097	0.077	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	1.50	J1	0.11	0.097	0.049
88-72-2	2-Nitrotoluene	1.05	J1	0.20	0.19	0.083
99-08-1	3-Nitrotoluene	1.18	J1	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.47		0.14	0.12	0.056
2691-41-0	HMX	1.80	M	0.20	0.19	0.085
98-95-3	Nitrobenzene	1.38		0.20	0.19	0.088
121-82-4	RDX	1.67	M	0.20	0.19	0.050
479-45-8	Tetryl	1.79		0.11	0.097	0.031

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270035.D
Lims ID: 280-148902-B-5-B MS
Client ID: G0070-21A
Sample Type: MS
Inject. Date: 28-May-2021 00:21:32 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-5-B
Misc. Info.: 280-0101842-035
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:45:54

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.612	6.617	-0.005	15732	0.2000	0.1864	M
	7 RDX	1	7.598	7.604	-0.006	18376	0.2000	0.1729	M
	8 2,4,6-Trinitrophenol	1	7.958	7.977	-0.019	28864	0.2000	0.3489	M
$	9 1,2-Dinitrobenzene	1	8.538	8.544	-0.006	22879	0.2000	0.1784	
	10 1,3,5-Trinitrobenzene	1	8.658	8.670	-0.012	39872	0.2000	0.1810	
	11 1,3-Dinitrobenzene	1	9.292	9.304	-0.012	51965	0.2000	0.1754	
	12 Nitrobenzene	1	9.685	9.697	-0.012	27819	0.2000	0.1425	
	14 Tetryl	1	10.025	10.037	-0.012	31978	0.2000	0.1855	
	15 Nitroglycerin	2	10.485	10.497	-0.012	122412	2.00	1.84	
	16 2,4,6-Trinitrotoluene	1	10.952	10.964	-0.012	37511	0.2000	0.1821	
	17 4-Amino-2,6-dinitrotoluene	1	11.165	11.184	-0.019	23233	0.2000	0.1521	
	18 2-Amino-4,6-dinitrotoluene	1	11.425	11.437	-0.012	32087	0.2000	0.1551	
	19 2,6-Dinitrotoluene	1	11.592	11.610	-0.018	23807	0.2000	0.1664	
	20 2,4-Dinitrotoluene	1	11.765	11.784	-0.019	46032	0.2000	0.1604	
	21 o-Nitrotoluene	1	12.652	12.670	-0.018	13976	0.2000	0.1089	
	22 p-Nitrotoluene	1	13.092	13.110	-0.018	15247	0.2000	0.1362	
	23 m-Nitrotoluene	1	13.692	13.710	-0.018	17358	0.2000	0.1220	
	24 PETN	2	14.818	14.844	-0.026	140873	2.00	1.88	

QC Flag Legend

Processing Flags

Review Flags

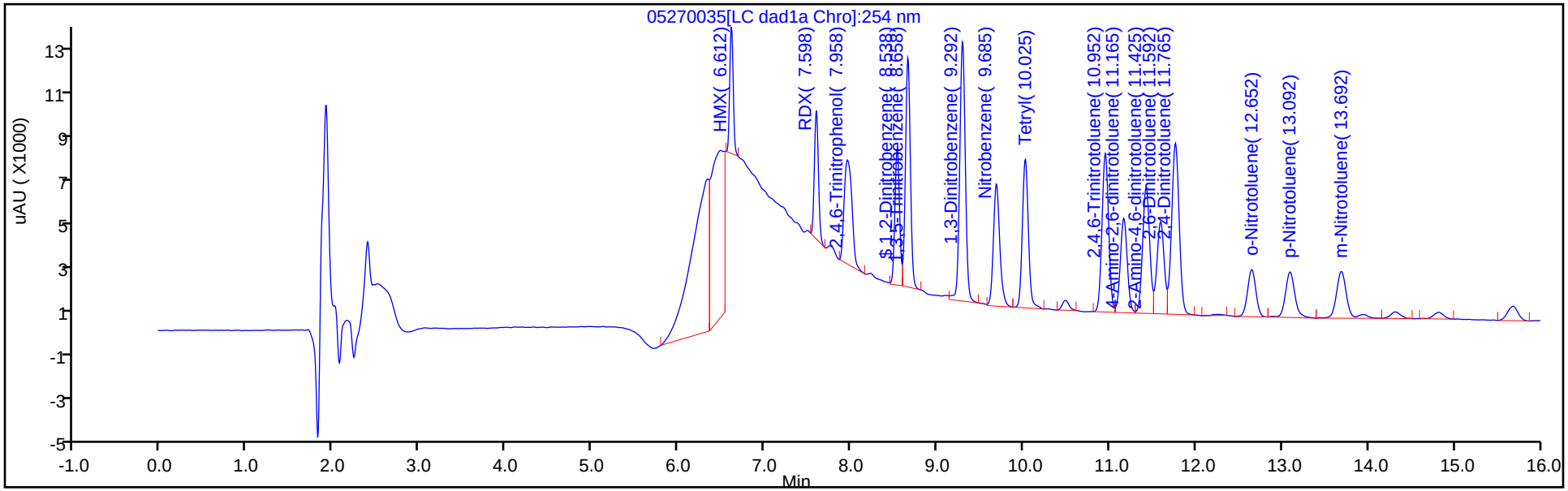
M - Manually Integrated

Report Date: 28-May-2021 14:38:42 Chrom Revision: 2.3 13-May-2021 07:57:40

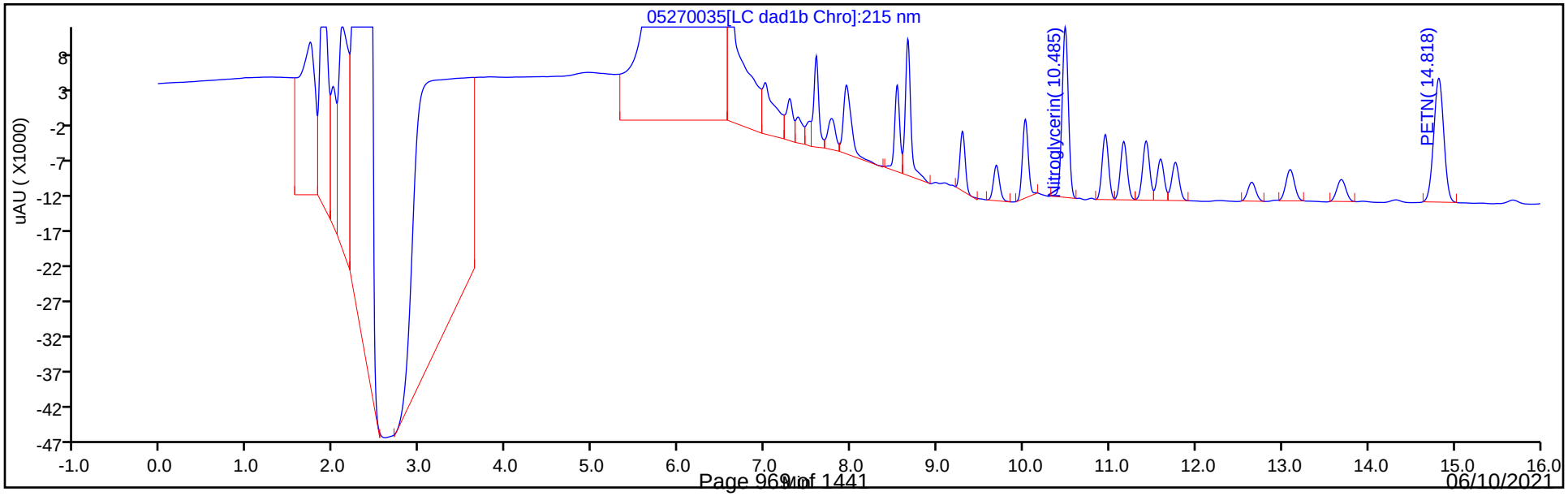
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270035.d				
Injection Date:	28-May-2021 00:21:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-5-B MS			Worklist Smp#:	35
Client ID:	G0070-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270035.D
Lims ID: 280-148902-B-5-B MS
Client ID: G0070-21A
Sample Type: MS
Inject. Date: 28-May-2021 00:21:32 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-5-B
Misc. Info.: 280-0101842-035
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:45:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1784	89.22

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

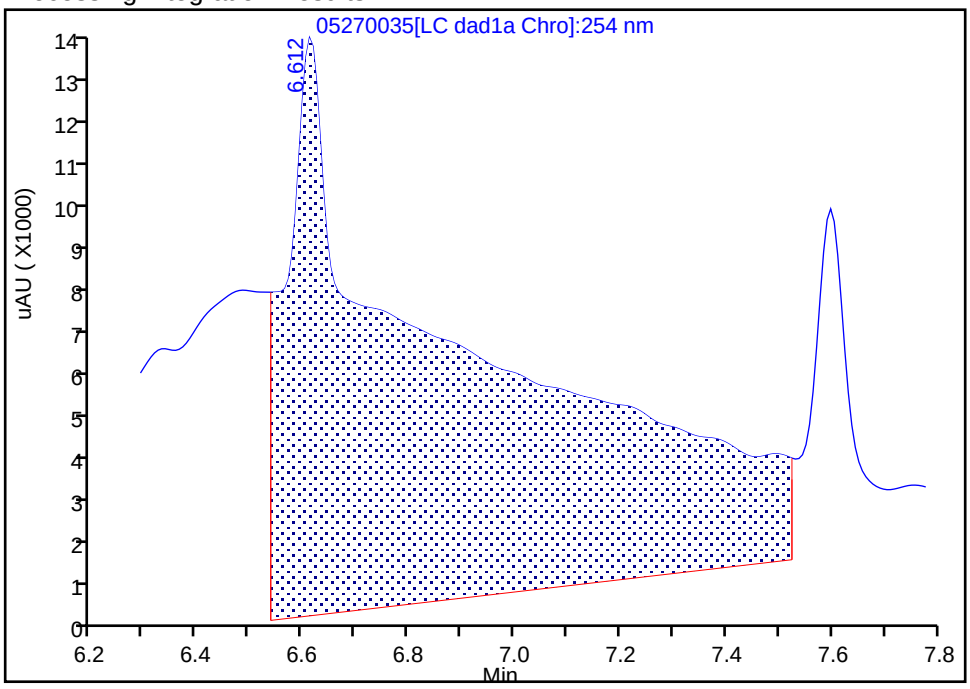
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270035.d				
Injection Date:	28-May-2021 00:21:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-5-B MS				
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

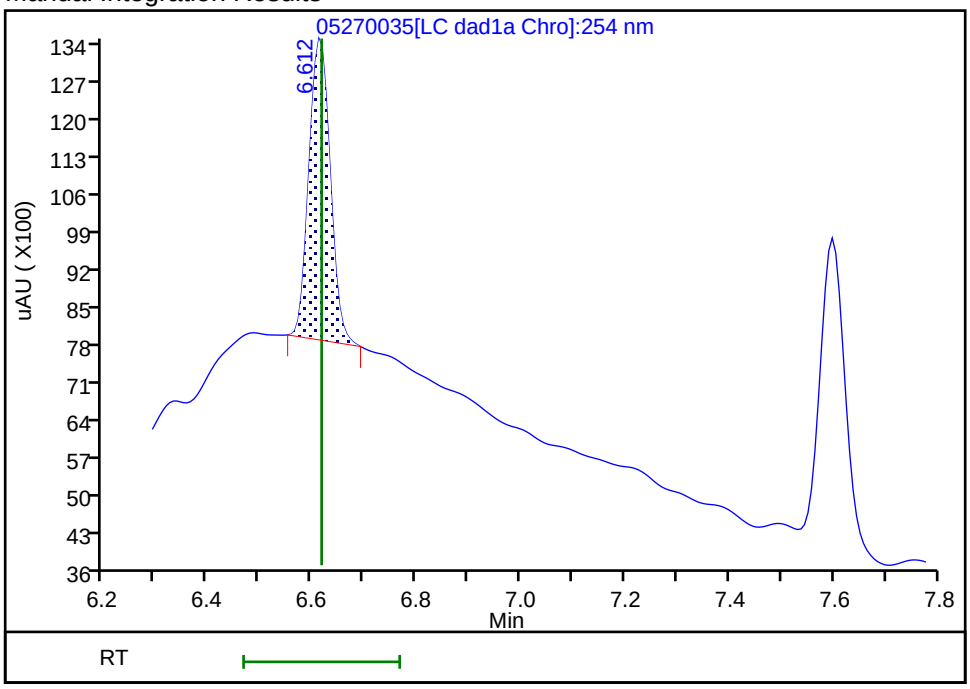
Processing Integration Results

RT: 6.61
Area: 290452
Amount: 3.440501
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 15732
Amount: 0.186351
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:45:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

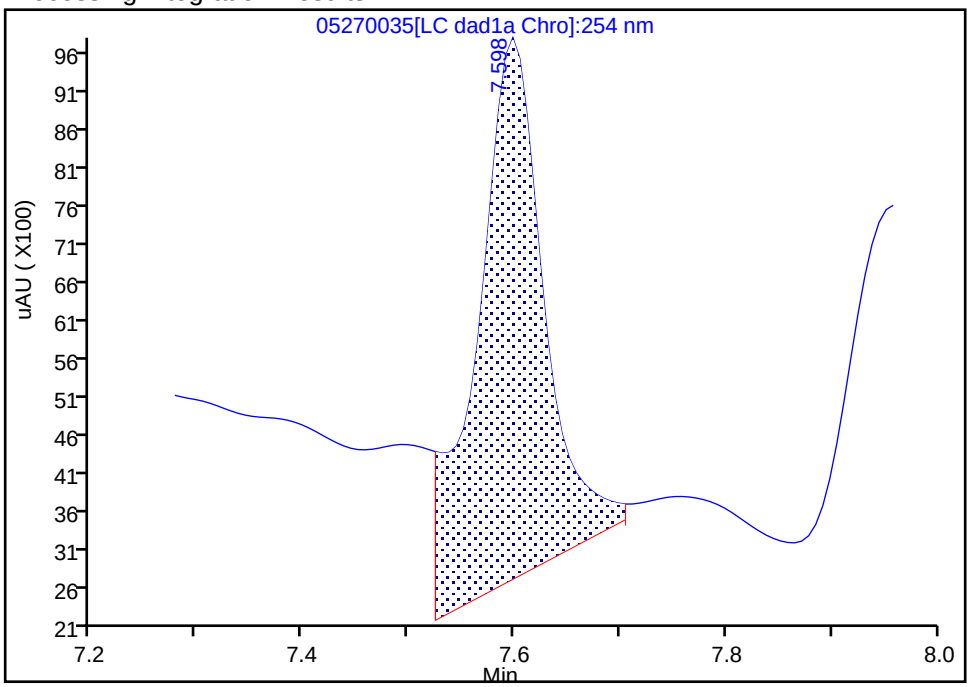
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270035.d				
Injection Date:	28-May-2021 00:21:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-5-B MS				
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

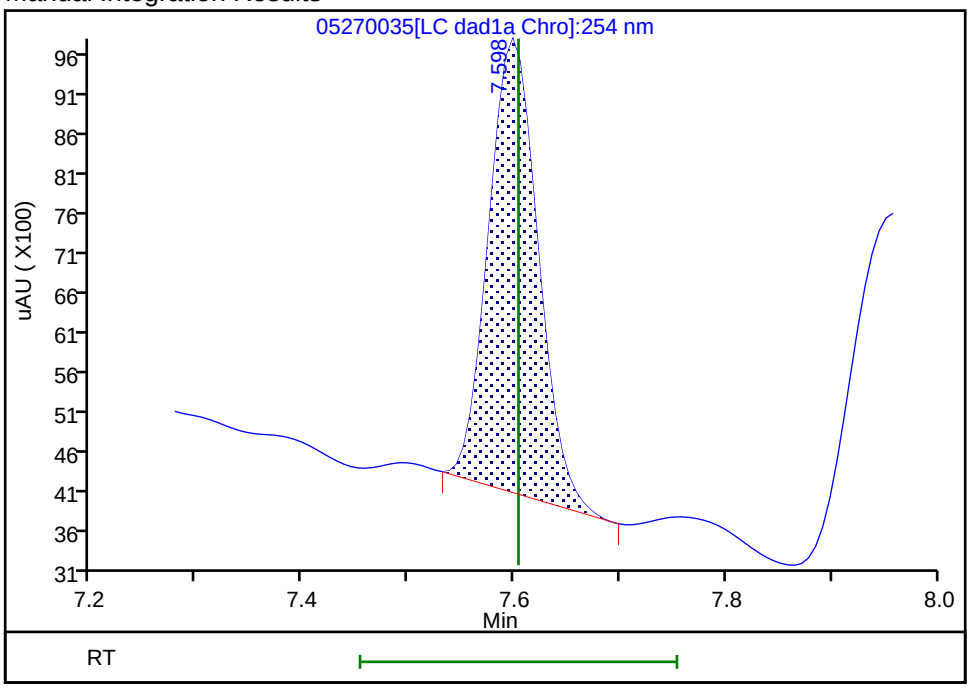
Processing Integration Results

RT: 7.60
Area: 31214
Amount: 0.293747
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 18376
Amount: 0.172932
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:45:45

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MS Lab Sample ID: 280-148902-5 MS

Matrix: Water Lab File ID: 05270037.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 522.1(mL) Date Analyzed: 05/28/2021 01:07

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.11	M	1.9	0.38	0.15

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270037.D				
Lims ID:	280-148902-A-5-B MS				
Client ID:	G0070-21A				
Sample Type:	MS				
Inject. Date:	28-May-2021 01:07:26	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-5-B				
Misc. Info.:	280-0101842-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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:	28-May-2021 12:46:29		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.496	6.499	-0.003	34274	0.2002	0.1845	M
5 DNX	1	6.809	6.819	-0.010	26156	0.2002	0.1840	M
6 MNX	1	7.223	7.232	-0.009	28763	0.2334	0.2207	M
$ 9 1,2-Dinitrobenzene	1	8.529	8.544	-0.015	23918	0.2000	0.1865	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

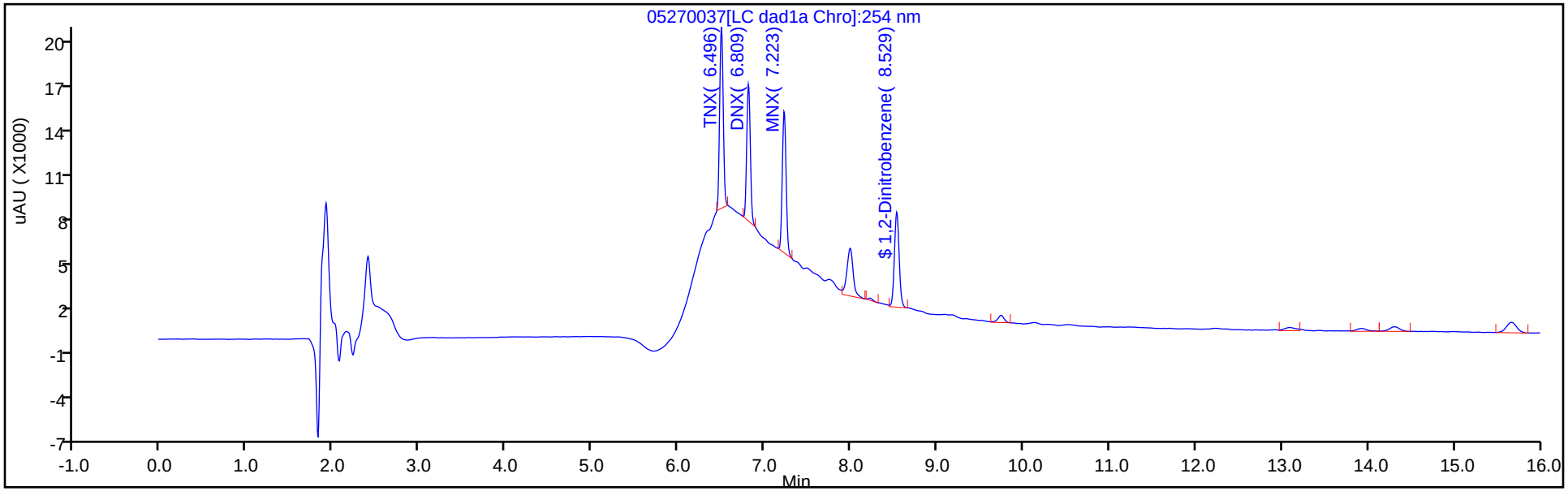
Report Date: 28-May-2021 14:38:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

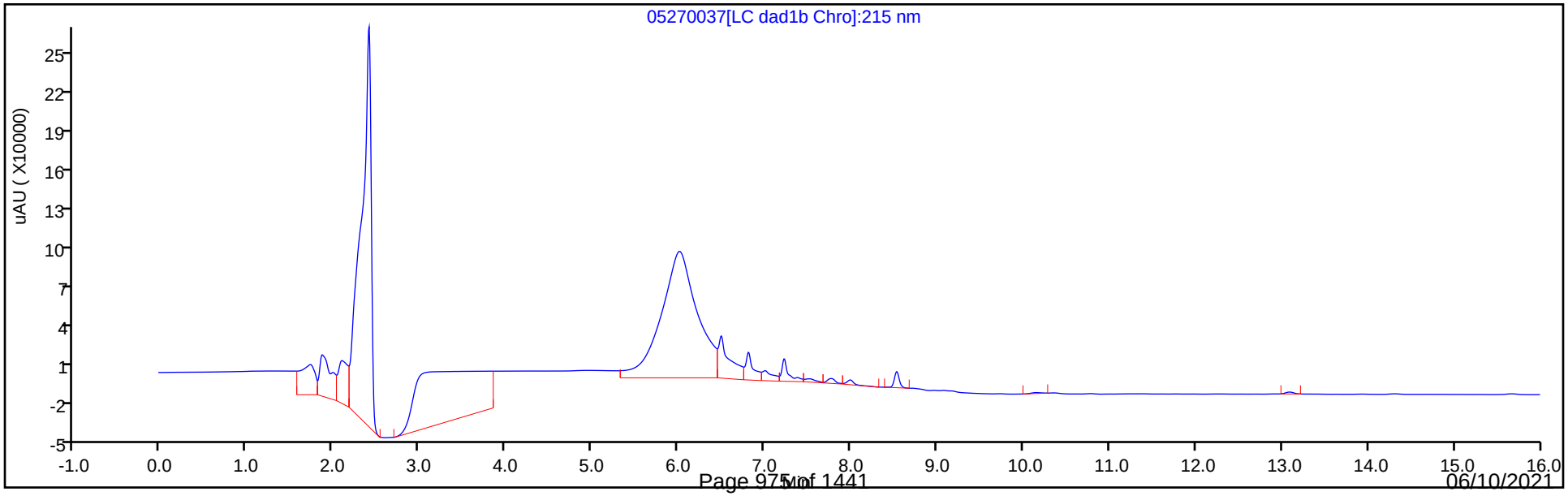
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270037.d

Injection Date:	28-May-2021 01:07:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-A-5-B MS			Worklist Smp#:	37
Client ID:	G0070-21A				
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\20210527-101842.b\05270037.D
Lims ID: 280-148902-A-5-B MS
Client ID: G0070-21A
Sample Type: MS
Inject. Date: 28-May-2021 01:07:26 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-5-B
Misc. Info.: 280-0101842-037
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:46:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1865	93.27

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

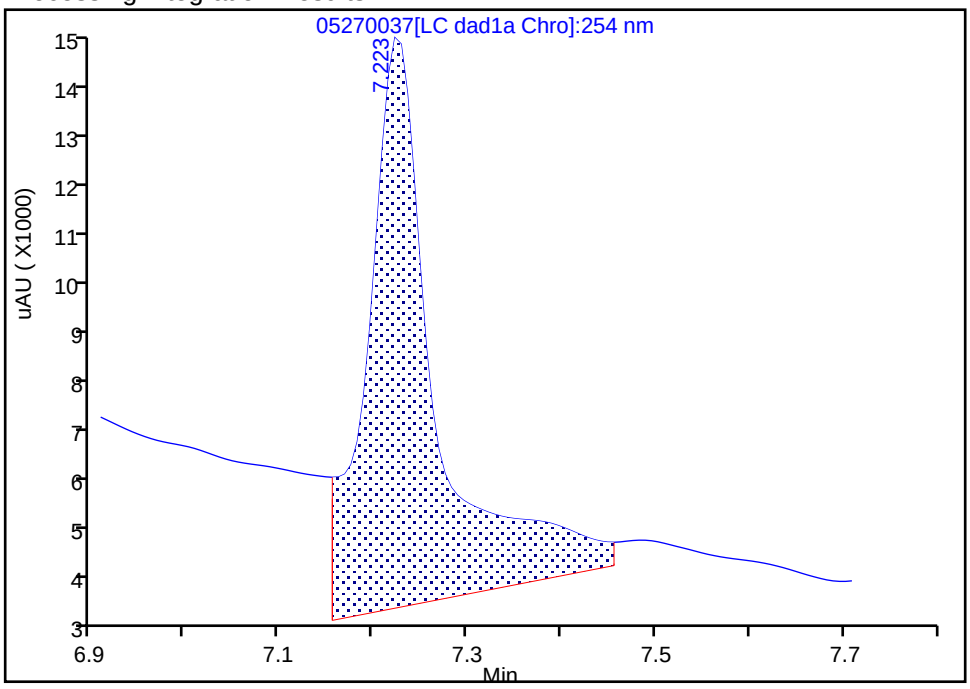
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270037.d				
Injection Date:	28-May-2021 01:07:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-5-B MS				
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

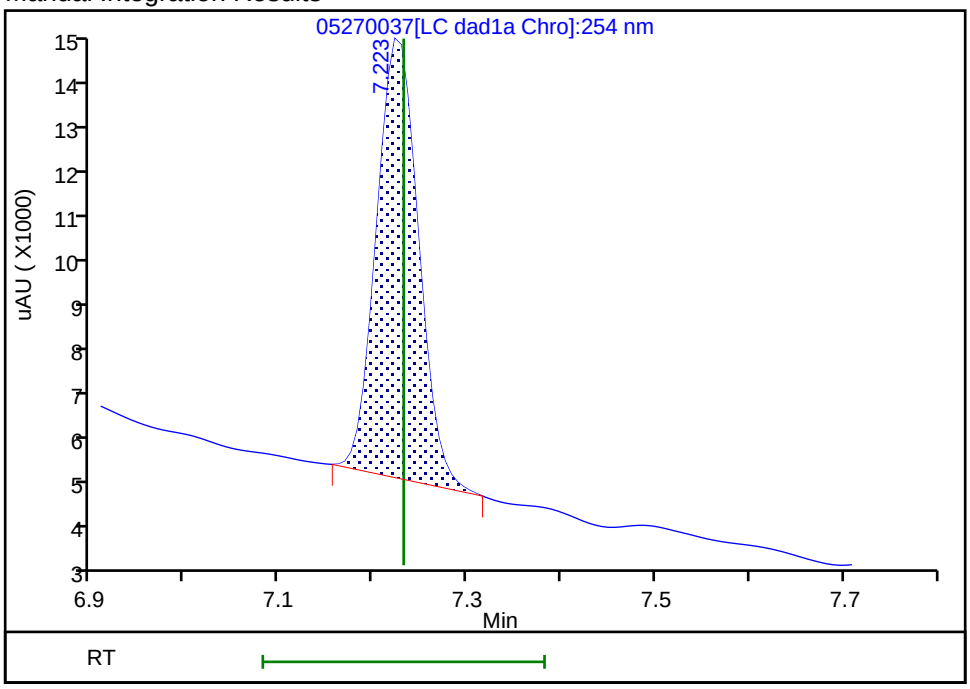
Processing Integration Results

RT: 7.22
Area: 59690
Amount: 0.457955
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 28763
Amount: 0.220676
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:46:28

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MS Lab Sample ID: 280-148902-5 MS

Matrix: Water Lab File ID: 052-2201.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 517.8(mL) Date Analyzed: 05/30/2021 00:55

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.: 537964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	1.11	J1	0.40	0.39	0.097

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	84		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\052-2201.D
Lims ID: 280-148902-B-5-B MS
Client ID: G0070-21A
Sample Type: MS
Inject. Date: 30-May-2021 00:55:43 ALS Bottle#: 52 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-B-5-B MS
Misc. Info.: 280-0101890-019
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:24 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: CTX1661

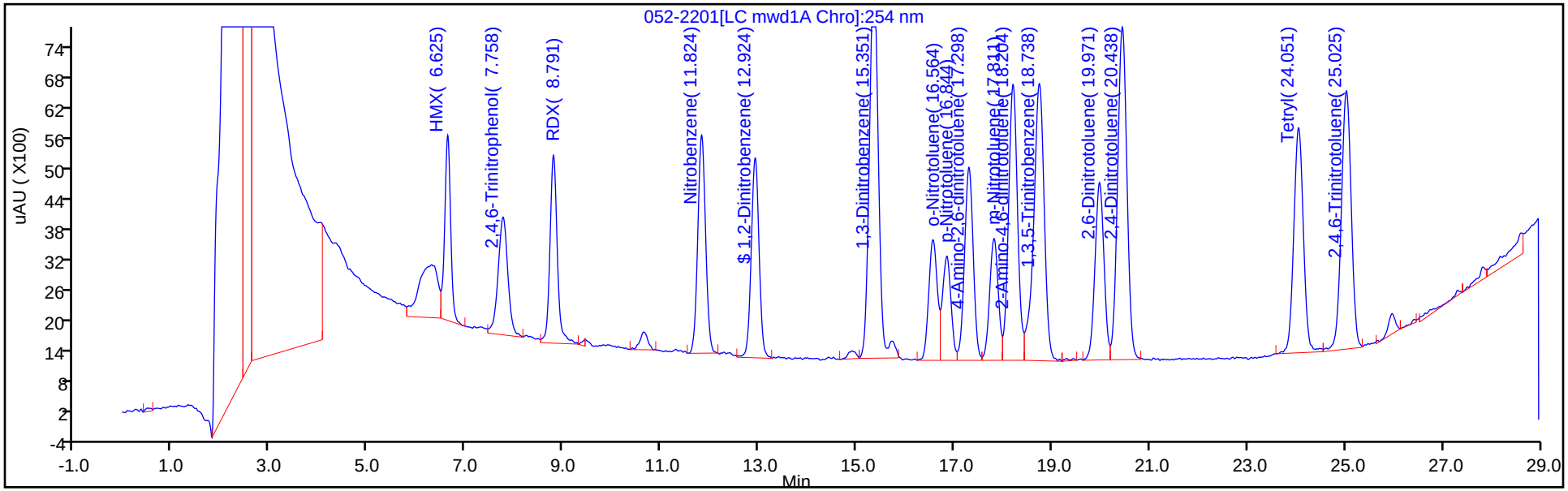
Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.625	6.694	-0.069	31309	0.2000	0.1910	
5 2,4,6-Trinitrophenol	1	7.758	7.908	-0.150	32505	0.2000	0.2037	
8 RDX	1	8.791	8.868	-0.077	39184	0.2000	0.1918	
9 Nitrobenzene	1	11.824	11.921	-0.097	48213	0.2000	0.1287	
$ 10 1,2-Dinitrobenzene	1	12.924	13.021	-0.097	44554	0.2000	0.1677	
12 1,3-Dinitrobenzene	1	15.351	15.447	-0.096	99370	0.2000	0.1741	
13 Nitroglycerin	2	15.738	15.861	-0.123	241188	2.00	1.88	
14 o-Nitrotoluene	1	16.564	16.687	-0.123	29575	0.2000	0.1188	
15 p-Nitrotoluene	1	16.844	16.974	-0.130	25014	0.2000	0.1152	
16 4-Amino-2,6-dinitrotoluene	1	17.298	17.427	-0.129	47806	0.2000	0.1611	
17 m-Nitrotoluene	1	17.811	17.947	-0.136	29839	0.2000	0.1072	
18 2-Amino-4,6-dinitrotoluene	1	18.204	18.327	-0.123	70770	0.2000	0.1783	
19 1,3,5-Trinitrobenzene	1	18.738	18.854	-0.116	83345	0.2000	0.1964	
20 2,6-Dinitrotoluene	1	19.971	20.101	-0.130	45318	0.2000	0.1679	
21 2,4-Dinitrotoluene	1	20.438	20.568	-0.129	88108	0.2000	0.1557	
22 Tetryl	1	24.051	24.194	-0.143	61453	0.2000	0.1875	
23 2,4,6-Trinitrotoluene	1	25.025	25.174	-0.149	72588	0.2000	0.1911	
24 PETN	2	25.958	26.101	-0.143	264867	2.00	1.92	

Report Date: 02-Jun-2021 19:44:25 Chrom Revision: 2.3 13-May-2021 07:57:40

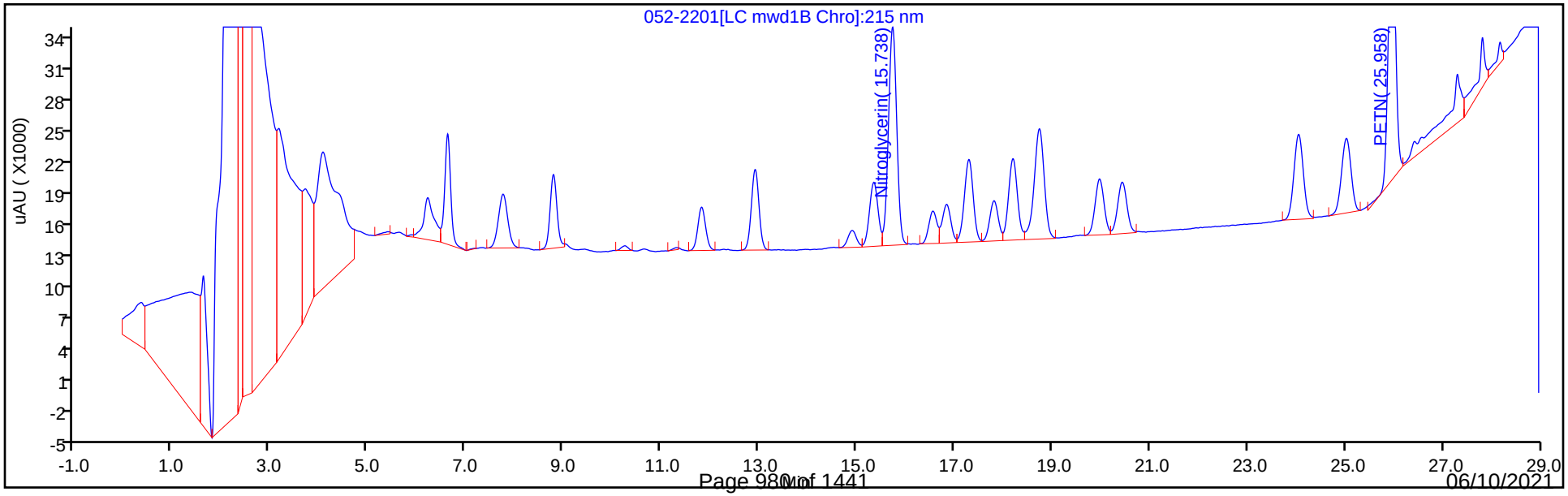
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\052-2201.D				
Injection Date:	30-May-2021 00:55:43	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-B-5-B MS			Worklist Smp#:	66
Client ID:	G0070-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
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\20210528-101890.b\052-2201.D				
Lims ID:	280-148902-B-5-B MS				
Client ID:	G0070-21A				
Sample Type:	MS				
Inject. Date:	30-May-2021 00:55:43	ALS Bottle#:	52	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-5-B MS				
Misc. Info.:	280-0101890-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jun-2021 19:44:24	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:	CTX1661				

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1677	83.86

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MSD Lab Sample ID: 280-148902-5 MSD

Matrix: Water Lab File ID: 05270036.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 511.8(mL) Date Analyzed: 05/28/2021 00:44

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.82		0.21	0.20	0.082
99-65-0	1,3-Dinitrobenzene	1.78		0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	1.82		0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	1.64		0.098	0.078	0.027
606-20-2	2,6-Dinitrotoluene	1.67		0.098	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	1.60		0.11	0.098	0.050
88-72-2	2-Nitrotoluene	1.20	J1	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	1.27	J1	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.57		0.15	0.12	0.056
2691-41-0	HMX	1.82	M	0.21	0.20	0.086
98-95-3	Nitrobenzene	1.53		0.21	0.20	0.089
121-82-4	RDX	1.71	M	0.21	0.20	0.050
479-45-8	Tetryl	1.82		0.11	0.098	0.031

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270036.D
Lims ID: 280-148902-A-5-A MSD
Client ID: G0070-21A
Sample Type: MSD
Inject. Date: 28-May-2021 00:44:28 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-5-A
Misc. Info.: 280-0101842-036
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-May-2021 14:38:41 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: 28-May-2021 12:46:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.610	6.617	-0.007	15729	0.2000	0.1863	M
	7 RDX	1	7.597	7.604	-0.007	18628	0.2000	0.1753	M
	8 2,4,6-Trinitrophenol	1	7.950	7.977	-0.027	29182	0.2000	0.3528	M
$	9 1,2-Dinitrobenzene	1	8.530	8.544	-0.014	23201	0.2000	0.1810	
	10 1,3,5-Trinitrobenzene	1	8.657	8.670	-0.013	41037	0.2000	0.1863	
	11 1,3-Dinitrobenzene	1	9.290	9.304	-0.014	54062	0.2000	0.1824	
	12 Nitrobenzene	1	9.683	9.697	-0.014	30598	0.2000	0.1567	
	14 Tetryl	1	10.016	10.037	-0.021	32196	0.2000	0.1867	
	15 Nitroglycerin	2	10.476	10.497	-0.021	122522	2.00	1.85	
	16 2,4,6-Trinitrotoluene	1	10.943	10.964	-0.021	38303	0.2000	0.1859	
	17 4-Amino-2,6-dinitrotoluene	1	11.156	11.184	-0.028	24517	0.2000	0.1605	
	18 2-Amino-4,6-dinitrotoluene	1	11.416	11.437	-0.021	33981	0.2000	0.1642	
	19 2,6-Dinitrotoluene	1	11.590	11.610	-0.020	24387	0.2000	0.1704	
	20 2,4-Dinitrotoluene	1	11.756	11.784	-0.028	48142	0.2000	0.1677	
	21 o-Nitrotoluene	1	12.643	12.670	-0.027	15723	0.2000	0.1225	
	22 p-Nitrotoluene	1	13.090	13.110	-0.020	16669	0.2000	0.1489	
	23 m-Nitrotoluene	1	13.683	13.710	-0.027	18493	0.2000	0.1300	
	24 PETN	2	14.810	14.844	-0.034	140684	2.00	1.88	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

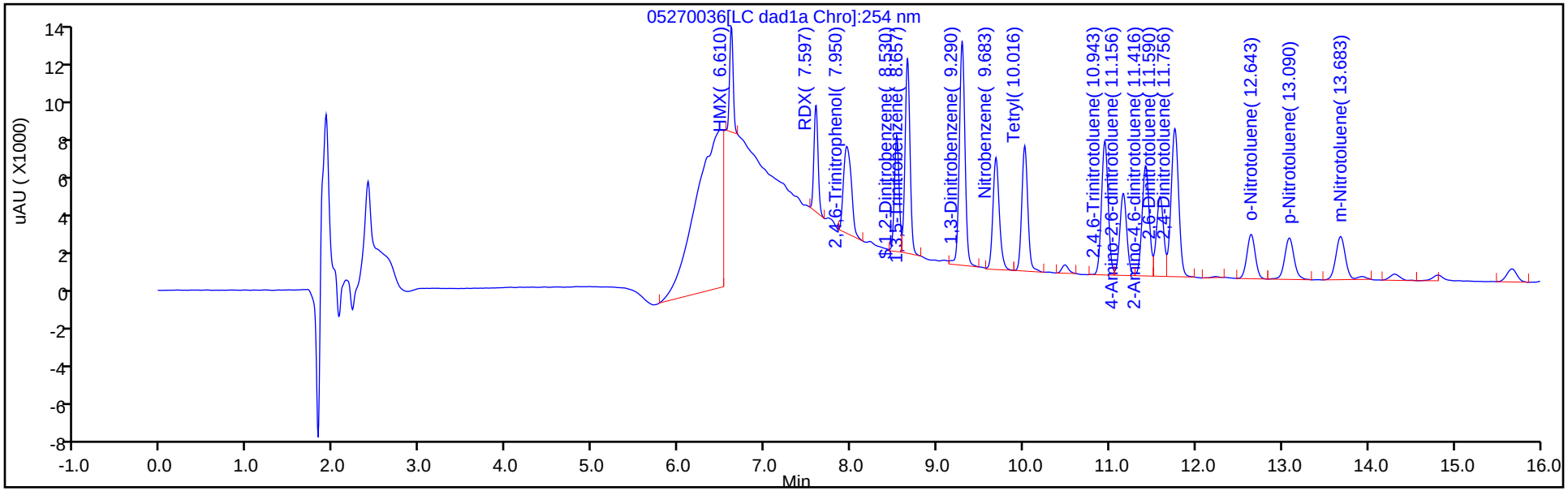
Report Date: 28-May-2021 14:38:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

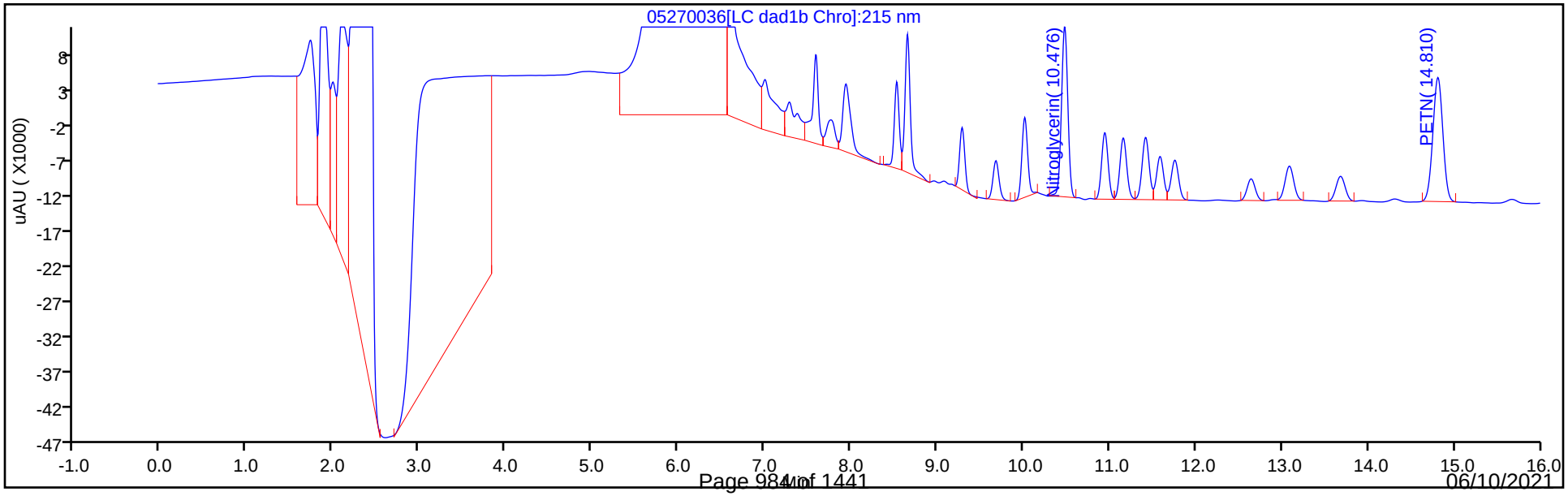
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270036.d

Injection Date:	28-May-2021 00:44:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-A-5-A MSD			Worklist Smp#:	36
Client ID:	G0070-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270036.D				
Lims ID:	280-148902-A-5-A MSD				
Client ID:	G0070-21A				
Sample Type:	MSD				
Inject. Date:	28-May-2021 00:44:28	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-5-A				
Misc. Info.:	280-0101842-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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: 28-May-2021 12:46:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1810	90.48

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

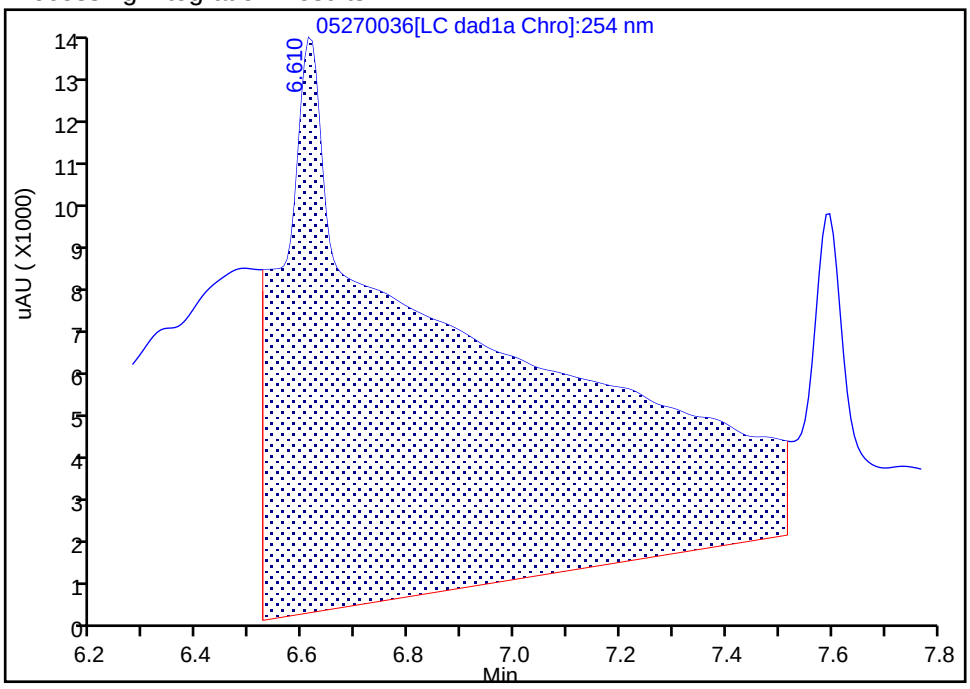
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270036.d				
Injection Date:	28-May-2021 00:44:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-5-A MSD				
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

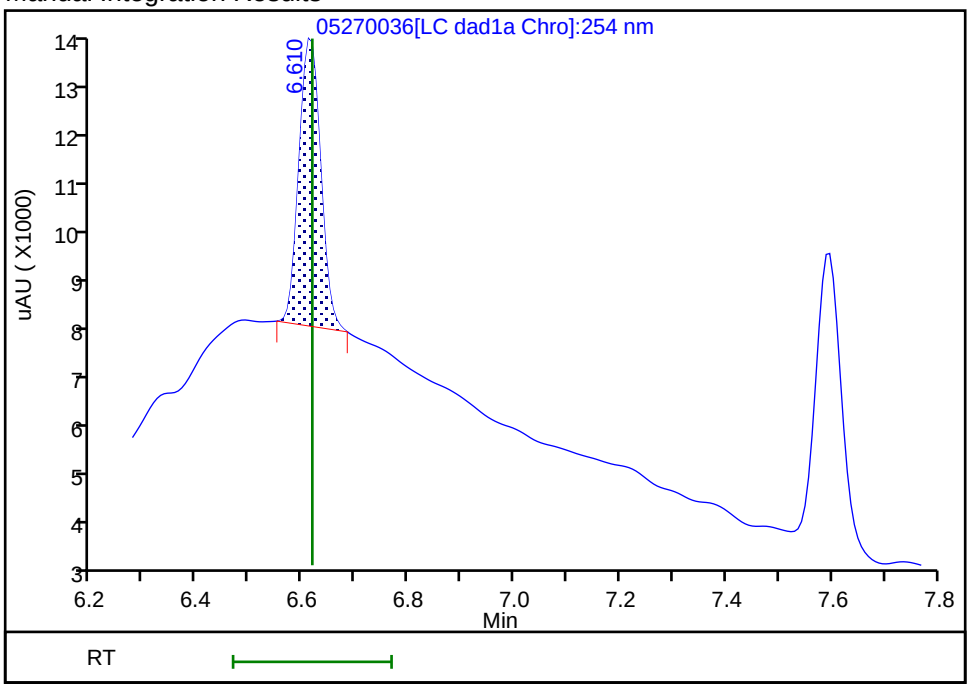
Processing Integration Results

RT: 6.61
Area: 329290
Amount: 3.900550
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 15729
Amount: 0.186315
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:46:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

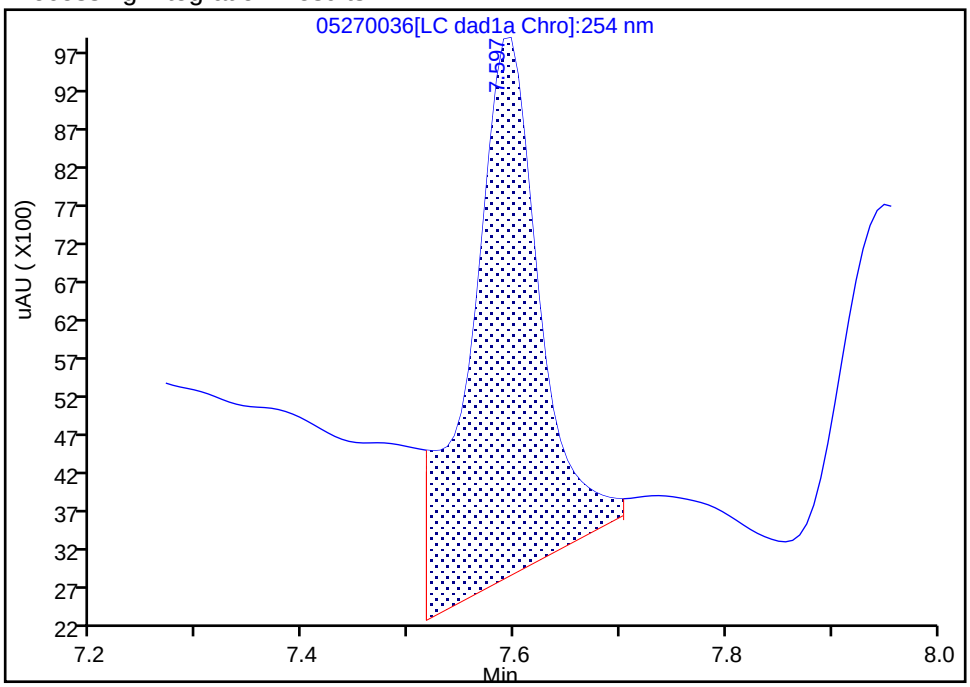
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270036.d				
Injection Date:	28-May-2021 00:44:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-A-5-A MSD				
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

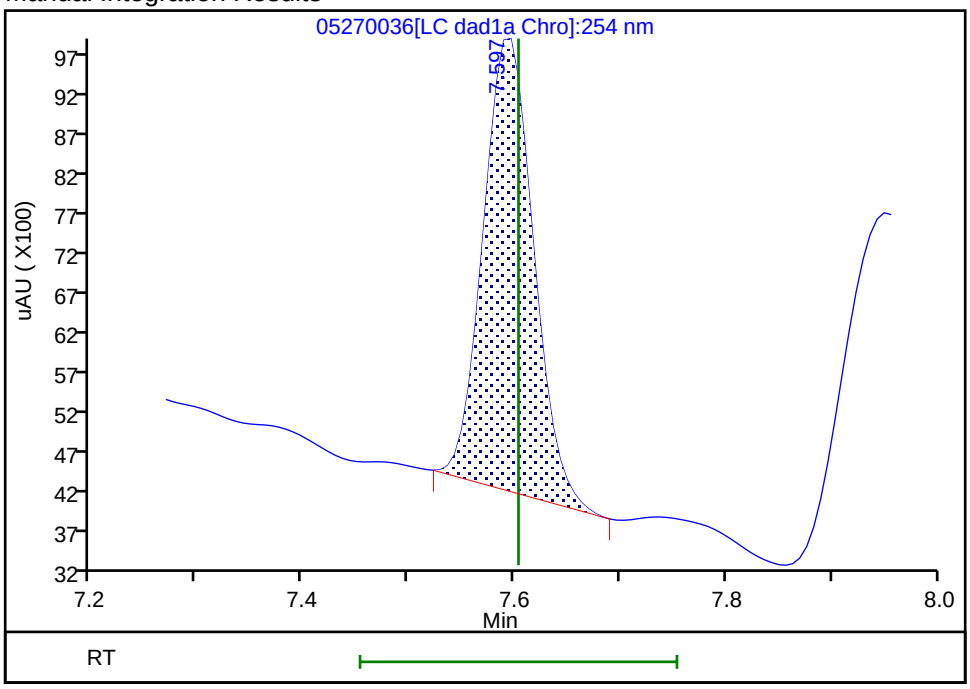
Processing Integration Results

RT: 7.60
Area: 32097
Amount: 0.302057
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 18628
Amount: 0.175303
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:46:07

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MSD Lab Sample ID: 280-148902-5 MSD

Matrix: Water Lab File ID: 05270038.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 531.5(mL) Date Analyzed: 05/28/2021 01:30

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 537692 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.05	M	1.9	0.38	0.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\05270038.D				
Lims ID:	280-148902-B-5-C MSD				
Client ID:	G0070-21A				
Sample Type:	MSD				
Inject. Date:	28-May-2021 01:30:23	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-5-C				
Misc. Info.:	280-0101842-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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:	28-May-2021 12:46:45		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.499	6.499	0.000	33958	0.2002	0.1828	M
5 DNX	1	6.813	6.819	-0.006	25765	0.2002	0.1813	M
6 MNX	1	7.226	7.232	-0.006	28412	0.2334	0.2180	M
$ 9 1,2-Dinitrobenzene	1	8.526	8.544	-0.018	24787	0.2000	0.1933	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

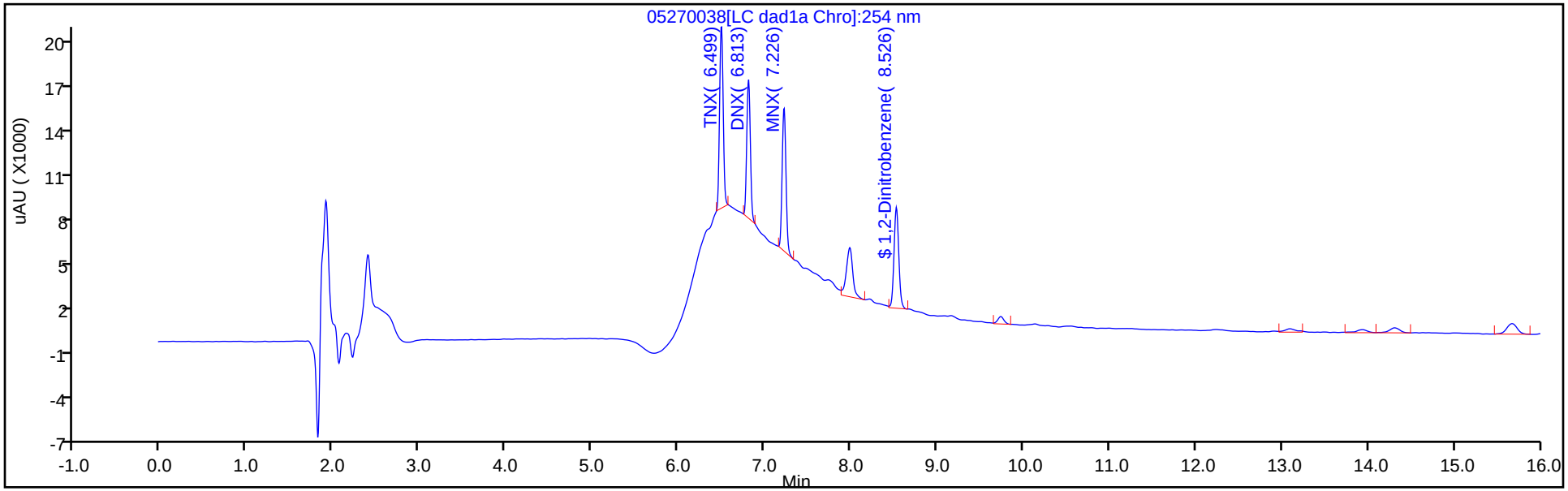
Report Date: 28-May-2021 14:38:44 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

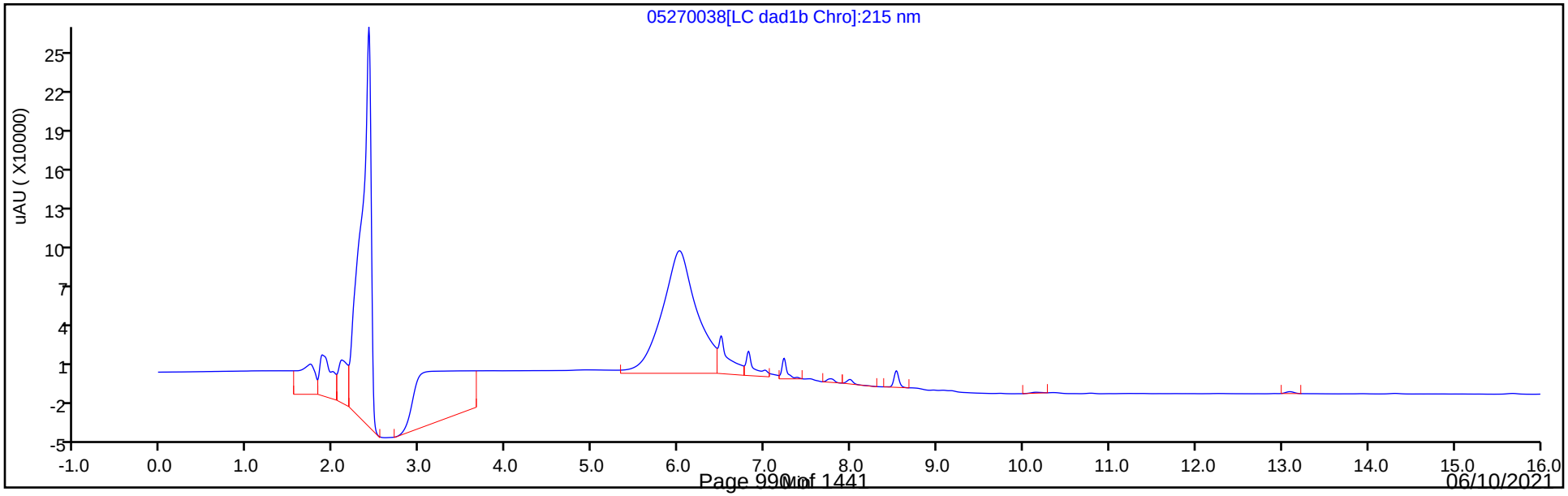
Data File: \\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270038.d

Injection Date:	28-May-2021 01:30:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-148902-B-5-C MSD			Worklist Smp#:	38
Client ID:	G0070-21A				
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\20210527-101842.b\05270038.D				
Lims ID:	280-148902-B-5-C MSD				
Client ID:	G0070-21A				
Sample Type:	MSD				
Inject. Date:	28-May-2021 01:30:23	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-B-5-C				
Misc. Info.:	280-0101842-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210527-101842.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2021 14:38:41	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: 28-May-2021 12:46:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1933	96.66

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

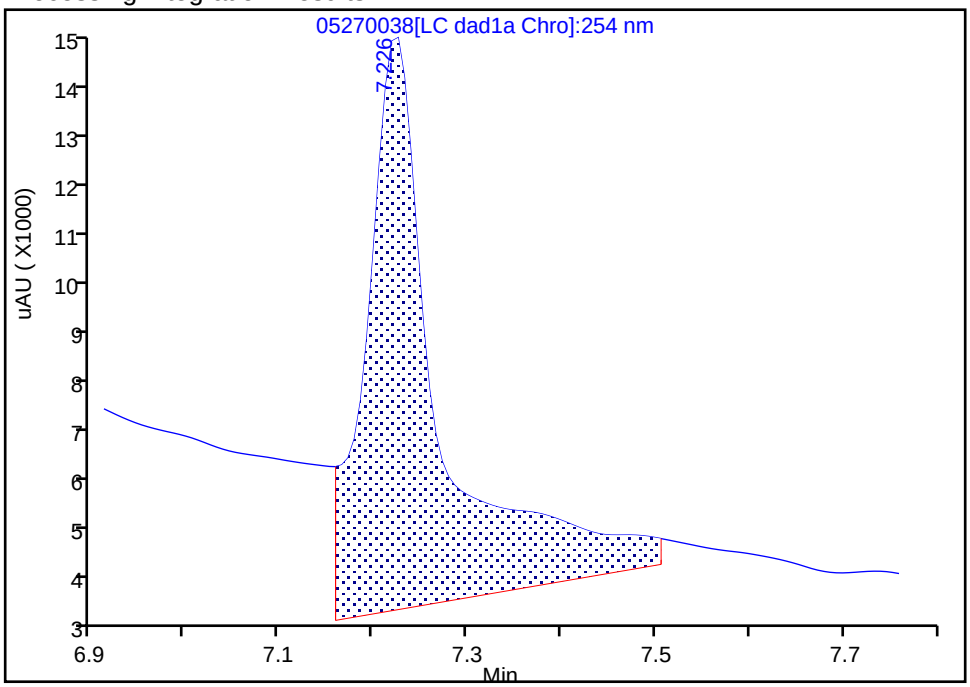
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210527-101842.b\05270038.d				
Injection Date:	28-May-2021 01:30:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-148902-B-5-C MSD				
Client ID:	G0070-21A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

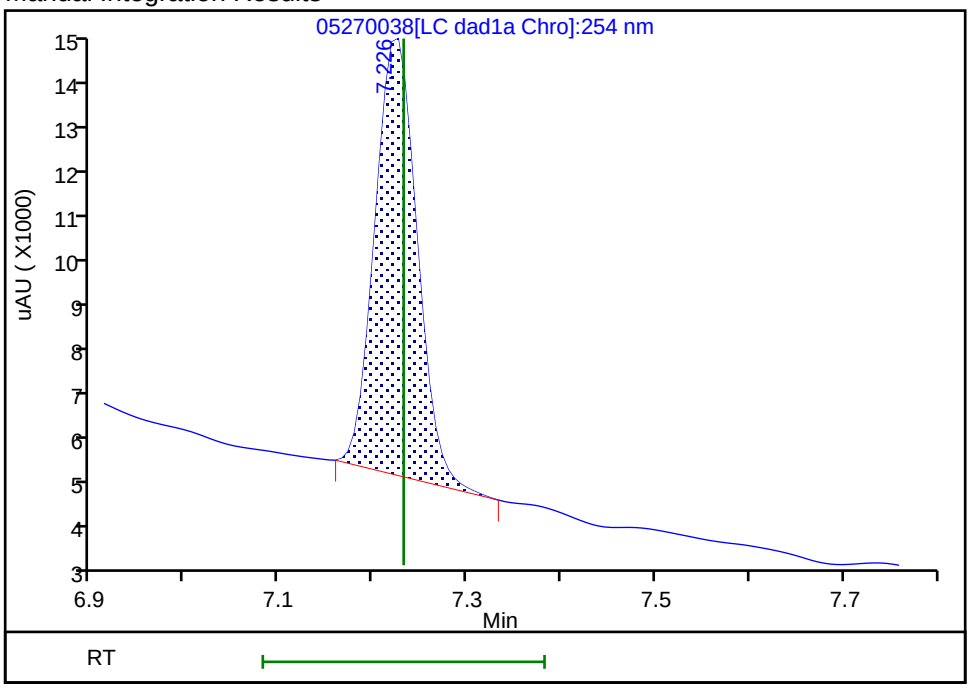
Processing Integration Results

RT: 7.23
Area: 65269
Amount: 0.500758
Amount Units: ug/mL



Manual Integration Results

RT: 7.23
Area: 28412
Amount: 0.217983
Amount Units: ug/mL



Reviewer: zhangji, 28-May-2021 12:46:44

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Client Sample ID: G0070-21A MSD Lab Sample ID: 280-148902-5 MSD

Matrix: Water Lab File ID: 053-2301.D

Analysis Method: 8330A Date Collected: 05/20/2021 12:50

Extraction Method: 3535 Date Extracted: 05/25/2021 17:25

Sample wt/vol: 511.8(mL) Date Analyzed: 05/30/2021 01:30

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.: 537964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	1.26	J1	0.40	0.39	0.098

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	84		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\053-2301.D
Lims ID: 280-148902-A-5-A MSD
Client ID: G0070-21A
Sample Type: MSD
Inject. Date: 30-May-2021 01:30:45 ALS Bottle#: 53 Worklist Smp#: 67
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-148902-A-5-A MSD
Misc. Info.: 280-0101890-020
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 02-Jun-2021 19:44:24 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: CTX1661

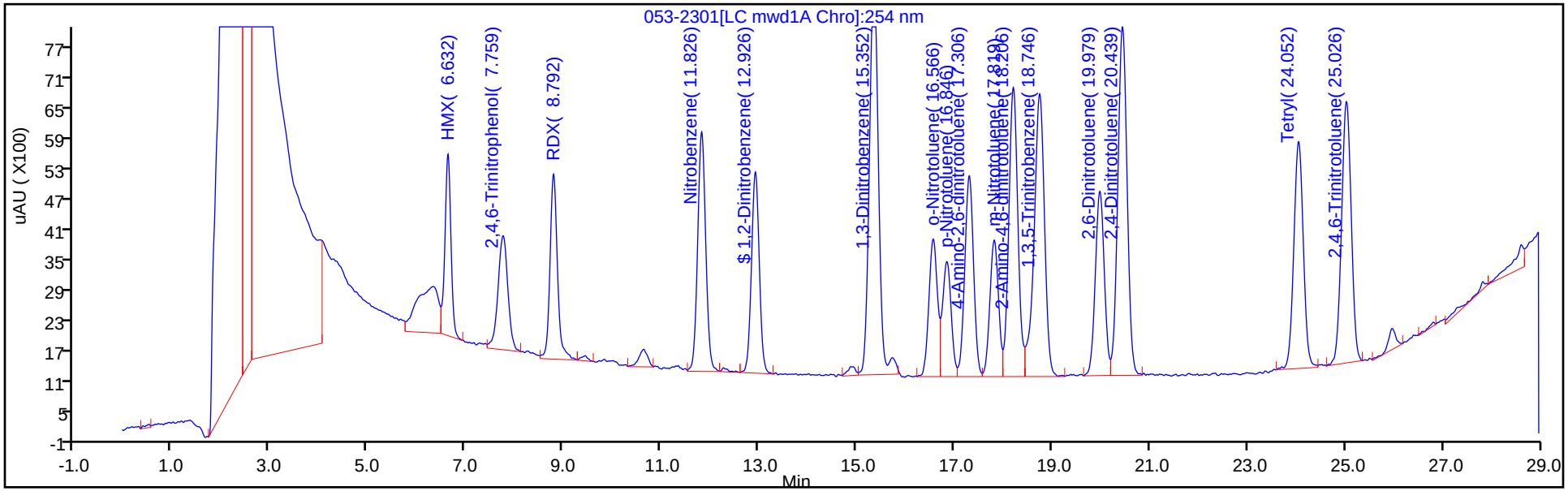
	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	6 HMX	1	6.632	6.694	-0.062	31001	0.2000	0.1891	
	5 2,4,6-Trinitrophenol	1	7.759	7.908	-0.149	31807	0.2000	0.1994	
	8 RDX	1	8.792	8.868	-0.076	39006	0.2000	0.1910	
	9 Nitrobenzene	1	11.826	11.921	-0.095	54598	0.2000	0.1457	
$	10 1,2-Dinitrobenzene	1	12.926	13.021	-0.095	44414	0.2000	0.1672	
	12 1,3-Dinitrobenzene	1	15.352	15.447	-0.095	102845	0.2000	0.1802	
	13 Nitroglycerin	2	15.739	15.861	-0.122	241272	2.00	1.88	
	14 o-Nitrotoluene	1	16.566	16.687	-0.121	33440	0.2000	0.1343	
	15 p-Nitrotoluene	1	16.846	16.974	-0.128	28009	0.2000	0.1290	
	16 4-Amino-2,6-dinitrotoluene	1	17.306	17.427	-0.121	50234	0.2000	0.1693	
	17 m-Nitrotoluene	1	17.819	17.947	-0.128	33491	0.2000	0.1203	
	18 2-Amino-4,6-dinitrotoluene	1	18.206	18.327	-0.121	74657	0.2000	0.1883	
	19 1,3,5-Trinitrobenzene	1	18.746	18.854	-0.108	83363	0.2000	0.1965	
	20 2,6-Dinitrotoluene	1	19.979	20.101	-0.122	46971	0.2000	0.1741	
	21 2,4-Dinitrotoluene	1	20.439	20.568	-0.128	91479	0.2000	0.1617	
	22 Tetryl	1	24.052	24.194	-0.142	61106	0.2000	0.1864	
	23 2,4,6-Trinitrotoluene	1	25.026	25.174	-0.148	71322	0.2000	0.1877	
	24 PETN	2	25.959	26.101	-0.142	265786	2.00	1.93	

Report Date: 02-Jun-2021 19:44:25 Chrom Revision: 2.3 13-May-2021 07:57:40

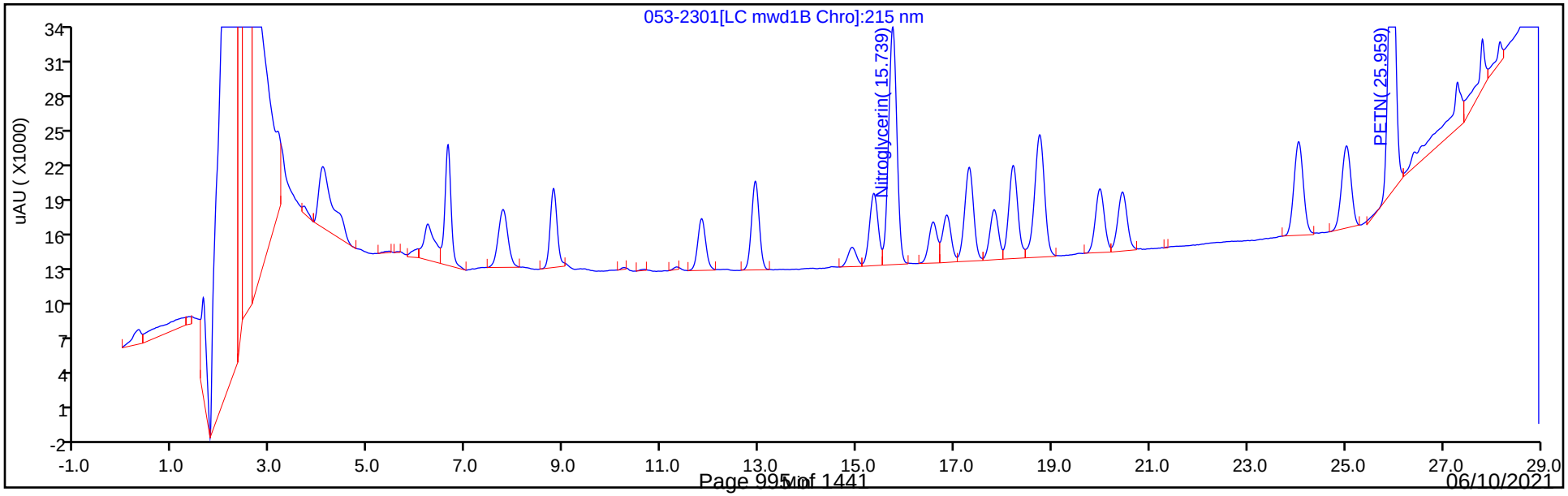
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\053-2301.D				
Injection Date:	30-May-2021 01:30:45	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-148902-A-5-A MSD			Worklist Smp#:	67
Client ID:	G0070-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
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\20210528-101890.b\053-2301.D				
Lims ID:	280-148902-A-5-A MSD				
Client ID:	G0070-21A				
Sample Type:	MSD				
Inject. Date:	30-May-2021 01:30:45	ALS Bottle#:	53	Worklist Smp#:	67
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-148902-A-5-A MSD				
Misc. Info.:	280-0101890-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210528-101890.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jun-2021 19:44:24	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:	CTX1661				

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1672	83.59

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

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.: 280-148902-1

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		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

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.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/27/2021 14:23

Analysis Batch Number: 537692 End Date: 05/28/2021 04:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-537692/7		05/27/2021 14:23	1	05270007.D	UltraCarb5uODS 4.6(mm)
CCV 280-537692/9		05/27/2021 14:46	1	05270009.D	UltraCarb5uODS 4.6(mm)
MB 280-537382/1-A		05/27/2021 15:09	1	05270011.D	UltraCarb5uODS 4.6(mm)
LCS 280-537382/2-A		05/27/2021 15:32	1	05270012.D	UltraCarb5uODS 4.6(mm)
LCS 280-537382/3-A		05/27/2021 15:55	1	05270013.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 16:18	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 16:41	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 17:04	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 17:27	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 17:50	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 18:13	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 18:36	1		UltraCarb5uODS 4.6(mm)
CCV 280-537692/21		05/27/2021 18:59	1	05270021.D	UltraCarb5uODS 4.6(mm)
CCV 280-537692/22		05/27/2021 19:22	1	05270022.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 19:45	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 20:08	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 20:31	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 20:54	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2021 21:17	1		UltraCarb5uODS 4.6(mm)
280-148902-1	G0081-21A	05/27/2021 21:40	1	05270028.D	UltraCarb5uODS 4.6(mm)
280-148902-2	G0079-21A	05/27/2021 22:03	1	05270029.D	UltraCarb5uODS 4.6(mm)
280-148902-3	G0085-21A	05/27/2021 22:26	1	05270030.D	UltraCarb5uODS 4.6(mm)
280-148902-4	NW071-21A	05/27/2021 22:49	1	05270031.D	UltraCarb5uODS 4.6(mm)
CCV 280-537692/32		05/27/2021 23:12	1	05270032.D	UltraCarb5uODS 4.6(mm)
CCV 280-537692/33		05/27/2021 23:35	1	05270033.D	UltraCarb5uODS 4.6(mm)
280-148902-5	G0070-21A	05/27/2021 23:58	1	05270034.D	UltraCarb5uODS 4.6(mm)
280-148902-5 MS	G0070-21A MS	05/28/2021 00:21	1	05270035.D	UltraCarb5uODS 4.6(mm)
280-148902-5 MSD	G0070-21A MSD	05/28/2021 00:44	1	05270036.D	UltraCarb5uODS 4.6(mm)
280-148902-5 MS	G0070-21A MS	05/28/2021 01:07	1	05270037.D	UltraCarb5uODS 4.6(mm)
280-148902-5 MSD	G0070-21A MSD	05/28/2021 01:30	1	05270038.D	UltraCarb5uODS 4.6(mm)
280-148902-6	G0089-21A	05/28/2021 01:53	1	05270039.D	UltraCarb5uODS 4.6(mm)
280-148902-7	G0090-21A	05/28/2021 02:16	1	05270040.D	UltraCarb5uODS 4.6(mm)
280-148902-8	G0076-21A	05/28/2021 02:39	1	05270041.D	UltraCarb5uODS 4.6(mm)
280-148902-9	G0075-21A	05/28/2021 03:02	1	05270042.D	UltraCarb5uODS 4.6(mm)
280-148902-10	G0082-21A	05/28/2021 03:25	1	05270043.D	UltraCarb5uODS 4.6(mm)
CCV 280-537692/44		05/28/2021 03:48	1	05270044.D	UltraCarb5uODS 4.6(mm)
CCV 280-537692/45		05/28/2021 04:11	1	05270045.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/28/2021 17:50

Analysis Batch Number: 537871 End Date: 05/29/2021 10:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-537871/7		05/28/2021 17:50	1	007-0601.D	Luna-phenylhex 4.6(mm)
CCV 280-537871/8		05/28/2021 18:25	1	008-0701.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2021 19:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2021 19:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2021 20:09	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2021 20:45	1		Luna-phenylhex 4.6(mm)
280-148902-1	G0081-21A	05/28/2021 21:19	1	05280014.D	Luna-phenylhex 4.6(mm)
280-148902-3	G0085-21A	05/28/2021 21:55	1	05280015.D	Luna-phenylhex 4.6(mm)
CCV 280-537871/16		05/28/2021 22:30	1	05280016.D	Luna-phenylhex 4.6(mm)
CCV 280-537871/17		05/28/2021 23:04	1	05280017.D	Luna-phenylhex 4.6(mm)
280-148902-6	G0089-21A	05/29/2021 02:34	1	05280023.D	Luna-phenylhex 4.6(mm)
280-148902-7	G0090-21A	05/29/2021 03:09	1	05280024.D	Luna-phenylhex 4.6(mm)
280-148902-9	G0075-21A	05/29/2021 03:44	1	05280025.D	Luna-phenylhex 4.6(mm)
280-148902-10	G0082-21A	05/29/2021 04:19	1	05280026.D	Luna-phenylhex 4.6(mm)
CCV 280-537871/27		05/29/2021 10:22	1	03120032b.D	Luna-phenylhex 4.6(mm)
CCV 280-537871/28		05/29/2021 10:57	1	03120033b.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/29/2021 23:10

Analysis Batch Number: 537964 End Date: 05/30/2021 02:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-537964/63		05/29/2021 23:10	1	05280047.D	Luna-phenylhex 4.6(mm)
CCV 280-537964/62		05/29/2021 23:45	1	05280048.D	Luna-phenylhex 4.6(mm)
280-148902-5	G0070-21A	05/30/2021 00:20	1	051-2101.D	Luna-phenylhex 4.6(mm)
280-148902-5 MS	G0070-21A MS	05/30/2021 00:55	1	052-2201.D	Luna-phenylhex 4.6(mm)
280-148902-5 MSD	G0070-21A MSD	05/30/2021 01:30	1	053-2301.D	Luna-phenylhex 4.6(mm)
CCV 280-537964/70		05/30/2021 02:05	1	007-2401.D	Luna-phenylhex 4.6(mm)
CCV 280-537964/71		05/30/2021 02:40	1	008-2501.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 537382 Batch Start Date: 05/25/21 17:25 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/25/21 20:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00108	8330_OP_DMT 00010
MB 280-537382/1		3535, 8330A				500 mL	5 mL		
LCS 280-537382/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-537382/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-148902-A-1	G0081-21A	3535, 8330A	T	815.3 g	286.0 g	529.3 mL	5 mL		
280-148902-B-2	G0079-21A	3535, 8330A	T	816.5 g	284.9 g	531.6 mL	5 mL		
280-148902-A-3	G0085-21A	3535, 8330A	T	784.0 g	283.7 g	500.3 mL	5 mL		
280-148902-A-4	NW071-21A	3535, 8330A	T	810.1 g	285.8 g	524.3 mL	5 mL		
280-148902-B-5	G0070-21A	3535, 8330A	T	811.5 g	285.0 g	526.5 mL	5 mL		
280-148902-B-5 MS	G0070-21A	3535, 8330A	T	800.6 g	282.8 g	517.8 mL	5 mL	0.1 mL	
280-148902-A-5 MSD	G0070-21A	3535, 8330A	T	795.6 g	283.8 g	511.8 mL	5 mL	0.1 mL	
280-148902-A-5 MS	G0070-21A	3535, 8330A	T	807.1 g	285.0 g	522.1 mL	5 mL		0.1 mL
280-148902-B-5 MSD	G0070-21A	3535, 8330A	T	813.8 g	282.3 g	531.5 mL	5 mL		0.1 mL
280-148902-A-6	G0089-21A	3535, 8330A	T	705.5 g	285.0 g	420.5 mL	5 mL		
280-148902-B-7	G0090-21A	3535, 8330A	T	810.4 g	283.5 g	526.9 mL	5 mL		
280-148902-B-8	G0076-21A	3535, 8330A	T	801.2 g	287.6 g	513.6 mL	5 mL		
280-148902-B-9	G0075-21A	3535, 8330A	T	806.8 g	284.2 g	522.6 mL	5 mL		
280-148902-B-10	G0082-21A	3535, 8330A	T	810.8 g	286.6 g	524.2 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00124	AnalysisComment				
MB 280-537382/1		3535, 8330A		0.1 mL					
LCS 280-537382/2		3535, 8330A		0.1 mL	8330 LCS				
LCS 280-537382/3		3535, 8330A		0.1 mL	DMT LCS				
280-148902-A-1	G0081-21A	3535, 8330A	T	0.1 mL					
280-148902-B-2	G0079-21A	3535, 8330A	T	0.1 mL					
280-148902-A-3	G0085-21A	3535, 8330A	T	0.1 mL					
280-148902-A-4	NW071-21A	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.: 280-148902-1

SDG No.:

Batch Number: 537382 Batch Start Date: 05/25/21 17:25 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/25/21 20:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00124	AnalysisComment				
280-148902-B-5	G0070-21A	3535, 8330A	T	0.1 mL					
280-148902-B-5 MS	G0070-21A	3535, 8330A	T	0.1 mL	8330 LCS				
280-148902-A-5 MSD	G0070-21A	3535, 8330A	T	0.1 mL	8330 LCS				
280-148902-A-5 MS	G0070-21A	3535, 8330A	T	0.1 mL	DMT LCS				
280-148902-B-5 MSD	G0070-21A	3535, 8330A	T	0.1 mL	DMT LCS				
280-148902-A-6	G0089-21A	3535, 8330A	T	0.1 mL					
280-148902-B-7	G0090-21A	3535, 8330A	T	0.1 mL					
280-148902-B-8	G0076-21A	3535, 8330A	T	0.1 mL					
280-148902-B-9	G0075-21A	3535, 8330A	T	0.1 mL					
280-148902-B-10	G0082-21A	3535, 8330A	T	0.1 mL					

Batch Notes	
Acid ID	Ca2Cl_Sol_00075
Acid Name	Ca2Cl
Balance ID	24350888
Batch Comment	DV-OP-0017; Mantel:B/C (QC on B)
First End time	05/25/2021 19:32
Pipette/Syringe/Dispenser ID	JiJi, Soot
Rinse Solvent Lot	0.1%AAinACN_00164
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	Acetonitrile_00054
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005130247A/005039204A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	DL/KA
Analyst ID - Spike Witness Analyst	Reviewer: TH
First Start time	05/25/2021 15:40

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.: 280-148902-1

SDG No.:

Batch Number: 537382 Batch Start Date: 05/25/21 17:25 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/25/21 20:20

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: 280-148902-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
G0081-21A	280-148902-1
G0079-21A	280-148902-2
G0085-21A	280-148902-3
NW071-21A	280-148902-4
G0070-21A	280-148902-5
G0089-21A	280-148902-6
G0090-21A	280-148902-7
G0076-21A	280-148902-8
G0075-21A	280-148902-9
G0082-21A	280-148902-10

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0081-21A
Lab Sample ID: 280-148902-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 09:20
Reporting Basis: WET
Date Received: 05/21/2021 09:50

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	3.6	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	140	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	280	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0081-21A
Lab Sample ID: 280-148902-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 09:20
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0079-21A
Lab Sample ID: 280-148902-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 09:05
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.83	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	1.8	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	50	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	310	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0079-21A
Lab Sample ID: 280-148902-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 09:05
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0085-21A
Lab Sample ID: 280-148902-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2021 15:20
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.30	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.82	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	0.037	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	3.2	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	190	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	380	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0085-21A
Lab Sample ID: 280-148902-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2021 15:20
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW071-21A
Lab Sample ID: 280-148902-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2021 14:55
Reporting Basis: WET
Date Received: 05/21/2021 09:50

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	32	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	63	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	110	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW071-21A
Lab Sample ID: 280-148902-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2021 14:55
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0070-21A
Lab Sample ID: 280-148902-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 12:50
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	44	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	220	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0070-21A
Lab Sample ID: 280-148902-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 12:50
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	1.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0089-21A
Lab Sample ID: 280-148902-6
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 13:20
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.11	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.84	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	1.5	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	100	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	370	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0089-21A
Lab Sample ID: 280-148902-6
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 13:20
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.5	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0090-21A
Lab Sample ID: 280-148902-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 12:10
Reporting Basis: WET
Date Received: 05/21/2021 09:50

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	5.1	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	150	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	310	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0090-21A
Lab Sample ID: 280-148902-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 12:10
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.5	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0076-21A
Lab Sample ID: 280-148902-8
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 11:10
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.6	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.8	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	320	10	5.0	2.1	mg/L		D	2	9056A
Total Alkalinity as CaCO3	370	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0076-21A
Lab Sample ID: 280-148902-8
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 11:10
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0075-21A
Lab Sample ID: 280-148902-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 10:00
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.053	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	3.3	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	190	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	290	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0075-21A
Lab Sample ID: 280-148902-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 10:00
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0082-21A
Lab Sample ID: 280-148902-10
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 10:40
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.19	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.96	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	2.8	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	99	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	370	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0082-21A
Lab Sample ID: 280-148902-10
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-148902-1
SDG ID.:
Matrix: Water
Date Sampled: 05/20/2021 10:40
Reporting Basis: WET
Date Received: 05/21/2021 09:50

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.9	1.0	0.80	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Analyst: RKD Batch Start Date: 05/25/2021

Reporting Units: mg/L Analytical Batch No.: 537405

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	12:00	Ammonia	0.513	0.500	103	90-110		350.1 cal_00467
15	ICV	12:02	Ammonia	2.54	2.50	102	90-110		350.1 cal_00467
16	ICB	12:04	Ammonia	0.050				U	
34	CCV	12:40	Ammonia	2.43	2.50	97	90-110		350.1 cal_00467
35	CCB	12:42	Ammonia	0.050				U	
49	CCVL	13:10	Ammonia	0.519	0.500	104	90-110		350.1 cal_00467
50	CCV	13:12	Ammonia	2.56	2.50	102	90-110		350.1 cal_00467
51	CCB	13:14	Ammonia	0.050				U	
79	CCVL	14:18	Ammonia	0.501	0.500	100	90-110		350.1 cal_00467
80	CCV	14:20	Ammonia	2.60	2.50	104	90-110		350.1 cal_00467
81	CCB	14:22	Ammonia	0.050				U	
90	CCVL	14:44	Ammonia	0.496	0.500	99	90-110		350.1 cal_00467
91	CCV	14:46	Ammonia	2.51	2.50	100	90-110		350.1 cal_00467
92	CCB	14:48	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.: 280-148902-1

SDG No.:

Analyst: RKD Batch Start Date: 05/26/2021

Reporting Units: mg/L Analytical Batch No.: 537549

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	09:55	Ammonia	0.459	0.501	92	90-110		350.1 ICV_00455
15	ICV	09:57	Ammonia	2.34	2.51	93	90-110		350.1 ICV_00455
16	ICB	09:59	Ammonia	0.050				U	
33	CCVL	10:33	Ammonia	0.503	0.500	101	90-110		350.1 cal_00467
34	CCV	10:35	Ammonia	2.55	2.50	102	90-110		350.1 cal_00467
35	CCB	10:37	Ammonia	0.050				U	
49	CCVL	11:05	Ammonia	0.516	0.500	103	90-110		350.1 cal_00467
50	CCV	11:07	Ammonia	2.60	2.50	104	90-110		350.1 cal_00467
51	CCB	11:09	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.: 280-148902-1

SDG No.:

Analyst: SVC Batch Start Date: 05/26/2021

Reporting Units: mg/L Analytical Batch No.: 537579

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	ICV	16:48	Nitrogen, Total Kjeldahl	5.08	5.00	102	90-110		TKN ICV 25_00106
14	ICB	16:49	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	17:11	Nitrogen, Total Kjeldahl	5.34	5.00	107	90-110		TKN 25ppm_00820
32	CCB	17:12	Nitrogen, Total Kjeldahl	1.0				U	
49	CCV	17:33	Nitrogen, Total Kjeldahl	5.24	5.00	105	90-110		TKN 25ppm_00820
50	CCB	17:34	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.: 280-148902-1

SDG No.:

Analyst: ZPM Batch Start Date: 05/25/2021

Reporting Units: mg/L Analytical Batch No.: 537429

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	13:03	Nitrate Nitrite as N	5.22	5.00	104	90-110		NXN ICV INT_00554
18	ICVL	13:05	Nitrate Nitrite as N	1.91	2.00	96	90-110		NXN ICV INT_00554
19	ICB	13:07	Nitrate Nitrite as N	0.050				U	
36	CCV	13:41	Nitrate Nitrite as N	5.08	5.00	102	90-110		NXN CAL INT_00578
38	CCB	13:45	Nitrate Nitrite as N	0.050				U	
52	CCV	14:13	Nitrate Nitrite as N	4.97	5.00	99	90-110		NXN CAL INT_00578
54	CCB	14:17	Nitrate Nitrite as N	0.050				U	
69	CCV	14:47	Nitrate Nitrite as N	4.94	5.00	99	90-110		NXN CAL INT_00578
71	CCB	14:51	Nitrate Nitrite as N	0.050				U	
86	CCV	15:21	Nitrate Nitrite as N	5.06	5.00	101	90-110		NXN CAL INT_00578
87	CCVL	15:23	Nitrate Nitrite as N	1.00	1.00	100	90-110		NXN CAL INT_00578
88	CCB	15:25	Nitrate Nitrite as N	0.050				U	
98	CCV	15:45	Nitrate Nitrite as N	4.99	5.00	100	90-110		NXN CAL INT_00578
99	CCVL	15:47	Nitrate Nitrite as N	0.976	1.00	98	90-110		NXN CAL INT_00578
100	CCB	15:49	Nitrate Nitrite as N	0.0210				J	
115	CCV	16:19	Nitrate Nitrite as N	4.79	5.00	96	90-110		NXN CAL INT_00578
116	CCVL	16:21	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00578
117	CCB	16:23	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.: 280-148902-1

SDG No.:

Analyst: JMB Batch Start Date: 06/01/2021

Reporting Units: mg/L Analytical Batch No.: 538116

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
9	ICB	14:13	Sulfate	2.5				U	
10	ICV	14:27	Sulfate	80.6	80.0	101	90-110		IC SO4 ICV_00022

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Analyst: JMB Batch Start Date: 06/05/2021

Reporting Units: mg/L Analytical Batch No.: 538716

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	15:02	Sulfate	77.0	80.0	96	90-110		IC SO4 ICV_00021
9	ICB	15:17	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.: 280-148902-1

SDG No.:

Analyst: CJ Batch Start Date: 06/07/2021

Reporting Units: mg/L Analytical Batch No.: 538883

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	13:08	Sulfate	100	100	100	90-110		IC LCS_01813
2	CCB	13:22	Sulfate	2.5				U	
17	CCV	19:44	Sulfate	98.7	100	99	90-110		IC LCS_01813
18	CCB	19:58	Sulfate	2.5				U	
29	CCV	22:32	Sulfate	99.4	100	99	90-110		IC LCS_01813
30	CCB	22:46	Sulfate	2.5				U	
41	CCV	01:20	Sulfate	99.6	100	100	90-110		IC LCS_01813
42	CCB	01:34	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.: 280-148902-1

SDG No.:

Analyst: JMB Batch Start Date: 06/08/2021

Reporting Units: mg/L Analytical Batch No.: 538974

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:00	Sulfate	94.6	100	95	90-110		IC LCS_01814
2	CCB	10:14	Sulfate	2.5				U	
17	CCV	17:33	Sulfate	97.1	100	97	90-110		IC LCS_01814
18	CCB	17:48	Sulfate	2.5				U	
53	CCV	02:34	Sulfate	97.3	100	97	90-110		IC LCS_01814
54	CCB	02:48	Sulfate	2.5				U	
65	CCV	05:33	Sulfate	97.2	100	97	90-110		IC LCS_01814
66	CCB	05:48	Sulfate	2.5				U	
74	CCV	07:47	Sulfate	95.7	100	96	90-110		IC LCS_01814
75	CCB	08:02	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.: 280-148902-1

SDG No.:

Analyst: RAF Batch Start Date: 06/01/2021

Reporting Units: mg/L Analytical Batch No.: 538229

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	13:04	Dissolved Organic Carbon - Quad	19.2	20.0	96	90-110		TOC ICV Std_00046
2	ICB	13:19	Dissolved Organic Carbon - Quad	0.80				U	
27	CCV	20:03	Dissolved Organic Carbon - Quad	24.9	25.0	99	90-110		TOC LCS Std_00051
28	CCB	20:17	Dissolved Organic Carbon - Quad	0.80				U	
39	CCV	22:59	Dissolved Organic Carbon - Quad	24.9	25.0	100	90-110		TOC LCS Std_00051
40	CCB	23:14	Dissolved Organic Carbon - Quad	0.80				U	
51	CCV	02:01	Dissolved Organic Carbon - Quad	25.1	25.0	100	90-110		TOC LCS Std_00051
52	CCB	02:16	Dissolved Organic Carbon - Quad	0.80				U	
63	CCV	05:04	Dissolved Organic Carbon - Quad	24.9	25.0	99	90-110		TOC LCS Std_00051
64	CCB	05:18	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.: 280-148902-1

SDG No.:

Analyst: QJB Batch Start Date: 05/24/2021

Reporting Units: mg/L Analytical Batch No.: 537358

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
28	CCV	17:33	Total Alkalinity as CaCO3	199	200	100	90-110		Alk daily lcs 00964
29	CCB	17:39	Total Alkalinity as CaCO3	6.4				U	
42	CCV	19:08	Total Alkalinity as CaCO3	199	200	99	90-110		Alk daily lcs 00964
43	CCB	19:14	Total Alkalinity as CaCO3	6.4				U	
54	CCV	20:25	Total Alkalinity as CaCO3	200	200	100	90-110		Alk daily lcs 00964
55	CCB	20:31	Total Alkalinity as CaCO3	6.4				U	
68	CCV	22:11	Total Alkalinity as CaCO3	209	200	105	90-110		Alk daily lcs 00964
69	CCB	22:17	Total Alkalinity as CaCO3	6.4				U	
80	CCV	23:38	Total Alkalinity as CaCO3	203	200	102	90-110		Alk daily lcs 00964
81	CCB	23:44	Total Alkalinity as CaCO3	6.4				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.: 280-148902-1

SDG No.:

Analyst: QJB Batch Start Date: 06/01/2021

Reporting Units: mg/L Analytical Batch No.: 538151

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	14:46	Total Alkalinity as CaCO3	200	200	100	90-110		Alk daily lcs 00966
17	CCB	14:52	Total Alkalinity as CaCO3	6.4				U	
28	CCV	16:20	Total Alkalinity as CaCO3	202	200	101	90-110		Alk daily lcs 00966
29	CCB	16:26	Total Alkalinity as CaCO3	6.4				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 537405 Date: 05/25/2021 12:12							
350.1	MB 280-537405/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 537405 Date: 05/25/2021 13:22							
350.1	MB 280-537405/55	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 537549 Date: 05/26/2021 10:07							
350.1	MB 280-537549/20	Ammonia	0.0312	J	mg/L	0.10	1
Batch ID: 537579 Date: 05/26/2021 16:52 Prep Batch: 537419 Date: 05/25/2021 16:18							
351.2	MB 280-537419/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 537429 Date: 05/25/2021 13:15							
353.2	MB 280-537429/23	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 537429 Date: 05/25/2021 14:33							
353.2	MB 280-537429/62	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 537429 Date: 05/25/2021 16:01							
353.2	MB 280-537429/106	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 537223 Date: 05/24/2021 11:19 Prep Batch: 537217 Date: 05/24/2021 10:30							
9034	MB 280-537217/3-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 537253 Date: 05/24/2021 13:47 Prep Batch: 537251 Date: 05/24/2021 13:44							
9034	MB 280-537251/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 537372 Date: 05/25/2021 11:57 Prep Batch: 537318 Date: 05/25/2021 07:12							
9034	MB 280-537318/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 538883 Date: 06/07/2021 14:17							
9056A	MB 280-538883/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 538974 Date: 06/08/2021 11:14							
9056A	MB 280-538974/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 538229 Date: 06/01/2021 22:01							
9060A	MB 280-538107/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 537358 Date: 05/24/2021 17:52							
SM 2320B	MB 280-537358/31	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1
Batch ID: 537358 Date: 05/24/2021 20:45							
SM 2320B	MB 280-537358/57	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1
Batch ID: 538151 Date: 06/01/2021 13:19							
SM 2320B	MB 280-538151/5	Total Alkalinity as CaCO3	4.03	J	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 537405	Date: 05/25/2021 13:36										
350.1	280-148902-4	Ammonia	0.050	U	mg/L						
350.1	280-148902-4 MS	Ammonia	1.04		mg/L	1.00	104	90-110			
Batch ID: 537549	Date: 05/26/2021 10:47										
350.1	280-148902-5	Ammonia	0.050	U	mg/L						
350.1	280-148902-5 MS	Ammonia	1.07		mg/L	1.00	107	90-110			
Batch ID: 537579	Date: 05/26/2021 16:54	Prep Batch: 537419	Date: 05/25/2021 16:18								
351.2	280-148902-5	Nitrogen, Total Kjeldahl	1.0	U	mg/L						
351.2	280-148902-5 MS	Nitrogen, Total Kjeldahl	3.28		mg/L	3.00	109	90-110			
Batch ID: 537429	Date: 05/25/2021 16:05										
353.2	280-148902-5	Nitrate Nitrite as N	0.050	U	mg/L						
353.2	280-148902-5 MS	Nitrate Nitrite as N	4.07		mg/L	4.00	102	90-110			
Batch ID: 537372	Date: 05/25/2021 11:57	Prep Batch: 537318	Date: 05/25/2021 07:12								
9034	280-148902-5	Sulfide	1.9	U	mg/L						
9034	280-148902-5 MS	Sulfide	14.4		mg/L	19.3	75	44-110			
Batch ID: 538883	Date: 06/07/2021 21:36										
9056A	280-148902-5	Sulfate	44		mg/L						
9056A	280-148902-5 MS	Sulfate	93.6		mg/L	50.0	100	87-112			
Batch ID: 538229	Date: 06/02/2021 03:02										
9060A	280-148902-5	Dissolved Organic Carbon - Quad	1.1		mg/L						
9060A	280-148902-5 MS	Dissolved Organic Carbon - Quad	25.9		mg/L	25.0	99	88-112			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 537405 Date: 05/25/2021 14:06											
350.1	280-148902-4 MSD	Ammonia	1.02		mg/L	1.00	102	90-110	2	10	
Batch ID: 537549 Date: 05/26/2021 10:49											
350.1	280-148902-5 MSD	Ammonia	1.06		mg/L	1.00	106	90-110	1	10	
Batch ID: 537579 Date: 05/26/2021 16:56			Prep Batch: 537419			Date: 05/25/2021 16:18					
351.2	280-148902-5 MSD	Nitrogen, Total Kjeldahl	3.13		mg/L	3.00	104	90-110	4	25	
Batch ID: 537429 Date: 05/25/2021 16:07											
353.2	280-148902-5 MSD	Nitrate Nitrite as N	4.08		mg/L	4.00	102	90-110	0	10	
Batch ID: 537372 Date: 05/25/2021 11:57			Prep Batch: 537318			Date: 05/25/2021 07:12					
9034	280-148902-5 MSD	Sulfide	12.8		mg/L	19.3	66	44-110	12	20	
Batch ID: 538883 Date: 06/07/2021 21:50											
9056A	280-148902-5 MSD	Sulfate	92.3		mg/L	50.0	97	87-112	1	10	
Batch ID: 538229 Date: 06/02/2021 03:17											
9060A	280-148902-5 MSD	Dissolved Organic Carbon - Quad	25.8		mg/L	25.0	99	88-112	0	15	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 538883 Date: 06/07/2021 21:22								
9056A	G0070-21A	280-148902-5	Sulfate	44	mg/L			
9056A	G0070-21A	280-148902-5 DU	Sulfate	43.6	mg/L	0.2	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 537405	Date: 05/25/2021 13:18										
						LCS Source: 350.1 cal_00467					
350.1	LCS 280-537405/53	Ammonia	2.64		mg/L	2.50	105	90-110	1	10	
Batch ID: 537549	Date: 05/26/2021 10:03										
						LCS Source: 350.1 cal_00467					
350.1	LCS 280-537549/18	Ammonia	2.45		mg/L	2.50	98	90-110	4	10	
Batch ID: 537579	Date: 05/26/2021 16:51	Prep Batch: 537419	Date: 05/25/2021 16:18								
						LCS Source: TKN 25ppm_00820					
351.2	LCS 280-537419/1-A	Nitrogen, Total Kjeldahl	5.68		mg/L	6.00	95	90-110			
Batch ID: 537429	Date: 05/25/2021 14:29										
						LCS Source: NXN CAL INT_00578					
353.2	LCS 280-537429/60	Nitrate Nitrite as N	5.08		mg/L	5.00	102	90-110	4	10	
Batch ID: 537429	Date: 05/25/2021 15:59										
						LCS Source: NXN CAL INT_00578					
353.2	LCS 280-537429/105	Nitrate Nitrite as N	5.09		mg/L	5.00	102	90-110			
Batch ID: 537223	Date: 05/24/2021 11:19	Prep Batch: 537217	Date: 05/24/2021 10:30								
						LCS Source: SFD ICV INT_01914					
9034	LCS 280-537217/1-A	Sulfide	15.2		mg/L	18.6	82	44-110	5	20	
Batch ID: 537253	Date: 05/24/2021 13:47	Prep Batch: 537251	Date: 05/24/2021 13:44								
						LCS Source: SFD ICV INT_01914					
9034	LCS 280-537251/1-A	Sulfide	13.6		mg/L	18.6	73	44-110			
Batch ID: 537372	Date: 05/25/2021 11:57	Prep Batch: 537318	Date: 05/25/2021 07:12								
						LCS Source: SFD ICV INT_01916					
9034	LCS 280-537318/1-A	Sulfide	10.4		mg/L	19.3	54	44-110			
Batch ID: 538883	Date: 06/07/2021 13:49										
						LCS Source: IC LCS_01813					
9056A	LCS 280-538883/4	Sulfate	99.4		mg/L	100	99	87-112	0	10	
Batch ID: 538974	Date: 06/08/2021 10:44										
						LCS Source: IC LCS_01814					
9056A	LCS 280-538974/4	Sulfate	94.6		mg/L	100	95	87-112	0	10	
Batch ID: 538229	Date: 06/01/2021 21:46										
						LCS Source: TOC LCS Std_00051					
9060A	LCS 280-538107/1-A	Dissolved Organic Carbon - Quad	24.7		mg/L	25.0	99	88-112			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 537358	Date: 05/24/2021 20:39										
						LCS Source: Alk daily lcs_00964					
SM 2320B	LCS 280-537358/56	Total Alkalinity as CaCO3	198		mg/L	200	99	89-109			
Batch ID: 538151	Date: 06/01/2021 13:13										
						LCS Source: Alk daily lcs_00966					
SM 2320B	LCS 280-538151/4	Total Alkalinity as CaCO3	197		mg/L	200	99	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.: 280-148902-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 537405	Date: 05/25/2021 13:20										
						LCSD Source: 350.1 cal_00467					
350.1	LCSD 280-537405/54	Ammonia	2.60		mg/L	2.50	104	90-110	1	10	
Batch ID: 537549	Date: 05/26/2021 10:05										
						LCSD Source: 350.1 cal_00467					
350.1	LCSD 280-537549/19	Ammonia	2.54		mg/L	2.50	102	90-110	4	10	
Batch ID: 537429	Date: 05/25/2021 14:31										
						LCSD Source: NXN CAL INT_00578					
353.2	LCSD 280-537429/61	Nitrate Nitrite as N	4.89		mg/L	5.00	98	90-110	4	10	
Batch ID: 537223	Date: 05/24/2021 11:19	Prep Batch: 537217	Date: 05/24/2021 10:30								
						LCSD Source: SFD ICV INT_01914					
9034	LCSD 280-537217/2-A	Sulfide	14.4		mg/L	18.6	77	44-110	5	20	
Batch ID: 538883	Date: 06/07/2021 14:03										
						LCSD Source: IC LCS_01813					
9056A	LCSD 280-538883/5	Sulfate	99.4		mg/L	100	99	87-112	0	10	
Batch ID: 538974	Date: 06/08/2021 10:59										
						LCSD Source: IC LCS_01814					
9056A	LCSD 280-538974/5	Sulfate	94.7		mg/L	100	95	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.: 280-148902-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 538883	Date: 06/07/2021 13:35										
						LCS Source: IC CAL cl/so4_00368					
9056A	MRL 280-538883/3	Sulfate	4.54	J	mg/L	5.00	91	50-150			
Batch ID: 538974	Date: 06/08/2021 10:29										
						LCS Source: IC CAL cl/so4_00368					
9056A	MRL 280-538974/3	Sulfate	3.83	J	mg/L	5.00	77	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: 280-148902-1

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: 280-148902-1

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: 280-148902-1

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

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: 280-148902-1

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

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: 280-148902-1

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: 280-148902-1

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: 280-148902-1

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: 280-148902-1

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: 280-148902-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-148902-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-148902-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

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: 280-148902-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

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: 280-148902-1

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: 280-148902-1

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: 280-148902-1

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: 280-148902-1

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.: 280-148902-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-537419/1-A	05/25/2021 16:18	537419		25	25
MB 280-537419/2-A	05/25/2021 16:18	537419		25	25
280-148902-5	05/25/2021 16:18	537419		25	25
280-148902-5 MS	05/25/2021 16:18	537419		25	25
280-148902-5 MSD	05/25/2021 16:18	537419		25	25
280-148902-1	05/25/2021 16:18	537419		25	25
280-148902-2	05/25/2021 16:18	537419		25	25
280-148902-3	05/25/2021 16:18	537419		25	25
280-148902-4	05/25/2021 16:18	537419		25	25
280-148902-6	05/25/2021 16:18	537419		25	25
280-148902-7	05/25/2021 16:18	537419		25	25
280-148902-8	05/25/2021 16:18	537419		25	25
280-148902-9	05/25/2021 16:18	537419		25	25
280-148902-10	05/25/2021 16:18	537419		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-537217/1-A	05/24/2021 10:30	537217		50	50
LCSD 280-537217/2-A	05/24/2021 10:30	537217		50	50
MB 280-537217/3-A	05/24/2021 10:30	537217		50	50
280-148902-3	05/24/2021 10:30	537217		50	50
280-148902-4	05/24/2021 10:30	537217		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-537251/1-A	05/24/2021 13:44	537251		50	50
MB 280-537251/2-A	05/24/2021 13:44	537251		50	50
280-148902-1	05/24/2021 13:44	537251		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-537318/1-A	05/25/2021 07:12	537318		50	50
MB 280-537318/2-A	05/25/2021 07:12	537318		50	50
280-148902-5	05/25/2021 07:12	537318		50	50
280-148902-5 MS	05/25/2021 07:12	537318		50	50
280-148902-5 MSD	05/25/2021 07:12	537318		50	50
280-148902-2	05/25/2021 07:12	537318		50	50
280-148902-6	05/25/2021 07:12	537318		50	50
280-148902-7	05/25/2021 07:12	537318		50	50
280-148902-8	05/25/2021 07:12	537318		50	50
280-148902-9	05/25/2021 07:12	537318		50	50
280-148902-10	05/25/2021 07:12	537318		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 05/25/2021 11:34 End Date: 05/25/2021 14:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:34																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
IC 280-537405/4			11:40	X																								
IC 280-537405/5			11:42	X																								
IC 280-537405/6			11:44	X																								
IC 280-537405/7			11:46	X																								
IC 280-537405/8			11:48	X																								
IC 280-537405/9			11:50	X																								
IC 280-537405/10			11:52	X																								
IC 280-537405/11			11:54	X																								
ZZZZZZ			11:56																									
ZZZZZZ			11:58																									
ICVL 280-537405/14	1		12:00	X																								
ICV 280-537405/15	1		12:02	X																								
ICB 280-537405/16	1		12:04	X																								
ZZZZZZ			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:10																									
MB 280-537405/20	1	T	12:12	X																								
ZZZZZZ			12:14																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
ZZZZZZ			12:22																									
ZZZZZZ			12:24																									
ZZZZZZ			12:26																									
ZZZZZZ			12:28																									
ZZZZZZ			12:30																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
CCVL 280-537405/33			12:38																									
CCV 280-537405/34	1		12:40	X																								
CCB 280-537405/35	1		12:42	X																								
ZZZZZZ			12:44																									
ZZZZZZ			12:46																									
ZZZZZZ			12:48																									
ZZZZZZ			12:50																									
ZZZZZZ			12:52																									
ZZZZZZ			12:54																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 05/25/2021 11:34 End Date: 05/25/2021 14:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:56																									
ZZZZZZ			12:58																									
ZZZZZZ			13:00																									
ZZZZZZ			13:02																									
ZZZZZZ			13:04																									
ZZZZZZ			13:06																									
ZZZZZZ			13:08																									
CCVL 280-537405/49	1		13:10	X																								
CCV 280-537405/50	1		13:12	X																								
CCB 280-537405/51	1		13:14	X																								
ZZZZZZ			13:16																									
LCS 280-537405/53	1	T	13:18	X																								
LCSD 280-537405/54	1	T	13:20	X																								
MB 280-537405/55	1	T	13:22	X																								
ZZZZZZ			13:24																									
ZZZZZZ			13:26																									
280-148902-1	1	T	13:28	X																								
280-148902-2	1	T	13:30	X																								
280-148902-3	1	T	13:32	X																								
280-148902-4	1	T	13:34	X																								
280-148902-4 MS	1	T	13:36	X																								
ZZZZZZ			13:38																									
ZZZZZZ			13:40																									
ZZZZZZ			13:42																									
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
ZZZZZZ			13:54																									
ZZZZZZ			13:56																									
280-148902-4 MSD	1	T	14:06	X																								
280-148902-6	1	T	14:08	X																								
280-148902-7	1	T	14:10	X																								
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
CCVL 280-537405/79	1		14:18	X																								
CCV 280-537405/80	1		14:20	X																								
CCB 280-537405/81	1		14:22	X																								
ZZZZZZ			14:24																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 05/25/2021 11:34 End Date: 05/25/2021 14:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			14:26																									
ZZZZZZ			14:28																									
ZZZZZZ			14:30																									
280-148902-8	1	T	14:32	X																								
ZZZZZZ			14:34																									
ZZZZZZ			14:40																									
ZZZZZZ			14:42																									
CCVL 280-537405/90	1		14:44	X																								
CCV 280-537405/91	1		14:46	X																								
CCB 280-537405/92	1		14:48	X																								
ZZZZZZ			14:50																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 05/26/2021 09:29 End Date: 05/26/2021 13:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			09:29																									
ZZZZZZ			09:31																									
ZZZZZZ			09:33																									
IC 280-537549/4			09:35	X																								
IC 280-537549/5			09:37	X																								
IC 280-537549/6			09:39	X																								
IC 280-537549/7			09:41	X																								
IC 280-537549/8			09:43	X																								
IC 280-537549/9			09:45	X																								
IC 280-537549/10			09:47	X																								
IC 280-537549/11			09:49	X																								
ZZZZZZ			09:51																									
ZZZZZZ			09:53																									
ICVL 280-537549/14	1		09:55	X																								
ICV 280-537549/15	1		09:57	X																								
ICB 280-537549/16	1		09:59	X																								
ZZZZZZ			10:01																									
LCS 280-537549/18	1	T	10:03	X																								
LCSD 280-537549/19	1	T	10:05	X																								
MB 280-537549/20	1	T	10:07	X																								
ZZZZZZ			10:09																									
ZZZZZZ			10:11																									
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									
ZZZZZZ			10:17																									
ZZZZZZ			10:19																									
ZZZZZZ			10:21																									
ZZZZZZ			10:23																									
ZZZZZZ			10:25																									
ZZZZZZ			10:27																									
ZZZZZZ			10:29																									
ZZZZZZ			10:31																									
CCVL 280-537549/33	1		10:33	X																								
CCV 280-537549/34	1		10:35	X																								
CCB 280-537549/35	1		10:37	X																								
ZZZZZZ			10:39																									
ZZZZZZ			10:41																									
ZZZZZZ			10:43																									
280-148902-5	1	T	10:45	X																								
280-148902-5 MS	1	T	10:47	X																								
280-148902-5 MSD	1	T	10:49	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 05/26/2021 09:29 End Date: 05/26/2021 13:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
280-148902-9	1	T	10:51	X																								
280-148902-10	1	T	10:53	X																								
ZZZZZZ			10:55																									
ZZZZZZ			10:57																									
ZZZZZZ			10:59																									
ZZZZZZ			11:01																									
ZZZZZZ			11:03																									
CCVL 280-537549/49	1		11:05	X																								
CCV 280-537549/50	1		11:07	X																								
CCB 280-537549/51	1		11:09	X																								
ZZZZZZ			11:11																									
ZZZZZZ			11:13																									
ZZZZZZ			11:15																									
ZZZZZZ			11:17																									
ZZZZZZ			11:19																									
ZZZZZZ			11:21																									
ZZZZZZ			11:23																									
ZZZZZZ			11:25																									
ZZZZZZ			11:27																									
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
ZZZZZZ			11:33																									
ZZZZZZ			11:35																									
ZZZZZZ			11:37																									
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:47																									
ZZZZZZ			11:49																									
ZZZZZZ			11:51																									
CCVL 280-537549/73			12:02																									
CCV 280-537549/74			12:04																									
CCB 280-537549/75			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:10																									
ZZZZZZ			12:12																									
ZZZZZZ			12:14																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									

