ANALYTICAL REPORT

Job Number: 280-155015-1

Job Description: Cornhusker (CHAAP)

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

Attention: Corey Schwabenlander



Approved for release.
Patrick J McEntee
Client Service Manager
11/23/2021 5:49 PM

Patrick J McEntee, Client Service Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0107
Patrick.McEntee@Eurofinset.com
11/23/2021

cc: Dean Converse
Jared DeSadier
Mr. Anthony Farinacci

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.

Table of Contents

Cover Title Page 1

Data Summaries 5

- Definitions 5
- Case Narrative 7
- Detection Summary 10
- Client Sample Results 13
- Default Detection Limits 23
- Surrogate Summary 24
- QC Sample Results 25
- QC Association 35
- Chronicle 42
- Certification Summary 48
- Method Summary 49
- Sample Summary 50
- Manual Integration Summary 51
- Reagent Traceability 85
  - COAs 92

Organic Sample Data 254

- GC VOA 254
  - RSK_175_DOD5 254
    - RSK_175_DOD5 QC Summary 255
    - RSK_175_DOD5 Sample Data 277
    - Standards Data 328
      - RSK_175_DOD5 ICAL Data 328
      - RSK_175_DOD5 CCAL Data 408
    - Raw QC Data 492

Table of Contents

RSK_175_DOD5 Blank Data 492

RSK_175_DOD5 LCS/LCSD Data 500

RSK_175_DOD5 Duplicate/Triplicate Data 516

RSK_175_DOD5 Run Logs 521

RSK_175_DOD5 Prep Data 526

HPLC/IC 528

8330A_DOD5 528

8330A_DOD5 QC Summary 529

8330A_DOD5 Sample Data 539

Standards Data 750

8330A_DOD5 ICAL Data 750

8330A_DOD5 CCAL Data 928

Raw QC Data 1019

8330A_DOD5 Blank Data 1019

8330A_DOD5 LCS/LCSD Data 1024

8330A_DOD5 Run Logs 1036

8330A_DOD5 Prep Data 1041

Inorganic Sample Data 1043

General Chemistry Data 1043

Gen Chem Cover Page 1044

Gen Chem Sample Data 1045

Gen Chem QC Data 1069

Gen Chem ICV/CCV 1069

Gen Chem Blanks 1083

Gen Chem MS/MSD/PDS 1084

Gen Chem Duplicates 1086

Table of Contents

Gen Chem LCS/LCSD 1087

Gen Chem MDL 1091

Gen Chem Preparation Log 1109

Gen Chem Analysis Run Log 1113

Gen Chem Prep Data 1151

Gen Chem Raw Data 1191

Shipping and Receiving Documents 1479

Client Chain of Custody 1480

Sample Receipt Checklist 1486

Qualifiers

GC VOA

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

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
D	The reported value is from a dilution.
H	Sample was prepped or analyzed beyond the specified holding time
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-155015-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/2/2021 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.4º C, 1.9º C, 2.6º C and 3.1º C.

DISSOLVED GASES (GC)

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 11/08/2021 and 11/09/2021.

Samples EW7-PM25A-7-25 (280-155015-1)[2X], EW7-PM25B-7-35 (280-155015-2)[2X], EW7-PM28A-7-25 (280-155015-8)[2X] and EW7-PM24A-7-25 (280-155015-10)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

NITROAROMATICS AND NITRAMINES (HPLC)

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 11/04/2021 and analyzed on 11/05/2021 and 11/06/2021.

Surrogate recovery for the following sample in preparation batch 280-556180 and analytical batch 280-556359 was outside the lower control limits: EW7-PM25B-7-35 (280-155015-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

Surrogate recovery for the following sample in preparation batch 280-556180 and analytical batch 280-556359 was outside the upper control limits: EW7-PM25A-7-25 (280-155015-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

Surrogate recovery for the following sample in preparation batch 280-556180 and analytical batch 280-556366 was outside the lower control limits: EW7-PM28A-7-25 (280-155015-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the primary instrument.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene, RDX and 1,3,5-Trinitrobenzene for the following samples: EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5) and G0075-7 (280-155015-12) in preparation batch 280-556180 and analytical batch 280-556366 .The results from both columns has been reported and qualified in accordance with the laboratory's QAS.

In preparation batch 280-556180, the following samples required filtration to reduce matrix interferences: EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8) and EW7-PM24A-7-25 (280-155015-10).

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

ALKALINITY

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/13/2021, 11/16/2021 and 11/17/2021.

Reanalysis of the following samples were performed outside of the analytical holding time due to instrument malfunction. EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12).

Total Alkalinity as CaCO3 was detected in method blank MB 280-557616/58 at a level that was below one half the LOQ.

Total Alkalinity as CaCO3 was detected in method blank MB 280-557846/32 at a level that was below one half the LOQ.

Total Alkalinity as CaCO3 was detected in method blank MB 280-557846/6 at a level greater than one half the LOQ but below the LOQ. If the associated sample reported a result above the DL, the result has been flagged.

Total Alkalinity as CaCO3 was detected in method blank MB 280-557935/5 at a level greater than one half the LOQ but below the LOQ. If the associated sample reported a result above the DL, the result has been flagged. The associated samples results are >10x the MB. The sample results have been qualified and reported.

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

AMMONIA

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 11/18/2021, 11/21/2021 and 11/22/2021.

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

Samples EW7-PM25A-7-25 (280-155015-1)[10X], EW7-PM25B-7-35 (280-155015-2)[10X], EW7-PM27B-7-35 (280-155015-3)[10X], EW7-PM26A-7-25 (280-155015-4)[10X], EW7-PM26B-7-35 (280-155015-5)[10X], EW7-PM29A-7-25 (280-155015-6)[10X], EW7-PM29B-7-35 (280-155015-7)[10X], EW7-PM28A-7-25 (280-155015-8)[10X] and EW7-PM24A-7-25 (280-155015-10)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL KJELDAHL NITROGEN

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 11/14/2021 and 11/16/2021 and analyzed on 11/15/2021 and 11/17/2021.

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

NITRATE-NITRITE AS NITROGEN

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 11/17/2021.

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

SULFIDE

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 11/04/2021 and 11/07/2021.

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

ANIONS (28 DAYS)

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 11/20/2021 and 11/23/2021.

Sample G0075-7 (280-155015-12)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED ORGANIC CARBON

Samples EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11) and G0075-7 (280-155015-12) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/04/2021.

The following samples had a pH >2 measured at the bench; it was reduced to <2 using concentrated sulfuric acid after filtration prior to analysis. EW7-PM25A-7-25 (280-155015-1), EW7-PM25B-7-35 (280-155015-2), EW7-PM27B-7-35 (280-155015-3), EW7-PM26A-7-25 (280-155015-4), EW7-PM26B-7-35 (280-155015-5), EW7-PM29A-7-25 (280-155015-6), EW7-PM29B-7-35 (280-155015-7), EW7-PM28A-7-25 (280-155015-8), G0080-7 (280-155015-9), EW7-PM24A-7-25 (280-155015-10), G0079-7 (280-155015-11), G0075-7 (280-155015-12), (280-155015-D-10-B MS) and (280-155015-D-10-C MSD)

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

Detection Summary

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

Job ID: 280-155015-1

Client Sample ID: EW7-PM25A-7-25 — Lab Sample ID: 280-155015-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	20	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
Ammonia	3.2		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	8.2		5.0	5.0	3.4	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.081	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	4.1	J	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	690		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	32		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM25B-7-35 — Lab Sample ID: 280-155015-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	19	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
RDX	1.1	Q M J1	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
RDX	0.39	J1	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Ammonia	2.9		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.7		1.7	1.7	1.1	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.046	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	120		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	440		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	12		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM27B-7-35 — Lab Sample ID: 280-155015-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	18		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
RDX	1.1	M J1	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
RDX	0.43	J1	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Ammonia	4.2		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	6.0		1.7	1.7	1.1	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.044	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	57		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	480		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	13		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM26A-7-25 — Lab Sample ID: 280-155015-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	18	M	0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	0.46	M J1	0.21	0.20	0.085	ug/L	1		8330A	Total/NA
1,3,5-Trinitrobenzene	0.29	J1	0.21	0.20	0.085	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.67		0.11	0.10	0.046	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.7		0.11	0.10	0.052	ug/L	1		8330A	Total/NA
RDX	1.0	M	0.21	0.20	0.052	ug/L	1		8330A	Total/NA
Ammonia	2.0		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	5.1		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	81		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	460	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW7-PM26A-7-25 (Continued) — Lab Sample ID: 280-155015-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	6.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM26B-7-35 — Lab Sample ID: 280-155015-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	16		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
RDX	1.6	M J1	0.21	0.20	0.052	ug/L	1		8330A	Total/NA
RDX	0.44	M J1	0.21	0.20	0.052	ug/L	1		8330A	Total/NA
Ammonia	2.4		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	6.6		5.0	5.0	3.4	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.034	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	36		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	560	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	18		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM29A-7-25 — Lab Sample ID: 280-155015-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	18		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.4		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.046	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	31		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	430	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	9.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM29B-7-35 — Lab Sample ID: 280-155015-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	11		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.8		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.5		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.045	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	110		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	390		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM28A-7-25 — Lab Sample ID: 280-155015-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	22	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
Ammonia	4.0		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	5.1		1.7	1.7	1.1	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.049	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	22		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	520	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	14		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: 280-155015-1

Client Sample ID: G0080-7 — Lab Sample ID: 280-155015-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0069	M	0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.5		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.6		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	4.0		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	81		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	340	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM24A-7-25 — Lab Sample ID: 280-155015-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	20	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
2,4,6-Trinitrotoluene	0.14		0.11	0.10	0.045	ug/L	1		8330A	Total/NA
Ammonia	0.49		0.20	0.10	0.044	mg/L	2		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.7		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	1.1		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	45		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	520	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0079-7 — Lab Sample ID: 280-155015-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Total Kjeldahl	0.74	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	31		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	120	H B	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0075-7 — Lab Sample ID: 280-155015-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.028		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.10	J J1	0.11	0.099	0.050	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.52	J1	0.11	0.099	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.17	J1	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.30	J1	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
Ammonia	0.076	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	1.7		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	190	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	350	H B	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

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW7-PM25A-7-25
Lab Sample ID: 280-155015-1

Date Collected: 10/31/21 12:45
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**20**	**D**	0.010	0.0026	0.0013	mg/L		11/09/21 19:05	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.087	ug/L		11/05/21 16:23	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		11/06/21 02:09	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047	ug/L		11/05/21 16:23	1
2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.028	ug/L		11/05/21 16:23	1
2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042	ug/L		11/05/21 16:23	1
2-Amino-4,6-dinitrotoluene	0.10	U M Q	0.11	0.10	0.053	ug/L		11/05/21 16:23	1
2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.089	ug/L		11/05/21 16:23	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		11/05/21 16:23	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		11/05/21 16:23	1
4-Nitrotoluene	0.42	U M Q	0.43	0.42	0.10	ug/L		11/05/21 16:23	1
HMX	0.21	U Q	0.22	0.21	0.091	ug/L		11/05/21 16:23	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		11/05/21 16:23	1
Nitrobenzene	0.21	U M Q	0.22	0.21	0.095	ug/L		11/05/21 16:23	1
RDX	0.21	U M Q	0.22	0.21	0.054	ug/L		11/05/21 16:23	1
Tetryl	0.10	U M Q	0.11	0.10	0.033	ug/L		11/05/21 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*122*	*M Q*	*83 - 119*	*11/04/21 14:13*	*11/05/21 16:23*	*1*
1,2-Dinitrobenzene	*107*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 02:09*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.2**		1.0	0.50	0.22	mg/L		11/18/21 12:01	10
Nitrogen, Total Kjeldahl	**8.2**		5.0	5.0	3.4	mg/L		11/17/21 20:46	1
Nitrate Nitrite as N	**0.081**	**J**	0.10	0.050	0.019	mg/L		11/17/21 17:54	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**4.1**	**J**	5.0	2.5	1.0	mg/L		11/20/21 03:36	1
Total Alkalinity as CaCO3	**690**		10	6.4	3.1	mg/L		11/13/21 03:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**32**		1.0	0.80	0.35	mg/L		11/04/21 02:14	1

Client Sample ID: EW7-PM25B-7-35
Lab Sample ID: 280-155015-2

Date Collected: 10/31/21 14:50
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**19**	**D**	0.010	0.0026	0.0013	mg/L		11/09/21 19:18	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.083	ug/L		11/05/21 16:46	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.036	ug/L		11/06/21 02:44	1
2,4,6-Trinitrotoluene	0.099	U Q	0.11	0.099	0.045	ug/L		11/05/21 16:46	1
2,4-Dinitrotoluene	0.079	U Q M	0.099	0.079	0.027	ug/L		11/05/21 16:46	1

Client Sample ID: EW7-PM25B-7-35
Lab Sample ID: 280-155015-2
Date Collected: 10/31/21 14:50
Matrix: Water
Date Received: 11/02/21 11:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.079	U Q	0.099	0.079	0.040	ug/L		11/05/21 16:46	1
2-Amino-4,6-dinitrotoluene	0.099	U Q M	0.11	0.099	0.050	ug/L		11/05/21 16:46	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.085	ug/L		11/05/21 16:46	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19	ug/L		11/05/21 16:46	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.057	ug/L		11/05/21 16:46	1
4-Nitrotoluene	0.40	U Q M	0.41	0.40	0.099	ug/L		11/05/21 16:46	1
HMX	0.20	U Q	0.21	0.20	0.087	ug/L		11/05/21 16:46	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/05/21 16:46	1
Nitrobenzene	0.20	U Q M	0.21	0.20	0.090	ug/L		11/05/21 16:46	1
RDX	**1.1**	**Q M J1**	0.21	0.20	0.051	ug/L		11/05/21 16:46	1
RDX	**0.39**	**J1**	0.21	0.20	0.051	ug/L		11/06/21 02:44	1
Tetryl	0.099	U Q M	0.11	0.099	0.031	ug/L		11/05/21 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*82*	*Q M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 16:46*	*1*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 02:44*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.9**		1.0	0.50	0.22	mg/L		11/18/21 12:45	10
Nitrogen, Total Kjeldahl	**4.7**		1.7	1.7	1.1	mg/L		11/17/21 20:47	1
Nitrate Nitrite as N	**0.046**	**J**	0.10	0.050	0.019	mg/L		11/17/21 17:56	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**120**		5.0	2.5	1.0	mg/L		11/20/21 04:21	1
Total Alkalinity as CaCO3	**440**		10	6.4	3.1	mg/L		11/13/21 03:22	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**12**		1.0	0.80	0.35	mg/L		11/04/21 02:29	1

Client Sample ID: EW7-PM27B-7-35
Lab Sample ID: 280-155015-3
Date Collected: 10/31/21 11:05
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**18**		0.0050	0.0013	0.00063	mg/L		11/08/21 16:57	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.083	ug/L		11/05/21 17:09	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037	ug/L		11/06/21 03:19	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045	ug/L		11/05/21 17:09	1
2,4-Dinitrotoluene	0.079	U M	0.099	0.079	0.027	ug/L		11/05/21 17:09	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/05/21 17:09	1
2-Amino-4,6-dinitrotoluene	0.099	U M	0.11	0.099	0.050	ug/L		11/05/21 17:09	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 17:09	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/05/21 17:09	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		11/05/21 17:09	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.099	ug/L		11/05/21 17:09	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		11/05/21 17:09	1

Client Sample ID: EW7-PM27B-7-35
Lab Sample ID: 280-155015-3
Date Collected: 10/31/21 11:05
Matrix: Water
Date Received: 11/02/21 11:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/05/21 17:09	1
Nitrobenzene	0.20	U M	0.21	0.20	0.090	ug/L		11/05/21 17:09	1
RDX	**1.1**	**M J1**	0.21	0.20	0.051	ug/L		11/05/21 17:09	1
RDX	**0.43**	**J1**	0.21	0.20	0.051	ug/L		11/06/21 03:19	1
Tetryl	0.099	U M	0.11	0.099	0.031	ug/L		11/05/21 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 17:09*	*1*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 03:19*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**4.2**		1.0	0.50	0.22	mg/L		11/18/21 12:47	10
Nitrogen, Total Kjeldahl	**6.0**		1.7	1.7	1.1	mg/L		11/17/21 20:47	1
Nitrate Nitrite as N	**0.044**	**J**	0.10	0.050	0.019	mg/L		11/17/21 17:58	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**57**		5.0	2.5	1.0	mg/L		11/20/21 04:36	1
Total Alkalinity as CaCO3	**480**		10	6.4	3.1	mg/L		11/13/21 03:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**13**		1.0	0.80	0.35	mg/L		11/04/21 02:44	1

Client Sample ID: EW7-PM26A-7-25
Lab Sample ID: 280-155015-4
Date Collected: 10/30/21 09:25
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**18**	**M**	0.0050	0.0013	0.00063	mg/L		11/08/21 17:23	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.46**	**M J1**	0.21	0.20	0.085	ug/L		11/05/21 17:32	1
1,3,5-Trinitrobenzene	**0.29**	**J1**	0.21	0.20	0.085	ug/L		11/06/21 03:54	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		11/05/21 17:32	1
2,4,6-Trinitrotoluene	**0.67**		0.11	0.10	0.046	ug/L		11/05/21 17:32	1
2,4-Dinitrotoluene	0.081	U M	0.10	0.081	0.028	ug/L		11/05/21 17:32	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/05/21 17:32	1
2-Amino-4,6-dinitrotoluene	**1.7**		0.11	0.10	0.052	ug/L		11/05/21 17:32	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/05/21 17:32	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/05/21 17:32	1
4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.059	ug/L		11/06/21 03:54	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/06/21 03:54	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		11/05/21 17:32	1
MNX	0.41	U M	2.0	0.41	0.16	ug/L		11/05/21 17:32	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		11/05/21 17:32	1
RDX	**1.0**	**M**	0.21	0.20	0.052	ug/L		11/05/21 17:32	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 17:32	1

Client Sample ID: EW7-PM26A-7-25
Lab Sample ID: 280-155015-4

Date Collected: 10/30/21 09:25
Matrix: Water
Date Received: 11/02/21 11:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 17:32*	*1*
1,2-Dinitrobenzene	*87*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 03:54*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.0**		1.0	0.50	0.22	mg/L		11/18/21 12:49	10
Nitrogen, Total Kjeldahl	**2.0**		1.0	1.0	0.69	mg/L		11/15/21 17:51	1
Nitrate Nitrite as N	**5.1**		0.10	0.050	0.019	mg/L		11/17/21 18:00	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/04/21 11:26	1
Sulfate	**81**		5.0	2.5	1.0	mg/L		11/20/21 04:51	1
Total Alkalinity as CaCO3	**460**	**H**	10	6.4	3.1	mg/L		11/16/21 22:24	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.4**		1.0	0.80	0.35	mg/L		11/04/21 02:59	1

Client Sample ID: EW7-PM26B-7-35
Lab Sample ID: 280-155015-5

Date Collected: 10/30/21 11:00
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**16**		0.0050	0.0013	0.00063	mg/L		11/08/21 17:48	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085	ug/L		11/05/21 17:55	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/06/21 04:29	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/05/21 17:55	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/05/21 17:55	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/05/21 17:55	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.051	ug/L		11/05/21 17:55	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.086	ug/L		11/05/21 17:55	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/05/21 17:55	1
4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.058	ug/L		11/05/21 17:55	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.10	ug/L		11/05/21 17:55	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		11/05/21 17:55	1
MNX	0.40	U M	2.0	0.40	0.16	ug/L		11/05/21 17:55	1
Nitrobenzene	0.20	U M	0.21	0.20	0.092	ug/L		11/05/21 17:55	1
RDX	**1.6**	**M J1**	0.21	0.20	0.052	ug/L		11/05/21 17:55	1
RDX	**0.44**	**M J1**	0.21	0.20	0.052	ug/L		11/06/21 04:29	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/05/21 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 17:55*	*1*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 04:29*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.4**		1.0	0.50	0.22	mg/L		11/18/21 12:43	10
Nitrogen, Total Kjeldahl	**6.6**		5.0	5.0	3.4	mg/L		11/17/21 20:47	1
Nitrate Nitrite as N	**0.034**	**J**	0.10	0.050	0.019	mg/L		11/17/21 18:02	1

Client Sample ID: EW7-PM26B-7-35

Lab Sample ID: 280-155015-5

Date Collected: 10/30/21 11:00

Matrix: Water

Date Received: 11/02/21 11:00

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/04/21 11:26	1
Sulfate	**36**		5.0	2.5	1.0	mg/L		11/20/21 05:06	1
Total Alkalinity as CaCO3	**560**	**H**	10	6.4	3.1	mg/L		11/16/21 21:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**18**		1.0	0.80	0.35	mg/L		11/04/21 03:13	1

Client Sample ID: EW7-PM29A-7-25

Lab Sample ID: 280-155015-6

Date Collected: 10/30/21 12:30

Matrix: Water

Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**18**		0.0050	0.0013	0.00063	mg/L		11/08/21 18:01	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	0.082	ug/L		11/05/21 18:18	1
1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036	ug/L		11/05/21 18:18	1
2,4,6-Trinitrotoluene	0.098	U	0.11	0.098	0.044	ug/L		11/05/21 18:18	1
2,4-Dinitrotoluene	0.078	U M	0.098	0.078	0.027	ug/L		11/05/21 18:18	1
2,6-Dinitrotoluene	0.078	U	0.098	0.078	0.039	ug/L		11/05/21 18:18	1
2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050	ug/L		11/05/21 18:18	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 18:18	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/05/21 18:18	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.056	ug/L		11/05/21 18:18	1
4-Nitrotoluene	0.39	U	0.40	0.39	0.098	ug/L		11/05/21 18:18	1
HMX	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 18:18	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		11/05/21 18:18	1
Nitrobenzene	0.20	U M	0.21	0.20	0.089	ug/L		11/05/21 18:18	1
RDX	0.20	U M	0.21	0.20	0.050	ug/L		11/06/21 05:05	1
Tetryl	0.098	U M	0.11	0.098	0.031	ug/L		11/05/21 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 18:18*	*1*
1,2-Dinitrobenzene	*85*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 05:05*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.4**		1.0	0.50	0.22	mg/L		11/18/21 12:51	10
Nitrogen, Total Kjeldahl	**3.0**		1.0	1.0	0.69	mg/L		11/15/21 17:52	1
Nitrate Nitrite as N	**0.046**	**J**	0.10	0.050	0.019	mg/L		11/17/21 18:16	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/04/21 11:26	1
Sulfate	**31**		5.0	2.5	1.0	mg/L		11/20/21 05:21	1
Total Alkalinity as CaCO3	**430**	**H**	10	6.4	3.1	mg/L		11/16/21 22:16	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**9.7**		1.0	0.80	0.35	mg/L		11/04/21 03:28	1

Client Sample ID: EW7-PM29B-7-35
Lab Sample ID: 280-155015-7

Date Collected: 10/30/21 14:35
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**11**		0.0050	0.0013	0.00063	mg/L		11/08/21 18:14	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.083	ug/L		11/05/21 18:41	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037	ug/L		11/05/21 18:41	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045	ug/L		11/05/21 18:41	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		11/05/21 18:41	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/05/21 18:41	1
2-Amino-4,6-dinitrotoluene	0.099	U M	0.11	0.099	0.050	ug/L		11/05/21 18:41	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 18:41	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/05/21 18:41	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		11/05/21 18:41	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.099	ug/L		11/05/21 18:41	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		11/05/21 18:41	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/05/21 18:41	1
Nitrobenzene	0.20	U M	0.21	0.20	0.090	ug/L		11/05/21 18:41	1
RDX	0.20	U M	0.21	0.20	0.051	ug/L		11/05/21 18:41	1
Tetryl	0.099	U M	0.11	0.099	0.032	ug/L		11/05/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 18:41*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.8**		1.0	0.50	0.22	mg/L		11/18/21 13:05	10
Nitrogen, Total Kjeldahl	**3.5**		1.0	1.0	0.69	mg/L		11/15/21 17:52	1
Nitrate Nitrite as N	**0.045**	**J**	0.10	0.050	0.019	mg/L		11/17/21 18:18	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/04/21 11:26	1
Sulfate	**110**		5.0	2.5	1.0	mg/L		11/20/21 05:36	1
Total Alkalinity as CaCO3	**390**		10	6.4	3.1	mg/L		11/13/21 03:36	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.6**		1.0	0.80	0.35	mg/L		11/04/21 03:43	1

Client Sample ID: EW7-PM28A-7-25
Lab Sample ID: 280-155015-8

Date Collected: 10/30/21 16:10
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**22**	**D**	0.010	0.0026	0.0013	mg/L		11/09/21 19:45	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.082	ug/L		11/05/21 19:50	1
1,3-Dinitrobenzene	0.098	U Q	0.11	0.098	0.036	ug/L		11/06/21 07:25	1
2,4,6-Trinitrotoluene	0.098	U	0.11	0.098	0.044	ug/L		11/05/21 19:50	1
2,4-Dinitrotoluene	0.078	U M	0.098	0.078	0.027	ug/L		11/05/21 19:50	1
2,6-Dinitrotoluene	0.078	U	0.098	0.078	0.039	ug/L		11/05/21 19:50	1

Client Sample ID: EW7-PM28A-7-25
Lab Sample ID: 280-155015-8
Date Collected: 10/30/21 16:10
Matrix: Water
Date Received: 11/02/21 11:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050	ug/L		11/05/21 19:50	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 19:50	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/05/21 19:50	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		11/05/21 19:50	1
4-Nitrotoluene	0.39	U M	0.40	0.39	0.098	ug/L		11/05/21 19:50	1
HMX	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 19:50	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		11/05/21 19:50	1
Nitrobenzene	0.20	U M	0.21	0.20	0.089	ug/L		11/05/21 19:50	1
RDX	0.20	U M Q	0.21	0.20	0.051	ug/L		11/06/21 07:25	1
Tetryl	0.098	U M	0.11	0.098	0.031	ug/L		11/05/21 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*91*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 19:50*	*1*
1,2-Dinitrobenzene	*82*	*M Q*	*83 - 119*	*11/04/21 14:13*	*11/06/21 07:25*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**4.0**		1.0	0.50	0.22	mg/L		11/18/21 13:07	10
Nitrogen, Total Kjeldahl	**5.1**		1.7	1.7	1.1	mg/L		11/17/21 20:49	1
Nitrate Nitrite as N	**0.049**	**J**	0.10	0.050	0.019	mg/L		11/17/21 18:20	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/04/21 11:26	1
Sulfate	**22**		5.0	2.5	1.0	mg/L		11/20/21 05:51	1
Total Alkalinity as CaCO3	**520**	**H**	10	6.4	3.1	mg/L		11/16/21 21:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**14**		1.0	0.80	0.35	mg/L		11/04/21 03:58	1

Client Sample ID: G0080-7
Lab Sample ID: 280-155015-9
Date Collected: 10/31/21 12:35
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0069**	**M**	0.0050	0.0013	0.00063	mg/L		11/08/21 18:40	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		11/05/21 20:13	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		11/05/21 20:13	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		11/05/21 20:13	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		11/05/21 20:13	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		11/05/21 20:13	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		11/05/21 20:13	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		11/05/21 20:13	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/05/21 20:13	1
4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.059	ug/L		11/06/21 08:00	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/05/21 20:13	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		11/05/21 20:13	1
MNX	0.41	U	2.1	0.41	0.16	ug/L		11/05/21 20:13	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		11/05/21 20:13	1

Client Sample ID: G0080-7
Lab Sample ID: 280-155015-9
Date Collected: 10/31/21 12:35
Matrix: Water
Date Received: 11/02/21 11:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.21	U	0.22	0.21	0.053	ug/L		11/05/21 20:13	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		11/05/21 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*91*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 20:13*	*1*
1,2-Dinitrobenzene	*89*		*83 - 119*	*11/04/21 14:13*	*11/06/21 08:00*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.5**		0.10	0.050	0.022	mg/L		11/21/21 11:14	1
Nitrogen, Total Kjeldahl	**1.6**		1.0	1.0	0.69	mg/L		11/15/21 17:53	1
Nitrate Nitrite as N	**4.0**		0.10	0.050	0.019	mg/L		11/17/21 18:22	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**81**		5.0	2.5	1.0	mg/L		11/20/21 07:21	1
Total Alkalinity as CaCO3	**340**	**H**	10	6.4	3.1	mg/L		11/16/21 21:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.0**		1.0	0.80	0.35	mg/L		11/04/21 04:13	1

Client Sample ID: EW7-PM24A-7-25
Lab Sample ID: 280-155015-10
Date Collected: 10/31/21 16:20
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**20**	**D**	0.010	0.0026	0.0013	mg/L		11/09/21 19:58	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 20:36	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/05/21 20:36	1
2,4,6-Trinitrotoluene	**0.14**		0.11	0.10	0.045	ug/L		11/05/21 20:36	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028	ug/L		11/05/21 20:36	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/05/21 20:36	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.051	ug/L		11/05/21 20:36	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 20:36	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/05/21 20:36	1
4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.058	ug/L		11/06/21 08:35	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/06/21 08:35	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/05/21 20:36	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/05/21 20:36	1
Nitrobenzene	0.20	U M	0.21	0.20	0.091	ug/L		11/05/21 20:36	1
RDX	0.20	U M	0.21	0.20	0.052	ug/L		11/06/21 08:35	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/05/21 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*84*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 20:36*	*1*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*11/04/21 14:13*	*11/06/21 08:35*	*1*

Client Sample ID: EW7-PM24A-7-25
Lab Sample ID: 280-155015-10
Date Collected: 10/31/21 16:20
Matrix: Water
Date Received: 11/02/21 11:00

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.49**		0.20	0.10	0.044	mg/L		11/22/21 12:59	2
Nitrogen, Total Kjeldahl	**1.7**		1.0	1.0	0.69	mg/L		11/15/21 17:57	1
Nitrate Nitrite as N	**1.1**		0.10	0.050	0.019	mg/L		11/17/21 18:36	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**45**		5.0	2.5	1.0	mg/L		11/20/21 07:36	1
Total Alkalinity as CaCO3	**520**	**H**	10	6.4	3.1	mg/L		11/16/21 22:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.4**		1.0	0.80	0.35	mg/L		11/04/21 04:28	1

Client Sample ID: G0079-7
Lab Sample ID: 280-155015-11
Date Collected: 11/01/21 10:40
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U M	0.0050	0.0013	0.00063	mg/L		11/08/21 19:06	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 20:58	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		11/05/21 20:58	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		11/05/21 20:58	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/05/21 20:58	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/05/21 20:58	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		11/05/21 20:58	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/05/21 20:58	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/05/21 20:58	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059	ug/L		11/05/21 20:58	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/05/21 20:58	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		11/05/21 20:58	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		11/05/21 20:58	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		11/05/21 20:58	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/05/21 20:58	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*	*M*	*83 - 119*	*11/04/21 14:13*	*11/05/21 20:58*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:16	1
Nitrogen, Total Kjeldahl	**0.74**	**J**	1.0	1.0	0.69	mg/L		11/15/21 17:59	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 18:50	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**31**		5.0	2.5	1.0	mg/L		11/20/21 07:51	1
Total Alkalinity as CaCO3	**120**	**H B**	10	6.4	3.1	mg/L		11/17/21 17:09	1

Client Sample ID: G0079-7
Lab Sample ID: 280-155015-11
Date Collected: 11/01/21 10:40
Matrix: Water
Date Received: 11/02/21 11:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.0**		1.0	0.80	0.35	mg/L		11/04/21 05:42	1

Client Sample ID: G0075-7
Lab Sample ID: 280-155015-12
Date Collected: 11/01/21 12:05
Matrix: Water
Date Received: 11/02/21 11:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.028**		0.0050	0.0013	0.00063	mg/L		11/08/21 19:19	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.083	ug/L		11/05/21 21:21	1
1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.037	ug/L		11/05/21 21:21	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045	ug/L		11/05/21 21:21	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		11/05/21 21:21	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/05/21 21:21	1
2-Amino-4,6-dinitrotoluene	**0.10**	**J J1**	0.11	0.099	0.050	ug/L		11/05/21 21:21	1
2-Amino-4,6-dinitrotoluene	**0.52**	**J1**	0.11	0.099	0.050	ug/L		11/06/21 09:45	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 21:21	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/05/21 21:21	1
4-Amino-2,6-dinitrotoluene	**0.17**	**J1**	0.15	0.12	0.057	ug/L		11/05/21 21:21	1
4-Amino-2,6-dinitrotoluene	**0.30**	**J1**	0.15	0.12	0.057	ug/L		11/06/21 09:45	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.099	ug/L		11/05/21 21:21	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		11/05/21 21:21	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/05/21 21:21	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		11/05/21 21:21	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/05/21 21:21	1
Tetryl	0.099	U	0.11	0.099	0.031	ug/L		11/05/21 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 119*	*11/04/21 14:13*	*11/05/21 21:21*	*1*
1,2-Dinitrobenzene	*89*		*83 - 119*	*11/04/21 14:13*	*11/06/21 09:45*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.076**	**J**	0.10	0.050	0.022	mg/L		11/22/21 10:48	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/15/21 17:59	1
Nitrate Nitrite as N	**1.7**		0.10	0.050	0.019	mg/L		11/17/21 18:52	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	**190**	**D**	25	13	5.2	mg/L		11/23/21 13:51	5
Total Alkalinity as CaCO3	**350**	**H B**	10	6.4	3.1	mg/L		11/17/21 17:17	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		11/04/21 05:57	1

Default Detection Limits

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

Job ID: 280-155015-1

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: 280-155015-1

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)
280-155015-1	EW7-PM25A-7-25	122 M Q
280-155015-2	EW7-PM25B-7-35	82 Q M
280-155015-3	EW7-PM27B-7-35	93 M
280-155015-4	EW7-PM26A-7-25	95 M
280-155015-5	EW7-PM26B-7-35	94 M
280-155015-6	EW7-PM29A-7-25	98 M
280-155015-7	EW7-PM29B-7-35	98 M
280-155015-8	EW7-PM28A-7-25	91 M
280-155015-9	G0080-7	91 M
280-155015-10	EW7-PM24A-7-25	84 M
280-155015-11	G0079-7	85 M
280-155015-12	G0075-7	94
LCS 280-556180/2-A	Lab Control Sample	90
LCS 280-556180/3-A	Lab Control Sample	89 M
MB 280-556180/1-A	Method Blank	92

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)
280-155015-1	EW7-PM25A-7-25	107 M
280-155015-2	EW7-PM25B-7-35	90 M
280-155015-3	EW7-PM27B-7-35	92 M
280-155015-4	EW7-PM26A-7-25	87 M
280-155015-5	EW7-PM26B-7-35	99 M
280-155015-6	EW7-PM29A-7-25	85 M
280-155015-8	EW7-PM28A-7-25	82 M Q
280-155015-9	G0080-7	89
280-155015-10	EW7-PM24A-7-25	93 M
280-155015-12	G0075-7	89

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-556641/4
Matrix: Water
Analysis Batch: 556641

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		11/08/21 14:08	1

Lab Sample ID: LCS 280-556641/2
Matrix: Water
Analysis Batch: 556641

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.0657	0.0674		mg/L		103	73 - 125		

Lab Sample ID: LCSD 280-556641/3
Matrix: Water
Analysis Batch: 556641

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.0657	0.0674		mg/L		103	73 - 125	0	20

Lab Sample ID: 280-155015-4 DU
Matrix: Water
Analysis Batch: 556641

Client Sample ID: EW7-PM26A-7-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Methane	18	M		18.1	M	mg/L				1	20

Lab Sample ID: MB 280-556811/4
Matrix: Water
Analysis Batch: 556811

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		11/09/21 18:13	1

Lab Sample ID: LCS 280-556811/2
Matrix: Water
Analysis Batch: 556811

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.0657	0.0659		mg/L		100	73 - 125		

Lab Sample ID: LCSD 280-556811/3
Matrix: Water
Analysis Batch: 556811

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.0657	0.0665		mg/L		101	73 - 125	1	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-556180/1-A
Matrix: Water
Analysis Batch: 556359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556180

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 15:15	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/05/21 15:15	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/05/21 15:15	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/05/21 15:15	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/05/21 15:15	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/05/21 15:15	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 15:15	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/05/21 15:15	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/05/21 15:15	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/05/21 15:15	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/05/21 15:15	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/05/21 15:15	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/05/21 15:15	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/05/21 15:15	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 15:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*		*83 - 119*	*11/04/21 14:13*	*11/05/21 15:15*	*1*

Lab Sample ID: LCS 280-556180/2-A
Matrix: Water
Analysis Batch: 556359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556180

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.07		ug/L		104	73 - 125
1,3-Dinitrobenzene	2.00	1.98		ug/L		99	78 - 120
2,4,6-Trinitrotoluene	2.00	2.00		ug/L		100	71 - 123
2,4-Dinitrotoluene	2.00	1.94		ug/L		97	78 - 120
2,6-Dinitrotoluene	2.00	1.93		ug/L		96	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.84		ug/L		92	79 - 120
2-Nitrotoluene	2.00	1.57		ug/L		78	70 - 127
3-Nitrotoluene	2.00	1.55	M	ug/L		77	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.82		ug/L		91	76 - 125
4-Nitrotoluene	2.00	1.61		ug/L		81	71 - 127
HMX	2.00	1.95	M	ug/L		97	65 - 135
Nitrobenzene	2.00	1.77		ug/L		88	65 - 134
RDX	2.00	1.88		ug/L		94	68 - 130
Tetryl	2.00	1.91		ug/L		95	64 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*90*		*83 - 119*

Lab Sample ID: LCS 280-556180/3-A
Matrix: Water
Analysis Batch: 556359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556180

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.16	M	ug/L		93	57 - 132

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-558000/20
Matrix: Water
Analysis Batch: 558000

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/18/21 11:53	1

Lab Sample ID: MB 280-558000/39
Matrix: Water
Analysis Batch: 558000

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/18/21 12:31	1

Lab Sample ID: LCS 280-558000/18
Matrix: Water
Analysis Batch: 558000

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	2.44		mg/L		98	90 - 110		

Lab Sample ID: LCS 280-558000/37
Matrix: Water
Analysis Batch: 558000

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

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

Lab Sample ID: LCSD 280-558000/19
Matrix: Water
Analysis Batch: 558000

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

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

Lab Sample ID: LCSD 280-558000/38
Matrix: Water
Analysis Batch: 558000

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	2.44		mg/L		97	90 - 110	0	10

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

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

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

Method: 350.1 - Nitrogen, Ammonia (Continued)

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

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

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

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

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

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

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

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

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

Lab Sample ID: MB 280-558390/55
Matrix: Water
Analysis Batch: 558390

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.0268	J	0.10	0.050	0.022	mg/L		11/22/21 11:56	1

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.51		mg/L		100	90 - 110

Lab Sample ID: LCS 280-558390/53
Matrix: Water
Analysis Batch: 558390

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.52		mg/L		101	90 - 110

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

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

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

Lab Sample ID: LCSD 280-558390/54
Matrix: Water
Analysis Batch: 558390

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

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

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-155015-12 MS
Matrix: Water
Analysis Batch: 558390

Client Sample ID: G0075-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.076	J	1.00	1.05		mg/L		97	90 - 110

Lab Sample ID: 280-155015-12 MSD
Matrix: Water
Analysis Batch: 558390

Client Sample ID: G0075-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.076	J	1.00	1.09		mg/L		101	90 - 110	4	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-557418/12-A
Matrix: Water
Analysis Batch: 557562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 557418

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/15/21 17:47	1

Lab Sample ID: LCS 280-557418/11-A
Matrix: Water
Analysis Batch: 557562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 557418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	5.85		mg/L		98	90 - 110

Lab Sample ID: MB 280-557730/2-A
Matrix: Water
Analysis Batch: 557899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 557730

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:47	1

Lab Sample ID: LCS 280-557730/1-A
Matrix: Water
Analysis Batch: 557899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 557730

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

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-557898/22
Matrix: Water
Analysis Batch: 557898

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 17:09	1

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

Lab Sample ID: MB 280-557898/61
Matrix: Water
Analysis Batch: 557898

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 18:28	1

Lab Sample ID: LCS 280-557898/21
Matrix: Water
Analysis Batch: 557898

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	5.00		mg/L		100	90 - 110

Lab Sample ID: LCS 280-557898/59
Matrix: Water
Analysis Batch: 557898

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	5.35		mg/L		107	90 - 110

Lab Sample ID: LCSD 280-557898/60
Matrix: Water
Analysis Batch: 557898

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	5.07		mg/L		101	90 - 110	5	10

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

Lab Sample ID: MB 280-556178/2-A
Matrix: Water
Analysis Batch: 556193

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556178

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/04/21 11:26	1

Lab Sample ID: LCS 280-556178/1-A
Matrix: Water
Analysis Batch: 556193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	19.5	16.8		mg/L		86	44 - 110

Lab Sample ID: 280-155015-6 MS
Matrix: Water
Analysis Batch: 556193

Client Sample ID: EW7-PM29A-7-25
Prep Type: Total/NA
Prep Batch: 556178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.9	U	19.5	16.0		mg/L		82	44 - 110

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

Lab Sample ID: 280-155015-6 MSD — **Client Sample ID: EW7-PM29A-7-25**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556193 — **Prep Batch: 556178**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	19.5	15.2		mg/L		78	44 - 110	5	20

Lab Sample ID: MB 280-556494/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556496 — **Prep Batch: 556494**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/07/21 12:16	1

Lab Sample ID: LCS 280-556494/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556496 — **Prep Batch: 556494**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	21.3	16.0		mg/L		75	44 - 110

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-558087/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558087

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		11/19/21 11:05	1

Lab Sample ID: MB 280-558087/66 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558087

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		11/20/21 01:50	1

Lab Sample ID: LCS 280-558087/64 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	98.5		mg/L		98	87 - 112

Lab Sample ID: LCSD 280-558087/65 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558087

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	98.6		mg/L		99	87 - 112	0	10

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

Lab Sample ID: MRL 280-558087/3
Matrix: Water
Analysis Batch: 558087

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	2.54	J	mg/L		51	50 - 150		

Lab Sample ID: 280-155015-8 MS
Matrix: Water
Analysis Batch: 558087

Client Sample ID: EW7-PM28A-7-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	22		50.0	69.8		mg/L		95	87 - 112		

Lab Sample ID: 280-155015-8 MSD
Matrix: Water
Analysis Batch: 558087

Client Sample ID: EW7-PM28A-7-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	22		50.0	71.0		mg/L		98	87 - 112	2	10

Lab Sample ID: 280-155015-8 DU
Matrix: Water
Analysis Batch: 558087

Client Sample ID: EW7-PM28A-7-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	22			22.2		mg/L				0	10

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

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

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

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

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

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

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

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

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

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

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

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

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

Lab Sample ID: MB 280-556007/2-A
Matrix: Water
Analysis Batch: 556162

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.80	U	1.0	0.80	0.35	mg/L		11/04/21 00:45	1

Lab Sample ID: LCS 280-556007/1-A
Matrix: Water
Analysis Batch: 556162

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	24.6		mg/L		98	88 - 112

Lab Sample ID: 280-155015-10 MS
Matrix: Water
Analysis Batch: 556162

Client Sample ID: EW7-PM24A-7-25
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	8.4		25.0	34.2		mg/L		103	88 - 112

Lab Sample ID: 280-155015-10 MSD
Matrix: Water
Analysis Batch: 556162

Client Sample ID: EW7-PM24A-7-25
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	8.4		25.0	34.2		mg/L		103	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-557616/58
Matrix: Water
Analysis Batch: 557616

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	3.11	J	10	6.4	3.1	mg/L		11/13/21 01:18	1

Lab Sample ID: LCS 280-557616/57
Matrix: Water
Analysis Batch: 557616

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	207		mg/L		103	89 - 109

Lab Sample ID: MB 280-557846/32
Matrix: Water
Analysis Batch: 557846

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	4.41	J	10	6.4	3.1	mg/L		11/16/21 21:11	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-557846/6
Matrix: Water
Analysis Batch: 557846

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	5.37	J	10	6.4	3.1	mg/L		11/16/21 18:06	1

Lab Sample ID: LCS 280-557846/31
Matrix: Water
Analysis Batch: 557846

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	212		mg/L		106	89 - 109

Lab Sample ID: LCSD 280-557846/5
Matrix: Water
Analysis Batch: 557846

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3	200	209		mg/L		105	89 - 109	1	10

Lab Sample ID: 280-155015-5 DU
Matrix: Water
Analysis Batch: 557846

Client Sample ID: EW7-PM26B-7-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	560	H	567		mg/L		0.7	10

Lab Sample ID: MB 280-557935/5
Matrix: Water
Analysis Batch: 557935

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	5.76	J	10	6.4	3.1	mg/L		11/17/21 16:22	1

Lab Sample ID: LCS 280-557935/4
Matrix: Water
Analysis Batch: 557935

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	212		mg/L		106	89 - 109

GC VOA

Analysis Batch: 556641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	RSK-175	
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	RSK-175	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	RSK-175	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	RSK-175	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	RSK-175	
280-155015-9	G0080-7	Total/NA	Water	RSK-175	
280-155015-11	G0079-7	Total/NA	Water	RSK-175	
280-155015-12	G0075-7	Total/NA	Water	RSK-175	
MB 280-556641/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-556641/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-556641/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-155015-4 DU	EW7-PM26A-7-25	Total/NA	Water	RSK-175	

Analysis Batch: 556811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	RSK-175	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	RSK-175	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	RSK-175	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	RSK-175	
MB 280-556811/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-556811/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-556811/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 556180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	3535	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	3535	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	3535	
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	3535	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	3535	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	3535	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	3535	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	3535	
280-155015-9	G0080-7	Total/NA	Water	3535	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	3535	
280-155015-11	G0079-7	Total/NA	Water	3535	
280-155015-12	G0075-7	Total/NA	Water	3535	
MB 280-556180/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-556180/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-556180/3-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 556359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	8330A	556180
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	8330A	556180
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	8330A	556180
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	8330A	556180
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	8330A	556180
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	8330A	556180

HPLC/IC (Continued)

Analysis Batch: 556359 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	8330A	556180
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	8330A	556180
280-155015-9	G0080-7	Total/NA	Water	8330A	556180
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	8330A	556180
280-155015-11	G0079-7	Total/NA	Water	8330A	556180
280-155015-12	G0075-7	Total/NA	Water	8330A	556180
MB 280-556180/1-A	Method Blank	Total/NA	Water	8330A	556180
LCS 280-556180/2-A	Lab Control Sample	Total/NA	Water	8330A	556180
LCS 280-556180/3-A	Lab Control Sample	Total/NA	Water	8330A	556180

Analysis Batch: 556366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	8330A	556180
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	8330A	556180
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	8330A	556180
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	8330A	556180
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	8330A	556180
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	8330A	556180
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	8330A	556180
280-155015-9	G0080-7	Total/NA	Water	8330A	556180
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	8330A	556180
280-155015-12	G0075-7	Total/NA	Water	8330A	556180

General Chemistry

Filtration Batch: 556007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Dissolved	Water	FILTRATION	
280-155015-2	EW7-PM25B-7-35	Dissolved	Water	FILTRATION	
280-155015-3	EW7-PM27B-7-35	Dissolved	Water	FILTRATION	
280-155015-4	EW7-PM26A-7-25	Dissolved	Water	FILTRATION	
280-155015-5	EW7-PM26B-7-35	Dissolved	Water	FILTRATION	
280-155015-6	EW7-PM29A-7-25	Dissolved	Water	FILTRATION	
280-155015-7	EW7-PM29B-7-35	Dissolved	Water	FILTRATION	
280-155015-8	EW7-PM28A-7-25	Dissolved	Water	FILTRATION	
280-155015-9	G0080-7	Dissolved	Water	FILTRATION	
280-155015-10	EW7-PM24A-7-25	Dissolved	Water	FILTRATION	
280-155015-11	G0079-7	Dissolved	Water	FILTRATION	
280-155015-12	G0075-7	Dissolved	Water	FILTRATION	
MB 280-556007/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-556007/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-155015-10 MS	EW7-PM24A-7-25	Dissolved	Water	FILTRATION	
280-155015-10 MSD	EW7-PM24A-7-25	Dissolved	Water	FILTRATION	

Analysis Batch: 556162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Dissolved	Water	9060A	556007
280-155015-2	EW7-PM25B-7-35	Dissolved	Water	9060A	556007
280-155015-3	EW7-PM27B-7-35	Dissolved	Water	9060A	556007
280-155015-4	EW7-PM26A-7-25	Dissolved	Water	9060A	556007
280-155015-5	EW7-PM26B-7-35	Dissolved	Water	9060A	556007

General Chemistry (Continued)

Analysis Batch: 556162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-6	EW7-PM29A-7-25	Dissolved	Water	9060A	556007
280-155015-7	EW7-PM29B-7-35	Dissolved	Water	9060A	556007
280-155015-8	EW7-PM28A-7-25	Dissolved	Water	9060A	556007
280-155015-9	G0080-7	Dissolved	Water	9060A	556007
280-155015-10	EW7-PM24A-7-25	Dissolved	Water	9060A	556007
280-155015-11	G0079-7	Dissolved	Water	9060A	556007
280-155015-12	G0075-7	Dissolved	Water	9060A	556007
MB 280-556007/2-A	Method Blank	Dissolved	Water	9060A	556007
LCS 280-556007/1-A	Lab Control Sample	Dissolved	Water	9060A	556007
280-155015-10 MS	EW7-PM24A-7-25	Dissolved	Water	9060A	556007
280-155015-10 MSD	EW7-PM24A-7-25	Dissolved	Water	9060A	556007

Prep Batch: 556178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	9030B	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	9030B	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	9030B	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	9030B	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	9030B	
MB 280-556178/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556178/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-155015-6 MS	EW7-PM29A-7-25	Total/NA	Water	9030B	
280-155015-6 MSD	EW7-PM29A-7-25	Total/NA	Water	9030B	

Analysis Batch: 556193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	9034	556178
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	9034	556178
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	9034	556178
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	9034	556178
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	9034	556178
MB 280-556178/2-A	Method Blank	Total/NA	Water	9034	556178
LCS 280-556178/1-A	Lab Control Sample	Total/NA	Water	9034	556178
280-155015-6 MS	EW7-PM29A-7-25	Total/NA	Water	9034	556178
280-155015-6 MSD	EW7-PM29A-7-25	Total/NA	Water	9034	556178

Prep Batch: 556494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	9030B	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	9030B	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	9030B	
280-155015-9	G0080-7	Total/NA	Water	9030B	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	9030B	
280-155015-11	G0079-7	Total/NA	Water	9030B	
280-155015-12	G0075-7	Total/NA	Water	9030B	
MB 280-556494/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556494/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 556496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	9034	556494

General Chemistry (Continued)

Analysis Batch: 556496 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	9034	556494
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	9034	556494
280-155015-9	G0080-7	Total/NA	Water	9034	556494
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	9034	556494
280-155015-11	G0079-7	Total/NA	Water	9034	556494
280-155015-12	G0075-7	Total/NA	Water	9034	556494
MB 280-556494/2-A	Method Blank	Total/NA	Water	9034	556494
LCS 280-556494/1-A	Lab Control Sample	Total/NA	Water	9034	556494

Prep Batch: 557418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	351.2	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	351.2	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	351.2	
280-155015-9	G0080-7	Total/NA	Water	351.2	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	351.2	
280-155015-11	G0079-7	Total/NA	Water	351.2	
280-155015-12	G0075-7	Total/NA	Water	351.2	
MB 280-557418/12-A	Method Blank	Total/NA	Water	351.2	
LCS 280-557418/11-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 557562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	351.2	557418
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	351.2	557418
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	351.2	557418
280-155015-9	G0080-7	Total/NA	Water	351.2	557418
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	351.2	557418
280-155015-11	G0079-7	Total/NA	Water	351.2	557418
280-155015-12	G0075-7	Total/NA	Water	351.2	557418
MB 280-557418/12-A	Method Blank	Total/NA	Water	351.2	557418
LCS 280-557418/11-A	Lab Control Sample	Total/NA	Water	351.2	557418

Analysis Batch: 557616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	SM 2320B	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	SM 2320B	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	SM 2320B	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	SM 2320B	
MB 280-557616/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-557616/57	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 557730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	351.2	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	351.2	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	351.2	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	351.2	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	351.2	
MB 280-557730/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-557730/1-A	Lab Control Sample	Total/NA	Water	351.2	

General Chemistry

Analysis Batch: 557846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	SM 2320B	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	SM 2320B	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	SM 2320B	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	SM 2320B	
280-155015-9	G0080-7	Total/NA	Water	SM 2320B	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	SM 2320B	
MB 280-557846/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-557846/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-557846/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-557846/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-155015-5 DU	EW7-PM26B-7-35	Total/NA	Water	SM 2320B	

Analysis Batch: 557898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	353.2	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	353.2	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	353.2	
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	353.2	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	353.2	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	353.2	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	353.2	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	353.2	
280-155015-9	G0080-7	Total/NA	Water	353.2	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	353.2	
280-155015-11	G0079-7	Total/NA	Water	353.2	
280-155015-12	G0075-7	Total/NA	Water	353.2	
MB 280-557898/22	Method Blank	Total/NA	Water	353.2	
MB 280-557898/61	Method Blank	Total/NA	Water	353.2	
LCS 280-557898/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-557898/59	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-557898/60	Lab Control Sample Dup	Total/NA	Water	353.2	

Analysis Batch: 557899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	351.2	557730
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	351.2	557730
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	351.2	557730
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	351.2	557730
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	351.2	557730
MB 280-557730/2-A	Method Blank	Total/NA	Water	351.2	557730
LCS 280-557730/1-A	Lab Control Sample	Total/NA	Water	351.2	557730

Analysis Batch: 557935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-11	G0079-7	Total/NA	Water	SM 2320B	
280-155015-12	G0075-7	Total/NA	Water	SM 2320B	
MB 280-557935/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-557935/4	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry

Analysis Batch: 558000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	350.1	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	350.1	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	350.1	
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	350.1	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	350.1	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	350.1	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	350.1	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	350.1	
MB 280-558000/20	Method Blank	Total/NA	Water	350.1	
MB 280-558000/39	Method Blank	Total/NA	Water	350.1	
LCS 280-558000/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-558000/37	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558000/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-558000/38	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 558087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-1	EW7-PM25A-7-25	Total/NA	Water	9056A	
280-155015-2	EW7-PM25B-7-35	Total/NA	Water	9056A	
280-155015-3	EW7-PM27B-7-35	Total/NA	Water	9056A	
280-155015-4	EW7-PM26A-7-25	Total/NA	Water	9056A	
280-155015-5	EW7-PM26B-7-35	Total/NA	Water	9056A	
280-155015-6	EW7-PM29A-7-25	Total/NA	Water	9056A	
280-155015-7	EW7-PM29B-7-35	Total/NA	Water	9056A	
280-155015-8	EW7-PM28A-7-25	Total/NA	Water	9056A	
280-155015-9	G0080-7	Total/NA	Water	9056A	
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	9056A	
280-155015-11	G0079-7	Total/NA	Water	9056A	
MB 280-558087/6	Method Blank	Total/NA	Water	9056A	
MB 280-558087/66	Method Blank	Total/NA	Water	9056A	
LCS 280-558087/64	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558087/65	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558087/3	Lab Control Sample	Total/NA	Water	9056A	
280-155015-8 MS	EW7-PM28A-7-25	Total/NA	Water	9056A	
280-155015-8 MSD	EW7-PM28A-7-25	Total/NA	Water	9056A	
280-155015-8 DU	EW7-PM28A-7-25	Total/NA	Water	9056A	

Analysis Batch: 558260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-9	G0080-7	Total/NA	Water	350.1	
280-155015-11	G0079-7	Total/NA	Water	350.1	
MB 280-558260/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558260/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558260/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 558390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-10	EW7-PM24A-7-25	Total/NA	Water	350.1	
280-155015-12	G0075-7	Total/NA	Water	350.1	
MB 280-558390/20	Method Blank	Total/NA	Water	350.1	
MB 280-558390/55	Method Blank	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 558390 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-558390/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-558390/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558390/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-558390/54	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155015-12 MS	G0075-7	Total/NA	Water	350.1	
280-155015-12 MSD	G0075-7	Total/NA	Water	350.1	

Analysis Batch: 558471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155015-12	G0075-7	Total/NA	Water	9056A	
MB 280-558471/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558471/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558471/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558471/3	Lab Control Sample	Total/NA	Water	9056A	

Client Sample ID: EW7-PM25A-7-25

Lab Sample ID: 280-155015-1

Date Collected: 10/31/21 12:45

Matrix: Water

Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	556811	11/09/21 19:05	CAS	TAL DEN
Total/NA	Prep	3535			480.9 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 16:23	JZ	TAL DEN
Total/NA	Prep	3535			480.9 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 02:09	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 12:01	JJM	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 20:46	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 17:54	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 03:36	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 02:14	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 03:15	ECC	TAL DEN

Client Sample ID: EW7-PM25B-7-35

Lab Sample ID: 280-155015-2

Date Collected: 10/31/21 14:50

Matrix: Water

Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	556811	11/09/21 19:18	CAS	TAL DEN
Total/NA	Prep	3535			505.5 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 16:46	JZ	TAL DEN
Total/NA	Prep	3535			505.5 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 02:44	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 12:45	JJM	TAL DEN
Total/NA	Prep	351.2			15 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 20:47	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 17:56	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 04:21	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 02:29	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 03:22	ECC	TAL DEN

Client Sample ID: EW7-PM27B-7-35

Lab Sample ID: 280-155015-3

Date Collected: 10/31/21 11:05

Matrix: Water

Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 16:57	CAS	TAL DEN

Client Sample ID: EW7-PM27B-7-35
Lab Sample ID: 280-155015-3

Date Collected: 10/31/21 11:05
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			505.3 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 17:09	JZ	TAL DEN
Total/NA	Prep	3535			505.3 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 03:19	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 12:47	JJM	TAL DEN
Total/NA	Prep	351.2			15 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 20:47	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 17:58	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 04:36	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 02:44	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 03:29	ECC	TAL DEN

Client Sample ID: EW7-PM26A-7-25
Lab Sample ID: 280-155015-4

Date Collected: 10/30/21 09:25
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 17:23	CAS	TAL DEN
Total/NA	Prep	3535			492.1 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 17:32	JZ	TAL DEN
Total/NA	Prep	3535			492.1 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 03:54	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 12:49	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:51	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:00	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556178	11/04/21 10:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556193	11/04/21 11:26	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 04:51	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 02:59	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/16/21 22:24	ECC	TAL DEN

Client Sample ID: EW7-PM26B-7-35
Lab Sample ID: 280-155015-5

Date Collected: 10/30/21 11:00
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 17:48	CAS	TAL DEN
Total/NA	Prep	3535			494.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 17:55	JZ	TAL DEN

Client Sample ID: EW7-PM26B-7-35
Lab Sample ID: 280-155015-5

Date Collected: 10/30/21 11:00
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			494.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 04:29	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 12:43	JJM	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 20:47	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:02	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556178	11/04/21 10:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556193	11/04/21 11:26	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 05:06	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 03:13	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/16/21 21:21	ECC	TAL DEN

Client Sample ID: EW7-PM29A-7-25
Lab Sample ID: 280-155015-6

Date Collected: 10/30/21 12:30
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 18:01	CAS	TAL DEN
Total/NA	Prep	3535			510.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 18:18	JZ	TAL DEN
Total/NA	Prep	3535			510.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 05:05	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 12:51	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:52	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:16	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556178	11/04/21 10:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556193	11/04/21 11:26	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 05:21	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 03:28	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/16/21 22:16	ECC	TAL DEN

Client Sample ID: EW7-PM29B-7-35
Lab Sample ID: 280-155015-7

Date Collected: 10/30/21 14:35
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 18:14	CAS	TAL DEN
Total/NA	Prep	3535			504.2 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 18:41	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 13:05	JJM	TAL DEN

Client Sample ID: EW7-PM29B-7-35
Lab Sample ID: 280-155015-7

Date Collected: 10/30/21 14:35
Matrix: Water
Date Received: 11/02/21 11:00

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	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:52	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:18	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556178	11/04/21 10:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556193	11/04/21 11:26	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 05:36	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 03:43	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 03:36	ECC	TAL DEN

Client Sample ID: EW7-PM28A-7-25
Lab Sample ID: 280-155015-8

Date Collected: 10/30/21 16:10
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	556811	11/09/21 19:45	CAS	TAL DEN
Total/NA	Prep	3535			509.9 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 19:50	JZ	TAL DEN
Total/NA	Prep	3535			509.9 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 07:25	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	558000	11/18/21 13:07	JJM	TAL DEN
Total/NA	Prep	351.2			15 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 20:49	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:20	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556178	11/04/21 10:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556193	11/04/21 11:26	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 05:51	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 03:58	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/16/21 21:51	ECC	TAL DEN

Client Sample ID: G0080-7
Lab Sample ID: 280-155015-9

Date Collected: 10/31/21 12:35
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 18:40	CAS	TAL DEN
Total/NA	Prep	3535			485.2 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 20:13	JZ	TAL DEN
Total/NA	Prep	3535			485.2 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 08:00	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:14	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:53	SVC	TAL DEN

Client Sample ID: G0080-7
Lab Sample ID: 280-155015-9

Date Collected: 10/31/21 12:35
Matrix: Water
Date Received: 11/02/21 11:00

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	557898	11/17/21 18:22	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 07:21	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 04:13	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/16/21 21:58	ECC	TAL DEN

Client Sample ID: EW7-PM24A-7-25
Lab Sample ID: 280-155015-10

Date Collected: 10/31/21 16:20
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	556811	11/09/21 19:58	CAS	TAL DEN
Total/NA	Prep	3535			498.1 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 20:36	JZ	TAL DEN
Total/NA	Prep	3535			498.1 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 08:35	JZ	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	558390	11/22/21 12:59	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:57	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:36	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 07:36	SPG	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 04:28	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/16/21 22:42	ECC	TAL DEN

Client Sample ID: G0079-7
Lab Sample ID: 280-155015-11

Date Collected: 11/01/21 10:40
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 19:06	CAS	TAL DEN
Total/NA	Prep	3535			491.9 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 20:58	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:16	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:59	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:50	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558087	11/20/21 07:51	SPG	TAL DEN

Client Sample ID: G0079-7
Lab Sample ID: 280-155015-11

Date Collected: 11/01/21 10:40
Matrix: Water
Date Received: 11/02/21 11:00

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	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 05:42	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557935	11/17/21 17:09	ECC	TAL DEN

Client Sample ID: G0075-7
Lab Sample ID: 280-155015-12

Date Collected: 11/01/21 12:05
Matrix: Water
Date Received: 11/02/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556641	11/08/21 19:19	CAS	TAL DEN
Total/NA	Prep	3535			505.2 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 21:21	JZ	TAL DEN
Total/NA	Prep	3535			505.2 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 09:45	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558390	11/22/21 10:48	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557418	11/14/21 16:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557562	11/15/21 17:59	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:52	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	558471	11/23/21 13:51	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556007	11/03/21 10:54	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556162	11/04/21 05:57	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557935	11/17/21 17:17	ECC	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Brice Environmental Services, Corp
Job ID: 280-155015-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

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

Method Summary

Client: Brice Environmental Services, Corp
Job ID: 280-155015-1
Project/Site: Cornhusker (CHAAP)

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	TAL DEN
8330A	Nitroaromatics and Nitramines (HPLC)	EPA	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL DEN
9056A	Anions, Ion Chromatography	SW846	TAL DEN
9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL DEN
FILTRATION	Sample Filtration	None	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

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

Job ID: 280-155015-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155015-1	EW7-PM25A-7-25	Water	10/31/21 12:45	11/02/21 11:00
280-155015-2	EW7-PM25B-7-35	Water	10/31/21 14:50	11/02/21 11:00
280-155015-3	EW7-PM27B-7-35	Water	10/31/21 11:05	11/02/21 11:00
280-155015-4	EW7-PM26A-7-25	Water	10/30/21 09:25	11/02/21 11:00
280-155015-5	EW7-PM26B-7-35	Water	10/30/21 11:00	11/02/21 11:00
280-155015-6	EW7-PM29A-7-25	Water	10/30/21 12:30	11/02/21 11:00
280-155015-7	EW7-PM29B-7-35	Water	10/30/21 14:35	11/02/21 11:00
280-155015-8	EW7-PM28A-7-25	Water	10/30/21 16:10	11/02/21 11:00
280-155015-9	G0080-7	Water	10/31/21 12:35	11/02/21 11:00
280-155015-10	EW7-PM24A-7-25	Water	10/31/21 16:20	11/02/21 11:00
280-155015-11	G0079-7	Water	11/01/21 10:40	11/02/21 11:00
280-155015-12	G0075-7	Water	11/01/21 12:05	11/02/21 11:00

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/2 Client Sample ID:

Date Analyzed: 09/24/21 13:28 Lab File ID: 004F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.29	Peak assignment corrected	sciannac	09/24/21 13:54
Ethane	1.56	Peak assignment corrected	sciannac	09/24/21 13:54
Ethylene	1.86	Peak assignment corrected	sciannac	09/24/21 13:54
Acetylene	4.18	Peak assignment corrected	sciannac	09/24/21 13:55

Lab Sample ID: IC 280-550959/2 Client Sample ID:

Date Analyzed: 09/24/21 13:28 Lab File ID: 004F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.69	Peak assignment corrected	sciannac	09/24/21 13:54
Ethylene	2.61	Peak assignment corrected	sciannac	09/24/21 13:54
Acetylene	2.76	Peak assignment corrected	sciannac	09/24/21 13:55
Ethane	3.03	Peak assignment corrected	sciannac	09/24/21 13:54

Lab Sample ID: IC 280-550959/4 Client Sample ID:

Date Analyzed: 09/24/21 13:54 Lab File ID: 006F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

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

Lab Sample ID: IC 280-550959/4 Client Sample ID:

Date Analyzed: 09/24/21 13:54 Lab File ID: 006F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

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

Date Analyzed: 09/24/21 14:33 Lab File ID: 009F0701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:46

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 556641

Lab Sample ID: CCVRT 280-556641/1 Client Sample ID:

Date Analyzed: 11/08/21 13:28 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.87	Split Peak	sciannac	11/08/21 14:29

Lab Sample ID: CCVRT 280-556641/1 Client Sample ID:

Date Analyzed: 11/08/21 13:28 Lab File ID: 001F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Split Peak	sciannac	11/08/21 14:29

Lab Sample ID: CCV 280-556641/19 Client Sample ID:

Date Analyzed: 11/08/21 17:10 Lab File ID: 018F1801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.86	Split Peak	sciannac	11/09/21 09:59
Acetylene	4.24	Split Peak	sciannac	11/09/21 09:59

Lab Sample ID: CCV 280-556641/19 Client Sample ID:

Date Analyzed: 11/08/21 17:10 Lab File ID: 018F1801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.59	Split Peak	sciannac	11/09/21 09:59
Acetylene	2.74	Split Peak	sciannac	11/09/21 09:59

Lab Sample ID: 280-155015-4 Client Sample ID: EW7-PM26A-7-25

Date Analyzed: 11/08/21 17:23 Lab File ID: 019F1901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.66	Wrong Peak	sciannac	11/09/21 10:02

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 556641

Lab Sample ID: 280-155015-4 DU Client Sample ID: EW7-PM26A-7-25 DU

Date Analyzed: 11/08/21 17:35 Lab File ID: 020F2001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.67	Peak not integrated	sciannac	11/09/21 14:05

Lab Sample ID: 280-155015-9 Client Sample ID: G0080-7

Date Analyzed: 11/08/21 18:40 Lab File ID: 025F2501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.29	Peak assignment corrected	sciannac	11/09/21 10:05

Lab Sample ID: 280-155015-9 Client Sample ID: G0080-7

Date Analyzed: 11/08/21 18:40 Lab File ID: 025F2501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.67	Wrong Peak	sciannac	11/09/21 10:05

Lab Sample ID: 280-155015-11 Client Sample ID: G0079-7

Date Analyzed: 11/08/21 19:06 Lab File ID: 027F2701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.28	Peak assignment corrected	sciannac	11/09/21 10:06

Lab Sample ID: 280-155015-11 Client Sample ID: G0079-7

Date Analyzed: 11/08/21 19:06 Lab File ID: 027F2701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.67	Peak not integrated	sciannac	11/09/21 10:06

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 556641

Lab Sample ID: CCV 280-556641/30 Client Sample ID:

Date Analyzed: 11/08/21 19:32 Lab File ID: 029F2901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.86	Peak assignment corrected	sciannac	11/09/21 10:07
Acetylene	4.24	Split Peak	sciannac	11/09/21 10:08

Lab Sample ID: CCV 280-556641/30 Client Sample ID:

Date Analyzed: 11/08/21 19:32 Lab File ID: 029F2901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.59	Peak assignment corrected	sciannac	11/09/21 10:07
Acetylene	2.74	Peak assignment corrected	sciannac	11/09/21 10:07

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 556811

Lab Sample ID: CCVRT 280-556811/1 Client Sample ID:

Date Analyzed: 11/09/21 17:35 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.03	Peak assignment corrected	sciannac	11/10/21 09:18

Lab Sample ID: CCVRT 280-556811/1 Client Sample ID:

Date Analyzed: 11/09/21 17:35 Lab File ID: 001F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.76	Peak assignment corrected	sciannac	11/10/21 09:18

Lab Sample ID: CCV 280-556811/28 Client Sample ID:

Date Analyzed: 11/09/21 23:25 Lab File ID: 028F2801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.24	Wrong Peak	sciannac	11/12/21 10:25

Lab Sample ID: CCV 280-556811/28 Client Sample ID:

Date Analyzed: 11/09/21 23:25 Lab File ID: 028F2801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.74	Wrong Peak	sciannac	11/12/21 10:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

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.: 280-155015-1

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.: 280-155015-1

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.: 280-155015-1

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.: 280-155015-1

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.: 280-155015-1

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.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: CCV 280-556359/7 Client Sample ID:

Date Analyzed: 11/05/21 14:27 Lab File ID: 11050007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	11/05/21 14:53

Lab Sample ID: CCV 280-556359/9 Client Sample ID:

Date Analyzed: 11/05/21 14:50 Lab File ID: 11050009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	11/05/21 15:50
DNX	6.81	Baseline	zhangji	11/05/21 15:50

Lab Sample ID: LCS 280-556180/2-A Client Sample ID:

Date Analyzed: 11/05/21 15:38 Lab File ID: 11050012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	11/05/21 16:07
3-Nitrotoluene	13.68	Baseline	zhangji	11/05/21 16:07

Lab Sample ID: LCS 280-556180/3-A Client Sample ID:

Date Analyzed: 11/05/21 16:00 Lab File ID: 11050013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.23	Baseline	zhangji	11/05/21 17:38
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 17:38

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155015-1 Client Sample ID: EW7-PM25A-7-25

Date Analyzed: 11/05/21 16:23 Lab File ID: 11050014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 17:39
1,3-Dinitrobenzene	9.31	Baseline	zhangji	11/05/21 17:39
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:39
2-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:39
4-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:39
MNX		Invalid Compound ID	zhangji	11/05/21 17:39
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 17:39
RDX		Invalid Compound ID	zhangji	11/05/21 17:39
Tetryl		Invalid Compound ID	zhangji	11/05/21 17:39

Lab Sample ID: 280-155015-2 Client Sample ID: EW7-PM25B-7-35

Date Analyzed: 11/05/21 16:46 Lab File ID: 11050015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.64	Baseline	zhangji	11/05/21 17:40
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 17:40
1,3-Dinitrobenzene	9.32	Baseline	zhangji	11/05/21 17:40
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:40
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:40
4-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:40
MNX		Invalid Compound ID	zhangji	11/05/21 17:40
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 17:40
Tetryl		Invalid Compound ID	zhangji	11/05/21 17:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155015-3 Client Sample ID: EW7-PM27B-7-35

Date Analyzed: 11/05/21 17:09 Lab File ID: 11050016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.63	Baseline	zhangji	11/05/21 17:41
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 17:41
1,3-Dinitrobenzene	9.31	Baseline	zhangji	11/05/21 17:41
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/05/21 17:41
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:41
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:41
4-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 17:41
MNX		Invalid Compound ID	zhangji	11/05/21 17:40
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 17:41
Tetryl		Invalid Compound ID	zhangji	11/05/21 17:41

Lab Sample ID: 280-155015-4 Client Sample ID: EW7-PM26A-7-25

Date Analyzed: 11/05/21 17:32 Lab File ID: 11050017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.62	Baseline	zhangji	11/05/21 18:40
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 18:40
1,3,5-Trinitrobenzene	8.69	Baseline	zhangji	11/05/21 18:40
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/05/21 18:39
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:39
MNX		Invalid Compound ID	zhangji	11/05/21 18:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155015-5 Client Sample ID: EW7-PM26B-7-35

Date Analyzed: 11/05/21 17:55 Lab File ID: 11050018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.63	Baseline	zhangji	11/05/21 18:41
1,2-Dinitrobenzene	8.59	Baseline	zhangji	11/05/21 18:40
1,3-Dinitrobenzene	9.33	Baseline	zhangji	11/05/21 18:41
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/05/21 18:40
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:41
2-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:41
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:41
4-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:41
MNX		Invalid Compound ID	zhangji	11/05/21 18:40
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 18:41
Tetryl		Invalid Compound ID	zhangji	11/05/21 18:41

Lab Sample ID: 280-155015-6 Client Sample ID: EW7-PM29A-7-25

Date Analyzed: 11/05/21 18:18 Lab File ID: 11050019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.63	Baseline	zhangji	11/05/21 18:59
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 18:59
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:59
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 18:59
MNX		Invalid Compound ID	zhangji	11/05/21 18:59
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 18:59
Tetryl		Invalid Compound ID	zhangji	11/05/21 18:59

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155015-7 Client Sample ID: EW7-PM29B-7-35

Date Analyzed: 11/05/21 18:41 Lab File ID: 11050020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 19:59
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 19:59
4-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 19:59
MNX		Invalid Compound ID	zhangji	11/05/21 19:59
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 19:59
RDX		Invalid Compound ID	zhangji	11/05/21 19:59
Tetryl		Invalid Compound ID	zhangji	11/05/21 19:59

Lab Sample ID: CCV 280-556359/21 Client Sample ID:

Date Analyzed: 11/05/21 19:04 Lab File ID: 11050021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/05/21 19:59

Lab Sample ID: CCV 280-556359/22 Client Sample ID:

Date Analyzed: 11/05/21 19:27 Lab File ID: 11050022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/05/21 20:00
DNX	6.80	Baseline	zhangji	11/05/21 20:00

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155015-8 Client Sample ID: EW7-PM28A-7-25

Date Analyzed: 11/05/21 19:50 Lab File ID: 11050023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.63	Baseline	zhangji	11/05/21 20:38
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 20:38
1,3-Dinitrobenzene	9.32	Baseline	zhangji	11/05/21 20:38
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/05/21 20:38
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 20:38
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/05/21 20:38
4-Nitrotoluene		Invalid Compound ID	zhangji	11/05/21 20:38
MNX		Invalid Compound ID	zhangji	11/05/21 20:38
Nitrobenzene		Invalid Compound ID	zhangji	11/05/21 20:38
Tetryl		Invalid Compound ID	zhangji	11/05/21 20:38

Lab Sample ID: 280-155015-9 Client Sample ID: G0080-7

Date Analyzed: 11/05/21 20:13 Lab File ID: 11050024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 20:39

Lab Sample ID: 280-155015-10 Client Sample ID: EW7-PM24A-7-25

Date Analyzed: 11/05/21 20:36 Lab File ID: 11050025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.64	Baseline	zhangji	11/06/21 10:11
1,2-Dinitrobenzene	8.60	Baseline	zhangji	11/06/21 10:11
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 10:10
MNX		Invalid Compound ID	zhangji	11/06/21 10:10
Nitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:10
Tetryl		Invalid Compound ID	zhangji	11/06/21 10:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155015-11 Client Sample ID: G0079-7

Date Analyzed: 11/05/21 20:58 Lab File ID: 11050026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:11

Lab Sample ID: 280-155015-12 Client Sample ID: G0075-7

Date Analyzed: 11/05/21 21:21 Lab File ID: 11050027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:11
MNX		Invalid Compound ID	zhangji	11/06/21 10:11

Lab Sample ID: CCV 280-556359/33 Client Sample ID:

Date Analyzed: 11/05/21 23:39 Lab File ID: 11050033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:12

Lab Sample ID: CCV 280-556359/34 Client Sample ID:

Date Analyzed: 11/06/21 00:02 Lab File ID: 11050034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/06/21 10:13
DNX	6.80	Baseline	zhangji	11/06/21 10:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556359

Lab Sample ID: CCV 280-556359/42 Client Sample ID:

Date Analyzed: 11/06/21 03:05 Lab File ID: 11050042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	11/06/21 10:17
DNX	6.81	Baseline	zhangji	11/06/21 10:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

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.: 280-155015-1

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.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556366

Lab Sample ID: 280-155015-1 Client Sample ID: EW7-PM25A-7-25

Date Analyzed: 11/06/21 02:09 Lab File ID: 11050028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/06/21 12:34
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/06/21 12:34
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:34
RDX		Invalid Compound ID	zhangji	11/06/21 12:34
1,2-Dinitrobenzene	12.93	Baseline Smoothing	zhangji	11/06/21 12:34
2-Nitrotoluene	16.63	Baseline Smoothing	zhangji	11/06/21 12:34

Lab Sample ID: 280-155015-2 Client Sample ID: EW7-PM25B-7-35

Date Analyzed: 11/06/21 02:44 Lab File ID: 11050029.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:34
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:35
1,2-Dinitrobenzene	12.90	Baseline Smoothing	zhangji	11/06/21 12:34

Lab Sample ID: 280-155015-3 Client Sample ID: EW7-PM27B-7-35

Date Analyzed: 11/06/21 03:19 Lab File ID: 11050030.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.34	Baseline Smoothing	zhangji	11/06/21 12:35
2-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:35
Nitrobenzene	11.78	Baseline Smoothing	zhangji	11/06/21 12:35
1,2-Dinitrobenzene	12.92	Baseline Smoothing	zhangji	11/06/21 12:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556366

Lab Sample ID: 280-155015-4 Client Sample ID: EW7-PM26A-7-25

Date Analyzed: 11/06/21 03:54 Lab File ID: 11050031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:36
Nitrobenzene		Invalid Compound ID	zhangji	11/06/21 12:35
1,2-Dinitrobenzene	12.92	Baseline Smoothing	zhangji	11/06/21 12:36
2-Amino-4,6-dinitrotoluene	18.22	Baseline Smoothing	zhangji	11/06/21 12:36
2,4,6-Trinitrotoluene	25.03	Baseline Smoothing	zhangji	11/06/21 12:36

Lab Sample ID: 280-155015-5 Client Sample ID: EW7-PM26B-7-35

Date Analyzed: 11/06/21 04:29 Lab File ID: 11050032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.35	Baseline Smoothing	zhangji	11/06/21 12:36
RDX	8.73	Baseline Smoothing	zhangji	11/06/21 12:36
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:37
HMX		Invalid Compound ID	zhangji	11/06/21 12:36
Nitrobenzene	11.79	Baseline Smoothing	zhangji	11/06/21 12:36
1,2-Dinitrobenzene	12.93	Baseline Smoothing	zhangji	11/06/21 12:37
2-Nitrotoluene	16.65	Baseline Smoothing	zhangji	11/06/21 12:37
2-Amino-4,6-dinitrotoluene	18.27	Baseline Smoothing	zhangji	11/06/21 12:37

Lab Sample ID: 280-155015-6 Client Sample ID: EW7-PM29A-7-25

Date Analyzed: 11/06/21 05:05 Lab File ID: 11050033.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:37
RDX		Invalid Compound ID	zhangji	11/06/21 12:37
1,2-Dinitrobenzene	12.92	Baseline Smoothing	zhangji	11/06/21 12:37
2-Nitrotoluene	16.62	Baseline Smoothing	zhangji	11/06/21 12:38
2-Amino-4,6-dinitrotoluene	18.25	Baseline Smoothing	zhangji	11/06/21 12:37

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556366

Lab Sample ID: 280-155015-8 Client Sample ID: EW7-PM28A-7-25

Date Analyzed: 11/06/21 07:25 Lab File ID: 11050037.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:38
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:38
Nitrobenzene		Invalid Compound ID	zhangji	11/06/21 12:38
RDX		Invalid Compound ID	zhangji	11/06/21 12:38
1,2-Dinitrobenzene	12.93	Baseline Smoothing	zhangji	11/06/21 12:38

Lab Sample ID: 280-155015-9 Client Sample ID: G0080-7

Date Analyzed: 11/06/21 08:00 Lab File ID: 11050038.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:39

Lab Sample ID: 280-155015-10 Client Sample ID: EW7-PM24A-7-25

Date Analyzed: 11/06/21 08:35 Lab File ID: 11050039.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.33	Baseline Smoothing	zhangji	11/06/21 12:40
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:40
RDX		Invalid Compound ID	zhangji	11/06/21 12:39
Nitrobenzene	11.79	Baseline Smoothing	zhangji	11/06/21 12:40
1,2-Dinitrobenzene	12.93	Baseline Smoothing	zhangji	11/06/21 12:39
2-Amino-4,6-dinitrotoluene	18.27	Baseline Smoothing	zhangji	11/06/21 12:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556366

Lab Sample ID: 280-155015-12 Client Sample ID: G0075-7

Date Analyzed: 11/06/21 09:45 Lab File ID: 11050041.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 12:40

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 557417

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 557417

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

Date Analyzed: 11/14/21 18:35 Lab File ID: 0008.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Baseline Smoothing	gonzalezsp	11/15/21 07:45

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

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

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

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

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

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 558471

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

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

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 555743

Lab Sample ID: STD 280-555743/2 IC Client Sample ID:

Date Analyzed: 11/01/21 17:25 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.14	Baseline Smoothing	jindaratc	11/01/21 18:37
Bromide	6.37	Baseline Smoothing	gonzalezsp	11/03/21 09:10
Sulfate	9.94	Baseline Smoothing	gonzalezsp	11/03/21 09:10

Lab Sample ID: STD 280-555743/3 IC Client Sample ID:

Date Analyzed: 11/01/21 17:40 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.14	Baseline Smoothing	jindaratc	11/01/21 18:36
Bromide	6.36	Baseline Smoothing	gonzalezsp	11/03/21 09:10
Sulfate	9.94	Baseline Smoothing	gonzalezsp	11/03/21 09:11

Lab Sample ID: STD 280-555743/4 IC Client Sample ID:

Date Analyzed: 11/01/21 17:55 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.15	Baseline Smoothing	jindaratc	11/01/21 18:15
Sulfate	9.95	Baseline Smoothing	jindaratc	11/01/21 18:16

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 555743

Lab Sample ID: STD 280-555743/5 IC Client Sample ID:

Date Analyzed: 11/01/21 18:10 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.16	Baseline Smoothing	jindaratc	11/01/21 18:36
Sulfate	9.93	Baseline Smoothing	gonzalezsp	11/02/21 12:32

Lab Sample ID: STD 280-555743/6 IC Client Sample ID:

Date Analyzed: 11/01/21 18:25 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.18	Baseline Smoothing	gonzalezsp	11/02/21 12:32
Sulfate	9.92	Baseline Smoothing	gonzalezsp	11/02/21 12:32

Lab Sample ID: STD 280-555743/7 IC Client Sample ID:

Date Analyzed: 11/01/21 18:40 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.90	Baseline Smoothing	gonzalezsp	11/02/21 12:33

Lab Sample ID: ICV 280-555743/8 Client Sample ID:

Date Analyzed: 11/01/21 18:54 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.15	Baseline Smoothing	gonzalezsp	11/02/21 12:33
Sulfate	9.93	Baseline Smoothing	gonzalezsp	11/03/21 09:15

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 555743

Lab Sample ID: ICB 280-555743/9 Client Sample ID:

Date Analyzed: 11/01/21 19:09 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.00	Baseline Smoothing	gonzalezsp	11/03/21 09:15

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 558087

Lab Sample ID: CCB 280-558087/2 Client Sample ID:

Date Analyzed: 11/19/21 10:05 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.83	Baseline Smoothing	gonzalezsp	11/19/21 16:46

Lab Sample ID: CCB 280-558087/18 Client Sample ID:

Date Analyzed: 11/19/21 14:05 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.83	Baseline Smoothing	gonzalezsp	11/19/21 16:49

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00508	11/21/21	11/14/21	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 cal_00509	11/28/21	11/21/21	Di Water, Lot na	100 mL	NH3 CAL STD_00033	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00033	02/28/22		Ricca, Lot 4008G09		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00493	11/21/21	11/14/21	na, Lot na	100 mL	NH3 ICV STD_00032	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00032	08/01/22		Inorganic Ventures, Lot N2-NH669544		(Purchased Reagent)		Ammonia	1002 mg/L
350.1 ICV_00494	11/28/21	11/21/21	na, Lot na	100 mL	NH3 ICV STD_00032	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00032	08/01/22		Inorganic Ventures, Lot N2-NH669544		(Purchased Reagent)		Ammonia	1002 mg/L
8330 DMT_00008	05/31/21	01/08/21	Acetonitrile, Lot 257727	5 mL	MNX,TNX,DNX_00051	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00051	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00009	12/02/21	06/02/21	Acetonitrile, Lot ACN 237	5 mL	MNX,TNX,DNX_00059	1 mL	MNX	23.34 ug/mL
.MNX,TNX,DNX_00059	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		MNX	116.7 ug/mL
8330 LCS_00108	09/02/21	03/31/21	Acetonitrile, Lot Acetonitrile_00050	100 mL	8330LCSMix1_00121	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00023	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.8330LCSMix1_00121	08/31/25		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00023	11/30/25		Restek, Lot A0165983		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetryl	1000 ug/mL
8330 LCS_00110	09/10/22	09/10/21	Acetonitrile, Lot Acetonitrile_00056	100 mL	8330_NG_Stk_00105	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00106	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00106	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00108	1 mL	PETN	100 ug/mL
					8330LCSMix1_00124	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00024	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					PicricARestek_00098	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00105	09/10/22		Restek, Lot A0172805		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00106	09/10/22		Restek, Lot A0172805		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00106	09/10/22		Restek, Lot A0168448		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00108	09/10/22		Restek, Lot A0168448		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00124	09/10/22		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00024	09/10/22		Restek, Lot A0165983		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.PicricARestek_00098	09/10/22		Restek, Lot A0164473		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00009	05/31/21	08/14/20	Acetonitrile, Lot Acetonitrile_00045	25 mL	MNX,TNX,DNX_00048	1 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00049	0.5 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00050	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00048	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00049	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00050	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330_OP_DMT_00010	05/31/21	03/03/21	Acetonitrile, Lot Acetonitrile_00051	20 mL	MNX,TNX,DNX_00052	1 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00053	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00052	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00053	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00011	04/30/22	06/01/21	Acetonitrile, Lot Acetonitrile_00054	10 mL	MNX,TNX,DNX_00054	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00054	04/30/22		Agilent, Lot 0006594482		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00067	05/22/21	11/18/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00094	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00064	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00094	06/30/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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_00069	03/31/22	10/22/21	Acetonitrile, Lot ACN_237	10 mL	8330ICALStock_00031	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
.8330ICALStock_00031	03/31/22	04/30/21	Acetonitrile, Lot ACN_237	10 mL	8330 Stock_TS_00018	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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
					8330SurrStkSS_00188	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00192	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00193	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00185	05/31/25	Restek, Lot A0160559			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00188	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00192	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00193	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00126	03/09/22	09/09/21	Acetonitrile, Lot Acetonitrile_00056	500 mL	8330SurrStkSS_00187	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00195	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00197	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00200	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00202	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00187	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00195	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00197	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00200	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00202	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01005	11/16/21	11/09/21	Di Water, Lot na	1000 mL	Alk stk std_00022	4 mL	Total Alkalinity as CaCO3	200 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.Alk stk std_00022	10/30/22		SPEX, Lot 2-85BT		(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
Alk daily lcs_01006	11/19/21	11/12/21	Di Water, Lot na	1000 mL	Alk stk std_00022	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00022	10/30/22		SPEX, Lot 2-85BT		(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00391	11/03/21	10/27/21	Di Water, Lot na	100 mL	IC CL cal_00064	25 mL	Chloride	250 mg/L
					IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC CL cal_00064	02/28/22		SPEX CertiPrep, Lot 5-67CL-2Y		(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00062	12/30/21		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00393	11/17/21	11/10/21	Di Water, Lot na	100 mL	IC CL cal_00064	25 mL	Chloride	250 mg/L
					IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC CL cal_00064	02/28/22		SPEX CertiPrep, Lot 5-67CL-2Y		(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00062	12/30/21		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00394	11/23/21	11/16/21	Di Water, Lot na	100 mL	IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00062	12/30/21		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00605	11/03/21	10/27/21	Di Water, Lot NA	100 mL	IC BR ICV_00021	5 mL	Bromide	50 mg/L
					IC FL cal_00016	5 mL	Fluoride	50 mg/L
.IC BR ICV_00021	04/01/22		ricca, Lot 4010N41		(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00016	01/31/22		Ricca, Lot 2007C85		(Purchased Reagent)		Fluoride	1000 mg/L
IC Cal low_00607	11/17/21	11/10/21	Di Water, Lot NA	100 mL	IC BR ICV_00021	5 mL	Bromide	50 mg/L
					IC FL cal_00016	5 mL	Fluoride	50 mg/L
.IC BR ICV_00021	04/01/22		ricca, Lot 4010N41		(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00016	01/31/22		Ricca, Lot 2007C85		(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01845	11/23/21	11/16/21	Di Water, Lot 27	200 mL	IC sulfatecal_00063	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00063	02/28/22		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00022	07/06/22		ERA, Lot 060720m		(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00730	11/23/21	11/16/21	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00026	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00026	09/06/22	11/16/21	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00006	09/29/23		FISHER, Lot 147276		(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00601	11/22/21	11/15/21	Di Water, Lot NA	100 mL	NOXT Cal STD_00025	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00025	10/31/22		RICCA, Lot 2104e50		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00577	11/22/21	11/15/21	Di Water, Lot NA	100 mL	NOXT ICV STD_00024	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00024	02/10/22		ERA, Lot 190220m		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
RSK175methane_00010	04/16/22		Supelco Analytical, Lot 160-401480003-1		(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00031	03/09/22		Matheson, Lot DL0396162		(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
RSK7gasMathes_00034	03/22/23		Matheson, Lot 9301615705		(Purchased Reagent)		Methane	6570.3 ug/L
SFD ICV INT_02019	01/10/22	10/10/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.6555 g	Sulfide	976.019 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SFD ICV INT_02020	01/10/22	10/10/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.9851 g	Sulfide	1064.02 mg/L
.50% NaOH_00022	06/30/23	RICCA, Lot 1006F87			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24	Acros, Lot A0412804			(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00826	12/14/21	11/14/21	Di Water, Lot 1	100 mL	TKN 100PPM_00139	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00139	12/14/21	11/14/21	Di Water, Lot 1	500 mL	TKN CAL STD_00019	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00019	08/31/24	nsi lab solutions, Lot 200817			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TKN ICV 25_00112	12/14/21	11/14/21	DI water, Lot 1	100 mL	TKN ICV 100_00101	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00101	12/14/21	11/14/21	Di Water, Lot 1	500 mL	TKN ICV_00013	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00013	07/02/22	ERA, Lot 200220m			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00047	01/31/22	Ricca, Lot 1102654			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00052	06/30/23	Agilent, Lot 0006606278			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							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 LCS_00110

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0104610-006 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

Reagent

8330 Stock_TS_00015

Agilent

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 1 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
RDX	000121-82-4	RM10915	1000 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM06608	1002 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM14290	1002 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1004 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM10279	1004 ± 5 µg/mL
tetryl	000479-45-8	RM14651	1002 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	NT00450	1004 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1000 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1001 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1002 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1004 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1001 ± 5 µg/mL

Matrix: acetonitrile

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

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 2 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System

ISO17025 Cert No.
AT-1937

Reagent

8330 Stock_TS_00018

Agilent

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 1 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
RDX	000121-82-4	RM10915	1000 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM06608	1002 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM14290	1002 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1004 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM10279	1004 ± 5 µg/mL
tetryl	000479-45-8	RM14651	1002 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	NT00450	1004 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1000 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1001 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1002 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1004 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1001 ± 5 µg/mL

Matrix: acetonitrile

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

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 2 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System

ISO17025 Cert No.
AT-1937

Reagent

8330_NG_Stk_00094

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.:** A0161450

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

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

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

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

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

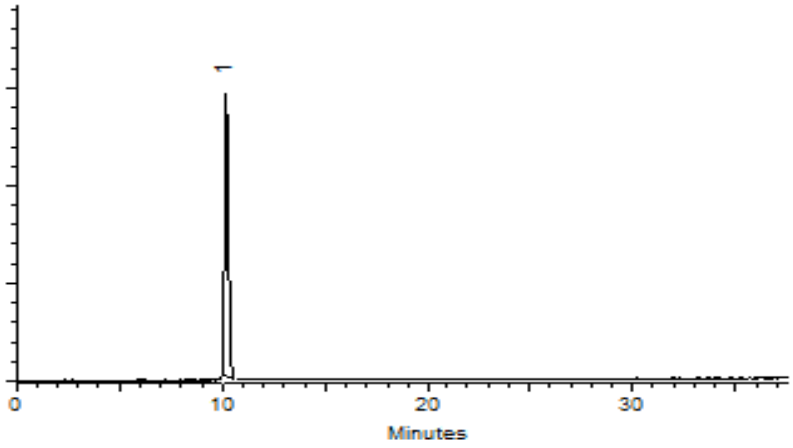
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jun-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG_Stk_00105

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.:** A0172805

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : May 31, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,000.0 µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 276.2417	µg/mL	Unstressed
	Purity 99%		+/- 321.4093	µg/mL	Stressed

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

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

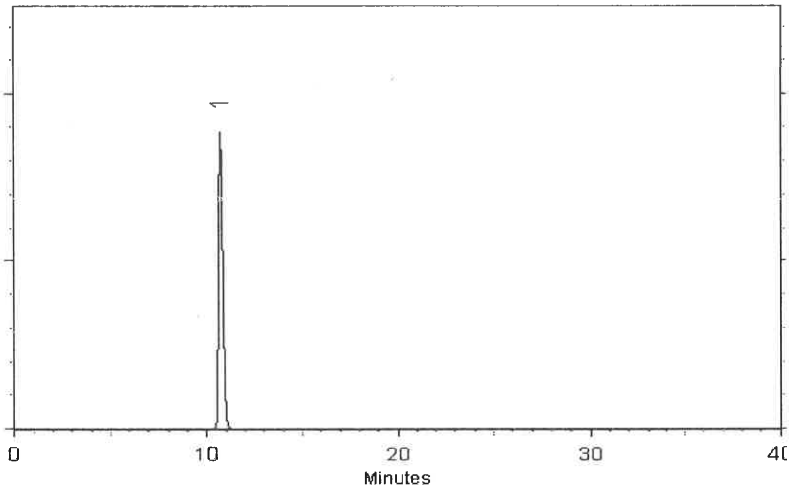
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Cathleen Soltis - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jun-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG_Stk_00106

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.:** A0172805

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : May 31, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,000.0 µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 276.2417	µg/mL	Unstressed
	Purity 99%		+/- 321.4093	µg/mL	Stressed

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

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

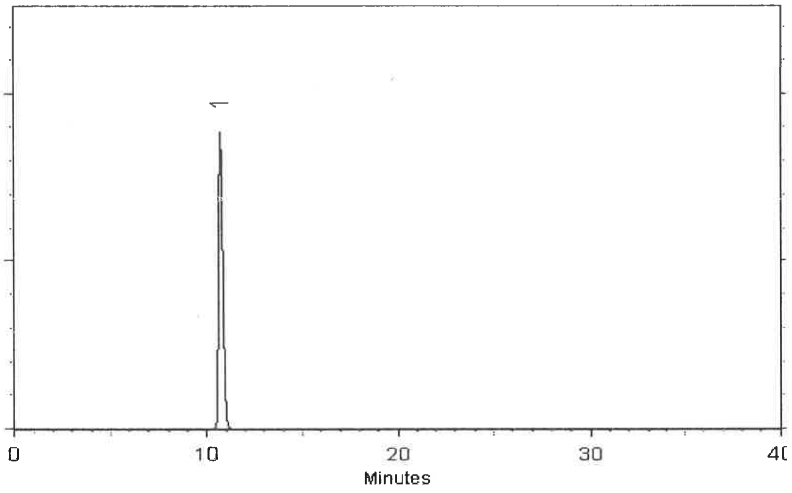
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Cathleen Soltis - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jun-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_OP_DMT_00009

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0094226-006 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

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

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

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

Reagent

8330_OP_DMT_00011

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0102004-006 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

Reagent

8330_PETN_Stk_00087

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

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.:** A0154763

Description : Custom PETN Standard

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

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

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

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

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

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

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

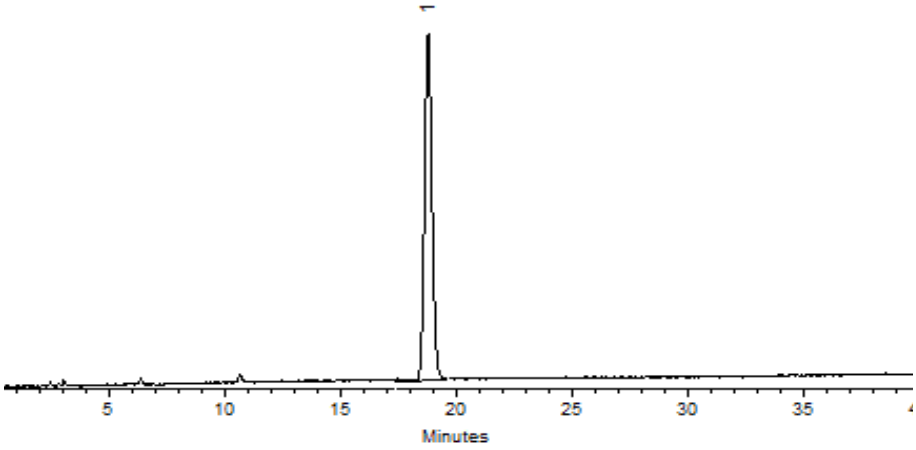
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00106

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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

Description : Custom PETN Standard

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

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

Expiration Date : January 31, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,008.0 µg/mL	+/- 46.5717	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.6836	µg/mL	Unstressed
	Purity 99%		+/- 321.9236	µg/mL	Stressed

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

Rec 2/9/21 3 vials
AL

Reagent

8330_PETN_Stk_00108

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

Description : Custom PETN Standard

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

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

Expiration Date : January 31, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,008.0 µg/mL	+/- 46.5717	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.6836	µg/mL	Unstressed
	Purity 99%		+/- 321.9236	µg/mL	Stressed

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

Rec 21/21 3 vials
AL

Reagent

8330LCSMix1_00121

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

RESTEK CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

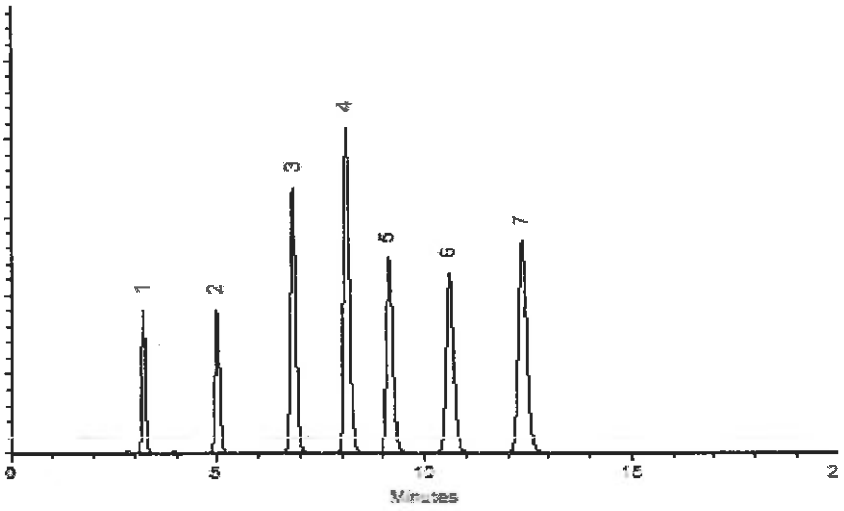
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Dalton Stover - Operations Technician I

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSMix1_00124

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

RESTEK CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

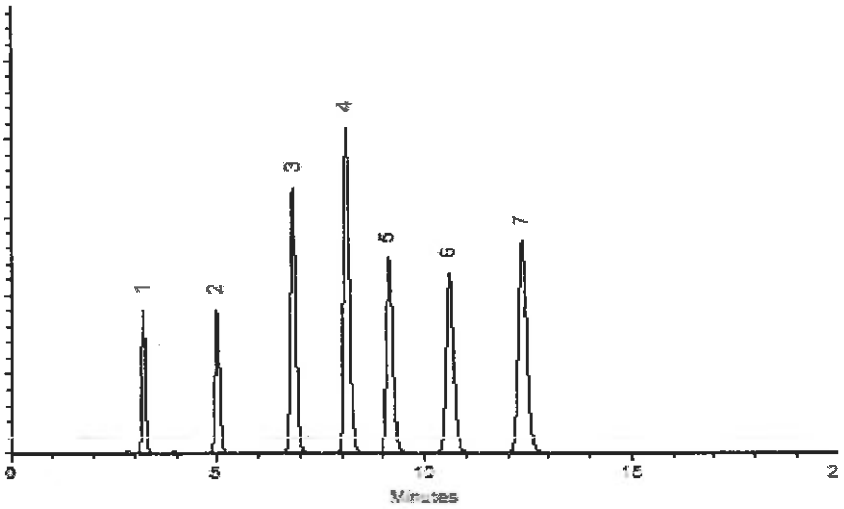
Flow Rate:
1.0 ml/min.

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Calibration Mix #2

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSmix2_00024

Rec 1/22/21 at 2 vials

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Calibration Mix #2

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330PAStkPS_00064

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

Date Certified: Apr 22, 2019
Expiration: May 22, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

8330Surrogate_00124

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0100173-006 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

860-270-C-1-A

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

280-146579-B-1-A

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

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

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

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

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

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

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

Reagent

8330Surrogate_00126

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0104566-006 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

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

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

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

280-152538-B-6-A

Reagent

8330SurrStkSS_00185

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

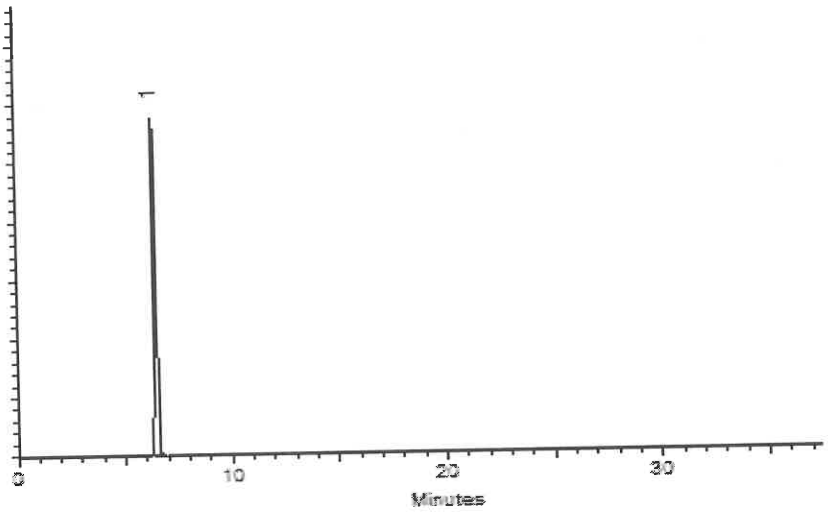
Flow Rate:
1.0 ml/min.

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_00187

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00188

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00195

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00197

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00200

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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_00202

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

Sample

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

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

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

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

See reverse side for additional information

Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

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

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

Reagent

8330SurrStock_00168

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

Alk daily lcs_01005

spex certiprep

ACCREDITED
Reference Materials Producer
Cert# 2495.01

SPEXertificate®
Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

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

Description: Custom Standard

Matrix: H_2O

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

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

Certified Value:

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

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

Date of Certification: OCT - - 2021

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2021 | Spex, an Antylia Scientific company.

Report of Certification

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

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

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

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

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

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

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

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

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

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

spex® an antylia scientific company

203 Norcross Avenue • Metuchen, NJ 08840
www.spexcertiprep.com • Email: CRMSales@spex.com
Phone: 1.800.LAB.SPEX • 1.732.549.7144 Fax: 732.603.9647

Reagent

Alk stk std_00022

spex certiprep

ACCREDITED
Reference Materials Producer
Cert# 2495.01

SPEXertificate®
Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

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

Description: Custom Standard

Matrix: H_2O

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

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

Certified Value:

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

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

Date of Certification: OCT - - 2021

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2021 | Spex, an Antylia Scientific company.

Report of Certification

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

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

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

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

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

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

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

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

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

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

spex® an antylia scientific company

203 Norcross Avenue • Metuchen, NJ 08840
www.spexcertiprep.com • Email: CRMSales@spex.com
Phone: 1.800.LAB.SPEX • 1.732.549.7144 Fax: 732.603.9647

Reagent

IC BR ICV_00021

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 4010N41 **Product Number:** 1180

Manufacture Date: OCT 26, 2020

Expiration Date: APR 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br^-)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br^-)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br?)	ASTM (D 4327)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months
1180-4	120 mL natural poly	18 months

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

Chris Collins (10/26/2020)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

IC CL cal_00064

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 5-67CL-2X

Description: 1000 µg/mL Chloride

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 998 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 09141H. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 998 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 997 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_3^-	<0.06
F^-	<0.05	$PO4^{-3}$	<0.03
NO_2^-	<0.05	$SO4^{-2}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: FEB - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2020 SPEX CertiPrep, LLC

Report of Certification

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

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

Material Source:

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

Instructions for Use:

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

Method of Preparation:

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

Homogeneity:

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

Statistical Estimator and Confidence Limits:

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

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

Certification Report:

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

Legal Notice:

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

SPEX CertiPrep
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 MS/MSD S04_00006

Fisher Scientific

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

Certificate of Analysis

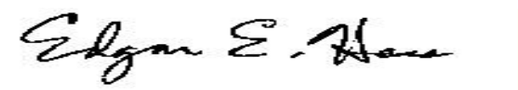
Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

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

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

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





Lab Manager Fair Lawn

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

Reagent

IC SO4 ICV_00022

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: 1000 mg/L Sulfate
Catalog Number: 062-125mL, 995-500mL
Lot No. 060720m
Starting Material: Potassium Sulfate (K_2SO_4)
Matrix: 18 megohm deionized water
Density: 1.0001 ± 0.0010 mg/L at 21.2 °C and 755 mm Hg
Verification Method: Ion Chromatography
Certificate Issue Date: July 13, 2020
Expiration Date: July 6, 2022
Revision Number: Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Sulfate	1000	0.984	3181	97.7

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

Reagent

IC sulfatecal_00062

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-48SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 997 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 1002 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	NO_2^-	<0.004
Cl^-	<0.01	NO_3^-	<0.006
F^-	<0.008	$PO4^{-3}$	<0.01

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: DEC -- 2020 Certifying Officer: Katherine Cullinan, 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*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 997 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 1002 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	NO_2^-	<0.004
Cl^-	<0.01	NO_3^-	<0.006
F^-	<0.008	$PO4^{-3}$	<0.01

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: FEB - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2019 SPEX Certiprep, LLC

Report of Certification

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

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

Material Source:

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

Instructions for Use:

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

Method of Preparation:

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

Homogeneity:

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

Statistical Estimator and Confidence Limits:

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

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

Certification Report:

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

Legal Notice:

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

SPEX CertiPrep
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

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.

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_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.

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_00054

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 10-Mar-2021

Lot Number: 0006594482 **Expiration Date:** 30-Apr-2022

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

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	99.7 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

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

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

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

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

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

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

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

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

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

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006594482

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

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

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

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

Reagent

MNX,TNX,DNX_00059

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Number: 0006599273

Lot Issue Date: 02-Apr-2021

Expiration Date: 30-Apr-2022

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

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.4 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

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

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

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

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

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

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

Page: 1 of 2

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

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

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

Certificate of Analysis

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

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

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

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

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

Reagent

NH3 CAL STD_00033

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 4008G09 **Product Number:** 5455

Manufacture Date: AUG 17, 2020

Expiration Date: FEB 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months
5455-4	120 mL natural poly	18 months

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



Chris Collins (08/17/2020)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

NH3 ICV STD_00032

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	N2-NH669544
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.0000%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1005 ± 3 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

Assay Method #2 **997 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

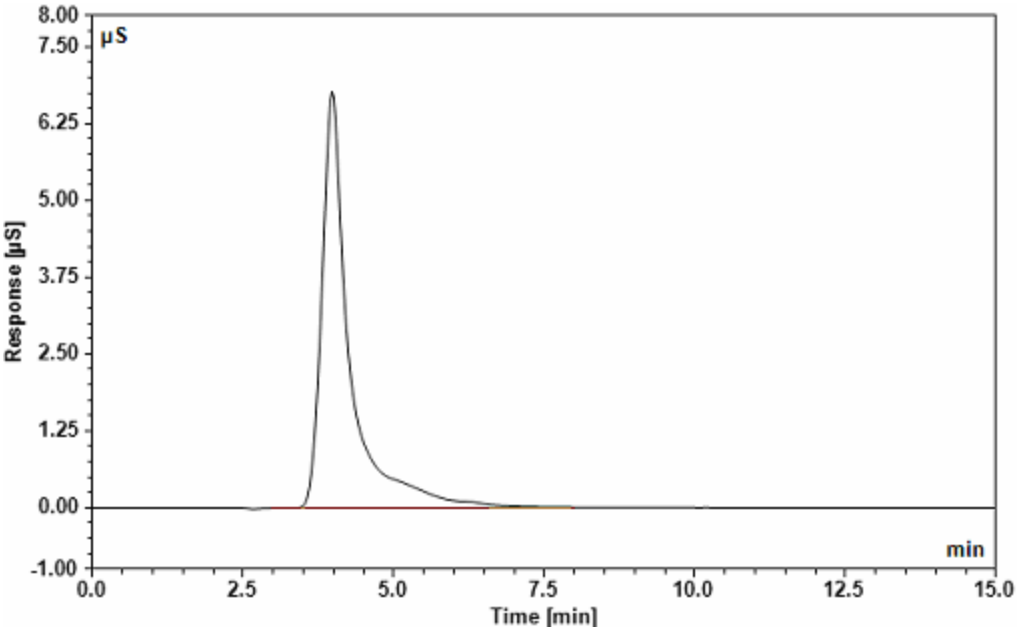
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35 °C
		Cell Temp:	35 °C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 01, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 01, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

James King Jr
Chemist, Technical Manager



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT Cal STD_00025

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO_3)

Lot Number: 2104E50 **Product Number:** 5459

Manufacture Date: APR 19, 2021
Expiration Date: OCT 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO3-N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO3-N	EPA (353.3)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5459-16	500 mL natural poly	18 months
5459-4	120 mL natural poly	18 months

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

Kerry Kingsbury (04/19/2021)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

NOXT ICV STD_00024

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	190220m
ISSUE DATE:	February 19, 2020
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9988 ± 0.0020 g/mL at 19.4°C and 753 mm Hg
TRACEABILITY[3]:	101%
NIST/SRM:	3185 Nitrate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 2/10/2022**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

PicricARestek_00098

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)

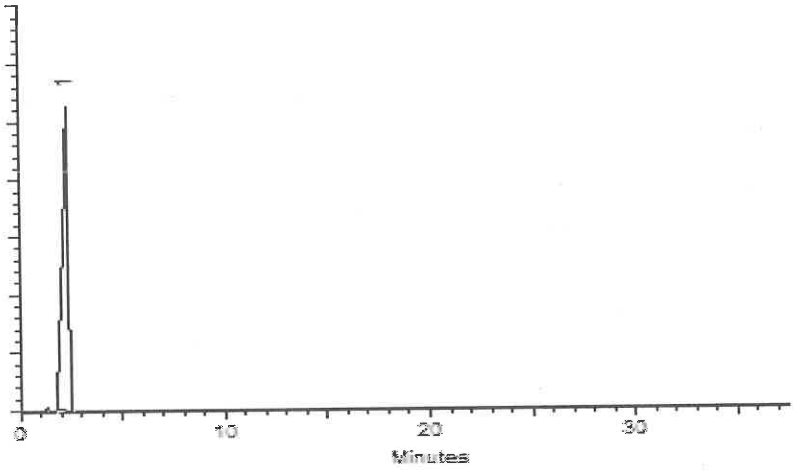
Flow Rate:
1.0 ml/min.

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_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)
*DL039162

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

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

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

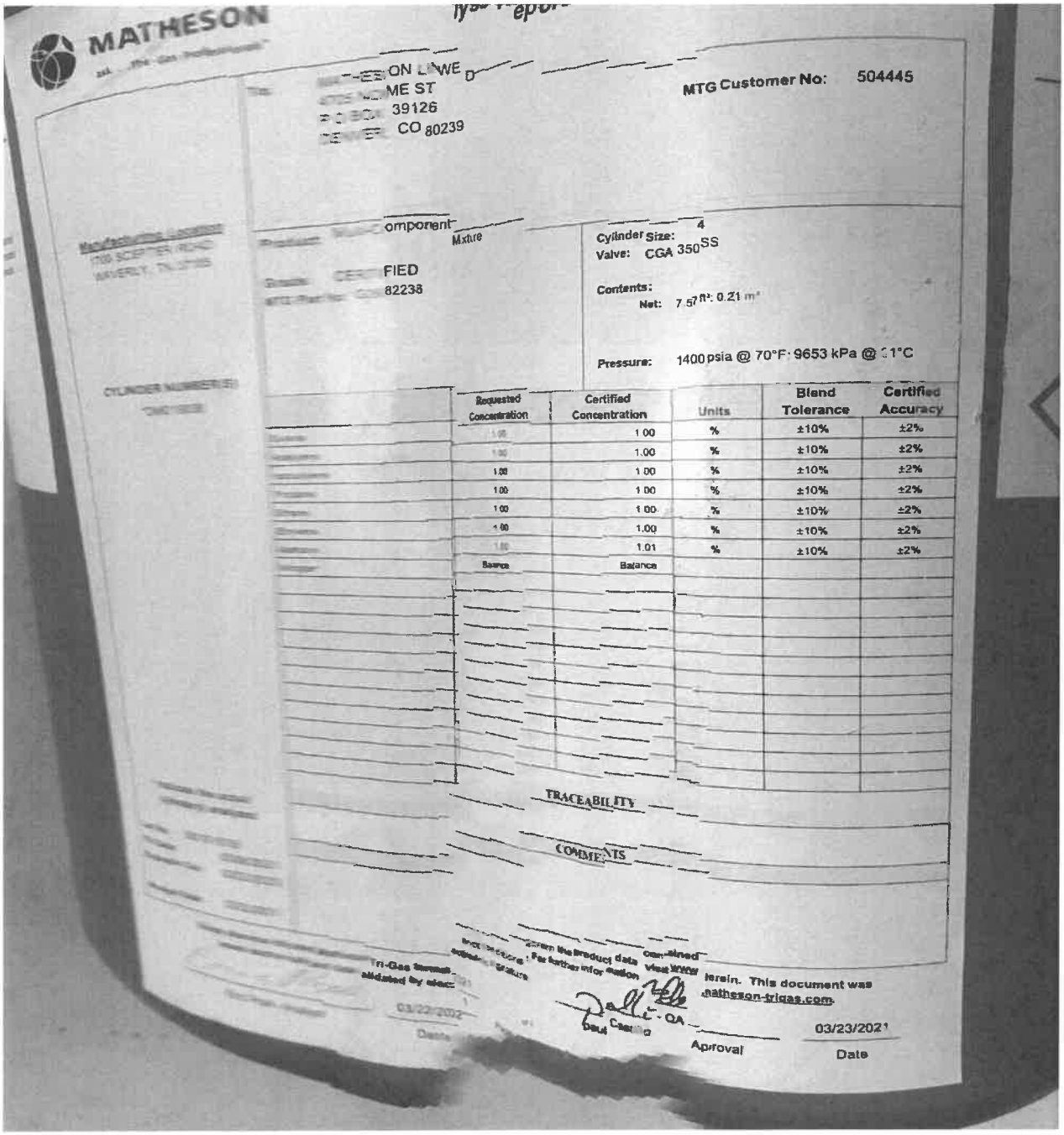
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 Date

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

Reagent

RSK7gasMathes_00034


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

MTG Part No: [illegible]

Net: [illegible]

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

CYLINDER NUMBER(S)

*DM019038

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

TRACEABILITY

COMMENTS

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

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

Analysis Date: 03/22/2021

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

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

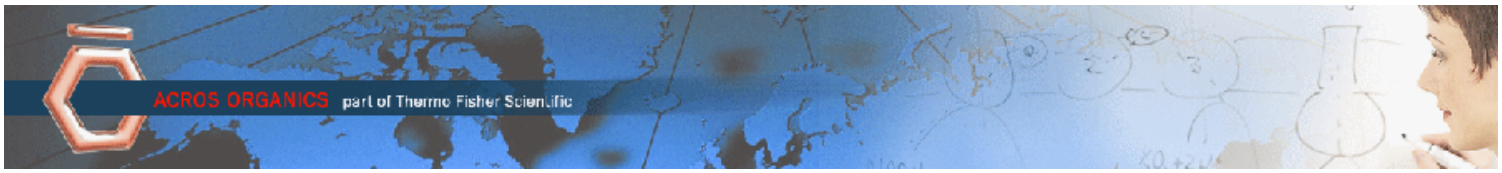
Paul Castillo - QA Approval — 03/23/2021 (Date)

Page 1 of 1

[redacted]

Reagent

SFD ICV 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

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

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

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

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

Packaging, Storage, Instructions For Use

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

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

Traceability Information

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

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

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

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

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

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: IS-009, IS-009-500
Lot Number: 200817

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the certified concentration is the expanded uncertainty at 95% confidence interval (CI) with K=2. This expanded uncertainty incorporates contributions from manufacturing, homogeneity, and stability.

Homogeneity

This CRM was thoroughly mixed in production. Batch homogeneity was established through analysis of samples chosen at random. A minimum 1 mL sample size is recommended.

Stability/Expiration

The stability of this CRM is based on short-term and long-term monitoring of the certified concentration. The expiration date is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

Reagent

TKN ICV_00013

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Total Kjeldahl Nitrogen (TKN)
CATALOG NUMBER:	043 -125 mL; 996 - 500 mL
LOT NUMBER:	200220m
ISSUE DATE:	March 20, 2020
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	6.1%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	0.9966 ± 0.0020 g/mL at 19.4°C and 753 mm Hg
TRACEABILITY[3]:	98.3%
NIST/SRM:	194a Ammonium Dihydrogen Phosphate
VERIFICATION METHOD:	Ion Selective Electrode (ISE)
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 02/07/2022.** The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

TOC ICV Std_00047

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 1102654 **Product Number:** 1847

Manufacture Date: FEB 02, 2021
Expiration Date: JAN 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

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

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months
1847-8	250 mL amber glass	12 months

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

Israel Alamudun (02/02/2021)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

TOC LCS Std_00052

Agilent

Certificate of Analysis

Product Name: Total Organic Carbon (TOC) Standard

Product Number: IQC-106

Lot Number: 0006606278

Lot Issue Date: 07-May-2021

Expiration Date: 30-Jun-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO 17034 / ISO 17025 accredited laboratory and compared to calibration standards independently prepared using NIST SRM(s) when available. The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
potassium hydrogen phthalate (KHP) (as TOC)	000877-24-7	RM17581	1001 ± 5 mg/L

Matrix: water (low TOC, < 50 ppb)

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

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

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

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

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

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

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

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

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-556641/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0674	103	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.: 280-155015-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-556811/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0659	100	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.: 280-155015-1

SDG No.:

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

Lab ID: LCSD 280-556641/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0674	103	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

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

Lab ID: LCSD 280-556811/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0665	101	1	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: MB 280-556641/4

Matrix: Water Date Extracted:

Lab File ID:(1) 004F0401.D Lab File ID:(2) 004F0401.D

Date Analyzed:(1) 11/08/2021 14:08 Date Analyzed:(2) 11/08/2021 14:08

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 280-556641/2	11/08/2021 13:42	11/08/2021 13:42
	LCSD 280-556641/3	11/08/2021 13:55	11/08/2021 13:55
EW7-PM27B-7-35	280-155015-3	11/08/2021 16:57	11/08/2021 16:57
EW7-PM26A-7-25	280-155015-4	11/08/2021 17:23	11/08/2021 17:23
EW7-PM26A-7-25 DU	280-155015-4 DU	11/08/2021 17:35	11/08/2021 17:35
EW7-PM26B-7-35	280-155015-5	11/08/2021 17:48	11/08/2021 17:48
EW7-PM29A-7-25	280-155015-6	11/08/2021 18:01	11/08/2021 18:01
EW7-PM29B-7-35	280-155015-7	11/08/2021 18:14	11/08/2021 18:14
G0080-7	280-155015-9	11/08/2021 18:40	11/08/2021 18:40
G0079-7	280-155015-11	11/08/2021 19:06	11/08/2021 19:06
G0075-7	280-155015-12	11/08/2021 19:19	11/08/2021 19:19

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: MB 280-556811/4

Matrix: Water Date Extracted:

Lab File ID:(1) 004F0401.D Lab File ID:(2) 004F0401.D

Date Analyzed:(1) 11/09/2021 18:13 Date Analyzed:(2) 11/09/2021 18:13

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 280-556811/2	11/09/2021 17:48	11/09/2021 17:48
	LCSD 280-556811/3	11/09/2021 18:00	11/09/2021 18:00
EW7-PM25A-7-25	280-155015-1	11/09/2021 19:05	11/09/2021 19:05
EW7-PM25B-7-35	280-155015-2	11/09/2021 19:18	11/09/2021 19:18
EW7-PM28A-7-25	280-155015-8	11/09/2021 19:45	11/09/2021 19:45
EW7-PM24A-7-25	280-155015-10	11/09/2021 19:58	11/09/2021 19:58

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25A-7-25 Lab Sample ID: 280-155015-1

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

Date Analyzed (1): 11/09/2021 19:05 Date Analyzed (2): 11/09/2021 19:05

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	20		5.1
	2		1.29	1.26	1.34	21		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

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

Date Analyzed (1): 11/09/2021 19:18 Date Analyzed (2): 11/09/2021 19:18

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	19		4.2
	2		1.29	1.26	1.34	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

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

Date Analyzed (1): 11/08/2021 16:57 Date Analyzed (2): 11/08/2021 16:57

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.65	1.73	18		4.8
	2		1.29	1.26	1.34	19		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

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

Date Analyzed (1): 11/08/2021 17:23 Date Analyzed (2): 11/08/2021 17:23

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.65	1.73	18		7.2
	2		1.29	1.26	1.34	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 DU Lab Sample ID: 280-155015-4 DU

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

Date Analyzed (1): 11/08/2021 17:35 Date Analyzed (2): 11/08/2021 17:35

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	18.1		6.4
	2		1.29	1.26	1.34	19.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

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

Date Analyzed (1): 11/08/2021 17:48 Date Analyzed (2): 11/08/2021 17:48

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	16		5.3
	2		1.29	1.26	1.34	17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29A-7-25 Lab Sample ID: 280-155015-6

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

Date Analyzed (1): 11/08/2021 18:01 Date Analyzed (2): 11/08/2021 18:01

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	18		4.4
	2		1.29	1.26	1.34	18		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29B-7-35 Lab Sample ID: 280-155015-7

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

Date Analyzed (1): 11/08/2021 18:14 Date Analyzed (2): 11/08/2021 18:14

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	11		4.1
	2		1.29	1.26	1.34	11		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM28A-7-25 Lab Sample ID: 280-155015-8

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

Date Analyzed (1): 11/09/2021 19:45 Date Analyzed (2): 11/09/2021 19:45

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		1.67	1.65	1.73	22		4.5
	2		1.29	1.26	1.34	23		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0080-7 Lab Sample ID: 280-155015-9

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

Date Analyzed (1): 11/08/2021 18:40 Date Analyzed (2): 11/08/2021 18:40

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		1.67	1.65	1.73	0.0069		11.8
	2		1.29	1.26	1.34	0.0077		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

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

Date Analyzed (1): 11/09/2021 19:58 Date Analyzed (2): 11/09/2021 19:58

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	20		4.4
	2		1.29	1.26	1.34	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0075-7 Lab Sample ID: 280-155015-12

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

Date Analyzed (1): 11/08/2021 19:19 Date Analyzed (2): 11/08/2021 19:19

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.028		6.1
	2		1.29	1.26	1.34	0.030		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556641/2

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

Date Analyzed (1): 11/08/2021 13:42 Date Analyzed (2): 11/08/2021 13:42

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		1.69	1.65	1.73	0.0674		3.6
	2		1.30	1.26	1.34	0.0651		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-556641/3

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

Date Analyzed (1): 11/08/2021 13:55 Date Analyzed (2): 11/08/2021 13:55

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		1.68	1.65	1.73	0.0674		2.7
	2		1.30	1.26	1.34	0.0657		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556811/2

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

Date Analyzed (1): 11/09/2021 17:48 Date Analyzed (2): 11/09/2021 17:48

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.65	1.73	0.0659		2.1
	2		1.30	1.26	1.34	0.0645		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-556811/3

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

Date Analyzed (1): 11/09/2021 18:00 Date Analyzed (2): 11/09/2021 18:00

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.65	1.73	0.0665		1.9
	2		1.30	1.26	1.34	0.0653		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25A-7-25 Lab Sample ID: 280-155015-1

Matrix: Water Lab File ID: 008F0801.D

Analysis Method: RSK-175 Date Collected: 10/31/2021 12:45

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 19:05

Soil Aliquot Vol: Dilution Factor: 2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	20	D	0.010	0.0026	0.0013

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\008F0801.D
Lims ID: 280-155015-I-1
Client ID: EW7-PM25A-7-25
Sample Type: Client
Inject. Date: 09-Nov-2021 19:05:57 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-155015-I-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:46:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.289	1.302	-0.013	368595761	10478	
2	1.668	1.690	-0.022	359422950	9953.8	
					RPD = 5.13	
3 Ethane						
1		1.550			ND	
2		3.030				
4 Ethylene						
1		1.828			ND	
2		2.612				
5 Propane						
1		2.608			ND	
2		4.930				
6 Acetylene						
1		4.032			ND	
2		2.755				
7 Butane						
1		4.423			ND	
2		6.428				
8 isobutylene						
1		5.282			ND	
2		6.270				

QC Flag Legend

Processing Flags

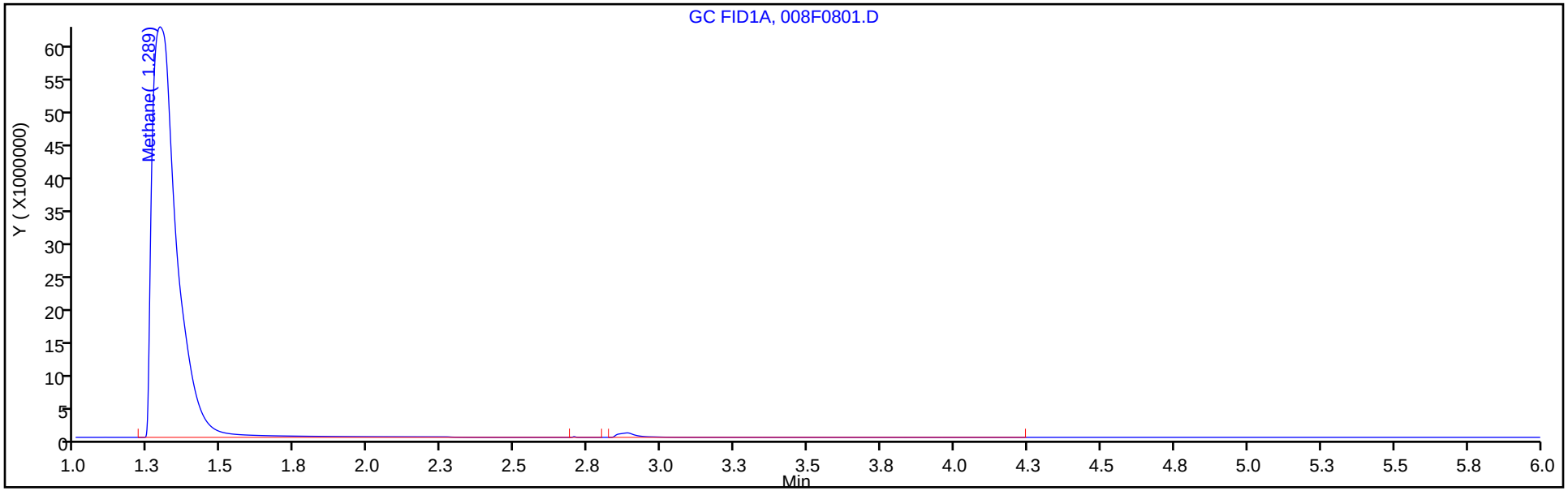
Report Date: 15-Nov-2021 12:57:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

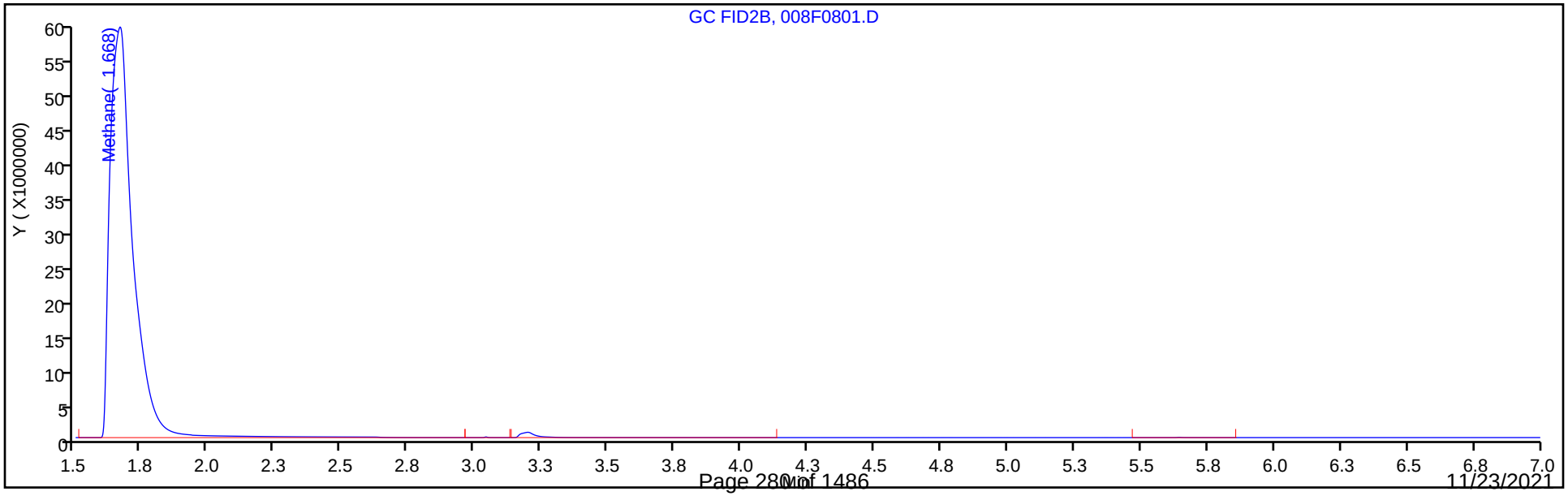
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\008F0801.D

Injection Date:	09-Nov-2021 19:05:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-1	Lab Sample ID:	280-155015-1	Worklist Smp#:	8
Client ID:	EW7-PM25A-7-25				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

Matrix: Water Lab File ID: 009F0901.D

Analysis Method: RSK-175 Date Collected: 10/31/2021 14:50

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 19:18

Soil Aliquot Vol: Dilution Factor: 2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	19	D	0.010	0.0026	0.0013

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\009F0901.D
Lims ID: 280-155015-I-2
Client ID: EW7-PM25B-7-35
Sample Type: Client
Inject. Date: 09-Nov-2021 19:18:56 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-155015-I-2
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 08:28:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.288	1.302	-0.014	345067086	9809.3	
2	1.670	1.690	-0.020	339505218	9402.1	
					RPD = 4.24	
3 Ethane						
1		1.550			ND	
2		3.030				
4 Ethylene						
1		1.828			ND	
2		2.612				
5 Propane						
1		2.608			ND	
2		4.930				
6 Acetylene						
1		4.032			ND	
2		2.755				
7 Butane						
1		4.423			ND	
2		6.428				
8 isobutylene						
1		5.282			ND	
2		6.270				

QC Flag Legend

Processing Flags

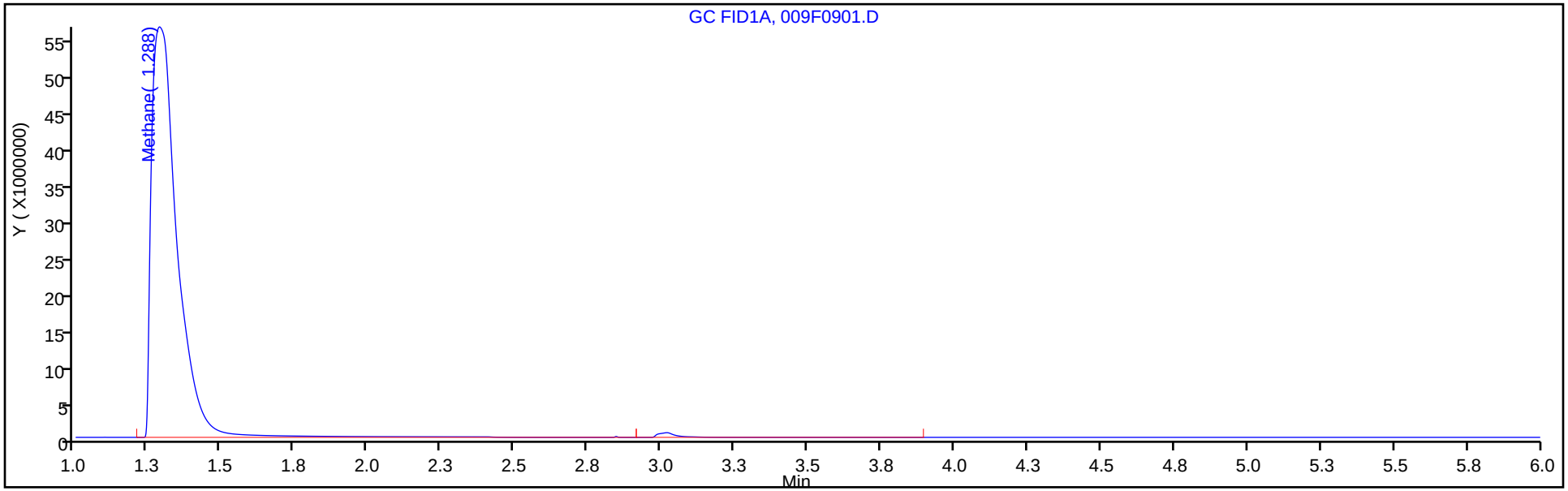
Report Date: 15-Nov-2021 12:57:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

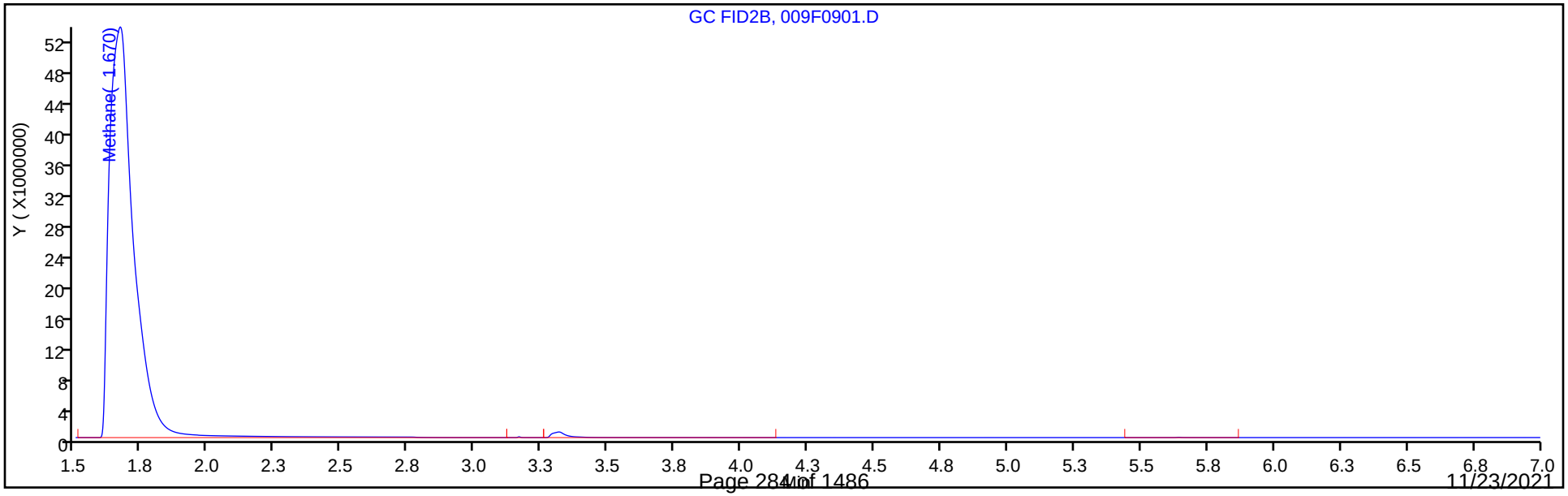
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\009F0901.D

Injection Date:	09-Nov-2021 19:18:56	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-2	Lab Sample ID:	280-155015-2	Worklist Smp#:	9
Client ID:	EW7-PM25B-7-35				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

Matrix: Water Lab File ID: 017F1701.D

Analysis Method: RSK-175 Date Collected: 10/31/2021 11:05

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 16:57

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	18		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\017F1701.D
Lims ID: 280-155015-H-3
Client ID: EW7-PM27B-7-35
Sample Type: Client
Inject. Date: 08-Nov-2021 16:57:10 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-H-3
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 09:57:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.287	1.299	-0.012	668184307	18996	
2	1.662	1.688	-0.026	653485256	18099	
					RPD = 4.84	
3 Ethane						a
1	0.000	1.538	0.000	0	0	
2	3.040	3.026	0.014	137515	4.12	a
					RPD = 200.00	
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

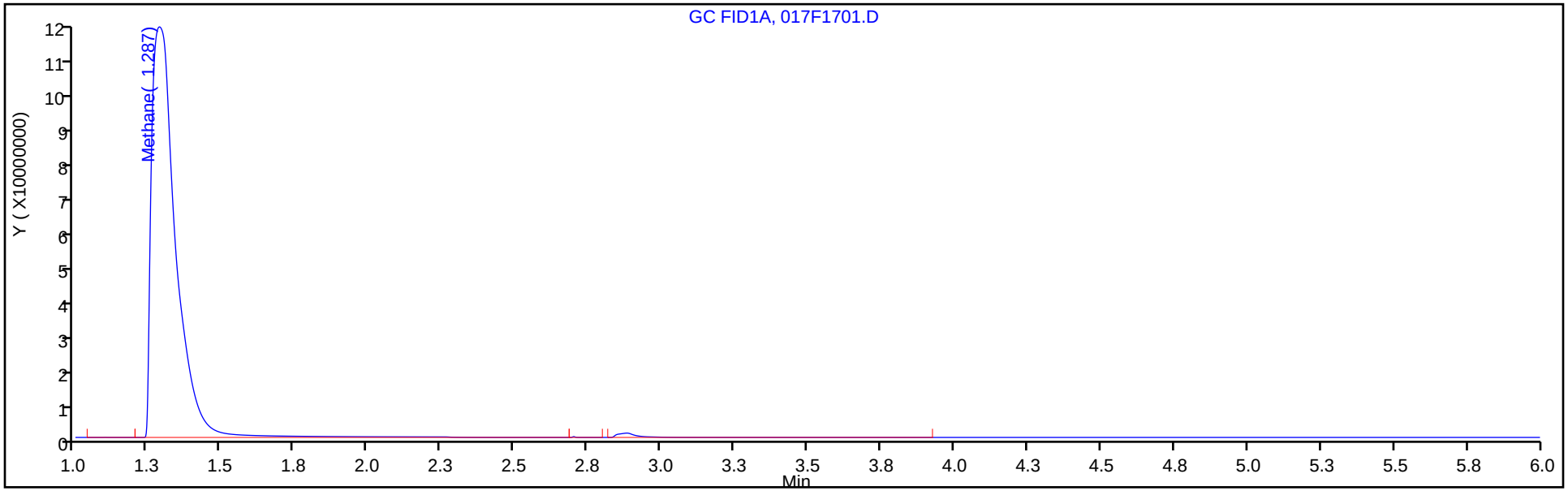
Report Date: 09-Nov-2021 10:13:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

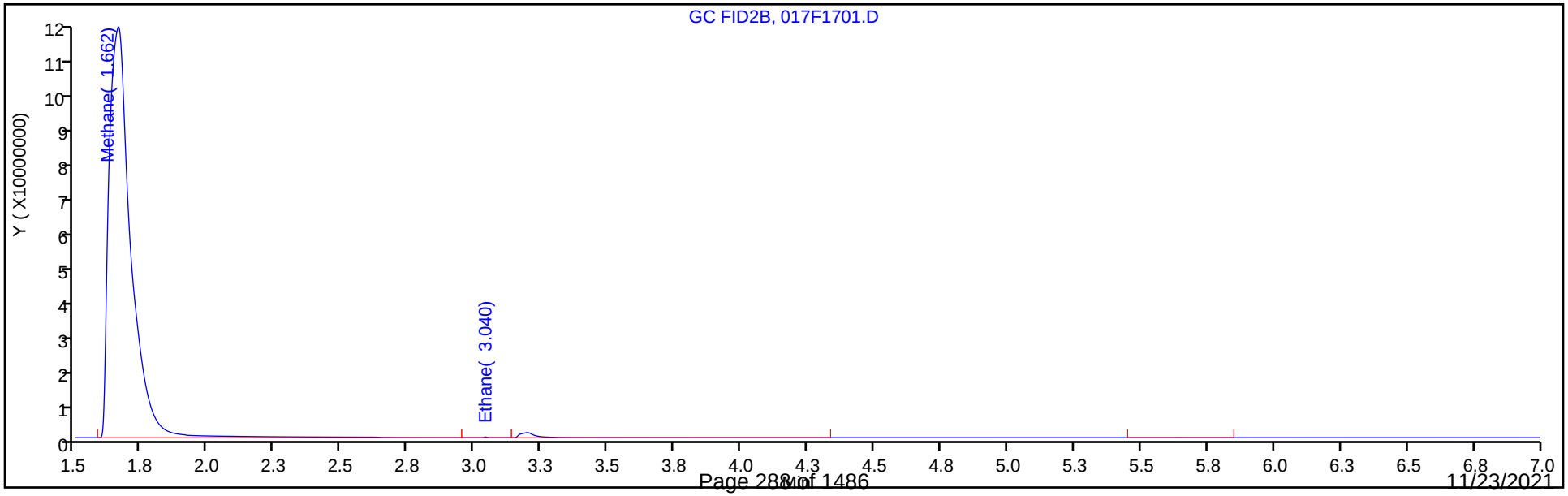
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\017F1701.D

Injection Date:	08-Nov-2021 16:57:10	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-H-3	Lab Sample ID:	280-155015-3	Worklist Smp#:	18
Client ID:	EW7-PM27B-7-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

Matrix: Water Lab File ID: 019F1901.D

Analysis Method: RSK-175 Date Collected: 10/30/2021 09:25

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 17:23

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	18	M	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\019F1901.D
Lims ID: 280-155015-I-4
Client ID: EW7-PM26A-7-25
Sample Type: Client
Inject. Date: 08-Nov-2021 17:23:00 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-I-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:19 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 14:04:53

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						EMa
1	1.287	1.299	-0.012	693891484	19727	E
2	1.664	1.688	-0.024	662462271	18348	M
					RPD = 7.25	
3 Ethane						Ma
1	0.000	1.538	0.000	0	0	
2	3.057	3.026	0.031	115440	3.46	M
					RPD = 200.00	
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

a - User Assigned ID

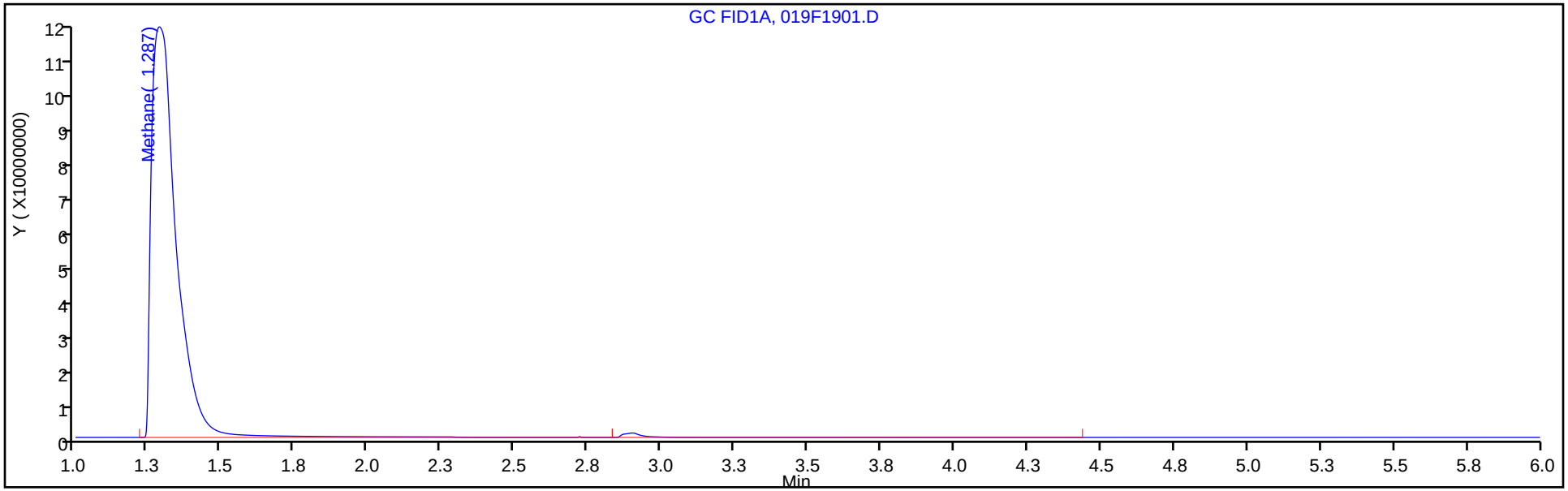
Report Date: 09-Nov-2021 14:04:53 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

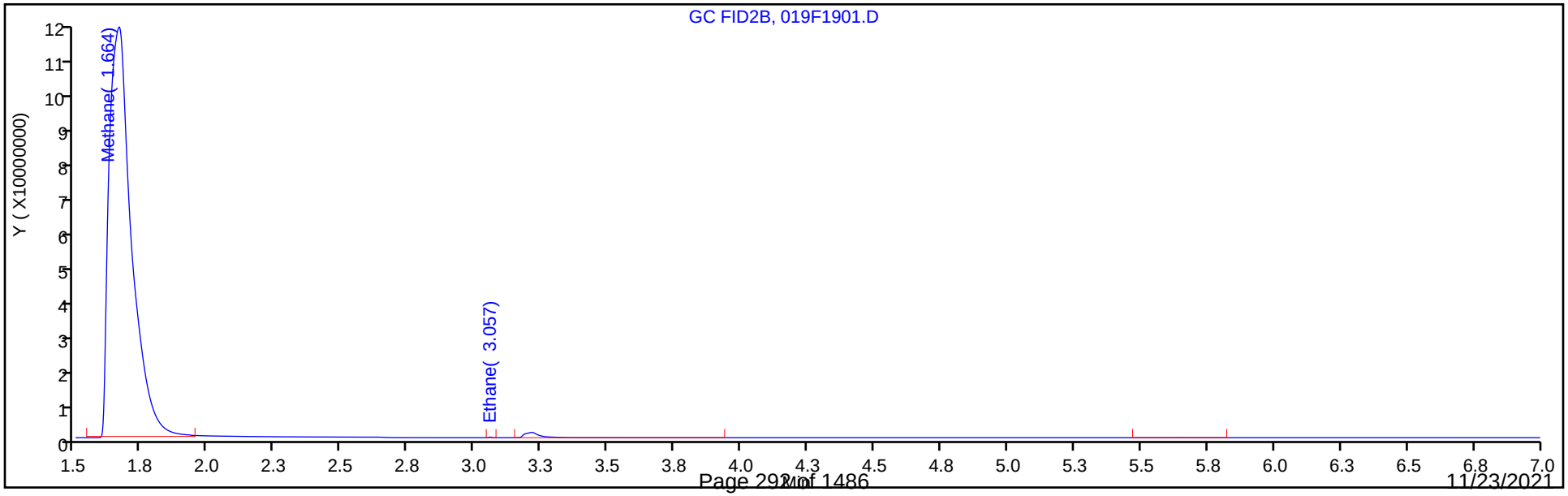
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\019F1901.D

Injection Date:	08-Nov-2021 17:23:00	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-4	Lab Sample ID:	280-155015-4	Worklist Smp#:	20
Client ID:	EW7-PM26A-7-25				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

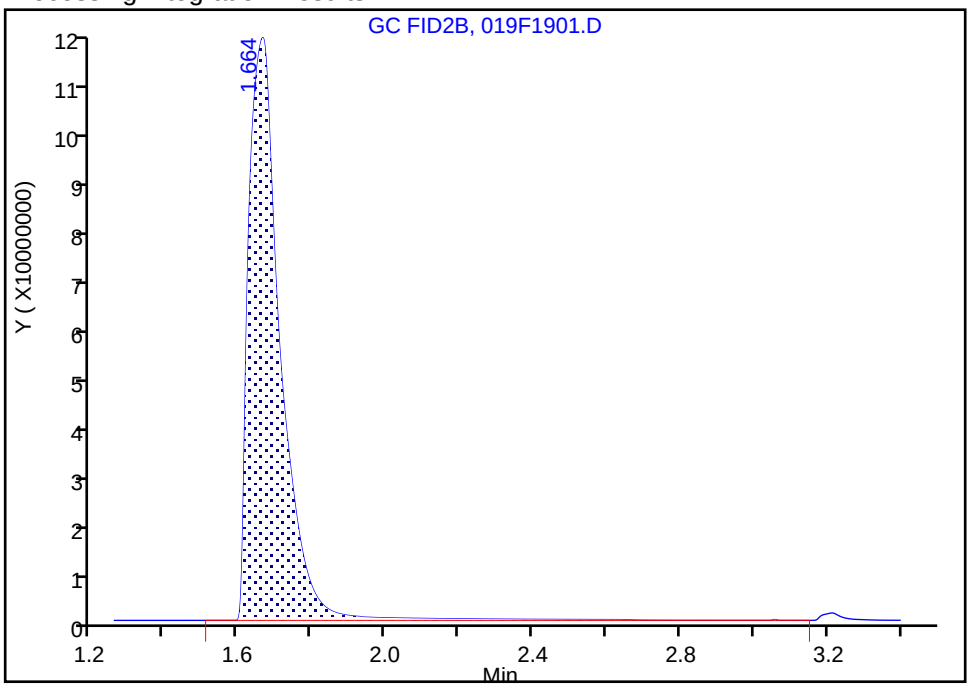
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\019F1901.D				
Injection Date:	08-Nov-2021 17:23:00	Instrument ID:	VGC_J		
Lims ID:	280-155015-I-4	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	sciannac	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

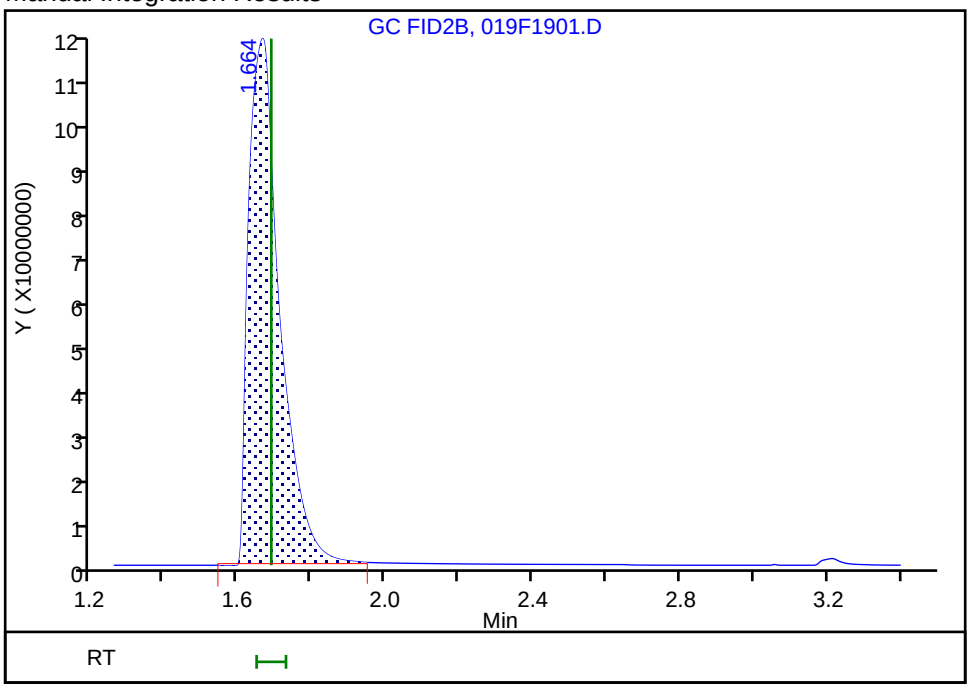
Processing Integration Results

RT: 1.66
Area: 682861515
Amount: 18913
Amount Units: ug/l



Manual Integration Results

RT: 1.66
Area: 662462271
Amount: 18348
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:02:35
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Wrong Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

Matrix: Water Lab File ID: 021F2101.D

Analysis Method: RSK-175 Date Collected: 10/30/2021 11:00

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 17:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556641 Units: mg/L

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\021F2101.D
Lims ID: 280-155015-H-5
Client ID: EW7-PM26B-7-35
Sample Type: Client
Inject. Date: 08-Nov-2021 17:48:56 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-H-5
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:04:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.288	1.299	-0.011	592792009	16853	
2	1.665	1.688	-0.023	576921866	15978	
					RPD = 5.33	
3 Ethane						
1		1.538			ND	
2		3.026				
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

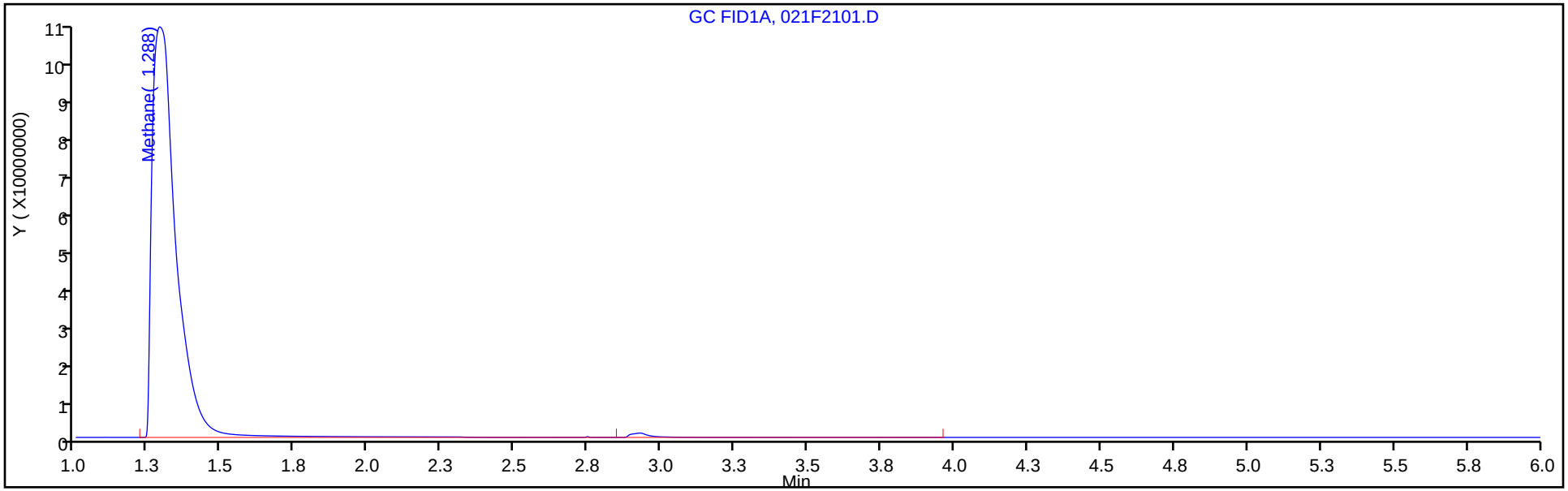
Report Date: 09-Nov-2021 10:13:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

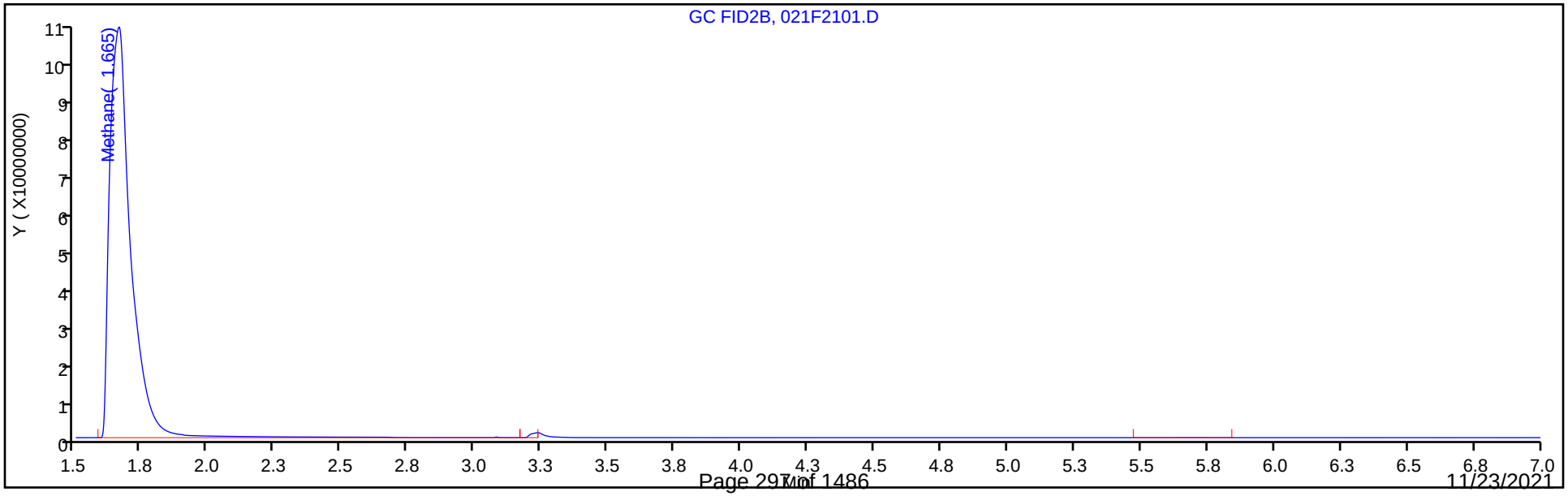
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\021F2101.D

Injection Date:	08-Nov-2021 17:48:56	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-H-5	Lab Sample ID:	280-155015-5	Worklist Smp#:	22
Client ID:	EW7-PM26B-7-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29A-7-25 Lab Sample ID: 280-155015-6

Matrix: Water Lab File ID: 022F2201.D

Analysis Method: RSK-175 Date Collected: 10/30/2021 12:30

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 18:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	18		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\022F2201.D
Lims ID: 280-155015-I-6
Client ID: EW7-PM29A-7-25
Sample Type: Client
Inject. Date: 08-Nov-2021 18:01:54 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-I-6
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:05:01

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						
1	1.288	1.299	-0.011	648834119	18446	
2	1.665	1.688	-0.023	637413996	17654	
					RPD = 4.39	
3 Ethane						
1		1.538			ND	
2		3.026				
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

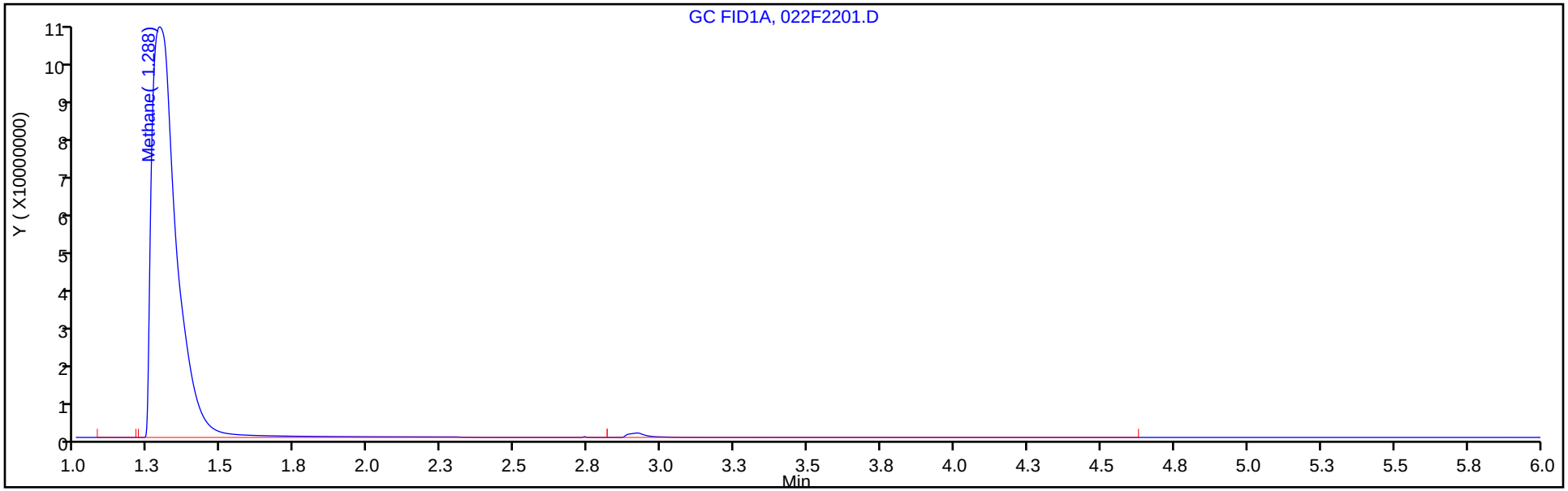
Report Date: 09-Nov-2021 10:13:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

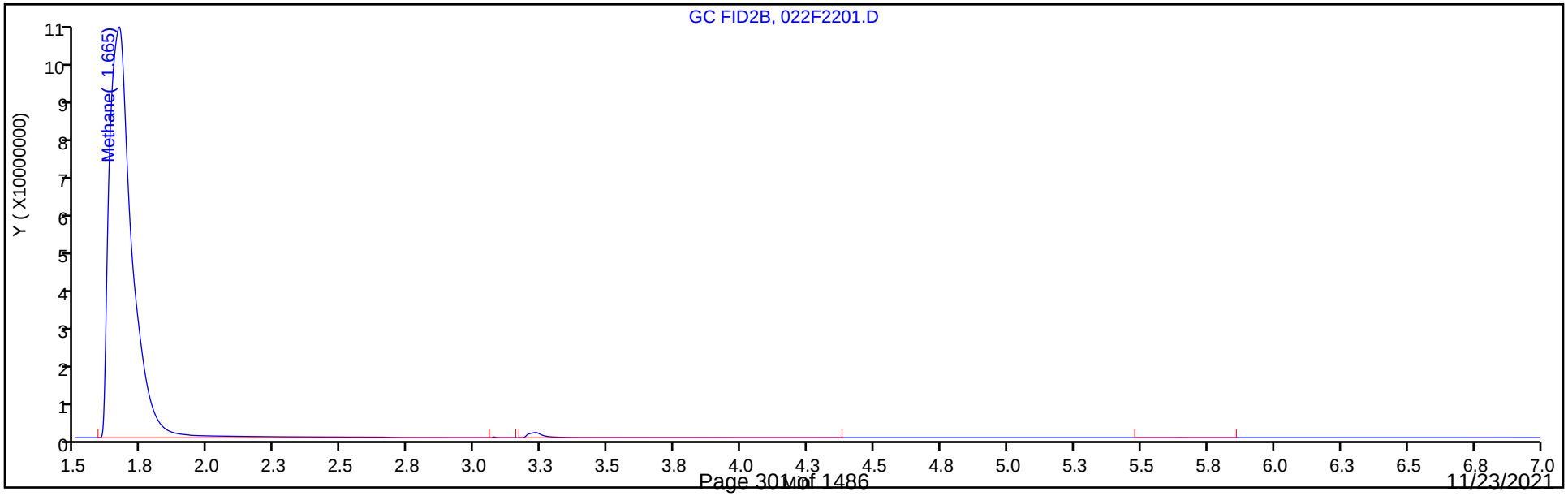
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\022F2201.D

Injection Date:	08-Nov-2021 18:01:54	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-6	Lab Sample ID:	280-155015-6	Worklist Smp#:	23
Client ID:	EW7-PM29A-7-25				
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29B-7-35 Lab Sample ID: 280-155015-7

Matrix: Water Lab File ID: 023F2301.D

Analysis Method: RSK-175 Date Collected: 10/30/2021 14:35

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 18:14

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	11		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\023F2301.D
Lims ID: 280-155015-I-7
Client ID: EW7-PM29B-7-35
Sample Type: Client
Inject. Date: 08-Nov-2021 18:14:51 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-I-7
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:05:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.289	1.299	-0.010	401082865	11402	
2	1.667	1.688	-0.021	395029620	10940	
					RPD = 4.14	
3 Ethane						
1		1.538			ND	
2		3.026				
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

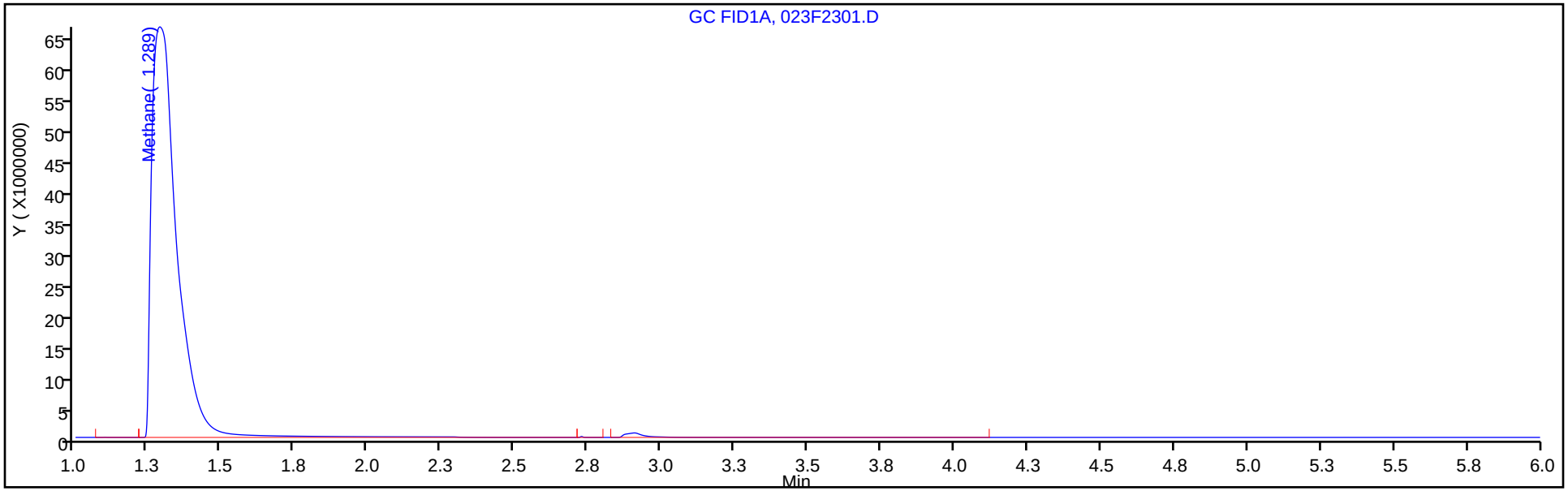
Report Date: 09-Nov-2021 10:13:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

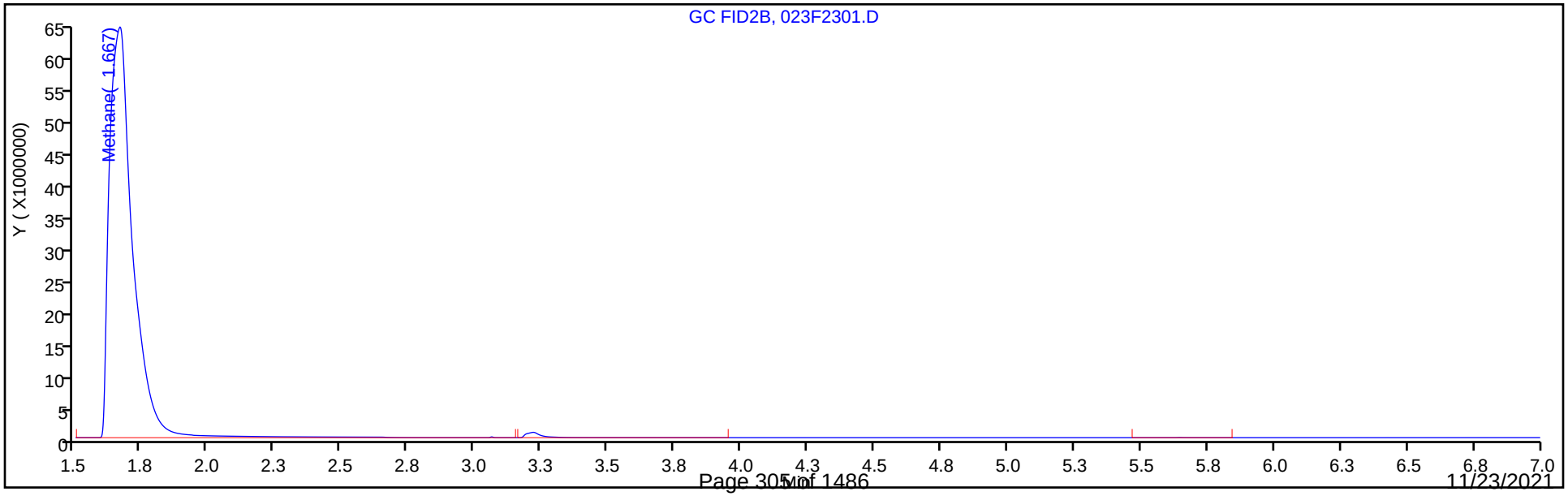
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\023F2301.D

Injection Date:	08-Nov-2021 18:14:51	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-7	Lab Sample ID:	280-155015-7	Worklist Smp#:	24
Client ID:	EW7-PM29B-7-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM28A-7-25 Lab Sample ID: 280-155015-8

Matrix: Water Lab File ID: 011F1101.D

Analysis Method: RSK-175 Date Collected: 10/30/2021 16:10

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 19:45

Soil Aliquot Vol: Dilution Factor: 2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	22	D	0.010	0.0026	0.0013

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\011F1101.D
Lims ID: 280-155015-I-8
Client ID: EW7-PM28A-7-25
Sample Type: Client
Inject. Date: 09-Nov-2021 19:45:22 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-155015-I-8
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:46:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.286	1.302	-0.016	407912417	11596	
2	1.668	1.690	-0.022	400184030	11083	
					RPD = 4.53	
3 Ethane						
1		1.550			ND	
2		3.030				
4 Ethylene						
1		1.828			ND	
2		2.612				
5 Propane						
1		2.608			ND	
2		4.930				
6 Acetylene						
1		4.032			ND	
2		2.755				
7 Butane						
1		4.423			ND	
2		6.428				
8 isobutylene						
1		5.282			ND	
2		6.270				

QC Flag Legend

Processing Flags

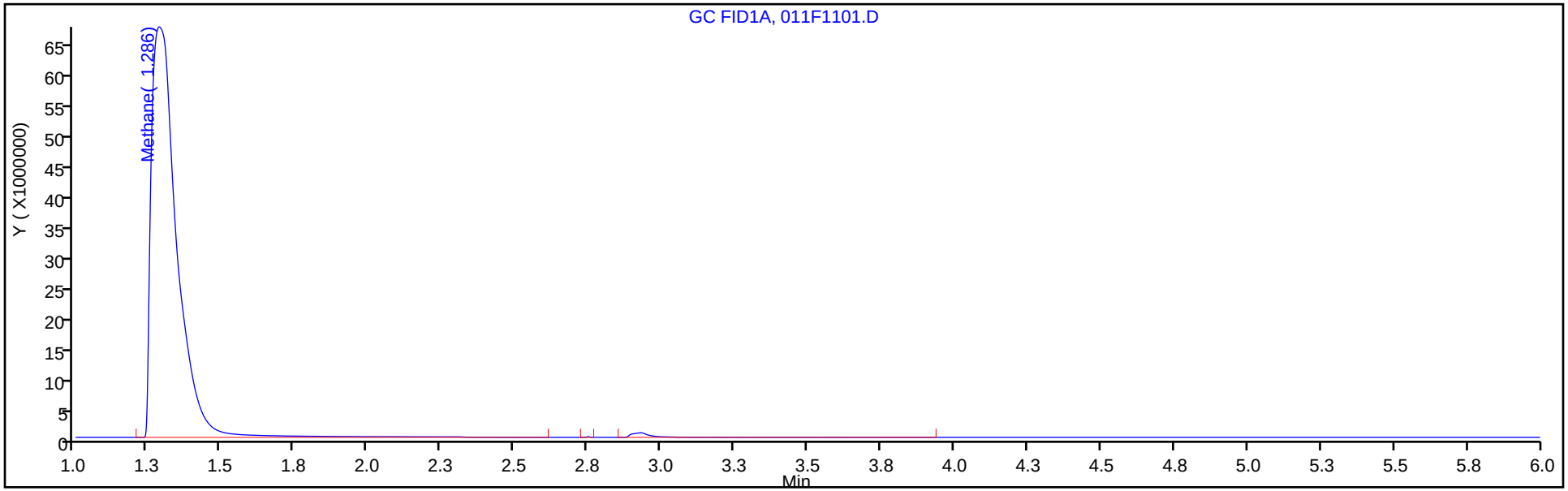
Report Date: 15-Nov-2021 12:57:19 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

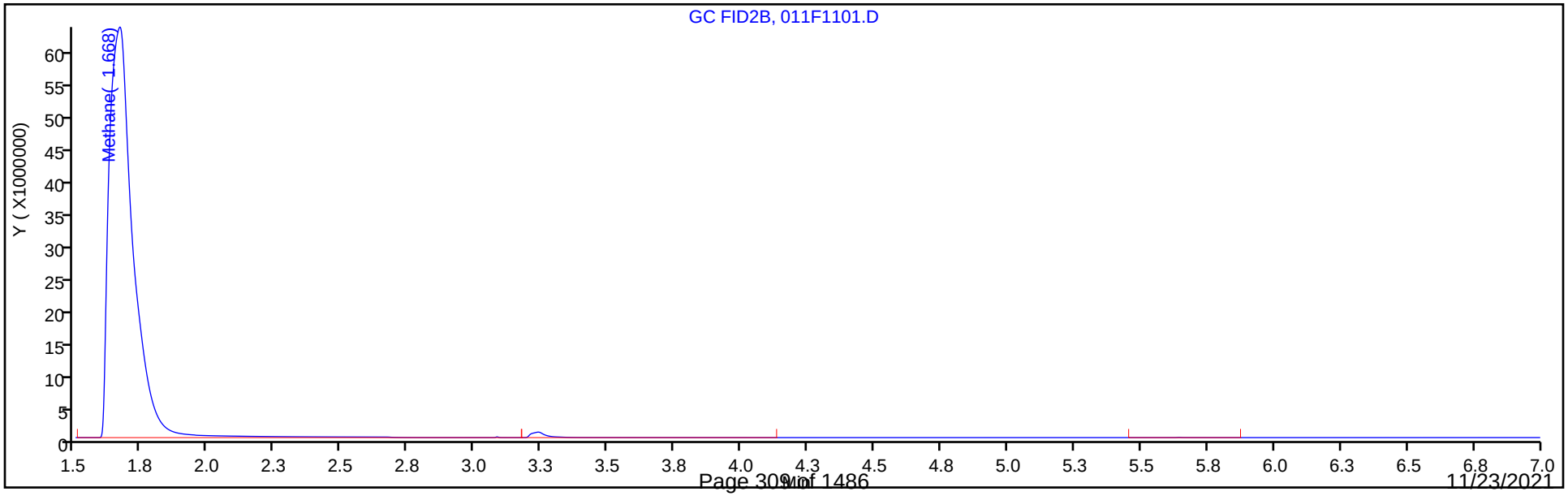
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\011F1101.D

Injection Date:	09-Nov-2021 19:45:22	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-8	Lab Sample ID:	280-155015-8	Worklist Smp#:	11
Client ID:	EW7-PM28A-7-25				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0080-7 Lab Sample ID: 280-155015-9

Matrix: Water Lab File ID: 025F2501.D

Analysis Method: RSK-175 Date Collected: 10/31/2021 12:35

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 18:40

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0069	M	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\025F2501.D
Lims ID: 280-155015-I-9
Client ID: G0080-7
Sample Type: Client
Inject. Date: 08-Nov-2021 18:40:43 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-I-9
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:06:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						Ma
1	1.286	1.299	-0.013	337194	7.73	a
2	1.669	1.688	-0.019	310488	6.87	M
					RPD = 11.84	
3 Ethane						Ma
1	0.000	1.538	0.000	0	0	
2	3.054	3.026	0.028	28994	0.8685	M
					RPD = 200.00	
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

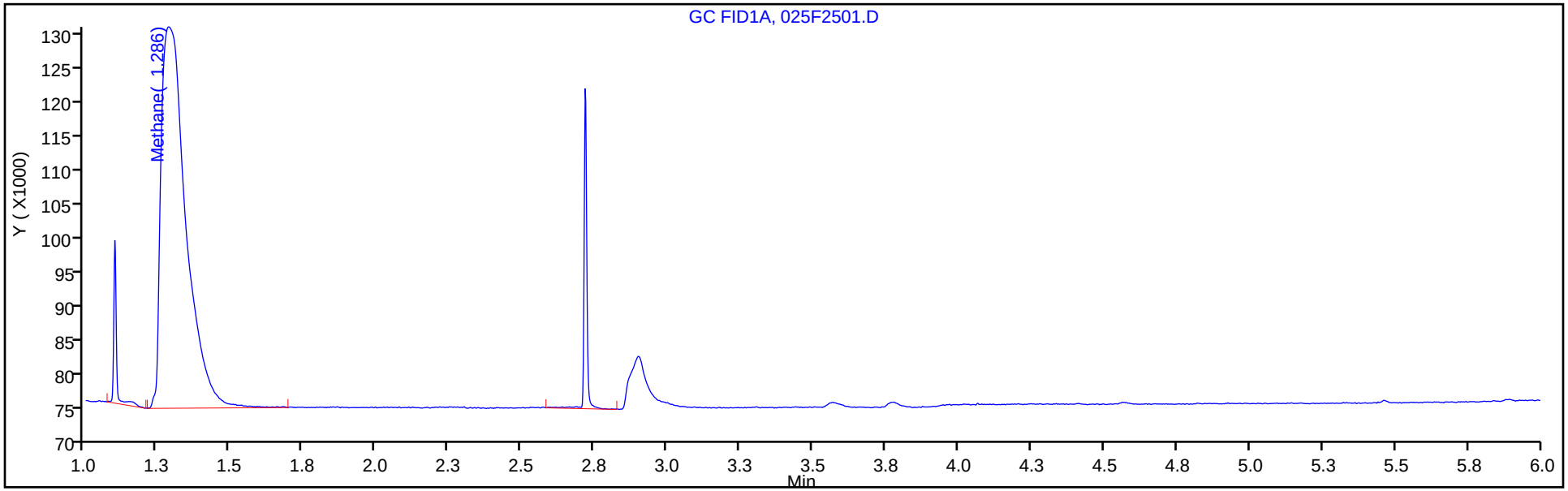
Report Date: 09-Nov-2021 10:13:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

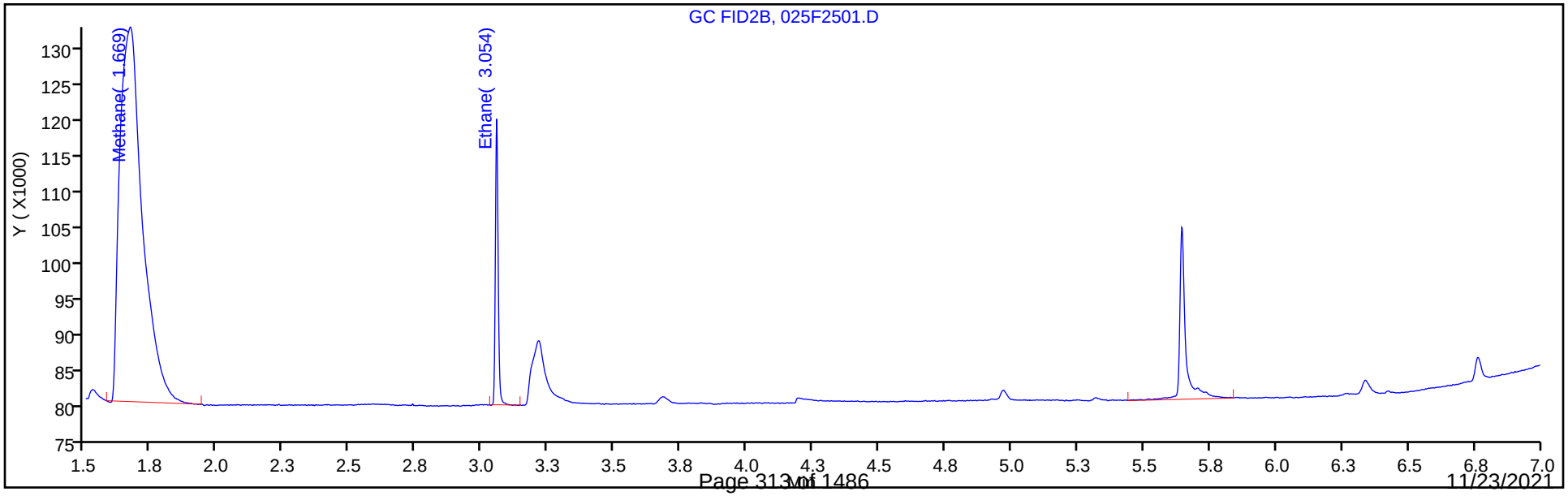
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\025F2501.D

Injection Date:	08-Nov-2021 18:40:43	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-I-9	Lab Sample ID:	280-155015-9	Worklist Smp#:	26
Client ID:	G0080-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

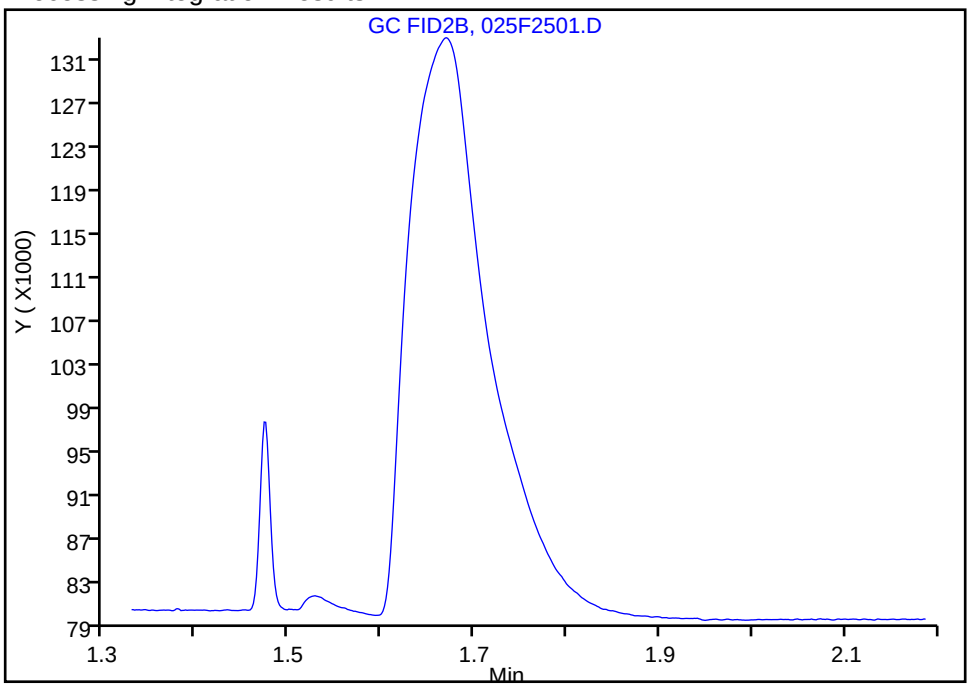
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\025F2501.D				
Injection Date:	08-Nov-2021 18:40:43	Instrument ID:	VGC_J		
Lims ID:	280-155015-I-9	Lab Sample ID:	280-155015-9		
Client ID:	G0080-7				
Operator ID:	sciannac	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

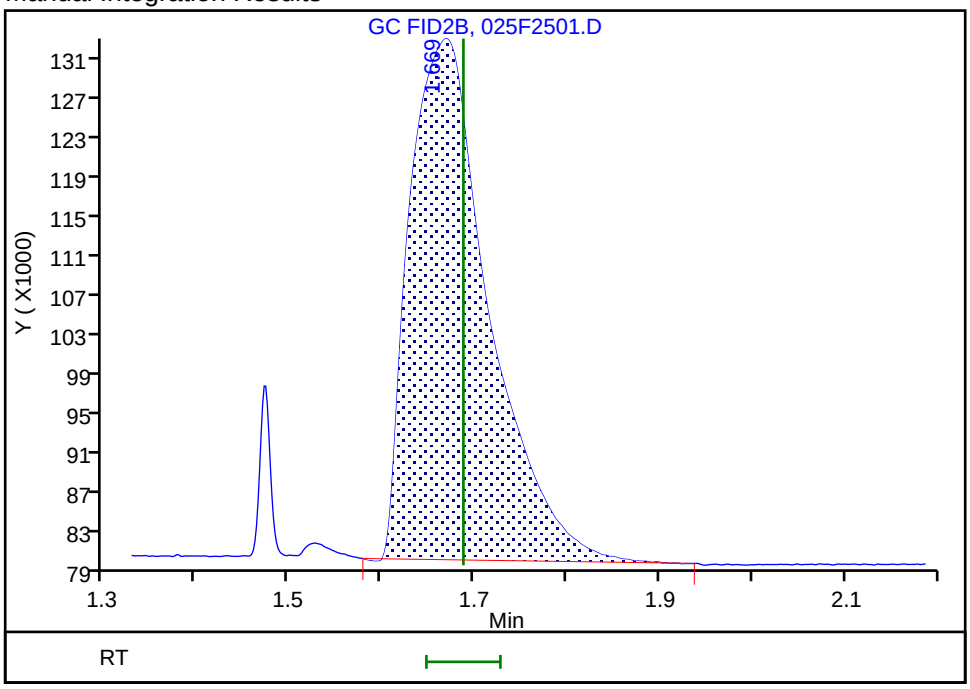
Processing Integration Results

Not Detected
Expected RT: 1.69



Manual Integration Results

RT: 1.67
Area: 310488
Amount: 6.865210
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:05:44
Audit Action: Manually Integrated Audit Reason: Wrong Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

Matrix: Water Lab File ID: 012F1201.D

Analysis Method: RSK-175 Date Collected: 10/31/2021 16:20

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 19:58

Soil Aliquot Vol: Dilution Factor: 2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	20	D	0.010	0.0026	0.0013

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\012F1201.D
Lims ID: 280-155015-H-10
Client ID: EW7-PM24A-7-25
Sample Type: Client
Inject. Date: 09-Nov-2021 19:58:20 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-155015-H-10
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:46:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.286	1.302	-0.016	358343510	10187	
2	1.666	1.690	-0.024	352095550	9750.8	
					RPD = 4.37	
3 Ethane						
1		1.550			ND	
2		3.030				
4 Ethylene						
1		1.828			ND	
2		2.612				
5 Propane						
1		2.608			ND	
2		4.930				
6 Acetylene						
1		4.032			ND	
2		2.755				
7 Butane						
1		4.423			ND	
2		6.428				
8 isobutylene						
1		5.282			ND	
2		6.270				

QC Flag Legend

Processing Flags

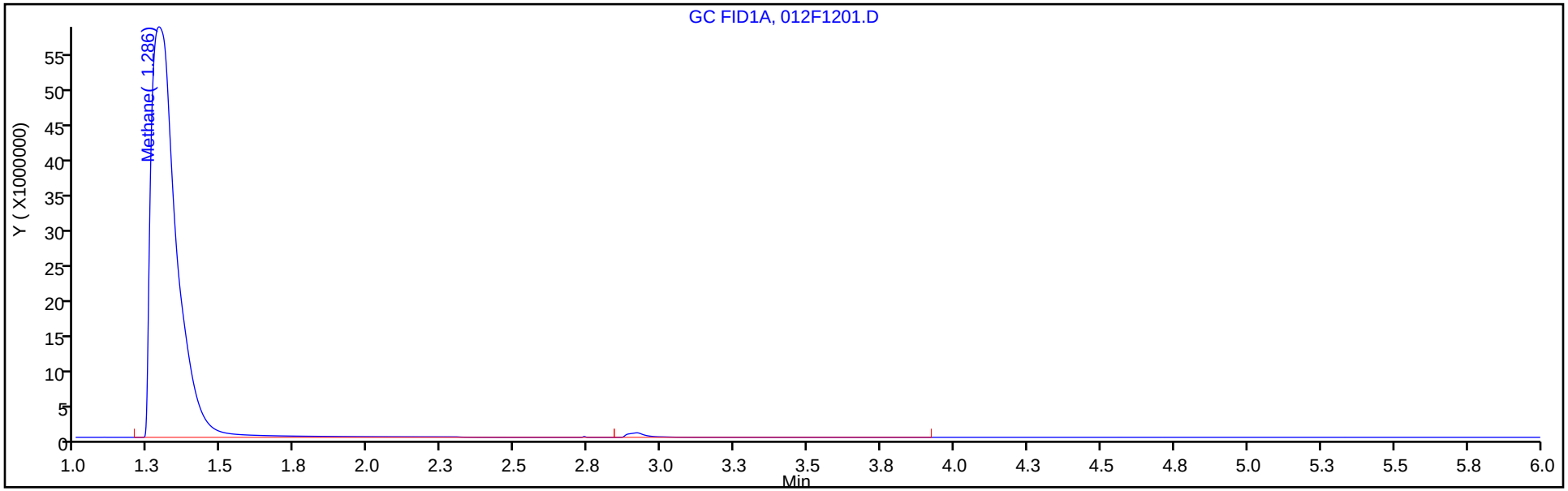
Report Date: 15-Nov-2021 12:57:19 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

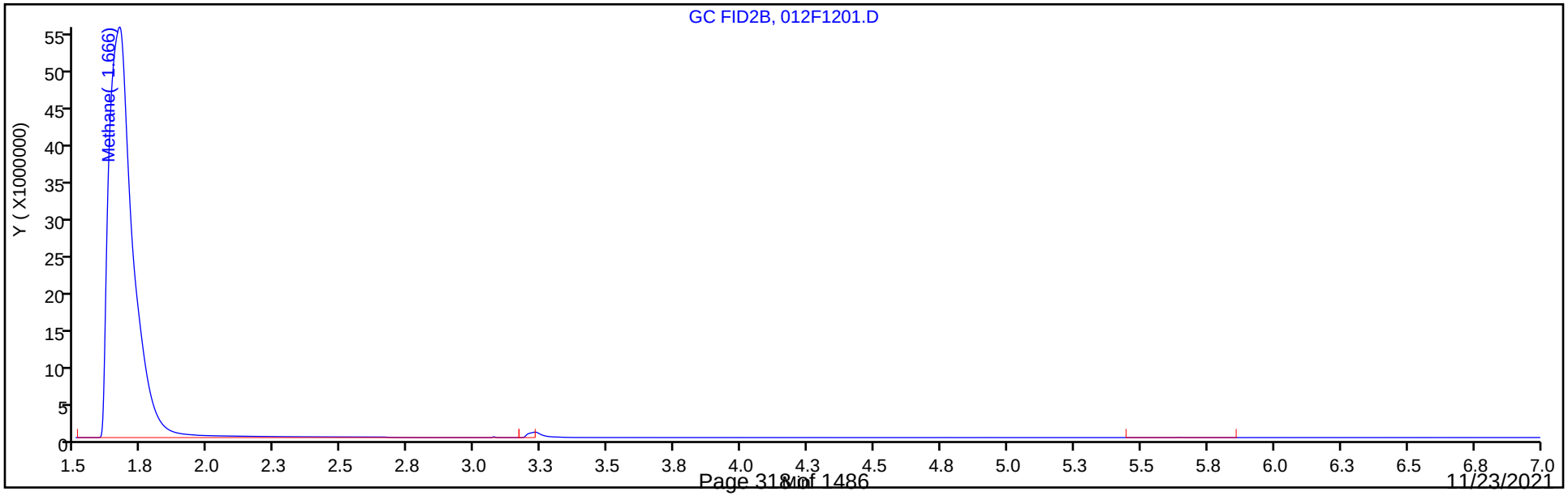
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\012F1201.D

Injection Date:	09-Nov-2021 19:58:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-H-10	Lab Sample ID:	280-155015-10	Worklist Smp#:	12
Client ID:	EW7-PM24A-7-25				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0079-7 Lab Sample ID: 280-155015-11

Matrix: Water Lab File ID: 027F2701.D

Analysis Method: RSK-175 Date Collected: 11/01/2021 10:40

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 19:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556641 Units: mg/L

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\027F2701.D
Lims ID: 280-155015-H-11
Client ID: G0079-7
Sample Type: Client
Inject. Date: 08-Nov-2021 19:06:34 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-H-11
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:07:17

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	1.278	1.299	-0.021	86732	0.6082	a
2	1.666	1.688	-0.022	66894	0.1180	M
					RPD = 135.00	
LOD = 0.6300						
3 Ethane						a
1	0.000	1.538	0.000	0	0	
2	3.048	3.026	0.022	25224	0.7556	a
					RPD = 200.00	
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

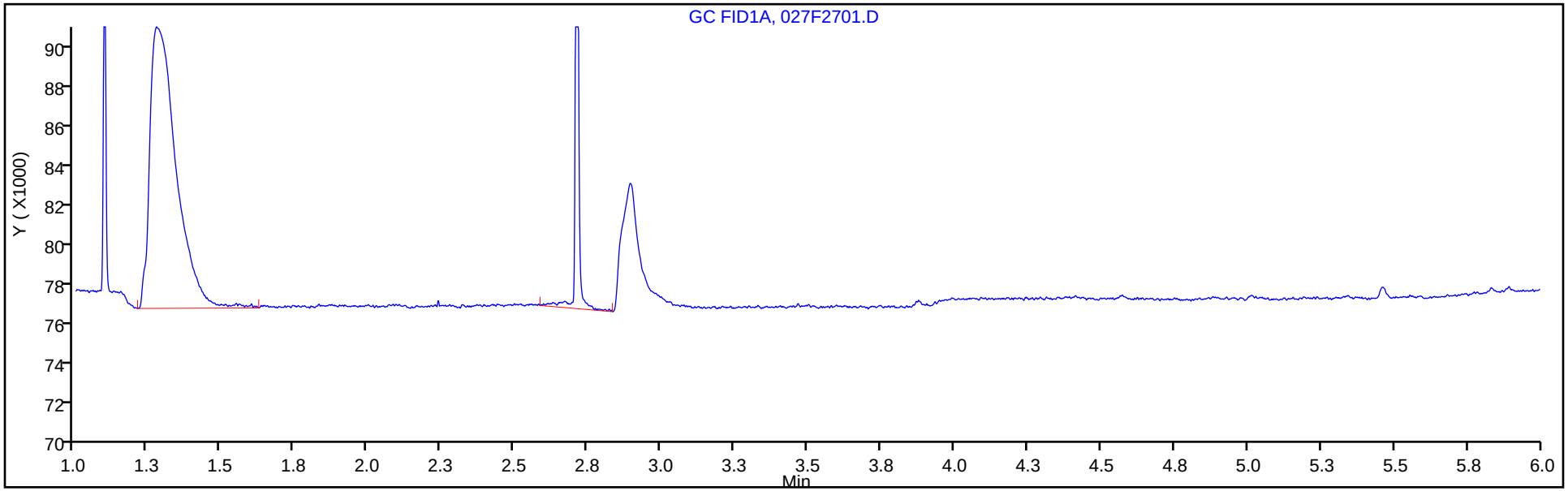
Report Date: 09-Nov-2021 10:13:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

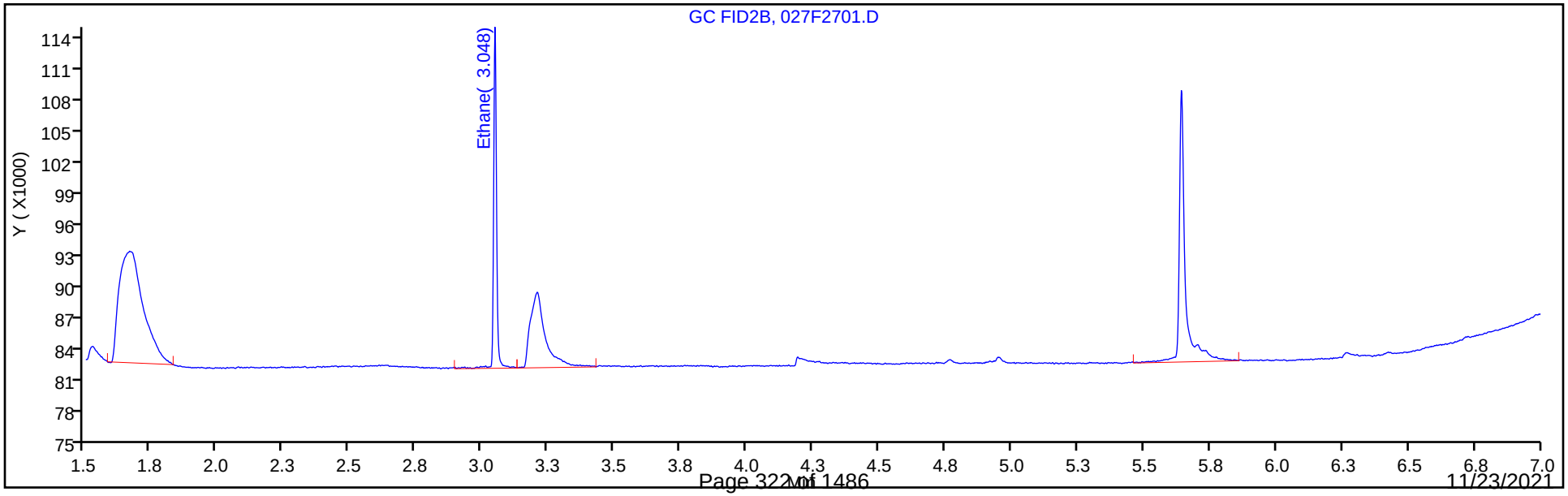
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\027F2701.D

Injection Date:	08-Nov-2021 19:06:34	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-H-11	Lab Sample ID:	280-155015-11	Worklist Smp#:	28
Client ID:	G0079-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

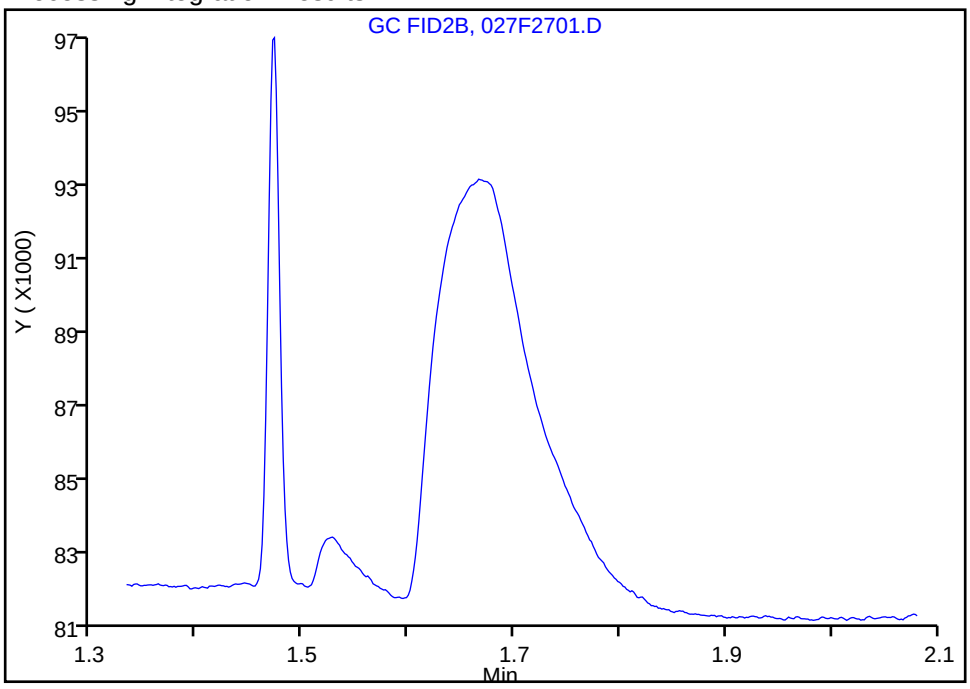
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\027F2701.D				
Injection Date:	08-Nov-2021 19:06:34	Instrument ID:	VGC_J		
Lims ID:	280-155015-H-11	Lab Sample ID:	280-155015-11		
Client ID:	G0079-7				
Operator ID:	sciannac	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

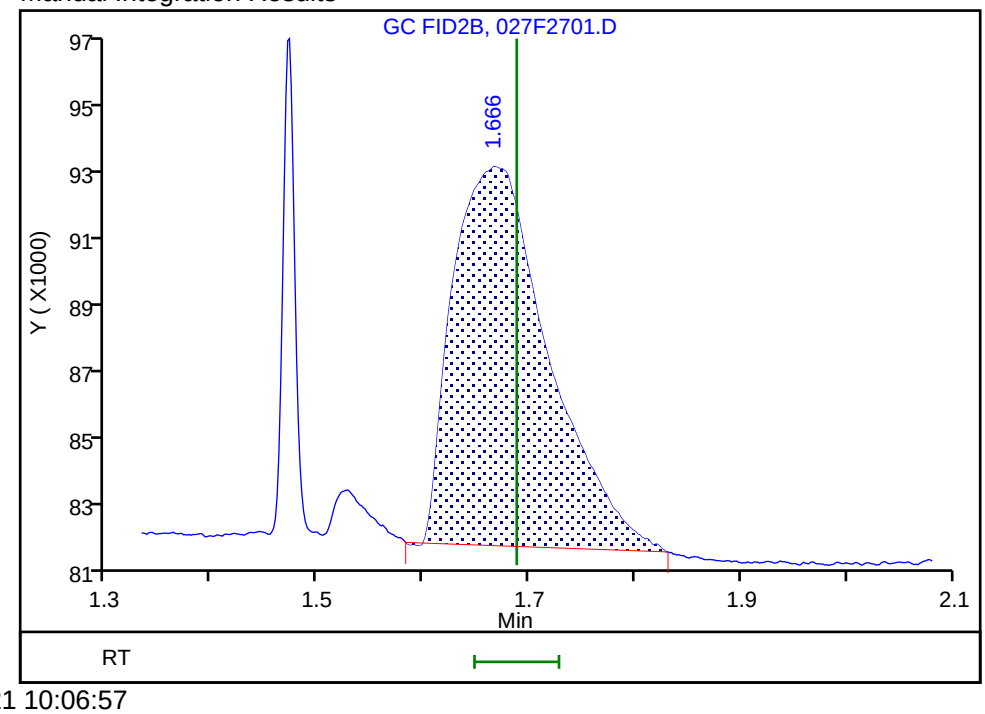
Not Detected
Expected RT: 1.69

Processing Integration Results



Manual Integration Results

RT: 1.67
Area: 66894
Amount: 0.118002
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:06:57
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0075-7 Lab Sample ID: 280-155015-12

Matrix: Water Lab File ID: 028F2801.D

Analysis Method: RSK-175 Date Collected: 11/01/2021 12:05

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 19:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.028		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\028F2801.D
Lims ID: 280-155015-G-12
Client ID: G0075-7
Sample Type: Client
Inject. Date: 08-Nov-2021 19:19:29 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-G-12
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:07:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.289	1.299	-0.010	1108313	29.7	
2	1.670	1.688	-0.018	1070300	27.9	
					RPD = 6.06	
3 Ethane						
1		1.538			ND	
2		3.026				
4 Ethylene						
1		1.789			ND	
2		2.608				
5 Propane						
1		2.531			ND	
2		4.929				
6 Acetylene						
1		3.868			ND	
2		2.753				
7 Butane						
1		4.319			ND	
2		6.428				
8 isobutylene						
1		5.281			ND	
2		6.269				

QC Flag Legend

Processing Flags

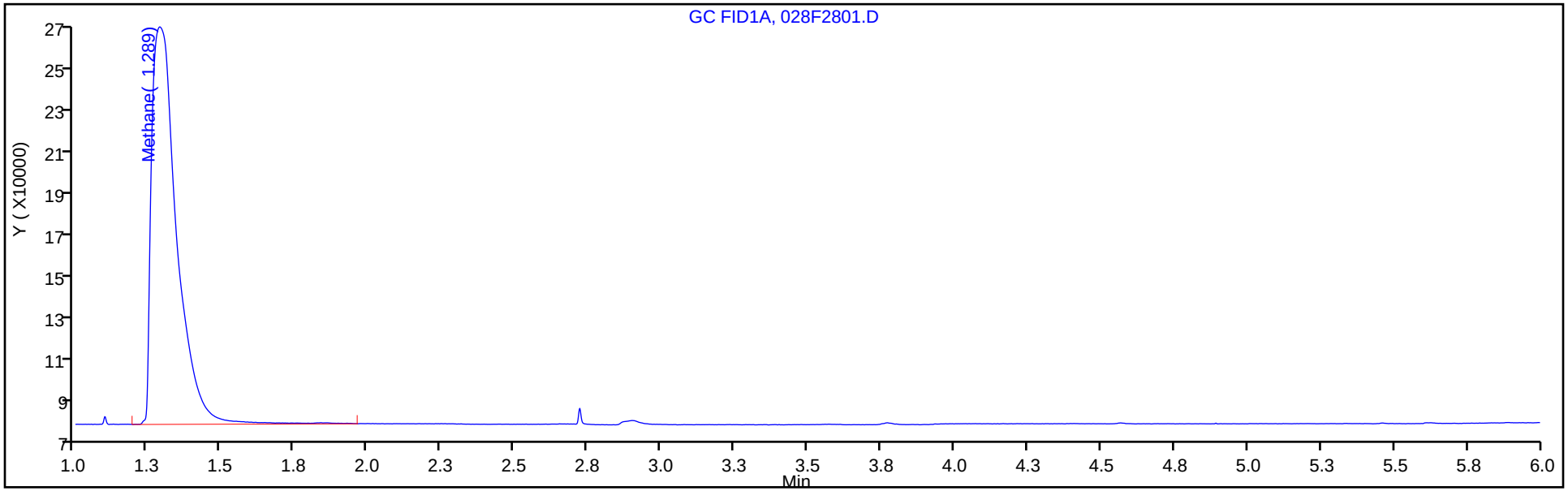
Report Date: 09-Nov-2021 10:13:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

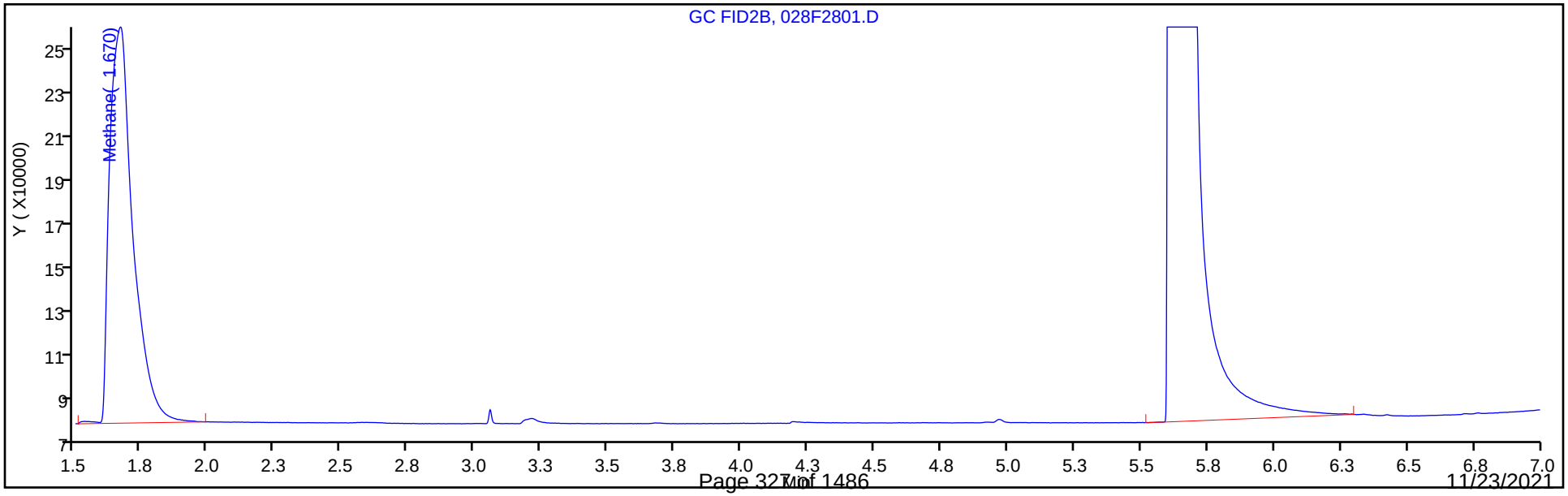
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\028F2801.D

Injection Date:	08-Nov-2021 19:19:29	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-G-12	Lab Sample ID:	280-155015-12	Worklist Smp#:	29
Client ID:	G0075-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.292	1.293	1.293	1.295	1.295	1.294	1.293	1.292	1.288		1.259 - 1.339	1.293
Ethane	1.559	1.562	1.561	1.561	1.560	1.561					1.506 - 1.606	1.561
Ethylene	1.859	1.867	1.870	1.870	1.873	1.873					1.794 - 1.894	1.869
Acetylene	4.184	4.213	4.226	4.230	4.230	4.228					4.150 - 4.310	4.219

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Methane	113753 36593 34286	77207 30893	37613 37193	37343 37763	Lin2	65341.4749	35170.8362							0.9950		0.9900
Ethane	30155 35527	35278 30441	32231	35816	Ave		33241.2722				7.9		20.0			
Ethylene	33189 37346	37318 31937	33977	37589	Ave		35225.9675				7.1		20.0			
Acetylene	26445 29412	29909 25729	27524	29815	Ave		28139.0195				6.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	93424 8118988	126818 60484705	494257 245647963	2453548 669092603	4808571	0.821 263	1.64 1626	13.1 6505	65.7 19515	131
Ethane	Ave	46427 14997572	108631	793971	4411499	8751636	1.54 493	3.08	24.6	123	246
Ethylene	Ave	47667 14678124	107197	780792	4318968	8582166	1.44 460	2.87	23.0	115	230
Acetylene	Ave	35261 10977943	79761	587204	3180347	6274725	1.33 427	2.67	21.3	107	213

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Sep-2021 13:28:57 ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:57:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.292	1.299	-0.007	93424	0.8213	0.7985	a
2	1.689	1.686	0.003	91227	0.8213	0.7920	a
						RPD = 0.81	
3 Ethane							a
1	1.559	1.556	0.003	46427	1.54	1.40	a
2	3.032	3.028	0.004	46984	1.54	1.41	a
						RPD = 0.77	
4 Ethylene							a
1	1.859	1.844	0.015	47667	1.44	1.35	a
2	2.612	2.609	0.003	41226	1.44	1.33	a
						RPD = 1.67	
5 Propane							a
1	2.682	2.721	-0.039	76526	2.26	2.13	a
2	4.937	4.929	0.008	73050	2.26	2.09	a
						RPD = 1.83	
6 Acetylene							a
1	4.184	4.230	-0.046	35261	1.33	1.25	a
2	2.759	2.746	0.013	41503	1.33	1.21	a
						RPD = 3.15	
7 Butane							Ma
1	4.555	4.528	0.027	101912	2.98	2.80	a
2	6.435	6.426	0.009	95155	2.98	2.71	M
						RPD = 3.27	
8 isobutylene							Ma
1	5.437	5.403	0.034	92868	2.87	2.57	M
2	6.277	6.274	0.003	91569	2.87	2.76	a
						RPD = 7.02	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

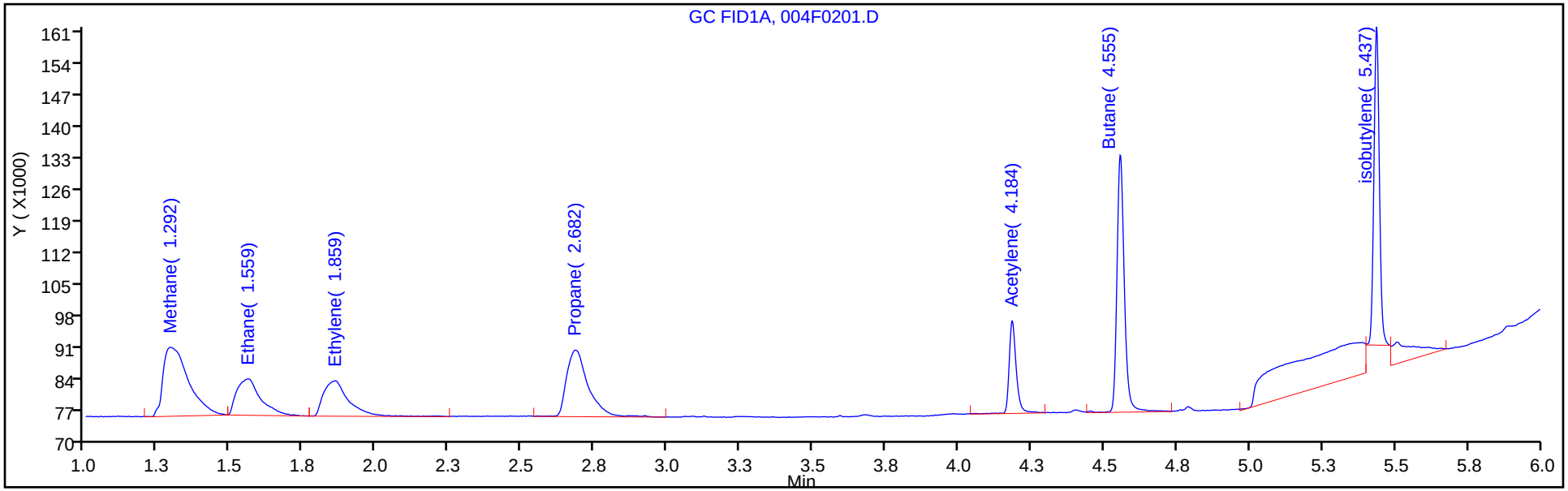
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

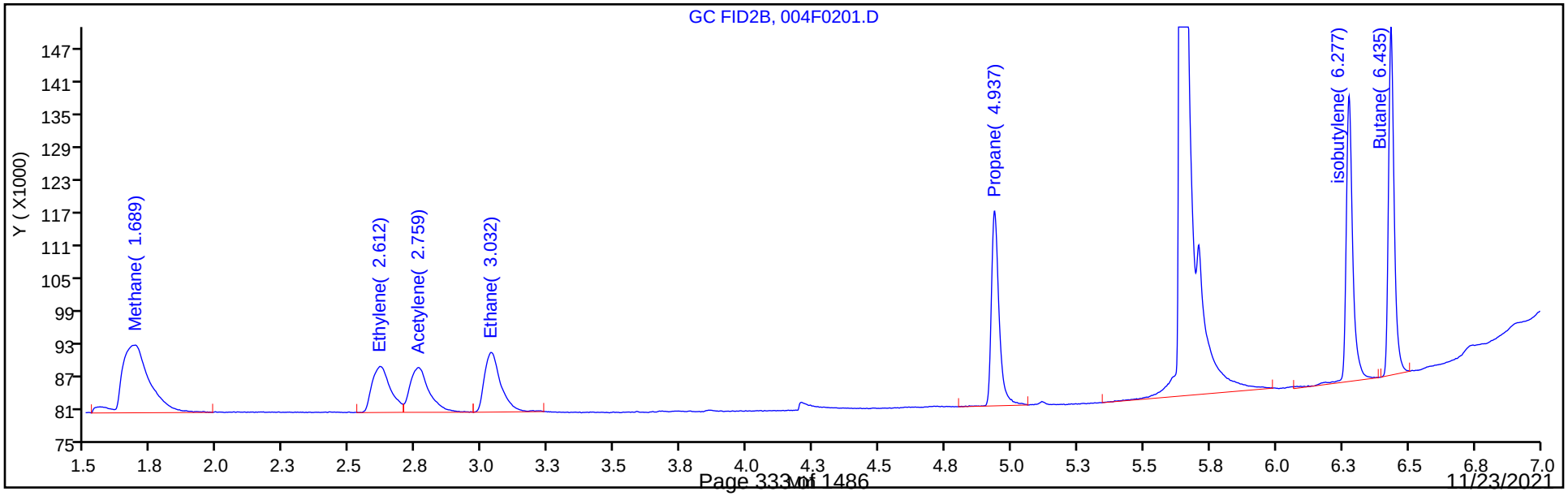
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

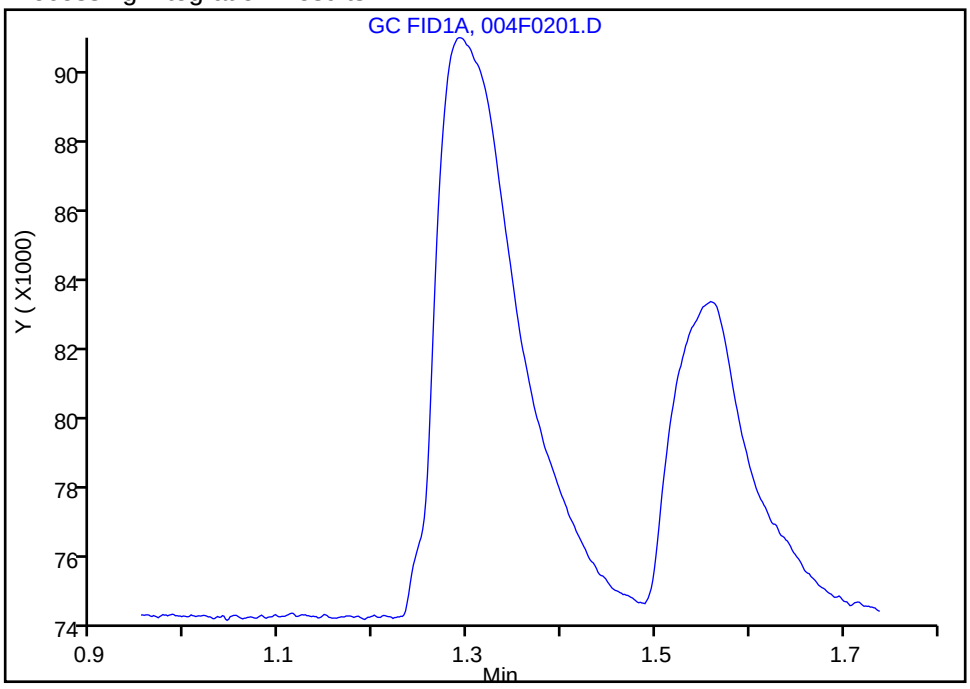
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK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

2 Methane, CAS: 74-82-8

Signal: 1

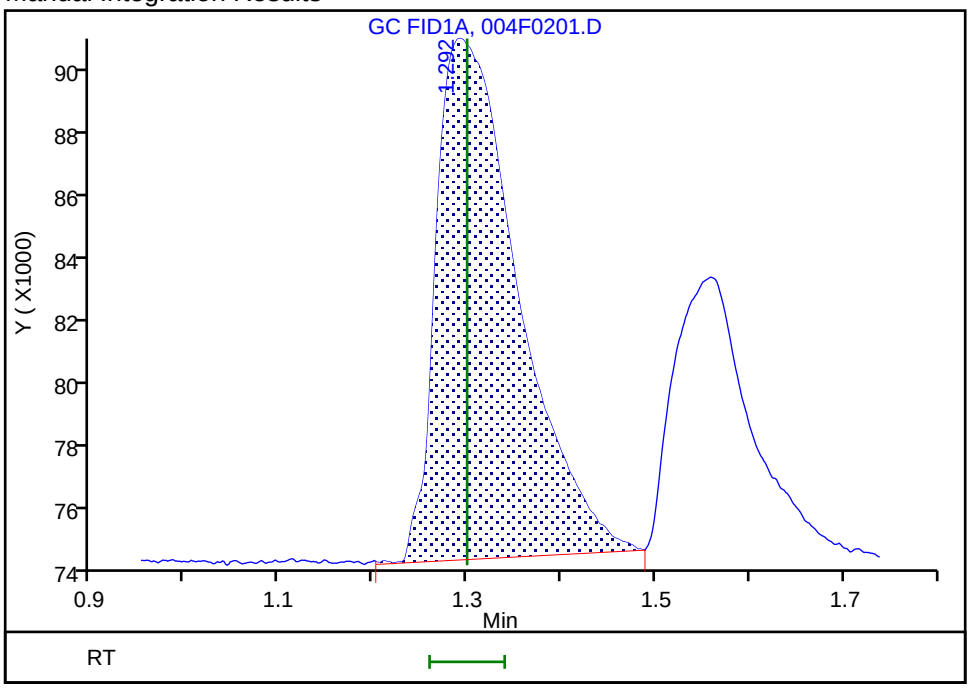
Not Detected
Expected RT: 1.30

Processing Integration Results



Manual Integration Results

RT: 1.29
Area: 93424
Amount: 0.798461
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

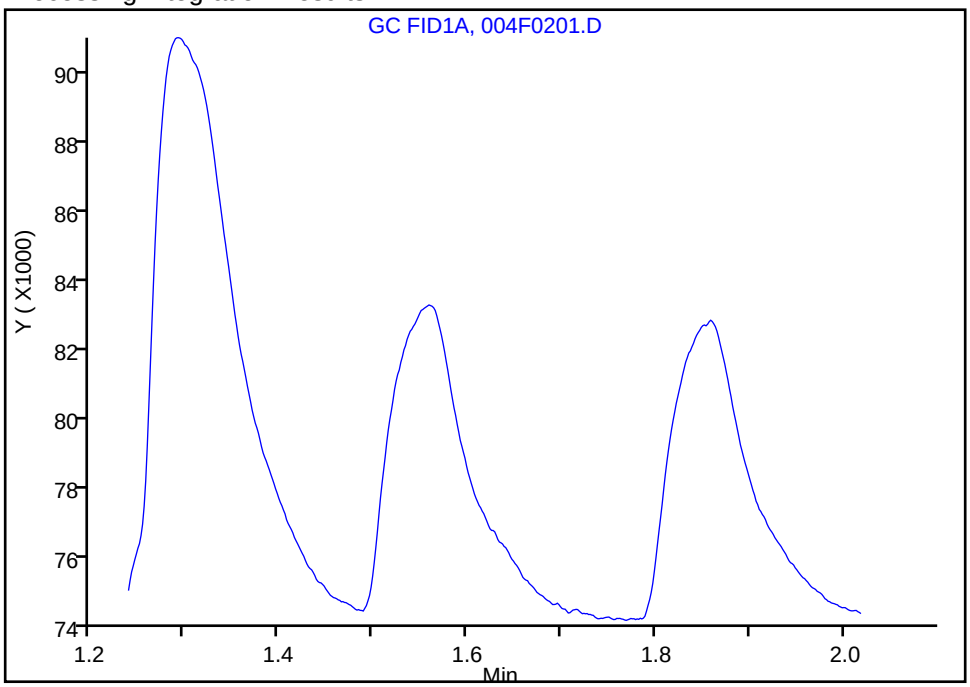
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK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

3 Ethane, CAS: 74-84-0

Signal: 1

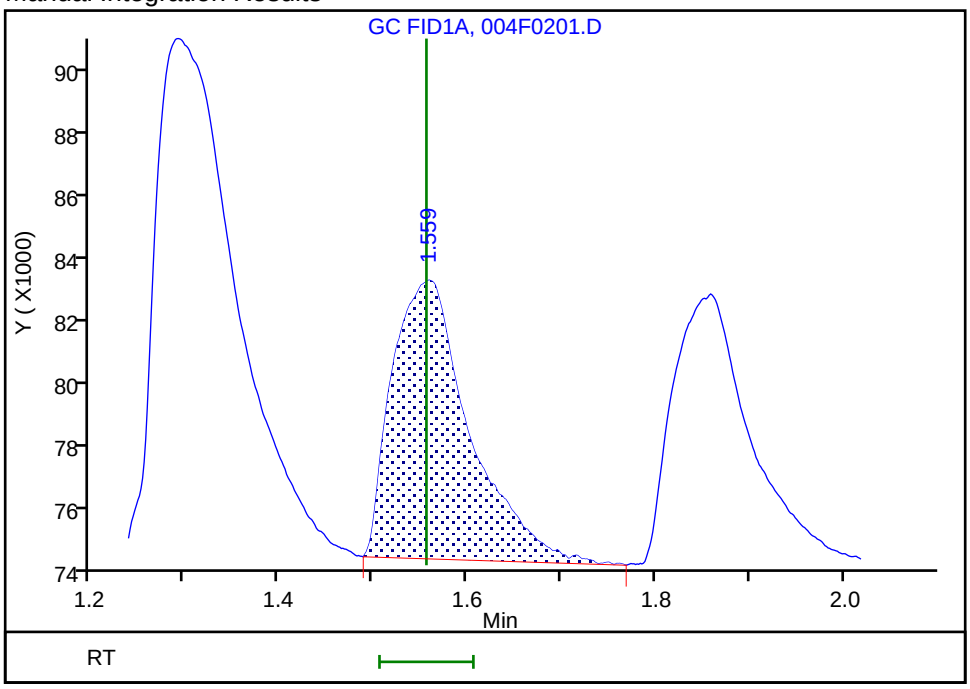
Not Detected
Expected RT: 1.56

Processing Integration Results



Manual Integration Results

RT: 1.56
Area: 46427
Amount: 1.396667
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

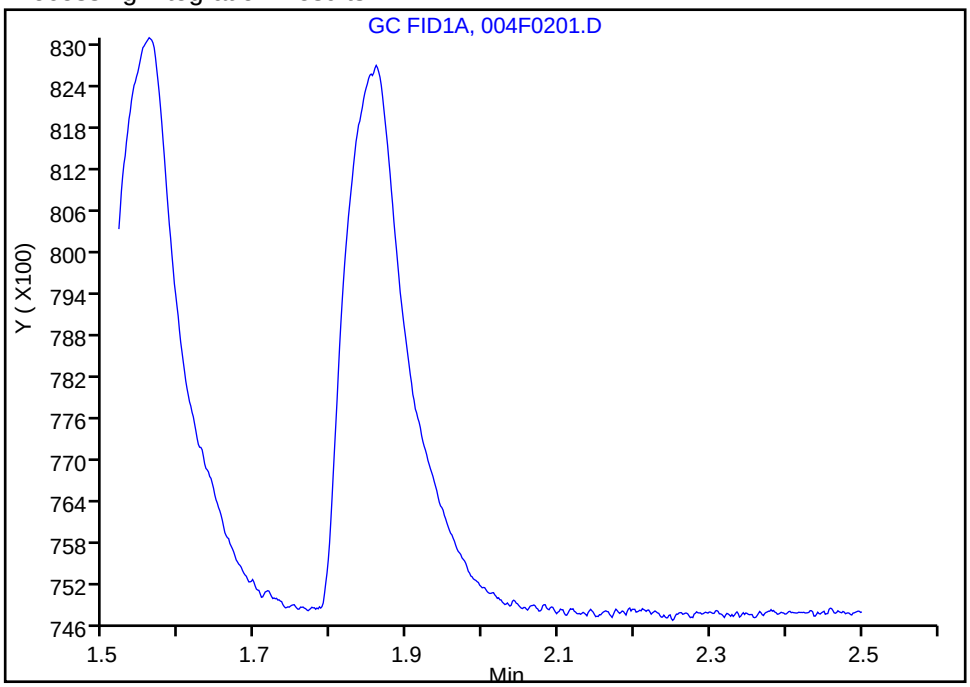
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina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

4 Ethylene, CAS: 74-85-1

Signal: 1

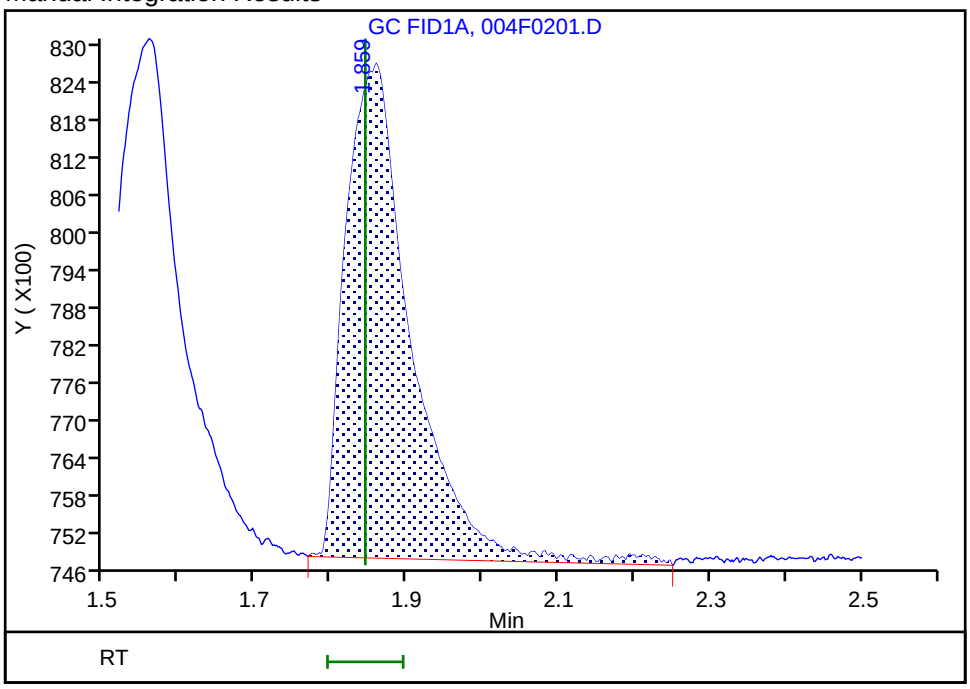
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.86
Area: 47667
Amount: 1.353178
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

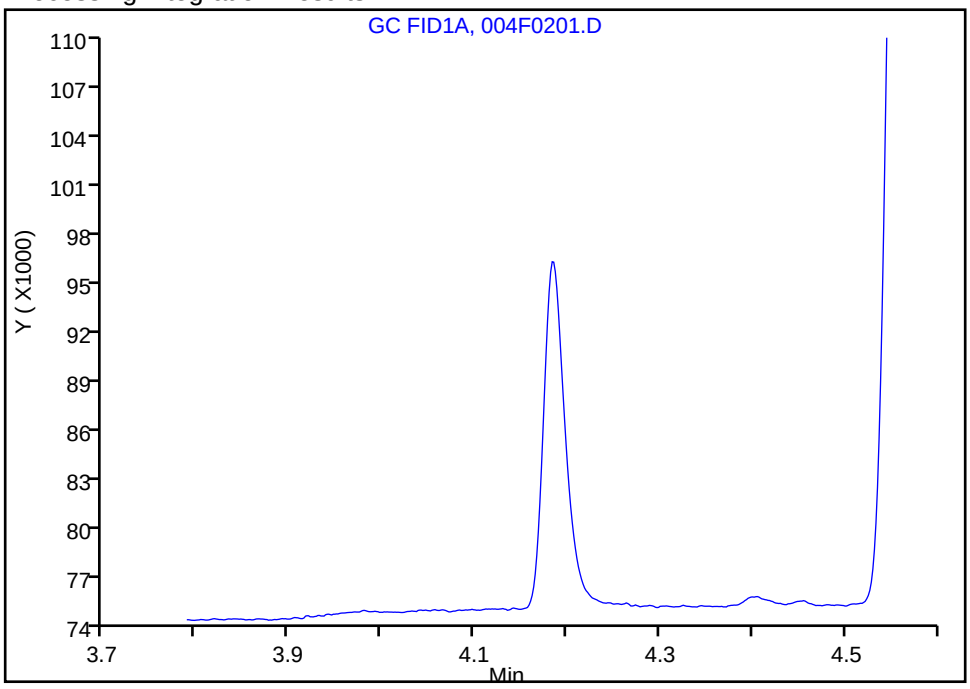
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK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

6 Acetylene, CAS: 74-86-2

Signal: 1

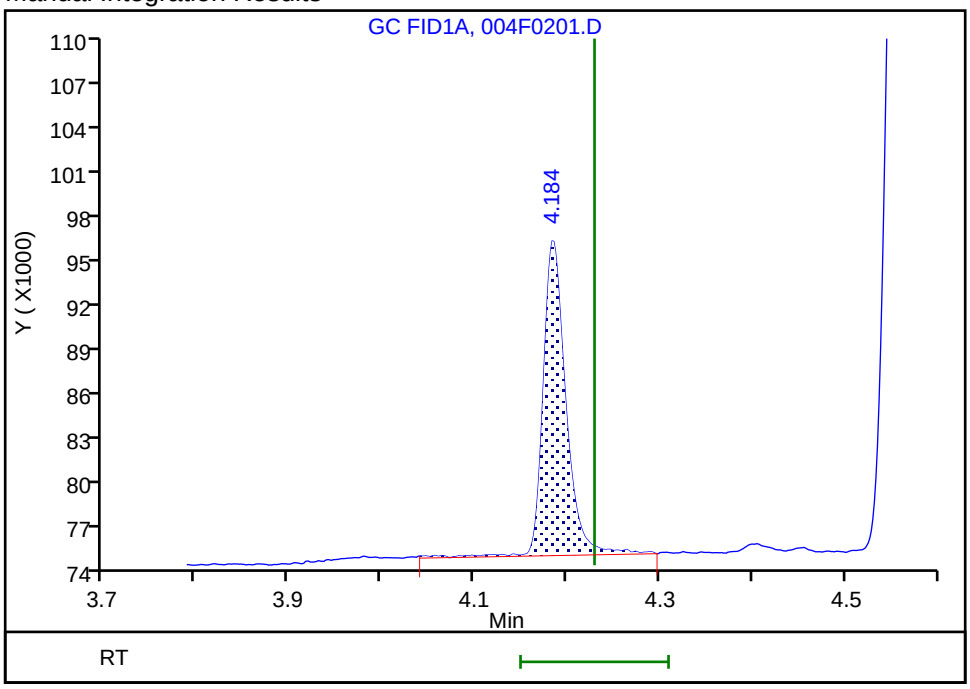
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.18
Area: 35261
Amount: 1.253100
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:55:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Sep-2021 13:41:52 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:58:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	126818	1.64	1.75	
2	1.686	1.686	0.000	126529	1.64	1.77	
						RPD = 1.24	
3 Ethane							
1	1.562	1.556	0.006	108631	3.08	3.27	
2	3.031	3.028	0.003	107446	3.08	3.22	
						RPD = 1.52	
4 Ethylene							
1	1.867	1.844	0.023	107197	2.87	3.04	
2	2.613	2.609	0.004	95159	2.87	3.07	
						RPD = 0.93	
5 Propane							
1	2.700	2.721	-0.021	174390	4.52	4.84	
2	4.935	4.929	0.006	170185	4.52	4.86	
						RPD = 0.37	
6 Acetylene							
1	4.213	4.230	-0.017	79761	2.67	2.83	
2	2.756	2.746	0.010	94797	2.67	2.77	
						RPD = 2.17	
7 Butane							Ma
1	4.575	4.528	0.047	232737	5.95	6.39	a
2	6.435	6.426	0.009	221865	5.95	6.31	M
						RPD = 1.20	
8 isobutylene							Ma
1	5.457	5.403	0.054	232885	5.75	6.45	
2	6.276	6.274	0.002	200266	5.75	6.03	M
						RPD = 6.65	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

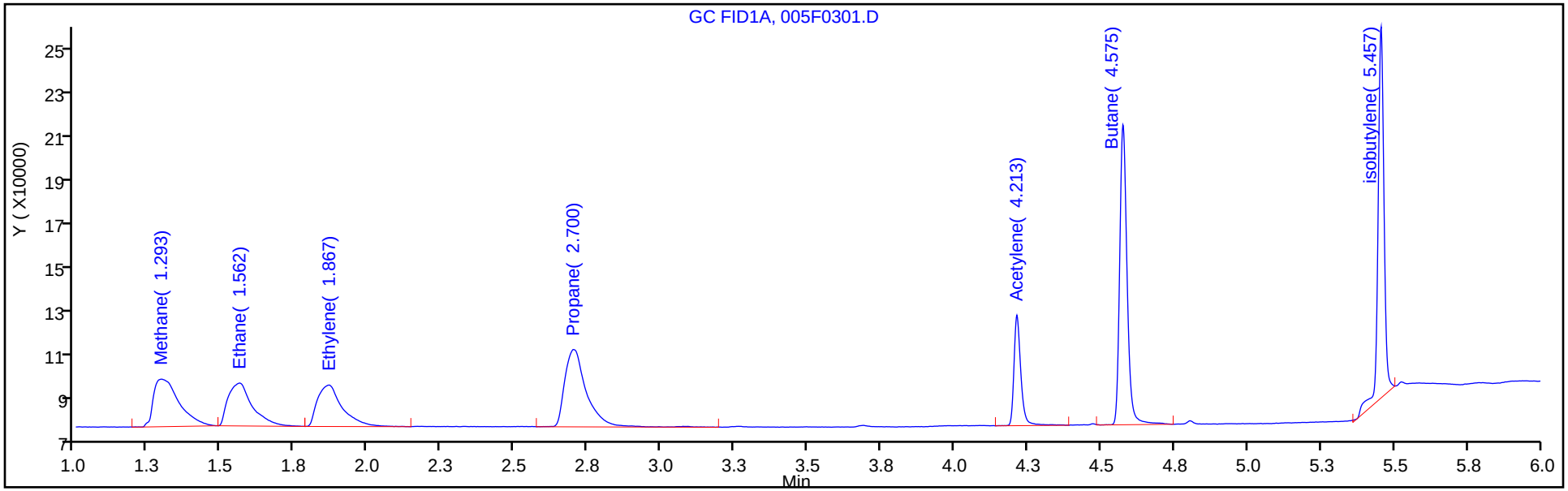
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

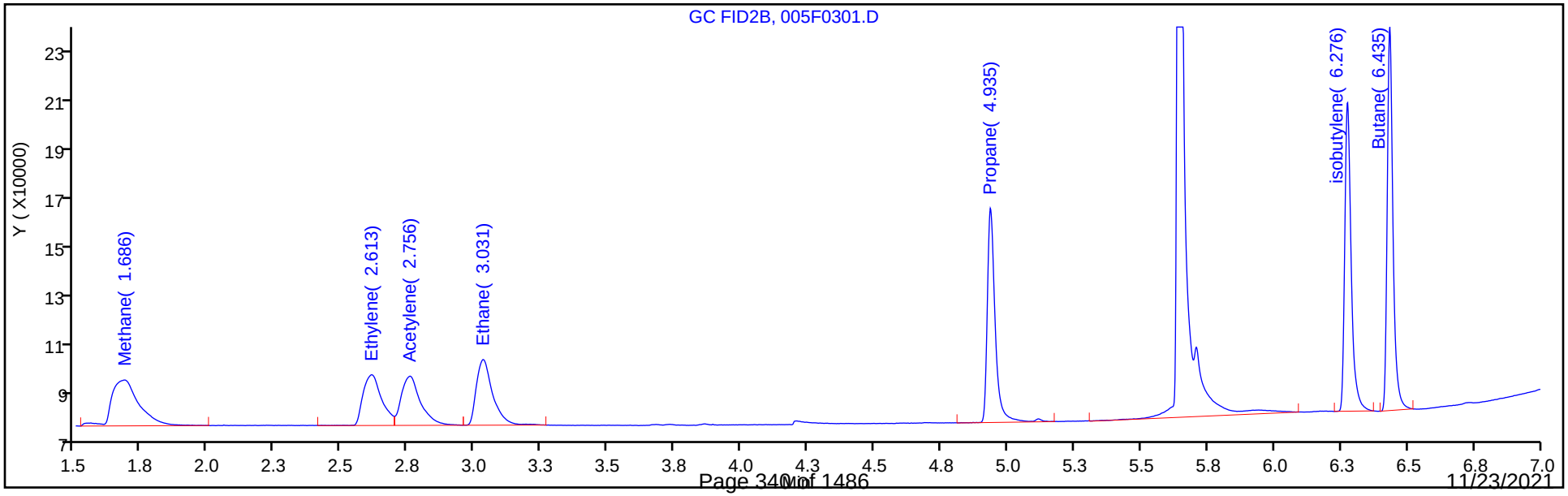
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

Injection Date:	24-Sep-2021 13:41:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Sep-2021 13:54:46 ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:51:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	494257	13.1	12.2	
2	1.684	1.686	-0.002	509129	13.1	12.4	
						RPD = 1.40	
3 Ethane							
1	1.561	1.556	0.005	793971	24.6	23.9	
2	3.029	3.028	0.001	803791	24.6	24.1	
						RPD = 0.81	
4 Ethylene							
1	1.870	1.844	0.026	780792	23.0	22.2	
2	2.609	2.609	0.000	687818	23.0	22.2	
						RPD = 0.16	
5 Propane							
1	2.711	2.721	-0.010	1259121	36.1	35.0	
2	4.934	4.929	0.005	1221976	36.1	34.9	
						RPD = 0.18	
6 Acetylene							a
1	4.226	4.230	-0.004	587204	21.3	20.9	a
2	2.753	2.746	0.007	713476	21.3	20.9	a
						RPD = 0.03	
7 Butane							Ma
1	4.586	4.528	0.058	1686797	47.6	46.3	a
2	6.433	6.426	0.007	1612366	47.6	45.9	M
						RPD = 0.93	
8 isobutylene							Ma
1	5.465	5.403	0.062	1589725	46.0	44.0	
2	6.274	6.274	0.000	1464027	46.0	44.1	M
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

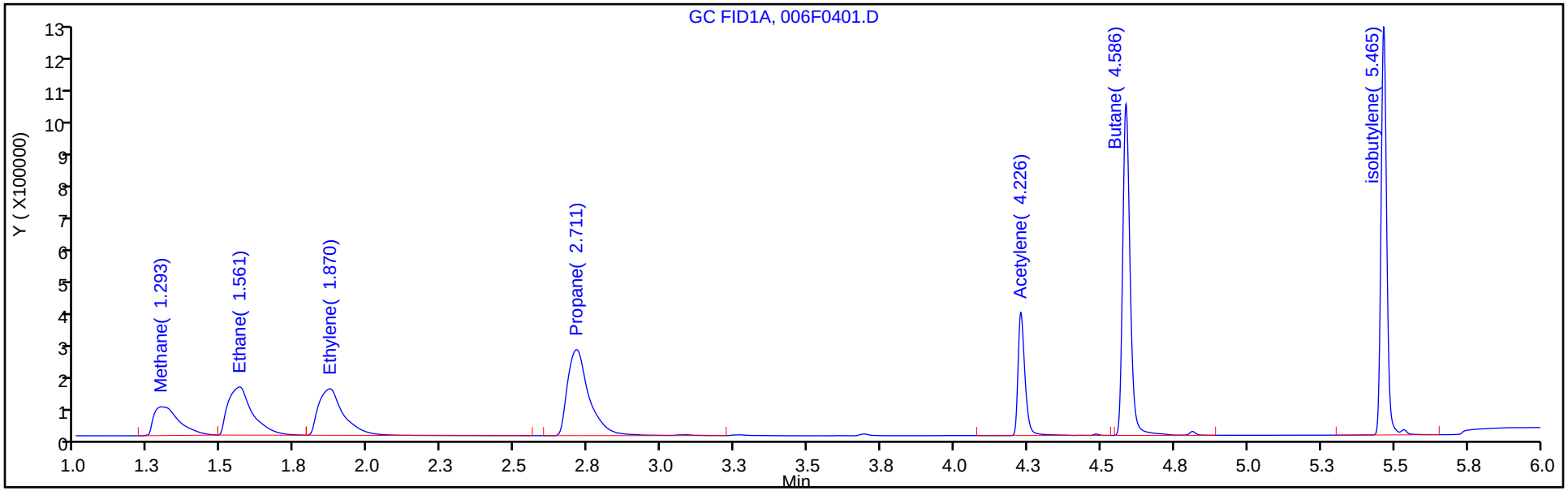
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

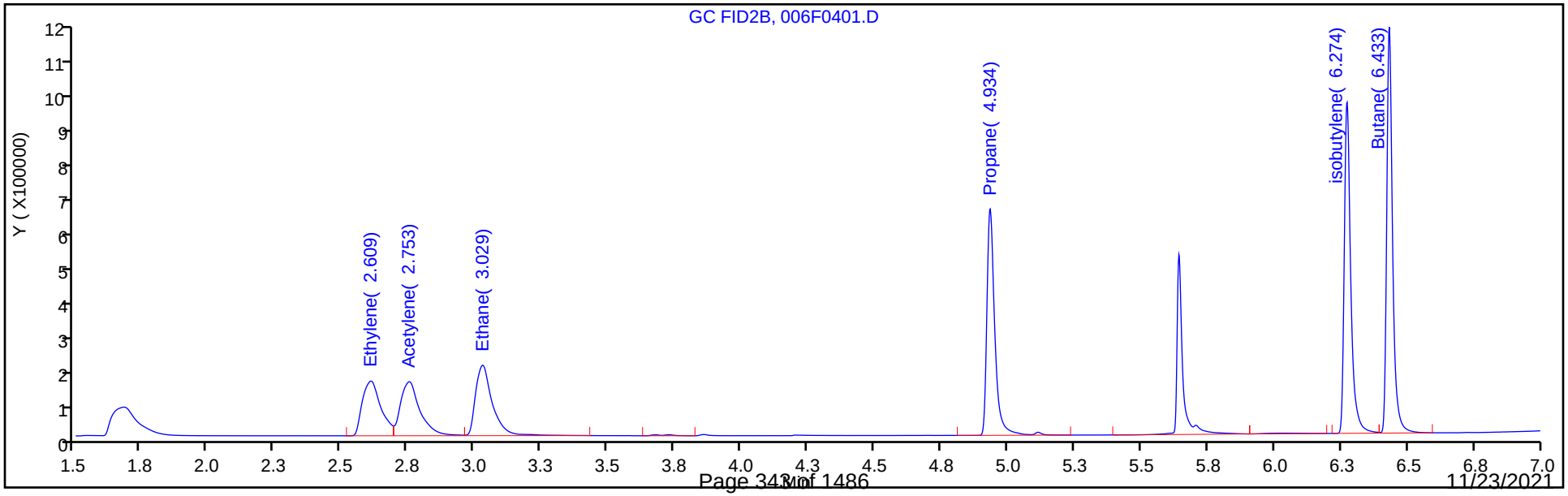
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

Injection Date:	24-Sep-2021 13:54:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

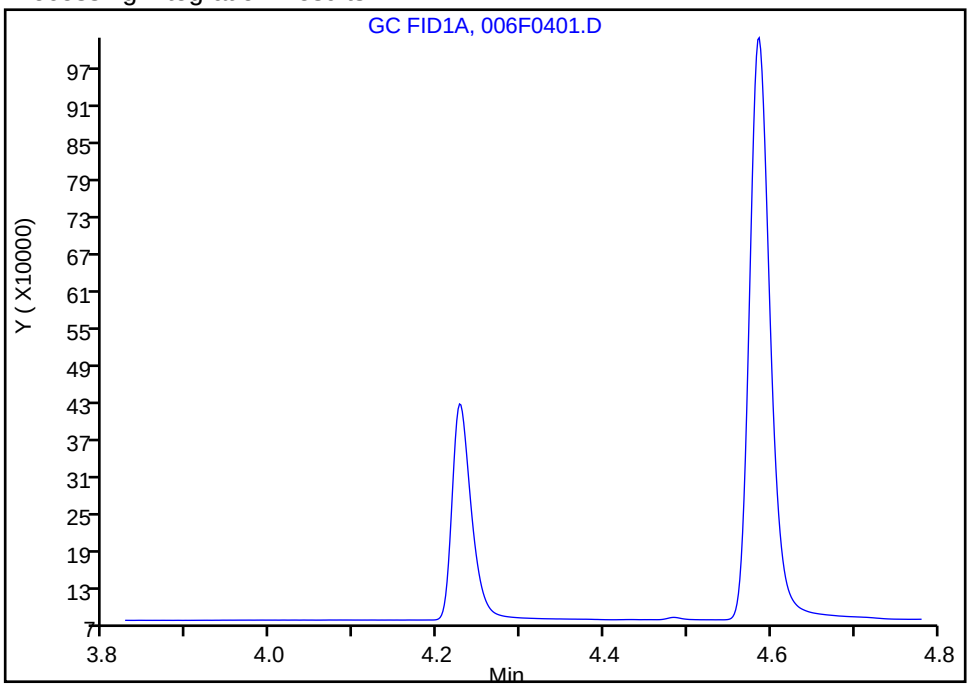
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina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

6 Acetylene, CAS: 74-86-2

Signal: 1

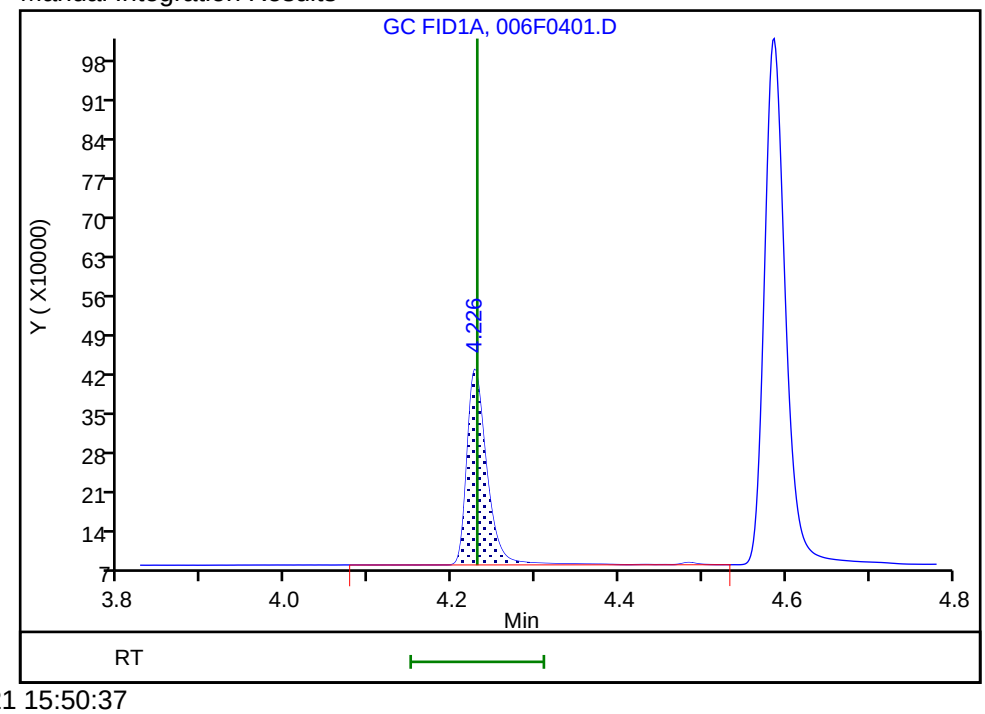
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 587204
Amount: 20.867962
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Sep-2021 14:07:45 ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:50:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.295	1.295	0.000	2453548	65.7	67.9	
2	1.681	1.681	0.000	2553566	65.7	69.0	
						RPD = 1.60	
3 Ethane							Ma
1	1.561	1.561	0.000	4411499	123.2	132.7	
2	3.026	3.026	0.000	4450065	123.2	133.3	M
						RPD = 0.45	
4 Ethylene							
1	1.870	1.870	0.000	4318968	114.9	122.6	
2	2.608	2.608	0.000	3812973	114.9	123.1	
						RPD = 0.38	
5 Propane							
1	2.716	2.716	0.000	6962772	180.6	193.4	
2	4.933	4.933	0.000	6754582	180.6	192.9	
						RPD = 0.22	
6 Acetylene							a
1	4.230	4.230	0.000	3180347	106.7	113.0	a
2	2.751	2.751	0.000	3899802	106.7	114.1	a
						RPD = 0.95	
7 Butane							
1	4.590	4.590	0.000	9255328	238.1	254.1	
2	6.430	6.430	0.000	8939530	238.1	254.4	
						RPD = 0.11	
8 isobutylene							
1	5.468	5.468	0.000	8777969	229.8	243.0	
2	6.271	6.271	0.000	8052089	229.8	242.5	
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

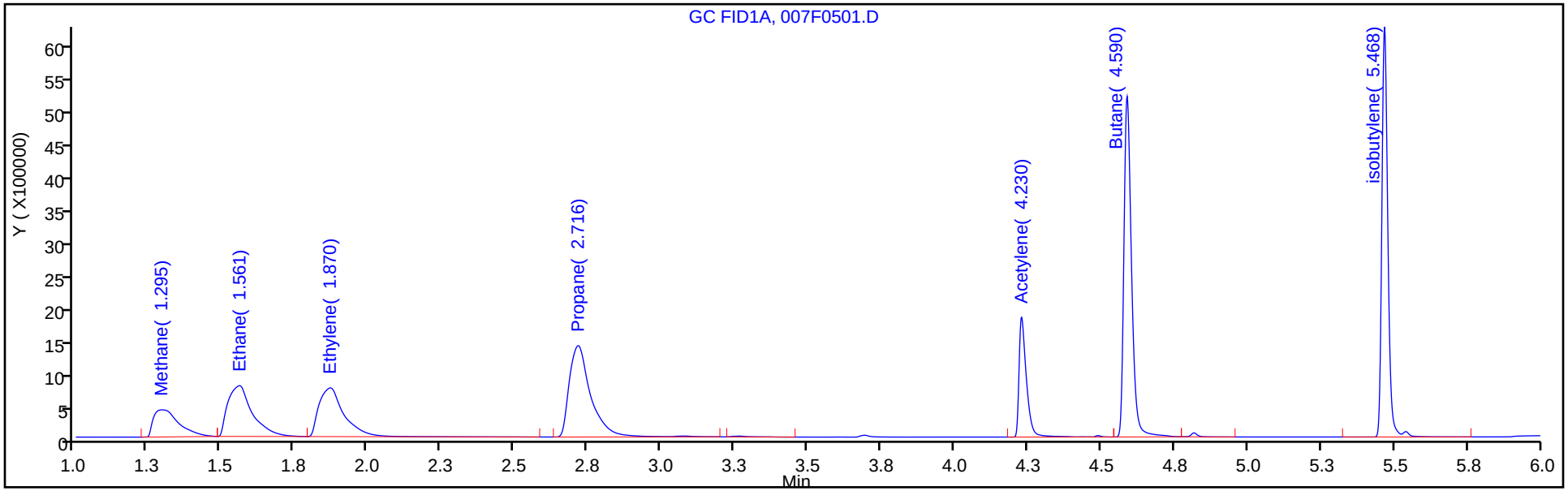
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

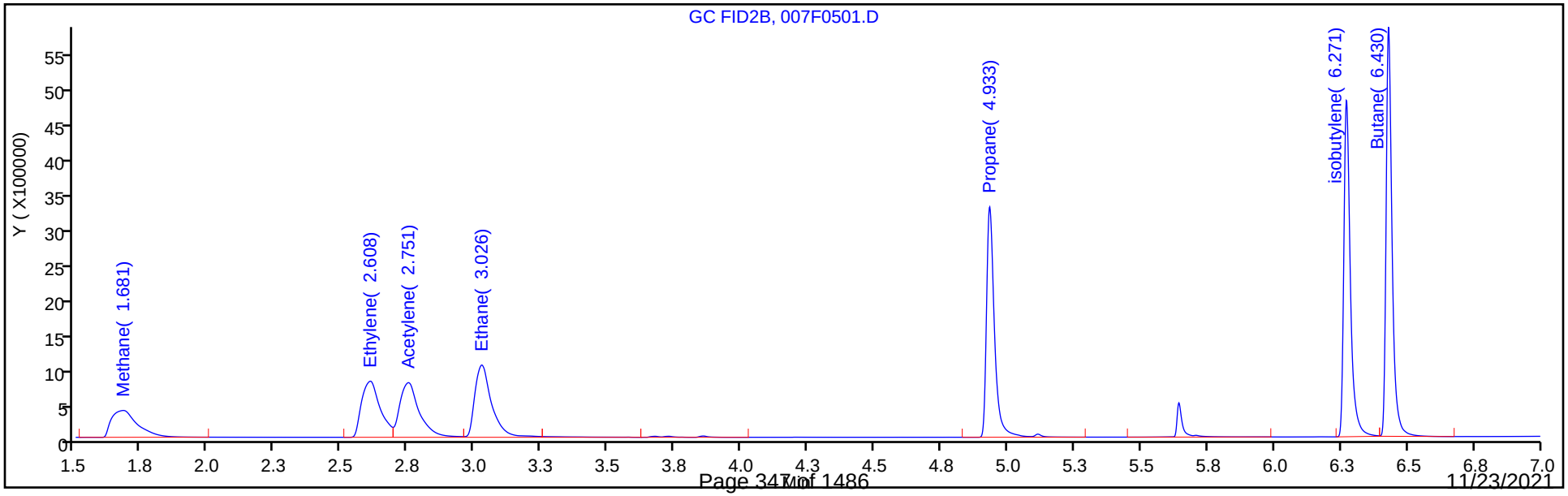
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

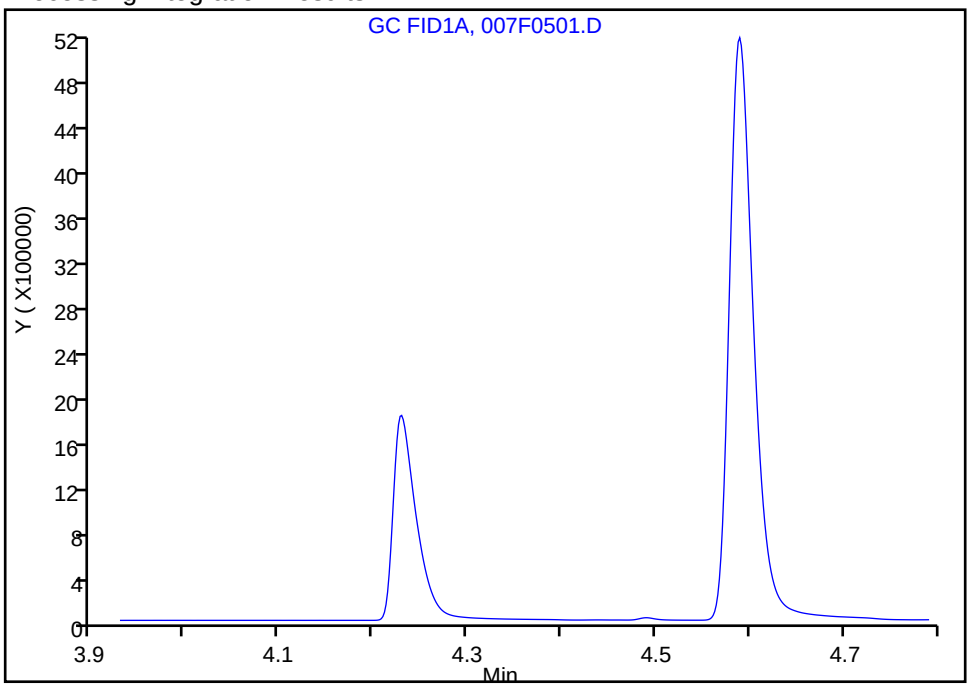
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina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

6 Acetylene, CAS: 74-86-2

Signal: 1

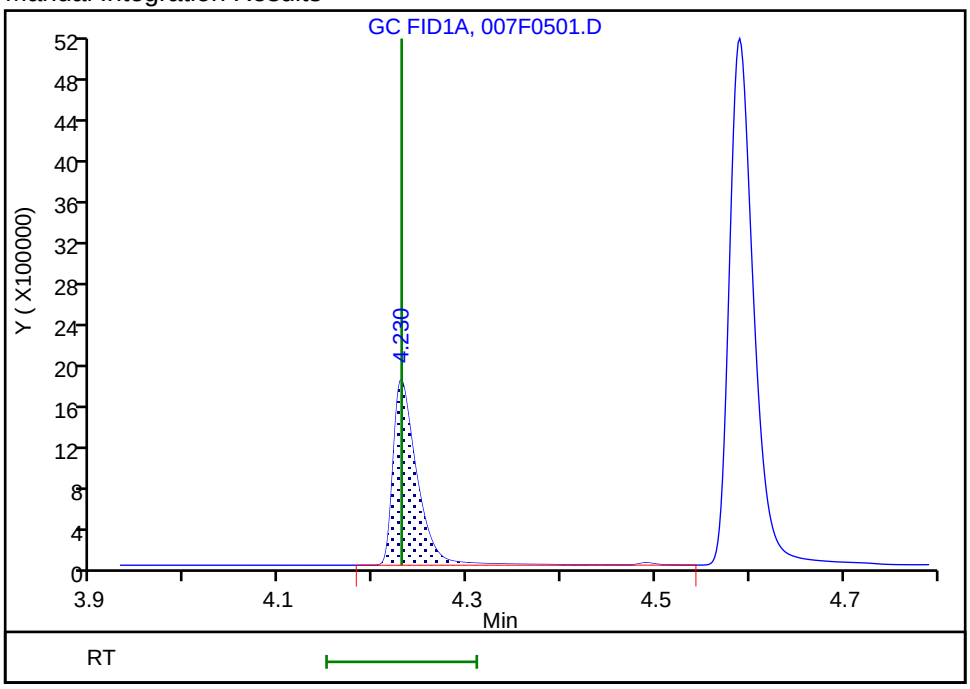
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 3180347
Amount: 113.0227
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:17
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Sep-2021 14:20:44 ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:46:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							M
1	1.295	1.295	0.000	4808571	131.4	134.9	
2	1.678	1.678	0.000	5065048	131.4	138.6	M
						RPD = 2.70	
3 Ethane							
1	1.560	1.560	0.000	8751636	246.3	263.3	
2	3.023	3.023	0.000	8976911	246.3	268.9	
						RPD = 2.12	
4 Ethylene							
1	1.873	1.873	0.000	8582166	229.8	243.6	
2	2.603	2.603	0.000	7548044	229.8	243.6	
						RPD = 0.00	
5 Propane							M
1	2.721	2.721	0.000	13578180	361.3	377.1	M
2	4.929	4.929	0.000	13344347	361.3	381.1	
						RPD = 1.08	
6 Acetylene							a
1	4.230	4.230	0.000	6274725	213.3	223.0	a
2	2.746	2.746	0.000	7865310	213.3	230.1	a
						RPD = 3.15	
7 Butane							Ma
1	4.591	4.591	0.000	18468578	476.1	507.1	a
2	6.426	6.426	0.000	17766895	476.1	505.6	M
						RPD = 0.29	
8 isobutylene							Ma
1	5.468	5.468	0.000	17314841	459.7	479.3	
2	6.269	6.269	0.000	15966351	459.7	480.9	M
						RPD = 0.33	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

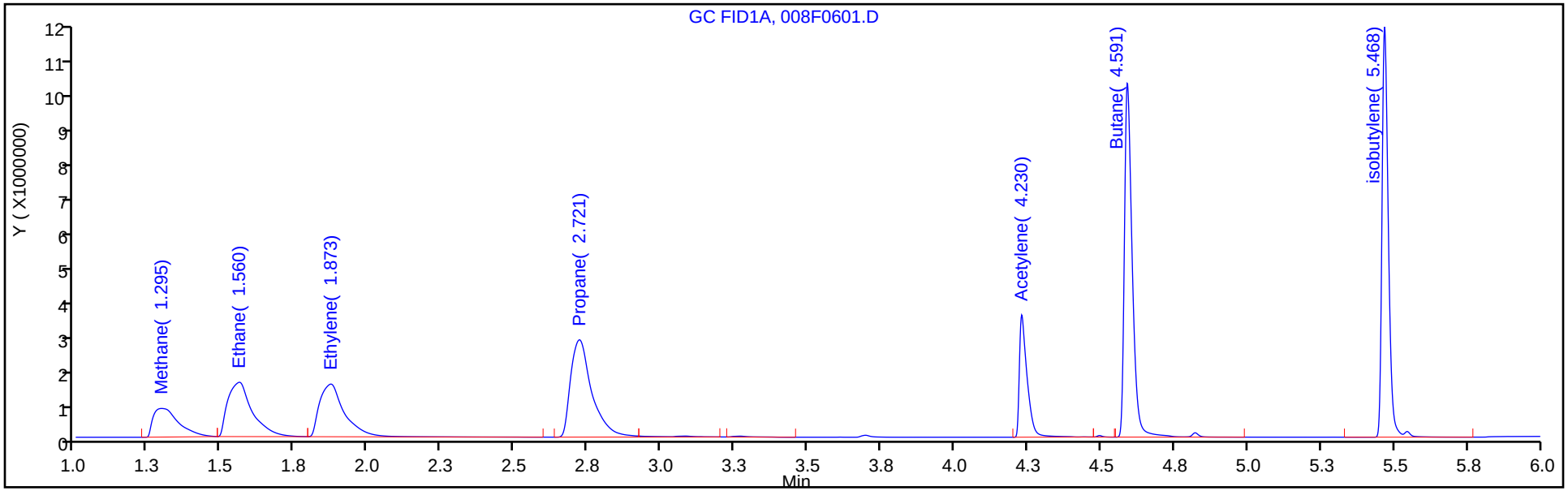
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

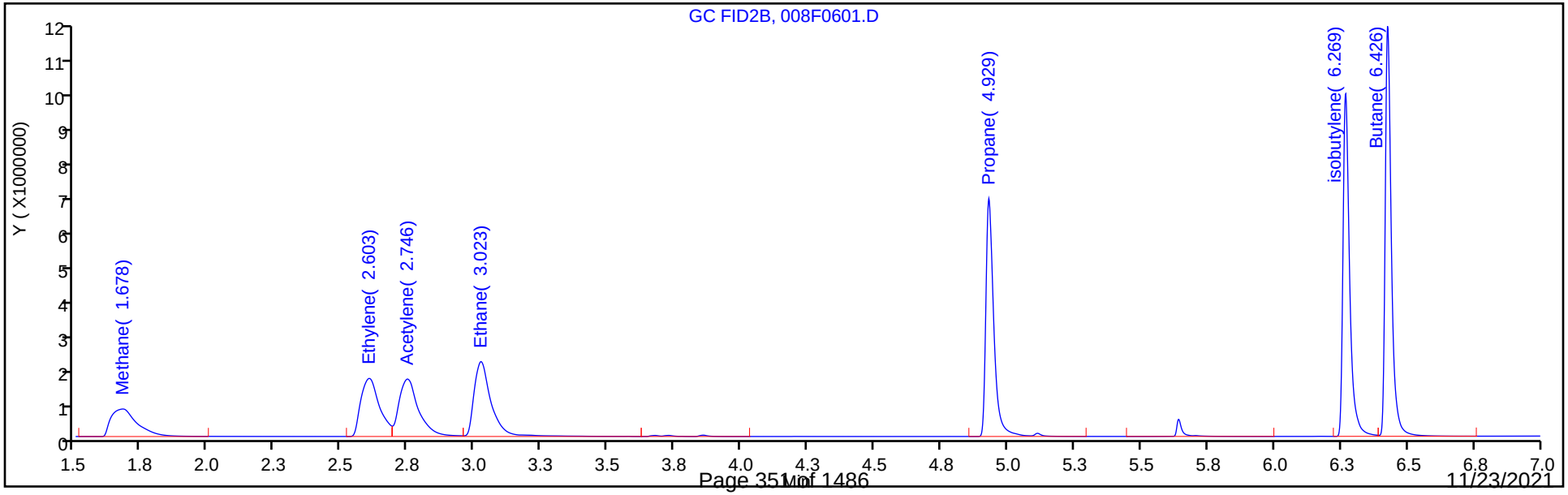
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

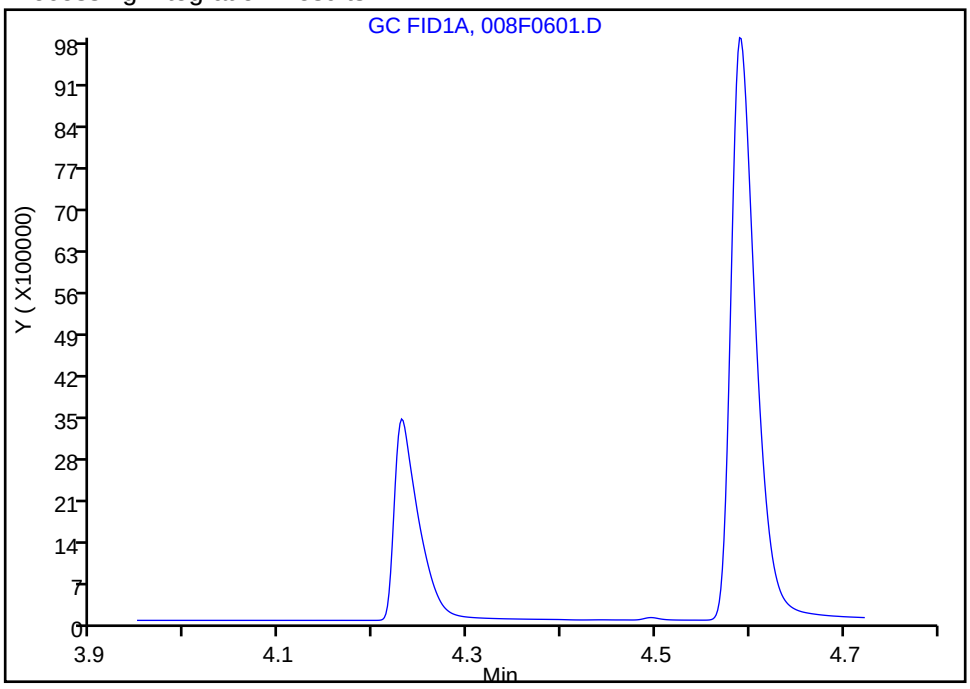
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D				
Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	8	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK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

6 Acetylene, CAS: 74-86-2

Signal: 1

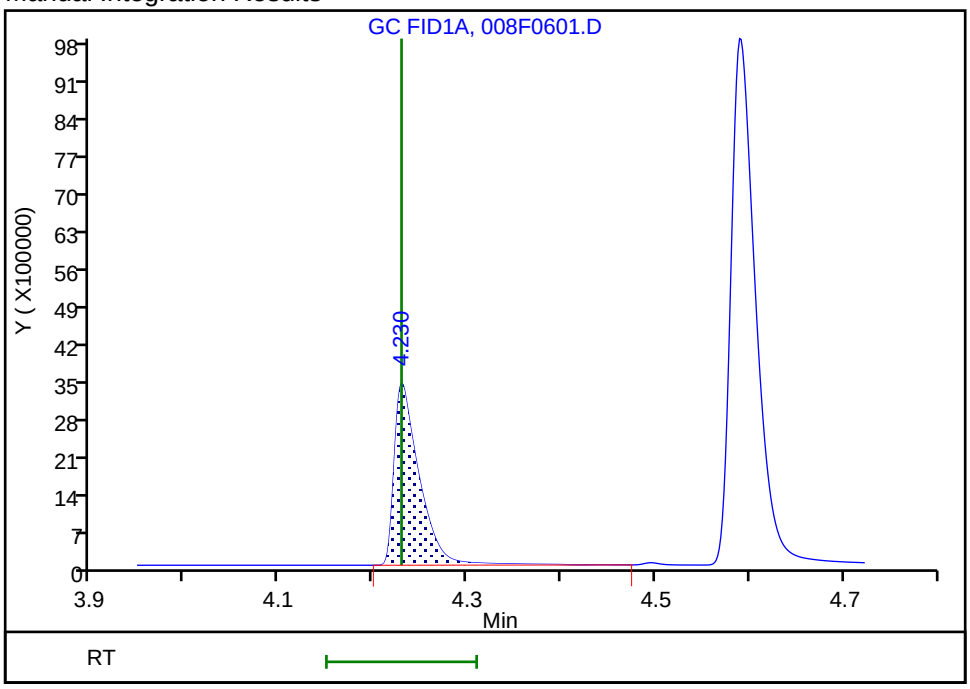
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 6274725
Amount: 222.9902
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:44:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Sep-2021 14:33:44 ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:16 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:47:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.295	-0.001	8118988	262.8	229.0	
2	1.678	1.678	0.000	8455607	262.8	232.5	
						RPD = 1.51	
3 Ethane							
1	1.561	1.560	0.001	14997572	492.7	451.2	
2	3.021	3.023	-0.002	14625440	492.7	438.1	
						RPD = 2.94	
4 Ethylene							
1	1.873	1.873	0.000	14678124	459.6	416.7	
2	2.602	2.603	-0.001	12909086	459.6	416.7	
						RPD = 0.00	
5 Propane							
1	2.723	2.721	0.002	23539538	722.6	653.7	
2	4.926	4.929	-0.003	23034734	722.6	657.9	
						RPD = 0.65	
6 Acetylene							a
1	4.228	4.230	-0.002	10977943	426.7	390.1	a
2	2.746	2.746	0.000	13452620	426.7	393.6	a
						RPD = 0.88	
7 Butane							Ma
1	4.588	4.591	-0.003	30555104	952.3	838.9	a
2	6.423	6.426	-0.003	31281741	952.3	890.2	M
						RPD = 5.93	
8 isobutylene							Ma
1	5.466	5.468	-0.002	30754275	919.4	851.3	
2	6.266	6.269	-0.003	28385241	919.4	854.9	M
						RPD = 0.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

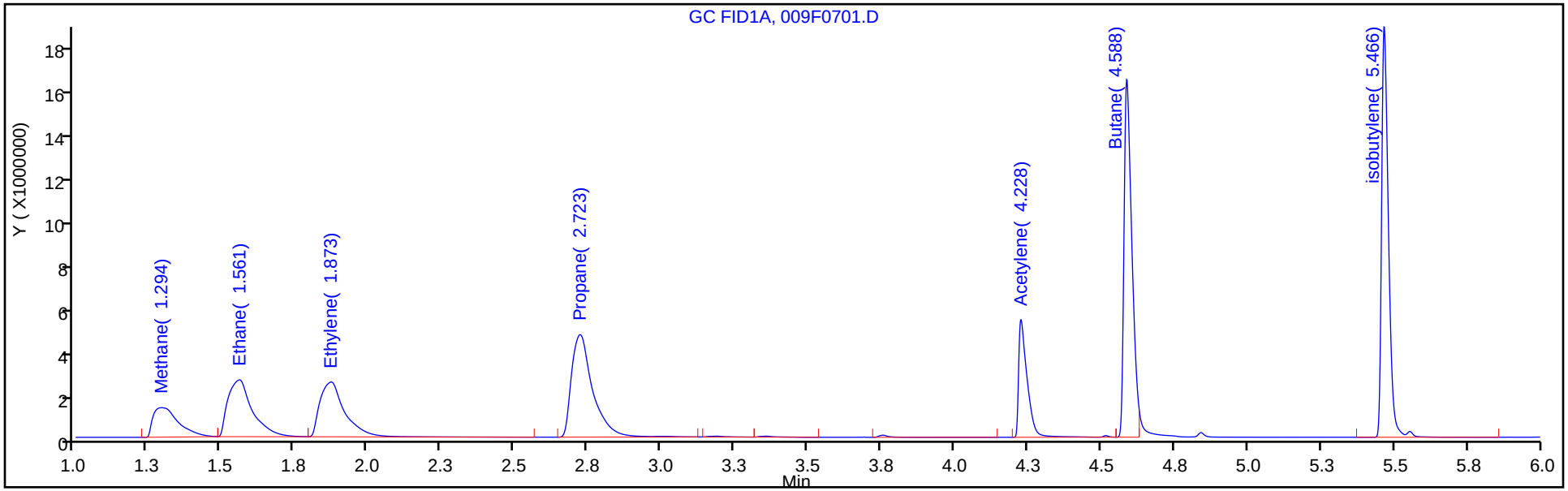
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

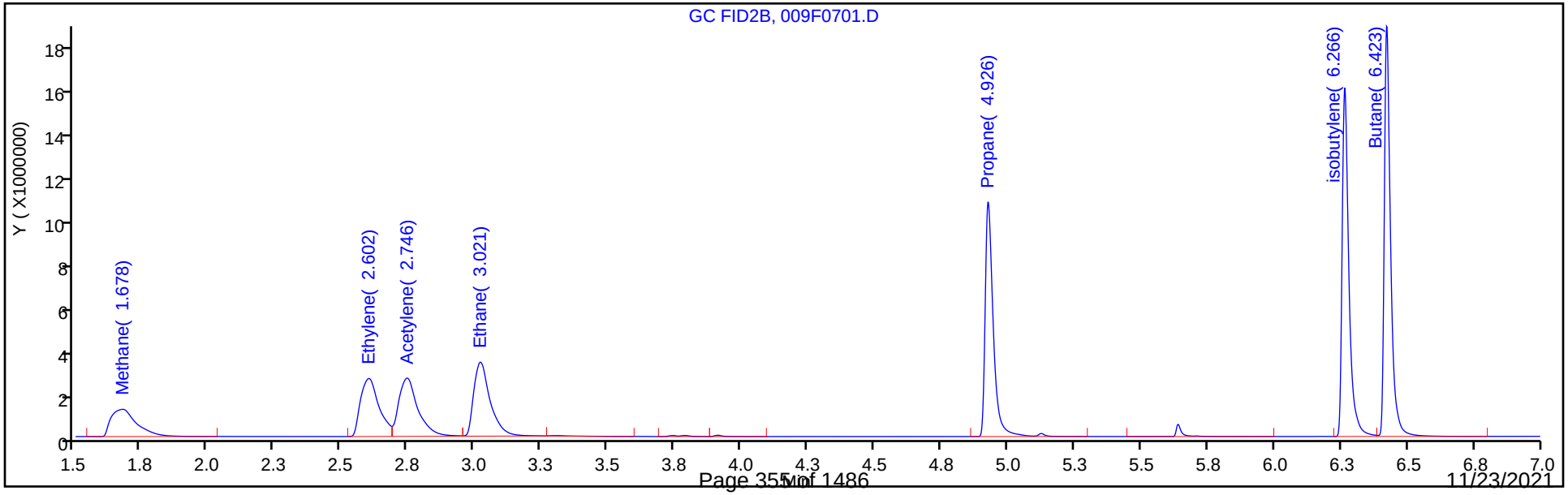
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

Injection Date:	24-Sep-2021 14:33:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

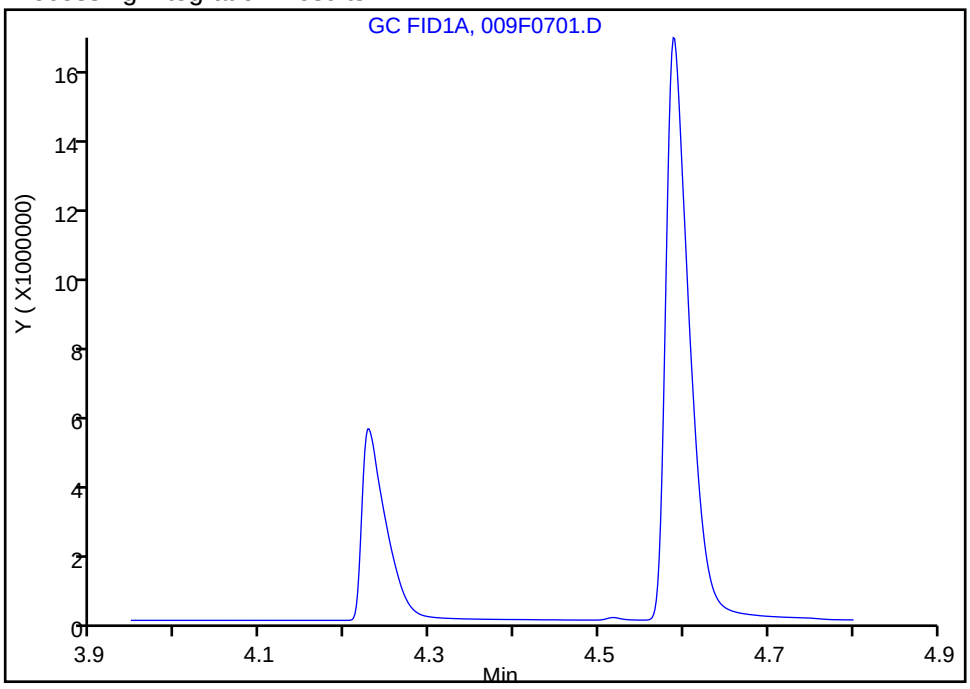
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina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

6 Acetylene, CAS: 74-86-2

Signal: 1

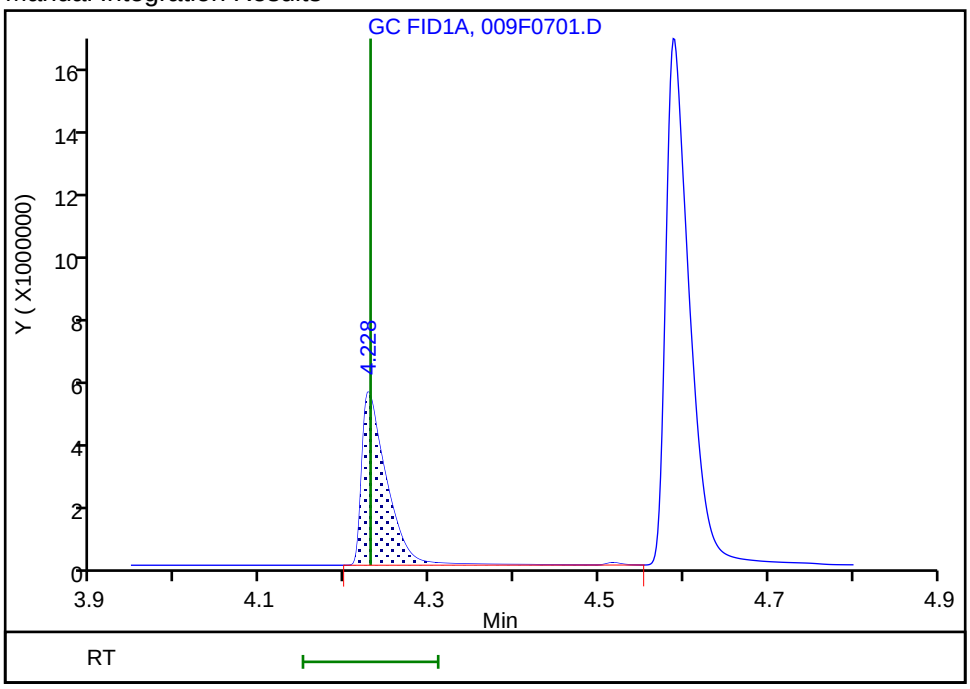
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 10977943
Amount: 390.1324
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:46:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Sep-2021 14:46:48 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.295	-0.002	60484705	1626.3	1717.9	
2	1.676	1.678	-0.002	59798125	1626.3	1654.6	
						RPD = 3.75	

QC Flag Legend
Processing Flags

Reagents:
RSK175methane_00010 Amount Added: 50.00 Units: uL

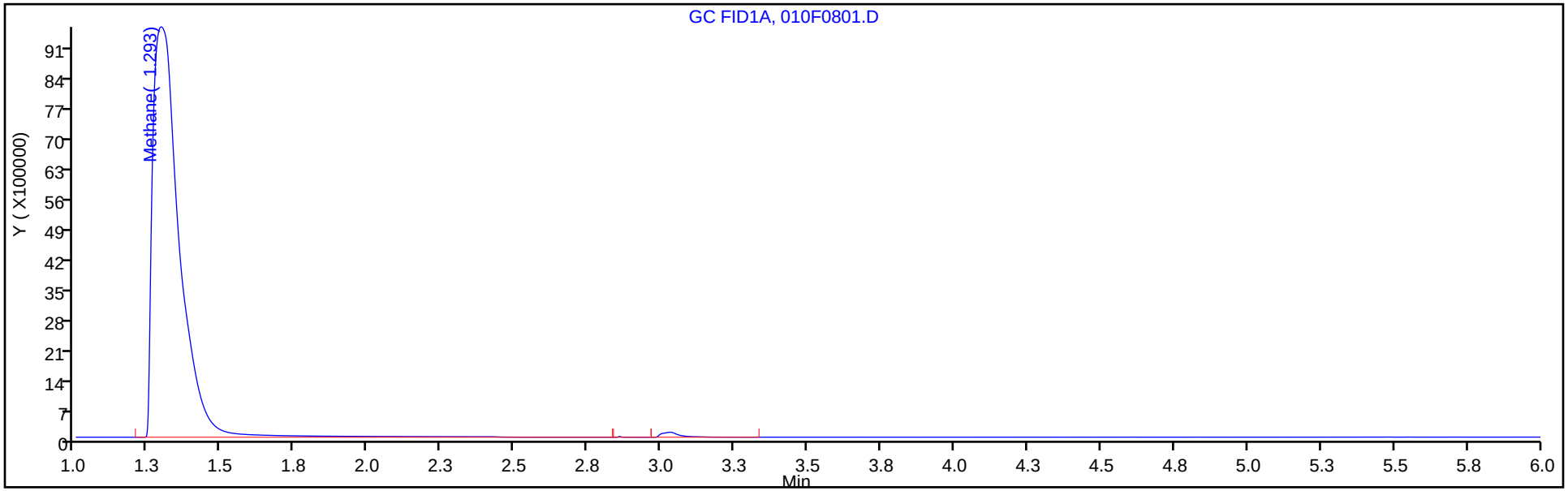
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

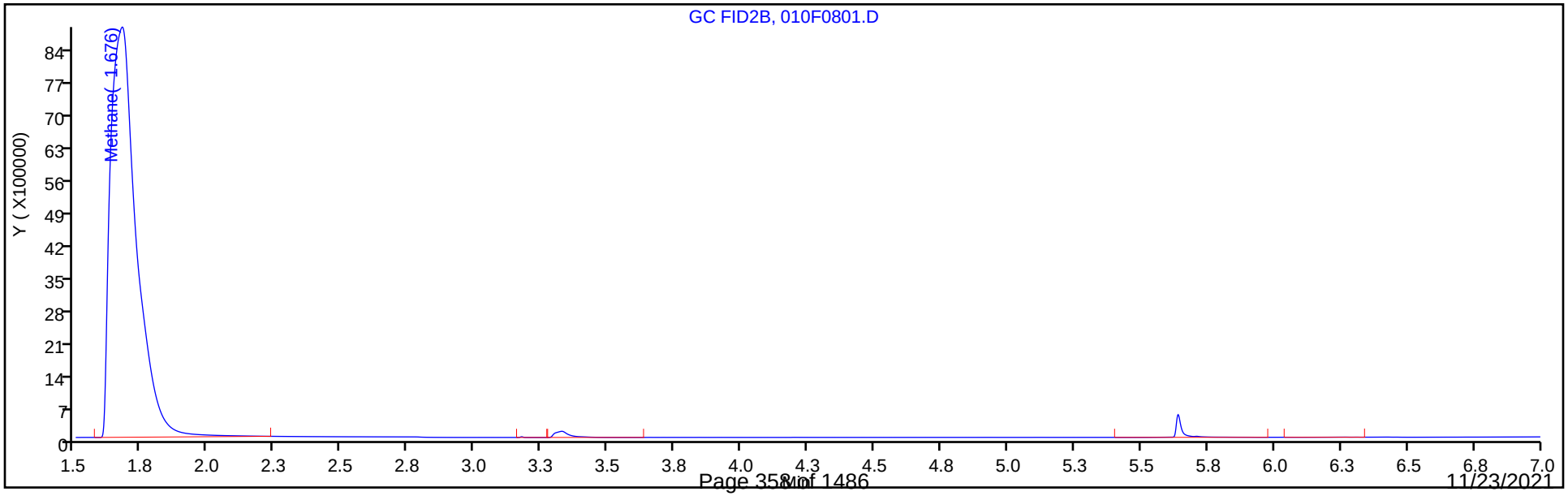
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

Injection Date:	24-Sep-2021 14:46:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	24-Sep-2021 14:59:53	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:17	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.292	1.295	-0.003	245647963	6505.0	6982.6	
2	1.673	1.678	-0.005	247051774	6505.0	6841.2	
						RPD = 2.04	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

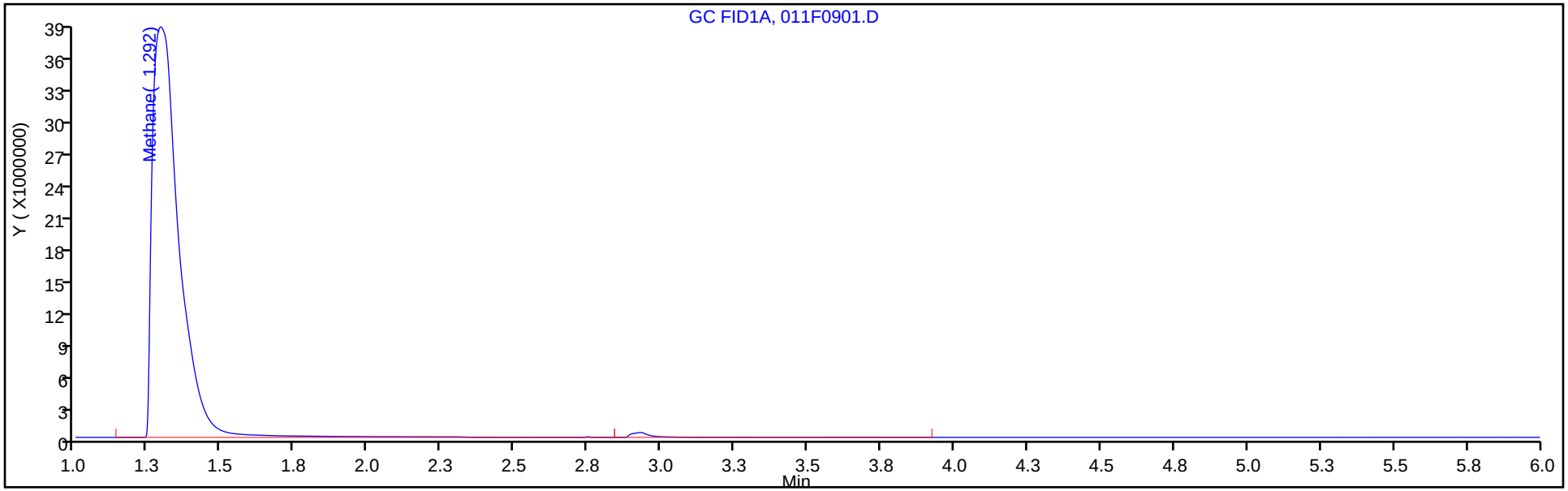
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

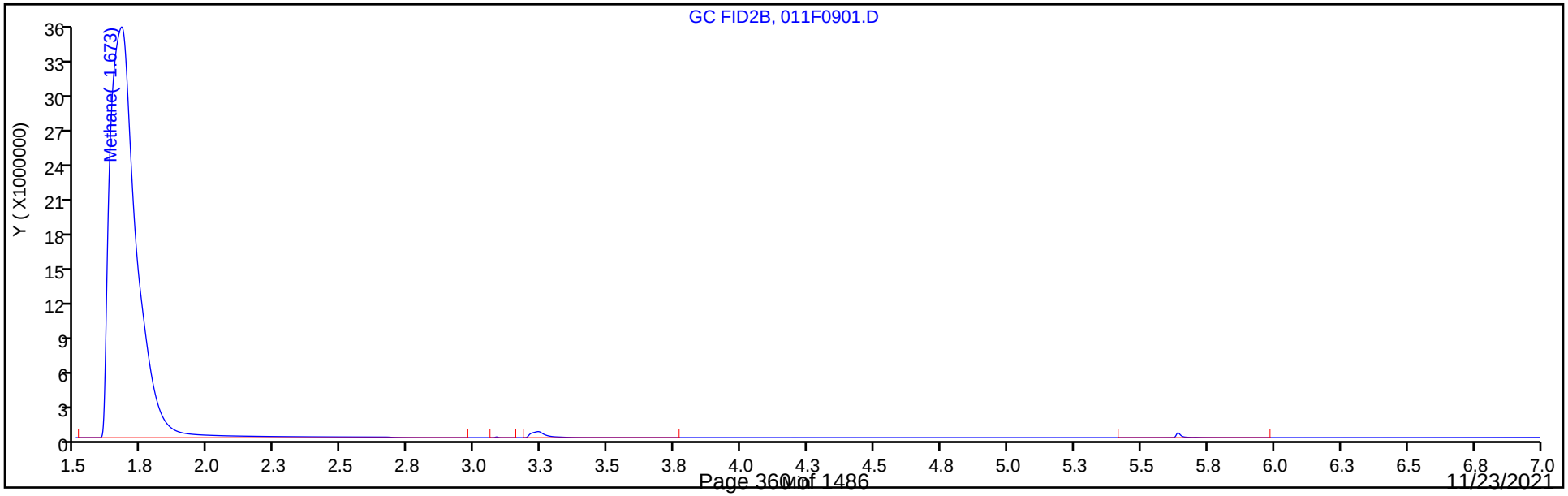
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

Injection Date:	24-Sep-2021 14:59:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	10		
Inject. Date:	24-Sep-2021 15:12:55	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:18	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.295	-0.007	669092603	19515	19022	
2	1.669	1.678	-0.009	675608539	19515	18712	
						RPD = 1.65	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

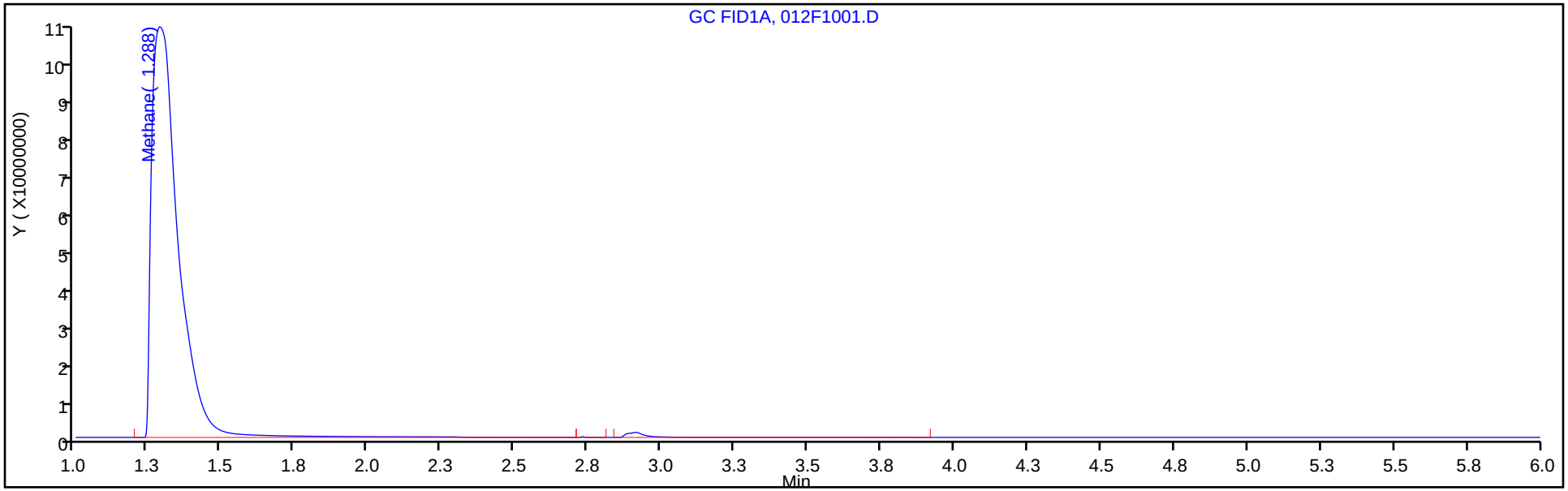
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

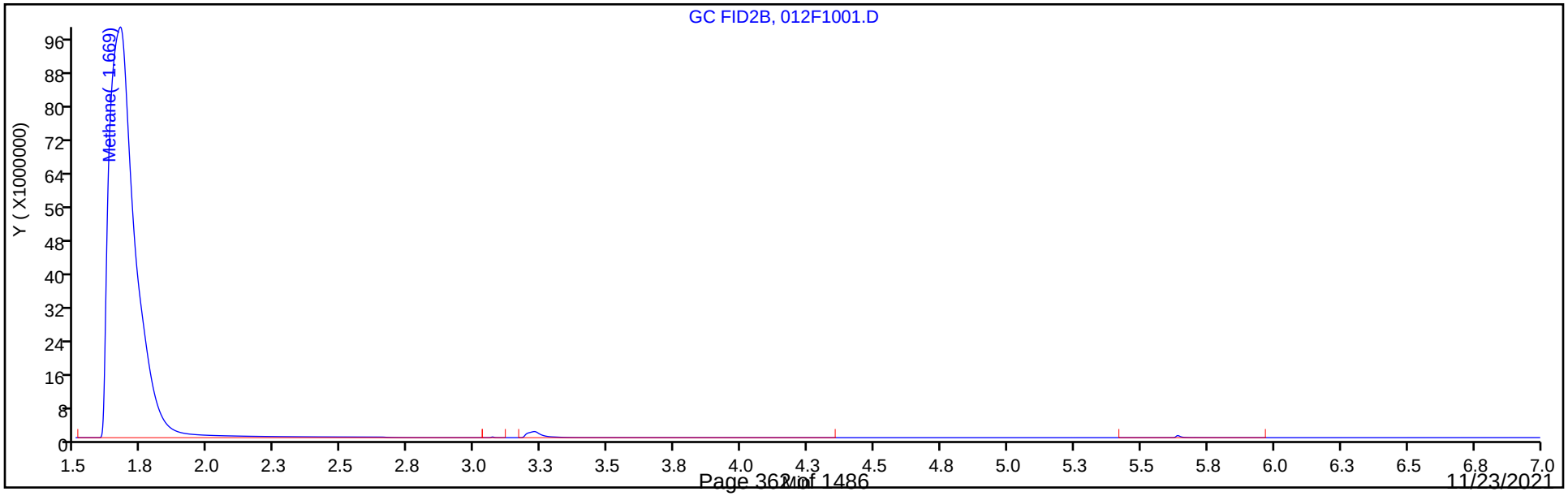
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Injection Date:	24-Sep-2021 15:12:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Calibration / Methane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

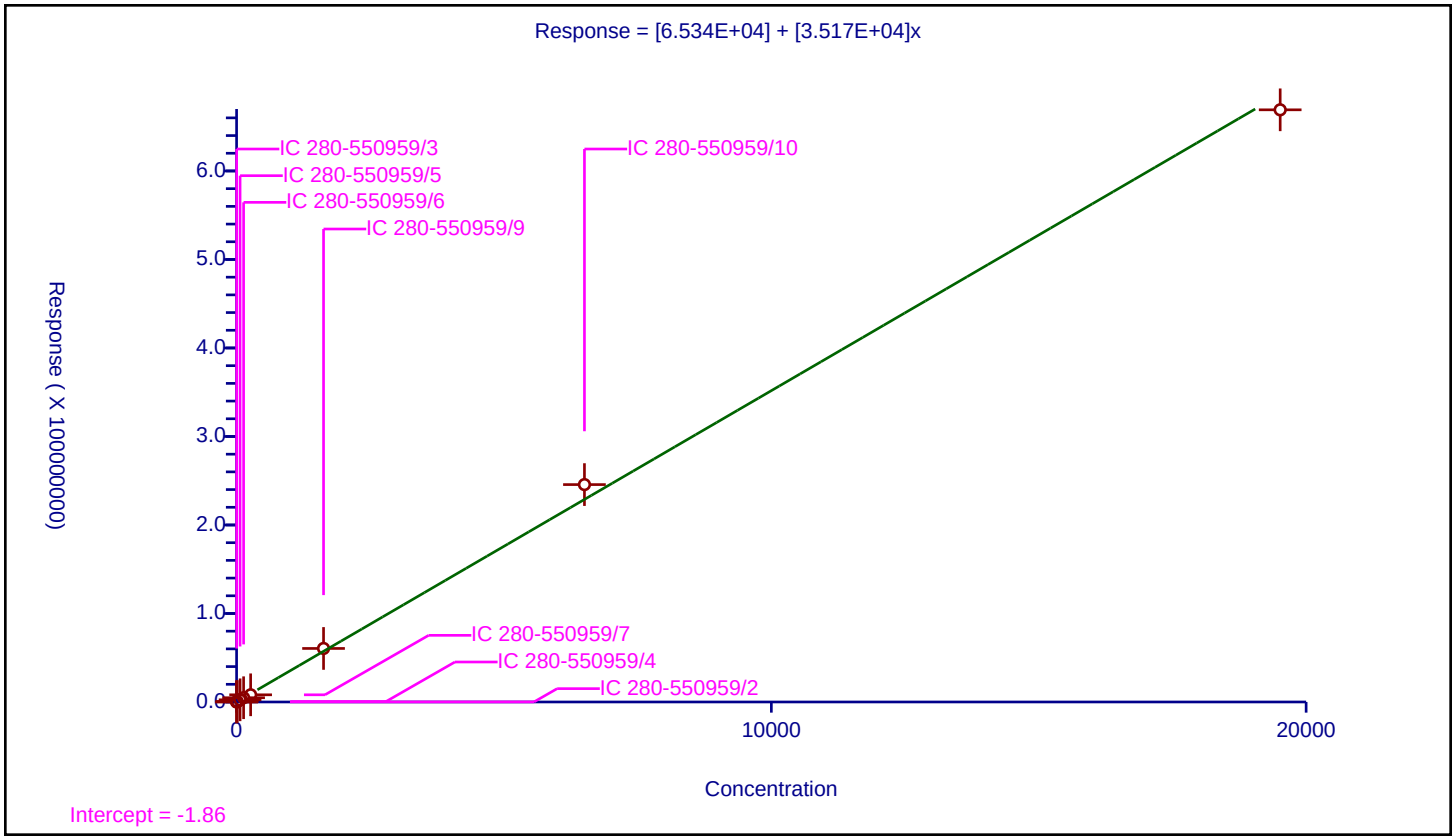
Curve Coefficients

Intercept:	6.534E+04
Slope:	3.517E+04

Error Coefficients

Standard Error:	9210000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	0.821288	93424.0			113753.101076	Y
2	IC 280-550959/3	1.642575	126818.0			77206.82465	Y
3	IC 280-550959/4	13.1406	494257.0			37612.970488	Y
4	IC 280-550959/5	65.703	2453548.0			37343.013257	Y
5	IC 280-550959/6	131.406	4808571.0			36593.237752	Y
6	IC 280-550959/7	262.812	8118988.0			30892.759844	Y
7	IC 280-550959/9	1626.25	60484705.0			37192.747118	Y
8	IC 280-550959/10	6505.0	245647963.0			37762.945888	Y
9	IC 280-550959/11	19515.0	669092603.0			34286.067282	Y



Calibration / Ethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

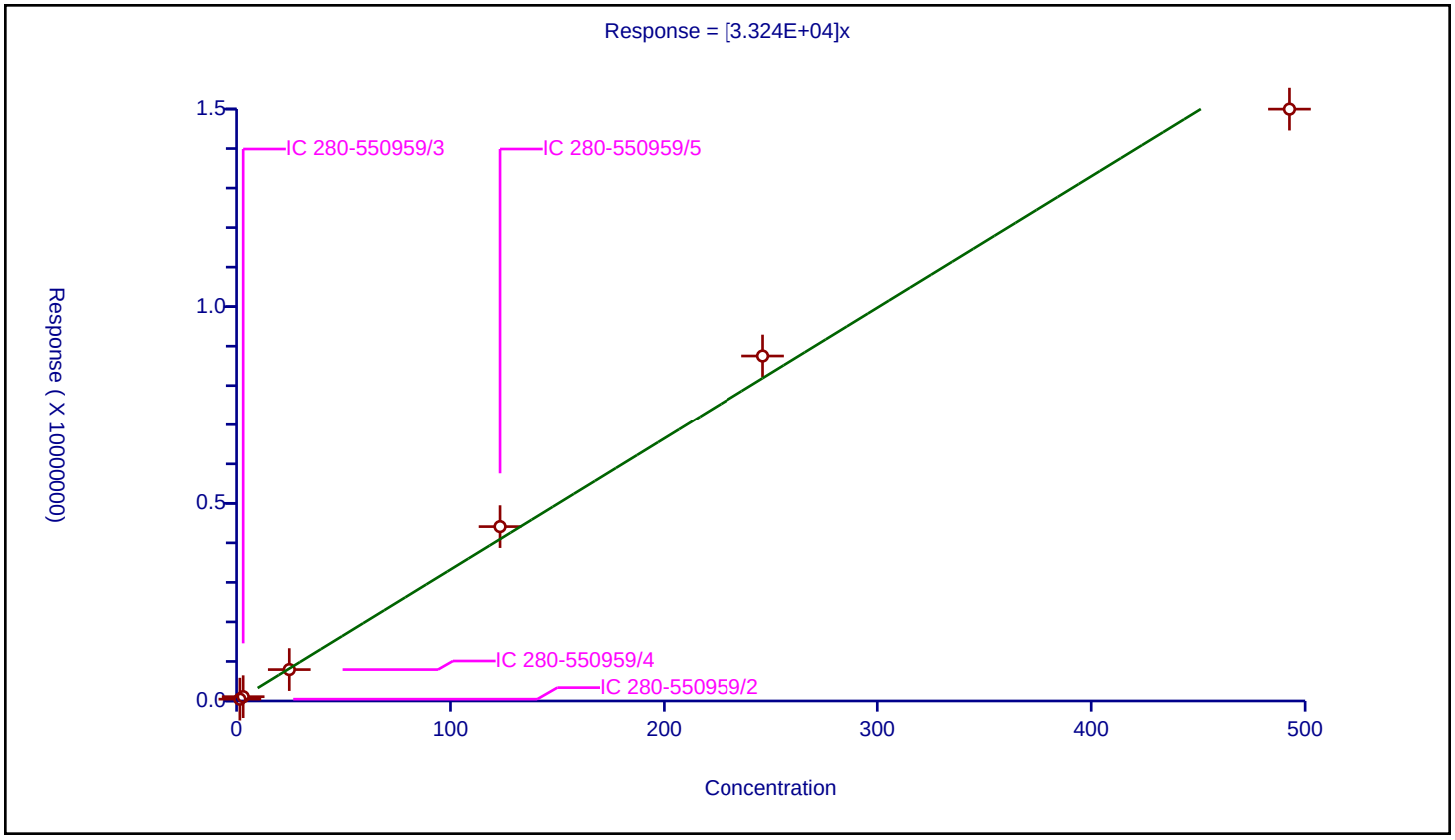
Curve Coefficients

Intercept:	0
Slope:	3.324E+04

Error Coefficients

Standard Error:	681000
Relative Standard Error:	7.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.539625	46427.0			30154.745474	Y
2	IC 280-550959/3	3.07925	108631.0			35278.395713	Y
3	IC 280-550959/4	24.634	793971.0			32230.69741	Y
4	IC 280-550959/5	123.17	4411499.0			35816.343265	Y
5	IC 280-550959/6	246.34	8751636.0			35526.654218	Y
6	IC 280-550959/7	492.68	14997572.0			30440.797272	Y



Calibration / Ethylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

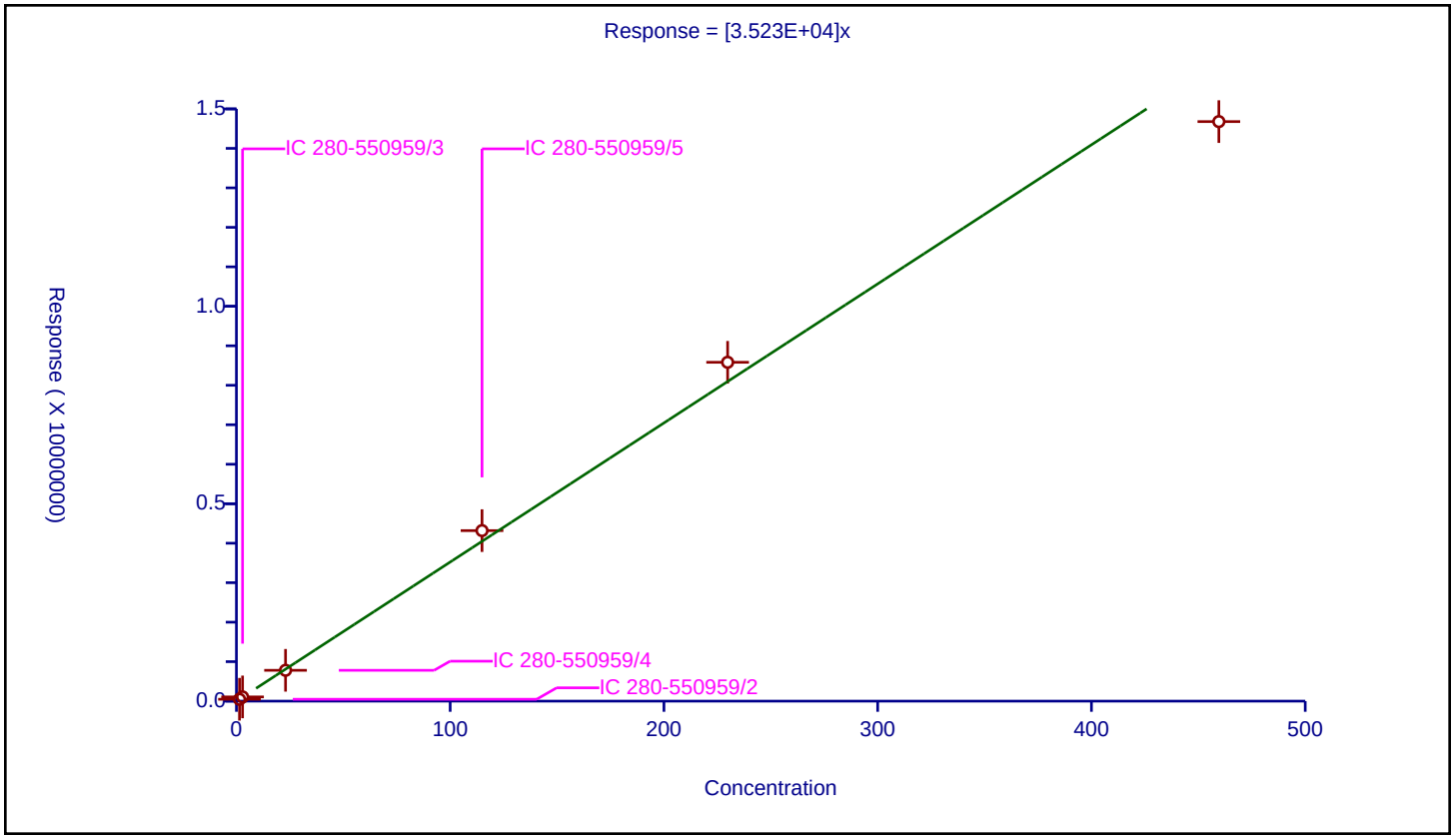
Curve Coefficients

Intercept:	0
Slope:	3.523E+04

Error Coefficients

Standard Error:	721000
Relative Standard Error:	7.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	47667.0			33188.511749	Y
2	IC 280-550959/3	2.8725	107197.0			37318.363795	Y
3	IC 280-550959/4	22.98	780792.0			33977.023499	Y
4	IC 280-550959/5	114.9	4318968.0			37588.929504	Y
5	IC 280-550959/6	229.8	8582166.0			37346.240209	Y
6	IC 280-550959/7	459.6	14678124.0			31936.736292	Y



Calibration / Acetylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

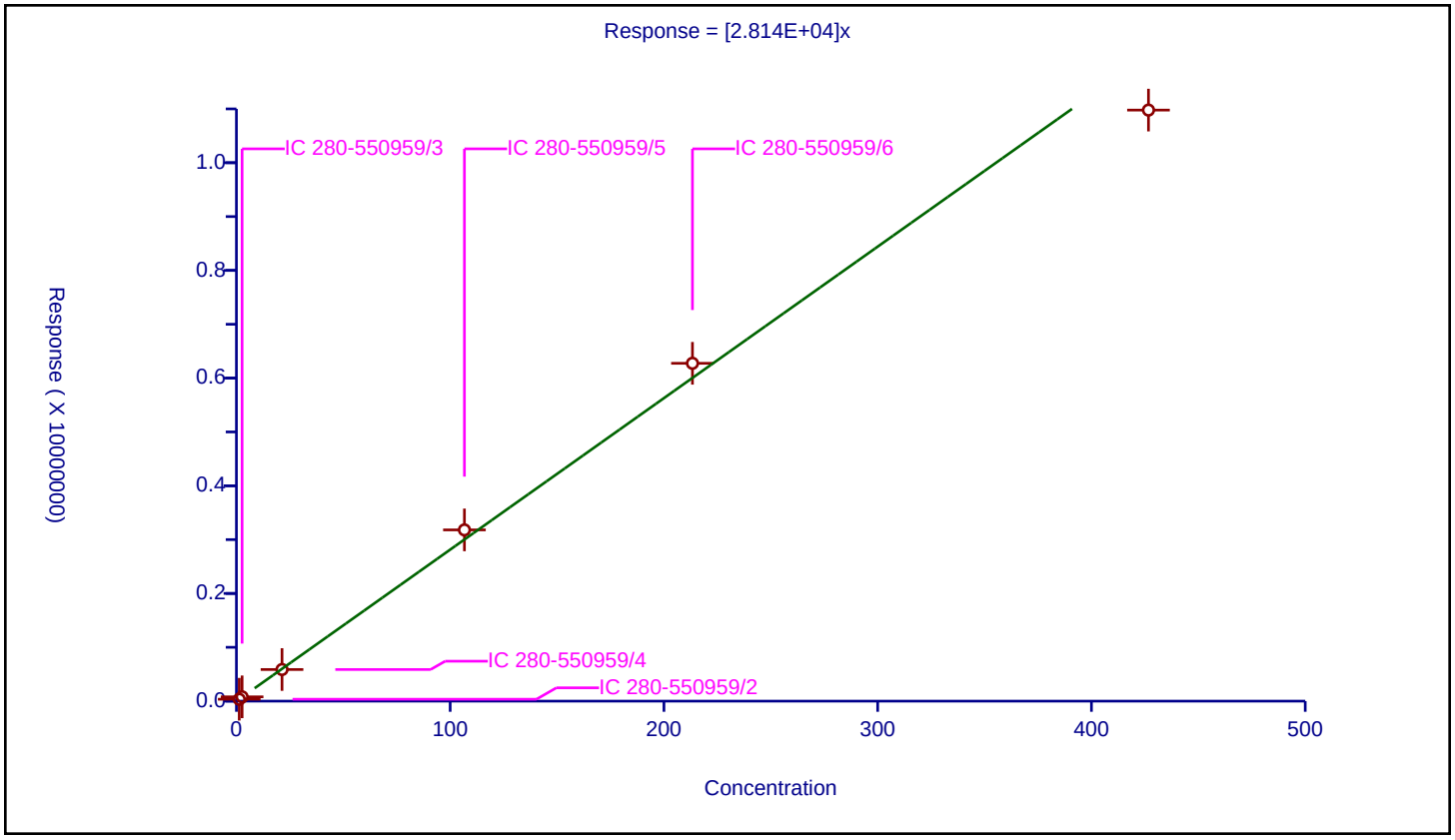
Curve Coefficients

Intercept:	0
Slope:	2.814E+04

Error Coefficients

Standard Error:	482000
Relative Standard Error:	6.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.333375	35261.0			26444.923596	Y
2	IC 280-550959/3	2.66675	79761.0			29909.44033	Y
3	IC 280-550959/4	21.334	587204.0			27524.327365	Y
4	IC 280-550959/5	106.67	3180347.0			29814.821412	Y
5	IC 280-550959/6	213.34	6274725.0			29411.854317	Y
6	IC 280-550959/7	426.68	10977943.0			25728.749883	Y



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.689	1.686	1.684	1.681	1.678	1.678	1.676	1.673	1.669		1.646 - 1.726	1.679
Ethylene	2.612	2.613	2.609	2.608	2.603	2.602					2.559 - 2.659	2.608
Acetylene	2.759	2.756	2.753	2.751	2.746	2.746					2.666 - 2.826	2.752
Ethane	3.032	3.031	3.029	3.026	3.023	3.021					2.978 - 3.078	3.027

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Methane	111078 38545 34620	77031 32174	38745 36771	38865 37979	Lin2	62633.7795	36102.9355							0.9950		0.9900
Ethylene	28704 32846	33128 28088	29931	33185	Ave		30980.2676				7.6		20.0			
Acetylene	31126 36867	35548 31529	33443	36560	Ave		34178.7944				7.4		20.0			
Ethane	30517 36441	34894 29685	32629	36129	Ave		33382.5817				8.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	91227 8455607	126529 59798125	509129 247051774	2553566 675608539	5065048	0.821 263	1.64 1626	13.1 6505	65.7 19515	131
Ethylene	Ave	41226 12909086	95159	687818	3812973	7548044	1.44 460	2.87	23.0	115	230
Acetylene	Ave	41503 13452620	94797	713476	3899802	7865310	1.33 427	2.67	21.3	107	213
Ethane	Ave	46984 14625440	107446	803791	4450065	8976911	1.54 493	3.08	24.6	123	246

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Sep-2021 13:28:57 ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:57:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.292	1.299	-0.007	93424	0.8213	0.7985	a
2	1.689	1.686	0.003	91227	0.8213	0.7920	a
						RPD = 0.81	
3 Ethane							a
1	1.559	1.556	0.003	46427	1.54	1.40	a
2	3.032	3.028	0.004	46984	1.54	1.41	a
						RPD = 0.77	
4 Ethylene							a
1	1.859	1.844	0.015	47667	1.44	1.35	a
2	2.612	2.609	0.003	41226	1.44	1.33	a
						RPD = 1.67	
5 Propane							a
1	2.682	2.721	-0.039	76526	2.26	2.13	a
2	4.937	4.929	0.008	73050	2.26	2.09	a
						RPD = 1.83	
6 Acetylene							a
1	4.184	4.230	-0.046	35261	1.33	1.25	a
2	2.759	2.746	0.013	41503	1.33	1.21	a
						RPD = 3.15	
7 Butane							Ma
1	4.555	4.528	0.027	101912	2.98	2.80	a
2	6.435	6.426	0.009	95155	2.98	2.71	M
						RPD = 3.27	
8 isobutylene							Ma
1	5.437	5.403	0.034	92868	2.87	2.57	M
2	6.277	6.274	0.003	91569	2.87	2.76	a
						RPD = 7.02	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

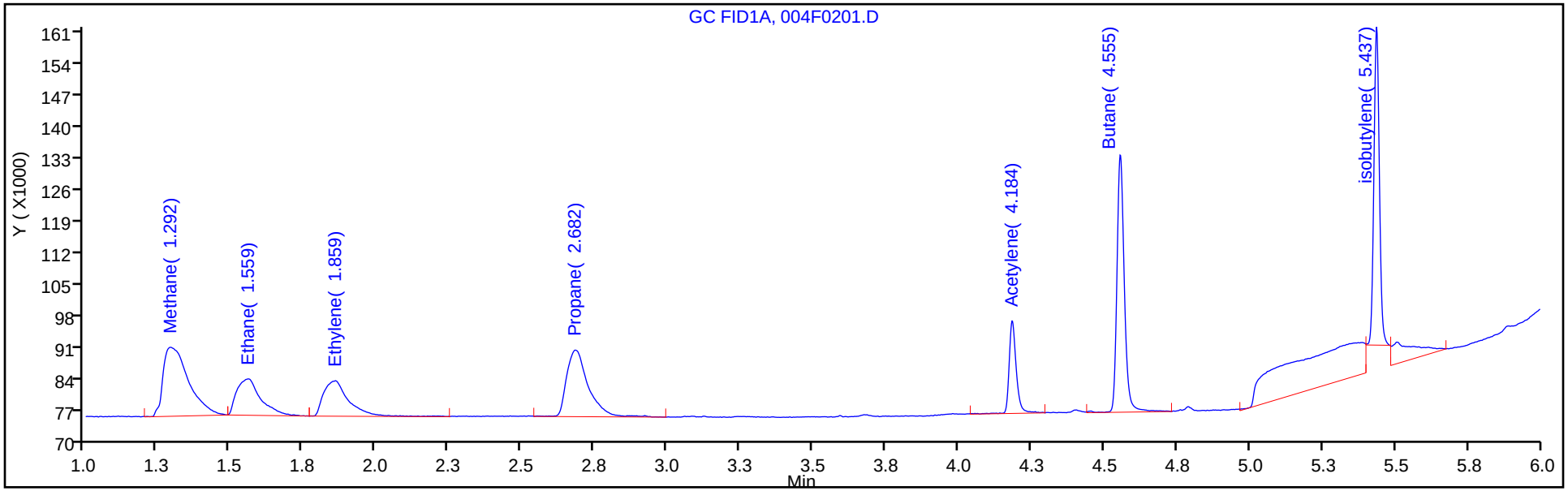
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

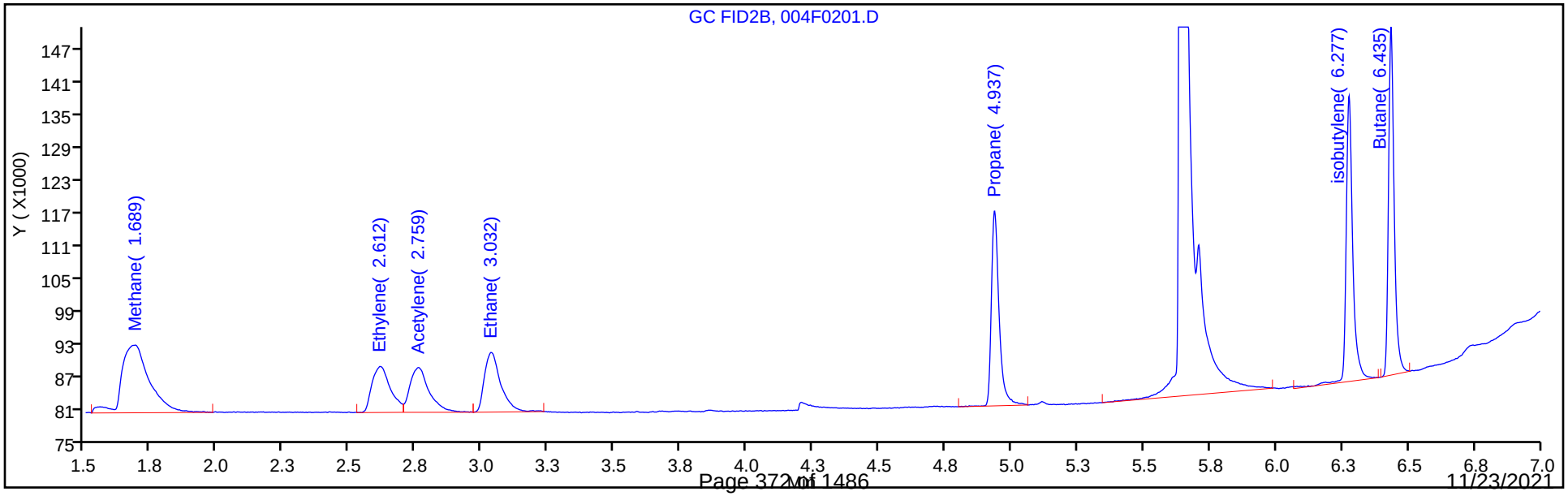
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

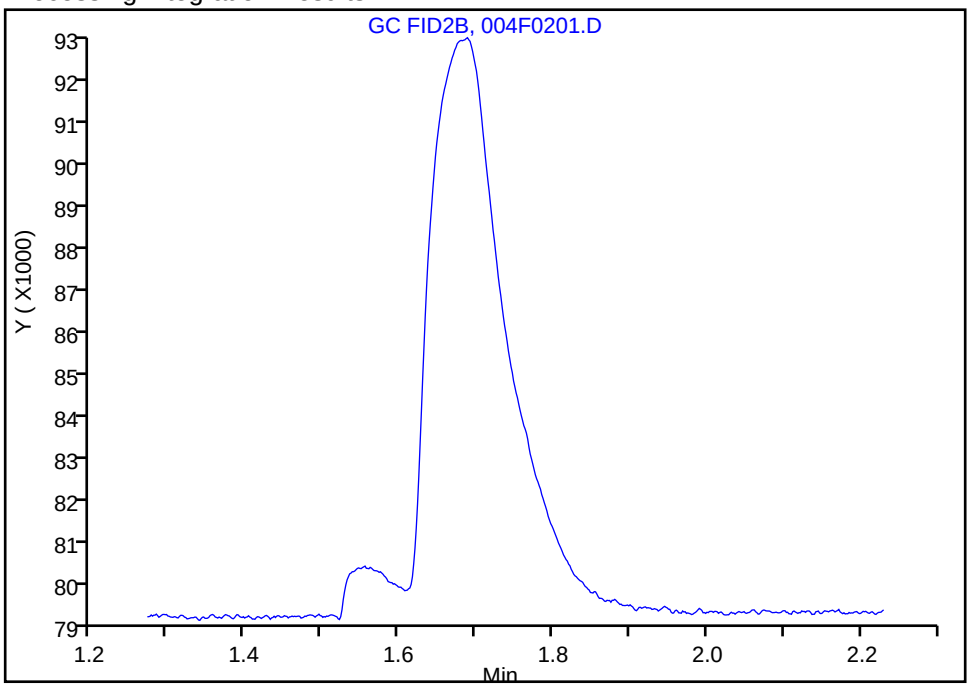
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

2 Methane, CAS: 74-82-8

Signal: 2

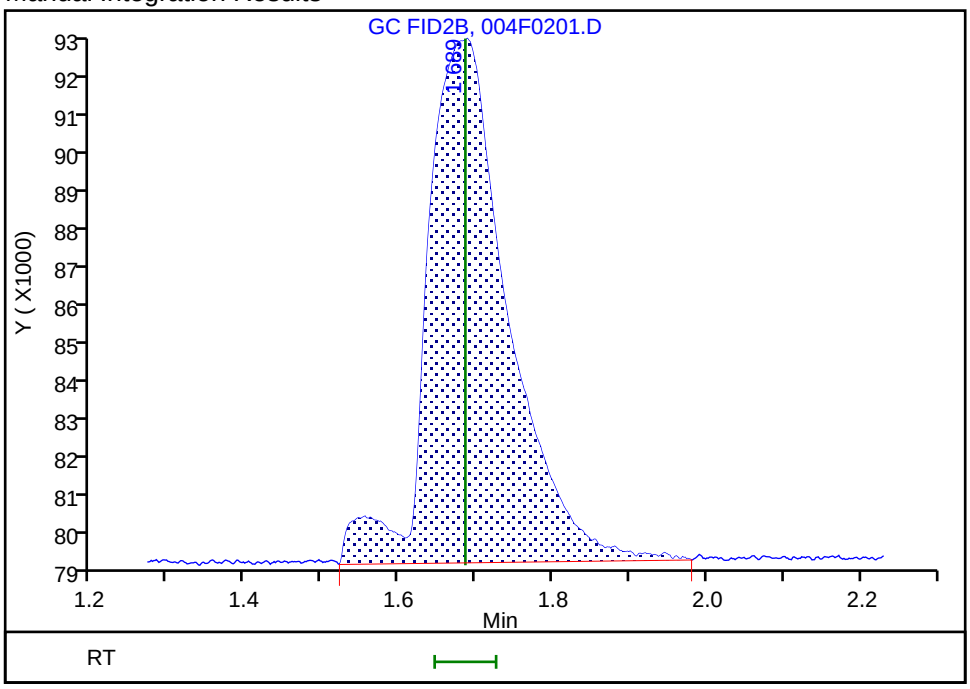
Not Detected
Expected RT: 1.69

Processing Integration Results



Manual Integration Results

RT: 1.69
Area: 91227
Amount: 0.791992
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

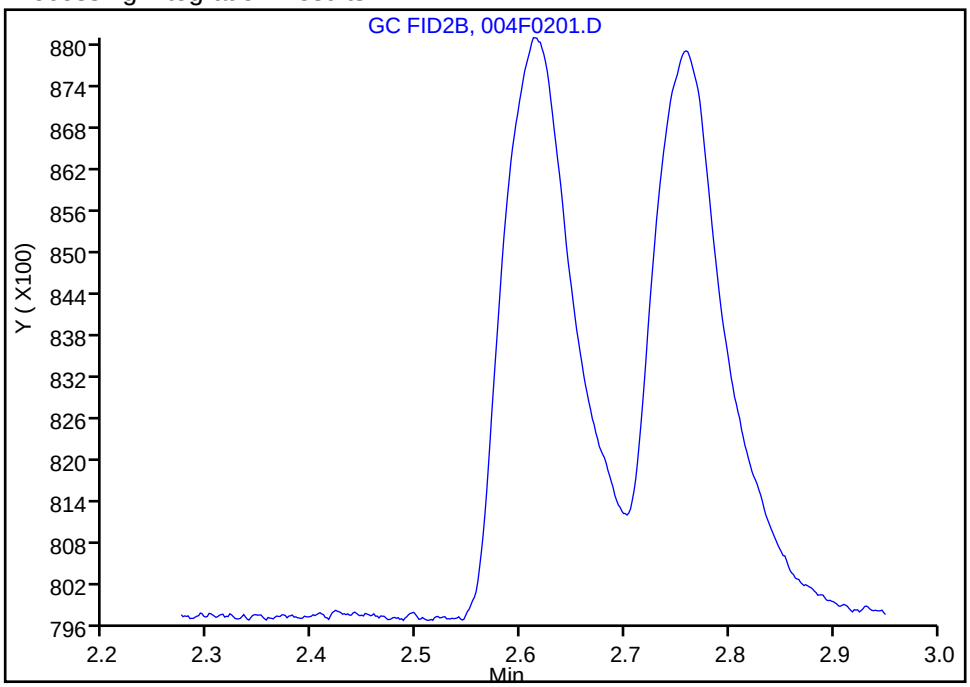
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

4 Ethylene, CAS: 74-85-1

Signal: 2

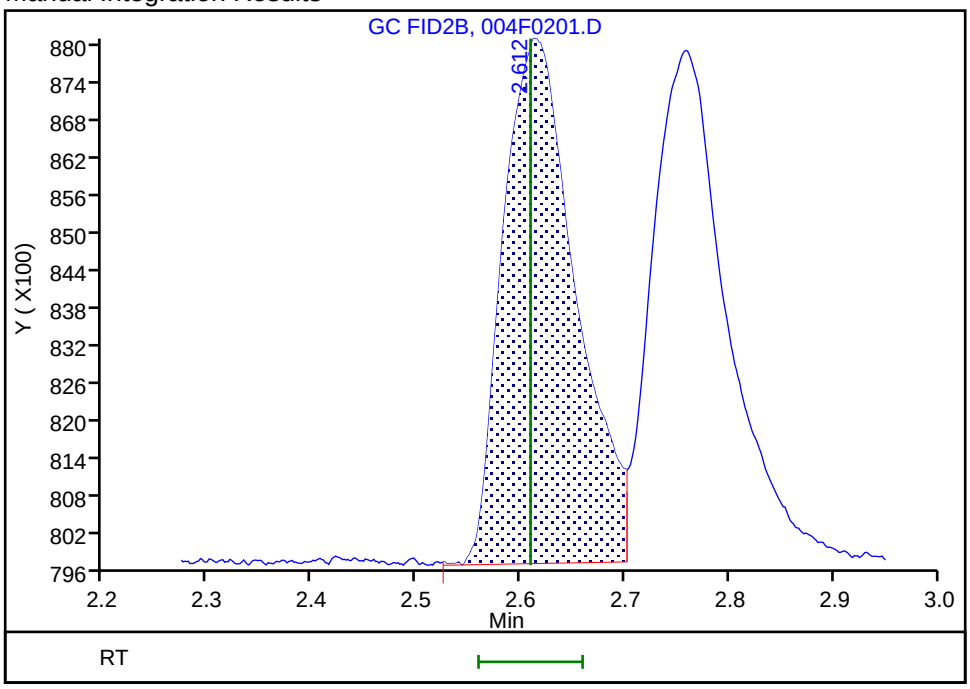
Not Detected
Expected RT: 2.61

Processing Integration Results



Manual Integration Results

RT: 2.61
Area: 41226
Amount: 1.330718
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

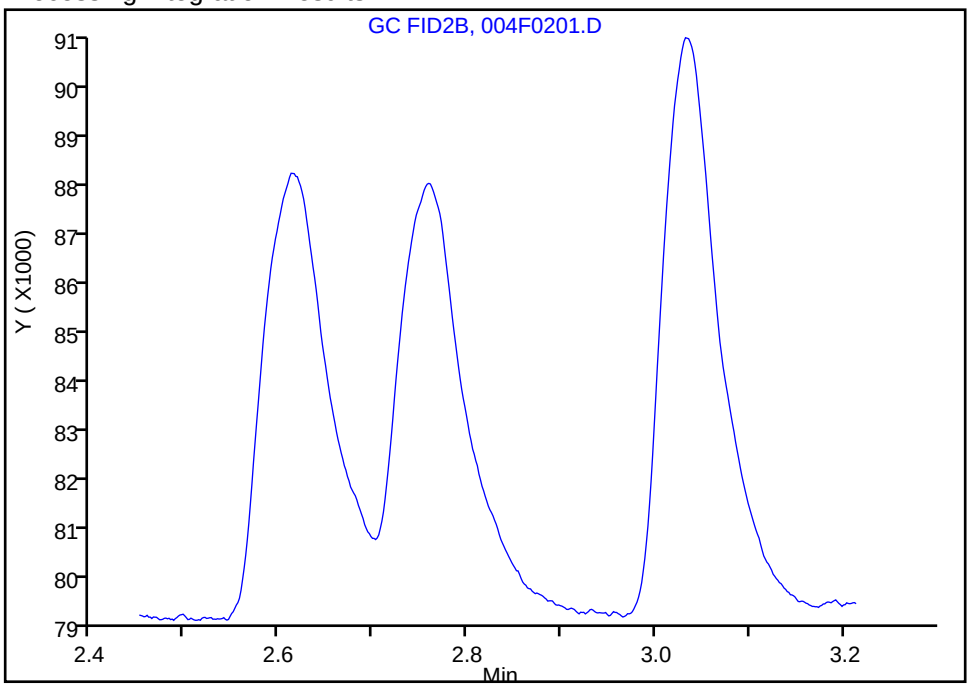
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

6 Acetylene, CAS: 74-86-2

Signal: 2

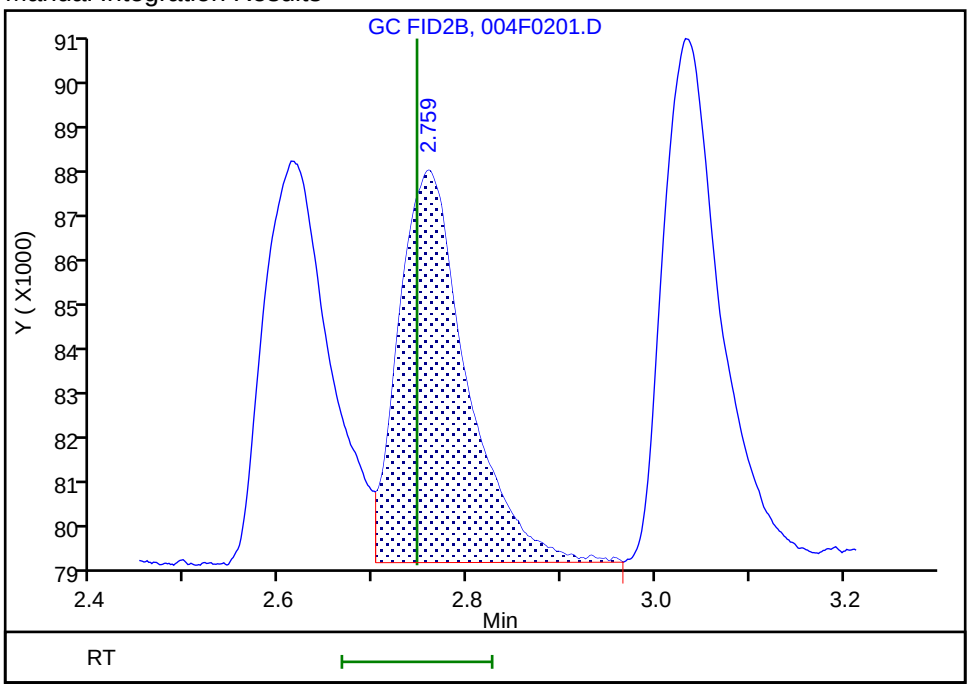
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 41503
Amount: 1.214291
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:55:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

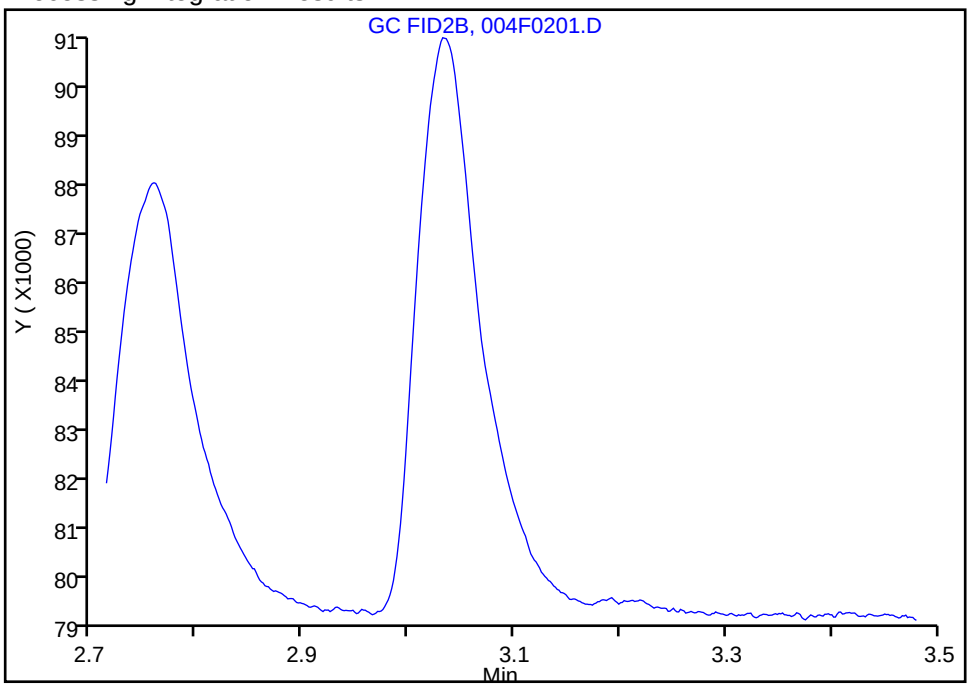
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

3 Ethane, CAS: 74-84-0

Signal: 2

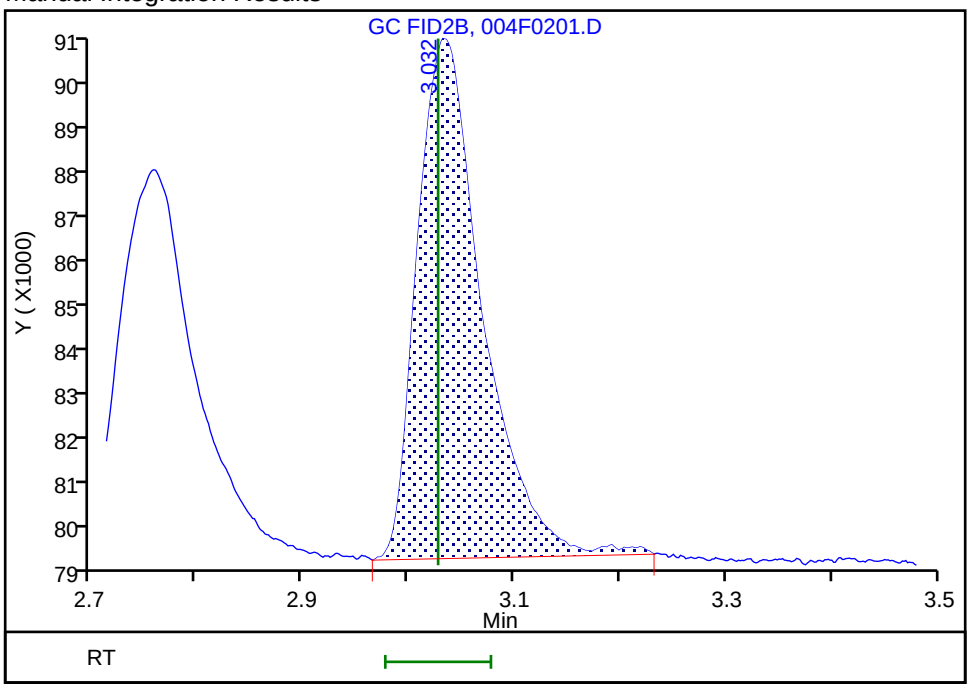
Not Detected
Expected RT: 3.03

Processing Integration Results



Manual Integration Results

RT: 3.03
Area: 46984
Amount: 1.407441
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Sep-2021 13:41:52 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:58:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	126818	1.64	1.75	
2	1.686	1.686	0.000	126529	1.64	1.77	
						RPD = 1.24	
3 Ethane							
1	1.562	1.556	0.006	108631	3.08	3.27	
2	3.031	3.028	0.003	107446	3.08	3.22	
						RPD = 1.52	
4 Ethylene							
1	1.867	1.844	0.023	107197	2.87	3.04	
2	2.613	2.609	0.004	95159	2.87	3.07	
						RPD = 0.93	
5 Propane							
1	2.700	2.721	-0.021	174390	4.52	4.84	
2	4.935	4.929	0.006	170185	4.52	4.86	
						RPD = 0.37	
6 Acetylene							
1	4.213	4.230	-0.017	79761	2.67	2.83	
2	2.756	2.746	0.010	94797	2.67	2.77	
						RPD = 2.17	
7 Butane							Ma
1	4.575	4.528	0.047	232737	5.95	6.39	a
2	6.435	6.426	0.009	221865	5.95	6.31	M
						RPD = 1.20	
8 isobutylene							Ma
1	5.457	5.403	0.054	232885	5.75	6.45	
2	6.276	6.274	0.002	200266	5.75	6.03	M
						RPD = 6.65	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

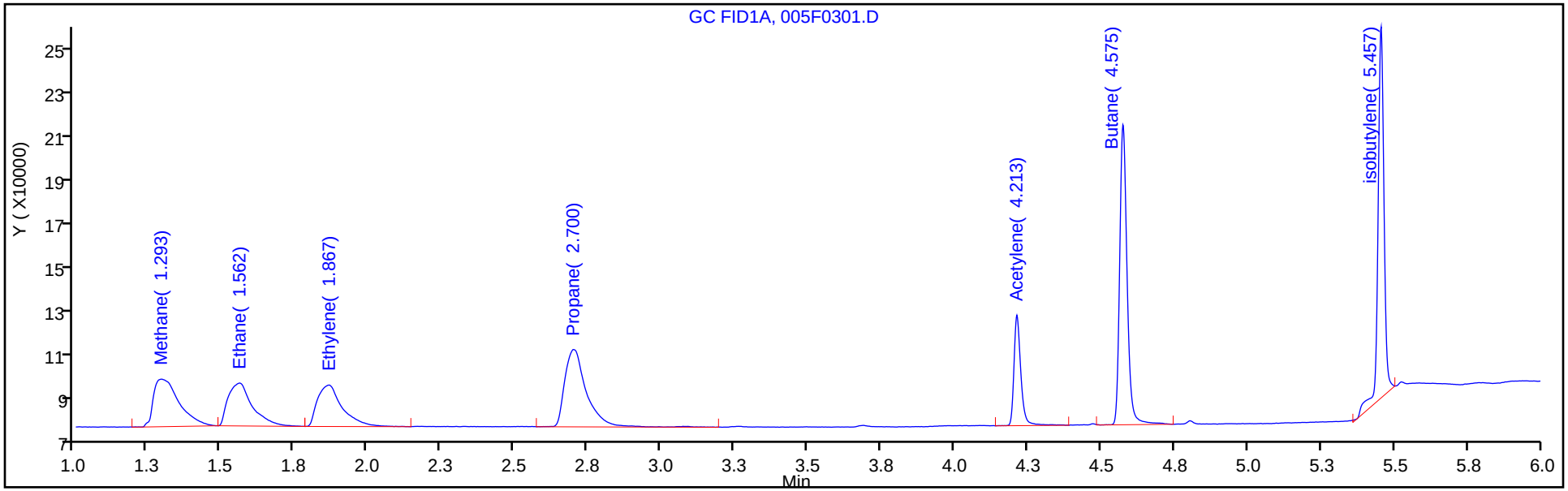
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

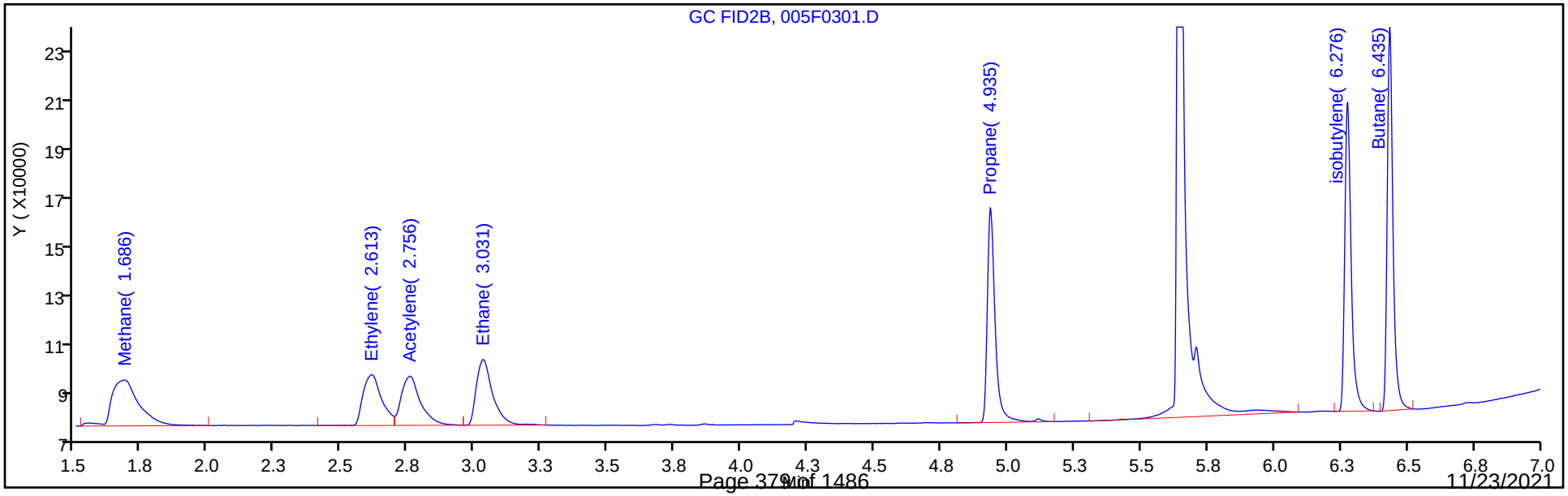
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

Injection Date:	24-Sep-2021 13:41:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Sep-2021 13:54:46 ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:51:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	494257	13.1	12.2	
2	1.684	1.686	-0.002	509129	13.1	12.4	
						RPD = 1.40	
3 Ethane							
1	1.561	1.556	0.005	793971	24.6	23.9	
2	3.029	3.028	0.001	803791	24.6	24.1	
						RPD = 0.81	
4 Ethylene							
1	1.870	1.844	0.026	780792	23.0	22.2	
2	2.609	2.609	0.000	687818	23.0	22.2	
						RPD = 0.16	
5 Propane							
1	2.711	2.721	-0.010	1259121	36.1	35.0	
2	4.934	4.929	0.005	1221976	36.1	34.9	
						RPD = 0.18	
6 Acetylene							a
1	4.226	4.230	-0.004	587204	21.3	20.9	a
2	2.753	2.746	0.007	713476	21.3	20.9	a
						RPD = 0.03	
7 Butane							Ma
1	4.586	4.528	0.058	1686797	47.6	46.3	a
2	6.433	6.426	0.007	1612366	47.6	45.9	M
						RPD = 0.93	
8 isobutylene							Ma
1	5.465	5.403	0.062	1589725	46.0	44.0	
2	6.274	6.274	0.000	1464027	46.0	44.1	M
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

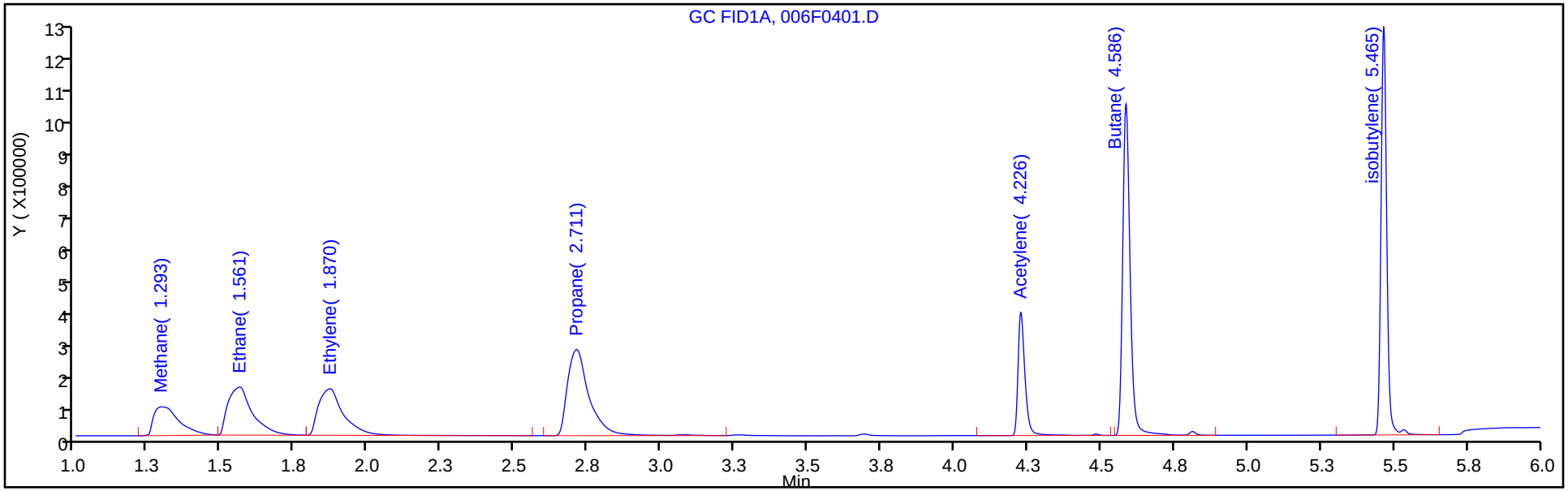
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

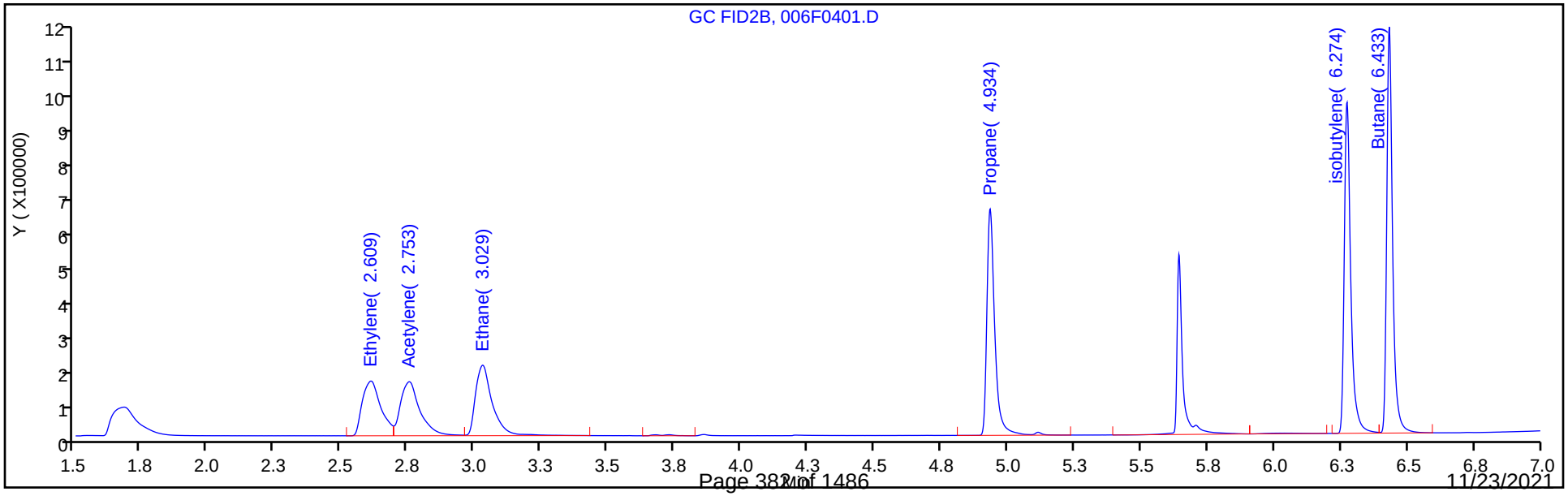
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

Injection Date:	24-Sep-2021 13:54:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

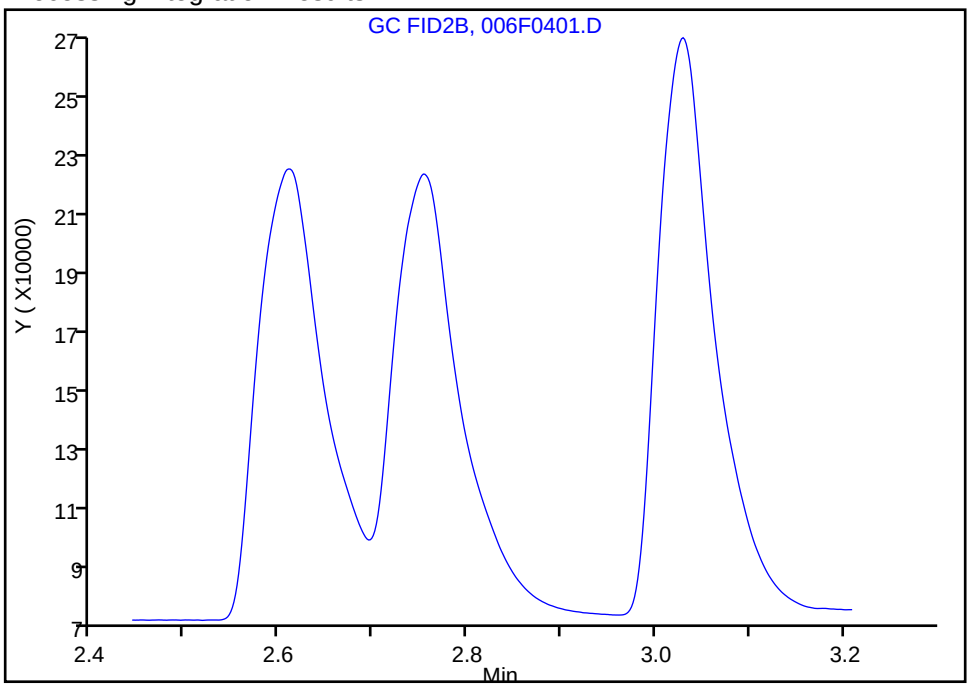
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

6 Acetylene, CAS: 74-86-2

Signal: 2

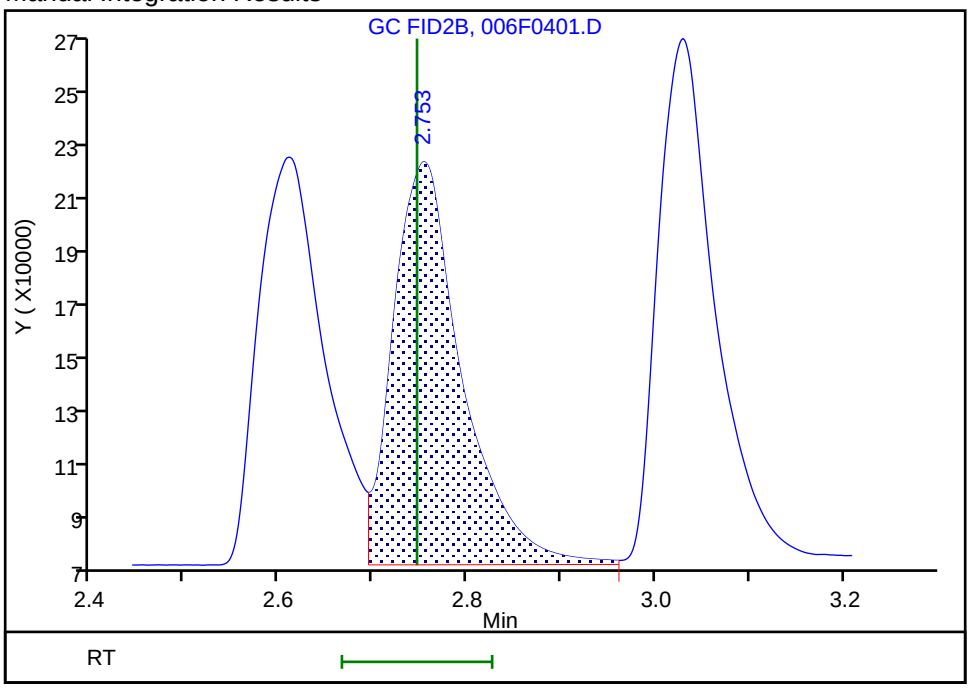
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 713476
Amount: 20.874815
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Sep-2021 14:07:45 ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:50:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.295	1.295	0.000	2453548	65.7	67.9	
2	1.681	1.681	0.000	2553566	65.7	69.0	
						RPD = 1.60	
3 Ethane							Ma
1	1.561	1.561	0.000	4411499	123.2	132.7	
2	3.026	3.026	0.000	4450065	123.2	133.3	M
						RPD = 0.45	
4 Ethylene							
1	1.870	1.870	0.000	4318968	114.9	122.6	
2	2.608	2.608	0.000	3812973	114.9	123.1	
						RPD = 0.38	
5 Propane							
1	2.716	2.716	0.000	6962772	180.6	193.4	
2	4.933	4.933	0.000	6754582	180.6	192.9	
						RPD = 0.22	
6 Acetylene							a
1	4.230	4.230	0.000	3180347	106.7	113.0	a
2	2.751	2.751	0.000	3899802	106.7	114.1	a
						RPD = 0.95	
7 Butane							
1	4.590	4.590	0.000	9255328	238.1	254.1	
2	6.430	6.430	0.000	8939530	238.1	254.4	
						RPD = 0.11	
8 isobutylene							
1	5.468	5.468	0.000	8777969	229.8	243.0	
2	6.271	6.271	0.000	8052089	229.8	242.5	
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

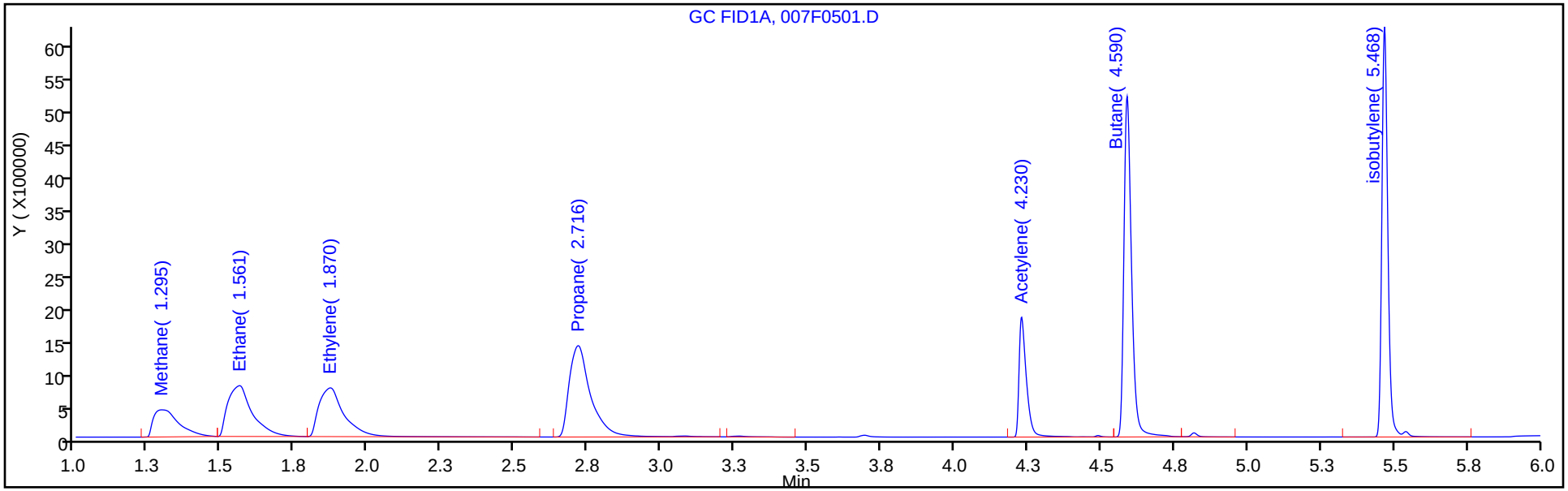
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

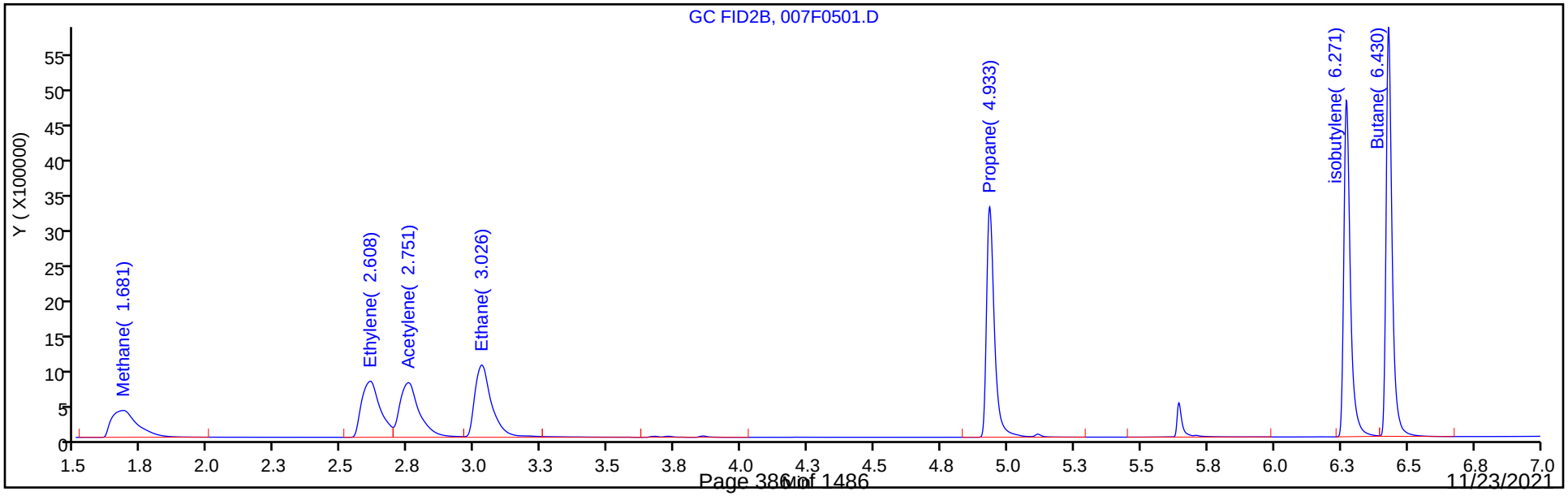
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

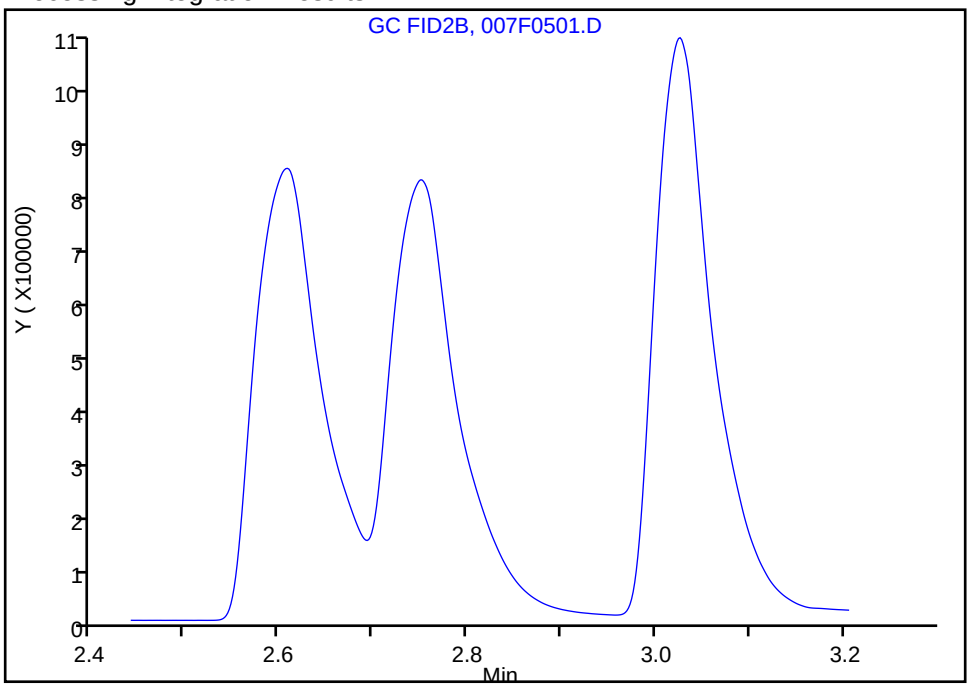
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

6 Acetylene, CAS: 74-86-2

Signal: 2

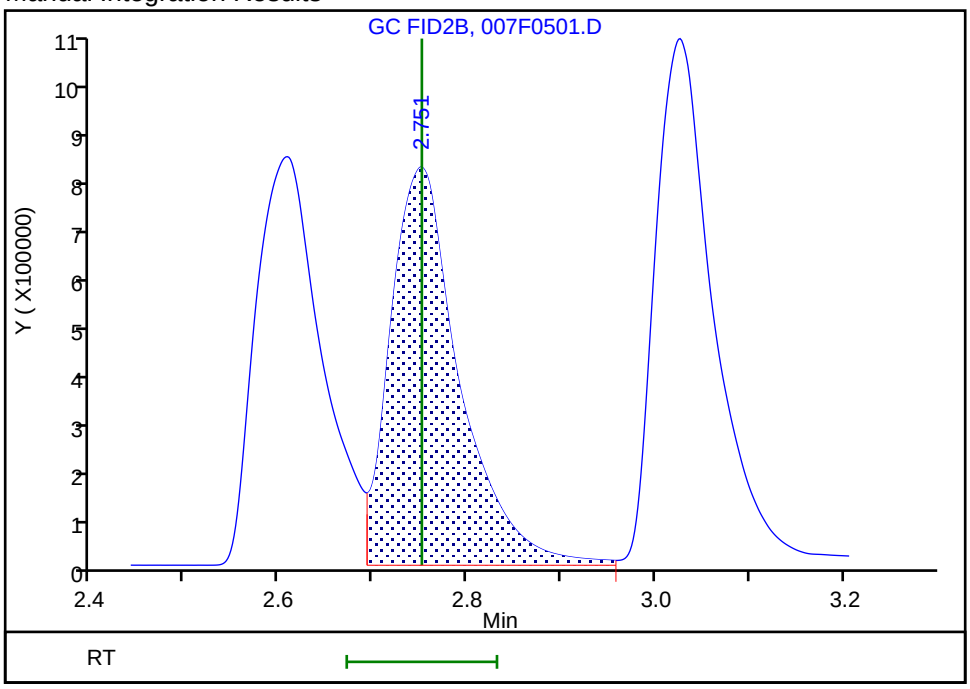
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3899802
Amount: 114.1000
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:19
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

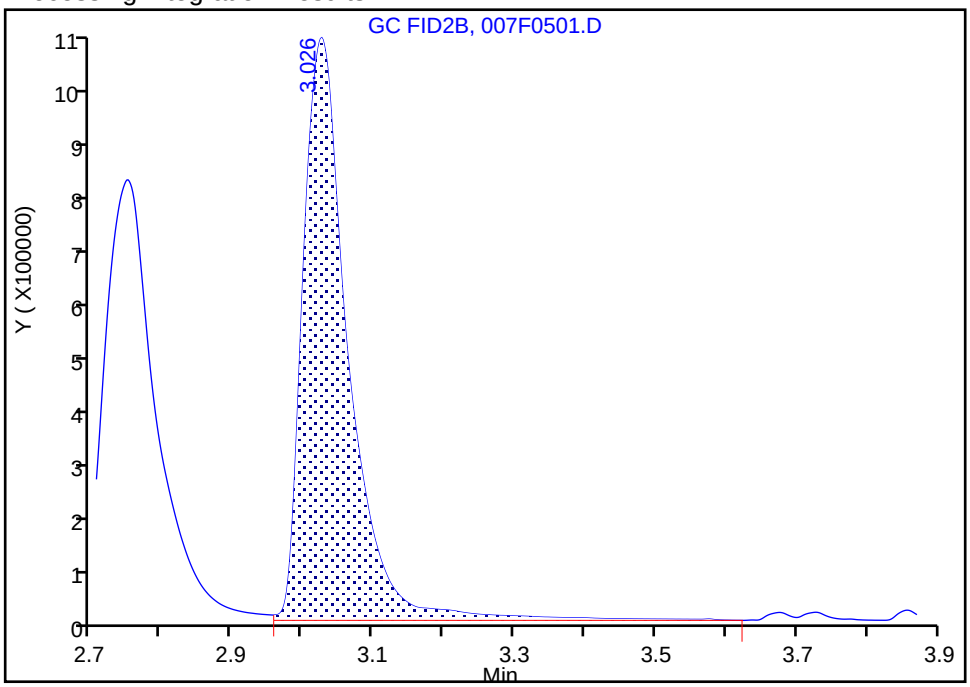
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

3 Ethane, CAS: 74-84-0

Signal: 2

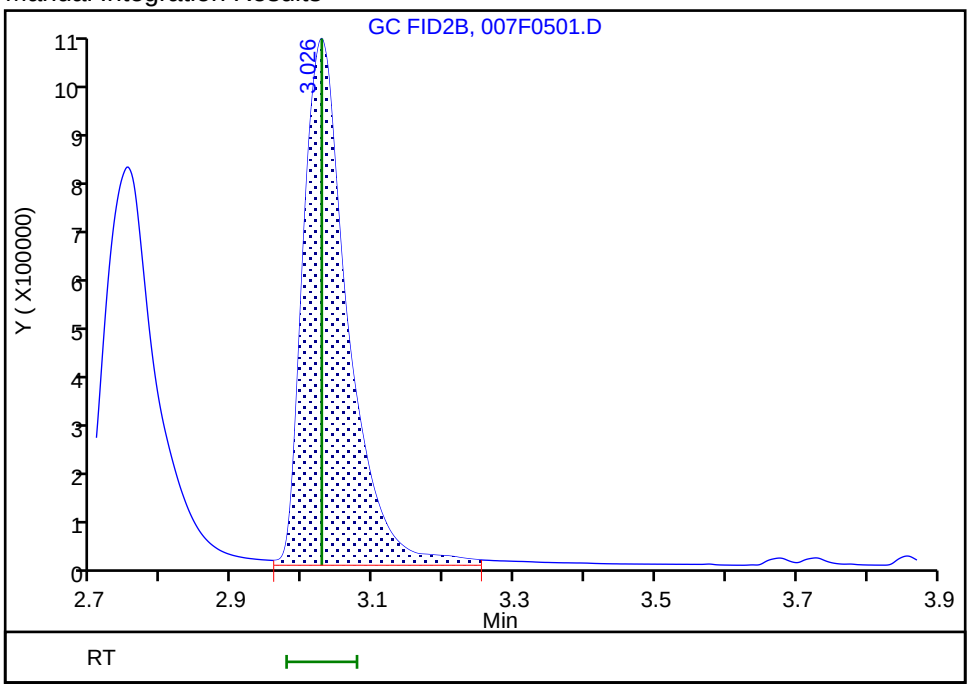
Processing Integration Results

RT: 3.03
Area: 4534073
Amount: 134.6635
Amount Units: ug/l



Manual Integration Results

RT: 3.03
Area: 4450065
Amount: 133.3050
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:09
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Sep-2021 14:20:44 ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:46:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							M
1	1.295	1.295	0.000	4808571	131.4	134.9	
2	1.678	1.678	0.000	5065048	131.4	138.6	M
						RPD = 2.70	
3 Ethane							
1	1.560	1.560	0.000	8751636	246.3	263.3	
2	3.023	3.023	0.000	8976911	246.3	268.9	
						RPD = 2.12	
4 Ethylene							
1	1.873	1.873	0.000	8582166	229.8	243.6	
2	2.603	2.603	0.000	7548044	229.8	243.6	
						RPD = 0.00	
5 Propane							M
1	2.721	2.721	0.000	13578180	361.3	377.1	M
2	4.929	4.929	0.000	13344347	361.3	381.1	
						RPD = 1.08	
6 Acetylene							a
1	4.230	4.230	0.000	6274725	213.3	223.0	a
2	2.746	2.746	0.000	7865310	213.3	230.1	a
						RPD = 3.15	
7 Butane							Ma
1	4.591	4.591	0.000	18468578	476.1	507.1	a
2	6.426	6.426	0.000	17766895	476.1	505.6	M
						RPD = 0.29	
8 isobutylene							Ma
1	5.468	5.468	0.000	17314841	459.7	479.3	
2	6.269	6.269	0.000	15966351	459.7	480.9	M
						RPD = 0.33	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

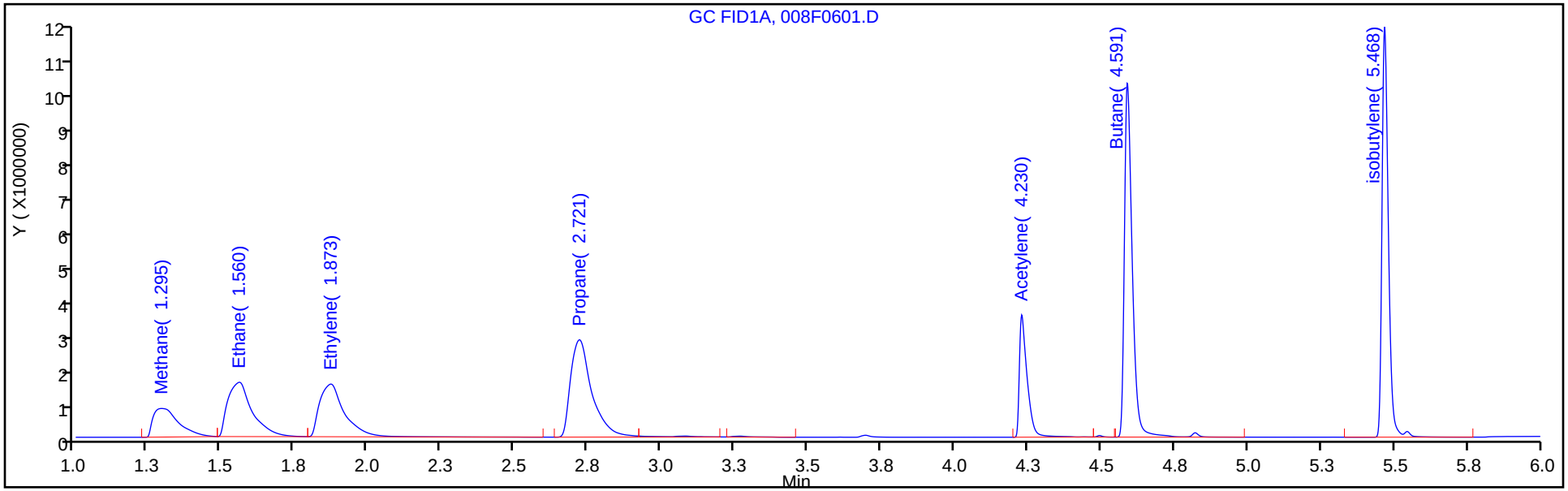
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

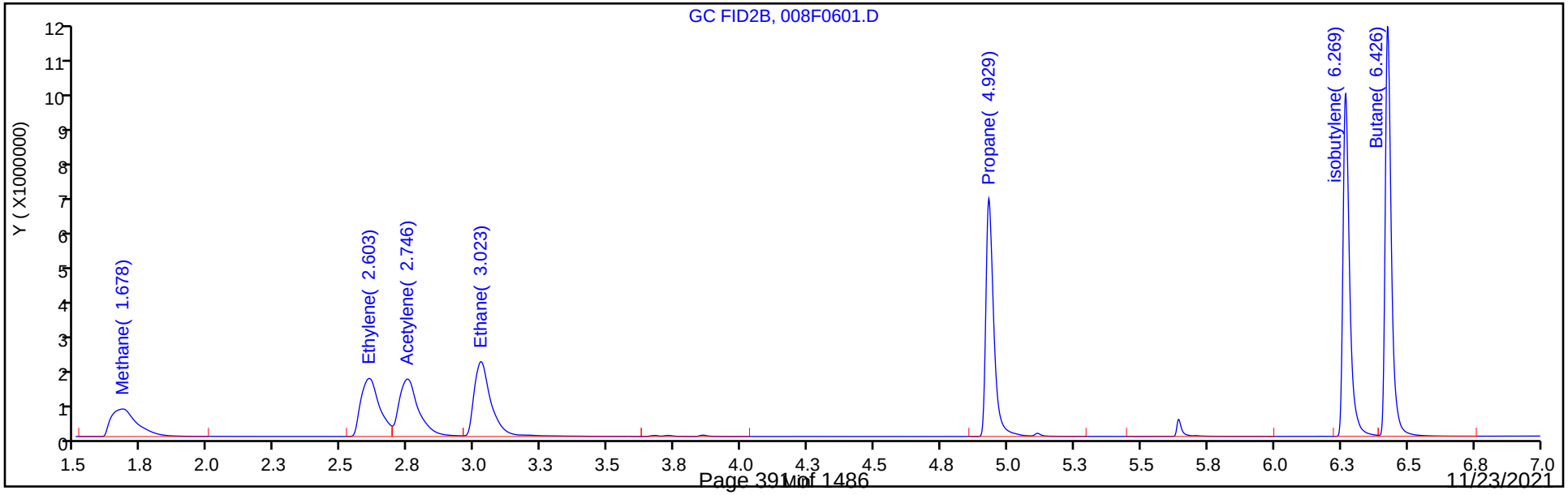
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

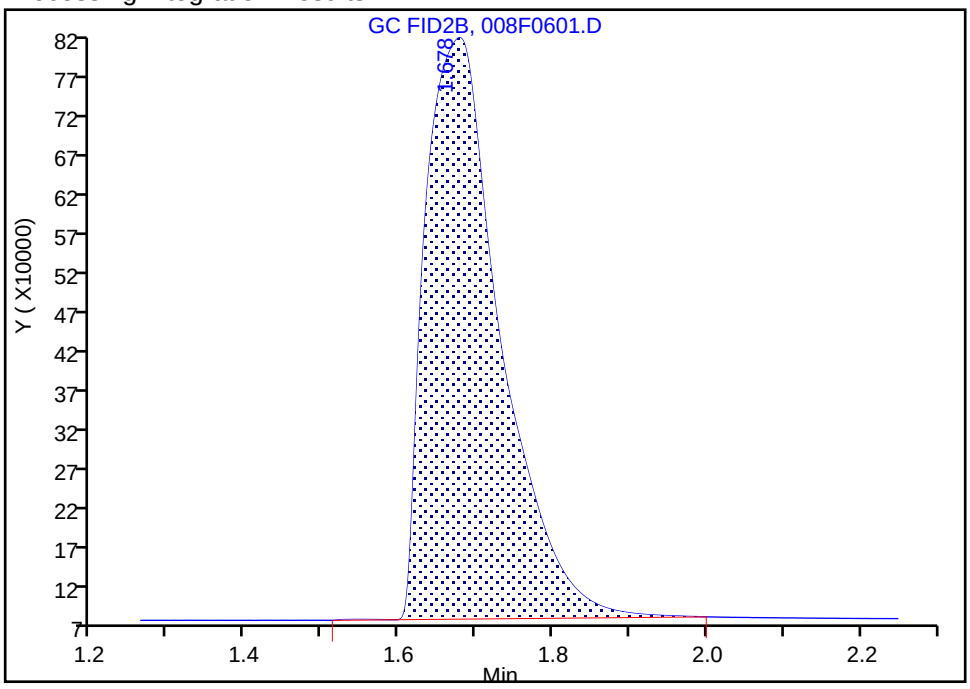
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

2 Methane, CAS: 74-82-8

Signal: 2

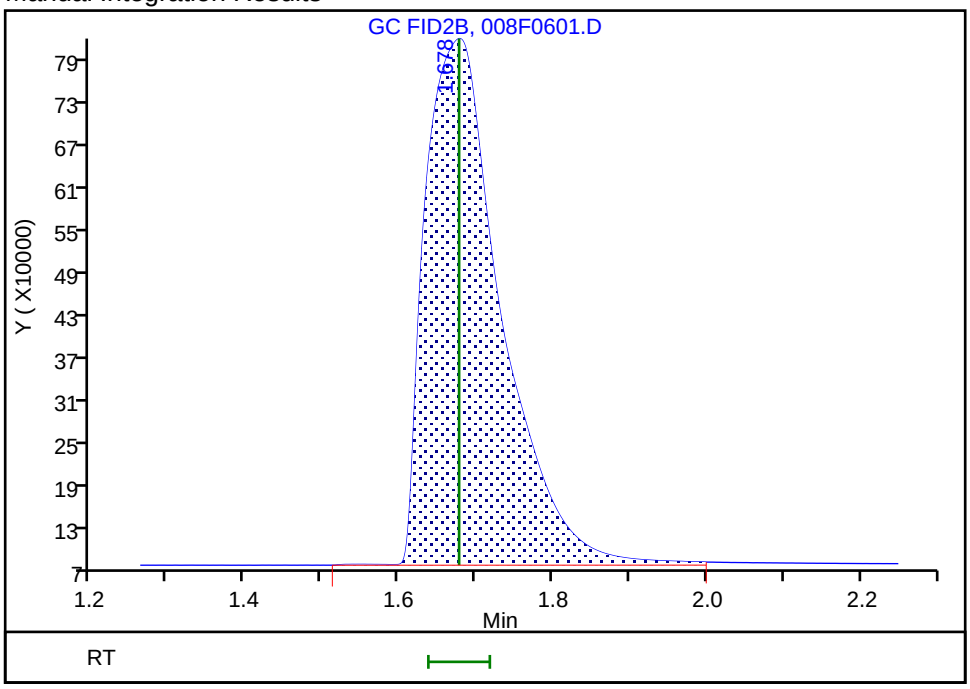
Processing Integration Results

RT: 1.68
Area: 5002633
Amount: 137.0848
Amount Units: ug/l



Manual Integration Results

RT: 1.68
Area: 5065048
Amount: 138.5598
Amount Units: ug/l



Reviewer: sciannac, 29-Sep-2021 09:21:50
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

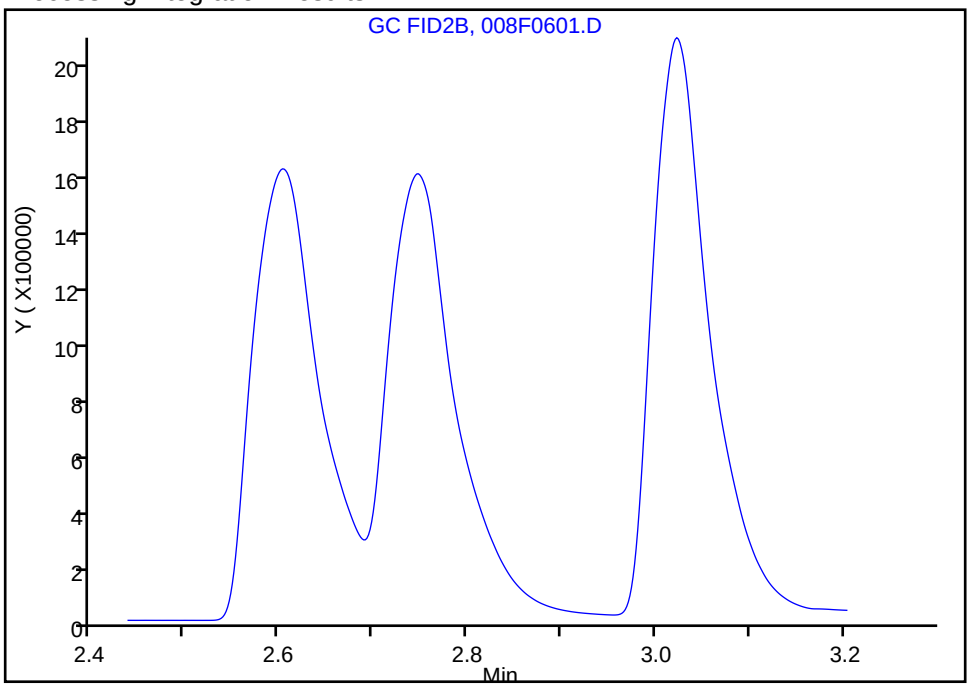
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

6 Acetylene, CAS: 74-86-2

Signal: 2

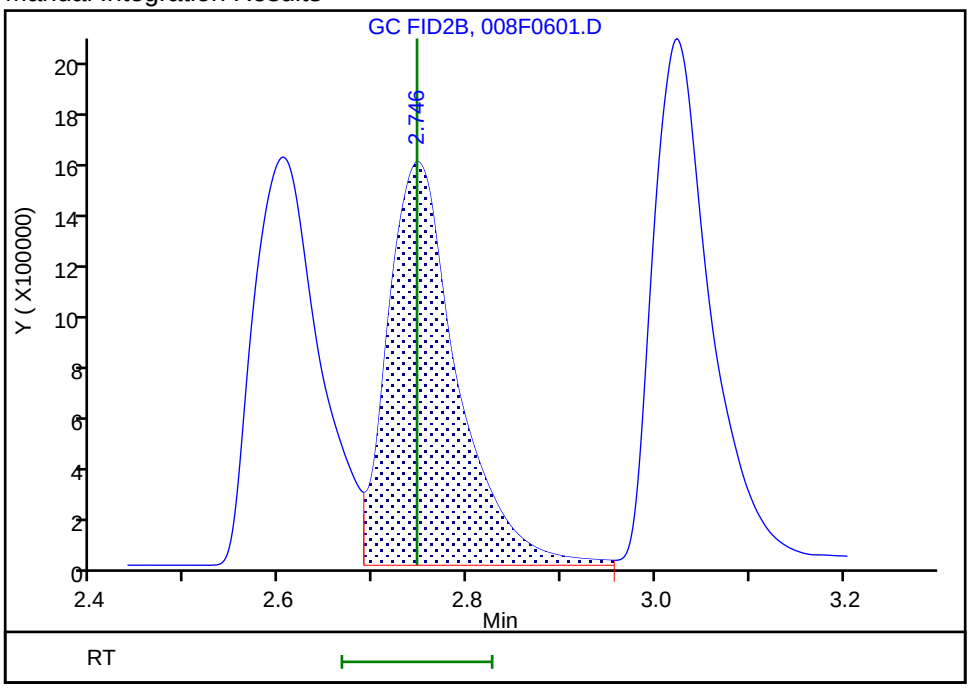
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 7865310
Amount: 230.1225
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:44:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Sep-2021 14:33:44 ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:16 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:47:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.295	-0.001	8118988	262.8	229.0	
2	1.678	1.678	0.000	8455607	262.8	232.5	
						RPD = 1.51	
3 Ethane							
1	1.561	1.560	0.001	14997572	492.7	451.2	
2	3.021	3.023	-0.002	14625440	492.7	438.1	
						RPD = 2.94	
4 Ethylene							
1	1.873	1.873	0.000	14678124	459.6	416.7	
2	2.602	2.603	-0.001	12909086	459.6	416.7	
						RPD = 0.00	
5 Propane							
1	2.723	2.721	0.002	23539538	722.6	653.7	
2	4.926	4.929	-0.003	23034734	722.6	657.9	
						RPD = 0.65	
6 Acetylene							a
1	4.228	4.230	-0.002	10977943	426.7	390.1	a
2	2.746	2.746	0.000	13452620	426.7	393.6	a
						RPD = 0.88	
7 Butane							Ma
1	4.588	4.591	-0.003	30555104	952.3	838.9	a
2	6.423	6.426	-0.003	31281741	952.3	890.2	M
						RPD = 5.93	
8 isobutylene							Ma
1	5.466	5.468	-0.002	30754275	919.4	851.3	
2	6.266	6.269	-0.003	28385241	919.4	854.9	M
						RPD = 0.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

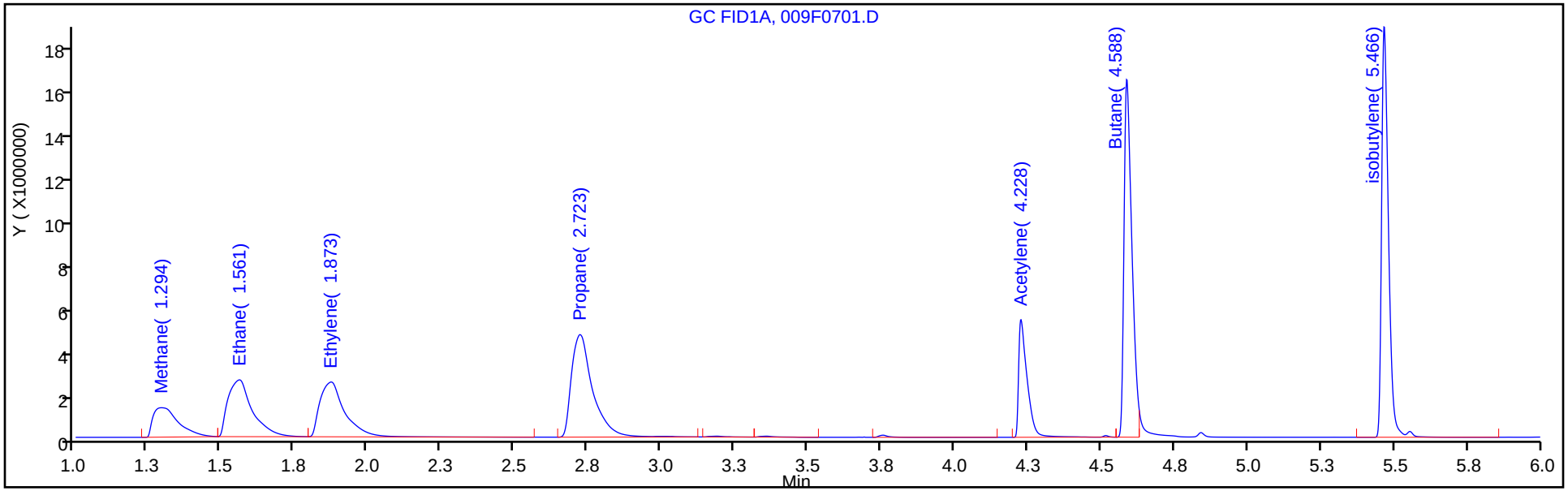
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

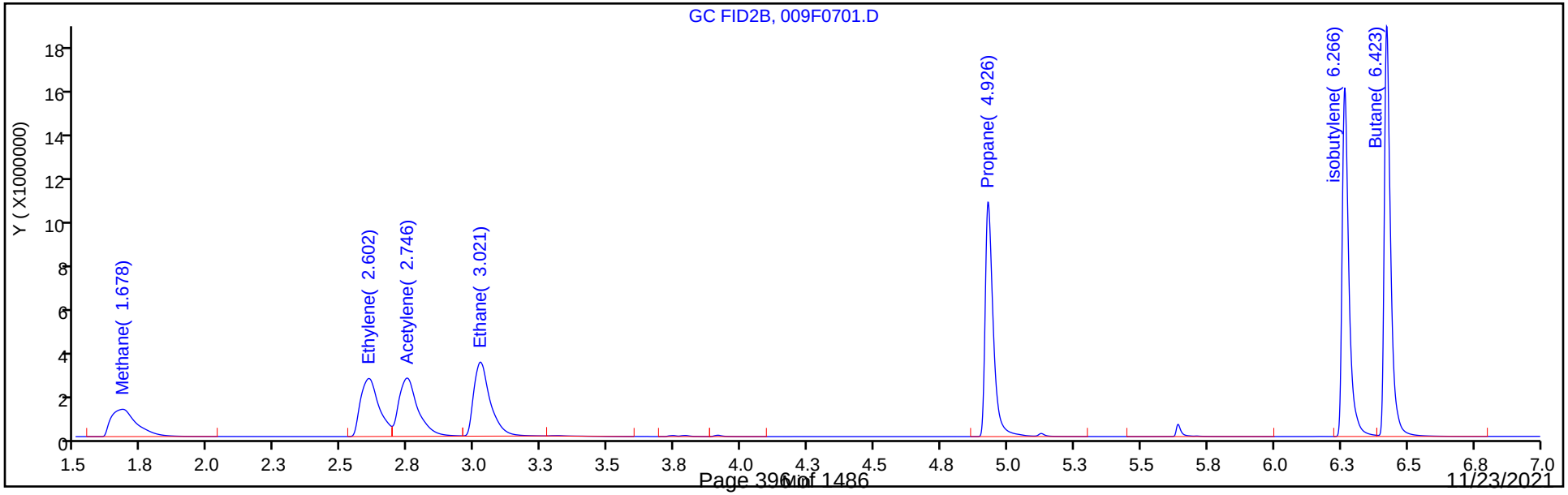
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

Injection Date:	24-Sep-2021 14:33:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

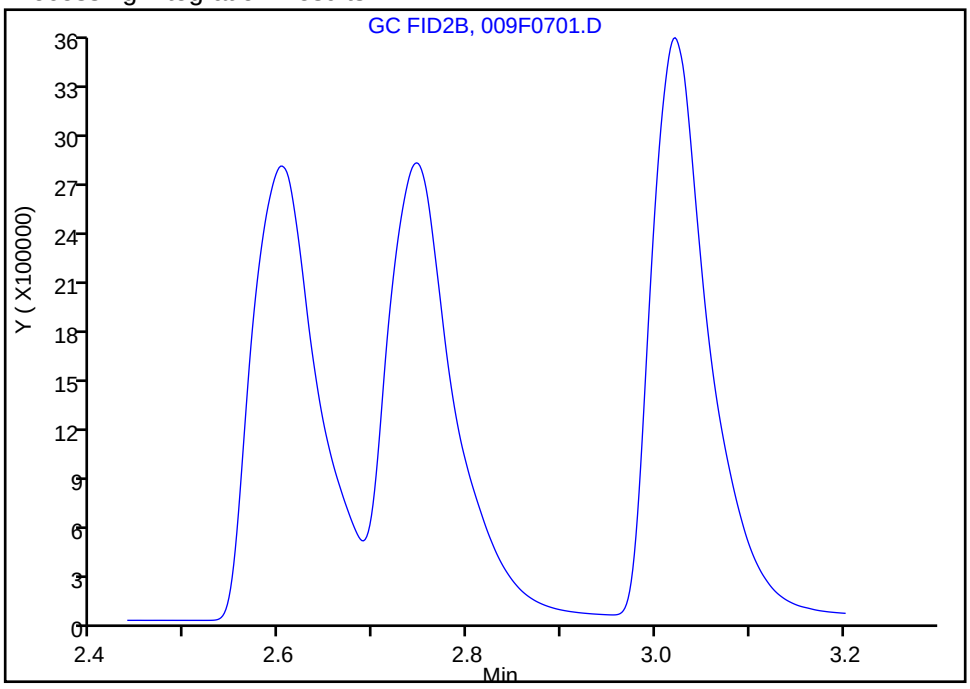
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q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

6 Acetylene, CAS: 74-86-2

Signal: 2

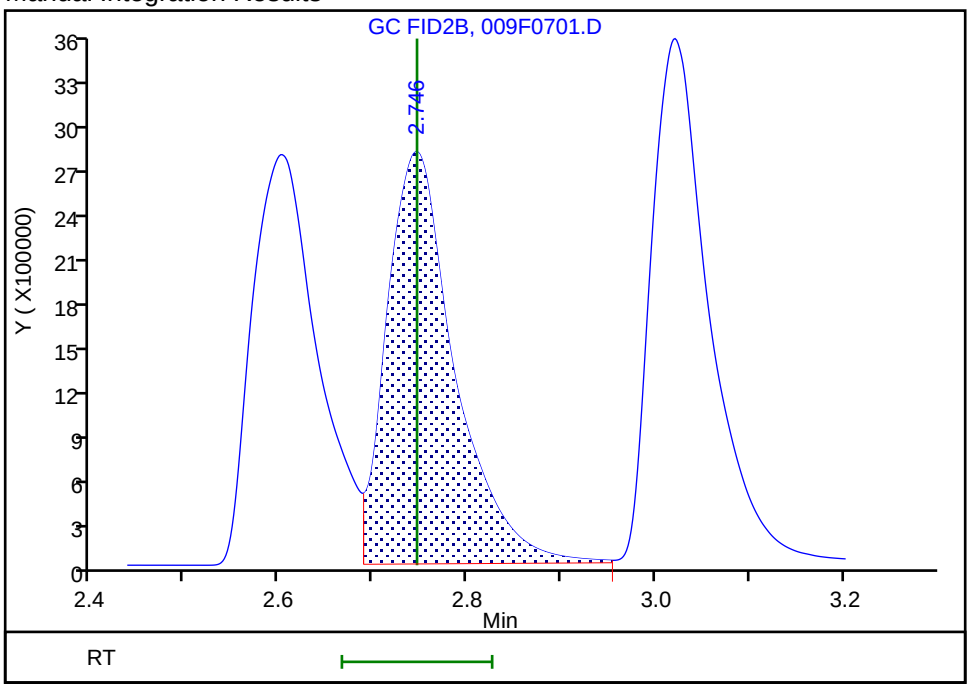
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 13452620
Amount: 393.5955
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:46:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Sep-2021 14:46:48 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.295	-0.002	60484705	1626.3	1717.9	
2	1.676	1.678	-0.002	59798125	1626.3	1654.6	
						RPD = 3.75	

QC Flag Legend
Processing Flags

Reagents:
RSK175methane_00010 Amount Added: 50.00 Units: uL

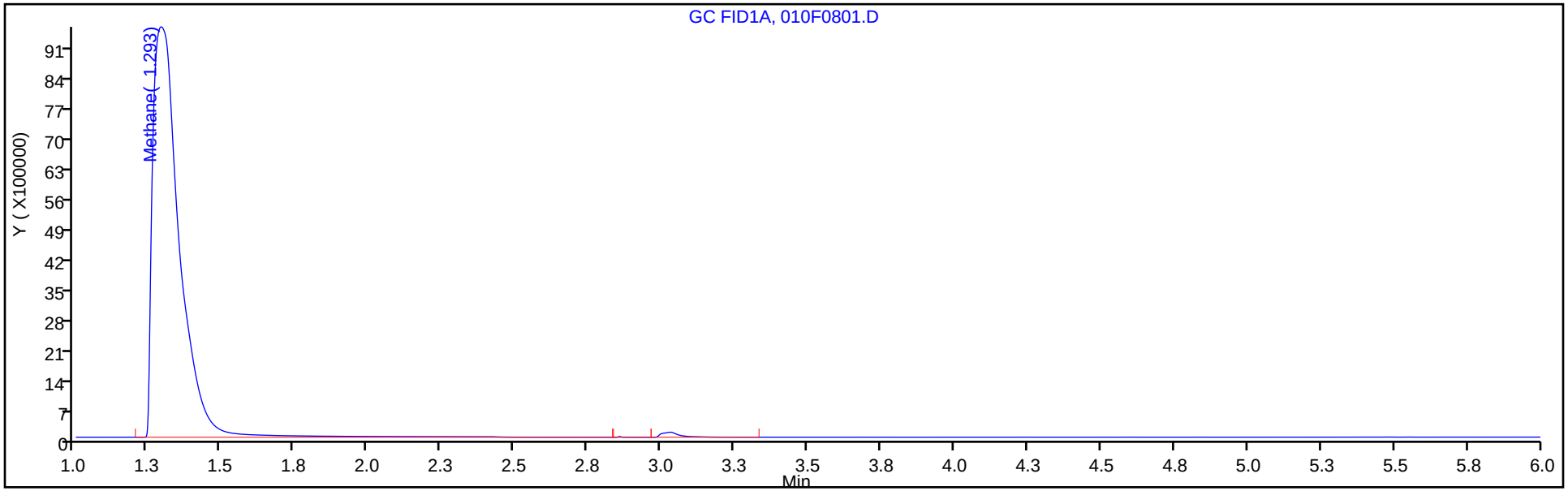
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

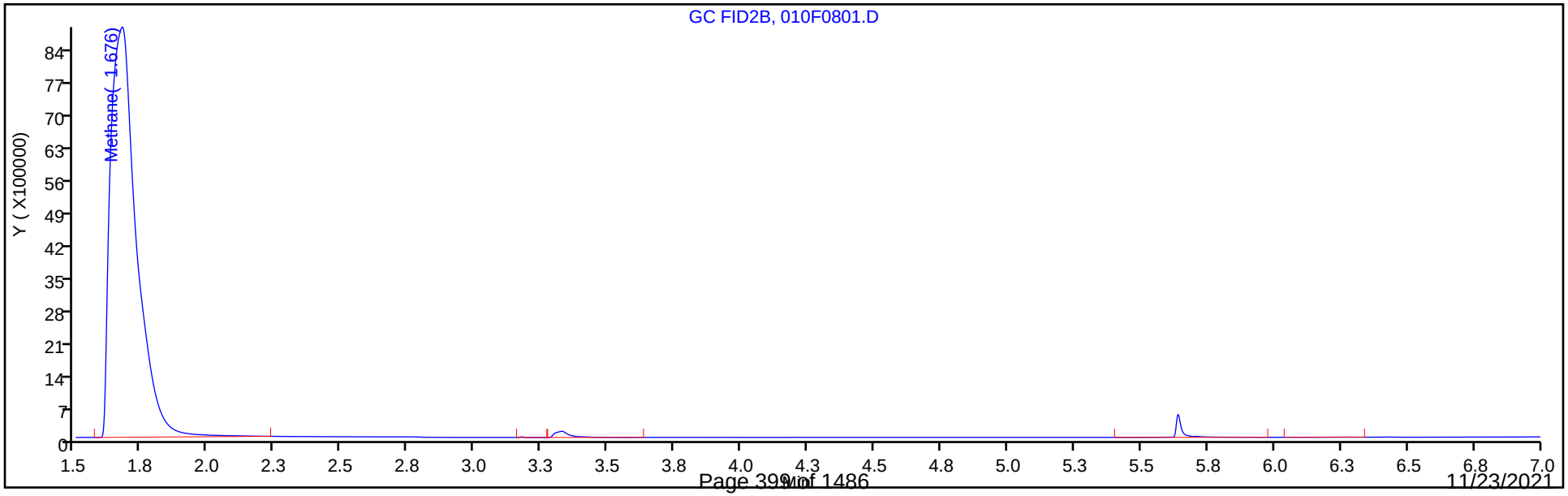
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

Injection Date:	24-Sep-2021 14:46:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Sep-2021 14:59:53 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.292	1.295	-0.003	245647963	6505.0	6982.6	
2	1.673	1.678	-0.005	247051774	6505.0	6841.2	
						RPD = 2.04	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

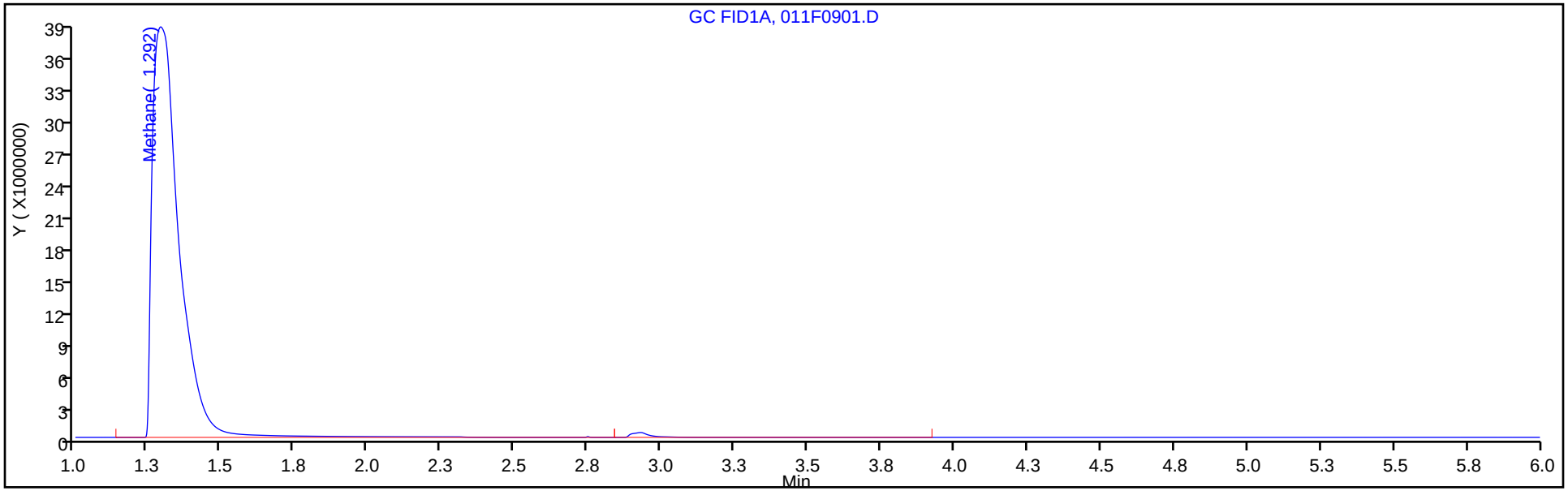
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

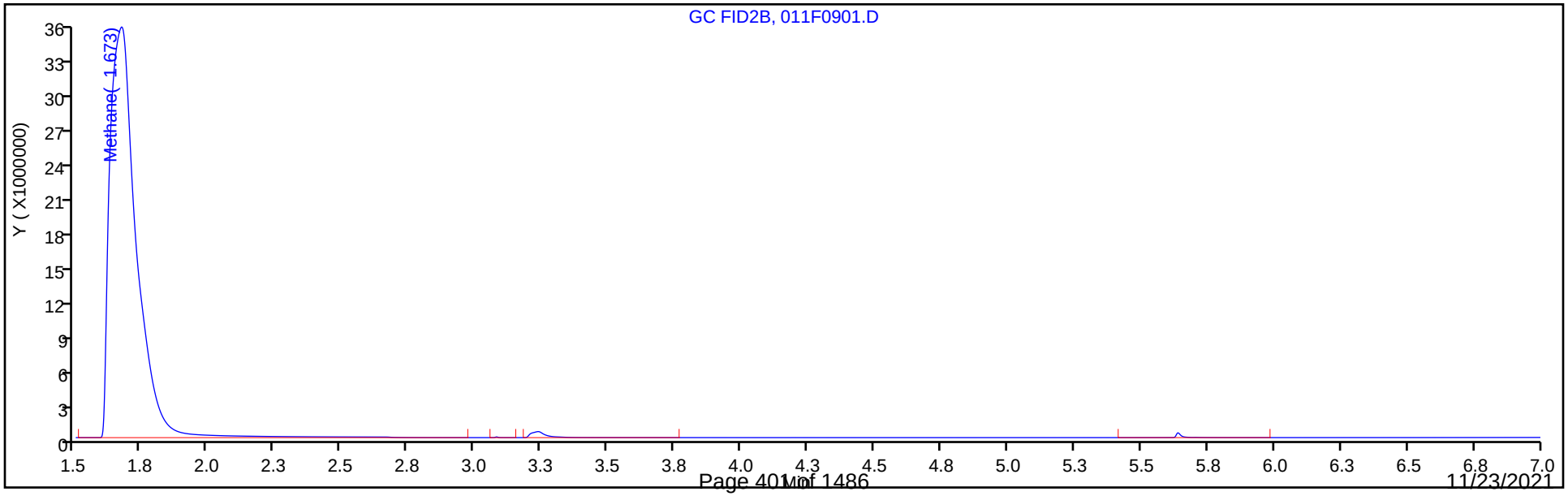
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

Injection Date:	24-Sep-2021 14:59:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 24-Sep-2021 15:12:55 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:18 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.295	-0.007	669092603	19515	19022	
2	1.669	1.678	-0.009	675608539	19515	18712	
						RPD = 1.65	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

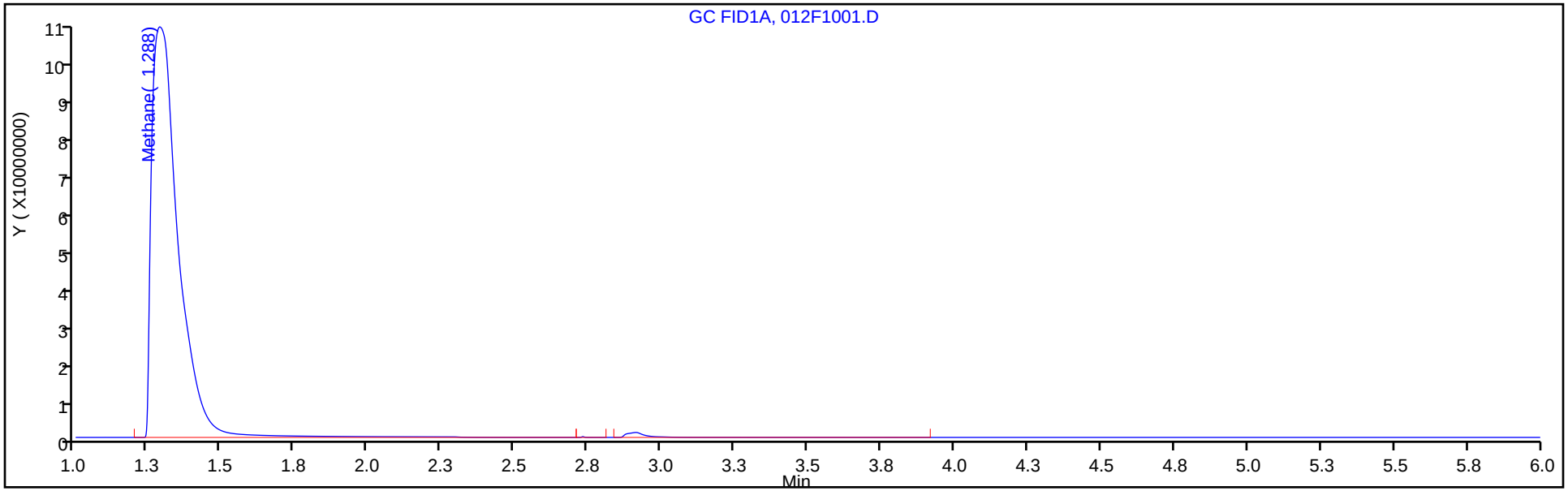
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

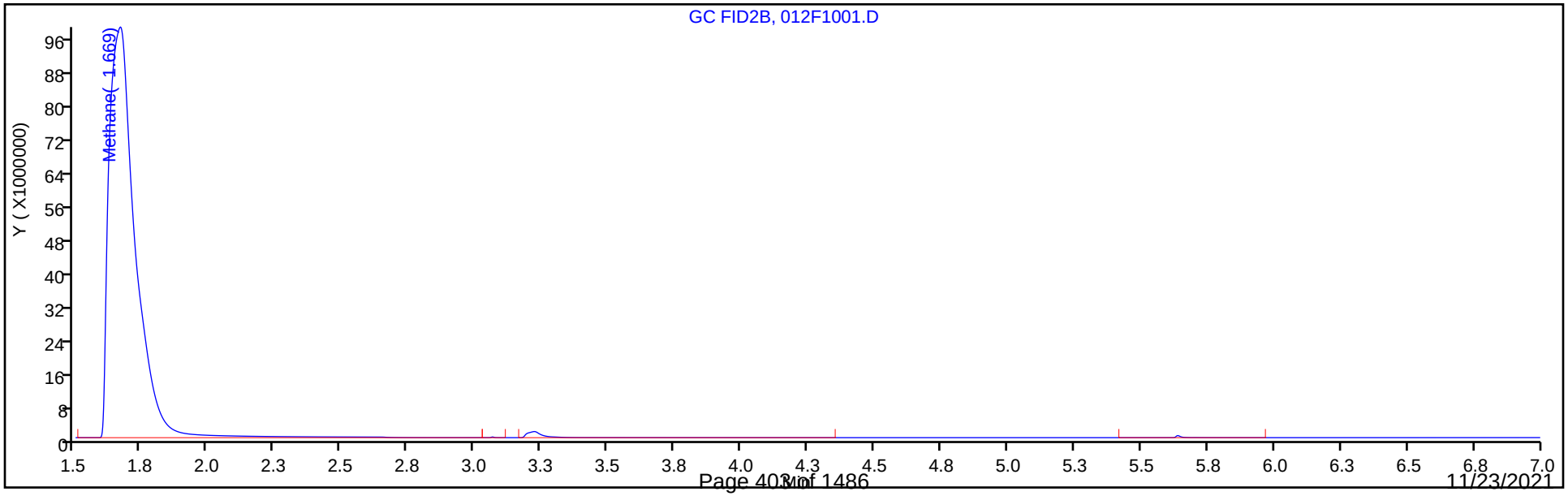
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Injection Date:	24-Sep-2021 15:12:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Calibration / Methane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

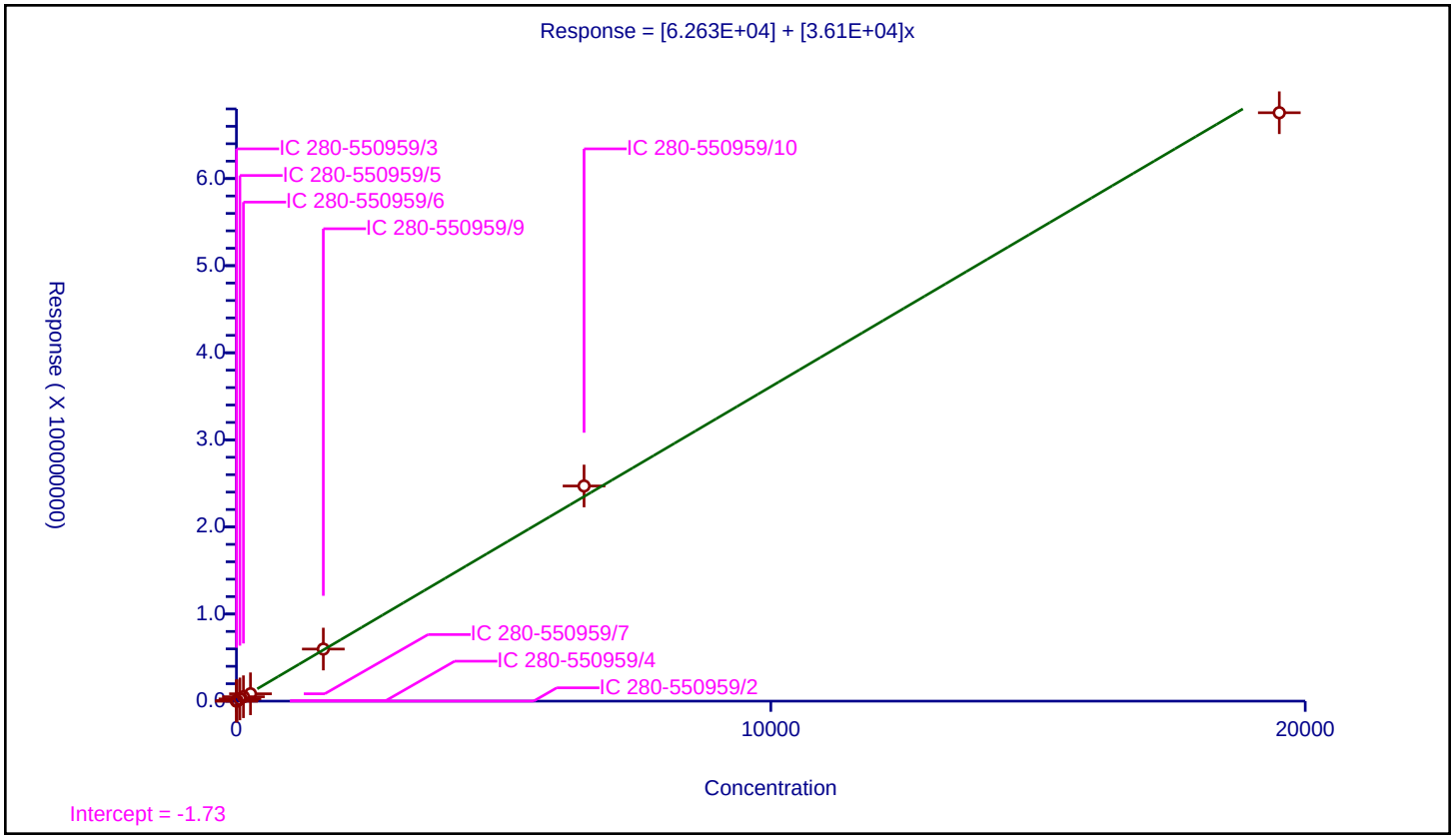
Curve Coefficients

Intercept:	6.263E+04
Slope:	3.61E+04

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	0.821288	91227.0			111078.032967	Y
2	IC 280-550959/3	1.642575	126529.0			77030.88139	Y
3	IC 280-550959/4	13.1406	509129.0			38744.730073	Y
4	IC 280-550959/5	65.703	2553566.0			38865.287734	Y
5	IC 280-550959/6	131.406	5065048.0			38545.028385	Y
6	IC 280-550959/7	262.812	8455607.0			32173.595574	Y
7	IC 280-550959/9	1626.25	59798125.0			36770.561107	Y
8	IC 280-550959/10	6505.0	247051774.0			37978.750807	Y
9	IC 280-550959/11	19515.0	675608539.0			34619.961004	Y



Calibration / Ethylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

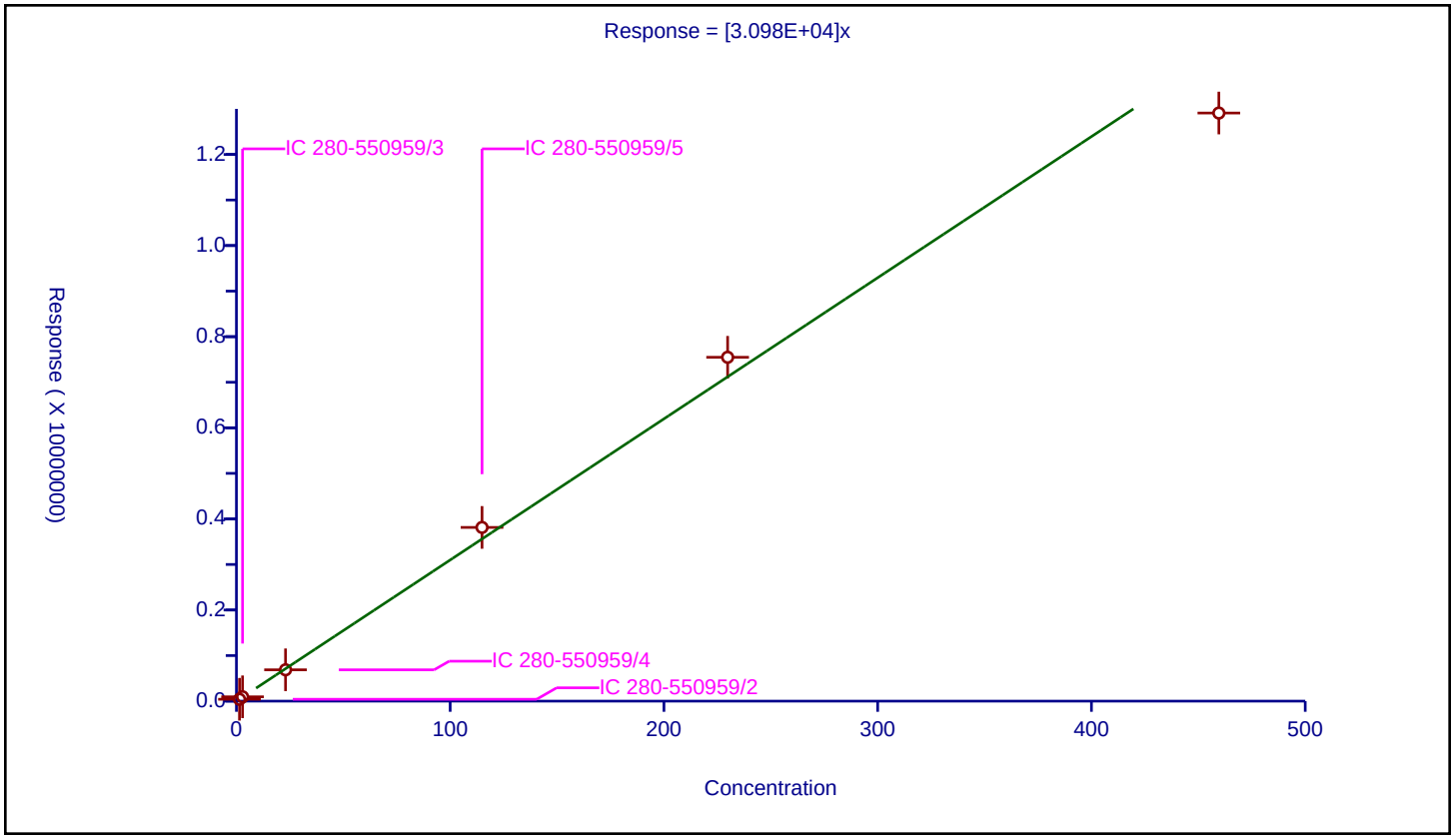
Curve Coefficients

Intercept:	0
Slope:	3.098E+04

Error Coefficients

Standard Error:	635000
Relative Standard Error:	7.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	41226.0			28703.916449	Y
2	IC 280-550959/3	2.8725	95159.0			33127.589208	Y
3	IC 280-550959/4	22.98	687818.0			29931.157528	Y
4	IC 280-550959/5	114.9	3812973.0			33185.143603	Y
5	IC 280-550959/6	229.8	7548044.0			32846.144473	Y
6	IC 280-550959/7	459.6	12909086.0			28087.654482	Y



Calibration / Acetylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

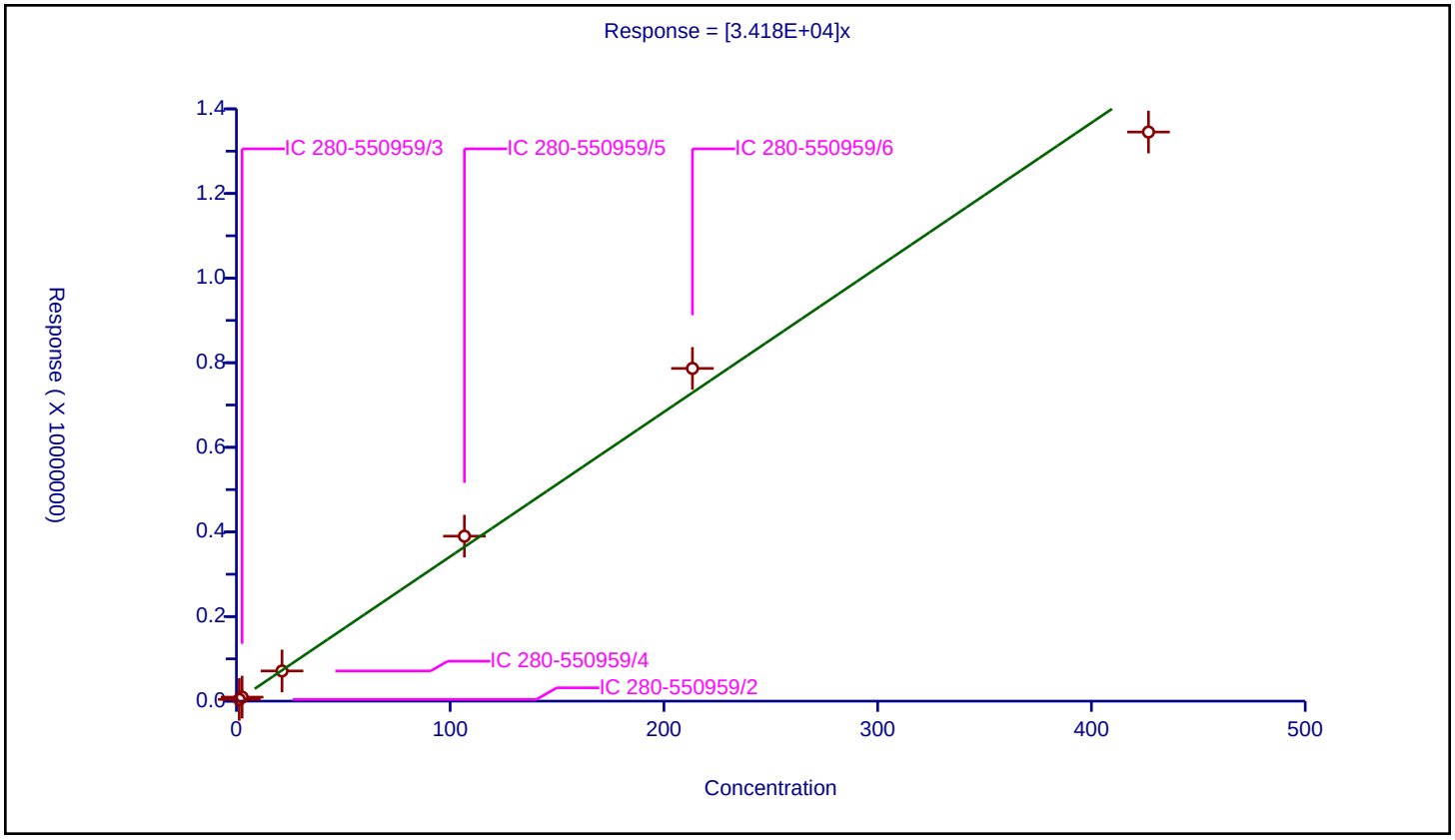
Curve Coefficients

Intercept:	0
Slope:	3.418E+04

Error Coefficients

Standard Error:	578000
Relative Standard Error:	7.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.333375	41503.0			31126.277304	Y
2	IC 280-550959/3	2.66675	94797.0			35547.764132	Y
3	IC 280-550959/4	21.334	713476.0			33443.142402	Y
4	IC 280-550959/5	106.67	3899802.0			36559.501266	Y
5	IC 280-550959/6	213.34	7865310.0			36867.488516	Y
6	IC 280-550959/7	426.68	13452620.0			31528.592856	Y



Calibration / Ethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

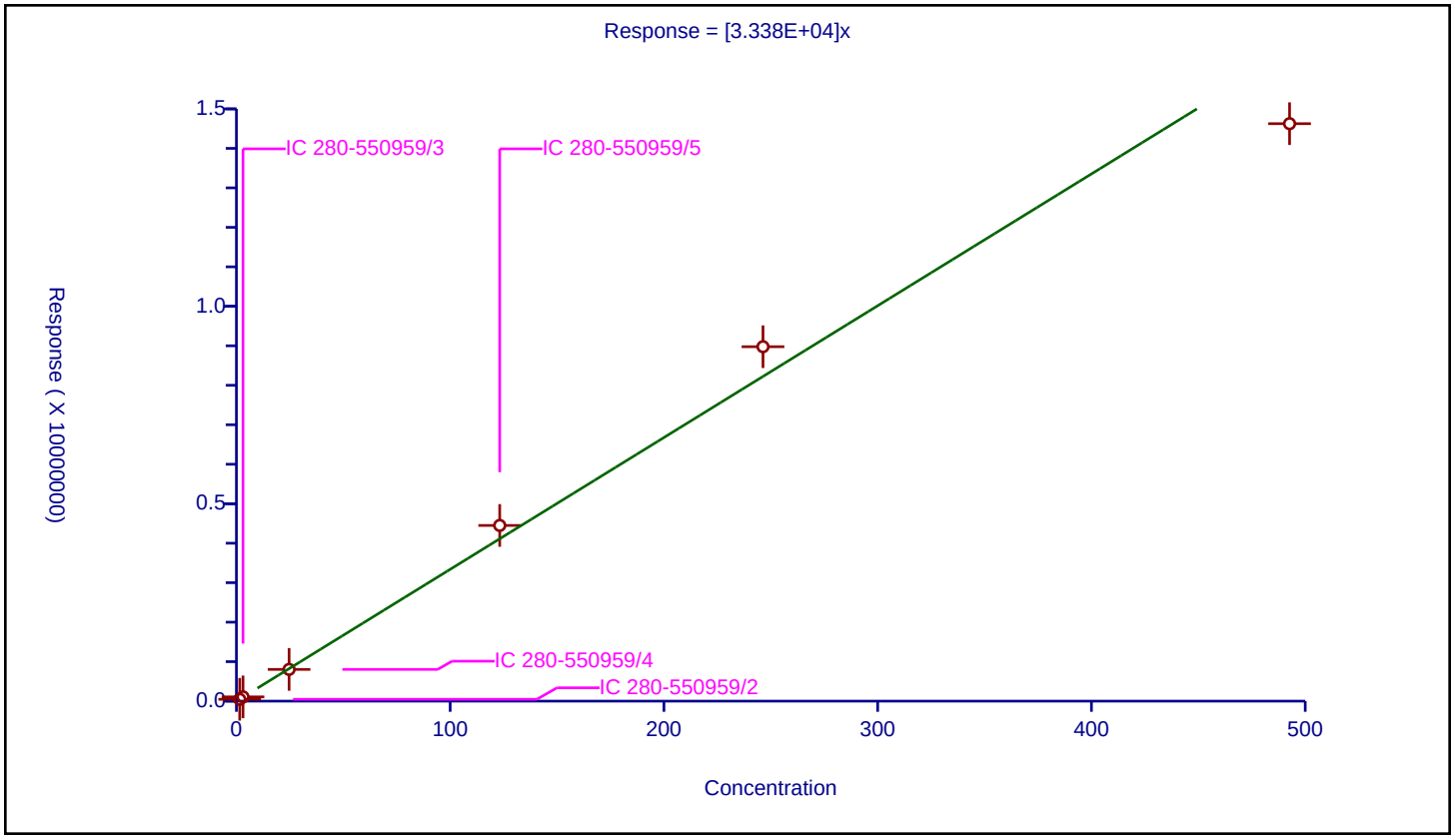
Curve Coefficients

Intercept:	0
Slope:	3.338E+04

Error Coefficients

Standard Error:	894000
Relative Standard Error:	8.6
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.539625	46984.0			30516.52188	Y
2	IC 280-550959/3	3.07925	107446.0			34893.561744	Y
3	IC 280-550959/4	24.634	803791.0			32629.333442	Y
4	IC 280-550959/5	123.17	4450065.0			36129.455224	Y
5	IC 280-550959/6	246.34	8976911.0			36441.142324	Y
6	IC 280-550959/7	492.68	14625440.0			29685.475359	Y



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

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

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

Lab File ID: 014F1201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37179		67.6	65.7	2.9	20.0
Ethane	Ave	33241	36496		135	123	9.8	20.0
Ethylene	Ave	35226	37757		123	115	7.2	20.0
Acetylene	Ave	28139	30719		116	107	9.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

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

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

Lab File ID: 014F1201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.56	1.51	1.61
Ethylene	1.87	1.79	1.89
Acetylene	4.24	4.15	4.31

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Sep-2021 15:38:59 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:58:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:54:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.299	-0.010	2442793	65.7	67.6	
2	1.676	1.686	-0.010	2535074	65.7	68.5	
						RPD = 1.30	
3 Ethane							
1	1.559	1.556	0.003	4495267	123.2	135.2	
2	3.018	3.028	-0.010	4535642	123.2	135.9	
						RPD = 0.47	
4 Ethylene							
1	1.874	1.844	0.030	4338329	114.9	123.2	
2	2.598	2.609	-0.011	3828020	114.9	123.6	
						RPD = 0.33	
5 Propane							
1	2.726	2.721	0.005	7114360	180.6	197.6	
2	4.928	4.929	-0.001	6799509	180.6	194.2	
						RPD = 1.71	
6 Acetylene							
1	4.243	4.230	0.013	3276773	106.7	116.4	
2	2.741	2.746	-0.005	4007122	106.7	117.2	
						RPD = 0.68	
7 Butane							Ma
1	4.599	4.528	0.071	9349199	238.1	256.7	a
2	6.426	6.426	0.000	8946550	238.1	254.6	M
						RPD = 0.82	
8 isobutylene							Ma
1	5.479	5.403	0.076	8850386	229.8	245.0	
2	6.268	6.274	-0.006	8132396	229.8	244.9	M
						RPD = 0.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

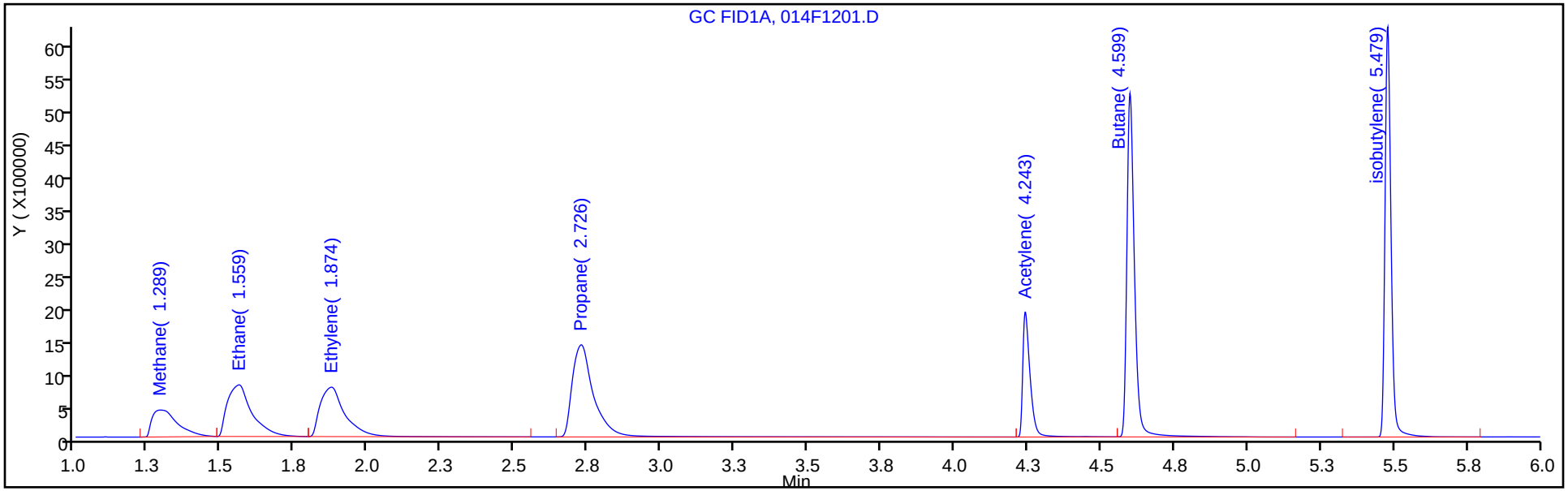
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

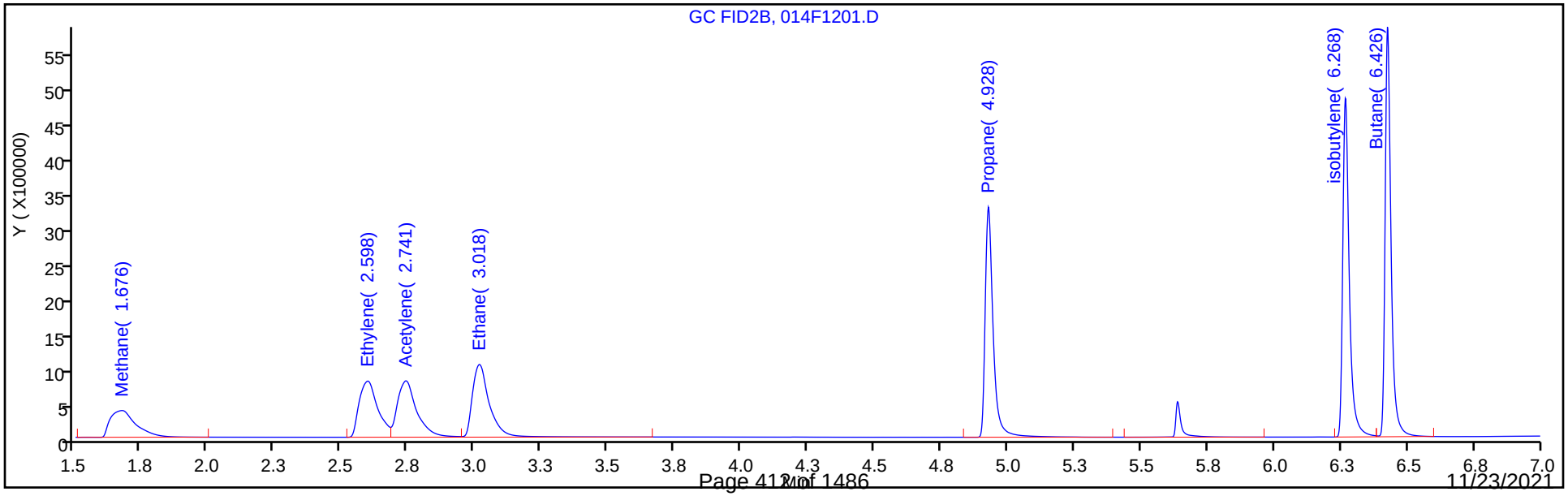
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

Injection Date:	24-Sep-2021 15:38:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

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

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

Lab File ID: 014F1201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		38584		68.5	65.7	4.2	20.0
Ethylene	Ave	30980	33316		124	115	7.5	20.0
Acetylene	Ave	34179	37566		117	107	9.9	20.0
Ethane	Ave	33383	36824		136	123	10.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

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

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

Lab File ID: 014F1201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.65	1.73
Ethylene	2.60	2.56	2.66
Acetylene	2.74	2.67	2.83
Ethane	3.02	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Sep-2021 15:38:59 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:58:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:54:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.299	-0.010	2442793	65.7	67.6	
2	1.676	1.686	-0.010	2535074	65.7	68.5	
						RPD = 1.30	
3 Ethane							
1	1.559	1.556	0.003	4495267	123.2	135.2	
2	3.018	3.028	-0.010	4535642	123.2	135.9	
						RPD = 0.47	
4 Ethylene							
1	1.874	1.844	0.030	4338329	114.9	123.2	
2	2.598	2.609	-0.011	3828020	114.9	123.6	
						RPD = 0.33	
5 Propane							
1	2.726	2.721	0.005	7114360	180.6	197.6	
2	4.928	4.929	-0.001	6799509	180.6	194.2	
						RPD = 1.71	
6 Acetylene							
1	4.243	4.230	0.013	3276773	106.7	116.4	
2	2.741	2.746	-0.005	4007122	106.7	117.2	
						RPD = 0.68	
7 Butane							Ma
1	4.599	4.528	0.071	9349199	238.1	256.7	a
2	6.426	6.426	0.000	8946550	238.1	254.6	M
						RPD = 0.82	
8 isobutylene							Ma
1	5.479	5.403	0.076	8850386	229.8	245.0	
2	6.268	6.274	-0.006	8132396	229.8	244.9	M
						RPD = 0.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

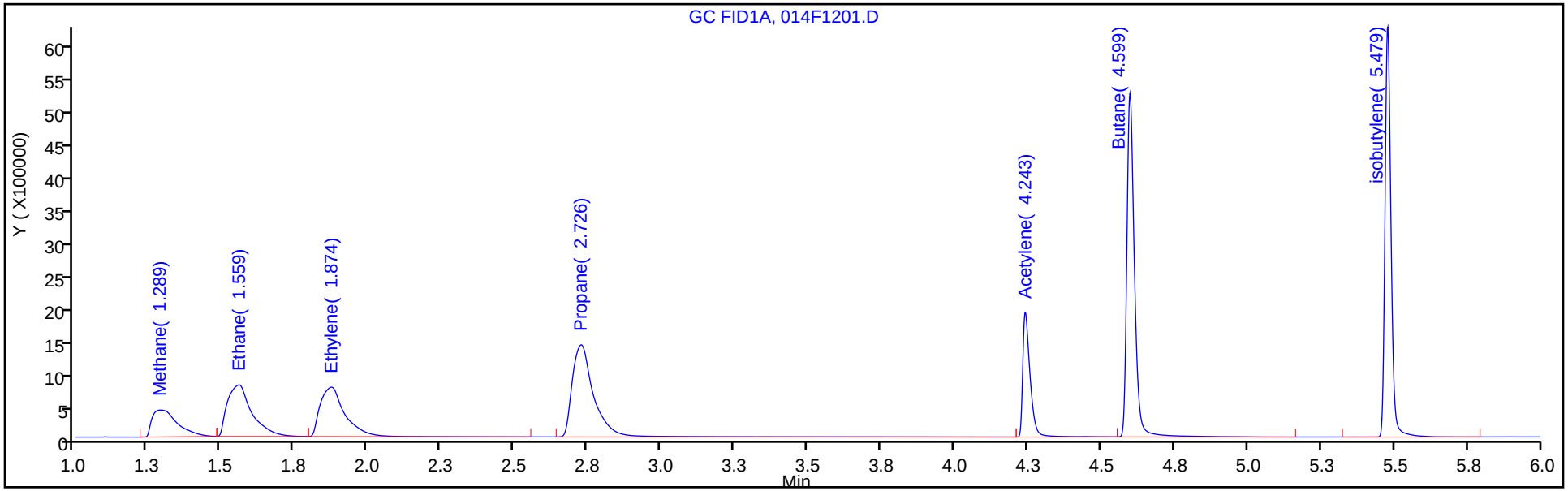
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

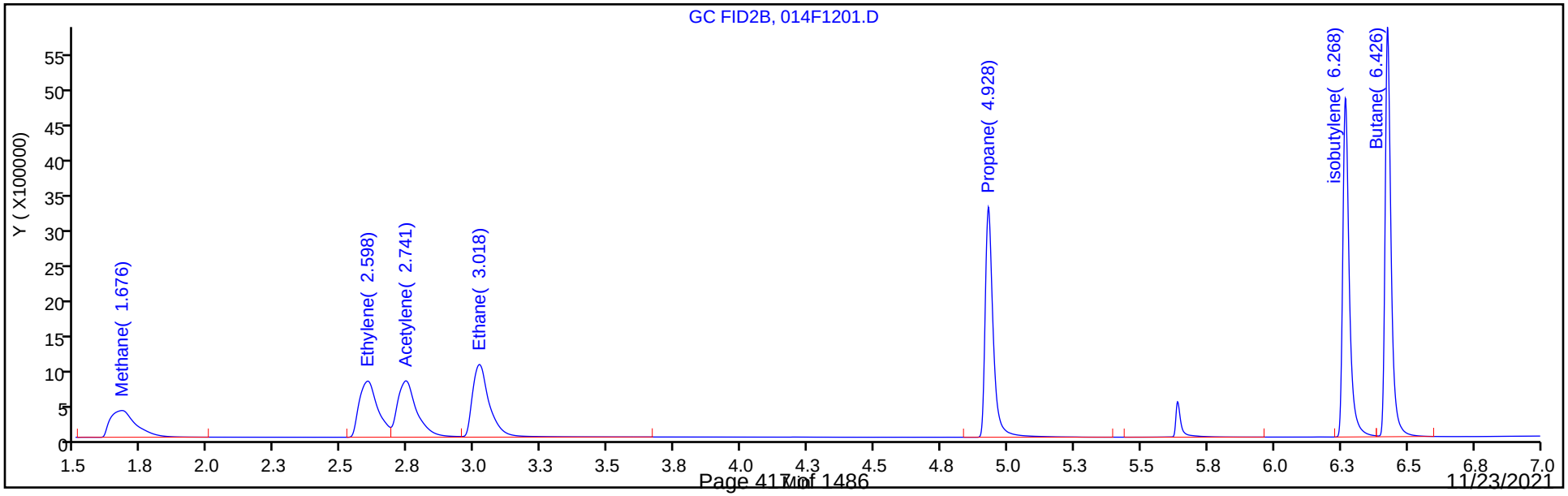
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

Injection Date:	24-Sep-2021 15:38:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556641/1 Calibration Date: 11/08/2021 13:28

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

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

Lab File ID: 001F0101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		35143		63.8	65.7	-2.9	20.0
Ethane	Ave	33241	33431		124	123	0.6	20.0
Ethylene	Ave	35226	35455		116	115	0.6	20.0
Acetylene	Ave	28139	28927		110	107	2.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556641/1 Calibration Date: 11/08/2021 13:28

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

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

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.54	1.49	1.59
Ethylene	1.79	1.74	1.84
Acetylene	3.87	3.79	3.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 08-Nov-2021 13:28:55 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: rtc
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 08-Nov-2021 14:29:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.299	1.299	0.000	2308974	65.7	63.8	
2	1.688	1.688	0.000	2480141	65.7	67.0	
						RPD = 4.85	
3 Ethane							
1	1.538	1.538	0.000	4117654	123.2	123.9	
2	3.026	3.026	0.000	4348452	123.2	130.3	
						RPD = 5.03	
4 Ethylene							
1	1.789	1.789	0.000	4073770	114.9	115.6	
2	2.608	2.608	0.000	3677187	114.9	118.7	
						RPD = 2.60	
5 Propane							a
1	2.531	2.531	0.000	6613234	180.6	183.6	a
2	4.929	4.929	0.000	6455300	180.6	184.4	a
						RPD = 0.40	
6 Acetylene							a
1	3.868	3.868	0.000	3085599	106.7	109.7	a
2	2.753	2.753	0.000	3847016	106.7	112.6	a
						RPD = 2.61	
7 Butane							Ma
1	4.319	4.319	0.000	8705964	238.1	239.0	a
2	6.428	6.428	0.000	8498012	238.1	241.8	M
						RPD = 1.17	
8 isobutylene							Ma
1	5.281	5.281	0.000	8284964	229.8	229.3	
2	6.269	6.269	0.000	7646423	229.8	230.3	M
						RPD = 0.41	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

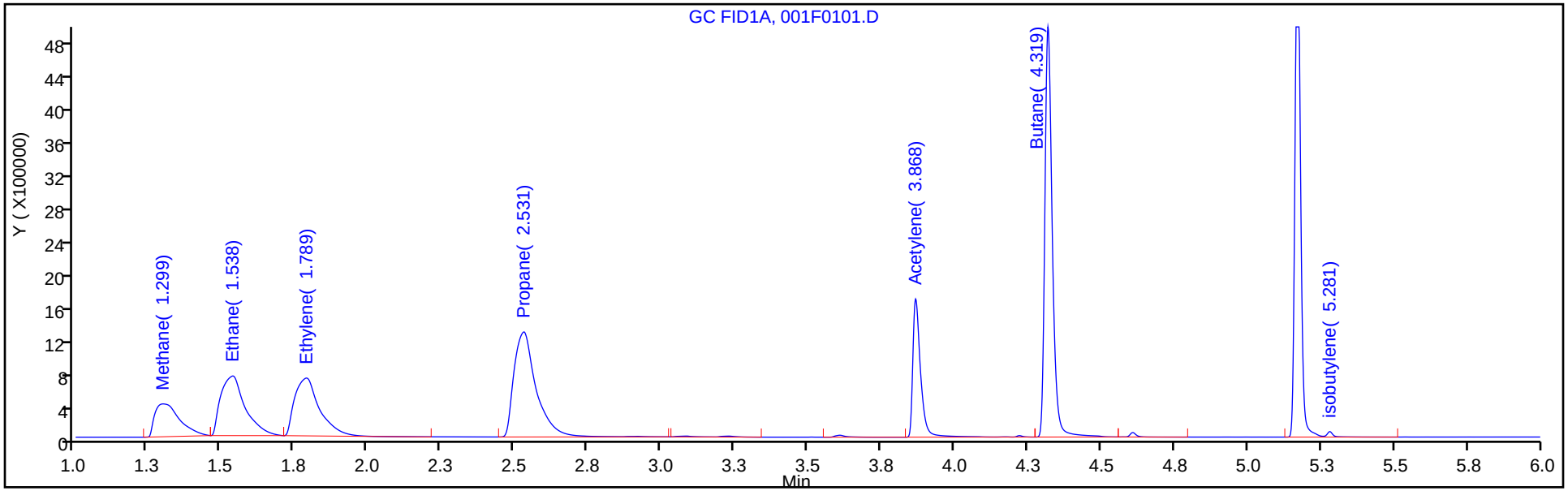
Report Date: 09-Nov-2021 10:13:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

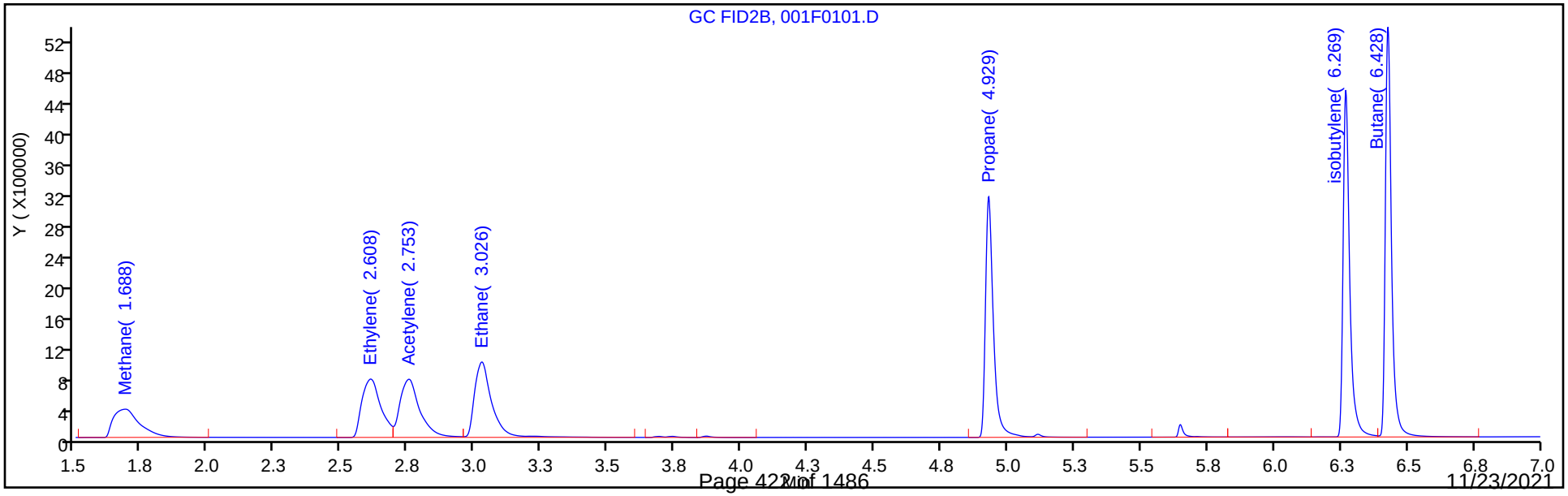
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\001F0101.D

Injection Date:	08-Nov-2021 13:28:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

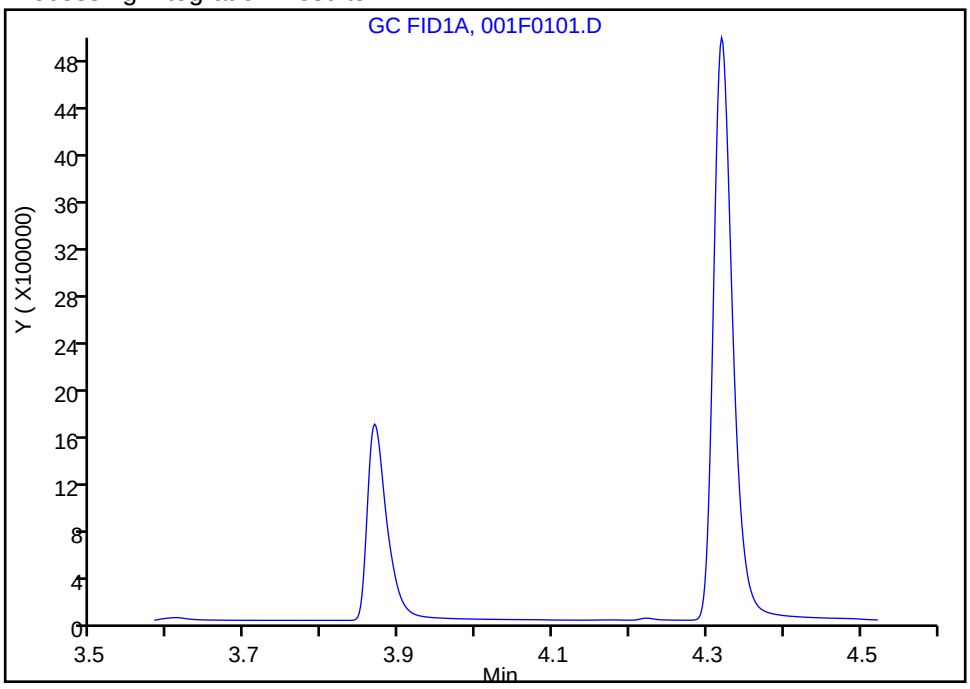
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\001F0101.D				
Injection Date:	08-Nov-2021 13:28:55	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

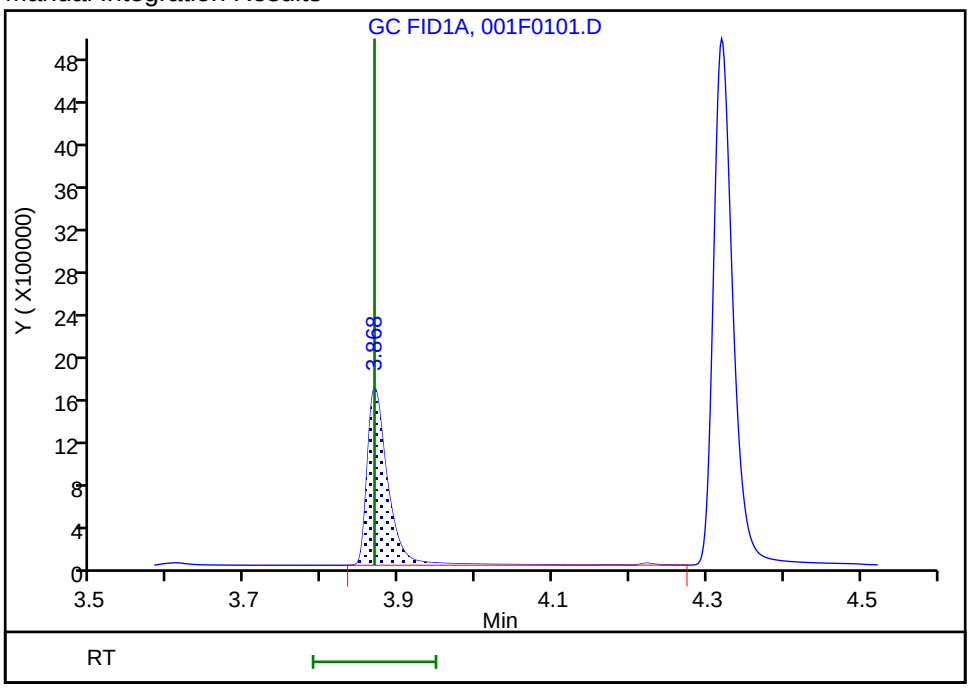
Not Detected
Expected RT: 3.87

Processing Integration Results



Manual Integration Results

RT: 3.87
Area: 3085599
Amount: 109.6555
Amount Units: ug/l



Reviewer: sciannac, 08-Nov-2021 14:29:07
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556641/1 Calibration Date: 11/08/2021 13:28

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

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

Lab File ID: 001F0101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37748		67.0	65.7	1.9	20.0
Ethylene	Ave	30980	32003		119	115	3.3	20.0
Acetylene	Ave	34179	36065		113	107	5.5	20.0
Ethane	Ave	33383	35304		130	123	5.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556641/1 Calibration Date: 11/08/2021 13:28

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

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

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.61	2.56	2.66
Acetylene	2.75	2.67	2.83
Ethane	3.03	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 08-Nov-2021 13:28:55 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: rtc
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 08-Nov-2021 14:29:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.299	1.299	0.000	2308974	65.7	63.8	
2	1.688	1.688	0.000	2480141	65.7	67.0	
						RPD = 4.85	
3 Ethane							
1	1.538	1.538	0.000	4117654	123.2	123.9	
2	3.026	3.026	0.000	4348452	123.2	130.3	
						RPD = 5.03	
4 Ethylene							
1	1.789	1.789	0.000	4073770	114.9	115.6	
2	2.608	2.608	0.000	3677187	114.9	118.7	
						RPD = 2.60	
5 Propane							a
1	2.531	2.531	0.000	6613234	180.6	183.6	a
2	4.929	4.929	0.000	6455300	180.6	184.4	a
						RPD = 0.40	
6 Acetylene							a
1	3.868	3.868	0.000	3085599	106.7	109.7	a
2	2.753	2.753	0.000	3847016	106.7	112.6	a
						RPD = 2.61	
7 Butane							Ma
1	4.319	4.319	0.000	8705964	238.1	239.0	a
2	6.428	6.428	0.000	8498012	238.1	241.8	M
						RPD = 1.17	
8 isobutylene							Ma
1	5.281	5.281	0.000	8284964	229.8	229.3	
2	6.269	6.269	0.000	7646423	229.8	230.3	M
						RPD = 0.41	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

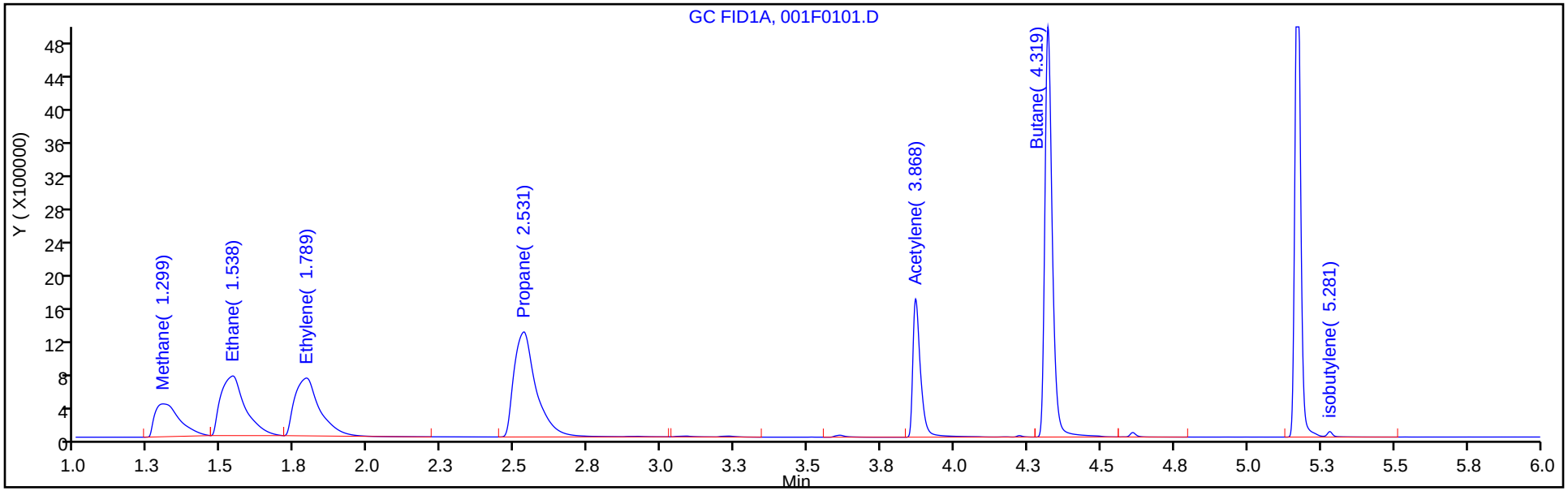
Report Date: 09-Nov-2021 10:13:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

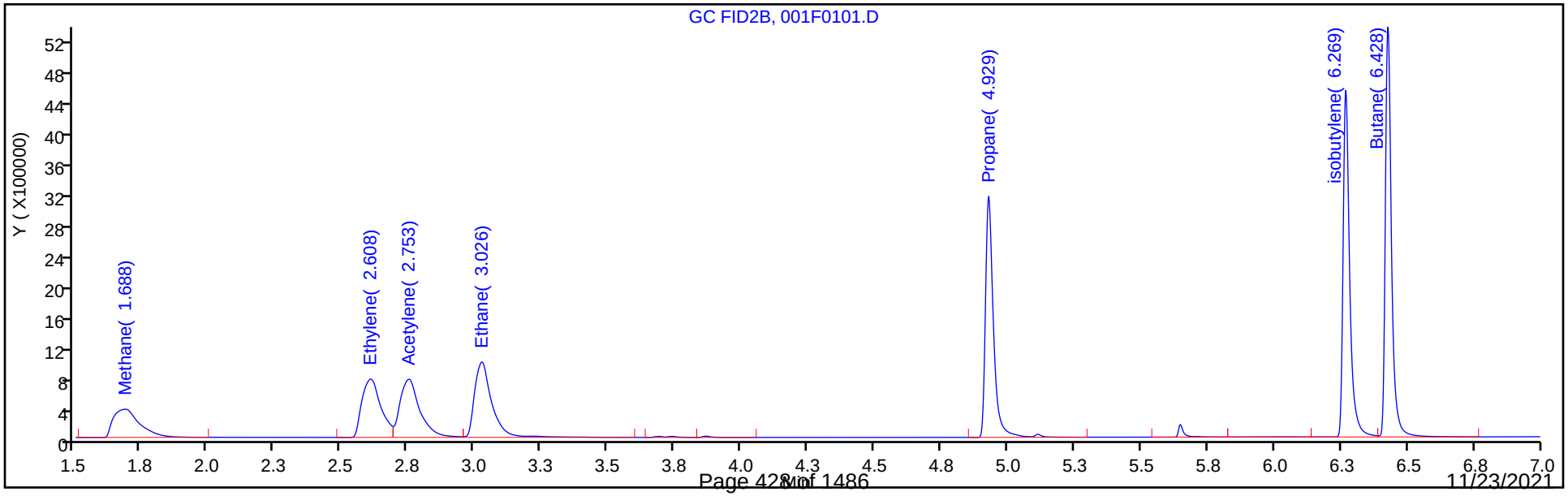
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\001F0101.D

Injection Date:	08-Nov-2021 13:28:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

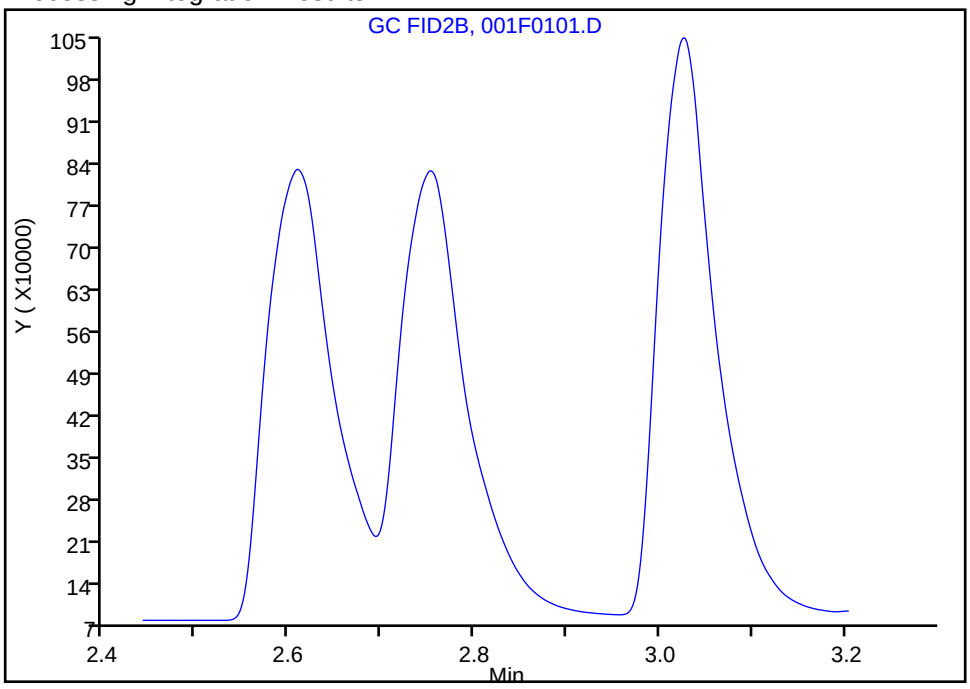
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\001F0101.D
Injection Date: 08-Nov-2021 13:28:55 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

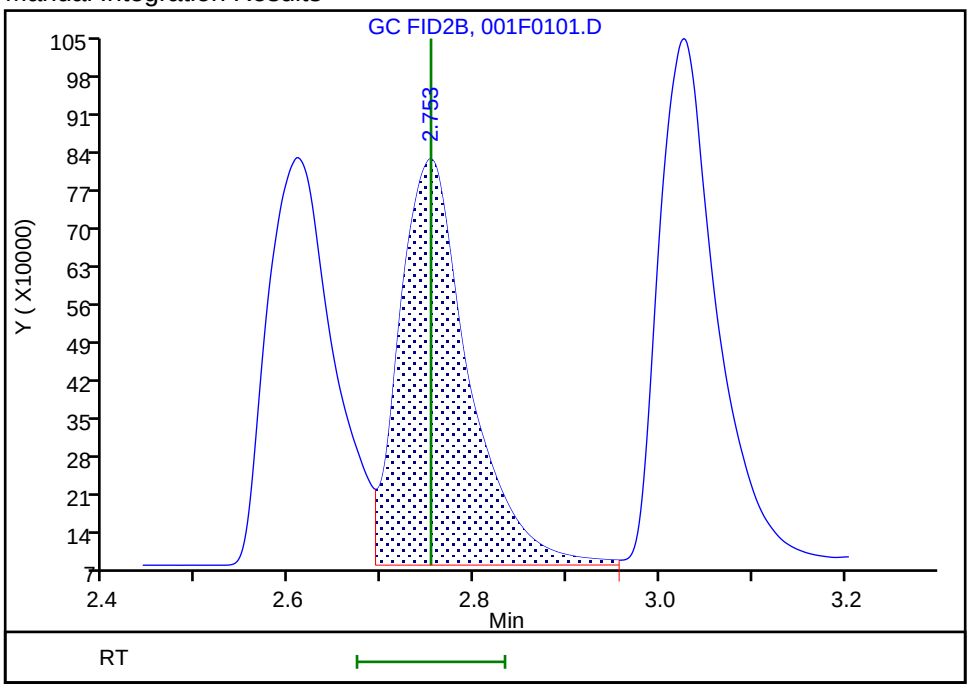
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3847016
Amount: 112.5556
Amount Units: ug/l



Reviewer: sciannac, 08-Nov-2021 14:29:00
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/19 Calibration Date: 11/08/2021 17:10

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

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

Lab File ID: 018F1801.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		37058		67.4	65.7	2.5	20.0
Ethane	Ave	33241	34864		129	123	4.9	20.0
Ethylene	Ave	35226	36725		120	115	4.3	20.0
Acetylene	Ave	28139	28217		107	107	0.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/19 Calibration Date: 11/08/2021 17:10

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

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

Lab File ID: 018F1801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.49	1.59
Ethylene	1.86	1.74	1.84
Acetylene	4.24	3.79	3.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Nov-2021 17:10:05 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 15:27:06 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 15:27:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.286	1.299	-0.013	2434789	65.7	67.4	
2	1.670	1.688	-0.018	2527840	65.7	68.3	
						RPD = 1.35	
3 Ethane							
1	1.550	1.538	0.012	4294149	123.2	129.2	
2	3.010	3.026	-0.016	4461374	123.2	133.6	
						RPD = 3.40	
4 Ethylene							a
1	1.863	1.789	0.074	4219691	114.9	119.8	a
2	2.591	2.608	-0.017	3728051	114.9	120.3	a
						RPD = 0.46	
5 Propane							a
1	2.695	2.531	0.164	6717507	180.6	186.5	a
2	4.923	4.929	-0.006	6477581	180.6	185.0	a
						RPD = 0.82	
6 Acetylene							a
1	4.243	3.868	0.375	3009870	106.7	107.0	a
2	2.735	2.753	-0.018	3855352	106.7	112.8	a
						RPD = 5.31	
7 Butane							Ma
1	4.565	4.319	0.246	8616548	238.1	236.6	a
2	6.423	6.428	-0.005	8374238	238.1	238.3	M
						RPD = 0.73	
8 isobutylene							Ma
1	5.453	5.281	0.172	8127491	229.8	225.0	M
2	6.265	6.269	-0.004	7510735	229.8	226.2	M
						RPD = 0.54	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

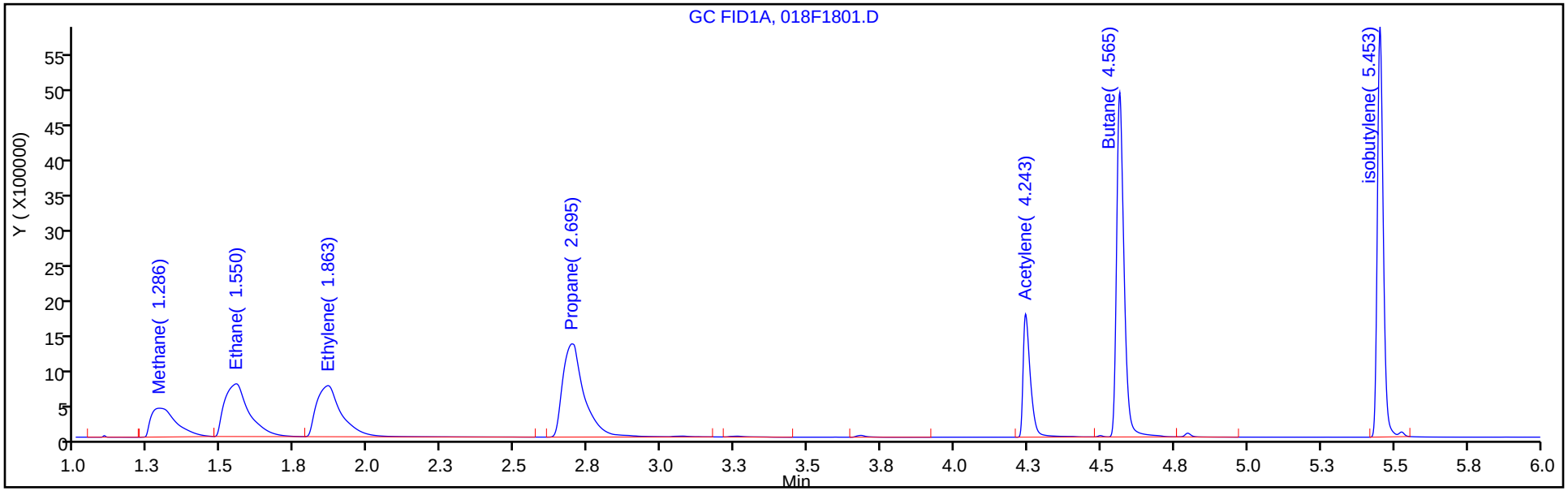
Report Date: 09-Nov-2021 15:27:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

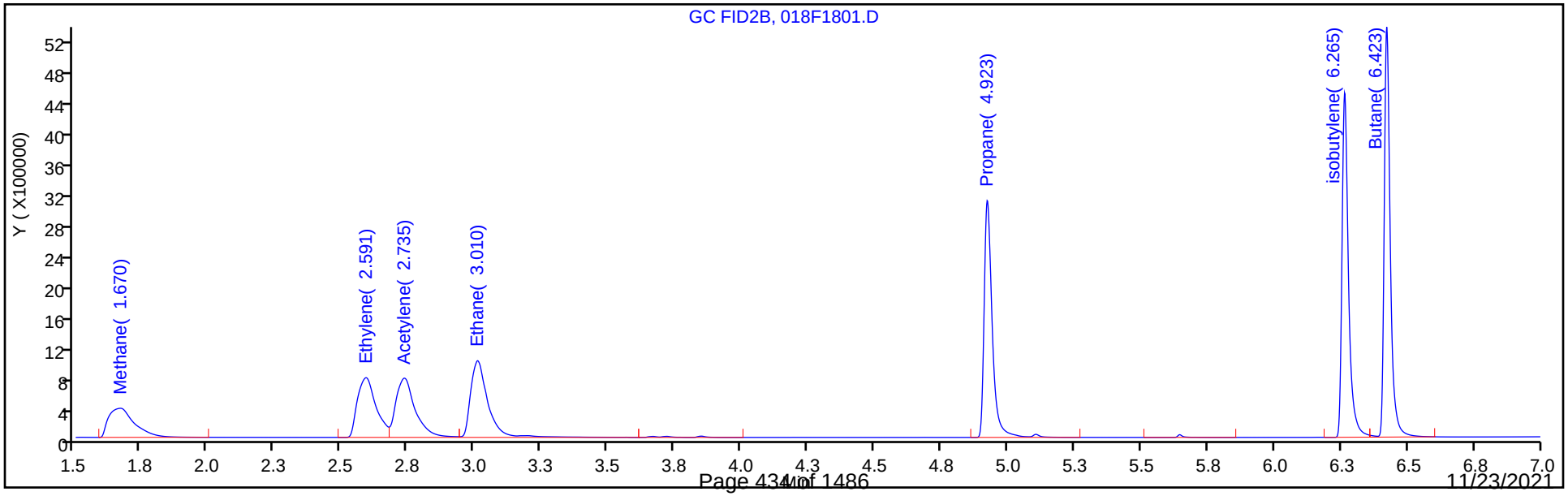
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D

Injection Date:	08-Nov-2021 17:10:05	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	19
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

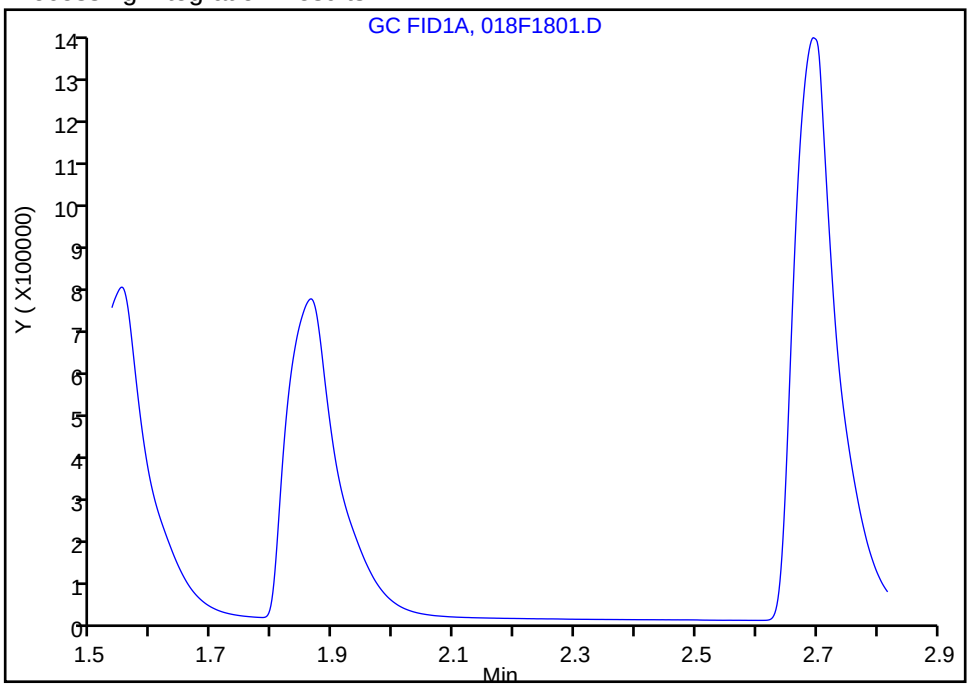
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D
Injection Date: 08-Nov-2021 17:10:05 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

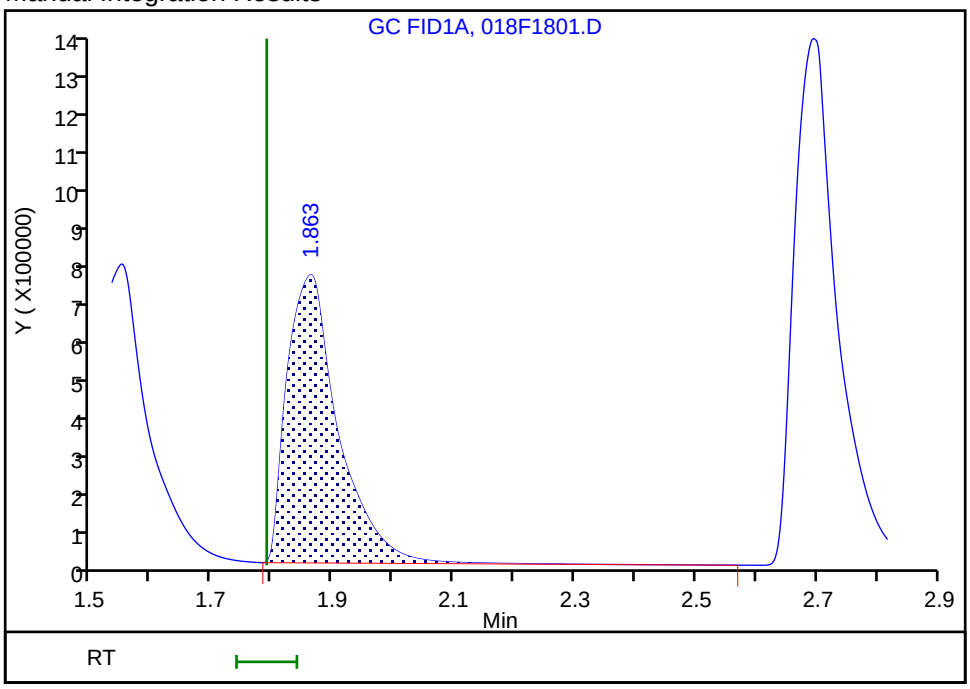
Not Detected
Expected RT: 1.79

Processing Integration Results



Manual Integration Results

RT: 1.86
Area: 4219691
Amount: 119.7892
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 09:59:18
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

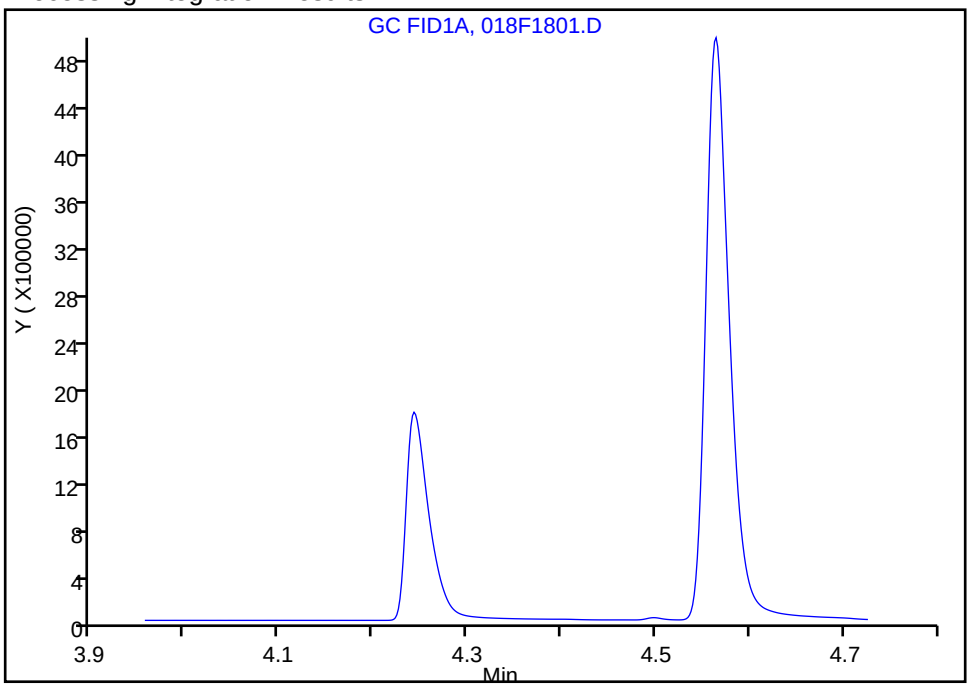
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D
Injection Date: 08-Nov-2021 17:10:05 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

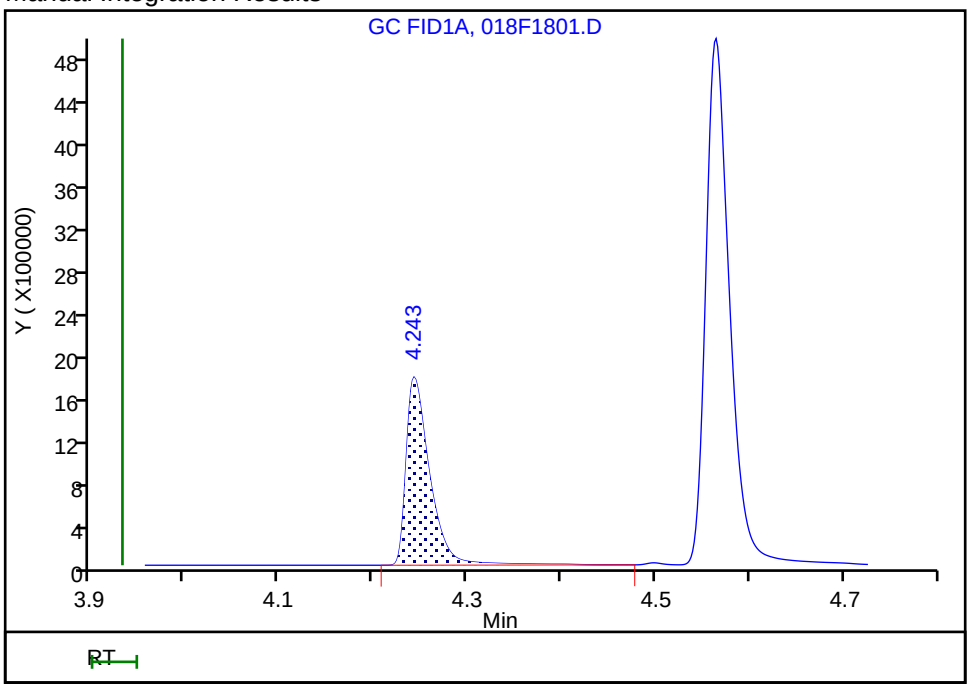
Not Detected
Expected RT: 3.87

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 3009870
Amount: 106.9643
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 09:59:39
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/19 Calibration Date: 11/08/2021 17:10

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

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

Lab File ID: 018F1801.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		38474		68.3	65.7	3.9	20.0
Ethylene	Ave	30980	32446		120	115	4.7	20.0
Acetylene	Ave	34179	36143		113	107	5.7	20.0
Ethane	Ave	33383	36221		134	123	8.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/19 Calibration Date: 11/08/2021 17:10

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

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

Lab File ID: 018F1801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Acetylene	2.74	2.67	2.83
Ethane	3.01	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Nov-2021 17:10:05 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 15:27:06 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 15:27:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.286	1.299	-0.013	2434789	65.7	67.4	
2	1.670	1.688	-0.018	2527840	65.7	68.3	
						RPD = 1.35	
3 Ethane							
1	1.550	1.538	0.012	4294149	123.2	129.2	
2	3.010	3.026	-0.016	4461374	123.2	133.6	
						RPD = 3.40	
4 Ethylene							a
1	1.863	1.789	0.074	4219691	114.9	119.8	a
2	2.591	2.608	-0.017	3728051	114.9	120.3	a
						RPD = 0.46	
5 Propane							a
1	2.695	2.531	0.164	6717507	180.6	186.5	a
2	4.923	4.929	-0.006	6477581	180.6	185.0	a
						RPD = 0.82	
6 Acetylene							a
1	4.243	3.868	0.375	3009870	106.7	107.0	a
2	2.735	2.753	-0.018	3855352	106.7	112.8	a
						RPD = 5.31	
7 Butane							Ma
1	4.565	4.319	0.246	8616548	238.1	236.6	a
2	6.423	6.428	-0.005	8374238	238.1	238.3	M
						RPD = 0.73	
8 isobutylene							Ma
1	5.453	5.281	0.172	8127491	229.8	225.0	M
2	6.265	6.269	-0.004	7510735	229.8	226.2	M
						RPD = 0.54	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

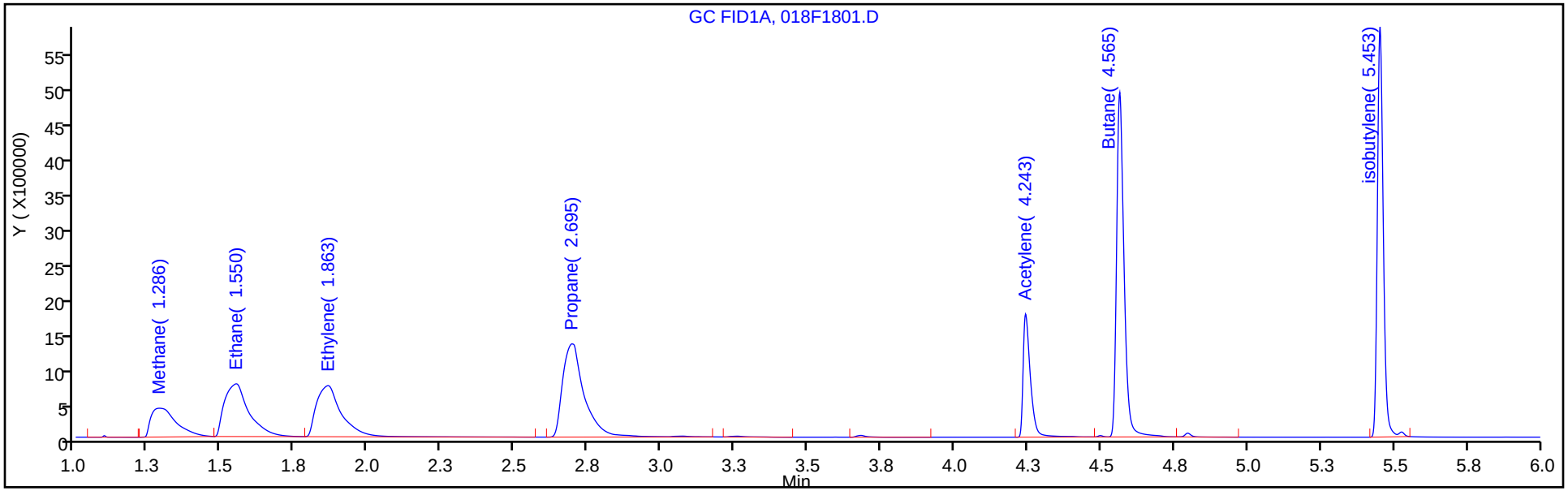
Report Date: 09-Nov-2021 15:27:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

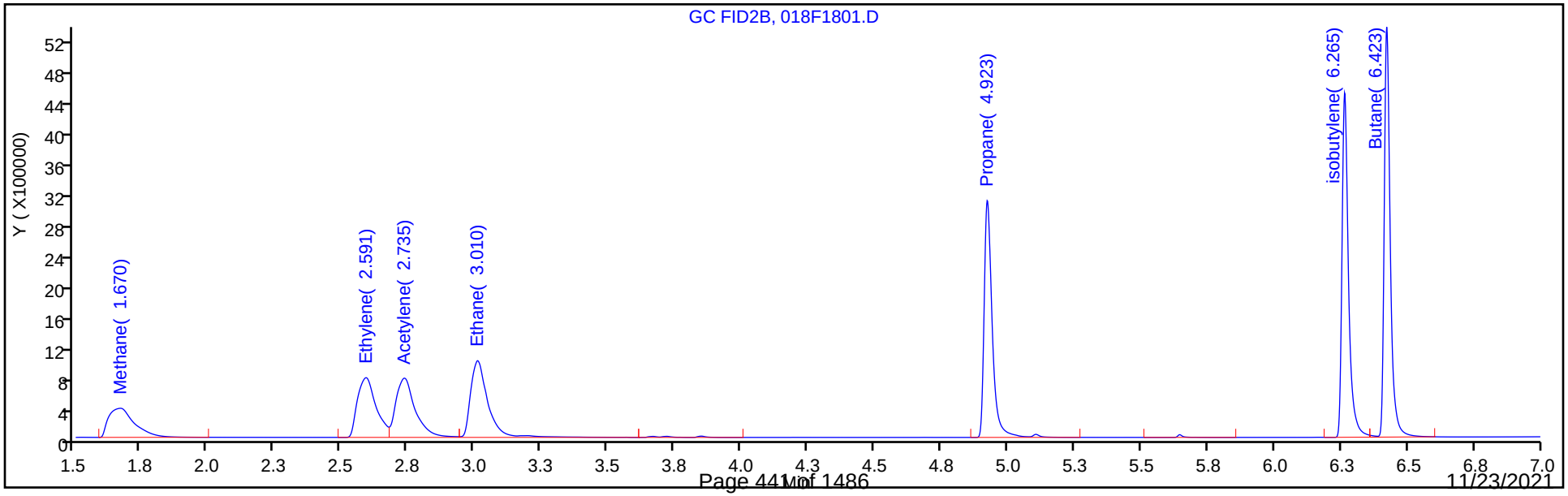
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D

Injection Date:	08-Nov-2021 17:10:05	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	19
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

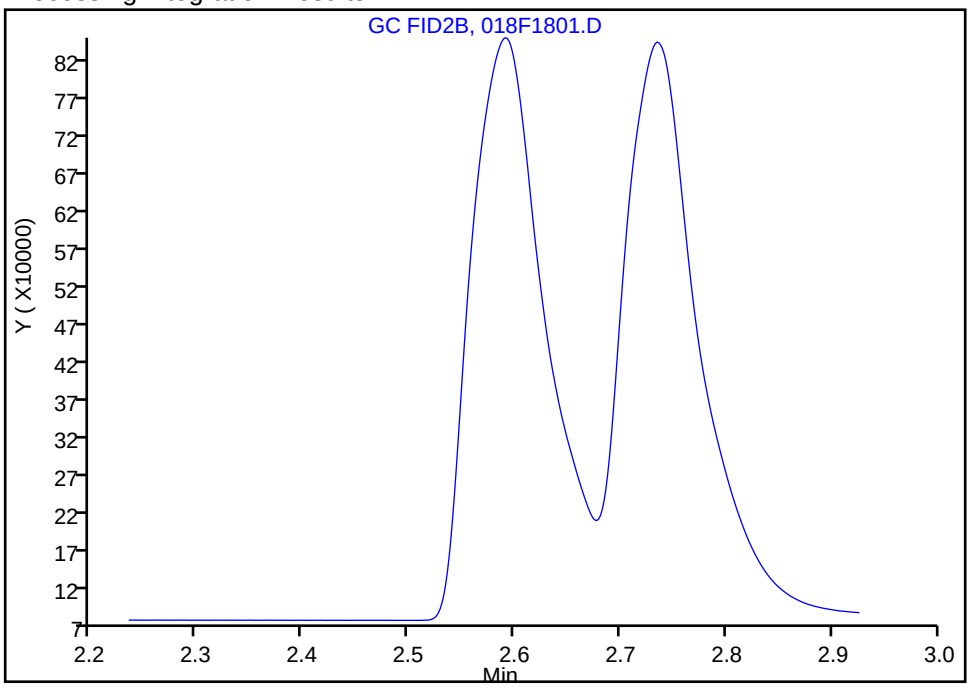
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D
Injection Date: 08-Nov-2021 17:10:05 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

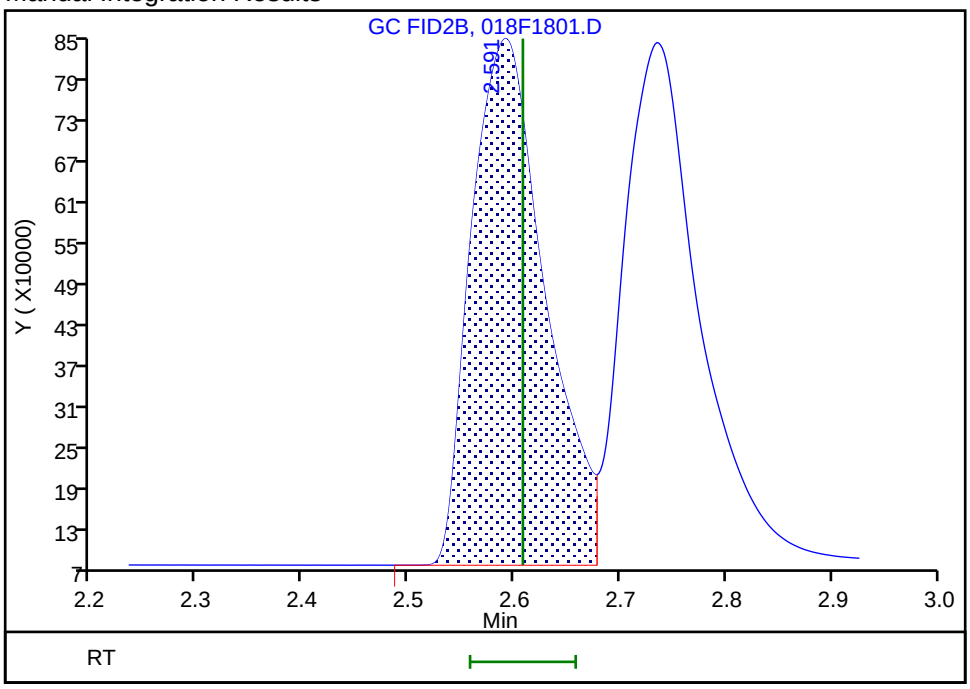
Not Detected
Expected RT: 2.61

Processing Integration Results



Manual Integration Results

RT: 2.59
Area: 3728051
Amount: 120.3363
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 09:59:21
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

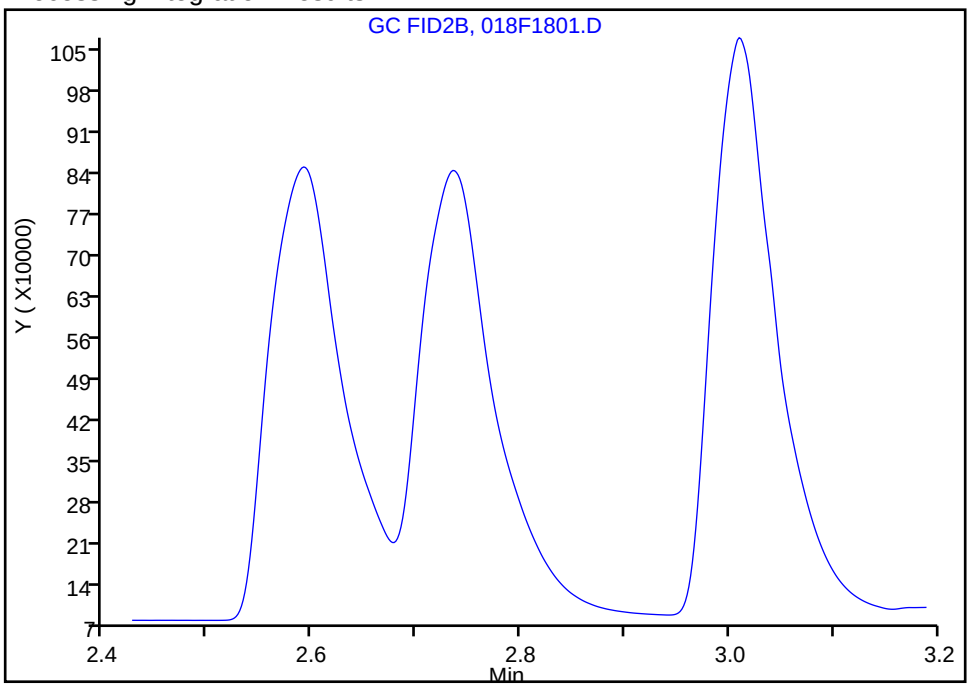
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\018F1801.D
Injection Date: 08-Nov-2021 17:10:05 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

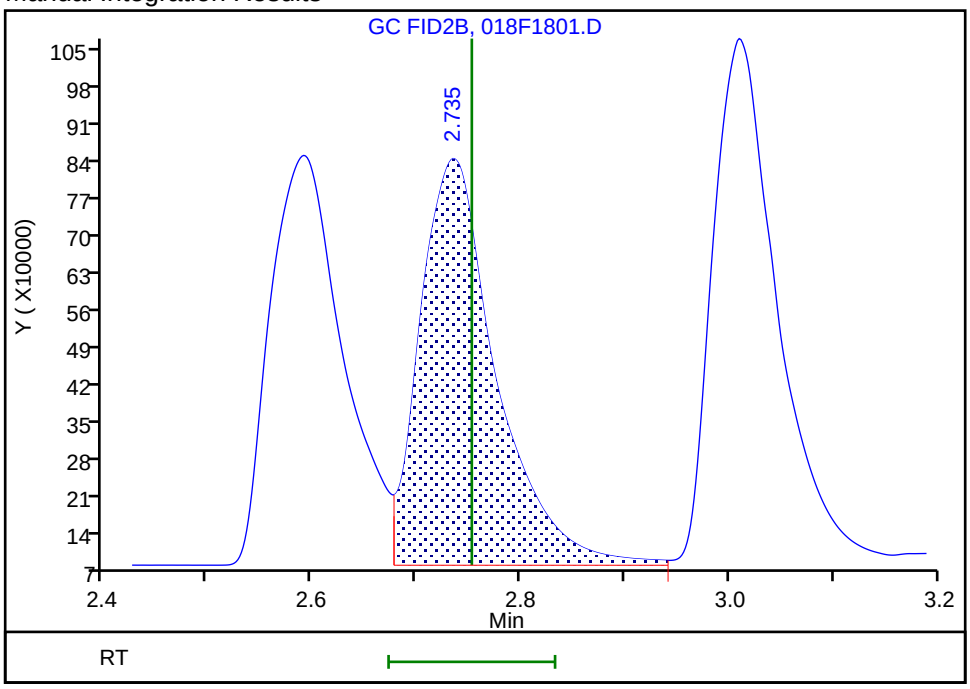
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3855352
Amount: 112.7995
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 09:59:43
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/30 Calibration Date: 11/08/2021 19:32

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

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

Lab File ID: 029F2901.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		36633		66.6	65.7	1.3	20.0
Ethane	Ave	33241	34922		129	123	5.1	20.0
Ethylene	Ave	35226	36744		120	115	4.3	20.0
Acetylene	Ave	28139	29763		113	107	5.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/30 Calibration Date: 11/08/2021 19:32

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

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

Lab File ID: 029F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.49	1.59
Ethylene	1.86	1.74	1.84
Acetylene	4.24	3.79	3.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Nov-2021 19:32:27 ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:19 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:09:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.287	1.299	-0.012	2406892	65.7	66.6	
2	1.672	1.688	-0.016	2505065	65.7	67.7	
						RPD = 1.60	
3 Ethane							
1	1.552	1.538	0.014	4301288	123.2	129.4	
2	3.012	3.026	-0.014	4342160	123.2	130.1	
						RPD = 0.52	
4 Ethylene							a
1	1.864	1.789	0.075	4221832	114.9	119.8	a
2	2.592	2.608	-0.016	3729726	114.9	120.4	a
						RPD = 0.45	
5 Propane							a
1	2.697	2.531	0.166	6852602	180.6	190.3	a
2	4.922	4.929	-0.007	6541203	180.6	186.8	a
						RPD = 1.84	
6 Acetylene							a
1	4.244	3.868	0.376	3174866	106.7	112.8	a
2	2.737	2.753	-0.016	3956474	106.7	115.8	a
						RPD = 2.56	
7 Butane							Ma
1	4.567	4.319	0.248	8891452	238.1	244.1	a
2	6.422	6.428	-0.006	8585919	238.1	244.3	M
						RPD = 0.09	
8 isobutylene							Ma
1	5.454	5.281	0.173	8299527	229.8	229.7	M
2	6.264	6.269	-0.005	7709968	229.8	232.2	M
						RPD = 1.07	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

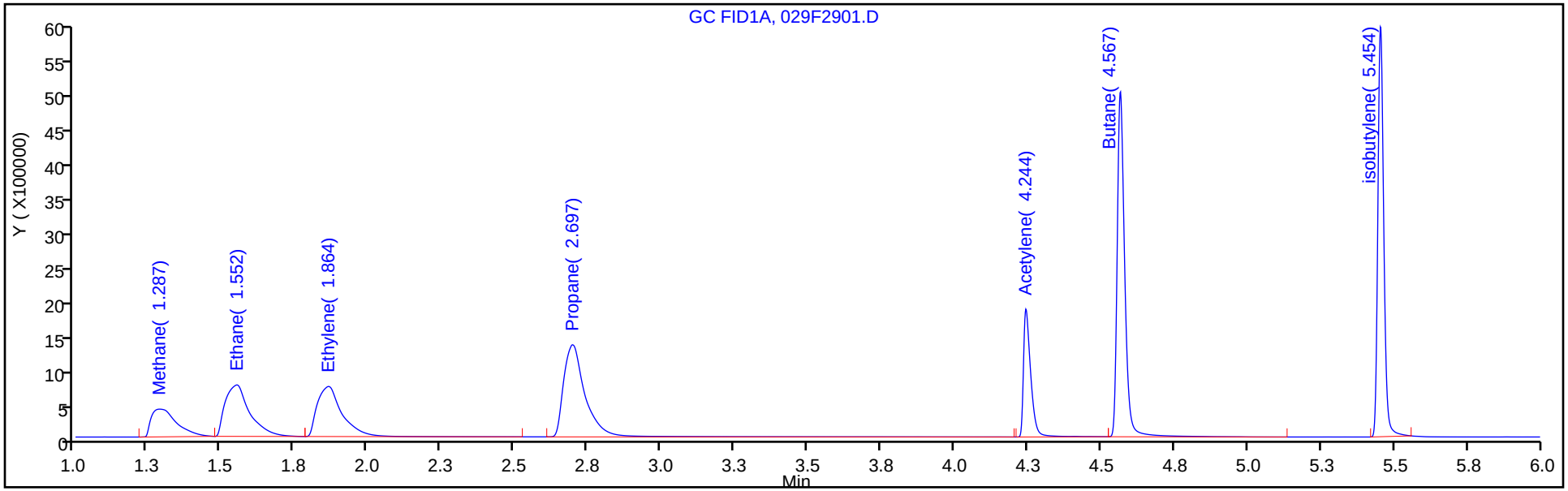
Report Date: 09-Nov-2021 10:13:19 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

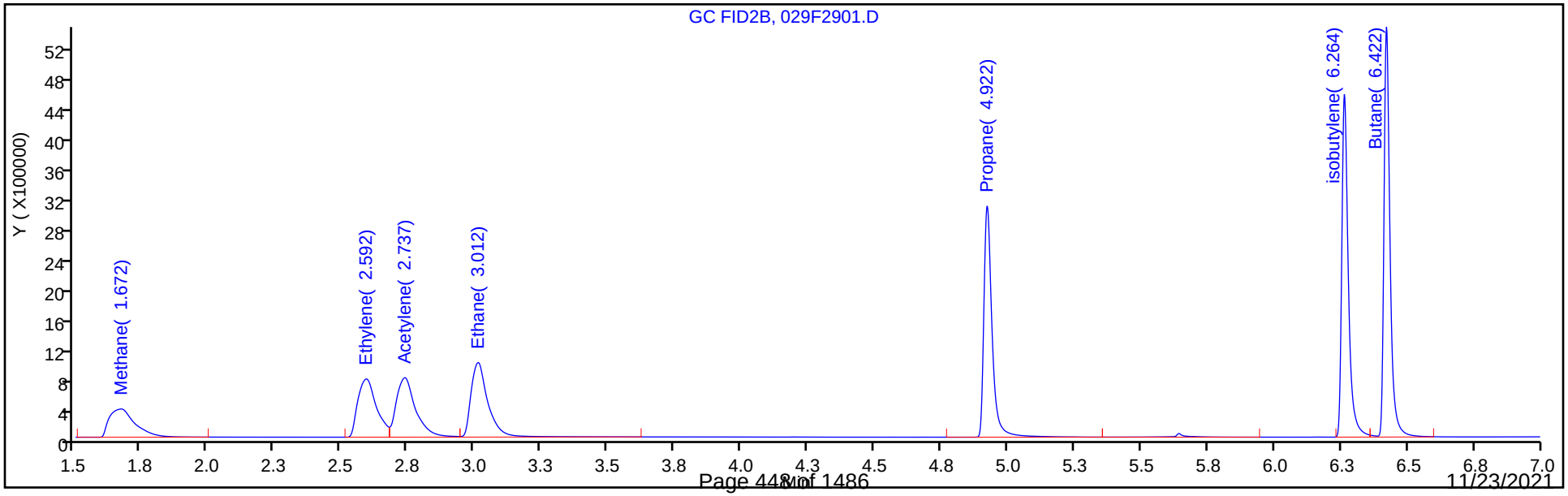
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D

Injection Date:	08-Nov-2021 19:32:27	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

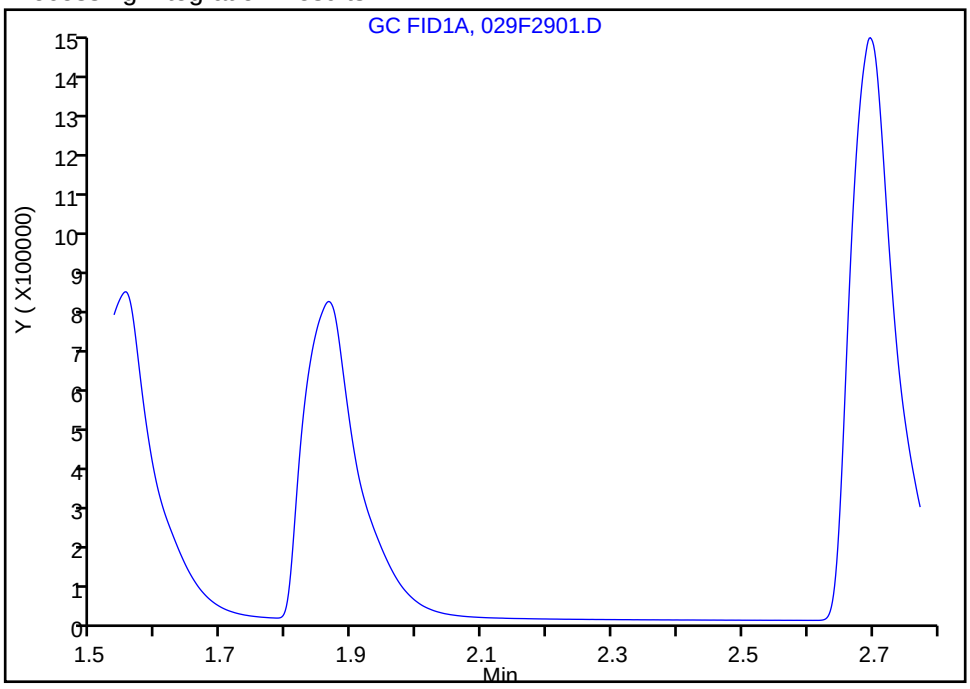
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D				
Injection Date:	08-Nov-2021 19:32:27	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

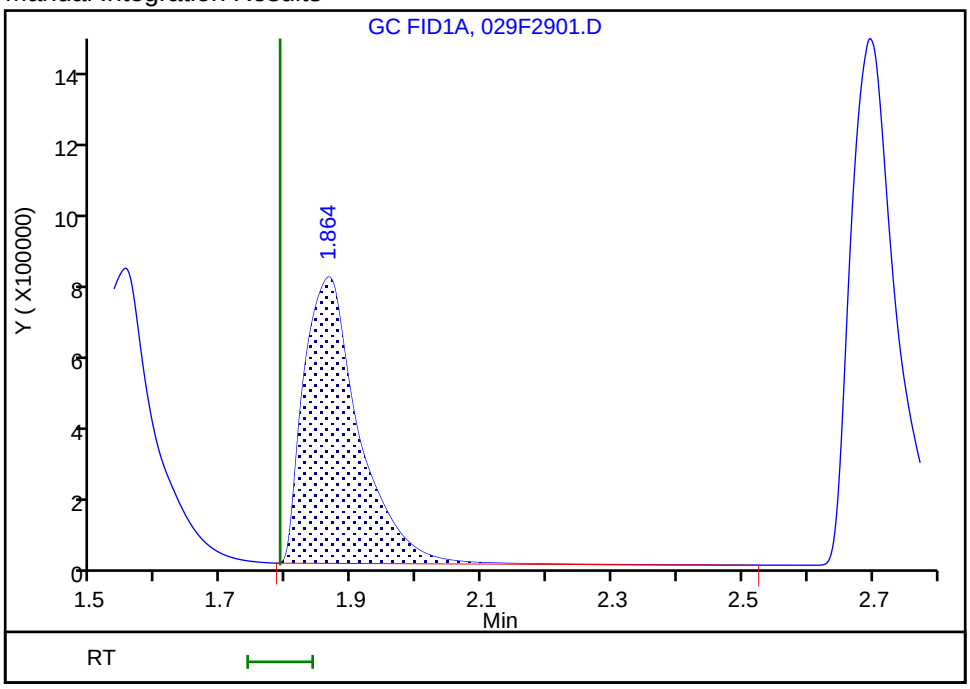
Not Detected
Expected RT: 1.79

Processing Integration Results



Manual Integration Results

RT: 1.86
Area: 4221832
Amount: 119.8500
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:07:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

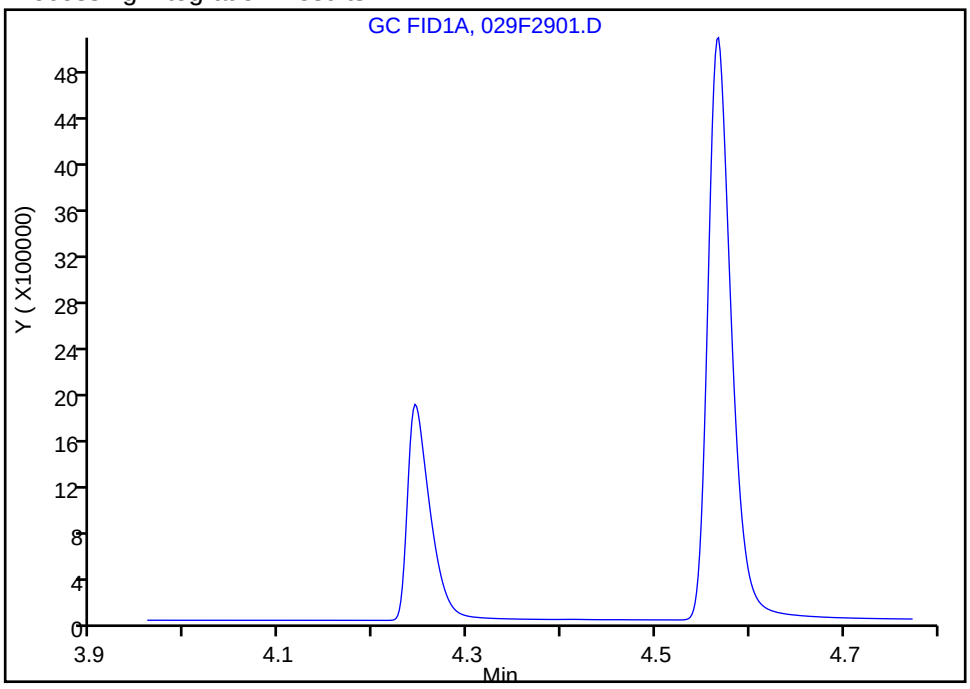
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D				
Injection Date:	08-Nov-2021 19:32:27	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

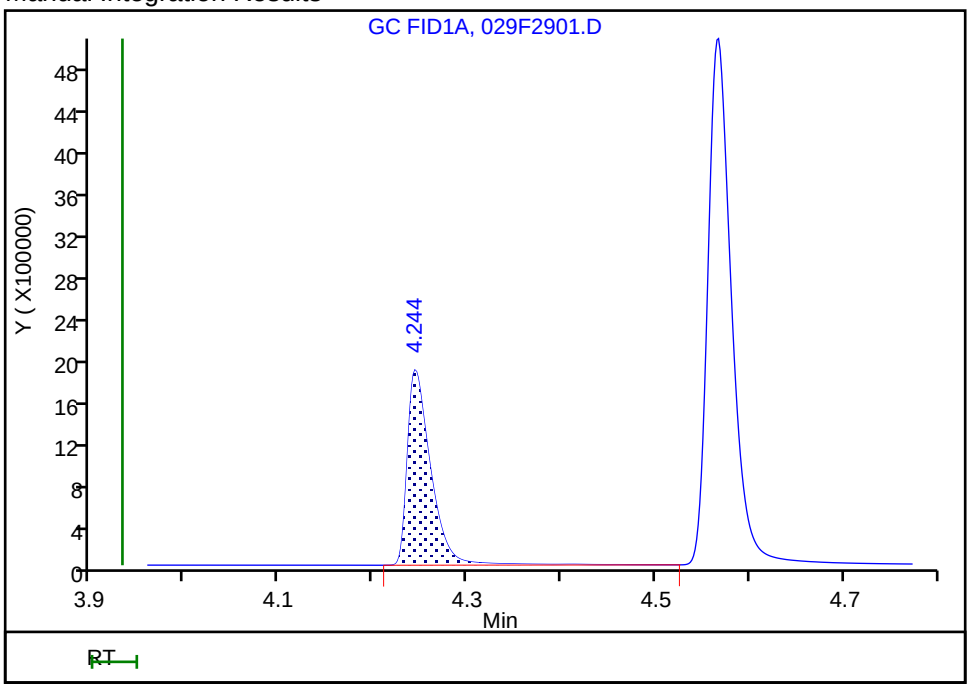
Not Detected
Expected RT: 3.87

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 3174866
Amount: 112.8279
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:08:46
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/30 Calibration Date: 11/08/2021 19:32

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

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

Lab File ID: 029F2901.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		38127		67.7	65.7	3.0	20.0
Ethylene	Ave	30980	32461		120	115	4.8	20.0
Acetylene	Ave	34179	37091		116	107	8.5	20.0
Ethane	Ave	33383	35253		130	123	5.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556641/30 Calibration Date: 11/08/2021 19:32

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

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

Lab File ID: 029F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Acetylene	2.74	2.67	2.83
Ethane	3.01	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Nov-2021 19:32:27 ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:19 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:09:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.287	1.299	-0.012	2406892	65.7	66.6	
2	1.672	1.688	-0.016	2505065	65.7	67.7	
						RPD = 1.60	
3 Ethane							
1	1.552	1.538	0.014	4301288	123.2	129.4	
2	3.012	3.026	-0.014	4342160	123.2	130.1	
						RPD = 0.52	
4 Ethylene							a
1	1.864	1.789	0.075	4221832	114.9	119.8	a
2	2.592	2.608	-0.016	3729726	114.9	120.4	a
						RPD = 0.45	
5 Propane							a
1	2.697	2.531	0.166	6852602	180.6	190.3	a
2	4.922	4.929	-0.007	6541203	180.6	186.8	a
						RPD = 1.84	
6 Acetylene							a
1	4.244	3.868	0.376	3174866	106.7	112.8	a
2	2.737	2.753	-0.016	3956474	106.7	115.8	a
						RPD = 2.56	
7 Butane							Ma
1	4.567	4.319	0.248	8891452	238.1	244.1	a
2	6.422	6.428	-0.006	8585919	238.1	244.3	M
						RPD = 0.09	
8 isobutylene							Ma
1	5.454	5.281	0.173	8299527	229.8	229.7	M
2	6.264	6.269	-0.005	7709968	229.8	232.2	M
						RPD = 1.07	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

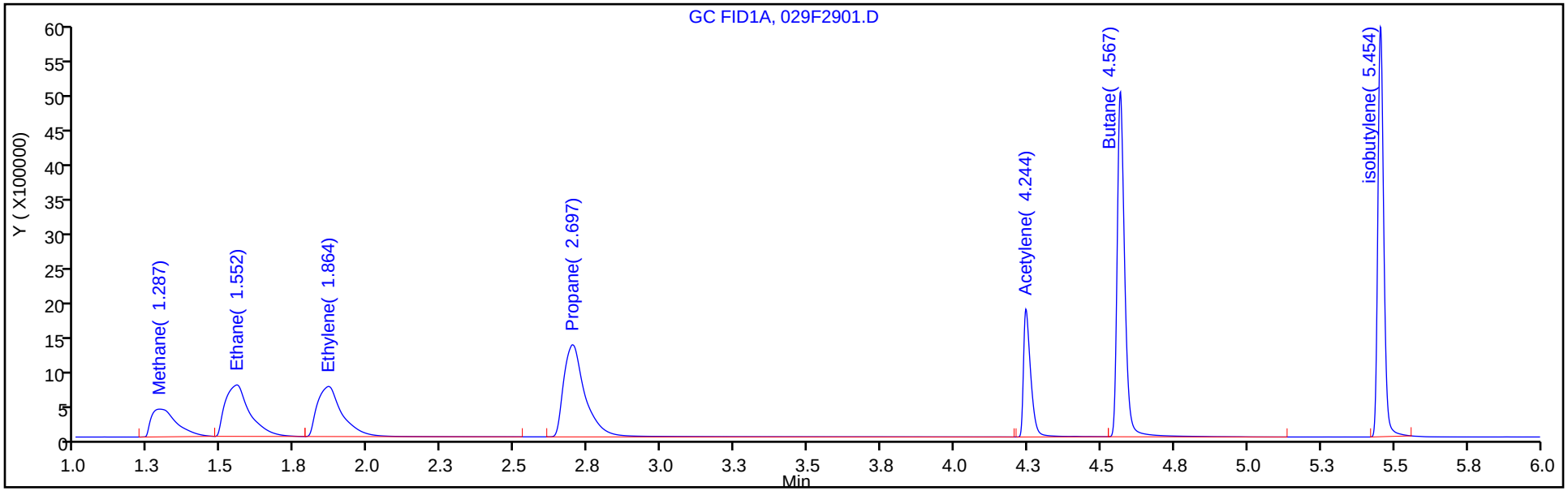
Report Date: 09-Nov-2021 10:13:19 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

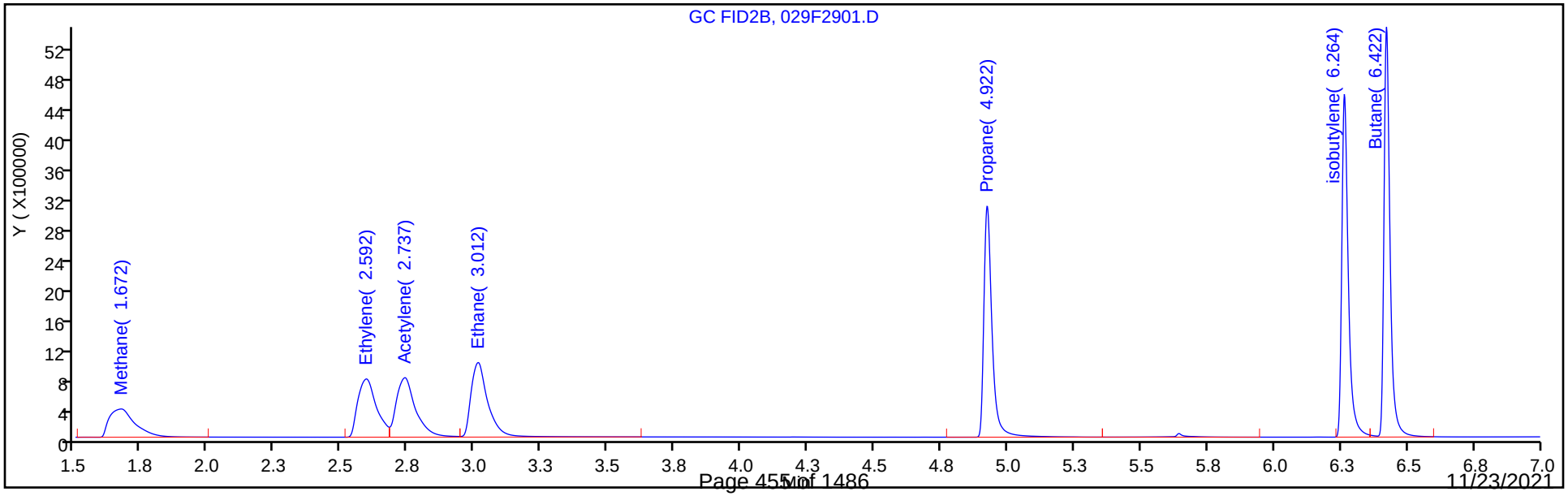
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D

Injection Date:	08-Nov-2021 19:32:27	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

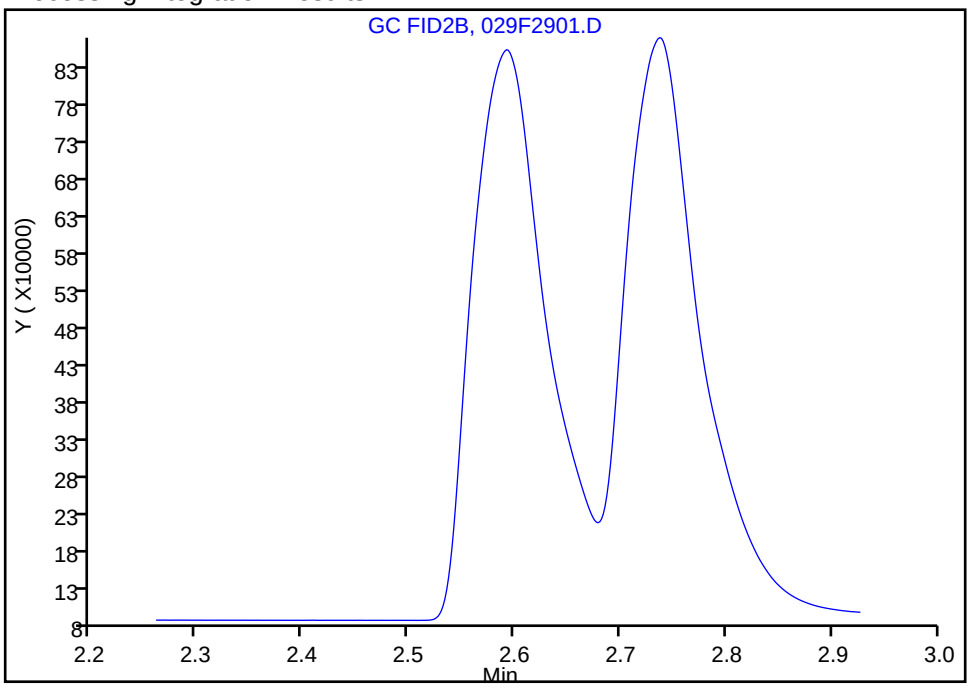
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D
Injection Date: 08-Nov-2021 19:32:27 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

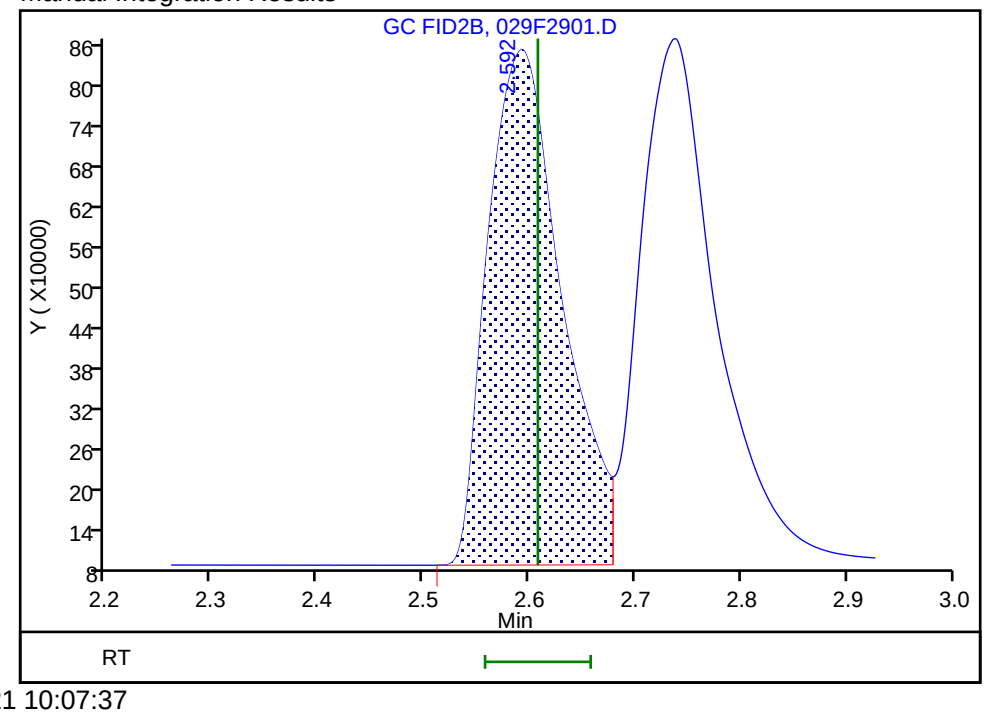
Not Detected
Expected RT: 2.61

Processing Integration Results



Manual Integration Results

RT: 2.59
Area: 3729726
Amount: 120.3904
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:07:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

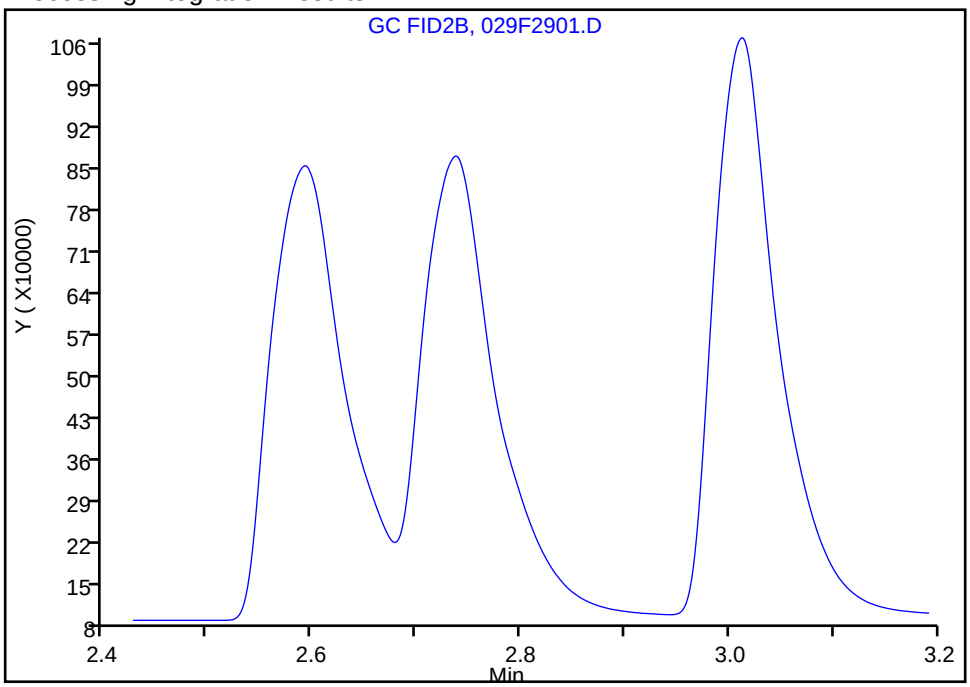
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\029F2901.D
Injection Date: 08-Nov-2021 19:32:27 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

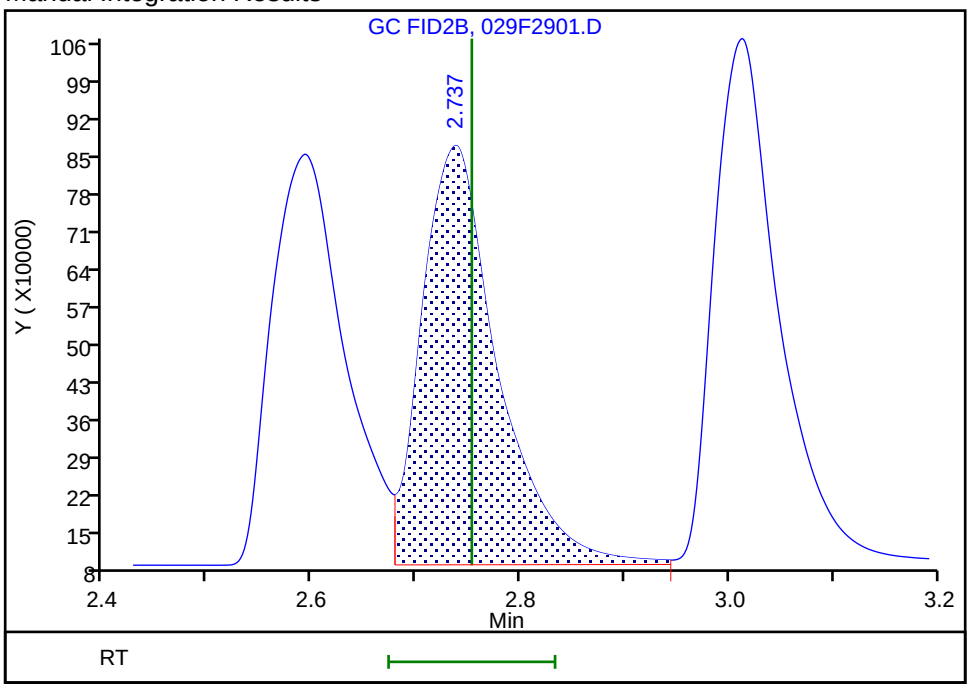
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.74
Area: 3956474
Amount: 115.7581
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 10:07:46
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35

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

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

Lab File ID: 001F0101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36039		65.5	65.7	-0.4	20.0
Ethane	Ave	33241	34150		127	123	2.7	20.0
Ethylene	Ave	35226	36209		118	115	2.8	20.0
Acetylene	Ave	28139	29206		111	107	3.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35

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

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

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.83	1.78	1.88
Acetylene	4.03	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 09-Nov-2021 17:35:06 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: rtc
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 09:19:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.302	1.302	0.000	2367893	65.7	65.5	
2	1.690	1.690	0.000	2489769	65.7	67.2	
						RPD = 2.65	
3 Ethane							
1	1.550	1.550	0.000	4206303	123.2	126.5	
2	3.030	3.030	0.000	4328589	123.2	129.7	
						RPD = 2.44	
4 Ethylene							
1	1.828	1.828	0.000	4160465	114.9	118.1	
2	2.612	2.612	0.000	3673687	114.9	118.6	
						RPD = 0.40	
5 Propane							a
1	2.608	2.608	0.000	6634907	180.6	184.2	a
2	4.930	4.930	0.000	6402005	180.6	182.9	a
						RPD = 0.76	
6 Acetylene							a
1	4.032	4.032	0.000	3115418	106.7	110.7	a
2	2.755	2.755	0.000	3899838	106.7	114.1	a
						RPD = 3.01	
7 Butane							Ma
1	4.423	4.423	0.000	8524120	238.1	234.0	a
2	6.428	6.428	0.000	8255667	238.1	234.9	M
						RPD = 0.39	
8 isobutylene							Ma
1	5.282	5.282	0.000	8170450	229.8	226.2	
2	6.270	6.270	0.000	7463944	229.8	224.8	M
						RPD = 0.61	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

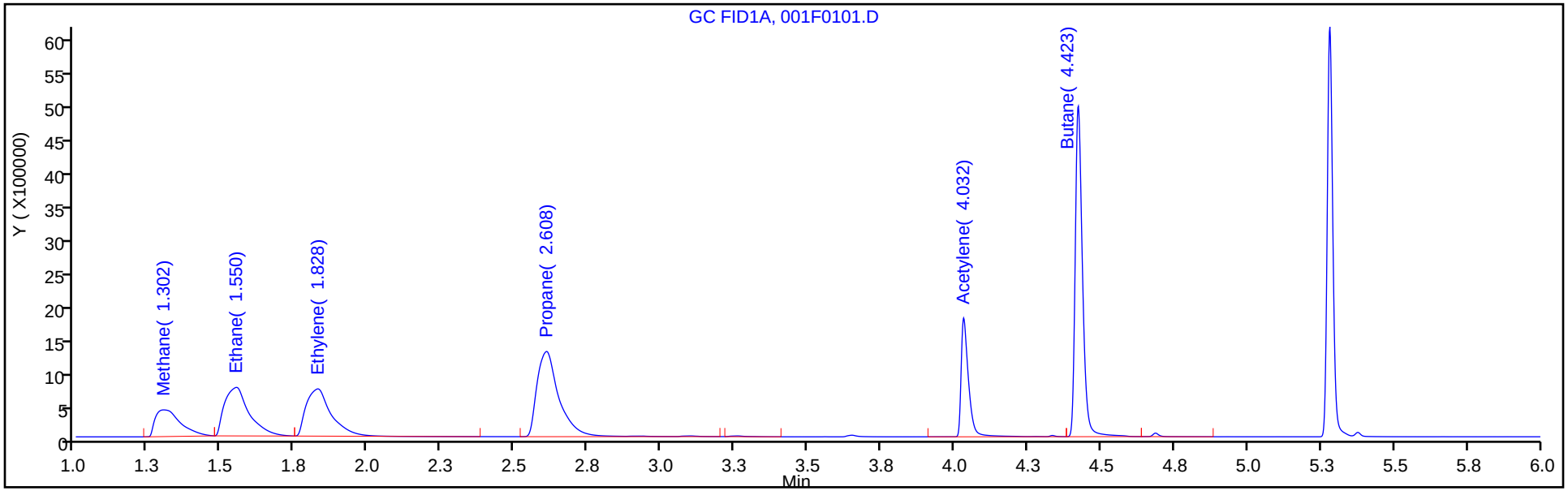
Report Date: 15-Nov-2021 12:57:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

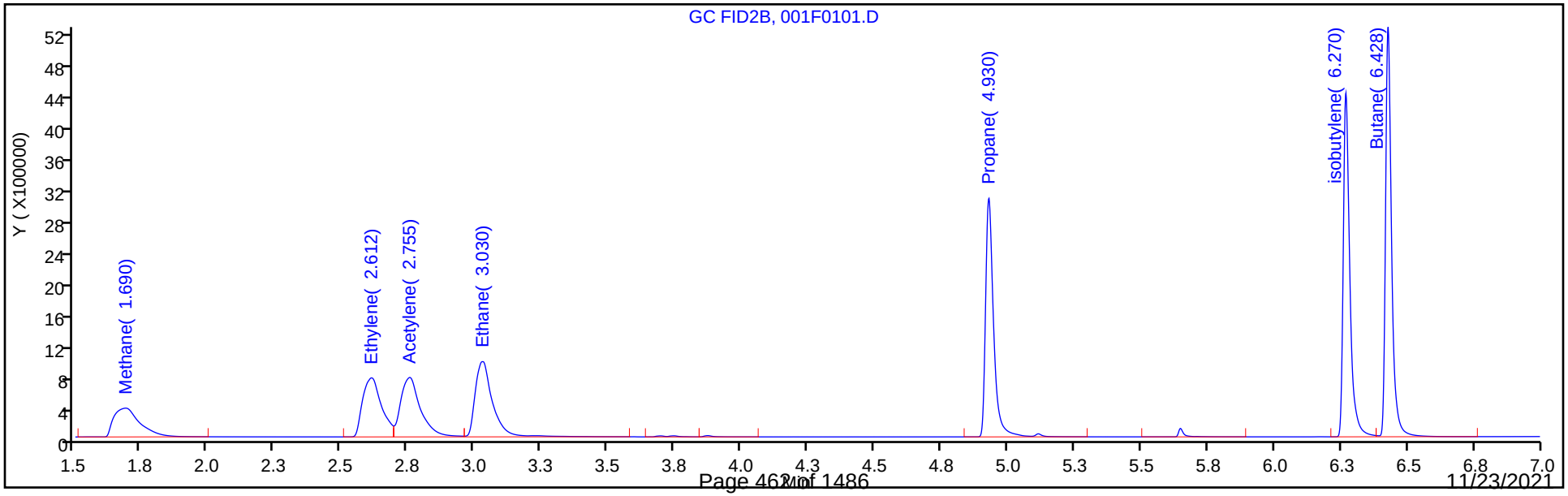
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\001F0101.D

Injection Date:	09-Nov-2021 17:35:06	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

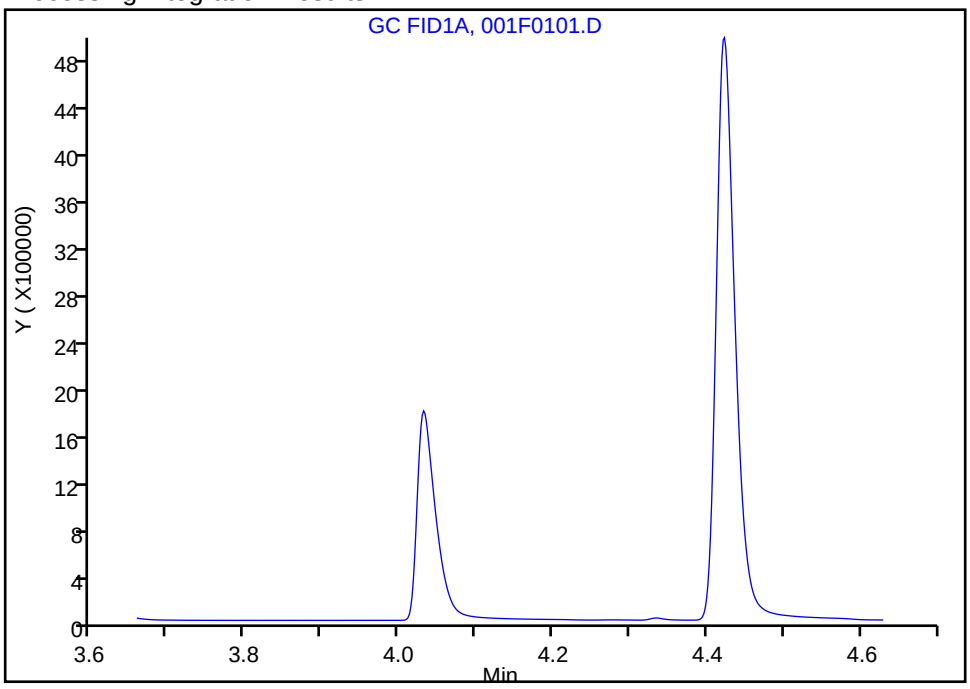
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\001F0101.D				
Injection Date:	09-Nov-2021 17:35:06	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

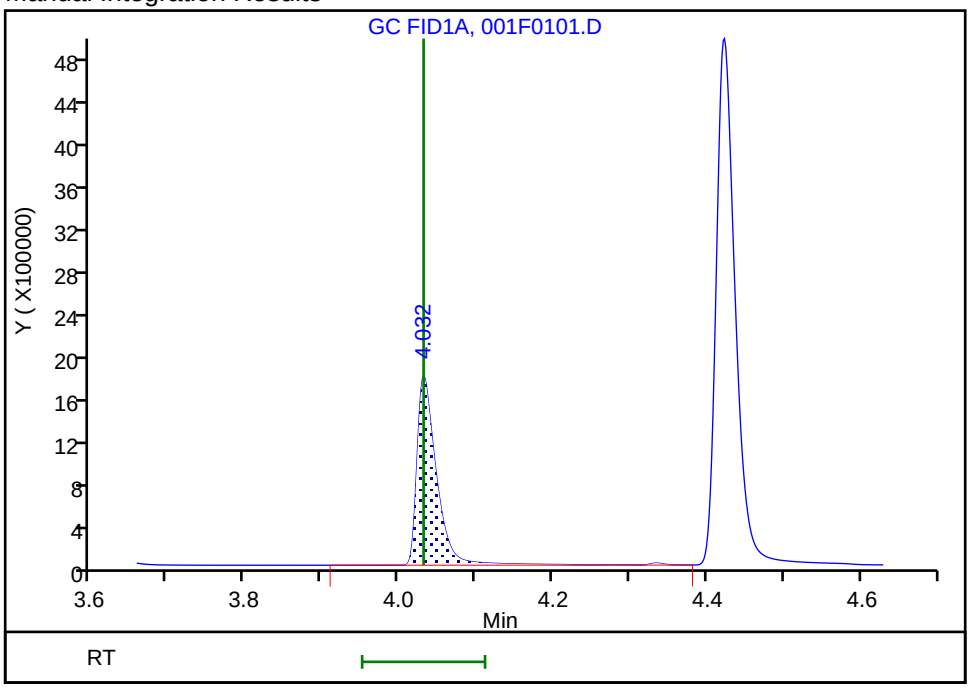
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.03
Area: 3115418
Amount: 110.7152
Amount Units: ug/l



Reviewer: sciannac, 10-Nov-2021 09:18:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35

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

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 001F0101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37894		67.2	65.7	2.3	20.0
Ethylene	Ave	30980	31973		119	115	3.2	20.0
Acetylene	Ave	34179	36560		114	107	7.0	20.0
Ethane	Ave	33383	35143		130	123	5.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.61	2.56	2.66
Acetylene	2.76	2.68	2.84
Ethane	3.03	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 09-Nov-2021 17:35:06 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: rtc
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 09:19:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.302	1.302	0.000	2367893	65.7	65.5	
2	1.690	1.690	0.000	2489769	65.7	67.2	
						RPD = 2.65	
3 Ethane							
1	1.550	1.550	0.000	4206303	123.2	126.5	
2	3.030	3.030	0.000	4328589	123.2	129.7	
						RPD = 2.44	
4 Ethylene							
1	1.828	1.828	0.000	4160465	114.9	118.1	
2	2.612	2.612	0.000	3673687	114.9	118.6	
						RPD = 0.40	
5 Propane							a
1	2.608	2.608	0.000	6634907	180.6	184.2	a
2	4.930	4.930	0.000	6402005	180.6	182.9	a
						RPD = 0.76	
6 Acetylene							a
1	4.032	4.032	0.000	3115418	106.7	110.7	a
2	2.755	2.755	0.000	3899838	106.7	114.1	a
						RPD = 3.01	
7 Butane							Ma
1	4.423	4.423	0.000	8524120	238.1	234.0	a
2	6.428	6.428	0.000	8255667	238.1	234.9	M
						RPD = 0.39	
8 isobutylene							Ma
1	5.282	5.282	0.000	8170450	229.8	226.2	
2	6.270	6.270	0.000	7463944	229.8	224.8	M
						RPD = 0.61	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

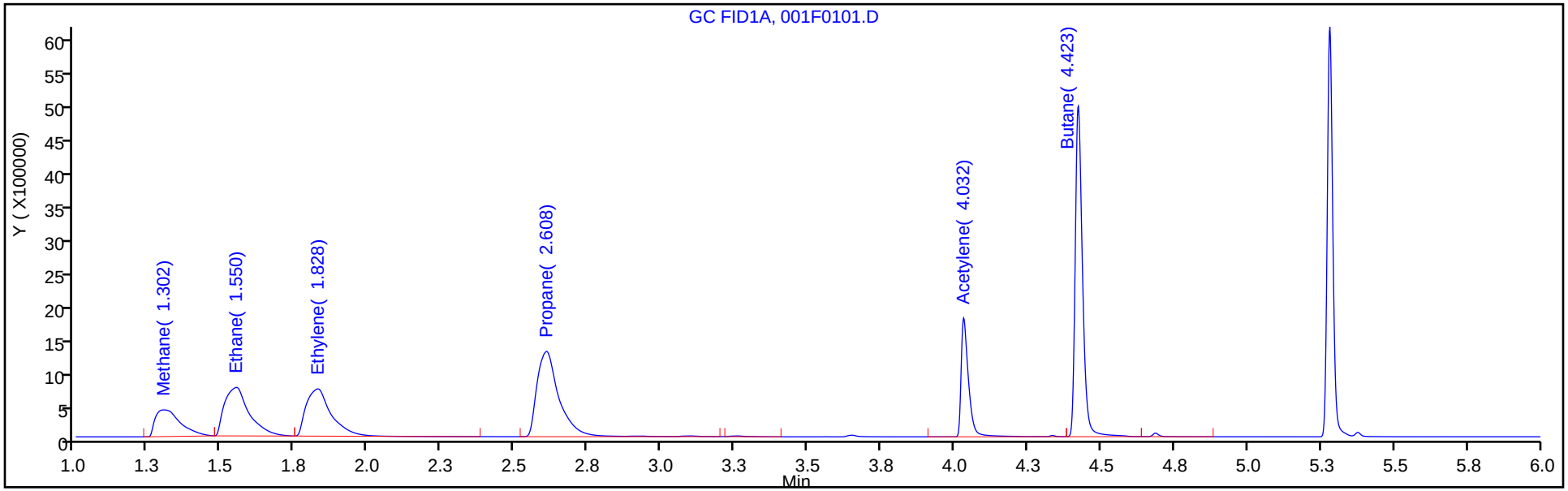
Report Date: 15-Nov-2021 12:57:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

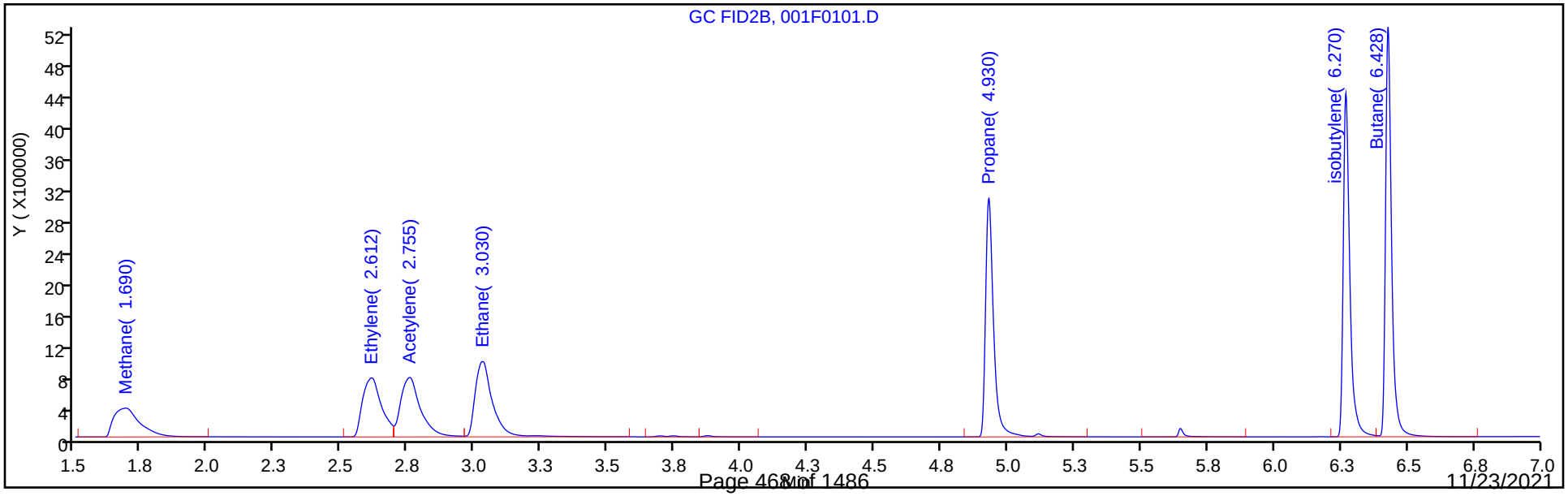
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\001F0101.D

Injection Date:	09-Nov-2021 17:35:06	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

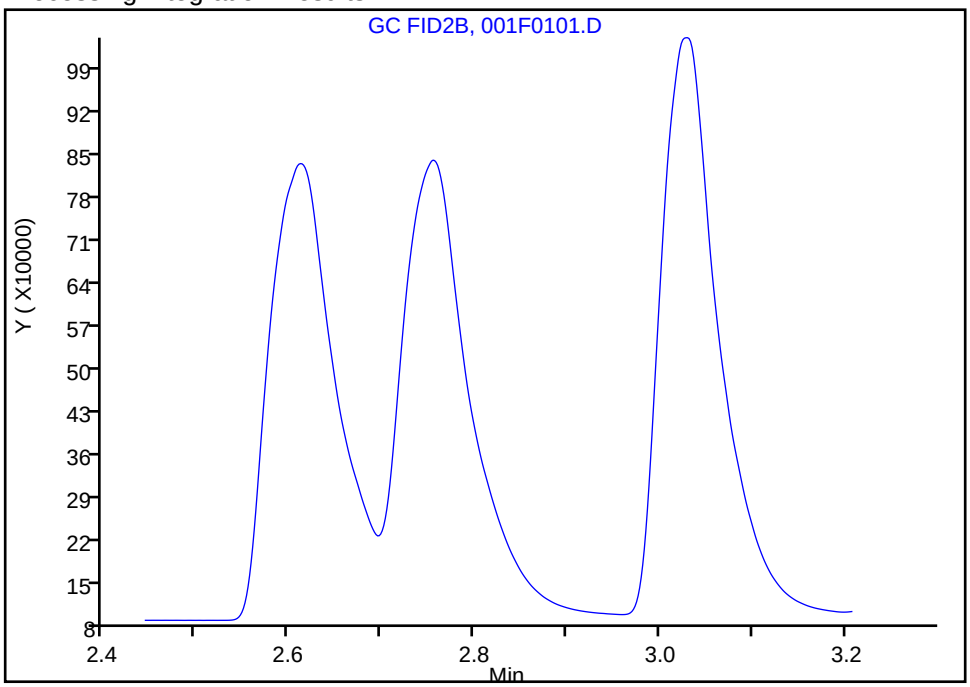
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\001F0101.D				
Injection Date:	09-Nov-2021 17:35:06	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

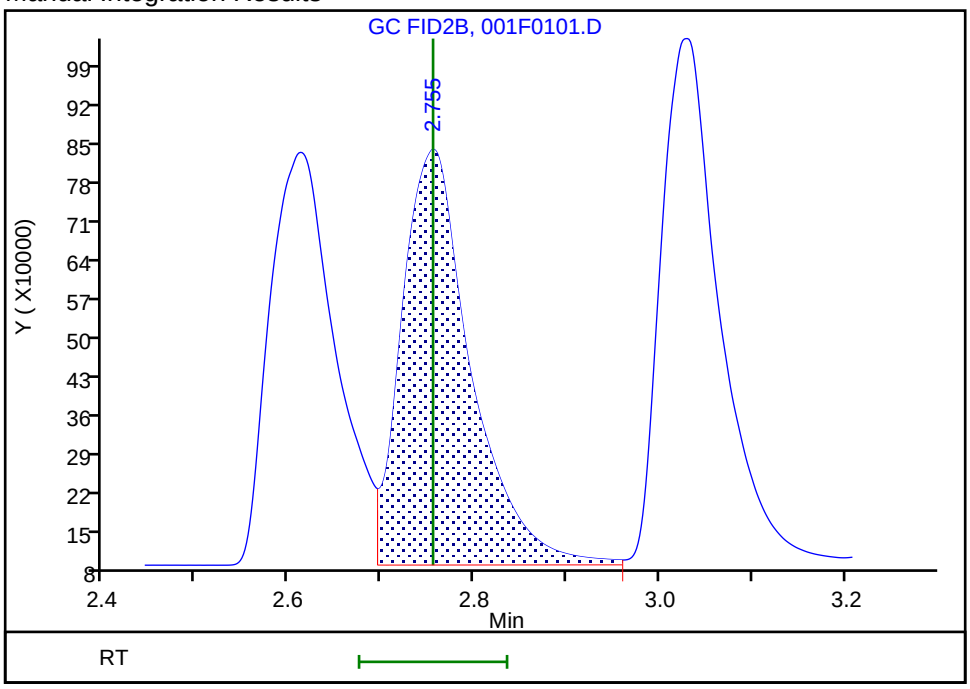
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 3899838
Amount: 114.1011
Amount Units: ug/l



Reviewer: sciannac, 10-Nov-2021 09:18:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1401.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		37187		67.6	65.7	2.9	20.0
Ethane	Ave	33241	35402		131	123	6.5	20.0
Ethylene	Ave	35226	37261		122	115	5.8	20.0
Acetylene	Ave	28139	29132		110	107	3.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.78	1.88
Acetylene	4.24	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\014F1401.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 09-Nov-2021 20:24:17 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 13:09:40 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: ornelasg Date: 15-Nov-2021 13:09:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							
1	1.286	1.302	-0.016	2443296	65.7	67.6	
2	1.670	1.690	-0.020	2525279	65.7	68.2	
						RPD = 0.88	
3 Ethane							
1	1.550	1.550	0.000	4360453	123.2	131.2	
2	3.012	3.030	-0.018	4457352	123.2	133.5	
						RPD = 1.77	
4 Ethylene							
1	1.861	1.828	0.033	4281335	114.9	121.5	
2	2.593	2.612	-0.019	3748331	114.9	121.0	
						RPD = 0.45	
5 Propane							
1	2.693	2.608	0.085	6836920	180.6	189.9	
2	4.922	4.930	-0.008	6581443	180.6	188.0	
						RPD = 0.99	
6 Acetylene							
1	4.243	4.032	0.211	3107560	106.7	110.4	
2	2.737	2.755	-0.018	3937912	106.7	115.2	
						RPD = 4.24	
7 Butane							
1	4.563	4.423	0.140	8926091	238.1	245.1	
2	6.422	6.428	-0.006	8603988	238.1	244.9	
						RPD = 0.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.451	5.282	0.169	8656838	229.8	239.6	M
2	6.265	6.270	-0.005	7736052	229.8	233.0	
						RPD = 2.81	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

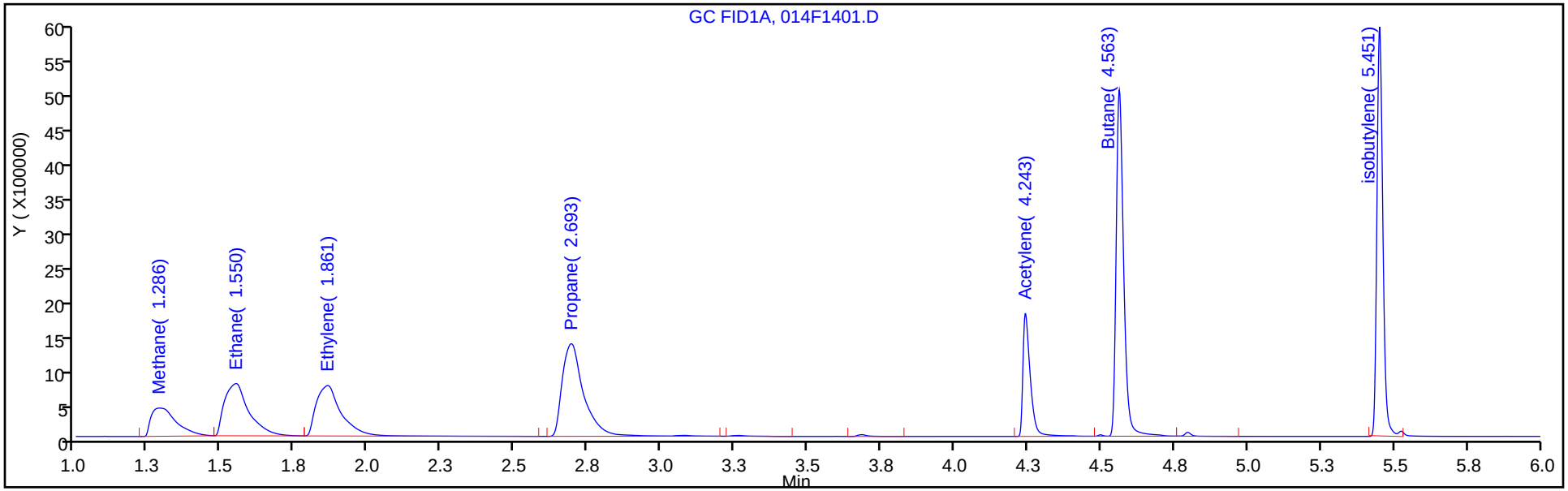
Report Date: 15-Nov-2021 13:09:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

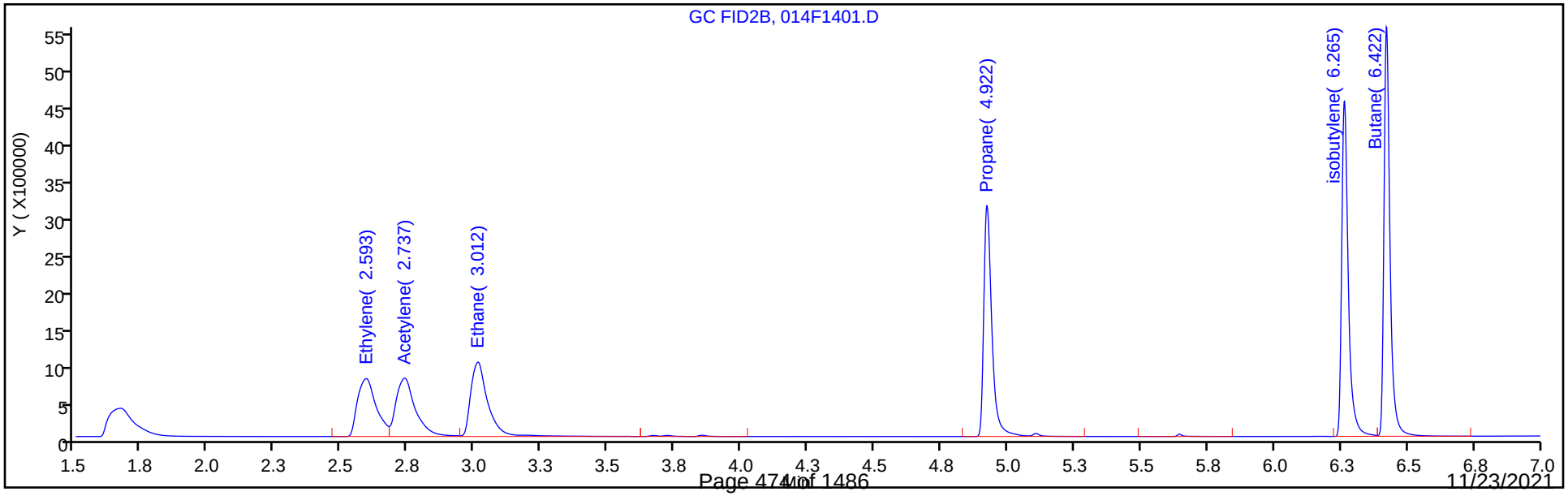
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\014F1401.D

Injection Date:	09-Nov-2021 20:24:17	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	14
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1401.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		38435		68.2	65.7	3.8	20.0
Ethylene	Ave	30980	32623		121	115	5.3	20.0
Acetylene	Ave	34179	36917		115	107	8.0	20.0
Ethane	Ave	33383	36189		134	123	8.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Acetylene	2.74	2.68	2.84
Ethane	3.01	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\014F1401.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 09-Nov-2021 20:24:17 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 13:09:40 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: ornelasg Date: 15-Nov-2021 13:09:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							
1	1.286	1.302	-0.016	2443296	65.7	67.6	
2	1.670	1.690	-0.020	2525279	65.7	68.2	
						RPD = 0.88	
3 Ethane							
1	1.550	1.550	0.000	4360453	123.2	131.2	
2	3.012	3.030	-0.018	4457352	123.2	133.5	
						RPD = 1.77	
4 Ethylene							
1	1.861	1.828	0.033	4281335	114.9	121.5	
2	2.593	2.612	-0.019	3748331	114.9	121.0	
						RPD = 0.45	
5 Propane							
1	2.693	2.608	0.085	6836920	180.6	189.9	
2	4.922	4.930	-0.008	6581443	180.6	188.0	
						RPD = 0.99	
6 Acetylene							
1	4.243	4.032	0.211	3107560	106.7	110.4	
2	2.737	2.755	-0.018	3937912	106.7	115.2	
						RPD = 4.24	
7 Butane							
1	4.563	4.423	0.140	8926091	238.1	245.1	
2	6.422	6.428	-0.006	8603988	238.1	244.9	
						RPD = 0.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.451	5.282	0.169	8656838	229.8	239.6	M
2	6.265	6.270	-0.005	7736052	229.8	233.0	
						RPD = 2.81	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

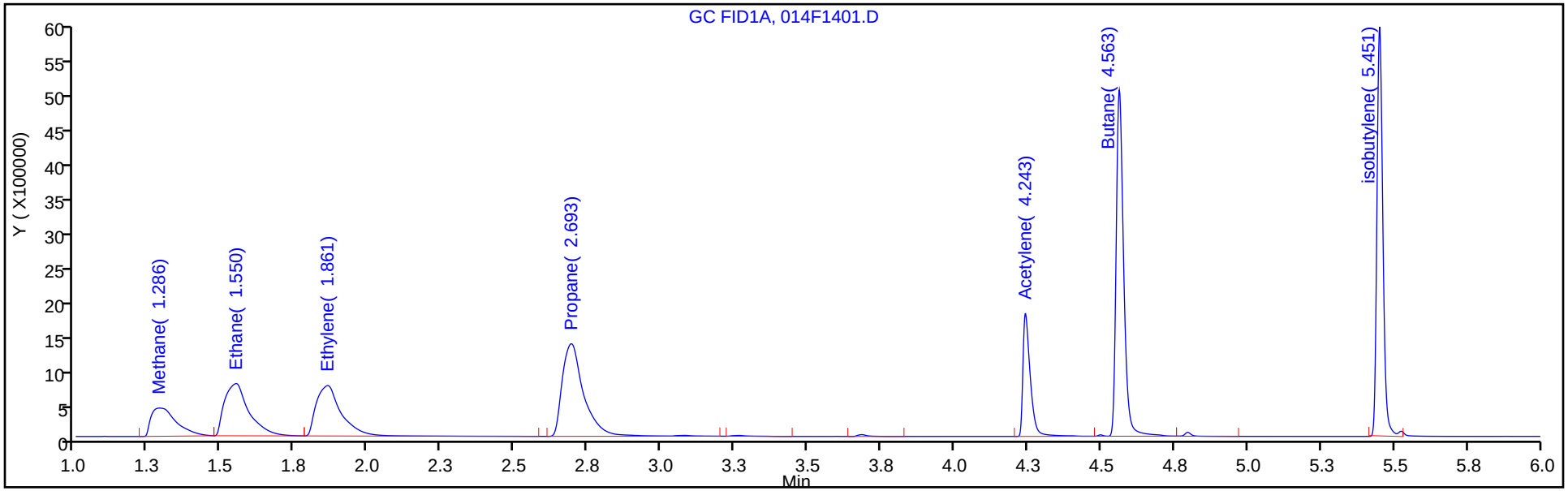
Report Date: 15-Nov-2021 13:09:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

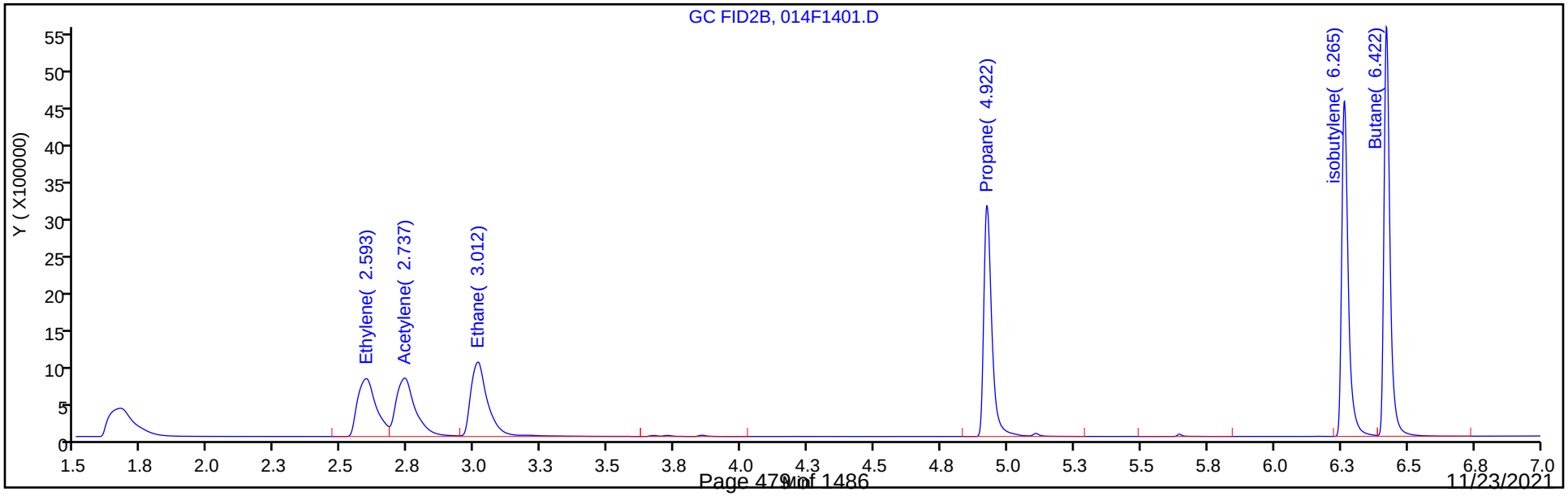
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\014F1401.D

Injection Date:	09-Nov-2021 20:24:17	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	14
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37122		67.5	65.7	2.7	20.0
Ethane	Ave	33241	35391		131	123	6.5	20.0
Ethylene	Ave	35226	37163		121	115	5.5	20.0
Acetylene	Ave	28139	29961		114	107	6.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.78	1.88
Acetylene	4.24	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\028F2801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 09-Nov-2021 23:25:30 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:59:05 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 10:25:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.302	-0.014	2439054	65.7	67.5	
2	1.671	1.690	-0.019	2523384	65.7	68.2	
						RPD = 0.99	
3 Ethane							
1	1.551	1.550	0.001	4359097	123.2	131.1	
2	3.011	3.030	-0.019	4364152	123.2	130.7	
						RPD = 0.31	
4 Ethylene							
1	1.864	1.828	0.036	4270048	114.9	121.2	
2	2.593	2.612	-0.019	3742208	114.9	120.8	
						RPD = 0.35	
5 Propane							a
1	2.696	2.608	0.088	6915331	180.6	192.0	a
2	4.923	4.930	-0.007	6558425	180.6	187.3	a
						RPD = 2.48	
6 Acetylene							a
1	4.244	4.032	0.212	3195950	106.7	113.6	a
2	2.736	2.755	-0.019	3972279	106.7	116.2	a
						RPD = 2.30	
7 Butane							Ma
1	4.566	4.423	0.143	9005046	238.1	247.2	a
2	6.423	6.428	-0.005	9100557	238.1	259.0	M
						RPD = 4.64	
8 isobutylene							Ma
1	5.454	5.282	0.172	8492325	229.8	235.1	a
2	6.265	6.270	-0.005	8005212	229.8	241.1	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

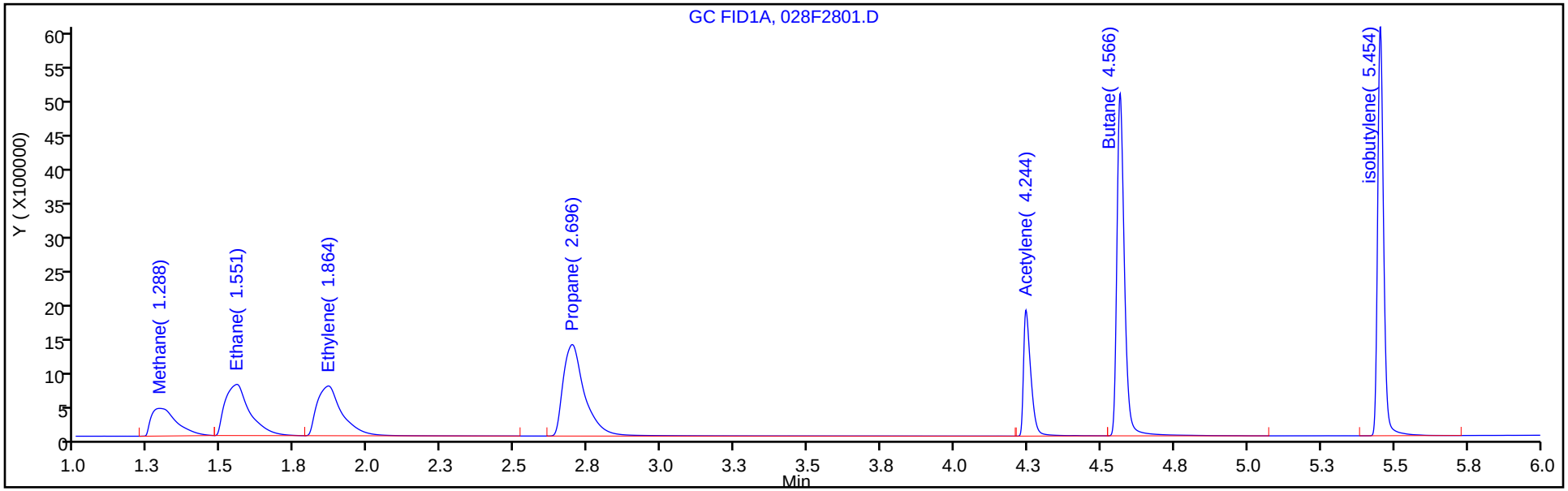
Report Date: 15-Nov-2021 12:59:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

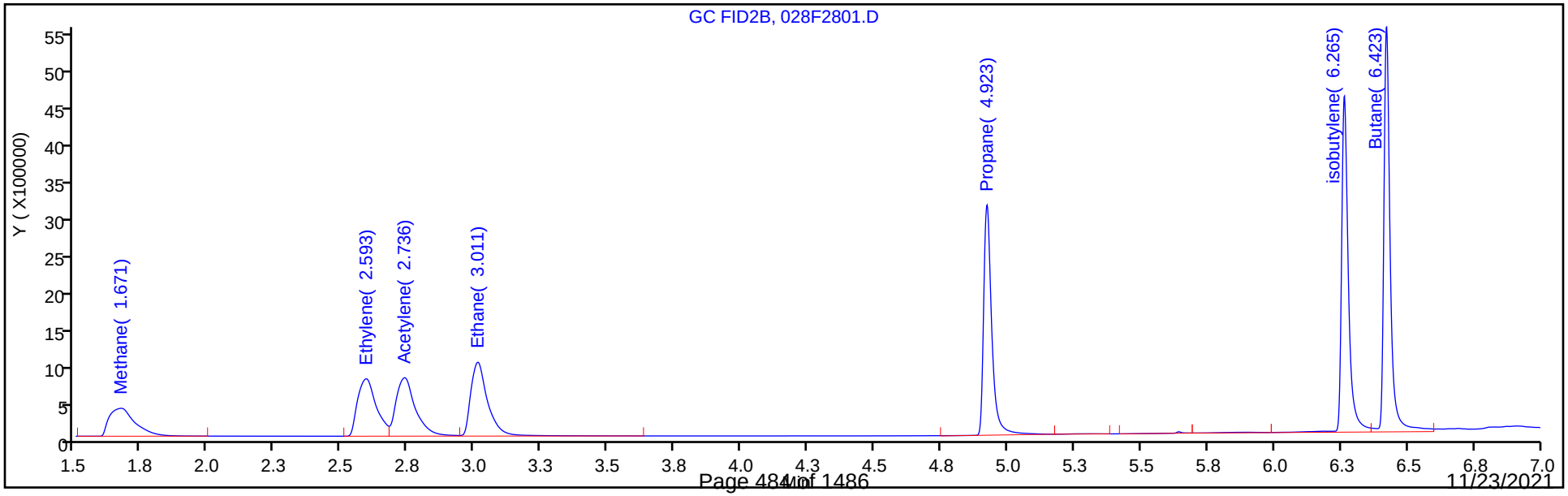
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\028F2801.D

Injection Date:	09-Nov-2021 23:25:30	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

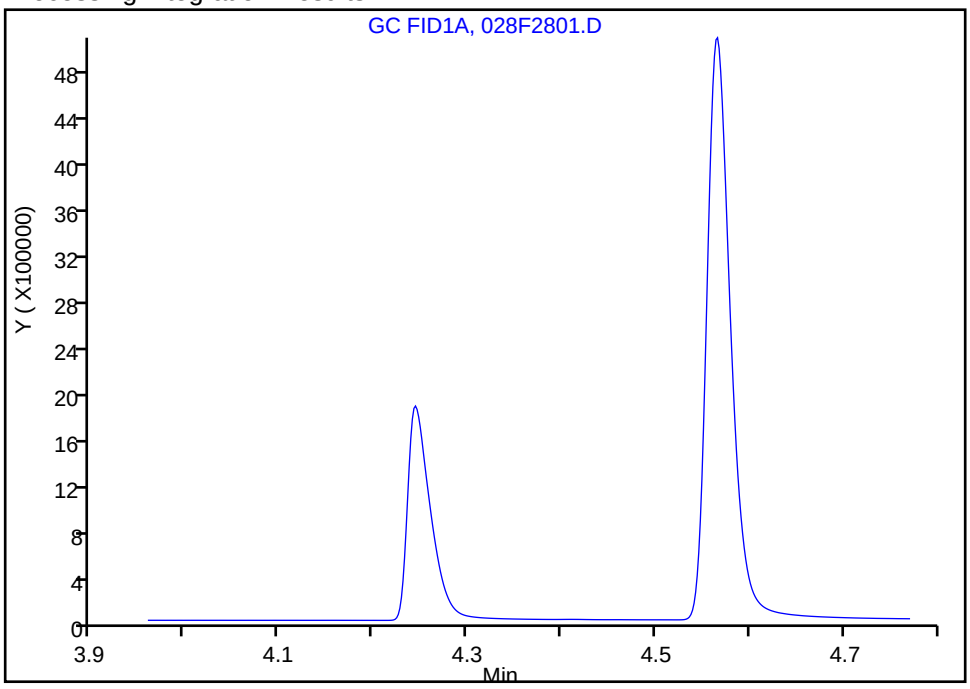
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\028F2801.D
Injection Date: 09-Nov-2021 23:25:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

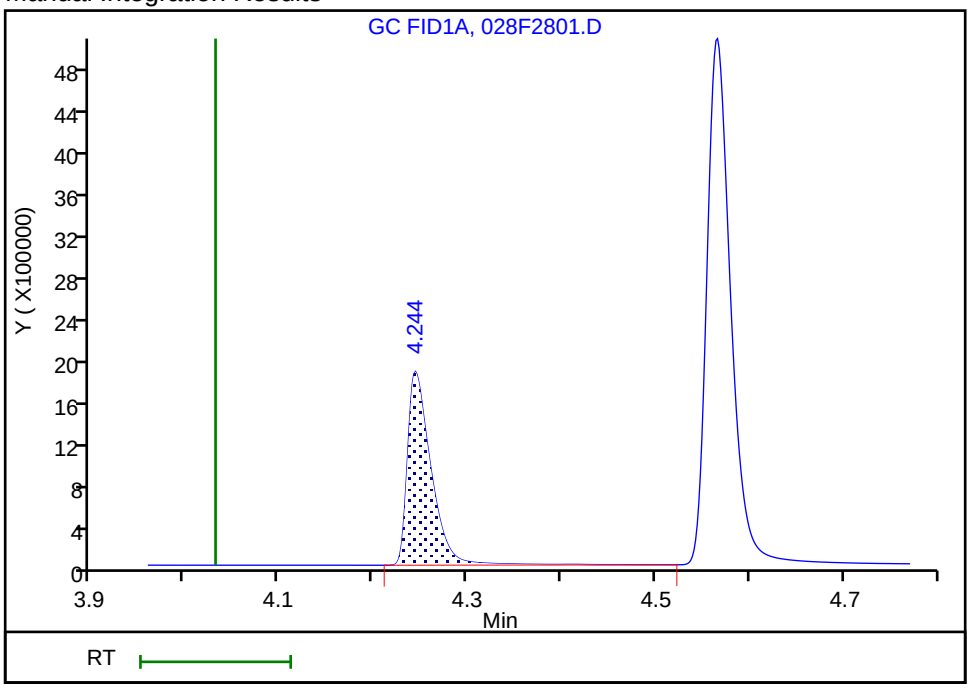
Not Detected
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.24
Area: 3195950
Amount: 113.5772
Amount Units: ug/l



Reviewer: sciannac, 12-Nov-2021 10:25:02
Audit Action: Assigned Compound ID Audit Reason: Wrong Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		38406		68.2	65.7	3.7	20.0
Ethylene	Ave	30980	32569		121	115	5.1	20.0
Acetylene	Ave	34179	37239		116	107	9.0	20.0
Ethane	Ave	33383	35432		131	123	6.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Acetylene	2.74	2.68	2.84
Ethane	3.01	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\028F2801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 09-Nov-2021 23:25:30 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:59:05 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 10:25:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.302	-0.014	2439054	65.7	67.5	
2	1.671	1.690	-0.019	2523384	65.7	68.2	
						RPD = 0.99	
3 Ethane							
1	1.551	1.550	0.001	4359097	123.2	131.1	
2	3.011	3.030	-0.019	4364152	123.2	130.7	
						RPD = 0.31	
4 Ethylene							
1	1.864	1.828	0.036	4270048	114.9	121.2	
2	2.593	2.612	-0.019	3742208	114.9	120.8	
						RPD = 0.35	
5 Propane							a
1	2.696	2.608	0.088	6915331	180.6	192.0	a
2	4.923	4.930	-0.007	6558425	180.6	187.3	a
						RPD = 2.48	
6 Acetylene							a
1	4.244	4.032	0.212	3195950	106.7	113.6	a
2	2.736	2.755	-0.019	3972279	106.7	116.2	a
						RPD = 2.30	
7 Butane							Ma
1	4.566	4.423	0.143	9005046	238.1	247.2	a
2	6.423	6.428	-0.005	9100557	238.1	259.0	M
						RPD = 4.64	
8 isobutylene							Ma
1	5.454	5.282	0.172	8492325	229.8	235.1	a
2	6.265	6.270	-0.005	8005212	229.8	241.1	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

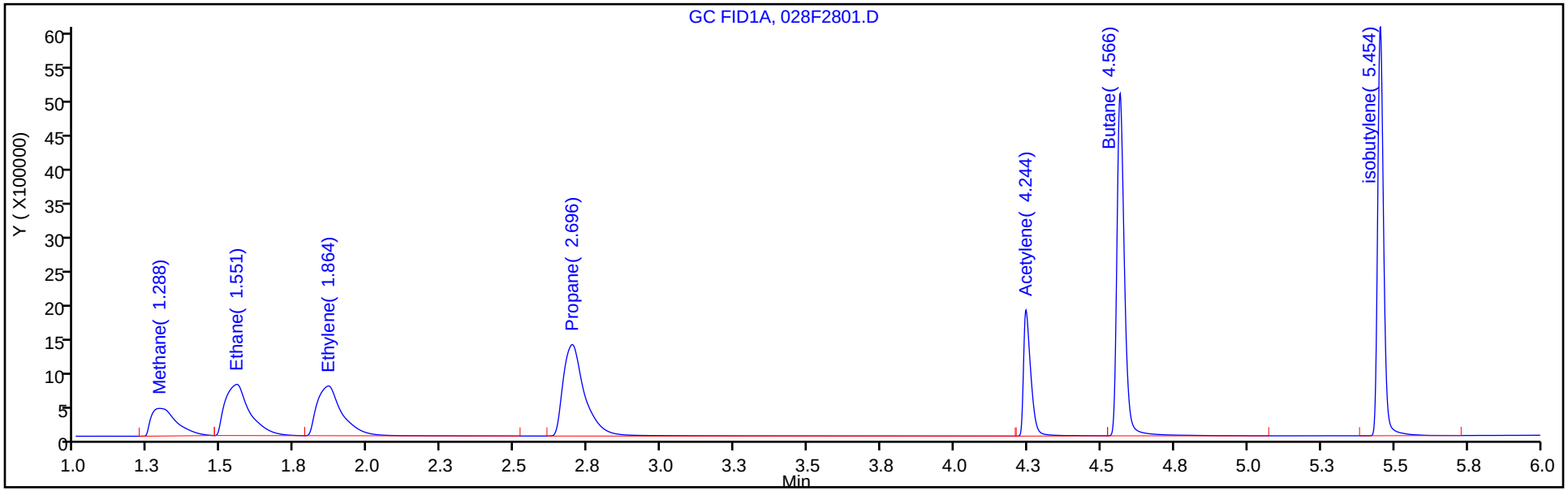
Report Date: 15-Nov-2021 12:59:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

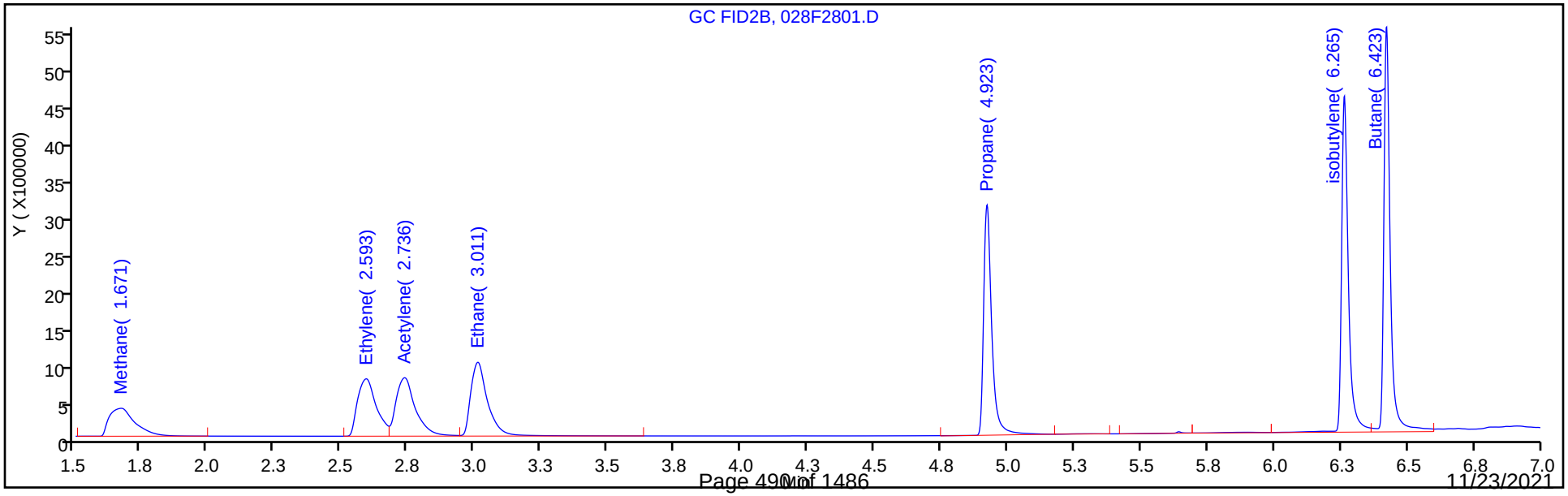
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\028F2801.D

Injection Date:	09-Nov-2021 23:25:30	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

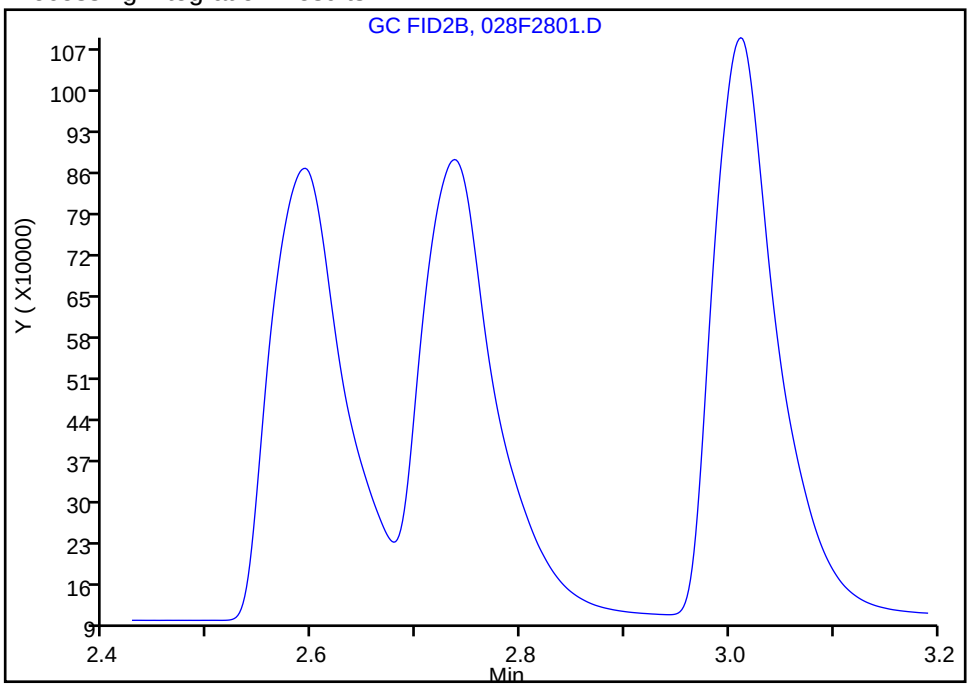
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\028F2801.D
Injection Date: 09-Nov-2021 23:25:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

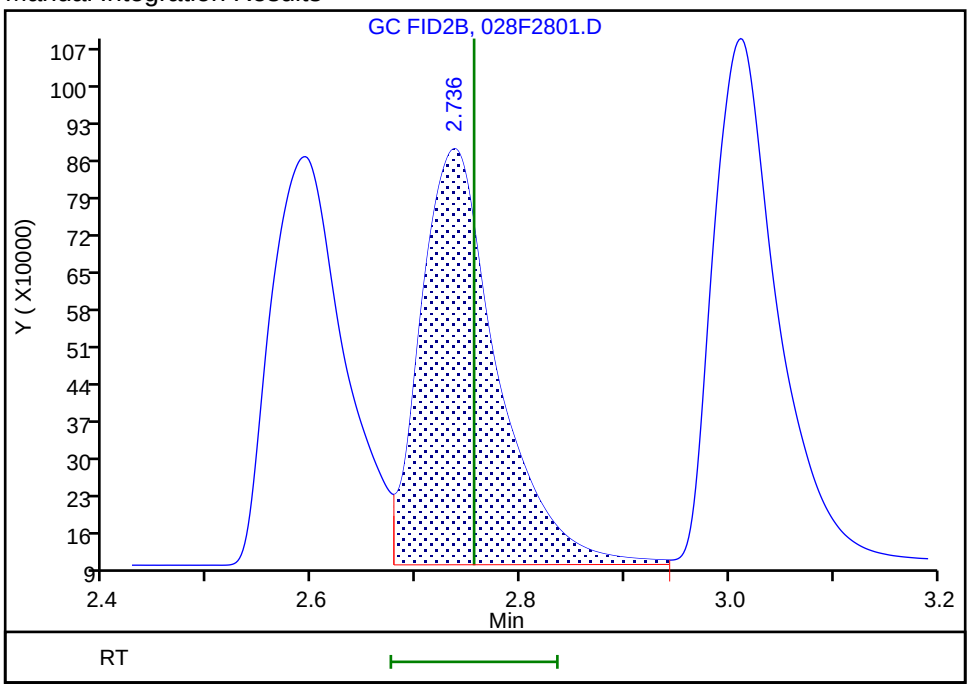
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.74
Area: 3972279
Amount: 116.2206
Amount Units: ug/l



Reviewer: sciannac, 12-Nov-2021 10:24:40
Audit Action: Assigned Compound ID Audit Reason: Wrong Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-556641/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 14:08

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\004F0401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 08-Nov-2021 14:08:06 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 09:45:08

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		1.299				ND	
2		1.688					
3 Ethane							
1		1.538				ND	
2		3.026					
4 Ethylene							
1		1.789				ND	
2		2.608					
5 Propane							
1		2.531				ND	
2		4.929					
6 Acetylene							
1		3.868				ND	
2		2.753					
7 Butane							
1		4.319				ND	
2		6.428					
8 isobutylene							
1		5.281				ND	
2		6.269					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

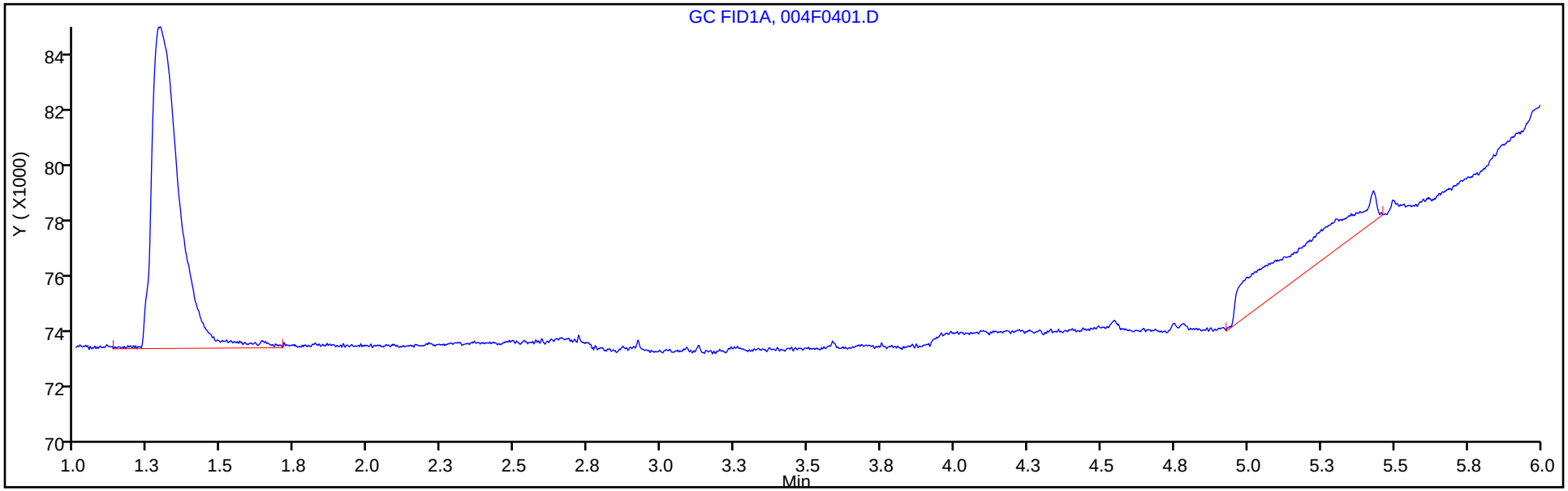
Report Date: 09-Nov-2021 10:13:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

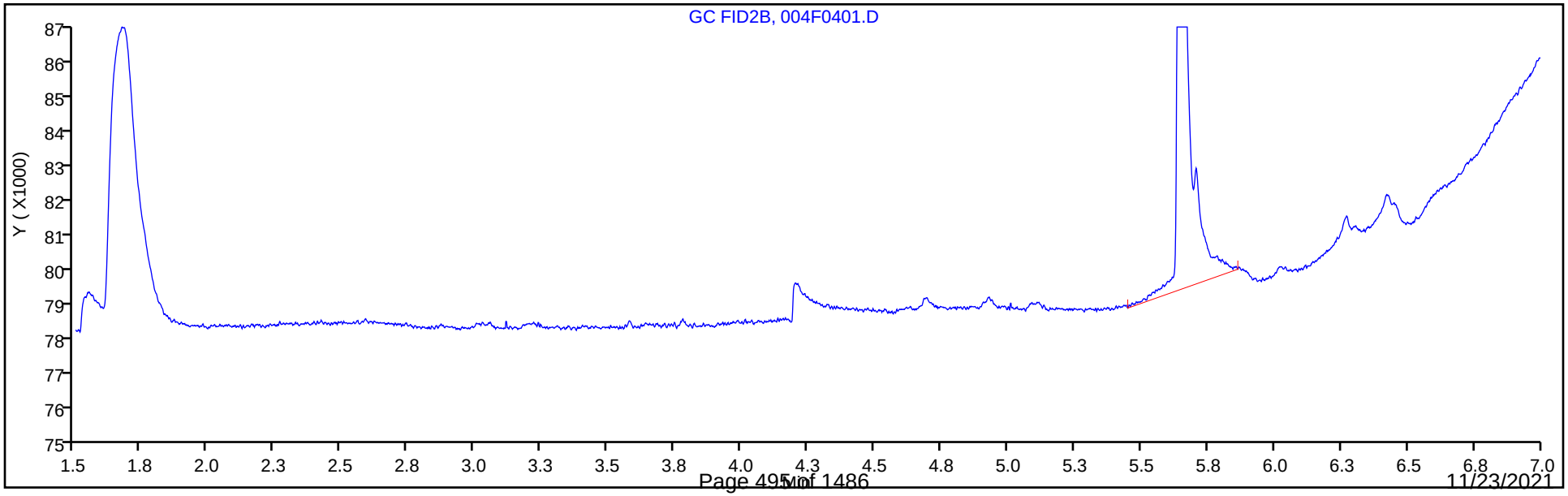
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\004F0401.D

Injection Date:	08-Nov-2021 14:08:06	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-556811/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 18:13

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.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\004F0401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 09-Nov-2021 18:13:56 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:18:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.302				ND	
2		1.690					
3 Ethane							
1		1.550				ND	
2		3.030					
4 Ethylene							
1		1.828				ND	
2		2.612					
5 Propane							
1		2.608				ND	
2		4.930					
6 Acetylene							
1		4.032				ND	
2		2.755					
7 Butane							
1		4.423				ND	
2		6.428					
8 isobutylene							
1		5.282				ND	
2		6.270					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

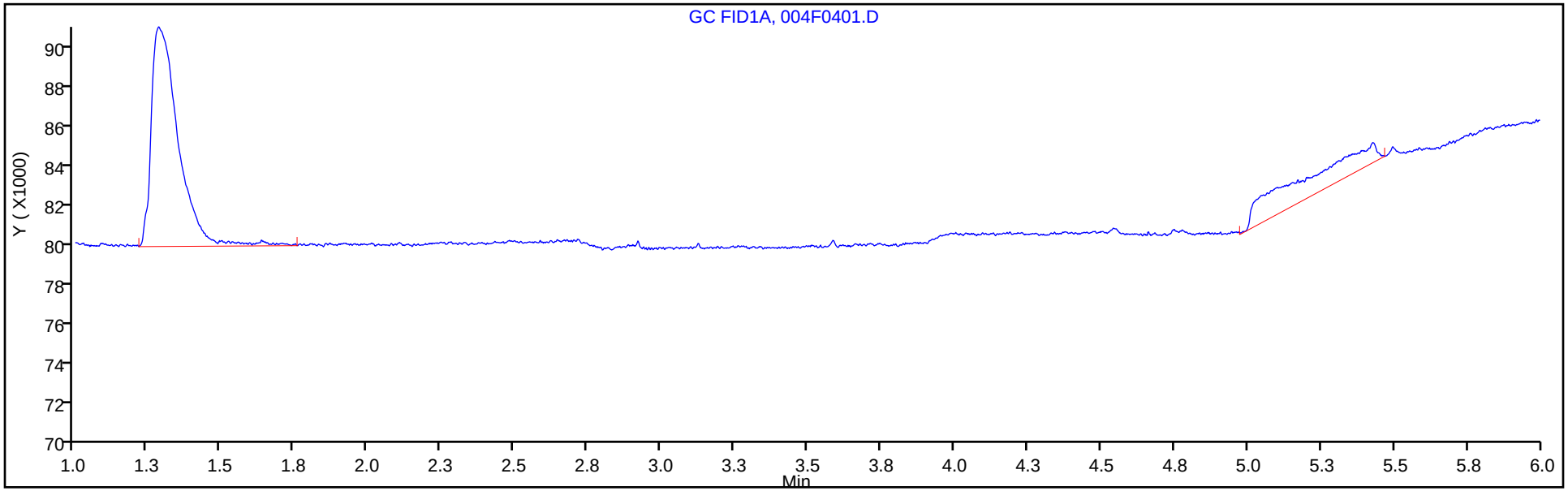
Report Date: 15-Nov-2021 12:57:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

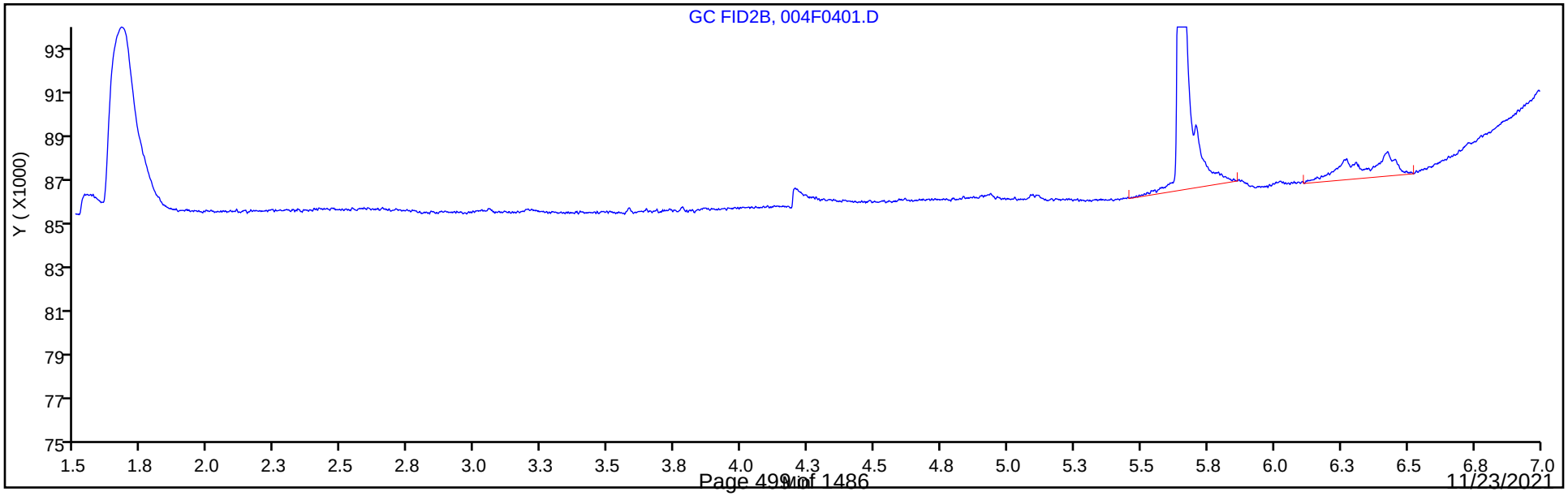
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\004F0401.D