FORM XIII-IN

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 05/26/2021 09:29 End Date: 05/26/2021 13:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:22																									
ZZZZZZ			12:24																									
ZZZZZZ			12:26																									
ZZZZZZ			12:28																									
ZZZZZZ			12:30																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
ZZZZZZ			12:45																									
ZZZZZZ			12:47																									
ZZZZZZ			12:49																									
CCVL 280-537549/95			12:56																									
CCV 280-537549/96			12:58																									
CCB 280-537549/97			13:00																									
ZZZZZZ			13:02																									
ZZZZZZ			13:04																									
ZZZZZZ			13:06																									
ZZZZZZ			13:08																									
ZZZZZZ			13:10																									
ZZZZZZ			13:16																									
ZZZZZZ			13:18																									
ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
ZZZZZZ			13:24																									
ZZZZZZ			13:26																									
CCVL 280-537549/109			13:28																									
CCV 280-537549/110			13:30																									
CCB 280-537549/111			13:32																									
ZZZZZZ			13:34																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 05/26/2021 16:34 End Date: 05/26/2021 17:53

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			16:34																									
ZZZZZZ			16:34																									
ZZZZZZ			16:36																									
ZZZZZZ			16:37																									
IC 280-534740/1-A			16:38	X																								
IC 280-534740/2-A			16:39	X																								
IC 280-534740/3-A			16:41	X																								
IC 280-534740/4-A			16:42	X																								
IC 280-534740/5-A			16:43	X																								
IC 280-534740/6-A			16:44	X																								
ZZZZZZ			16:46																									
ZZZZZZ			16:47																									
ICV 280-534740/7-A	1		16:48	X																								
ICB 280-534740/8-A	1		16:49	X																								
LCS 280-537419/1-A	1	T	16:51	X																								
MB 280-537419/2-A	1	T	16:52	X																								
280-148902-5	1	T	16:53	X																								
280-148902-5 MS	1	T	16:54	X																								
280-148902-5 MSD	1	T	16:56	X																								
ZZZZZZ			16:57																									
280-148902-1	1	T	16:58	X																								
280-148902-2	1	T	16:59	X																								
ZZZZZZ			17:01																									
ZZZZZZ			17:02																									
280-148902-3	1	T	17:03	X																								
280-148902-4	1	T	17:04	X																								
280-148902-6	1	T	17:06	X																								
280-148902-7	1	T	17:07	X																								
280-148902-8	1	T	17:08	X																								
ZZZZZZ			17:09																									
CCV 280-534740/9-A	1		17:11	X																								
CCB 280-534740/10-A	1		17:12	X																								
280-148902-9	1	T	17:13	X																								
280-148902-10	1	T	17:14	X																								
ZZZZZZ			17:16																									
ZZZZZZ			17:17																									
ZZZZZZ			17:18																									
ZZZZZZ			17:19																									
ZZZZZZ			17:21																									
ZZZZZZ			17:22																									
ZZZZZZ			17:23																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 05/26/2021 16:34 End Date: 05/26/2021 17:53

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			17:24																									
ZZZZZZ			17:26																									
ZZZZZZ			17:27																									
ZZZZZZ			17:28																									
ZZZZZZ			17:29																									
ZZZZZZ			17:31																									
ZZZZZZ			17:32																									
CCV 280-534740/9-A	1		17:33	X																								
CCB 280-534740/10-A	1		17:34	X																								
ZZZZZZ			17:36																									
ZZZZZZ			17:37																									
ZZZZZZ			17:38																									
ZZZZZZ			17:39																									
ZZZZZZ			17:41																									
ZZZZZZ			17:42																									
ZZZZZZ			17:43																									
ZZZZZZ			17:44																									
ZZZZZZ			17:46																									
ZZZZZZ			17:47																									
ZZZZZZ			17:48																									
CCV 280-534740/9-A			17:49																									
CCB 280-534740/10-A			17:51																									
ZZZZZZ			17:52																									
ZZZZZZ			17:53																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 05/25/2021 12:31 End Date: 05/25/2021 16:59

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			12:31	
ZZZZZZ			12:33	
ZZZZZZ			12:35	
ZZZZZZ			12:37	
IC 280-537429/5			12:39	X
IC 280-537429/6			12:41	X
IC 280-537429/7			12:43	X
IC 280-537429/8			12:45	X
IC 280-537429/9			12:47	X
IC 280-537429/10			12:49	X
IC 280-537429/11			12:51	X
IC 280-537429/12			12:53	X
IC 280-537429/13			12:55	X
ZZZZZZ			12:57	
ZZZZZZ			12:59	
ZZZZZZ			13:01	
ICV 280-537429/17	1		13:03	X
ICVL 280-537429/18	1		13:05	X
ICB 280-537429/19	1		13:07	X
ZZZZZZ			13:09	
ZZZZZZ			13:11	
ZZZZZZ			13:13	
MB 280-537429/23	1	T	13:15	X
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	
RINSE 280-537429/34			13:37	
ZZZZZZ			13:39	
CCV 280-537429/36	1		13:41	X
CCVL 280-537429/37			13:43	
CCB 280-537429/38	1		13:45	X
ZZZZZZ			13:47	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 05/25/2021 12:31 End Date: 05/25/2021 16:59

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									
ZZZZZZ			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:07																									
RINSE 280-537429/50			14:09																									
ZZZZZZ			14:11																									
CCV 280-537429/52	1		14:13	X																								
CCVL 280-537429/53			14:15																									
CCB 280-537429/54	1		14:17	X																								
ZZZZZZ			14:19																									
ZZZZZZ			14:21																									
ZZZZZZ			14:23																									
ZZZZZZ			14:25																									
ZZZZZZ			14:27																									
LCS 280-537429/60	1	T	14:29	X																								
LCSD 280-537429/61	1	T	14:31	X																								
MB 280-537429/62	1	T	14:33	X																								
ZZZZZZ			14:35																									
ZZZZZZ			14:37																									
ZZZZZZ			14:39																									
ZZZZZZ			14:41																									
RINSE 280-537429/67			14:43																									
ZZZZZZ			14:45																									
CCV 280-537429/69	1		14:47	X																								
CCVL 280-537429/70			14:49																									
CCB 280-537429/71	1		14:51	X																								
ZZZZZZ			14:53																									
ZZZZZZ			14:55																									
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ZZZZZZ			15:01																									
ZZZZZZ			15:03																									
ZZZZZZ			15:05																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 05/25/2021 12:31 End Date: 05/25/2021 16:59

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			15:07																									
ZZZZZZ			15:09																									
ZZZZZZ			15:11																									
ZZZZZZ			15:13																									
ZZZZZZ			15:15																									
RINSE 280-537429/84			15:17																									
ZZZZZZ			15:19																									
CCV 280-537429/86	1		15:21	X																								
CCVL 280-537429/87	1		15:23	X																								
CCB 280-537429/88	1		15:25	X																								
ZZZZZZ			15:27																									
280-148902-1	1	T	15:29	X																								
280-148902-2	1	T	15:31	X																								
280-148902-3	1	T	15:33	X																								
280-148902-4	10	T	15:35	X																								
280-148902-6	1	T	15:37	X																								
280-148902-7	1	T	15:39	X																								
RINSE 280-537429/96			15:41																									
ZZZZZZ			15:43																									
CCV 280-537429/98	1		15:45	X																								
CCVL 280-537429/99	1		15:47	X																								
CCB 280-537429/100	1		15:49	X																								
ZZZZZZ			15:51																									
280-148902-8	1	T	15:53	X																								
280-148902-9	1	T	15:55	X																								
280-148902-10	1	T	15:57	X																								
LCS 280-537429/105	1	T	15:59	X																								
MB 280-537429/106	1	T	16:01	X																								
280-148902-5	1	T	16:03	X																								
280-148902-5 MS	1	T	16:05	X																								
280-148902-5 MSD	1	T	16:07	X																								
ZZZZZZ			16:09																									
ZZZZZZ			16:11																									
ZZZZZZ			16:13																									
RINSE 280-537429/113			16:15																									
ZZZZZZ			16:17																									
CCV 280-537429/115	1		16:19	X																								
CCVL 280-537429/116	1		16:21	X																								
CCB 280-537429/117	1		16:23	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 05/25/2021 12:31 End Date: 05/25/2021 16:59

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			16:25																									
ZZZZZZ			16:27																									
ZZZZZZ			16:29																									
ZZZZZZ			16:31																									
ZZZZZZ			16:33																									
ZZZZZZ			16:35																									
ZZZZZZ			16:37																									
ZZZZZZ			16:39																									
ZZZZZZ			16:41																									
ZZZZZZ			16:43																									
ZZZZZZ			16:45																									
ZZZZZZ			16:47																									
RINSE 280-537429/130			16:49																									
ZZZZZZ			16:51																									
CCV 280-537429/132			16:53																									
CCVL 280-537429/133			16:55																									
CCB 280-537429/134			16:57																									
ZZZZZZ			16:59																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 05/24/2021 11:19 End Date: 05/24/2021 11:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-537217/1-A	1	T	11:19	X																								
LCSD 280-537217/2-A	1	T	11:19	X																								
MB 280-537217/3-A	1	T	11:19	X																								
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
ZZZZZZ			11:19																									
280-148902-3	1	T	11:19	X																								
280-148902-4	1	T	11:19	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 05/24/2021 13:47 End Date: 05/24/2021 13:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-537251/1-A	1	T	13:47	X																								
MB 280-537251/2-A	1	T	13:47	X																								
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
280-148902-1	1	T	13:47	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 05/25/2021 11:57 End Date: 05/25/2021 11:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-537318/1-A	1	T	11:57	X																								
MB 280-537318/2-A	1	T	11:57	X																								
280-148902-5	1	T	11:57	X																								
280-148902-5 MS	1	T	11:57	X																								
280-148902-5 MSD	1	T	11:57	X																								
280-148902-2	1	T	11:57	X																								
280-148902-6	1	T	11:57	X																								
280-148902-7	1	T	11:57	X																								
280-148902-8	1	T	11:57	X																								
280-148902-9	1	T	11:57	X																								
280-148902-10	1	T	11:57	X																								
ZZZZZZ			11:57																									
ZZZZZZ			11:57																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/01/2021 12:21 End Date: 06/02/2021 08:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
RTC 280-538116/1			12:21																									
STD1 280-538116/2 IC	1		12:35	X																								
STD2 280-538116/3 IC	1		12:49	X																								
STD3 280-538116/4 IC	1		13:03	X																								
STD4 280-538116/5 IC	1		13:17	X																								
STD5 280-538116/6 IC	1		13:31	X																								
STD6 280-538116/7 IC	1		13:45	X																								
STD7 280-538116/8 IC	1		13:59	X																								
ICB 280-538116/9	1		14:13	X																								
ICV 280-538116/10	1		14:27	X																								
ZZZZZZ			14:41																									
ZZZZZZ			14:55																									
ZZZZZZ			15:09																									
ZZZZZZ			15:23																									
ZZZZZZ			16:10																									
ZZZZZZ			16:24																									
ZZZZZZ			16:38																									
ZZZZZZ			16:52																									
ZZZZZZ			17:06																									
ZZZZZZ			17:20																									
ZZZZZZ			17:34																									
ZZZZZZ			17:48																									
ZZZZZZ			18:02																									
ZZZZZZ			18:16																									
ZZZZZZ			18:30																									
ZZZZZZ			18:44																									
CCV 280-538116/27			18:58																									
CCB 280-538116/28			19:12																									
ZZZZZZ			19:26																									
ZZZZZZ			19:40																									
ZZZZZZ			19:54																									
ZZZZZZ			20:08																									
ZZZZZZ			20:22																									
ZZZZZZ			20:36																									
ZZZZZZ			20:50																									
ZZZZZZ			21:04																									
ZZZZZZ			21:18																									
ZZZZZZ			21:32																									
CCV 280-538116/39			21:46																									
CCB 280-538116/40			22:00																									
ZZZZZZ			22:14																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/01/2021 12:21 End Date: 06/02/2021 08:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			22:28																									
ZZZZZZ			22:42																									
ZZZZZZ			22:56																									
ZZZZZZ			23:10																									
ZZZZZZ			23:24																									
ZZZZZZ			23:38																									
ZZZZZZ			23:52																									
ZZZZZZ			00:06																									
ZZZZZZ			00:20																									
CCV 280-538116/51			00:34																									
CCB 280-538116/52			00:48																									
ZZZZZZ			01:02																									
ZZZZZZ			01:16																									
ZZZZZZ			01:30																									
ZZZZZZ			01:44																									
ZZZZZZ			01:58																									
ZZZZZZ			02:12																									
ZZZZZZ			02:26																									
ZZZZZZ			02:40																									
ZZZZZZ			02:54																									
ZZZZZZ			03:08																									
CCV 280-538116/63			03:22																									
CCB 280-538116/64			03:36																									
ZZZZZZ			03:50																									
ZZZZZZ			04:04																									
ZZZZZZ			04:18																									
ZZZZZZ			04:32																									
ZZZZZZ			04:46																									
ZZZZZZ			05:00																									
ZZZZZZ			05:14																									
ZZZZZZ			05:28																									
ZZZZZZ			05:42																									
ZZZZZZ			05:56																									
CCV 280-538116/75			06:10																									
CCB 280-538116/76			06:24																									
ZZZZZZ			06:38																									
ZZZZZZ			06:52																									
ZZZZZZ			07:06																									
ZZZZZZ			07:20																									
ZZZZZZ			07:34																									
ZZZZZZ			07:48																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/01/2021 12:21 End Date: 06/02/2021 08:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			08:02																									
ZZZZZZ			08:16																									
CCV 280-538116/85			08:30																									
CCB 280-538116/86			08:44																									

Prep Types:
=

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/07/2021 13:08 End Date: 06/08/2021 02:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-538883/1	1		13:08	X																								
CCB 280-538883/2	1		13:22	X																								
MRL 280-538883/3	1	T	13:35	X																								
LCS 280-538883/4	1	T	13:49	X																								
LCSD 280-538883/5	1	T	14:03	X																								
MB 280-538883/6	1	T	14:17	X																								
ZZZZZZ			17:24																									
ZZZZZZ			17:38																									
ZZZZZZ			17:52																									
ZZZZZZ			18:06																									
ZZZZZZ			18:20																									
ZZZZZZ			18:34																									
ZZZZZZ			18:48																									
ZZZZZZ			19:02																									
ZZZZZZ			19:16																									
ZZZZZZ			19:30																									
CCV 280-538883/17	1		19:44	X																								
CCB 280-538883/18	1		19:58	X																								
280-148902-1	1	T	20:12	X																								
280-148902-2	1	T	20:26	X																								
ZZZZZZ			20:40																									
280-148902-4	1	T	20:54	X																								
280-148902-5	1	T	21:08	X																								
280-148902-5 DU	1	T	21:22	X																								
280-148902-5 MS	1	T	21:36	X																								
280-148902-5 MSD	1	T	21:50	X																								
280-148902-6	1	T	22:04	X																								
280-148902-7	1	T	22:18	X																								
CCV 280-538883/29	1		22:32	X																								
CCB 280-538883/30	1		22:46	X																								
ZZZZZZ			23:00																									
280-148902-8	2	T	23:14	X																								
280-148902-9	1	T	23:28	X																								
280-148902-10	1	T	23:42	X																								
ZZZZZZ			23:56																									
ZZZZZZ			00:10																									
ZZZZZZ			00:24																									
ZZZZZZ			00:38																									
ZZZZZZ			00:52																									
ZZZZZZ			01:06																									
CCV 280-538883/41	1		01:20	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/07/2021 13:08 End Date: 06/08/2021 02:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-538883/42	1		01:34	X																								
ZZZZZZ			01:48																									
ZZZZZZ			02:02																									
ZZZZZZ			02:16																									
CCV 280-538883/46			02:30																									
CCB 280-538883/47			02:44																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/05/2021 12:16 End Date: 06/08/2021 09:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
RTC 280-538716/1			12:16																									
STD 280-538716/2 IC	1		12:31	X																								
STD 280-538716/3 IC	1		12:46	X																								
STD 280-538716/4 IC	1		13:02	X																								
STD 280-538716/5 IC	1		13:16	X																								
STD 280-538716/6 IC	1		13:31	X																								
STD 280-538716/7 IC	1		13:46	X																								
ICV 280-538716/8	1		15:02	X																								
ICB 280-538716/9	1		15:17	X																								
ZZZZZZ			15:32																									
ZZZZZZ			15:47																									
ZZZZZZ			16:02																									
ZZZZZZ			16:17																									
ZZZZZZ			16:10																									
ZZZZZZ			16:24																									
ZZZZZZ			16:39																									
ZZZZZZ			16:54																									
ZZZZZZ			17:09																									
ZZZZZZ			17:24																									
ZZZZZZ			17:39																									
ZZZZZZ			17:54																									
ZZZZZZ			18:09																									
ZZZZZZ			18:23																									
CCV 280-538716/24			18:38																									
CCB 280-538716/25			18:53																									
ZZZZZZ			19:08																									
ZZZZZZ			19:23																									
ZZZZZZ			19:38																									
ZZZZZZ			19:53																									
ZZZZZZ			20:08																									
ZZZZZZ			20:23																									
ZZZZZZ			20:38																									
ZZZZZZ			20:53																									
ZZZZZZ			21:08																									
ZZZZZZ			21:23																									
CCV 280-538716/36			21:37																									
CCB 280-538716/37			21:52																									
ZZZZZZ			22:07																									
ZZZZZZ			22:22																									
ZZZZZZ			22:37																									
ZZZZZZ			22:52																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/05/2021 12:16 End Date: 06/08/2021 09:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			23:07																									
ZZZZZZ			23:22																									
ZZZZZZ			23:37																									
ZZZZZZ			23:52																									
ZZZZZZ			00:07																									
ZZZZZZ			00:22																									
CCV 280-538716/49			00:37																									
CCB 280-538716/50			00:52																									
ZZZZZZ			01:06																									
ZZZZZZ			01:21																									
ZZZZZZ			01:36																									
ZZZZZZ			01:51																									
ZZZZZZ			02:06																									
ZZZZZZ			02:21																									
ZZZZZZ			02:36																									
ZZZZZZ			02:51																									
ZZZZZZ			03:06																									
ZZZZZZ			03:21																									
CCV 280-538716/61			03:36																									
CCB 280-538716/62			03:51																									
ZZZZZZ			04:06																									
ZZZZZZ			08:43																									
ZZZZZZ			08:57																									
ZZZZZZ			09:12																									
CCV 280-538716/67			09:27																									
CCB 280-538716/68			09:42																									

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/08/2021 10:00 End Date: 06/09/2021 08:02

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-538974/1	1		10:00	X																								
CCB 280-538974/2	1		10:14	X																								
MRL 280-538974/3	1	T	10:29	X																								
LCS 280-538974/4	1	T	10:44	X																								
LCSD 280-538974/5	1	T	10:59	X																								
MB 280-538974/6	1	T	11:14	X																								
ZZZZZZ			15:04																									
ZZZZZZ			15:19																									
ZZZZZZ			15:33																									
ZZZZZZ			15:48																									
ZZZZZZ			16:03																									
ZZZZZZ			16:18																									
ZZZZZZ			16:33																									
ZZZZZZ			16:48																									
CCV 280-538974/17	1		17:33	X																								
CCB 280-538974/18	1		17:48	X																								
ZZZZZZ			18:03																									
ZZZZZZ			18:18																									
ZZZZZZ			18:33																									
ZZZZZZ			18:48																									
ZZZZZZ			19:02																									
ZZZZZZ			19:17																									
ZZZZZZ			19:32																									
ZZZZZZ			19:47																									
ZZZZZZ			20:02																									
ZZZZZZ			20:17																									
CCV 280-538974/29			20:36																									
CCB 280-538974/30			20:50																									
ZZZZZZ			21:05																									
ZZZZZZ			21:20																									
ZZZZZZ			21:35																									
ZZZZZZ			21:50																									
ZZZZZZ			22:05																									
ZZZZZZ			22:20																									
ZZZZZZ			22:35																									
ZZZZZZ			22:50																									
ZZZZZZ			23:05																									
ZZZZZZ			23:19																									
CCV 280-538974/41			23:34																									
CCB 280-538974/42			23:49																									
ZZZZZZ			00:04																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/08/2021 10:00 End Date: 06/09/2021 08:02

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
ZZZZZZ			00:19																										
ZZZZZZ			00:34																										
ZZZZZZ			00:49																										
ZZZZZZ			01:04																										
ZZZZZZ			01:19																										
ZZZZZZ			01:34																										
ZZZZZZ			01:49																										
ZZZZZZ			02:04																										
ZZZZZZ			02:19																										
CCV 280-538974/53	1		02:34	X																									
CCB 280-538974/54	1		02:48	X																									
ZZZZZZ			03:03																										
ZZZZZZ			03:18																										
ZZZZZZ			03:33																										
ZZZZZZ			03:48																										
ZZZZZZ			04:03																										
ZZZZZZ			04:18																										
ZZZZZZ			04:33																										
ZZZZZZ			04:48																										
ZZZZZZ			05:03																										
ZZZZZZ			05:18																										
CCV 280-538974/65	1		05:33	X																									
CCB 280-538974/66	1		05:48	X																									
ZZZZZZ			06:02																										
ZZZZZZ			06:17																										
ZZZZZZ			06:32																										
280-148902-3	5	T	06:47	X																									
ZZZZZZ			07:02																										
ZZZZZZ			07:17																										
ZZZZZZ			07:32																										
CCV 280-538974/74	1		07:47	X																									
CCB 280-538974/75	1		08:02	X																									

Prep Types:
T = Total/NA

FORM XIII-IN

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 06/01/2021 13:04 End Date: 06/02/2021 06:03

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-538229/1	1		13:04	X
ICB 280-538229/2	1		13:19	X
ZZZZZZ			13:34	
ZZZZZZ			13:49	
ZZZZZZ			14:03	
ZZZZZZ			14:22	
ZZZZZZ			14:39	
ZZZZZZ			14:56	
ZZZZZZ			15:15	
ZZZZZZ			15:35	
ZZZZZZ			15:51	
ZZZZZZ			16:06	
ZZZZZZ			16:25	
ZZZZZZ			16:41	
CCV 280-538229/15			16:56	
CCB 280-538229/16			17:11	
ZZZZZZ			17:25	
ZZZZZZ			17:40	
ZZZZZZ			17:59	
ZZZZZZ			18:18	
ZZZZZZ			18:34	
ZZZZZZ			18:49	
ZZZZZZ			19:04	
ZZZZZZ			19:19	
ZZZZZZ			19:33	
ZZZZZZ			19:48	
CCV 280-538229/27	1		20:03	X
CCB 280-538229/28	1		20:17	X
ZZZZZZ			20:32	
ZZZZZZ			20:47	
ZZZZZZ			21:01	
ZZZZZZ			21:16	
ZZZZZZ			21:31	
LCS 280-538107/1-A	1	D	21:46	X
MB 280-538107/2-A	1	D	22:01	X
ZZZZZZ			22:15	
ZZZZZZ			22:30	
ZZZZZZ			22:45	
CCV 280-538229/39	1		22:59	X
CCB 280-538229/40	1		23:14	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 06/01/2021 13:04 End Date: 06/02/2021 06:03

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			23:33																										
ZZZZZZ			23:47																										
ZZZZZZ			00:02																										
ZZZZZZ			00:17																										
ZZZZZZ			00:33																										
ZZZZZZ			00:48																										
ZZZZZZ			01:03																										
280-148902-1	1	D	01:17	X																									
280-148902-2	1	D	01:32	X																									
280-148902-3	1	D	01:47	X																									
CCV 280-538229/51	1		02:01	X																									
CCB 280-538229/52	1		02:16	X																									
280-148902-4	1	D	02:31	X																									
280-148902-5	1	D	02:47	X																									
280-148902-5 MS	1	D	03:02	X																									
280-148902-5 MSD	1	D	03:17	X																									
280-148902-6	1	D	03:32	X																									
280-148902-7	1	D	03:46	X																									
280-148902-8	1	D	04:01	X																									
280-148902-9	1	D	04:18	X																									
280-148902-10	1	D	04:32	X																									
ZZZZZZ			04:47																										
CCV 280-538229/63	1		05:04	X																									
CCB 280-538229/64	1		05:18	X																									
ZZZZZZ			05:33																										
CCV 280-538229/66			05:48																										
CCB 280-538229/67			06:03																										

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/24/2021 14:09 End Date: 05/25/2021 05:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-537358/1			14:09																									
ZZZZZZ			14:17																									
ZZZZZZ			14:20																									
ZZZZZZ			14:28																									
ZZZZZZ			14:34																									
ZZZZZZ			14:44																									
ZZZZZZ			14:53																									
ZZZZZZ			15:01																									
ZZZZZZ			15:11																									
ZZZZZZ			15:19																									
ZZZZZZ			15:28																									
ZZZZZZ			15:38																									
ZZZZZZ			15:46																									
ZZZZZZ			15:56																									
ZZZZZZ			16:02																									
CCV 280-537358/16			16:09																									
CCB 280-537358/17			16:15																									
ZZZZZZ			16:23																									
ZZZZZZ			16:32																									
ZZZZZZ			16:41																									
ZZZZZZ			16:47																									
ZZZZZZ			16:53																									
ZZZZZZ			16:59																									
ZZZZZZ			17:05																									
ZZZZZZ			17:12																									
ZZZZZZ			17:18																									
ZZZZZZ			17:25																									
CCV 280-537358/28	1		17:33	X																								
CCB 280-537358/29	1		17:39	X																								
ZZZZZZ			17:46																									
MB 280-537358/31	1	T	17:52	X																								
ZZZZZZ			17:59																									
ZZZZZZ			18:06																									
ZZZZZZ			18:15																									
ZZZZZZ			18:22																									
ZZZZZZ			18:29																									
ZZZZZZ			18:36																									
ZZZZZZ			18:42																									
ZZZZZZ			18:49																									
ZZZZZZ			18:55																									
ZZZZZZ			19:00																									

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/24/2021 14:09 End Date: 05/25/2021 05:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-537358/42	1		19:08	X																								
CCB 280-537358/43	1		19:14	X																								
ZZZZZZ			19:21																									
ZZZZZZ			19:29																									
ZZZZZZ			19:36																									
ZZZZZZ			19:42																									
ZZZZZZ			19:48																									
ZZZZZZ			19:53																									
ZZZZZZ			19:59																									
ZZZZZZ			20:06																									
ZZZZZZ			20:12																									
ZZZZZZ			20:18																									
CCV 280-537358/54	1		20:25	X																								
CCB 280-537358/55	1		20:31	X																								
LCS 280-537358/56	1	T	20:39	X																								
MB 280-537358/57	1	T	20:45	X																								
ZZZZZZ			20:51																									
ZZZZZZ			20:57																									
ZZZZZZ			21:02																									
ZZZZZZ			21:09																									
ZZZZZZ			21:18																									
ZZZZZZ			21:29																									
ZZZZZZ			21:38																									
ZZZZZZ			21:46																									
ZZZZZZ			21:55																									
ZZZZZZ			22:04																									
CCV 280-537358/68	1		22:11	X																								
CCB 280-537358/69	1		22:17	X																								
280-148902-1	1	T	22:24	X																								
280-148902-2	1	T	22:32	X																								
280-148902-3	1	T	22:40	X																								
280-148902-4	1	T	22:46	X																								
280-148902-5	1	T	22:53	X																								
280-148902-6	1	T	23:01	X																								
280-148902-7	1	T	23:08	X																								
280-148902-9	1	T	23:15	X																								
280-148902-10	1	T	23:23	X																								
ZZZZZZ			23:31																									
CCV 280-537358/80	1		23:38	X																								
CCB 280-537358/81	1		23:44	X																								
ZZZZZZ			23:52																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/24/2021 14:09 End Date: 05/25/2021 05:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			23:58																									
ZZZZZZ			00:05																									
ZZZZZZ			00:12																									
ZZZZZZ			00:18																									
ZZZZZZ			00:25																									
ZZZZZZ			00:31																									
ZZZZZZ			00:37																									
ZZZZZZ			00:43																									
ZZZZZZ			00:51																									
ZZZZZZ			00:59																									
ZZZZZZ			01:07																									
CCV 280-537358/94			01:15																									
CCB 280-537358/95			01:21																									
ZZZZZZ			01:27																									
ZZZZZZ			01:36																									
ZZZZZZ			01:45																									
ZZZZZZ			01:52																									
ZZZZZZ			01:59																									
ZZZZZZ			02:08																									
ZZZZZZ			02:29																									
ZZZZZZ			02:49																									
ZZZZZZ			02:55																									
ZZZZZZ			03:01																									
CCV 280-537358/106			03:09																									
CCB 280-537358/107			03:15																									
ZZZZZZ			03:23																									
ZZZZZZ			03:29																									
ZZZZZZ			03:35																									
ZZZZZZ			03:42																									
ZZZZZZ			03:47																									
ZZZZZZ			03:54																									
ZZZZZZ			04:00																									
ZZZZZZ			04:06																									
ZZZZZZ			04:12																									
ZZZZZZ			04:17																									
ZZZZZZ			04:23																									
ZZZZZZ			04:29																									
CCV 280-537358/120			04:36																									
CCB 280-537358/121			04:42																									
ZZZZZZ			04:47																									
ZZZZZZ			04:52																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/24/2021 14:09 End Date: 05/25/2021 05:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			04:57																									
ZZZZZZ			05:02																									
ZZZZZZ			05:07																									
CCV 280-537358/127			05:15																									
CCB 280-537358/128			05:21																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/01/2021 12:54 End Date: 06/01/2021 16:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-538151/1			12:54																									
ZZZZZZ			13:02																									
ZZZZZZ			13:06																									
LCS 280-538151/4	1	T	13:13	X																								
MB 280-538151/5	1	T	13:19	X																								
ZZZZZZ			13:25																									
ZZZZZZ			13:30																									
ZZZZZZ			13:41																									
ZZZZZZ			13:52																									
ZZZZZZ			14:00																									
ZZZZZZ			14:07																									
ZZZZZZ			14:15																									
ZZZZZZ			14:24																									
ZZZZZZ			14:30																									
ZZZZZZ			14:38																									
CCV 280-538151/16	1		14:46	X																								
CCB 280-538151/17	1		14:52	X																								
ZZZZZZ			14:57																									
ZZZZZZ			15:06																									
ZZZZZZ			15:15																									
ZZZZZZ			15:22																									
ZZZZZZ			15:28																									
ZZZZZZ			15:34																									
ZZZZZZ			15:41																									
280-148902-8	1	T	15:49	X																								
ZZZZZZ			16:00																									
ZZZZZZ			16:12																									
CCV 280-538151/28	1		16:20	X																								
CCB 280-538151/29	1		16:26	X																								

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 537405 Batch Start Date: 05/25/21 11:34 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	350.1 cal 00467		
ICVL 280-537405/14		350.1		No	100 mL	100 mL	0.5 mL		
ICV 280-537405/15		350.1		No	100 mL	100 mL	2.5 mL		
ICB 280-537405/16		350.1		No	10 mL	10 mL			
MB 280-537405/20		350.1		No	10 mL	10 mL			
CCV 280-537405/34		350.1		No	100 mL	100 mL	2.5 mL		
CCB 280-537405/35		350.1		No	10 mL	10 mL			
CCVL 280-537405/49		350.1		No	100 mL	100 mL	0.5 mL		
CCV 280-537405/50		350.1		No	100 mL	100 mL	2.5 mL		
CCB 280-537405/51		350.1		No	10 mL	10 mL			
LCS 280-537405/53		350.1		No	100 mL	100 mL	2.5 mL		
LCSD 280-537405/54		350.1		No	100 mL	100 mL	2.5 mL		
MB 280-537405/55		350.1		No	10 mL	10 mL			
280-148902-C-1	G0081-21A	350.1	T	No	10 mL	10 mL			
280-148902-C-2	G0079-21A	350.1	T	No	10 mL	10 mL			
280-148902-C-3	G0085-21A	350.1	T	No	10 mL	10 mL			
280-148902-C-4	NW071-21A	350.1	T	No	10 mL	10 mL			
280-148902-C-4 MS	NW071-21A	350.1	T	No	10 mL	10 mL	0.1 mL		
280-148902-C-4 MSD	NW071-21A	350.1	T	No	10 mL	10 mL	0.1 mL		
280-148902-C-6	G0089-21A	350.1	T	No	10 mL	10 mL			
280-148902-C-7	G0090-21A	350.1	T	No	10 mL	10 mL			
CCVL 280-537405/79		350.1		No	100 mL	100 mL	0.5 mL		
CCV 280-537405/80		350.1		No	100 mL	100 mL	2.5 mL		
CCB 280-537405/81		350.1		No	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.: 280-148902-1

SDG No.:

Batch Number: 537405 Batch Start Date: 05/25/21 11:34 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	350.1 cal 00467		
280-148902-C-8	G0076-21A	350.1	T	No	10 mL	10 mL			
CCVL 280-537405/90		350.1		No	100 mL	100 mL	0.5 mL		
CCV 280-537405/91		350.1		No	100 mL	100 mL	2.5 mL		
CCB 280-537405/92		350.1		No	10 mL	10 mL			

Batch Notes	
Batch Comment	RD
Carrier Identification	530.1 Complex_00531
Hypochlorite ID	350.1 Bleach_01398
Sodium Salicylate ID	soduim sal_00021
Sodium Nitroprusside ID	350.1 Color_00243
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 INTERCESSOR, BWH 200

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 537549 Batch Start Date: 05/26/21 09:29 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 00467	350.1 ICV 00455
ICVL 280-537549/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-537549/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-537549/16		350.1			10 mL	10 mL			
LCS 280-537549/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-537549/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-537549/20		350.1			10 mL	10 mL			
CCVL 280-537549/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-537549/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-537549/35		350.1			10 mL	10 mL			
280-148902-C-5	G0070-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-148902-C-5 MS	G0070-21A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-148902-C-5 MSD	G0070-21A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-148902-C-9	G0075-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-148902-C-10	G0082-21A	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-537549/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-537549/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-537549/51		350.1			10 mL	10 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 537549 Batch Start Date: 05/26/21 09:29 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Batch Notes	
Acid used for pH adjustment	Sulfuric acid_00264
Batch Comment	RD
Carrier Identification	350.1 complex_00531
Hypochlorite ID	350.1 bleach_01399
Sodium Salicylate ID	sodiul sal_00021
Sodium Nitroprusside ID	350.1 Color_00243
pH Indicator ID	HC041002
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 INTERCESSOR, BWH 200

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 534740 Batch Start Date: 05/03/21 15:48 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 00820	TKN ICV 25 00106		
ICV 280-534740/7		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-534740/8		351.2, 351.2		25 mL	25 mL				
CCV 280-534740/9		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-534740/10		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestion End time	05/03/21 2300
Block Digestion Start time	05/03/21 1700
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00141
Oven, Bath or Block Temperature 1	165 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C
pH Indicator ID	hc904495
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

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.: 280-148902-1

SDG No.:

Batch Number: 537419 Batch Start Date: 05/25/21 16:17 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 00820		
LCS 280-537419/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-537419/2		351.2, 351.2			25 mL	25 mL			
280-148902-C-5	G0070-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-5 MS	G0070-21A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-148902-C-5 MSD	G0070-21A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-148902-C-1	G0081-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-2	G0079-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-3	G0085-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-4	NW071-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-6	G0089-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-7	G0090-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-8	G0076-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-9	G0075-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-148902-C-10	G0082-21A	351.2, 351.2	T	<2	25 mL	25 mL			

Batch Notes	
Block Digestion End time	05/25/21 23:00
Block Digestion Start time	05/25/21 1700
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00142
Oven, Bath or Block Temperature 1	160 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C
pH Indicator ID	hc904495
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

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.: 280-148902-1

SDG No.:

Batch Number: 537579 Batch Start Date: 05/26/21 16:34 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-534740/7-A		351.2		4 mL					
ICB 280-534740/8-A		351.2		4 mL					
LCS 280-537419/1-A		351.2		4 mL					
MB 280-537419/2-A		351.2		4 mL					
280-148902-C-5-A	G0070-21A	351.2	T	4 mL					
280-148902-C-5-B MS	G0070-21A	351.2	T	4 mL					
280-148902-C-5-C MSD	G0070-21A	351.2	T	4 mL					
280-148902-C-1-A	G0081-21A	351.2	T	4 mL					
280-148902-C-2-A	G0079-21A	351.2	T	4 mL					
280-148902-C-3-A	G0085-21A	351.2	T	4 mL					
280-148902-C-4-A	NW071-21A	351.2	T	4 mL					
280-148902-C-6-A	G0089-21A	351.2	T	4 mL					
280-148902-C-7-A	G0090-21A	351.2	T	4 mL					
280-148902-C-8-A	G0076-21A	351.2	T	4 mL					
CCV 280-534740/9-A		351.2		4 mL					
CCB 280-534740/10-A		351.2		4 mL					
280-148902-C-9-A	G0075-21A	351.2	T	4 mL					
280-148902-C-10-A	G0082-21A	351.2	T	4 mL					
CCV 280-534740/9-A		351.2		4 mL					
CCB 280-534740/10-A		351.2		4 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.: 280-148902-1

SDG No.:

Batch Number: 537579 Batch Start Date: 05/26/21 16:34 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Batch Notes	
Buffer Reagent ID	TKN buffer_00130
Hypochlorite ID	TKN hypo_00672
Sodium Nitroprusside ID	sodium nitro_00105
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

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.: 280-148902-1

SDG No.:

Batch Number: 537429 Batch Start Date: 05/25/21 12:31 Batch Analyst: Mayer, Zachary P

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00578	NXN ICV INT 00554		
ICV 280-537429/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-537429/18		353.2		100 mL	100 mL		2 mL		
ICB 280-537429/19		353.2		100 mL	100 mL				
MB 280-537429/23		353.2		100 mL	100 mL				
CCV 280-537429/36		353.2		100 mL	100 mL	5 mL			
CCB 280-537429/38		353.2		100 mL	100 mL				
CCV 280-537429/52		353.2		100 mL	100 mL	5 mL			
CCB 280-537429/54		353.2		100 mL	100 mL				
LCS 280-537429/60		353.2		100 mL	100 mL	5 mL			
LCSD 280-537429/61		353.2		100 mL	100 mL	5 mL			
MB 280-537429/62		353.2		100 mL	100 mL				
CCV 280-537429/69		353.2		100 mL	100 mL	5 mL			
CCB 280-537429/71		353.2		100 mL	100 mL				
CCV 280-537429/86		353.2		100 mL	100 mL	5 mL			
CCVL 280-537429/87		353.2		100 mL	100 mL	1 mL			
CCB 280-537429/88		353.2		100 mL	100 mL				
280-148902-A-1	G0081-21A	353.2	T	100 mL	100 mL				
280-148902-A-2	G0079-21A	353.2	T	100 mL	100 mL				
280-148902-A-3	G0085-21A	353.2	T	100 mL	100 mL				
280-148902-A-4	NW071-21A	353.2	T	100 mL	100 mL				
280-148902-A-6	G0089-21A	353.2	T	100 mL	100 mL				
280-148902-A-7	G0090-21A	353.2	T	100 mL	100 mL				
CCV 280-537429/98		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.: 280-148902-1

SDG No.:

Batch Number: 537429 Batch Start Date: 05/25/21 12:31 Batch Analyst: Mayer, Zachary P

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00578	NXN ICV INT 00554		
CCVL 280-537429/99		353.2		100 mL	100 mL	1 mL			
CCB 280-537429/100		353.2		100 mL	100 mL				
280-148902-A-8	G0076-21A	353.2	T	100 mL	100 mL				
280-148902-A-9	G0075-21A	353.2	T	100 mL	100 mL				
280-148902-A-10	G0082-21A	353.2	T	100 mL	100 mL				
LCS 280-537429/105		353.2		100 mL	100 mL	5 mL			
MB 280-537429/106		353.2		100 mL	100 mL				
280-148902-A-5	G0070-21A	353.2	T	100 mL	100 mL				
280-148902-A-5 MS	G0070-21A	353.2	T	5 mL	5 mL	0.2 mL			
280-148902-A-5 MSD	G0070-21A	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-537429/115		353.2		100 mL	100 mL	5 mL			
CCVL 280-537429/116		353.2		100 mL	100 mL	1 mL			
CCB 280-537429/117		353.2		100 mL	100 mL				

Batch Notes	
Buffer Reagent ID	NOXT buffer_00215
Cadmium Column Lot ID	q19133-0419
Color Reagent ID	NOXT CR_00111
Copper Sulfate ID	CuSO4 NOXT_0012
Hydrochloric Acid ID	0.5N HCl_0079
pH Indicator ID	hc902937
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

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.: 280-148902-1

SDG No.:

Batch Number: 537217 Batch Start Date: 05/24/21 11:25 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date: 05/24/21 12:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-537217/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
LCSD 280-537217/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
MB 280-537217/3		9030B, 9034		50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-148902-D-3	G0085-21A	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-148902-D-4	NW071-21A	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 01914					
LCS 280-537217/1		9030B, 9034		1 mL					
LCSD 280-537217/2		9030B, 9034		1 mL					
MB 280-537217/3		9030B, 9034							
280-148902-D-3	G0085-21A	9030B, 9034	T						
280-148902-D-4	NW071-21A	9030B, 9034	T						

Batch Notes	
Batch Comment	SAH
Distillation End Time	05/24/2021 12:55
Distillation Start Time	05/24/2021 11:25
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-148902-1

SDG No.:

Batch Number: 537223 Batch Start Date: 05/24/21 11:25 Batch Analyst: Hohulin, Sierra A

Batch Method: 9034 Batch End Date: 05/24/21 12:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-537217/1-A		9034		0 mL	3.1 mL	5 mL	3.1 mL	50 mL	
LCSD 280-537217/2-A		9034		3.1 mL	6.3 mL	5 mL	3.2 mL	50 mL	
MB 280-537217/3-A		9034		6.3 mL	7.4 mL	1 mL	1.1 mL	50 mL	
280-148902-D-3-A	G0085-21A	9034	T	20.0 mL	20.6 mL	1 mL	0.600000000000001 mL	50 mL	
280-148902-D-4-A	NW071-21A	9034	T	20.6 mL	21.5 mL	1 mL	0.899999999999999 mL	50 mL	

Batch Notes	
Batch Comment	SAH
Hydrochloric Acid ID	HCL Sol_00189
Iodine ID	Iod_00264
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00067
Normality of First Titrant	0.0250 N

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.: 280-148902-1

SDG No.:

Batch Number: 537251 Batch Start Date: 05/24/21 13:50 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date: 05/24/21 15:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-537251/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-537251/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-148902-D-1	G0081-21A	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 01914					
LCS 280-537251/1		9030B, 9034		1 mL					
MB 280-537251/2		9030B, 9034							
280-148902-D-1	G0081-21A	9030B, 9034	T						

Batch Notes	
Batch Comment	SAH
Distillation End Time	05/24/2021 15:20
Distillation Start Time	05/24/2021 13:50
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-148902-1

SDG No.:

Batch Number: 537253 Batch Start Date: 05/24/21 13:50 Batch Analyst: Hohulin, Sierra A

Batch Method: 9034 Batch End Date: 05/24/21 15:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-537251/1-A		9034		0 mL	3.3 mL	5 mL	3.3 mL	50 mL	
MB 280-537251/2-A		9034		3.3 mL	4.3 mL	1 mL	1 mL	50 mL	
280-148902-D-1-A	G0081-21A	9034	T	18.6 mL	19.7 mL	1 mL	1.1 mL	50 mL	

Batch Notes	
Batch Comment	SAH
Hydrochloric Acid ID	HCL Sol_00187
Iodine ID	Iod_00264
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00067
Normality of First Titrant	0.0250 N

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.: 280-148902-1

SDG No.:

Batch Number: 537318 Batch Start Date: 05/25/21 07:20 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date: 05/25/21 08:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-537318/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-537318/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-148902-D-5	G0070-21A	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-148902-D-5 MS	G0070-21A	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-148902-D-5 MSD	G0070-21A	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-148902-D-2	G0079-21A	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-148902-D-6	G0089-21A	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-148902-D-7	G0090-21A	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-148902-D-8	G0076-21A	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-148902-D-9	G0075-21A	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-148902-D-10	G0082-21A	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01916					
LCS 280-537318/1		9030B, 9034		1 mL					
MB 280-537318/2		9030B, 9034							
280-148902-D-5	G0070-21A	9030B, 9034	T						
280-148902-D-5 MS	G0070-21A	9030B, 9034	T	1 mL					
280-148902-D-5 MSD	G0070-21A	9030B, 9034	T	1 mL					
280-148902-D-2	G0079-21A	9030B, 9034	T						
280-148902-D-6	G0089-21A	9030B, 9034	T						
280-148902-D-7	G0090-21A	9030B, 9034	T						
280-148902-D-8	G0076-21A	9030B, 9034	T						
280-148902-D-9	G0075-21A	9030B, 9034	T						
280-148902-D-10	G0082-21A	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.: 280-148902-1

SDG No.:

Batch Number: 537318 Batch Start Date: 05/25/21 07:20 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date: 05/25/21 08:50

Batch Notes	
Batch Comment	SAH
Distillation End Time	05/25/2021 08:50
Distillation Start Time	05/25/2021 07:20
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-148902-1

SDG No.:

Batch Number: 537372 Batch Start Date: 05/25/21 11:55 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 05/25/21 13:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-537318/1-A		9034		0 mL	3.7 mL	5 mL	3.7 mL	50 mL	
MB 280-537318/2-A		9034		3.7 mL	4.7 mL	1 mL	1 mL	50 mL	
280-148902-D-5-A	G0070-21A	9034	T	4.7 mL	5.7 mL	1 mL	1 mL	50 mL	
280-148902-D-5-B MS	G0070-21A	9034	T	5.7 mL	8.9 mL	5 mL	3.2 mL	50 mL	
280-148902-D-5-C MSD	G0070-21A	9034	T	8.9 mL	12.3 mL	5 mL	3.4 mL	50 mL	
280-148902-D-2-A	G0079-21A	9034	T	12.3 mL	13.3 mL	1 mL	1 mL	50 mL	
280-148902-D-6-A	G0089-21A	9034	T	13.3 mL	14.3 mL	1 mL	1 mL	50 mL	
280-148902-D-7-A	G0090-21A	9034	T	14.3 mL	15.3 mL	1 mL	1 mL	50 mL	
280-148902-D-8-A	G0076-21A	9034	T	15.3 mL	16.3 mL	1 mL	1 mL	50 mL	
280-148902-D-9-A	G0075-21A	9034	T	16.3 mL	17.3 mL	1 mL	1 mL	50 mL	
280-148902-D-10-A	G0082-21A	9034	T	0 mL	1 mL	1 mL	1 mL	50 mL	

Batch Notes	
Batch Comment	SAH
Hydrochloric Acid ID	HCl Sol_00189
Iodine ID	Iod_00264
Normality of Iodine Solution	0.025 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00067
Normality of First Titrant	0.025 N

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.: 280-148902-1

SDG No.:

Batch Number: 538116 Batch Start Date: 06/01/21 12:21 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC Cal5 00003	IC CL cal 00067	IC ICV 5 00319
STD1 280-538116/2 IC		9056A		10 mL	10 mL		0.02 mL	0.002 mL	
STD2 280-538116/3 IC		9056A		10 mL	10 mL		0.04 mL	0.005 mL	
STD3 280-538116/4 IC		9056A		10 mL	10 mL		0.1 mL	0.02 mL	
STD4 280-538116/5 IC		9056A		10 mL	10 mL		0.2 mL	0.1 mL	
STD5 280-538116/6 IC		9056A		10 mL	10 mL		0.8 mL	0.5 mL	
STD6 280-538116/7 IC		9056A		10 mL	10 mL		1.6 mL	1 mL	
STD7 280-538116/8 IC		9056A		10 mL	10 mL		2 mL	2 mL	
ICB 280-538116/9		9056A		10 mL	10 mL				
ICV 280-538116/10		9056A		10 mL	10 mL	0.8 mL			0.8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022	IC sulfatecal 00063				
STD1 280-538116/2 IC		9056A			0.005 mL				
STD2 280-538116/3 IC		9056A			0.01 mL				
STD3 280-538116/4 IC		9056A			0.02 mL				
STD4 280-538116/5 IC		9056A			0.1 mL				
STD5 280-538116/6 IC		9056A			0.5 mL				
STD6 280-538116/7 IC		9056A			1 mL				
STD7 280-538116/8 IC		9056A			2 mL				
ICB 280-538116/9		9056A							
ICV 280-538116/10		9056A		0.8 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 538116 Batch Start Date: 06/01/21 12:21 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Batch Notes	
Batch Comment	Run by JMB and CJ, reviewed by JMB
Eluent 1 ID	IC10 Eluent_00001
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000, 200 CJ, IC100
Sufficient Volume for Batch QC	Yes

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.: 280-148902-1

SDG No.:

Batch Number: 538716 Batch Start Date: 06/05/21 12:16 Batch Analyst: Battillo, Jenna M

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 00368	IC Cal low 00583	IC ICV 5 00319
STD 280-538716/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-538716/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-538716/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-538716/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-538716/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-538716/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-538716/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-538716/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00021					
STD 280-538716/2 IC		9056A							
STD 280-538716/3 IC		9056A							
STD 280-538716/4 IC		9056A							
STD 280-538716/5 IC		9056A							
STD 280-538716/6 IC		9056A							
STD 280-538716/7 IC		9056A							
ICV 280-538716/8		9056A		0.4 mL					
ICB 280-538716/9		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.: 280-148902-1

SDG No.:

Batch Number: 538716 Batch Start Date: 06/05/21 12:16 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Batch Notes	
Batch Comment	JMB
Eluent 1 ID	IC11 Eluent_00649
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000, 200 CJ, IC100
Sufficient Volume for Batch QC	Yes

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.: 280-148902-1

SDG No.:

Batch Number: 538883 Batch Start Date: 06/07/21 13:08 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 00368	IC Cal low 00583	IC LCS 01813	ICMS/MSD WEEK 00705
CCV 280-538883/1		9056A		10 mL	10 mL			10 mL	
CCB 280-538883/2		9056A		10 mL	10 mL				
MRL 280-538883/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-538883/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-538883/5		9056A		10 mL	10 mL			10 mL	
MB 280-538883/6		9056A		10 mL	10 mL				
CCV 280-538883/17		9056A		10 mL	10 mL			10 mL	
CCB 280-538883/18		9056A		10 mL	10 mL				
280-148902-E-1	G0081-21A	9056A	T	10 mL	10 mL				
280-148902-E-2	G0079-21A	9056A	T	10 mL	10 mL				
280-148902-E-3	G0085-21A	9056A	T	10 mL	10 mL				
280-148902-E-4	NW071-21A	9056A	T	10 mL	10 mL				
280-148902-E-5	G0070-21A	9056A	T	10 mL	10 mL				
280-148902-E-5 DU	G0070-21A	9056A	T	10 mL	10 mL				
280-148902-E-5 MS	G0070-21A	9056A	T	10 mL	10 mL				0.1 mL
280-148902-E-5 MSD	G0070-21A	9056A	T	10 mL	10 mL				0.1 mL
280-148902-E-6	G0089-21A	9056A	T	10 mL	10 mL				
280-148902-E-7	G0090-21A	9056A	T	10 mL	10 mL				
CCV 280-538883/29		9056A		10 mL	10 mL			10 mL	
CCB 280-538883/30		9056A		10 mL	10 mL				
280-148902-A-8	G0076-21A	9056A	T	10 mL	10 mL				
280-148902-A-8	G0076-21A	9056A	T	10 mL	10 mL				
280-148902-E-9	G0075-21A	9056A	T	10 mL	10 mL				
280-148902-E-10	G0082-21A	9056A	T	10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 538883 Batch Start Date: 06/07/21 13:08 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 00368	IC Cal low 00583	IC LCS 01813	ICMS/MSD WEEK 00705
CCV 280-538883/41		9056A		10 mL	10 mL			10 mL	
CCB 280-538883/42		9056A		10 mL	10 mL				

Batch Notes	
Batch Comment	CJ
Eluent 1 ID	ic10 eluent_00001
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	BMF5000, BMF1000, 200CJ
Sufficient Volume for Batch QC	Yes

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.: 280-148902-1

SDG No.:

Batch Number: 538974 Batch Start Date: 06/08/21 10:00 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00368	IC Cal low 00584	IC LCS 01814	
CCV 280-538974/1		9056A		5 mL	5 mL			5 mL	
CCB 280-538974/2		9056A		5 mL	5 mL				
MRL 280-538974/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-538974/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-538974/5		9056A		5 mL	5 mL			5 mL	
MB 280-538974/6		9056A		5 mL	5 mL				
CCV 280-538974/17		9056A		5 mL	5 mL			5 mL	
CCB 280-538974/18		9056A		5 mL	5 mL				
CCV 280-538974/53		9056A		5 mL	5 mL			5 mL	
CCB 280-538974/54		9056A		5 mL	5 mL				
CCV 280-538974/65		9056A		5 mL	5 mL			5 mL	
CCB 280-538974/66		9056A		5 mL	5 mL				
280-148902-E-3	G0085-21A	9056A	T	5 mL	5 mL				
CCV 280-538974/74		9056A		5 mL	5 mL			5 mL	
CCB 280-538974/75		9056A		5 mL	5 mL				

Batch Notes	
Batch Comment	Run by CJ, reviewed by JMB
Eluent 1 ID	IC11 Eluent_00649
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000, 200 CJ, IC100
Sufficient Volume for Batch QC	Yes

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.: 280-148902-1

SDG No.:

Batch Number: 538974 Batch Start Date: 06/08/21 10:00 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 538228 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC LCS Std 00051	AnalysisComment	
LCS 280-538107/1-A		9060A		200 mL	200 mL	<2 SU	5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
MB 280-538107/2-A		9060A		20 mL	20 mL	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-1-A	G0081-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-2-A	G0079-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-3-A	G0085-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-4-A	NW071-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-5-A	G0070-21A	9060A	D	20 mL	20 mL	7 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.: 280-148902-1

SDG No.:

Batch Number: 538228 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC LCS Std 00051	AnalysisComment	
280-148902-F-5-B MS	G0070-21A	9060A	D	50 mL	50 mL	7 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-5-C MSD	G0070-21A	9060A	D	50 mL	50 mL	7 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-6-A	G0089-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-7-A	G0090-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-8-A	G0076-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-9-A	G0075-21A	9060A	D	20 mL	20 mL	6 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.	
280-148902-F-10-A	G0082-21A	9060A	D	20 mL	20 mL	6 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.: 280-148902-1

SDG No.:

Batch Number: 538228 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Batch Notes	
Acid ID	SulfuricAcid_00264, 0.2% H2SO4_00388
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000

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.: 280-148902-1

SDG No.:

Batch Number: 538229 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
ICV 280-538229/1		9060A		50 mL	50 mL	<2 SU	1 mL		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
ICB 280-538229/2		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-538229/27		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-538229/28		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
LCS 280-538107/1-A		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-538107/2-A		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-538229/39		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 538229 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
CCB 280-538229/40		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-1-A	G0081-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-2-A	G0079-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-3-A	G0085-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-538229/51		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-538229/52		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-4-A	NW071-21A	9060A	D	20 mL	20 mL	6 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.: 280-148902-1

SDG No.:

Batch Number: 538229 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
280-148902-F-5-A	G0070-21A	9060A	D	20 mL	20 mL	7 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-5-B MS	G0070-21A	9060A	D	50 mL	50 mL	7 SU		1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-5-C MSD	G0070-21A	9060A	D	50 mL	50 mL	7 SU		1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-6-A	G0089-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-7-A	G0090-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-8-A	G0076-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-148902-F-9-A	G0075-21A	9060A	D	20 mL	20 mL	6 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.: 280-148902-1

SDG No.:

Batch Number: 538229 Batch Start Date: 06/01/21 13:04 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
280-148902-F-10-A	G0082-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-538229/63		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-538229/64		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

Batch Notes	
Acid ID	SulfuricAcid_00264, 0.2% H2SO4_00388
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000

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.: 280-148902-1

SDG No.:

Batch Number: 537358 Batch Start Date: 05/24/21 14:09 Batch Analyst: Brown, Quintin J

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00964				
CCV 280-537358/28		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-537358/29		SM 2320B		InitialAmount is blank					
MB 280-537358/31		SM 2320B		InitialAmount is blank					
CCV 280-537358/42		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-537358/43		SM 2320B		InitialAmount is blank					
CCV 280-537358/54		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-537358/55		SM 2320B		InitialAmount is blank					
LCS 280-537358/56		SM 2320B		InitialAmount is blank	10 mL				
MB 280-537358/57		SM 2320B		InitialAmount is blank					
CCV 280-537358/68		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-537358/69		SM 2320B		InitialAmount is blank					
280-148902-E-1	G0081-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-2	G0079-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-3	G0085-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-4	NW071-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-5	G0070-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-6	G0089-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-7	G0090-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-9	G0075-21A	SM 2320B	T	InitialAmount is blank					
280-148902-E-10	G0082-21A	SM 2320B	T	InitialAmount is blank					
CCV 280-537358/80		SM 2320B		InitialAmount is blank	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-148902-1

SDG No.:

Batch Number: 537358 Batch Start Date: 05/24/21 14:09 Batch Analyst: Brown, Quintin J

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00964				
CCB 280-537358/81		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	0.02N H2SO4_00278
Batch Comment	QB
pH Buffer 1 ID	pH 2.0 buffer_00087
pH Buffer 2 ID	pH 4.0 buffer_00193
pH Buffer 3 ID	pH 7.0 buffer_00293
pH Buffer 4 ID	pH 10 buffer_00154
pH Buffer 5 ID	pH 12 buffer_00170
pH Buffer 6 ID	pH 7.0 buffer_00290
Sodium Carbonate ID	Alk stk std_00019
Nominal Amount Used	10 mL
Probe ID	PCE 80 pH 1200D_8080
Normality of First Titrant	0.02 N

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.: 280-148902-1

SDG No.:

Batch Number: 538151 Batch Start Date: 06/01/21 12:54 Batch Analyst: Brown, Quintin J

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00966				
LCS 280-538151/4		SM 2320B		InitialAmount is blank	10 mL				
MB 280-538151/5		SM 2320B		InitialAmount is blank					
CCV 280-538151/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538151/17		SM 2320B		InitialAmount is blank					
280-148902-A-8	G0076-21A	SM 2320B	T	InitialAmount is blank					
CCV 280-538151/28		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538151/29		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	0.02N H2SO4_00278
Batch Comment	QB
pH Buffer 1 ID	pH 2.0 buffer_00087
pH Buffer 2 ID	pH 4.0 buffer_00194
pH Buffer 3 ID	pH 7.0 buffer_00293
pH Buffer 4 ID	pH 10 buffer_00154
pH Buffer 5 ID	pH 12 buffer_00170
pH Buffer 6 ID	pH 7.0 buffer_00290
Sodium Carbonate ID	Alk stk std_00019
Nominal Amount Used	10 mL
Probe ID	PCE 80 pH 1200D_8080
Normality of First Titrant	0.02 N

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: 25-May-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	RB	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
201	280-148935-a-10	U	1	1	1		
202	MS 280-148935-a-10	U	1	1	1		
203	MSD 280-148935-a-10	U	1	1	1		
204	280-148768-b-2	U	1	1	1		
205	280-148787-d-2	U	1	1	1		
206	280-148787-c-3	U	1	1	1		
207	280-148787-d-4	U	1	1	1		
208	280-148787-d-5	U	1	1	1		
209	280-148792-b-1	U	1	1	1		
210	280-148847-a-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		
211	280-148877-c-1	U	1	1	1		
212	280-148877-c-2	U	1	1	1		
213	280-148525-a-11	U	1	1	1		
214	MS 280-148525-a-11	U	1	1	1		
215	MSD 280-148525-a-11	U	1	1	1		
216	280-148877-c-3	U	1	1	1		
217	280-148877-c-4	U	1	1	1		
218	280-148877-c-5	U	1	1	1		
219	280-148877-c-6	U	1	1	1		
220	280-148877-c-7	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
221	280-148877-c-8	U	1	1	1		
222	280-148902-c-1	U	1	1	1		
223	280-148902-c-2	U	1	1	1		
224	280-148902-c-3	U	1	1	1		
225	280-148902-c-4	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
226	MS 280-148902-c-4 U		1	1	1	1	
227	MSD X 280-148902-c-4 U		1	1	1	1	
228	280-148902-c-6 X U		1	1	1	1	
229	280-148902-c-7 X U		1	1	1	1	
230	280-148754-d-1 X U		1	1	1	1	
0	X Blank	BLNK	1	1	1		
0	X read baseline	RB	1	1	1		
105	X CCVL 500.0 ppb U		1	1	1	1	
107	X CCV 2500.0 ppb U		1	1	1	1	
111	X CCB	U	1	1	1		
0	X read baseline	RB	1	1	1		
227	MSD 280-148902-c-4 U		1	1	1	1	
228	280-148902-c-6	U	1	1	1		
229	280-148902-c-7	U	1	1	1		
230	280-148754-d-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		
231	280-148978-b-1	U	1	1	1		
232	590-15171-h-1	U	1	1	1		
233	590-15173-g-1	U	1	500	1		
234	280-148902-c-8	U	1	1	1		
235	590-15173-g-2	U	1	500	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		

Peak Table:NH3

File name: C:\FLOW_4\052521.RST
Date: 25-May-21
Operator: RD

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	35492	1040.132935	
2	0	Carry Over	1	CO	1	1	358	12.786016	
B	0	Blank	1	RB	1	1	0	2.607735	BL
4	101	Cal 0 ppb	1	C	1	1	847	26.707336	
5	102	Cal 25 ppb	1	C	1	1	-117	-0.730856	LO
6	103	Cal 50 ppb	1	C	1	1	1892	56.490761	
7	104	Cal 100 ppb	1	C	1	1	3255	95.393074	
8	105	Cal 500 ppb	1	C	1	1	16447	476.294678	
9	106	Cal 1000 ppb	1	C	1	1	35251	1032.892700	
10	107	Cal 2500 ppb	1	C	1	1	81983	2485.335693	
11	108	Cal 5000 ppb	1	C	1	1	156413	5002.630371	HI
12	0	Blank	1	BLNK	1	1	-1165	-30.476248	LO
B	0	Read Baseline	1	RB	1	1	0	2.607735	BL
14	109	ICVL 500.0 ppb	1	U	1	1	17700	512.910950	
15	110	ICV 2500.0 ppb	1	U	1	1	83808	2544.084473	
16	111	ICB	1	U	1	1	-432	-9.666306	LO
B	0	read baseline	1	RB	1	1	0	2.607735	BL
18	107	LCS	1	U	1	1	85312	2592.583496	
19	107	LCSD	1	U	1	1	83586	2536.909424	
20	111	MB	1	U	1	1	252	9.781900	
21	201	280-148935-a-10	1	U	1	1	531	17.712706	
22	202	MS 280-148935-a-10	1	U	1	1	34048	996.785034	
23	203	MSD 280-148935-a-10	1	U	1	1	33774	988.596069	
24	204	280-148768-b-2	1	U	1	1	709	22.764956	
25	205	280-148787-d-2	1	U	1	1	3714	108.495079	
26	206	280-148787-c-3	1	U	1	1	251	9.738606	
27	207	280-148787-d-4	1	U	1	1	345	12.413725	
28	208	280-148787-d-5	1	U	1	1	272	10.355091	
29	209	280-148792-b-1	1	U	1	1	1034	32.038754	
30	210	280-148847-a-1	1	U	1	1	591	19.404581	
31	0	Blank	1	BLNK	1	1	412	14.316356	
B	0	read baseline	1	RB	1	1	0	2.607735	BL
33	105	CCVL 500.0 ppb	1	U	1	1	16619	481.335815	
34	107	CCV 2500.0 ppb	1	U	1	1	80331	2432.308105	
35	111	CCB	1	U	1	1	-311	-6.245619	LO
B	0	read baseline	1	RB	1	1	0	2.607735	BL
37	211	280-148877-c-1	1	U	1	1	33946	993.744507	
38	212	280-148877-c-2	1	U	1	1	1101	33.937763	
39	213	280-148525-a-11	1	U	1	1	581	19.120050	
40	214	MS 280-148525-a-11	1	U	1	1	34553	1011.923828	
41	215	MSD 280-148525-a-11	1	U	1	1	34460	1009.139648	
42	216	280-148877-c-3	1	U	1	1	-235	-4.073903	LO
43	217	280-148877-c-4	1	U	1	1	80091	2424.616699	
44	218	280-148877-c-5	1	U	1	1	4722	137.349380	
45	219	280-148877-c-6	1	U	1	1	-126	-0.976474	LO
46	220	280-148877-c-7	1	U	1	1	-333	-6.870147	LO
47	0	Blank	1	BLNK	1	1	-65	0.771861	
B	0	read baseline	1	RB	1	1	0	2.607735	BL
49	105	CCVL 500.0 ppb	1	U	1	1	17916	519.211548	
50	107	CCV 2500.0 ppb	1	U	1	1	84213	2557.126221	
51	111	CCB	1	U	1	1	-400	-8.758311	LO
B	0	read baseline	1	RB	1	1	0	2.607735	BL
53	107	LCS	1	U	1	1	86649	2635.809814	
54	107	LCSD	1	U	1	1	85618	2602.473877	
55	111	MB	1	U	1	1	-466	-10.626736	LO
B	0	read baseline	1	RB	1	1	0	2.607735	BL
57	221	280-148877-c-8	1	U	1	1	98	5.382053	
58	222	280-148902-c-1	1	U	1	1	317	11.624023	
59	223	280-148902-c-2	1	U	1	1	565	18.670092	
60	224	280-148902-c-3	1	U	1	1	10501	303.643250	
61	225	280-148902-c-4	1	U	1	1	-117	-0.717118	LO
62	226	MS 280-148902-c-4	1	U	1	1	35460	1039.146484	
63	227	MSD X 280-148902-c-4	1	U	1	1	37248	1092.938110	
64	228	280-148902-c-6 X	1	U	1	1	-186	-2.692690	LO
65	229	280-148902-c-7 X	1	U	1	1	-80	0.336678	
66	230	280-148754-d-1 X	1	U	1	1	-1108	-28.857256	LO
67	0	X Blank	1	BLNK	1	1	11	2.914126	
B	0	X read baseline	1	RB	1	1	0	2.607735	BL
69	105	X CCVL 500.0 ppb	1	U	1	1	17260	500.037506	
70	107	X CCV 2500.0 ppb	1	U	1	1	85910	2611.889648	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	X CCB	1	U	1	1	-714	-17.691196	LO
B	0	X read baseline	1	RB	1	1	0	2.607735	BL
73	227	MSD 280-148902-c-4	1	U	1	1	34883	1021.829224	
74	228	280-148902-c-6	1	U	1	1	3712	108.455292	
75	229	280-148902-c-7	1	U	1	1	162	7.212142	
76	230	280-148754-d-1	1	U	1	1	6548	189.734589	
77	0	Blank	1	BLNK	1	1	220	8.854603	
B	0	read baseline	1	RB	1	1	0	2.607735	BL
79	105	CCVL 500.0 ppb	1	U	1	1	17295	501.055359	
80	107	CCV 2500.0 ppb	1	U	1	1	85465	2597.521240	
81	111	CCB	1	U	1	1	265	10.152904	
B	0	read baseline	1	RB	1	1	0	2.607735	BL
83	231	280-148978-b-1	1	U	1	1	13	2.975965	
84	232	590-15171-h-1	1	U	1	1	10	2.880853	
85	233	590-15173-g-1	1	U	500	1	64985	972797.875000	
86	234	280-148902-c-8	1	U	1	1	52527	1558.333740	
87	235	590-15173-g-2	1	U	500	1	50509	748125.312500	
88	0	Blank	1	BLNK	1	1	116	5.902015	
B	0	read baseline	1	RB	1	1	0	2.607735	BL
90	105	CCVL 500.0 ppb	1	U	1	1	17105	495.517273	
91	107	CCV 2500.0 ppb	1	U	1	1	82618	2505.776123	
92	111	CCB	1	U	1	1	259	9.973500	
B	0	read baseline	1	RB	1	1	0	2.607735	BL

NH3:Calibration 1: Peak 4-93

File name: C:\FLOW_4\052521.RST
Date: 25-May-21
Operator: RD

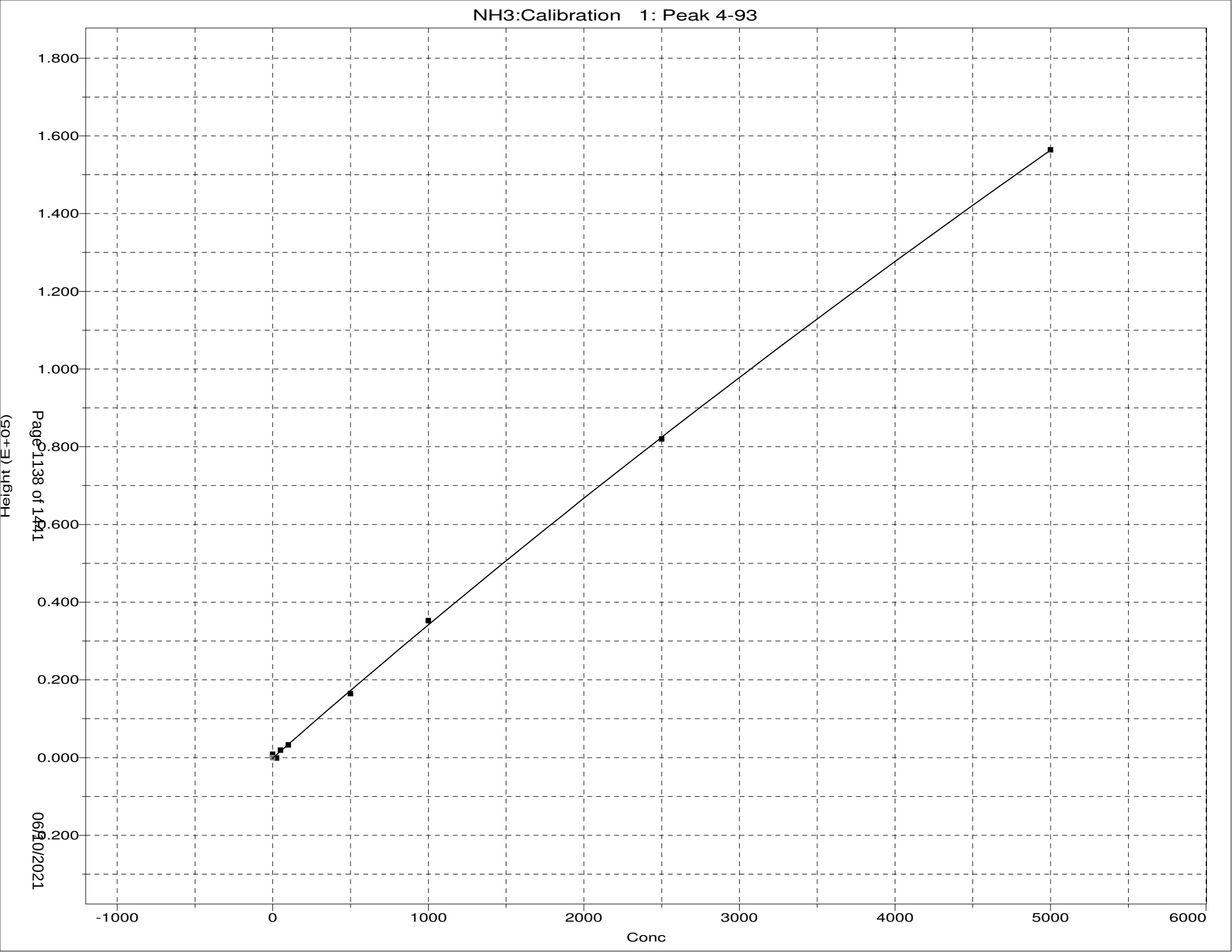
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	847.119324
*	Cal 25 ppb	25.000000	-117.444092
*	Cal 50 ppb	50.000000	1892.456787
*	Cal 100 ppb	100.000000	3255.244385
*	Cal 500 ppb	500.000000	16446.529297
*	Cal 1000 ppb	1000.000000	35251.292969
*	Cal 2500 ppb	2500.000000	81982.578125
*	Cal 5000 ppb	5000.000000	156413.421875

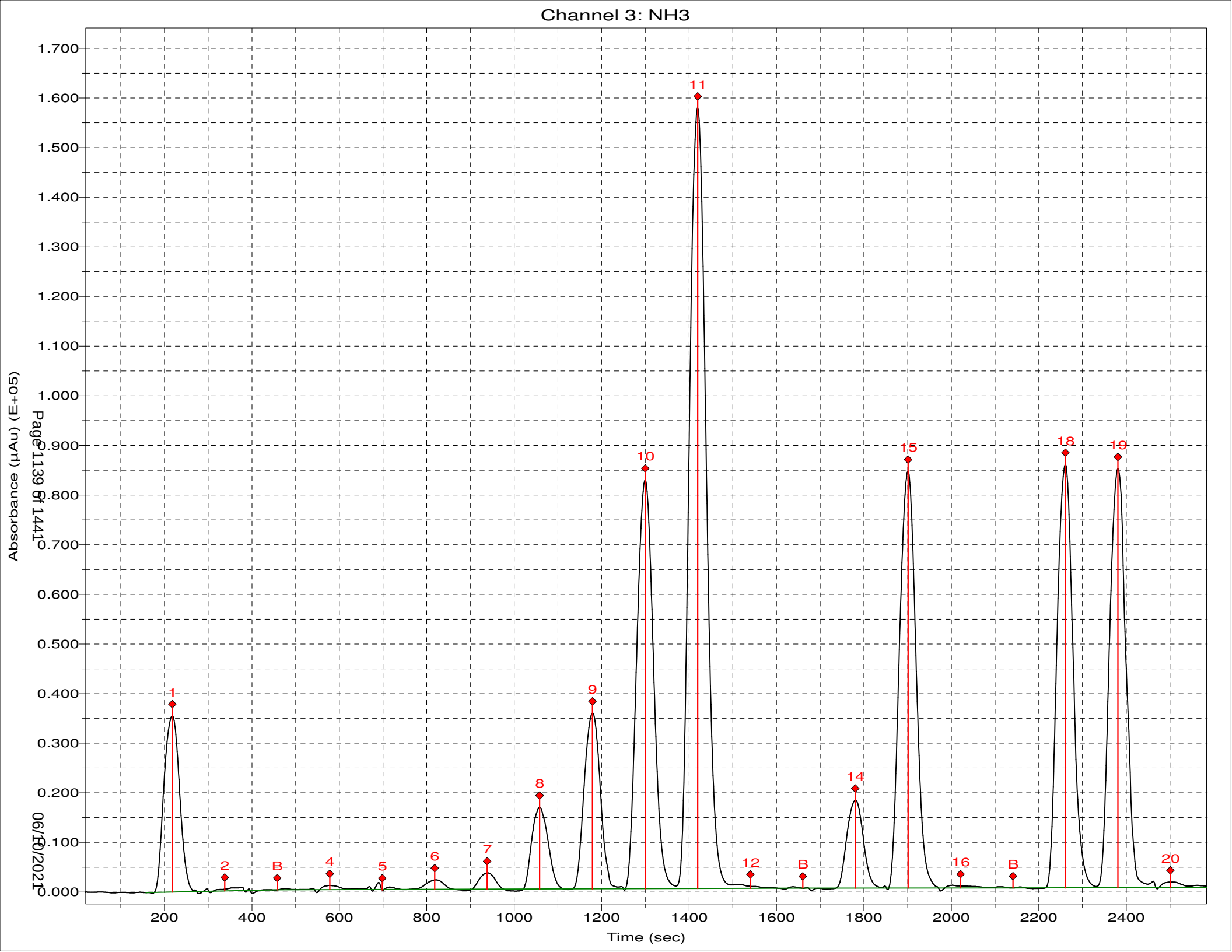
Calib Coef:
x=cyy+by+a
a: (intercept) 2.6077e+00
b: 2.8430e-02
c: 2.2613e-08

Corr Coef: 0.999925

Carryover: 1.01%

No Drift Peaks


NH3:Calibration 1: Peak 4-93
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Height (E+05)
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1138 of 1441
06/10/2021


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec)
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
1
2
B
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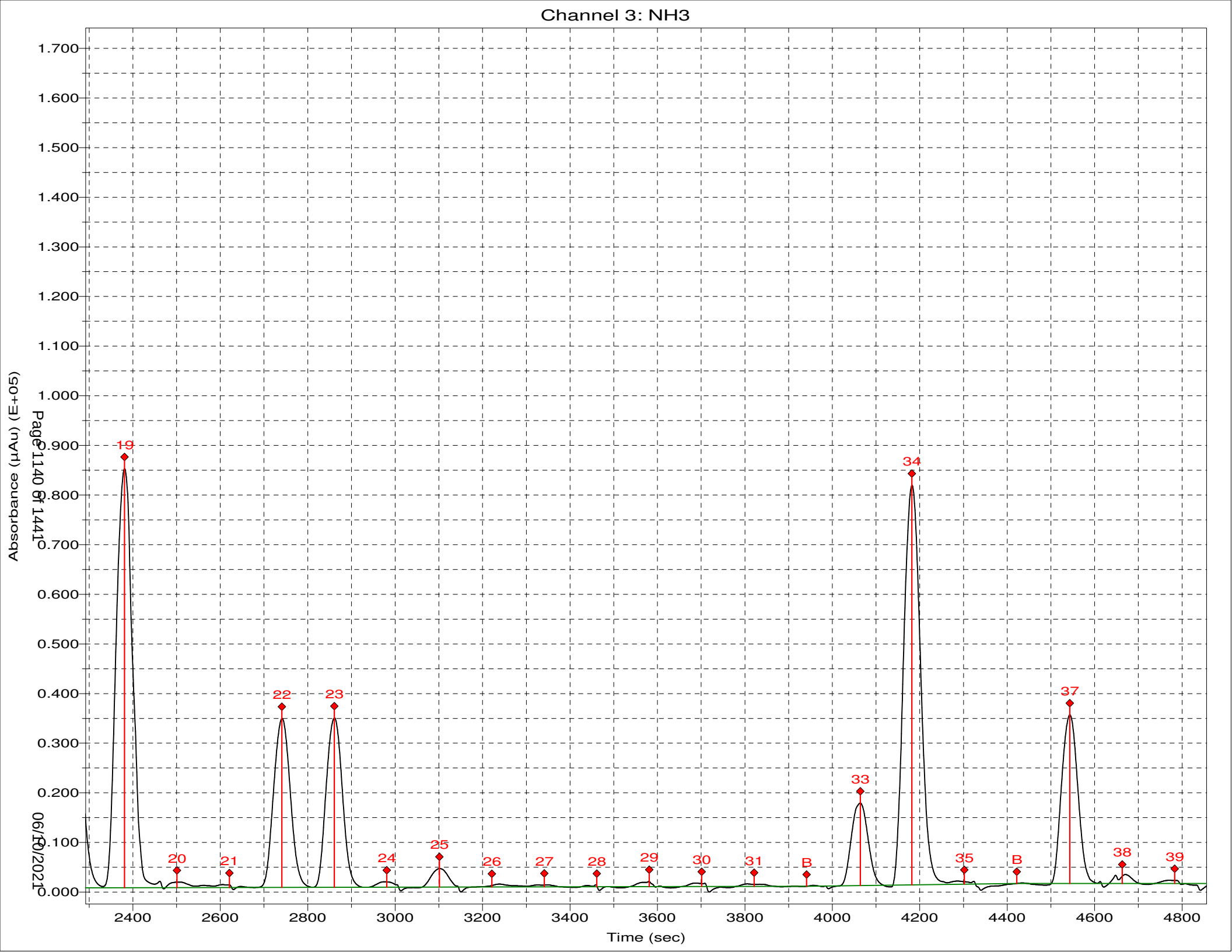
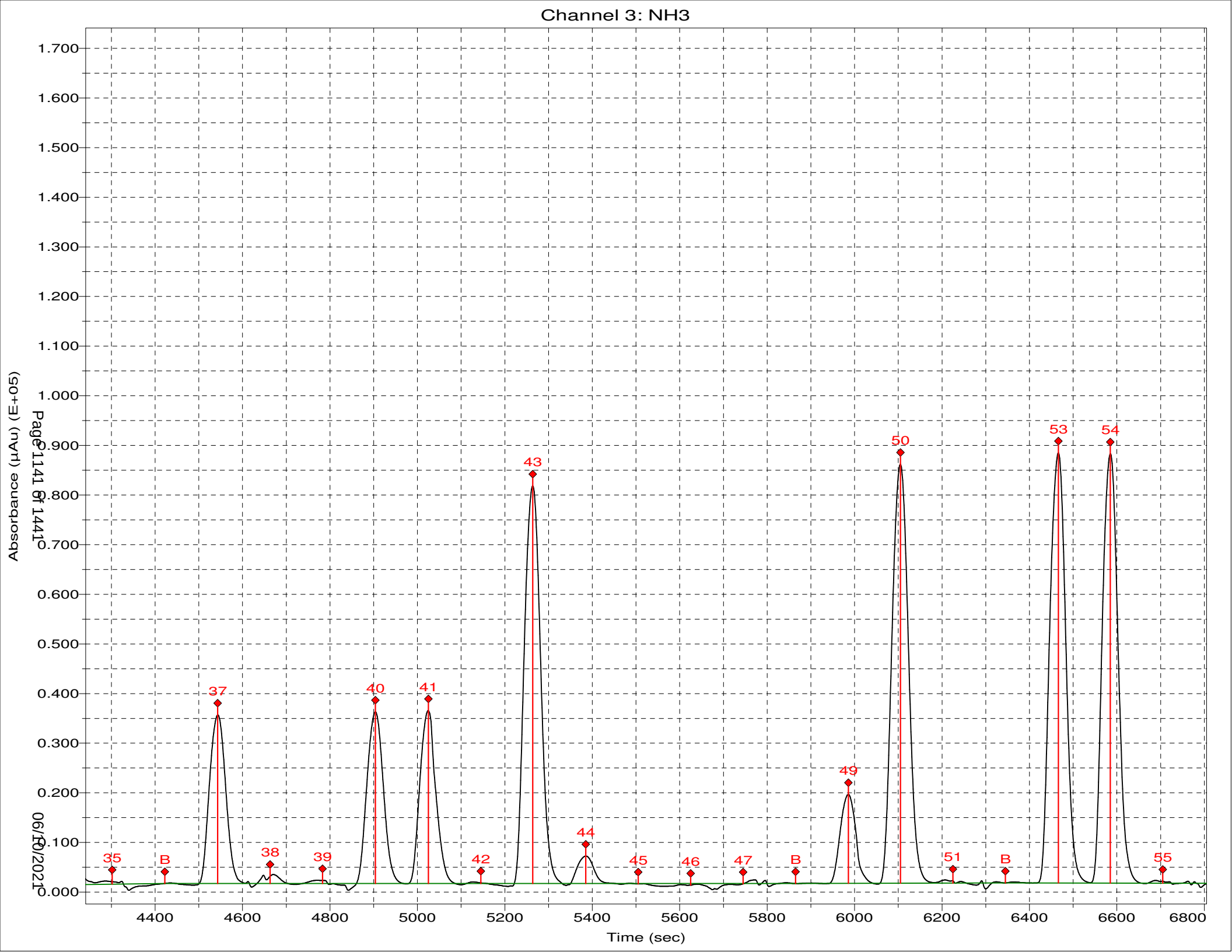
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 3: NH3
Absorbance (µAu) (E+05)
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
39
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
Time (sec)
Page 1140 of 1441
06/10/2021


Channel 3: NH3
Absorbance (µAu) (E+05)
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
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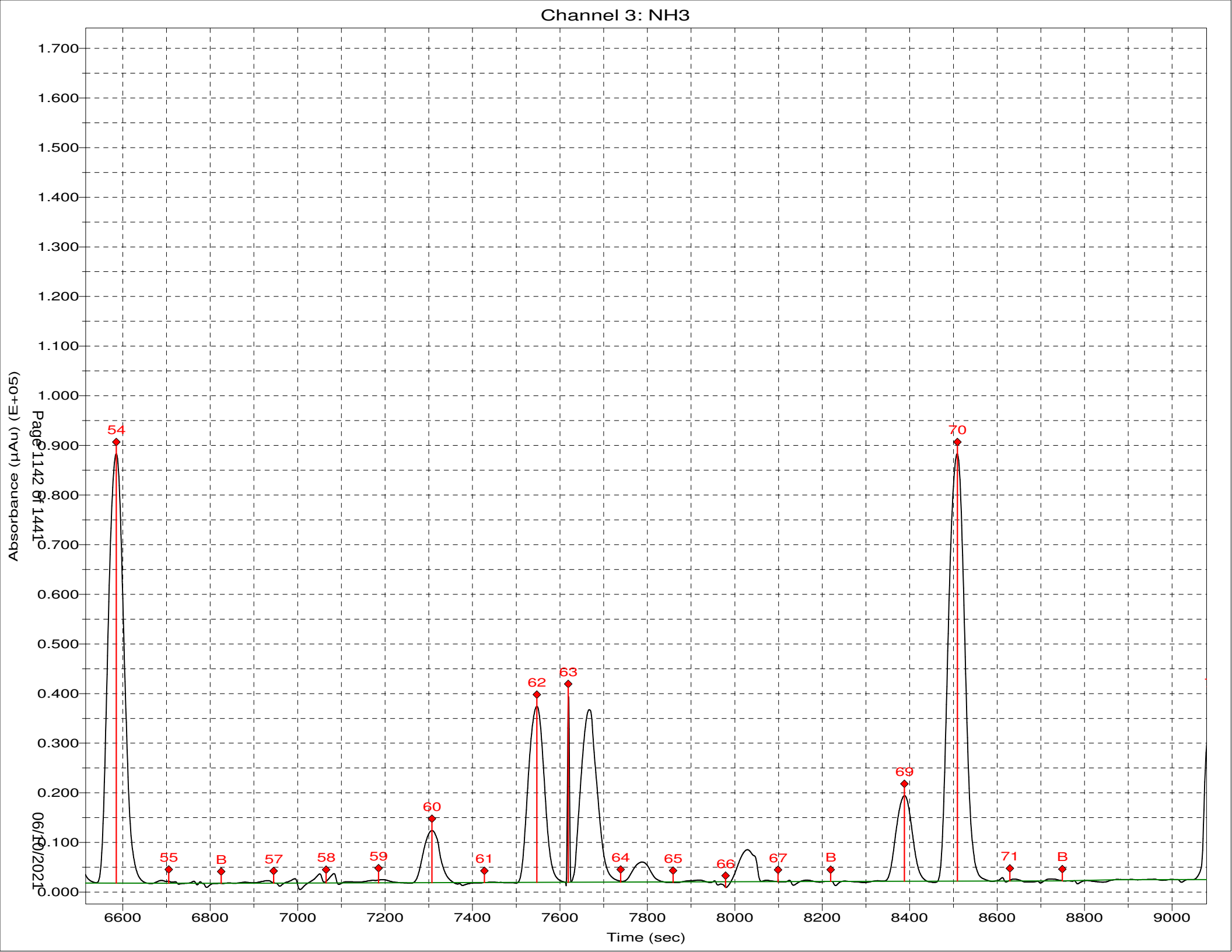
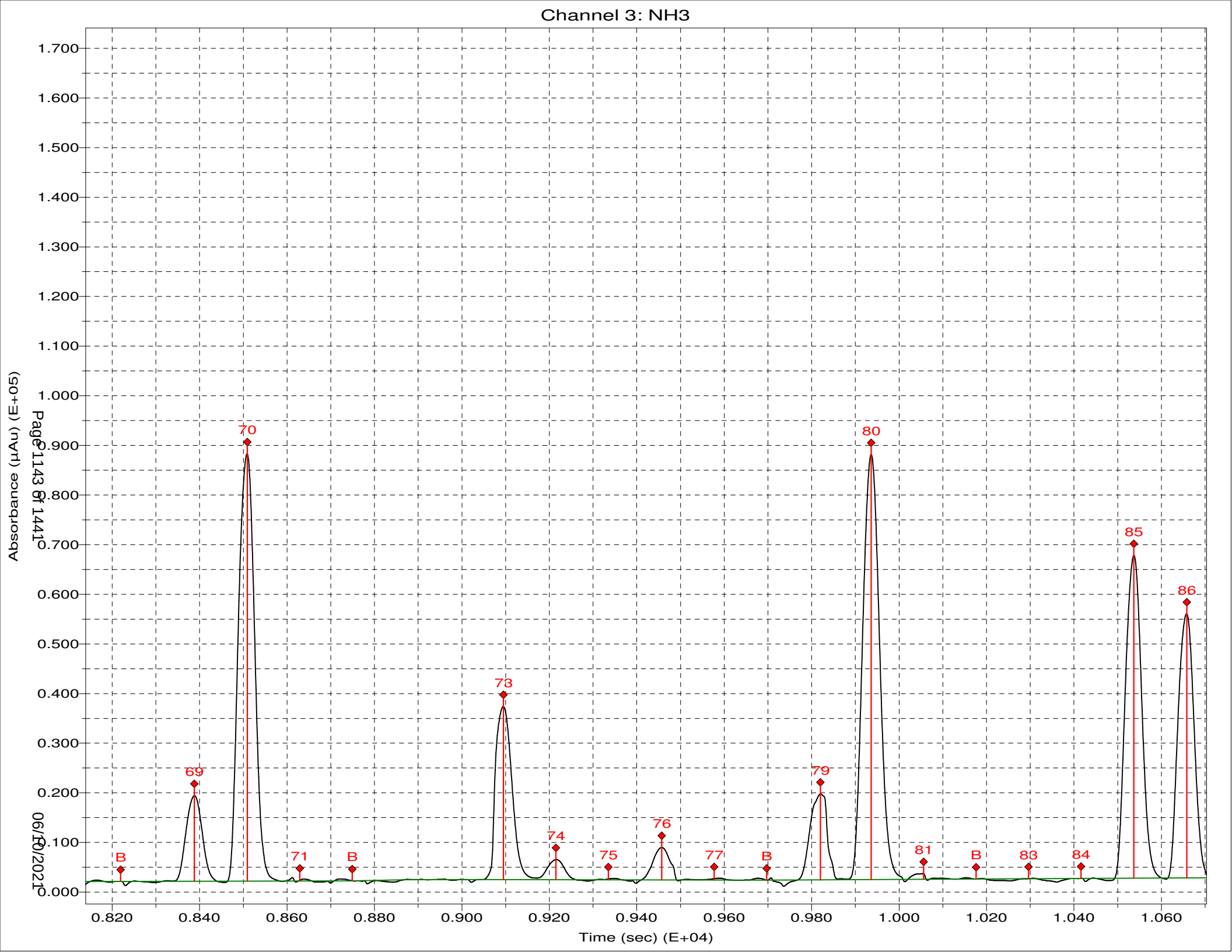
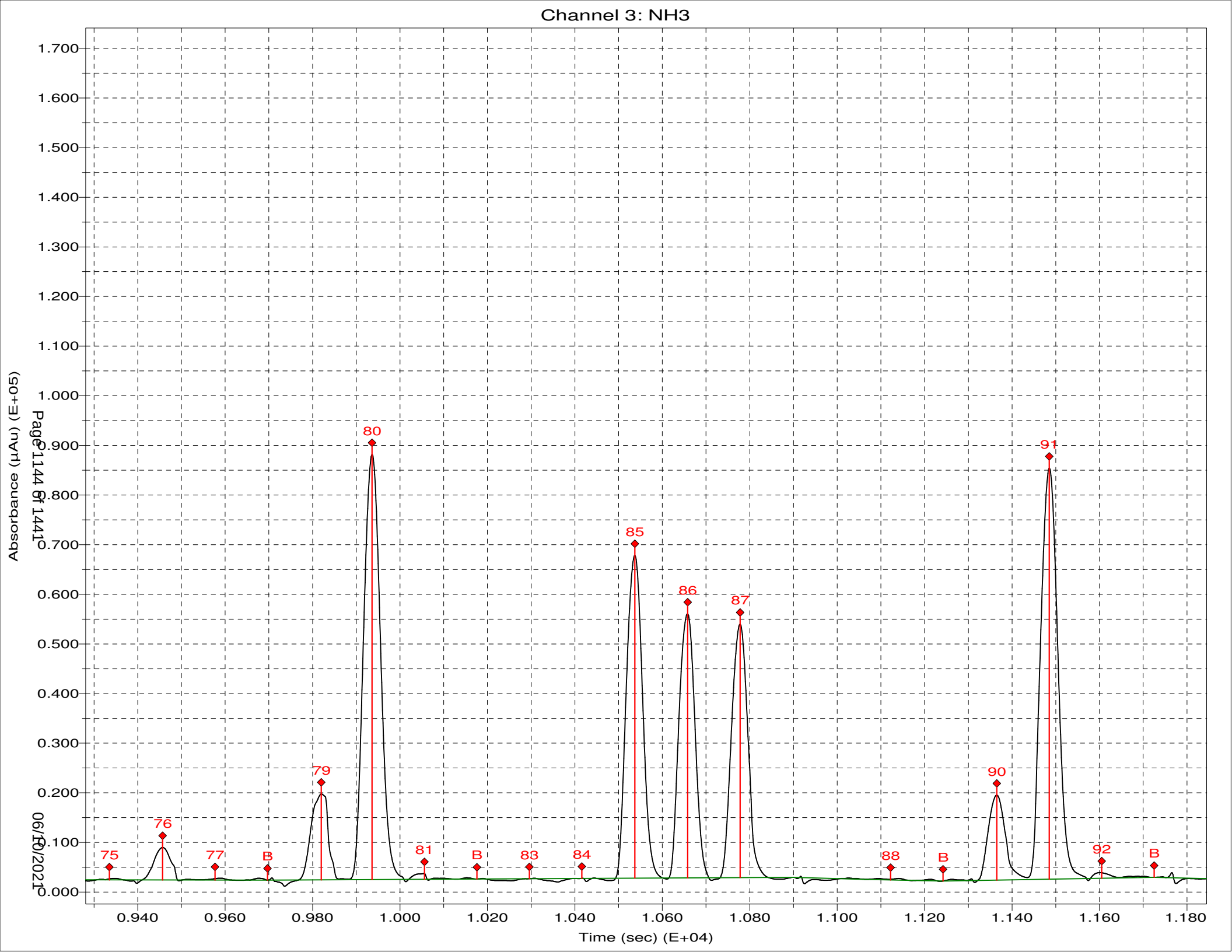
06/10/2021
35
B
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+05)
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Page 1142 of 1441
06/10/2021
54
55
B
57
58
59
60
61
62
63
64
65
66
67
B
69
70
71
B
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+05)
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Page 1143 of 1441
06/10/2021
0.820
0.840
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
Time (sec) (E+04)
B
69
70
71
B
73
74
75
76
77
B
79
80
81
B
83
84
85
86


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec) (E+04)
Page 1144 of 1441
06/10/2021
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
1.100
1.120
1.140
1.160
1.180
75
76
77
B
79
80
81
B
83
84
85
86
87
88
B
90
91
92
B

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 25-May-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment	RD	RB
106	Sync	SYNC	1	1	1		530.1 Bleach- 01398		
0	Carry Over	CO	1	1	1		530.1 Color- 00243		
0	Blank	RB	1	1	1		530.1 Complex- 00531		
101	Cal 0 ppb	C	1	1	1				
102	Cal 25 ppb	C	1	1	1				
103	Cal 50 ppb	C	1	1	1				
104	Cal 100 ppb	C	1	1	1				
105	Cal 500 ppb	C	1	1	1				
106	Cal 1000 ppb	C	1	1	1				
107	Cal 2500 ppb	C	1	1	1				
108	Cal 5000 ppb	C	1	1	1				
0	Blank	BLNK	1	1	1				
0	Read Baseline	RB	1	1	1				
109	ICVL 500.0 ppb	U	1	1	1				
110	ICV 2500.0 ppb	U	1	1	1				
111	ICB	U	1	1	1				
0	read baseline	RB	1	1	1				
107	LCS	U	1	1	1			pH	Cl-
107	LCSD	U	1	1	1				
111	MB	U	1	1	1			<2	2
201	280-148935-a-10	U	1	1	1			<2	2
202	MS 280-148935-a-10	U	1	1	1			<2	2
203	MSD 280-148935-a-10	U	1	1	1			<2	2
204	280-148768-b-2	U	1	1	1			<2	2
205	280-148787-d-2	U	1	1	1			<2	2
206	280-148787-c-3	U	1	1	1			<2	2
207	280-148787-d-4	U	1	1	1			<2	2
208	280-148787-d-5	U	1	1	1			<2	2
209	280-148792-b-1	U	1	1	1			<2	2
210	280-148847-a-1	U	1	1	1			<2	2
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			<2	2
211	280-148877-c-1	U	1	1	1			<2	2
212	280-148877-c-2	U	1	1	1			<2	2
213	280-148525-a-11	U	1	1	1			<2	2
214	MS 280-148525-a-11	U	1	1	1			<2	2
215	MSD 280-148525-a-11	U	1	1	1			<2	2
216	280-148877-c-3	U	1	1	1			<2	2
217	280-148877-c-4	U	1	1	1			<2	2
218	280-148877-c-5	U	1	1	1			<2	2
219	280-148877-c-6	U	1	1	1			<2	2
220	280-148877-c-7	U	1	1	1			<2	2
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	U	1	1	1				
107	LCSD	U	1	1	1				
111	MB	U	1	1	1				
0	read baseline	RB	1	1	1				

Cup	Name	Type	R	Dil	Wt	Vial	Comment	pH	Cl
221	280-148877-c-8	U	1	1	1			<2	22
222	280-148902-c-1	U	1	1	1			<2	22
223	280-148902-c-2	U	1	1	1			<2	22
224	280-148902-c-3	U	1	1	1			<2	22
225	280-148902-c-4	U	1	1	1			<2	22
226	MS 280-148902-c-4	U	1	1	1			<2	22
227	MSD X 280-148902-c-4	U	1	1	1			<2	22
228	280-148902-c-6 X	U	1	1	1			<2	22
229	280-148902-c-7 X	U	1	1	1			<2	22
230	280-148754-d-1 X	U	1	1	1			<2	22
0	X Blank	BLNK	1	1	1				
0	X read baseline	RB	1	1	1				
105	X CCVL 500.0 ppb	U	1	1	1				
107	X CCV 2500.0 ppb	U	1	1	1				
111	X CCB	U	1	1	1				
0	X read baseline	RB	1	1	1				
227	MSD 280-148902-c-4	U	1	1	1			<2	2
228	280-148902-c-6	U	1	1	1			<2	2
229	280-148902-c-7	U	1	1	1			<2	2
230	280-148754-d-1	U	1	1	1			<2	2
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			<2	2
231	280-148978-b-1	U	1	1	1			<2	2
232	590-15171-h-1	U	1	1	1			<2	2
233	590-15173-g-1	U	1	500	1			<2	2
234	280-148902-c-8	U	1	1	1			<2	2
235	590-15173-g-2	U	1	500	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				

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	RD
Operator ID	RD
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	57
Result path	C:\FLOW_4\052621.RST
Sample table path	C:\FLOW_4\052621.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	26-May-21
Time acquired	13:40

Date	Time	Cup	Name
26-May-21	09:29	106	Sync
26-May-21	09:31	0	Carry Over
26-May-21	09:33	0	Blank
26-May-21	09:35	101	Cal 0 ppb
26-May-21	09:37	102	Cal 25 ppb
26-May-21	09:39	103	Cal 50 ppb
26-May-21	09:41	104	Cal 100 ppb
26-May-21	09:43	105	Cal 500 ppb
26-May-21	09:45	106	Cal 1000 ppb
26-May-21	09:47	107	Cal 2500 ppb
26-May-21	09:49	108	Cal 5000 ppb
26-May-21	09:51	0	Blank
26-May-21	09:53	0	Read Baseline
26-May-21	09:55	109	ICVL 500.0 ppb
26-May-21	09:57	110	ICV 2500.0 ppb
26-May-21	09:59	111	ICB
26-May-21	10:01	0	read baseline
26-May-21	10:03	107	LCS
26-May-21	10:05	107	LCSD
26-May-21	10:07	111	MB
26-May-21	10:09	201	280-148877-c-1
26-May-21	10:11	202	MS 280-148877-c-1
26-May-21	10:13	203	MSD 280-148877-c-1
26-May-21	10:15	204	280-148768-b-2 X
26-May-21	10:17	205	280-148813-d-1
26-May-21	10:19	206	280-148823-c-2
26-May-21	10:21	207	280-148823-c-3
26-May-21	10:23	208	280-148823-c-5
26-May-21	10:25	209	280-148823-c-6
26-May-21	10:27	210	280-148823-c-7
26-May-21	10:29	0	Blank
26-May-21	10:31	0	read baseline
26-May-21	10:33	105	CCVL 500.0 ppb
26-May-21	10:35	107	CCV 2500.0 ppb
26-May-21	10:37	111	CCB
26-May-21	10:39	0	read baseline
26-May-21	10:41	211	280-148823-c-8
26-May-21	10:43	212	280-148823-c-4
26-May-21	10:45	213	280-148902-c-5
26-May-21	10:47	214	MS 280-148902-c-5
26-May-21	10:49	215	MSD 280-148902-c-5
26-May-21	10:51	216	280-148902-c-9
26-May-21	10:53	217	280-148902-c-10
26-May-21	10:55	218	280-148956-d-7 X
26-May-21	10:57	219	280-148956-c-8 X

Result path C:\FLOW_4\052621.RST
Sample table path C:\FLOW_4\052621.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 26-May-21
Time acquired 13:40

Date	Time	Cup	Name
26-May-21	10:59	220	280-148956-c-9 X
26-May-21	11:01	0	Blank
26-May-21	11:03	0	read baseline
26-May-21	11:05	105	CCVL 500.0 ppb
26-May-21	11:07	107	CCV 2500.0 ppb
26-May-21	11:09	111	CCB
26-May-21	11:11	0	read baseline
26-May-21	11:13	107	LCS
26-May-21	11:15	107	LCSD
26-May-21	11:17	111	MB
26-May-21	11:19	0	read baseline
26-May-21	11:21	221	280-148956-c-10
26-May-21	11:23	222	280-148956-c-11 X
26-May-21	11:25	223	280-148956-c-12 X
26-May-21	11:27	224	280-148956-d-13 X
26-May-21	11:29	225	590-15186-a-3 X
26-May-21	11:31	226	MS 590-15186-a-3
26-May-21	11:33	227	MSD 590-15186-a-3
26-May-21	11:35	228	280-148956-d-14
26-May-21	11:37	229	280-148956-c-15
26-May-21	11:39	230	280-148978-b-1
26-May-21	11:41	0	Blank
26-May-21	11:43	0	read baseline
26-May-21	11:45	105	X CCVL 500.0 ppb
26-May-21	11:47	107	X CCV 2500.0 ppb
26-May-21	11:49	111	X CCB
26-May-21	11:51	0	X read baseline
26-May-21	12:02	105	CCVL 500.0 ppb
26-May-21	12:04	107	CCV 2500.0 ppb
26-May-21	12:06	111	CCB
26-May-21	12:08	0	read baseline
26-May-21	12:10	231	280-149004-a-1
26-May-21	12:12	232	280-149004-a-2
26-May-21	12:14	233	280-149004-a-3
26-May-21	12:16	234	280-149004-a-4
26-May-21	12:18	235	280-149004-a-5
26-May-21	12:20	236	280-148651-b-1
26-May-21	12:22	204	280-148768-b-2
26-May-21	12:24	237	280-148956-d-7
26-May-21	12:26	238	280-148956-c-8
26-May-21	12:28	220	280-148956-c-9
26-May-21	12:30	0	Blank
26-May-21	12:32	0	read baseline
26-May-21	12:34	105	X CCVL 500.0 ppb
26-May-21	12:36	107	X CCV 2500.0 ppb
26-May-21	12:38	111	X CCB
26-May-21	12:45	105	X CCVL 500.0 ppb
26-May-21	12:47	107	X CCV 2500.0 ppb
26-May-21	12:49	111	X CCB
26-May-21	12:56	105	CCVL 500.0 ppb
26-May-21	12:58	107	CCV 2500.0 ppb
26-May-21	13:00	111	CCB
26-May-21	13:02	0	read baseline
26-May-21	13:04	107	LCS
26-May-21	13:06	107	LCSD
26-May-21	13:08	111	MB
26-May-21	13:10	0	read baseline

Result path	C:\FLOW_4\052621.RST
Sample table path	C:\FLOW_4\052621.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	26-May-21
Time acquired	13:40

Date	Time	Cup	Name
26-May-21	13:16	239	280-148956-c-11
26-May-21	13:18	223	280-148956-c-12
26-May-21	13:20	240	280-148956-d-13
26-May-21	13:22	225	590-15186-a-3
26-May-21	13:24	0	Blank
26-May-21	13:26	0	read baseline
26-May-21	13:28	105	CCVL 500.0 ppb
26-May-21	13:30	107	CCV 2500.0 ppb
26-May-21	13:32	111	CCB
26-May-21	13:34	0	read baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	RD
Operator ID	RD
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	57
Result path	C:\FLOW_4\052621.RST
Sample table path	C:\FLOW_4\052621.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	26-May-21
Time acquired	13:40

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Sync	32737	1014.630			
Carry Over	-572	-33.740	LO		
Blank	0	-16.005	BL		
Cal 0 ppb	1313	24.782			
Cal 25 ppb	647	4.087			
Cal 50 ppb	2058	47.914			
Cal 100 ppb	3658	97.725			
Cal 500 ppb	16364	495.514			
Cal 1000 ppb	32537	1008.245			
Cal 2500 ppb	78254	2495.998			
Cal 5000 ppb	151576	5000.737	HI		
Blank	818	9.403			
Read Baseline	0	-16.005	BL		
ICVL 500.0 ppb	15188	458.515			
ICV 2500.0 ppb	73561	2340.644			
ICB	376	-4.345	LO		
read baseline	0	-16.005	BL		
LCS	76841	2449.158			
LCSD	79522	2538.069			
MB	1521	31.222			
280-148877-c-1	33302	1032.651			
MS 280-148877-c-1	62887	1989.586			
MSD 280-148877-c-1	61048	1929.393			
280-148768-b-2 X	2182	51.779			
280-148813-d-1	18317	557.074			
280-148823-c-2	30575	945.669			
280-148823-c-3	1184	20.753			
280-148823-c-5	10937	325.084			
280-148823-c-6	40914	1276.608			
280-148823-c-7	38105	1186.382			
Blank	510	-0.179	LO		
read baseline	0	-16.005	BL		
CCVL 500.0 ppb	16589	502.596			
CCV 2500.0 ppb	79742	2545.372			
CCB	910	12.257			
read baseline	0	-16.005	BL		
280-148823-c-8	21296	651.125			
280-148823-c-4	22855	700.442			
280-148902-c-5	704	5.837			
MS 280-148902-c-5	34423	1068.484			
MSD 280-148902-c-5	34203	1061.450			
280-148902-c-9	2222	53.020			
280-148902-c-10	6509	186.586			
280-148956-d-7 X	1598591	84336.430	HI		
280-148956-c-8 X	1335312	65065.273	HI		

Result path C:\FLOW_4\052621.RST
Sample table path C:\FLOW_4\052621.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 26-May-21
Time acquired 13:40

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-148956-c-9 X	85419	2734.318	FL		
Blank	1463	29.444			
read baseline	0	-16.005	BL		
CCVL 500.0 ppb	17013	515.946			
CCV 2500.0 ppb	81401	2600.517			
CCB	1251	22.839			
read baseline	0	-16.005	BL		
LCS	79641	2542.012			
LCSD	81476	2602.990			
MB	784	8.341			
read baseline	0	-16.005	BL		
280-148956-c-10	82617	2640.964			
280-148956-c-11 X	1223312	58293.824	HI		
280-148956-c-12 X	23218	711.942	FL		
280-148956-d-13 X	1467033	74771.031	HI		
590-15186-a-3 X	15969	483.078	FL		
MS 590-15186-a-3	51180	1608.083	FL		
MSD 590-15186-a-3	50925	1599.798			
280-148956-d-14	816	9.334			
280-148956-c-15	32488	1006.676			
280-148978-b-1	980	14.424			
Blank	298	-6.767	LO		
read baseline	0	-16.005	BL		
X CCVL 500.0 ppb	17858	542.588			
X CCV 2500.0 ppb	102634	3312.612			
X CCB	-14	-16.451	LO		
X read baseline	0	-16.005	BL		
CCVL 500.0 ppb	17946	545.354			
CCV 2500.0 ppb	82109	2624.037			
CCB	436	-2.480	LO		
read baseline	0	-16.005	BL		
280-149004-a-1	1878	42.322			
280-149004-a-2	1544	31.953			
280-149004-a-3	838	10.023			
280-149004-a-4	1565	32.612			
280-149004-a-5	320	-6.058	LO		
280-148651-b-1	15494	468.135			
280-148768-b-2	1128	19.016			
280-148956-d-7	16128	244054.281			
280-148956-c-8	27164	418551.781			
280-148956-c-9	84487	2703.254			
Blank	273	-7.541	LO		
read baseline	0	-16.005	BL		
X CCVL 500.0 ppb	19124	582.531			
X CCV 2500.0 ppb	79703	2544.074			
X CCB	1450	29.015			
X CCVL 500.0 ppb	18224	554.128			
X CCV 2500.0 ppb	85267	2729.237			
X CCB	1289	24.036			
CCVL 500.0 ppb	17453	529.831			
CCV 2500.0 ppb	83216	2660.887			
CCB	929	12.826			
read baseline	0	-16.005	BL		
LCS	84486	2703.222			
LCSD	85069	2722.654			
MB	581	2.018			
read baseline	0	-16.005	BL		

Result path C:\FLOW_4\052621.RST
Sample table path C:\FLOW_4\052621.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 26-May-21
Time acquired 13:40

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-148956-c-11	51217	804637.688			
280-148956-c-12	36299	1128.522			
280-148956-d-13	8717	127790.789			
590-15186-a-3	17785	540.292			
Blank	453	-1.952	LO		
read baseline	0	-16.005	BL		
CCVL 500.0 ppb	17552	532.937			
CCV 2500.0 ppb	84572	2706.061			
CCB	1220	21.886			
read baseline	0	-16.005	BL		

Peak Table:NH3

File name: C:\FLOW_4\052621.RST
Date: 26-May-21
Operator: RD

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	32737	1014.629883	
2	0	Carry Over	1	CO	1	1	-572	-33.739548	LO
B	0	Blank	1	RB	1	1	0	-16.004677	BL
4	101	Cal 0 ppb	1	C	1	1	1313	24.782221	
5	102	Cal 25 ppb	1	C	1	1	647	4.087206	
6	103	Cal 50 ppb	1	C	1	1	2058	47.913780	
7	104	Cal 100 ppb	1	C	1	1	3658	97.725128	
8	105	Cal 500 ppb	1	C	1	1	16364	495.513550	
9	106	Cal 1000 ppb	1	C	1	1	32537	1008.245056	
10	107	Cal 2500 ppb	1	C	1	1	78254	2495.997803	
11	108	Cal 5000 ppb	1	C	1	1	151576	5000.737305	HI
12	0	Blank	1	BLNK	1	1	818	9.403420	
B	0	Read Baseline	1	RB	1	1	0	-16.004675	BL
14	109	ICVL 500.0 ppb	1	U	1	1	15188	458.515289	
15	110	ICV 2500.0 ppb	1	U	1	1	73561	2340.643555	
16	111	ICB	1	U	1	1	376	-4.345238	LO
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
18	107	LCS	1	U	1	1	76841	2449.157715	
19	107	LCSD	1	U	1	1	79522	2538.068848	
20	111	MB	1	U	1	1	1521	31.222391	
21	201	280-148877-c-1	1	U	1	1	33302	1032.651001	
22	202	MS 280-148877-c-1	1	U	1	1	62887	1989.585815	
23	203	MSD 280-148877-c-1	1	U	1	1	61048	1929.392822	
24	204	280-148768-b-2 X 1	1	U	1	1	2182	51.778957	
25	205	280-148813-d-1	1	U	1	1	18317	557.074280	
26	206	280-148823-c-2	1	U	1	1	30575	945.669250	
27	207	280-148823-c-3	1	U	1	1	1184	20.752815	
28	208	280-148823-c-5	1	U	1	1	10937	325.083984	
29	209	280-148823-c-6	1	U	1	1	40914	1276.608276	
30	210	280-148823-c-7	1	U	1	1	38105	1186.382080	
31	0	Blank	1	BLNK	1	1	510	-0.179080	LO
B	0	read baseline	1	RB	1	1	0	-16.004679	BL
33	105	CCVL 500.0 ppb	1	U	1	1	16589	502.596191	
34	107	CCV 2500.0 ppb	1	U	1	1	79742	2545.371582	
35	111	CCB	1	U	1	1	910	12.256733	
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
37	211	280-148823-c-8	1	U	1	1	21296	651.124695	
38	212	280-148823-c-4	1	U	1	1	22855	700.441772	
39	213	280-148902-c-5	1	U	1	1	704	5.837034	
40	214	MS 280-148902-c-5	1	U	1	1	34423	1068.484009	
41	215	MSD 280-148902-c-5	1	U	1	1	34203	1061.450317	
42	216	280-148902-c-9	1	U	1	1	2222	53.020000	
43	217	280-148902-c-10	1	U	1	1	6509	186.585510	
44	218	280-148956-d-7 X 1	1	U	1	1	1598591	84336.429688	HI
45	219	280-148956-c-8 X 1	1	U	1	1	1335312	65665.273438	HI
46	220	280-148956-c-9 X 1	1	U	1	1	85419	2734.318359	FL
47	0	Blank	1	BLNK	1	1	1463	29.444382	
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
49	105	CCVL 500.0 ppb	1	U	1	1	17013	515.946167	
50	107	CCV 2500.0 ppb	1	U	1	1	81401	2600.516846	
51	111	CCB	1	U	1	1	1251	22.838999	
B	0	read baseline	1	RB	1	1	0	-16.004677	BL
53	107	LCS	1	U	1	1	79641	2542.011963	
54	107	LCSD	1	U	1	1	81476	2602.990234	
55	111	MB	1	U	1	1	784	8.340851	
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
57	221	280-148956-c-10	1	U	1	1	82617	2640.963623	
58	222	280-148956-c-11 X 1	1	U	1	1	1223312	58293.824219	HI
59	223	280-148956-c-12 X 1	1	U	1	1	23218	711.942017	FL
60	224	280-148956-d-13 X 1	1	U	1	1	1467033	74771.031250	HI
61	225	590-15186-a-3 X 1	1	U	1	1	15969	483.078278	FL
62	226	MS 590-15186-a-3 1	1	U	1	1	51180	1608.083008	FL
63	227	MSD 590-15186-a-3 1	1	U	1	1	50925	1599.798462	
64	228	280-148956-d-14 1	1	U	1	1	816	9.333853	
65	229	280-148956-c-15 1	1	U	1	1	32488	1006.676453	
66	230	280-148978-b-1	1	U	1	1	980	14.424071	
67	0	Blank	1	BLNK	1	1	298	-6.766794	LO
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
69	105	X CCVL 500.0 ppb 1	1	U	1	1	17858	542.587708	
70	107	X CCV 2500.0 ppb 1	1	U	1	1	102634	3312.611572	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	X CCB	1	U	1	1	-14	-16.451191	LO
B	0	X read baseline	1	RB	1	1	0	-16.004675	BL
73	105	CCVL 500.0 ppb	1	U	1	1	17946	545.353821	
74	107	CCV 2500.0 ppb	1	U	1	1	82109	2624.037109	
75	111	CCB	1	U	1	1	436	-2.479743	LO
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
77	231	280-149004-a-1	1	U	1	1	1878	42.321854	
78	232	280-149004-a-2	1	U	1	1	1544	31.953226	
79	233	280-149004-a-3	1	U	1	1	838	10.023240	
80	234	280-149004-a-4	1	U	1	1	1565	32.612381	
81	235	280-149004-a-5	1	U	1	1	320	-6.058403	LO
82	236	280-148651-b-1	1	U	1	1	15494	468.135254	
83	204	280-148768-b-2	1	U	1	1	1128	19.016451	
84	237	280-148956-d-7	1	U	500	1	16128	244054.281250	
85	238	280-148956-c-8	1	U	500	1	27164	418551.781250	
86	220	280-148956-c-9	1	U	1	1	84487	2703.254150	
87	0	Blank	1	BLNK	1	1	273	-7.540709	LO
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
89	105	X CCVL 500.0 ppb	1	U	1	1	19124	582.531494	
90	107	X CCV 2500.0 ppb	1	U	1	1	79703	2544.074463	
91	111	X CCB	1	U	1	1	1450	29.014868	
92	105	X CCVL 500.0 ppb	1	U	1	1	18224	554.127686	
93	107	X CCV 2500.0 ppb	1	U	1	1	85267	2729.236572	
94	111	X CCB	1	U	1	1	1289	24.036242	
95	105	CCVL 500.0 ppb	1	U	1	1	17453	529.830627	
96	107	CCV 2500.0 ppb	1	U	1	1	83216	2660.886719	
97	111	CCB	1	U	1	1	929	12.825736	
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
99	107	LCS	1	U	1	1	84486	2703.221680	
100	107	LCSD	1	U	1	1	85069	2722.653809	
101	111	MB	1	U	1	1	581	2.017648	
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
103	239	280-148956-c-11	1	U	500	1	51217	804637.687500	
104	223	280-148956-c-12	1	U	1	1	36299	1128.522095	
105	240	280-148956-d-13	1	U	500	1	8717	127790.789062	
106	225	590-15186-a-3	1	U	1	1	17785	540.291748	
107	0	Blank	1	BLNK	1	1	453	-1.952107	LO
B	0	read baseline	1	RB	1	1	0	-16.004675	BL
109	105	CCVL 500.0 ppb	1	U	1	1	17552	532.936707	
110	107	CCV 2500.0 ppb	1	U	1	1	84572	2706.061035	
111	111	CCB	1	U	1	1	1220	21.886217	
B	0	read baseline	1	RB	1	1	0	-16.004675	BL

NH3:Calibration 1: Peak 4-112

File name: C:\FLOW_4\052621.RST
Date: 26-May-21
Operator: RD

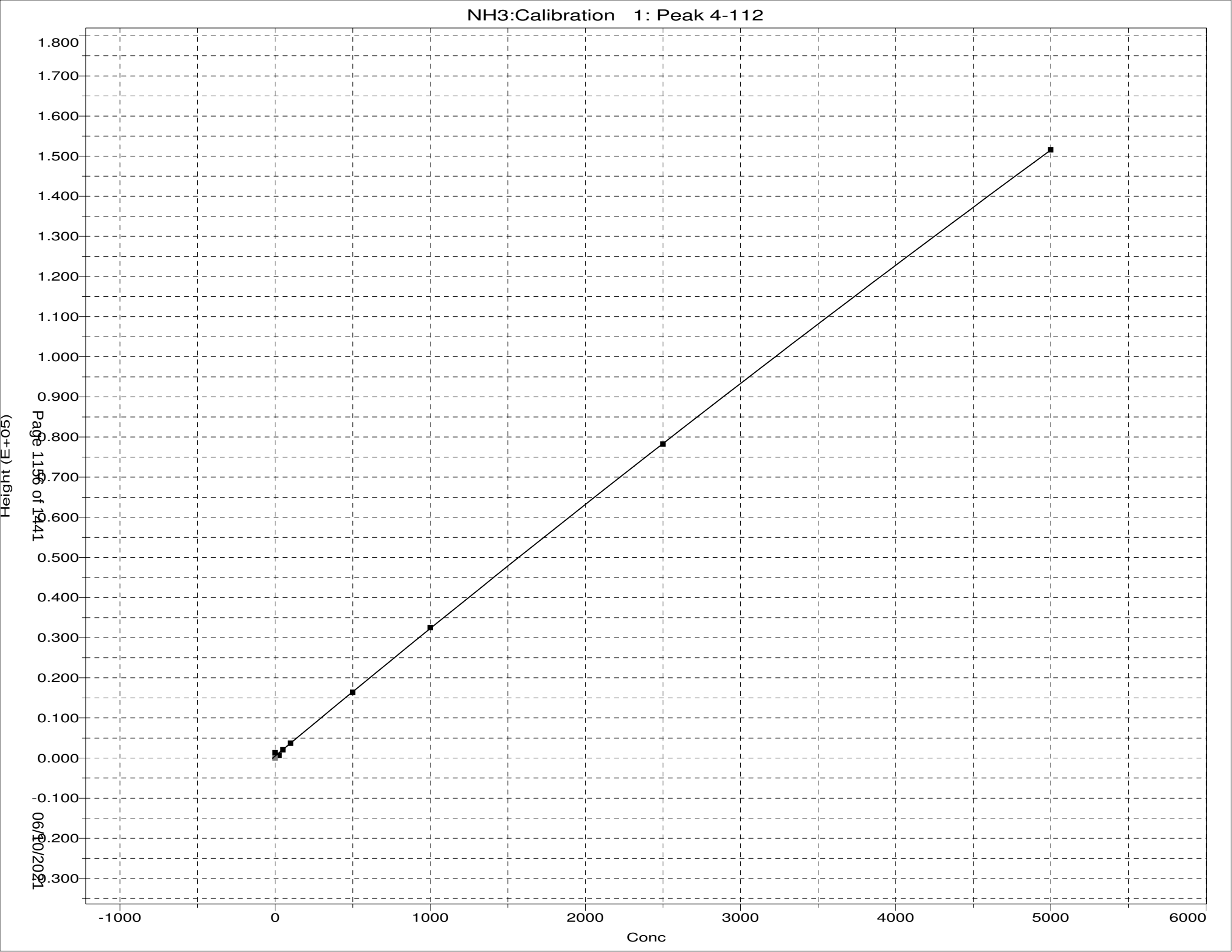
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	1313.385742
*	Cal 25 ppb	25.000000	647.170837
*	Cal 50 ppb	50.000000	2057.578857
*	Cal 100 ppb	100.000000	3658.477539
*	Cal 500 ppb	500.000000	16363.686523
*	Cal 1000 ppb	1000.000000	32537.349609
*	Cal 2500 ppb	2500.000000	78253.984375
*	Cal 5000 ppb	5000.000000	151575.562500

Calib Coef:
x=cyy+by+a
a: (intercept) -1.6005e+01
b: 3.1037e-02
c: 1.3593e-08

Corr Coef: 0.999973

Carryover: 0%

No Drift Peaks


NH3:Calibration 1: Peak 4-112
Height (E+05)
1.800
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
-0.200
-0.300
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1156 of 1441
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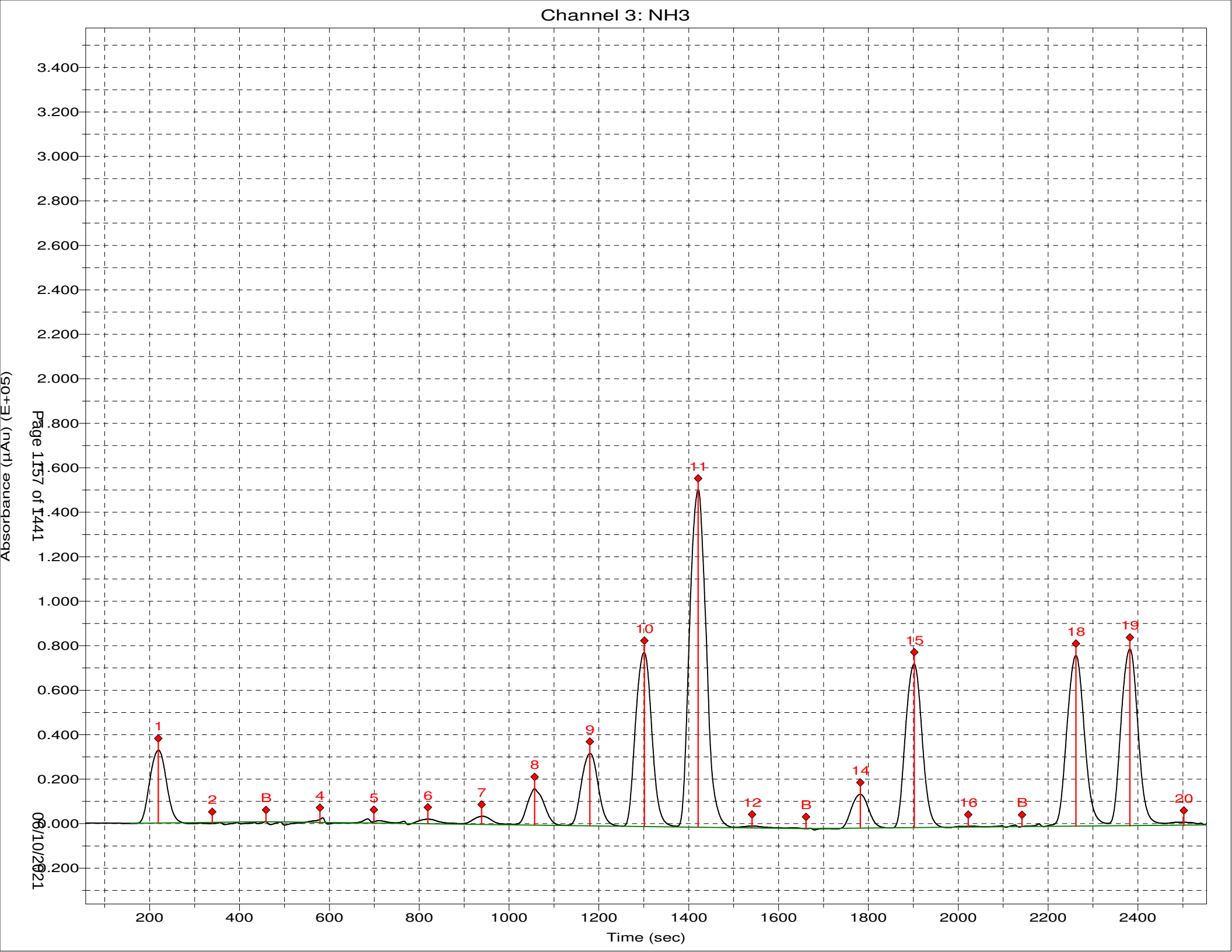
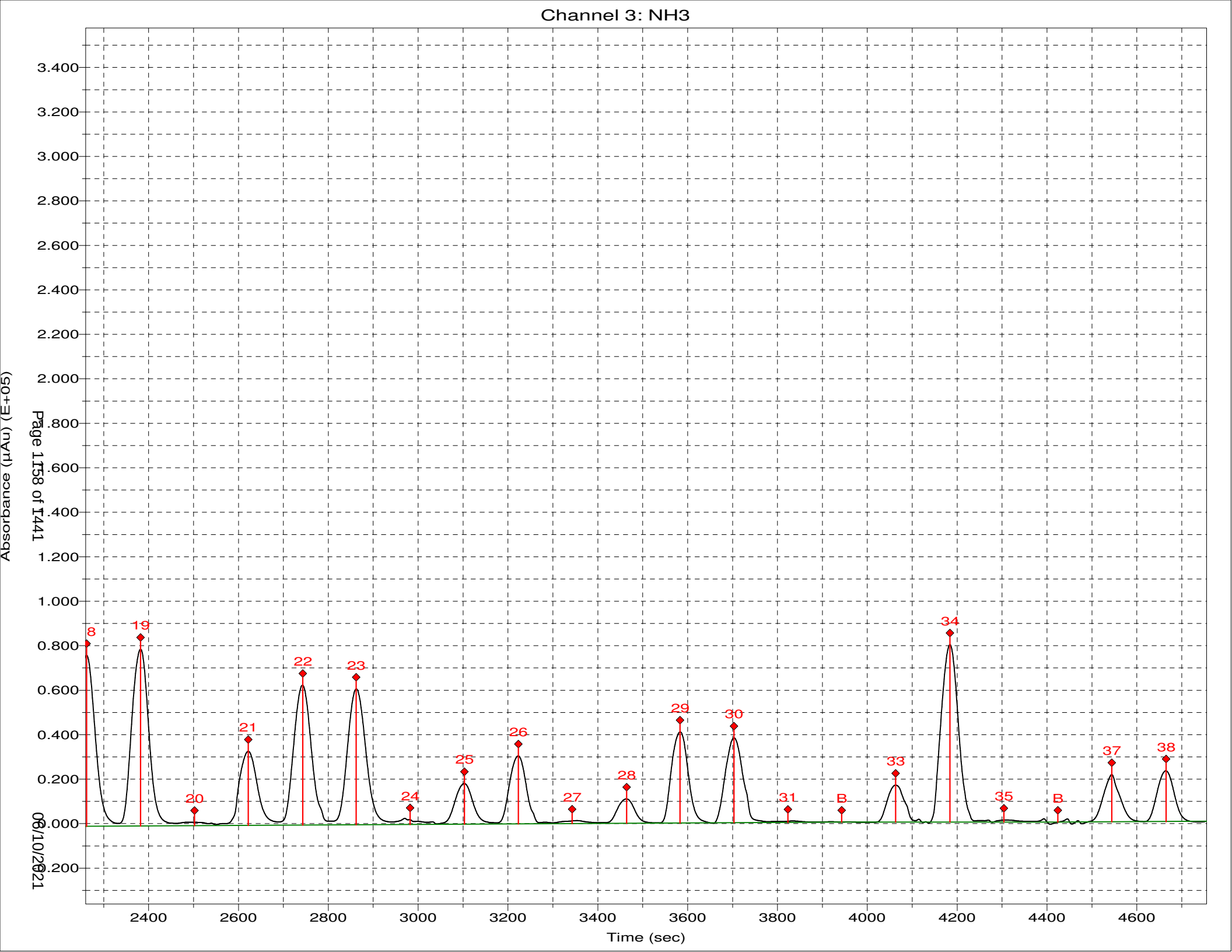
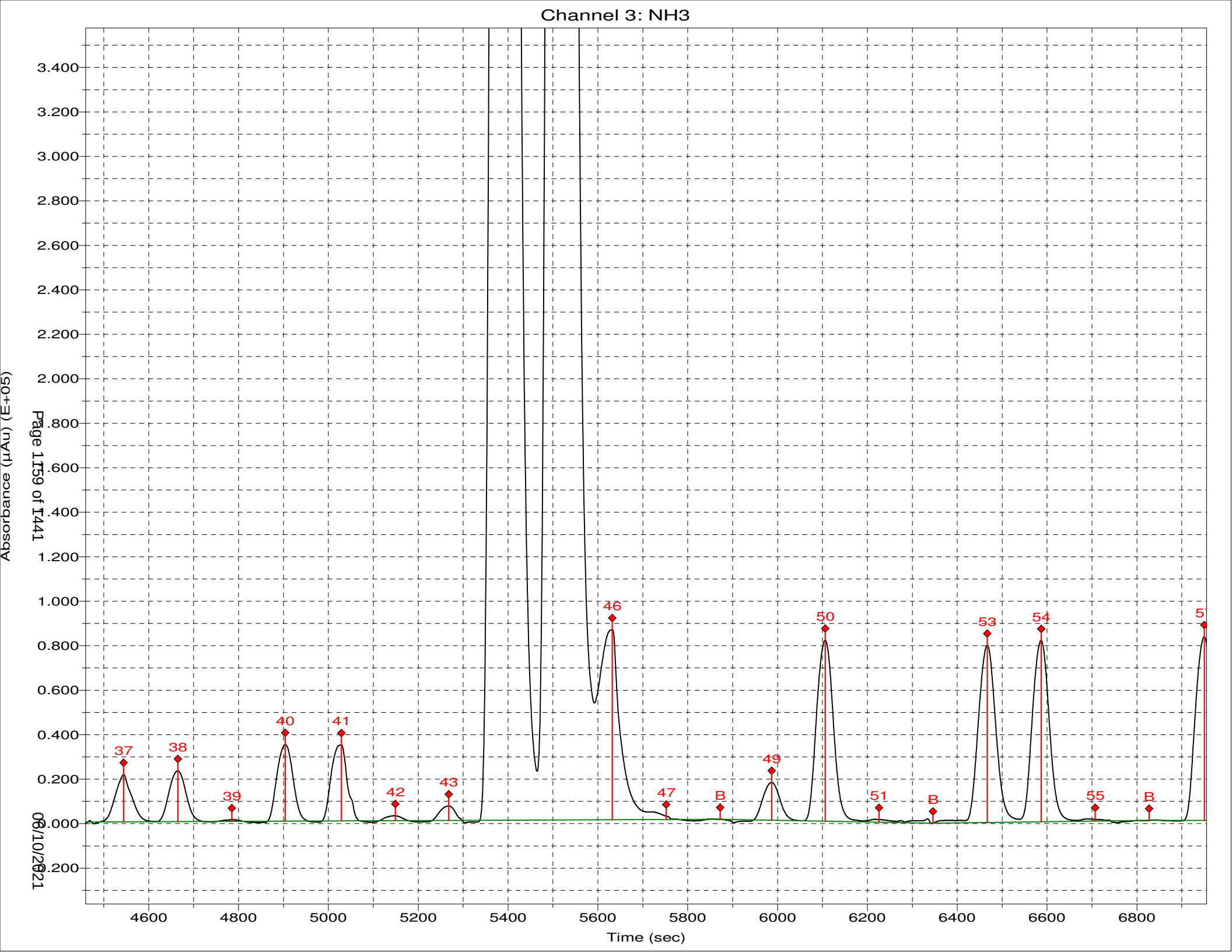

Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Page 157 of 441
06/10/2021
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
Time (sec)
1
2
B
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Page 1158 of 1441
06/10/2021
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)


Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
37
38
39
40
41
42
43
46
47
B
49
50
51
B
53
54
55
B
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
Time (sec)
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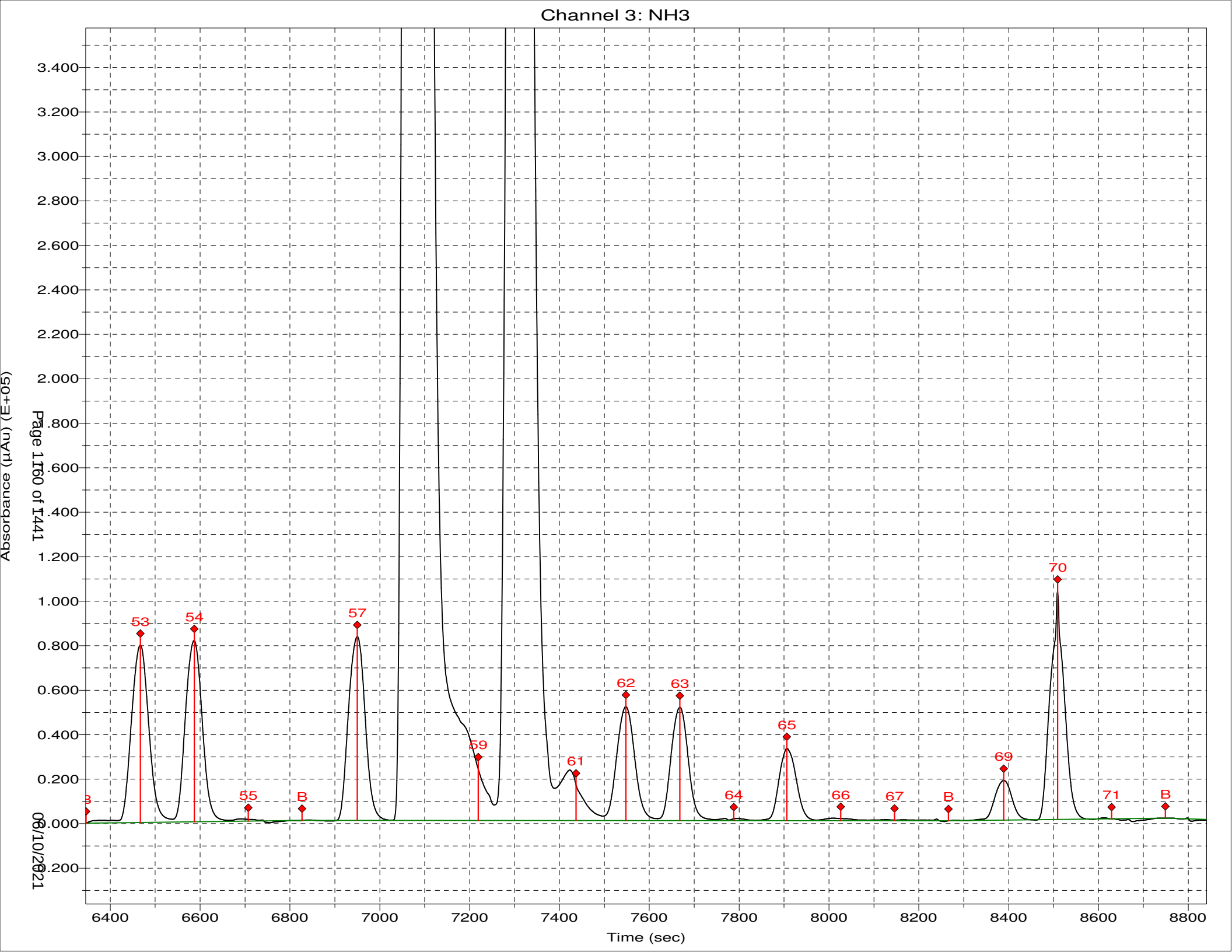
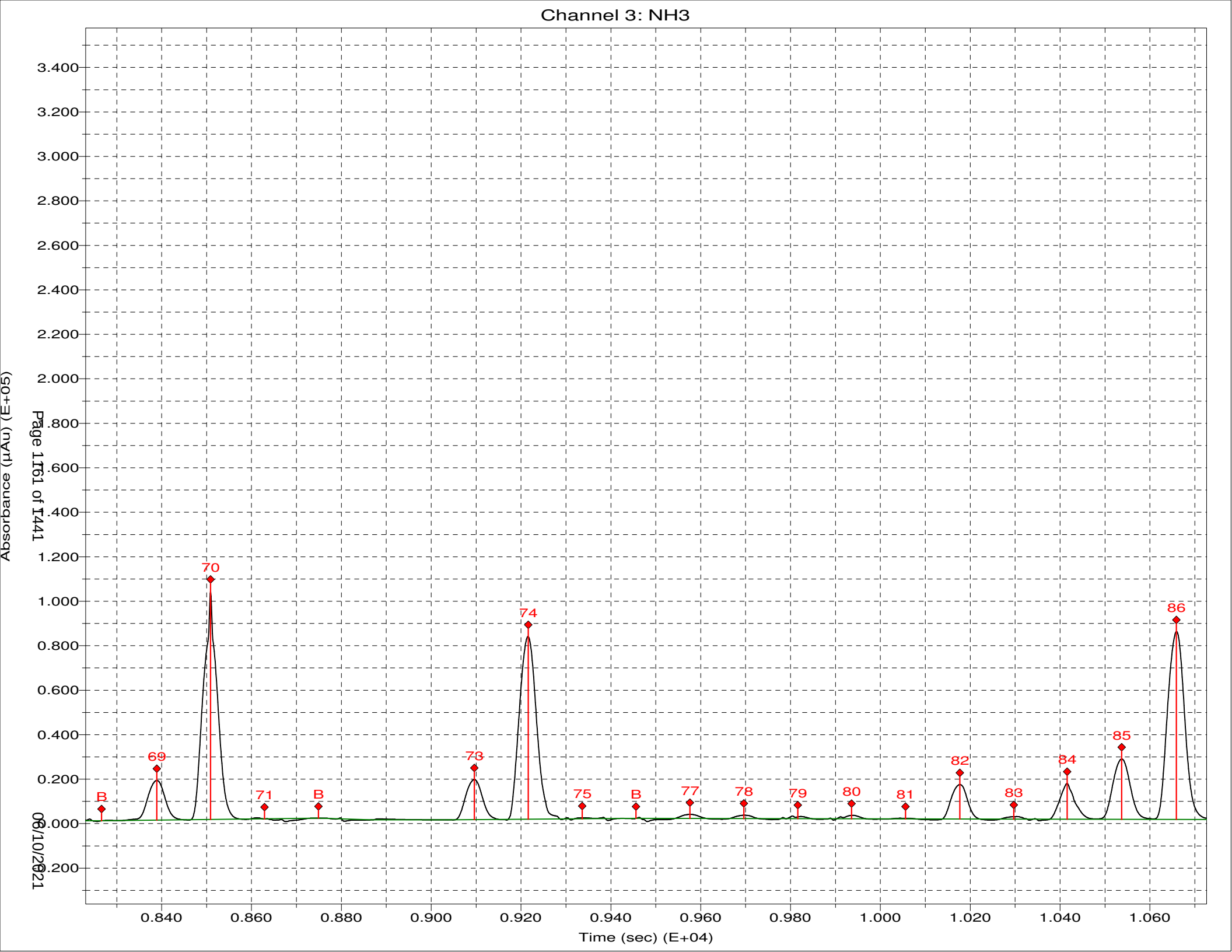
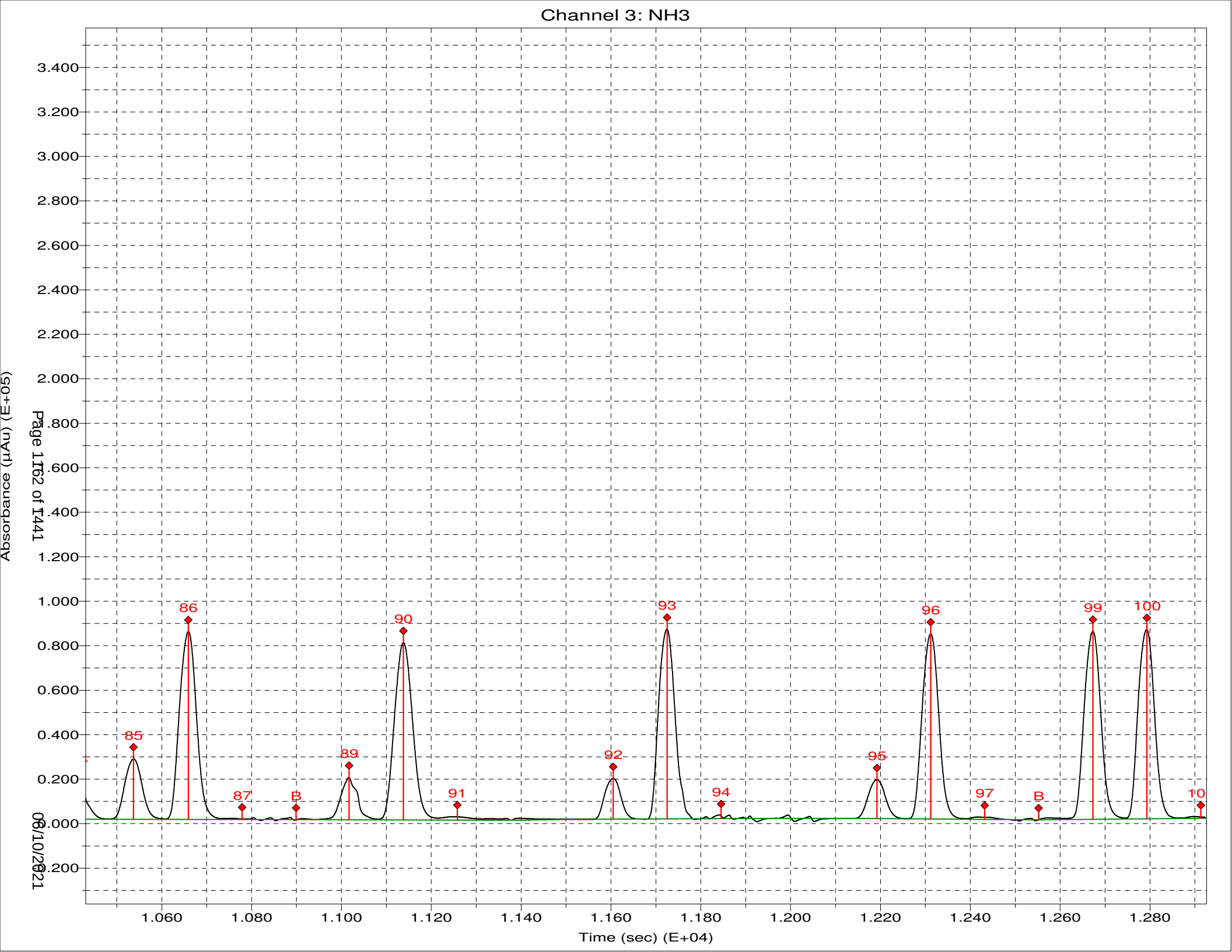
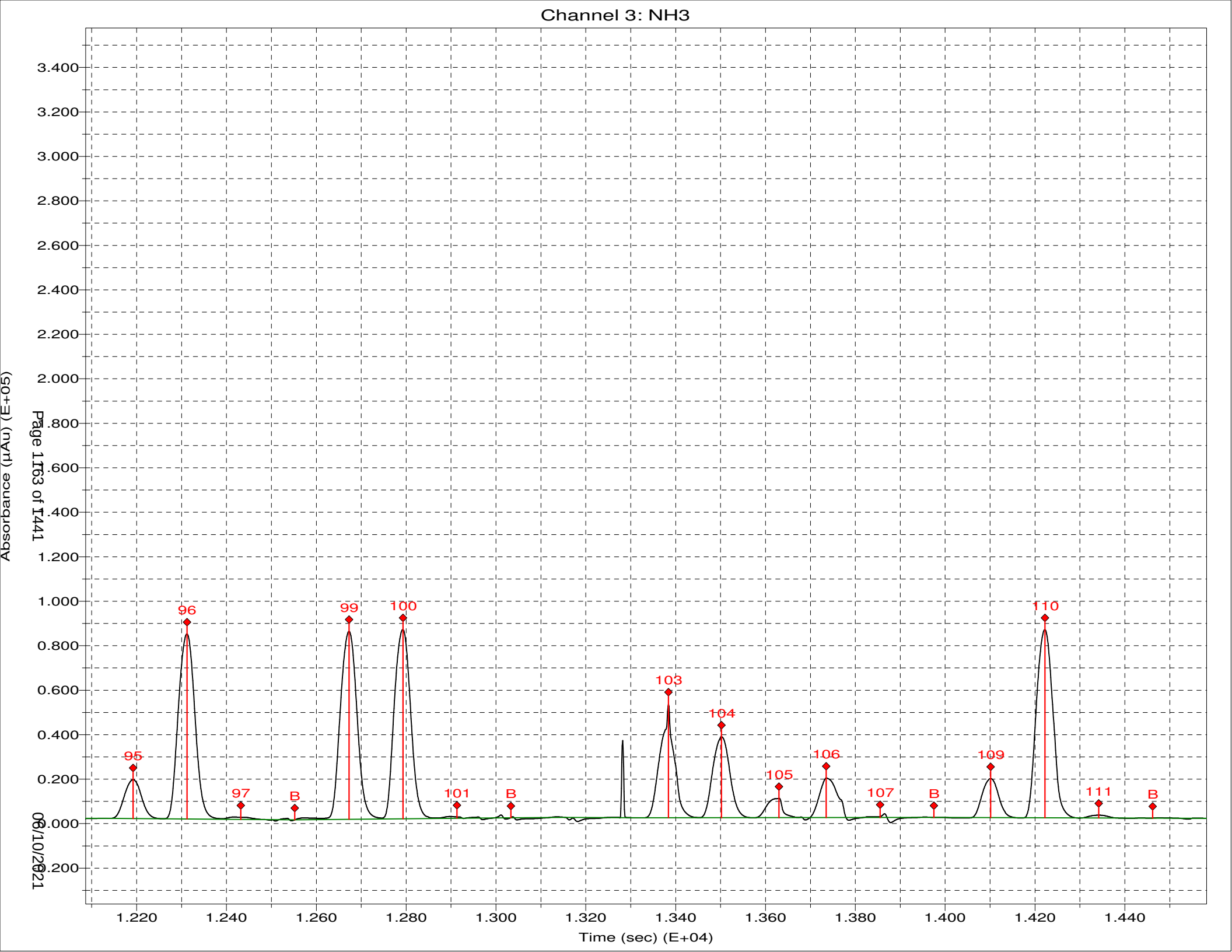

Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Page 1 of 1441
06/10/2021
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
Time (sec)
53
54
55
B
57
59
61
62
63
64
65
66
67
B
69
70
71
B


Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
B
69
70
71
B
73
74
75
B
77
78
79
80
81
82
83
84
85
86
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)
Page 1 of 1
06/10/2021


Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Page 162 of 1441
06/10/2021
85
86
87
B
89
90
91
92
93
94
95
96
97
B
99
100
10
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)


Channel 3: NH3
Absorbance (µAu) (E+05)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Page 163 of 1441
06/10/2021
95
96
97
B
99
100
101
B
103
104
105
106
107
B
109
110
111
B
1.220
1.240
1.260
1.280
1.300
1.320
1.340
1.360
1.380
1.400
1.420
1.440
Time (sec) (E+04)

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 26-May-21

RD

pH RD 05/26/21 C

350.1 Bleach - 01399
350.1 Color - 00243
350.1 Complex - 00531

Cup	Name	Type	R	Dil	Wt	Vial	Comment	pH	Cl
106	Sync	SYNC	1	1	1				
0	Carry Over	CO	1	1	1				
0	Blank	RB	1	1	1				
101	Cal 0 ppb	C	1	1	1				
102	Cal 25 ppb	C	1	1	1				
103	Cal 50 ppb	C	1	1	1				
104	Cal 100 ppb	C	1	1	1				
105	Cal 500 ppb	C	1	1	1				
106	Cal 1000 ppb	C	1	1	1				
107	Cal 2500 ppb	C	1	1	1				
108	Cal 5000 ppb	C	1	1	1				
0	Blank	BLNK	1	1	1				
0	Read Baseline	RB	1	1	1				
109	ICVL 500.0 ppb	U	1	1	1				
110	ICV 2500.0 ppb	U	1	1	1				
111	ICB	U	1	1	1				
0	read baseline	RB	1	1	1				
107	LCS	U	1	1	1				
107	LCSD	U	1	1	1				
111	MB	U	1	1	1				
201	280-148877-c-1	U	1	1	1			<2	2222222222
202	MS 280-148877-c-1	U	1	1	1			<2	
203	MSD 280-148877-c-1	U	1	1	1			<2	
204	280-148768-b-2 X	U	1	1	1			<2	
205	280-148813-d-1	U	1	1	1			<2	
206	280-148823-c-2	U	1	1	1			<2	
207	280-148823-c-3	U	1	1	1			<2	
208	280-148823-c-5	U	1	1	1			<2	
209	280-148823-c-6	U	1	1	1			<2	
210	280-148823-c-7	U	1	1	1			<2	
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	280-148823-c-8	U	1	1	1			<2	2222222221
212	280-148823-c-4	U	1	1	1			<2	
213	280-148902-c-5	U	1	1	1			<2	
214	MS 280-148902-c-5	U	1	1	1			<2	
215	MSD 280-148902-c-5	U	1	1	1			<2	
216	280-148902-c-9	U	1	1	1			<2	
217	280-148902-c-10	U	1	1	1			<2	
218	280-148956-d-7 X	U	1	1	1			<2	
219	280-148956-c-8 X	U	1	1	1			<2	
220	280-148956-c-9 X	U	1	1	1			<2	
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	U	1	1	1				
107	LCSD	U	1	1	1				
111	MB	U	1	1	1				
0	read baseline	RB	1	1	1				

Cup	Name	Type	R	Dil	Wt	Vial	Comment
221	280-148956-c-10	U	1	1	1		
222	280-148956-c-11	X U	1	1	1		
223	280-148956-c-12	X U	1	1	1		
224	280-148956-d-13	X U	1	1	1		
225	590-15186-a-3	X U	1	1	1		
226	MS 590-15186-a-3	U	1	1	1		
227	MSD 590-15186-a-3	U	1	1	1		
228	280-148956-d-14	U	1	1	1		
229	280-148956-c-15	U	1	1	1		
230	280-148978-b-1	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	X CCVL 500.0 ppb	U	1	1	1		
107	X CCV 2500.0 ppb	U	1	1	1		
111	X CCB	U	1	1	1		
0	X 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	280-149004-a-1	U	1	1	1		
232	280-149004-a-2	U	1	1	1		
233	280-149004-a-3	U	1	1	1		
234	280-149004-a-4	U	1	1	1		
235	280-149004-a-5	U	1	1	1		
236	280-148651-b-1	U	1	1	1		
204	280-148768-b-2	U	1	1	1		
237	280-148956-d-7	U	1	500	1		
238	280-148956-c-8	U	1	500	1		
220	280-148956-c-9	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	X CCVL 500.0 ppb	U	1	1	1		
107	X CCV 2500.0 ppb	U	1	1	1		
111	X CCB	U	1	1	1		
105	X CCVL 500.0 ppb	U	1	1	1		
107	X CCV 2500.0 ppb	U	1	1	1		
111	X 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	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
239	280-148956-c-11	U	1	500	1		
223	280-148956-c-12	U	1	1	1		
240	280-148956-d-13	U	1	500	1		
225	590-15186-a-3	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		

pH
<2
<2
<2
3 → 2 RD 05/26/21
<2
<2
<2
<2
<2

22222 2227

<2
<2
<2
<2
<2
<2
<2
<2
<2
<2

2222222222

<2 2

Initial pH=3, Final PH=<2 2

<2 2
<2 2

Sample Table for 052621

	Position	Identifier	Type	Cup Type
1	1:1	SYNC	SYNC	4 ml
2	1:2	CO	Carry over	4 ml
3	1:3	w	Blank	4 ml
4	1:4	W	Wash	4 ml
5	1:5	C1	Calibrant	4 ml
6	1:6	C2	Calibrant	4 ml
7	1:7	C3	Calibrant	4 ml
8	1:8	C4	Calibrant	4 ml
9	1:9	C5	Calibrant	4 ml
10	1:10	C6	Calibrant	4 ml
11	1:13	w	Blank	4 ml
12	1:14	W	Wash	4 ml
13	1:15	ICV 280-534740/7-A	Unknown	4 ml
14	1:16	ICB 280-534740/8-A	Unknown	4 ml
15	1:17	LCS 280-537419/1-A	Unknown	4 ml
16	1:18	MB 280-537419/2-A	Unknown	4 ml
17	1:19	280-148902-C-5-A	Unknown	4 ml
18	1:20	280-148902-C-5-B MS	Unknown	4 ml
19	1:21	280-148902-C-5-C MSD	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-148902-C-1-A	Unknown	4 ml
22	1:24	280-148902-C-2-A	Unknown	4 ml
23	1:25	280-148902-C-3-A	Unknown	4 ml
24	1:26	280-148902-C-4-A	Unknown	4 ml
25	1:27	280-148902-C-6-A	Unknown	4 ml
26	1:28	280-148902-C-7-A	Unknown	4 ml
27	1:29	280-148902-C-8-A	Unknown	4 ml
28	1:30	w	Blank	4 ml
29	1:31	CCV 280-534740/9-A	Unknown	4 ml
30	1:32	CCB 280-534740/10-A	Unknown	4 ml
31	1:33	280-148902-C-9-A	Unknown	4 ml
32	1:34	280-148902-C-10-A	Unknown	4 ml
33	1:35	580-103139-I-1-A	Unknown	4 ml
34	1:36	580-103139-I-1-B MS	Unknown	4 ml
35	1:37	580-103139-I-1-C MSD	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	580-103139-I-2-A	Unknown	4 ml
38	1:40	580-103139-I-3-A	Unknown	4 ml
39	1:41	580-103139-I-4-A	Unknown	4 ml
40	1:42	590-15186-A-3-A	Unknown	4 ml
41	1:43	580-103254-A-1-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-534740/9-A	Unknown	4 ml
44	1:46	CCB 280-534740/10-A	Unknown	4 ml

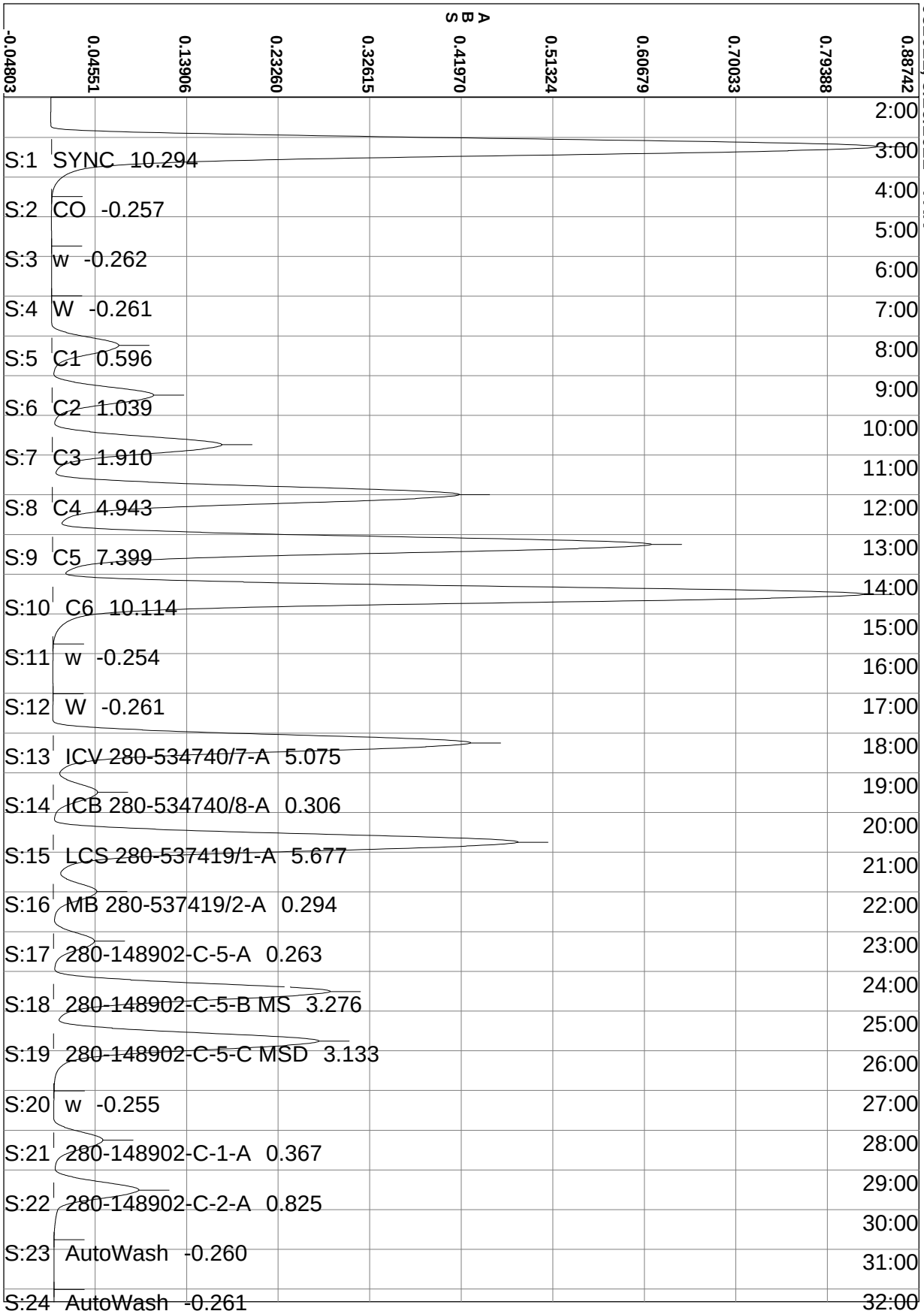
Sample Table for 052621

	Position	Identifier	Type	Cup Type
45	1:47	580-103254-A-2-A	Unknown	4 ml
46	1:48	580-103252-A-1-A	Unknown	4 ml
47	1:49	580-103252-A-2-A	Unknown	4 ml
48	1:50	580-103251-A-1-A	Unknown	4 ml
49	1:51	w	Blank	4 ml
50	1:52	w	Blank	4 ml
51	1:53	w	Blank	4 ml
52	1:54	w	Blank	4 ml
53	1:55	w	Blank	4 ml
54	1:56	CCV 280-534740/9-A	Unknown	4 ml
55	1:57	CCB 280-534740/10-A	Unknown	4 ml

Run Name: 052621
Configuration: TKN
Run date: 5/26/2021

	Position	Identifier	Type	Comme	Date	Time	otal	Raw Ht	TKN Cor Ht	mg/l
1	1:1	SYNC	SYNC	50;351.2	5/26/2021	4:34:22 PM	1	0.84304	0.84183	10.294
2	1:2	CO	Carry over		5/26/2021	4:34:52 PM	1	0.00154	0.00033	-0.257
3	1:3	w	Blank		5/26/2021	4:36:07 PM	1	0.00108	-0.00013	-0.262
4	1:4	W	Wash		5/26/2021	4:37:22 PM	1	0.00121	0.00000	-0.261
5	1:5	C1	Calibrant		5/26/2021	4:38:37 PM	1	0.06969	0.06831	0.596
6	1:6	C2	Calibrant		5/26/2021	4:39:52 PM	1	0.10520	0.10364	1.039
7	1:7	C3	Calibrant		5/26/2021	4:41:07 PM	1	0.17488	0.17314	1.910
8	1:8	C4	Calibrant		5/26/2021	4:42:22 PM	1	0.41692	0.41500	4.943
9	1:9	C5	Calibrant		5/26/2021	4:43:37 PM	1	0.61303	0.61093	7.399
10	1:10	C6	Calibrant		5/26/2021	4:44:52 PM	1	0.82969	0.82742	10.114
		Curve #:								1
		Curve Type:								Linear
		Correlation:								0.99969
		Intercept:								0.020795
		Linear coef:								0.079756
11	1:13	w	Blank		5/26/2021	4:46:07 PM	1	0.00297	0.00052	-0.254
12	1:14	W	Wash		5/26/2021	4:47:22 PM	1	0.00262	0.00000	-0.261
13	1:15	ICV 280-534740/7-A	Unknown		5/26/2021	4:48:37 PM	1	0.42827	0.42557	5.075
14	1:16	ICB 280-534740/8-A	Unknown		5/26/2021	4:49:52 PM	1	0.04796	0.04518	0.306
15	1:17	LCS 280-537419/1-A	Unknown		5/26/2021	4:51:07 PM	1	0.47646	0.47360	5.677
16	1:18	MB 280-537419/2-A	Unknown		5/26/2021	4:52:22 PM	1	0.04719	0.04426	0.294
17	1:19	280-148902-C-5-A	Unknown		5/26/2021	4:53:37 PM	1	0.04482	0.04181	0.263
18	1:20	280-148902-C-5-B MS	Unknown		5/26/2021	4:54:52 PM	1	0.28514	0.28205	3.276
19	1:21	280-148902-C-5-C MSD	Unknown		5/26/2021	4:56:07 PM	1	0.27383	0.27066	3.133
20	1:22	w	Blank		5/26/2021	4:57:22 PM	1	0.00371	0.00047	-0.255
21	1:23	280-148902-C-1-A	Unknown		5/26/2021	4:58:37 PM	1	0.05342	0.05010	0.367
22	1:24	280-148902-C-2-A	Unknown		5/26/2021	4:59:52 PM	1	0.08999	0.08659	0.825
23	0	AutoWash	AutoWash		5/26/2021	5:01:08 PM	1	0.00355	0.00007	-0.260
24	0	AutoWash	AutoWash		5/26/2021	5:02:23 PM	1	0.00356	0.00000	-0.261
25	1:25	280-148902-C-3-A	Unknown		5/26/2021	5:03:37 PM	1	0.08944	0.08581	0.815
26	1:26	280-148902-C-4-A	Unknown		5/26/2021	5:04:52 PM	1	0.02597	0.02228	0.019
27	1:27	280-148902-C-6-A	Unknown		5/26/2021	5:06:07 PM	1	0.09162	0.08786	0.841
28	1:28	280-148902-C-7-A	Unknown		5/26/2021	5:07:22 PM	1	0.04378	0.03995	0.240
29	1:29	280-148902-C-8-A	Unknown		5/26/2021	5:08:37 PM	1	0.16579	0.16190	1.769
30	1:30	w	Blank		5/26/2021	5:09:52 PM	1	0.00463	0.00067	-0.252
31	1:31	CCV 280-534740/9-A	Unknown		5/26/2021	5:11:07 PM	1	0.45061	0.44659	5.339
32	1:32	CCB 280-534740/10-A	Unknown		5/26/2021	5:12:22 PM	1	0.05257	0.04847	0.347
33	1:33	280-148902-C-9-A	Unknown		5/26/2021	5:13:37 PM	1	0.05405	0.04989	0.365
34	1:34	280-148902-C-10-A	Unknown		5/26/2021	5:14:52 PM	1	0.10180	0.09757	0.963
35	0	AutoWash	AutoWash		5/26/2021	5:16:07 PM	1	0.00439	0.00010	-0.260
36	0	AutoWash	AutoWash		5/26/2021	5:17:22 PM	1	0.00436	0.00000	-0.261
37	1:35	580-103139-I-1-A	Unknown		5/26/2021	5:18:37 PM	1	0.12287	0.11847	1.225
38	1:36	580-103139-I-1-B MS	Unknown		5/26/2021	5:19:52 PM	1	0.36023	0.35579	4.200

	Position	Identifier	Type	Comme	Date	Time	otal	Raw Ht	TKN Cor Ht	mg/l
39	1:37	580-103139-I-1-C MSD	Unknown		5/26/2021	5:21:07 PM	1	0.34591	0.34144	4.020
40	1:38	w	Blank		5/26/2021	5:22:22 PM	1	0.00503	0.00052	-0.254
41	1:39	580-103139-I-2-A	Unknown		5/26/2021	5:23:37 PM	1	0.13081	0.12626	1.322
42	1:40	580-103139-I-3-A	Unknown		5/26/2021	5:24:52 PM	1	0.04562	0.04104	0.254
43	1:41	580-103139-I-4-A	Unknown		5/26/2021	5:26:07 PM	1	0.04301	0.03839	0.221
44	1:42	590-15186-A-3-A	Unknown		5/26/2021	5:27:22 PM	1	0.68059	0.67593	8.214
45	1:43	580-103254-A-1-A	Unknown		5/26/2021	5:28:37 PM	1	0.05808	0.05339	0.409
46	1:44	w	Blank		5/26/2021	5:29:52 PM	1	0.00488	0.00015	-0.259
47	0	AutoWash	AutoWash		5/26/2021	5:31:07 PM	1	0.00474	-0.00002	-0.261
48	0	AutoWash	AutoWash		5/26/2021	5:32:22 PM	1	0.00481	0.00000	-0.261
49	1:45	CCV 280-534740/9-A	Unknown		5/26/2021	5:33:37 PM	1	0.44323	0.43839	5.236
50	1:46	CCB 280-534740/10-A	Unknown		5/26/2021	5:34:52 PM	1	0.05125	0.04637	0.321
51	1:47	580-103254-A-2-A	Unknown		5/26/2021	5:36:08 PM	1	0.05183	0.04691	0.327
52	1:48	580-103252-A-1-A	Unknown		5/26/2021	5:37:23 PM	1	0.05981	0.05485	0.427
53	1:49	580-103252-A-2-A	Unknown		5/26/2021	5:38:37 PM	1	0.05834	0.05335	0.408
54	1:50	580-103251-A-1-A	Unknown		5/26/2021	5:39:52 PM	1	0.07481	0.06977	0.614
55	1:51	w	Blank		5/26/2021	5:41:07 PM	1	0.00543	0.00036	-0.256
56	1:52	w	Blank		5/26/2021	5:42:22 PM	1	0.00524	0.00013	-0.259
57	1:53	w	Blank		5/26/2021	5:43:37 PM	1	0.00554	0.00039	-0.256
58	1:54	w	Blank		5/26/2021	5:44:52 PM	1	0.47439	0.46921	5.622
59	0	AutoWash	AutoWash		5/26/2021	5:46:07 PM	1	0.00570	0.00048	-0.255
60	0	AutoWash	AutoWash		5/26/2021	5:47:22 PM	1	0.00526	0.00000	-0.261
61	1:55	w	Blank		5/26/2021	5:48:37 PM	1	0.05048	0.04519	0.306
62	1:56	CCV 280-534740/9-A	Unknown		5/26/2021	5:49:52 PM	1	0.43157	0.42627	5.084
63	1:57	CCB 280-534740/10-A	Unknown		5/26/2021	5:51:07 PM	1	0.04986	0.04454	0.298
64	0	AutoWash	AutoWash		5/26/2021	5:52:22 PM	1	0.00533	0.00000	-0.261
65	0	AutoWash	AutoWash		5/26/2021	5:53:37 PM	1	0.00536	0.00000	-0.261


052621, 5/26/2021 - TKN
ABS
-0.04803
0.04551
0.13906
0.23260
0.32615
0.41970
0.51324
0.60679
0.70033
0.79388
0.88742
S:1 SYNC 10.294
S:2 CO -0.257
S:3 w -0.262
S:4 W -0.261
S:5 C1 0.596
S:6 C2 1.039
S:7 C3 1.910
S:8 C4 4.943
S:9 C5 7.399
S:10 C6 10.114
S:11 w -0.254
S:12 W -0.261
S:13 ICV 280-534740/7-A 5.075
S:14 ICB 280-534740/8-A 0.306
S:15 LCS 280-537419/1-A 5.677
S:16 MB 280-537419/2-A 0.294
S:17 280-148902-C-5-A 0.263
S:18 280-148902-C-5-B MS 3.276
S:19 280-148902-C-5-C MSD 3.133
S:20 w -0.255
S:21 280-148902-C-1-A 0.367
S:22 280-148902-C-2-A 0.825
S:23 AutoWash -0.260
S:24 AutoWash -0.261
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
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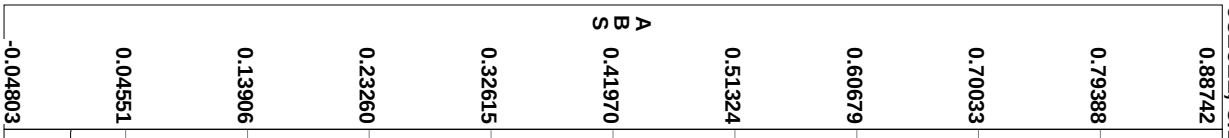

052621, 5/26/2021 - TKN

S:25	280-148902-C-3-A 0.815	33:00
S:26	280-148902-C-4-A 0.019	34:00
S:27	280-148902-C-6-A 0.841	35:00
S:28	280-148902-C-7-A 0.240	36:00
S:29	280-148902-C-8-A 1.769	37:00
S:30	w -0.252	38:00
S:31	CCV 280-534740/9-A 5.339	39:00
S:32	CCB 280-534740/10-A 0.347	40:00
S:33	280-148902-C-9-A 0.365	41:00
S:34	280-148902-C-10-A 0.963	42:00
S:35	AutoWash -0.260	43:00
S:36	AutoWash -0.261	44:00
S:37	580-103139-I-1-A 1.225	45:00
S:38	580-103139-I-1-B MS 4.200	46:00
S:39	580-103139-I-1-C MSD 4.020	47:00
S:40	w -0.254	48:00
S:41	580-103139-I-2-A 1.322	49:00
S:42	580-103139-I-3-A 0.254	50:00
S:43	580-103139-I-4-A 0.221	51:00
S:44	590-15186-A-3-A 8.214	52:00
S:45	580-103254-A-1-A 0.409	53:00
S:46	w -0.259	54:00
S:47	AutoWash -0.261	55:00
S:48	AutoWash -0.261	56:00
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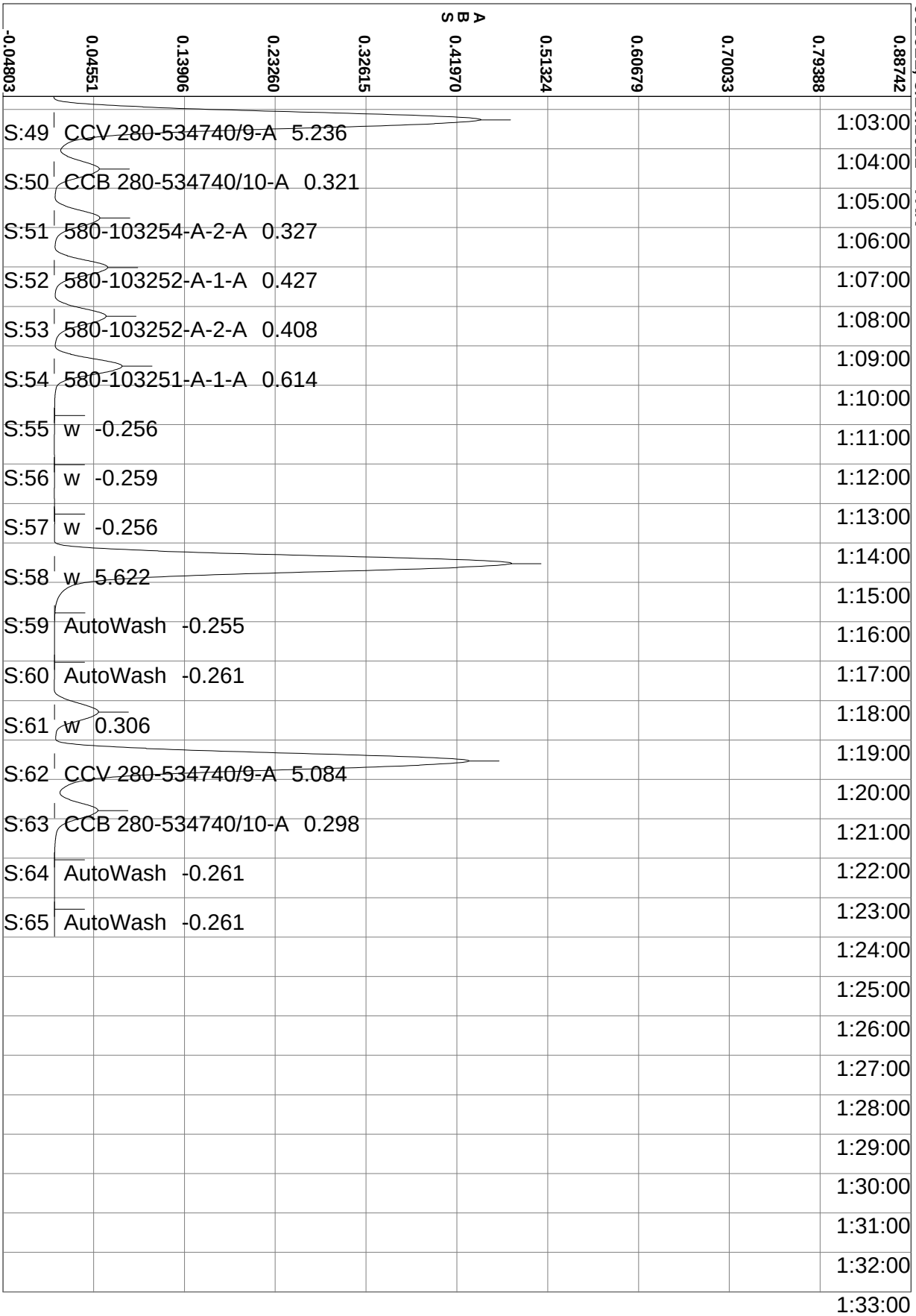
		58:00
		59:00
		1:00:00
		1:01:00
		1:02:00


052621, 5/26/2021 - TKN
ABS
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0.04551
0.13906
0.23260
0.32615
0.41970
0.51324
0.60679
0.70033
0.79388
0.88742
S:49 CCV 280-534740/9-A 5.236
S:50 CCB 280-534740/10-A 0.321
S:51 580-103254-A-2-A 0.327
S:52 580-103252-A-1-A 0.427
S:53 580-103252-A-2-A 0.408
S:54 580-103251-A-1-A 0.614
S:55 w -0.256
S:56 w -0.259
S:57 w -0.256
S:58 w 5.622
S:59 AutoWash -0.255
S:60 AutoWash -0.261
S:61 w 0.306
S:62 CCV 280-534740/9-A 5.084
S:63 CCB 280-534740/10-A 0.298
S:64 AutoWash -0.261
S:65 AutoWash -0.261
1:03:00
1:04:00
1:05:00
1:06:00
1:07:00
1:08:00
1:09:00
1:10:00
1:11:00
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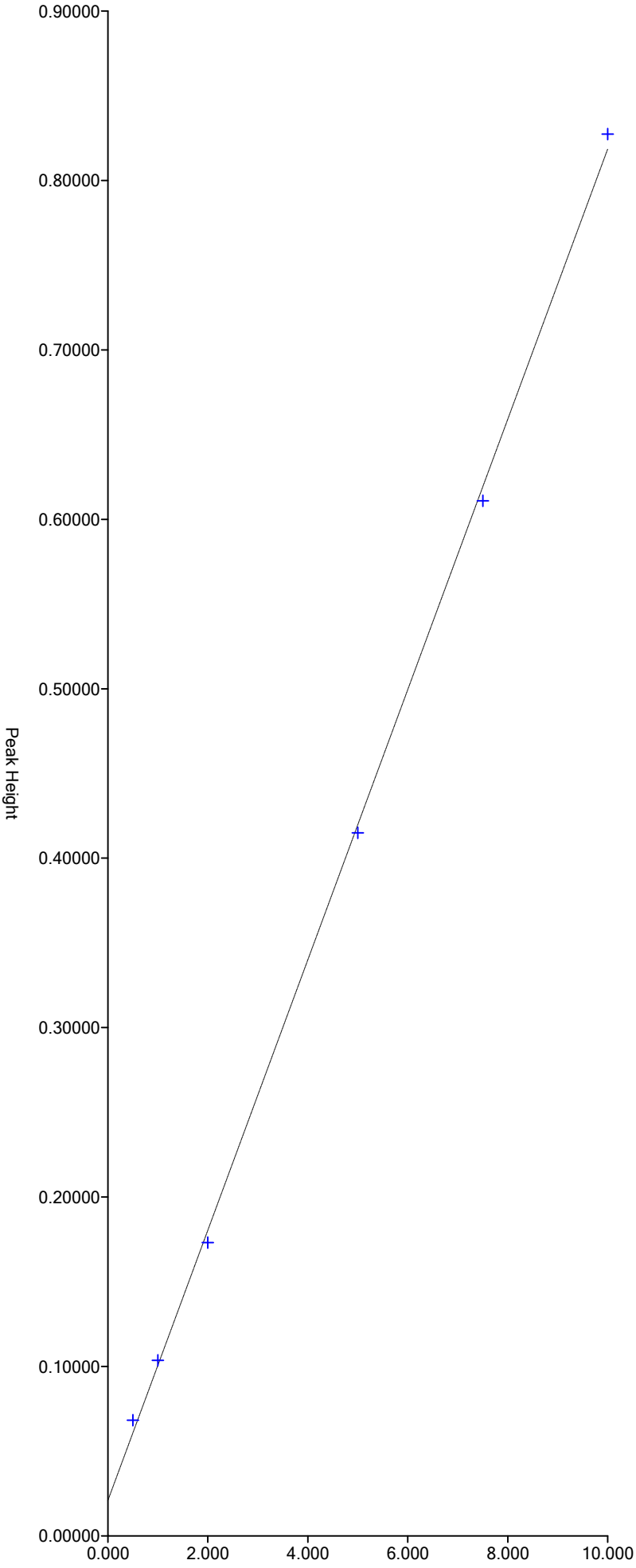
1:33:00

Calibration for TKN



Segment 1: Equation: y = 0.07976x + 0.02080
Correlation: 0.9997
X Range = 0.000 to 10.000
Y Range = 0.00000 to 7.20000

Run Results Report

Facility Name
Facility Location
Department
Operator Name zm
Operator ID zm
Platform FS III/IV/3100
Software Rev Code 240
Data system ID 54

Result path C:\FLOW_4\052521_B.RST
Sample table path C:\FLOW_4\052521.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 25-May-21
Time acquired 17:06

Date	Time	Cup	Name
25-May-21	12:31	109	SYNC
25-May-21	12:33	0	Carryover
25-May-21	12:35	0	Carryover (Statistics)
25-May-21	12:37	0	read baseline
25-May-21	12:39	101	Cal 0.00 ppb
25-May-21	12:41	102	Cal 50.0 ppb
25-May-21	12:43	103	Cal 100 ppb
25-May-21	12:45	104	Cal 500 ppb
25-May-21	12:47	105	Cal 1000 ppb
25-May-21	12:49	106	Cal 2500 ppb
25-May-21	12:51	107	Cal 5000 ppb
25-May-21	12:53	108	Cal 7500 ppb
25-May-21	12:55	109	Cal 10000 ppb
25-May-21	12:57	0	Blank
25-May-21	12:59	0	Read Baseline
25-May-21	13:01	110	5000 PPB NO2
25-May-21	13:03	111	ICV 5000 PPB
25-May-21	13:05	112	ICV 2000 PPB
25-May-21	13:07	0	ICB
25-May-21	13:09	0	Read Baseline
25-May-21	13:11	107	LCS
25-May-21	13:13	107	LCSD
25-May-21	13:15	0	MB
25-May-21	13:17	113	280-148742-A-1
25-May-21	13:19	114	ms 280-148742-A-1
25-May-21	13:21	115	msd 280-148742-A-1
25-May-21	13:23	116	280-148742-B-2
25-May-21	13:25	117	280-148742-B-3
25-May-21	13:27	118	280-148742-B-4
25-May-21	13:29	119	280-148787-D-2
25-May-21	13:31	120	280-148787-C-3
25-May-21	13:33	121	280-148787-D-4
25-May-21	13:35	122	280-148787-C-5
25-May-21	13:37	0	Rinse
25-May-21	13:39	0	Read Baseline
25-May-21	13:41	107	CCV 5000 ppb
25-May-21	13:43	105	CCVL 1000 ppb
25-May-21	13:45	0	CCB
25-May-21	13:47	0	Read Baseline
25-May-21	13:49	123	280-148856-C-1
25-May-21	13:51	124	280-148856-C-2
25-May-21	13:53	125	680-199084-G-2
25-May-21	13:55	126	ms 680-199084-G-2
25-May-21	13:57	127	msd 680-199084-G-2

Result path C:\FLOW_4\052521_B.RST
Sample table path C:\FLOW_4\052521.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 25-May-21
Time acquired 17:06

Date	Time	Cup	Name
25-May-21	13:59	128	280-148856-C-3
25-May-21	14:01	129	280-148911-K-2
25-May-21	14:03	130	680-199084-G-1
25-May-21	14:05	131	680-199084-F-3
25-May-21	14:07	132	680-199084-G-4
25-May-21	14:09	0	Rinse
25-May-21	14:11	0	Read Baseline
25-May-21	14:13	107	CCV 5000 ppb
25-May-21	14:15	105	CCVL 1000 ppb
25-May-21	14:17	0	CCB
25-May-21	14:19	0	Read Baseline
25-May-21	14:21	133	280-148696-B-1
25-May-21	14:23	134	280-148716-C-1
25-May-21	14:25	135	280-148915-F-1
25-May-21	14:27	136	280-148915-F-2
25-May-21	14:29	107	LCS
25-May-21	14:31	107	LCSD
25-May-21	14:33	0	MB
25-May-21	14:35	137	280-148801-a-1
25-May-21	14:37	138	ms 280-148801-a-1
25-May-21	14:39	139	msd 280-148801-a-1
25-May-21	14:41	140	280-148801-a-2
25-May-21	14:43	0	Rinse
25-May-21	14:45	0	Read Baseline
25-May-21	14:47	107	CCV 5000 ppb
25-May-21	14:49	105	CCVL 1000 ppb
25-May-21	14:51	0	CCB
25-May-21	14:53	0	Read Baseline
25-May-21	14:55	141	280-148801-b-3
25-May-21	14:57	142	280-148801-b-4
25-May-21	14:59	143	280-148801-b-9
25-May-21	15:01	144	280-148801-b-10
25-May-21	15:03	145	280-148801-b-11
25-May-21	15:05	146	d
25-May-21	15:07	147	d
25-May-21	15:09	148	280-148851-a-1
25-May-21	15:11	149	280-148525-a-11
25-May-21	15:13	150	ms 280-148525-a-11
25-May-21	15:15	151	msd 280-148525-a-11
25-May-21	15:17	0	Rinse
25-May-21	15:19	0	Read Baseline
25-May-21	15:21	107	CCV 5000 ppb
25-May-21	15:23	105	CCVL 1000 ppb
25-May-21	15:25	0	CCB
25-May-21	15:27	0	Read Baseline
25-May-21	15:29	152	280-148902-a-1
25-May-21	15:31	153	280-148902-a-2
25-May-21	15:33	154	280-148902-a-3
25-May-21	15:35	155	280-148902-a-4
25-May-21	15:37	156	280-148902-a-6
25-May-21	15:39	157	280-148902-a-7
25-May-21	15:41	0	Rinse
25-May-21	15:43	0	Read Baseline
25-May-21	15:45	107	CCV 5000 ppb
25-May-21	15:47	105	CCVL 1000 ppb
25-May-21	15:49	0	CCB
25-May-21	15:51	0	Read Baseline

Result path	C:\FLOW_4\052521_B.RST
Sample table path	C:\FLOW_4\052521.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	25-May-21
Time acquired	17:06

Date	Time	Cup	Name
25-May-21	15:53	158	280-148902-a-8
25-May-21	15:55	159	280-148902-a-9
25-May-21	15:57	160	280-148902-a-10
25-May-21	15:59	107	LCS
25-May-21	16:01	0	MB
25-May-21	16:03	201	280-148902-a-5
25-May-21	16:05	202	ms 280-148902-a-5
25-May-21	16:07	203	msd 280-148902-a-5
25-May-21	16:09	204	280-148877-a-8
25-May-21	16:11	205	280-148877-a-7
25-May-21	16:13	206	280-148877-a-6
25-May-21	16:15	0	Rinse
25-May-21	16:17	0	Read Baseline
25-May-21	16:19	107	CCV 5000 ppb
25-May-21	16:21	105	CCVL 1000 ppb
25-May-21	16:23	0	CCB
25-May-21	16:25	0	Read Baseline
25-May-21	16:27	207	280-148877-a-5
25-May-21	16:29	208	280-148877-a-4
25-May-21	16:31	209	280-148877-a-3
25-May-21	16:33	210	280-148877-a-2
25-May-21	16:35	211	280-148813-d-1
25-May-21	16:37	212	280-148813-f-1
25-May-21	16:39	213	280-148877-a-1
25-May-21	16:41	214	ms 280-148877-a-1
25-May-21	16:43	215	msd 280-148877-a-1
25-May-21	16:45	217	d
25-May-21	16:47	218	d
25-May-21	16:49	0	Rinse
25-May-21	16:51	0	Read Baseline
25-May-21	16:53	107	CCV 5000 ppb
25-May-21	16:55	105	CCVL 1000 ppb
25-May-21	16:57	0	CCB
25-May-21	16:59	0	Read Baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	zm
Operator ID	zm
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\052521_B.RST
Sample table path	C:\FLOW_4\052521.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	25-May-21
Time acquired	17:06

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2098009	10381.311	HI			
Carryover	2549	14.247				
Carryover	678	6.238				
(Statistics)				1613	10.242	N
read baseline	0	3.339	BL			
Cal 0.00 ppb	1164	8.318				
Cal 50.0 ppb	11465	52.431				
Cal 100 ppb	22620	100.273				
Cal 500 ppb	117710	511.335				
Cal 1000 ppb	217469	948.769				
Cal 2500 ppb	579796	2590.888				
Cal 5000 ppb	1052852	4860.763				
Cal 7500 ppb	1592087	7622.093				
Cal 10000 ppb	2021780	9955.129				
Blank	853	6.987				
Read Baseline	0	3.339	BL			
5000 PPB NO2	737496	3331.740				
ICV 5000 PPB	1125888	5223.915				
ICV 2000 PPB	432552	1913.468				
ICB	-92	2.945				
Read Baseline	0	3.339	BL			
LCS	1072771	4959.464				
LCSD	1038194	4788.285				
MB	57	3.585				
280-148742-A-1	11245	51.487				
ms 280-148742-A-1	744839	3366.621				
msd 280-148742-A-1	735616	3322.813				
280-148742-B-2	1493807	71050.094				
280-148742-B-3	1450304	68780.930				
280-148742-B-4	1538963	73418.273				
280-148787-D-2	2029	12.021				
280-148787-C-3	1107	8.074				
280-148787-D-4	1708716	8243.705				
280-148787-C-5	1706841	8233.642				
Rinse	57	3.582				
Read Baseline	0	3.339	BL			
CCV 5000 ppb	1097423	5081.974				
CCVL 1000 ppb	227813	994.491				
CCB	284	4.553				
Read Baseline	0	3.339	BL			
280-148856-C-1	1364981	6436.537				
280-148856-C-2	1245900	5828.033				
680-199084-G-2	230629	1006.946				
ms 680-199084-G-2	1065442	4923.118				
msd 680-199084-G-2	1092411	5057.036				

Result path	C:\FLOW_4\052521_B.RST
Sample table path	C:\FLOW_4\052521.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	25-May-21
Time acquired	17:06

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-148856-C-3	1049137	4842.378			
280-148911-K-2	793013	3596.321			
680-199084-G-1	97448	423.262			
680-199084-F-3	97053	421.546			
680-199084-G-4	283342	1241.092			
Rinse	200	4.196			
Read Baseline	0	3.339	BL		
CCV 5000 ppb	1075702	4974.010			
CCVL 1000 ppb	231345	1010.115			
CCB	562	5.745			
Read Baseline	0	3.339	BL		
280-148696-B-1	23440	103.794			
280-148716-C-1	1291281	60588.637			
280-148915-F-1	5101	25.172			
280-148915-F-2	4615	23.088			
LCS	1097302	5081.377			
LCSD	1058797	4890.193			
MB	-733	0.204			
280-148801-a-1	1500661	7140.871			
ms 280-148801-a-1	2185560	10875.350	HI		
msd 280-148801-a-1	2103430	10411.757	HI		
280-148801-a-2	1304490	6126.301	FL		
Rinse	216	4.265			
Read Baseline	0	3.339	BL		
CCV 5000 ppb	1068092	4936.257			
CCVL 1000 ppb	220794	963.456			
CCB	1701	10.617			
Read Baseline	0	3.339	BL		
280-148801-b-3	987881	4540.560			
280-148801-b-4	983869	4520.878			
280-148801-b-9	452061	2002.430			
280-148801-b-10	739187	333976.844			
280-148801-b-11	1459914	6928.118			
d	3823	19.697			
d	2555	14.271			
280-148851-a-1	16580	74.356			
280-148525-a-11	82177	357.057			
ms 280-148525-a-11	965325	4430.026			
msd 280-148525-a-11	978853	4496.280			
Rinse	-161	2.649			
Read Baseline	0	3.339	BL		
CCV 5000 ppb	1093120	5060.566			
CCVL 1000 ppb	230167	1004.901			
CCB	3593	18.715			
Read Baseline	0	3.339	BL		
280-148902-a-1	792707	3594.857	UM		
280-148902-a-2	414801	1832.734	UM		
280-148902-a-3	7750	36.515			
280-148902-a-4	711330	32077.180	UM		
280-148902-a-6	352137	1549.336	UM		
280-148902-a-7	1106054	5124.960	UM		
Rinse	19319	86.107			
Read Baseline	0	3.339	BL		
CCV 5000 ppb	1078335	4987.085	UM		
CCVL 1000 ppb	223639	976.034	UM		
CCB	4132	21.024			
Read Baseline	0	3.339	BL		

Result path C:\FLOW_4\052521_B.RST
Sample table path C:\FLOW_4\052521.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 25-May-21
Time acquired 17:06

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-148902-a-8	-161	2.649			
280-148902-a-9	720925	3253.144	UM		
280-148902-a-10	616116	2760.109			
LCS	1098438	5087.030			
MB	365	4.901			
280-148902-a-5	3256	17.274			
ms 280-148902-a-5	890510	4065.723			
msd 280-148902-a-5	893967	4082.475			
280-148877-a-8	330141	1450.453			
280-148877-a-7	1500589	14280.993			
280-148877-a-6	1364522	32170.877			
Rinse	145	3.960			
Read Baseline	0	3.339	BL		
CCV 5000 ppb	1038095	4787.794			
CCVL 1000 ppb	236391	1032.454			
CCB	587	5.850			
Read Baseline	0	3.339	BL		
280-148877-a-5	900210	41127.520			
280-148877-a-4	1987963	9767.256			
280-148877-a-3	534977	2383.228			
280-148877-a-2	6363	30.574			
280-148813-d-1	1714512	16549.637			
280-148813-f-1	1750571	16937.789			
280-148877-a-1	11574	52.897			
ms 280-148877-a-1	876351	3997.178			
msd 280-148877-a-1	867084	3952.385			
d	906239	4142.014			
d	1078167	4986.247			
Rinse	1316	8.970			
Read Baseline	0	3.339	BL		
CCV 5000 ppb	1032513	4760.232			
CCVL 1000 ppb	234941	1026.034			
CCB	-114	2.850			
Read Baseline	0	3.339	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\052521_B.RST
Date: 25-May-21
Operator: zm

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2098009	10381.310547	HI
2	0	Carryover	1	CO	1	1	2549	14.246524	
3	0	Carryover	2	CO	1	1	678	6.238008	
B	0	read baseline	1	RB	1	1	0	3.339135	BL
5	101	Cal 0.00 ppb	1	C	1	1	1164	8.318176	
6	102	Cal 50.0 ppb	1	C	1	1	11465	52.430504	
7	103	Cal 100 ppb	1	C	1	1	22620	100.273140	
8	104	Cal 500 ppb	1	C	1	1	117710	511.335114	
9	105	Cal 1000 ppb	1	C	1	1	217469	948.769043	
10	106	Cal 2500 ppb	1	C	1	1	579796	2590.888184	
11	107	Cal 5000 ppb	1	C	1	1	1052852	4860.762695	
12	108	Cal 7500 ppb	1	C	1	1	1592087	7622.092773	
13	109	Cal 10000 ppb	1	C	1	1	2021780	9955.128906	
14	0	Blank	1	BLNK	1	1	853	6.986922	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
16	110	5000 PPB NO2	1	U	1	1	737496	3331.739990	
17	111	ICV 5000 PPB	1	CCV	1	1	1125888	5223.914551	
18	112	ICV 2000 PPB	1	CCV	1	1	432552	1913.468384	
19	0	ICB	1	U	1	1	-92	2.944862	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
21	107	LCS	1	U	1	1	1072771	4959.464355	
22	107	LCSD	1	U	1	1	1038194	4788.284668	
23	0	MB	1	U	1	1	57	3.584619	
24	113	280-148742-A-1	1	U	1	1	11245	51.487148	
25	114	ms 280-148742-A-1	1	U	1	1	744839	3366.621338	
26	115	msd 280-148742-A-1	1	U	1	1	735616	3322.813477	
27	116	280-148742-B-2	1	U	10	1	1493807	71050.093750	
28	117	280-148742-B-3	1	U	10	1	1450304	68780.929688	
29	118	280-148742-B-4	1	U	10	1	1538963	73418.273438	
30	119	280-148787-D-2	1	U	1	1	2029	12.021184	
31	120	280-148787-C-3	1	U	1	1	1107	8.074244	
32	121	280-148787-D-4	1	U	1	1	1708716	8243.705078	
33	122	280-148787-C-5	1	U	1	1	1706841	8233.641602	
34	0	Rinse	1	U	1	1	57	3.582408	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
36	107	CCV 5000 ppb	1	CCV	1	1	1097423	5081.974121	
37	105	CCVL 1000 ppb	1	CCV	1	1	227813	994.491394	
38	0	CCB	1	U	1	1	284	4.552888	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
40	123	280-148856-C-1	1	U	1	1	1364981	6436.536621	
41	124	280-148856-C-2	1	U	1	1	1245900	5828.033203	
42	125	680-199084-G-2	1	U	1	1	230629	1006.946045	
43	126	ms 680-199084-G-2	1	U	1	1	1065442	4923.117676	
44	127	msd 680-199084-G-2	1	U	1	1	1092411	5057.036133	
45	128	280-148856-C-3	1	U	1	1	1049137	4842.377930	
46	129	280-148911-K-2	1	U	1	1	793013	3596.321045	
47	130	680-199084-G-1	1	U	1	1	97448	423.261627	
48	131	680-199084-F-3	1	U	1	1	97053	421.545532	
49	132	680-199084-G-4	1	U	1	1	283342	1241.092285	
50	0	Rinse	1	U	1	1	200	4.196226	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
52	107	CCV 5000 ppb	1	CCV	1	1	1075702	4974.010254	
53	105	CCVL 1000 ppb	1	CCV	1	1	231345	1010.114502	
54	0	CCB	1	U	1	1	562	5.744922	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
56	133	280-148696-B-1	1	U	1	1	23440	103.793610	
57	134	280-148716-C-1	1	U	10	1	1291281	60588.636719	
58	135	280-148915-F-1	1	U	1	1	5101	25.171770	
59	136	280-148915-F-2	1	U	1	1	4615	23.087616	
60	107	LCS	1	U	1	1	1097302	5081.376953	
61	107	LCSD	1	U	1	1	1058797	4890.192871	
62	0	MB	1	U	1	1	-733	0.203825	
63	137	280-148801-a-1	1	U	1	1	1500661	7140.871094	
64	138	ms 280-148801-a-1	1	U	1	1	2185560	10875.349609	HI
65	139	msd 280-148801-a-1	1	U	1	1	2103430	10411.756836	HI
66	140	280-148801-a-2	1	U	1	1	1304490	6126.301270	FL
67	0	Rinse	1	U	1	1	216	4.264629	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
69	107	CCV 5000 ppb	1	CCV	1	1	1068092	4936.257324	
70	105	CCVL 1000 ppb	1	CCV	1	1	220794	963.456360	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	0	CCB	1	U	1	1	1701	10.616977	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
73	141	280-148801-b-3	1	U	1	1	987881	4540.560059	
74	142	280-148801-b-4	1	U	1	1	983869	4520.877930	
75	143	280-148801-b-9	1	U	1	1	452061	2002.429932	
76	144	280-148801-b-10	1	U	100	1	739187	333976.843750	
77	145	280-148801-b-11	1	U	1	1	1459914	6928.117676	
78	146	d	1	U	1	1	3823	19.697189	
79	147	d	1	U	1	1	2555	14.271375	
80	148	280-148851-a-1	1	U	1	1	16580	74.356415	
81	149	280-148525-a-11	1	U	1	1	82177	357.056976	
82	150	ms 280-148525-a-11	1	U	1	1	965325	4430.025879	
83	151	msd 280-148525-a-11	1	U	1	1	978853	4496.279785	
84	0	Rinse	1	U	1	1	-161	2.649440	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
86	107	CCV 5000 ppb	1	CCV	1	1	1093120	5060.566406	
87	105	CCVL 1000 ppb	1	CCV	1	1	230167	1004.901489	
88	0	CCB	1	U	1	1	3593	18.715069	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
90	152	280-148902-a-1	1	U	1	1	792707	3594.857422	UM
91	153	280-148902-a-2	1	U	1	1	414801	1832.734253	UM
92	154	280-148902-a-3	1	U	1	1	7750	36.514767	
93	155	280-148902-a-4	1	U	10	1	711330	32077.179688	UM
94	156	280-148902-a-6	1	U	1	1	352137	1549.335938	UM
95	157	280-148902-a-7	1	U	1	1	1106054	5124.959961	UM
96	0	Rinse	1	U	1	1	19319	86.107147	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
98	107	CCV 5000 ppb	1	CCV	1	1	1078335	4987.085449	UM
99	105	CCVL 1000 ppb	1	CCV	1	1	223639	976.034180	UM
100	0	CCB	1	U	1	1	4132	21.023706	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
102	158	280-148902-a-8	1	U	1	1	-161	2.648906	
103	159	280-148902-a-9	1	U	1	1	720925	3253.144287	UM
104	160	280-148902-a-10	1	U	1	1	616116	2760.109131	
105	107	LCS	1	U	1	1	1098438	5087.029785	
106	0	MB	1	U	1	1	365	4.901240	
107	201	280-148902-a-5	1	U	1	1	3256	17.273621	
108	202	ms 280-148902-a-5	1	U	1	1	890510	4065.722900	
109	203	msd 280-148902-a-5	1	U	1	1	893967	4082.474609	
110	204	280-148877-a-8	1	U	1	1	330141	1450.453491	
111	205	280-148877-a-7	1	U	2	1	1500589	14280.993164	
112	206	280-148877-a-6	1	U	5	1	1364522	32170.876953	
113	0	Rinse	1	U	1	1	145	3.960361	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
115	107	CCV 5000 ppb	1	CCV	1	1	1038095	4787.794434	
116	105	CCVL 1000 ppb	1	CCV	1	1	236391	1032.454102	
117	0	CCB	1	U	1	1	587	5.849729	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
119	207	280-148877-a-5	1	U	10	1	900210	41127.519531	
120	208	280-148877-a-4	1	U	1	1	1987963	9767.255859	
121	209	280-148877-a-3	1	U	1	1	534977	2383.227783	
122	210	280-148877-a-2	1	U	1	1	6363	30.574001	
123	211	280-148813-d-1	1	U	2	1	1714512	16549.636719	
124	212	280-148813-f-1	1	U	2	1	1750571	16937.789062	
125	213	280-148877-a-1	1	U	1	1	11574	52.897038	
126	214	ms 280-148877-a-1	1	U	1	1	876351	3997.178223	
127	215	msd 280-148877-a-1	1	U	1	1	867084	3952.385254	
128	217	d	1	U	1	1	906239	4142.014160	
129	218	d	1	U	1	1	1078167	4986.246582	
130	0	Rinse	1	U	1	1	1316	8.970091	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL
132	107	CCV 5000 ppb	1	CCV	1	1	1032513	4760.231934	
133	105	CCVL 1000 ppb	1	CCV	1	1	234941	1026.033691	
134	0	CCB	1	U	1	1	-114	2.850351	
B	0	Read Baseline	1	RB	1	1	0	3.339135	BL

Nitrate as N:Calibration 1: Peak 5-135

File name: C:\FLOW_4\052521_B.RST
Date: 25-May-21
Operator: zm

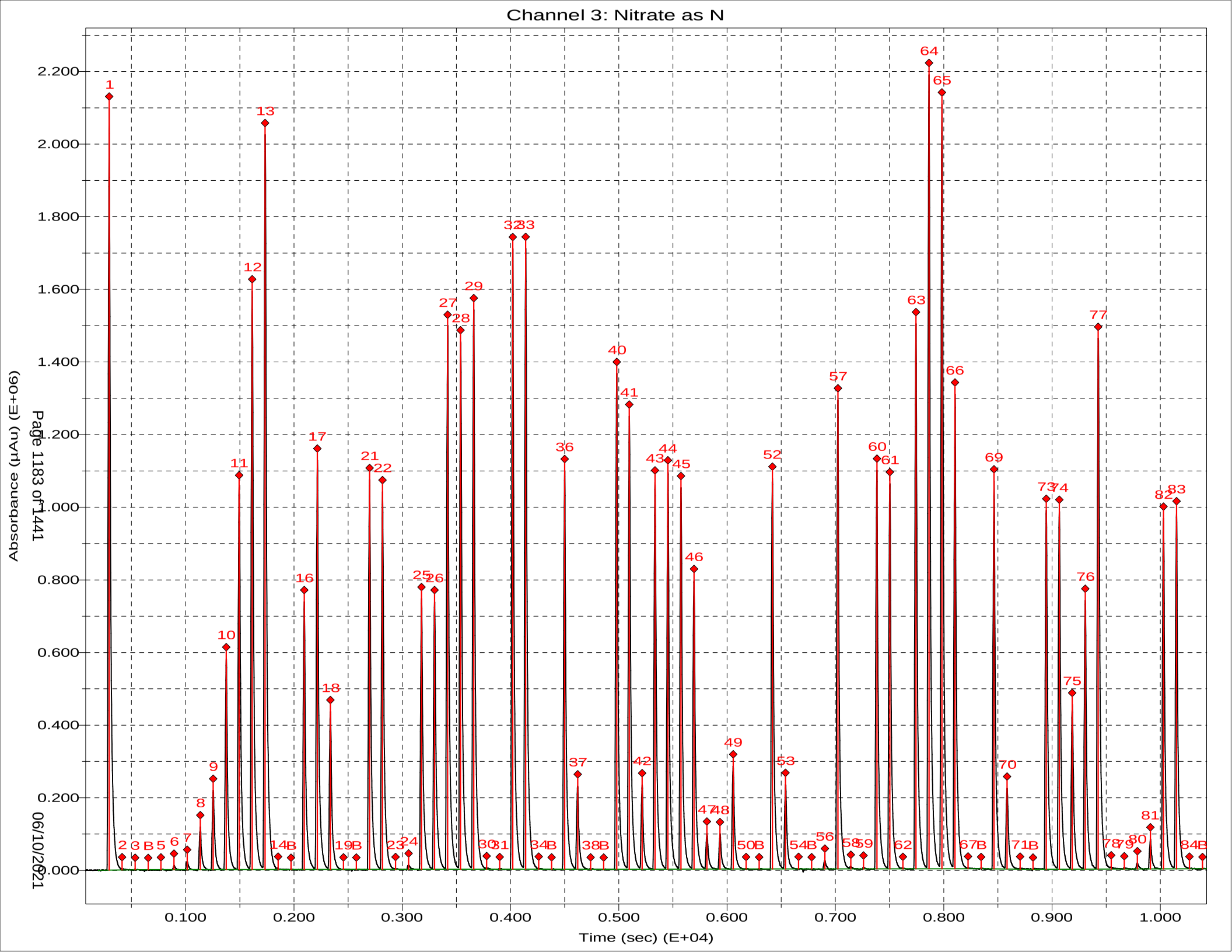
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	1163.733398
*	Cal 50.0 ppb	50.000000	11465.154297
*	Cal 100 ppb	100.000000	22619.896484
*	Cal 500 ppb	500.000000	117710.484375
*	Cal 1000 ppb	1000.000000	217469.015625
*	Cal 2500 ppb	2500.000000	579795.687500
*	Cal 5000 ppb	5000.000000	1052852.500000
*	Cal 7500 ppb	7500.000000	1592086.625000
*	Cal 10000 ppb	10000.000000	2021779.500000

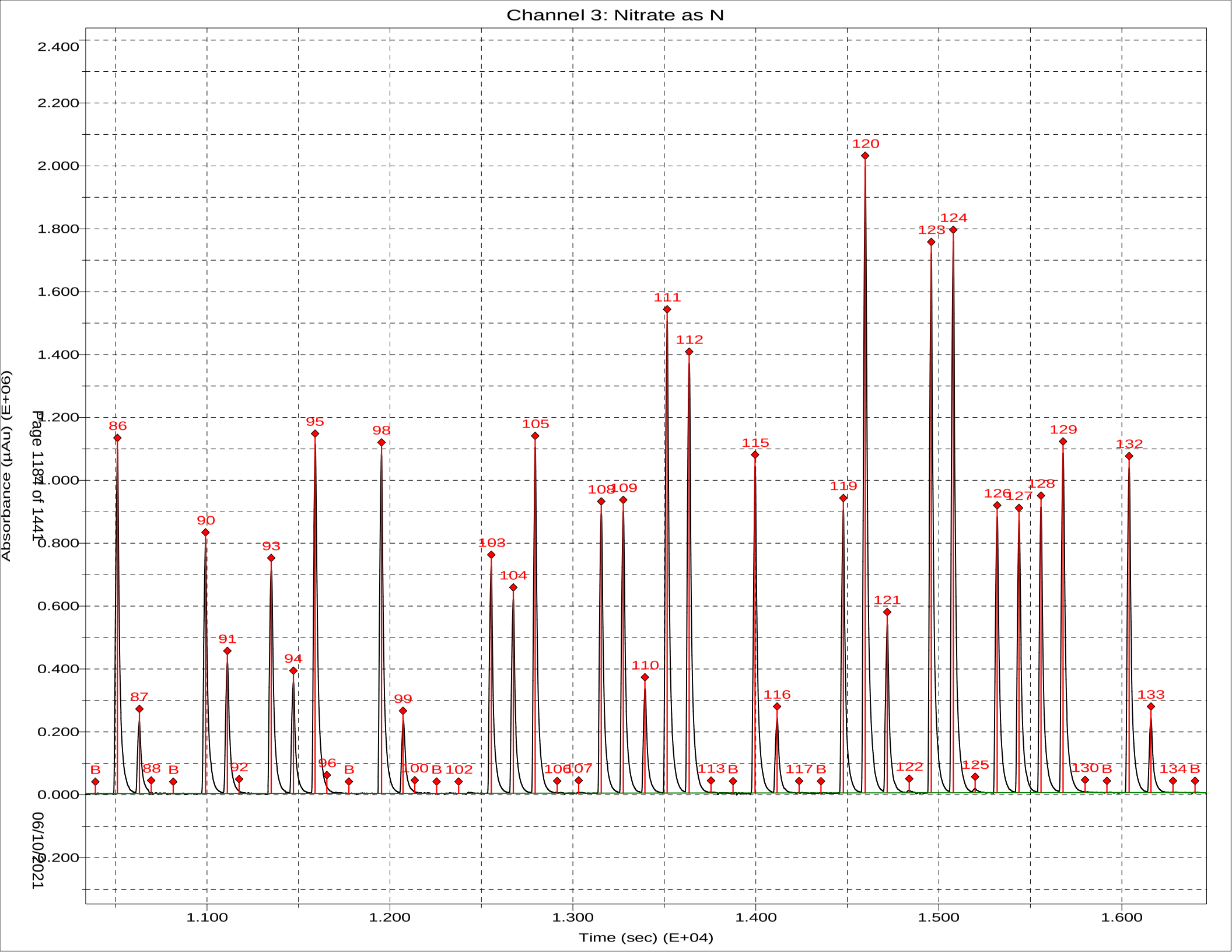
Calib Coef:
x=cyy+by+a
a: (intercept) 3.3391e+00
b: 4.2781e-03
c: 3.1861e-10

Corr Coef: 0.999784

Carryover: 0.122%

No Drift Peaks


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1183 of 1441
06/10/2021
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
0.100
0.200
0.300
0.400
0.500
0.600
0.700
0.800
0.900
1.000


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
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
1.100
1.200
1.300
1.400
1.500
1.600
B
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B
98
99
100
B
102
103
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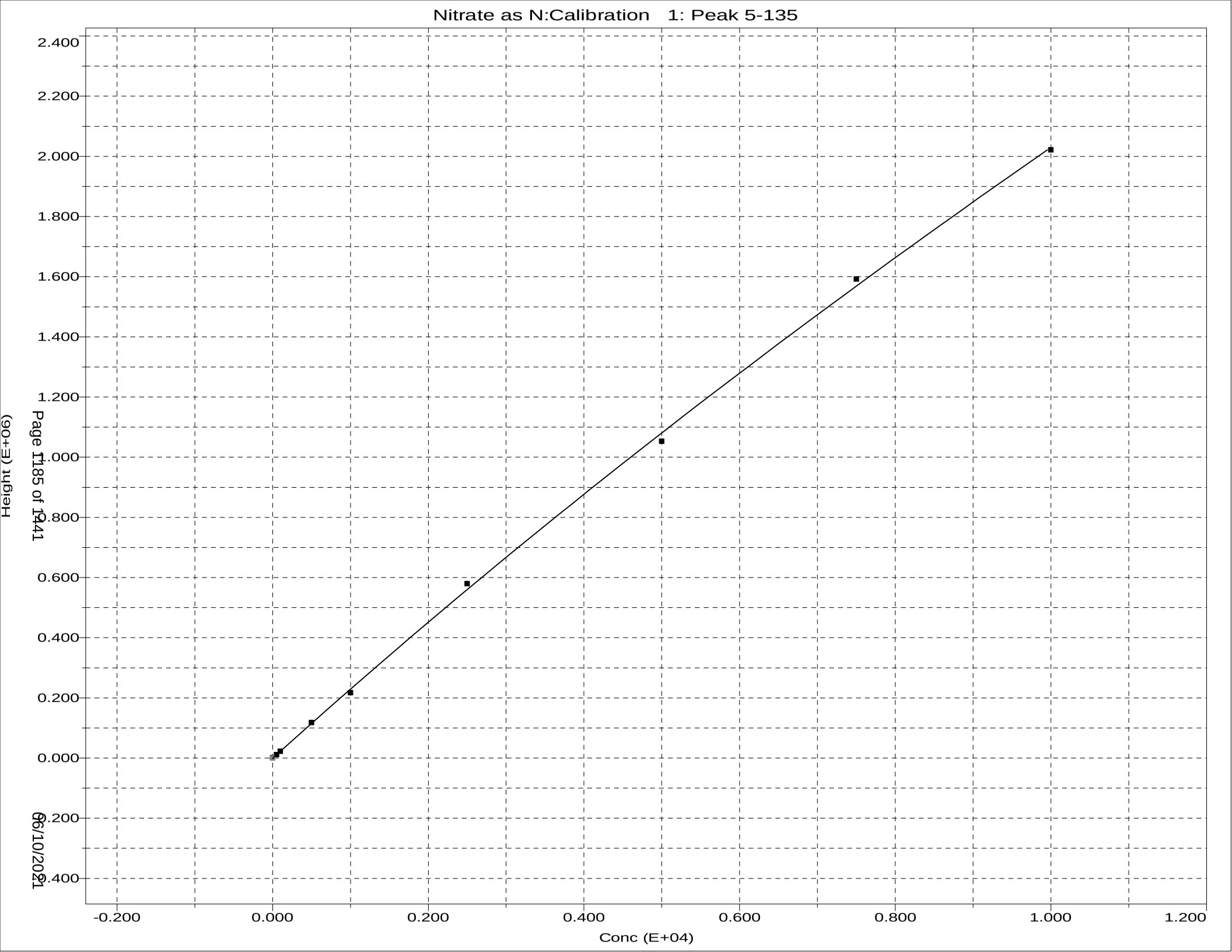
134
B
Page 1184 of 1441
06/10/2021


Nitrate as N:Calibration 1: Peak 5-135
Height (E+06)
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 25-May-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		
107	LCSD	U	1	1	1		pH
0	MB	U	1	1	1		
113	280-148742-A-1	U	1	1	1	<2	
114	ms 280-148742-A-1	U	1	1	1	<2	
115	msd 280-148742-A-1	U	1	1	1	<2	
116	280-148742-B-2	U	1	10	1	<2	
117	280-148742-B-3	U	1	10	1	<2	
118	280-148742-B-4	U	1	10	1	<2	
119	280-148787-D-2	U	1	1	1	<2	
120	280-148787-C-3	U	1	1	1	<2	
121	280-148787-D-4	U	1	1	1	<2	
122	280-148787-C-5	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		
123	280-148856-C-1	U	1	1	1	<2	
124	280-148856-C-2	U	1	1	1	<2	
125	680-199084-G-2	U	1	1	1	<2	
126	ms 680-199084-G-2	U	1	1	1	<2	
127	msd 680-199084-G-2	U	1	1	1	<2	
128	280-148856-C-3	U	1	1	1	<2	
129	280-148911-K-2	U	1	1	1	<2	
130	680-199084-G-1	U	1	1	1	<2	
131	680-199084-F-3	U	1	1	1	<2	
132	680-199084-G-4	U	1	1	1	<2	
0	Rinse	U	1	1	1	<2	
0	Read Baseline	RB	1	1	1	<2	
107	CCV 5000 ppb	CCV	1	1	1	<2	
105	CCVL 1000 ppb	CCV	1	1	1	<2	
0	CCB	U	1	1	1	<2	
0	Read Baseline	RB	1	1	1	<2	
133	280-148696-B-1	U	1	1	1	<2	

Cup	Name	Type	R	Dil	Wt	Vial	Comment
134	280-148716-C-1	U	1		10	1	
135	280-148915-F-1	U	1		1	1	
136	280-148915-F-2	U	1		1	1	
107	LCS	U	1		1	1	
107	LCSD	U	1		1	1	
0	MB	U	1		1	1	
137	280-148801-a-1	U	1		1	1	
138	ms 280-148801-a-1	U	1		1	1	
139	msd 280-148801-a-1	U	1		1	1	
140	280-148801-a-2	U	1		1	1	
0	Rinse	U	1		1	1	
0	Read Baseline	RB	1		1	1	
107	CCV 5000 ppb	CCV	1		1	1	
105	CCVL 1000 ppb	CCV	1		1	1	
0	CCB	U	1		1	1	
0	Read Baseline	RB	1		1	1	
141	280-148801-b-3	U	1		1	1	
142	280-148801-b-4	U	1		1	1	
143	280-148801-b-9	U	1		1	1	
144	280-148801-b-10	U	1		100	1	
145	280-148801-b-11	U	1		1	1	
146	d	U	1		1	1	
147	d	U	1		1	1	
148	280-148851-a-1	U	1		1	1	
149	280-148525-a-11	U	1		1	1	
150	ms 280-148525-a-11	U	1		1	1	
151	msd 280-148525-a-11	U	1		1	1	
0	Rinse	U	1		1	1	
0	Read Baseline	RB	1		1	1	
107	CCV 5000 ppb	CCV	1		1	1	
105	CCVL 1000 ppb	CCV	1		1	1	
0	CCB	U	1		1	1	
0	Read Baseline	RB	1		1	1	
152	280-148902-a-1	U	1		1	1	
153	280-148902-a-2	U	1		1	1	
154	280-148902-a-3	U	1		1	1	
155	280-148902-a-4	U	1		10	1	
156	280-148902-a-6	U	1		1	1	
157	280-148902-a-7	U	1		1	1	
0	Rinse	U	1		1	1	
0	Read Baseline	RB	1		1	1	
107	CCV 5000 ppb	CCV	1		1	1	
105	CCVL 1000 ppb	CCV	1		1	1	
0	CCB	U	1		1	1	
0	Read Baseline	RB	1		1	1	
158	280-148902-a-8	U	1		1	1	
159	280-148902-a-9	U	1		1	1	
160	280-148902-a-10	U	1		1	1	
107	LCS	U	1		1	1	
0	MB	U	1		1	1	
201	280-148902-a-5	U	1		1	1	
202	ms 280-148902-a-5	U	1		1	1	
203	msd 280-148902-a-5	U	1		1	1	
204	280-148877-a-8	U	1		1	1	
205	280-148877-a-7	U	1		2	1	
206	280-148877-a-6	U	1		5	1	
0	Rinse	U	1		1	1	
0	Read Baseline	RB	1		1	1	
107	CCV 5000 ppb	CCV	1		1	1	
105	CCVL 1000 ppb	CCV	1		1	1	

Cup	Name	Type	R	Dil	Wt	Vial	Comment
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
207	280-148877-a-5	U	1	10	1	C2	
208	280-148877-a-4	U	1	1	1	C2	
209	280-148877-a-3	U	1	1	1	C2	
210	280-148877-a-2	U	1	1	1	C2	
211	280-148813-d-1	U	1	2	1	C2	
212	280-148813-f-1	U	1	2	1	C2	
213	280-148877-a-1	U	1	1	1	7	Unpreserved
214	ms 280-148877-a-1	U	1	1	1	C2	
215	msd 280-148877-a-1	U	1	1	1	C2	
217	d	U	1	1	1		
218	d 5000 ppb NO2	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

General Chemistry Raw Data Report

Job ID: 280-148902-1

Batch: 537223 **Analyst Initials: SaH**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-537217/1-A **Analysis Date: May 24, 2021 11:19**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.2	mg/L	50 mL	50 mL

Lab Sample ID: LCSD 280-537217/2-A **Analysis Date: May 24, 2021 11:19**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	14.4	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-537217/3-A **Analysis Date: May 24, 2021 11:19**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	-0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-3-A **Analysis Date: May 24, 2021 11:19**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	3.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-4-A **Analysis Date: May 24, 2021 11:19**

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:	SAH	SOP Information:	
Date:	5/24/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	920
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.70	20	8.70	904.000
CAL	5	8.70	17.00	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	932
Expiration Date:	8/26/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.60	20	8.60	912.000
ICV	5	8.60	16.70	20	8.10	952.000

TALS Raw Data Report

Job Number: 280-148783-1
LIMS Batch: 537223
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537217/1-A** Inj Date: 5/24/2021 11:19:00AM 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	82	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-537217/2-A** Inj Date: 5/24/2021 11:19:00AM 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	77	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-537217/3-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 4 Lab ID: **280-148841-E-1-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 5 Lab ID: **280-148841-E-1-B MS** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		10.4 mg/L	mg/L	56	44 110		
Sulfide as H2S		11.05 mg/L	mg/L				

RS# 6 Lab ID: **280-148841-E-1-C MSD** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	86	44 110	42	20
Sulfide as H2S		17 mg/L	mg/L				

RS# 7 Lab ID: **280-148783-D-4-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-148841-1
LIMS Batch: 537223
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537217/1-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	82	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-537217/2-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.4 mg/L	mg/L	77	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-537217/3-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

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# 4 Lab ID: **280-148841-E-1-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

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# 5 Lab ID: **280-148841-E-1-B MS** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		10.4 mg/L	mg/L	56	44 110		
Sulfide as H2S		11.05 mg/L	mg/L				

RS# 6 Lab ID: **280-148841-E-1-C MSD** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	86	44 110	42	20
Sulfide as H2S		17 mg/L	mg/L				

RS# 8 Lab ID: **280-148841-E-2-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		00000003 mg/L	1.6 J mg/L				
Sulfide as H2S		00000003 mg/L	1.7 J mg/L				

RS# 9 Lab ID: **280-148841-E-3-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

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# 10 Lab ID: **280-148841-E-4-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