Injection Date:	09-Nov-2021 18:13:56	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556641/2

Matrix: Water Lab File ID: 002F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 13:42

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0674		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 08-Nov-2021 13:42:00 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 08-Nov-2021 14:31:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.296	1.299	-0.003	2353389	65.7	65.1	
2	1.686	1.688	-0.002	2497749	65.7	67.4	
						RPD = 3.61	
3 Ethane							
1	1.541	1.538	0.003	4235583	123.2	127.4	
2	3.031	3.026	0.005	4420465	123.2	132.4	
						RPD = 3.85	
4 Ethylene							
1	1.808	1.789	0.019	4181689	114.9	118.7	
2	2.613	2.608	0.005	3744830	114.9	120.9	
						RPD = 1.81	
5 Propane							
1	2.573	2.531	0.042	6759917	180.6	187.7	
2	4.931	4.929	0.002	6600408	180.6	188.5	
						RPD = 0.43	
6 Acetylene							
1	4.059	3.868	0.191	3162906	106.7	112.4	
2	2.758	2.753	0.005	3961001	106.7	115.9	
						RPD = 3.06	
7 Butane							
1	4.436	4.319	0.117	9085242	238.1	249.4	
2	6.429	6.428	0.001	8753800	238.1	249.1	
						RPD = 0.13	
8 isobutylene							
1	5.326	5.281	0.045	8670930	229.8	240.0	
2	6.271	6.269	0.002	7946880	229.8	239.3	
						RPD = 0.29	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

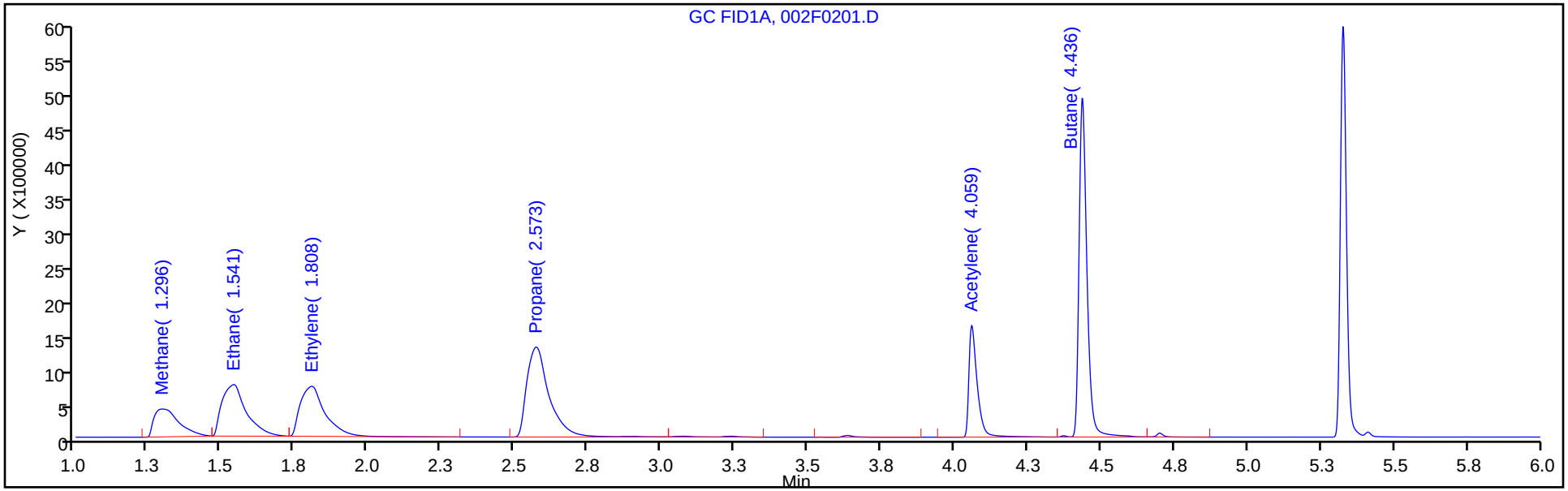
Report Date: 09-Nov-2021 10:13:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

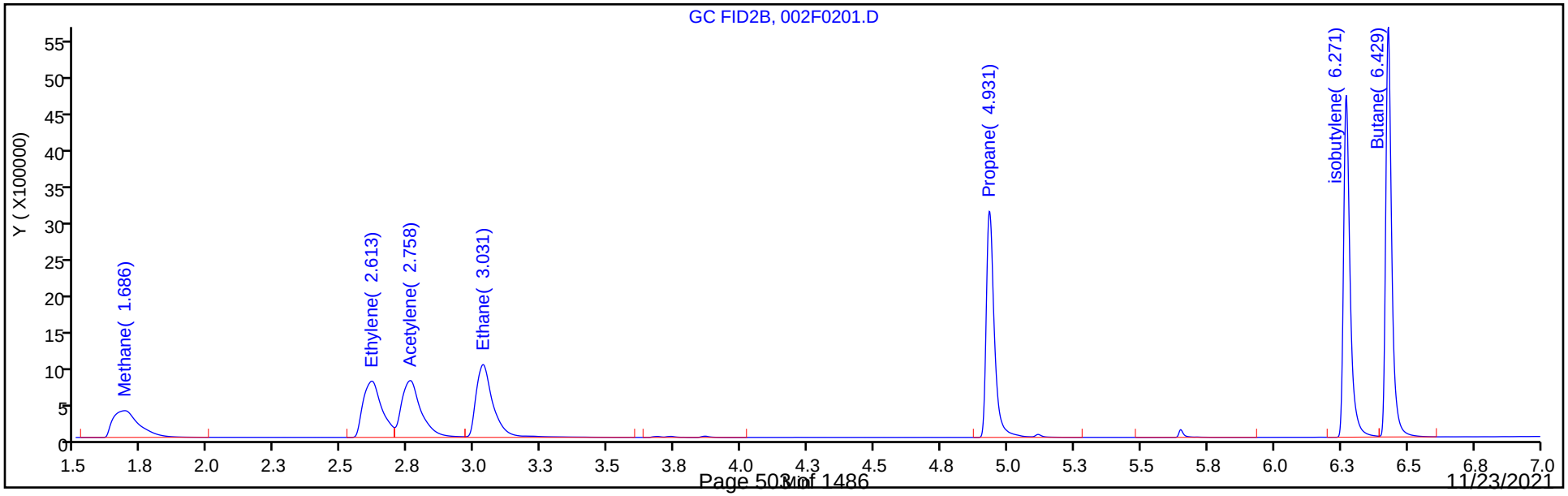
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\002F0201.D

Injection Date:	08-Nov-2021 13:42:00	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556811/2

Matrix: Water Lab File ID: 002F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 17:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0659		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 09-Nov-2021 17:48:02 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 08:28:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.299	1.302	-0.003	2334253	65.7	64.5	
2	1.687	1.690	-0.003	2441711	65.7	65.9	
						RPD = 2.13	
3 Ethane							
1	1.551	1.550	0.001	4188659	123.2	126.0	
2	3.032	3.030	0.002	4326877	123.2	129.6	
						RPD = 2.82	
4 Ethylene							
1	1.834	1.828	0.006	4139064	114.9	117.5	
2	2.616	2.612	0.004	3666408	114.9	118.3	
						RPD = 0.72	
5 Propane							a
1	2.621	2.608	0.013	6670960	180.6	185.2	a
2	4.932	4.930	0.002	6420309	180.6	183.4	a
						RPD = 1.01	
6 Acetylene							a
1	4.111	4.032	0.079	3108348	106.7	110.5	a
2	2.759	2.755	0.004	3896519	106.7	114.0	a
						RPD = 3.15	
7 Butane							Ma
1	4.474	4.423	0.051	8856120	238.1	243.2	a
2	6.429	6.428	0.001	8536861	238.1	243.0	M
						RPD = 0.09	
8 isobutylene							Ma
1	5.362	5.282	0.080	8467430	229.8	234.4	a
2	6.271	6.270	0.001	7718160	229.8	232.5	M
						RPD = 0.83	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

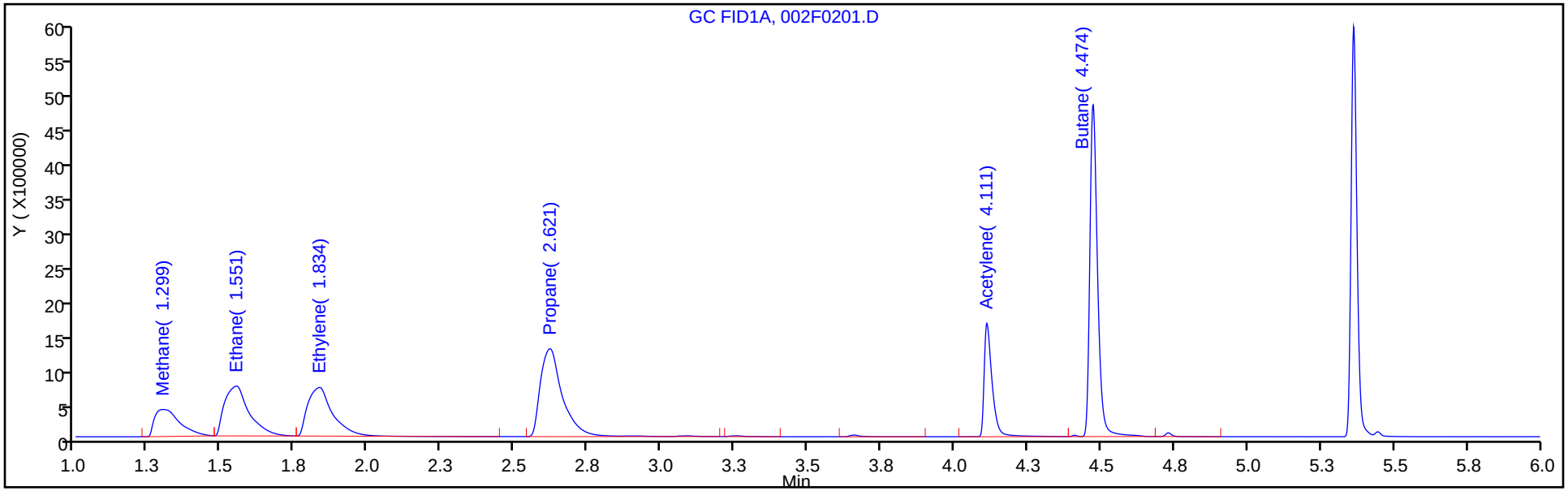
Report Date: 15-Nov-2021 12:57:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

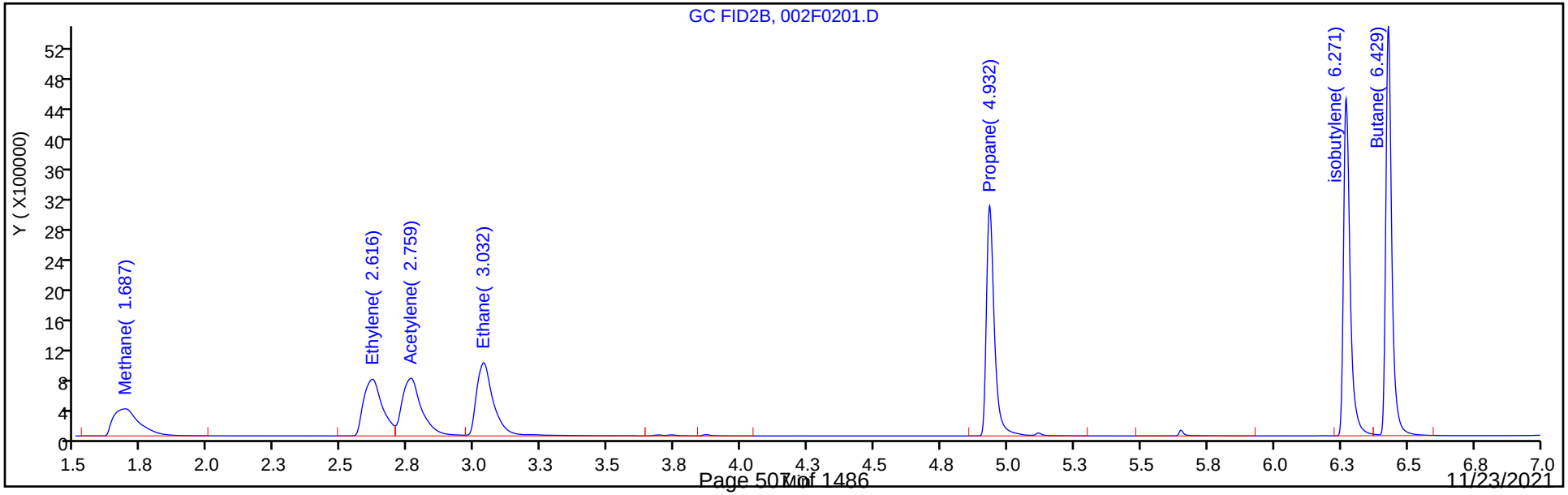
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\002F0201.D

Injection Date:	09-Nov-2021 17:48:02	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-556641/3

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 13:55

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.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0674		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 08-Nov-2021 13:55:11 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 10:13:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 09:45:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.296	1.299	-0.003	2374518	65.7	65.7	
2	1.683	1.688	-0.005	2497604	65.7	67.4	
						RPD = 2.69	
3 Ethane							
1	1.548	1.538	0.010	4277259	123.2	128.7	
2	3.028	3.026	0.002	4435942	123.2	132.9	
						RPD = 3.22	
4 Ethylene							
1	1.836	1.789	0.047	4215985	114.9	119.7	
2	2.610	2.608	0.002	3755078	114.9	121.2	
						RPD = 1.27	
5 Propane							
1	2.634	2.531	0.103	6811013	180.6	189.1	
2	4.930	4.929	0.001	6602407	180.6	188.6	
						RPD = 0.30	
6 Acetylene							a
1	4.164	3.868	0.296	3115847	106.7	110.7	a
2	2.755	2.753	0.002	3911208	106.7	114.4	a
						RPD = 3.29	
7 Butane							Ma
1	4.506	4.319	0.187	9196842	238.1	252.5	a
2	6.428	6.428	0.000	8766443	238.1	249.5	M
						RPD = 1.21	
8 isobutylene							Ma
1	5.393	5.281	0.112	8643776	229.8	239.3	a
2	6.270	6.269	0.001	7951060	229.8	239.5	M
						RPD = 0.08	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

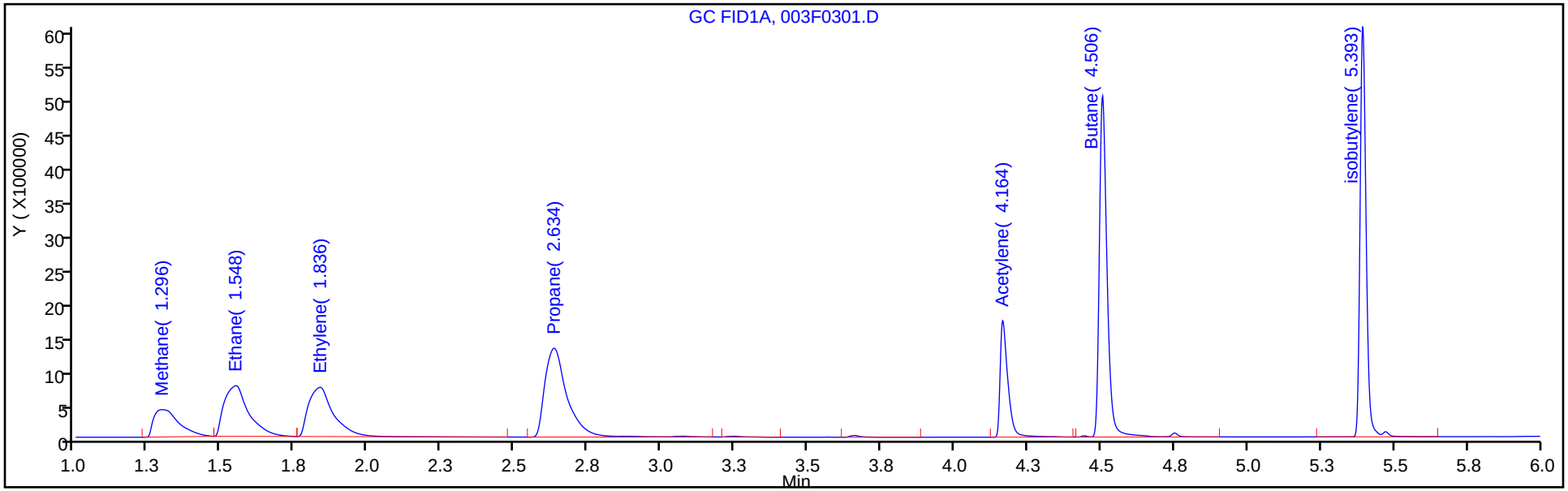
Report Date: 09-Nov-2021 10:13:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

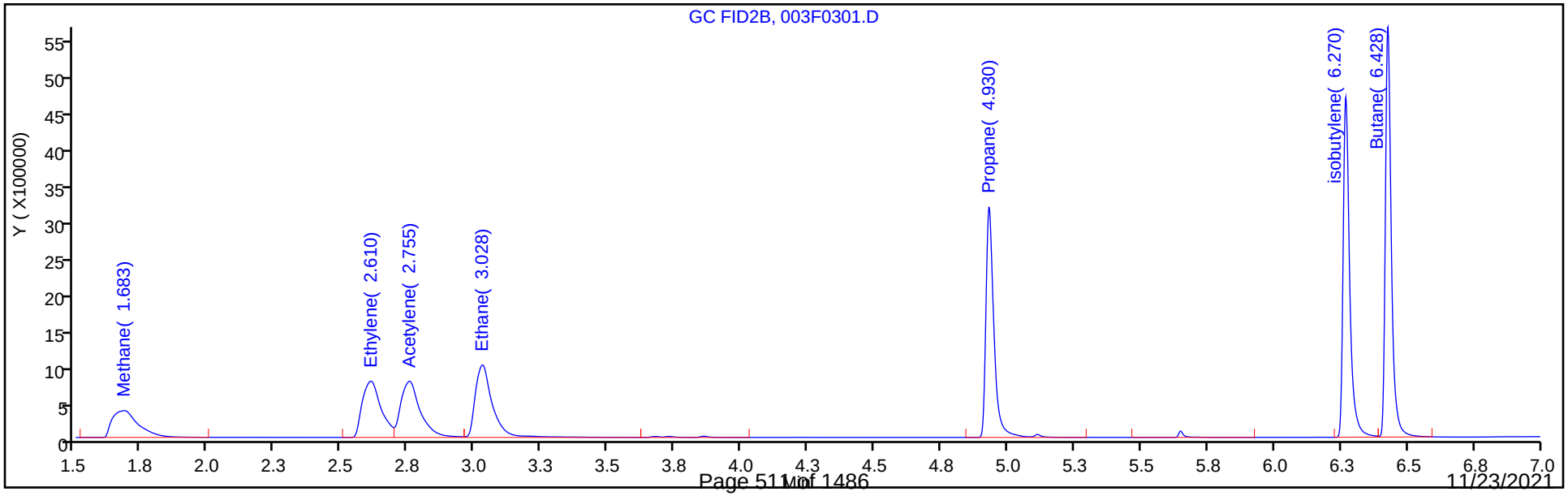
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\003F0301.D

Injection Date:	08-Nov-2021 13:55:11	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-556811/3

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/09/2021 18:00

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.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0665		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 09-Nov-2021 18:00:59 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 12:57:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:18:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.296	1.302	-0.006	2361311	65.7	65.3	
2	1.682	1.690	-0.008	2464511	65.7	66.5	
						RPD = 1.89	
3 Ethane							
1	1.550	1.550	0.000	4246015	123.2	127.7	
2	3.028	3.030	-0.002	4359024	123.2	130.6	
						RPD = 2.20	
4 Ethylene							
1	1.840	1.828	0.012	4177601	114.9	118.6	
2	2.608	2.612	-0.004	3684639	114.9	118.9	
						RPD = 0.29	
5 Propane							a
1	2.641	2.608	0.033	6763739	180.6	187.8	a
2	4.930	4.930	0.000	6511914	180.6	186.0	a
						RPD = 0.98	
6 Acetylene							a
1	4.171	4.032	0.139	3096120	106.7	110.0	a
2	2.753	2.755	-0.002	3900587	106.7	114.1	a
						RPD = 3.65	
7 Butane							a
1	4.511	4.423	0.088	9114747	238.1	250.3	a
2	6.428	6.428	0.000	8653308	238.1	246.3	a
						RPD = 1.61	
8 isobutylene							a
1	5.398	5.282	0.116	8564739	229.8	237.1	a
2	6.270	6.270	0.000	7817510	229.8	235.4	a
						RPD = 0.69	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

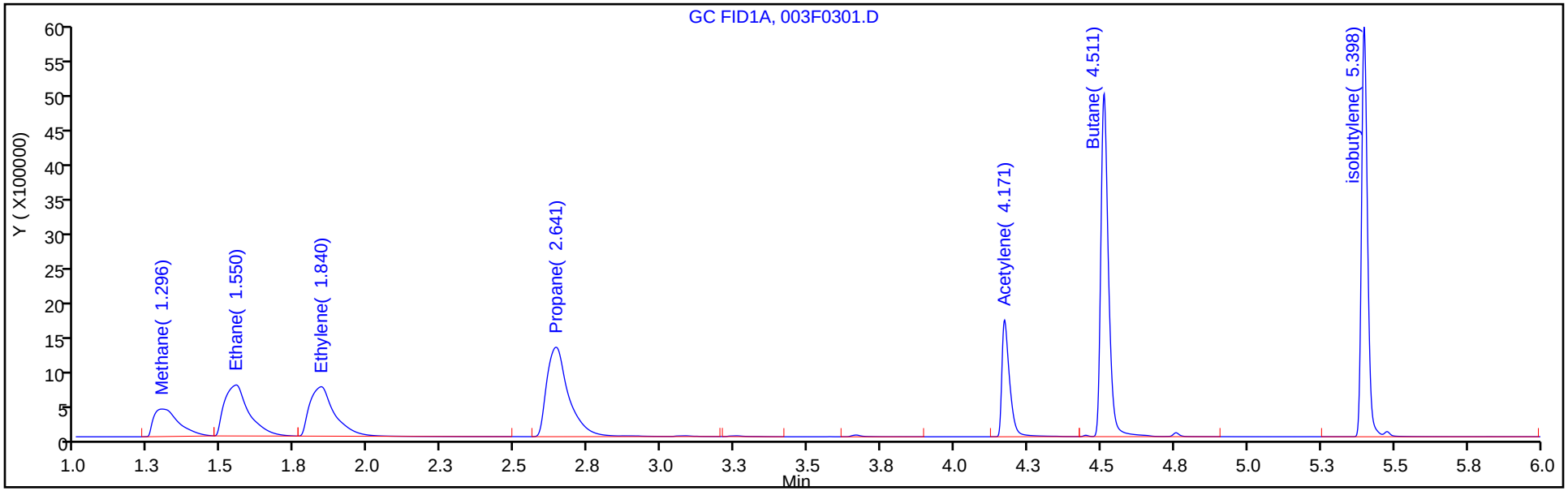
Report Date: 15-Nov-2021 12:57:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

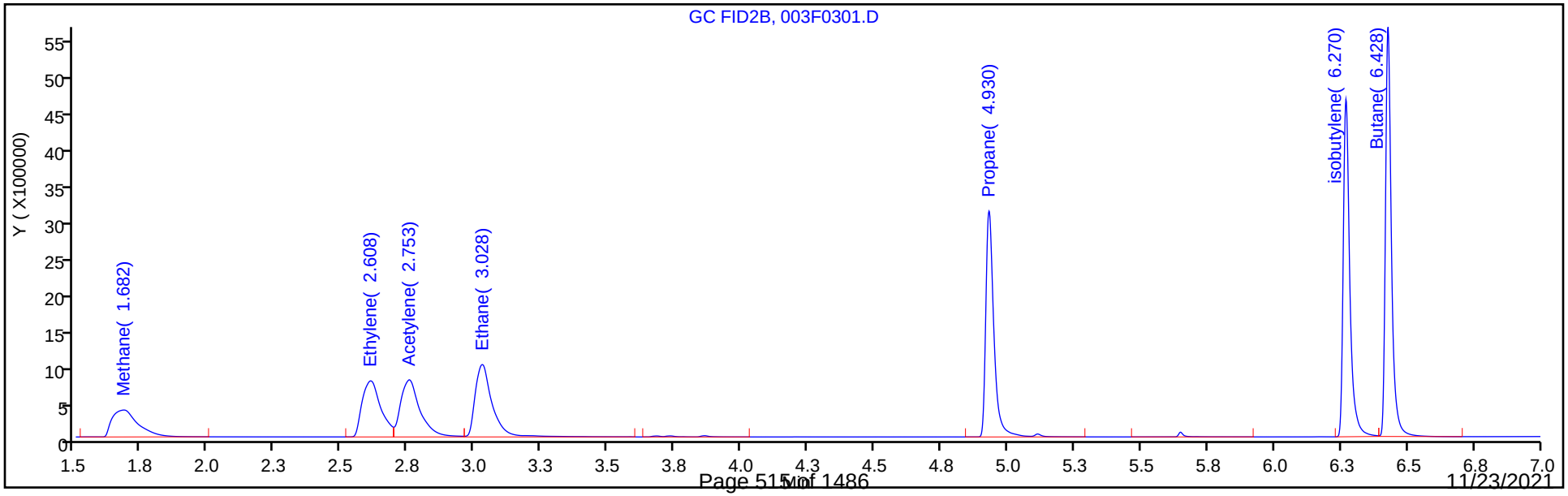
Data File: \\chromfs\Denver\ChromData\VGC_J\20211109-106343.b\003F0301.D

Injection Date:	09-Nov-2021 18:00:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 DU Lab Sample ID: 280-155015-4 DU

Matrix: Water Lab File ID: 020F2001.D

Analysis Method: RSK-175 Date Collected: 10/30/2021 09:25

Sample wt/vol: 20(mL) Date Analyzed: 11/08/2021 17:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556641 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	18.1	M	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\020F2001.D
Lims ID: 280-155015-H-4 DU
Client ID:
Sample Type: DU
Inject. Date: 08-Nov-2021 17:35:57 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155015-H-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Nov-2021 14:05:22 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1667

First Level Reviewer: sciannac Date: 09-Nov-2021 10:00:36

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							Ma
1	1.286	1.299	-0.013	680175192		19337	
2	1.665	1.688	-0.023	654997437		18141	M
						RPD = 6.39	
3 Ethane							Ma
1	0.000	1.538	0.000	0		0	
2	3.066	3.026	0.040	124530		3.73	M
						RPD = 200.00	
4 Ethylene							
1		1.789				ND	
2		2.608					
5 Propane							
1		2.531				ND	
2		4.929					
6 Acetylene							
1		3.868				ND	
2		2.753					
7 Butane							
1		4.319				ND	
2		6.428					
8 isobutylene							
1		5.281				ND	
2		6.269					

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

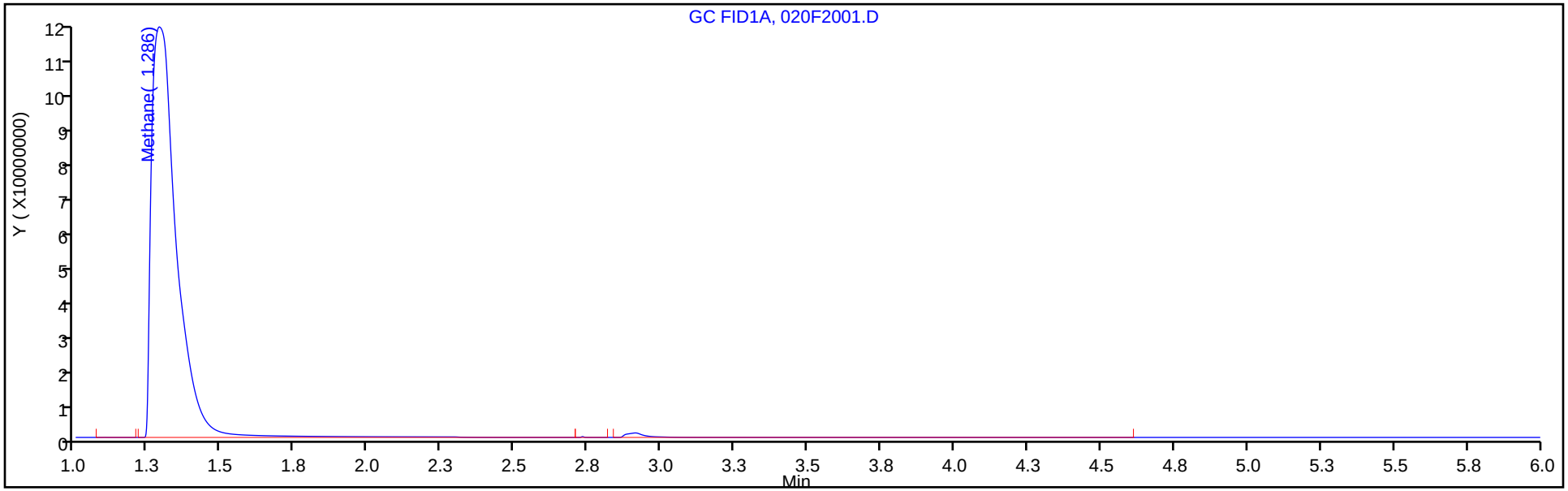
Report Date: 09-Nov-2021 14:05:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

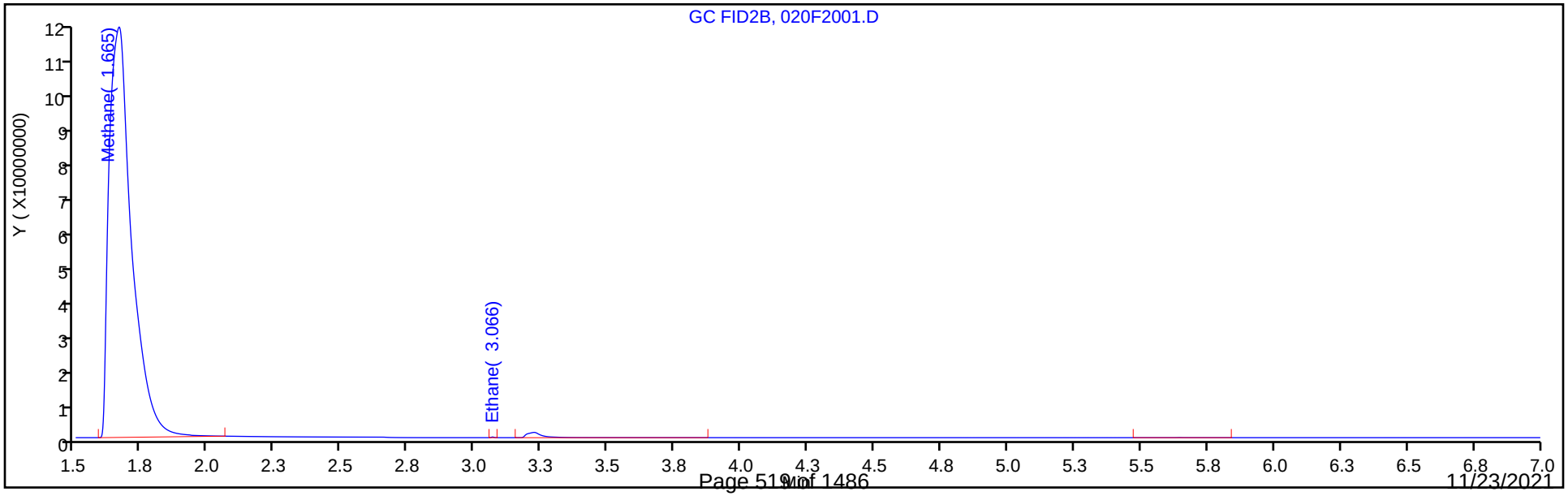
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\020F2001.D

Injection Date:	08-Nov-2021 17:35:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155015-H-4 DU			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

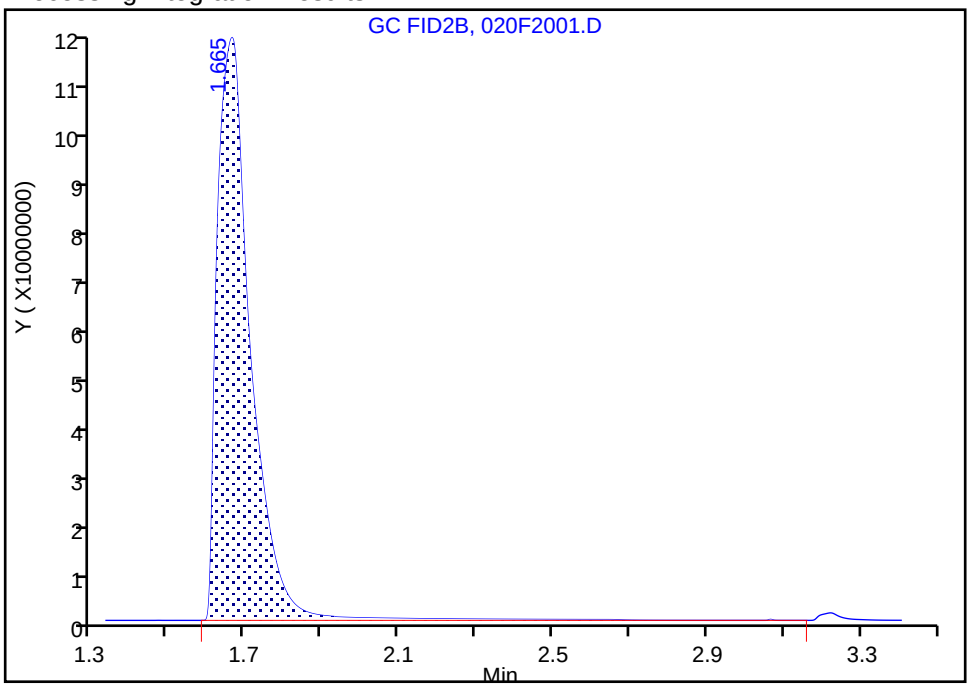
Data File: \\chromfs\Denver\ChromData\VGC_J\20211108-106303.b\020F2001.D
Injection Date: 08-Nov-2021 17:35:57 Instrument ID: VGC_J
Lims ID: 280-155015-H-4 DU
Client ID:
Operator ID: sciannac ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

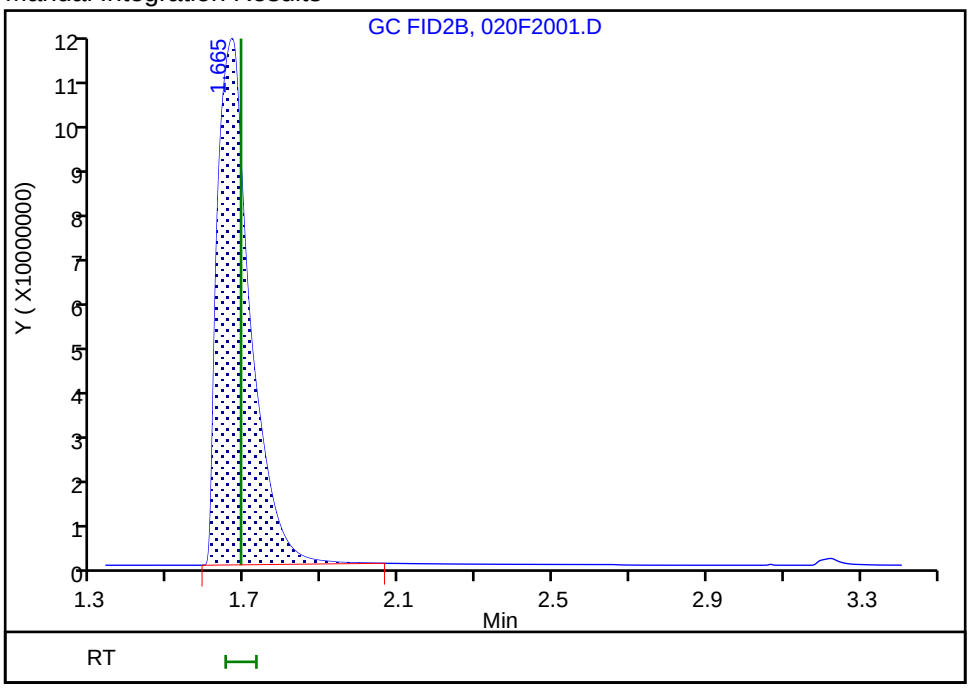
Processing Integration Results

RT: 1.66
Area: 669567676
Amount: 18544
Amount Units: ug/l



Manual Integration Results

RT: 1.66
Area: 654997437
Amount: 18141
Amount Units: ug/l



Reviewer: sciannac, 09-Nov-2021 14:05:15
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Start Date: 09/24/2021 13:16

Analysis Batch Number: 550959 End Date: 09/24/2021 15:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-550959/1		09/24/2021 13:16	1		Rt-Alumina KCl 0.53(mm)
RTC 280-550959/1		09/24/2021 13:16	1		HP-Plot Q 0.53(mm)
IC 280-550959/2		09/24/2021 13:28	1	004F0201.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/2		09/24/2021 13:28	1	004F0201.D	HP-Plot Q 0.53(mm)
IC 280-550959/3		09/24/2021 13:41	1	005F0301.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/3		09/24/2021 13:41	1	005F0301.D	HP-Plot Q 0.53(mm)
IC 280-550959/4		09/24/2021 13:54	1	006F0401.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/4		09/24/2021 13:54	1	006F0401.D	HP-Plot Q 0.53(mm)
IC 280-550959/5		09/24/2021 14:07	1	007F0501.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/5		09/24/2021 14:07	1	007F0501.D	HP-Plot Q 0.53(mm)
IC 280-550959/6		09/24/2021 14:20	1	008F0601.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/6		09/24/2021 14:20	1	008F0601.D	HP-Plot Q 0.53(mm)
IC 280-550959/7		09/24/2021 14:33	1	009F0701.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/7		09/24/2021 14:33	1	009F0701.D	HP-Plot Q 0.53(mm)
IC 280-550959/9		09/24/2021 14:46	1	010F0801.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/9		09/24/2021 14:46	1	010F0801.D	HP-Plot Q 0.53(mm)
IC 280-550959/10		09/24/2021 14:59	1	011F0901.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/10		09/24/2021 14:59	1	011F0901.D	HP-Plot Q 0.53(mm)
IC 280-550959/11		09/24/2021 15:12	1	012F1001.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/11		09/24/2021 15:12	1	012F1001.D	HP-Plot Q 0.53(mm)
ZZZZZ		09/24/2021 15:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		09/24/2021 15:25	1		HP-Plot Q 0.53(mm)
ICV 280-550959/13		09/24/2021 15:38	1	014F1201.D	Rt-Alumina KCl 0.53(mm)
ICV 280-550959/13		09/24/2021 15:38	1	014F1201.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/08/2021 13:28

Analysis Batch Number: 556641 End Date: 11/08/2021 19:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-556641/1		11/08/2021 13:28	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-556641/1		11/08/2021 13:28	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-556641/2		11/08/2021 13:42	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-556641/2		11/08/2021 13:42	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-556641/3		11/08/2021 13:55	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-556641/3		11/08/2021 13:55	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-556641/4		11/08/2021 14:08	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-556641/4		11/08/2021 14:08	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 14:21	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 14:21	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 14:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 14:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 14:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 14:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 14:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 14:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 15:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 15:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 15:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 15:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 15:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 15:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 15:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 15:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 16:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 16:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 16:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 16:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 16:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 16:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 16:44	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 16:44	1		HP-Plot Q 0.53(mm)
280-155015-3	EW7-PM27B-7-35	11/08/2021 16:57	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
280-155015-3	EW7-PM27B-7-35	11/08/2021 16:57	1	017F1701.D	HP-Plot Q 0.53(mm)
CCV 280-556641/19		11/08/2021 17:10	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556641/19		11/08/2021 17:10	1	018F1801.D	HP-Plot Q 0.53(mm)
280-155015-4	EW7-PM26A-7-25	11/08/2021 17:23	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-155015-4	EW7-PM26A-7-25	11/08/2021 17:23	1	019F1901.D	HP-Plot Q 0.53(mm)
280-155015-4 DU	EW7-PM26A-7-25 DU	11/08/2021 17:35	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-155015-4 DU	EW7-PM26A-7-25 DU	11/08/2021 17:35	1	020F2001.D	HP-Plot Q 0.53(mm)
280-155015-5	EW7-PM26B-7-35	11/08/2021 17:48	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
280-155015-5	EW7-PM26B-7-35	11/08/2021 17:48	1	021F2101.D	HP-Plot Q 0.53(mm)
280-155015-6	EW7-PM29A-7-25	11/08/2021 18:01	1	022F2201.D	Rt-Alumina KCl 0.53(mm)
280-155015-6	EW7-PM29A-7-25	11/08/2021 18:01	1	022F2201.D	HP-Plot Q 0.53(mm)
280-155015-7	EW7-PM29B-7-35	11/08/2021 18:14	1	023F2301.D	Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/08/2021 13:28

Analysis Batch Number: 556641 End Date: 11/08/2021 19:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-155015-7	EW7-PM29B-7-35	11/08/2021 18:14	1	023F2301.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 18:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 18:27	1		HP-Plot Q 0.53(mm)
280-155015-9	G0080-7	11/08/2021 18:40	1	025F2501.D	Rt-Alumina KCl 0.53(mm)
280-155015-9	G0080-7	11/08/2021 18:40	1	025F2501.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/08/2021 18:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/08/2021 18:53	1		HP-Plot Q 0.53(mm)
280-155015-11	G0079-7	11/08/2021 19:06	1	027F2701.D	Rt-Alumina KCl 0.53(mm)
280-155015-11	G0079-7	11/08/2021 19:06	1	027F2701.D	HP-Plot Q 0.53(mm)
280-155015-12	G0075-7	11/08/2021 19:19	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
280-155015-12	G0075-7	11/08/2021 19:19	1	028F2801.D	HP-Plot Q 0.53(mm)
CCV 280-556641/30		11/08/2021 19:32	1	029F2901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556641/30		11/08/2021 19:32	1	029F2901.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/09/2021 17:35

Analysis Batch Number: 556811 End Date: 11/09/2021 23:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-556811/1		11/09/2021 17:35	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-556811/1		11/09/2021 17:35	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-556811/2		11/09/2021 17:48	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-556811/2		11/09/2021 17:48	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-556811/3		11/09/2021 18:00	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-556811/3		11/09/2021 18:00	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-556811/4		11/09/2021 18:13	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-556811/4		11/09/2021 18:13	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 18:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 18:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 18:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 18:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 18:52	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 18:52	2		HP-Plot Q 0.53(mm)
280-155015-1	EW7-PM25A-7-25	11/09/2021 19:05	2	008F0801.D	Rt-Alumina KCl 0.53(mm)
280-155015-1	EW7-PM25A-7-25	11/09/2021 19:05	2	008F0801.D	HP-Plot Q 0.53(mm)
280-155015-2	EW7-PM25B-7-35	11/09/2021 19:18	2	009F0901.D	Rt-Alumina KCl 0.53(mm)
280-155015-2	EW7-PM25B-7-35	11/09/2021 19:18	2	009F0901.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 19:32	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 19:32	2		HP-Plot Q 0.53(mm)
280-155015-8	EW7-PM28A-7-25	11/09/2021 19:45	2	011F1101.D	Rt-Alumina KCl 0.53(mm)
280-155015-8	EW7-PM28A-7-25	11/09/2021 19:45	2	011F1101.D	HP-Plot Q 0.53(mm)
280-155015-10	EW7-PM24A-7-25	11/09/2021 19:58	2	012F1201.D	Rt-Alumina KCl 0.53(mm)
280-155015-10	EW7-PM24A-7-25	11/09/2021 19:58	2	012F1201.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 20:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 20:11	1		HP-Plot Q 0.53(mm)
CCV 280-556811/14		11/09/2021 20:24	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556811/14		11/09/2021 20:24	1	014F1401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 20:37	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 20:37	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 20:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 20:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:54	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:07	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:07	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:20	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/09/2021 17:35

Analysis Batch Number: 556811 End Date: 11/09/2021 23:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		11/09/2021 22:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 23:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 23:12	1		HP-Plot Q 0.53(mm)
CCV 280-556811/28		11/09/2021 23:25	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556811/28		11/09/2021 23:25	1	028F2801.D	HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556641 Batch Start Date: 11/08/21 13:28 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-556641/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-556641/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-556641/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-556641/4		RSK-175		20 mL	20 mL	5 SU			
280-155015-H-3	EW7-PM27B-7-35	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-556641/19		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-155015-I-4	EW7-PM26A-7-25	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-H-4 DU	EW7-PM26A-7-25	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-H-5	EW7-PM26B-7-35	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-I-6	EW7-PM29A-7-25	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-I-7	EW7-PM29B-7-35	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-I-9	G0080-7	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-H-11	G0079-7	RSK-175	T	20 mL	20 mL	< 2 SU			
280-155015-G-12	G0075-7	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-556641/30		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556811 Batch Start Date: 11/09/21 17:35 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-556811/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-556811/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-556811/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-556811/4		RSK-175		20 mL	20 mL	5 SU			
280-155015-I-1	EW7-PM25A-7-25	RSK-175	T	20 mL	20 mL	<2 SU			
280-155015-I-2	EW7-PM25B-7-35	RSK-175	T	20 mL	20 mL	<2 SU			
280-155015-I-8	EW7-PM28A-7-25	RSK-175	T	20 mL	20 mL	<2 SU			
280-155015-H-10	EW7-PM24A-7-25	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-556811/14		RSK-175		20 mL	20 mL	5 SU	200 uL		
CCV 280-556811/28		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

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 #
EW7-PM25A-7-25	280-155015-1	122 M Q	
EW7-PM25A-7-25	280-155015-1		107 M
EW7-PM25B-7-35	280-155015-2	82 Q M	
EW7-PM25B-7-35	280-155015-2		90 M
EW7-PM27B-7-35	280-155015-3	93 M	
EW7-PM27B-7-35	280-155015-3		92 M
EW7-PM26A-7-25	280-155015-4	95 M	
EW7-PM26A-7-25	280-155015-4		87 M
EW7-PM26B-7-35	280-155015-5	94 M	
EW7-PM26B-7-35	280-155015-5		99 M
EW7-PM29A-7-25	280-155015-6	98 M	
EW7-PM29A-7-25	280-155015-6		85 M
EW7-PM29B-7-35	280-155015-7	98 M	
EW7-PM28A-7-25	280-155015-8	91 M	
EW7-PM28A-7-25	280-155015-8		82 M Q
G0080-7	280-155015-9	91 M	
G0080-7	280-155015-9		89
EW7-PM24A-7-25	280-155015-10	84 M	
EW7-PM24A-7-25	280-155015-10		93 M
G0079-7	280-155015-11	85 M	
G0075-7	280-155015-12	94	
G0075-7	280-155015-12		89
	MB 280-556180/1-A	92	
	LCS 280-556180/2-A	90	
	LCS 280-556180/3-A	89 M	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11050012.D

Lab ID: LCS 280-556180/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.07	104	73-125	
1,3-Dinitrobenzene	2.00	1.98	99	78-120	
2,4,6-Trinitrotoluene	2.00	2.00	100	71-123	
2,4-Dinitrotoluene	2.00	1.94	97	78-120	
2,6-Dinitrotoluene	2.00	1.93	96	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.84	92	79-120	
2-Nitrotoluene	2.00	1.57	78	70-127	
3-Nitrotoluene	2.00	1.55	77	73-125	M
4-Amino-2,6-dinitrotoluene	2.00	1.82	91	76-125	
4-Nitrotoluene	2.00	1.61	81	71-127	
HMX	2.00	1.95	97	65-135	M
Nitrobenzene	2.00	1.77	88	65-134	
RDX	2.00	1.88	94	68-130	
Tetryl	2.00	1.91	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.: 280-155015-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11050013.D

Lab ID: LCS 280-556180/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.16	93	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: MB 280-556180/1-A

Matrix: Water Date Extracted: 11/04/2021 14:13

Lab File ID:(1) 11050011.D Lab File ID:(2)

Date Analyzed:(1) 11/05/2021 15:15 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 280-556180/2-A	11/05/2021 15:38	
	LCS 280-556180/3-A	11/05/2021 16:00	
EW7-PM25A-7-25	280-155015-1	11/05/2021 16:23	11/06/2021 02:09
EW7-PM25B-7-35	280-155015-2	11/05/2021 16:46	11/06/2021 02:44
EW7-PM27B-7-35	280-155015-3	11/05/2021 17:09	11/06/2021 03:19
EW7-PM26A-7-25	280-155015-4	11/05/2021 17:32	11/06/2021 03:54
EW7-PM26B-7-35	280-155015-5	11/05/2021 17:55	11/06/2021 04:29
EW7-PM29A-7-25	280-155015-6	11/05/2021 18:18	11/06/2021 05:05
EW7-PM29B-7-35	280-155015-7	11/05/2021 18:41	
EW7-PM28A-7-25	280-155015-8	11/05/2021 19:50	11/06/2021 07:25
G0080-7	280-155015-9	11/05/2021 20:13	11/06/2021 08:00
EW7-PM24A-7-25	280-155015-10	11/05/2021 20:36	11/06/2021 08:35
G0079-7	280-155015-11	11/05/2021 20:58	
G0075-7	280-155015-12	11/05/2021 21:21	11/06/2021 09:45

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/05/2021 16:46 Date Analyzed (2): 11/06/2021 02:44

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	
RDX	1		7.64	7.48	7.78	1.1		98.4
	2		8.69	8.68	8.98	0.39		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/05/2021 17:09 Date Analyzed (2): 11/06/2021 03:19

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		7.63	7.48	7.78	1.1		86.4
	2		8.72	8.68	8.98	0.43		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/05/2021 17:32 Date Analyzed (2): 11/06/2021 03:54

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		7.62	7.48	7.78	1.0		35.7
	2		8.73	8.68	8.98	1.5		
1,3,5-Trinitrobenzene	1		8.69	8.58	8.88	0.46		45.4
	2		18.75	18.64	18.94	0.29		
2,4,6-Trinitrotoluene	1		10.98	10.93	11.13	0.67		9.2
	2		25.03	24.95	25.25	0.61		
2-Amino-4,6-dinitrotoluene	1		11.46	11.40	11.60	1.7		26.8
	2		18.22	18.12	18.42	2.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/05/2021 17:55 Date Analyzed (2): 11/06/2021 04:29

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		7.63	7.48	7.78	1.6		113.6
	2		8.73	8.68	8.98	0.44		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/05/2021 20:36 Date Analyzed (2): 11/06/2021 08:35

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		11.02	10.93	11.13	0.14		10.4
	2		25.07	24.95	25.25	0.12		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0075-7 Lab Sample ID: 280-155015-12

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/05/2021 21:21 Date Analyzed (2): 11/06/2021 09:45

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	
4-Amino-2,6-dinitrotoluene	1		11.19	11.14	11.34	0.17		56.4
	2		17.27	17.23	17.53	0.30		
2-Amino-4,6-dinitrotoluene	1		11.45	11.40	11.60	0.10		135.4
	2		18.23	18.12	18.42	0.52		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25A-7-25 Lab Sample ID: 280-155015-1

Matrix: Water Lab File ID: 11050014.D

Analysis Method: 8330A Date Collected: 10/31/2021 12:45

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 480.9(mL) Date Analyzed: 11/05/2021 16:23

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.087
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U M Q	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U M Q	0.43	0.42	0.10
2691-41-0	HMX	0.21	U Q	0.22	0.21	0.091
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M Q	0.22	0.21	0.095
121-82-4	RDX	0.21	U M Q	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U M Q	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	122	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050014.D
Lims ID: 280-155015-A-1-A
Client ID: EW7-PM25A-7-25
Sample Type: Client
Inject. Date: 05-Nov-2021 16:23:49 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-1-A
Misc. Info.: 280-0106237-014
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:39:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1		7.632			ND	U
$ 10 1,2-Dinitrobenzene	1	8.576	8.606	-0.030	31248	0.2437	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1	9.309	9.365	-0.056	13959	0.0471	M
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	U
23 p-Nitrotoluene	1		13.152			ND	U
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

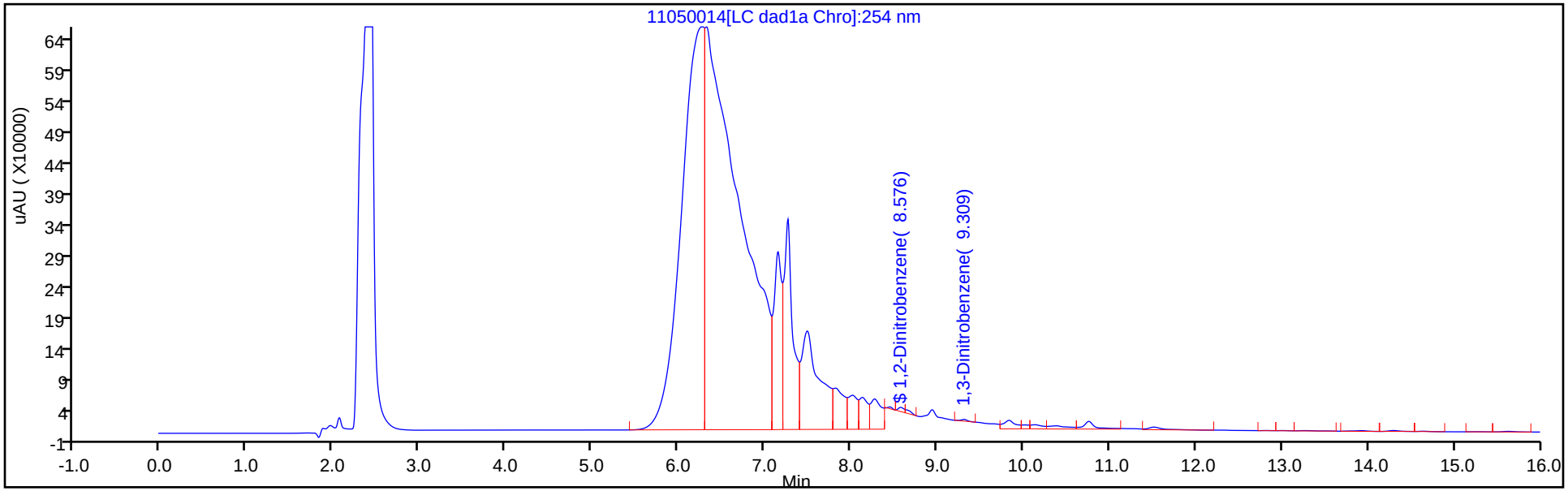
Report Date: 06-Nov-2021 10:24:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

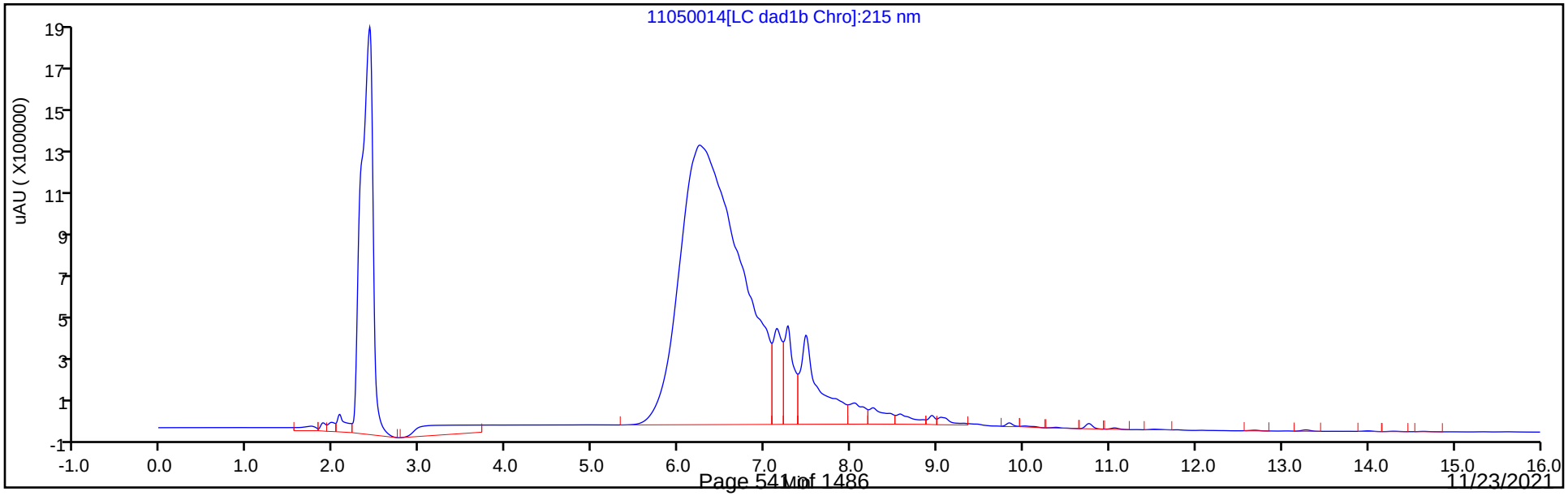
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d

Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1	Worklist Smp#:	14
Client ID:	EW7-PM25A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050014.D				
Lims ID:	280-155015-A-1-A				
Client ID:	EW7-PM25A-7-25				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 16:23:49	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-1-A				
Misc. Info.:	280-0106237-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 17:39:59		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2437	121.86

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

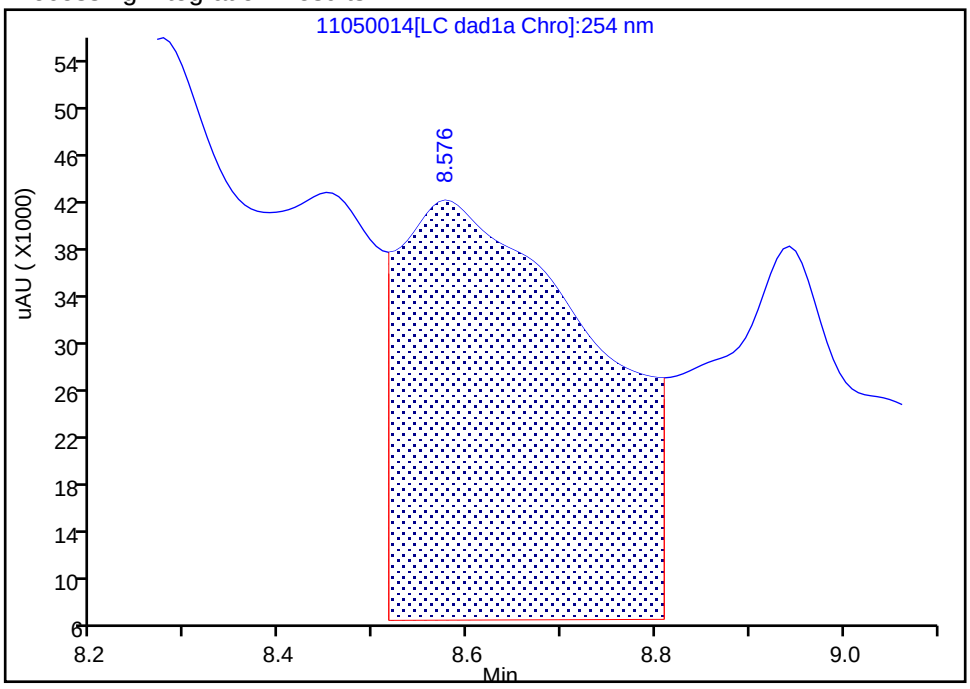
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d				
Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

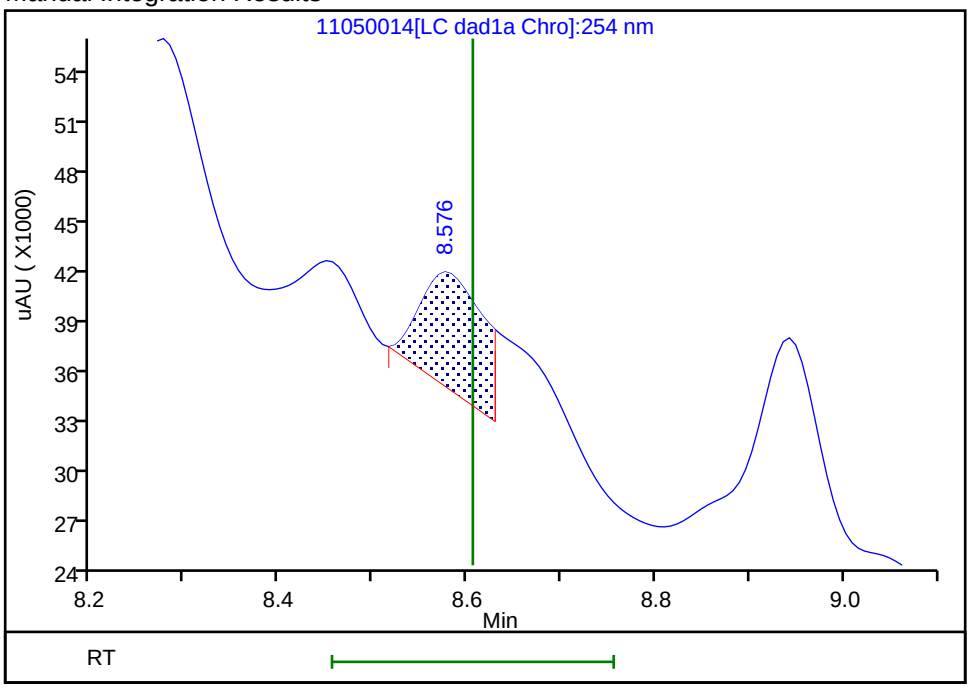
Processing Integration Results

RT: 8.58
Area: 496476
Amount: 3.872148
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 31248
Amount: 0.243711
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:39:53

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

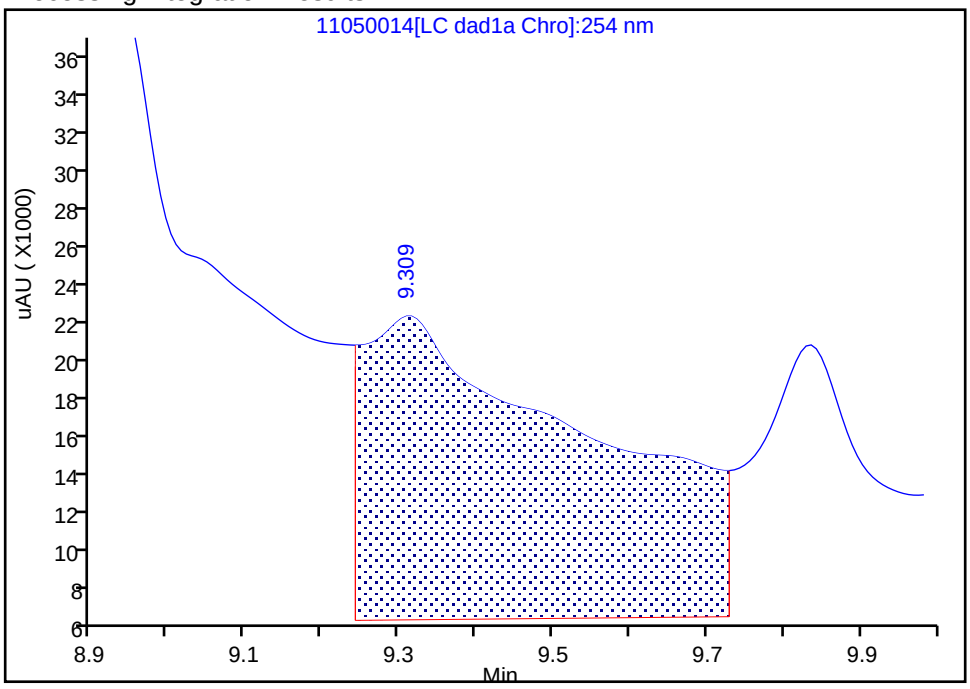
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d				
Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

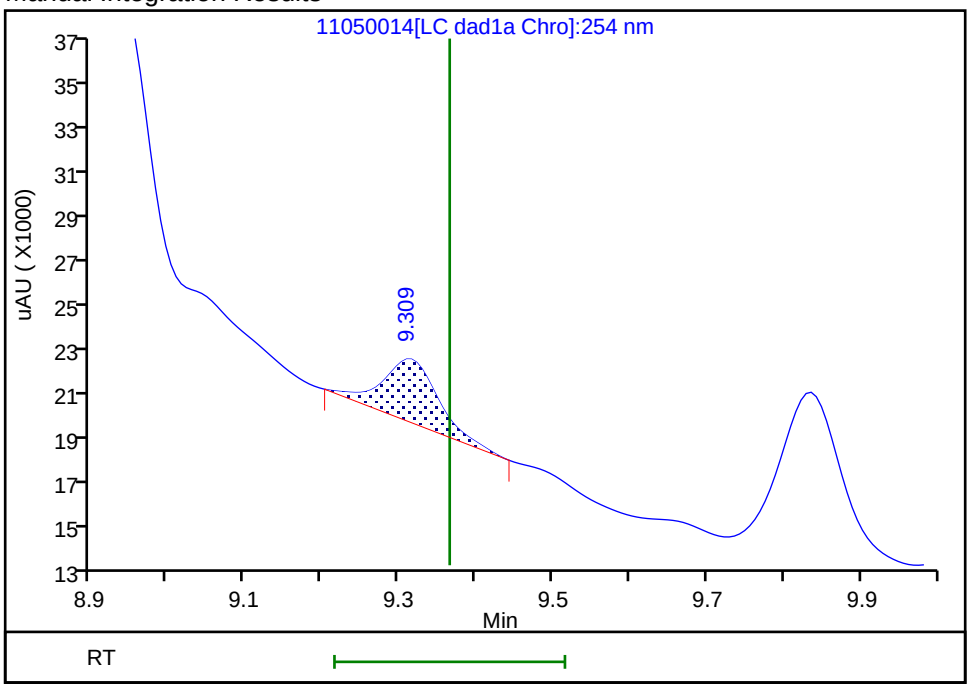
Processing Integration Results

RT: 9.31
Area: 312796
Amount: 1.055569
Amount Units: ug/mL



Manual Integration Results

RT: 9.31
Area: 13959
Amount: 0.047106
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:39:39

Audit Action: Manually Integrated Audit Reason: Baseline

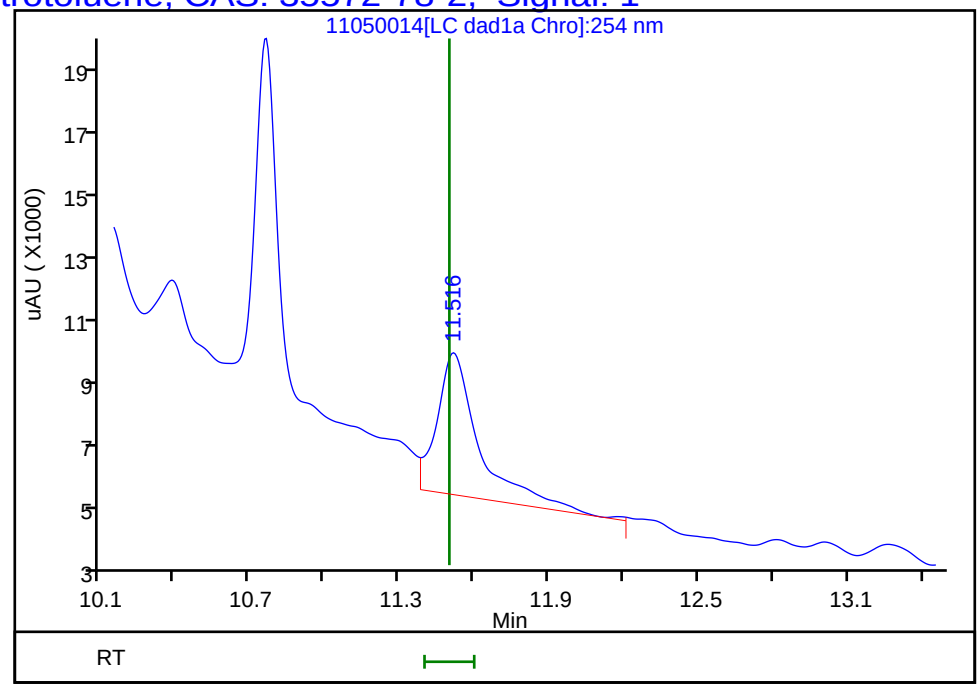
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d				
Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
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		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.52
Response: 48796
Amount: 0.235814



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

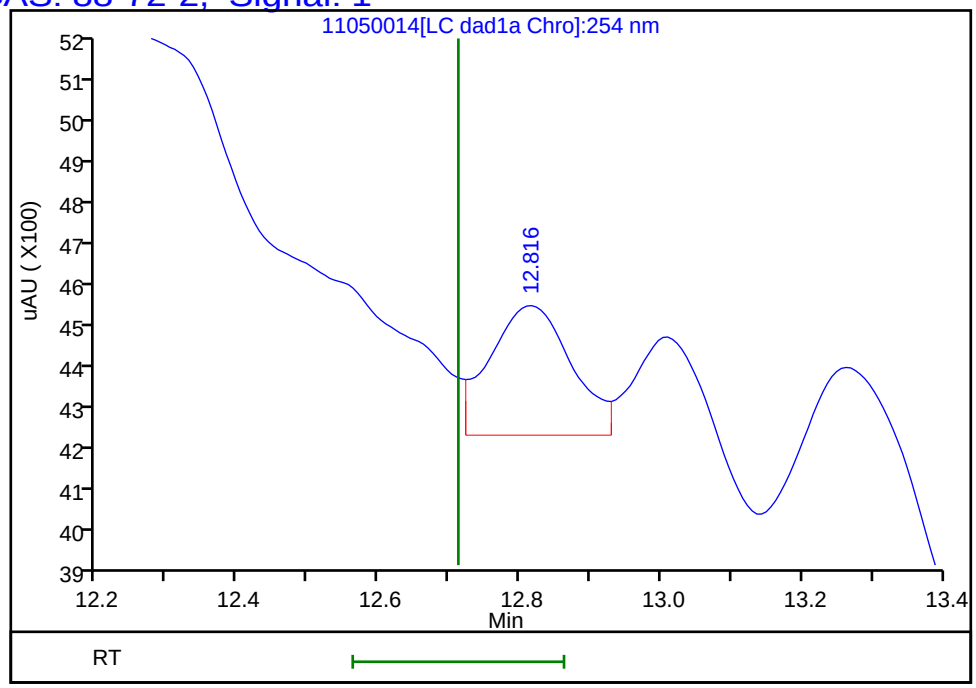
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d
Injection Date: 05-Nov-2021 16:23:49 Instrument ID: CHHPLC_X3
Lims ID: 280-155015-A-1-A Lab Sample ID: 280-155015-1
Client ID: EW7-PM25A-7-25
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

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.82
Response: 2316
Amount: 0.018039



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

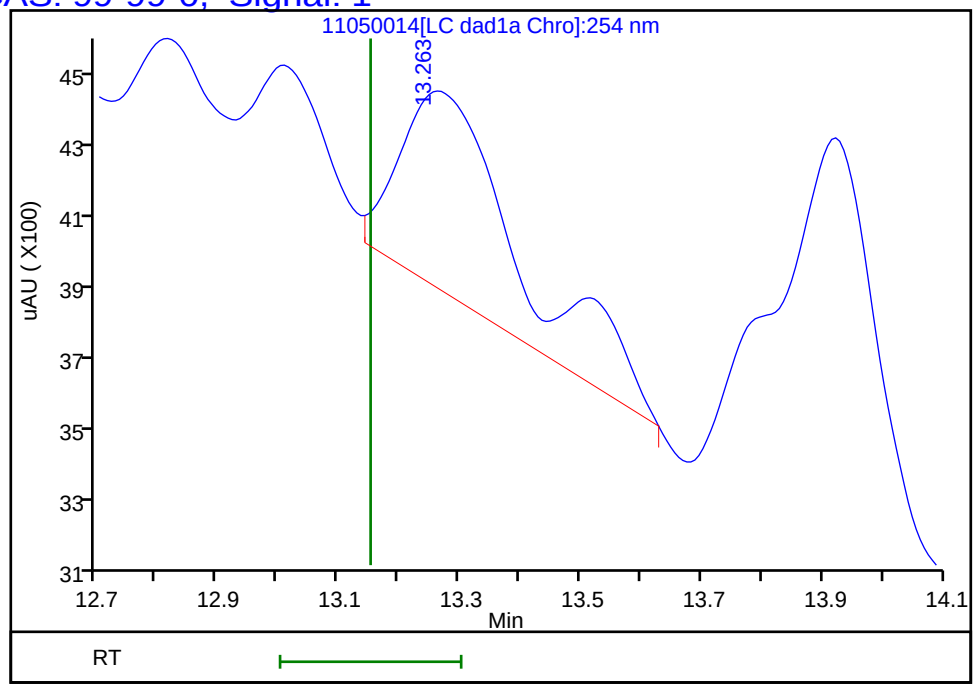
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d				
Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
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		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.26
Response: 7343
Amount: 0.065614



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

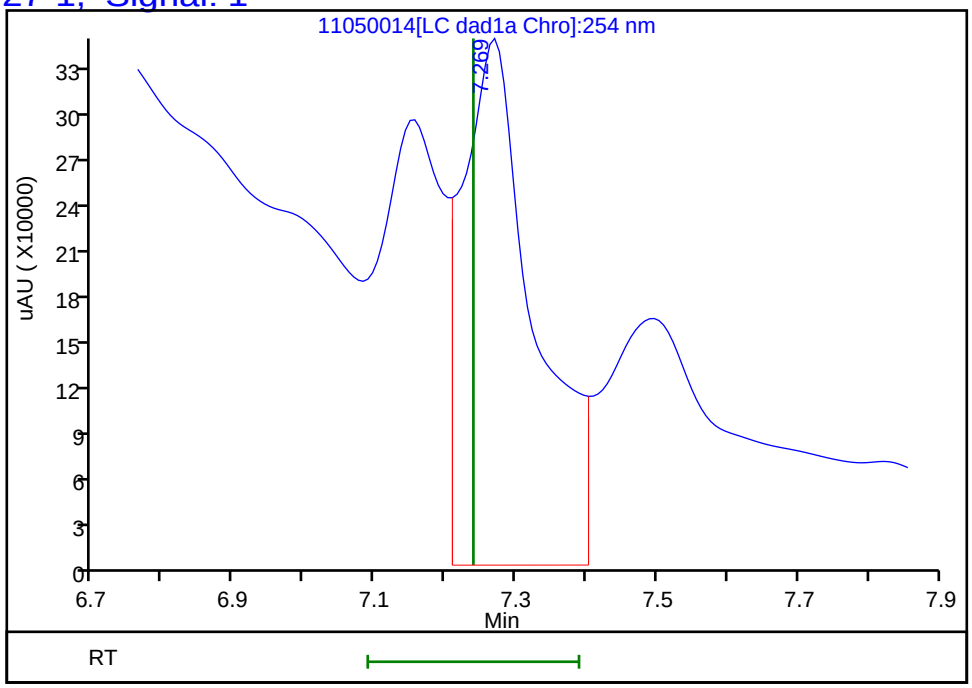
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d				
Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 2374022
Amount: 18.214024



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

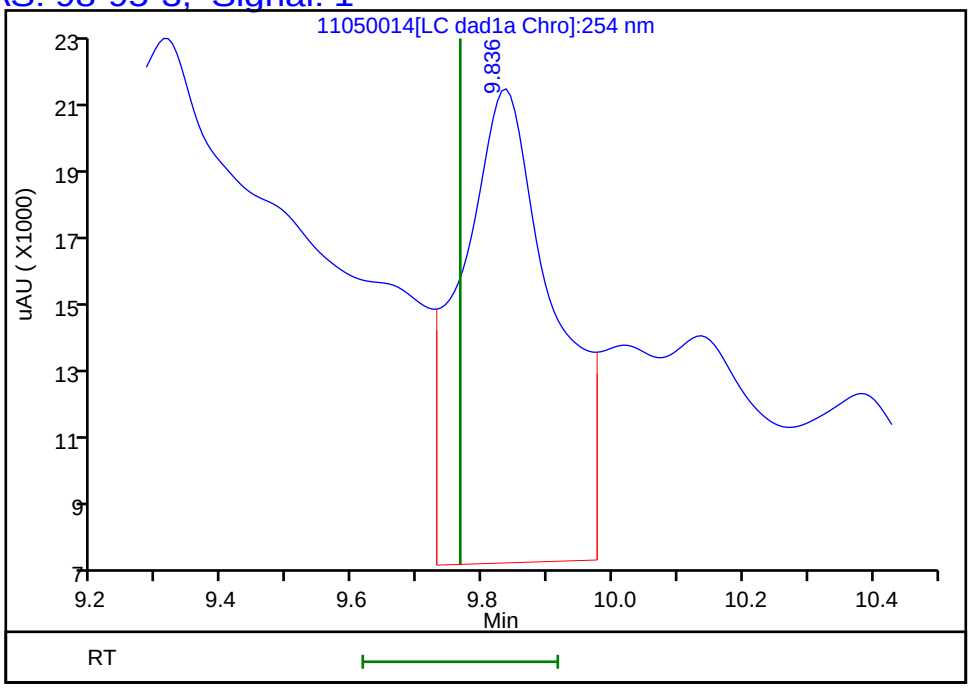
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d				
Injection Date:	05-Nov-2021 16:23:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
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		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.84
Response: 135671
Amount: 0.694730



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

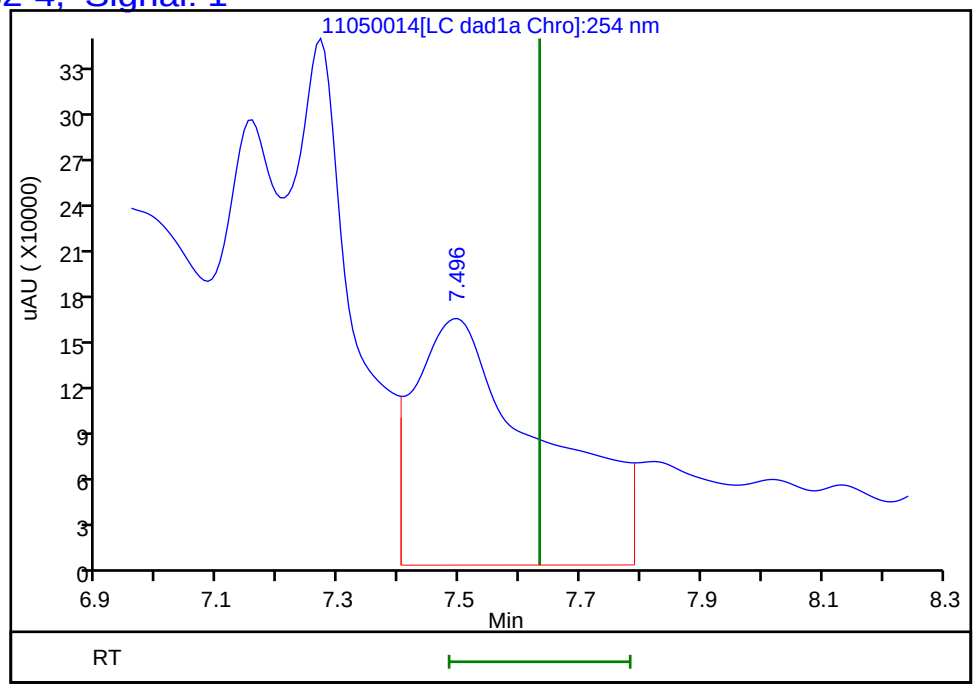
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d
Injection Date: 05-Nov-2021 16:23:49 Instrument ID: CHHPLC_X3
Lims ID: 280-155015-A-1-A Lab Sample ID: 280-155015-1
Client ID: EW7-PM25A-7-25
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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.50
Response: 2317371
Amount: 21.808197



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

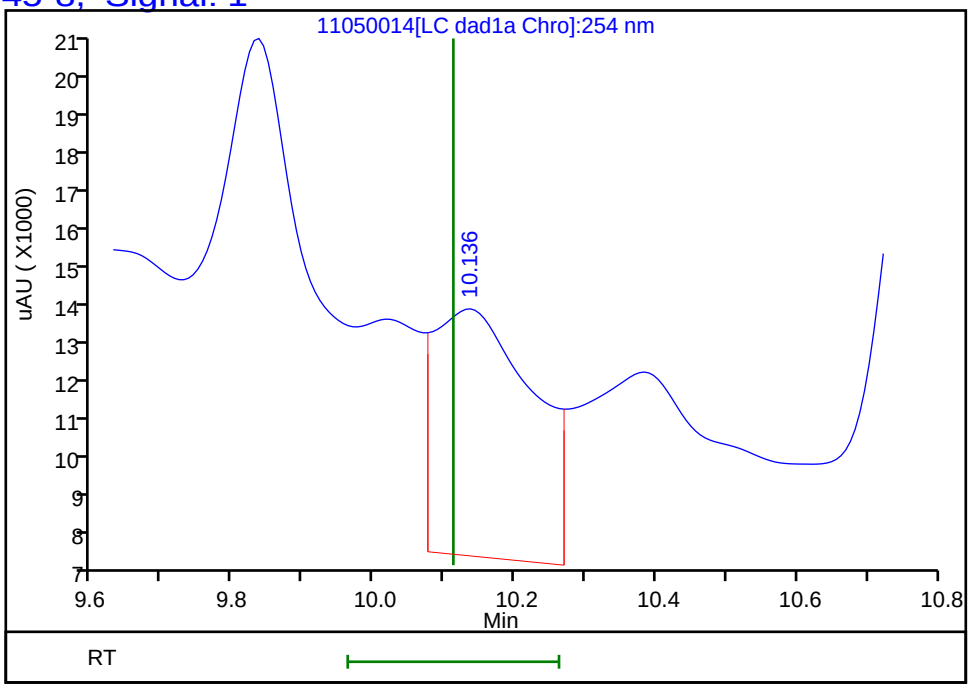
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050014.d
Injection Date: 05-Nov-2021 16:23:49 Instrument ID: CHHPLC_X3
Lims ID: 280-155015-A-1-A Lab Sample ID: 280-155015-1
Client ID: EW7-PM25A-7-25
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.14
Response: 63091
Amount: 0.365915



Reviewer: zhangji, 05-Nov-2021 17:39:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25A-7-25 Lab Sample ID: 280-155015-1

Matrix: Water Lab File ID: 11050028.D

Analysis Method: 8330A Date Collected: 10/31/2021 12:45

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 480.9(mL) Date Analyzed: 11/06/2021 02:09

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.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	107	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D
Lims ID: 280-155015-A-1-A
Client ID: EW7-PM25A-7-25
Sample Type: Client
Inject. Date: 06-Nov-2021 02:09:55 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-1-A
Misc. Info.: 280-0106238-028
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:34:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	
	6 MNX	1	7.354	7.384	-0.030	7167	0.0271	
	8 RDX	1		8.825			ND	U
	9 Nitrobenzene	1		11.885			ND	
$	10 1,2-Dinitrobenzene	1	12.927	12.978	-0.051	56687	0.2134	M
	12 1,3-Dinitrobenzene	1		15.398			ND	U
	14 o-Nitrotoluene	1	16.634	16.631	0.003	18853	0.0757	M
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.265			ND	U
	20 1,3,5-Trinitrobenzene	1		18.785			ND	U
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1		25.098			ND	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

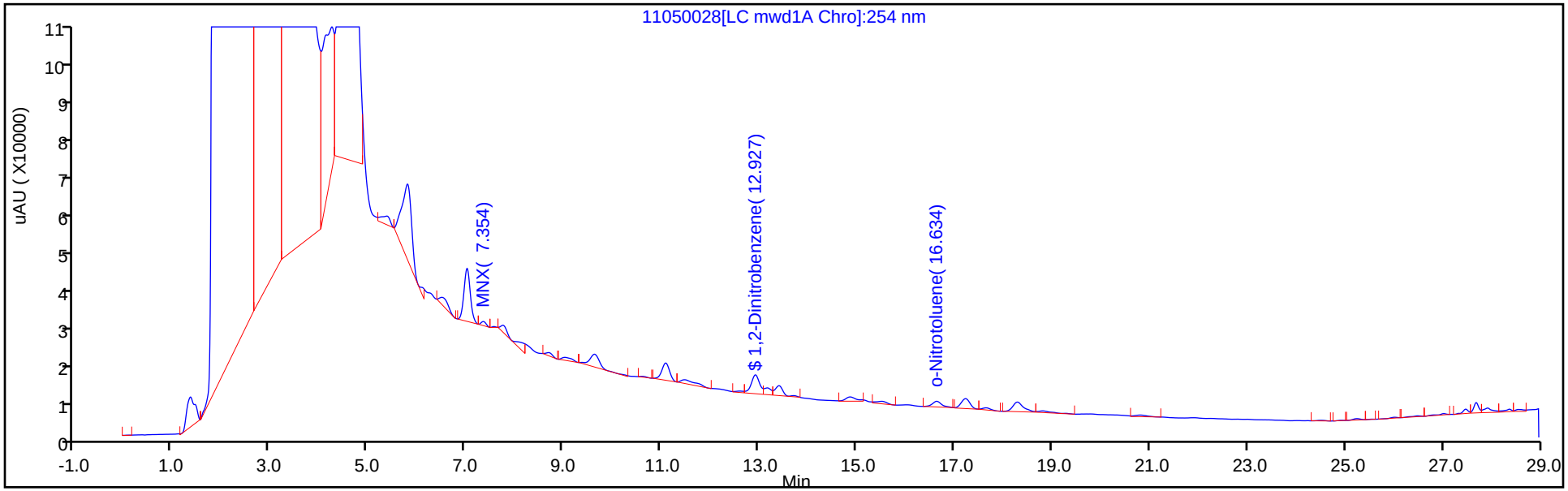
Report Date: 06-Nov-2021 12:42:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

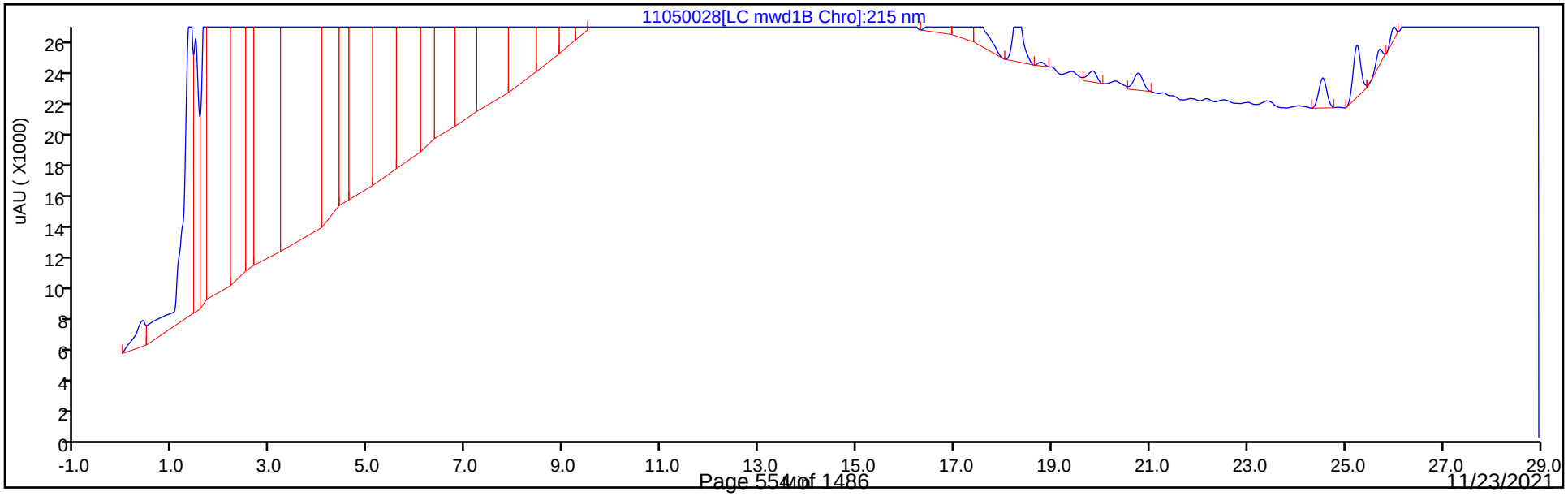
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D

Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1	Worklist Smp#:	28
Client ID:	EW7-PM25A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Lims ID:	280-155015-A-1-A				
Client ID:	EW7-PM25A-7-25				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 02:09:55	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-1-A				
Misc. Info.:	280-0106238-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:04	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:34:35		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2134	106.69

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

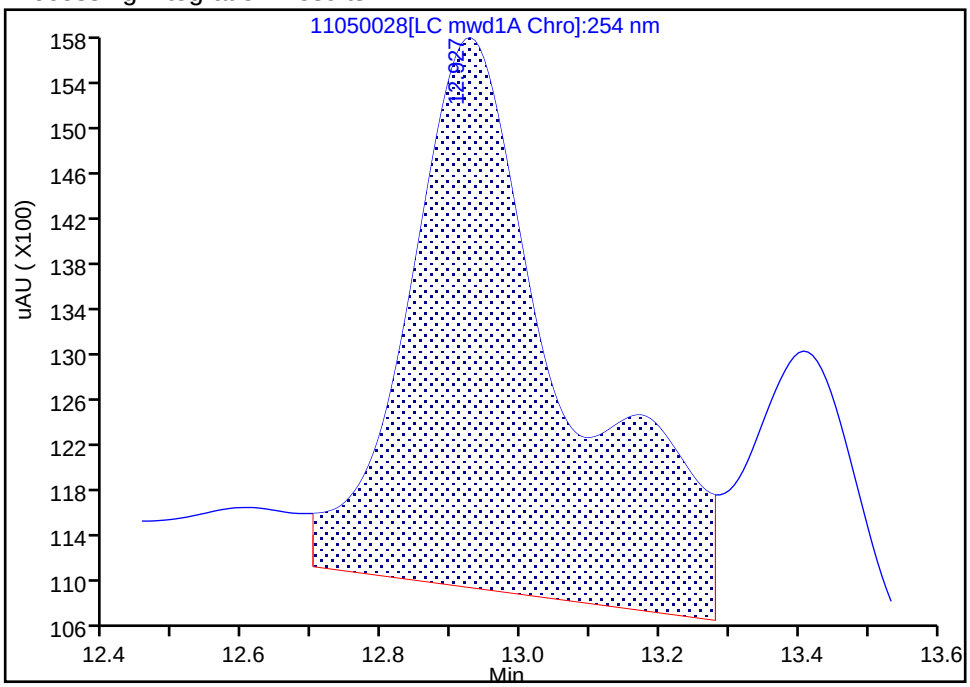
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

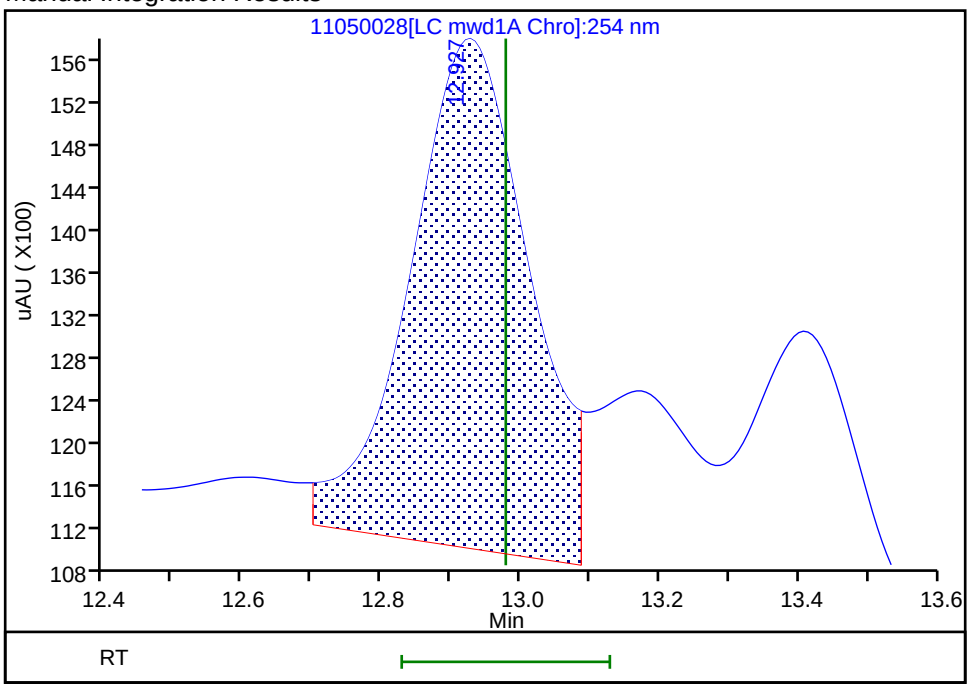
Processing Integration Results

RT: 12.93
Area: 74600
Amount: 0.280811
Amount Units: ug/ml



Manual Integration Results

RT: 12.93
Area: 56687
Amount: 0.213382
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:34:12

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

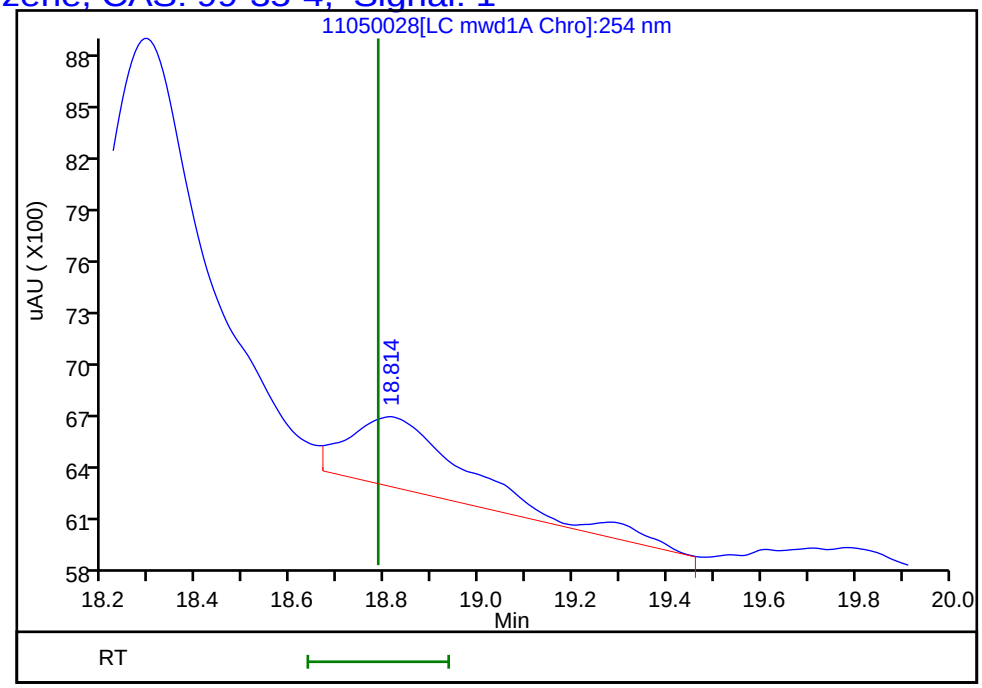
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 18.81
Response: 7686
Amount: 0.011725



Reviewer: zhangji, 06-Nov-2021 12:34:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

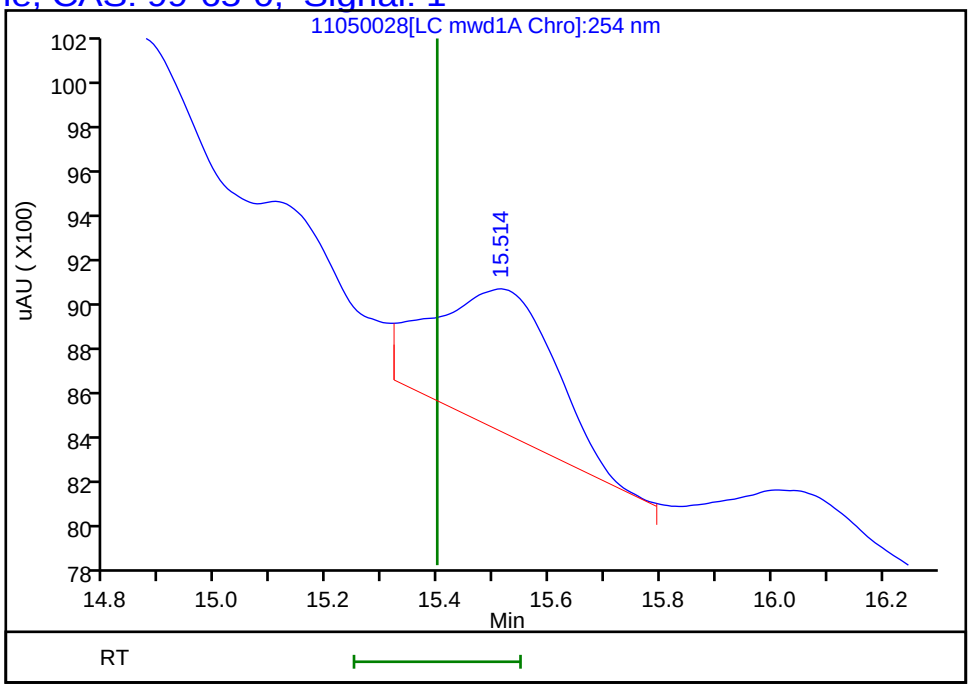
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.51
Response: 9429
Amount: 0.014310



Reviewer: zhangji, 06-Nov-2021 12:34:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

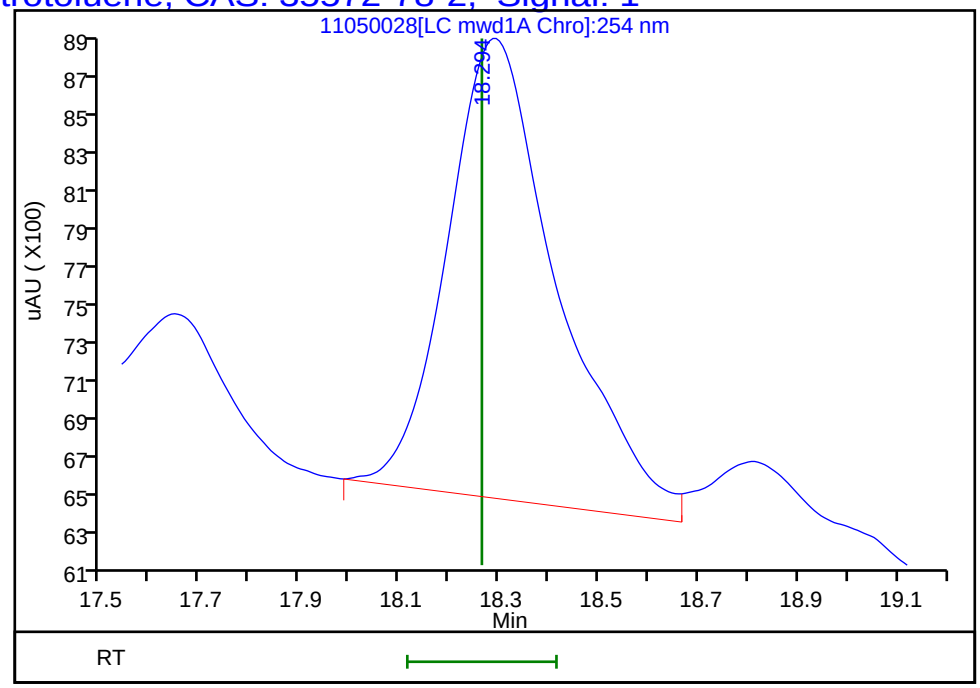
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 18.29
Response: 37225
Amount: 0.092269



Reviewer: zhangji, 06-Nov-2021 12:34:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

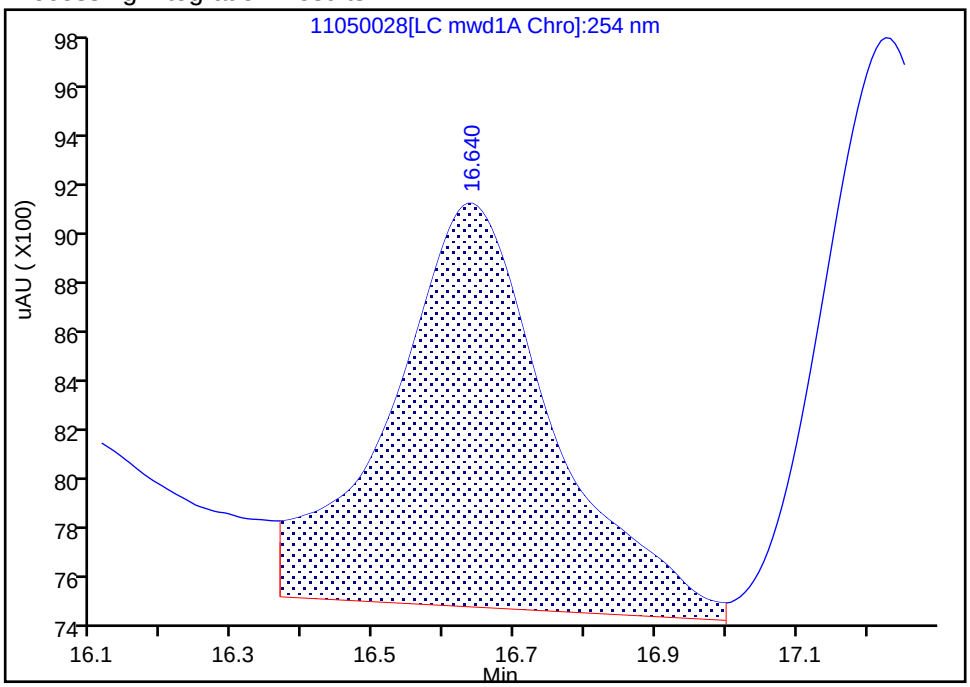
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

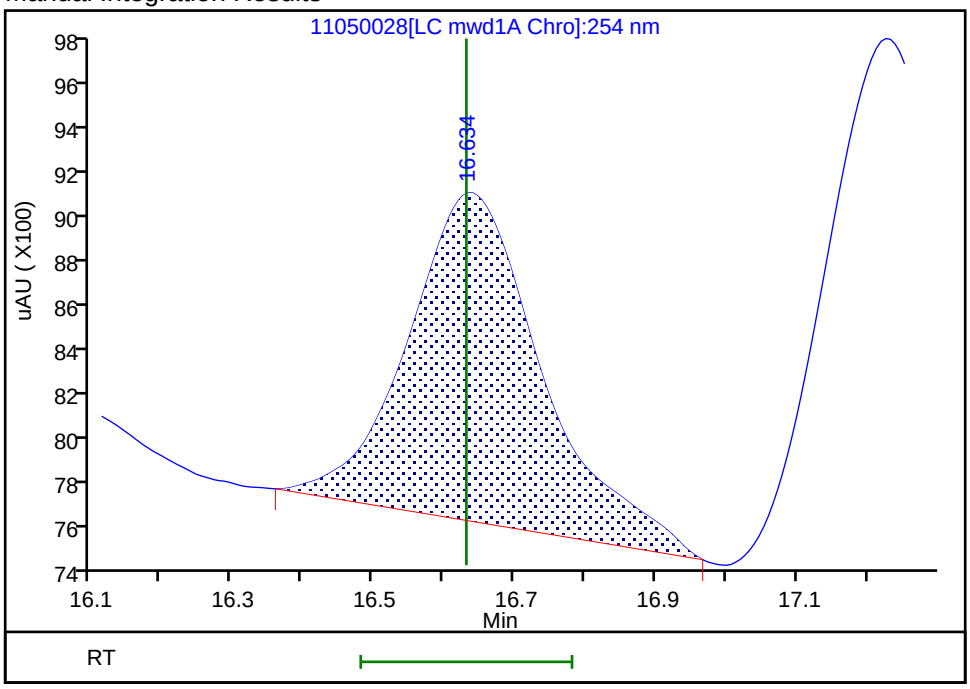
Processing Integration Results

RT: 16.64
Area: 26053
Amount: 0.104644
Amount Units: ug/ml



Manual Integration Results

RT: 16.63
Area: 18853
Amount: 0.075725
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:34:29

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

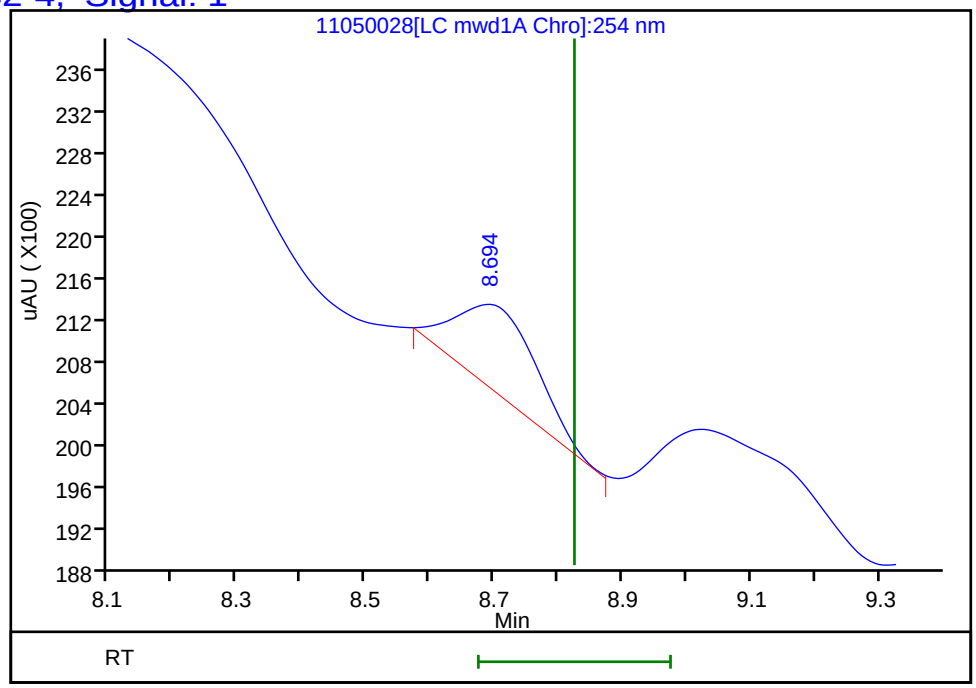
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050028.D				
Injection Date:	06-Nov-2021 02:09:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-1-A	Lab Sample ID:	280-155015-1		
Client ID:	EW7-PM25A-7-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 8.69
Response: 7226
Amount: 0.035375



Reviewer: zhangji, 06-Nov-2021 12:34:35
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

Matrix: Water Lab File ID: 11050015.D

Analysis Method: 8330A Date Collected: 10/31/2021 14:50

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 505.5(mL) Date Analyzed: 11/05/2021 16:46

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.083
118-96-7	2,4,6-Trinitrotoluene	0.099	U Q	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U Q M	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U Q	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U Q M	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U Q M	0.41	0.40	0.099
2691-41-0	HMX	0.20	U Q	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U Q M	0.21	0.20	0.090
121-82-4	RDX	1.1	Q M J1	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U Q M	0.11	0.099	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	Q M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050015.D
Lims ID: 280-155015-A-2-A
Client ID: EW7-PM25B-7-35
Sample Type: Client
Inject. Date: 05-Nov-2021 16:46:43 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-2-A
Misc. Info.: 280-0106237-015
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:40:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.636	7.632	0.004	12231	0.1151	M
$ 10 1,2-Dinitrobenzene	1	8.583	8.606	-0.023	20925	0.1632	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1	9.323	9.365	-0.042	1877	0.006334	M
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	U
22 o-Nitrotoluene	1		12.712			ND	7
23 p-Nitrotoluene	1		13.152			ND	U
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

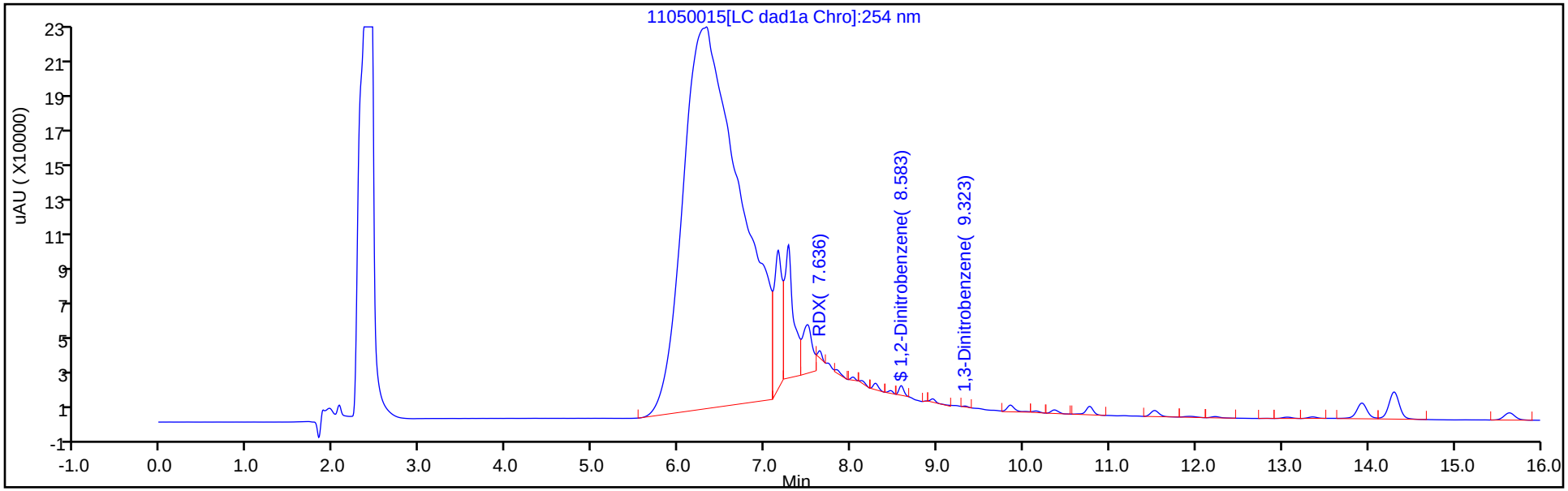
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Nov-2021 10:24:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

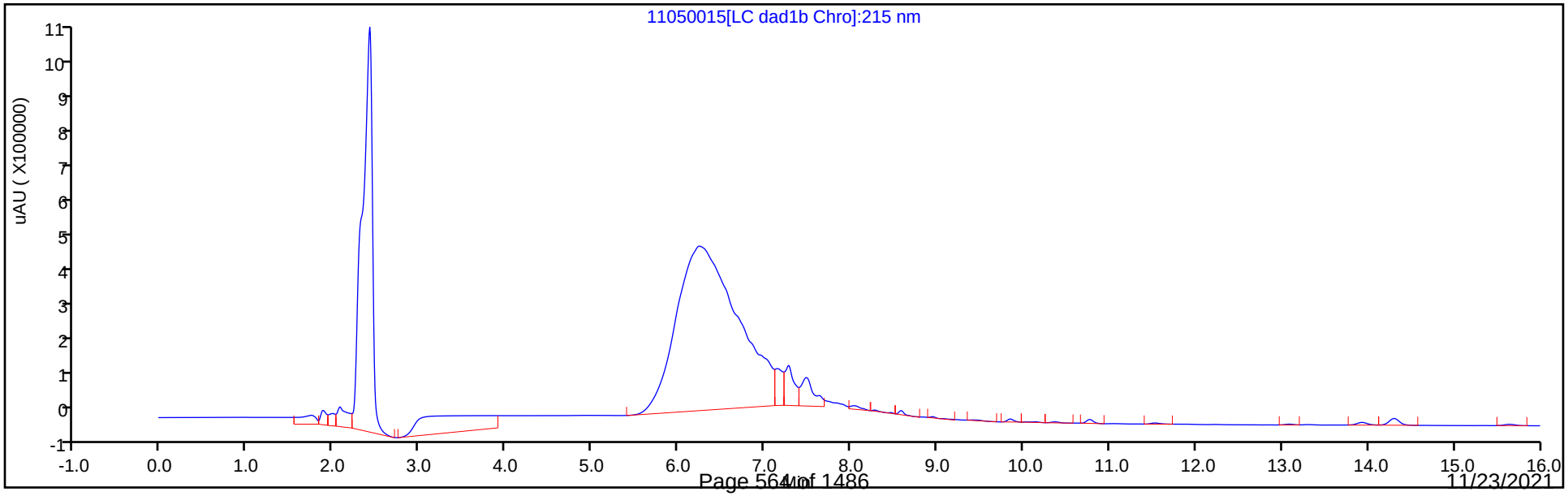
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2	Worklist Smp#:	15
Client ID:	EW7-PM25B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050015.D				
Lims ID:	280-155015-A-2-A				
Client ID:	EW7-PM25B-7-35				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 16:46:43	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-2-A				
Misc. Info.:	280-0106237-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 17:40:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1632	81.60

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

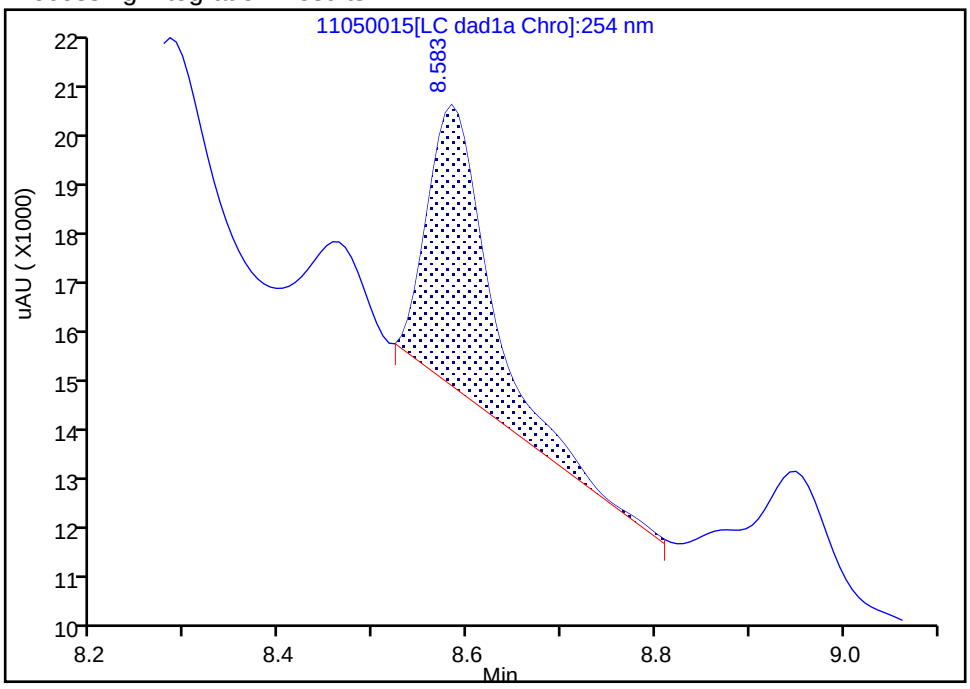
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

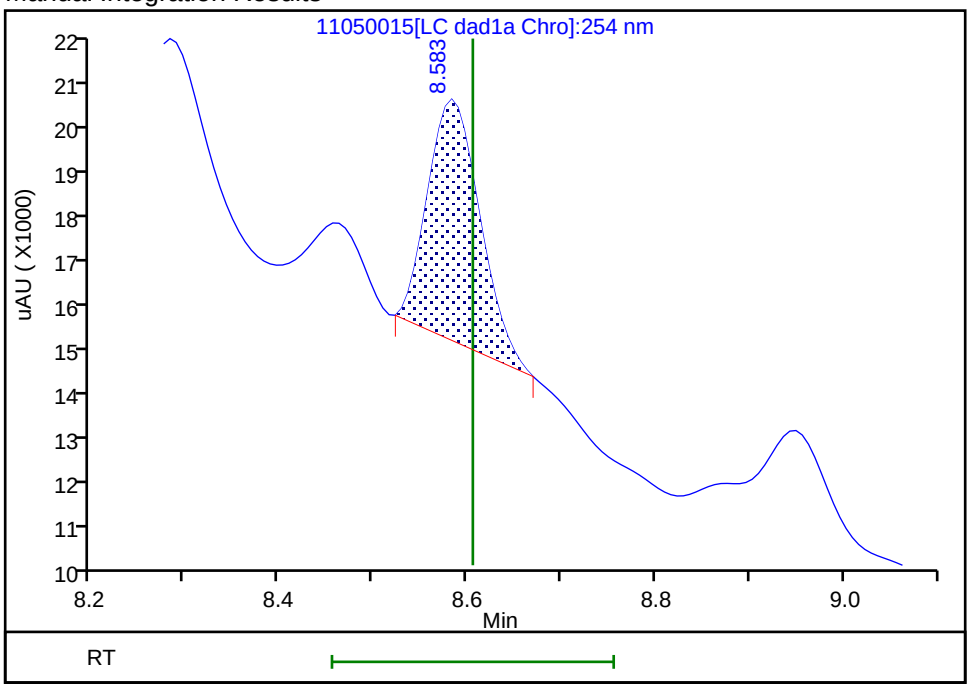
Processing Integration Results

RT: 8.58
Area: 26136
Amount: 0.203842
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 20925
Amount: 0.163200
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:40:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

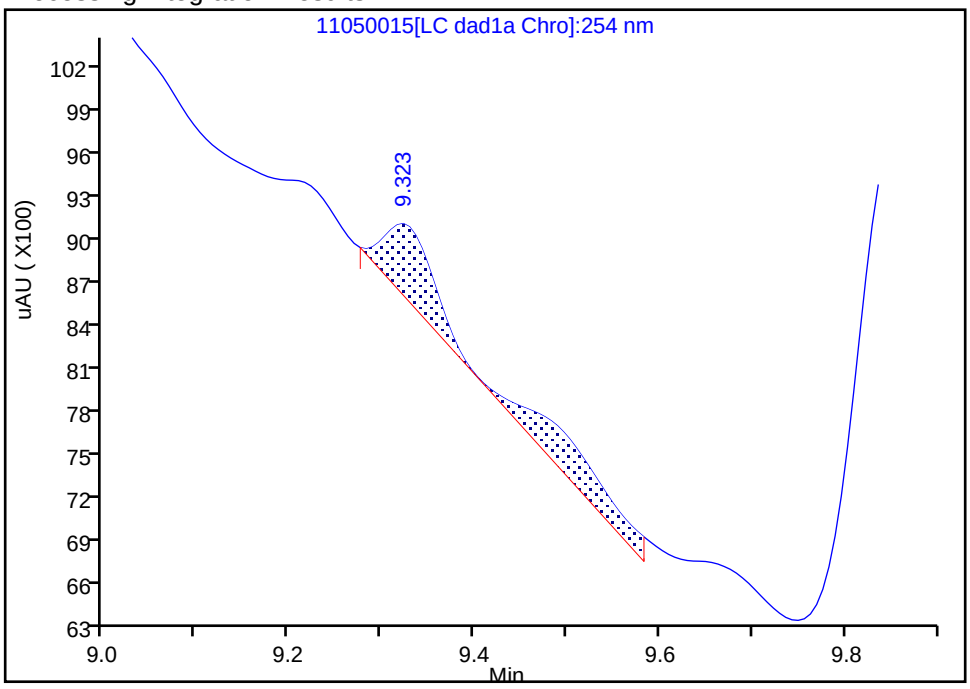
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

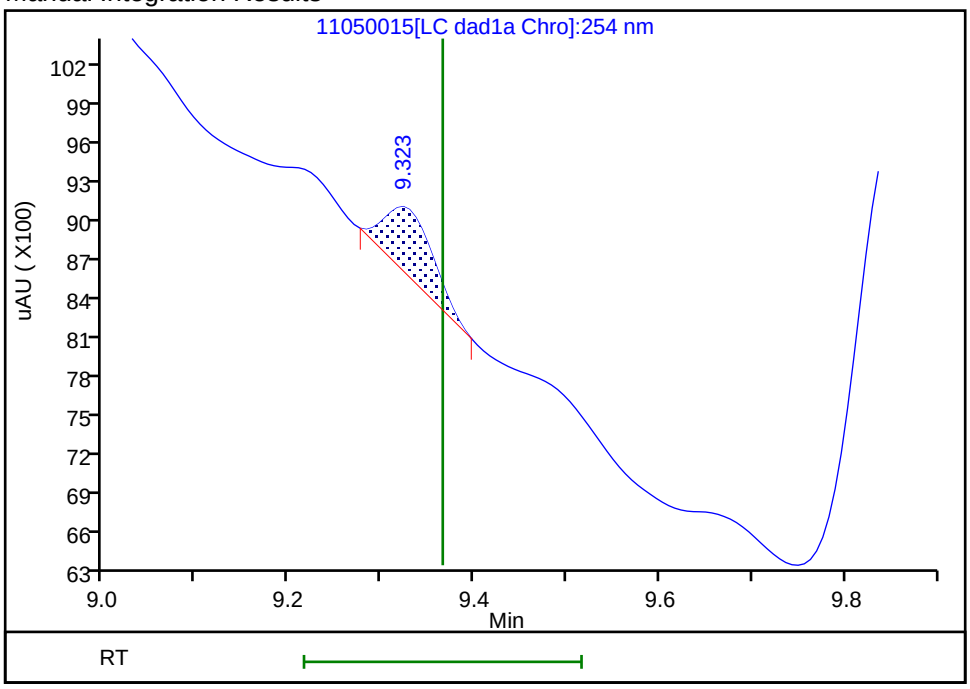
Processing Integration Results

RT: 9.32
Area: 3762
Amount: 0.012695
Amount Units: ug/mL



Manual Integration Results

RT: 9.32
Area: 1877
Amount: 0.006334
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:40:23

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

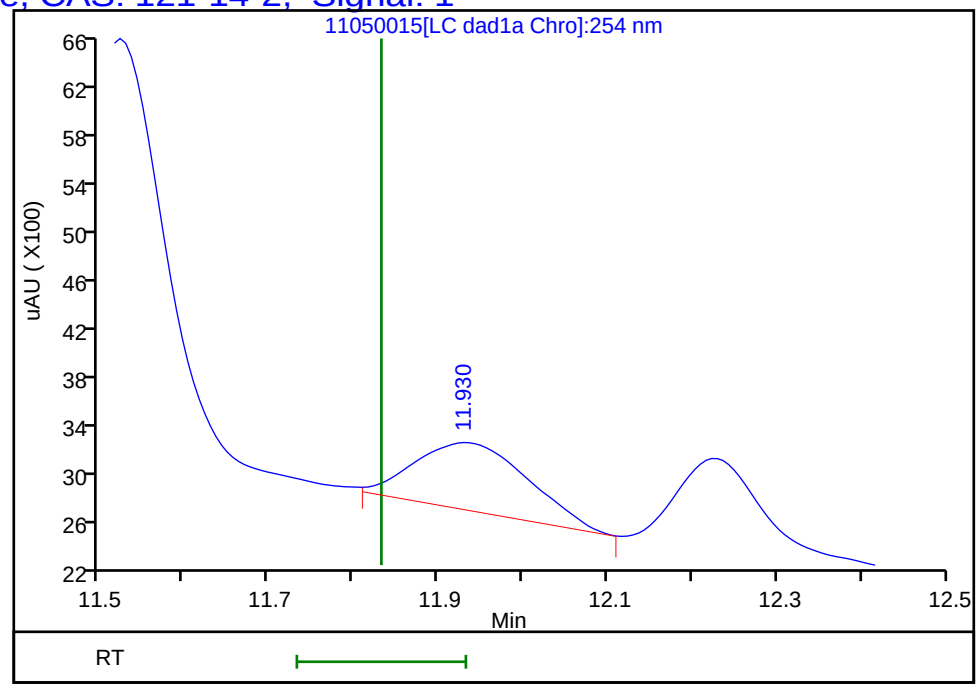
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d

Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
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		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.93
Response: 5146
Amount: 0.017930



Reviewer: zhangji, 05-Nov-2021 17:40:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

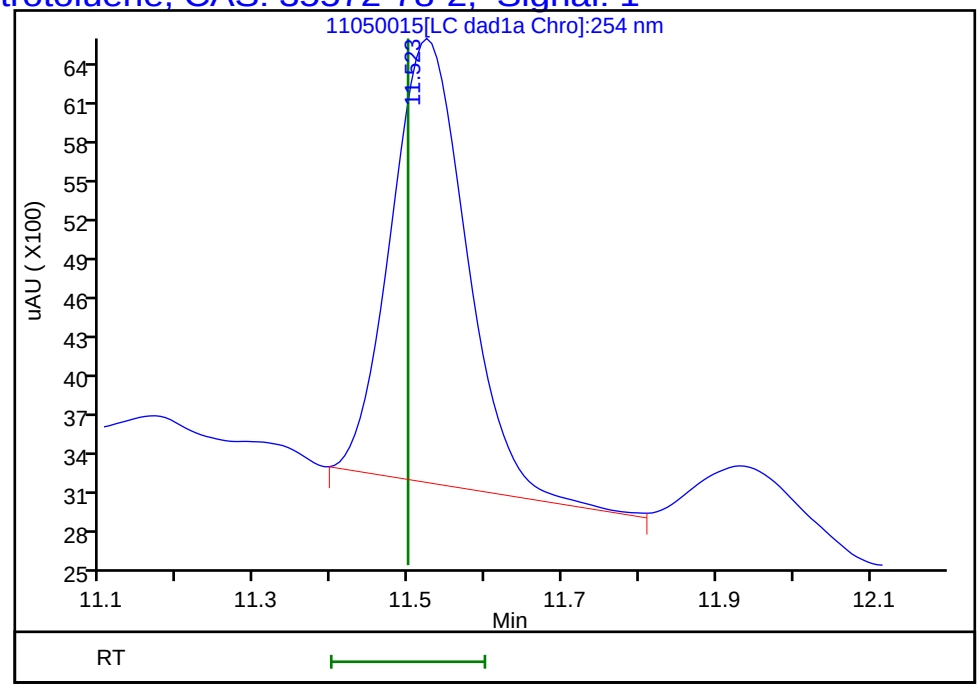
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
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		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.52
Response: 23506
Amount: 0.113596



Reviewer: zhangji, 05-Nov-2021 17:40:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

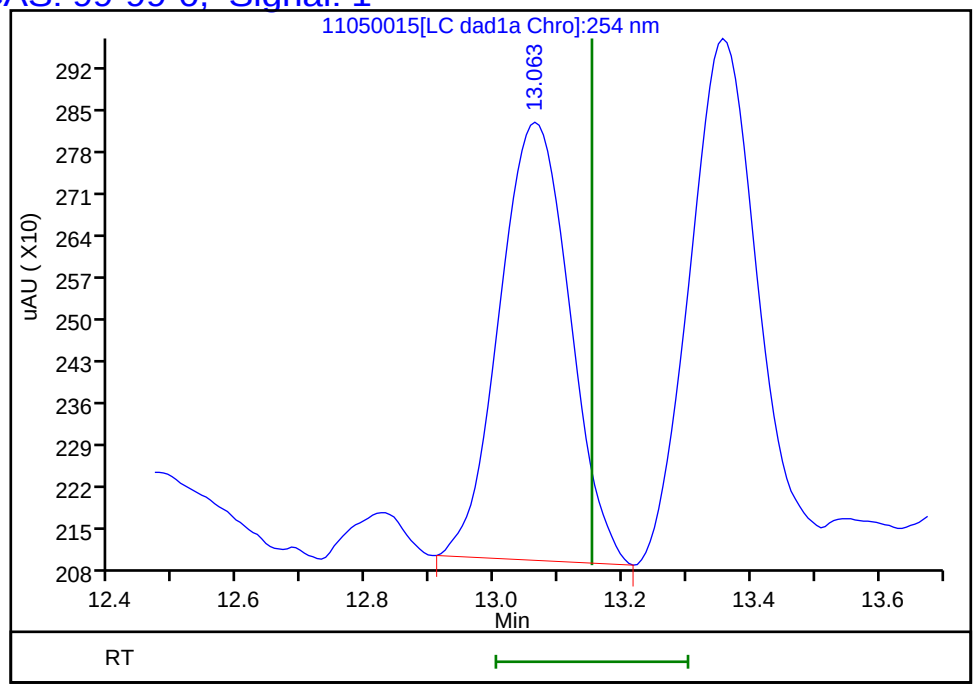
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
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		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.06
Response: 5547
Amount: 0.049565



Reviewer: zhangji, 05-Nov-2021 17:40:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

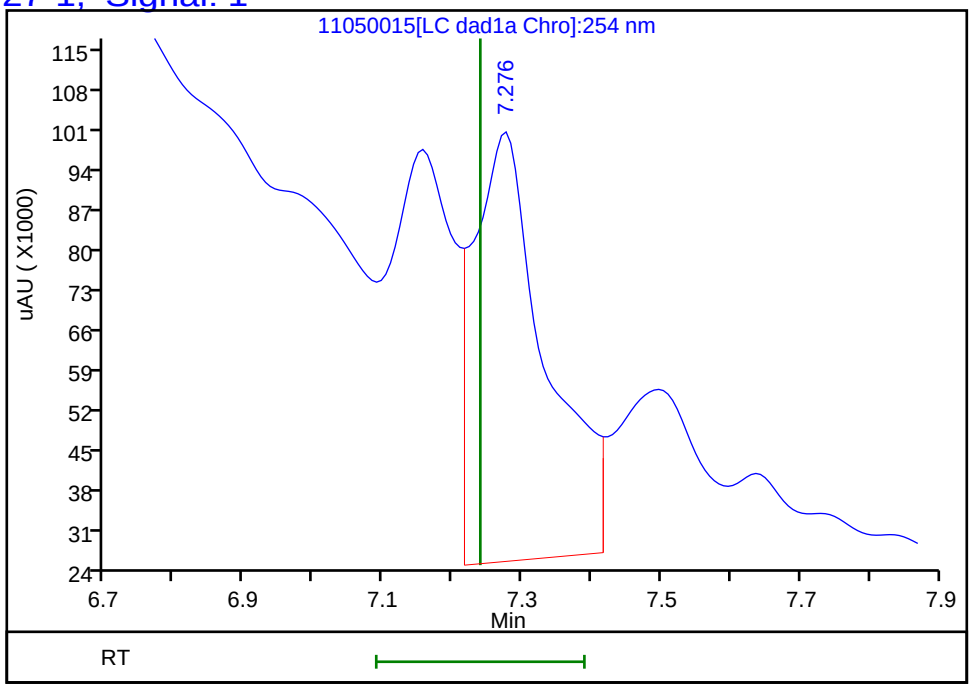
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
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		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.28
Response: 537356
Amount: 4.122715



Reviewer: zhangji, 05-Nov-2021 17:40:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

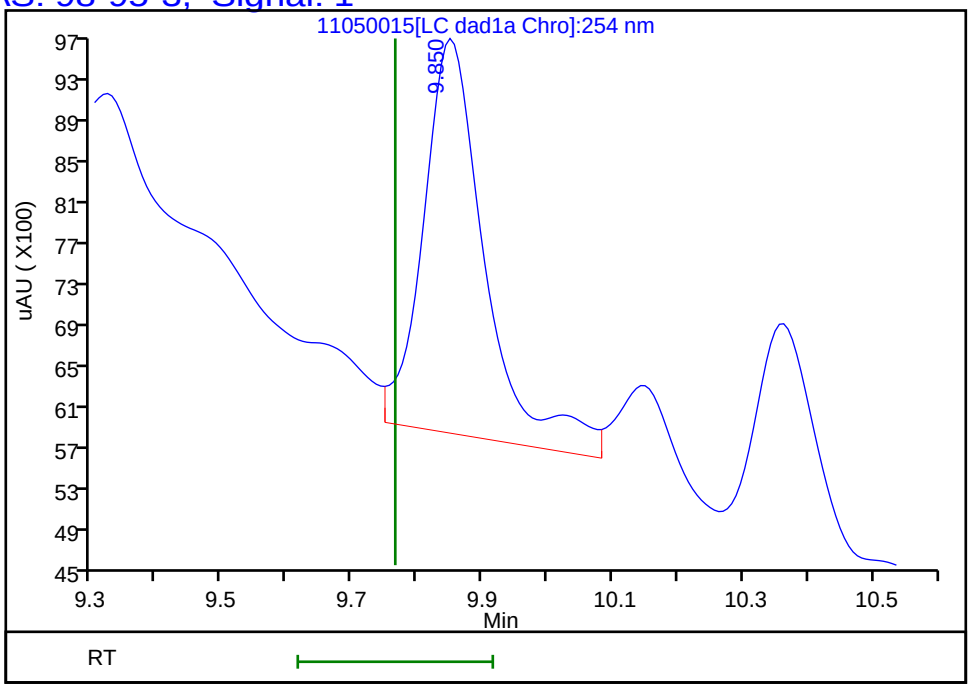
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
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		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.85
Response: 24908
Amount: 0.127546



Reviewer: zhangji, 05-Nov-2021 17:40:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

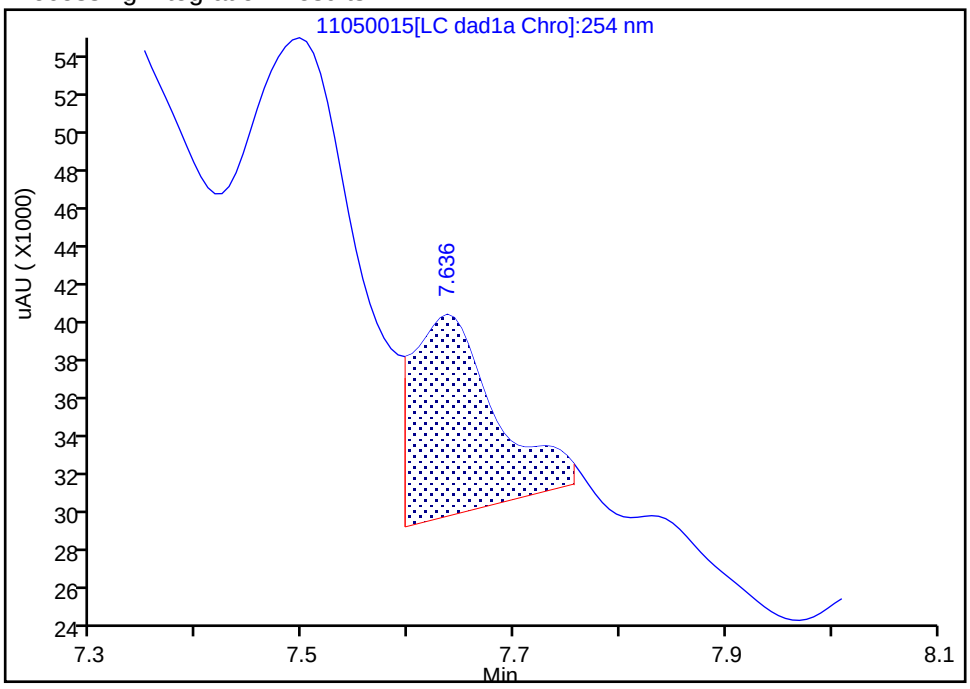
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

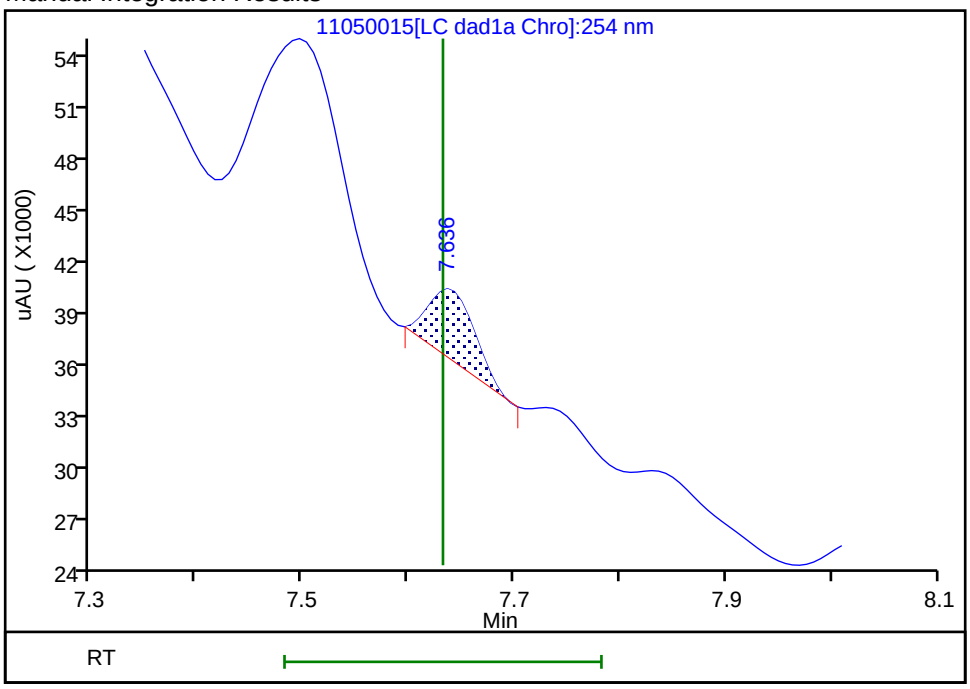
Processing Integration Results

RT: 7.64
Area: 57273
Amount: 0.538982
Amount Units: ug/mL



Manual Integration Results

RT: 7.64
Area: 12231
Amount: 0.115103
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:40:10

Audit Action: Manually Integrated Audit Reason: Baseline

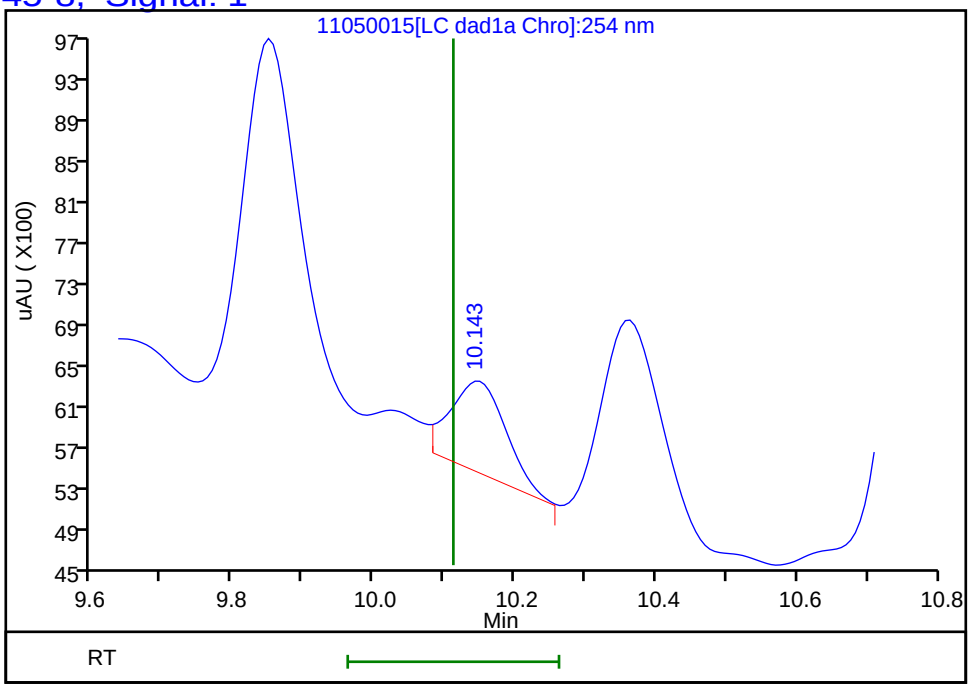
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050015.d				
Injection Date:	05-Nov-2021 16:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
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		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.14
Response: 4763
Amount: 0.027624



Reviewer: zhangji, 05-Nov-2021 17:40:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

Matrix: Water Lab File ID: 11050029.D

Analysis Method: 8330A Date Collected: 10/31/2021 14:50

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 505.5(mL) Date Analyzed: 11/06/2021 02:44

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.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.036
121-82-4	*RDX*	*0.39*	*J1*	*0.21*	0.20	*0.051*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050029.D
Lims ID: 280-155015-A-2-A
Client ID: EW7-PM25B-7-35
Sample Type: Client
Inject. Date: 06-Nov-2021 02:44:54 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-2-A
Misc. Info.: 280-0106238-029
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:35:07

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	
	6 MNX	1	7.326	7.384	-0.058	34130	0.1289	
	8 RDX	1	8.693	8.825	-0.132	8004	0.0392	
	9 Nitrobenzene	1	11.766	11.885	-0.119	19344	0.0516	
$	10 1,2-Dinitrobenzene	1	12.899	12.978	-0.079	47598	0.1792	M
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1		16.631			ND	U
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.239	18.265	-0.026	51025	0.1277	
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1		25.098			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

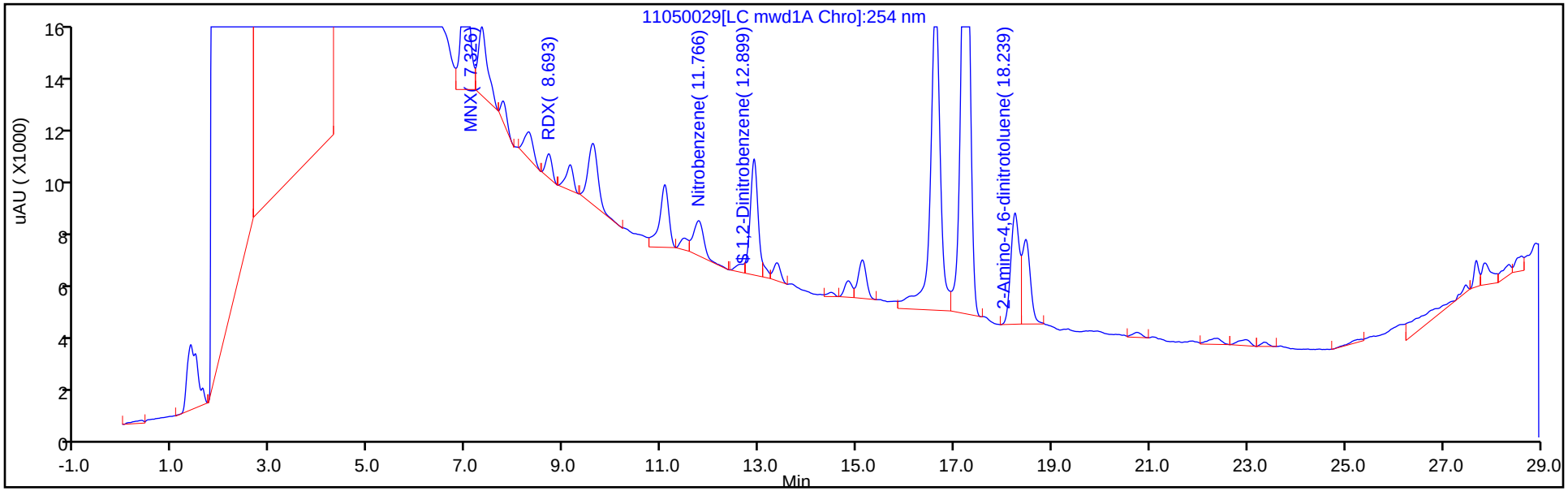
Report Date: 06-Nov-2021 12:42:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

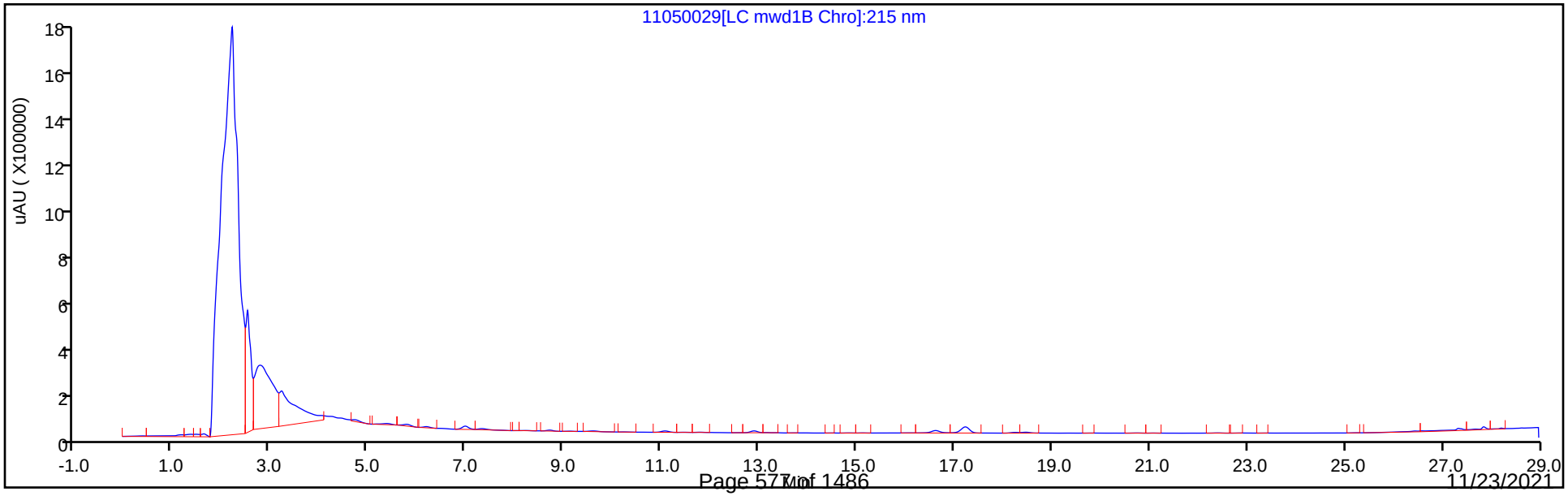
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050029.D

Injection Date:	06-Nov-2021 02:44:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2	Worklist Smp#:	29
Client ID:	EW7-PM25B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050029.D				
Lims ID:	280-155015-A-2-A				
Client ID:	EW7-PM25B-7-35				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 02:44:54	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-2-A				
Misc. Info.:	280-0106238-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:04	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:35:07		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1792	89.58

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

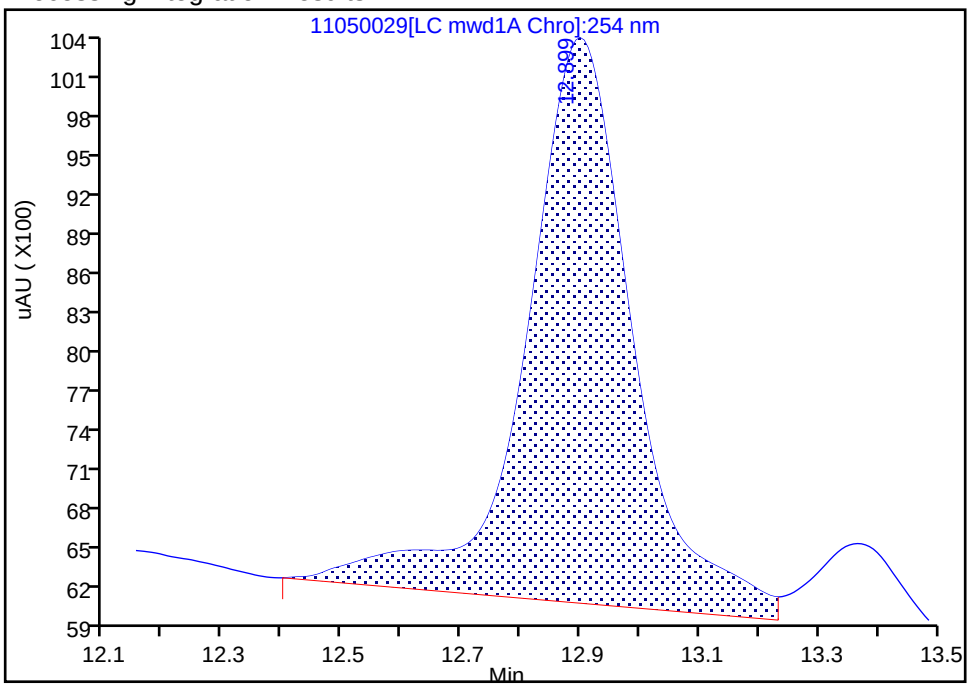
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050029.D				
Injection Date:	06-Nov-2021 02:44:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

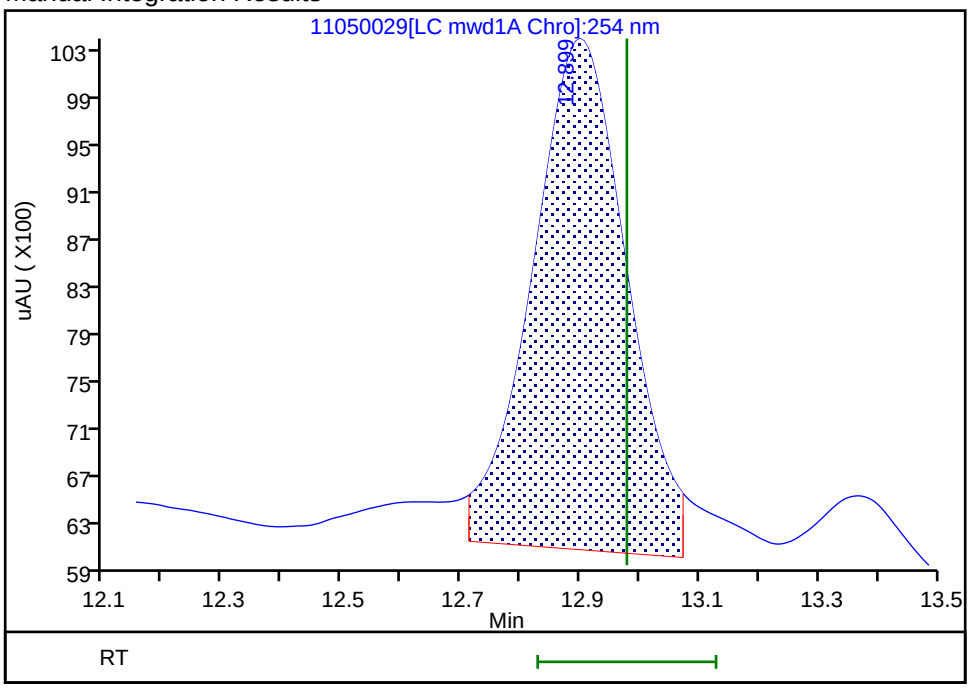
Processing Integration Results

RT: 12.90
Area: 54452
Amount: 0.204969
Amount Units: ug/ml



Manual Integration Results

RT: 12.90
Area: 47598
Amount: 0.179169
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:34:45

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

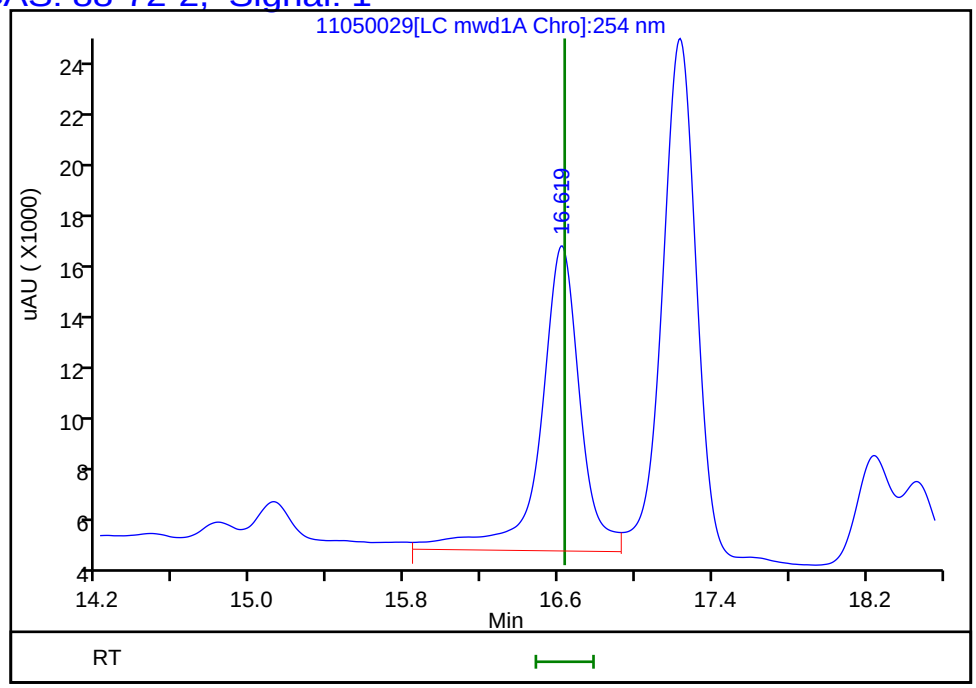
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050029.D				
Injection Date:	06-Nov-2021 02:44:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
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: 16.62
Response: 165488
Amount: 0.664699



Reviewer: zhangji, 06-Nov-2021 12:35:07
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

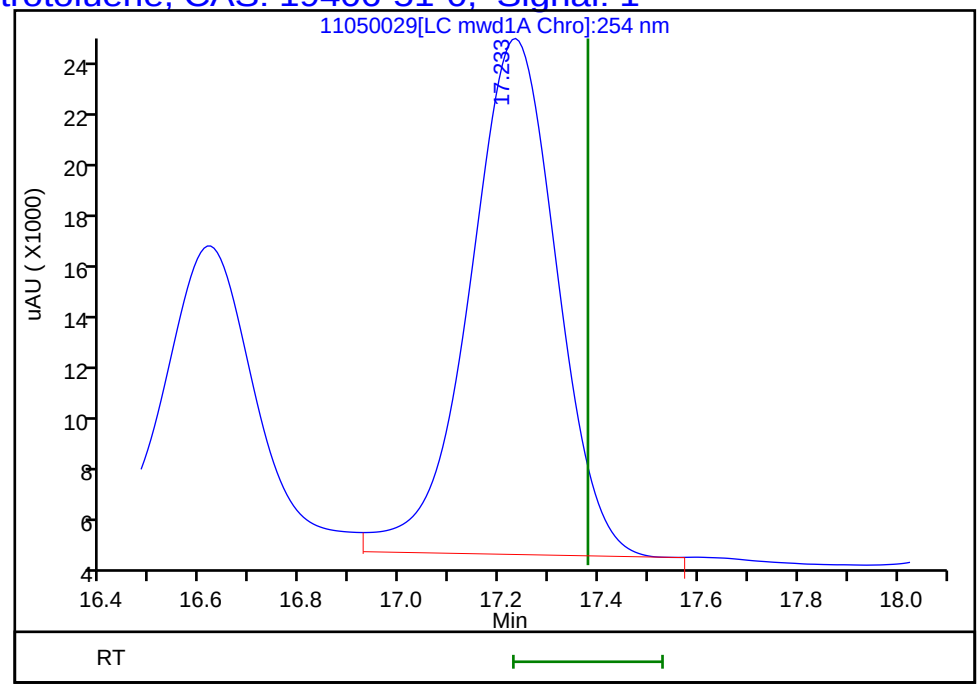
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050029.D				
Injection Date:	06-Nov-2021 02:44:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-2-A	Lab Sample ID:	280-155015-2		
Client ID:	EW7-PM25B-7-35				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.23
Response: 237708
Amount: 0.801159



Reviewer: zhangji, 06-Nov-2021 12:35:07
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

Matrix: Water Lab File ID: 11050016.D

Analysis Method: 8330A Date Collected: 10/31/2021 11:05

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 505.3(mL) Date Analyzed: 11/05/2021 17:09

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.083
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U M	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U M	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.099
2691-41-0	HMX	0.20	U	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.090
121-82-4	RDX	1.1	M J1	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U M	0.11	0.099	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050016.D
Lims ID: 280-155015-A-3-A
Client ID: EW7-PM27B-7-35
Sample Type: Client
Inject. Date: 05-Nov-2021 17:09:35 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-3-A
Misc. Info.: 280-0106237-016
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:41:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.631	7.632	-0.001	11549	0.1087	M
$ 10 1,2-Dinitrobenzene	1	8.578	8.606	-0.028	23932	0.1867	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	U
12 1,3-Dinitrobenzene	1	9.311	9.365	-0.054	2979	0.0101	M
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	U
22 o-Nitrotoluene	1		12.712			ND	7
23 p-Nitrotoluene	1		13.152			ND	U
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

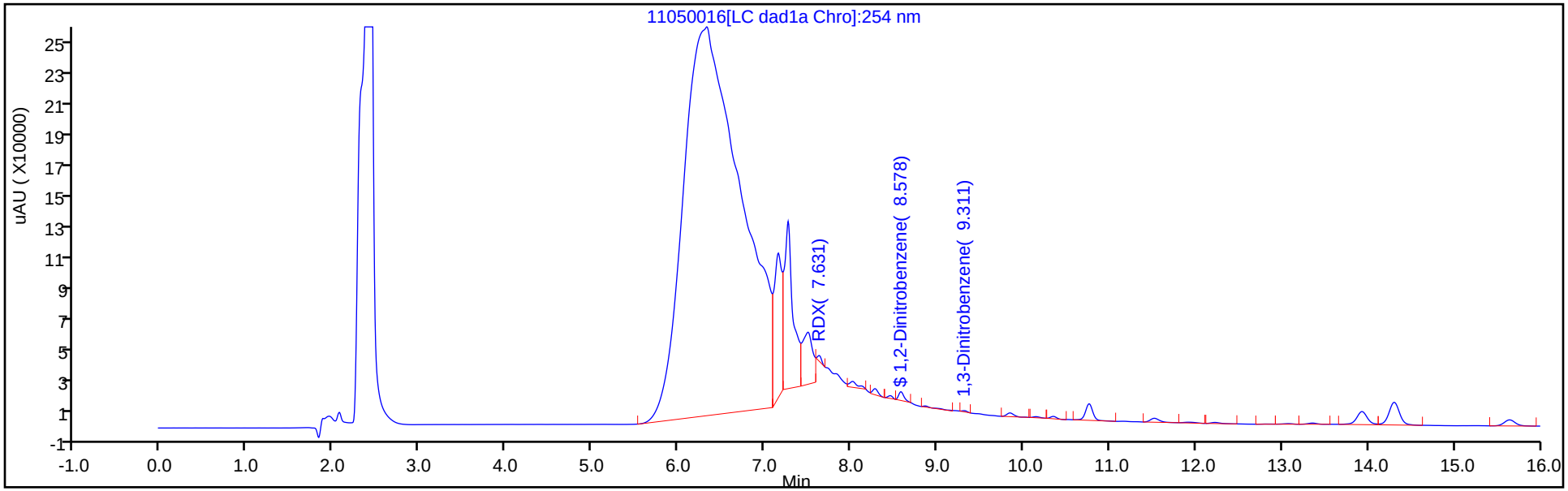
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Nov-2021 10:24:51 Chrom Revision: 2.3 22-Sep-2021 15:38:46

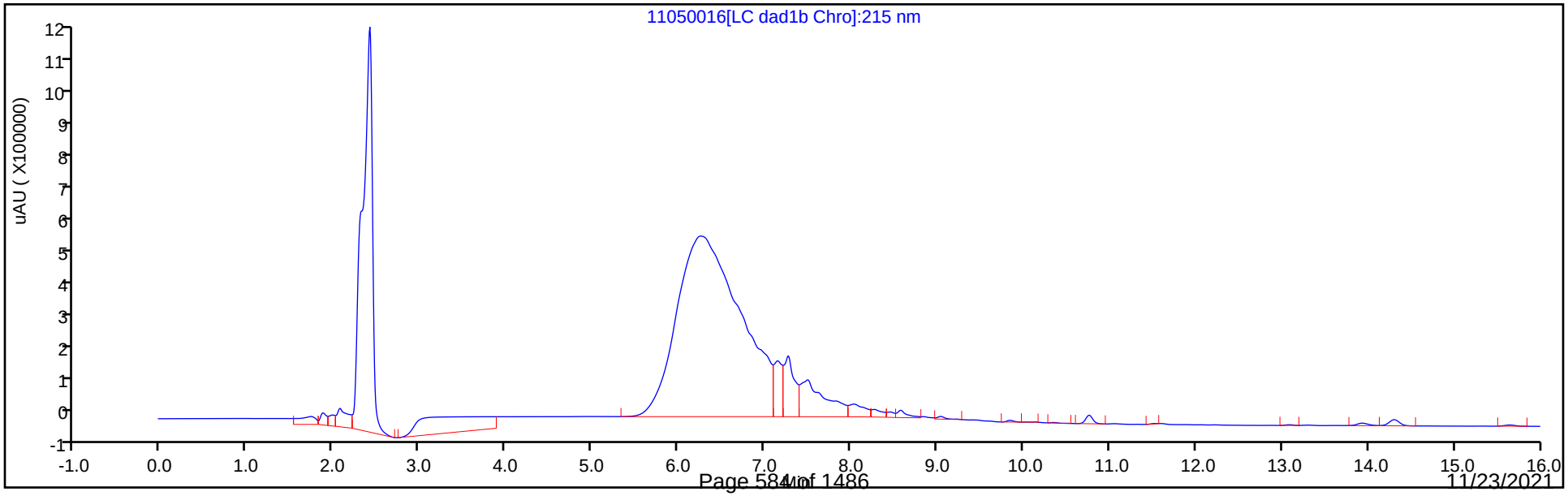
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3	Worklist Smp#:	16
Client ID:	EW7-PM27B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050016.D				
Lims ID:	280-155015-A-3-A				
Client ID:	EW7-PM27B-7-35				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 17:09:35	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-3-A				
Misc. Info.:	280-0106237-016				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 17:41:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1867	93.33

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

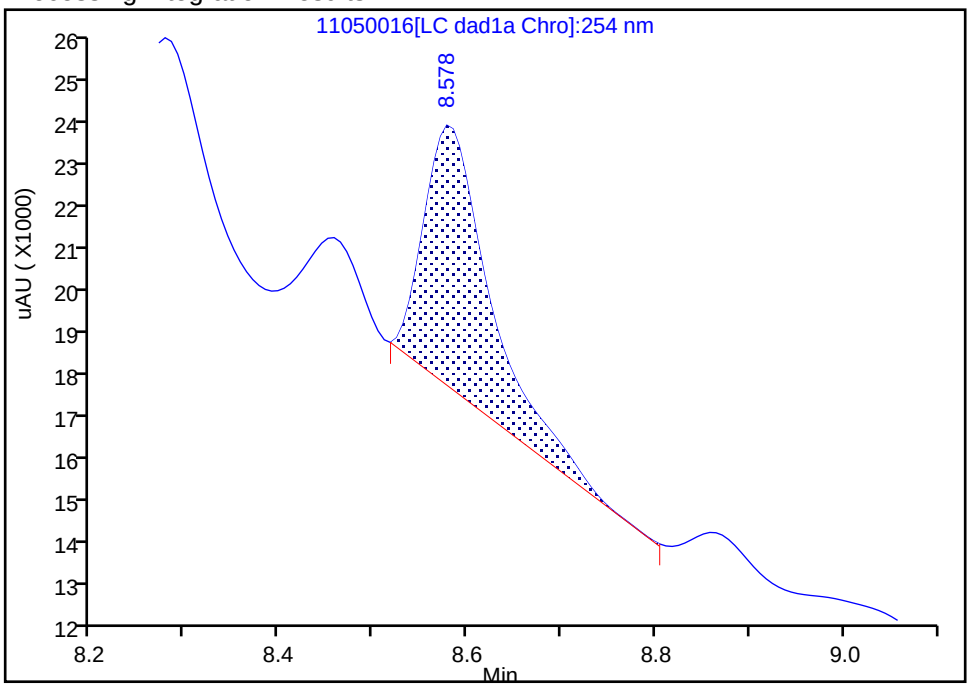
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

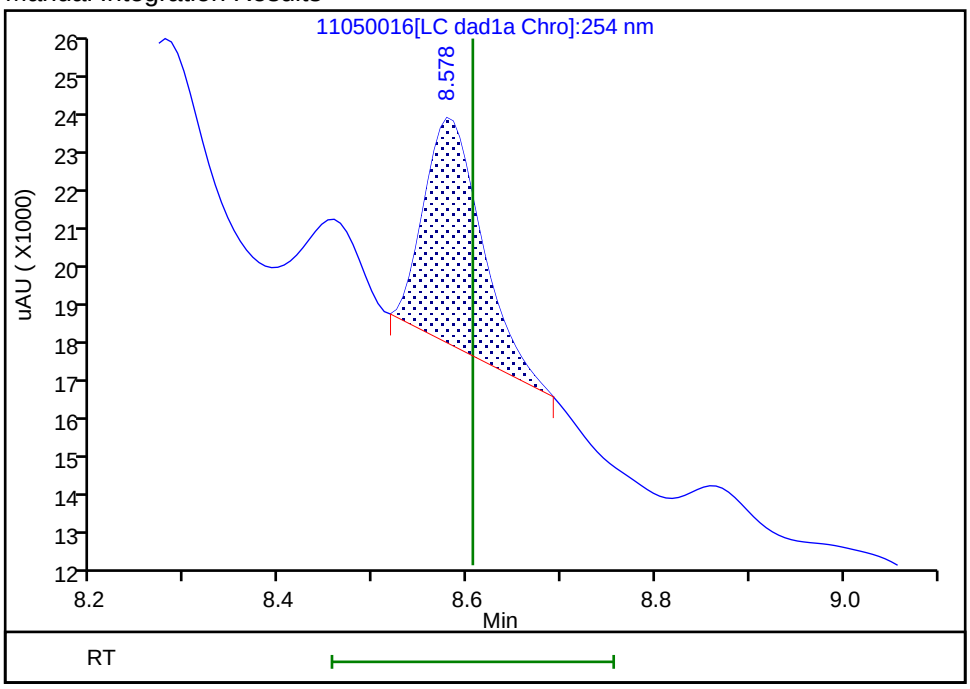
Processing Integration Results

RT: 8.58
Area: 28843
Amount: 0.224954
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 23932
Amount: 0.186652
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:41:09

Audit Action: Manually Integrated Audit Reason: Baseline

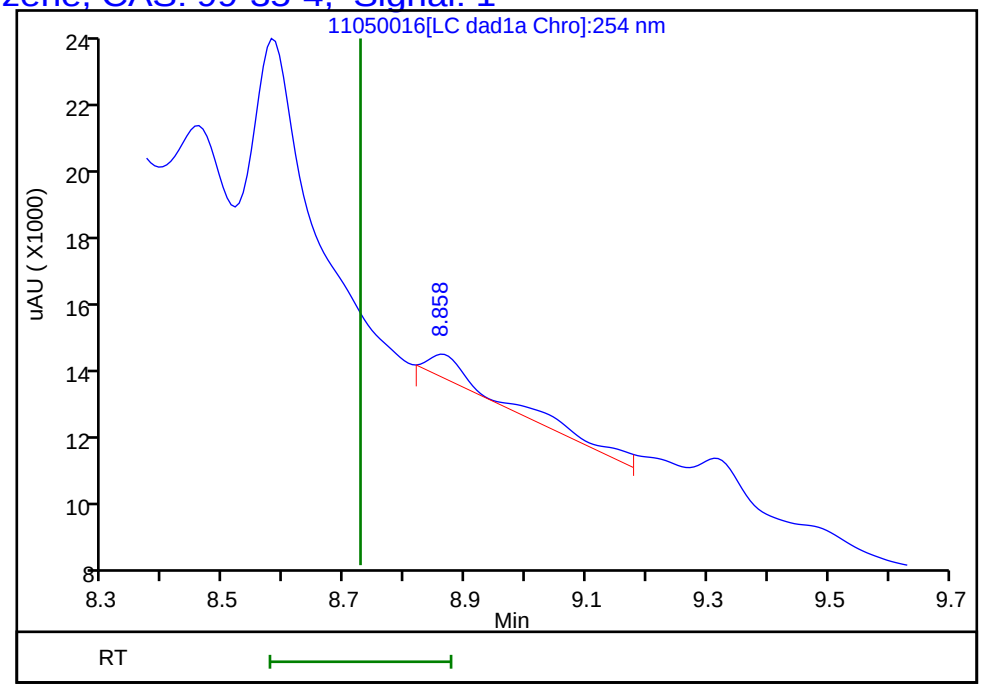
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
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		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.86
Response: 5862
Amount: 0.026607



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

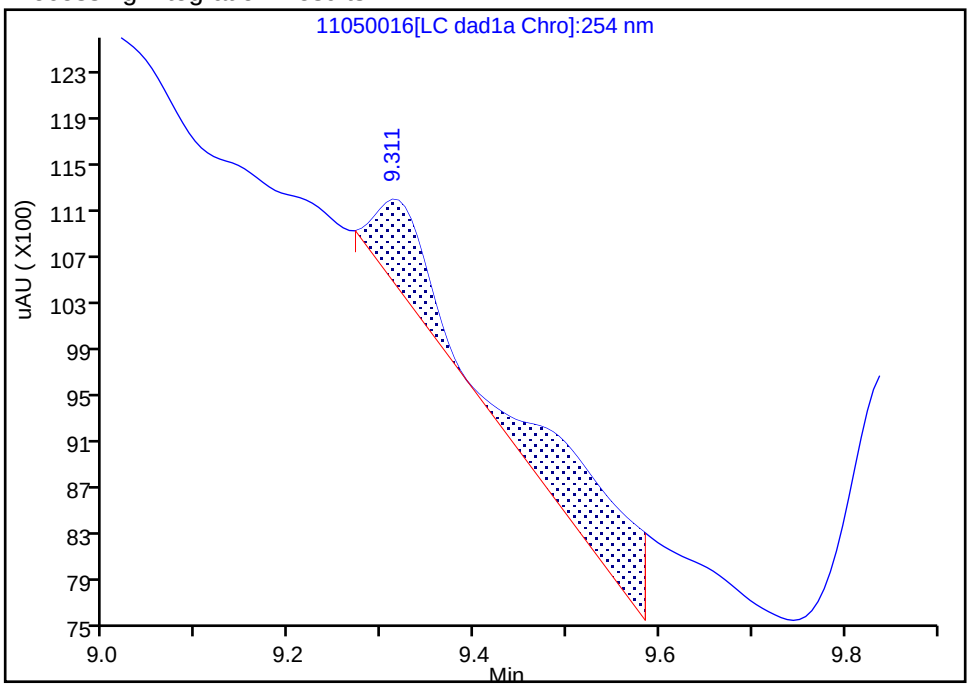
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

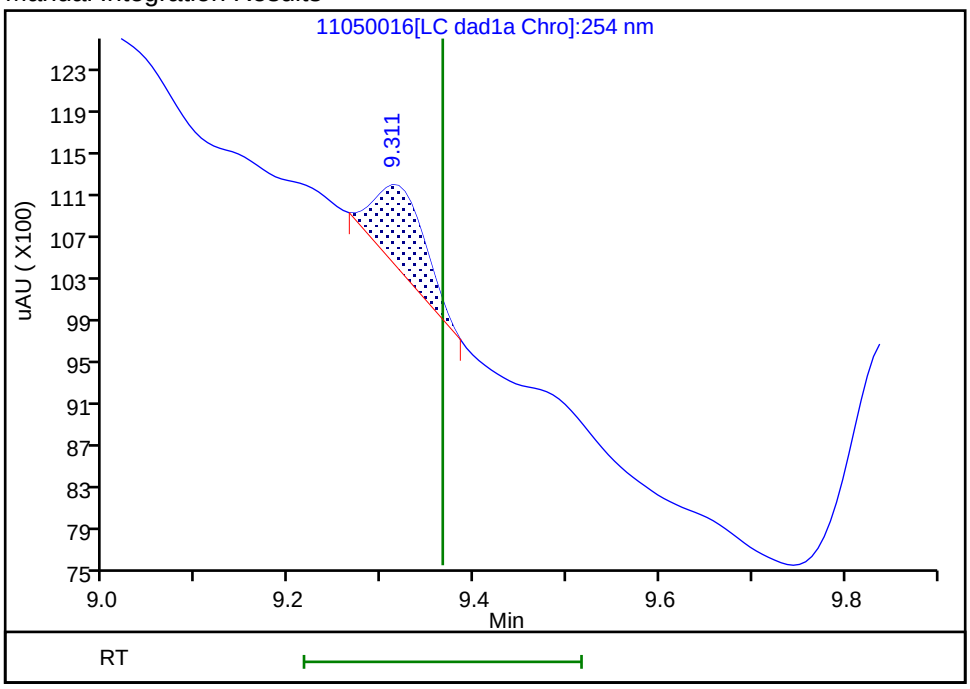
Processing Integration Results

RT: 9.31
Area: 7823
Amount: 0.026400
Amount Units: ug/mL



Manual Integration Results

RT: 9.31
Area: 2979
Amount: 0.010053
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:41:17

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

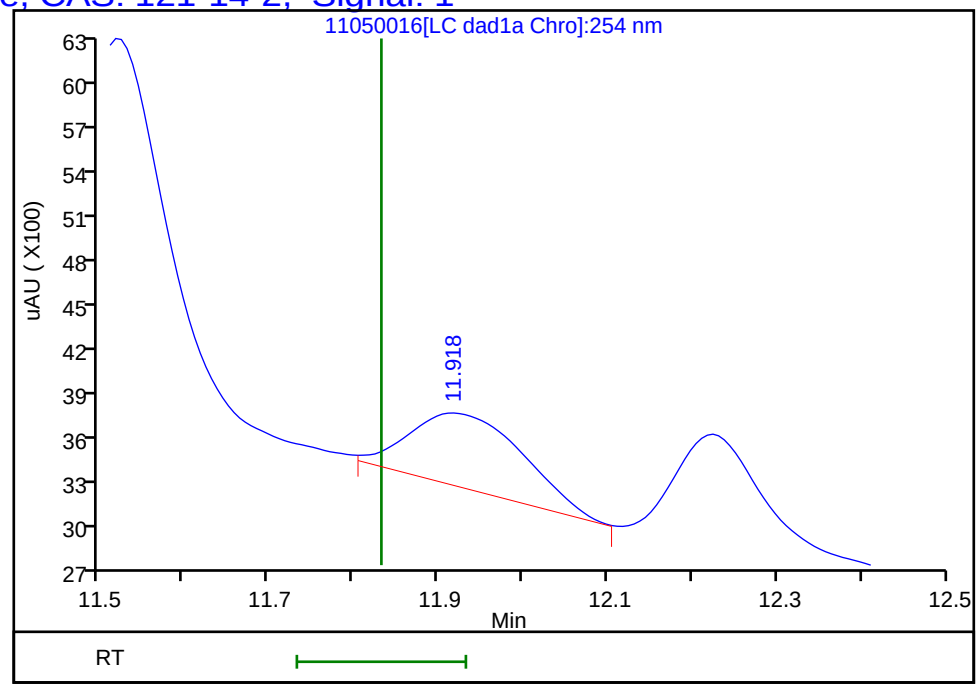
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d

Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
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		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.92
Response: 4711
Amount: 0.016414



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

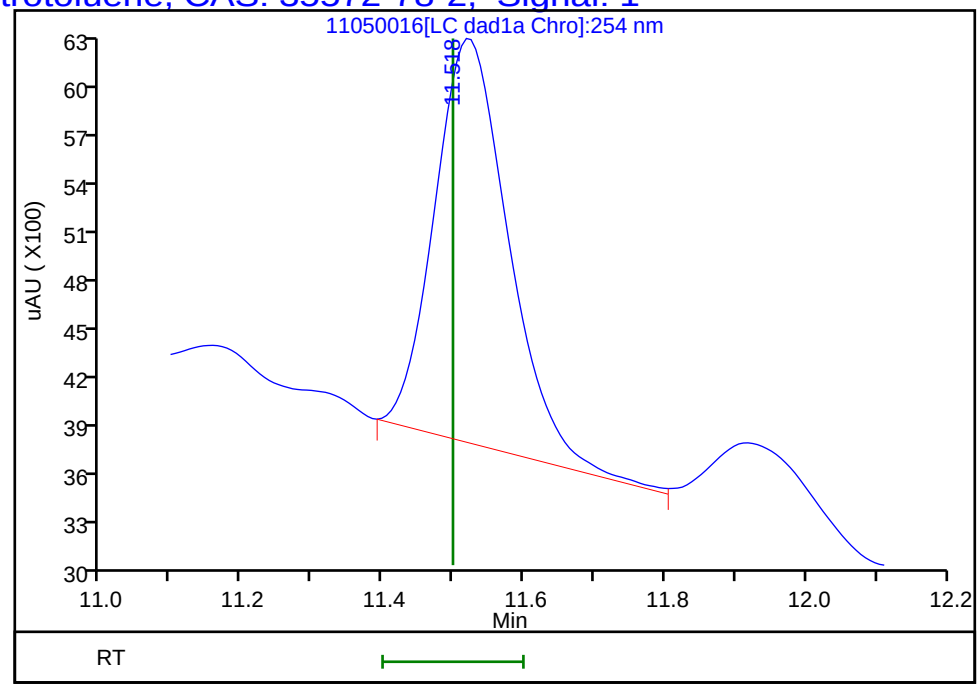
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
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		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.52
Response: 18510
Amount: 0.089452



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

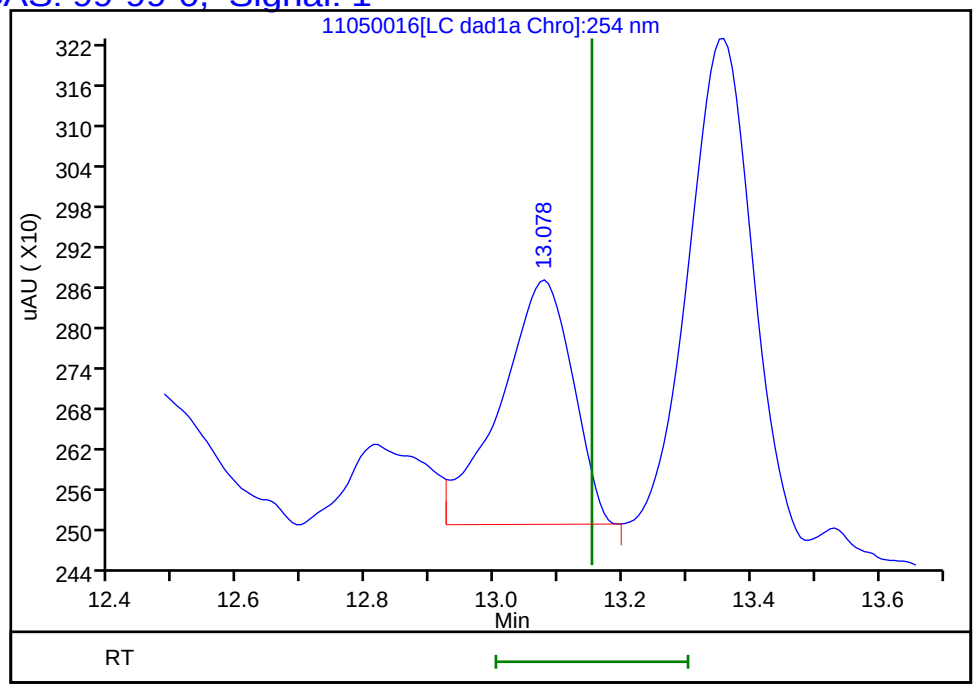
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
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		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.08
Response: 2829
Amount: 0.025279



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

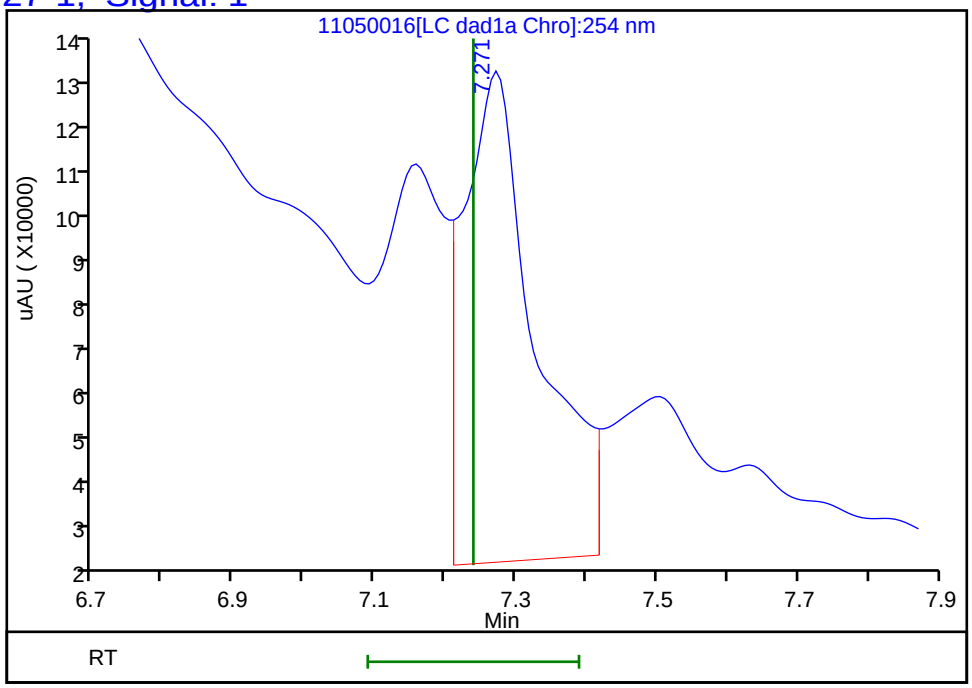
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
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		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 759575
Amount: 5.827628



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

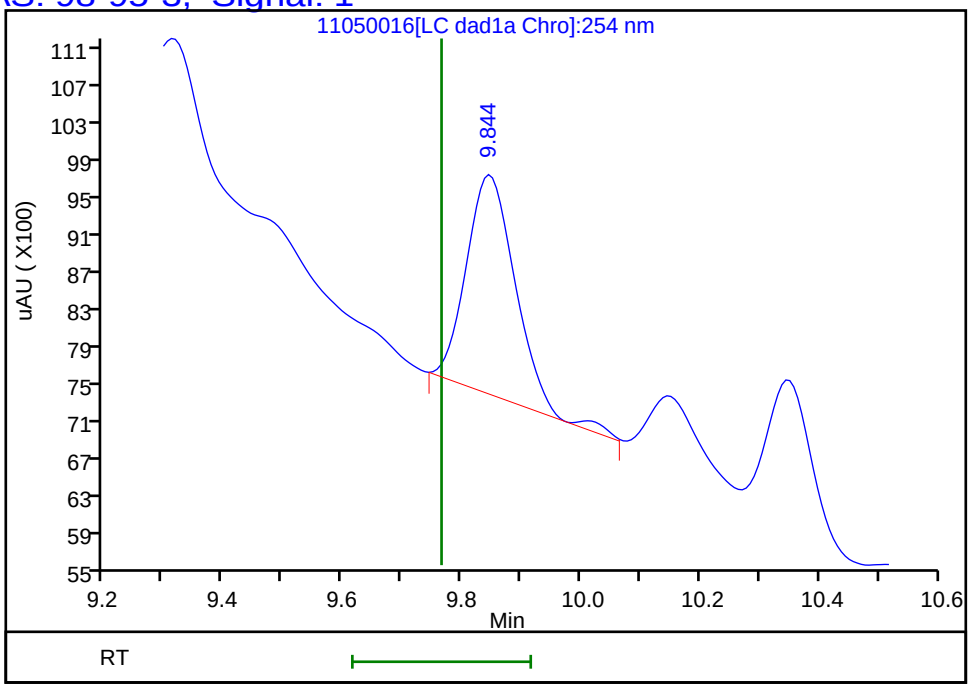
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.84
Response: 13768
Amount: 0.070502



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

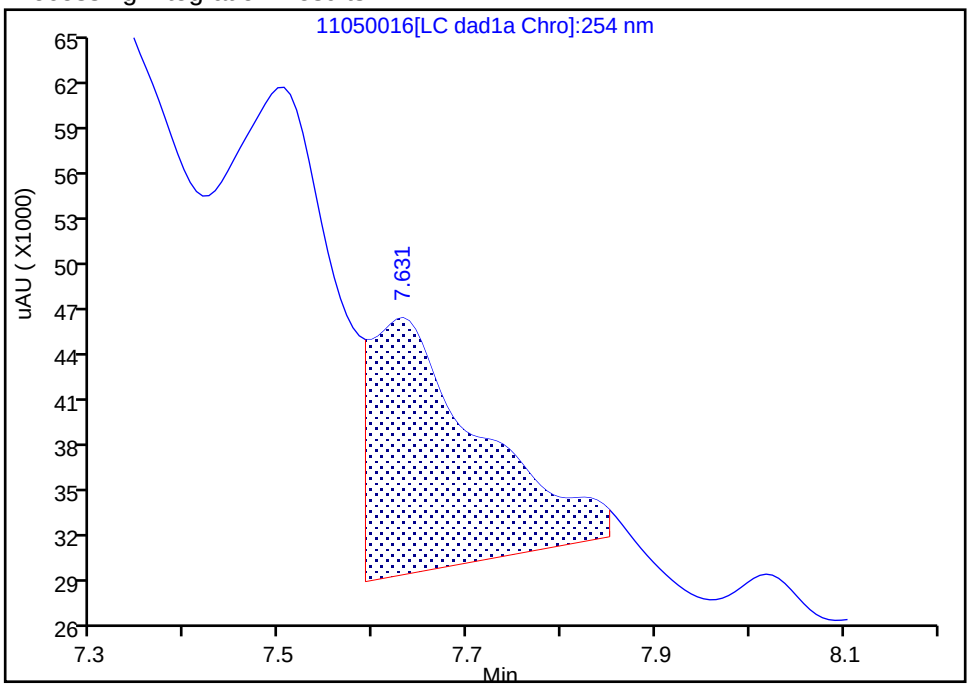
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

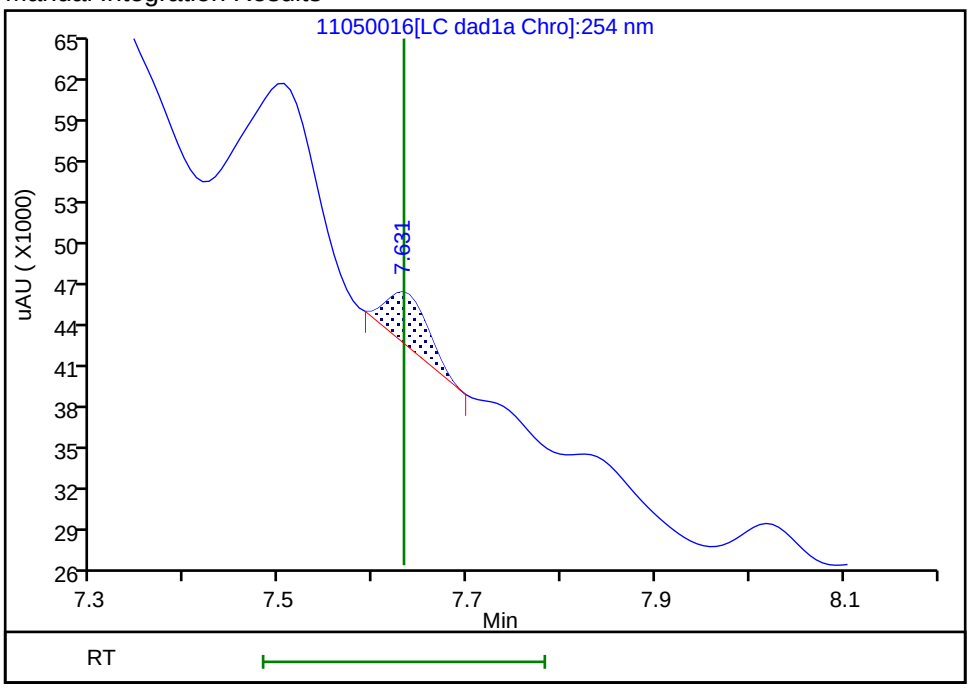
Processing Integration Results

RT: 7.63
Area: 134514
Amount: 1.265877
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 11549
Amount: 0.108685
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:41:02
Audit Action: Manually Integrated Audit Reason: Baseline

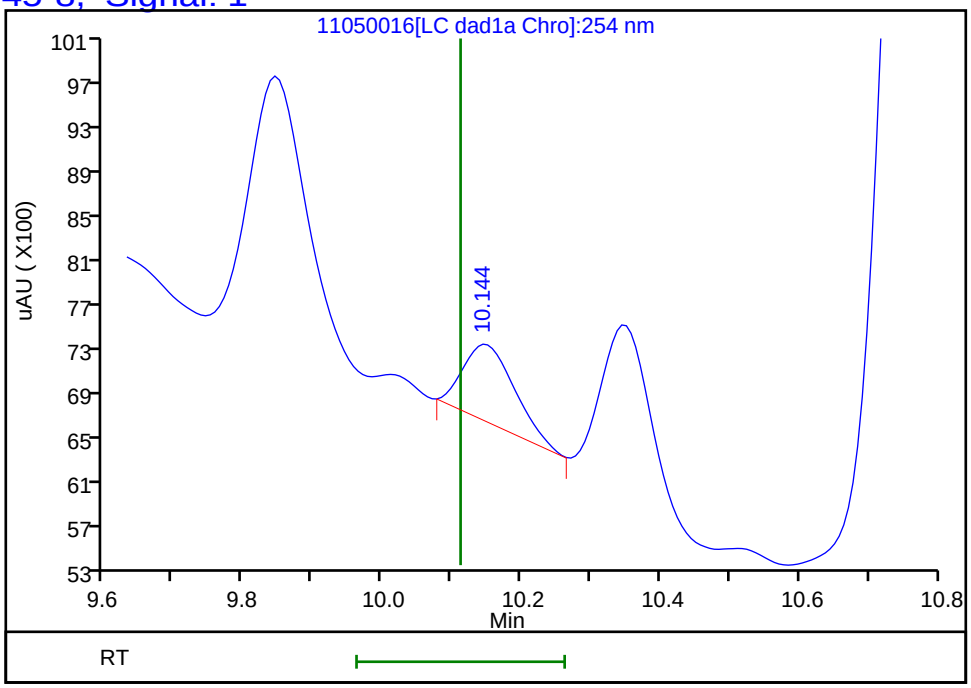
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050016.d				
Injection Date:	05-Nov-2021 17:09:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.14
Response: 3571
Amount: 0.020711



Reviewer: zhangji, 05-Nov-2021 17:41:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

Matrix: Water Lab File ID: 11050030.D

Analysis Method: 8330A Date Collected: 10/31/2021 11:05

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 505.3(mL) Date Analyzed: 11/06/2021 03:19

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.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037
121-82-4	*RDX*	*0.43*	*J1*	*0.21*	0.20	*0.051*

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_X5\20211105-106238.b\11050030.D
Lims ID: 280-155015-A-3-A
Client ID: EW7-PM27B-7-35
Sample Type: Client
Inject. Date: 06-Nov-2021 03:19:54 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-3-A
Misc. Info.: 280-0106238-030
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:35:51

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	
	6 MNX	1	7.340	7.384	-0.044	14026	0.0530	M
	8 RDX	1	8.720	8.825	-0.105	8804	0.0431	
	9 Nitrobenzene	1	11.779	11.885	-0.106	18584	0.0496	M
$	10 1,2-Dinitrobenzene	1	12.919	12.978	-0.059	48626	0.1830	M
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1		16.631			ND	U
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.259	17.378	-0.119	225673	0.7606	
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.273	18.265	0.008	48335	0.1208	
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1		25.098			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

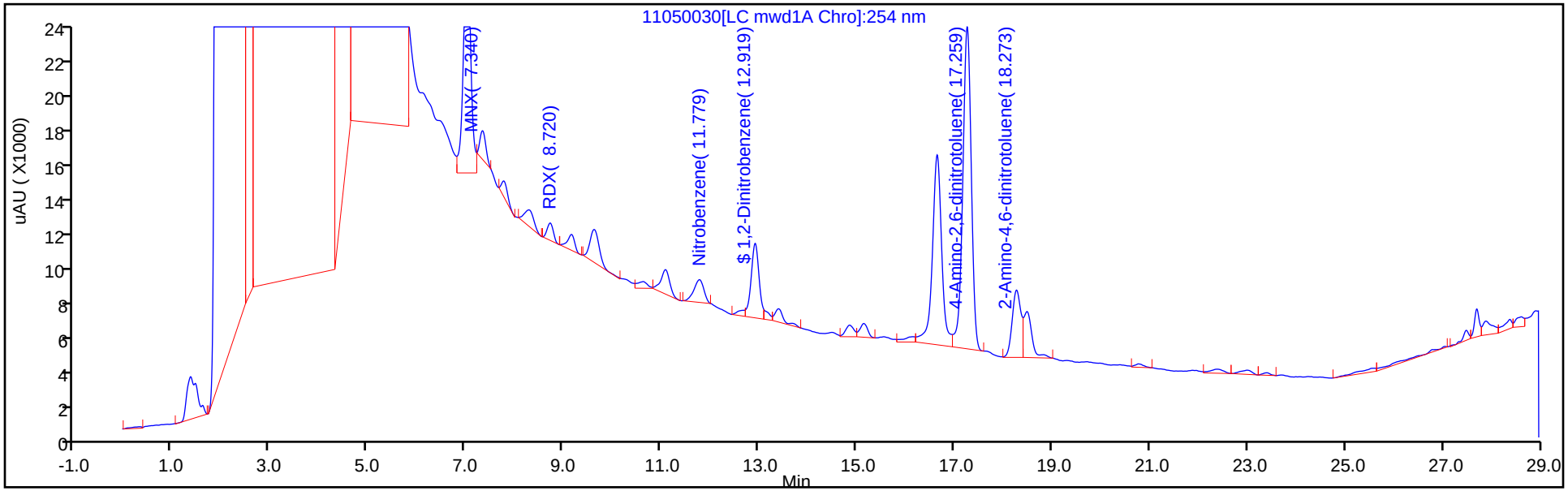
Report Date: 06-Nov-2021 12:42:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

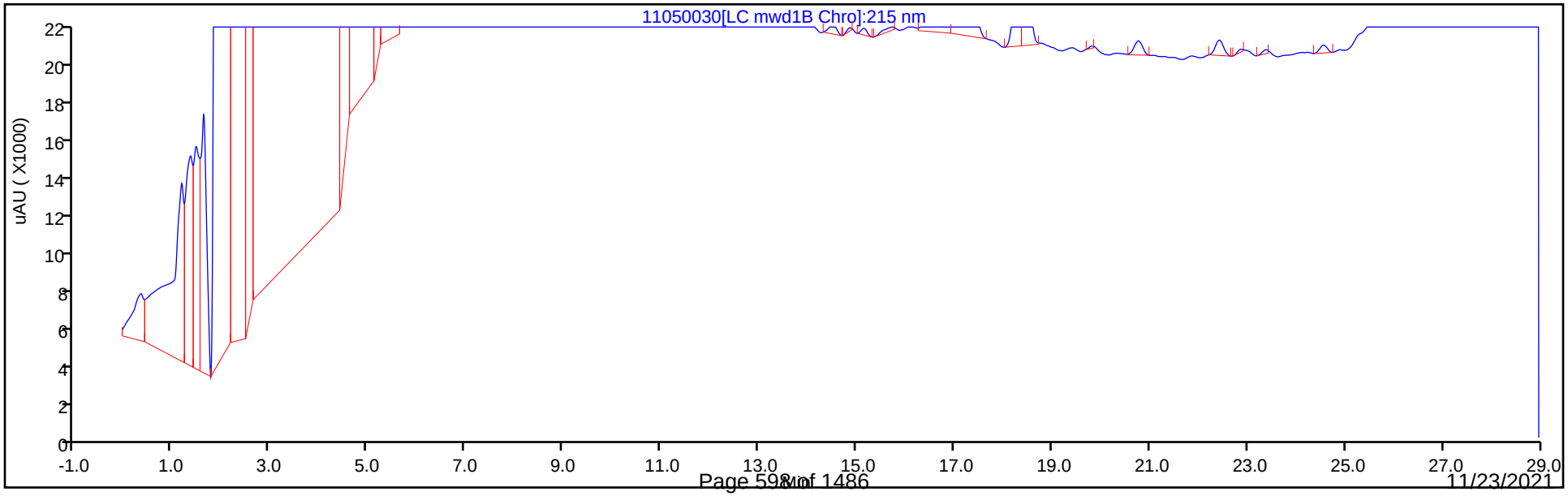
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050030.D

Injection Date:	06-Nov-2021 03:19:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3	Worklist Smp#:	30
Client ID:	EW7-PM27B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050030.D				
Lims ID:	280-155015-A-3-A				
Client ID:	EW7-PM27B-7-35				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 03:19:54	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-3-A				
Misc. Info.:	280-0106238-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:04	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:35:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1830	91.52

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

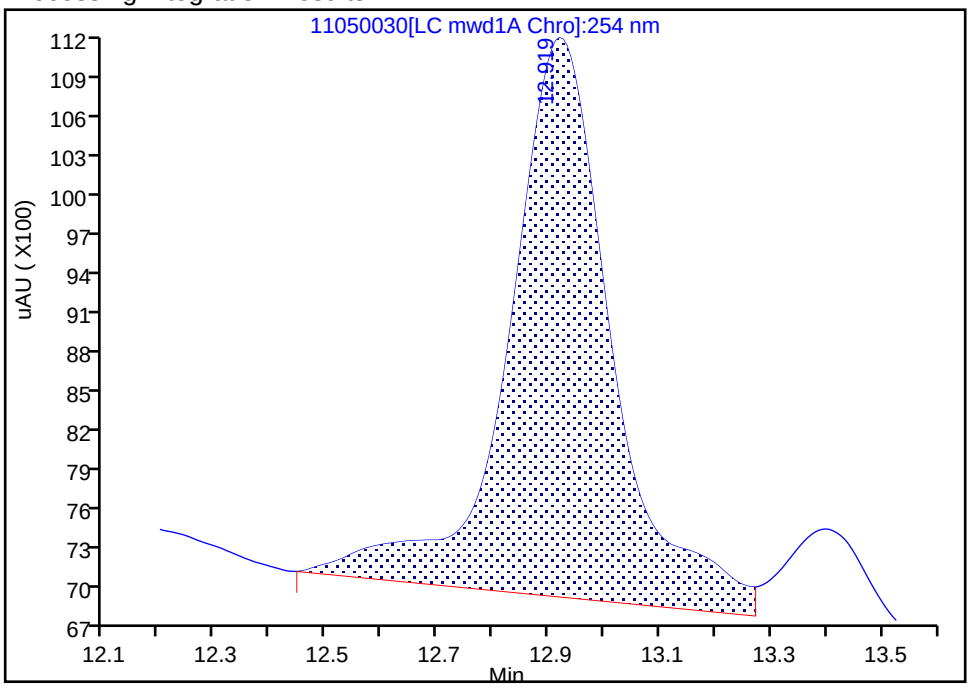
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050030.D				
Injection Date:	06-Nov-2021 03:19:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

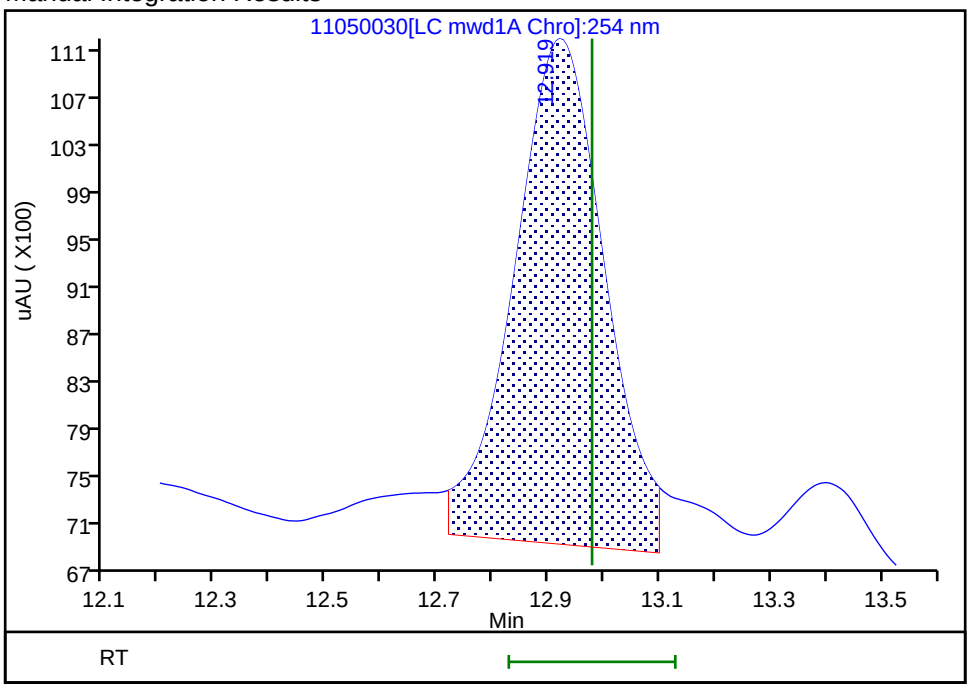
Processing Integration Results

RT: 12.92
Area: 56076
Amount: 0.211082
Amount Units: ug/ml



Manual Integration Results

RT: 12.92
Area: 48626
Amount: 0.183039
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:35:14

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

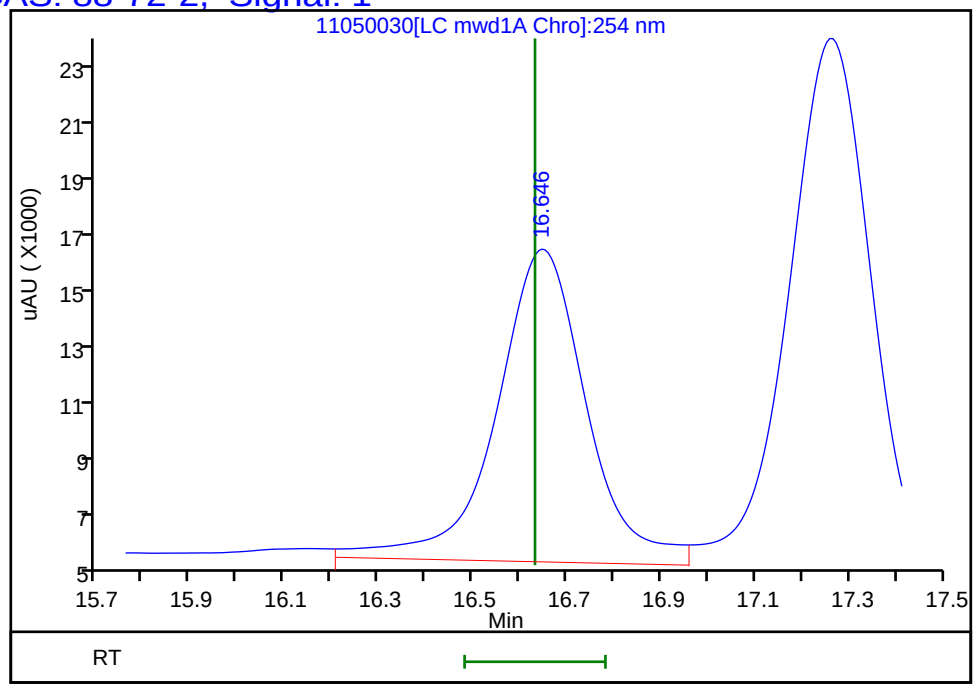
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050030.D				
Injection Date:	06-Nov-2021 03:19:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.65
Response: 146308
Amount: 0.587660



Reviewer: zhangji, 06-Nov-2021 12:35:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

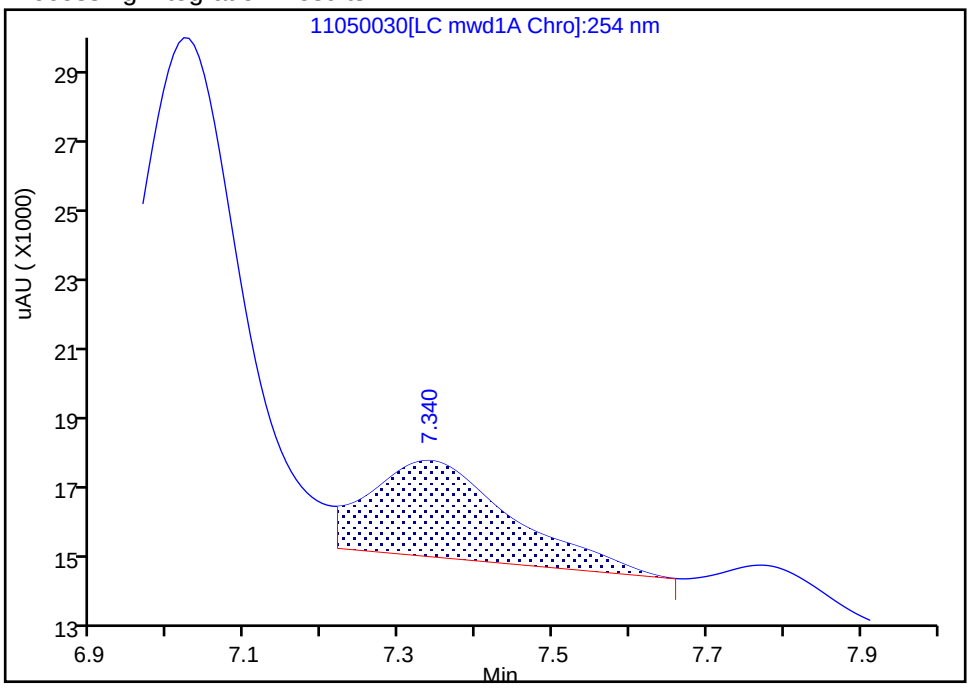
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050030.D				
Injection Date:	06-Nov-2021 03:19:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

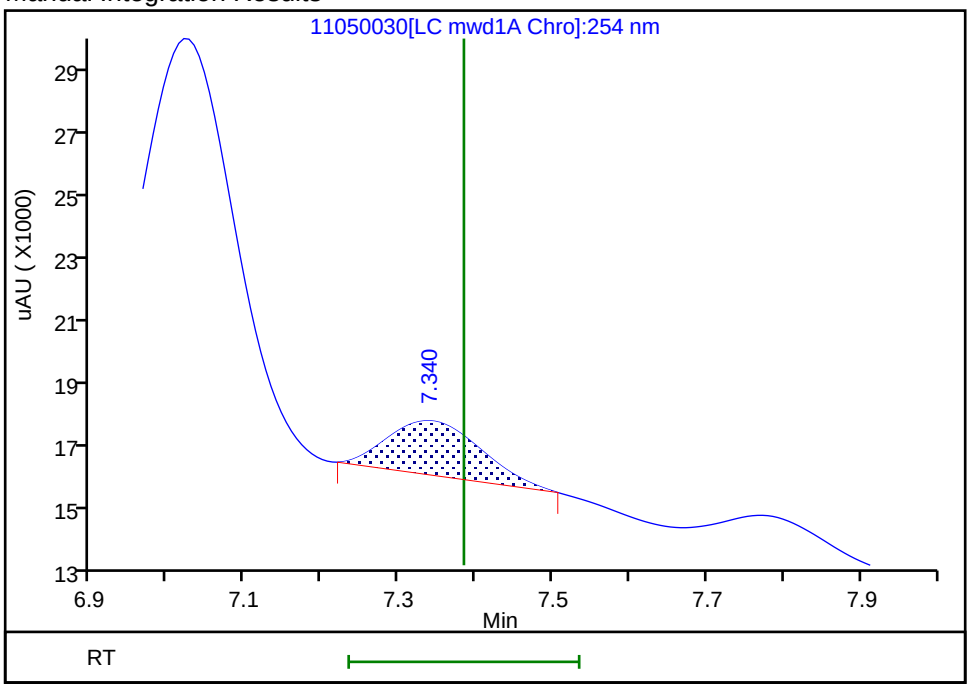
Processing Integration Results

RT: 7.34
Area: 33977
Amount: 0.128291
Amount Units: ug/ml



Manual Integration Results

RT: 7.34
Area: 14026
Amount: 0.052960
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:35:36
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

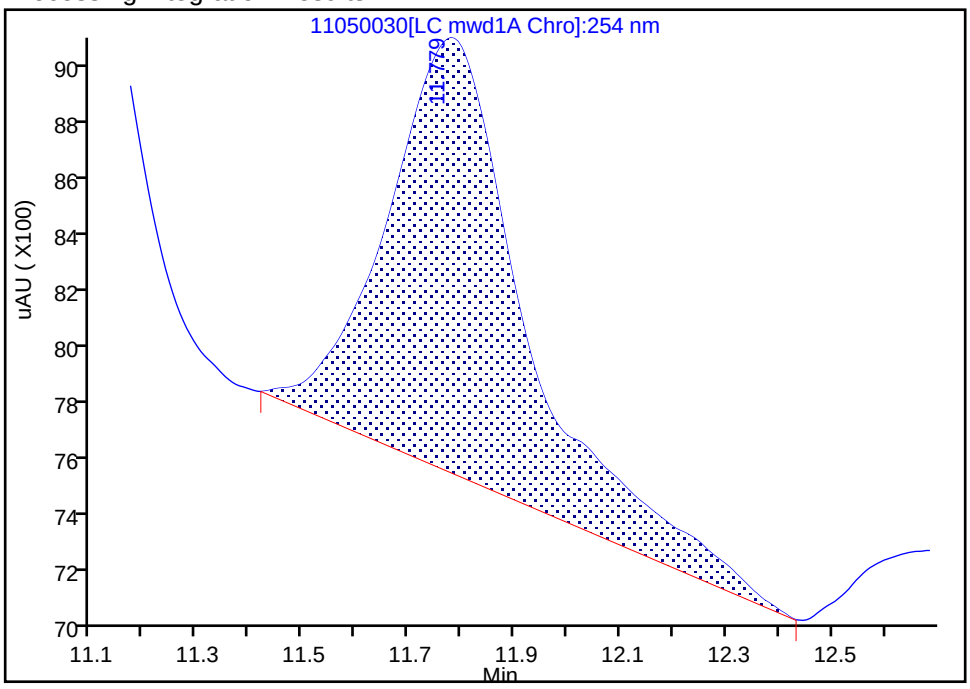
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050030.D				
Injection Date:	06-Nov-2021 03:19:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-3-A	Lab Sample ID:	280-155015-3		
Client ID:	EW7-PM27B-7-35				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

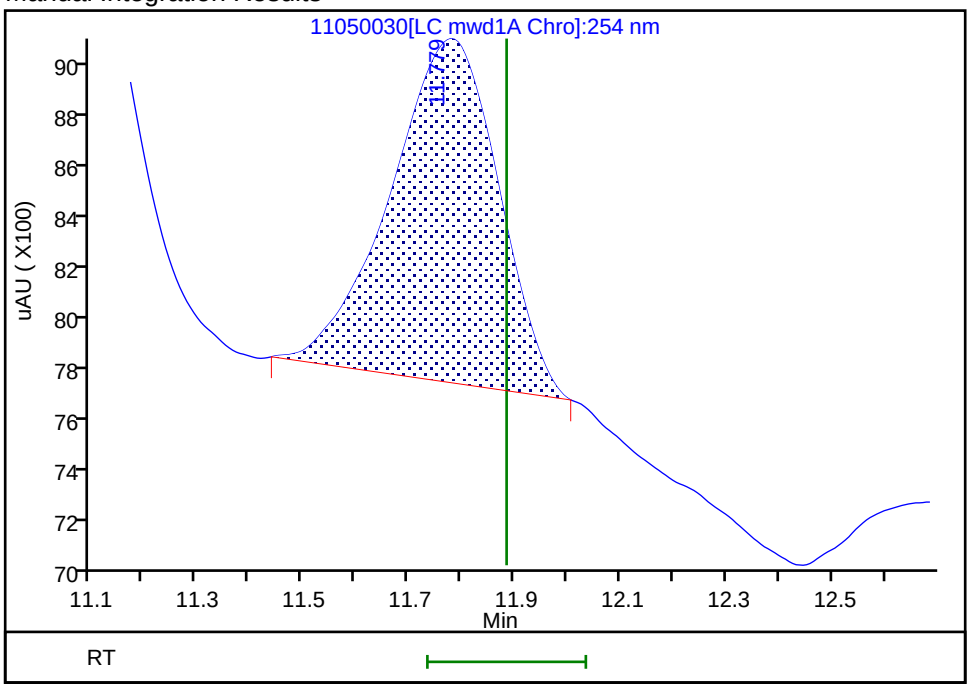
Processing Integration Results

RT: 11.78
Area: 27581
Amount: 0.073618
Amount Units: ug/ml



Manual Integration Results

RT: 11.78
Area: 18584
Amount: 0.049603
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:35:29

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

Matrix: Water Lab File ID: 11050017.D

Analysis Method: 8330A Date Collected: 10/30/2021 09:25

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 492.1(mL) Date Analyzed: 11/05/2021 17:32

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.46	M J1	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.67		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.081	U M	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.7		0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
2691-41-0	HMX	0.20	U	0.21	0.20	0.089
5755-27-1	MNX	0.41	U M	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	1.0	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	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050017.D
Lims ID: 280-155015-A-4-A
Client ID: EW7-PM26A-7-25
Sample Type: Client
Inject. Date: 05-Nov-2021 17:32:32 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-4-A
Misc. Info.: 280-0106237-017
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 18:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.621	7.632	-0.011	10589	0.0997	M
$ 10 1,2-Dinitrobenzene	1	8.581	8.606	-0.025	24266	0.1893	M
11 1,3,5-Trinitrobenzene	1	8.687	8.726	-0.039	10024	0.0455	M
12 1,3-Dinitrobenzene	1		9.365			ND	U
13 Nitrobenzene	1		9.765			ND	7
15 Tetryl	1		10.112			ND	
17 2,4,6-Trinitrotoluene	1	10.980	11.025	-0.045	13666	0.0663	
18 4-Amino-2,6-dinitrotoluene	1	11.200	11.239	-0.039	24149	0.1581	
19 2-Amino-4,6-dinitrotoluene	1	11.460	11.499	-0.039	34291	0.1657	
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	U
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1	13.107	13.152	-0.045	2669	0.0238	
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

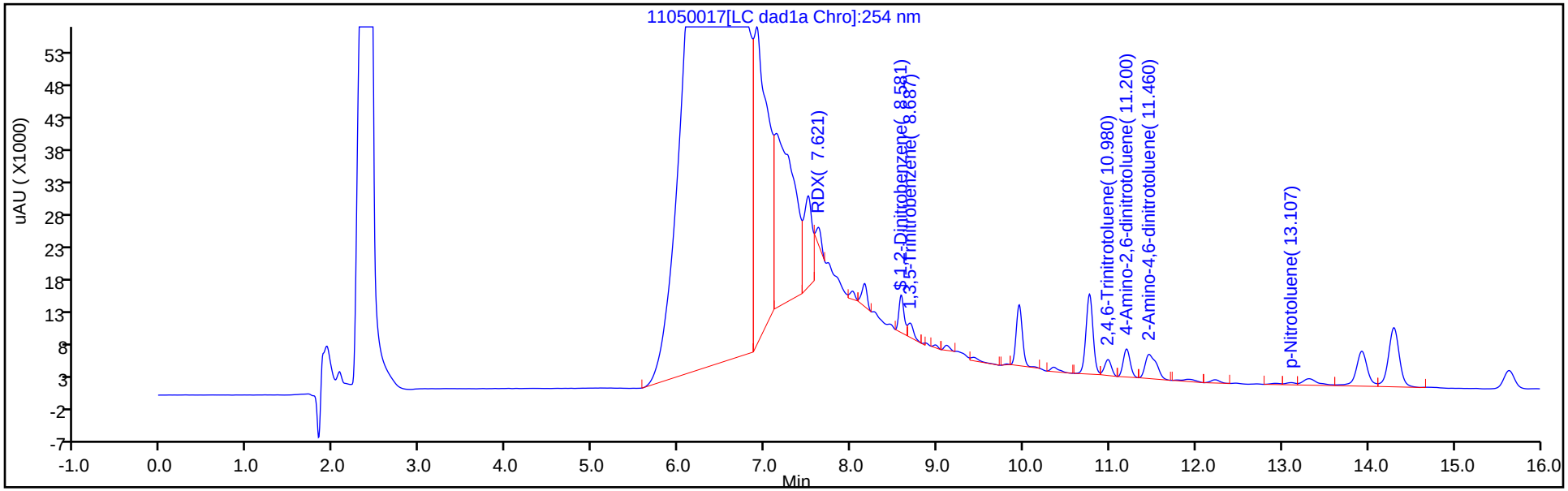
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Nov-2021 10:24:51 Chrom Revision: 2.3 22-Sep-2021 15:38:46

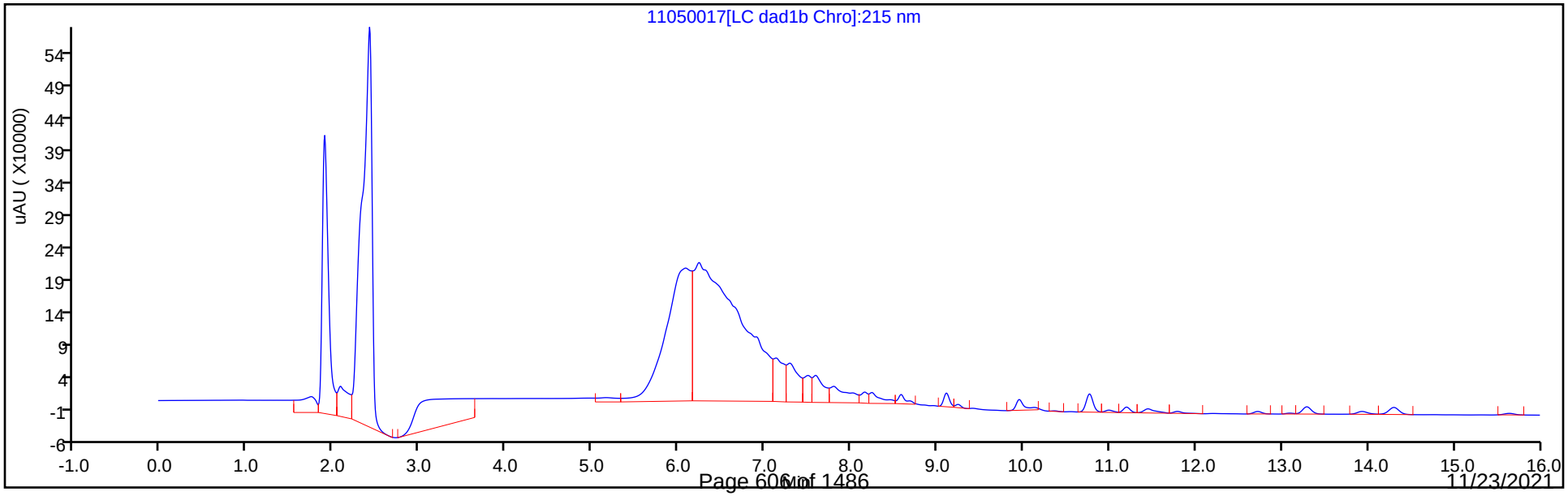
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4	Worklist Smp#:	17
Client ID:	EW7-PM26A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050017.D				
Lims ID:	280-155015-A-4-A				
Client ID:	EW7-PM26A-7-25				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 17:32:32	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-4-A				
Misc. Info.:	280-0106237-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 18:40:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1893	94.63

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

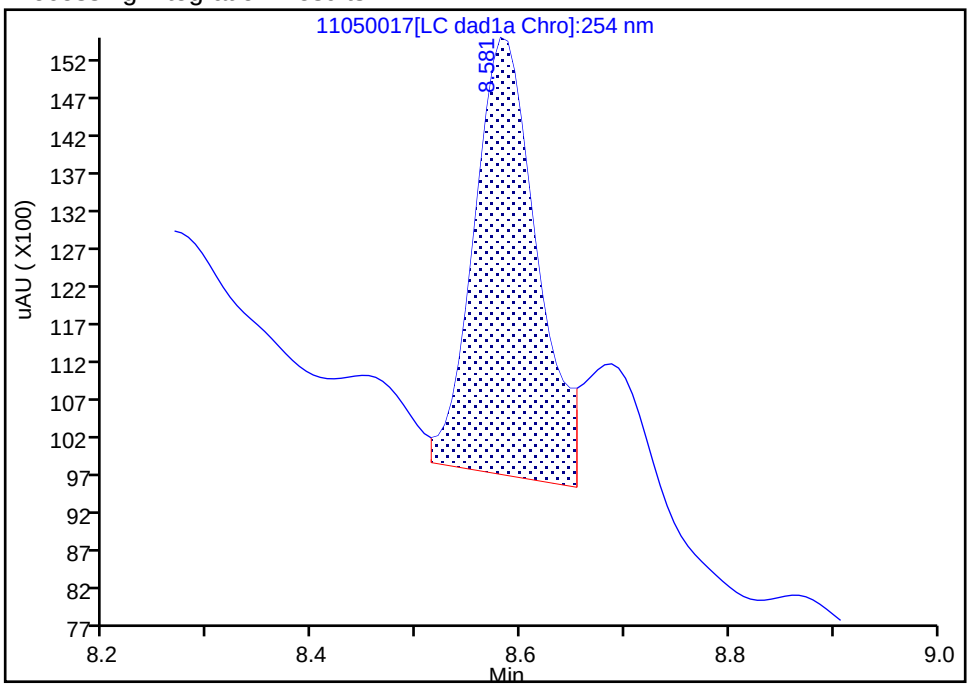
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

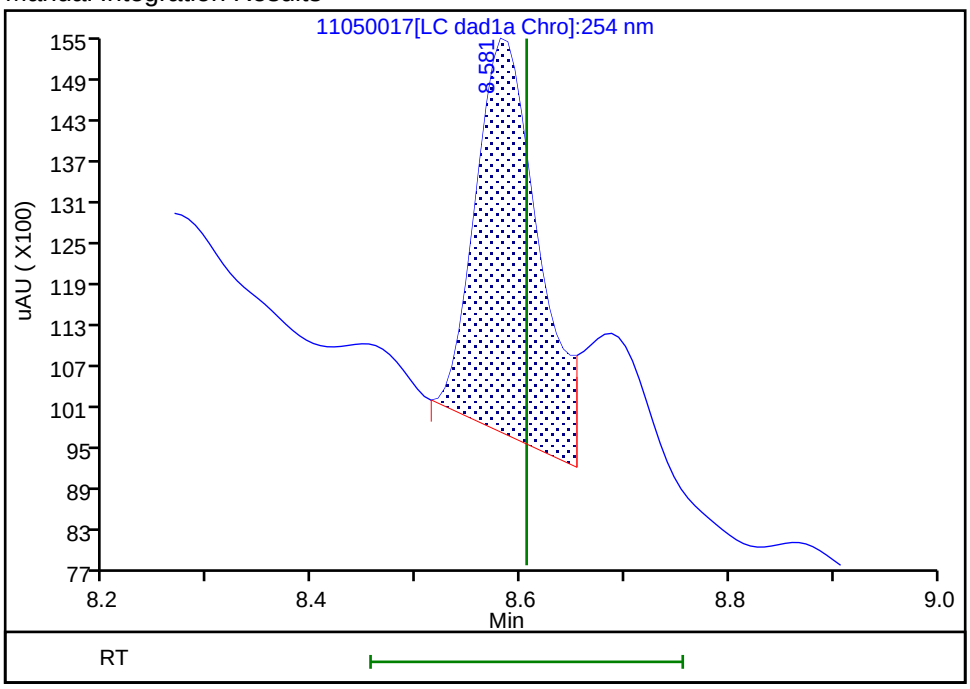
Processing Integration Results

RT: 8.58
Area: 24287
Amount: 0.189421
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 24266
Amount: 0.189257
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:40:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

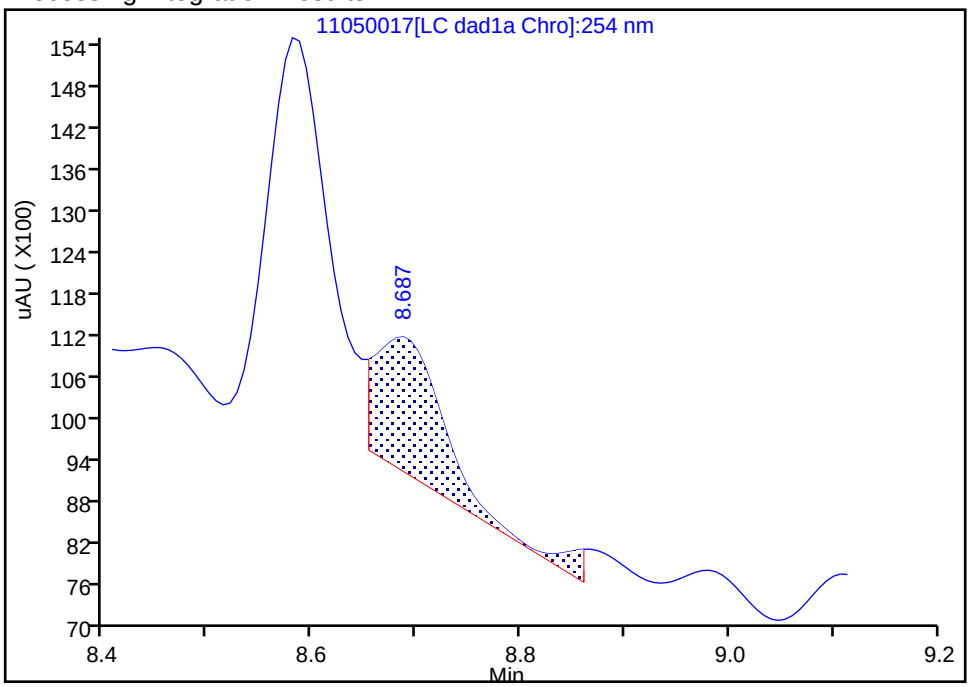
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

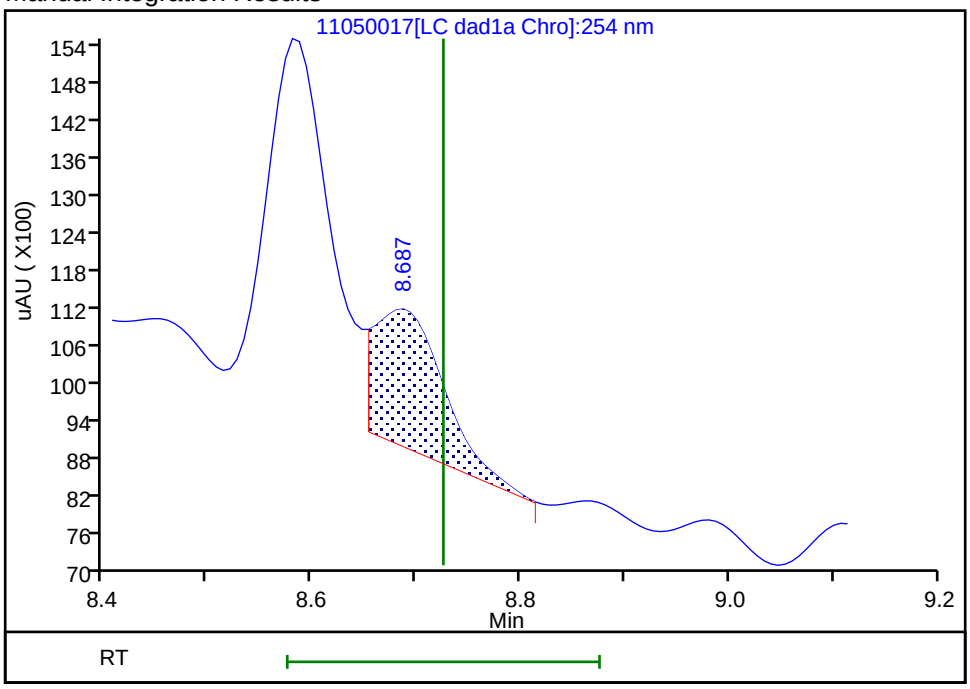
Processing Integration Results

RT: 8.69
Area: 9146
Amount: 0.041513
Amount Units: ug/mL



Manual Integration Results

RT: 8.69
Area: 10024
Amount: 0.045498
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:40:14

Audit Action: Split an Integrated Peak Audit Reason: Baseline

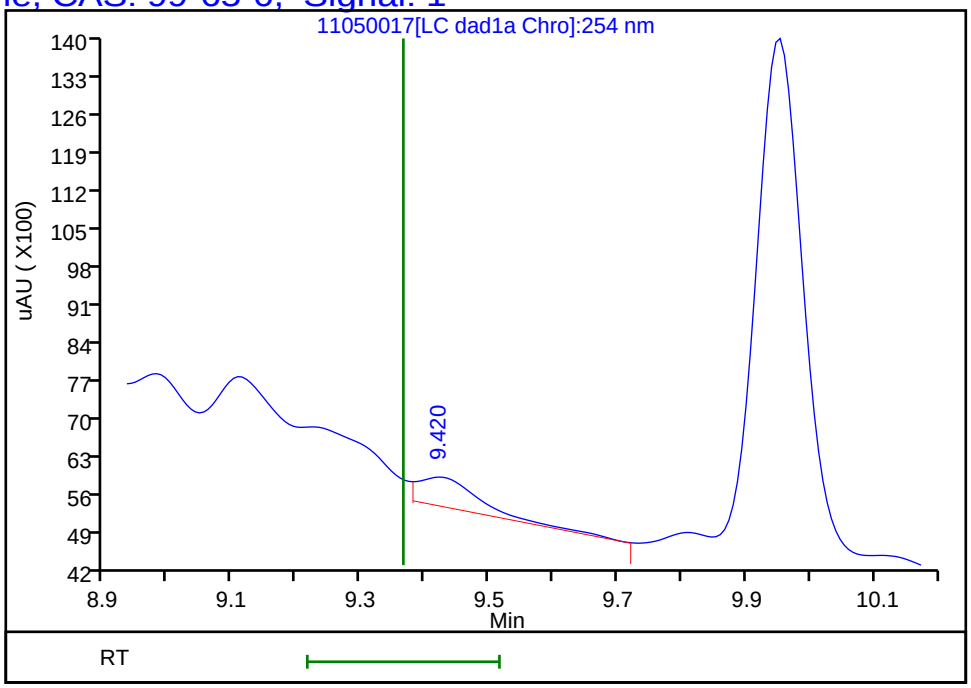
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.42
Response: 3616
Amount: 0.012203



Reviewer: zhangji, 05-Nov-2021 18:40:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

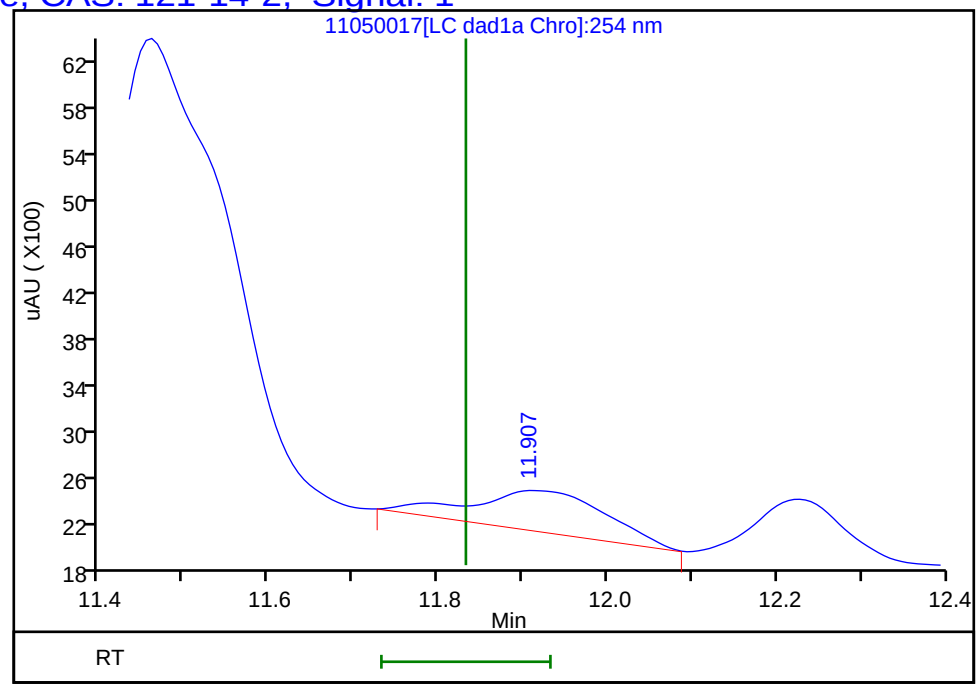
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.91
Response: 3874
Amount: 0.013498



Reviewer: zhangji, 05-Nov-2021 18:40:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

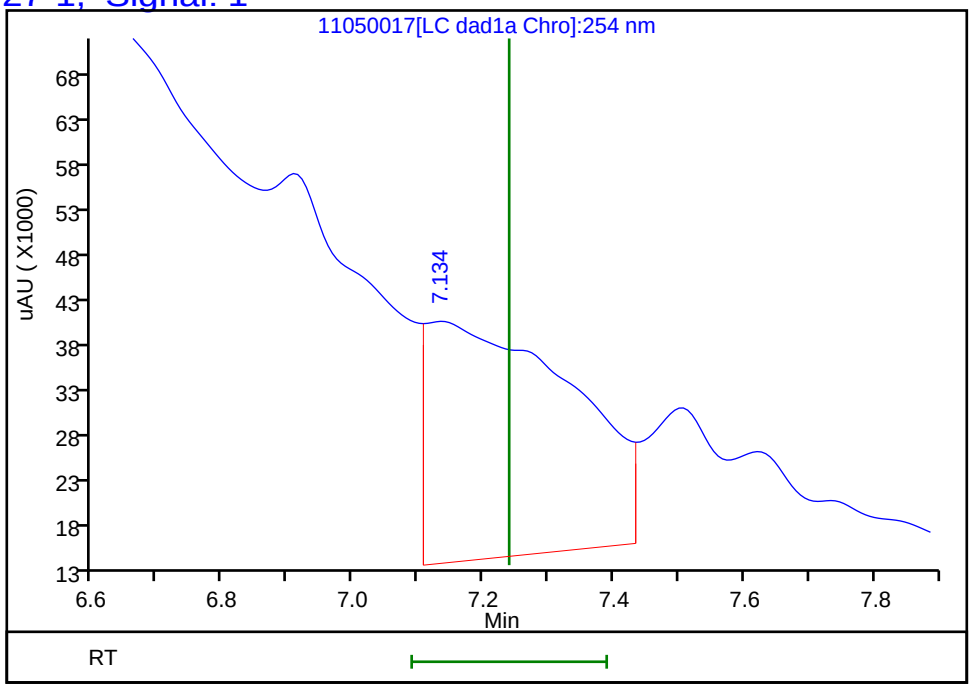
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.13
Response: 408373
Amount: 3.133128



Reviewer: zhangji, 05-Nov-2021 18:40:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

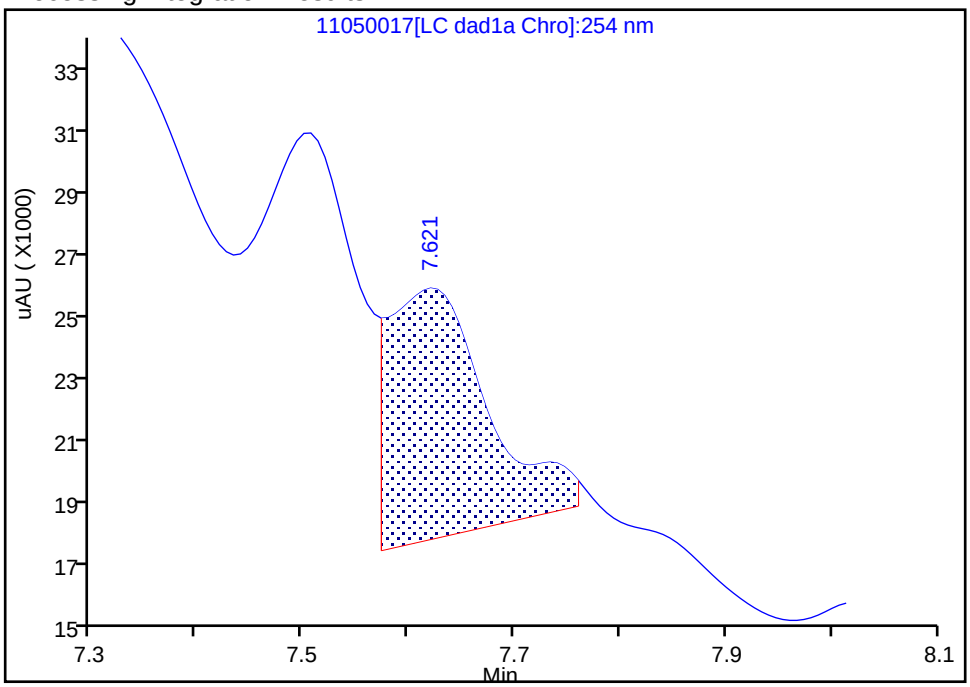
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050017.d				
Injection Date:	05-Nov-2021 17:32:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

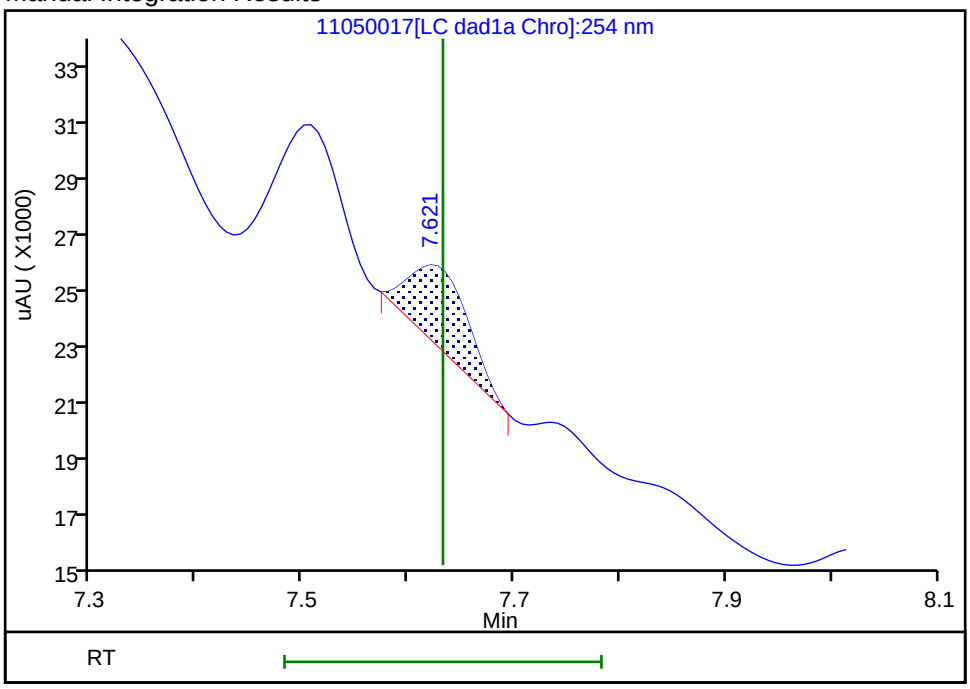
Processing Integration Results

RT: 7.62
Area: 50631
Amount: 0.476476
Amount Units: ug/mL



Manual Integration Results

RT: 7.62
Area: 10589
Amount: 0.099650
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:40:23

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

Matrix: Water Lab File ID: 11050031.D

Analysis Method: 8330A Date Collected: 10/30/2021 09:25

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 492.1(mL) Date Analyzed: 11/06/2021 03:54

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.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.29*	*J1*	*0.21*	0.20	*0.085*
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D
Lims ID: 280-155015-A-4-A
Client ID: EW7-PM26A-7-25
Sample Type: Client
Inject. Date: 06-Nov-2021 03:54:59 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-4-A
Misc. Info.: 280-0106238-031
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:36:29

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.620	6.665	-0.045	10414	0.0594	
	6 MNX	1	7.314	7.384	-0.070	11539	0.0436	
	8 RDX	1	8.727	8.825	-0.098	29205	0.1430	
	9 Nitrobenzene	1		11.885			ND	U
$	10 1,2-Dinitrobenzene	1	12.920	12.978	-0.058	46409	0.1747	M
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1	16.634	16.631	0.003	96465	0.3875	
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.220	18.265	-0.045	85870	0.2170	M
	20 1,3,5-Trinitrobenzene	1	18.747	18.785	-0.038	14619	0.0287	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	7
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1	25.027	25.098	-0.071	24060	0.0605	M

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

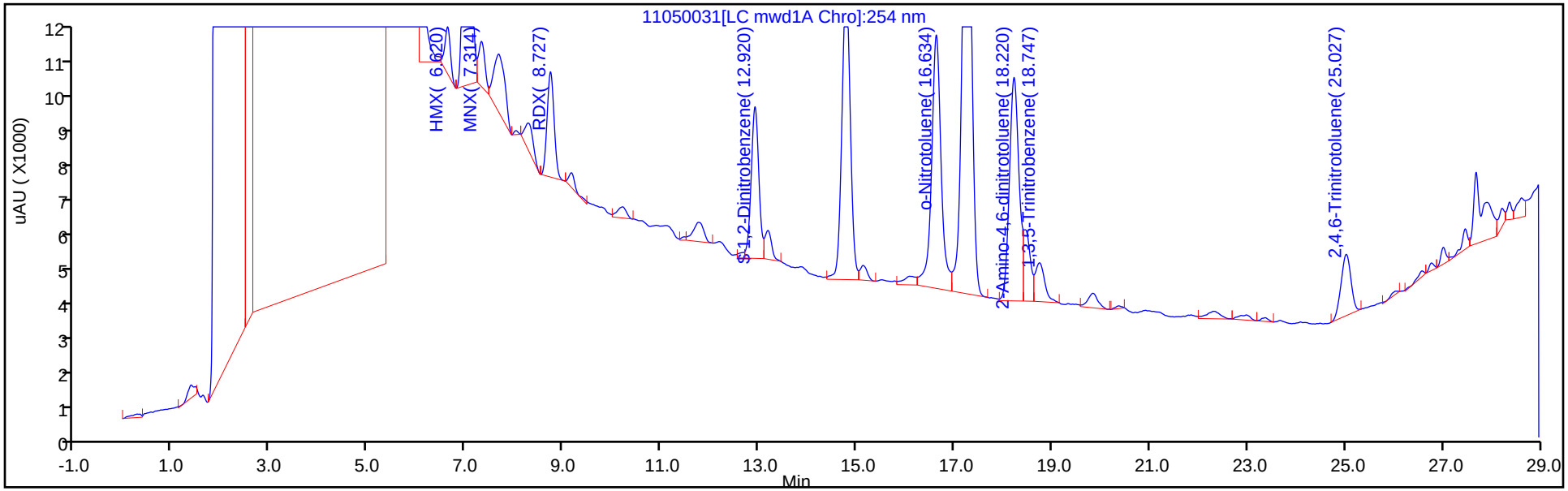
Report Date: 06-Nov-2021 12:42:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

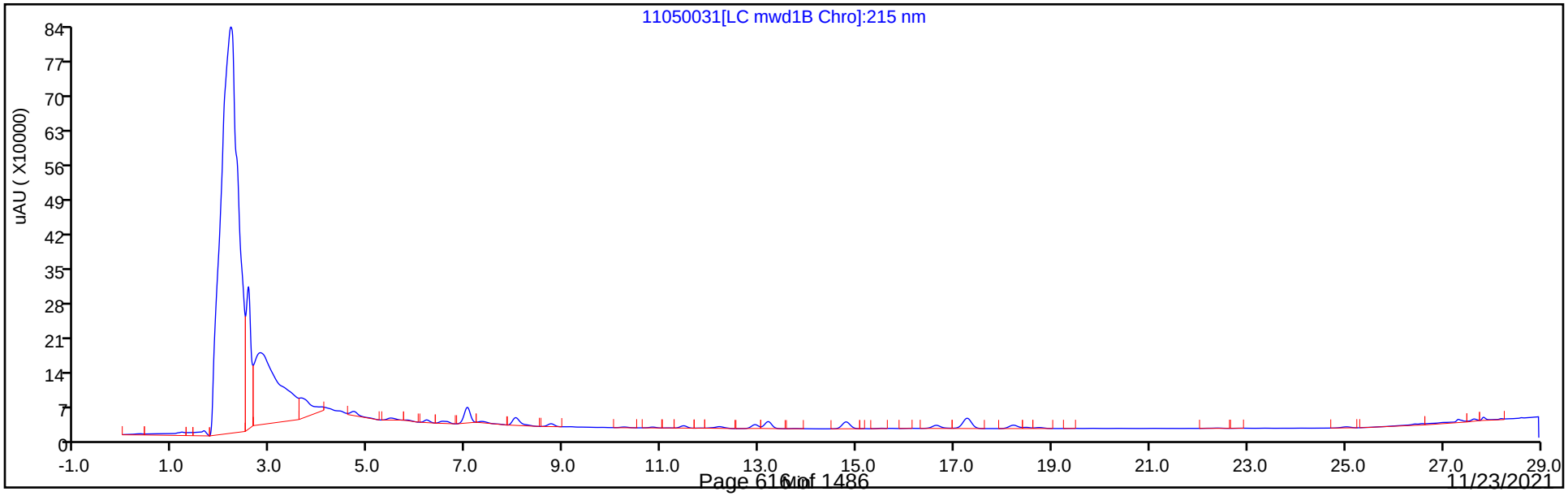
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D

Injection Date:	06-Nov-2021 03:54:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4	Worklist Smp#:	31
Client ID:	EW7-PM26A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D
Lims ID: 280-155015-A-4-A
Client ID: EW7-PM26A-7-25
Sample Type: Client
Inject. Date: 06-Nov-2021 03:54:59 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-4-A
Misc. Info.: 280-0106238-031
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:36:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1747	87.35

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

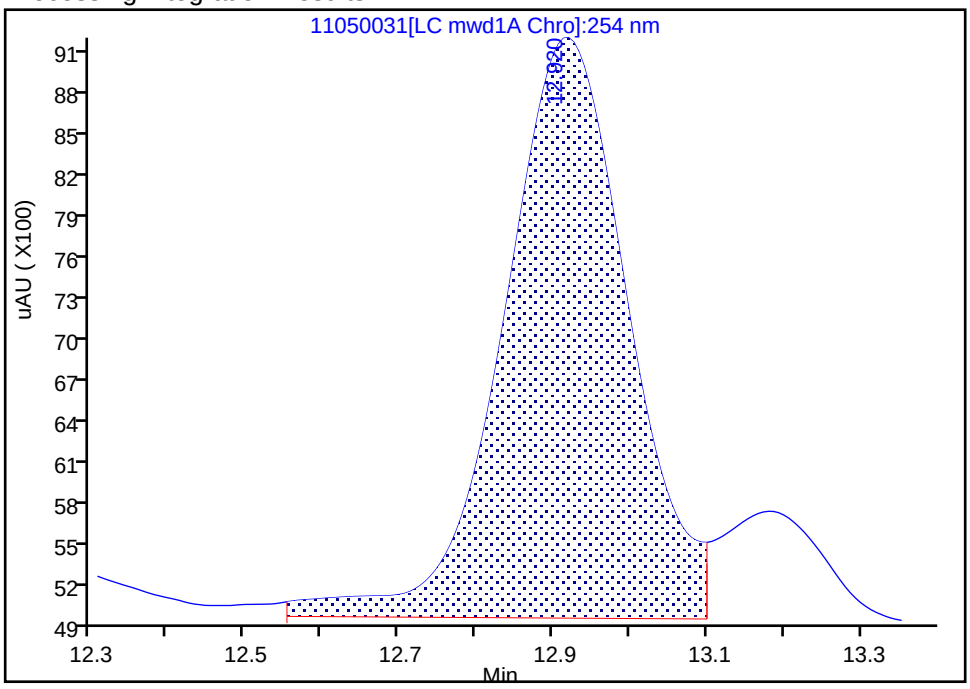
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D				
Injection Date:	06-Nov-2021 03:54:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

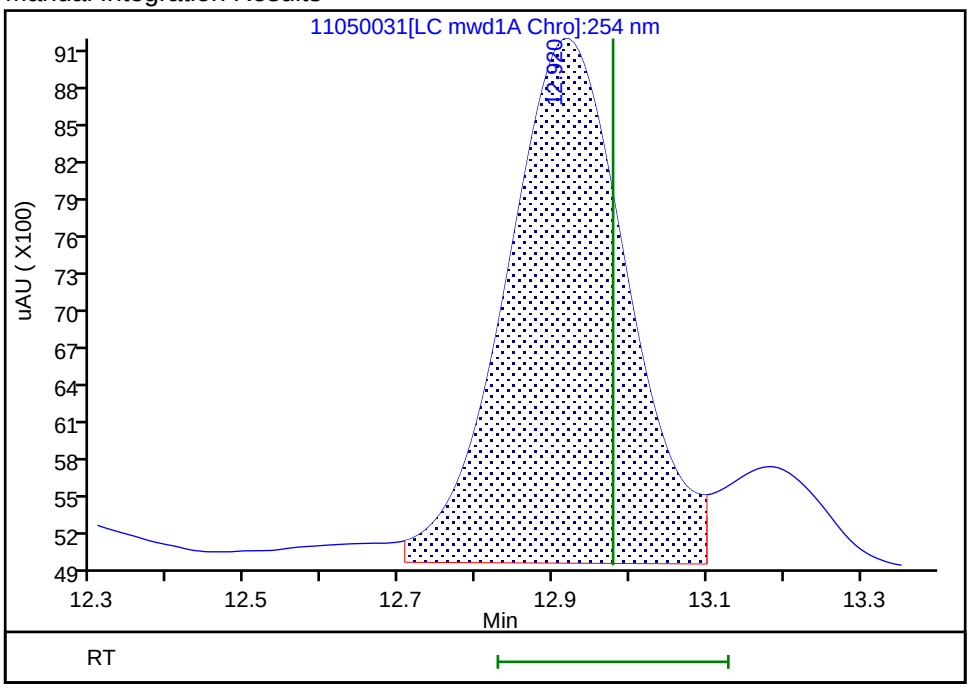
Processing Integration Results

RT: 12.92
Area: 47702
Amount: 0.179561
Amount Units: ug/ml



Manual Integration Results

RT: 12.92
Area: 46409
Amount: 0.174694
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:36:06

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

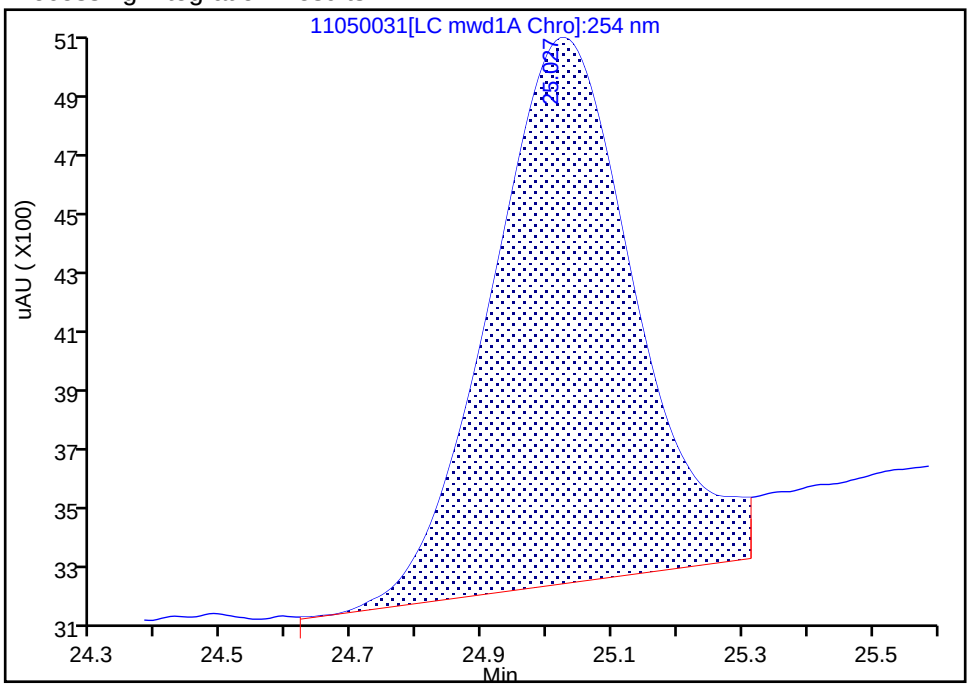
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D				
Injection Date:	06-Nov-2021 03:54:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

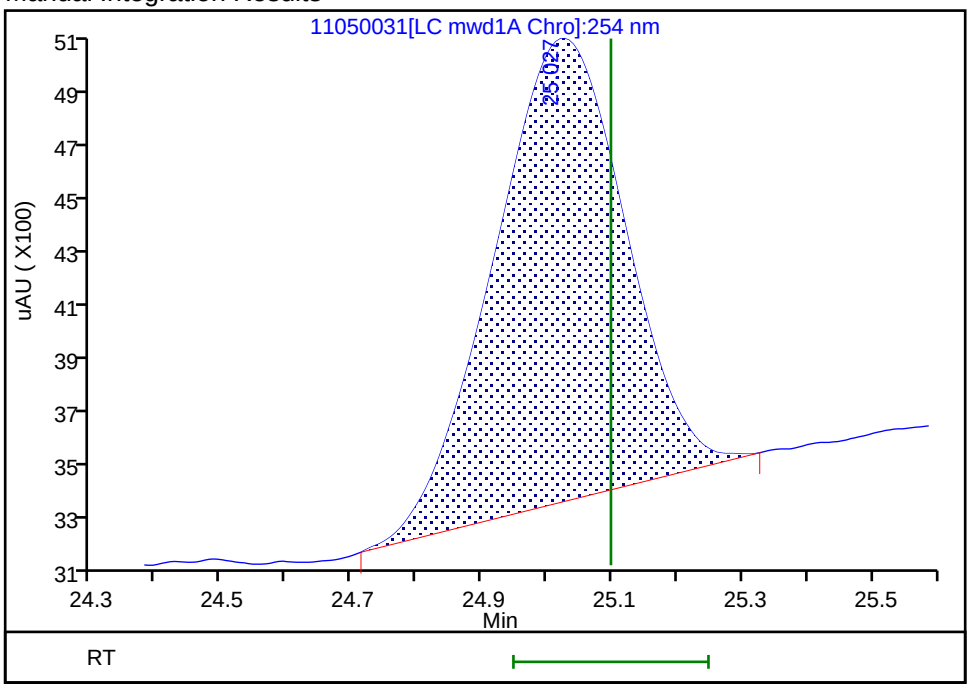
Processing Integration Results

RT: 25.03
Area: 27986
Amount: 0.071052
Amount Units: ug/ml



Manual Integration Results

RT: 25.03
Area: 24060
Amount: 0.060488
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:36:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

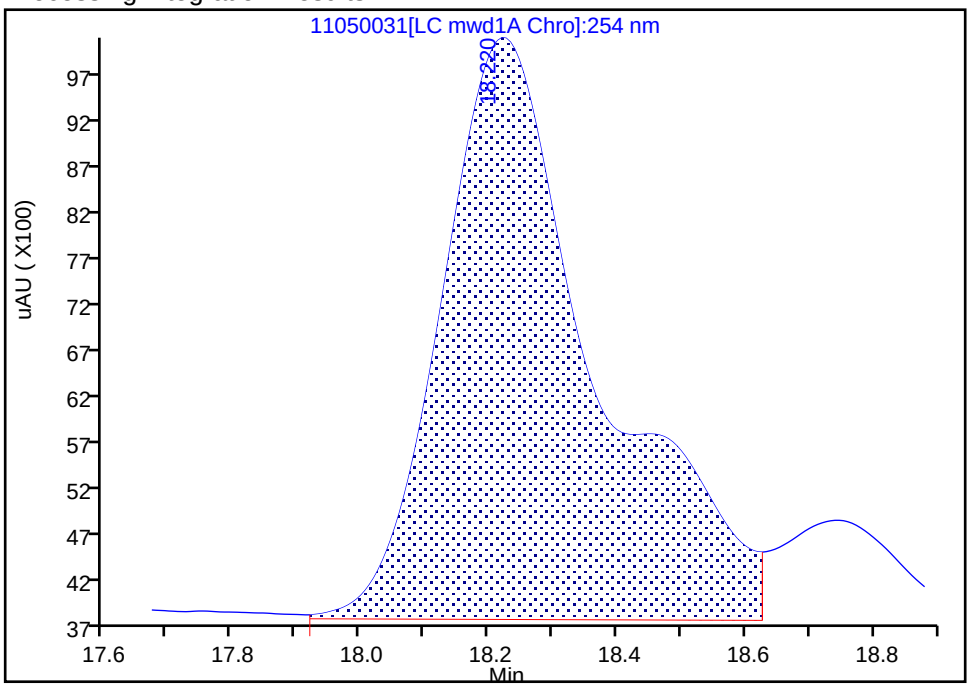
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D				
Injection Date:	06-Nov-2021 03:54:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

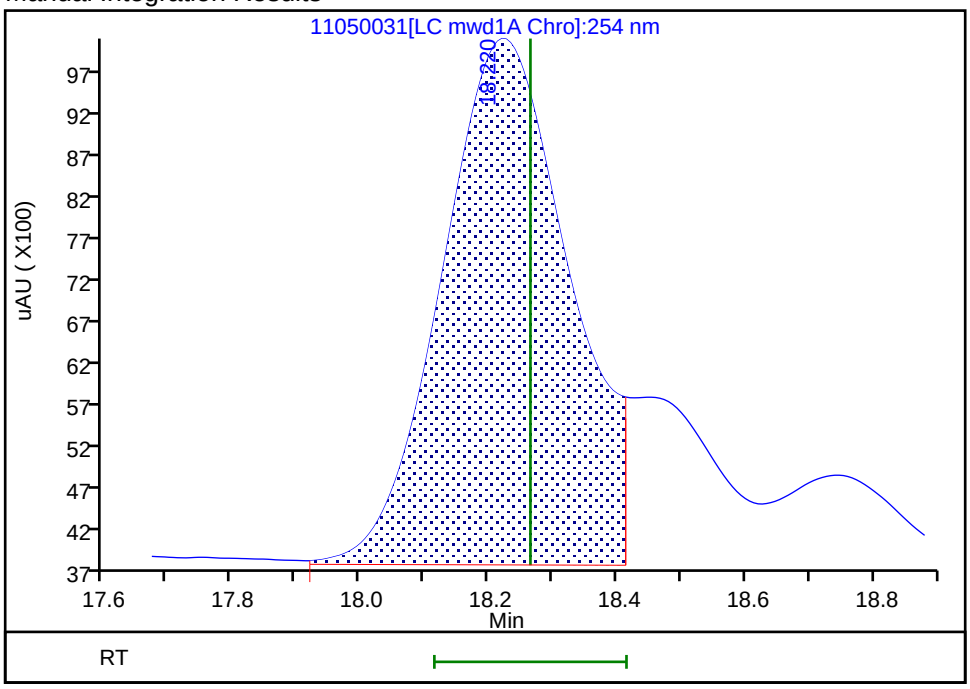
Processing Integration Results

RT: 18.22
Area: 104848
Amount: 0.265728
Amount Units: ug/ml



Manual Integration Results

RT: 18.22
Area: 85870
Amount: 0.217048
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:36:20

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

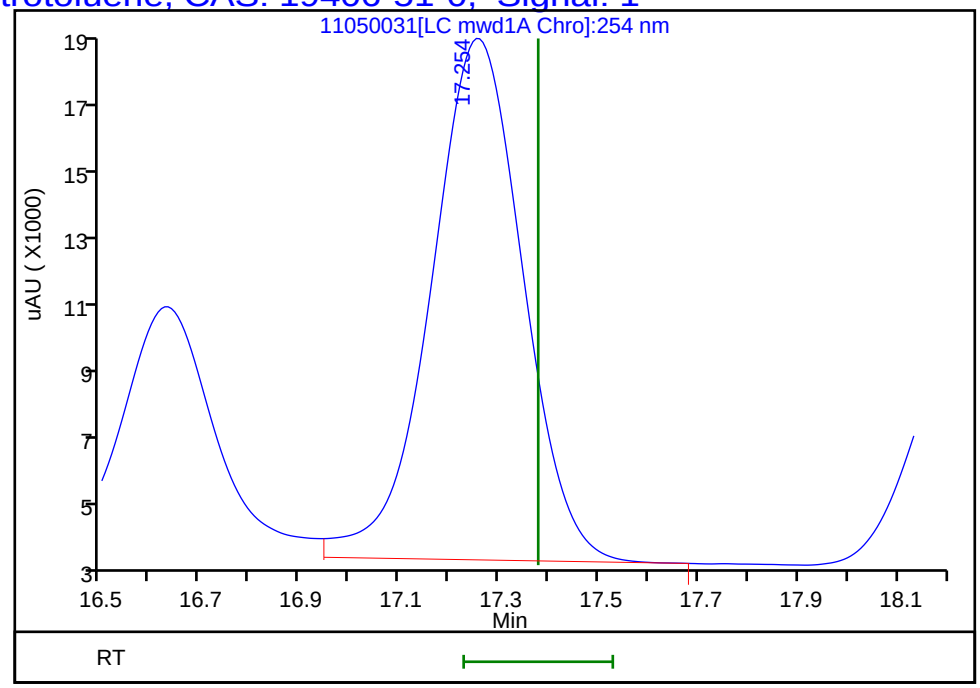
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D				
Injection Date:	06-Nov-2021 03:54:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.25
Response: 190894
Amount: 0.643380



Reviewer: zhangji, 06-Nov-2021 12:36:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

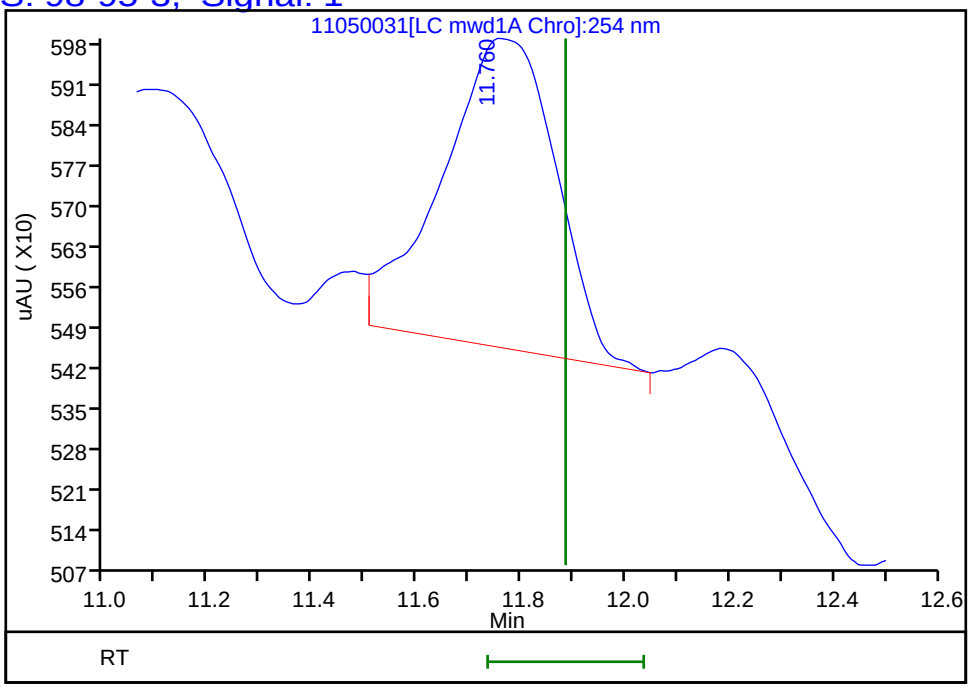
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050031.D				
Injection Date:	06-Nov-2021 03:54:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-4-A	Lab Sample ID:	280-155015-4		
Client ID:	EW7-PM26A-7-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 11.76
Response: 8137
Amount: 0.021719



Reviewer: zhangji, 06-Nov-2021 12:36:29
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

Matrix: Water Lab File ID: 11050018.D

Analysis Method: 8330A Date Collected: 10/30/2021 11:00

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 494.7(mL) Date Analyzed: 11/05/2021 17:55

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
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 M	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 M	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	0.089
5755-27-1	MNX	0.40	U M	2.0	0.40	0.16
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.092
121-82-4	RDX	1.6	M J1	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050018.D
Lims ID: 280-155015-B-5-A
Client ID: EW7-PM26B-7-35
Sample Type: Client
Inject. Date: 05-Nov-2021 17:55:28 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-B-5-A
Misc. Info.: 280-0106237-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 18:41:23

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.633	7.632	0.001	16798	0.1581	M
$ 10 1,2-Dinitrobenzene	1	8.586	8.606	-0.020	24086	0.1879	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	U
12 1,3-Dinitrobenzene	1	9.326	9.365	-0.039	3583	0.0121	M
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	U
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	U
23 p-Nitrotoluene	1		13.152			ND	U
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

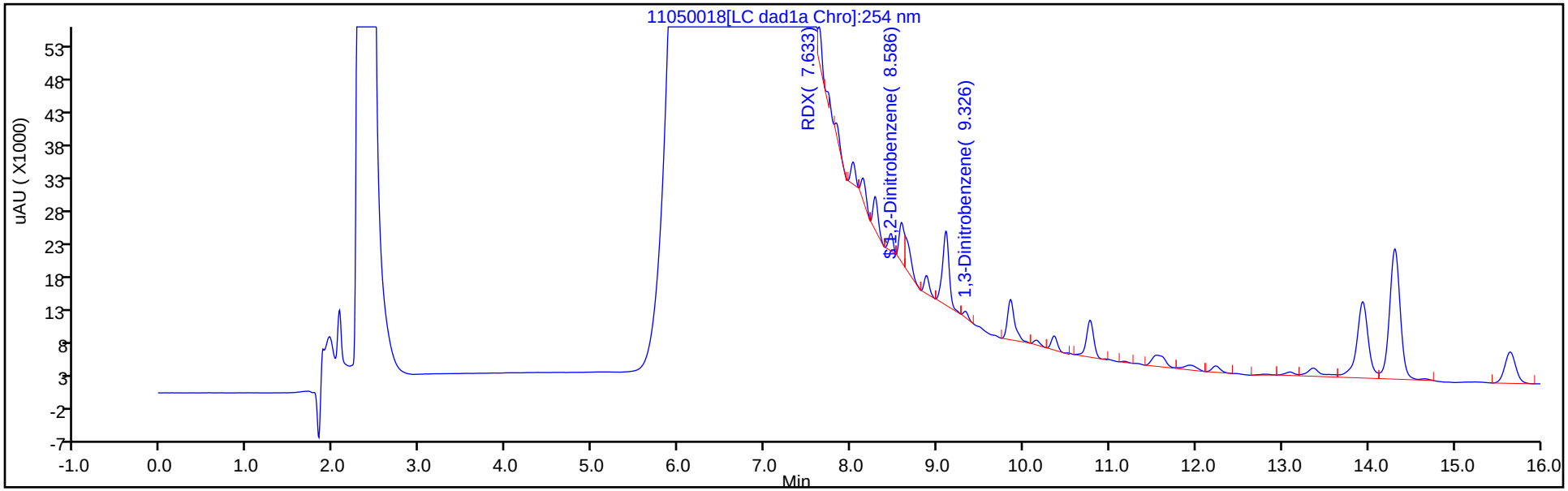
Report Date: 06-Nov-2021 10:24:52 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

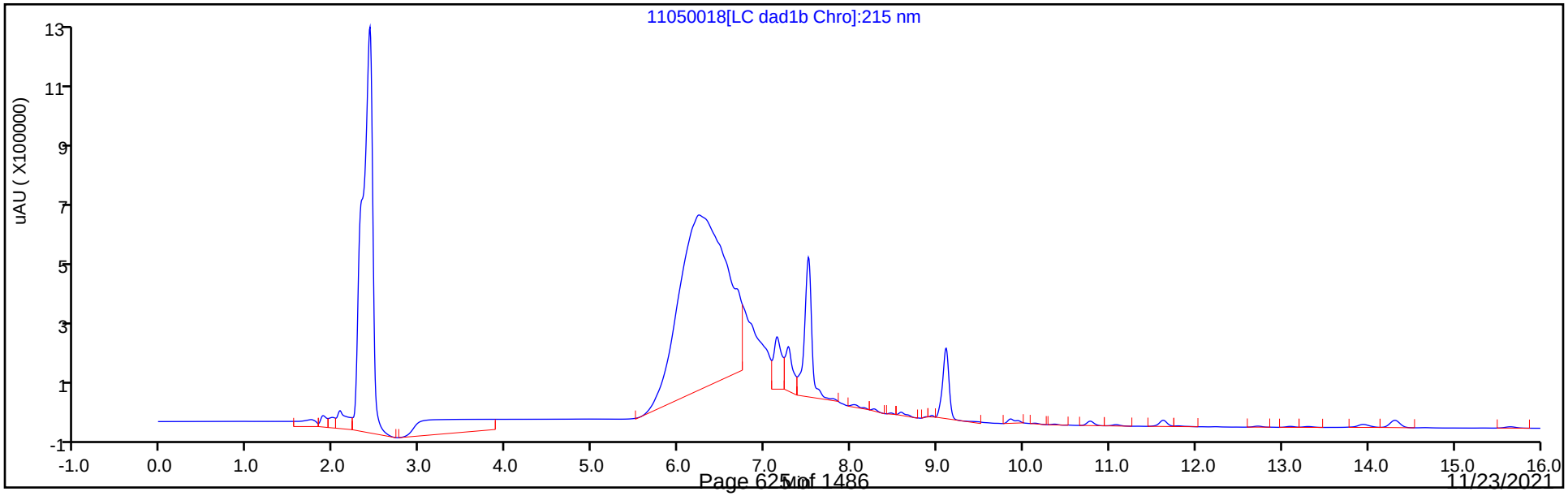
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d

Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5	Worklist Smp#:	18
Client ID:	EW7-PM26B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050018.D				
Lims ID:	280-155015-B-5-A				
Client ID:	EW7-PM26B-7-35				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 17:55:28	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-B-5-A				
Misc. Info.:	280-0106237-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 18:41:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1879	93.93

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

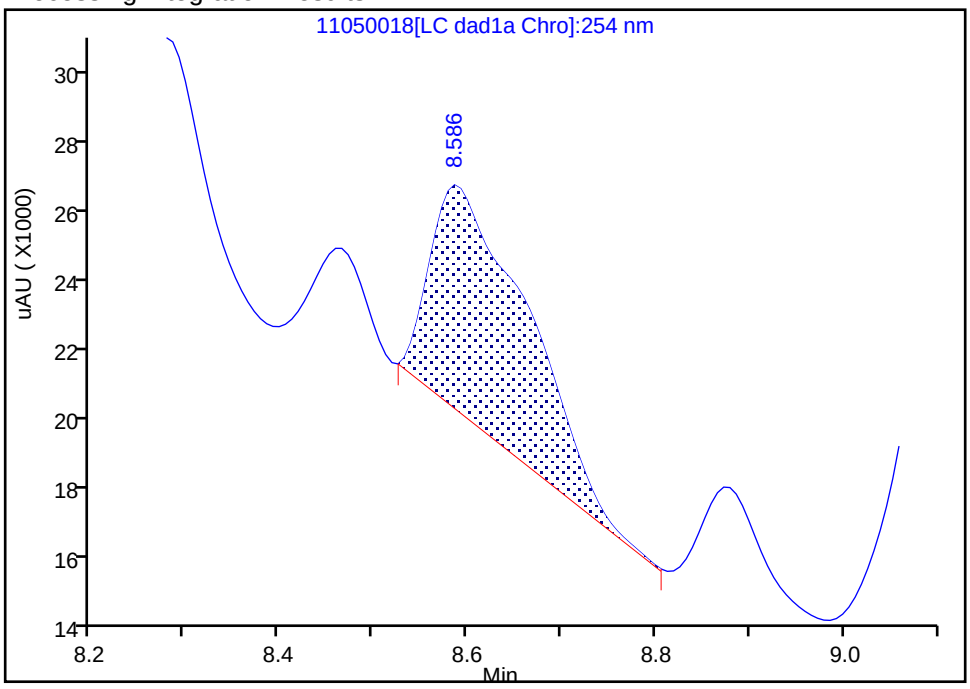
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

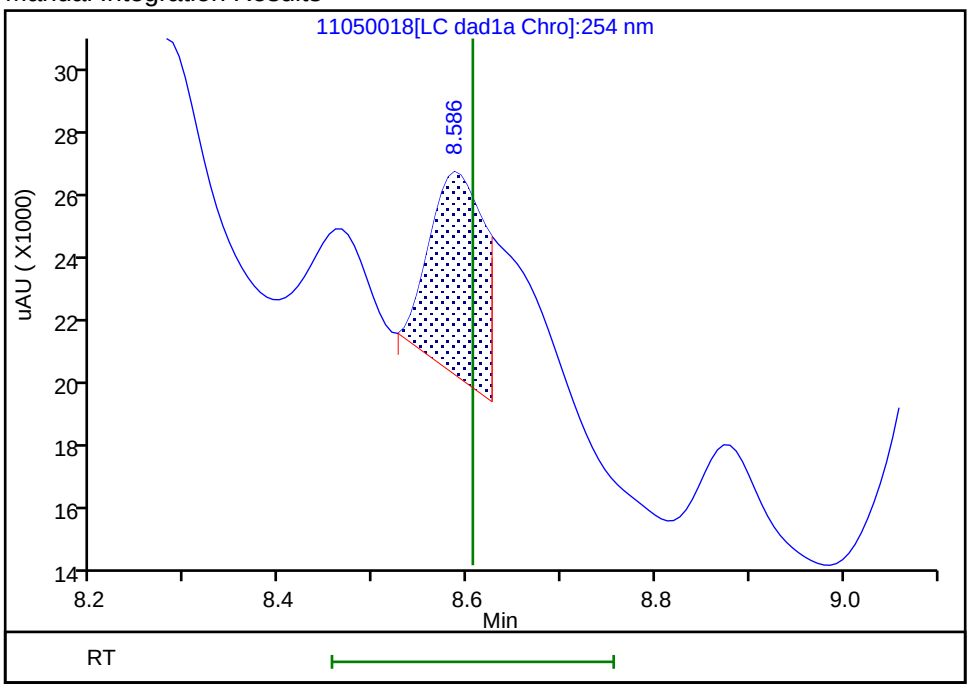
Processing Integration Results

RT: 8.59
Area: 45817
Amount: 0.357339
Amount Units: ug/mL



Manual Integration Results

RT: 8.59
Area: 24086
Amount: 0.187853
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:40:41

Audit Action: Split an Integrated Peak Audit Reason: Baseline

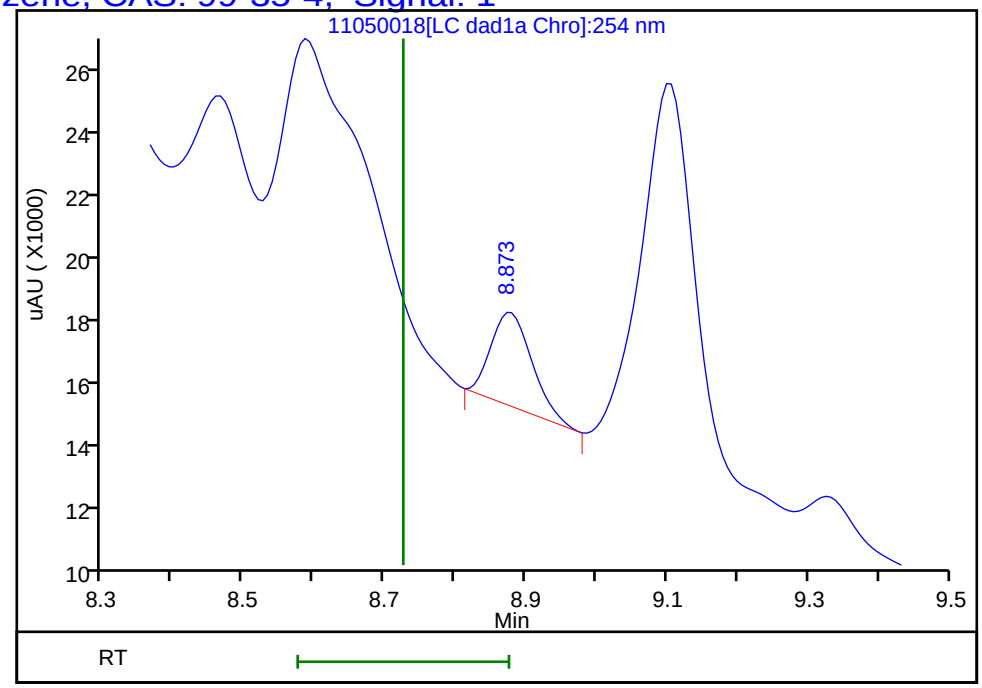
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.87
Response: 11243
Amount: 0.051031



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

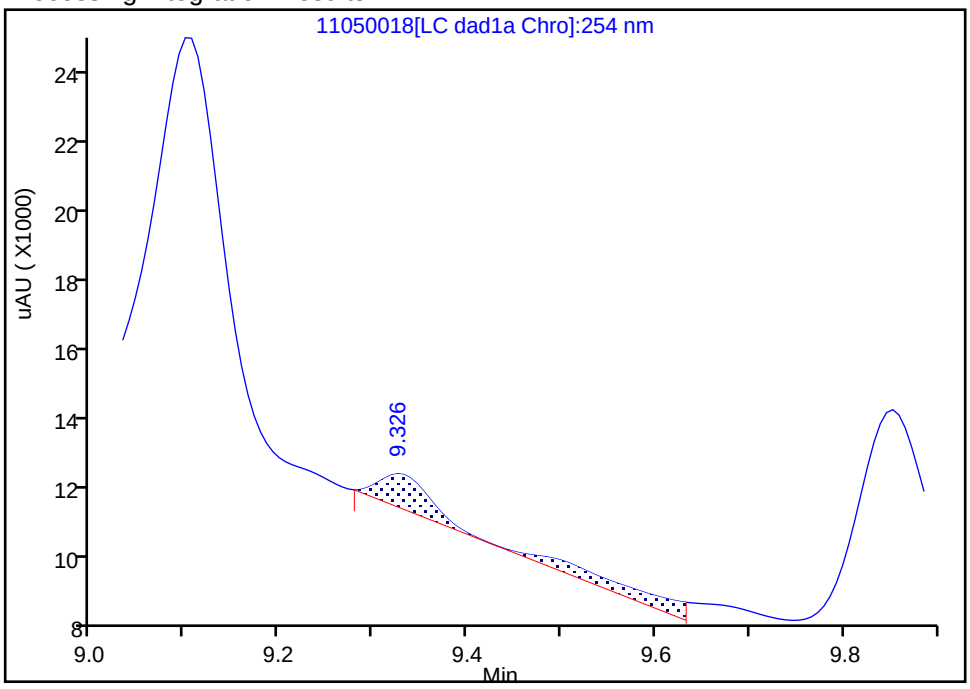
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

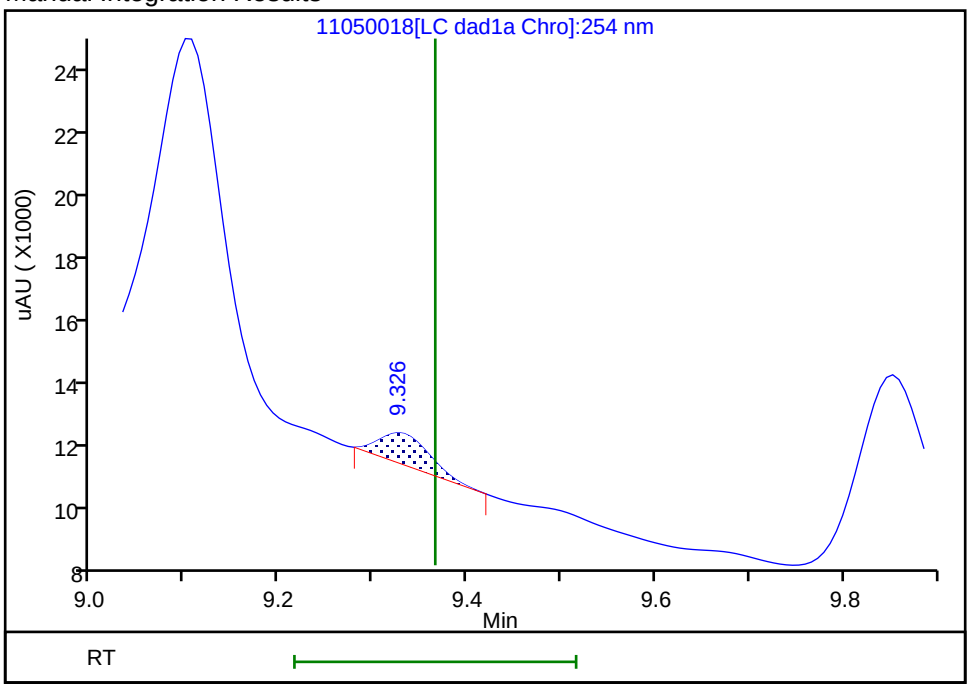
Processing Integration Results

RT: 9.33
Area: 6798
Amount: 0.022941
Amount Units: ug/mL



Manual Integration Results

RT: 9.33
Area: 3583
Amount: 0.012091
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:41:10

Audit Action: Manually Integrated Audit Reason: Baseline

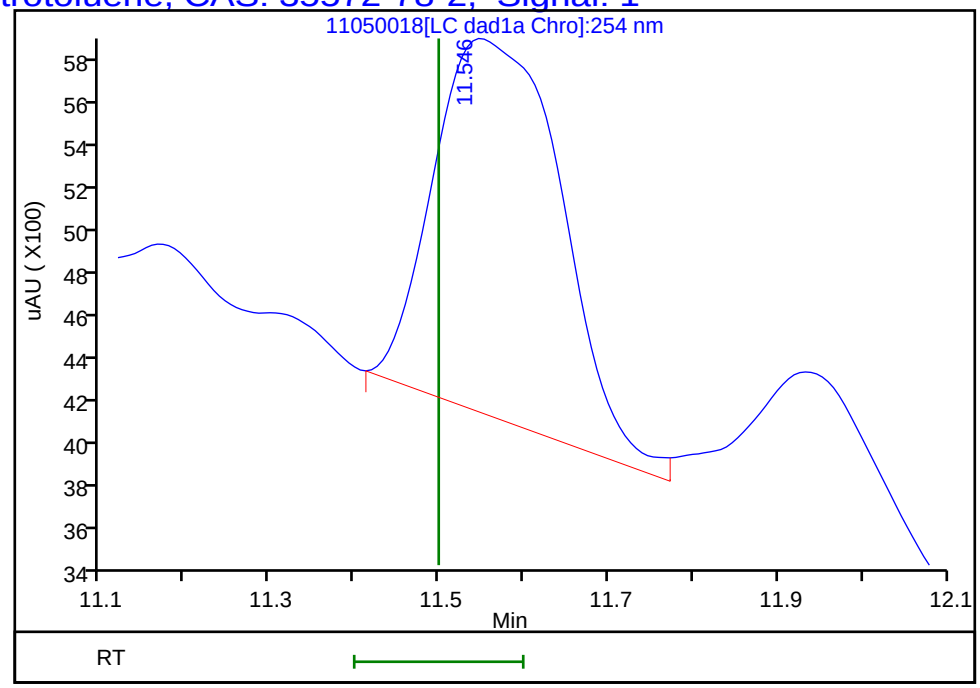
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
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		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.55
Response: 18380
Amount: 0.088824



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

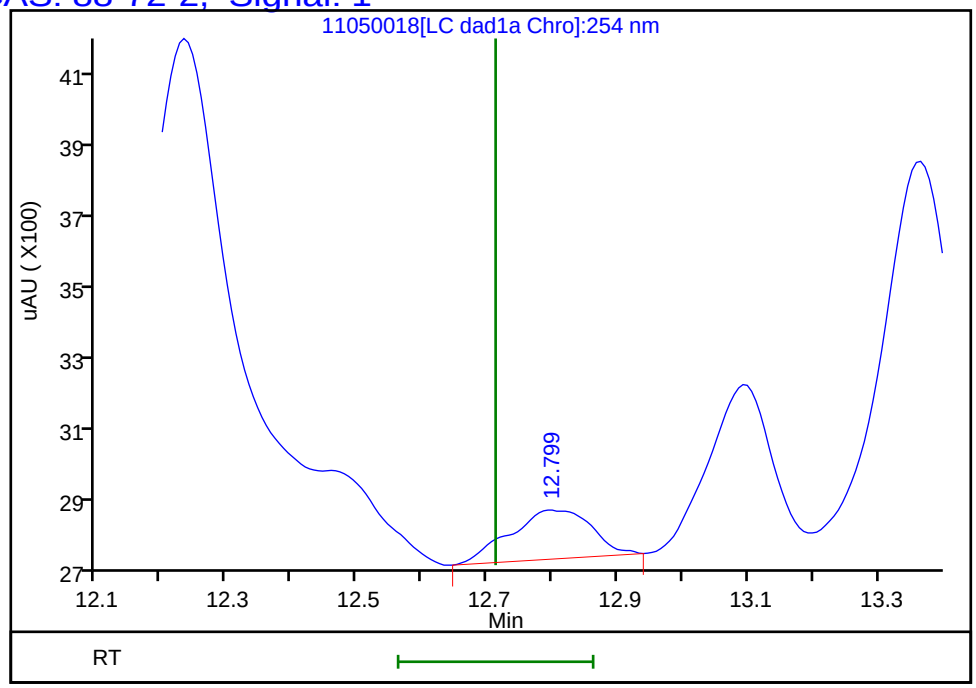
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
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		

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.80
Response: 1142
Amount: 0.008895



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

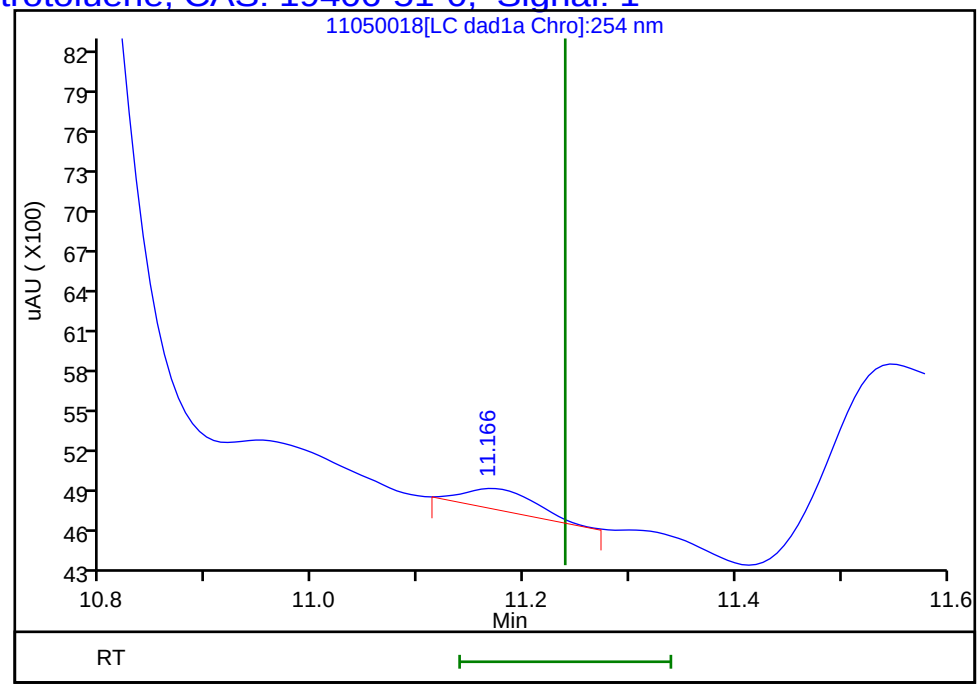
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d

Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
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		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.17
Response: 745
Amount: 0.004877



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

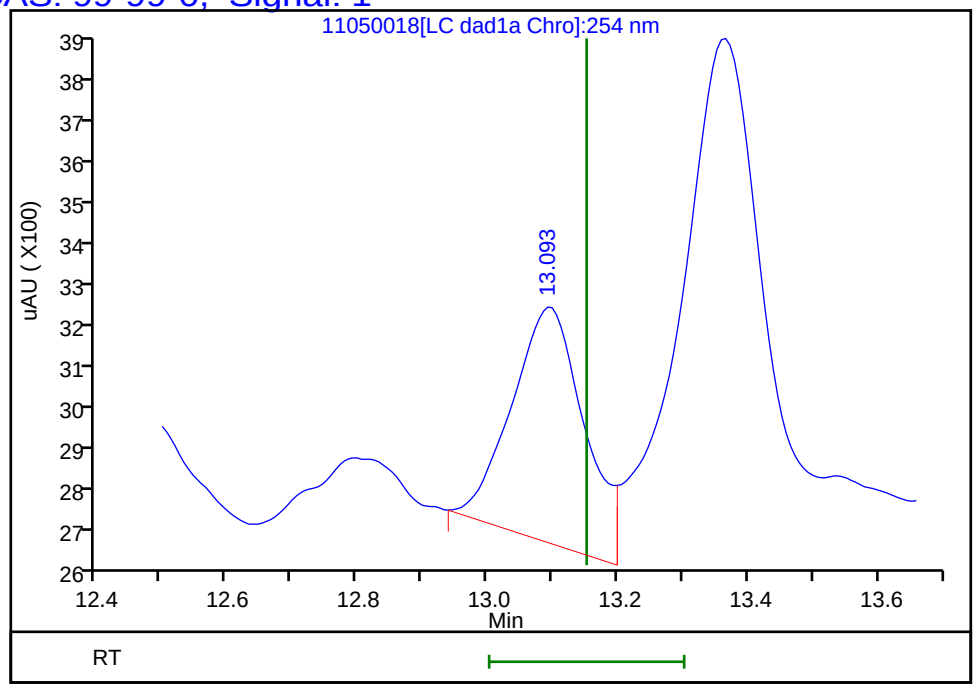
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.09
Response: 4059
Amount: 0.036269



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

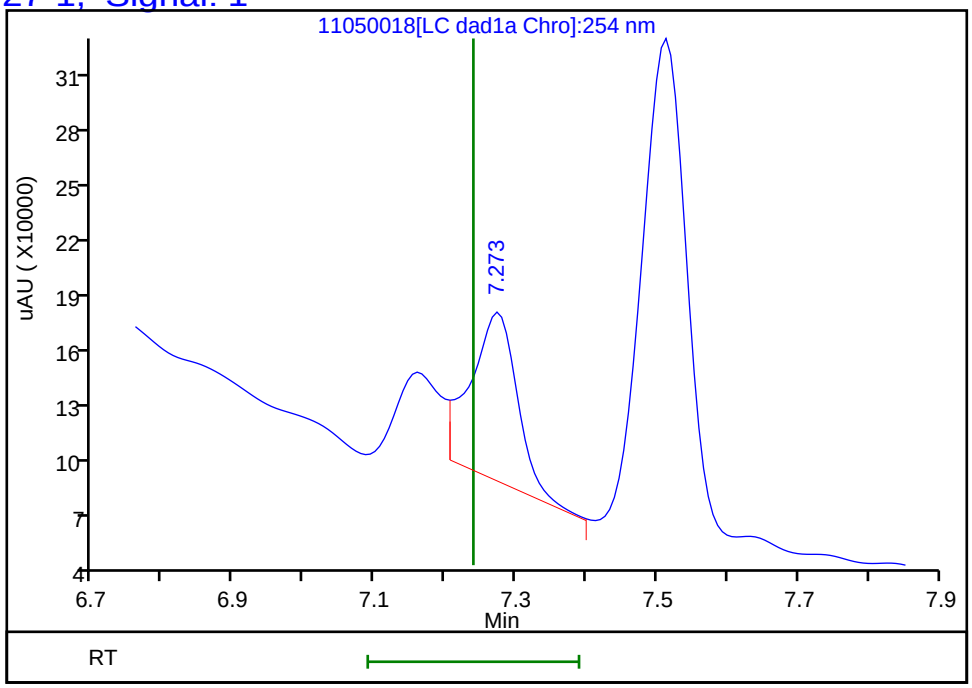
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 420485
Amount: 3.226054



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

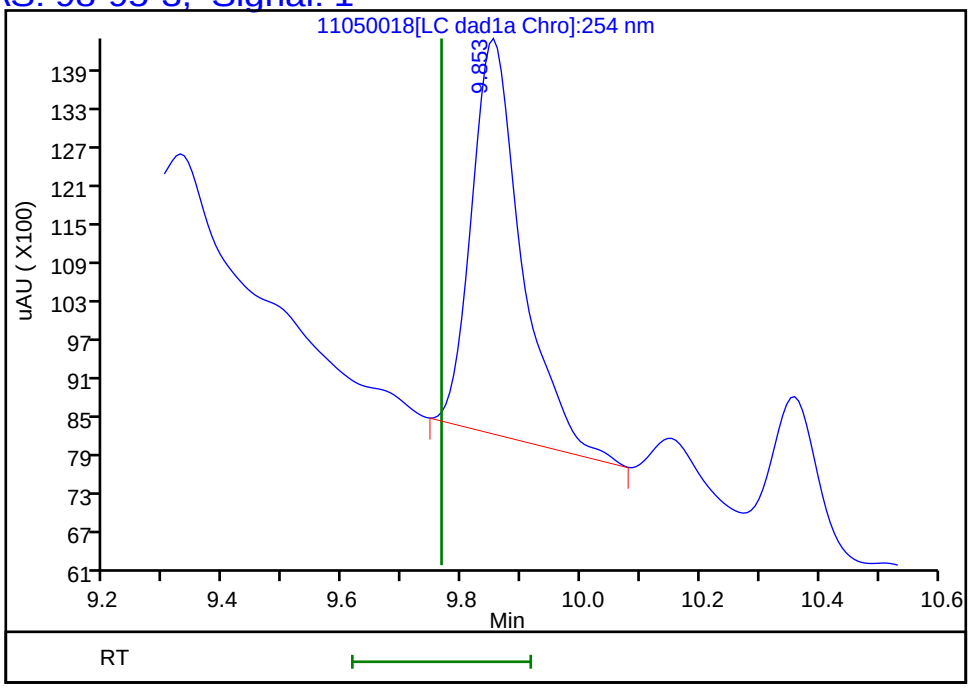
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.85
Response: 36132
Amount: 0.185021



Reviewer: zhangji, 05-Nov-2021 18:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

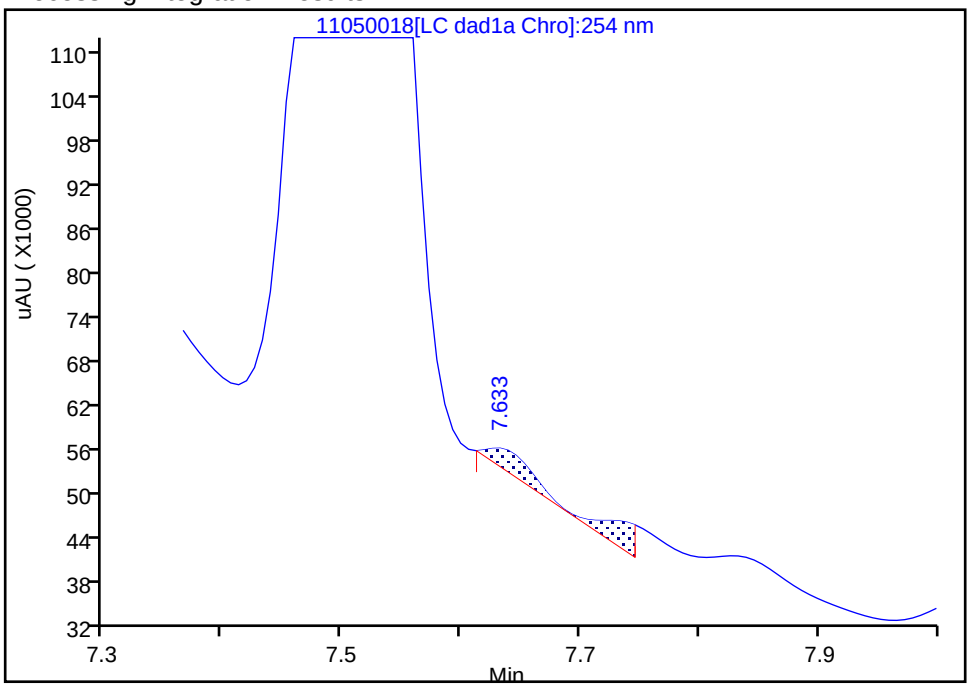
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

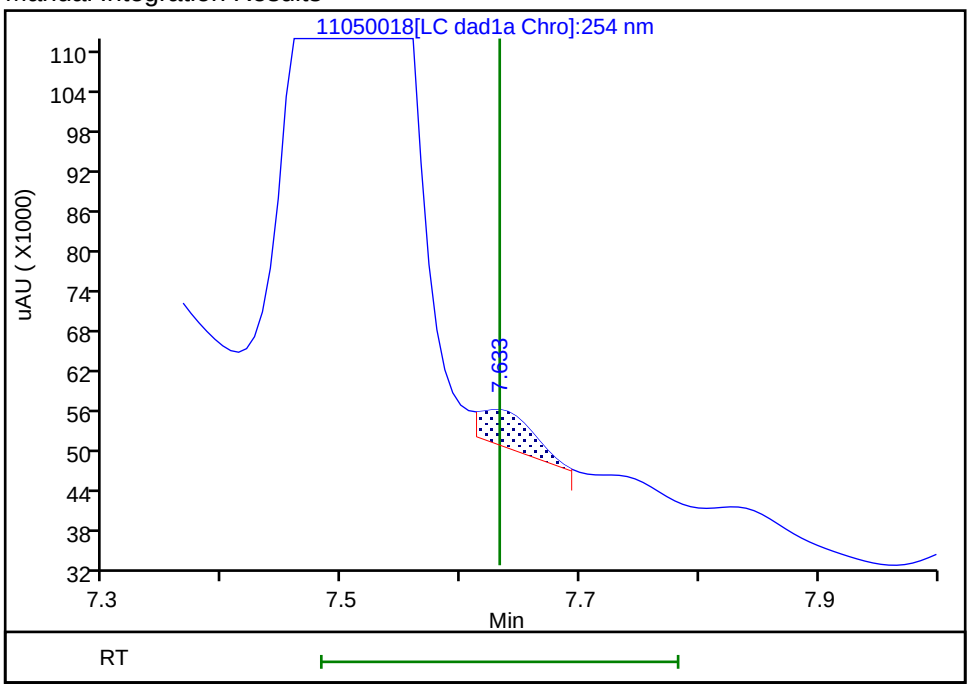
Processing Integration Results

RT: 7.63
Area: 14315
Amount: 0.134715
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 16798
Amount: 0.158082
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:41:03