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: **280-148841-E-5-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034_Calc

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: 280-148902-1
LIMS Batch: 537223
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537217/1-A** Inj Date: 5/24/2021 11:19:00AM 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	82	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-537217/2-A** Inj Date: 5/24/2021 11:19:00AM 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	77	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-537217/3-A** Inj Date: 5/24/2021 11:19:00AM 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# 4 Lab ID: **280-148841-E-1-A** Inj Date: 5/24/2021 11:19:00AM 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# 5 Lab ID: **280-148841-E-1-B MS** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		10.4 mg/L	mg/L	56	44 110		
Sulfide as H2S		11.05 mg/L	mg/L				

RS# 6 Lab ID: **280-148841-E-1-C MSD** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	86	44 110	42	20
Sulfide as H2S		17 mg/L	mg/L				

RS# 12 Lab ID: **280-148902-D-3-A** Inj Date: 5/24/2021 11:19:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		3.2 mg/L	3.2 J mg/L				
Sulfide as H2S		3.4 mg/L	3.4 J mg/L				

RS# 13 Lab ID: **280-148902-D-4-A** Inj Date: 5/24/2021 11:19:00AM 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				

General Chemistry Raw Data Report

Job ID: 280-148902-1

Batch: 537253 **Analyst Initials: SaH**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-537251/1-A **Analysis Date: May 24, 2021 13:47**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	13.6	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-537251/2-A **Analysis Date: May 24, 2021 13:47**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-1-A **Analysis Date: May 24, 2021 13:47**

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:	SAH	SOP Information:	
Date:	5/24/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	920
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.70	20	8.70	904.000
CAL	5	8.70	17.00	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	932
Expiration Date:	8/26/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.60	20	8.60	912.000
ICV	5	8.60	16.70	20	8.10	952.000

TALS Raw Data Report

Job Number: 280-148877-1
LIMS Batch: 537253
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537251/1-A** Inj Date: 5/24/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-537251/2-A** Inj Date: 5/24/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-148877-E-1-A** Inj Date: 5/24/2021 1:47:00PM 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# 4 Lab ID: **280-148877-E-1-B MS** Inj Date: 5/24/2021 1:47:00PM 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	82	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-148877-E-1-C MSD** Inj Date: 5/24/2021 1:47:00PM 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	77	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 6 Lab ID: **280-148877-E-2-A** Inj Date: 5/24/2021 1:47:00PM 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: **280-148877-E-3-A** Inj Date: 5/24/2021 1:47:00PM 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: **280-148877-E-4-A** Inj Date: 5/24/2021 1:47:00PM 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: **280-148877-E-5-A** Inj Date: 5/24/2021 1:47:00PM 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# 10 Lab ID: **280-148877-E-6-A** Inj Date: 5/24/2021 1:47:00PM 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: **280-148877-E-7-A** Inj Date: 5/24/2021 1:47:00PM 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# 12 Lab ID: **280-148877-E-8-A** Inj Date: 5/24/2021 1:47:00PM 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: 280-148902-1
LIMS Batch: 537253
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537251/1-A** Inj Date: 5/24/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-537251/2-A** Inj Date: 5/24/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-148877-E-1-A** Inj Date: 5/24/2021 1:47:00PM 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# 4 Lab ID: **280-148877-E-1-B MS** Inj Date: 5/24/2021 1:47:00PM 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	82	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-148877-E-1-C MSD** Inj Date: 5/24/2021 1:47:00PM 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	77	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 13 Lab ID: **280-148902-D-1-A** Inj Date: 5/24/2021 1:47:00PM 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				

General Chemistry Raw Data Report

Job ID: 280-148902-1

Batch: 537372 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-537318/1-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	10.4	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-537318/2-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-5-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-5-B MS **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	14.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-5-C MSD **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	12.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-2-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-6-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-7-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-8-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-9-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-148902-D-10-A **Analysis Date: May 25, 2021 11:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	SAH	SOP Information:	
Date:	5/24/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	956
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.00	20	8.00	960.000
CAL	5	0.00	8.10	20	8.10	952.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	964
Expiration Date:	8/26/2021

	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	0.00	7.90	20	7.90	968.000

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-124
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jun-2021 12:35:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-002
Misc. Info.: 280-0101970-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:53 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:27:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.823	2.832	-0.009	2622467	0.1000	0.1142	M
2 Chloride	3.938	3.952	-0.014	2198962	0.2000	0.2297	M
3 Nitrite as N	4.620	4.587	0.033	2052025	NC	NC	
4 Bromide	5.737	5.682	0.055	882191	0.2000	0.2507	M
5 Nitrate as N	6.550	6.413	0.137	2684253	NC	NC	M
7 Orthophosphate as P	7.980	7.975	0.005	2436643	NC	NC	M
6 Sulfate	9.148	9.123	0.025	4218206	0.5000	0.5813	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

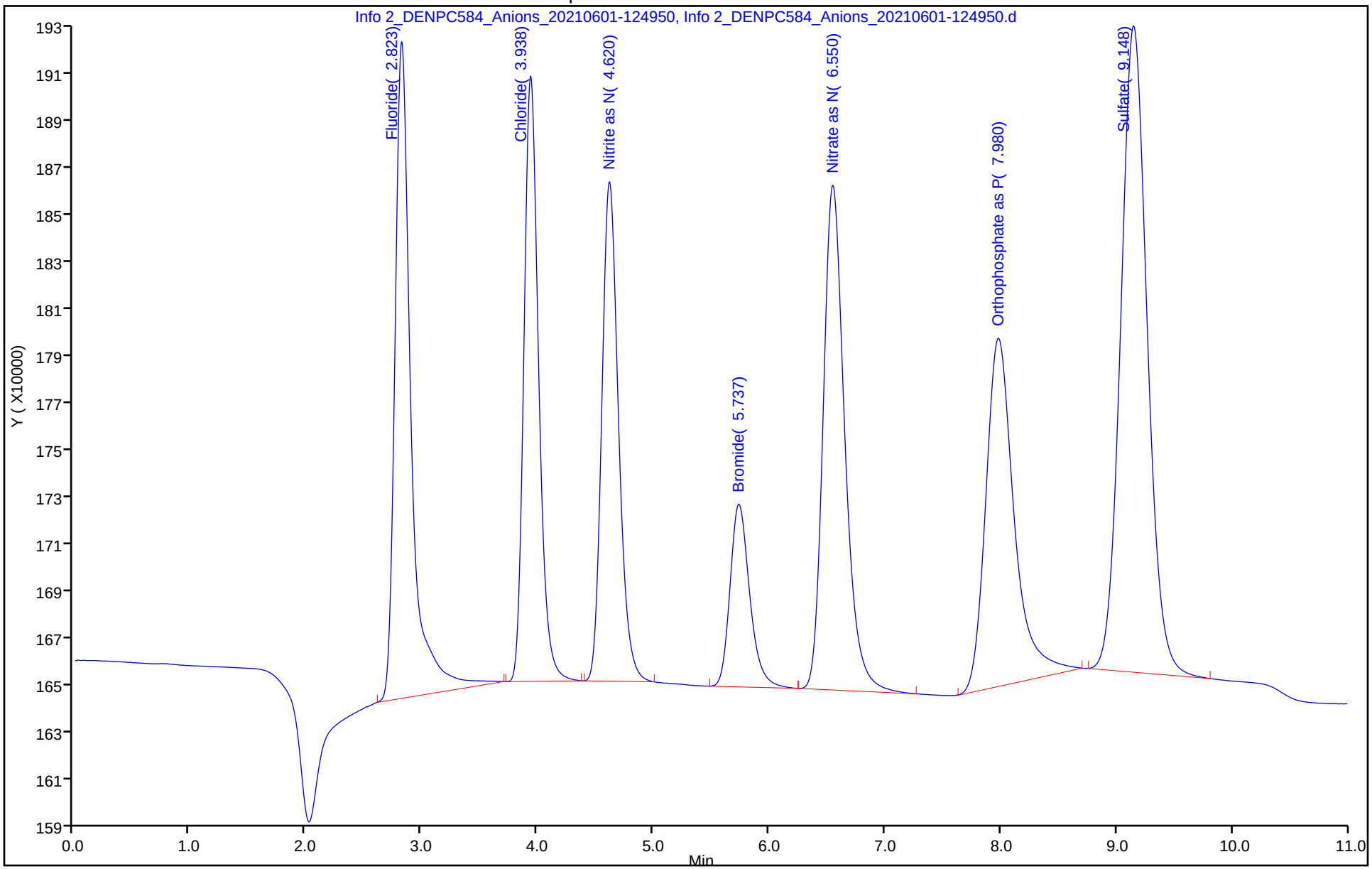
IC Cal5_00003	Amount Added:	0.02	Units: mL
IC sulfatecal_00063	Amount Added:	0.01	Units: mL
IC CL cal_00067	Amount Added:	0.00	Units: mL

Report Date: 01-Jun-2021 15:41:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-124950.d

Injection Date:	01-Jun-2021 12:35:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-124

Injection Date: 01-Jun-2021 12:35:00 Instrument ID: WC_IonChrom13

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

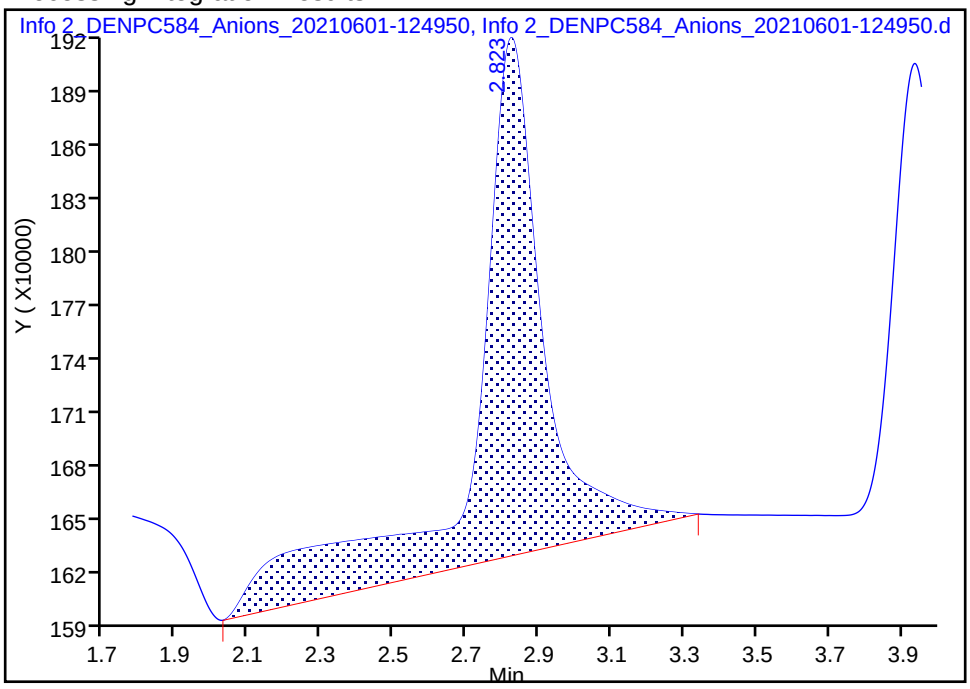
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

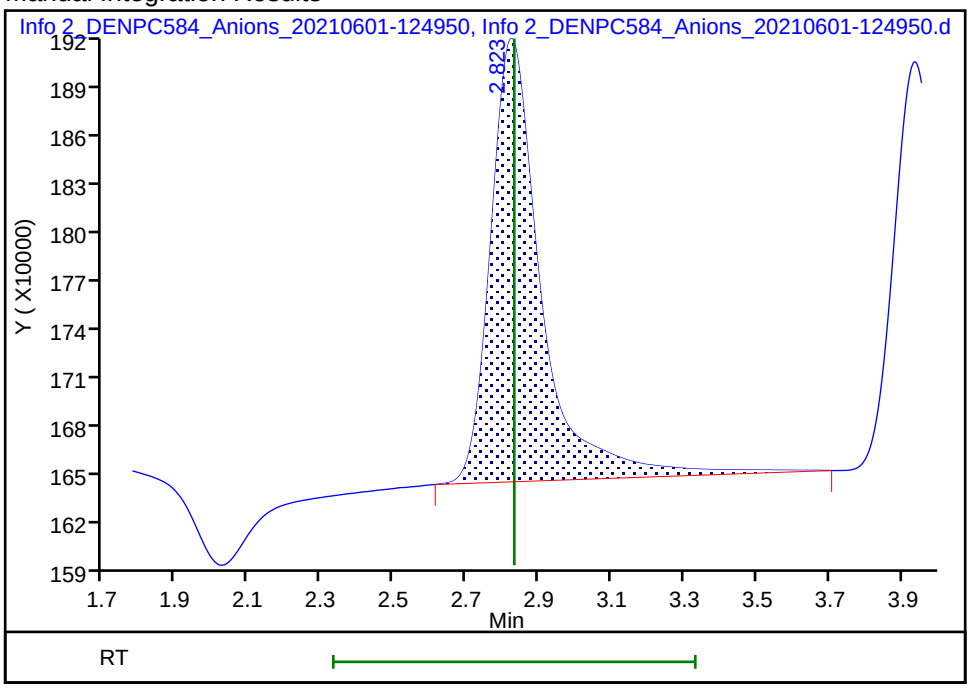
Processing Integration Results

RT: 2.82
Area: 3851161
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.82
Area: 2622467
Amount: 0.114247
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:30:48

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-124

Injection Date: 01-Jun-2021 12:35:00 Instrument ID: WC_IonChrom13

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

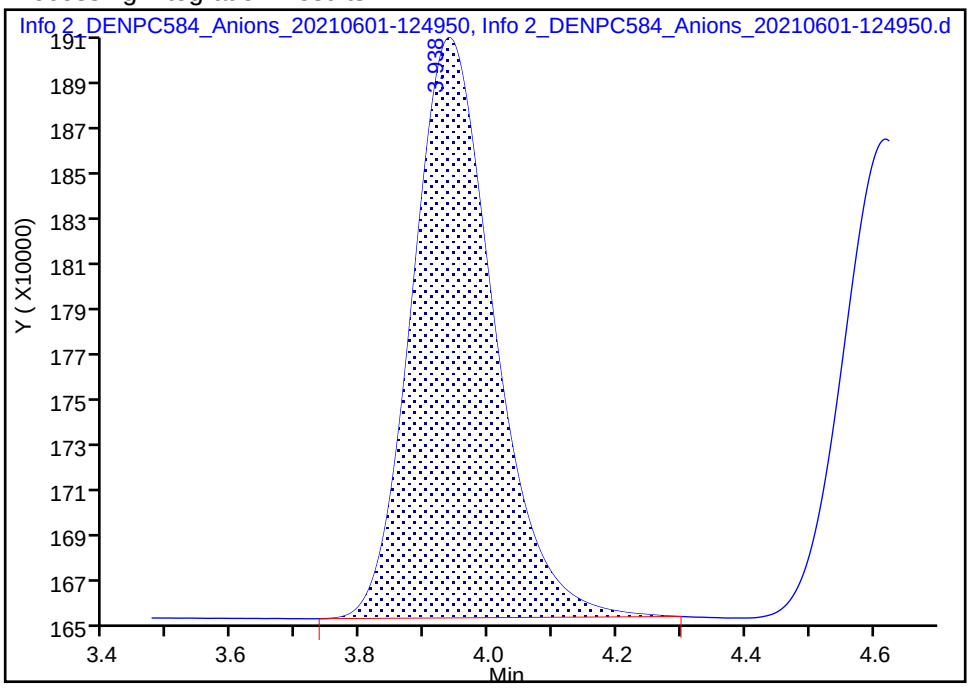
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

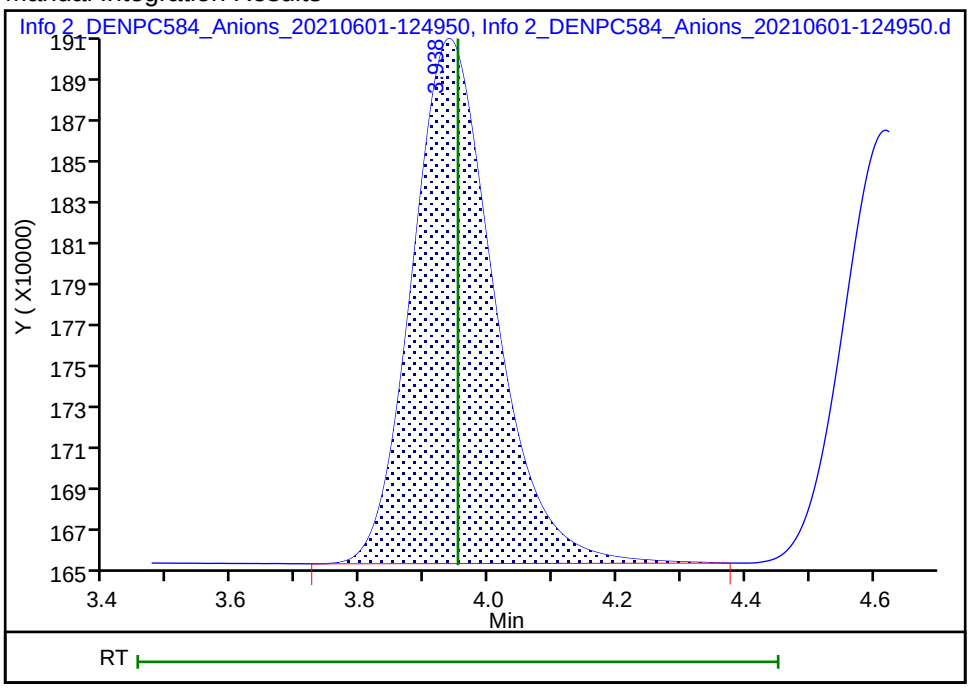
Processing Integration Results

RT: 3.94
Area: 2185262
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 3.94
Area: 2198962
Amount: 0.229739
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:26:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-124

Injection Date: 01-Jun-2021 12:35:00 Instrument ID: WC_IonChrom13

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

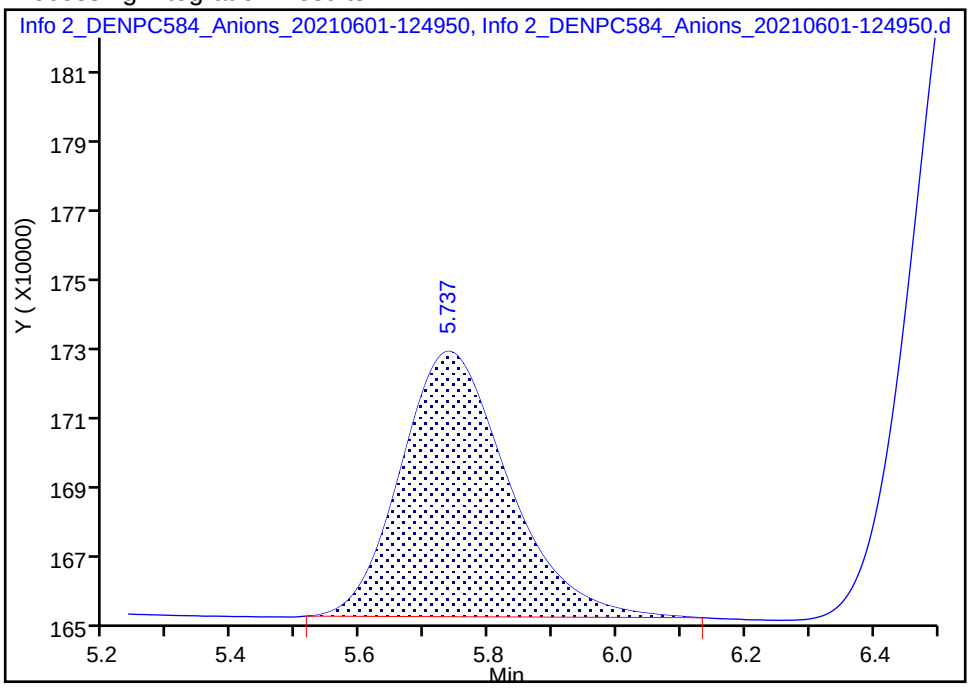
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

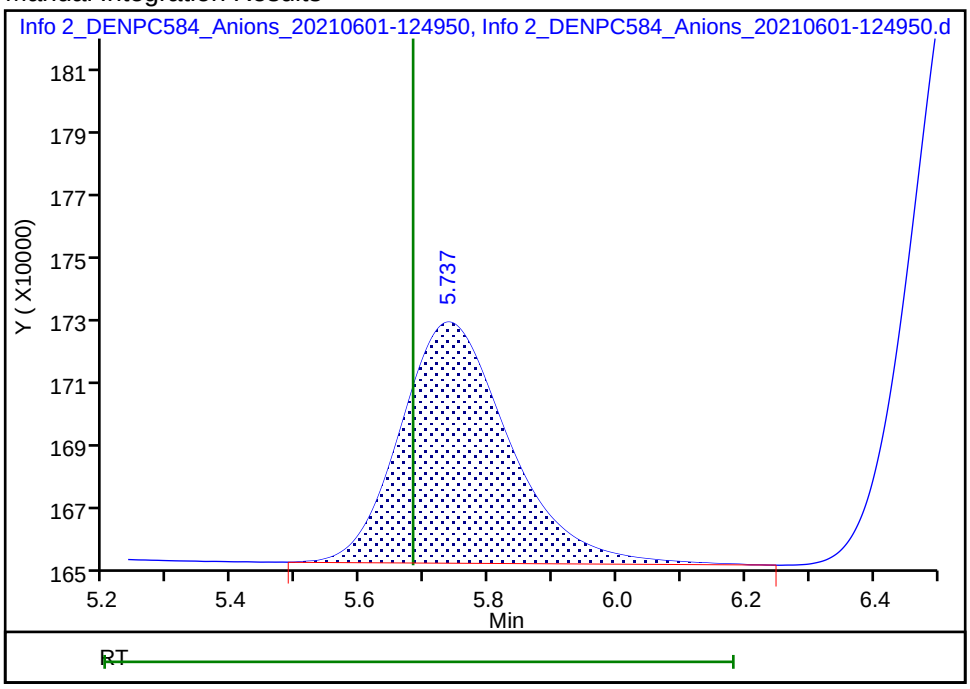
Processing Integration Results

RT: 5.74
Area: 864435
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.74
Area: 882191
Amount: 0.250682
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:27:16

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-124

Injection Date: 01-Jun-2021 12:35:00 Instrument ID: WC_IonChrom13

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

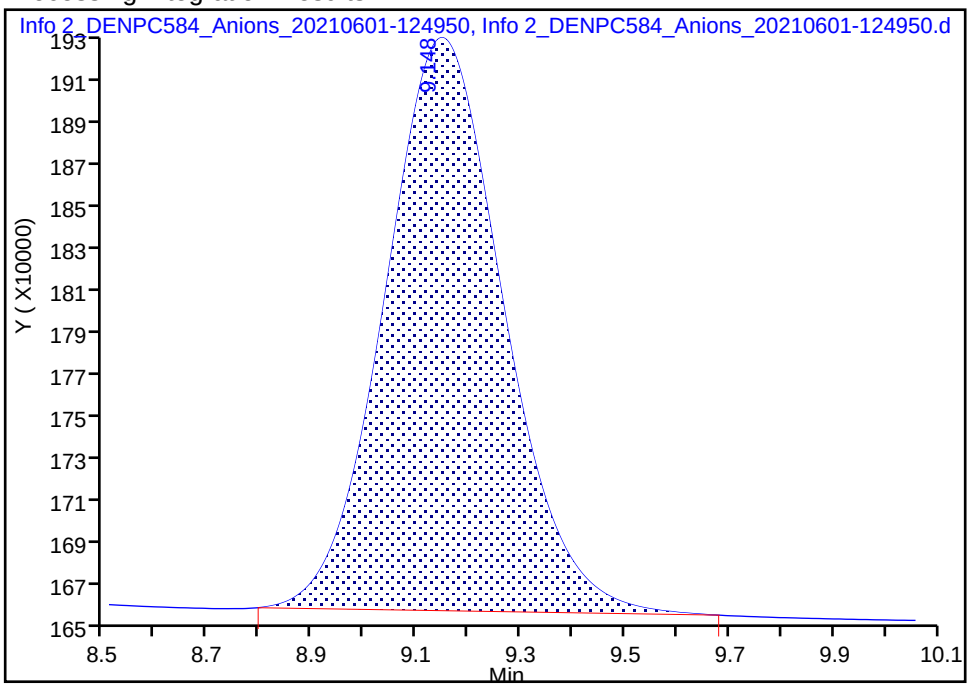
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

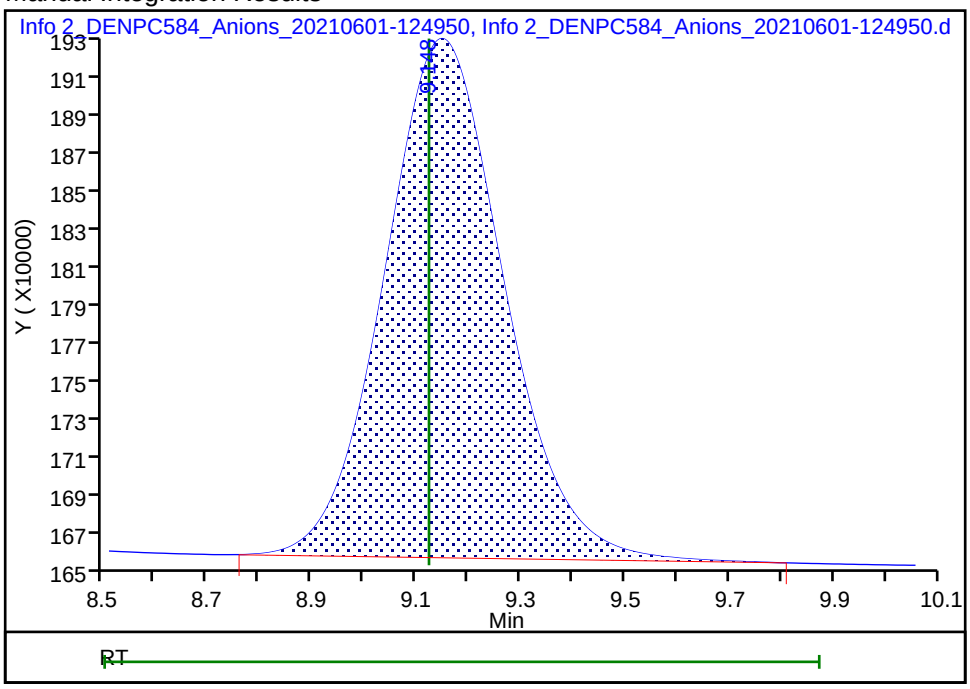
Processing Integration Results

RT: 9.15
Area: 4179672
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.15
Area: 4218206
Amount: 0.581298
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:26:59

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-130
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jun-2021 12:49:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-003
Misc. Info.: 280-0101970-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:54 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:29:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.832	2.832	0.000	4716343	0.2000	0.1939	M
2 Chloride	3.945	3.952	-0.007	5797089	0.5000	0.4639	
3 Nitrite as N	4.625	4.587	0.038	4559337	NC	NC	
4 Bromide	5.737	5.682	0.055	1793941	0.4000	0.4050	M
5 Nitrate as N	6.540	6.413	0.127	5677728	NC	NC	M
7 Orthophosphate as P	7.990	7.975	0.015	4921799	NC	NC	M
6 Sulfate	9.160	9.123	0.037	8569456	1.00	0.9622	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

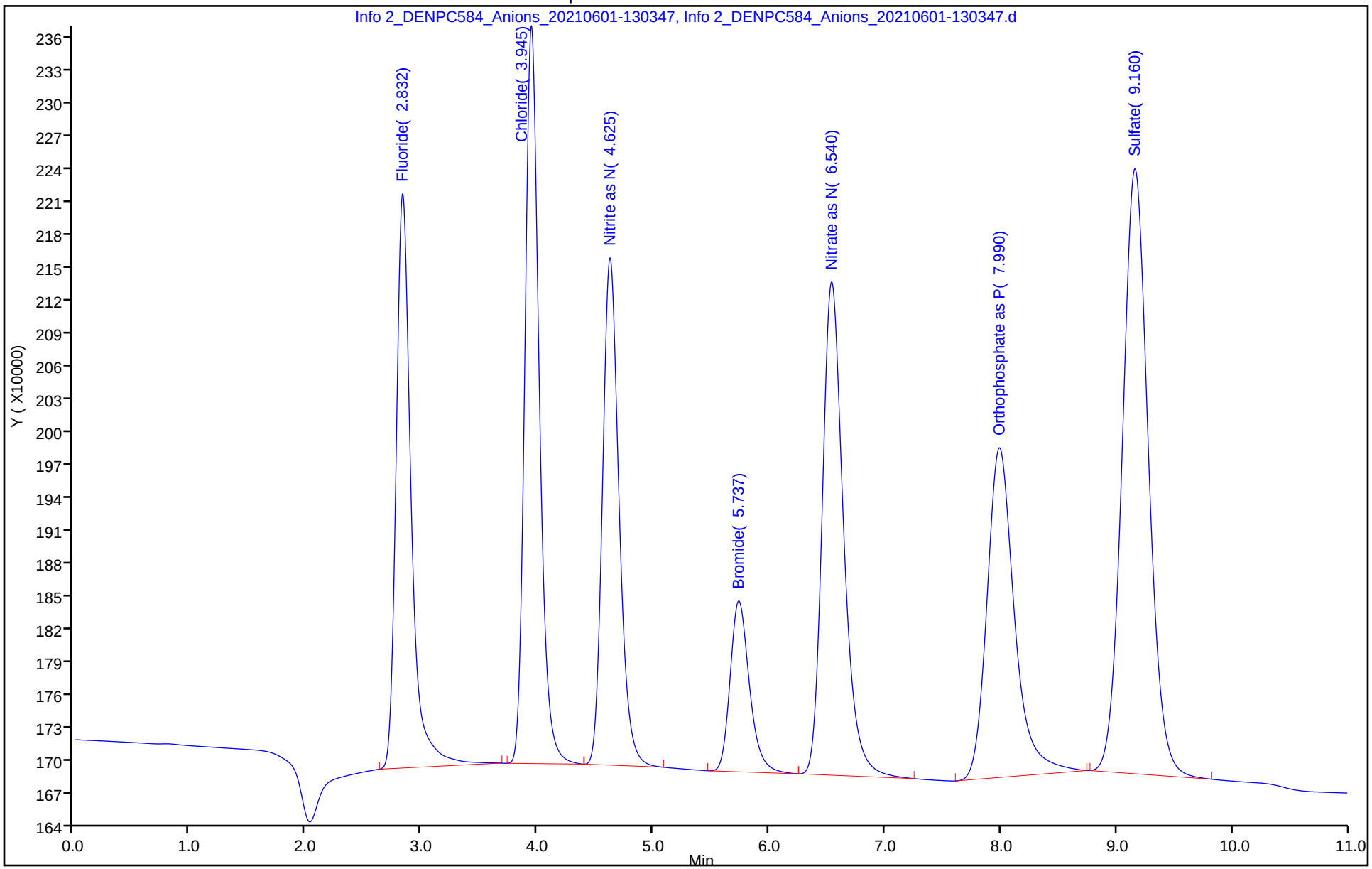
IC Cal5_00003	Amount Added:	0.04	Units: mL
IC sulfatecal_00063	Amount Added:	0.01	Units: mL
IC CL cal_00067	Amount Added:	0.01	Units: mL

Report Date: 01-Jun-2021 15:41:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-130347.d

Injection Date:	01-Jun-2021 12:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-130

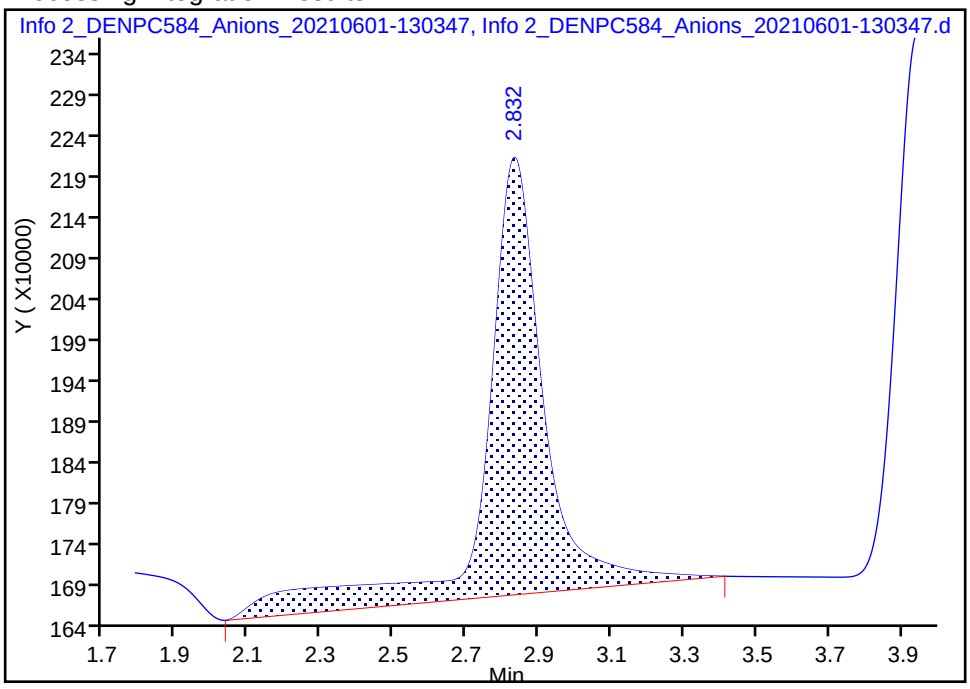
Injection Date:	01-Jun-2021 12:49:00	Instrument ID:	WC_IonChrom13
Lims ID:	STD2		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 3
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

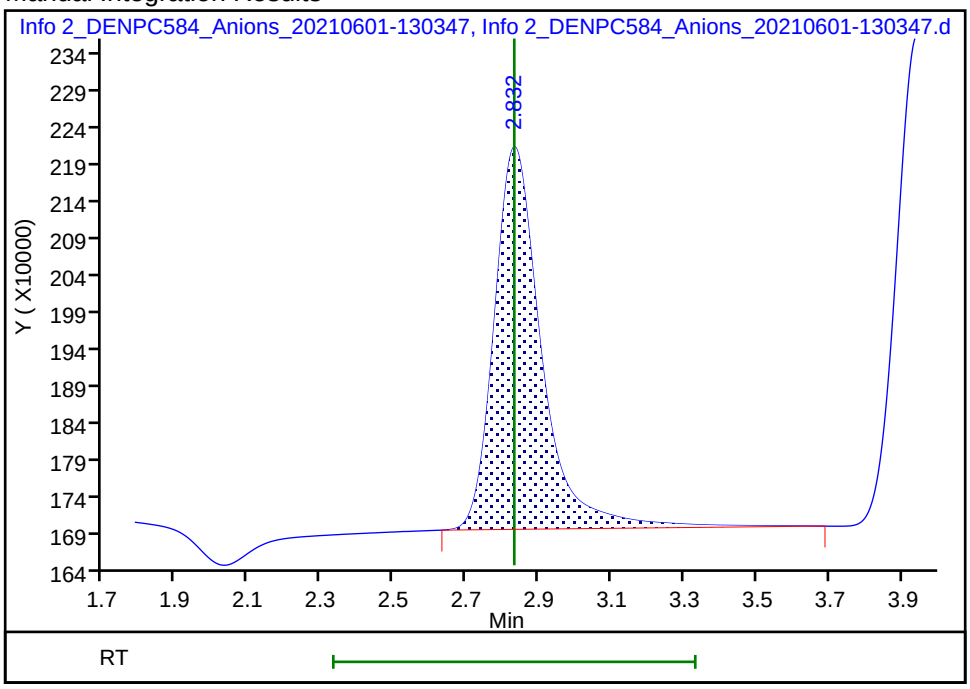
Processing Integration Results

RT: 2.83
Area: 6104101
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.83
Area: 4716343
Amount: 0.193889
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:28:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-130

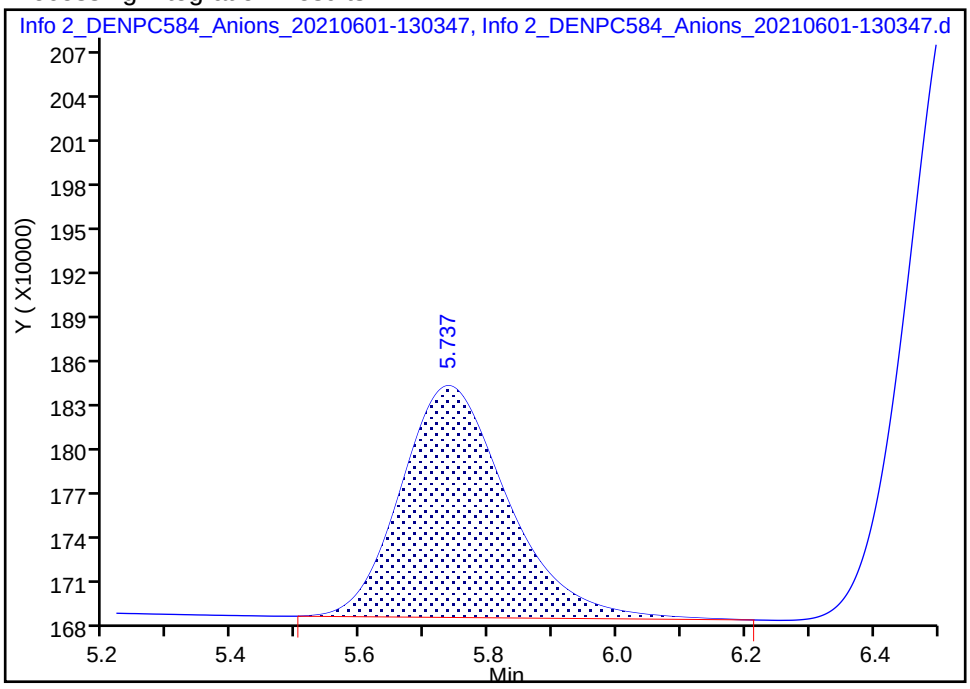
Injection Date:	01-Jun-2021 12:49:00	Instrument ID:	WC_IonChrom13
Lims ID:	STD2		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 3
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

4 Bromide, CAS: 24959-67-9

Signal: 1

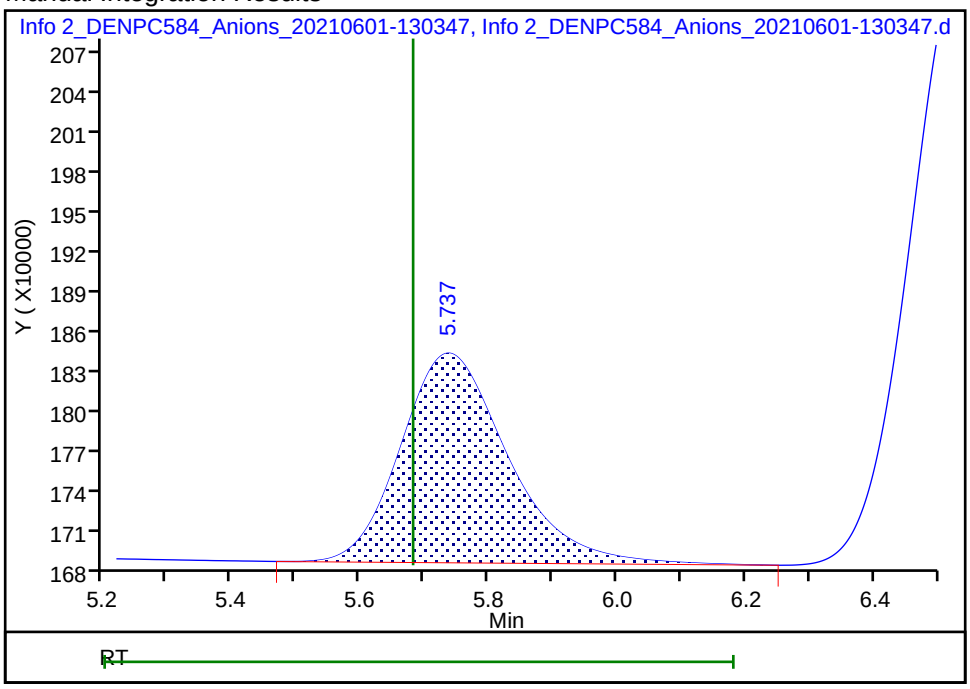
Processing Integration Results

RT: 5.74
Area: 1787396
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.74
Area: 1793941
Amount: 0.405032
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:28:28

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-130

Injection Date: 01-Jun-2021 12:49:00 Instrument ID: WC_IonChrom13

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

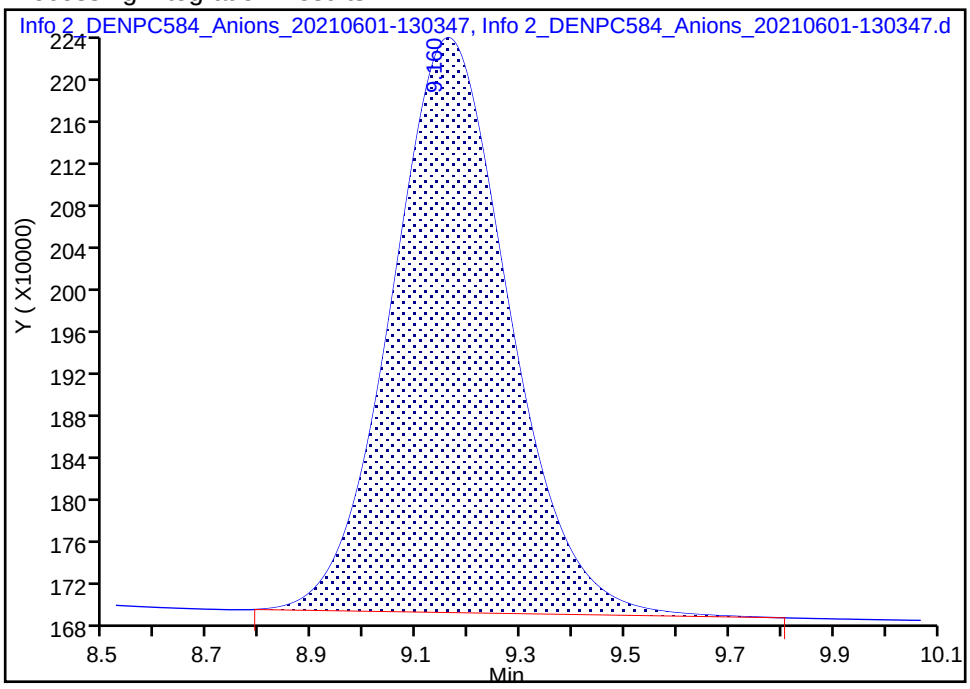
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

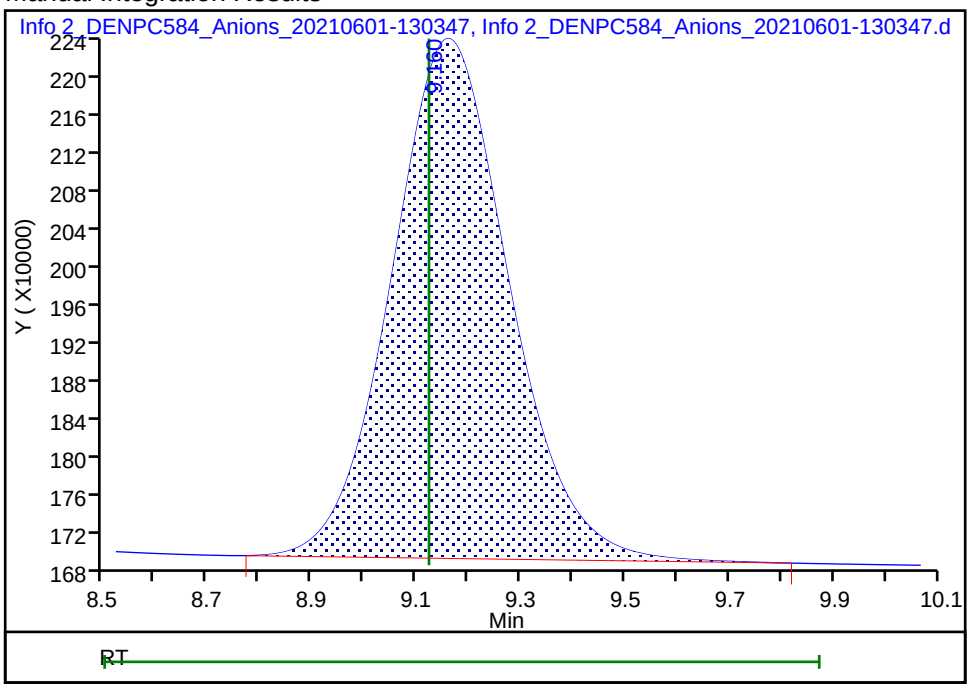
Processing Integration Results

RT: 9.16
Area: 8554904
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.16
Area: 8569456
Amount: 0.962155
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:29:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-131
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jun-2021 13:03:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-004
Misc. Info.: 280-0101970-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:54 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:30:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.828	2.832	-0.004	11646298	0.5000	0.4575	M
2 Chloride	3.937	3.952	-0.015	26147407	2.00	1.79	
3 Nitrite as N	4.615	4.587	0.028	13143230	NC	NC	
4 Bromide	5.720	5.682	0.038	4593106	1.00	0.8789	
5 Nitrate as N	6.508	6.413	0.095	15248650	NC	NC	
7 Orthophosphate as P	7.982	7.975	0.007	13139445	NC	NC	
6 Sulfate	9.155	9.123	0.032	17773439	2.00	1.77	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

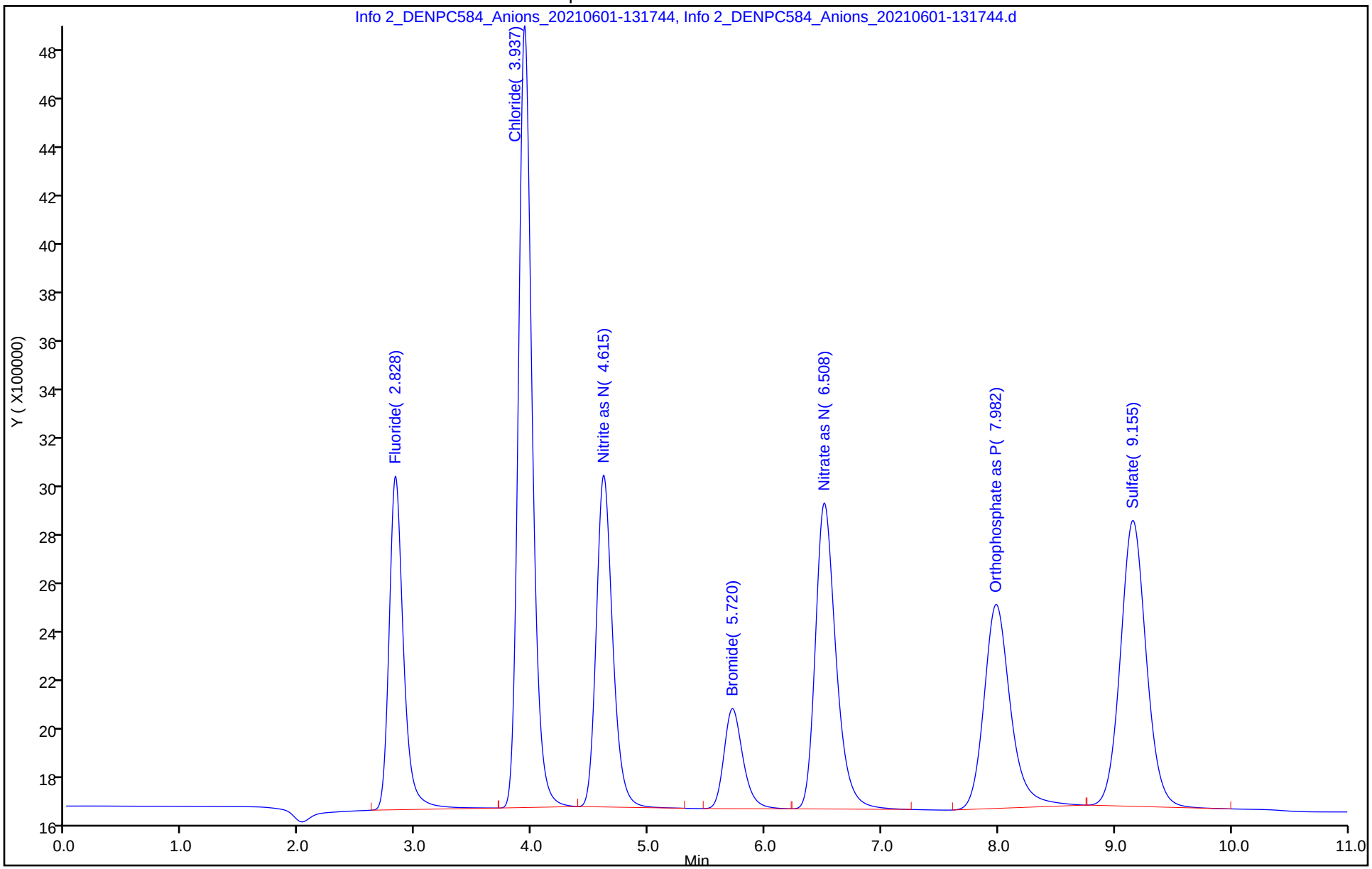
Reagents:

IC Cal5_00003	Amount Added:	0.10	Units: mL
IC CL cal_00067	Amount Added:	0.02	Units: mL
IC sulfatecal_00063	Amount Added:	0.02	Units: mL

Report Date: 01-Jun-2021 15:41:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-131744.d				
Injection Date:	01-Jun-2021 13:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-131

Injection Date: 01-Jun-2021 13:03:00 Instrument ID: WC_IonChrom13

Lims ID: STD3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

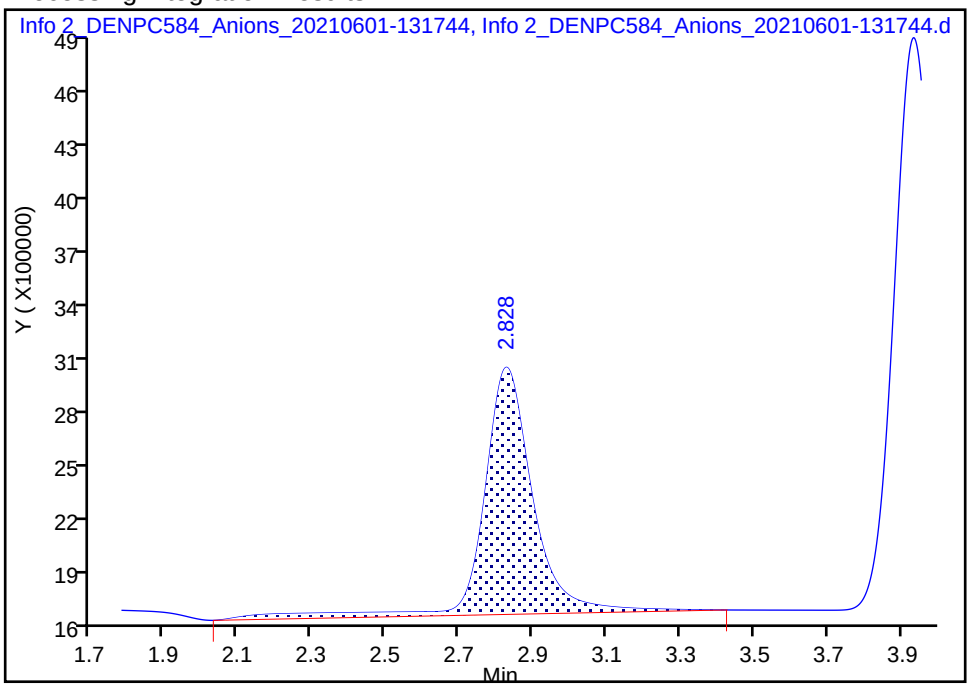
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

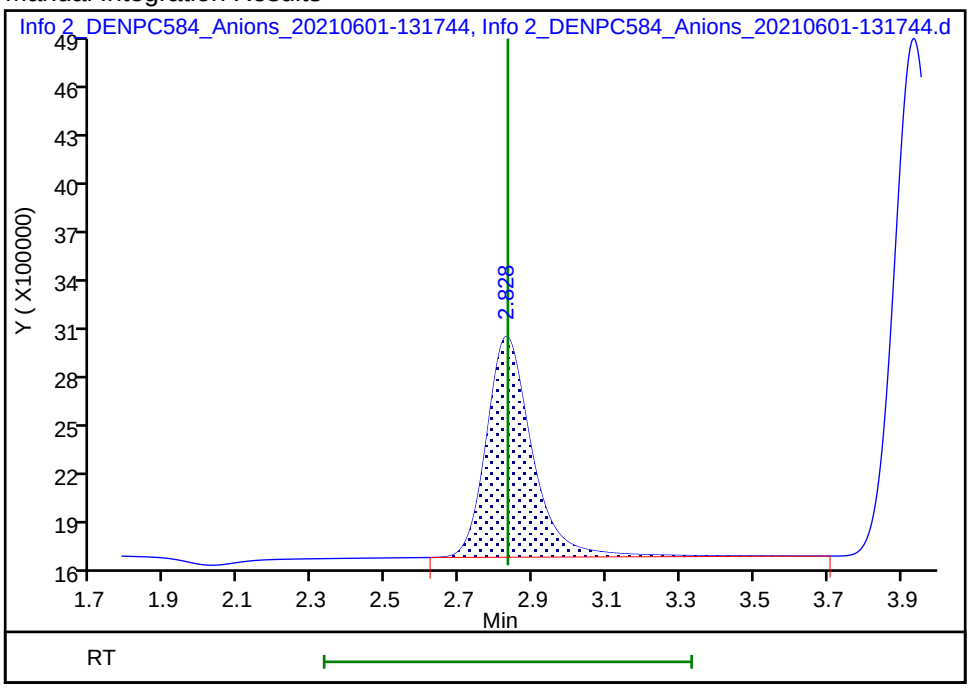
Processing Integration Results

RT: 2.83
Area: 12923225
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.83
Area: 11646298
Amount: 0.457476
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:29:29

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-133
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jun-2021 13:17:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-005
Misc. Info.: 280-0101970-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:55 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:30:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.833	2.833	0.000	24238482	1.00	0.9364	M
2 Chloride	3.938	3.938	0.000	148982586	10.0	9.78	
3 Nitrite as N	4.615	4.615	0.000	28199306	NC	NC	M
4 Bromide	5.713	5.713	0.000	9435139	2.00	1.70	
5 Nitrate as N	6.488	6.488	0.000	32466289	NC	NC	
7 Orthophosphate as P	7.987	7.987	0.000	28026815	NC	NC	
6 Sulfate	9.157	9.157	0.000	105604103	10.0	9.46	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

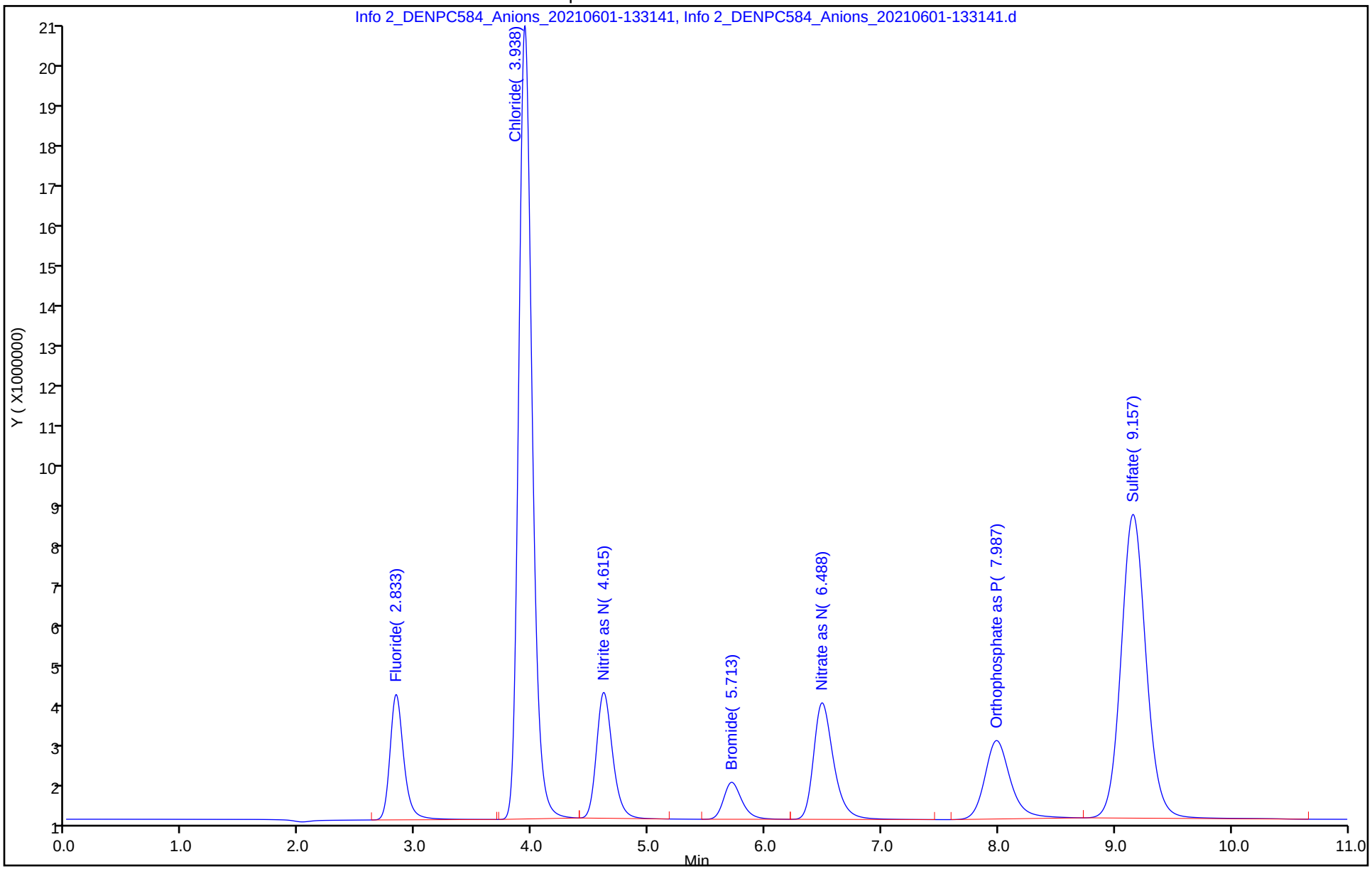
IC Cal5_00003	Amount Added:	0.20	Units: mL
IC sulfatecal_00063	Amount Added:	0.10	Units: mL
IC CL cal_00067	Amount Added:	0.10	Units: mL

Report Date: 01-Jun-2021 15:41:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-133141.d

Injection Date:	01-Jun-2021 13:17:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-133

Injection Date: 01-Jun-2021 13:17:00 Instrument ID: WC_IonChrom13

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

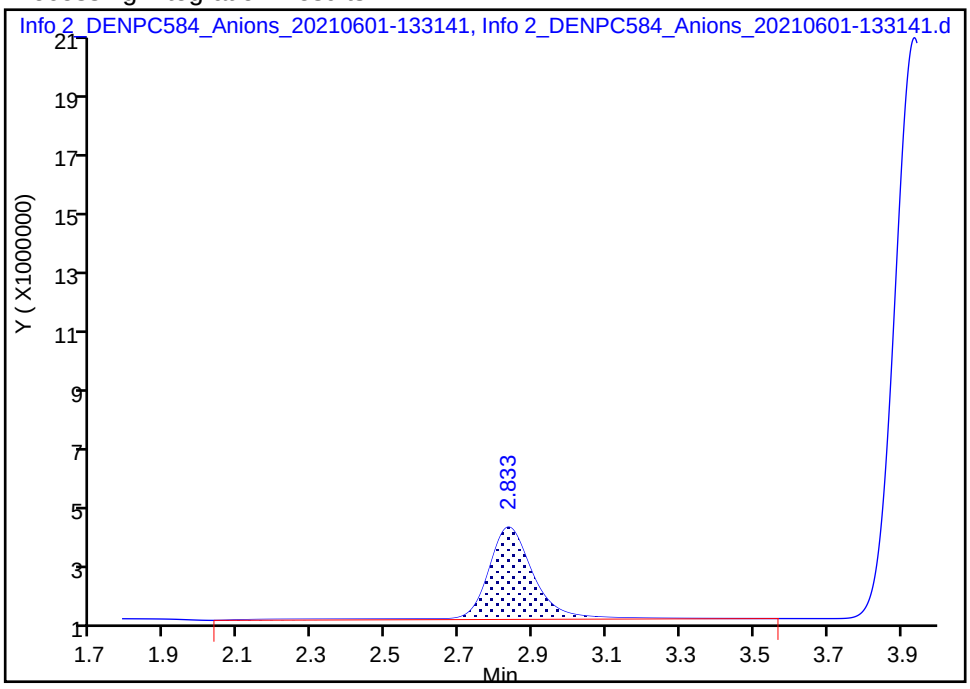
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

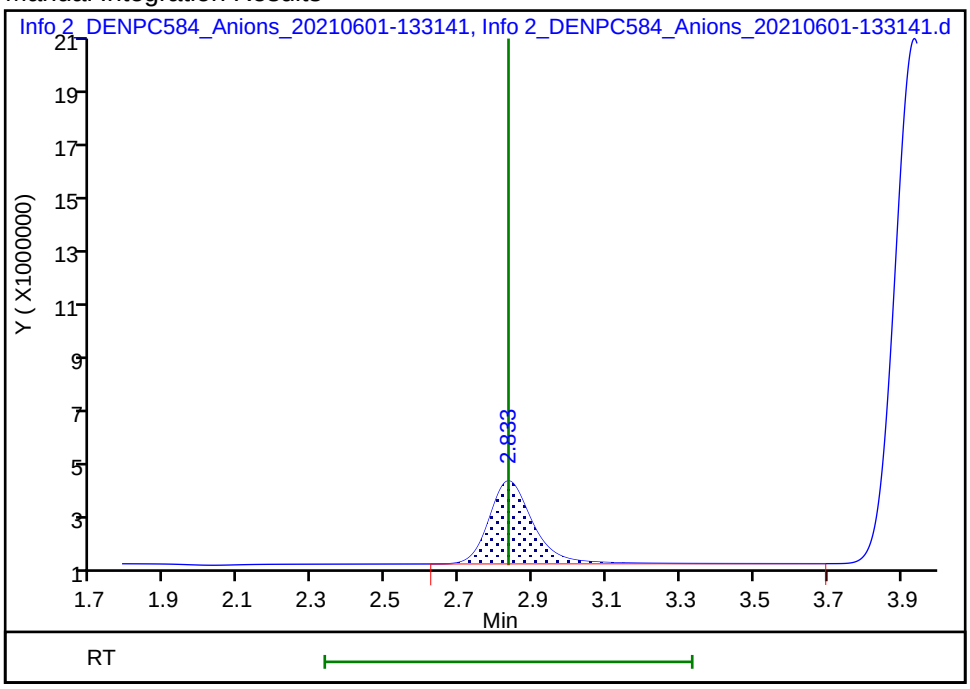
Processing Integration Results

RT: 2.83
Area: 25590878
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.83
Area: 24238482
Amount: 0.936430
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:30:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-134
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jun-2021 13:31:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-006
Misc. Info.: 280-0101970-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:56 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:33:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.838	2.838	0.000	108389439	4.00	4.14	M
2 Chloride	3.945	3.945	0.000	800462964	50.0	52.2	
3 Nitrite as N	4.603	4.603	0.000	131613346	NC	NC	M
4 Bromide	5.690	5.690	0.000	45020993	8.00	7.72	
5 Nitrate as N	6.432	6.432	0.000	153347313	NC	NC	
7 Orthophosphate as P	7.975	7.975	0.000	130335543	NC	NC	
6 Sulfate	9.142	9.142	0.000	587701409	50.0	51.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

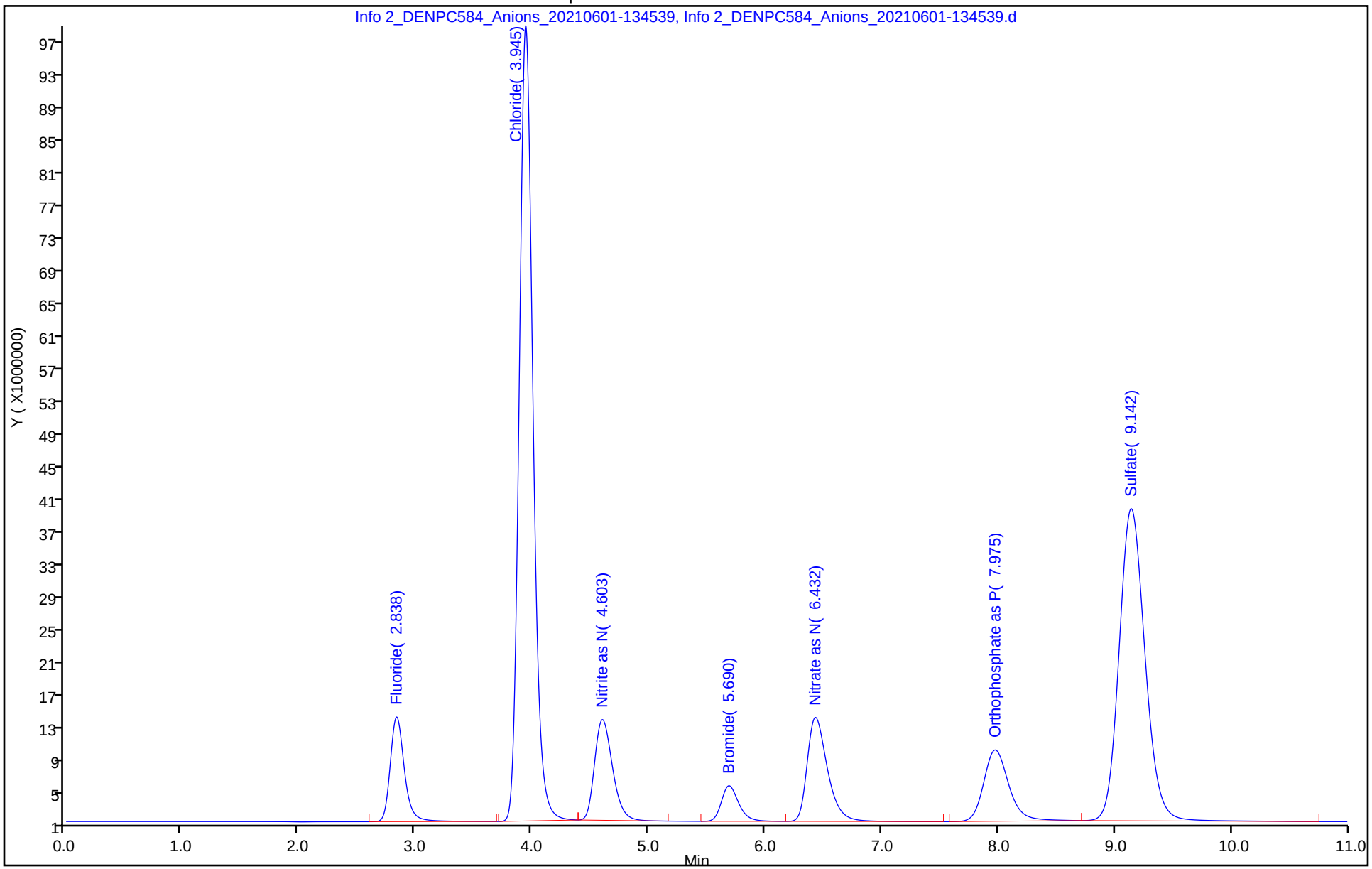
Reagents:

IC Cal5_00003	Amount Added:	0.80	Units: mL
IC CL cal_00067	Amount Added:	0.50	Units: mL
IC sulfatecal_00063	Amount Added:	0.50	Units: mL

Report Date: 01-Jun-2021 15:41:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-134539.d				
Injection Date:	01-Jun-2021 13:31:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-134

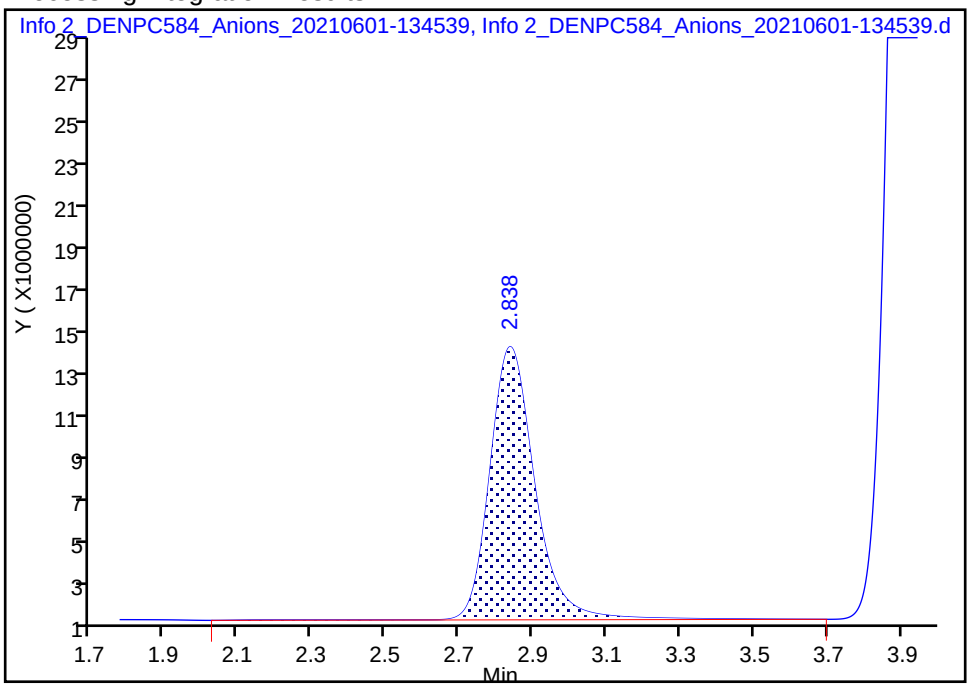
Injection Date:	01-Jun-2021 13:31:00	Instrument ID:	WC_IonChrom13		
Lims ID:	STD5				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

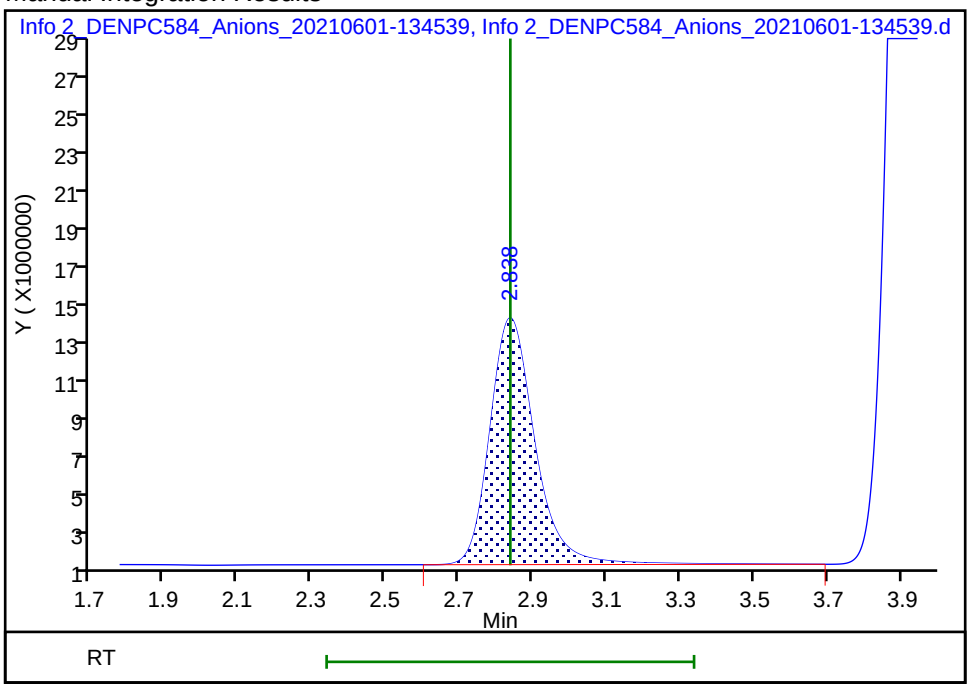
Processing Integration Results

RT: 2.84
Area: 109174004
Amount: 4.012400
Amount Units: ug/ml



Manual Integration Results

RT: 2.84
Area: 108389439
Amount: 4.137183
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:33:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-135
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Jun-2021 13:45:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-007
Misc. Info.: 280-0101970-007
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:56 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:34:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.843	2.838	0.005	216599518	8.00	8.25	
2 Chloride	3.960	3.945	0.015	1585457586	100.0	103.3	
3 Nitrite as N	4.590	4.603	-0.013	271051869	NC	NC	M
4 Bromide	5.677	5.690	-0.013	97807928	16.0	16.7	
5 Nitrate as N	6.395	6.432	-0.037	323466920	NC	NC	
7 Orthophosphate as P	7.962	7.975	-0.013	270238113	NC	NC	
6 Sulfate	9.122	9.142	-0.020	1179756629	100.0	103.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

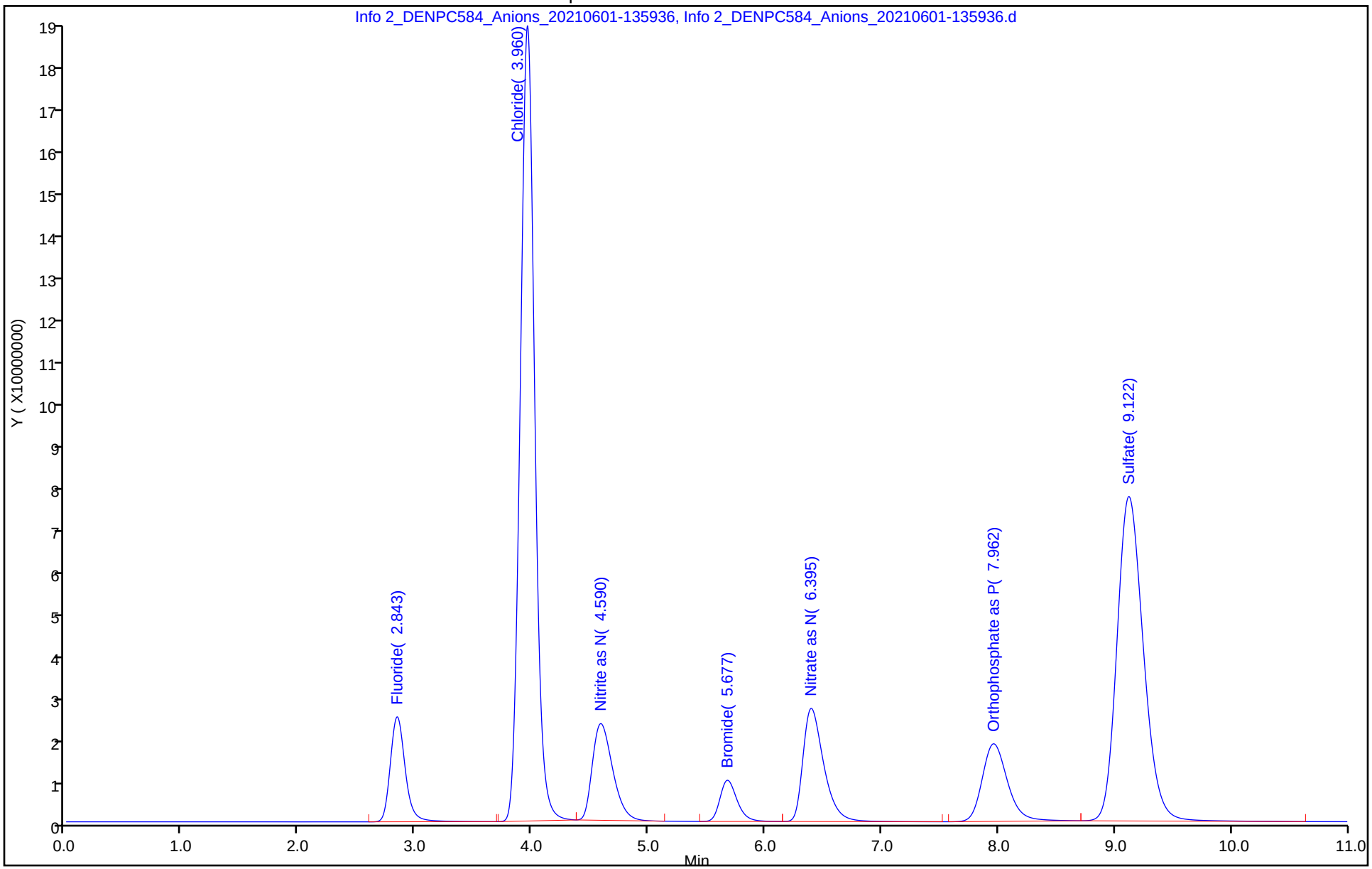
IC Cal5_00003 Amount Added: 1.60 Units: mL
IC CL cal_00067 Amount Added: 1.00 Units: mL
IC sulfatecal_00063 Amount Added: 1.00 Units: mL

Report Date: 01-Jun-2021 15:41:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-135936.d

Injection Date:	01-Jun-2021 13:45:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-135

Injection Date: 01-Jun-2021 13:45:00 Instrument ID: WC_IonChrom13

Lims ID: STD6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

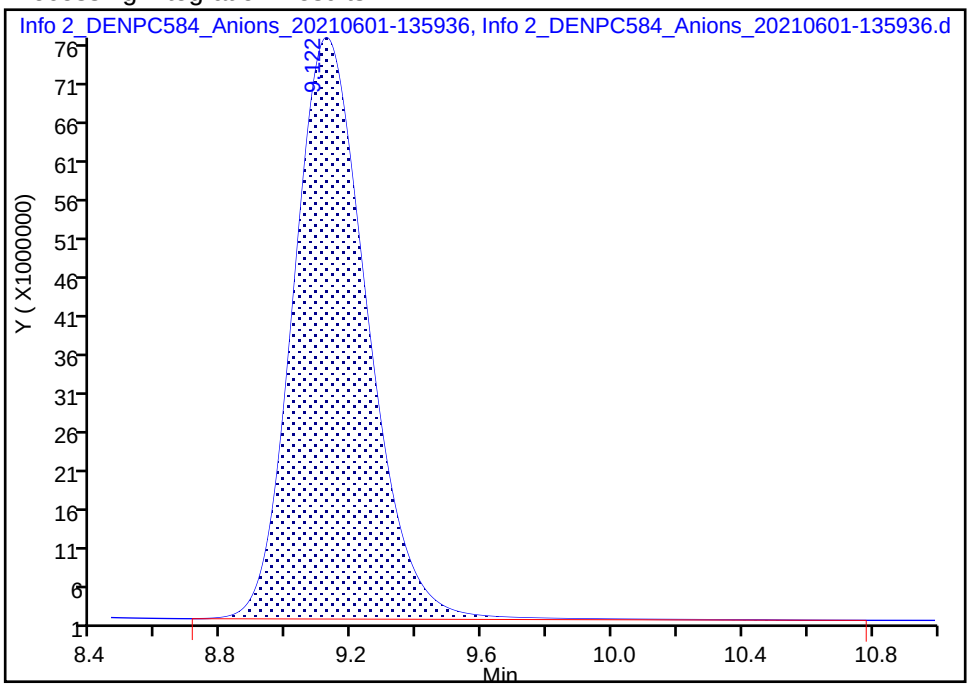
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

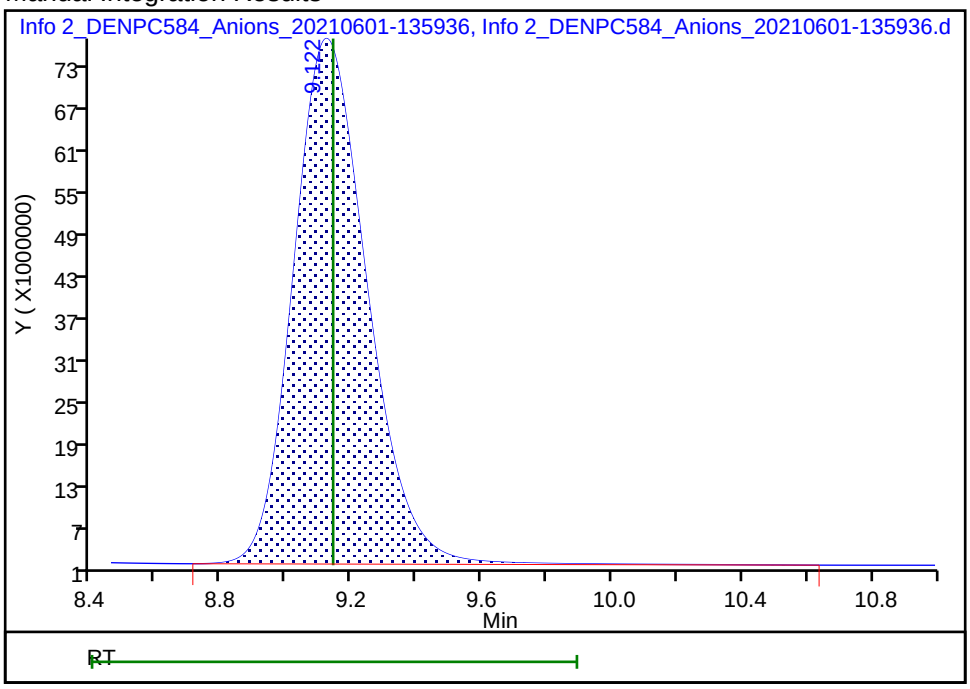
Processing Integration Results

RT: 9.12
Area: 1179711368
Amount: 100.6579
Amount Units: ug/ml



Manual Integration Results

RT: 9.12
Area: 1179756629
Amount: 103.4740
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:34:20

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jun-2021 13:59:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-008
Misc. Info.: 280-0101970-008
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 01-Jun-2021 15:41:57 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1685

First Level Reviewer: battilloj Date: 01-Jun-2021 15:35:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.837	2.838	-0.001	254844587	10.0	9.71	
2 Chloride	3.988	3.945	0.043	2994981531	200.0	195.0	
3 Nitrite as N	4.580	4.603	-0.023	316867109	NC	NC	M
4 Bromide	5.668	5.690	-0.022	117450379	20.0	20.0	
5 Nitrate as N	6.383	6.432	-0.049	384391938	NC	NC	
7 Orthophosphate as P	7.950	7.975	-0.025	319990447	NC	NC	
6 Sulfate	9.085	9.142	-0.057	2232363631	200.0	195.6	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

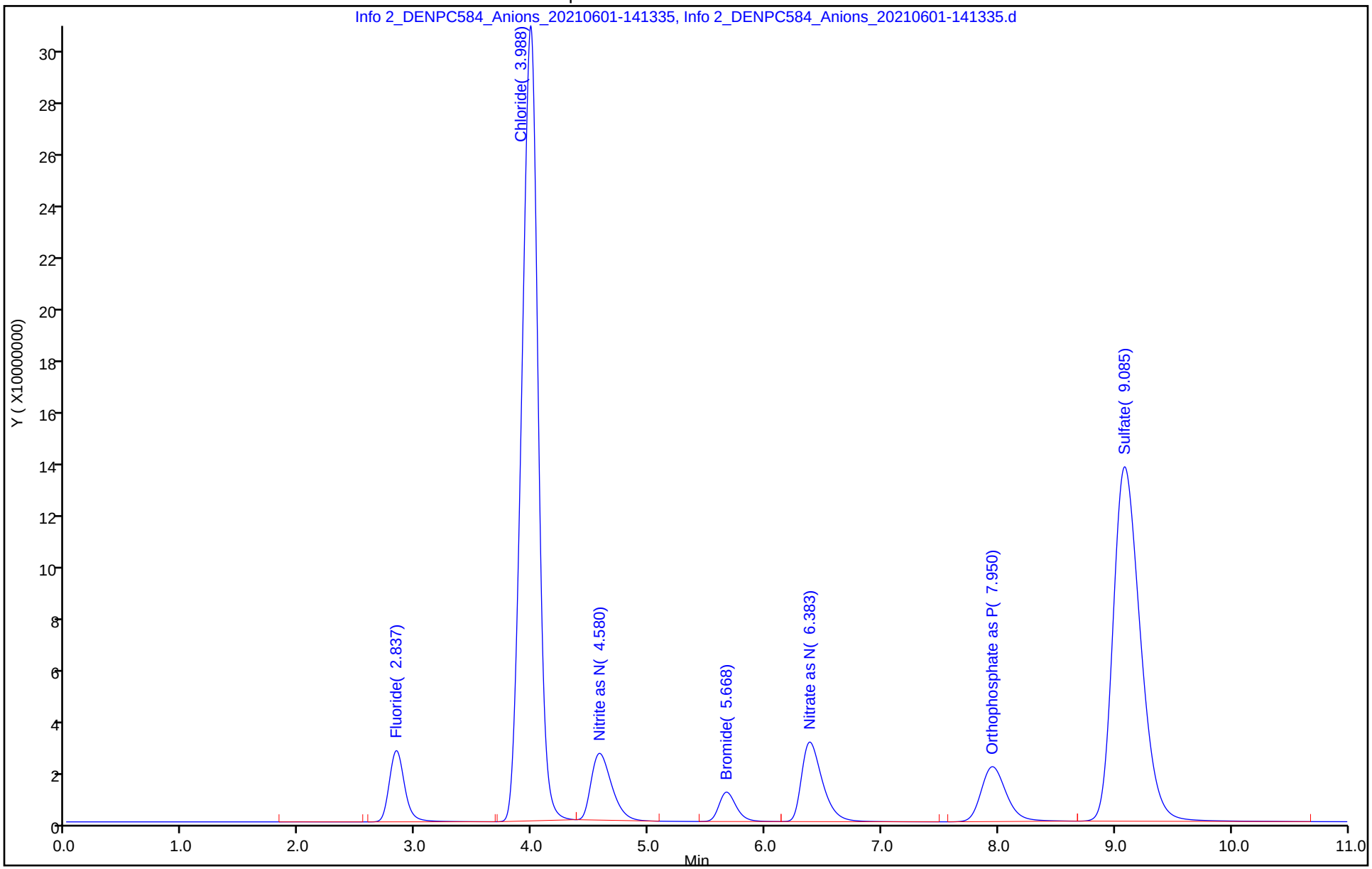
Reagents:

IC Cal5_00003 Amount Added: 2.00 Units: mL
IC CL cal_00067 Amount Added: 2.00 Units: mL
IC sulfatecal_00063 Amount Added: 2.00 Units: mL

Report Date: 01-Jun-2021 15:41:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141335.d				
Injection Date:	01-Jun-2021 13:59:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	STD7			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

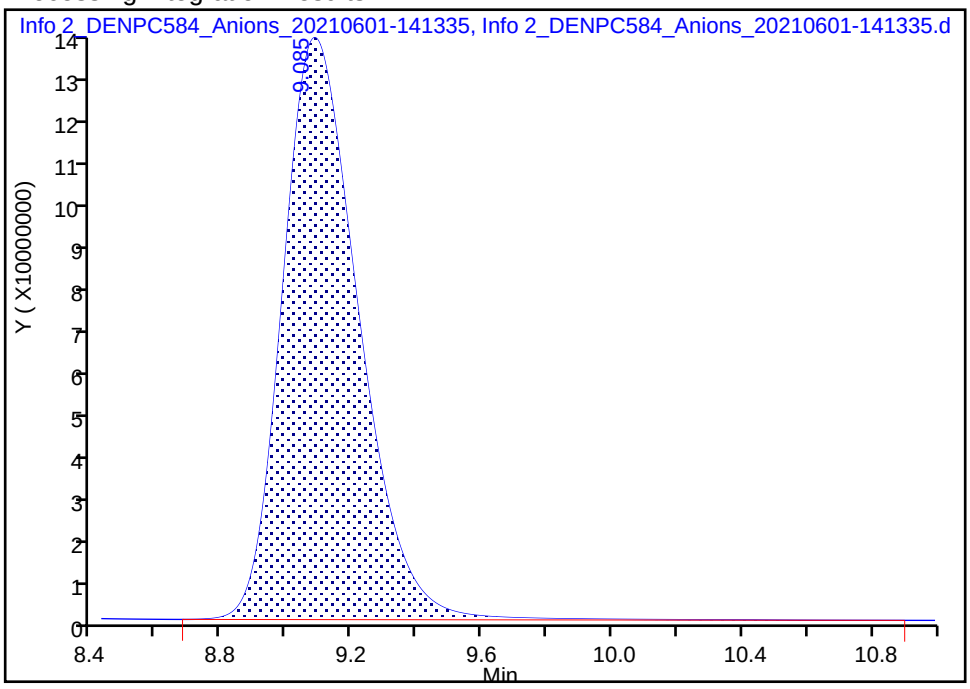
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141				
Injection Date:	01-Jun-2021 13:59:00	Instrument ID:	WC_IonChrom13		
Lims ID:	STD7				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

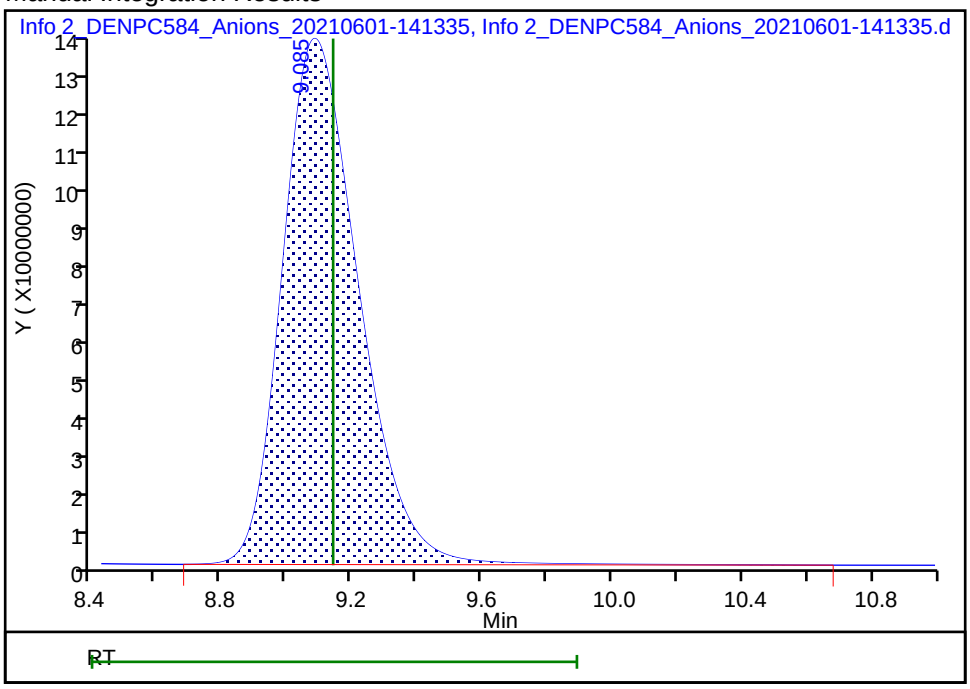
Processing Integration Results

RT: 9.09
Area: 2232571128
Amount: 195.6150
Amount Units: ug/ml



Manual Integration Results

RT: 9.09
Area: 2232363631
Amount: 195.6068
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:35:10
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 101940 **Inst ID:** IC13 **Analysis Date:** 6/1/2021 **Analyst:** CS

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	148490	13	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	148285	1	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	148539	1	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	73543	4	(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
490		F Cl NO2 Br NO3 PO4 SO4	5,10,20,50	Hist.
285		F Cl NO2 Br NO3 PO4 SO4	2,5X	interference.
539		F Cl NO2 Br NO3 PO4 SO4	5,10X	dilution.
543		F Cl NO2 Br NO3 PO4 SO4	5,10X	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		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2021 15:35:15
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b
Inj Date : 01-Jun-2021 12:35:00, Sublist: chrom-Anions-IC13*sub2

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-381202	2629098		0.999
2 Chloride					-133126	1536627		0.999
3 Nitrite as N	-179438	3277508		0.998				
4 Bromide					-598589	5907013		0.999
5 Nitrate as N	-209458	3915735		0.999				
7 Orthophosphate as P	-149601	1637732		0.998				
6 Sulfate					-242306	1142489		0.999

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	01-Jun-2021 15:35:15

No.Compounds:7
Sublist: chrom-Anions-IC13*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.917 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-12495		
	Inj Date: 01-Jun-2021 12:35:00	Worklist: 101970	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13034		
	Inj Date: 01-Jun-2021 12:49:00	Worklist: 101970	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13174		
	Inj Date: 01-Jun-2021 13:03:00	Worklist: 101970	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13314		
	Inj Date: 01-Jun-2021 13:17:00	Worklist: 101970	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13453		
	Inj Date: 01-Jun-2021 13:31:00	Worklist: 101970	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13593		
	Inj Date: 01-Jun-2021 13:45:00	Worklist: 101970	Sample#: 7
Level: 7	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-14133		
	Inj Date: 01-Jun-2021 13:59:00	Worklist: 101970	Sample#: 8

Start Cal Date: 01-Jun-2021 12:35:00 End Cal Date: 01-Jun-2021 13:59:00

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
1 Fluoride				Signal: 1					
Error: raw_COD									
26224670	23581715	23292596	24238482	27097360	27074940	-381202			0.999
0.100000(1)	0.200000(2)	0.500000(3)	1.0000 (4)	4.0000 (5)	8.0000 (6)		26290989		
M2622467	M4716343	M11646298	M24238482	M108389439	216599518				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
25484459									
10.0 (7)									
254844587									
101970(8)									
2 Chloride				Signal: 1					
10994810	11594178	13073704	14898259	16009259	15854576	-1331266			0.999
0.200000(1)	0.500000(2)	2.0000 (3)	10.0 (4)	50.0 (5)	100.0 (6)		15366272		
M2198962	5797089	26147407	148982586	800462964	1585457586				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
14974908									
200.0 (7)									
2994981531									
101970(8)									
4 Bromide				Signal: 1					
4410955	4484853	4593106	4717570	5627624	6112996	-598589			0.999
0.200000(1)	0.400000(2)	1.0000 (3)	2.0000 (4)	8.0000 (5)	16.0 (6)		5907013		
M882191	M1793941	4593106	9435139	45020993	97807928				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
5872519									
20.0 (7)									
117450379									
101970(8)									

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
6 Sulfate				Signal: 1					
Error: raw_COD									
8436412	8569456	8886720	10560410	11754028	11797566	-2423063			0.999
0.500000(1)	1.0000 (2)	2.0000 (3)	10.0 (4)	50.0 (5)	100.0 (6)		11424892		
M4218206	M8569456	17773439	105604103	587701409	M1179756629				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
11161818									
200.0 (7)									
M2232363631									
101970(8)									

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	01-Jun-2021 15:35:15

No.Compounds:7
Sublist: chrom-Anions-IC13*sub2
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.917 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-12495		
	Inj Date: 01-Jun-2021 12:35:00	Worklist: 101970	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13034		
	Inj Date: 01-Jun-2021 12:49:00	Worklist: 101970	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13174		
	Inj Date: 01-Jun-2021 13:03:00	Worklist: 101970	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13314		
	Inj Date: 01-Jun-2021 13:17:00	Worklist: 101970	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13453		
	Inj Date: 01-Jun-2021 13:31:00	Worklist: 101970	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13593		
	Inj Date: 01-Jun-2021 13:45:00	Worklist: 101970	Sample#: 7
Level: 7	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-14133		
	Inj Date: 01-Jun-2021 13:59:00	Worklist: 101970	Sample#: 8

Start Cal Date: 01-Jun-2021 12:35:00 End Cal Date: 01-Jun-2021 13:59:00

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
3 Nitrite as N				Signal: 1					
20520250	22796685	26286460	28199306	32903337	33881484	-1794389			0.998
0.100000(1)	0.200000(2)	0.500000(3)	1.0000 (4)	4.0000 (5)	8.0000 (6)		32775082		
2052025	4559337	13143230	M28199306	M131613346	M271051869				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
31686711									
10.0 (7)									
M316867109									
101970(8)									
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
26842530	28388640	30497300	32466289	38336828	40433365	-2094580			0.999
0.100000(1)	0.200000(2)	0.500000(3)	1.0000 (4)	4.0000 (5)	8.0000 (6)		39157359		
M2684253	M5677728	15248650	32466289	153347313	323466920				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
38439194									
10.0 (7)									
384391938									
101970(8)									
7 Orthophosphate as P				Signal: 1					
12183215	12304498	13139445	14013408	16291943	16889882	-1496010			0.998
0.200000(1)	0.400000(2)	1.0000 (3)	2.0000 (4)	8.0000 (5)	16.0 (6)		16377329		
M2436643	M4921799	13139445	28026815	130335543	270238113				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
15999522									
20.0 (7)									
319990447									
101970(8)									

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-142
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 01-Jun-2021 14:13:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-009
Misc. Info.: 280-0101970-009
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2021 13:49:58 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1618

First Level Reviewer: battilloj Date: 01-Jun-2021 15:39:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.837	2.832	0.005	428700		0.0308	M
2 Chloride	3.947	3.952	-0.005	73186		0.0914	Ma
3 Nitrite as N	4.622	4.587	0.035	85497		NC	Ma
4 Bromide		5.682				ND	
5 Nitrate as N		6.413				ND	
7 Orthophosphate as P		7.975				ND	
6 Sulfate	9.182	9.123	0.059	158973		0.2260	M

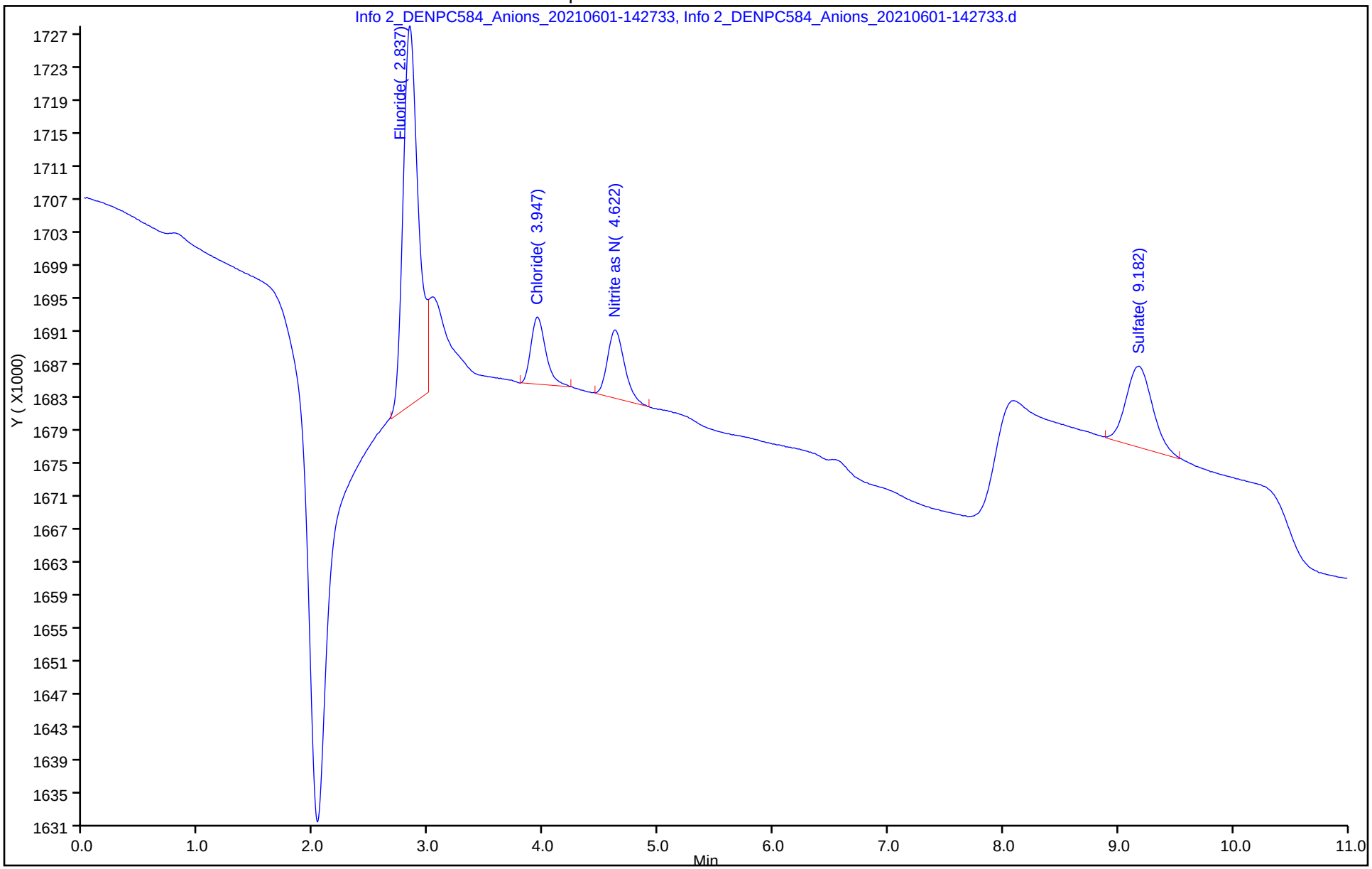
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 02-Jun-2021 13:56:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-142733.d				
Injection Date:	01-Jun-2021 14:13:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-142

Injection Date: 01-Jun-2021 14:13:00 Instrument ID: WC_IonChrom13

Lims ID: icb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 9

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

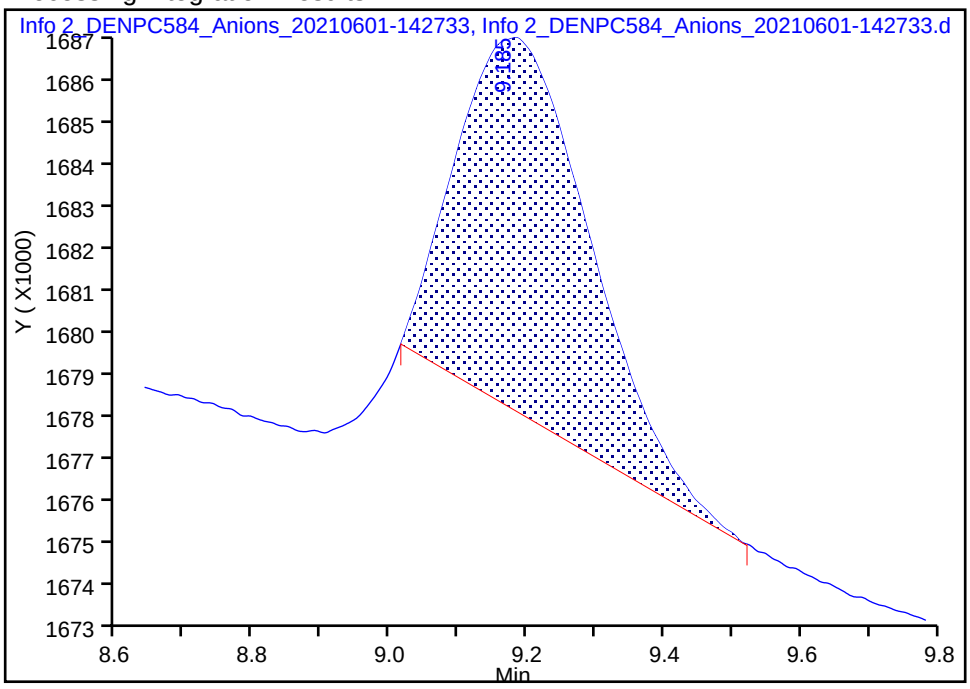
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

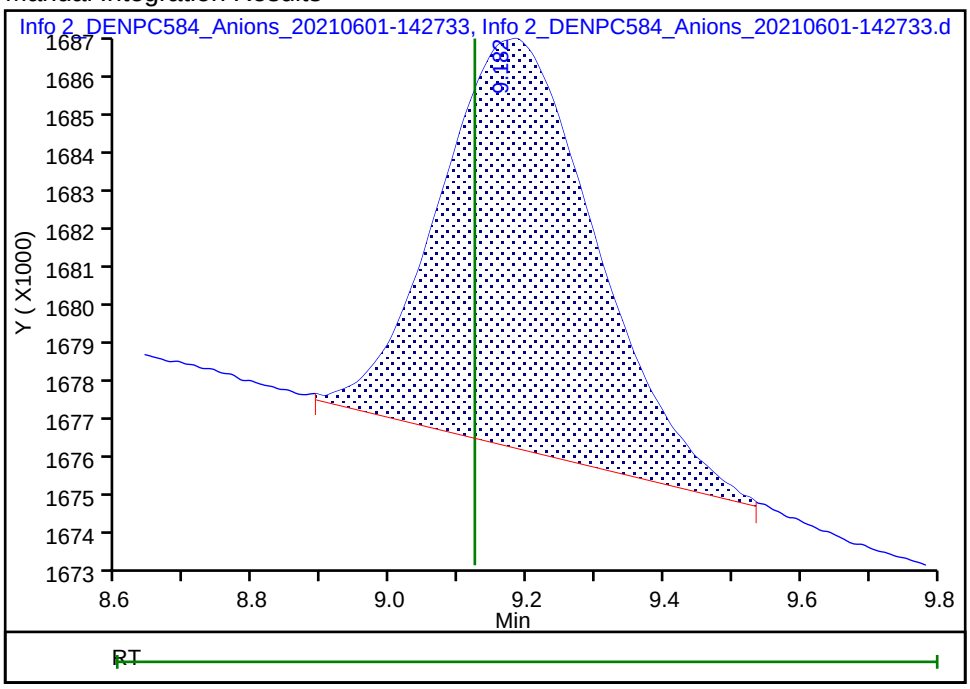
Processing Integration Results

RT: 9.19
Area: 111161
Amount: 0.221816
Amount Units: ug/ml



Manual Integration Results

RT: 9.18
Area: 158973
Amount: 0.226001
Amount Units: ug/ml



Reviewer: battilloj, 01-Jun-2021 15:36:34

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-144
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 01-Jun-2021 14:27:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0101970-010
Misc. Info.: 280-0101970-010
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2021 13:56:14 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1618

First Level Reviewer: jindaratc Date: 01-Jun-2021 15:15:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.832	2.832	0.000	99933460	4.00	3.82	M
2 Chloride	3.952	3.952	0.000	1275113141	80.0	83.1	
3 Nitrite as N	4.587	4.587	0.000	137592649	NC	NC	M
4 Bromide	5.682	5.682	0.000	21849553	4.00	3.80	
5 Nitrate as N	6.413	6.413	0.000	150215330	NC	NC	
7 Orthophosphate as P	7.975	7.975	0.000	57239185	NC	NC	
6 Sulfate	9.123	9.123	0.000	918072843	80.0	80.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

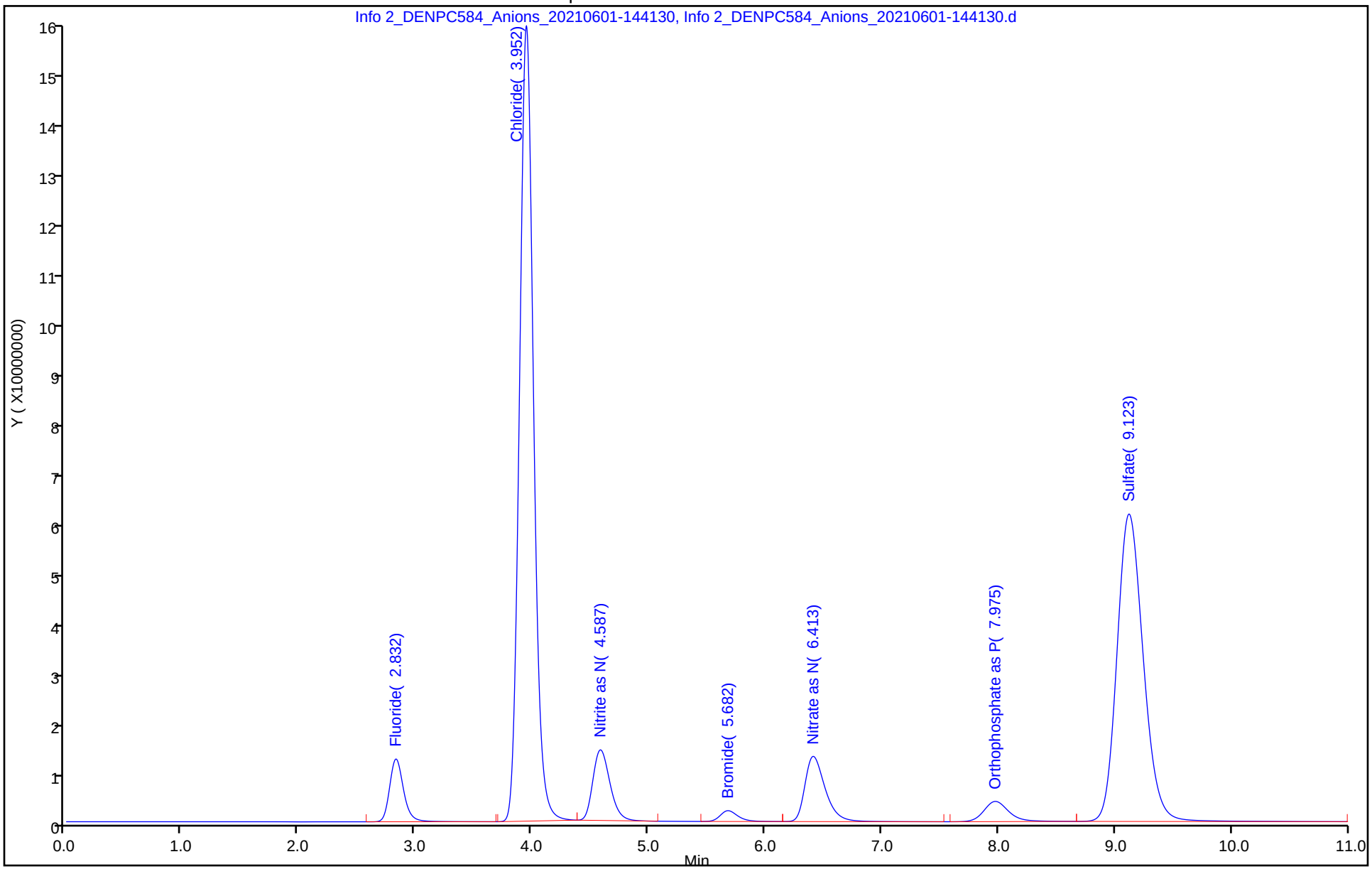
Reagents:

IC ICV 5_00319	Amount Added:	0.80	Units: mL
IC SO4 ICV_00022	Amount Added:	0.80	Units: mL
Cl ICV Std_00002	Amount Added:	0.80	Units: mL

Report Date: 02-Jun-2021 13:56:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-144130.d				
Injection Date:	01-Jun-2021 14:27:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	icv			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 102139 **Inst ID:** IC13 **Analysis Date:** 6/7/2021 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	148977	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	149046	1	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	148967	3	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	148902	10	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) 5	
☐	148646	4	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	148674	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
977		F Cl NO2 Br NO3 PO4 SO4	500 1000X	Rerun to confirm dilution
046		F Cl NO2 Br NO3 PO4 SO4	250X	Rerun dilution
967		F Cl NO2 Br NO3 PO4 SO4	5,100X	Rerun dilution
646		F Cl NO2 Br NO3 PO4 SO4	5,10X	Hist
674		F Cl NO2 Br NO3 PO4 SO4	10X	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_IonChrom13\20210601-101970.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	01-Jun-2021 15:35:15