Audit Action: Split an Integrated Peak Audit Reason: Baseline

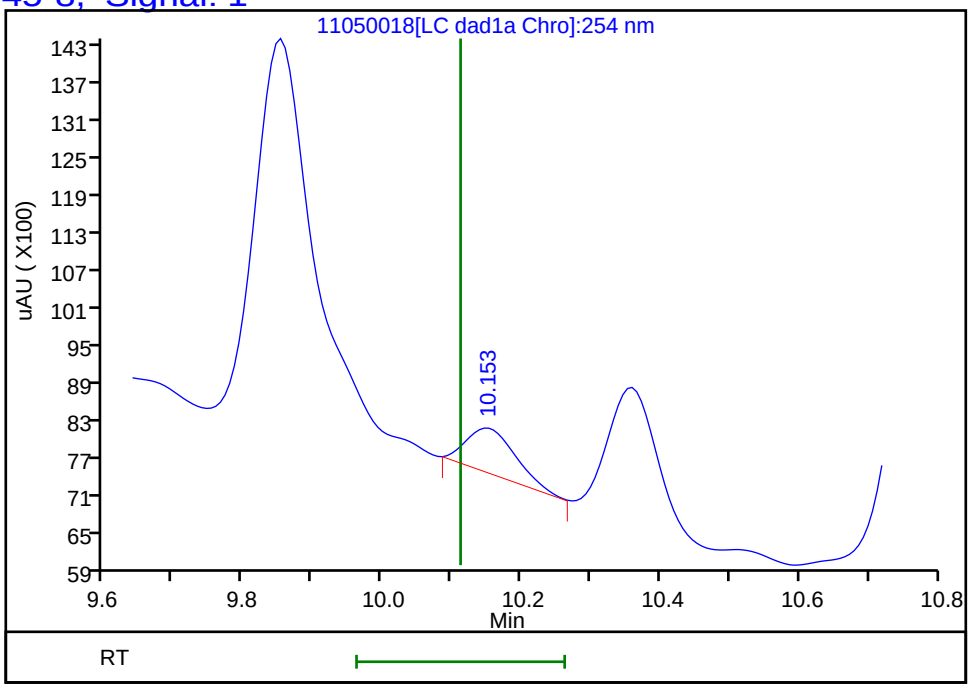
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050018.d				
Injection Date:	05-Nov-2021 17:55:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 3557
Amount: 0.020630



Reviewer: zhangji, 05-Nov-2021 18:41:23
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

Matrix: Water Lab File ID: 11050032.D

Analysis Method: 8330A Date Collected: 10/30/2021 11:00

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 494.7(mL) Date Analyzed: 11/06/2021 04:29

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.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
121-82-4	*RDX*	*0.44*	*M J1*	*0.21*	0.20	*0.052*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D
Lims ID: 280-155015-B-5-A
Client ID: EW7-PM26B-7-35
Sample Type: Client
Inject. Date: 06-Nov-2021 04:29:58 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-B-5-A
Misc. Info.: 280-0106238-032
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:37:19

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	U
	6 MNX	1	7.347	7.384	-0.037	19530	0.0737	M
	8 RDX	1	8.734	8.825	-0.091	8893	0.0435	M
	9 Nitrobenzene	1	11.794	11.885	-0.091	26797	0.0715	M
$	10 1,2-Dinitrobenzene	1	12.927	12.978	-0.051	52778	0.1987	M
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1	16.647	16.631	0.016	188811	0.7584	M
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.267	18.265	0.002	61187	0.1537	M
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	7
	24 2,4,6-Trinitrotoluene	1		25.098			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

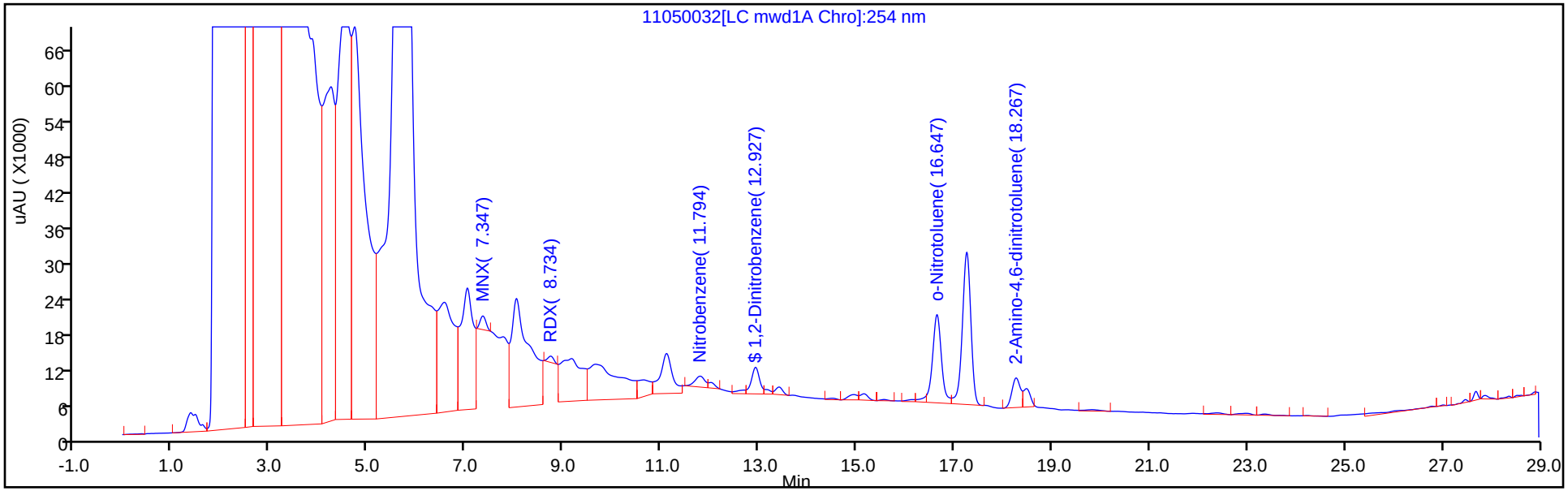
Report Date: 06-Nov-2021 12:42:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

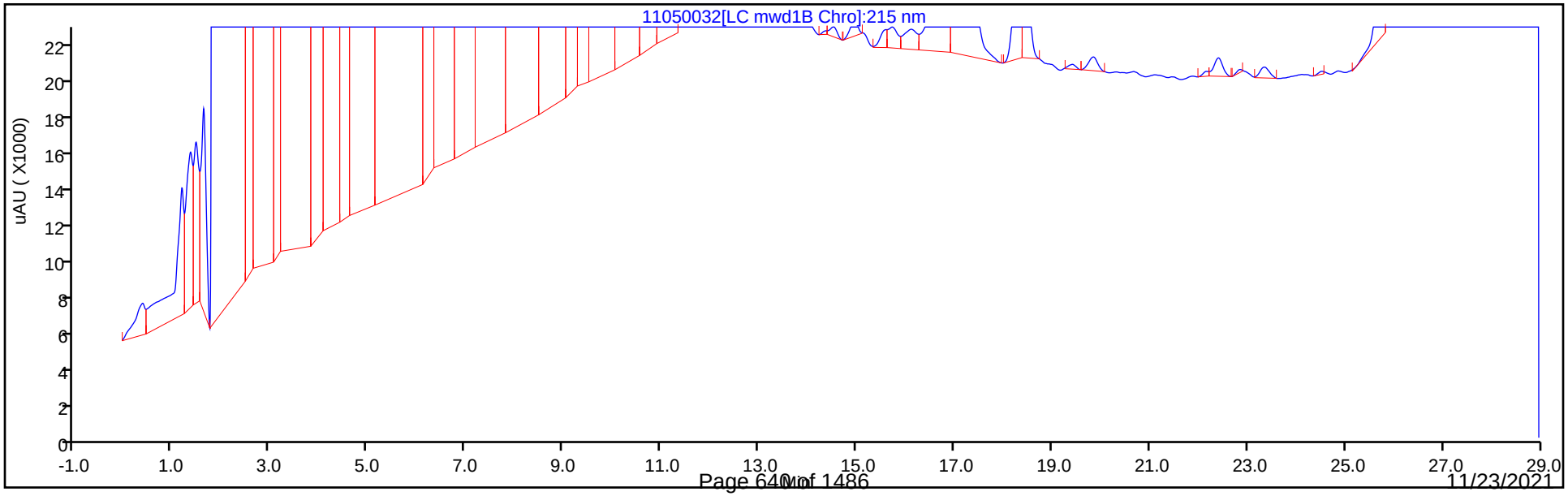
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D

Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5	Worklist Smp#:	32
Client ID:	EW7-PM26B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Lims ID:	280-155015-B-5-A				
Client ID:	EW7-PM26B-7-35				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 04:29:58	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-B-5-A				
Misc. Info.:	280-0106238-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:04	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:37:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1987	99.33

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

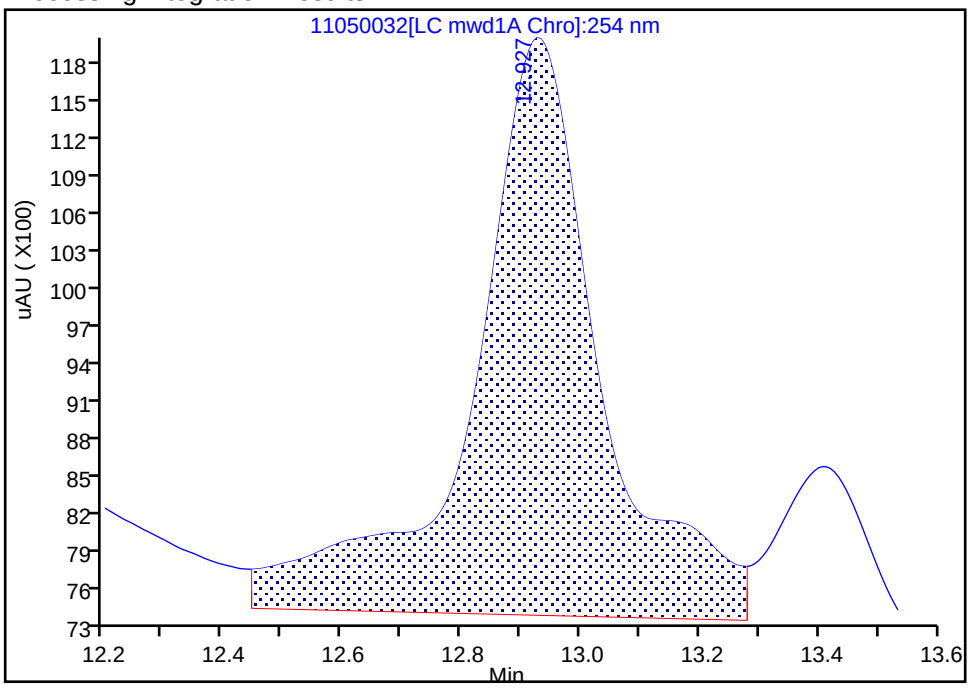
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

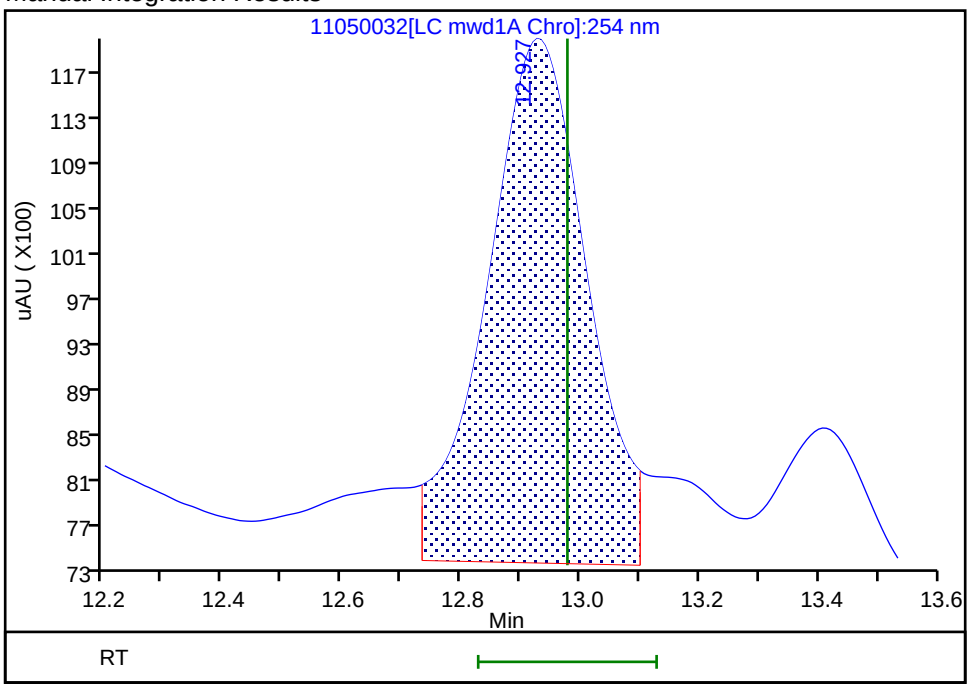
Processing Integration Results

RT: 12.93
Area: 68239
Amount: 0.256867
Amount Units: ug/ml



Manual Integration Results

RT: 12.93
Area: 52778
Amount: 0.198668
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:37:02

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

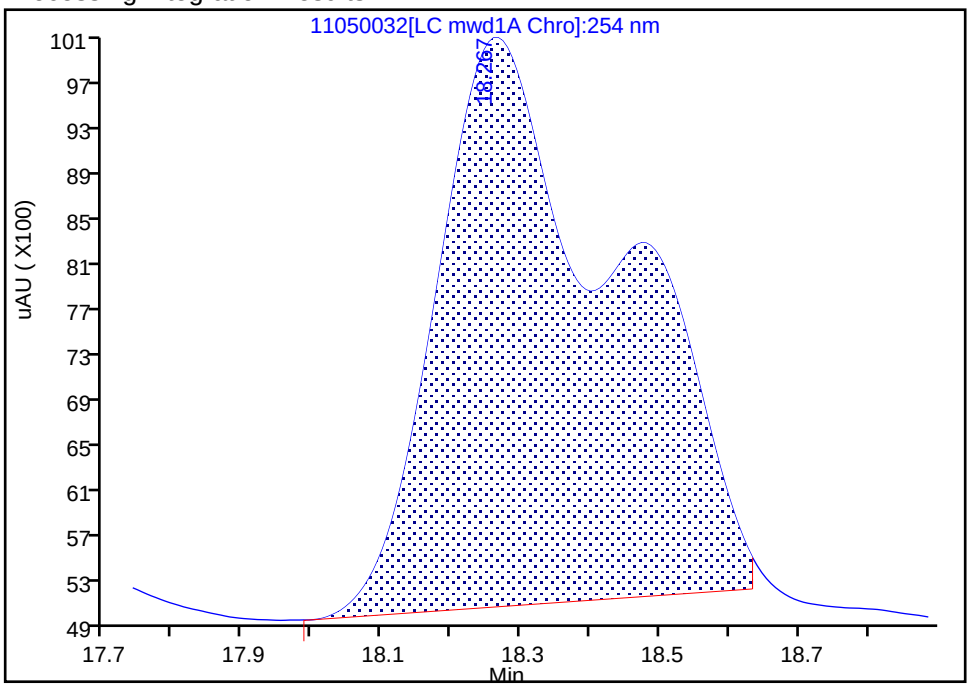
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

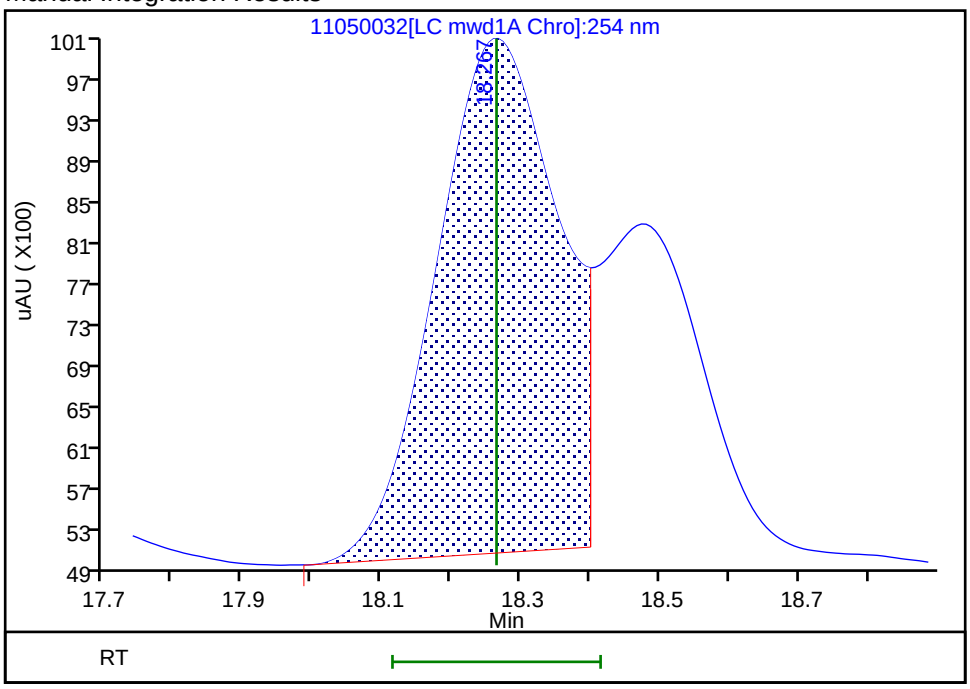
Processing Integration Results

RT: 18.27
Area: 91778
Amount: 0.232203
Amount Units: ug/ml



Manual Integration Results

RT: 18.27
Area: 61187
Amount: 0.153734
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:37:11

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

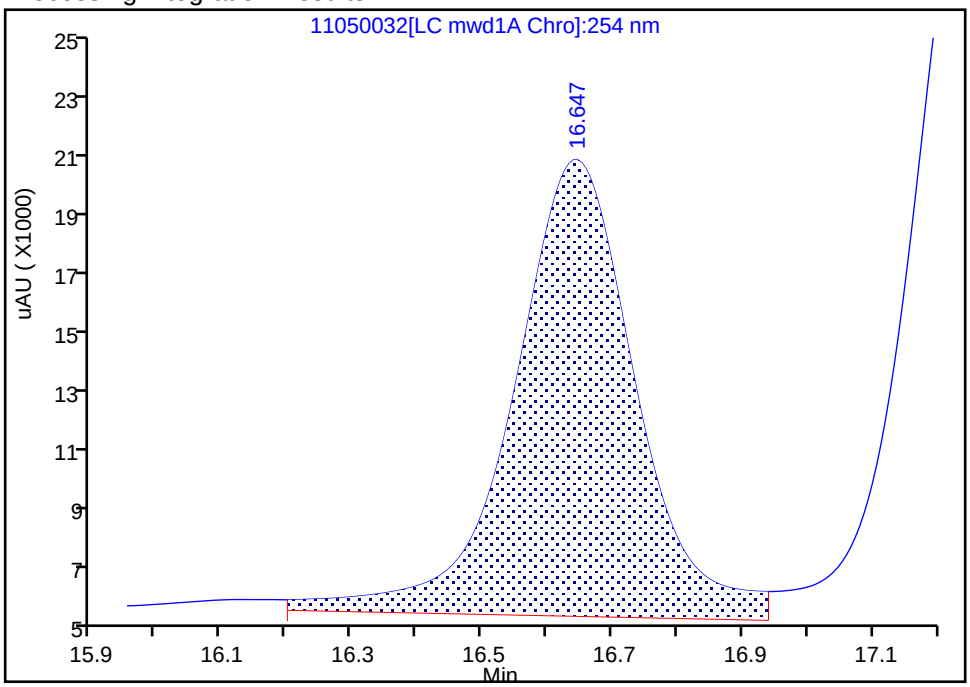
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

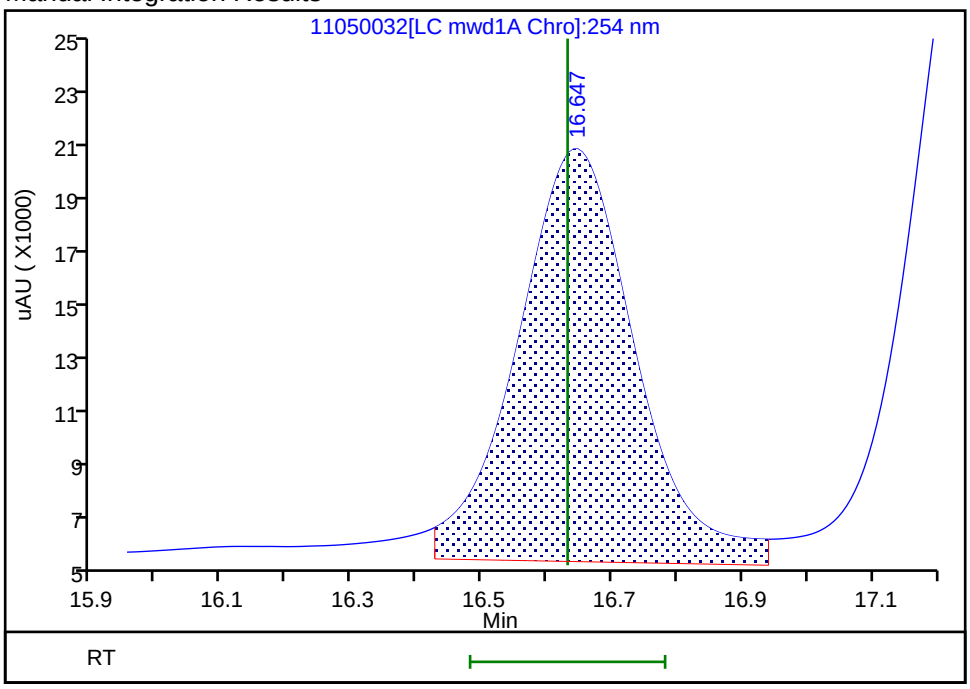
Processing Integration Results

RT: 16.65
Area: 196803
Amount: 0.790478
Amount Units: ug/ml



Manual Integration Results

RT: 16.65
Area: 188811
Amount: 0.758378
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:37:18

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

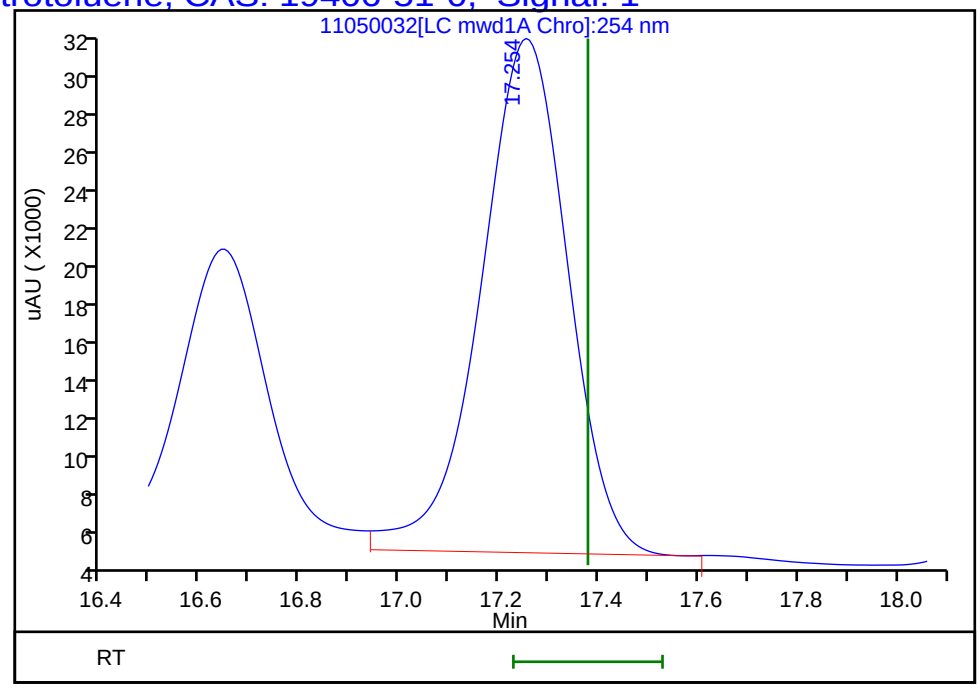
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.25
Response: 314983
Amount: 1.061603



Reviewer: zhangji, 06-Nov-2021 12:37:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

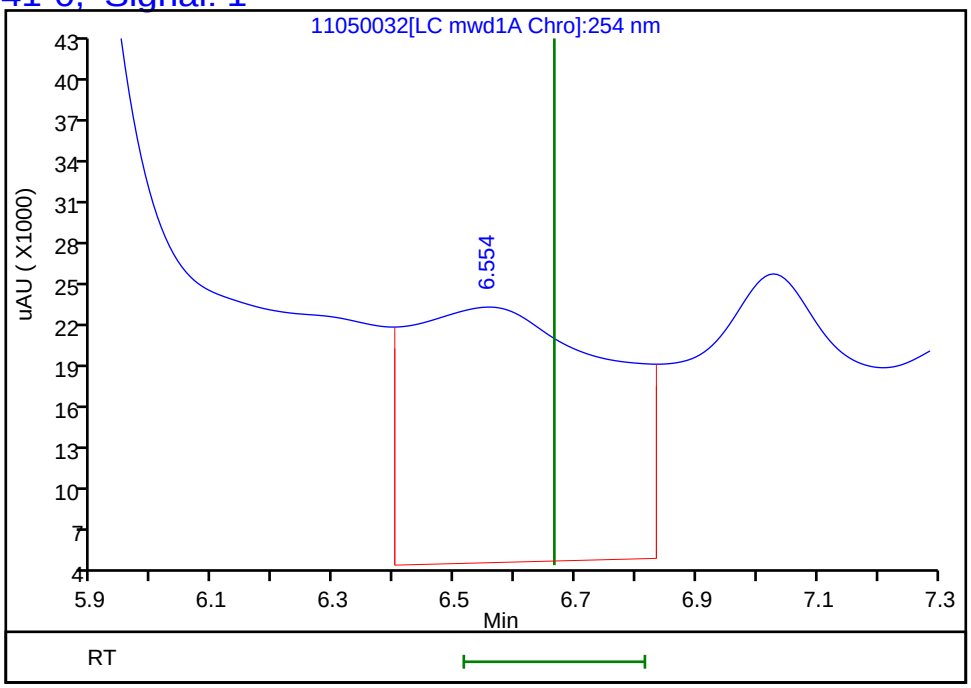
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.55
Response: 434044
Amount: 2.727550



Reviewer: zhangji, 06-Nov-2021 12:37:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

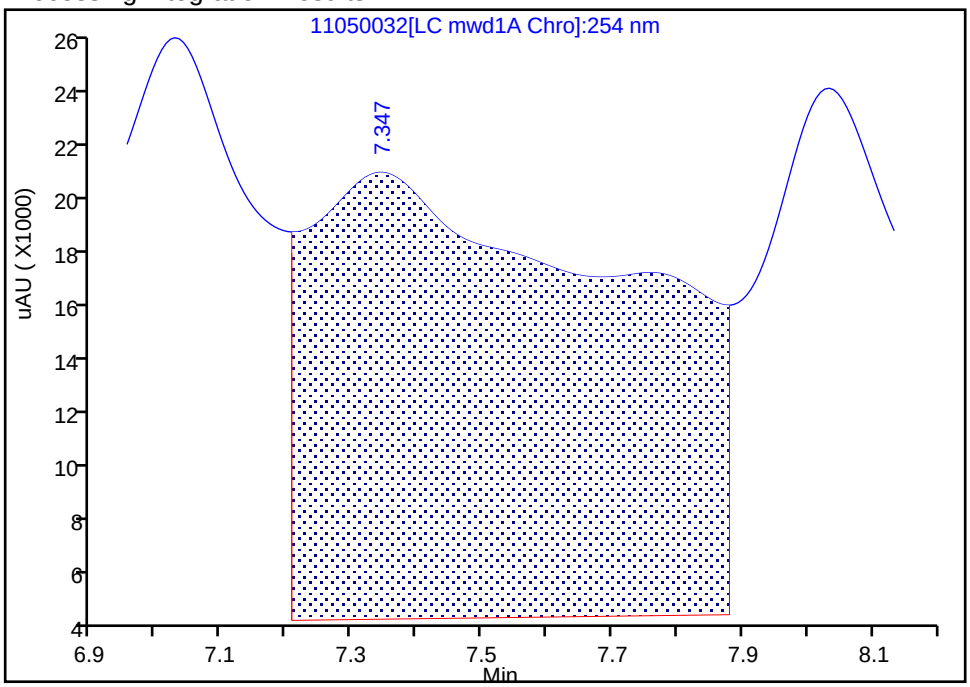
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

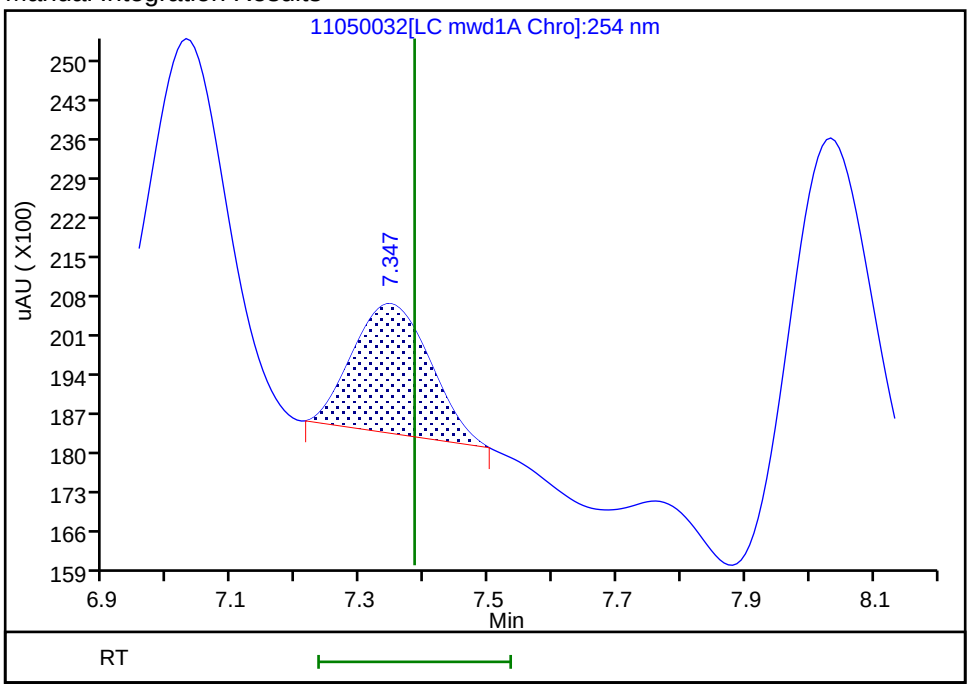
Processing Integration Results

RT: 7.35
Area: 530789
Amount: 2.004168
Amount Units: ug/ml



Manual Integration Results

RT: 7.35
Area: 19530
Amount: 0.073742
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:36:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

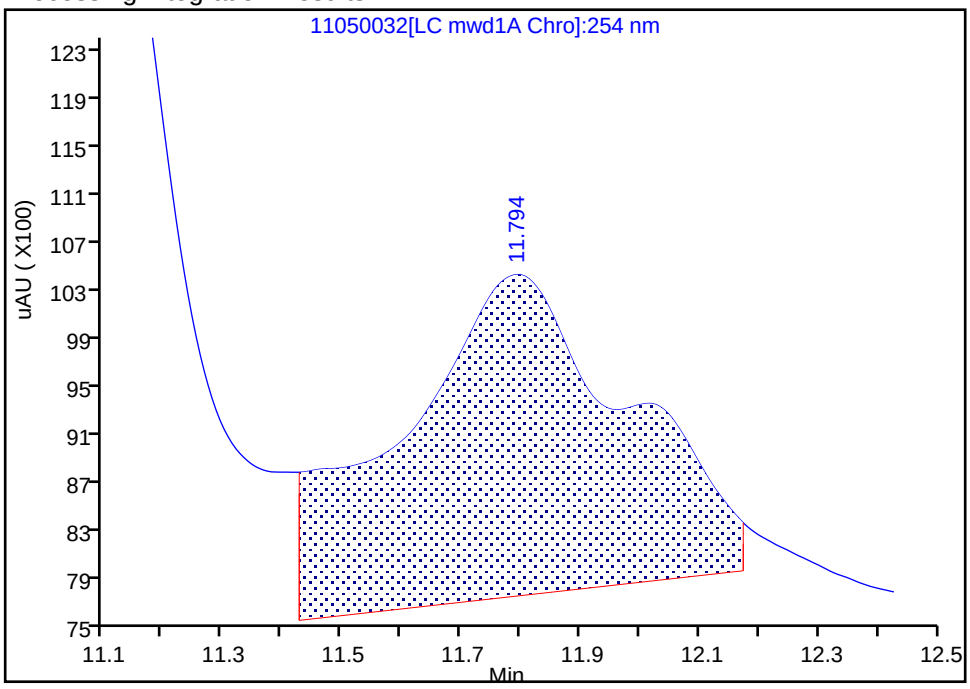
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

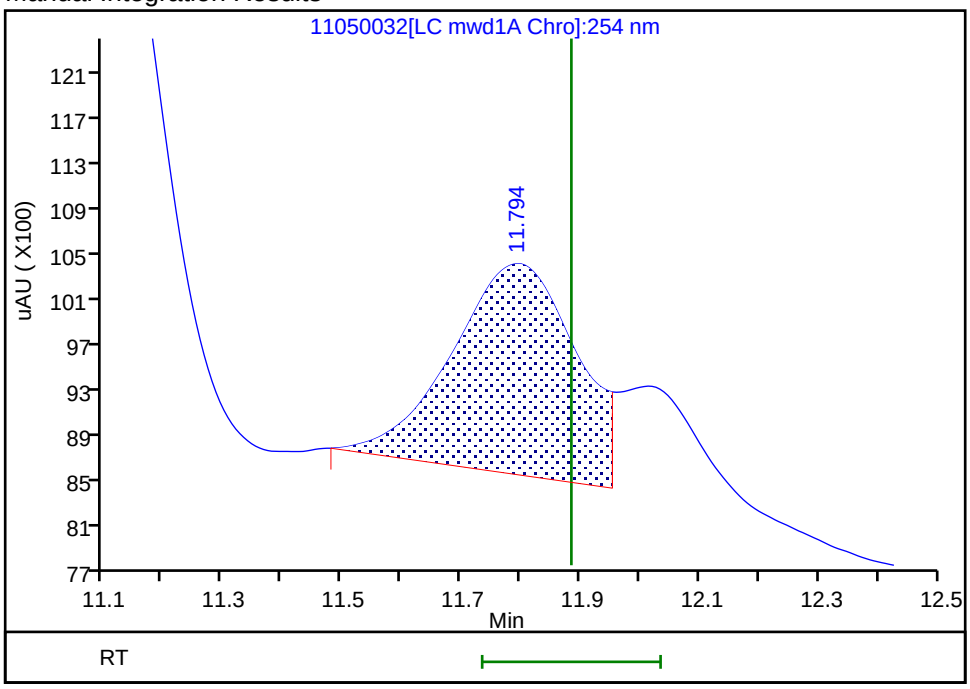
Processing Integration Results

RT: 11.79
Area: 71819
Amount: 0.191695
Amount Units: ug/ml



Manual Integration Results

RT: 11.79
Area: 26797
Amount: 0.071525
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:36:56
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

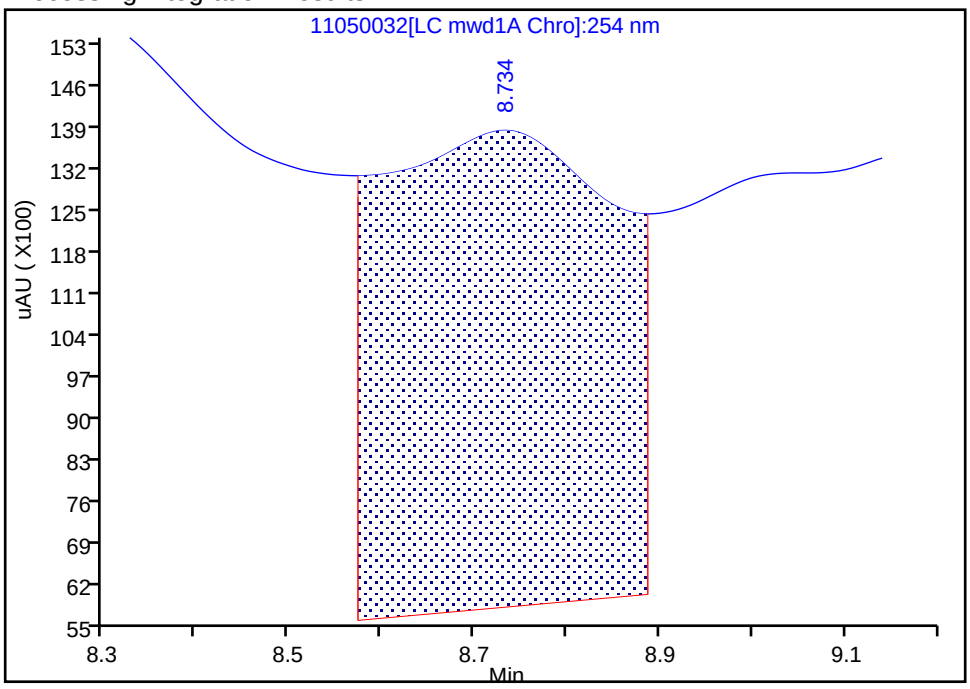
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050032.D				
Injection Date:	06-Nov-2021 04:29:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-B-5-A	Lab Sample ID:	280-155015-5		
Client ID:	EW7-PM26B-7-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

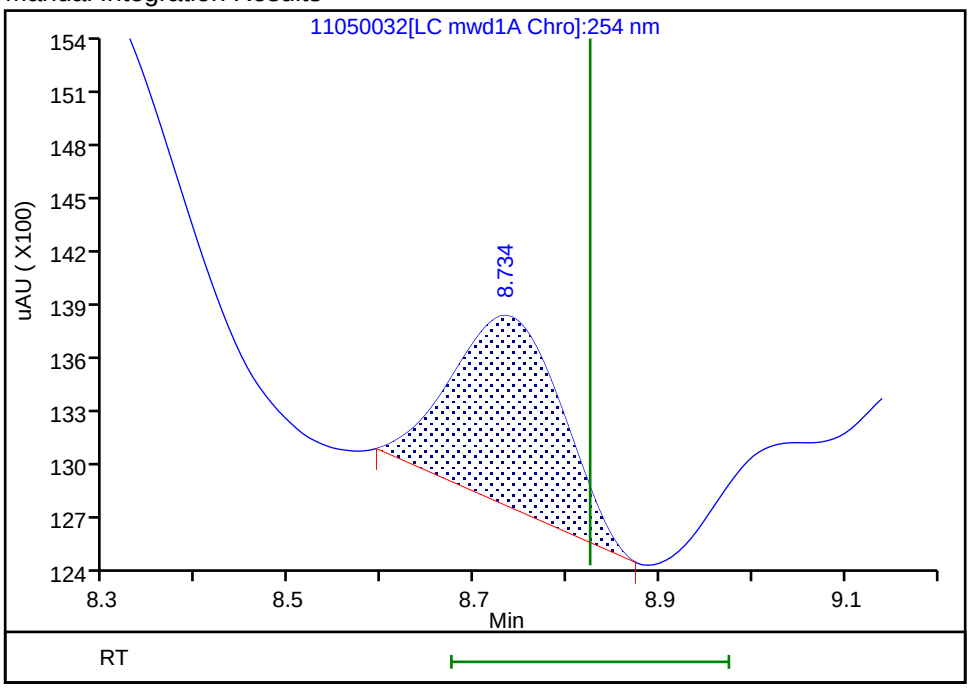
Processing Integration Results

RT: 8.73
Area: 139219
Amount: 0.681544
Amount Units: ug/ml



Manual Integration Results

RT: 8.73
Area: 8893
Amount: 0.043536
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:36:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29A-7-25 Lab Sample ID: 280-155015-6

Matrix: Water Lab File ID: 11050019.D

Analysis Method: 8330A Date Collected: 10/30/2021 12:30

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 510.7(mL) Date Analyzed: 11/05/2021 18:18

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.: 556359 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	0.082
99-65-0	1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	0.098	U	0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U M	0.098	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U	0.098	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U	0.40	0.39	0.098
2691-41-0	HMX	0.20	U	0.21	0.20	0.086
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.089
479-45-8	Tetryl	0.098	U M	0.11	0.098	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050019.D
Lims ID: 280-155015-A-6-A
Client ID: EW7-PM29A-7-25
Sample Type: Client
Inject. Date: 05-Nov-2021 18:18:28 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-6-A
Misc. Info.: 280-0106237-019
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 18:59:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.626	7.632	-0.006	6387	0.0601	M
$ 10 1,2-Dinitrobenzene	1	8.580	8.606	-0.026	25060	0.1954	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1		9.365			ND	
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	U
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1		13.152			ND	
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

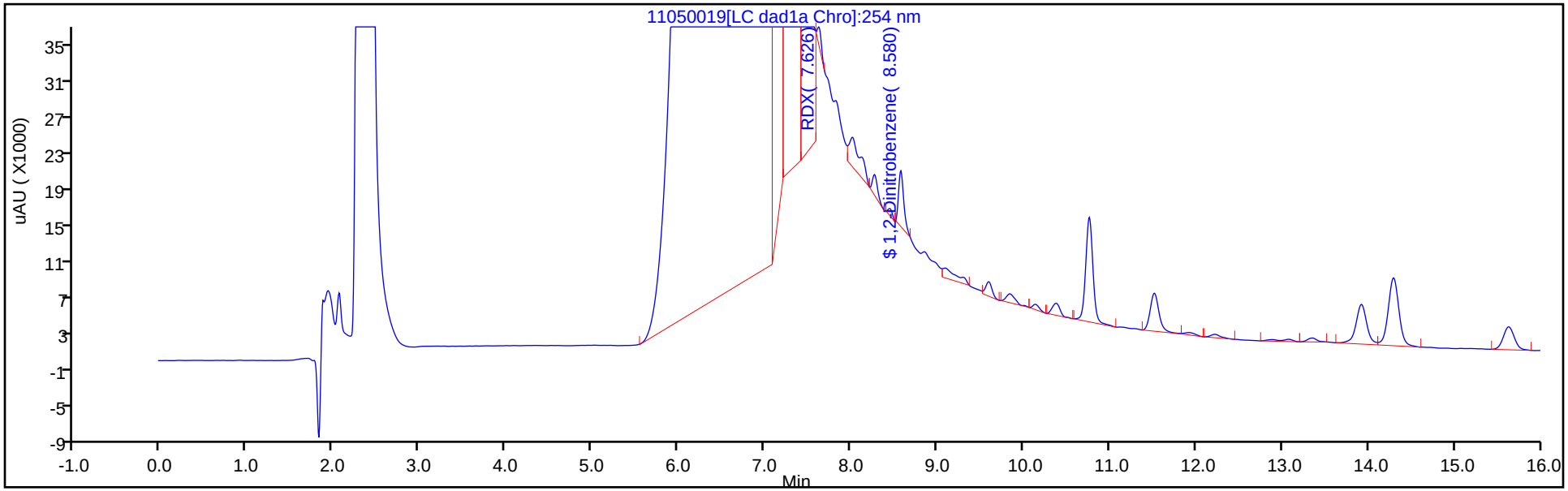
Report Date: 06-Nov-2021 10:24:52 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

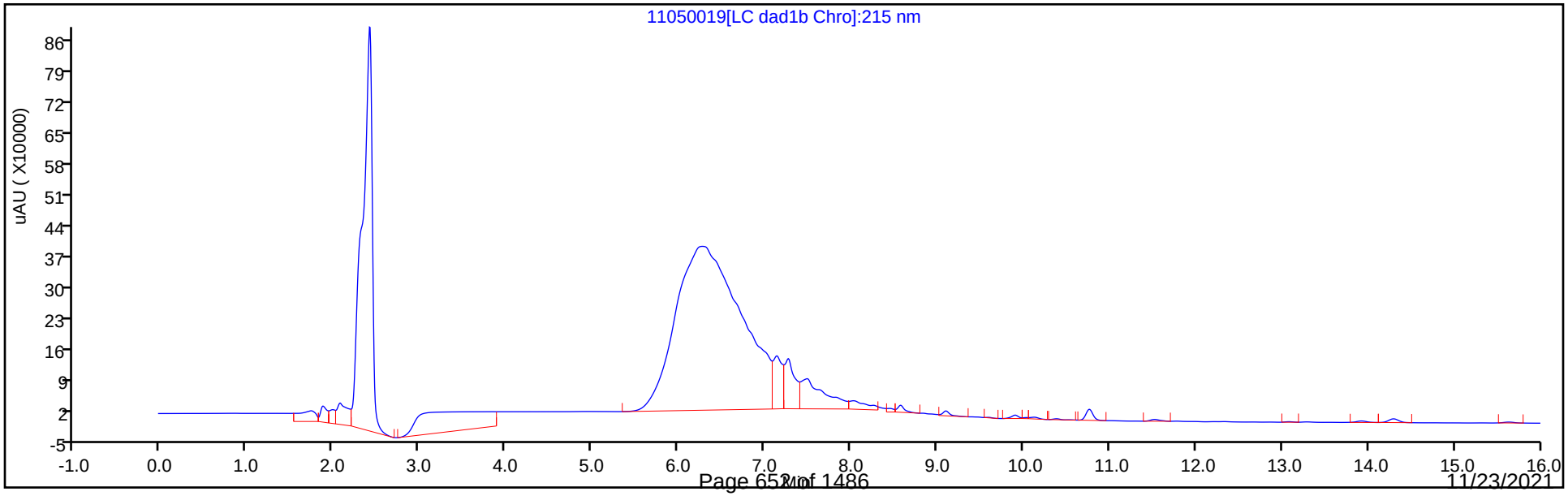
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d

Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6	Worklist Smp#:	19
Client ID:	EW7-PM29A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050019.D				
Lims ID:	280-155015-A-6-A				
Client ID:	EW7-PM29A-7-25				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 18:18:28	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-6-A				
Misc. Info.:	280-0106237-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 18:59:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1954	97.72

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

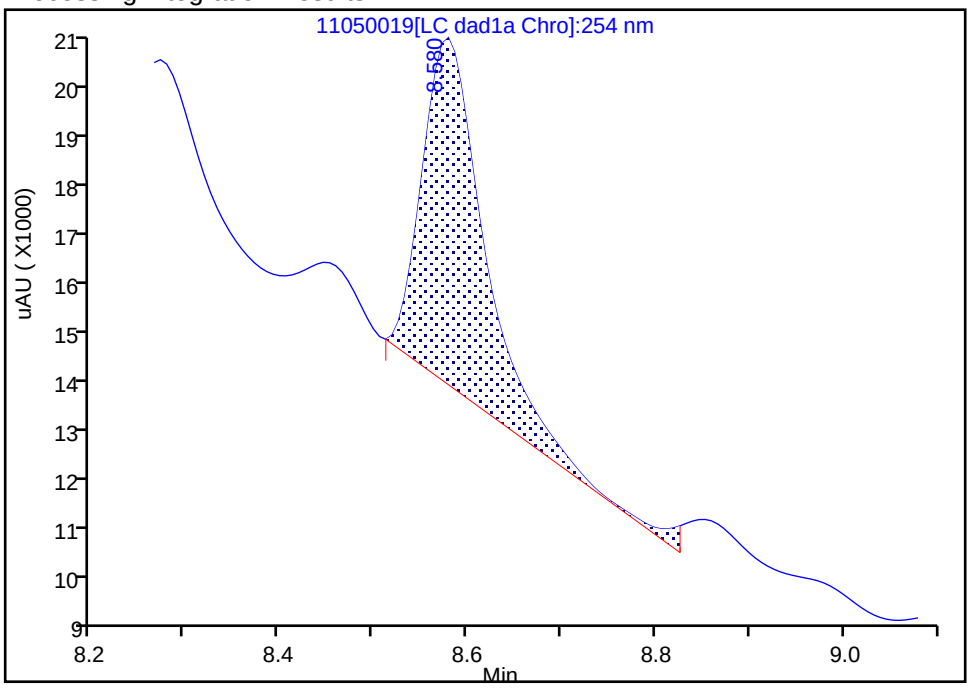
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d				
Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

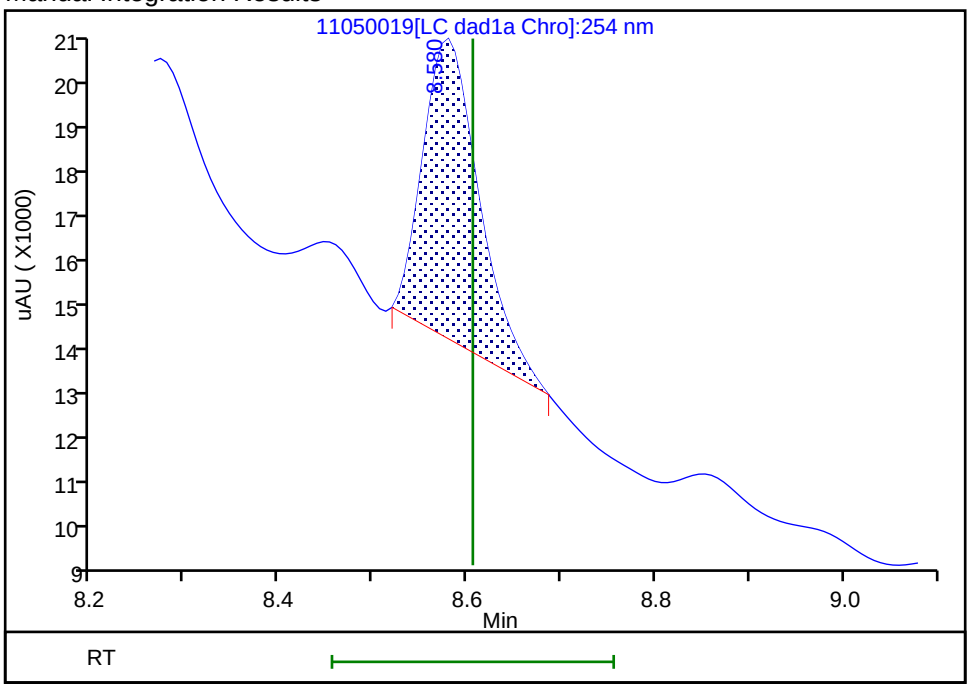
Processing Integration Results

RT: 8.58
Area: 29548
Amount: 0.230453
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 25060
Amount: 0.195450
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:59:33

Audit Action: Manually Integrated Audit Reason: Baseline

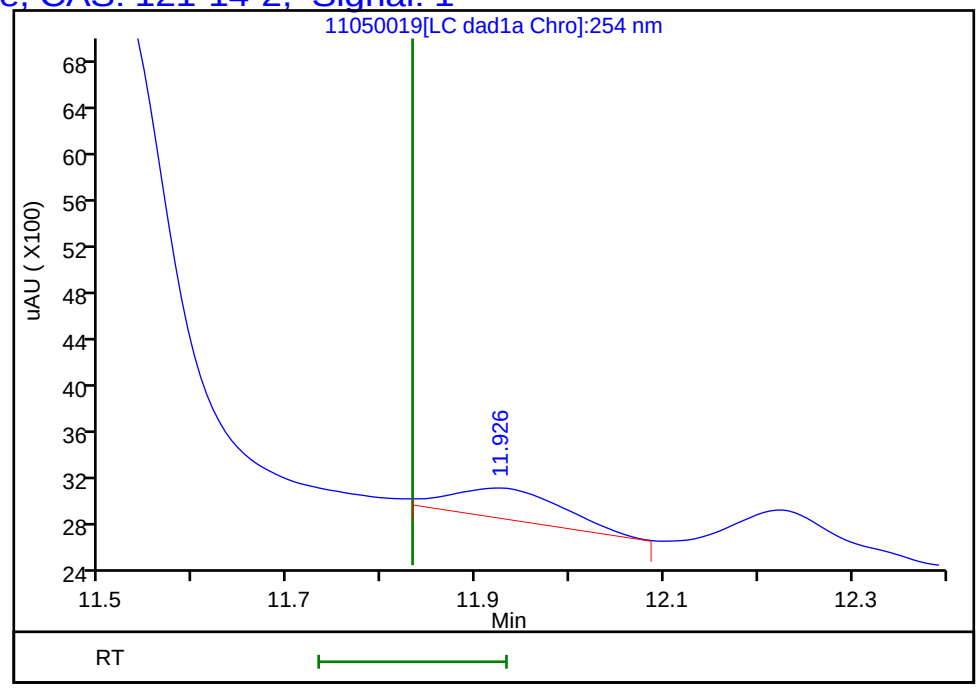
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d				
Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.93
Response: 2203
Amount: 0.007676



Reviewer: zhangji, 05-Nov-2021 18:59:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

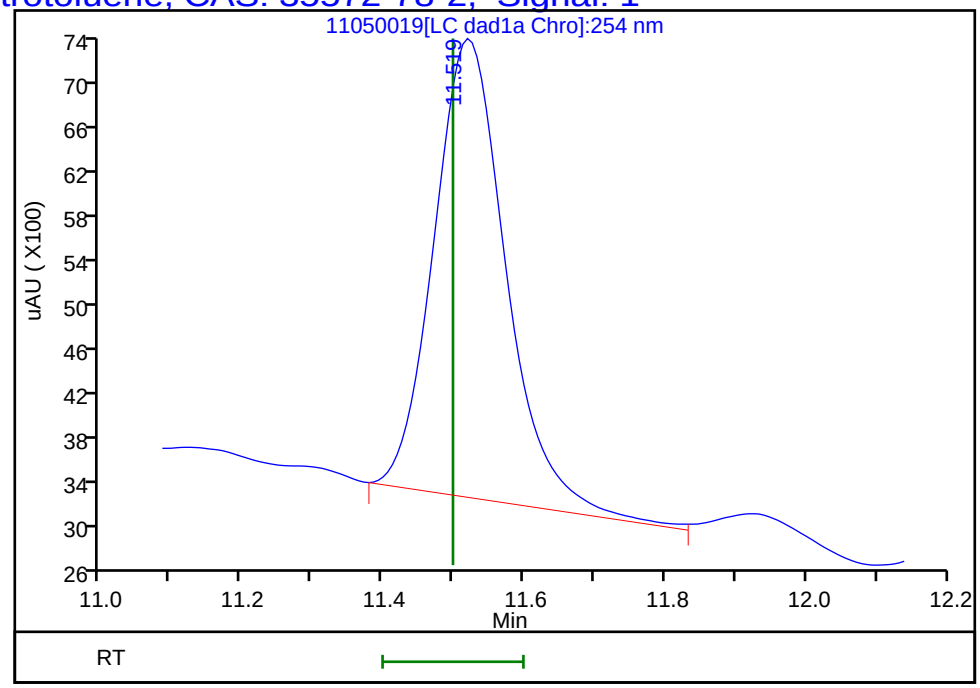
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d				
Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.52
Response: 29393
Amount: 0.142046



Reviewer: zhangji, 05-Nov-2021 18:59:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

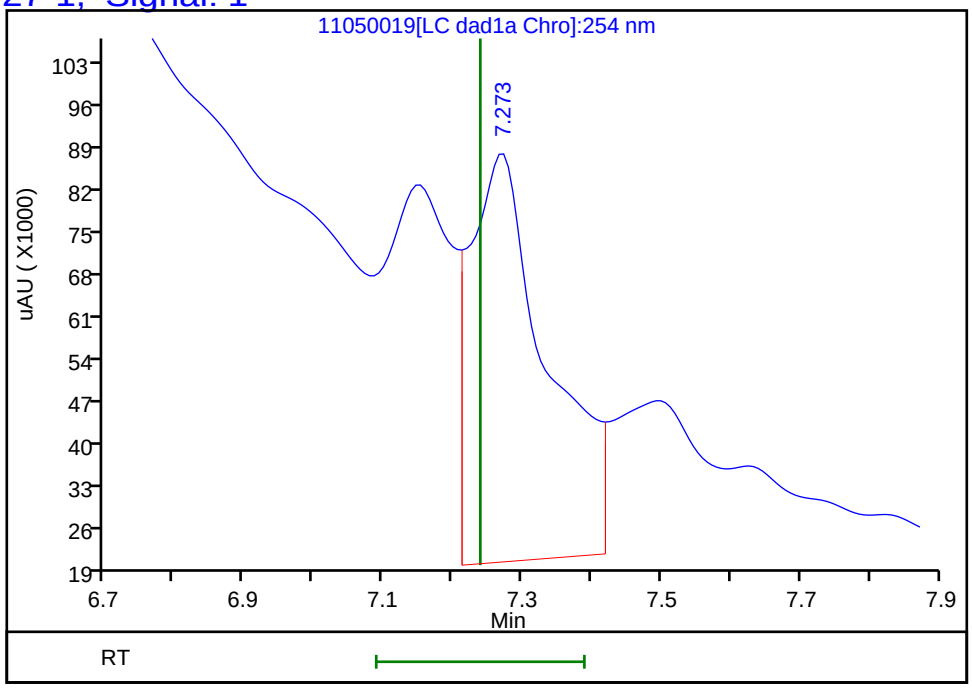
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d				
Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
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		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 514724
Amount: 3.949077



Reviewer: zhangji, 05-Nov-2021 18:59:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

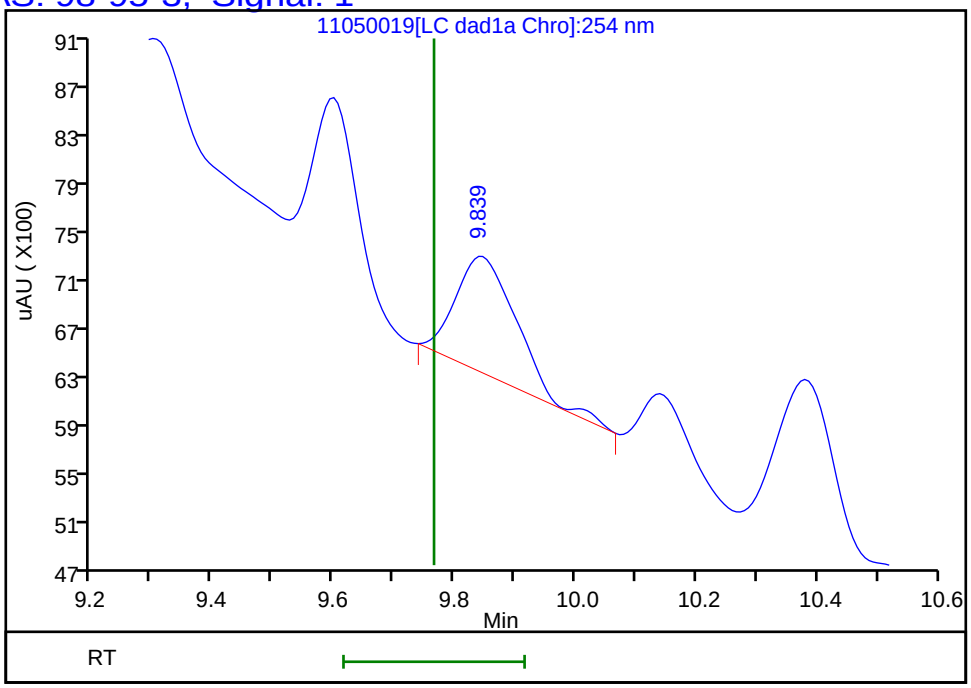
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d				
Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
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		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.84
Response: 6765
Amount: 0.034642



Reviewer: zhangji, 05-Nov-2021 18:59:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

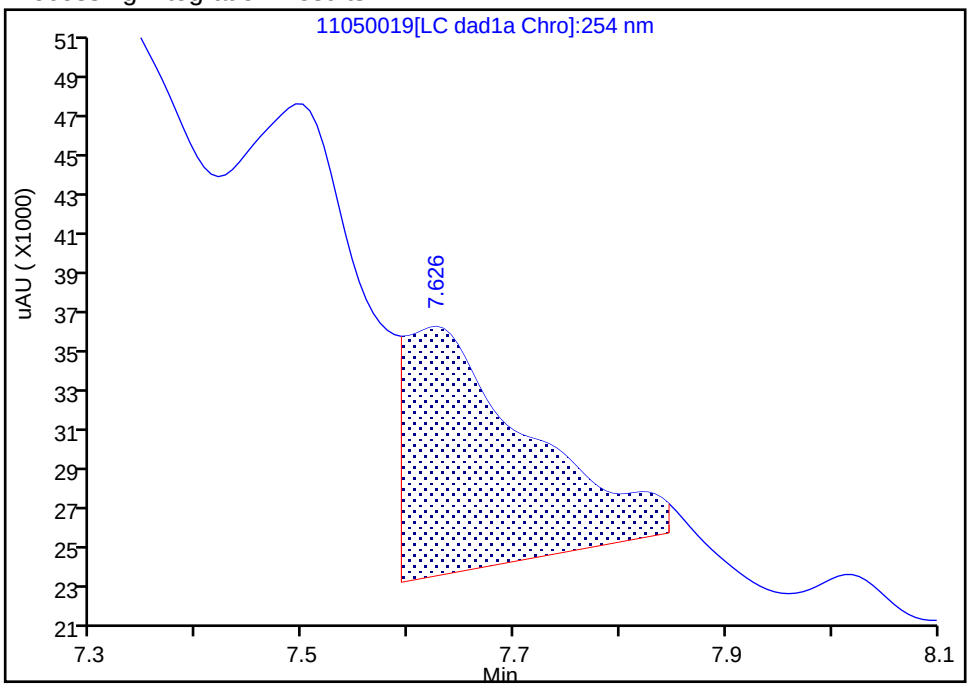
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d				
Injection Date:	05-Nov-2021 18:18:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

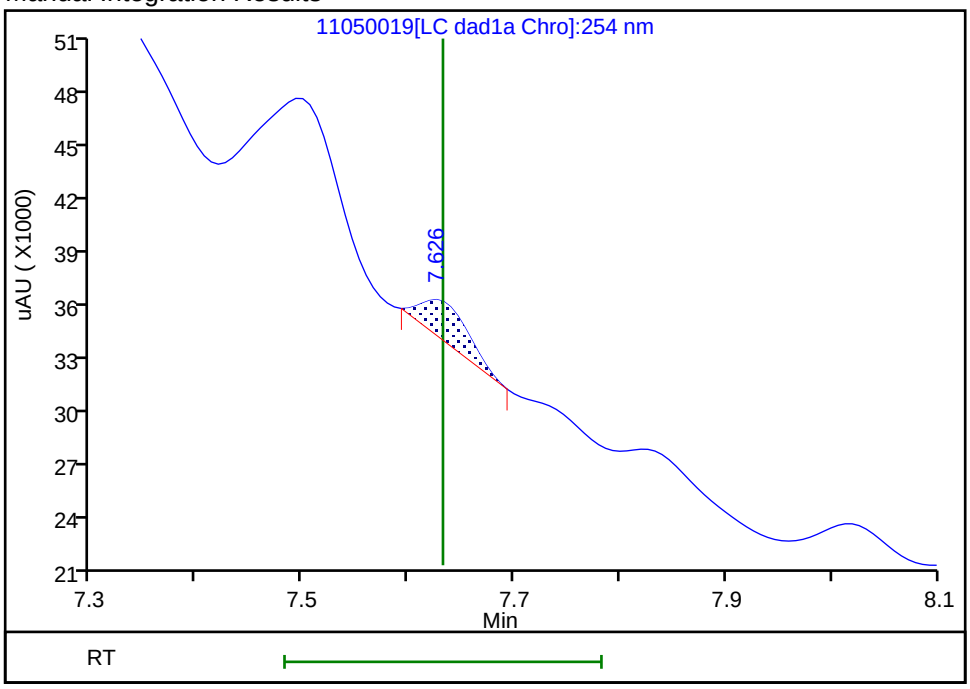
Processing Integration Results

RT: 7.63
Area: 96269
Amount: 0.905963
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 6387
Amount: 0.060106
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 18:59:30

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

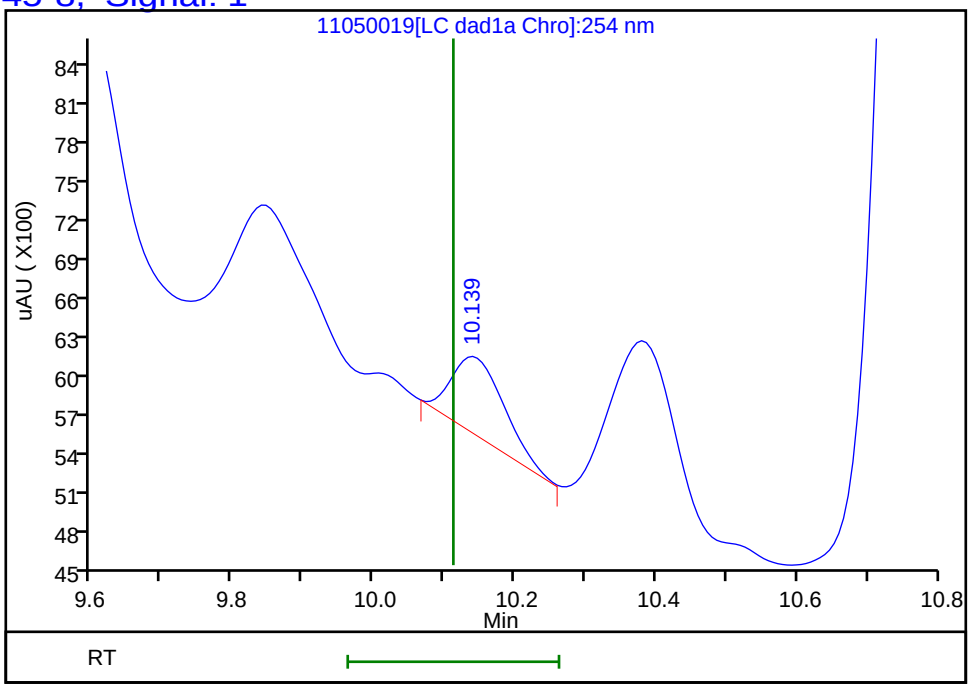
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050019.d
Injection Date: 05-Nov-2021 18:18:28 Instrument ID: CHHPLC_X3
Lims ID: 280-155015-A-6-A Lab Sample ID: 280-155015-6
Client ID: EW7-PM29A-7-25
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.14
Response: 3033
Amount: 0.017591



Reviewer: zhangji, 05-Nov-2021 18:59:45
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29A-7-25 Lab Sample ID: 280-155015-6

Matrix: Water Lab File ID: 11050033.D

Analysis Method: 8330A Date Collected: 10/30/2021 12:30

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 510.7(mL) Date Analyzed: 11/06/2021 05:05

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	0.20	U M	0.21	0.20	0.050

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D
Lims ID: 280-155015-A-6-A
Client ID: EW7-PM29A-7-25
Sample Type: Client
Inject. Date: 06-Nov-2021 05:05:05 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-6-A
Misc. Info.: 280-0106238-033
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:04 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:38:03

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	
	6 MNX	1		7.384			ND	
	8 RDX	1		8.825			ND	U
	9 Nitrobenzene	1		11.885			ND	
$	10 1,2-Dinitrobenzene	1	12.917	12.978	-0.061	45098	0.1698	M
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1	16.624	16.631	-0.007	63570	0.2553	M
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.250	18.265	-0.015	34443	0.0851	M
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1		25.098			ND	7

QC Flag Legend

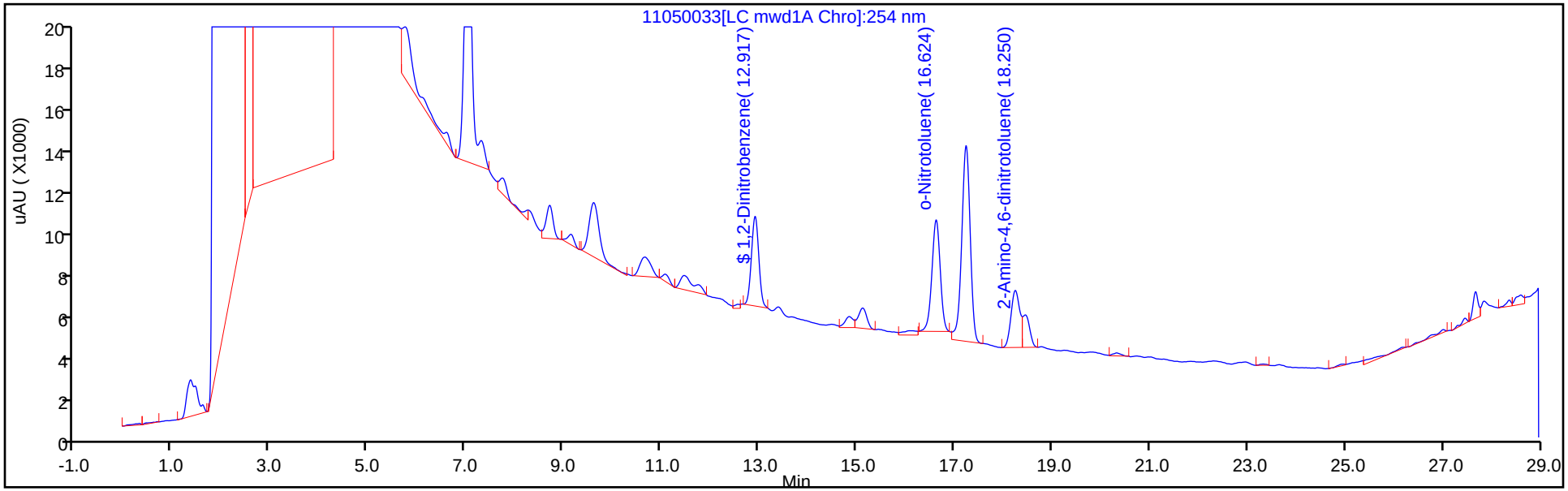
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Nov-2021 12:42:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

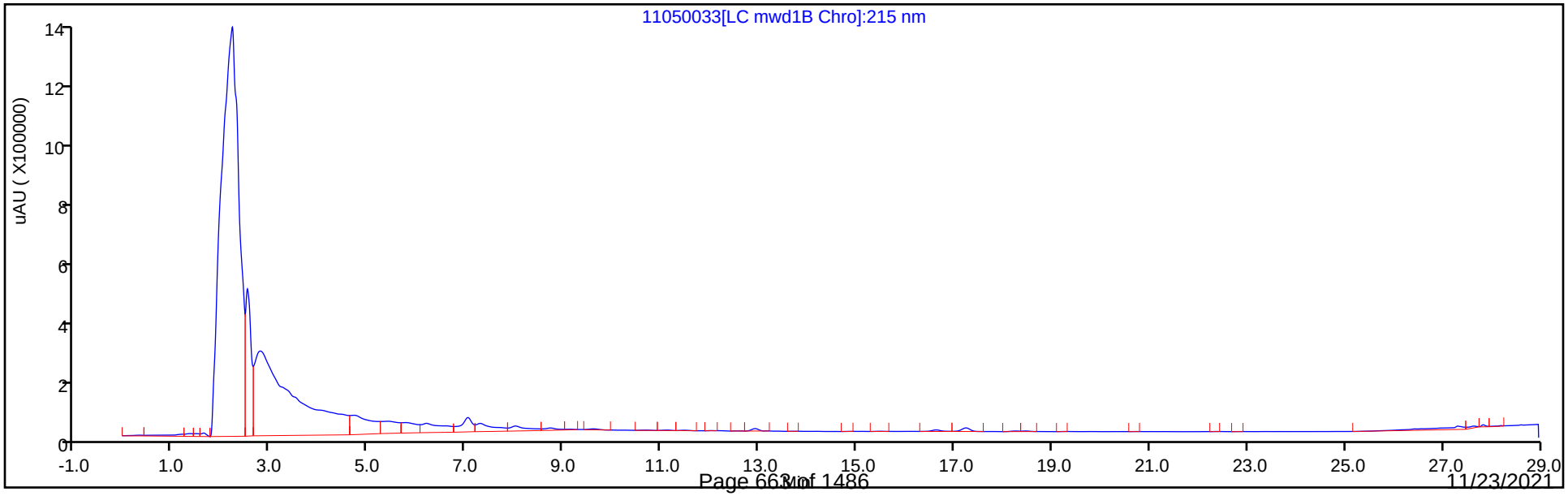
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D				
Injection Date:	06-Nov-2021 05:05:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6	Worklist Smp#:	33
Client ID:	EW7-PM29A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
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\20211105-106238.b\11050033.D				
Lims ID:	280-155015-A-6-A				
Client ID:	EW7-PM29A-7-25				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 05:05:05	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-6-A				
Misc. Info.:	280-0106238-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:04	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:38:03		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1698	84.88

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

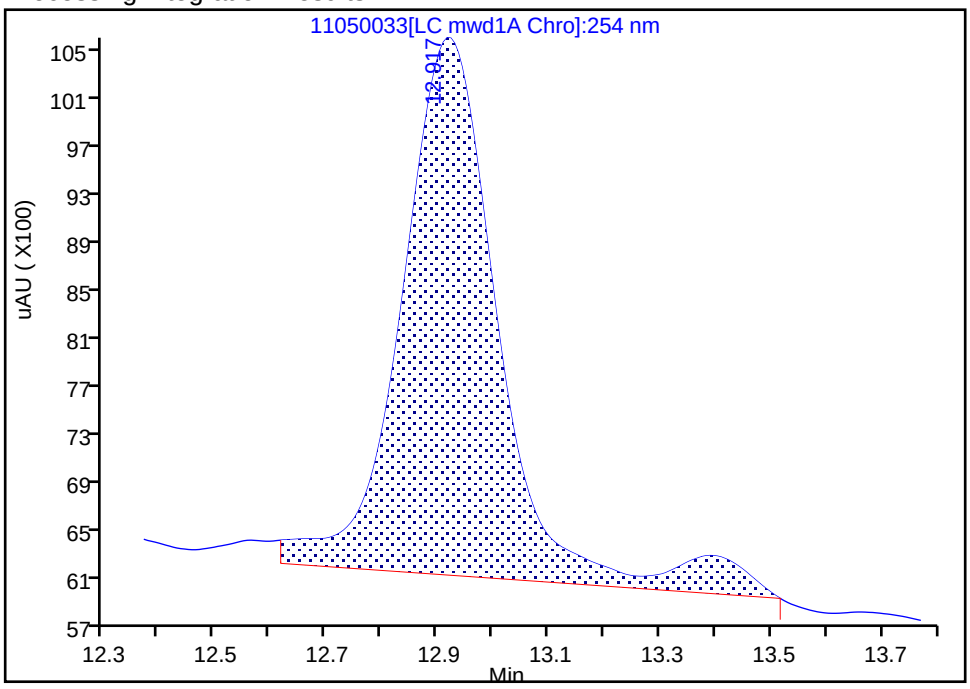
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D				
Injection Date:	06-Nov-2021 05:05:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

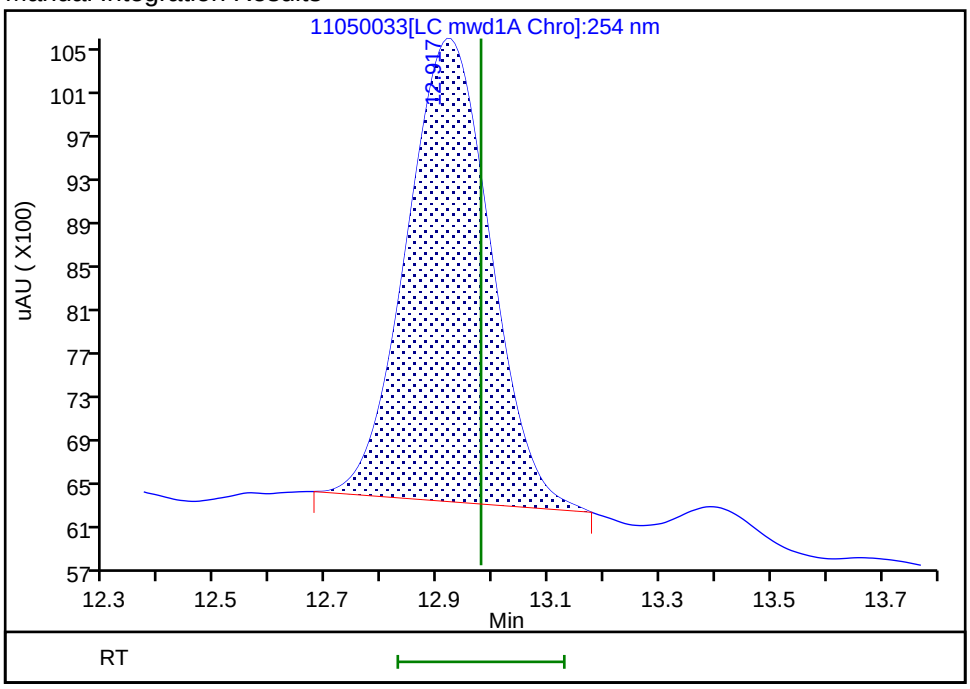
Processing Integration Results

RT: 12.92
Area: 55813
Amount: 0.210092
Amount Units: ug/ml



Manual Integration Results

RT: 12.92
Area: 45098
Amount: 0.169759
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:37:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

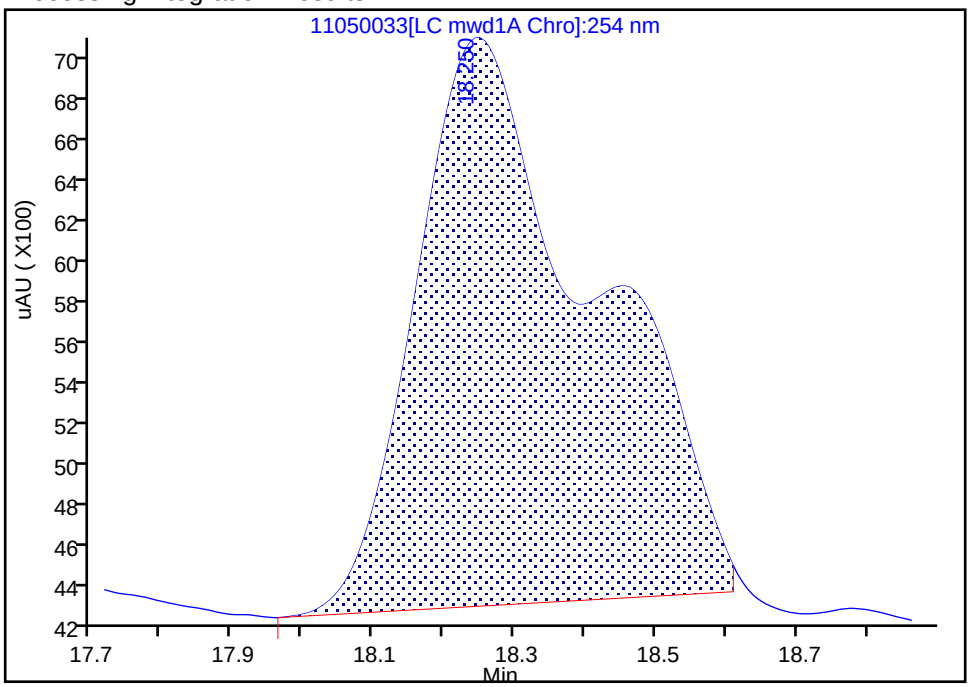
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D				
Injection Date:	06-Nov-2021 05:05:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

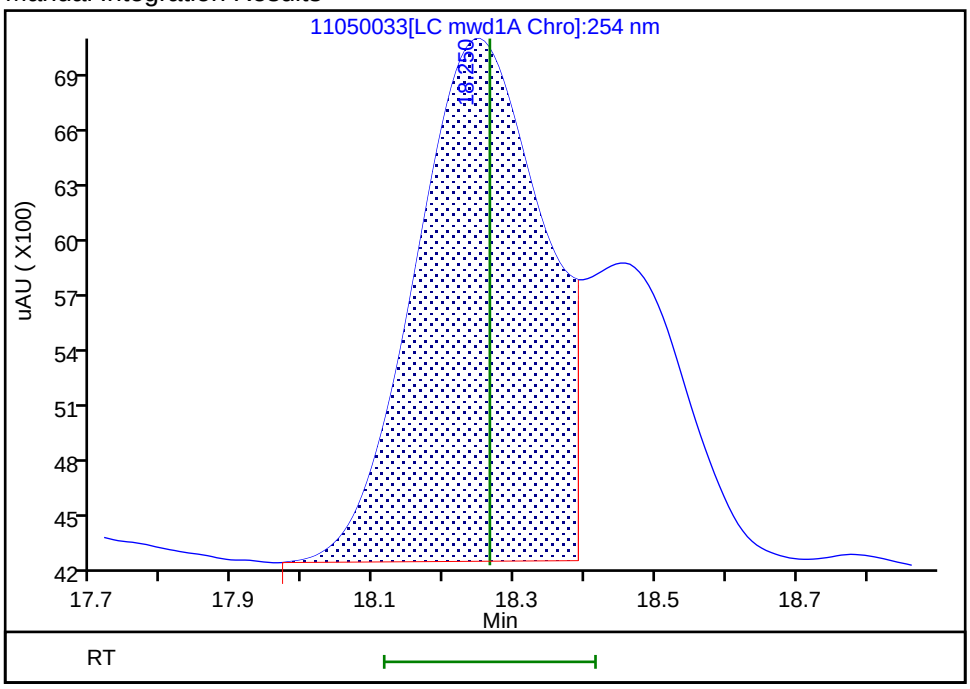
Processing Integration Results

RT: 18.25
Area: 47355
Amount: 0.118253
Amount Units: ug/ml



Manual Integration Results

RT: 18.25
Area: 34443
Amount: 0.085133
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:37:41

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

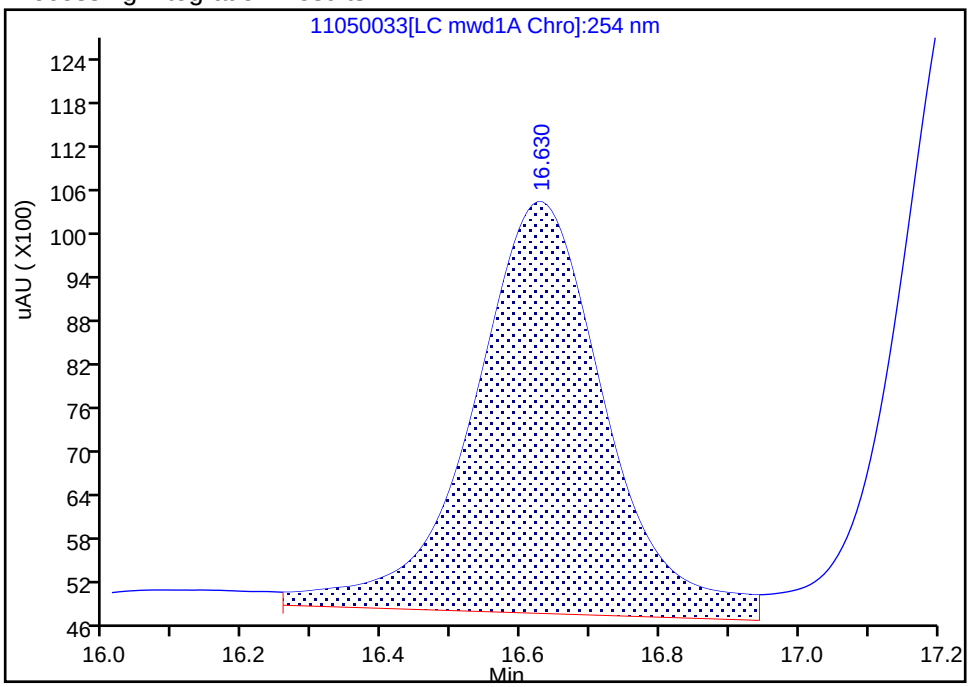
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D				
Injection Date:	06-Nov-2021 05:05:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

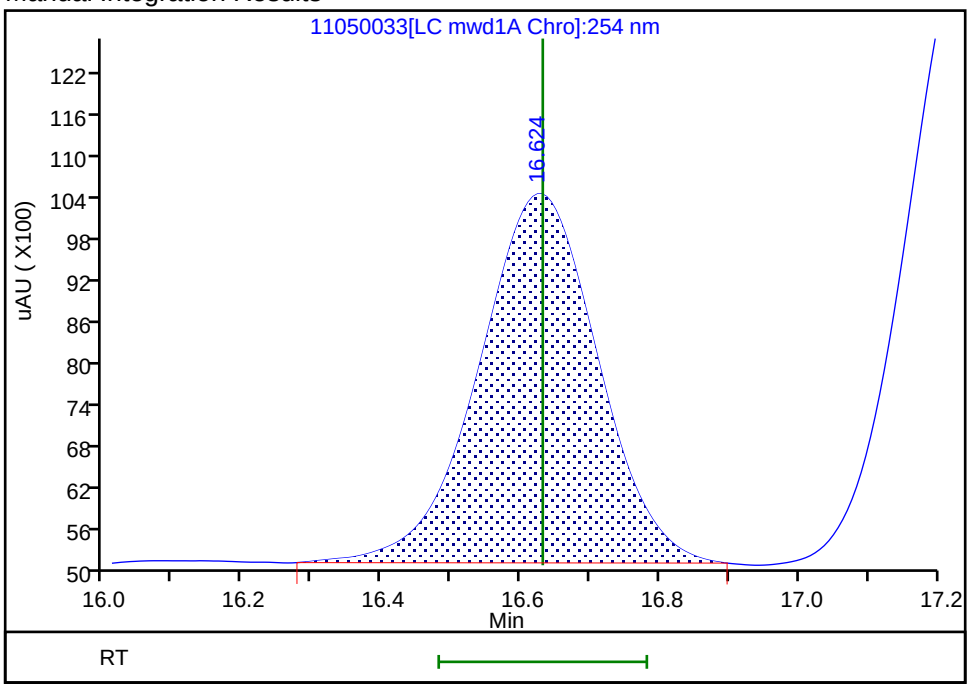
Processing Integration Results

RT: 16.63
Area: 75083
Amount: 0.301578
Amount Units: ug/ml



Manual Integration Results

RT: 16.62
Area: 63570
Amount: 0.255335
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:38:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

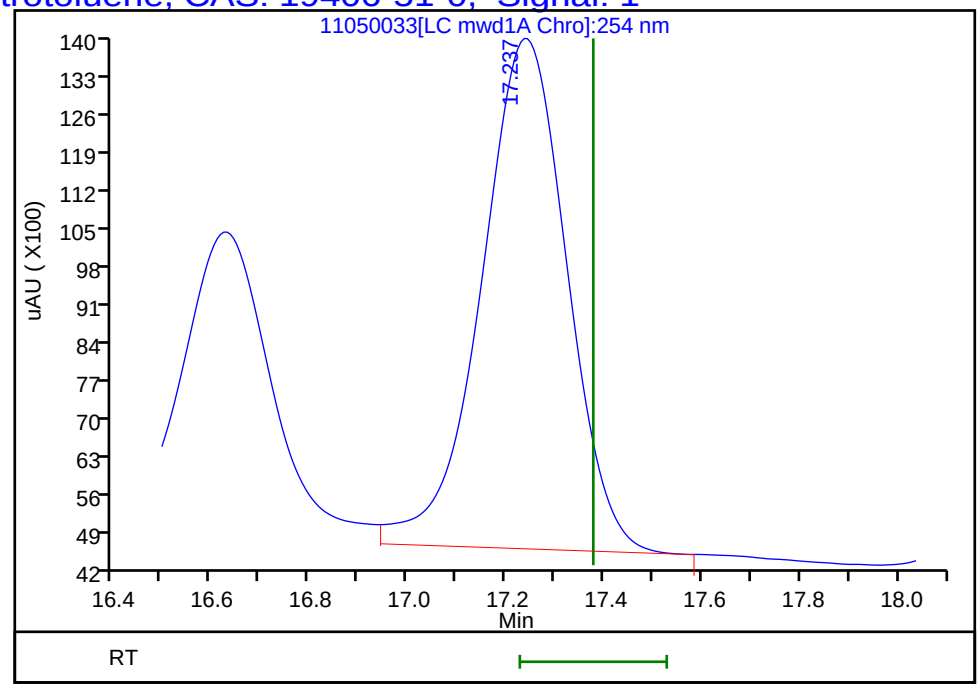
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D				
Injection Date:	06-Nov-2021 05:05:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.24
Response: 113662
Amount: 0.383081



Reviewer: zhangji, 06-Nov-2021 12:38:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

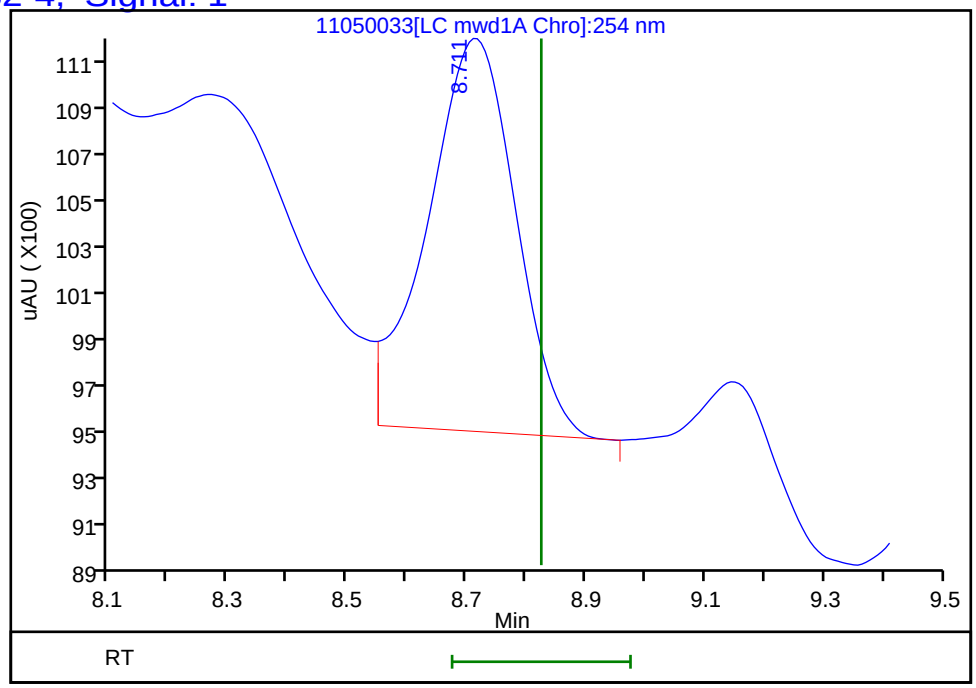
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050033.D				
Injection Date:	06-Nov-2021 05:05:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-6-A	Lab Sample ID:	280-155015-6		
Client ID:	EW7-PM29A-7-25				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 8.71
Response: 16293
Amount: 0.079762



Reviewer: zhangji, 06-Nov-2021 12:38:03
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM29B-7-35 Lab Sample ID: 280-155015-7

Matrix: Water Lab File ID: 11050020.D

Analysis Method: 8330A Date Collected: 10/30/2021 14:35

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 504.2(mL) Date Analyzed: 11/05/2021 18:41

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U M	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.099
2691-41-0	HMX	0.20	U	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.090
121-82-4	RDX	0.20	U M	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U M	0.11	0.099	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\20211105-106237.b\11050020.D
Lims ID: 280-155015-A-7-A
Client ID: EW7-PM29B-7-35
Sample Type: Client
Inject. Date: 05-Nov-2021 18:41:27 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-7-A
Misc. Info.: 280-0106237-020
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 19:59:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1		7.632			ND	U
$ 10 1,2-Dinitrobenzene	1	8.580	8.606	-0.026	25247	0.1969	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1		9.365			ND	
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1		13.152			ND	U
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

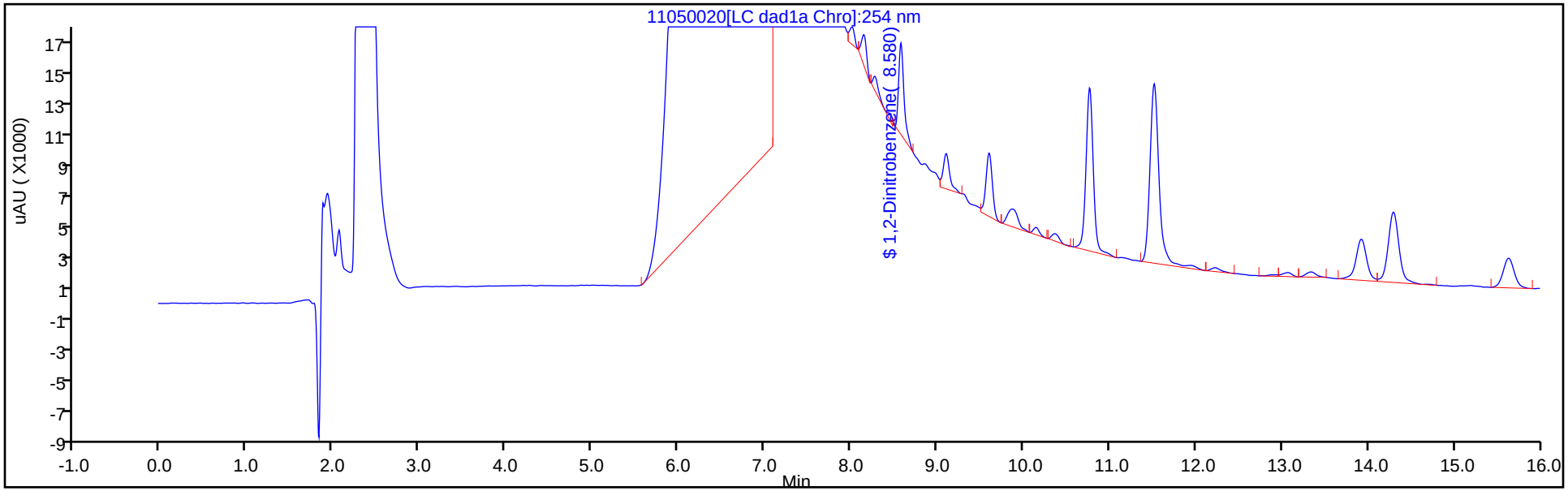
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Nov-2021 10:24:53 Chrom Revision: 2.3 22-Sep-2021 15:38:46

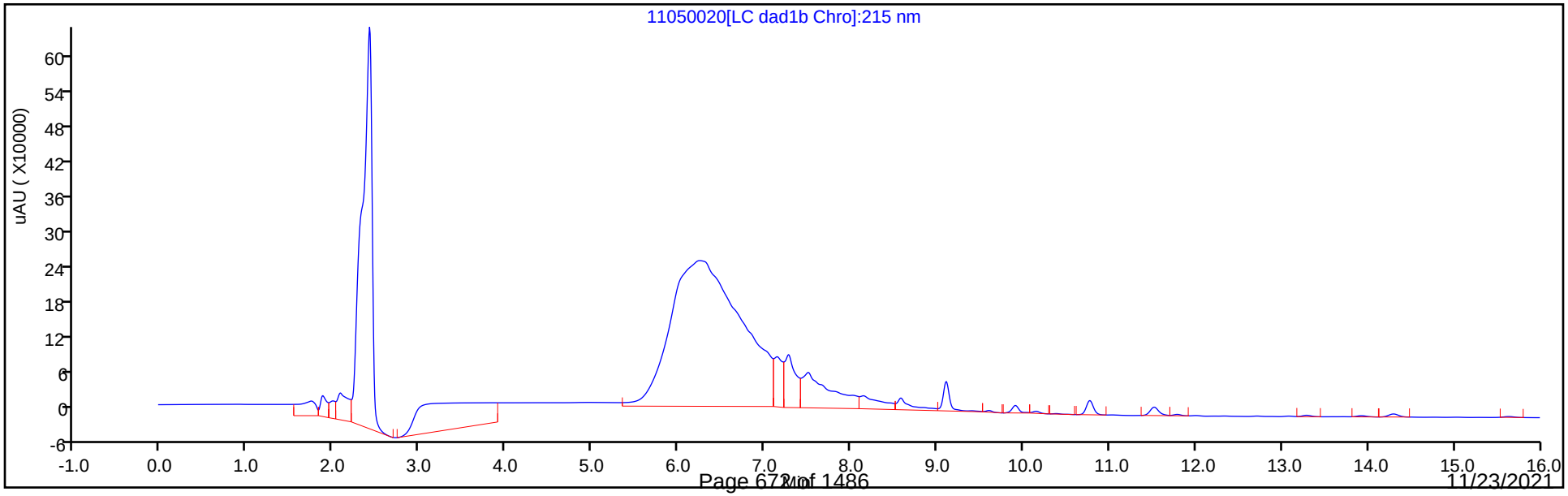
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7	Worklist Smp#:	20
Client ID:	EW7-PM29B-7-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050020.D				
Lims ID:	280-155015-A-7-A				
Client ID:	EW7-PM29B-7-35				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 18:41:27	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-7-A				
Misc. Info.:	280-0106237-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 19:59:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1969	98.45

Eurofins TestAmerica, Denver

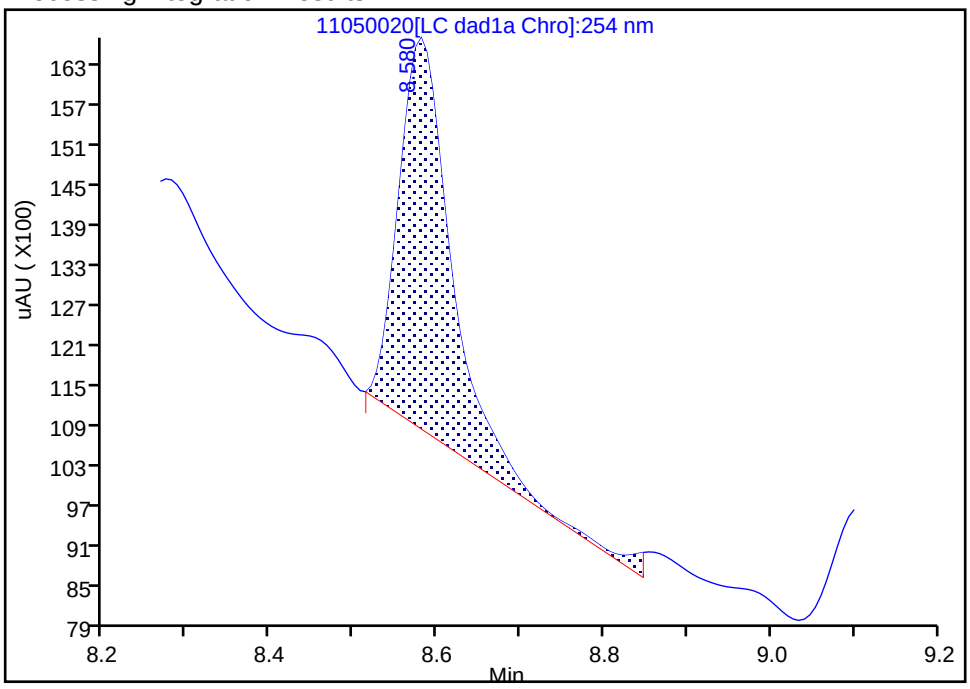
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7		
Client ID:	EW7-PM29B-7-35				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

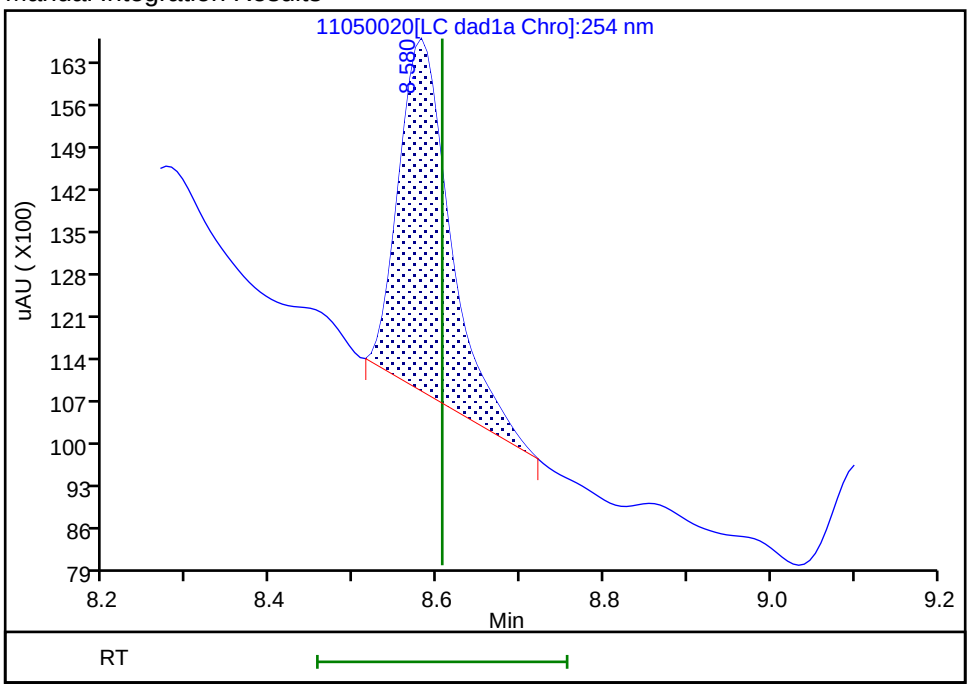
Processing Integration Results

RT: 8.58
Area: 26332
Amount: 0.205370
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 25247
Amount: 0.196908
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 19:59:40
Audit Action: Manually Integrated Audit Reason: Baseline

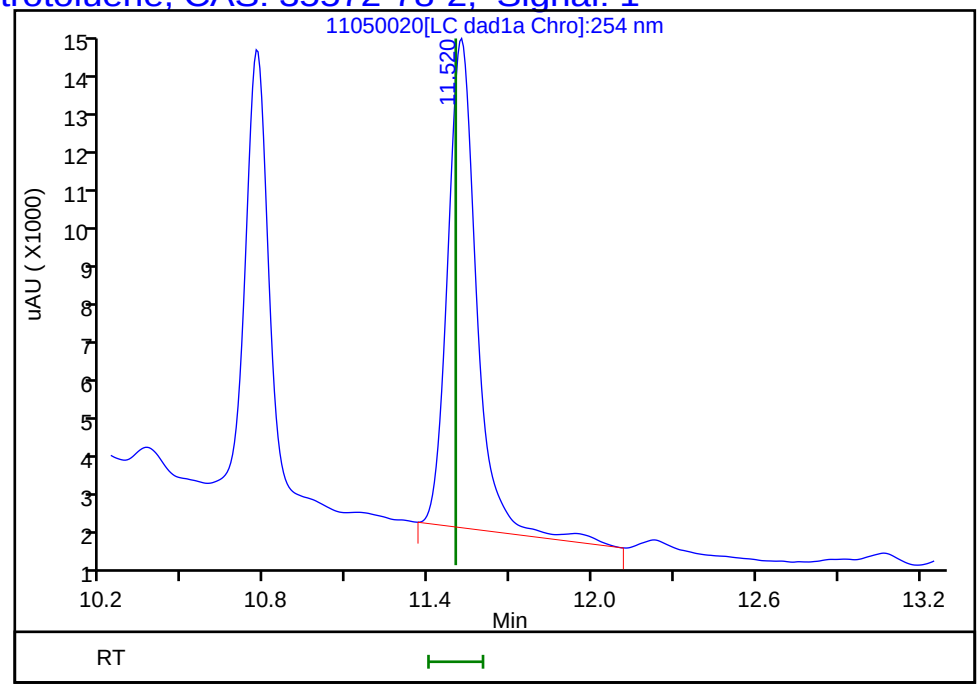
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7		
Client ID:	EW7-PM29B-7-35				
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		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.52
Response: 85396
Amount: 0.412688



Reviewer: zhangji, 05-Nov-2021 19:59:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

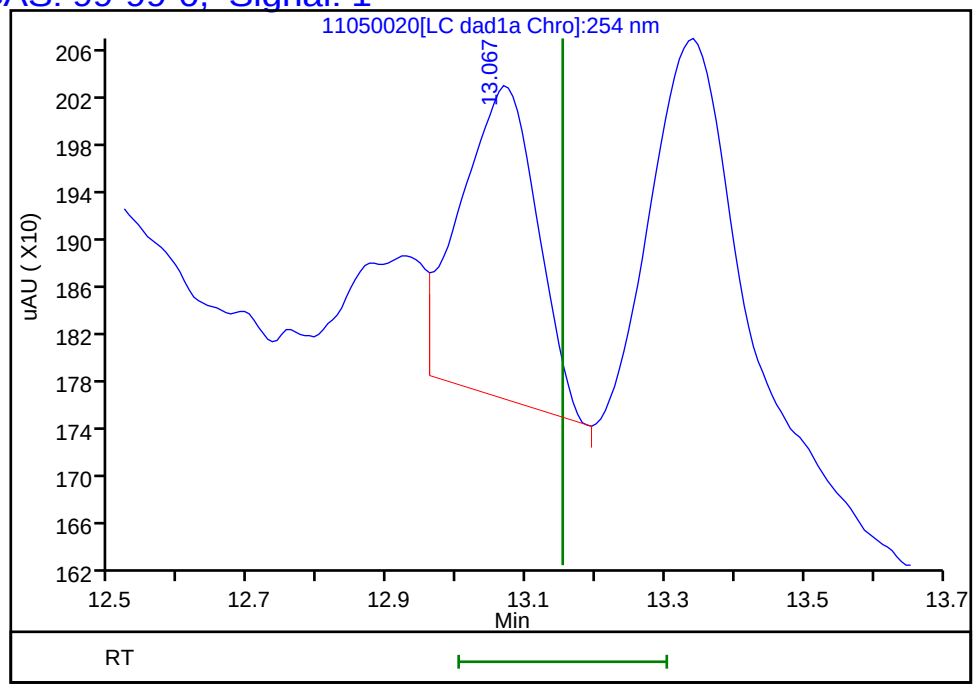
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7		
Client ID:	EW7-PM29B-7-35				
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		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.07
Response: 1972
Amount: 0.017621



Reviewer: zhangji, 05-Nov-2021 19:59:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

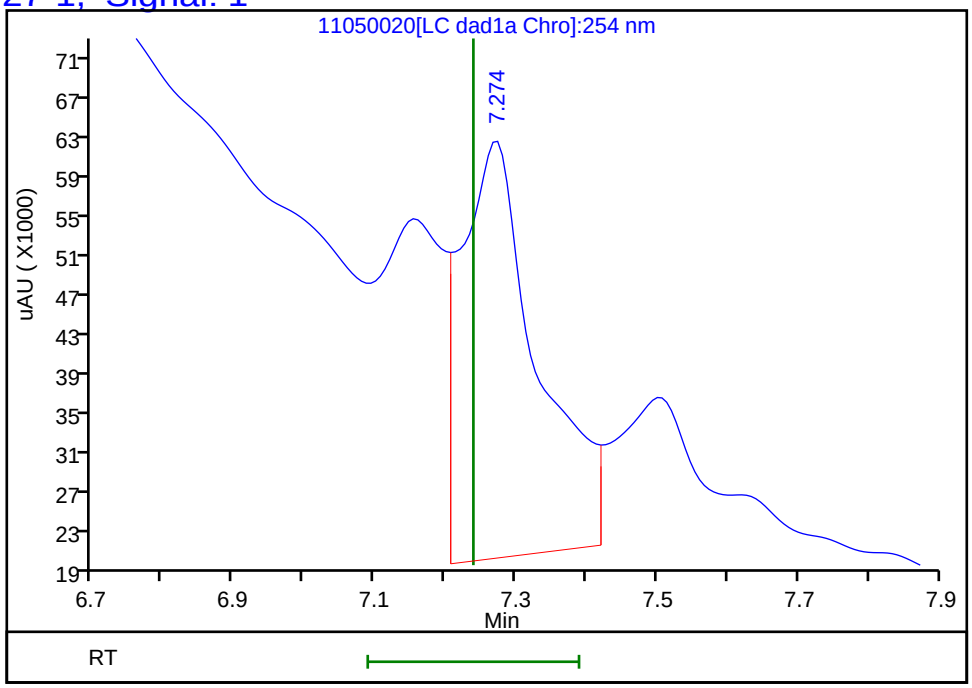
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7		
Client ID:	EW7-PM29B-7-35				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 314776
Amount: 2.415031



Reviewer: zhangji, 05-Nov-2021 19:59:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

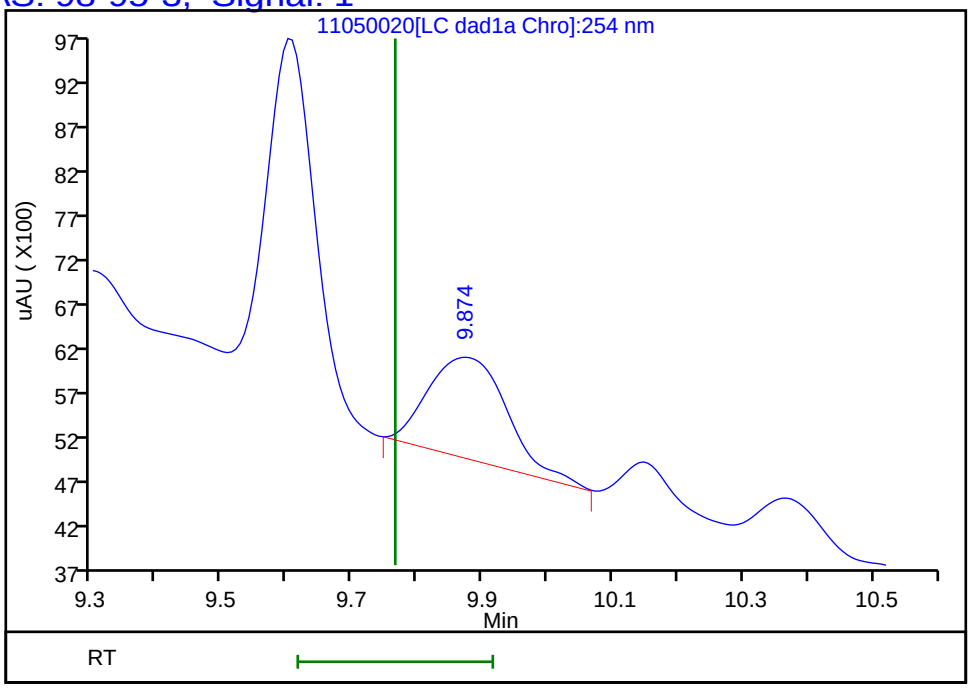
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7		
Client ID:	EW7-PM29B-7-35				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.87
Response: 9610
Amount: 0.049210



Reviewer: zhangji, 05-Nov-2021 19:59:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

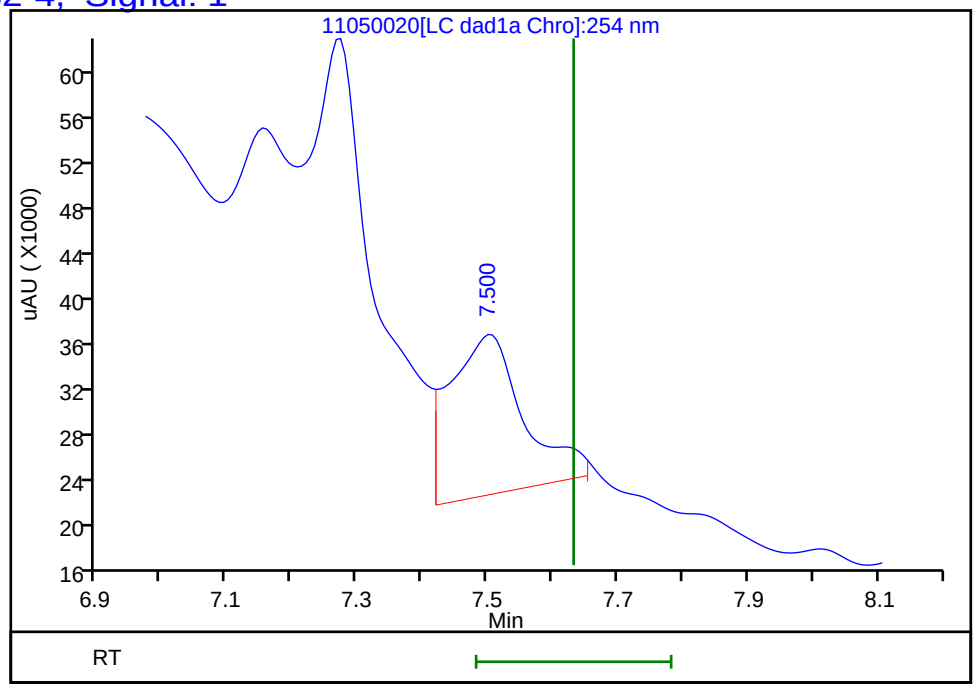
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d
Injection Date: 05-Nov-2021 18:41:27 Instrument ID: CHHPLC_X3
Lims ID: 280-155015-A-7-A Lab Sample ID: 280-155015-7
Client ID: EW7-PM29B-7-35
Operator ID: JZ ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.50
Response: 109968
Amount: 1.034881



Reviewer: zhangji, 05-Nov-2021 19:59:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

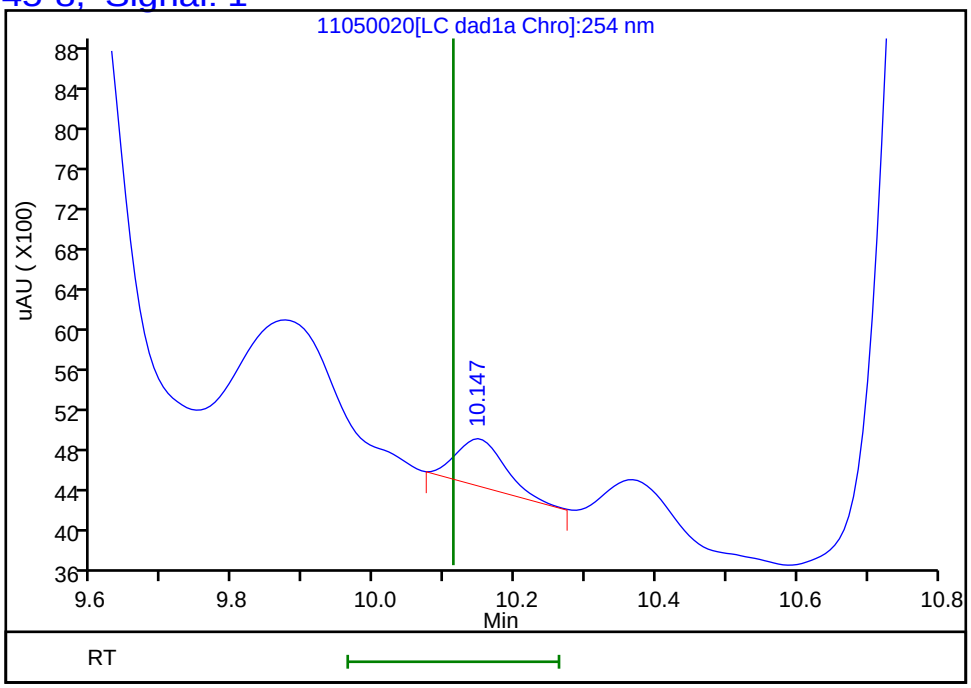
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050020.d				
Injection Date:	05-Nov-2021 18:41:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-7-A	Lab Sample ID:	280-155015-7		
Client ID:	EW7-PM29B-7-35				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 2268
Amount: 0.013154



Reviewer: zhangji, 05-Nov-2021 19:59:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM28A-7-25 Lab Sample ID: 280-155015-8

Matrix: Water Lab File ID: 11050023.D

Analysis Method: 8330A Date Collected: 10/30/2021 16:10

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 509.9(mL) Date Analyzed: 11/05/2021 19:50

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.082
118-96-7	2,4,6-Trinitrotoluene	0.098	U	0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U M	0.098	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U	0.098	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U M	0.40	0.39	0.098
2691-41-0	HMX	0.20	U	0.21	0.20	0.086
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.089
479-45-8	Tetryl	0.098	U M	0.11	0.098	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050023.D
Lims ID: 280-155015-A-8-A
Client ID: EW7-PM28A-7-25
Sample Type: Client
Inject. Date: 05-Nov-2021 19:50:14 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-8-A
Misc. Info.: 280-0106237-023
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 20:38:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.626	7.632	-0.006	10935	0.1029	M
$ 10 1,2-Dinitrobenzene	1	8.579	8.606	-0.027	23263	0.1814	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	U
12 1,3-Dinitrobenzene	1	9.319	9.365	-0.046	3867	0.0130	M
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	U
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1		13.152			ND	U
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

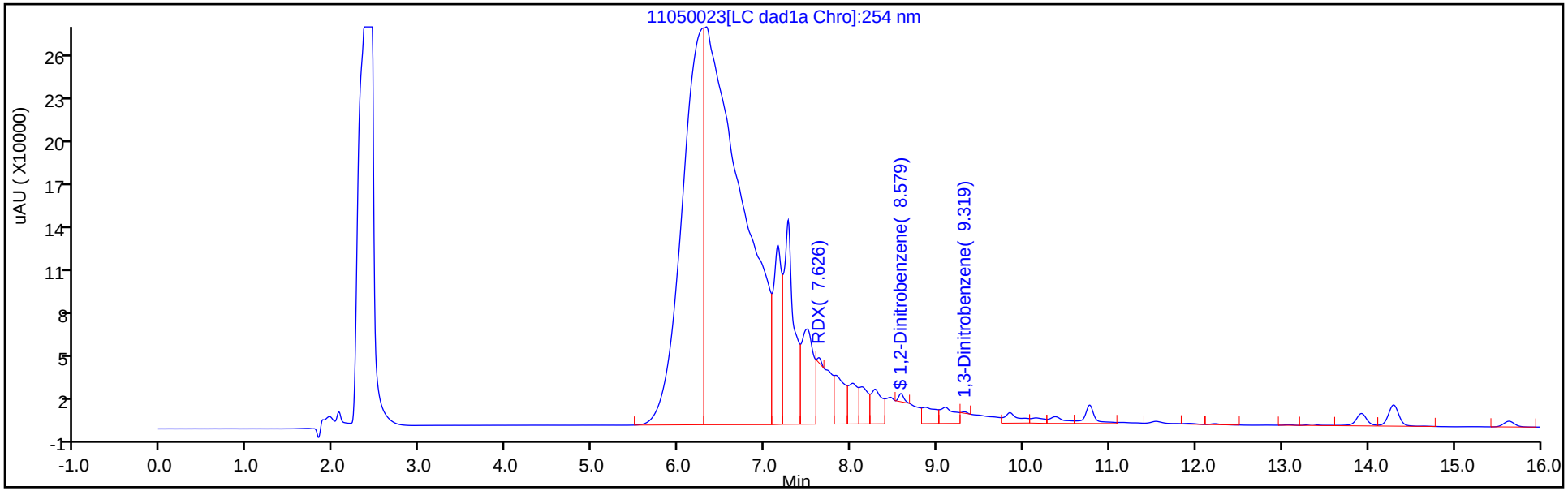
Report Date: 06-Nov-2021 10:24:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

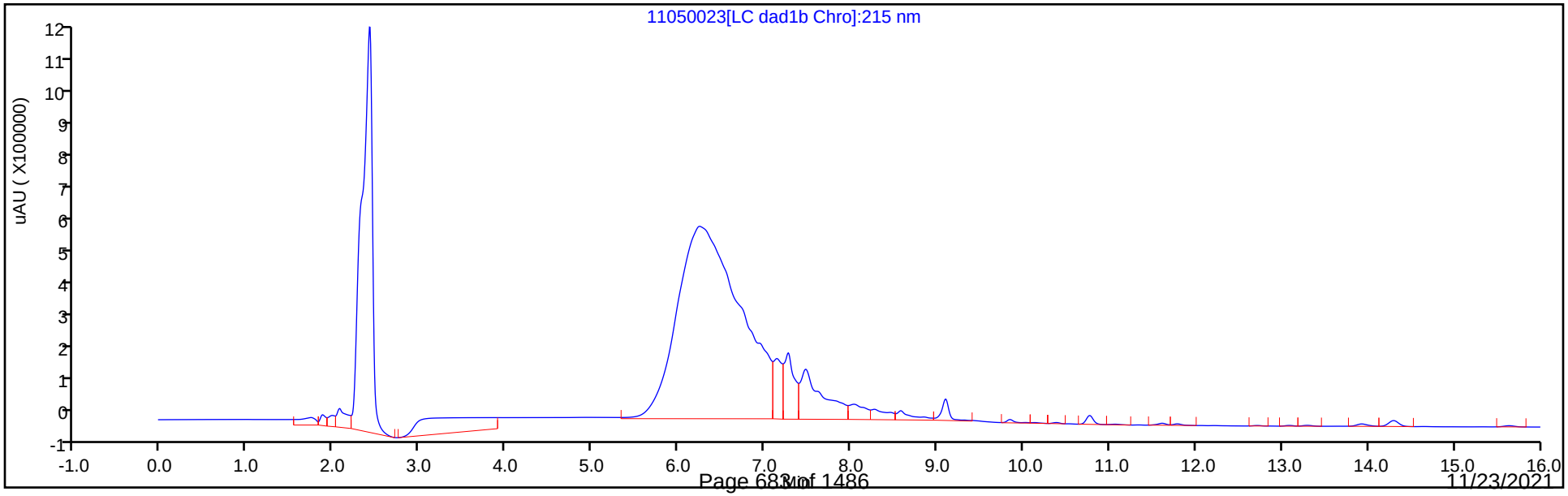
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d

Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8	Worklist Smp#:	23
Client ID:	EW7-PM28A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050023.D				
Lims ID:	280-155015-A-8-A				
Client ID:	EW7-PM28A-7-25				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 19:50:14	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-8-A				
Misc. Info.:	280-0106237-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:53	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 20:38:59		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1814	90.72

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

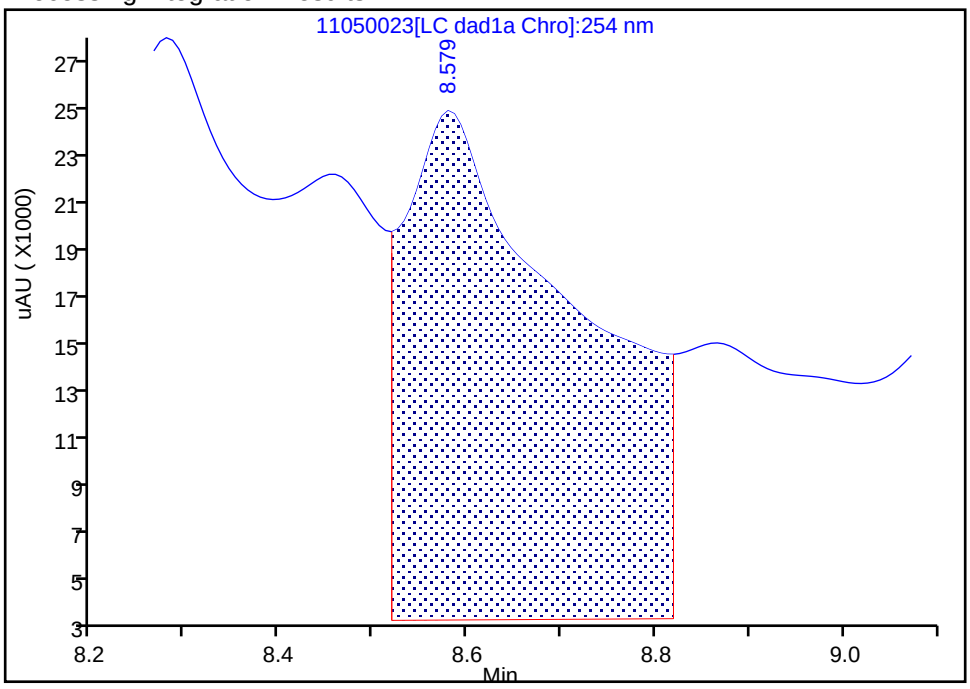
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

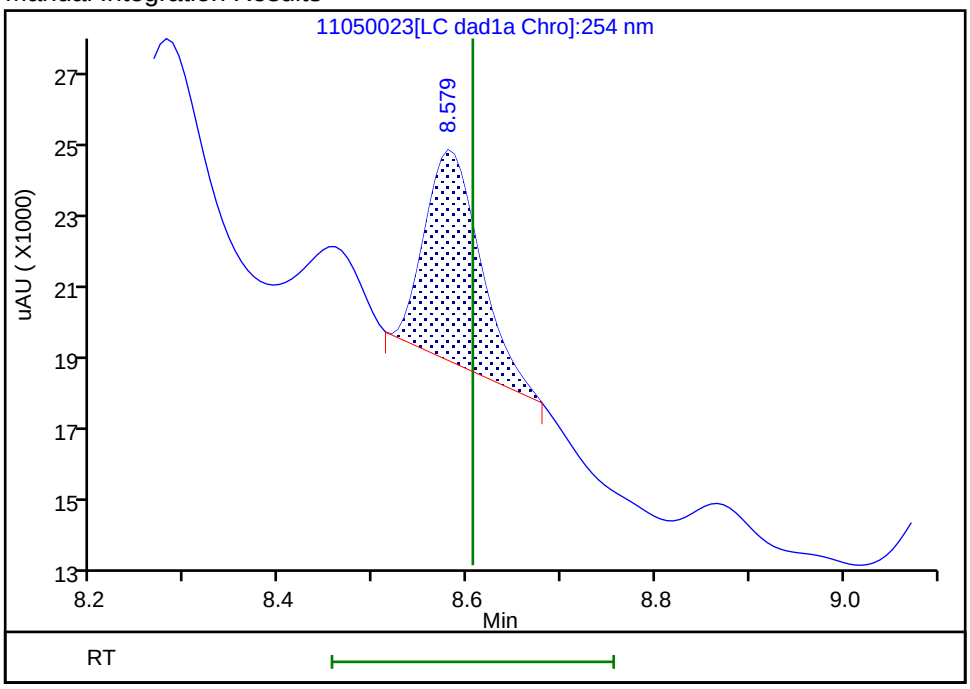
Processing Integration Results

RT: 8.58
Area: 266614
Amount: 2.079393
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 23263
Amount: 0.181434
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 20:38:34

Audit Action: Manually Integrated Audit Reason: Baseline

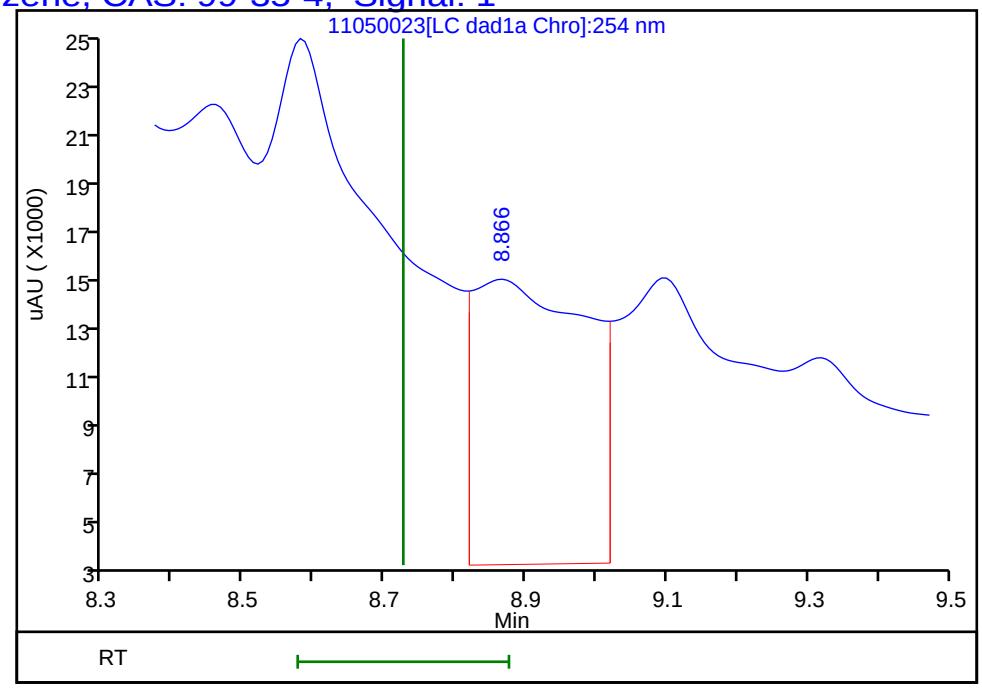
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.87
Response: 123981
Amount: 0.562738



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

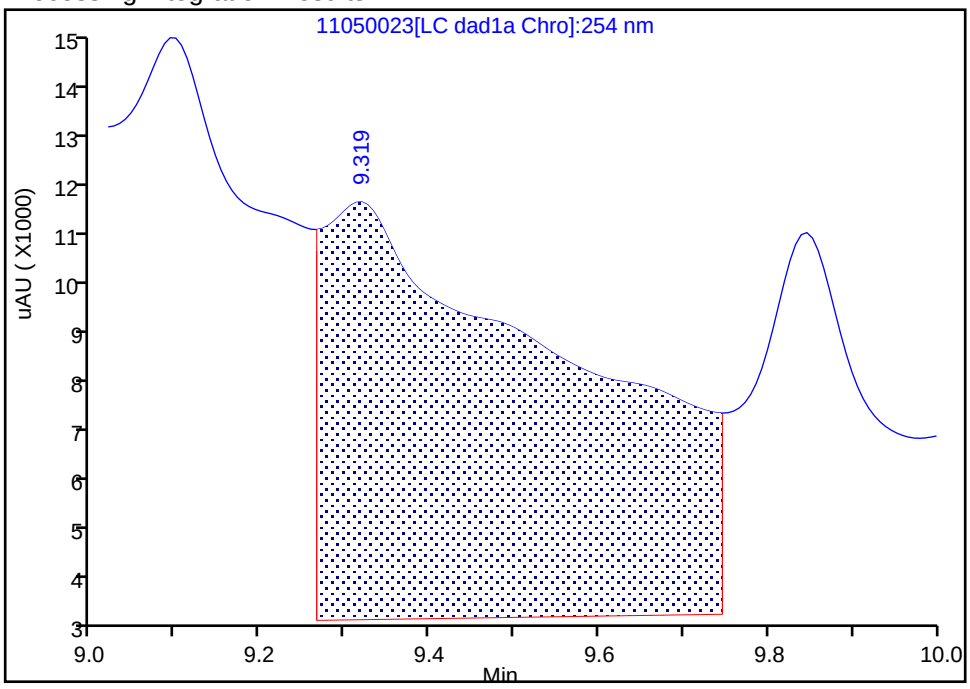
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

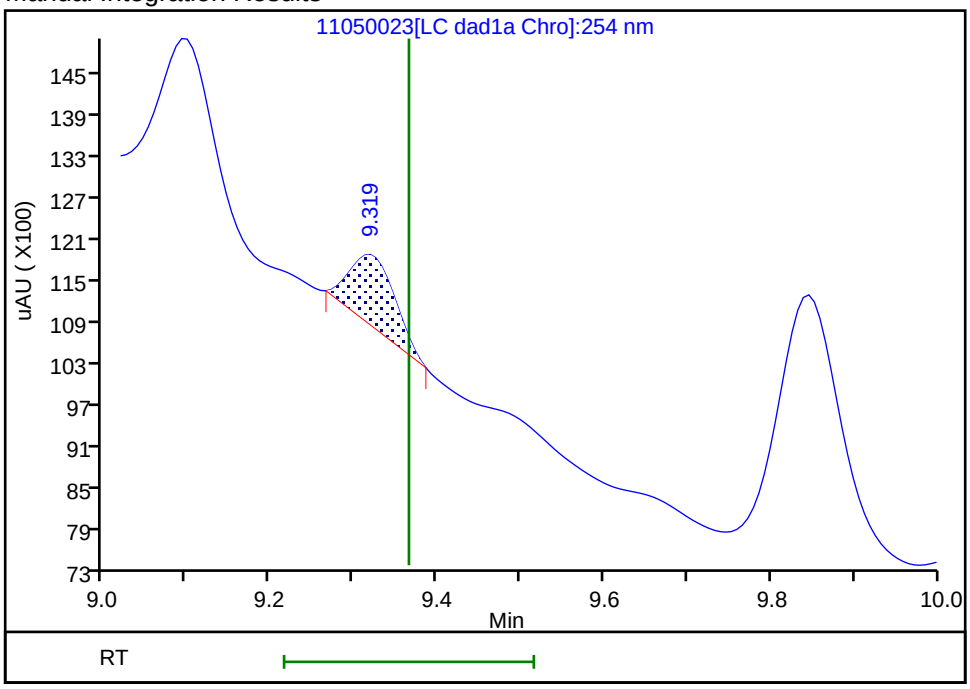
Processing Integration Results

RT: 9.32
Area: 160940
Amount: 0.543112
Amount Units: ug/mL



Manual Integration Results

RT: 9.32
Area: 3867
Amount: 0.013050
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 20:38:46
Audit Action: Manually Integrated Audit Reason: Baseline

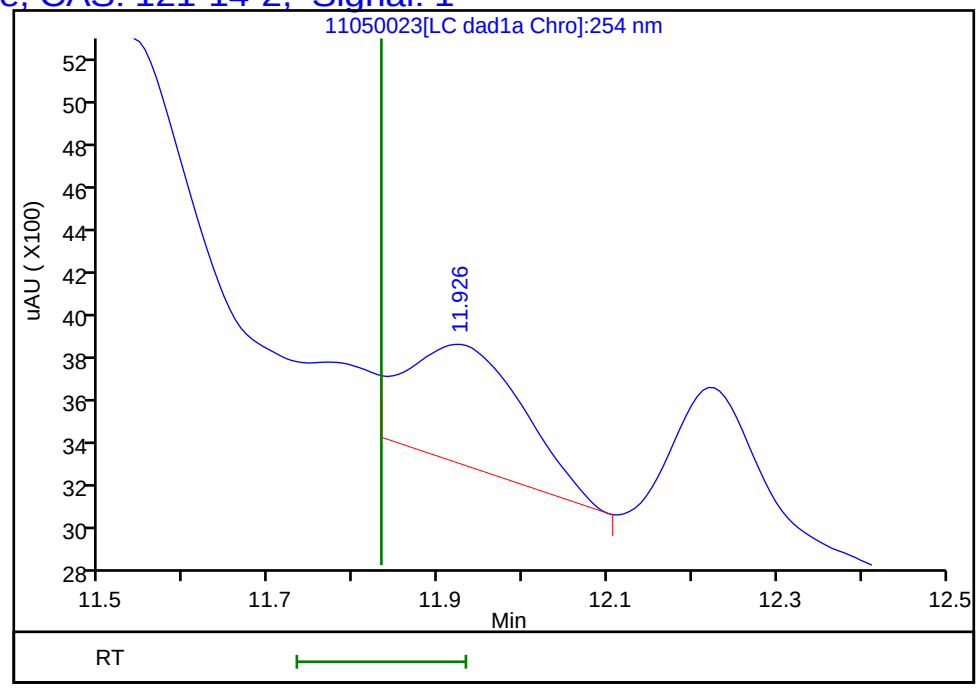
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.93
Response: 5348
Amount: 0.018633



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

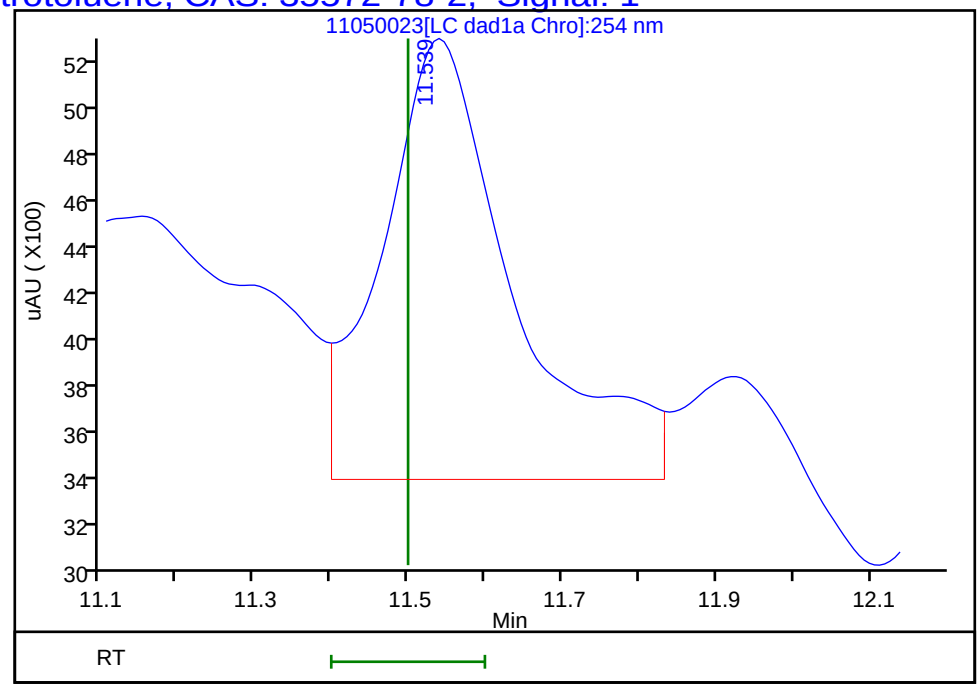
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.54
Response: 21837
Amount: 0.105530



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

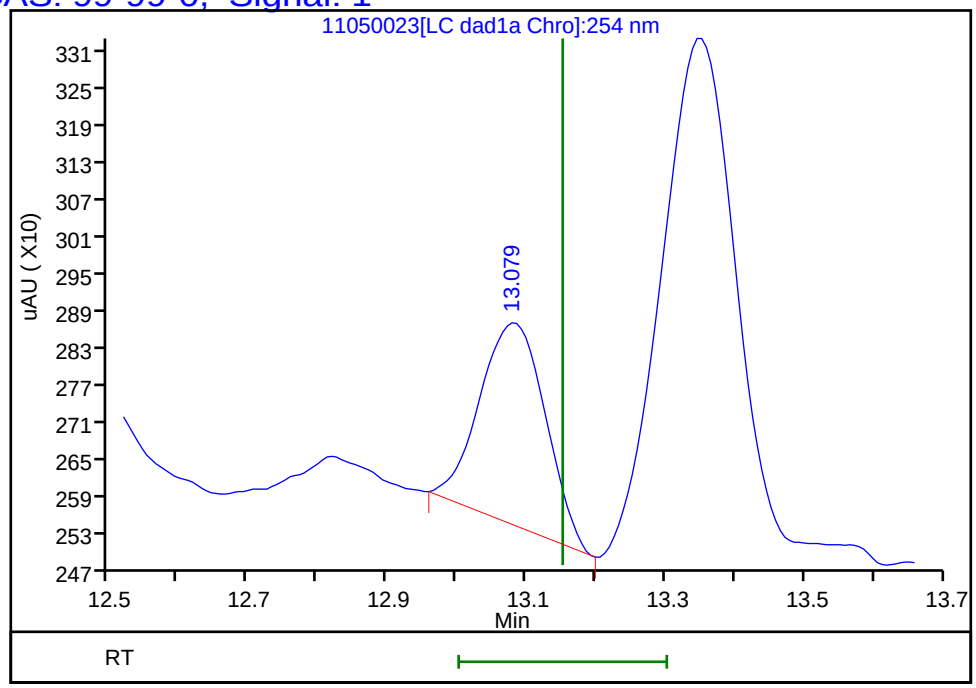
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d

Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.08
Response: 2152
Amount: 0.019229



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

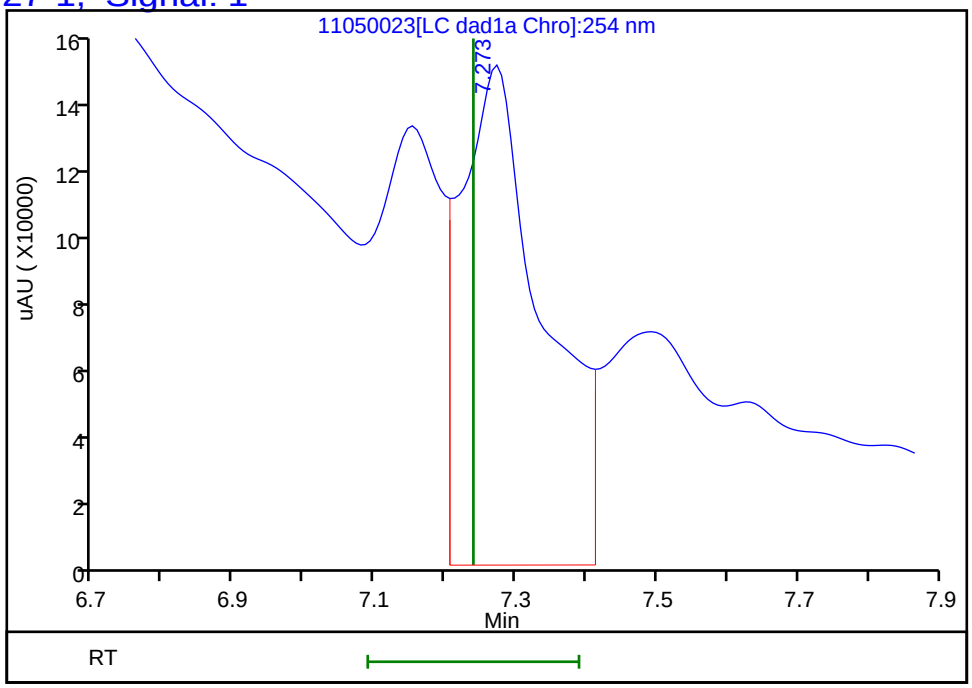
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 1133585
Amount: 8.697116



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

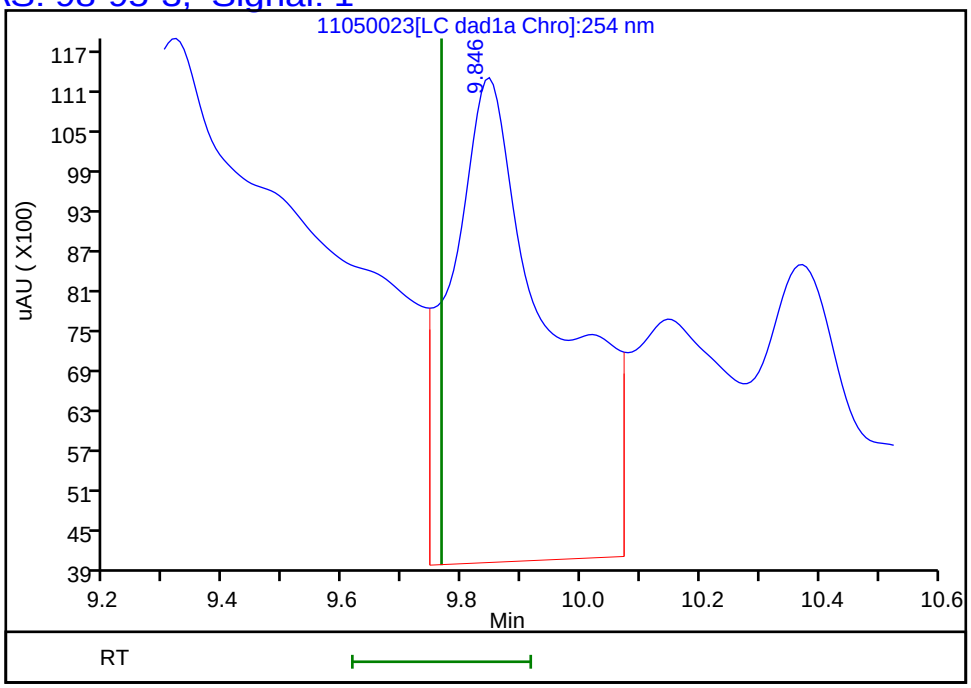
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.85
Response: 86437
Amount: 0.442618



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

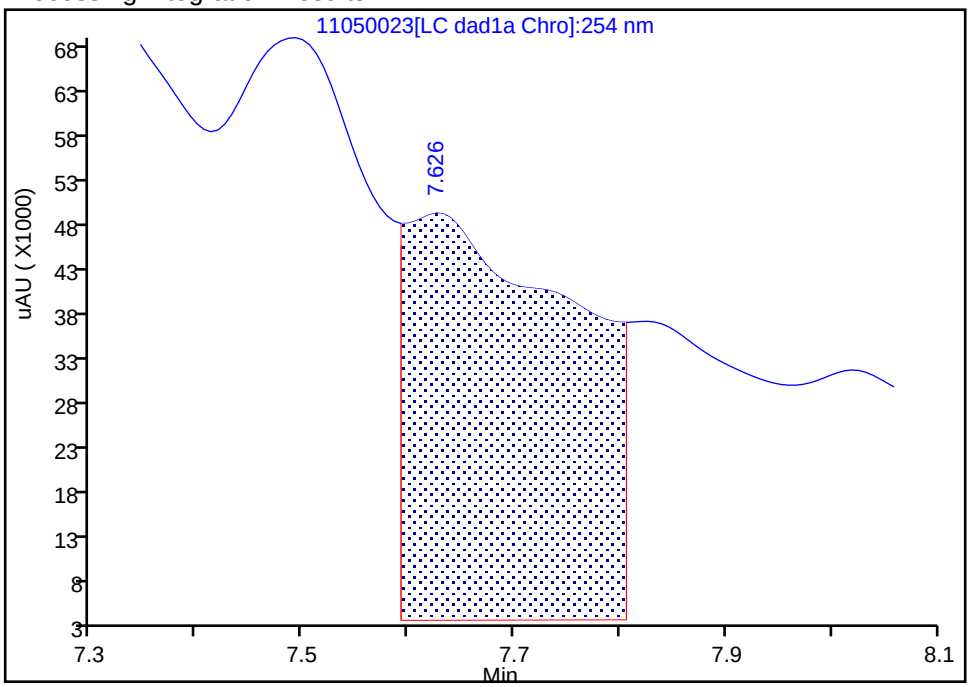
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d				
Injection Date:	05-Nov-2021 19:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

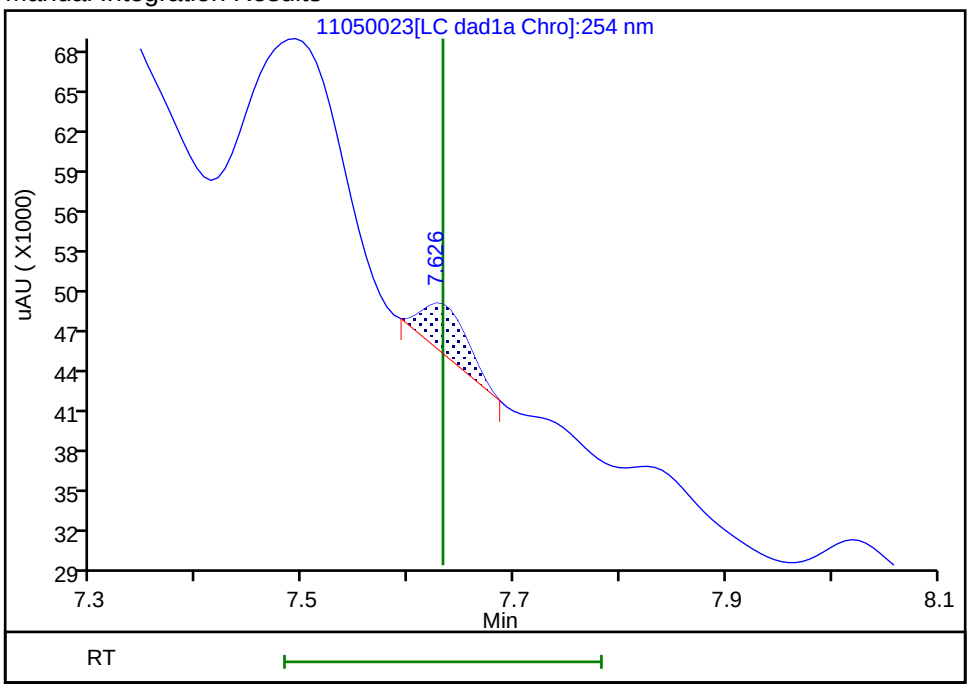
Processing Integration Results

RT: 7.63
Area: 502959
Amount: 4.733221
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 10935
Amount: 0.102907
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 20:38:30

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

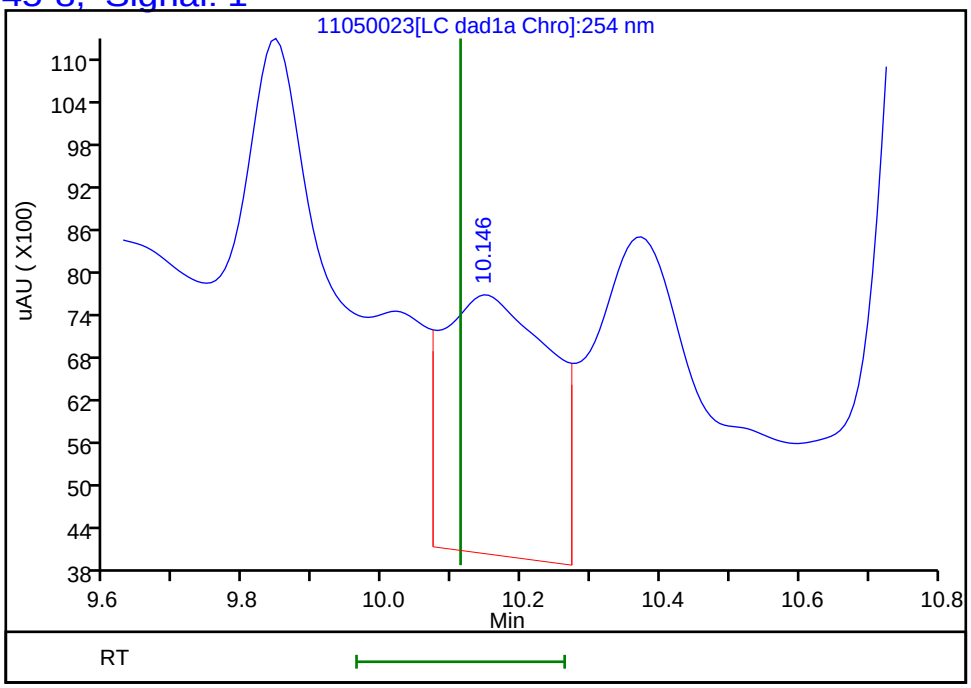
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050023.d
Injection Date: 05-Nov-2021 19:50:14 Instrument ID: CHHPLC_X3
Lims ID: 280-155015-A-8-A Lab Sample ID: 280-155015-8
Client ID: EW7-PM28A-7-25
Operator ID: JZ ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 39231
Amount: 0.227532



Reviewer: zhangji, 05-Nov-2021 20:38:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM28A-7-25 Lab Sample ID: 280-155015-8

Matrix: Water Lab File ID: 11050037.D

Analysis Method: 8330A Date Collected: 10/30/2021 16:10

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 509.9(mL) Date Analyzed: 11/06/2021 07:25

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.098	U Q	0.11	0.098	0.036
121-82-4	RDX	0.20	U M Q	0.21	0.20	0.051

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	*M Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D
Lims ID: 280-155015-A-8-A
Client ID: EW7-PM28A-7-25
Sample Type: Client
Inject. Date: 06-Nov-2021 07:25:12 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-8-A
Misc. Info.: 280-0106238-037
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:08 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:39:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.665			ND	
6 MNX	1	7.327	7.384	-0.057	19998	0.0755	
8 RDX	1		8.825			ND	U
9 Nitrobenzene	1		11.885			ND	U
$ 10 1,2-Dinitrobenzene	1	12.927	12.978	-0.051	43606	0.1641	M
12 1,3-Dinitrobenzene	1		15.398			ND	
14 o-Nitrotoluene	1		16.631			ND	U
16 p-Nitrotoluene	1		16.918			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
18 m-Nitrotoluene	1		17.885			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.281	18.265	0.016	53776	0.1347	
20 1,3,5-Trinitrobenzene	1		18.785			ND	
21 2,6-Dinitrotoluene	1		20.045			ND	
22 2,4-Dinitrotoluene	1		20.505			ND	
23 Tetryl	1		24.112			ND	
24 2,4,6-Trinitrotoluene	1		25.098			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

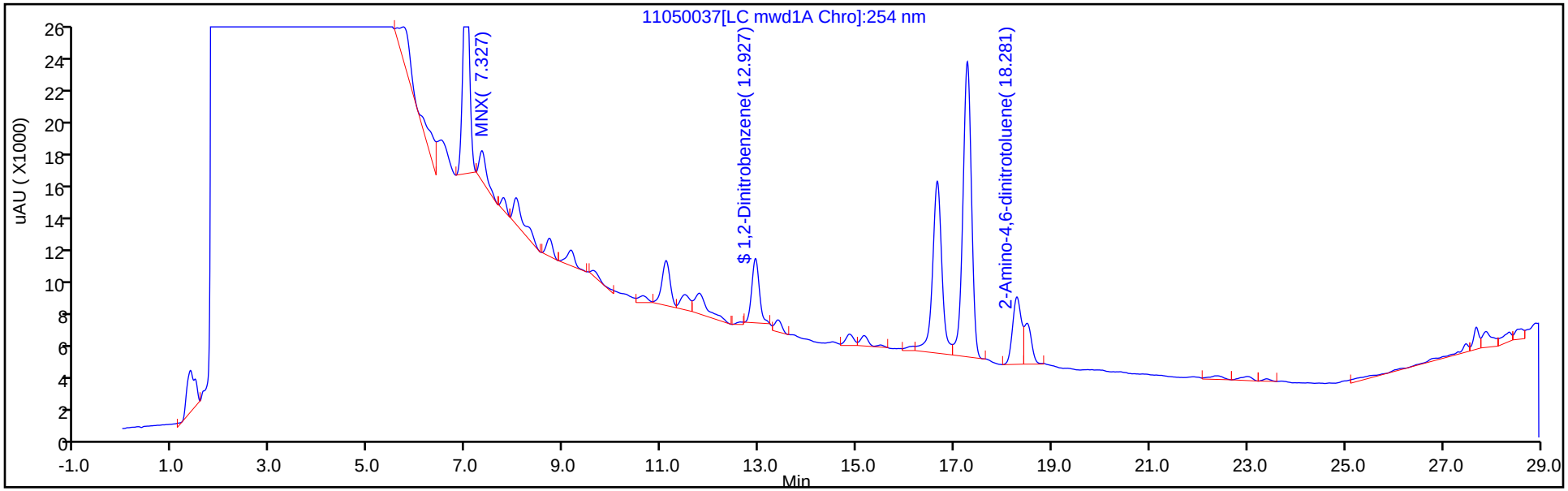
Report Date: 06-Nov-2021 12:42:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

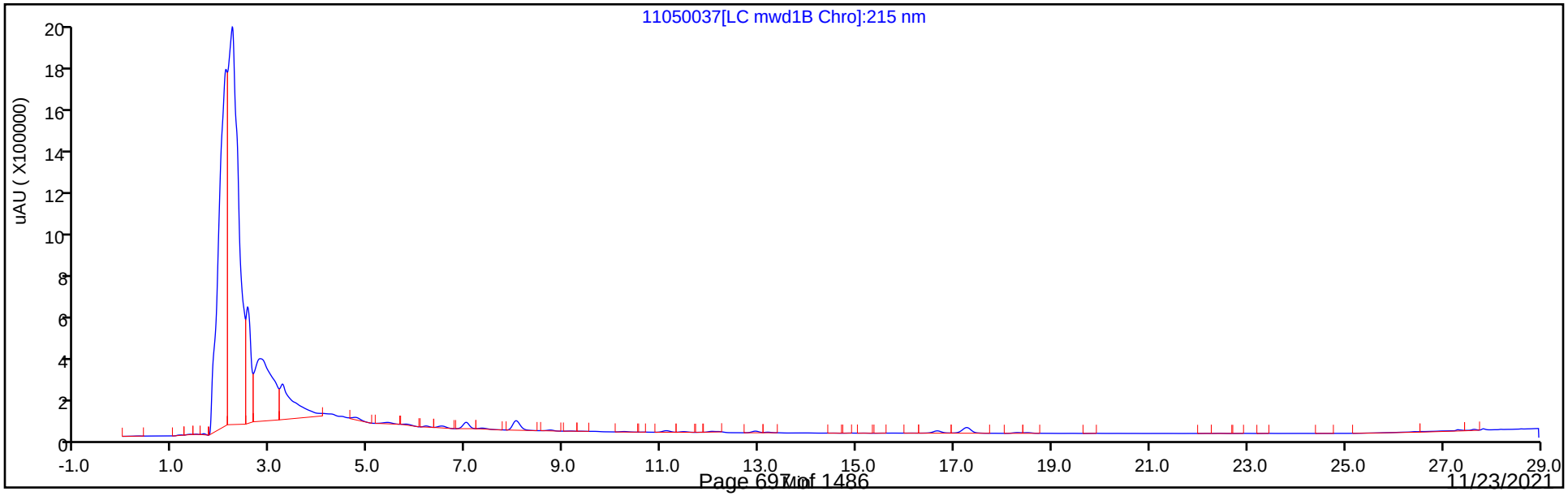
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D

Injection Date:	06-Nov-2021 07:25:12	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8	Worklist Smp#:	37
Client ID:	EW7-PM28A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D				
Lims ID:	280-155015-A-8-A				
Client ID:	EW7-PM28A-7-25				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 07:25:12	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-8-A				
Misc. Info.:	280-0106238-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:08	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:39:02		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1641	82.07

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

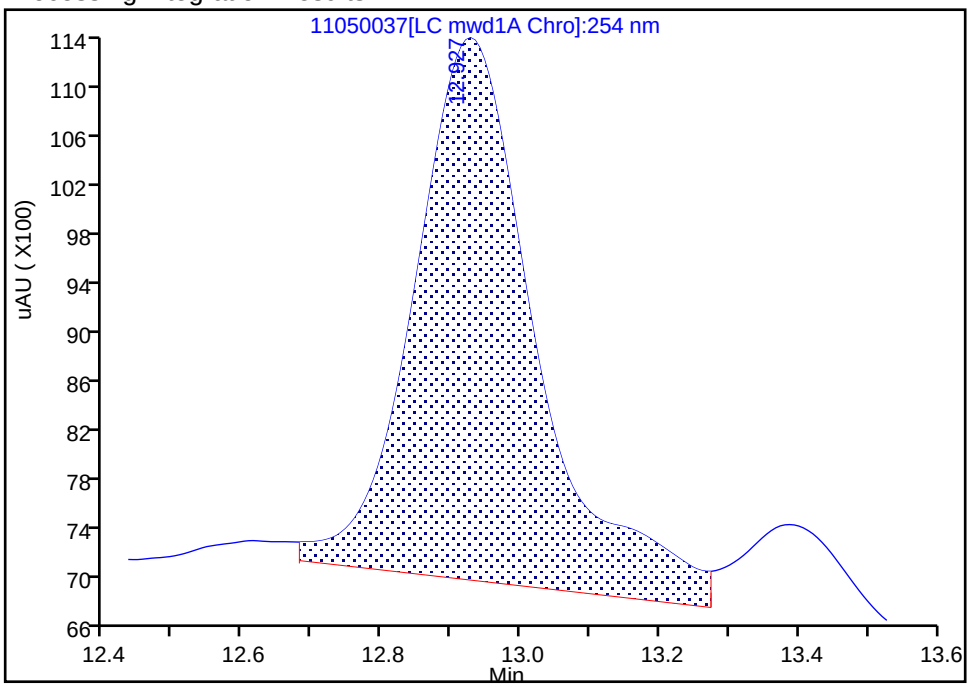
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D				
Injection Date:	06-Nov-2021 07:25:12	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

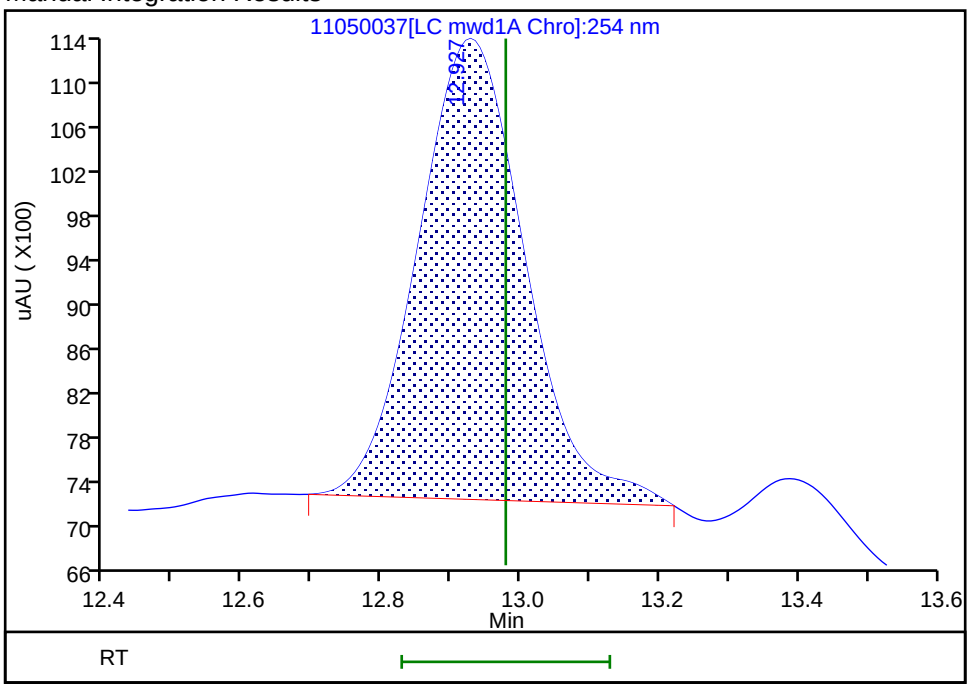
Processing Integration Results

RT: 12.93
Area: 53387
Amount: 0.200960
Amount Units: ug/ml



Manual Integration Results

RT: 12.93
Area: 43606
Amount: 0.164143
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:38:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

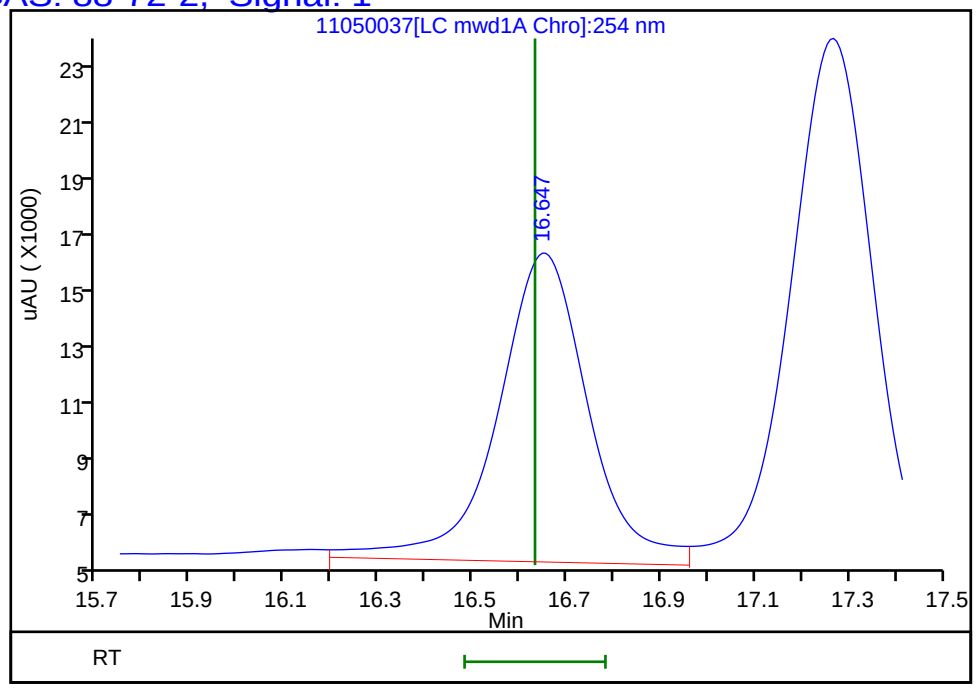
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D				
Injection Date:	06-Nov-2021 07:25:12	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.65
Response: 146201
Amount: 0.587231



Reviewer: zhangji, 06-Nov-2021 12:39:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

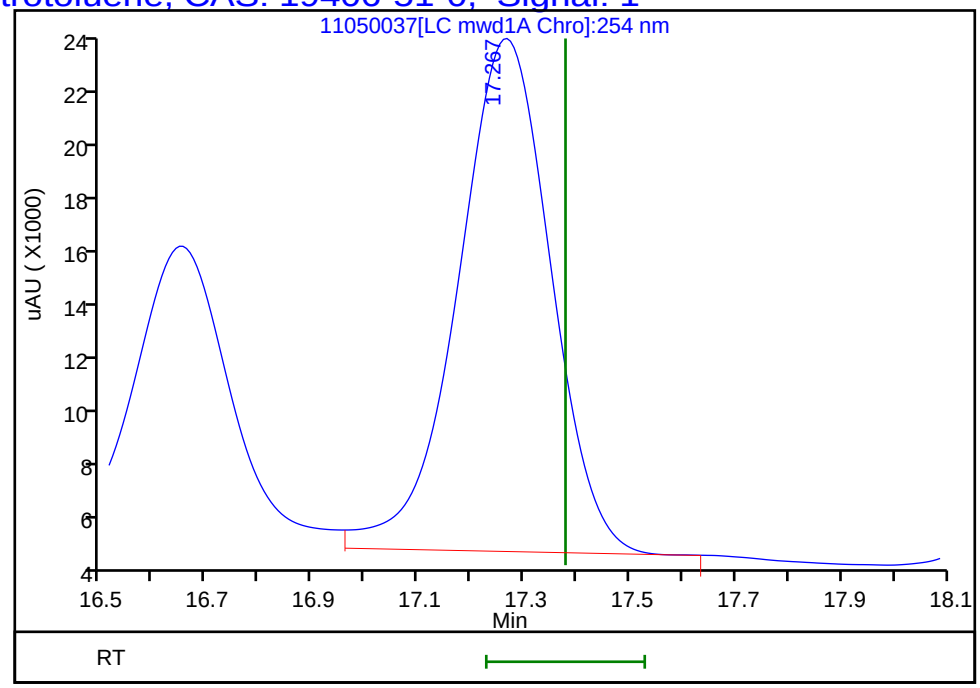
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D				
Injection Date:	06-Nov-2021 07:25:12	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.27
Response: 228833
Amount: 0.771247



Reviewer: zhangji, 06-Nov-2021 12:39:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

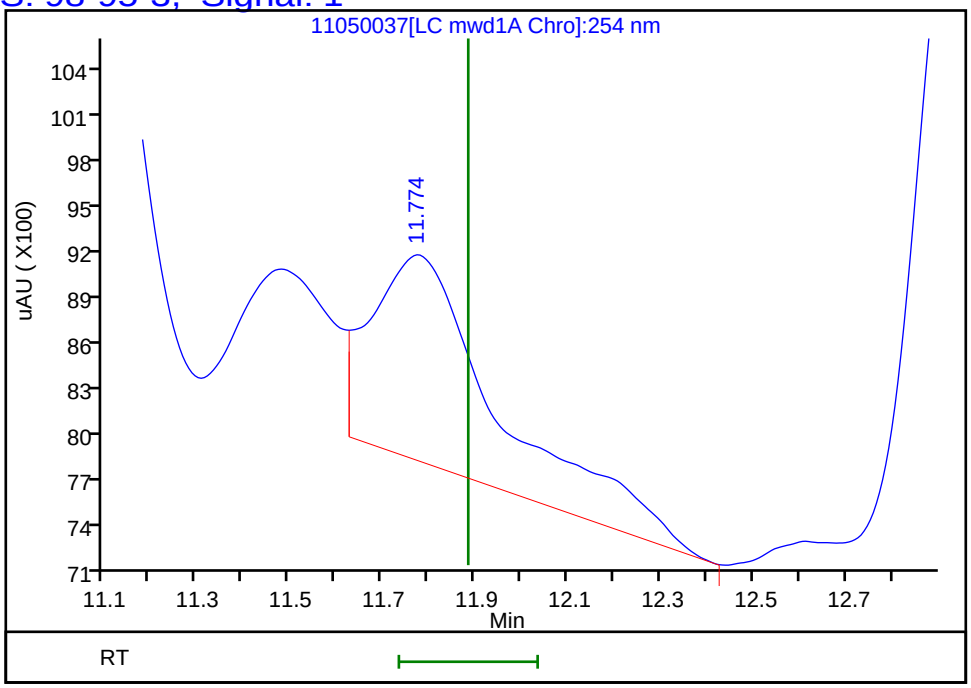
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D				
Injection Date:	06-Nov-2021 07:25:12	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 11.77
Response: 24991
Amount: 0.066705



Reviewer: zhangji, 06-Nov-2021 12:39:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

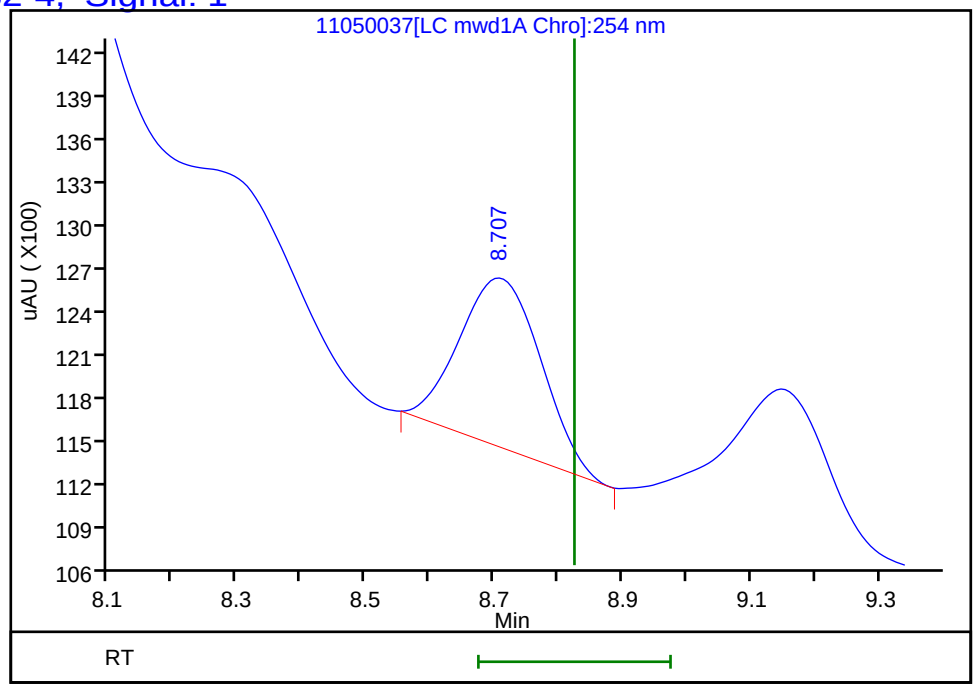
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050037.D				
Injection Date:	06-Nov-2021 07:25:12	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-8-A	Lab Sample ID:	280-155015-8		
Client ID:	EW7-PM28A-7-25				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 8.71
Response: 10119
Amount: 0.049537



Reviewer: zhangji, 06-Nov-2021 12:39:02
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.: 280-155015-1

SDG No.:

Client Sample ID: G0080-7 Lab Sample ID: 280-155015-9

Matrix: Water Lab File ID: 11050024.D

Analysis Method: 8330A Date Collected: 10/31/2021 12:35

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 485.2(mL) Date Analyzed: 11/05/2021 20:13

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.090
5755-27-1	MNX	0.41	U	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050024.D
Lims ID: 280-155015-A-9-A
Client ID: G0080-7
Sample Type: Client
Inject. Date: 05-Nov-2021 20:13:06 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-9-A
Misc. Info.: 280-0106237-024
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 20:39:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	
8 RDX	1		7.632			ND	
$ 10 1,2-Dinitrobenzene	1	8.584	8.606	-0.022	23344	0.1821	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1		9.365			ND	
13 Nitrobenzene	1		9.765			ND	
15 Tetryl	1		10.112			ND	
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.197	11.239	-0.042	884	0.005787	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1		13.152			ND	7
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

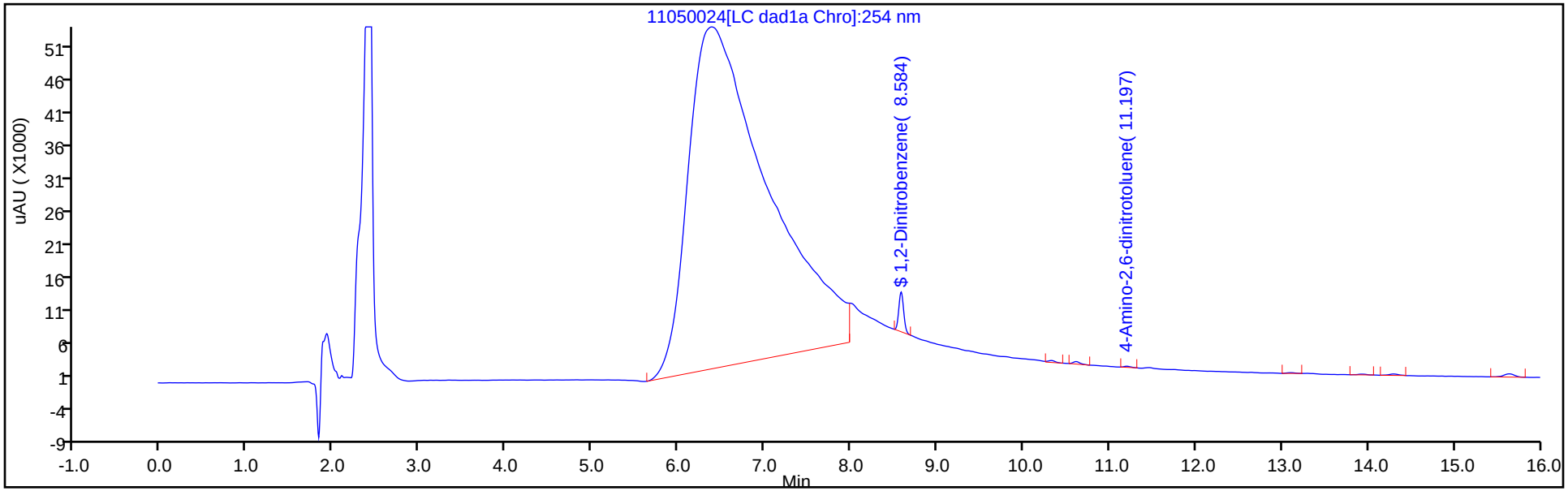
Report Date: 06-Nov-2021 10:24:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

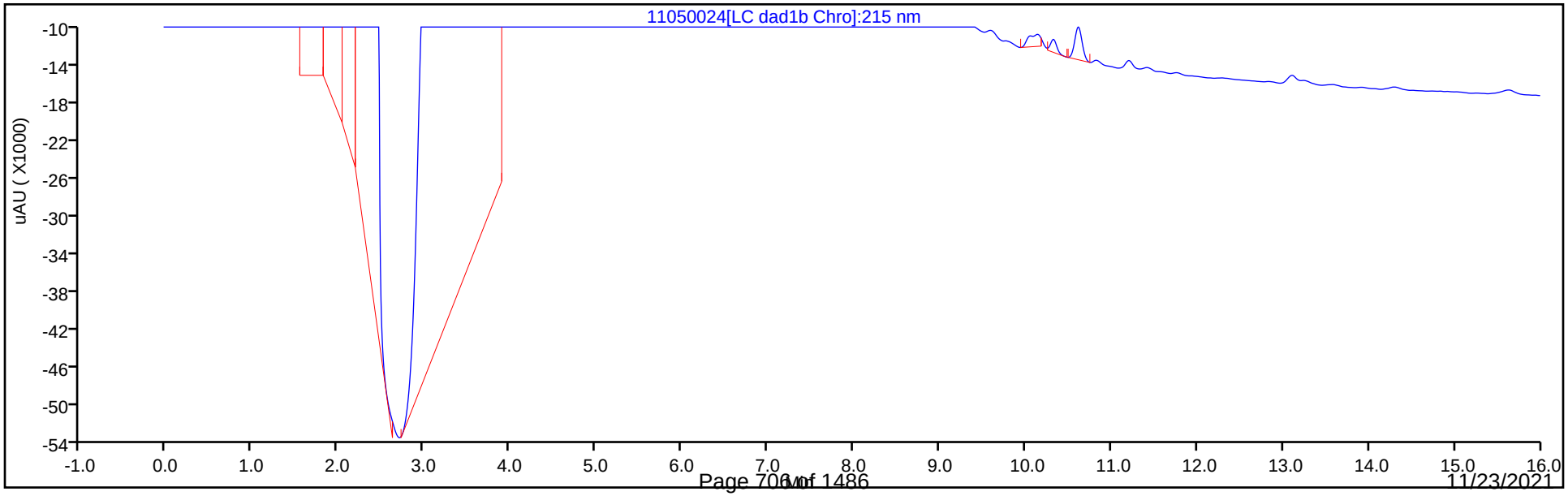
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050024.d

Injection Date:	05-Nov-2021 20:13:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-9-A	Lab Sample ID:	280-155015-9	Worklist Smp#:	24
Client ID:	G0080-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050024.D				
Lims ID:	280-155015-A-9-A				
Client ID:	G0080-7				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 20:13:06	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-9-A				
Misc. Info.:	280-0106237-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:53	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 20:39:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1821	91.03

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

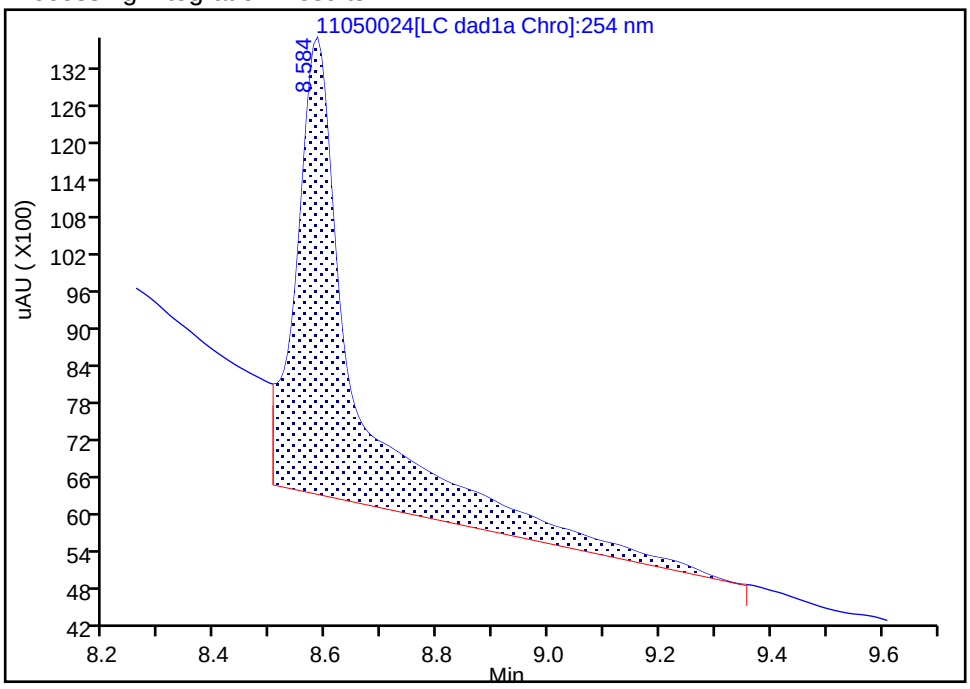
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050024.d				
Injection Date:	05-Nov-2021 20:13:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-9-A	Lab Sample ID:	280-155015-9		
Client ID:	G0080-7				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

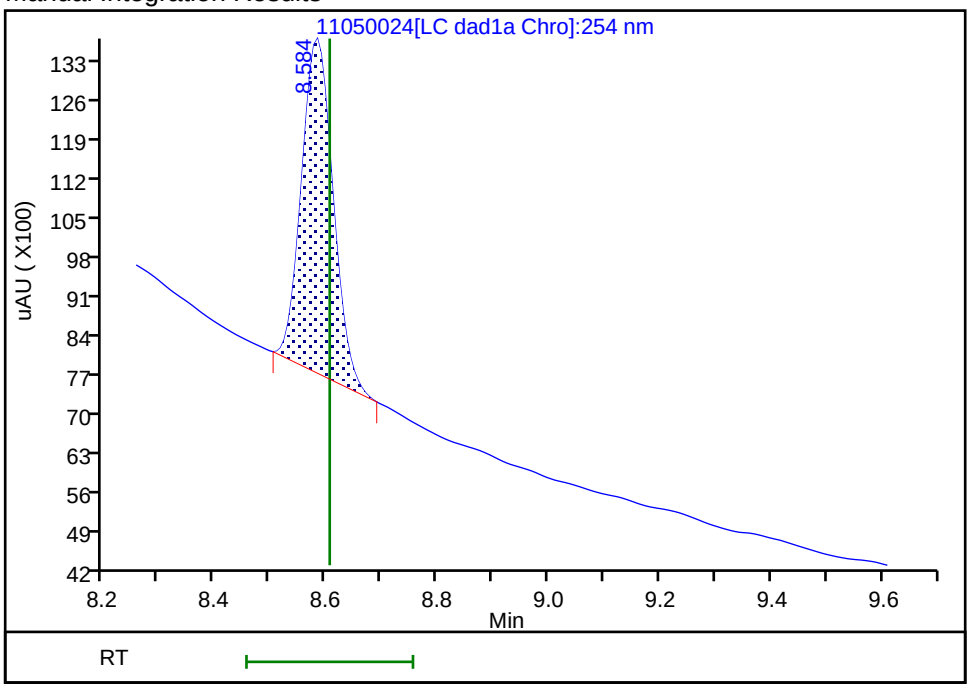
Processing Integration Results

RT: 8.58
Area: 53744
Amount: 0.419164
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 23344
Amount: 0.182066
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 20:39:08
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0080-7 Lab Sample ID: 280-155015-9

Matrix: Water Lab File ID: 11050038.D

Analysis Method: 8330A Date Collected: 10/31/2021 12:35

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 485.2(mL) Date Analyzed: 11/06/2021 08:00

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.059

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\20211105-106238.b\11050038.D
Lims ID: 280-155015-A-9-A
Client ID: G0080-7
Sample Type: Client
Inject. Date: 06-Nov-2021 08:00:18 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-9-A
Misc. Info.: 280-0106238-038
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:08 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:39:09

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	
	6 MNX	1		7.384			ND	
	8 RDX	1		8.825			ND	
	9 Nitrobenzene	1		11.885			ND	
$	10 1,2-Dinitrobenzene	1	12.921	12.978	-0.057	47463	0.1787	
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1	16.621	16.631	-0.010	2465	0.0099	
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.255	18.265	-0.010	17240	0.0410	
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1		25.098			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

Report Date: 06-Nov-2021 12:42:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

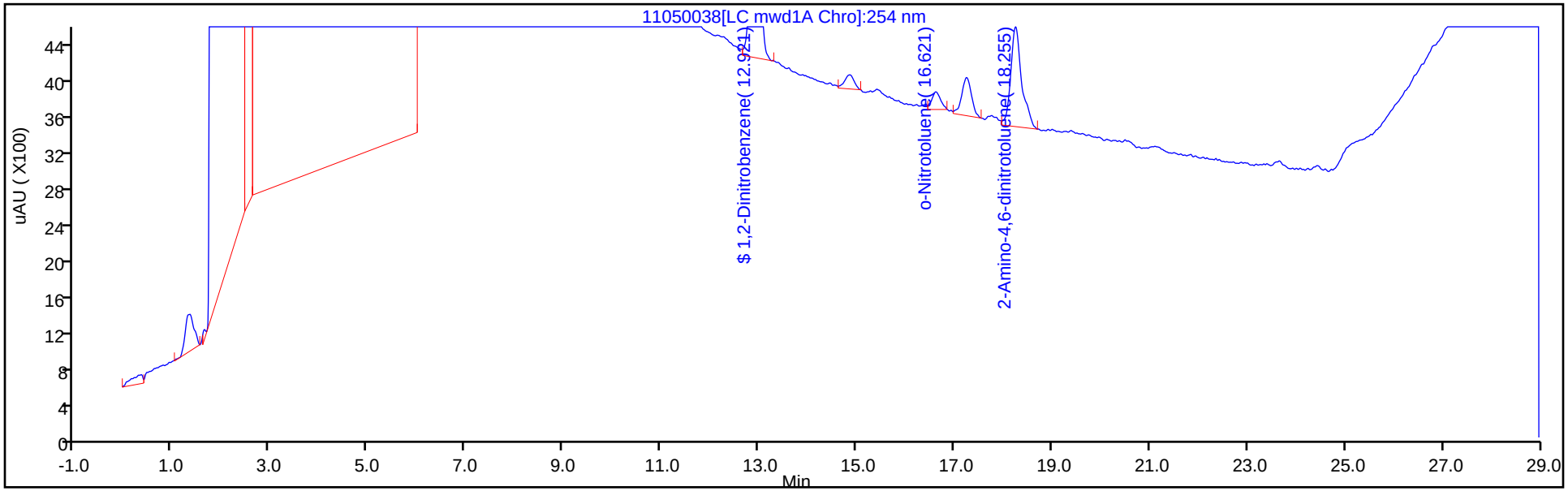
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050038.D

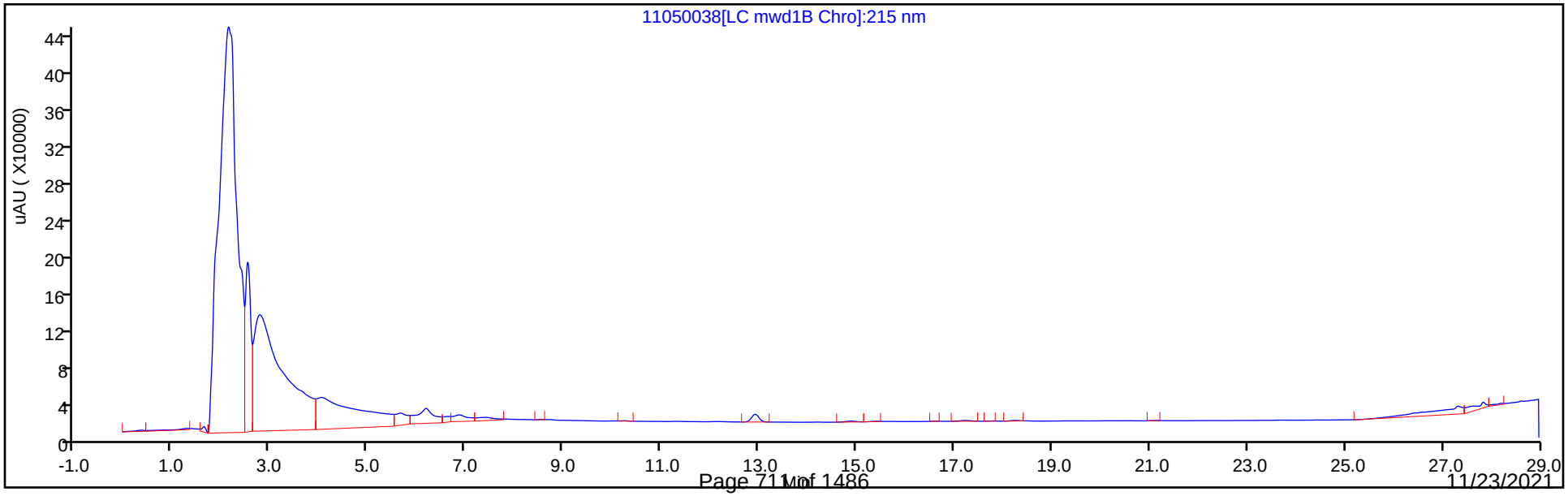
Injection Date:	06-Nov-2021 08:00:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-9-A	Lab Sample ID:	280-155015-9	Worklist Smp#:	38
Client ID:	G0080-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050038.D				
Lims ID:	280-155015-A-9-A				
Client ID:	G0080-7				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 08:00:18	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-9-A				
Misc. Info.:	280-0106238-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:08	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:39:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1787	89.33

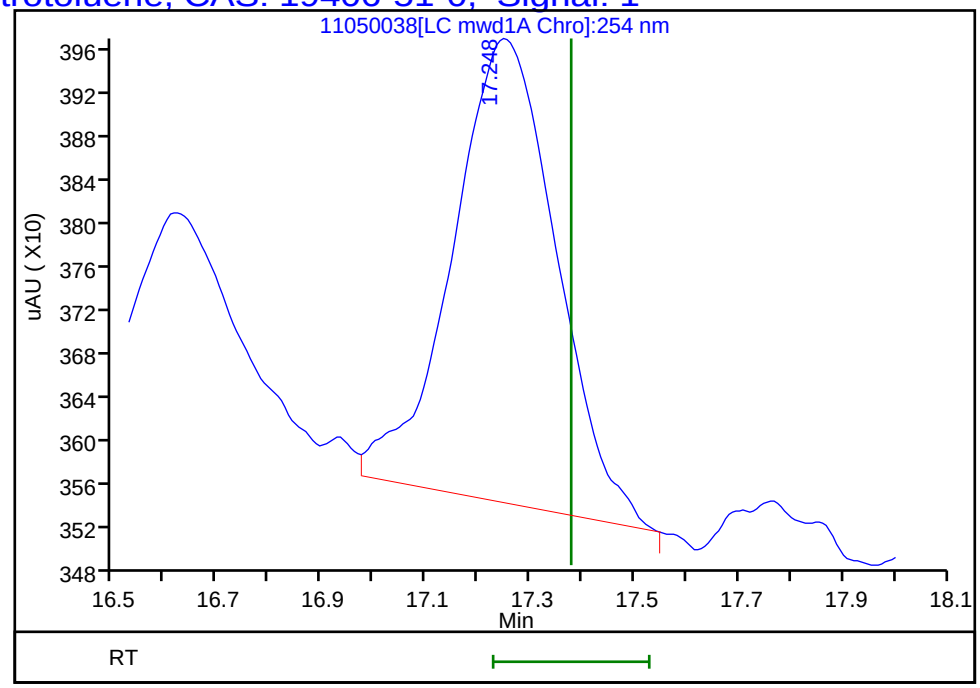
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050038.D				
Injection Date:	06-Nov-2021 08:00:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-9-A	Lab Sample ID:	280-155015-9		
Client ID:	G0080-7				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.25
Response: 5862
Amount: 0.019757



Reviewer: zhangji, 06-Nov-2021 12:39:09
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.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

Matrix: Water Lab File ID: 11050025.D

Analysis Method: 8330A Date Collected: 10/31/2021 16:20

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 498.1(mL) Date Analyzed: 11/05/2021 20:36

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 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	0.14		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U M	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
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.091
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	84	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050025.D
Lims ID: 280-155015-A-10-A
Client ID: EW7-PM24A-7-25
Sample Type: Client
Inject. Date: 05-Nov-2021 20:36:01 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-10-
Misc. Info.: 280-0106237-025
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:11:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1	7.643	7.632	0.011	10714	0.1008	M
$ 10 1,2-Dinitrobenzene	1	8.596	8.606	-0.010	21485	0.1676	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1		9.365			ND	
13 Nitrobenzene	1		9.765			ND	U
15 Tetryl	1		10.112			ND	U
17 2,4,6-Trinitrotoluene	1	11.016	11.025	-0.009	2817	0.0137	
18 4-Amino-2,6-dinitrotoluene	1	11.229	11.239	-0.010	3085	0.0202	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	U
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1	13.142	13.152	-0.010	3202	0.0286	
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

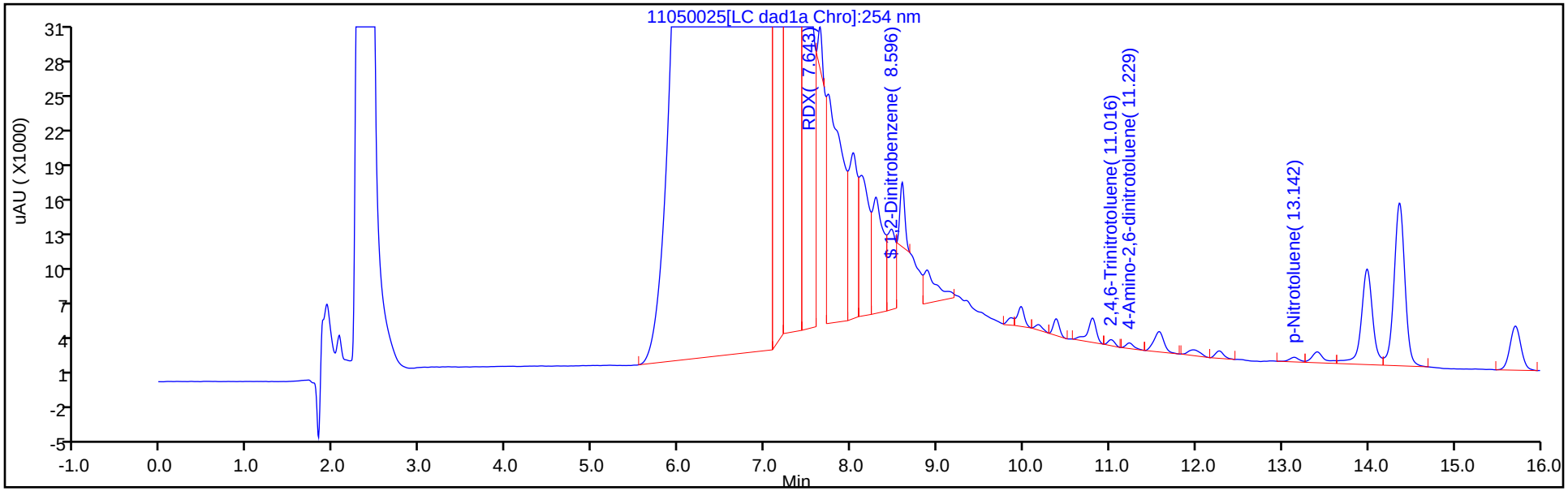
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Nov-2021 10:24:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

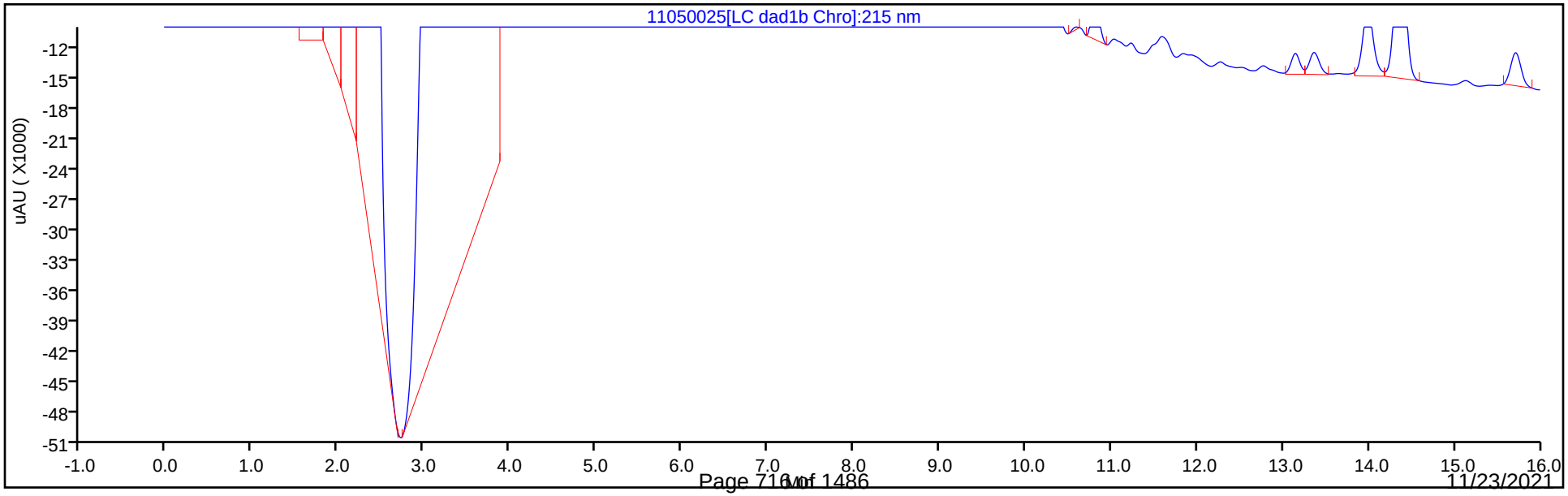
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d				
Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10	Worklist Smp#:	25
Client ID:	EW7-PM24A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050025.D				
Lims ID:	280-155015-A-10-A				
Client ID:	EW7-PM24A-7-25				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 20:36:01	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-10-				
Misc. Info.:	280-0106237-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:53	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 10:11:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1676	83.78

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

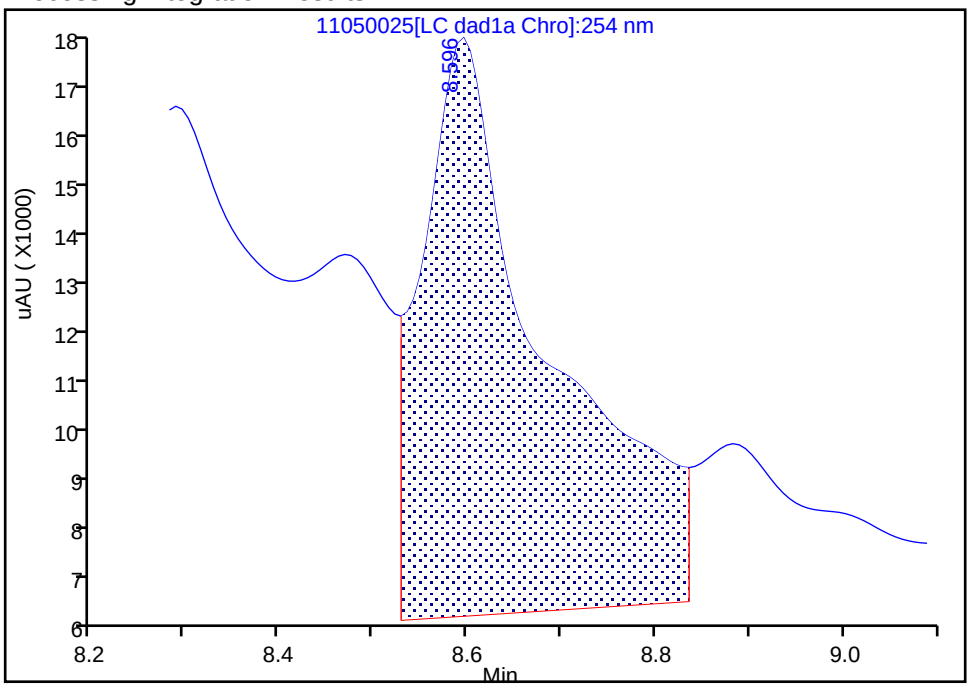
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d				
Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

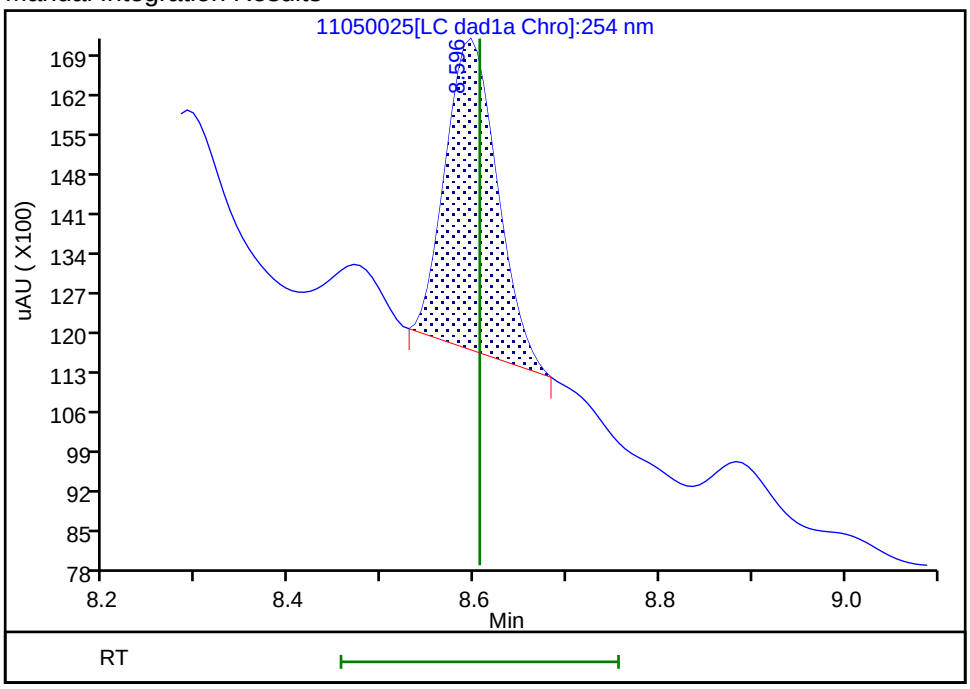
Processing Integration Results

RT: 8.60
Area: 100186
Amount: 0.781377
Amount Units: ug/mL



Manual Integration Results

RT: 8.60
Area: 21485
Amount: 0.167567
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:11:03
Audit Action: Manually Integrated Audit Reason: Baseline

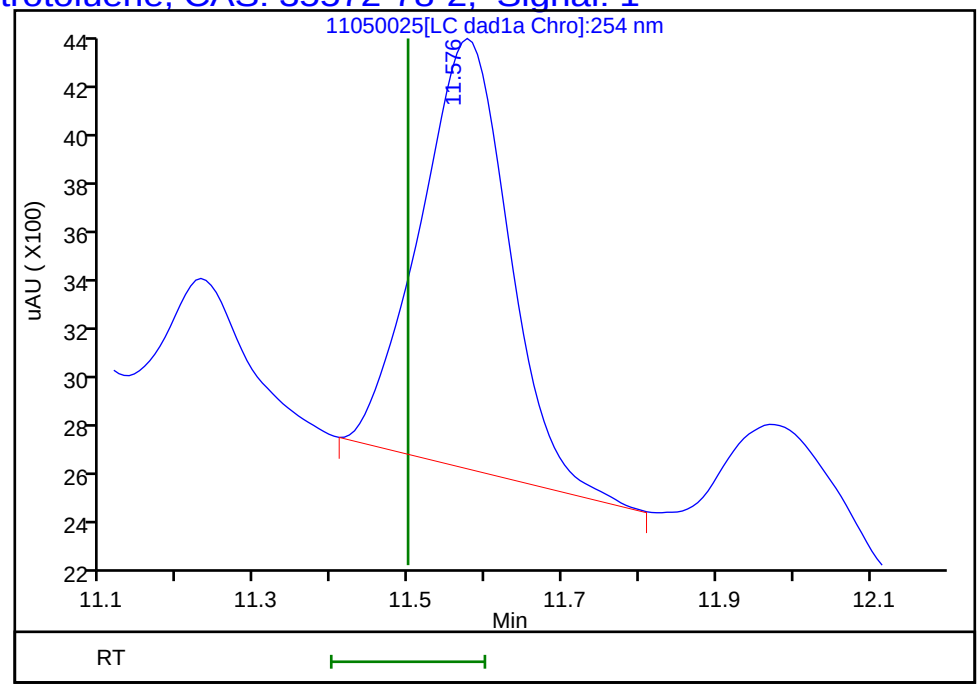
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d				
Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.58
Response: 14215
Amount: 0.068696



Reviewer: zhangji, 06-Nov-2021 10:11:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

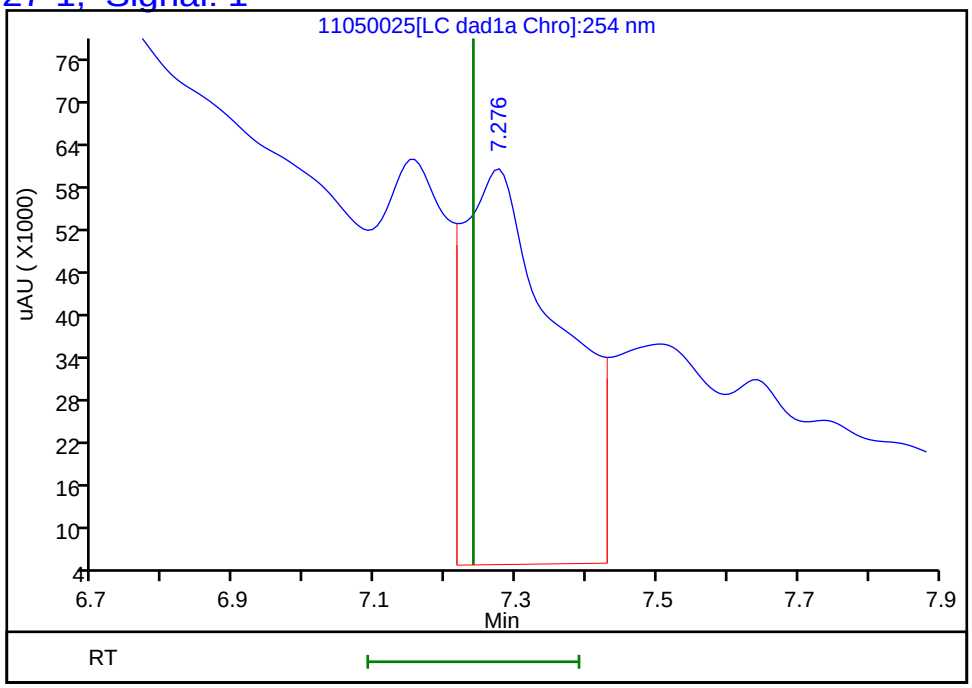
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d				
Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.28
Response: 530937
Amount: 4.073467



Reviewer: zhangji, 06-Nov-2021 10:11:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

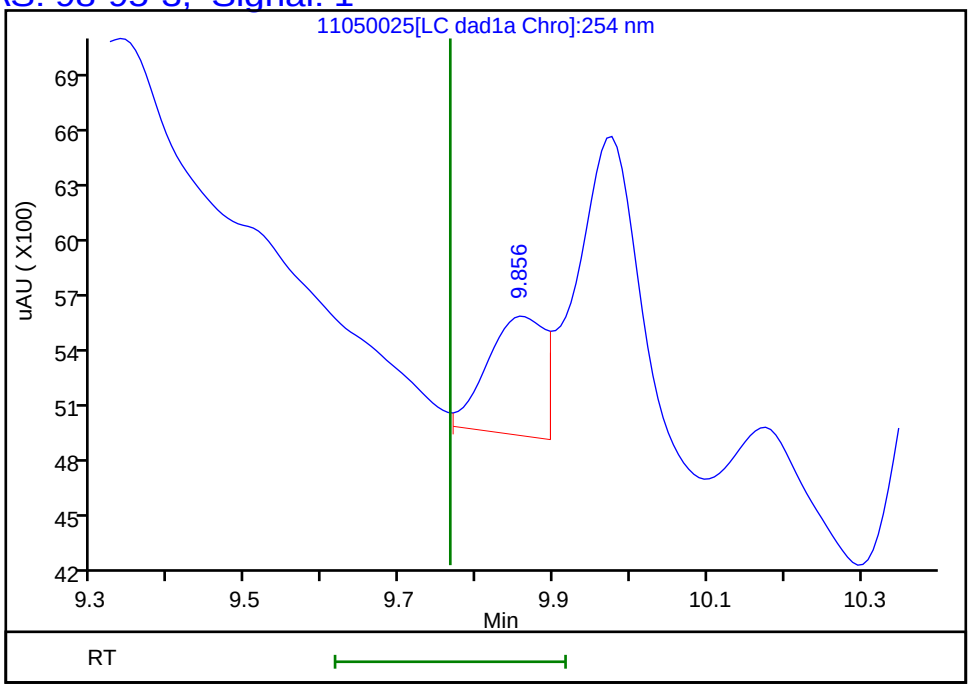
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d				
Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.86
Response: 3302
Amount: 0.016909



Reviewer: zhangji, 06-Nov-2021 10:11:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

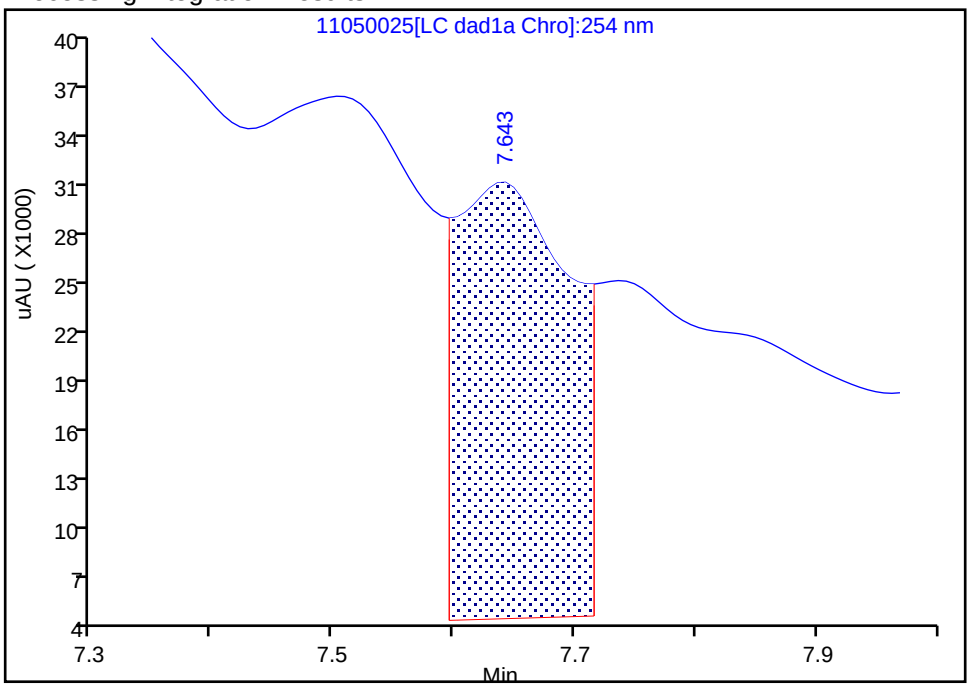
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d				
Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

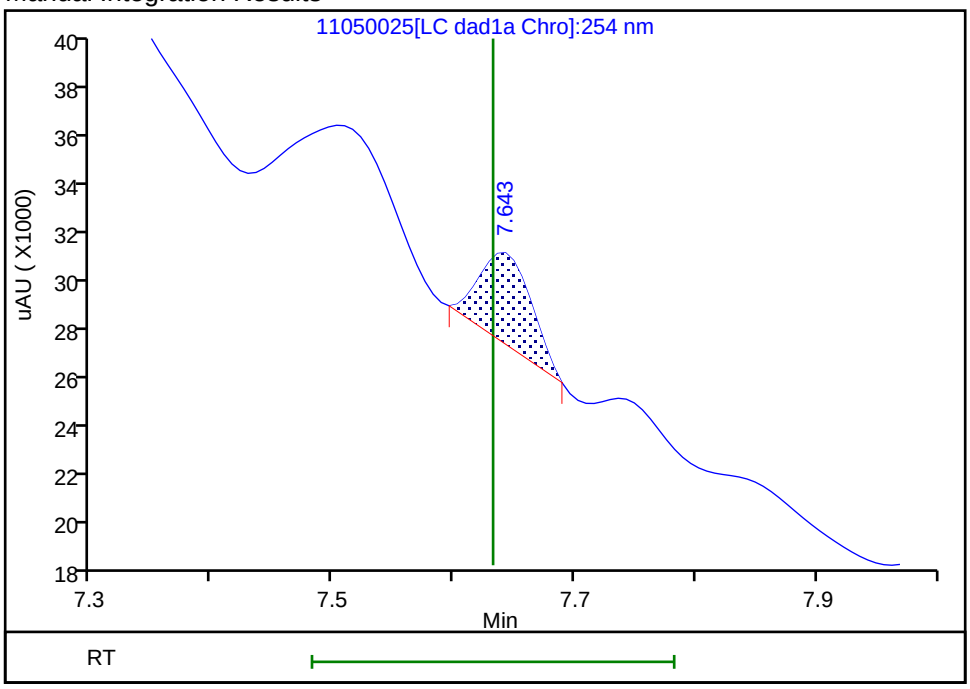
Processing Integration Results

RT: 7.64
Area: 165549
Amount: 1.557940
Amount Units: ug/mL



Manual Integration Results

RT: 7.64
Area: 10714
Amount: 0.100827
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:11:07

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

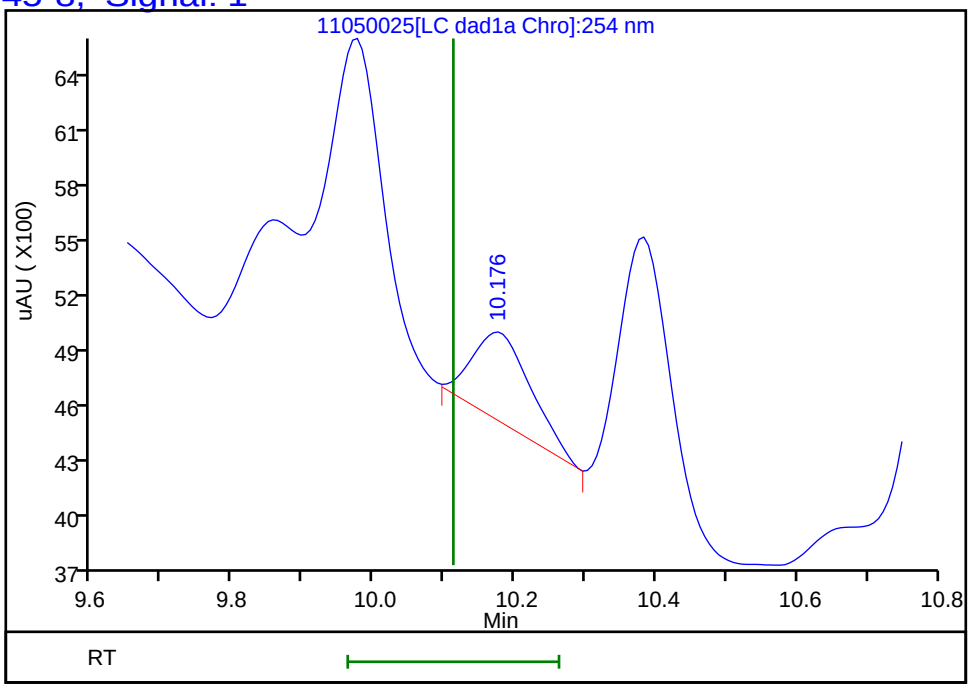
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050025.d

Injection Date:	05-Nov-2021 20:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.18
Response: 2714
Amount: 0.015741



Reviewer: zhangji, 06-Nov-2021 10:11:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

Matrix: Water Lab File ID: 11050039.D

Analysis Method: 8330A Date Collected: 10/31/2021 16:20

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 498.1(mL) Date Analyzed: 11/06/2021 08:35

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U M	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
121-82-4	RDX	0.20	U M	0.21	0.20	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D
Lims ID: 280-155015-A-10-A
Client ID: EW7-PM24A-7-25
Sample Type: Client
Inject. Date: 06-Nov-2021 08:35:16 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-10-A
Misc. Info.: 280-0106238-039
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:08 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:40:28

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.665			ND	
	6 MNX	1	7.332	7.384	-0.052	15628	0.0590	M
	8 RDX	1		8.825			ND	U
	9 Nitrobenzene	1	11.786	11.885	-0.099	19695	0.0526	M
$	10 1,2-Dinitrobenzene	1	12.926	12.978	-0.052	49434	0.1861	M
	12 1,3-Dinitrobenzene	1		15.398			ND	7
	14 o-Nitrotoluene	1	16.646	16.631	0.015	136816	0.5495	
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.378			ND	U
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.266	18.265	0.001	47448	0.1185	M
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1	25.066	25.098	-0.032	6160	0.0123	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

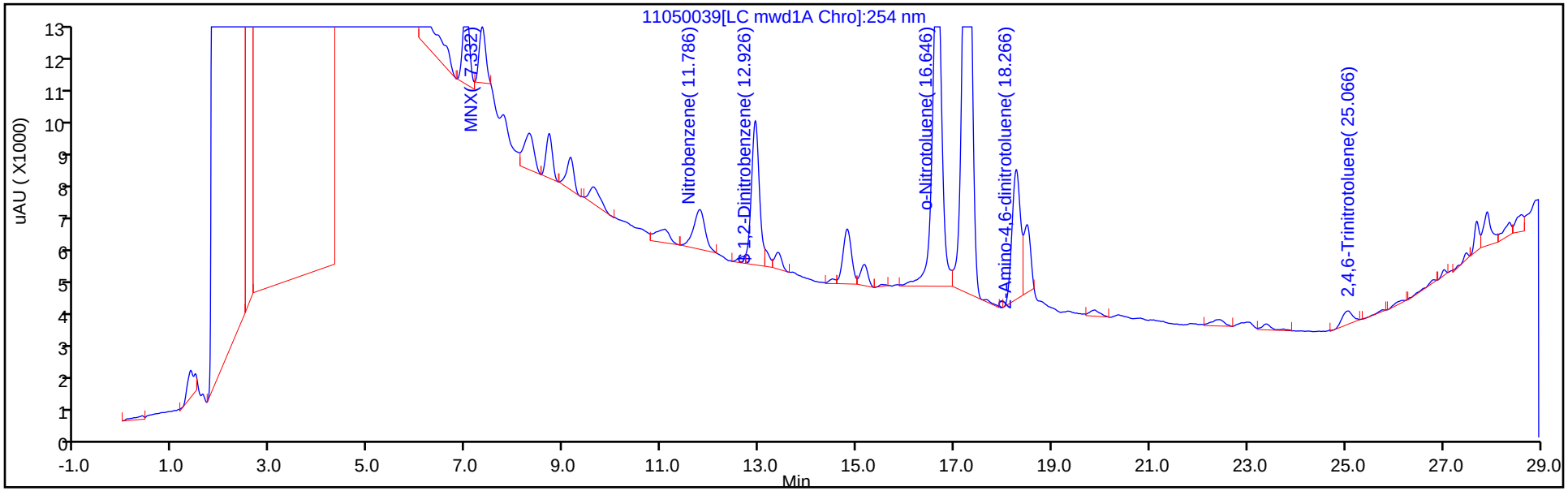
Report Date: 06-Nov-2021 12:42:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

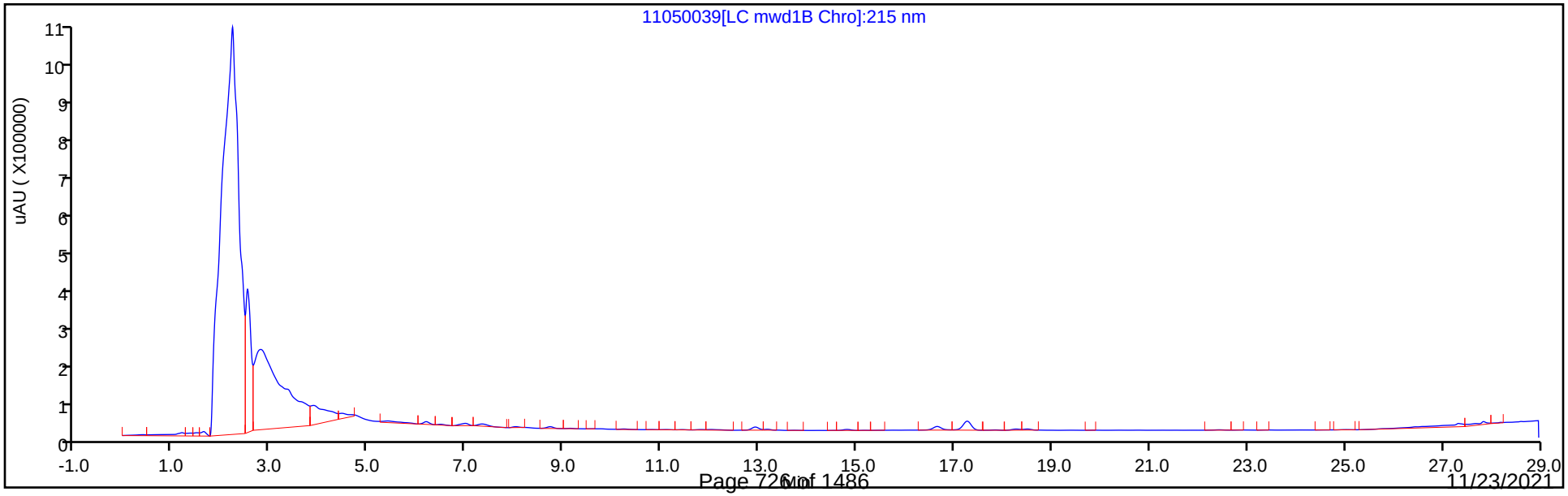
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D

Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10	Worklist Smp#:	39
Client ID:	EW7-PM24A-7-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Lims ID:	280-155015-A-10-A				
Client ID:	EW7-PM24A-7-25				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 08:35:16	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-10-A				
Misc. Info.:	280-0106238-039				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:08	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:40:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1861	93.04

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

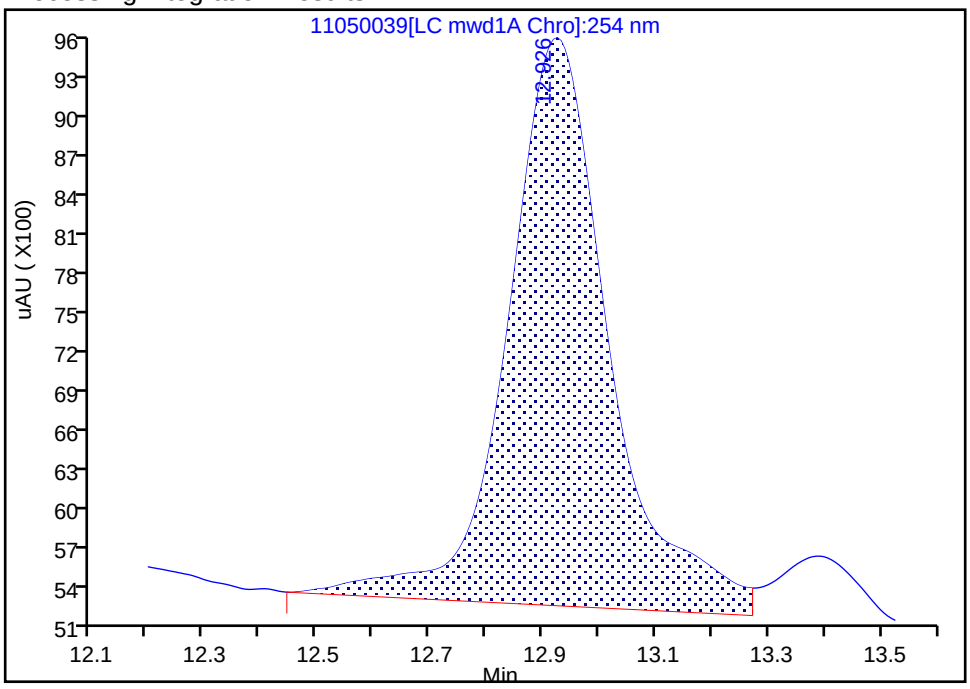
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

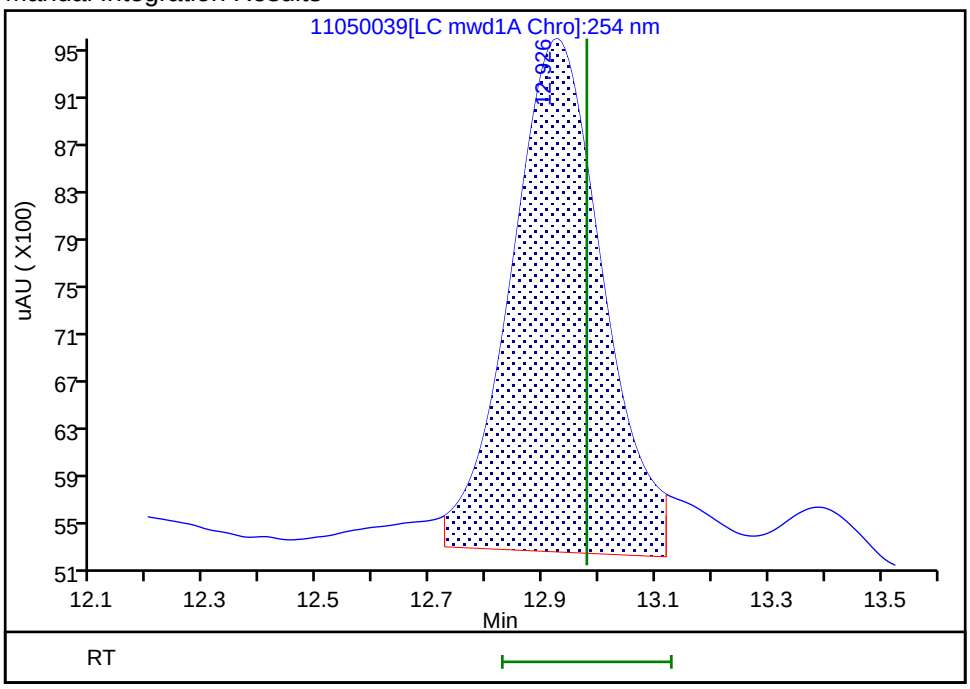
Processing Integration Results

RT: 12.93
Area: 54799
Amount: 0.206276
Amount Units: ug/ml



Manual Integration Results

RT: 12.93
Area: 49434
Amount: 0.186081
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:39:47

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

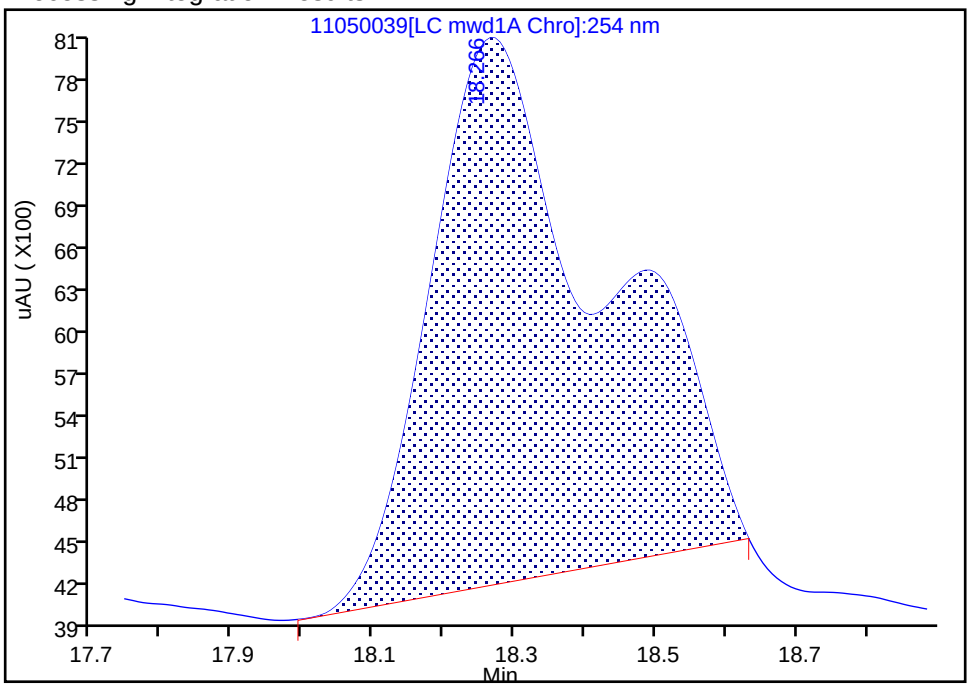
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

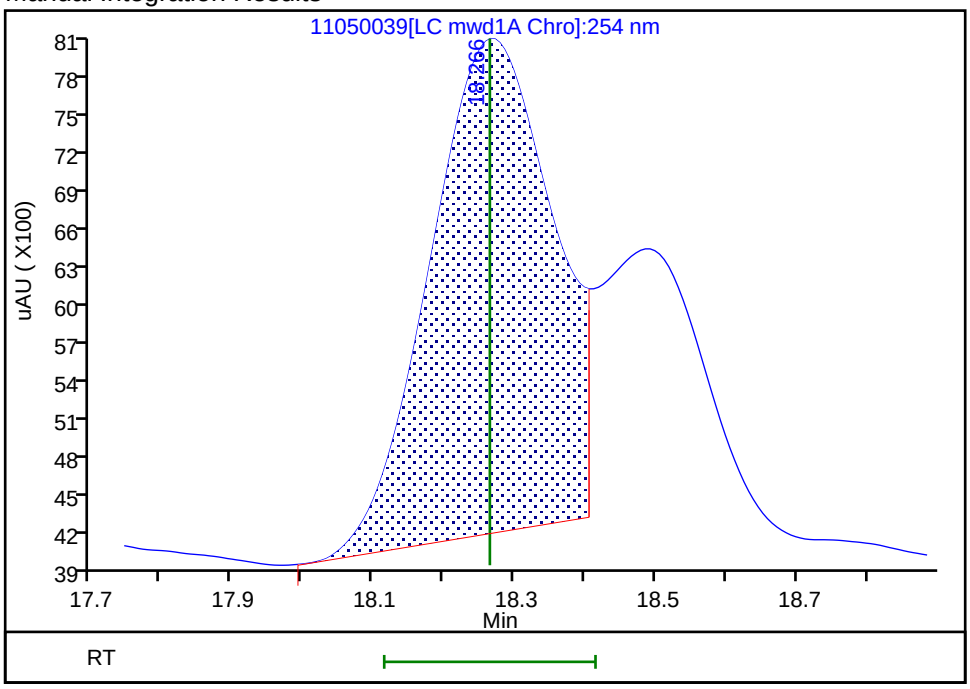
Processing Integration Results

RT: 18.27
Area: 66992
Amount: 0.168624
Amount Units: ug/ml



Manual Integration Results

RT: 18.27
Area: 47448
Amount: 0.118492
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:40:24

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

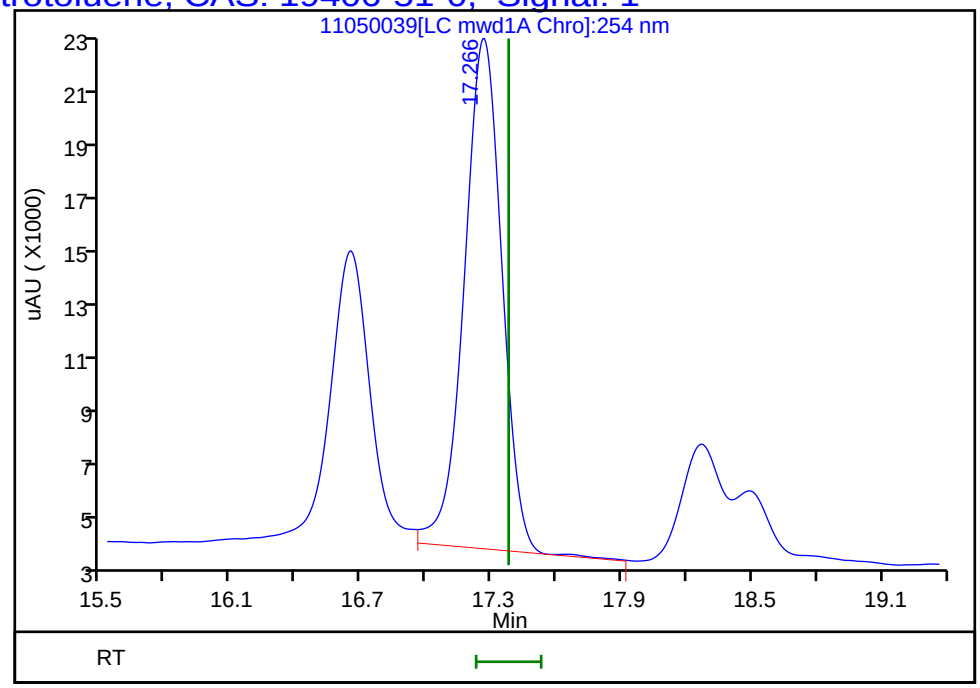
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.27
Response: 220477
Amount: 0.743085



Reviewer: zhangji, 06-Nov-2021 12:40:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

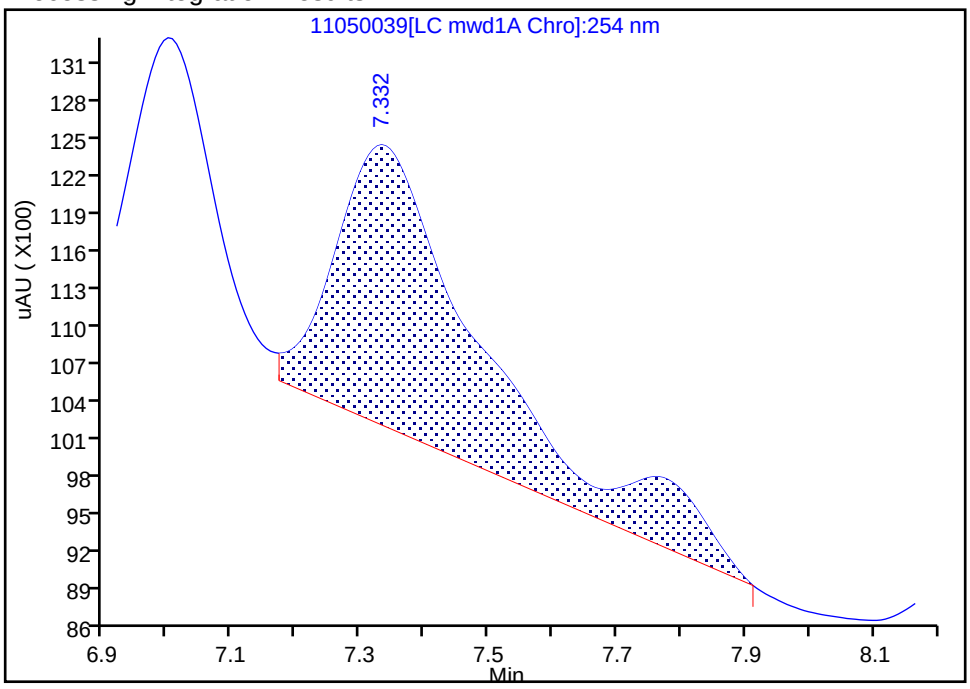
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

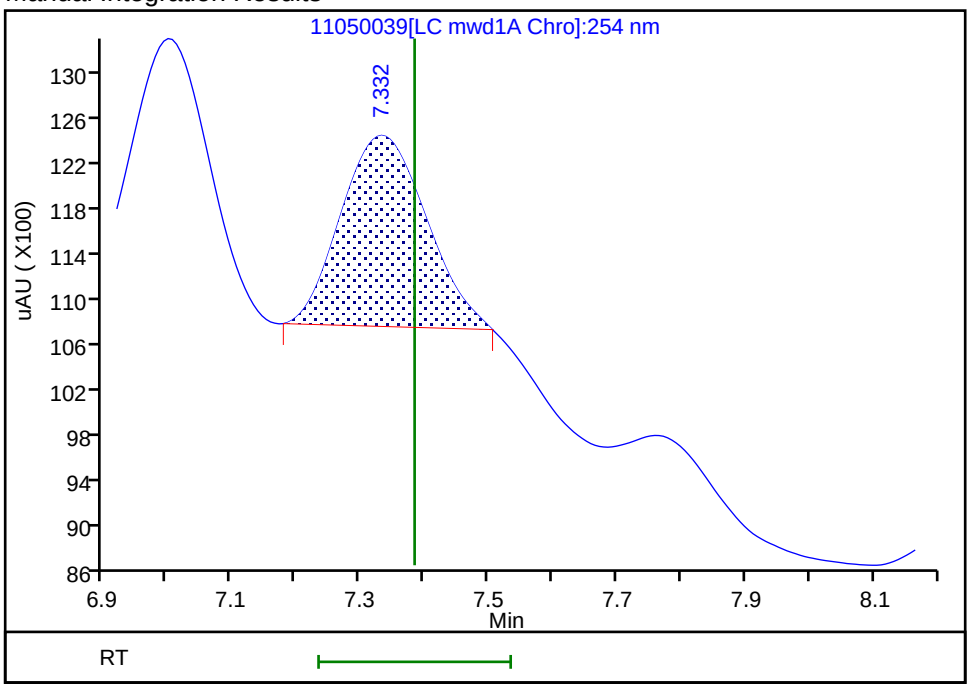
Processing Integration Results

RT: 7.33
Area: 36911
Amount: 0.139370
Amount Units: ug/ml



Manual Integration Results

RT: 7.33
Area: 15628
Amount: 0.059009
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:40:04

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

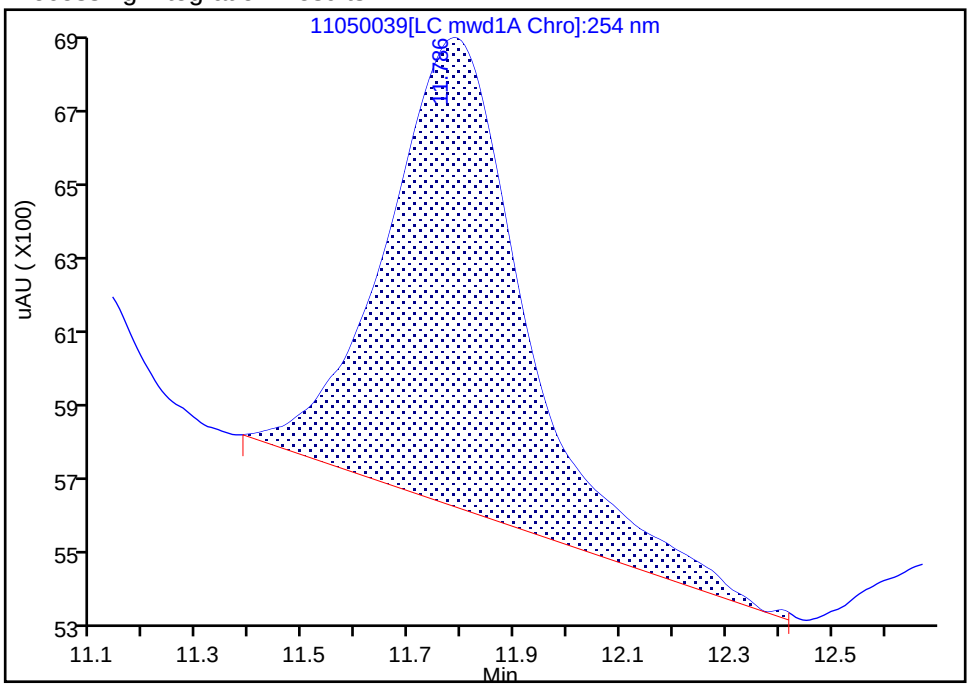
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

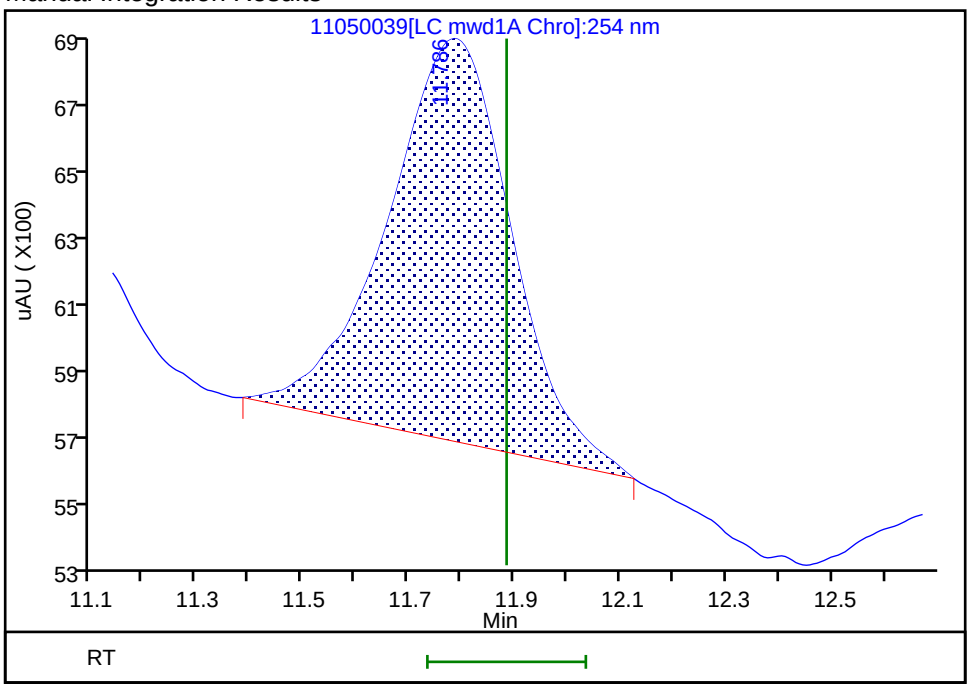
Processing Integration Results

RT: 11.79
Area: 23250
Amount: 0.062058
Amount Units: ug/ml



Manual Integration Results

RT: 11.79
Area: 19695
Amount: 0.052569
Amount Units: ug/ml



Reviewer: zhangji, 06-Nov-2021 12:40:14

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

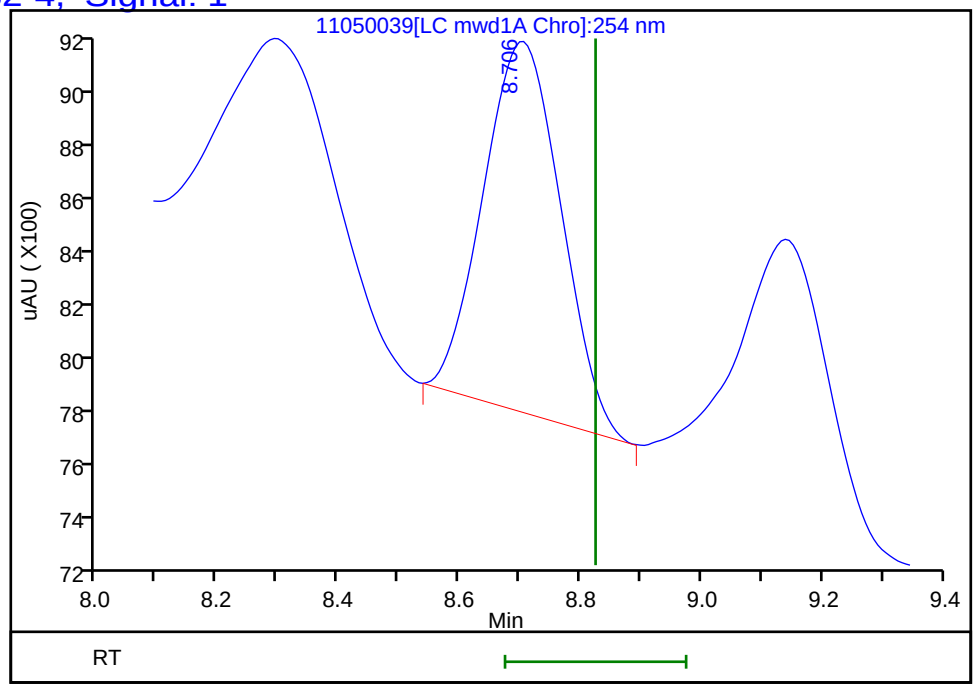
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050039.D				
Injection Date:	06-Nov-2021 08:35:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-10-A	Lab Sample ID:	280-155015-10		
Client ID:	EW7-PM24A-7-25				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 8.71
Response: 12033
Amount: 0.058907



Reviewer: zhangji, 06-Nov-2021 12:40:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0079-7 Lab Sample ID: 280-155015-11

Matrix: Water Lab File ID: 11050026.D

Analysis Method: 8330A Date Collected: 11/01/2021 10:40

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 491.9(mL) Date Analyzed: 11/05/2021 20:58

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050026.D
Lims ID: 280-155015-B-11-A
Client ID: G0079-7
Sample Type: Client
Inject. Date: 05-Nov-2021 20:58:56 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-B-11-
Misc. Info.: 280-0106237-026
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:11:23

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	
8 RDX	1		7.632			ND	
$ 10 1,2-Dinitrobenzene	1	8.581	8.606	-0.025	21764	0.1697	M
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1		9.365			ND	
13 Nitrobenzene	1		9.765			ND	
15 Tetryl	1		10.112			ND	
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499			ND	
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1		13.152			ND	
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

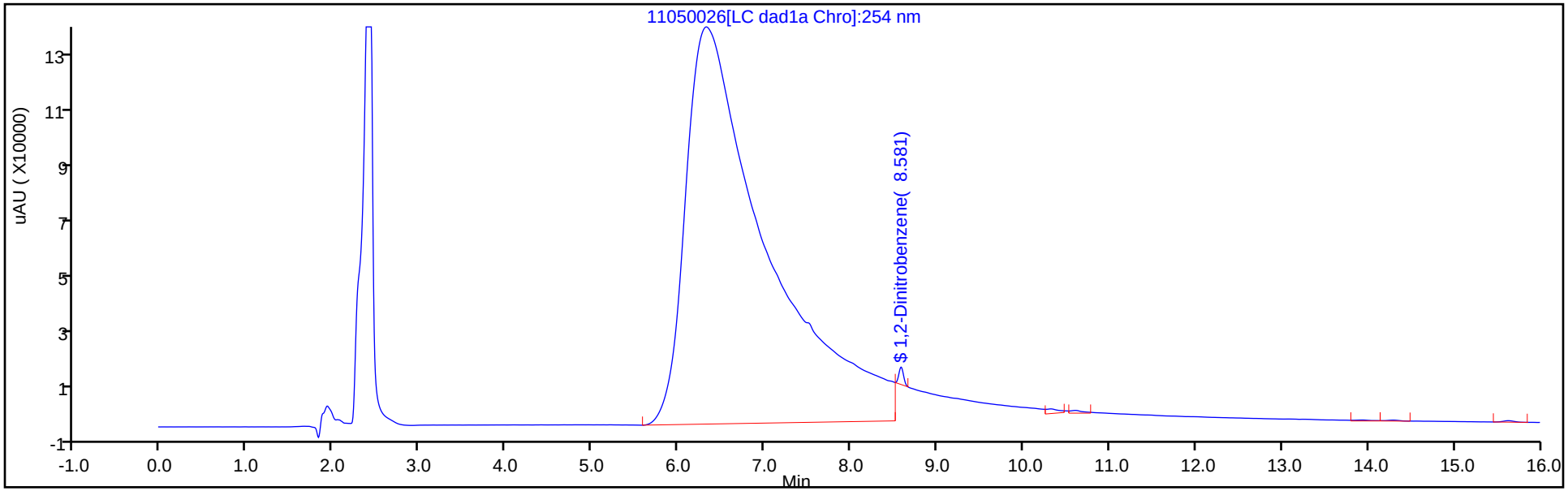
Report Date: 06-Nov-2021 10:24:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

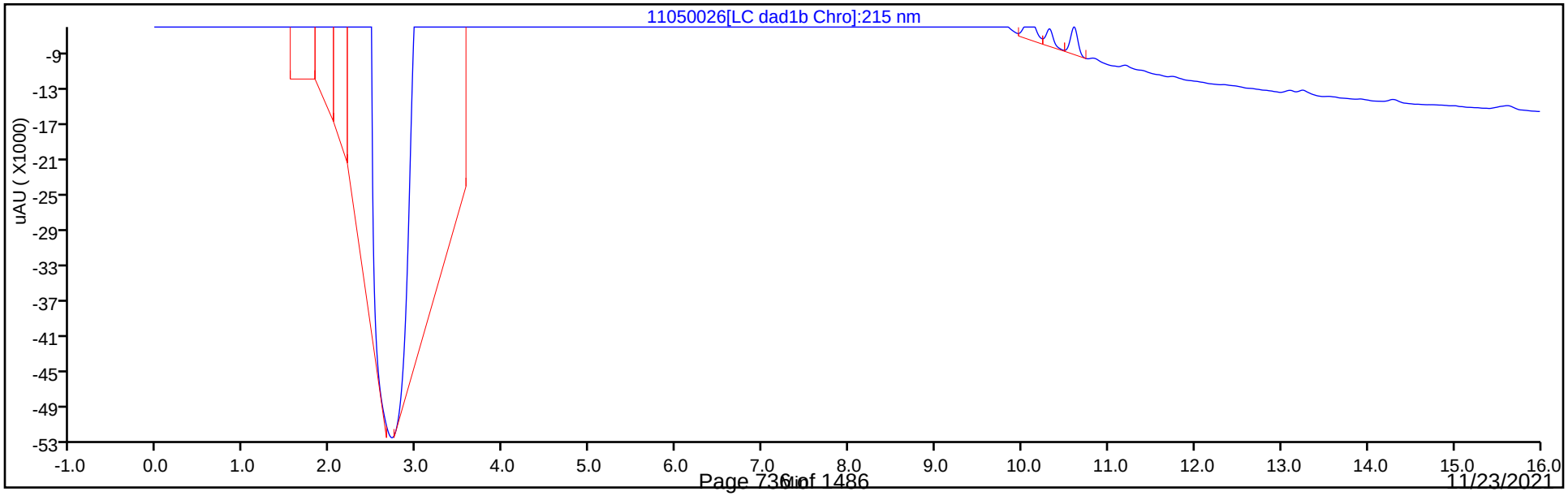
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050026.d

Injection Date:	05-Nov-2021 20:58:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-B-11-A	Lab Sample ID:	280-155015-11	Worklist Smp#:	26
Client ID:	G0079-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050026.D				
Lims ID:	280-155015-B-11-A				
Client ID:	G0079-7				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 20:58:56	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-B-11-				
Misc. Info.:	280-0106237-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:53	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 10:11:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1697	84.87

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

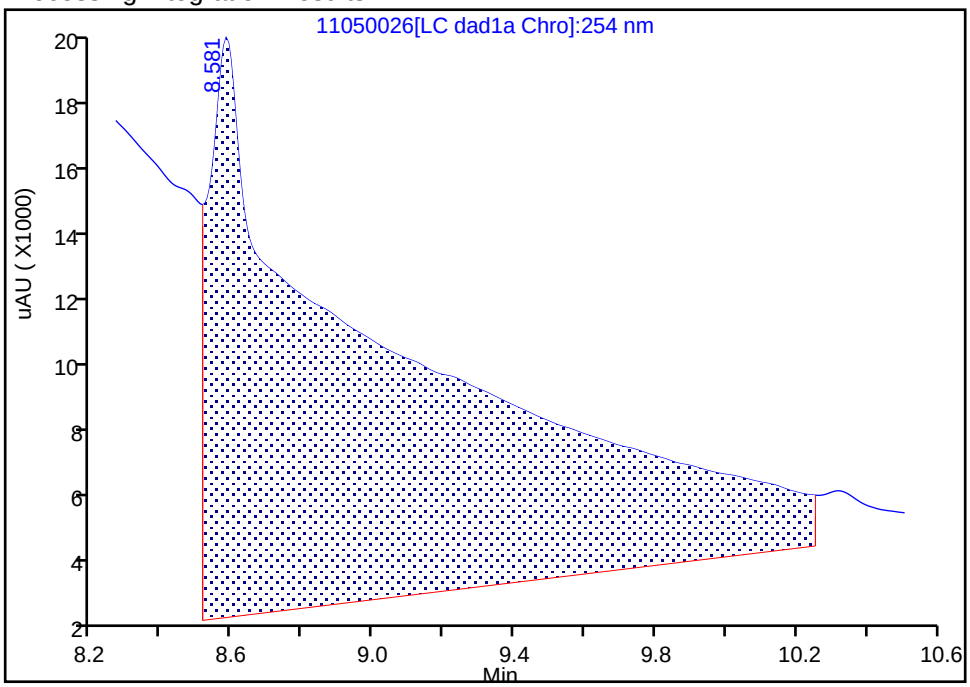
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050026.d				
Injection Date:	05-Nov-2021 20:58:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-B-11-A	Lab Sample ID:	280-155015-11		
Client ID:	G0079-7				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

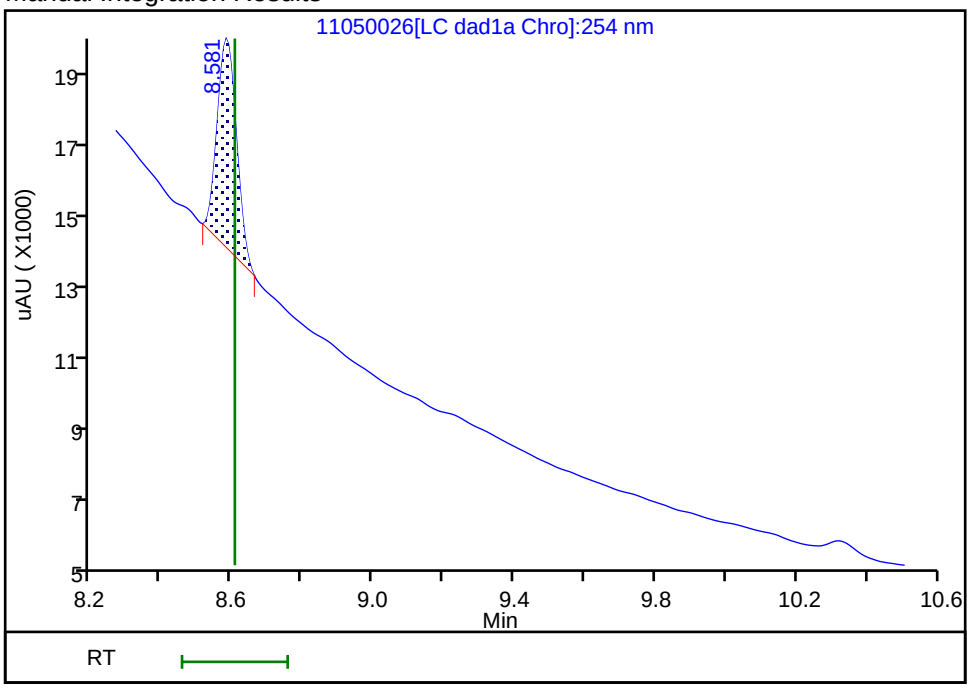
Processing Integration Results

RT: 8.58
Area: 645749
Amount: 5.036368
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 21764
Amount: 0.169743
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:11:22

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0075-7 Lab Sample ID: 280-155015-12

Matrix: Water Lab File ID: 11050027.D

Analysis Method: 8330A Date Collected: 11/01/2021 12:05

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 505.2(mL) Date Analyzed: 11/05/2021 21:21

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.037
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	J J1	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.17	J1	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.099
2691-41-0	HMX	0.20	U	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	0.031

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_X\20211105-106237.b\11050027.D
Lims ID: 280-155015-A-12-A
Client ID: G0075-7
Sample Type: Client
Inject. Date: 05-Nov-2021 21:21:49 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-12-
Misc. Info.: 280-0106237-027
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:11:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.612			ND	
7 MNX	1		7.239			ND	U
8 RDX	1		7.632			ND	
$ 10 1,2-Dinitrobenzene	1	8.578	8.606	-0.028	24044	0.1875	
11 1,3,5-Trinitrobenzene	1		8.726			ND	
12 1,3-Dinitrobenzene	1		9.365			ND	U
13 Nitrobenzene	1		9.765			ND	
15 Tetryl	1		10.112			ND	
17 2,4,6-Trinitrotoluene	1		11.025			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.192	11.239	-0.047	2603	0.0170	
19 2-Amino-4,6-dinitrotoluene	1	11.445	11.499	-0.054	2099	0.0101	
20 2,6-Dinitrotoluene	1		11.665			ND	
21 2,4-Dinitrotoluene	1		11.832			ND	
22 o-Nitrotoluene	1		12.712			ND	
23 p-Nitrotoluene	1		13.152			ND	
24 m-Nitrotoluene	1		13.745			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

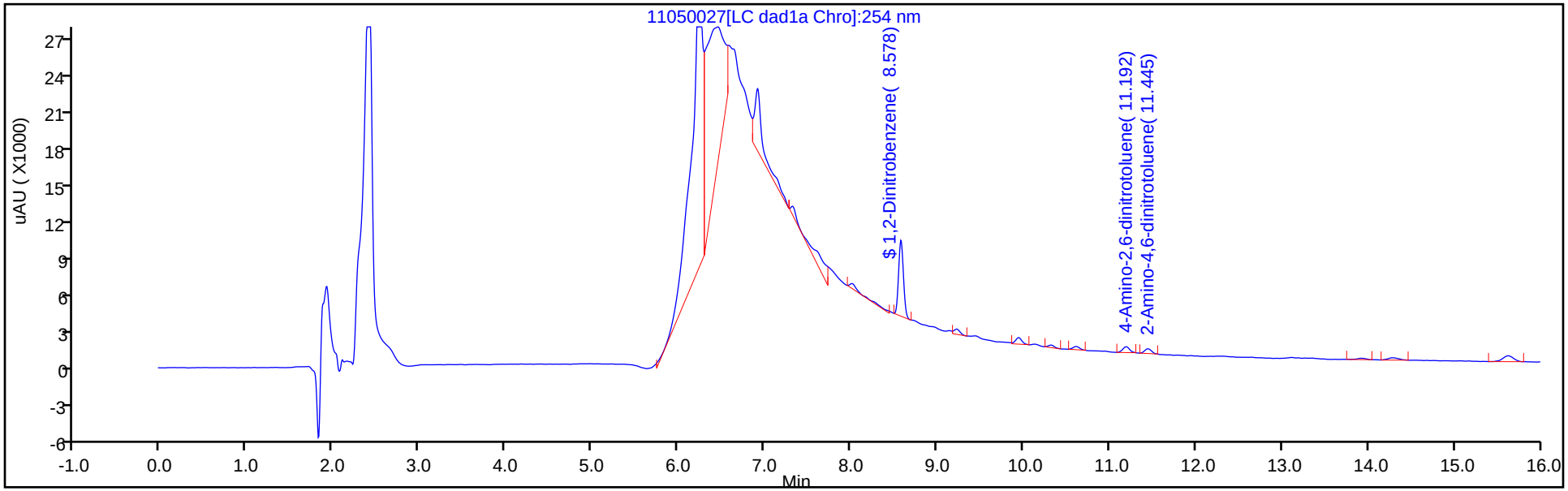
Report Date: 06-Nov-2021 10:24:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

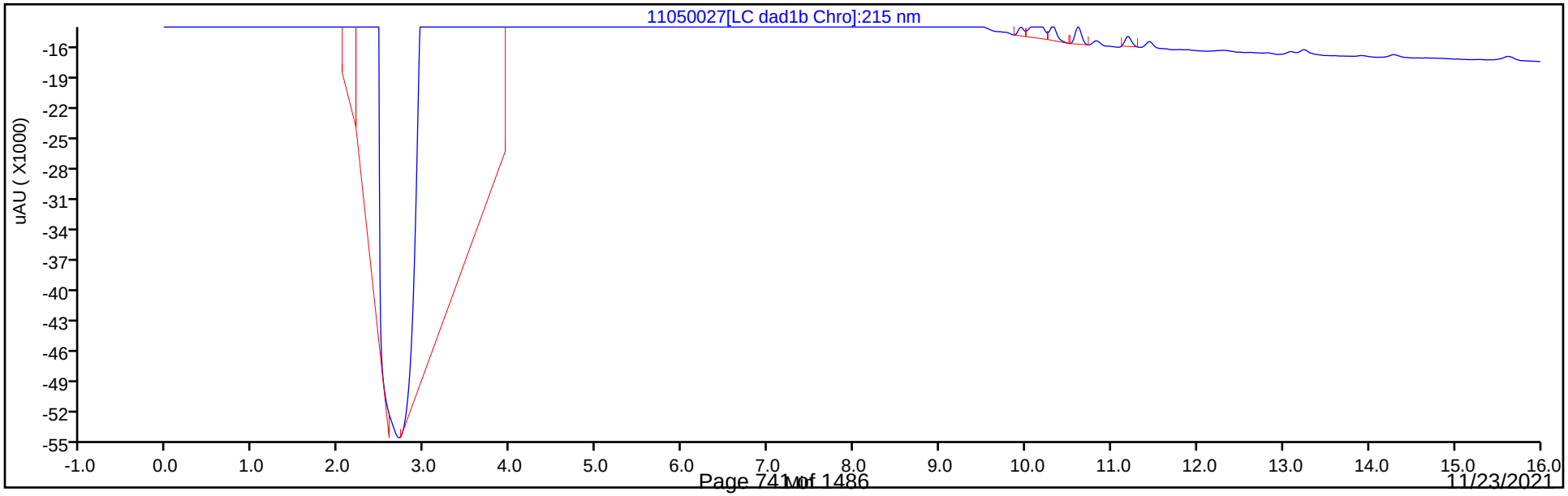
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050027.d

Injection Date:	05-Nov-2021 21:21:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155015-A-12-A	Lab Sample ID:	280-155015-12	Worklist Smp#:	27
Client ID:	G0075-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050027.D				
Lims ID:	280-155015-A-12-A				
Client ID:	G0075-7				
Sample Type:	Client				
Inject. Date:	05-Nov-2021 21:21:49	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-12-				
Misc. Info.:	280-0106237-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:53	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 10:11:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1875	93.76

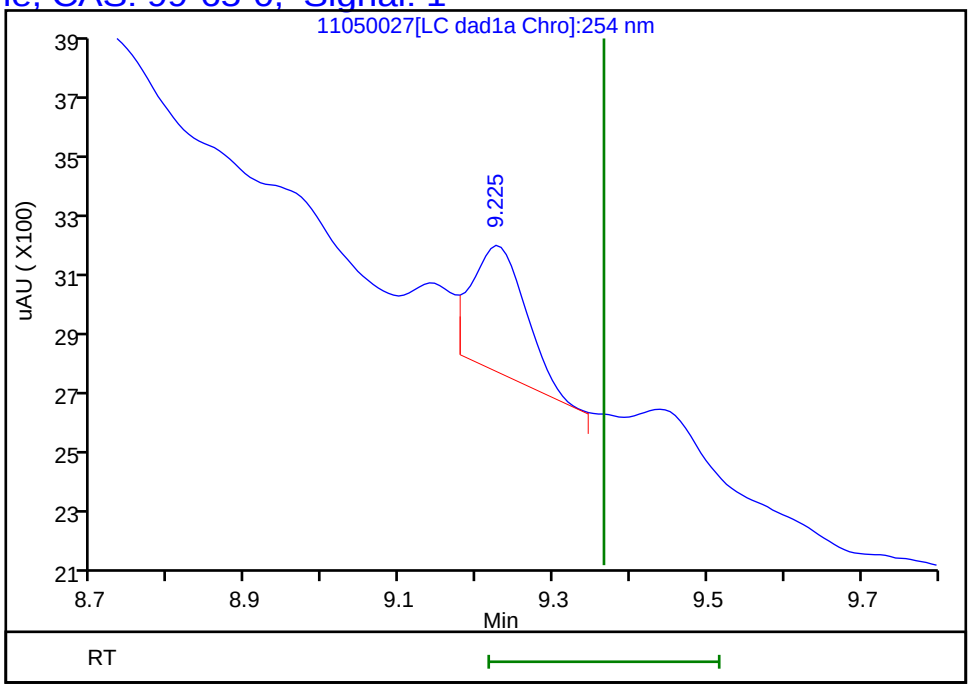
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050027.d				
Injection Date:	05-Nov-2021 21:21:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-12-A	Lab Sample ID:	280-155015-12		
Client ID:	G0075-7				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.23
Response: 2059
Amount: 0.006948



Reviewer: zhangji, 06-Nov-2021 10:11:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

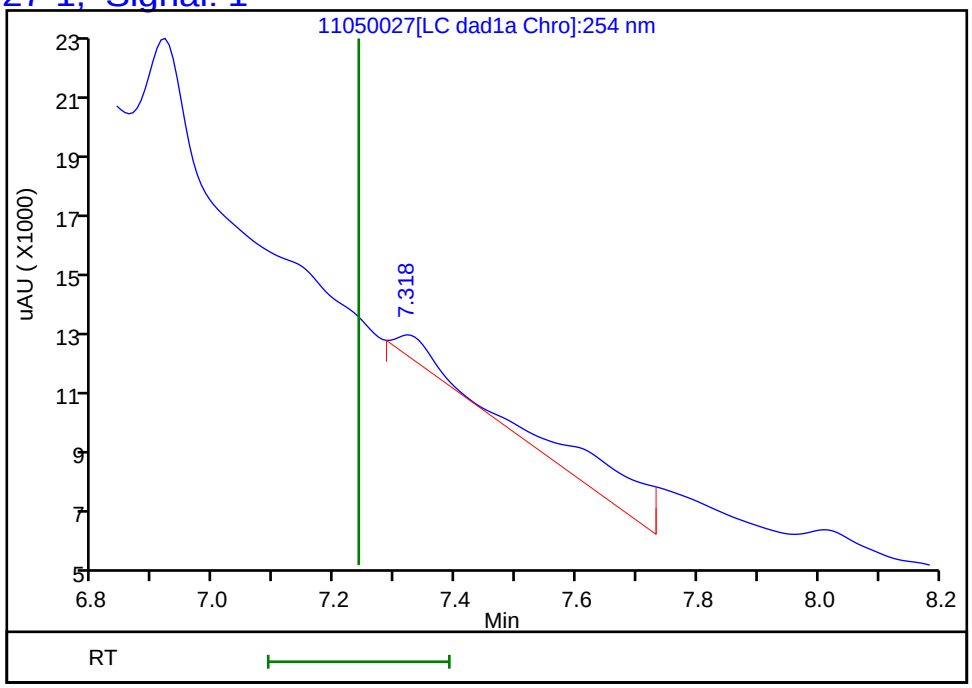
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050027.d				
Injection Date:	05-Nov-2021 21:21:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155015-A-12-A	Lab Sample ID:	280-155015-12		
Client ID:	G0075-7				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.32
Response: 16208
Amount: 0.124351



Reviewer: zhangji, 06-Nov-2021 10:11:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: G0075-7 Lab Sample ID: 280-155015-12

Matrix: Water Lab File ID: 11050041.D

Analysis Method: 8330A Date Collected: 11/01/2021 12:05

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 505.2(mL) Date Analyzed: 11/06/2021 09:45

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.: 556366 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.52*	*J1*	*0.11*	0.099	*0.050*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.30*	*J1*	*0.15*	0.12	*0.057*

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\20211105-106238.b\11050041.D
Lims ID: 280-155015-A-12-A
Client ID: G0075-7
Sample Type: Client
Inject. Date: 06-Nov-2021 09:45:20 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155015-A-12-A
Misc. Info.: 280-0106238-041
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:08 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:41:03

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.615	6.665	-0.050	2661	0.0106	
	6 MNX	1		7.384			ND	
	8 RDX	1		8.825			ND	7
	9 Nitrobenzene	1		11.885			ND	
$	10 1,2-Dinitrobenzene	1	12.908	12.978	-0.070	47151	0.1775	
	12 1,3-Dinitrobenzene	1		15.398			ND	
	14 o-Nitrotoluene	1		16.631			ND	U
	16 p-Nitrotoluene	1		16.918			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.274	17.378	-0.104	9024	0.0304	
	18 m-Nitrotoluene	1		17.885			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.234	18.265	-0.031	21800	0.0527	
	20 1,3,5-Trinitrobenzene	1		18.785			ND	
	21 2,6-Dinitrotoluene	1		20.045			ND	
	22 2,4-Dinitrotoluene	1		20.505			ND	
	23 Tetryl	1		24.112			ND	
	24 2,4,6-Trinitrotoluene	1		25.098			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

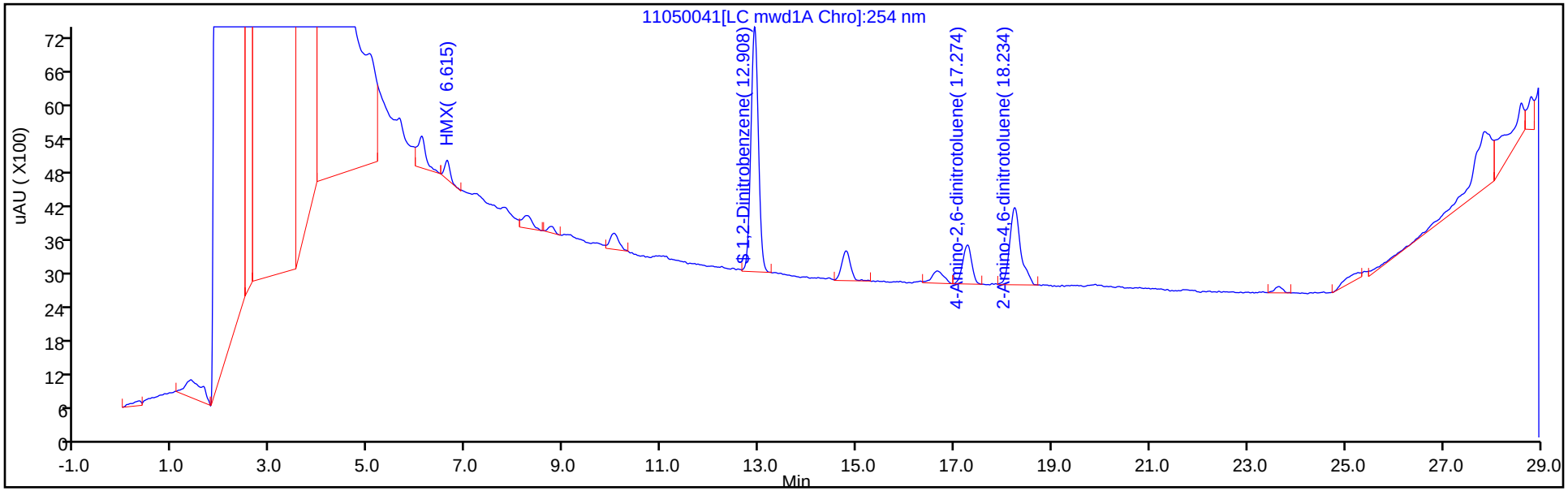
Report Date: 06-Nov-2021 12:42:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

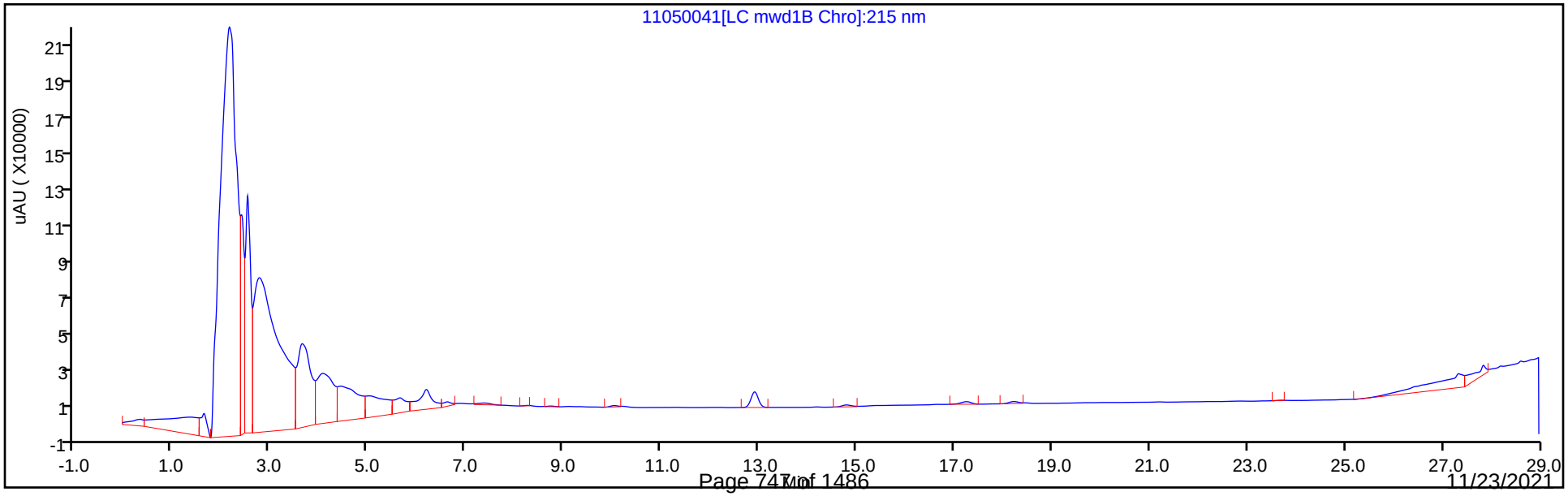
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050041.D

Injection Date:	06-Nov-2021 09:45:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155015-A-12-A	Lab Sample ID:	280-155015-12	Worklist Smp#:	41
Client ID:	G0075-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
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\20211105-106238.b\11050041.D				
Lims ID:	280-155015-A-12-A				
Client ID:	G0075-7				
Sample Type:	Client				
Inject. Date:	06-Nov-2021 09:45:20	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155015-A-12-A				
Misc. Info.:	280-0106238-041				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:08	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:	CTX1650				
First Level Reviewer: zhangji		Date:	06-Nov-2021 12:41:03		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1775	88.74

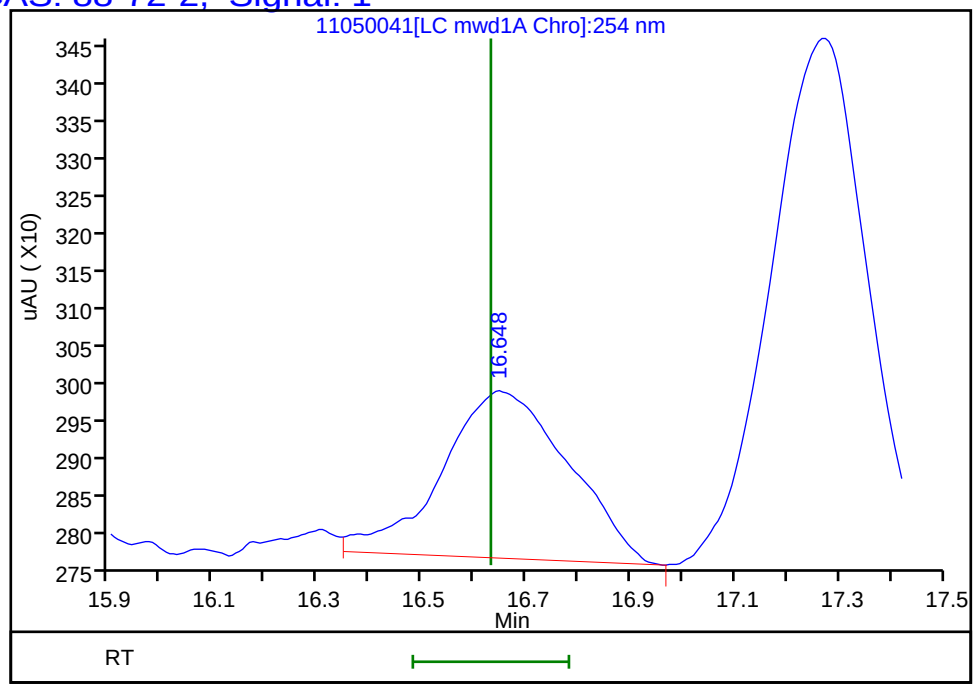
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050041.D				
Injection Date:	06-Nov-2021 09:45:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155015-A-12-A	Lab Sample ID:	280-155015-12		
Client ID:	G0075-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
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: 16.65
Response: 3723
Amount: 0.014954



Reviewer: zhangji, 06-Nov-2021 12:41:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	3664 131907	9328 187526	18578 478826	44228	75195	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2984 100368	7121 141853	13949 360207	33502	57462	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3082 107376	7585 152050	15275 382579	36376	61731	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020029.D
Lims ID: IC DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-Mar-2021 23:49:27 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 8
Misc. Info.: 280-0099486-029
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:24 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:18:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.520	6.518	0.002	478826	2.50	2.58	M
5 DNX	1	6.833	6.832	0.001	360207	2.50	2.53	M
6 MNX	1	7.240	7.232	0.008	382579	2.92	2.94	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 125.00 Units: uL

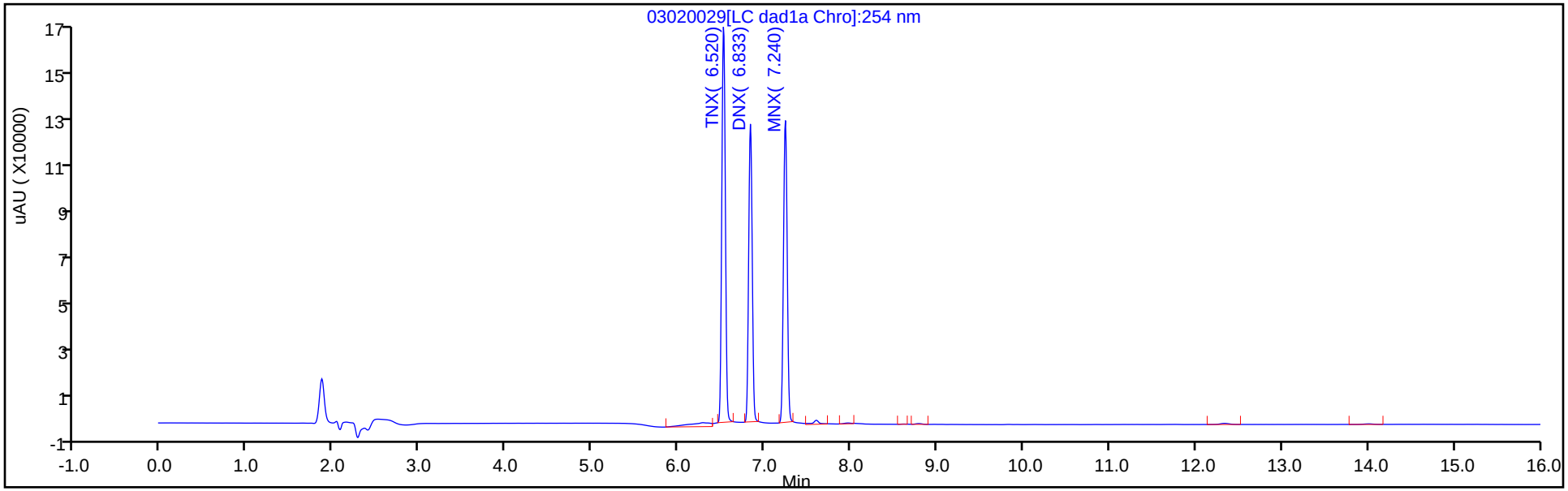
Report Date: 03-Mar-2021 13:32:24 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

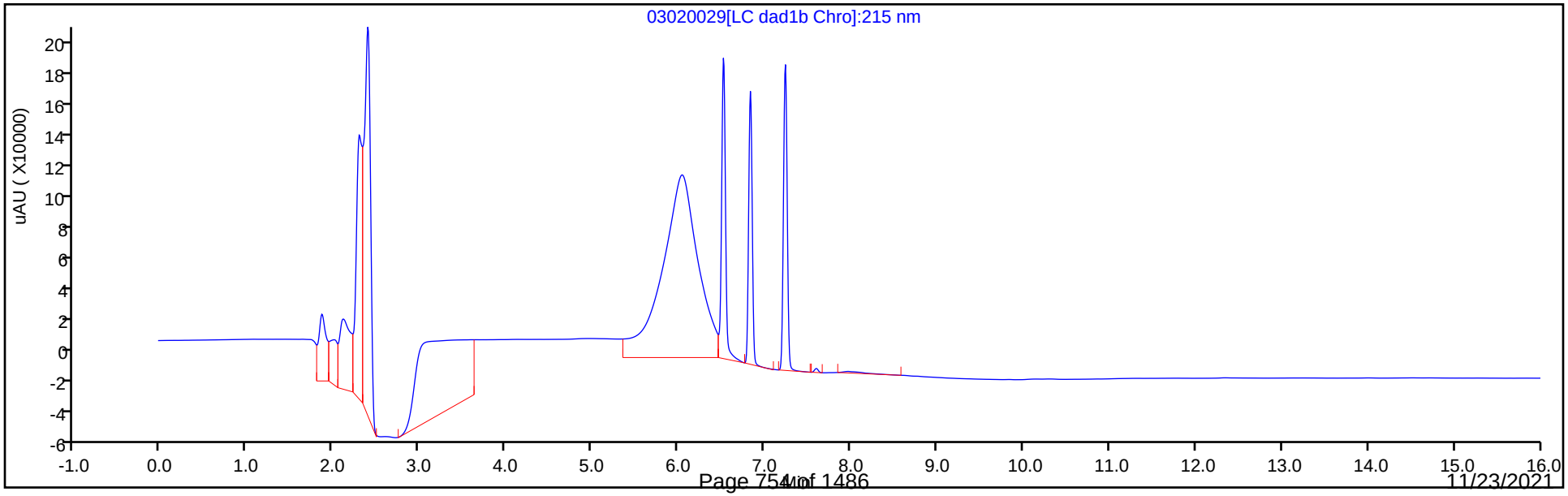
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d

Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 8			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

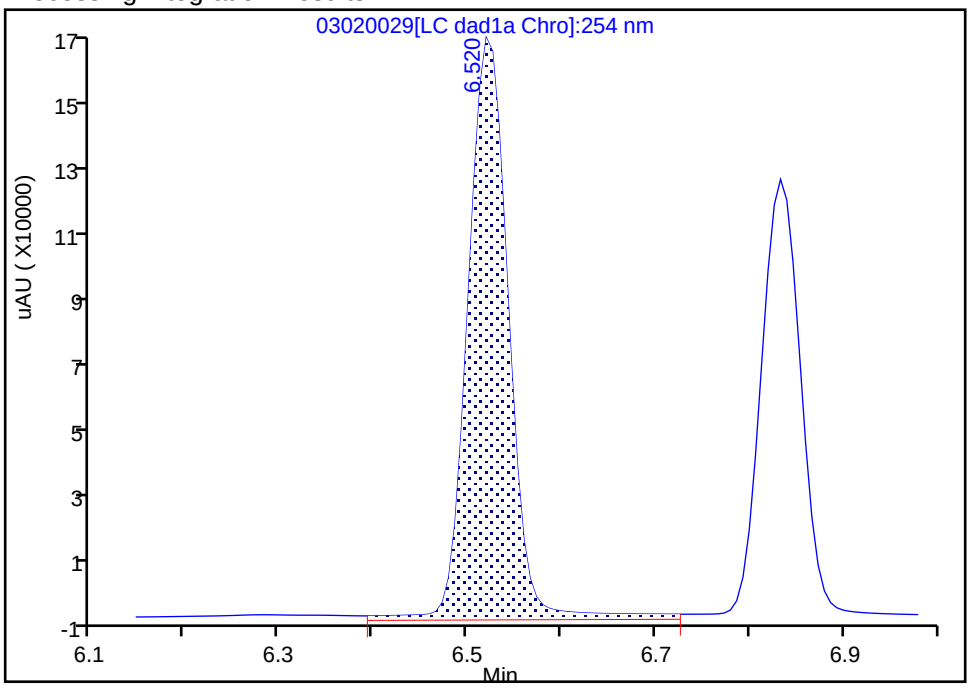
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

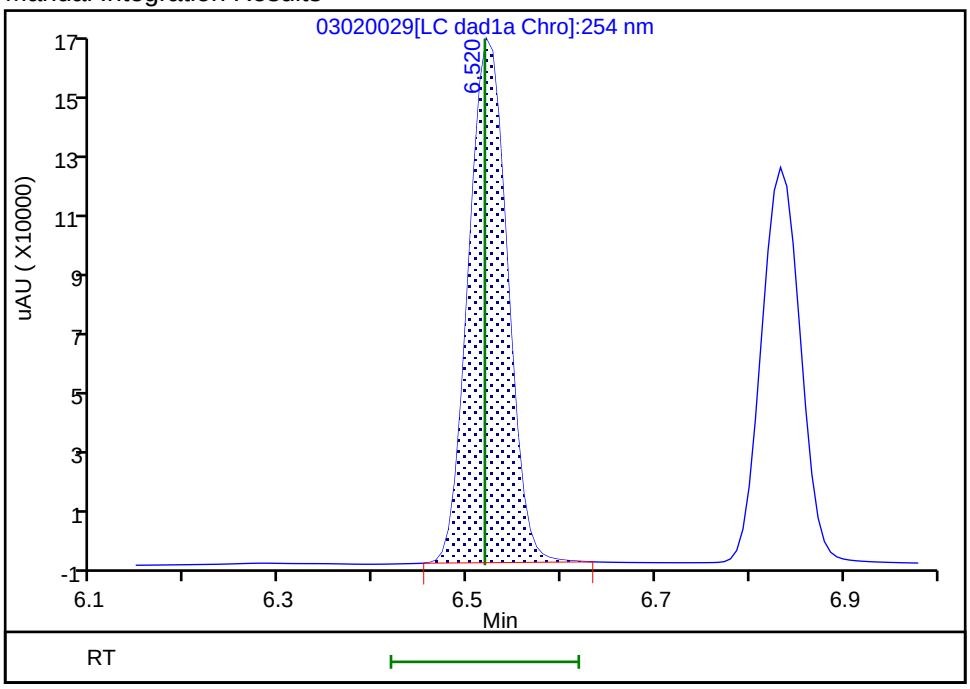
Processing Integration Results

RT: 6.52
Area: 511017
Amount: 2.370738
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 478826
Amount: 2.577021
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

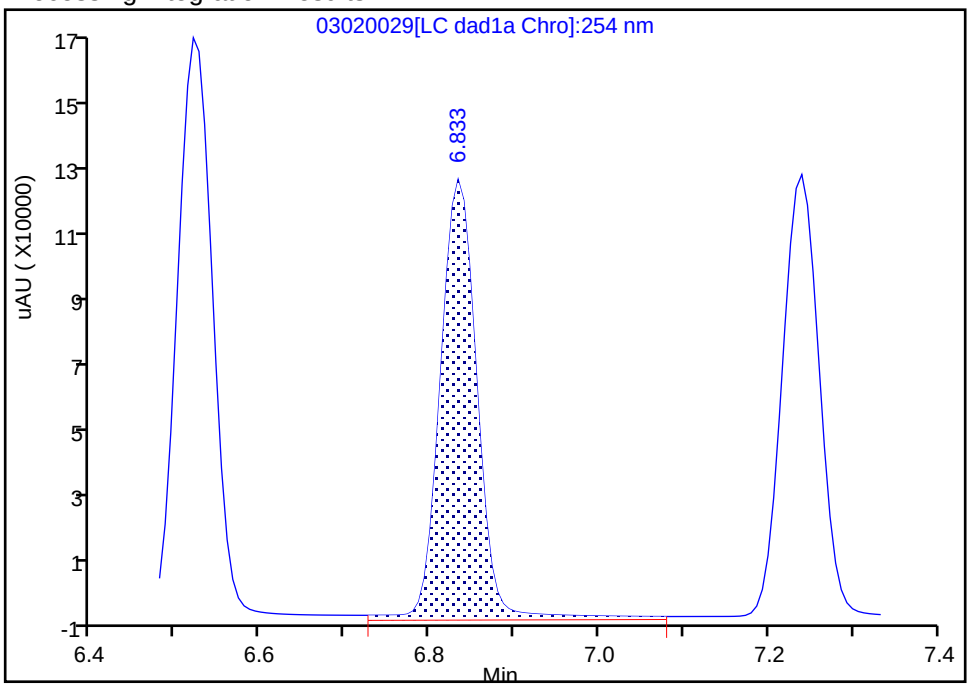
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

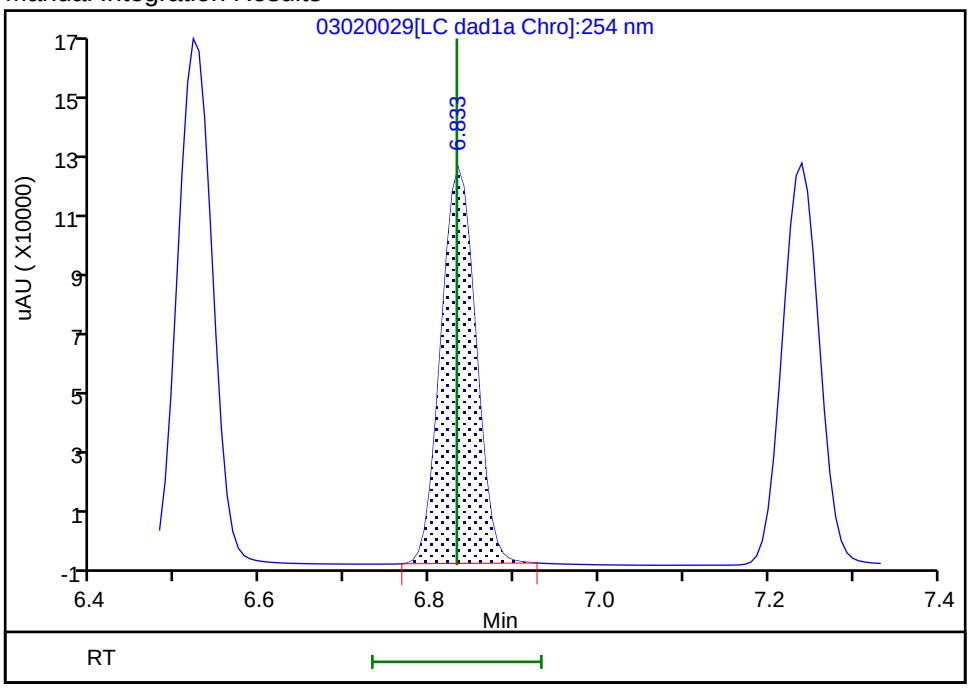
Processing Integration Results

RT: 6.83
Area: 389383
Amount: 2.402937
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 360207
Amount: 2.534539
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

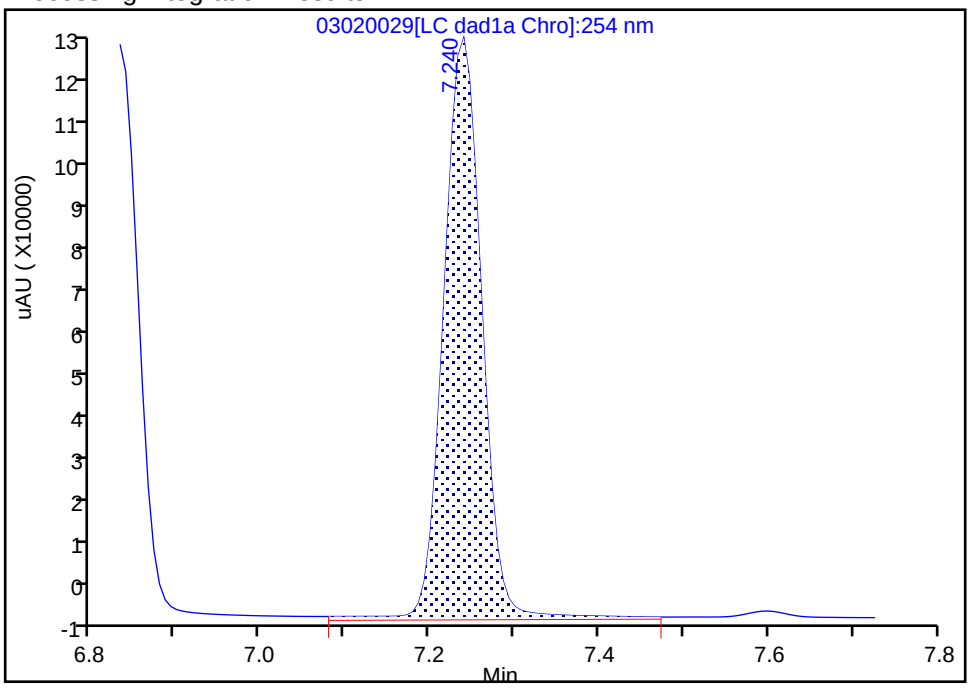
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d				
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:		ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

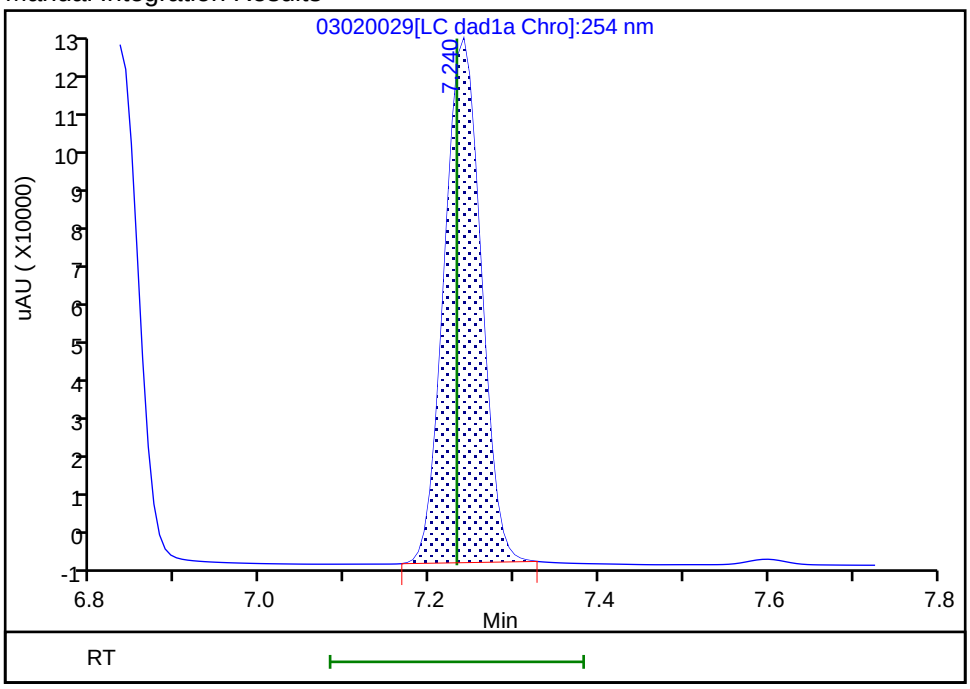
Processing Integration Results

RT: 7.24
Area: 404536
Amount: 3.036153
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 382579
Amount: 2.935231
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:57
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020030.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	03-Mar-2021 00:12:24	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0099486-030				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:25	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:19:14		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	187526	1.00	1.01	M
5 DNX	1	6.836	6.832	0.004	141853	1.00	1.00	M
6 MNX	1	7.236	7.232	0.004	152050	1.17	1.17	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 50.00 Units: uL

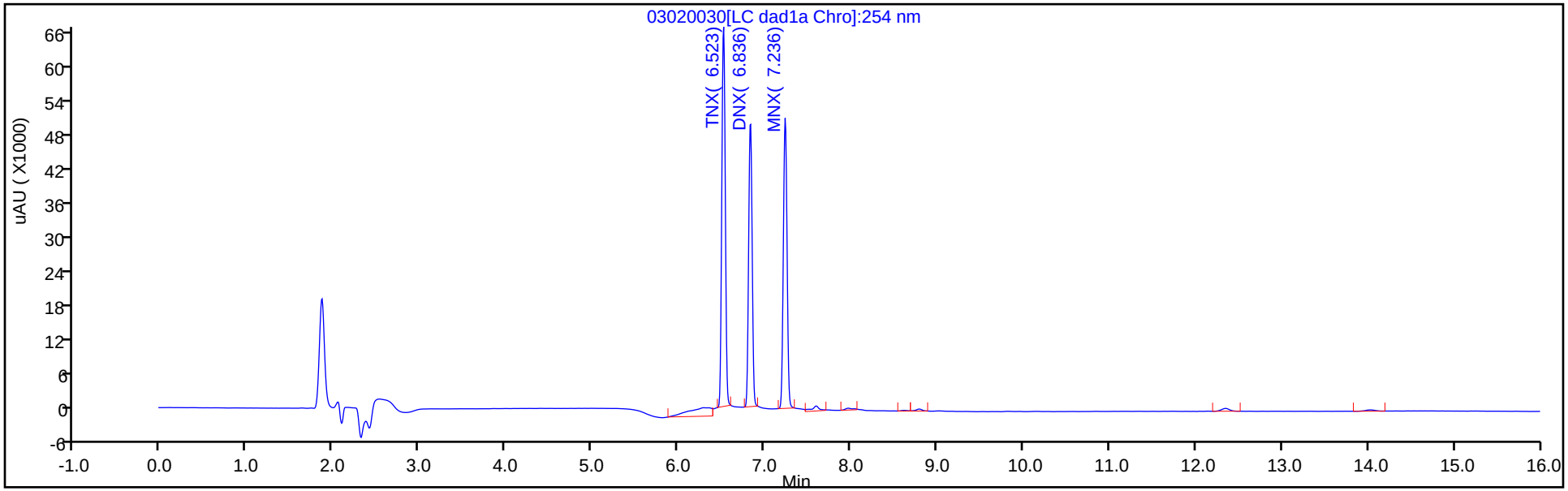
Report Date: 03-Mar-2021 13:32:25 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

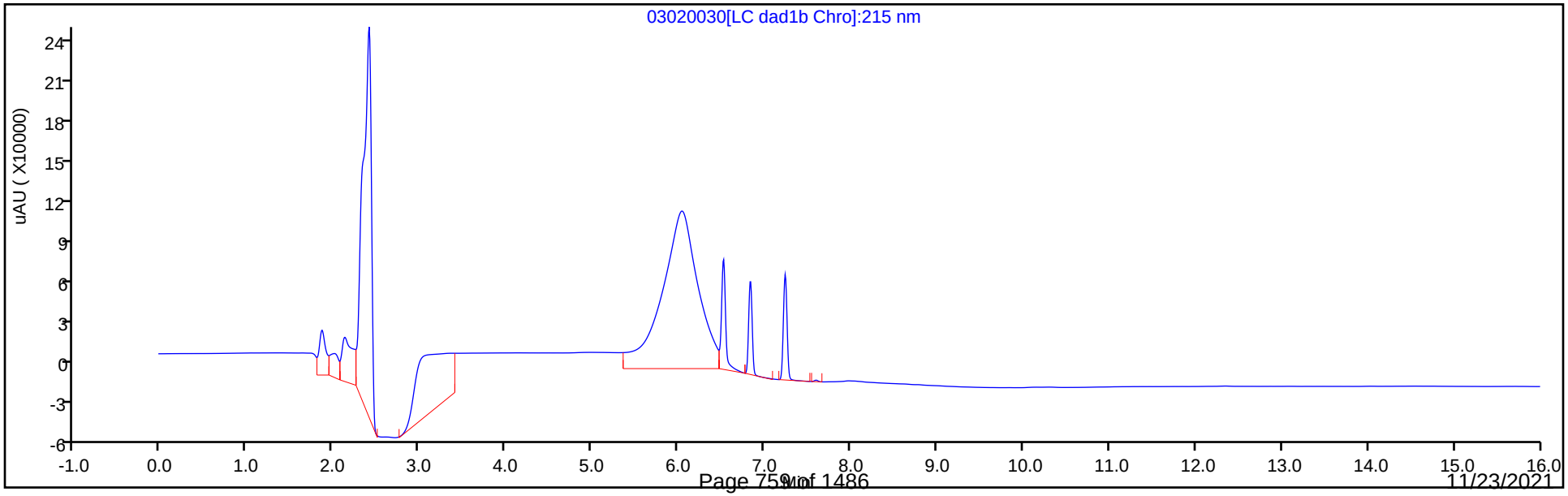
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d

Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 7			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

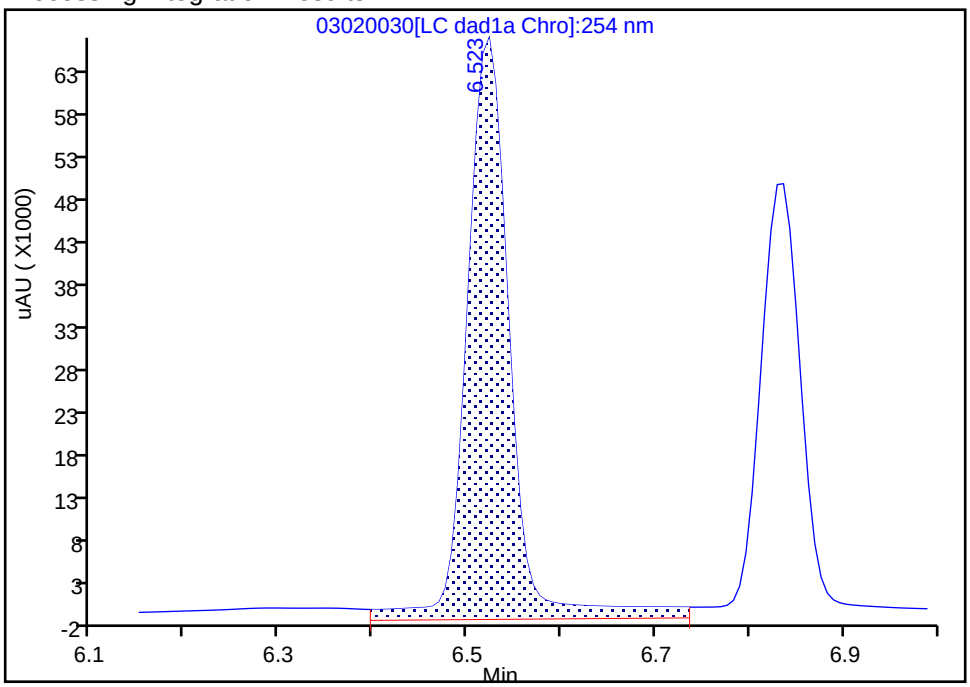
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