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b
Inj Date : 01-Jun-2021 12:35:00, Sublist: chrom-Anions-IC13*sub2

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-381202	2629098		0.999
2 Chloride					-133126	1536627		0.999
3 Nitrite as N	-179438	3277508		0.998				
4 Bromide					-598589	5907013		0.999
5 Nitrate as N	-209458	3915735		0.999				
7 Orthophosphate as P	-149601	1637732		0.998				
6 Sulfate					-242306	1142489		0.999

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	01-Jun-2021 15:35:15

No.Compounds:7
Sublist: chrom-Anions-IC13*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.917 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-12495		
	Inj Date: 01-Jun-2021 12:35:00	Worklist: 101970	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13034		
	Inj Date: 01-Jun-2021 12:49:00	Worklist: 101970	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13174		
	Inj Date: 01-Jun-2021 13:03:00	Worklist: 101970	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13314		
	Inj Date: 01-Jun-2021 13:17:00	Worklist: 101970	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13453		
	Inj Date: 01-Jun-2021 13:31:00	Worklist: 101970	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13593		
	Inj Date: 01-Jun-2021 13:45:00	Worklist: 101970	Sample#: 7
Level: 7	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-14133		
	Inj Date: 01-Jun-2021 13:59:00	Worklist: 101970	Sample#: 8

Start Cal Date: 01-Jun-2021 12:35:00 End Cal Date: 01-Jun-2021 13:59:00

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
1 Fluoride				Signal: 1					
Error: raw_COD									
26224670	23581715	23292596	24238482	27097360	27074940	-381202			0.999
0.100000(1)	0.200000(2)	0.500000(3)	1.0000 (4)	4.0000 (5)	8.0000 (6)		26290989		
M2622467	M4716343	M11646298	M24238482	M108389439	216599518				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
25484459									
10.0 (7)									
254844587									
101970(8)									
2 Chloride				Signal: 1					
10994810	11594178	13073704	14898259	16009259	15854576	-1331266			0.999
0.200000(1)	0.500000(2)	2.0000 (3)	10.0 (4)	50.0 (5)	100.0 (6)		15366272		
M2198962	5797089	26147407	148982586	800462964	1585457586				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
14974908									
200.0 (7)									
2994981531									
101970(8)									
4 Bromide				Signal: 1					
4410955	4484853	4593106	4717570	5627624	6112996	-598589			0.999
0.200000(1)	0.400000(2)	1.0000 (3)	2.0000 (4)	8.0000 (5)	16.0 (6)		5907013		
M882191	M1793941	4593106	9435139	45020993	97807928				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
5872519									
20.0 (7)									
117450379									
101970(8)									

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
6 Sulfate				Signal: 1					
Error: raw_COD									
8436412	8569456	8886720	10560410	11754028	11797566	-2423063			0.999
0.500000(1)	1.0000 (2)	2.0000 (3)	10.0 (4)	50.0 (5)	100.0 (6)		11424892		
M4218206	M8569456	17773439	105604103	587701409	M1179756629				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
11161818									
200.0 (7)									
M2232363631									
101970(8)									

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	01-Jun-2021 15:35:15

No.Compounds:7
Sublist: chrom-Anions-IC13*sub2
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.917 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-12495		
	Inj Date: 01-Jun-2021 12:35:00	Worklist: 101970	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13034		
	Inj Date: 01-Jun-2021 12:49:00	Worklist: 101970	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13174		
	Inj Date: 01-Jun-2021 13:03:00	Worklist: 101970	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13314		
	Inj Date: 01-Jun-2021 13:17:00	Worklist: 101970	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13453		
	Inj Date: 01-Jun-2021 13:31:00	Worklist: 101970	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-13593		
	Inj Date: 01-Jun-2021 13:45:00	Worklist: 101970	Sample#: 7
Level: 7	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-14133		
	Inj Date: 01-Jun-2021 13:59:00	Worklist: 101970	Sample#: 8

Start Cal Date: 01-Jun-2021 12:35:00 End Cal Date: 01-Jun-2021 13:59:00

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
3 Nitrite as N				Signal: 1					
20520250	22796685	26286460	28199306	32903337	33881484	-1794389			0.998
0.100000(1)	0.200000(2)	0.500000(3)	1.0000 (4)	4.0000 (5)	8.0000 (6)		32775082		
2052025	4559337	13143230	M28199306	M131613346	M271051869				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
31686711									
10.0 (7)									
M316867109									
101970(8)									
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
26842530	28388640	30497300	32466289	38336828	40433365	-2094580			0.999
0.100000(1)	0.200000(2)	0.500000(3)	1.0000 (4)	4.0000 (5)	8.0000 (6)		39157359		
M2684253	M5677728	15248650	32466289	153347313	323466920				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
38439194									
10.0 (7)									
384391938									
101970(8)									
7 Orthophosphate as P				Signal: 1					
12183215	12304498	13139445	14013408	16291943	16889882	-1496010			0.998
0.200000(1)	0.400000(2)	1.0000 (3)	2.0000 (4)	8.0000 (5)	16.0 (6)		16377329		
M2436643	M4921799	13139445	28026815	130335543	270238113				
101970(2)	101970(3)	101970(4)	101970(5)	101970(6)	101970(7)				
15999522									
20.0 (7)									
319990447									
101970(8)									

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-132
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Jun-2021 13:08:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-001
Misc. Info.: 280-0102139-001
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:13 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 07-Jun-2021 13:25:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.860	0.000	143951915	5.00	5.49	
2 Chloride	3.993	3.993	0.000	1548422587	100.0	100.9	
3 Nitrite as N	4.627	4.627	0.000	166983275	NC	NC	
4 Bromide	5.750	5.750	0.000	26880006	5.00	4.65	
5 Nitrate as N	6.485	6.485	0.000	191521565	NC	NC	
7 Orthophosphate as P	8.023	8.023	0.000	79199167	NC	NC	
6 Sulfate	9.142	9.142	0.000	1140002364	100.0	100.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

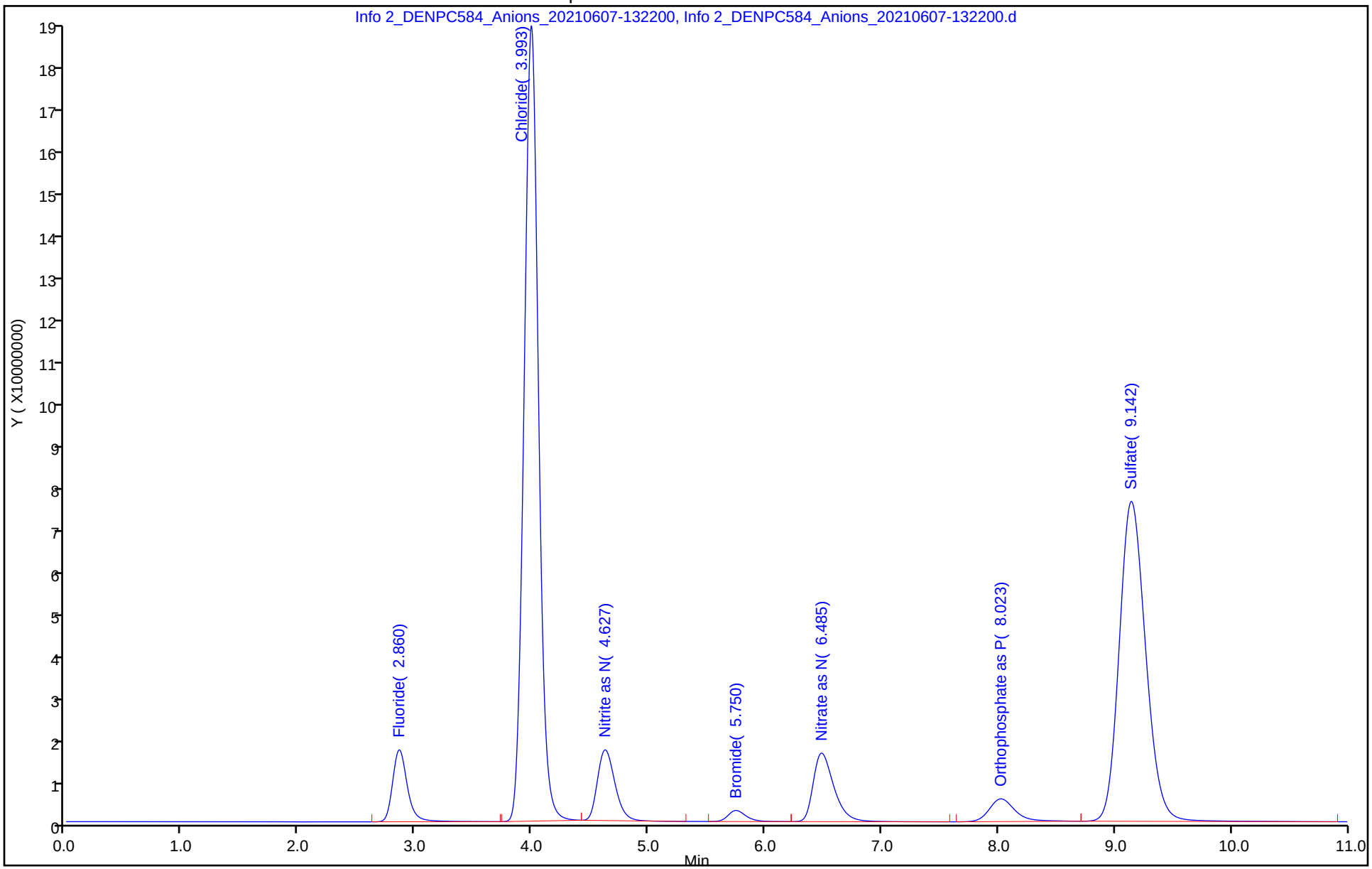
Reagents:

IC LCS_01813 Amount Added: 10.00 Units: mL

Report Date: 08-Jun-2021 13:45:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-132200.d				
Injection Date:	07-Jun-2021 13:08:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-133
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 07-Jun-2021 13:22:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-002
Misc. Info.: 280-0102139-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:13 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 07-Jun-2021 19:56:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.893	2.860	0.033	17479		0.0152	M
2 Chloride		3.993				ND	
3 Nitrite as N		4.627				ND	
4 Bromide		5.750				ND	
5 Nitrate as N		6.485				ND	
7 Orthophosphate as P		8.023				ND	
6 Sulfate	9.213	9.142	0.071	77215		0.2188	Ma

QC Flag Legend

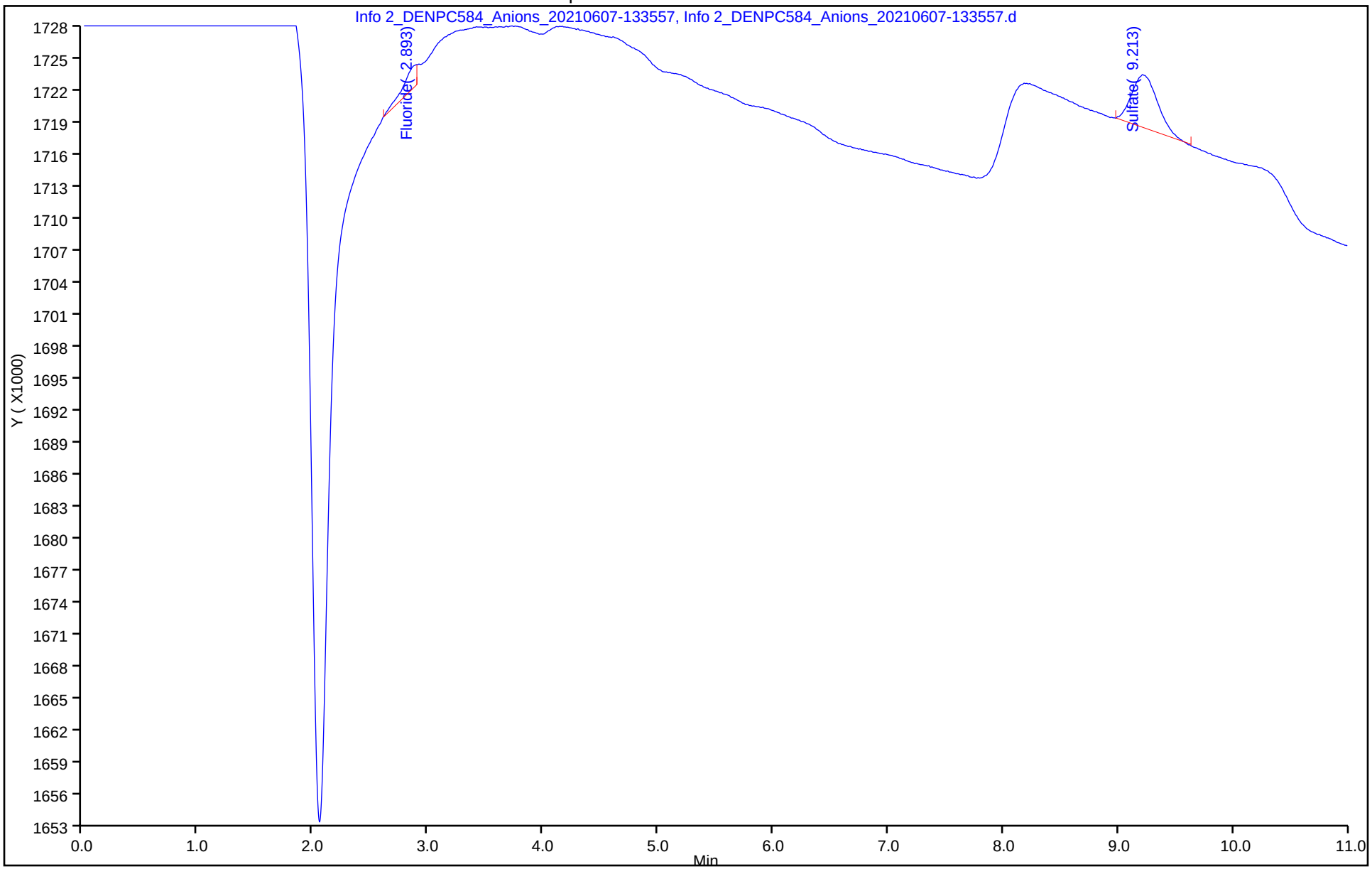
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 08-Jun-2021 13:45:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-133557.d

Injection Date:	07-Jun-2021 13:22:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-133

Injection Date: 07-Jun-2021 13:22:00 Instrument ID: WC_IonChrom13

Lims ID: CCB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

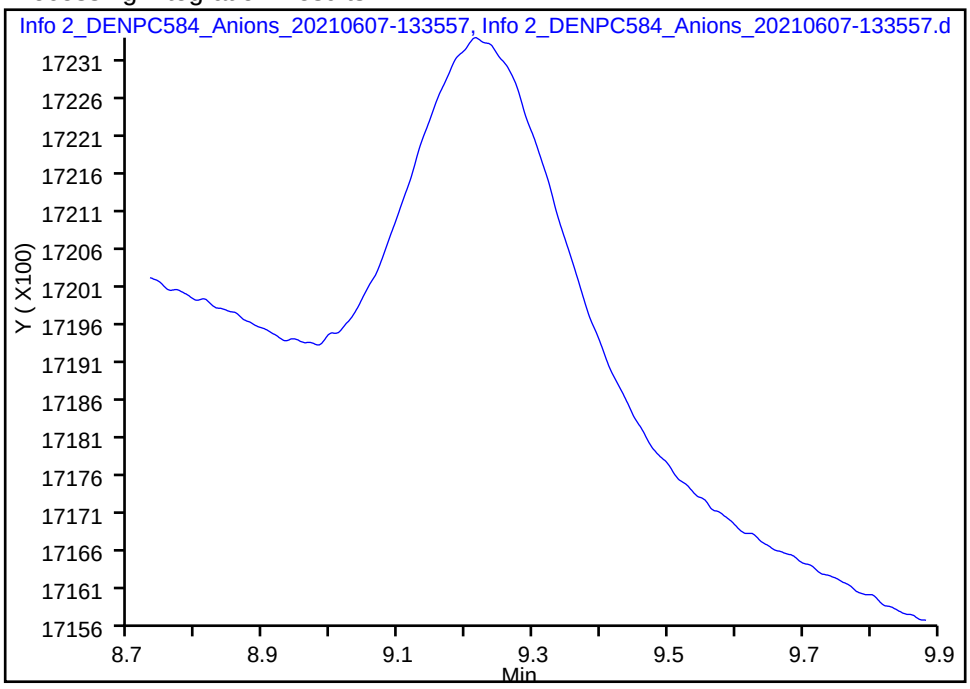
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 9.14

Processing Integration Results



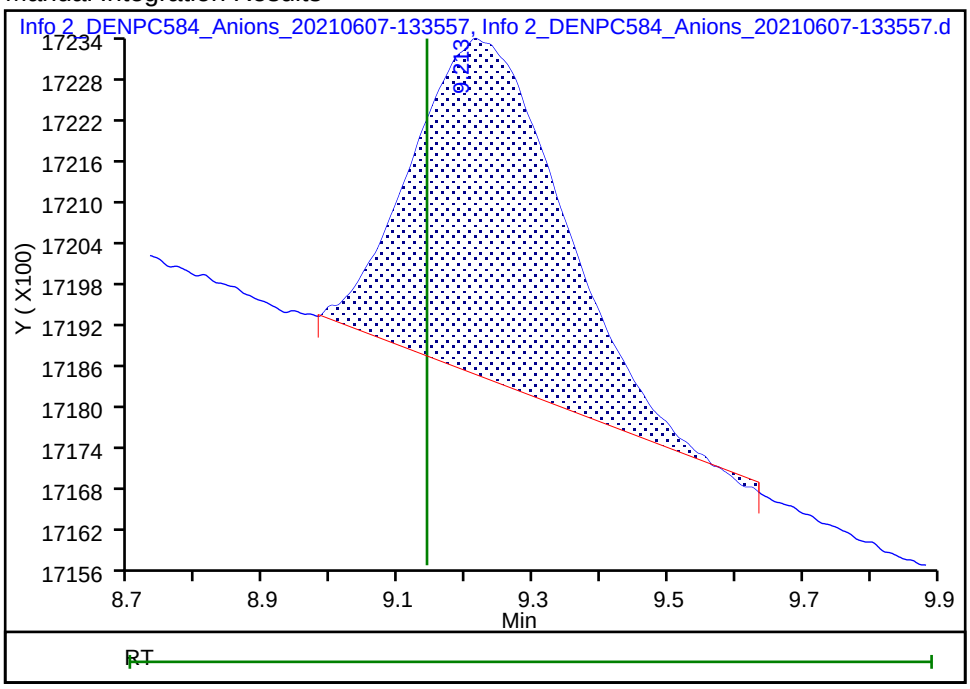
Manual Integration Results

RT: 9.21

Area: 77215

Amount: 0.218845

Amount Units: ug/ml



Reviewer: jindaratc, 07-Jun-2021 19:56:07

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-134
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 07-Jun-2021 13:35:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-003
Misc. Info.: 280-0102139-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:13 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 07-Jun-2021 19:56:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.860	0.000	12397216	0.5000	0.4860	M
2 Chloride	3.967	3.993	-0.026	69989951	5.00	4.64	
3 Nitrite as N	4.643	4.627	0.016	14253585	NC	NC	
4 Bromide	5.765	5.750	0.015	2314381	0.5000	0.4931	
5 Nitrate as N	6.547	6.485	0.062	15573571	NC	NC	
7 Orthophosphate as P	8.060	8.023	0.037	8196261	NC	NC	
6 Sulfate	9.202	9.142	0.060	49488302	5.00	4.54	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

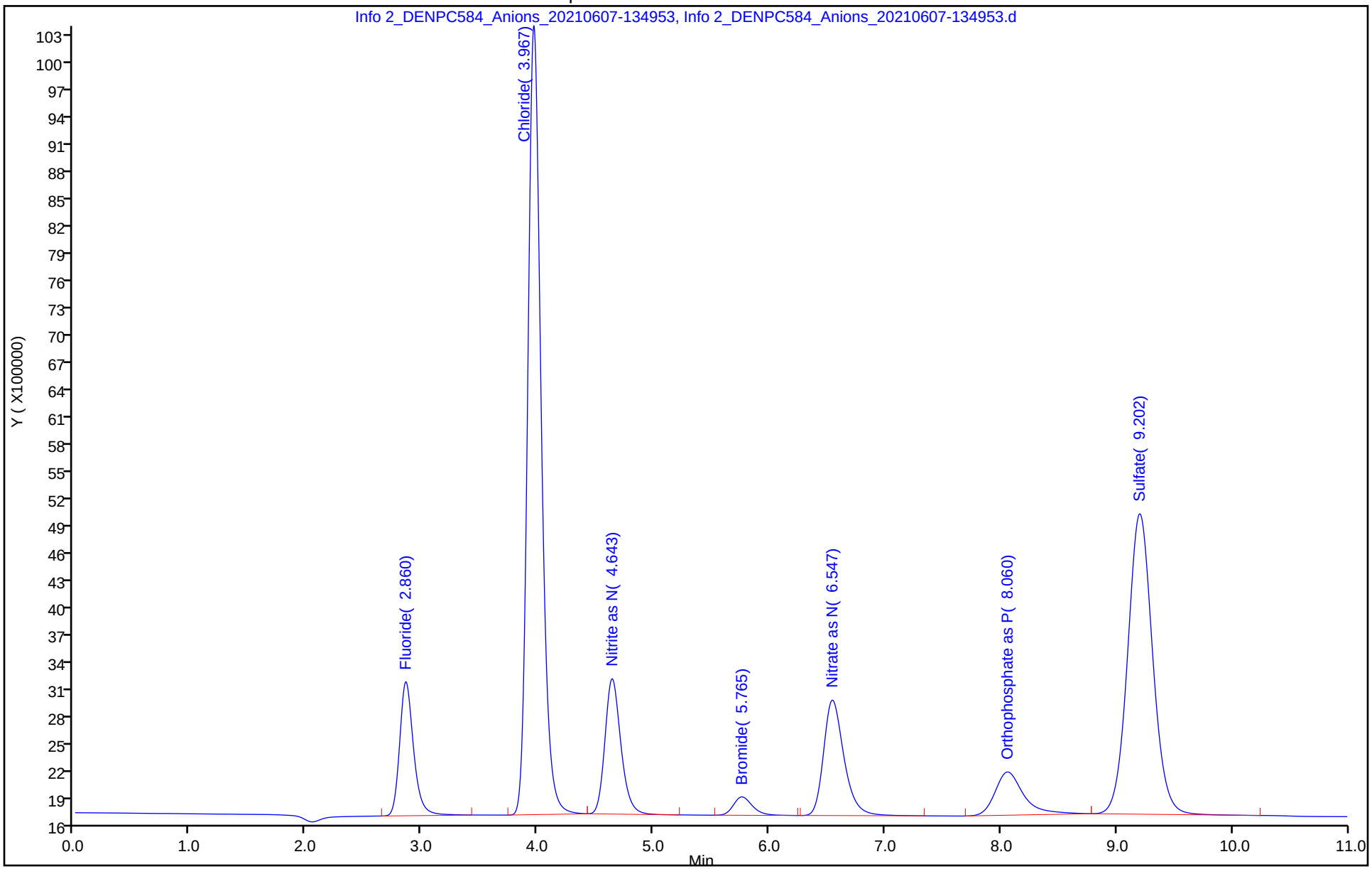
Reagents:

IC CAL cl/so4_00368 Amount Added: 0.20 Units: mL
IC Cal low_00583 Amount Added: 0.10 Units: mL

Report Date: 08-Jun-2021 13:45:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-134953.d				
Injection Date:	07-Jun-2021 13:35:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-140
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Jun-2021 13:49:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-004
Misc. Info.: 280-0102139-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:13 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.860	0.010	144169413	5.00	5.50	
2 Chloride	3.997	3.993	0.004	1538055169	100.0	100.2	
3 Nitrite as N	4.623	4.627	-0.004	166632872	NC	NC	
4 Bromide	5.730	5.750	-0.020	26950583	5.00	4.66	
5 Nitrate as N	6.457	6.485	-0.028	191211919	NC	NC	
7 Orthophosphate as P	8.050	8.023	0.027	79619621	NC	NC	
6 Sulfate	9.172	9.142	0.030	1133233546	100.0	99.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

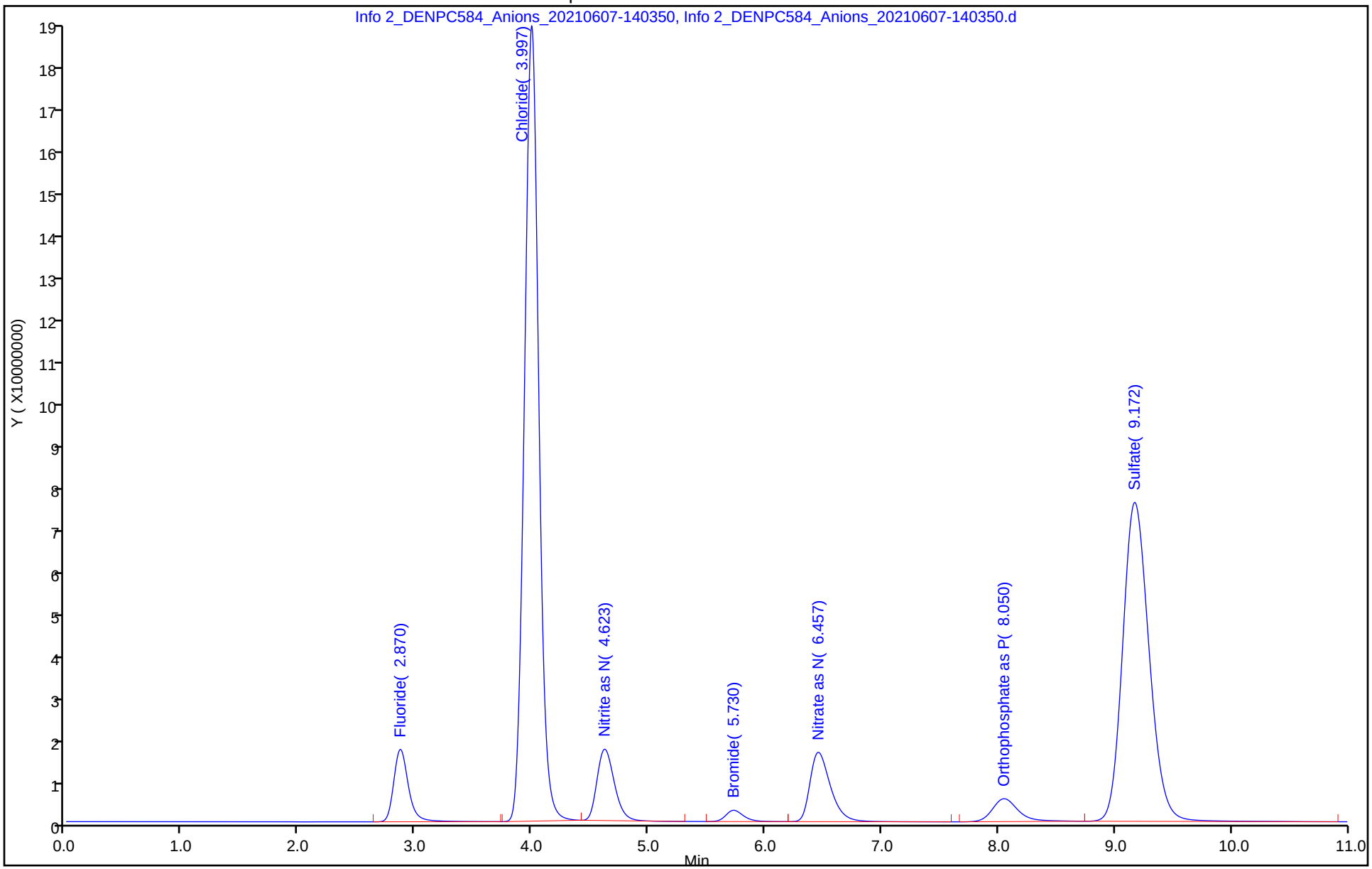
Reagents:

IC LCS_01813 Amount Added: 10.00 Units: mL

Report Date: 08-Jun-2021 13:45:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-140350.d				
Injection Date:	07-Jun-2021 13:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-141
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 07-Jun-2021 14:03:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-005
Misc. Info.: 280-0102139-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:13 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.860	0.010	143656680	5.00	5.48	
2 Chloride	3.997	3.993	0.004	1541332554	100.0	100.4	
3 Nitrite as N	4.620	4.627	-0.007	166193962	NC	NC	
4 Bromide	5.723	5.750	-0.027	26804743	5.00	4.64	
5 Nitrate as N	6.448	6.485	-0.037	191231357	NC	NC	
7 Orthophosphate as P	8.055	8.023	0.032	79177113	NC	NC	
6 Sulfate	9.175	9.142	0.033	1133538045	100.0	99.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

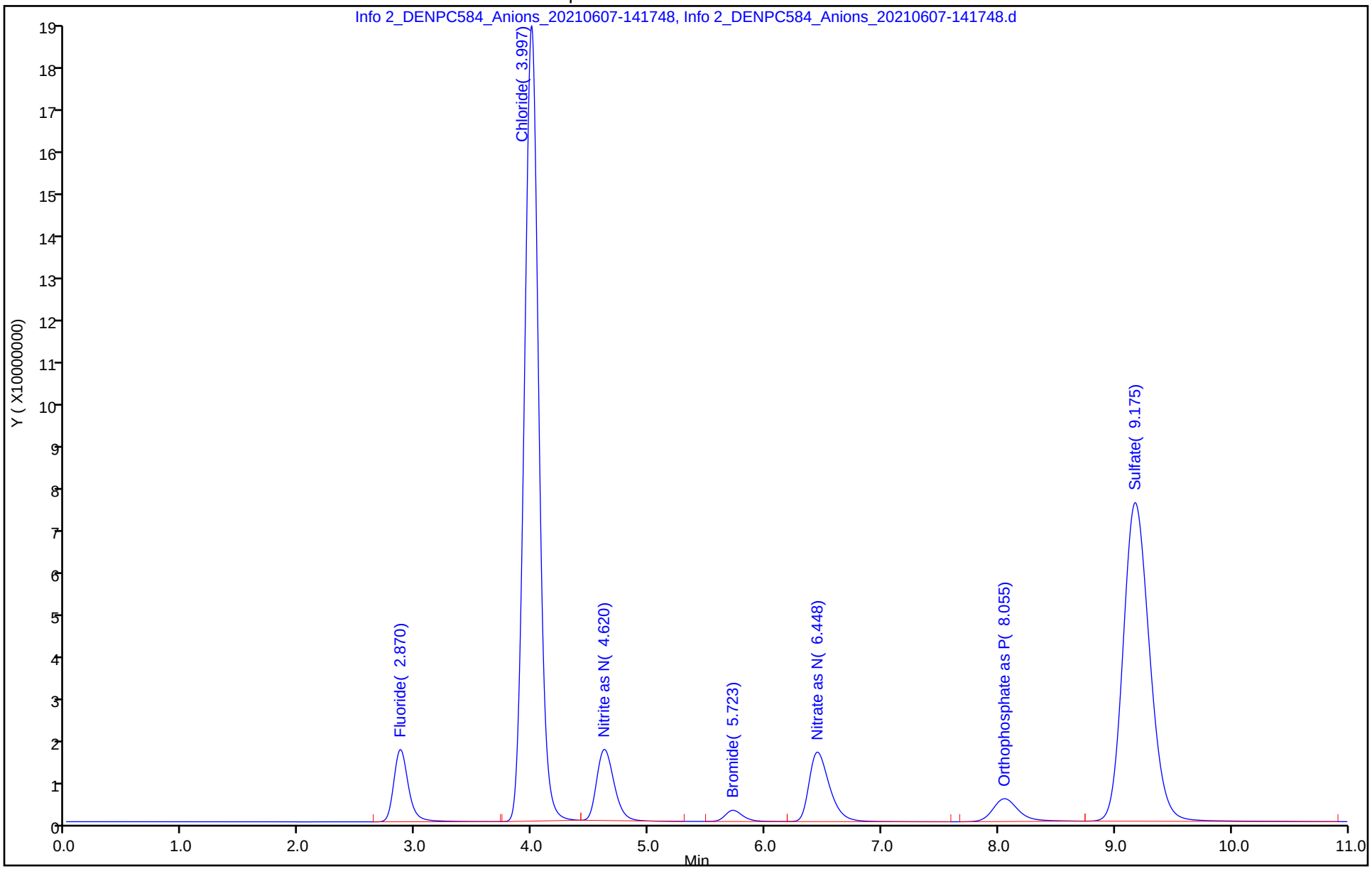
Reagents:

IC LCS_01813 Amount Added: 10.00 Units: mL

Report Date: 08-Jun-2021 13:45:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-141748.d				
Injection Date:	07-Jun-2021 14:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-143
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-Jun-2021 14:17:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-006
Misc. Info.: 280-0102139-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:16 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 07-Jun-2021 19:56:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.903	2.903	0.000	16179		0.0151	M
2 Chloride		3.993				ND	
3 Nitrite as N		4.627				ND	
4 Bromide		5.750				ND	
5 Nitrate as N		6.485				ND	
7 Orthophosphate as P		8.023				ND	
6 Sulfate	9.237	9.237	0.000	90796		0.2200	Ma

QC Flag Legend

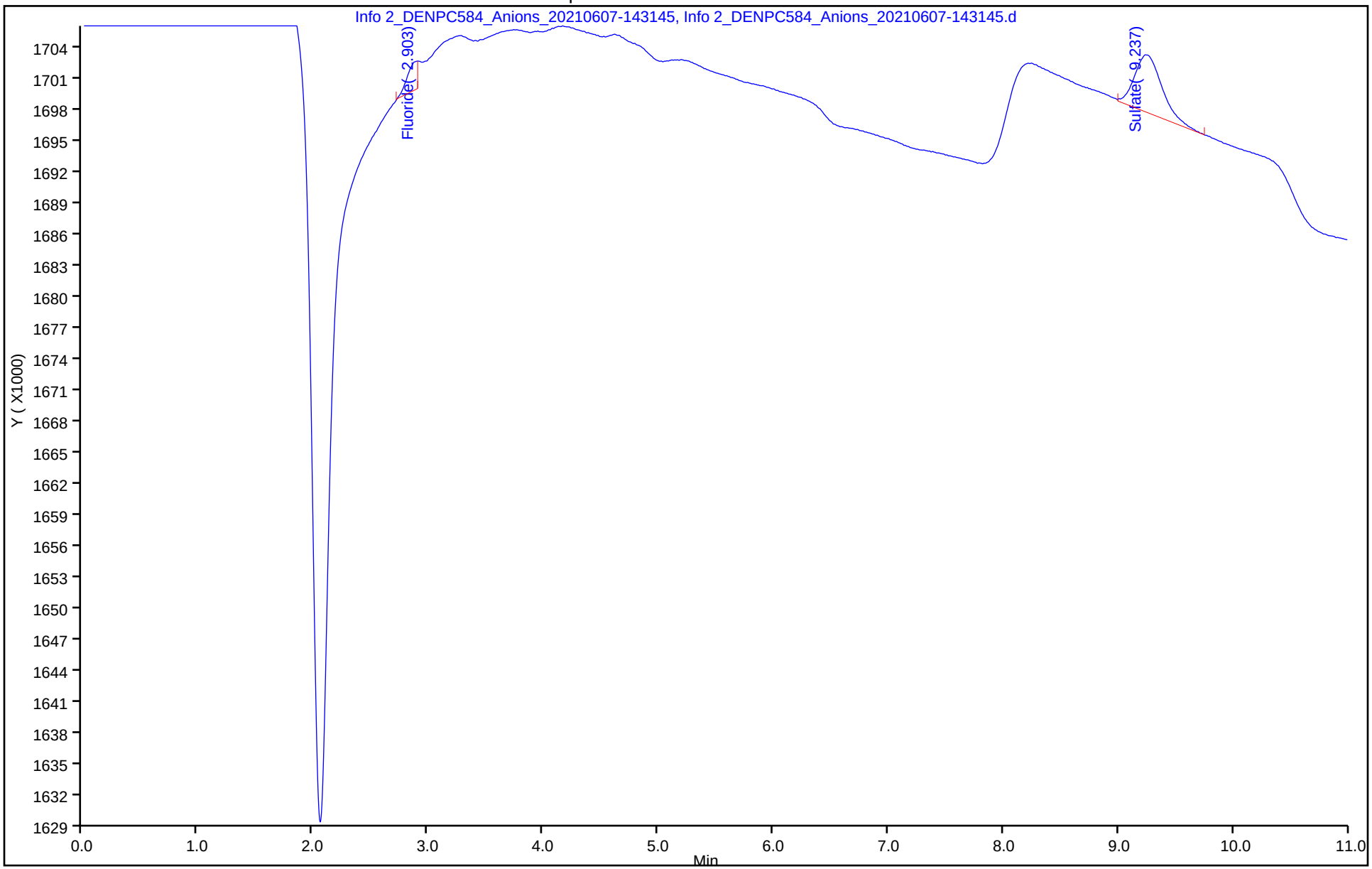
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 08-Jun-2021 13:45:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-143145.d

Injection Date:	07-Jun-2021 14:17:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-143

Injection Date: 07-Jun-2021 14:17:00 Instrument ID: WC_IonChrom13

Lims ID: MB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

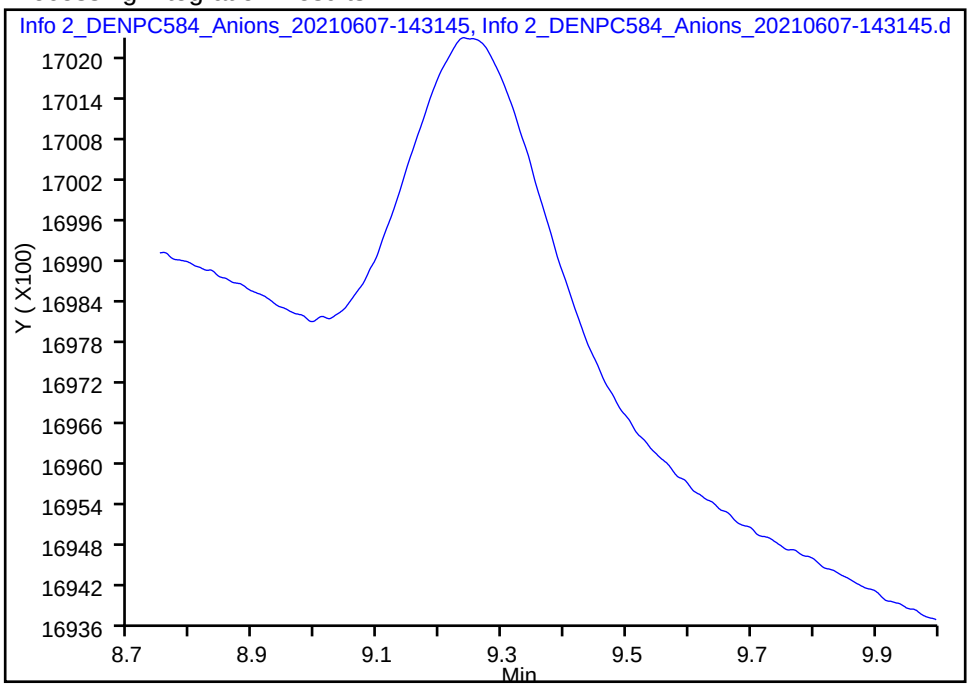
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 9.24

Processing Integration Results



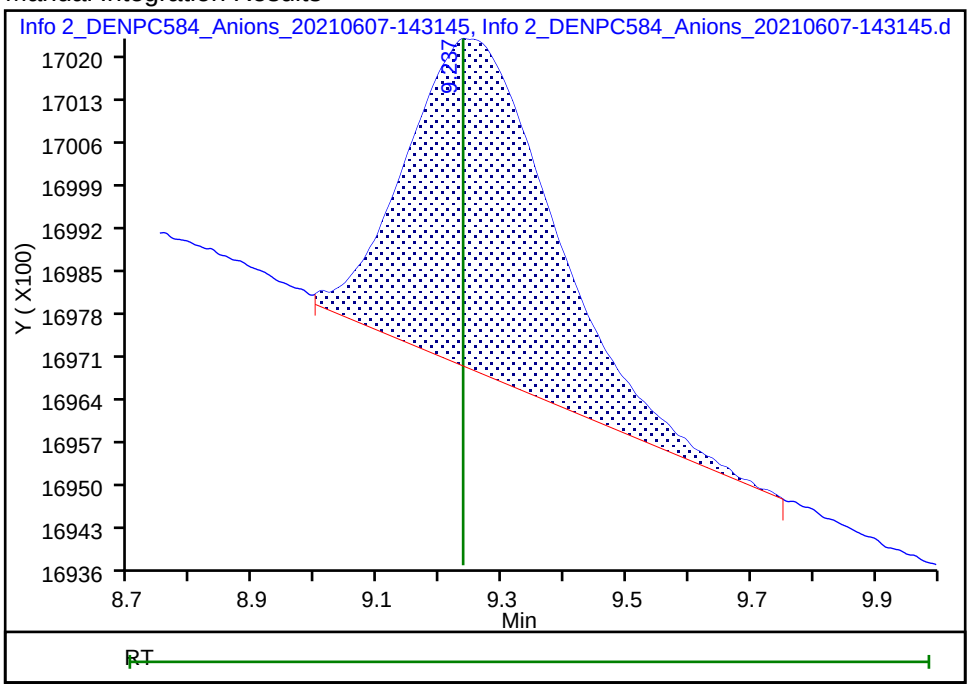
Manual Integration Results

RT: 9.24

Area: 90796

Amount: 0.220034

Amount Units: ug/ml



Reviewer: jindaratc, 07-Jun-2021 19:56:44

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-195
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 07-Jun-2021 19:44:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-017
Misc. Info.: 280-0102139-017
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.893	2.903	-0.010	139358429	5.00	5.32	
2 Chloride	4.028	3.993	0.035	1535872678	100.0	100.0	
3 Nitrite as N	4.653	4.627	0.026	162845983	NC	NC	
4 Bromide	5.757	5.750	0.007	26697536	5.00	4.62	
5 Nitrate as N	6.483	6.485	-0.002	191104914	NC	NC	
7 Orthophosphate as P	8.185	8.023	0.162	77969514	NC	NC	
6 Sulfate	9.295	9.237	0.058	1125224968	100.0	98.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

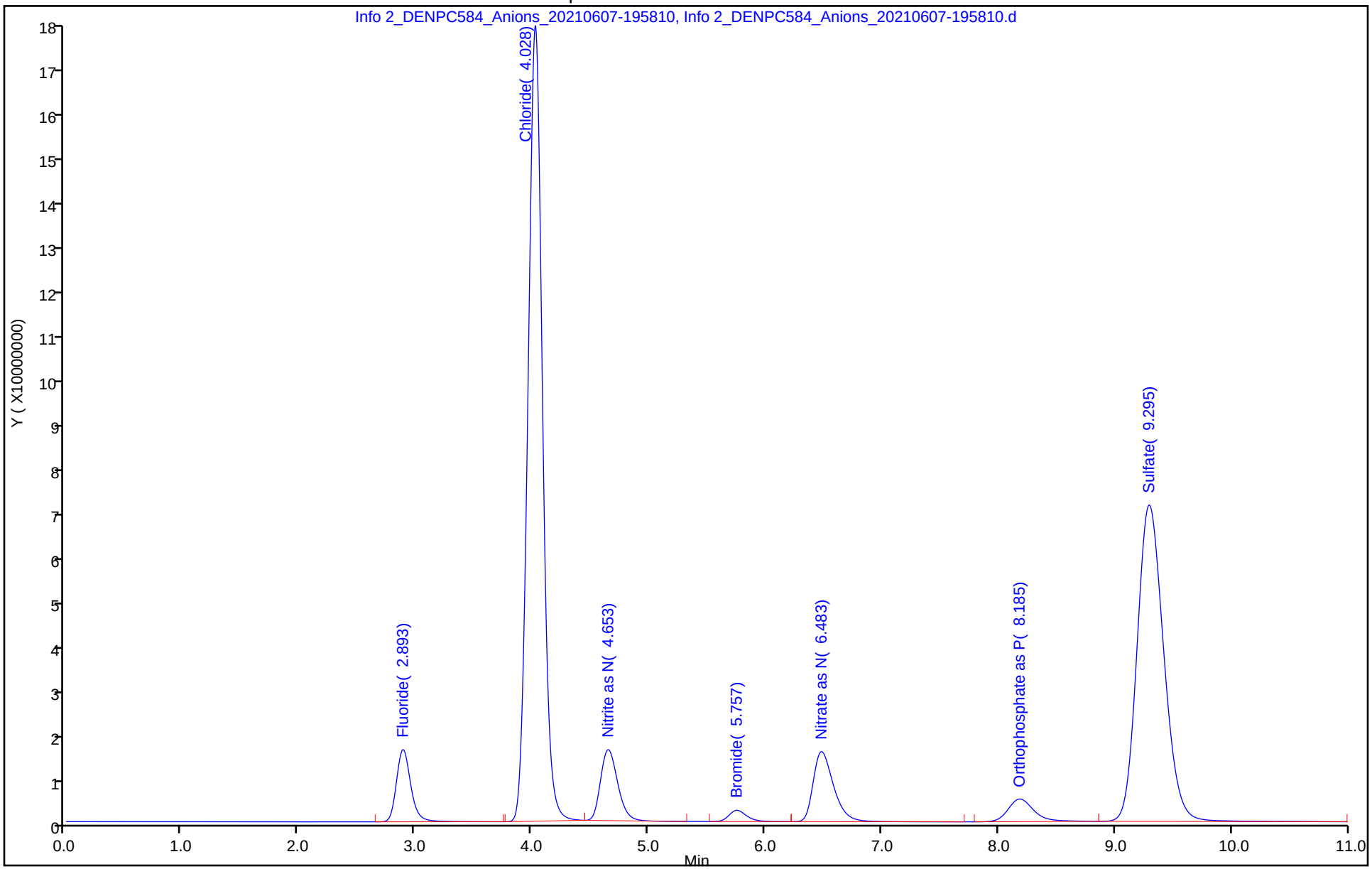
Reagents:

IC LCS_01813 Amount Added: 10.00 Units: mL

Report Date: 08-Jun-2021 13:45:21 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-195810.d				
Injection Date:	07-Jun-2021 19:44:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-201
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 07-Jun-2021 19:58:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-018
Misc. Info.: 280-0102139-018
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 08-Jun-2021 13:29:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.950	2.903	0.047	17102		0.0151	M
2 Chloride	3.998	3.993	0.005	36104		0.0890	Ma
3 Nitrite as N		4.627				ND	
4 Bromide		5.750				ND	
5 Nitrate as N		6.485				ND	
7 Orthophosphate as P		8.023				ND	
6 Sulfate	9.358	9.237	0.121	95276		0.2204	Ma

QC Flag Legend

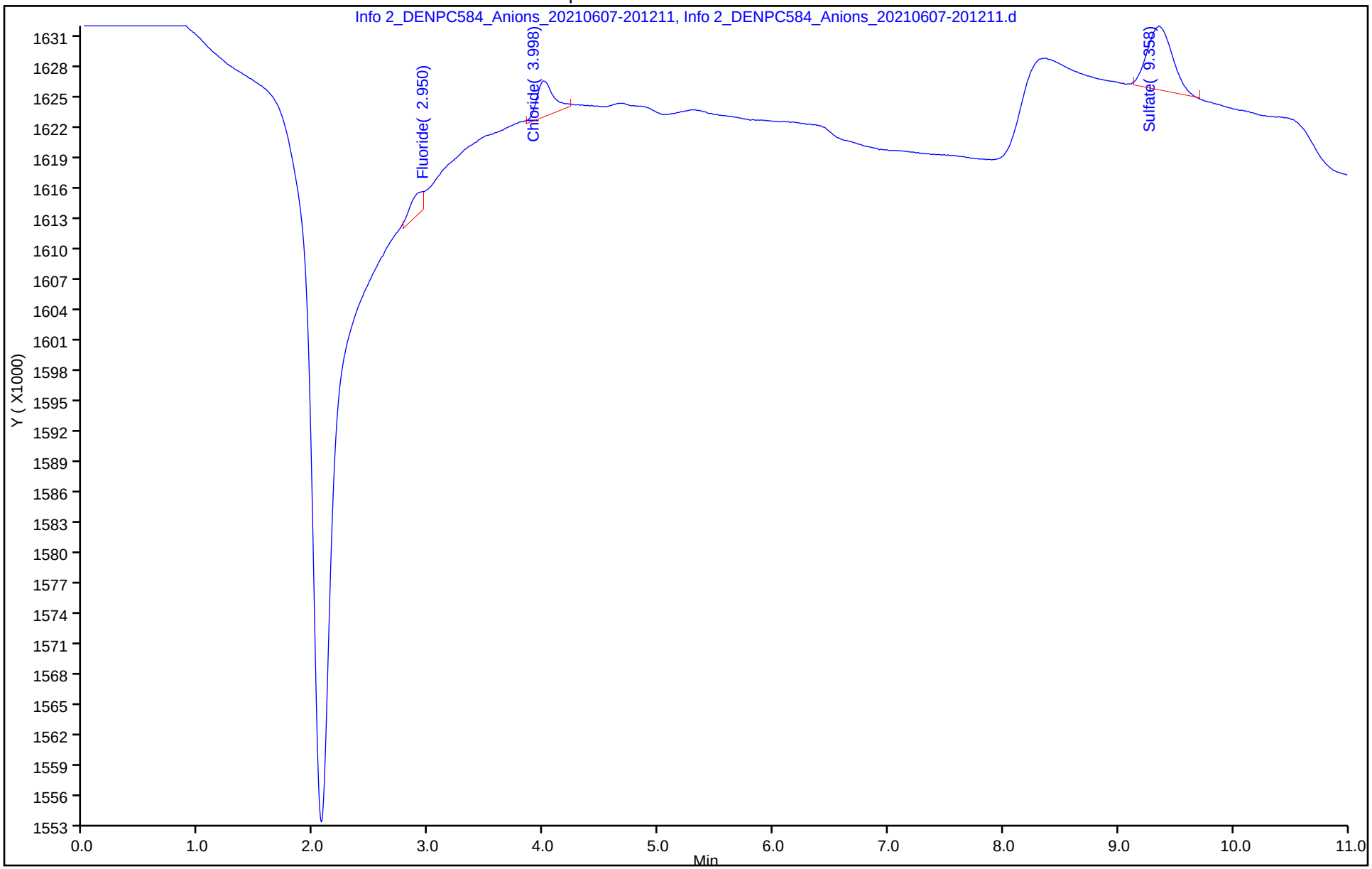
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 08-Jun-2021 13:45:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-201211.d

Injection Date:	07-Jun-2021 19:58:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-201

Injection Date: 07-Jun-2021 19:58:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 18

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

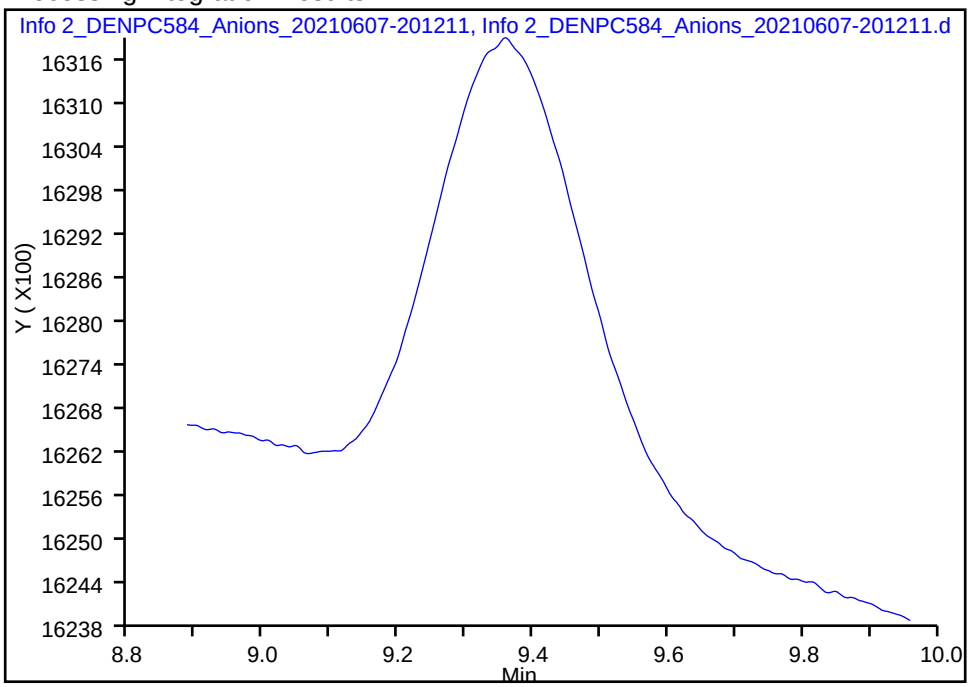
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 9.24

Processing Integration Results



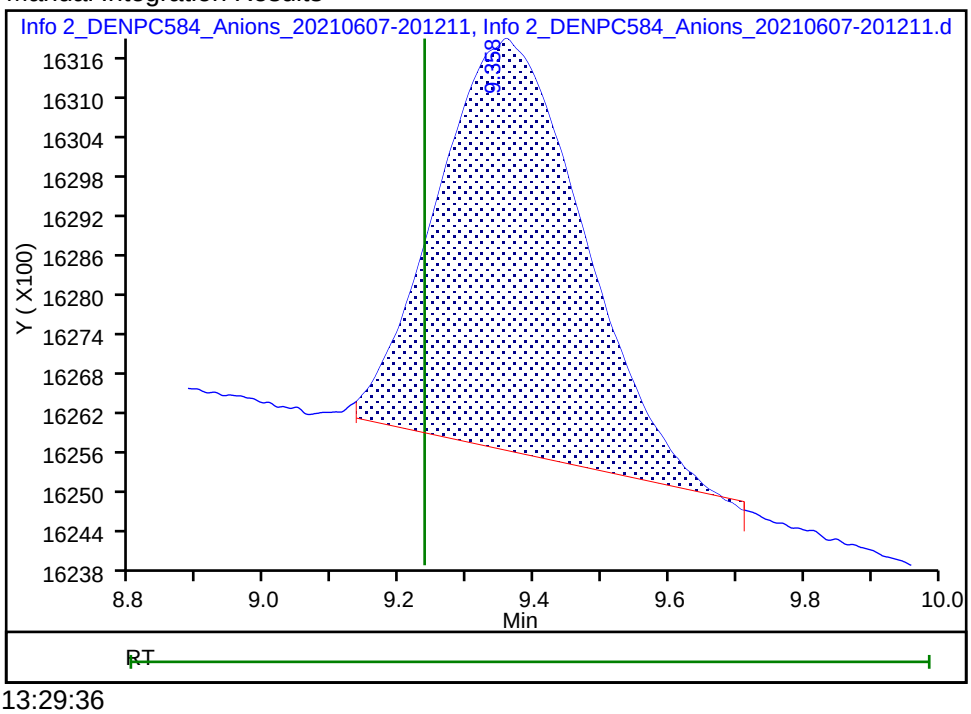
Manual Integration Results

RT: 9.36

Area: 95276

Amount: 0.220426

Amount Units: ug/ml



Reviewer: jindaratc, 08-Jun-2021 13:29:36

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-202
Lims ID: 280-148902-E-1
Client ID: G0081-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 20:12:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-019
Misc. Info.: 280-0102139-019
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.878	2.903	-0.025	4848200	0.1989	
2 Chloride	4.037	3.993	0.044	520208990	33.9	
3 Nitrite as N	5.002	4.627	0.375	350255	NC	
4 Bromide	5.840	5.750	0.090	847883	0.2449	
5 Nitrate as N	6.542	6.485	0.057	112794246	NC	
7 Orthophosphate as P	8.240	8.023	0.217	6669844	NC	
6 Sulfate	9.288	9.237	0.051	1633150177	143.2	

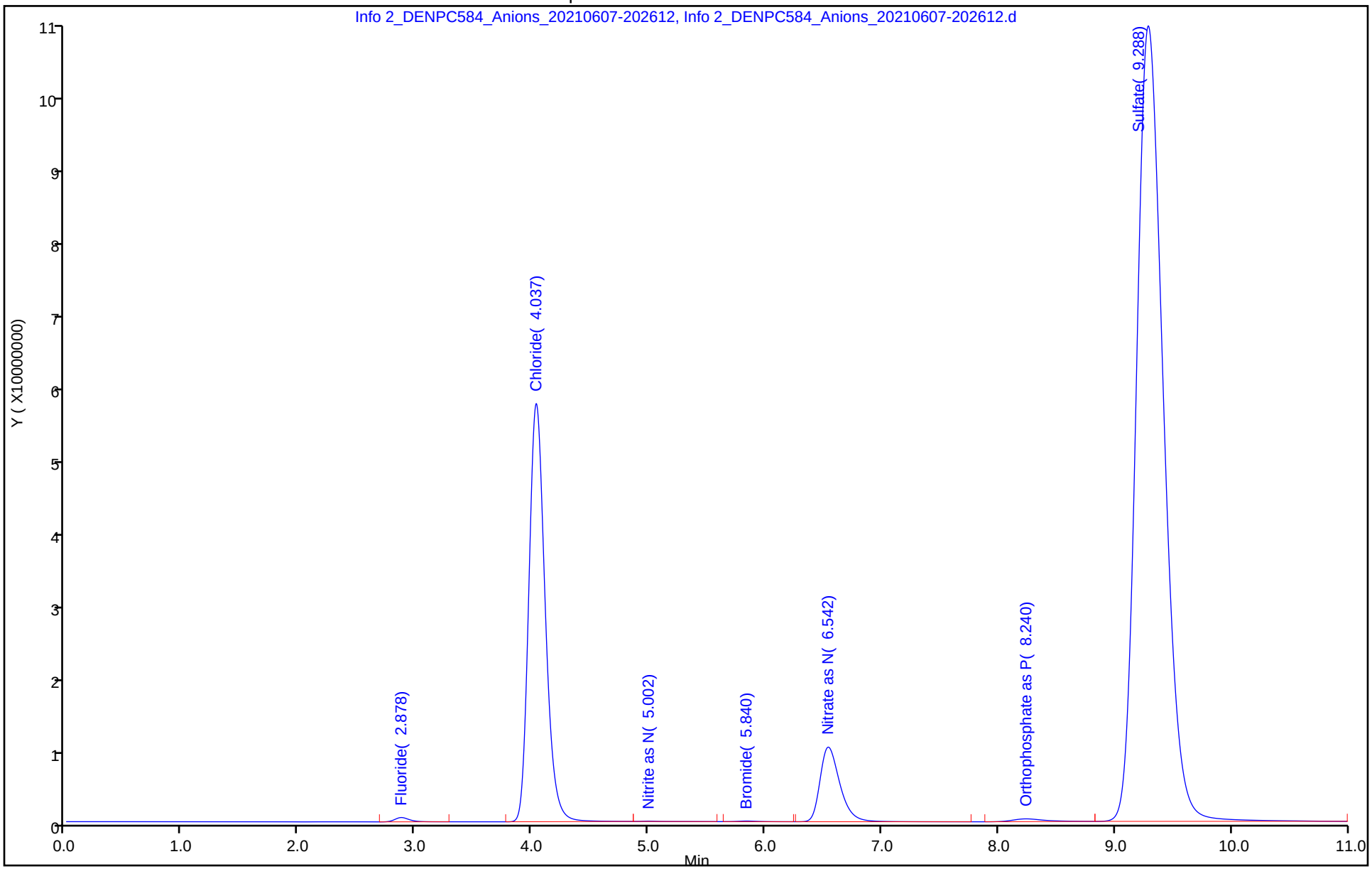
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-202612.d				
Injection Date:	07-Jun-2021 20:12:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-1	Lab Sample ID:	280-148902-1	Worklist Smp#:	19
Client ID:	G0081-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-204				
Lims ID:	280-148902-E-2				
Client ID:	G0079-21A				
Sample Type:	Client				
Inject. Date:	07-Jun-2021 20:26:00	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0102139-020				
Misc. Info.:	280-0102139-020				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-Jun-2021 13:45:21	Calib Date:	01-Jun-2021 13:59:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141				
Column 1 :			Det: 0005		
Process Host:	CTX1619				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.877	2.903	-0.026	6286930	0.2536	
2 Chloride	4.032	3.993	0.039	390755033	25.5	
3 Nitrite as N	5.025	4.627	0.398	863077	NC	
4 Bromide	5.850	5.750	0.100	681184	0.2167	
5 Nitrate as N	6.568	6.485	0.083	64686447	NC	
7 Orthophosphate as P	8.247	8.023	0.224	5841756	NC	
6 Sulfate	9.330	9.237	0.093	571042968	50.2	

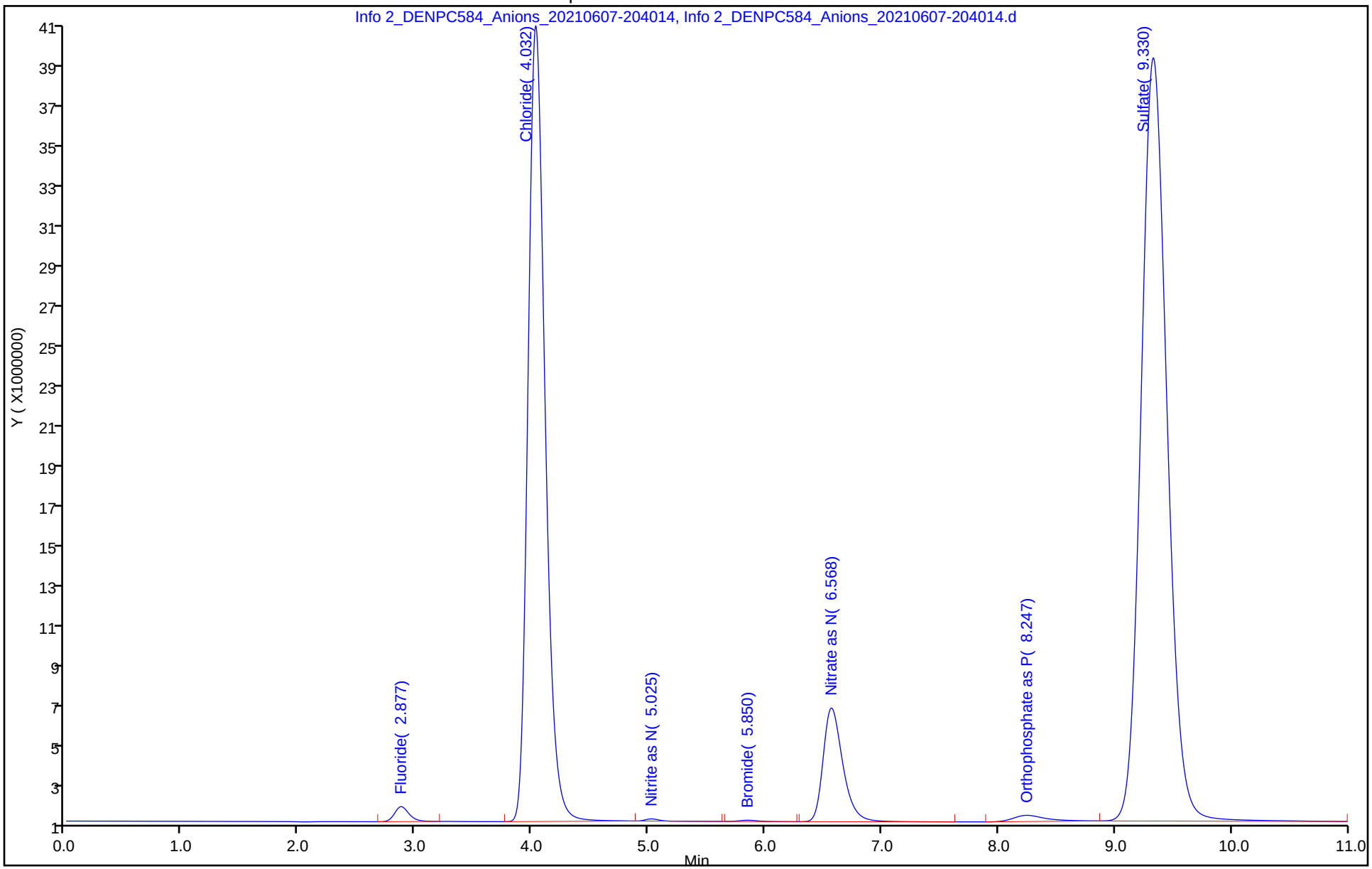
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-204014.d				
Injection Date:	07-Jun-2021 20:26:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-2	Lab Sample ID:	280-148902-2	Worklist Smp#:	20
Client ID:	G0079-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-210
Lims ID: 280-148902-E-4
Client ID: NW071-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 20:54:00 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-022
Misc. Info.: 280-0102139-022
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.878	2.903	-0.025	2481846	0.1089	
2 Chloride	4.013	3.993	0.020	650775488	42.4	
3 Nitrite as N		4.627			ND	
4 Bromide	5.827	5.750	0.077	390309	0.1674	
5 Nitrate as N	6.448	6.485	-0.037	1242814138	NC	
7 Orthophosphate as P	8.240	8.023	0.217	7738006	NC	
6 Sulfate	9.318	9.237	0.081	722079018	63.4	

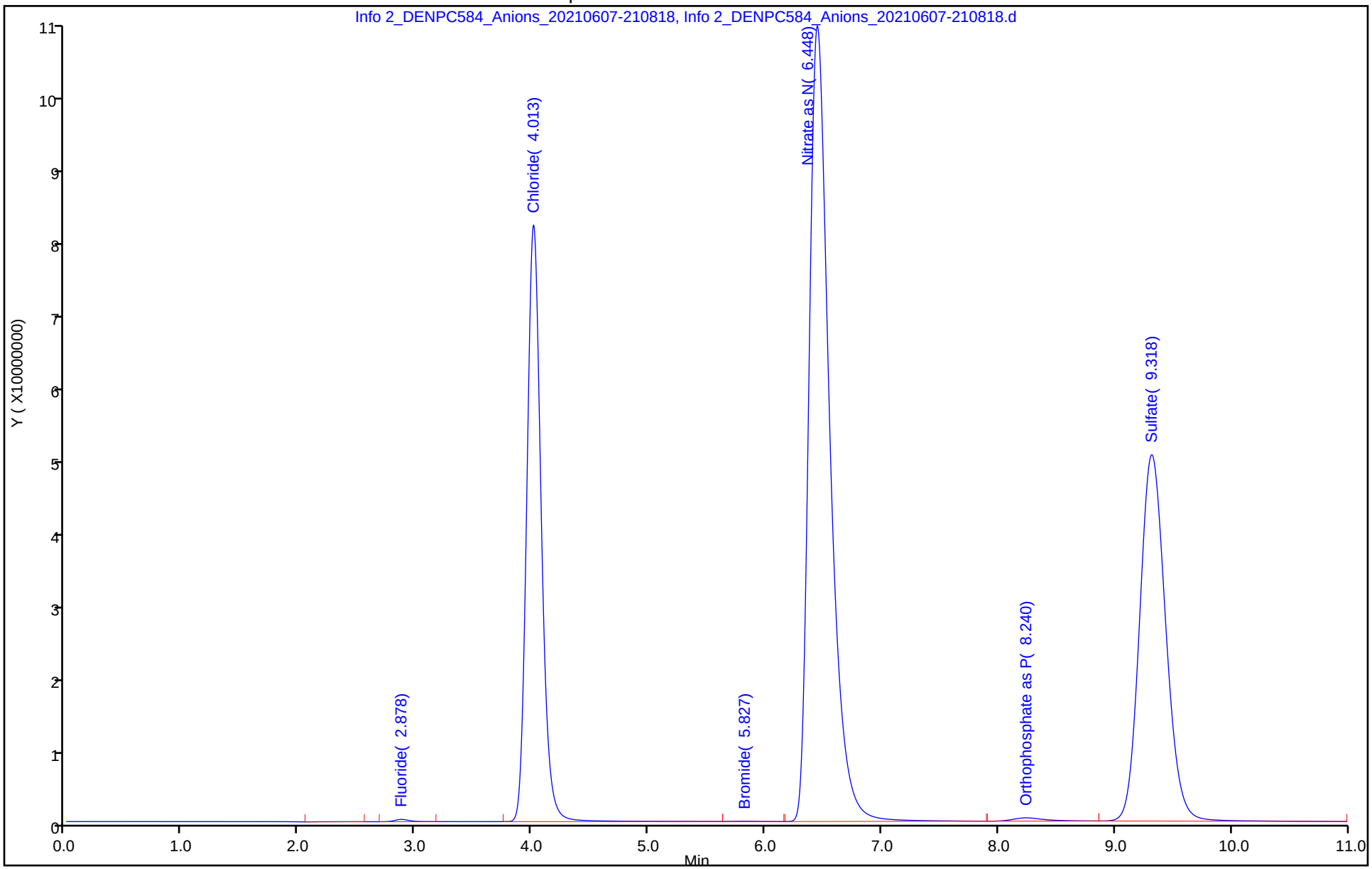
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-210818.d				
Injection Date:	07-Jun-2021 20:54:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-4	Lab Sample ID:	280-148902-4	Worklist Smp#:	22
Client ID:	NW071-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-212
Lims ID: 280-148902-E-5
Client ID: G0070-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 21:08:00 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-023
Misc. Info.: 280-0102139-023
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.878	2.903	-0.025	4092106	0.1701	
2 Chloride	4.022	3.993	0.029	165223222	10.8	
3 Nitrite as N		4.627			ND	
4 Bromide	5.845	5.750	0.095	463410	0.1798	
5 Nitrate as N	6.672	6.485	0.187	160849	NC	
7 Orthophosphate as P	8.252	8.023	0.229	1106104	NC	
6 Sulfate	9.317	9.237	0.080	496423195	43.7	

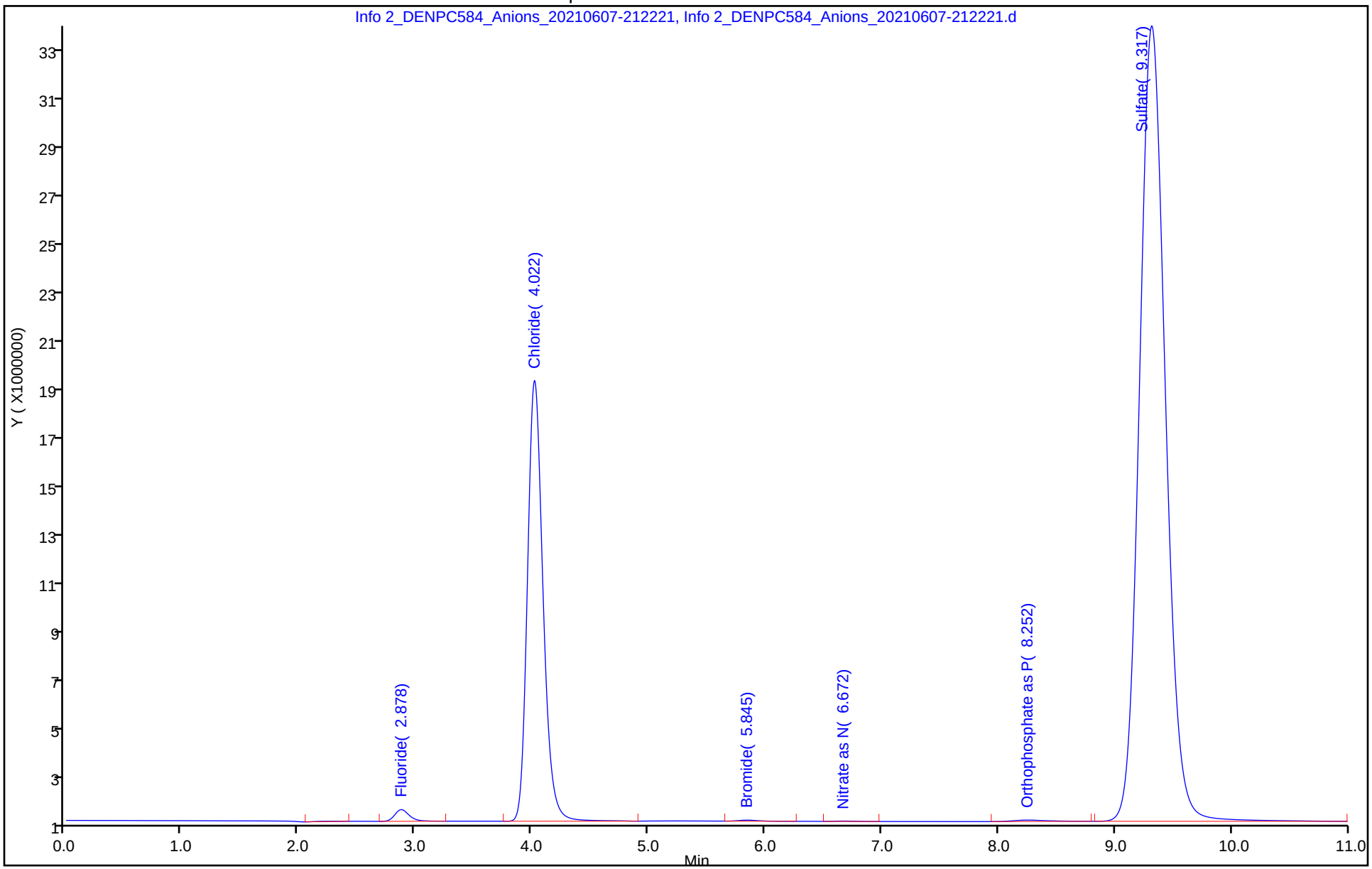
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-212221.d				
Injection Date:	07-Jun-2021 21:08:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-5	Lab Sample ID:	280-148902-5	Worklist Smp#:	23
Client ID:	G0070-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-213
Lims ID: 280-148902-E-5 DU
Client ID:
Sample Type: DU
Inject. Date: 07-Jun-2021 21:22:00 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-024
Misc. Info.: 280-0102139-024
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.877	2.903	-0.026	3999404		0.1666	
2 Chloride	4.022	3.993	0.029	164585549		10.8	
3 Nitrite as N		4.627				ND	
4 Bromide	5.848	5.750	0.098	456695		0.1786	
5 Nitrate as N	6.673	6.485	0.188	145604		NC	
7 Orthophosphate as P	8.252	8.023	0.229	1056220		NC	
6 Sulfate	9.317	9.237	0.080	495382271		43.6	

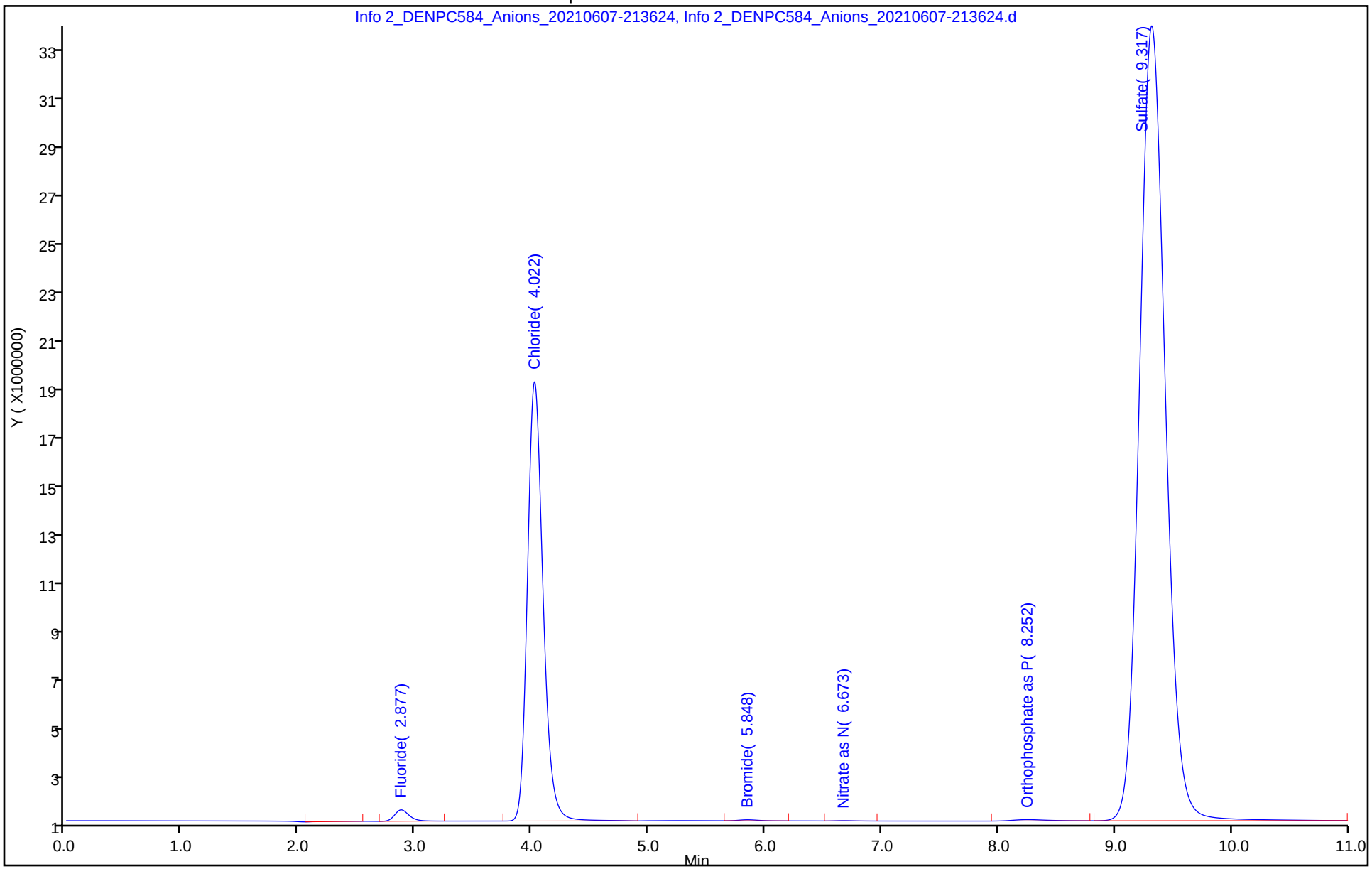
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-213624.d				
Injection Date:	07-Jun-2021 21:22:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-5 DU			Worklist Smp#:	24
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-215
Lims ID: 280-148902-E-5 MS
Client ID: G0070-21A
Sample Type: MS
Inject. Date: 07-Jun-2021 21:36:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-025
Misc. Info.: 280-0102139-025
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.883	2.903	-0.020	115207470	5.00	4.40	
2 Chloride	4.020	3.993	0.027	953606821	50.0	62.1	
3 Nitrite as N	4.977	4.627	0.350	169515364	NC	NC	
4 Bromide	5.812	5.750	0.062	26870117	5.00	4.65	
5 Nitrate as N	6.537	6.485	0.052	180131484	NC	NC	
7 Orthophosphate as P	8.197	8.023	0.174	72744250	NC	NC	
6 Sulfate	9.295	9.237	0.058	1066989902	50.0	93.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

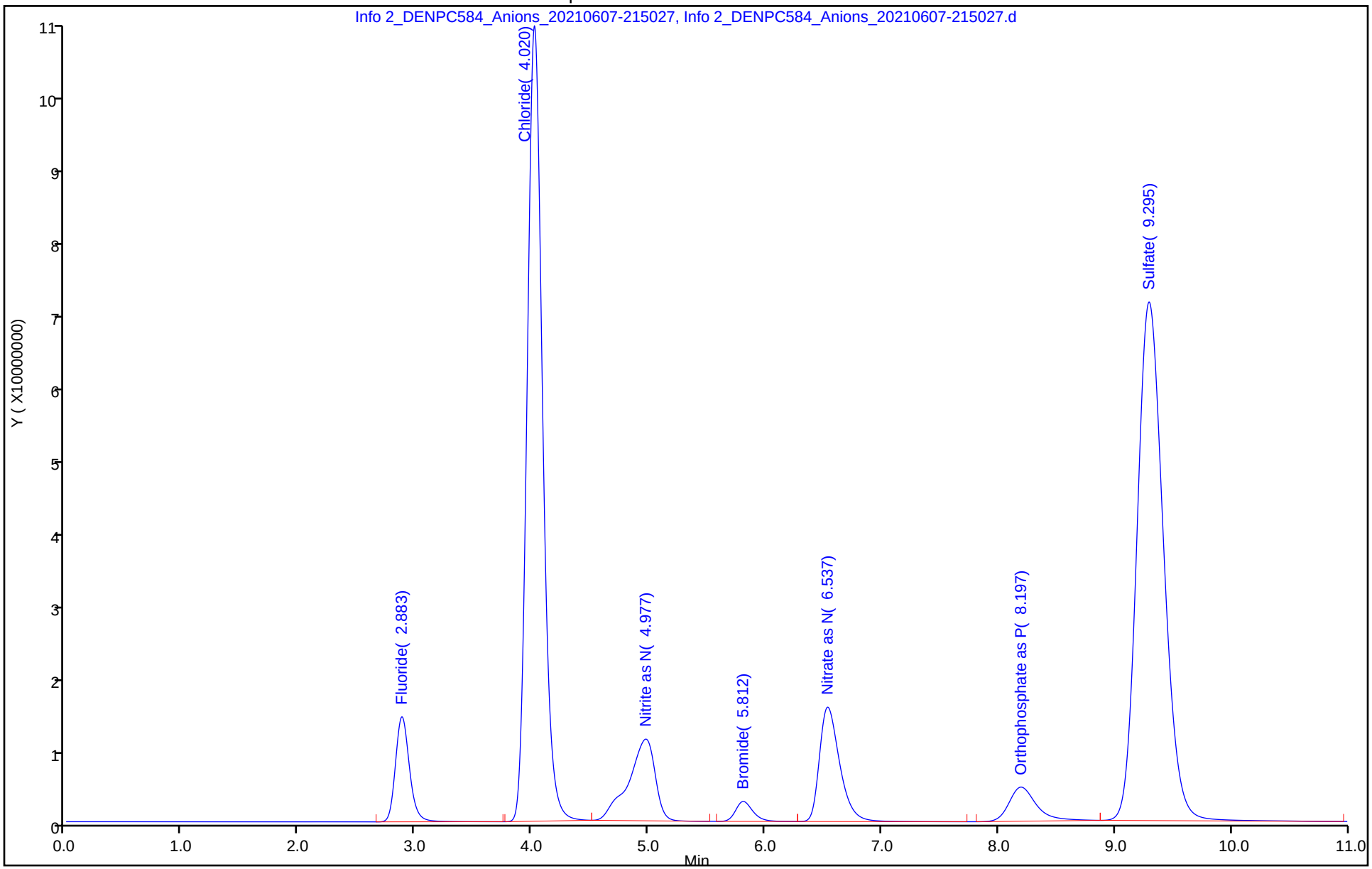
Reagents:

ICMS/MSD WEEK_00705 Amount Added: 0.10 Units: mL

Report Date: 08-Jun-2021 13:45:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-215027.d				
Injection Date:	07-Jun-2021 21:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-5 MS			Worklist Smp#:	25
Client ID:	G0070-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-220
Lims ID: 280-148902-E-5 MSD
Client ID: G0070-21A
Sample Type: MSD
Inject. Date: 07-Jun-2021 21:50:00 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-026
Misc. Info.: 280-0102139-026
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.880	2.903	-0.023	112182296	5.00	4.28	
2 Chloride	4.018	3.993	0.025	931357859	50.0	60.7	
3 Nitrite as N	4.973	4.627	0.346	164700271	NC	NC	
4 Bromide	5.812	5.750	0.062	26185612	5.00	4.53	
5 Nitrate as N	6.538	6.485	0.053	174836478	NC	NC	
7 Orthophosphate as P	8.192	8.023	0.169	70122150	NC	NC	
6 Sulfate	9.290	9.237	0.053	1052155935	50.0	92.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

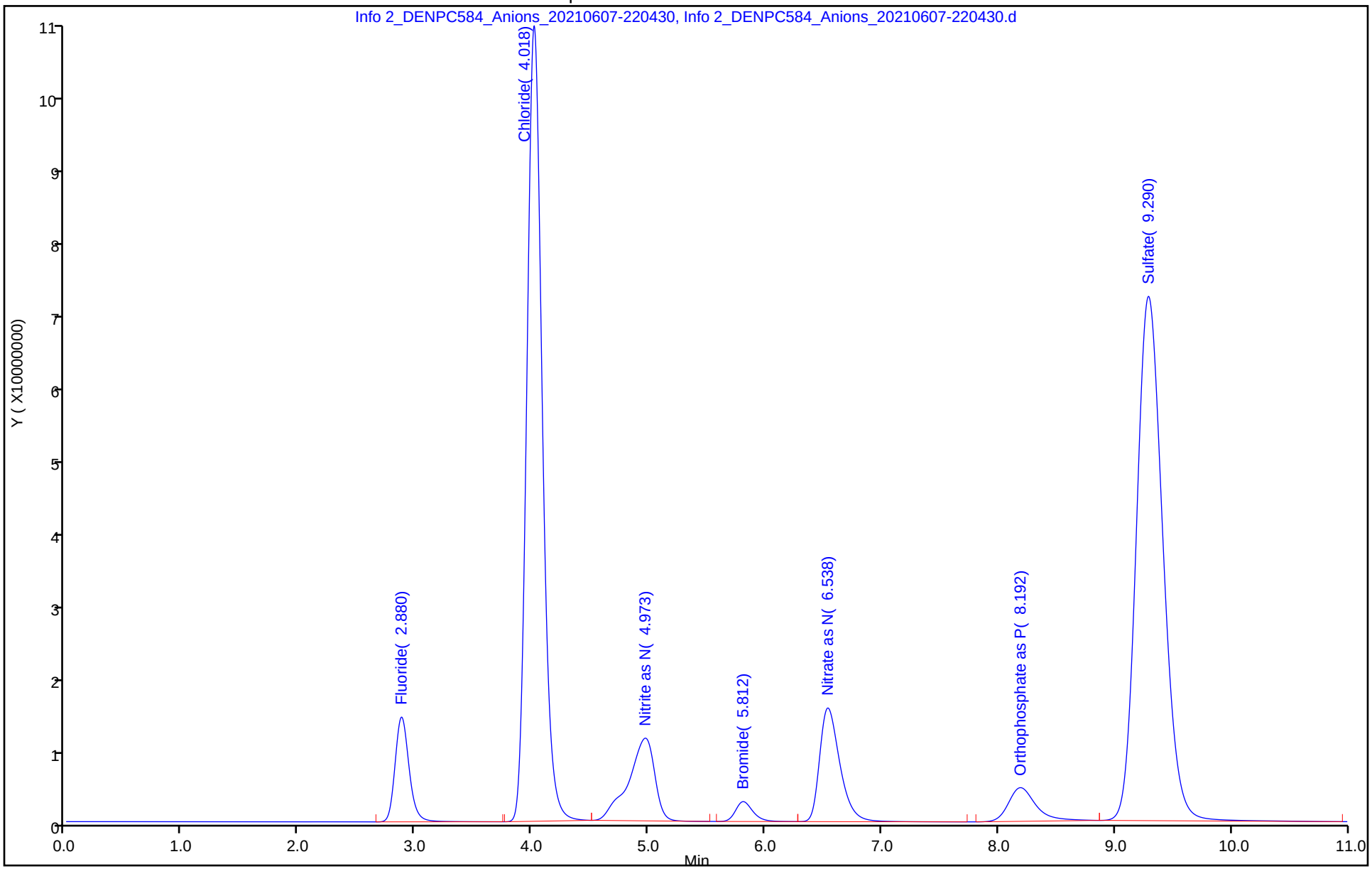
Reagents:

ICMS/MSD WEEK_00705 Amount Added: 0.10 Units: mL

Report Date: 08-Jun-2021 13:45:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-220430.d				
Injection Date:	07-Jun-2021 21:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-5 MSD			Worklist Smp#:	26
Client ID:	G0070-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-221
Lims ID: 280-148902-E-6
Client ID: G0089-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 22:04:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-027
Misc. Info.: 280-0102139-027
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.875	2.903	-0.028	5255227	0.2144	
2 Chloride	4.055	3.993	0.062	517123173	33.7	
3 Nitrite as N	5.045	4.627	0.418	708708	NC	
4 Bromide	5.878	5.750	0.128	813957	0.2391	
5 Nitrate as N	6.617	6.485	0.132	44275708	NC	
7 Orthophosphate as P	8.228	8.023	0.205	8859159	NC	
6 Sulfate	9.298	9.237	0.061	1138034877	99.8	

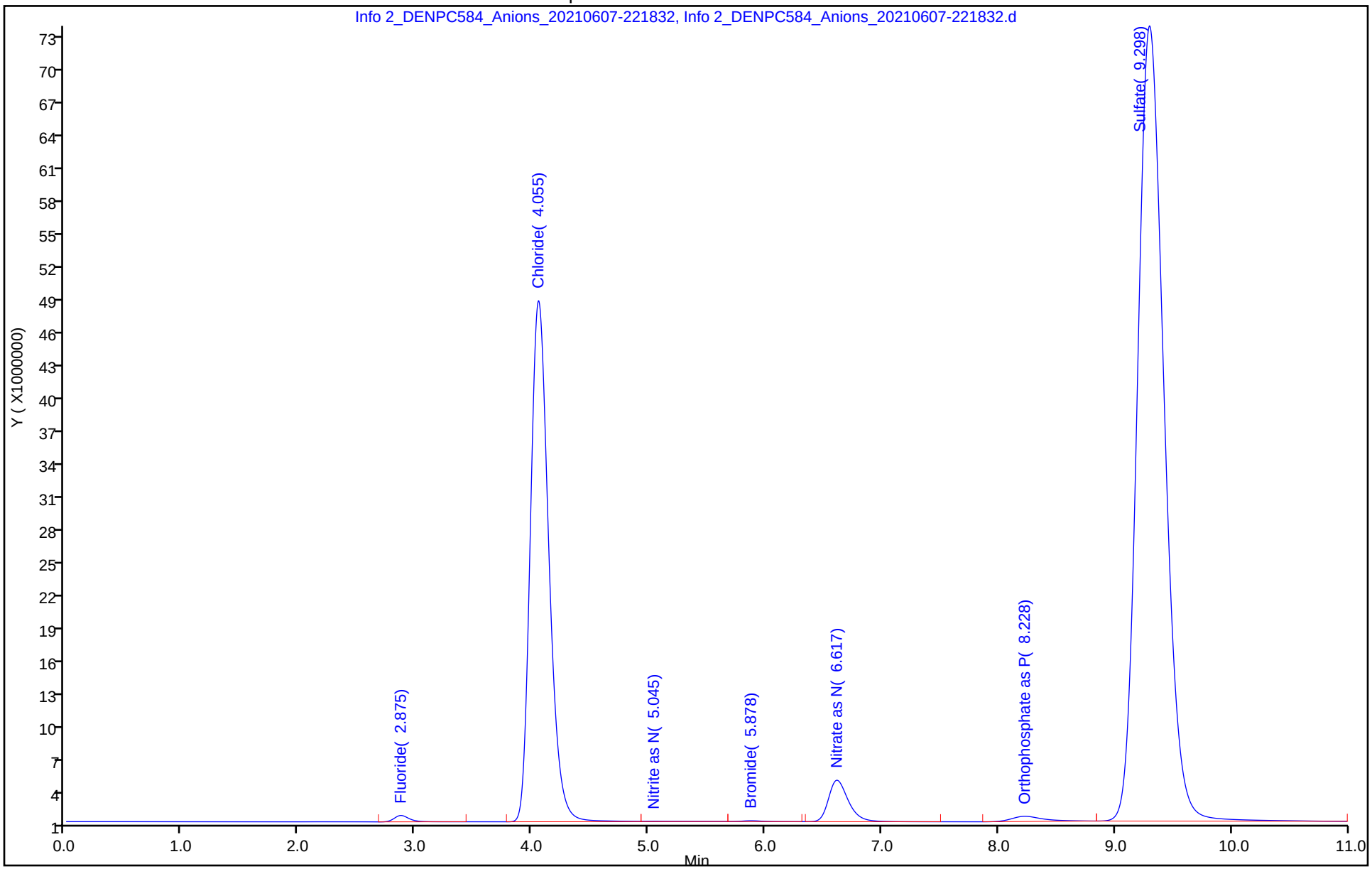
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-221832.d				
Injection Date:	07-Jun-2021 22:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-6	Lab Sample ID:	280-148902-6	Worklist Smp#:	27
Client ID:	G0089-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-223
Lims ID: 280-148902-E-7
Client ID: G0090-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 22:18:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-028
Misc. Info.: 280-0102139-028
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:21 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.873	2.903	-0.030	4652722	0.1915	
2 Chloride	4.045	3.993	0.052	539176419	35.2	
3 Nitrite as N		4.627			ND	
4 Bromide	5.867	5.750	0.117	840876	0.2437	
5 Nitrate as N	6.558	6.485	0.073	175350940	NC	
7 Orthophosphate as P	8.232	8.023	0.209	5055168	NC	
6 Sulfate	9.277	9.237	0.040	1684669041	147.7	

QC Flag Legend

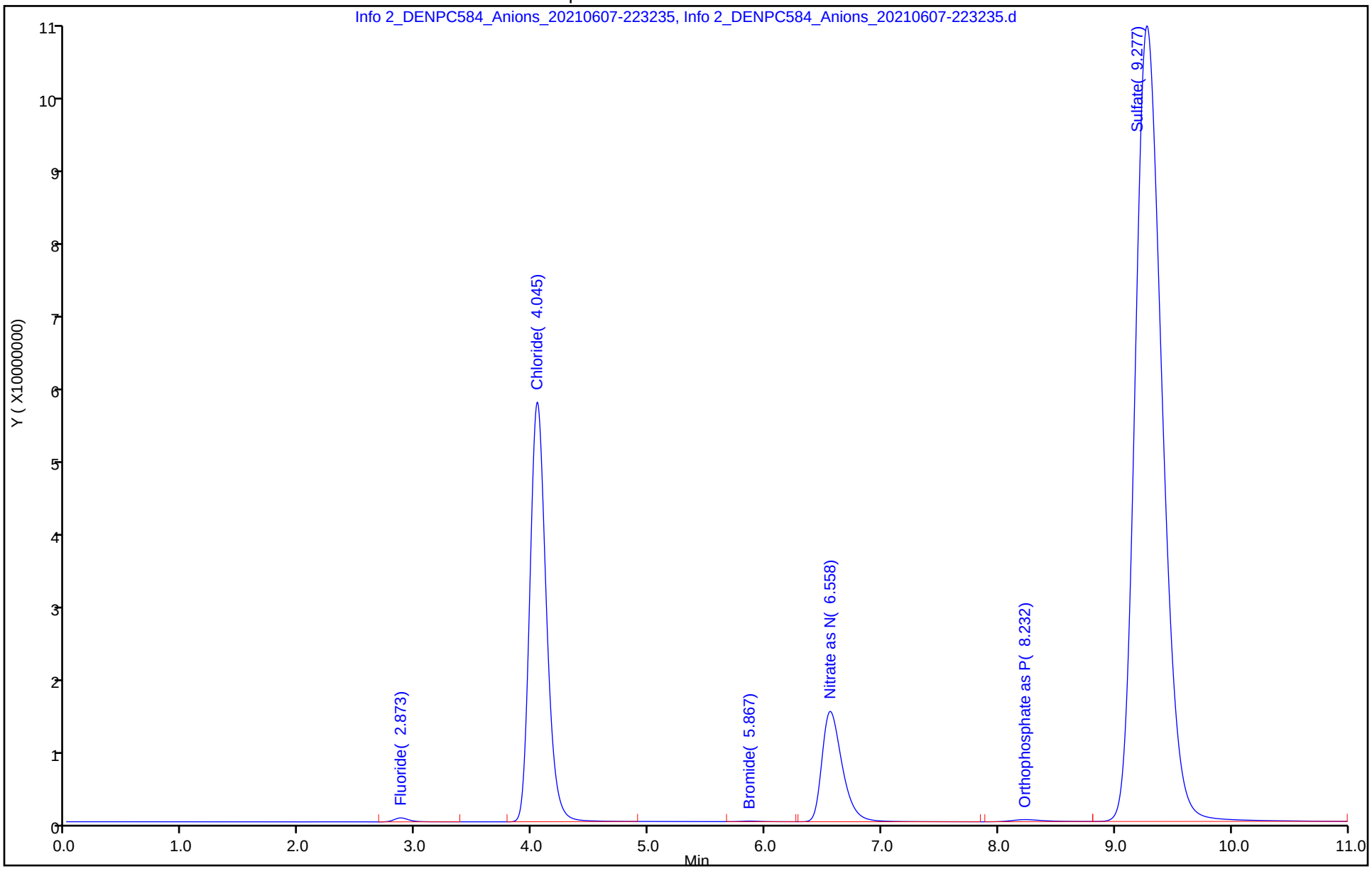
Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:25 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-223235.d

Injection Date:	07-Jun-2021 22:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-7	Lab Sample ID:	280-148902-7	Worklist Smp#:	28
Client ID:	G0090-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-224
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 07-Jun-2021 22:32:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-029
Misc. Info.: 280-0102139-029
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:25 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.882	2.903	-0.021	139751069	5.00	5.33	
2 Chloride	4.025	3.993	0.032	1545582713	100.0	100.7	
3 Nitrite as N	4.658	4.627	0.031	163350223	NC	NC	
4 Bromide	5.782	5.750	0.032	26792722	5.00	4.64	
5 Nitrate as N	6.520	6.485	0.035	191662941	NC	NC	
7 Orthophosphate as P	8.162	8.023	0.139	77879433	NC	NC	
6 Sulfate	9.273	9.237	0.036	1133164553	100.0	99.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

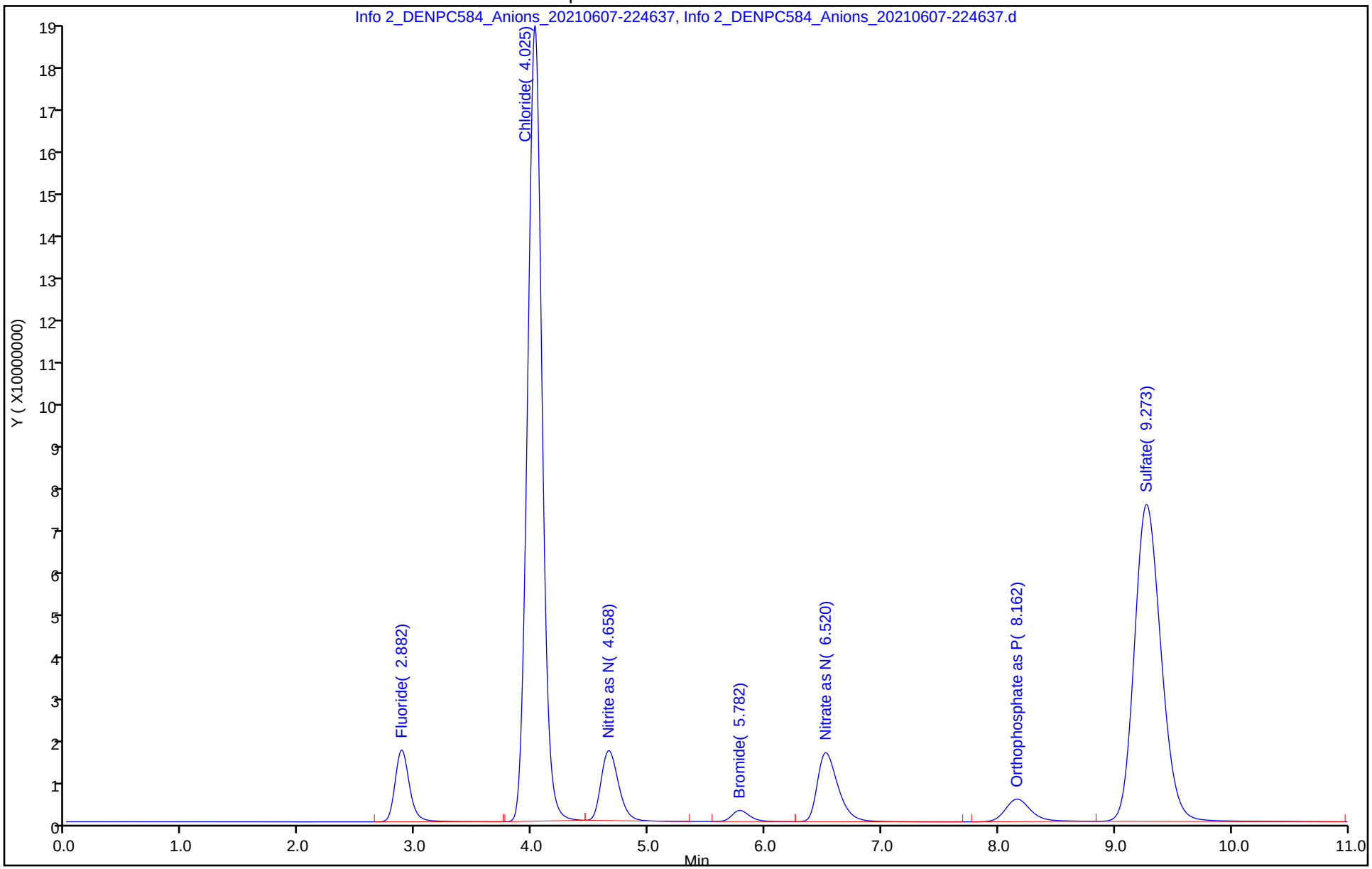
IC LCS_01813 Amount Added: 10.00 Units: mL

Report Date: 08-Jun-2021 13:45:25 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-224637.d

Injection Date:	07-Jun-2021 22:32:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-230
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 07-Jun-2021 22:46:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-030
Misc. Info.: 280-0102139-030
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:25 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 08-Jun-2021 13:30:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.315	2.903	0.412	23992		0.0154	M
2 Chloride		3.993				ND	
3 Nitrite as N		4.627				ND	
4 Bromide		5.750				ND	
5 Nitrate as N		6.485				ND	
7 Orthophosphate as P		8.023				ND	
6 Sulfate	9.332	9.237	0.095	122217		0.2228	Ma

QC Flag Legend

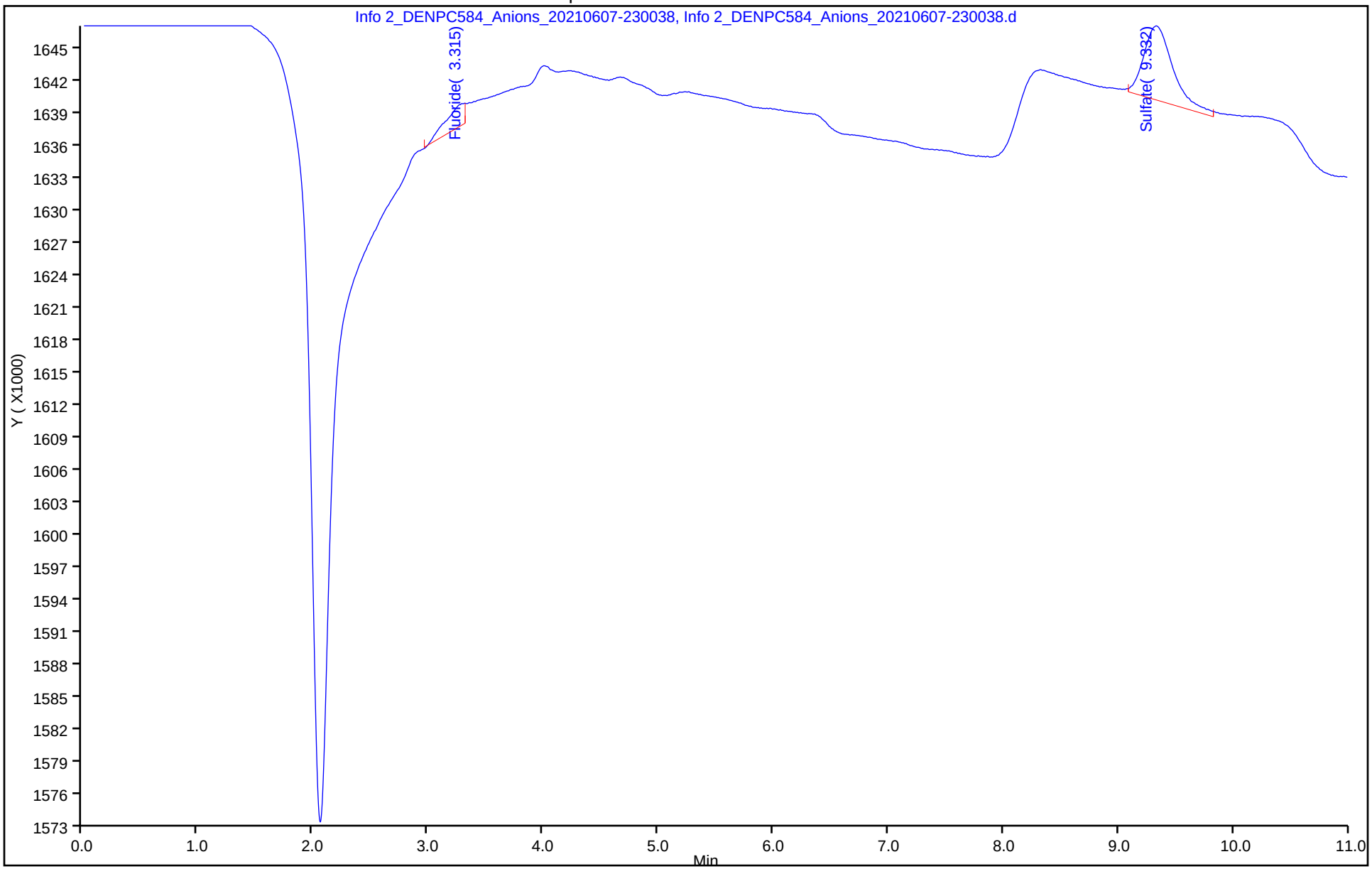
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 08-Jun-2021 13:45:25 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-230038.d

Injection Date:	07-Jun-2021 22:46:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-230

Injection Date: 07-Jun-2021 22:46:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 30

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

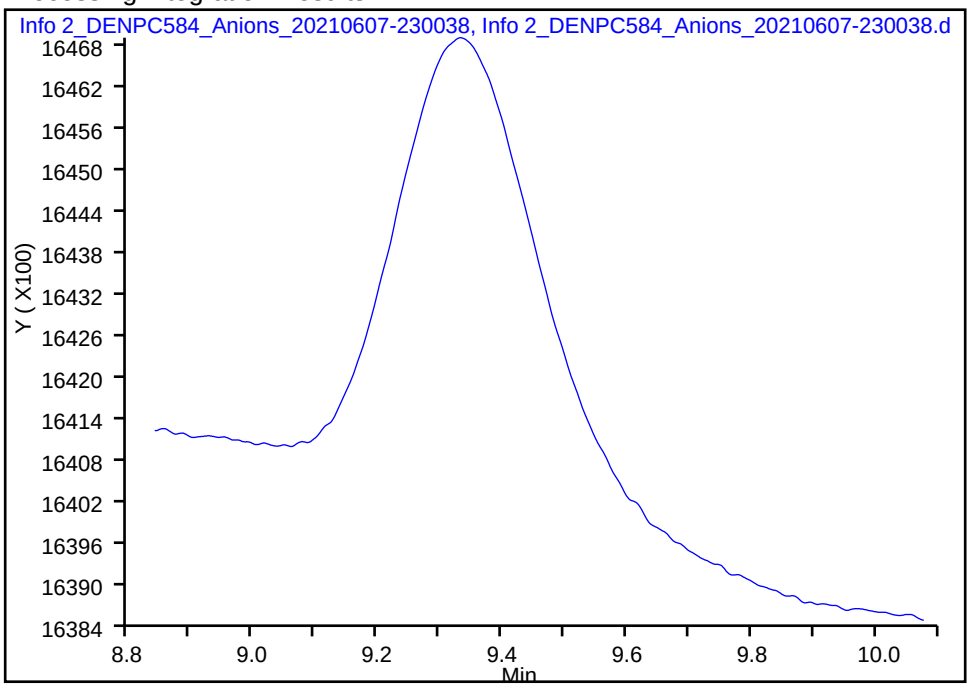
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 9.24

Processing Integration Results



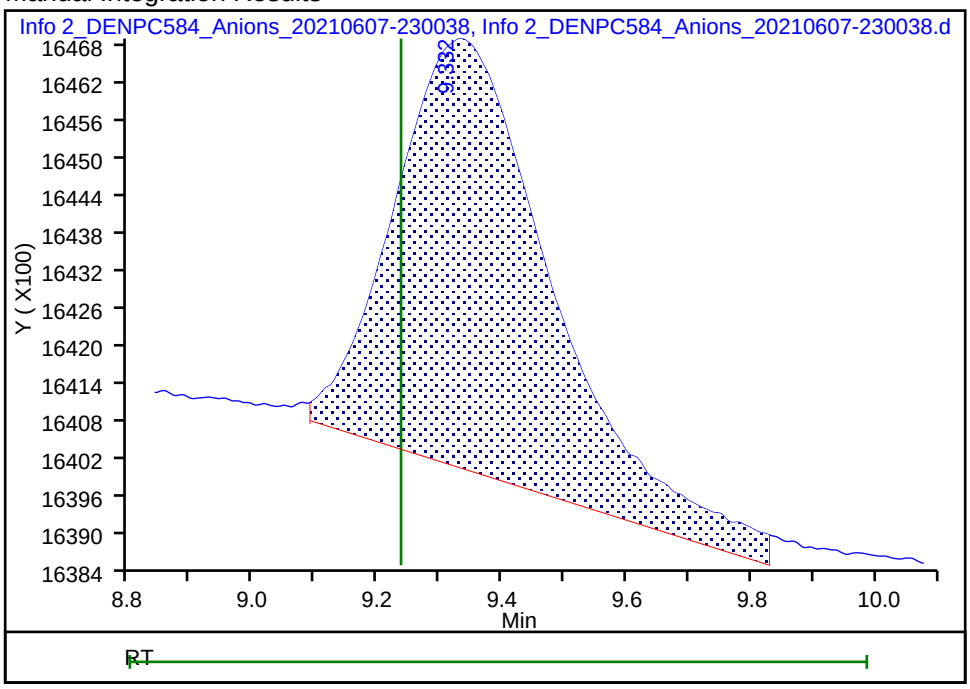
Manual Integration Results

RT: 9.33

Area: 122217

Amount: 0.222784

Amount Units: ug/ml



Reviewer: jindaratc, 08-Jun-2021 13:30:12

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-232
Lims ID: 280-148902-A-8
Client ID: G0076-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 23:14:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-032
Misc. Info.: 280-0102139-032
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:25 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