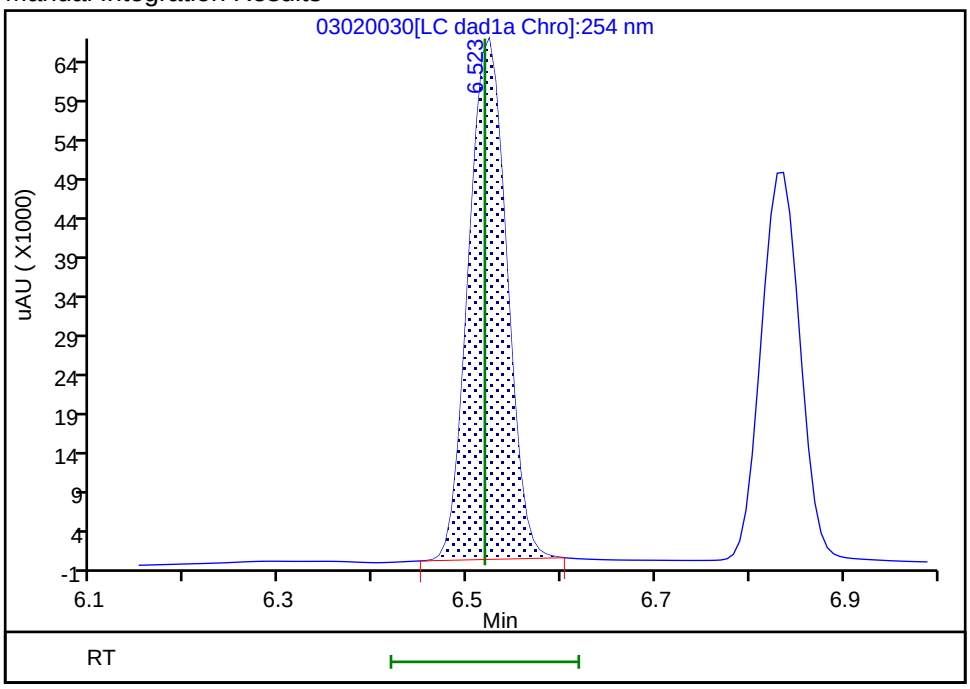
Processing Integration Results

RT: 6.52
Area: 217440
Amount: 0.997461
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 187526
Amount: 1.009257
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:13
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

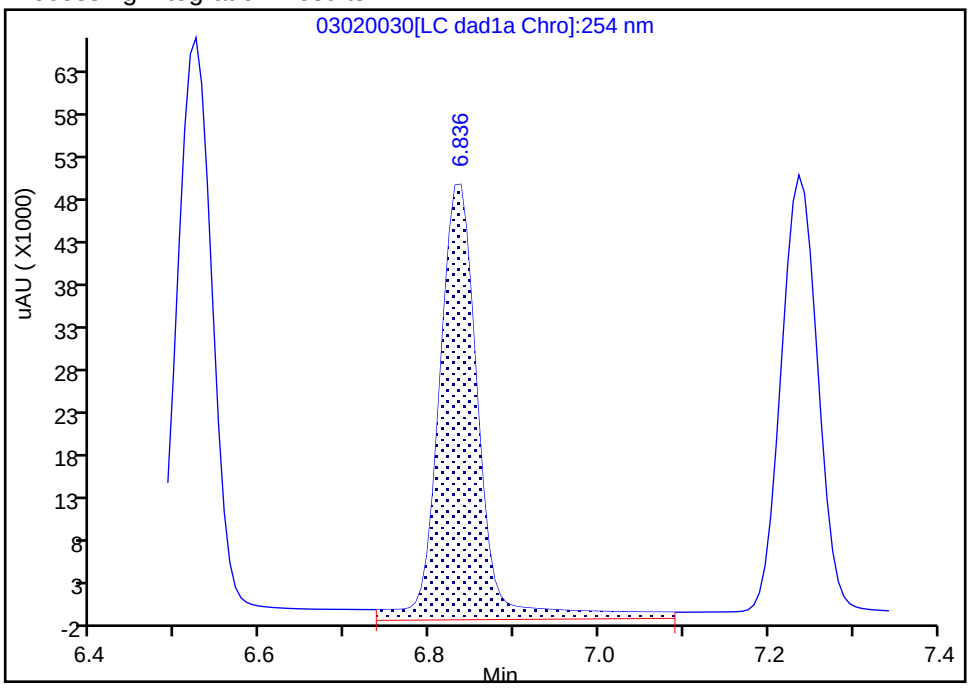
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

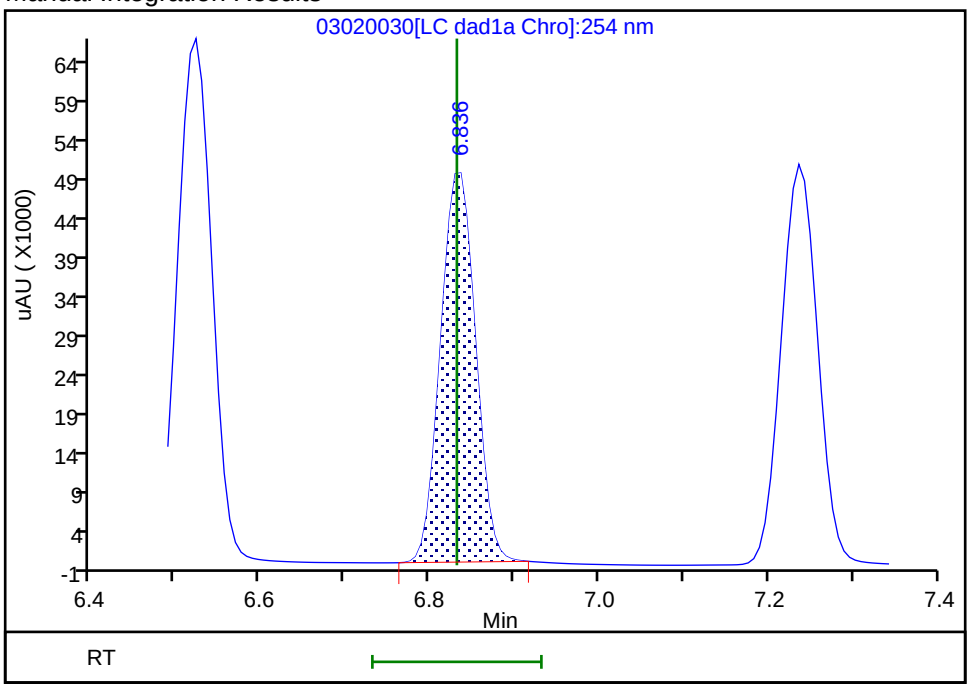
Processing Integration Results

RT: 6.84
Area: 165195
Amount: 1.028693
Amount Units: ug/mL



Manual Integration Results

RT: 6.84
Area: 141853
Amount: 0.998126
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

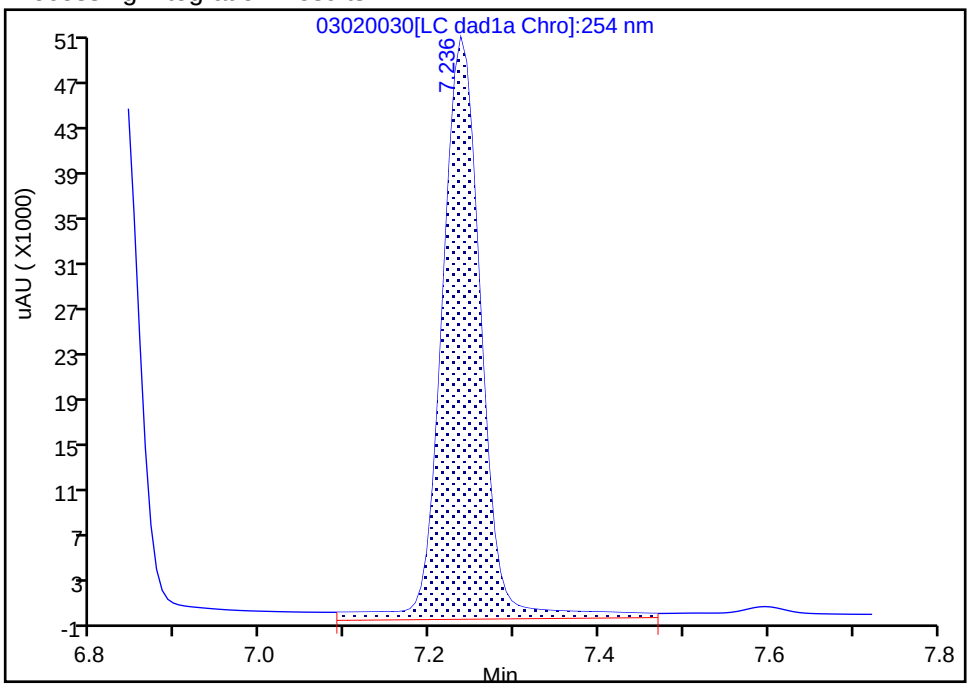
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d		
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 7		
Client ID:			
Operator ID:		ALS Bottle#:	30 Worklist Smp#: 30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

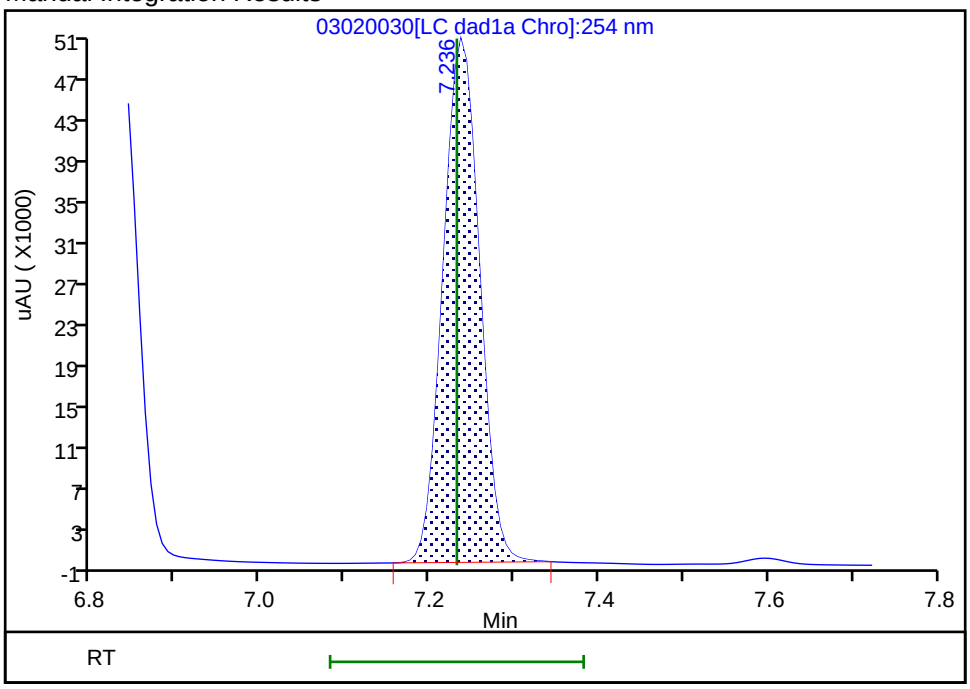
Processing Integration Results

RT: 7.24
Area: 166888
Amount: 1.261447
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 152050
Amount: 1.166561
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:05
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020031.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Mar-2021 00:35:25 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Misc. Info.: 280-0099486-031
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:26 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.519	6.518	0.001	131907	0.7007	0.7099	M
5 DNX	1	6.833	6.832	0.001	100368	0.7007	0.7062	M
6 MNX	1	7.239	7.232	0.007	107376	0.8169	0.8238	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 35.00 Units: uL

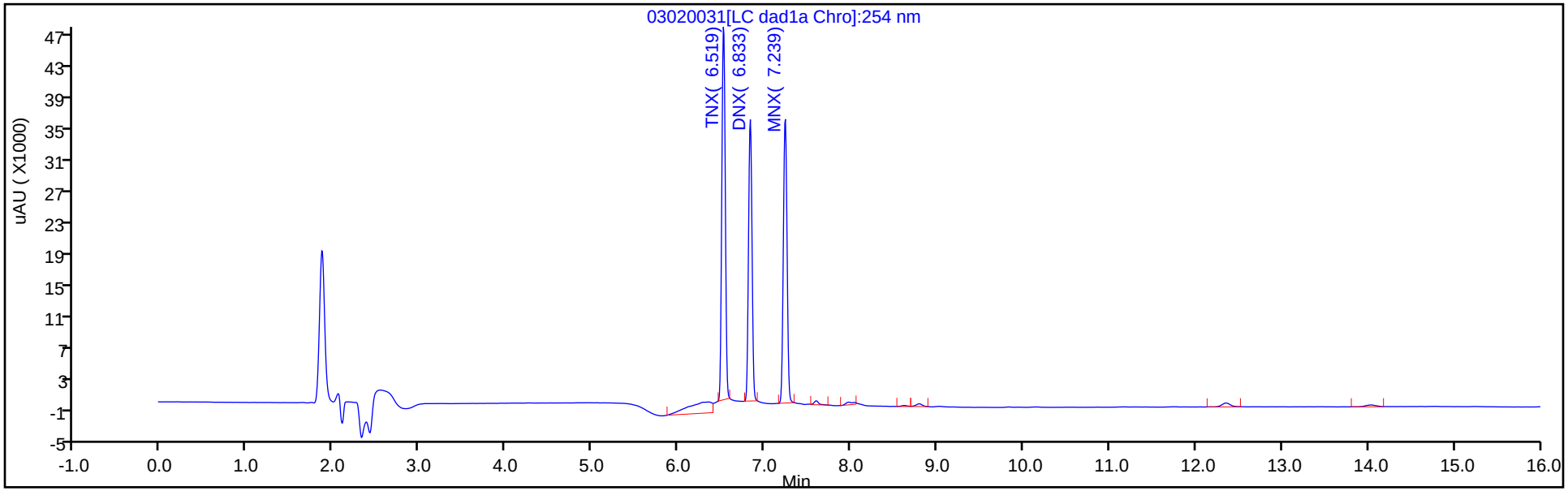
Report Date: 03-Mar-2021 13:32:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

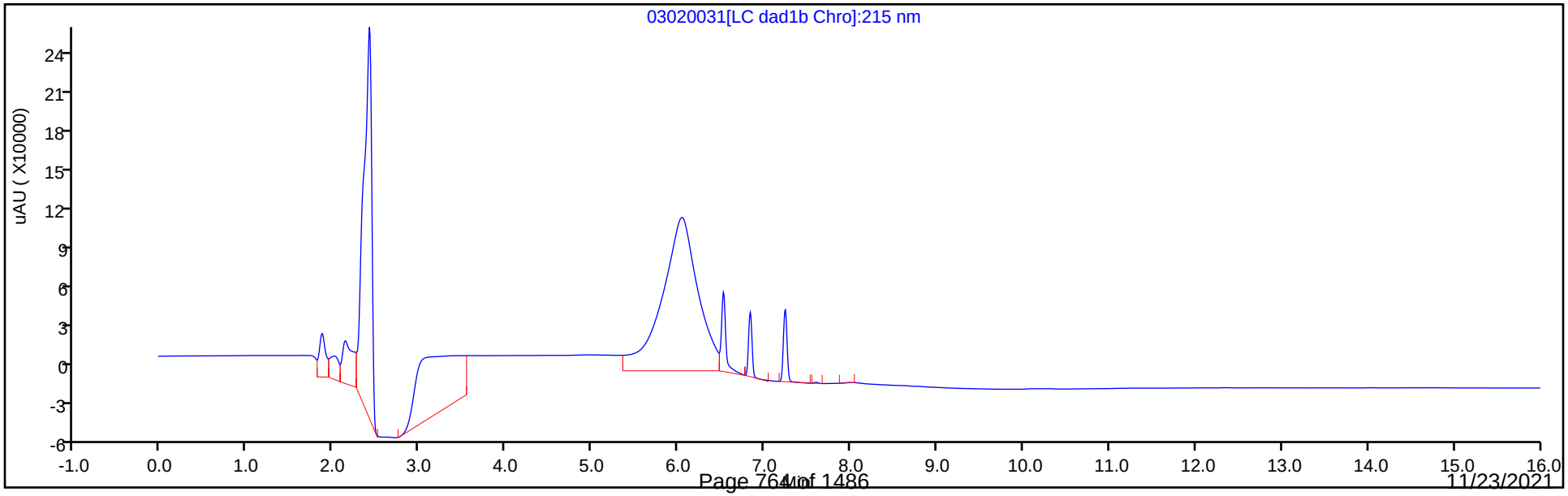
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d

Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 6			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

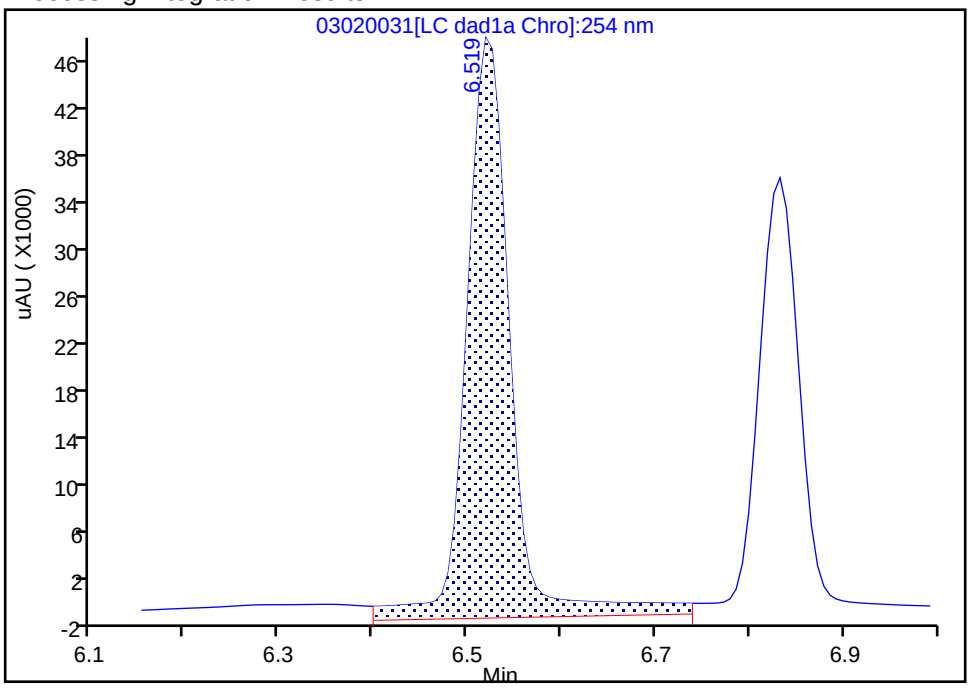
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

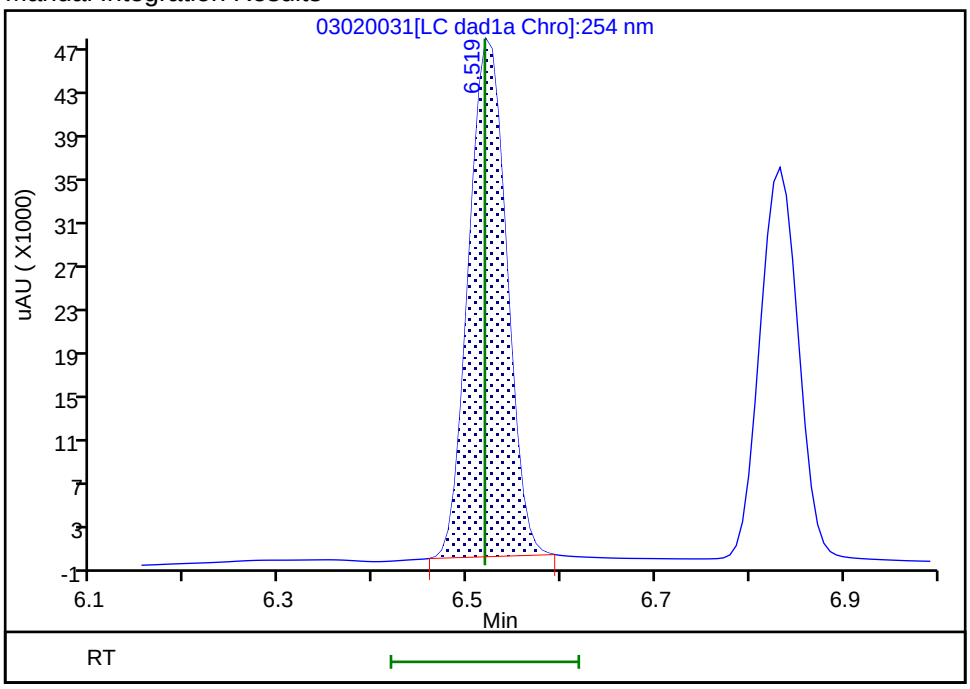
Processing Integration Results

RT: 6.52
Area: 157523
Amount: 0.765441
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 131907
Amount: 0.709918
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

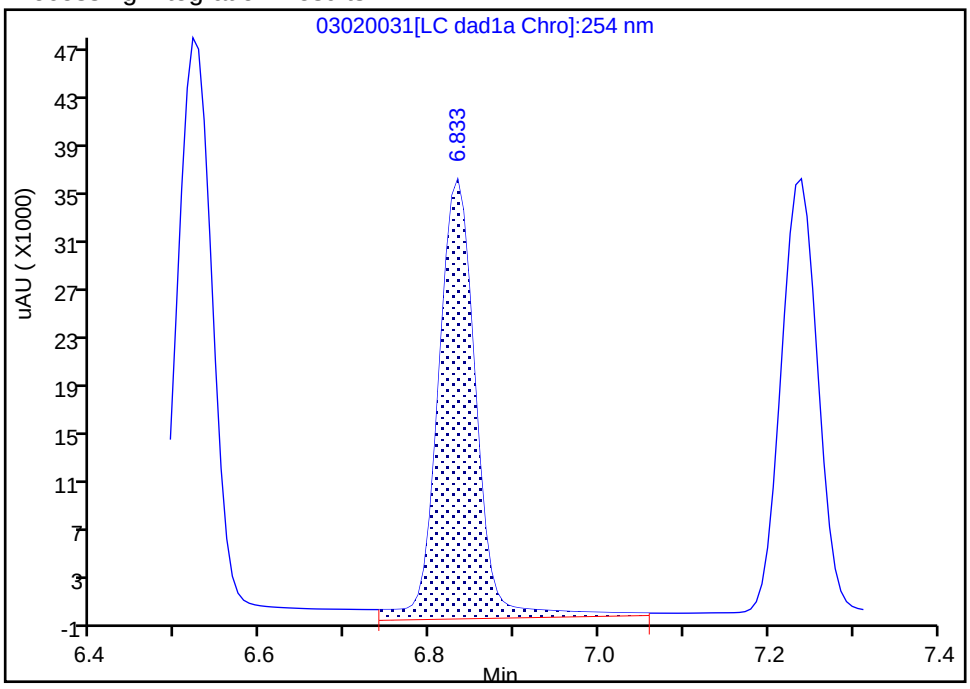
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d		
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 6		
Client ID:			
Operator ID:		ALS Bottle#:	31 Worklist Smp#: 31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

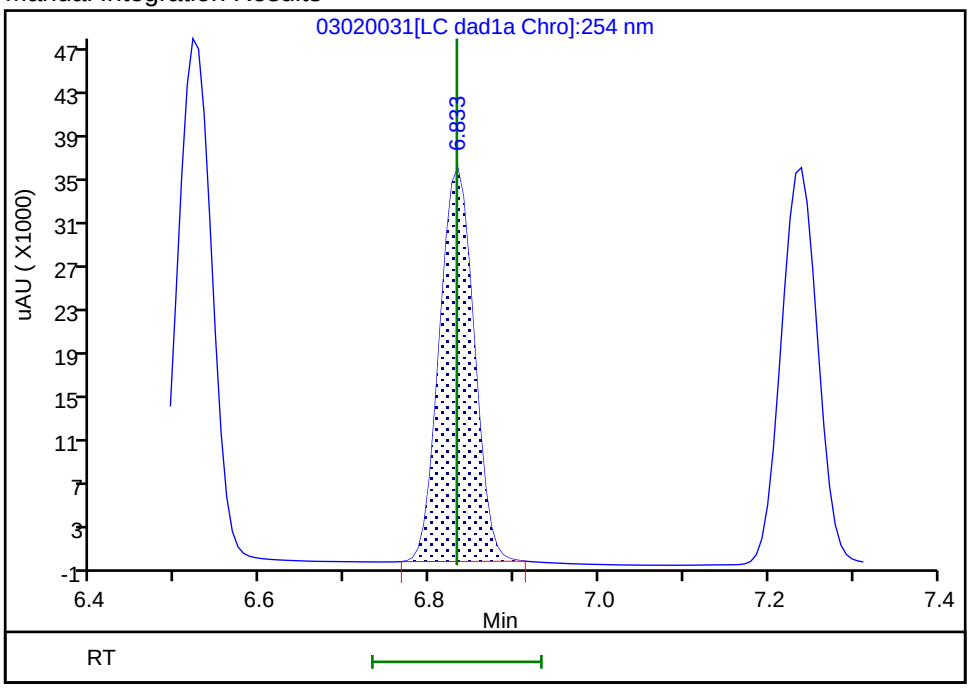
Processing Integration Results

RT: 6.83
Area: 112441
Amount: 0.713130
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 100368
Amount: 0.706223
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

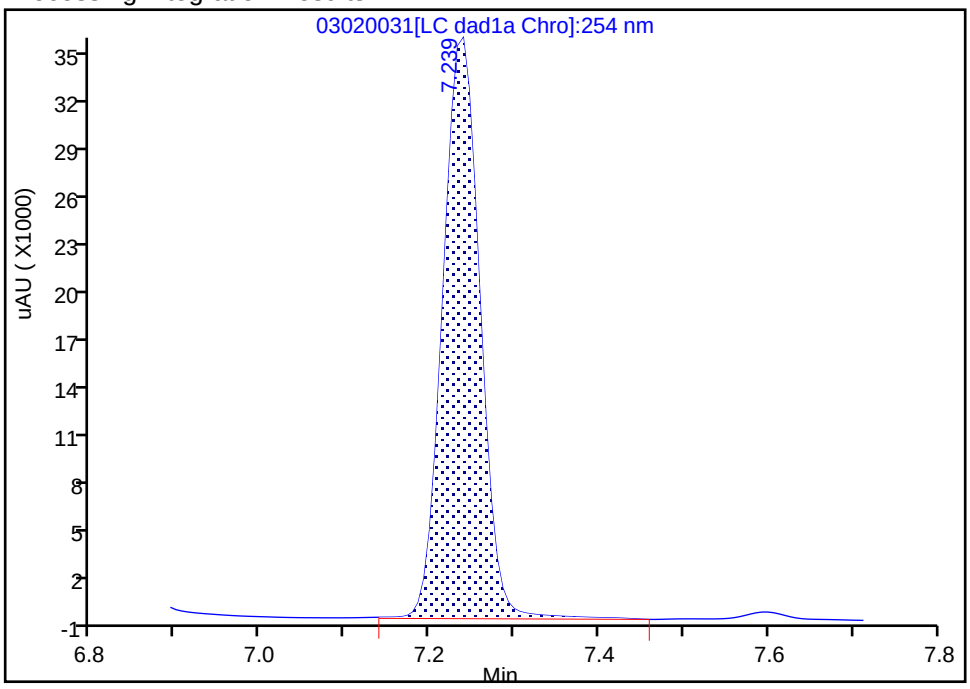
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

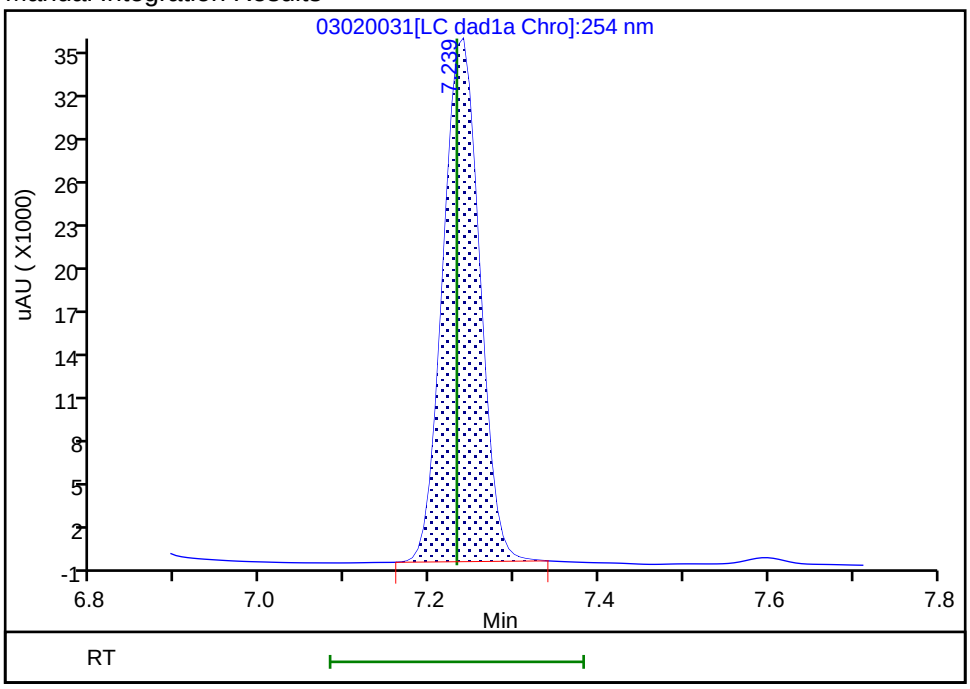
Processing Integration Results

RT: 7.24
Area: 109789
Amount: 0.839946
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 107376
Amount: 0.823813
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:32

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020032.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Mar-2021 00:58:19 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 5
Misc. Info.: 280-0099486-032
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:27 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	75195	0.4004	0.4047	M
5 DNX	1	6.828	6.832	-0.004	57462	0.4004	0.4043	M
6 MNX	1	7.234	7.232	0.002	61731	0.4668	0.4736	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 20.00 Units: uL

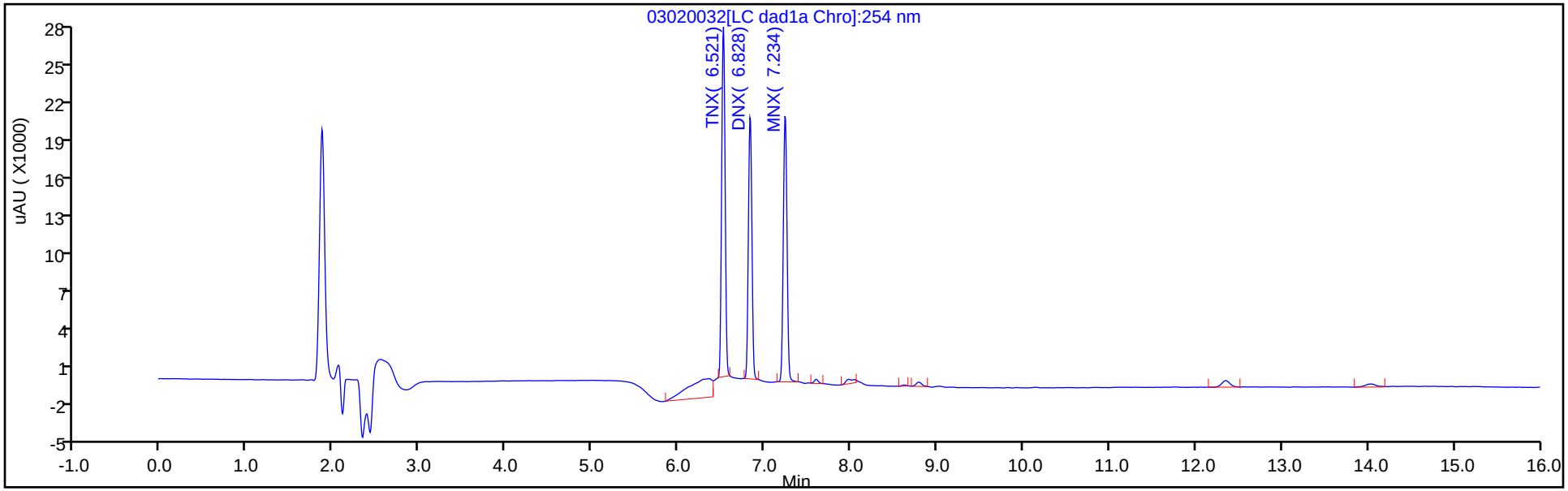
Report Date: 03-Mar-2021 13:32:27 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

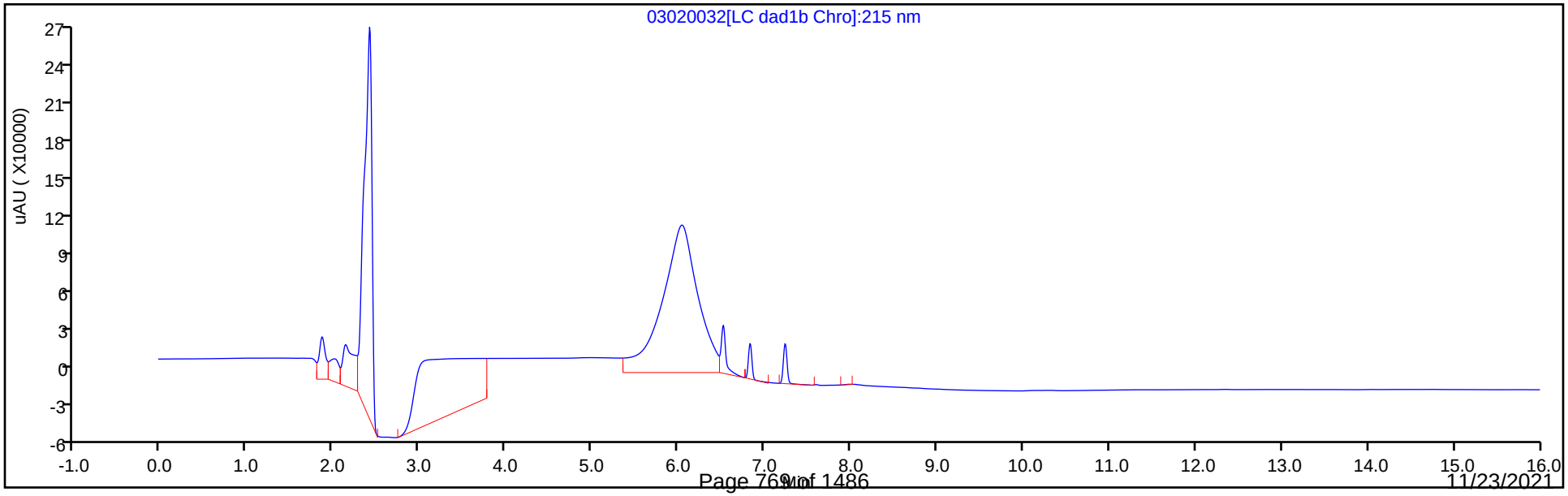
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d

Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 5			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

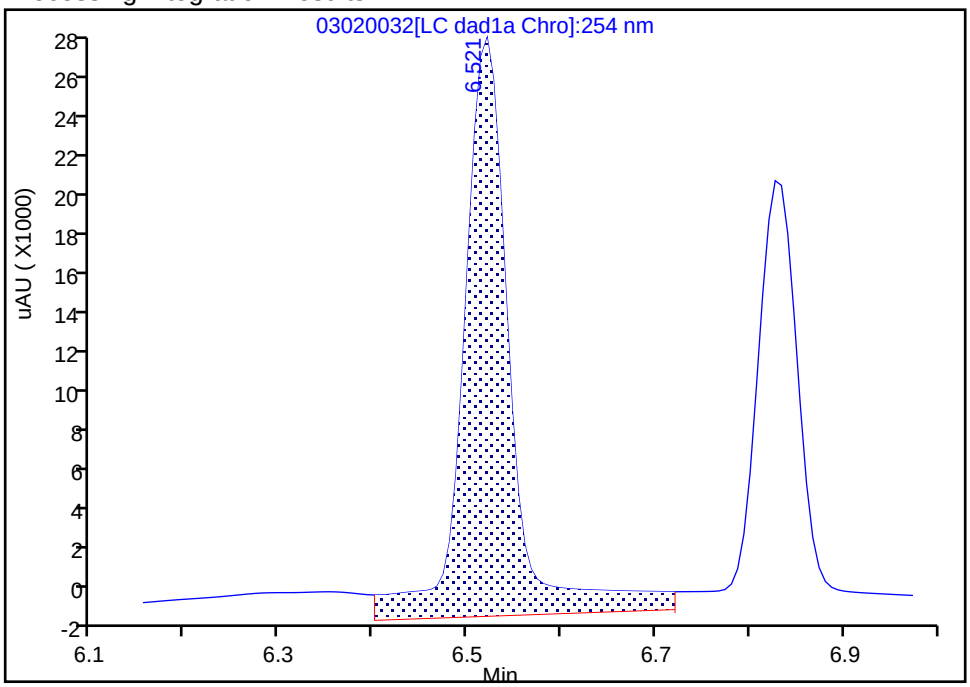
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d				
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

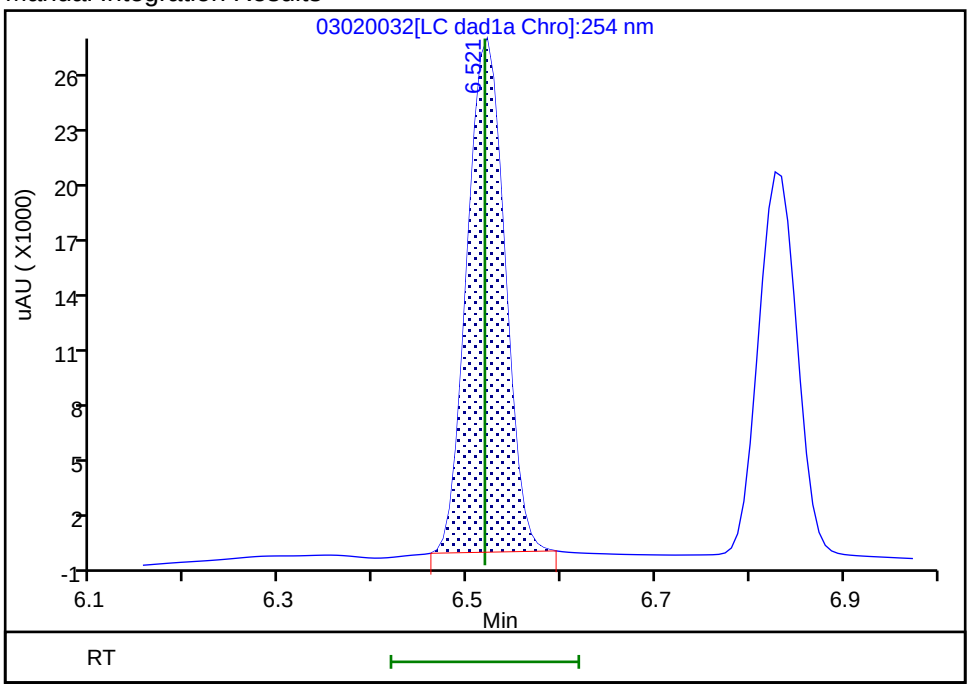
Processing Integration Results

RT: 6.52
Area: 98522
Amount: 0.473037
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 75195
Amount: 0.404696
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

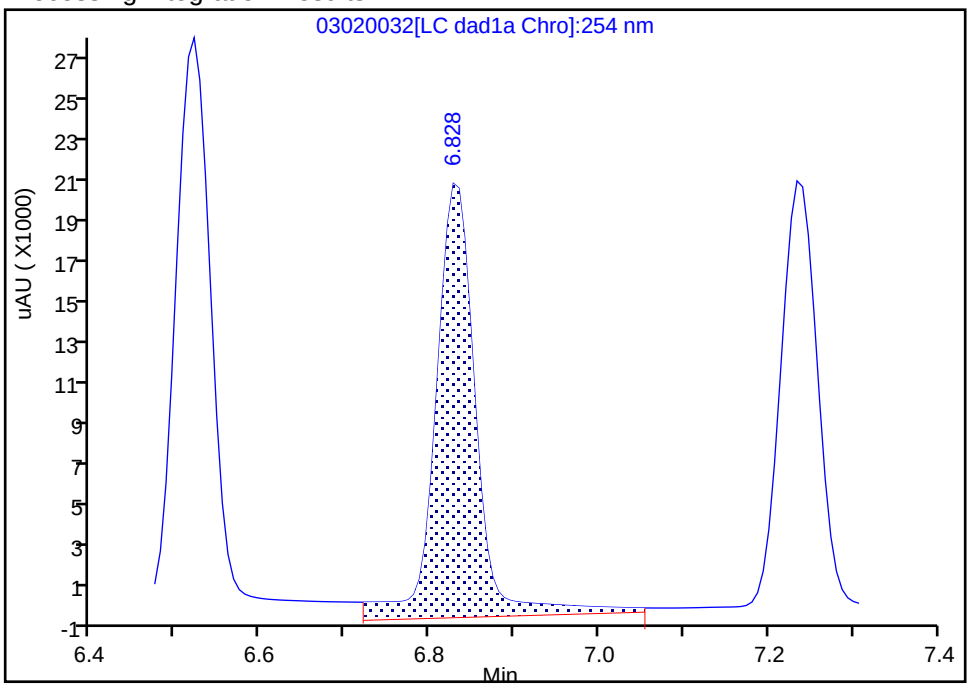
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d		
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 5		
Client ID:			
Operator ID:		ALS Bottle#:	32 Worklist Smp#: 32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

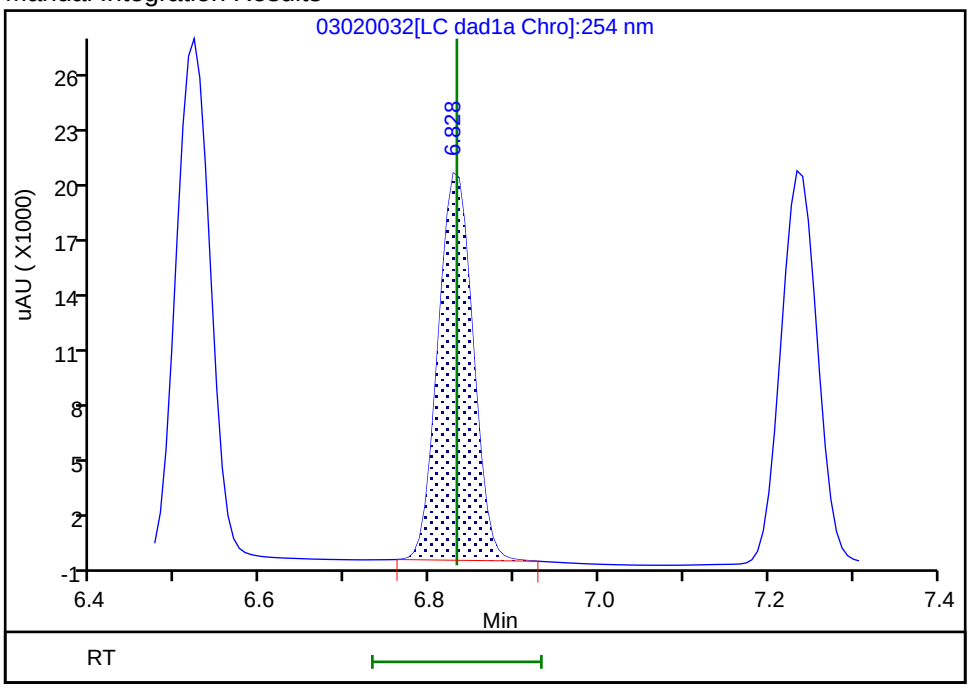
Processing Integration Results

RT: 6.83
Area: 69186
Amount: 0.444873
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 57462
Amount: 0.404322
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020033.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2021 01:21:15 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Misc. Info.: 280-0099486-033
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:28 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:20:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.518	6.518	0.000	44228	0.2503	0.2380	M
5 DNX	1	6.832	6.832	0.000	33502	0.2503	0.2357	M
6 MNX	1	7.232	7.232	0.000	36376	0.2918	0.2791	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

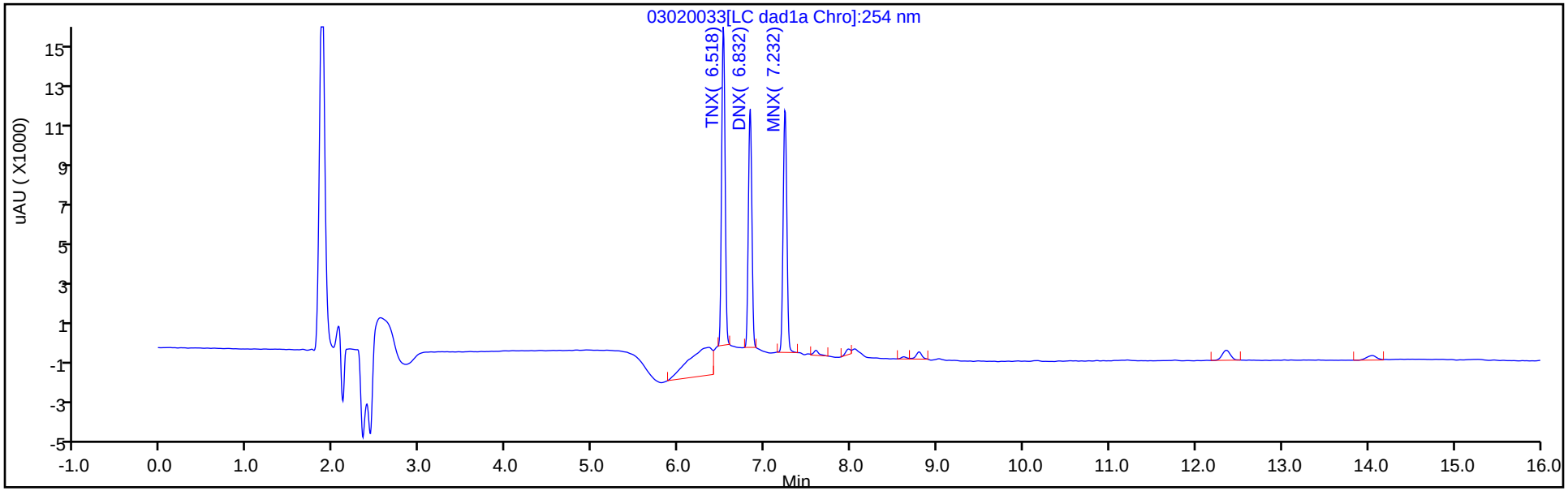
Report Date: 03-Mar-2021 13:32:28 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

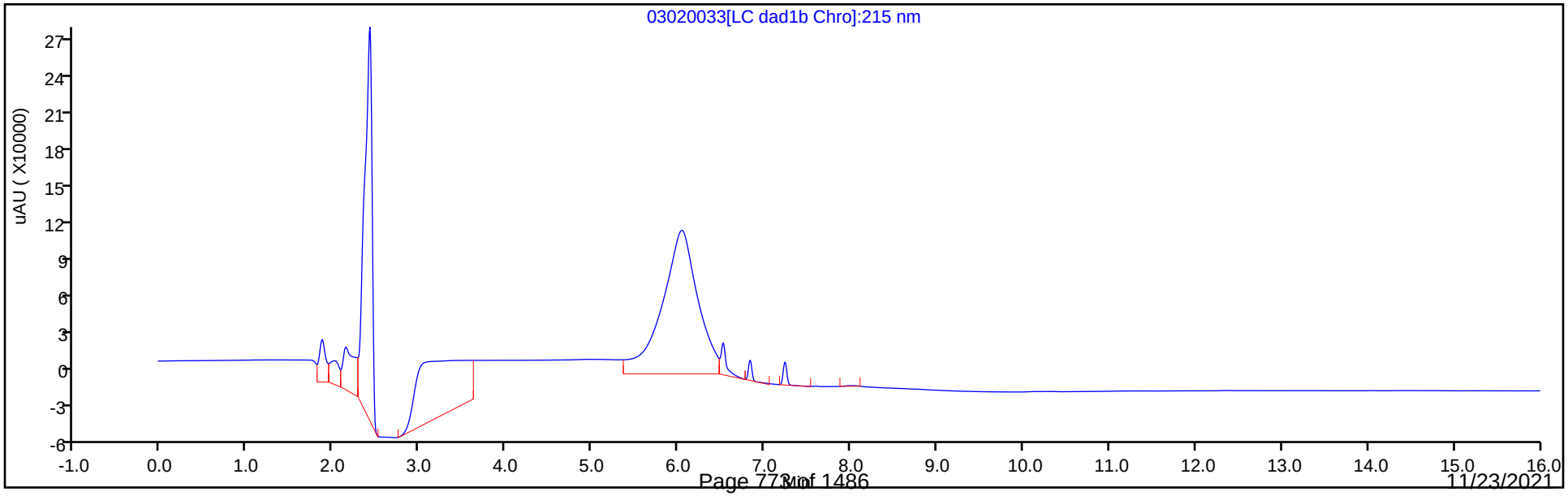
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d

Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 4			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

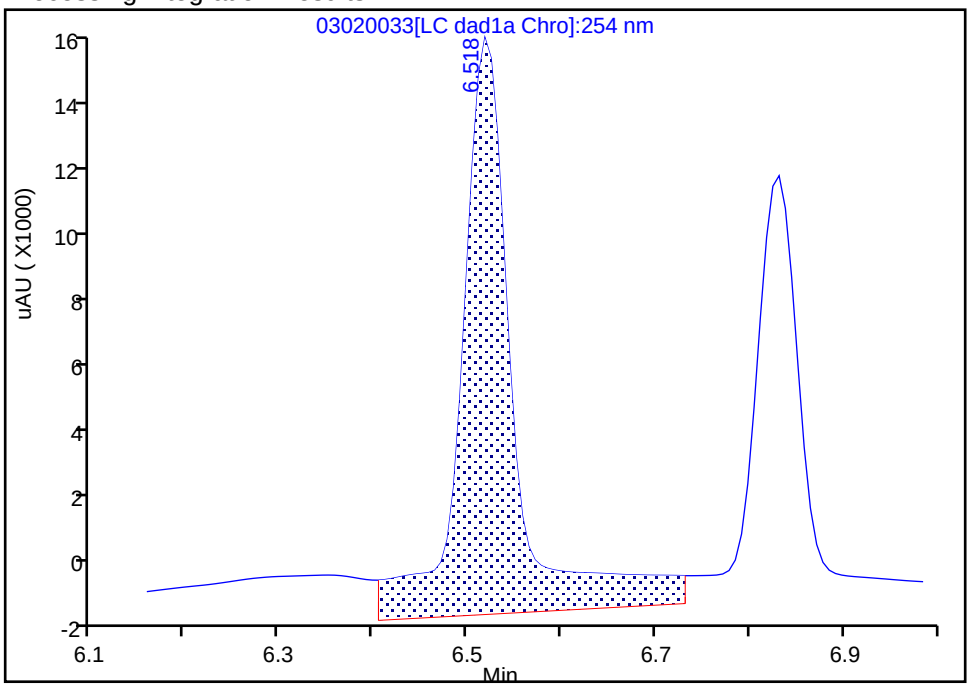
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

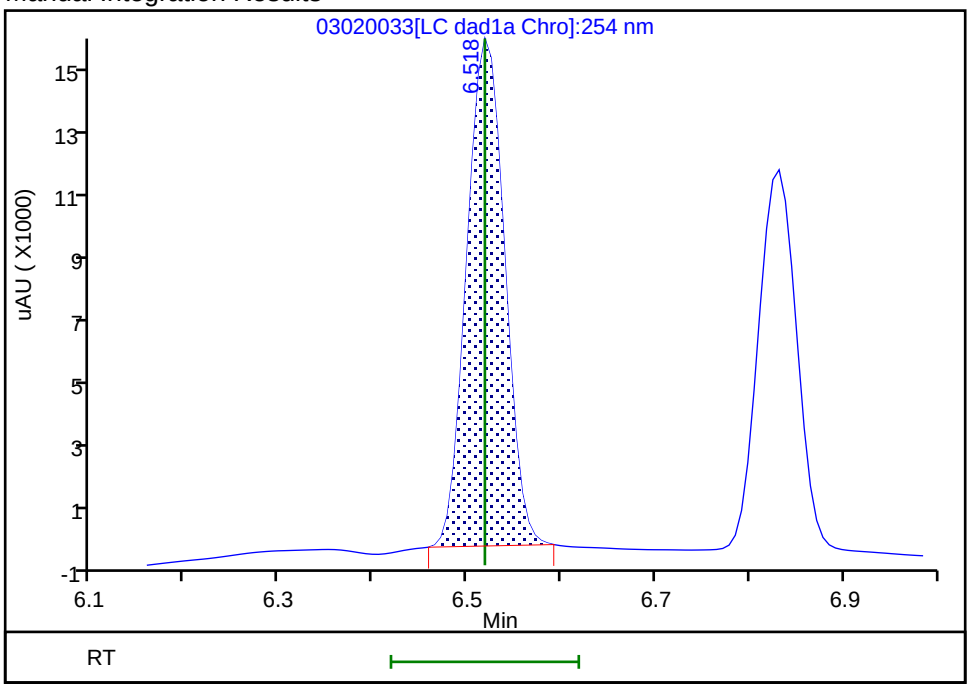
Processing Integration Results

RT: 6.52
Area: 66731
Amount: 0.312730
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 44228
Amount: 0.238033
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

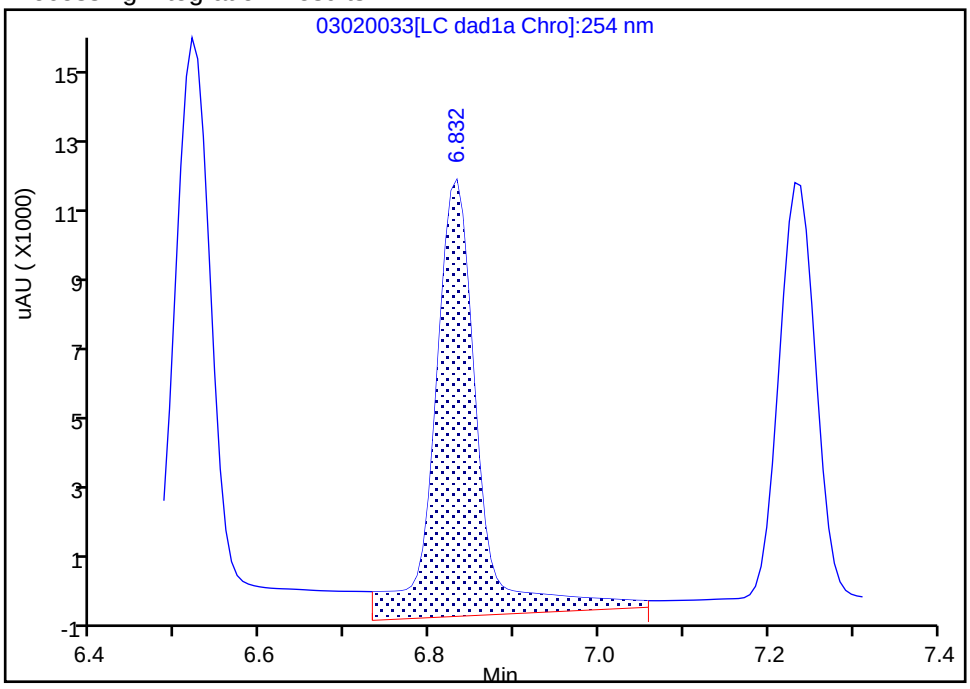
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

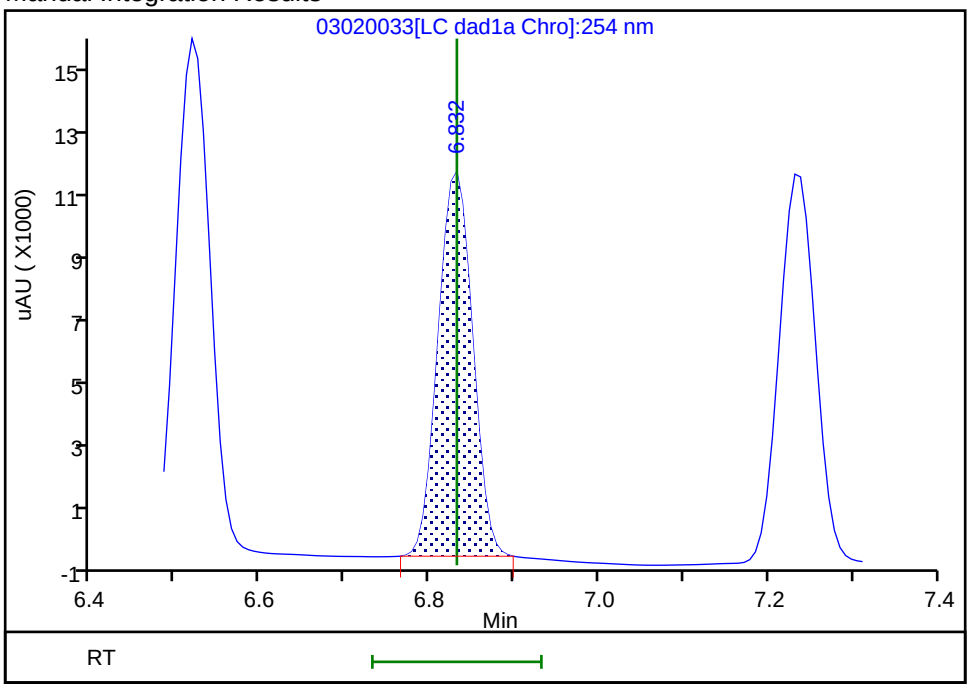
Processing Integration Results

RT: 6.83
Area: 44700
Amount: 0.294353
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 33502
Amount: 0.235731
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:06
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020034.D
Lims ID: IC DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Mar-2021 01:44:28 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 3
Misc. Info.: 280-0099486-034
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:29 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:20:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	18578	0.1001	0.1000	M
5 DNX	1	6.828	6.832	-0.004	13949	0.1001	0.0981	M
6 MNX	1	7.235	7.232	0.003	15275	0.1167	0.1172	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 5.00 Units: uL

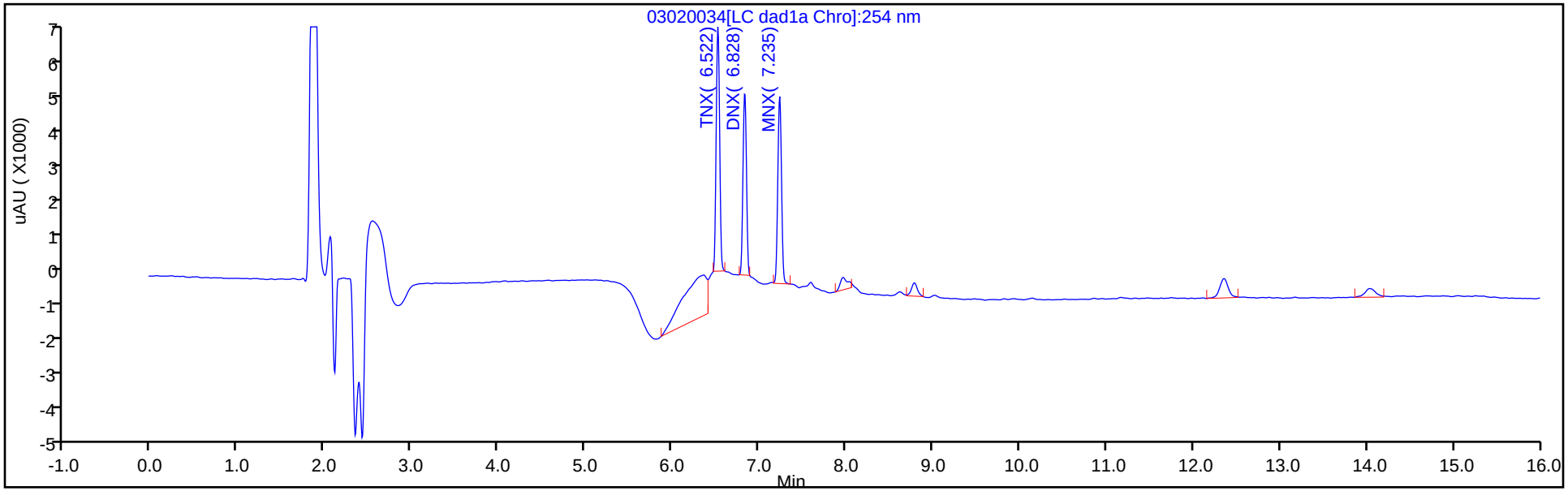
Report Date: 03-Mar-2021 13:32:29 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

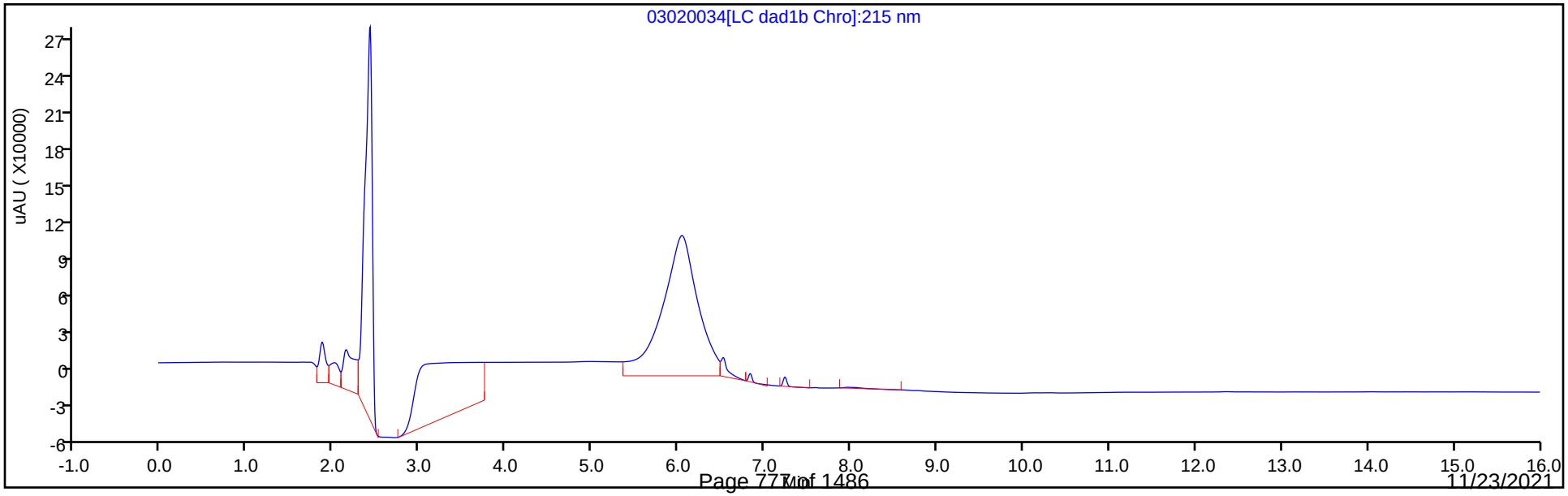
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d

Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 3			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

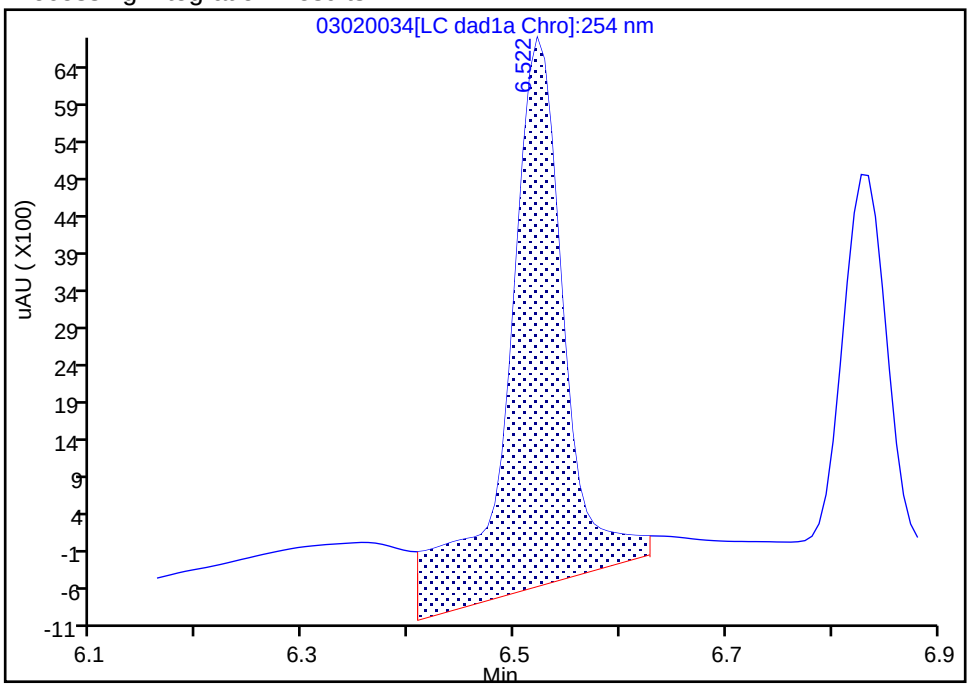
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d				
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

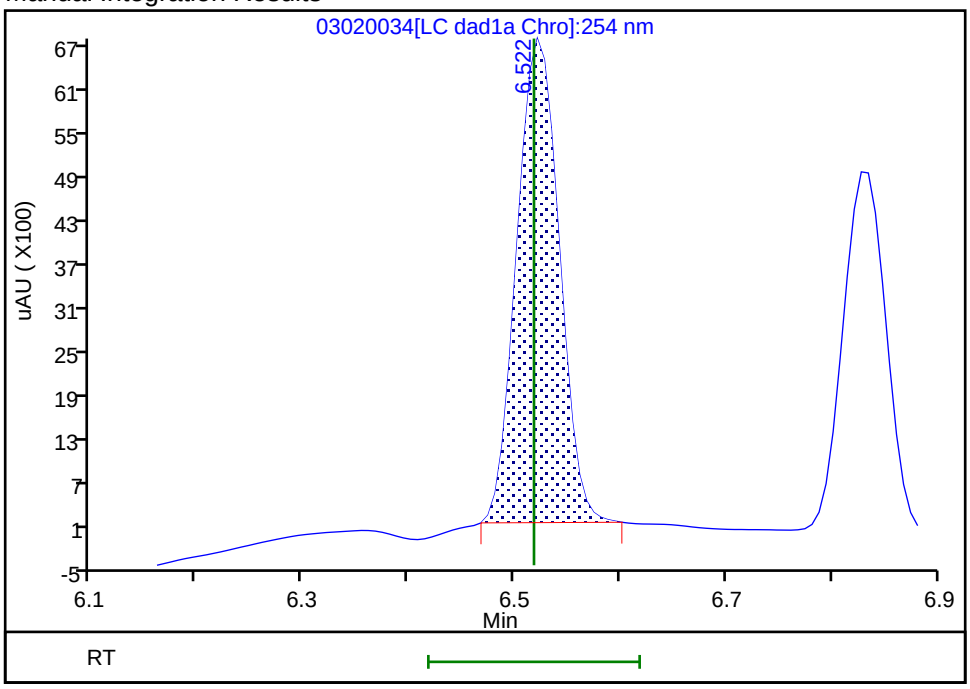
Processing Integration Results

RT: 6.52
Area: 27541
Amount: 0.106458
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 18578
Amount: 0.099986
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:18

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

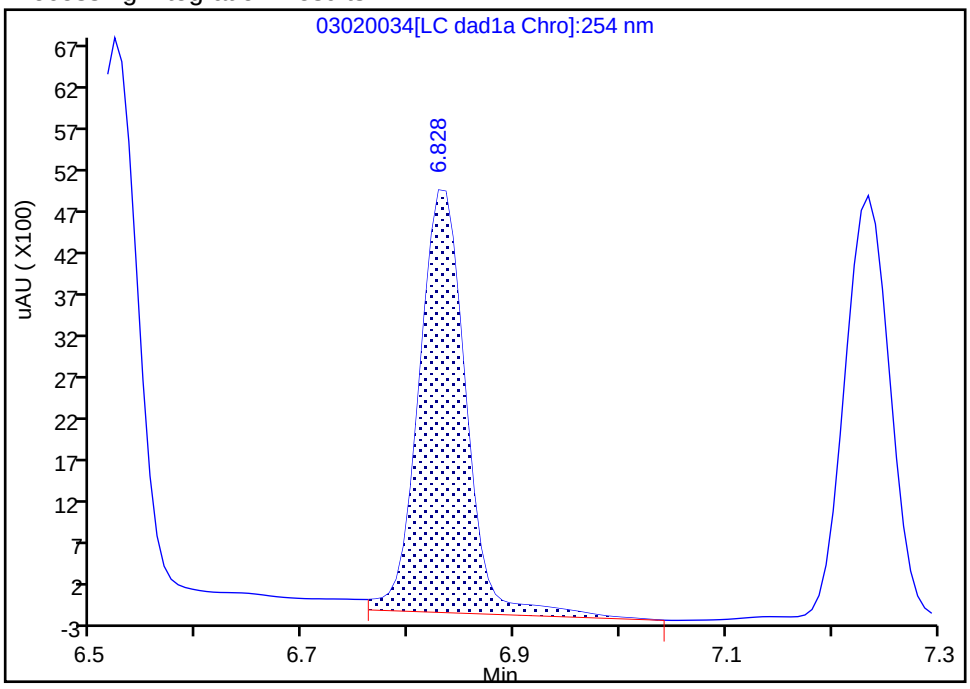
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d		
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 3		
Client ID:			
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

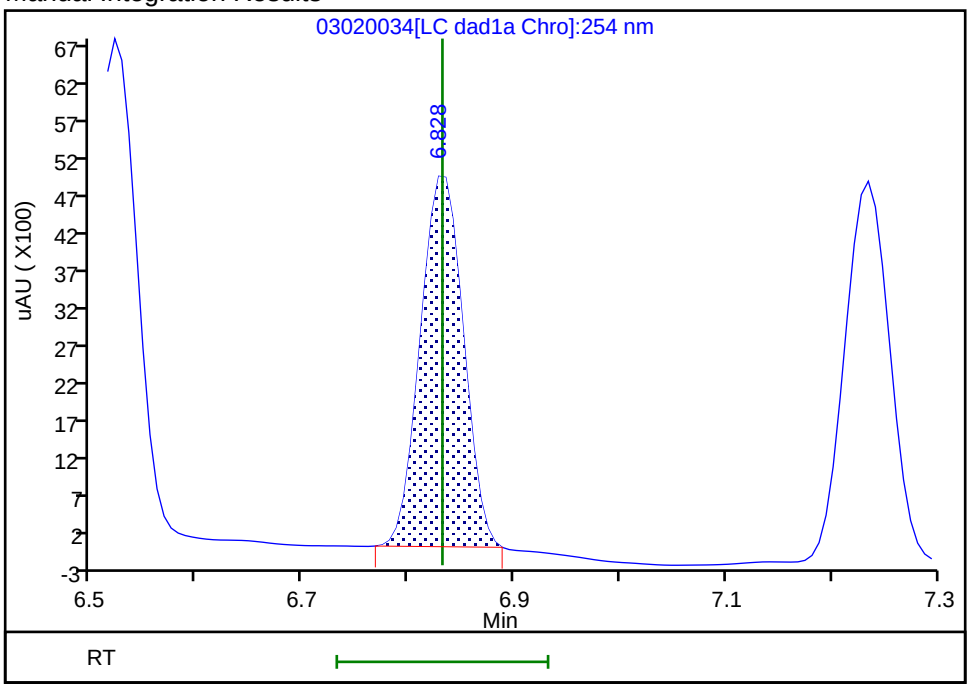
Processing Integration Results

RT: 6.83
Area: 15711
Amount: 0.107414
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 13949
Amount: 0.098150
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:22
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020035.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	03-Mar-2021 02:07:25	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0099486-035				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:30	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:20:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	9328	0.0501	0.0502	M
5 DNX	1	6.829	6.832	-0.003	7121	0.0501	0.0501	M
6 MNX	1	7.235	7.232	0.003	7585	0.0584	0.0582	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 2.50 Units: uL

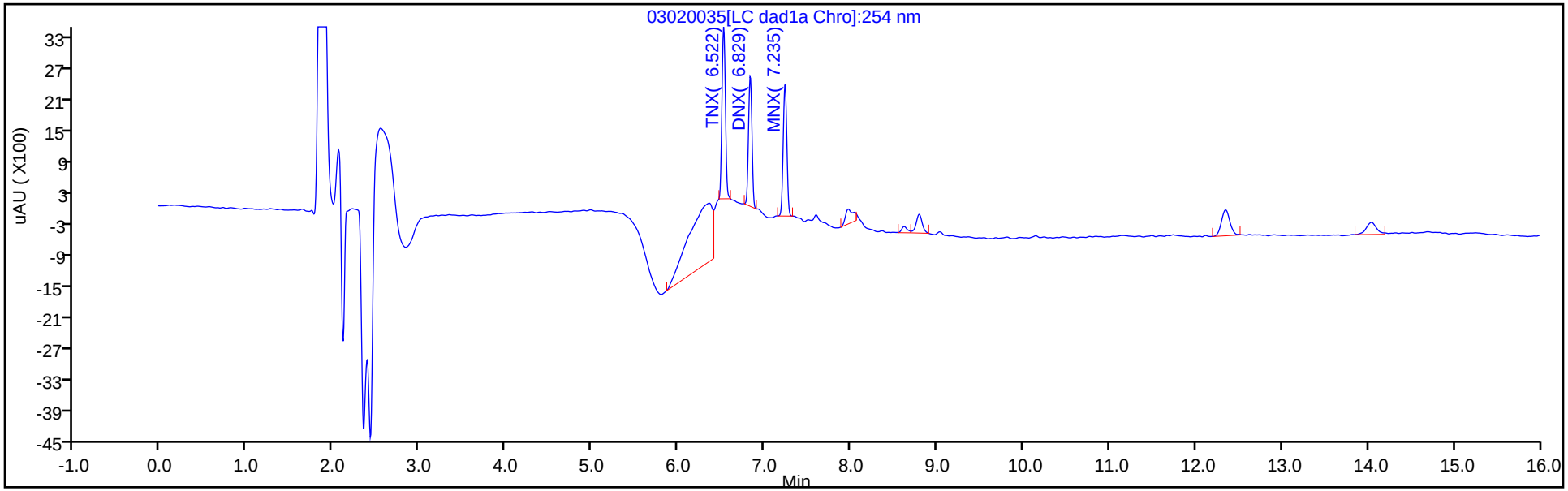
Report Date: 03-Mar-2021 13:32:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

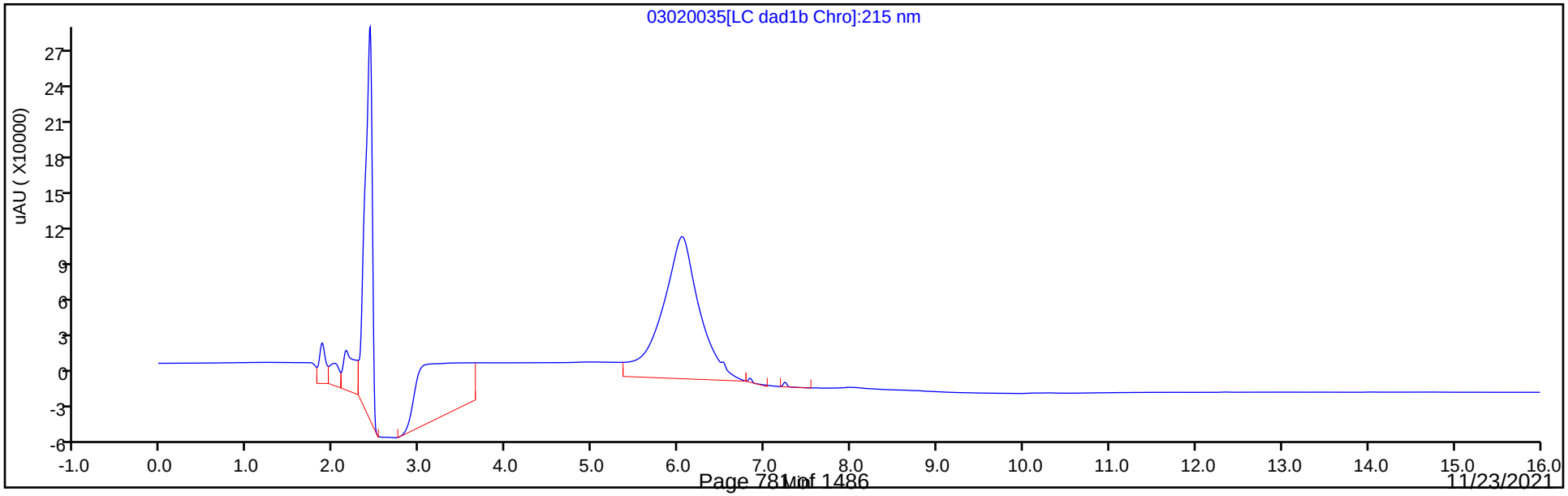
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d

Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 2			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

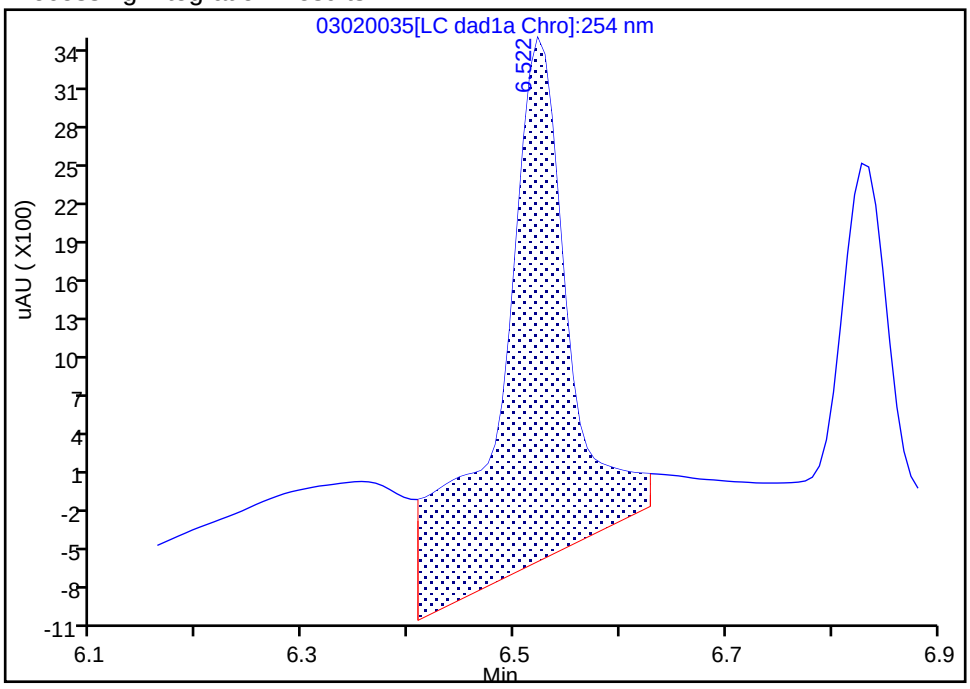
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d		
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 2		
Client ID:			
Operator ID:		ALS Bottle#:	35 Worklist Smp#: 35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

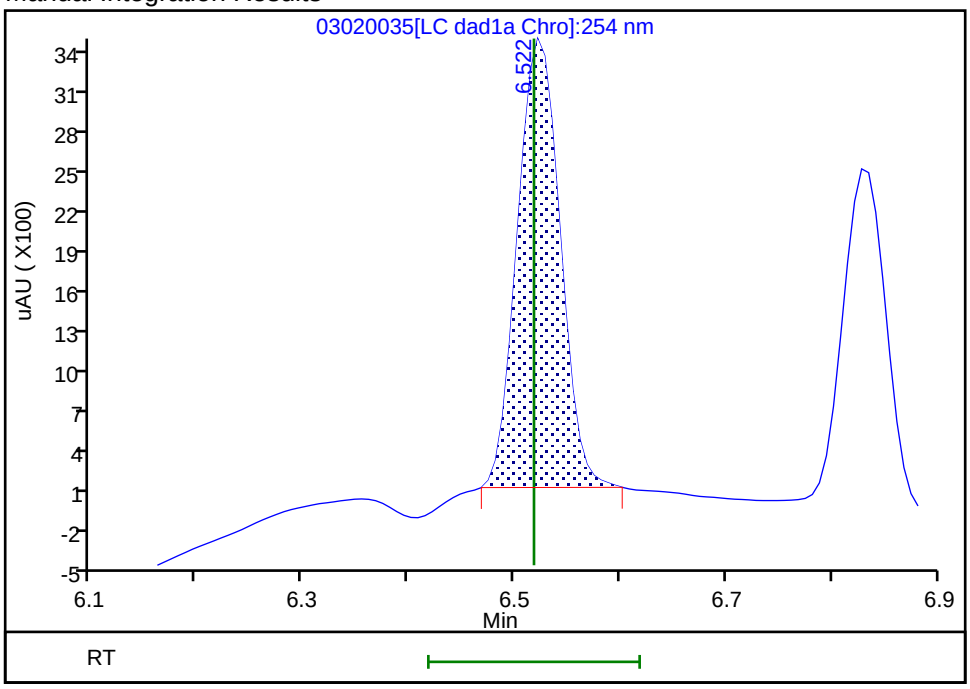
Processing Integration Results

RT: 6.52
Area: 18356
Amount: 0.060447
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 9328
Amount: 0.050203
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:37

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

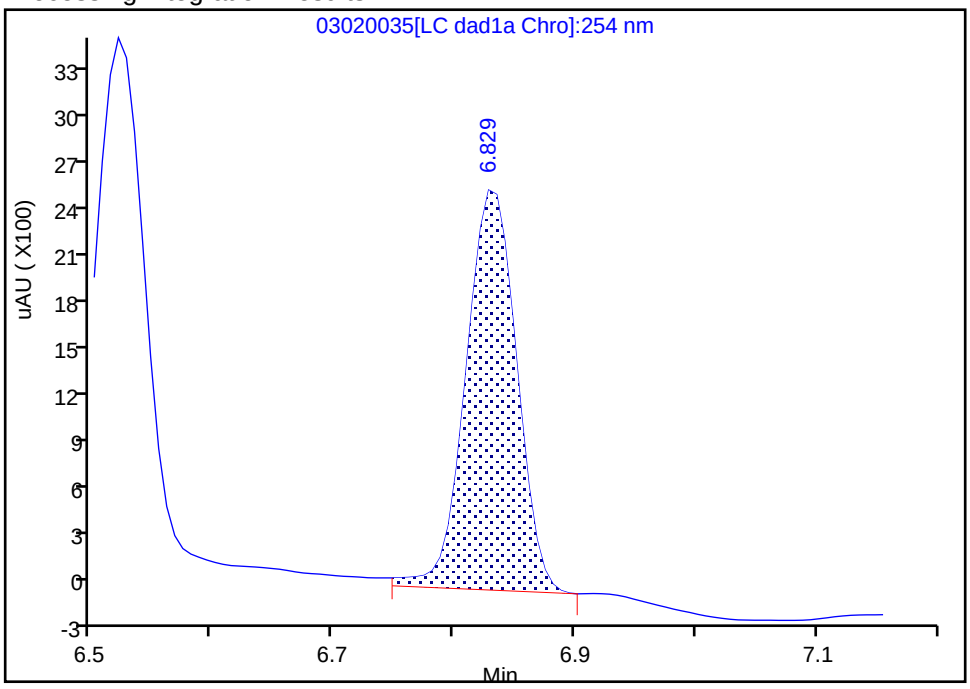
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d				
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:		ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

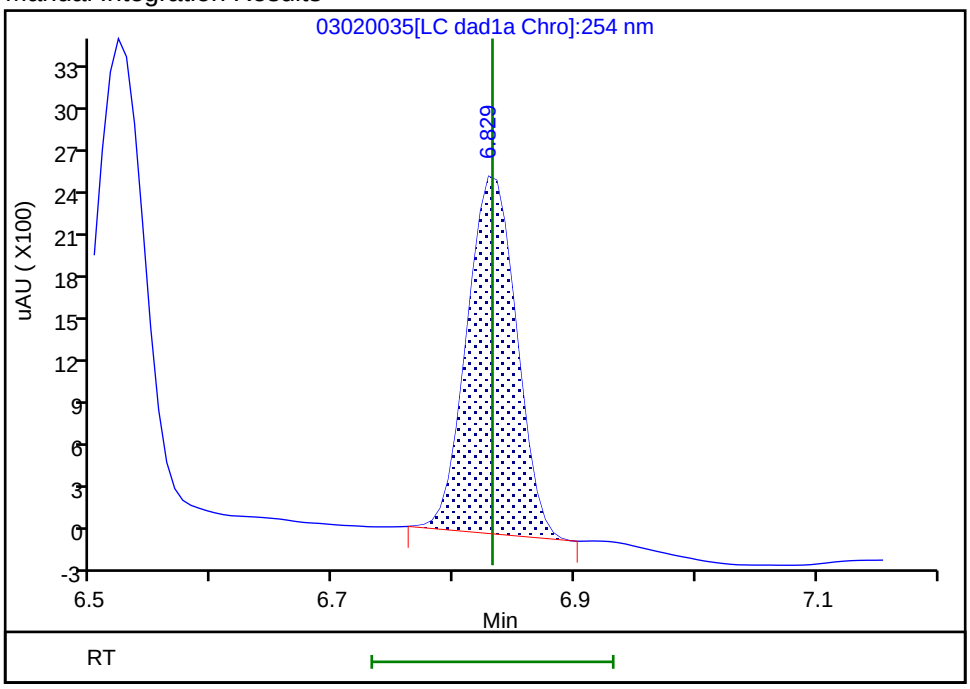
Processing Integration Results

RT: 6.83
Area: 7405
Amount: 0.051400
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 7121
Amount: 0.050106
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:41
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	03-Mar-2021 02:30:22	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0099486-036				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:31	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:21:03		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	3664	0.0200	0.0197	M
5 DNX	1	6.827	6.832	-0.005	2984	0.0200	0.0210	M
6 MNX	1	7.234	7.232	0.002	3082	0.0233	0.0236	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 1.00 Units: uL

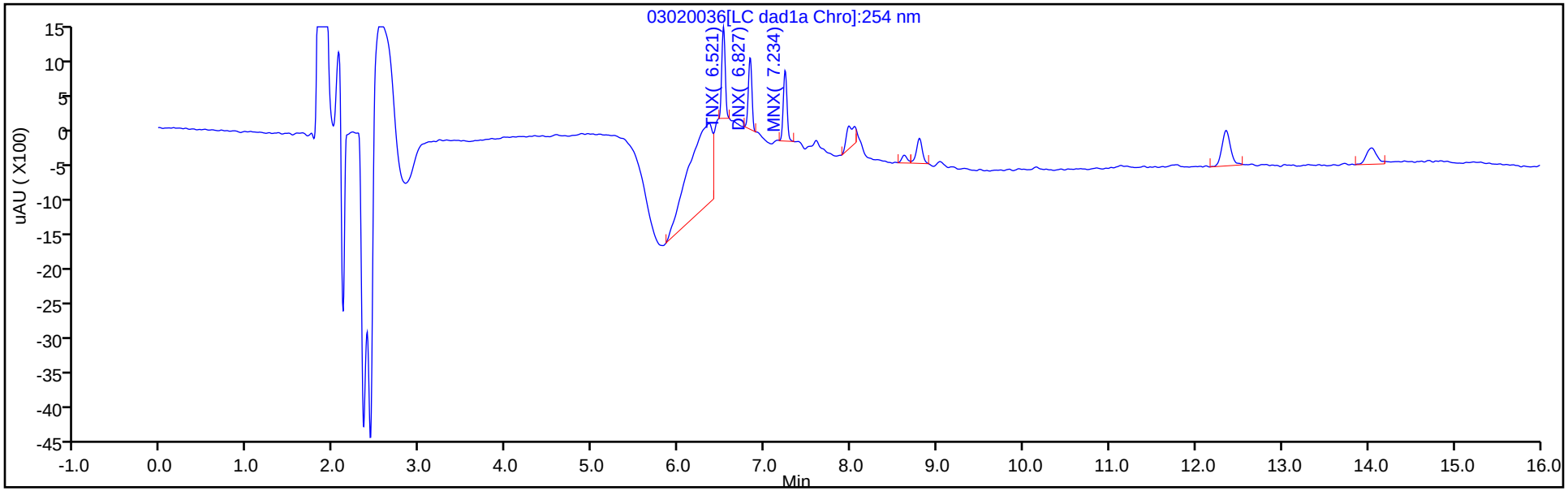
Report Date: 03-Mar-2021 13:32:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

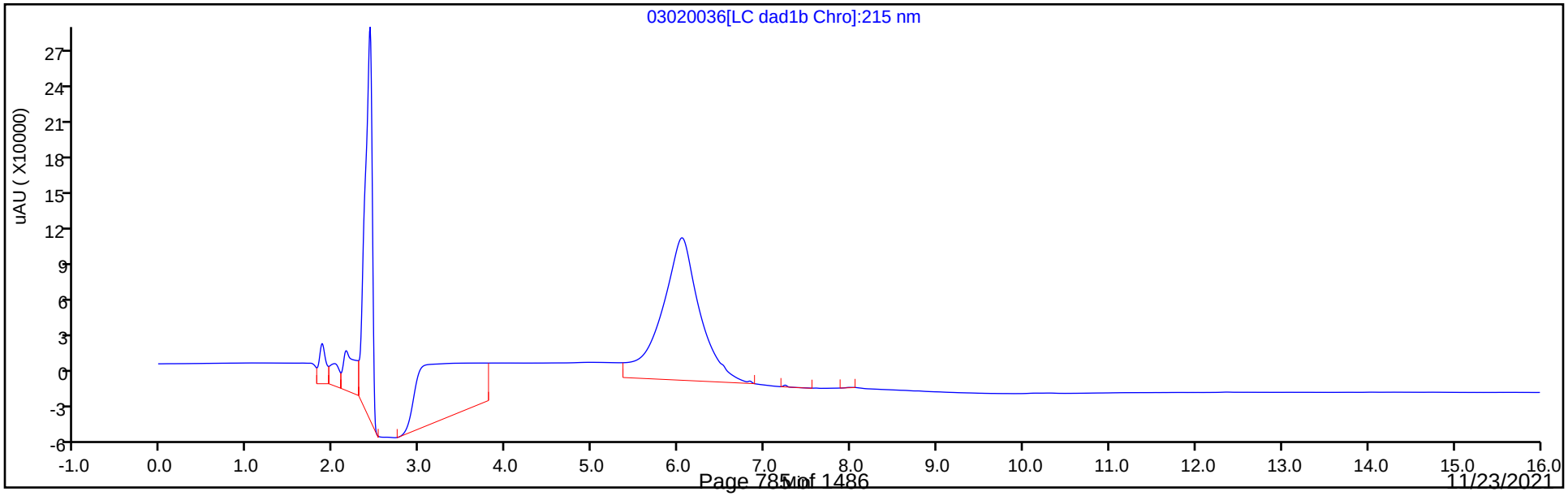
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d

Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 1			Worklist Smp#:	36
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

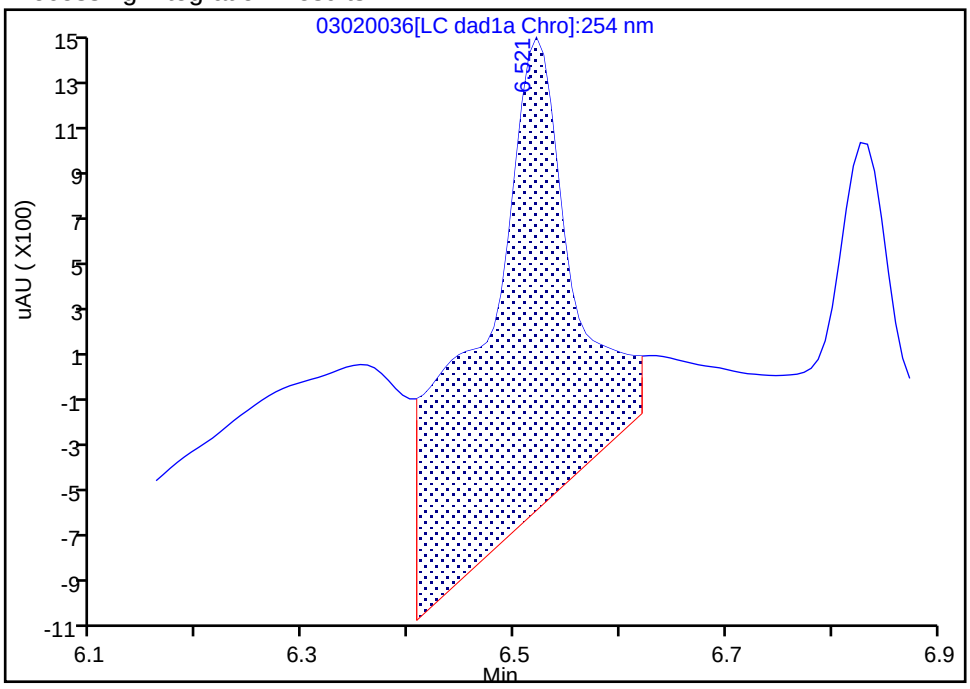
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d		
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 1		
Client ID:			
Operator ID:		ALS Bottle#:	36 Worklist Smp#: 36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

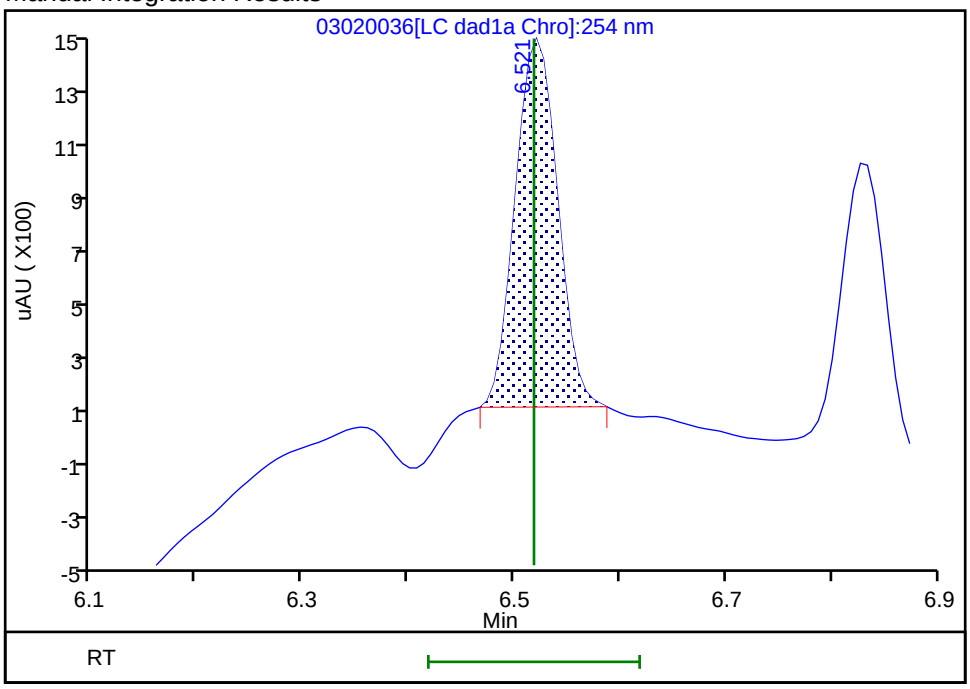
Processing Integration Results

RT: 6.52
Area: 12511
Amount: 0.051903
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 3664
Amount: 0.019719
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

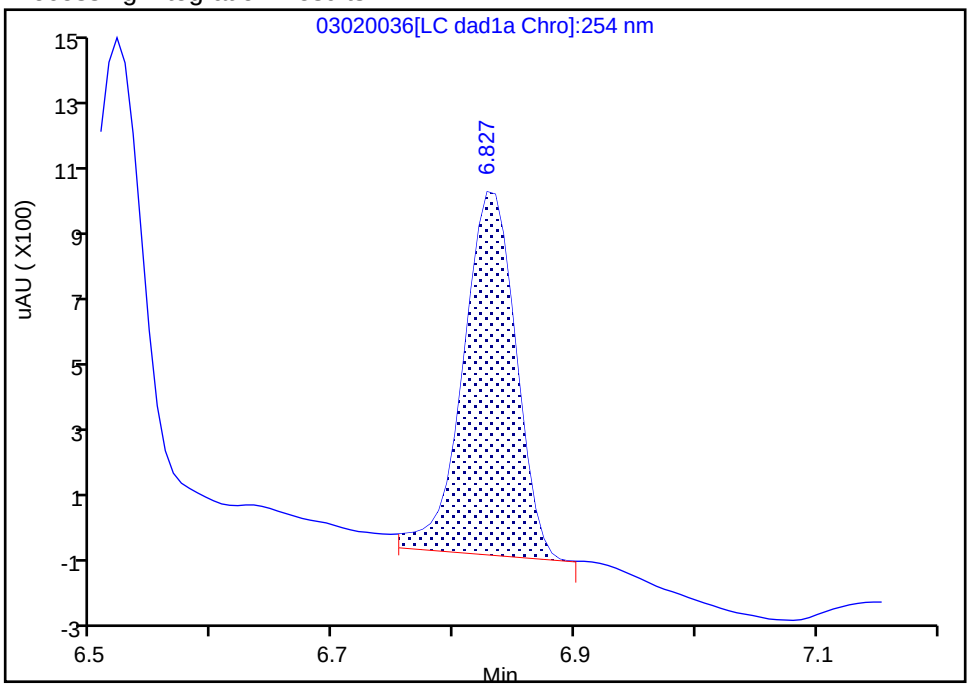
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d				
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:		ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

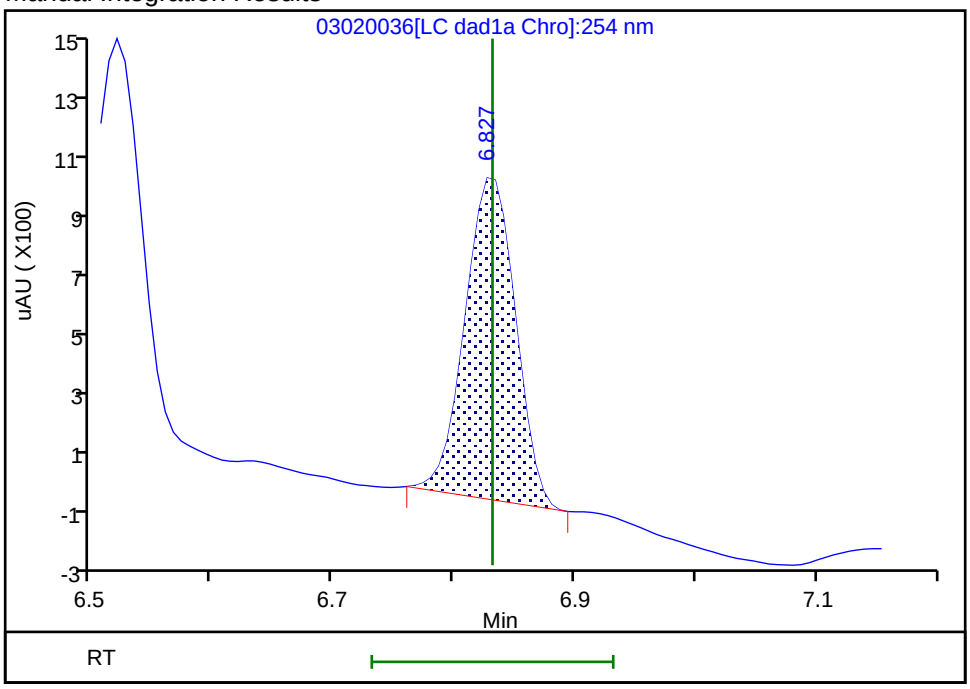
Processing Integration Results

RT: 6.83
Area: 3182
Amount: 0.022197
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 2984
Amount: 0.020996
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:57

Audit Action: Manually Integrated Audit Reason: Baseline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

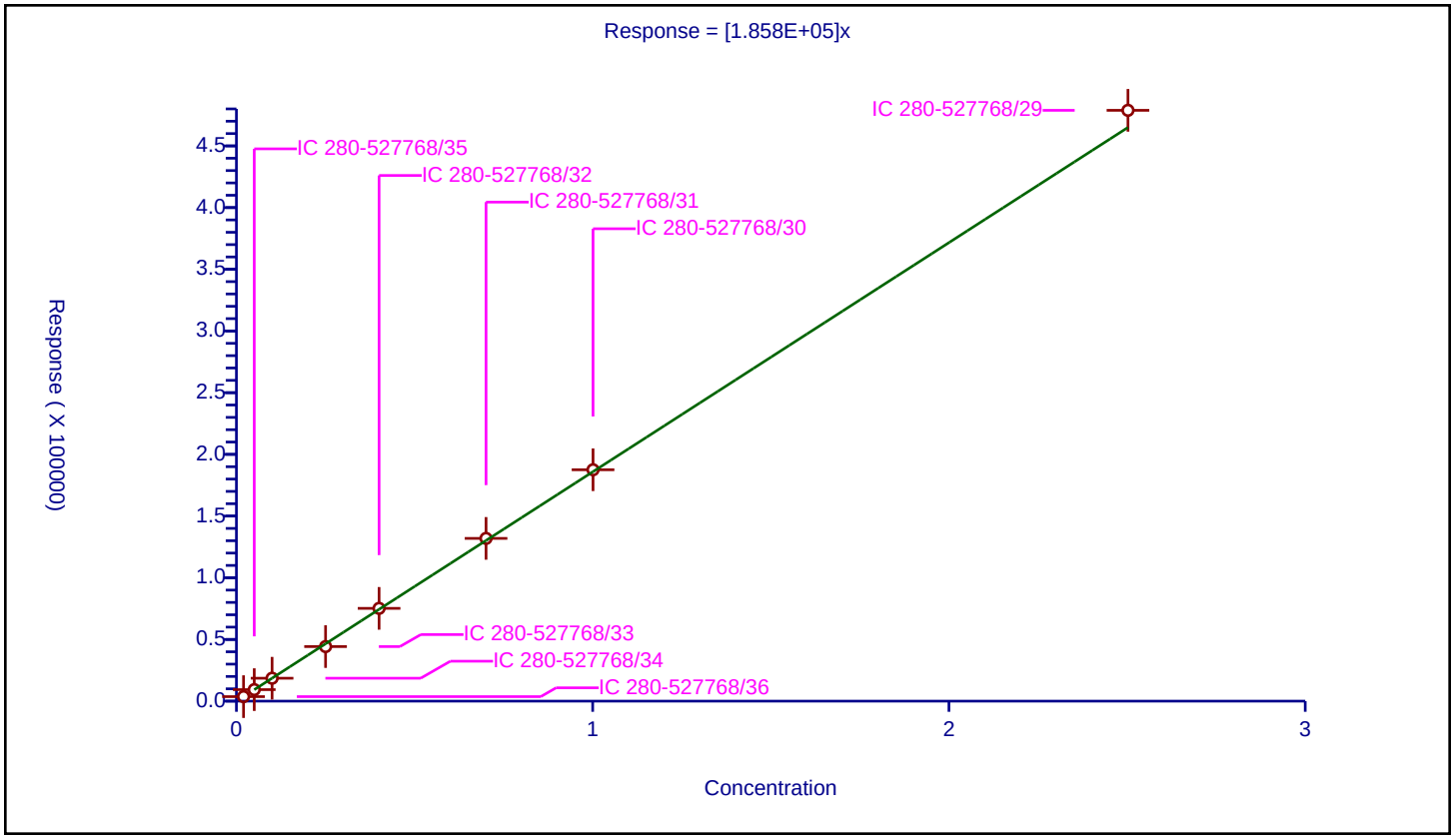
Curve Coefficients

Intercept:	0
Slope:	1.858E+05

Error Coefficients

Standard Error:	5380
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02002	3664.0			183016.983017	Y
2	IC 280-527768/35	0.05005	9328.0			186373.626374	Y
3	IC 280-527768/34	0.1001	18578.0			185594.405594	Y
4	IC 280-527768/33	0.25025	44228.0			176735.264735	Y
5	IC 280-527768/32	0.4004	75195.0			187799.7003	Y
6	IC 280-527768/31	0.7007	131907.0			188250.321107	Y
7	IC 280-527768/30	1.001	187526.0			187338.661339	Y
8	IC 280-527768/29	2.5025	478826.0			191339.060939	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

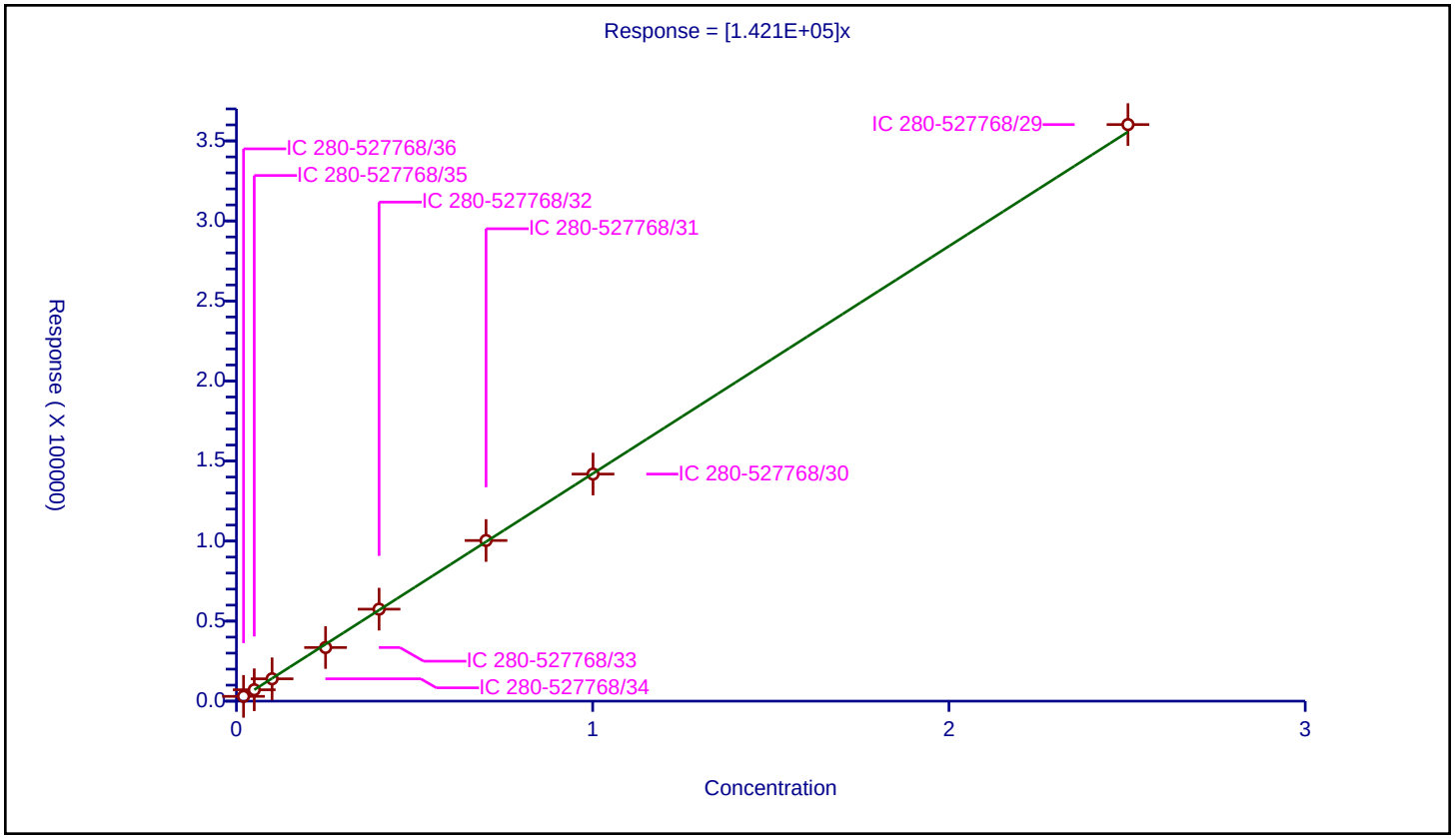
Curve Coefficients

Intercept:	0
Slope:	1.421E+05

Error Coefficients

Standard Error:	1930
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02002	2984.0			149050.949051	Y
2	IC 280-527768/35	0.05005	7121.0			142277.722278	Y
3	IC 280-527768/34	0.1001	13949.0			139350.649351	Y
4	IC 280-527768/33	0.25025	33502.0			133874.125874	Y
5	IC 280-527768/32	0.4004	57462.0			143511.488511	Y
6	IC 280-527768/31	0.7007	100368.0			143239.617525	Y
7	IC 280-527768/30	1.001	141853.0			141711.288711	Y
8	IC 280-527768/29	2.5025	360207.0			143938.861139	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

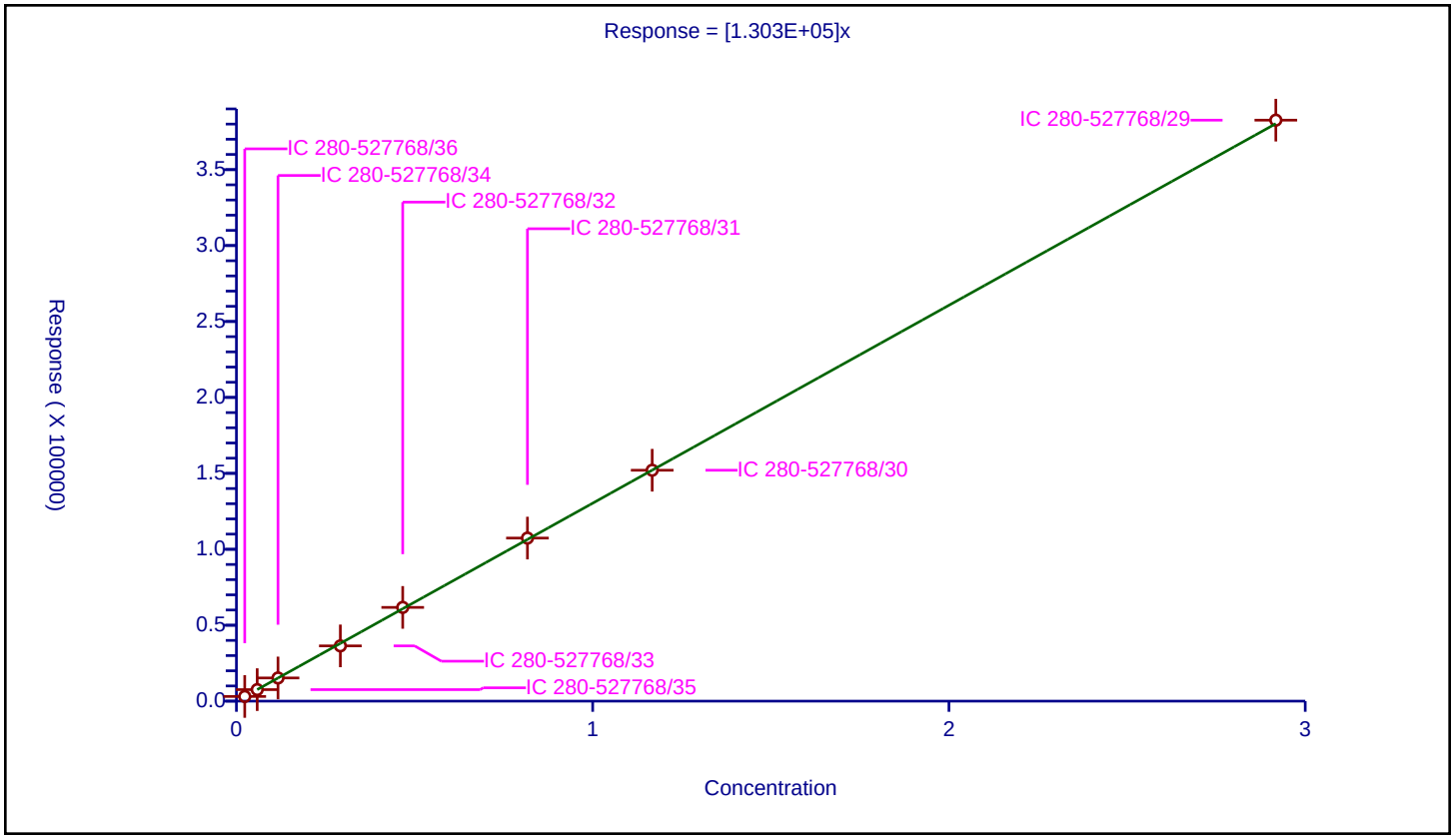
Curve Coefficients

Intercept:	0
Slope:	1.303E+05

Error Coefficients

Standard Error:	1180
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02334	3082.0			132047.98629	Y
2	IC 280-527768/35	0.05835	7585.0			129991.43102	Y
3	IC 280-527768/34	0.1167	15275.0			130891.17395	Y
4	IC 280-527768/33	0.29175	36376.0			124682.090831	Y
5	IC 280-527768/32	0.4668	61731.0			132242.930591	Y
6	IC 280-527768/31	0.8169	107376.0			131443.261109	Y
7	IC 280-527768/30	1.167	152050.0			130291.34533	Y
8	IC 280-527768/29	2.9175	382579.0			131132.476435	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 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

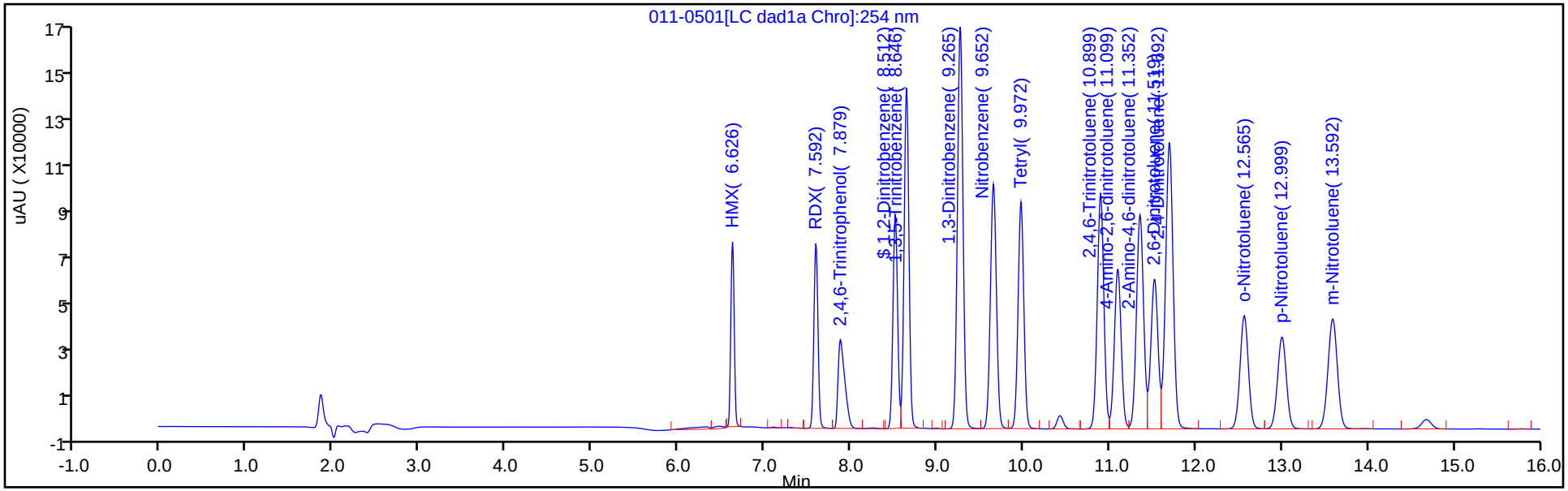
Report Date: 04-May-2021 13:25:06 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

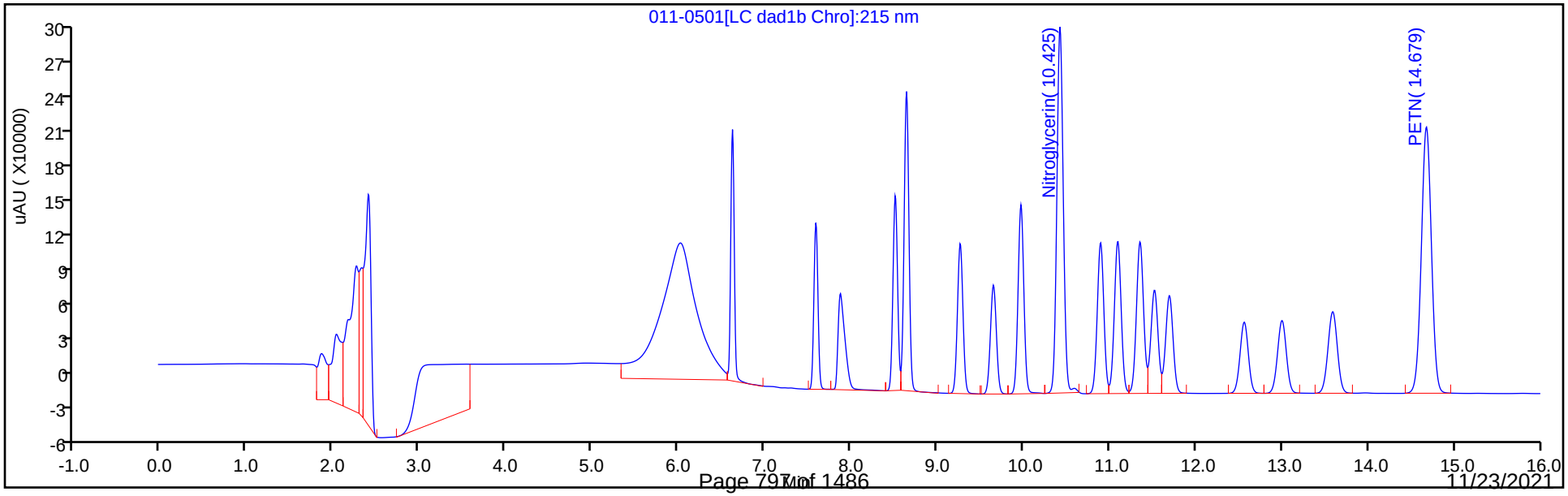
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d

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

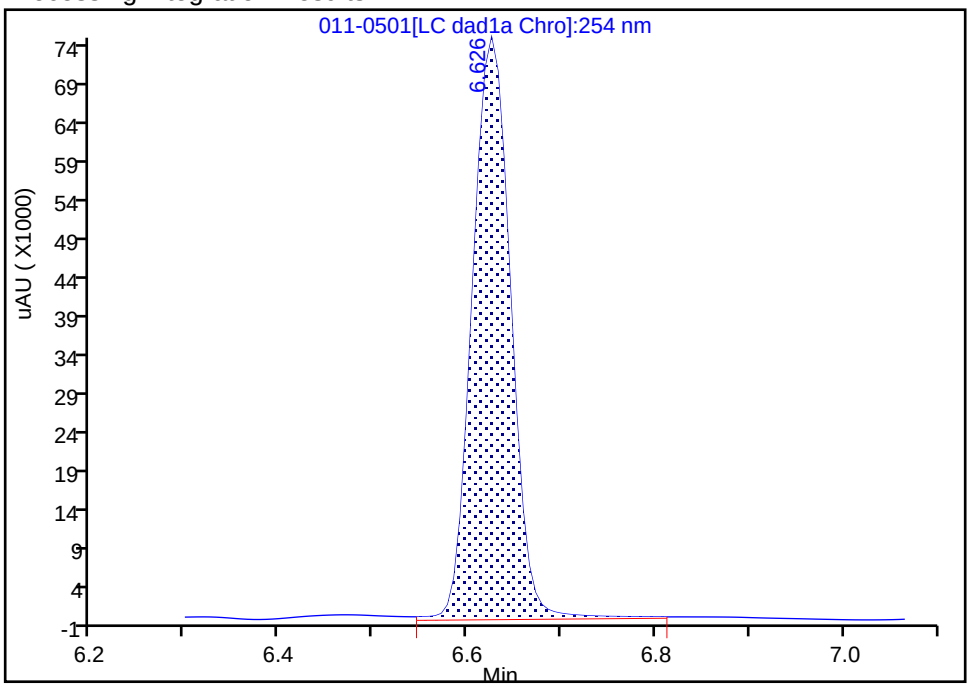
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d				
Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

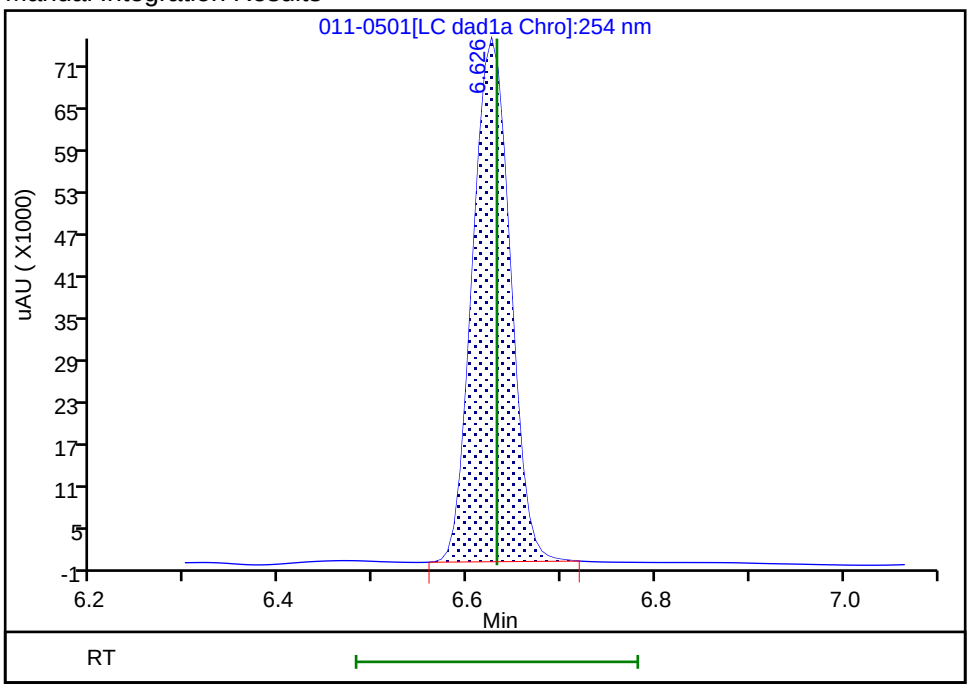
Processing Integration Results

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

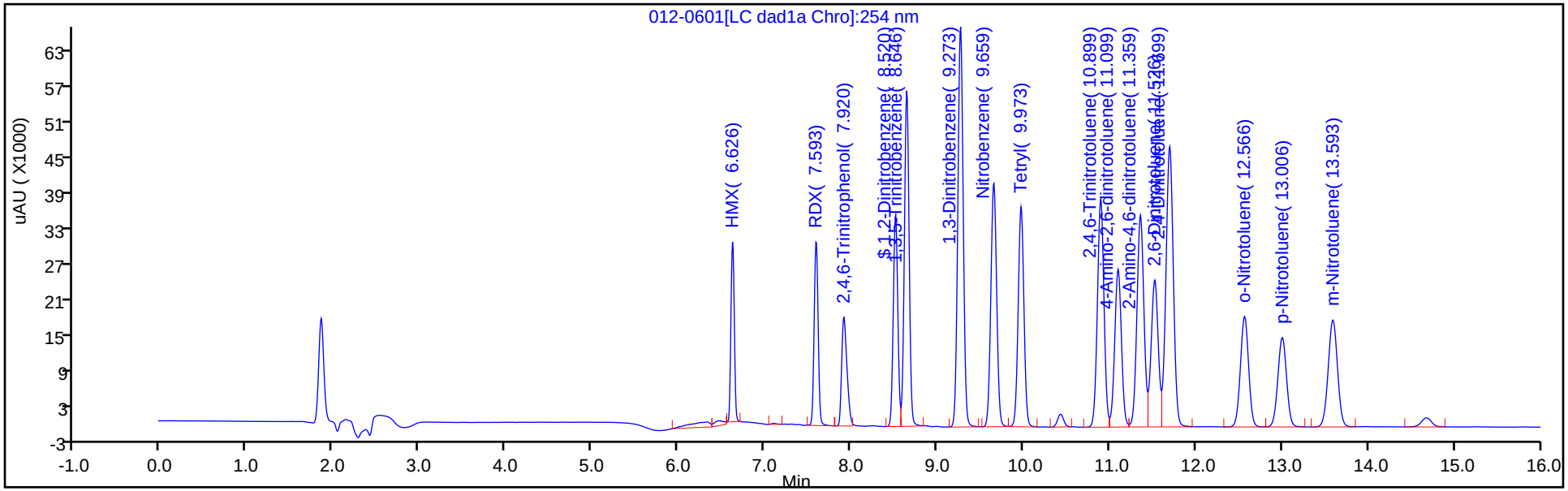
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

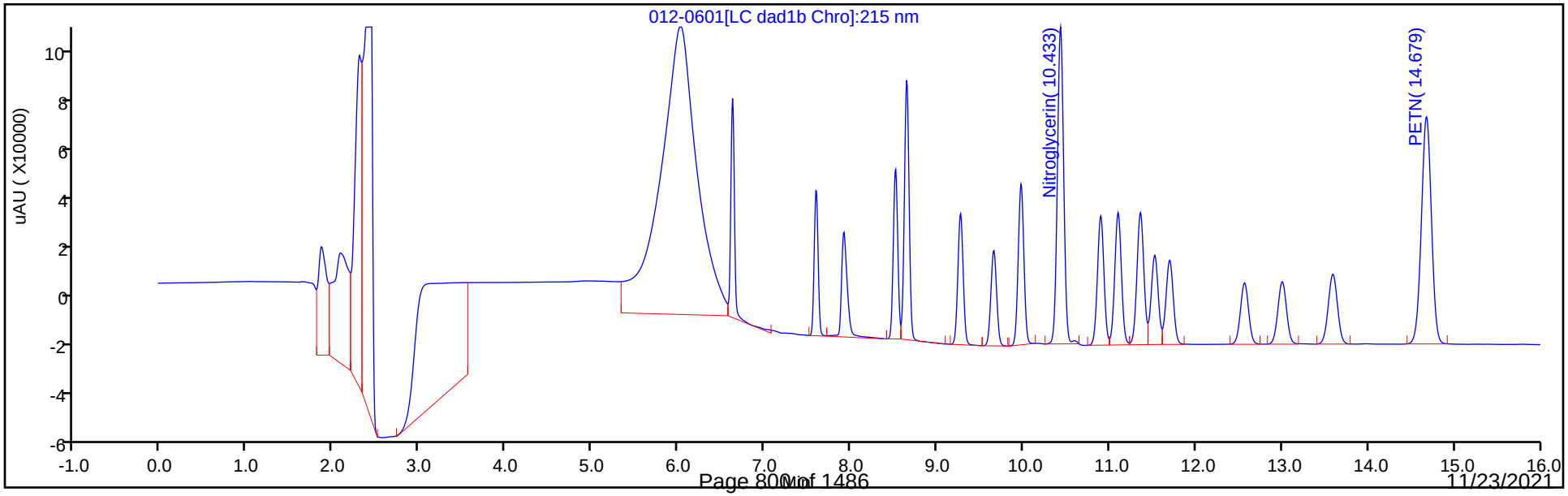
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d

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

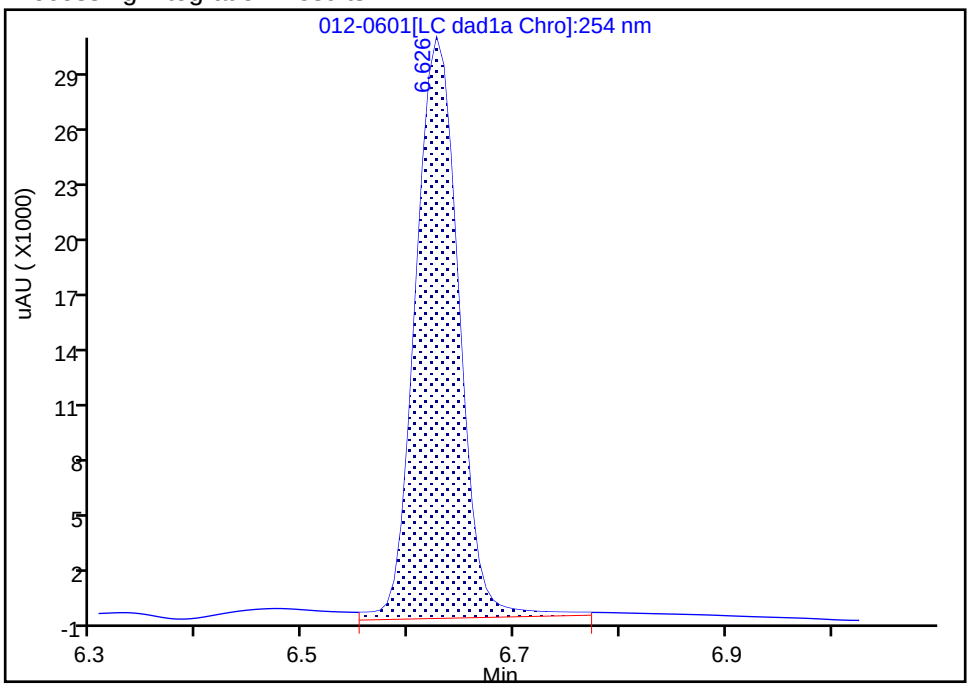
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d				
Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

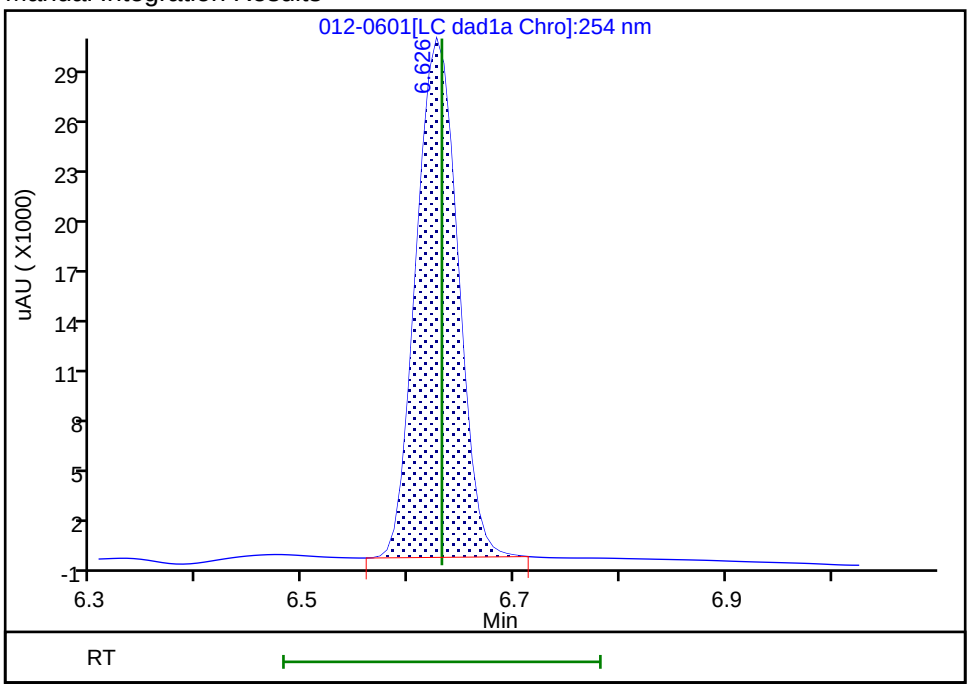
Processing Integration Results

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

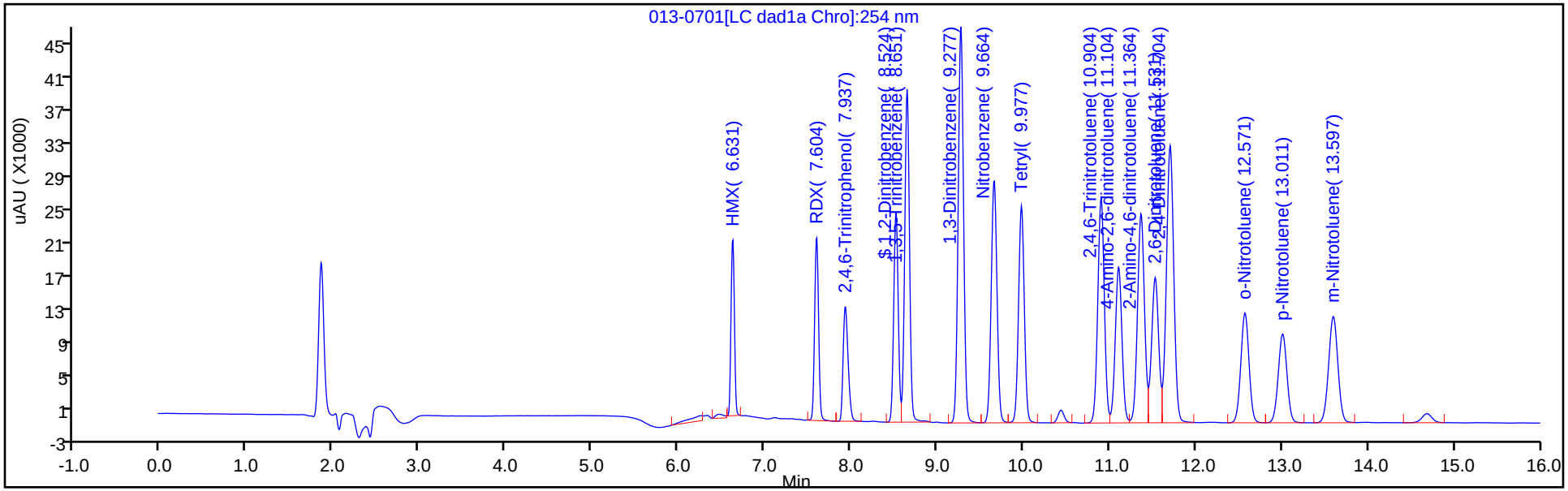
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

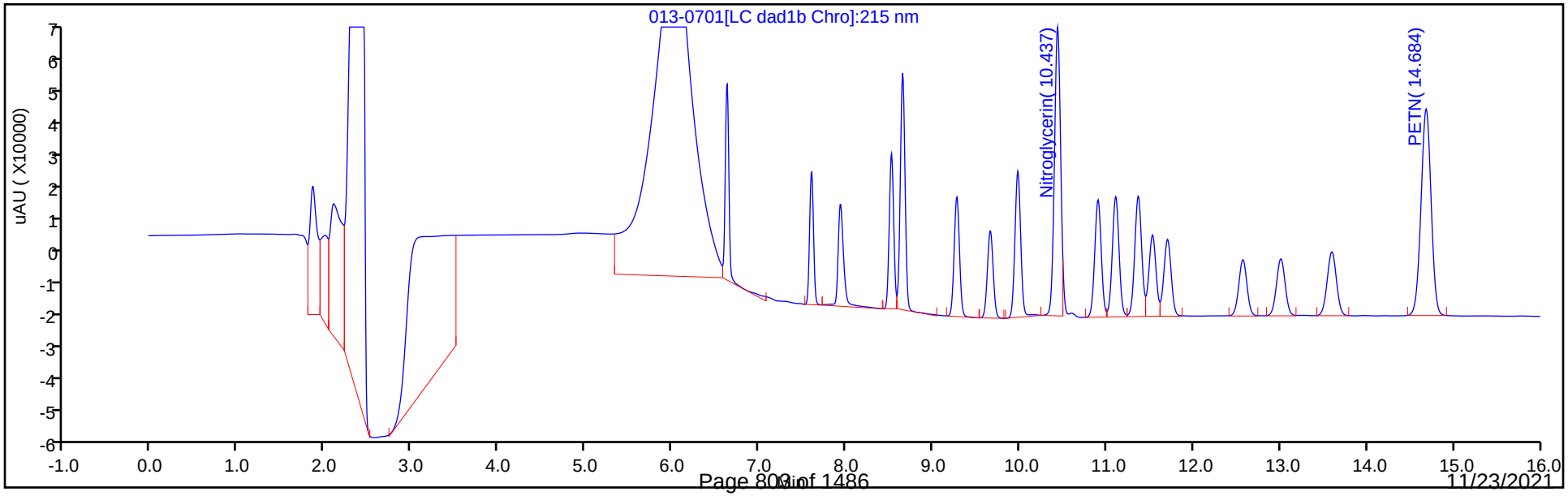
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d

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

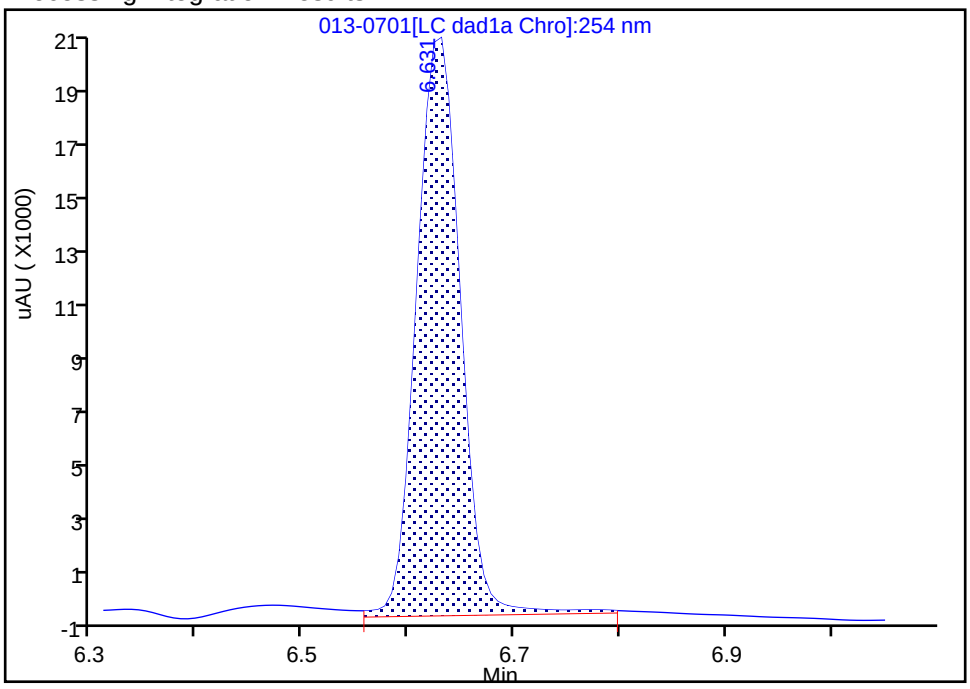
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d				
Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

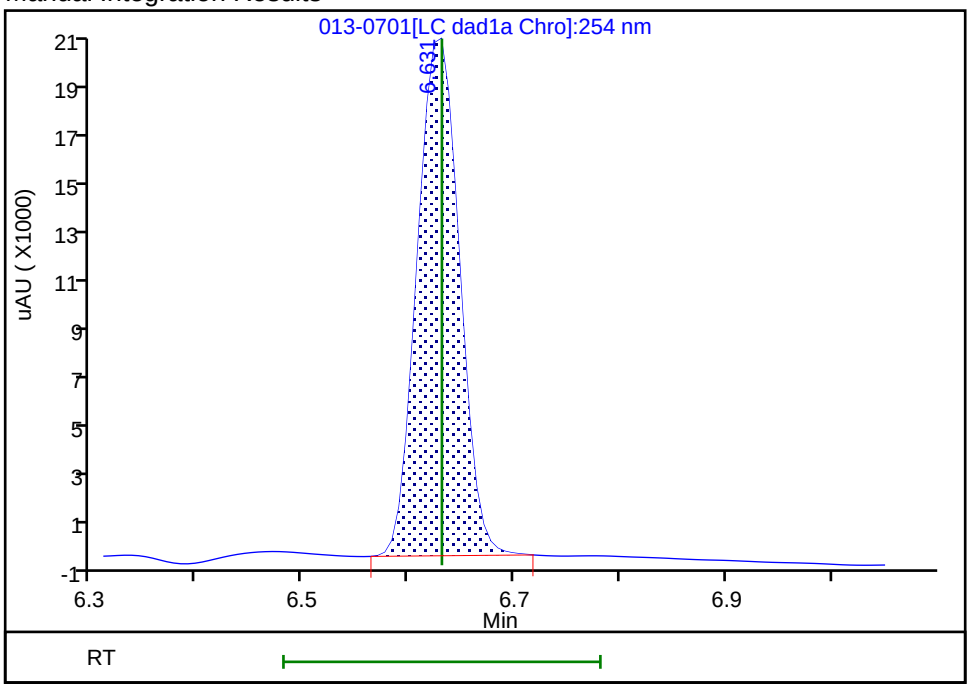
Processing Integration Results

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

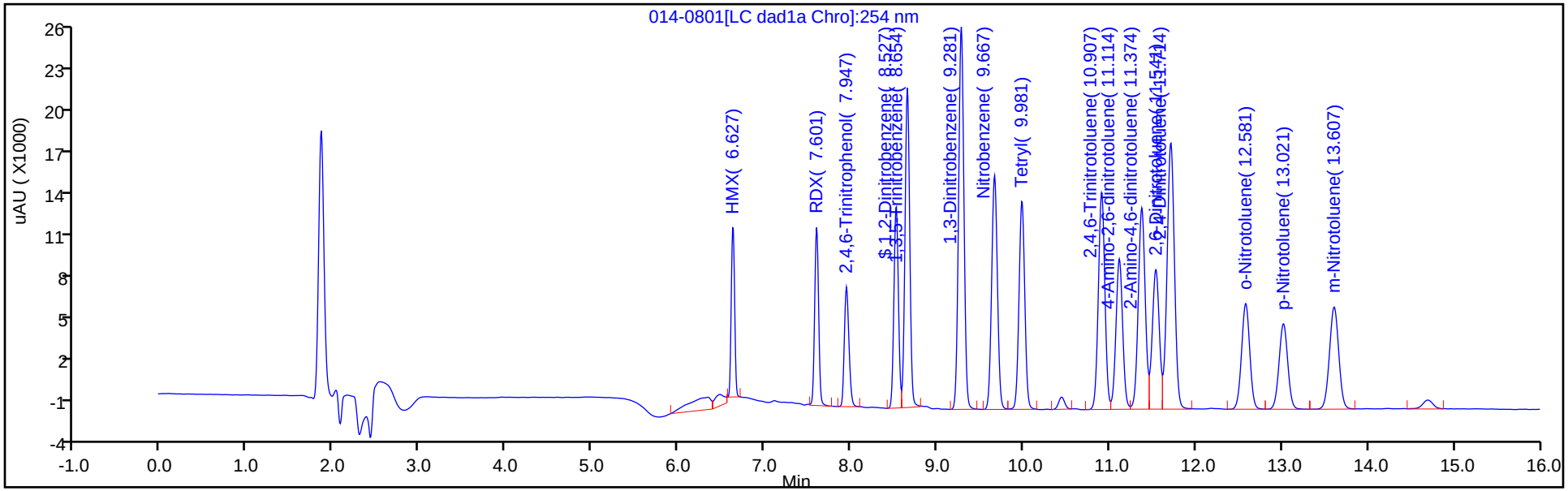
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

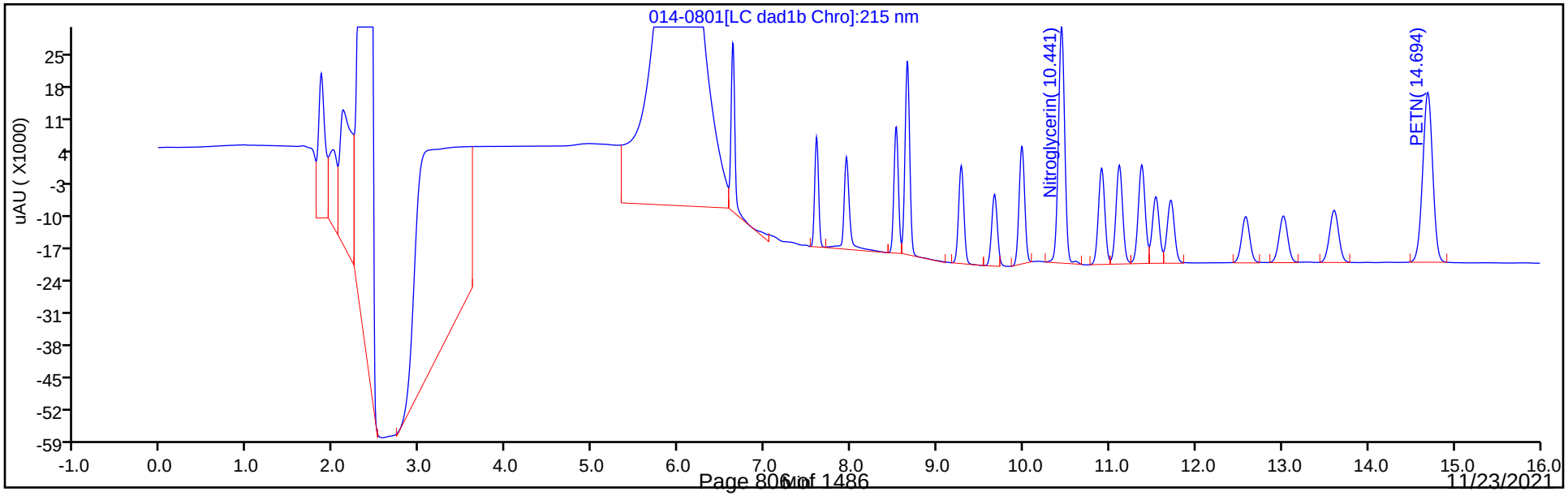
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d

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

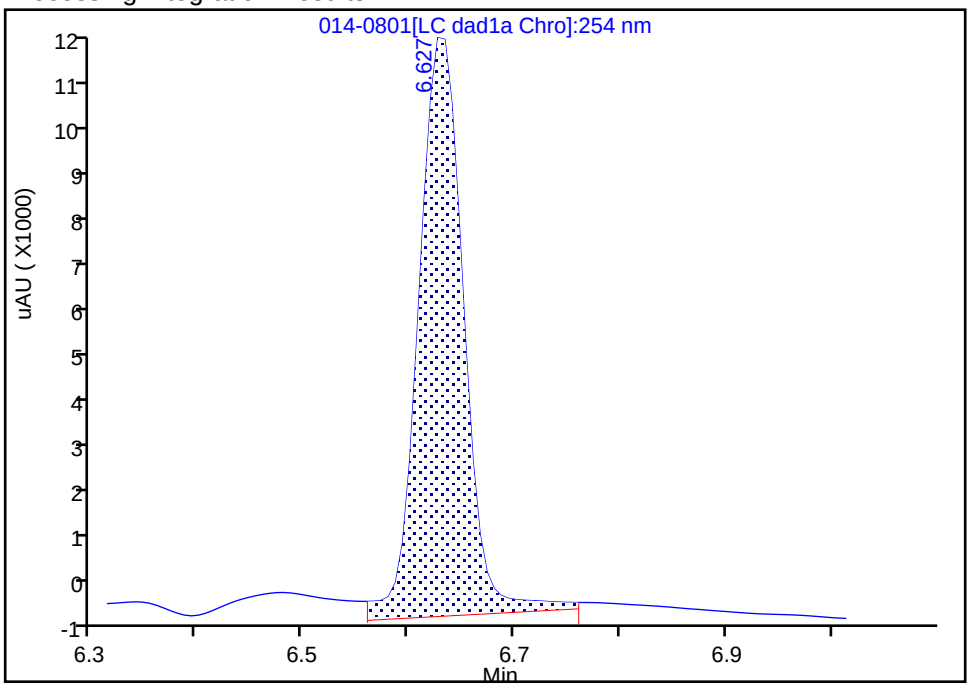
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d				
Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

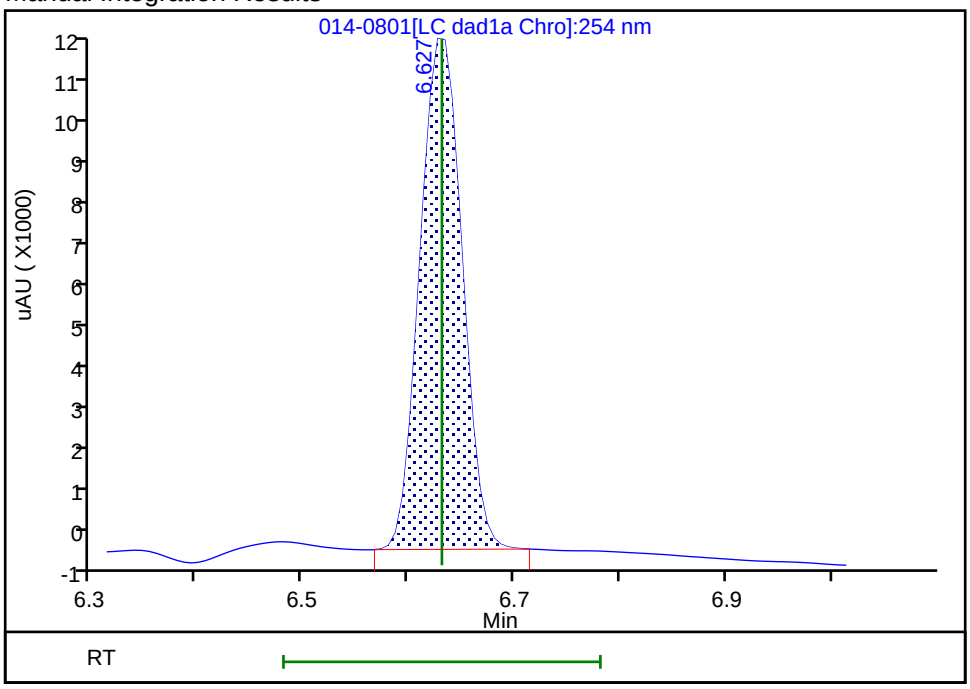
Processing Integration Results

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

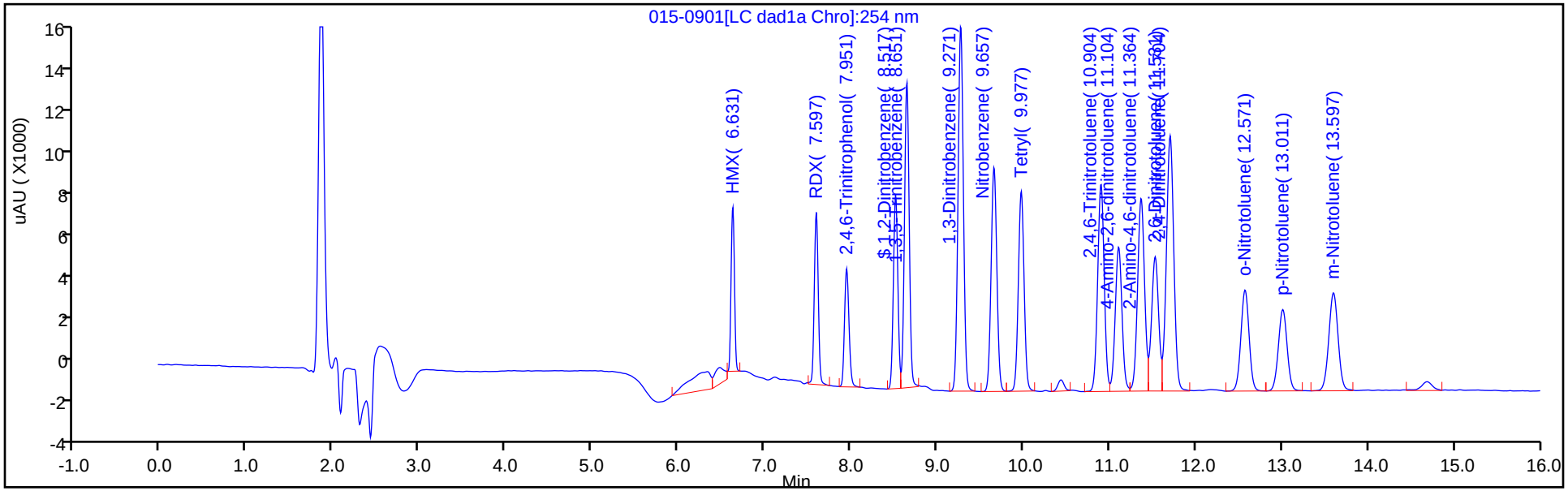
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

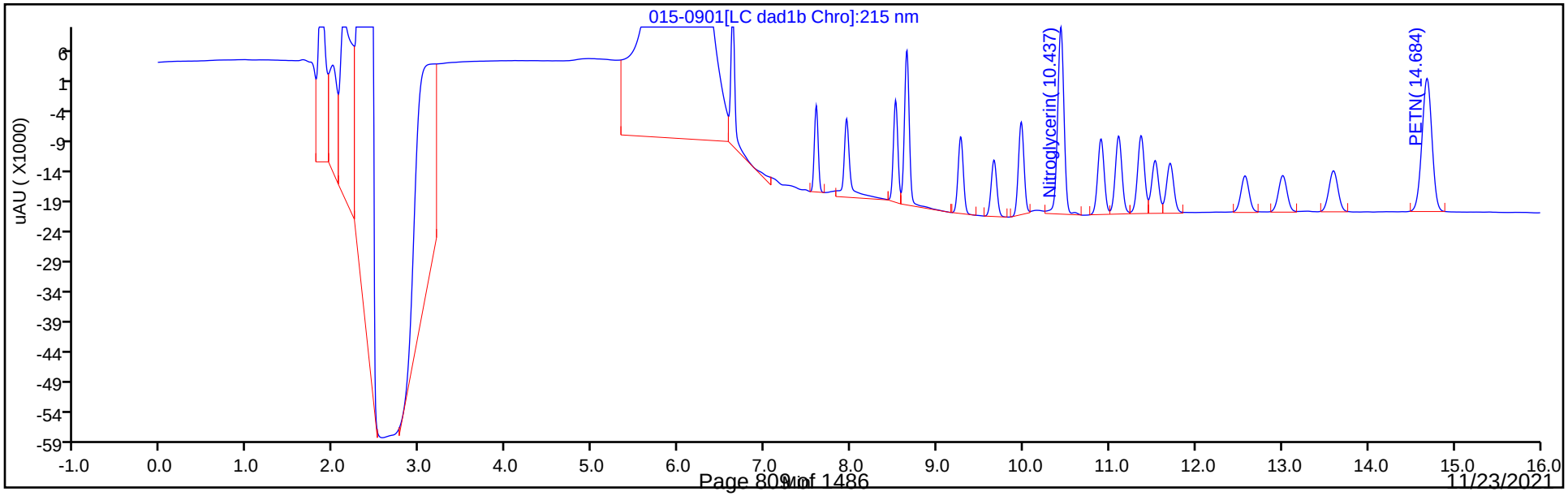
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d

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

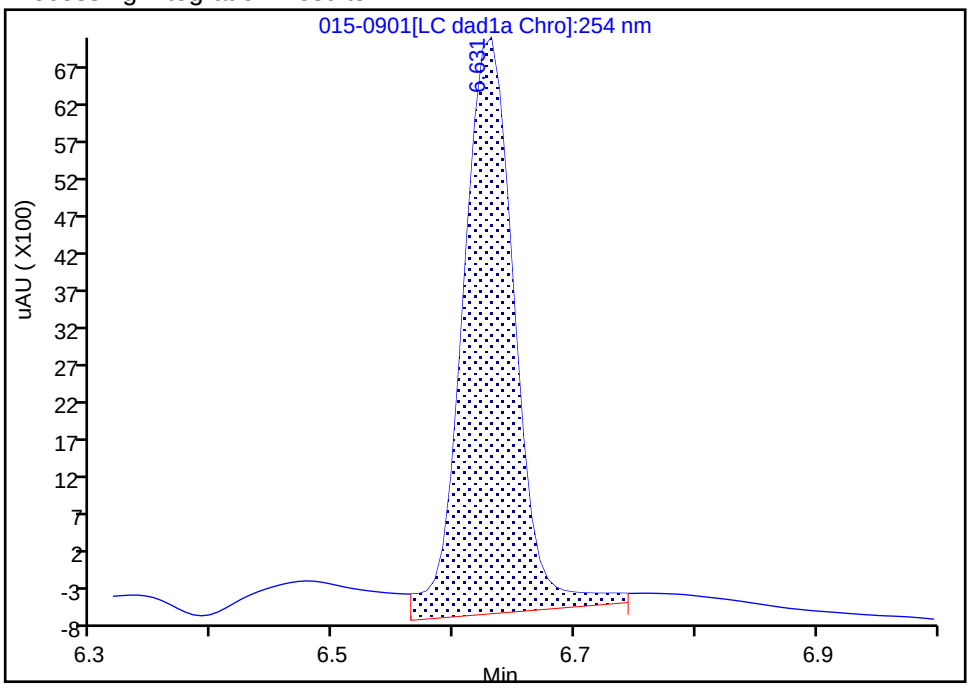
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d				
Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

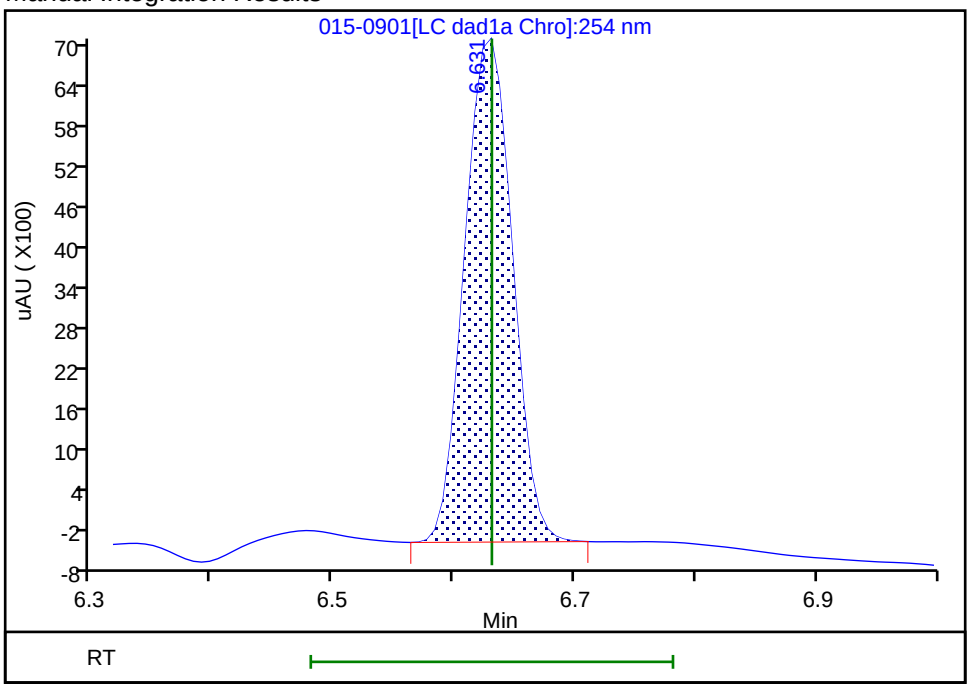
Processing Integration Results

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

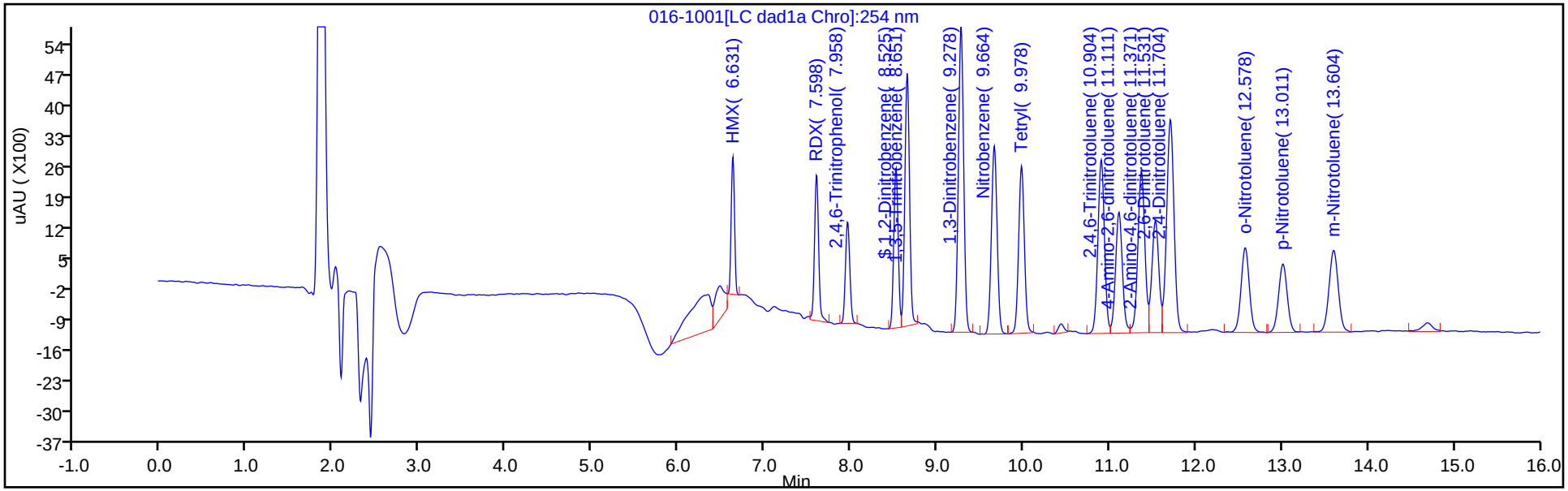
Report Date: 04-May-2021 13:25:09 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

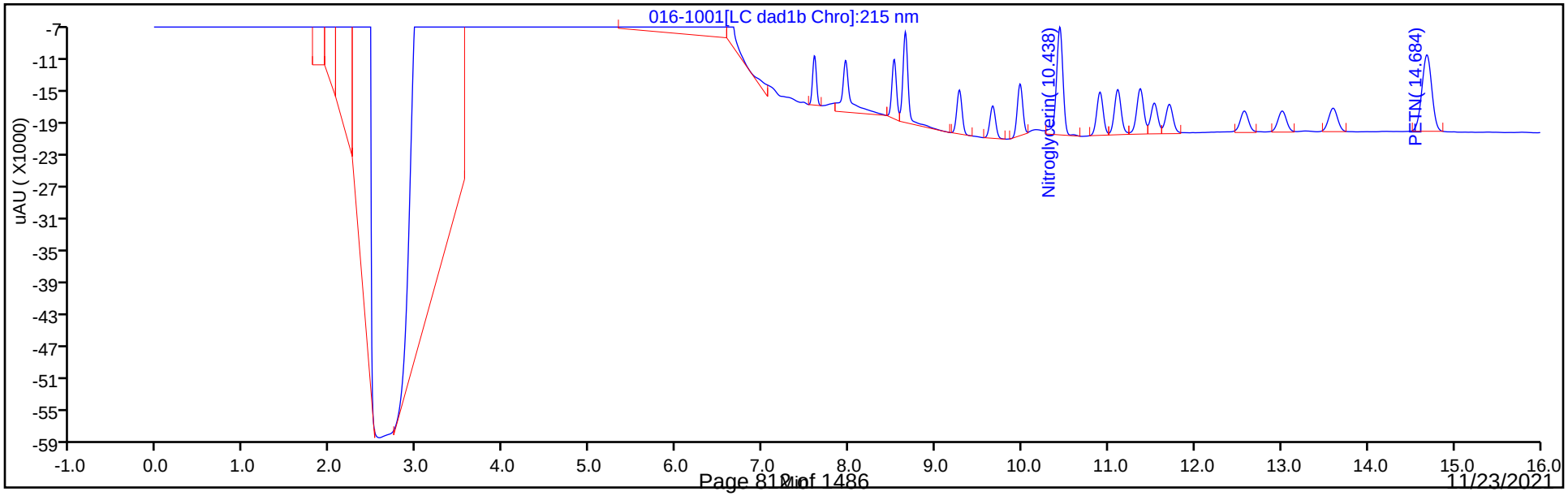
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d

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

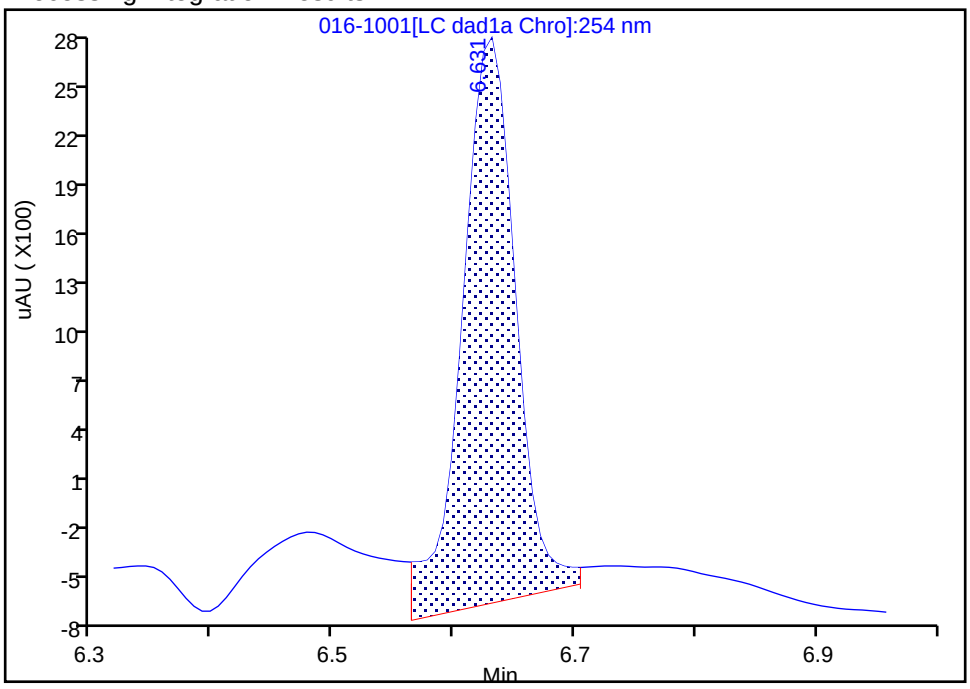
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d				
Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

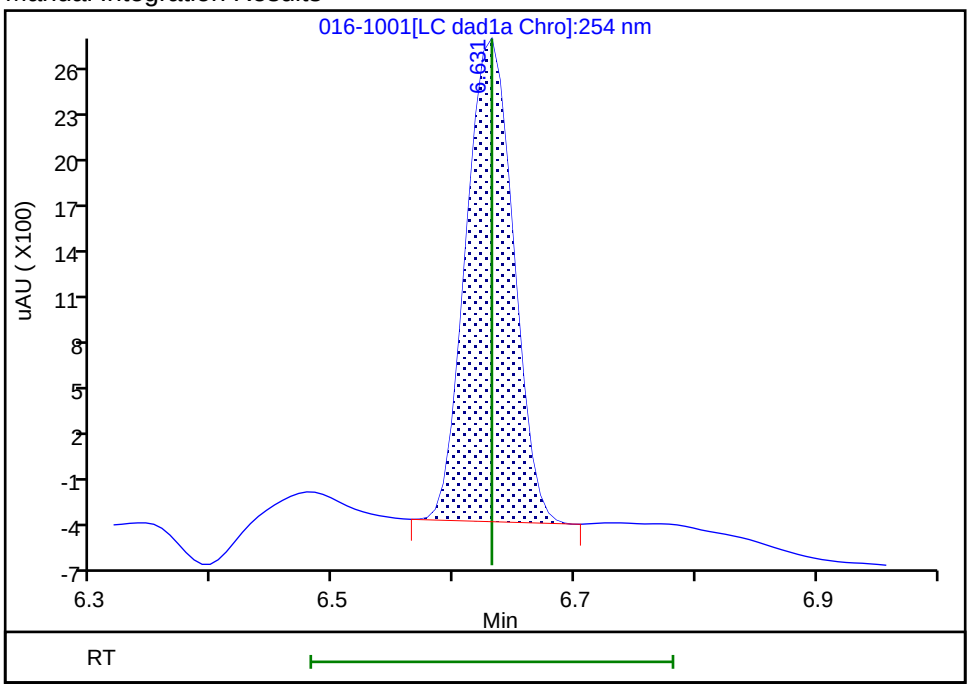
Processing Integration Results

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

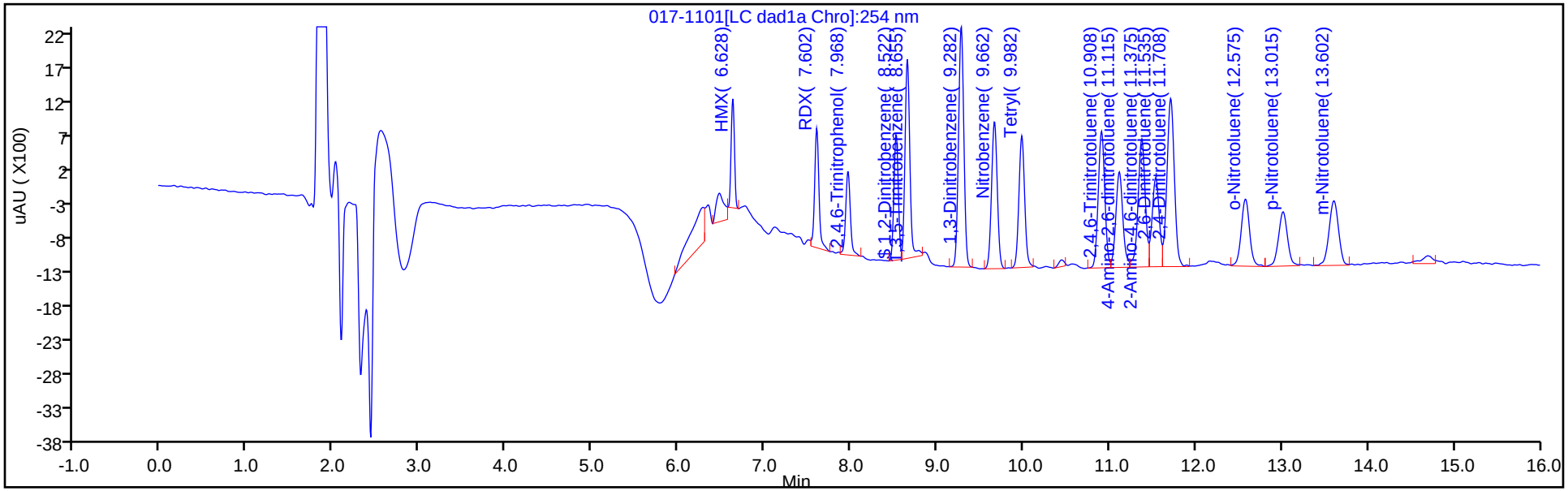
Report Date: 04-May-2021 13:25:10 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

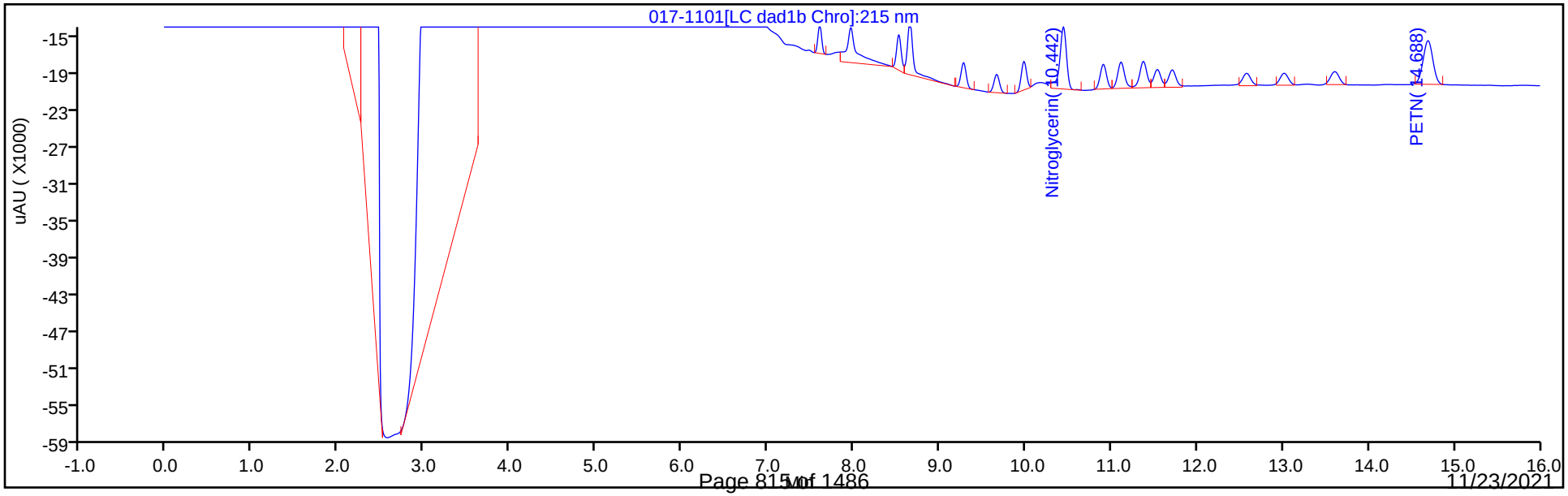
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d

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

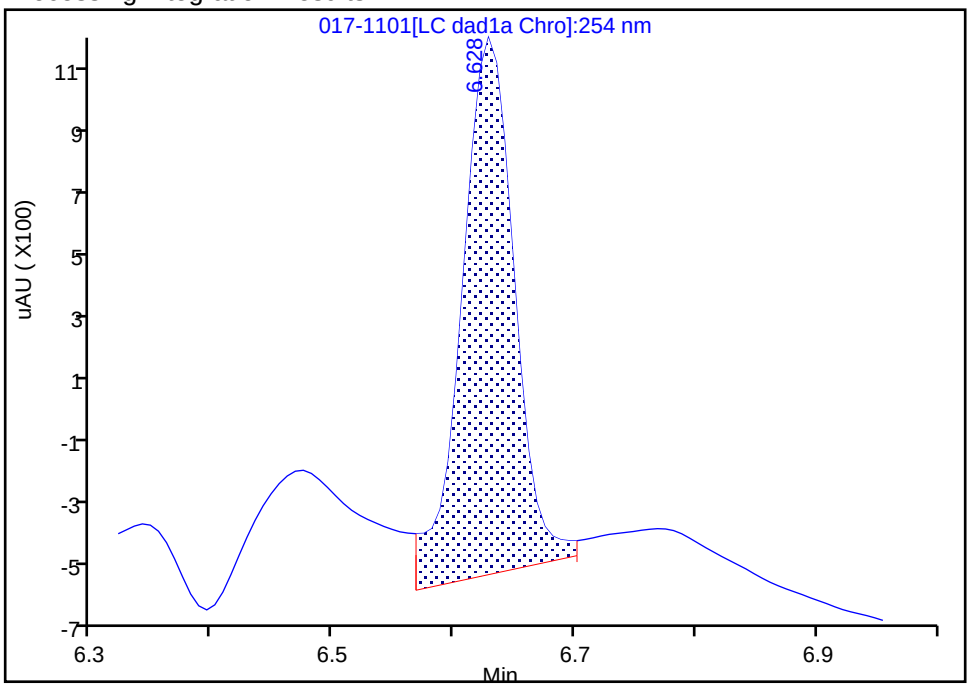
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d
Injection Date: 01-May-2021 20:18:45 Instrument ID: CHHPLC_X3
Lims ID: IC INT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

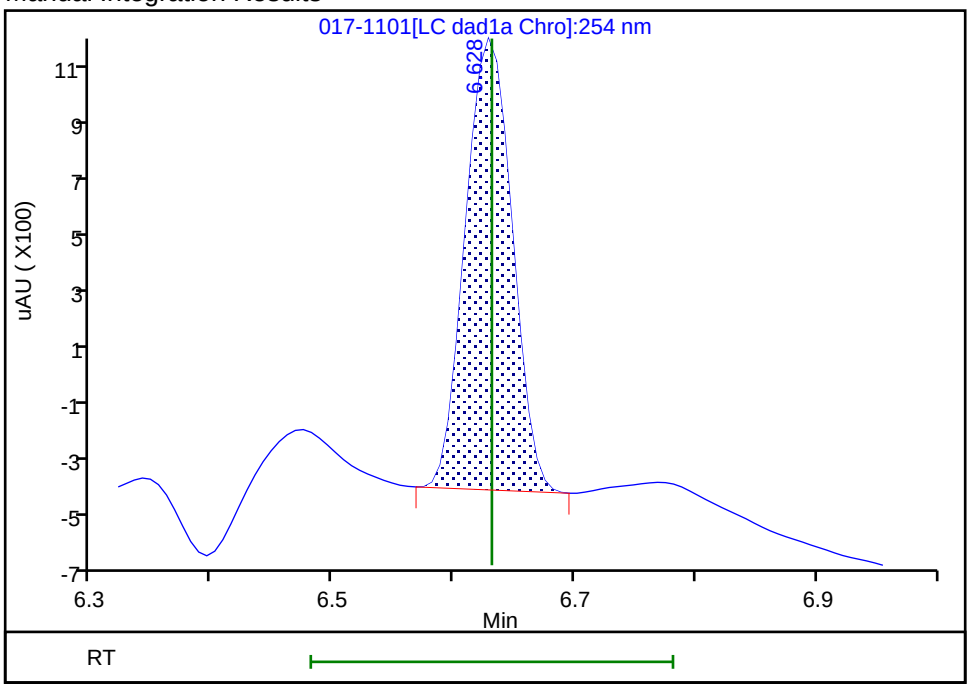
Processing Integration Results

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

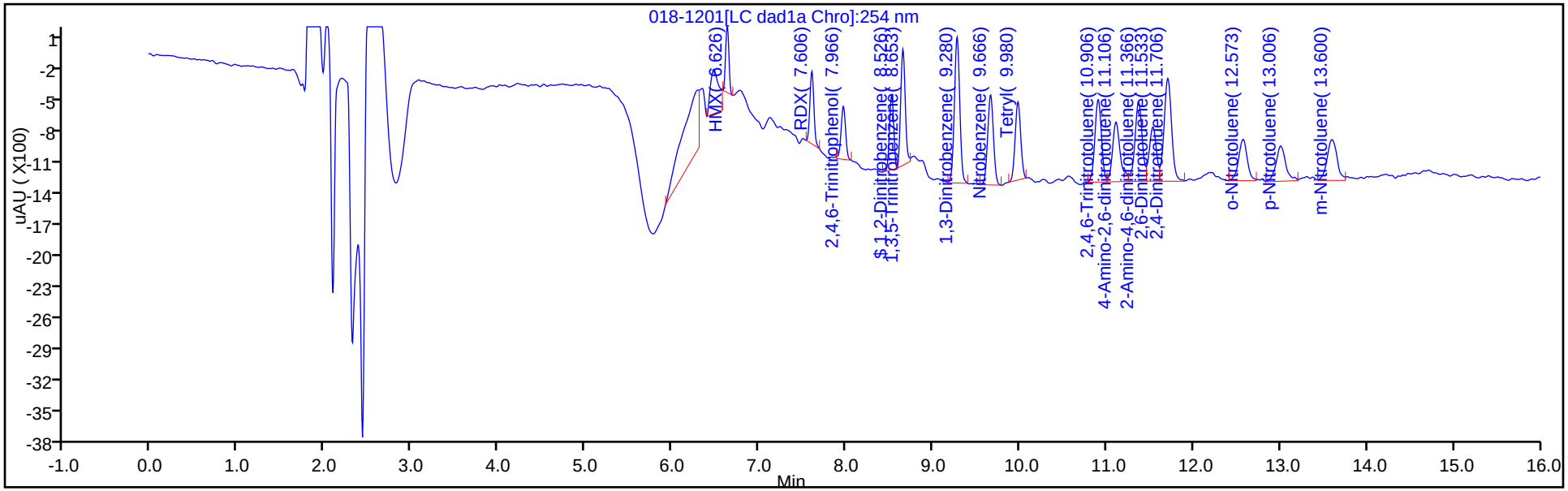
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

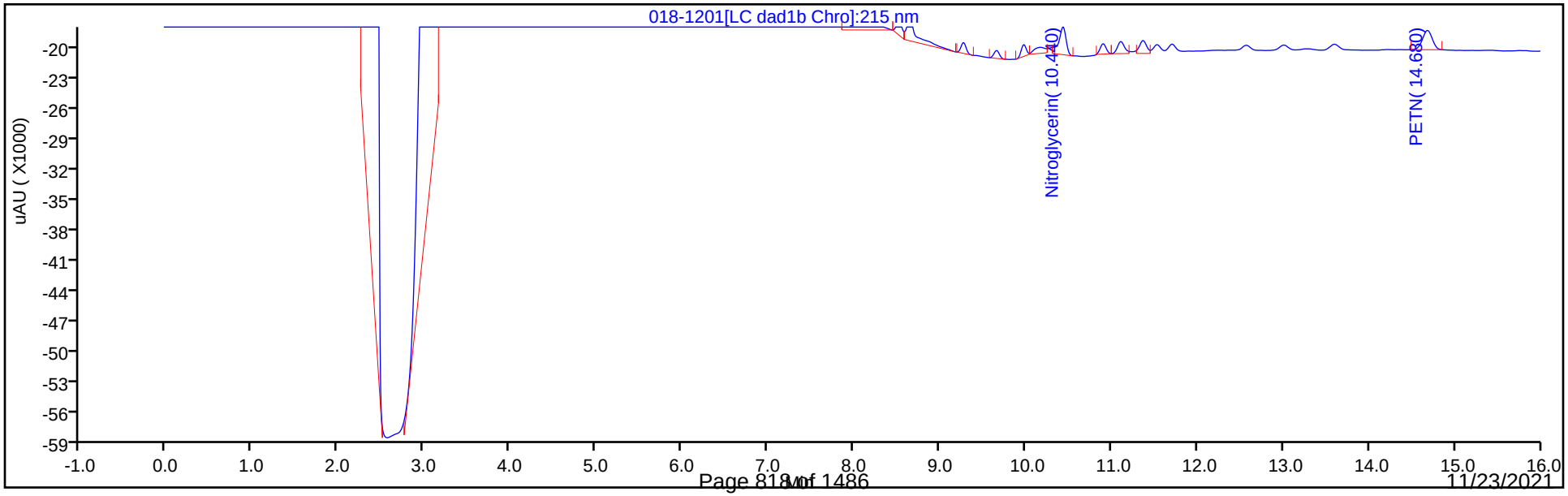
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d

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

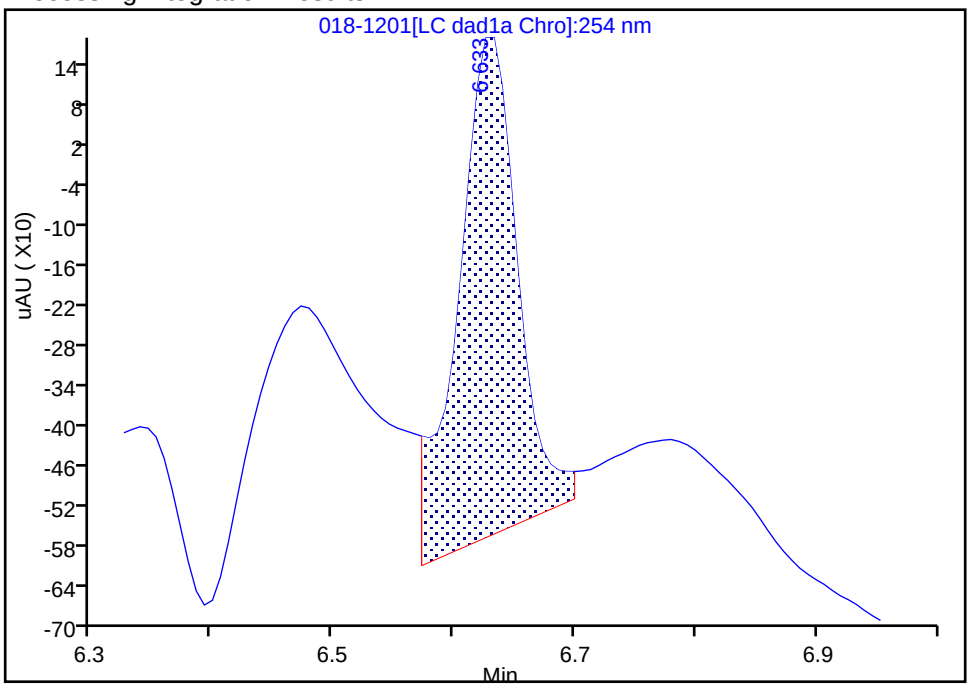
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

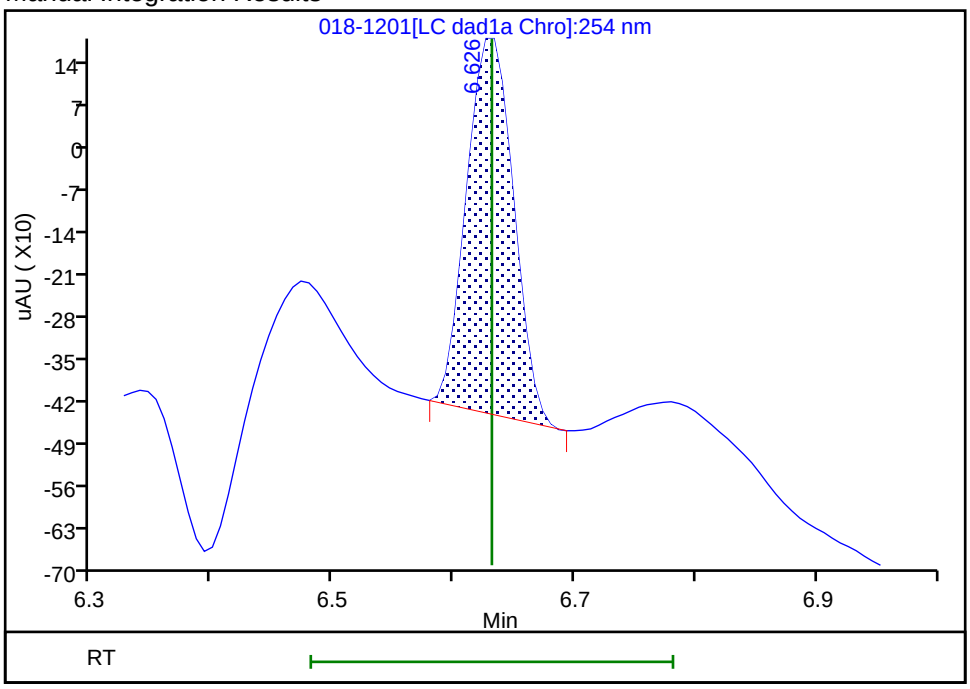
Processing Integration Results

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

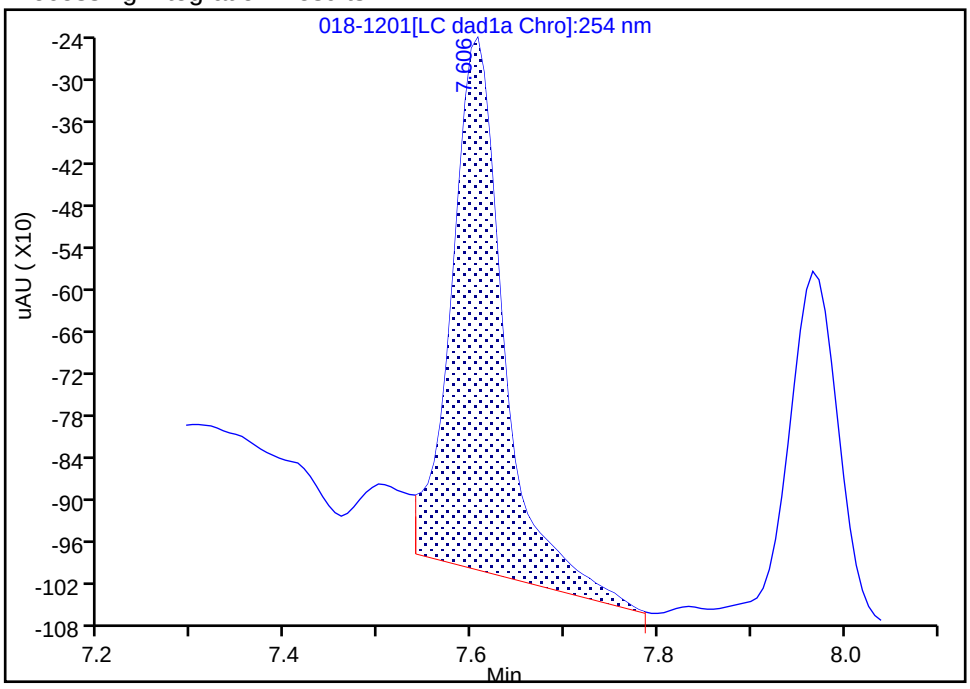
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

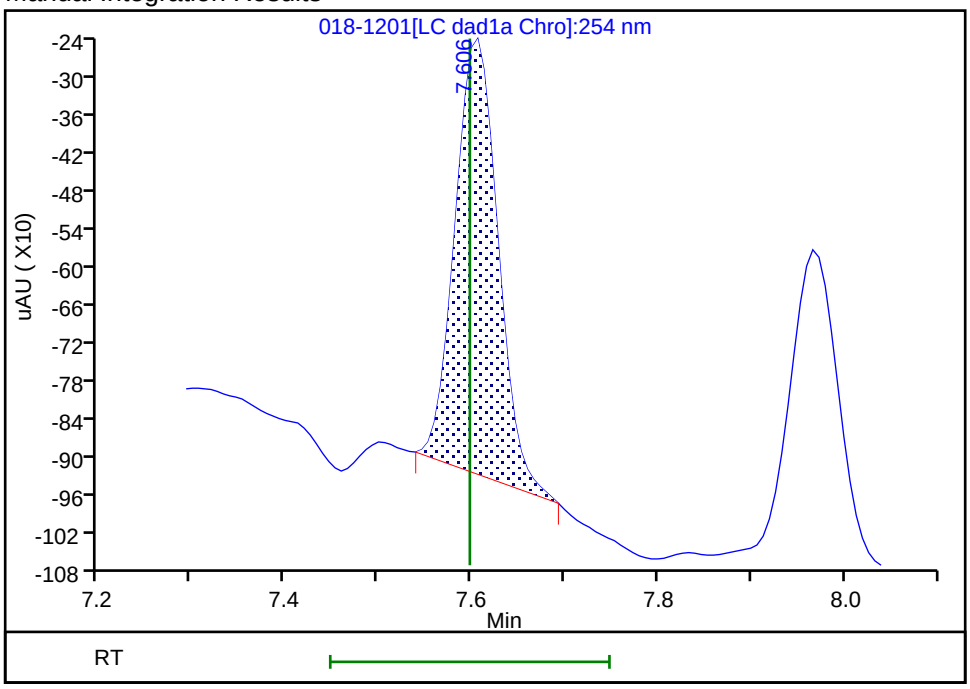
Processing Integration Results

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

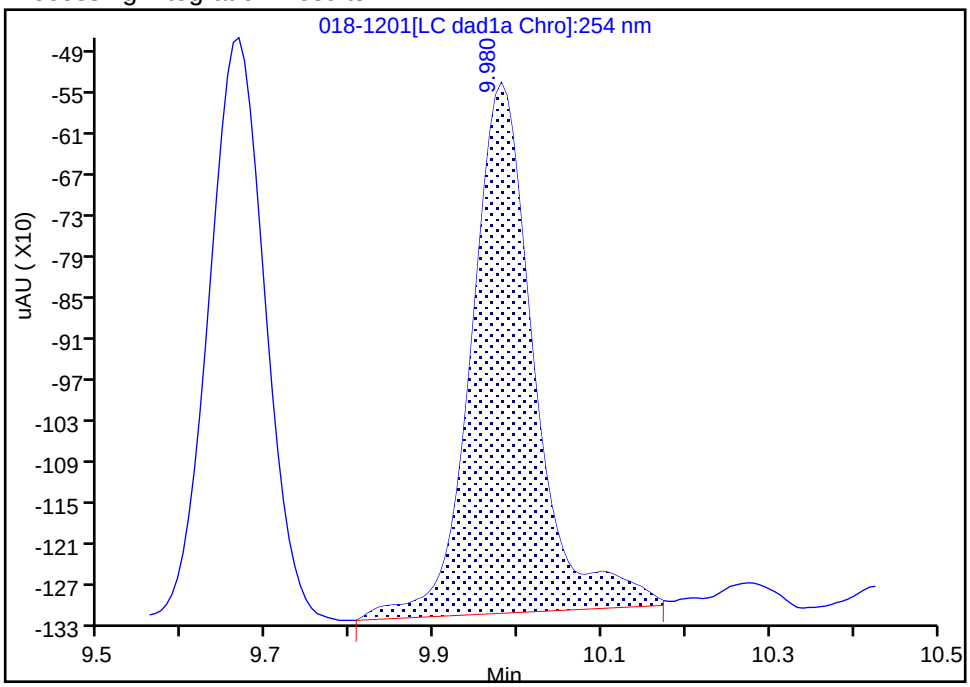
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

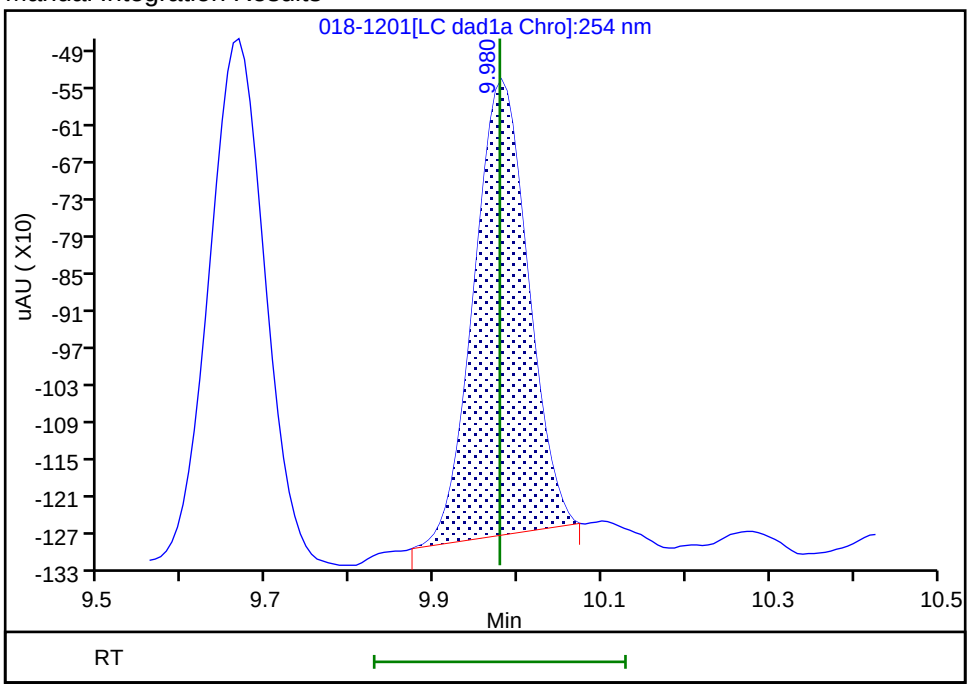
Processing Integration Results

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

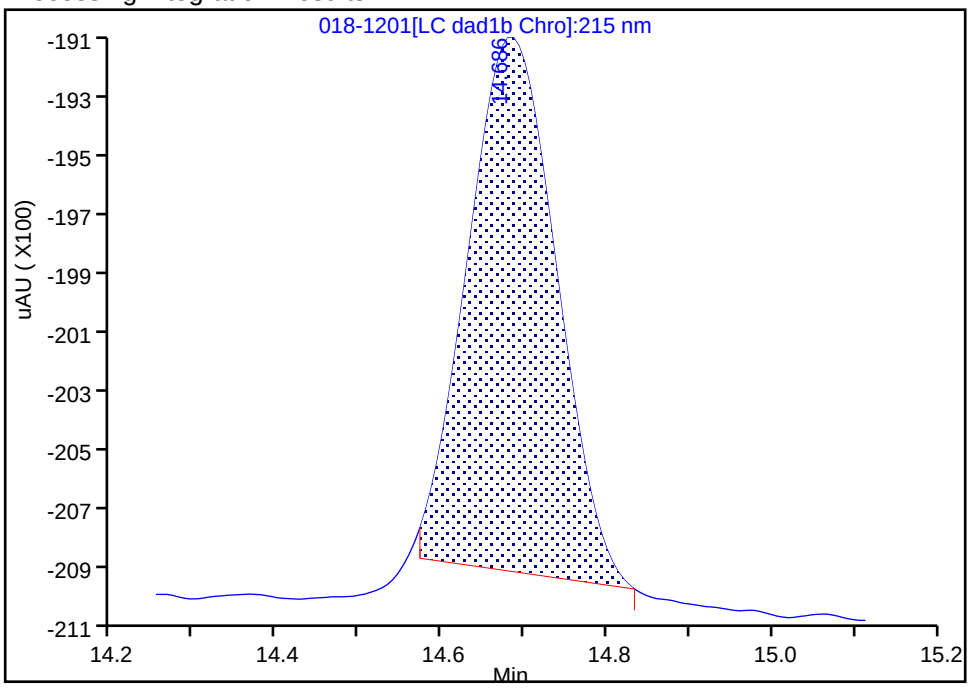
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

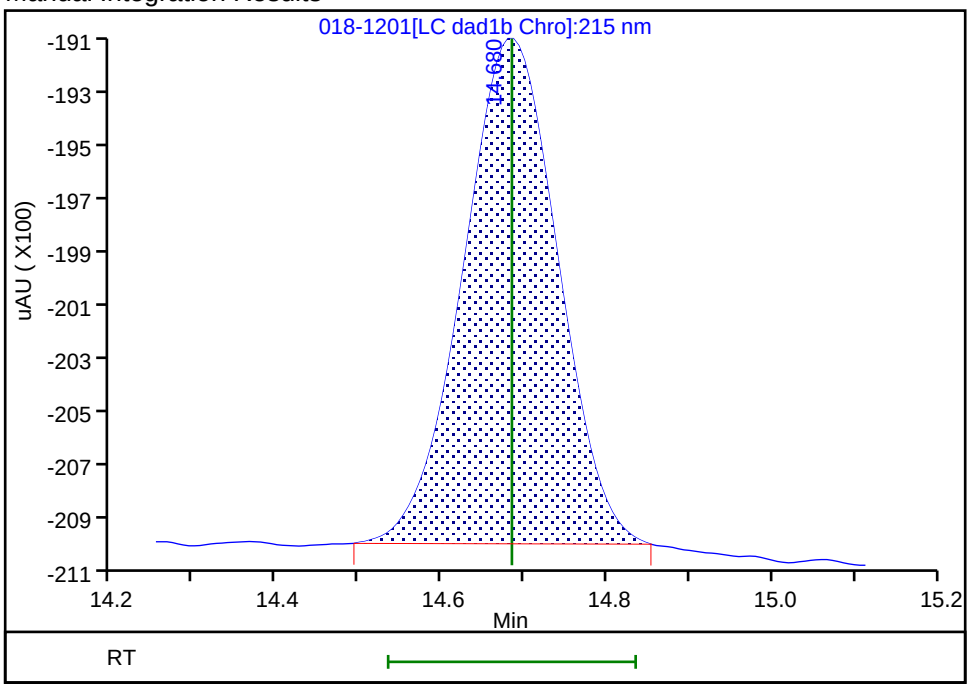
Processing Integration Results

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

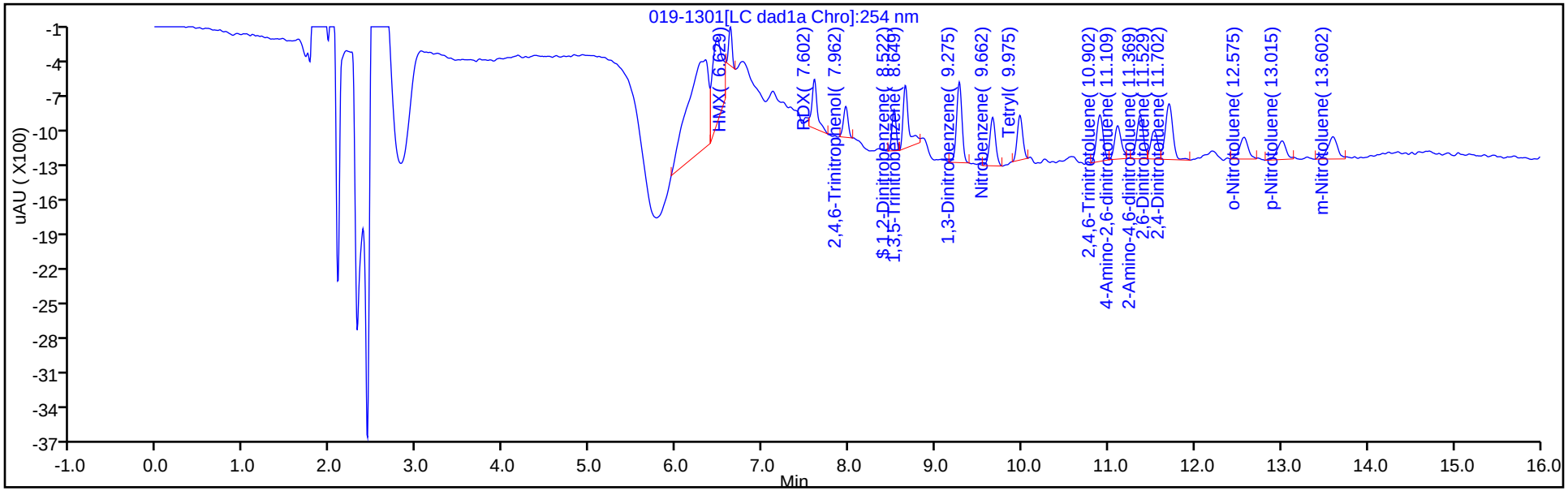
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

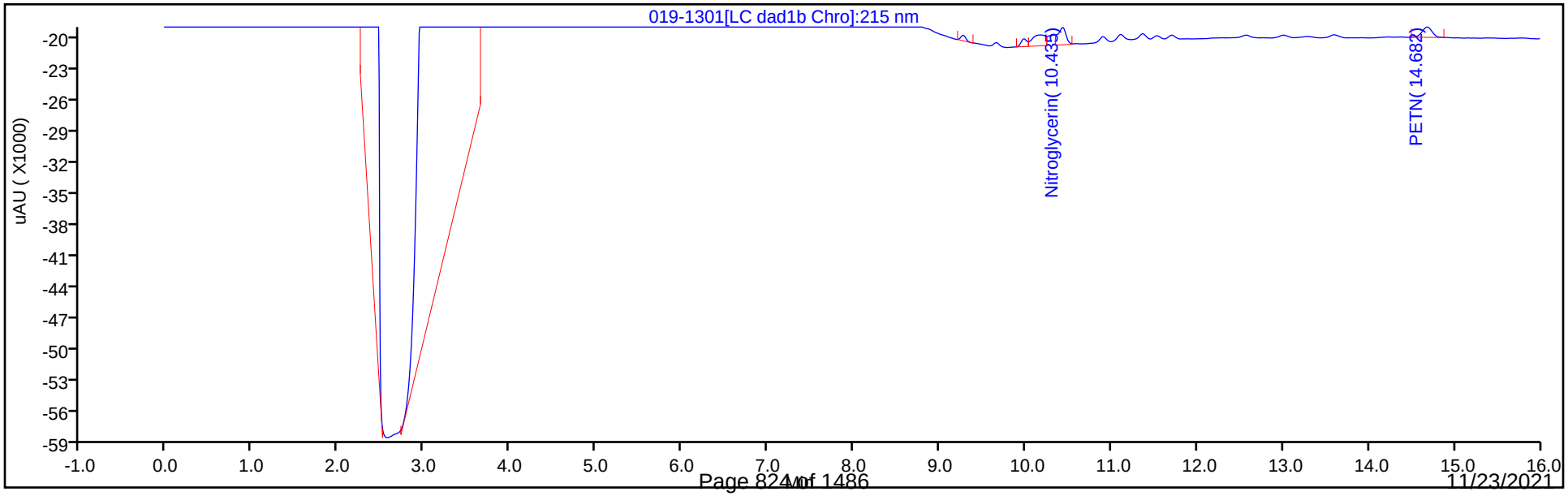
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d

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

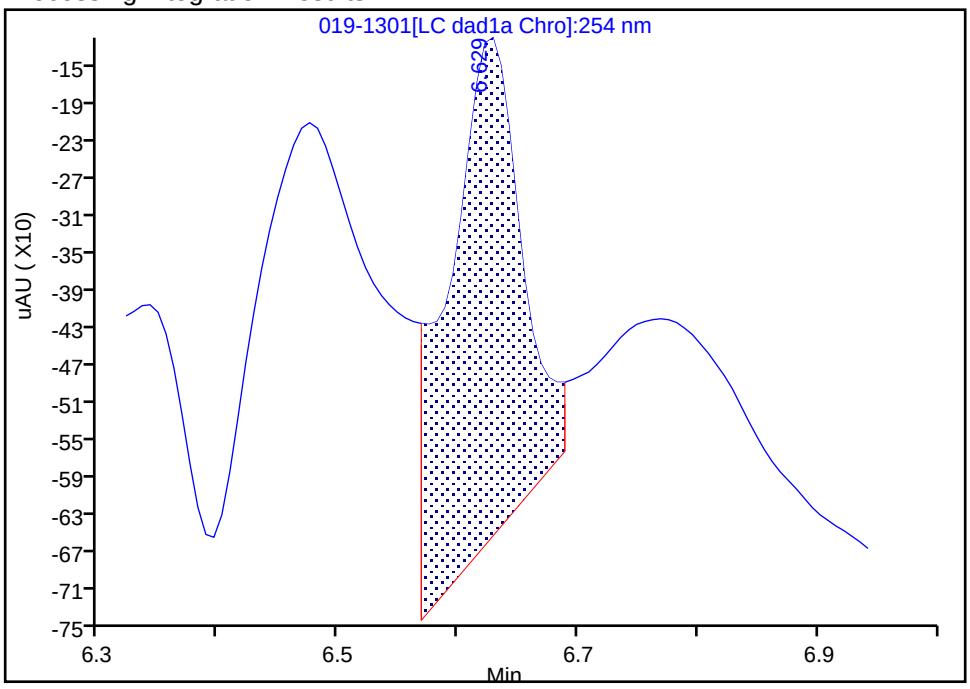
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d				
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

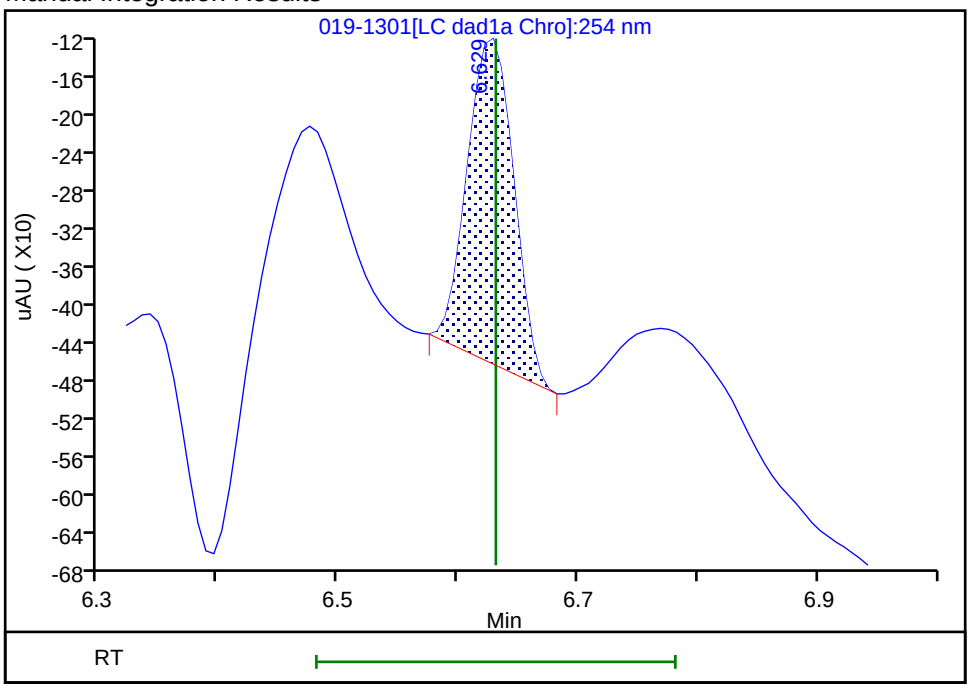
Processing Integration Results

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

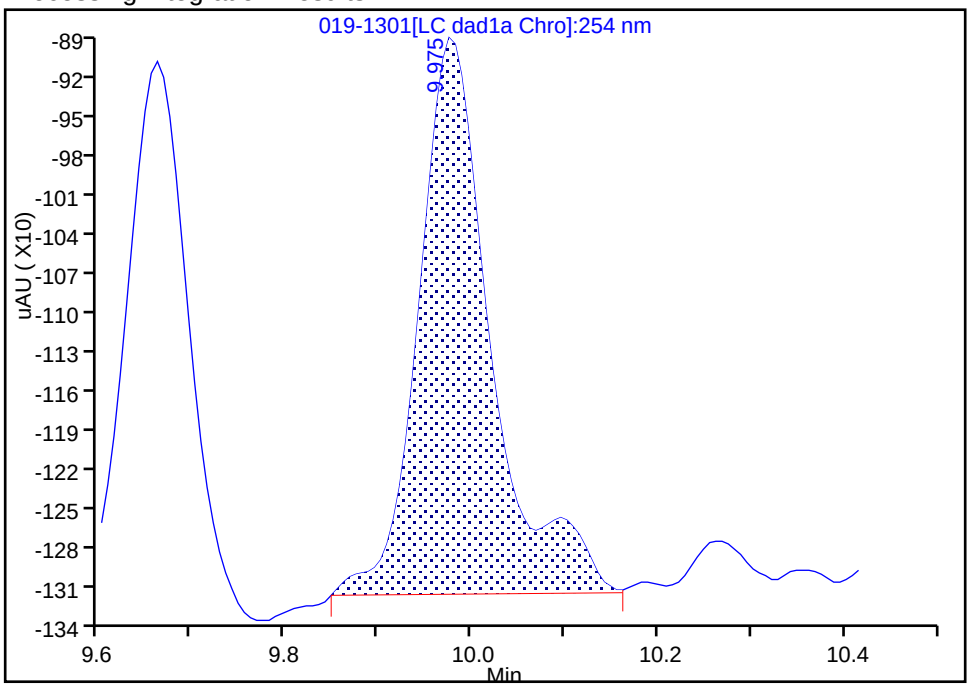
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

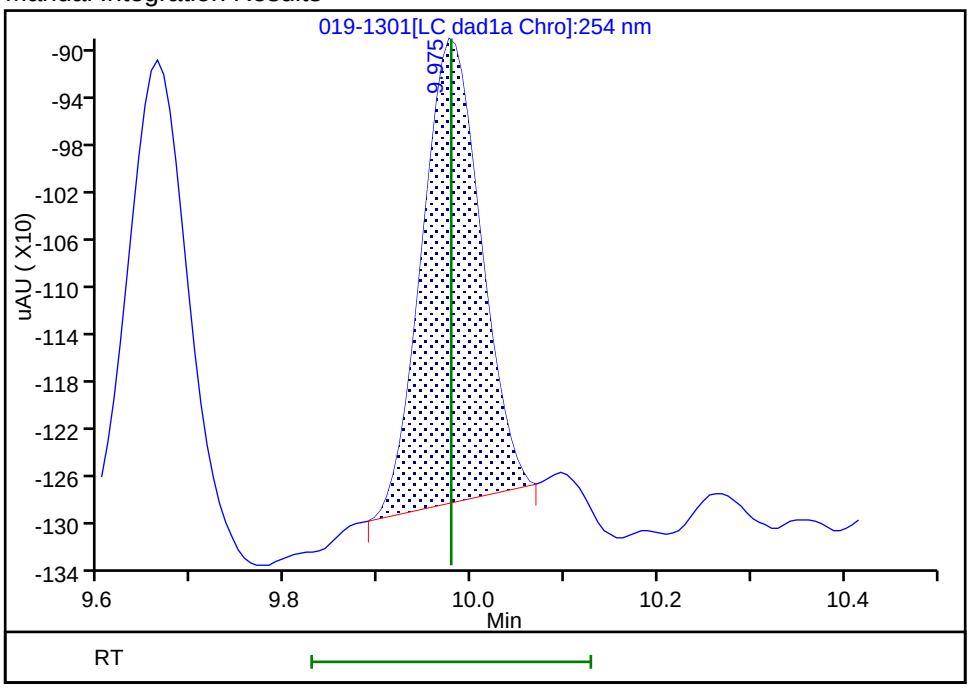
Processing Integration Results

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

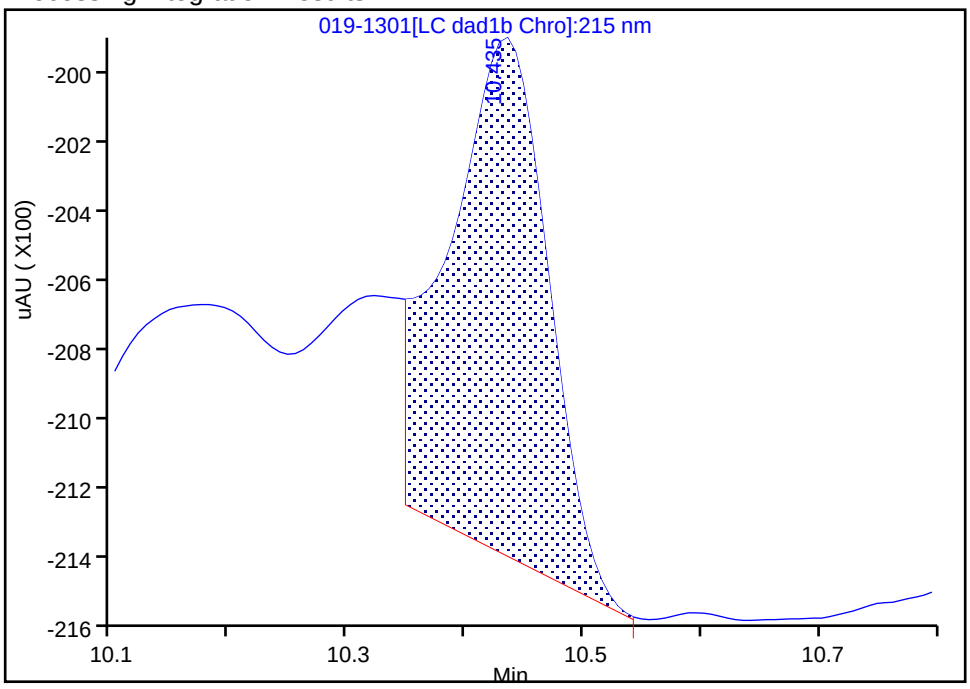
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

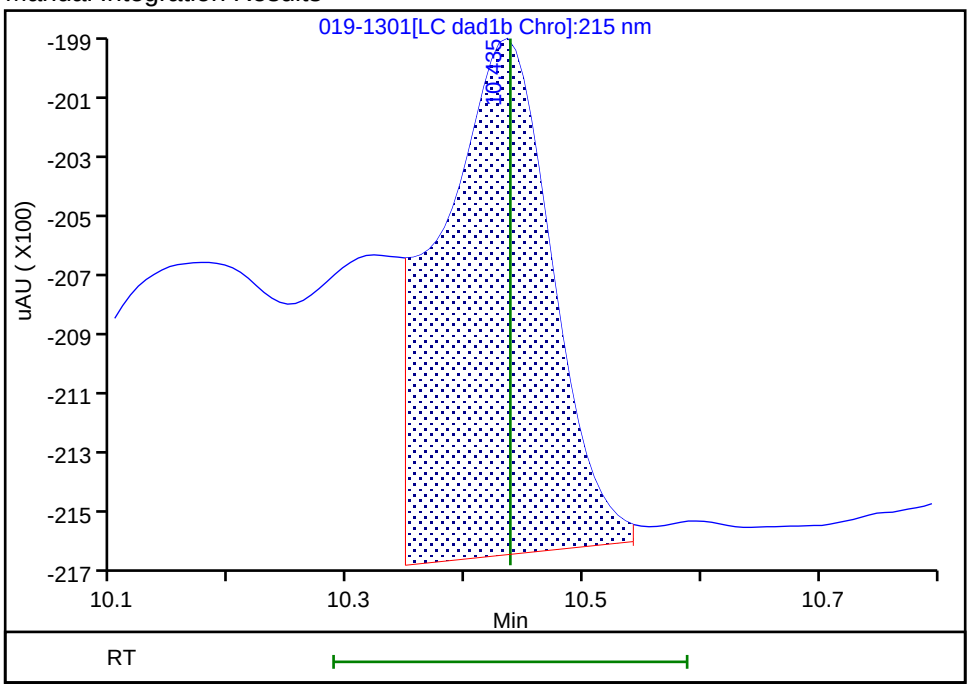
Processing Integration Results

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

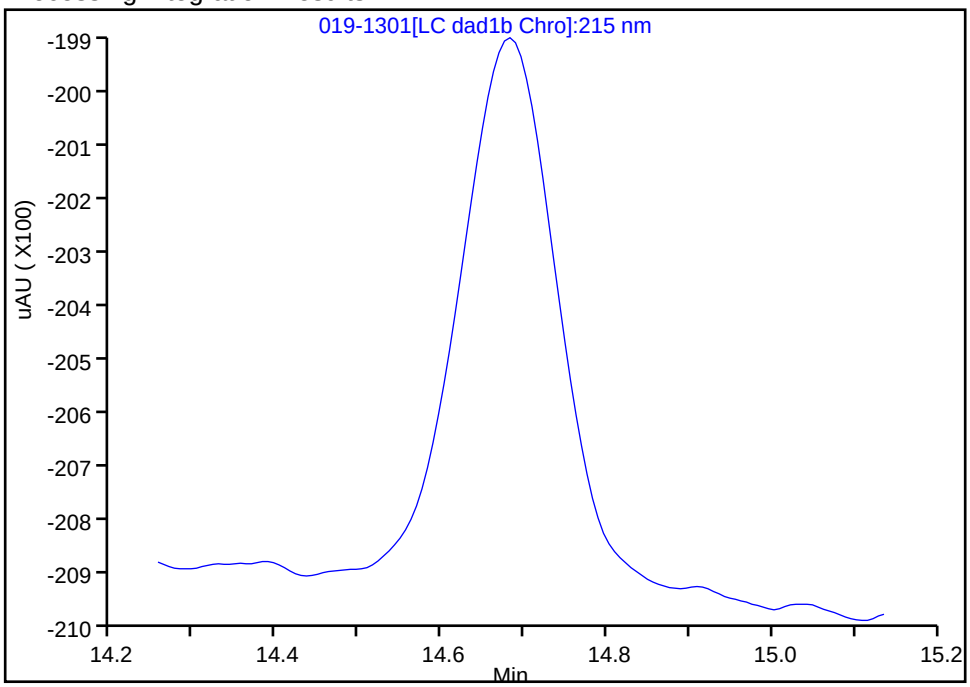
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

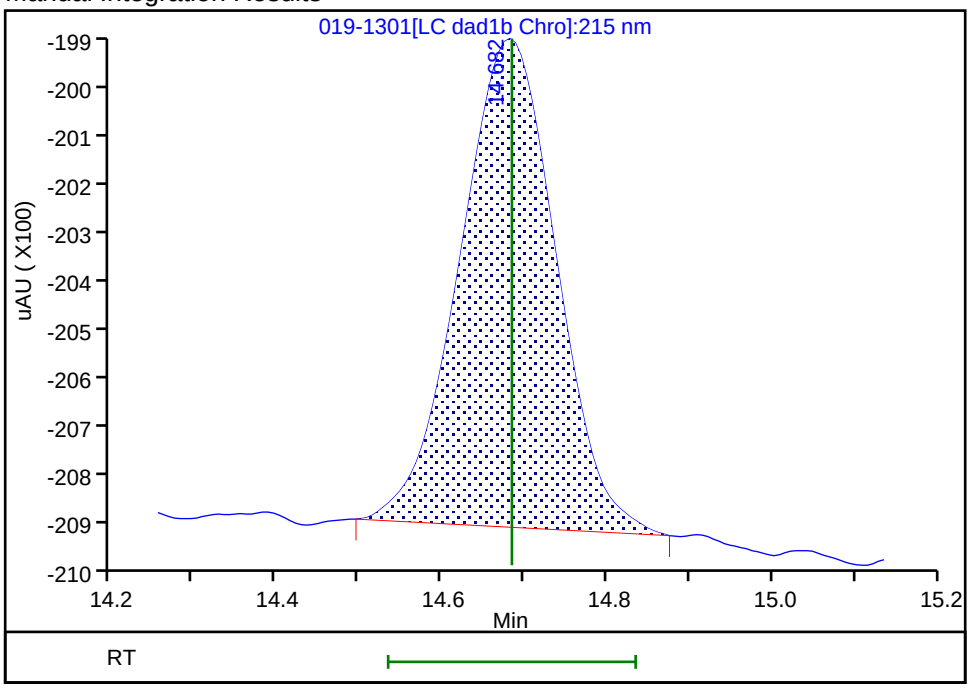
Not Detected
Expected RT: 14.68

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

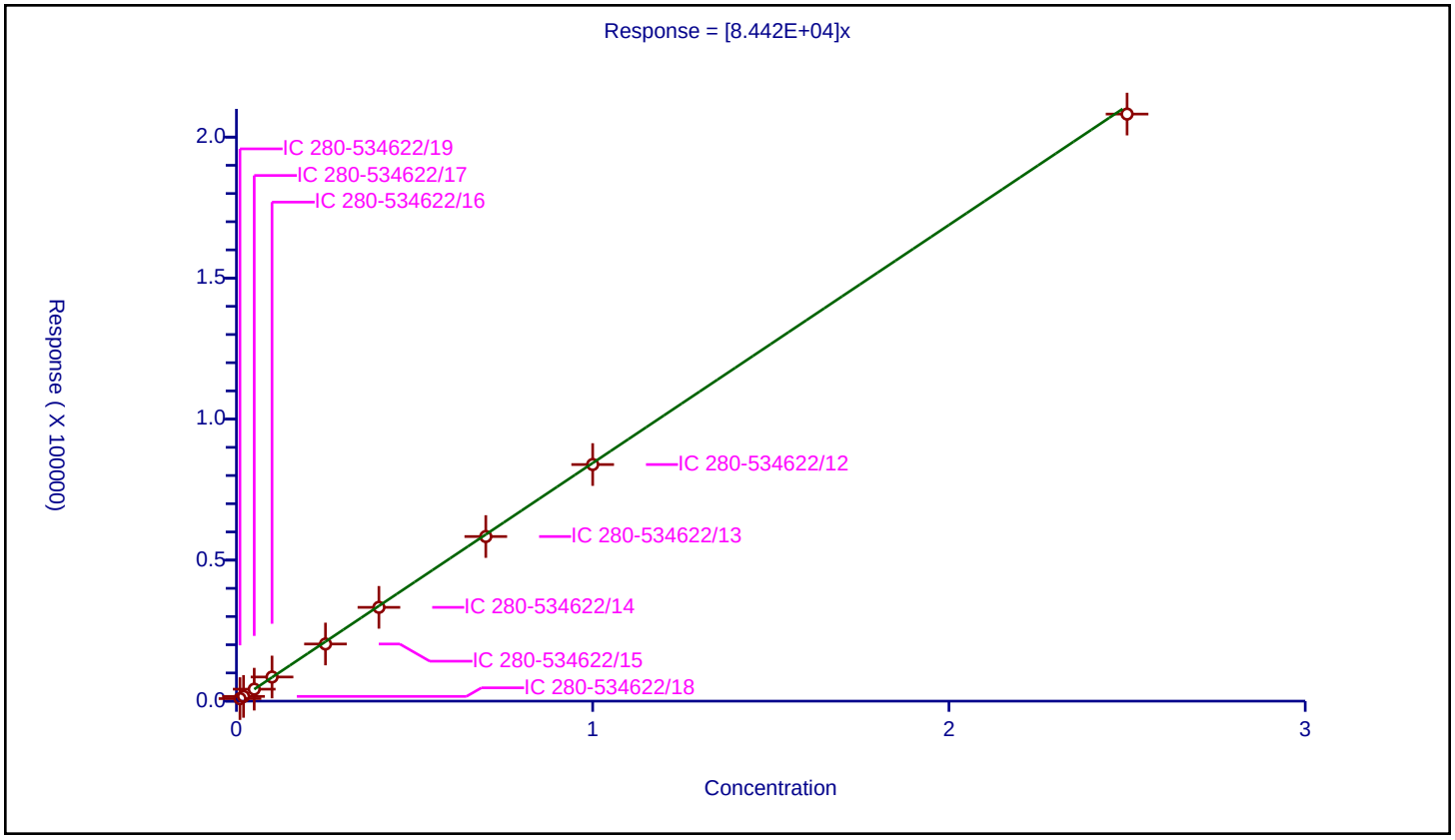
Curve Coefficients

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

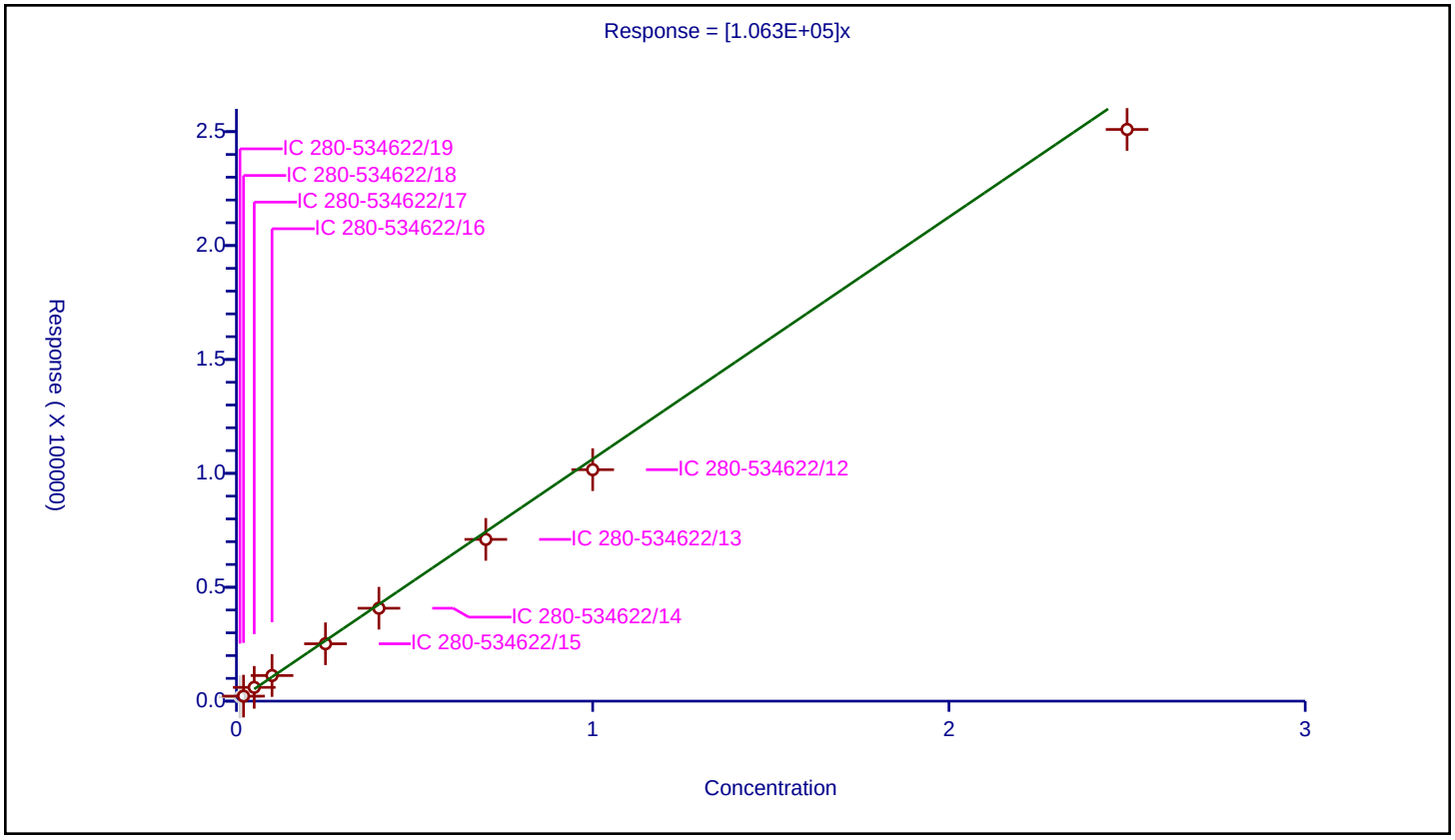
Curve Coefficients

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

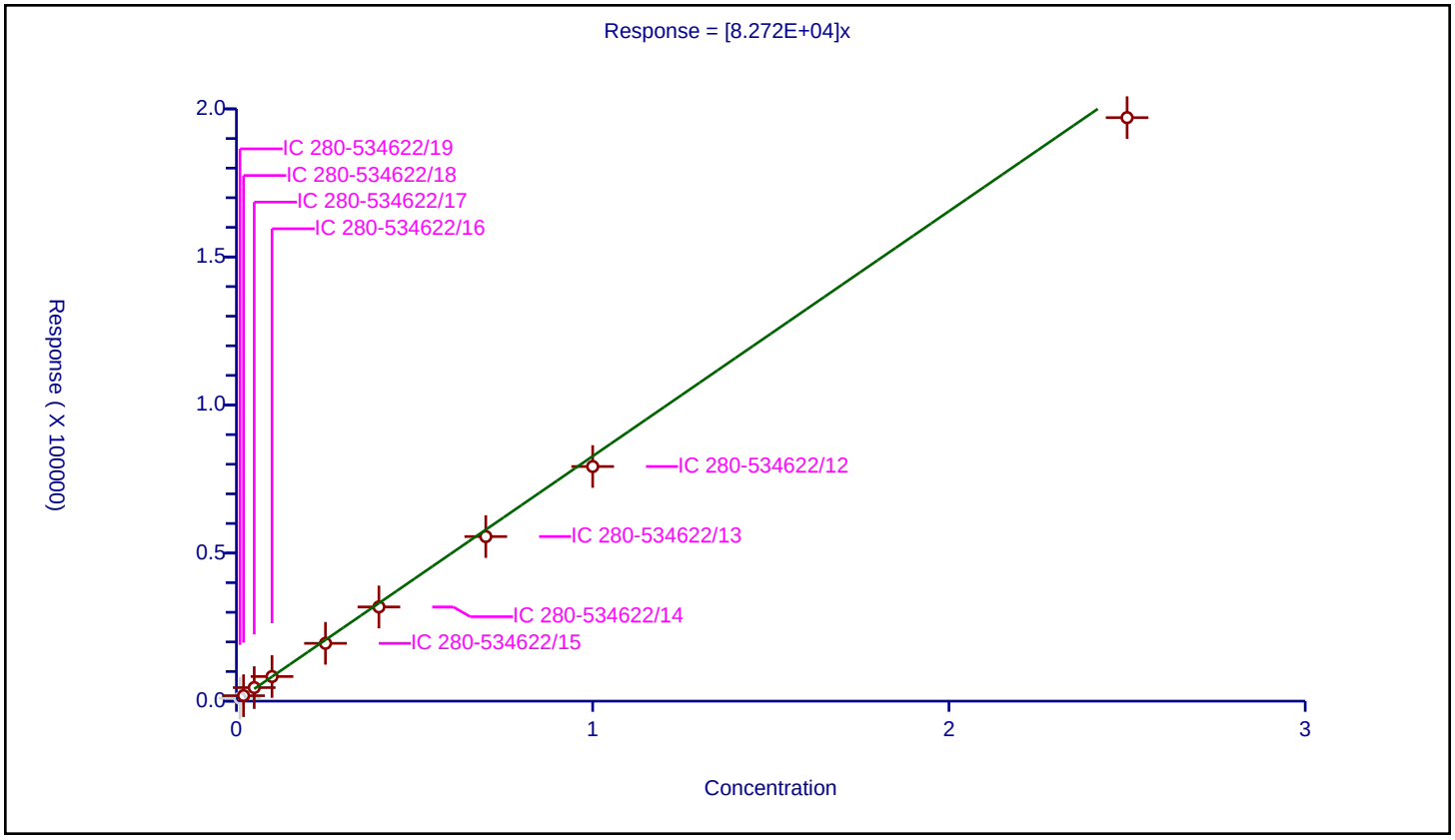
Curve Coefficients

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

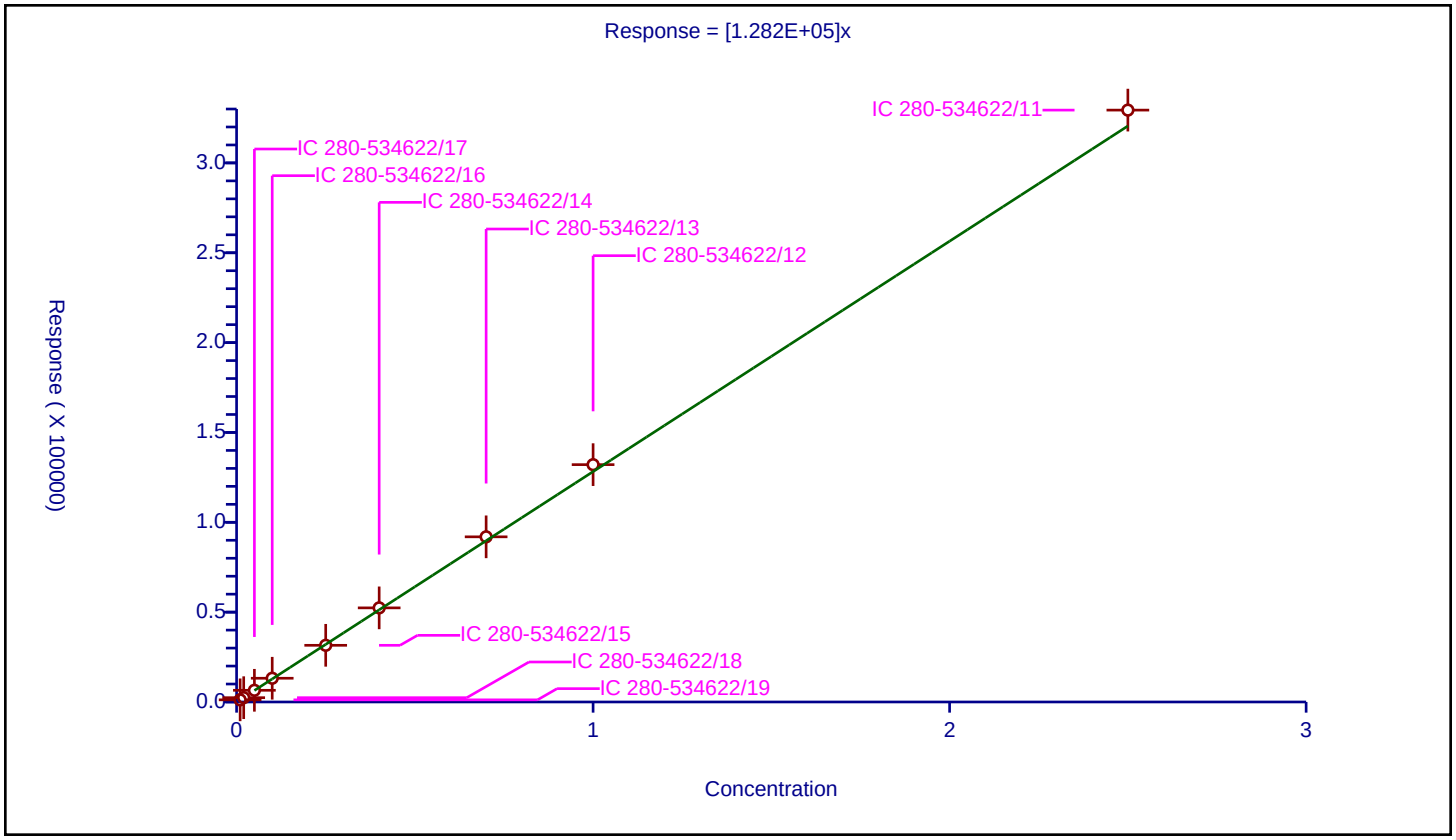
Curve Coefficients

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

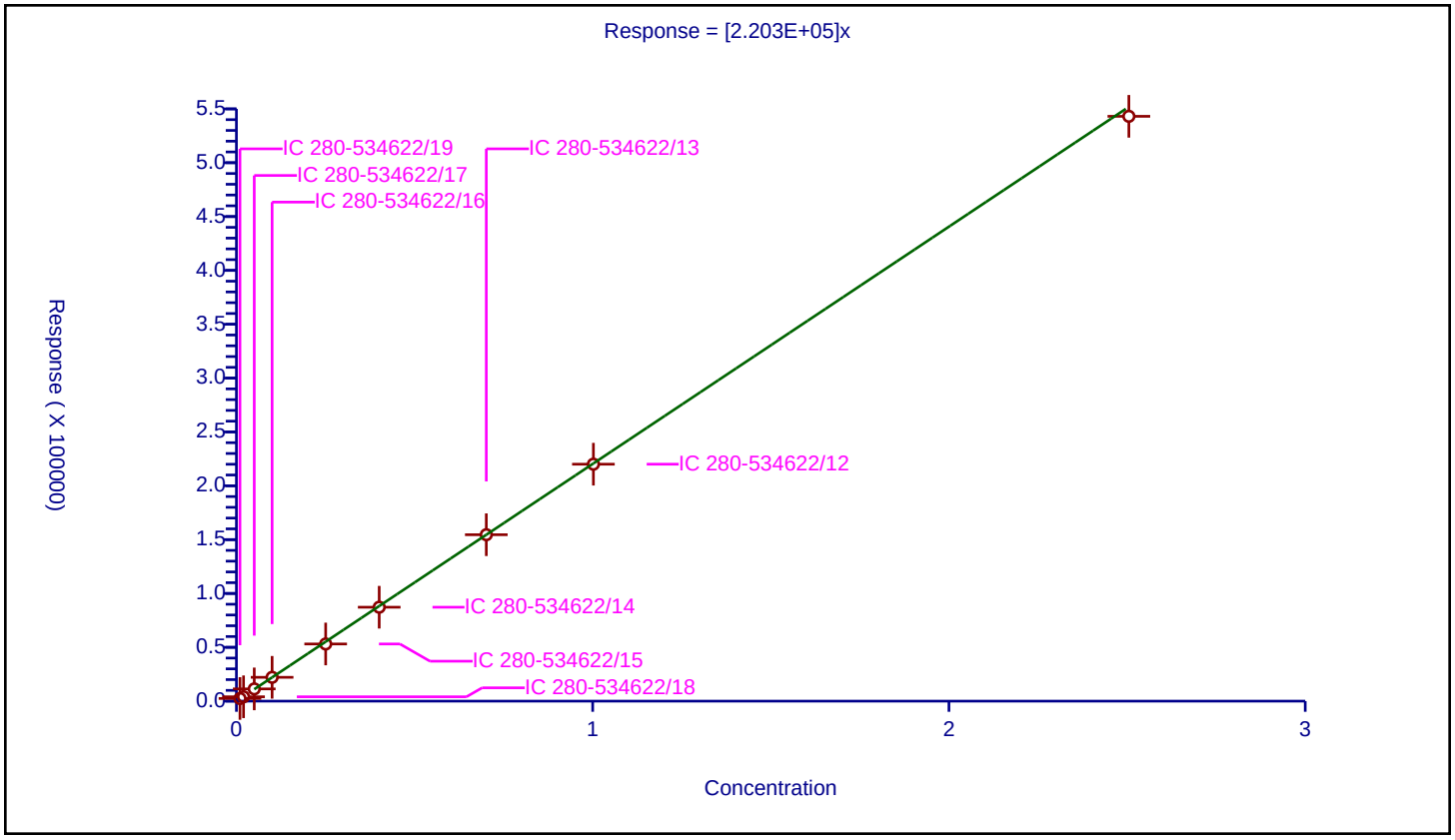
Curve Coefficients

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

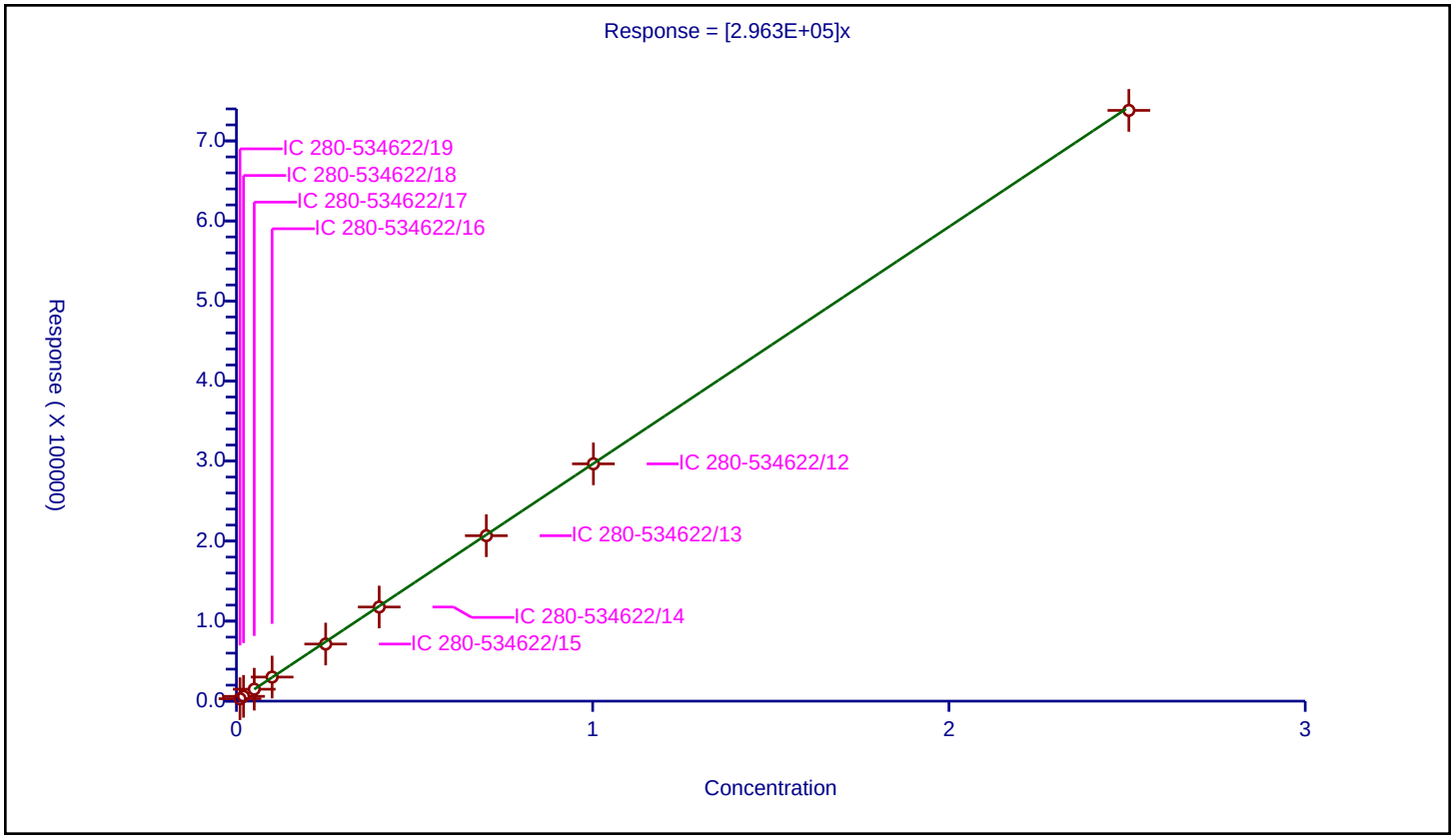
Curve Coefficients

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

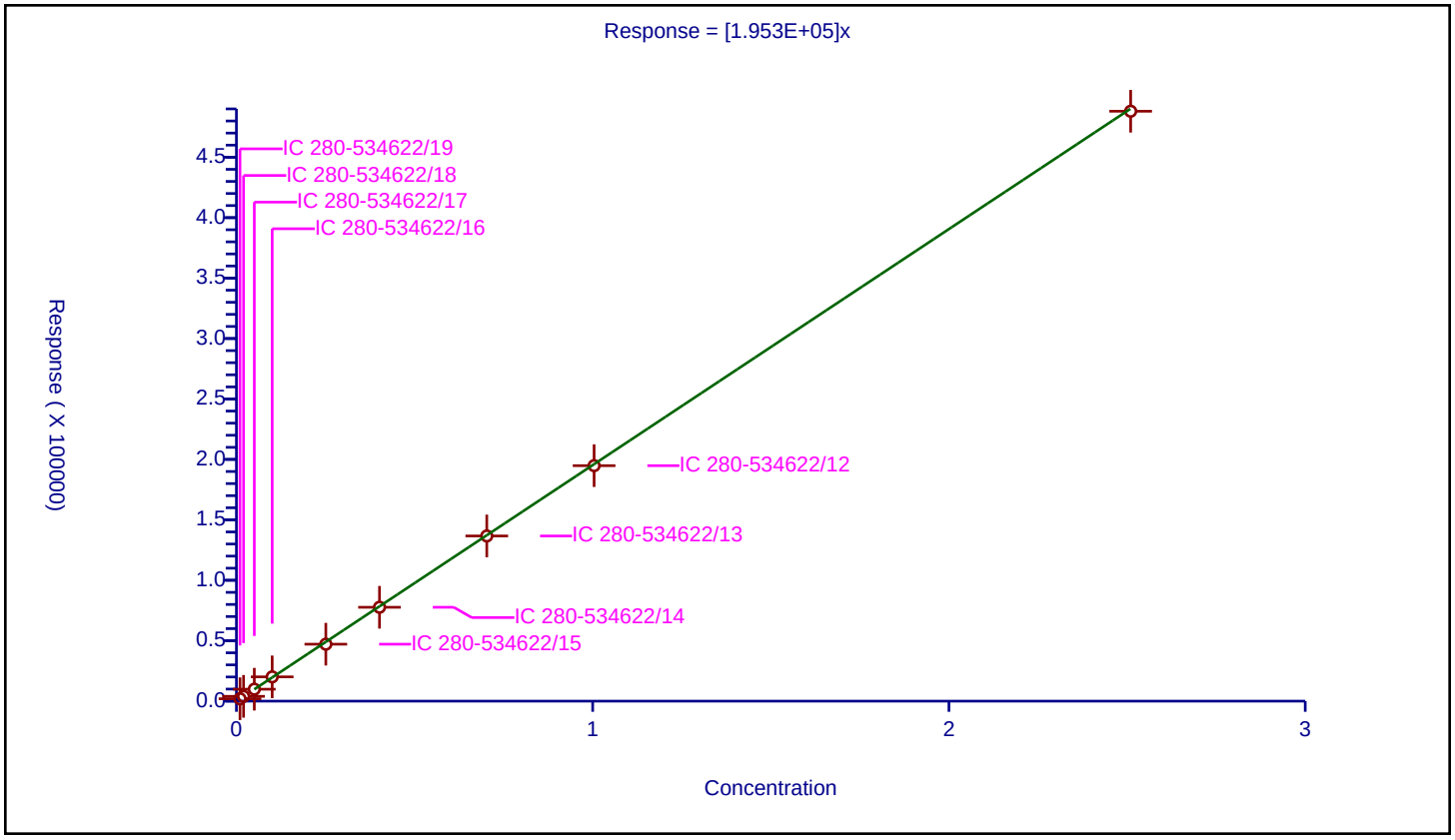
Curve Coefficients

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

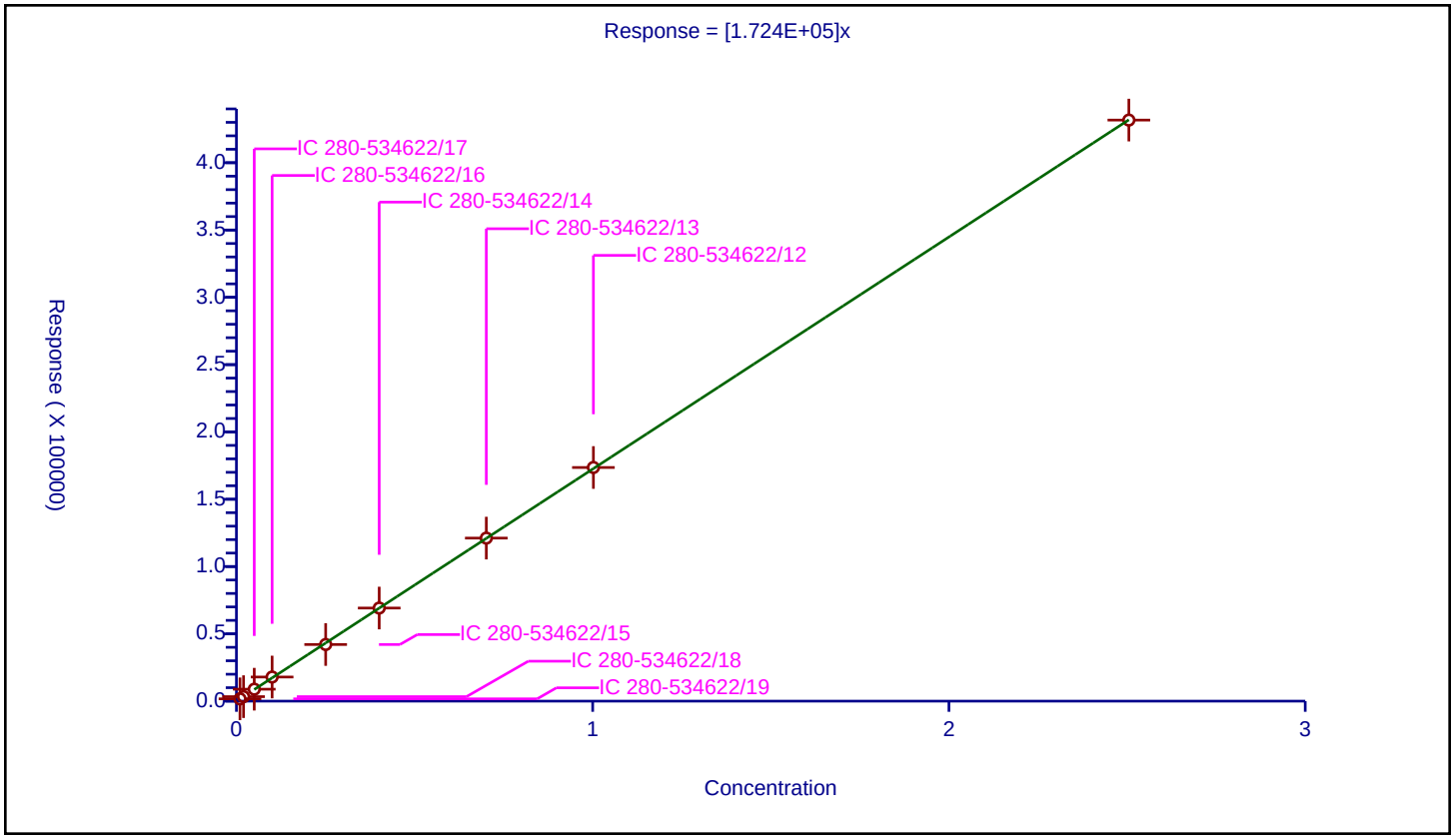
Curve Coefficients

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

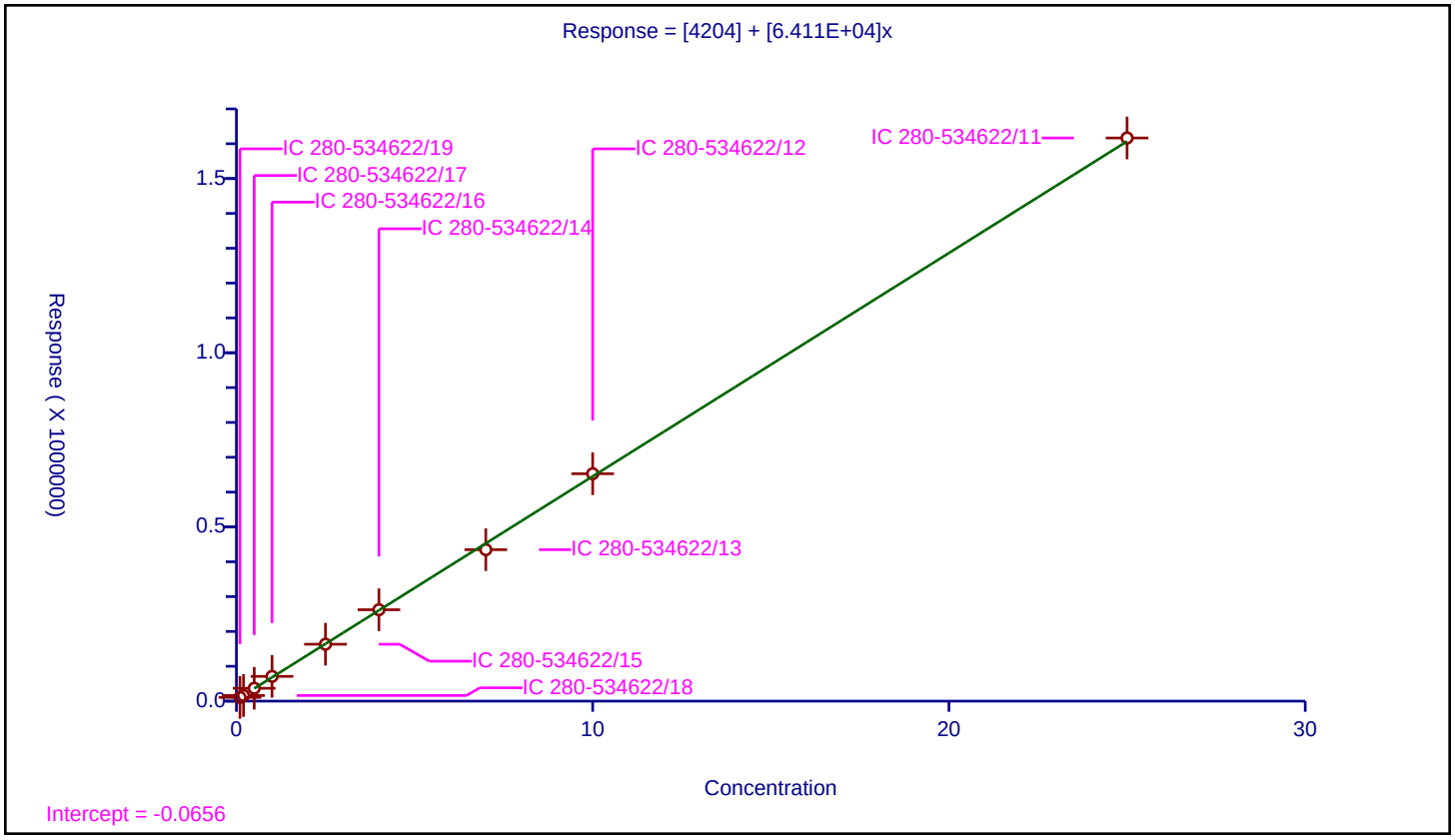
Curve Coefficients

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

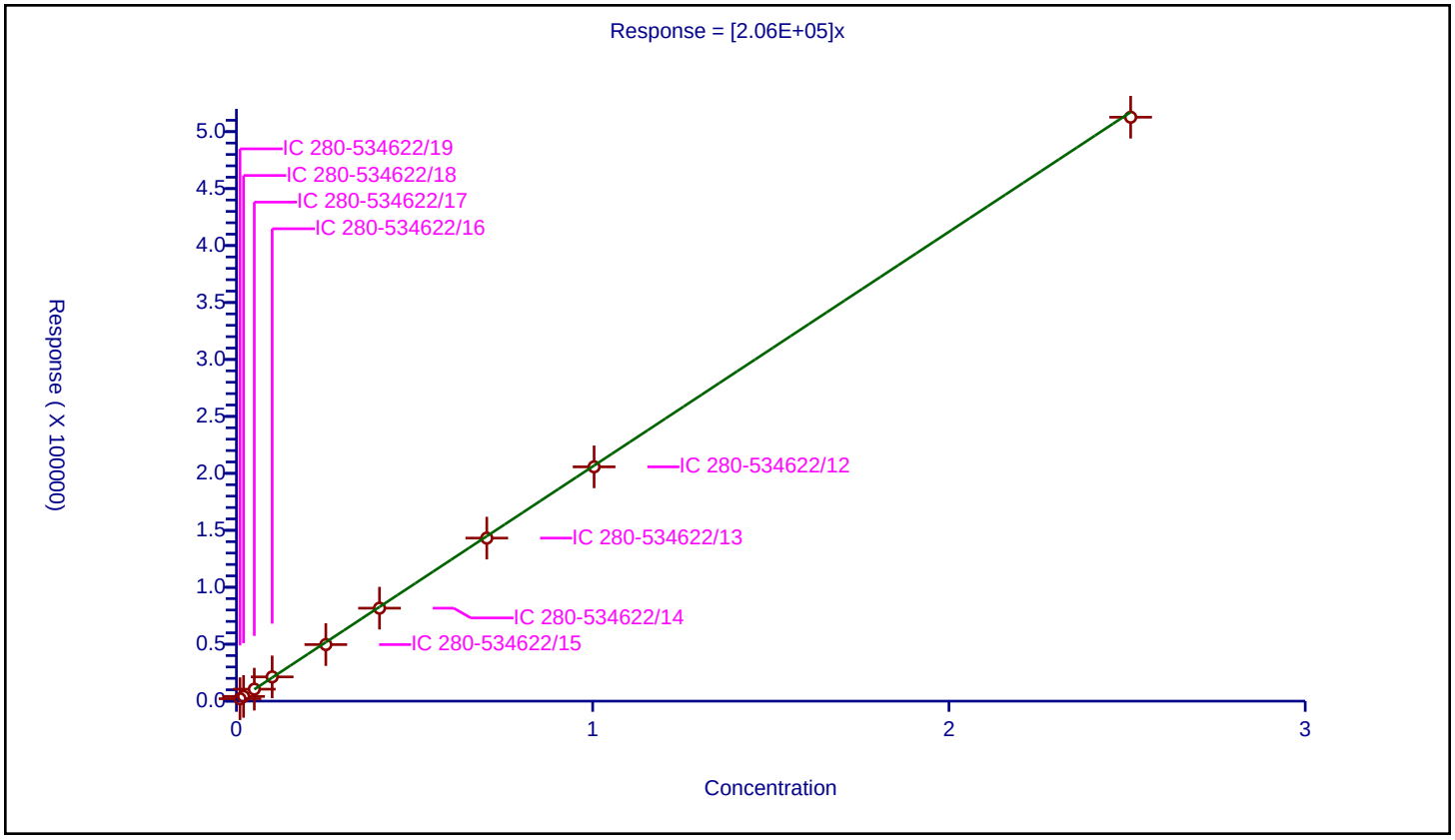
Curve Coefficients

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

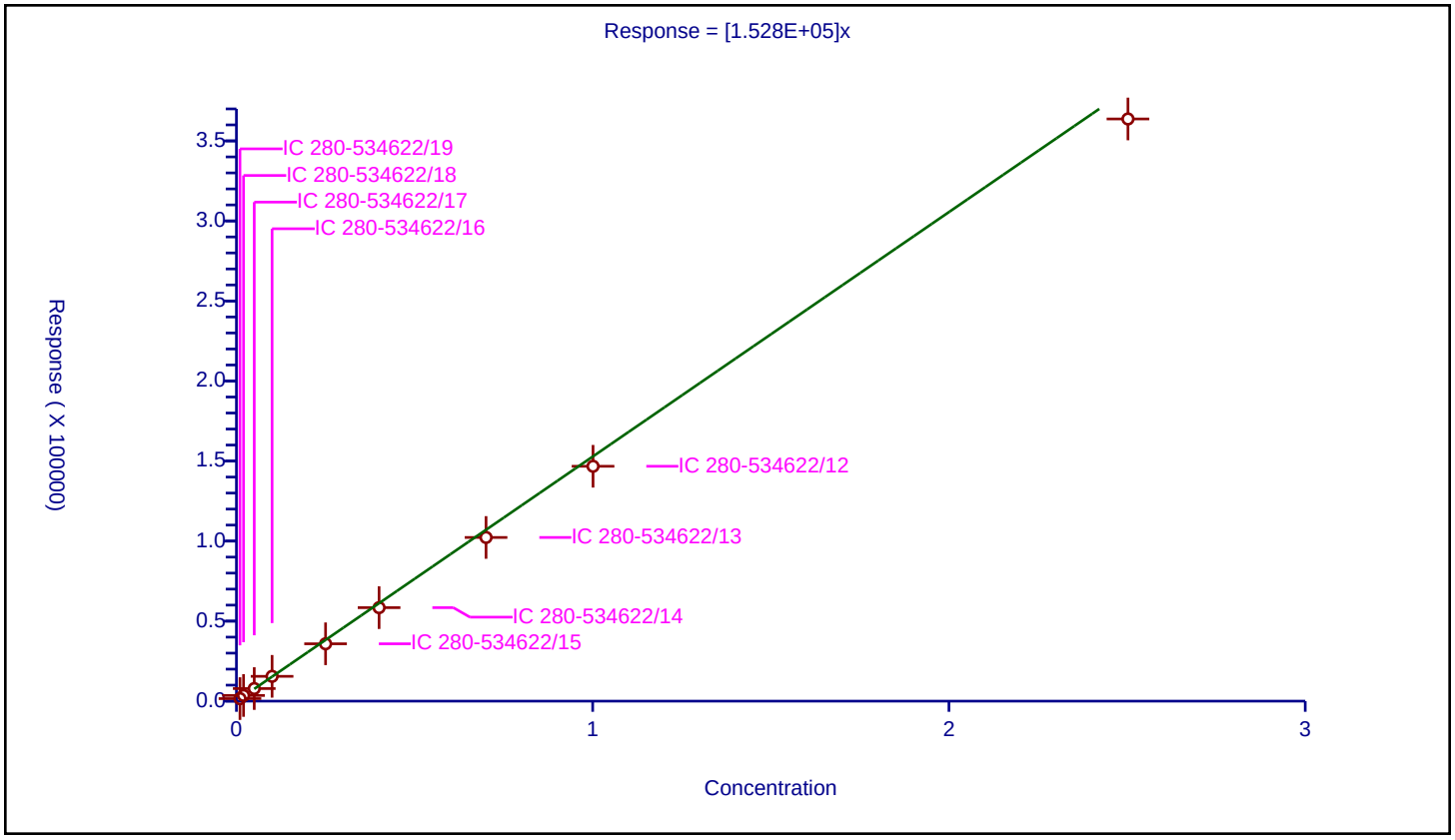
Curve Coefficients

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

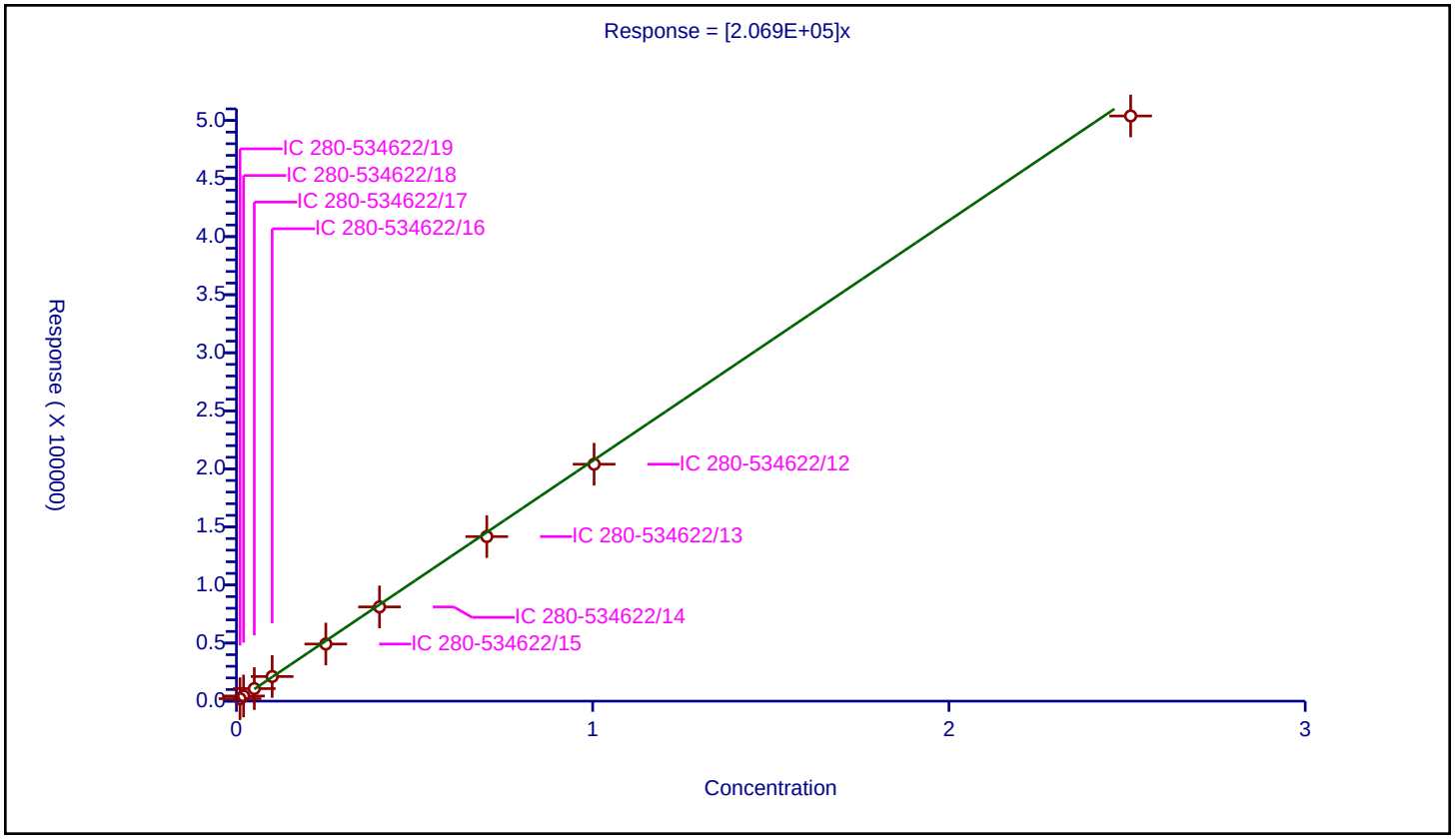
Curve Coefficients

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

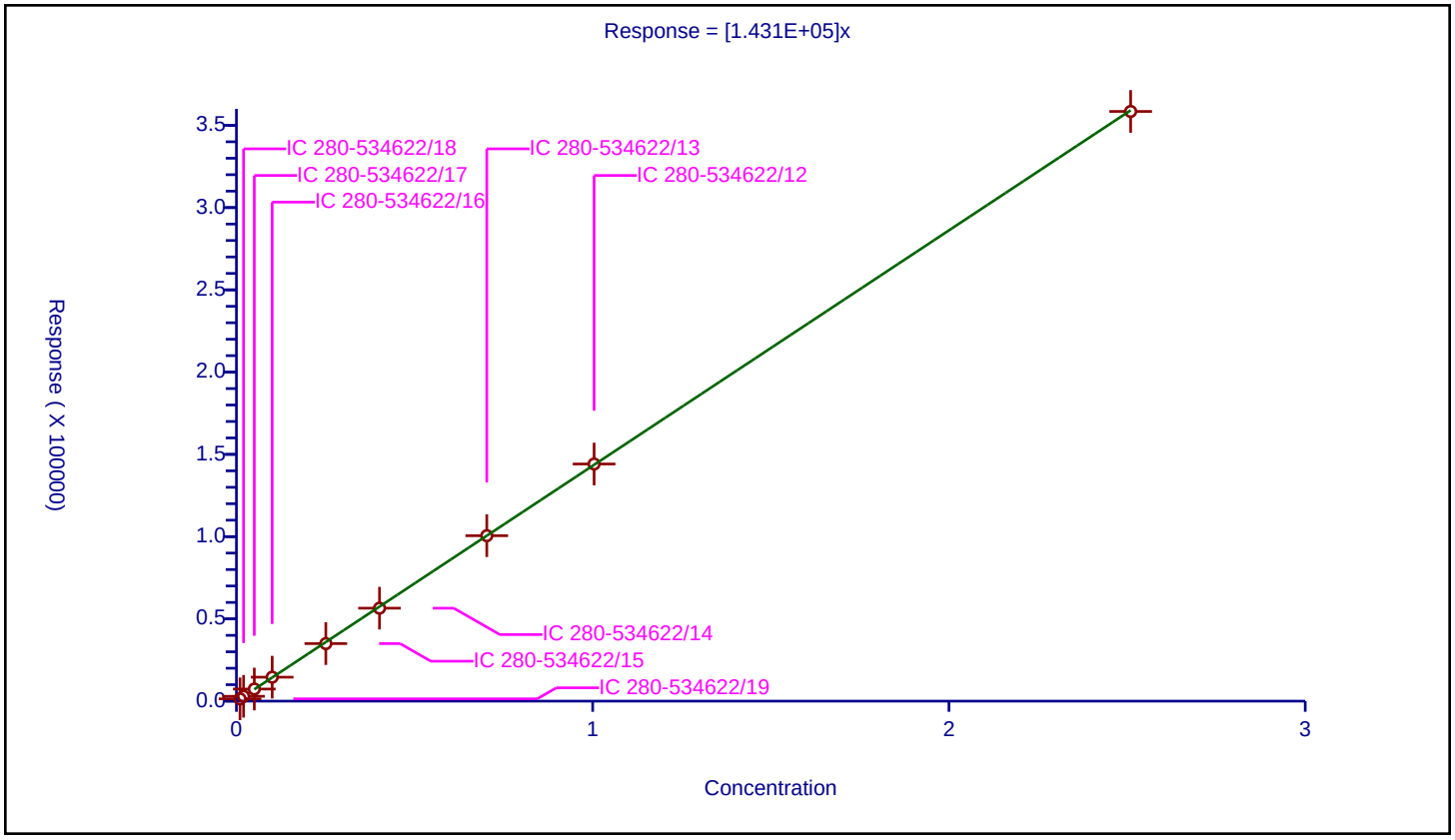
Curve Coefficients

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

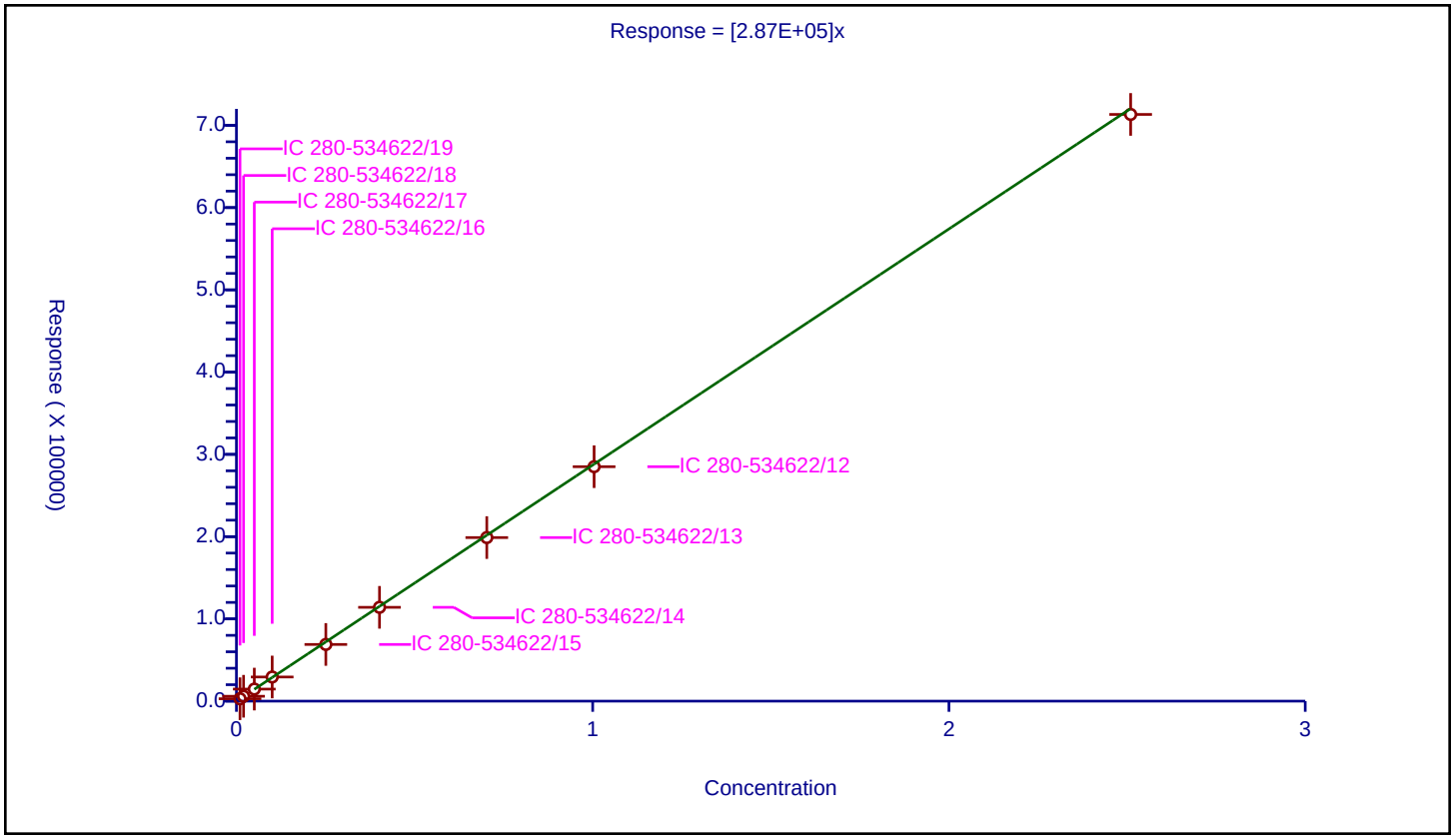
Curve Coefficients

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

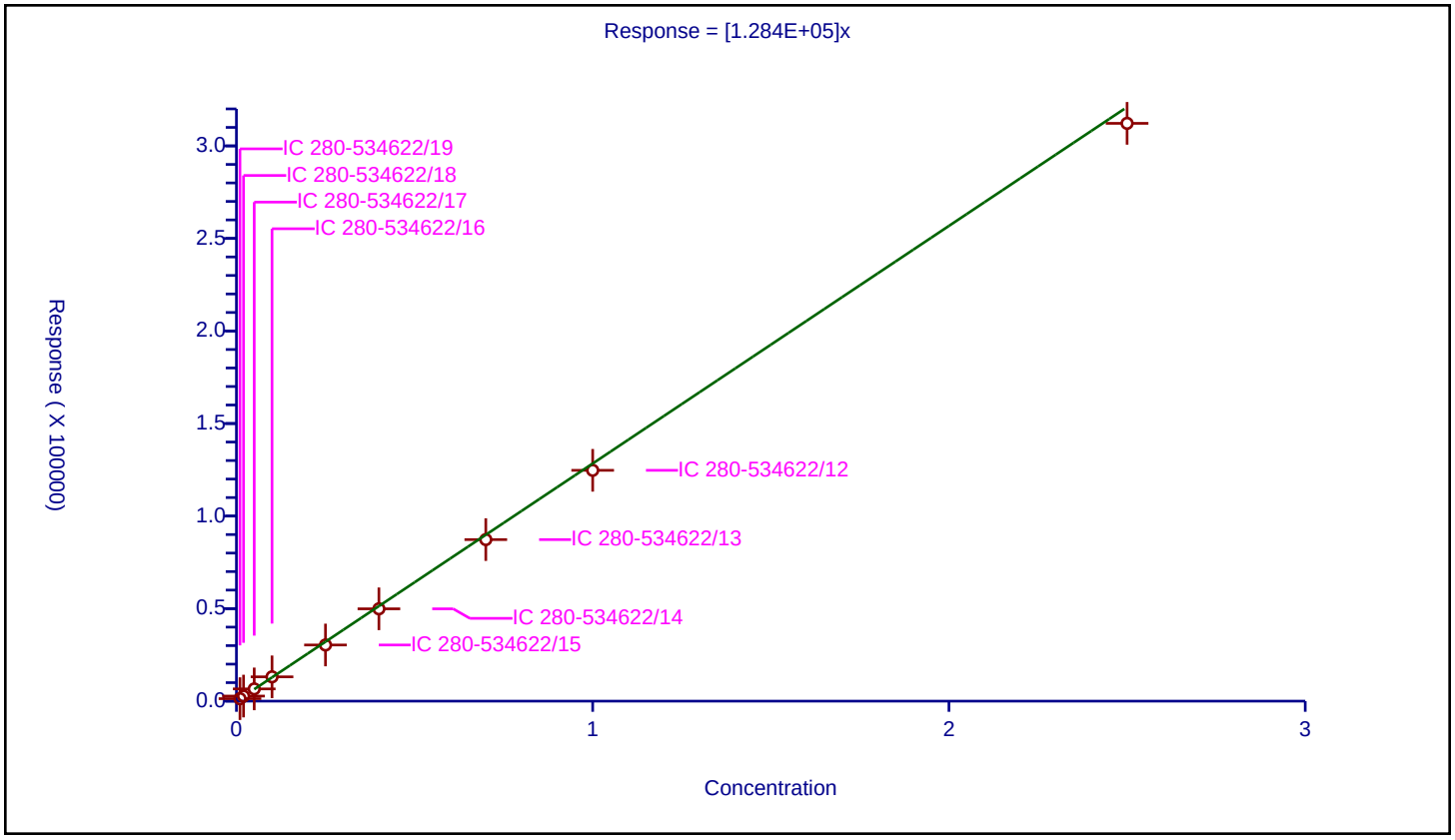
Curve Coefficients

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

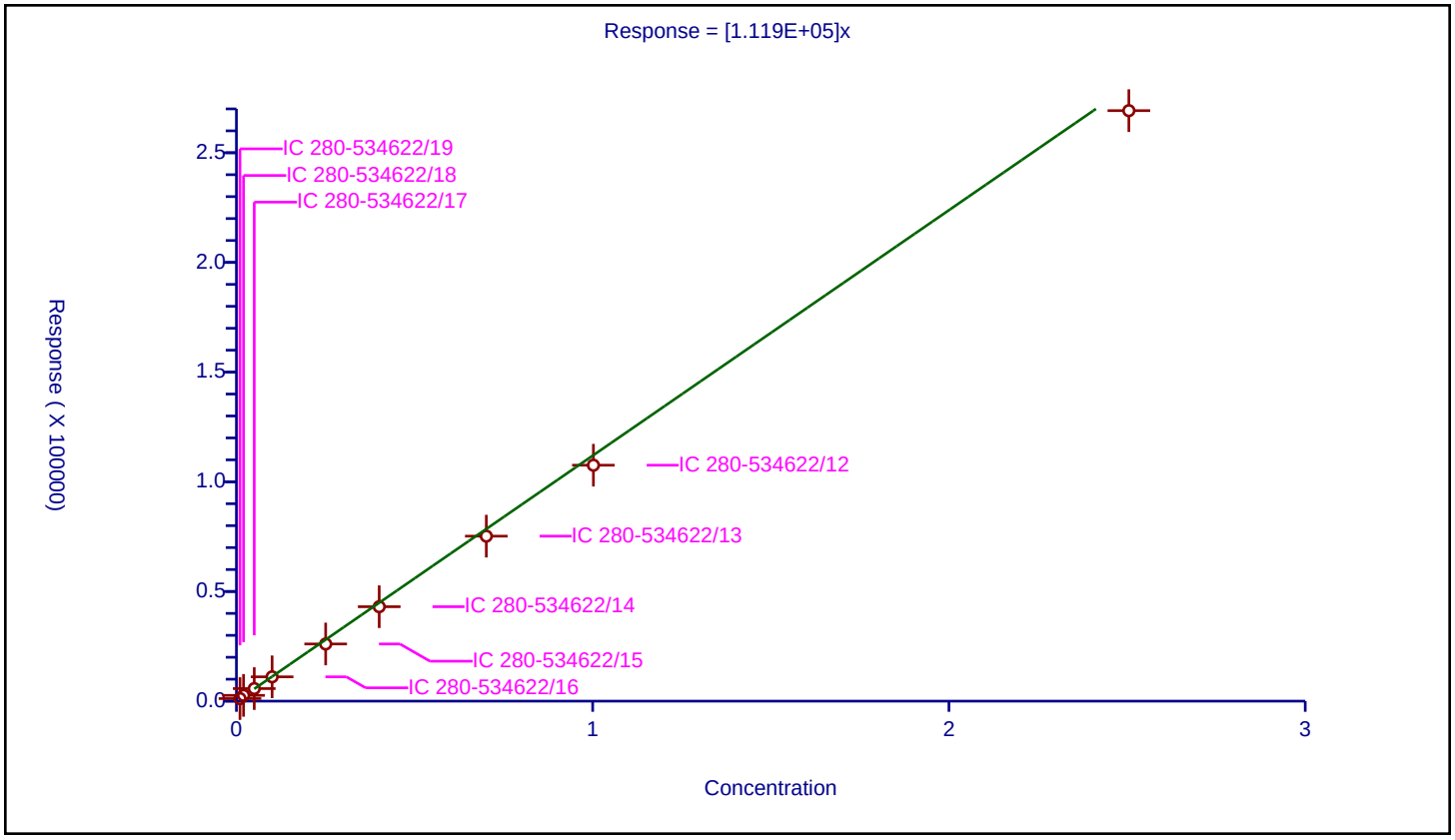
Curve Coefficients

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

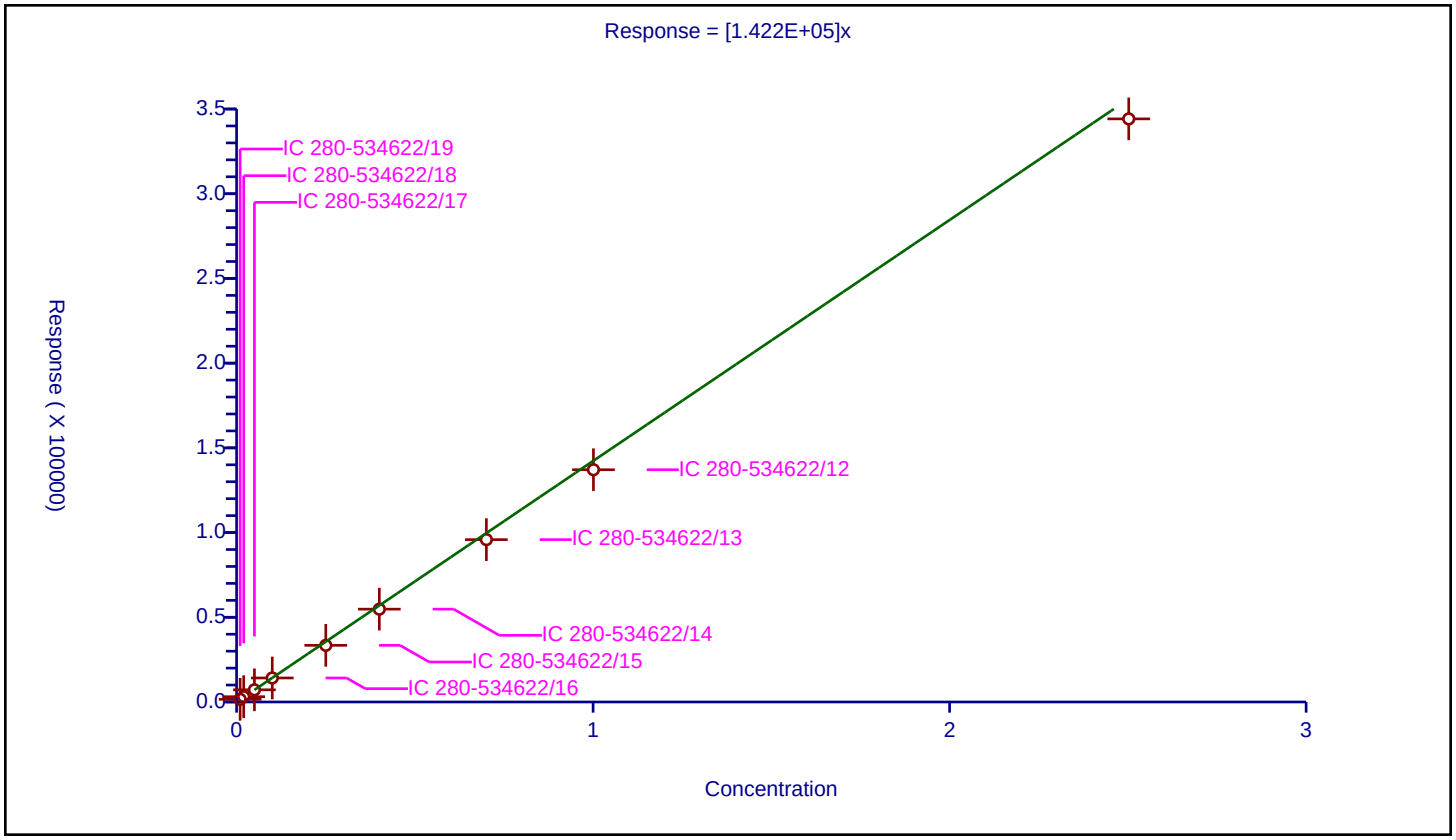
Curve Coefficients

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

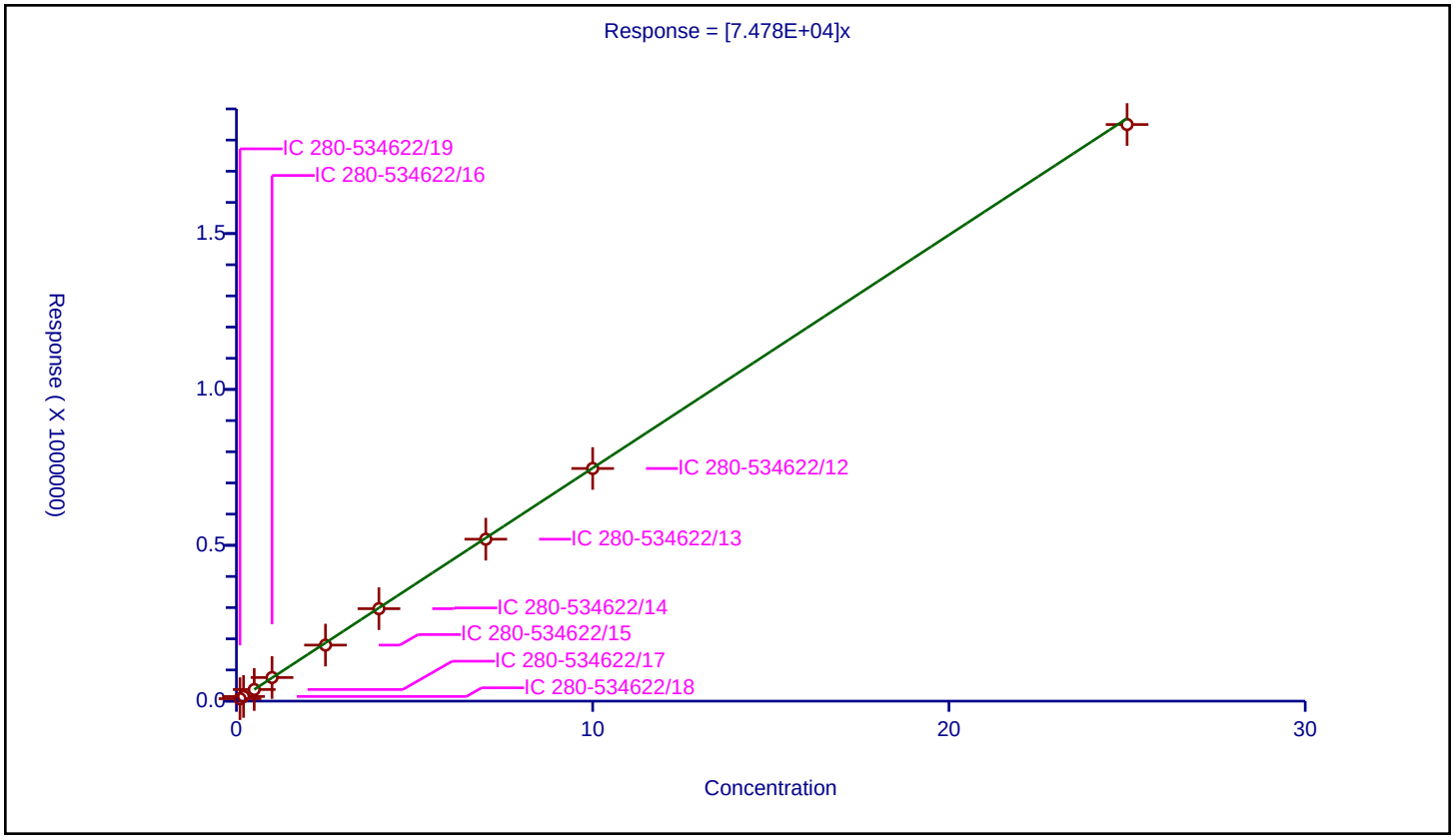
Curve Coefficients

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.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		106452	187184	273958	669889		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	6619	12229	28396	55838	134163	0.0100	0.0201	0.0502	0.100	0.251
		215819	377631	552269	1360486		0.402	0.703	1.00	2.51	
Tetryl	Lin2	5245	7583	17573	34148	80996	0.0100	0.0200	0.0501	0.100	0.251
		129140	227001	329366	813489		0.401	0.701	1.00	2.51	
2,4,6-Trinitrotoluene	Lin2	5469	8548	19400	38740	93822	0.0100	0.0201	0.0502	0.100	0.251
		151709	266122	389102	959496		0.402	0.703	1.00	2.51	
PETN	Ave	15659	27436	69170	136676	330309	0.100	0.200	0.500	1.00	2.50
		531566	944599	1371986	3343027		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	+++++	6280	13836	26678	63081	+++++	0.0200	0.0500	0.100	0.250
		101248	176180	257324	633300		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:54:50 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.061	4.126	-0.065	1092989	2.50	2.67	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	538473	2.50	2.25	
6 HMX	1	6.635	6.713	-0.078	406565	2.50	2.55	
5 2,4,6-Trinitrophenol	1	7.801	7.933	-0.132	353462	2.50	2.22	
8 RDX	1	8.801	8.906	-0.105	488855	2.50	2.39	
9 Nitrobenzene	1	11.854	11.973	-0.119	939811	2.51	2.51	
$ 10 1,2-Dinitrobenzene	1	12.988	13.093	-0.105	633300	2.50	2.38	
11 3,5-Dinitroaniline	1	14.868	14.979	-0.111	1143420	2.50	2.54	
12 1,3-Dinitrobenzene	1	15.421	15.519	-0.098	1422490	2.51	2.52	
13 Nitroglycerin	2	15.861	15.939	-0.078	3131400	25.0	24.3	
14 o-Nitrotoluene	1	16.668	16.759	-0.091	604653	2.50	2.43	
15 p-Nitrotoluene	1	16.928	17.046	-0.118	510755	2.51	2.35	
16 4-Amino-2,6-dinitrotoluene	1	17.421	17.526	-0.105	690165	2.50	2.33	
17 m-Nitrotoluene	1	17.928	18.026	-0.098	655662	2.50	2.36	
18 2-Amino-4,6-dinitrotoluene	1	18.321	18.426	-0.105	983275	2.51	2.52	
19 1,3,5-Trinitrobenzene	1	18.861	18.939	-0.078	1035616	2.51	2.52	
20 2,6-Dinitrotoluene	1	20.114	20.199	-0.085	669889	2.51	2.53	
21 2,4-Dinitrotoluene	1	20.581	20.666	-0.085	1360486	2.51	2.40	
22 Tetryl	1	24.248	24.313	-0.065	813489	2.51	2.55	
23 2,4,6-Trinitrotoluene	1	25.221	25.280	-0.059	959496	2.51	2.58	
24 PETN	2	26.155	26.186	-0.031	3343027	25.0	24.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 250.00	Units: uL
8330_ADDs_00027	Amount Added: 125.00	Units: uL

Report Date: 04-May-2021 13:43:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

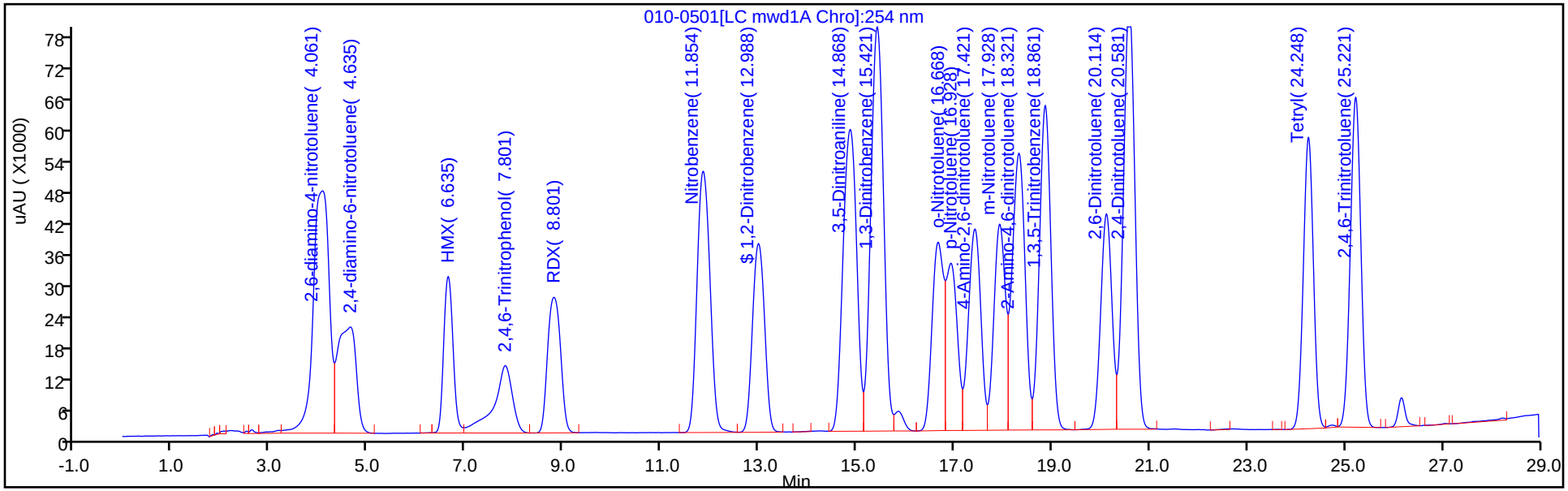
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D

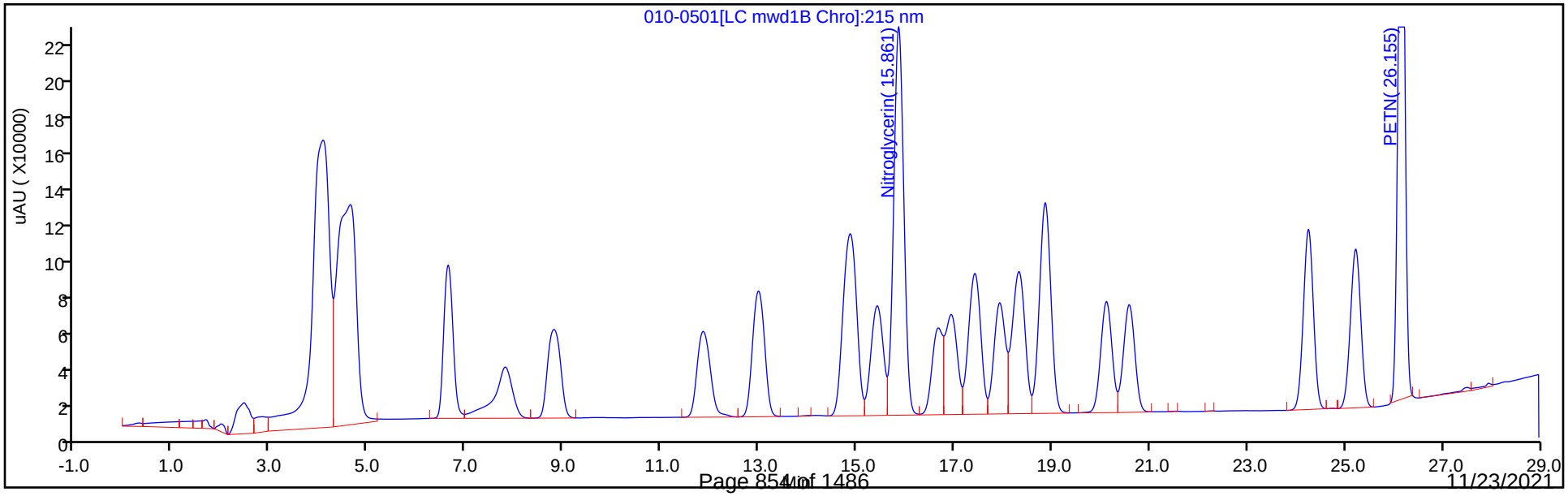
Injection Date:	01-May-2021 18:54:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

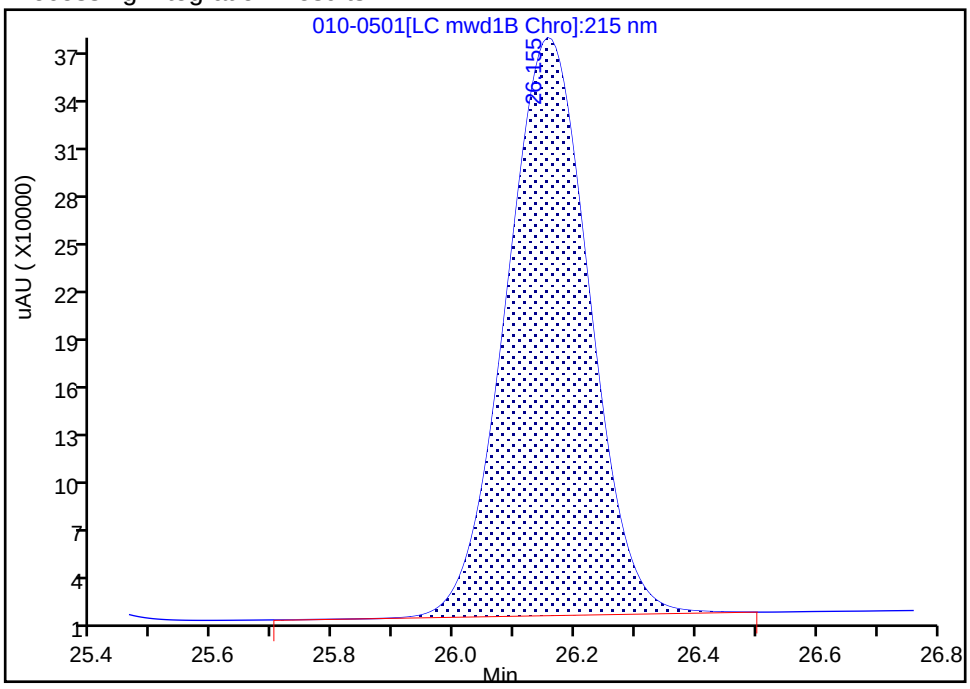
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D				
Injection Date:	01-May-2021 18:54:50	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

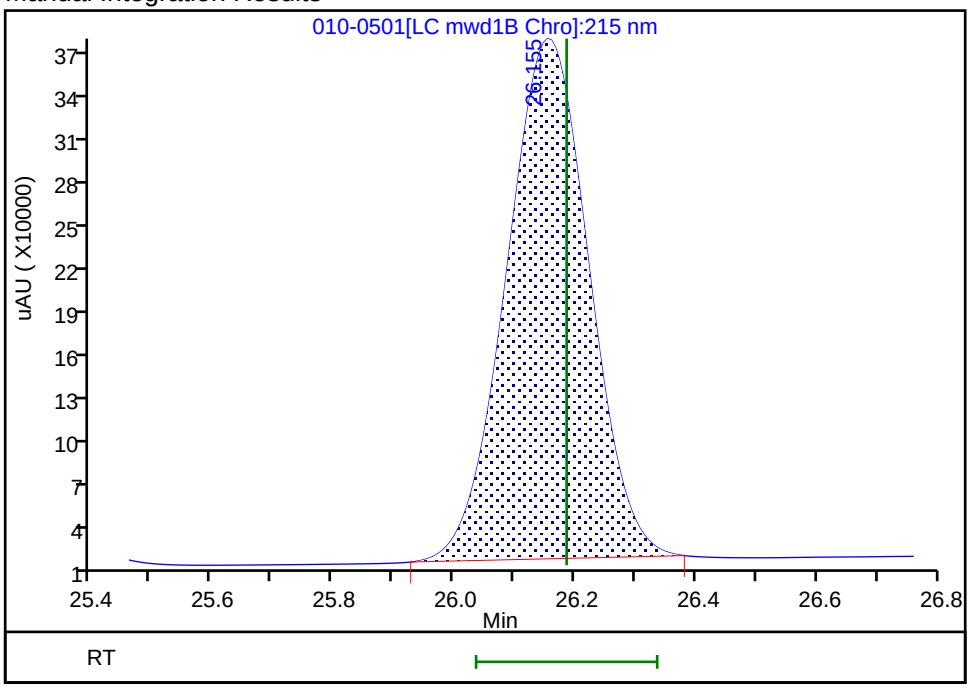
Processing Integration Results

RT: 26.15
Area: 3390696
Amount: 25.717777
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 3343027
Amount: 24.270492
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 19:29:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.085	4.126	-0.041	410324	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.598	4.653	-0.055	250474	1.00	1.04	
6 HMX	1	6.691	6.713	-0.022	161798	1.00	1.01	
5 2,4,6-Trinitrophenol	1	7.845	7.933	-0.088	155884	1.00	0.9771	
8 RDX	1	8.878	8.906	-0.028	199019	1.00	0.9743	
9 Nitrobenzene	1	11.924	11.973	-0.049	377310	1.00	1.01	
$ 10 1,2-Dinitrobenzene	1	13.044	13.093	-0.049	257324	1.00	0.9686	
11 3,5-Dinitroaniline	1	14.918	14.979	-0.061	457283	1.00	1.01	
12 1,3-Dinitrobenzene	1	15.471	15.519	-0.048	577120	1.00	1.02	
13 Nitroglycerin	2	15.891	15.939	-0.048	1273886	10.0	9.91	
14 o-Nitrotoluene	1	16.704	16.759	-0.055	240595	1.00	0.9664	
15 p-Nitrotoluene	1	16.991	17.046	-0.055	208929	1.00	0.9620	
16 4-Amino-2,6-dinitrotoluene	1	17.458	17.526	-0.068	280366	1.00	0.9449	
17 m-Nitrotoluene	1	17.964	18.026	-0.062	265803	1.00	0.9548	
18 2-Amino-4,6-dinitrotoluene	1	18.364	18.426	-0.062	397243	1.00	1.02	
19 1,3,5-Trinitrobenzene	1	18.884	18.939	-0.055	423869	1.00	1.03	
20 2,6-Dinitrotoluene	1	20.138	20.199	-0.061	273958	1.00	1.03	
21 2,4-Dinitrotoluene	1	20.605	20.666	-0.062	552269	1.00	0.9762	
22 Tetryl	1	24.245	24.313	-0.068	329366	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	25.218	25.280	-0.062	389102	1.00	1.04	
24 PETN	2	26.138	26.186	-0.048	1371986	10.0	9.96	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 100.00	Units: uL
8330_ADDs_00027	Amount Added: 50.00	Units: uL

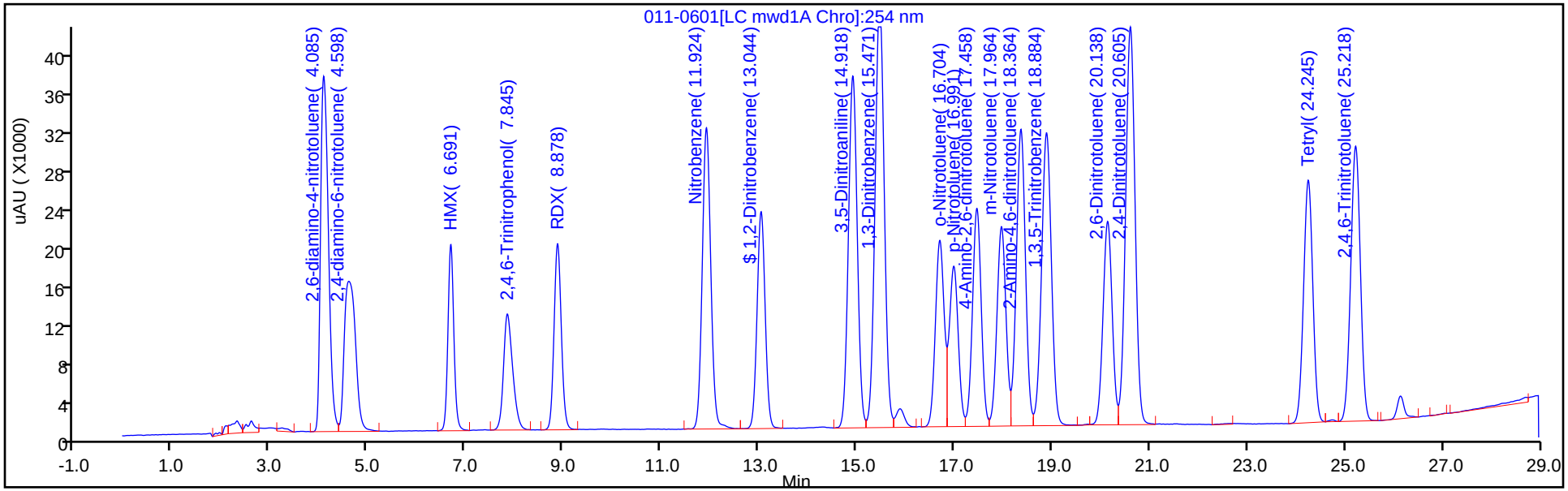
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

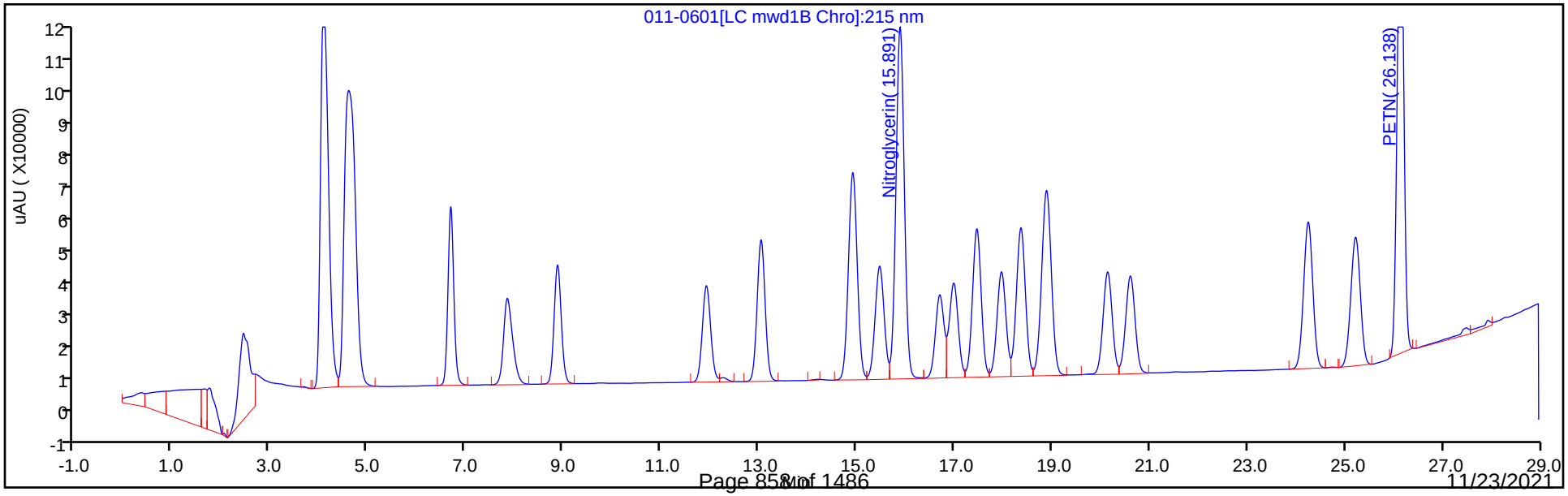
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D

Injection Date:	01-May-2021 19:29:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

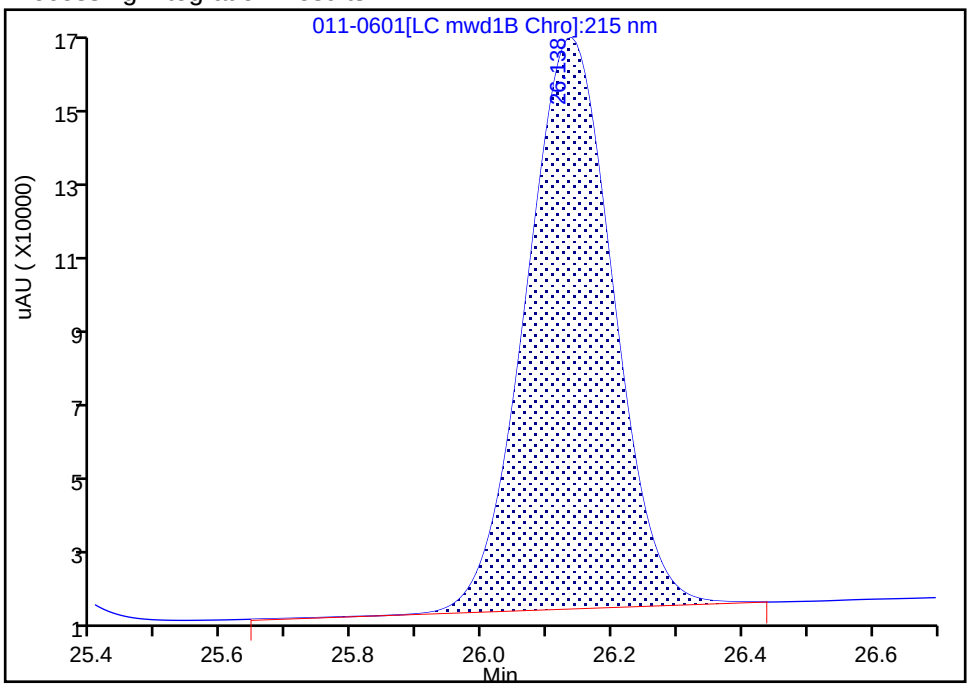
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D		
Injection Date:	01-May-2021 19:29:53	Instrument ID:	CHHPLC_X5
Lims ID:	IC INT/ADD 8		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	11 Worklist Smp#: 11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330
Column:		Detector	LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

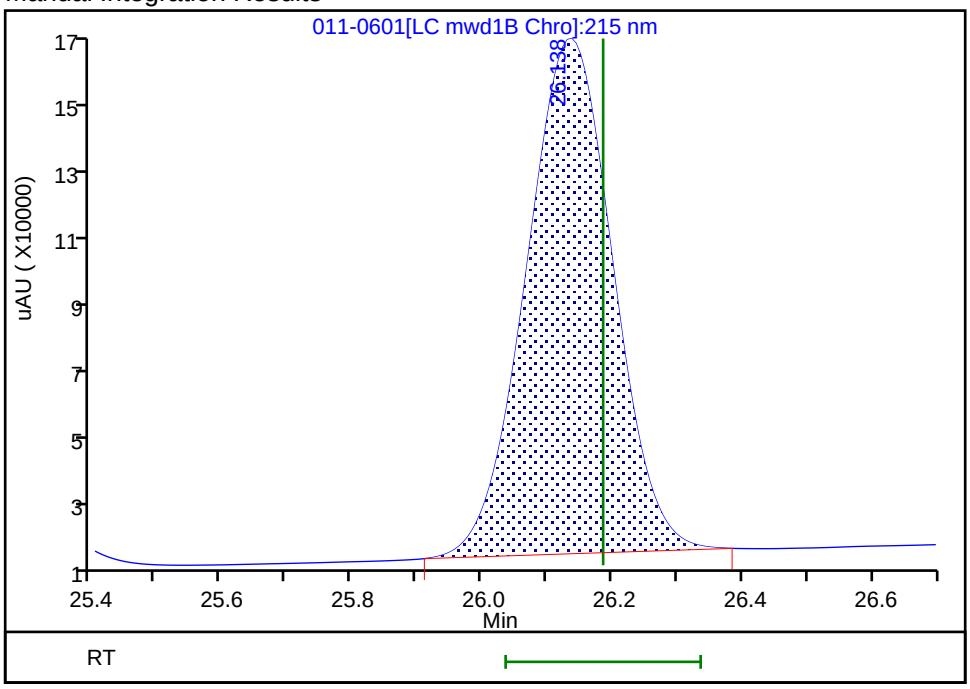
Processing Integration Results

RT: 26.14
Area: 1384511
Amount: 10.424343
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 1371986
Amount: 9.960666
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 20:04:53 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:12 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.104	4.126	-0.022	286797	0.7000	0.6941	
2 2,4-diamino-6-nitrotoluene	1	4.618	4.653	-0.035	172168	0.7000	0.7152	
6 HMX	1	6.698	6.713	-0.015	111120	0.7000	0.6937	
5 2,4,6-Trinitrophenol	1	7.878	7.933	-0.055	106987	0.7000	0.6706	
8 RDX	1	8.891	8.906	-0.015	136592	0.7000	0.6687	
9 Nitrobenzene	1	11.951	11.973	-0.022	256719	0.7028	0.6852	
$ 10 1,2-Dinitrobenzene	1	13.071	13.093	-0.022	176180	0.7000	0.6632	
11 3,5-Dinitroaniline	1	14.957	14.979	-0.022	318505	0.7000	0.7055	
12 1,3-Dinitrobenzene	1	15.504	15.519	-0.015	394975	0.7014	0.6992	
13 Nitroglycerin	2	15.924	15.939	-0.015	872941	7.00	6.79	
14 o-Nitrotoluene	1	16.744	16.759	-0.015	165863	0.7000	0.6662	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	143722	0.7014	0.6617	
16 4-Amino-2,6-dinitrotoluene	1	17.504	17.526	-0.022	192075	0.7007	0.6474	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	182587	0.7007	0.6559	
18 2-Amino-4,6-dinitrotoluene	1	18.411	18.426	-0.015	272718	0.7028	0.6963	
19 1,3,5-Trinitrobenzene	1	18.924	18.939	-0.015	290458	0.7014	0.7021	
20 2,6-Dinitrotoluene	1	20.184	20.199	-0.015	187184	0.7028	0.7036	
21 2,4-Dinitrotoluene	1	20.651	20.666	-0.015	377631	0.7028	0.6675	
22 Tetryl	1	24.304	24.313	-0.009	227001	0.7014	0.7086	
23 2,4,6-Trinitrotoluene	1	25.271	25.280	-0.009	266122	0.7028	0.7118	
24 PETN	2	26.184	26.186	-0.002	944599	7.00	6.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	70.00	Units: uL
8330_ADDs_00027	Amount Added:	35.00	Units: uL

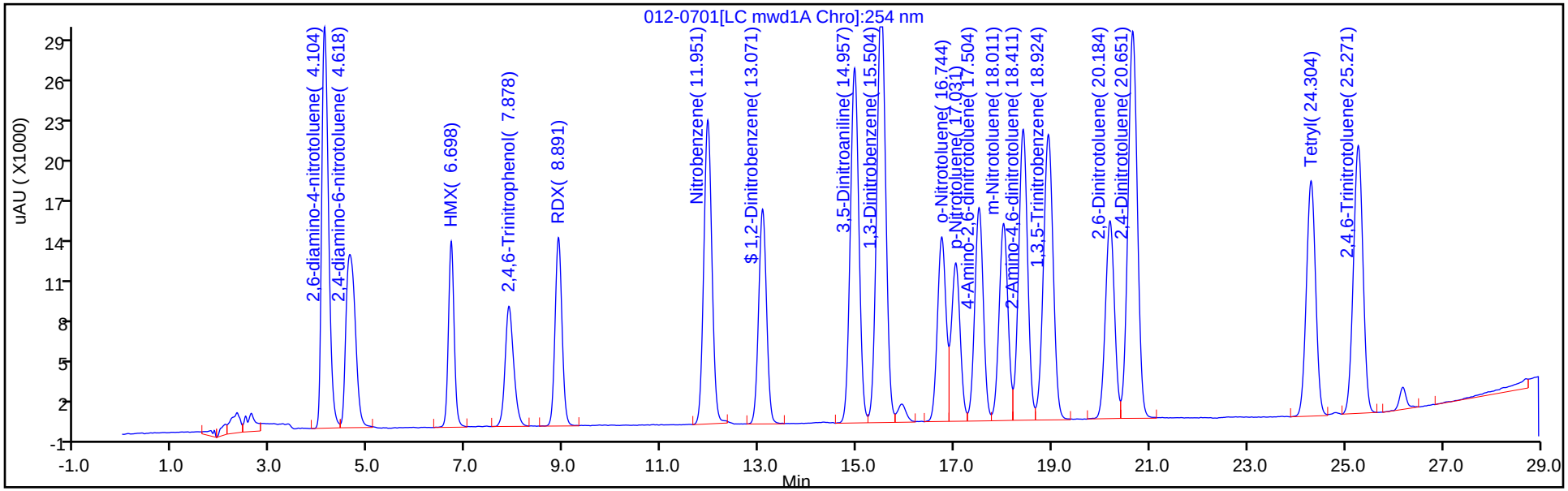
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

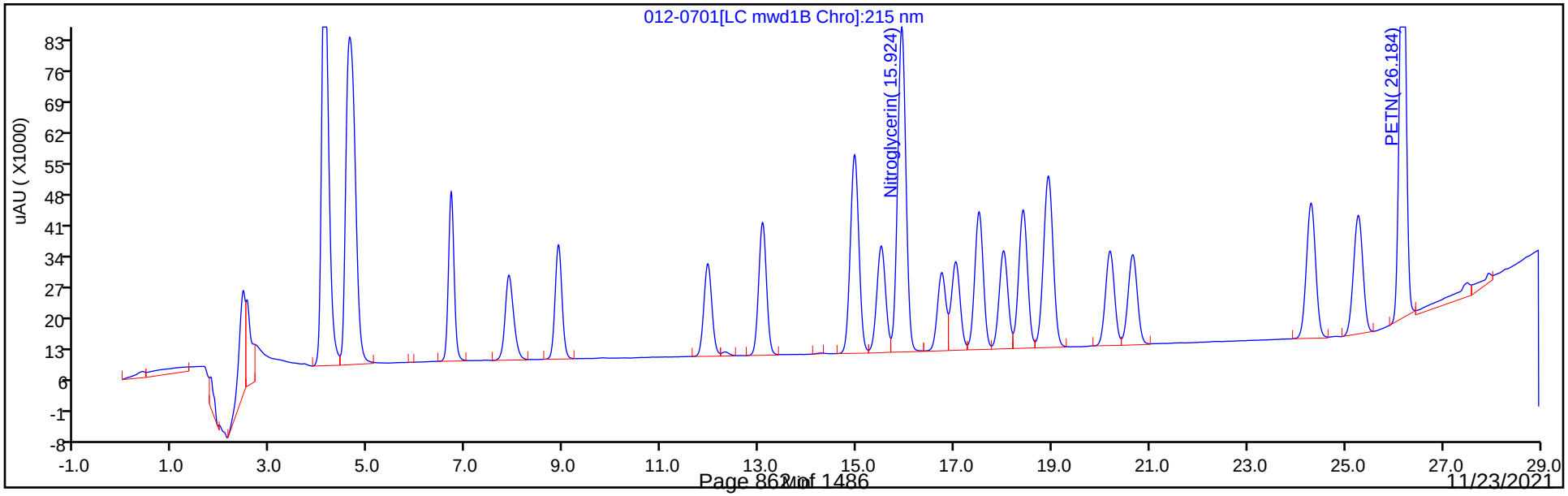
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D

Injection Date:	01-May-2021 20:04:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

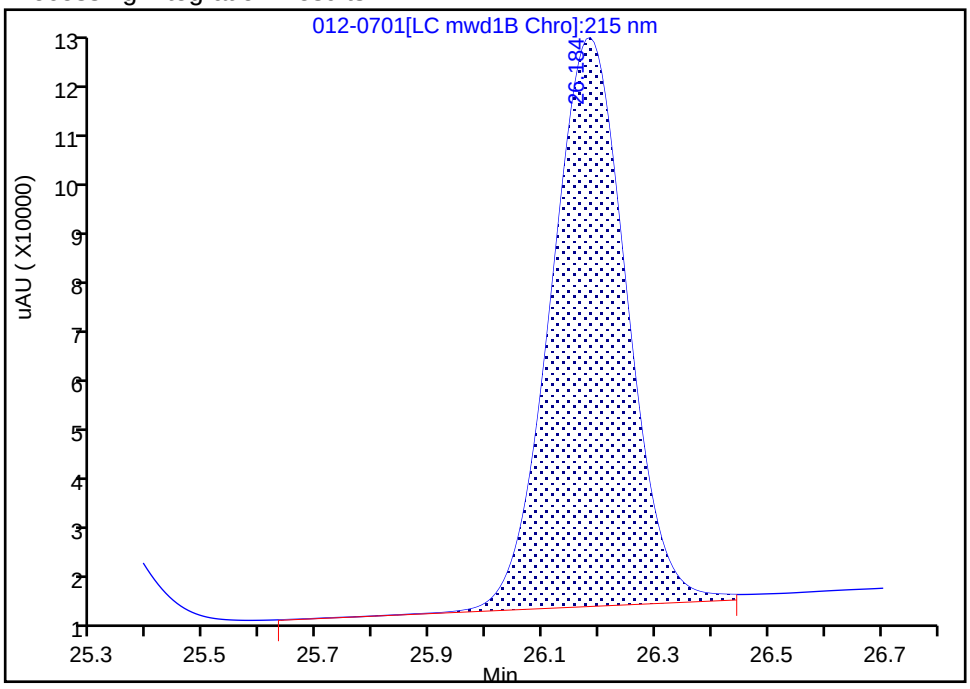
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Injection Date: 01-May-2021 20:04:53 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 7
Client ID:
Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

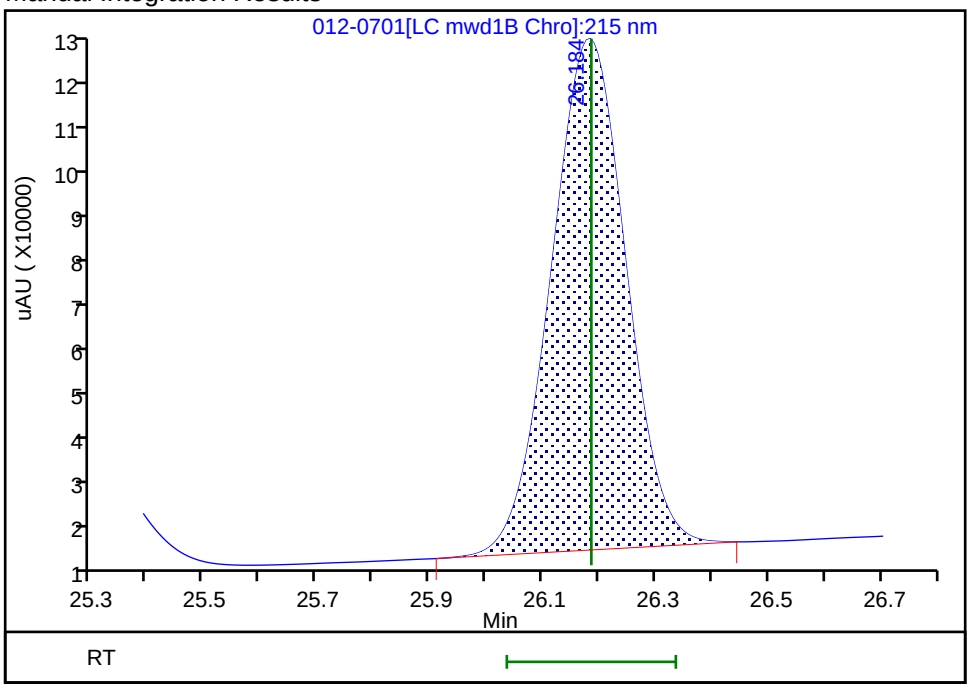
Processing Integration Results

RT: 26.18
Area: 962158
Amount: 7.202862
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 944599
Amount: 6.857822
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:24
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Lims ID: IC INT/ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 20:39:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 6
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.111	4.126	-0.015	166673	0.4000	0.3994	
2 2,4-diamino-6-nitrotoluene	1	4.631	4.653	-0.022	98867	0.4000	0.4084	
6 HMX	1	6.705	6.713	-0.008	64089	0.4000	0.3975	
5 2,4,6-Trinitrophenol	1	7.911	7.933	-0.022	62190	0.4000	0.3898	
8 RDX	1	8.898	8.906	-0.008	78185	0.4000	0.3828	
9 Nitrobenzene	1	11.951	11.973	-0.022	145926	0.4016	0.3895	
$ 10 1,2-Dinitrobenzene	1	13.065	13.093	-0.028	101248	0.4000	0.3811	
11 3,5-Dinitroaniline	1	14.951	14.979	-0.028	183549	0.4000	0.4057	
12 1,3-Dinitrobenzene	1	15.491	15.519	-0.028	226148	0.4008	0.3993	
13 Nitroglycerin	2	15.905	15.939	-0.034	498088	4.00	3.87	
14 o-Nitrotoluene	1	16.725	16.759	-0.034	94418	0.4000	0.3792	
15 p-Nitrotoluene	1	17.011	17.046	-0.035	82281	0.4008	0.3788	
16 4-Amino-2,6-dinitrotoluene	1	17.485	17.526	-0.041	109890	0.4004	0.3704	
17 m-Nitrotoluene	1	17.985	18.026	-0.041	104128	0.4004	0.3740	
18 2-Amino-4,6-dinitrotoluene	1	18.385	18.426	-0.041	155961	0.4016	0.3968	
19 1,3,5-Trinitrobenzene	1	18.905	18.939	-0.034	165828	0.4008	0.3978	
20 2,6-Dinitrotoluene	1	20.158	20.199	-0.041	106452	0.4016	0.3987	
21 2,4-Dinitrotoluene	1	20.625	20.666	-0.041	215819	0.4016	0.3815	
22 Tetryl	1	24.258	24.313	-0.055	129140	0.4008	0.4006	
23 2,4,6-Trinitrotoluene	1	25.231	25.280	-0.049	151709	0.4016	0.4040	
24 PETN	2	26.145	26.186	-0.041	531566	4.00	3.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	40.00	Units: uL
8330_ADDs_00027	Amount Added:	20.00	Units: uL

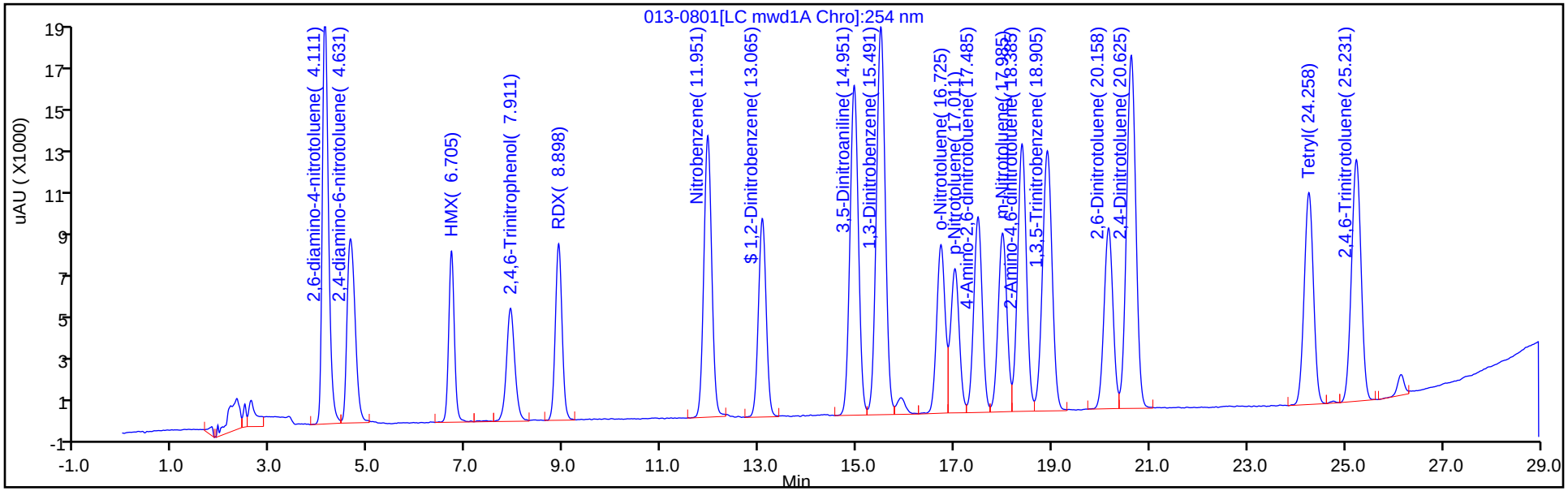
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

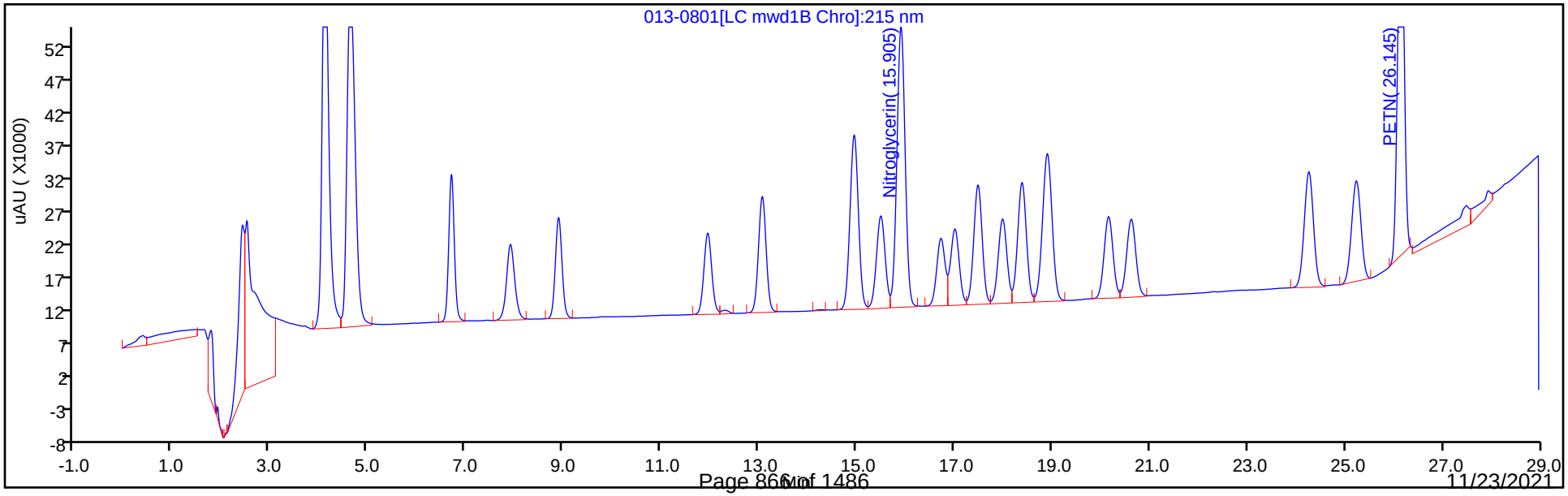
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D

Injection Date:	01-May-2021 20:39:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

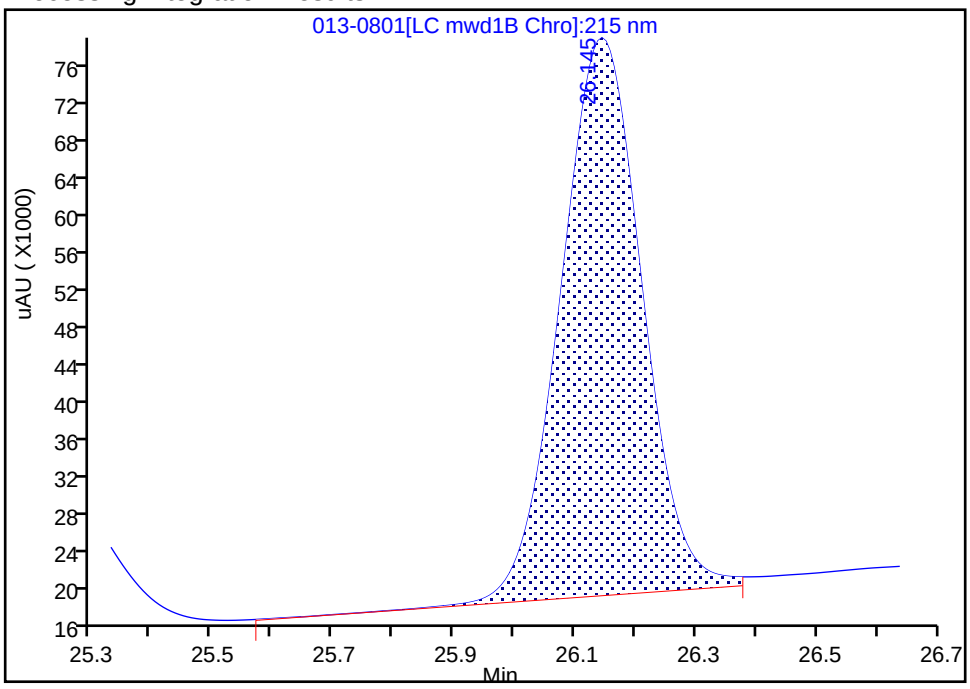
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Injection Date: 01-May-2021 20:39:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 6
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

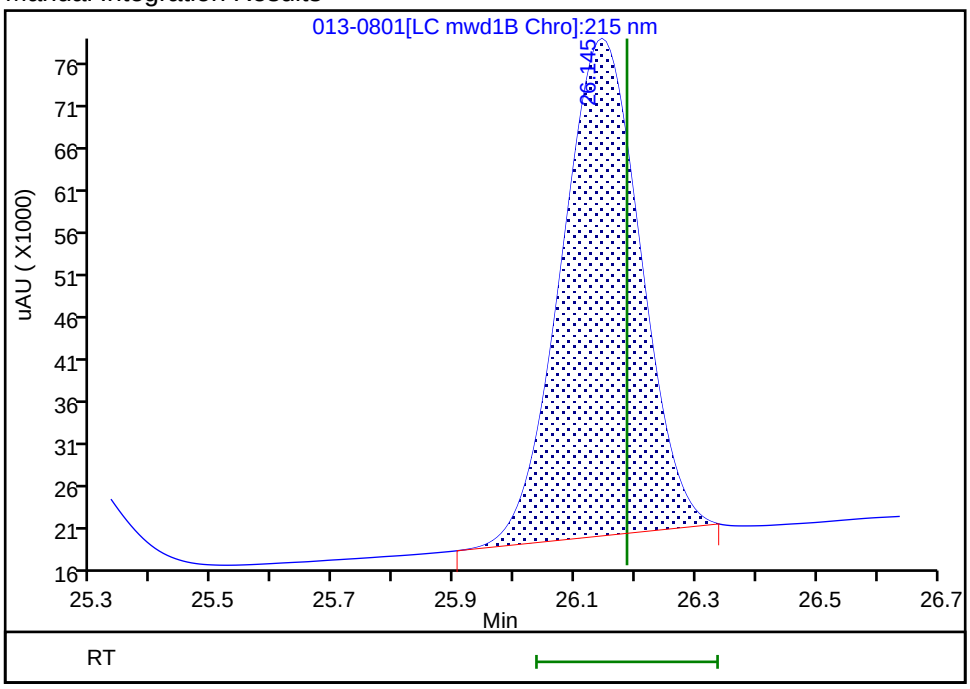
Processing Integration Results

RT: 26.14
Area: 555116
Amount: 4.095081
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 531566
Amount: 3.859188
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Lims ID: IC INT/ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 21:15:02 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 5
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:35:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.126	4.126	0.000	101396	0.2500	0.2392	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	59623	0.2500	0.2442	
6 HMX	1	6.713	6.713	0.000	39580	0.2500	0.2431	
5 2,4,6-Trinitrophenol	1	7.933	7.933	0.000	38222	0.2500	0.2396	
8 RDX	1	8.906	8.906	0.000	48606	0.2500	0.2379	
9 Nitrobenzene	1	11.973	11.973	0.000	90760	0.2510	0.2423	
$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	63081	0.2500	0.2375	
11 3,5-Dinitroaniline	1	14.979	14.979	0.000	110385	0.2500	0.2431	
12 1,3-Dinitrobenzene	1	15.519	15.519	0.000	140347	0.2505	0.2469	
13 Nitroglycerin	2	15.939	15.939	0.000	310480	2.50	2.41	
14 o-Nitrotoluene	1	16.759	16.759	0.000	58191	0.2500	0.2337	
15 p-Nitrotoluene	1	17.046	17.046	0.000	51245	0.2505	0.2359	
16 4-Amino-2,6-dinitrotoluene	1	17.526	17.526	0.000	68509	0.2503	0.2309	
17 m-Nitrotoluene	1	18.026	18.026	0.000	64933	0.2503	0.2332	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	97071	0.2510	0.2458	
19 1,3,5-Trinitrobenzene	1	18.939	18.939	0.000	104344	0.2505	0.2477	
20 2,6-Dinitrotoluene	1	20.199	20.199	0.000	66062	0.2510	0.2462	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	134163	0.2510	0.2372	
22 Tetryl	1	24.313	24.313	0.000	80996	0.2505	0.2490	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	93822	0.2510	0.2482	
24 PETN	2	26.186	26.186	0.000	330309	2.50	2.40	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

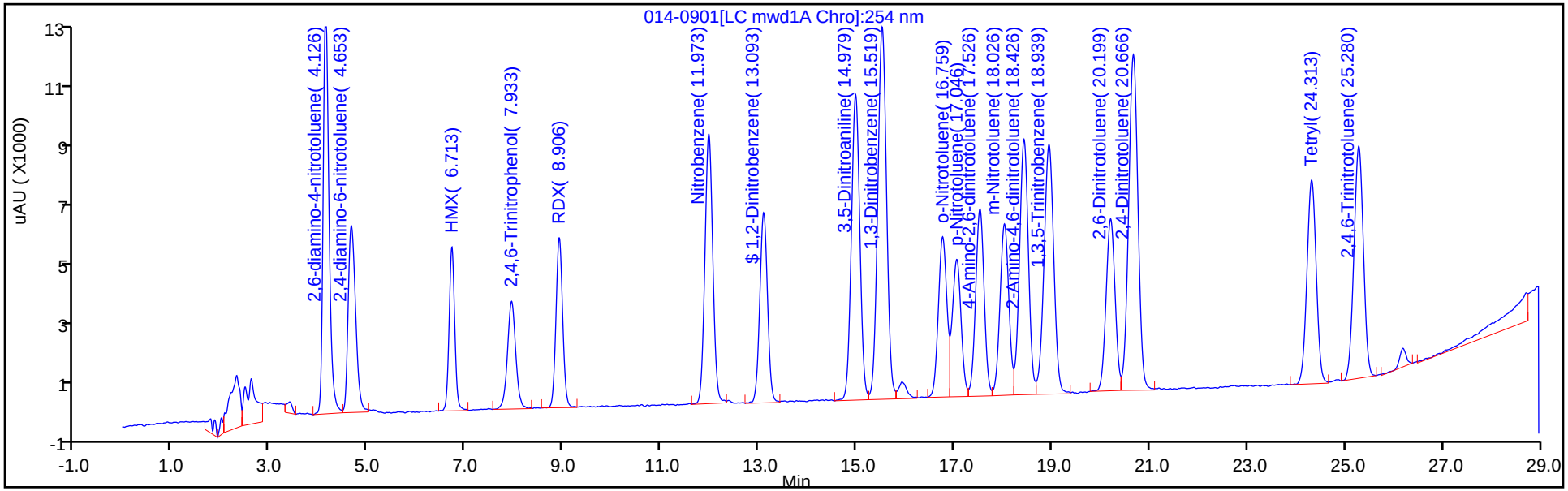
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

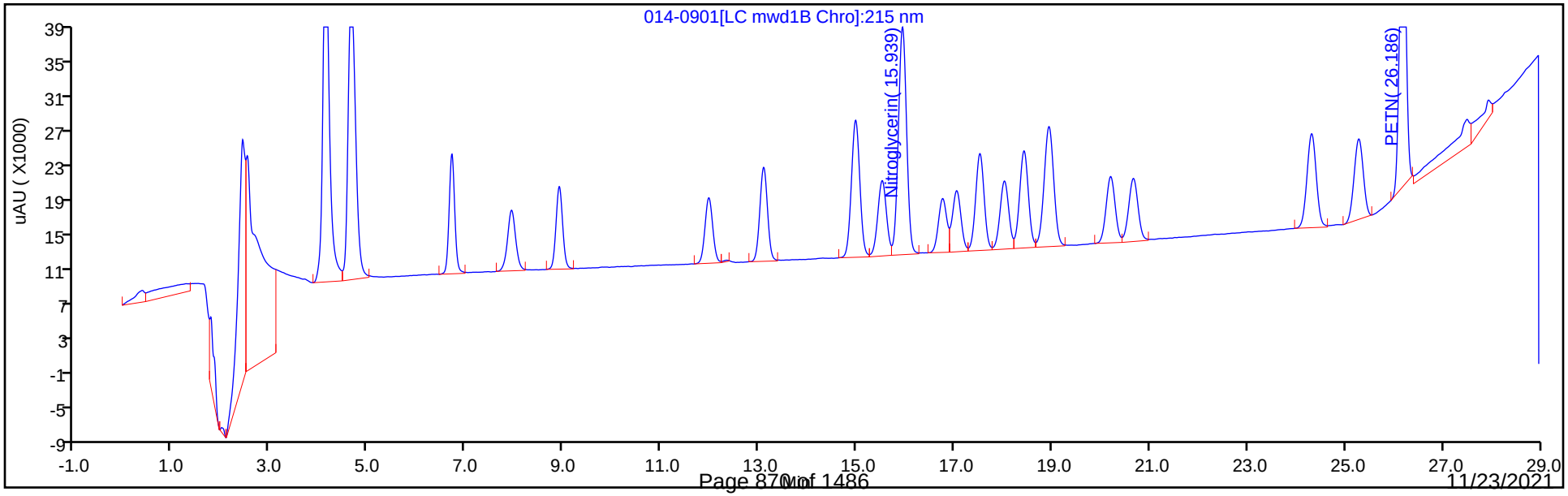
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D

Injection Date:	01-May-2021 21:15:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

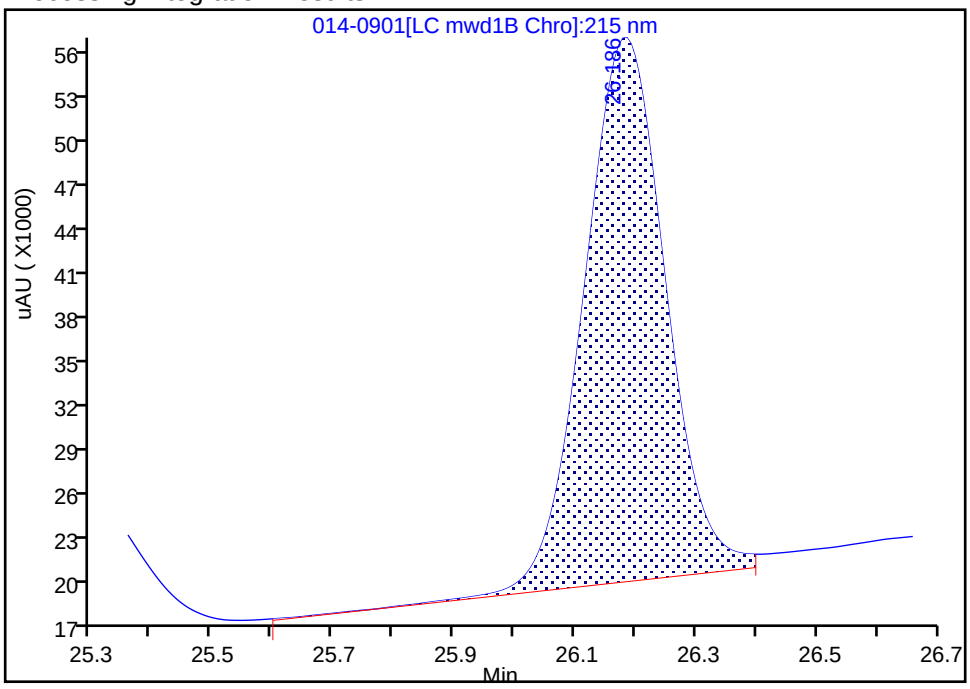
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Injection Date: 01-May-2021 21:15:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 5
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

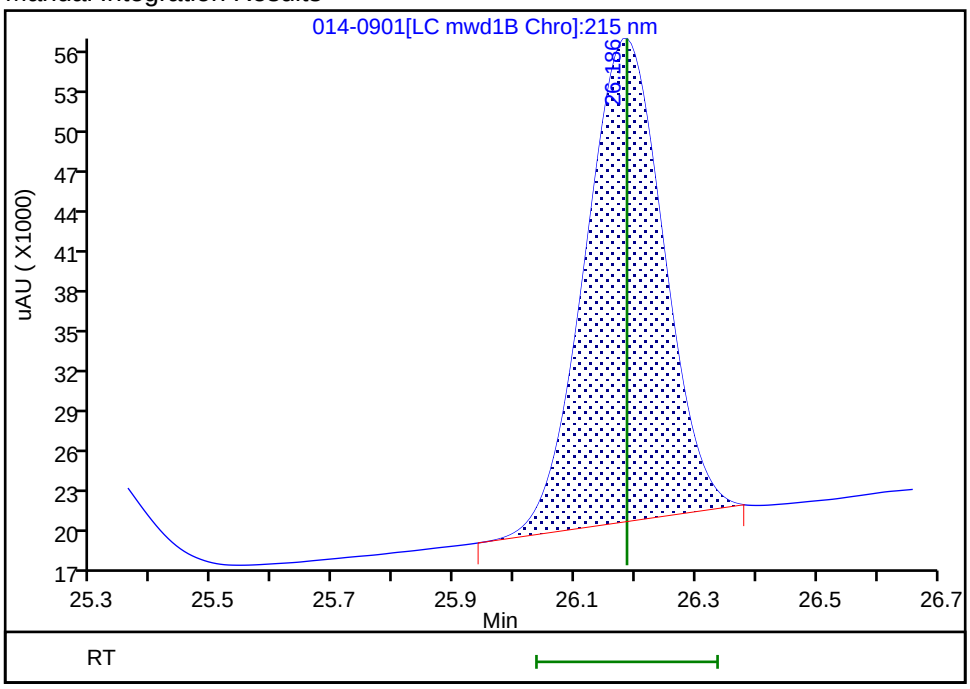
Processing Integration Results

RT: 26.19
Area: 348444
Amount: 2.522976
Amount Units: ug/ml



Manual Integration Results

RT: 26.19
Area: 330309
Amount: 2.398055
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D
Lims ID: IC INT/ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 21:50:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.132	4.126	0.006	44112	0.1000	0.0987	
2 2,4-diamino-6-nitrotoluene	1	4.658	4.653	0.005	25556	0.1000	0.1016	
6 HMX	1	6.718	6.713	0.005	16850	0.1000	0.0999	
5 2,4,6-Trinitrophenol	1	7.958	7.933	0.025	16340	0.1000	0.1024	
8 RDX	1	8.912	8.906	0.006	20661	0.1000	0.1011	
9 Nitrobenzene	1	11.971	11.973	-0.002	38085	0.1004	0.1017	
$ 10 1,2-Dinitrobenzene	1	13.091	13.093	-0.002	26678	0.1000	0.1004	
11 3,5-Dinitroaniline	1	14.971	14.979	-0.008	46817	0.1000	0.1019	
12 1,3-Dinitrobenzene	1	15.518	15.519	-0.001	58764	0.1002	0.1019	
13 Nitroglycerin	2	15.931	15.939	-0.008	130447	1.00	1.01	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	24528	0.1000	0.0985	
15 p-Nitrotoluene	1	17.038	17.046	-0.008	21221	0.1002	0.0977	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	28819	0.1001	0.0971	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	27212	0.1001	0.0977	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	40904	0.1004	0.1017	
19 1,3,5-Trinitrobenzene	1	18.931	18.939	-0.008	44594	0.1002	0.1018	
20 2,6-Dinitrotoluene	1	20.185	20.199	-0.014	27721	0.1004	0.1014	
21 2,4-Dinitrotoluene	1	20.652	20.666	-0.015	55838	0.1004	0.0987	
22 Tetryl	1	24.298	24.313	-0.015	34148	0.1002	0.1015	
23 2,4,6-Trinitrotoluene	1	25.265	25.280	-0.015	38740	0.1004	0.1000	
24 PETN	2	26.172	26.186	-0.014	136676	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	10.00	Units: uL
8330_ADDs_00027	Amount Added:	5.00	Units: uL

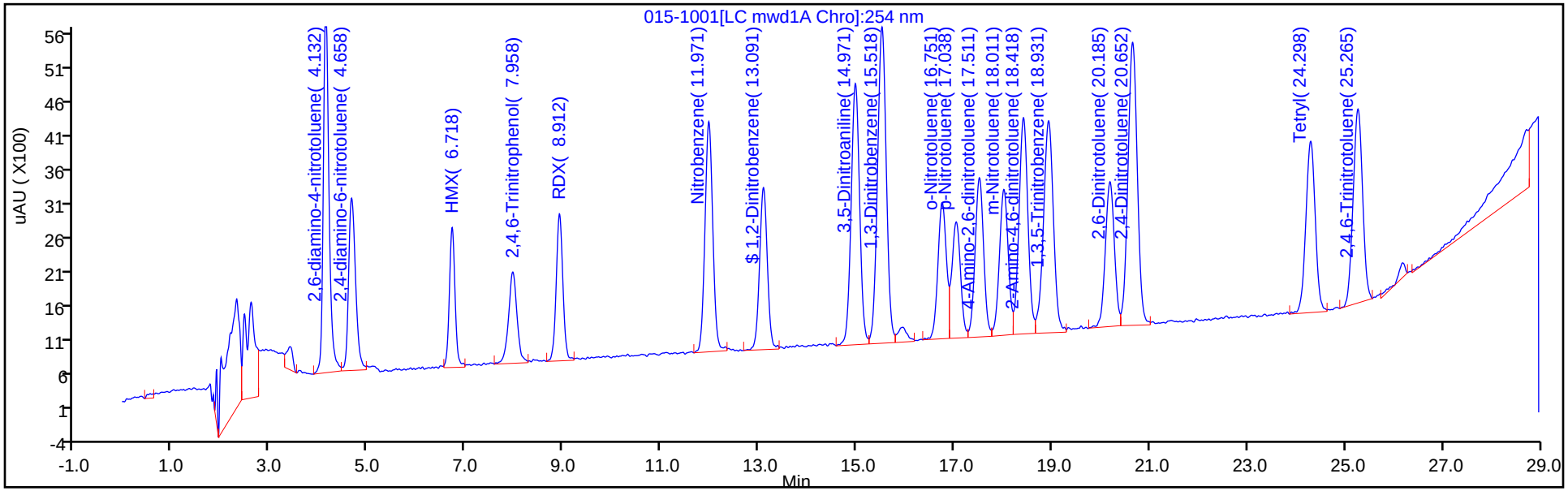
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

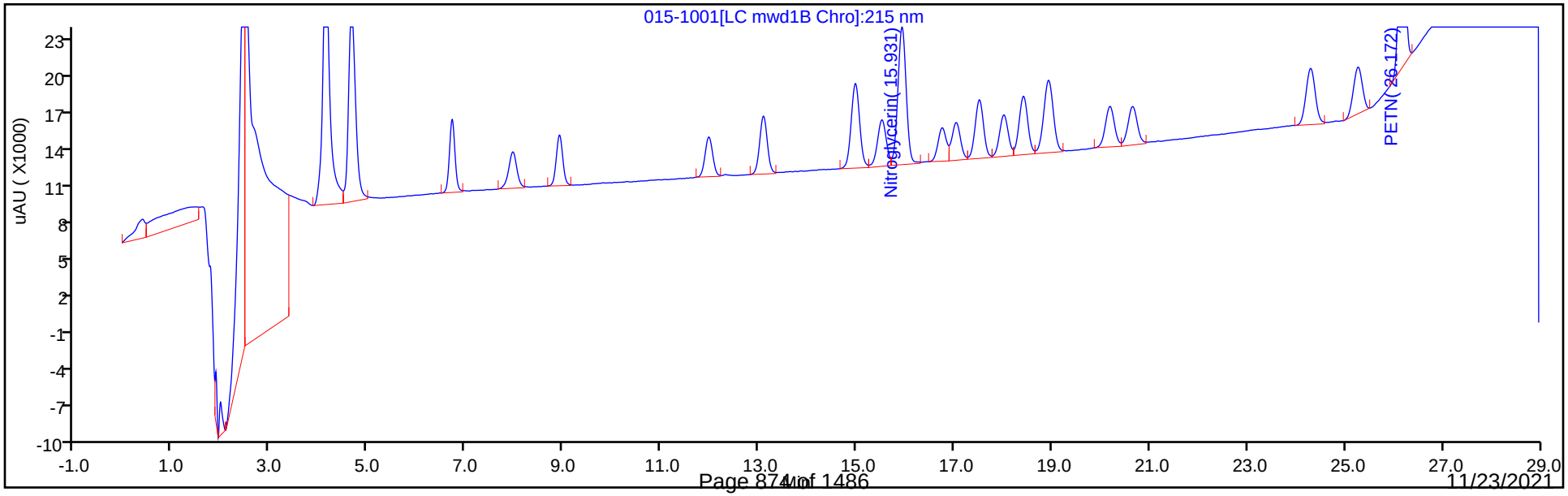
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D

Injection Date:	01-May-2021 21:50:04	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

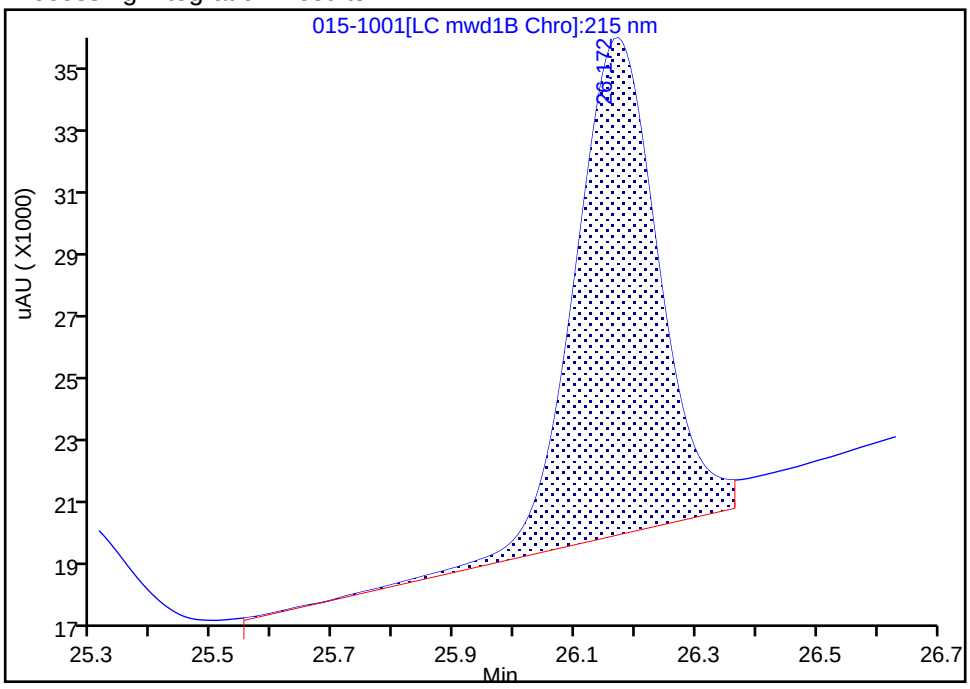
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D				
Injection Date:	01-May-2021 21:50:04	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

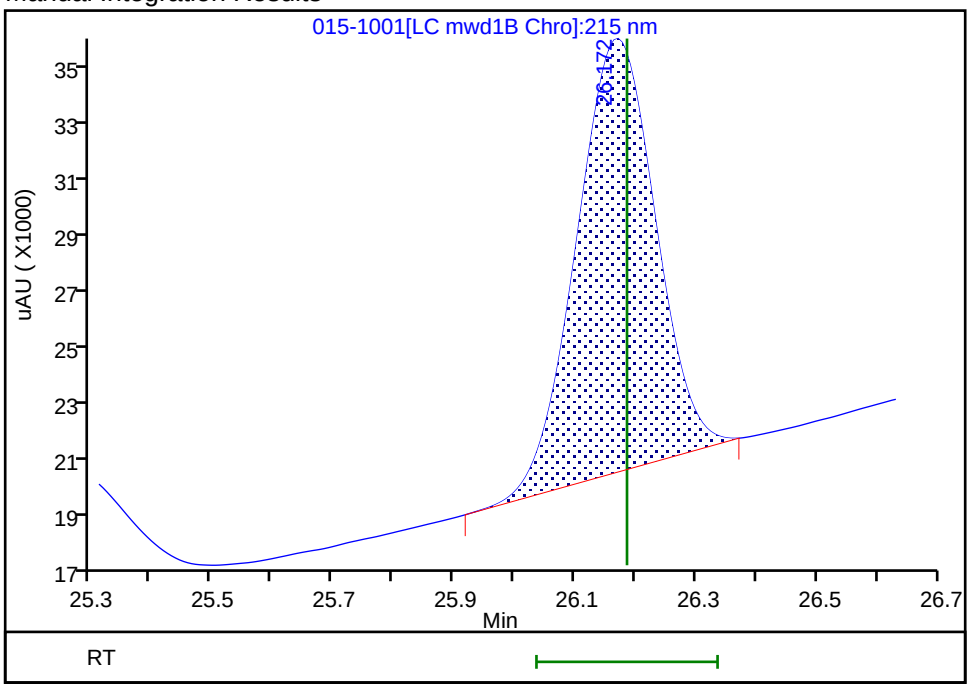
Processing Integration Results

RT: 26.17
Area: 151513
Amount: 1.005886
Amount Units: ug/ml



Manual Integration Results

RT: 26.17
Area: 136676
Amount: 0.992273
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Lims ID: IC INT/ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 22:25:05 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 3
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.134	4.126	0.008	24575	0.0500	0.0507	
2 2,4-diamino-6-nitrotoluene	1	4.667	4.653	0.014	13602	0.0500	0.0516	
6 HMX	1	6.734	6.713	0.021	8791	0.0500	0.0492	
5 2,4,6-Trinitrophenol	1	7.987	7.933	0.054	8578	0.0500	0.0538	
8 RDX	1	8.934	8.906	0.028	11066	0.0500	0.0542	
9 Nitrobenzene	1	11.994	11.973	0.021	19306	0.0502	0.0515	
$ 10 1,2-Dinitrobenzene	1	13.114	13.093	0.021	13836	0.0500	0.0521	
11 3,5-Dinitroaniline	1	15.007	14.979	0.028	23131	0.0500	0.0493	
12 1,3-Dinitrobenzene	1	15.547	15.519	0.028	29142	0.0501	0.0493	
13 Nitroglycerin	2	15.961	15.939	0.022	65416	0.5000	0.5087	
14 o-Nitrotoluene	1	16.781	16.759	0.022	12373	0.0500	0.0497	
15 p-Nitrotoluene	1	17.074	17.046	0.028	10760	0.0501	0.0495	
16 4-Amino-2,6-dinitrotoluene	1	17.541	17.526	0.015	14802	0.0501	0.0499	
17 m-Nitrotoluene	1	18.047	18.026	0.021	13943	0.0501	0.0501	
18 2-Amino-4,6-dinitrotoluene	1	18.441	18.426	0.015	21111	0.0502	0.0509	
19 1,3,5-Trinitrobenzene	1	18.954	18.939	0.015	23506	0.0501	0.0503	
20 2,6-Dinitrotoluene	1	20.201	20.199	0.002	14081	0.0502	0.0499	
21 2,4-Dinitrotoluene	1	20.674	20.666	0.008	28396	0.0502	0.0502	
22 Tetryl	1	24.287	24.313	-0.026	17573	0.0501	0.0494	
23 2,4,6-Trinitrotoluene	1	25.254	25.280	-0.026	19400	0.0502	0.0479	
24 PETN	2	26.154	26.186	-0.032	69170	0.5000	0.5022	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	5.00	Units: uL
8330_ADDs_00027	Amount Added:	2.50	Units: uL

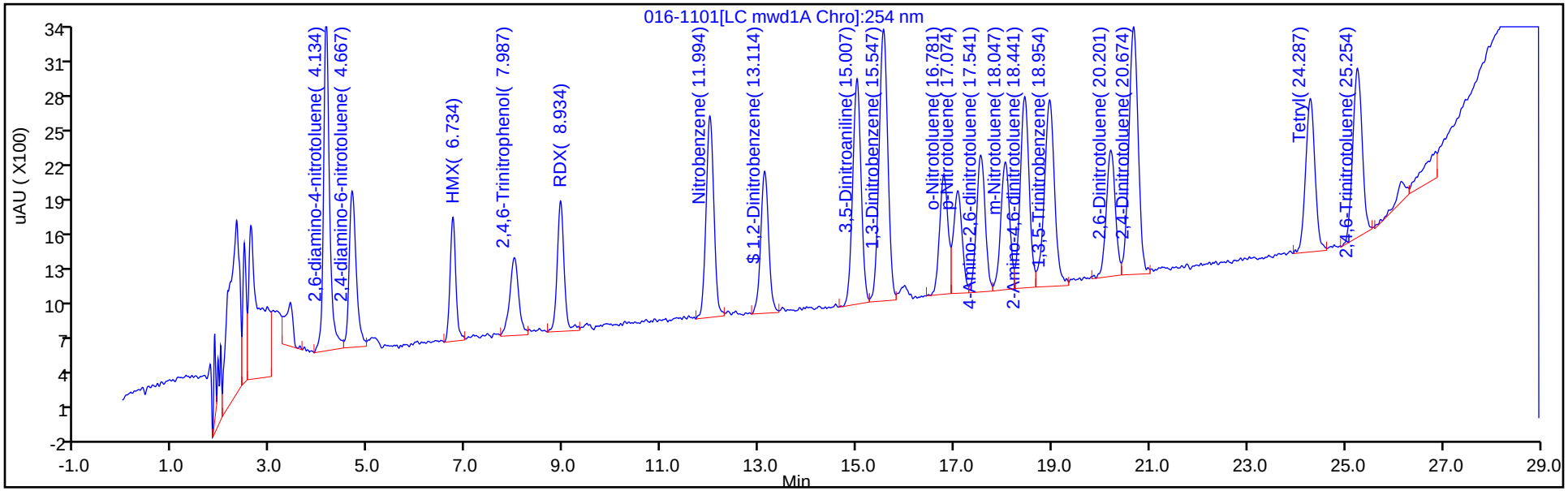
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

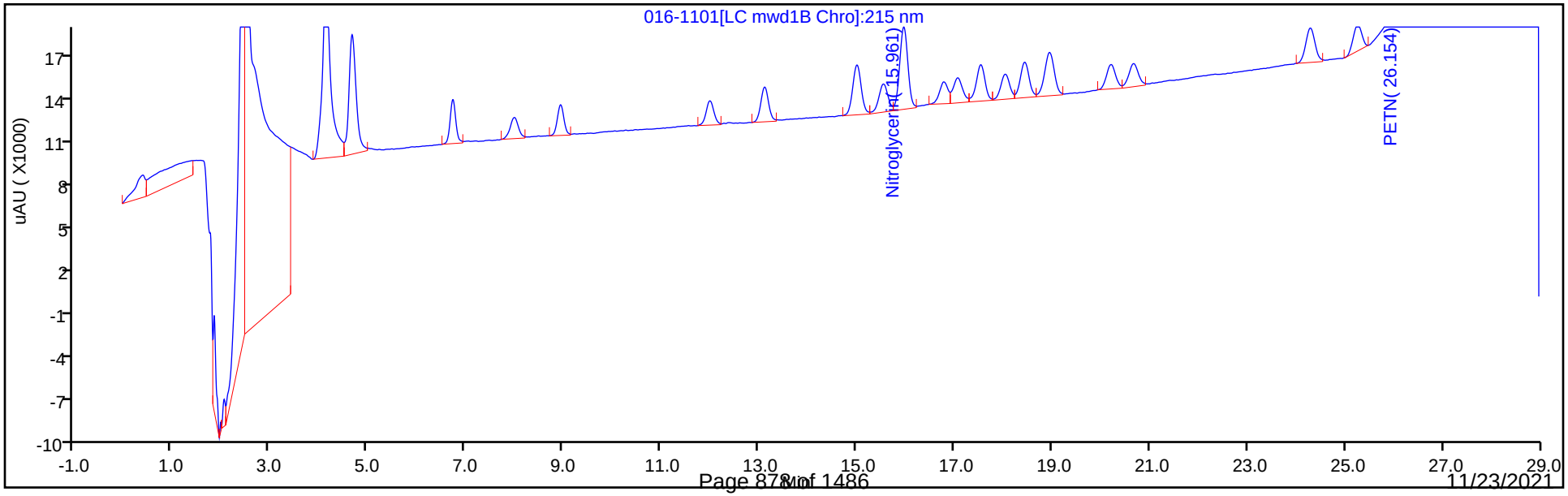
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D

Injection Date:	01-May-2021 22:25:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

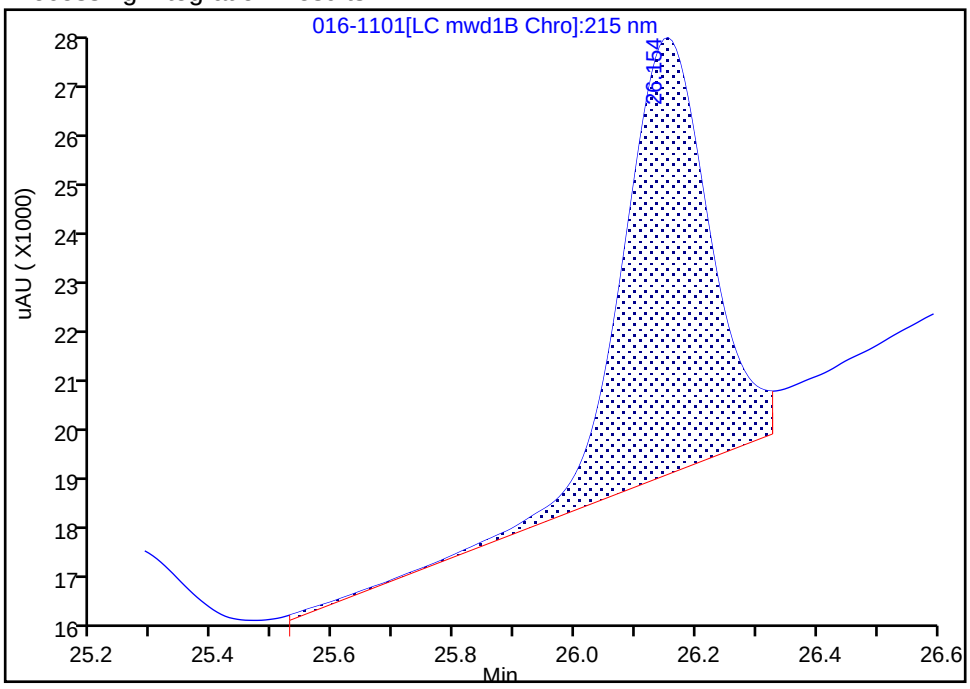
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Injection Date: 01-May-2021 22:25:05 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

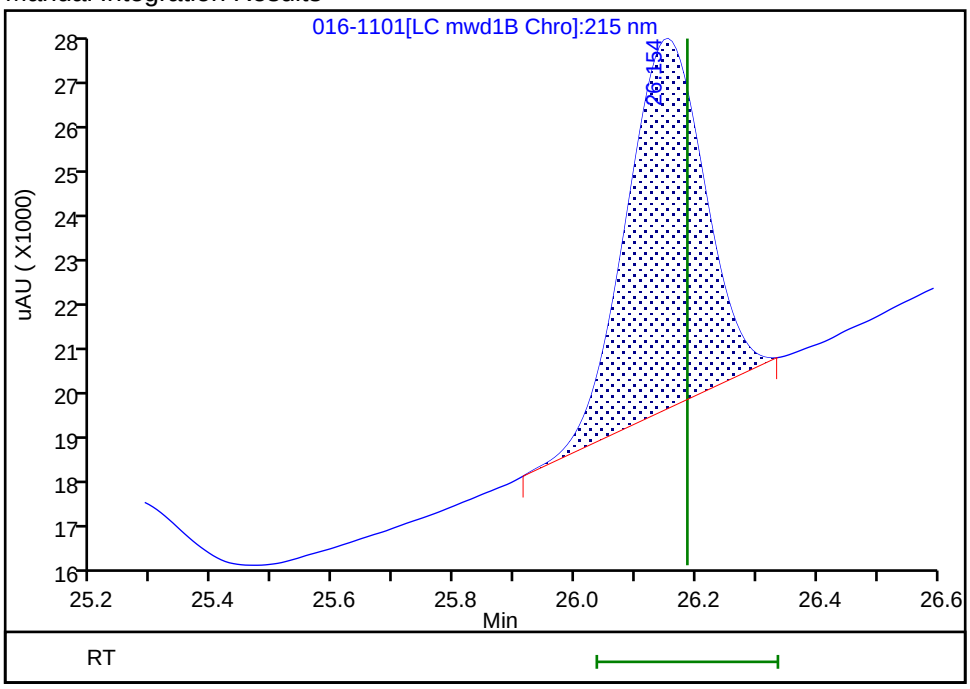
Processing Integration Results

RT: 26.15
Area: 81816
Amount: 0.467715
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 69170
Amount: 0.502177
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Lims ID: IC INT/ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 23:00:06 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.133	4.126	0.007	11811	0.0200	0.0194	
2 2,4-diamino-6-nitrotoluene	1	4.673	4.653	0.020	6051	0.0200	0.0200	
6 HMX	1	6.720	6.713	0.007	4286	0.0200	0.0208	
5 2,4,6-Trinitrophenol	1	7.980	7.933	0.047	3270	0.0200	0.0205	
8 RDX	1	8.926	8.906	0.020	4533	0.0200	0.0222	
9 Nitrobenzene	1	11.973	11.973	0.000	7888	0.0201	0.0211	
$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	6280	0.0200	0.0236	
11 3,5-Dinitroaniline	1	14.980	14.979	0.001	9417	0.0200	0.0188	
12 1,3-Dinitrobenzene	1	15.533	15.519	0.014	12411	0.0200	0.0196	
13 Nitroglycerin	2	15.940	15.939	0.001	28299	0.2000	0.2200	
14 o-Nitrotoluene	1	16.740	16.759	-0.019	5151	0.0200	0.0207	
15 p-Nitrotoluene	1	17.060	17.046	0.014	4823	0.0200	0.0222	
16 4-Amino-2,6-dinitrotoluene	1	17.520	17.526	-0.006	6276	0.0200	0.0212	
17 m-Nitrotoluene	1	18.033	18.026	0.007	5928	0.0200	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	9114	0.0201	0.0202	
19 1,3,5-Trinitrobenzene	1	18.946	18.939	0.007	10540	0.0200	0.0187	
20 2,6-Dinitrotoluene	1	20.200	20.199	0.001	6026	0.0201	0.0195	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	12229	0.0201	0.0216	
22 Tetryl	1	24.306	24.313	-0.007	7583	0.0200	0.0179	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	8548	0.0201	0.0187	
24 PETN	2	26.180	26.186	-0.006	27436	0.2000	0.1992	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	2.00	Units: uL
8330_ADDs_00027	Amount Added:	1.00	Units: uL

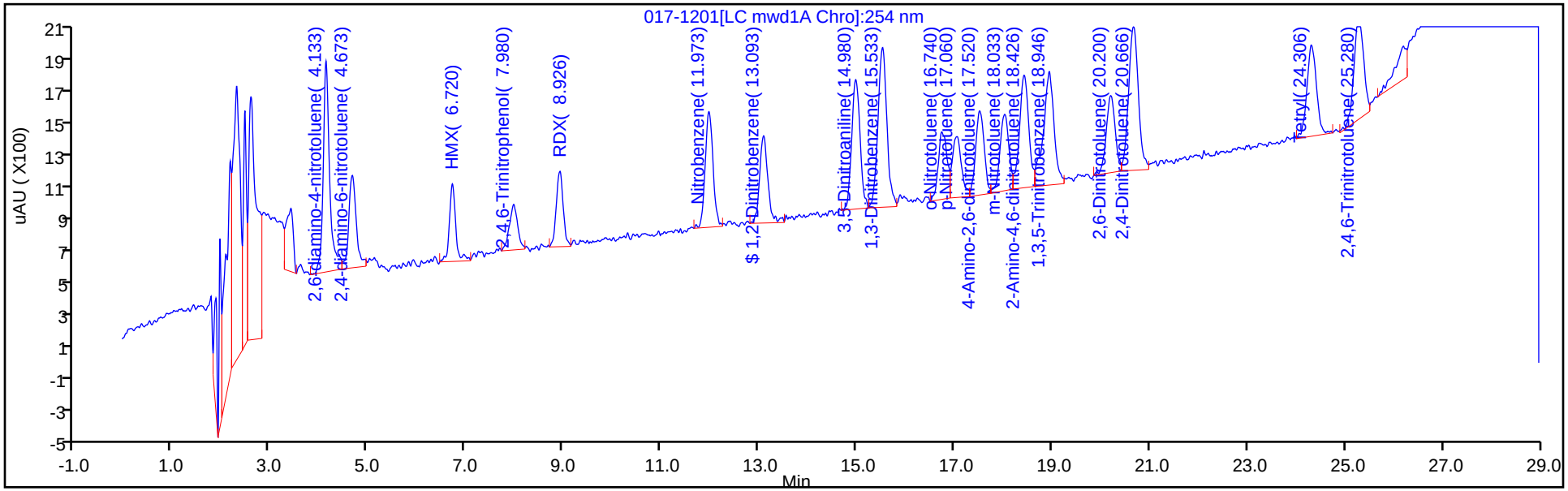
Report Date: 04-May-2021 13:43:15 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

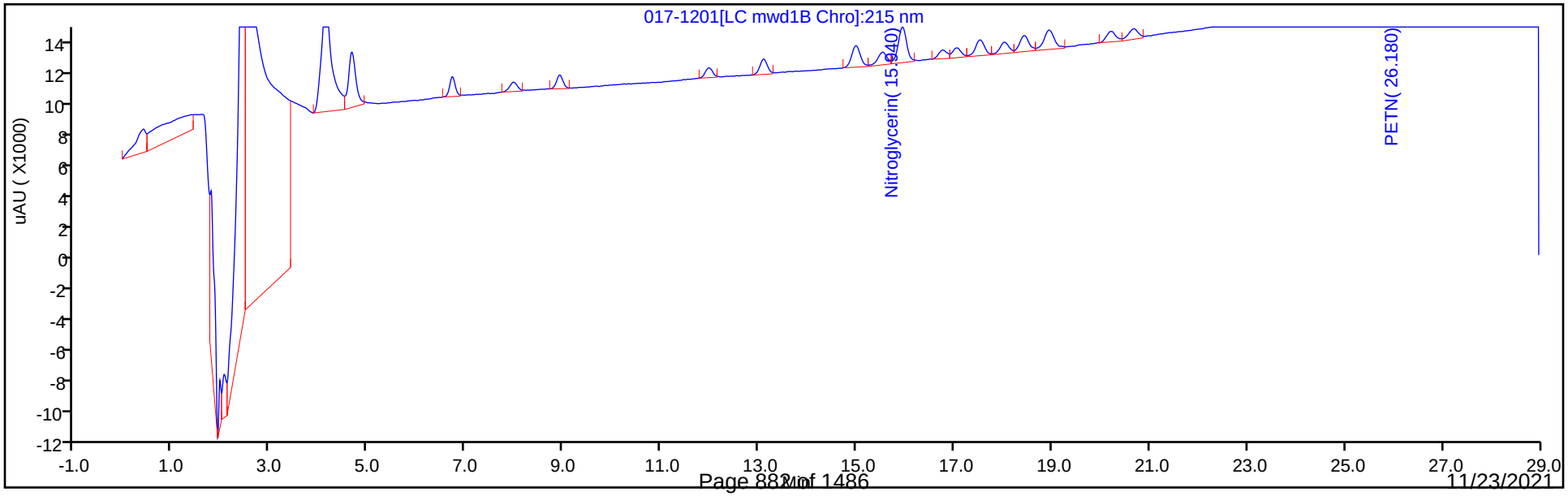
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D

Injection Date:	01-May-2021 23:00:06	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

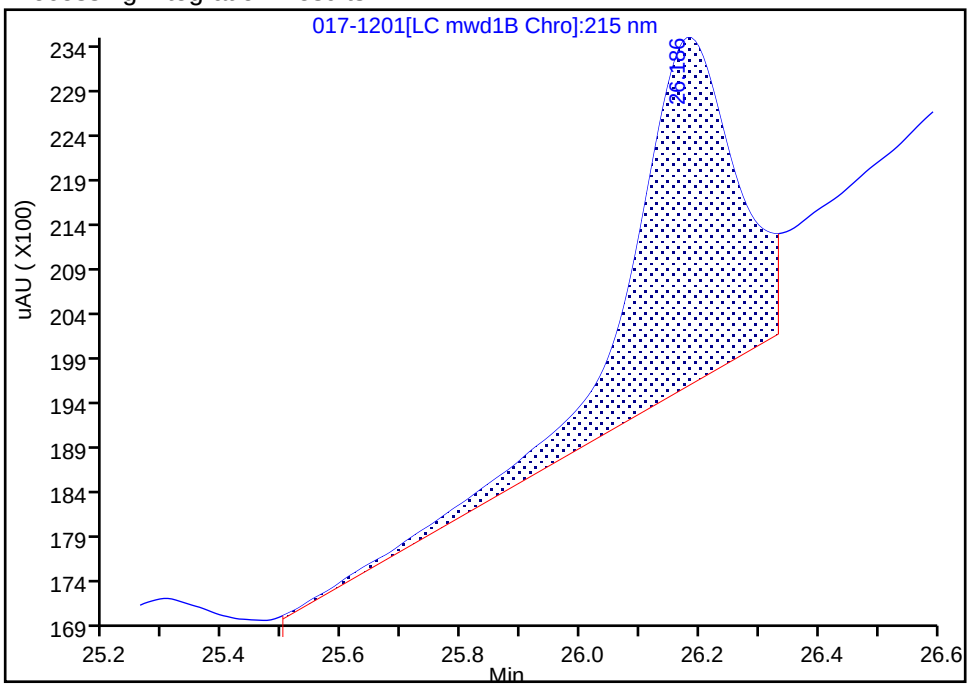
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D				
Injection Date:	01-May-2021 23:00:06	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

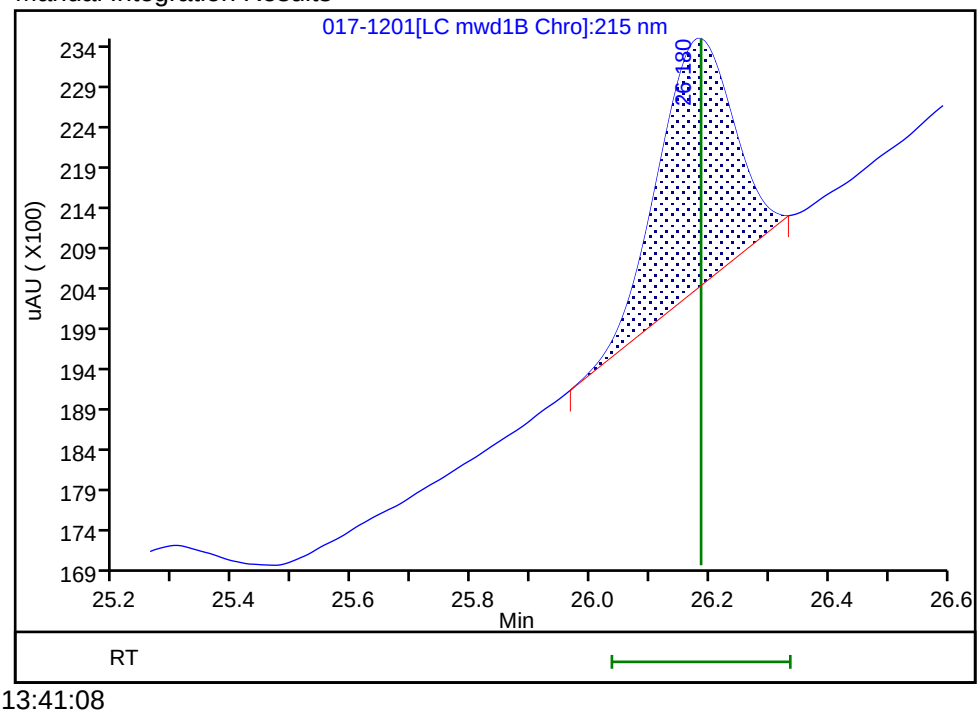
Processing Integration Results

RT: 26.19
Area: 47400
Amount: 0.217570
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 27436
Amount: 0.199186
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Lims ID: IC INT/ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 23:35:08 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 1
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:42:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.144	4.126	0.018	8029	0.0100	0.0101	
2 2,4-diamino-6-nitrotoluene	1	4.684	4.653	0.031	3655	0.0100	0.0099	
6 HMX	1	6.724	6.713	0.011	2543	0.0100	0.009840	
5 2,4,6-Trinitrophenol	1	8.004	7.933	0.071	1789	0.0100	0.0112	
8 RDX	1	8.918	8.906	0.012	2988	0.0100	0.0146	
9 Nitrobenzene	1	11.978	11.973	0.005	4507	0.0100	0.0120	
$ 10 1,2-Dinitrobenzene	1	13.104	13.093	0.011	4082	0.0100	0.0154	
11 3,5-Dinitroaniline	1	14.978	14.979	-0.001	5594	0.0100	0.0103	
12 1,3-Dinitrobenzene	1	15.524	15.519	0.005	7085	0.0100	0.0101	
13 Nitroglycerin	2	15.924	15.939	-0.015	16401	0.1000	0.1275	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	3022	0.0100	0.0121	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	2608	0.0100	0.0120	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	3954	0.0100	0.0133	
17 m-Nitrotoluene	1	17.978	18.026	-0.048	3517	0.0100	0.0126	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	5148	0.0100	0.0100	
19 1,3,5-Trinitrobenzene	1	18.904	18.939	-0.035	7116	0.0100	0.0103	
20 2,6-Dinitrotoluene	1	20.191	20.199	-0.008	3555	0.0100	0.0102	
21 2,4-Dinitrotoluene	1	20.644	20.666	-0.022	6619	0.0100	0.0117	
22 Tetryl	1	24.271	24.313	-0.042	5245	0.0100	0.0106	
23 2,4,6-Trinitrotoluene	1	25.258	25.280	-0.022	5469	0.0100	0.0105	
24 PETN	2	26.151	26.186	-0.035	15659	0.1000	0.1137	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	1.00	Units: uL
8330_ADDs_00027	Amount Added:	0.50	Units: uL

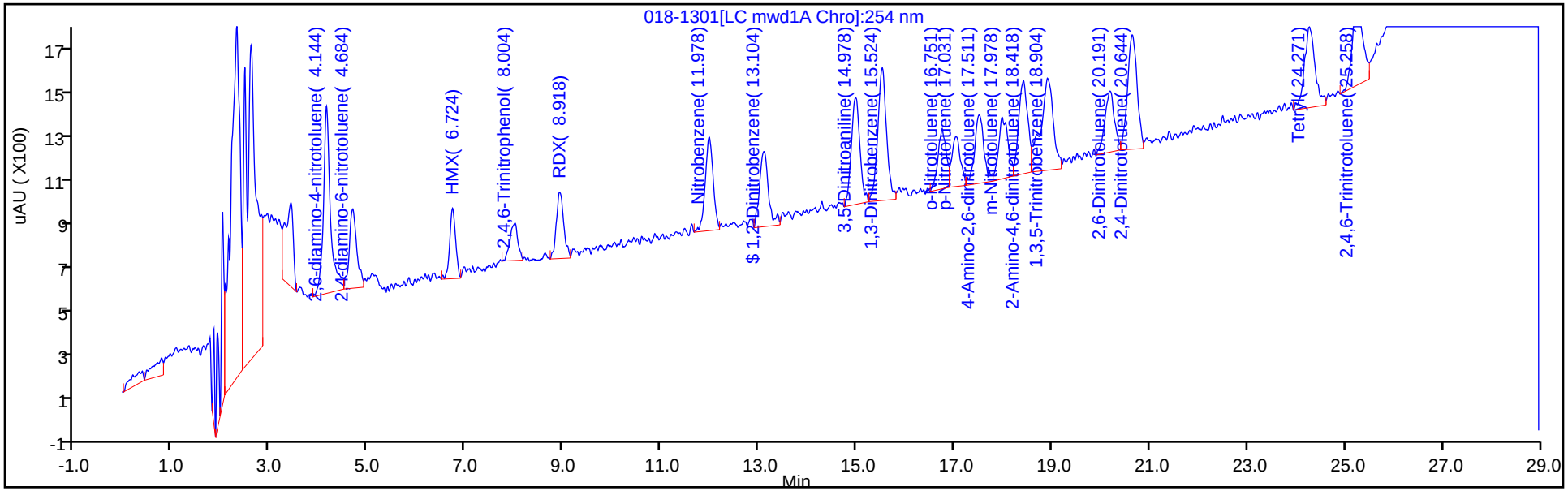
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

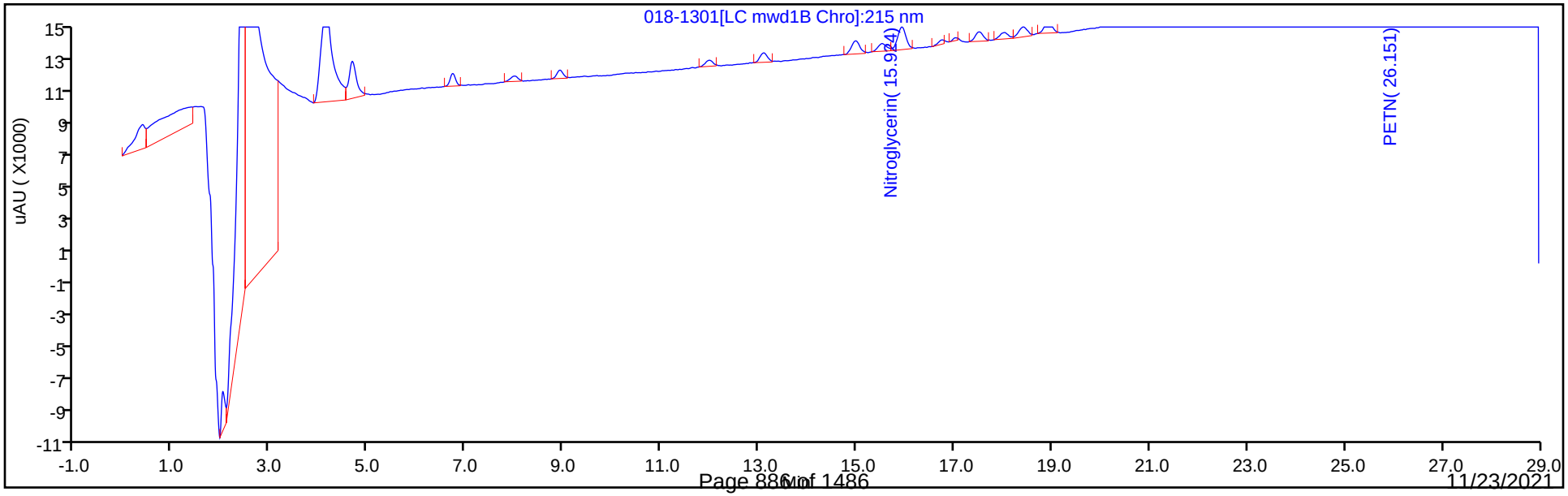
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

Injection Date:	01-May-2021 23:35:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

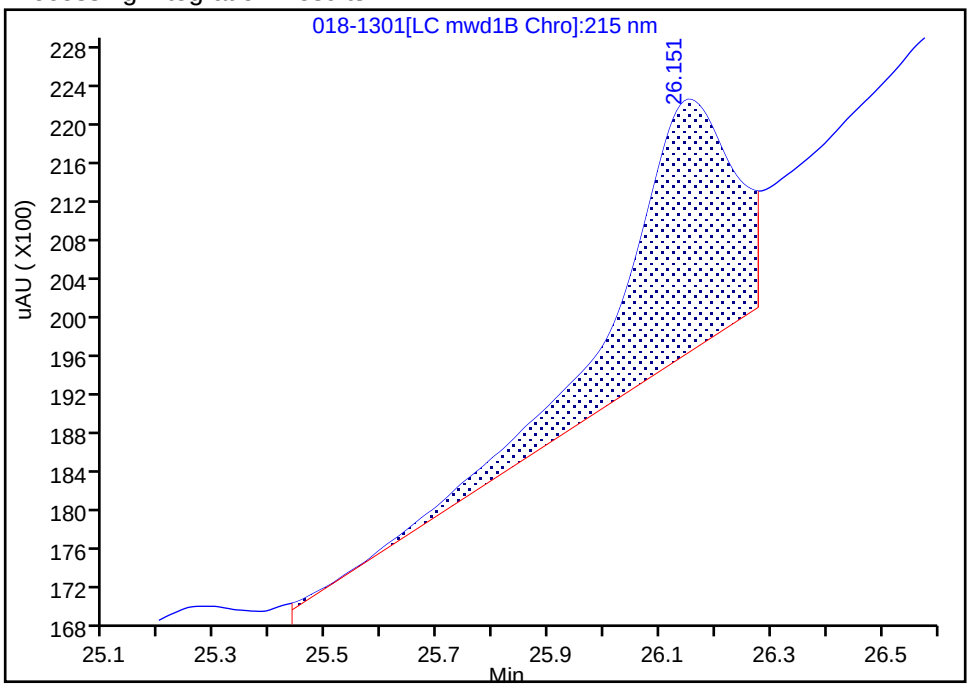
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Injection Date: 01-May-2021 23:35:08 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

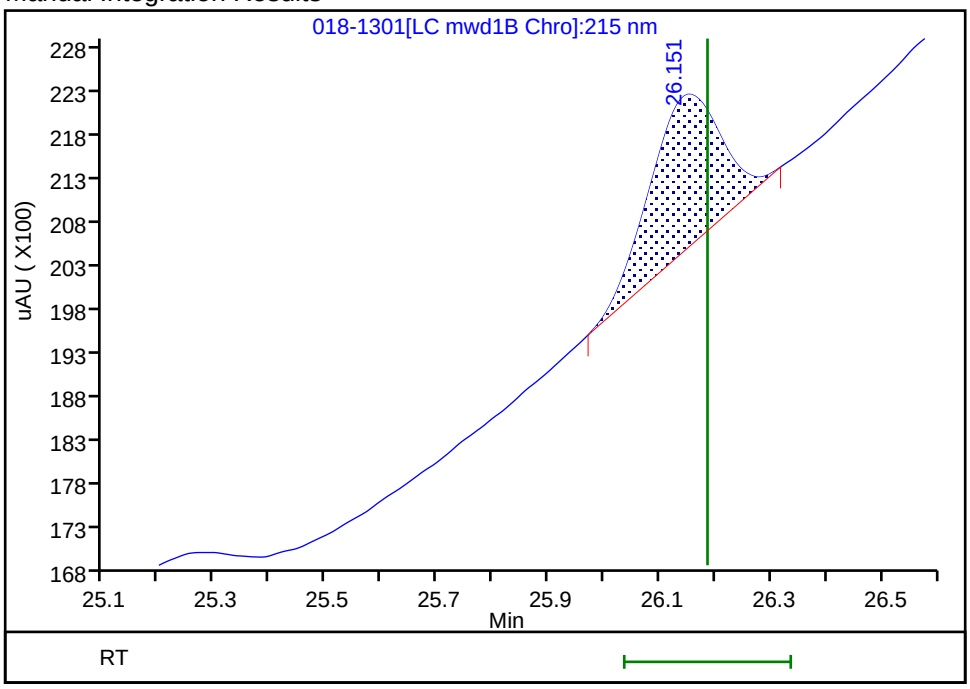
Processing Integration Results

RT: 26.15
Area: 35908
Amount: 0.224090
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 15659
Amount: 0.113685
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

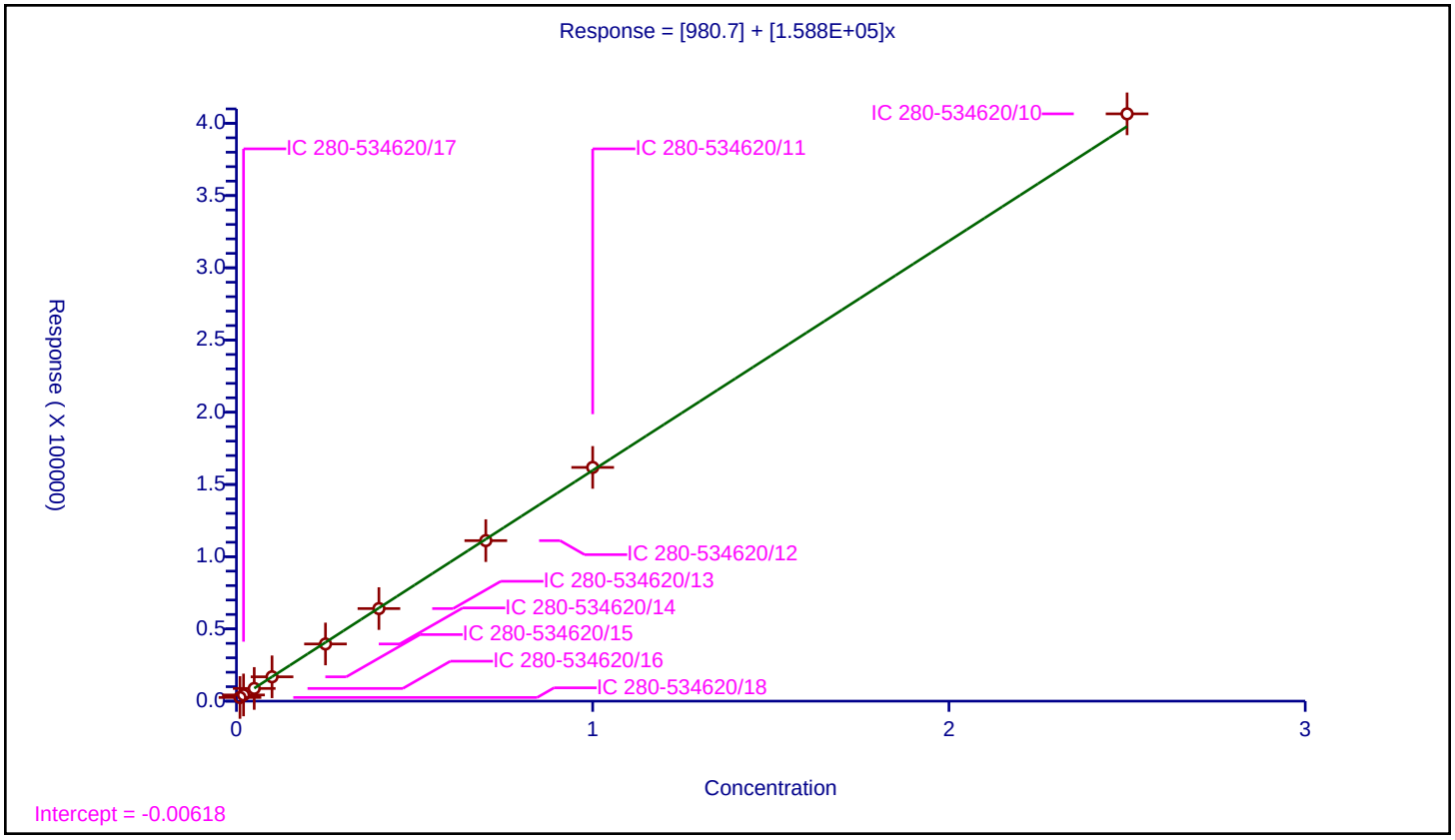
Curve Coefficients

Intercept:	980.7
Slope:	1.588E+05

Error Coefficients

Standard Error:	3410
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2543.0			254300.0	Y
2	IC 280-534620/17	0.02	4286.0			214300.0	Y
3	IC 280-534620/16	0.05	8791.0			175820.0	Y
4	IC 280-534620/15	0.1	16850.0			168500.0	Y
5	IC 280-534620/14	0.25	39580.0			158320.0	Y
6	IC 280-534620/13	0.4	64089.0			160222.5	Y
7	IC 280-534620/12	0.7	111120.0			158742.857143	Y
8	IC 280-534620/11	1.0	161798.0			161798.0	Y
9	IC 280-534620/10	2.5	406565.0			162626.0	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

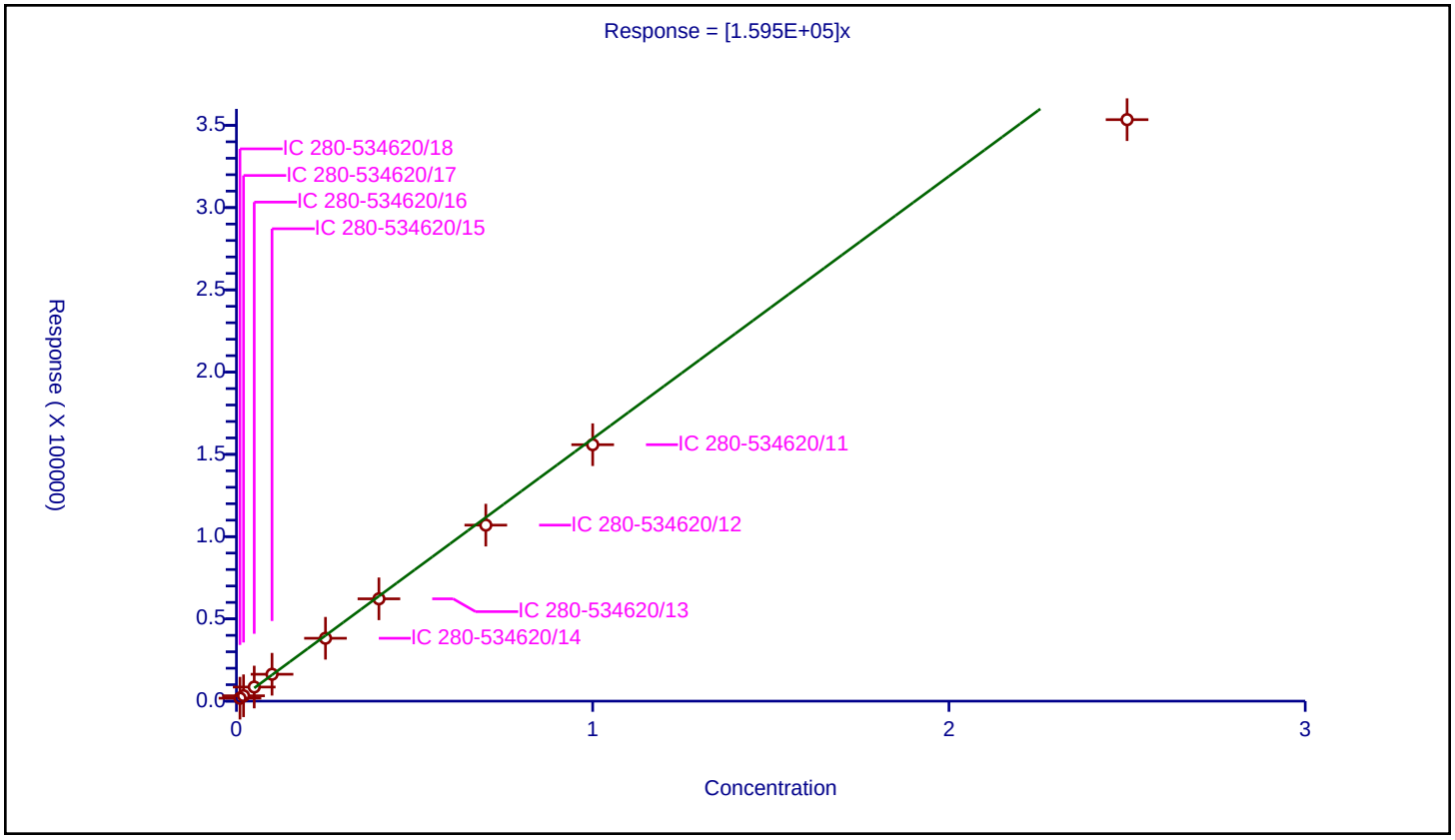
Curve Coefficients

Intercept:	0
Slope:	1.595E+05

Error Coefficients

Standard Error:	16200
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	1789.0			178900.0	Y
2	IC 280-534620/17	0.02	3270.0			163500.0	Y
3	IC 280-534620/16	0.05	8578.0			171560.0	Y
4	IC 280-534620/15	0.1	16340.0			163400.0	Y
5	IC 280-534620/14	0.25	38222.0			152888.0	Y
6	IC 280-534620/13	0.4	62190.0			155475.0	Y
7	IC 280-534620/12	0.7	106987.0			152838.571429	Y
8	IC 280-534620/11	1.0	155884.0			155884.0	Y
9	IC 280-534620/10	2.5	353462.0			141384.8	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

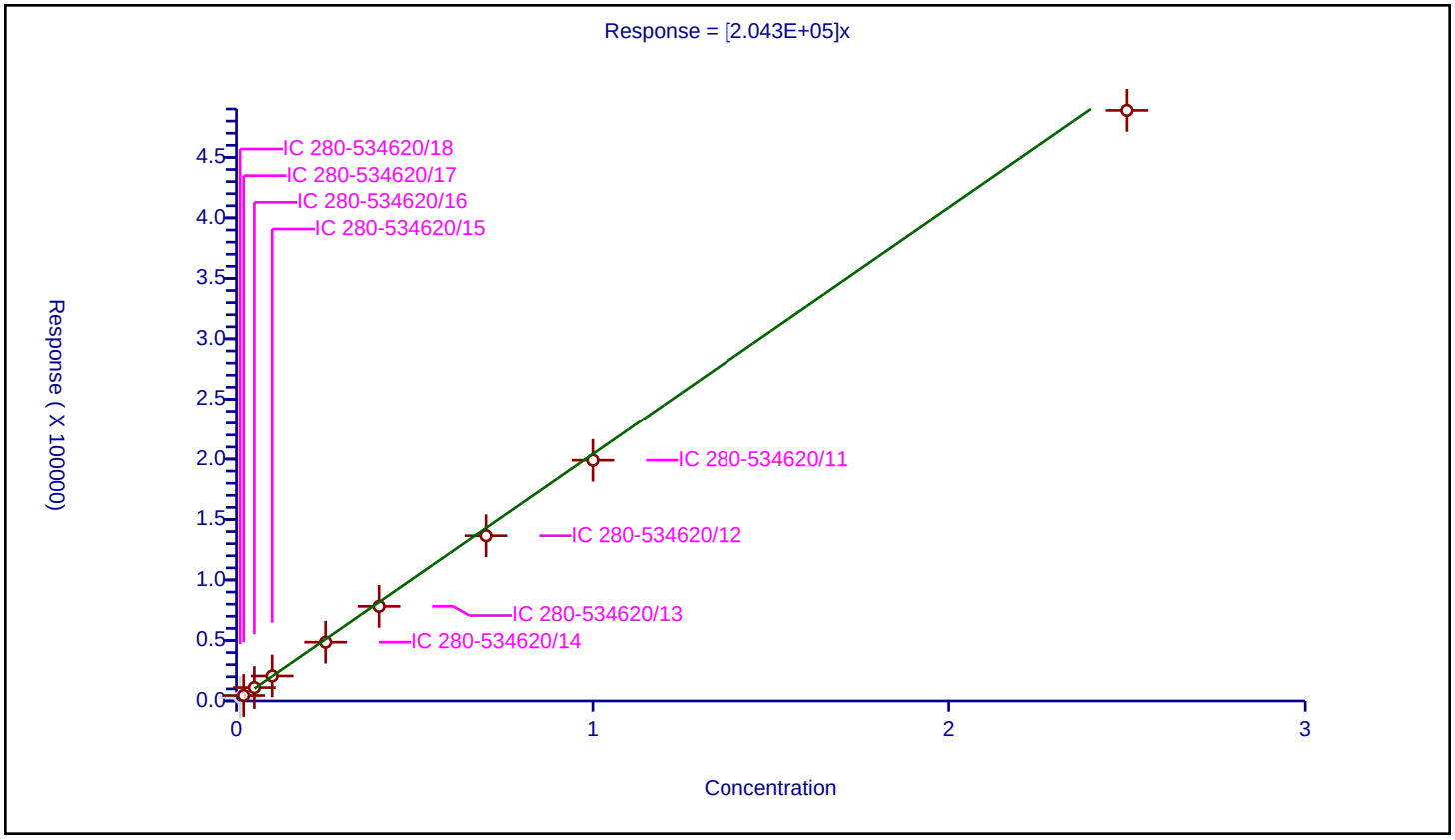
Curve Coefficients

Intercept:	0
Slope:	2.043E+05

Error Coefficients

Standard Error:	8980
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2988.0			298800.0	N
2	IC 280-534620/17	0.02	4533.0			226650.0	Y
3	IC 280-534620/16	0.05	11066.0			221320.0	Y
4	IC 280-534620/15	0.1	20661.0			206610.0	Y
5	IC 280-534620/14	0.25	48606.0			194424.0	Y
6	IC 280-534620/13	0.4	78185.0			195462.5	Y
7	IC 280-534620/12	0.7	136592.0			195131.428571	Y
8	IC 280-534620/11	1.0	199019.0			199019.0	Y
9	IC 280-534620/10	2.5	488855.0			195542.0	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

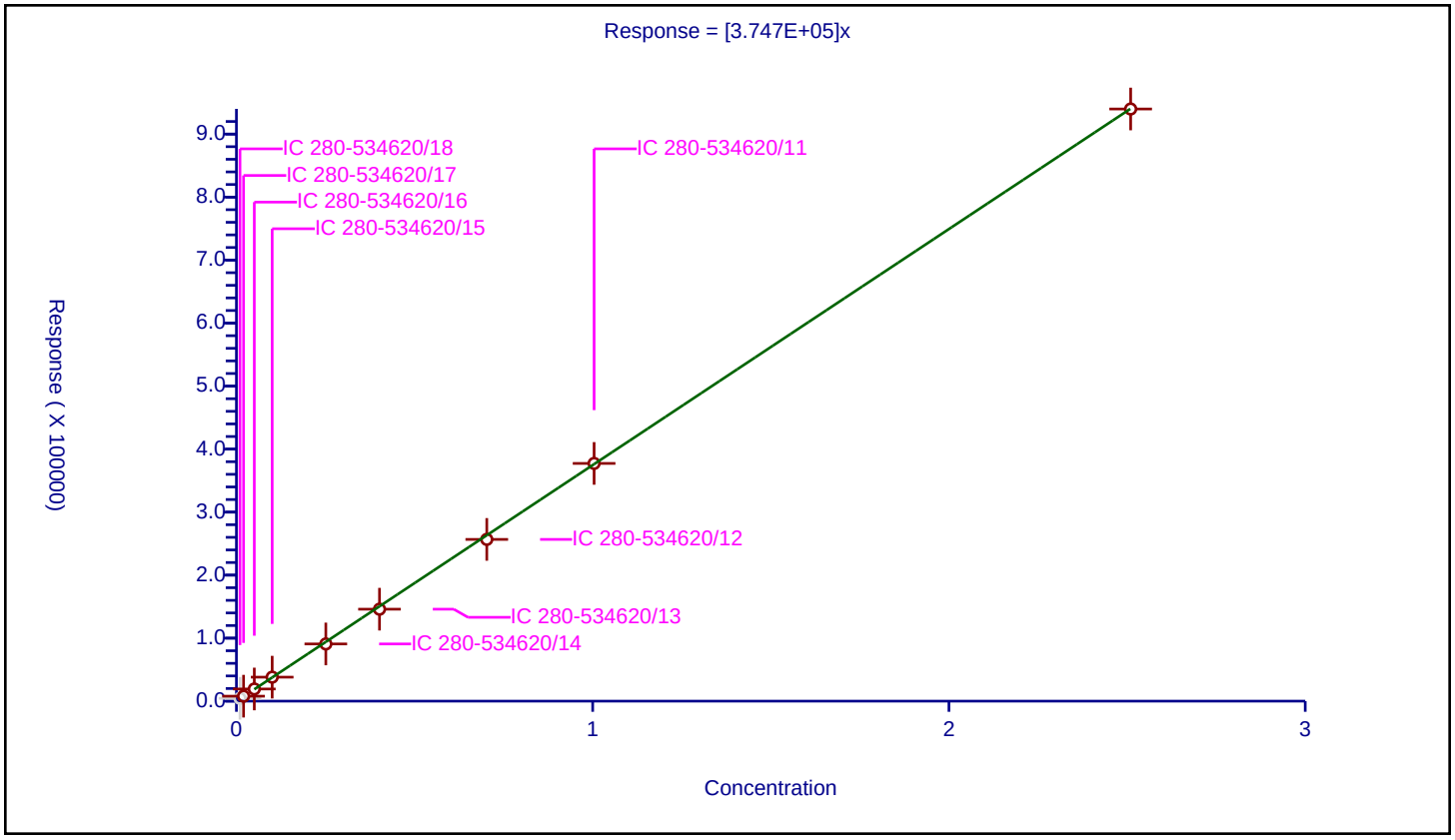
Curve Coefficients

Intercept:	0
Slope:	3.747E+05

Error Coefficients

Standard Error:	3320
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	4507.0			448904.38247	N
2	IC 280-534620/17	0.02008	7888.0			392828.685259	Y
3	IC 280-534620/16	0.0502	19306.0			384581.673307	Y
4	IC 280-534620/15	0.1004	38085.0			379332.669323	Y
5	IC 280-534620/14	0.251	90760.0			361593.625498	Y
6	IC 280-534620/13	0.4016	145926.0			363361.553785	Y
7	IC 280-534620/12	0.7028	256719.0			365280.307342	Y
8	IC 280-534620/11	1.004	377310.0			375806.772908	Y
9	IC 280-534620/10	2.51	939811.0			374426.693227	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

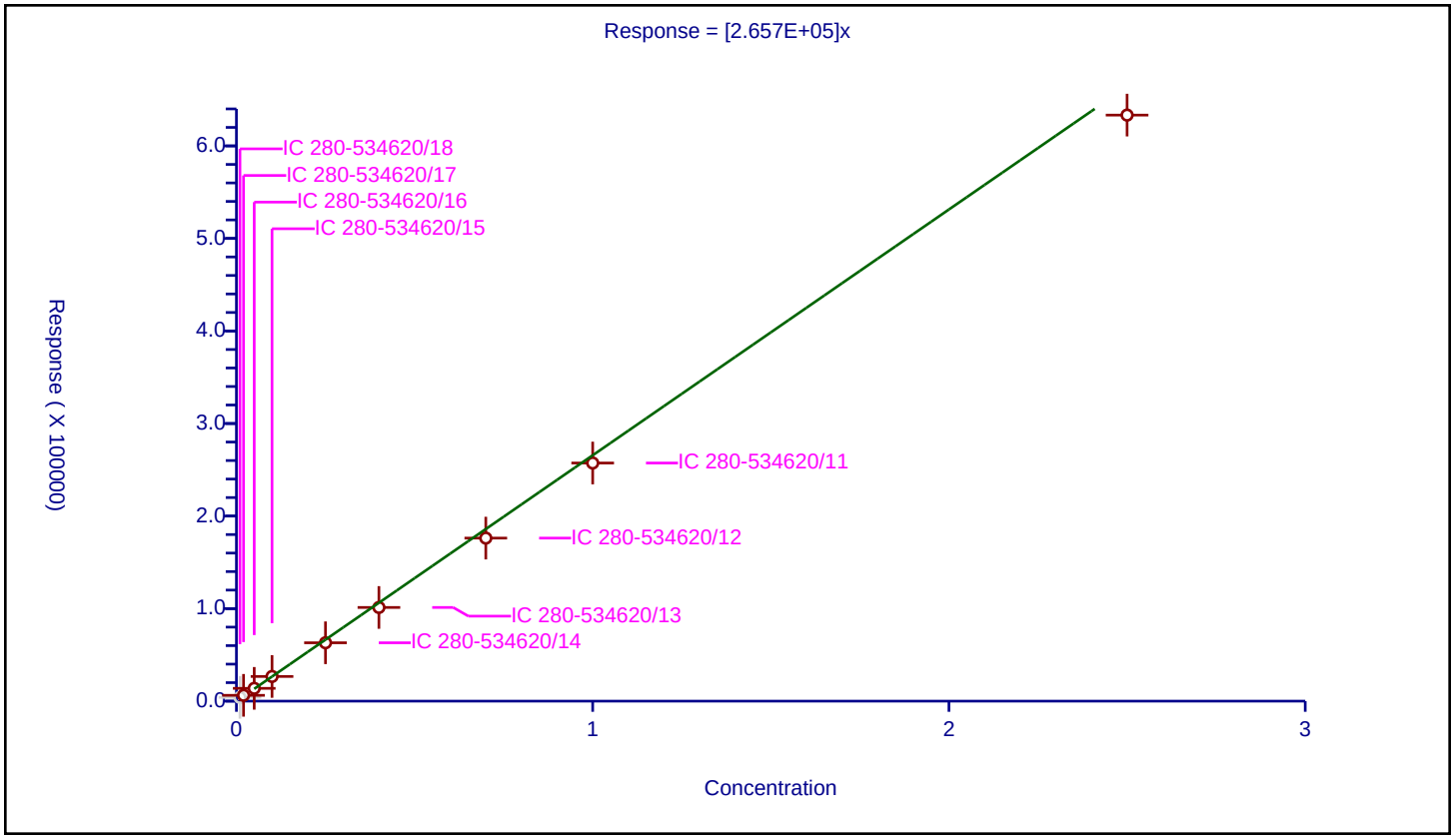
Curve Coefficients

Intercept:	0
Slope:	2.657E+05

Error Coefficients

Standard Error:	12800
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	4082.0			408200.0	N
2	IC 280-534620/17	0.02	6280.0			314000.0	Y
3	IC 280-534620/16	0.05	13836.0			276720.0	Y
4	IC 280-534620/15	0.1	26678.0			266780.0	Y
5	IC 280-534620/14	0.25	63081.0			252324.0	Y
6	IC 280-534620/13	0.4	101248.0			253120.0	Y
7	IC 280-534620/12	0.7	176180.0			251685.714286	Y
8	IC 280-534620/11	1.0	257324.0			257324.0	Y
9	IC 280-534620/10	2.5	633300.0			253320.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

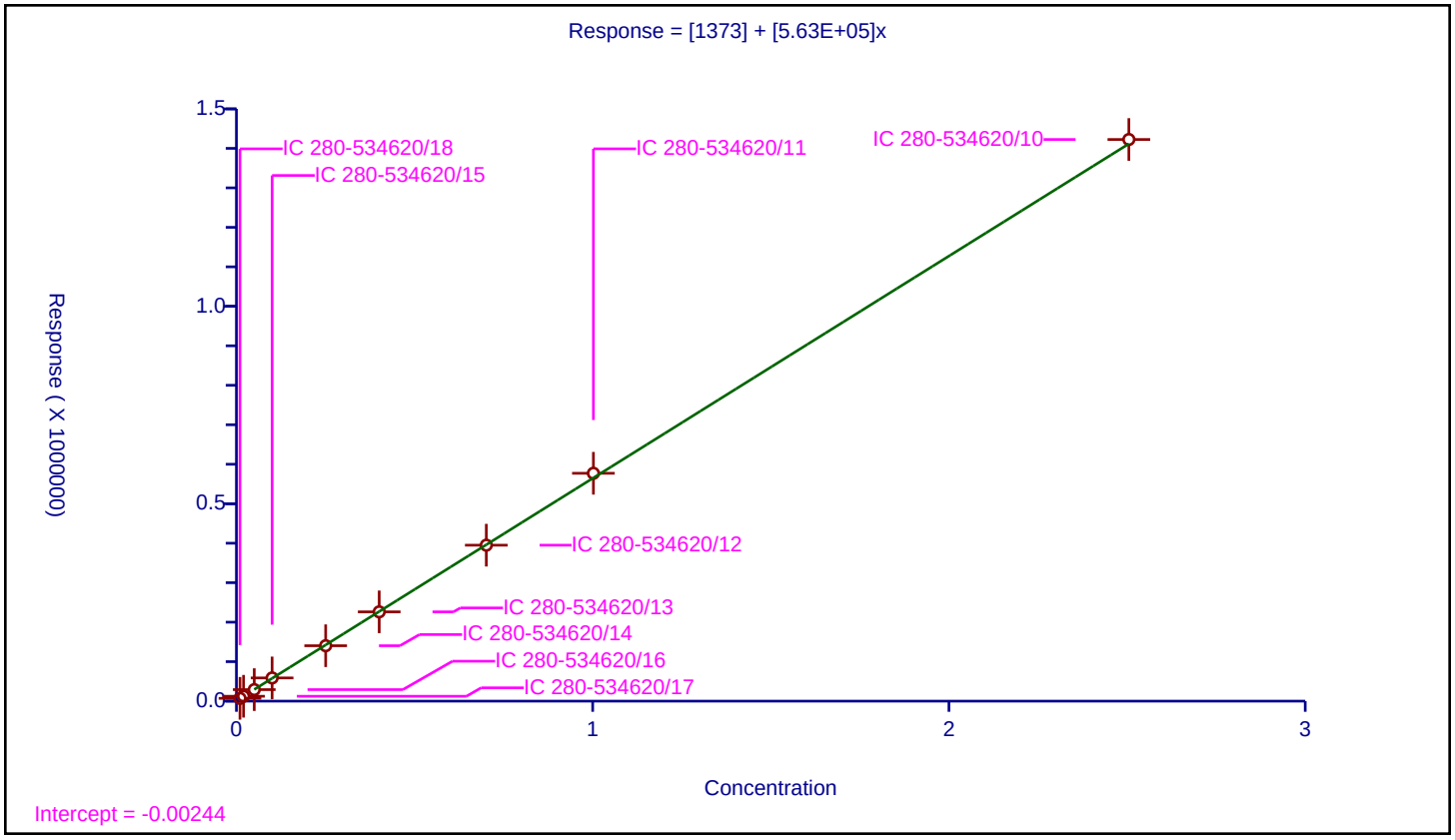
Curve Coefficients

Intercept:	1373
Slope:	5.63E+05

Error Coefficients

Standard Error:	6130
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7085.0			707085.828343	Y
2	IC 280-534620/17	0.02004	12411.0			619311.377246	Y
3	IC 280-534620/16	0.0501	29142.0			581676.646707	Y
4	IC 280-534620/15	0.1002	58764.0			586467.065868	Y
5	IC 280-534620/14	0.2505	140347.0			560267.46507	Y
6	IC 280-534620/13	0.4008	226148.0			564241.516966	Y
7	IC 280-534620/12	0.7014	394975.0			563123.752495	Y
8	IC 280-534620/11	1.002	577120.0			575968.063872	Y
9	IC 280-534620/10	2.505	1422490.0			567860.279441	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

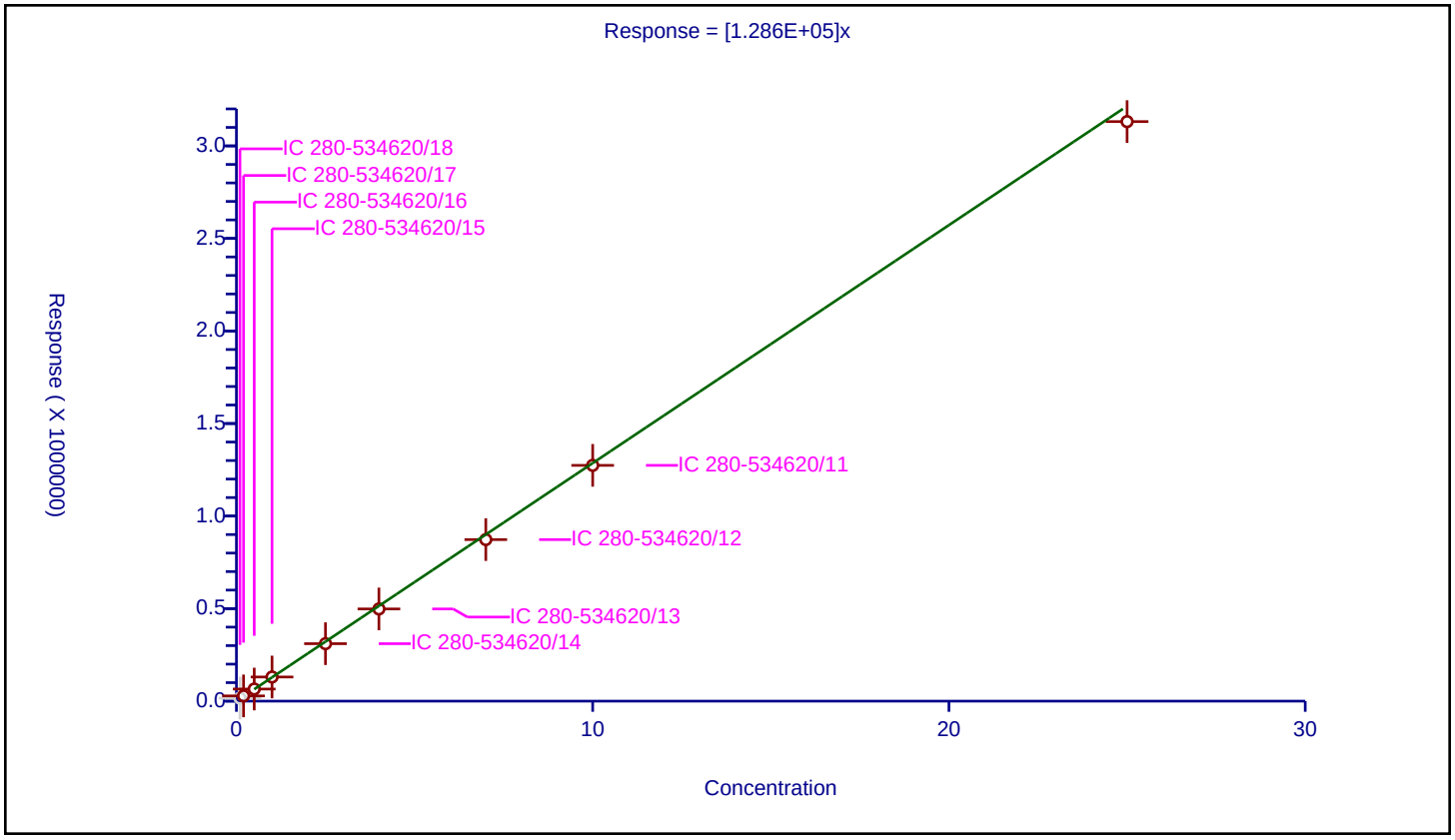
Curve Coefficients

Intercept:	0
Slope:	1.286E+05

Error Coefficients

Standard Error:	34400
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	16401.0			164010.0	N
2	IC 280-534620/17	0.2	28299.0			141495.0	Y
3	IC 280-534620/16	0.5	65416.0			130832.0	Y
4	IC 280-534620/15	1.0	130447.0			130447.0	Y
5	IC 280-534620/14	2.5	310480.0			124192.0	Y
6	IC 280-534620/13	4.0	498088.0			124522.0	Y
7	IC 280-534620/12	7.0	872941.0			124705.857143	Y
8	IC 280-534620/11	10.0	1273886.0			127388.6	Y
9	IC 280-534620/10	25.0	3131400.0			125256.0	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

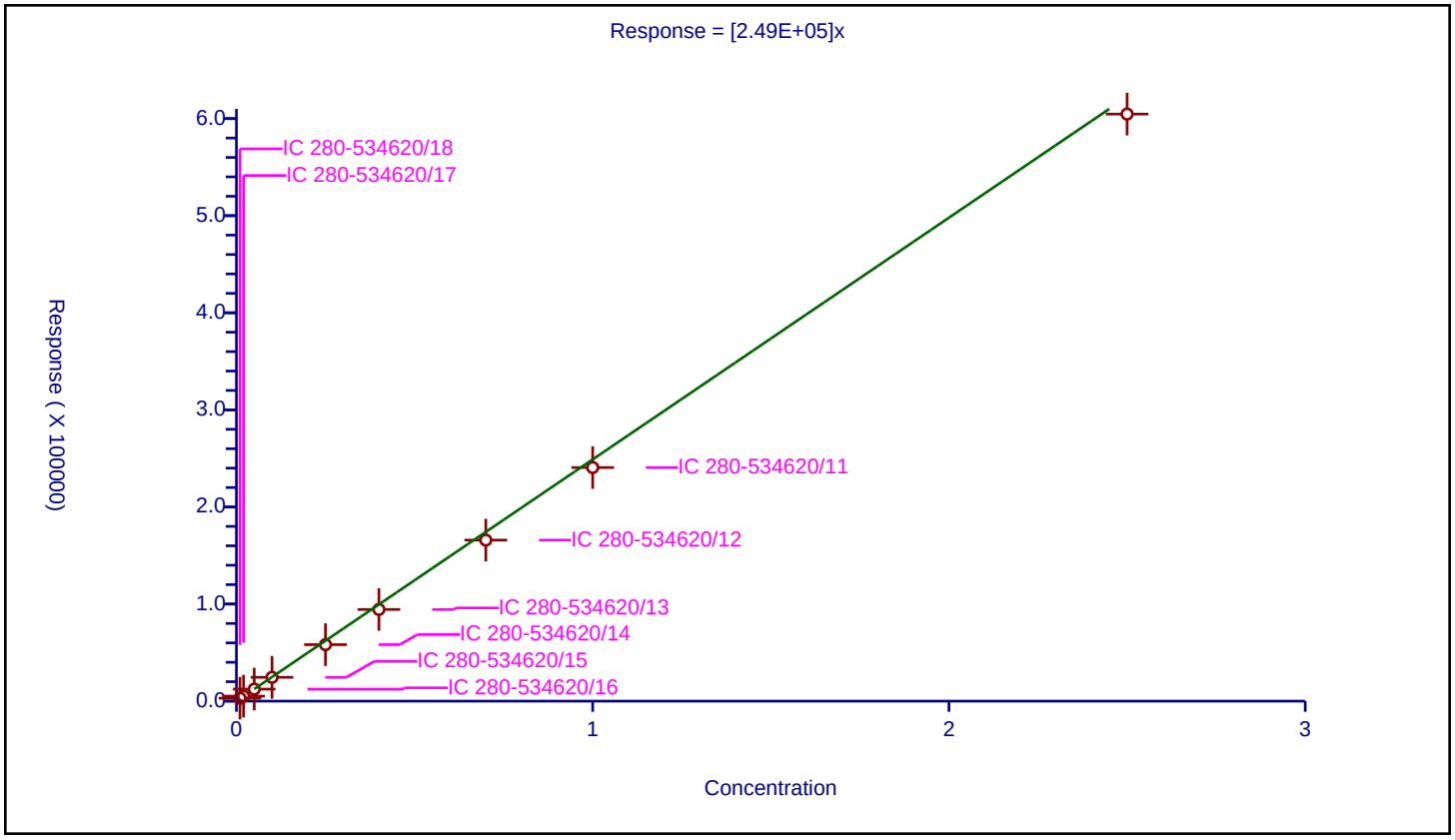
Curve Coefficients

Intercept:	0
Slope:	2.49E+05

Error Coefficients

Standard Error:	7910
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	3022.0			302200.0	Y
2	IC 280-534620/17	0.02	5151.0			257550.0	Y
3	IC 280-534620/16	0.05	12373.0			247460.0	Y
4	IC 280-534620/15	0.1	24528.0			245280.0	Y
5	IC 280-534620/14	0.25	58191.0			232764.0	Y
6	IC 280-534620/13	0.4	94418.0			236045.0	Y
7	IC 280-534620/12	0.7	165863.0			236947.142857	Y
8	IC 280-534620/11	1.0	240595.0			240595.0	Y
9	IC 280-534620/10	2.5	604653.0			241861.2	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

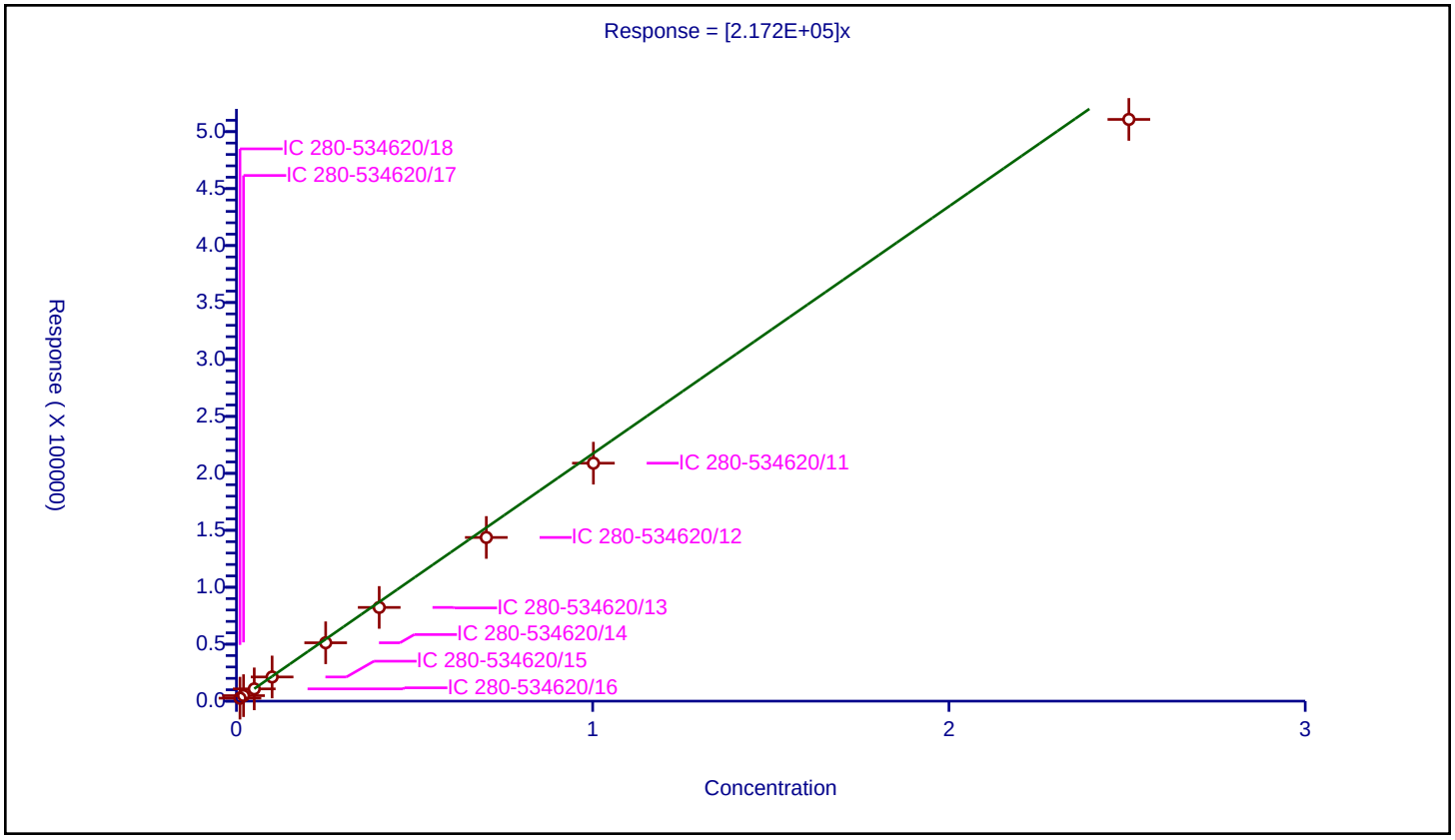
Curve Coefficients

Intercept:	0
Slope:	2.172E+05

Error Coefficients

Standard Error:	12700
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	2608.0			260279.441118	Y
2	IC 280-534620/17	0.02004	4823.0			240668.662675	Y
3	IC 280-534620/16	0.0501	10760.0			214770.459082	Y
4	IC 280-534620/15	0.1002	21221.0			211786.427146	Y
5	IC 280-534620/14	0.2505	51245.0			204570.858283	Y
6	IC 280-534620/13	0.4008	82281.0			205291.916168	Y
7	IC 280-534620/12	0.7014	143722.0			204907.328201	Y
8	IC 280-534620/11	1.002	208929.0			208511.976048	Y
9	IC 280-534620/10	2.505	510755.0			203894.211577	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

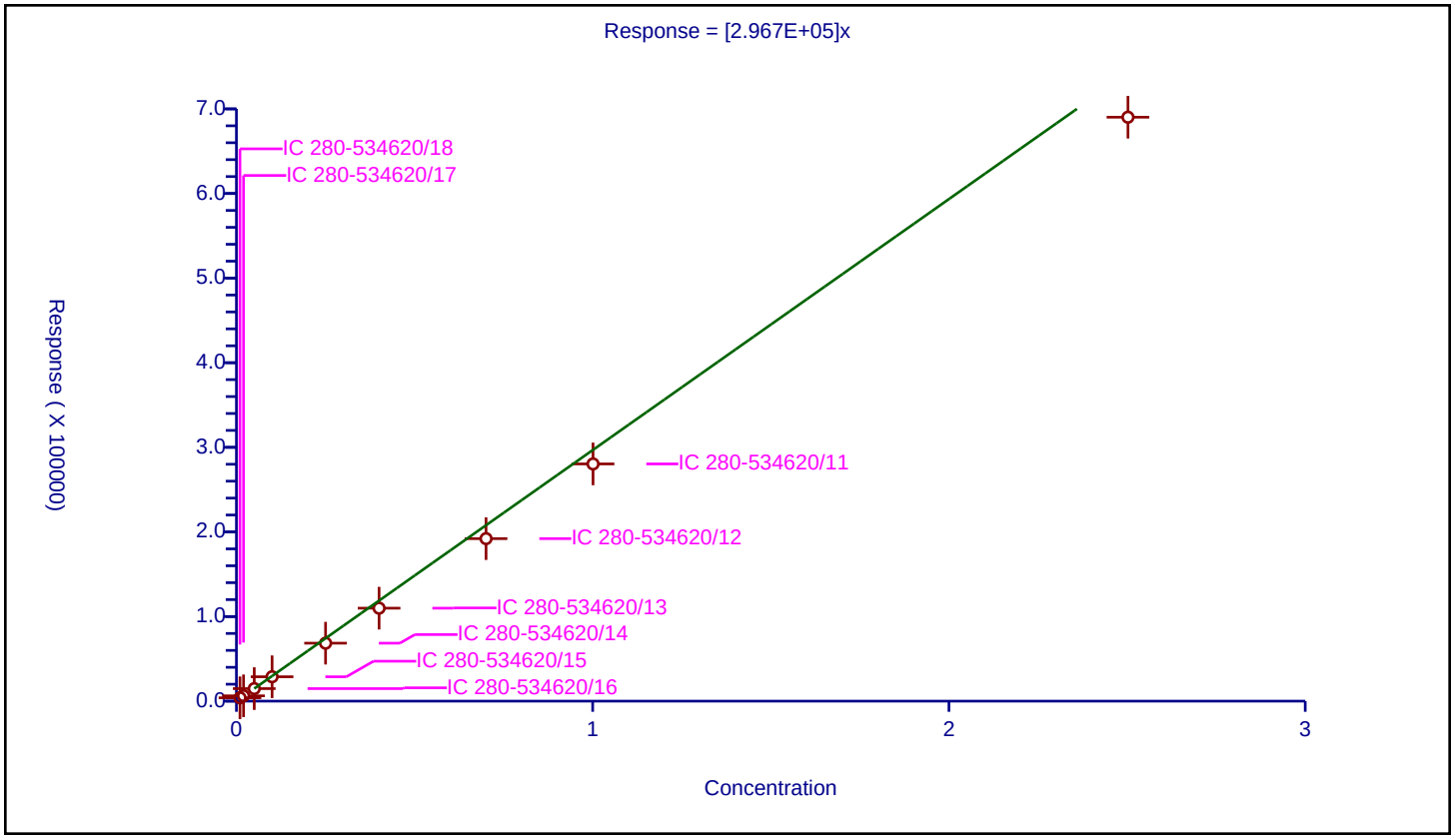
Curve Coefficients

Intercept:	0
Slope:	2.967E+05

Error Coefficients

Standard Error:	20600
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3954.0			395004.995005	Y
2	IC 280-534620/17	0.02002	6276.0			313486.513487	Y
3	IC 280-534620/16	0.05005	14802.0			295744.255744	Y
4	IC 280-534620/15	0.1001	28819.0			287902.097902	Y
5	IC 280-534620/14	0.25025	68509.0			273762.237762	Y
6	IC 280-534620/13	0.4004	109890.0			274450.549451	Y
7	IC 280-534620/12	0.7007	192075.0			274118.738404	Y
8	IC 280-534620/11	1.001	280366.0			280085.914086	Y
9	IC 280-534620/10	2.5025	690165.0			275790.20979	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

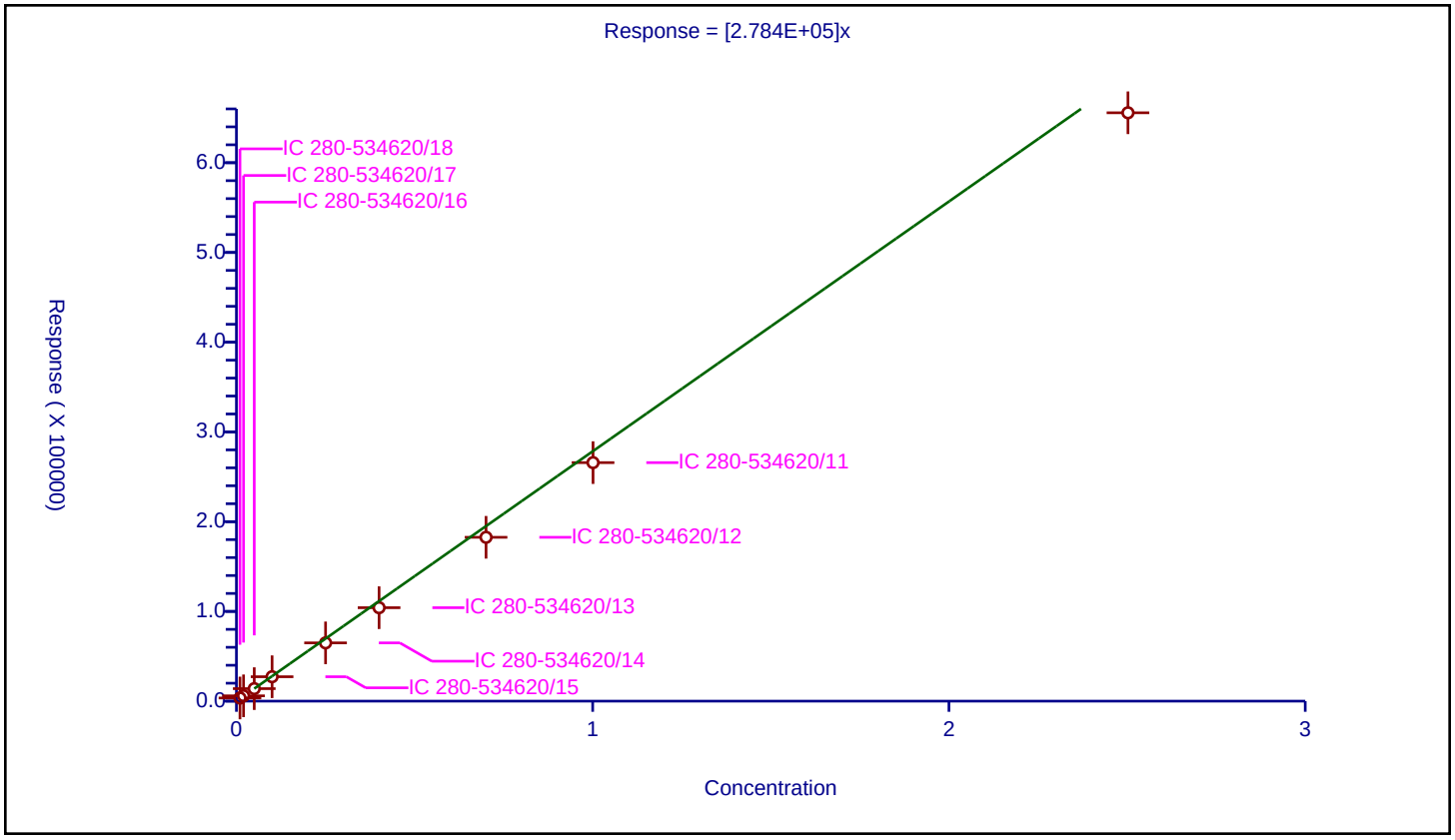
Curve Coefficients

Intercept:	0
Slope:	2.784E+05

Error Coefficients

Standard Error:	16100
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3517.0			351348.651349	Y
2	IC 280-534620/17	0.02002	5928.0			296103.896104	Y
3	IC 280-534620/16	0.05005	13943.0			278581.418581	Y
4	IC 280-534620/15	0.1001	27212.0			271848.151848	Y
5	IC 280-534620/14	0.25025	64933.0			259472.527473	Y
6	IC 280-534620/13	0.4004	104128.0			260059.94006	Y
7	IC 280-534620/12	0.7007	182587.0			260577.993435	Y
8	IC 280-534620/11	1.001	265803.0			265537.462537	Y
9	IC 280-534620/10	2.5025	655662.0			262002.797203	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

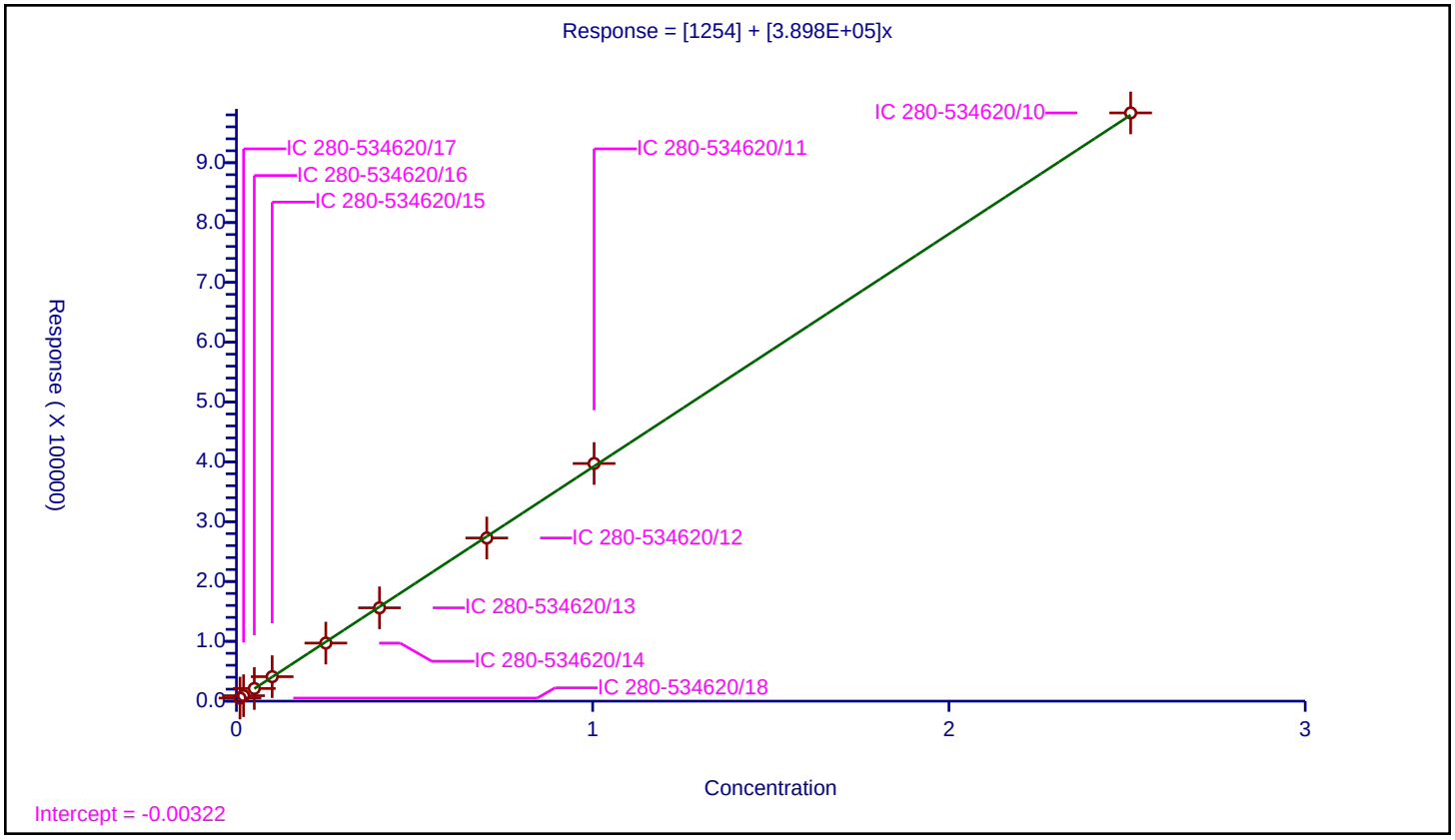
Curve Coefficients

Intercept:	1254
Slope:	3.898E+05

Error Coefficients

Standard Error:	2610
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5148.0			512749.003984	Y
2	IC 280-534620/17	0.02008	9114.0			453884.462151	Y
3	IC 280-534620/16	0.0502	21111.0			420537.848606	Y
4	IC 280-534620/15	0.1004	40904.0			407410.358566	Y
5	IC 280-534620/14	0.251	97071.0			386737.051793	Y
6	IC 280-534620/13	0.4016	155961.0			388349.103586	Y
7	IC 280-534620/12	0.7028	272718.0			388044.963005	Y
8	IC 280-534620/11	1.004	397243.0			395660.358566	Y
9	IC 280-534620/10	2.51	983275.0			391743.027888	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

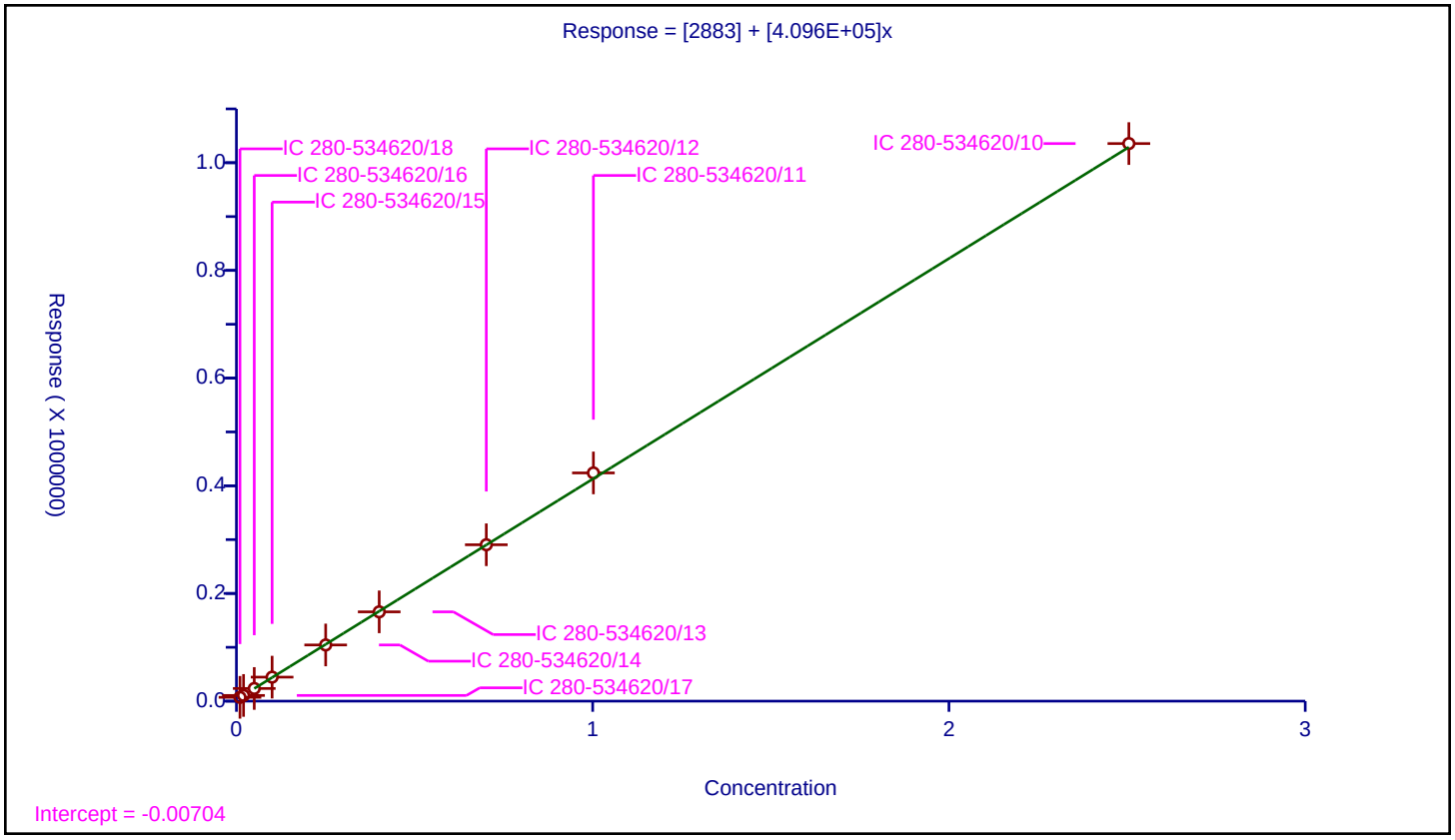
Curve Coefficients

Intercept:	2883
Slope:	4.096E+05

Error Coefficients

Standard Error:	4780
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7116.0			710179.640719	Y
2	IC 280-534620/17	0.02004	10540.0			525948.103792	Y
3	IC 280-534620/16	0.0501	23506.0			469181.636727	Y
4	IC 280-534620/15	0.1002	44594.0			445049.9002	Y
5	IC 280-534620/14	0.2505	104344.0			416542.914172	Y
6	IC 280-534620/13	0.4008	165828.0			413742.51497	Y
7	IC 280-534620/12	0.7014	290458.0			414111.776447	Y
8	IC 280-534620/11	1.002	423869.0			423022.954092	Y
9	IC 280-534620/10	2.505	1035616.0			413419.560878	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

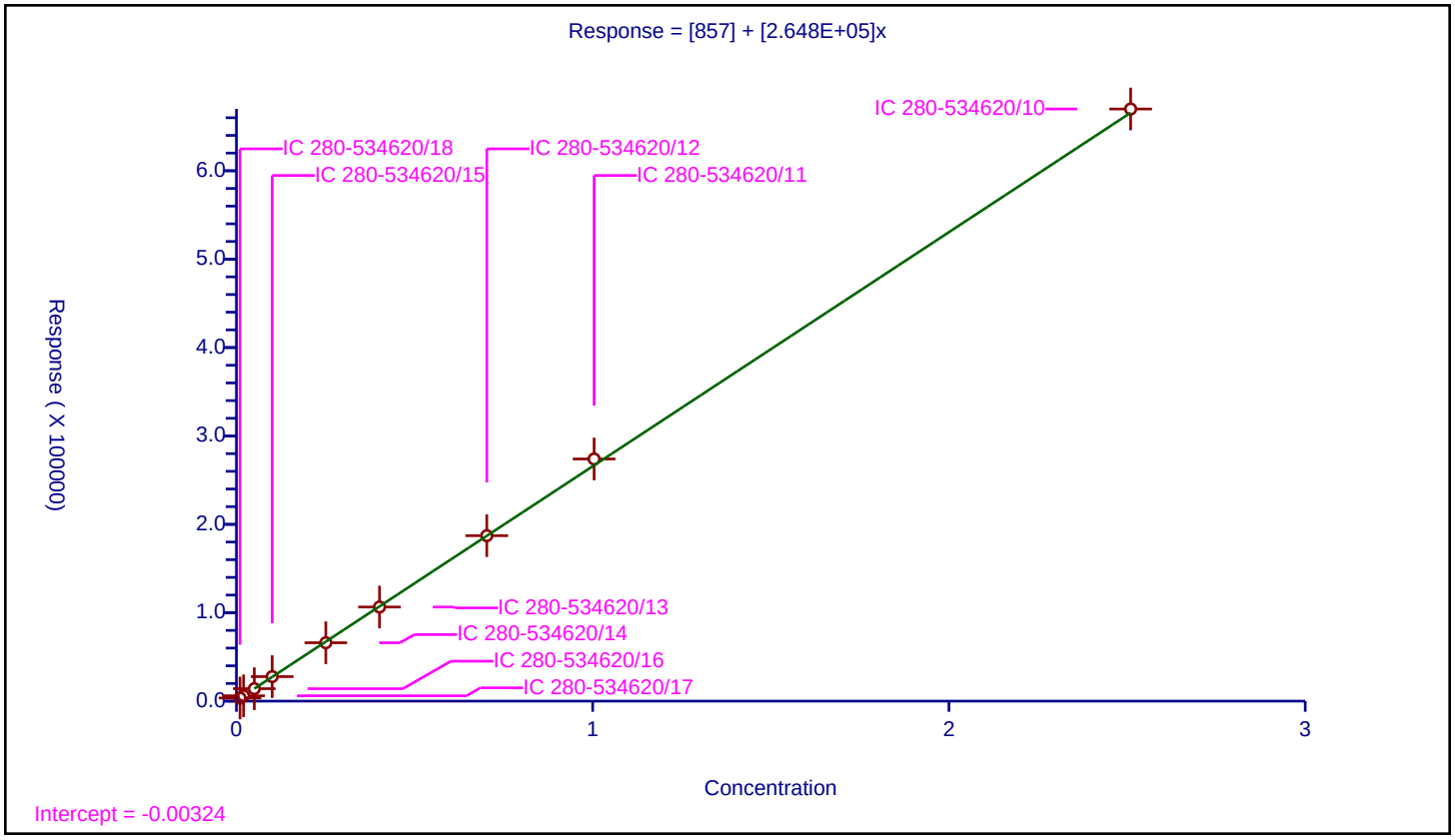
Curve Coefficients

Intercept:	857
Slope:	2.648E+05

Error Coefficients

Standard Error:	3220
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	3555.0			354083.665339	Y
2	IC 280-534620/17	0.02008	6026.0			300099.601594	Y
3	IC 280-534620/16	0.0502	14081.0			280498.007968	Y
4	IC 280-534620/15	0.1004	27721.0			276105.577689	Y
5	IC 280-534620/14	0.251	66062.0			263195.219124	Y
6	IC 280-534620/13	0.4016	106452.0			265069.721116	Y
7	IC 280-534620/12	0.7028	187184.0			266340.352874	Y
8	IC 280-534620/11	1.004	273958.0			272866.533865	Y
9	IC 280-534620/10	2.51	669889.0			266888.047809	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

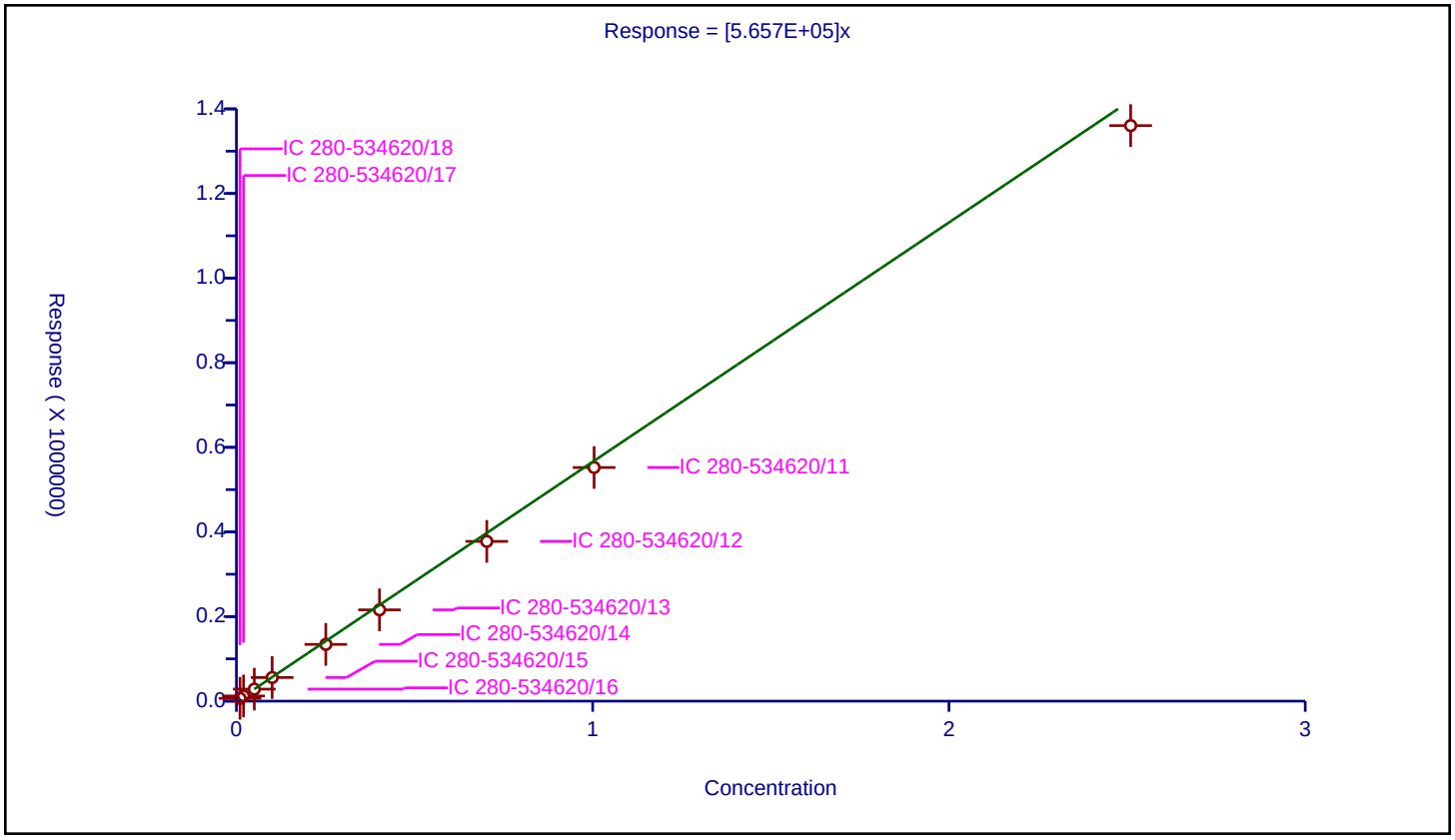
Curve Coefficients

Intercept:	0
Slope:	5.657E+05

Error Coefficients

Standard Error:	23400
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	6619.0			659262.948207	Y
2	IC 280-534620/17	0.02008	12229.0			609013.944223	Y
3	IC 280-534620/16	0.0502	28396.0			565657.370518	Y
4	IC 280-534620/15	0.1004	55838.0			556155.378486	Y
5	IC 280-534620/14	0.251	134163.0			534513.944223	Y
6	IC 280-534620/13	0.4016	215819.0			537397.908367	Y
7	IC 280-534620/12	0.7028	377631.0			537323.562891	Y
8	IC 280-534620/11	1.004	552269.0			550068.7251	Y
9	IC 280-534620/10	2.51	1360486.0			542026.294821	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

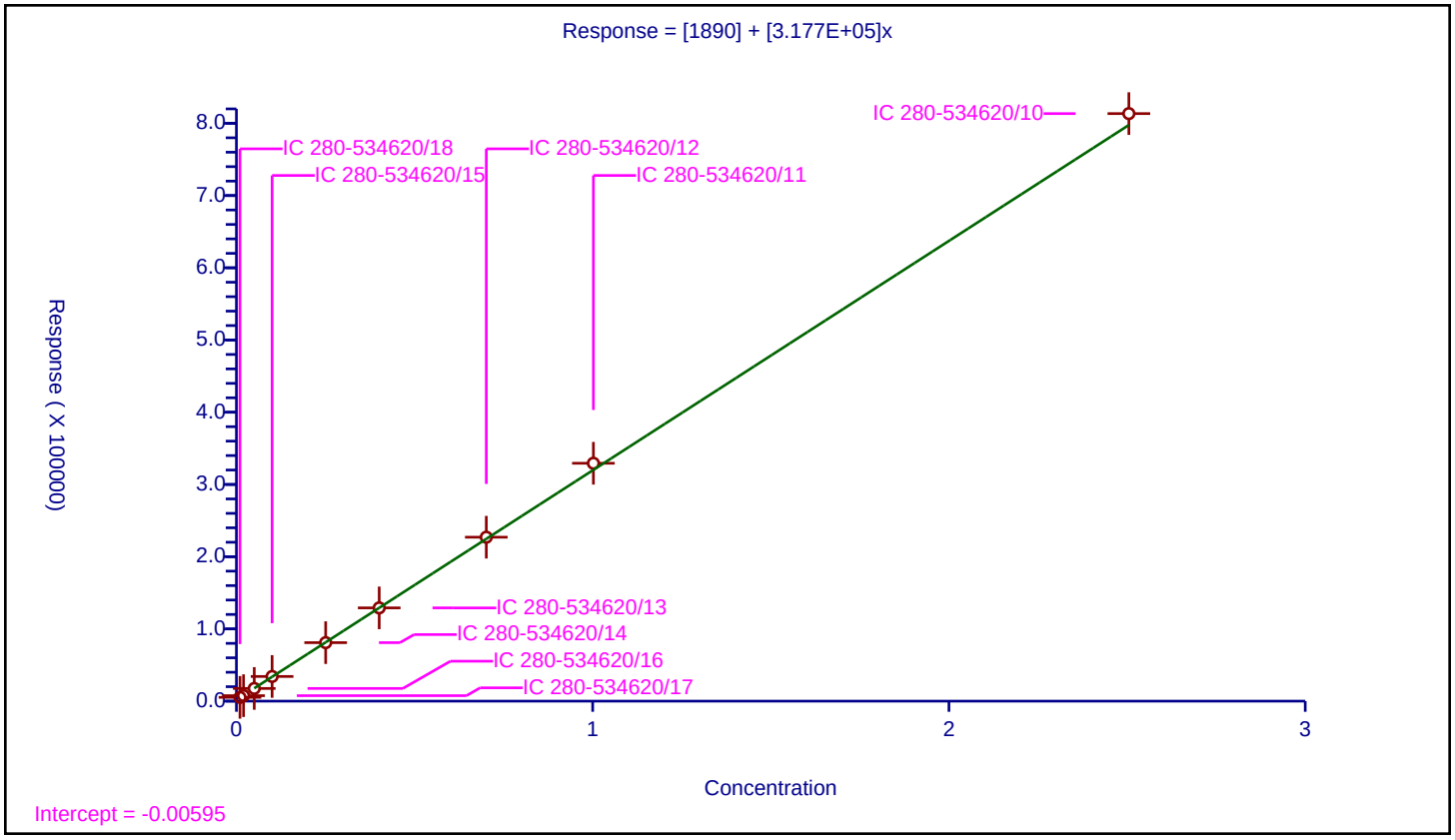
Curve Coefficients

Intercept:	1890
Slope:	3.177E+05

Error Coefficients

Standard Error:	6990
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	5245.0			523453.093812	Y
2	IC 280-534620/17	0.02004	7583.0			378393.213573	Y
3	IC 280-534620/16	0.0501	17573.0			350758.483034	Y
4	IC 280-534620/15	0.1002	34148.0			340798.403194	Y
5	IC 280-534620/14	0.2505	80996.0			323337.325349	Y
6	IC 280-534620/13	0.4008	129140.0			322205.588822	Y
7	IC 280-534620/12	0.7014	227001.0			323639.863131	Y
8	IC 280-534620/11	1.002	329366.0			328708.582834	Y
9	IC 280-534620/10	2.505	813489.0			324746.107784	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

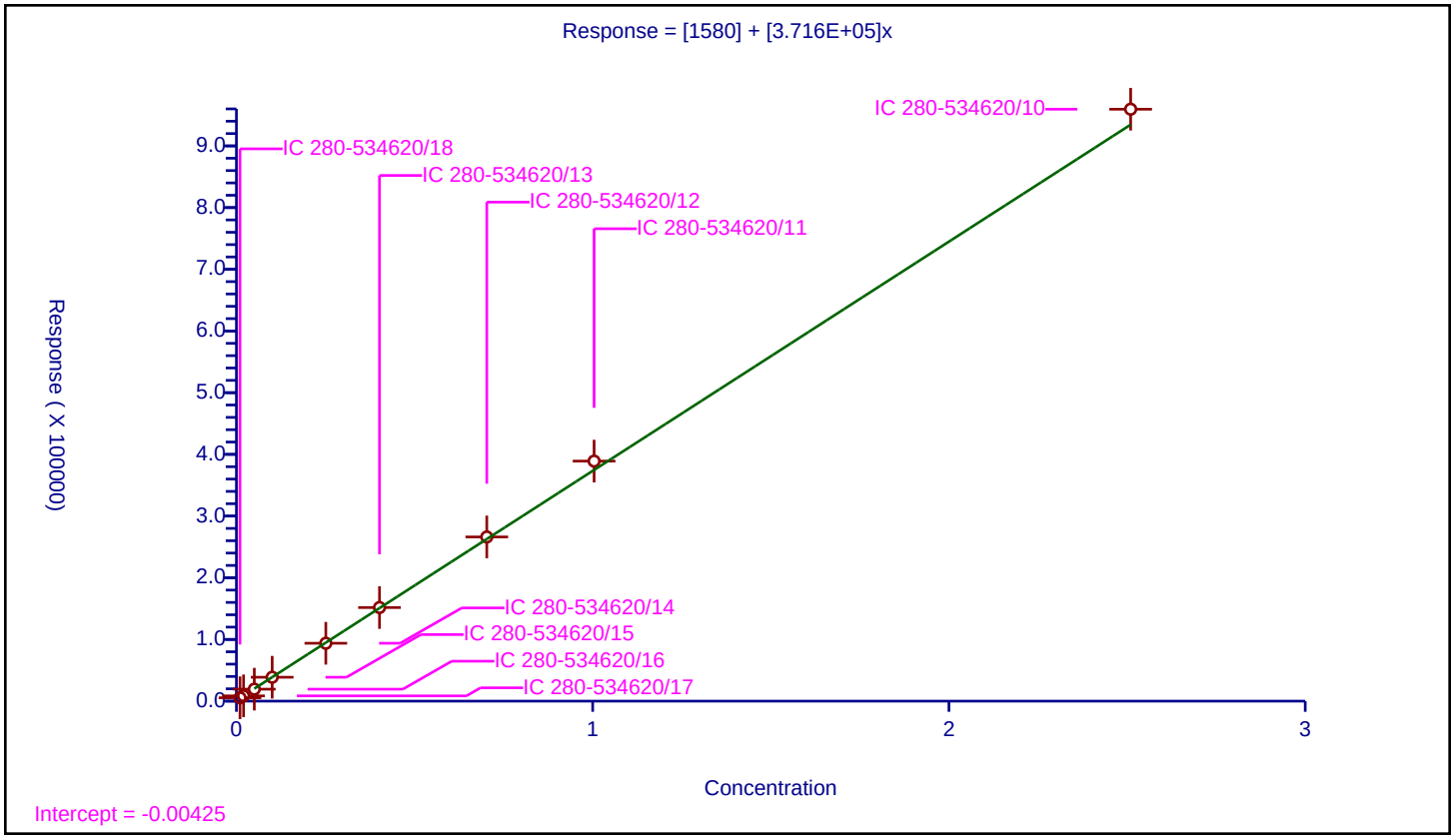
Curve Coefficients

Intercept:	1580
Slope:	3.716E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5469.0			544721.115538	Y
2	IC 280-534620/17	0.02008	8548.0			425697.211155	Y
3	IC 280-534620/16	0.0502	19400.0			386454.183267	Y
4	IC 280-534620/15	0.1004	38740.0			385856.573705	Y
5	IC 280-534620/14	0.251	93822.0			373792.828685	Y
6	IC 280-534620/13	0.4016	151709.0			377761.454183	Y
7	IC 280-534620/12	0.7028	266122.0			378659.647126	Y
8	IC 280-534620/11	1.004	389102.0			387551.792829	Y
9	IC 280-534620/10	2.51	959496.0			382269.322709	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

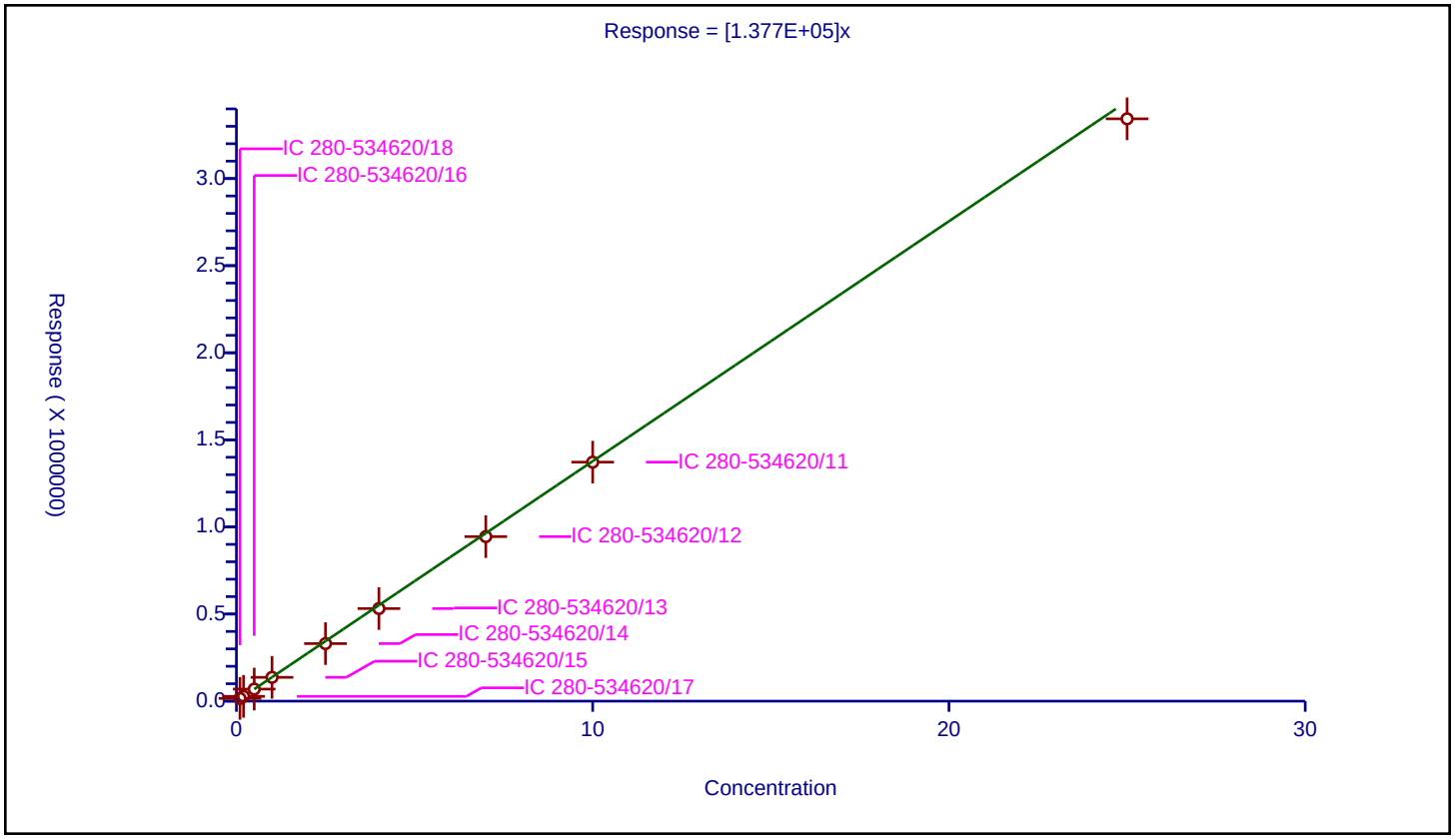
Curve Coefficients

Intercept:	0
Slope:	1.377E+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.: 280-155015-1 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.: 280-155015-1 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.: 280-155015-1 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

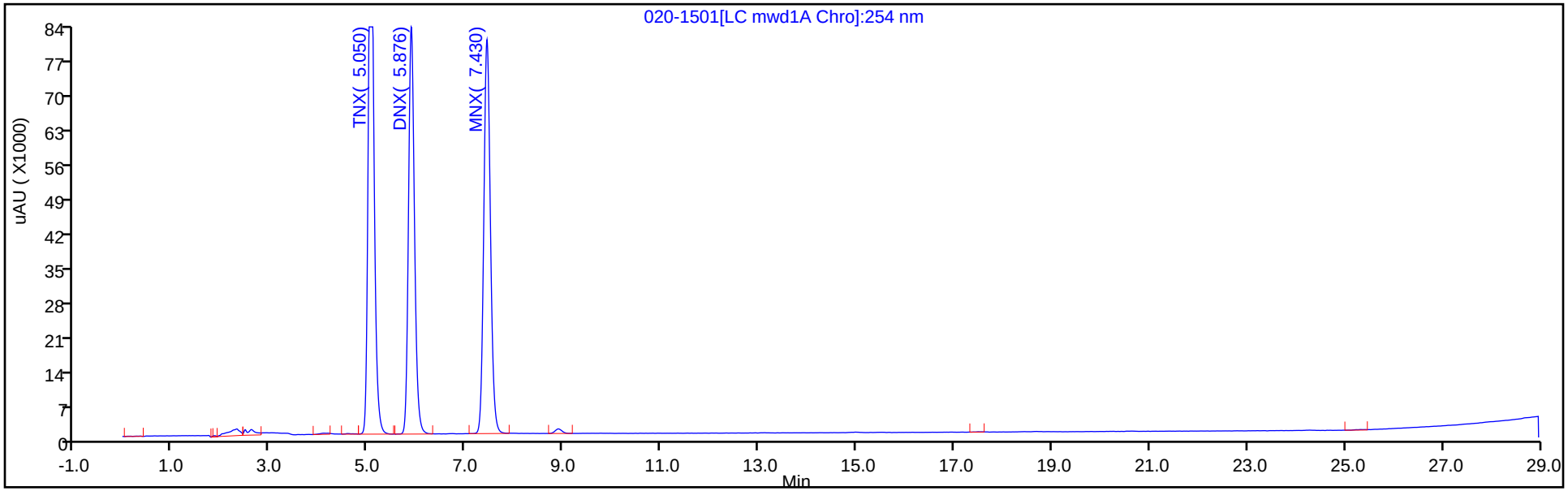
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

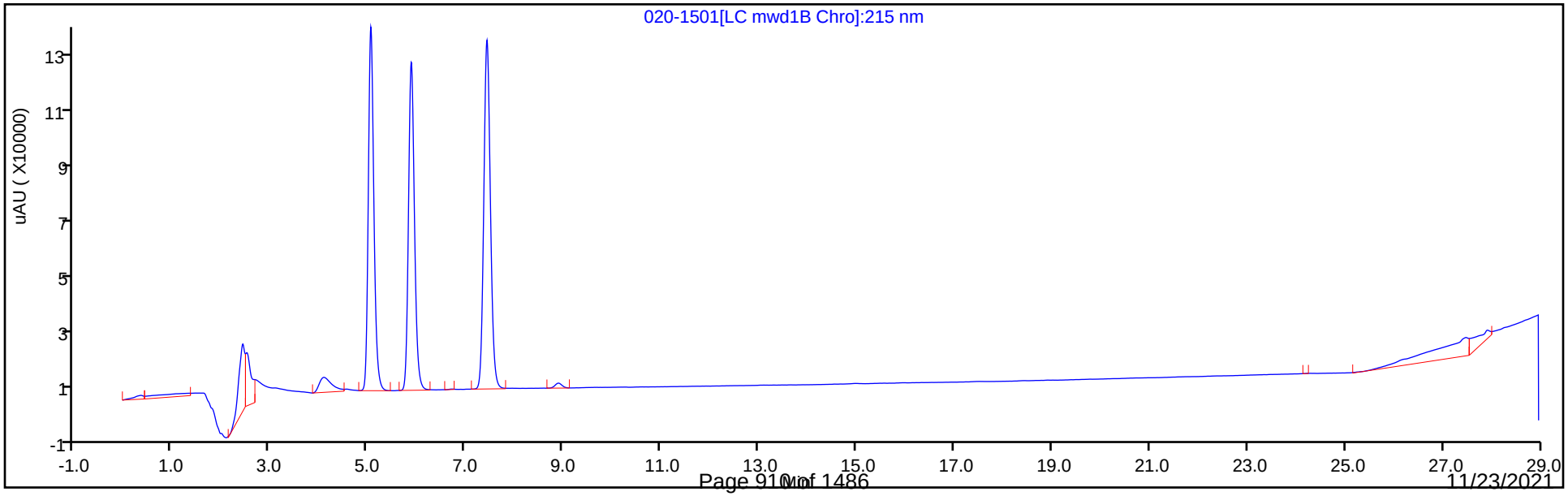
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\020-1501.D

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

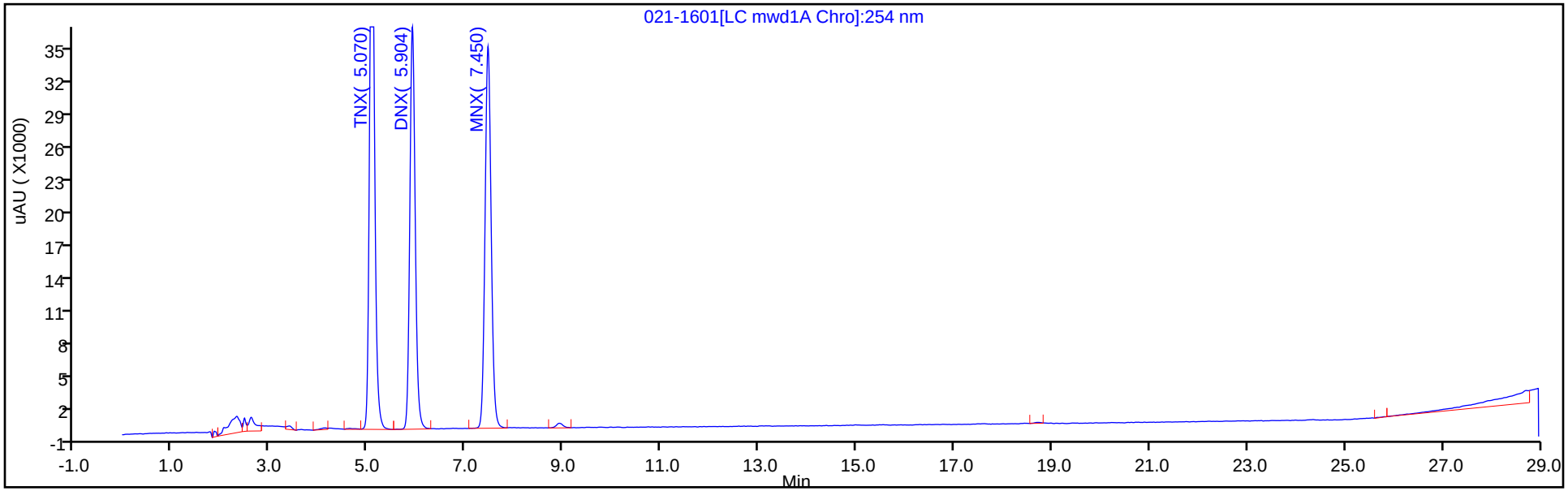
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

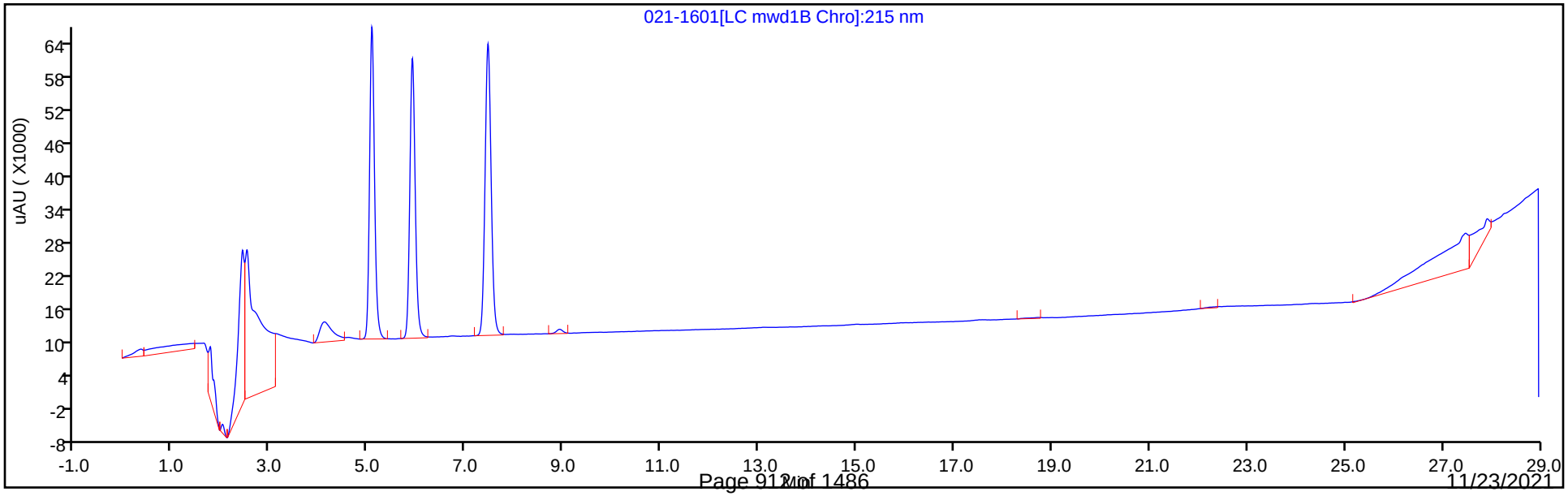
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D

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

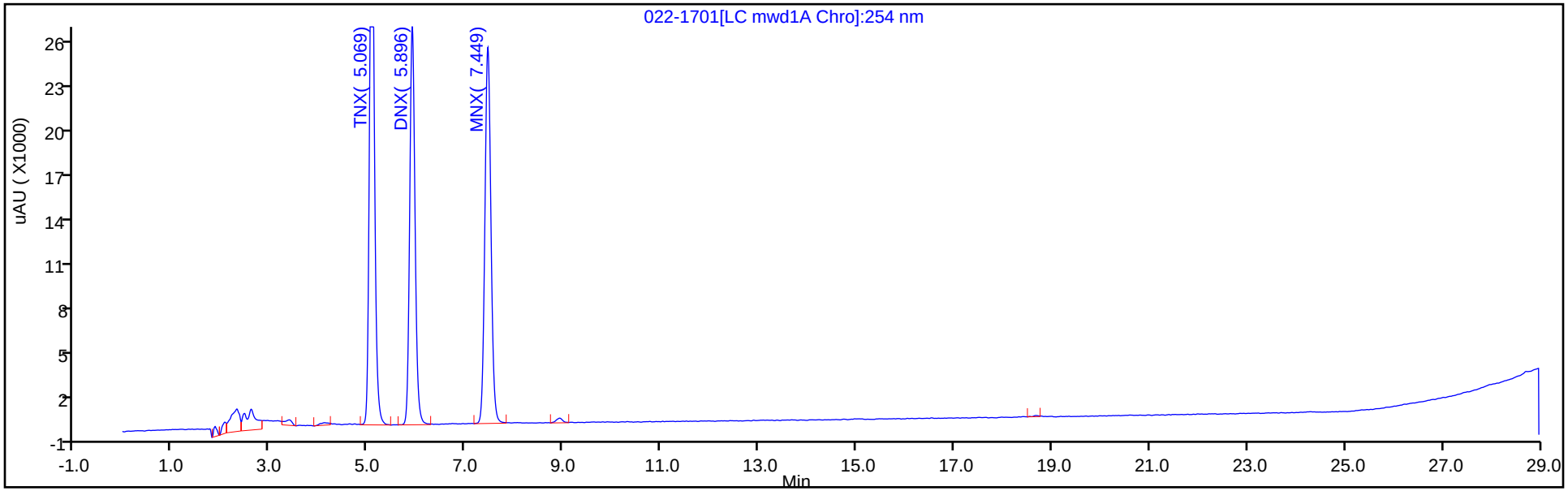
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

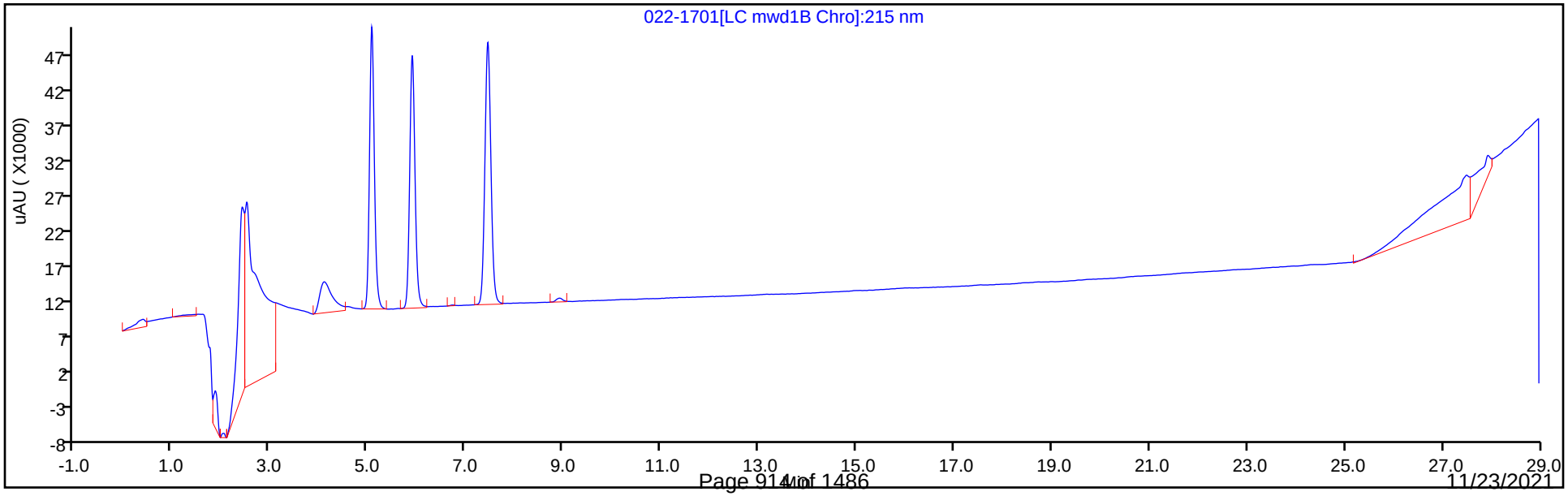
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D

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

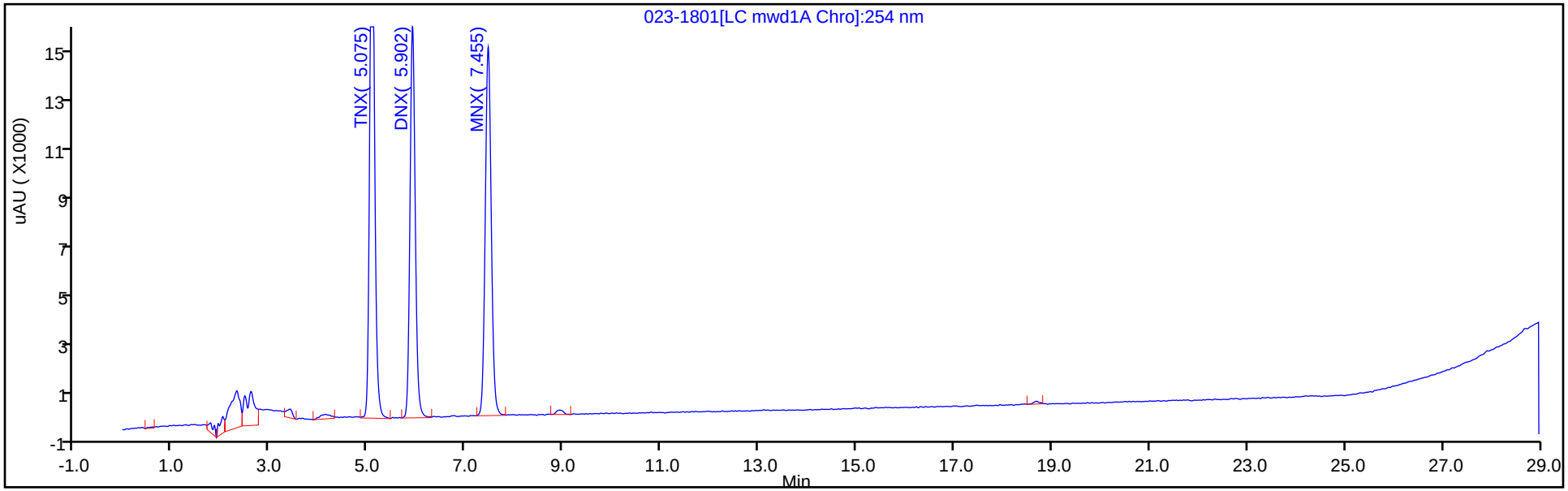
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

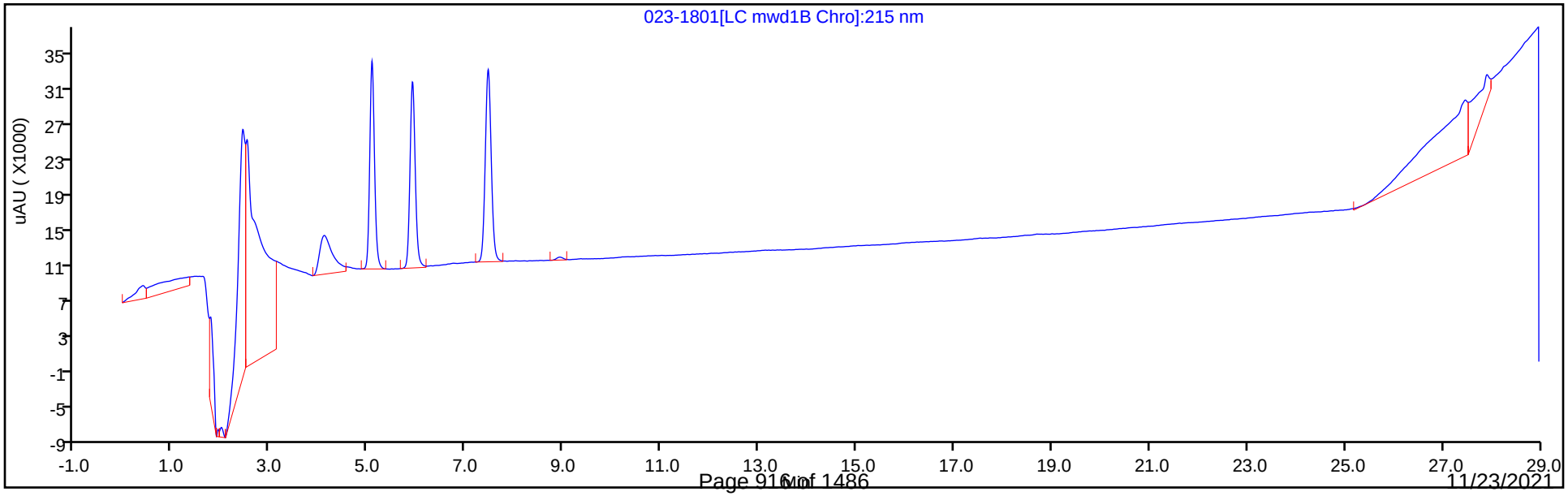
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D

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

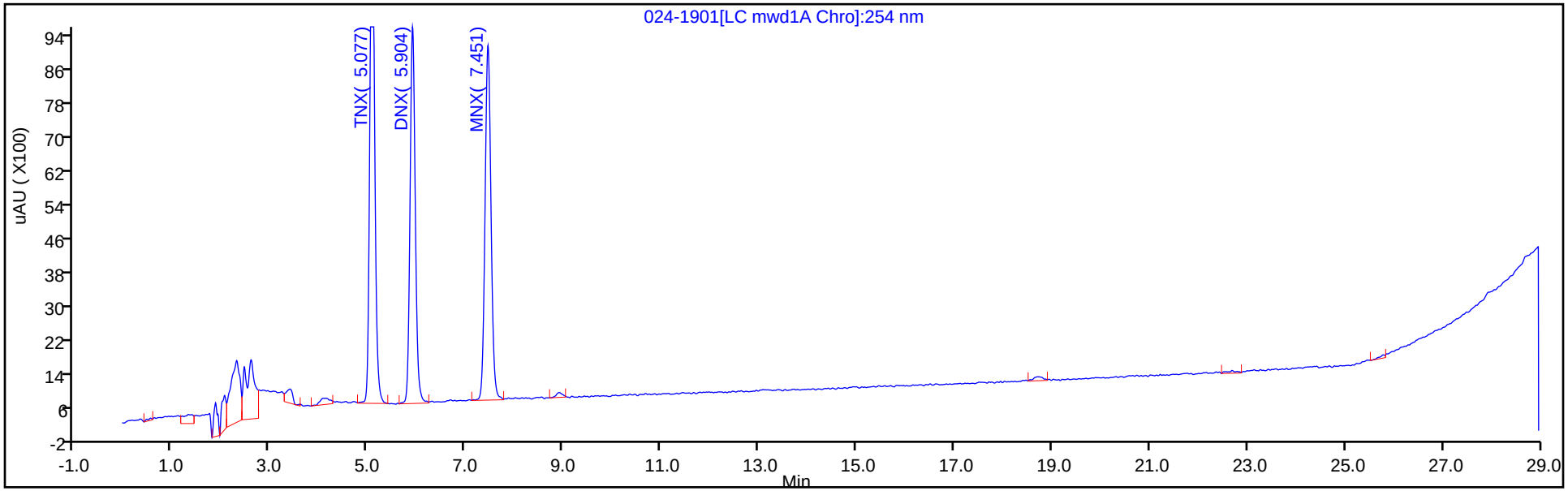
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

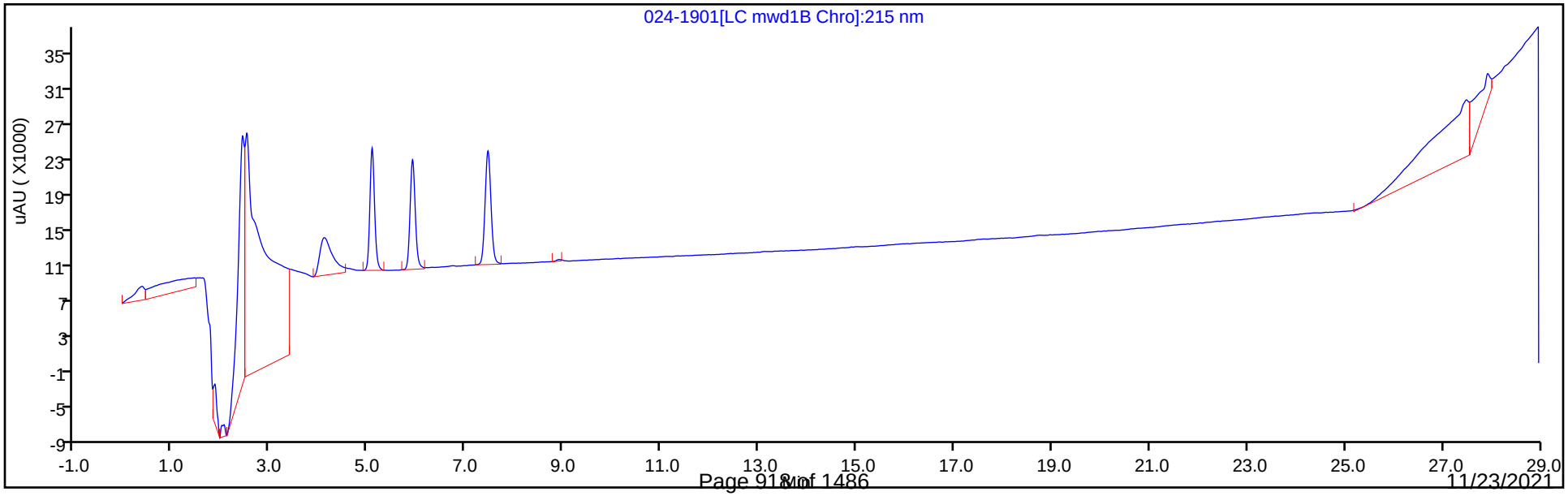
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D

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

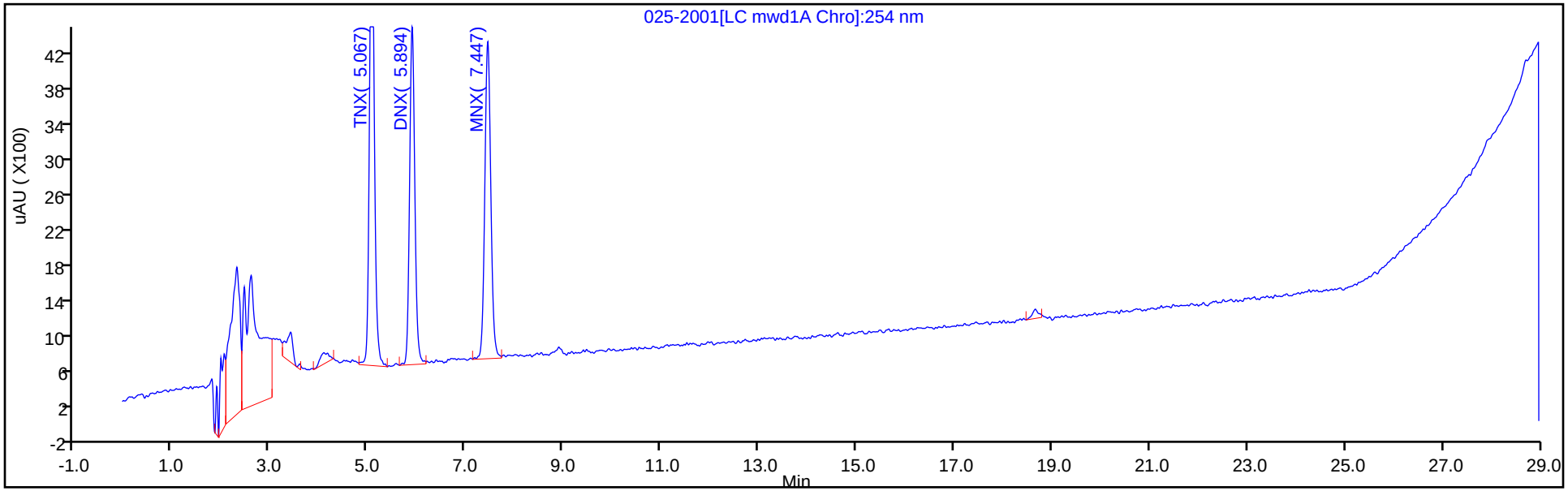
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

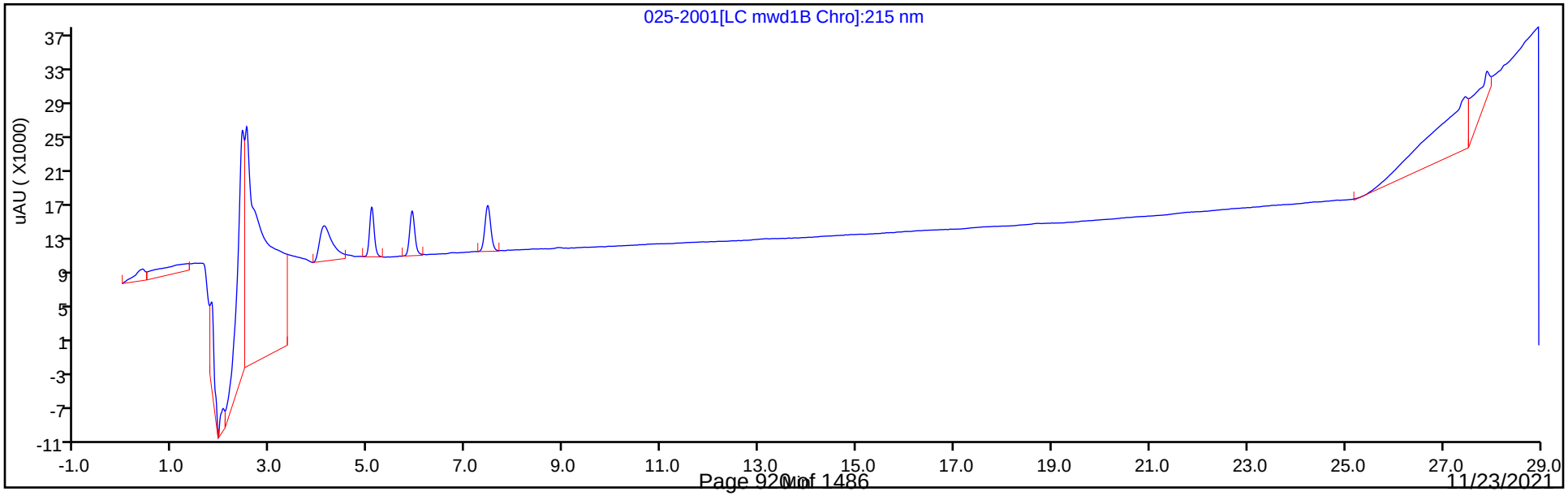
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D

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

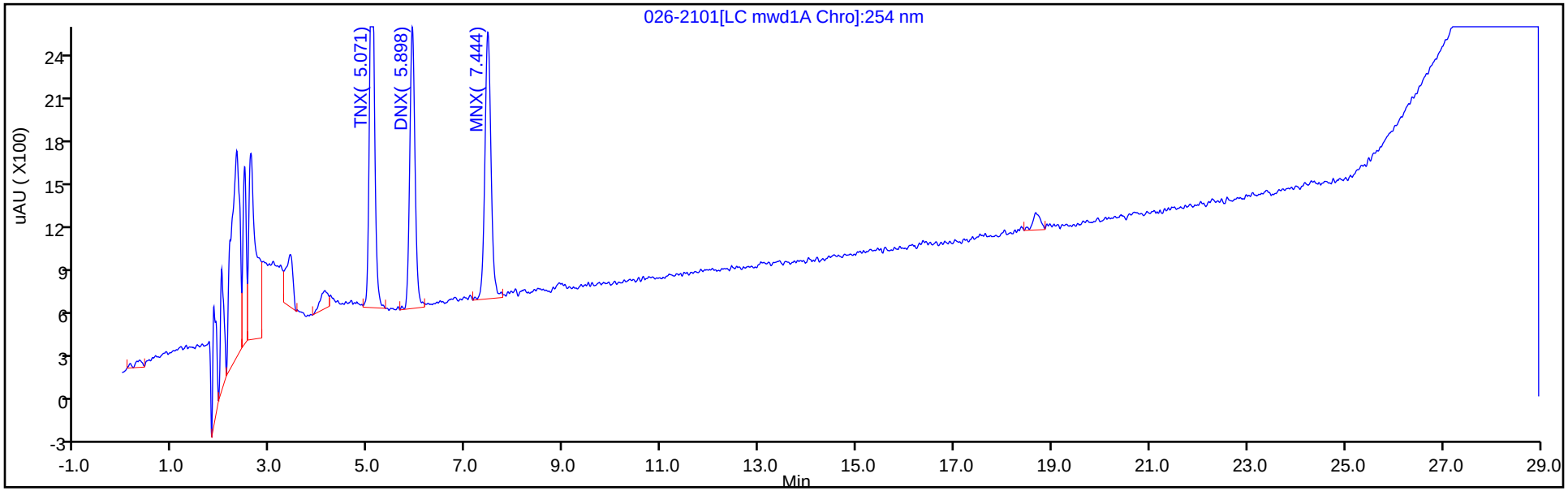
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

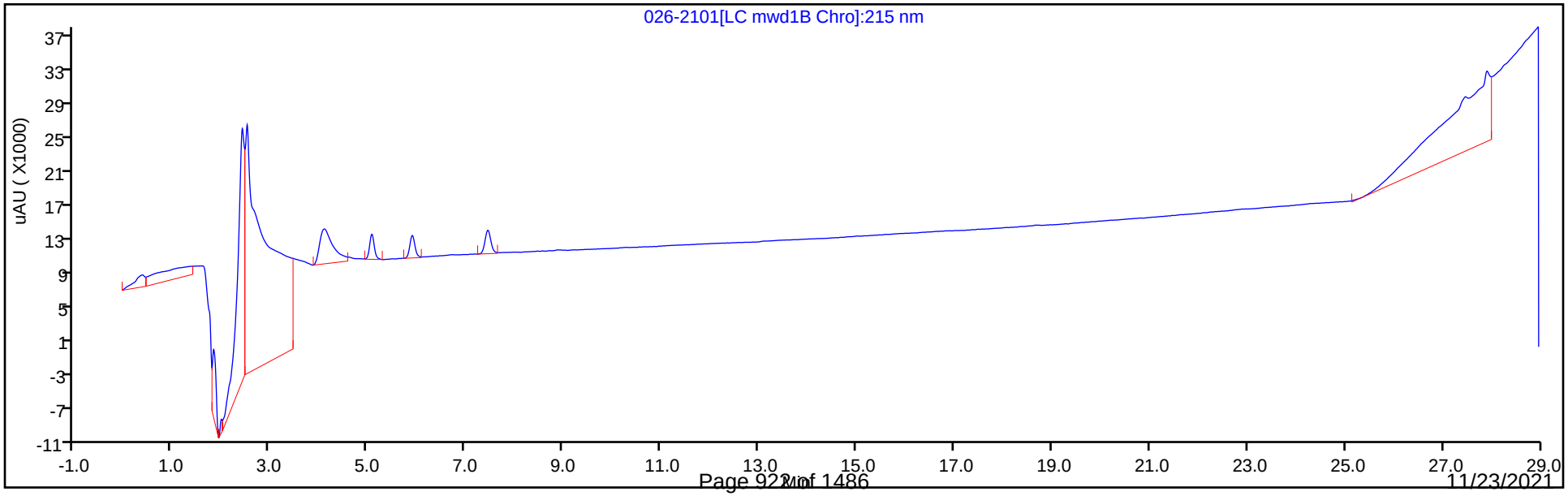
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D

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

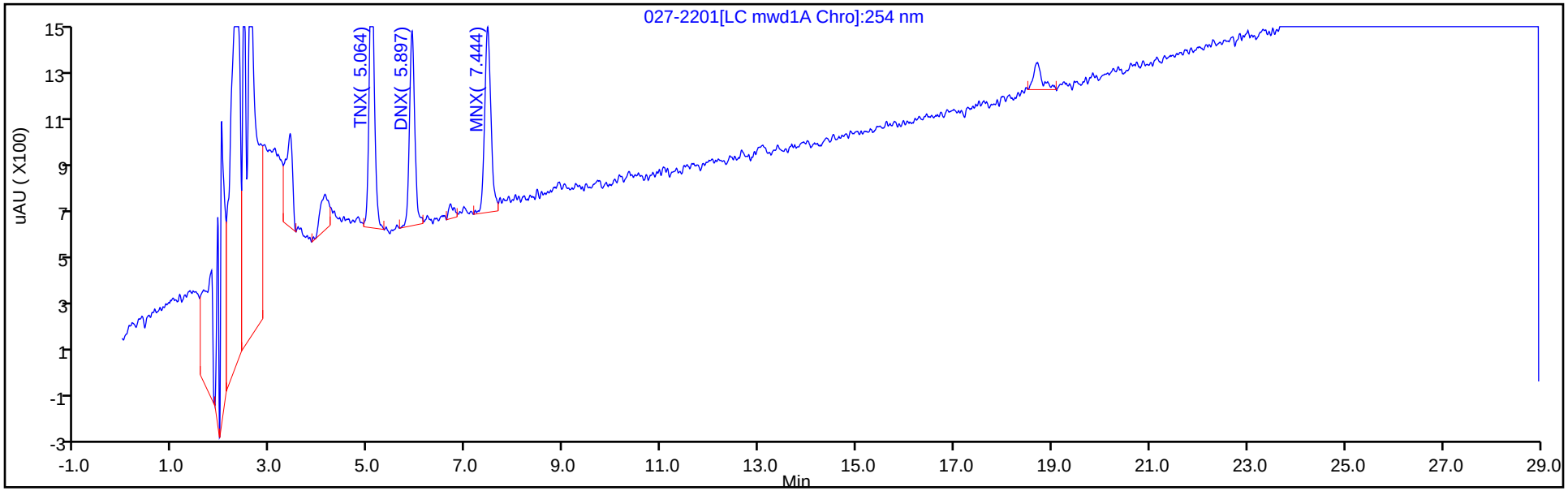
Report Date: 04-May-2021 13:43:20 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

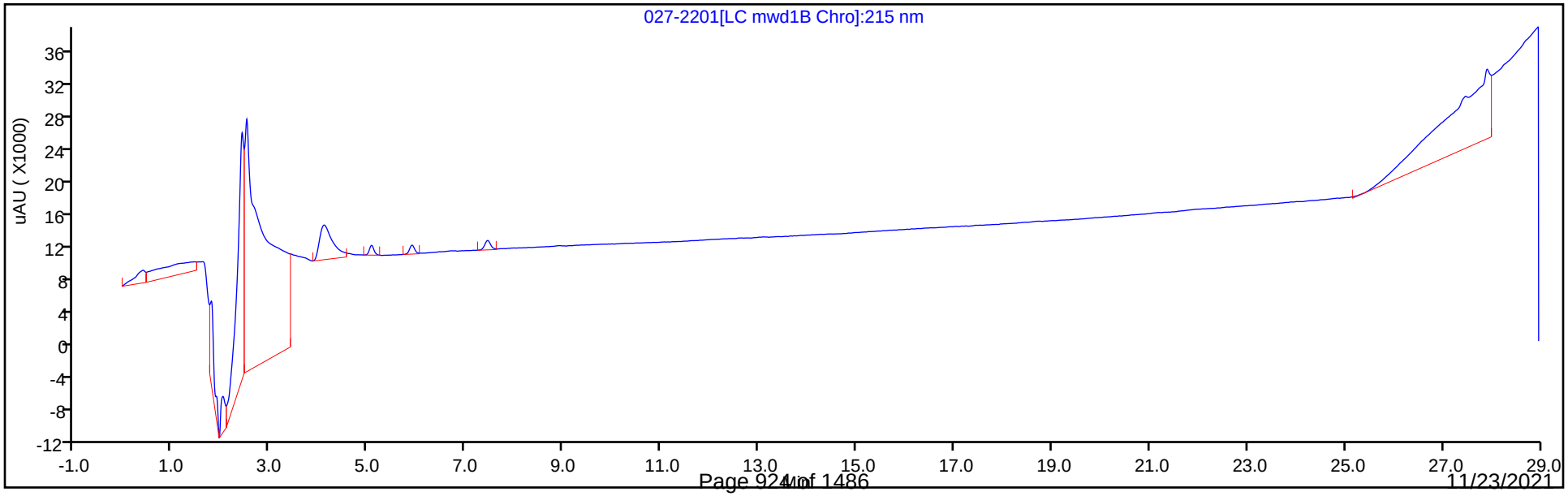
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

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

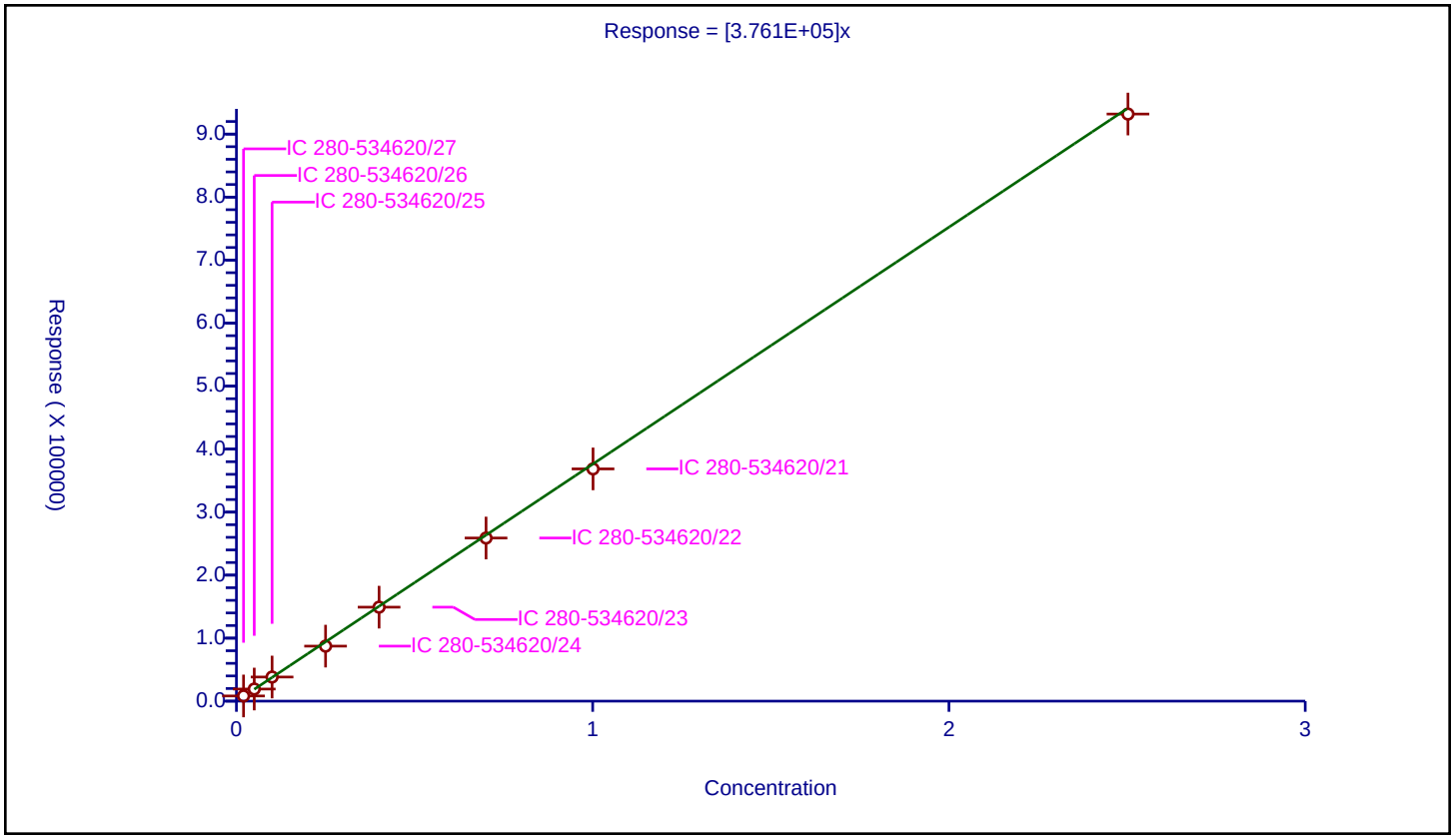
Curve Coefficients

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

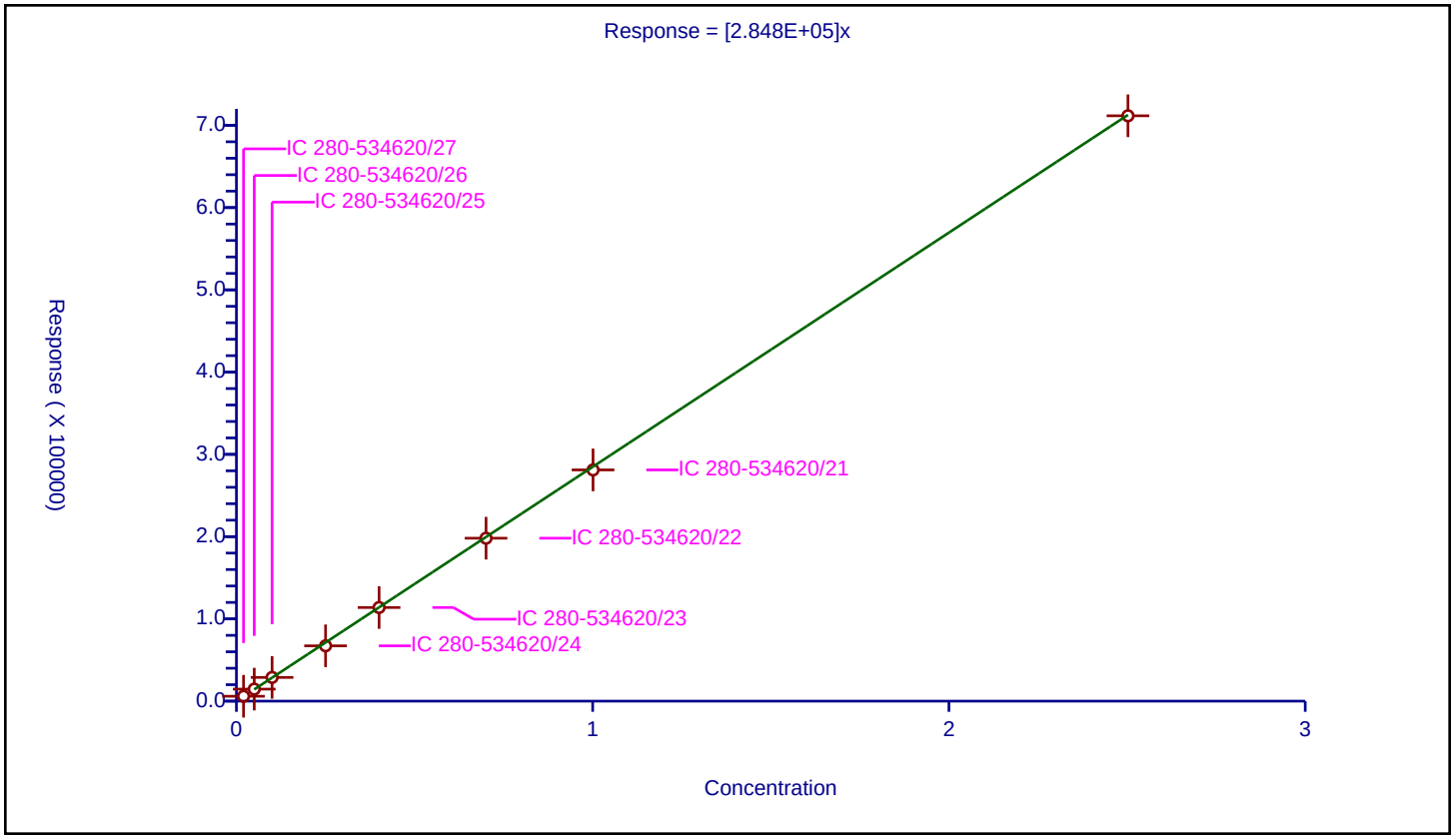
Curve Coefficients

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

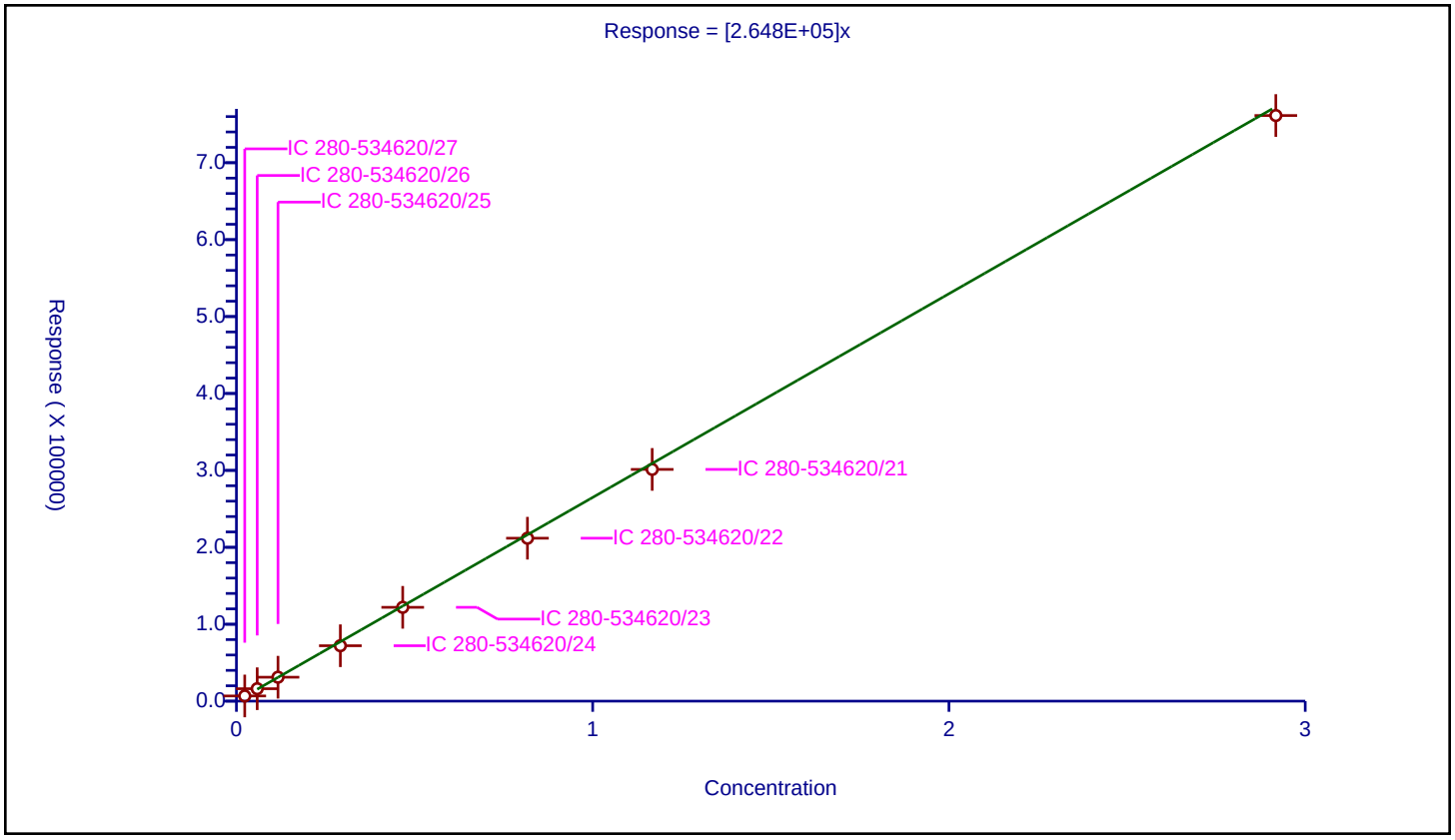
Curve Coefficients

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.: 280-155015-1

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.: 280-155015-1

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

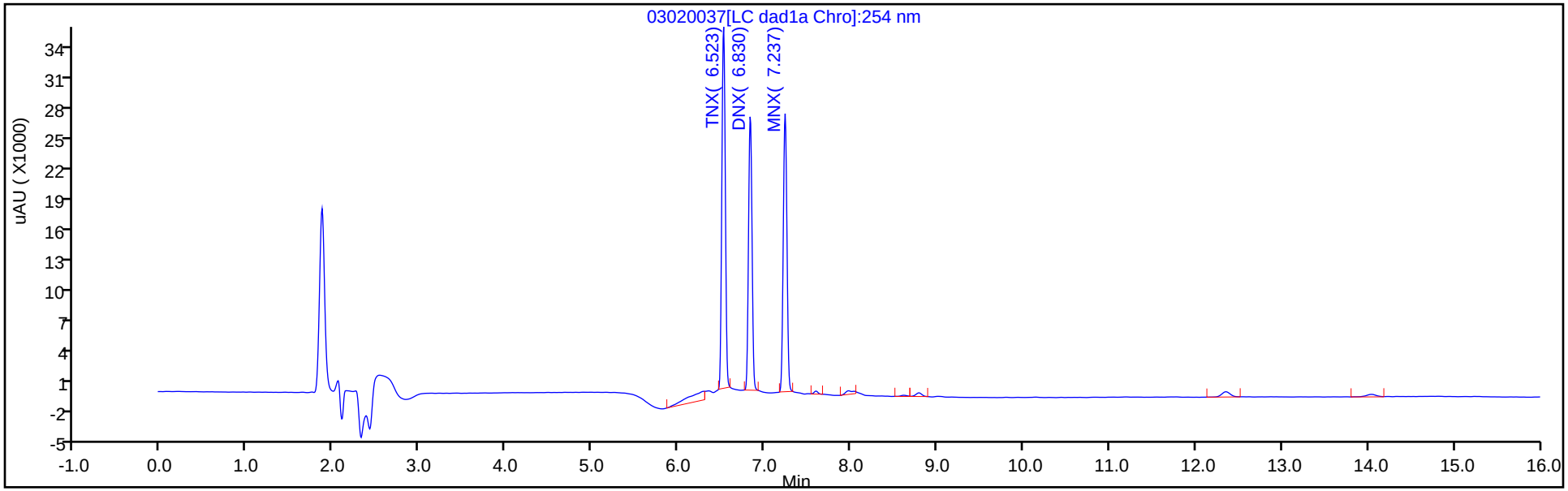
Report Date: 03-Mar-2021 13:36:35 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

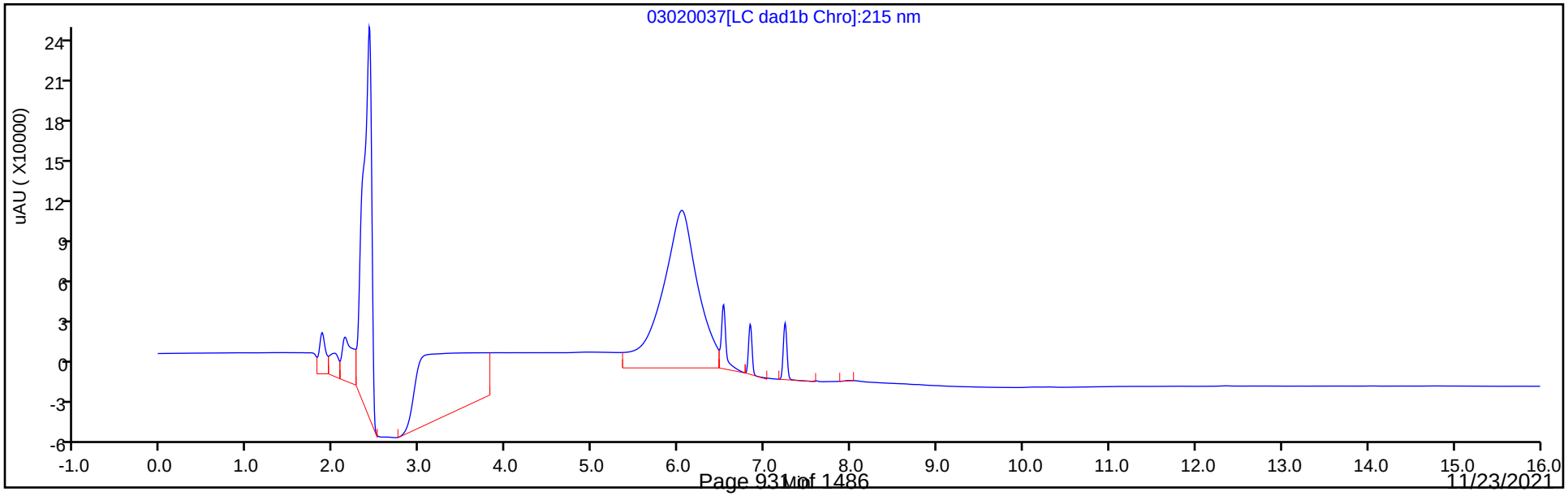
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d

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

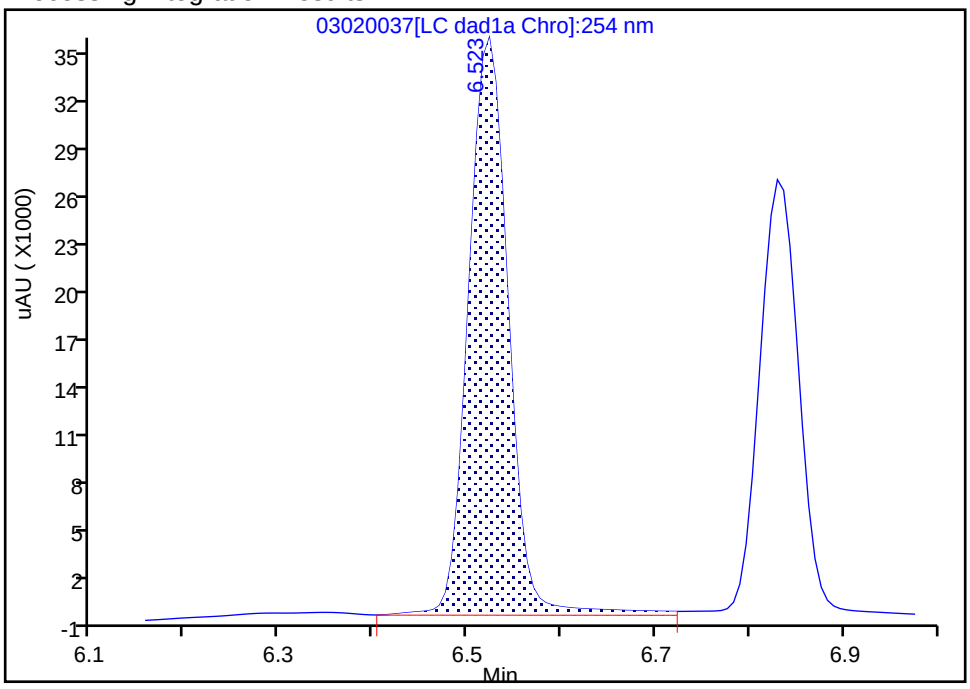
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

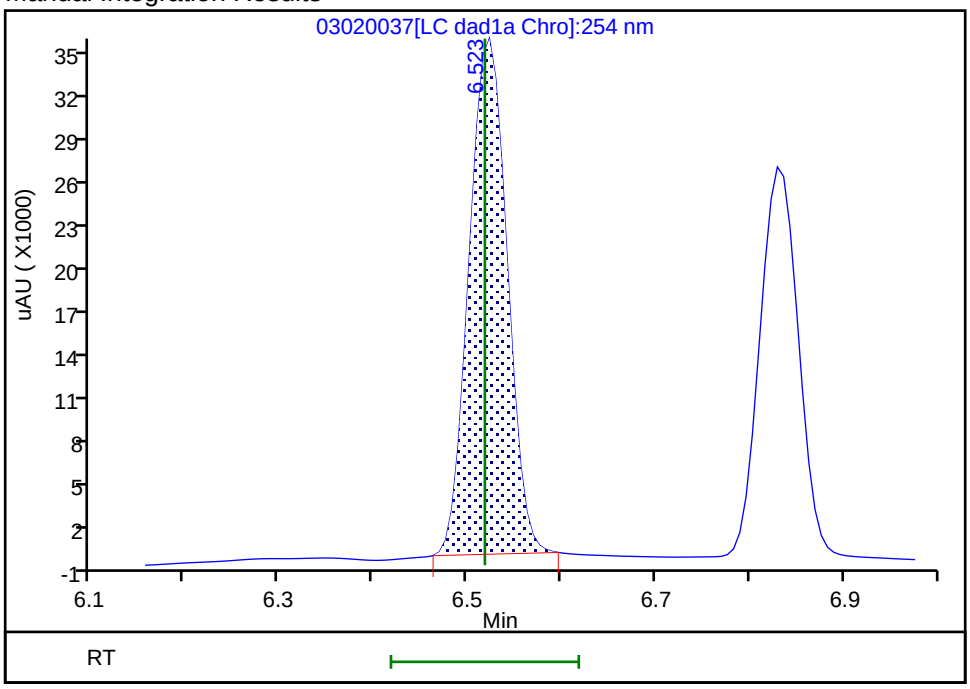
Processing Integration Results

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

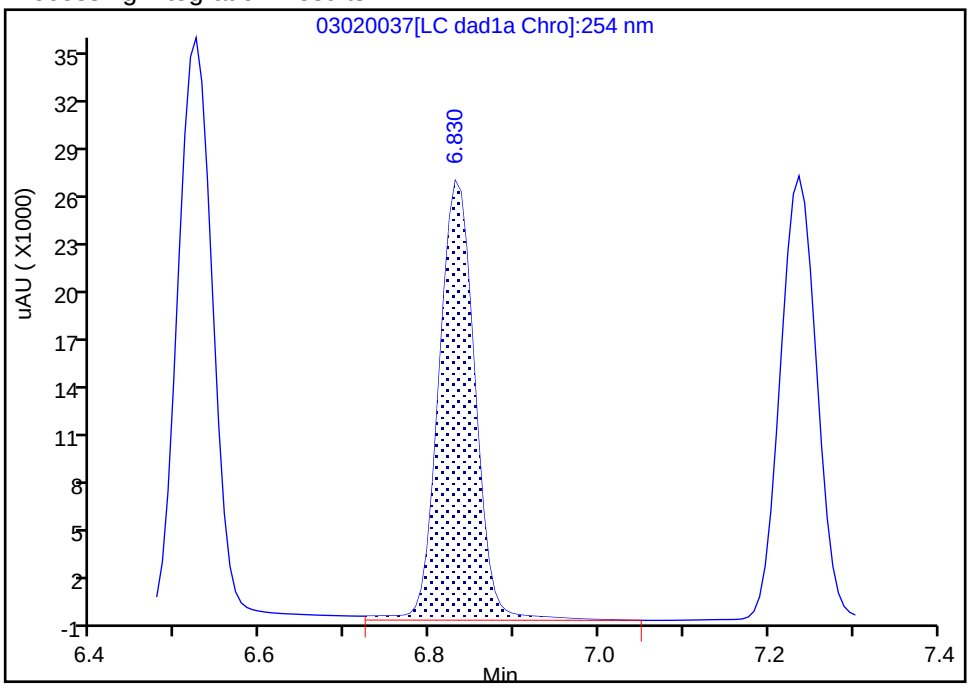
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

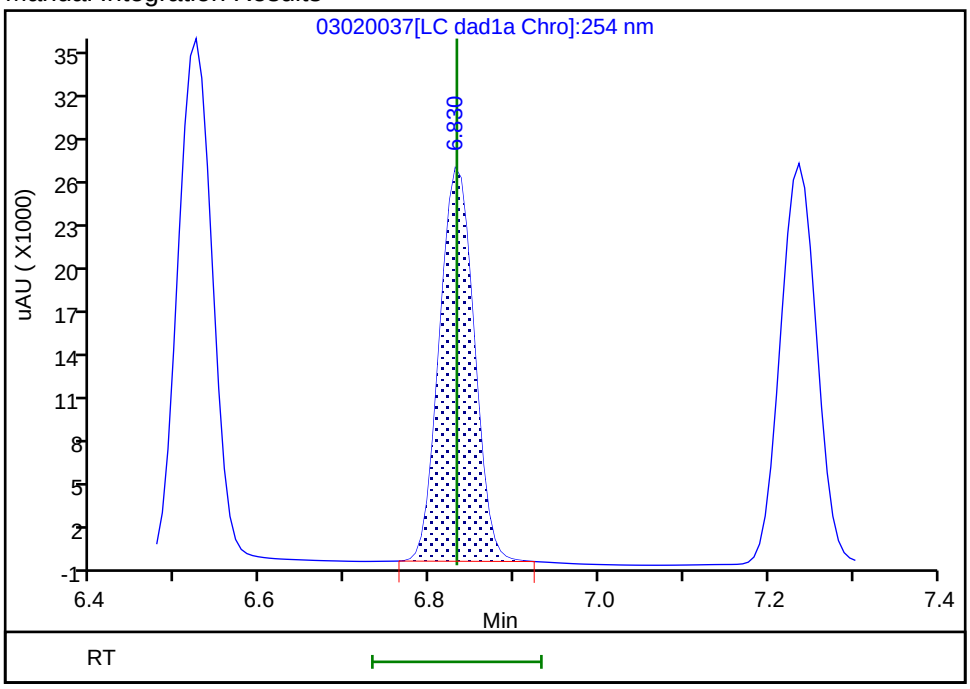
Processing Integration Results

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

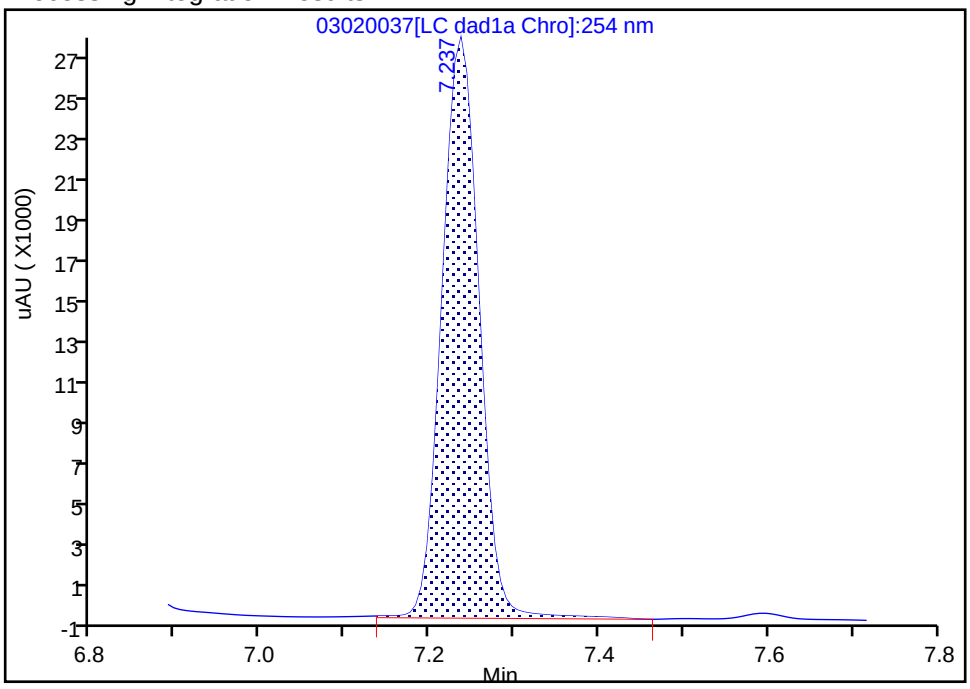
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d		
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3
Lims ID:	ICV DMT		
Client ID:			
Operator ID:		ALS Bottle#:	37 Worklist Smp#: 37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

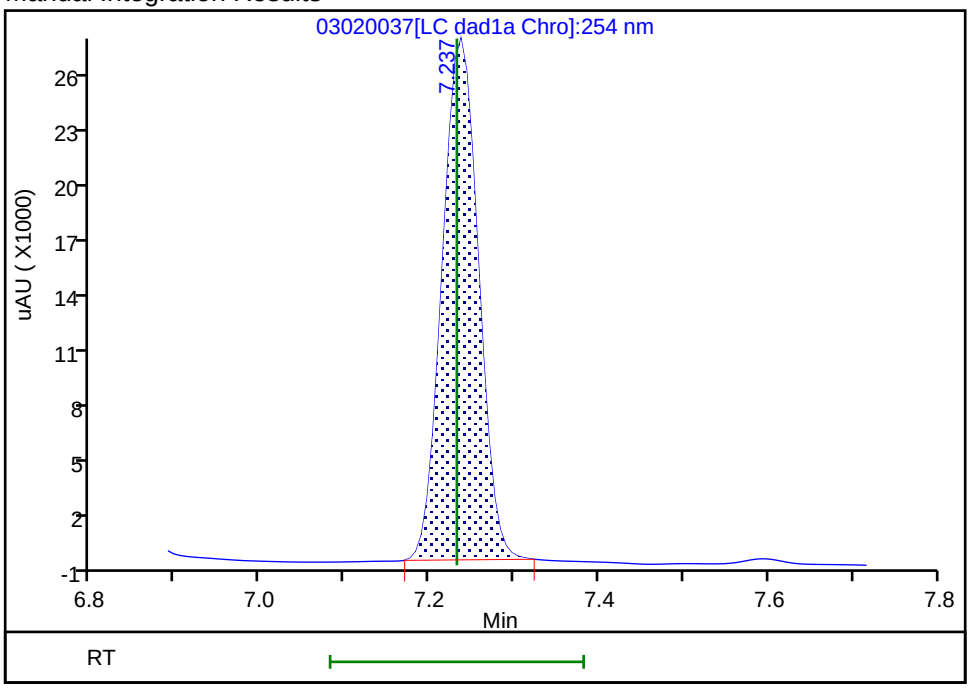
Processing Integration Results

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.: 280-155015-1

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.: 280-155015-1

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

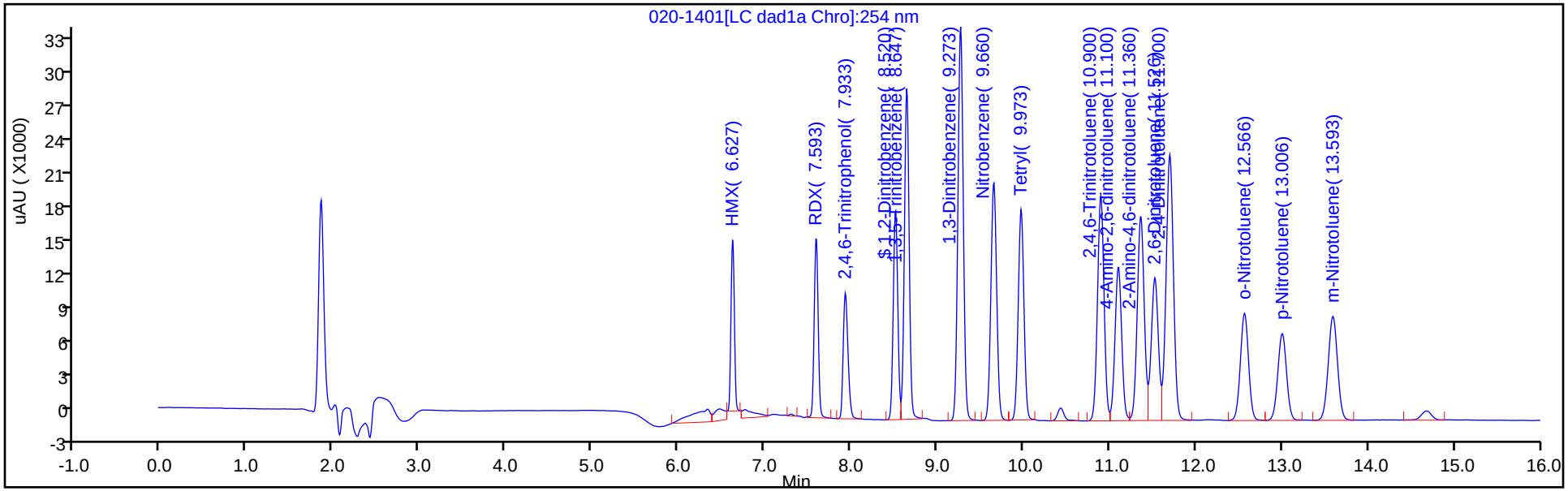
Report Date: 04-May-2021 13:29:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

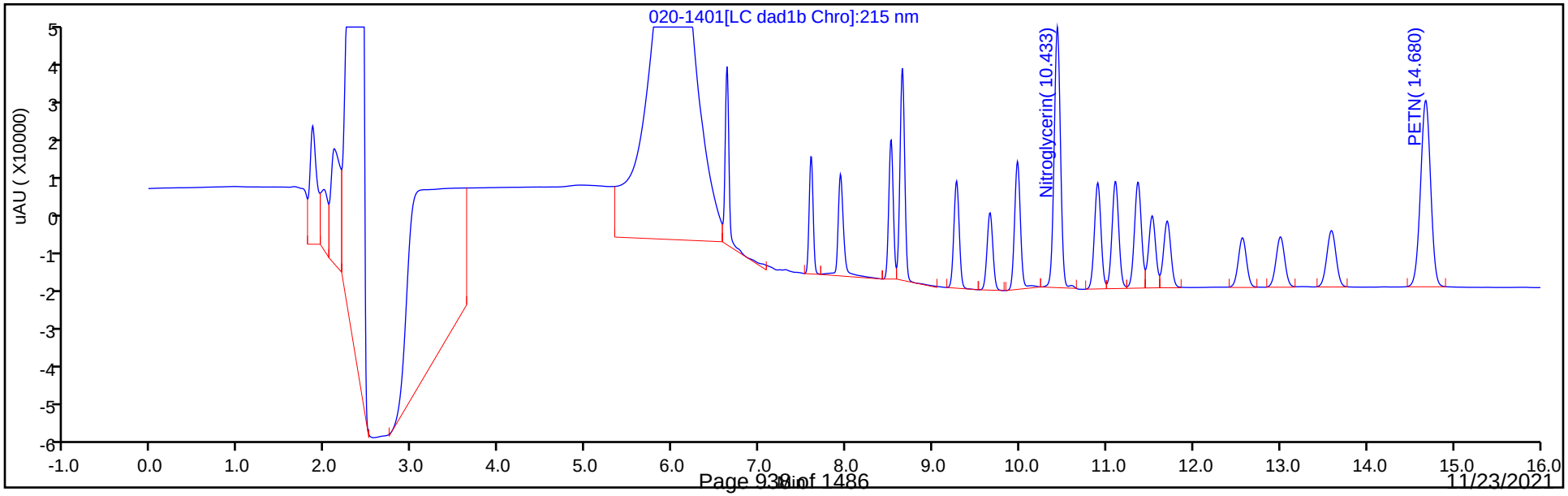
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d

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

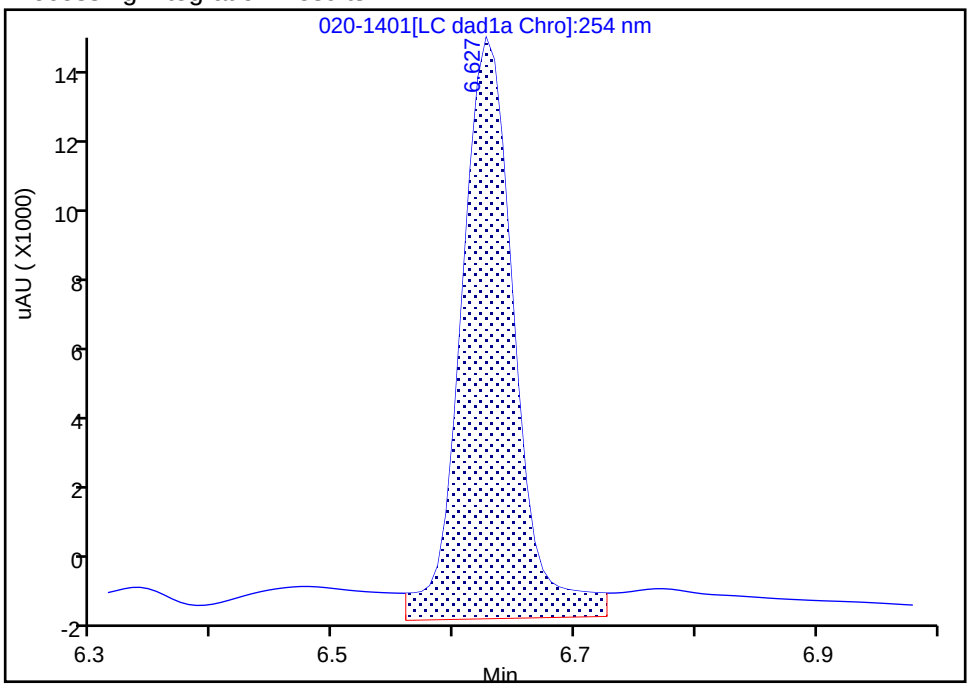
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d				
Injection Date:	01-May-2021 21:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

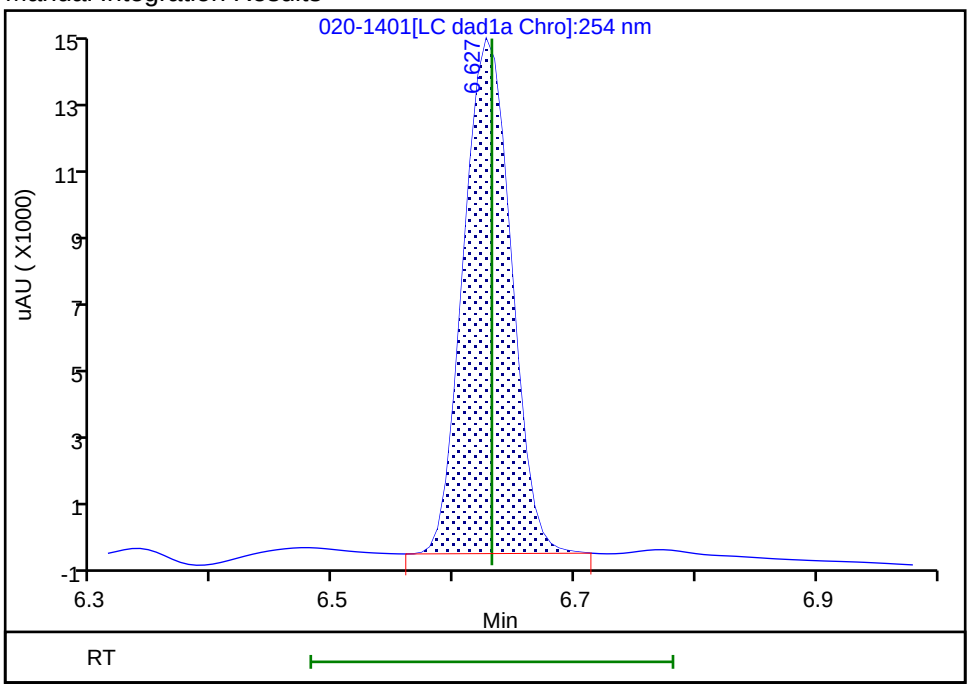
Processing Integration Results

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.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/7 Calibration Date: 11/05/2021 14:27

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: 11050007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86664		257	250	2.7	15.0
RDX	Ave	106261	104060		245	250	-2.1	15.0
Picric acid	Ave	82721	81392		246	250	-1.6	15.0
1,3,5-Trinitrobenzene	Ave	220317	230587		262	251	4.7	15.0
1,3-Dinitrobenzene	Ave	296329	306463		259	251	3.4	15.0
Nitrobenzene	Ave	195286	199633		257	251	2.2	15.0
Tetryl	Ave	172420	154363		224	251	-10.5	15.0
Nitroglycerin	Lin2		64942		2470	2500	-1.3	15.0
2,4,6-Trinitrotoluene	Ave	206038	207769		253	251	0.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	153822		252	250	0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	207705		252	251	0.4	15.0
2,6-Dinitrotoluene	Ave	143079	147781		259	251	3.3	15.0
2,4-Dinitrotoluene	Ave	287012	304490		266	251	6.1	15.0
2-Nitrotoluene	Ave	128392	129944		253	250	1.2	15.0
4-Nitrotoluene	Ave	111913	112168		251	251	0.2	15.0
3-Nitrotoluene	Ave	142246	144767		255	250	1.8	15.0
PETN	Ave	74779	69689		2330	2500	-6.8	15.0
1,2-Dinitrobenzene	Ave	128217	134956		263	250	5.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/7 Calibration Date: 11/05/2021 14:27

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: 11050007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.63	7.48	7.78
Picric acid	8.02	7.87	8.17
1,3,5-Trinitrobenzene	8.73	8.58	8.88
1,3-Dinitrobenzene	9.37	9.22	9.52
Nitrobenzene	9.77	9.62	9.92
Tetryl	10.11	9.96	10.26
Nitroglycerin	10.57	10.42	10.72
2,4,6-Trinitrotoluene	11.03	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.24	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.50	11.40	11.60
2,6-Dinitrotoluene	11.67	11.57	11.77
2,4-Dinitrotoluene	11.83	11.73	11.93
2-Nitrotoluene	12.71	12.56	12.86
4-Nitrotoluene	13.15	13.00	13.30
3-Nitrotoluene	13.75	13.60	13.90
PETN	14.86	14.71	15.01
1,2-Dinitrobenzene	8.61	8.46	8.76

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2021 14:27:48 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106237-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 14:53:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.612	6.612	0.000	21666	0.2500	0.2566	M
8 RDX	1	7.632	7.632	0.000	26015	0.2500	0.2448	
9 2,4,6-Trinitrophenol	1	8.019	8.019	0.000	20348	0.2500	0.2460	
$ 10 1,2-Dinitrobenzene	1	8.606	8.606	0.000	33739	0.2500	0.2631	
11 1,3,5-Trinitrobenzene	1	8.726	8.726	0.000	57762	0.2505	0.2622	
12 1,3-Dinitrobenzene	1	9.365	9.365	0.000	76769	0.2505	0.2591	
13 Nitrobenzene	1	9.765	9.765	0.000	50108	0.2510	0.2566	
15 Tetryl	1	10.112	10.112	0.000	38668	0.2505	0.2243	
16 Nitroglycerin	2	10.572	10.572	0.000	162354	2.50	2.47	
17 2,4,6-Trinitrotoluene	1	11.025	11.025	0.000	52150	0.2510	0.2531	
18 4-Amino-2,6-dinitrotoluene	1	11.239	11.239	0.000	38494	0.2503	0.2520	
19 2-Amino-4,6-dinitrotoluene	1	11.499	11.499	0.000	52134	0.2510	0.2519	
20 2,6-Dinitrotoluene	1	11.665	11.665	0.000	37093	0.2510	0.2592	
21 2,4-Dinitrotoluene	1	11.832	11.832	0.000	76427	0.2510	0.2663	
22 o-Nitrotoluene	1	12.712	12.712	0.000	32486	0.2500	0.2530	
23 p-Nitrotoluene	1	13.152	13.152	0.000	28098	0.2505	0.2511	
24 m-Nitrotoluene	1	13.745	13.745	0.000	36228	0.2503	0.2547	
25 PETN	2	14.859	14.859	0.000	174222	2.50	2.33	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL

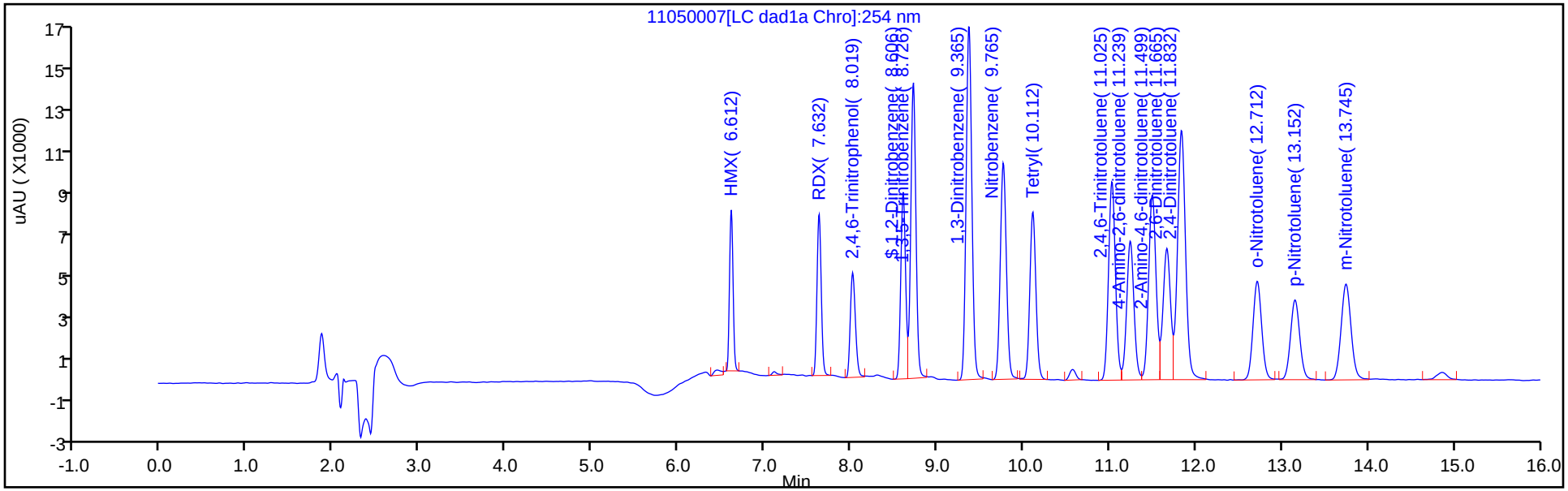
Report Date: 06-Nov-2021 10:24:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

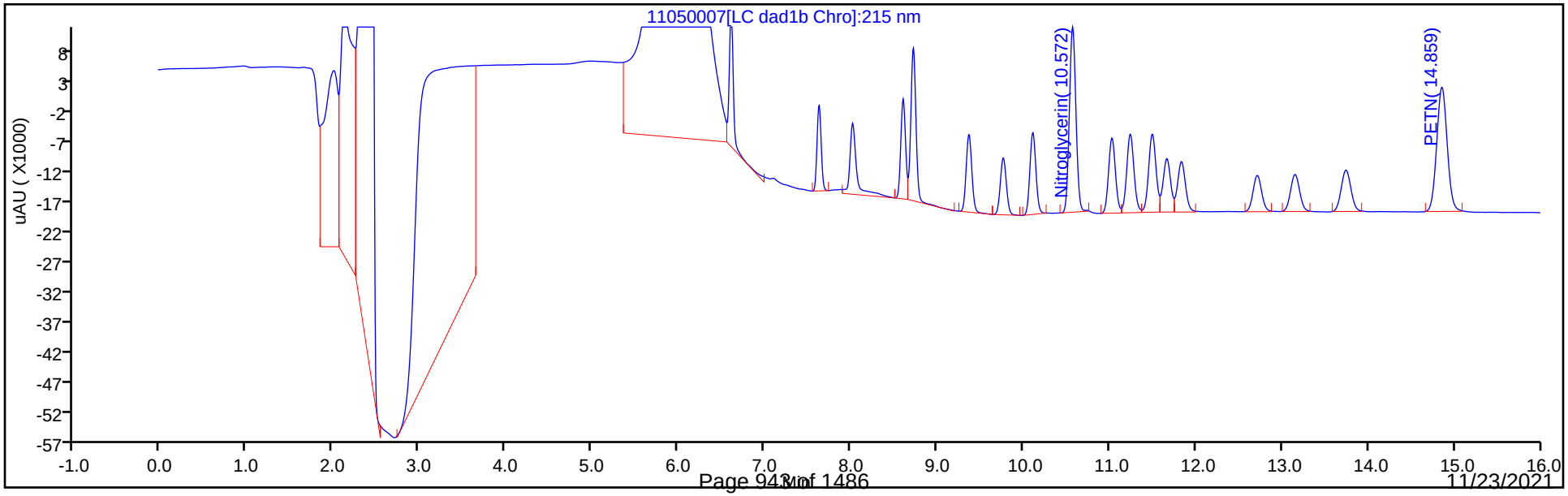
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050007.d

Injection Date:	05-Nov-2021 14:27:48	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

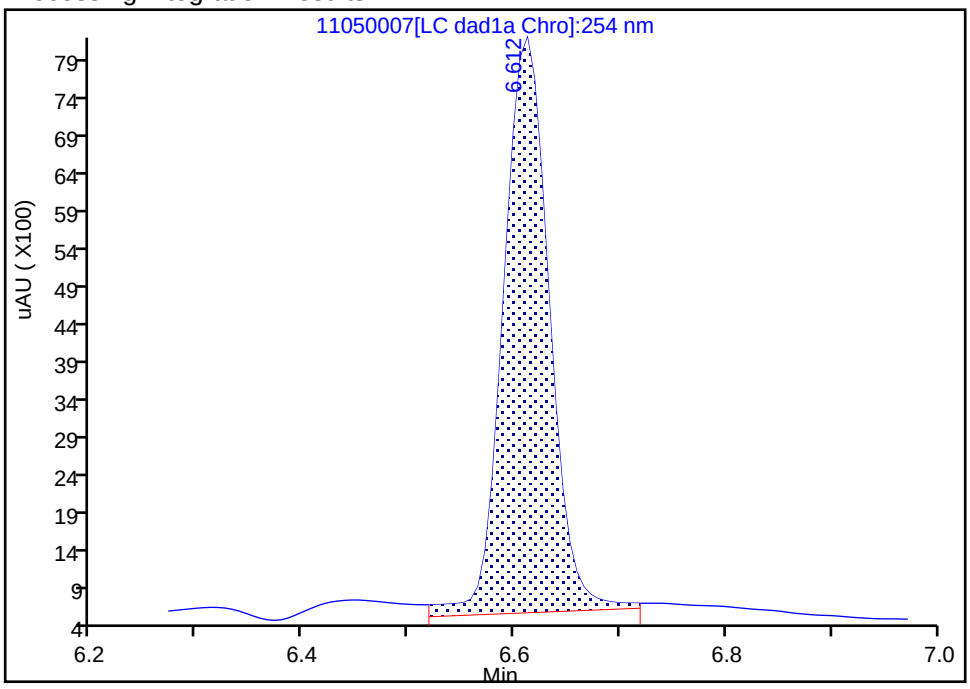
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050007.d				
Injection Date:	05-Nov-2021 14:27:48	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

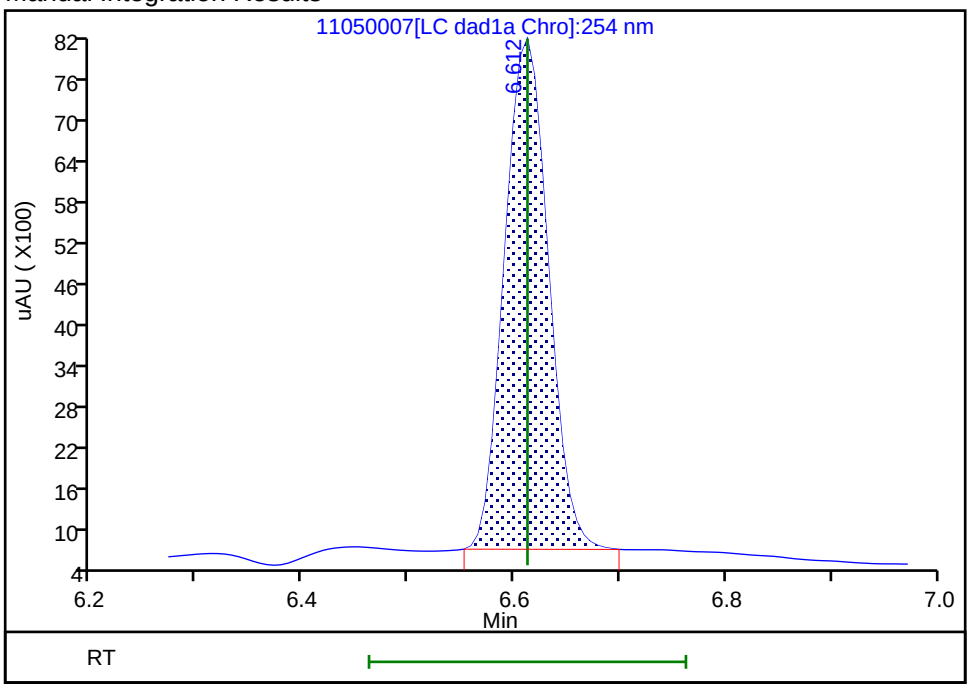
Processing Integration Results

RT: 6.61
Area: 23183
Amount: 0.274610
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 21666
Amount: 0.256641
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 14:53:34
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/9 Calibration Date: 11/05/2021 14:50

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: 11050009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	192176		259	250	3.4	15.0
DNX	Ave	142119	145998		257	250	2.7	15.0
MNX	Ave	130340	133436		299	292	2.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/9 Calibration Date: 11/05/2021 14:50

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: 11050009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.81	6.71	6.91
MNX	7.24	7.09	7.39

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Nov-2021 14:50:48	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106237-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 10:24:48	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1650				
First Level Reviewer: zhangji		Date:	05-Nov-2021 15:50:27		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.493	6.493	0.000	48092	0.2503	0.2588	M
6 DNX	1	6.813	6.813	0.000	36536	0.2503	0.2571	M
7 MNX	1	7.239	7.239	0.000	38930	0.2918	0.2987	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

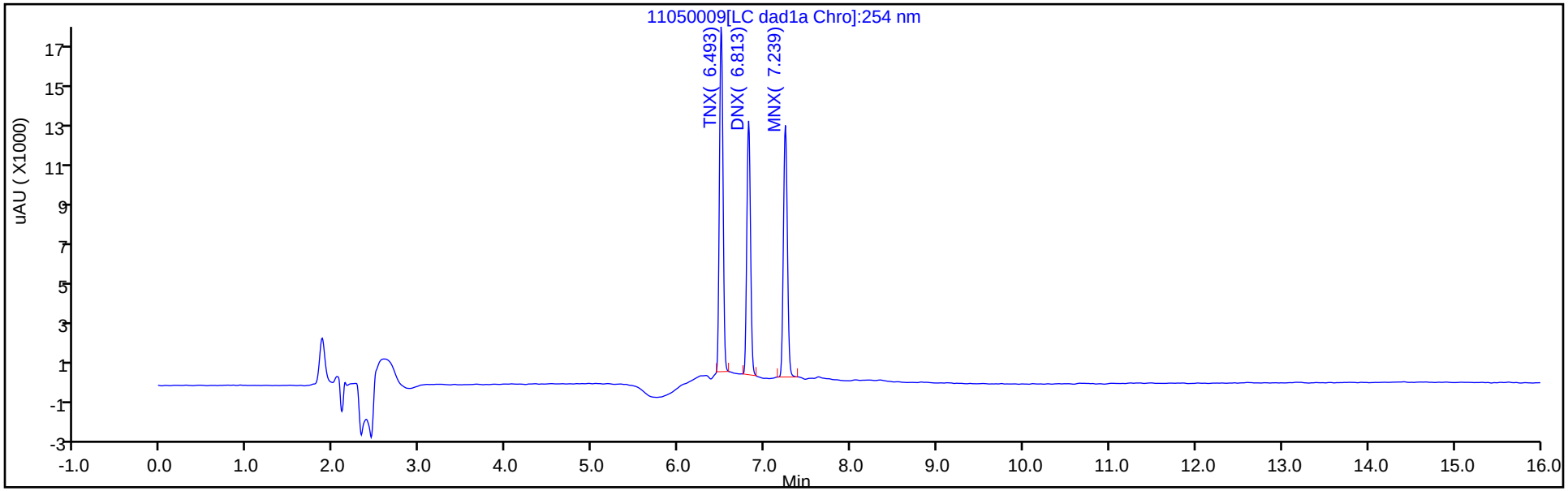
Report Date: 06-Nov-2021 10:24:48 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

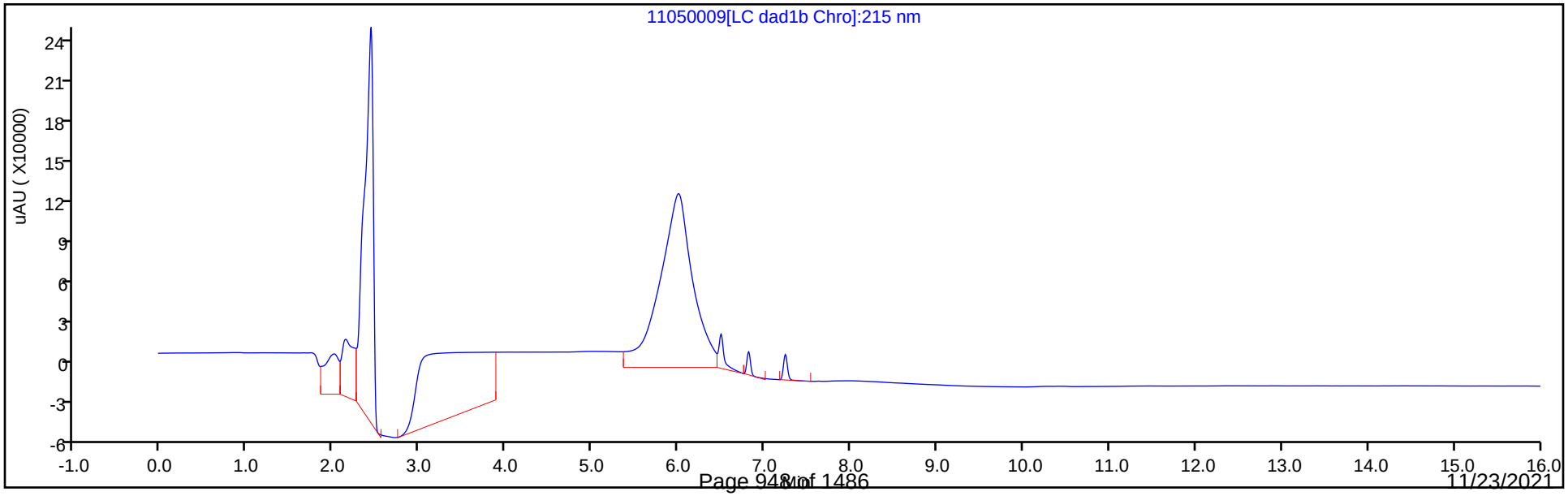
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050009.d

Injection Date:	05-Nov-2021 14:50:48	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

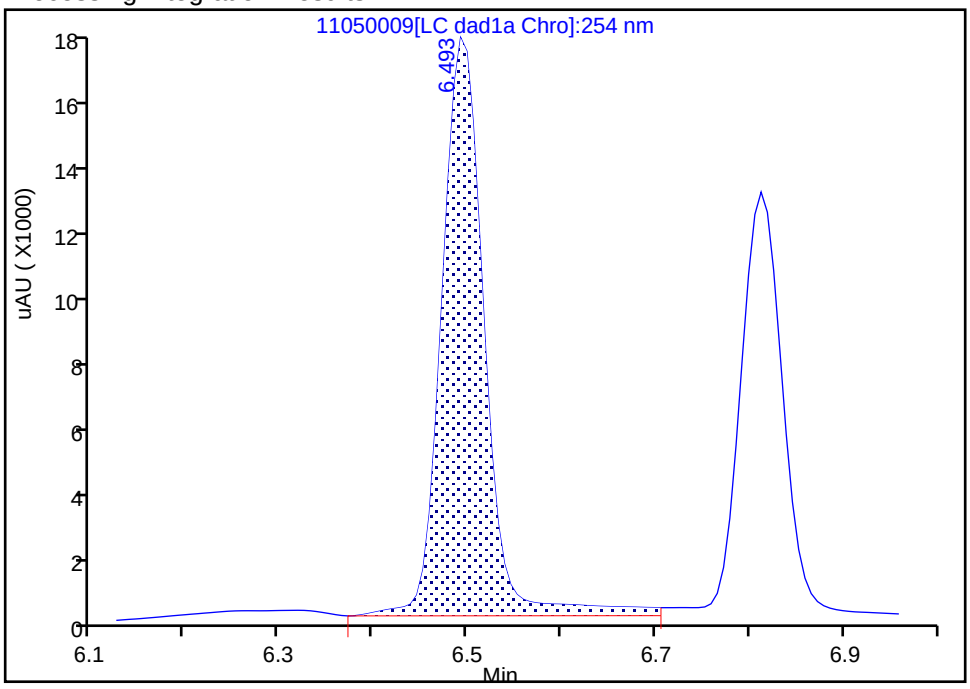
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050009.d				
Injection Date:	05-Nov-2021 14:50:48	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

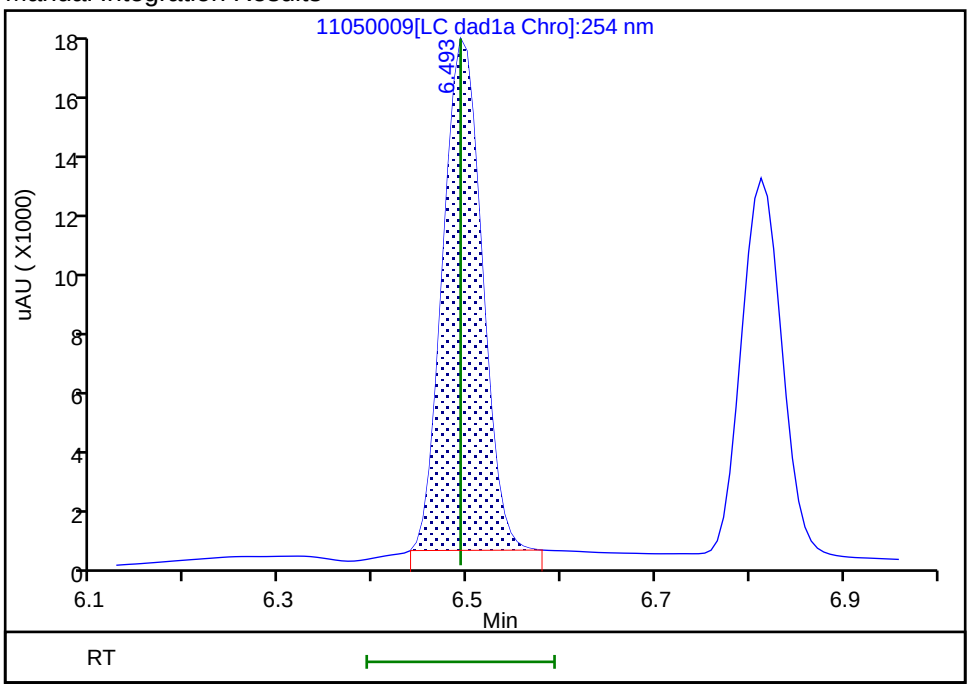
Processing Integration Results

RT: 6.49
Area: 53748
Amount: 0.289269
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 48092
Amount: 0.258829
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 15:50:19
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

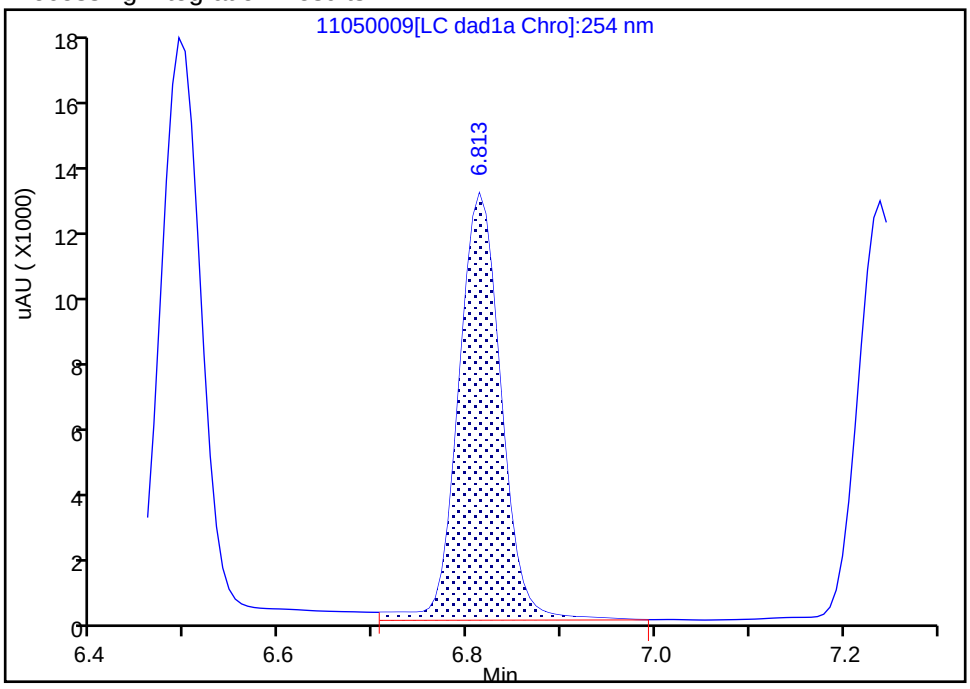
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050009.d				
Injection Date:	05-Nov-2021 14:50:48	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

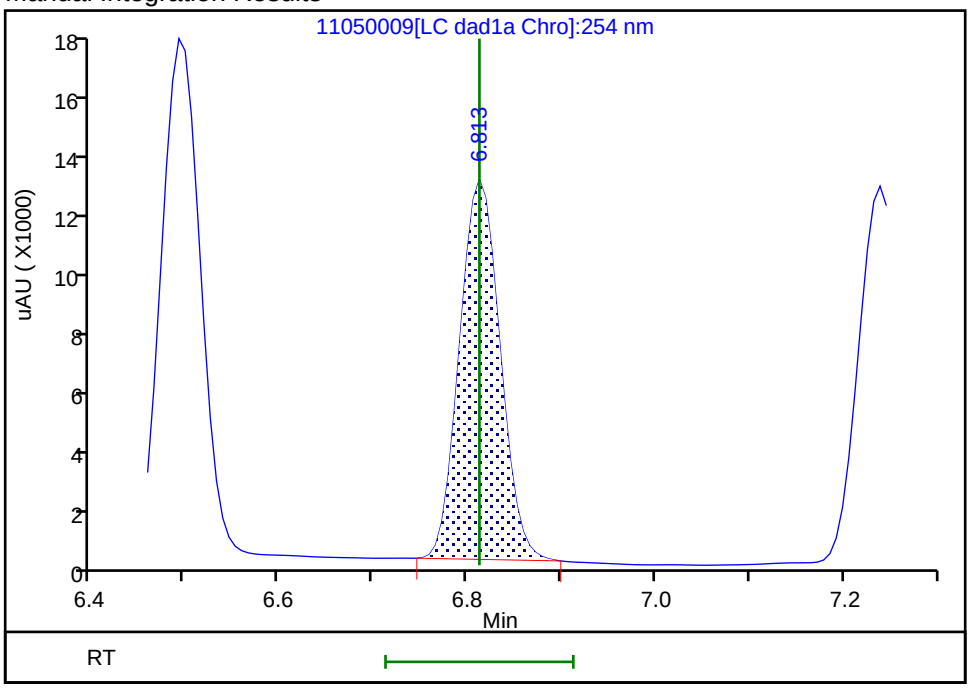
Processing Integration Results

RT: 6.81
Area: 39143
Amount: 0.275423
Amount Units: ug/mL



Manual Integration Results

RT: 6.81
Area: 36536
Amount: 0.257080
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 15:50:23
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/21 Calibration Date: 11/05/2021 19:04

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: 11050021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86576		256	250	2.6	15.0
RDX	Ave	106261	104264		245	250	-1.9	15.0
Picric acid	Ave	82721	80056		242	250	-3.2	15.0
1,3,5-Trinitrobenzene	Ave	220317	227134		258	251	3.1	15.0
1,3-Dinitrobenzene	Ave	296329	304659		258	251	2.8	15.0
Nitrobenzene	Ave	195286	196833		253	251	0.8	15.0
Tetryl	Ave	172420	156096		227	251	-9.5	15.0
Nitroglycerin	Lin2		66157		2510	2500	0.6	15.0
2,4,6-Trinitrotoluene	Ave	206038	206968		252	251	0.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	152392		250	250	-0.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	206088		250	251	-0.4	15.0
2,6-Dinitrotoluene	Ave	143079	149012		261	251	4.1	15.0
2,4-Dinitrotoluene	Ave	287012	301765		264	251	5.1	15.0
2-Nitrotoluene	Ave	128392	128580		250	250	0.1	15.0
4-Nitrotoluene	Ave	111913	111257		249	251	-0.6	15.0
3-Nitrotoluene	Ave	142246	141738		249	250	-0.4	15.0
PETN	Ave	74779	69378		2320	2500	-7.2	15.0
1,2-Dinitrobenzene	Ave	128217	135448		264	250	5.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/21 Calibration Date: 11/05/2021 19:04

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: 11050021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.61	7.48	7.78
Picric acid	8.00	7.87	8.17
1,3,5-Trinitrobenzene	8.70	8.58	8.88
1,3-Dinitrobenzene	9.34	9.22	9.52
Nitrobenzene	9.73	9.62	9.92
Tetryl	10.08	9.96	10.26
Nitroglycerin	10.53	10.42	10.72
2,4,6-Trinitrotoluene	10.98	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.20	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.45	11.40	11.60
2,6-Dinitrotoluene	11.62	11.57	11.77
2,4-Dinitrotoluene	11.78	11.73	11.93
2-Nitrotoluene	12.66	12.56	12.86
4-Nitrotoluene	13.09	13.00	13.30
3-Nitrotoluene	13.68	13.60	13.90
PETN	14.78	14.71	15.01
1,2-Dinitrobenzene	8.58	8.46	8.76

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2021 19:04:24 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106237-021
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 19:59:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.603	6.612	-0.009	21644	0.2500	0.2564	M
8 RDX	1	7.610	7.632	-0.022	26066	0.2500	0.2453	
9 2,4,6-Trinitrophenol	1	8.003	8.019	-0.016	20014	0.2500	0.2419	
$ 10 1,2-Dinitrobenzene	1	8.577	8.606	-0.029	33862	0.2500	0.2641	
11 1,3,5-Trinitrobenzene	1	8.697	8.726	-0.029	56897	0.2505	0.2583	
12 1,3-Dinitrobenzene	1	9.337	9.365	-0.028	76317	0.2505	0.2575	
13 Nitrobenzene	1	9.730	9.765	-0.035	49405	0.2510	0.2530	
15 Tetryl	1	10.077	10.112	-0.035	39102	0.2505	0.2268	
16 Nitroglycerin	2	10.530	10.572	-0.042	165393	2.50	2.51	
17 2,4,6-Trinitrotoluene	1	10.983	11.025	-0.042	51949	0.2510	0.2521	
18 4-Amino-2,6-dinitrotoluene	1	11.197	11.239	-0.042	38136	0.2503	0.2496	
19 2-Amino-4,6-dinitrotoluene	1	11.450	11.499	-0.049	51728	0.2510	0.2500	
20 2,6-Dinitrotoluene	1	11.617	11.665	-0.048	37402	0.2510	0.2614	
21 2,4-Dinitrotoluene	1	11.783	11.832	-0.049	75743	0.2510	0.2639	
22 o-Nitrotoluene	1	12.657	12.712	-0.055	32145	0.2500	0.2504	
23 p-Nitrotoluene	1	13.090	13.152	-0.062	27870	0.2505	0.2490	
24 m-Nitrotoluene	1	13.677	13.745	-0.068	35470	0.2503	0.2494	
25 PETN	2	14.777	14.859	-0.082	173446	2.50	2.32	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL

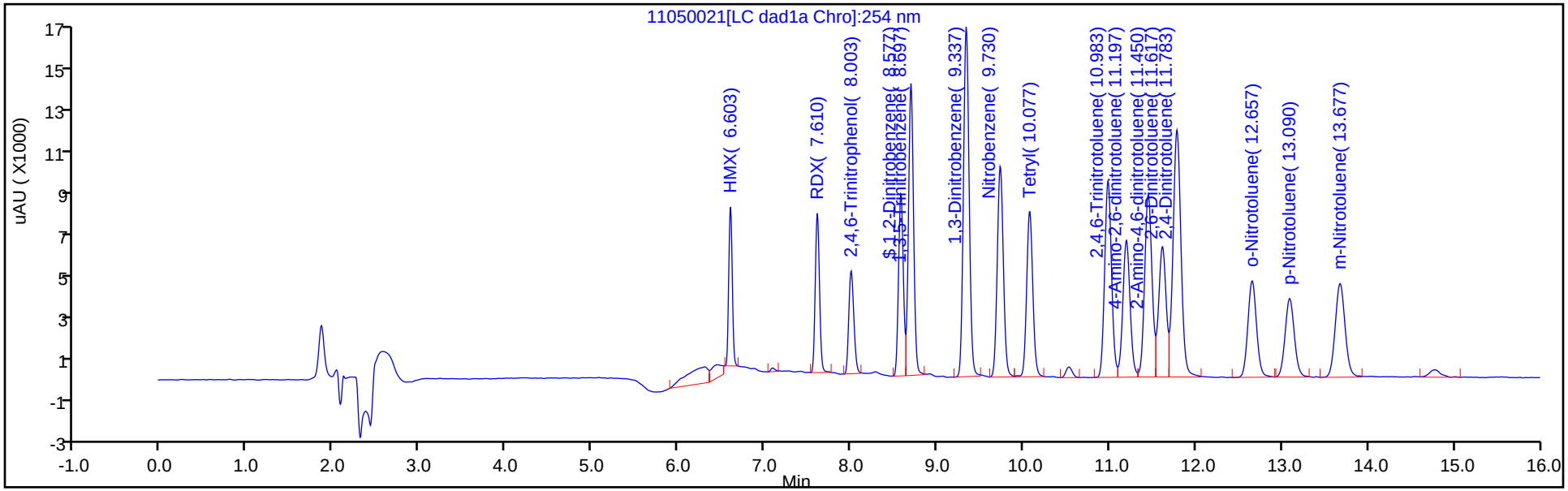
Report Date: 06-Nov-2021 10:24:53 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

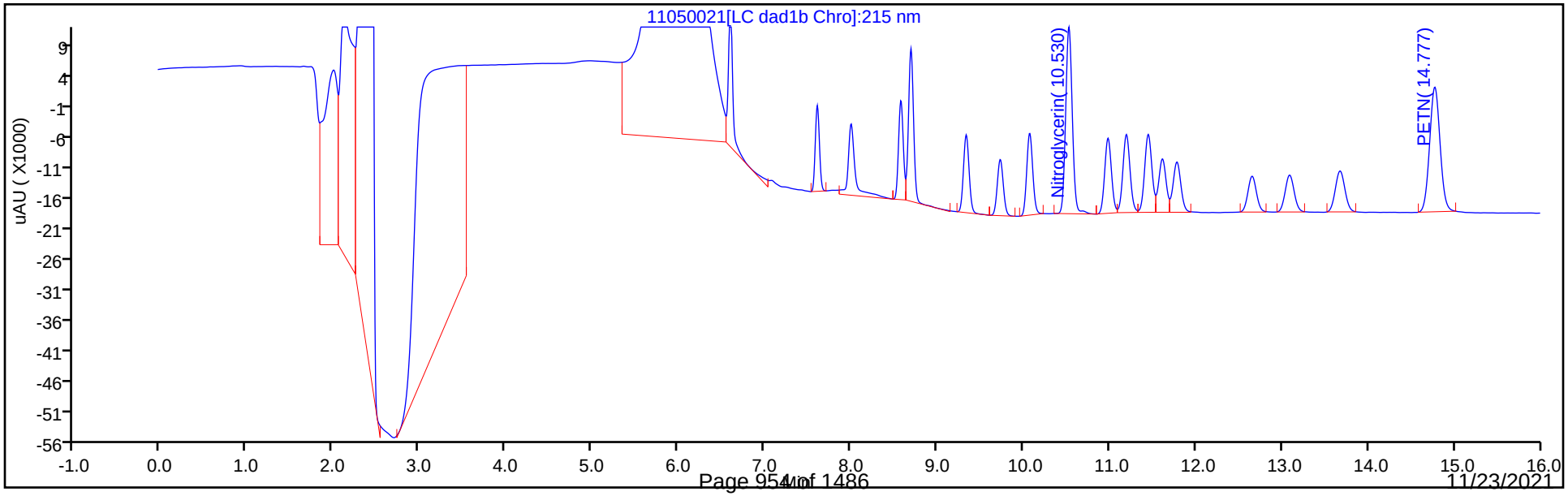
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050021.d

Injection Date:	05-Nov-2021 19:04:24	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

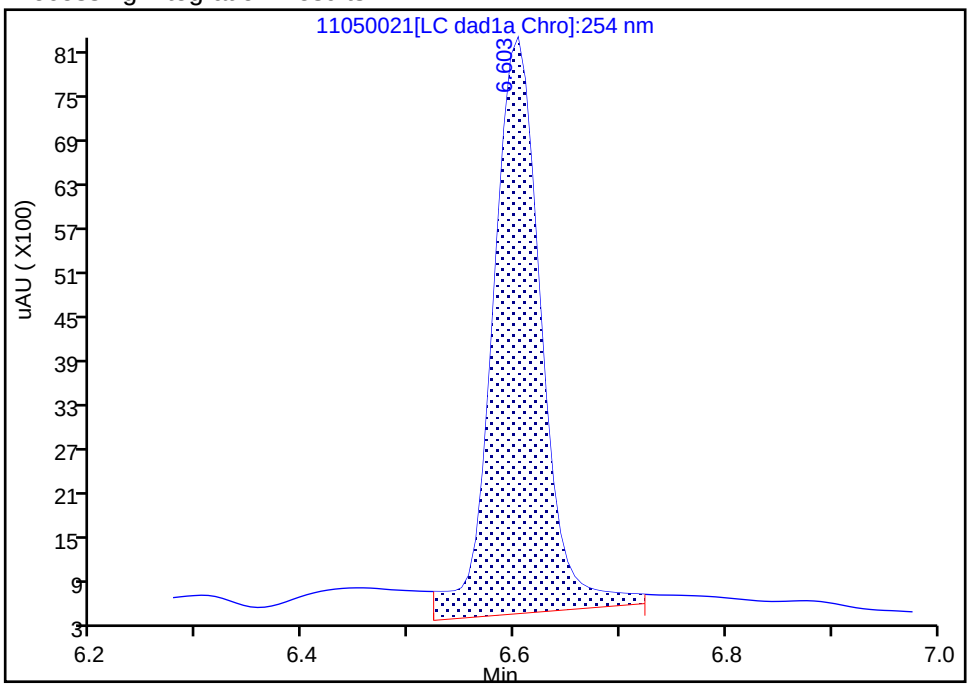
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050021.d				
Injection Date:	05-Nov-2021 19:04:24	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

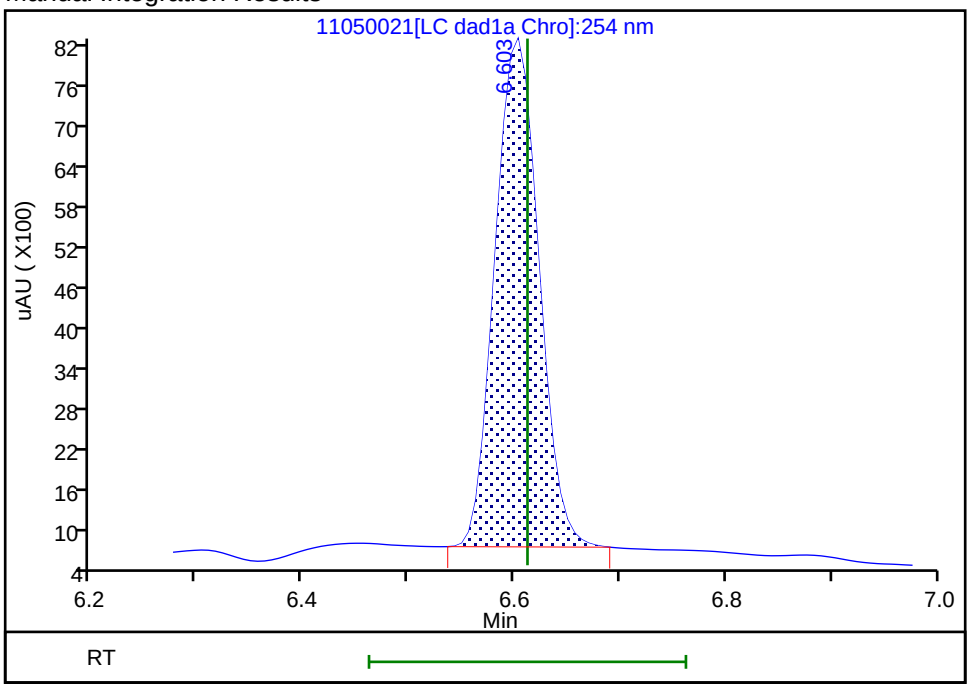
Processing Integration Results

RT: 6.60
Area: 24880
Amount: 0.294712
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 21644
Amount: 0.256380
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 19:59:54
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/22 Calibration Date: 11/05/2021 19:27

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: 11050022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	189718		256	250	2.1	15.0
DNX	Ave	142119	144272		254	250	1.5	15.0
MNX	Ave	130340	134255		301	292	3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/22 Calibration Date: 11/05/2021 19:27

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: 11050022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.39	6.59
DNX	6.80	6.71	6.91
MNX	7.23	7.09	7.39

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050022.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2021 19:27:22 ALS Bottle#: 9 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106237-022
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 20:00:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.482	6.493	-0.011	47477	0.2503	0.2555	M
6 DNX	1	6.802	6.813	-0.011	36104	0.2503	0.2540	M
7 MNX	1	7.229	7.239	-0.010	39169	0.2918	0.3005	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

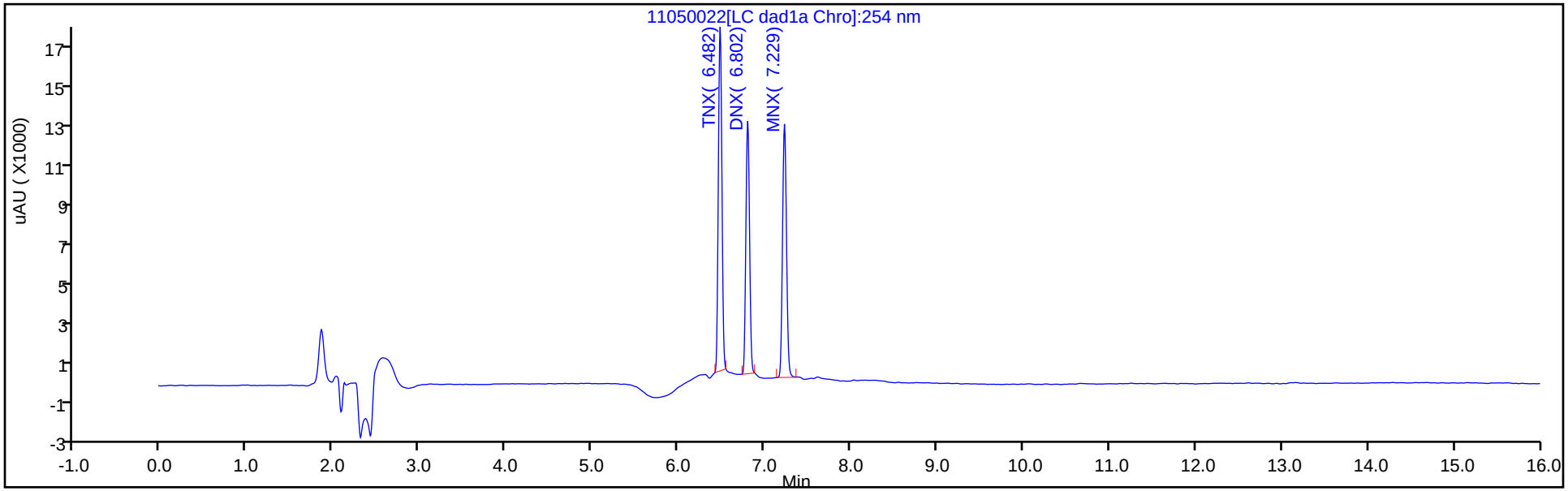
Report Date: 06-Nov-2021 10:24:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

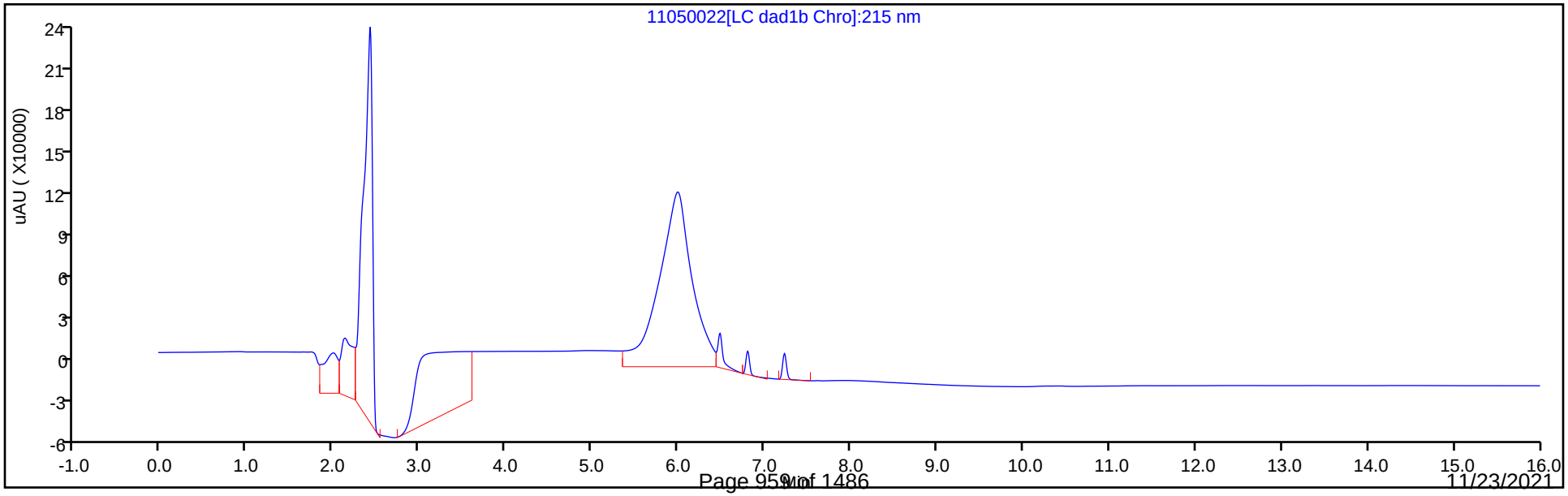
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050022.d

Injection Date:	05-Nov-2021 19:27:22	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