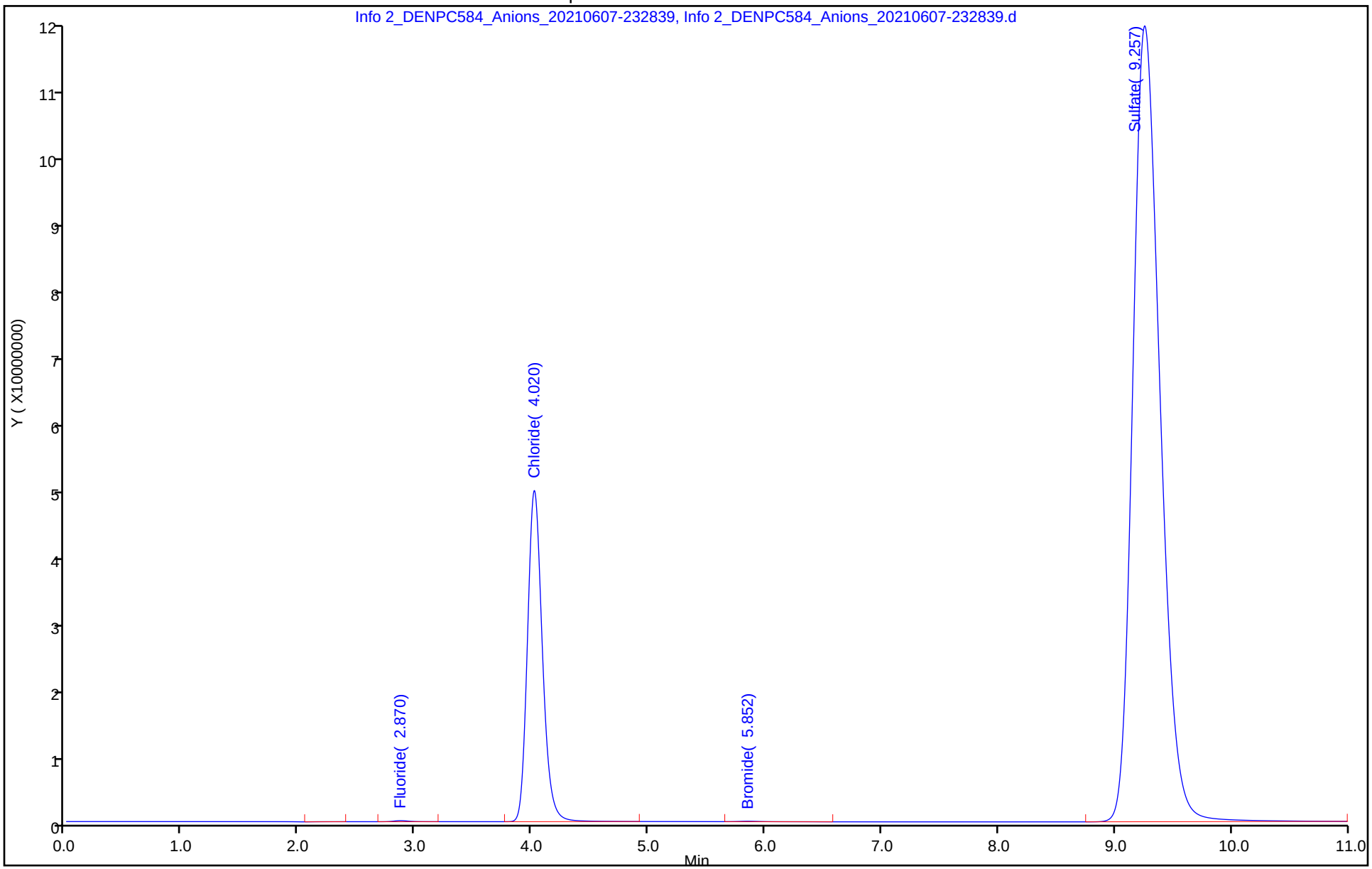
Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.903	-0.033	1331733	0.0652	
2 Chloride	4.020	3.993	0.027	416466378	27.2	
3 Nitrite as N		4.627			ND	
4 Bromide	5.852	5.750	0.102	842680	0.2440	
5 Nitrate as N		6.485			ND	
7 Orthophosphate as P		8.023			ND	
6 Sulfate	9.257	9.237	0.020	1830829574	160.5	

Report Date: 08-Jun-2021 13:45:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-232839.d				
Injection Date:	07-Jun-2021 23:14:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-A-8	Lab Sample ID:	280-148902-8	Worklist Smp#:	32
Client ID:	G0076-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-234
Lims ID: 280-148902-E-9
Client ID: G0075-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 23:28:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-033
Misc. Info.: 280-0102139-033
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:25 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.903	-0.033	5560384	0.2260	
2 Chloride	4.038	3.993	0.045	494931088	32.3	
3 Nitrite as N		4.627			ND	
4 Bromide	5.860	5.750	0.110	854742	0.2460	
5 Nitrate as N	6.580	6.485	0.095	101565185	NC	
7 Orthophosphate as P	8.225	8.023	0.202	4129904	NC	
6 Sulfate	9.250	9.237	0.013	2172442467	190.4	

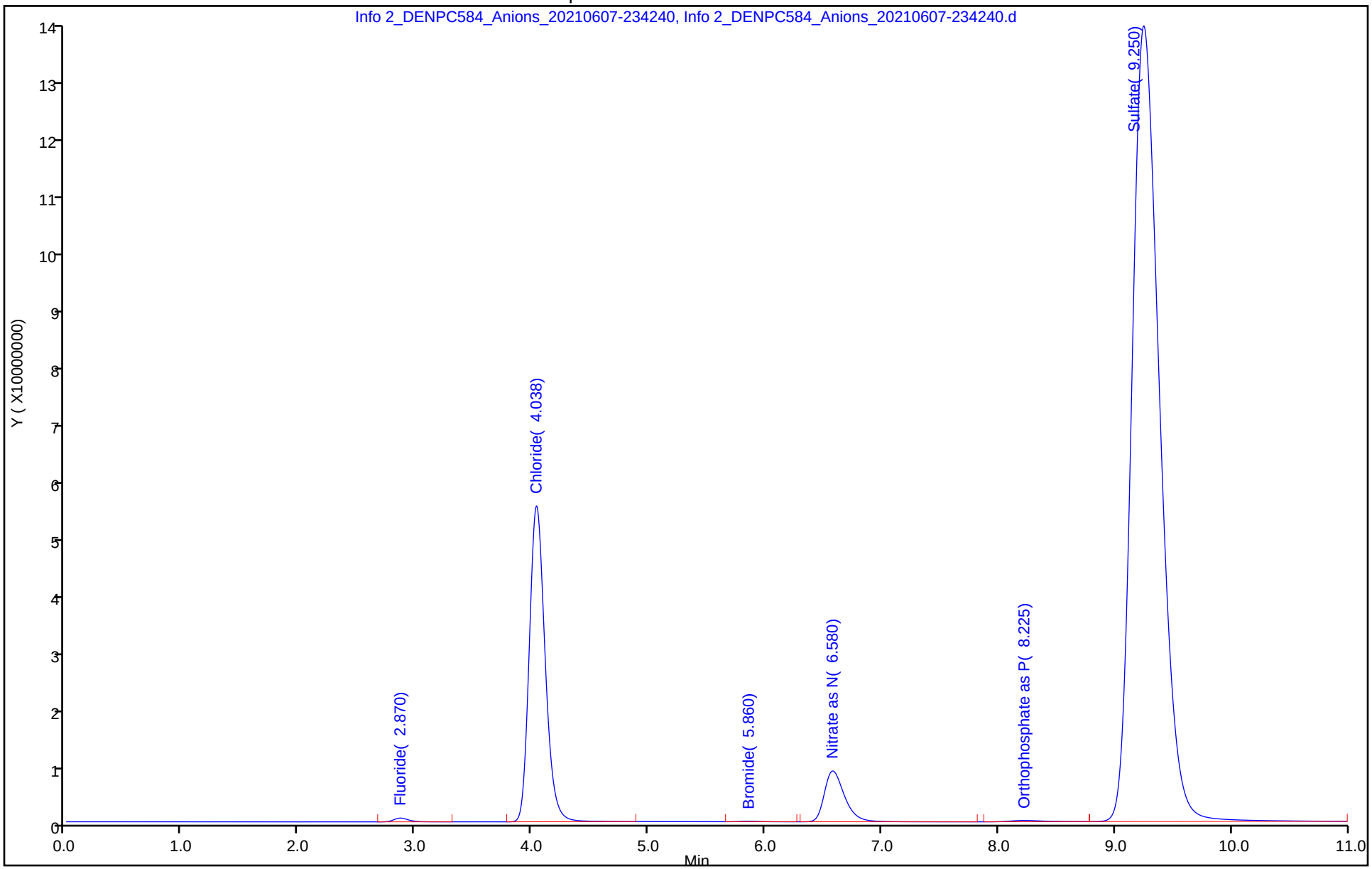
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:26 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-234240.d				
Injection Date:	07-Jun-2021 23:28:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-9	Lab Sample ID:	280-148902-9	Worklist Smp#:	33
Client ID:	G0075-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-235
Lims ID: 280-148902-E-10
Client ID: G0082-21A
Sample Type: Client
Inject. Date: 07-Jun-2021 23:42:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-034
Misc. Info.: 280-0102139-034
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:25 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.877	2.903	-0.026	5601120	0.2275	
2 Chloride	4.062	3.993	0.069	526625003	34.4	
3 Nitrite as N	5.030	4.627	0.403	804895	NC	
4 Bromide	5.883	5.750	0.133	797931	0.2364	
5 Nitrate as N	6.600	6.485	0.115	83481448	NC	
7 Orthophosphate as P	8.230	8.023	0.207	7747192	NC	
6 Sulfate	9.297	9.237	0.060	1123812551	98.6	

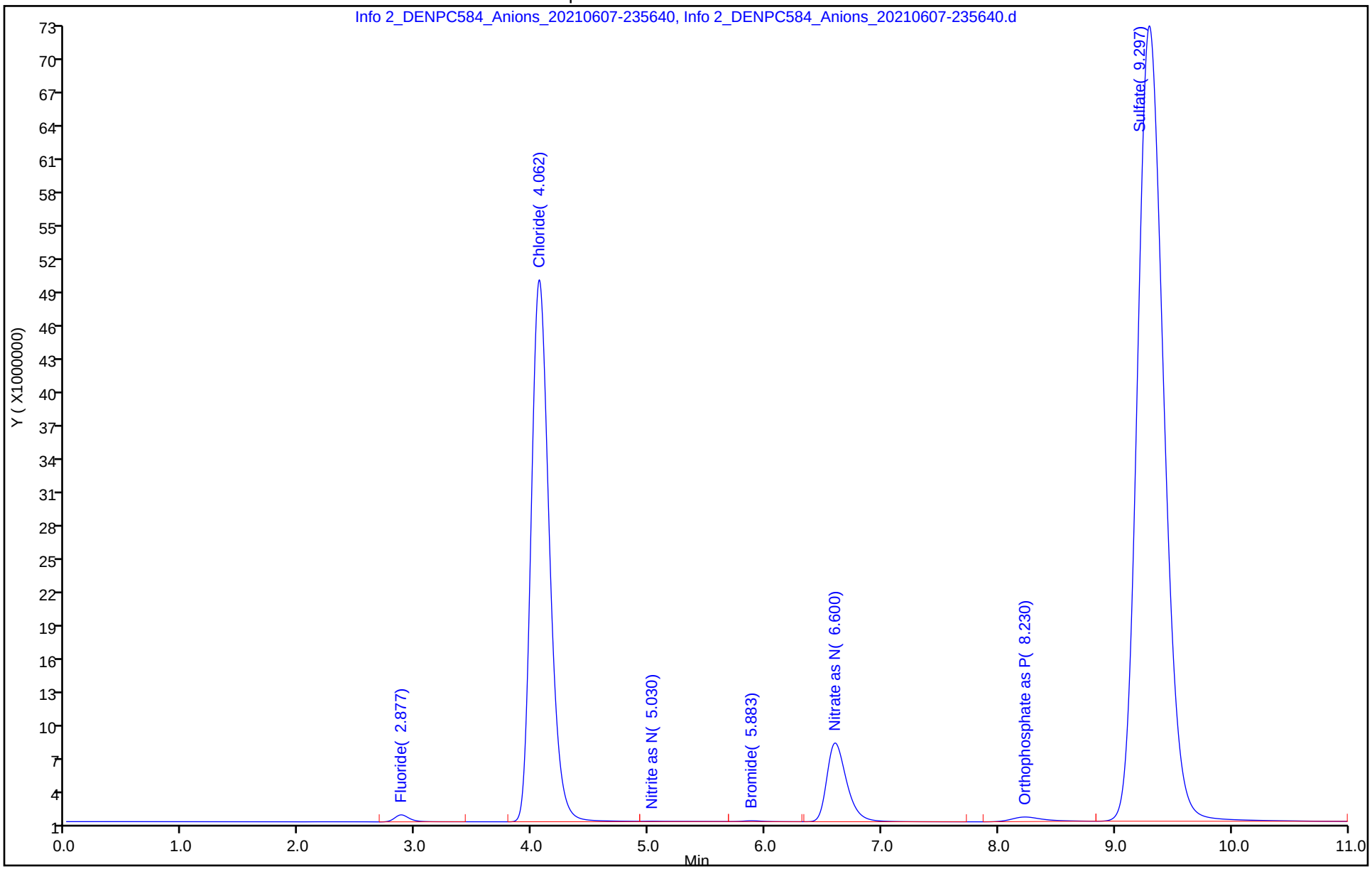
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 08-Jun-2021 13:45:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210607-235640.d				
Injection Date:	07-Jun-2021 23:42:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-148902-E-10	Lab Sample ID:	280-148902-10	Worklist Smp#:	34
Client ID:	G0082-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210608-013
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Jun-2021 01:20:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-041
Misc. Info.: 280-0102139-041
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:28 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.883	2.903	-0.020	140746360	5.00	5.37	
2 Chloride	4.028	3.993	0.035	1548718796	100.0	100.9	
3 Nitrite as N	4.665	4.627	0.038	162621174	NC	NC	
4 Bromide	5.795	5.750	0.045	26776253	5.00	4.63	
5 Nitrate as N	6.535	6.485	0.050	191685616	NC	NC	
7 Orthophosphate as P	8.157	8.023	0.134	78889970	NC	NC	
6 Sulfate	9.270	9.237	0.033	1136027425	100.0	99.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

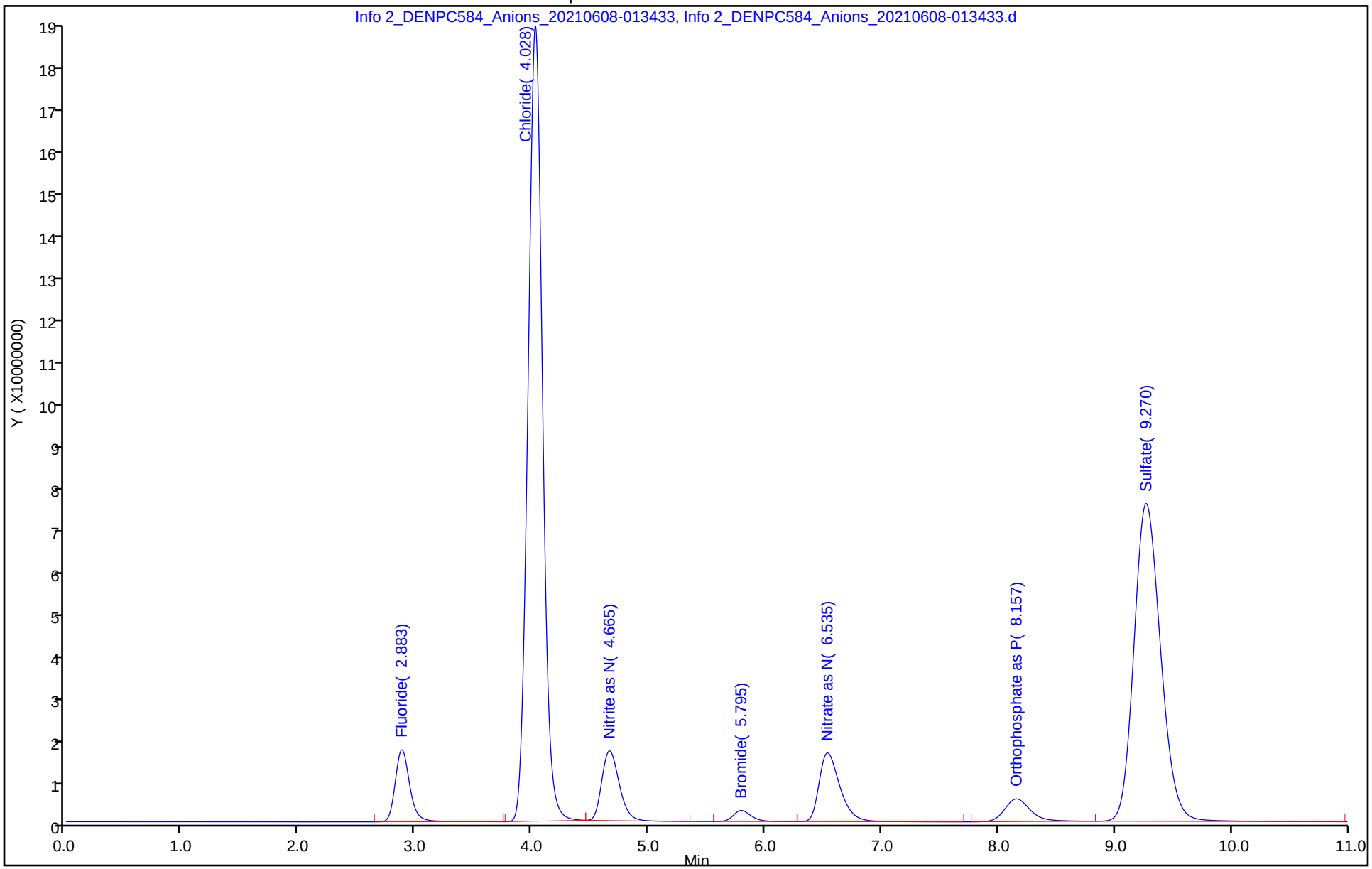
IC LCS_01813 Amount Added: 10.00 Units: mL

Report Date: 08-Jun-2021 13:45:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210608-013433.d

Injection Date:	08-Jun-2021 01:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210608-014
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 08-Jun-2021 01:34:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102139-042
Misc. Info.: 280-0102139-042
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 13:45:28 Calib Date: 01-Jun-2021 13:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210601-101970.b\Info 2_DENPC584_Anions_20210601-141

Column 1 : Det: 0005
Process Host: CTX1619

First Level Reviewer: jindaratc Date: 08-Jun-2021 13:30:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.903				ND	
2 Chloride	4.008	3.993	0.015	48316		0.0898	M
3 Nitrite as N		4.627				ND	
4 Bromide		5.750				ND	
5 Nitrate as N		6.485				ND	
7 Orthophosphate as P		8.023				ND	
6 Sulfate	9.322	9.237	0.085	161818		0.2262	Ma

QC Flag Legend

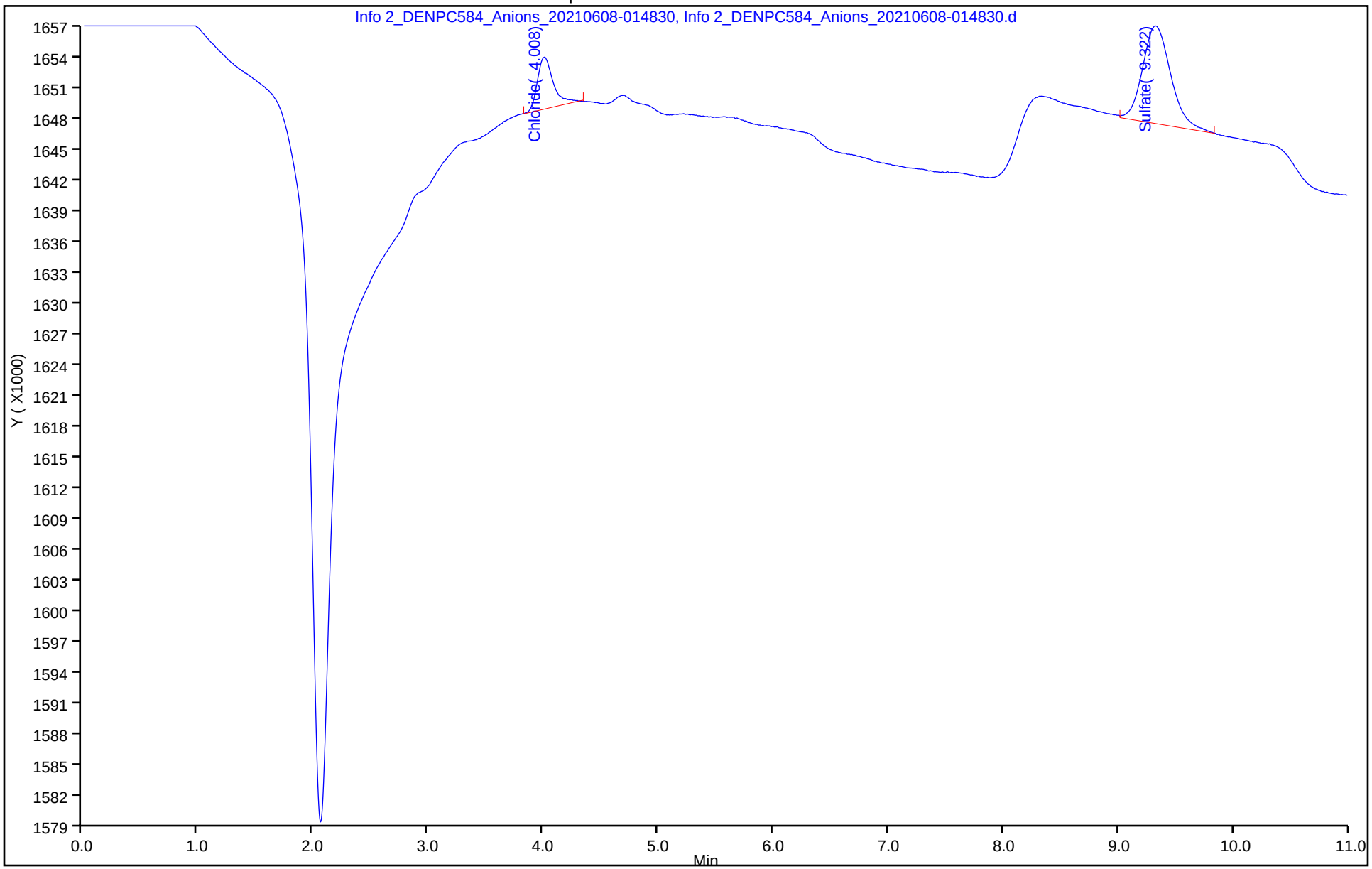
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 08-Jun-2021 13:45:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210608-014830.d

Injection Date:	08-Jun-2021 01:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210607-102139.b\Info 2_DENPC584_Anions_20210608-014

Injection Date: 08-Jun-2021 01:34:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 42

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

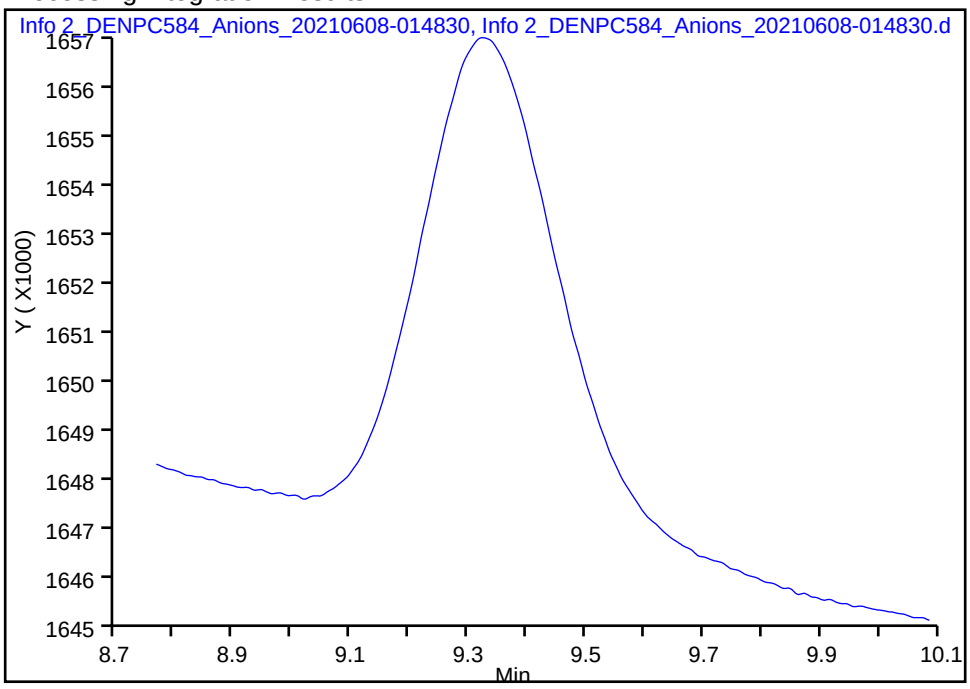
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 9.24

Processing Integration Results



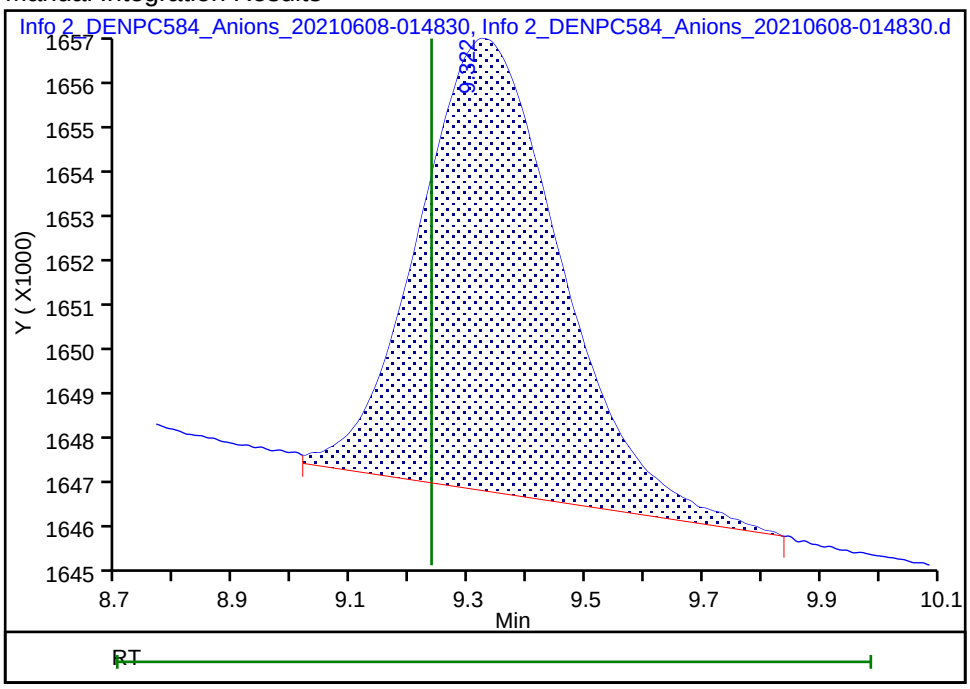
Manual Integration Results

RT: 9.32

Area: 161818

Amount: 0.226250

Amount Units: ug/ml



Reviewer: jindaratc, 08-Jun-2021 13:30:41

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-Jun-2021 12:31:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-002
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jun-2021 21:22:22 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1673

First Level Reviewer: battilloj Date: 05-Jun-2021 14:36:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.442	2.467	-0.025	3454143	0.2000	0.2209	M
2 Chloride	3.625	3.717	-0.092	9768142	1.00	1.32	M
3 Nitrite as N	4.442	4.484	-0.042	3961465	NC	NC	M
4 Bromide	5.375	5.409	-0.034	807554	0.2000	0.2076	
5 Nitrate as N	6.125	6.142	-0.017	4900120	NC	NC	M
7 Orthophosphate as P	8.892	8.917	-0.025	2053960	NC	NC	M
6 Sulfate	10.000	10.092	-0.092	10591841	1.00	1.37	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

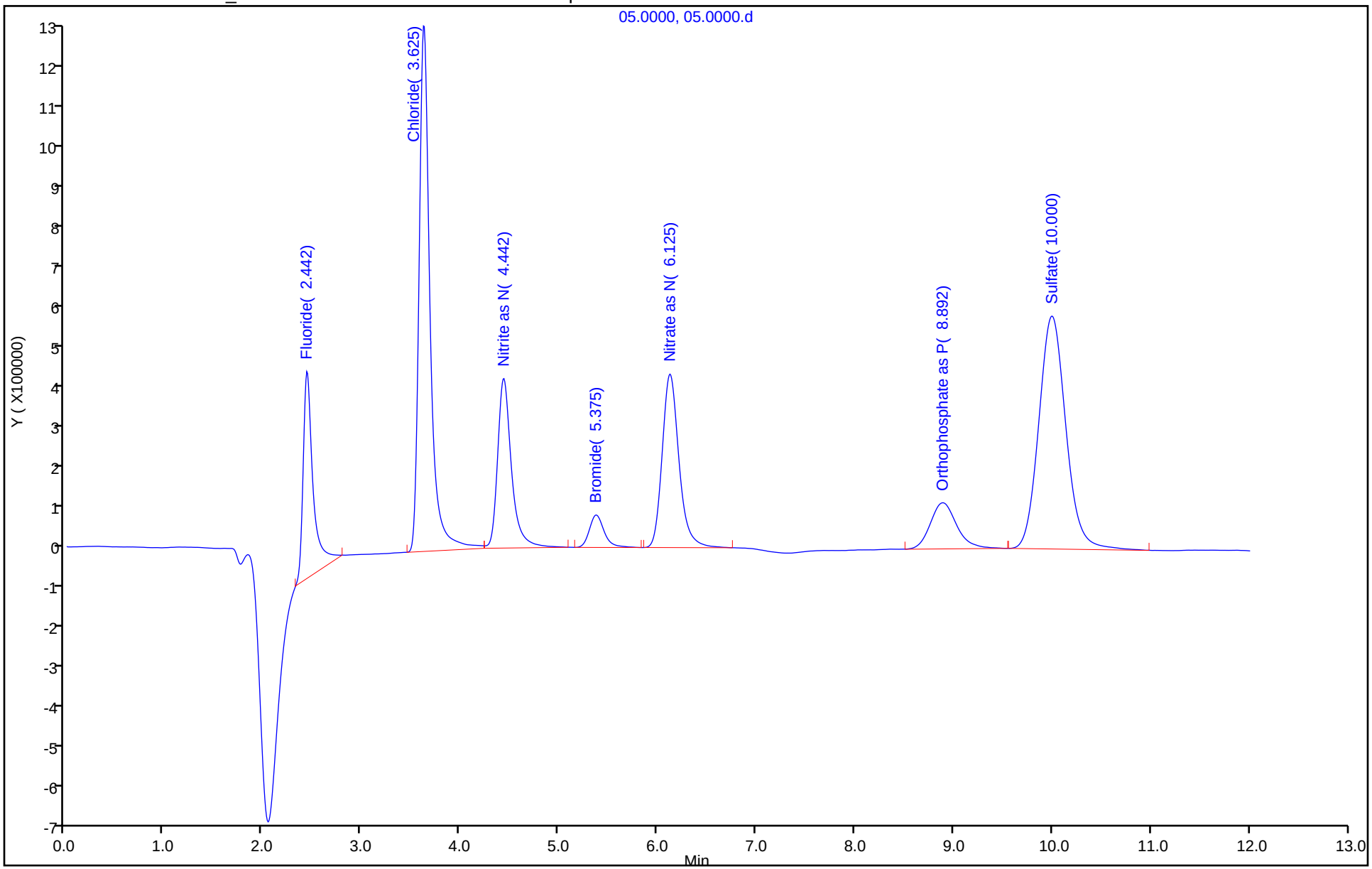
IC Cal low_00583 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00368 Amount Added: 0.02 Units: mL

Report Date: 05-Jun-2021 21:22:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d

Injection Date:	05-Jun-2021 12:31:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

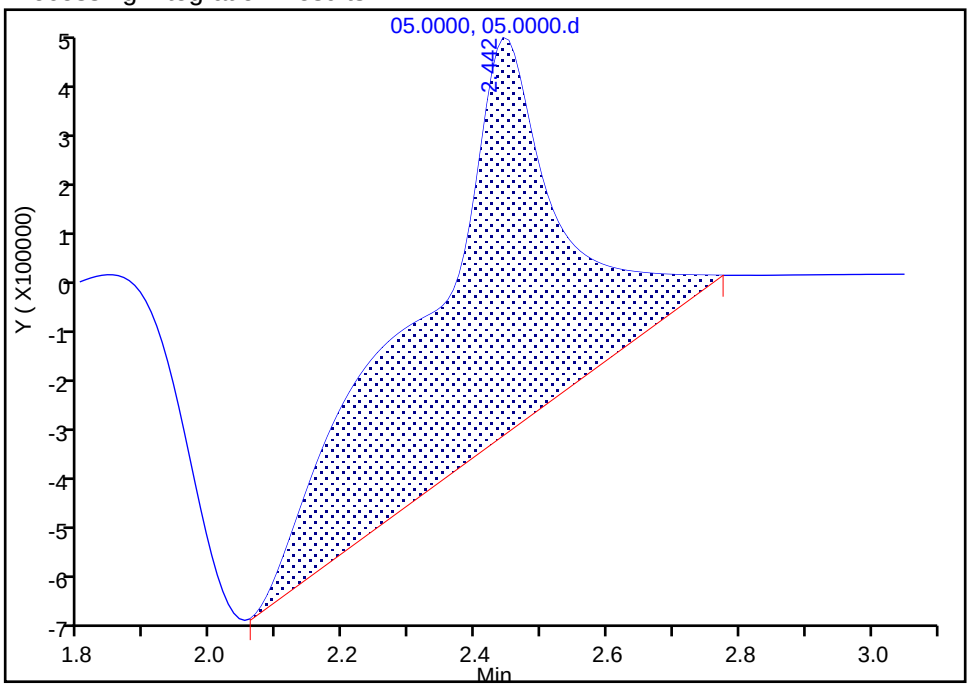
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d				
Injection Date:	05-Jun-2021 12:31:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

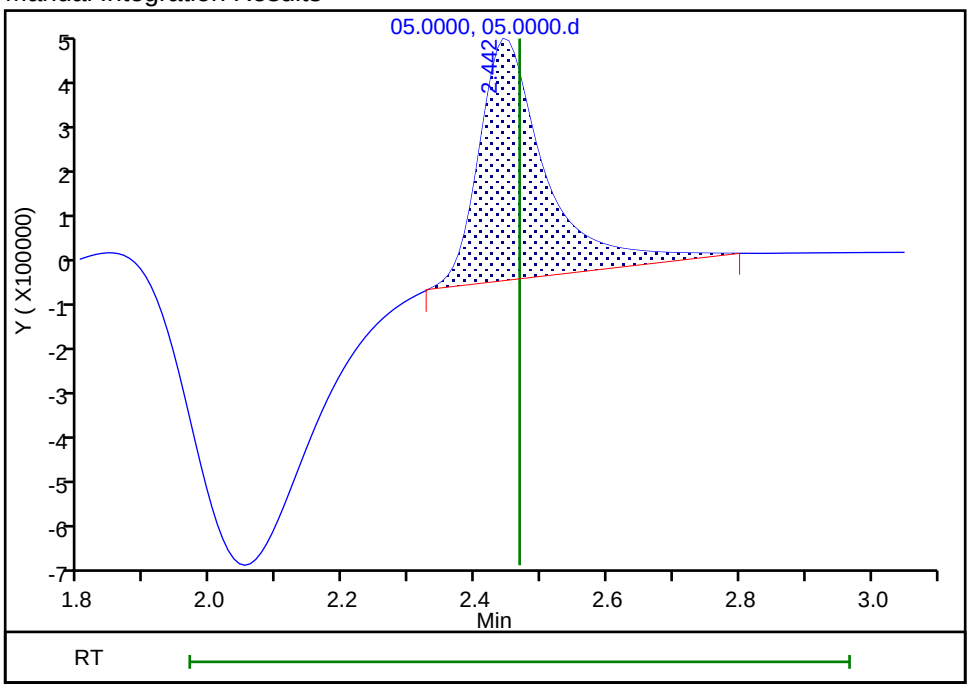
Processing Integration Results

RT: 2.44
Area: 11257841
Amount: 0.169810
Amount Units: ug/ml



Manual Integration Results

RT: 2.44
Area: 3454143
Amount: 0.220850
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:48:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

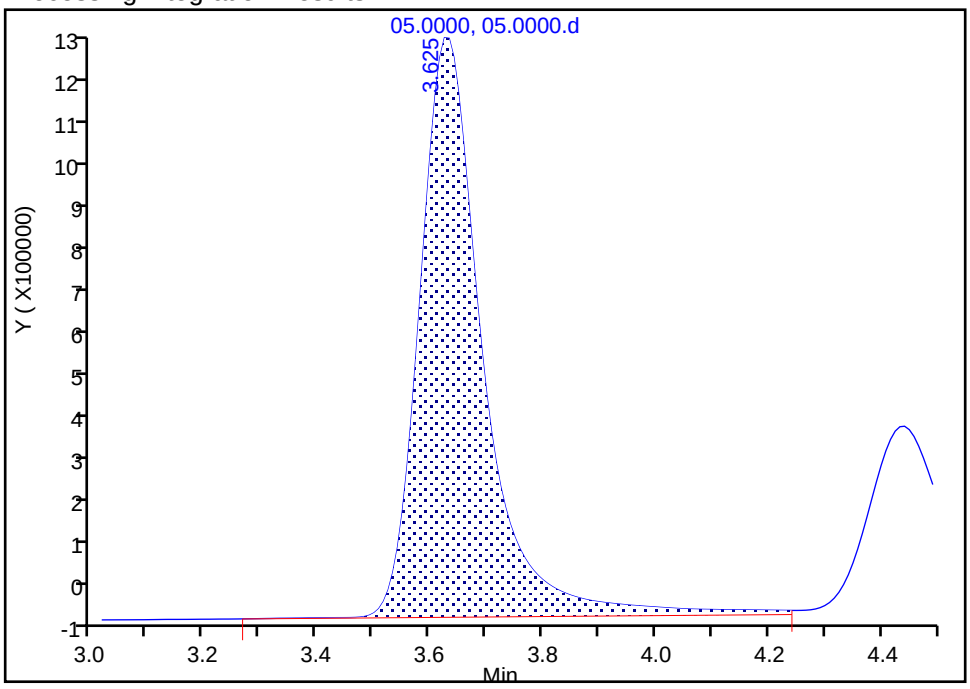
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d
Injection Date: 05-Jun-2021 12:31:00 Instrument ID: WC_IonChrom7
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

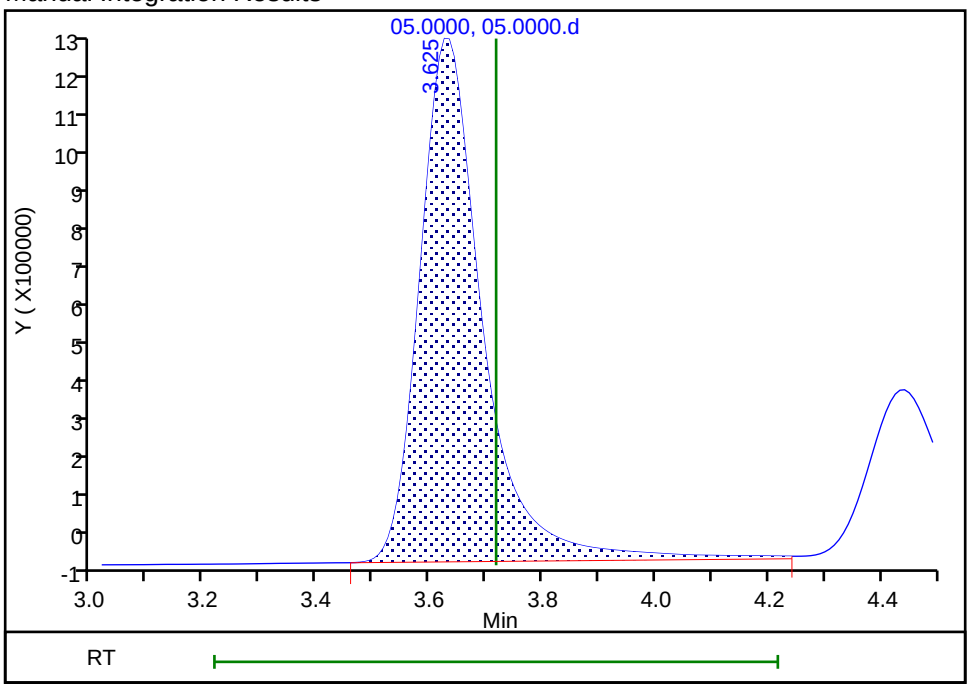
Processing Integration Results

RT: 3.63
Area: 9869677
Amount: 1.320316
Amount Units: ug/ml



Manual Integration Results

RT: 3.63
Area: 9768142
Amount: 1.321246
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:49:29
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

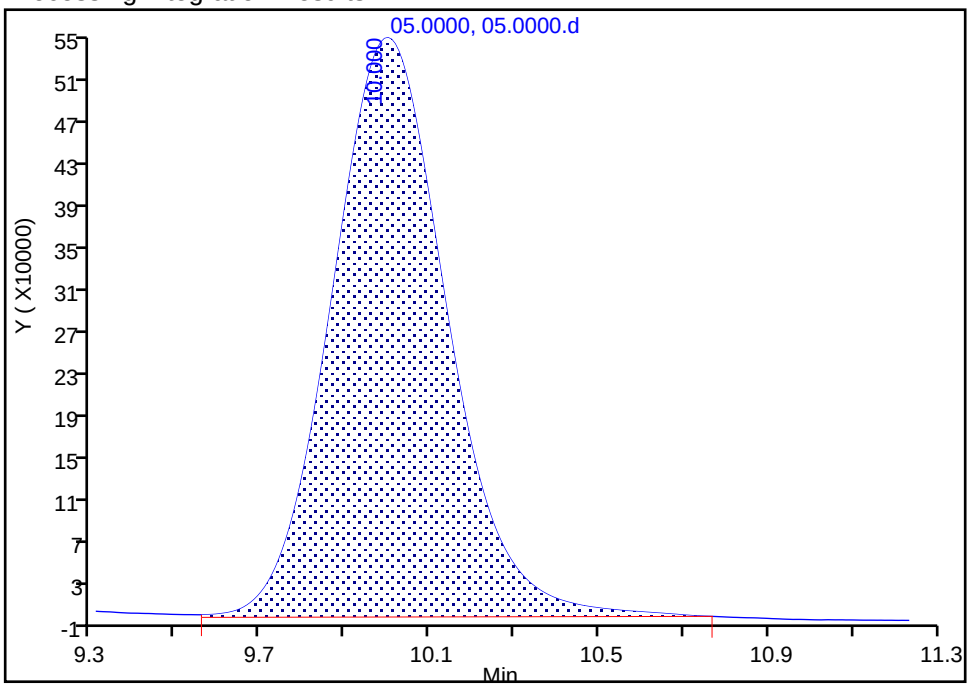
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d
Injection Date: 05-Jun-2021 12:31:00 Instrument ID: WC_IonChrom7
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

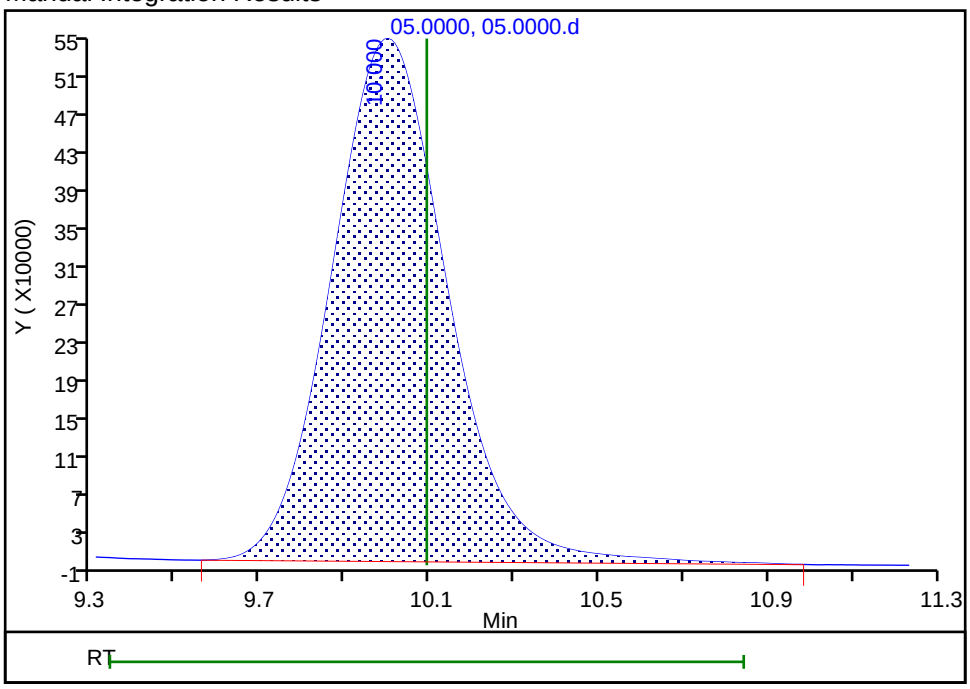
Processing Integration Results

RT: 10.00
Area: 10574383
Amount: 1.375923
Amount Units: ug/ml



Manual Integration Results

RT: 10.00
Area: 10591841
Amount: 1.374831
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:50:07
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Jun-2021 12:46:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-003
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jun-2021 21:22:22 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1673

First Level Reviewer: battilloj Date: 05-Jun-2021 14:33:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.450	2.467	-0.017	8316621	0.5000	0.4823	M
2 Chloride	3.634	3.717	-0.083	24455660	2.50	2.30	M
3 Nitrite as N	4.450	4.484	-0.034	10654557	NC	NC	M
4 Bromide	5.384	5.409	-0.025	2325075	0.5000	0.5200	M
5 Nitrate as N	6.134	6.142	-0.008	12673407	NC	NC	M
7 Orthophosphate as P	8.900	8.917	-0.017	4914951	NC	NC	
6 Sulfate	10.009	10.092	-0.083	19486620	2.50	2.26	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

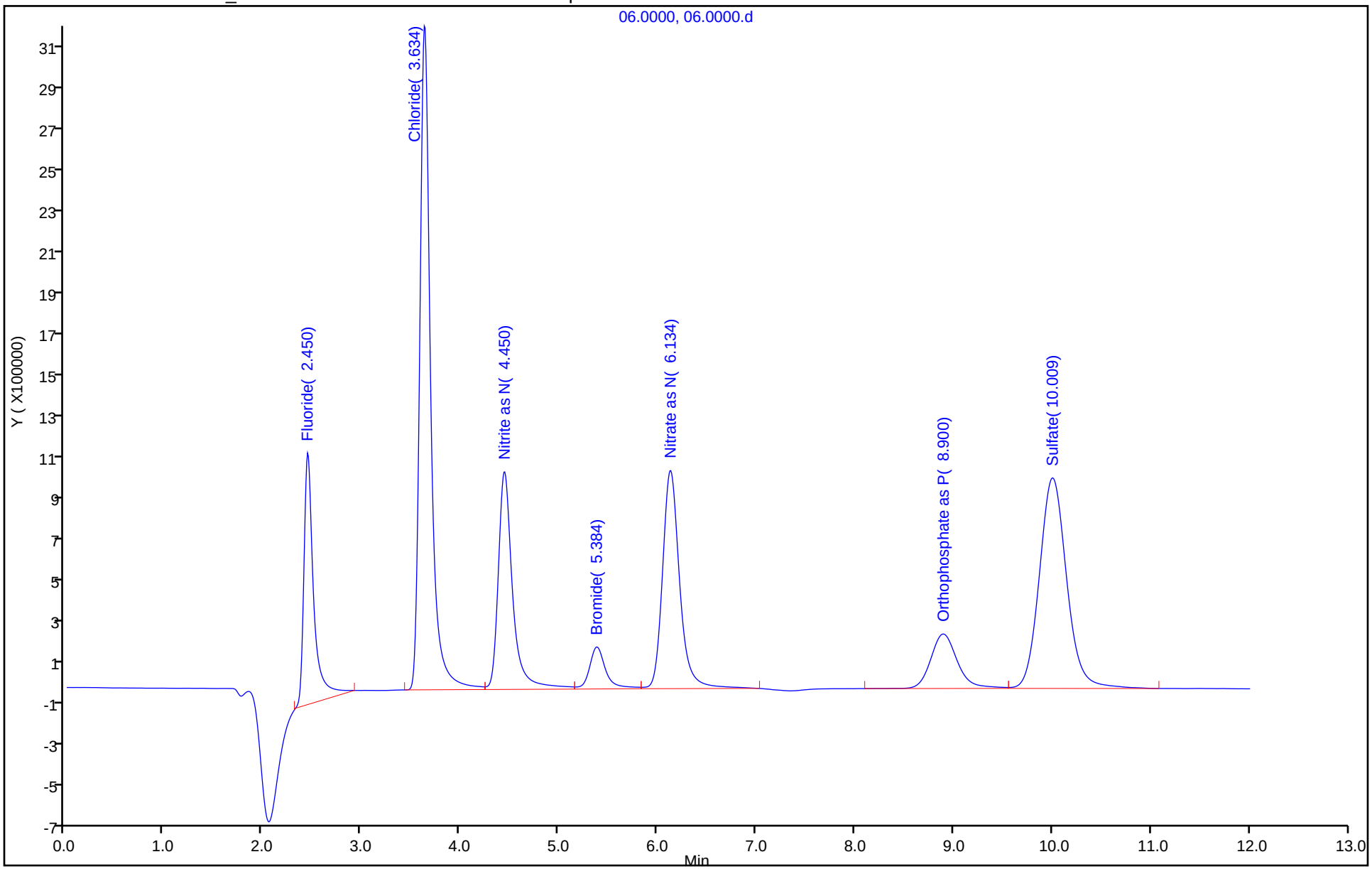
IC CAL cl/so4_00368 Amount Added: 0.05 Units: mL
IC Cal low_00583 Amount Added: 0.05 Units: mL

Report Date: 05-Jun-2021 21:22:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d

Injection Date:	05-Jun-2021 12:46:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

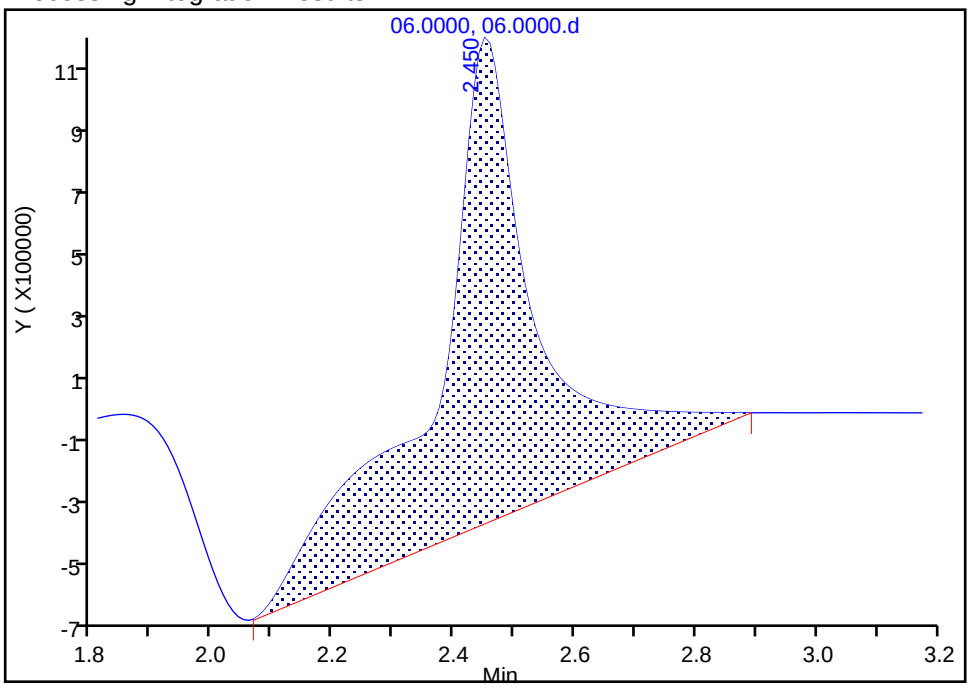
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d
Injection Date: 05-Jun-2021 12:46:00 Instrument ID: WC_IonChrom7
Lims ID: std L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

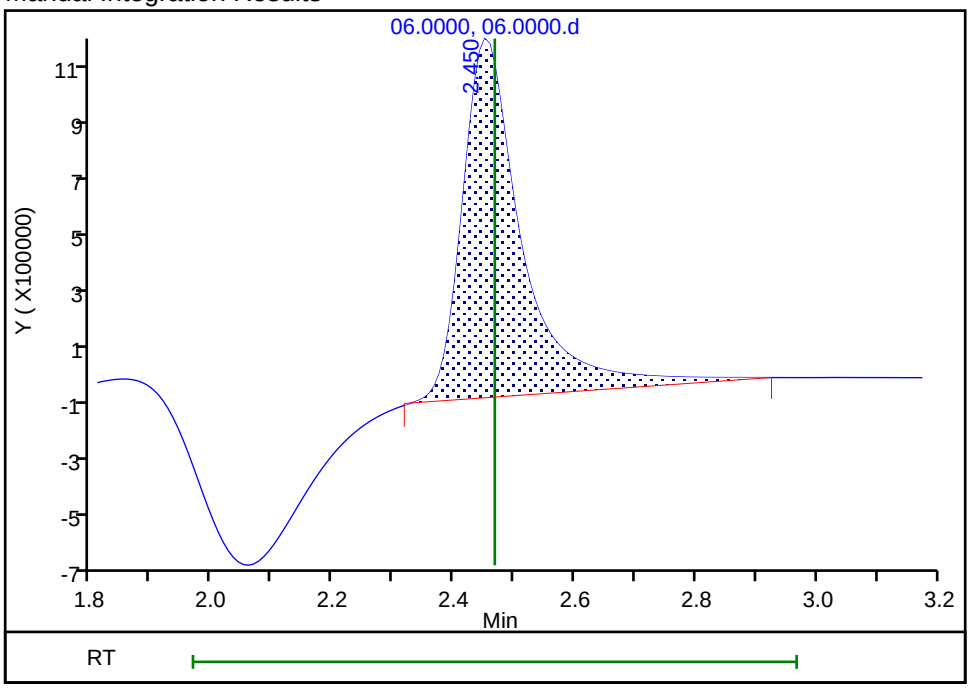
Processing Integration Results

RT: 2.45
Area: 17640175
Amount: 0.767282
Amount Units: ug/ml



Manual Integration Results

RT: 2.45
Area: 8316621
Amount: 0.482254
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:50:53
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

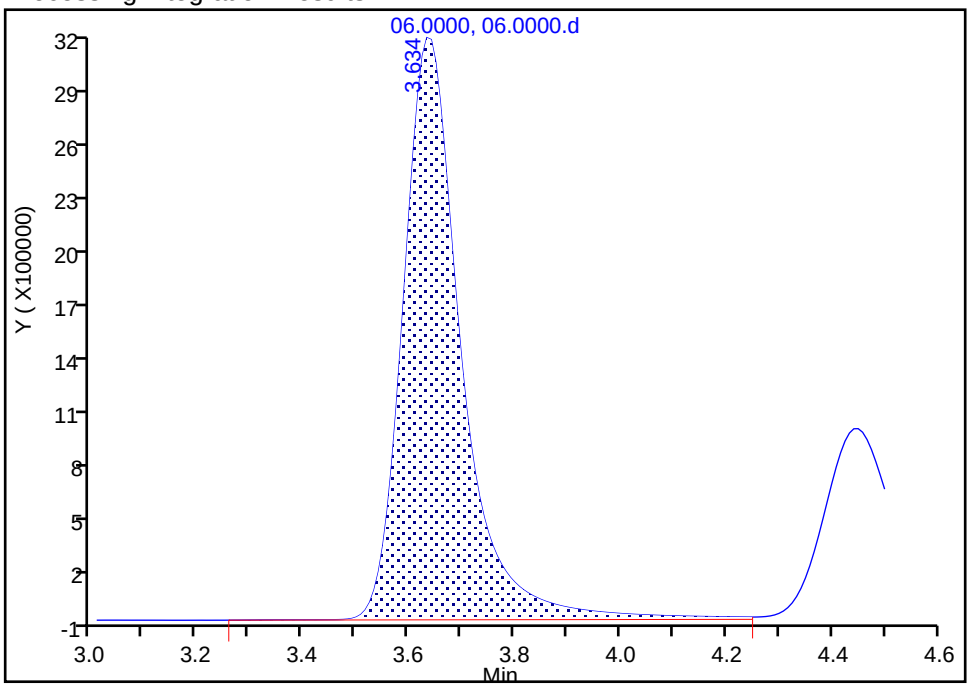
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d
Injection Date: 05-Jun-2021 12:46:00 Instrument ID: WC_IonChrom7
Lims ID: std L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

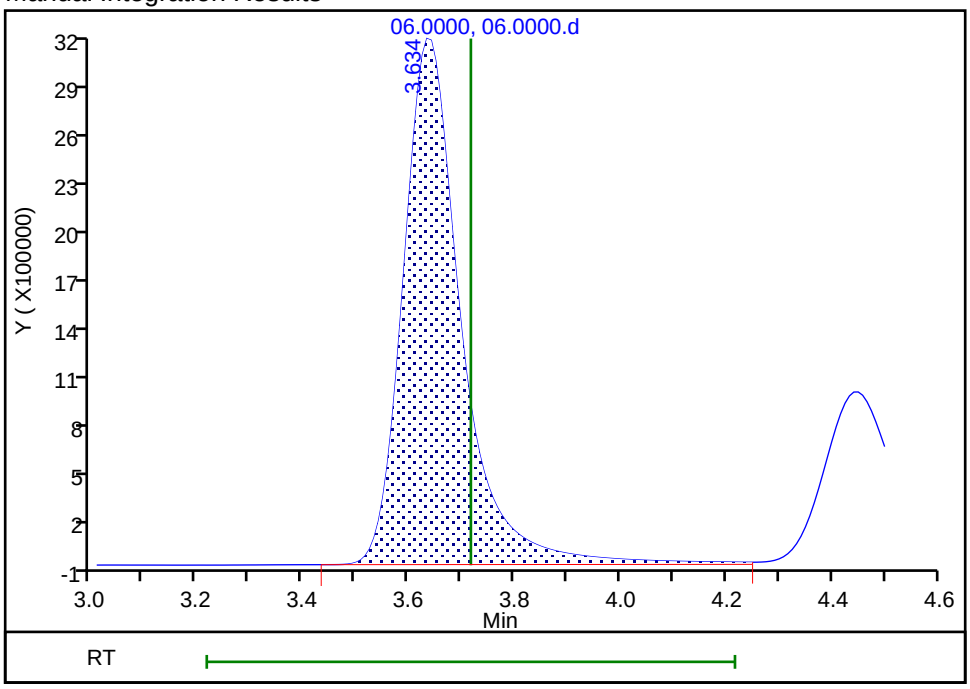
Processing Integration Results

RT: 3.63
Area: 24496099
Amount: 2.295033
Amount Units: ug/ml



Manual Integration Results

RT: 3.63
Area: 24455660
Amount: 2.297566
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:51:58
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

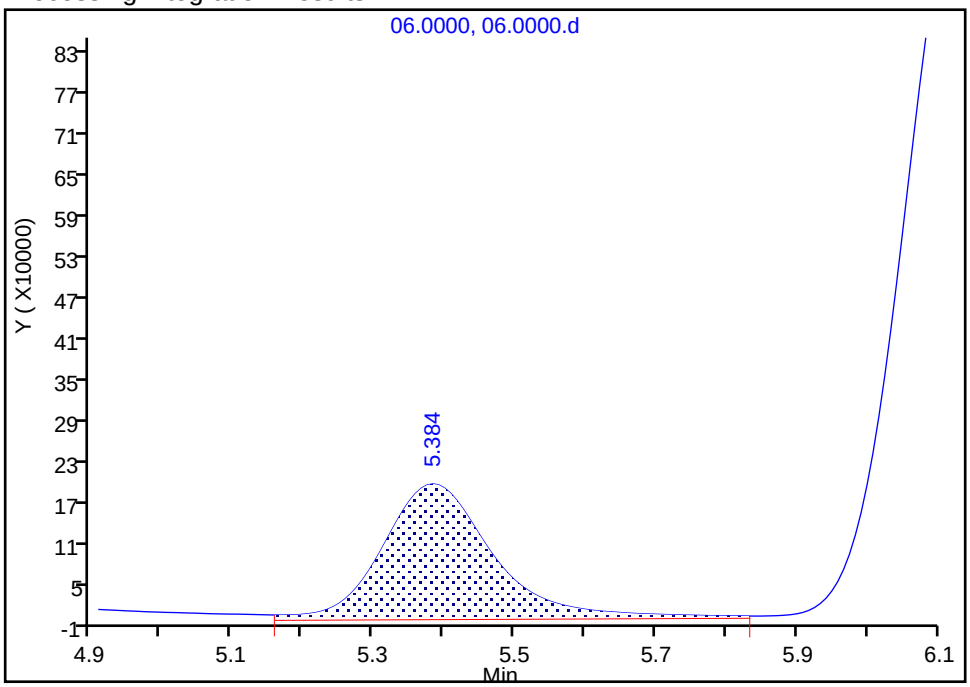
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d		
Injection Date:	05-Jun-2021 12:46:00	Instrument ID:	WC_IonChrom7
Lims ID:	std L2		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

4 Bromide, CAS: 24959-67-9

Signal: 1

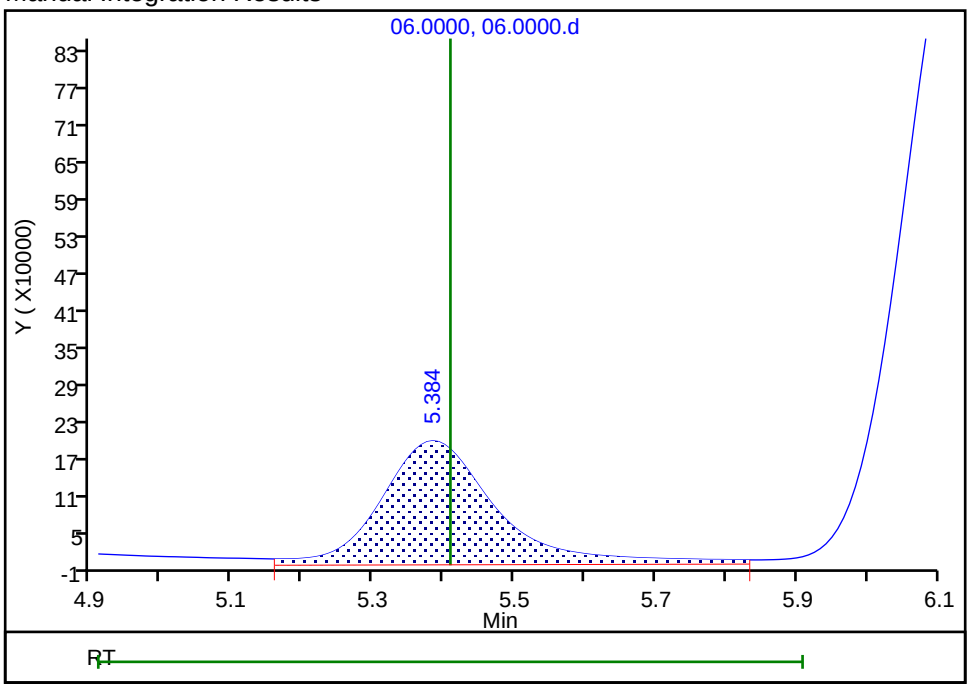
Processing Integration Results

RT: 5.38
Area: 2205701
Amount: 0.480180
Amount Units: ug/ml



Manual Integration Results

RT: 5.38
Area: 2325075
Amount: 0.519966
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:52:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

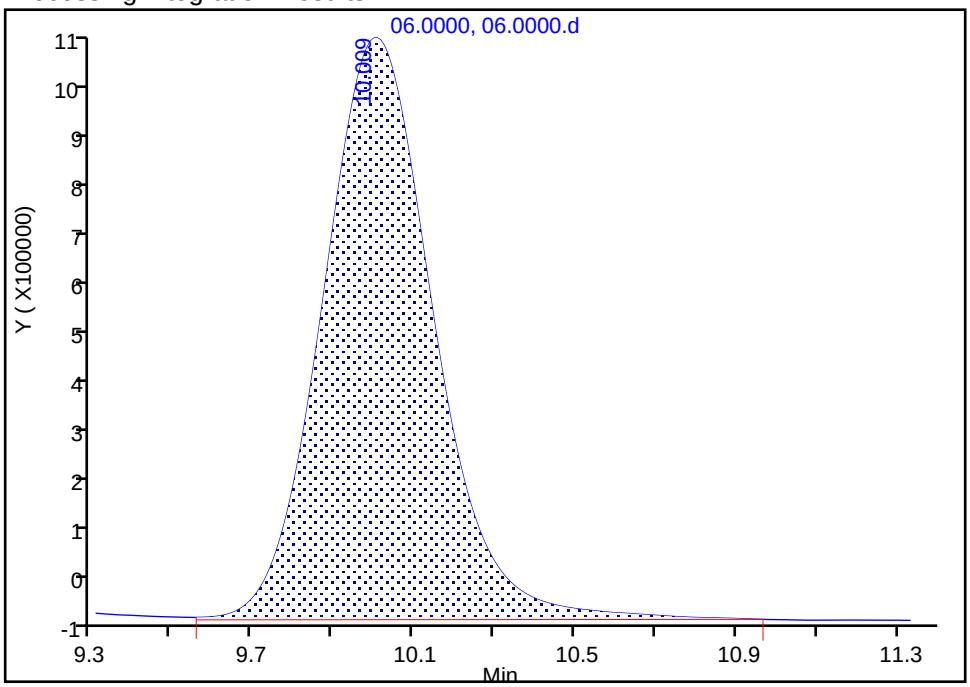
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d
Injection Date: 05-Jun-2021 12:46:00 Instrument ID: WC_IonChrom7
Lims ID: std L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

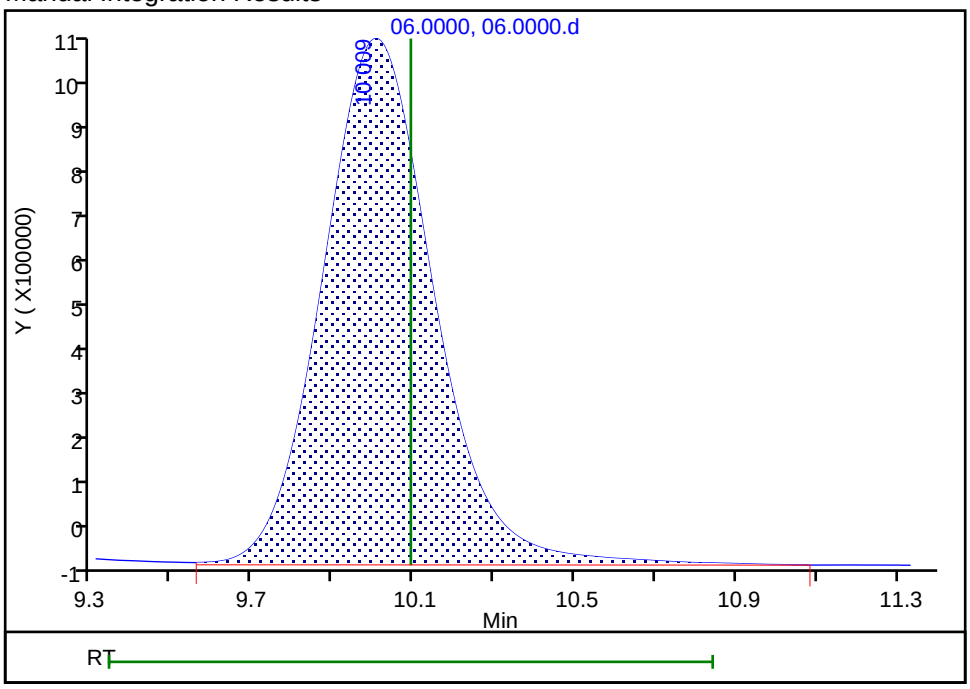
Processing Integration Results

RT: 10.01
Area: 19416493
Amount: 2.255516
Amount Units: ug/ml



Manual Integration Results

RT: 10.01
Area: 19486620
Amount: 2.260774
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:52:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\13.0000.d
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Jun-2021 13:02:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-010
Misc. Info.: 13
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jun-2021 21:22:23 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1673

First Level Reviewer: battilloj Date: 05-Jun-2021 20:53:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.442	2.467	-0.025	16787050	1.00	0.9376	M
2 Chloride	3.634	3.717	-0.083	50146169	5.00	4.01	
3 Nitrite as N	4.442	4.484	-0.042	21621087	NC	NC	
4 Bromide	5.375	5.409	-0.034	4385135	1.00	0.9441	
5 Nitrate as N	6.125	6.142	-0.017	25721089	NC	NC	
7 Orthophosphate as P	8.892	8.917	-0.025	9871817	NC	NC	
6 Sulfate	10.009	10.092	-0.083	36678520	5.00	3.97	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

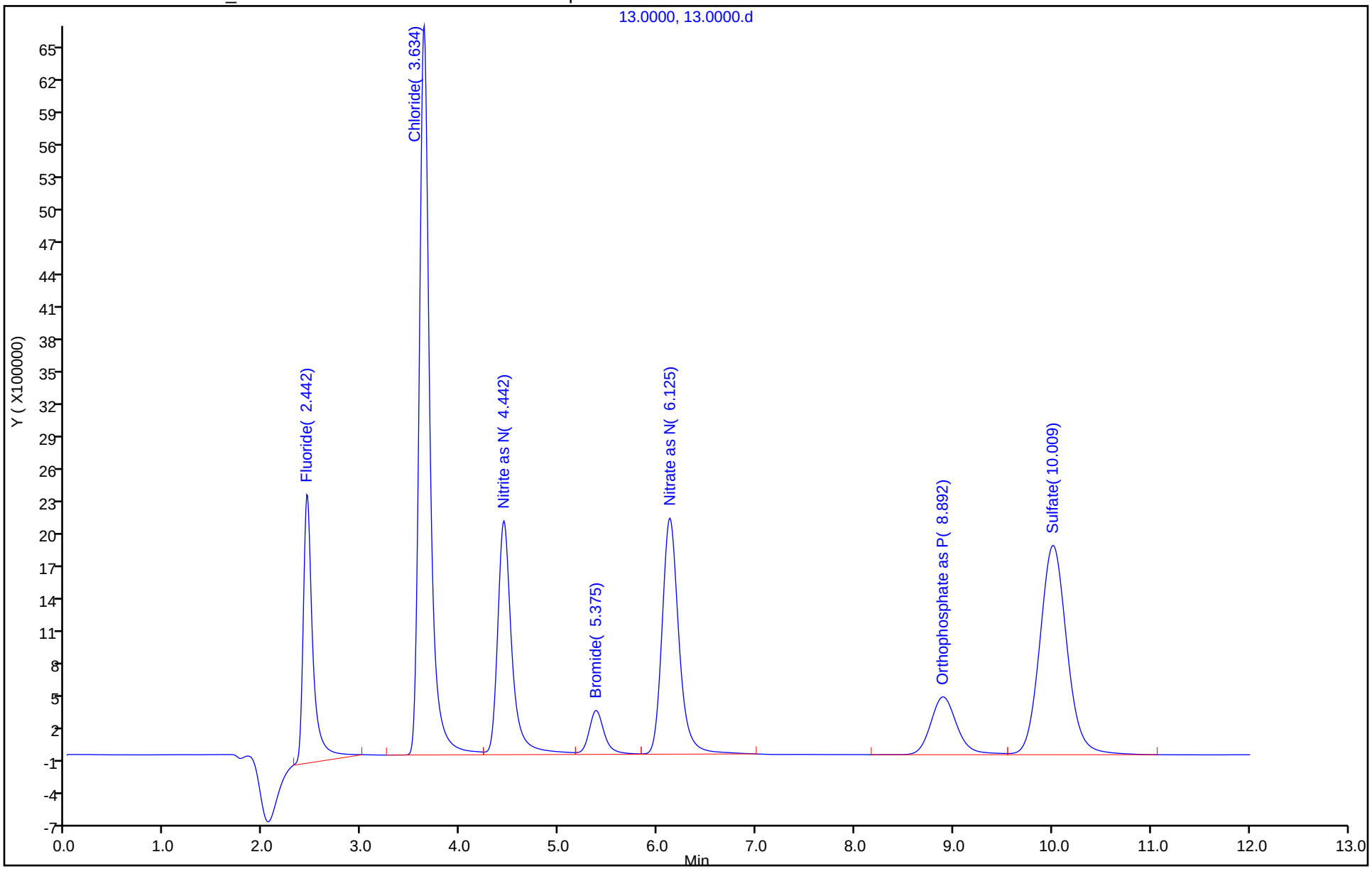
IC CAL cl/so4_00368 Amount Added: 0.10 Units: mL
IC Cal low_00583 Amount Added: 0.10 Units: mL

Report Date: 05-Jun-2021 21:22:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\13.0000.d

Injection Date:	05-Jun-2021 13:02:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

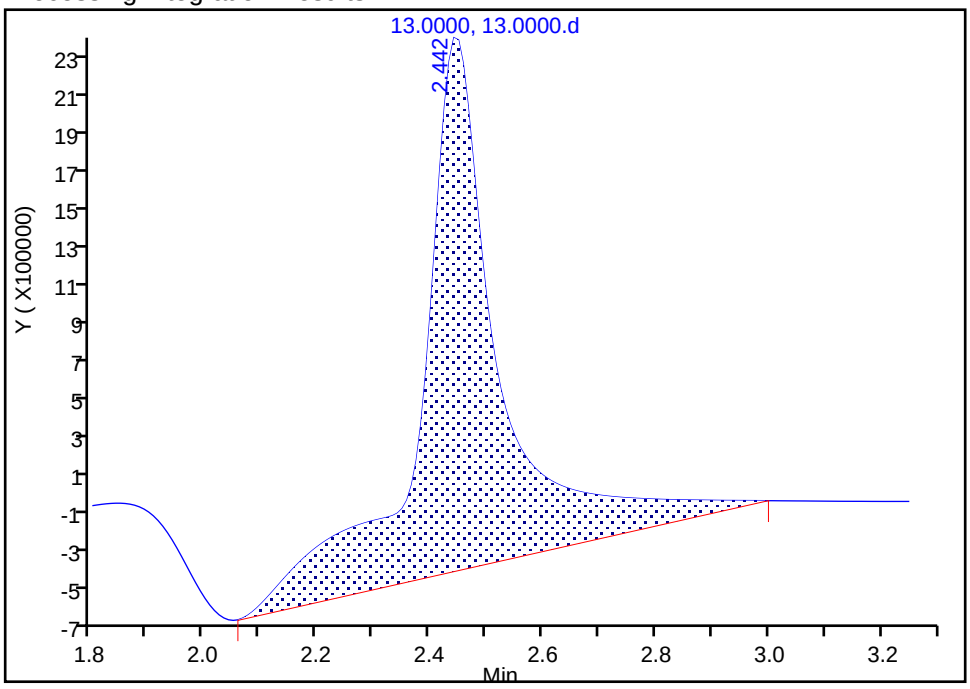
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\13.0000.d
Injection Date: 05-Jun-2021 13:02:00 Instrument ID: WC_IonChrom7
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

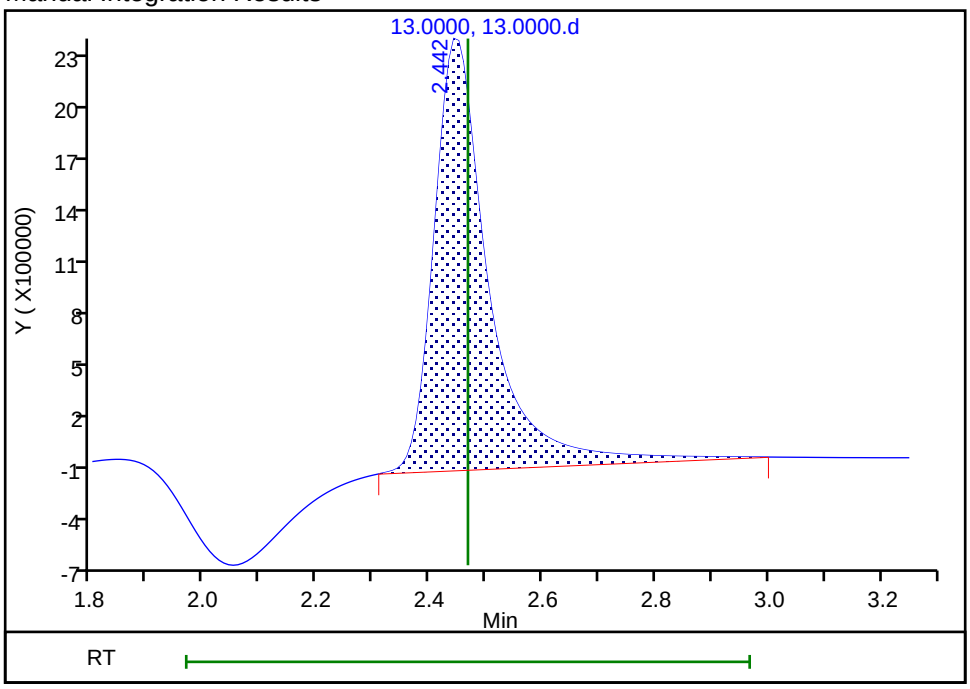
Processing Integration Results

RT: 2.44
Area: 27478103
Amount: 1.383857
Amount Units: ug/ml



Manual Integration Results

RT: 2.44
Area: 16787050
Amount: 0.937619
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:53:13
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 05-Jun-2021 13:16:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-011
Misc. Info.: 14
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jun-2021 21:22:23 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1673

First Level Reviewer: battilloj Date: 05-Jun-2021 14:36:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.459	2.459	0.000	72446772	4.00	3.93	M
2 Chloride	3.684	3.684	0.000	835888505	60.0	56.2	M
3 Nitrite as N	4.459	4.459	0.000	96297983	NC	NC	M
4 Bromide	5.384	5.384	0.000	18512261	4.00	3.85	M
5 Nitrate as N	6.117	6.117	0.000	114394797	NC	NC	M
7 Orthophosphate as P	8.884	8.884	0.000	40598700	NC	NC	
6 Sulfate	10.050	10.050	0.000	537196554	60.0	53.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

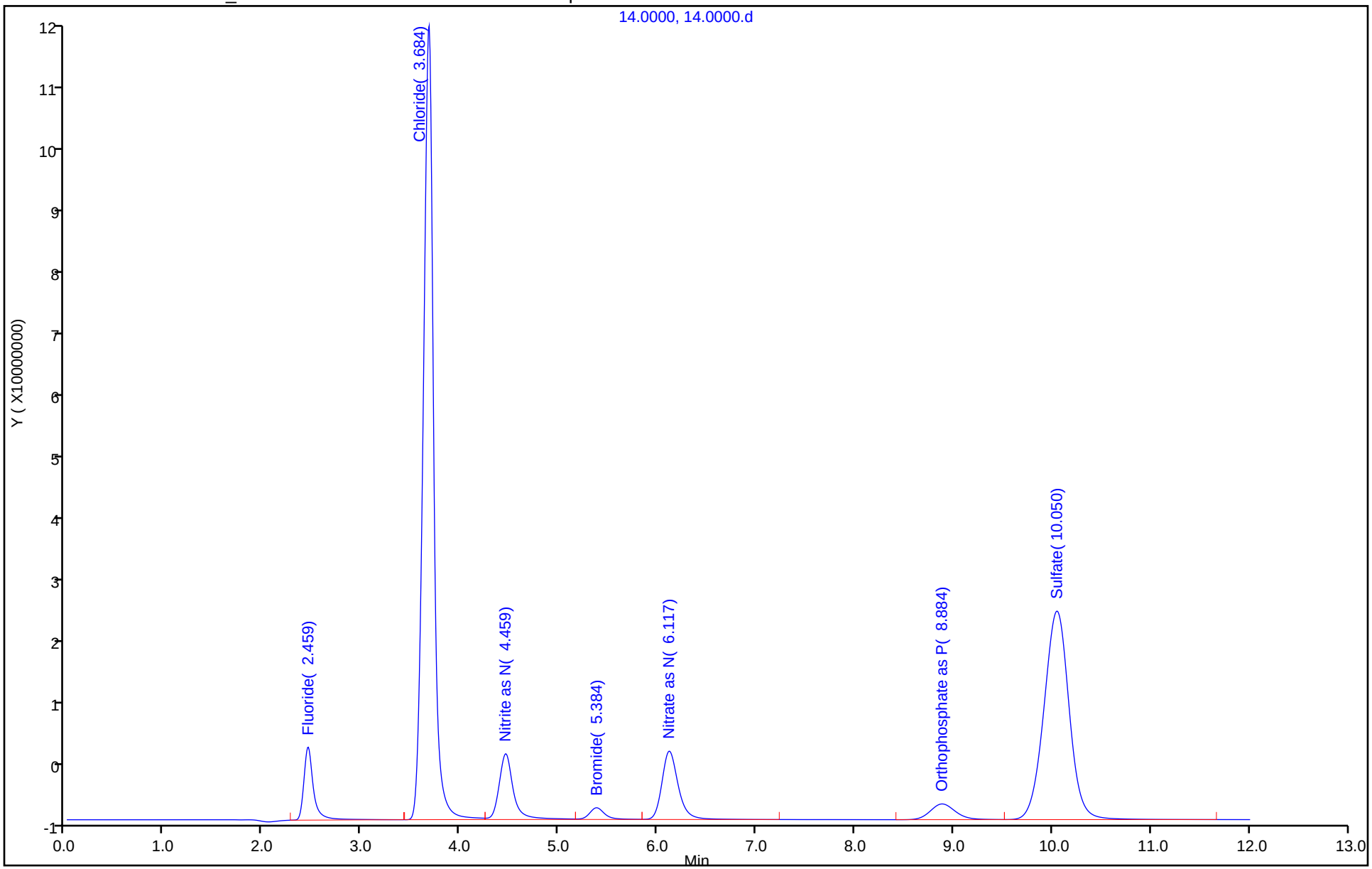
IC CAL cl/so4_00368 Amount Added: 1.20 Units: mL
IC Cal low_00583 Amount Added: 0.40 Units: mL

Report Date: 05-Jun-2021 21:22:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d

Injection Date:	05-Jun-2021 13:16:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

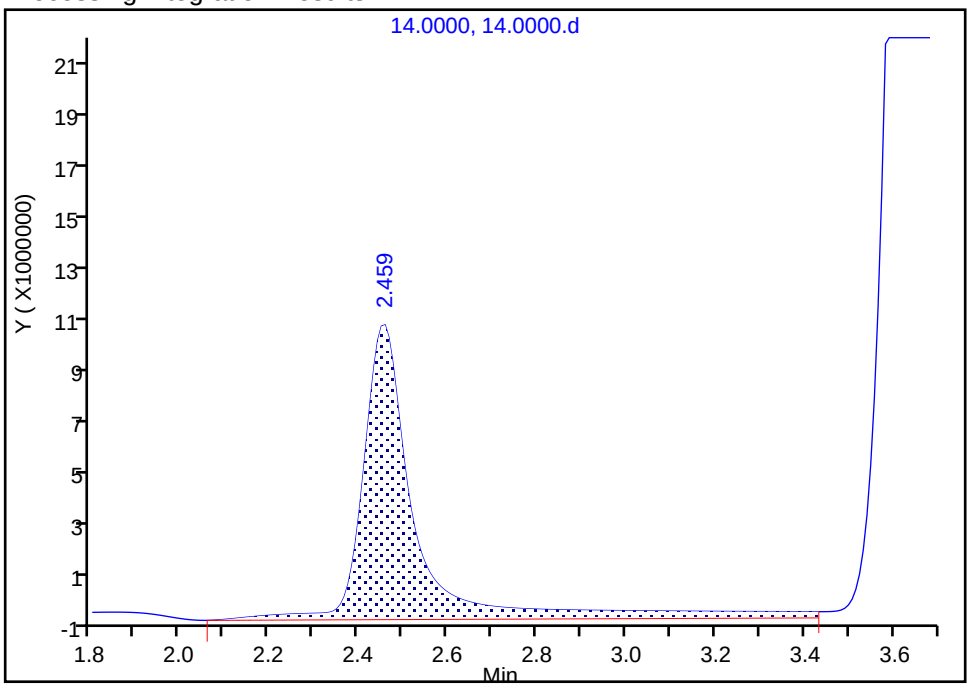
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d
Injection Date: 05-Jun-2021 13:16:00 Instrument ID: WC_IonChrom7
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

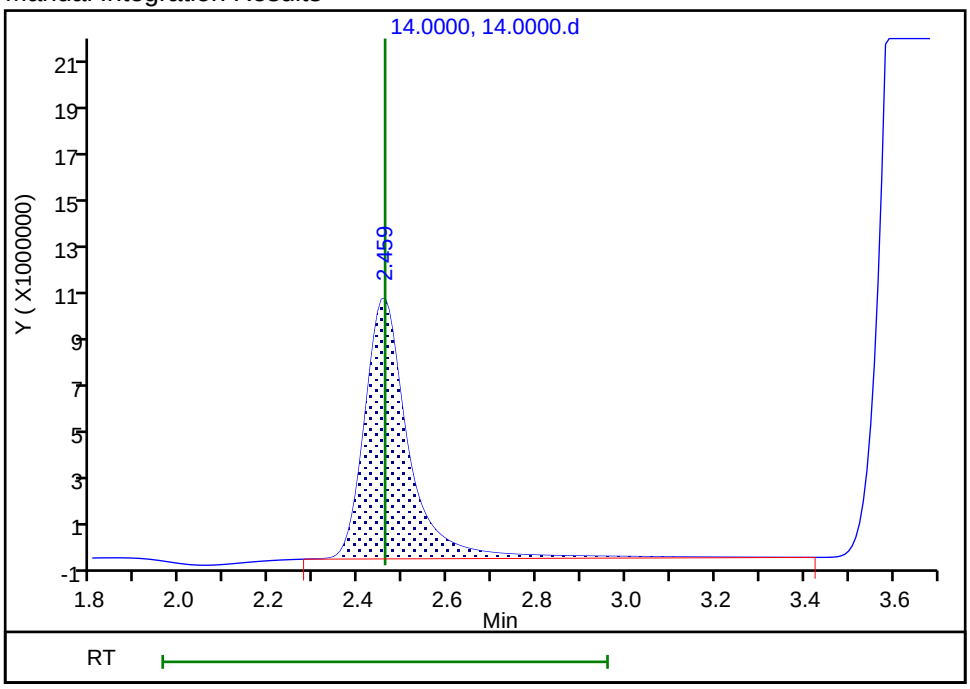
Processing Integration Results

RT: 2.46
Area: 90011393
Amount: 4.687279
Amount Units: ug/ml



Manual Integration Results

RT: 2.46
Area: 72446772
Amount: 3.929849
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:54:13
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

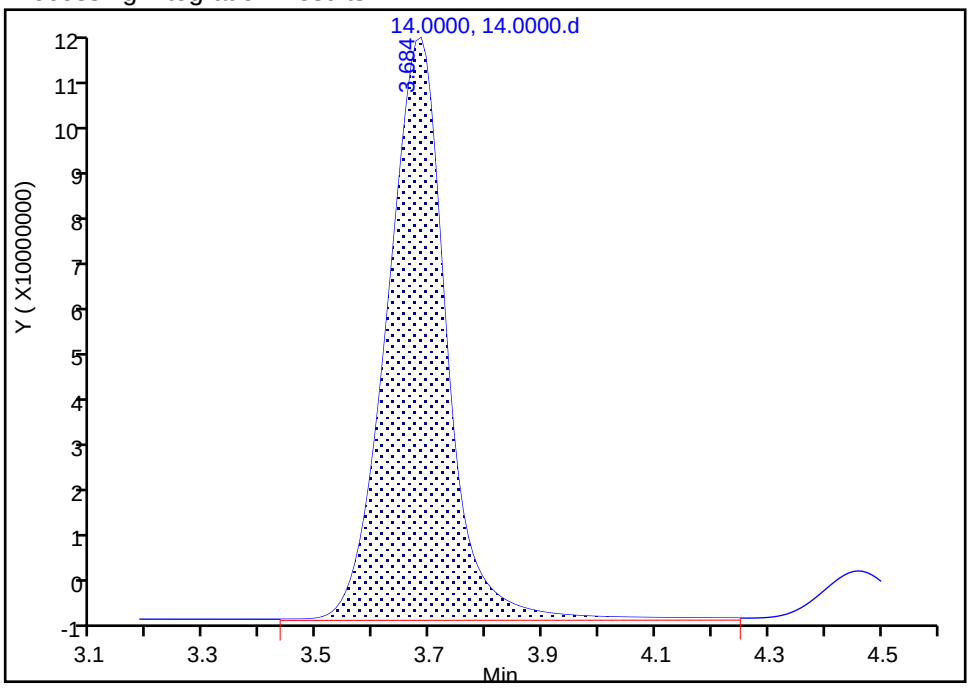
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d
Injection Date: 05-Jun-2021 13:16:00 Instrument ID: WC_IonChrom7
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

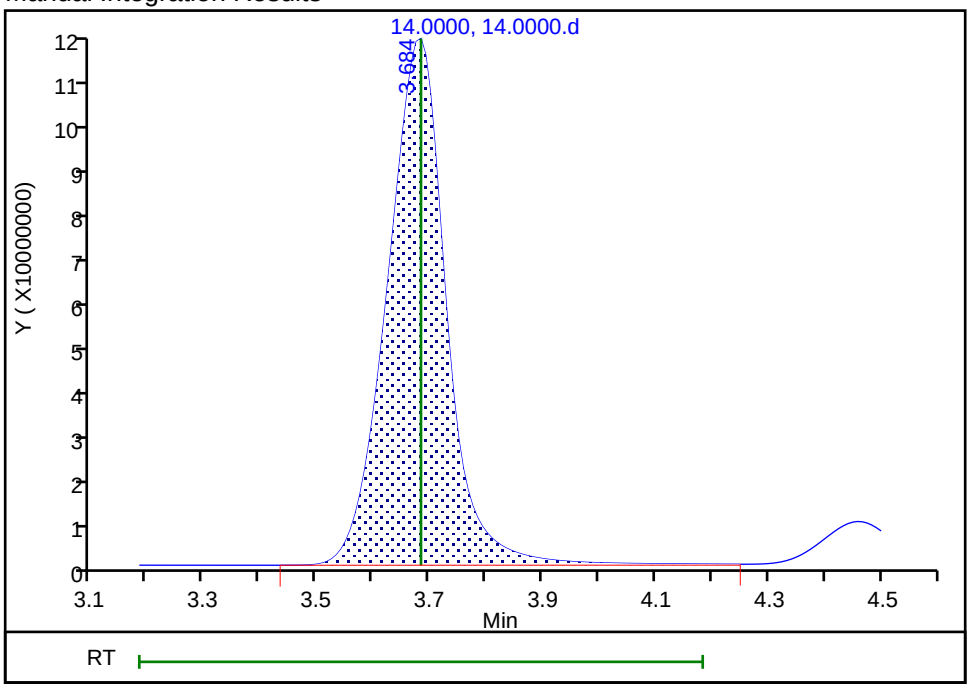
Processing Integration Results

RT: 3.68
Area: 846165716
Amount: 56.813513
Amount Units: ug/ml



Manual Integration Results

RT: 3.68
Area: 835888505
Amount: 56.235790
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:54:21
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

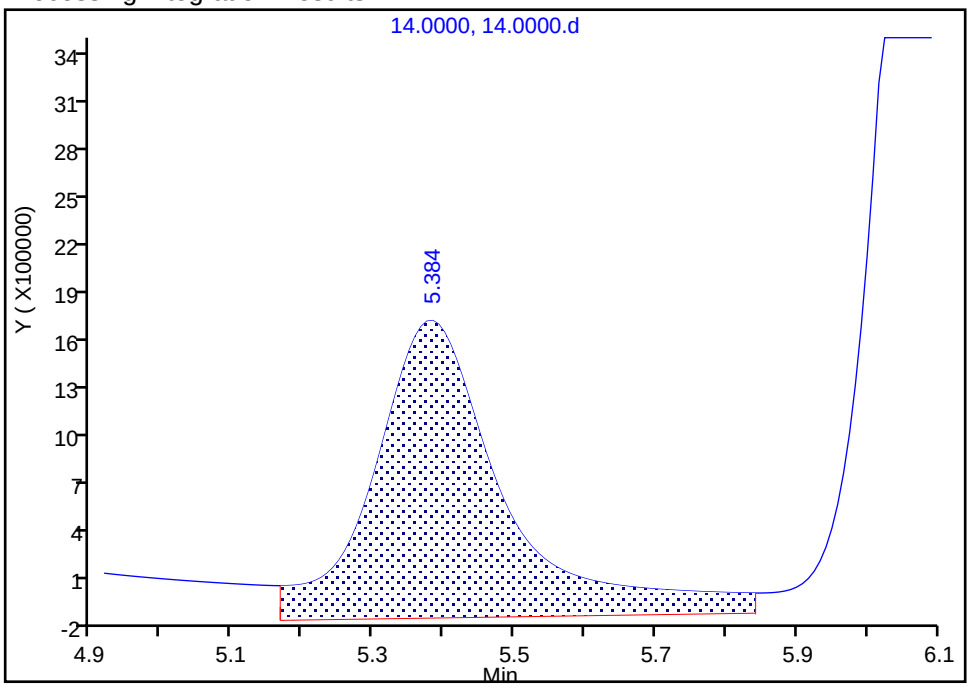
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d		
Injection Date:	05-Jun-2021 13:16:00	Instrument ID:	WC_IonChrom7
Lims ID:	std L4		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 5
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

4 Bromide, CAS: 24959-67-9

Signal: 1

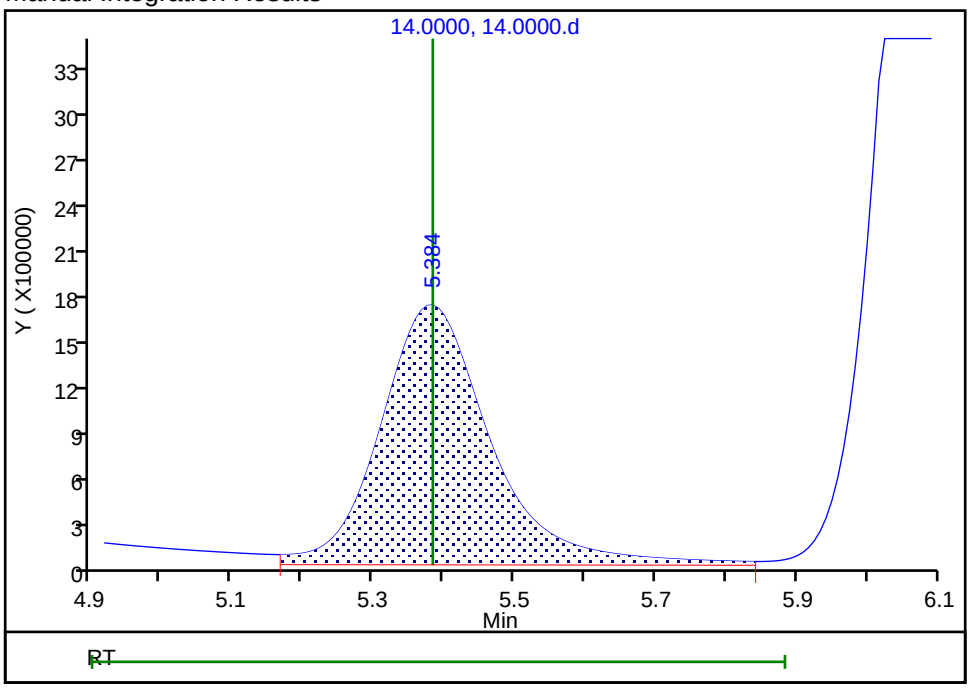
Processing Integration Results

RT: 5.38
Area: 23508301
Amount: 4.613562
Amount Units: ug/ml



Manual Integration Results

RT: 5.38
Area: 18512261
Amount: 3.852336
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:54:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\15.0000.d
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-Jun-2021 13:31:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-012
Misc. Info.: 15
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jun-2021 21:22:23 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1673

First Level Reviewer: battilloj Date: 05-Jun-2021 20:56:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.467	2.459	0.008	146830675	8.00	7.93	
2 Chloride	3.726	3.684	0.042	1787046727	120.0	119.5	M
3 Nitrite as N	4.484	4.459	0.025	200953038	NC	NC	M
4 Bromide	5.384	5.384	0.000	38175841	8.00	7.90	M
5 Nitrate as N	6.109	6.117	-0.008	244306604	NC	NC	M
7 Orthophosphate as P	8.876	8.884	-0.008	82195697	NC	NC	
6 Sulfate	10.092	10.050	0.042	1182923745	120.0	118.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

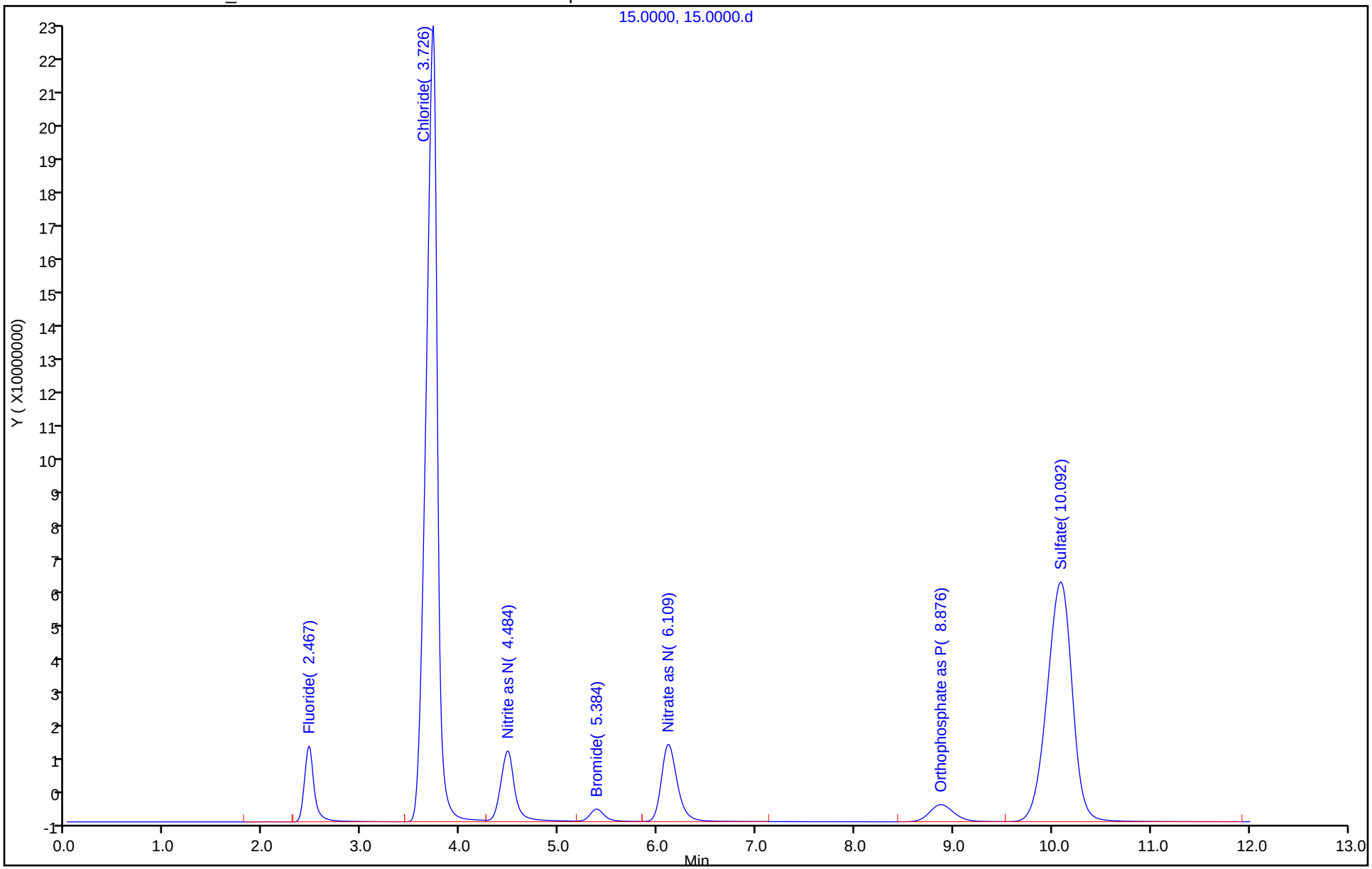
Reagents:

IC CAL cl/so4_00368 Amount Added: 2.40 Units: mL
IC Cal low_00583 Amount Added: 0.80 Units: mL

Report Date: 05-Jun-2021 21:22:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\15.0000.d				
Injection Date:	05-Jun-2021 13:31:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

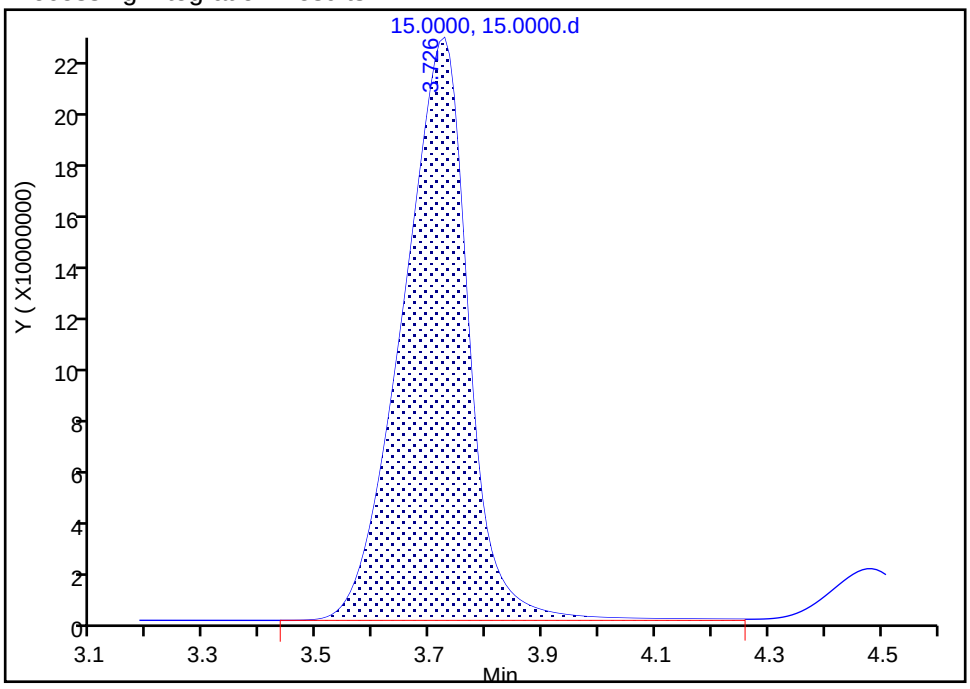
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\15.0000.d				
Injection Date:	05-Jun-2021 13:31:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

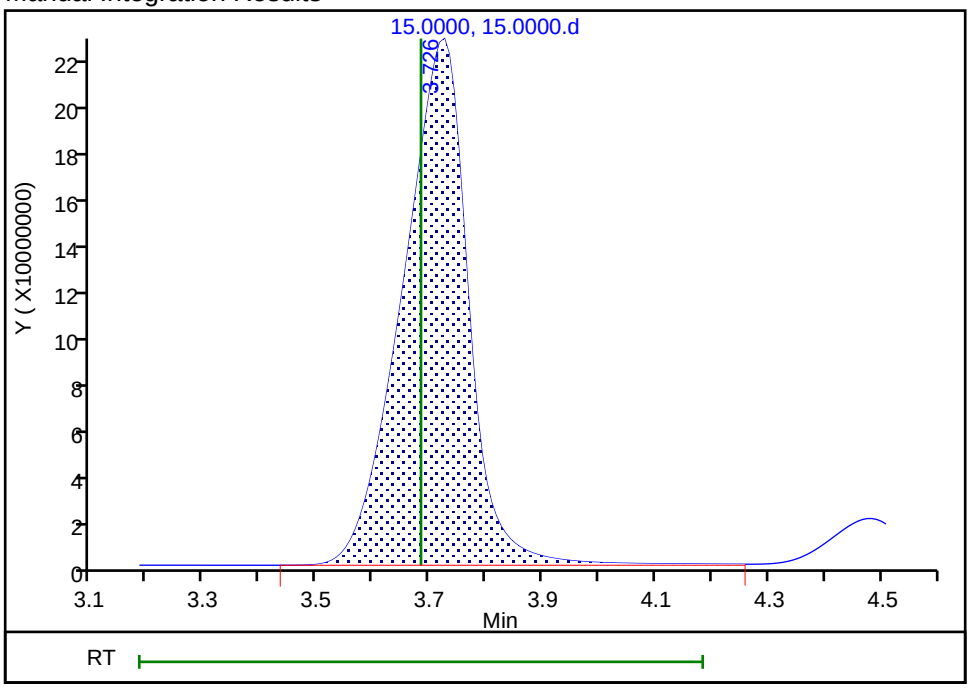
Processing Integration Results

RT: 3.73
Area: 1787205473
Amount: 119.4608
Amount Units: ug/ml



Manual Integration Results

RT: 3.73
Area: 1787046727
Amount: 119.4620
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:55:20

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

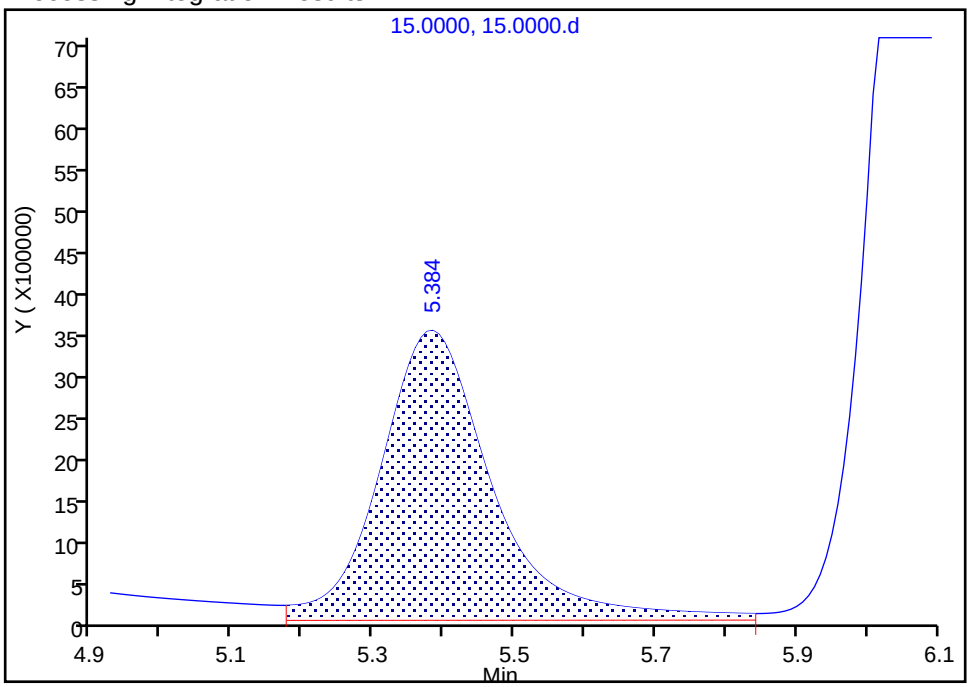
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\15.0000.d				
Injection Date:	05-Jun-2021 13:31:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

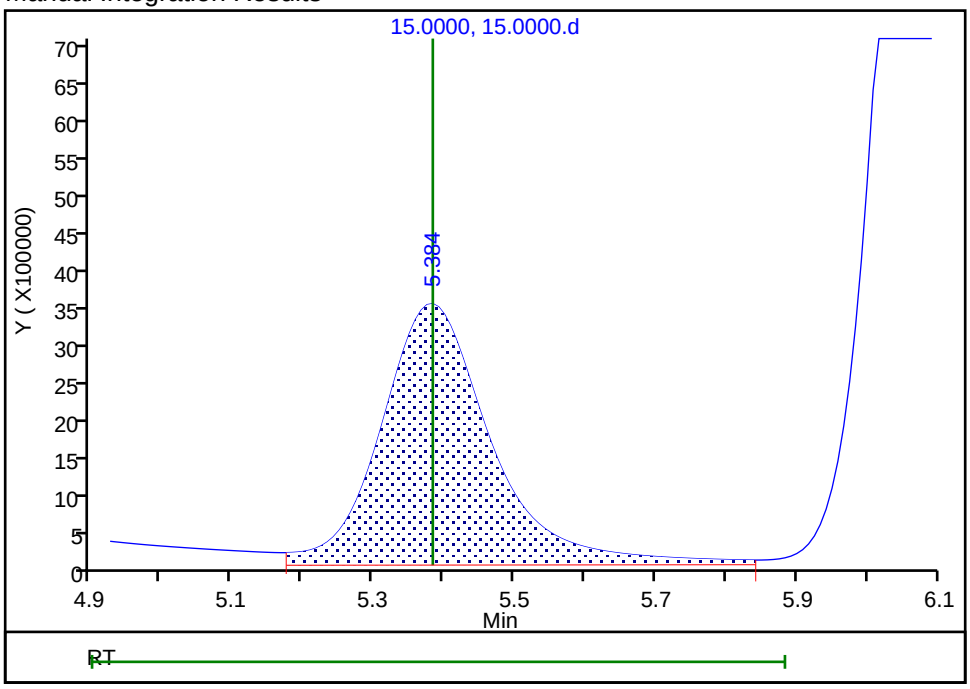
Processing Integration Results

RT: 5.38
Area: 38779681
Amount: 7.904911
Amount Units: ug/ml



Manual Integration Results

RT: 5.38
Area: 38175841
Amount: 7.900372
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:55:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Jun-2021 13:46:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-013
Misc. Info.: 16
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jun-2021 21:22:24 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1673

First Level Reviewer: battilloj Date: 05-Jun-2021 20:57:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.459	2.459	0.000	189094409	10.0	10.2	
2 Chloride	3.759	3.684	0.075	3076539404	200.0	205.2	M
3 Nitrite as N	4.484	4.459	0.025	265016392	NC	NC	M
4 Bromide	5.376	5.384	-0.008	49714162	10.0	10.3	M
5 Nitrate as N	6.101	6.117	-0.016	320231504	NC	NC	M
7 Orthophosphate as P	8.859	8.884	-0.025	106166126	NC	NC	
6 Sulfate	10.126	10.050	0.076	2094358305	200.0	208.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

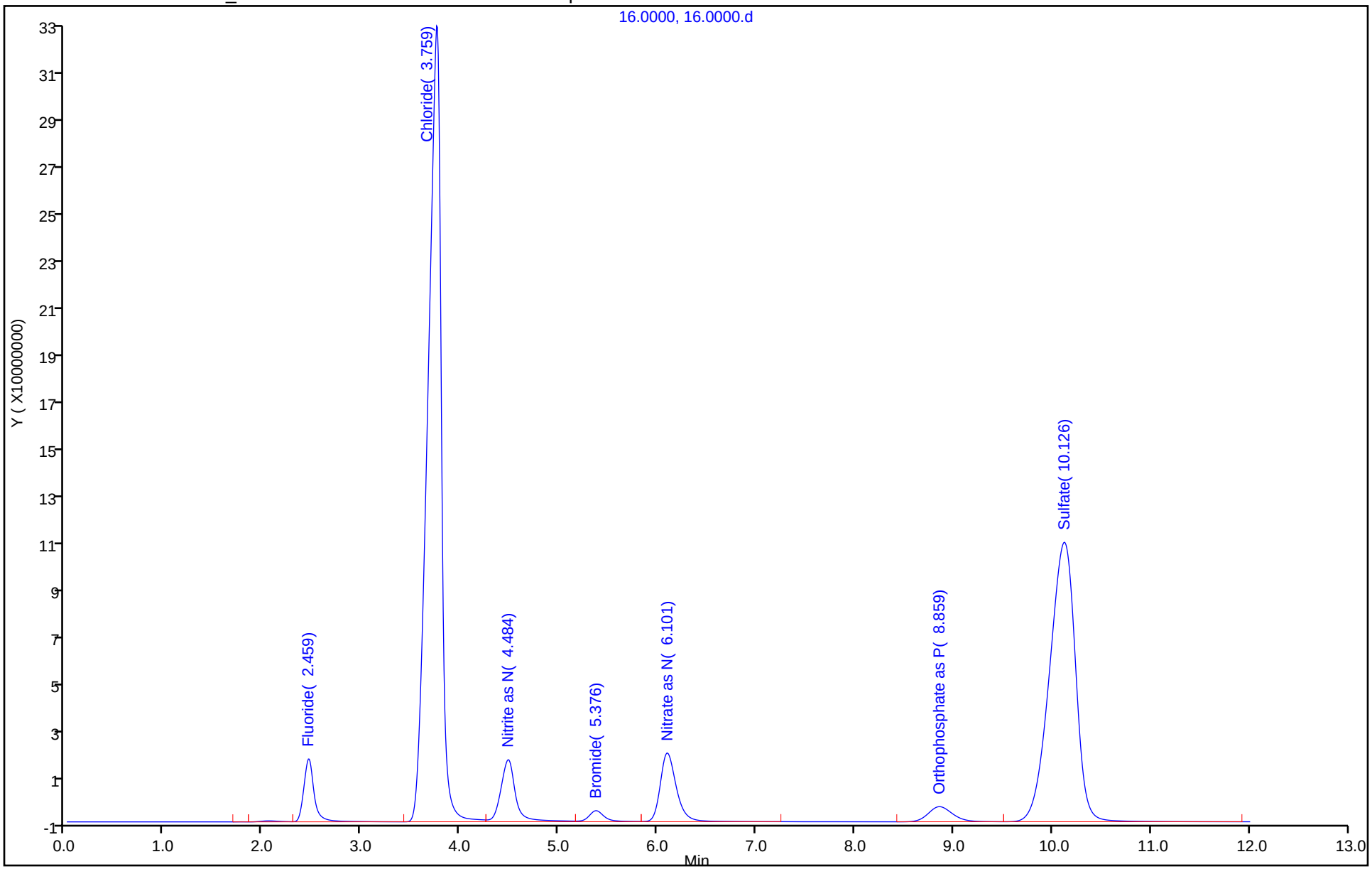
Reagents:

IC CAL cl/so4_00368 Amount Added: 4.00 Units: mL
IC Cal low_00583 Amount Added: 1.00 Units: mL

Report Date: 05-Jun-2021 21:22:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d				
Injection Date:	05-Jun-2021 13:46:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

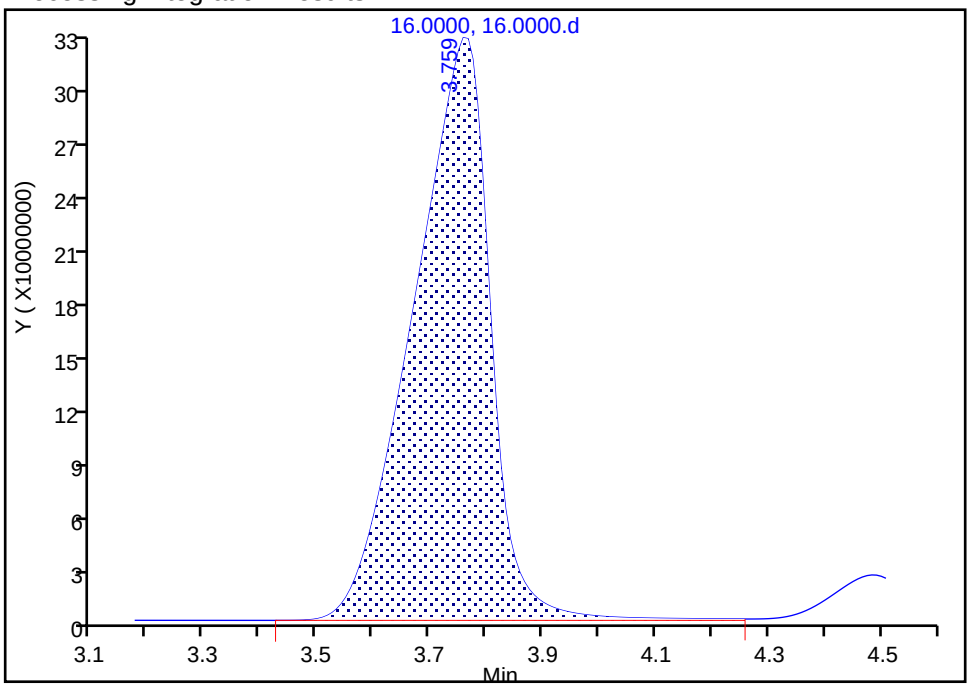
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d				
Injection Date:	05-Jun-2021 13:46:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

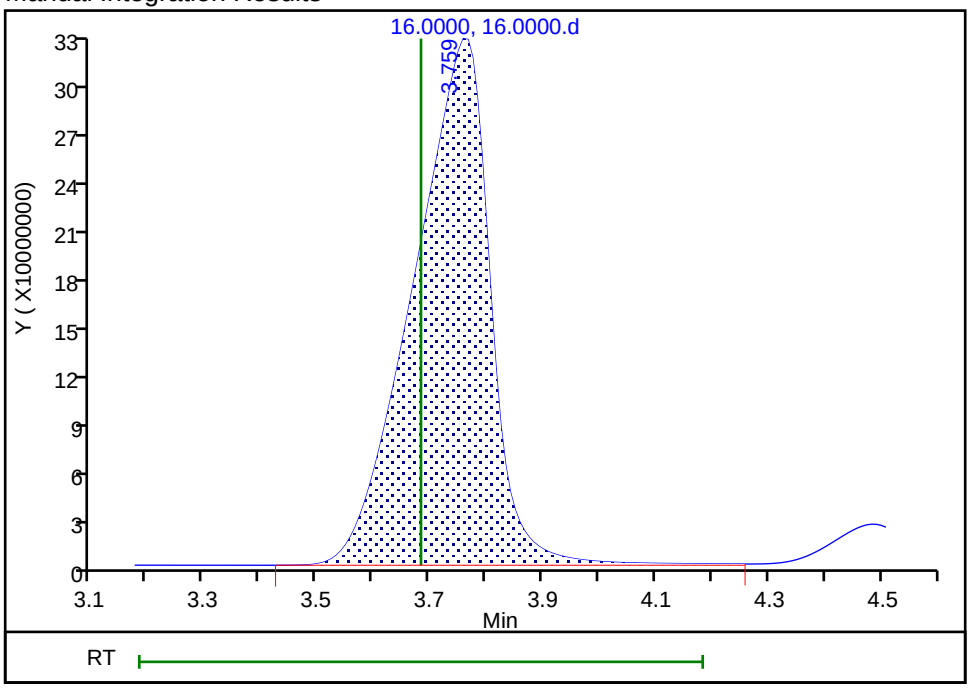
Processing Integration Results

RT: 3.76
Area: 3076945504
Amount: 205.1905
Amount Units: ug/ml



Manual Integration Results

RT: 3.76
Area: 3076539404
Amount: 205.1782
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:57:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

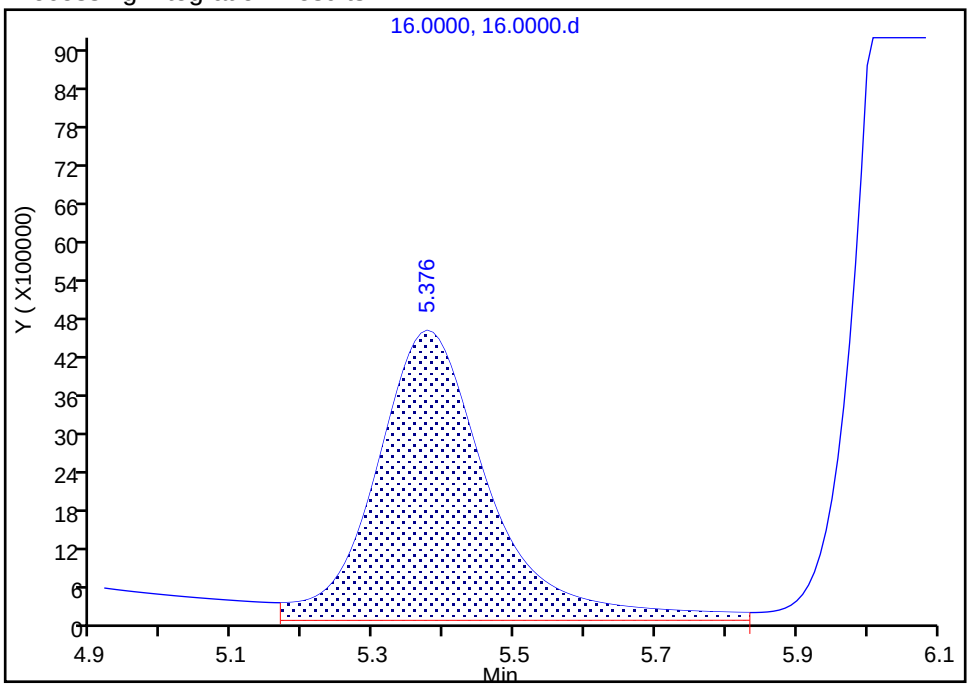
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d				
Injection Date:	05-Jun-2021 13:46:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

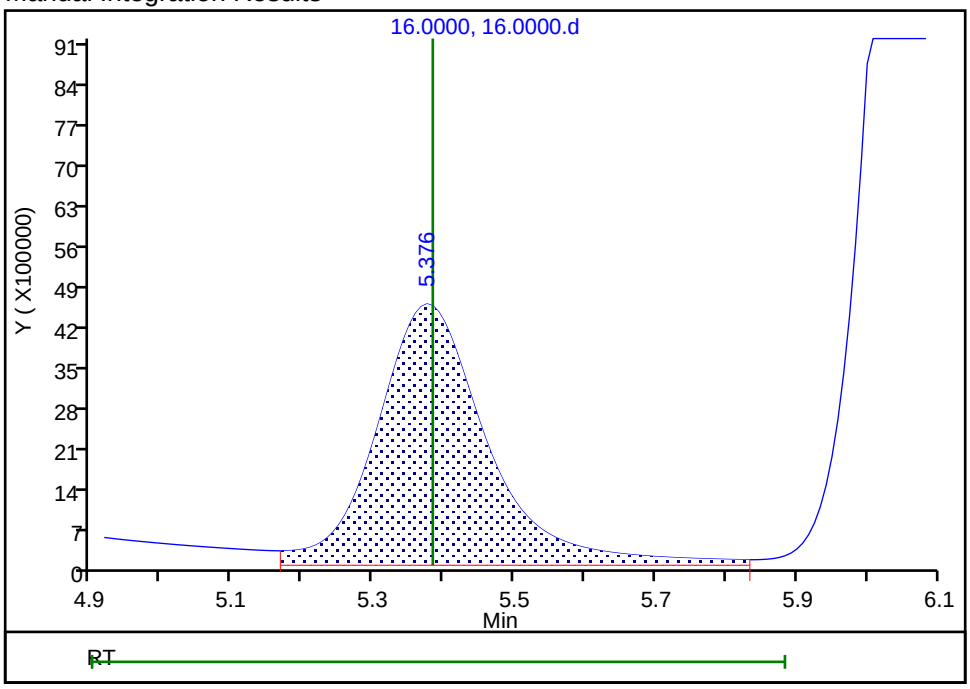
Processing Integration Results

RT: 5.38
Area: 50752582
Amount: 10.388106
Amount Units: ug/ml



Manual Integration Results

RT: 5.38
Area: 49714162
Amount: 10.275705
Amount Units: ug/ml



Reviewer: battilloj, 05-Jun-2021 20:57:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\11.0000.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 05-Jun-2021 15:02:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-008
Misc. Info.: 11
Operator ID: Instrument ID: WC_IonChrom7
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 14:14:24 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1654

First Level Reviewer: jindaratc Date: 05-Jun-2021 19:39:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.467	2.467	0.000	66946364	4.00	3.63	M
2 Chloride	3.717	3.717	0.000	1220546146	80.0	81.8	M
3 Nitrite as N	4.484	4.484	0.000	100229521	NC	NC	M
4 Bromide	5.409	5.409	0.000	20027485	4.00	4.16	M
5 Nitrate as N	6.142	6.142	0.000	110552681	NC	NC	M
7 Orthophosphate as P	8.917	8.917	0.000	38289728	NC	NC	
6 Sulfate	10.092	10.092	0.000	769756914	80.0	77.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

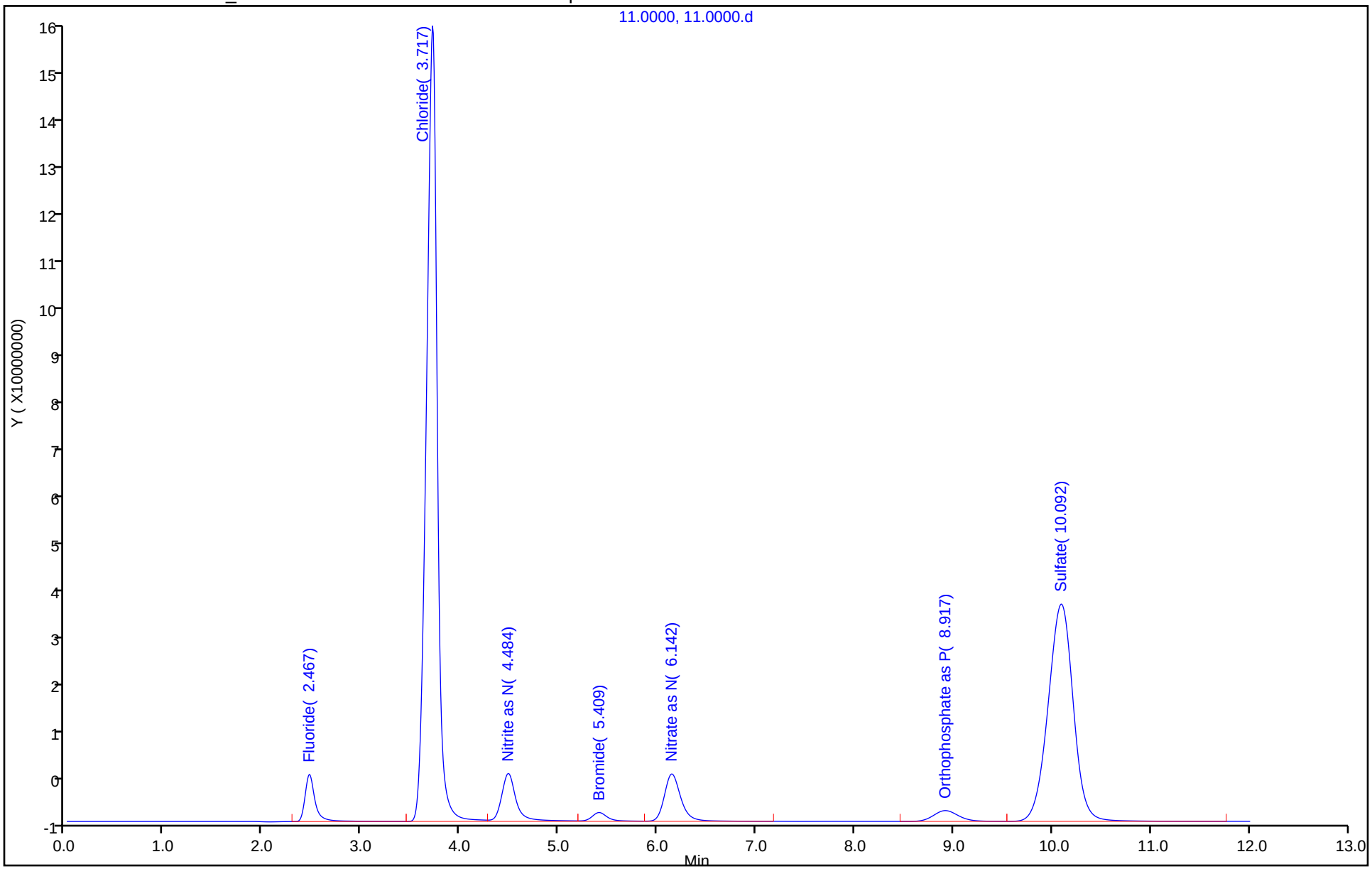
Reagents:

IC SO4 ICV_00021	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00319	Amount Added:	0.40	Units: mL

Report Date: 08-Jun-2021 14:14:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\11.0000.d				
Injection Date:	05-Jun-2021 15:02:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	icv			Worklist Smp#:	8
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\12.0000.d
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 05-Jun-2021 15:17:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102102-009
Misc. Info.: 12
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 08-Jun-2021 14:14:24 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1654

First Level Reviewer: battilloj Date: 05-Jun-2021 20:59:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.467				ND	
2 Chloride	3.634	3.717	-0.083	199936		0.6852	M
3 Nitrite as N		4.484				ND	
4 Bromide		5.409				ND	
5 Nitrate as N		6.142				ND	
7 Orthophosphate as P		8.917				ND	
6 Sulfate	10.001	10.092	-0.091	604820		0.3801	

QC Flag Legend

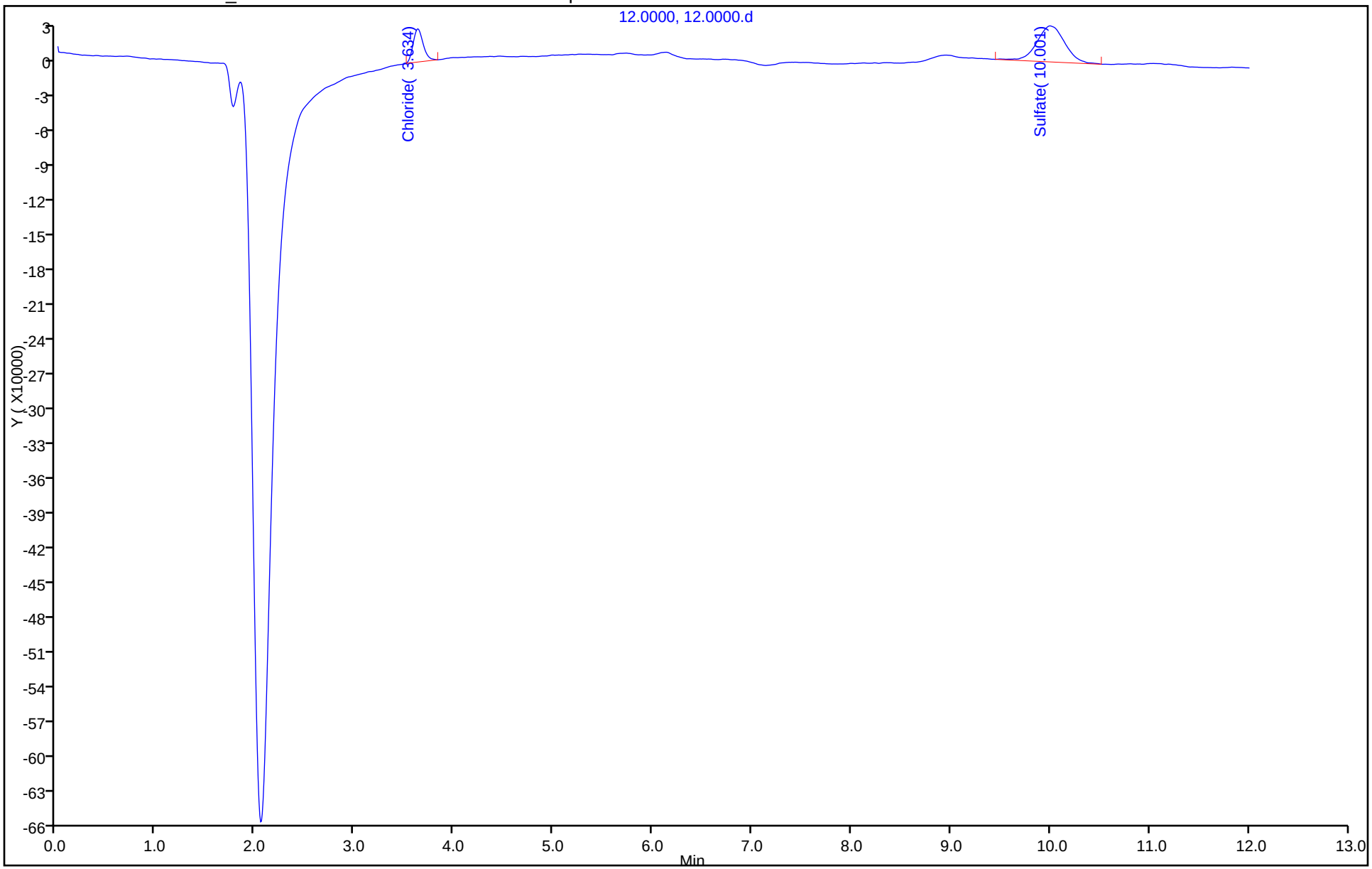
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 08-Jun-2021 14:14:25 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\12.0000.d

Injection Date:	05-Jun-2021 15:17:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 102164 **Inst ID:** IC4 **Analysis Date:** 6/8/2021 **Analyst:** CJ.

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	149493	5	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	149487	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	149474	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	149491	4	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	149489	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	148930	1-12	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	148902	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
493		F Cl NO2 Br NO3 PO4 SO4	5,10X	Hist
487		F Cl NO2 Br NO3 PO4 SO4	5X	Hist.
491		F Cl NO2 Br NO3 PO4 SO4	20X	Test
489		F Cl NO2 Br NO3 PO4 SO4	20X	coverage
930		F Cl NO2 Br NO3 PO4 SO4	5,10,20X	Hist.
902		F Cl NO2 Br NO3 PO4 SO4	5X	Rerun dilution.
		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_IonChrom7\20210605-102102.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-Jun-2021 14:14:51
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b
Inj Date : 05-Jun-2021 12:31:00, Sublist: chrom-Anions_IC7*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-653985	1860141		0.999
2 Chloride					-101083	1504374		0.999
3 Nitrite as N	-188144	2572967		0.998				
4 Bromide					-200689	4857560		0.999
5 Nitrate as N	-231651	3106019		0.998				
7 Orthophosphate as P	-174798	1041561		0.999				
6 Sulfate					-321133	1003990		0.996

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-Jun-2021 14:14:51
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-12.000 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d
Inj Date: 05-Jun-2021 12:31:00 Worklist: 102102 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d
Inj Date: 05-Jun-2021 12:46:00 Worklist: 102102 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\13.0000.d
Inj Date: 05-Jun-2021 13:02:00 Worklist: 102102 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d
Inj Date: 05-Jun-2021 13:16:00 Worklist: 102102 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\15.0000.d
Inj Date: 05-Jun-2021 13:31:00 Worklist: 102102 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d
Inj Date: 05-Jun-2021 13:46:00 Worklist: 102102 Sample#: 7

Start Cal Date: 05-Jun-2021 12:31:00 End Cal Date: 05-Jun-2021 13:46:00

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					
19807325	21309114	21621087	24074496	25119130	26501639	-1881443			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		25729670		
M3961465	M10654557	21621087	M96297983	M200953038	M265016392				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				
5 Nitrate as N				Signal: 1					
24500600	25346814	25721089	28598699	30538326	32023150	-2316519			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		31060195		
M4900120	M12673407	25721089	M114394797	M244306604	M320231504				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				
7 Orthophosphate as P				Signal: 1					
10269800	9829902	9871817	10149675	10274462	10616613	-174798			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		10415613		
M2053960	4914951	9871817	40598700	82195697	106166126				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-Jun-2021 14:14:51
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-12.000 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\05.0000.d
Inj Date: 05-Jun-2021 12:31:00 Worklist: 102102 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\06.0000.d
Inj Date: 05-Jun-2021 12:46:00 Worklist: 102102 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\13.0000.d
Inj Date: 05-Jun-2021 13:02:00 Worklist: 102102 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\14.0000.d
Inj Date: 05-Jun-2021 13:16:00 Worklist: 102102 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\15.0000.d
Inj Date: 05-Jun-2021 13:31:00 Worklist: 102102 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d
Inj Date: 05-Jun-2021 13:46:00 Worklist: 102102 Sample#: 7

Start Cal Date: 05-Jun-2021 12:31:00 End Cal Date: 05-Jun-2021 13:46:00

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									
17270715	16633242	16787050	18111693	18353834	18909441	-653985			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		18601417		
M3454143	M8316621	M16787050	M72446772	146830675	189094409				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				
2 Chloride				Signal: 1					
9768142	9782264	10029234	13931475	14892056	15382697	-10108342			0.999
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15043744		
M9768142	M24455660	50146169	M835888505	M1787046727	M3076539404				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				
4 Bromide				Signal: 1					
4037770	4650150	4385135	4628065	4771980	4971416	-200689			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		4857560		
807554	M2325075	4385135	M18512261	M38175841	M49714162				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
10591841	7794648	7335704	8953276	9857698	10471792	-3211337			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10039906		
M10591841	M19486620	36678520	537196554	1182923745	2094358305				
102102(2)	102102(3)	102102(4)	102102(5)	102102(6)	102102(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\01.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Jun-2021 10:00:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-001
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:32 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 08-Jun-2021 13:39:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.442	2.442	0.000	83478140	5.00	4.52	M
2 Chloride	3.709	3.709	0.000	1436858739	100.0	96.2	
3 Nitrite as N	4.467	4.467	0.000	119711226	NC	NC	
4 Bromide	5.392	5.392	0.000	23418221	5.00	4.86	
5 Nitrate as N	6.126	6.126	0.000	139791038	NC	NC	
7 Orthophosphate as P	8.967	8.967	0.000	47853231	NC	NC	
6 Sulfate	10.159	10.159	0.000	946338398	100.0	94.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

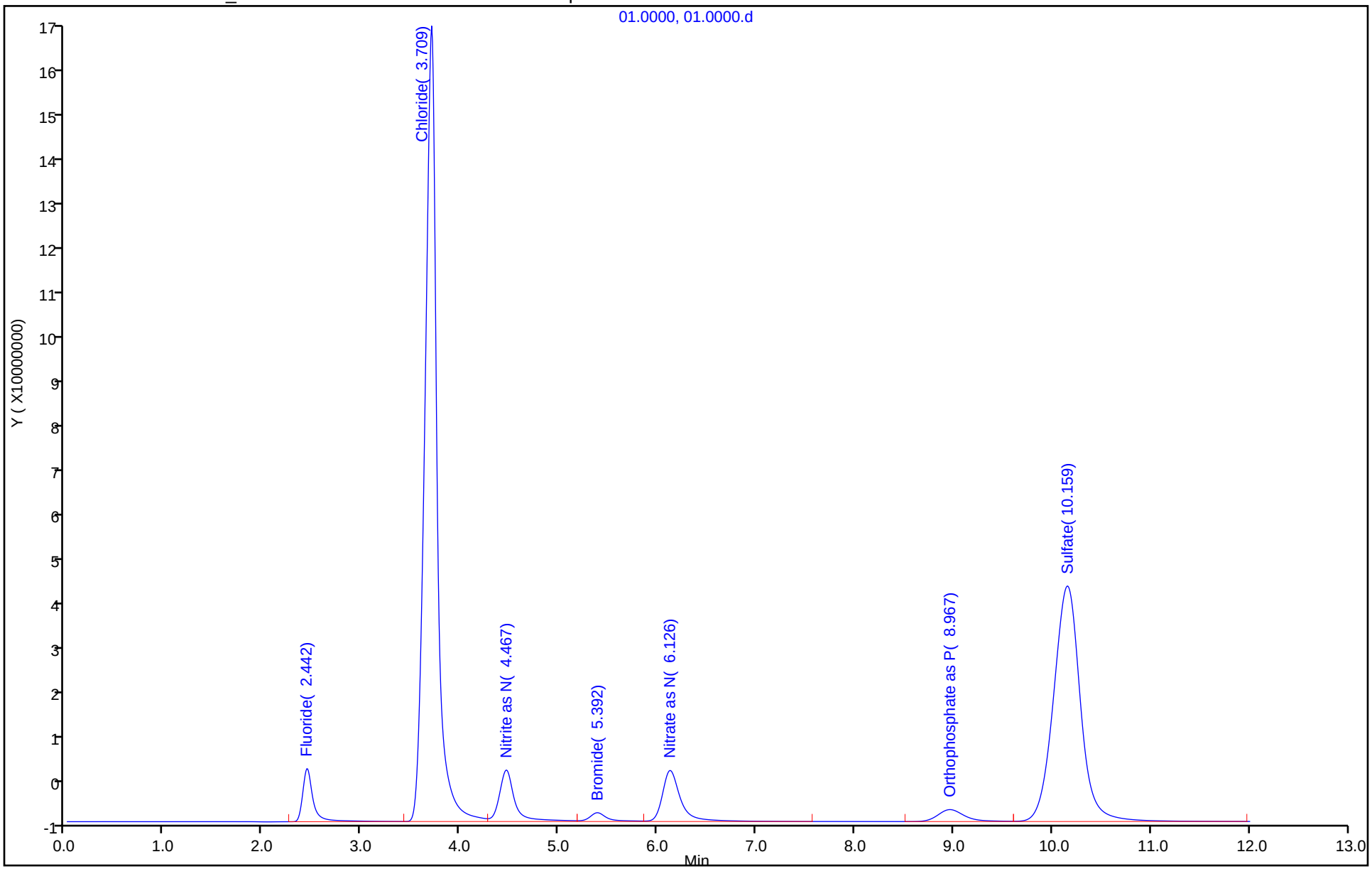
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:32:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\01.0000.d

Injection Date:	08-Jun-2021 10:00:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\02.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 08-Jun-2021 10:14:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-002
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:32 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 13:18:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.442				ND	
2 Chloride		3.709				ND	U
3 Nitrite as N		4.467				ND	
4 Bromide		5.392				ND	
5 Nitrate as N		6.126				ND	
7 Orthophosphate as P		8.967				ND	
6 Sulfate		10.159				ND	

QC Flag Legend

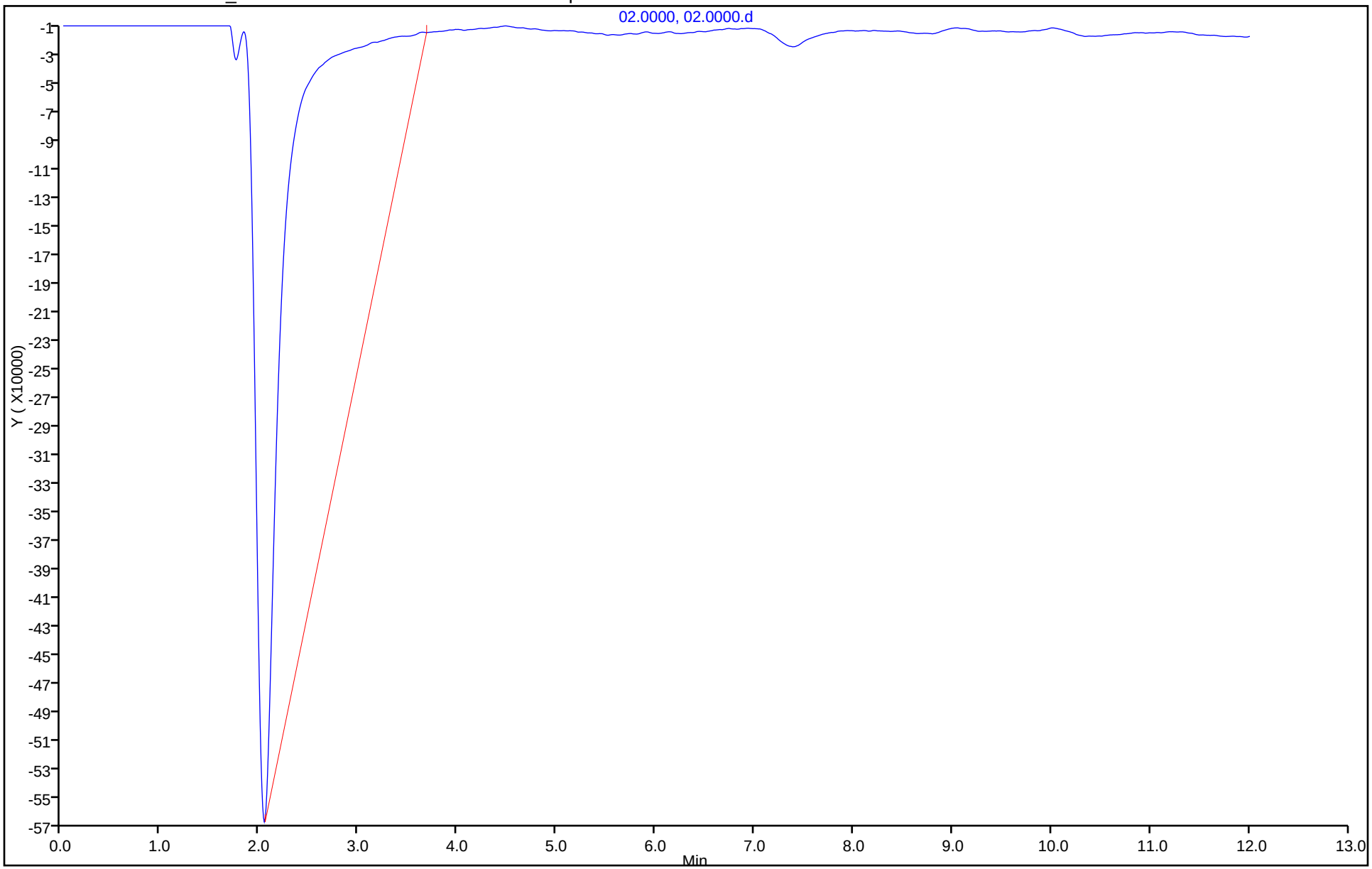
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 09-Jun-2021 15:32:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\02.0000.d

Injection Date:	08-Jun-2021 10:14:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\03.0000.d
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 08-Jun-2021 10:29:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-003
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:32 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 13:21:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.434	2.442	-0.008	7682157	0.5000	0.4481	M
2 Chloride	3.634	3.709	-0.075	47895290	5.00	3.86	M
3 Nitrite as N	4.442	4.467	-0.025	9958258	NC	NC	M
4 Bromide	5.384	5.392	-0.008	1784814	0.5000	0.4087	M
5 Nitrate as N	6.134	6.126	0.008	11490289	NC	NC	M
7 Orthophosphate as P	8.984	8.967	0.017	4237782	NC	NC	
6 Sulfate	10.084	10.159	-0.075	35214591	5.00	3.83	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

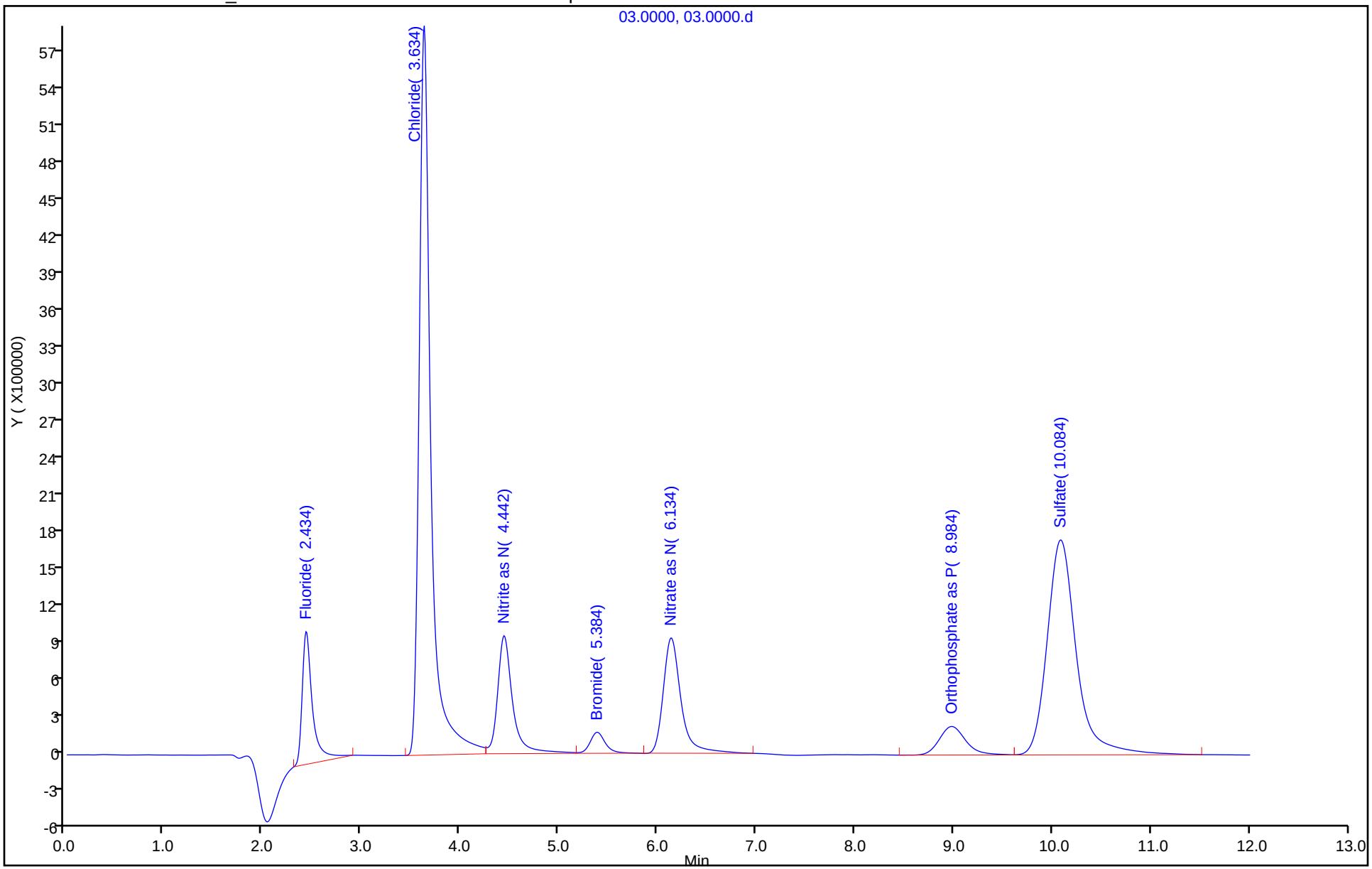
IC Cal low_00584 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00368 Amount Added: 0.10 Units: mL

Report Date: 09-Jun-2021 15:32:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\03.0000.d

Injection Date:	08-Jun-2021 10:29:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\04.0000.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 08-Jun-2021 10:44:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-004
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:32 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 13:22:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.450	2.442	0.008	83381745	5.00	4.52	M
2 Chloride	3.709	3.709	0.000	1435409109	100.0	96.1	
3 Nitrite as N	4.467	4.467	0.000	119243747	NC	NC	
4 Bromide	5.392	5.392	0.000	23252904	5.00	4.83	
5 Nitrate as N	6.125	6.126	-0.001	139565339	NC	NC	
7 Orthophosphate as P	8.967	8.967	0.000	47800019	NC	NC	
6 Sulfate	10.159	10.159	0.000	946901448	100.0	94.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

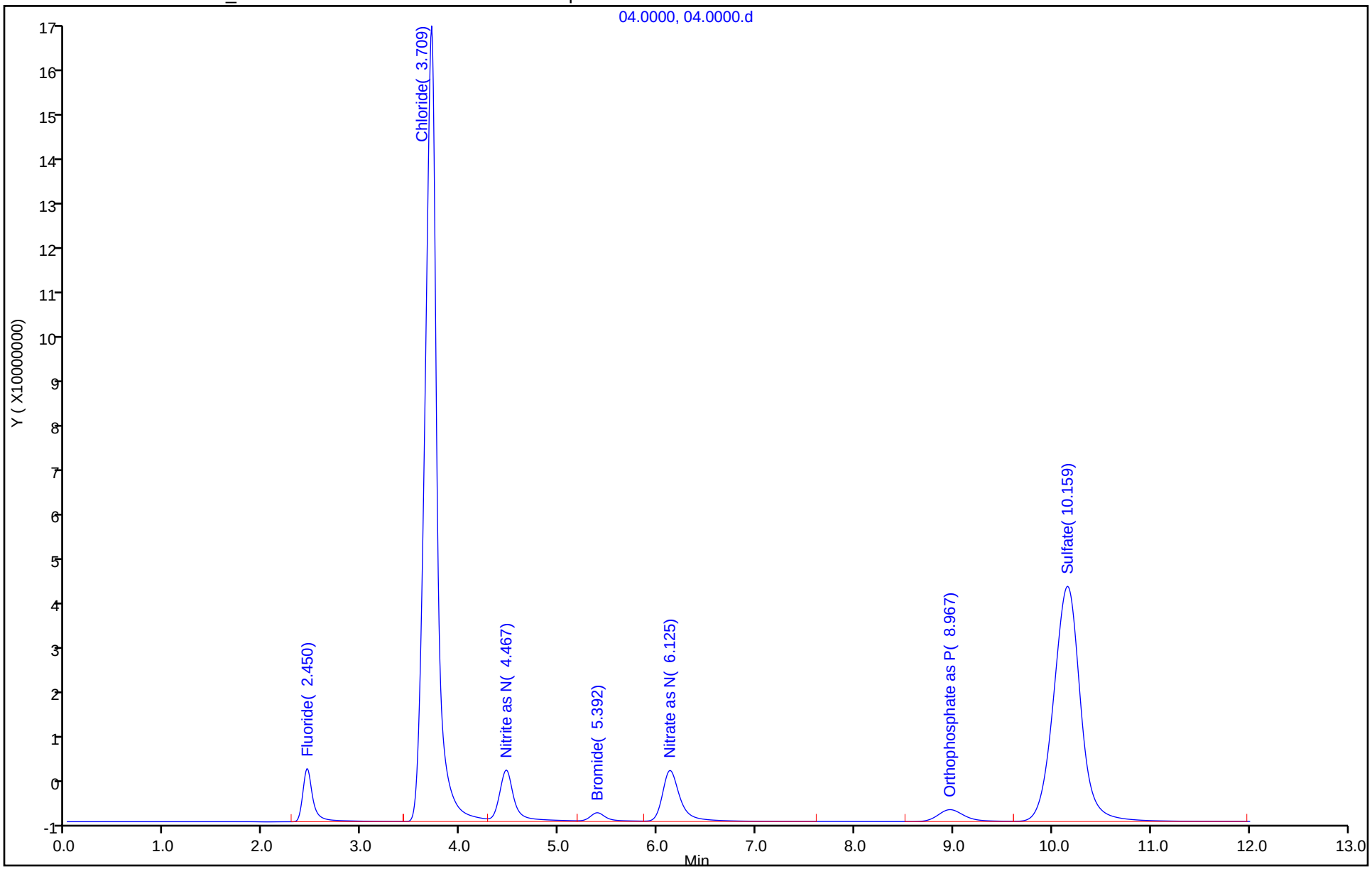
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:32:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\04.0000.d

Injection Date:	08-Jun-2021 10:44:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\05.0000.d
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 08-Jun-2021 10:59:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-005
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:32 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 08-Jun-2021 15:43:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.450	2.442	0.008	83544655	5.00	4.53	M
2 Chloride	3.709	3.709	0.000	1438470644	100.0	96.3	
3 Nitrite as N	4.467	4.467	0.000	120296490	NC	NC	
4 Bromide	5.392	5.392	0.000	23421827	5.00	4.86	
5 Nitrate as N	6.125	6.126	-0.001	139779325	NC	NC	
7 Orthophosphate as P	8.967	8.967	0.000	47943043	NC	NC	
6 Sulfate	10.159	10.159	0.000	947123584	100.0	94.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

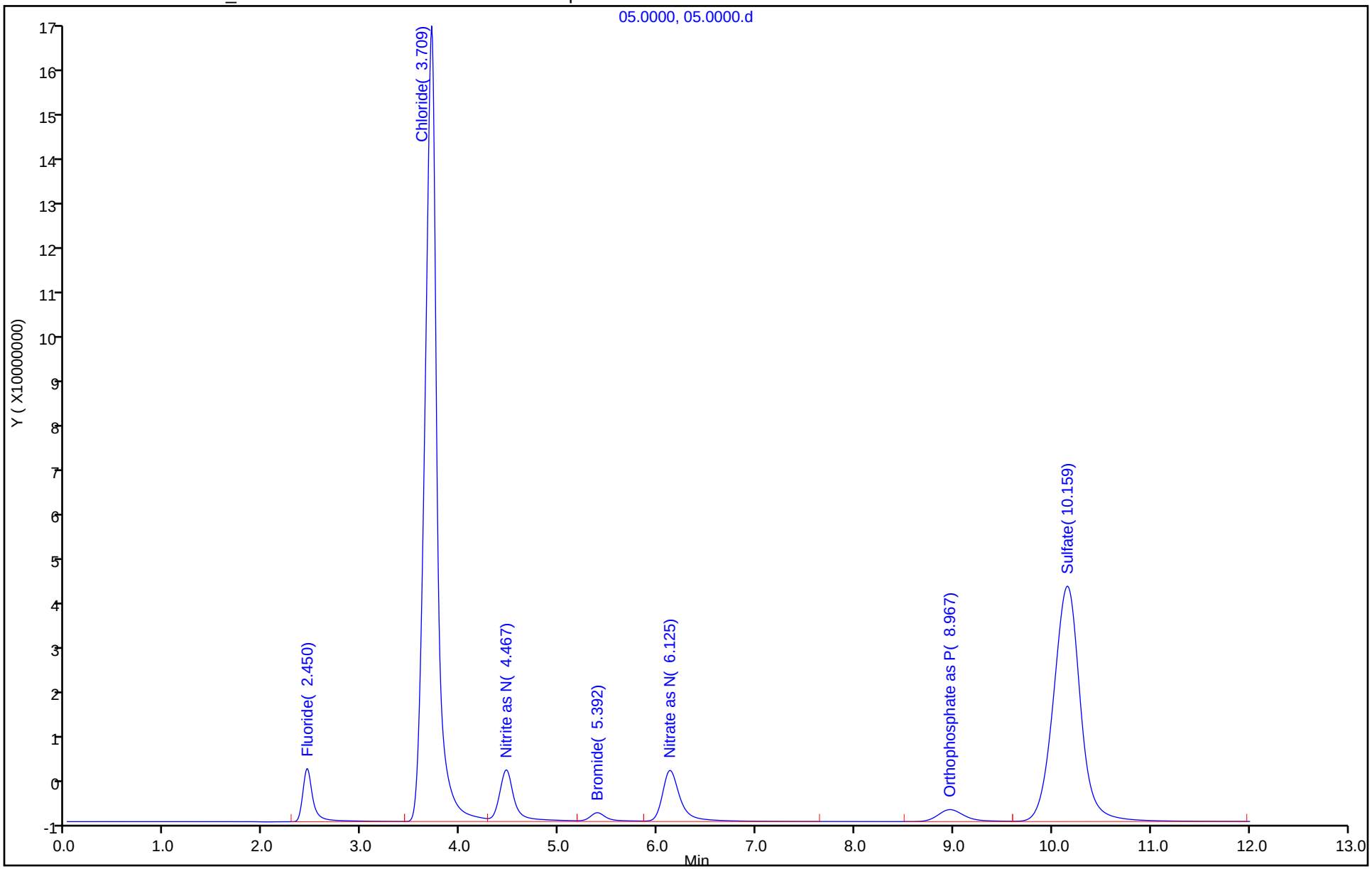
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:32:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\05.0000.d

Injection Date:	08-Jun-2021 10:59:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\06.0000.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 08-Jun-2021 11:14:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-006
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:32 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 13:23:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.442				ND	
2 Chloride		3.709				ND	U
3 Nitrite as N		4.467				ND	
4 Bromide		5.392				ND	
5 Nitrate as N		6.126				ND	
7 Orthophosphate as P		8.967				ND	
6 Sulfate		10.159				ND	

QC Flag Legend

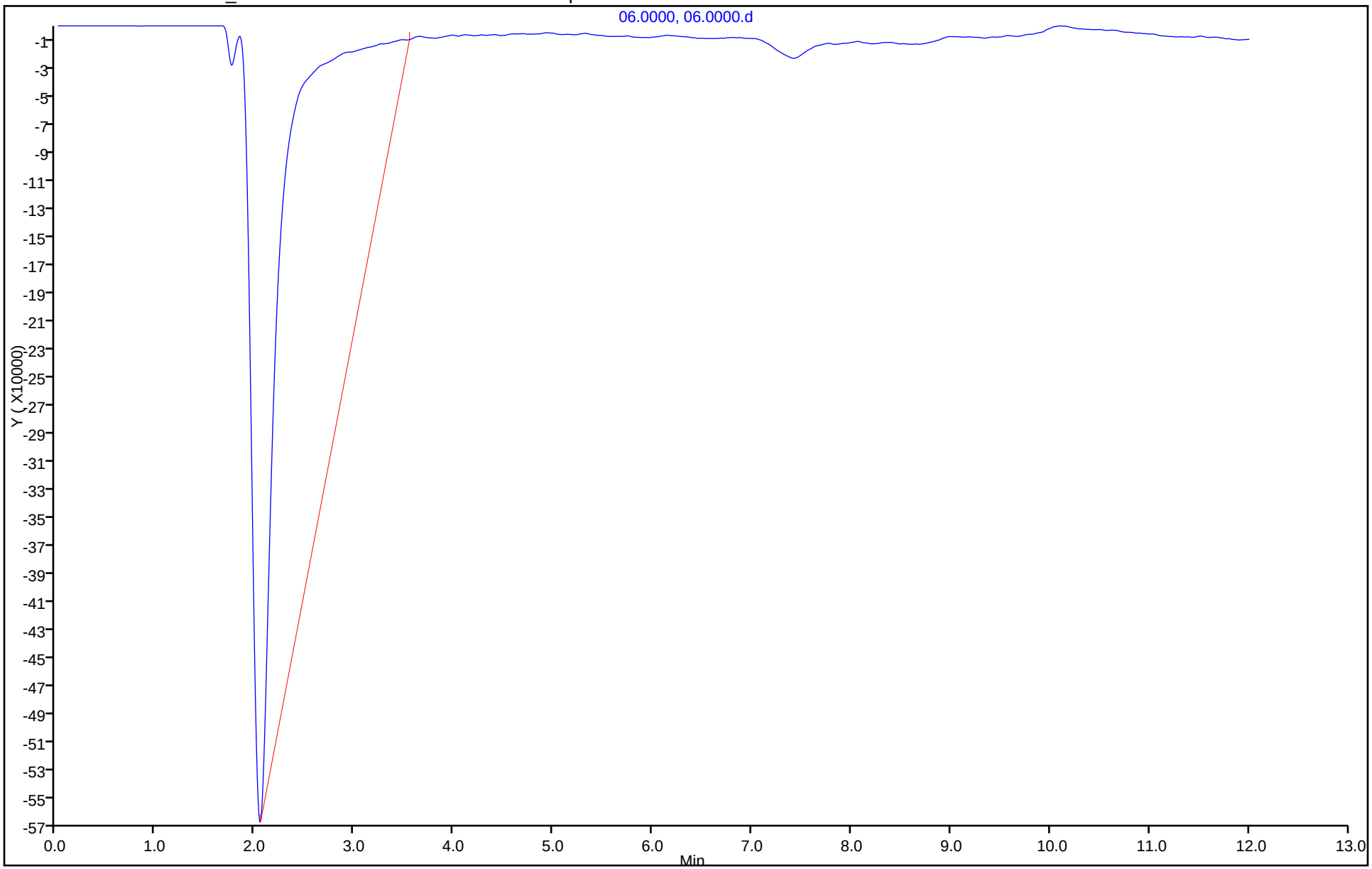
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 09-Jun-2021 15:32:35 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\06.0000.d

Injection Date:	08-Jun-2021 11:14:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\17.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Jun-2021 17:33:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-017
Misc. Info.: 4799
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:39 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 08-Jun-2021 18:48:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.450	2.442	0.008	85710974	5.00	4.64	M
2 Chloride	3.709	3.709	0.000	1474376173	100.0	98.7	
3 Nitrite as N	4.459	4.467	-0.008	119082479	NC	NC	
4 Bromide	5.375	5.392	-0.017	23676148	5.00	4.92	
5 Nitrate as N	6.117	6.126	-0.009	143744281	NC	NC	
7 Orthophosphate as P	8.967	8.967	0.000	49532337	NC	NC	
6 Sulfate	10.175	10.159	0.016	971492181	100.0	97.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

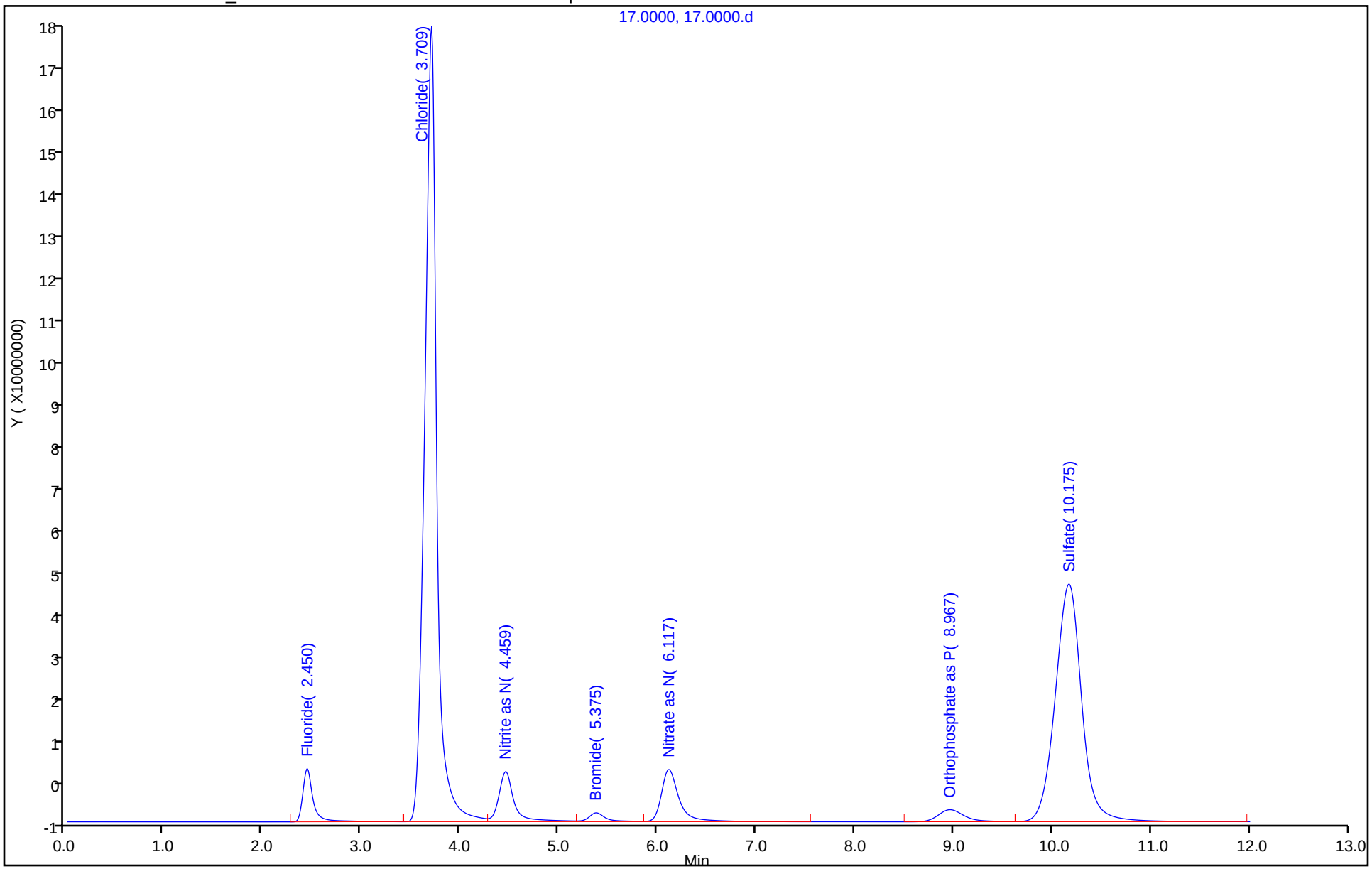
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:32:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\17.0000.d

Injection Date:	08-Jun-2021 17:33:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\18.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 08-Jun-2021 17:48:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-018
Misc. Info.: 7811
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:39 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 13:44:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.442				ND	
2 Chloride	3.634	3.709	-0.075	101275		0.6787	M
3 Nitrite as N		4.467				ND	
4 Bromide		5.392				ND	
5 Nitrate as N		6.126				ND	
7 Orthophosphate as P		8.967				ND	
6 Sulfate	10.100	10.159	-0.059	143399		0.3341	Ma

QC Flag Legend

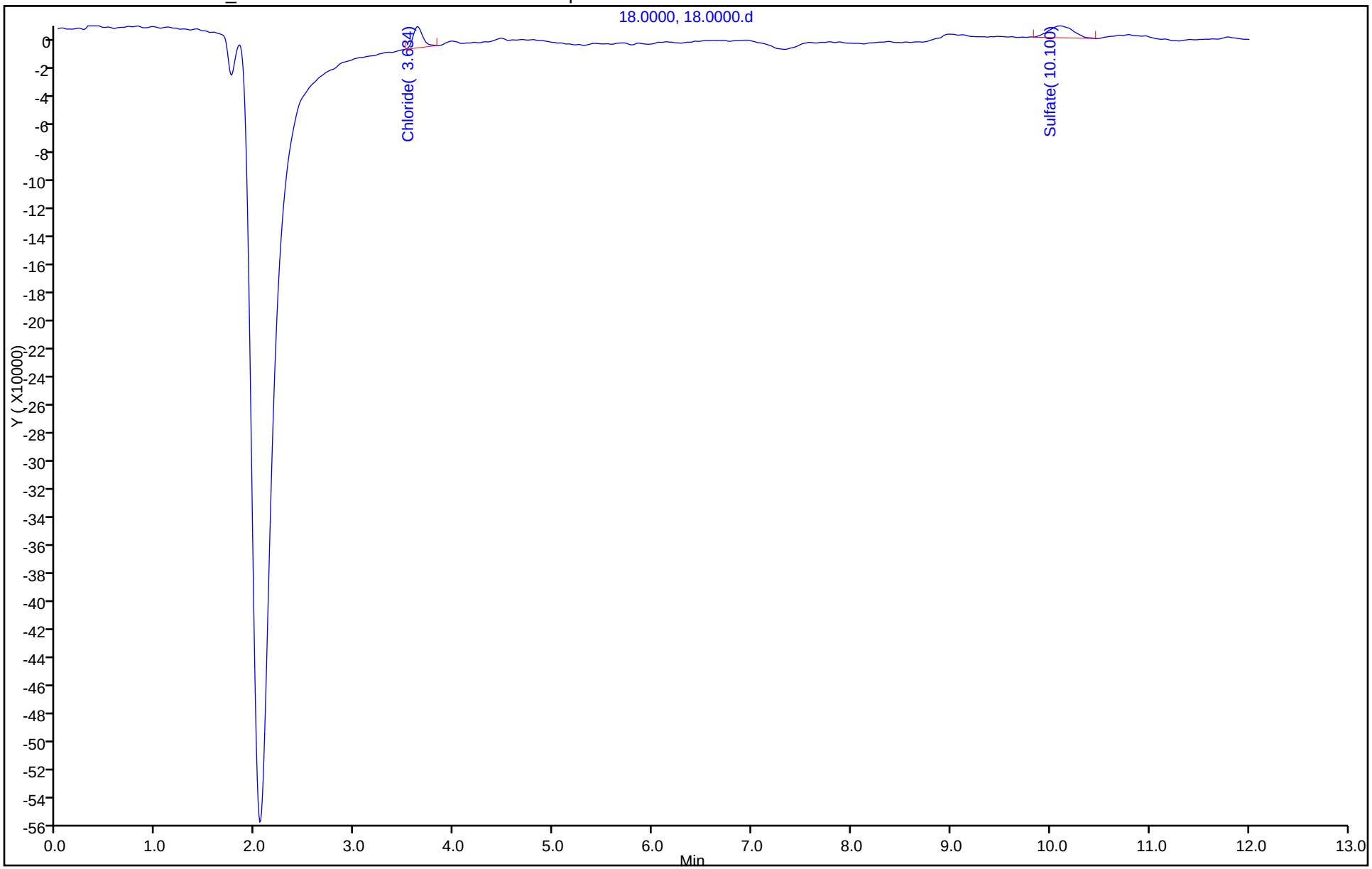
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 09-Jun-2021 15:32:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\18.0000.d

Injection Date:	08-Jun-2021 17:48:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

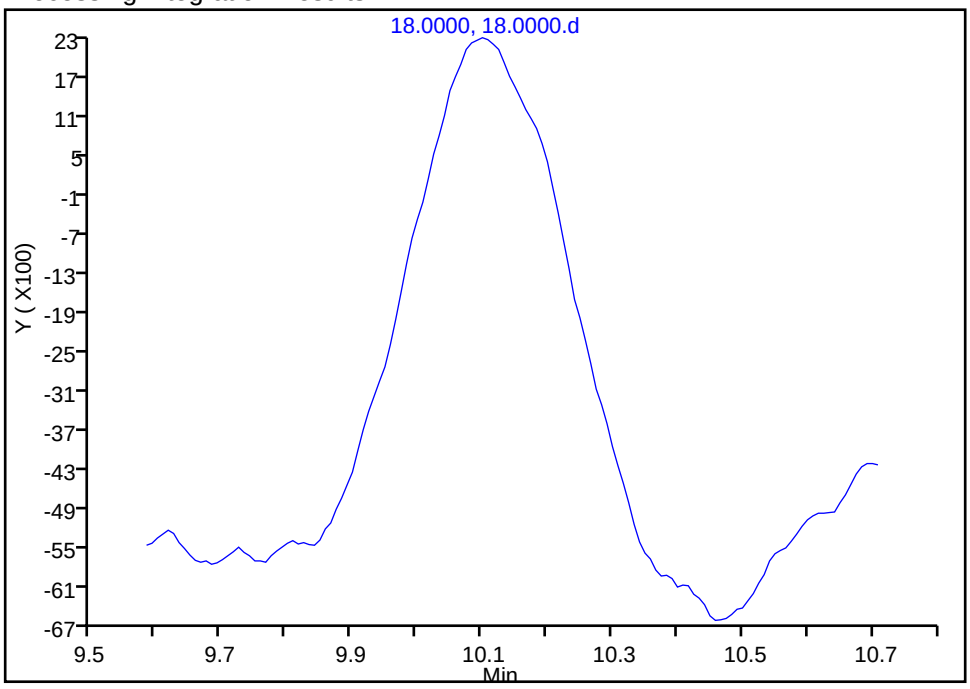
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\18.0000.d		
Injection Date:	08-Jun-2021 17:48:00	Instrument ID:	WC_IonChrom7
Lims ID:	ccb		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 18
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

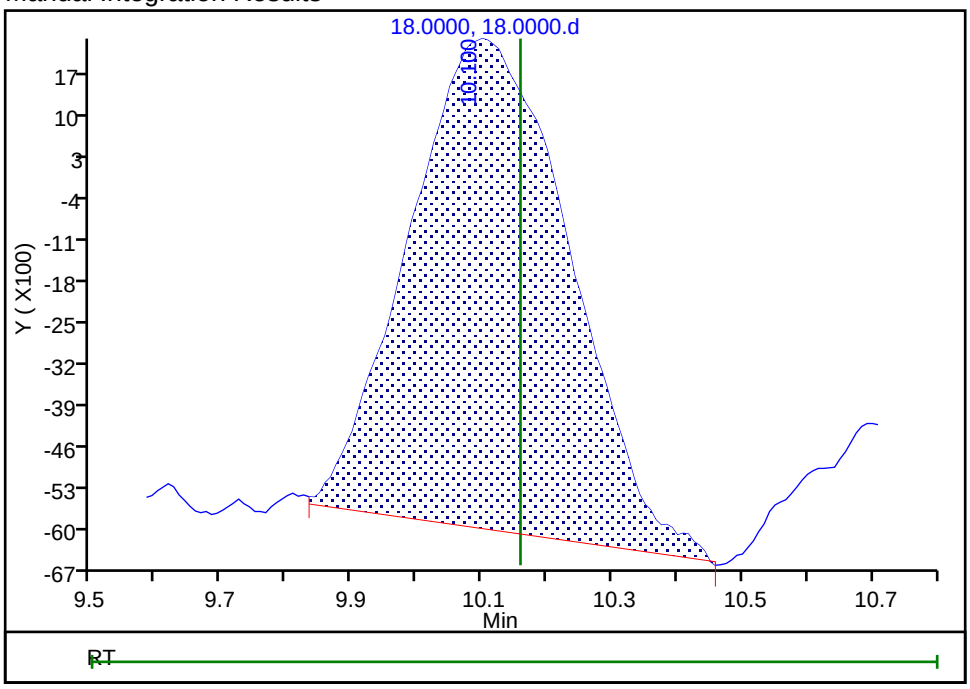
Not Detected
Expected RT: 10.16

Processing Integration Results



Manual Integration Results

RT: 10.10
Area: 143399
Amount: 0.334140
Amount Units: ug/ml



Reviewer: battilloj, 09-Jun-2021 13:44:09
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\53.0000.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	09-Jun-2021 02:34:00	ALS Bottle#:	0	Worklist Smp#:	53
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0102164-053				
Misc. Info.:	21917				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	09-Jun-2021 15:32:53	Calib Date:	05-Jun-2021 13:46:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.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	2.450	2.442	0.008	86759297	5.00	4.70	
2 Chloride	3.709	3.709	0.000	1481178541	100.0	99.1	
3 Nitrite as N	4.459	4.467	-0.008	119916441	NC	NC	
4 Bromide	5.384	5.392	-0.008	23051931	5.00	4.79	
5 Nitrate as N	6.125	6.126	-0.001	142456770	NC	NC	
7 Orthophosphate as P	8.942	8.967	-0.025	49543385	NC	NC	
6 Sulfate	10.125	10.159	-0.034	973853148	100.0	97.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

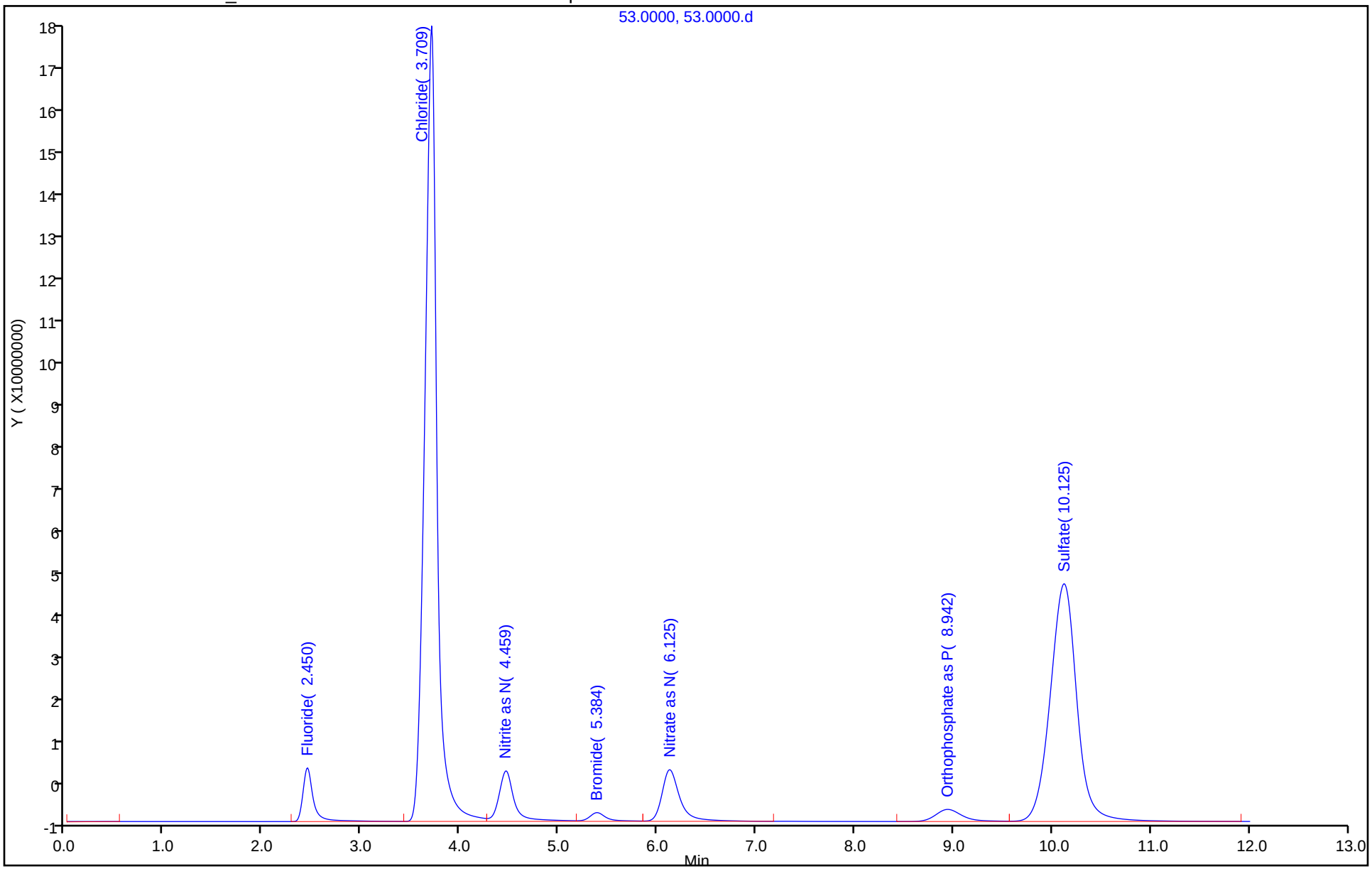
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:32:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\53.0000.d

Injection Date:	09-Jun-2021 02:34:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\54.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 09-Jun-2021 02:48:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-054
Misc. Info.: 7925
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:53 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 15:18:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.442				ND	
2 Chloride	3.634	3.709	-0.075	24326		0.6735	M
3 Nitrite as N		4.467				ND	
4 Bromide		5.392				ND	
5 Nitrate as N		6.126				ND	
7 Orthophosphate as P		8.967				ND	
6 Sulfate	10.075	10.159	-0.084	112577		0.3311	Ma

QC Flag Legend

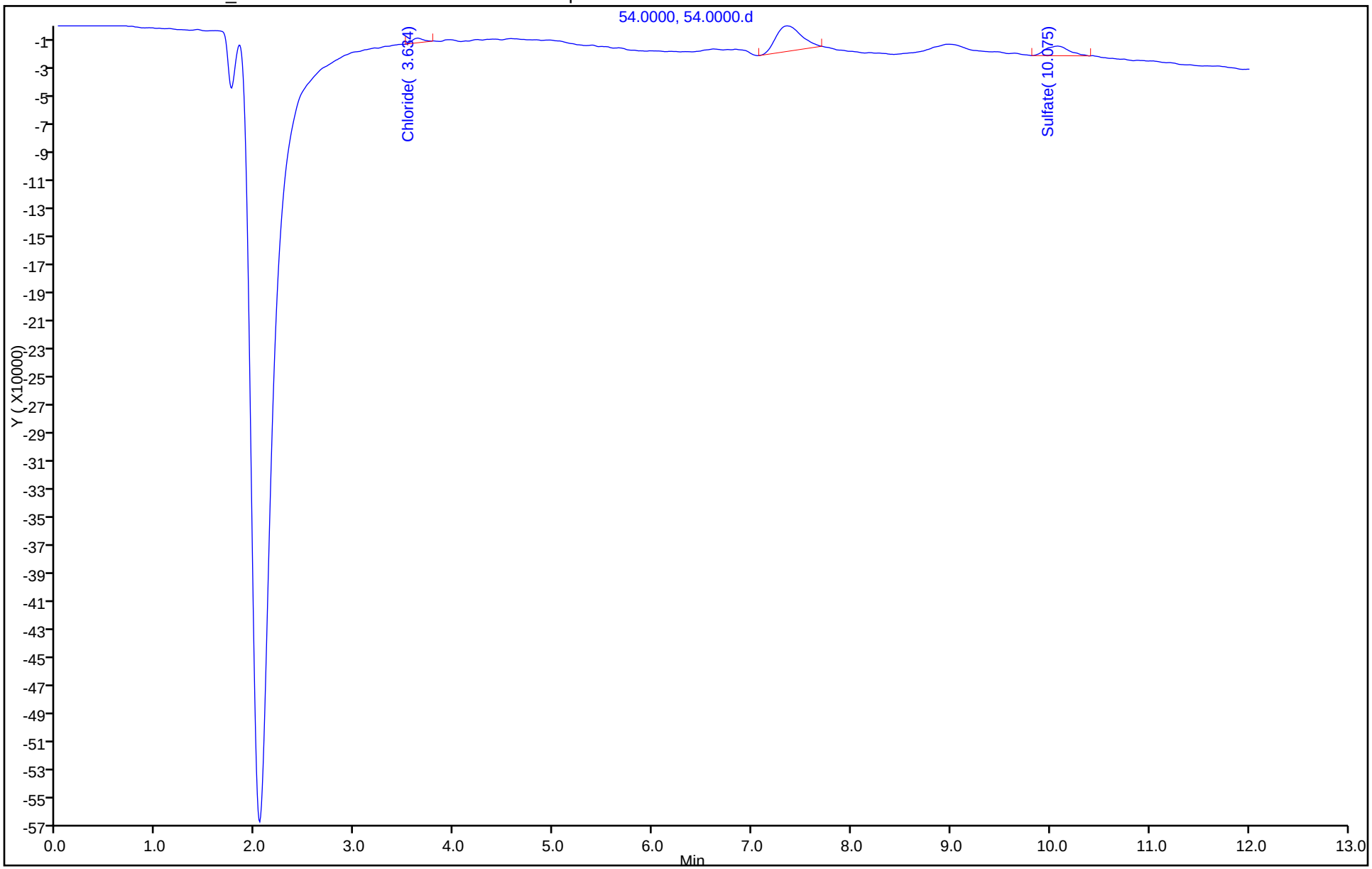
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 09-Jun-2021 15:32:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\54.0000.d

Injection Date:	09-Jun-2021 02:48:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

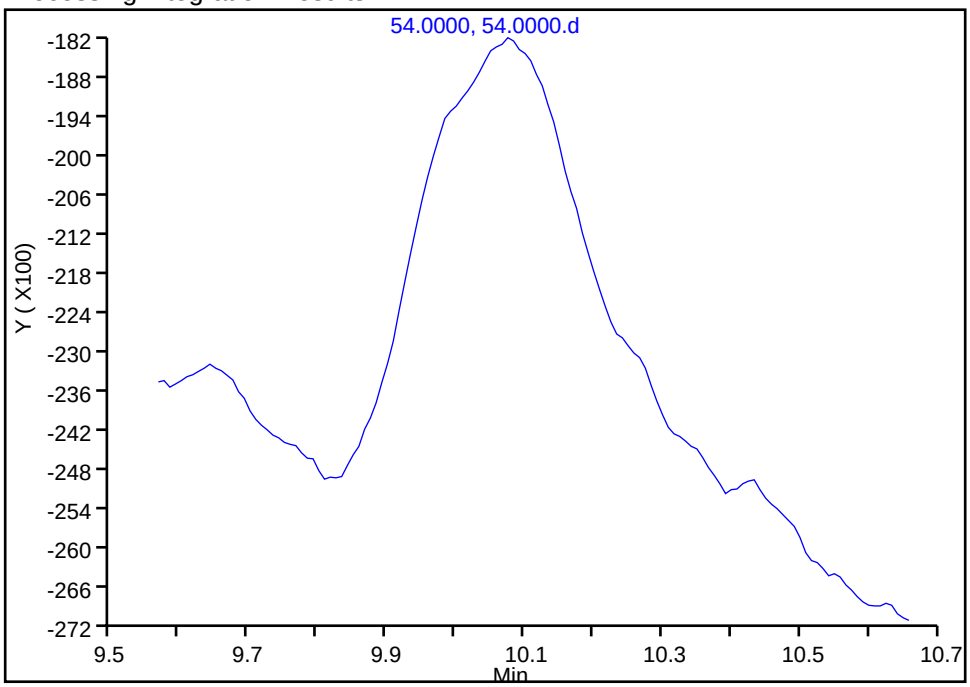
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\54.0000.d				
Injection Date:	09-Jun-2021 02:48:00	Instrument ID:	WC_IonChrom7		
Lims ID:	ccb				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	54
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

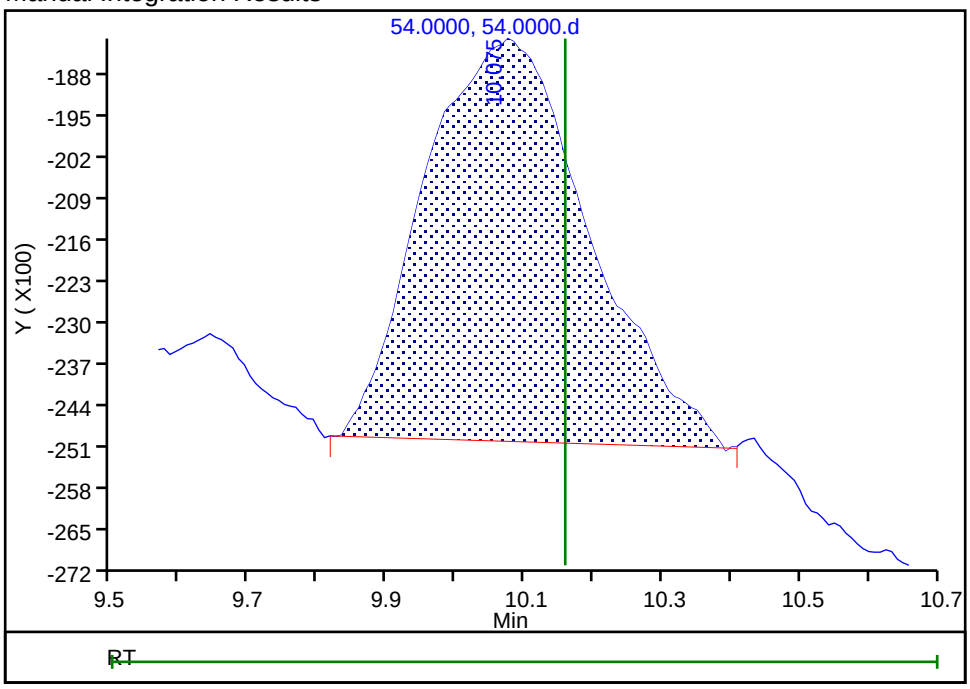
Not Detected
Expected RT: 10.16

Processing Integration Results



Manual Integration Results

RT: 10.08
Area: 112577
Amount: 0.331070
Amount Units: ug/ml



Reviewer: battilloj, 09-Jun-2021 15:18:05
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\65.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 09-Jun-2021 05:33:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-065
Misc. Info.: 11519
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:57 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.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	2.450	2.442	0.008	86465436	5.00	4.68	
2 Chloride	3.709	3.709	0.000	1477379877	100.0	98.9	
3 Nitrite as N	4.459	4.467	-0.008	118999784	NC	NC	
4 Bromide	5.384	5.392	-0.008	23061584	5.00	4.79	
5 Nitrate as N	6.117	6.126	-0.009	142023644	NC	NC	
7 Orthophosphate as P	8.934	8.967	-0.033	49719272	NC	NC	
6 Sulfate	10.109	10.159	-0.050	972255325	100.0	97.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

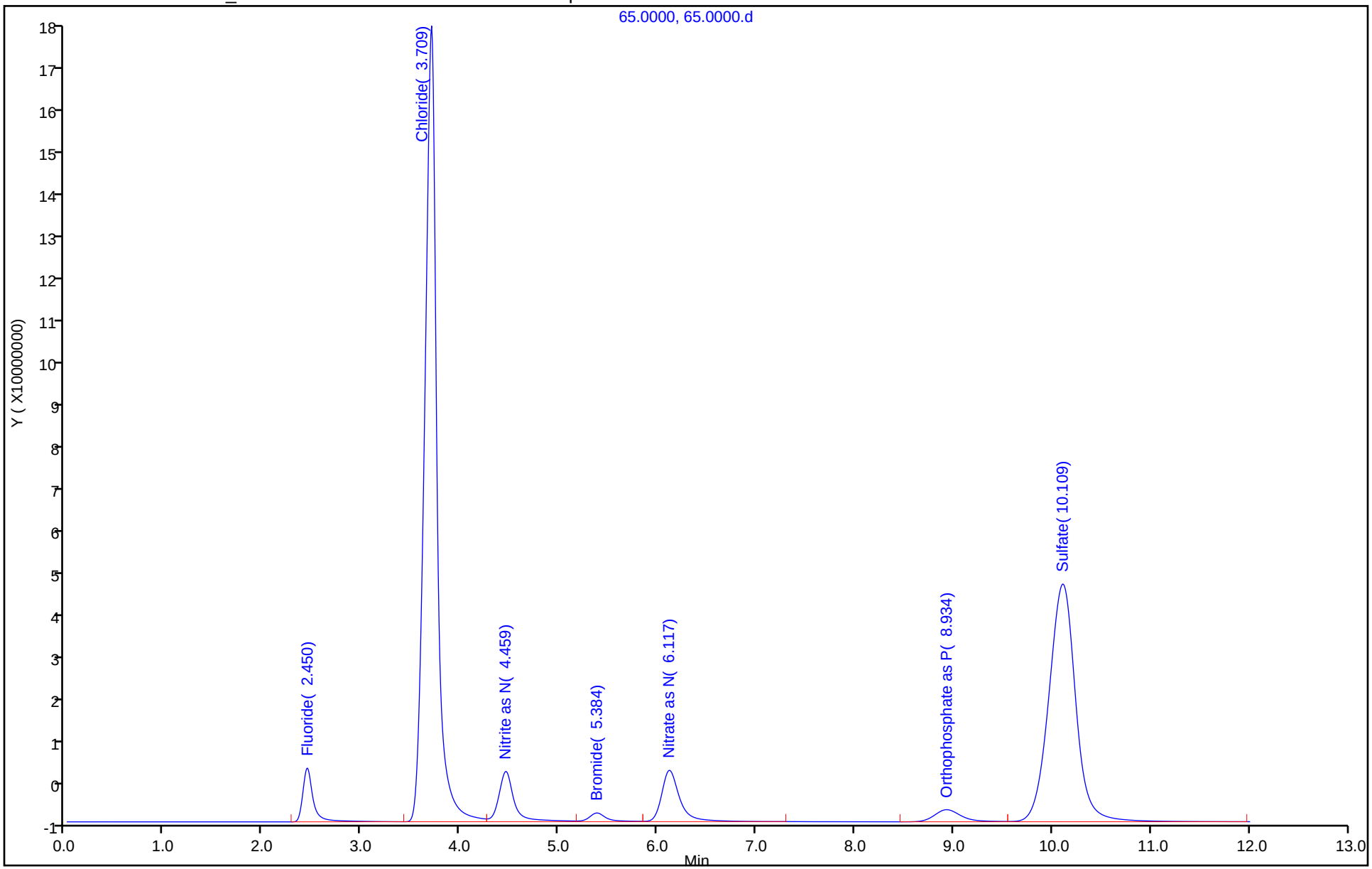
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:32:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\65.0000.d

Injection Date:	09-Jun-2021 05:33:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	65
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\66.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 09-Jun-2021 05:48:00 ALS Bottle#: 0 Worklist Smp#: 66
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-066
Misc. Info.: 26770
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:57 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 15:26:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.442				ND	
2 Chloride	3.642	3.709	-0.067	91265		0.6780	M
3 Nitrite as N		4.467				ND	
4 Bromide		5.392				ND	
5 Nitrate as N		6.126				ND	
7 Orthophosphate as P		8.967				ND	
6 Sulfate	10.067	10.159	-0.092	209849		0.3408	Ma

QC Flag Legend

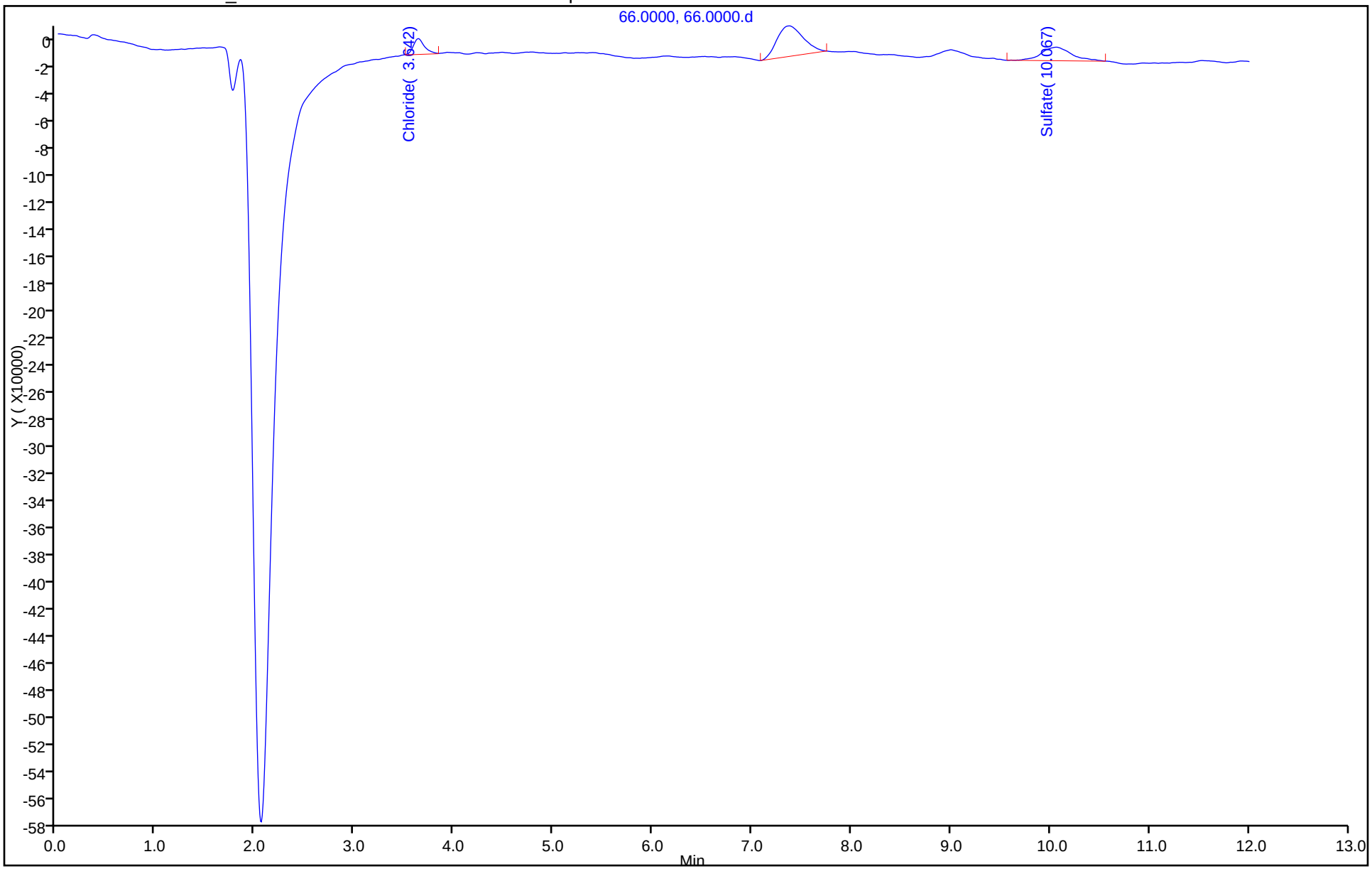
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 09-Jun-2021 15:32:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\66.0000.d

Injection Date:	09-Jun-2021 05:48:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	66
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

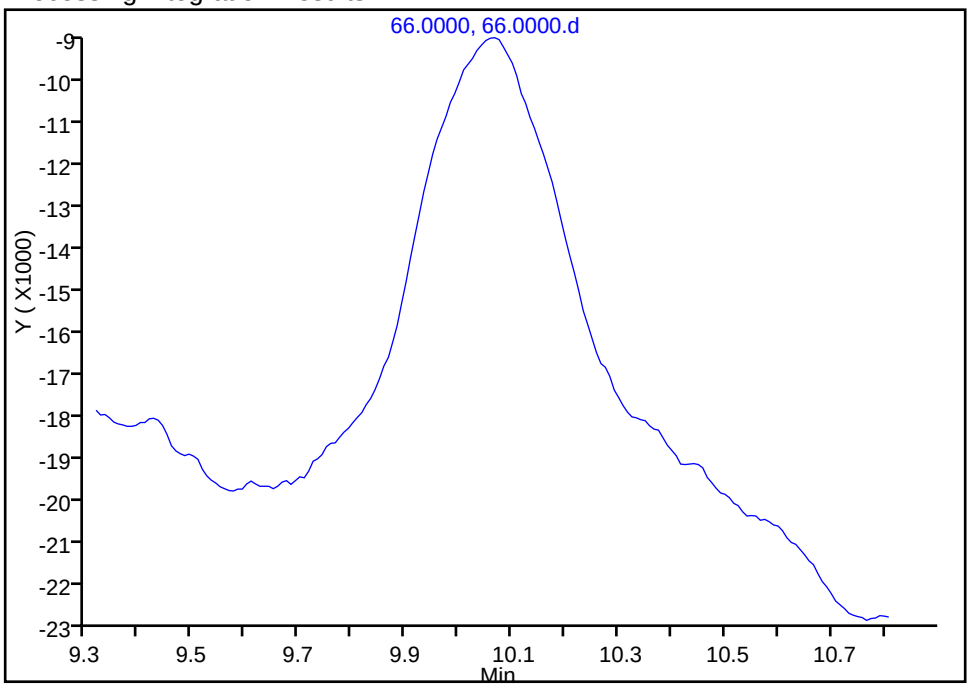
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\66.0000.d		
Injection Date:	09-Jun-2021 05:48:00	Instrument ID:	WC_IonChrom7
Lims ID:	ccb		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 66
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

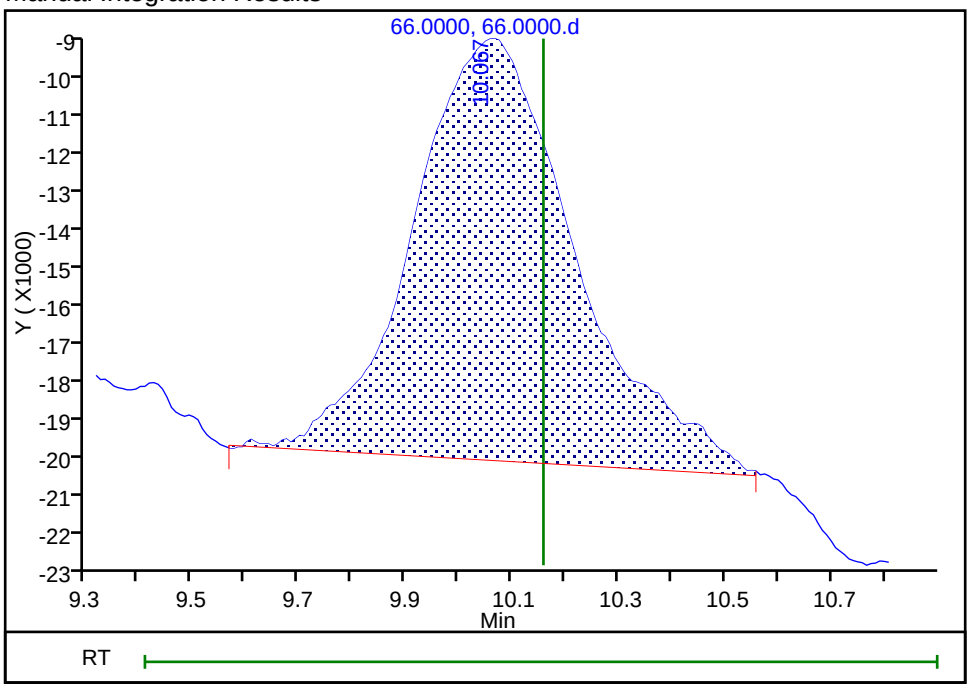
Not Detected
Expected RT: 10.16

Processing Integration Results



Manual Integration Results

RT: 10.07
Area: 209849
Amount: 0.340759
Amount Units: ug/ml



Reviewer: battilloj, 09-Jun-2021 15:26:48
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\70.0000.d
Lims ID: 280-148902-E-3
Client ID: G0085-21A
Sample Type: Client
Inject. Date: 09-Jun-2021 06:47:00 ALS Bottle#: 0 Worklist Smp#: 70
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0102164-070
Misc. Info.: 5612
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:32:57 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 15:28:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.442	2.442	0.000	739925	0.0749	M
2 Chloride	3.642	3.709	-0.067	123586094	8.89	
3 Nitrite as N		4.467			ND	
4 Bromide		5.392			ND	
5 Nitrate as N		6.126			ND	
7 Orthophosphate as P		8.967			ND	
6 Sulfate	10.076	10.159	-0.083	374274809	37.6	

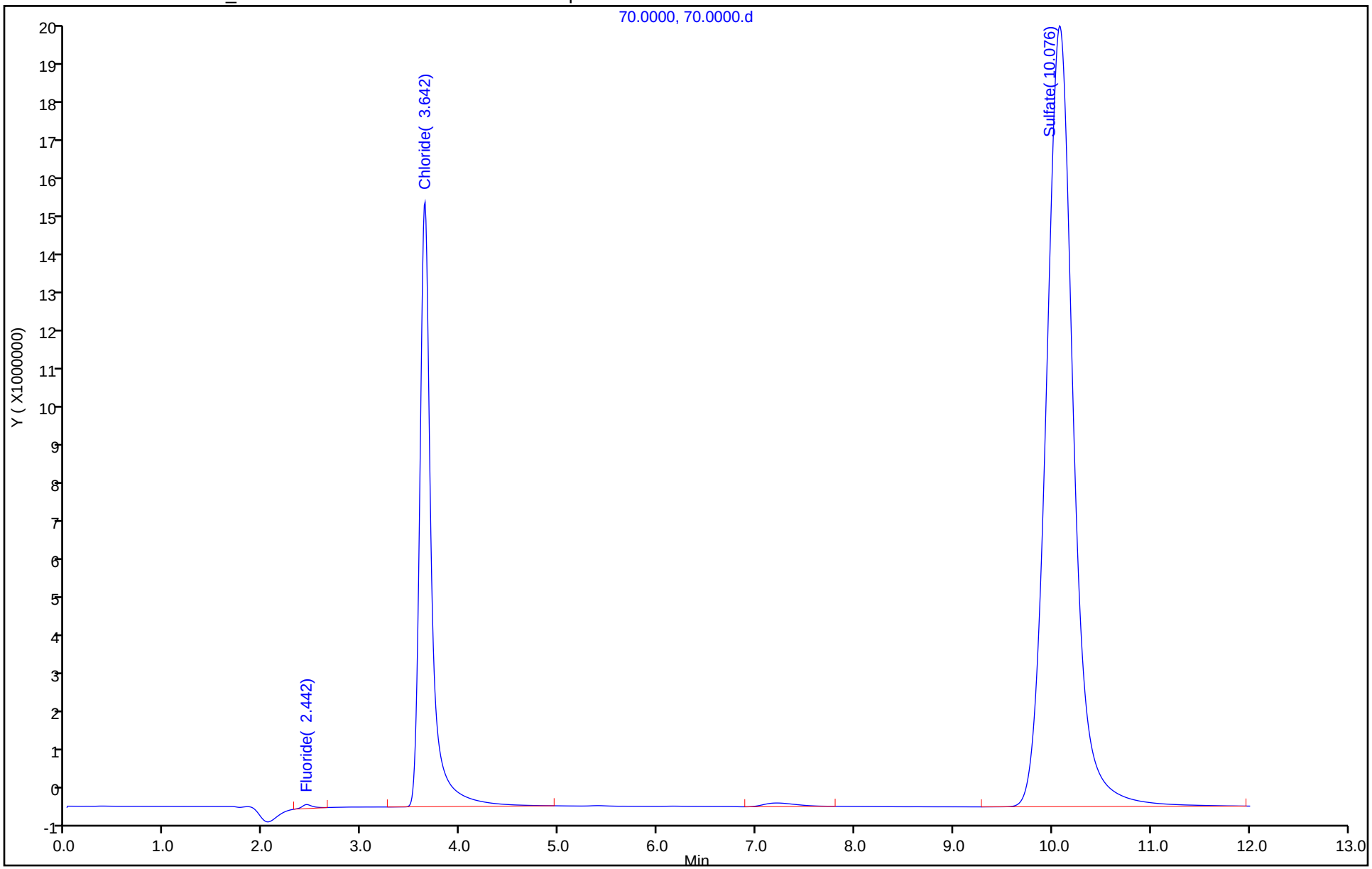
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Report Date: 09-Jun-2021 15:32:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\70.0000.d				
Injection Date:	09-Jun-2021 06:47:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-148902-E-3	Lab Sample ID:	280-148902-3	Worklist Smp#:	70
Client ID:	G0085-21A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\74.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 09-Jun-2021 07:47:00 ALS Bottle#: 0 Worklist Smp#: 74
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-074
Misc. Info.: 12534
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:33:01 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.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	2.442	2.442	0.000	85021673	5.00	4.61	
2 Chloride	3.700	3.709	-0.009	1456796806	100.0	97.5	
3 Nitrite as N	4.459	4.467	-0.008	121112911	NC	NC	
4 Bromide	5.384	5.392	-0.008	22988466	5.00	4.77	
5 Nitrate as N	6.117	6.126	-0.009	141201615	NC	NC	
7 Orthophosphate as P	8.934	8.967	-0.033	48642797	NC	NC	
6 Sulfate	10.117	10.159	-0.042	957874094	100.0	95.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

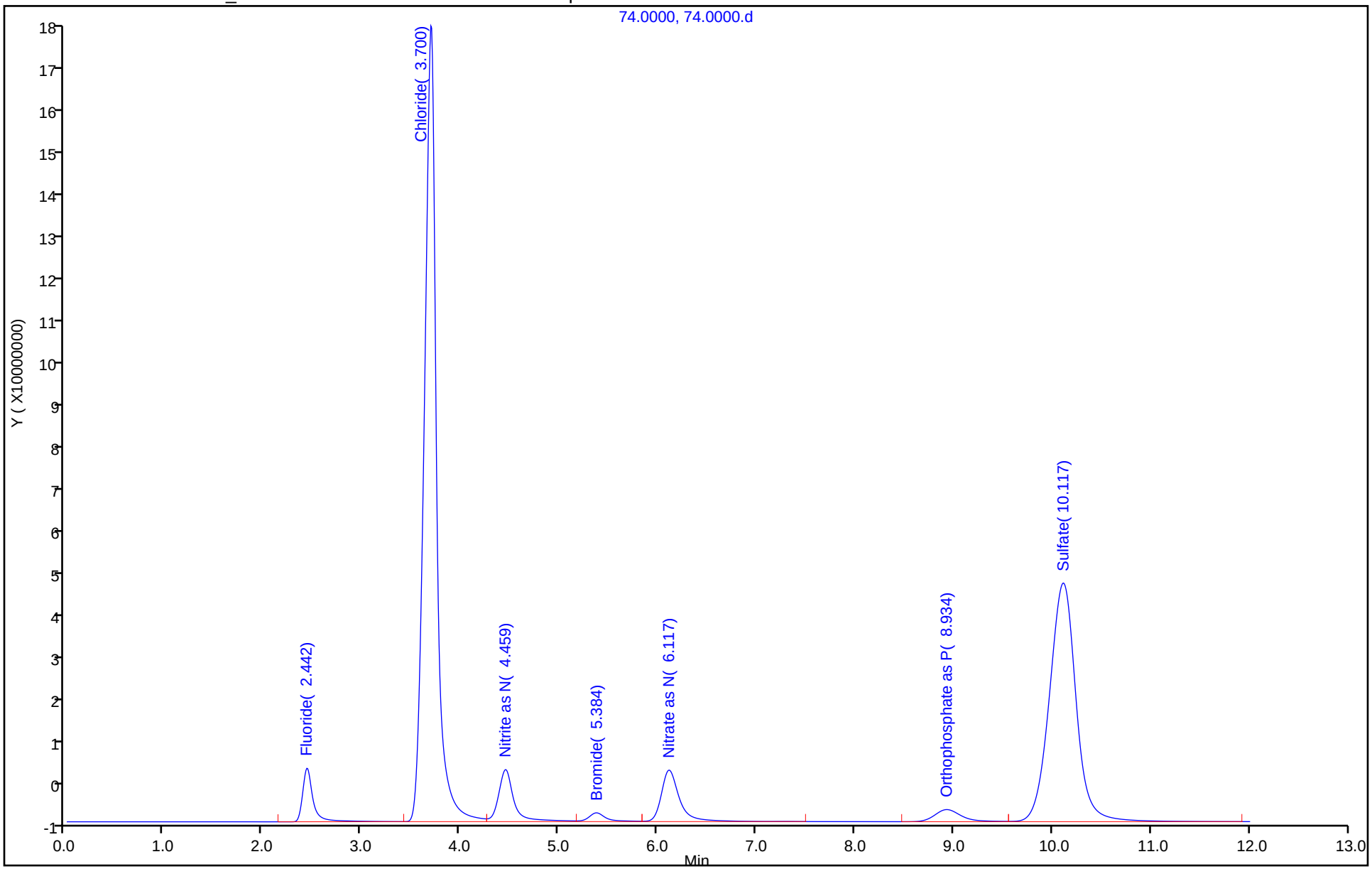
IC LCS_01814 Amount Added: 5.00 Units: mL

Report Date: 09-Jun-2021 15:33:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\74.0000.d

Injection Date:	09-Jun-2021 07:47:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	74
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\75.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 09-Jun-2021 08:02:00 ALS Bottle#: 0 Worklist Smp#: 75
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102164-075
Misc. Info.: 28844
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 09-Jun-2021 15:33:01 Calib Date: 05-Jun-2021 13:46:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210605-102102.b\16.0000.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 09-Jun-2021 15:32:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.442				ND	
2 Chloride		3.709				ND	U
3 Nitrite as N		4.467				ND	
4 Bromide		5.392				ND	
5 Nitrate as N		6.126				ND	
7 Orthophosphate as P		8.967				ND	
6 Sulfate		10.159				ND	

QC Flag Legend

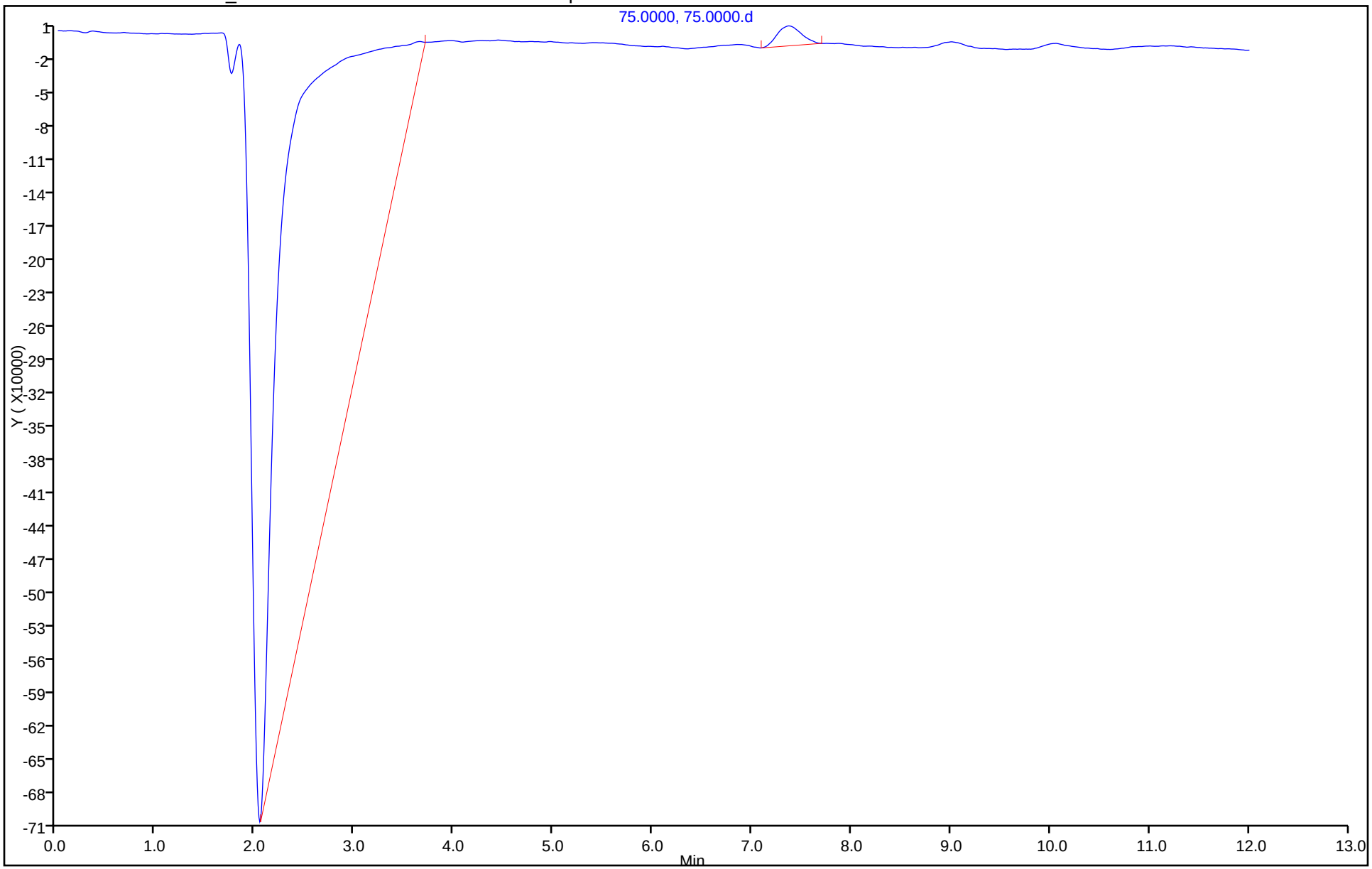
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 09-Jun-2021 15:33:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20210608-102164.b\75.0000.d

Injection Date:	09-Jun-2021 08:02:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	75
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



	Type	Analysis	Sample Name	Sa	Origin	Result	Notes	Status	Date / Time
1	Unknown	NPOC	ICV		NPOC.met	NPOC:19.24mg/L		Completed	6/1/2021 1:11:11 PM
2	Unknown	NPOC	ICB		NPOC.met	NPOC:0.07972mg/L		Completed	6/1/2021 1:25:51 PM
3	Unknown	NPOC	LCS		NPOC.met	NPOC:24.90mg/L		Completed	6/1/2021 1:40:35 PM
4	Unknown	NPOC	MB		NPOC.met	NPOC:0.07757mg/L		Completed	6/1/2021 1:55:15 PM
5	Unknown	NPOC	TIC		NPOC.met	NPOC:0.1146mg/L		Completed	6/1/2021 2:09:55 PM
6	Unknown	NPOC	280-148915-f-1		NPOC.met	NPOC:144.5mg/L		Completed	6/1/2021 2:28:58 PM
7	Unknown	NPOC	MS 280-148915-f-1		NPOC.met	NPOC:166.5mg/L		Completed	6/1/2021 2:46:04 PM
8	Unknown	NPOC	MSD 280-148915-f-1		NPOC.met	NPOC:166.3mg/L		Completed	6/1/2021 3:02:57 PM
9	Unknown	NPOC	280-148915-f-2		NPOC.met	NPOC:145.3mg/L		Completed	6/1/2021 3:22:30 PM
10	Unknown	NPOC	280-148710-a-3		NPOC.met	NPOC:2.728mg/L		Completed	6/1/2021 3:41:10 PM
11	Unknown	NPOC	280-148710-a-5		NPOC.met	NPOC:2.208mg/L		Completed	6/1/2021 3:57:46 PM
12	Unknown	NPOC	280-148710-a-6		NPOC.met	NPOC:643.6mg/L		Completed	6/1/2021 4:12:24 PM
13	Unknown	NPOC	280-148710-a-7		NPOC.met	NPOC:1.270mg/L		Completed	6/1/2021 4:31:10 PM
14	Unknown	NPOC	280-148710-a-8		NPOC.met	NPOC:1.747mg/L		Completed	6/1/2021 4:47:46 PM
15	Unknown	NPOC	CCV		NPOC.met	NPOC:24.77mg/L		Completed	6/1/2021 5:02:41 PM
16	Unknown	NPOC	CCB		NPOC.met	NPOC:0.1506mg/L		Completed	6/1/2021 5:17:21 PM
17	Unknown	NPOC	280-148710-a-9		NPOC.met	NPOC:1.676mg/L		Completed	6/1/2021 5:32:01 PM
18	Unknown	NPOC	280-148710-a-10		NPOC.met	NPOC:2.976mg/L		Completed	6/1/2021 5:48:44 PM
19	Unknown	NPOC	280-148710-a-11		NPOC.met	NPOC:3.065mg/L		Completed	6/1/2021 6:05:25 PM
20	Unknown	NPOC	280-148710-a-12		NPOC.met	NPOC:1.559mg/L		Completed	6/1/2021 6:24:09 PM
21	Unknown	NPOC	280-148750-d-1		NPOC.met	NPOC:16.39mg/L		Completed	6/1/2021 6:40:45 PM
22	Unknown	NPOC	MS 280-148750-d-1		NPOC.met	NPOC:41.01mg/L		Completed	6/1/2021 6:55:38 PM
23	Unknown	NPOC	MSD 280-148750-d-1		NPOC.met	NPOC:41.30mg/L		Completed	6/1/2021 7:10:35 PM
24	Unknown	NPOC	280-148734-a-2		NPOC.met	NPOC:1.455mg/L		Completed	6/1/2021 7:25:15 PM
25	Unknown	NPOC	280-148734-a-3		NPOC.met	NPOC:1.161mg/L		Completed	6/1/2021 7:39:55 PM
26	Unknown	NPOC	280-148734-a-5		NPOC.met	NPOC:0.9814mg/L		Completed	6/1/2021 7:54:35 PM
27	Unknown	NPOC	CCV		NPOC.met	NPOC:24.85mg/L		Completed	6/1/2021 8:09:15 PM
28	Unknown	NPOC	CCB		NPOC.met	NPOC:0.1142mg/L		Completed	6/1/2021 8:23:55 PM
29	Unknown	NPOC	280-148734-a-6		NPOC.met	NPOC:0.9603mg/L		Completed	6/1/2021 8:38:35 PM
30	Unknown	NPOC	280-148734-a-7		NPOC.met	NPOC:1.126mg/L		Completed	6/1/2021 8:53:15 PM
31	Unknown	NPOC	280-148787-c-2		NPOC.met	NPOC:0.6649mg/L		Completed	6/1/2021 9:07:55 PM
32	Unknown	NPOC	280-148787-d-3		NPOC.met	NPOC:0.2543mg/L		Completed	6/1/2021 9:22:55 PM
33	Unknown	NPOC	280-149129-a-5		NPOC.met	NPOC:5.960mg/L		Completed	6/1/2021 9:37:35 PM
34	Unknown	NPOC	lcs 280-538107/1-a		NPOC.met	NPOC:24.68mg/L		Completed	6/1/2021 9:52:34 PM
35	Unknown	NPOC	mb 280-538107/2-a		NPOC.met	NPOC:0.1246mg/L		Completed	6/1/2021 10:07:14 PM
36	Unknown	NPOC	280-148877-d-1-a		NPOC.met	NPOC:2.917mg/L		Completed	6/1/2021 10:21:54 PM
37	Unknown	NPOC	280-148877-d-1-b ms		NPOC.met	NPOC:27.78mg/L		Completed	6/1/2021 10:36:34 PM
38	Unknown	NPOC	280-148877-d-1-c msd		NPOC.met	NPOC:27.65mg/L		Completed	6/1/2021 10:51:14 PM
39	Unknown	NPOC	CCV		NPOC.met	NPOC:24.94mg/L		Completed	6/1/2021 11:05:55 PM
40	Unknown	NPOC	CCB		NPOC.met	NPOC:0.1374mg/L		Completed	6/1/2021 11:20:36 PM
41	Unknown	NPOC	280-148877-d-2-a		NPOC.met	NPOC:14.79mg/L		Completed	6/1/2021 11:39:21 PM
42	Unknown	NPOC	280-148877-d-3-a		NPOC.met	NPOC:2.610mg/L		Completed	6/1/2021 11:53:56 PM
43	Unknown	NPOC	280-148877-d-4-a		NPOC.met	NPOC:4.731mg/L		Completed	6/2/2021 12:08:36 AM
44	Unknown	NPOC	280-148877-d-5-a		NPOC.met	NPOC:9.458mg/L		Completed	6/2/2021 12:23:17 AM
45	Unknown	NPOC	280-148877-d-6-a		NPOC.met	NPOC:4.738mg/L		Completed	6/2/2021 12:39:59 AM
46	Unknown	NPOC	280-148877-d-7-a		NPOC.met	NPOC:2.393mg/L		Completed	6/2/2021 12:54:39 AM
47	Unknown	NPOC	280-148877-d-8-a		NPOC.met	NPOC:1.985mg/L		Completed	6/2/2021 1:09:19 AM
48	Unknown	NPOC	280-148902-f-1-a		NPOC.met	NPOC:3.609mg/L		Completed	6/2/2021 1:24:00 AM
49	Unknown	NPOC	280-148902-f-2-a		NPOC.met	NPOC:4.961mg/L		Completed	6/2/2021 1:38:41 AM
50	Unknown	NPOC	280-148902-f-3-a		NPOC.met	NPOC:4.074mg/L		Completed	6/2/2021 1:53:21 AM
51	Unknown	NPOC	CCV		NPOC.met	NPOC:25.05mg/L		Completed	6/2/2021 2:08:03 AM
52	Unknown	NPOC	CCB		NPOC.met	NPOC:0.1351mg/L		Completed	6/2/2021 2:22:44 AM
53	Unknown	NPOC	280-148902-f-4-a		NPOC.met	NPOC:3.242mg/L		Completed	6/2/2021 2:37:24 AM