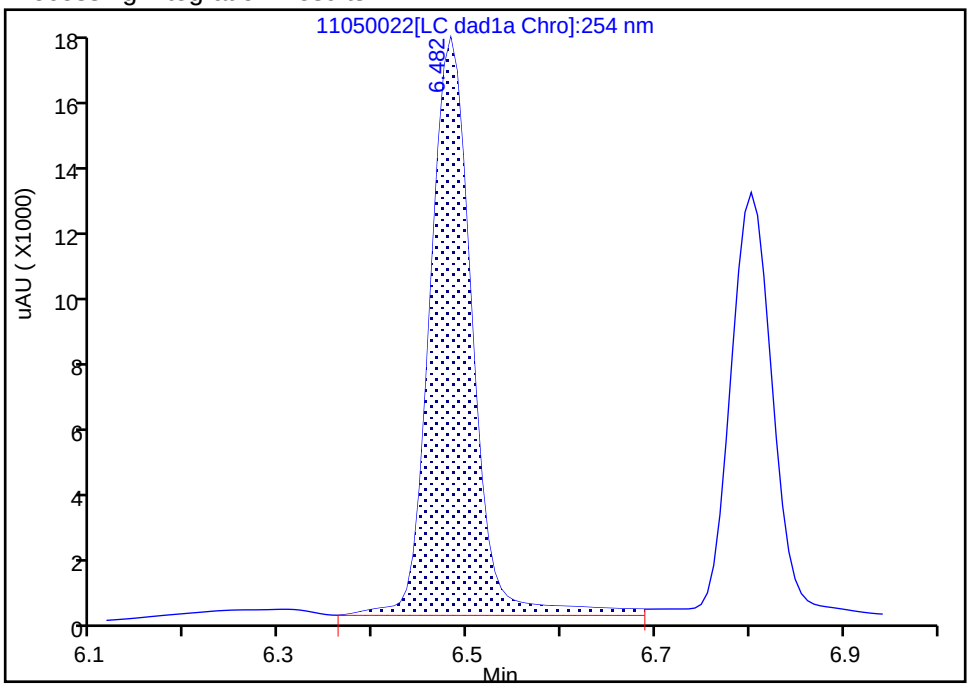
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050022.d				
Injection Date:	05-Nov-2021 19:27:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

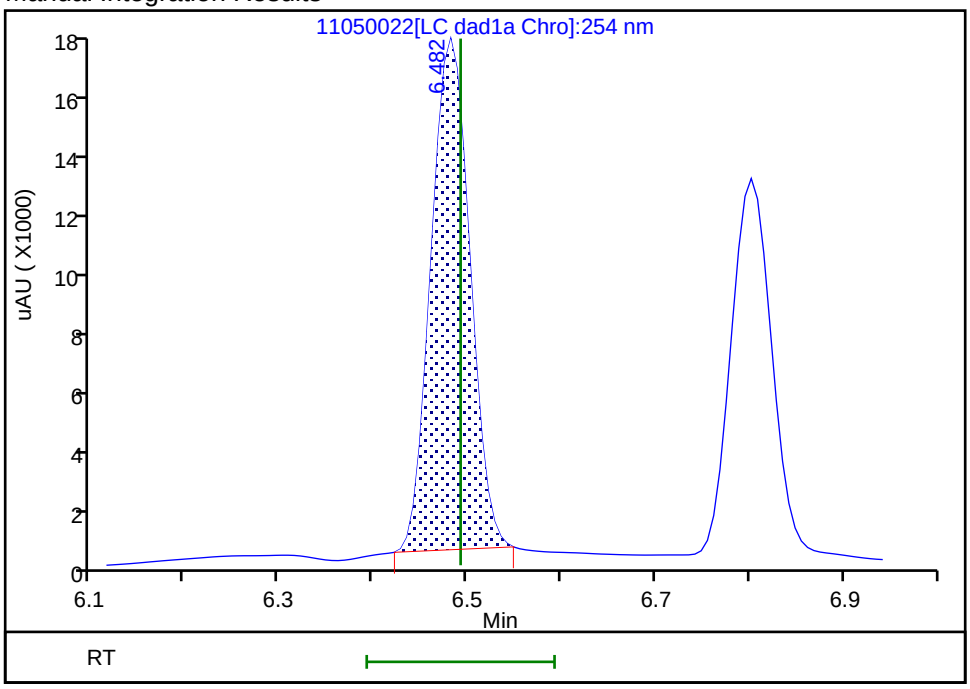
Processing Integration Results

RT: 6.48
Area: 52862
Amount: 0.284501
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 47477
Amount: 0.255519
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 20:00:19

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

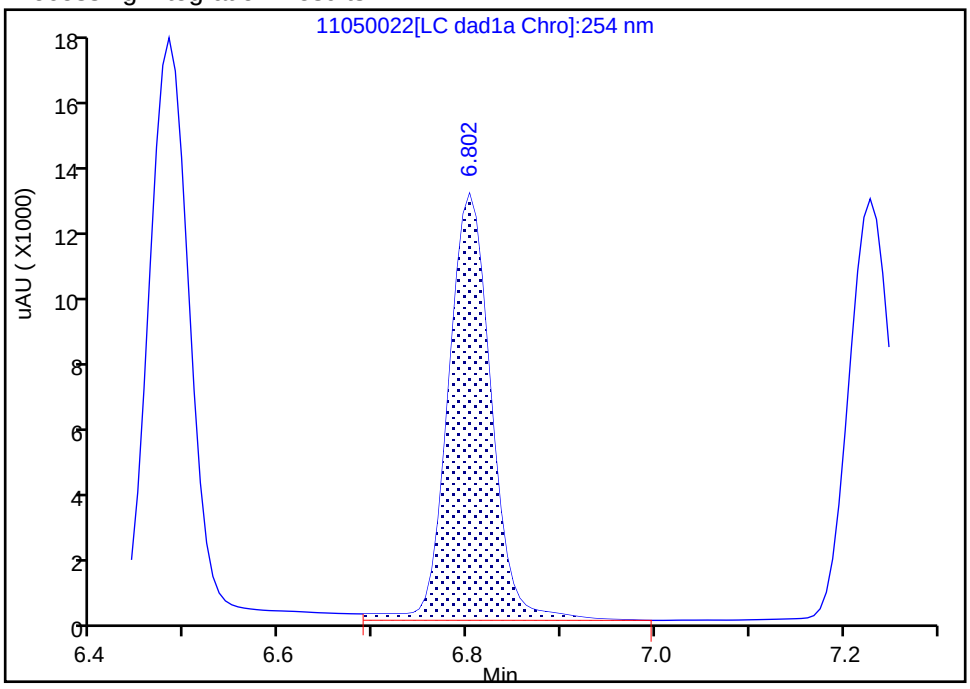
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050022.d				
Injection Date:	05-Nov-2021 19:27:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

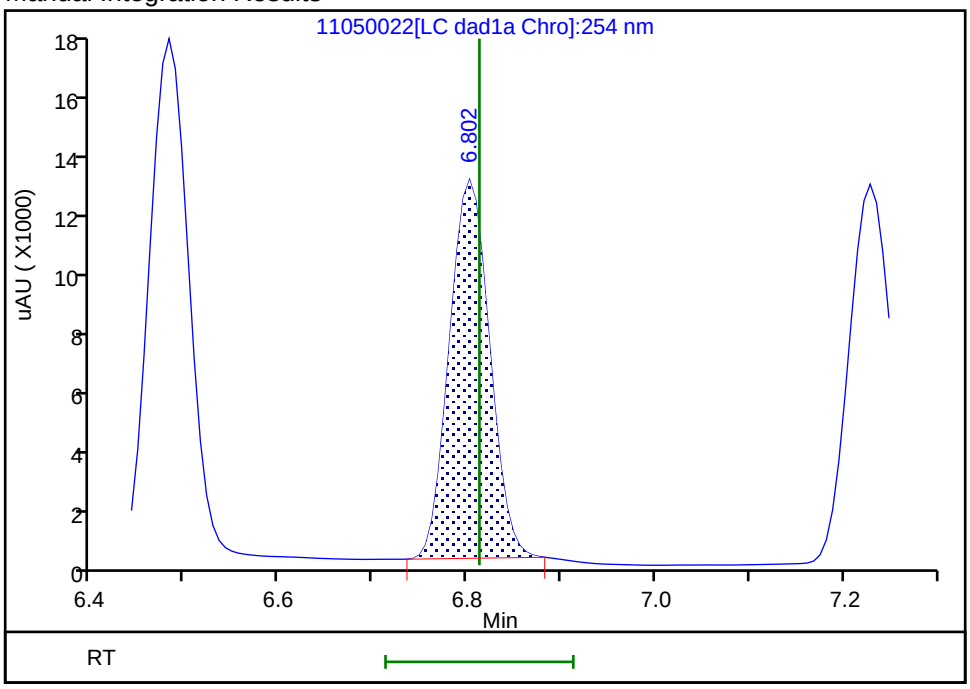
Processing Integration Results

RT: 6.80
Area: 39138
Amount: 0.275388
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 36104
Amount: 0.254040
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 20:00:23
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/33 Calibration Date: 11/05/2021 23:39

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: 11050033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86840		257	250	2.9	15.0
RDX	Ave	106261	103700		244	250	-2.4	15.0
Picric acid	Ave	82721	80680		244	250	-2.5	15.0
1,3,5-Trinitrobenzene	Ave	220317	229030		260	251	4.0	15.0
1,3-Dinitrobenzene	Ave	296329	305034		258	251	2.9	15.0
Nitrobenzene	Ave	195286	193570		249	251	-0.9	15.0
Tetryl	Ave	172420	155737		226	251	-9.7	15.0
Nitroglycerin	Lin2		66479		2530	2500	1.1	15.0
2,4,6-Trinitrotoluene	Ave	206038	207745		253	251	0.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	154190		253	250	0.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	208518		253	251	0.8	15.0
2,6-Dinitrotoluene	Ave	143079	148522		261	251	3.8	15.0
2,4-Dinitrotoluene	Ave	287012	301940		264	251	5.2	15.0
2-Nitrotoluene	Ave	128392	125680		245	250	-2.1	15.0
4-Nitrotoluene	Ave	111913	110599		248	251	-1.2	15.0
3-Nitrotoluene	Ave	142246	140236		247	250	-1.4	15.0
PETN	Ave	74779	69412		2320	2500	-7.2	15.0
1,2-Dinitrobenzene	Ave	128217	134136		262	250	4.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/33 Calibration Date: 11/05/2021 23:39

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: 11050033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.60	7.48	7.78
Picric acid	8.00	7.87	8.17
1,3,5-Trinitrobenzene	8.69	8.58	8.88
1,3-Dinitrobenzene	9.34	9.22	9.52
Nitrobenzene	9.73	9.62	9.92
Tetryl	10.07	9.96	10.26
Nitroglycerin	10.52	10.42	10.72
2,4,6-Trinitrotoluene	10.98	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.19	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.44	11.40	11.60
2,6-Dinitrotoluene	11.61	11.57	11.77
2,4-Dinitrotoluene	11.78	11.73	11.93
2-Nitrotoluene	12.66	12.56	12.86
4-Nitrotoluene	13.09	13.00	13.30
3-Nitrotoluene	13.68	13.60	13.90
PETN	14.78	14.71	15.01
1,2-Dinitrobenzene	8.58	8.46	8.76

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050033.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2021 23:39:25 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106237-033
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:57 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:13:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.612	-0.015	21710	0.2500	0.2572	M
8 RDX	1	7.604	7.632	-0.028	25925	0.2500	0.2440	
9 2,4,6-Trinitrophenol	1	7.997	8.019	-0.022	20170	0.2500	0.2438	
$ 10 1,2-Dinitrobenzene	1	8.577	8.606	-0.029	33534	0.2500	0.2615	
11 1,3,5-Trinitrobenzene	1	8.691	8.726	-0.035	57372	0.2505	0.2604	
12 1,3-Dinitrobenzene	1	9.337	9.365	-0.028	76411	0.2505	0.2579	
13 Nitrobenzene	1	9.730	9.765	-0.035	48586	0.2510	0.2488	
15 Tetryl	1	10.070	10.112	-0.042	39012	0.2505	0.2263	
16 Nitroglycerin	2	10.524	10.572	-0.048	166197	2.50	2.53	
17 2,4,6-Trinitrotoluene	1	10.977	11.025	-0.048	52144	0.2510	0.2531	
18 4-Amino-2,6-dinitrotoluene	1	11.190	11.239	-0.049	38586	0.2503	0.2526	
19 2-Amino-4,6-dinitrotoluene	1	11.444	11.499	-0.055	52338	0.2510	0.2529	
20 2,6-Dinitrotoluene	1	11.610	11.665	-0.055	37279	0.2510	0.2605	
21 2,4-Dinitrotoluene	1	11.784	11.832	-0.048	75787	0.2510	0.2641	
22 o-Nitrotoluene	1	12.657	12.712	-0.055	31420	0.2500	0.2447	
23 p-Nitrotoluene	1	13.090	13.152	-0.062	27705	0.2505	0.2476	
24 m-Nitrotoluene	1	13.677	13.745	-0.068	35094	0.2503	0.2467	
25 PETN	2	14.777	14.859	-0.082	173531	2.50	2.32	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL

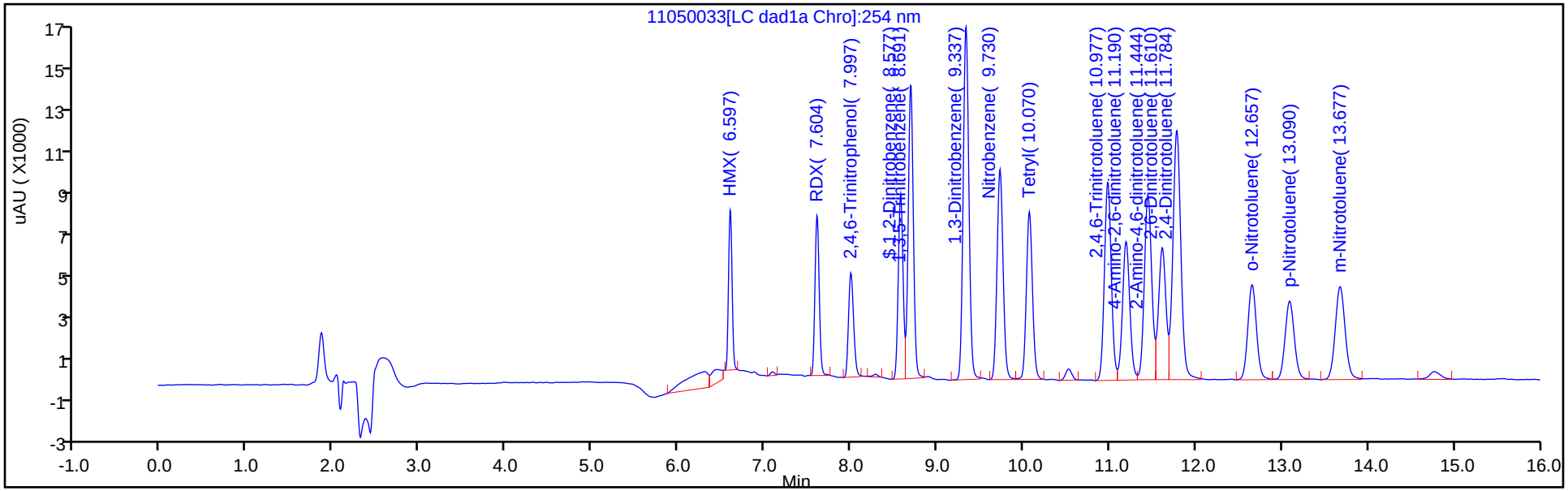
Report Date: 06-Nov-2021 10:24:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

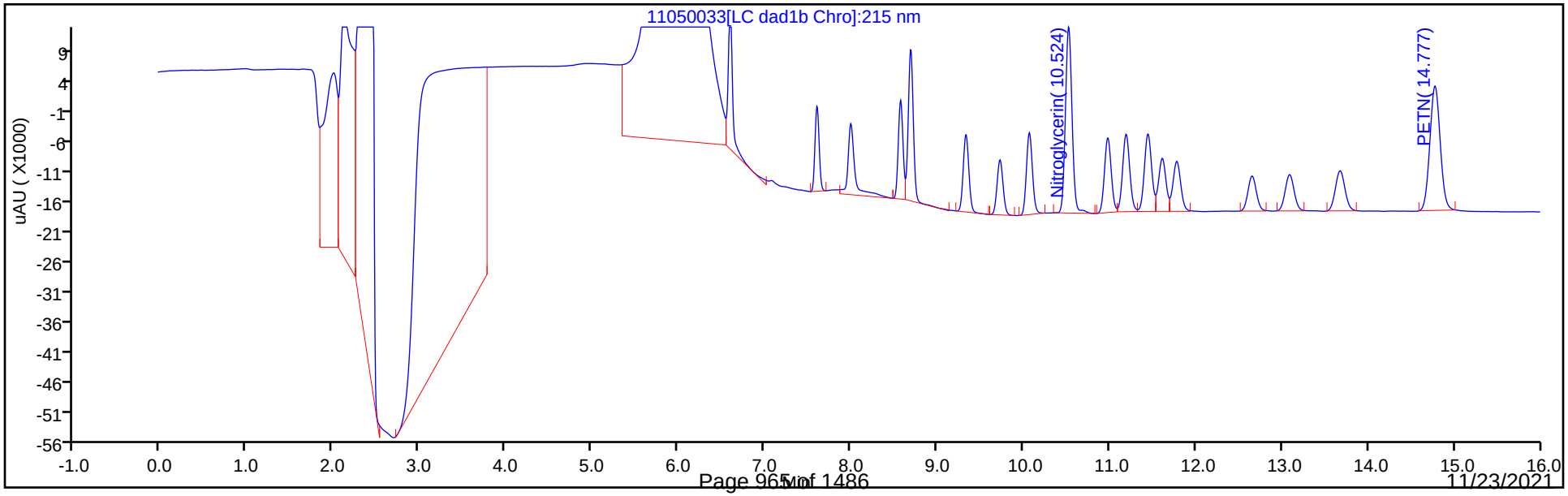
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050033.d

Injection Date:	05-Nov-2021 23:39:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	33
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

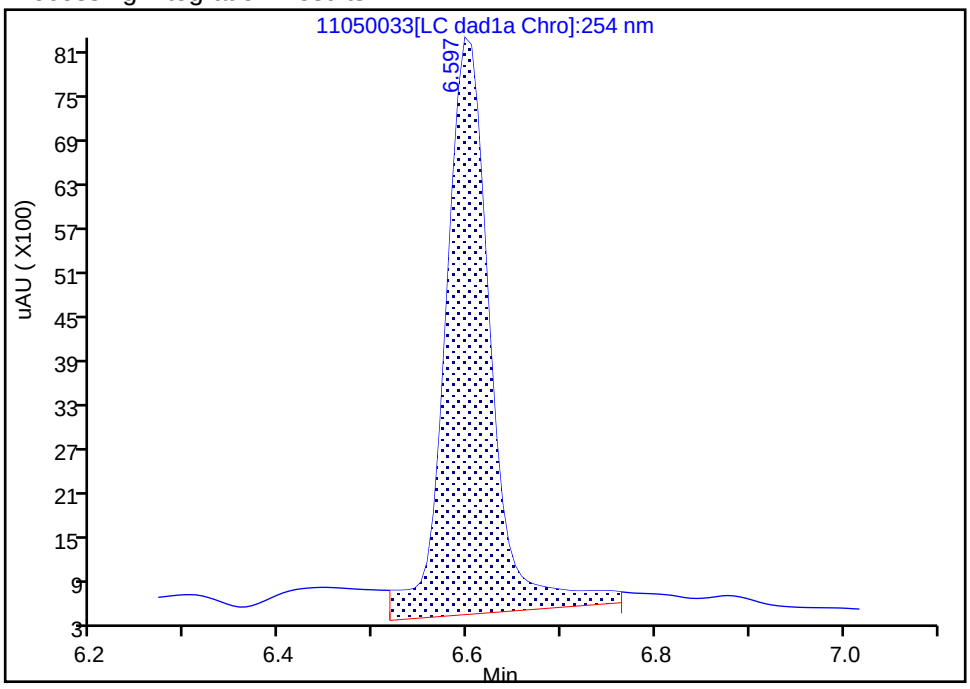
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050033.d				
Injection Date:	05-Nov-2021 23:39:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

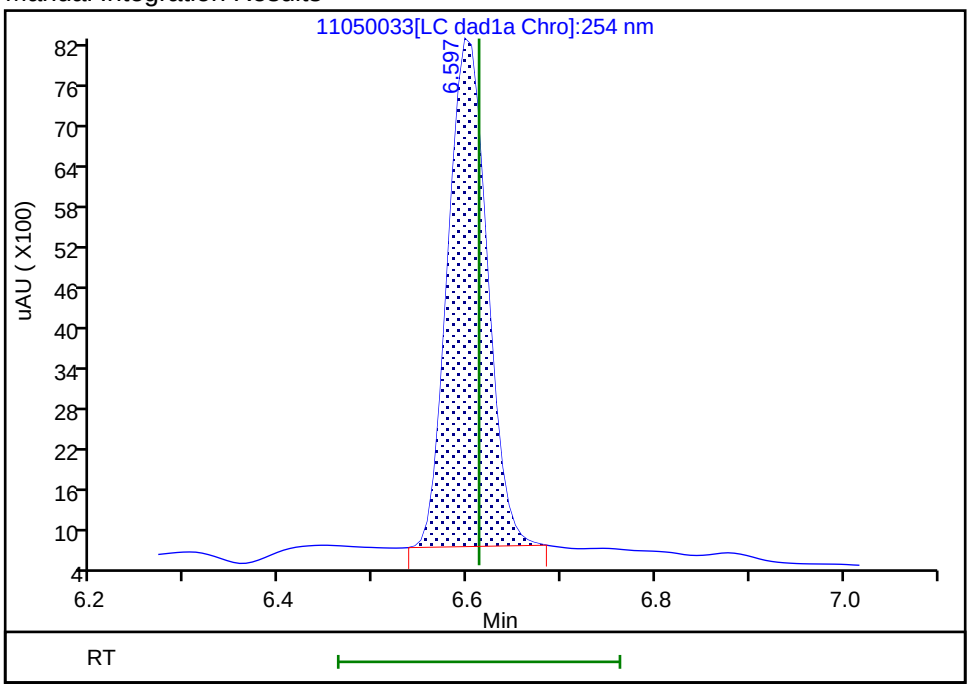
Processing Integration Results

RT: 6.60
Area: 26176
Amount: 0.310063
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 21710
Amount: 0.257162
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:12:59
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/34 Calibration Date: 11/06/2021 00:02

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: 11050034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	188128		253	250	1.2	15.0
DNX	Ave	142119	140955		248	250	-0.8	15.0
MNX	Ave	130340	133556		299	292	2.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/34 Calibration Date: 11/06/2021 00:02

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: 11050034.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.39	6.59
DNX	6.80	6.71	6.91
MNX	7.23	7.09	7.39

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050034.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 06-Nov-2021 00:02:27 ALS Bottle#: 9 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106237-034
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:13:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.493	-0.014	47079	0.2503	0.2534	M
6 DNX	1	6.799	6.813	-0.014	35274	0.2503	0.2482	M
7 MNX	1	7.226	7.239	-0.013	38965	0.2918	0.2989	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

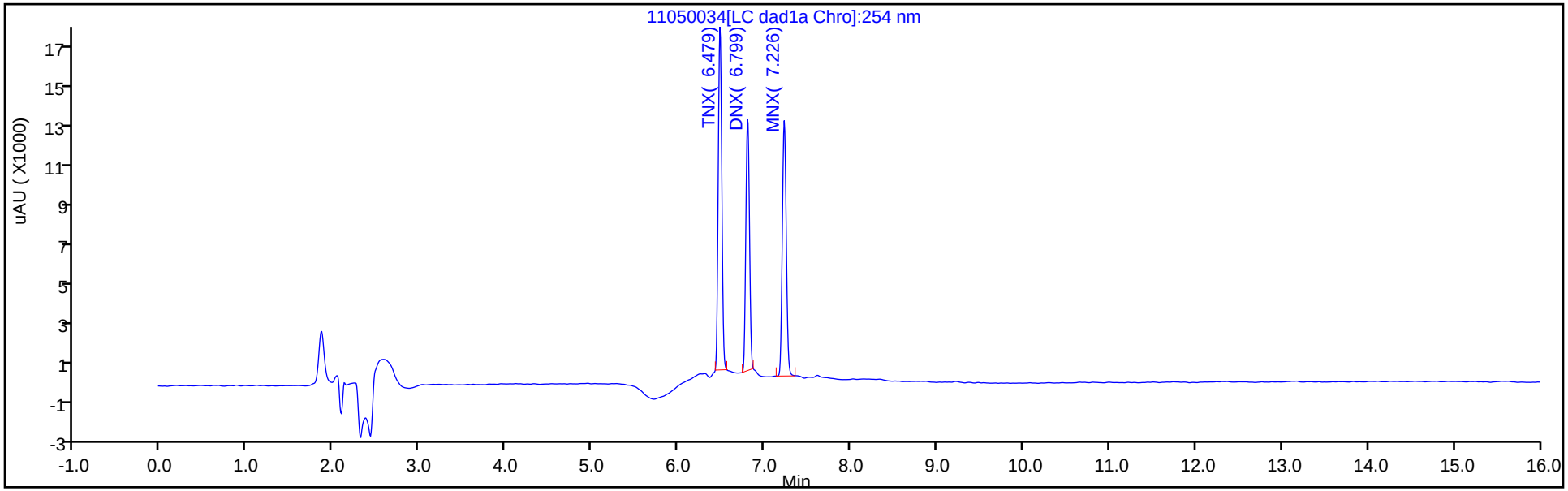
Report Date: 06-Nov-2021 10:24:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

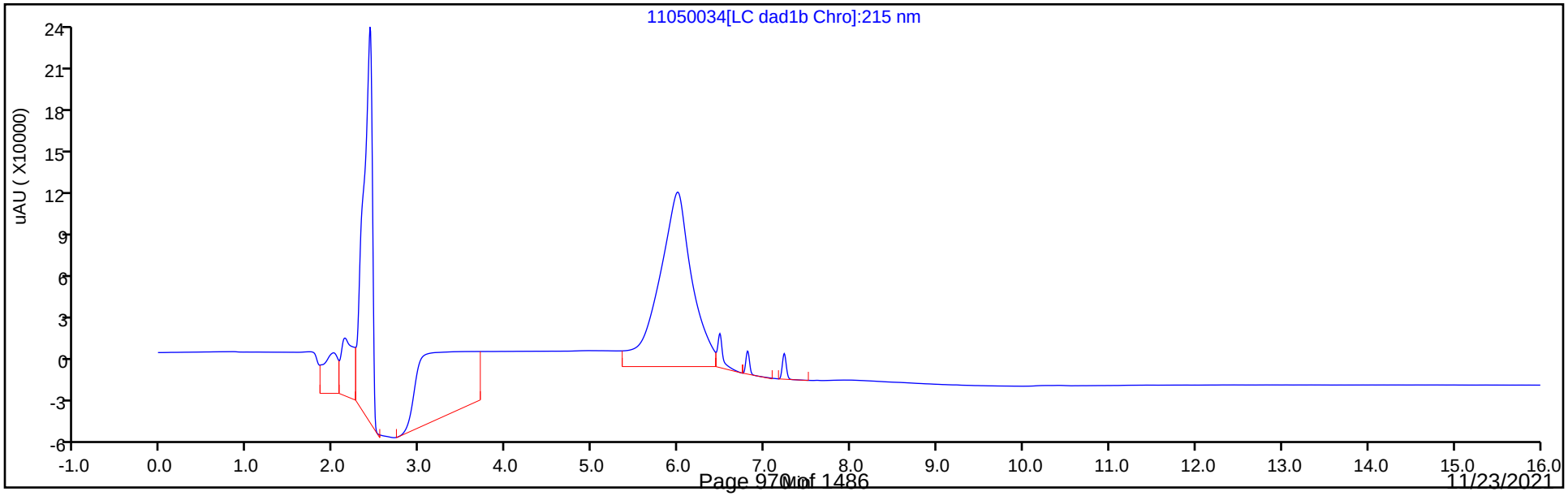
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050034.d

Injection Date:	06-Nov-2021 00:02:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	34
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

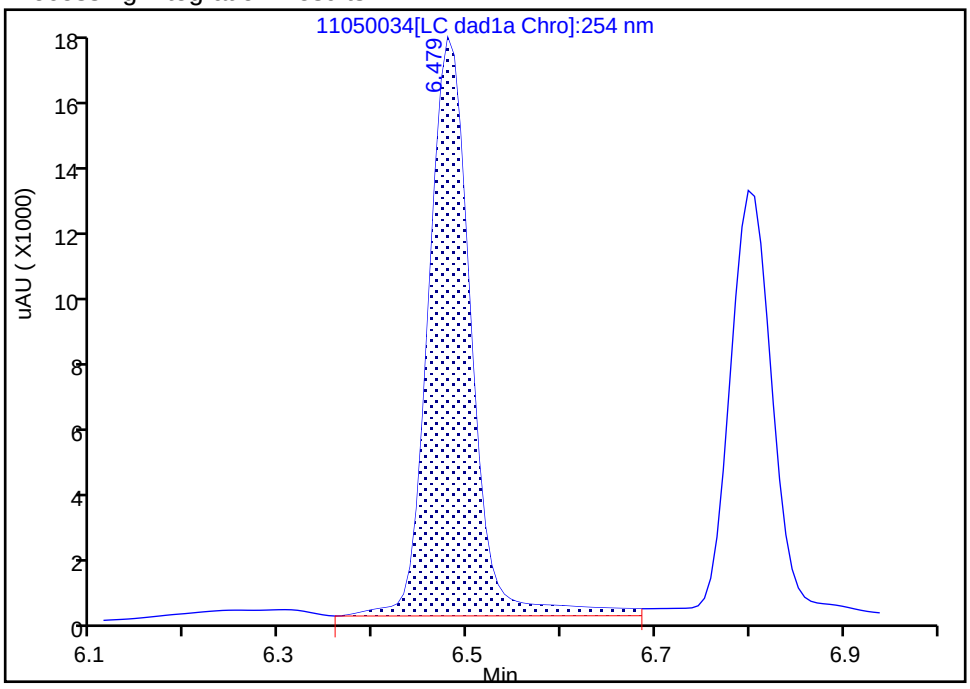
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050034.d				
Injection Date:	06-Nov-2021 00:02:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

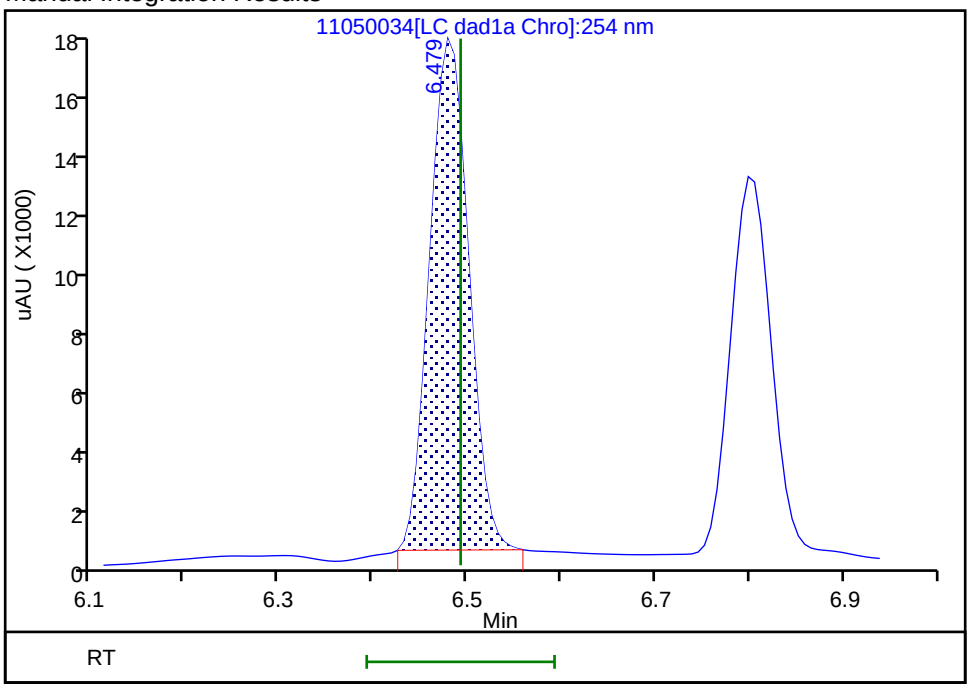
Processing Integration Results

RT: 6.48
Area: 52465
Amount: 0.282364
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 47079
Amount: 0.253377
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:13:09
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

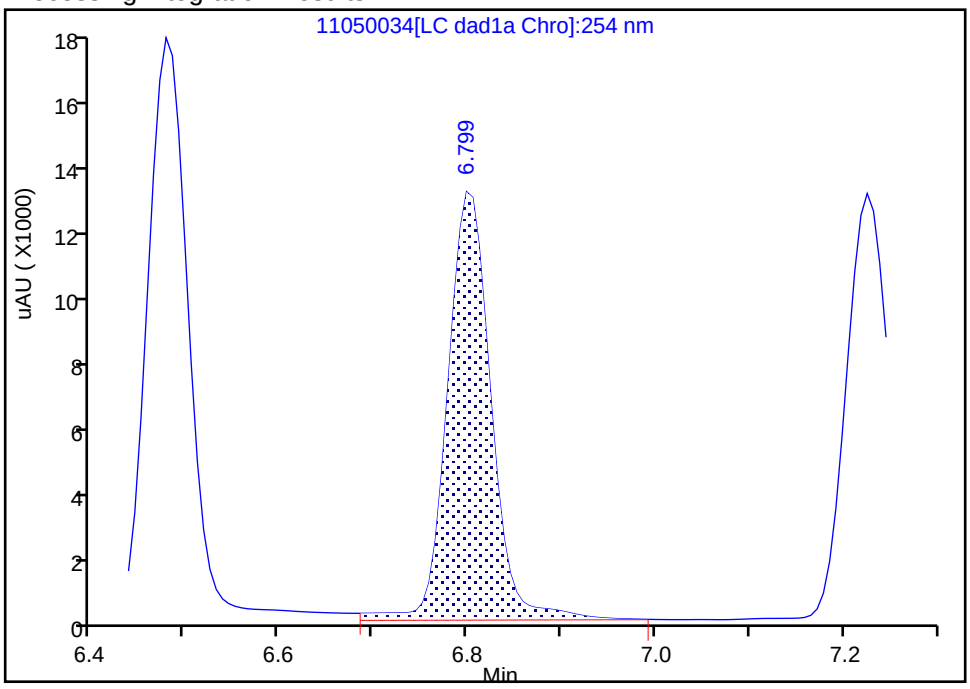
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050034.d				
Injection Date:	06-Nov-2021 00:02:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

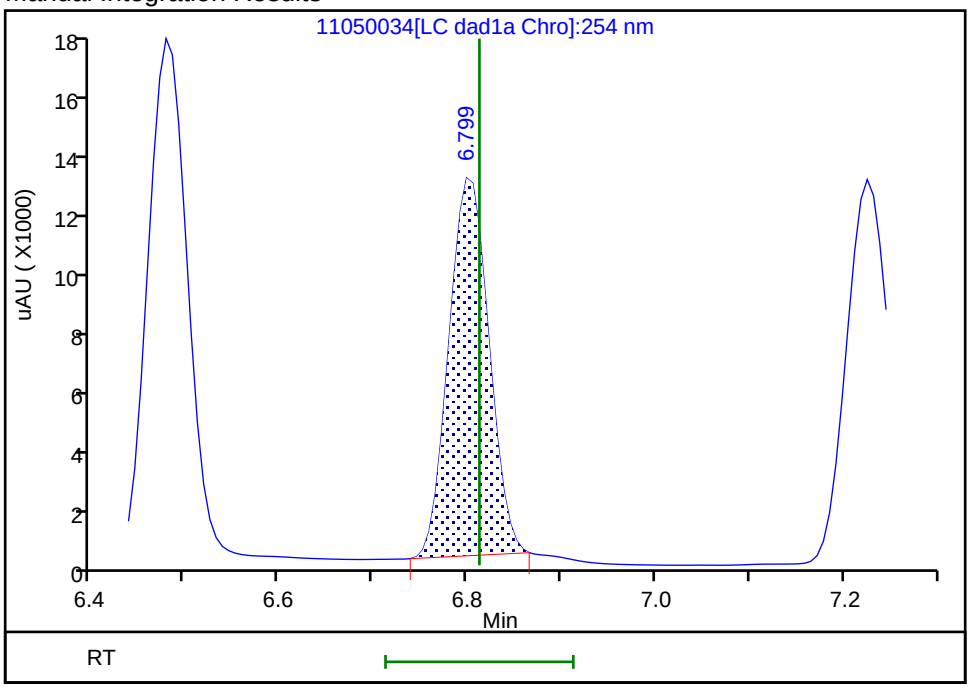
Processing Integration Results

RT: 6.80
Area: 39445
Amount: 0.277548
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35274
Amount: 0.248200
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:13:13
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/41 Calibration Date: 11/06/2021 02:42

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: 11050041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	87736		260	250	3.9	15.0
RDX	Ave	106261	104100		245	250	-2.0	15.0
Picric acid	Ave	82721	80948		245	250	-2.1	15.0
1,3,5-Trinitrobenzene	Ave	220317	229106		260	251	4.0	15.0
1,3-Dinitrobenzene	Ave	296329	304627		258	251	2.8	15.0
Nitrobenzene	Ave	195286	191884		247	251	-1.7	15.0
Tetryl	Ave	172420	156076		227	251	-9.5	15.0
Nitroglycerin	Lin2		65314		2480	2500	-0.7	15.0
2,4,6-Trinitrotoluene	Ave	206038	206470		252	251	0.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	154314		253	250	1.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	207394		252	251	0.2	15.0
2,6-Dinitrotoluene	Ave	143079	146765		257	251	2.6	15.0
2,4-Dinitrotoluene	Ave	287012	302793		265	251	5.5	15.0
2-Nitrotoluene	Ave	128392	124540		242	250	-3.0	15.0
4-Nitrotoluene	Ave	111913	108874		244	251	-2.7	15.0
3-Nitrotoluene	Ave	142246	137359		242	250	-3.4	15.0
PETN	Ave	74779	70069		2340	2500	-6.3	15.0
1,2-Dinitrobenzene	Ave	128217	133448		260	250	4.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/41 Calibration Date: 11/06/2021 02:42

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: 11050041.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.62	7.48	7.78
Picric acid	8.01	7.87	8.17
1,3,5-Trinitrobenzene	8.71	8.58	8.88
1,3-Dinitrobenzene	9.35	9.22	9.52
Nitrobenzene	9.74	9.62	9.92
Tetryl	10.08	9.96	10.26
Nitroglycerin	10.54	10.42	10.72
2,4,6-Trinitrotoluene	11.00	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.20	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.46	11.40	11.60
2,6-Dinitrotoluene	11.63	11.57	11.77
2,4-Dinitrotoluene	11.80	11.73	11.93
2-Nitrotoluene	12.67	12.56	12.86
4-Nitrotoluene	13.10	13.00	13.30
3-Nitrotoluene	13.69	13.60	13.90
PETN	14.79	14.71	15.01
1,2-Dinitrobenzene	8.59	8.46	8.76

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050041.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 06-Nov-2021 02:42:55 ALS Bottle#: 7 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106237-041
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.609	6.612	-0.003	21934	0.2500	0.2598	
8 RDX	1	7.622	7.632	-0.010	26025	0.2500	0.2449	
9 2,4,6-Trinitrophenol	1	8.009	8.019	-0.010	20237	0.2500	0.2446	
$ 10 1,2-Dinitrobenzene	1	8.589	8.606	-0.017	33362	0.2500	0.2602	
11 1,3,5-Trinitrobenzene	1	8.709	8.726	-0.017	57391	0.2505	0.2605	
12 1,3-Dinitrobenzene	1	9.349	9.365	-0.016	76309	0.2505	0.2575	
13 Nitrobenzene	1	9.742	9.765	-0.023	48163	0.2510	0.2466	
15 Tetryl	1	10.082	10.112	-0.030	39097	0.2505	0.2268	
16 Nitroglycerin	2	10.542	10.572	-0.030	163285	2.50	2.48	
17 2,4,6-Trinitrotoluene	1	10.995	11.025	-0.030	51824	0.2510	0.2515	
18 4-Amino-2,6-dinitrotoluene	1	11.202	11.239	-0.037	38617	0.2503	0.2528	
19 2-Amino-4,6-dinitrotoluene	1	11.455	11.499	-0.044	52056	0.2510	0.2516	
20 2,6-Dinitrotoluene	1	11.629	11.665	-0.036	36838	0.2510	0.2575	
21 2,4-Dinitrotoluene	1	11.795	11.832	-0.037	76001	0.2510	0.2648	
22 o-Nitrotoluene	1	12.669	12.712	-0.043	31135	0.2500	0.2425	
23 p-Nitrotoluene	1	13.102	13.152	-0.050	27273	0.2505	0.2437	
24 m-Nitrotoluene	1	13.689	13.745	-0.056	34374	0.2503	0.2417	
25 PETN	2	14.789	14.859	-0.070	175173	2.50	2.34	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00069 Amount Added: 25.00 Units: uL

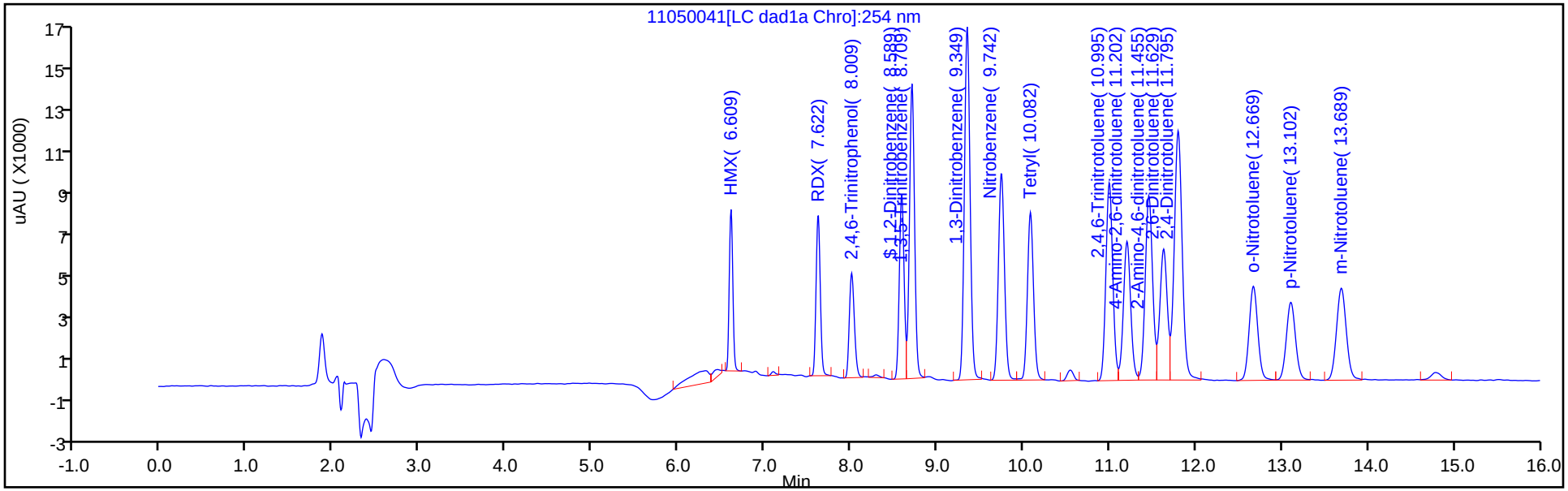
Report Date: 06-Nov-2021 10:25:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

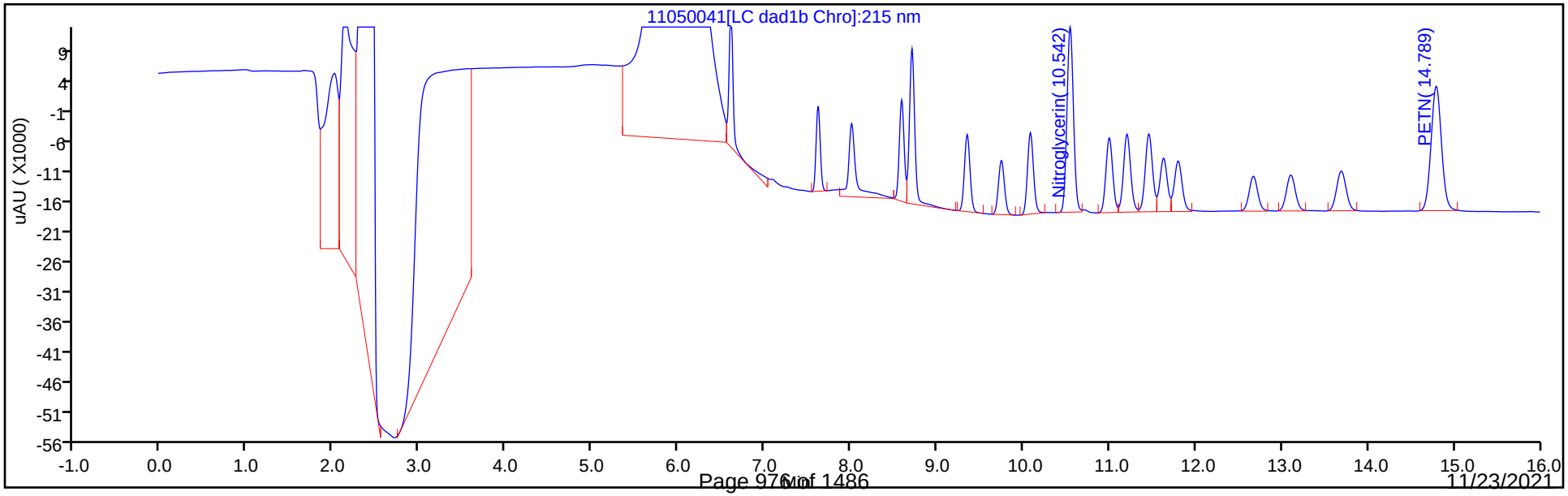
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050041.d

Injection Date:	06-Nov-2021 02:42:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	41
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.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/42 Calibration Date: 11/06/2021 03:05

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: 11050042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	186849		252	250	0.6	15.0
DNX	Ave	142119	140400		247	250	-1.2	15.0
MNX	Ave	130340	134526		301	292	3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556359/42 Calibration Date: 11/06/2021 03:05

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: 11050042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.81	6.71	6.91
MNX	7.24	7.09	7.39

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050042.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 06-Nov-2021 03:05:51 ALS Bottle#: 9 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106237-042
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.488	6.493	-0.005	46759	0.2503	0.2517	M
6 DNX	1	6.808	6.813	-0.005	35135	0.2503	0.2472	M
7 MNX	1	7.235	7.239	-0.004	39248	0.2918	0.3011	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

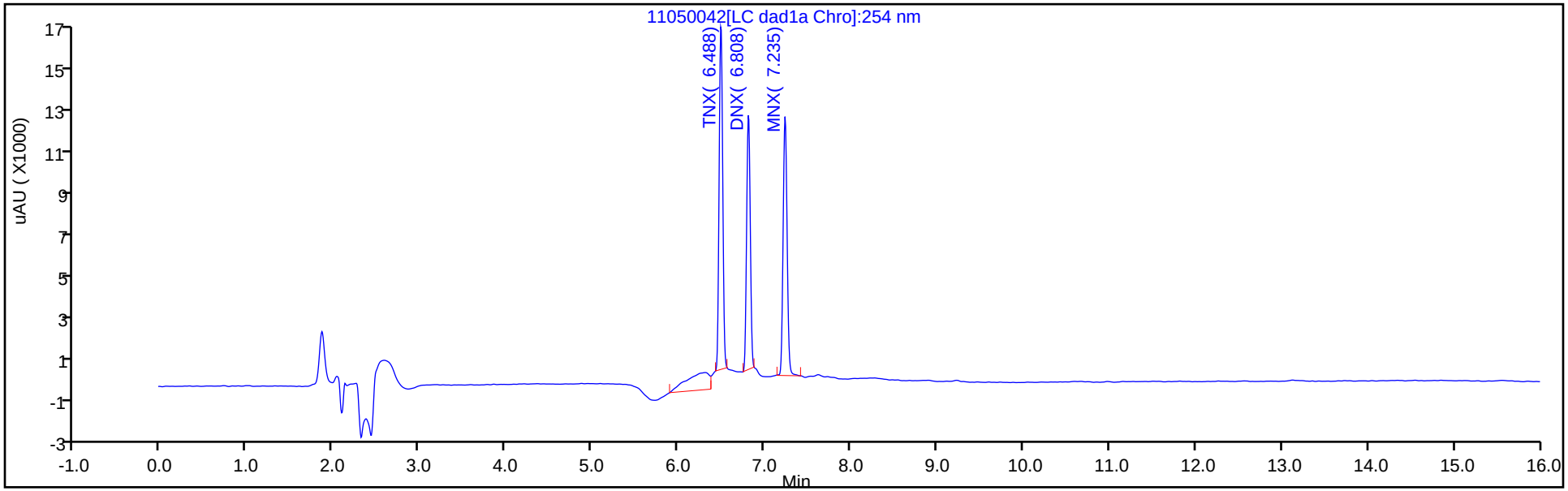
Report Date: 06-Nov-2021 10:25:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

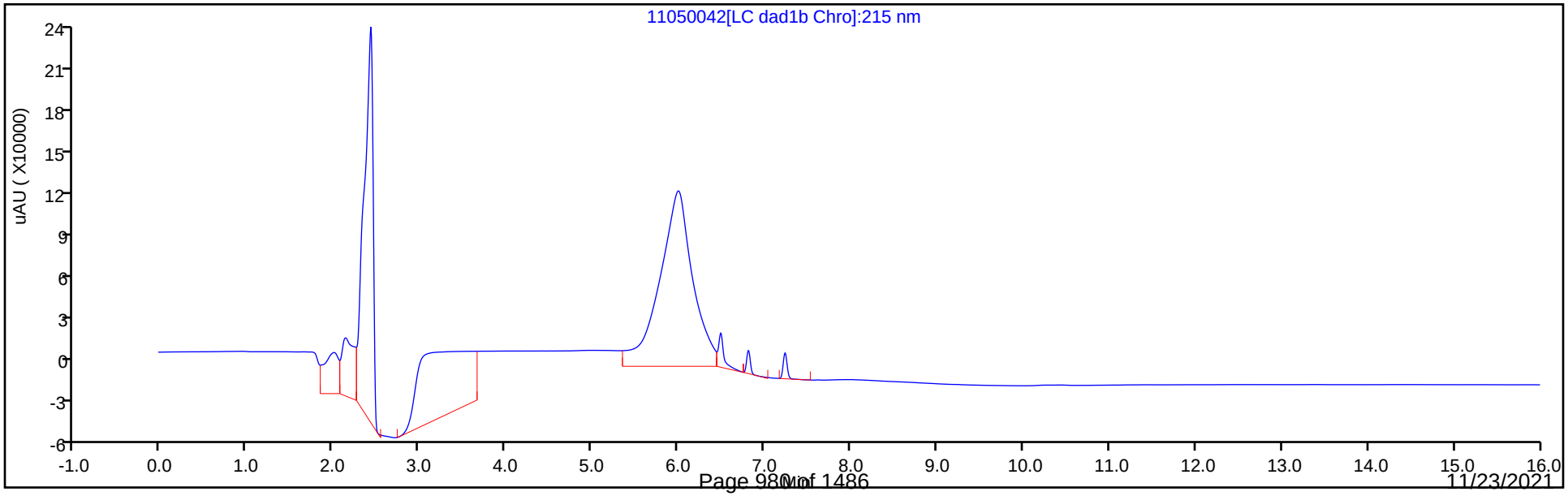
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050042.d

Injection Date:	06-Nov-2021 03:05:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	42
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

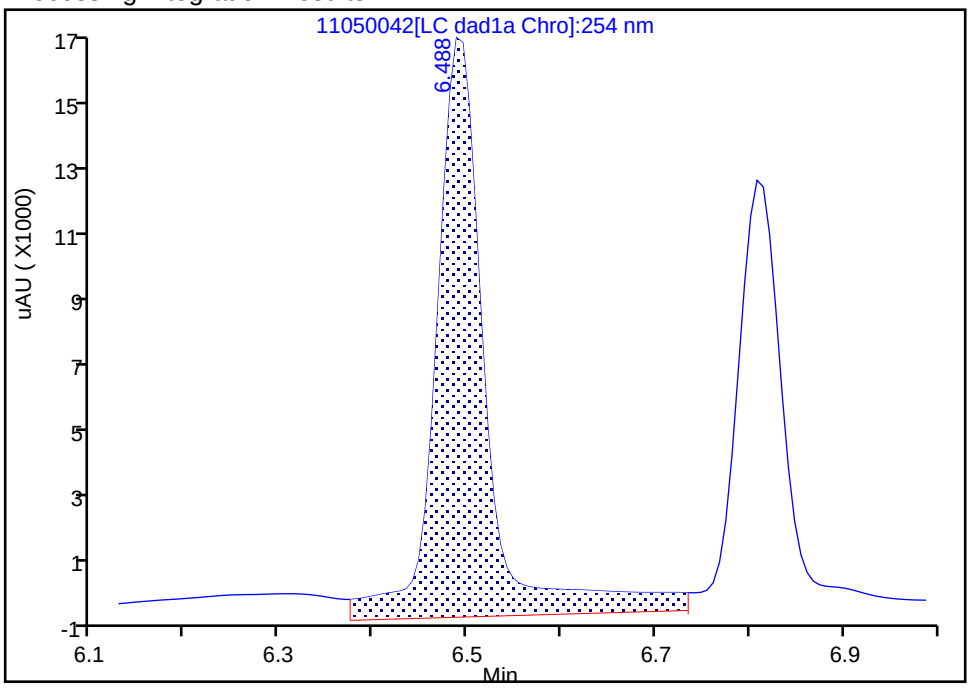
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050042.d				
Injection Date:	06-Nov-2021 03:05:51	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

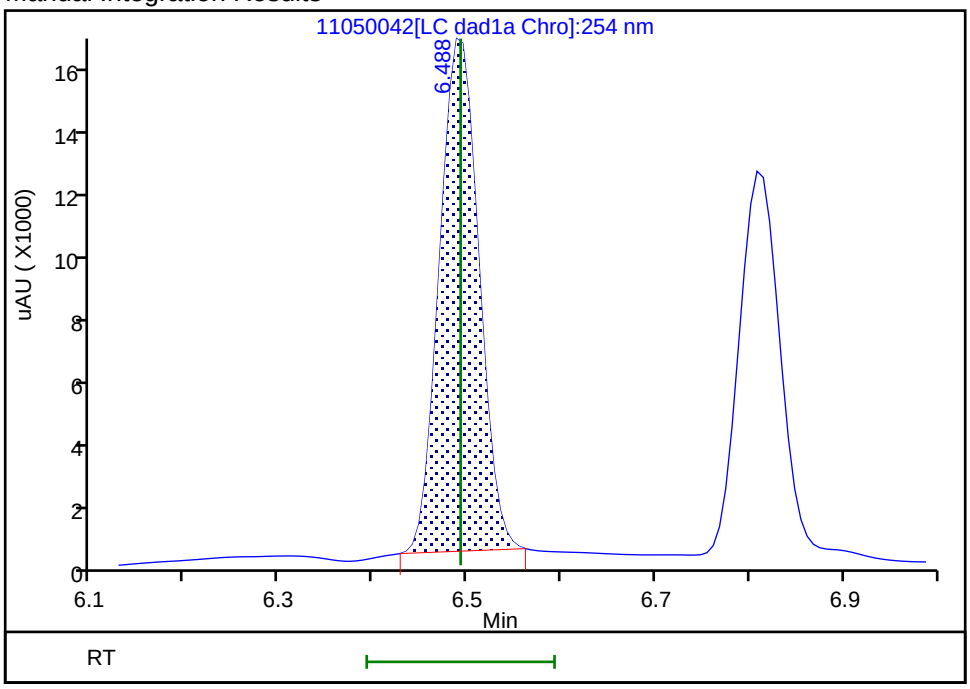
Processing Integration Results

RT: 6.49
Area: 62330
Amount: 0.335457
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 46759
Amount: 0.251655
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:17:36
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

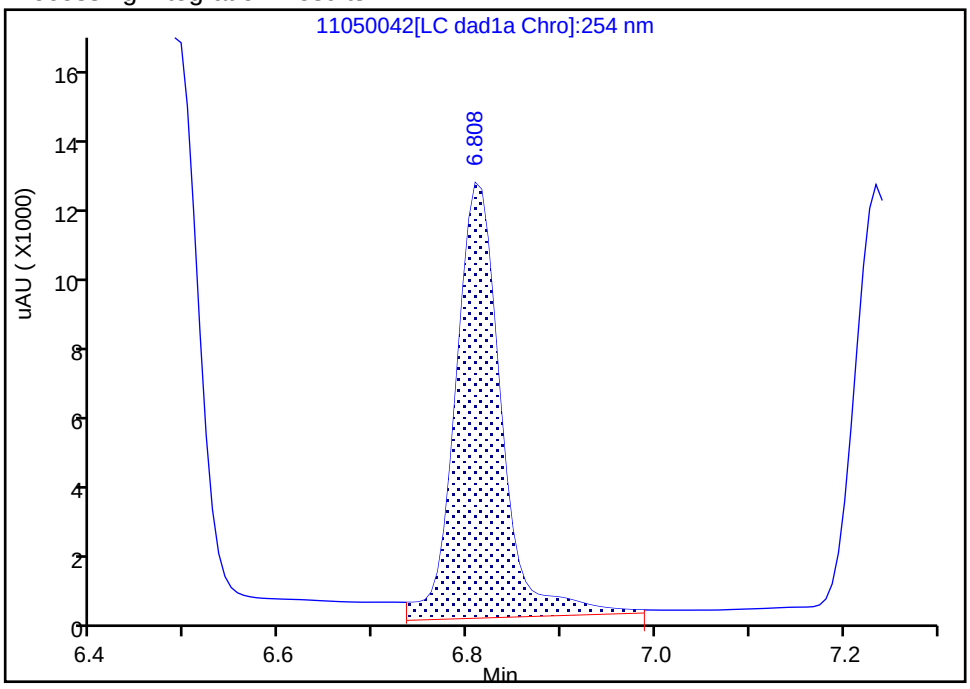
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050042.d				
Injection Date:	06-Nov-2021 03:05:51	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

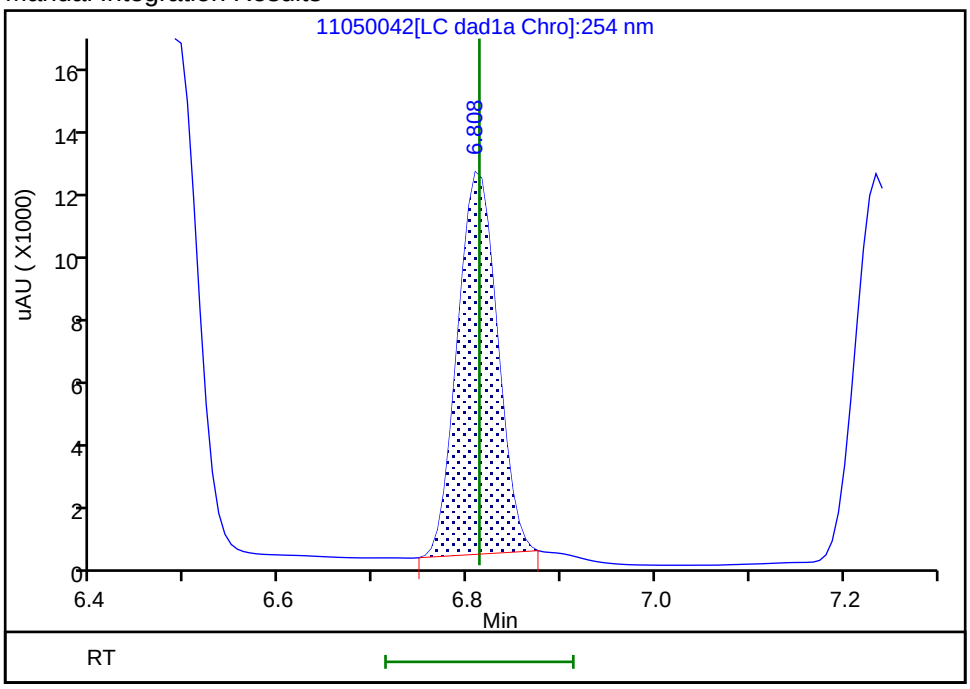
Processing Integration Results

RT: 6.81
Area: 42040
Amount: 0.295808
Amount Units: ug/mL



Manual Integration Results

RT: 6.81
Area: 35135
Amount: 0.247222
Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:17:39
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

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.: 280-155015-1

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

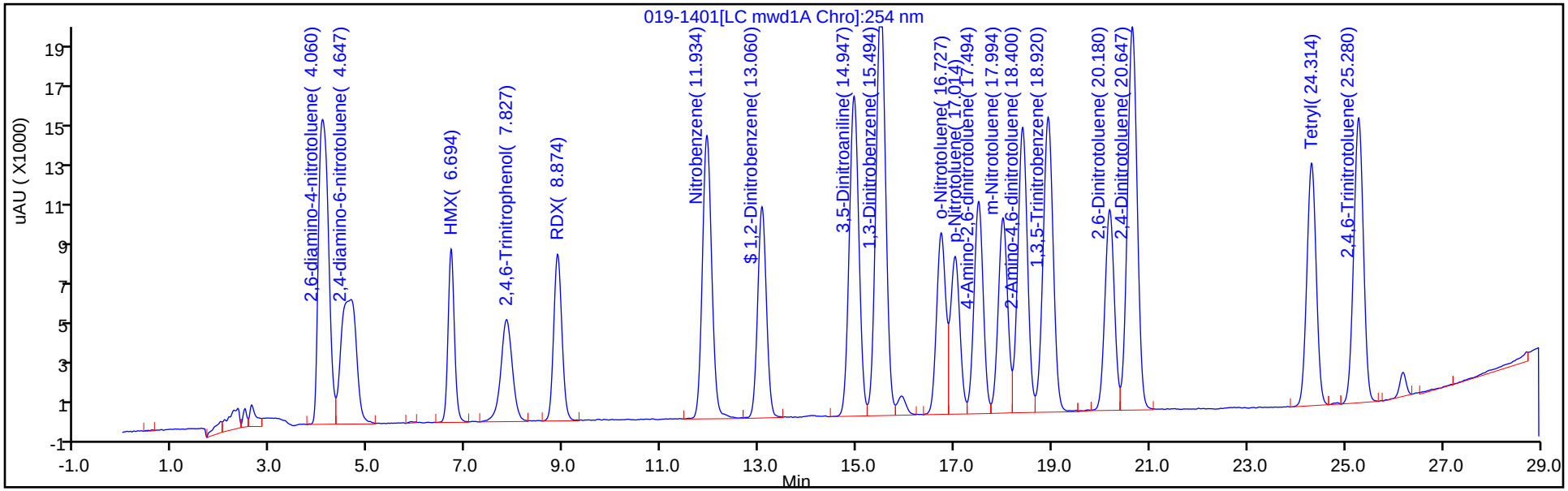
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

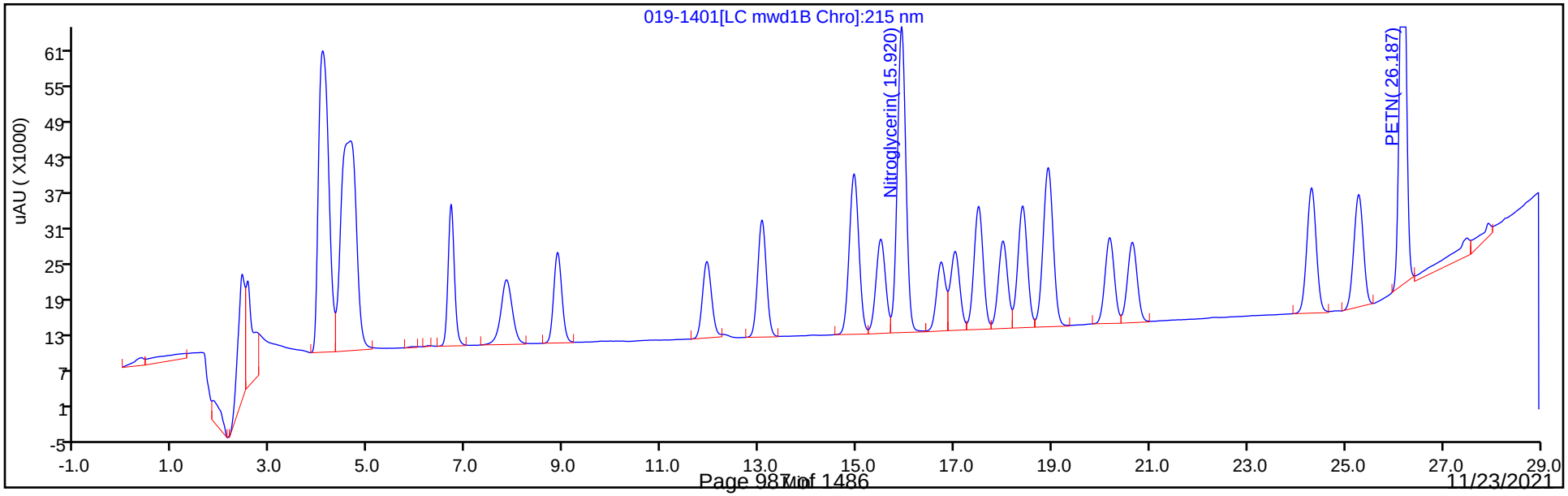
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D

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

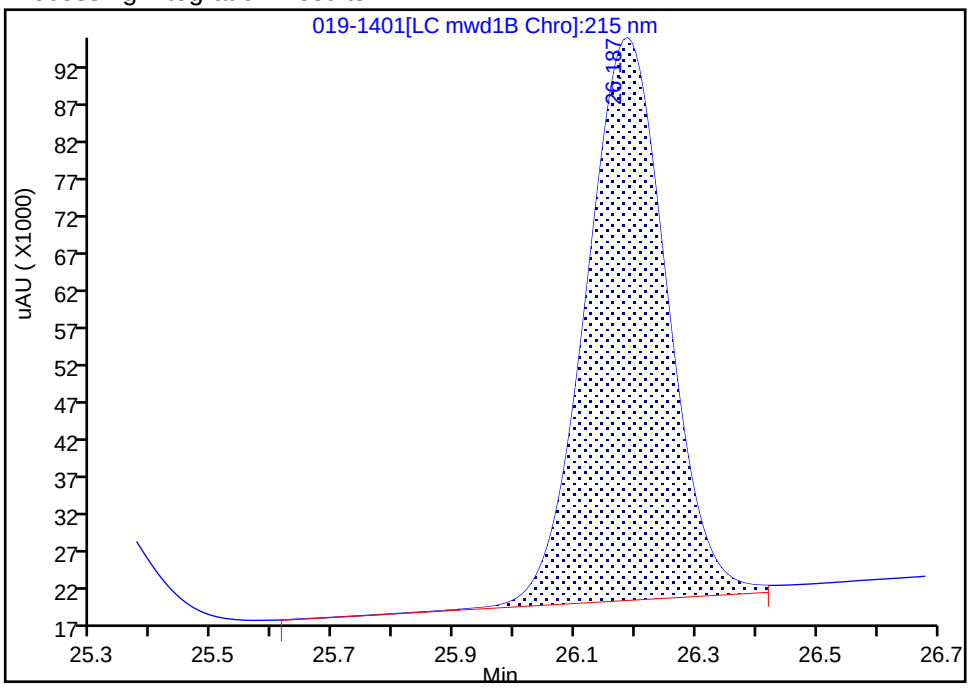
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D
Injection Date: 02-May-2021 00:10:18 Instrument ID: CHHPLC_X5
Lims ID: ICV INT/ADD
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

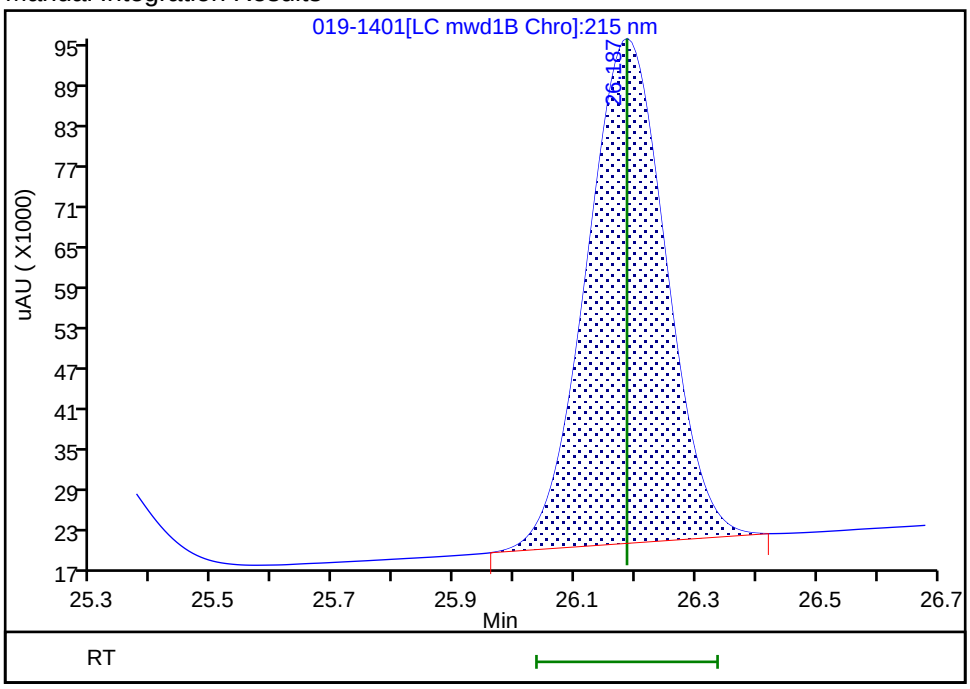
Processing Integration Results

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.: 280-155015-1

SDG No.:

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	376410		501	501	0.0	15.0
DNX	Ave	284791	287804		506	501	1.1	15.0
MNX	Ave	264843	265575		585	584	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.07	4.93	5.23
DNX	5.89	5.75	6.05
MNX	7.44	7.31	7.61

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 02-May-2021 05:26:08 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:45:38 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:36:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.067	5.075	-0.008	188393	0.5005	0.5009	
4 DNX	1	5.894	5.902	-0.008	144046	0.5005	0.5058	
7 MNX	1	7.441	7.455	-0.014	154963	0.5835	0.5851	

Reagents:

8330_OP_DMT_00010 Amount Added: 50.00 Units: uL

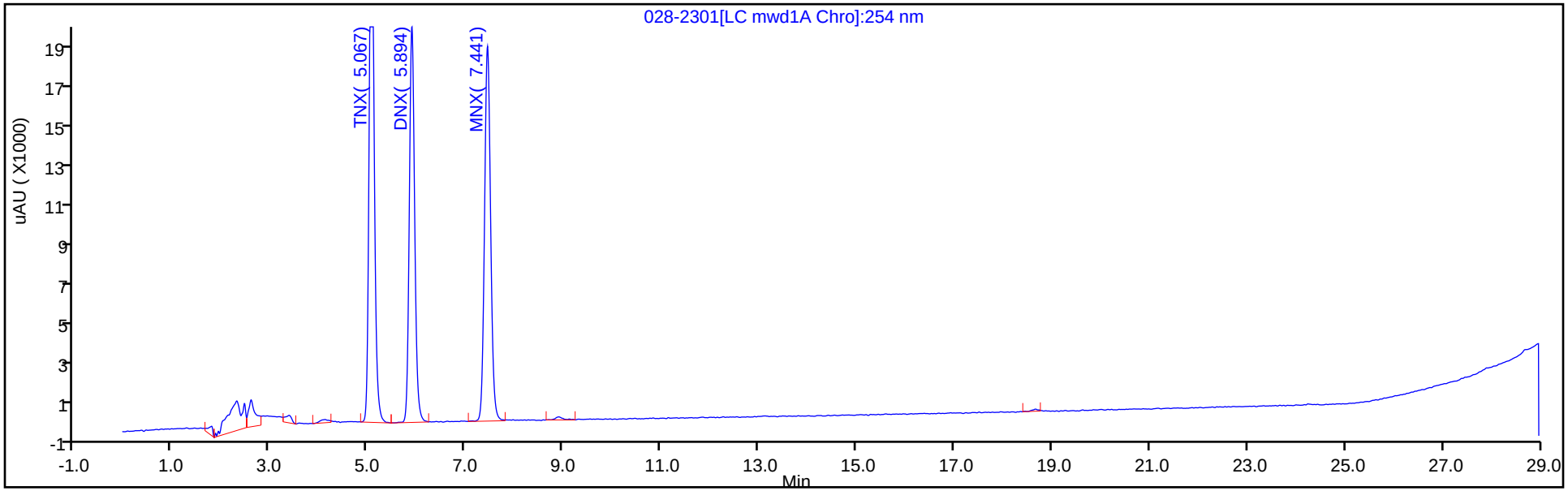
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

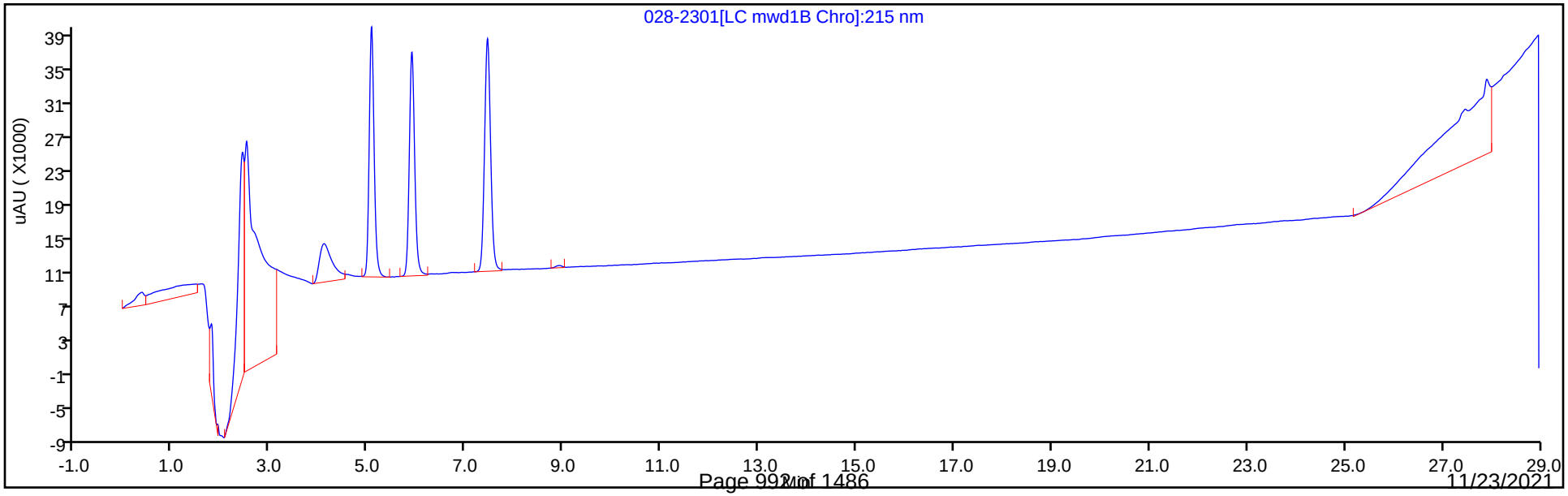
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D

Injection Date:	02-May-2021 05:26:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV DMT			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/23 Calibration Date: 11/05/2021 23:15

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: 11050023.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		168288		259	250	3.5	15.0
Picric acid	Ave	159537	160928		252	250	0.9	15.0
RDX	Ave	204270	203524		249	250	-0.4	15.0
Nitrobenzene	Ave	374651	376809		252	251	0.6	15.0
1,3-Dinitrobenzene	Lin2		609725		269	251	7.3	15.0
Nitroglycerin	Ave	128605	134169		2610	2500	4.3	15.0
2-Nitrotoluene	Ave	248967	241880		243	250	-2.8	15.0
4-Nitrotoluene	Ave	217187	215269		248	251	-0.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	291357		246	250	-1.8	15.0
3-Nitrotoluene	Ave	278393	274026		246	250	-1.6	15.0
2-Amino-4,6-dinitrotoluene	Lin2		433665		276	251	10.0	15.0
1,3,5-Trinitrobenzene	Lin2		437062		260	251	3.9	15.0
2,6-Dinitrotoluene	Lin2		278625		261	251	3.9	15.0
2,4-Dinitrotoluene	Ave	565713	565199		251	251	-0.0	15.0
Tetryl	Lin2		297721		229	251	-8.7	15.0
2,4,6-Trinitrotoluene	Lin2		396761		264	251	5.1	15.0
PETN	Ave	137740	133110		2420	2500	-3.4	15.0
1,2-Dinitrobenzene	Ave	265659	265084		249	250	-0.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/23 Calibration Date: 11/05/2021 23:15

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: 11050023.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.52	6.82
Picric acid	7.81	7.76	8.06
RDX	8.81	8.68	8.98
Nitrobenzene	11.87	11.74	12.04
1,3-Dinitrobenzene	15.41	15.25	15.55
Nitroglycerin	15.75	15.61	15.91
2-Nitrotoluene	16.63	16.48	16.78
4-Nitrotoluene	16.91	16.77	17.07
4-Amino-2,6-dinitrotoluene	17.38	17.23	17.53
3-Nitrotoluene	17.89	17.74	18.04
2-Amino-4,6-dinitrotoluene	18.27	18.12	18.42
1,3,5-Trinitrobenzene	18.80	18.64	18.94
2,6-Dinitrotoluene	20.05	19.90	20.20
2,4-Dinitrotoluene	20.51	20.36	20.66
Tetryl	24.12	23.96	24.26
2,4,6-Trinitrotoluene	25.11	24.95	25.25
PETN	25.99	25.85	26.15
1,2-Dinitrobenzene	12.97	12.83	13.13

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050023.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Nov-2021 23:15:00 ALS Bottle#: 7 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0106238-023
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:03 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: CTX1650

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	4.107	4.118	-0.011	106090	0.2500	0.2507	
2 2,4-diamino-6-nitrotoluene	1	4.627	4.638	-0.011	64254	0.2500	0.2635	
5 HMX	1	6.647	6.665	-0.018	42072	0.2500	0.2588	
7 2,4,6-Trinitrophenol	1	7.807	7.905	-0.098	40232	0.2500	0.2522	
8 RDX	1	8.814	8.825	-0.011	50881	0.2500	0.2491	
9 Nitrobenzene	1	11.874	11.885	-0.011	94579	0.2510	0.2524	
$ 10 1,2-Dinitrobenzene	1	12.974	12.978	-0.004	66271	0.2500	0.2495	
11 3,5-Dinitroaniline	1	14.854	14.851	0.003	114801	0.2500	0.2529	
12 1,3-Dinitrobenzene	1	15.407	15.398	0.009	152736	0.2505	0.2689	
13 Nitroglycerin	2	15.754	15.758	-0.004	335423	2.50	2.61	
14 o-Nitrotoluene	1	16.627	16.631	-0.004	60470	0.2500	0.2429	
16 p-Nitrotoluene	1	16.914	16.918	-0.004	53925	0.2505	0.2483	
17 4-Amino-2,6-dinitrotoluene	1	17.380	17.378	0.002	72912	0.2503	0.2457	
18 m-Nitrotoluene	1	17.887	17.885	0.002	68575	0.2503	0.2463	
19 2-Amino-4,6-dinitrotoluene	1	18.274	18.265	0.009	108850	0.2510	0.2760	
20 1,3,5-Trinitrobenzene	1	18.800	18.785	0.015	109484	0.2505	0.2603	
21 2,6-Dinitrotoluene	1	20.054	20.045	0.009	69935	0.2510	0.2608	
22 2,4-Dinitrotoluene	1	20.514	20.505	0.009	141865	0.2510	0.2508	
23 Tetryl	1	24.121	24.112	0.009	74579	0.2505	0.2288	
24 2,4,6-Trinitrotoluene	1	25.107	25.098	0.009	99587	0.2510	0.2637	
25 PETN	2	25.987	25.998	-0.011	332776	2.50	2.42	

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL
8330_ADDs_00029 Amount Added: 12.50 Units: uL

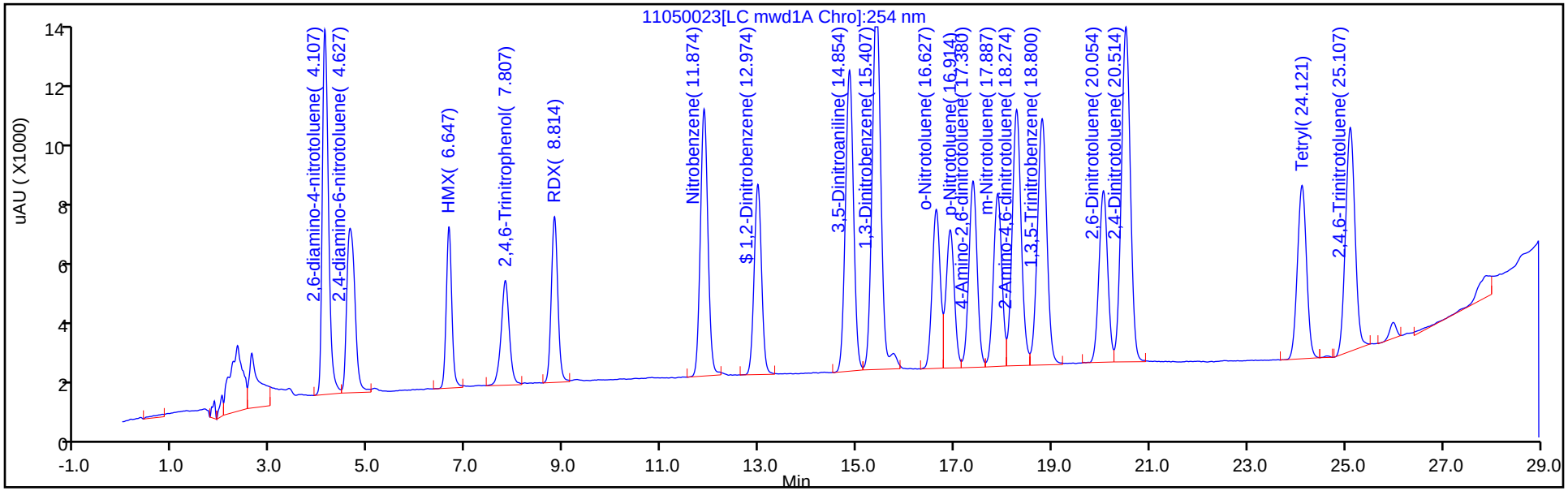
Report Date: 06-Nov-2021 12:42:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

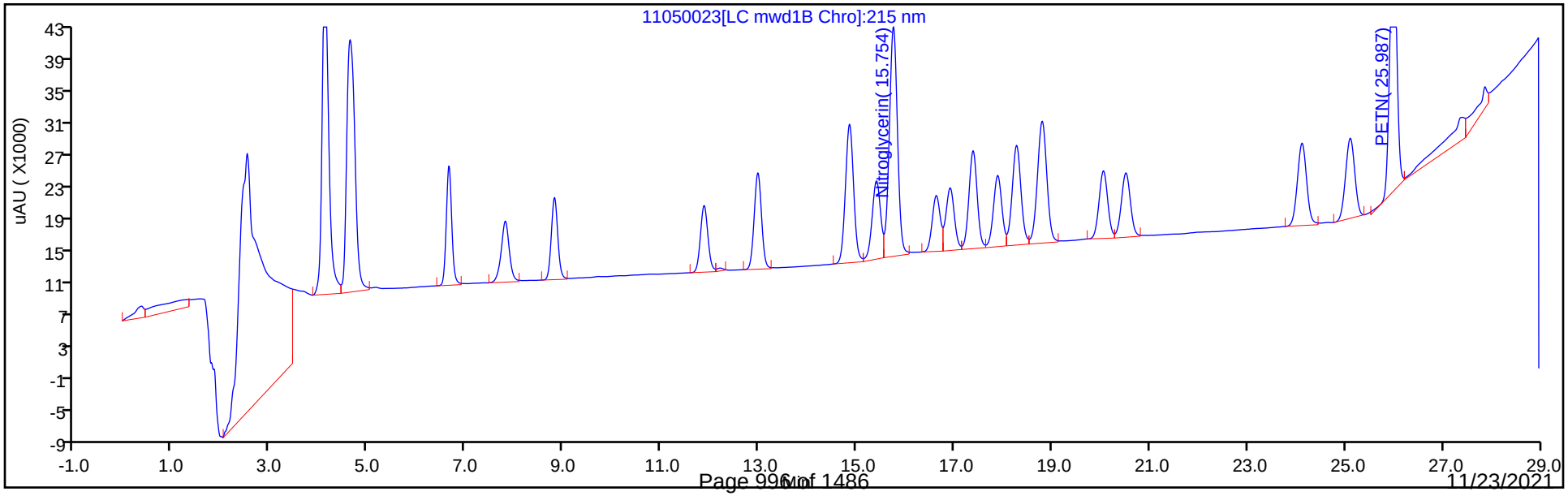
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050023.D

Injection Date:	05-Nov-2021 23:15:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/24 Calibration Date: 11/05/2021 23:49

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: 11050024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	368631		245	250	-2.0	15.0
DNX	Ave	284791	286981		252	250	0.8	15.0
MNX	Ave	264843	263335		290	292	-0.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/24 Calibration Date: 11/05/2021 23:49

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: 11050024.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.03	4.89	5.19
DNX	5.85	5.71	6.01
MNX	7.37	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050024.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Nov-2021 23:49:57	ALS Bottle#:	8	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106238-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:04	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:	CTX1650				

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	5.044	-0.012	92250	0.2503	0.2453	
4 DNX	1	5.845	5.857	-0.012	71817	0.2503	0.2522	
6 MNX	1	7.365	7.384	-0.019	76828	0.2918	0.2901	

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

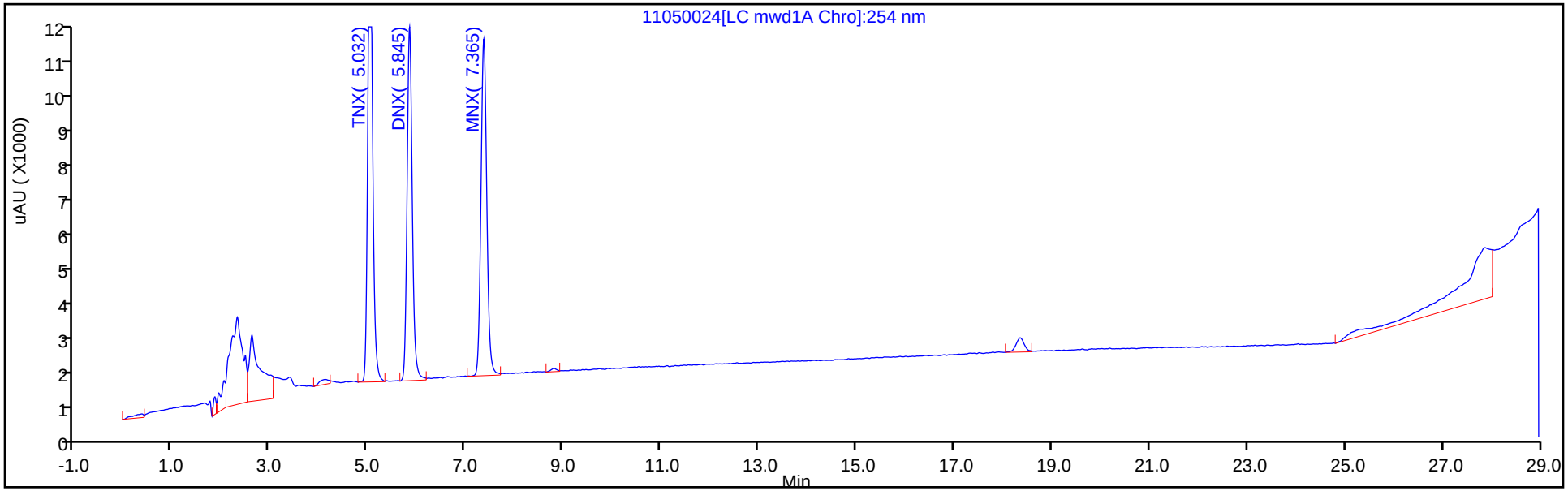
Report Date: 06-Nov-2021 12:42:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

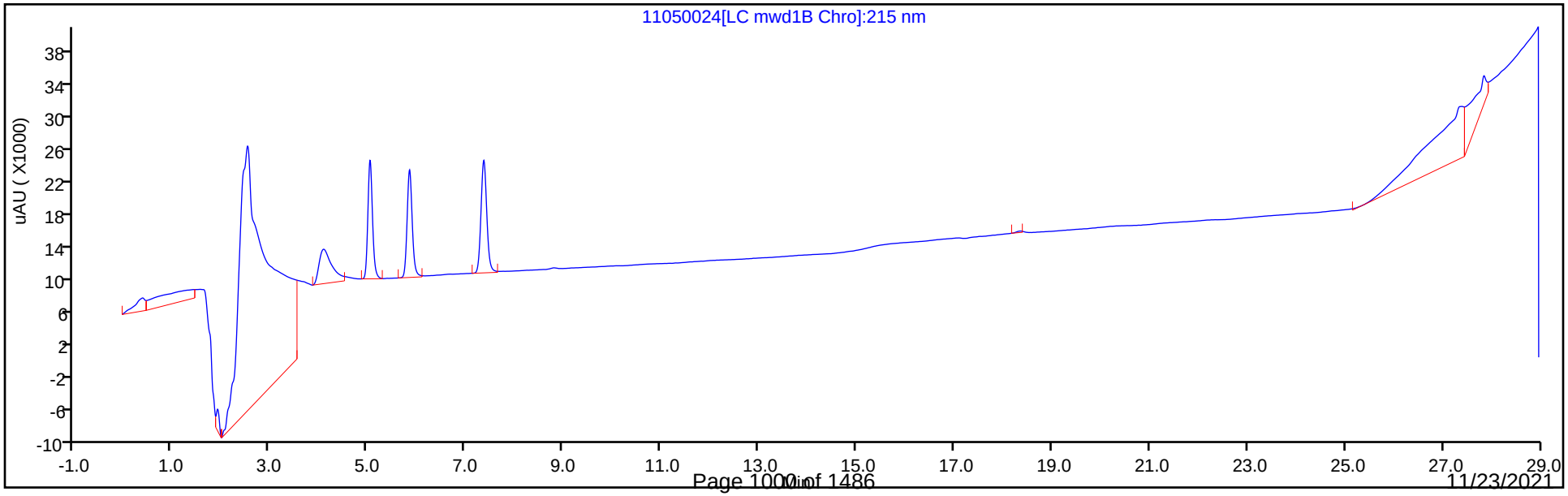
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050024.D

Injection Date:	05-Nov-2021 23:49:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/35 Calibration Date: 11/06/2021 06:15

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: 11050035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		168796		260	250	3.8	15.0
Picric acid	Ave	159537	161176		253	250	1.0	15.0
RDX	Ave	204270	203928		250	250	-0.2	15.0
Nitrobenzene	Ave	374651	368291		247	251	-1.7	15.0
1,3-Dinitrobenzene	Lin2		608579		268	251	7.1	15.0
Nitroglycerin	Ave	128605	135421		2630	2500	5.3	15.0
2-Nitrotoluene	Ave	248967	234852		236	250	-5.7	15.0
4-Nitrotoluene	Ave	217187	212814		245	251	-2.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	291552		246	250	-1.7	15.0
3-Nitrotoluene	Ave	278393	268328		241	250	-3.6	15.0
2-Amino-4,6-dinitrotoluene	Lin2		434040		276	251	10.1	15.0
1,3,5-Trinitrobenzene	Lin2		441046		263	251	4.9	15.0
2,6-Dinitrotoluene	Lin2		280773		263	251	4.7	15.0
2,4-Dinitrotoluene	Ave	565713	568797		252	251	0.5	15.0
Tetryl	Lin2		302547		233	251	-7.1	15.0
2,4,6-Trinitrotoluene	Lin2		404191		269	251	7.1	15.0
PETN	Ave	137740	132076		2400	2500	-4.1	15.0
1,2-Dinitrobenzene	Ave	265659	266400		251	250	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/35 Calibration Date: 11/06/2021 06:15

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: 11050035.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.63	6.52	6.82
Picric acid	7.73	7.76	8.06
RDX	8.78	8.68	8.98
Nitrobenzene	11.84	11.74	12.04
1,3-Dinitrobenzene	15.35	15.25	15.55
Nitroglycerin	15.69	15.61	15.91
2-Nitrotoluene	16.57	16.48	16.78
4-Nitrotoluene	16.85	16.77	17.07
4-Amino-2,6-dinitrotoluene	17.31	17.23	17.53
3-Nitrotoluene	17.82	17.74	18.04
2-Amino-4,6-dinitrotoluene	18.20	18.12	18.42
1,3,5-Trinitrobenzene	18.73	18.64	18.94
2,6-Dinitrotoluene	19.97	19.90	20.20
2,4-Dinitrotoluene	20.43	20.36	20.66
Tetryl	24.03	23.96	24.26
2,4,6-Trinitrotoluene	25.02	24.95	25.25
PETN	25.93	25.85	26.15
1,2-Dinitrobenzene	12.93	12.83	13.13

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050035.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 06-Nov-2021 06:15:02 ALS Bottle#: 7 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0106238-035
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:08 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:38:35

	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	4.099	4.118	-0.019	106710	0.2500	0.2523	
	2 2,4-diamino-6-nitrotoluene	1	4.619	4.638	-0.019	64759	0.2500	0.2657	
	5 HMX	1	6.632	6.665	-0.033	42199	0.2500	0.2596	
	7 2,4,6-Trinitrophenol	1	7.732	7.905	-0.173	40294	0.2500	0.2526	
	8 RDX	1	8.779	8.825	-0.046	50982	0.2500	0.2496	
	9 Nitrobenzene	1	11.838	11.885	-0.047	92441	0.2510	0.2467	
$	10 1,2-Dinitrobenzene	1	12.925	12.978	-0.053	66600	0.2500	0.2507	
	11 3,5-Dinitroaniline	1	14.792	14.851	-0.059	114892	0.2500	0.2531	
	12 1,3-Dinitrobenzene	1	15.352	15.398	-0.046	152449	0.2505	0.2684	
	13 Nitroglycerin	2	15.692	15.758	-0.066	338553	2.50	2.63	
	14 o-Nitrotoluene	1	16.565	16.631	-0.066	58713	0.2500	0.2358	
	16 p-Nitrotoluene	1	16.852	16.918	-0.066	53310	0.2505	0.2455	
	17 4-Amino-2,6-dinitrotoluene	1	17.305	17.378	-0.073	72961	0.2503	0.2459	
	18 m-Nitrotoluene	1	17.818	17.885	-0.067	67149	0.2503	0.2412	
	19 2-Amino-4,6-dinitrotoluene	1	18.198	18.265	-0.067	108944	0.2510	0.2762	
	20 1,3,5-Trinitrobenzene	1	18.732	18.785	-0.053	110482	0.2505	0.2627	
	21 2,6-Dinitrotoluene	1	19.972	20.045	-0.073	70474	0.2510	0.2629	
	22 2,4-Dinitrotoluene	1	20.432	20.505	-0.073	142768	0.2510	0.2524	
	23 Tetryl	1	24.025	24.112	-0.087	75788	0.2505	0.2326	
	24 2,4,6-Trinitrotoluene	1	25.019	25.098	-0.079	101452	0.2510	0.2687	
	25 PETN	2	25.925	25.998	-0.073	330189	2.50	2.40	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00069	Amount Added:	25.00	Units: uL
8330_ADDs_00029	Amount Added:	12.50	Units: uL

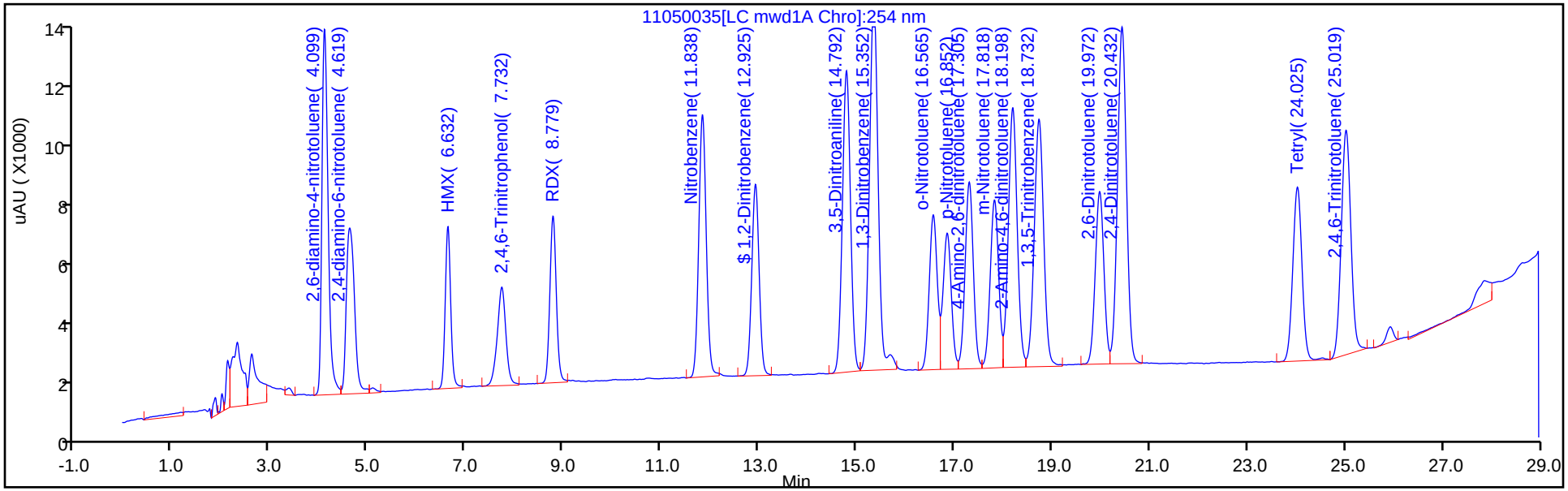
Report Date: 06-Nov-2021 12:42:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

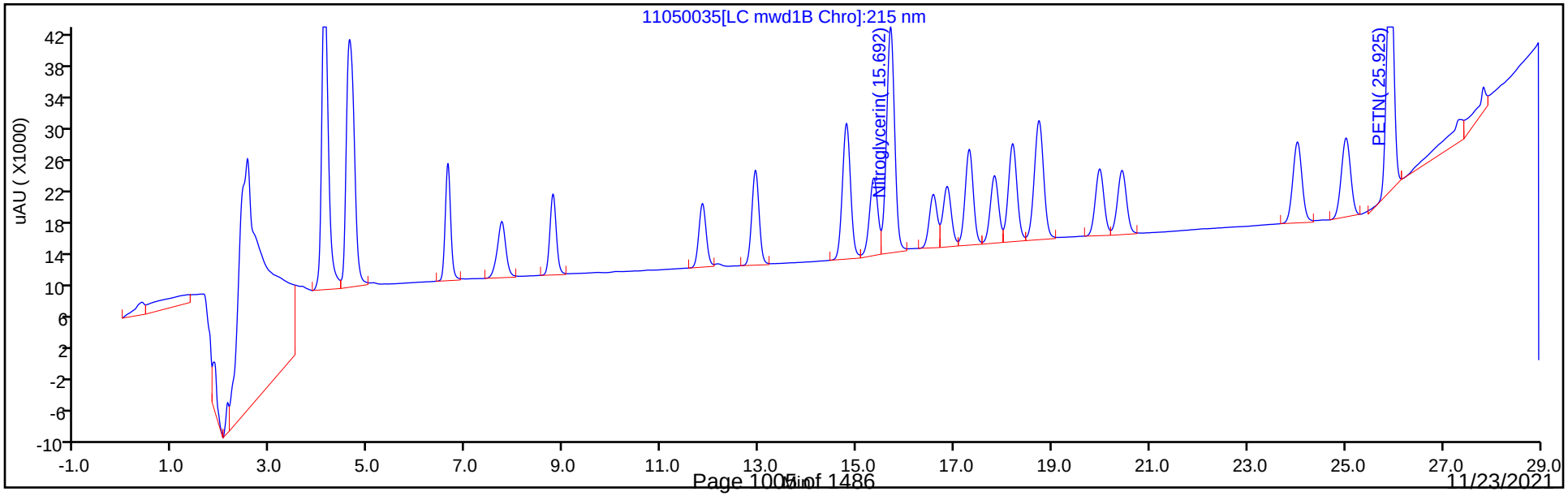
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050035.D

Injection Date:	06-Nov-2021 06:15:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	35
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.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/36 Calibration Date: 11/06/2021 06:50

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: 11050036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	362102		241	250	-3.7	15.0
DNX	Ave	284791	284412		250	250	-0.1	15.0
MNX	Ave	264843	263410		290	292	-0.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/36 Calibration Date: 11/06/2021 06:50

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: 11050036.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.03	4.89	5.19
DNX	5.84	5.71	6.01
MNX	7.36	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050036.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	06-Nov-2021 06:50:06	ALS Bottle#:	8	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106238-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Nov-2021 12:42:08	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:	CTX1650				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.033	5.044	-0.011	90616	0.2503	0.2409	
4 DNX	1	5.840	5.857	-0.017	71174	0.2503	0.2499	
6 MNX	1	7.360	7.384	-0.024	76850	0.2918	0.2902	

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

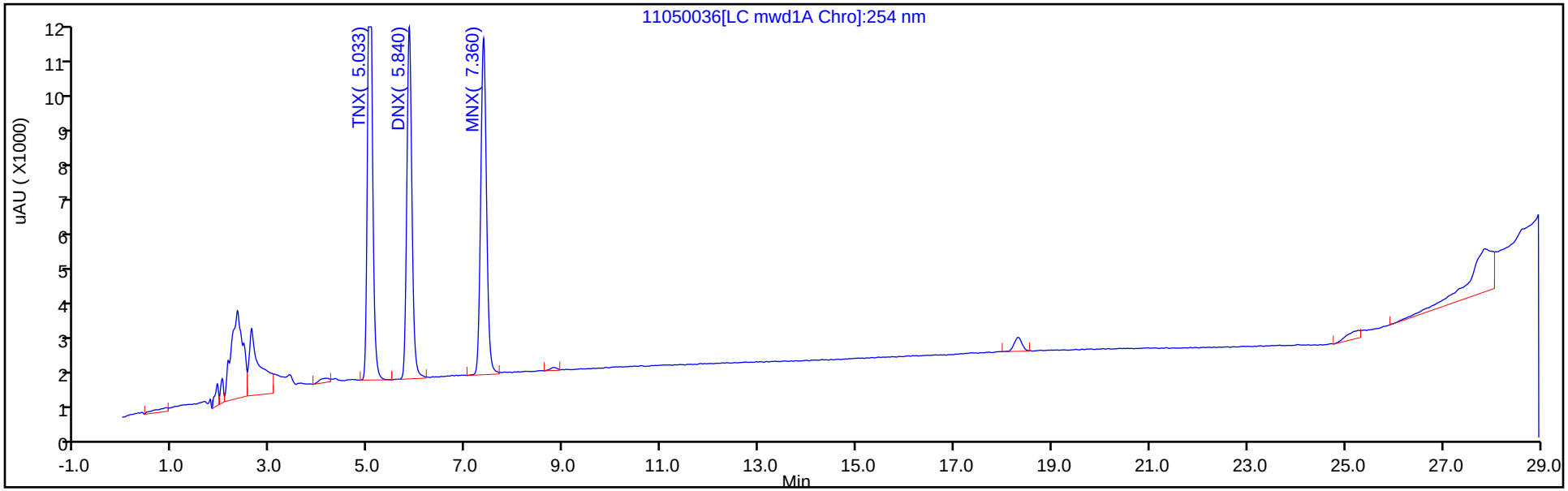
Report Date: 06-Nov-2021 12:42:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

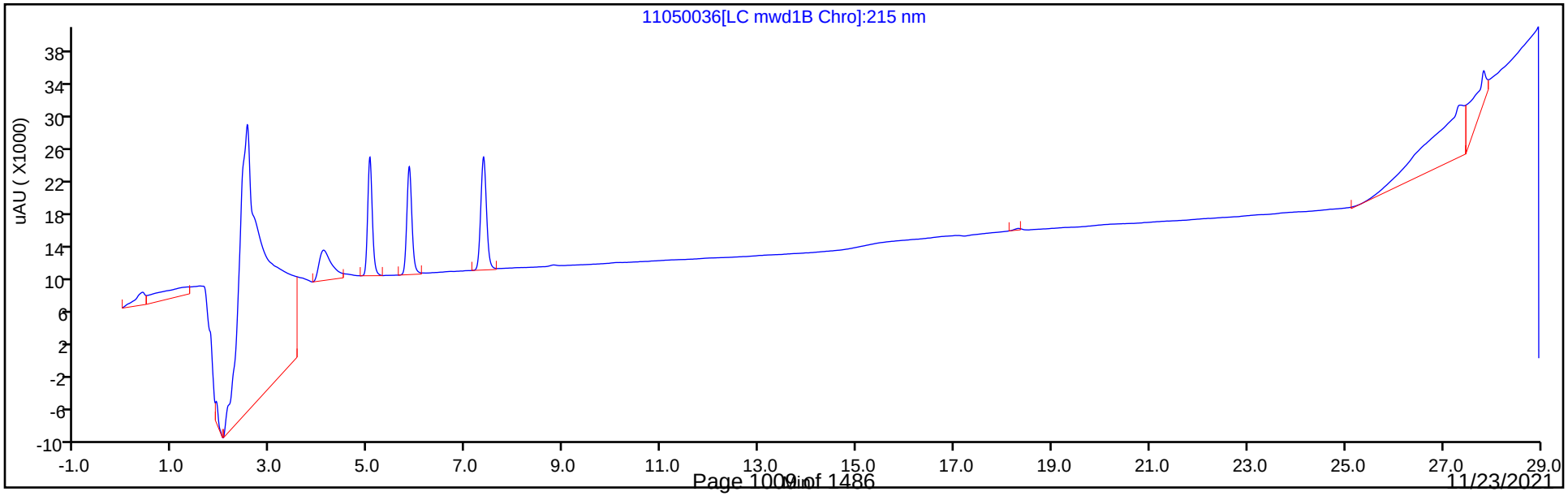
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050036.D

Injection Date:	06-Nov-2021 06:50:06	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	36
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.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/55 Calibration Date: 11/06/2021 11:30

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: 11050055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		169324		260	250	4.2	15.0
Picric acid	Ave	159537	161644		253	250	1.3	15.0
RDX	Ave	204270	205400		251	250	0.6	15.0
Nitrobenzene	Ave	374651	363080		243	251	-3.1	15.0
1,3-Dinitrobenzene	Lin2		607689		268	251	7.0	15.0
Nitroglycerin	Ave	128605	135251		2630	2500	5.2	15.0
2-Nitrotoluene	Ave	248967	227728		229	250	-8.5	15.0
4-Nitrotoluene	Ave	217187	208415		240	251	-4.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	292388		247	250	-1.5	15.0
3-Nitrotoluene	Ave	278393	260543		234	250	-6.4	15.0
2-Amino-4,6-dinitrotoluene	Lin2		435394		277	251	10.4	15.0
1,3,5-Trinitrobenzene	Lin2		440028		262	251	4.6	15.0
2,6-Dinitrotoluene	Lin2		280833		263	251	4.8	15.0
2,4-Dinitrotoluene	Ave	565713	568797		252	251	0.5	15.0
Tetryl	Lin2		302036		232	251	-7.3	15.0
2,4,6-Trinitrotoluene	Lin2		407936		271	251	8.1	15.0
PETN	Ave	137740	131992		2400	2500	-4.2	15.0
1,2-Dinitrobenzene	Ave	265659	268160		252	250	0.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/55 Calibration Date: 11/06/2021 11:30

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: 11050055.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.52	6.82
Picric acid	7.68	7.76	8.06
RDX	8.76	8.68	8.98
Nitrobenzene	11.82	11.74	12.04
1,3-Dinitrobenzene	15.31	15.25	15.55
Nitroglycerin	15.66	15.61	15.91
2-Nitrotoluene	16.53	16.48	16.78
4-Nitrotoluene	16.81	16.77	17.07
4-Amino-2,6-dinitrotoluene	17.25	17.23	17.53
3-Nitrotoluene	17.78	17.74	18.04
2-Amino-4,6-dinitrotoluene	18.14	18.12	18.42
1,3,5-Trinitrobenzene	18.68	18.64	18.94
2,6-Dinitrotoluene	19.92	19.90	20.20
2,4-Dinitrotoluene	20.38	20.36	20.66
Tetryl	23.95	23.96	24.26
2,4,6-Trinitrotoluene	24.95	24.95	25.25
PETN	25.88	25.85	26.15
1,2-Dinitrobenzene	12.89	12.83	13.13

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050055.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 06-Nov-2021 11:30:24 ALS Bottle#: 7 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0106238-055
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:11 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: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:41:50

	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	4.103	4.118	-0.015	105780	0.2500	0.2500	
	2 2,4-diamino-6-nitrotoluene	1	4.610	4.638	-0.028	62503	0.2500	0.2562	
	5 HMX	1	6.610	6.665	-0.055	42331	0.2500	0.2604	
	7 2,4,6-Trinitrophenol	1	7.683	7.905	-0.222	40411	0.2500	0.2533	
	8 RDX	1	8.757	8.825	-0.068	51350	0.2500	0.2514	
	9 Nitrobenzene	1	11.816	11.885	-0.069	91133	0.2510	0.2432	
$	10 1,2-Dinitrobenzene	1	12.890	12.978	-0.088	67040	0.2500	0.2524	
	11 3,5-Dinitroaniline	1	14.743	14.851	-0.108	114873	0.2500	0.2531	
	12 1,3-Dinitrobenzene	1	15.310	15.398	-0.088	152226	0.2505	0.2680	
	13 Nitroglycerin	2	15.656	15.758	-0.102	338127	2.50	2.63	
	14 o-Nitrotoluene	1	16.530	16.631	-0.101	56932	0.2500	0.2287	
	16 p-Nitrotoluene	1	16.810	16.918	-0.108	52208	0.2505	0.2404	
	17 4-Amino-2,6-dinitrotoluene	1	17.250	17.378	-0.128	73170	0.2503	0.2466	
	18 m-Nitrotoluene	1	17.776	17.885	-0.109	65201	0.2503	0.2342	
	19 2-Amino-4,6-dinitrotoluene	1	18.136	18.265	-0.129	109284	0.2510	0.2771	
	20 1,3,5-Trinitrobenzene	1	18.683	18.785	-0.102	110227	0.2505	0.2621	
	21 2,6-Dinitrotoluene	1	19.923	20.045	-0.122	70489	0.2510	0.2629	
	22 2,4-Dinitrotoluene	1	20.383	20.505	-0.122	142768	0.2510	0.2524	
	23 Tetryl	1	23.950	24.112	-0.162	75660	0.2505	0.2322	
	24 2,4,6-Trinitrotoluene	1	24.950	25.098	-0.148	102392	0.2510	0.2713	
	25 PETN	2	25.883	25.998	-0.115	329981	2.50	2.40	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00069	Amount Added:	25.00	Units: uL
8330_ADDs_00029	Amount Added:	12.50	Units: uL

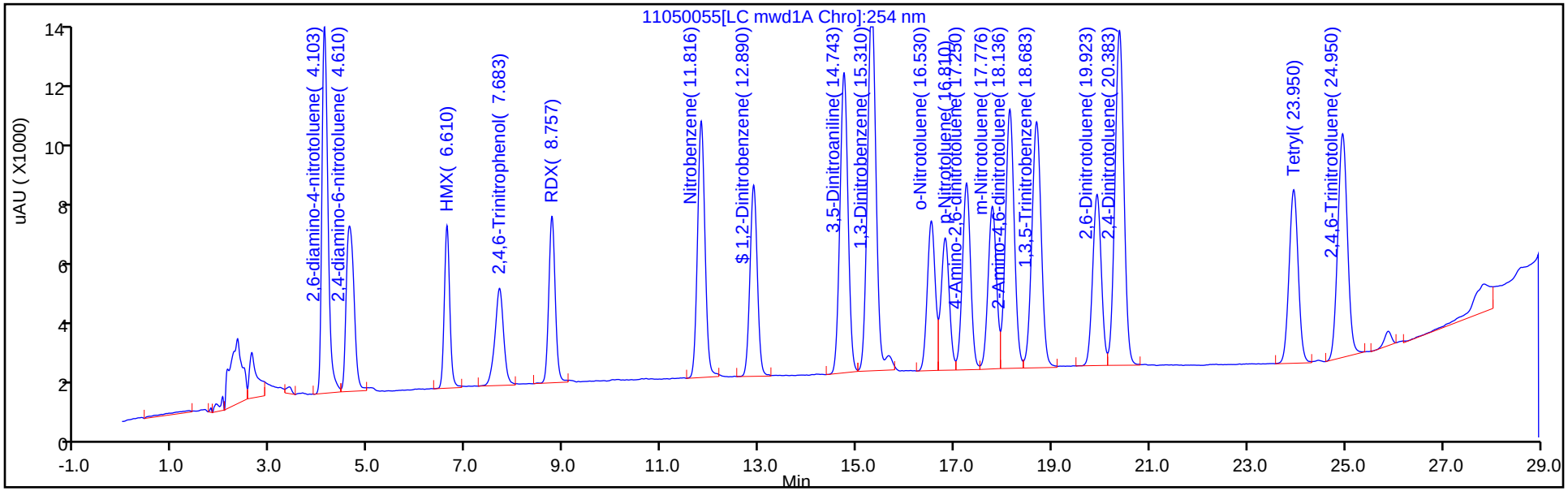
Report Date: 06-Nov-2021 12:42:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

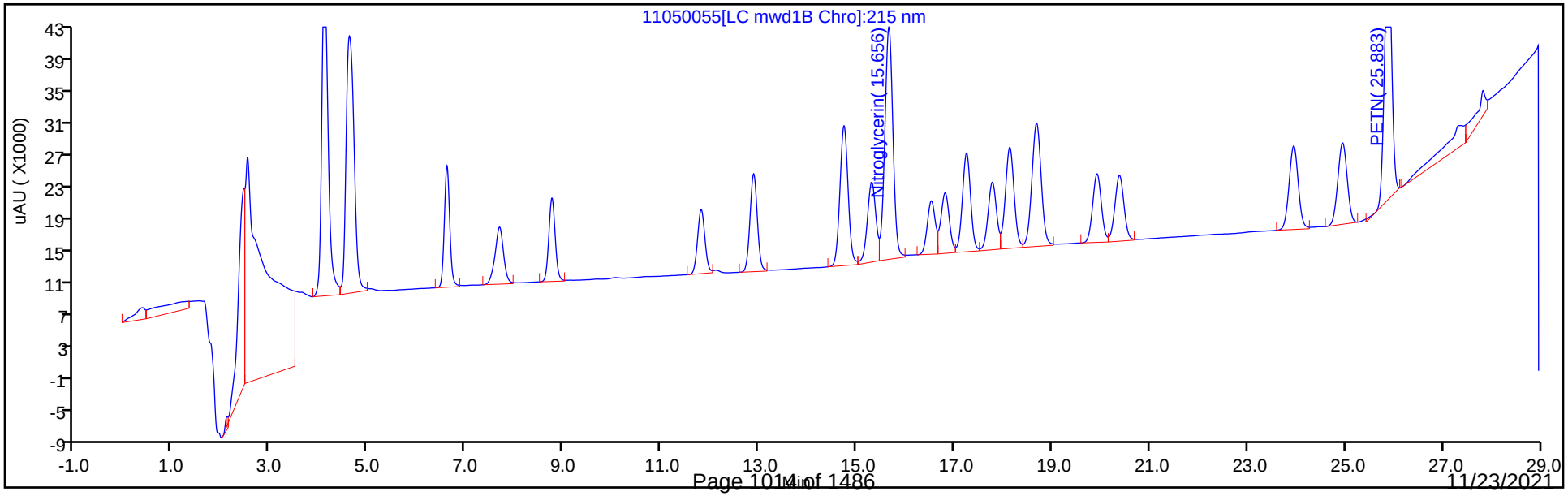
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050055.D

Injection Date:	06-Nov-2021 11:30:24	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	55
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.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/56 Calibration Date: 11/06/2021 12:05

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: 11050056.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	359417		239	250	-4.4	15.0
DNX	Ave	284791	286226		252	250	0.5	15.0
MNX	Ave	264843	262194		289	292	-1.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Lab Sample ID: CCV 280-556366/56 Calibration Date: 11/06/2021 12:05

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: 11050056.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.02	4.89	5.19
DNX	5.83	5.71	6.01
MNX	7.34	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050056.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 06-Nov-2021 12:05:21 ALS Bottle#: 8 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106238-056
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 12:42:12 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: CTX1650

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.022	5.044	-0.022	89944	0.2503	0.2391	
4 DNX	1	5.828	5.857	-0.029	71628	0.2503	0.2515	
6 MNX	1	7.342	7.384	-0.042	76495	0.2918	0.2888	

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

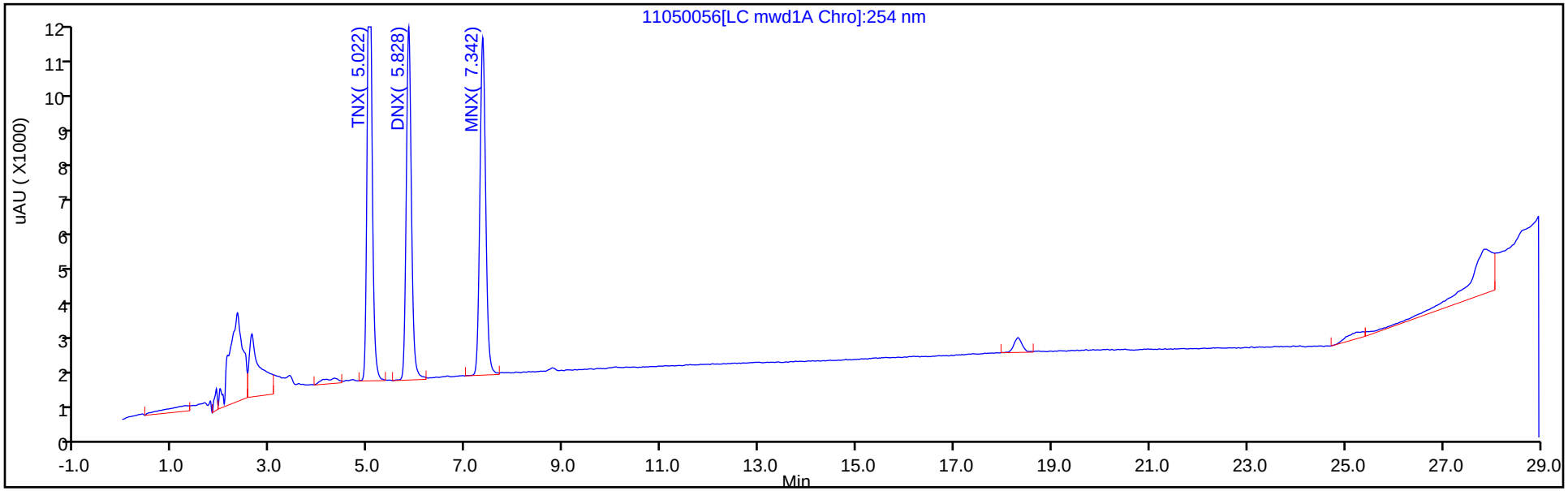
Report Date: 06-Nov-2021 12:42:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

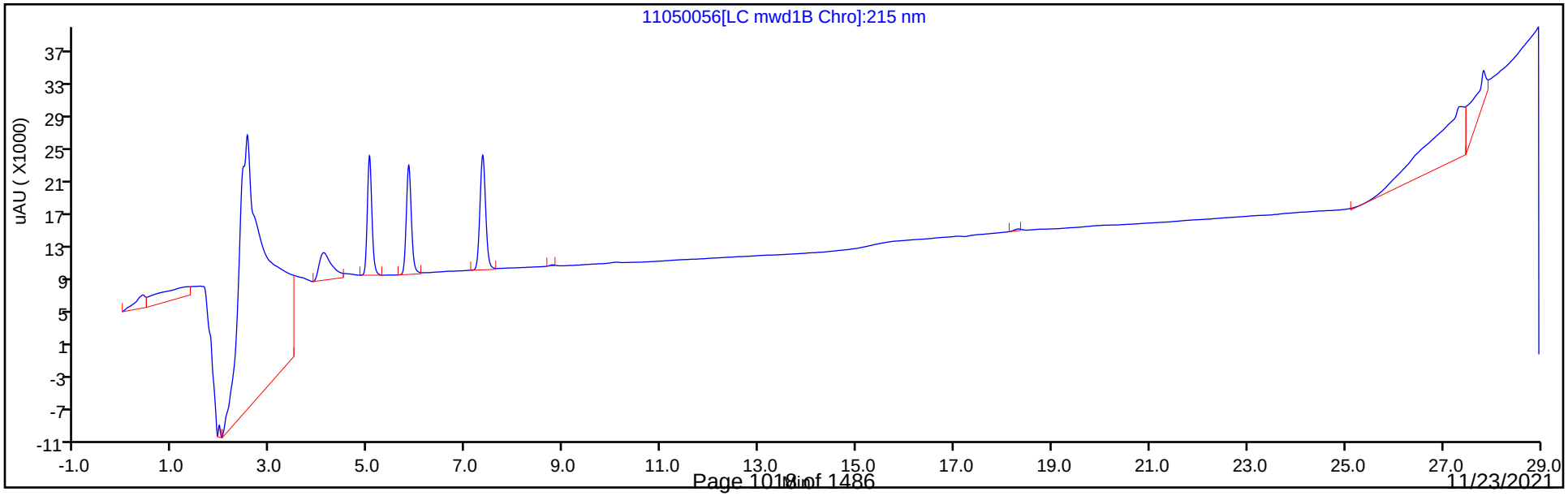
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211105-106238.b\11050056.D

Injection Date:	06-Nov-2021 12:05:21	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	56
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.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-556180/1-A

Matrix: Water Lab File ID: 11050011.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 500(mL) Date Analyzed: 11/05/2021 15:15

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050011.D
Lims ID: MB 280-556180/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Nov-2021 15:15:07 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-556180/1-
Misc. Info.: 280-0106237-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 15:50:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1		2.449				ND	
2 2,6-diamino-4-nitrotoluene	1		6.470				ND	
3 TNX	1		6.493				ND	U
4 HMX	1		6.612				ND	
5 2,4-diamino-6-nitrotoluene	1		6.650				ND	
6 DNX	1		6.813				ND	
7 MNX	1		7.239				ND	
8 RDX	1		7.632				ND	
9 2,4,6-Trinitrophenol	1		8.019				ND	
$ 10 1,2-Dinitrobenzene	1	8.602	8.606	-0.004	23698	0.2000	0.1848	
11 1,3,5-Trinitrobenzene	1		8.726				ND	
12 1,3-Dinitrobenzene	1		9.365				ND	
13 Nitrobenzene	1		9.765				ND	
14 3,5-Dinitroaniline	1		9.930				ND	
15 Tetryl	1		10.112				ND	
16 Nitroglycerin	2		10.572				ND	
17 2,4,6-Trinitrotoluene	1		11.025				ND	
18 4-Amino-2,6-dinitrotoluene	1		11.239				ND	
19 2-Amino-4,6-dinitrotoluene	1		11.499				ND	
20 2,6-Dinitrotoluene	1		11.665				ND	
21 2,4-Dinitrotoluene	1		11.832				ND	
22 o-Nitrotoluene	1		12.712				ND	
23 p-Nitrotoluene	1		13.152				ND	
24 m-Nitrotoluene	1		13.745				ND	
25 PETN	2		14.859				ND	
26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
U - Marked Undetected

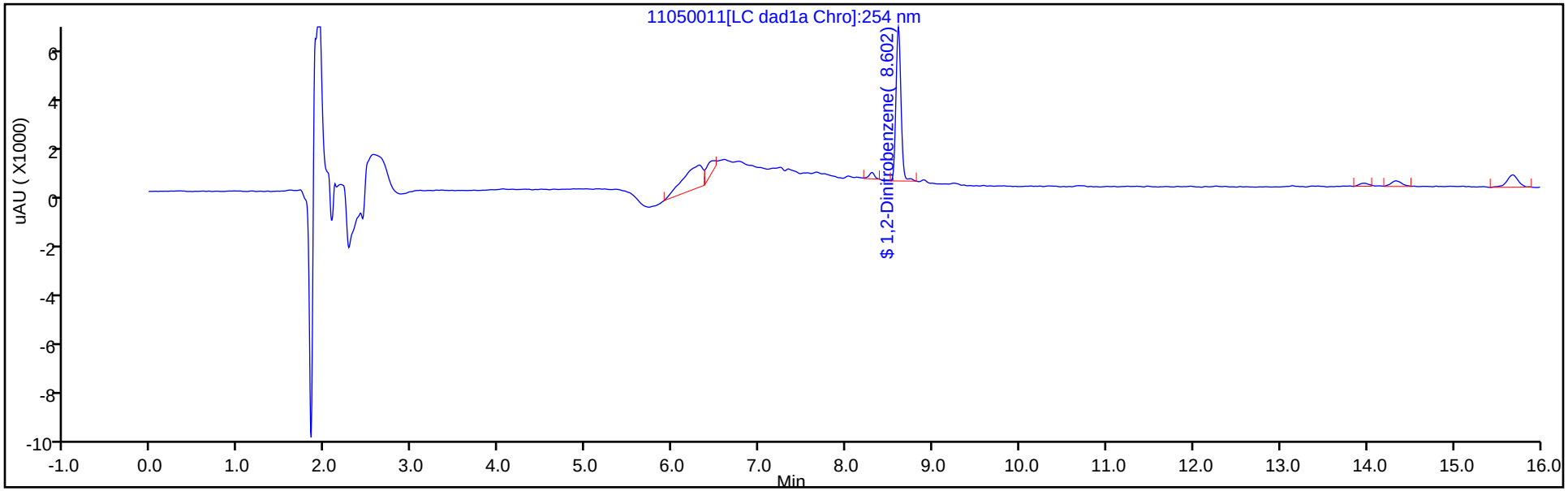
Report Date: 06-Nov-2021 10:24:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

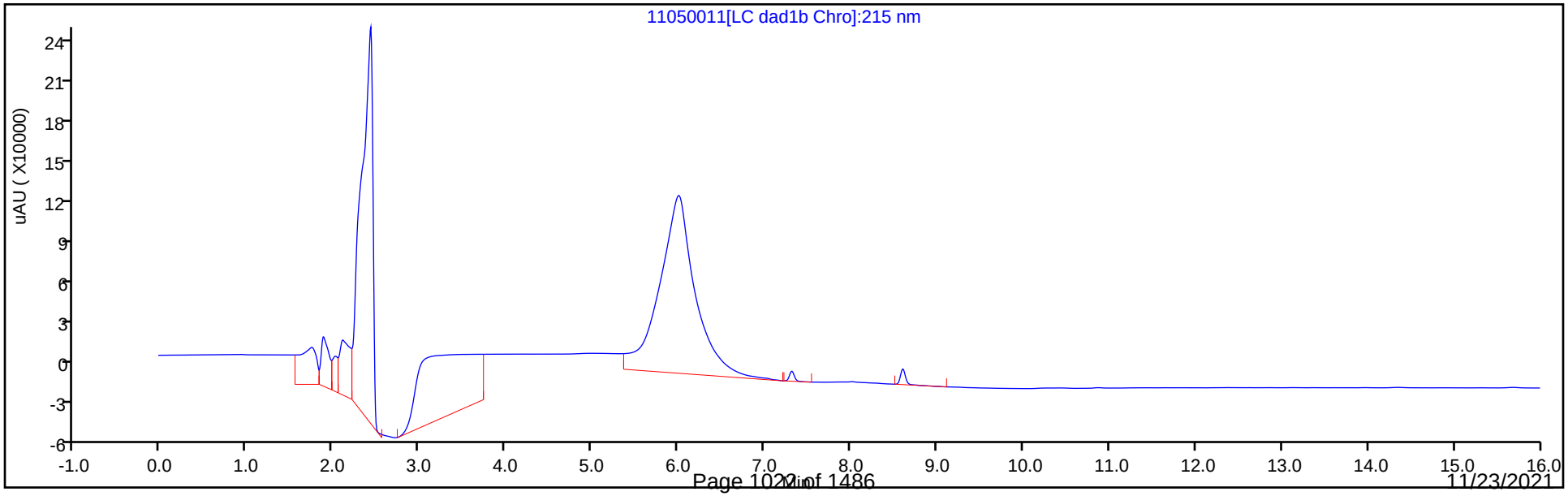
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050011.d

Injection Date:	05-Nov-2021 15:15:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-556180/1-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\20211105-106237.b\11050011.D
Lims ID: MB 280-556180/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Nov-2021 15:15:07 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-556180/1-
Misc. Info.: 280-0106237-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 15:50:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1848	92.41

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556180/2-A

Matrix: Water Lab File ID: 11050012.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 500(mL) Date Analyzed: 11/05/2021 15:38

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.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.07		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.98		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.00		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.94		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.93		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.84		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.57		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.55	M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.82		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.61		0.41	0.40	0.10
2691-41-0	HMX	1.95	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.77		0.21	0.20	0.091
121-82-4	RDX	1.88		0.21	0.20	0.052
479-45-8	Tetryl	1.91		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050012.D
Lims ID: LCS 280-556180/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Nov-2021 15:38:03 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-556180/2
Misc. Info.: 280-0106237-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 16:07:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.608	6.612	-0.004	16450	0.2000	0.1949	M
8 RDX	1	7.615	7.632	-0.017	19998	0.2000	0.1882	
9 2,4,6-Trinitrophenol	1	7.988	8.019	-0.031	17206	0.2000	0.2080	
$ 10 1,2-Dinitrobenzene	1	8.582	8.606	-0.024	23205	0.2000	0.1810	
11 1,3,5-Trinitrobenzene	1	8.702	8.726	-0.024	45637	0.2000	0.2071	
12 1,3-Dinitrobenzene	1	9.335	9.365	-0.030	58737	0.2000	0.1982	
13 Nitrobenzene	1	9.735	9.765	-0.030	34549	0.2000	0.1769	
15 Tetryl	1	10.075	10.112	-0.037	32847	0.2000	0.1905	
16 Nitroglycerin	2	10.528	10.572	-0.044	128207	2.00	1.93	
17 2,4,6-Trinitrotoluene	1	10.982	11.025	-0.043	41225	0.2000	0.2001	
18 4-Amino-2,6-dinitrotoluene	1	11.195	11.239	-0.044	27763	0.2000	0.1817	
19 2-Amino-4,6-dinitrotoluene	1	11.448	11.499	-0.051	38158	0.2000	0.1844	
20 2,6-Dinitrotoluene	1	11.615	11.665	-0.050	27587	0.2000	0.1928	
21 2,4-Dinitrotoluene	1	11.782	11.832	-0.050	55575	0.2000	0.1936	
22 o-Nitrotoluene	1	12.655	12.712	-0.057	20121	0.2000	0.1567	
23 p-Nitrotoluene	1	13.095	13.152	-0.057	18048	0.2000	0.1613	
24 m-Nitrotoluene	1	13.675	13.745	-0.070	22048	0.2000	0.1550	M
25 PETN	2	14.782	14.859	-0.077	146480	2.00	1.96	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

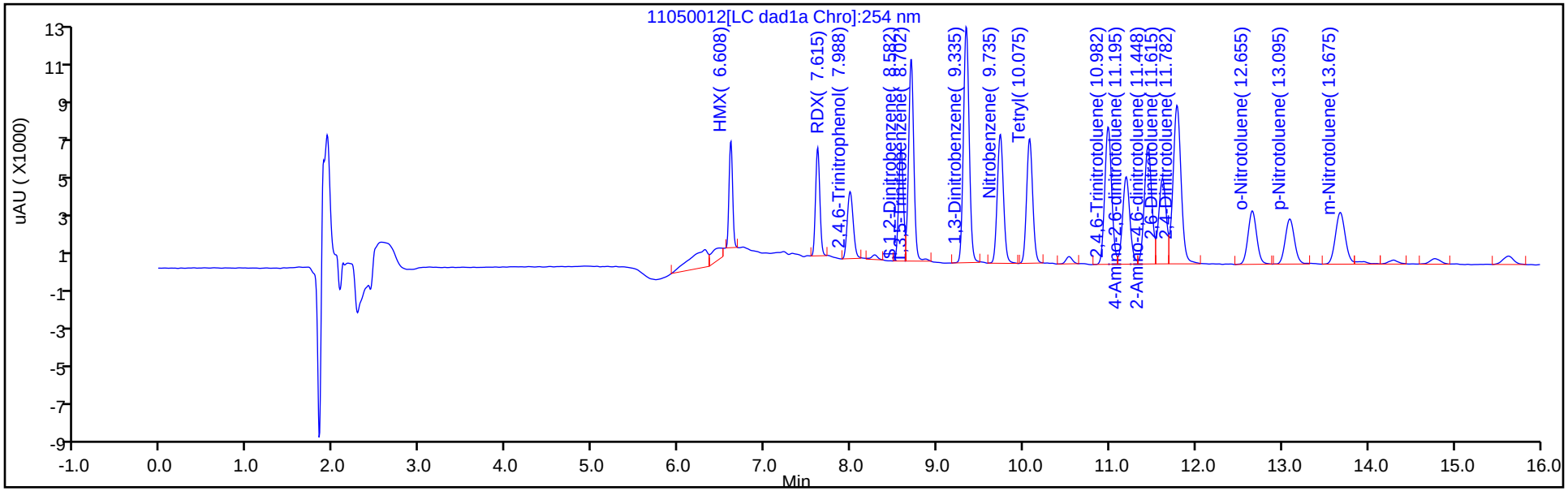
Report Date: 06-Nov-2021 10:24:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

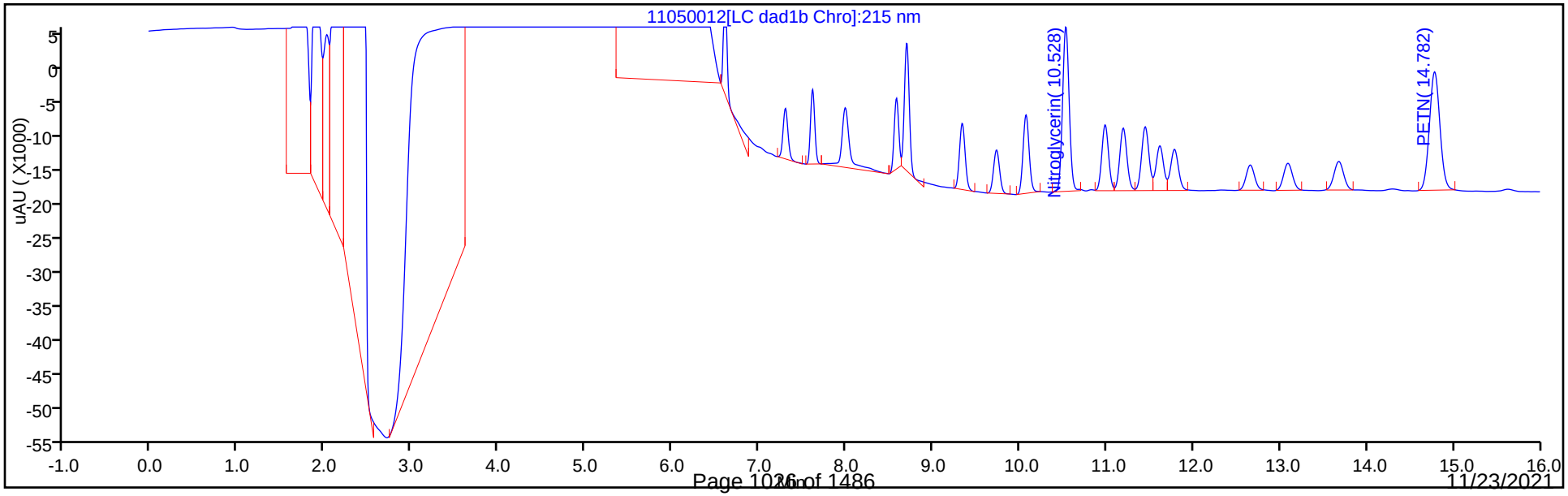
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050012.d

Injection Date:	05-Nov-2021 15:38:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-556180/2-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\20211105-106237.b\11050012.D
Lims ID: LCS 280-556180/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Nov-2021 15:38:03 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-556180/2
Misc. Info.: 280-0106237-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 16:07:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1810	90.49

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

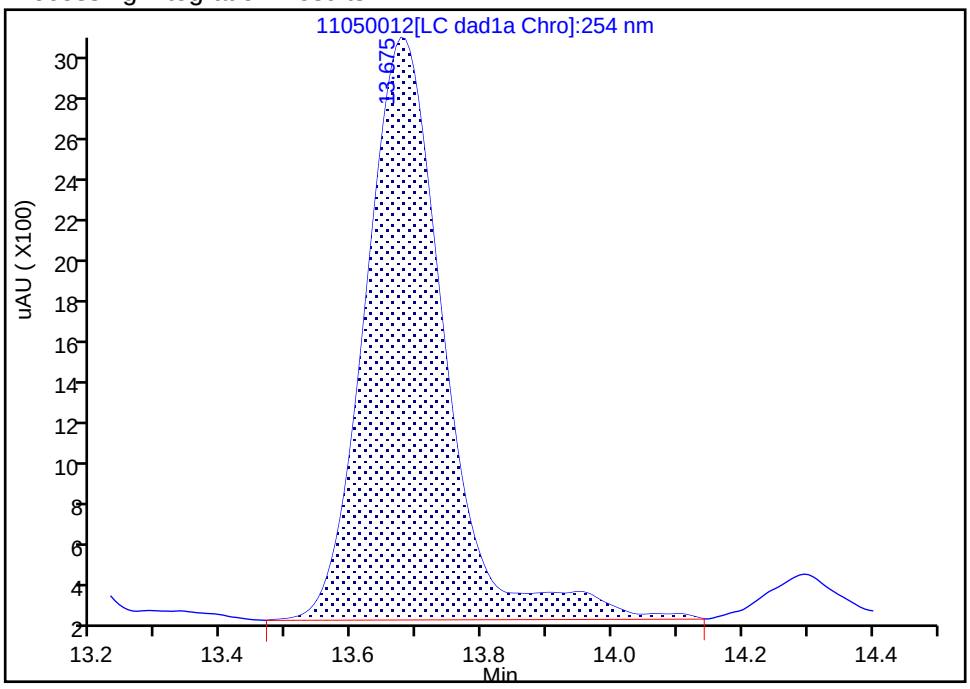
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050012.d				
Injection Date:	05-Nov-2021 15:38:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556180/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

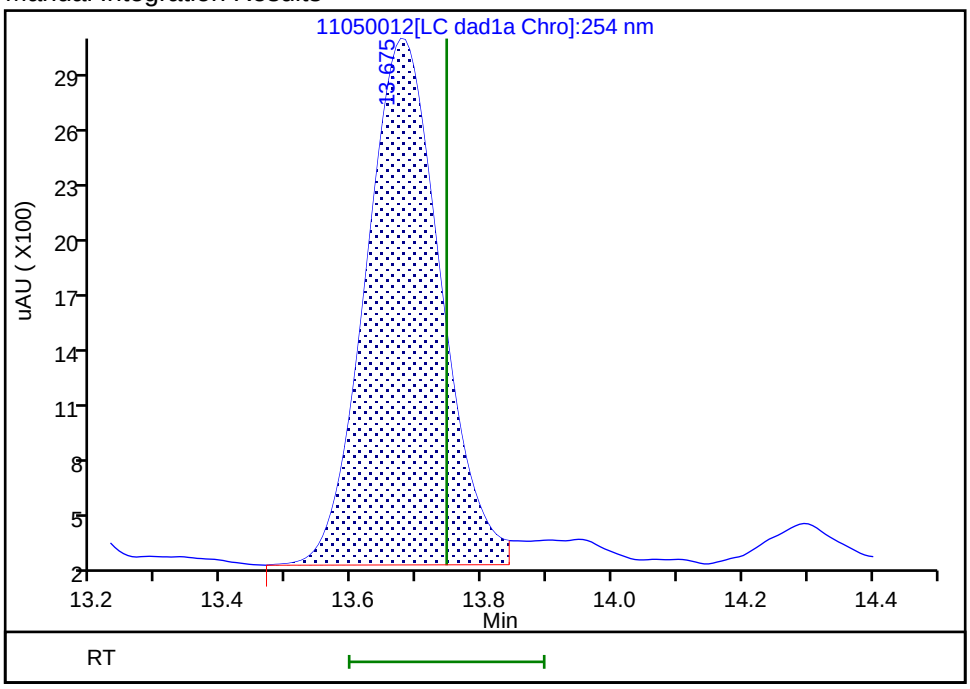
Processing Integration Results

RT: 13.67
Area: 23395
Amount: 0.164468
Amount Units: ug/mL



Manual Integration Results

RT: 13.67
Area: 22048
Amount: 0.154999
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 16:07:36

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

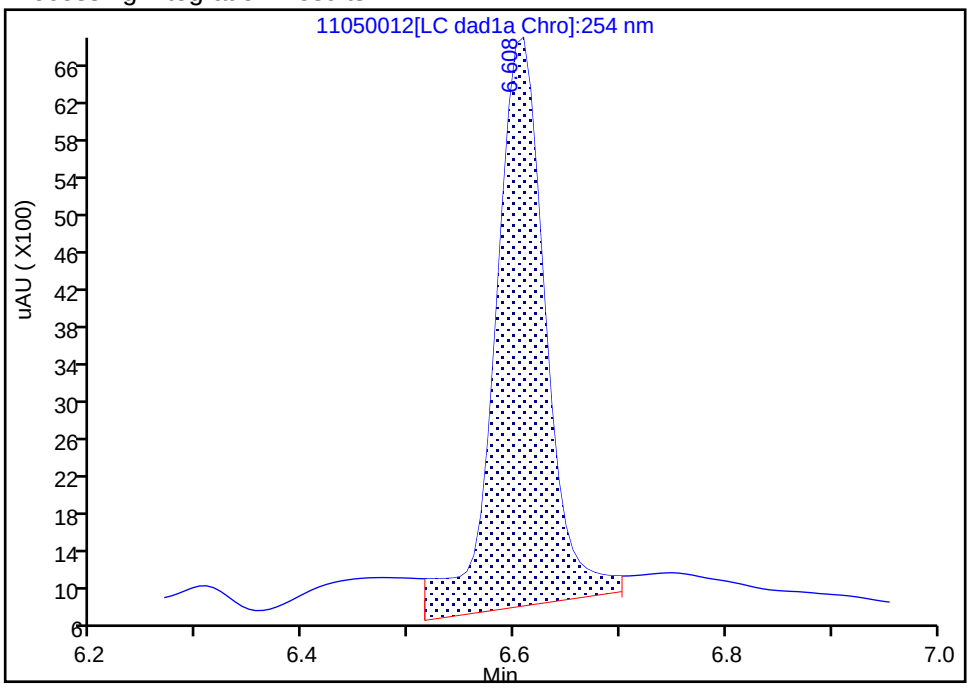
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050012.d				
Injection Date:	05-Nov-2021 15:38:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556180/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

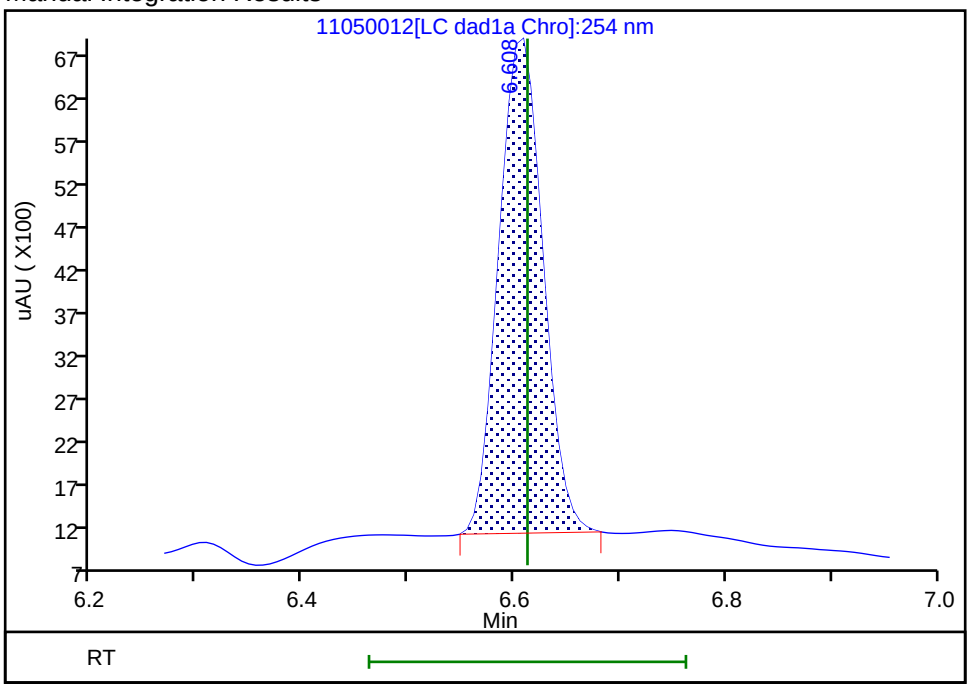
Processing Integration Results

RT: 6.61
Area: 19981
Amount: 0.236682
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 16450
Amount: 0.194856
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 16:07:30
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556180/3-A

Matrix: Water Lab File ID: 11050013.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 11/04/2021 14:13

Sample wt/vol: 500(mL) Date Analyzed: 11/05/2021 16:00

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.16	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\11050013.D
Lims ID: LCS 280-556180/3-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Nov-2021 16:00:54 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-556180/3
Misc. Info.: 280-0106237-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:38:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.493	-0.013	35583	0.2002	0.1915	M
6 DNX	1	6.800	6.813	-0.013	26577	0.2002	0.1870	M
7 MNX	1	7.227	7.239	-0.012	28201	0.2334	0.2164	M
$ 10 1,2-Dinitrobenzene	1	8.580	8.606	-0.026	22887	0.2000	0.1785	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

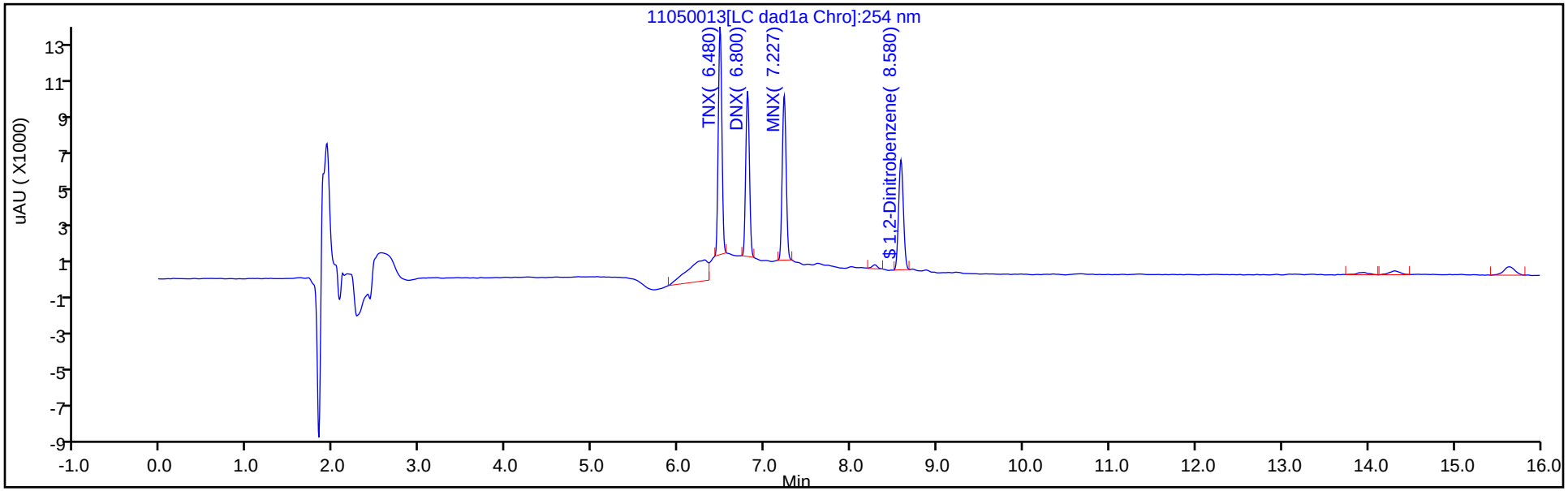
Report Date: 06-Nov-2021 10:24:49 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

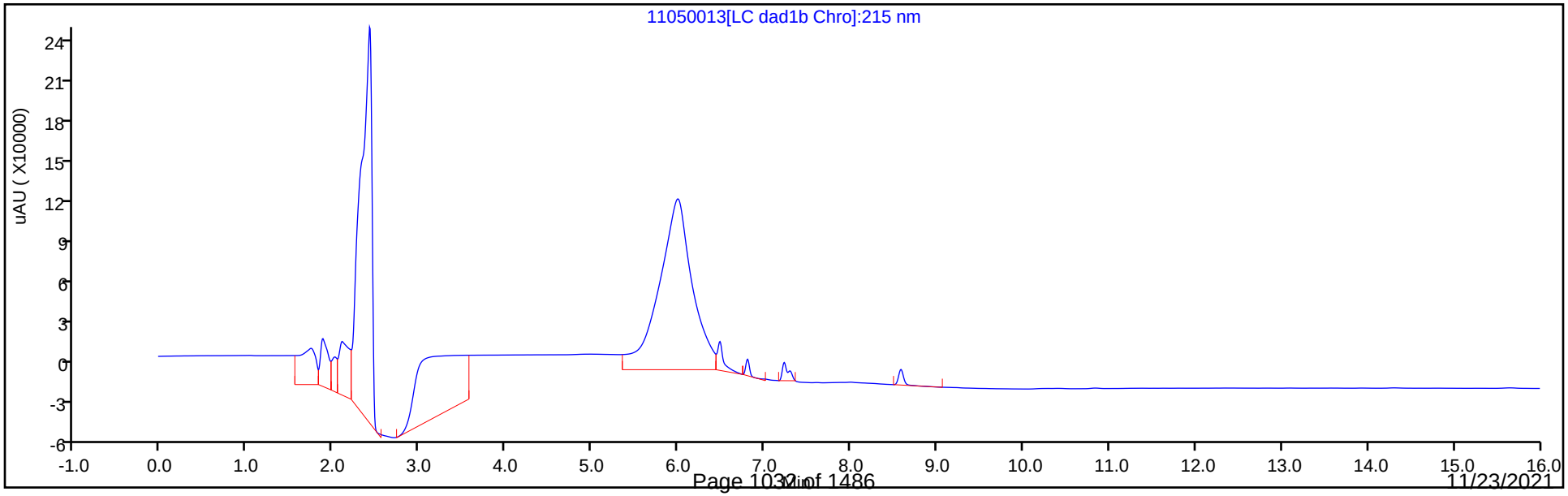
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050013.d

Injection Date:	05-Nov-2021 16:00:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-556180/3-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\20211105-106237.b\11050013.D
Lims ID: LCS 280-556180/3-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Nov-2021 16:00:54 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-556180/3
Misc. Info.: 280-0106237-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211105-106237.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:38:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1785	89.25

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

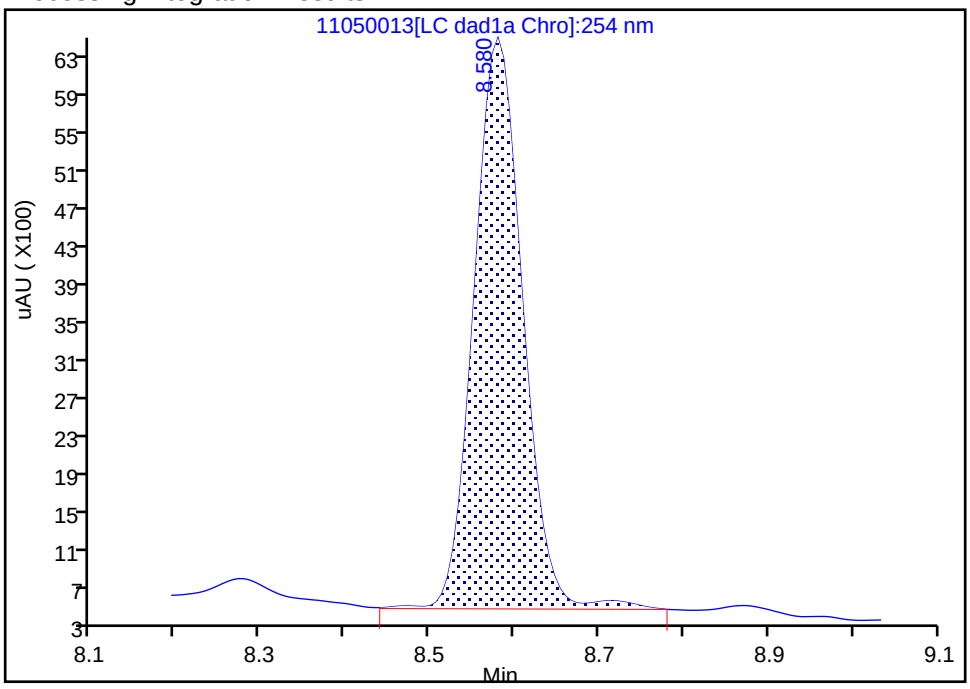
Data File: \\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050013.d
Injection Date: 05-Nov-2021 16:00:54 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-556180/3-A
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

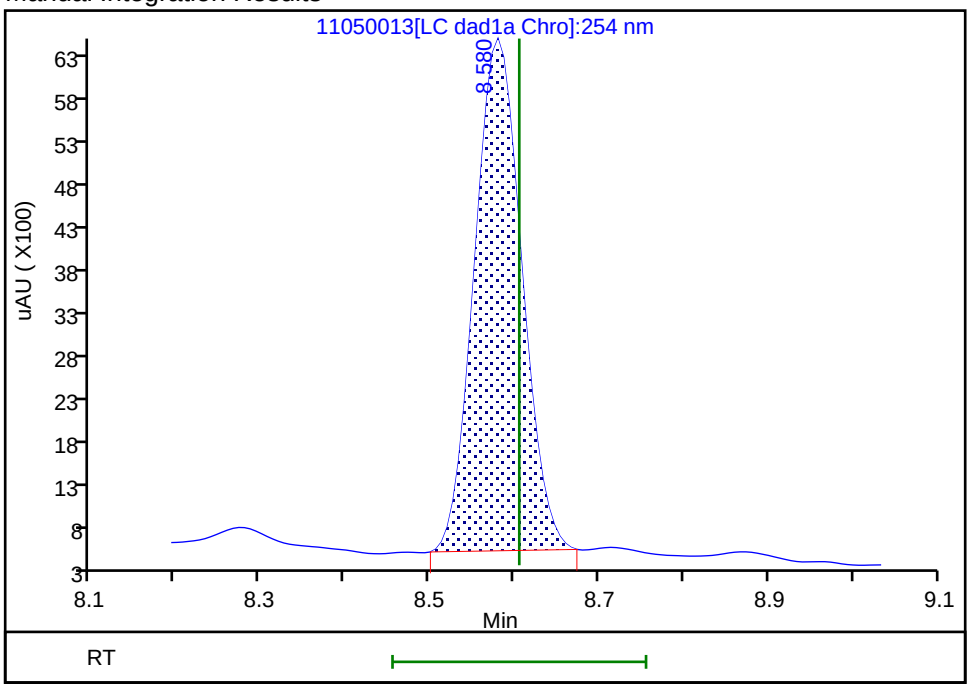
Processing Integration Results

RT: 8.58
Area: 23823
Amount: 0.185802
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 22887
Amount: 0.178502
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:38:57
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

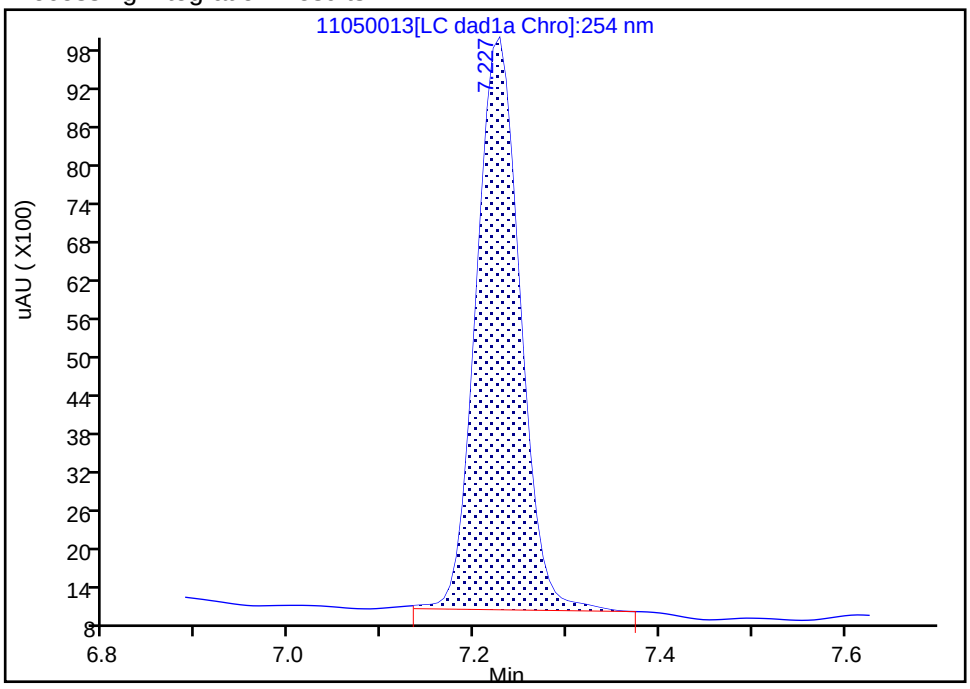
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211105-106237.b\11050013.d				
Injection Date:	05-Nov-2021 16:00:54	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556180/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

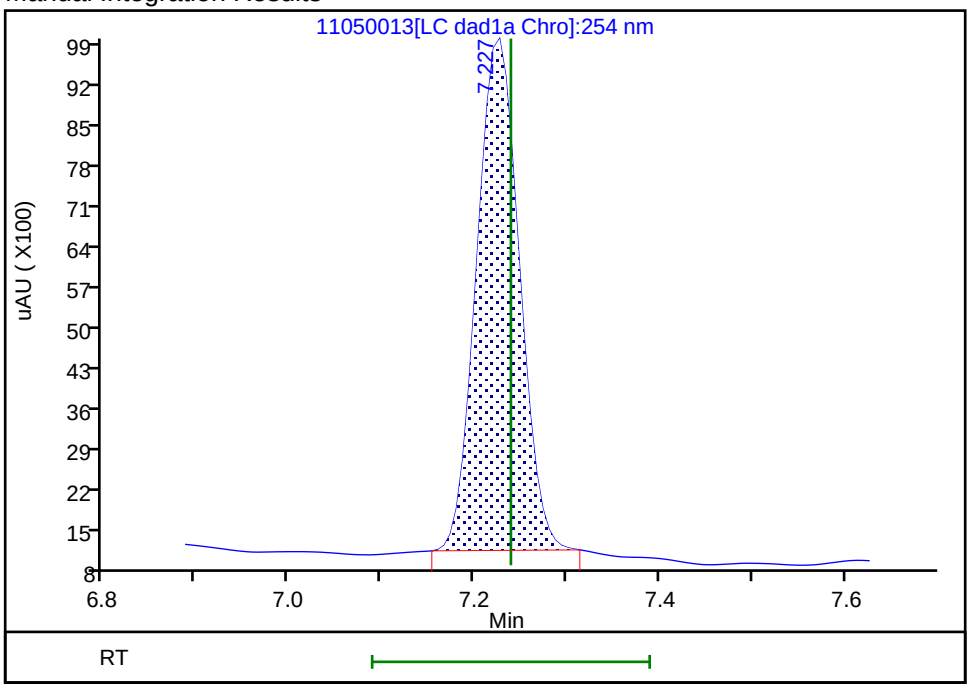
Processing Integration Results

RT: 7.23
Area: 29311
Amount: 0.224880
Amount Units: ug/mL



Manual Integration Results

RT: 7.23
Area: 28201
Amount: 0.216364
Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:38:53

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

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.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/01/2021 18:54

Analysis Batch Number: 534620 End Date: 05/02/2021 05:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534620/10		05/01/2021 18:54	1	010-0501.D	Luna-phenylhex 4.6(mm)
IC 280-534620/11		05/01/2021 19:29	1	011-0601.D	Luna-phenylhex 4.6(mm)
IC 280-534620/12		05/01/2021 20:04	1	012-0701.D	Luna-phenylhex 4.6(mm)
IC 280-534620/13		05/01/2021 20:39	1	013-0801.D	Luna-phenylhex 4.6(mm)
IC 280-534620/14		05/01/2021 21:15	1	014-0901.D	Luna-phenylhex 4.6(mm)
IC 280-534620/15		05/01/2021 21:50	1	015-1001.D	Luna-phenylhex 4.6(mm)
IC 280-534620/16		05/01/2021 22:25	1	016-1101.D	Luna-phenylhex 4.6(mm)
IC 280-534620/17		05/01/2021 23:00	1	017-1201.D	Luna-phenylhex 4.6(mm)
IC 280-534620/18		05/01/2021 23:35	1	018-1301.D	Luna-phenylhex 4.6(mm)
ICV 280-534620/19		05/02/2021 00:10	1	019-1401.D	Luna-phenylhex 4.6(mm)
IC 280-534620/20		05/02/2021 00:45	1	020-1501.D	Luna-phenylhex 4.6(mm)
IC 280-534620/21		05/02/2021 01:20	1	021-1601.D	Luna-phenylhex 4.6(mm)
IC 280-534620/22		05/02/2021 01:55	1	022-1701.D	Luna-phenylhex 4.6(mm)
IC 280-534620/23		05/02/2021 02:30	1	023-1801.D	Luna-phenylhex 4.6(mm)
IC 280-534620/24		05/02/2021 03:05	1	024-1901.D	Luna-phenylhex 4.6(mm)
IC 280-534620/25		05/02/2021 03:41	1	025-2001.D	Luna-phenylhex 4.6(mm)
IC 280-534620/26		05/02/2021 04:16	1	026-2101.D	Luna-phenylhex 4.6(mm)
IC 280-534620/27		05/02/2021 04:51	1	027-2201.D	Luna-phenylhex 4.6(mm)
ICV 280-534620/28		05/02/2021 05:26	1	028-2301.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

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.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 11/05/2021 14:27

Analysis Batch Number: 556359 End Date: 11/06/2021 05:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-556359/7		11/05/2021 14:27	1	11050007.D	UltraCarb5uODS 4.6(mm)
CCV 280-556359/9		11/05/2021 14:50	1	11050009.D	UltraCarb5uODS 4.6(mm)
MB 280-556180/1-A		11/05/2021 15:15	1	11050011.D	UltraCarb5uODS 4.6(mm)
LCS 280-556180/2-A		11/05/2021 15:38	1	11050012.D	UltraCarb5uODS 4.6(mm)
LCS 280-556180/3-A		11/05/2021 16:00	1	11050013.D	UltraCarb5uODS 4.6(mm)
280-155015-1	EW7-PM25A-7-25	11/05/2021 16:23	1	11050014.D	UltraCarb5uODS 4.6(mm)
280-155015-2	EW7-PM25B-7-35	11/05/2021 16:46	1	11050015.D	UltraCarb5uODS 4.6(mm)
280-155015-3	EW7-PM27B-7-35	11/05/2021 17:09	1	11050016.D	UltraCarb5uODS 4.6(mm)
280-155015-4	EW7-PM26A-7-25	11/05/2021 17:32	1	11050017.D	UltraCarb5uODS 4.6(mm)
280-155015-5	EW7-PM26B-7-35	11/05/2021 17:55	1	11050018.D	UltraCarb5uODS 4.6(mm)
280-155015-6	EW7-PM29A-7-25	11/05/2021 18:18	1	11050019.D	UltraCarb5uODS 4.6(mm)
280-155015-7	EW7-PM29B-7-35	11/05/2021 18:41	1	11050020.D	UltraCarb5uODS 4.6(mm)
CCV 280-556359/21		11/05/2021 19:04	1	11050021.D	UltraCarb5uODS 4.6(mm)
CCV 280-556359/22		11/05/2021 19:27	1	11050022.D	UltraCarb5uODS 4.6(mm)
280-155015-8	EW7-PM28A-7-25	11/05/2021 19:50	1	11050023.D	UltraCarb5uODS 4.6(mm)
280-155015-9	G0080-7	11/05/2021 20:13	1	11050024.D	UltraCarb5uODS 4.6(mm)
280-155015-10	EW7-PM24A-7-25	11/05/2021 20:36	1	11050025.D	UltraCarb5uODS 4.6(mm)
280-155015-11	G0079-7	11/05/2021 20:58	1	11050026.D	UltraCarb5uODS 4.6(mm)
280-155015-12	G0075-7	11/05/2021 21:21	1	11050027.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		11/05/2021 21:44	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/05/2021 22:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/05/2021 22:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/05/2021 22:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/05/2021 23:16	1		UltraCarb5uODS 4.6(mm)
CCV 280-556359/33		11/05/2021 23:39	1	11050033.D	UltraCarb5uODS 4.6(mm)
CCV 280-556359/34		11/06/2021 00:02	1	11050034.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 00:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 00:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 01:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 01:34	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 01:57	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 02:20	1		UltraCarb5uODS 4.6(mm)
CCV 280-556359/41		11/06/2021 02:42	1	11050041.D	UltraCarb5uODS 4.6(mm)
CCV 280-556359/42		11/06/2021 03:05	1	11050042.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 03:28	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 03:51	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 04:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 04:37	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/06/2021 05:00	1		UltraCarb5uODS 4.6(mm)
CCV 280-556359/48		11/06/2021 05:23	1		UltraCarb5uODS 4.6(mm)
CCV 280-556359/49		11/06/2021 05:46	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 11/05/2021 23:15

Analysis Batch Number: 556366 End Date: 11/06/2021 12:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-556366/23		11/05/2021 23:15	1	11050023.D	Luna-phenylhex 4.6(mm)
CCV 280-556366/24		11/05/2021 23:49	1	11050024.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 00:24	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 01:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 01:34	1		Luna-phenylhex 4.6(mm)
280-155015-1	EW7-PM25A-7-25	11/06/2021 02:09	1	11050028.D	Luna-phenylhex 4.6(mm)
280-155015-2	EW7-PM25B-7-35	11/06/2021 02:44	1	11050029.D	Luna-phenylhex 4.6(mm)
280-155015-3	EW7-PM27B-7-35	11/06/2021 03:19	1	11050030.D	Luna-phenylhex 4.6(mm)
280-155015-4	EW7-PM26A-7-25	11/06/2021 03:54	1	11050031.D	Luna-phenylhex 4.6(mm)
280-155015-5	EW7-PM26B-7-35	11/06/2021 04:29	1	11050032.D	Luna-phenylhex 4.6(mm)
280-155015-6	EW7-PM29A-7-25	11/06/2021 05:05	1	11050033.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 05:40	1		Luna-phenylhex 4.6(mm)
CCV 280-556366/35		11/06/2021 06:15	1	11050035.D	Luna-phenylhex 4.6(mm)
CCV 280-556366/36		11/06/2021 06:50	1	11050036.D	Luna-phenylhex 4.6(mm)
280-155015-8	EW7-PM28A-7-25	11/06/2021 07:25	1	11050037.D	Luna-phenylhex 4.6(mm)
280-155015-9	G0080-7	11/06/2021 08:00	1	11050038.D	Luna-phenylhex 4.6(mm)
280-155015-10	EW7-PM24A-7-25	11/06/2021 08:35	1	11050039.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 09:10	1		Luna-phenylhex 4.6(mm)
280-155015-12	G0075-7	11/06/2021 09:45	1	11050041.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 10:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/06/2021 10:55	1		Luna-phenylhex 4.6(mm)
CCV 280-556366/55		11/06/2021 11:30	1	11050055.D	Luna-phenylhex 4.6(mm)
CCV 280-556366/56		11/06/2021 12:05	1	11050056.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556180 Batch Start Date: 11/04/21 14:13 Batch Analyst: Hayburn, Christopher D

Batch Method: 3535 Batch End Date: 11/04/21 17:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00110	8330_OP_DMT 00011
MB 280-556180/1		3535, 8330A				500 mL	5 mL		
LCS 280-556180/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-556180/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-155015-A-1	EW7-PM25A-7-25	3535, 8330A	T	767.3 g	286.4 g	480.9 mL	5 mL		
280-155015-A-2	EW7-PM25B-7-35	3535, 8330A	T	791.4 g	285.9 g	505.5 mL	5 mL		
280-155015-A-3	EW7-PM27B-7-35	3535, 8330A	T	793.1 g	287.8 g	505.3 mL	5 mL		
280-155015-A-4	EW7-PM26A-7-25	3535, 8330A	T	780.4 g	288.3 g	492.1 mL	5 mL		
280-155015-B-5	EW7-PM26B-7-35	3535, 8330A	T	781.9 g	287.2 g	494.7 mL	5 mL		
280-155015-A-6	EW7-PM29A-7-25	3535, 8330A	T	797.9 g	287.2 g	510.7 mL	5 mL		
280-155015-A-7	EW7-PM29B-7-35	3535, 8330A	T	792.6 g	288.4 g	504.2 mL	5 mL		
280-155015-A-8	EW7-PM28A-7-25	3535, 8330A	T	797.2 g	287.3 g	509.9 mL	5 mL		
280-155015-A-9	G0080-7	3535, 8330A	T	772.5 g	287.3 g	485.2 mL	5 mL		
280-155015-A-10	EW7-PM24A-7-25	3535, 8330A	T	783.1 g	285.0 g	498.1 mL	5 mL		
280-155015-B-11	G0079-7	3535, 8330A	T	779.1 g	287.2 g	491.9 mL	5 mL		
280-155015-A-12	G0075-7	3535, 8330A	T	791.3 g	286.1 g	505.2 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00126	AnalysisComment				
MB 280-556180/1		3535, 8330A		0.1 mL					
LCS 280-556180/2		3535, 8330A		0.1 mL	8830				
LCS 280-556180/3		3535, 8330A		0.1 mL	DMT				
280-155015-A-1	EW7-PM25A-7-25	3535, 8330A	T	0.1 mL					
280-155015-A-2	EW7-PM25B-7-35	3535, 8330A	T	0.1 mL					
280-155015-A-3	EW7-PM27B-7-35	3535, 8330A	T	0.1 mL					
280-155015-A-4	EW7-PM26A-7-25	3535, 8330A	T	0.1 mL					
280-155015-B-5	EW7-PM26B-7-35	3535, 8330A	T	0.1 mL					
280-155015-A-6	EW7-PM29A-7-25	3535, 8330A	T	0.1 mL					
280-155015-A-7	EW7-PM29B-7-35	3535, 8330A	T	0.1 mL					
280-155015-A-8	EW7-PM28A-7-25	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.: 280-155015-1

SDG No.:

Batch Number: 556180 Batch Start Date: 11/04/21 14:13 Batch Analyst: Hayburn, Christopher D

Batch Method: 3535 Batch End Date: 11/04/21 17:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00126	AnalysisComment				
280-155015-A-9	G0080-7	3535, 8330A	T	0.1 mL					
280-155015-A-10	EW7-PM24A-7-25	3535, 8330A	T	0.1 mL					
280-155015-B-11	G0079-7	3535, 8330A	T	0.1 mL					
280-155015-A-12	G0075-7	3535, 8330A	T	0.1 mL					

Batch Notes	
First Start time	11/04/2021 14:50
First End time	11/04/2021 17:10
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	0052312024
Balance ID	24350888
Pipette/Syringe/Dispenser ID	JiJi, Soot, DOD
Solvent Name	Acetonitrile
Solvent Lot #	Acetonitrile_00055
Rinse Solvent Name	0.1%AAinACN
Rinse Solvent Lot	0.1%AAinACN_00168
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00078
Analyst ID - Spike Analyst	DL
Analyst ID - Spike Witness Analyst	Reviewer: EB
Batch Comment	DV-OP-0017; Mantel: A/B

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
EW7-PM25A-7-25	280-155015-1
EW7-PM25B-7-35	280-155015-2
EW7-PM27B-7-35	280-155015-3
EW7-PM26A-7-25	280-155015-4
EW7-PM26B-7-35	280-155015-5
EW7-PM29A-7-25	280-155015-6
EW7-PM29B-7-35	280-155015-7
EW7-PM28A-7-25	280-155015-8
G0080-7	280-155015-9
EW7-PM24A-7-25	280-155015-10
G0079-7	280-155015-11
G0075-7	280-155015-12

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM25A-7-25 Lab Sample ID: 280-155015-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 12:45

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.2	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	8.2	5.0	5.0	3.4	mg/L			1	351.2
Nitrate Nitrite as N	0.081	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	4.1	5.0	2.5	1.0	mg/L	J		1	9056A
Total Alkalinity as CaCO3	690	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM25A-7-25 Lab Sample ID: 280-155015-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 12:45

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	32	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 14:50

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.9	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	4.7	1.7	1.7	1.1	mg/L			1	351.2
Nitrate Nitrite as N	0.046	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	120	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	440	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM25B-7-35 Lab Sample ID: 280-155015-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 14:50

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	12	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 11:05

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	4.2	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	6.0	1.7	1.7	1.1	mg/L			1	351.2
Nitrate Nitrite as N	0.044	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	57	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	480	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM27B-7-35 Lab Sample ID: 280-155015-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 11:05

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	13	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 09:25

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.0	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	2.0	1.0	1.0	0.69	mg/L			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	81	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	460	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM26A-7-25 Lab Sample ID: 280-155015-4

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 09:25

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 11:00

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.4	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	6.6	5.0	5.0	3.4	mg/L			1	351.2
Nitrate Nitrite as N	0.034	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	36	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	560	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM26B-7-35 Lab Sample ID: 280-155015-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 11:00

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	18	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM29A-7-25 Lab Sample ID: 280-155015-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 12:30

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.4	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	3.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.046	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	31	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	430	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM29A-7-25 Lab Sample ID: 280-155015-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 12:30

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	9.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM29B-7-35 Lab Sample ID: 280-155015-7

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 14:35

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.8	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	3.5	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.045	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	110	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	390	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM29B-7-35 Lab Sample ID: 280-155015-7

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 14:35

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM28A-7-25 Lab Sample ID: 280-155015-8

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 16:10

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	4.0	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	5.1	1.7	1.7	1.1	mg/L			1	351.2
Nitrate Nitrite as N	0.049	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	22	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	520	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM28A-7-25 Lab Sample ID: 280-155015-8

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/30/2021 16:10

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	14	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0080-7 | Lab Sample ID: 280-155015-9

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155015-1

SDG ID.:

Matrix: Water | Date Sampled: 10/31/2021 12:35

Reporting Basis: WET | Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.5	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.6	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	4.0	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	81	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	340	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0080-7 Lab Sample ID: 280-155015-9

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 12:35

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 16:20

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.49	0.20	0.10	0.044	mg/L			2	350.1
Nitrogen, Total Kjeldahl	1.7	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	1.1	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	45	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	520	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM24A-7-25 Lab Sample ID: 280-155015-10

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 10/31/2021 16:20

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0079-7 | Lab Sample ID: 280-155015-11

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155015-1

SDG ID.:

Matrix: Water | Date Sampled: 11/01/2021 10:40

Reporting Basis: WET | Date Received: 11/02/2021 11:00

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	0.74	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	31	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	120	10	6.4	3.1	mg/L		H B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0079-7 Lab Sample ID: 280-155015-11

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 11/01/2021 10:40

Reporting Basis: WET Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0075-7 | Lab Sample ID: 280-155015-12

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155015-1

SDG ID.:

Matrix: Water | Date Sampled: 11/01/2021 12:05

Reporting Basis: WET | Date Received: 11/02/2021 11:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.076	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	1.7	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	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	350	10	6.4	3.1	mg/L		H B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0075-7 Lab Sample ID: 280-155015-12

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG ID.:

Matrix: Water Date Sampled: 11/01/2021 12:05

Reporting Basis: WET Date Received: 11/02/2021 11:00

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

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Analyst: JJM Batch Start Date: 11/18/2021

Reporting Units: mg/L Analytical Batch No.: 558000

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	11:41	Ammonia	0.490	0.501	98	90-110		350.1 ICV_00493
15	ICV	11:43	Ammonia	2.58	2.51	103	90-110		350.1 ICV_00493
16	ICB	11:45	Ammonia	0.050				U	
33	CCVL	12:19	Ammonia	0.488	0.500	98	90-110		350.1 cal_00508
34	CCV	12:21	Ammonia	2.43	2.50	97	90-110		350.1 cal_00508
35	CCB	12:23	Ammonia	0.050				U	
52	CCVL	12:57	Ammonia	0.495	0.500	99	90-110		350.1 cal_00508
53	CCV	12:59	Ammonia	2.43	2.50	97	90-110		350.1 cal_00508
54	CCB	13:01	Ammonia	0.050				U	
61	CCVL	13:19	Ammonia	0.502	0.500	100	90-110		350.1 cal_00508
62	CCV	13:21	Ammonia	2.49	2.50	100	90-110		350.1 cal_00508
63	CCB	13:23	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.: 280-155015-1

SDG No.:

Analyst: JJM Batch Start Date: 11/21/2021

Reporting Units: mg/L Analytical Batch No.: 558260

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:50	Ammonia	0.511	0.501	102	90-110		350.1 ICV_00494
15	ICV	10:52	Ammonia	2.47	2.51	99	90-110		350.1 ICV_00494
16	ICB	10:54	Ammonia	0.050				U	
33	CCVL	11:28	Ammonia	0.487	0.500	97	90-110		350.1 cal_00509
34	CCV	11:30	Ammonia	2.47	2.50	99	90-110		350.1 cal_00509
35	CCB	11:32	Ammonia	0.050				U	

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.: 280-155015-1

SDG No.:

Analyst: RKD Batch Start Date: 11/22/2021

Reporting Units: mg/L Analytical Batch No.: 558390

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:34	Ammonia	0.507	0.501	101	90-110		350.1 ICV_00494
15	ICV	10:36	Ammonia	2.46	2.51	98	90-110		350.1 ICV_00494
16	ICB	10:38	Ammonia	0.0284				J	
33	CCVL	11:12	Ammonia	0.500	0.500	100	90-110		350.1 cal_00509
34	CCV	11:14	Ammonia	2.50	2.50	100	90-110		350.1 cal_00509
35	CCB	11:16	Ammonia	0.0268				J	
50	CCV	11:46	Ammonia	2.51	2.50	101	90-110		350.1 cal_00509
51	CCB	11:48	Ammonia	0.0339				J	
69	CCVL	12:24	Ammonia	0.513	0.500	103	90-110		350.1 cal_00509
70	CCV	12:26	Ammonia	2.52	2.50	101	90-110		350.1 cal_00509
71	CCB	12:28	Ammonia	0.0313				J	
85	CCVL	13:05	Ammonia	0.477	0.500	95	90-110		350.1 cal_00509
86	CCV	13:07	Ammonia	2.35	2.50	94	90-110		350.1 cal_00509
87	CCB	13:09	Ammonia	0.0323				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Analyst: SVC Batch Start Date: 11/15/2021

Reporting Units: mg/L Analytical Batch No.: 557562

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	17:47	Nitrogen, Total Kjeldahl	5.09	5.00	102	90-110		TKN ICV 25_00112
8	ICB	17:47	Nitrogen, Total Kjeldahl	1.0				U	
18	CCV	17:52	Nitrogen, Total Kjeldahl	4.94	5.00	99	90-110		TKN 25ppm_00826
19	CCB	17:53	Nitrogen, Total Kjeldahl	1.0				U	
30	CCV	17:58	Nitrogen, Total Kjeldahl	5.04	5.00	101	90-110		TKN 25ppm_00826
31	CCB	17:58	Nitrogen, Total Kjeldahl	1.0				U	
36	CCV	18:00	Nitrogen, Total Kjeldahl	4.94	5.00	99	90-110		TKN 25ppm_00826
37	CCB	18:01	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.: 280-155015-1

SDG No.:

Analyst: SVC Batch Start Date: 11/17/2021

Reporting Units: mg/L Analytical Batch No.: 557899

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	19:34	Nitrogen, Total Kjeldahl	5.09	5.00	102	90-110		TKN ICV 25_00112
8	ICB	19:34	Nitrogen, Total Kjeldahl	1.0				U	
44	CCV	19:51	Nitrogen, Total Kjeldahl	5.01	5.00	100	90-110		TKN 25ppm_00826
45	CCB	19:51	Nitrogen, Total Kjeldahl	1.0				U	
57	CCV	20:46	Nitrogen, Total Kjeldahl	5.09	5.00	102	90-110		TKN 25ppm_00826
58	CCB	20:46	Nitrogen, Total Kjeldahl	1.0				U	
66	CCV	20:50	Nitrogen, Total Kjeldahl	5.15	5.00	103	90-110		TKN 25ppm_00826
67	CCV	20:50	Nitrogen, Total Kjeldahl	5.06	5.00	101	90-110		TKN 25ppm_00826
68	CCB	20:51	Nitrogen, Total Kjeldahl	1.0				U	
69	CCB	20:51	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.: 280-155015-1

SDG No.:

Analyst: SVC Batch Start Date: 11/17/2021

Reporting Units: mg/L Analytical Batch No.: 557898

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	16:59	Nitrate Nitrite as N	4.82	5.00	96	90-110		NXN ICV INT_00577
18	ICVL	17:01	Nitrate Nitrite as N	1.92	2.00	96	90-110		NXN ICV INT_00577
19	ICB	17:03	Nitrate Nitrite as N	0.050				U	
35	CCV	17:35	Nitrate Nitrite as N	5.13	5.00	103	90-110		NXN CAL INT_00601
36	CCVL	17:37	Nitrate Nitrite as N	0.994	1.00	99	90-110		NXN CAL INT_00601
37	CCB	17:39	Nitrate Nitrite as N	0.050				U	
51	CCV	18:08	Nitrate Nitrite as N	5.31	5.00	106	90-110		NXN CAL INT_00601
52	CCVL	18:10	Nitrate Nitrite as N	1.08	1.00	108	90-110		NXN CAL INT_00601
53	CCB	18:12	Nitrate Nitrite as N	0.050				U	
68	CCV	18:42	Nitrate Nitrite as N	5.29	5.00	106	90-110		NXN CAL INT_00601
69	CCVL	18:44	Nitrate Nitrite as N	1.09	1.00	109	90-110		NXN CAL INT_00601
70	CCB	18:46	Nitrate Nitrite as N	0.050				U	
84	CCV	19:14	Nitrate Nitrite as N	5.20	5.00	104	90-110		NXN CAL INT_00601
85	CCVL	19:16	Nitrate Nitrite as N	1.06	1.00	106	90-110		NXN CAL INT_00601
86	CCB	19:18	Nitrate Nitrite as N	0.0202				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Analyst: SPG Batch Start Date: 11/01/2021

Reporting Units: mg/L Analytical Batch No.: 555743

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	18:54	Sulfate	81.4	80.0	102	90-110		IC SO4 ICV_00022
9	ICB	19:09	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.: 280-155015-1

SDG No.:

Analyst: CJ Batch Start Date: 11/14/2021

Reporting Units: mg/L Analytical Batch No.: 557417

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	19:07	Sulfate	80.7	80.0	101	90-110		IC SO4 ICV_00022
9	ICB	19:24	Sulfate	2.5				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Analyst: SPG Batch Start Date: 11/19/2021

Reporting Units: mg/L Analytical Batch No.: 558087

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:50	Sulfate	95.9	100	96	90-110		IC LCS_01845
2	CCB	10:05	Sulfate	2.5				U	
17	CCV	13:50	Sulfate	98.8	100	99	90-110		IC LCS_01845
18	CCB	14:05	Sulfate	2.5				U	
62	CCV	00:50	Sulfate	98.2	100	98	90-110		IC LCS_01845
63	CCB	01:05	Sulfate	2.5				U	
74	CCV	03:51	Sulfate	98.2	100	98	90-110		IC LCS_01845
75	CCB	04:06	Sulfate	2.5				U	
86	CCV	06:51	Sulfate	97.9	100	98	90-110		IC LCS_01845
87	CCB	07:06	Sulfate	2.5				U	
96	CCV	09:20	Sulfate	98.1	100	98	90-110		IC LCS_01845
97	CCB	09:35	Sulfate	2.5				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Analyst: CJ Batch Start Date: 11/23/2021

Reporting Units: mg/L Analytical Batch No.: 558471

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:27	Sulfate	96.6	100	97	90-110		IC LCS_01845
2	CCB	10:43	Sulfate	2.5				U	
15	CCV	14:24	Sulfate	98.6	100	99	90-110		IC LCS_01845
16	CCB	14:40	Sulfate	2.5				U	

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.: 280-155015-1

SDG No.:

Analyst: RAF Batch Start Date: 11/03/2021

Reporting Units: mg/L Analytical Batch No.: 556162

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:57	Dissolved Organic Carbon - Quad	19.1	20.0	95	90-110		TOC ICV Std_00047
2	ICB	16:12	Dissolved Organic Carbon - Quad	0.80				U	
27	CCV	22:39	Dissolved Organic Carbon - Quad	24.7	25.0	99	90-110		TOC LCS Std_00052
28	CCB	22:54	Dissolved Organic Carbon - Quad	0.80				U	
39	CCV	01:44	Dissolved Organic Carbon - Quad	25.1	25.0	100	90-110		TOC LCS Std_00052
40	CCB	01:59	Dissolved Organic Carbon - Quad	0.80				U	
51	CCV	04:43	Dissolved Organic Carbon - Quad	24.7	25.0	99	90-110		TOC LCS Std_00052
52	CCB	04:58	Dissolved Organic Carbon - Quad	0.80				U	
57	CCV	06:12	Dissolved Organic Carbon - Quad	24.9	25.0	100	90-110		TOC LCS Std_00052
58	CCB	06:27	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.: 280-155015-1

SDG No.:

Analyst: ECC Batch Start Date: 11/13/2021

Reporting Units: mg/L Analytical Batch No.: 557616

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
69	CCV	02:23	Total Alkalinity as CaCO3	207	200	103	90-110		Alk daily lcs 01005
70	CCB	02:28	Total Alkalinity as CaCO3	6.4				U	
81	CCV	03:42	Total Alkalinity as CaCO3	208	200	104	90-110		Alk daily lcs 01005
82	CCB	03:47	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.: 280-155015-1

SDG No.:

Analyst: ECC Batch Start Date: 11/16/2021

Reporting Units: mg/L Analytical Batch No.: 557846

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	19:09	Total Alkalinity as CaCO3	214	200	107	90-110		Alk daily lcs 01006
18	CCB	19:15	Total Alkalinity as CaCO3	4.04				J	
29	CCV	20:53	Total Alkalinity as CaCO3	213	200	106	90-110		Alk daily lcs 01006
30	CCB	20:59	Total Alkalinity as CaCO3	4.21				J	
43	CCV	22:49	Total Alkalinity as CaCO3	214	200	107	90-110		Alk daily lcs 01006
44	CCB	22:55	Total Alkalinity as CaCO3	3.77				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Analyst: ECC Batch Start Date: 11/17/2021

Reporting Units: mg/L Analytical Batch No.: 557935

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	18:02	Total Alkalinity as CaCO3	213	200	107	90-110		Alk daily lcs 01006
17	CCB	18:08	Total Alkalinity as CaCO3	4.42				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 558000 Date: 11/18/2021 11:53							
350.1	MB 280-558000/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558000 Date: 11/18/2021 12:31							
350.1	MB 280-558000/39	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558260 Date: 11/21/2021 11:02							
350.1	MB 280-558260/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558390 Date: 11/22/2021 10:46							
350.1	MB 280-558390/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558390 Date: 11/22/2021 11:56							
350.1	MB 280-558390/55	Ammonia	0.0268	J	mg/L	0.10	1
Batch ID: 557562 Date: 11/15/2021 17:47 Prep Batch: 557418 Date: 11/14/2021 16:04							
351.2	MB 280-557418/12-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 557899 Date: 11/17/2021 19:47 Prep Batch: 557730 Date: 11/16/2021 18:07							
351.2	MB 280-557730/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 557898 Date: 11/17/2021 17:09							
353.2	MB 280-557898/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 557898 Date: 11/17/2021 18:28							
353.2	MB 280-557898/61	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 556193 Date: 11/04/2021 11:26 Prep Batch: 556178 Date: 11/04/2021 10:32							
9034	MB 280-556178/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 556496 Date: 11/07/2021 12:16 Prep Batch: 556494 Date: 11/07/2021 11:29							
9034	MB 280-556494/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 558087 Date: 11/19/2021 11:05							
9056A	MB 280-558087/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 558087 Date: 11/20/2021 01:50							
9056A	MB 280-558087/66	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 558471 Date: 11/23/2021 11:48							
9056A	MB 280-558471/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 556162 Date: 11/04/2021 00:45							
9060A	MB 280-556007/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 557616 Date: 11/13/2021 01:18							
SM 2320B	MB 280-557616/58	Total Alkalinity as CaCO3	3.11	J	mg/L	10	1
Batch ID: 557846 Date: 11/16/2021 18:06							
SM 2320B	MB 280-557846/6	Total Alkalinity as CaCO3	5.37	J	mg/L	10	1
Batch ID: 557846 Date: 11/16/2021 21:11							
SM 2320B	MB 280-557846/32	Total Alkalinity as CaCO3	4.41	J	mg/L	10	1
Batch ID: 557935 Date: 11/17/2021 16:22							
SM 2320B	MB 280-557935/5	Total Alkalinity as CaCO3	5.76	J	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558390 Date: 11/22/2021 10:50											
350.1	280-155015-12	Ammonia	0.076	J	mg/L						
350.1	280-155015-12 MS	Ammonia	1.05		mg/L	1.00	97	90-110			
Batch ID: 556193 Date: 11/04/2021 11:26 Prep Batch: 556178 Date: 11/04/2021 10:32											
9034	280-155015-6	Sulfide	1.9	U	mg/L						
9034	280-155015-6 MS	Sulfide	16.0		mg/L	19.5	82	44-110			
Batch ID: 558087 Date: 11/20/2021 06:21											
9056A	280-155015-8	Sulfate	22		mg/L						
9056A	280-155015-8 MS	Sulfate	69.8		mg/L	50.0	95	87-112			
Batch ID: 556162 Date: 11/04/2021 05:12											
9060A	280-155015-10	Dissolved Organic Carbon - Quad	8.4		mg/L						
9060A	280-155015-10 MS	Dissolved Organic Carbon - Quad	34.2		mg/L	25.0	103	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.: 280-155015-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558390 Date: 11/22/2021 10:52											
350.1	280-155015-12 MSD	Ammonia	1.09		mg/L	1.00	101	90-110	4	10	
Batch ID: 556193 Date: 11/04/2021 11:26 Prep Batch: 556178 Date: 11/04/2021 10:32											
9034	280-155015-6 MSD	Sulfide	15.2		mg/L	19.5	78	44-110	5	20	
Batch ID: 558087 Date: 11/20/2021 06:36											
9056A	280-155015-8 MSD	Sulfate	71.0		mg/L	50.0	98	87-112	2	10	
Batch ID: 556162 Date: 11/04/2021 05:27											
9060A	280-155015-10 MSD	Dissolved Organic Carbon - Quad	34.2		mg/L	25.0	103	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.: 280-155015-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 558087 Date: 11/20/2021 06:06								
9056A	EW7-PM28A-7-25	280-155015-8	Sulfate	22	mg/L			
9056A	EW7-PM28A-7-25	280-155015-8 DU	Sulfate	22.2	mg/L	0	10	
Batch ID: 557846 Date: 11/16/2021 21:30								
SM 2320B	EW7-PM26B-7-35	280-155015-5	Total Alkalinity as CaCO3	560	mg/L			
SM 2320B	EW7-PM26B-7-35	280-155015-5 DU	Total Alkalinity as CaCO3	567	mg/L	0.7	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.: 280-155015-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558000	Date: 11/18/2021 11:49										
						LCS Source: 350.1 cal_00508					
350.1	LCS 280-558000/18	Ammonia	2.44		mg/L	2.50	98	90-110	0	10	
Batch ID: 558000	Date: 11/18/2021 12:27										
						LCS Source: 350.1 cal_00508					
350.1	LCS 280-558000/37	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558260	Date: 11/21/2021 10:58										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558260/18	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558390	Date: 11/22/2021 10:42										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558390/18	Ammonia	2.51		mg/L	2.50	100	90-110	0	10	
Batch ID: 558390	Date: 11/22/2021 11:52										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558390/53	Ammonia	2.52		mg/L	2.50	101	90-110	1	10	
Batch ID: 557562	Date: 11/15/2021 17:47	Prep Batch: 557418	Date: 11/14/2021 16:04								
						LCS Source: TKN 25ppm_00826					
351.2	LCS 280-557418/11-A	Nitrogen, Total Kjeldahl	5.85		mg/L	6.00	98	90-110			
Batch ID: 557899	Date: 11/17/2021 19:47	Prep Batch: 557730	Date: 11/16/2021 18:07								
						LCS Source: TKN 25ppm_00826					
351.2	LCS 280-557730/1-A	Nitrogen, Total Kjeldahl	5.71		mg/L	6.00	95	90-110			
Batch ID: 557898	Date: 11/17/2021 17:07										
						LCS Source: NXN CAL INT_00601					
353.2	LCS 280-557898/21	Nitrate Nitrite as N	5.00		mg/L	5.00	100	90-110			
Batch ID: 557898	Date: 11/17/2021 18:24										
						LCS Source: NXN CAL INT_00601					
353.2	LCS 280-557898/59	Nitrate Nitrite as N	5.35		mg/L	5.00	107	90-110	5	10	
Batch ID: 556193	Date: 11/04/2021 11:26	Prep Batch: 556178	Date: 11/04/2021 10:32								
						LCS Source: SFD ICV INT_02019					
9034	LCS 280-556178/1-A	Sulfide	16.8		mg/L	19.5	86	44-110			
Batch ID: 556496	Date: 11/07/2021 12:16	Prep Batch: 556494	Date: 11/07/2021 11:29								
						LCS Source: SFD ICV INT_02020					
9034	LCS 280-556494/1-A	Sulfide	16.0		mg/L	21.3	75	44-110			

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.: 280-155015-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558087	Date: 11/20/2021 01:20										
						LCS Source: IC LCS_01845					
9056A	LCS 280-558087/64	Sulfate	98.5		mg/L	100	98	87-112	0	10	
Batch ID: 558471	Date: 11/23/2021 11:16										
						LCS Source: IC LCS_01845					
9056A	LCS 280-558471/4	Sulfate	96.4		mg/L	100	96	87-112	0	10	
Batch ID: 556162	Date: 11/04/2021 00:30										
						LCS Source: TOC LCS Std_00052					
9060A	LCS 280-556007/1-A	Dissolved Organic Carbon - Quad	24.6		mg/L	25.0	98	88-112			
Batch ID: 557616	Date: 11/13/2021 01:13										
						LCS Source: Alk daily lcs_01005					
SM 2320B	LCS 280-557616/57	Total Alkalinity as CaCO3	207		mg/L	200	103	89-109			
Batch ID: 557846	Date: 11/16/2021 21:05										
						LCS Source: Alk daily lcs_01006					
SM 2320B	LCS 280-557846/31	Total Alkalinity as CaCO3	212		mg/L	200	106	89-109			
Batch ID: 557935	Date: 11/17/2021 16:16										
						LCS Source: Alk daily lcs_01006					
SM 2320B	LCS 280-557935/4	Total Alkalinity as CaCO3	212		mg/L	200	106	89-109			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558000	Date: 11/18/2021 11:51										
						LCSD Source: 350.1 cal_00508					
350.1	LCSD 280-558000/19	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558000	Date: 11/18/2021 12:29										
						LCSD Source: 350.1 cal_00508					
350.1	LCSD 280-558000/38	Ammonia	2.44		mg/L	2.50	97	90-110	0	10	
Batch ID: 558260	Date: 11/21/2021 11:00										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558260/19	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558390	Date: 11/22/2021 10:44										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558390/19	Ammonia	2.51		mg/L	2.50	100	90-110	0	10	
Batch ID: 558390	Date: 11/22/2021 11:54										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558390/54	Ammonia	2.53		mg/L	2.50	101	90-110	1	10	
Batch ID: 557898	Date: 11/17/2021 18:26										
						LCSD Source: NXN CAL INT_00601					
353.2	LCSD 280-557898/60	Nitrate Nitrite as N	5.07		mg/L	5.00	101	90-110	5	10	
Batch ID: 558087	Date: 11/20/2021 01:35										
						LCSD Source: IC LCS_01845					
9056A	LCSD 280-558087/65	Sulfate	98.6		mg/L	100	99	87-112	0	10	
Batch ID: 558471	Date: 11/23/2021 11:32										
						LCSD Source: IC LCS_01845					
9056A	LCSD 280-558471/5	Sulfate	96.6		mg/L	100	97	87-112	0	10	
Batch ID: 557846	Date: 11/16/2021 18:00										
						LCSD Source: Alk daily lcs_01006					
SM 2320B	LCSD 280-557846/5	Total Alkalinity as CaCO3	209		mg/L	200	105	89-109	1	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558087	Date: 11/19/2021 10:20										
						LCS Source: IC CAL cl/so4_00394					
9056A	MRL 280-558087/3	Sulfate	2.54	J	mg/L	5.00	51	50-150			
Batch ID: 558471	Date: 11/23/2021 10:59										
						LCS Source: IC CAL cl/so4_00394					
9056A	MRL 280-558471/3	Sulfate	4.08	J	mg/L	5.00	82	50-150			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

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: 280-155015-1

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: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_GAL1

Method: 351.2 DL Date: 02/03/2019 00:00

Prep Method: 351.2

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_GAL1

Method: 351.2 XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

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: 280-155015-1

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: 280-155015-1

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: 280-155015-1

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: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

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: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI4

Method: 9060A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI4

Method: 9060A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

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: 280-155015-1

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

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC-AT3

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: 280-155015-1

SDG Number:

Matrix: Water Instrument ID: WC-AT3

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.: 280-155015-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-557418/11-A	11/14/2021 16:04	557418		25	25
MB 280-557418/12-A	11/14/2021 16:04	557418		25	25
280-155015-4	11/14/2021 16:04	557418		25	25
280-155015-6	11/14/2021 16:04	557418		25	25
280-155015-7	11/14/2021 16:04	557418		25	25
280-155015-9	11/14/2021 16:04	557418		25	25
280-155015-10	11/14/2021 16:04	557418		25	25
280-155015-11	11/14/2021 16:04	557418		25	25
280-155015-12	11/14/2021 16:04	557418		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-557730/1-A	11/16/2021 18:07	557730		25	25
MB 280-557730/2-A	11/16/2021 18:07	557730		25	25
280-155015-1	11/16/2021 18:07	557730		5	25
280-155015-2	11/16/2021 18:07	557730		15	25
280-155015-3	11/16/2021 18:07	557730		15	25
280-155015-5	11/16/2021 18:07	557730		5	25
280-155015-8	11/16/2021 18:07	557730		15	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556178/1-A	11/04/2021 10:32	556178		50	50
MB 280-556178/2-A	11/04/2021 10:32	556178		50	50
280-155015-6	11/04/2021 10:32	556178		50	50
280-155015-6 MS	11/04/2021 10:32	556178		50	50
280-155015-6 MSD	11/04/2021 10:32	556178		50	50
280-155015-4	11/04/2021 10:32	556178		50	50
280-155015-5	11/04/2021 10:32	556178		50	50
280-155015-7	11/04/2021 10:32	556178		50	50
280-155015-8	11/04/2021 10:32	556178		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556494/1-A	11/07/2021 11:29	556494		50	50
MB 280-556494/2-A	11/07/2021 11:29	556494		50	50
280-155015-1	11/07/2021 11:29	556494		50	50
280-155015-2	11/07/2021 11:29	556494		50	50
280-155015-3	11/07/2021 11:29	556494		50	50
280-155015-9	11/07/2021 11:29	556494		50	50
280-155015-10	11/07/2021 11:29	556494		50	50
280-155015-11	11/07/2021 11:29	556494		50	50
280-155015-12	11/07/2021 11:29	556494		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/18/2021 11:15 End Date: 11/18/2021 13:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:15																									
ZZZZZZ			11:17																									
ZZZZZZ			11:19																									
IC 280-558000/4			11:21	X																								
IC 280-558000/5			11:23	X																								
IC 280-558000/6			11:25	X																								
IC 280-558000/7			11:27	X																								
IC 280-558000/8			11:29	X																								
IC 280-558000/9			11:31	X																								
IC 280-558000/10			11:33	X																								
IC 280-558000/11			11:35	X																								
ZZZZZZ			11:37																									
ZZZZZZ			11:39																									
ICVL 280-558000/14	1		11:41	X																								
ICV 280-558000/15	1		11:43	X																								
ICB 280-558000/16	1		11:45	X																								
ZZZZZZ			11:47																									
LCS 280-558000/18	1	T	11:49	X																								
LCSD 280-558000/19	1	T	11:51	X																								
MB 280-558000/20	1	T	11:53	X																								
ZZZZZZ			11:55																									
ZZZZZZ			11:57																									
ZZZZZZ			11:59																									
280-155015-1	10	T	12:01	X																								
ZZZZZZ			12:03																									
ZZZZZZ			12:05																									
ZZZZZZ			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									
ZZZZZZ			12:13																									
ZZZZZZ			12:15																									
ZZZZZZ			12:17																									
CCVL 280-558000/33	1		12:19	X																								
CCV 280-558000/34	1		12:21	X																								
CCB 280-558000/35	1		12:23	X																								
ZZZZZZ			12:25																									
LCS 280-558000/37	1	T	12:27	X																								
LCSD 280-558000/38	1	T	12:29	X																								
MB 280-558000/39	1	T	12:31	X																								
ZZZZZZ			12:33																									
ZZZZZZ			12:35																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/18/2021 11:15 End Date: 11/18/2021 13:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
280-155015-5	10	T	12:43	X																								
280-155015-2	10	T	12:45	X																								
280-155015-3	10	T	12:47	X																								
280-155015-4	10	T	12:49	X																								
280-155015-6	10	T	12:51	X																								
ZZZZZZ			12:53																									
ZZZZZZ			12:55																									
CCVL 280-558000/52	1		12:57	X																								
CCV 280-558000/53	1		12:59	X																								
CCB 280-558000/54	1		13:01	X																								
ZZZZZZ			13:03																									
280-155015-7	10	T	13:05	X																								
280-155015-8	10	T	13:07	X																								
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
CCVL 280-558000/61	1		13:19	X																								
CCV 280-558000/62	1		13:21	X																								
CCB 280-558000/63	1		13:23	X																								
ZZZZZZ			13:25																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 10:23 End Date: 11/21/2021 12:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:23																									
ZZZZZZ			10:25																									
ZZZZZZ			10:27																									
IC 280-558260/4			10:29	X																								
IC 280-558260/5			10:31	X																								
IC 280-558260/6			10:34	X																								
IC 280-558260/7			10:36	X																								
IC 280-558260/8			10:38	X																								
IC 280-558260/9			10:40	X																								
IC 280-558260/10			10:42	X																								
IC 280-558260/11			10:44	X																								
ZZZZZZ			10:46																									
ZZZZZZ			10:48																									
ICVL 280-558260/14	1		10:50	X																								
ICV 280-558260/15	1		10:52	X																								
ICB 280-558260/16	1		10:54	X																								
ZZZZZZ			10:56																									
LCS 280-558260/18	1	T	10:58	X																								
LCSD 280-558260/19	1	T	11:00	X																								
MB 280-558260/20	1	T	11:02	X																								
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:08																									
ZZZZZZ			11:10																									
ZZZZZZ			11:12																									
280-155015-9	1	T	11:14	X																								
280-155015-11	1	T	11:16	X																								
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
ZZZZZZ			11:22																									
ZZZZZZ			11:24																									
ZZZZZZ			11:26																									
CCVL 280-558260/33	1		11:28	X																								
CCV 280-558260/34	1		11:30	X																								
CCB 280-558260/35	1		11:32	X																								
ZZZZZZ			11:34																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
ZZZZZZ			11:40																									
ZZZZZZ			11:42																									
ZZZZZZ			11:44																									

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 10:23 End Date: 11/21/2021 12:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:46																									
ZZZZZZ			11:48																									
ZZZZZZ			11:50																									
ZZZZZZ			11:52																									
ZZZZZZ			11:54																									
ZZZZZZ			11:56																									
ZZZZZZ			11:58																									
CCVL 280-558260/49			12:00																									
CCV 280-558260/50			12:02																									
CCB 280-558260/51			12:04																									
ZZZZZZ			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:10																									
ZZZZZZ			12:12																									
ZZZZZZ			12:14																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:08																									
ZZZZZZ			10:10																									
ZZZZZZ			10:12																									
IC 280-558390/4			10:14	X																								
IC 280-558390/5			10:16	X																								
IC 280-558390/6			10:18	X																								
IC 280-558390/7			10:20	X																								
IC 280-558390/8			10:22	X																								
IC 280-558390/9			10:24	X																								
IC 280-558390/10			10:26	X																								
IC 280-558390/11			10:28	X																								
ZZZZZZ			10:30																									
ZZZZZZ			10:32																									
ICVL 280-558390/14	1		10:34	X																								
ICV 280-558390/15	1		10:36	X																								
ICB 280-558390/16	1		10:38	X																								
ZZZZZZ			10:40																									
LCS 280-558390/18	1	T	10:42	X																								
LCSD 280-558390/19	1	T	10:44	X																								
MB 280-558390/20	1	T	10:46	X																								
280-155015-12	1	T	10:48	X																								
280-155015-12 MS	1	T	10:50	X																								
280-155015-12 MSD	1	T	10:52	X																								
ZZZZZZ			10:54																									
ZZZZZZ			10:56																									
ZZZZZZ			10:58																									
ZZZZZZ			11:00																									
ZZZZZZ			11:02																									
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:08																									
ZZZZZZ			11:10																									
CCVL 280-558390/33	1		11:12	X																								
CCV 280-558390/34	1		11:14	X																								
CCB 280-558390/35	1		11:16	X																								
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
ZZZZZZ			11:22																									
ZZZZZZ			11:24																									
ZZZZZZ			11:26																									
ZZZZZZ			11:28																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:30																									
ZZZZZZ			11:32																									
ZZZZZZ			11:34																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
ZZZZZZ			11:40																									
ZZZZZZ			11:42																									
CCVL 280-558390/49			11:44																									
CCV 280-558390/50	1		11:46	X																								
CCB 280-558390/51	1		11:48	X																								
ZZZZZZ			11:50																									
LCS 280-558390/53	1	T	11:52	X																								
LCSD 280-558390/54	1	T	11:54	X																								
MB 280-558390/55	1	T	11:56	X																								
ZZZZZZ			11:58																									
ZZZZZZ			12:00																									
ZZZZZZ			12:02																									
ZZZZZZ			12:04																									
ZZZZZZ			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:10																									
ZZZZZZ			12:12																									
ZZZZZZ			12:14																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
ZZZZZZ			12:22																									
CCVL 280-558390/69	1		12:24	X																								
CCV 280-558390/70	1		12:26	X																								
CCB 280-558390/71	1		12:28	X																								
ZZZZZZ			12:30																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
ZZZZZZ			12:40																									
ZZZZZZ			12:42																									
ZZZZZZ			12:53																									
ZZZZZZ			12:55																									
ZZZZZZ			12:57																									
280-155015-10	2	T	12:59	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			13:01																									
ZZZZZZ			13:03																									
CCVL 280-558390/85	1		13:05	X																								
CCV 280-558390/86	1		13:07	X																								
CCB 280-558390/87	1		13:09	X																								
ZZZZZZ			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
ZZZZZZ			13:21																									
ZZZZZZ			13:23																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
ZZZZZZ			13:31																									
ZZZZZZ			13:33																									
ZZZZZZ			13:35																									
ZZZZZZ			13:37																									
ZZZZZZ			13:39																									
ZZZZZZ			13:41																									
ZZZZZZ			13:43																									
ZZZZZZ			13:45																									
ZZZZZZ			13:47																									
ZZZZZZ			13:54																									
ZZZZZZ			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:39																									
ZZZZZZ			14:41																									
ZZZZZZ			14:43																									
ZZZZZZ			14:45																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/15/2021 18:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
IC 280-557418/1-A			17:04	X																								
IC 280-557418/2-A			17:04	X																								
IC 280-557418/3-A			17:05	X																								
IC 280-557418/4-A			17:05	X																								
IC 280-557418/5-A			17:05	X																								
IC 280-557418/6-A			17:05	X																								
ICV 280-557418/7-A	1		17:47	X																								
ICB 280-557418/8-A	1		17:47	X																								
LCS 280-557418/11-A	1	T	17:47	X																								
MB 280-557418/12-A	1	T	17:47	X																								
ZZZZZZ			17:49																									
ZZZZZZ			17:50																									
ZZZZZZ			17:50																									
ZZZZZZ			17:51																									
280-155015-4	1	T	17:51	X																								
280-155015-6	1	T	17:52	X																								
280-155015-7	1	T	17:52	X																								
CCV 280-557418/9-A	1		17:52	X																								
CCB 280-557418/10-A	1		17:53	X																								
ZZZZZZ			17:53																									
280-155015-9	1	T	17:53	X																								
ZZZZZZ			17:55																									
ZZZZZZ			17:55																									
ZZZZZZ			17:55																									
ZZZZZZ			17:55																									
ZZZZZZ			17:56																									
ZZZZZZ			17:56																									
ZZZZZZ			17:57																									
280-155015-10	1	T	17:57	X																								
CCV 280-557418/9-A	1		17:58	X																								
CCB 280-557418/10-A	1		17:58	X																								
280-155015-11	1	T	17:59	X																								
280-155015-12	1	T	17:59	X																								
ZZZZZZ			18:00																									
ZZZZZZ			18:00																									
CCV 280-557418/9-A	1		18:00	X																								
CCB 280-557418/10-A	1		18:01	X																								
ZZZZZZ			18:15																									
ZZZZZZ			18:15																									
ZZZZZZ			18:17																									
CCV 280-557418/9-A			18:47																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/15/2021 18:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
CCB 280-557418/10-A			18:47																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/17/2021 20:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
IC 280-557418/1-A			17:04	X																								
IC 280-557418/2-A			17:04	X																								
IC 280-557418/3-A			17:05	X																								
IC 280-557418/4-A			17:05	X																								
IC 280-557418/5-A			17:05	X																								
IC 280-557418/6-A			17:05	X																								
ICV 280-557418/7-A	1		19:34	X																								
ICB 280-557418/8-A	1		19:34	X																								
ZZZZZZ			19:34																									
ZZZZZZ			19:34																									
ZZZZZZ			19:35																									
ZZZZZZ			19:35																									
ZZZZZZ			19:35																									
ZZZZZZ			19:35																									
ZZZZZZ			19:36																									
ZZZZZZ			19:37																									
ZZZZZZ			19:38																									
ZZZZZZ			19:38																									
ZZZZZZ			19:39																									
ZZZZZZ			19:39																									
CCV 280-557418/9-A			19:39																									
CCB 280-557418/10-A			19:39																									
ZZZZZZ			19:40																									
ZZZZZZ			19:40																									
ZZZZZZ			19:42																									
ZZZZZZ			19:42																									
ZZZZZZ			19:42																									
ZZZZZZ			19:42																									
ZZZZZZ			19:43																									
ZZZZZZ			19:43																									
ZZZZZZ			19:43																									
CCV 280-557418/9-A			19:45																									
CCB 280-557418/10-A			19:45																									
ZZZZZZ			19:46																									
ZZZZZZ			19:46																									
ZZZZZZ			19:47																									
ZZZZZZ			19:47																									
LCS 280-557730/1-A	1	T	19:47	X																								
MB 280-557730/2-A	1	T	19:47	X																								
ZZZZZZ			19:48																									
ZZZZZZ			19:48																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/17/2021 20:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			19:49																									
ZZZZZZ			19:49																									
CCV 280-557418/9-A	1		19:51	X																								
CCB 280-557418/10-A	1		19:51	X																								
ZZZZZZ			19:51																									
ZZZZZZ			19:51																									
ZZZZZZ			19:52																									
ZZZZZZ			19:52																									
ZZZZZZ			19:52																									
ZZZZZZ			19:52																									
ZZZZZZ			19:54																									
ZZZZZZ			19:54																									
ZZZZZZ			19:55																									
ZZZZZZ			19:55																									
ZZZZZZ			20:46																									
CCV 280-557418/9-A	1		20:46	X																								
CCB 280-557418/10-A	1		20:46	X																								
280-155015-1	1	T	20:46	X																								
280-155015-2	1	T	20:47	X																								
280-155015-3	1	T	20:47	X																								
280-155015-5	1	T	20:47	X																								
ZZZZZZ			20:48																									
280-155015-8	1	T	20:49	X																								
ZZZZZZ			20:49																									
CCV 280-557418/9-A	1		20:50	X																								
CCV 280-557418/9-A	1		20:50	X																								
CCB 280-557418/10-A	1		20:51	X																								
CCB 280-557418/10-A	1		20:51	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/17/2021 16:27 End Date: 11/17/2021 19:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			16:27																									
ZZZZZZ			16:29																									
ZZZZZZ			16:31																									
ZZZZZZ			16:33																									
IC 280-557898/5			16:35	X																								
IC 280-557898/6			16:37	X																								
IC 280-557898/7			16:39	X																								
IC 280-557898/8			16:41	X																								
IC 280-557898/9			16:43	X																								
IC 280-557898/10			16:45	X																								
IC 280-557898/11			16:47	X																								
IC 280-557898/12			16:49	X																								
IC 280-557898/13			16:51	X																								
ZZZZZZ			16:53																									
ZZZZZZ			16:55																									
ZZZZZZ			16:57																									
ICV 280-557898/17	1		16:59	X																								
ICVL 280-557898/18	1		17:01	X																								
ICB 280-557898/19	1		17:03	X																								
ZZZZZZ			17:05																									
LCS 280-557898/21	1	T	17:07	X																								
MB 280-557898/22	1	T	17:09	X																								
ZZZZZZ			17:11																									
ZZZZZZ			17:13																									
ZZZZZZ			17:15																									
ZZZZZZ			17:17																									
ZZZZZZ			17:19																									
ZZZZZZ			17:21																									
ZZZZZZ			17:23																									
ZZZZZZ			17:25																									
ZZZZZZ			17:27																									
ZZZZZZ			17:29																									
RINSE 280-557898/33			17:31																									
ZZZZZZ			17:33																									
CCV 280-557898/35	1		17:35	X																								
CCVL 280-557898/36	1		17:37	X																								
CCB 280-557898/37	1		17:39	X																								
ZZZZZZ			17:41																									
ZZZZZZ			17:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/17/2021 16:27 End Date: 11/17/2021 19:52

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:46	
ZZZZZZ			17:48	
ZZZZZZ			17:50	
ZZZZZZ			17:52	
280-155015-1	1	T	17:54	X
280-155015-2	1	T	17:56	X
280-155015-3	1	T	17:58	X
280-155015-4	1	T	18:00	X
280-155015-5	1	T	18:02	X
RINSE 280-557898/49			18:04	
ZZZZZZ			18:06	
CCV 280-557898/51	1		18:08	X
CCVL 280-557898/52	1		18:10	X
CCB 280-557898/53	1		18:12	X
ZZZZZZ			18:14	
280-155015-6	1	T	18:16	X
280-155015-7	1	T	18:18	X
280-155015-8	1	T	18:20	X
280-155015-9	1	T	18:22	X
LCS 280-557898/59	1	T	18:24	X
LCSD 280-557898/60	1	T	18:26	X
MB 280-557898/61	1	T	18:28	X
ZZZZZZ			18:30	
ZZZZZZ			18:32	
ZZZZZZ			18:34	
280-155015-10	1	T	18:36	X
RINSE 280-557898/66			18:38	
ZZZZZZ			18:40	
CCV 280-557898/68	1		18:42	X
CCVL 280-557898/69	1		18:44	X
CCB 280-557898/70	1		18:46	X
ZZZZZZ			18:48	
280-155015-11	1	T	18:50	X
280-155015-12	1	T	18:52	X
ZZZZZZ			18:54	
ZZZZZZ			18:56	
ZZZZZZ			18:58	
ZZZZZZ			19:00	
ZZZZZZ			19:02	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/17/2021 16:27 End Date: 11/17/2021 19:52

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			19:04	
ZZZZZZ			19:06	
ZZZZZZ			19:08	
RINSE 280-557898/82			19:10	
ZZZZZZ			19:12	
CCV 280-557898/84	1		19:14	X
CCVL 280-557898/85	1		19:16	X
CCB 280-557898/86	1		19:18	X
ZZZZZZ			19:20	
ZZZZZZ			19:22	
ZZZZZZ			19:24	
ZZZZZZ			19:26	
ZZZZZZ			19:28	
ZZZZZZ			19:30	
ZZZZZZ			19:32	
ZZZZZZ			19:34	
ZZZZZZ			19:36	
ZZZZZZ			19:38	
ZZZZZZ			19:40	
RINSE 280-557898/98			19:42	
ZZZZZZ			19:44	
CCV 280-557898/100			19:46	
CCVL 280-557898/101			19:48	
CCB 280-557898/102			19:50	
ZZZZZZ			19:52	

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/04/2021 11:26 End Date: 11/04/2021 11:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-556178/1-A	1	T	11:26	X																								
MB 280-556178/2-A	1	T	11:26	X																								
280-155015-6	1	T	11:26	X																								
280-155015-6 MS	1	T	11:26	X																								
280-155015-6 MSD	1	T	11:26	X																								
280-155015-4	1	T	11:26	X																								
280-155015-5	1	T	11:26	X																								
280-155015-7	1	T	11:26	X																								
280-155015-8	1	T	11:26	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/07/2021 12:16 End Date: 11/07/2021 12:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-556494/1-A	1	T	12:16	X																								
MB 280-556494/2-A	1	T	12:16	X																								
ZZZZZZ			12:16																									
ZZZZZZ			12:16																									
ZZZZZZ			12:16																									
ZZZZZZ			12:16																									
ZZZZZZ			12:16																									
ZZZZZZ			12:16																									
280-155015-1	1	T	12:16	X																								
280-155015-2	1	T	12:16	X																								
280-155015-3	1	T	12:16	X																								
280-155015-9	1	T	12:16	X																								
280-155015-10	1	T	12:16	X																								
280-155015-11	1	T	12:16	X																								
280-155015-12	1	T	12:16	X																								
ZZZZZZ			12:16																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/14/2021 17:29 End Date: 11/16/2021 04:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-557417/2 IC	1		17:29	X																								
STD 280-557417/3 IC	1		17:45	X																								
STD 280-557417/4 IC	1		18:02	X																								
STD 280-557417/5 IC	1		18:18	X																								
STD 280-557417/6 IC	1		18:35	X																								
STD 280-557417/7 IC	1		18:51	X																								
ICV 280-557417/8	1		19:07	X																								
ICB 280-557417/9	1		19:24	X																								
ZZZZZZ			19:40																									
ZZZZZZ			19:57																									
ZZZZZZ			20:13																									
ZZZZZZ			20:29																									
ZZZZZZ			09:40																									
ZZZZZZ			09:56																									
ZZZZZZ			10:12																									
ZZZZZZ			10:29																									
ZZZZZZ			10:45																									
ZZZZZZ			11:02																									
ZZZZZZ			11:18																									
ZZZZZZ			11:34																									
ZZZZZZ			11:51																									
ZZZZZZ			12:07																									
CCV 280-557417/24			12:24																									
CCB 280-557417/25			12:40																									
ZZZZZZ			12:56																									
ZZZZZZ			13:13																									
ZZZZZZ			13:29																									
ZZZZZZ			13:46																									
ZZZZZZ			14:02																									
ZZZZZZ			14:19																									
ZZZZZZ			14:35																									
ZZZZZZ			14:51																									
ZZZZZZ			15:08																									
ZZZZZZ			15:24																									
ZZZZZZ			15:41																									
CCV 280-557417/37			15:57																									
CCB 280-557417/38			16:13																									
ZZZZZZ			16:30																									
ZZZZZZ			16:46																									
ZZZZZZ			17:03																									
ZZZZZZ			17:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/14/2021 17:29 End Date: 11/16/2021 04:21

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
ZZZZZZ			17:36																										
ZZZZZZ			17:52																										
ZZZZZZ			18:08																										
CCV 280-557417/46			18:25																										
CCB 280-557417/47			18:41																										
ZZZZZZ			19:36																										
ZZZZZZ			19:52																										
ZZZZZZ			20:08																										
ZZZZZZ			20:25																										
ZZZZZZ			20:41																										
ZZZZZZ			20:58																										
ZZZZZZ			21:14																										
ZZZZZZ			21:31																										
ZZZZZZ			21:47																										
ZZZZZZ			22:03																										
CCV 280-557417/58			22:20																										
CCB 280-557417/59			22:36																										
ZZZZZZ			22:53																										
ZZZZZZ			23:09																										
ZZZZZZ			23:25																										
ZZZZZZ			23:42																										
ZZZZZZ			23:58																										
ZZZZZZ			00:15																										
ZZZZZZ			00:31																										
ZZZZZZ			00:48																										
ZZZZZZ			01:04																										
ZZZZZZ			01:20																										
CCV 280-557417/70			01:37																										
CCB 280-557417/71			01:53																										
ZZZZZZ			02:10																										
ZZZZZZ			02:26																										
ZZZZZZ			02:42																										
ZZZZZZ			02:59																										
ZZZZZZ			03:15																										
ZZZZZZ			03:32																										
ZZZZZZ			03:48																										
CCV 280-557417/79			04:05																										
CCB 280-557417/80			04:21																										

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/23/2021 10:27 End Date: 11/23/2021 14:40

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-558471/1	1		10:27	X																								
CCB 280-558471/2	1		10:43	X																								
MRL 280-558471/3	1	T	10:59	X																								
LCS 280-558471/4	1	T	11:16	X																								
LCSD 280-558471/5	1	T	11:32	X																								
MB 280-558471/6	1	T	11:48	X																								
ZZZZZZ			12:29																									
ZZZZZZ			12:45																									
ZZZZZZ			13:02																									
ZZZZZZ			13:18																									
ZZZZZZ			13:34																									
280-155015-12	5	T	13:51	X																								
ZZZZZZ			14:07																									
CCV 280-558471/15	1		14:24	X																								
CCB 280-558471/16	1		14:40	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/01/2021 17:25 End Date: 11/03/2021 17:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-555743/2 IC	1		17:25	X																								
STD 280-555743/3 IC	1		17:40	X																								
STD 280-555743/4 IC	1		17:55	X																								
STD 280-555743/5 IC	1		18:10	X																								
STD 280-555743/6 IC	1		18:25	X																								
STD 280-555743/7 IC	1		18:40	X																								
ICV 280-555743/8	1		18:54	X																								
ICB 280-555743/9	1		19:09	X																								
ZZZZZZ			19:24																									
ZZZZZZ			19:39																									
ZZZZZZ			19:54																									
ZZZZZZ			20:09																									
ZZZZZZ			12:13																									
ZZZZZZ			12:28																									
ZZZZZZ			12:43																									
ZZZZZZ			12:58																									
ZZZZZZ			13:13																									
ZZZZZZ			13:28																									
ZZZZZZ			13:43																									
ZZZZZZ			13:58																									
ZZZZZZ			14:13																									
ZZZZZZ			14:28																									
CCV 280-555743/24			14:43																									
CCB 280-555743/25			14:58																									
ZZZZZZ			15:13																									
ZZZZZZ			15:28																									
ZZZZZZ			15:43																									
ZZZZZZ			15:58																									
ZZZZZZ			16:13																									
ZZZZZZ			16:28																									
ZZZZZZ			16:43																									
ZZZZZZ			16:58																									
ZZZZZZ			17:13																									
ZZZZZZ			17:28																									
CCV 280-555743/36			17:43																									
CCB 280-555743/37			17:58																									
ZZZZZZ			18:13																									
ZZZZZZ			18:28																									
ZZZZZZ			18:43																									
ZZZZZZ			18:58																									
ZZZZZZ			19:13																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/01/2021 17:25 End Date: 11/03/2021 17:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			19:28																									
ZZZZZZ			19:43																									
ZZZZZZ			19:58																									
ZZZZZZ			20:13																									
ZZZZZZ			20:28																									
CCV 280-555743/48			20:43																									
CCB 280-555743/49			20:59																									
ZZZZZZ			21:14																									
ZZZZZZ			21:29																									
ZZZZZZ			21:44																									
ZZZZZZ			21:59																									
ZZZZZZ			22:14																									
ZZZZZZ			22:28																									
ZZZZZZ			22:43																									
ZZZZZZ			22:58																									
ZZZZZZ			23:13																									
ZZZZZZ			23:28																									
CCV 280-555743/60			23:43																									
CCB 280-555743/61			23:58																									
ZZZZZZ			00:13																									
ZZZZZZ			00:28																									
ZZZZZZ			00:43																									
ZZZZZZ			00:58																									
ZZZZZZ			01:13																									
ZZZZZZ			01:28																									
ZZZZZZ			01:43																									
ZZZZZZ			01:58																									
ZZZZZZ			02:13																									
ZZZZZZ			02:28																									
CCV 280-555743/72			02:43																									
CCB 280-555743/73			02:58																									
ZZZZZZ			03:13																									
ZZZZZZ			03:28																									
ZZZZZZ			03:43																									
ZZZZZZ			03:58																									
ZZZZZZ			04:13																									
ZZZZZZ			04:28																									
ZZZZZZ			04:43																									
ZZZZZZ			04:58																									
ZZZZZZ			05:13																									
CCV 280-555743/82			05:28																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/01/2021 17:25 End Date: 11/03/2021 17:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-555743/83			05:43																									
ZZZZZZ			05:58																									
ZZZZZZ			06:13																									
ZZZZZZ			06:28																									
ZZZZZZ			06:43																									
ZZZZZZ			06:58																									
ZZZZZZ			07:13																									
ZZZZZZ			07:28																									
ZZZZZZ			07:43																									
ZZZZZZ			07:58																									
ZZZZZZ			08:13																									
CCV 280-555743/95			08:28																									
CCB 280-555743/96			08:43																									
ZZZZZZ			08:58																									
ZZZZZZ			09:13																									
ZZZZZZ			09:28																									
ZZZZZZ			09:43																									
ZZZZZZ			09:58																									
ZZZZZZ			10:13																									
ZZZZZZ			10:28																									
ZZZZZZ			10:43																									
ZZZZZZ			10:58																									
ZZZZZZ			11:13																									
CCV 280-555743/107			11:28																									
CCB 280-555743/108			11:43																									
ZZZZZZ			11:58																									
ZZZZZZ			12:13																									
ZZZZZZ			12:28																									
ZZZZZZ			12:43																									
ZZZZZZ			12:58																									
ZZZZZZ			13:13																									
ZZZZZZ			13:28																									
ZZZZZZ			13:43																									
ZZZZZZ			13:58																									
ZZZZZZ			14:13																									
CCV 280-555743/119			14:28																									
CCB 280-555743/120			14:43																									
ZZZZZZ			14:58																									
ZZZZZZ			15:14																									
ZZZZZZ			15:29																									
ZZZZZZ			15:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/01/2021 17:25 End Date: 11/03/2021 17:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			15:59																									
ZZZZZZ			16:14																									
ZZZZZZ			16:29																									
ZZZZZZ			16:44																									
CCV 280-555743/129			16:59																									
CCB 280-555743/130			17:14																									

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/19/2021 09:50 End Date: 11/20/2021 09:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-558087/1	1		09:50	X																								
CCB 280-558087/2	1		10:05	X																								
MRL 280-558087/3	1	T	10:20	X																								
ZZZZZZ			10:35																									
ZZZZZZ			10:50																									
MB 280-558087/6	1	T	11:05	X																								
ZZZZZZ			11:20																									
ZZZZZZ			11:35																									
ZZZZZZ			11:50																									
ZZZZZZ			12:05																									
ZZZZZZ			12:20																									
ZZZZZZ			12:35																									
ZZZZZZ			12:50																									
ZZZZZZ			13:05																									
ZZZZZZ			13:20																									
ZZZZZZ			13:35																									
CCV 280-558087/17	1		13:50	X																								
CCB 280-558087/18	1		14:05	X																								
ZZZZZZ			14:20																									
ZZZZZZ			14:35																									
ZZZZZZ			14:50																									
ZZZZZZ			15:05																									
ZZZZZZ			15:20																									
ZZZZZZ			15:35																									
CCV 280-558087/25			15:50																									
CCB 280-558087/26			16:05																									
ZZZZZZ			16:20																									
ZZZZZZ			16:35																									
ZZZZZZ			16:51																									
ZZZZZZ			17:06																									
ZZZZZZ			17:21																									
ZZZZZZ			17:36																									
ZZZZZZ			17:51																									
ZZZZZZ			18:06																									
ZZZZZZ			18:21																									
ZZZZZZ			18:36																									
CCV 280-558087/38			18:51																									
CCB 280-558087/39			19:06																									
ZZZZZZ			19:21																									
ZZZZZZ			19:36																									
ZZZZZZ			19:51																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/19/2021 09:50 End Date: 11/20/2021 09:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			20:06																									
ZZZZZZ			20:21																									
ZZZZZZ			20:36																									
ZZZZZZ			20:51																									
ZZZZZZ			21:06																									
ZZZZZZ			21:21																									
ZZZZZZ			21:35																									
CCV 280-558087/50			21:50																									
CCB 280-558087/51			22:05																									
ZZZZZZ			22:20																									
ZZZZZZ			22:35																									
ZZZZZZ			22:50																									
ZZZZZZ			23:05																									
ZZZZZZ			23:20																									
ZZZZZZ			23:35																									
ZZZZZZ			23:50																									
ZZZZZZ			00:05																									
ZZZZZZ			00:20																									
ZZZZZZ			00:35																									
CCV 280-558087/62	1		00:50	X																								
CCB 280-558087/63	1		01:05	X																								
LCS 280-558087/64	1	T	01:20	X																								
LCSD 280-558087/65	1	T	01:35	X																								
MB 280-558087/66	1	T	01:50	X																								
ZZZZZZ			02:05																									
ZZZZZZ			02:20																									
ZZZZZZ			02:36																									
ZZZZZZ			02:51																									
ZZZZZZ			03:06																									
ZZZZZZ			03:21																									
280-155015-1	1	T	03:36	X																								
CCV 280-558087/74	1		03:51	X																								
CCB 280-558087/75	1		04:06	X																								
280-155015-2	1	T	04:21	X																								
280-155015-3	1	T	04:36	X																								
280-155015-4	1	T	04:51	X																								
280-155015-5	1	T	05:06	X																								
280-155015-6	1	T	05:21	X																								
280-155015-7	1	T	05:36	X																								
280-155015-8	1	T	05:51	X																								
280-155015-8 DU	1	T	06:06	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 11/19/2021 09:50 End Date: 11/20/2021 09:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
280-155015-8 MS	1	T	06:21	X																								
280-155015-8 MSD	1	T	06:36	X																								
CCV 280-558087/86	1		06:51	X																								
CCB 280-558087/87	1		07:06	X																								
280-155015-9	1	T	07:21	X																								
280-155015-10	1	T	07:36	X																								
280-155015-11	1	T	07:51	X																								
ZZZZZZ			08:06																									
ZZZZZZ			08:20																									
ZZZZZZ			08:35																									
ZZZZZZ			08:50																									
ZZZZZZ			09:05																									
CCV 280-558087/96	1		09:20	X																								
CCB 280-558087/97	1		09:35	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_SHI4 Analysis Method: 9060A

Start Date: 11/03/2021 15:57 End Date: 11/04/2021 06:27

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-556162/1	1		15:57	X
ICB 280-556162/2	1		16:12	X
ZZZZZZ			16:27	
ZZZZZZ			16:41	
ZZZZZZ			16:56	
ZZZZZZ			17:11	
ZZZZZZ			17:26	
ZZZZZZ			17:41	
ZZZZZZ			17:56	
ZZZZZZ			18:11	
ZZZZZZ			18:28	
ZZZZZZ			18:44	
ZZZZZZ			18:59	
ZZZZZZ			19:14	
CCV 280-556162/15			19:29	
CCB 280-556162/16			19:44	
ZZZZZZ			19:59	
ZZZZZZ			20:13	
ZZZZZZ			20:28	
ZZZZZZ			20:47	
ZZZZZZ			21:02	
ZZZZZZ			21:17	
ZZZZZZ			21:34	
ZZZZZZ			21:49	
ZZZZZZ			22:06	
ZZZZZZ			22:24	
CCV 280-556162/27	1		22:39	X
CCB 280-556162/28	1		22:54	X
ZZZZZZ			23:09	
ZZZZZZ			23:26	
ZZZZZZ			23:43	
ZZZZZZ			00:00	
ZZZZZZ			00:15	
LCS 280-556007/1-A	1	D	00:30	X
MB 280-556007/2-A	1	D	00:45	X
ZZZZZZ			01:00	
ZZZZZZ			01:15	
ZZZZZZ			01:29	
CCV 280-556162/39	1		01:44	X
CCB 280-556162/40	1		01:59	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_SHI4 Analysis Method: 9060A

Start Date: 11/03/2021 15:57 End Date: 11/04/2021 06:27

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
280-155015-1	1	D	02:14	X																									
280-155015-2	1	D	02:29	X																									
280-155015-3	1	D	02:44	X																									
280-155015-4	1	D	02:59	X																									
280-155015-5	1	D	03:13	X																									
280-155015-6	1	D	03:28	X																									
280-155015-7	1	D	03:43	X																									
280-155015-8	1	D	03:58	X																									
280-155015-9	1	D	04:13	X																									
280-155015-10	1	D	04:28	X																									
CCV 280-556162/51	1		04:43	X																									
CCB 280-556162/52	1		04:58	X																									
280-155015-10 MS	1	D	05:12	X																									
280-155015-10 MSD	1	D	05:27	X																									
280-155015-11	1	D	05:42	X																									
280-155015-12	1	D	05:57	X																									
CCV 280-556162/57	1		06:12	X																									
CCB 280-556162/58	1		06:27	X																									

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-557846/1			17:36																									
ZZZZZZ			17:43																									
ZZZZZZ			17:46																									
ZZZZZZ			17:53																									
LCSD 280-557846/5	1	T	18:00	X																								
MB 280-557846/6	1	T	18:06	X																								
ZZZZZZ			18:11																									
ZZZZZZ			18:17																									
ZZZZZZ			18:23																									
ZZZZZZ			18:28																									
ZZZZZZ			18:33																									
ZZZZZZ			18:38																									
ZZZZZZ			18:44																									
ZZZZZZ			18:49																									
ZZZZZZ			18:54																									
ZZZZZZ			19:03																									
CCV 280-557846/17	1		19:09	X																								
CCB 280-557846/18	1		19:15	X																								
ZZZZZZ			19:23																									
ZZZZZZ			19:30																									
ZZZZZZ			19:37																									
ZZZZZZ			19:45																									
ZZZZZZ			19:56																									
ZZZZZZ			20:12																									
ZZZZZZ			20:21																									
ZZZZZZ			20:26																									
ZZZZZZ			20:37																									
ZZZZZZ			20:46																									
CCV 280-557846/29	1		20:53	X																								
CCB 280-557846/30	1		20:59	X																								
LCS 280-557846/31	1	T	21:05	X																								
MB 280-557846/32	1	T	21:11	X																								
280-155015-5	1	T	21:21	X																								
280-155015-5 DU	1	T	21:30	X																								
ZZZZZZ			21:41																									
280-155015-8	1	T	21:51	X																								
280-155015-9	1	T	21:58	X																								
ZZZZZZ			22:07																									
280-155015-6	1	T	22:16	X																								
280-155015-4	1	T	22:24	X																								
ZZZZZZ			22:32																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
280-155015-10	1	T	22:42	X																								
CCV 280-557846/43	1		22:49	X																								
CCB 280-557846/44	1		22:55	X																								
ZZZZZZ			23:04																									
ZZZZZZ			23:16																									
ZZZZZZ			23:26																									
ZZZZZZ			23:34																									
ZZZZZZ			23:43																									
ZZZZZZ			23:54																									
ZZZZZZ			00:06																									
ZZZZZZ			00:14																									
ZZZZZZ			00:23																									
ZZZZZZ			00:34																									
CCV 280-557846/55			00:40																									
CCB 280-557846/56			00:46																									
ZZZZZZ			00:53																									
ZZZZZZ			00:59																									
ZZZZZZ			01:05																									
ZZZZZZ			01:12																									
ZZZZZZ			01:20																									
ZZZZZZ			01:26																									
ZZZZZZ			01:31																									
ZZZZZZ			01:39																									
ZZZZZZ			01:42																									
ZZZZZZ			01:47																									
ZZZZZZ			01:53																									
ZZZZZZ			01:58																									
CCV 280-557846/69			02:06																									
CCB 280-557846/70			02:11																									
ZZZZZZ			02:17																									
ZZZZZZ			02:30																									
ZZZZZZ			02:42																									
ZZZZZZ			02:55																									
ZZZZZZ			03:11																									
ZZZZZZ			03:19																									
ZZZZZZ			03:27																									
ZZZZZZ			03:35																									
ZZZZZZ			03:42																									
ZZZZZZ			03:49																									
CCV 280-557846/81			03:57																									
CCB 280-557846/82			04:03																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			04:09																									
ZZZZZZ			04:14																									
ZZZZZZ			04:22																									
ZZZZZZ			04:29																									
ZZZZZZ			04:35																									
ZZZZZZ			04:41																									
ZZZZZZ			04:49																									
ZZZZZZ			04:55																									
ZZZZZZ			05:03																									
ZZZZZZ			05:11																									
ZZZZZZ			05:19																									
ZZZZZZ			05:27																									
CCV 280-557846/95			05:34																									
CCB 280-557846/96			05:40																									
ZZZZZZ			05:45																									
ZZZZZZ			05:53																									
ZZZZZZ			06:07																									
ZZZZZZ			06:22																									
ZZZZZZ			06:30																									
ZZZZZZ			06:38																									
ZZZZZZ			06:46																									
ZZZZZZ			06:54																									
ZZZZZZ			07:01																									
ZZZZZZ			07:12																									
CCV 280-557846/107			07:19																									
CCB 280-557846/108			07:25																									
ZZZZZZ			07:32																									
ZZZZZZ			07:38																									
ZZZZZZ			07:46																									
ZZZZZZ			07:54																									
ZZZZZZ			08:00																									
ZZZZZZ			08:10																									
ZZZZZZ			08:17																									
ZZZZZZ			08:24																									
ZZZZZZ			08:33																									
ZZZZZZ			08:40																									
ZZZZZZ			08:49																									
ZZZZZZ			08:57																									
CCV 280-557846/121			09:04																									
CCB 280-557846/122			09:10																									
ZZZZZZ			09:16																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			09:24																									
ZZZZZZ			09:33																									
ZZZZZZ			09:40																									
ZZZZZZ			09:48																									
ZZZZZZ			09:57																									
ZZZZZZ			10:06																									
ZZZZZZ			10:16																									
ZZZZZZ			10:23																									
ZZZZZZ			10:29																									
CCV 280-557846/133			10:37																									
CCB 280-557846/134			10:42																									
ZZZZZZ			10:50																									
ZZZZZZ			10:55																									
ZZZZZZ			11:01																									
ZZZZZZ			11:07																									
ZZZZZZ			11:13																									
ZZZZZZ			11:19																									
ZZZZZZ			11:24																									
ZZZZZZ			11:29																									
ZZZZZZ			11:34																									
ZZZZZZ			11:39																									
ZZZZZZ			11:45																									
ZZZZZZ			11:50																									
CCV 280-557846/147			11:57																									
CCB 280-557846/148			12:03																									
ZZZZZZ			12:08																									
ZZZZZZ			12:14																									
ZZZZZZ			12:19																									
ZZZZZZ			12:25																									
ZZZZZZ			12:30																									
ZZZZZZ			12:36																									
ZZZZZZ			12:42																									
ZZZZZZ			12:48																									
ZZZZZZ			12:53																									
ZZZZZZ			12:58																									
CCV 280-557846/159			13:05																									
CCB 280-557846/160			13:11																									
ZZZZZZ			13:17																									
ZZZZZZ			13:23																									
ZZZZZZ			13:28																									
ZZZZZZ			13:34																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			13:39																									
CCV 280-557846/166			13:45																									
CCB 280-557846/167			13:51																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/17/2021 15:59 End Date: 11/18/2021 02:37

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-557935/1			15:59																									
ZZZZZZ			16:06																									
ZZZZZZ			16:09																									
LCS 280-557935/4	1	T	16:16	X																								
MB 280-557935/5	1	T	16:22	X																								
ZZZZZZ			16:34																									
ZZZZZZ			16:45																									
ZZZZZZ			16:55																									
ZZZZZZ			17:03																									
280-155015-11	1	T	17:09	X																								
280-155015-12	1	T	17:17	X																								
ZZZZZZ			17:25																									
ZZZZZZ			17:35																									
ZZZZZZ			17:44																									
ZZZZZZ			17:54																									
CCV 280-557935/16	1		18:02	X																								
CCB 280-557935/17	1		18:08	X																								
ZZZZZZ			18:19																									
ZZZZZZ			18:28																									
ZZZZZZ			18:36																									
ZZZZZZ			18:43																									
ZZZZZZ			18:52																									
ZZZZZZ			19:01																									
ZZZZZZ			19:11																									
ZZZZZZ			19:21																									
ZZZZZZ			19:27																									
ZZZZZZ			19:33																									
CCV 280-557935/28			19:39																									
CCB 280-557935/29			19:45																									
ZZZZZZ			19:52																									
ZZZZZZ			19:58																									
ZZZZZZ			20:04																									
ZZZZZZ			20:11																									
ZZZZZZ			20:17																									
ZZZZZZ			20:23																									
ZZZZZZ			20:32																									
ZZZZZZ			20:39																									
ZZZZZZ			20:48																									
ZZZZZZ			20:56																									
ZZZZZZ			21:07																									
ZZZZZZ			21:14																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/17/2021 15:59 End Date: 11/18/2021 02:37

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-557935/42			21:21																									
CCB 280-557935/43			21:26																									
ZZZZZZ			21:37																									
ZZZZZZ			21:50																									
ZZZZZZ			22:11																									
ZZZZZZ			22:24																									
ZZZZZZ			22:34																									
ZZZZZZ			22:38																									
ZZZZZZ			22:41																									
ZZZZZZ			22:49																									
ZZZZZZ			22:53																									
ZZZZZZ			22:58																									
CCV 280-557935/54			23:05																									
CCB 280-557935/55			23:10																									
ZZZZZZ			23:17																									
ZZZZZZ			23:22																									
ZZZZZZ			23:30																									
ZZZZZZ			23:38																									
ZZZZZZ			23:45																									
ZZZZZZ			23:53																									
ZZZZZZ			00:01																									
ZZZZZZ			00:08																									
ZZZZZZ			00:14																									
ZZZZZZ			00:28																									
ZZZZZZ			00:39																									
ZZZZZZ			00:50																									
CCV 280-557935/68			00:57																									
CCB 280-557935/69			01:03																									
ZZZZZZ			01:16																									
ZZZZZZ			01:31																									
ZZZZZZ			01:40																									
ZZZZZZ			01:50																									
ZZZZZZ			01:59																									
ZZZZZZ			02:08																									
ZZZZZZ			02:16																									
ZZZZZZ			02:25																									
CCV 280-557935/78			02:31																									
CCB 280-557935/79			02:37																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 11/12/2021 19:00 End Date: 11/13/2021 03:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-557616/1			19:00																									
ZZZZZZ			19:03																									
ZZZZZZ			19:15																									
ZZZZZZ			19:21																									
ZZZZZZ			19:28																									
ZZZZZZ			19:32																									
ZZZZZZ			19:38																									
ZZZZZZ			19:43																									
ZZZZZZ			19:47																									
ZZZZZZ			19:52																									
ZZZZZZ			19:56																									
ZZZZZZ			20:00																									
ZZZZZZ			20:05																									
ZZZZZZ			20:09																									
ZZZZZZ			20:21																									
ZZZZZZ			20:33																									
CCV 280-557616/17			20:39																									
CCB 280-557616/18			20:44																									
ZZZZZZ			20:50																									
ZZZZZZ			20:55																									
ZZZZZZ			21:00																									
ZZZZZZ			21:05																									
ZZZZZZ			21:11																									
ZZZZZZ			21:15																									
ZZZZZZ			21:20																									
ZZZZZZ			21:26																									
ZZZZZZ			21:32																									
ZZZZZZ			21:40																									
CCV 280-557616/29			21:46																									
CCB 280-557616/30			21:51																									
ZZZZZZ			21:56																									
ZZZZZZ			22:01																									
ZZZZZZ			22:13																									
ZZZZZZ			22:25																									
ZZZZZZ			22:31																									
ZZZZZZ			22:41																									
ZZZZZZ			22:48																									
ZZZZZZ			22:54																									
ZZZZZZ			23:00																									
ZZZZZZ			23:06																									
ZZZZZZ			23:10																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 11/12/2021 19:00 End Date: 11/13/2021 03:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			23:16																									
CCV 280-557616/43			23:22																									
CCB 280-557616/44			23:27																									
ZZZZZZ			23:32																									
ZZZZZZ			23:42																									
ZZZZZZ			23:47																									
ZZZZZZ			23:57																									
ZZZZZZ			00:06																									
ZZZZZZ			00:26																									
ZZZZZZ			00:38																									
ZZZZZZ			00:45																									
ZZZZZZ			00:51																									
ZZZZZZ			00:56																									
CCV 280-557616/55			01:02																									
CCB 280-557616/56			01:07																									
LCS 280-557616/57	1	T	01:13	X																								
MB 280-557616/58	1	T	01:18	X																								
ZZZZZZ			01:25																									
ZZZZZZ			01:32																									
ZZZZZZ			01:38																									
ZZZZZZ			01:43																									
ZZZZZZ			01:50																									
ZZZZZZ			01:54																									
ZZZZZZ			02:01																									
ZZZZZZ			02:05																									
ZZZZZZ			02:12																									
ZZZZZZ			02:17																									
CCV 280-557616/69	1		02:23	X																								
CCB 280-557616/70	1		02:28	X																								
ZZZZZZ			02:34																									
ZZZZZZ			02:40																									
ZZZZZZ			02:45																									
ZZZZZZ			02:52																									
ZZZZZZ			02:58																									
ZZZZZZ			03:06																									
280-155015-1	1	T	03:15	X																								
280-155015-2	1	T	03:22	X																								
280-155015-3	1	T	03:29	X																								
280-155015-7	1	T	03:36	X																								
CCV 280-557616/81	1		03:42	X																								
CCB 280-557616/82	1		03:47	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 11/12/2021 19:00 End Date: 11/13/2021 03:47

Lab Sample Id	D/F	Type	Time	Analytes																									
				Alk																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 558000 Batch Start Date: 11/18/21 11:15 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00508	350.1 ICV 00493
ICVL 280-558000/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558000/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558000/16		350.1			10 mL	10 mL			
LCS 280-558000/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558000/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558000/20		350.1			10 mL	10 mL			
280-155015-C-1	EW7-PM25A-7-25	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558000/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558000/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558000/35		350.1			10 mL	10 mL			
LCS 280-558000/37		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558000/38		350.1			100 mL	100 mL		2.5 mL	
MB 280-558000/39		350.1			10 mL	10 mL			
280-155015-C-5	EW7-PM26B-7-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-155015-C-2	EW7-PM25B-7-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-155015-C-3	EW7-PM27B-7-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-155015-C-4	EW7-PM26A-7-25	350.1	T	no	10 mL	10 mL	<2 SU		
280-155015-C-6	EW7-PM29A-7-25	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558000/52		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558000/53		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558000/54		350.1			10 mL	10 mL			
280-155015-C-7	EW7-PM29B-7-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-155015-C-8	EW7-PM28A-7-25	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558000/61		350.1			100 mL	100 mL		0.5 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.: 280-155015-1

SDG No.:

Batch Number: 558000 Batch Start Date: 11/18/21 11:15 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00508	350.1 ICV 00493
CCV 280-558000/62		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558000/63		350.1			10 mL	10 mL			

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01523
Carrier Identification	350.1 complex_00583
Sodium Salicylate ID	Sodium Sal_00021
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 558260 Batch Start Date: 11/21/21 10:23 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558260/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558260/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558260/16		350.1			10 mL	10 mL			
LCS 280-558260/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558260/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558260/20		350.1			10 mL	10 mL			
280-155015-C-9	G0080-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155015-C-11	G0079-7	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558260/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558260/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558260/35		350.1			10 mL	10 mL			

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01524
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	Sodium Sal_00021
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 558390 Batch Start Date: 11/22/21 10:08 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558390/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558390/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558390/16		350.1			10 mL	10 mL			
LCS 280-558390/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558390/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558390/20		350.1			10 mL	10 mL			
280-155015-C-12	G0075-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155015-C-12 MS	G0075-7	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-155015-C-12 MSD	G0075-7	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-558390/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/35		350.1			10 mL	10 mL			
CCV 280-558390/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/51		350.1			10 mL	10 mL			
LCS 280-558390/53		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558390/54		350.1			100 mL	100 mL		2.5 mL	
MB 280-558390/55		350.1			10 mL	10 mL			
CCVL 280-558390/69		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/70		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/71		350.1			10 mL	10 mL			
280-155015-C-10	EW7-PM24A-7-25	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-558390/85		350.1			100 mL	100 mL		0.5 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.: 280-155015-1

SDG No.:

Batch Number: 558390 Batch Start Date: 11/22/21 10:08 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
CCV 280-558390/86		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/87		350.1			10 mL	10 mL			

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01525
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	sodium sal_00033
Pipette/Syringe/Dispenser ID	SAH 5000, 1000 INTERCESSOR, BWH 200
Batch Comment	RKD

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557418 Batch Start Date: 11/14/21 16:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00826	TKN ICV 25 00112	
ICV 280-557418/7		351.2, 351.2			25 mL	25 mL		5 mL	
ICB 280-557418/8		351.2, 351.2			25 mL	25 mL			
CCV 280-557418/9		351.2, 351.2			25 mL	25 mL	5 mL		
CCB 280-557418/10		351.2, 351.2			25 mL	25 mL			
LCS 280-557418/11		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-557418/12		351.2, 351.2			25 mL	25 mL			
280-155015-C-4	EW7-PM26A-7-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-155015-C-6	EW7-PM29A-7-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-155015-C-7	EW7-PM29B-7-35	351.2, 351.2	T	<2	25 mL	25 mL			
280-155015-C-9	G0080-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155015-C-10	EW7-PM24A-7-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-155015-C-11	G0079-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155015-C-12	G0075-7	351.2, 351.2	T	<2	25 mL	25 mL			

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/14/2021 16:45
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	11/14/2021 23:00
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

Basis	Basis Description
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.: 280-155015-1

SDG No.:

Batch Number: 557562 Batch Start Date: 11/15/21 17:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-557418/7-A		351.2		2 mL					
ICB 280-557418/8-A		351.2		2 mL					
LCS 280-557418/11-A		351.2		2 mL					
MB 280-557418/12-A		351.2		2 mL					
280-155015-C-4-A	EW7-PM26A-7-25	351.2	T	2 mL					
280-155015-C-6-A	EW7-PM29A-7-25	351.2	T	2 mL					
280-155015-C-7-A	EW7-PM29B-7-35	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155015-C-9-A	G0080-7	351.2	T	2 mL					
280-155015-C-10-A	EW7-PM24A-7-25	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155015-C-11-A	G0079-7	351.2	T	2 mL					
280-155015-C-12-A	G0075-7	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					

Batch Notes	
Hypochlorite ID	TKN hypo_00675
Buffer Reagent ID	TKN buffer_00132
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Sodium Nitroprusside ID	sodium nitro_00107

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.: 280-155015-1

SDG No.:

Batch Number: 557562 Batch Start Date: 11/15/21 17:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557730 Batch Start Date: 11/16/21 18:07 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00826		
LCS 280-557730/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-557730/2		351.2, 351.2			25 mL	25 mL			
280-155015-C-1	EW7-PM25A-7-25	351.2, 351.2	T	<2	5 mL	25 mL			
280-155015-C-2	EW7-PM25B-7-35	351.2, 351.2	T	<2	15 mL	25 mL			
280-155015-C-3	EW7-PM27B-7-35	351.2, 351.2	T	<2	15 mL	25 mL			
280-155015-C-5	EW7-PM26B-7-35	351.2, 351.2	T	<2	5 mL	25 mL			
280-155015-C-8	EW7-PM28A-7-25	351.2, 351.2	T	<2	15 mL	25 mL			

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/16/2021 18:25
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	11/16/2021 23:45
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557899 Batch Start Date: 11/15/21 17:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-557418/7-A		351.2		2 mL					
ICB 280-557418/8-A		351.2		2 mL					
LCS 280-557730/1-A		351.2		2 mL					
MB 280-557730/2-A		351.2		2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155015-C-1-B	EW7-PM25A-7-25	351.2	T	2 mL					
280-155015-C-2-B	EW7-PM25B-7-35	351.2	T	2 mL					
280-155015-C-3-B	EW7-PM27B-7-35	351.2	T	2 mL					
280-155015-C-5-B	EW7-PM26B-7-35	351.2	T	2 mL					
280-155015-C-8-B	EW7-PM28A-7-25	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					

Batch Notes	
Hypochlorite ID	TKN hypo_00675
Buffer Reagent ID	TKN buffer_00132
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Sodium Nitroprusside ID	sodium nitro_00107

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.: 280-155015-1

SDG No.:

Batch Number: 557899 Batch Start Date: 11/15/21 17:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

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.: 280-155015-1

SDG No.:

Batch Number: 557898 Batch Start Date: 11/17/21 16:27 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00601	NXN ICV INT 00577		
ICV 280-557898/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-557898/18		353.2		100 mL	100 mL		2 mL		
ICB 280-557898/19		353.2		100 mL	100 mL				
LCS 280-557898/21		353.2		100 mL	100 mL	5 mL			
MB 280-557898/22		353.2		100 mL	100 mL				
CCV 280-557898/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/36		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/37		353.2		100 mL	100 mL				
280-155015-C-1	EW7-PM25A-7-25	353.2	T	100 mL	100 mL				
280-155015-C-2	EW7-PM25B-7-35	353.2	T	100 mL	100 mL				
280-155015-C-3	EW7-PM27B-7-35	353.2	T	100 mL	100 mL				
280-155015-C-4	EW7-PM26A-7-25	353.2	T	100 mL	100 mL				
280-155015-C-5	EW7-PM26B-7-35	353.2	T	100 mL	100 mL				
CCV 280-557898/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/52		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/53		353.2		100 mL	100 mL				
280-155015-C-6	EW7-PM29A-7-25	353.2	T	100 mL	100 mL				
280-155015-C-7	EW7-PM29B-7-35	353.2	T	100 mL	100 mL				
280-155015-C-8	EW7-PM28A-7-25	353.2	T	100 mL	100 mL				
280-155015-C-9	G0080-7	353.2	T	100 mL	100 mL				
LCS 280-557898/59		353.2		100 mL	100 mL	5 mL			
LCSD 280-557898/60		353.2		100 mL	100 mL	5 mL			
MB 280-557898/61		353.2		100 mL	100 mL				
280-155015-C-10	EW7-PM24A-7-25	353.2	T	100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557898 Batch Start Date: 11/17/21 16:27 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00601	NXN ICV INT 00577		
CCV 280-557898/68		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/69		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/70		353.2		100 mL	100 mL				
280-155015-C-11	G0079-7	353.2	T	100 mL	100 mL				
280-155015-C-12	G0075-7	353.2	T	100 mL	100 mL				
CCV 280-557898/84		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/85		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/86		353.2		100 mL	100 mL				

Batch Notes	
pH Indicator ID	hc902937
Buffer Reagent ID	NOXT Buffer_00222
Color Reagent ID	NOXT CR_00121
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Cadmium Column Lot ID	q19133-0419
Copper Sulfate ID	CuSO4 NOXT_0014
Hydrochloric Acid ID	0.5N HCl_0084

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556178 Batch Start Date: 11/04/21 10:45 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/04/21 12:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556178/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556178/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155015-E-6	EW7-PM29A-7-25	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-155015-E-6 MS	EW7-PM29A-7-25	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-155015-E-6 MSD	EW7-PM29A-7-25	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-155015-E-4	EW7-PM26A-7-25	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-155015-E-5	EW7-PM26B-7-35	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-155015-E-7	EW7-PM29B-7-35	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-155015-E-8	EW7-PM28A-7-25	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02019					
LCS 280-556178/1		9030B, 9034		1 mL					
MB 280-556178/2		9030B, 9034							
280-155015-E-6	EW7-PM29A-7-25	9030B, 9034	T						
280-155015-E-6 MS	EW7-PM29A-7-25	9030B, 9034	T	1 mL					
280-155015-E-6 MSD	EW7-PM29A-7-25	9030B, 9034	T	1 mL					
280-155015-E-4	EW7-PM26A-7-25	9030B, 9034	T						
280-155015-E-5	EW7-PM26B-7-35	9030B, 9034	T						
280-155015-E-7	EW7-PM29B-7-35	9030B, 9034	T						
280-155015-E-8	EW7-PM28A-7-25	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.: 280-155015-1

SDG No.:

Batch Number: 556178 Batch Start Date: 11/04/21 10:45 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/04/21 12:15

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/04/2021 10:45
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/04/2021 12:15
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556193 Batch Start Date: 11/04/21 11:26 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556178/1-A		9034		0 mL	2.9 mL	5 mL	2.9 mL	50 mL	
MB 280-556178/2-A		9034		2.9 mL	3.9 mL	1 mL	1 mL	50 mL	
280-155015-E-6-A	EW7-PM29A-7-25	9034	T	3.9 mL	4.9 mL	1 mL	1 mL	50 mL	
280-155015-E-6-B MS	EW7-PM29A-7-25	9034	T	4.9 mL	7.9 mL	5 mL	3 mL	50 mL	
280-155015-E-6-C MSD	EW7-PM29A-7-25	9034	T	7.9 mL	11.0 mL	5 mL	3.1 mL	50 mL	
280-155015-E-4-A	EW7-PM26A-7-25	9034	T	11.0 mL	12.0 mL	1 mL	1 mL	50 mL	
280-155015-E-5-A	EW7-PM26B-7-35	9034	T	12.0 mL	13.0 mL	1 mL	1 mL	50 mL	
280-155015-E-7-A	EW7-PM29B-7-35	9034	T	13.0 mL	14.0 mL	1 mL	1 mL	50 mL	
280-155015-E-8-A	EW7-PM28A-7-25	9034	T	14.0 mL	14.9 mL	1 mL	0.9 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556494 Batch Start Date: 11/07/21 11:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/07/21 13:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556494/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556494/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155015-E-1	EW7-PM25A-7-25	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-155015-E-2	EW7-PM25B-7-35	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-155015-E-3	EW7-PM27B-7-35	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-155015-E-9	G0080-7	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-155015-E-10	EW7-PM24A-7-25	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL
280-155015-E-11	G0079-7	9030B, 9034	T	50 mL	50 mL	14	>9 SU	<2 SU	5 mL
280-155015-E-12	G0075-7	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02020					
LCS 280-556494/1		9030B, 9034		1 mL					
MB 280-556494/2		9030B, 9034							
280-155015-E-1	EW7-PM25A-7-25	9030B, 9034	T						
280-155015-E-2	EW7-PM25B-7-35	9030B, 9034	T						
280-155015-E-3	EW7-PM27B-7-35	9030B, 9034	T						
280-155015-E-9	G0080-7	9030B, 9034	T						
280-155015-E-10	EW7-PM24A-7-25	9030B, 9034	T						
280-155015-E-11	G0079-7	9030B, 9034	T						
280-155015-E-12	G0075-7	9030B, 9034	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556494 Batch Start Date: 11/07/21 11:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/07/21 13:05

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/07/2021 11:35
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/07/2021 13:05
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556496 Batch Start Date: 11/07/21 13:05 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556494/1-A		9034		0 mL	3.0 mL	5 mL	3 mL	50 mL	
MB 280-556494/2-A		9034		3.0 mL	4.0 mL	1 mL	1 mL	50 mL	
280-155015-E-1-A	EW7-PM25A-7-25	9034	T	13.6 mL	14.6 mL	1 mL	1 mL	50 mL	
280-155015-E-2-A	EW7-PM25B-7-35	9034	T	14.7 mL	15.6 mL	1 mL	0.9 mL	50 mL	
280-155015-E-3-A	EW7-PM27B-7-35	9034	T	15.6 mL	16.6 mL	1 mL	1 mL	50 mL	
280-155015-E-9-A	G0080-7	9034	T	16.6 mL	17.6 mL	1 mL	1 mL	50 mL	
280-155015-E-10-A	EW7-PM24A-7-25	9034	T	14.6 mL	18.5 mL	1 mL	3.9 mL	50 mL	
280-155015-E-11-A	G0079-7	9034	T	18.5 mL	19.4 mL	1 mL	0.899999999999999 mL	50 mL	
280-155015-E-12-A	G0075-7	9034	T	19.4 mL	20.4 mL	1 mL	1 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 555743 Batch Start Date: 11/01/21 17:25 Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC CAL cl/so4 00391	IC Cal low 00605	IC ICV 5 00340
STD 280-555743/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-555743/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-555743/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-555743/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-555743/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-555743/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-555743/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-555743/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-555743/2 IC		9056A							
STD 280-555743/3 IC		9056A							
STD 280-555743/4 IC		9056A							
STD 280-555743/5 IC		9056A							
STD 280-555743/6 IC		9056A							
STD 280-555743/7 IC		9056A							
ICV 280-555743/8		9056A		0.4 mL					
ICB 280-555743/9		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.: 280-155015-1

SDG No.:

Batch Number: 555743 Batch Start Date: 11/01/21 17:25 Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SLGB033NB
Pipette/Syringe/Dispenser ID	5000ARM 5000CK IC100 CJ200
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 eluent_00002
Batch Comment	CJ and SG

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557417 Batch Start Date: 11/14/21 17:29 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC CAL cl/so4 00393	IC Cal low 00607	IC ICV 5 00341
STD 280-557417/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-557417/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-557417/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-557417/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-557417/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-557417/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-557417/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-557417/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-557417/2 IC		9056A							
STD 280-557417/3 IC		9056A							
STD 280-557417/4 IC		9056A							
STD 280-557417/5 IC		9056A							
STD 280-557417/6 IC		9056A							
STD 280-557417/7 IC		9056A							
ICV 280-557417/8		9056A		0.4 mL					
ICB 280-557417/9		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557417 Batch Start Date: 11/14/21 17:29 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	AS14 Eluent_00022

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 558087 Batch Start Date: 11/19/21 09:50 Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00730
CCV 280-558087/1		9056A		10 mL	10 mL			10 mL	
CCB 280-558087/2		9056A		10 mL	10 mL				
MRL 280-558087/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
MB 280-558087/6		9056A		10 mL	10 mL				
CCV 280-558087/17		9056A		10 mL	10 mL			10 mL	
CCB 280-558087/18		9056A		10 mL	10 mL				
CCV 280-558087/62		9056A		10 mL	10 mL			10 mL	
CCB 280-558087/63		9056A		10 mL	10 mL				
LCS 280-558087/64		9056A		10 mL	10 mL			10 mL	
LCSD 280-558087/65		9056A		10 mL	10 mL			10 mL	
MB 280-558087/66		9056A		10 mL	10 mL				
280-155015-F-1	EW7-PM25A-7-25	9056A	T	10 mL	10 mL				
CCV 280-558087/74		9056A		10 mL	10 mL			10 mL	
CCB 280-558087/75		9056A		10 mL	10 mL				
280-155015-F-2	EW7-PM25B-7-35	9056A	T	10 mL	10 mL				
280-155015-F-3	EW7-PM27B-7-35	9056A	T	10 mL	10 mL				
280-155015-F-4	EW7-PM26A-7-25	9056A	T	10 mL	10 mL				
280-155015-F-5	EW7-PM26B-7-35	9056A	T	10 mL	10 mL				
280-155015-F-6	EW7-PM29A-7-25	9056A	T	10 mL	10 mL				
280-155015-F-7	EW7-PM29B-7-35	9056A	T	10 mL	10 mL				
280-155015-F-8	EW7-PM28A-7-25	9056A	T	10 mL	10 mL				
280-155015-F-8 DU	EW7-PM28A-7-25	9056A	T	10 mL	10 mL				
280-155015-F-8 MS	EW7-PM28A-7-25	9056A	T	10 mL	10 mL				0.1 mL
280-155015-F-8 MSD	EW7-PM28A-7-25	9056A	T	10 mL	10 mL				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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 558087 Batch Start Date: 11/19/21 09:50 Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00730
CCV 280-558087/86		9056A		10 mL	10 mL			10 mL	
CCB 280-558087/87		9056A		10 mL	10 mL				
280-155015-F-9	G0080-7	9056A	T	10 mL	10 mL				
280-155015-F-10	EW7-PM24A-7-25	9056A	T	10 mL	10 mL				
280-155015-F-11	G0079-7	9056A	T	10 mL	10 mL				
280-155015-F-12	G0075-7	9056A	T	10 mL	10 mL				
CCV 280-558087/96		9056A		10 mL	10 mL			10 mL	
CCB 280-558087/97		9056A		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	5000ARM 1000BMf IC100 CJ200
Sufficient Volume for Batch QC	yse
Eluent 1 ID	IC10 eluent_00002
Batch Comment	Run by JF reviewed by SG

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.: 280-155015-1

SDG No.:

Batch Number: 558471 Batch Start Date: 11/23/21 10:27 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	
CCV 280-558471/1		9056A		5 mL	5 mL			5 mL	
CCB 280-558471/2		9056A		5 mL	5 mL				
MRL 280-558471/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-558471/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-558471/5		9056A		5 mL	5 mL			5 mL	
MB 280-558471/6		9056A		5 mL	5 mL				
280-155015-F-12	G0075-7	9056A	T	5 mL	5 mL				
CCV 280-558471/15		9056A		5 mL	5 mL			5 mL	
CCB 280-558471/16		9056A		5 mL	5 mL				

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	AS14 Eluent_00022
Batch Comment	Run by JF, review by CJ

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556161 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
LCS 280-556007/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU	5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-556007/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-1-A	EW7-PM25A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-2-A	EW7-PM25B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-3-A	EW7-PM27B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-4-A	EW7-PM26A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-5-A	EW7-PM26B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

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.: 280-155015-1

SDG No.:

Batch Number: 556161 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
280-155015-D-6-A	EW7-PM29A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-7-A	EW7-PM29B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-8-A	EW7-PM28A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-9-A	G0080-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-10-A	EW7-PM24A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-10-B MS	EW7-PM24A-7-25	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-10-C MSD	EW7-PM24A-7-25	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556161 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
280-155015-D-11-A	G0079-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155015-D-12-A	G0075-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

Batch Notes	
Acid ID	H2SO4_00210, 0.2% H2SO4_00207
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000
pH Paper ID	HC157843

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556162 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00047	TOC LCS Std 00052
ICV 280-556162/1		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-556162/2		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-556162/27		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556162/28		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-556007/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-556007/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-556162/39		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556162/40		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155015-D-1-A	EW7-PM25A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-2-A	EW7-PM25B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-3-A	EW7-PM27B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-4-A	EW7-PM26A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-5-A	EW7-PM26B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-6-A	EW7-PM29A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-7-A	EW7-PM29B-7-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-8-A	EW7-PM28A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-9-A	G0080-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-10-A	EW7-PM24A-7-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-556162/51		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556162/52		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155015-D-10-B MS	EW7-PM24A-7-25	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556162 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00047	TOC LCS Std 00052
280-155015-D-10-C MSD	EW7-PM24A-7-25	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155015-D-11-A	G0079-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155015-D-12-A	G0075-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-556162/57		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556162/58		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-556162/1		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-556162/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556162/27		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556162/28		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556162 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
LCS 280-556007/1-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-556007/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556162/39		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556162/40		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-1-A	EW7-PM25A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-2-A	EW7-PM25B-7-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-3-A	EW7-PM27B-7-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556162 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-155015-D-4-A	EW7-PM26A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-5-A	EW7-PM26B-7-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-6-A	EW7-PM29A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-7-A	EW7-PM29B-7-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-8-A	EW7-PM28A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-9-A	G0080-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-10-A	EW7-PM24A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556162 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-556162/51		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556162/52		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-10 -B MS	EW7-PM24A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-10 -C MSD	EW7-PM24A-7-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-11 -A	G0079-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155015-D-12 -A	G0075-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556162/57		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 556162 Batch Start Date: 11/03/21 15:57 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCB 280-556162/58		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

Batch Notes	
Acid ID	H2SO4_00210, 0.2% H2SO4_00407
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1082991
Filter ID	9743727, 16876568
pH Paper ID	HC157843
Batch Comment	DOC filtration

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.: 280-155015-1

SDG No.:

Batch Number: 557616 Batch Start Date: 11/12/21 19:00 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01005				
LCS 280-557616/57		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557616/58		SM 2320B		InitialAmount is blank					
CCV 280-557616/69		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557616/70		SM 2320B		InitialAmount is blank					
280-155015-F-1	EW7-PM25A-7-25	SM 2320B	T	InitialAmount is blank					
280-155015-F-2	EW7-PM25B-7-35	SM 2320B	T	InitialAmount is blank					
280-155015-F-3	EW7-PM27B-7-35	SM 2320B	T	InitialAmount is blank					
280-155015-F-7	EW7-PM29B-7-35	SM 2320B	T	InitialAmount is blank					
CCV 280-557616/81		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557616/82		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00283
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00093
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00305
pH Buffer 4 ID	pH 10 buffer_00157
pH Buffer 5 ID	pH 12 buffer_00175
pH Buffer 6 ID	pH 7.0 buffer_00302
Probe ID	PCE 80 pH 1200D_7803
Batch Comment	Man-tech froze mid run - EC

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.: 280-155015-1

SDG No.:

Batch Number: 557616 Batch Start Date: 11/12/21 19:00 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B 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.: 280-155015-1

SDG No.:

Batch Number: 557846 Batch Start Date: 11/16/21 17:36 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01006				
LCSD 280-557846/5		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557846/6		SM 2320B		InitialAmount is blank					
CCV 280-557846/17		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/18		SM 2320B		InitialAmount is blank					
CCV 280-557846/29		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/30		SM 2320B		InitialAmount is blank					
LCS 280-557846/31		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557846/32		SM 2320B		InitialAmount is blank					
280-155015-F-5	EW7-PM26B-7-35	SM 2320B	T	InitialAmount is blank					
280-155015-F-5 DU	EW7-PM26B-7-35	SM 2320B	T	InitialAmount is blank					
280-155015-F-8	EW7-PM28A-7-25	SM 2320B	T	InitialAmount is blank					
280-155015-F-9	G0080-7	SM 2320B	T	InitialAmount is blank					
280-155015-F-6	EW7-PM29A-7-25	SM 2320B	T	InitialAmount is blank					
280-155015-F-4	EW7-PM26A-7-25	SM 2320B	T	InitialAmount is blank					
280-155015-F-10	EW7-PM24A-7-25	SM 2320B	T	InitialAmount is blank					
CCV 280-557846/43		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/44		SM 2320B		InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557846 Batch Start Date: 11/16/21 17:36 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B Batch End Date:

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00281
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00093
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00305
pH Buffer 4 ID	pH 10 buffer_00157
pH Buffer 5 ID	pH 12 buffer_00175
pH Buffer 6 ID	pH 7.0 buffer_00302
Probe ID	PCE 80 pH 1200D_8080
Batch Comment	EC

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155015-1

SDG No.:

Batch Number: 557935 Batch Start Date: 11/17/21 15:59 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01006				
LCS 280-557935/4		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557935/5		SM 2320B		InitialAmount is blank					
280-155015-F-11	G0079-7	SM 2320B	T	InitialAmount is blank					
280-155015-F-12	G0075-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557935/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557935/17		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00281
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00093
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00305
pH Buffer 4 ID	pH 10 buffer_00157
pH Buffer 5 ID	pH 12 buffer_00175
pH Buffer 6 ID	pH 7.0 buffer_00302
Probe ID	PCE 80 pH 1200D_8080
Batch Comment	EC

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 18-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-154964-a-1	U	1	1	1		
202	MS 280-154964-a-1	U	1	1	1		
203	MSD 280-154964-a-1	U	1	1	1		
204	280-155015-c-1	U	1	10	1		
205	280-154931-d-3	U	1	1	1		
206	280-155002-c-2	U	1	20	1		
207	280-155002-c-4	U	1	20	1		
208	280-155002-c-6	U	1	1	1		
209	Void 280-155070-f-3	U	1	5	1		
210	280-155070-f-2	U	1	5	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
211	280-154965-a-6	U	1	1	1		
212	MS 280-154965-a-6	U	1	1	1		
213	MSD 280-154965-a-6	U	1	1	1		
214	280-154965-a-11	U	1	1	1		
215	280-154965-a-16	U	1	1	1		
216	280-155015-c-5	U	1	10	1		
217	280-155015-c-2	U	1	10	1		
218	280-155015-c-3	U	1	10	1		
219	280-155015-c-4	U	1	10	1		
220	280-155015-c-6	U	1	10	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		
221	280-155015-c-7	U	1	10	1		
222	280-155015-c-8	U	1	10	1		
223	Void 280-155070-f-3	U	1	100	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
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\111821.RST
Date: 18-Nov-21
Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	22330	1068.389038	
2	0	Carry Over	1	CO	1	1	14	-17.778664	LO
3	0	Blank	1	BLNK	1	1	20	-17.513552	LO
4	101	Cal 0 ppb	1	C	1	1	483	5.356714	
5	102	Cal 25 ppb	1	C	1	1	823	22.091898	
6	103	Cal 50 ppb	1	C	1	1	1296	45.412376	
7	104	Cal 100 ppb	1	C	1	1	2312	95.473389	
8	105	Cal 500 ppb	1	C	1	1	10514	497.105835	
9	106	Cal 1000 ppb	1	C	1	1	21266	1017.324768	
10	107	Cal 2500 ppb	1	C	1	1	52558	2490.699707	
11	108	Cal 5000 ppb	1	C	1	1	109138	5001.514160	HI
12	0	Blank	1	BLNK	1	1	40	-16.539316	LO
B	0	Read Baseline	1	RB	1	1	0	-18.491808	BL
14	109	ICVL 500.0 ppb	1	U	1	1	10358	489.514160	
15	110	ICV 2500.0 ppb	1	U	1	1	54502	2580.255371	
16	111	ICB	1	U	1	1	562	9.254610	
B	0	read baseline	1	RB	1	1	0	-18.491808	BL
18	107	LCS 2500.00	1	U	1	1	51458	2439.954346	
19	107	LCSD 2500.00	1	U	1	1	51643	2448.504150	
20	111	MB	1	U	1	1	388	0.657685	
21	201	280-154964-a-1	1	U	1	1	83	-14.373616	LO
22	202	MS 280-154964-a-1	1	U	1	1	21123	1010.410767	
23	203	MSD 280-154964-a-1	1	U	1	1	21139	1011.203186	
24	204	280-155015-c-1	1	U	10	1	6960	3235.579590	
25	205	280-154931-d-3	1	U	1	1	1855	72.980247	
26	206	280-155002-c-2	1	U	20	1	38796	37003.148438	
27	207	280-155002-c-4	1	U	20	1	30282	28960.876953	
28	208	280-155002-c-6	1	U	1	1	86233	4008.846436	
29	209	Void 280-155070-f-3	1	U	5	1	209251	44802.093750	HI
30	210	280-155070-f-2	1	U	5	1	101954	23468.375000	FL
31	0	Blank	1	BLNK	1	1	-15	-19.217407	LO
B	0	Read Baseline	1	RB	1	1	0	-18.491808	BL
33	105	CCVL 500.0 ppb	1	U	1	1	10332	488.222717	
34	107	CCV 2500.0 ppb	1	U	1	1	51340	2434.483643	
35	111	CCB	1	U	1	1	473	4.839373	
B	0	read baseline	1	RB	1	1	0	-18.491808	BL
37	107	LCS 2500.00	1	U	1	1	51587	2445.881104	
38	107	LCSD 2500.00	1	U	1	1	51373	2435.995605	
39	111	MB	1	U	1	1	489	5.619391	
40	211	280-154965-a-6	1	U	1	1	91	-13.988241	LO
41	212	MS 280-154965-a-6	1	U	1	1	20964	1002.791199	
42	213	MSD 280-154965-a-6	1	U	1	1	21780	1042.005615	
43	214	280-154965-a-11	1	U	1	1	97	-13.713927	LO
44	215	280-154965-a-16	1	U	1	1	63	-15.370940	LO
45	216	280-155015-c-5	1	U	10	1	5234	2390.283447	
46	217	280-155015-c-2	1	U	10	1	6242	2884.227295	
47	218	280-155015-c-3	1	U	10	1	8863	4166.044922	
48	219	280-155015-c-4	1	U	10	1	4425	1993.368530	
49	220	280-155015-c-6	1	U	10	1	5231	2388.584229	
50	0	Blank	1	BLNK	1	1	8	-18.091700	LO
B	0	Read Baseline	1	RB	1	1	0	-18.491808	BL
52	105	CCVL 500.0 ppb	1	U	1	1	10474	495.169159	
53	107	CCV 2500.0 ppb	1	U	1	1	51332	2434.114990	
54	111	CCB	1	U	1	1	480	5.215889	
B	0	read baseline	1	RB	1	1	0	-18.491808	BL
56	221	280-155015-c-7	1	U	10	1	6123	2826.215820	
57	222	280-155015-c-8	1	U	10	1	8465	3971.586670	
58	223	Void 280-155070-f-3	1	U	100	1	9792	46189.191406	
59	0	Blank	1	BLNK	1	1	-10	-19.005056	LO
B	0	Read Baseline	1	RB	1	1	0	-18.491808	BL
61	105	CCVL 500.0 ppb	1	U	1	1	10624	502.467102	
62	107	CCV 2500.0 ppb	1	U	1	1	52612	2493.181885	
63	111	CCB	1	U	1	1	513	6.826937	
B	0	read baseline	1	RB	1	1	0	-18.491808	BL

NH3:Calibration 1: Peak 4-64

File name: C:\FLOW_4\111821.RST
Date: 18-Nov-21
Operator: JM

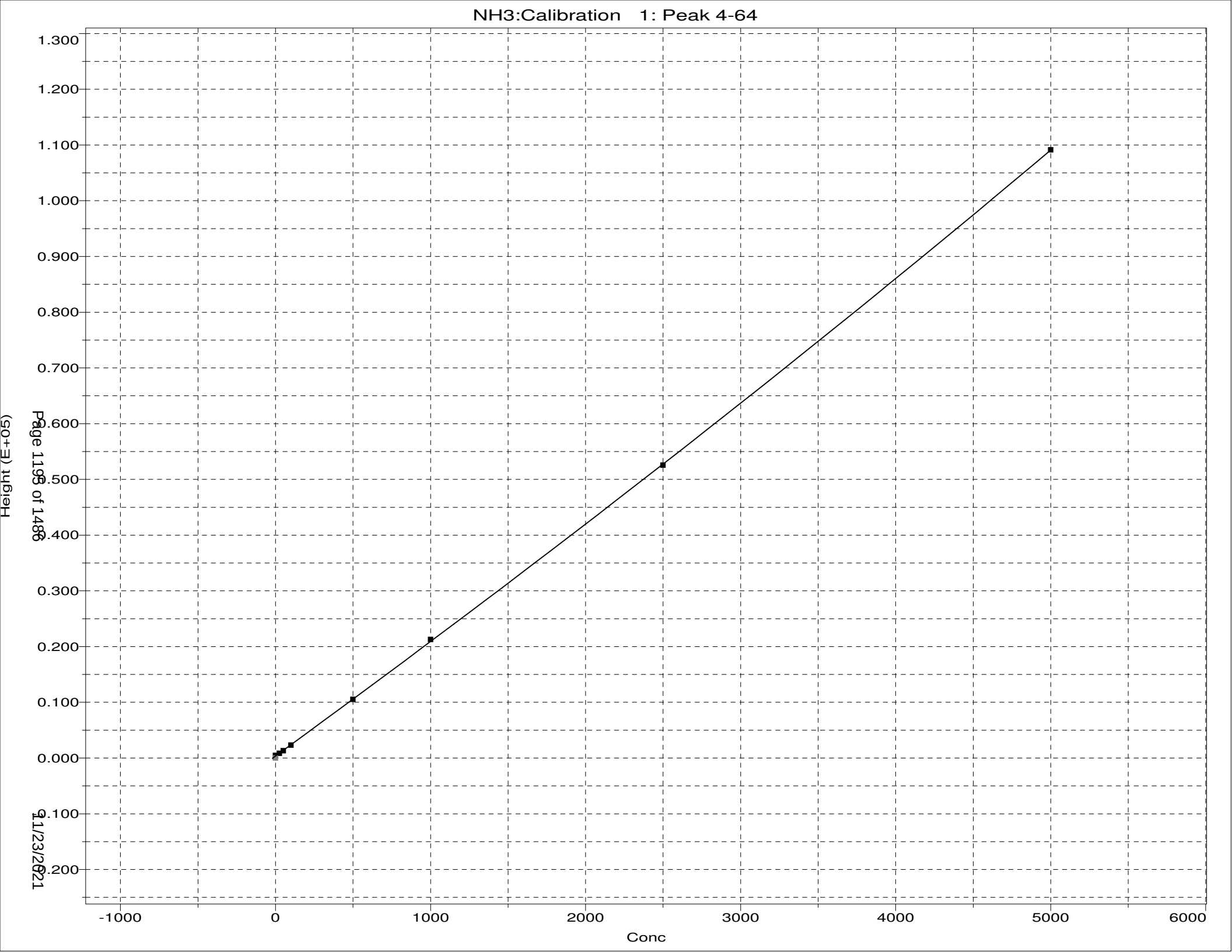
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	483.277405
*	Cal 25 ppb	25.000000	822.581299
*	Cal 50 ppb	50.000000	1295.641357
*	Cal 100 ppb	100.000000	2312.085449
*	Cal 500 ppb	500.000000	10514.213867
*	Cal 1000 ppb	1000.000000	21266.458984
*	Cal 2500 ppb	2500.000000	52557.699219
*	Cal 5000 ppb	5000.000000	109137.960938

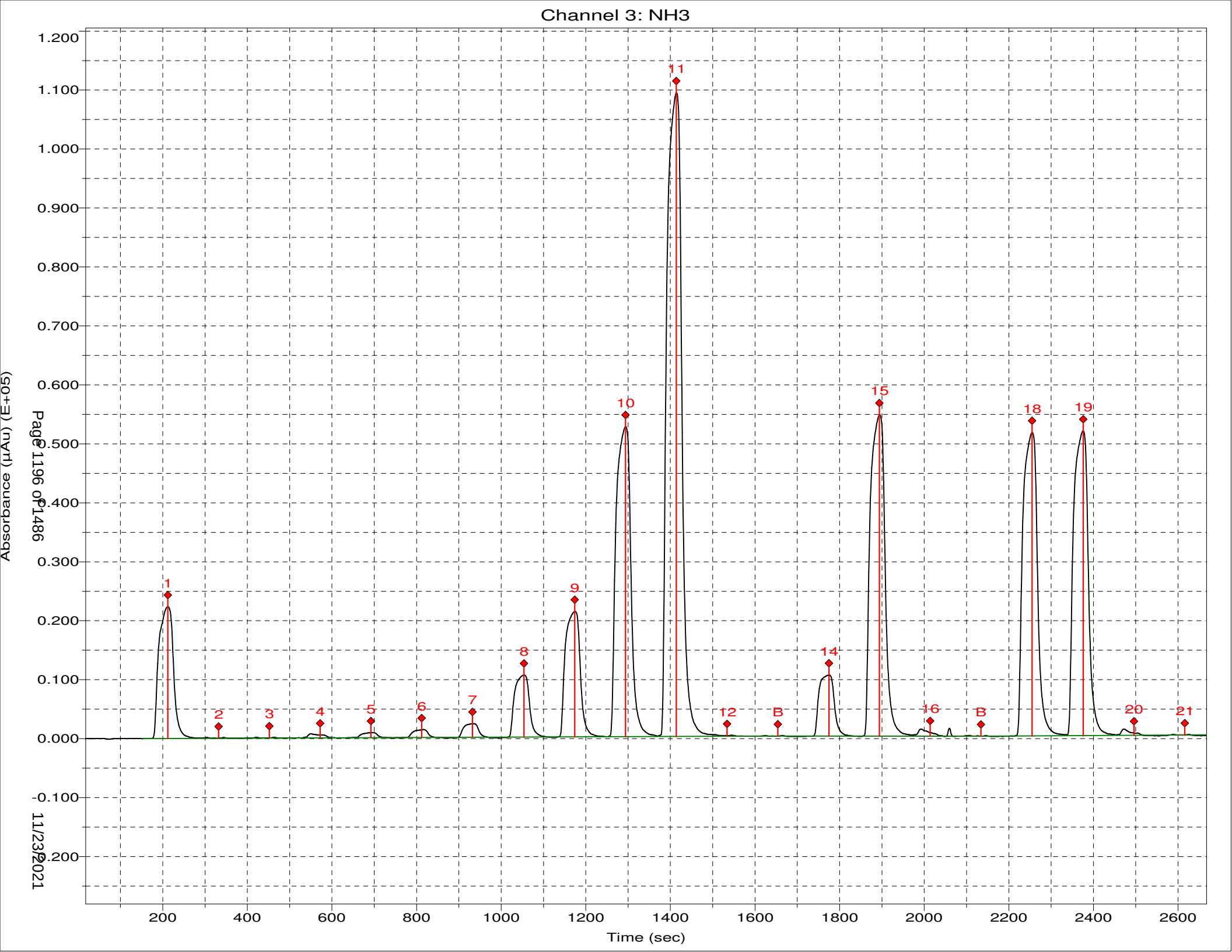
Calib Coef:
x=cyy+by+a
a: (intercept) -1.8492e+01
b: 4.9362e-02
c: -3.0837e-08

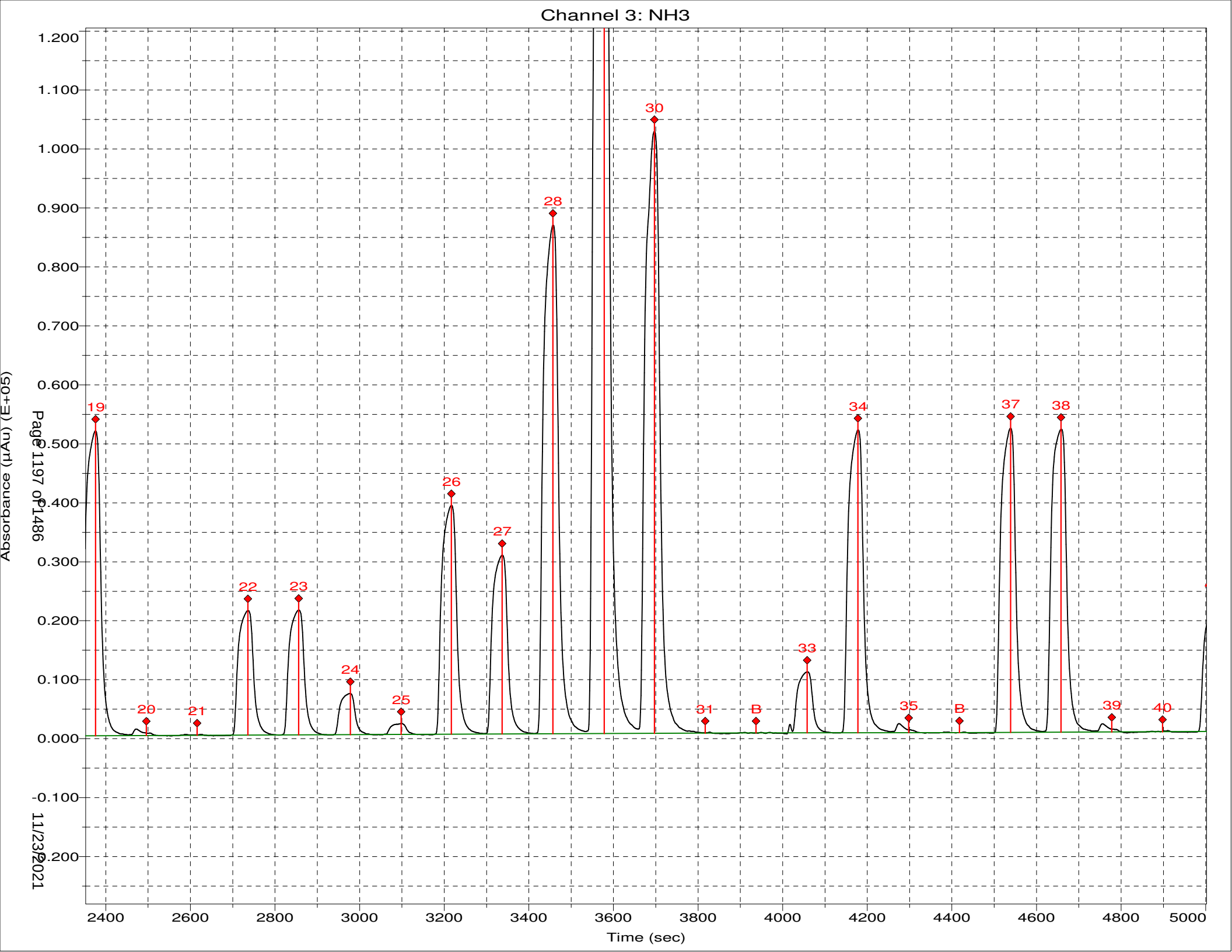
Corr Coef: 0.999989

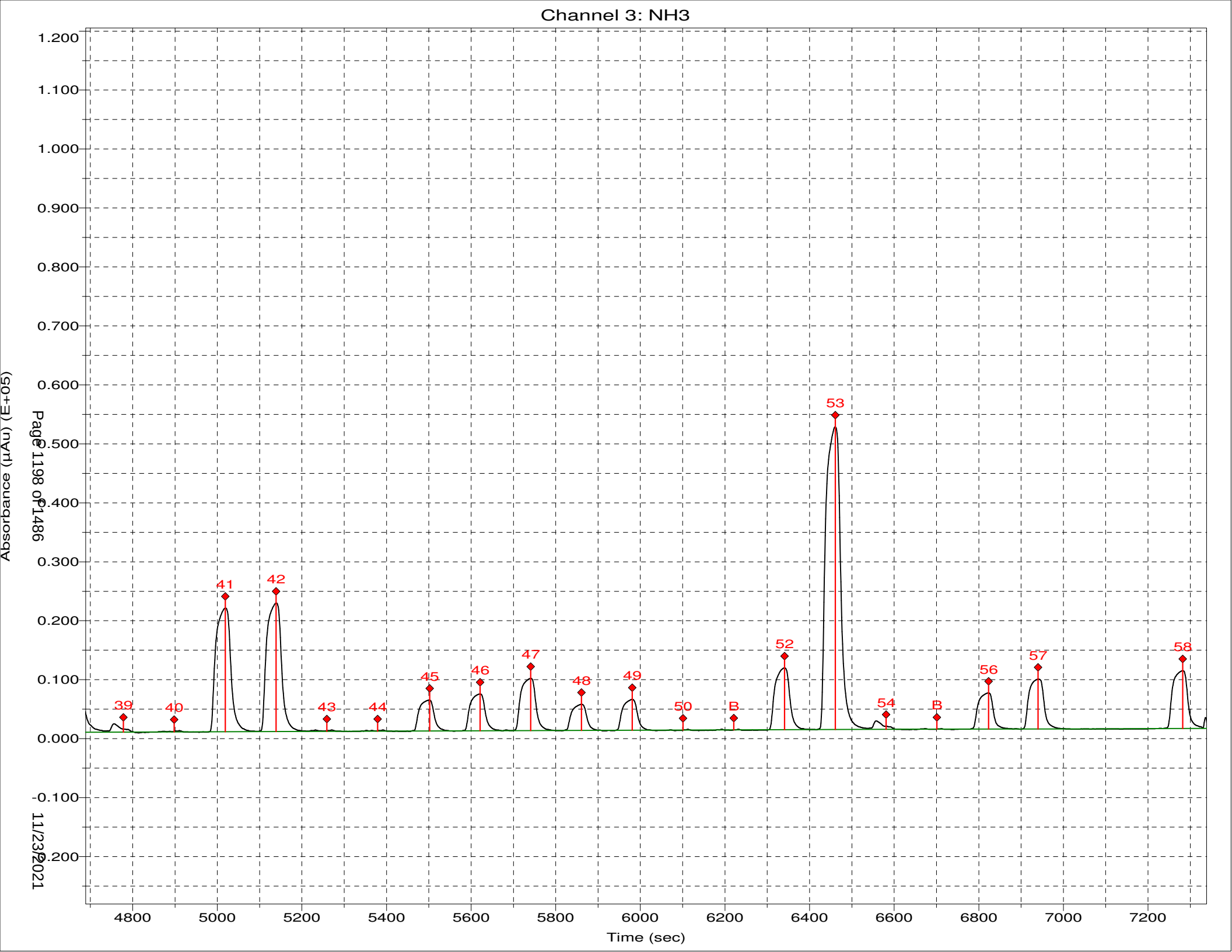
Carryover: 0.0647%

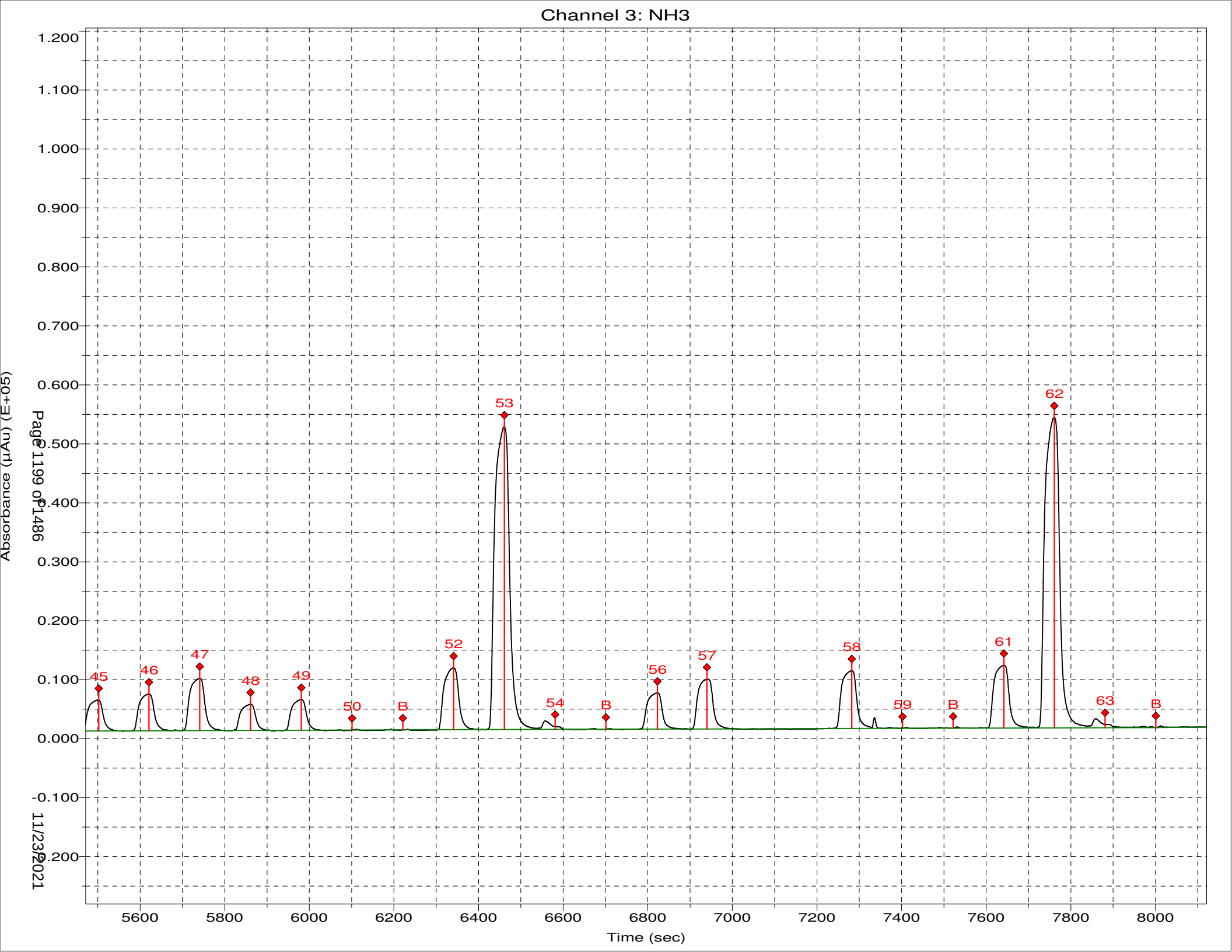
No Drift Peaks


NH3:Calibration 1: Peak 4-64
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
Height (E+05)
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+05)
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
Page 1196 of 1486
11/23/2021
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
Time (sec)
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
21


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec)
Page 1197 of 1486
11/23/2021
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
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
19
20
21
22
23
24
25
26
27
28
30
31
B
33
34
35
B
37
38
39
40


Channel 3: NH3
Absorbance (µAu) (E+05)
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
Page 1198 of 1486
11/23/2021
39
40
41
42
43
44
45
46
47
48
49
50
B
52
53
54
B
56
57
58
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
7000
7200
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+05)
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
45
46
47
48
49
50
B
52
53
54
B
56
57
58
59
B
61
62
63
B
5600
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
Time (sec)
Page 1199 of 1486
11/23/2021

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method		350.1
Analyte/Da	NH3	11/18/2021

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	483.277			483.27700
25.000	822.581			822.58100
50.000	1295.641			1295.64100
100.000	2312.085			2312.08544
500.000	10514.214			10514.21400
1000.000	21266.459			21266.45898
2500.000	52557.699			52557.69900
5000.000	109137.961			109137.96090
				0.00000
				0.00000

Relative Errors in X

	Average	Linear (1/x2)	Linear (1/X)	Linear Forced	Linear	Quadratic
	#DIV/0!	#DIV/0!	#DIV/0!	56.23%	3.35%	-0.15%
	#DIV/0!	#DIV/0!	#DIV/0!	23.04%	-3.07%	-4.52%
	#DIV/0!	#DIV/0!	#DIV/0!	9.78%	-2.91%	-3.33%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.15%	-2.11%	-1.80%
	#DIV/0!	#DIV/0!	#DIV/0!	0.98%	0.38%	0.67%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.18%	0.03%	-0.03%
	#DIV/0!	#DIV/0!	#DIV/0!	3.64%	4.15%	3.37%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	25.2%	3.2%	3.4%