	Vial
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
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	Type	Analysis	Sample Name	Sa	Origin	Result	Notes	Status	Date / Time
54	Unknown	NPOC	280-148902-f-5-a		NPOC.met	NPOC:1.071mg/L		Completed	6/2/2021 2:54:07 AM
55	Unknown	NPOC	280-148902-f-5-b ms		NPOC.met	NPOC:25.89mg/L		Completed	6/2/2021 3:08:48 AM
56	Unknown	NPOC	280-148902-f-5-c msd		NPOC.met	NPOC:25.79mg/L		Completed	6/2/2021 3:23:32 AM
57	Unknown	NPOC	280-148902-f-6-a		NPOC.met	NPOC:4.544mg/L		Completed	6/2/2021 3:38:13 AM
58	Unknown	NPOC	280-148902-f-7-		NPOC.met	NPOC:3.525mg/L		Completed	6/2/2021 3:52:54 AM
59	Unknown	NPOC	280-148902-f-8-a		NPOC.met	NPOC:3.371mg/L		Completed	6/2/2021 4:07:34 AM
60	Unknown	NPOC	280-148902-f-9-a		NPOC.met	NPOC:2.747mg/L		Completed	6/2/2021 4:24:18 AM
61	Unknown	NPOC	280-148902-f-10-a		NPOC.met	NPOC:4.856mg/L		Completed	6/2/2021 4:38:59 AM
62	Unknown	NPOC	280-148964-d-7-a		NPOC.met	NPOC:8.299mg/L		Completed	6/2/2021 4:53:40 AM
63	Unknown	NPOC	CCV		NPOC.met	NPOC:24.88mg/L		Completed	6/2/2021 5:10:24 AM
64	Unknown	NPOC	CCB		NPOC.met	NPOC:0.1394mg/L		Completed	6/2/2021 5:25:04 AM
65	Unknown	NPOC	280-148964-d-8-a		NPOC.met	NPOC:3.159mg/L		Completed	6/2/2021 5:39:46 AM
66	Unknown	NPOC	CCV		NPOC.met	NPOC:25.17mg/L		Completed	6/2/2021 5:54:43 AM
67	Unknown	NPOC	CCB		NPOC.met	NPOC:0.1498mg/L		Completed	6/2/2021 6:09:25 AM

	Vial
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TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2021_05_25_16_26_10.cal

Date of Creation 5:32:01 PM 5/25/2021
User rf
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-134635D20DEC-0000
Cal. Curve: TOC3.2021_05_25_16_26_10.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2941	50uL	1	*******		5/25/2021 4:34:45 PM
2	0.2377	50uL	1	*******		5/25/2021 4:36:48 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.2659
SD Area 0.03988
CV Area 15.00%
Vial 6

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.857	50uL	1	*******		5/25/2021 4:45:21 PM
2	4.120	50uL	1	*******	E	5/25/2021 4:47:33 PM
3	3.920	50uL	1	*******		5/25/2021 4:49:36 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 3.889
SD Area 0.04455
CV Area 1.15%
Vial 7

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.93	50uL	1	*******		5/25/2021 4:58:04 PM
2	18.19	50uL	1	*******		5/25/2021 5:00:07 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 18.06
SD Area 0.1838
CV Area 1.02%
Vial 8

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	36.42	50uL	1	*******		5/25/2021 5:08:40 PM
2	36.86	50uL	1	*******		5/25/2021 5:10:43 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 36.64
SD Area 0.3111
CV Area 0.85%
Vial 9

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	90.30	50uL	1	*******		5/25/2021 5:19:16 PM
2	90.01	50uL	1	*******		5/25/2021 5:21:19 PM

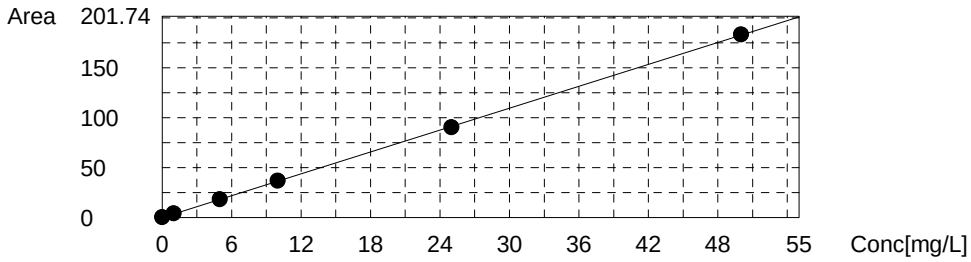
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 90.16
SD Area 0.2051
CV Area 0.23%
Vial 10

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	184.6	50uL	1	*******		5/25/2021 5:29:58 PM
2	182.2	50uL	1	*******		5/25/2021 5:32:01 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 183.4
SD Area 1.697
CV Area 0.93%
Vial 11

Slope: 3.658
Intercept -0.07334
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

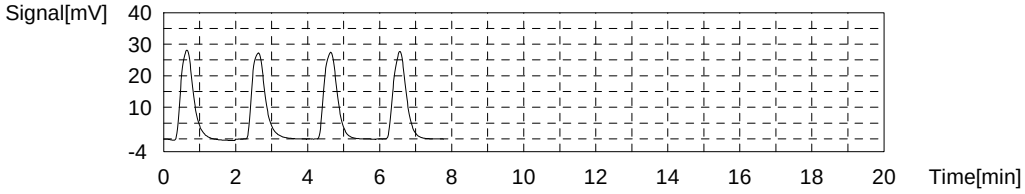
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.86	19.39mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:04:57 PM
2	70.62	19.33mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:07:05 PM
3	70.29	19.24mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:09:08 PM
4	69.42	19.00mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:11:11 PM

Mean Area 70.30
Mean Conc. 19.24mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

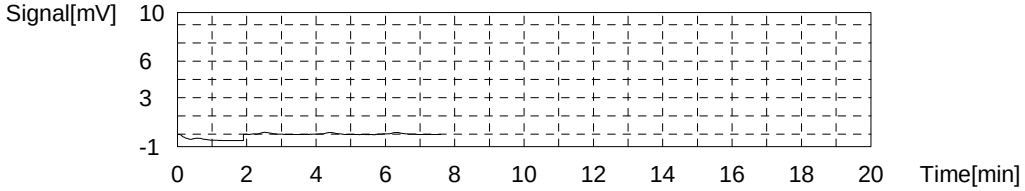
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07972mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1564	0.06281mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:19:42 PM
2	0.2738	0.09491mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:21:45 PM
3	0.2418	0.08616mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:23:48 PM
4	0.2010	0.07500mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:25:51 PM

Mean Area 0.2183
Mean Conc. 0.07972mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

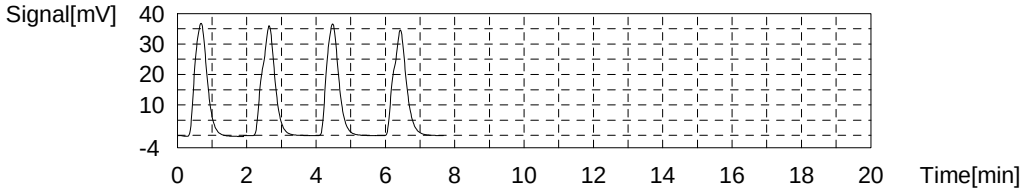
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.72	25.10mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:34:22 PM
2	92.27	25.25mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:36:25 PM
3	89.81	24.57mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:38:28 PM
4	90.16	24.67mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:40:35 PM

Mean Area 90.99
Mean Conc. 24.90mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

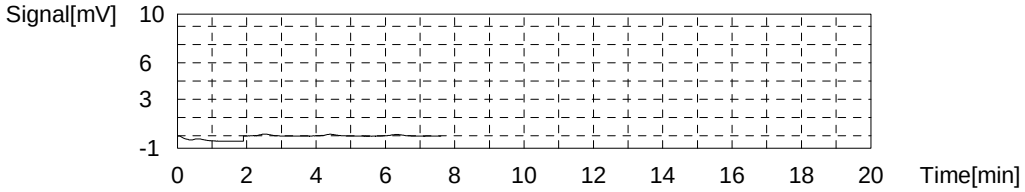
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07757mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1833	0.07016mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:49:06 PM
2	0.2583	0.09067mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:51:09 PM
3	0.2100	0.07746mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:53:12 PM
4	0.1899	0.07197mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 1:55:15 PM

Mean Area 0.2104
Mean Conc. 0.07757mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

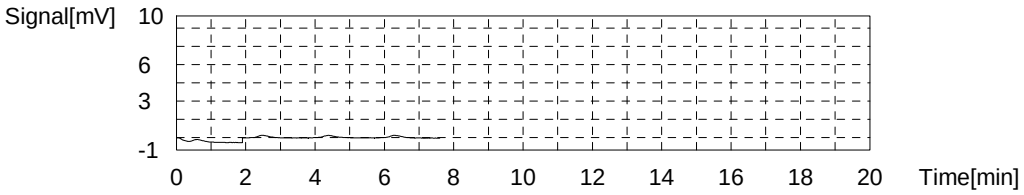
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1146mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2817	0.09707mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:03:46 PM
2	0.3820	0.1245mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:05:49 PM
3	0.3347	0.1116mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:07:52 PM
4	0.3854	0.1254mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:09:55 PM

Mean Area 0.3459
Mean Conc. 0.1146mg/L



Sample

Sample Name: 280-148915-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

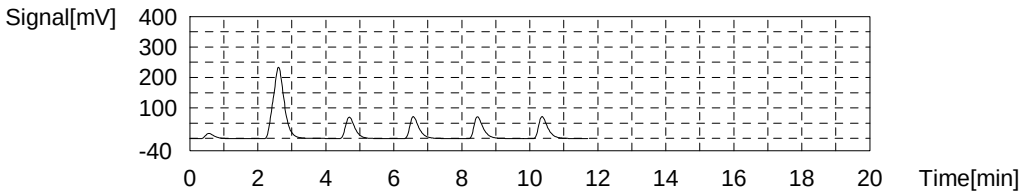
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:144.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.83	8.722mg/L	50uL	1	R	TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:18:26 PM
2	537.3	146.9mg/L	50uL	1	R	TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:20:47 PM
3	137.2	144.3mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:22:50 PM
4	137.5	144.6mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:24:53 PM
5	136.5	143.6mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:26:55 PM
6	138.3	145.4mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:28:58 PM

Mean Area 137.4
Mean Conc. 144.5mg/L



Sample

Sample Name: MS 280-148915-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

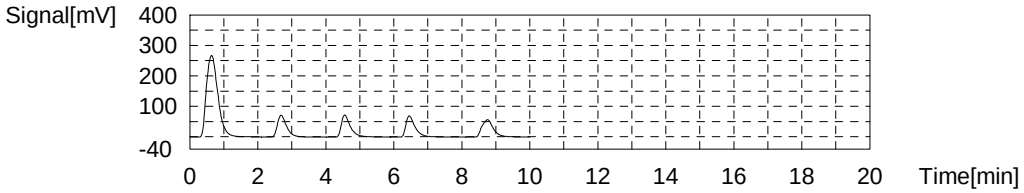
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:166.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	632.9	173.1mg/L	50uL	1	R	TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:37:34 PM
2	135.3	168.2mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:39:38 PM
3	135.1	167.9mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:41:40 PM
4	132.3	164.4mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:44:01 PM
5	133.0	165.3mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:46:04 PM

Mean Area 133.9
Mean Conc. 166.5mg/L



Sample

Sample Name: MSD 280-148915-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

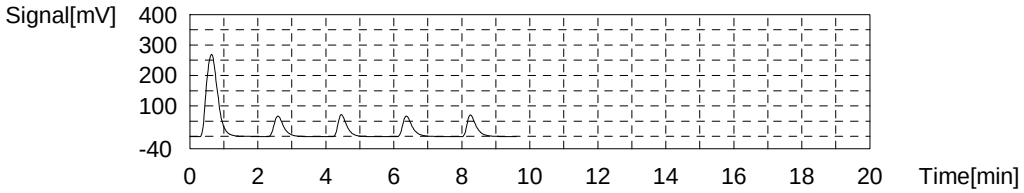
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:166.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	626.5	171.3mg/L	50uL	1	R	TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:54:40 PM
2	135.0	167.8mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:56:48 PM
3	131.8	163.8mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 2:58:51 PM
4	133.7	166.2mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:00:54 PM
5	134.6	167.3mg/L	11uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:02:57 PM

Mean Area 133.8
Mean Conc. 166.3mg/L



Sample

Sample Name: 280-148915-f-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

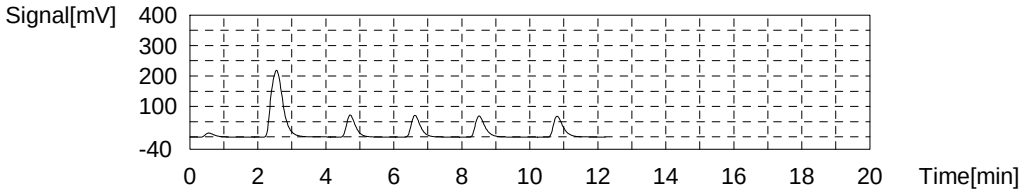
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:145.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.40	7.238mg/L	50uL	1	R	TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:11:27 PM
2	541.2	148.0mg/L	50uL	1	R	TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:13:50 PM
3	136.0	143.0mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:15:53 PM
4	137.6	144.7mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:17:56 PM
5	140.1	147.3mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:20:22 PM
6	138.8	146.0mg/L	13uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:22:30 PM

Mean Area 138.1
Mean Conc. 145.3mg/L



Sample

Sample Name: 280-148710-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

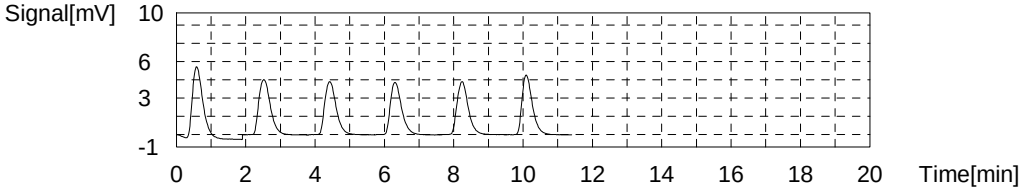
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.728mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.09	3.325mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:30:55 PM
2	10.51	2.893mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:32:58 PM
3	9.946	2.739mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:35:01 PM
4	9.708	2.674mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:37:04 PM
5	9.745	2.684mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:39:07 PM
6	10.22	2.814mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:41:10 PM

Mean Area 9.905
Mean Conc. 2.728mg/L



Sample

Sample Name: 280-148710-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

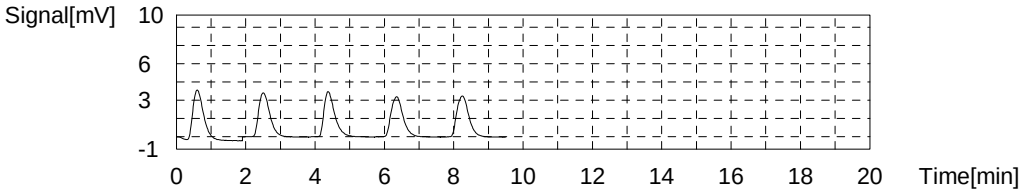
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.208mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.752	2.413mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:49:34 PM
2	8.081	2.229mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:51:37 PM
3	7.977	2.201mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:53:40 PM
4	7.880	2.174mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:55:43 PM
5	8.068	2.226mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 3:57:46 PM

Mean Area 8.002
Mean Conc. 2.208mg/L



Sample

Sample Name: 280-148710-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

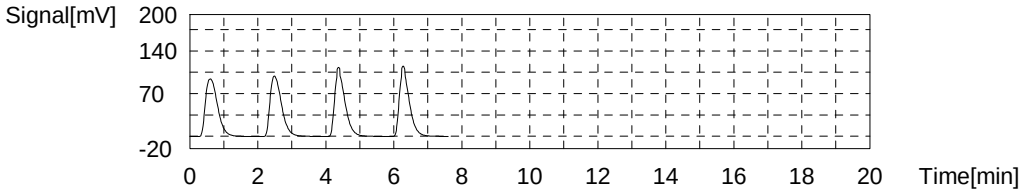
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:643.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	236.9	647.9mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:06:15 PM
2	235.3	643.5mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:08:18 PM
3	236.0	645.4mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:10:21 PM
4	233.1	637.5mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:12:24 PM

Mean Area 235.3
Mean Conc. 643.6mg/L



Sample

Sample Name: 280-148710-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

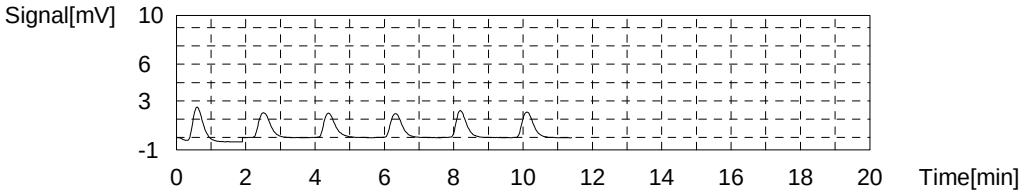
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.270mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.528	1.531mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:20:55 PM
2	4.779	1.327mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:22:58 PM
3	4.599	1.277mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:25:01 PM
4	4.480	1.245mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:27:04 PM
5	4.482	1.245mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:29:07 PM
6	4.722	1.311mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:31:10 PM

Mean Area 4.571
Mean Conc. 1.270mg/L



Sample

Sample Name: 280-148710-a-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

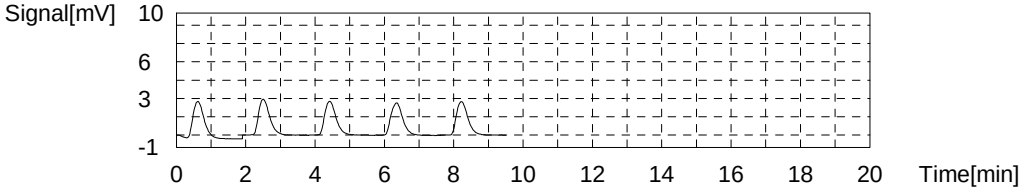
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.747mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.599	1.824mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:39:34 PM
2	6.460	1.786mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:41:37 PM
3	6.276	1.736mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:43:40 PM
4	6.280	1.737mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:45:43 PM
5	6.253	1.730mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:47:46 PM

Mean Area 6.317
Mean Conc. 1.747mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

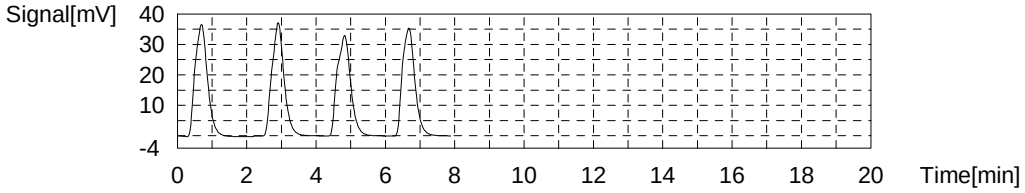
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.77mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.05	25.19mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:56:32 PM
2	91.39	25.01mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 4:58:35 PM
3	89.85	24.58mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:00:38 PM
4	88.81	24.30mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:02:41 PM

Mean Area 90.53
Mean Conc. 24.77mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

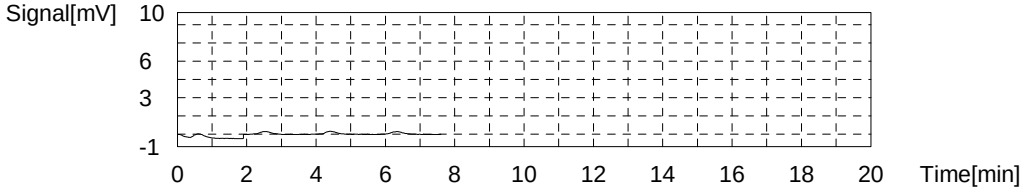
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1506mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5949	0.1827mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:11:12 PM
2	0.4318	0.1381mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:13:15 PM
3	0.4574	0.1451mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:15:18 PM
4	0.4256	0.1364mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:17:21 PM

Mean Area 0.4774
Mean Conc. 0.1506mg/L



Sample

Sample Name: 280-148710-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

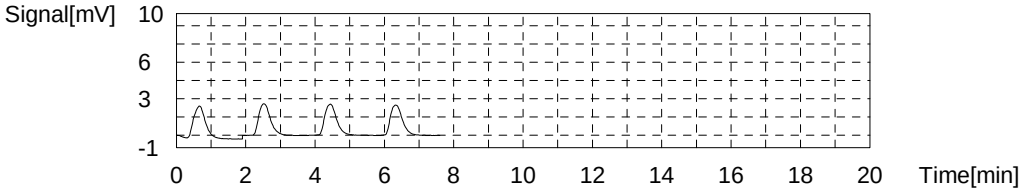
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.676mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.160	1.704mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:25:52 PM
2	6.042	1.672mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:27:55 PM
3	6.010	1.663mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:29:58 PM
4	6.020	1.666mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:32:01 PM

Mean Area 6.058
Mean Conc. 1.676mg/L



Sample

Sample Name: 280-148710-a-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

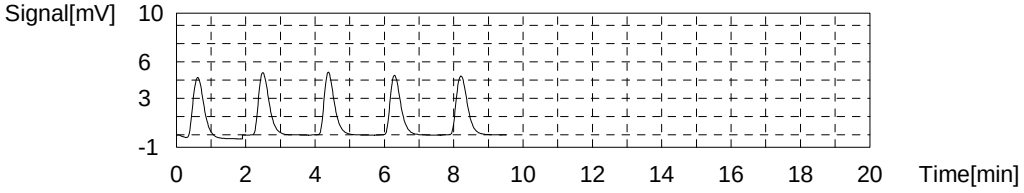
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.976mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.92	3.006mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:40:32 PM
2	10.96	3.016mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:42:35 PM
3	10.54	2.902mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:44:38 PM
4	10.46	2.880mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:46:41 PM
5	10.83	2.981mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:48:44 PM

Mean Area 10.81
Mean Conc. 2.976mg/L



Sample

Sample Name: 280-148710-a-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

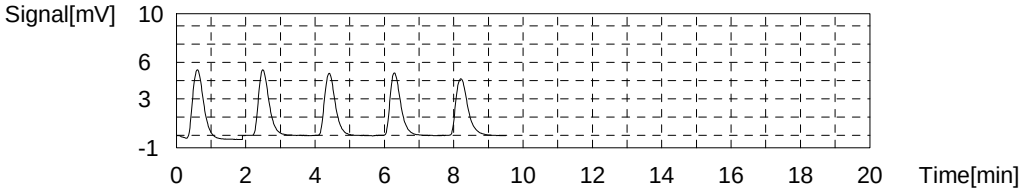
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.065mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.22	3.361mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:57:13 PM
2	11.33	3.118mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 5:59:16 PM
3	11.01	3.030mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:01:19 PM
4	11.02	3.033mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:03:22 PM
5	11.19	3.079mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:05:25 PM

Mean Area 11.14
Mean Conc. 3.065mg/L



Sample

Sample Name: 280-148710-a-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

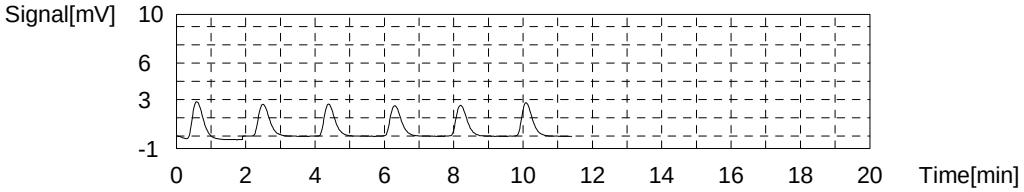
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.559mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.614	1.828mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:13:54 PM
2	5.822	1.612mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:15:57 PM
3	5.599	1.551mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:18:00 PM
4	5.538	1.534mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:20:03 PM
5	5.607	1.553mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:22:06 PM
6	5.772	1.598mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:24:09 PM

Mean Area 5.629
Mean Conc. 1.559mg/L



Sample

Sample Name: 280-148750-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

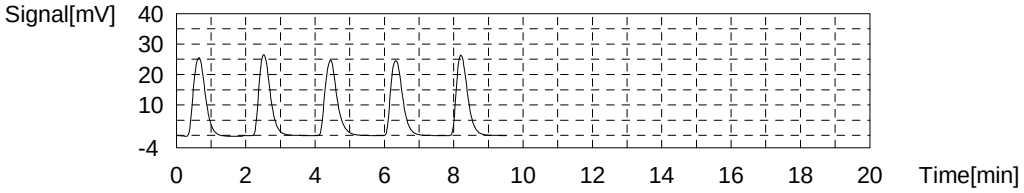
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.39mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.11	17.00mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:32:33 PM
2	60.77	16.63mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:34:36 PM
3	59.95	16.41mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:36:39 PM
4	59.29	16.23mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:38:42 PM
5	59.48	16.28mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:40:45 PM

Mean Area 59.87
Mean Conc. 16.39mg/L



Sample

Sample Name: MS 280-148750-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

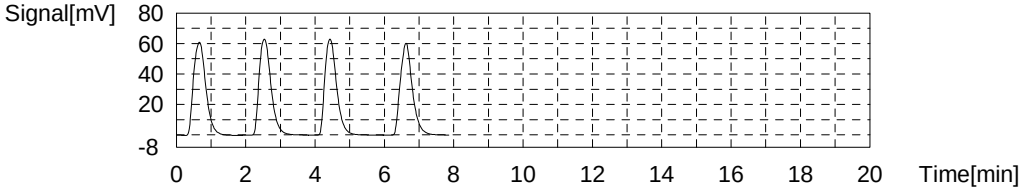
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:41.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	152.8	41.80mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:49:14 PM
2	150.9	41.28mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:51:17 PM
3	149.5	40.89mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:53:35 PM
4	146.5	40.07mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 6:55:38 PM

Mean Area 149.9
Mean Conc. 41.01mg/L



Sample

Sample Name: MSD 280-148750-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

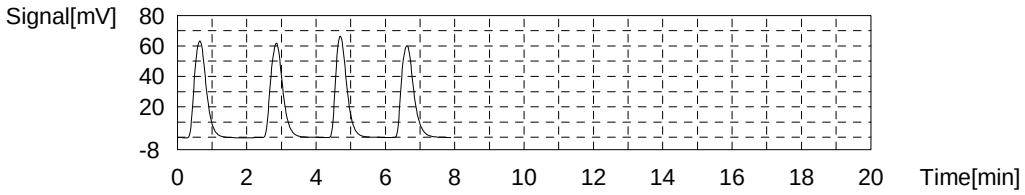
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:41.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	153.1	41.88mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:04:26 PM
2	152.4	41.69mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:06:29 PM
3	148.8	40.70mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:08:32 PM
4	149.7	40.95mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:10:35 PM

Mean Area 151.0
Mean Conc. 41.30mg/L



Sample

Sample Name: 280-148734-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

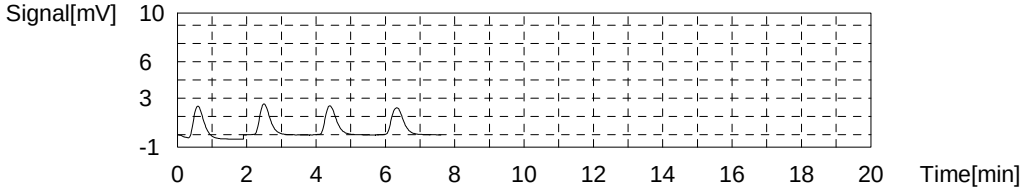
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.455mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.265	1.459mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:19:06 PM
2	5.249	1.455mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:21:09 PM
3	5.212	1.445mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:23:12 PM
4	5.262	1.459mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:25:15 PM

Mean Area 5.247
Mean Conc. 1.455mg/L



Sample

Sample Name: 280-148734-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

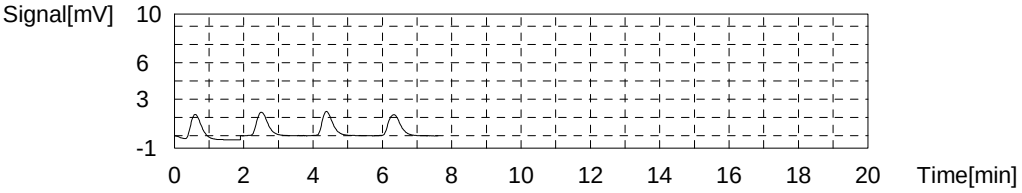
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.161mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.203	1.169mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:33:46 PM
2	4.239	1.179mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:35:49 PM
3	4.101	1.141mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:37:52 PM
4	4.150	1.155mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:39:55 PM

Mean Area 4.173
Mean Conc. 1.161mg/L



Sample

Sample Name: 280-148734-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

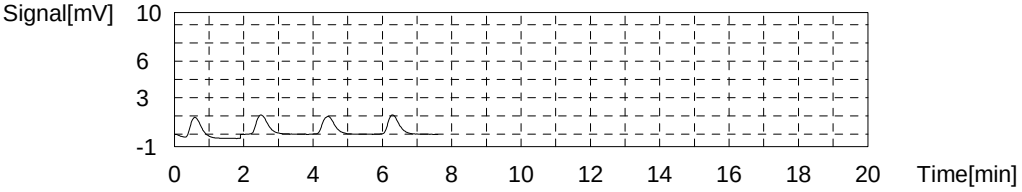
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9814mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.503	0.9778mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:48:26 PM
2	3.612	1.008mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:50:29 PM
3	3.482	0.9720mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:52:32 PM
4	3.468	0.9682mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 7:54:35 PM

Mean Area 3.516
Mean Conc. 0.9814mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

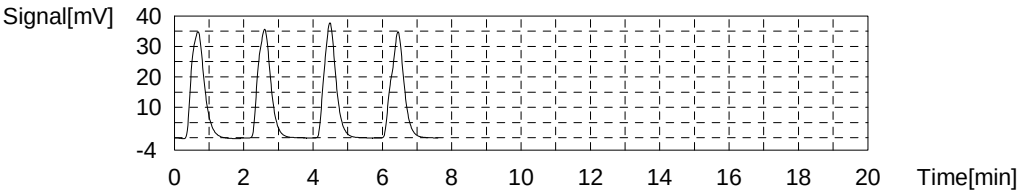
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.98	25.17mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:03:06 PM
2	91.68	25.09mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:05:09 PM
3	90.03	24.63mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:07:12 PM
4	89.56	24.51mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:09:15 PM

Mean Area 90.81
Mean Conc. 24.85mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

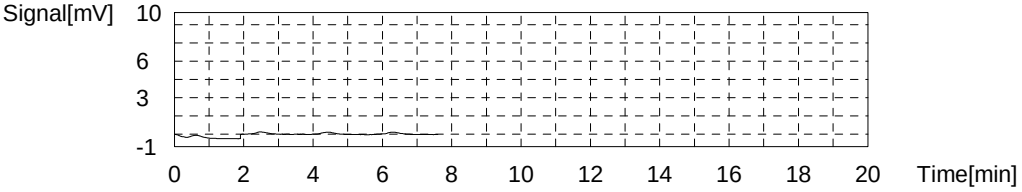
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1142mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3616	0.1189mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:17:46 PM
2	0.3455	0.1145mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:19:49 PM
3	0.3572	0.1177mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:21:52 PM
4	0.3132	0.1057mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:23:55 PM

Mean Area 0.3444
Mean Conc. 0.1142mg/L



Sample

Sample Name: 280-148734-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

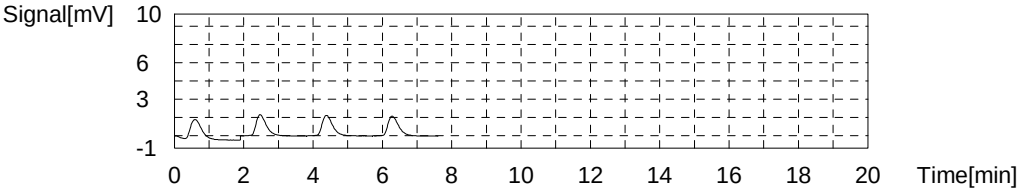
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9603mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.379	0.9439mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:32:26 PM
2	3.496	0.9758mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:34:29 PM
3	3.460	0.9660mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:36:32 PM
4	3.421	0.9553mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:38:35 PM

Mean Area 3.439
Mean Conc. 0.9603mg/L



Sample

Sample Name: 280-148734-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

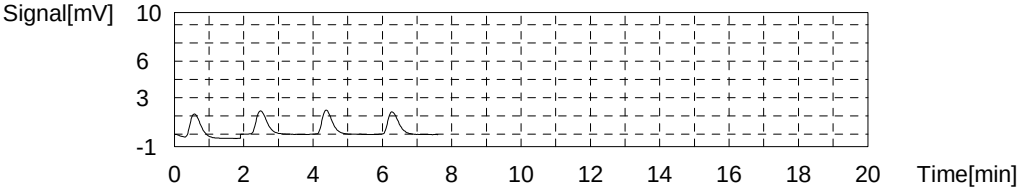
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.126mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.022	1.120mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:47:06 PM
2	4.133	1.150mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:49:09 PM
3	4.055	1.129mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:51:12 PM
4	3.978	1.108mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 8:53:15 PM

Mean Area 4.047
Mean Conc. 1.126mg/L



Sample

Sample Name: 280-148787-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

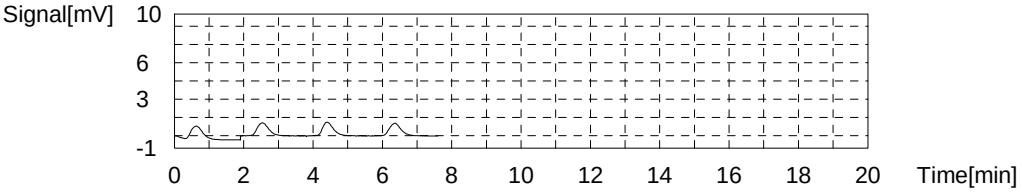
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6649mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.351	0.6628mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:01:46 PM
2	2.402	0.6767mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:03:49 PM
3	2.316	0.6532mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:05:52 PM
4	2.365	0.6666mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:07:55 PM

Mean Area 2.359
Mean Conc. 0.6649mg/L



Sample

Sample Name: 280-148787-d-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

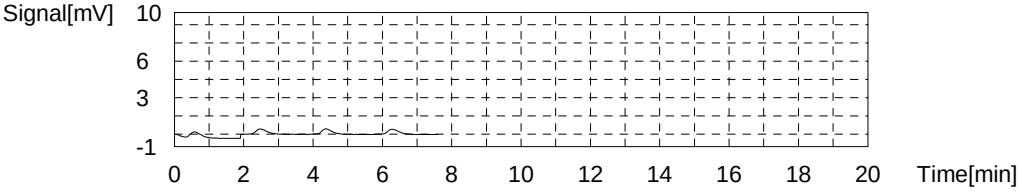
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2543mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8538	0.2535mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:16:46 PM
2	0.9037	0.2671mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:18:49 PM
3	0.8152	0.2429mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:20:52 PM
4	0.8539	0.2535mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:22:55 PM

Mean Area 0.8567
Mean Conc. 0.2543mg/L



Sample

Sample Name: 280-149129-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

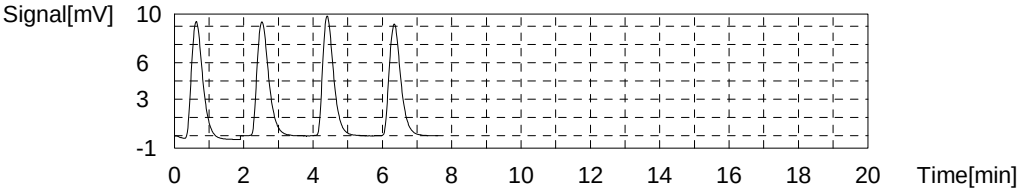
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.960mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.77	5.972mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:31:26 PM
2	22.05	6.048mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:33:29 PM
3	21.64	5.936mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:35:32 PM
4	21.44	5.882mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:37:35 PM

Mean Area 21.73
Mean Conc. 5.960mg/L



Sample

Sample Name: lcs 280-538107/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

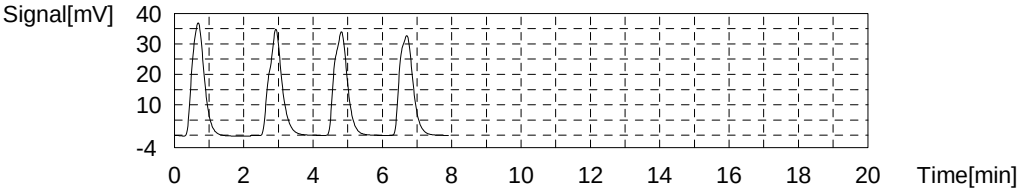
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.84	25.13mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:46:25 PM
2	90.01	24.63mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:48:28 PM
3	90.24	24.69mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:50:31 PM
4	88.75	24.28mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 9:52:34 PM

Mean Area 90.21
Mean Conc. 24.68mg/L



Sample

Sample Name: mb 280-538107/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

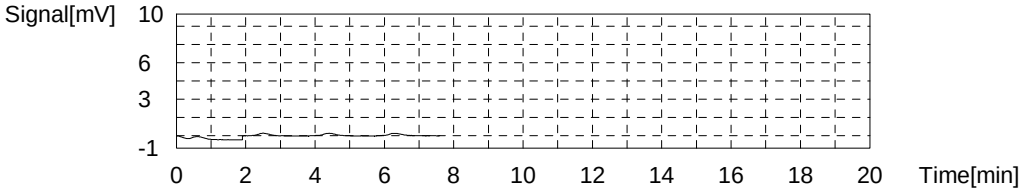
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1246mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3595	0.1183mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:01:05 PM
2	0.4040	0.1305mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:03:08 PM
3	0.3698	0.1212mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:05:11 PM
4	0.3970	0.1286mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:07:14 PM

Mean Area 0.3826
Mean Conc. 0.1246mg/L



Sample

Sample Name: 280-148877-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

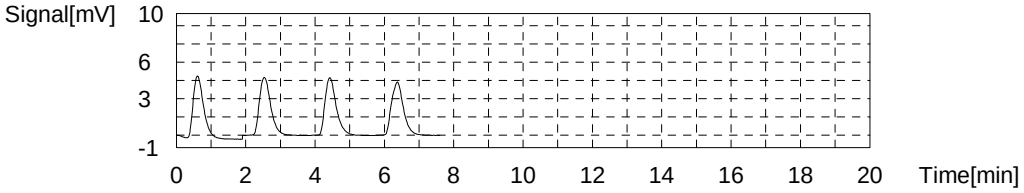
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.917mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.61	2.921mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:15:45 PM
2	10.74	2.956mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:17:48 PM
3	10.65	2.932mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:19:51 PM
4	10.39	2.861mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:21:54 PM

Mean Area 10.60
Mean Conc. 2.917mg/L



Sample

Sample Name: 280-148877-d-1-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

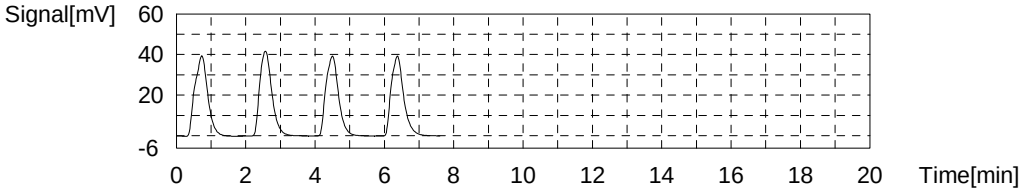
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	103.6	28.34mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:30:25 PM
2	102.5	28.04mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:32:28 PM
3	100.6	27.52mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:34:31 PM
4	99.40	27.20mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:36:34 PM

Mean Area 101.5
Mean Conc. 27.78mg/L



Sample

Sample Name: 280-148877-d-1-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

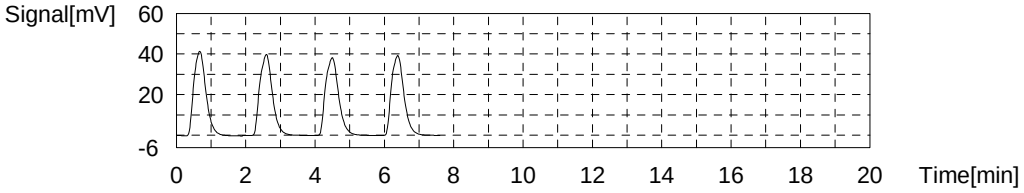
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	102.3	27.99mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:45:05 PM
2	101.4	27.74mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:47:08 PM
3	101.2	27.69mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:49:11 PM
4	99.40	27.20mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:51:14 PM

Mean Area 101.1
Mean Conc. 27.65mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

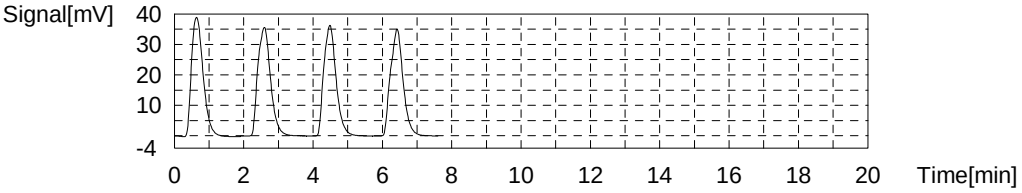
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.94mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.67	25.36mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 10:59:46 PM
2	91.85	25.13mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:01:49 PM
3	90.59	24.79mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:03:52 PM
4	89.54	24.50mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:05:55 PM

Mean Area 91.16
Mean Conc. 24.94mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

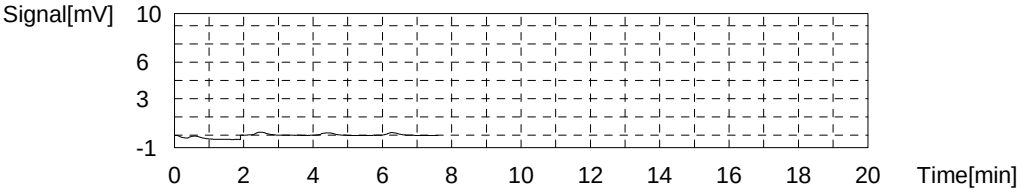
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1374mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3651	0.1199mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:14:27 PM
2	0.5032	0.1576mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:16:30 PM
3	0.4491	0.1428mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:18:33 PM
4	0.3999	0.1294mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:20:36 PM

Mean Area 0.4293
Mean Conc. 0.1374mg/L



Sample

Sample Name: 280-148877-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

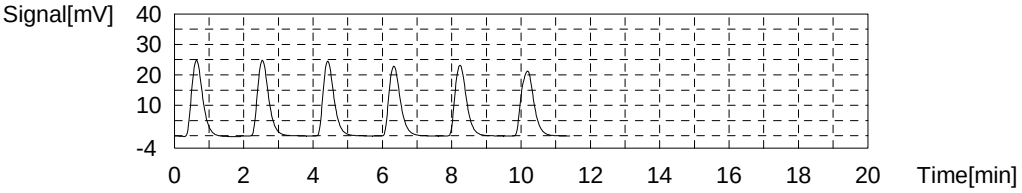
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.34	15.42mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:29:07 PM
2	55.84	15.29mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:31:10 PM
3	54.21	14.84mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:33:13 PM
4	53.03	14.52mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:35:16 PM
5	53.98	14.78mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:37:19 PM
6	54.85	15.02mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:39:21 PM

Mean Area 54.02
Mean Conc. 14.79mg/L



Sample

Sample Name: 280-148877-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

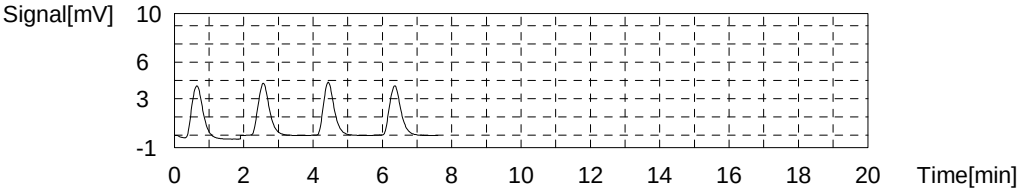
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.610mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.544	2.629mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:47:47 PM
2	9.663	2.662mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:49:50 PM
3	9.403	2.591mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:51:53 PM
4	9.285	2.559mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/1/2021 11:53:56 PM

Mean Area 9.474
Mean Conc. 2.610mg/L



Sample

Sample Name: 280-148877-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

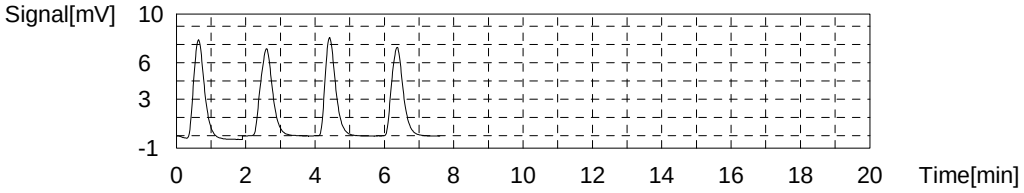
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.731mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.48	4.799mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:02:27 AM
2	17.39	4.774mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:04:30 AM
3	17.05	4.681mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:06:33 AM
4	17.01	4.671mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:08:36 AM

Mean Area 17.23
Mean Conc. 4.731mg/L



Sample

Sample Name: 280-148877-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

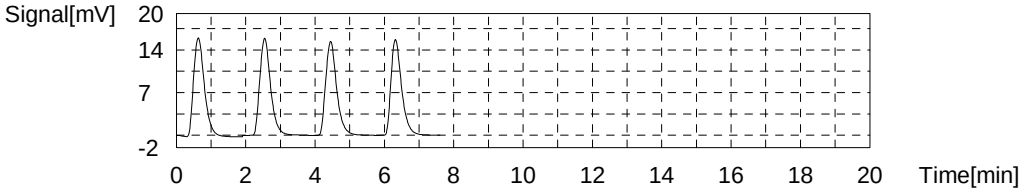
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.458mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.34	9.682mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:17:08 AM
2	34.63	9.488mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:19:11 AM
3	34.33	9.406mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:21:14 AM
4	33.78	9.255mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:23:17 AM

Mean Area 34.52
Mean Conc. 9.458mg/L



Sample

Sample Name: 280-148877-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

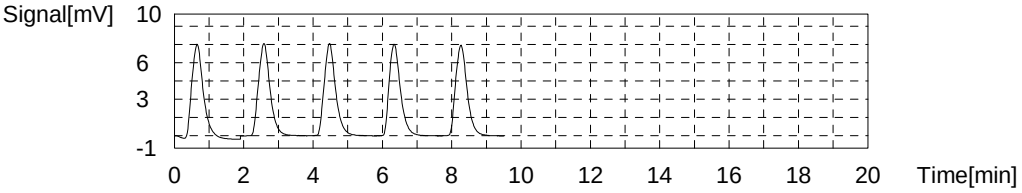
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.738mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.89	4.911mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:31:48 AM
2	17.57	4.824mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:33:51 AM
3	17.28	4.744mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:35:54 AM
4	17.03	4.676mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:37:57 AM
5	17.15	4.709mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:39:59 AM

Mean Area 17.26
Mean Conc. 4.738mg/L



Sample

Sample Name: 280-148877-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

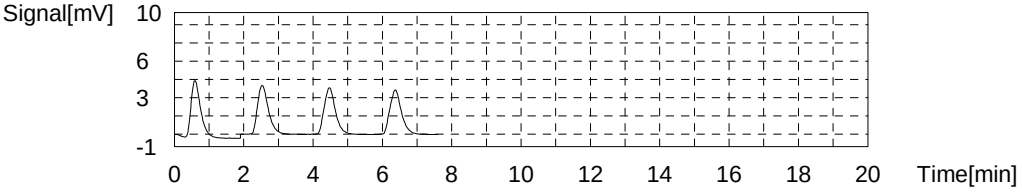
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.393mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.816	2.430mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:48:30 AM
2	8.748	2.412mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:50:33 AM
3	8.632	2.380mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:52:36 AM
4	8.523	2.350mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 12:54:39 AM

Mean Area 8.680
Mean Conc. 2.393mg/L



Sample

Sample Name: 280-148877-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

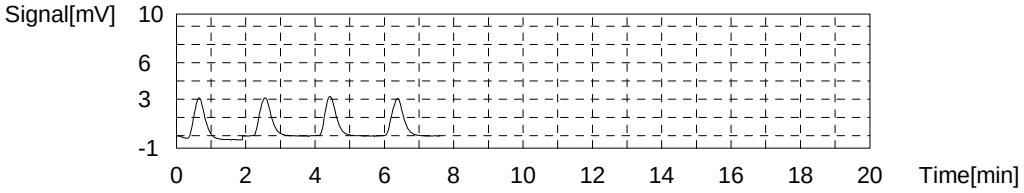
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.985mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.250	2.002mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:03:10 AM
2	7.235	1.998mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:05:13 AM
3	7.111	1.964mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:07:16 AM
4	7.157	1.977mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:09:19 AM

Mean Area 7.188
Mean Conc. 1.985mg/L



Sample

Sample Name: 280-148902-f-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

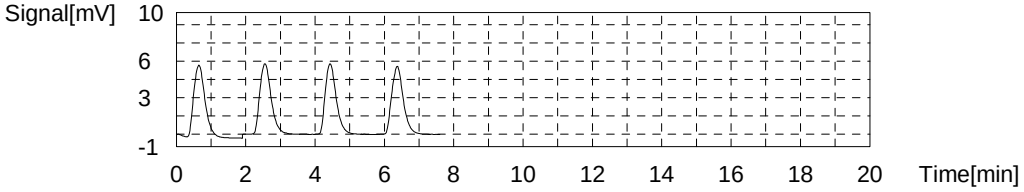
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.609mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.41	3.686mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:17:51 AM
2	13.27	3.648mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:19:54 AM
3	12.83	3.528mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:21:57 AM
4	13.00	3.574mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:24:00 AM

Mean Area 13.13
Mean Conc. 3.609mg/L



Sample

Sample Name: 280-148902-f-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

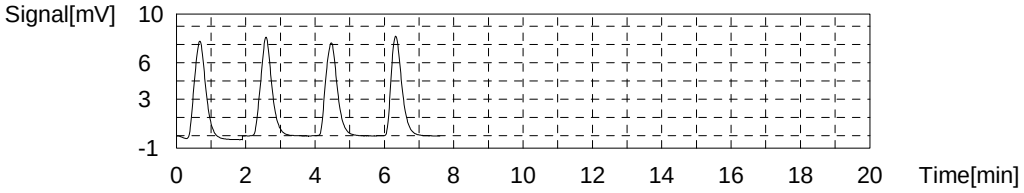
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.961mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.41	5.053mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:32:32 AM
2	18.20	4.996mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:34:35 AM
3	17.92	4.919mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:36:38 AM
4	17.76	4.876mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:38:41 AM

Mean Area 18.07
Mean Conc. 4.961mg/L



Sample

Sample Name: 280-148902-f-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

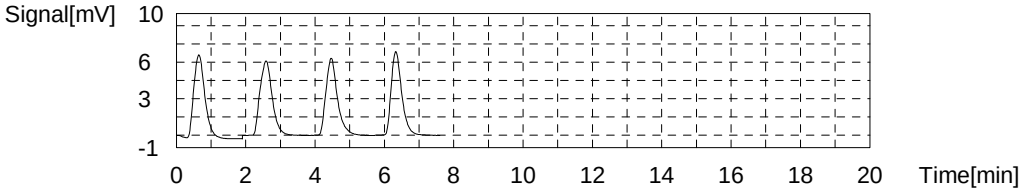
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.074mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.16	4.165mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:47:12 AM
2	14.95	4.107mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:49:15 AM
3	14.68	4.034mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:51:18 AM
4	14.52	3.990mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 1:53:21 AM

Mean Area 14.83
Mean Conc. 4.074mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

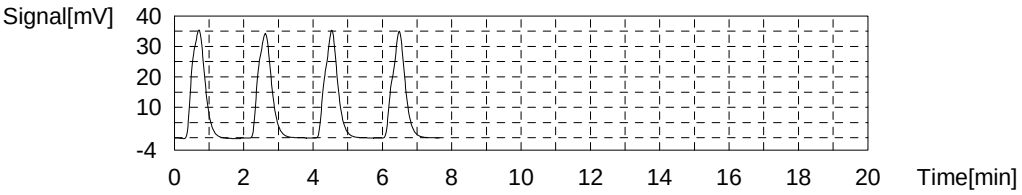
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.57	25.60mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:01:52 AM
2	92.26	25.24mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:03:55 AM
3	90.79	24.84mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:06:00 AM
4	89.61	24.52mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:08:03 AM

Mean Area 91.56
Mean Conc. 25.05mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

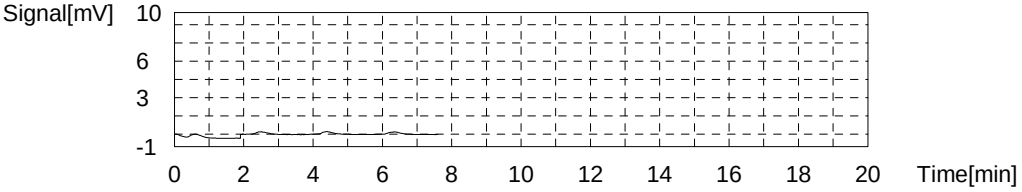
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1351mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4626	0.1465mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:16:35 AM
2	0.4075	0.1315mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:18:38 AM
3	0.3993	0.1292mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:20:41 AM
4	0.4144	0.1333mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:22:44 AM

Mean Area 0.4210
Mean Conc. 0.1351mg/L



Sample

Sample Name: 280-148902-f-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

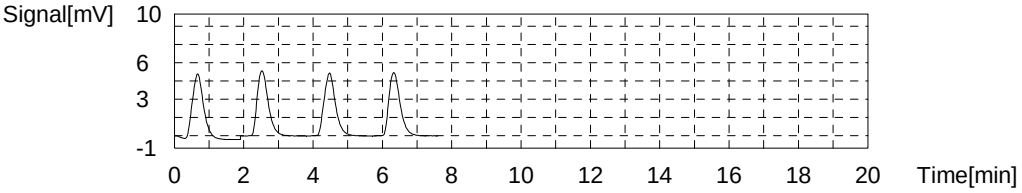
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.242mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.91	3.276mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:31:15 AM
2	11.84	3.257mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:33:18 AM
3	11.70	3.219mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:35:21 AM
4	11.69	3.216mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:37:24 AM

Mean Area 11.79
Mean Conc. 3.242mg/L



Sample

Sample Name: 280-148902-f-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

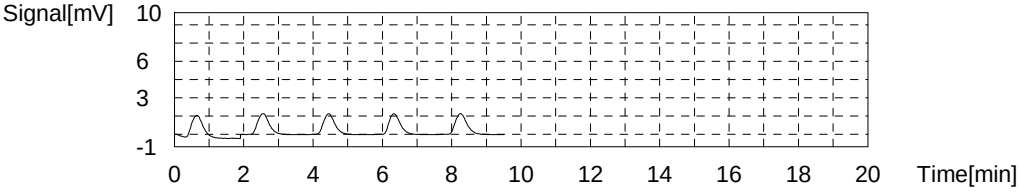
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.071mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.094	1.139mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:45:56 AM
2	3.907	1.088mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:47:59 AM
3	3.828	1.067mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:50:02 AM
4	3.735	1.041mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:52:04 AM
5	3.911	1.089mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 2:54:07 AM

Mean Area 3.845
Mean Conc. 1.071mg/L



Sample

Sample Name: 280-148902-f-5-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

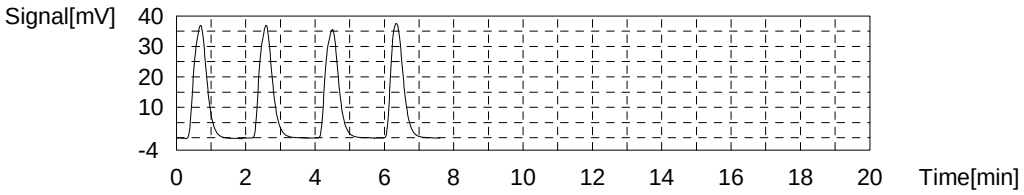
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	95.69	26.18mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:02:39 AM
2	95.27	26.07mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:04:42 AM
3	93.77	25.66mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:06:45 AM
4	93.75	25.65mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:08:48 AM

Mean Area 94.62
Mean Conc. 25.89mg/L



Sample

Sample Name: 280-148902-f-5-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

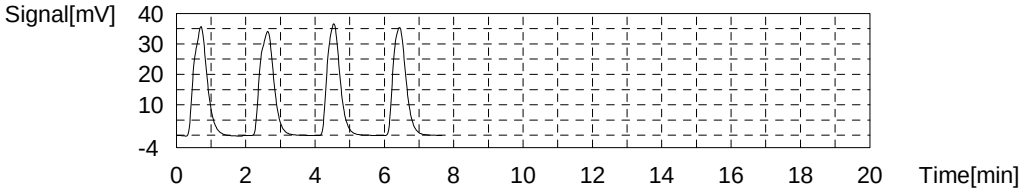
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.28	26.34mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:17:20 AM
2	95.07	26.01mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:19:26 AM
3	93.76	25.65mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:21:29 AM
4	91.91	25.15mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:23:32 AM

Mean Area 94.26
Mean Conc. 25.79mg/L



Sample

Sample Name: 280-148902-f-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

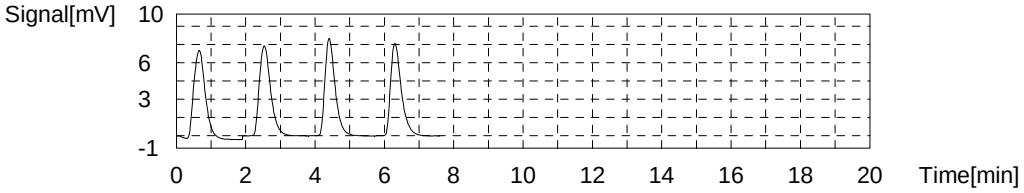
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.544mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.67	4.578mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:32:04 AM
2	16.75	4.599mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:34:07 AM
3	16.34	4.487mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:36:10 AM
4	16.43	4.512mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:38:13 AM

Mean Area 16.55
Mean Conc. 4.544mg/L



Sample

Sample Name: 280-148902-f-7-
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

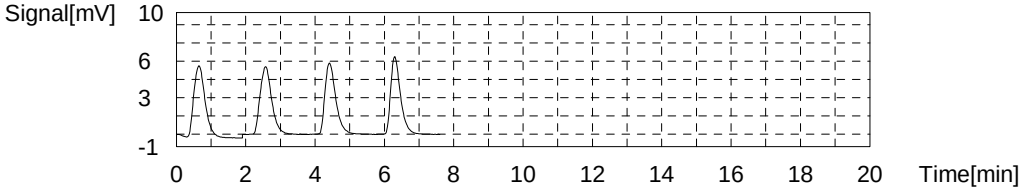
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.525mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.05	3.588mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:46:45 AM
2	12.93	3.555mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:48:48 AM
3	12.66	3.481mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:50:51 AM
4	12.64	3.476mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 3:52:54 AM

Mean Area 12.82
Mean Conc. 3.525mg/L



Sample

Sample Name: 280-148902-f-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

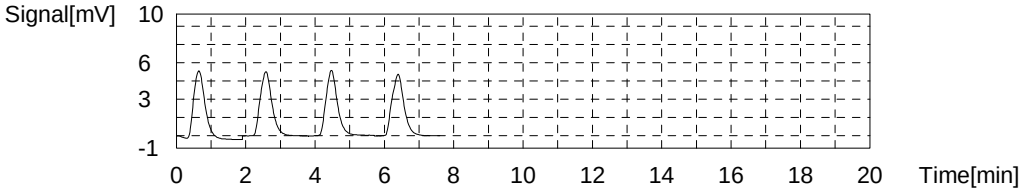
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.371mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.51	3.440mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:01:26 AM
2	12.37	3.402mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:03:29 AM
3	12.08	3.323mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:05:32 AM
4	12.06	3.317mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:07:34 AM

Mean Area 12.26
Mean Conc. 3.371mg/L



Sample

Sample Name: 280-148902-f-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

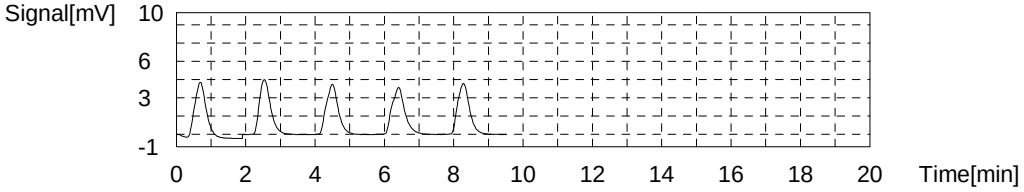
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.747mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.48	2.885mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:16:07 AM
2	10.13	2.790mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:18:10 AM
3	9.905	2.728mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:20:13 AM
4	9.926	2.734mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:22:16 AM
5	9.929	2.735mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:24:18 AM

Mean Area 9.973
Mean Conc. 2.747mg/L



Sample

Sample Name: 280-148902-f-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

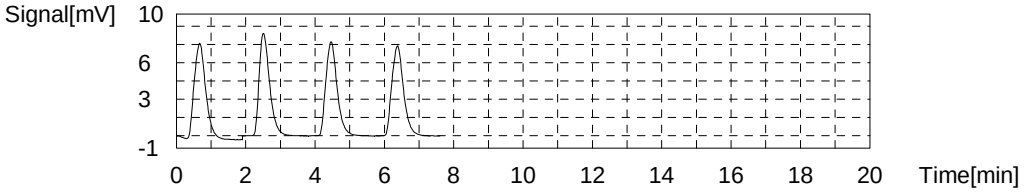
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.856mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.12	4.974mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:32:50 AM
2	17.69	4.856mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:34:53 AM
3	17.53	4.813mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:36:56 AM
4	17.41	4.780mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:38:59 AM

Mean Area 17.69
Mean Conc. 4.856mg/L



Sample

Sample Name: 280-148964-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

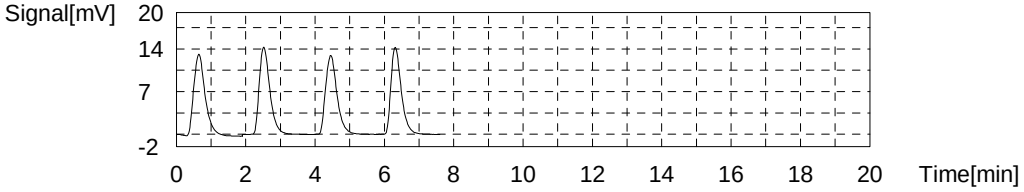
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.299mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.65	8.400mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:47:31 AM
2	30.58	8.381mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:49:34 AM
3	29.97	8.214mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:51:37 AM
4	29.92	8.200mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 4:53:40 AM

Mean Area 30.28
Mean Conc. 8.299mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

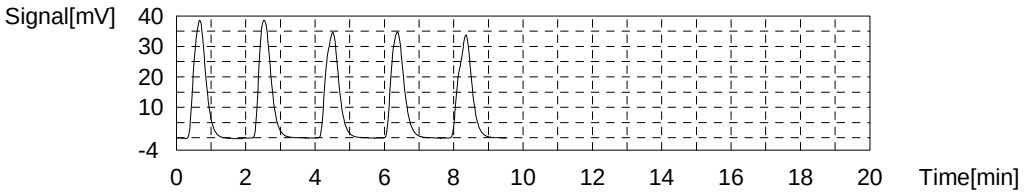
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	94.16	25.76mg/L	50uL	1	E	TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:02:12 AM
2	92.97	25.44mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:04:15 AM
3	90.87	24.86mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:06:18 AM
4	89.82	24.58mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:08:21 AM
5	90.09	24.65mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:10:24 AM

Mean Area 90.94
Mean Conc. 24.88mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

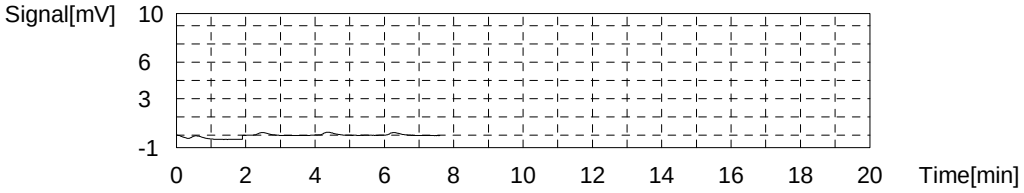
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1394mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4383	0.1399mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:18:56 AM
2	0.4356	0.1391mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:20:59 AM
3	0.4453	0.1418mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:23:02 AM
4	0.4263	0.1366mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:25:04 AM

Mean Area 0.4364
Mean Conc. 0.1394mg/L



Sample

Sample Name: 280-148964-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

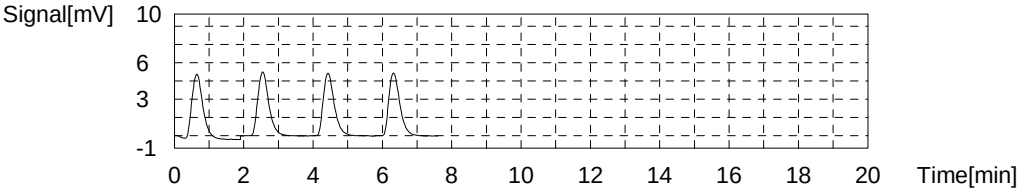
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.159mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.59	3.189mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:33:37 AM
2	11.56	3.181mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:35:40 AM
3	11.36	3.126mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:37:43 AM
4	11.42	3.142mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:39:46 AM

Mean Area 11.48
Mean Conc. 3.159mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

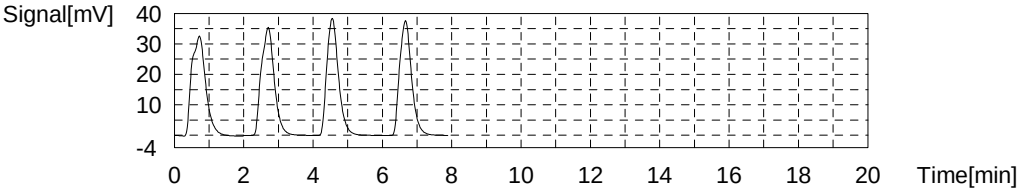
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.12	25.48mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:48:23 AM
2	92.86	25.41mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:50:26 AM
3	91.30	24.98mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:52:41 AM
4	90.68	24.81mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 5:54:43 AM

Mean Area 91.99
Mean Conc. 25.17mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

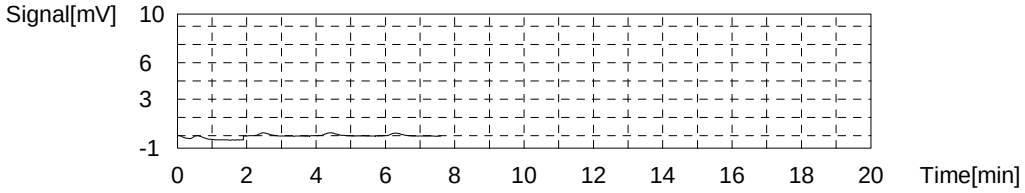
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1498mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4838	0.1523mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 6:03:16 AM
2	0.4568	0.1449mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 6:05:19 AM
3	0.4959	0.1556mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 6:07:22 AM
4	0.4621	0.1464mg/L	50uL	1		TOC3.2021_05_25_16_26_10.cal	6/2/2021 6:09:25 AM

Mean Area	0.4747
Mean Conc.	0.1498mg/L



Sh: 3

9060A

	Type	Analysis	Sample Name	Sa	O	Result	Notes	Stat	D	Vial
1*	Unknown	NPOC	ICV		N	✓		Def		1
2*	Unknown	NPOC	ICB		N	✓		Def		2
3*	Unknown	NPOC	LCS		N	✓		Def		3
4*	Unknown	NPOC	MB		N	✓		Def		4
5*	Unknown	NPOC	TIC		N	✓		Def		5
6*	Unknown	NPOC	280-148915-f-1		N	✓		Def		6
7*	Unknown	NPOC	MS 280-148915-f-1		N	✓		Def		7
8*	Unknown	NPOC	MSD 280-148915-f-1		N	✓		Def		8
9*	Unknown	NPOC	280-148915-f-2		N	✓		Def		9
10*	Unknown	NPOC	280-148710-a-3		N	✓		Def		10
11*	Unknown	NPOC	280-148710-a-5		N	✓		Def		11
12*	Unknown	NPOC	280-148710-a-6		N	✓	10X Dil-color	Def		12
13*	Unknown	NPOC	280-148710-a-7		N	✓		Def		13
14*	Unknown	NPOC	280-148710-a-8		N	✓		Def		14
15*	Unknown	NPOC	CCV		N	✓		Def		15
16*	Unknown	NPOC	CCB		N	✓		Def		16
17*	Unknown	NPOC	280-148710-a-9		N	✓		Def		17
18*	Unknown	NPOC	280-148710-a-10		N	✓		Def		18
19*	Unknown	NPOC	280-148710-a-11		N	✓		Def		19
20*	Unknown	NPOC	280-148710-a-12		N	✓		Def		20
21*	Unknown	NPOC	280-148750-d-1		N	✓		Def		21
22*	Unknown	NPOC	MS 280-148750-d-1		N	✓		Def		22
23*	Unknown	NPOC	MSD 280-148750-d-1		N	✓		Def		23
24*	Unknown	NPOC	280-148734-a-2		N	✓		Def		24
25*	Unknown	NPOC	280-148734-a-3		N	✓		Def		25
26*	Unknown	NPOC	280-148734-a-5		N	✓		Def		26
27*	Unknown	NPOC	CCV		N	✓		Def		27
28*	Unknown	NPOC	CCB		N	✓		Def		28
29*	Unknown	NPOC	280-148734-a-6		N	✓		Def		29
30*	Unknown	NPOC	280-148734-a-7		N	✓		Def		30
31*	Unknown	NPOC	280-148787-c-2		N	✓		Def		31
32*	Unknown	NPOC	280-148787-d-3		N	✓		Def		32
33*	Unknown	NPOC	280-149129-a-5		N	✓		Def		33
34*	Unknown	NPOC	lcs 280-538107/1-a		N	✓	filtration	Def		34
35*	Unknown	NPOC	mb 280-538107/2-a		N	✓	filtration	Def		35
36*	Unknown	NPOC	280-148877-d-1-a		N	6	DOC filtration	Def		36
37*	Unknown	NPOC	280-148877-d-1-b ms		N	6	DOC	Def		37
38*	Unknown	NPOC	280-148877-d-1-c msd		N	6	DOC	Def		38
39*	Unknown	NPOC	CCV		N	✓		Def		39
40*	Unknown	NPOC	CCB		N	✓		Def		40
41*	Unknown	NPOC	280-148877-d-2-a		N	6	DOC	Def		41
42*	Unknown	NPOC	280-148877-d-3-a		N	5	DOC	Def		42
43*	Unknown	NPOC	280-148877-d-4-a		N	6	DOC	Def		43
44*	Unknown	NPOC	280-148877-d-5-a		N	7	DOC	Def		44
45*	Unknown	NPOC	280-148877-d-6-a		N	6	DOC	Def		45
46*	Unknown	NPOC	280-148877-d-7-a		N	6	DOC	Def		46
47*	Unknown	NPOC	280-148877-d-8-a		N	6	DOC	Def		47
48*	Unknown	NPOC	280-148902-f-1-a		N	6	DOC	Def		48
49*	Unknown	NPOC	280-148902-f-2-a		N	6	DOC	Def		49
50*	Unknown	NPOC	280-148902-f-3-a		N	6	DOC	Def		50
51*	Unknown	NPOC	CCV		N	✓		Def		51

	Type	Analysis	Sample Name	Sa	O	Result	Notes	Stat	D	Vial
52*	Unknown	NPOC	CCB		N	✓		Def		52
53*	Unknown	NPOC	280-148902-f-4-a		N	6	DOC filtration	Def		53
54*	Unknown	NPOC	280-148902-f-5-a		N	7	DOC	Def		54
55*	Unknown	NPOC	280-148902-f-5-b ms		N	7	DOC	Def		55
56*	Unknown	NPOC	280-148902-f-5-c msd		N	7	DOC	Def		56
57*	Unknown	NPOC	280-148902-f-6-a		N	6	DOC	Def		57
58*	Unknown	NPOC	280-148902-f-7-		N	6	DOC	Def		58
59*	Unknown	NPOC	280-148902-f-8-a		N	6	DOC	Def		59
60*	Unknown	NPOC	280-148902-f-9-a		N	6	DOC	Def		60
61*	Unknown	NPOC	280-148902-f-10-a		N	6	DOC	Def		61
62*	Unknown	NPOC	280-148964-d-7-a		N	6	DOC	Def		62
63*	Unknown	NPOC	CCV		N	✓		Def		63
64*	Unknown	NPOC	CCB		N	✓		Def		64
65*	Unknown	NPOC	280-148964-d-8-a		N	6	DOC	Def		65
66*	Unknown	NPOC	CCV		N	✓		Def		66
67*	Unknown	NPOC	CCB		N	✓		Def		67

BWH 5000

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-538107

Analyst: Fox, Regan A

Batch Open: 6/1/2021 10:30:00AM

Batch End:

06/10/2021

Sample Filtration

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	LCS~280-538107/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-538107/2 N/A	N/A				N/A	N/A	N/A		
3	280-148877-D-1 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
4	280-148877-D-1~MS (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
5	280-148877-D-1~MSD (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
6	280-148877-D-2 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
7	280-148877-D-3 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
8	280-148877-D-4 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
9	280-148877-D-5 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
10	280-148877-D-6 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
11	280-148877-D-7 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
12	280-148877-D-8 (9060A_Diss)	N/A (280-148877-1)	Water			6/5/21	16_Days	4		
13	280-148902-F-1 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4		
14	280-148902-F-2 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-538107

Analyst: Fox, Regan A

Batch Open: 6/1/2021 10:30:00AM

Batch End:

15	280-148902-F-3 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
16	280-148902-F-4 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
17	280-148902-F-5 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
18	280-148902-F-5~MS (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
19	280-148902-F-5~MSD (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
20	280-148902-F-6 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
21	280-148902-F-7 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
22	280-148902-F-8 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
23	280-148902-F-9 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
24	280-148902-F-10 (9060A_Diss)	N/A (280-148902-1)	Water			6/6/21	16_Days	4	
25	280-148964-D-7 (9060A_Diss)	N/A (280-148964-1)	Water			6/9/21	16_Days	4	
26	280-148964-D-8 (9060A_Diss)	N/A (280-148964-1)	Water			6/9/21	16_Days	4	

06/10/2021

Page 1416 of 1441

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-538107

Analyst: Fox, Regan A

Batch Open: 6/1/2021 10:30:00AM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	0008647
Filter ID	16876568
Nitric Acid ID	N/A
Batch Comment	

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-538107

Analyst: Fox, Regan A

Batch Open: 6/1/2021 10:30:00AM

Batch End:

06/10/2021

Comments

280-148877-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148877-D-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-5~MS		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-538107

Analyst: Fox, Regan A

Batch Open: 6/1/2021 10:30:00AM

Batch End:

	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-5~MS		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-6		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-7		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-8		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-9		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148902-F-10		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148964-D-7		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-148964-D-8		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

06/10/2021

Batch Number: 280-538107

Analyst: Fox, Regan A

Batch Open: 6/1/2021 10:30:00AM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

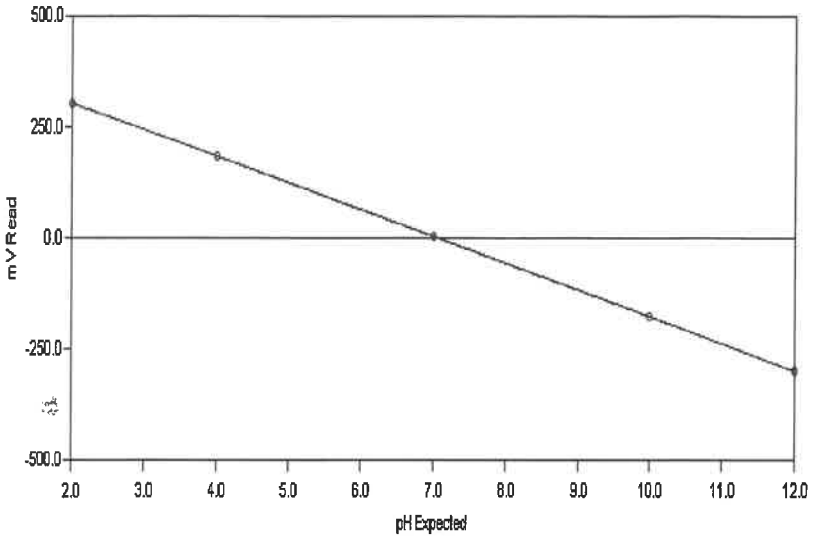
Other Reagents:

Reagent	Amount/Units	Lot#:

MANTECH INC.

Calibration Report

Calibration Record # 313



Calibration Settings

Calibration ID	PH	Date	5/24/2021
Channel	1	Time	12:02 PM
Probe Type	pH	Temperature	294.95 K 21.80 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-60.418	CorrCoeff	1.0000
Intercept	3.074	Equation:	Y = (-60.418) X + (3.074)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.418	-65.00	-53.00
Intercept	3.074	-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	305.29
	4.00	184.32
	7.00	2.56
	10.00	-177.49
	12.00	-299.31

Test America
Water Analysis Report

AT4 Analyst:_____

Run Number 964 **Order Number** 20210524-7

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	5/24/2021	2:09 PM	21.89	-1.00	5.55	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	5/24/2021	2:17 PM	21.85	-1.00	10.46	104.85	196.28	.00	182.85	13.43	1.05	1.96	-1.00	.02
BUFFER 7	5/24/2021	2:20 PM	21.77	-1.00	7.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	5/24/2021	2:28 PM	21.71	-1.00	10.49	102.82	198.05	.00	190.46	7.60	1.03	1.98	-1.00	.02
MB	5/24/2021	2:34 PM	21.83	-1.00	8.48	.76	2.62	1.10	1.51	.00	.01	.04	.06	.02
280-148811-a-2	5/24/2021	2:44 PM	21.76	-1.00	7.31	.00	620.18	620.18	.00	.00	.00	6.20	-1.00	.02
DU 280-148811-a-2	5/24/2021	2:53 PM	21.79	-1.00	7.33	.00	622.27	622.27	.00	.00	.00	6.22	-1.00	.02
280-148811-a-3	5/24/2021	3:01 PM	21.82	-1.00	7.53	.00	382.42	382.42	.00	.00	.00	3.82	-1.00	.02
280-148811-a-4	5/24/2021	3:11 PM	21.86	-1.00	7.34	.00	560.71	560.71	.00	.00	.00	5.61	-1.00	.02
280-148811-a-5	5/24/2021	3:19 PM	21.96	-1.00	7.37	.00	431.99	431.99	.00	.00	.00	4.32	-1.00	.02
280-148811-a-6	5/24/2021	3:28 PM	22.07	-1.00	7.53	.00	495.64	495.64	.00	.00	.00	4.96	-1.00	.02
280-148811-a-7	5/24/2021	3:38 PM	22.03	-1.00	7.30	.00	623.03	623.03	.00	.00	.00	6.23	-1.00	.02
280-148811-b-8	5/24/2021	3:46 PM	21.96	-1.00	7.54	.00	397.65	397.65	.00	.00	.00	3.98	-1.00	.02
280-148716-a-1	5/24/2021	3:56 PM	21.85	-1.00	7.87	.00	567.74	567.74	.00	.00	.00	5.68	-1.00	.02
280-148812-m-1	5/24/2021	4:02 PM	21.80	-1.00	7.39	.00	2.97	2.97	.00	.00	.00	.04	.06	.02
CCV	5/24/2021	4:09 PM	21.82	-1.00	10.49	104.19	196.68	.00	184.98	11.69	1.04	1.97	-1.00	.02
CCB	5/24/2021	4:15 PM	21.89	-1.00	7.75	.00	2.09	2.09	.00	.00	.00	.04	.06	.02
280-148815-a-2	5/24/2021	4:23 PM	21.77	-1.00	7.51	.00	376.09	376.09	.00	.00	.00	3.76	-1.00	.02
280-148815-a-3	5/24/2021	4:32 PM	21.77	-1.00	7.25	.00	495.51	495.51	.00	.00	.00	4.96	-1.00	.02
280-148815-a-4	5/24/2021	4:41 PM	21.90	-1.00	7.21	.00	494.10	494.10	.00	.00	.00	4.94	-1.00	.02
280-148823-b-2	5/24/2021	4:47 PM	21.92	-1.00	7.34	.00	135.52	135.52	.00	.00	.00	1.36	-1.00	.02
280-148823-b-3	5/24/2021	4:53 PM	22.07	-1.00	6.60	.00	1.60	1.60	.00	.00	.00	.03	.05	.02
280-148823-b-4	5/24/2021	4:59 PM	22.28	-1.00	7.32	.00	196.89	196.89	.00	.00	.00	1.97	-1.00	.02
280-148823-b-5	5/24/2021	5:05 PM	22.07	-1.00	7.75	.00	143.48	143.48	.00	.00	.00	1.43	-1.00	.02
280-148823-b-6	5/24/2021	5:12 PM	21.89	-1.00	7.84	.00	188.46	188.46	.00	.00	.00	1.88	-1.00	.02
280-148823-b-7	5/24/2021	5:18 PM	21.77	-1.00	7.85	.00	190.07	190.07	.00	.00	.00	1.90	-1.00	.02
280-148823-b-8	5/24/2021	5:25 PM	21.70	-1.00	7.83	.00	230.29	230.29	.00	.00	.00	2.30	-1.00	.02

PC Titration PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

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Run Number 964 **Order Number** 20210524-7

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	5/24/2021	5:33 PM	21.69	-1.00	10.44	103.24	199.13	.00	191.77	7.35	1.03	1.99	-1.00	.02
CCB	5/24/2021	5:39 PM	21.82	-1.00	7.90	.00	1.97	1.97	.00	.00	.00	.04	.06	.02
LCS	5/24/2021	5:46 PM	21.79	-1.00	10.46	103.25	198.21	.00	189.93	8.28	1.03	1.98	-1.00	.02
MB	5/24/2021	5:52 PM	21.90	-1.00	7.96	.00	2.02	2.02	.00	.00	.00	.04	.06	.02
280-148828-a-13	5/24/2021	5:59 PM	21.90	-1.00	7.45	.00	235.89	235.89	.00	.00	.00	2.36	-1.00	.02
DU 280-148828-a-13	5/24/2021	6:06 PM	21.98	-1.00	7.49	.00	238.34	238.34	.00	.00	.00	2.38	-1.00	.02
280-148828-a-14	5/24/2021	6:15 PM	22.13	-1.00	7.71	.00	447.85	447.85	.00	.00	.00	4.48	-1.00	.02
280-148828-a-15	5/24/2021	6:22 PM	22.28	-1.00	7.73	.00	316.99	316.99	.00	.00	.00	3.17	-1.00	.02
280-148856-a-1	5/24/2021	6:29 PM	22.08	-1.00	7.59	.00	180.74	180.74	.00	.00	.00	1.81	-1.00	.02
280-148856-a-2	5/24/2021	6:36 PM	21.90	-1.00	7.74	.00	189.70	189.70	.00	.00	.00	1.90	-1.00	.02
280-148856-a-3	5/24/2021	6:42 PM	21.79	-1.00	7.76	.00	194.55	194.55	.00	.00	.00	1.95	-1.00	.02
280-148877-f-1	5/24/2021	6:49 PM	21.63	-1.00	7.76	.00	266.49	266.49	.00	.00	.00	2.66	-1.00	.02
280-148877-f-2	5/24/2021	6:55 PM	21.56	-1.00	7.51	.00	119.61	119.61	.00	.00	.00	1.20	-1.00	.02
280-148877-f-3	5/24/2021	7:00 PM	21.51	-1.00	6.80	.00	36.17	36.17	.00	.00	.00	.36	-1.00	.02
CCV	5/24/2021	7:08 PM	21.45	-1.00	10.43	101.65	198.60	.00	193.90	4.70	1.02	1.99	-1.00	.02
CCB	5/24/2021	7:14 PM	21.57	-1.00	7.96	.00	1.88	1.88	.00	.00	.00	.04	.06	.02
280-148877-f-4	5/24/2021	7:21 PM	21.61	-1.00	7.72	.00	286.92	286.92	.00	.00	.00	2.87	-1.00	.02
280-148877-f-5	5/24/2021	7:29 PM	21.71	-1.00	7.46	.00	389.71	389.71	.00	.00	.00	3.90	-1.00	.02
280-148877-f-6	5/24/2021	7:36 PM	22.08	-1.00	7.23	.00	180.00	180.00	.00	.00	.00	1.80	-1.00	.02
280-148877-f-7	5/24/2021	7:42 PM	21.96	-1.00	7.37	.00	168.10	168.10	.00	.00	.00	1.68	-1.00	.02
280-148877-f-8	5/24/2021	7:48 PM	21.86	-1.00	7.77	.00	130.63	130.63	.00	.00	.00	1.31	-1.00	.02
280-148881-e-1	5/24/2021	7:53 PM	21.74	-1.00	6.74	.00	12.82	12.82	.00	.00	.00	.14	.16	.02
280-148881-e-2	5/24/2021	7:59 PM	21.66	-1.00	6.57	.00	18.90	18.90	.00	.00	.00	.20	.21	.02
280-148882-e-1	5/24/2021	8:06 PM	21.66	-1.00	7.64	.00	178.21	178.21	.00	.00	.00	1.78	-1.00	.02
280-148884-e-1	5/24/2021	8:12 PM	21.71	-1.00	6.28	.00	99.67	99.67	.00	.00	.00	1.00	-1.00	.02
280-148886-e-1	5/24/2021	8:18 PM	21.70	-1.00	6.26	.00	98.48	98.48	.00	.00	.00	.98	-1.00	.02
CCV	5/24/2021	8:25 PM	21.74	-1.00	10.36	99.03	200.12	2.06	198.07	.00	.99	2.00	-1.00	.02
CCB	5/24/2021	8:31 PM	21.87	-1.00	7.85	.00	2.07	2.07	.00	.00	.00	.04	.06	.02
LCS	5/24/2021	8:39 PM	21.99	-1.00	10.41	100.96	197.78	.00	193.63	4.15	1.01	1.98	-1.00	.02
MB	5/24/2021	8:45 PM	22.17	-1.00	7.86	.00	1.78	1.78	.00	.00	.00	.04	.06	.02

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Run Number 964 **Order Number** 20210524-7

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)
280-148886-e-2	5/24/2021	8:51 PM	22.22	-1.00	6.27	.00	94.07	94.07	.00	.00	.00	.94	-1.00	.02
DU 280-148886-e-2	5/24/2021	8:57 PM	22.03	-1.00	6.28	.00	93.75	93.75	.00	.00	.00	.94	-1.00	.02
280-148886-e-3	5/24/2021	9:02 PM	21.92	-1.00	5.83	.00	.97	.97	.00	.00	.00	.03	.04	.02
280-148886-e-4	5/24/2021	9:09 PM	21.82	-1.00	6.65	.00	264.03	264.03	.00	.00	.00	2.64	-1.00	.02
280-148894-b-1	5/24/2021	9:18 PM	21.79	-1.00	7.60	.00	461.20	461.20	.00	.00	.00	4.61	-1.00	.02
280-148894-b-3	5/24/2021	9:29 PM	21.77	-1.00	7.54	.00	798.68	798.68	.00	.00	.00	7.99	-1.00	.02
280-148894-b-4	5/24/2021	9:38 PM	21.80	-1.00	7.75	.00	448.85	448.85	.00	.00	.00	4.49	-1.00	.02
280-148894-b-5	5/24/2021	9:46 PM	21.80	-1.00	7.79	.00	358.16	358.16	.00	.00	.00	3.58	-1.00	.02
280-148894-b-6	5/24/2021	9:55 PM	21.80	-1.00	7.80	.00	566.26	566.26	.00	.00	.00	5.66	-1.00	.02
280-148894-b-7	5/24/2021	10:04 PM	21.86	-1.00	7.82	.00	464.86	464.86	.00	.00	.00	4.65	-1.00	.02
CCV	5/24/2021	10:11 PM	21.92	-1.00	10.35	118.89	209.15	.00	180.51	28.64	1.19	2.09	-1.00	.02
CCB	5/24/2021	10:17 PM	22.16	-1.00	7.79	.00	2.69	2.69	.00	.00	.00	.05	.07	.02
280-148902-e-1	5/24/2021	10:24 PM	21.96	-1.00	7.33	.00	276.52	276.52	.00	.00	.00	2.77	-1.00	.02
280-148902-e-2	5/24/2021	10:32 PM	21.79	-1.00	7.43	.00	308.73	308.73	.00	.00	.00	3.09	-1.00	.02
280-148902-e-3	5/24/2021	10:40 PM	21.69	-1.00	7.59	.00	382.28	382.28	.00	.00	.00	3.82	-1.00	.02
280-148902-e-4	5/24/2021	10:46 PM	21.58	-1.00	7.07	.00	106.64	106.64	.00	.00	.00	1.07	-1.00	.02
280-148902-e-5	5/24/2021	10:53 PM	21.53	-1.00	7.70	.00	219.87	219.87	.00	.00	.00	2.20	-1.00	.02
280-148902-e-6	5/24/2021	11:01 PM	21.47	-1.00	7.27	.00	372.76	372.76	.00	.00	.00	3.73	-1.00	.02
280-148902-e-7	5/24/2021	11:08 PM	21.47	-1.00	7.41	.00	305.27	305.27	.00	.00	.00	3.05	-1.00	.02
280-148902-e-9	5/24/2021	11:15 PM	21.41	-1.00	7.62	.00	289.21	289.21	.00	.00	.00	2.89	-1.00	.02
280-148902-e-10	5/24/2021	11:23 PM	21.45	-1.00	7.35	.00	373.26	373.26	.00	.00	.00	3.73	-1.00	.02
280-148922-c-2	5/24/2021	11:31 PM	21.53	-1.00	6.85	.00	298.08	298.08	.00	.00	.00	2.98	-1.00	.02
CCV	5/24/2021	11:38 PM	21.57	-1.00	10.34	99.09	203.03	4.86	198.17	.00	.99	2.03	-1.00	.02
CCB	5/24/2021	11:44 PM	21.71	-1.00	7.74	.00	1.87	1.87	.00	.00	.00	.04	.06	.02
LCS	5/24/2021	11:52 PM	21.60	-1.00	10.36	99.02	199.30	1.27	198.03	.00	.99	1.99	-1.00	.02
MB	5/24/2021	11:58 PM	21.48	-1.00	7.89	.00	2.00	2.00	.00	.00	.00	.04	.06	.02
280-148922-c-4	5/25/2021	12:05 AM	21.35	-1.00	6.93	.00	301.95	301.95	.00	.00	.00	3.02	-1.00	.02
DU 280-148922-c-4	5/25/2021	12:12 AM	21.30	-1.00	6.79	.00	298.06	298.06	.00	.00	.00	2.98	-1.00	.02
280-148922-c-6	5/25/2021	12:18 AM	21.21	-1.00	7.01	.00	75.45	75.45	.00	.00	.00	.75	-1.00	.02
280-148924-c-1	5/25/2021	12:25 AM	21.16	-1.00	7.44	.00	347.67	347.67	.00	.00	.00	3.48	-1.00	.02

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Run Number 964 **Order Number** 20210524-7

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)
280-148924-c-3	5/25/2021	12:31 AM	21.14	-1.00	6.20	.00	12.06	12.06	.00	.00	.00	.14	.15	.02
280-148924-c-5	5/25/2021	12:37 AM	21.09	-1.00	7.18	.00	176.61	176.61	.00	.00	.00	1.77	-1.00	.02
280-148924-c-7	5/25/2021	12:43 AM	21.14	-1.00	6.78	.00	2.37	2.37	.00	.00	.00	.04	.05	.02
280-148964-f-1	5/25/2021	12:51 AM	21.15	-1.00	7.85	.00	446.55	446.55	.00	.00	.00	4.47	-1.00	.02
280-148964-f-2	5/25/2021	12:59 AM	21.44	-1.00	7.75	.00	326.40	326.40	.00	.00	.00	3.26	-1.00	.02
280-148964-f-3	5/25/2021	1:07 AM	21.32	-1.00	7.43	.00	360.23	360.23	.00	.00	.00	3.60	-1.00	.02
CCV	5/25/2021	1:15 AM	21.22	-1.00	10.30	98.57	203.81	6.68	197.14	.00	.99	2.04	-1.00	.02
CCB	5/25/2021	1:21 AM	21.16	-1.00	7.66	.00	1.69	1.69	.00	.00	.00	.04	.06	.02
280-148964-f-4	5/25/2021	1:27 AM	21.06	-1.00	7.07	.00	212.88	212.88	.00	.00	.00	2.13	-1.00	.02
280-148964-f-5	5/25/2021	1:36 AM	21.02	-1.00	7.63	.00	487.22	487.22	.00	.00	.00	4.87	-1.00	.02
280-148964-f-6	5/25/2021	1:45 AM	20.95	-1.00	7.71	.00	435.01	435.01	.00	.00	.00	4.35	-1.00	.02
280-148964-f-7	5/25/2021	1:52 AM	20.92	-1.00	7.58	.00	273.16	273.16	.00	.00	.00	2.73	-1.00	.02
280-148964-f-8	5/25/2021	1:59 AM	20.87	-1.00	7.76	.00	296.03	296.03	.00	.00	.00	2.96	-1.00	.02
280-148964-f-14	5/25/2021	2:08 AM	20.84	-1.00	7.83	.00	496.07	496.07	.00	.00	.00	4.96	-1.00	.02
280-148915-e-1	5/25/2021	2:29 AM	20.81	-1.00	7.97	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-148915-e-2	5/25/2021	2:49 AM	20.80	-1.00	7.95	.00	.00	.00	.00	.00	.00	.00	.00	.02
680-199076-j-1	5/25/2021	2:55 AM	20.89	-1.00	7.39	.00	103.20	103.20	.00	.00	.00	1.03	-1.00	.02
680-199137-b-4	5/25/2021	3:01 AM	20.78	-1.00	6.65	.00	178.44	178.44	.00	.00	.00	1.78	-1.00	.02
CCV	5/25/2021	3:09 AM	20.73	-1.00	10.26	96.73	201.66	8.21	193.46	.00	.97	2.02	-1.00	.02
CCB	5/25/2021	3:15 AM	20.96	-1.00	7.77	.00	2.18	2.18	.00	.00	.00	.04	.06	.02
LCS	5/25/2021	3:23 AM	21.15	-1.00	10.28	96.55	201.25	8.16	193.10	.00	.97	2.01	-1.00	.02
MB	5/25/2021	3:29 AM	21.37	-1.00	7.75	.00	1.72	1.72	.00	.00	.00	.04	.06	.02
680-199137-b-5	5/25/2021	3:35 AM	21.41	-1.00	6.66	.00	198.58	198.58	.00	.00	.00	1.99	-1.00	.02
DU 680-199137-b-5	5/25/2021	3:42 AM	21.45	-1.00	6.63	.00	207.47	207.47	.00	.00	.00	2.07	-1.00	.02
680-199137-b-6	5/25/2021	3:47 AM	21.53	-1.00	6.95	.00	46.28	46.28	.00	.00	.00	.46	-1.00	.02
680-199137-b-7	5/25/2021	3:54 AM	21.60	-1.00	7.15	.00	186.63	186.63	.00	.00	.00	1.87	-1.00	.02
680-199137-b-8	5/25/2021	4:00 AM	21.76	-1.00	6.81	.00	158.95	158.95	.00	.00	.00	1.59	-1.00	.02
680-199137-b-9	5/25/2021	4:06 AM	22.03	-1.00	7.24	.00	186.11	186.11	.00	.00	.00	1.86	-1.00	.02
680-199082-i-10	5/25/2021	4:12 AM	22.07	-1.00	7.47	.00	75.68	75.68	.00	.00	.00	.76	-1.00	.02
680-199082-i-12	5/25/2021	4:17 AM	22.03	-1.00	7.21	.00	69.44	69.44	.00	.00	.00	.69	-1.00	.02

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Run Number 964 **Order Number** 20210524-7

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)
680-199082-13	5/25/2021	4:23 AM	22.03	-1.00	7.16	.00	59.17	59.17	.00	.00	.00	.59	-1.00	.02
680-199082-14	5/25/2021	4:29 AM	22.11	-1.00	7.27	.00	70.53	70.53	.00	.00	.00	.71	-1.00	.02
CCV	5/25/2021	4:36 AM	22.16	-1.00	10.25	94.77	203.03	13.49	189.54	.00	.95	2.03	-1.00	.02
CCB	5/25/2021	4:42 AM	22.26	-1.00	7.47	.00	1.52	1.52	.00	.00	.00	.04	.06	.02
680-199082-15	5/25/2021	4:47 AM	22.25	-1.00	6.39	.00	11.81	11.81	.00	.00	.00	.13	.13	.02
680-199082-20	5/25/2021	4:52 AM	22.25	-1.00	6.89	.00	42.70	42.70	.00	.00	.00	.43	-1.00	.02
680-199082-22	5/25/2021	4:57 AM	22.25	-1.00	6.68	.00	25.11	25.11	.00	.00	.00	.25	-1.00	.02
680-199082-27	5/25/2021	5:02 AM	22.32	-1.00	6.79	.00	34.37	34.37	.00	.00	.00	.34	-1.00	.02
680-199082-31	5/25/2021	5:07 AM	22.39	-1.00	6.77	.00	36.98	36.98	.00	.00	.00	.37	-1.00	.02
CCV	5/25/2021	5:15 AM	22.57	-1.00	10.22	92.87	202.93	17.20	185.74	.00	.93	2.03	-1.00	.02
CCB	5/25/2021	5:21 AM	22.61	-1.00	7.61	.00	1.66	1.66	.00	.00	.00	.04	.06	.02

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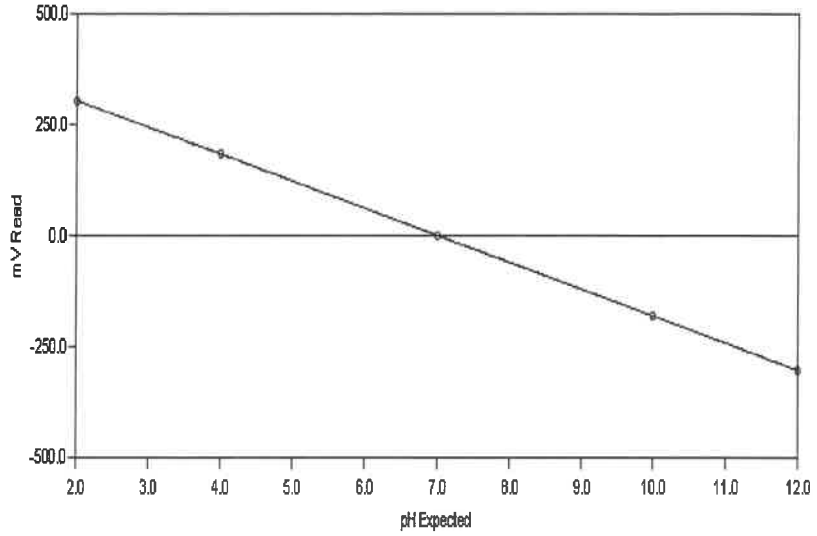
MANTECH

MANTECH INC.

Report Date: 6/1/2021 : 12:33 PM

Calibration Report

Calibration Record # 315



Calibration Settings

Calibration ID	PH	Date	6/1/2021	
Channel	1	Time	10:41 AM	
Probe Type	pH	Temperature	294.79 K	21.64 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.621	CorrCoeff	1.0000
Intercept	1.732	Equation:	Y = (-60.621) X + (1.732)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.621	-65.00	-53.00
Intercept	1.732	-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	304.07
	4.00	184.32
	7.00	1.83
	10.00	-179.44
	12.00	-302.12

Test America

Water Analysis Report

AT4 Analyst:_____

Run Number 979 **Order Number** 20210601-2

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	6/1/2021	12:54 PM	21.50	-1.00	5.49	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	6/1/2021	1:02 PM	21.58	-1.00	10.49	87.76	197.72	22.19	175.53	.00	.88	1.98	-1.00	.02
BUFFER 7	6/1/2021	1:06 PM	21.41	-1.00	6.98	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	6/1/2021	1:13 PM	21.45	-1.00	10.56	84.76	197.30	27.79	169.52	.00	.85	1.97	-1.00	.02
MB	6/1/2021	1:19 PM	21.43	-1.00	8.89	2.39	4.03	.00	3.27	.76	.02	.07	.10	.02
280-148812-m-2	6/1/2021	1:25 PM	21.19	-1.00	6.02	.00	1.47	1.47	.00	.00	.00	.04	.06	.02
DU 280-148812-m-2	6/1/2021	1:30 PM	21.19	-1.00	5.83	.00	.67	.67	.00	.00	.00	.02	.04	.02
280-148812-m-3	6/1/2021	1:41 PM	21.21	-1.00	7.66	.00	774.07	774.07	.00	.00	.00	7.74	-1.00	.02
280-148812-m-4	6/1/2021	1:52 PM	21.53	-1.00	7.59	.00	779.01	779.01	.00	.00	.00	7.79	-1.00	.02
280-148811-a-3	6/1/2021	2:00 PM	21.74	-1.00	7.56	.00	382.28	382.28	.00	.00	.00	3.82	-1.00	.02
280-148830-a-23	6/1/2021	2:07 PM	21.90	-1.00	7.36	.00	292.06	292.06	.00	.00	.00	2.92	-1.00	.02
280-148895-a-1	6/1/2021	2:15 PM	21.90	-1.00	7.79	.00	348.86	348.86	.00	.00	.00	3.49	-1.00	.02
280-148895-a-2	6/1/2021	2:24 PM	21.80	-1.00	7.34	.00	543.03	543.03	.00	.00	.00	5.43	-1.00	.02
280-148956-b-14	6/1/2021	2:30 PM	21.79	-1.00	7.15	.00	2.42	2.42	.00	.00	.00	.04	.05	.02
280-148956-b-21	6/1/2021	2:38 PM	21.73	-1.00	6.85	.00	473.16	473.16	.00	.00	.00	4.73	-1.00	.02
CCV	6/1/2021	2:46 PM	21.79	-1.00	10.46	99.87	199.67	.00	199.60	.07	1.00	2.00	-1.00	.02
CCB	6/1/2021	2:52 PM	21.80	-1.00	7.77	.00	2.04	2.04	.00	.00	.00	.04	.06	.02
280-148956-a-22	6/1/2021	2:57 PM	21.71	-1.00	5.78	.00	.61	.61	.00	.00	.00	.02	.04	.02
280-148956-b-24	6/1/2021	3:06 PM	21.70	-1.00	7.00	.00	464.74	464.74	.00	.00	.00	4.65	-1.00	.02
280-148964-f-12	6/1/2021	3:15 PM	21.73	-1.00	7.55	.00	459.49	459.49	.00	.00	.00	4.59	-1.00	.02
280-148964-f-13	6/1/2021	3:22 PM	21.70	-1.00	7.67	.00	310.77	310.77	.00	.00	.00	3.11	-1.00	.02
680-199223-b-16	6/1/2021	3:28 PM	21.73	-1.00	6.79	.00	60.10	60.10	.00	.00	.00	.60	-1.00	.02
280-148926-a-1	6/1/2021	3:34 PM	21.86	-1.00	7.20	.00	218.84	218.84	.00	.00	.00	2.19	-1.00	.02
280-148815-a-1	6/1/2021	3:41 PM	21.82	-1.00	7.66	.00	196.56	196.56	.00	.00	.00	1.97	-1.00	.02
280-148902-a-8	6/1/2021	3:49 PM	21.82	-1.00	7.43	.00	372.44	372.44	.00	.00	.00	3.72	-1.00	.02
280-148956-b-10	6/1/2021	4:00 PM	21.85	-1.00	6.91	.00	816.65	816.65	.00	.00	.00	8.17	-1.00	.02
280-148956-b-15	6/1/2021	4:12 PM	21.89	-1.00	7.15	.00	936.62	936.62	.00	.00	.00	9.37	-1.00	.02

GENERAL RESULTS REPORT.SRW

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Run Number 979 **Order Number** 20210601-2

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	6/1/2021	4:20 PM	21.93	-1.00	10.40	96.24	202.05	9.57	192.48	.00	.96	2.02	-1.00	.02
CCB	6/1/2021	4:26 PM	21.90	-1.00	7.44	.00	2.02	2.02	.00	.00	.00	.04	.06	.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): RH JO RE KM	

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
5-20-21	0920		X	GW081-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-20-21	0905		X	GW079-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C

280-148902 Chain of Custody

Signatures	Date	Time
Relinquished by:	5-20-21	1700
Received by:	5/21/21	0950
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 5018 6641 0410

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

1.0, 1.6, 1.3, 2.9, 1.3, 0.6 IP11 CF10.4

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06/10/2021

2020502

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CHAIN OF CUSTODY RECORD

Page ___ of ___

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RE KM JO	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks: standard TAT
5-19-21	1520		X	GW085-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-19-21	1455		X	MW071-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C

Bill to: Brice Engineering

Signatures	Date	Time
Relinquished by:	5-20-21	1700
Received by:	5/21/21	0950
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 5018 6641 0409

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

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2020129

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CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RH JO RE KM	

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
5-20-21	1230		X	GOO70-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-20-21	1320		X	GOO89-21A	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-20-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/21/21	0950	Airbill Number: 5018 6641 0442	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

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06/10/2021

2020505

AECOM
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CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RH JO	

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
5-20-21	1250		X	G0070-21A-MS/MSD	AQ	18	ABCDEF	X	X	X	X	X	X		6°C MS/MSD

Bill to: Brice Engineering

standard TAT

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-20-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/21/21	0950	Airbill Number: 5018 6641 0453	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

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2020506

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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): RE KM JO RH	

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
5-20-21	1210		X	GO090-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-20-21	1110		X	GO076-21A	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-20-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/21/21	0950	Airbill Number: 5018 6641 0431	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

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06/10/2021

2020504

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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): RH JO RE KM	

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
5-20-21	1000		X	GW075-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-20-21	1040		X	GW082-21A	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-20-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/21/21	0950	Airbill Number: 5018 6641 0420	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

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06/10/2021

2020503

280-148902 Waybill

650

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13

ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 13TH ST W

GRAND ISLAND, NE 68803
UNITED STATES US

SHIP DATE: 14MAY21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3409

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S180-71065

RMA:

FedEx Express

FedEx
TRK# 0221 5018 6641 0453

FRI - 21 MAY 10:30A
PRIORITY OVERNIGHT

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CO-US DEN

#5046225 05/20 56DJ3/71DC/FE4A

eurofins | Environment Testing TestAmerica

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ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 13TH ST W

GRAND ISLAND, NE 68803
UNITED STATES US

SHIP DATE: 14MAY21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3409

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S180-71065

RMA:

FedEx Express

FedEx
TRK# 0221 5018 6641 0420

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RMA:

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FedEx
TRK# 0221 5018 6641 0442

FRI - 21 MAY 10:30A
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FRI - 21 MAY 10:30A
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ORIGIN ID:PHDA (308) 379-7542
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ARVADA CO 800024517
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RMA:

FedEx Express

FedEx
TRK# 0221 5018 6641 0409

FRI - 21 MAY 10:30A
PRIORITY OVERNIGHT

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CO-US DEN

#5046225 05/20 56DJ3/71DC/FE4A

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-148902-1

Login Number: 148902
List Number: 1
Creator: Rystrom, Joshua R

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Refer to Job Narrative for details.
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	