Curve Fit Statistics

	Constant	1ST Degree Coefficient	2ND Degree Coefficient	X-Intercept	r²	r
Weighted (1/Amt^2)						
Average		#DIV/0!		0	#DIV/0!	#DIV/0!
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Weighted (1/Amt)						
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Unweighted						
Forced Zero		2.1061E+01		0	0.99901	0.99950
Linear	2.8249E+02	2.0904E+01		-13.51	0.99817	0.99908
Quadratic	3.0415E+02	2.0766E+01	5.6467E-05	-14.65	0.99874	0.99937
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	822.581	10,514.214			
IS Response:					
Avg RF Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x2) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear Forced:	39.057	499.225	0.000	0.000	0.000
Linear Result:	25.837	489.461	-13.514	-13.514	-13.514
Quad Result (no IS):	24.963	491.013	-14.647	-14.647	-14.647
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 18-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-154964-a-1	U	1	1	1		
202	MS 280-154964-a-1	U	1	1	1		
203	MSD 280-154964-a-1	U	1	1	1		
204	280-155015-c-1	U	1	10	1		
205	280-154931-d-3	U	1	1	1		
206	280-155002-c-2	U	1	20	1		
207	280-155002-c-4	U	1	20	1		
208	280-155002-c-6	U	1	1	1		
209	Void 280-155070-f-3	U	1	5	1		
210	280-155070-f-2	U	1	5	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
211	280-154965-a-6	U	1	1	1		
212	MS 280-154965-a-6	U	1	1	1		
213	MSD 280-154965-a-6	U	1	1	1		
214	280-154965-a-11	U	1	1	1		
215	280-154965-a-16	U	1	1	1		
216	280-155015-c-5	U	1	10	1		
217	280-155015-c-2	U	1	10	1		
218	280-155015-c-3	U	1	10	1		
219	280-155015-c-4	U	1	10	1		
220	280-155015-c-6	U	1	10	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		
221	280-155015-c-7	U	1	10	1		

350.1 _00268

350.1 bleach_01523

350.1 Complex_00583

pH — All <2

Cl^- — All No Detect

Cup	Name	Type	R	Dil	Wt	Vial	Comment
222	280-155015-c-8	U	1	10	1		
223	Void 280-155070-f-3 U		1	100	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 21-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155369-a-9	U	1	1	1		
202	MS 280-155369-a-9	U	1	1	1		
203	MSD 280-155369-a-9	U	1	1	1		
204	280-155070-f-2	U	1	5	1		
205	Void 280-155015-c-10	U	1	10	1		
206	280-155015-c-9	U	1	1	1		
207	280-155015-c-11	U	1	1	1		
208	280-155015-c-12	U	1	1	1		
209	280-155048-c-2	U	1	1	1		
210	280-155048-c-5	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-155138-c-9	U	1	1	1		
212	280-155138-c-4	U	1	1	1		
213	280-155048-c-8	U	1	1	1		
214	280-155048-c-8 ms	U	1	1	1		
215	280-155048-c-8 msd	U	1	1	1		
216	280-155048-c-1	U	1	1	1		
217	280-155048-c-4	U	1	1	1		
218	280-155048-c-3	U	1	1	1		
219	280-155048-c-6	U	1	1	1		
220	280-155138-c-7	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

Peak Table:NH3

File name: C:\FLOW_4\112121.RST
Date: 21-Nov-21
Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	7735	1085.109009	
2	0	Carry Over	1	CO	1	1	-8	-9.504777	LO
3	0	Blank	1	BLNK	1	1	-19	-11.167446	LO
4	101	Cal 0 ppb	1	C	1	1	97	5.097373	
5	102	Cal 25 ppb	1	C	1	1	251	26.544283	
6	103	Cal 50 ppb	1	C	1	1	388	45.798668	
7	104	Cal 100 ppb	1	C	1	1	738	94.724915	
8	105	Cal 500 ppb	1	C	1	1	3563	491.874084	
9	106	Cal 1000 ppb	1	C	1	1	7265	1017.944397	
10	107	Cal 2500 ppb	1	C	1	1	17413	2491.521240	
11	108	Cal 5000 ppb	1	C	1	1	34006	5001.498535	HI
12	0	Blank	1	BLNK	1	1	2	-8.177981	LO
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL
14	109	ICVL 500.0 ppb	1	U	1	1	3701	511.396759	
15	110	ICV 2500.0 ppb	1	U	1	1	17295	2474.119141	
16	111	ICB	1	U	1	1	173	15.661288	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
18	107	LCS 2500.00	1	U	1	1	17101	2445.604980	
19	107	LCSD 2500.00	1	U	1	1	17143	2451.770264	
20	111	MB	1	U	1	1	140	11.058041	
21	201	280-155369-a-9	1	U	1	1	100	5.562490	
22	202	MS 280-155369-a-9	1	U	1	1	7060	988.628052	
23	203	MSD 280-155369-a-9	1	U	1	1	7097	993.865967	
24	204	280-155070-f-2	1	U	5	1	27236	19811.871094	
25	205	Void 280-155015-c-10	1	U	10	1	510	627.920654	
26	206	280-155015-c-9	1	U	1	1	10911	1541.943604	
27	207	280-155015-c-11	1	U	1	1	125	9.052941	
28	208	280-155015-c-12	1	U	1	1	497	61.034966	
29	209	280-155048-c-2	1	U	1	1	47	-1.954761	LO
30	210	280-155048-c-5	1	U	1	1	69	1.216039	
31	0	Blank	1	BLNK	1	1	-6	-9.267093	LO
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL
33	105	CCVL 500.0 ppb	1	U	1	1	3528	486.922546	
34	107	CCV 2500.0 ppb	1	U	1	1	17258	2468.637939	
35	111	CCB	1	U	1	1	38	-3.085647	LO UM
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
37	211	280-155138-c-9	1	U	1	1	20	-5.728232	LO
38	212	280-155138-c-4	1	U	1	1	8	-7.336373	LO
39	213	280-155048-c-8	1	U	1	1	23	-5.224354	LO
40	214	280-155048-c-8 ms	1	U	1	1	7314	1024.856812	
41	215	280-155048-c-8 msd	1	U	1	1	7364	1032.005371	
42	216	280-155048-c-1	1	U	1	1	42	-2.560865	LO
43	217	280-155048-c-4	1	U	1	1	12834	1820.853394	
44	218	280-155048-c-3	1	U	1	1	27633	4022.796387	
45	219	280-155048-c-6	1	U	1	1	201	19.604500	
46	220	280-155138-c-7	1	U	1	1	40	-2.878658	LO
47	0	Blank	1	BLNK	1	1	-8	-9.543214	LO
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL
49	105	CCVL 500.0 ppb	1	U	1	1	3742	517.222717	
50	107	CCV 2500.0 ppb	1	U	1	1	18373	2633.388428	
51	111	CCB	1	U	1	1	227	23.320381	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
53	107	LCS 2500.00	1	U	1	1	18693	2680.700928	
54	107	LCSD 2500.00	1	U	1	1	18850	2704.001709	
55	111	MB	1	U	1	1	206	20.253628	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
57	0	Void	1		0	0	-1	-8.599980	LO

NH3:Calibration 1: Peak 4-59

File name: C:\FLOW_4\112121.RST
Date: 21-Nov-21
Operator: JM

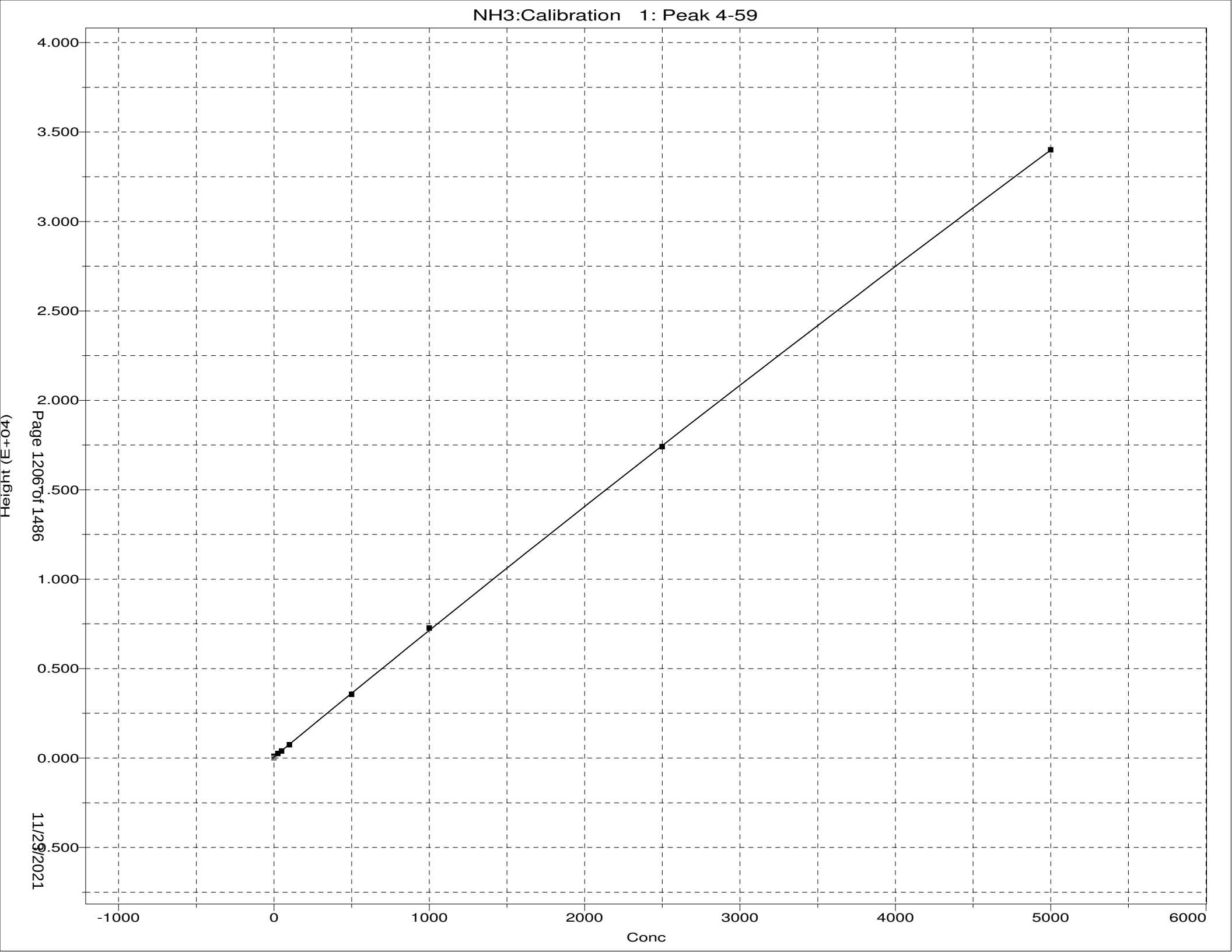
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	97.045105
*	Cal 25 ppb	25.000000	250.554932
*	Cal 50 ppb	50.000000	388.306458
*	Cal 100 ppb	100.000000	738.063171
*	Cal 500 ppb	500.000000	3562.644287
*	Cal 1000 ppb	1000.000000	7265.245605
*	Cal 2500 ppb	2500.000000	17412.826172
*	Cal 5000 ppb	5000.000000	34006.160156

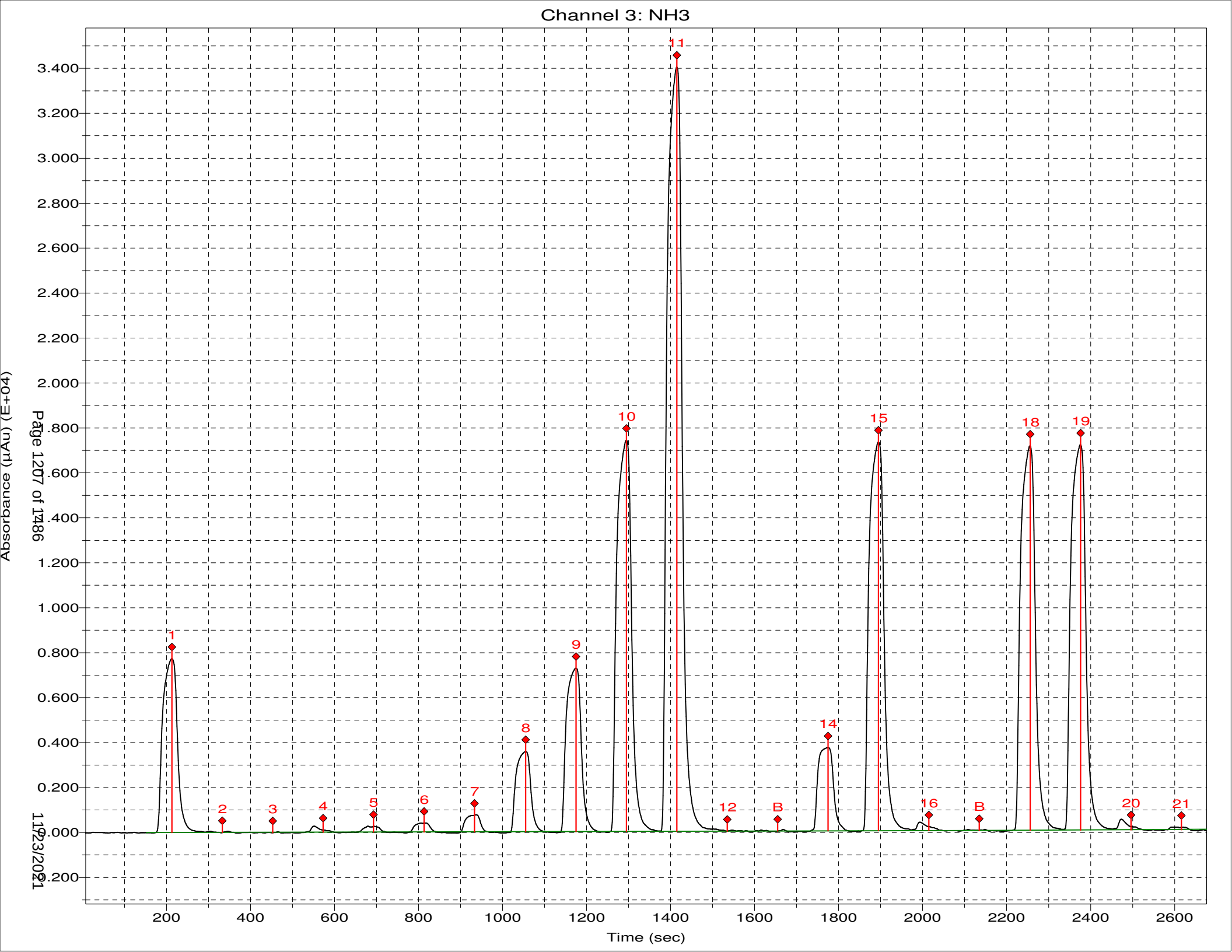
Calib Coef:
x=cyy+by+a
a: (intercept) -8.4553e+00
b: 1.3963e-01
c: 2.2623e-07

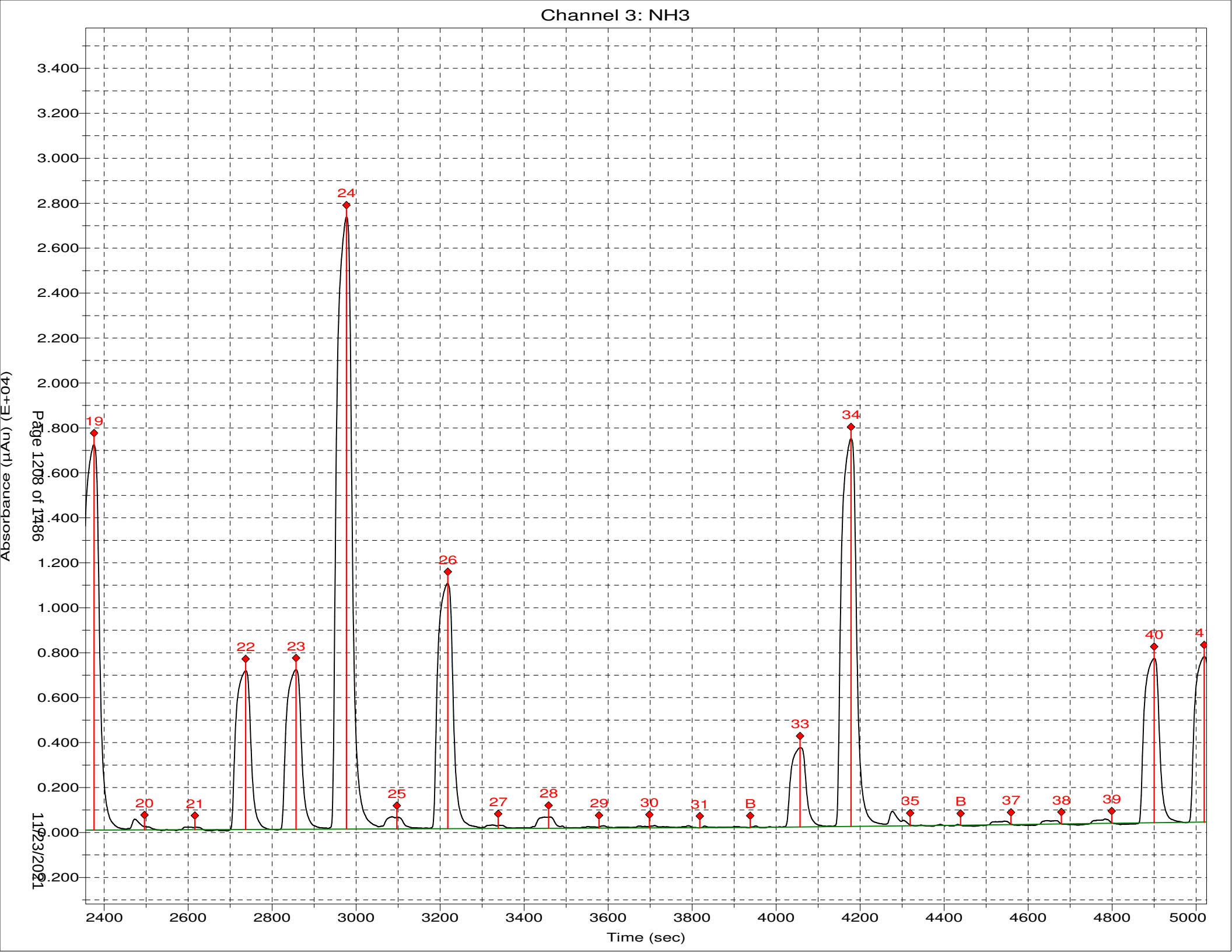
Corr Coef: 0.999988

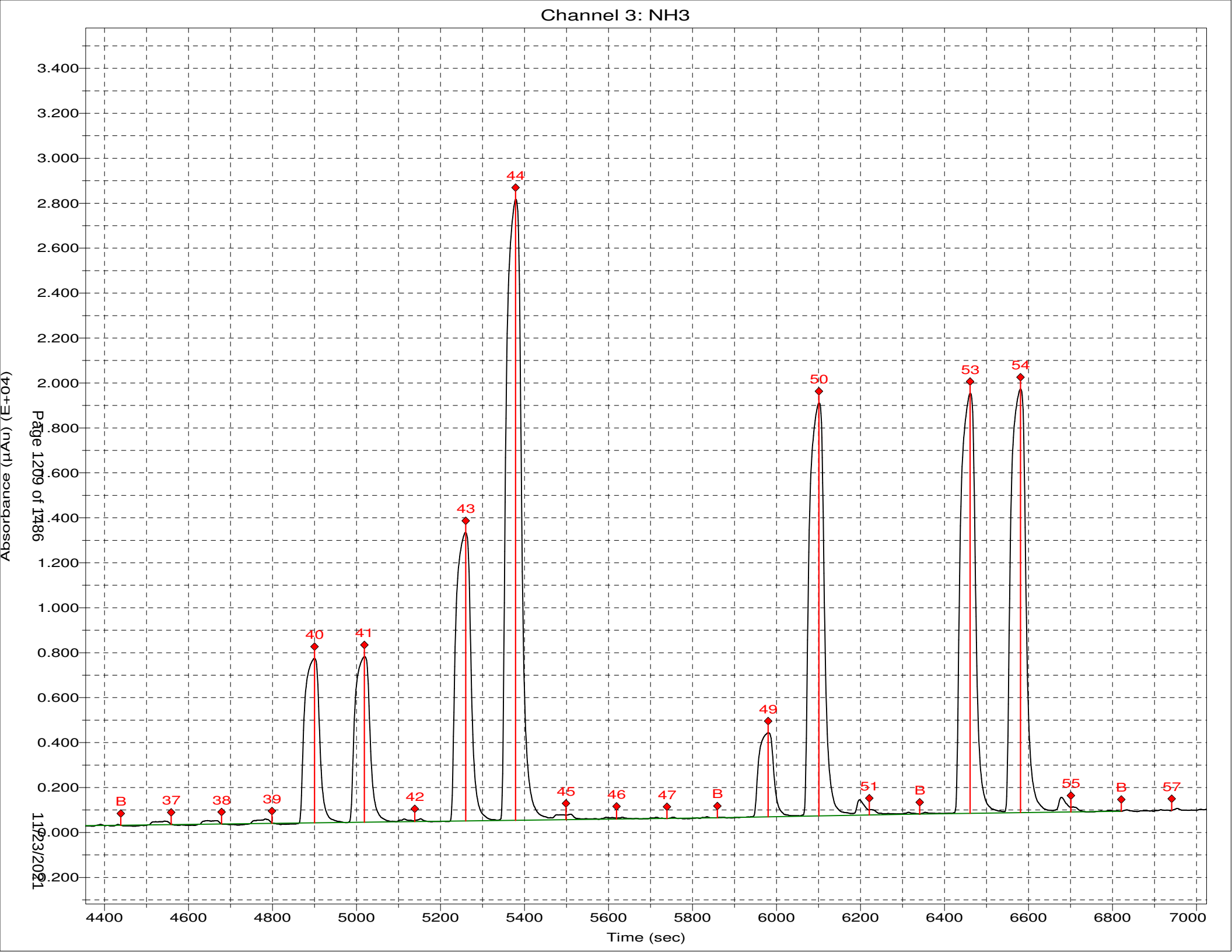
Carryover: 0%

No Drift Peaks


NH3:Calibration 1: Peak 4-59
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+04)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
21
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
Time (sec)
Page 1207 of 1486
11/23/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
39
40
4
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
Time (sec)
Page 1208 of 1486
11/23/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
B
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
B
57
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
7000
Time (sec)
Page 1209 of 1486
11/23/2021

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method	350.1
Analyte/Da	NH3

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	97.045			97.04500
25.000	250.554			250.55400
50.000	388.306			388.30600
100.000	738.063			738.06300
500.000	3562.644			3562.64400
1000.000	7265.246			7265.24600
2500.000	17412.826			17412.82600
5000.000	34006.160			34006.16000
				0.00000
				0.00000

Relative Errors in X

	Average	Linear (1/x2)	Linear (1/X)	Linear Forced	Linear	Quadratic
	#DIV/0!	#DIV/0!	#DIV/0!	42.94%	-10.24%	14.54%
	#DIV/0!	#DIV/0!	#DIV/0!	10.76%	-15.53%	-4.91%
	#DIV/0!	#DIV/0!	#DIV/0!	5.26%	-7.51%	-4.37%
	#DIV/0!	#DIV/0!	#DIV/0!	1.62%	-0.32%	-2.57%
	#DIV/0!	#DIV/0!	#DIV/0!	3.62%	3.04%	0.95%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.66%	-0.45%	-0.04%
	#DIV/0!	#DIV/0!	#DIV/0!	-3.00%	-2.54%	3.12%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	18.3%	9.1%	8.2%

Curve Fit Statistics

	Constant	1ST Degree Coefficient	2ND Degree Coefficient	X-Intercept	r²	r
Weighted (1/Amt^2)						
Average		#DIV/0!		0	#DIV/0!	#DIV/0!
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Weighted (1/Amt)						
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Unweighted						
Forced Zero		7.0115E+00		0	0.99921	0.99961
Linear	9.4393E+01	6.9590E+00		-13.56	0.99918	0.99959
Quadratic	4.1812E+01	7.2938E+00	-1.3706E-04	-5.73	0.99915	0.99957
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	250.554	3,562.644			
IS Response:					
Avg RF Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x2) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear Forced:	35.735	508.116	0.000	0.000	0.000
Linear Result:	22.440	498.382	-13.564	-13.564	-13.564
Quad Result (no IS):	28.634	487.173	-5.732	-5.732	-5.732
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 21-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync .	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155369-a-9	U	1	1	1		
202	MS 280-155369-a-9	U	1	1	1		
203	MSD 280-155369-a-9	U	1	1	1		
204	280-155070-f-2	U	1	5	1		
205	Void 280-155015-c-10	U	1	10	1		
206	280-155015-c-9	U	1	1	1		
207	280-155015-c-11	U	1	1	1		
208	280-155015-c-12	U	1	1	1		
209	280-155048-c-2	U	1	1	1		
210	280-155048-c-5	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-155138-c-9	U	1	1	1		
212	280-155138-c-4	U	1	1	1		
213	280-155048-c-8	U	1	1	1		
214	280-155048-c-8 ms	U	1	1	1		
215	280-155048-c-8 msd	U	1	1	1		
216	280-155048-c-1	U	1	1	1		
217	280-155048-c-4	U	1	1	1		
218	280-155048-c-3	U	1	1	1		
219	280-155048-c-6	U	1	1	1		
220	280-155138-c-7	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

350.1 color_00268

350.1 bleach_01524

350.1 complex_00584

pH

All <2

Cl^-

All non-detect

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 22-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155015-C-12	U	1	1	1		
202	MS 280-155015-c-12	U	1	1	1		
203	MSD 280-155015-c-12	U	1	1	1		
204	280-155048-c-3	U	1	1	1		
205	Void 280-155070-f-3	U	1	100	1		
206	Void 280-155015-c-10	U	1	10	1		
207	280-155117-b-1	U	1	1	1		
208	280-155117-b-7	U	1	1	1		
209	280-155117-b-8	U	1	1	1		
210	Void 280-155130-f-1	U	1	100	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-155130-f-2	U	1	1	1		
212	280-155138-c-3	U	1	2	1		
213	280-155138-c-10	U	1	1	1		
214	MS 280-155138-c-10	U	1	1	1		
215	MSD 280-155138-c-10	U	1	1	1		
216	280-155138-c-8	U	1	2	1		
217	320-81484-a-3	U	1	1	1		
218	320-81484-a-8	U	1	2	1		
219	Void 280-154777-r-1	U	1	100	1		
220	280-154779-p-1	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
221	280-155081-a-3	U	1	1	1		
222	280-155081-a-7	U	1	1	1		
223	280-155081-a-11	U	1	1	1		
224	280-155081-a-15	U	1	1	1		
225	280-155150-a-2	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
226	MS 280-155150-a-2	U		1	1	1	
227	MSD 280-155150-a-2	U		1	1	1	
228	280-155081-a-19	U		1	1	1	
229	Void 280-155225-c-1	U		1	2	1	
230	Void 280-155225-c-2	U		1	2	1	
0	Blank	BLNK		1	1	1	
0	Read Baseline	RB		1	1	1	
105	CCVL 500.0 ppb	U		1	1	1	
107	CCV 2500.0 ppb	U		1	1	1	
111	CCB	U		1	1	1	
0	read baseline	RB		1	1	1	
231	280-155225-c-3	U		1	2	1	
232	Void 280-155225-c-4	U		1	2	1	
233	280-155225-c-5	U		1	1	1	
234	280-155225-c-6	U		1	1	1	
235	280-155225-c-7	U		1	1	1	
236	280-155225-c-8	U		1	1	1	
237	280-155275-b-1	U		1	1	1	
238	MS 280-155275-b-1	U		1	1	1	
239	MSD 280-155275-b-1	U		1	1	1	
240	280-155015-c-10	U		1	2	1	
0	Blank	BLNK		1	1	1	
0	Read Baseline	RB		1	1	1	
105	CCVL 500.0 ppb	U		1	1	1	
107	CCV 2500.0 ppb	U		1	1	1	
111	CCB	U		1	1	1	
0	read baseline	RB		1	1	1	
107	LCS 2500.00	U		1	1	1	
107	LCSD 2500.00	U		1	1	1	
111	MB	U		1	1	1	
0	read baseline	RB		1	1	1	
241	Void 280-155070-f-3	U		1	20	1	
242	Void 280-155130-f-1	U		1	20	1	
243	Void 280-154777-r-1	U		1	20	1	
244	Void 280-155225-c-1	U		1	1	1	
245	Void 280-155225-c-2	U		1	1	1	
246	Void 280-155225-c-4	U		1	1	1	
247	Void 280-155225-c-9	U		1	2	1	
248	Void 280-155275-b-2	U		1	1	1	
0	Void Blank	BLNK		1	1	1	
0	Void Read Baseline	RB		1	1	1	
105	Void CCVL 500.0 ppb	U		1	1	1	
107	VOid CCV 2500.0 ppb	U		1	1	1	
111	VOid CCB	U		1	1	1	
0	Void read baseline	RB		1	1	1	
105	Void CCVL 500.0 ppb	U		1	1	1	
107	VOid CCV 2500.0 ppb	U		1	1	1	
111	VOid CCB	U		1	1	1	
0	VOid read baseline	RB		1	1	1	
105	Void CCVL 500.0 ppb	U		1	1	1	
107	Void CCV 2500.0 ppb	U		1	1	1	
111	Void CCB	U		1	1	1	
0	VOid read baseline	RB		1	1	1	

Peak Table:NH3

File name: C:\FLOW_4\112221.RST
Date: 22-Nov-21
Operator: RKD

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	13096	983.204590	
2	0	Carry Over	1	CO	1	1	-39	0.081900	
3	0	Blank	1	BLNK	1	1	-1	2.919065	
4	101	Cal 0 ppb	1	C	1	1	125	12.346548	
5	102	Cal 25 ppb	1	C	1	1	330	27.573448	
6	103	Cal 50 ppb	1	C	1	1	620	49.180344	
7	104	Cal 100 ppb	1	C	1	1	1288	99.022430	
8	105	Cal 500 ppb	1	C	1	1	6550	492.047974	
9	106	Cal 1000 ppb	1	C	1	1	13118	984.834778	
10	107	Cal 2500 ppb	1	C	1	1	33282	2512.545654	
11	108	Cal 5000 ppb	1	C	1	1	65468	4997.446289	
12	0	Blank	1	BLNK	1	1	39	5.927881	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
14	109	ICVL 500.0 ppb	1	U	1	1	6755	507.433655	
15	110	ICV 2500.0 ppb	1	U	1	1	32644	2463.885742	
16	111	ICB	1	U	1	1	340	28.375267	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
18	107	LCS 2500.00	1	U	1	1	33250	2510.051270	
19	107	LCSD 2500.00	1	U	1	1	33280	2512.344971	
20	111	MB	1	U	1	1	209	18.547848	
21	201	280-155015-C-12	1	U	1	1	979	75.961288	
22	202	MS 280-155015-c-12	1	U	1	1	13953	1047.651611	
23	203	MSD 280-155015-c-12	1	U	1	1	14455	1085.447876	
24	204	280-155048-c-3	1	U	1	1	51496	3911.741211	
25	205	Void 280-155070-f-3	1	U	100	1	5751	43228.550781	
26	206	Void 280-155015-c-10	1	U	10	1	750	588.661133	
27	207	280-155117-b-1	1	U	1	1	1069	82.697678	
28	208	280-155117-b-7	1	U	1	1	1232	94.786804	
29	209	280-155117-b-8	1	U	1	1	-33	0.566142	
30	210	Void 280-155130-f-1	1	U	100	1	9710	72883.554688	
31	0	Blank	1	BLNK	1	1	-1	2.945170	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
33	105	CCVL 500.0 ppb	1	U	1	1	6651	499.646698	
34	107	CCV 2500.0 ppb	1	U	1	1	33099	2498.571777	
35	111	CCB	1	U	1	1	319	26.772406	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
37	211	280-155130-f-2	1	U	1	1	1457	111.632919	
38	212	280-155138-c-3	1	U	2	1	7328	1100.680420	
39	213	280-155138-c-10	1	U	1	1	21	4.587388	
40	214	MS 280-155138-c-10	1	U	1	1	13119	984.894714	
41	215	MSD 280-155138-c-10	1	U	1	1	13460	1010.609924	
42	216	280-155138-c-8	1	U	2	1	2911	440.139740	
43	217	320-81484-a-3	1	U	1	1	1290	99.180946	
44	218	320-81484-a-8	1	U	2	1	1474	225.803711	
45	219	Void 280-154777-r-1	1	U	100	1	4007	30195.281250	
46	220	280-154779-p-1	1	U	1	1	42575	3224.127930	
47	0	Blank	1	BLNK	1	1	14	4.031395	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
49	105	CCVL 500.0 ppb	1	U	1	1	6662	500.443817	
50	107	CCV 2500.0 ppb	1	U	1	1	33294	2513.453857	
51	111	CCB	1	U	1	1	414	33.875896	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
53	107	LCS 2500.00	1	U	1	1	33336	2516.681885	
54	107	LCSD 2500.00	1	U	1	1	33533	2531.685059	
55	111	MB	1	U	1	1	319	26.812859	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
57	221	280-155081-a-3	1	U	1	1	10	3.762875	
58	222	280-155081-a-7	1	U	1	1	-71	-2.250809	LO
59	223	280-155081-a-11	1	U	1	1	-98	-4.271098	LO
60	224	280-155081-a-15	1	U	1	1	-3	2.797109	
61	225	280-155150-a-2	1	U	1	1	1242	95.554543	
62	226	MS 280-155150-a-2	1	U	1	1	14632	1098.800049	
63	227	MSD 280-155150-a-2	1	U	1	1	14783	1110.151001	
64	228	280-155081-a-19	1	U	1	1	62	7.649746	
65	229	Void 280-155225-c-1	1	U	2	1	117	23.468254	
66	230	Void 280-155225-c-2	1	U	2	1	56	14.418431	
67	0	Blank	1	BLNK	1	1	58	7.366704	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
69	105	CCVL 500.0 ppb	1	U	1	1	6830	513.055908	
70	107	CCV 2500.0 ppb	1	U	1	1	33432	2523.948242	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	CCB	1	U	1	1	380	31.332104	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
73	231	280-155225-c-3	1	U	2	1	1345	206.566467	
74	232	Void 280-155225-c-4	1	U	2	1	106	21.746801	
75	233	280-155225-c-5	1	U	1	1	-26	1.051014	
76	234	280-155225-c-6	1	U	1	1	329	27.514601	
77	235	280-155225-c-7	1	U	1	1	6222	467.523926	
78	236	280-155225-c-8	1	U	1	1	8652	649.490479	
79	237	280-155275-b-1	1	U	1	1	591	47.075035	
80	238	MS 280-155275-b-1	1	U	1	1	12826	962.861389	
81	239	MSD 280-155275-b-1	1	U	1	1	13204	991.321228	
82	240	280-155015-c-10	1	U	2	1	3259	492.118805	
83	0	Blank	1	BLNK	1	1	26	4.981570	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
85	105	CCVL 500.0 ppb	1	U	1	1	6345	476.718231	
86	107	CCV 2500.0 ppb	1	U	1	1	31169	2351.375977	
87	111	CCB	1	U	1	1	393	32.258194	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
89	107	LCS 2500.00	1	U	1	1	31057	2342.858887	
90	107	LCSD 2500.00	1	U	1	1	30662	2312.760254	
91	111	MB	1	U	1	1	266	22.851402	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
93	241	Void 280-155070-f-3	1	U	20	1	25805	38868.273438	
94	242	Void 280-155130-f-1	1	U	20	1	44579	67564.171875	
95	243	Void 280-154777-r-1	1	U	20	1	18338	27564.394531	
96	244	Void 280-155225-c-1	1	U	1	1	74	8.492549	
97	245	Void 280-155225-c-2	1	U	1	1	44	6.267785	
98	246	Void 280-155225-c-4	1	U	1	1	56	7.215763	
99	247	Void 280-155225-c-9	1	U	2	1	2977	450.006287	
100	248	Void 280-155275-b-2	1	U	1	1	1394	106.885307	
101	0	Void Blank	1	BLNK	1	1	49	6.657682	
B	0	Void Read Baseline	1	RB	1	1	0	3.014382	BL
103	105	Void CCVL 500.0 ppb	1	U	1	1	5934	445.998108	
104	107	VOid CCV 2500.0 ppb	1	U	1	1	29365	2214.025391	
105	111	VOid CCB	1	U	1	1	217	19.169249	
B	0	Void read baseline	1	RB	1	1	0	3.014382	BL
107	105	Void CCVL 500.0 ppb	1	U	1	1	5712	429.374664	
108	107	VOid CCV 2500.0 ppb	1	U	1	1	28770	2168.775635	
109	111	VOid CCB	1	U	1	1	209	18.588259	
B	0	VOid read baseline	1	RB	1	1	0	3.014382	BL
111	105	Void CCVL 500.0 ppb	1	U	1	1	-39	0.138372	
112	107	Void CCV 2500.0 ppb	1	U	1	1	54	7.071733	
113	111	Void CCB	1	U	1	1	78	8.812767	
B	0	VOid read baseline	1	RB	1	1	0	3.014382	BL

NH3:Calibration 1: Peak 4-114

File name: C:\FLOW_4\112221.RST
Date: 22-Nov-21
Operator: RKD

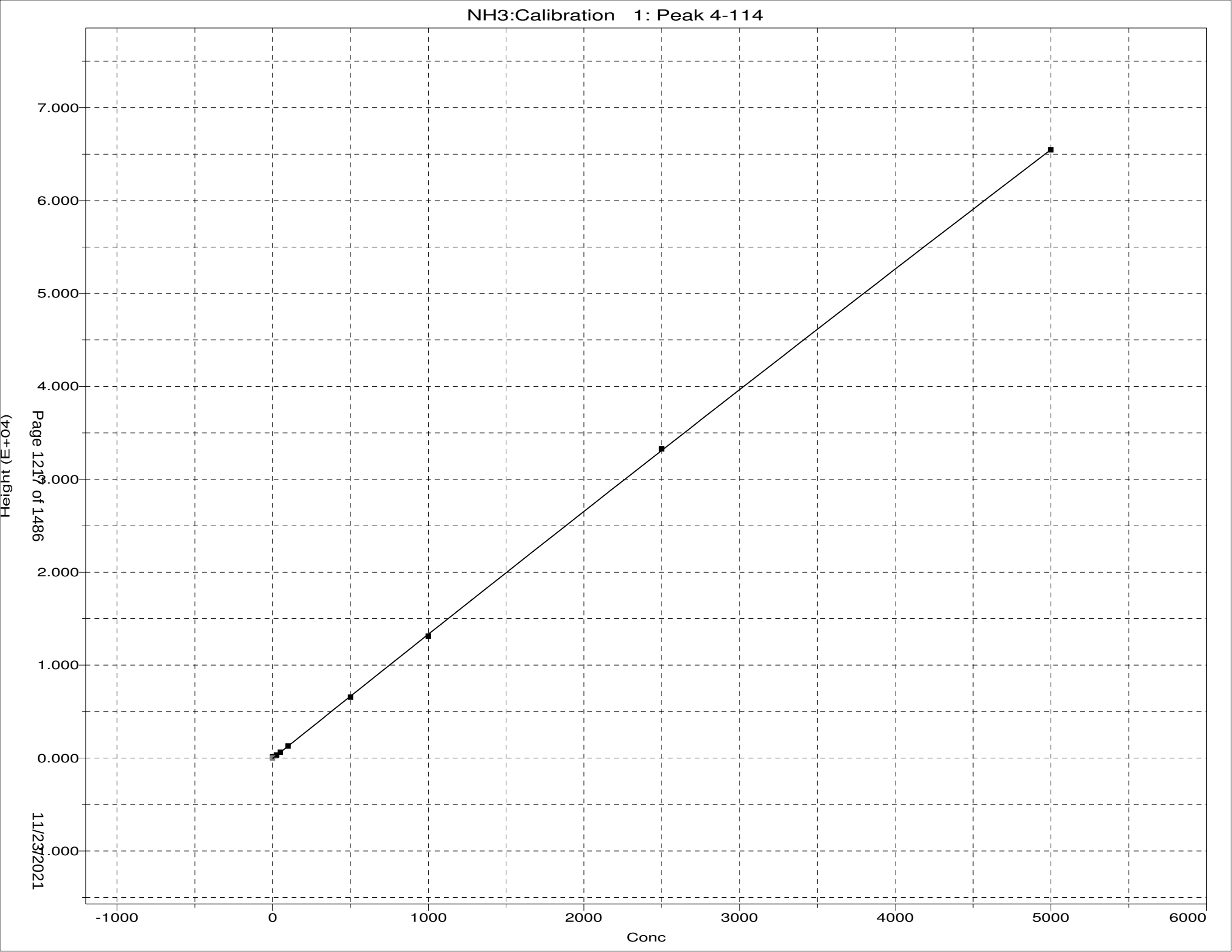
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	125.282837
*	Cal 25 ppb	25.000000	329.676575
*	Cal 50 ppb	50.000000	619.657349
*	Cal 100 ppb	100.000000	1288.338623
*	Cal 500 ppb	500.000000	6549.645508
*	Cal 1000 ppb	1000.000000	13117.789062
*	Cal 2500 ppb	2500.000000	33282.195312
*	Cal 5000 ppb	5000.000000	65468.359375

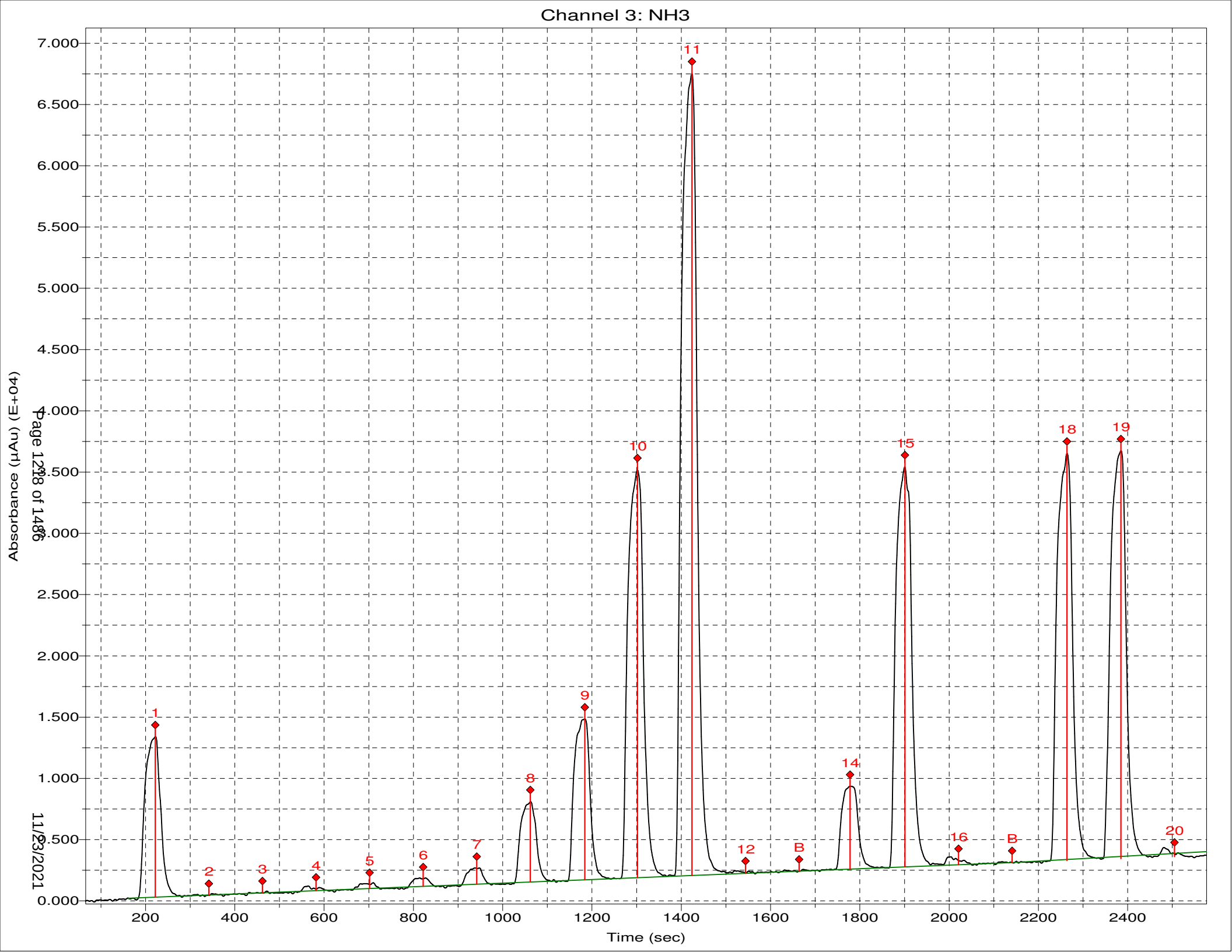
Calib Coef:
x=cyy+by+a
a: (intercept) 3.0144e+00
b: 7.4485e-02
c: 2.7531e-08

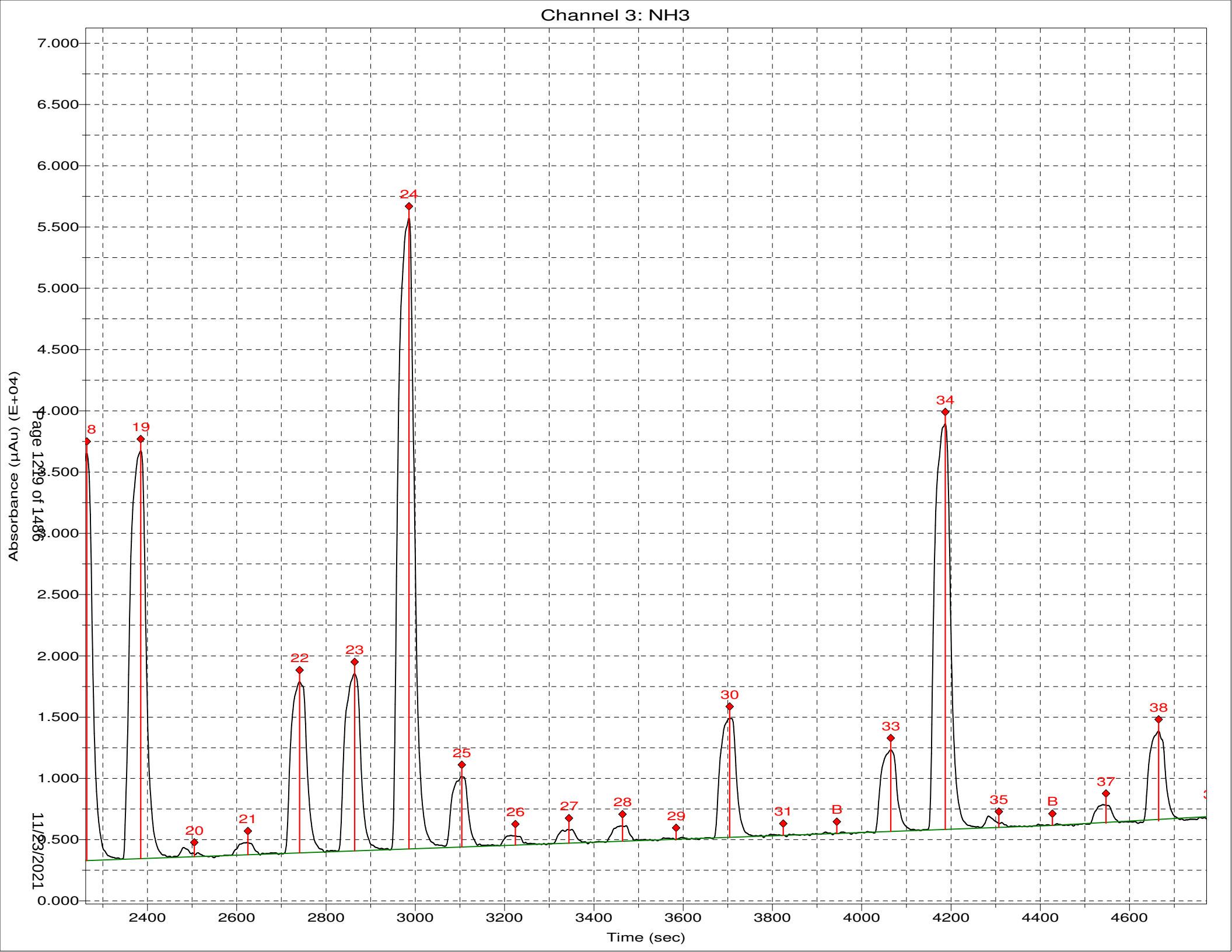
Corr Coef: 0.999986

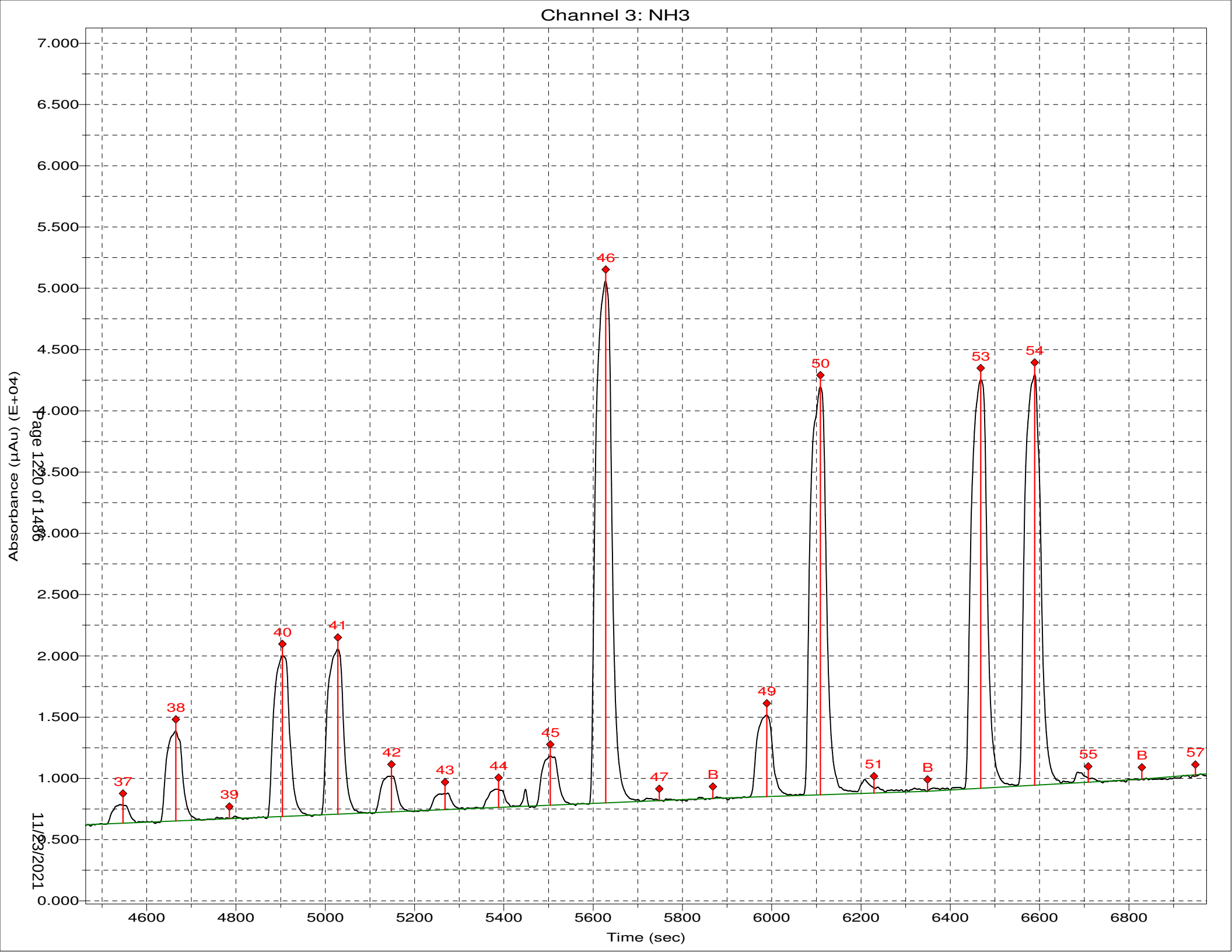
Carryover: 0%

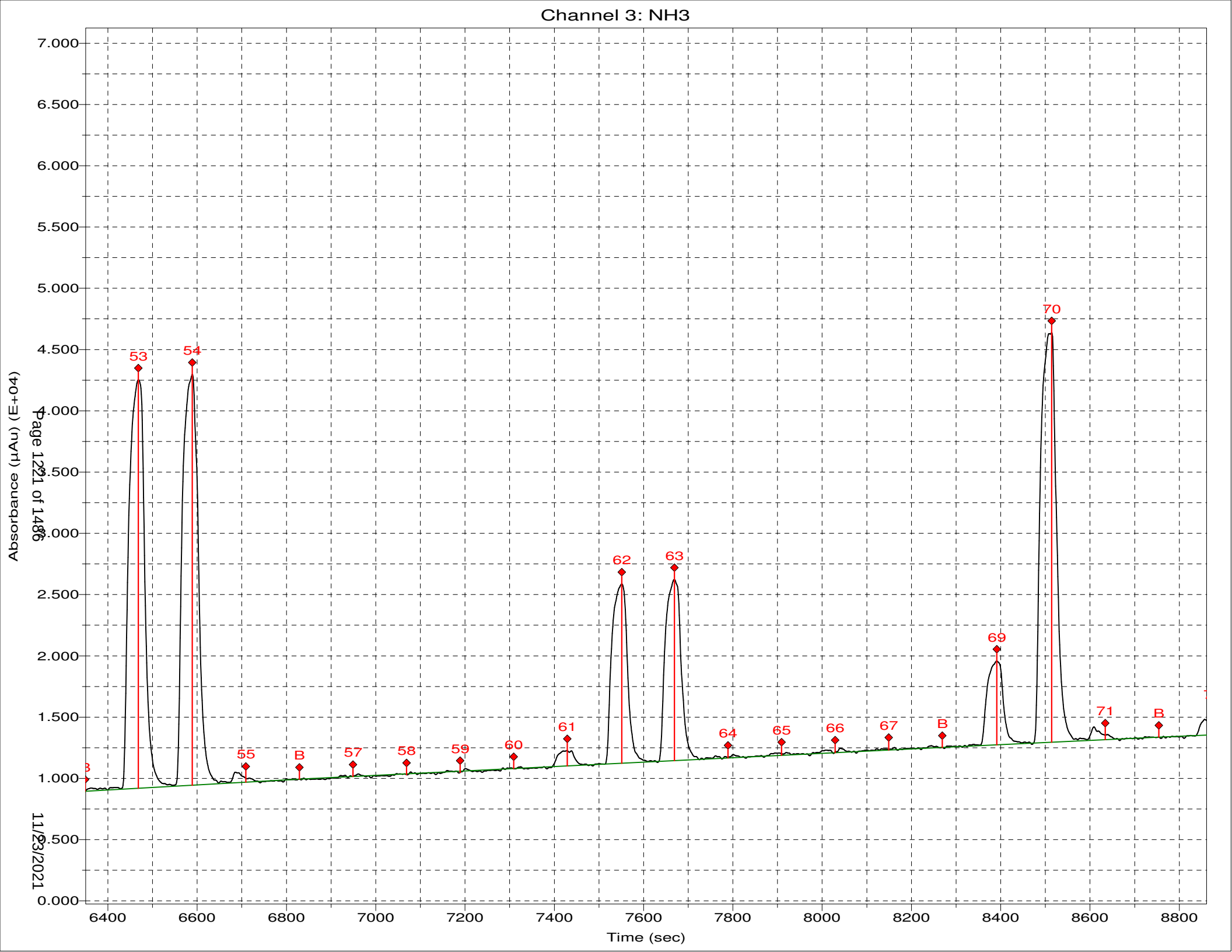
No Drift Peaks

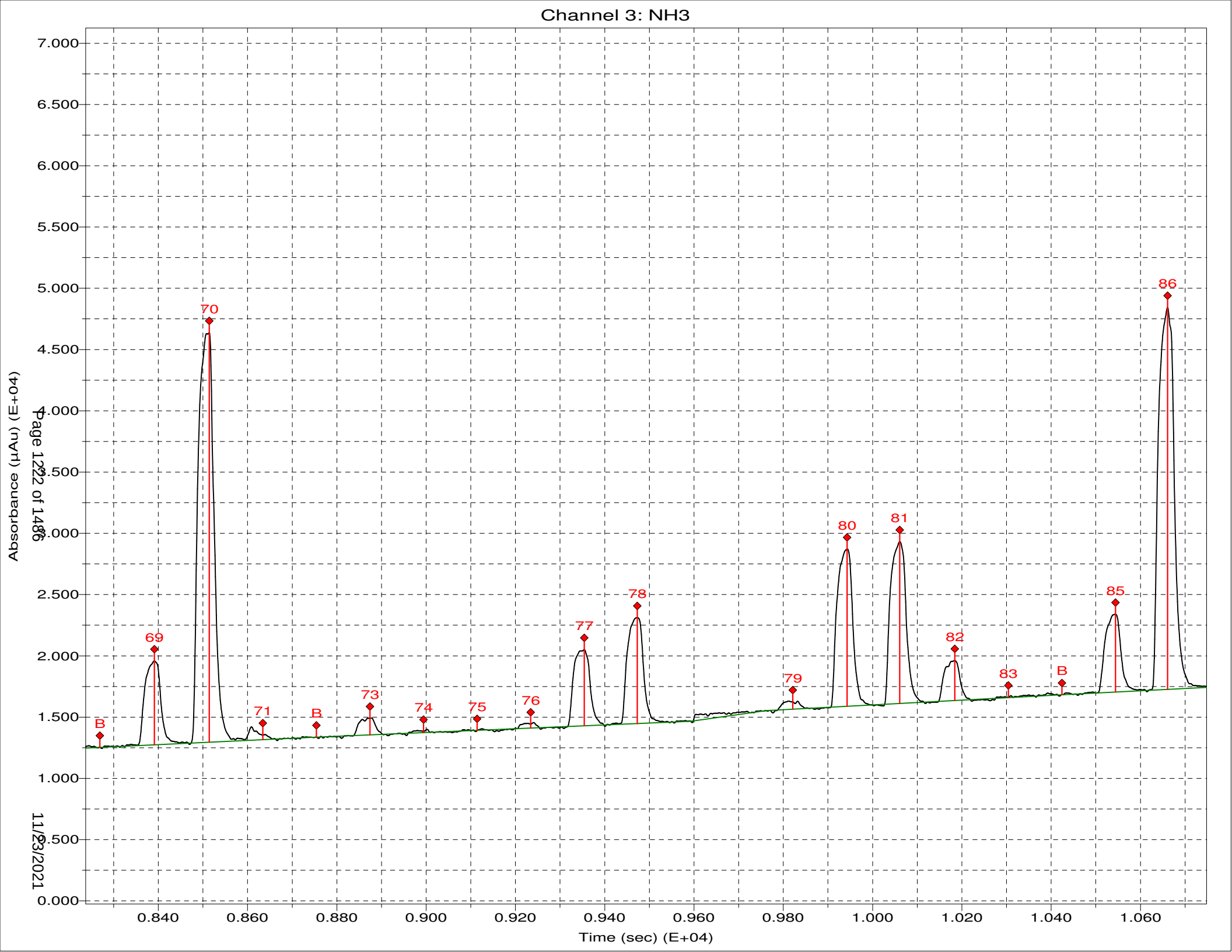

NH3:Calibration 1: Peak 4-114
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc

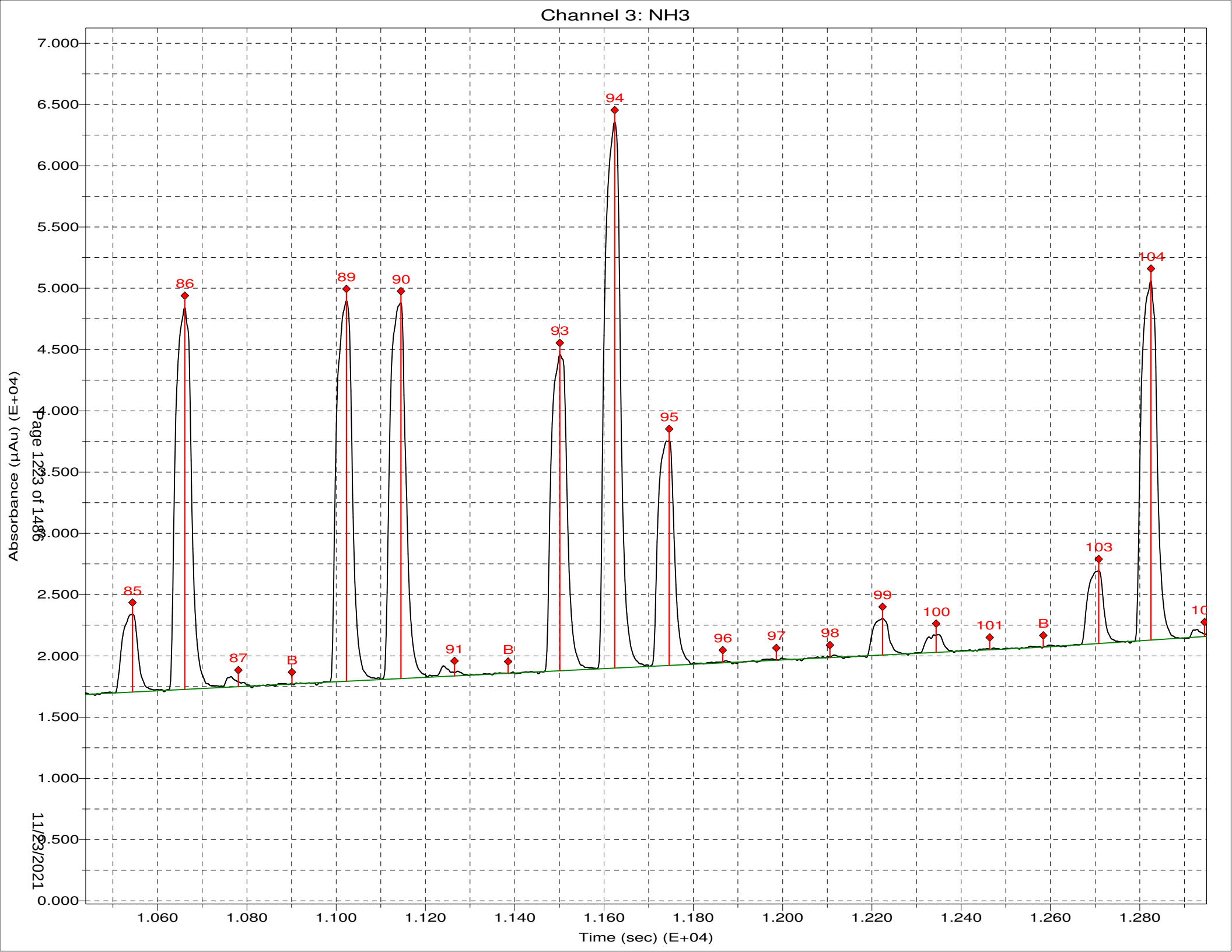

Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
Time (sec)
Page 128 of 1486
11/23/2021

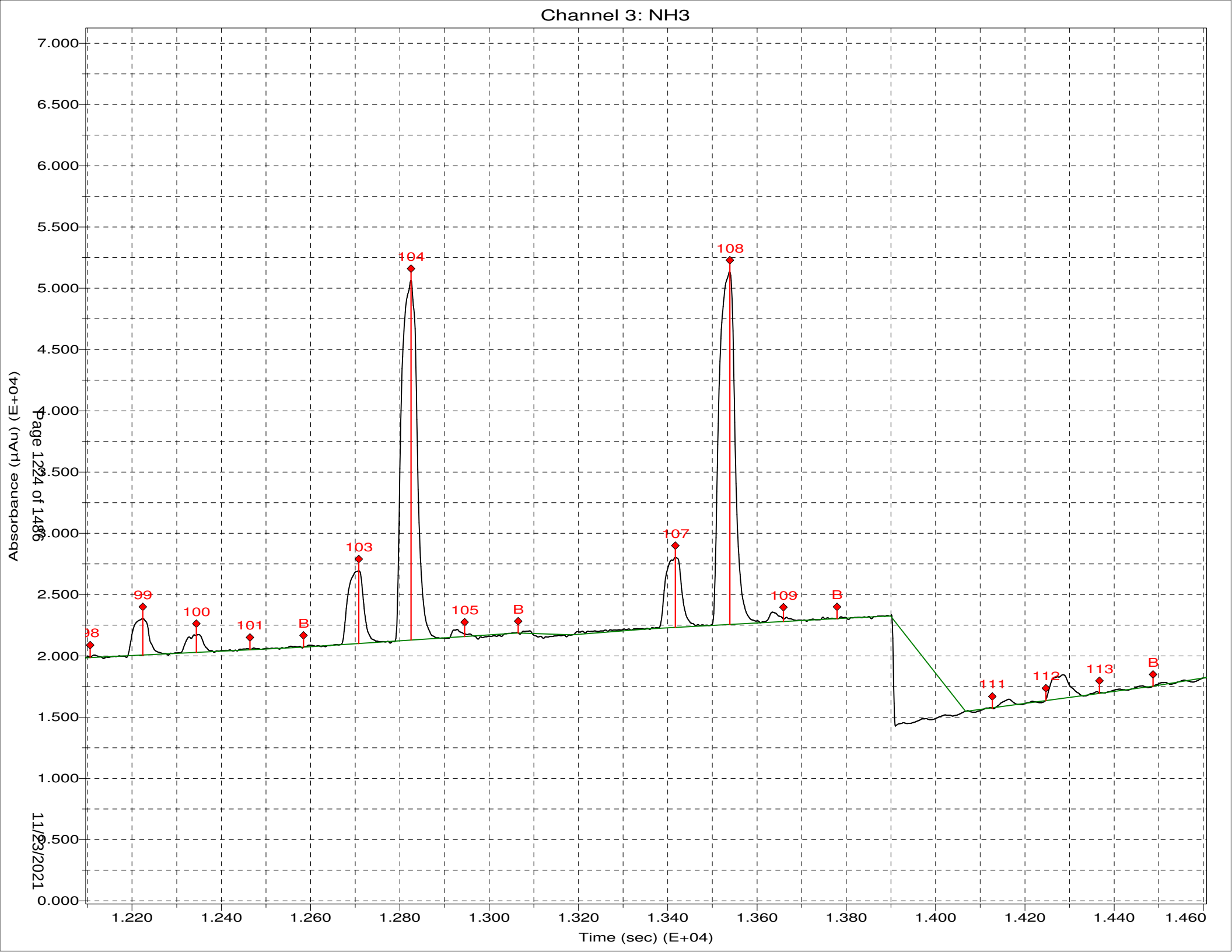

Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
8
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)
Page 1229 of 1486
11/23/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
B
57


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
53
54
55
B
57
58
59
60
61
62
63
64
65
66
67
B
69
70
71
B
Page 1221 of 1486
11/23/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
0.840
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
B
69
70
71
B
73
74
75
76
77
78
79
80
81
82
83
B
85
86


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1.060
1.080
1.100
1.120
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
85
86
87
B
89
90
91
B
93
94
95
96
97
98
99
100
101
B
103
104
Page 1223 of 1486
11/23/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1.220
1.240
1.260
1.280
1.300
1.320
1.340
1.360
1.380
1.400
1.420
1.440
1.460
98
99
100
101
B
103
104
105
B
107
108
109
B
111
112
113
B

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 22-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155015-C-12	U	1	1	1		
202	MS 280-155015-c-12	U	1	1	1		
203	MSD 280-155015-c-12	U	1	1	1		
204	280-155048-c-3	U	1	1	1		
205	Void 280-155070-f-3	U	1	100	1		
206	Void 280-155015-c-10	U	1	10	1		
207	280-155117-b-1	U	1	1	1		
208	280-155117-b-7	U	1	1	1		
209	280-155117-b-8	U	1	1	1		
210	Void 280-155130-f-1	U	1	100	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-155130-f-2	U	1	1	1		
212	280-155138-c-3	U	1	2	1		
213	280-155138-c-10	U	1	1	1		
214	MS 280-155138-c-10	U	1	1	1		
215	MSD 280-155138-c-10	U	1	1	1		
216	280-155138-c-8	U	1	2	1		
217	320-81484-a-3	U	1	1	1		
218	320-81484-a-8	U	1	2	1		
219	Void 280-154777-r-1	U	1	100	1		
220	280-154779-p-1	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

350.1 Color - 00268
350.1 Bleach - 01525
350.1 Complex - 00584

PH
<2

Cl
NO

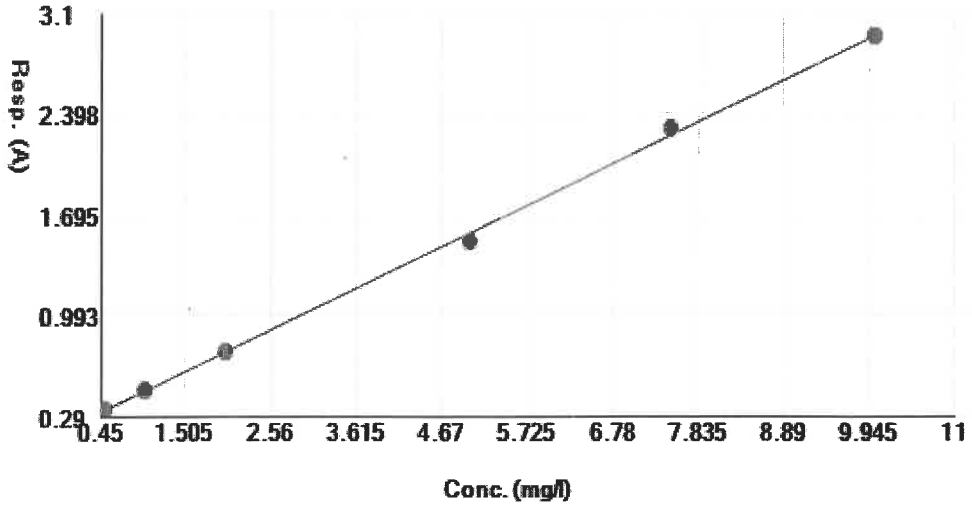
Calibration results

TKN Version number 1.5 WC_GAL1

Date	11/15/2021	**User**	Dealer
Time	5:07:49PM	**Software version: 7.0**	
Analyzer name	WC_GAL1		

Test	TKN	**Coeff. of deter.**	0.998983
Status	To be accepted	**Total factor**	3.644
Accepted			
Checked			
User name			
Comment			
Errors			
Factor	3.644		
Bias	0.187		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
TKN 10.0	0.333	0.52934520	0.50000000	Default	
TKN 10.0	0.468	1.02455200	1.00000000	Default	
TKN 10.0	0.745	2.03061500	2.00000000	Default	
TKN 10.0	1.498	4.77604200	5.00000000	Default	
TKN 7.5	2.287	7.65004500	7.50000000	Default	
TKN 10.0	2.929	9.98939900	10.00000000	Default	



Test results report

WC_GAL1

Test name TKN

Date 11/15/2021 **User** Dealer

Time 6:49:09PM **Software version: 7.0**

Test TKN **Group ID** [All] **Acceptance** Not accepted

Sample ID [All] **Group name** [All] **Request type** All

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	icv	1.5	5.0874060	mg/l		0.0	calc	
TKN	icb	1.5	0.1128380	mg/l		0.0	calc	
TKN	LCS 280-557418/11-A	1.5	5.8504830	mg/l		0.0	calc	
TKN	MB 280-557418/12-A	1.5	0.1563803	mg/l		0.0	calc	
TKN	280-155130-F-2-A	1.5	-0.4202970	mg/l		0.0	calc	
TKN	280-155015-C-1-A	1.5	0.4322933	mg/l		0.0	calc	
TKN	280-155015-C-2-A	1.5	0.5060589	mg/l		0.0	calc	
TKN	280-155015-C-3-A	1.5	0.6321927	mg/l		0.0	calc	
TKN	280-155015-C-4-A	1.5	2.0340520	mg/l		0.0	calc	
TKN	280-155015-C-6-A	1.5	2.9655280	mg/l		0.0	calc	
TKN	280-155015-C-7-A	1.5	3.4832660	mg/l		0.0	calc	
TKN	ccv1	1.5	4.9353710	mg/l		0.0	calc	
TKN	ccb1	1.5	0.0869167	mg/l		0.0	calc	
TKN	280-155015-C-8-A	1.5	0.6534711	mg/l		0.0	calc	
TKN	280-155015-C-9-A	1.5	1.6431170	mg/l		0.0	calc	
TKN	280-155268-A-1-A	1.5	-0.0891264	mg/l		0.0	calc	
TKN	280-155268-A-1-B MS	1.5	2.7325070	mg/l		0.0	calc	
TKN	280-155268-A-1-C MSD	1.5	2.7429490	mg/l		0.0	calc	
TKN	280-155268-A-2-A	1.5	-0.4611887	mg/l		0.0	calc	
TKN	280-155268-A-3-A	1.5	3.3466870	mg/l		0.0	calc	
TKN	590-16294-A-3-A	1.5	7.4588430	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155015-C-5-A	1.5	0.3305099	mg/l		0.0	calc	
TKN	280-155015-C-10-A	1.5	1.7448120	mg/l		0.0	calc	
TKN	ccv2	1.5	5.0382390	mg/l		0.0	calc	
TKN	ccb2	1.5	0.0979638	mg/l		0.0	calc	
TKN	280-155015-C-11-A	1.5	0.7428429	mg/l		0.0	calc	
TKN	280-155015-C-12-A	1.5	0.3866113	mg/l		0.0	calc	
TKN	590-16293-C-1-A	1.5	1.6048520	mg/l		0.0	calc	
TKN	590-16293-C-2-A	1.5	1.6692190	mg/l		0.0	calc	
TKN	ccv3	1.5	4.9375310	mg/l		0.0	calc	
TKN	ccb3	1.5	0.1274083	mg/l		0.0	calc	
TKN	280-155130-F-1-A	1.5	63.1837900	mg/l		9.0	calc	
TKN	280-155130-F-1-B MS	1.5	62.9501600	mg/l		9.0	calc	
TKN	280-155130-F-1-C MSD	1.5	63.1573100	mg/l		9.0	calc	
TKN	ccv4	1.5	4.9647240	mg/l		0.0	calc	
TKN	ccb4	1.5	0.1230213	mg/l		0.0	calc	

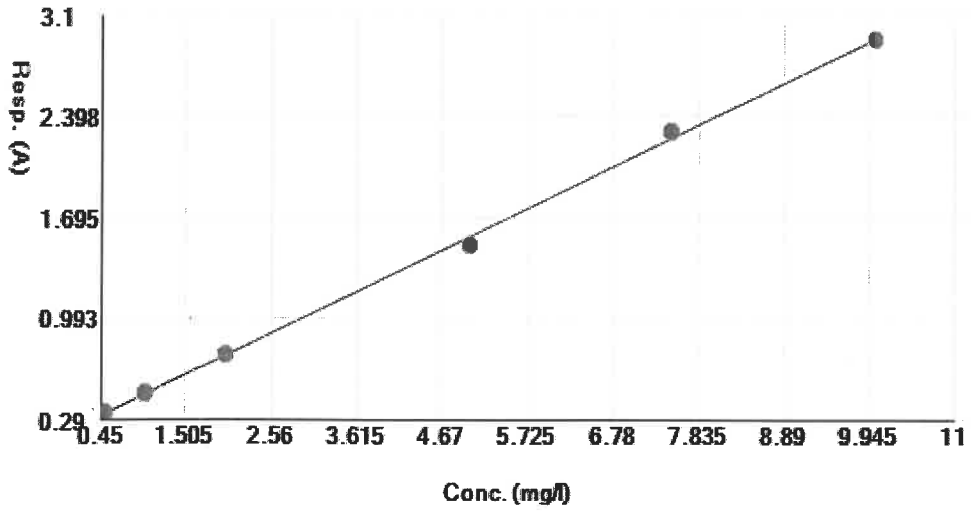
Calibration results

TKN Version number 1.5 WC_GAL1

Date	11/17/2021	**User**	Dealer
Time	8:58:09PM	**Software version: 7.0**	
Analyzer name	WC_GAL1		

Test	TKN	**Coeff. of deter.**	0.998983
Status	Accepted	**Total factor**	3.644
Accepted	11/15/2021 5:07 PM		
Checked	11/15/2021 5:07 PM		
User name	Dealer		
Comment			
Errors			
Factor	3.644		
Bias	0.187		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
TKN 10.0	0.333	0.52934520	0.50000000	Default	
TKN 10.0	0.468	1.02455200	1.00000000	Default	
TKN 10.0	0.745	2.03061500	2.00000000	Default	
TKN 10.0	1.498	4.77604200	5.00000000	Default	
TKN 7.5	2.287	7.65004500	7.50000000	Default	
TKN 10.0	2.929	9.98939900	10.00000000	Default	



Test results report

WC_GAL1

Test name TKN

Date 11/17/2021 **User** Dealer

Time 8:58:47PM **Software version: 7.0**

Test TKN **Group ID** [All] **Acceptance** Not accepted

Sample ID [All] **Group name** [All] **Request type** All

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	icv	1.5	5.0892210	mg/l		0.0	calc	
TKN	icb	1.5	0.1081988	mg/l		0.0	calc	
TKN	LCS 280-557729/1-A	1.5	5.9242120	mg/l		0.0	calc	
TKN	MB 280-557729/2-A	1.5	0.1000341	mg/l		0.0	calc	
TKN	280-155138-C-10-A	1.5	-0.4722454	mg/l		0.0	calc	
TKN	280-155138-C-10-B MS	1.5	-0.3525051	mg/l		0.0	calc	
TKN	280-155138-C-10-C MS	1.5	-0.3567832	mg/l		0.0	calc	
TKN	280-155138-C-9-A	1.5	-0.4782377	mg/l		0.0	calc	
TKN	280-155138-C-8-A	1.5	1.1154250	mg/l		0.0	calc	
TKN	280-155138-C-7-A	1.5	0.2176941	mg/l		0.0	calc	
TKN	280-155138-C-6-A	1.5	-0.4762098	mg/l		0.0	calc	
TKN	280-155138-C-5-A	1.5	-0.1736874	mg/l		0.0	calc	
TKN	280-155138-C-4-A	1.5	-0.1434925	mg/l		0.0	calc	
TKN	280-155138-C-3-A	1.5	1.3538810	mg/l		0.0	calc	
TKN	ccv1	1.5	5.0415520	mg/l		0.0	calc	
TKN	ccb1	1.5	0.1140050	mg/l		0.0	calc	
TKN	280-155138-C-2-A	1.5	-0.4676255	mg/l		0.0	calc	
TKN	280-155138-C-1-A	1.5	1.6367360	mg/l		0.0	calc	
TKN	280-155048-C-7-A	1.5	1.5839390	mg/l		0.0	calc	
TKN	280-155048-C-7-B MS	1.5	4.4388700	mg/l		0.0	calc	
TKN	280-155048-C-7-C MSD	1.5	4.4183430	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155048-C-1-A	1.5	-0.4686755	mg/l		0.0	calc	
TKN	280-155048-C-2-A	1.5	-0.4756789	mg/l		0.0	calc	
TKN	280-155048-C-3-A	1.5	2.8191080	mg/l		0.0	calc	
TKN	280-155048-C-4-A	1.5	1.9791010	mg/l		0.0	calc	
TKN	ccv2	1.5	5.0843170	mg/l		0.0	calc	
TKN	ccb2	1.5	0.0715438	mg/l		0.0	calc	
TKN	280-155048-C-5-A	1.5	0.1313861	mg/l		0.0	calc	
TKN	280-155048-C-6-A	1.5	-0.4361079	mg/l		0.0	calc	
TKN	280-155221-I-1-A	1.5	1.0254540	mg/l		0.0	calc	
TKN	280-155221-I-2-A	1.5	0.5735527	mg/l		0.0	calc	
TKN	LCS 280-557730/1-A	1.5	5.7142470	mg/l		0.0	calc	
TKN	MB 280-557730/2-A	1.5	0.0624511	mg/l		0.0	calc	
TKN	280-155048-C-8-A	1.5	0.2259924	mg/l		0.0	calc	
TKN	280-155048-C-8-B MS	1.5	3.4011620	mg/l		0.0	calc	
TKN	280-155048-C-8-C MSD	1.5	3.4080560	mg/l		0.0	calc	
TKN	280-155225-C-1-A	1.5	-0.0461806	mg/l		0.0	calc	
TKN	ccv3	1.5	5.0143890	mg/l		0.0	calc	
TKN	ccb3	1.5	0.0029035	mg/l		0.0	calc	
TKN	280-155225-C-2-A	1.5	-0.4762115	mg/l		0.0	calc	
TKN	280-155225-C-3-A	1.5	0.5290443	mg/l		0.0	calc	
TKN	280-155225-C-4-A	1.5	0.5121606	mg/l		0.0	calc	
TKN	280-155225-C-5-A	1.5	-0.4860420	mg/l		0.0	calc	
TKN	280-155225-C-7-A	1.5	1.9948230	mg/l		0.0	calc	
TKN	280-155225-C-8-A	1.5	2.8235230	mg/l		0.0	calc	
TKN	280-155225-C-9-A	1.5	1.9230160	mg/l		0.0	calc	
TKN	280-155225-C-6-A	1.5	-0.1736972	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155225-C-6-B MS	1.5	2.6271640	mg/l		0.0	calc	
TKN	280-155225-C-6-C MSD	1.5	2.6228180	mg/l		0.0	calc	
TKN	280-155436-K-1-B	1.5	12.6162800	mg/l		4.0	calc	
TKN	ccv4	1.5	5.0926820	mg/l		0.0	calc	
TKN	ccb4	1.5	0.0366655	mg/l		0.0	calc	
TKN	280-155015-C-1-B	1.5	1.6314870	mg/l		0.0	calc	
TKN	280-155015-C-2-B	1.5	2.8356290	mg/l		0.0	calc	
TKN	280-155015-C-3-B	1.5	3.6169980	mg/l		0.0	calc	
TKN	280-155015-C-5-B	1.5	1.3155450	mg/l		0.0	calc	
TKN	280-155015-C-5-B	1.5	1.3188080	mg/l		0.0	calc	
TKN	280-155015-C-8-B	1.5	3.0520540	mg/l		0.0	calc	
TKN	280-155015-C-8-B	1.5	3.0642320	mg/l		0.0	calc	
TKN	ccv5	1.5	5.1496120	mg/l		0.0	calc	
TKN	ccv5	1.5	5.0559920	mg/l		0.0	calc	
TKN	ccb5	1.5	0.0994432	mg/l		0.0	calc	
TKN	ccb5	1.5	0.0968346	mg/l		0.0	calc	

Run Results Report

Facility Name
Facility Location
Department
Operator Name svc
Operator ID svc
Platform FS III/IV/3100
Software Rev Code 240
Data system ID 54

Result path C:\FLOW_4\111721.RST
Sample table path C:\FLOW_4\111721.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 17-Nov-21
Time acquired 20:00

Date	Time	Cup	Name
17-Nov-21	16:27	109	SYNC
17-Nov-21	16:29	0	Carryover
17-Nov-21	16:31	0	Carryover (Statistics)
17-Nov-21	16:33	0	read baseline
17-Nov-21	16:35	101	Cal 0.00 ppb
17-Nov-21	16:37	102	Cal 50.0 ppb
17-Nov-21	16:39	103	Cal 100 ppb
17-Nov-21	16:41	104	Cal 500 ppb
17-Nov-21	16:43	105	Cal 1000 ppb
17-Nov-21	16:45	106	Cal 2500 ppb
17-Nov-21	16:47	107	Cal 5000 ppb
17-Nov-21	16:49	108	Cal 7500 ppb
17-Nov-21	16:51	109	Cal 10000 ppb
17-Nov-21	16:53	0	Blank
17-Nov-21	16:55	0	Read Baseline
17-Nov-21	16:57	110	5000 PPB NO2
17-Nov-21	16:59	111	ICV 5000 PPB
17-Nov-21	17:01	112	ICV 2000 PPB
17-Nov-21	17:03	0	ICB
17-Nov-21	17:05	0	Read Baseline
17-Nov-21	17:07	107	LCS
17-Nov-21	17:09	0	MB
17-Nov-21	17:11	113	280-154911-A-1
17-Nov-21	17:13	114	ms 280-154911-A-1
17-Nov-21	17:15	115	msd 280-154911-A-1
17-Nov-21	17:17	116	280-154911-A-2
17-Nov-21	17:19	117	280-154931-H-5
17-Nov-21	17:21	118	280-155237-H-2
17-Nov-21	17:23	119	280-155048-C-1
17-Nov-21	17:25	120	280-155048-C-2
17-Nov-21	17:27	121	280-155048-C-3
17-Nov-21	17:29	122	280-155048-C-4
17-Nov-21	17:31	0	Rinse
17-Nov-21	17:33	0	Read Baseline
17-Nov-21	17:35	107	CCV 5000 ppb
17-Nov-21	17:37	105	CCVL 1000 ppb
17-Nov-21	17:39	0	CCB
17-Nov-21	17:41	0	Read Baseline
17-Nov-21	17:44	123	280-155048-C-5
17-Nov-21	17:46	124	280-155048-C-6
17-Nov-21	17:48	125	280-155048-C-7
17-Nov-21	17:50	126	ms 280-155048-C-7
17-Nov-21	17:52	127	msd 280-155048-C-7
17-Nov-21	17:54	128	280-155015-C-1

Result path C:\FLOW_4\111721.RST
Sample table path C:\FLOW_4\111721.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 17-Nov-21
Time acquired 20:00

Date	Time	Cup	Name
17-Nov-21	17:56	129	280-155015-C-2
17-Nov-21	17:58	130	280-155015-C-3
17-Nov-21	18:00	131	280-155015-C-4
17-Nov-21	18:02	132	280-155015-C-5
17-Nov-21	18:04	0	Rinse
17-Nov-21	18:06	0	Read Baseline
17-Nov-21	18:08	107	CCV 5000 ppb
17-Nov-21	18:10	105	CCVL 1000 ppb
17-Nov-21	18:12	0	CCB
17-Nov-21	18:14	0	Read Baseline
17-Nov-21	18:16	133	280-155015-C-6
17-Nov-21	18:18	134	280-155015-C-7
17-Nov-21	18:20	135	280-155015-C-8
17-Nov-21	18:22	136	280-155015-C-9
17-Nov-21	18:24	107	LCS
17-Nov-21	18:26	107	LCSD
17-Nov-21	18:28	0	MB
17-Nov-21	18:30	137	280-155048-C-8
17-Nov-21	18:32	138	ms 280-155048-C-8
17-Nov-21	18:34	139	msd 280-155048-C-8
17-Nov-21	18:36	140	280-155015-C-10
17-Nov-21	18:38	0	Rinse
17-Nov-21	18:40	0	Read Baseline
17-Nov-21	18:42	107	CCV 5000 ppb
17-Nov-21	18:44	105	CCVL 1000 ppb
17-Nov-21	18:46	0	CCB
17-Nov-21	18:48	0	Read Baseline
17-Nov-21	18:50	141	280-155015-C-11
17-Nov-21	18:52	142	280-155015-C-12
17-Nov-21	18:54	143	280-155130-F-1
17-Nov-21	18:56	144	280-155130-F-2
17-Nov-21	18:58	145	280-155268-A-1
17-Nov-21	19:00	146	280-155268-A-2
17-Nov-21	19:02	147	280-155268-A-3
17-Nov-21	19:04	148	280-155081-A-4
17-Nov-21	19:06	149	280-155081-A-20
17-Nov-21	19:08	150	ms 280-155081-A-20
17-Nov-21	19:10	0	Rinse
17-Nov-21	19:12	0	Read Baseline
17-Nov-21	19:14	107	CCV 5000 ppb
17-Nov-21	19:16	105	CCVL 1000 ppb
17-Nov-21	19:18	0	CCB
17-Nov-21	19:20	0	Read Baseline
17-Nov-21	19:22	151	msd 280-155081-A-20
17-Nov-21	19:24	152	280-155081-A-12
17-Nov-21	19:26	153	280-155081-A-16
17-Nov-21	19:28	154	280-155081-A-8
17-Nov-21	19:30	155	550-173255-F-1
17-Nov-21	19:32	156	550-173255-F-2
17-Nov-21	19:34	157	550-173255-F-3
17-Nov-21	19:36	158	550-173255-F-4
17-Nov-21	19:38	159	550-173255-F-5
17-Nov-21	19:40	160	550-173255-F-6
17-Nov-21	19:42	0	Rinse
17-Nov-21	19:44	0	Read Baseline
17-Nov-21	19:46	107	CCV 5000 ppb
17-Nov-21	19:48	105	CCVL 1000 ppb

Result path	C:\FLOW_4\111721.RST
Sample table path	C:\FLOW_4\111721.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	17-Nov-21
Time acquired	20:00

Date	Time	Cup	Name
17-Nov-21	19:50	0	CCB
17-Nov-21	19:52	0	Read Baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\111721.RST
Sample table path	C:\FLOW_4\111721.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	17-Nov-21
Time acquired	20:00

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2273561	10018.147	HI UM			
Carryover	2254	-5.669	LO			
Carryover	-587	-18.208	LO			
(Statistics)				833	-11.938	N
read baseline	0	-15.617	BL			
Cal 0.00 ppb	767	-12.231	LO			
Cal 50.0 ppb	12789	40.824				
Cal 100 ppb	21925	81.143				
Cal 500 ppb	117897	504.691				
Cal 1000 ppb	217213	942.996				
Cal 2500 ppb	576566	2528.904				
Cal 5000 ppb	1156604	5088.751				
Cal 7500 ppb	1721845	7583.292				
Cal 10000 ppb	2244893	9891.628				
Blank	203	-14.720	LO			
Read Baseline	0	-15.617	BL			
5000 PPB NO2	1126588	4956.282				
ICV 5000 PPB	1094811	4816.044				
ICV 2000 PPB	438820	1921.000				
ICB	1348	-9.669	LO			
Read Baseline	0	-15.617	BL			
LCS	1136259	4998.963				
MB	1117	-10.689	LO UM			
280-154911-A-1	499153	21872.633				
ms 280-154911-A-1	1253144	55148.043				
msd 280-154911-A-1	1278188	56253.297				
280-154911-A-2	627780	27549.260				
280-154931-H-5	26142	99.755				
280-155237-H-2	556864	2441.957				
280-155048-C-1	828232	36395.688				
280-155048-C-2	395052	17278.395				
280-155048-C-3	546737	11986.313				
280-155048-C-4	2322	-5.369	LO			
Rinse	508	-13.375	LO			
Read Baseline	0	-15.617	BL			
CCV 5000 ppb	1165712	5128.946				
CCVL 1000 ppb	228797	994.121				
CCB	6072	11.181				
Read Baseline	0	-15.617	BL			
280-155048-C-5	816244	3586.663				
280-155048-C-6	661669	29044.848				
280-155048-C-7	3177	-1.598	LO			
ms 280-155048-C-7	886558	3896.973				
msd 280-155048-C-7	902342	3966.633				
280-155015-C-1	21912	81.080				

Result path	C:\FLOW_4\111721.RST
Sample table path	C:\FLOW_4\111721.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	17-Nov-21
Time acquired	20:00

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-155015-C-2	13949	45.946			
280-155015-C-3	13529	44.091			
280-155015-C-4	1170216	5148.823			
280-155015-C-5	11135	33.525			
Rinse	-1151	-20.697	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1207516	5313.438			
CCVL 1000 ppb	247663	1077.379			
CCB	1403	-9.426	LO		
Read Baseline	0	-15.617	BL		
280-155015-C-6	14013	46.228			
280-155015-C-7	13705	44.866			
280-155015-C-8	14592	48.783			
280-155015-C-9	900157	3956.991			
LCS	1216674	5353.855			
LCSD	1151946	5068.195			
MB	1810	-7.629	LO		
280-155048-C-8	5564	8.939			
ms 280-155048-C-8	952056	4186.034			
msd 280-155048-C-8	925318	4068.031			
280-155015-C-10	242786	1055.857			
Rinse	943	-11.454	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1201737	5287.934			
CCVL 1000 ppb	250093	1088.103			
CCB	6732	14.094			
Read Baseline	0	-15.617	BL		
280-155015-C-11	-2800	-27.974	LO		
280-155015-C-12	397361	1738.030			
280-155130-F-1	476693	2088.141			
280-155130-F-2	632045	69343.734			
280-155268-A-1	1117028	9828.189			
280-155268-A-2	597554	13107.654			
280-155268-A-3	934721	8219.057			
280-155081-A-4	87760	371.690			
280-155081-A-20	71897	301.683			
ms 280-155081-A-20	1026715	4515.521			
Rinse	2985	-2.441	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1181647	5199.271			
CCVL 1000 ppb	244454	1063.217			
CCB	8124	20.237			
Read Baseline	0	-15.617	BL		
msd 280-155081-A-20	888538	3905.710			
280-155081-A-12	12641	40.170			
280-155081-A-16	793	-12.116	LO		
280-155081-A-8	14478	48.278			
550-173255-F-1	521529	2286.016			
550-173255-F-2	481046	2107.355			
550-173255-F-3	464341	2033.631			
550-173255-F-4	661514	2903.800			
550-173255-F-5	661574	2904.068			
550-173255-F-6	658181	2889.093			
Rinse	-159	-16.320	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1041076	4578.896			
CCVL 1000 ppb	241789	1051.457			

Result path C:\FLOW_4\111721.RST
Sample table path C:\FLOW_4\111721.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 17-Nov-21
Time acquired 20:00

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
CCB	-646	-18.466	LO		
Read Baseline	0	-15.617	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\111721.RST
Date: 17-Nov-21
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2273561	10018.147461	HI UM
2	0	Carryover	1	CO	1	1	2254	-5.668645	LO
3	0	Carryover	2	CO	1	1	-587	-18.208199	LO
B	0	read baseline	1	RB	1	1	0	-15.616562	BL
5	101	Cal 0.00 ppb	1	C	1	1	767	-12.230652	LO
6	102	Cal 50.0 ppb	1	C	1	1	12789	40.823990	
7	103	Cal 100 ppb	1	C	1	1	21925	81.142853	
8	104	Cal 500 ppb	1	C	1	1	117897	504.691040	
9	105	Cal 1000 ppb	1	C	1	1	217213	942.996460	
10	106	Cal 2500 ppb	1	C	1	1	576566	2528.903809	
11	107	Cal 5000 ppb	1	C	1	1	1156604	5088.751465	
12	108	Cal 7500 ppb	1	C	1	1	1721845	7583.291504	
13	109	Cal 10000 ppb	1	C	1	1	2244893	9891.627930	
14	0	Blank	1	BLNK	1	1	203	-14.719746	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
16	110	5000 PPB NO2	1	U	1	1	1126588	4956.281738	
17	111	ICV 5000 PPB	1	CCV	1	1	1094811	4816.043945	
18	112	ICV 2000 PPB	1	CCV	1	1	438820	1921.000244	
19	0	ICB	1	U	1	1	1348	-9.669497	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
21	107	LCS	1	U	1	1	1136259	4998.963379	
22	0	MB	1	U	1	1	1117	-10.688707	LO UM
23	113	280-154911-A-1	1	U	10	1	499153	21872.632812	
24	114	ms 280-154911-A-1	1	U	10	1	1253144	55148.042969	
25	115	msd 280-154911-A-1	1	U	10	1	1278188	56253.296875	
26	116	280-154911-A-2	1	U	10	1	627780	27549.259766	
27	117	280-154931-H-5	1	U	1	1	26142	99.755203	
28	118	280-155237-H-2	1	U	1	1	556864	2441.957031	
29	119	280-155048-C-1	1	U	10	1	828232	36395.687500	
30	120	280-155048-C-2	1	U	10	1	395052	17278.394531	
31	121	280-155048-C-3	1	U	5	1	546737	11986.313477	
32	122	280-155048-C-4	1	U	1	1	2322	-5.368534	LO
33	0	Rinse	1	U	1	1	508	-13.375494	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1165712	5128.945801	
36	105	CCVL 1000 ppb	1	CCV	1	1	228797	994.120911	
37	0	CCB	1	U	1	1	6072	11.180510	
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
39	123	280-155048-C-5	1	U	1	1	816244	3586.663086	
40	124	280-155048-C-6	1	U	10	1	661669	29044.847656	
41	125	280-155048-C-7	1	U	1	1	3177	-1.597700	LO
42	126	ms 280-155048-C-7	1	U	1	1	886558	3896.972656	
43	127	msd 280-155048-C-7	1	U	1	1	902342	3966.632812	
44	128	280-155015-C-1	1	U	1	1	21912	81.085854	
45	129	280-155015-C-2	1	U	1	1	13949	45.945709	
46	130	280-155015-C-3	1	U	1	1	13529	44.090725	
47	131	280-155015-C-4	1	U	1	1	1170216	5148.823242	
48	132	280-155015-C-5	1	U	1	1	11135	33.524521	
49	0	Rinse	1	U	1	1	-1151	-20.697308	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1207516	5313.437988	
52	105	CCVL 1000 ppb	1	CCV	1	1	247663	1077.378662	
53	0	CCB	1	U	1	1	1403	-9.425538	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
55	133	280-155015-C-6	1	U	1	1	14013	46.227932	
56	134	280-155015-C-7	1	U	1	1	13705	44.865803	
57	135	280-155015-C-8	1	U	1	1	14592	48.782742	
58	136	280-155015-C-9	1	U	1	1	900157	3956.990723	
59	107	LCS	1	U	1	1	1216674	5353.855469	
60	107	LCSD	1	U	1	1	1151946	5068.195312	
61	0	MB	1	U	1	1	1810	-7.628735	LO
62	137	280-155048-C-8	1	U	1	1	5564	8.938836	
63	138	ms 280-155048-C-8	1	U	1	1	952056	4186.034180	
64	139	msd 280-155048-C-8	1	U	1	1	925318	4068.030762	
65	140	280-155015-C-10	1	U	1	1	242786	1055.856689	
66	0	Rinse	1	U	1	1	943	-11.454144	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
68	107	CCV 5000 ppb	1	CCV	1	1	1201737	5287.933594	
69	105	CCVL 1000 ppb	1	CCV	1	1	250093	1088.103149	
70	0	CCB	1	U	1	1	6732	14.093790	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
72	141	280-155015-C-11	1	U	1	1	-2800	-27.973682	LO
73	142	280-155015-C-12	1	U	1	1	397361	1738.030273	
74	143	280-155130-F-1	1	U	1	1	476693	2088.141357	
75	144	280-155130-F-2	1	U	25	1	632045	69343.734375	
76	145	280-155268-A-1	1	U	2	1	1117028	9828.189453	
77	146	280-155268-A-2	1	U	5	1	597554	13107.654297	
78	147	280-155268-A-3	1	U	2	1	934721	8219.056641	
79	148	280-155081-A-4	1	U	1	1	87760	371.690125	
80	149	280-155081-A-20	1	U	1	1	71897	301.683105	
81	150	ms 280-155081-A-20	1	U	1	1	1026715	4515.520996	
82	0	Rinse	1	U	1	1	2985	-2.441338	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616561	BL
84	107	CCV 5000 ppb	1	CCV	1	1	1181647	5199.270996	
85	105	CCVL 1000 ppb	1	CCV	1	1	244454	1063.216797	
86	0	CCB	1	U	1	1	8124	20.236729	
B	0	Read Baseline	1	RB	1	1	0	-15.616561	BL
88	151	msd 280-155081-A-20	1	U	1	1	888538	3905.709961	
89	152	280-155081-A-12	1	U	1	1	12641	40.169857	
90	153	280-155081-A-16	1	U	1	1	793	-12.115646	LO
91	154	280-155081-A-8	1	U	1	1	14478	48.277596	
92	155	550-173255-F-1	1	U	1	1	521529	2286.015625	
93	156	550-173255-F-2	1	U	1	1	481046	2107.355469	
94	157	550-173255-F-3	1	U	1	1	464341	2033.631470	
95	158	550-173255-F-4	1	U	1	1	661514	2903.800049	
96	159	550-173255-F-5	1	U	1	1	661574	2904.067627	
97	160	550-173255-F-6	1	U	1	1	658181	2889.092529	
98	0	Rinse	1	U	1	1	-159	-16.319666	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
100	107	CCV 5000 ppb	1	CCV	1	1	1041076	4578.895996	
101	105	CCVL 1000 ppb	1	CCV	1	1	241789	1051.457275	
102	0	CCB	1	U	1	1	-646	-18.465855	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL

Nitrate as N:Calibration 1: Peak 5-103

File name: C:\FLOW_4\111721.RST
Date: 17-Nov-21
Operator: svc

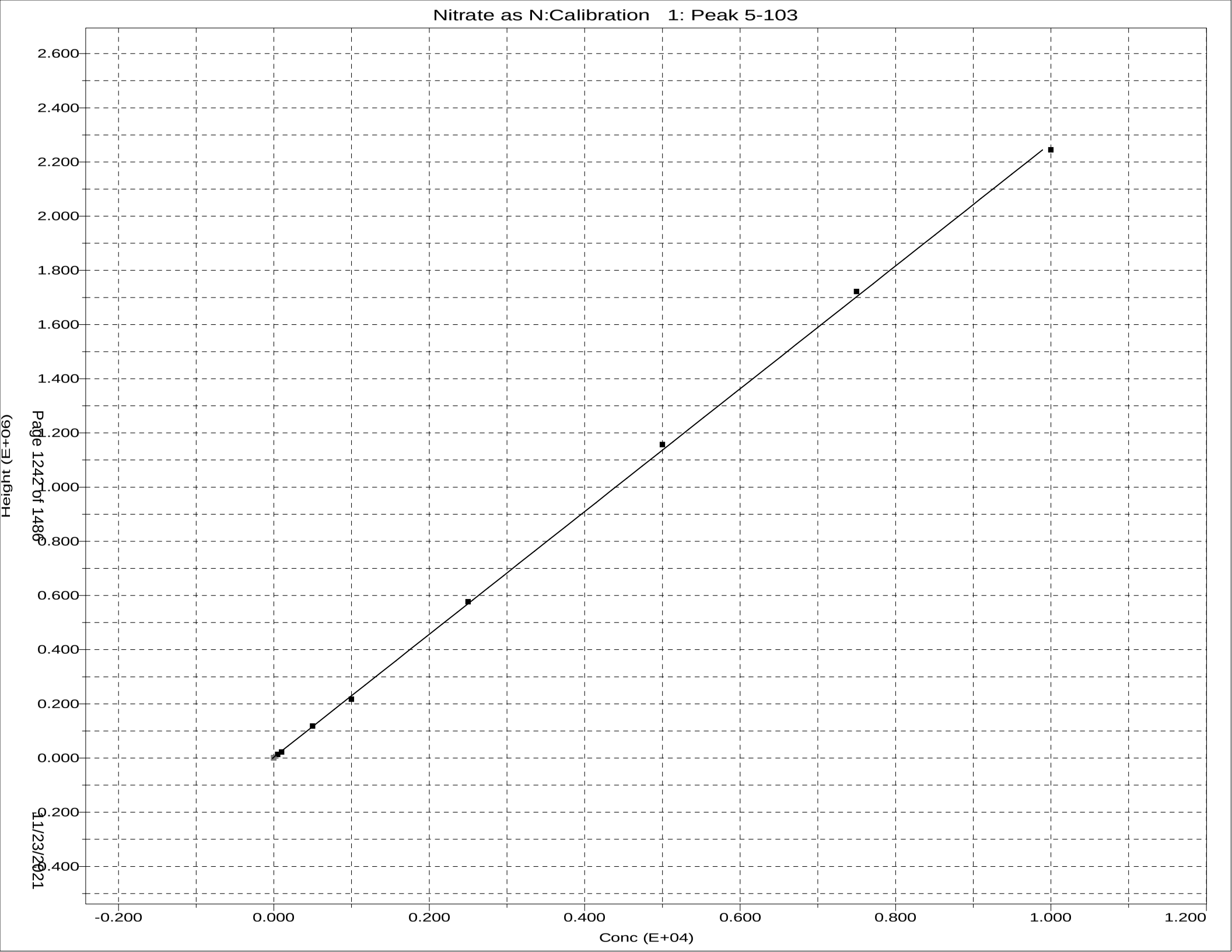
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	767.217041
*	Cal 50.0 ppb	50.000000	12788.924805
*	Cal 100 ppb	100.000000	21924.818359
*	Cal 500 ppb	500.000000	117897.046875
*	Cal 1000 ppb	1000.000000	217213.140625
*	Cal 2500 ppb	2500.000000	576565.562500
*	Cal 5000 ppb	5000.000000	1156604.125000
*	Cal 7500 ppb	7500.000000	1721844.625000
*	Cal 10000 ppb	10000.000000	2244893.000000

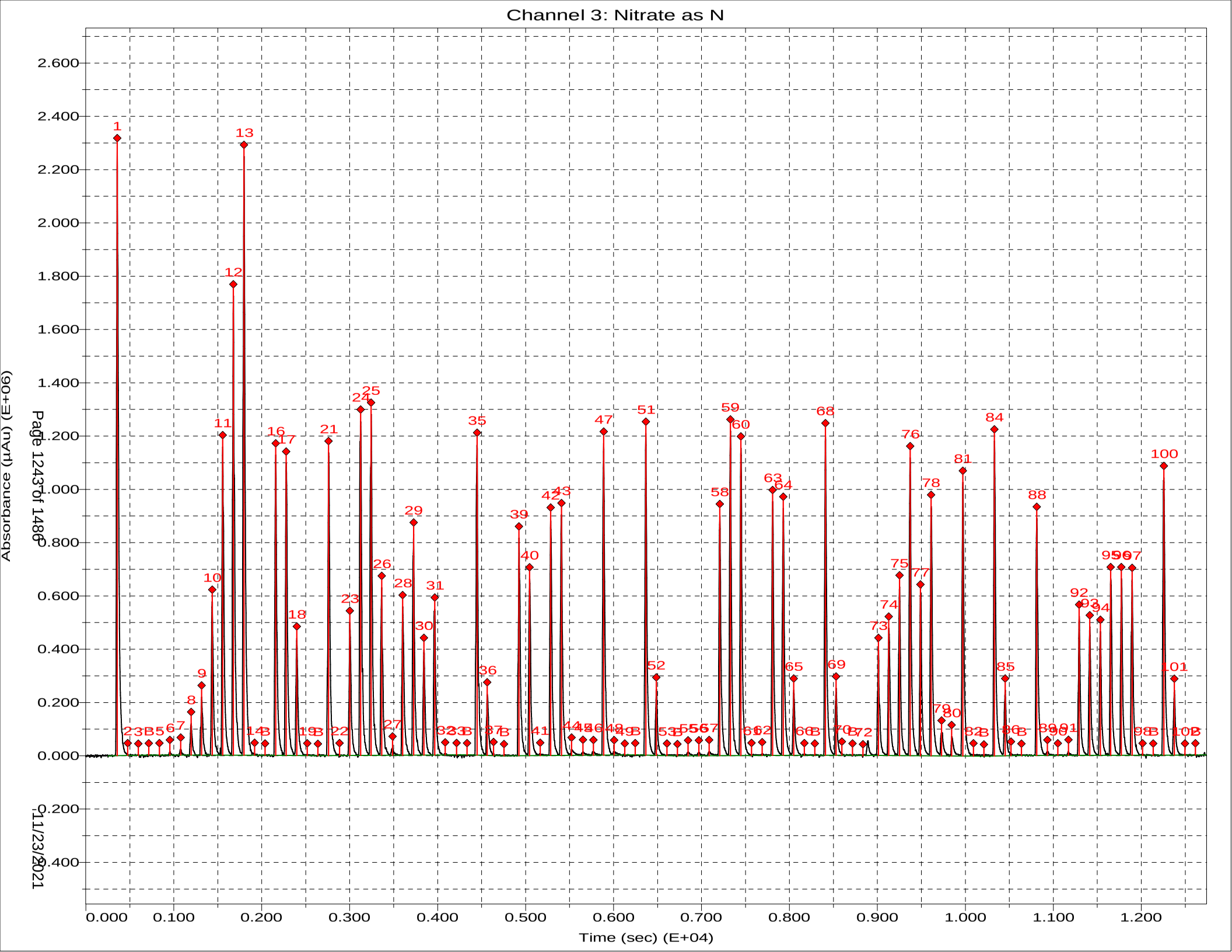
Calib Coef:
y=bx+a
a: (intercept) 3.5386e+03
b: 2.2659e+02

Corr Coef: 0.999858

Carryover: 0.0991%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-103
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
Height (E+06)
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1243 of 1486
11/23/2021

Sample Table - 111721.tbl

File name: C:\FLOW_4\111721.TBL
Date: 17-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment	
109	SYNC	SYNC	1	1	1			
0	Carryover	CO	1	1	1			
0	Carryover	CO	1	1	1			
0	read baseline	RB	1	1	1			
101	Cal 0.00 ppb	C	1	1	1			
102	Cal 50.0 ppb	C	1	1	1			
103	Cal 100 ppb	C	1	1	1			
104	Cal 500 ppb	C	1	1	1			
105	Cal 1000 ppb	C	1	1	1			
106	Cal 2500 ppb	C	1	1	1			
107	Cal 5000 ppb	C	1	1	1			
108	Cal 7500 ppb	C	1	1	1			
109	Cal 10000 ppb	C	1	1	1			
0	Blank	BLNK	1	1	1			
0	Read Baseline	RB	1	1	1			
110	5000 PPB NO2	U	1	1	1			
111	ICV 5000 PPB	CCV	1	1	1			
112	ICV 2000 PPB	CCV	1	1	1			
0	ICB	U	1	1	1			
0	Read Baseline	RB	1	1	1			
107	LCS	U	1	1	1			pH
0	MB	U	1	1	1			
113	280-154911-A-1	U	1	10	1			<2
114	ms 280-154911-A-1	U	1	10	1			<2
115	msd 280-154911-A-1	U	1	10	1			<2
116	280-154911-A-2	U	1	10	1			<2
117	280-154931-H-5	U	1	1	1		Total	<2
118	280-155237-H-2	U	1	1	1			<2
119	280-155048-C-1	U	1	10 ~~1~~	1			<2
120	280-155048-C-2	U	1	10 ~~1~~	1			<2
121	280-155048-C-3	U	1	5 ~~1~~	1			<2
122	280-155048-C-4	U	1	1	1			<2
0	Rinse	U	1	1	1			
0	Read Baseline	RB	1	1	1			
107	CCV 5000 ppb	CCV	1	1	1			
105	CCVL 1000 ppb	CCV	1	1	1			
0	CCB	U	1	1	1			
0	Read Baseline	RB	1	1	1			
123	280-155048-C-5	U	1	1	1			<2
124	280-155048-C-6	U	1	10 ~~1~~	1			<2
125	280-155048-C-7	U	1	1	1			<2
126	ms 280-155048-C-7	U	1	1	1			<2
127	msd 280-155048-C-7	U	1	1	1			<2
128	280-155015-C-1	U	1	1	1			<2
129	280-155015-C-2	U	1	1	1			<2
130	280-155015-C-3	U	1	1	1			<2
131	280-155015-C-4	U	1	1	1			<2
132	280-155015-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			
133	280-155015-C-6	U	1	1	1			<2
134	280-155015-C-7	U	1	1	1			<2

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-155015-C-8	U	1	1	1		<2
136	280-155015-C-9	U	1	1	1		<2
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
0	MB	U	1	1	1		
137	280-155048-C-8	U	1	1	1		<2
138	ms 280-155048-C-8	U	1	1	1		<2
139	msd 280-155048-C-8	U	1	1	1		<2
140	280-155015-C-10	U	1	1	1		<2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-155015-C-11	U	1	1	1		<2
142	280-155015-C-12	U	1	1	1		<2
143	280-155130-F-1	U	1	1	1		<2
144	280-155130-F-2	U	1	25 ~~1~~	1		<2
145	280-155268-A-1	U	1	2 ~~1~~	1		<2
146	280-155268-A-2	U	1	5 ~~1~~	1		<2
147	280-155268-A-3	U	1	2 ~~1~~	1		<2
148	280-155081-A-4	U	1	1	1		<2
149	280-155081-A-20	U	1	1	1		<2
150	ms 280-155081-A-20	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		
151	msd 280-155081-A-20	U	1	1	1		<2
152	280-155081-A-12	U	1	1	1		<2
153	280-155081-A-16	U	1	1	1		<2
154	280-155081-A-8	U	1	1	1		<2
155	550-173255-F-1	U	1	1	1		<2
156	550-173255-F-2	U	1	1	1		<2
157	550-173255-F-3	U	1	1	1		<2
158	550-173255-F-4	U	1	1	1		<2
159	550-173255-F-5	U	1	1	1		<2
160	550-173255-F-6	U	1	1	1		<2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

General Chemistry Raw Data Report

Job ID: 280-155015-1

Batch: 556193 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-556178/1-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556178/2-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-6-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-6-B MS

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-6-C MSD

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-4-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-5-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-7-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-8-A

Analysis Date: Nov 04, 2021 11:26

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	11/4/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	960
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	7/23/2021
Made By:	JM
Concentration:	976
Expiration Date:	11/8/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	7.80	20	7.80	976.000
CAL	5	7.80	16.00	20	8.20	944.000

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	7.90	20	7.90	968.000
ICV	5	7.90	15.60	20	7.70	984.000

TALS Raw Data Report

Job Number: 280-155015-1
LIMS Batch: 556193
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556178/1-A** Inj Date: 11/4/2021 11:26:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	86	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556178/2-A** Inj Date: 11/4/2021 11:26:00AM 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# 3 Lab ID: **280-155015-E-6-A** Inj Date: 11/4/2021 11:26:00AM 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# 4 Lab ID: **280-155015-E-6-B MS** Inj Date: 11/4/2021 11:26:00AM 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	82	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 5 Lab ID: **280-155015-E-6-C MSD** Inj Date: 11/4/2021 11:26:00AM 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	78	44 110	5	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 6 Lab ID: **280-155015-E-4-A** Inj Date: 11/4/2021 11:26:00AM 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# 7 Lab ID: **280-155015-E-5-A** Inj Date: 11/4/2021 11:26:00AM 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# 8 Lab ID: **280-155015-E-7-A** Inj Date: 11/4/2021 11:26:00AM 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# 9 Lab ID: **280-155015-E-8-A** Inj Date: 11/4/2021 11:26:00AM 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				

Titration Data Review Checklist

LIMS Batch Number: 556193	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: VRB	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 11/08/21	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):**
		AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	Y		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		—	If no, list details:
3. Are samples analyzed within the required hold time?	Y		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		—	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	Y		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		—	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		—	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		—	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	NA		—	MB @ beginning NO CCB's
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	Y		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	Y		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	Y		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		—	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	Y		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		—	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	Y		/	□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	✓		/	
b. All crossed out data is initialed and dated	✓		/	
c. Out of control QC is clearly identified	✓		/	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		/	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		/	
f. 100% of manual calculations are verified.	✓		/	
18. TALS Samples Tab			/	
a. LIMS Sample IDs / Containers are correct	✓		/	
b. Method and matrix are correct	✓		/	
c. Date and time match raw data	✓		/	
d. Dilutions are correct	✓		/	
e. Correct suffix designated (where applicable)	✓		/	
19. TALS Worksheet Tab is complete and correct	✓		/	
20. TALS Reagent Tab is complete and correct	✓		/	
21. TALS QC Links Tab is correct	✓		/	
22. TALS Sample Results Tab				
a. All unused data are marked Rejected or Accepted	✓		/	
b. All reported analytes are marked Primary or Secondary	✓		/	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		/	
d. TALS Batch Information Screen documentation is complete	✓		/	
e. TALS Status set to appropriate review level	✓		/	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			/	
g. Results for samples and QC correct on final report?			/	
h. Are all necessary scanned documents in TALS?			/	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			/	

Comments: P Analysis performed by SM on 11/04/21

2nd Reviewer: LaBu **Review Date:** 11.8.21

General Chemistry Raw Data Report

Job ID: 280-155015-1

Batch: 556496 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-556494/1-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556494/2-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-1-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-2-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-3-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-9-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-10-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	-23.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-11-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155015-E-12-A **Analysis Date: Nov 07, 2021 12:16**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	11/7/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	960
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.10	20	8.10	952.000
CAL	5	8.10	16.00	20	7.90	968.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	7/23/2021
Made By:	JM
Concentration:	1064
Expiration Date:	11/8/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	6.60	20	6.60	1072.000
ICV	5	6.60	13.40	20	6.80	1056.000

TALS Raw Data Report

Job Number: 280-154988-1
LIMS Batch: 556496
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556494/1-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	75	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556494/2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-155048-E-8-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155048-E-8-B MS** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	75	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-155048-E-8-C MSD** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	75	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-154988-F-1-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 7 Lab ID: **280-154988-F-2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 8 Lab ID: **280-154988-E-3-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-155015-1
LIMS Batch: 556496
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556494/1-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	75	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556494/2-A** Inj Date: 11/7/2021 12:16:00PM 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: **280-155048-E-8-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155048-E-8-B MS** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	75	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-155048-E-8-C MSD** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	75	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 9 Lab ID: **280-155015-E-1-A** Inj Date: 11/7/2021 12:16:00PM 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: **280-155015-E-2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 11 Lab ID: **280-155015-E-3-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-155015-E-9-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-155015-E-10-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-23.2 mg/L	1.9 U mg/L				
Sulfide as H2S		-24.65 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-155015-E-11-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 15 Lab ID: **280-155015-E-12-A** Inj Date: 11/7/2021 12:16:00PM 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: 280-155048-1
LIMS Batch: 556496
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556494/1-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	75	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556494/2-A** Inj Date: 11/7/2021 12:16:00PM 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: **280-155048-E-8-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155048-E-8-B MS** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	75	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-155048-E-8-C MSD** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	75	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 16 Lab ID: **280-155048-E-4-A** Inj Date: 11/7/2021 12:16:00PM 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				

TestAmerica *Denver*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Titration Data Review Checklist

LIMS Batch Number: 556496	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: WB	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 11/08/21	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	Y		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		–	If no, list details:
3. Are samples analyzed within the required hold time?	Y		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		–	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	Y		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		–	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		–	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		–	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	NA		–	NO CCB's
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	Y		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	Y		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	Y		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		–	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	Y		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		–	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	Y			□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab				
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab				
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓			
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: Performed by JM on ~~11/8/21~~ 11/7/21
WB 11/8/21

2nd Reviewer: [signature] **Review Date:** 11.8.21

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Nov-2021 17:29:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-002
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:37 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:52:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.517	0.000	3138766	0.2000	0.2172	M
2 Chloride	3.700	3.700	0.000	11646073	1.00	1.31	
3 Nitrite as N	4.525	4.525	0.000	5323545	NC	NC	
4 Bromide	5.484	5.484	0.000	1014966	0.2000	0.2102	
5 Nitrate as N	6.200	6.200	0.000	5998610	NC	NC	
7 Orthophosphate as P	9.209	9.209	0.000	1171008	NC	NC	
6 Sulfate	10.059	10.059	0.000	8264861	1.00	1.30	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

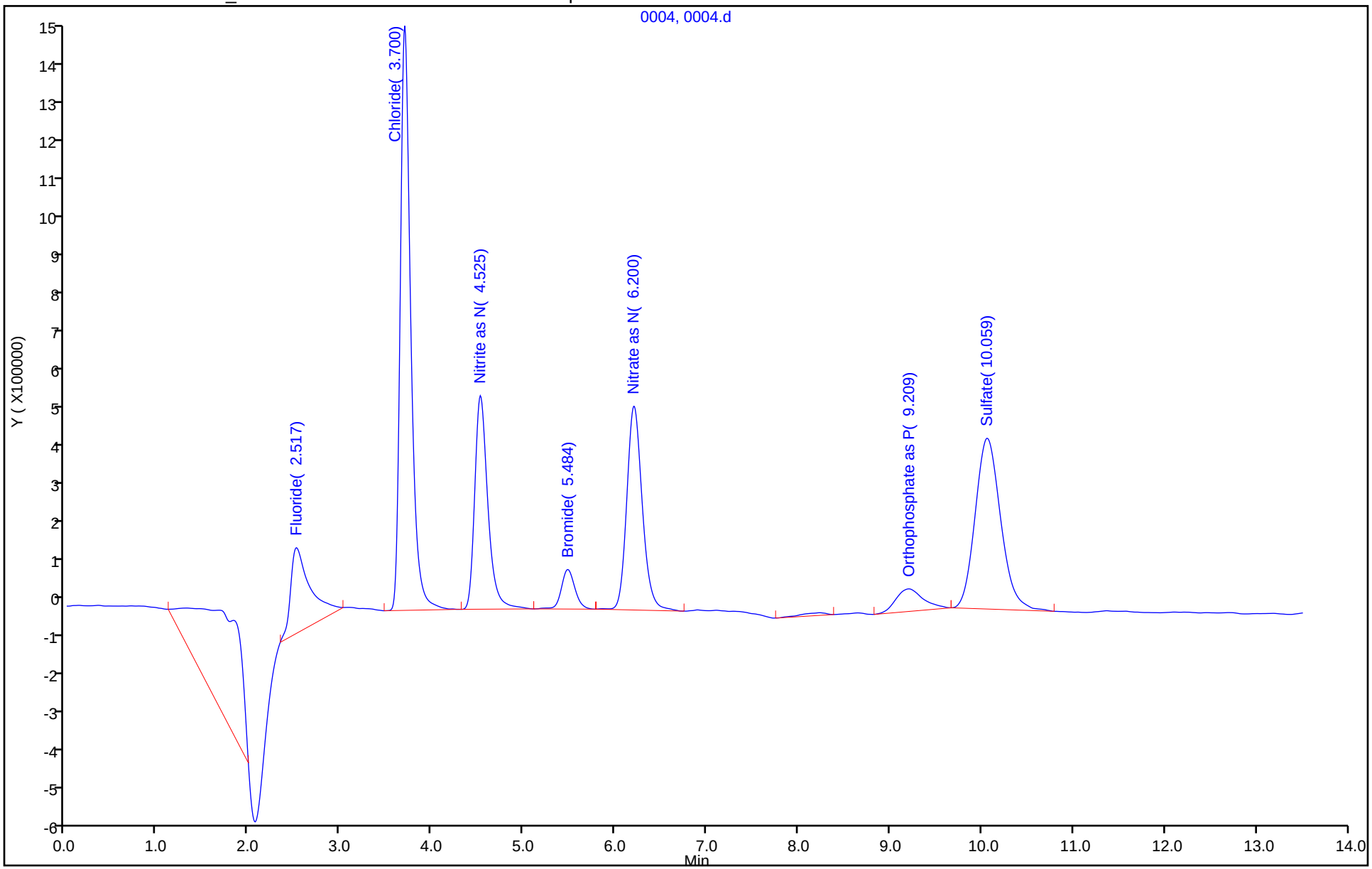
Reagents:

IC Cal low_00607 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.02 Units: mL

Report Date: 16-Nov-2021 13:02:37 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d				
Injection Date:	14-Nov-2021 17:29:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

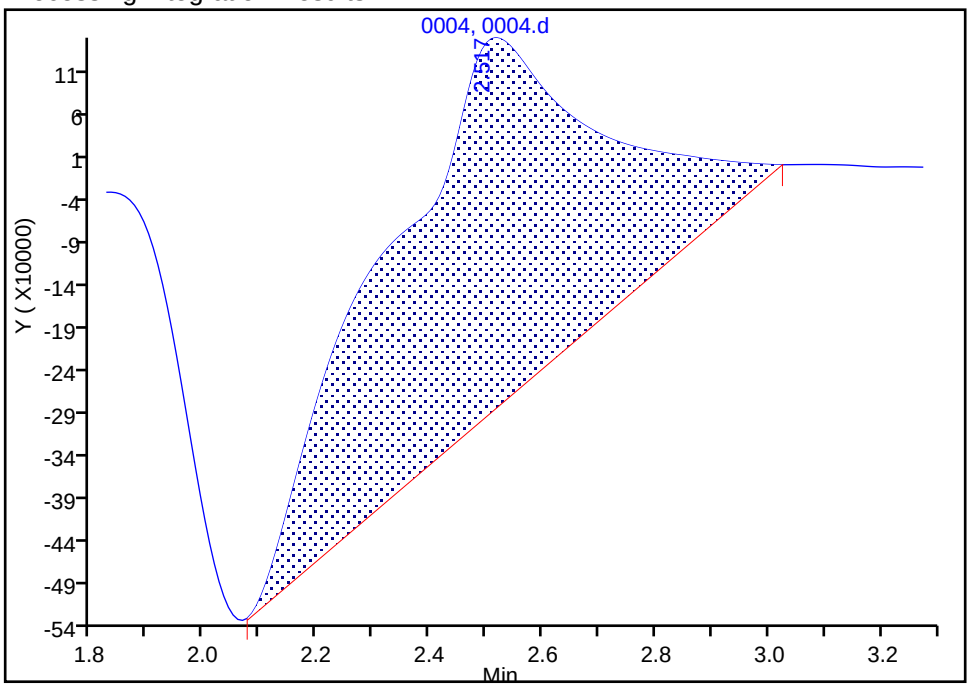
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

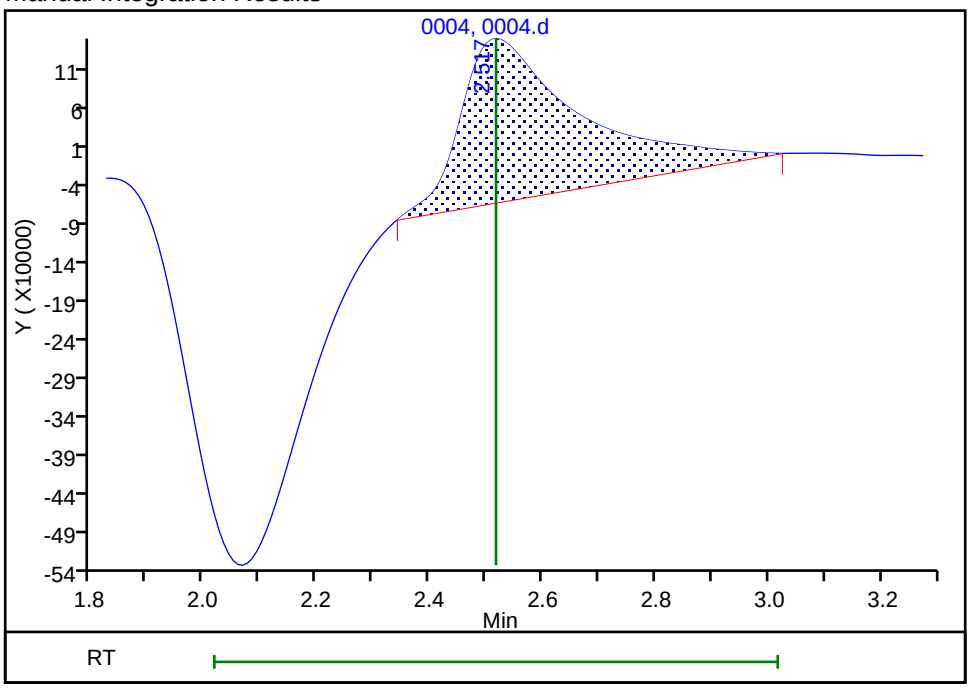
Processing Integration Results

RT: 2.52
Area: 12086115
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.52
Area: 3138766
Amount: 0.217247
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:52:45
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

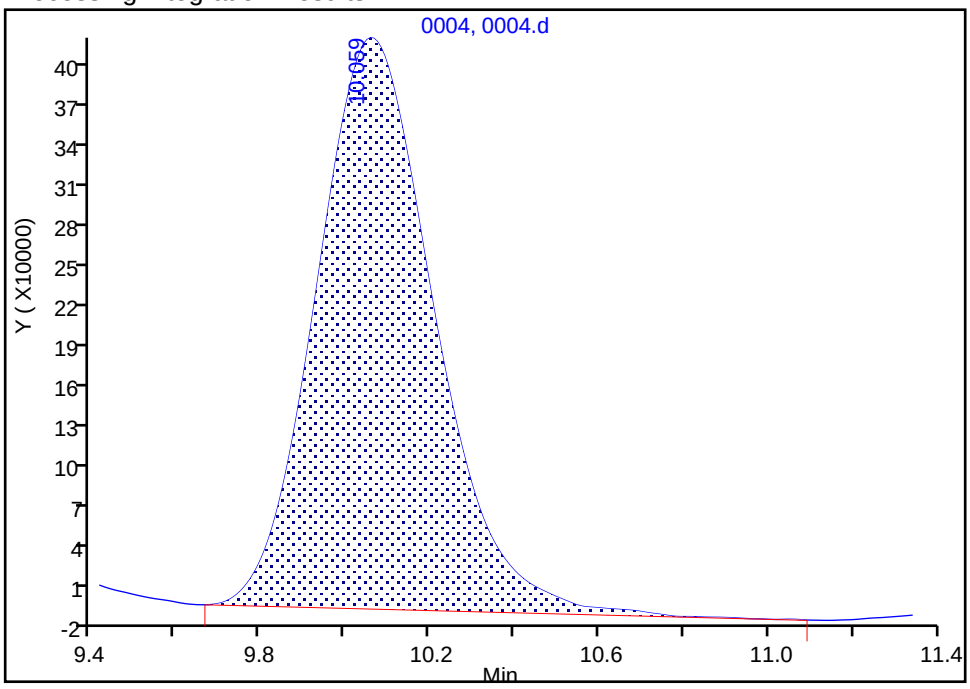
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

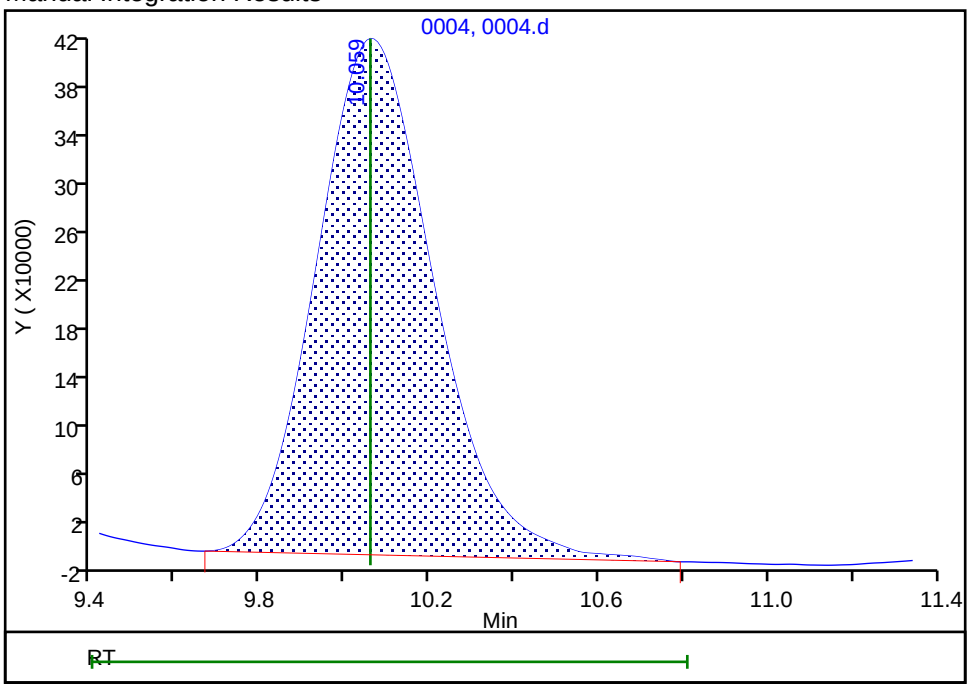
Processing Integration Results

RT: 10.06
Area: 8288886
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.06
Area: 8264861
Amount: 1.303181
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:43:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Nov-2021 17:45:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-003
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:38 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	7643242	0.5000	0.4915	M
2 Chloride	3.700	3.700	0.000	29173549	2.50	2.29	
3 Nitrite as N	4.525	4.525	0.000	13071055	NC	NC	
4 Bromide	5.475	5.475	0.000	2588032	0.5000	0.4994	
5 Nitrate as N	6.200	6.200	0.000	14609941	NC	NC	
7 Orthophosphate as P	9.192	9.192	0.000	2786926	NC	NC	
6 Sulfate	10.059	10.059	0.000	20543270	2.50	2.35	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

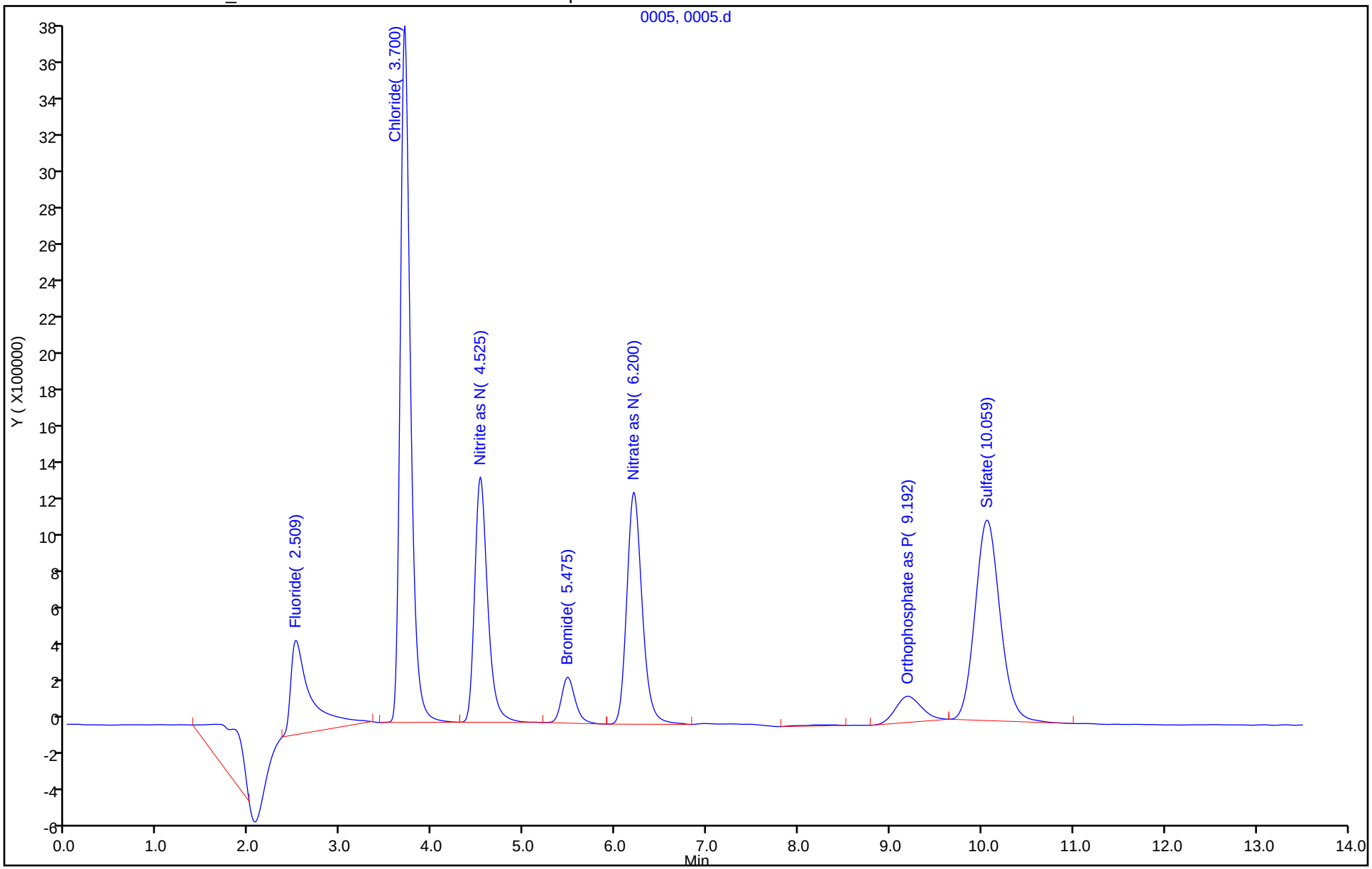
IC Cal low_00607 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.05 Units: mL

Report Date: 16-Nov-2021 13:02:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d

Injection Date:	14-Nov-2021 17:45:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

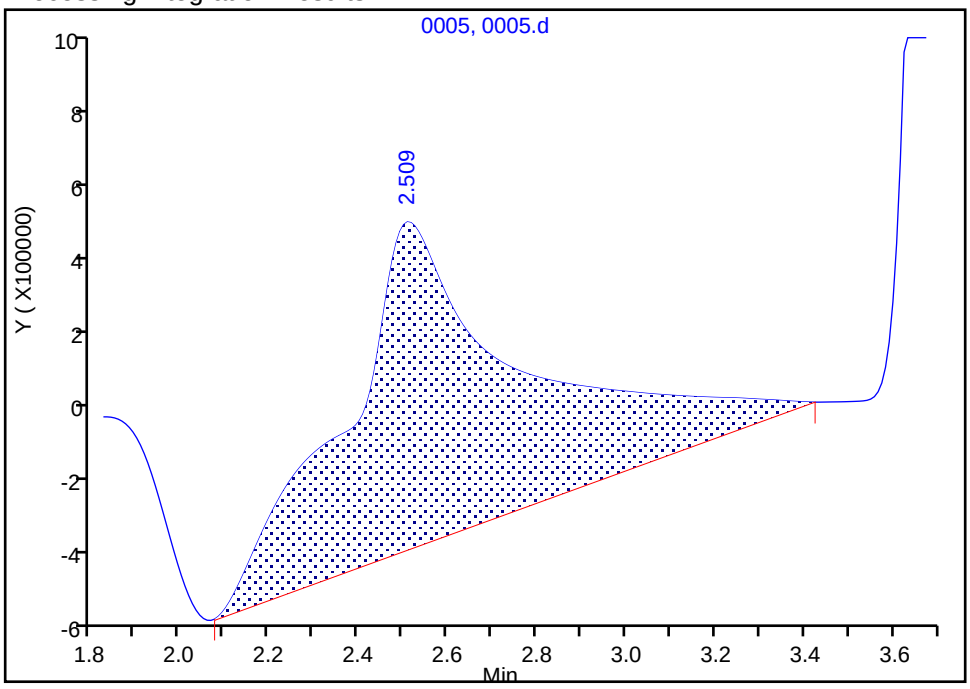
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d				
Injection Date:	14-Nov-2021 17:45:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

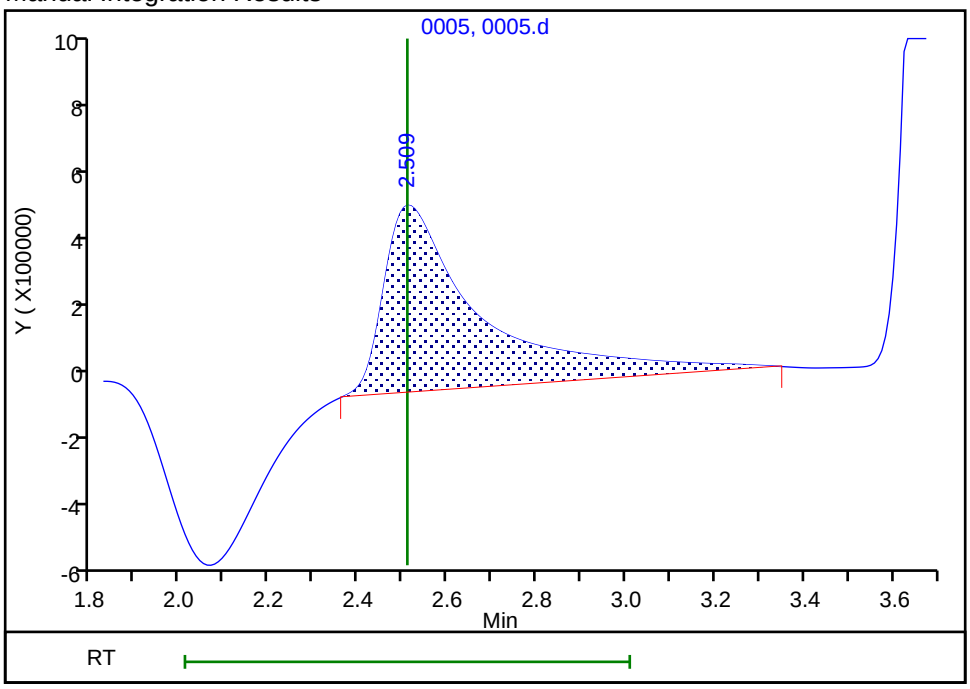
Processing Integration Results

RT: 2.51
Area: 22519207
Amount: 1.070054
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 7643242
Amount: 0.491494
Amount Units: ug/ml



Reviewer: gonzalezsp, 14-Nov-2021 20:06:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Nov-2021 18:02:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-004
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:38 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	15207785	1.00	0.9520	M
2 Chloride	3.700	3.700	0.000	60418917	5.00	4.03	
3 Nitrite as N	4.534	4.534	0.000	26760914	NC	NC	
4 Bromide	5.484	5.484	0.000	5089010	1.00	0.9591	
5 Nitrate as N	6.209	6.209	0.000	29649558	NC	NC	
7 Orthophosphate as P	9.184	9.184	0.000	6407539	NC	NC	
6 Sulfate	10.059	10.059	0.000	41674139	5.00	4.14	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

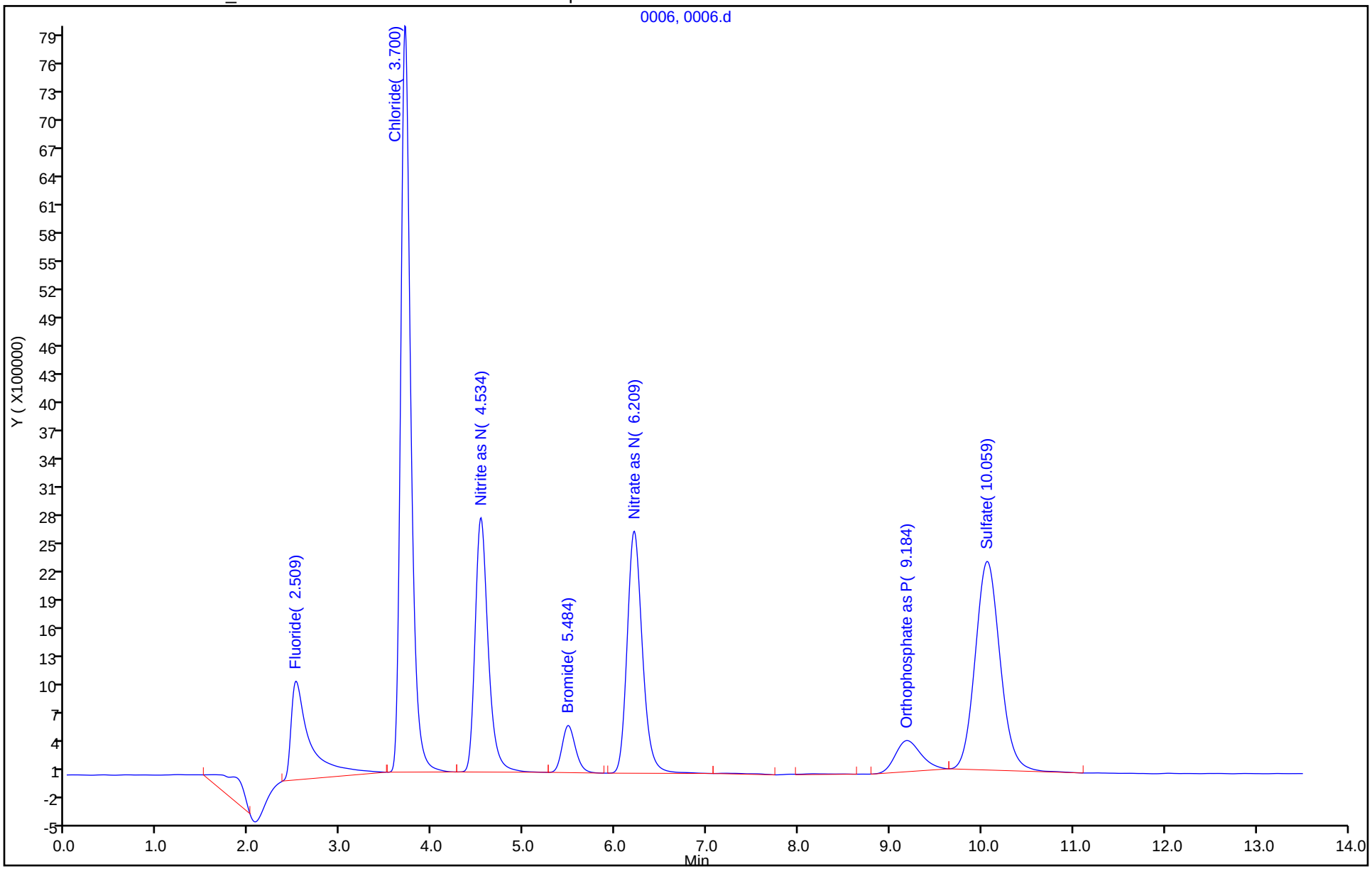
IC Cal low_00607 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.10 Units: mL

Report Date: 16-Nov-2021 13:02:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d

Injection Date:	14-Nov-2021 18:02:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

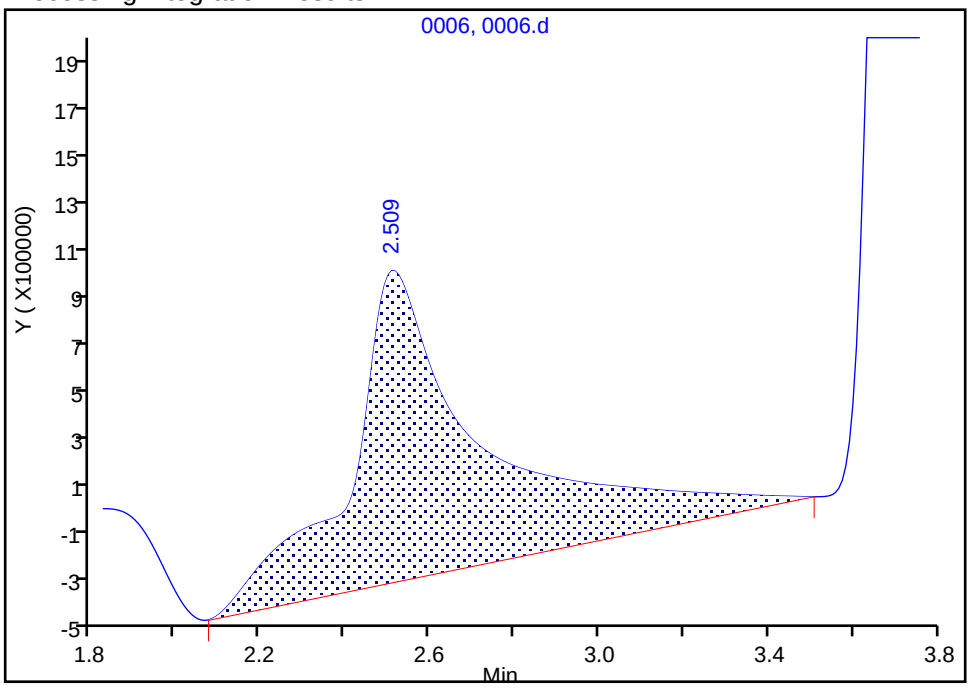
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
Injection Date: 14-Nov-2021 18:02:00 Instrument ID: WC_IonChrom11
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

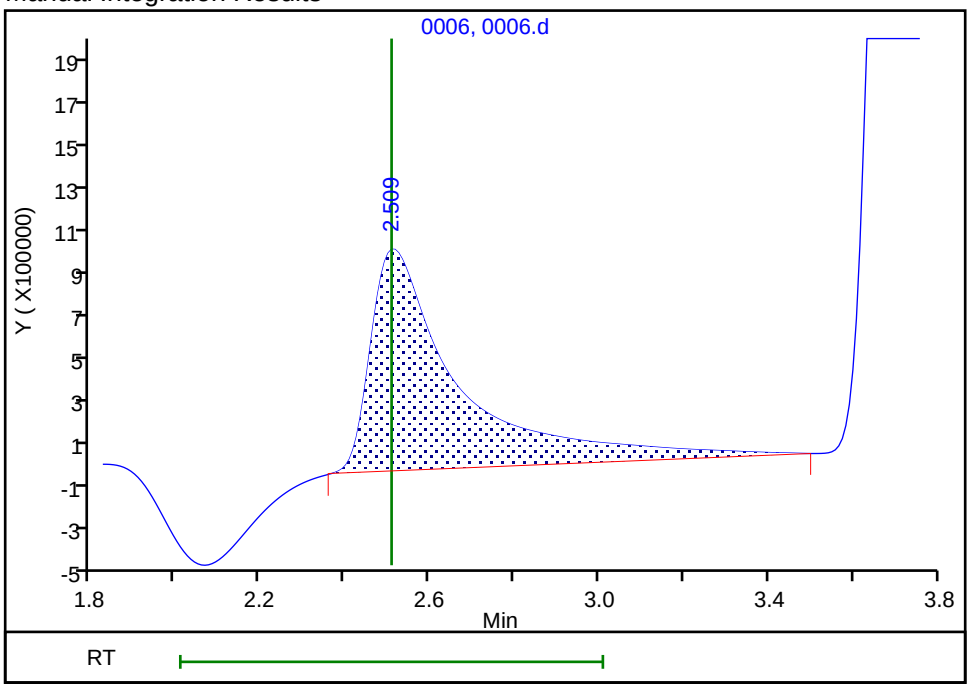
Processing Integration Results

RT: 2.51
Area: 29807017
Amount: 1.705578
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 15207785
Amount: 0.952047
Amount Units: ug/ml



Reviewer: gonzalezsp, 14-Nov-2021 20:06:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Nov-2021 18:18:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-005
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:39 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	62544168	4.00	3.83	M
2 Chloride	3.750	3.750	0.000	1007983829	60.0	56.8	
3 Nitrite as N	4.550	4.550	0.000	118723288	NC	NC	
4 Bromide	5.484	5.484	0.000	21222174	4.00	3.92	
5 Nitrate as N	6.200	6.200	0.000	131879303	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	32904898	NC	NC	
6 Sulfate	10.117	10.117	0.000	628840790	60.0	54.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

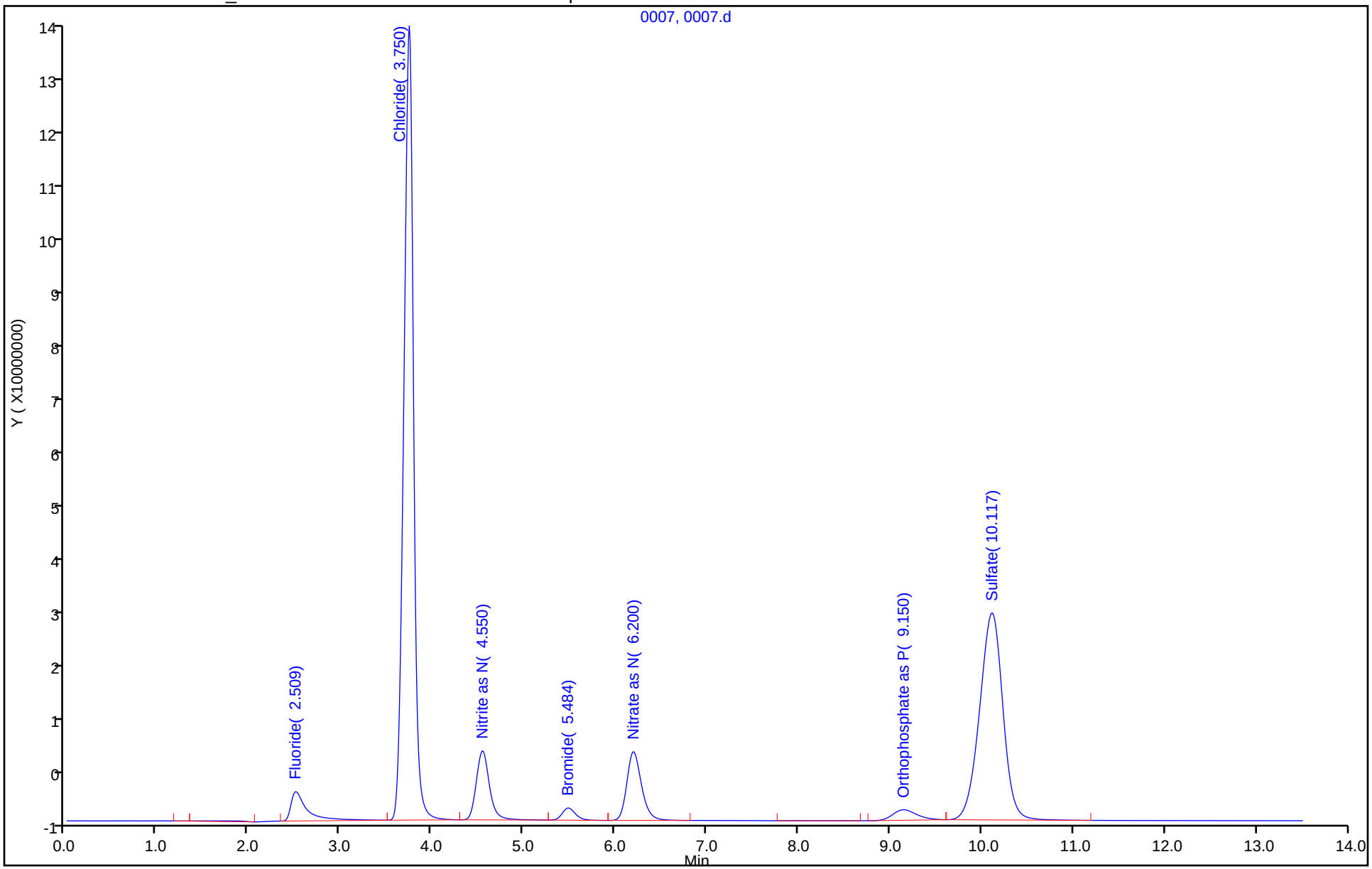
IC Cal low_00607 Amount Added: 0.40 Units: mL
IC CAL cl/so4_00393 Amount Added: 1.20 Units: mL

Report Date: 16-Nov-2021 13:02:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d

Injection Date:	14-Nov-2021 18:18:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

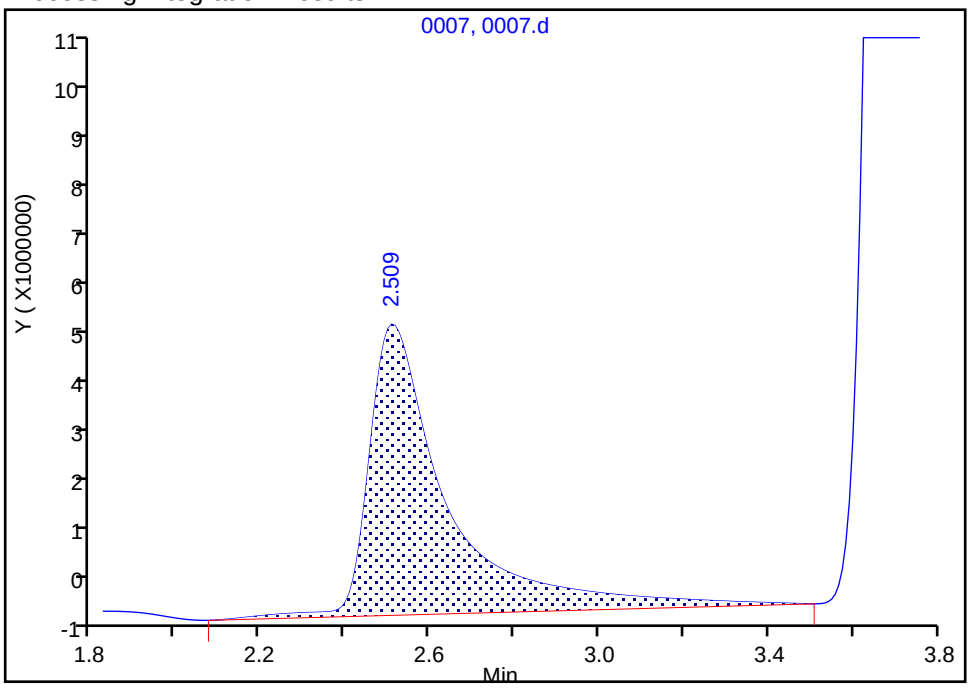
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
Injection Date:	14-Nov-2021 18:18:00	Instrument ID:	WC_IonChrom11
Lims ID:	std L4		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

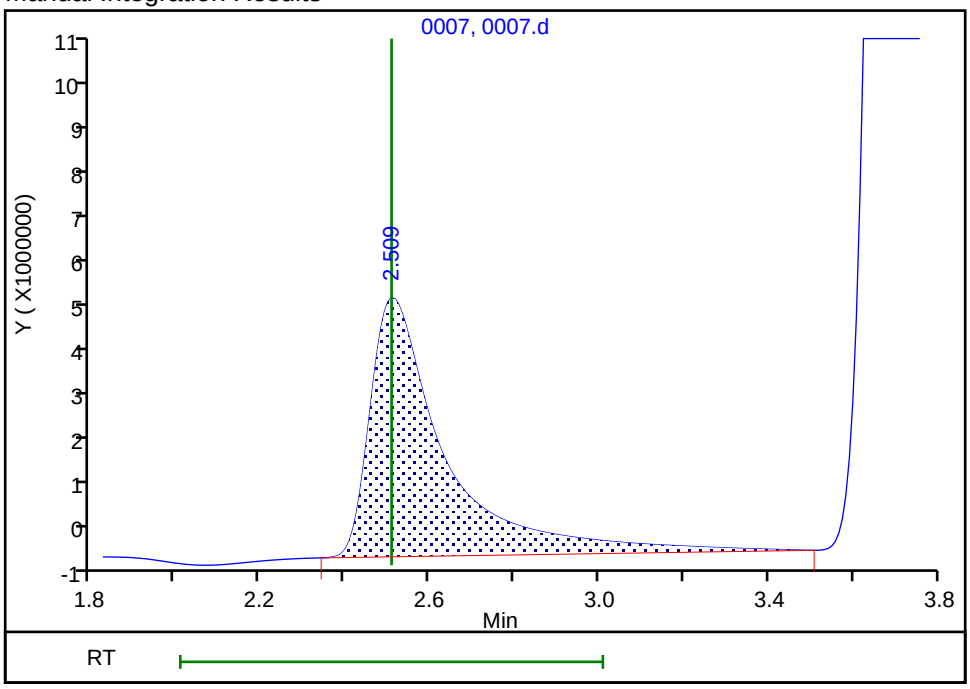
Processing Integration Results

RT: 2.51
Area: 66466563
Amount: 4.032208
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 62544168
Amount: 3.834033
Amount Units: ug/ml



Reviewer: gonzalezsp, 14-Nov-2021 20:06:52

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

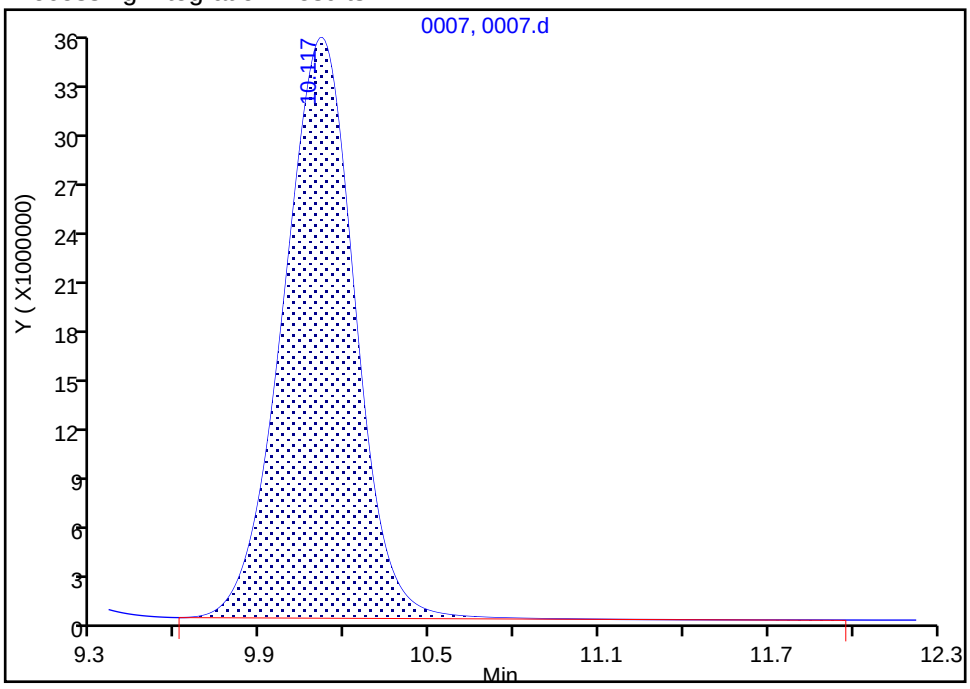
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

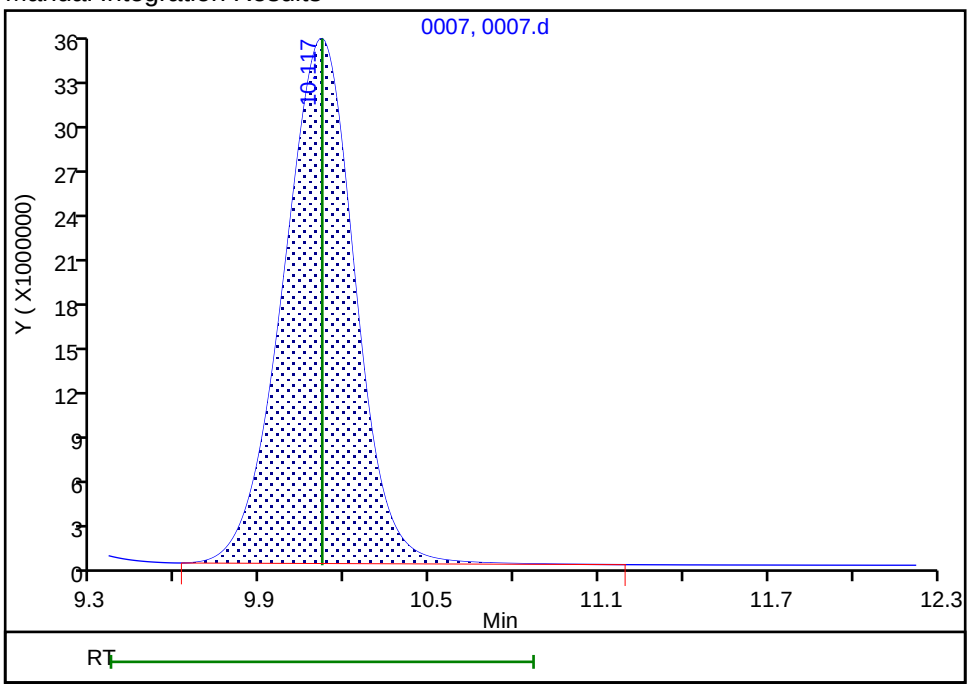
Processing Integration Results

RT: 10.12
Area: 629244124
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.12
Area: 628840790
Amount: 54.023175
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:44:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-Nov-2021 18:35:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-006
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:40 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:45:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	130775611	8.00	7.99	
2 Chloride	3.792	3.792	0.000	2142832479	120.0	120.1	
3 Nitrite as N	4.567	4.567	0.000	247152972	NC	NC	
4 Bromide	5.484	5.484	0.000	43224295	8.00	7.97	
5 Nitrate as N	6.184	6.184	0.000	285371230	NC	NC	M
7 Orthophosphate as P	9.117	9.117	0.000	74986164	NC	NC	
6 Sulfate	10.167	10.167	0.000	1392088630	120.0	118.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

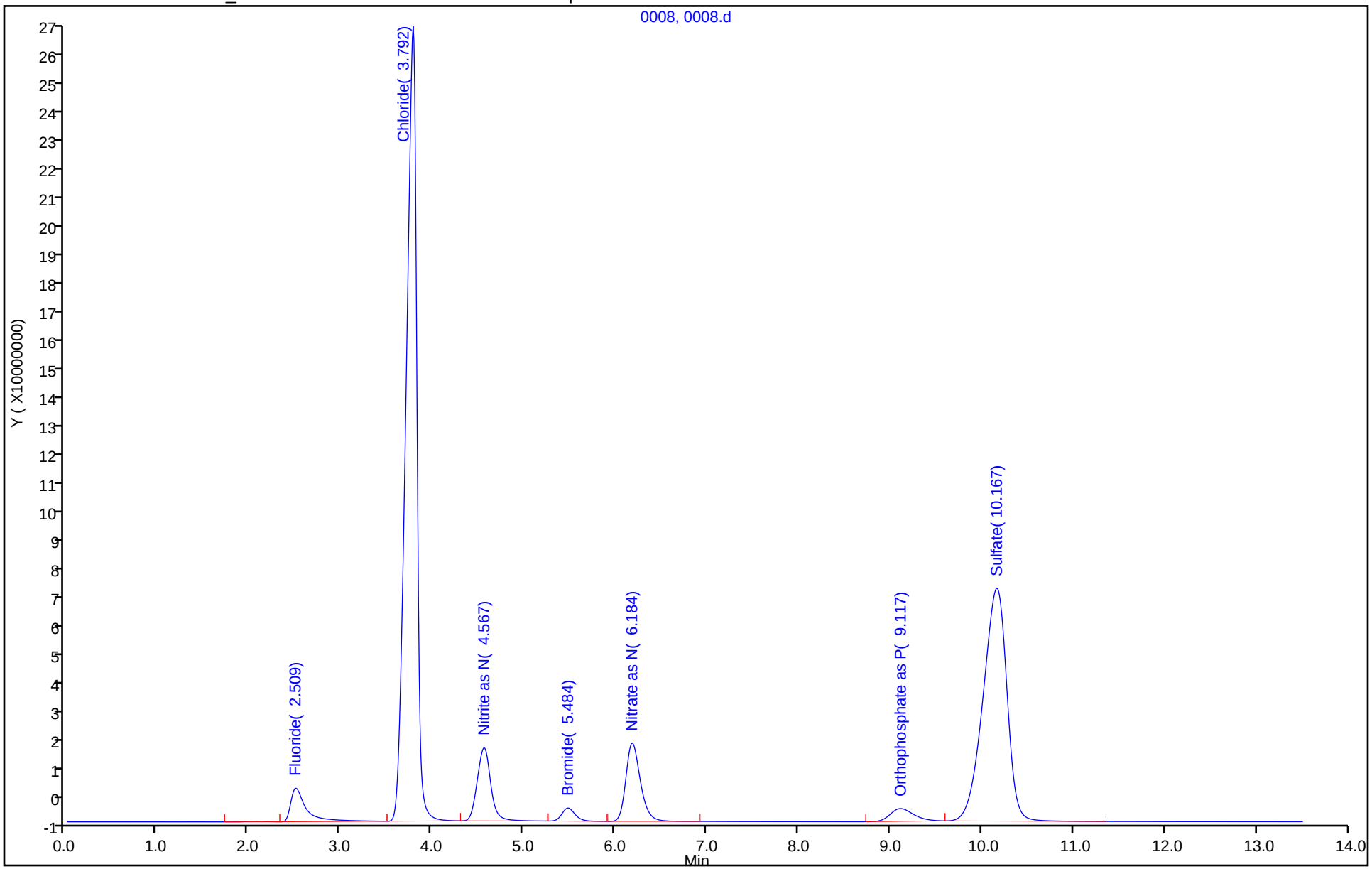
IC Cal low_00607 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00393 Amount Added: 2.40 Units: mL

Report Date: 16-Nov-2021 13:02:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d

Injection Date:	14-Nov-2021 18:35:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

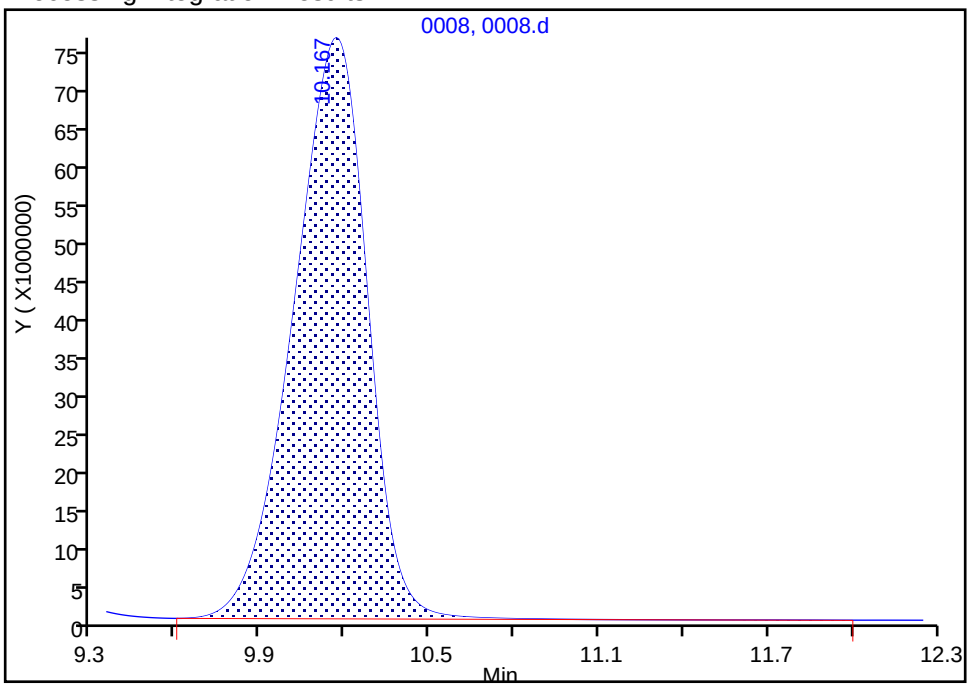
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
Injection Date: 14-Nov-2021 18:35:00 Instrument ID: WC_IonChrom11
Lims ID: std L5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

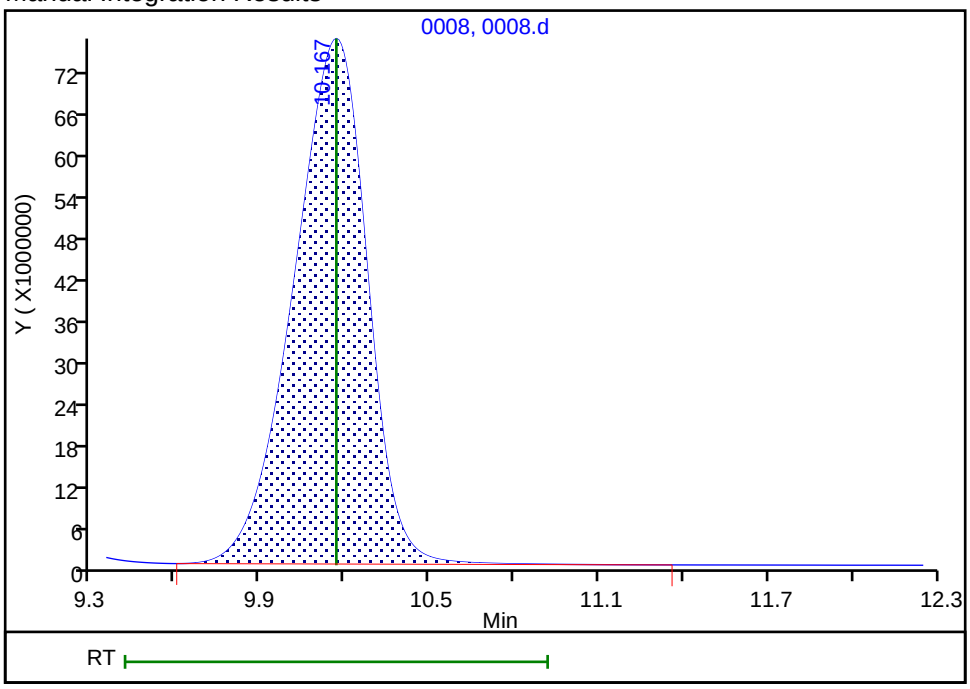
Processing Integration Results

RT: 10.17
Area: 1392640893
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 1392088630
Amount: 118.8636
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:45:06
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Nov-2021 18:51:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-007
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:40 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:45:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	167383964	10.0	10.2	
2 Chloride	3.842	3.842	0.000	3647971873	200.0	204.0	
3 Nitrite as N	4.575	4.575	0.000	314678249	NC	NC	
4 Bromide	5.484	5.484	0.000	55029657	10.0	10.1	
5 Nitrate as N	6.184	6.184	0.000	370295669	NC	NC	M
7 Orthophosphate as P	9.100	9.100	0.000	98180029	NC	NC	
6 Sulfate	10.225	10.225	0.000	2439236596	200.0	207.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

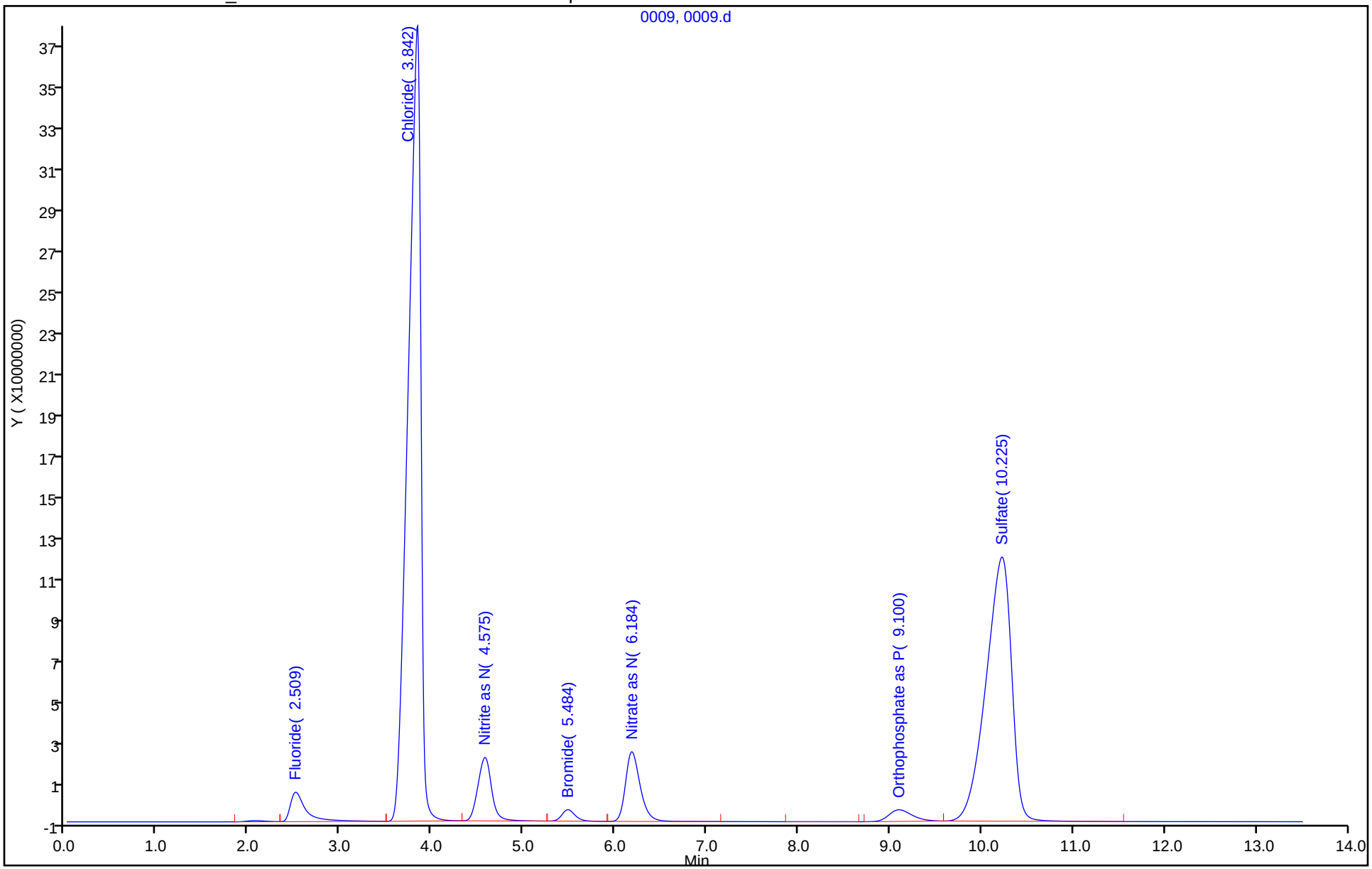
IC Cal low_00607 Amount Added: 1.00 Units: mL
IC CAL cl/so4_00393 Amount Added: 4.00 Units: mL

Report Date: 16-Nov-2021 13:02:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Injection Date:	14-Nov-2021 18:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

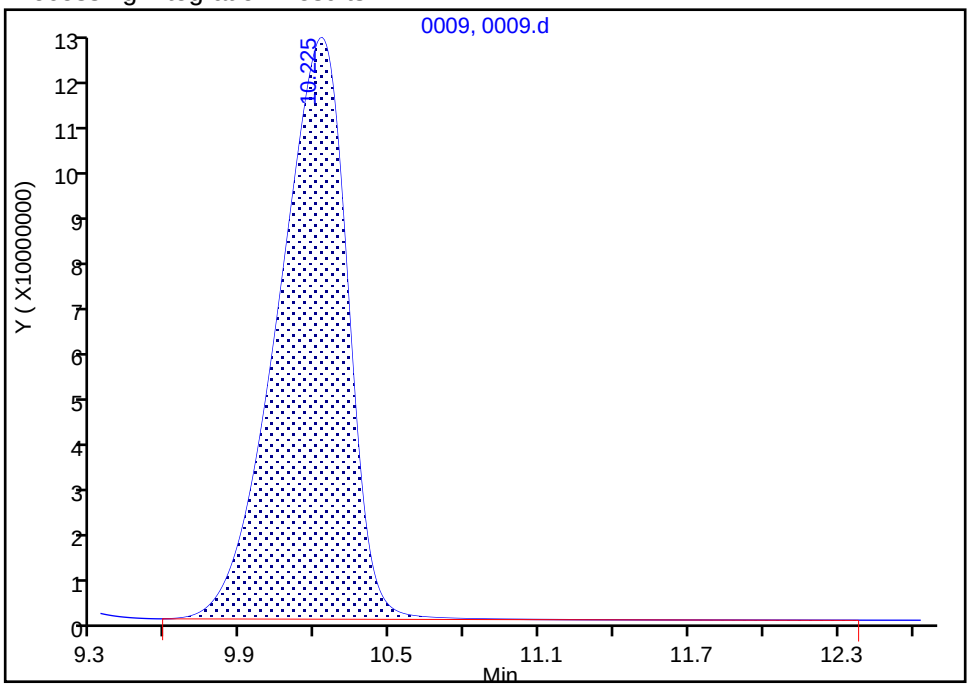
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
Injection Date:	14-Nov-2021 18:51:00	Instrument ID:	WC_IonChrom11
Lims ID:	std L6		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 7
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

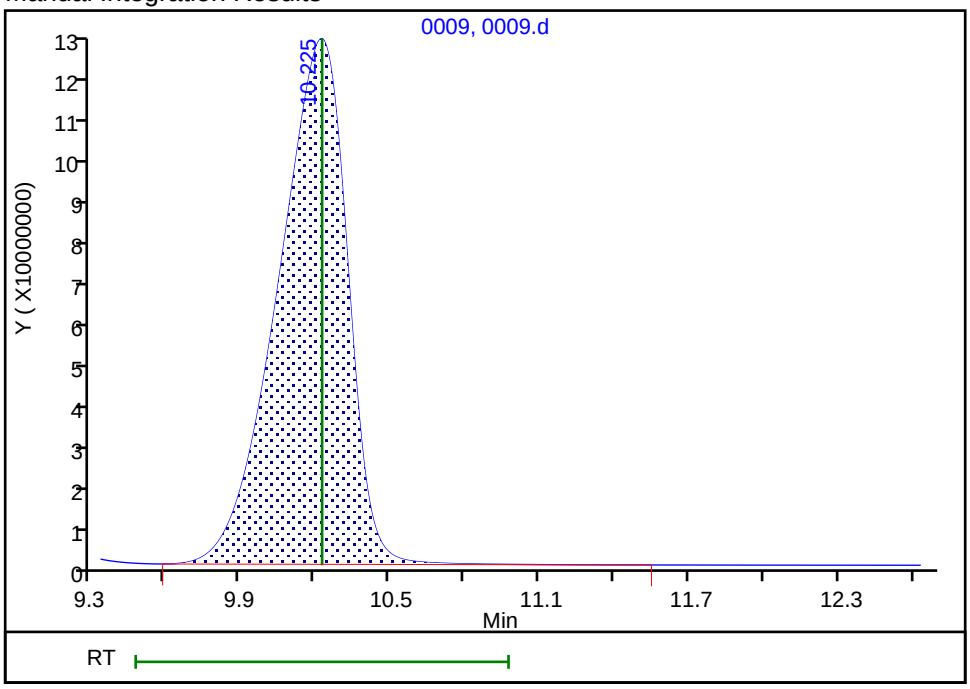
Processing Integration Results

RT: 10.23
Area: 2440190368
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.23
Area: 2439236596
Amount: 207.8223
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:45:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 106493 **Inst ID:** IC11 **Analysis Date:** 11/5/21 **Analyst:** SG

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	154833	5	(F) Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154837	5	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154839	3	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	155056	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154941	7	(F) Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
833	4	(F) Cl NO2 Br NO3 PO4 (SO4)	5X	coverage
837	5	(F) Cl NO2 Br NO3 PO4 SO4	5X, 10X	dilution
839	3	(F) Cl NO2 Br NO3 PO4 SO4	5X	dilution
056		F Cl NO2 Br NO3 PO4 SO4	5X	coverage.
941		F Cl NO2 Br NO3 PO4 SO4	10, 20, 100X	Test/coverage.
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b
Inj Date : 14-Nov-2021 17:29:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-429500	1642491		0.999
2 Chloride					-118831	179442C		1.000
3 Nitrite as N	-174820	3106326		0.999				
4 Bromide					-128835	5440555		1.000
5 Nitrate as N	-252573	3598982		0.998				
7 Orthophosphate as P	-137149	9479558	R1	).994*				
6 Sulfate					-707509	1177116		0.997

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Instrument: WC_IonChrom11 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Nov-2021 13:20:39
No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Inj Date: 14-Nov-2021 17:29:00 Worklist: 106493 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
Inj Date: 14-Nov-2021 17:45:00 Worklist: 106493 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
Inj Date: 14-Nov-2021 18:02:00 Worklist: 106493 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Inj Date: 14-Nov-2021 18:18:00 Worklist: 106493 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
Inj Date: 14-Nov-2021 18:35:00 Worklist: 106493 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
Inj Date: 14-Nov-2021 18:51:00 Worklist: 106493 Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39
No.Compounds:	7		
Sublist:	chrom-Anions_IC11*sub1		
Limit Group:	Wet - Anions 28D		

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 14-Nov-2021 19:07:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-008
Misc. Info.: 10
Operator ID: Instrument ID: WC_IonChrom11
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:20:09 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:08:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	60073164	4.00	3.68	M
2 Chloride	3.767	3.767	0.000	1470602591	80.0	82.6	
3 Nitrite as N	4.551	4.551	0.000	115835637	NC	NC	
4 Bromide	5.484	5.484	0.000	20914443	4.00	3.87	
5 Nitrate as N	6.201	6.201	0.000	132289111	NC	NC	M
7 Orthophosphate as P	9.142	9.142	0.000	32093698	NC	NC	
6 Sulfate	10.134	10.134	0.000	942891781	80.0	80.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

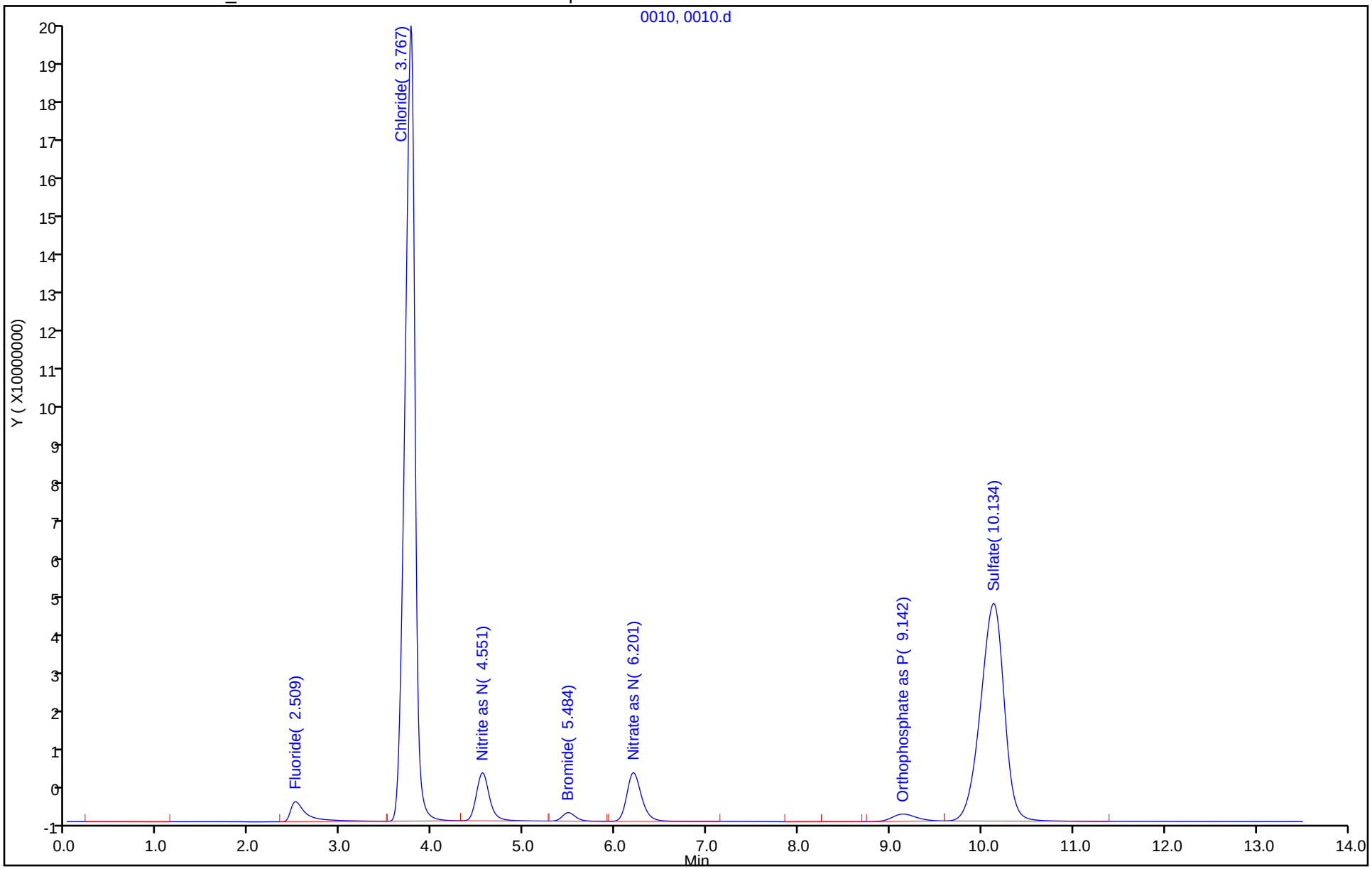
Reagents:

IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00341	Amount Added:	0.40	Units: mL

Report Date: 16-Nov-2021 13:20:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d				
Injection Date:	14-Nov-2021 19:07:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

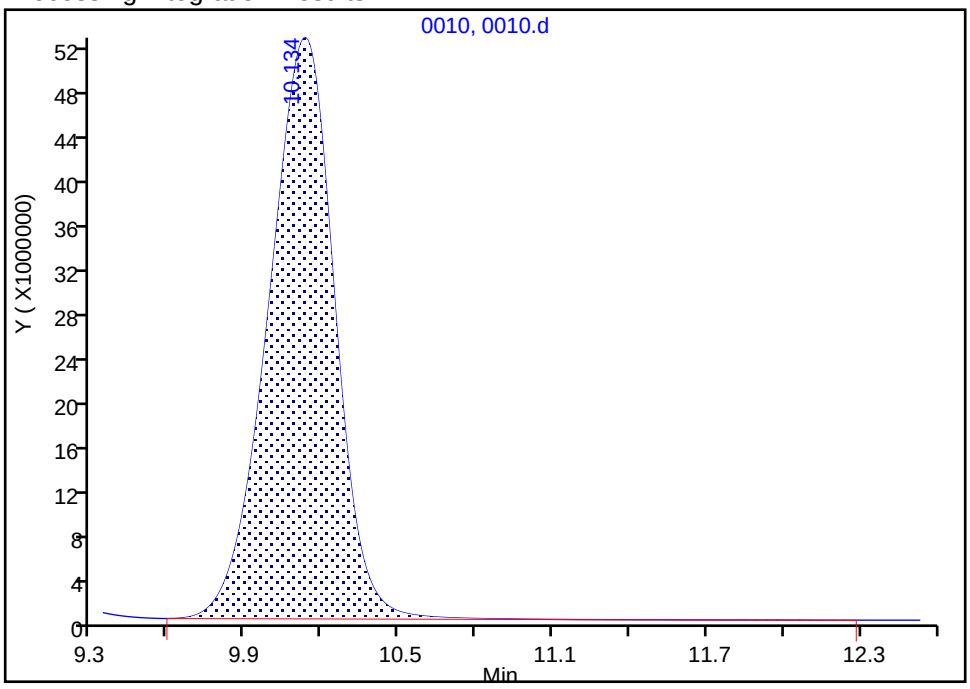
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d
Injection Date: 14-Nov-2021 19:07:00 Instrument ID: WC_IonChrom11
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

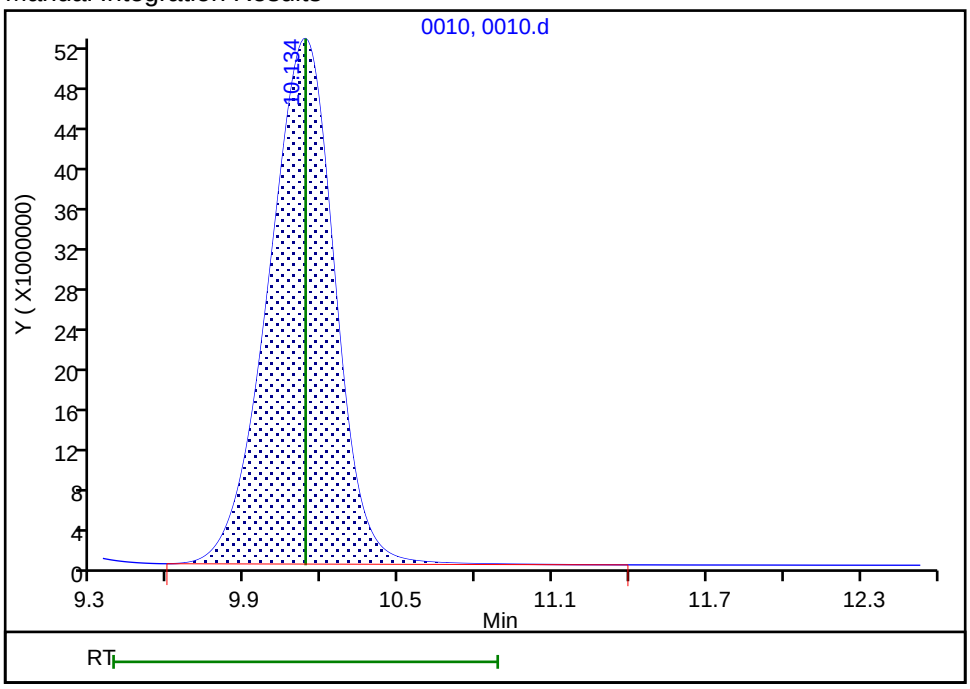
Processing Integration Results

RT: 10.13
Area: 943389256
Amount: 80.745117
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 942891781
Amount: 80.702854
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:46:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0011.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 14-Nov-2021 19:24:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-009
Misc. Info.: 11
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:20:09 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: jindaratc Date: 16-Nov-2021 13:03:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.509				ND	U
2 Chloride		3.767				ND	U
3 Nitrite as N		4.551				ND	U
4 Bromide		5.484				ND	U
5 Nitrate as N		6.201				ND	U
7 Orthophosphate as P	8.809	9.142	-0.333	127828		NC	
6 Sulfate	10.375	10.134	0.241	115396		0.6109	

QC Flag Legend

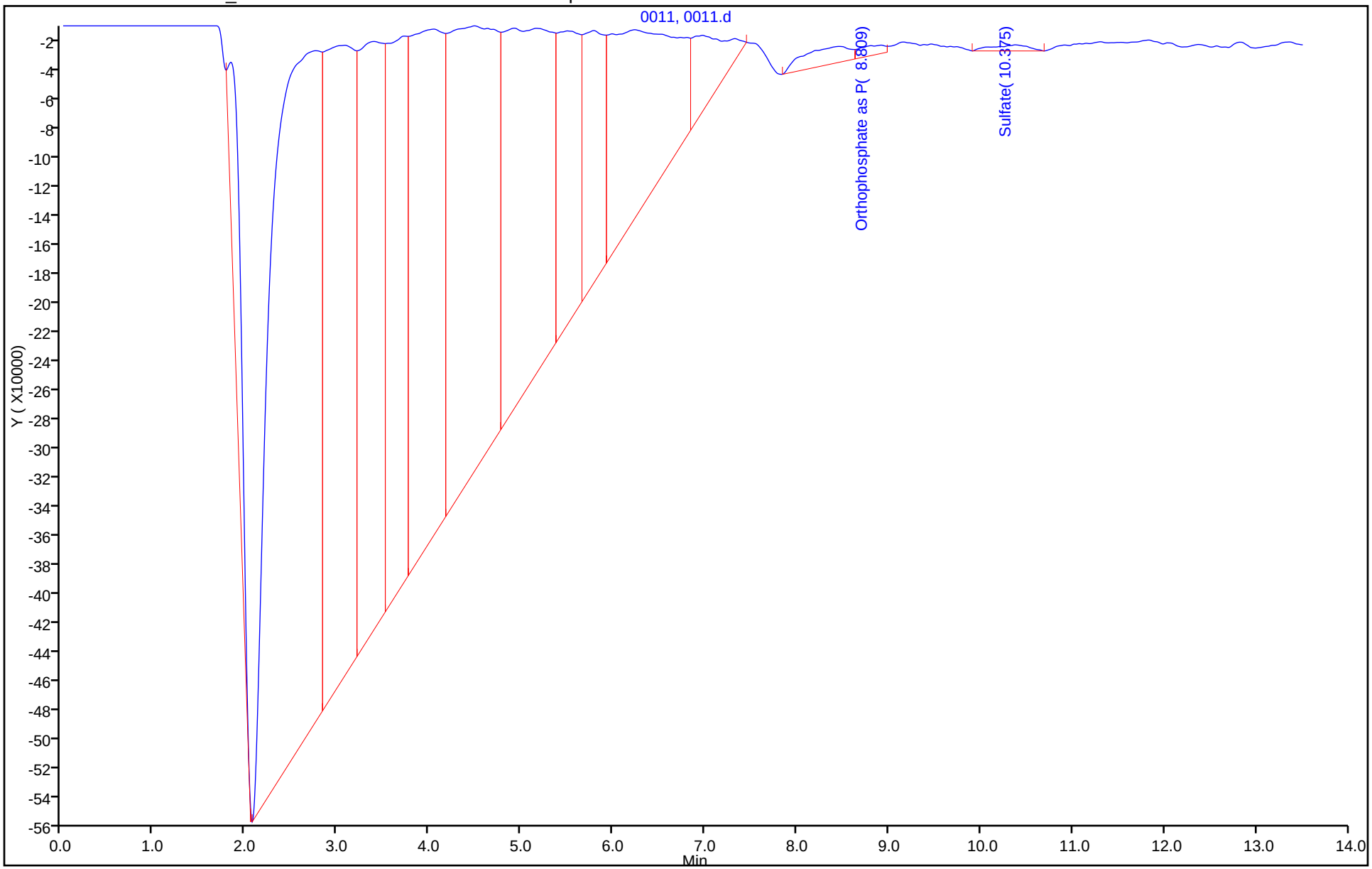
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 16-Nov-2021 13:20:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0011.d

Injection Date:	14-Nov-2021 19:24:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b
Inj Date : 14-Nov-2021 17:29:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-429500	1642491		0.999
2 Chloride					-118831	179442C		1.000
3 Nitrite as N	-174820	3106326		0.999				
4 Bromide					-128835	5440555		1.000
5 Nitrate as N	-252573	3598982		0.998				
7 Orthophosphate as P	-137149	9479558	R1	).994*				
6 Sulfate					-707509	1177116		0.997

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39
No.Compounds:	7		
Sublist:	chrom-Anions_IC11*sub1		
Limit Group:	Wet - Anions 28D		

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0001.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2021 10:27:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-001
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:21 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 11:39:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	78833251	5.00	4.83	
2 Chloride	3.684	3.684	0.000	1734483668	100.0	97.3	
3 Nitrite as N	4.417	4.417	0.000	143844195	NC	NC	
4 Bromide	5.292	5.292	0.000	25291560	5.00	4.67	
5 Nitrate as N	5.967	5.967	0.000	163421125	NC	NC	
7 Orthophosphate as P	8.642	8.642	0.000	27592814	NC	NC	
6 Sulfate	9.642	9.642	0.000	1129817623	100.0	96.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

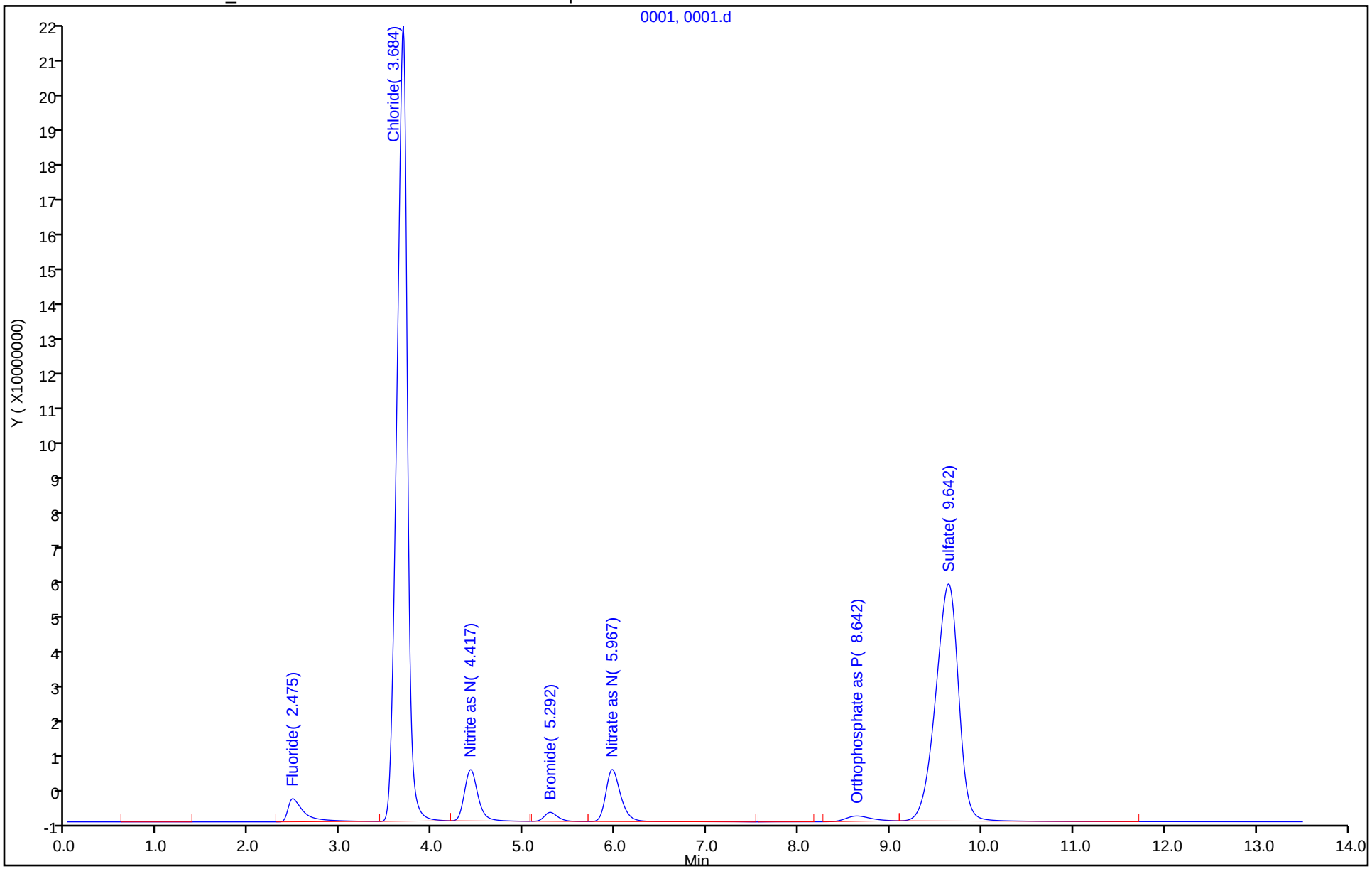
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0001.d

Injection Date:	23-Nov-2021 10:27:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0002.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 23-Nov-2021 10:43:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-002
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:22 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:20:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.475				ND	
2 Chloride		3.684				ND	U
3 Nitrite as N		4.417				ND	U
4 Bromide		5.292				ND	U
5 Nitrate as N	6.392	6.392	0.000	122795		NC	
7 Orthophosphate as P	8.650	8.650	0.000	385149		NC	
6 Sulfate		9.642				ND	

QC Flag Legend

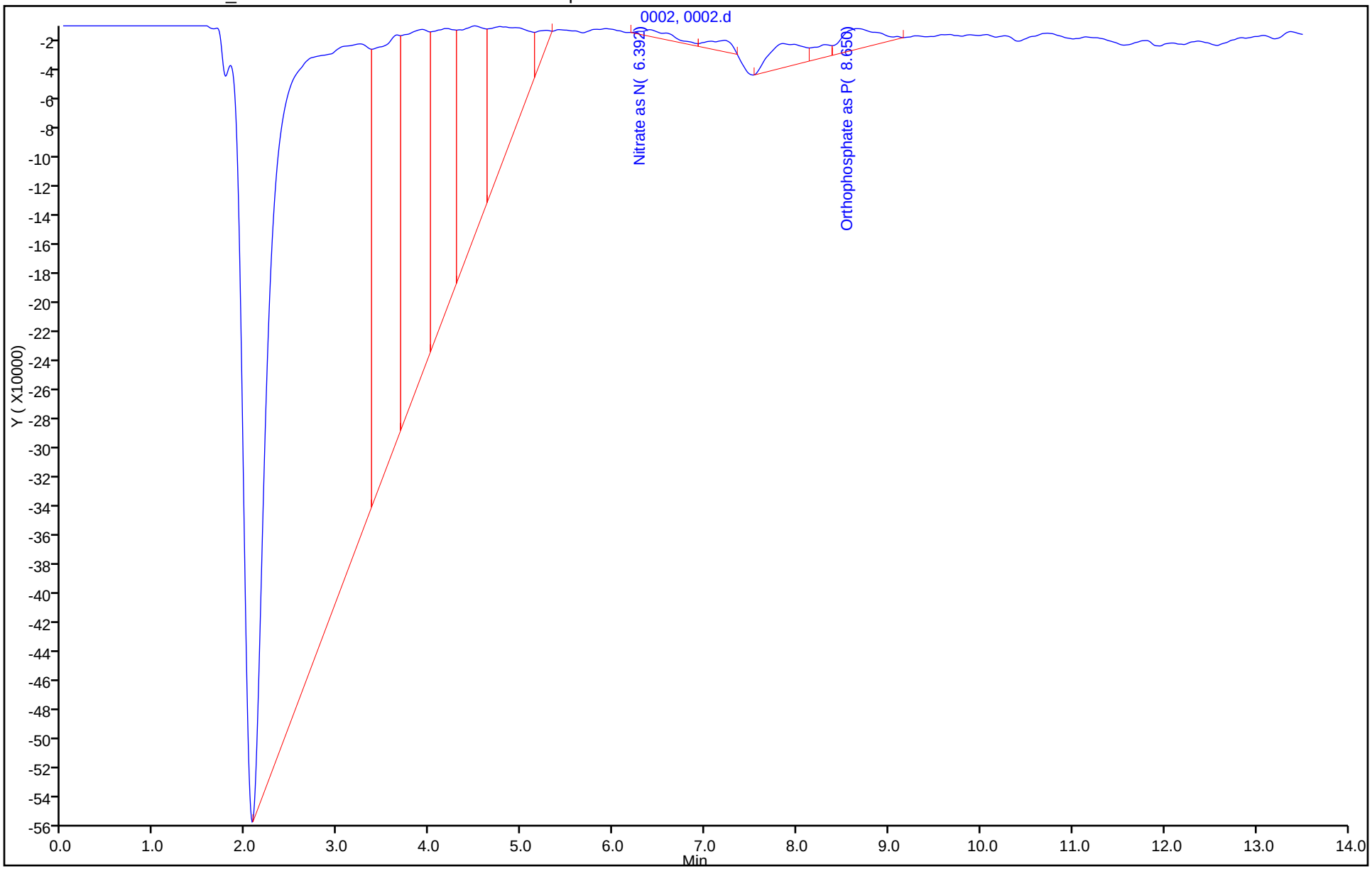
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 23-Nov-2021 15:23:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0002.d

Injection Date:	23-Nov-2021 10:43:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0003.d
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 23-Nov-2021 10:59:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-003
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:23 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:20:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.476	2.476	0.000	9599942	0.5000	0.6106	M
2 Chloride	3.609	3.609	0.000	58088946	5.00	3.90	
3 Nitrite as N	4.392	4.392	0.000	12947069	NC	NC	
4 Bromide	5.284	5.284	0.000	2427933	0.5000	0.4699	
5 Nitrate as N	5.976	5.976	0.000	14231182	NC	NC	
7 Orthophosphate as P	8.676	8.676	0.000	2032015	NC	NC	
6 Sulfate	9.551	9.551	0.000	40944320	5.00	4.08	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

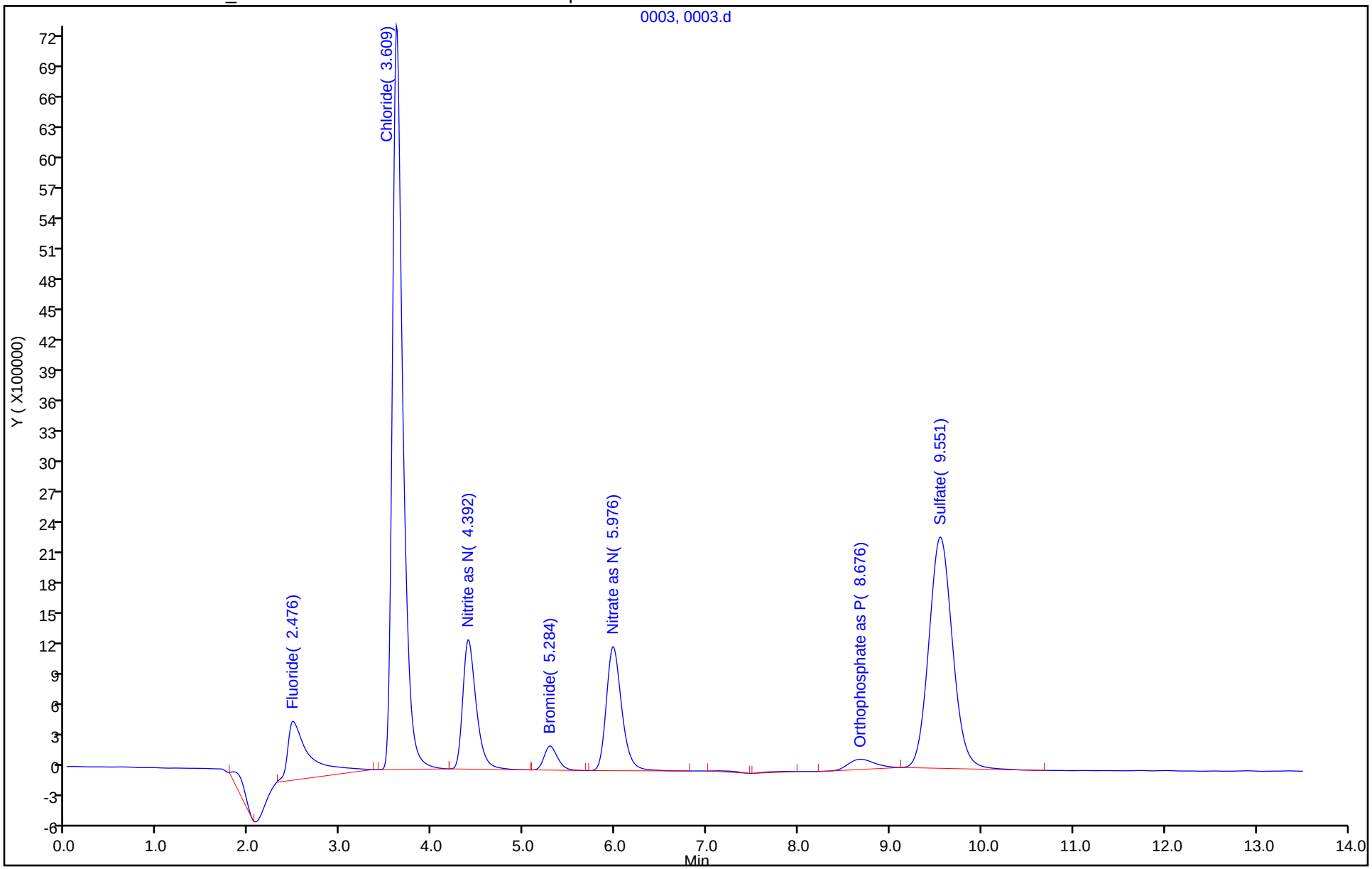
IC Cal low_00608 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00394 Amount Added: 0.10 Units: mL

Report Date: 23-Nov-2021 15:23:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0003.d

Injection Date:	23-Nov-2021 10:59:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0004.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Nov-2021 11:16:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-004
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:23 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:19:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	79641130	5.00	4.87	
2 Chloride	3.684	3.684	0.000	1731463106	100.0	97.2	
3 Nitrite as N	4.417	4.417	0.000	144241996	NC	NC	
4 Bromide	5.284	5.284	0.000	25332296	5.00	4.68	
5 Nitrate as N	5.959	5.959	0.000	162817810	NC	NC	
7 Orthophosphate as P	8.634	8.634	0.000	29298192	NC	NC	
6 Sulfate	9.634	9.634	0.000	1127889164	100.0	96.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

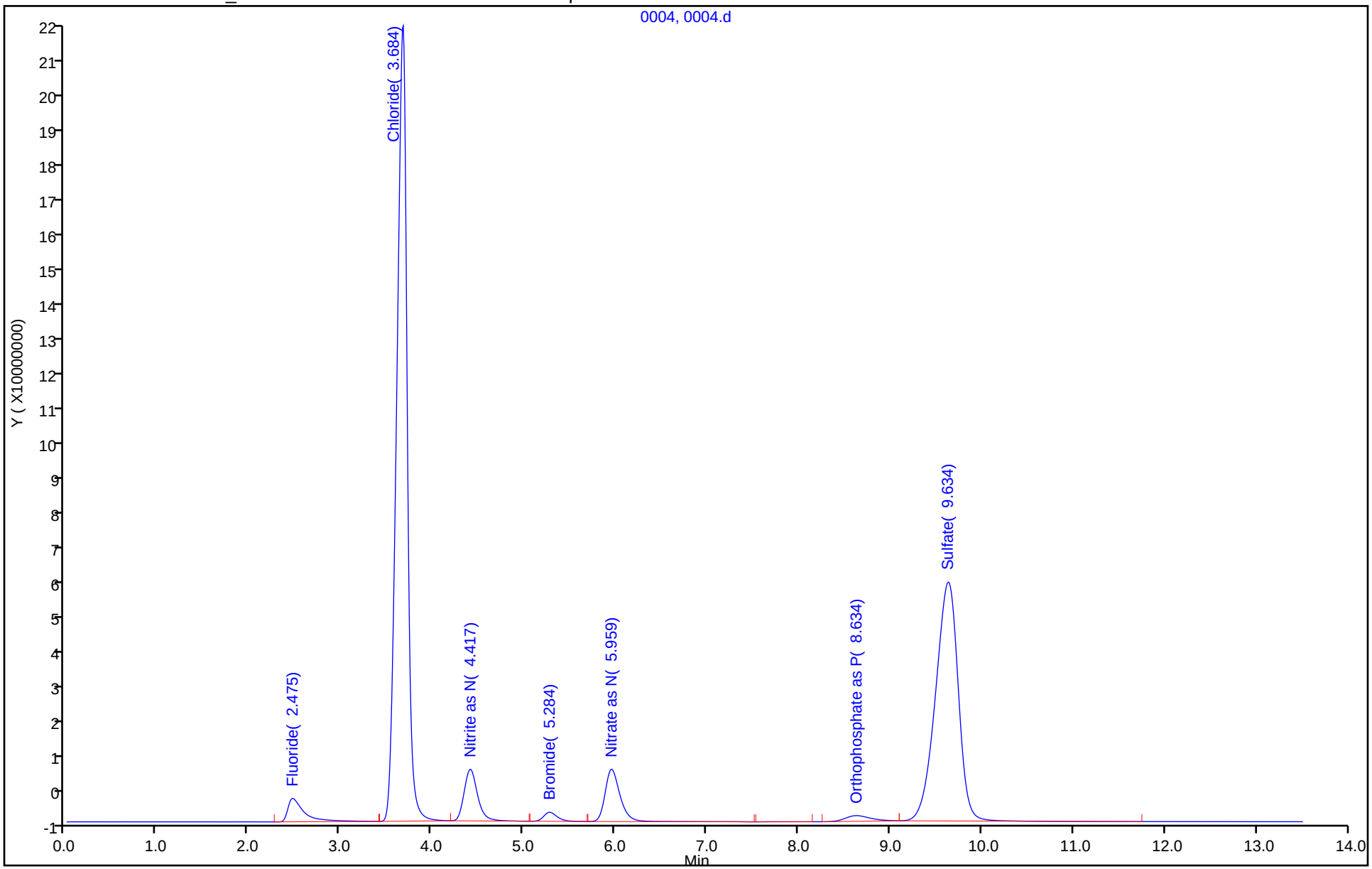
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0004.d

Injection Date:	23-Nov-2021 11:16:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0005.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 23-Nov-2021 11:32:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-005
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:24 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.476	2.476	0.000	80361384	5.00	4.92	
2 Chloride	3.676	3.676	0.000	1736312181	100.0	97.4	
3 Nitrite as N	4.409	4.409	0.000	144674479	NC	NC	
4 Bromide	5.276	5.276	0.000	25420295	5.00	4.70	
5 Nitrate as N	5.951	5.951	0.000	163451807	NC	NC	
7 Orthophosphate as P	8.626	8.626	0.000	30368590	NC	NC	
6 Sulfate	9.634	9.634	0.000	1130143541	100.0	96.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

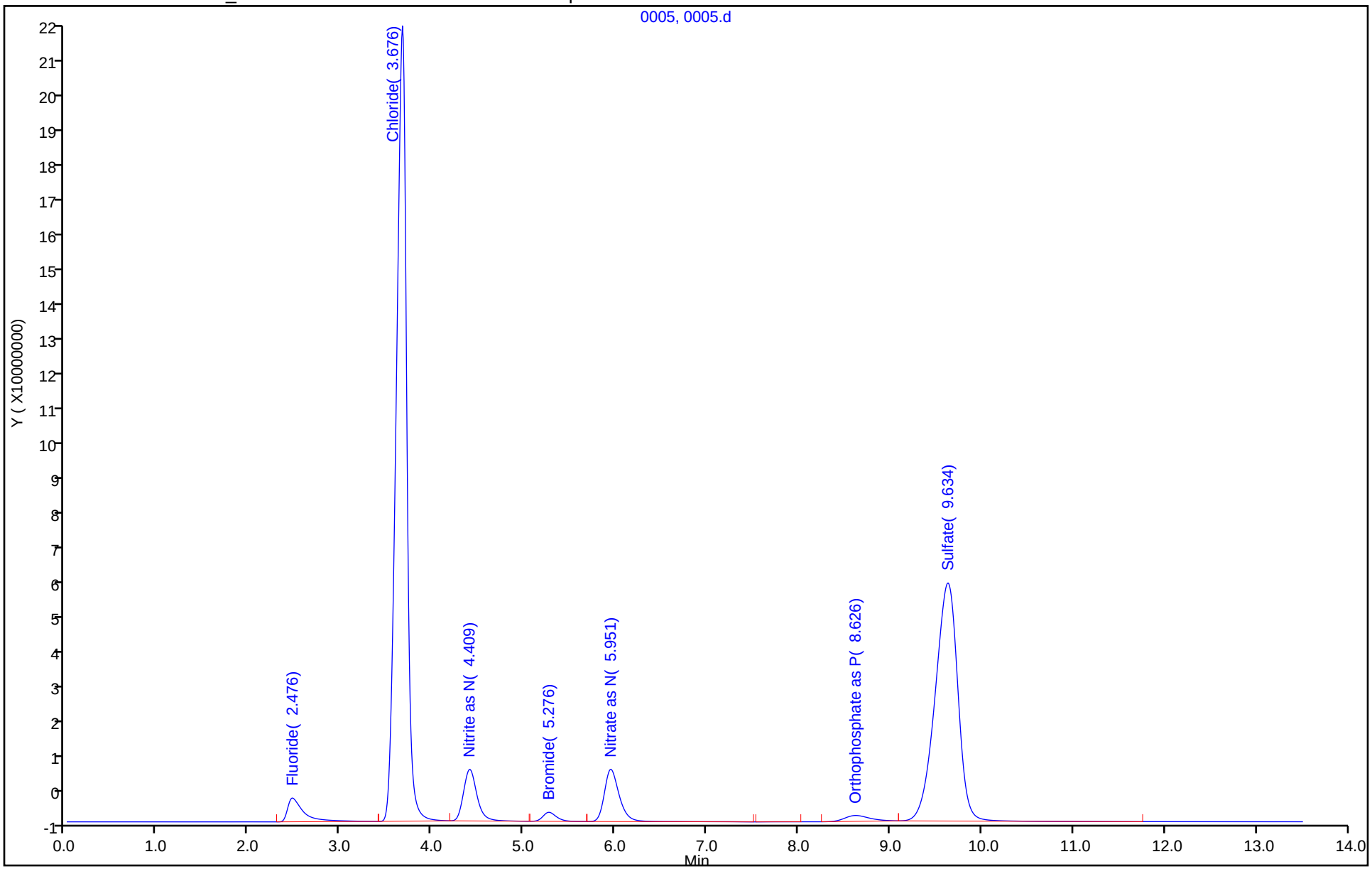
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0005.d

Injection Date:	23-Nov-2021 11:32:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0006.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Nov-2021 11:48:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-006
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:24 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:21:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.476				ND	
2 Chloride	3.617	3.617	0.000	82059		0.6668	M
3 Nitrite as N		4.409				ND	U
4 Bromide		5.276				ND	U
5 Nitrate as N		5.951				ND	U
7 Orthophosphate as P		8.626				ND	U
6 Sulfate	9.517	9.517	0.000	369815		0.6325	M

QC Flag Legend

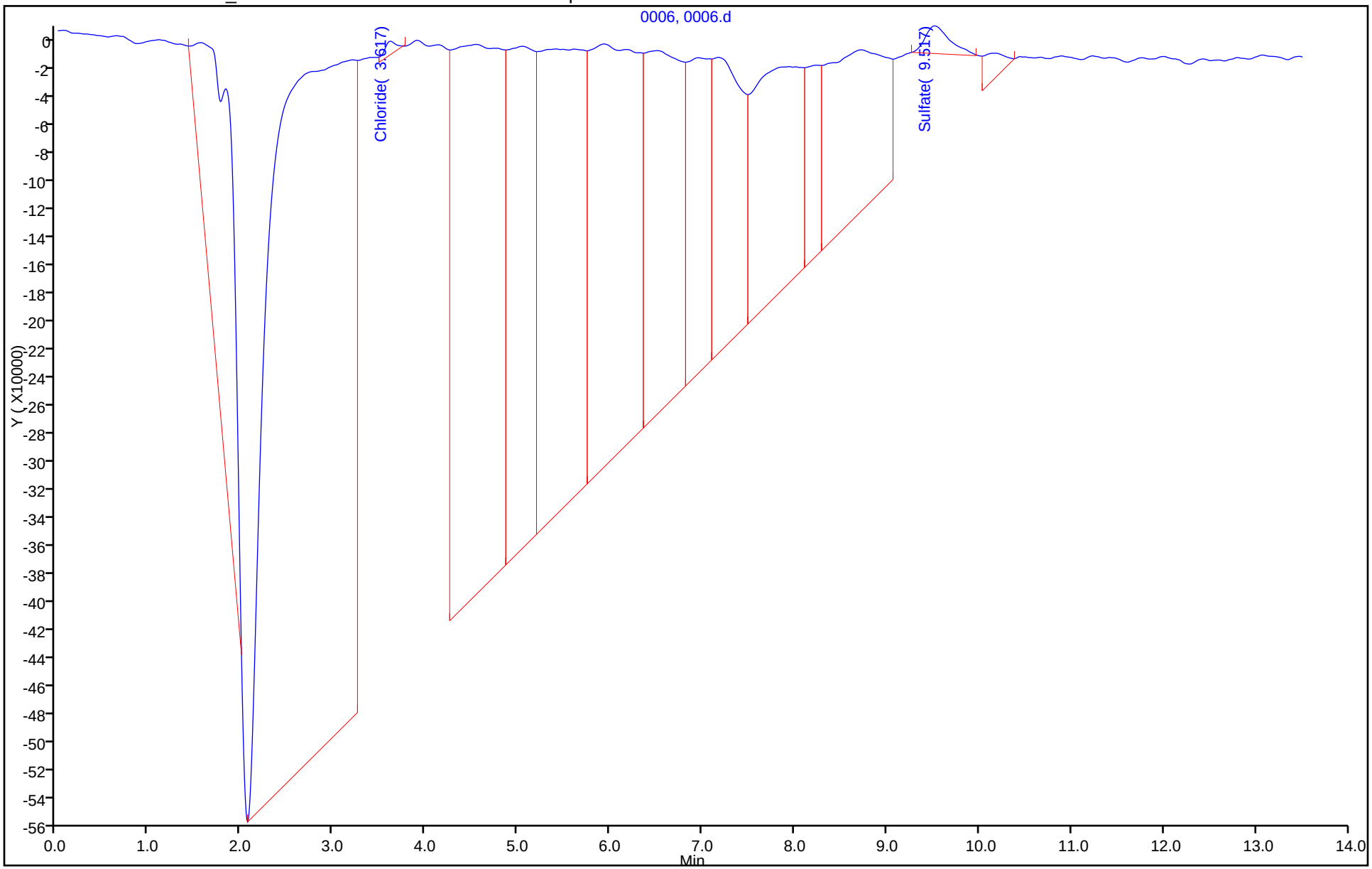
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Nov-2021 15:23:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0006.d

Injection Date:	23-Nov-2021 11:48:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

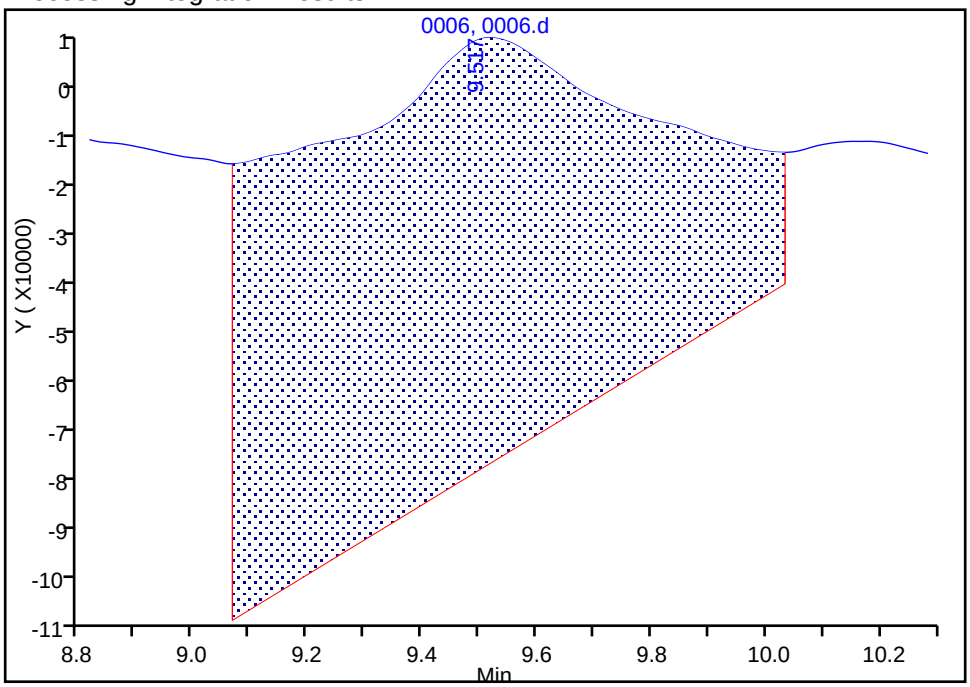
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0006.d
Injection Date: 23-Nov-2021 11:48:00 Instrument ID: WC_IonChrom11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

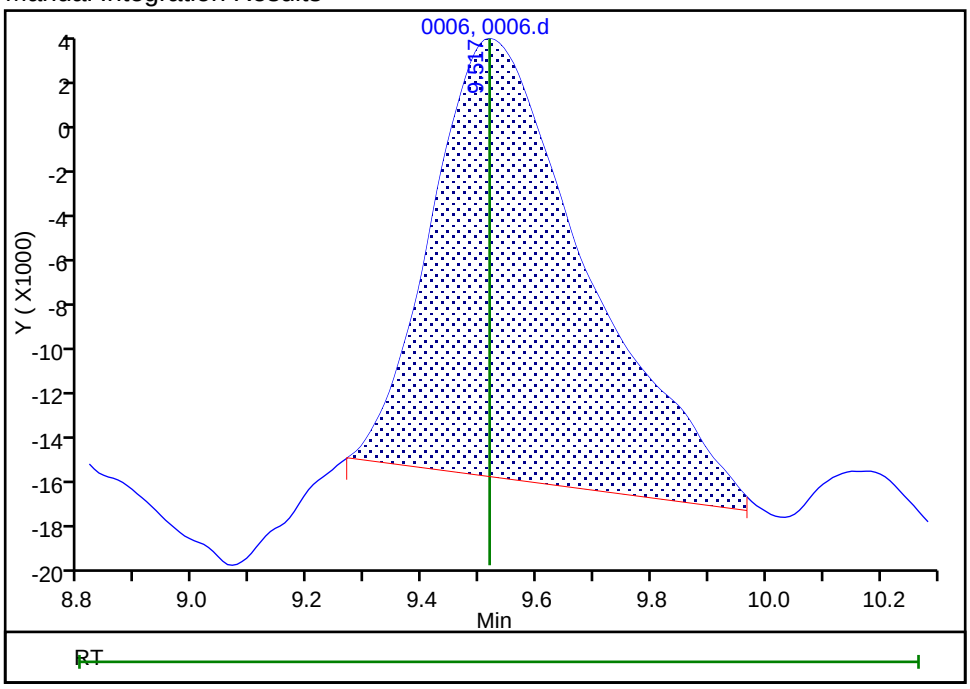
Processing Integration Results

RT: 9.52
Area: 3661438
Amount: 0.912105
Amount Units: ug/ml



Manual Integration Results

RT: 9.52
Area: 369815
Amount: 0.632470
Amount Units: ug/ml



Reviewer: jindaratc, 23-Nov-2021 15:20:57
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0012.d
Lims ID: 280-155015-F-12
Client ID: G0075-7
Sample Type: Client
Inject. Date: 23-Nov-2021 13:51:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0106740-012
Misc. Info.: 19573
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:24 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:22:28

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.476	0.008	916464	0.0819	M
2 Chloride	3.617	3.617	0.000	96537989	6.04	M
3 Nitrite as N	4.375	4.409	-0.034	100148	NC	M
4 Bromide	5.300	5.276	0.024	260418	0.0715	M
5 Nitrate as N	6.000	5.951	0.049	9465558	NC	
7 Orthophosphate as P	8.859	8.626	0.233	836739	NC	
6 Sulfate	9.592	9.517	0.075	435555877	37.6	

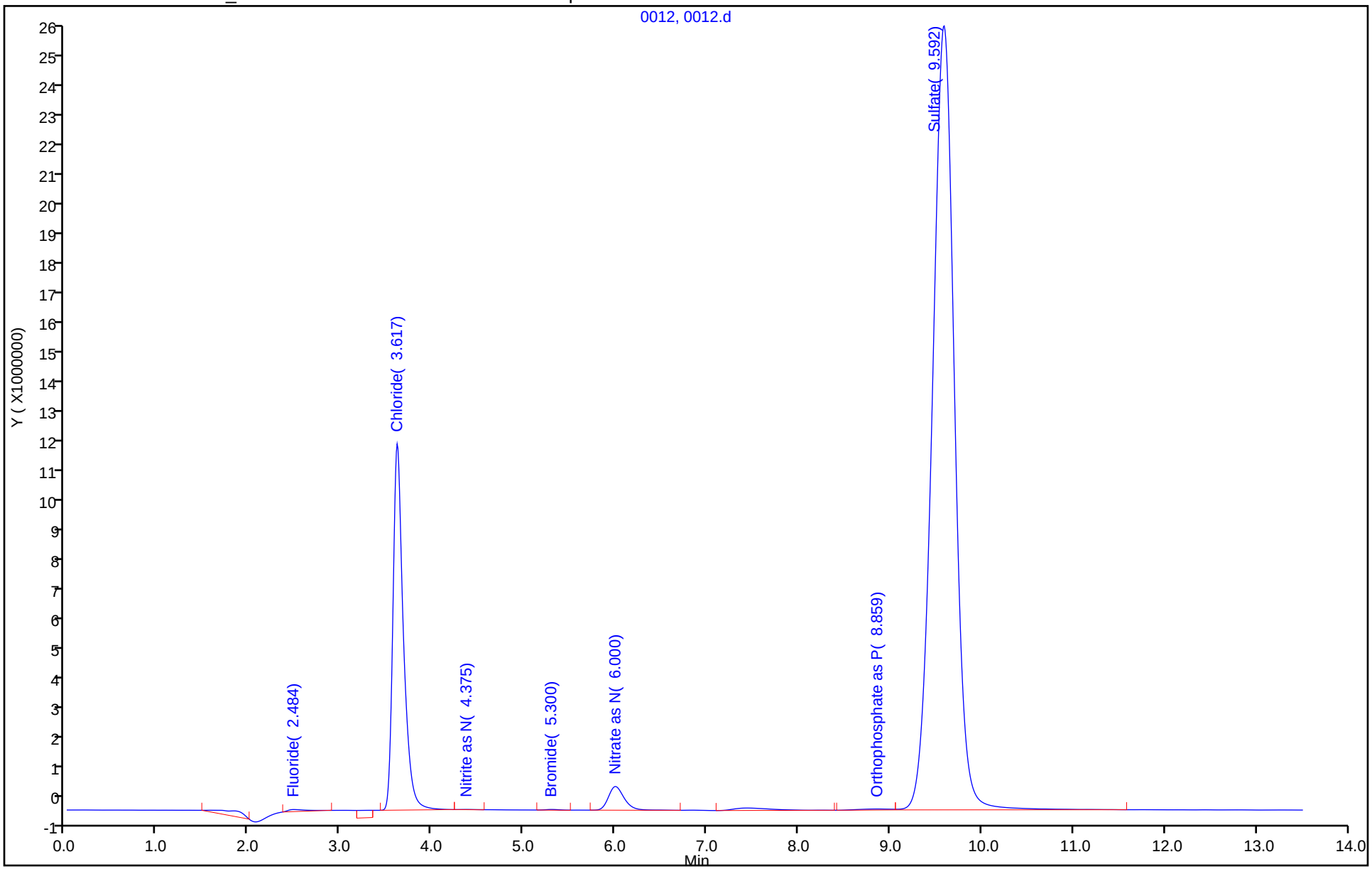
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 23-Nov-2021 15:23:27 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0012.d				
Injection Date:	23-Nov-2021 13:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155015-F-12	Lab Sample ID:	280-155015-12	Worklist Smp#:	12
Client ID:	G0075-7				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0014.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2021 14:24:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-015
Misc. Info.: 21879
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:28 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:22:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.476	-0.001	83643265	5.00	5.12	
2 Chloride	3.692	3.617	0.075	1766936446	100.0	99.1	
3 Nitrite as N	4.425	4.409	0.016	146800892	NC	NC	
4 Bromide	5.300	5.276	0.024	25825998	5.00	4.77	
5 Nitrate as N	5.984	5.951	0.033	166412734	NC	NC	
7 Orthophosphate as P	8.625	8.626	-0.001	31830882	NC	NC	
6 Sulfate	9.625	9.517	0.108	1153151253	100.0	98.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

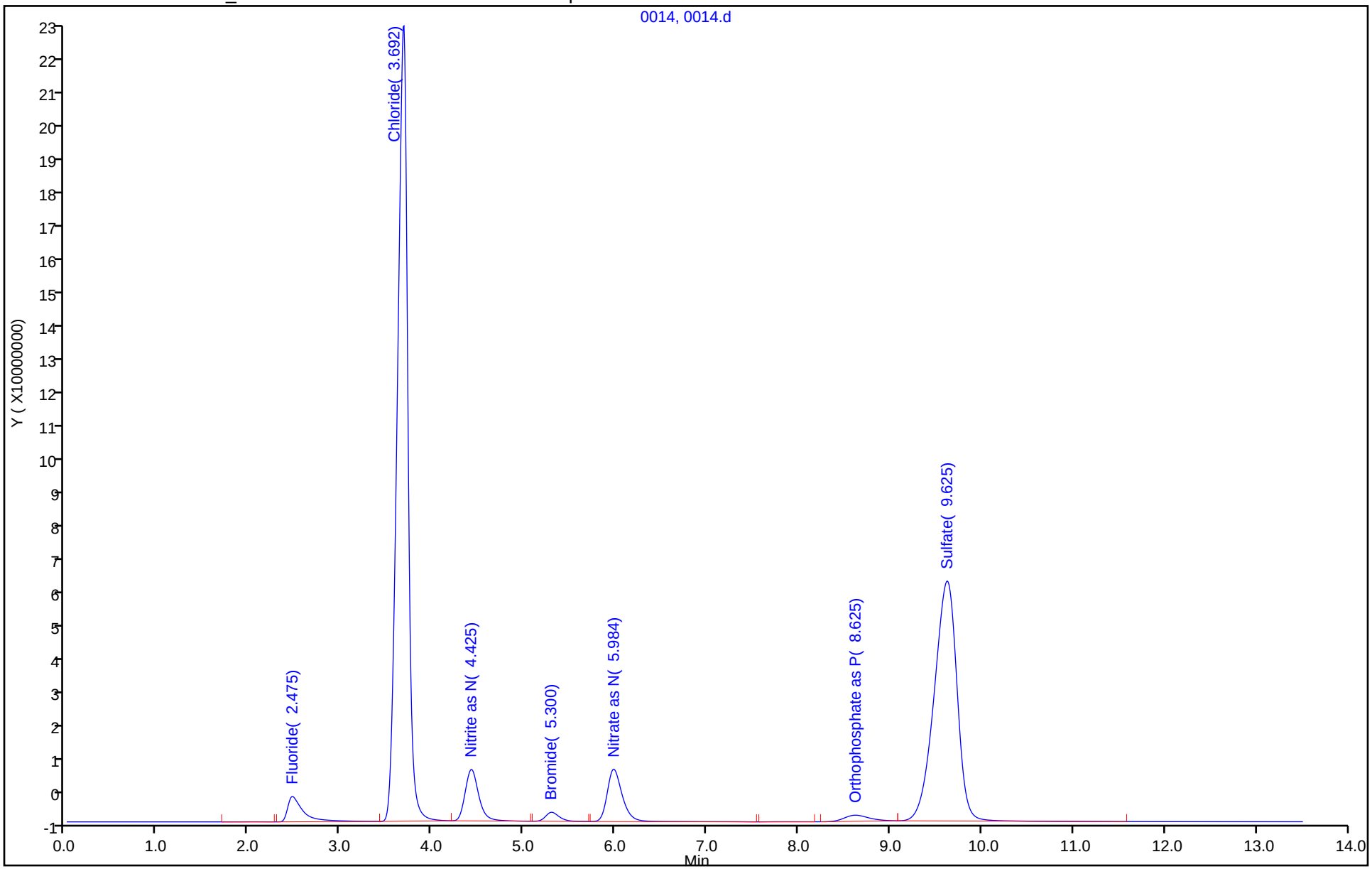
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:28 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0014.d

Injection Date:	23-Nov-2021 14:24:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	15
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0015.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 23-Nov-2021 14:40:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-016
Misc. Info.: 17154
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:28 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:23:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.476				ND	
2 Chloride	3.625	3.617	0.008	143779		0.6702	M
3 Nitrite as N		4.409				ND	U
4 Bromide		5.276				ND	U
5 Nitrate as N		5.951				ND	
7 Orthophosphate as P	8.667	8.626	0.041	250623		NC	
6 Sulfate	9.625	9.517	0.108	132667		0.6123	

QC Flag Legend

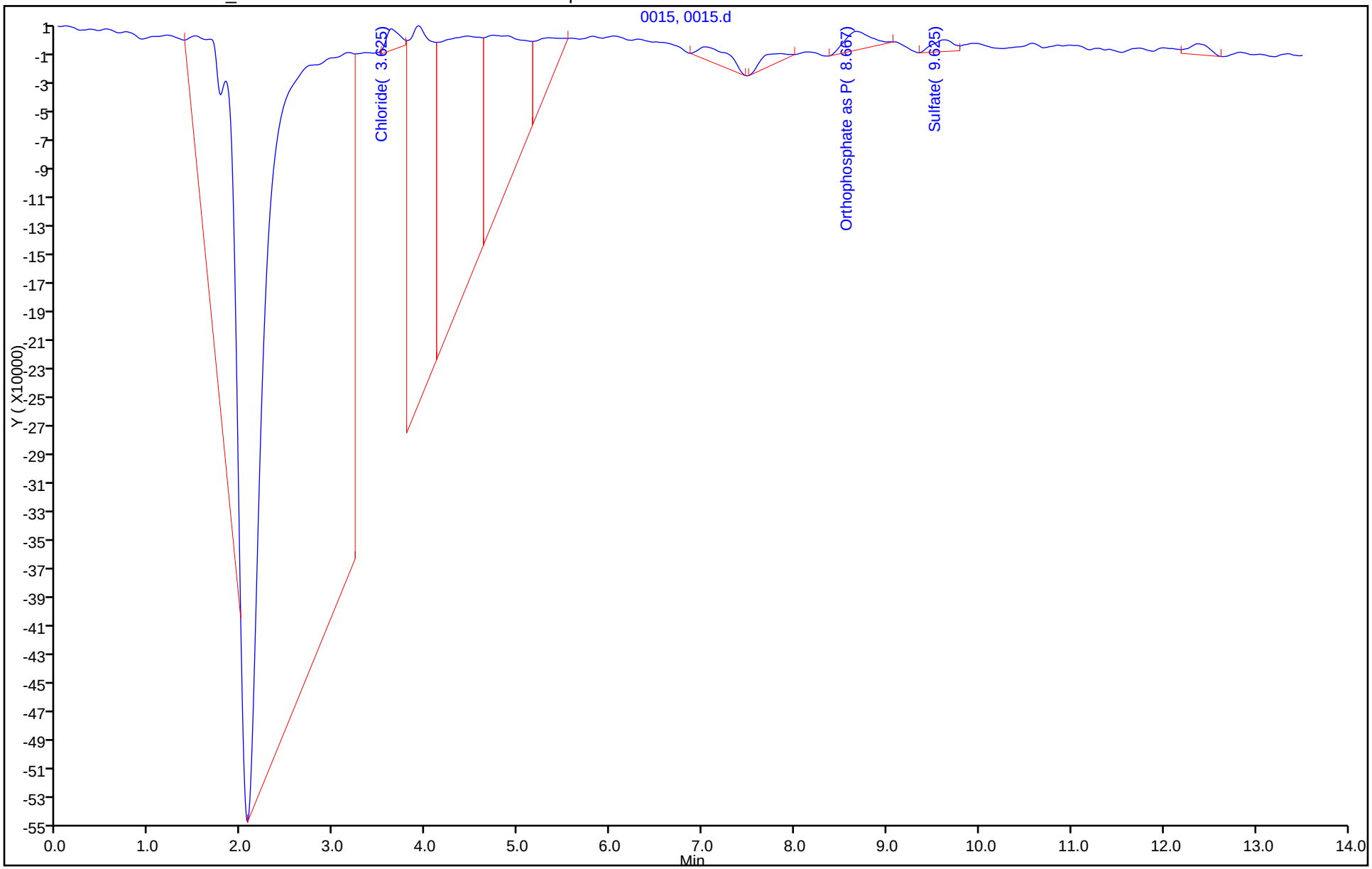
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Nov-2021 15:23:29 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0015.d

Injection Date:	23-Nov-2021 14:40:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	16
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-174
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Nov-2021 17:25:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-002
Misc. Info.: 280-0106089-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:37:42 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

First Level Reviewer: jindaratc Date: 01-Nov-2021 18:15:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.138	3.138	0.000	5541959	0.2000	0.2715	M
2 Chloride	4.352	4.352	0.000	13171525	1.00	1.07	
3 Nitrite as N	5.102	5.102	0.000	5777575	NC	NC	
4 Bromide	6.370	6.370	0.000	1079855	0.2000	0.2373	M
5 Nitrate as N	7.258	7.258	0.000	6576781	NC	NC	M
7 Orthophosphate as P	8.725	8.725	0.000	7104735	NC	NC	
6 Sulfate	9.942	9.942	0.000	9992591	1.00	1.14	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

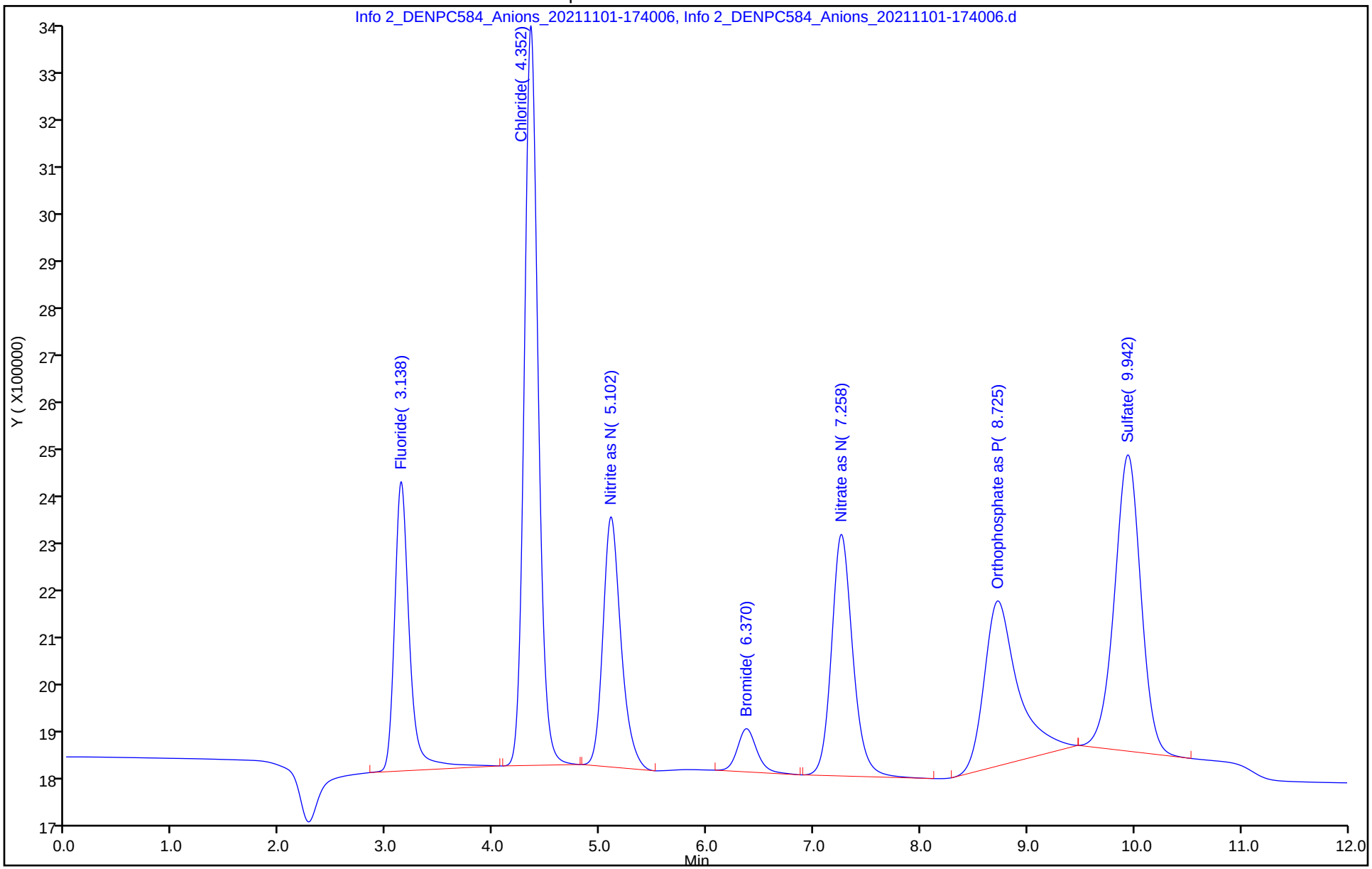
Reagents:

IC Cal low_00605 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00391 Amount Added: 0.02 Units: mL

Report Date: 03-Nov-2021 15:37:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-174006.d				
Injection Date:	01-Nov-2021 17:25:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-174

Injection Date: 01-Nov-2021 17:25:00 Instrument ID: WC_IonChrom13

Lims ID: std L1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

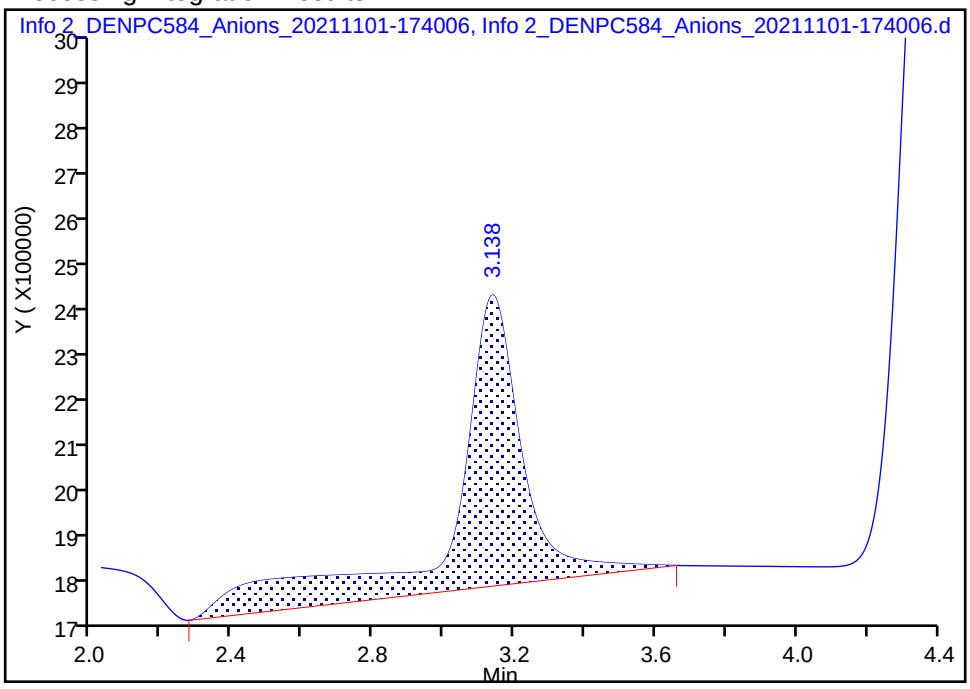
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

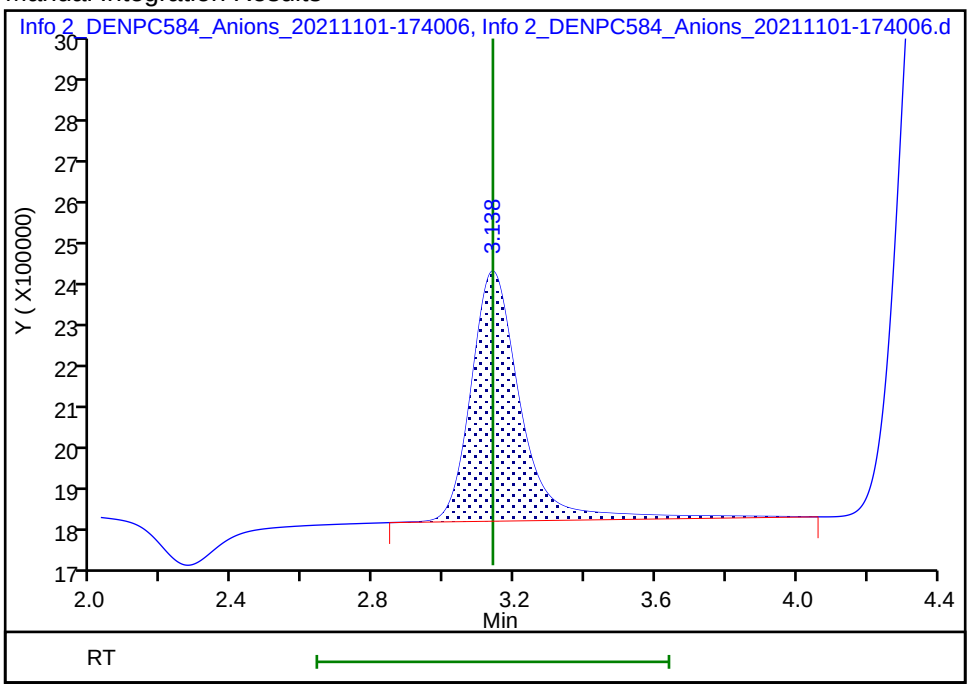
Processing Integration Results

RT: 3.14
Area: 8295370
Amount: 0.242764
Amount Units: ug/ml



Manual Integration Results

RT: 3.14
Area: 5541959
Amount: 0.271529
Amount Units: ug/ml



Reviewer: jindaratc, 01-Nov-2021 18:37:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

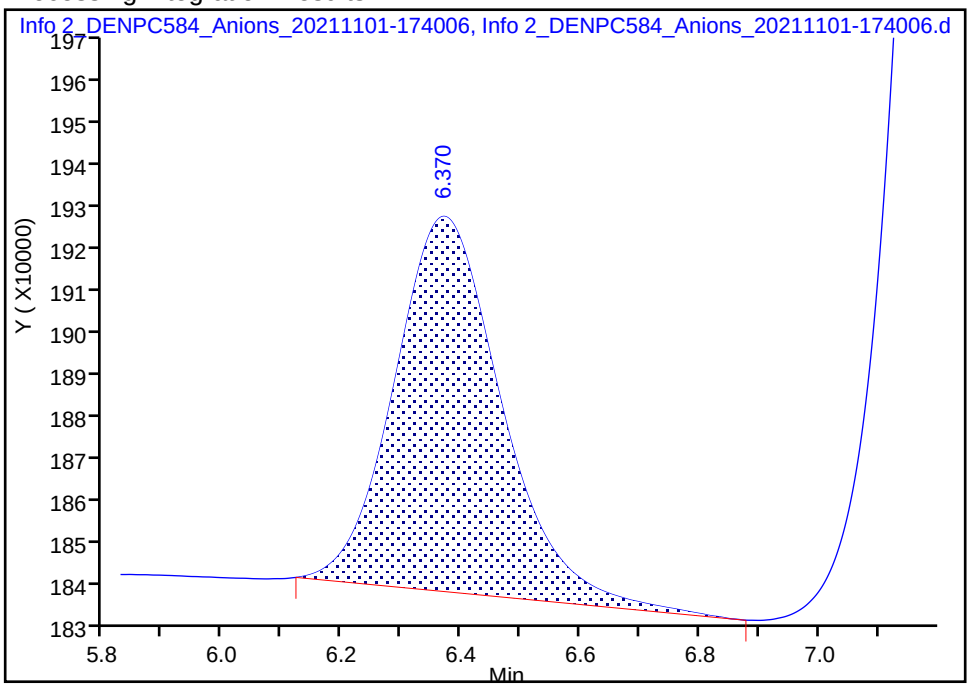
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-174				
Injection Date:	01-Nov-2021 17:25:00	Instrument ID:	WC_IonChrom13		
Lims ID:	std L1				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

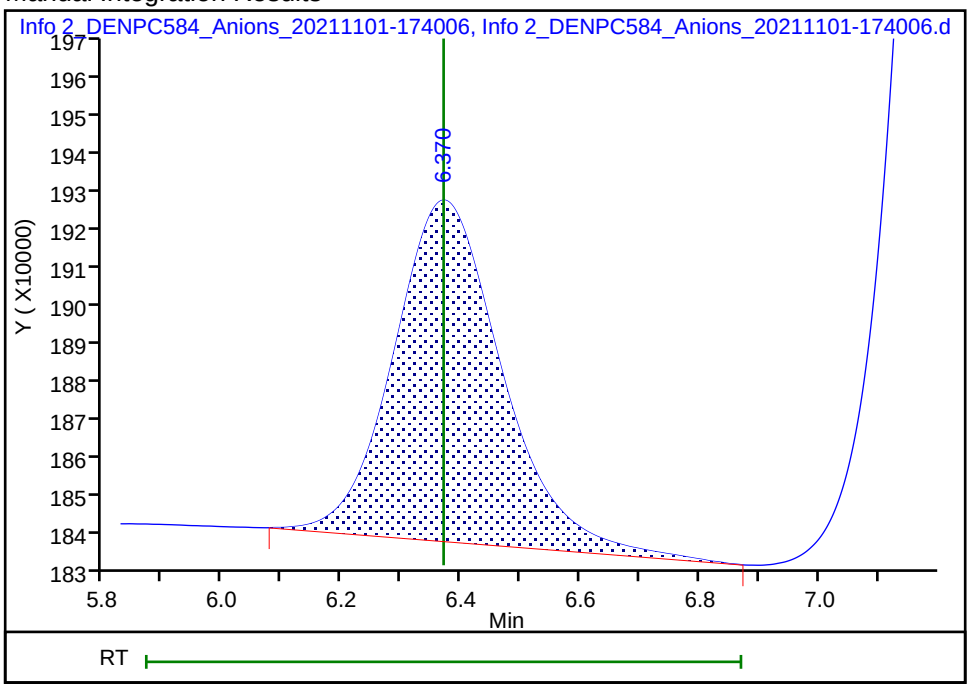
Processing Integration Results

RT: 6.37
Area: 1057445
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.37
Area: 1079855
Amount: 0.237310
Amount Units: ug/ml



Reviewer: gonzalezsp, 03-Nov-2021 09:10:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-174

Injection Date: 01-Nov-2021 17:25:00 Instrument ID: WC_IonChrom13

Lims ID: std L1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

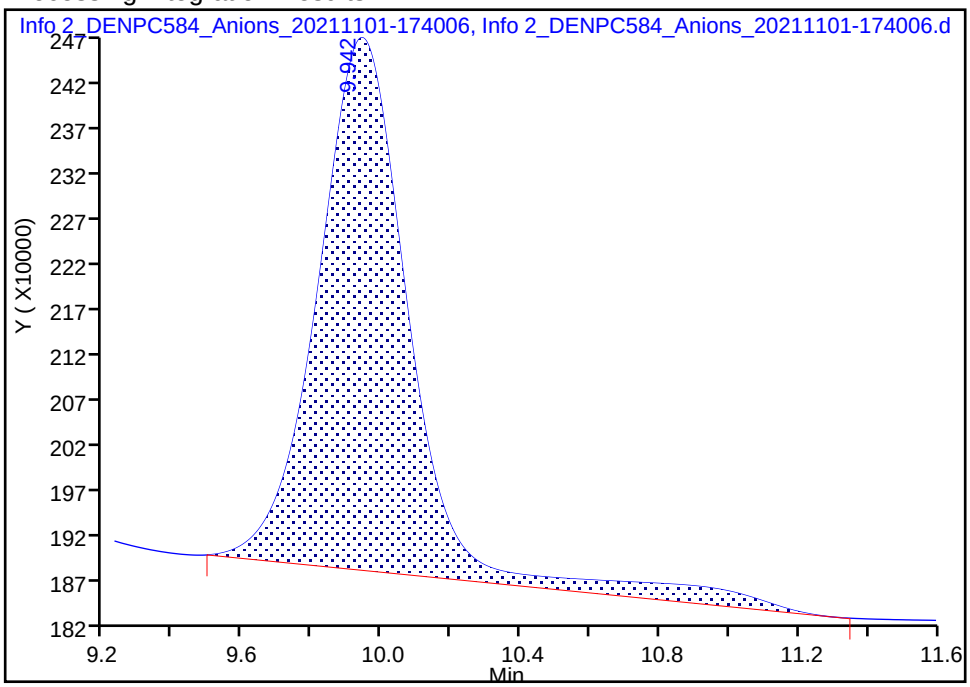
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

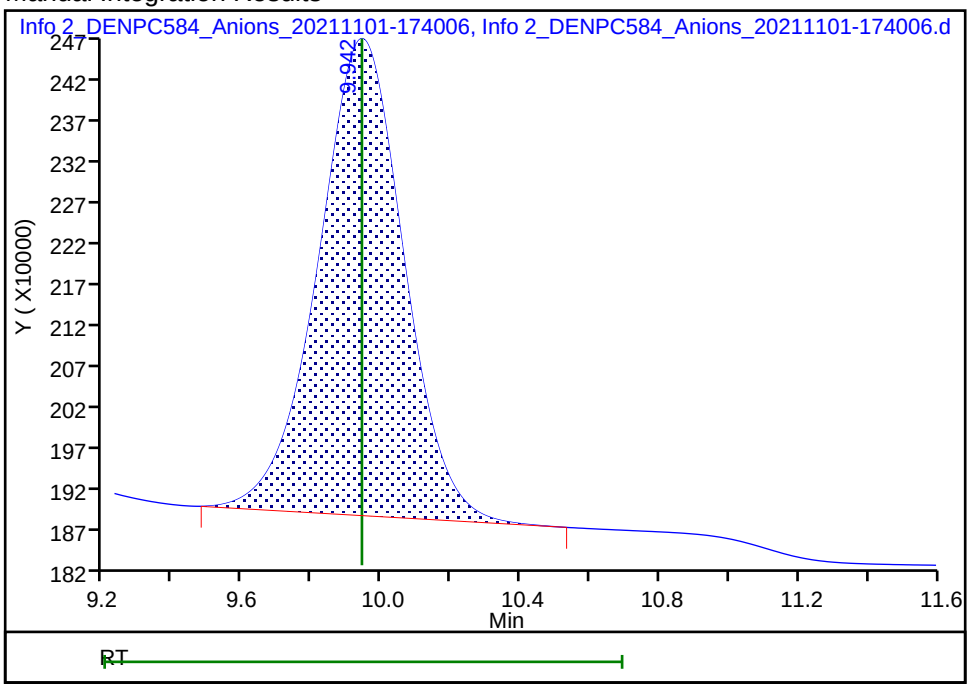
Processing Integration Results

RT: 9.94
Area: 10983163
Amount: 0.441021
Amount Units: ug/ml



Manual Integration Results

RT: 9.94
Area: 9992591
Amount: 1.142293
Amount Units: ug/ml



Reviewer: gonzalezsp, 03-Nov-2021 09:10:25

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-175
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Nov-2021 17:40:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-003
Misc. Info.: 280-0106089-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:37:43 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

First Level Reviewer: jindaratc Date: 01-Nov-2021 18:14:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.142	3.142	0.000	14213327	0.5000	0.4230	M
2 Chloride	4.352	4.352	0.000	36434927	2.50	2.39	
3 Nitrite as N	5.098	5.098	0.000	15525604	NC	NC	
4 Bromide	6.358	6.358	0.000	2741069	0.5000	0.4729	M
5 Nitrate as N	7.225	7.225	0.000	17912999	NC	NC	M
7 Orthophosphate as P	8.722	8.722	0.000	18950136	NC	NC	
6 Sulfate	9.943	9.943	0.000	25439643	2.50	2.32	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

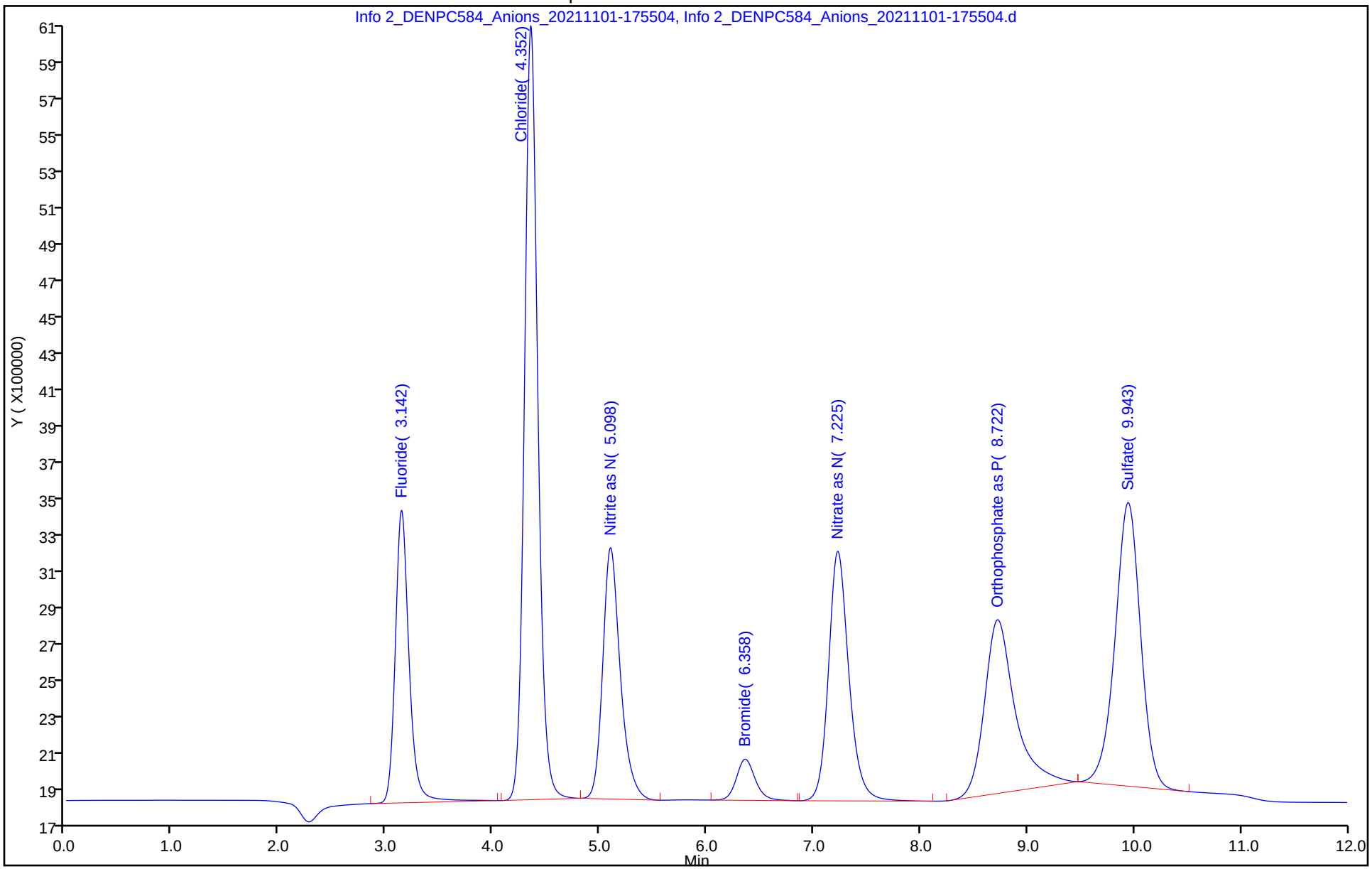
Reagents:

IC Cal low_00605 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00391 Amount Added: 0.05 Units: mL

Report Date: 03-Nov-2021 15:37:43 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-175504.d				
Injection Date:	01-Nov-2021 17:40:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-175

Injection Date: 01-Nov-2021 17:40:00 Instrument ID: WC_IonChrom13

Lims ID: std L2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

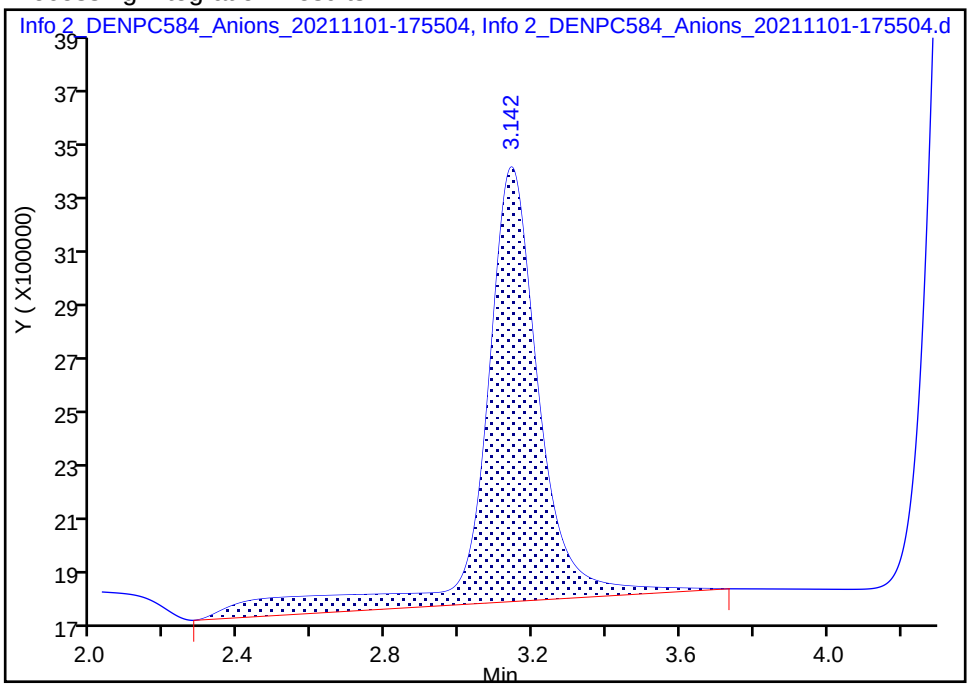
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

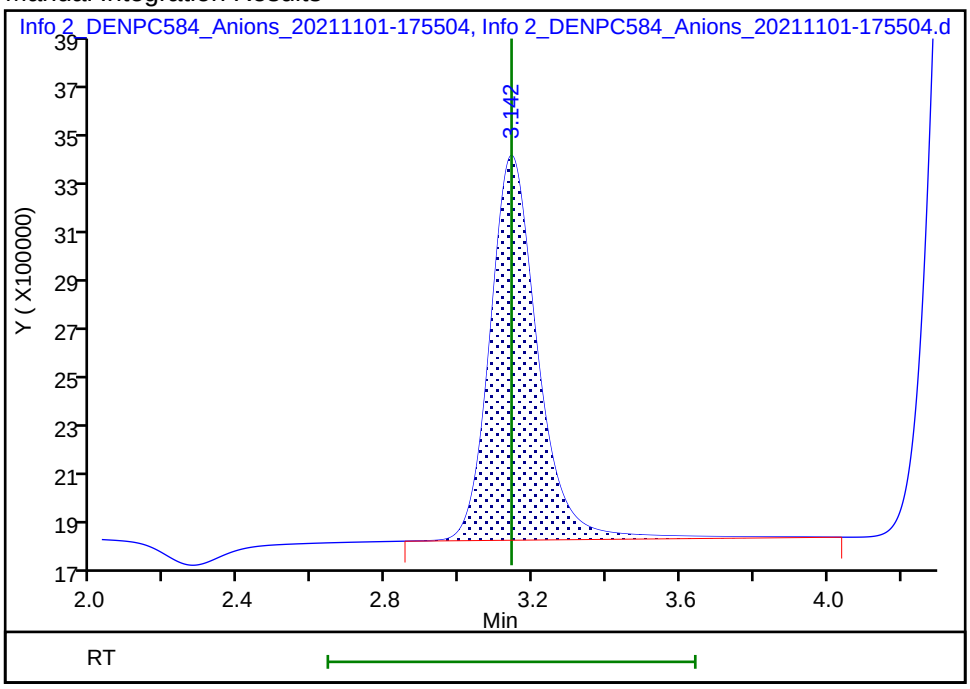
Processing Integration Results

RT: 3.14
Area: 17194524
Amount: 0.437844
Amount Units: ug/ml



Manual Integration Results

RT: 3.14
Area: 14213327
Amount: 0.423045
Amount Units: ug/ml



Reviewer: jindaratc, 01-Nov-2021 18:36:55

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-175

Injection Date: 01-Nov-2021 17:40:00 Instrument ID: WC_IonChrom13

Lims ID: std L2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

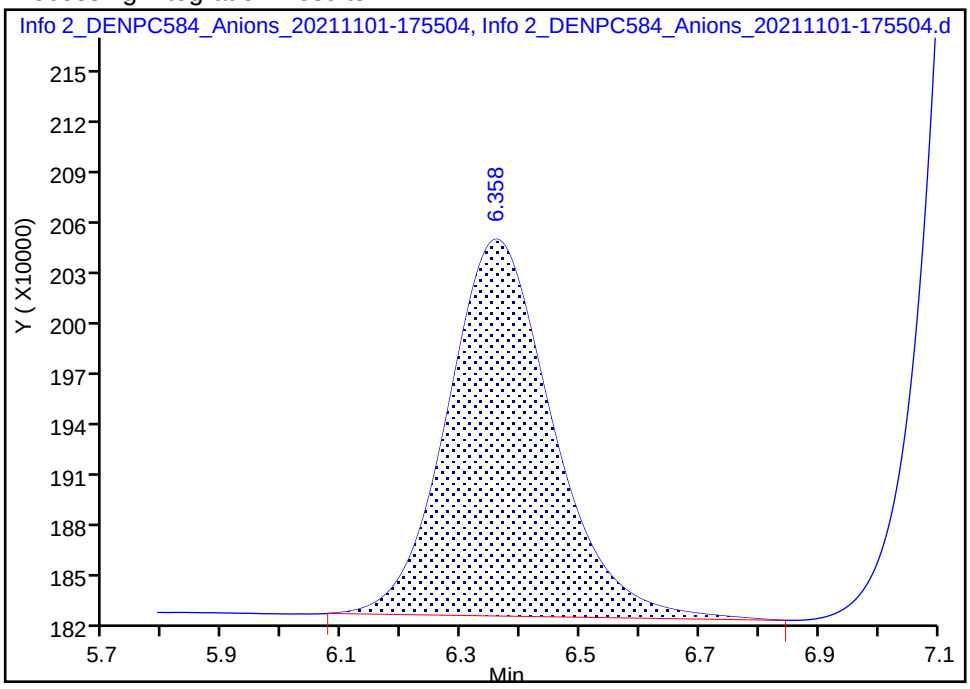
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

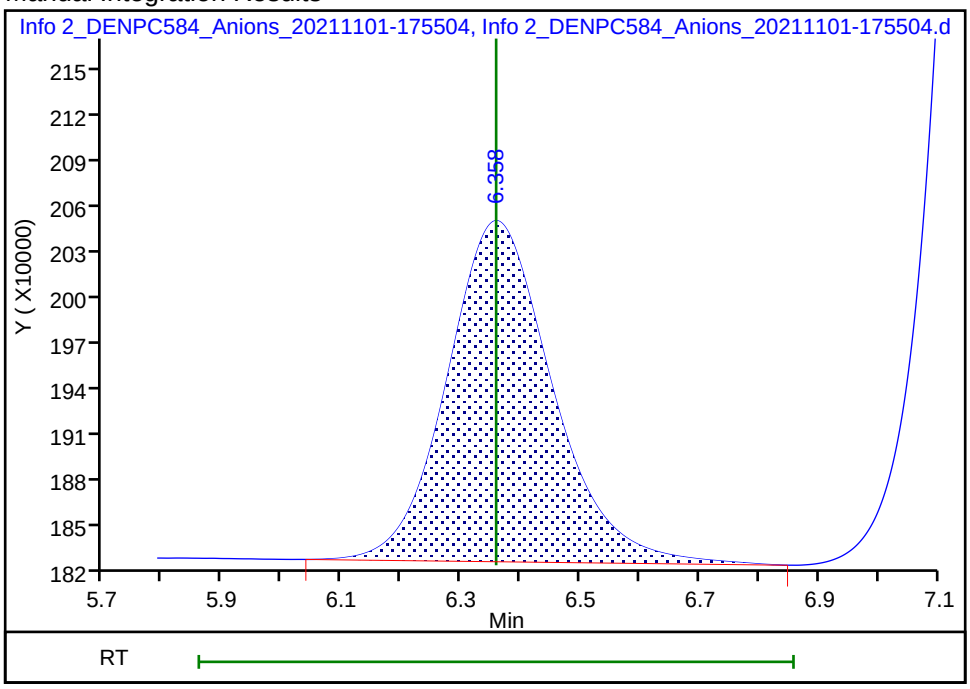
Processing Integration Results

RT: 6.36
Area: 2728660
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.36
Area: 2741069
Amount: 0.472902
Amount Units: ug/ml



Reviewer: gonzalezsp, 03-Nov-2021 09:10:55

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-175

Injection Date: 01-Nov-2021 17:40:00 Instrument ID: WC_IonChrom13

Lims ID: std L2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

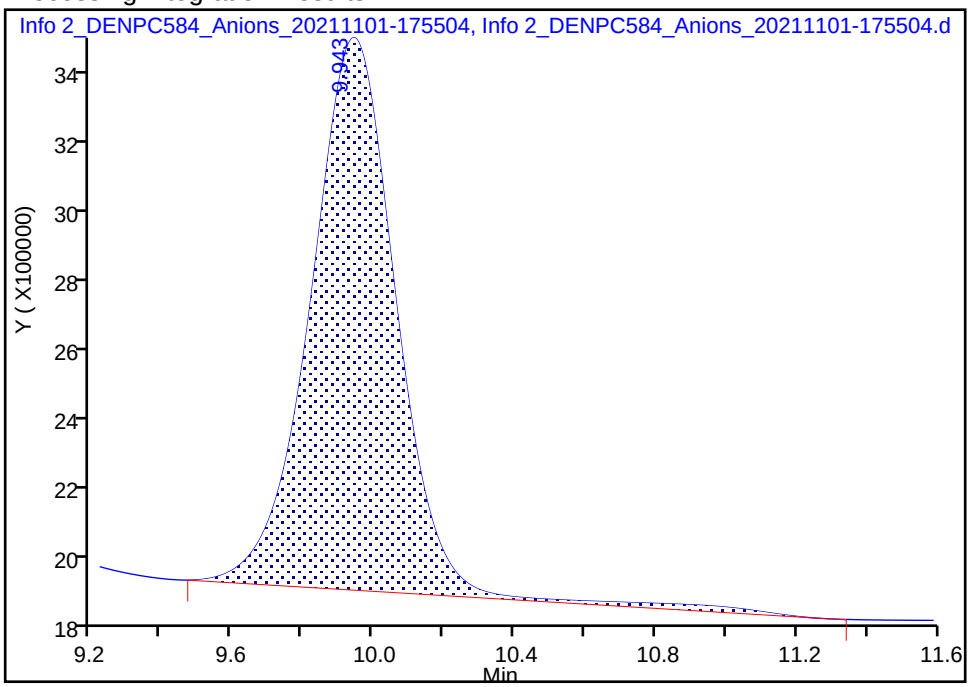
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

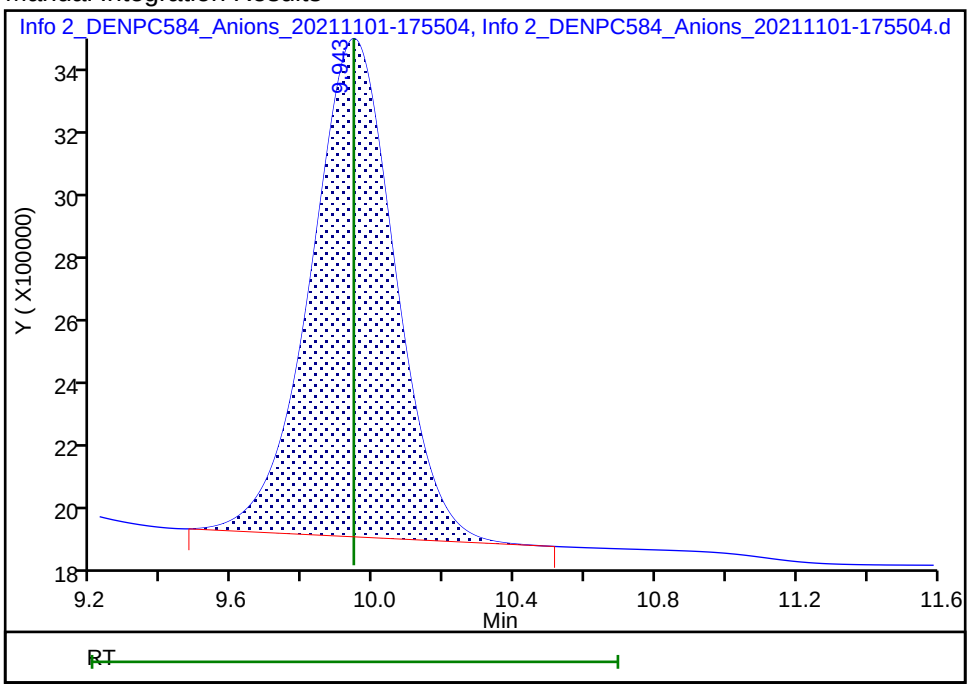
Processing Integration Results

RT: 9.94
Area: 26149394
Amount: 2.000476
Amount Units: ug/ml



Manual Integration Results

RT: 9.94
Area: 25439643
Amount: 2.316872
Amount Units: ug/ml



Reviewer: gonzalezsp, 03-Nov-2021 09:11:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-181
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Nov-2021 17:55:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-004
Misc. Info.: 280-0106089-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:37:44 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

First Level Reviewer: jindaratc Date: 01-Nov-2021 18:16:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.145	3.145	0.000	33814072	1.00	0.7655	M
2 Chloride	4.350	4.350	0.000	79431492	5.00	4.82	
3 Nitrite as N	5.092	5.092	0.000	34053323	NC	NC	
4 Bromide	6.350	6.350	0.000	5704707	1.00	0.8932	
5 Nitrate as N	7.198	7.198	0.000	39468175	NC	NC	
7 Orthophosphate as P	8.727	8.727	0.000	45373745	NC	NC	
6 Sulfate	9.952	9.952	0.000	55284208	5.00	4.59	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

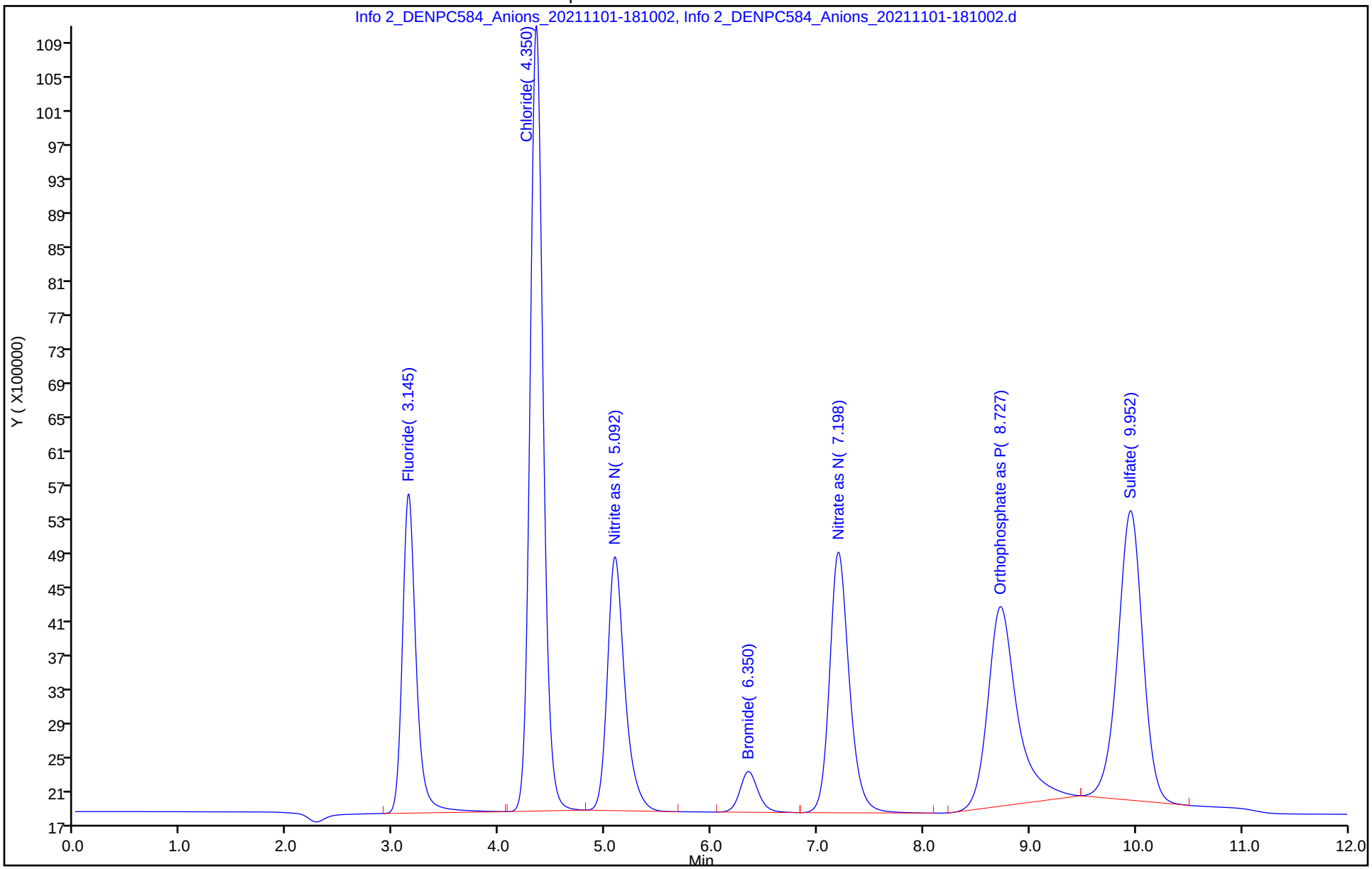
Reagents:

IC Cal low_00605 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00391 Amount Added: 0.10 Units: mL

Report Date: 03-Nov-2021 15:37:44 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-181002.d				
Injection Date:	01-Nov-2021 17:55:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-181

Injection Date: 01-Nov-2021 17:55:00 Instrument ID: WC_IonChrom13

Lims ID: std L3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

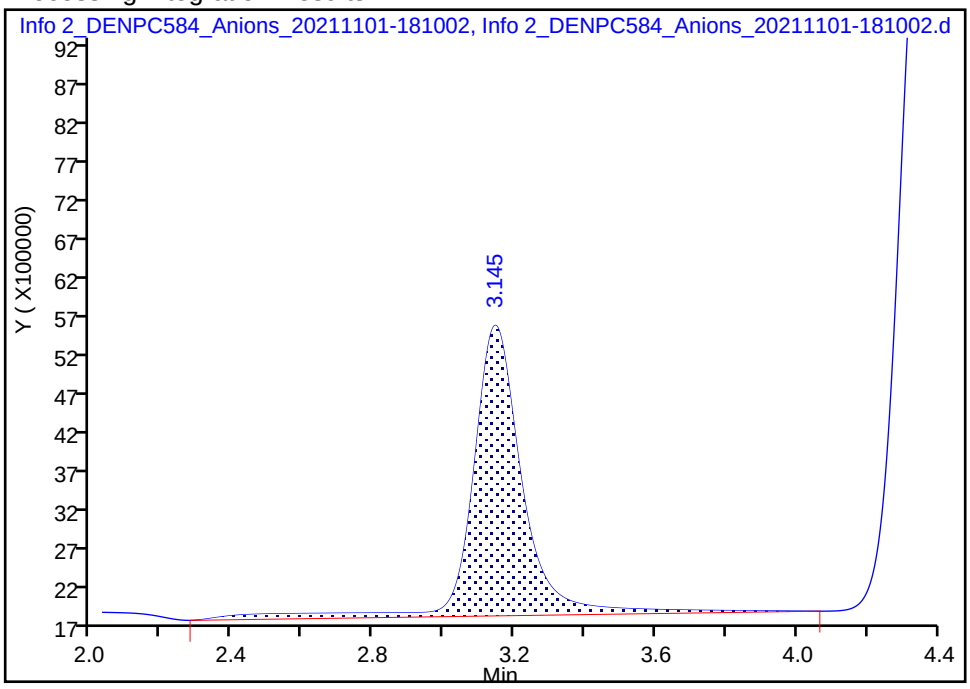
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

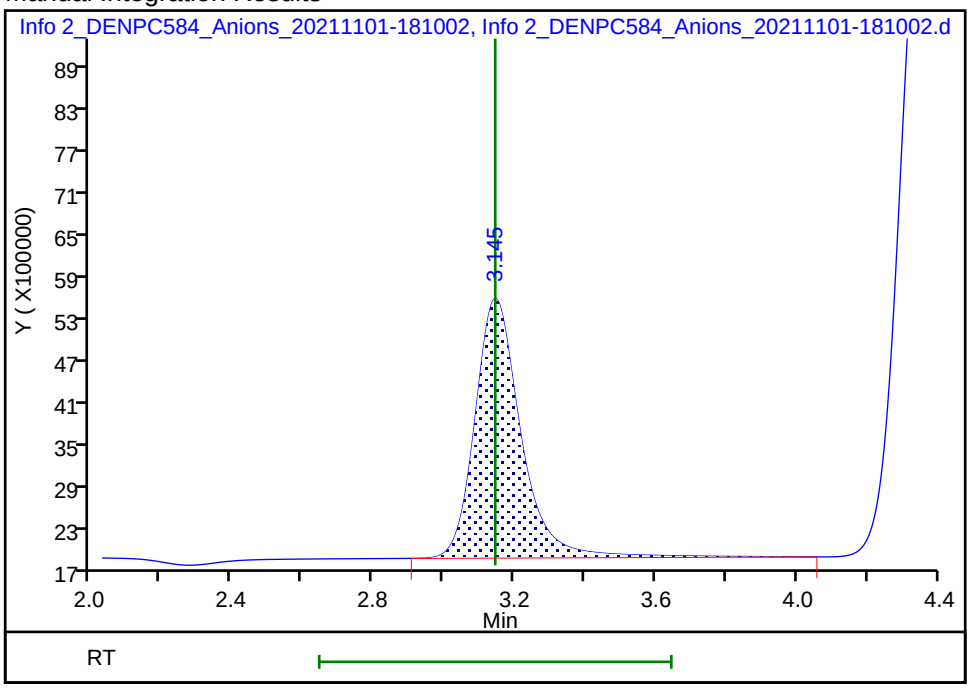
Processing Integration Results

RT: 3.15
Area: 37860794
Amount: 0.783865
Amount Units: ug/ml



Manual Integration Results

RT: 3.15
Area: 33814072
Amount: 0.765531
Amount Units: ug/ml



Reviewer: jindaratc, 01-Nov-2021 18:15:55

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

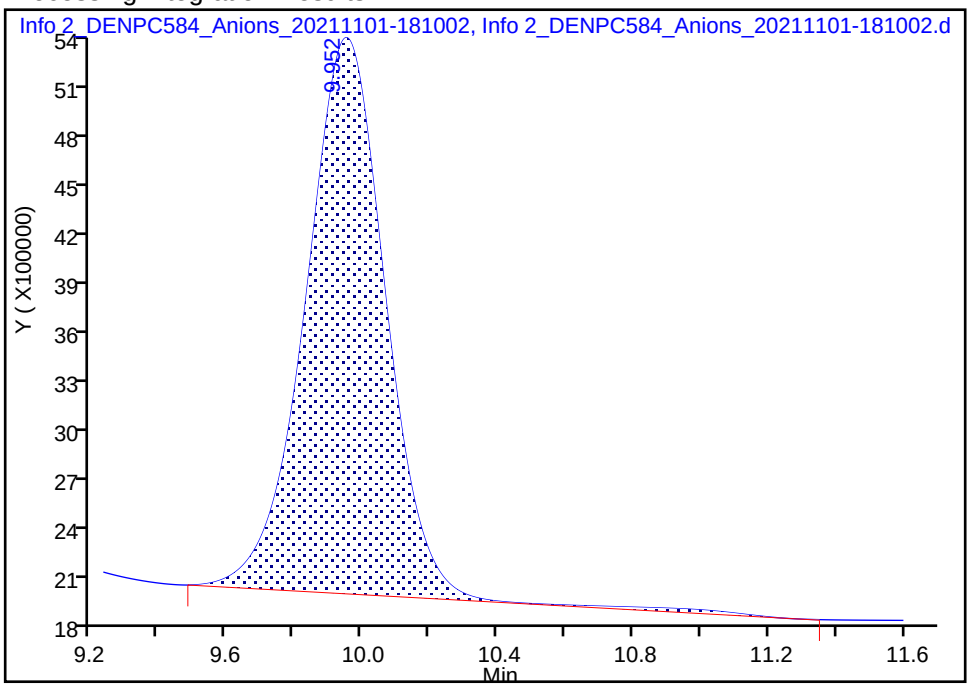
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-181				
Injection Date:	01-Nov-2021 17:55:00	Instrument ID:	WC_IonChrom13		
Lims ID:	std L3				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

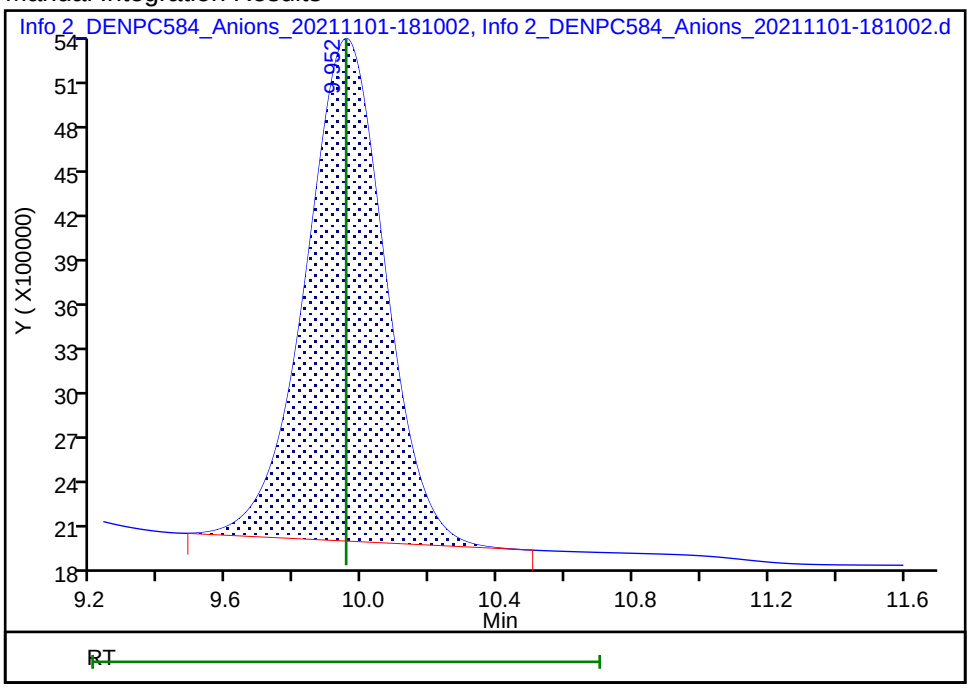
Processing Integration Results

RT: 9.95
Area: 55956579
Amount: 4.529849
Amount Units: ug/ml



Manual Integration Results

RT: 9.95
Area: 55284208
Amount: 4.586224
Amount Units: ug/ml



Reviewer: jindaratc, 01-Nov-2021 18:16:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-182
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Nov-2021 18:10:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-005
Misc. Info.: 280-0106089-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:37:45 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

First Level Reviewer: jindaratc Date: 01-Nov-2021 18:36:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.163	0.000	218790412	4.00	4.00	M
2 Chloride	4.362	4.362	0.000	1063385204	60.0	60.5	
3 Nitrite as N	5.070	5.070	0.000	155178833	NC	NC	M
4 Bromide	6.330	6.330	0.000	25957786	4.00	3.77	
5 Nitrate as N	7.132	7.132	0.000	180955263	NC	NC	
7 Orthophosphate as P	8.712	8.712	0.000	146543567	NC	NC	
6 Sulfate	9.930	9.930	0.000	795718184	60.0	60.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

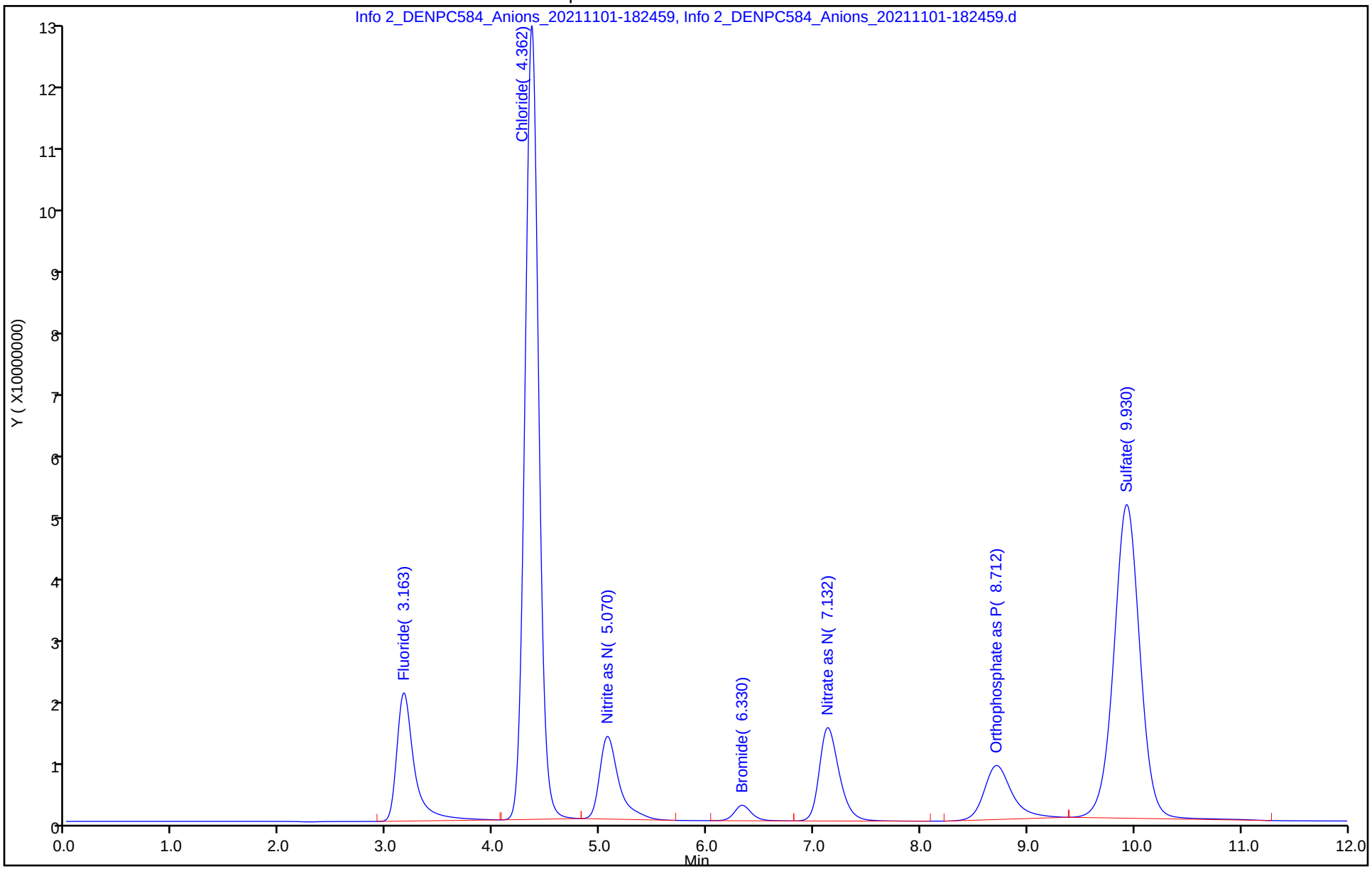
Reagents:

IC Cal low_00605 Amount Added: 0.40 Units: mL
IC CAL cl/so4_00391 Amount Added: 1.20 Units: mL

Report Date: 03-Nov-2021 15:37:45 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-182459.d				
Injection Date:	01-Nov-2021 18:10:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-182

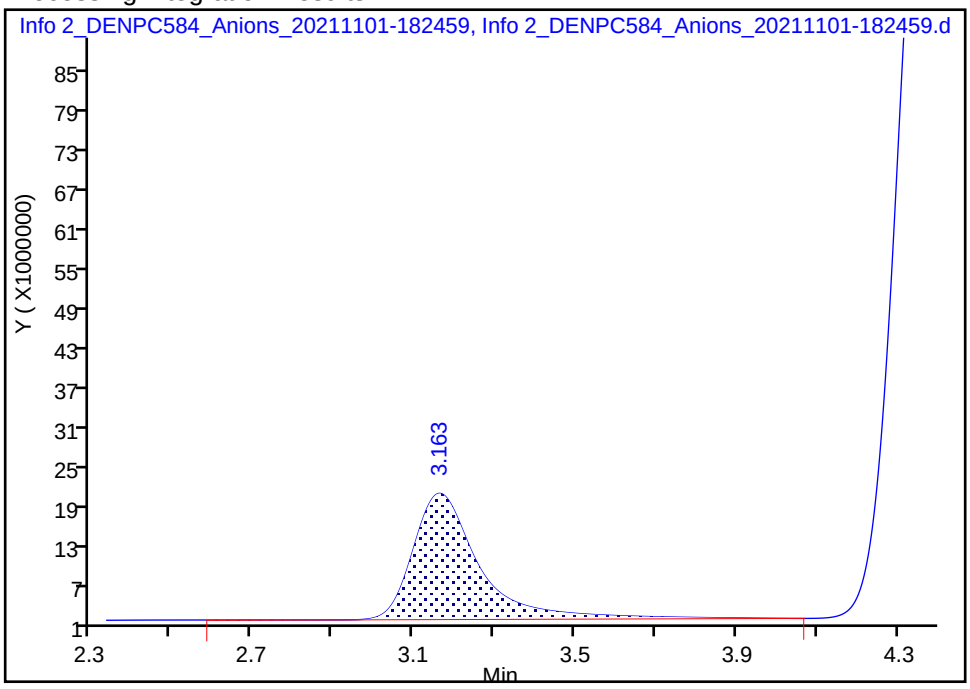
Injection Date:	01-Nov-2021 18:10:00	Instrument ID:	WC_IonChrom13
Lims ID:	std L4		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

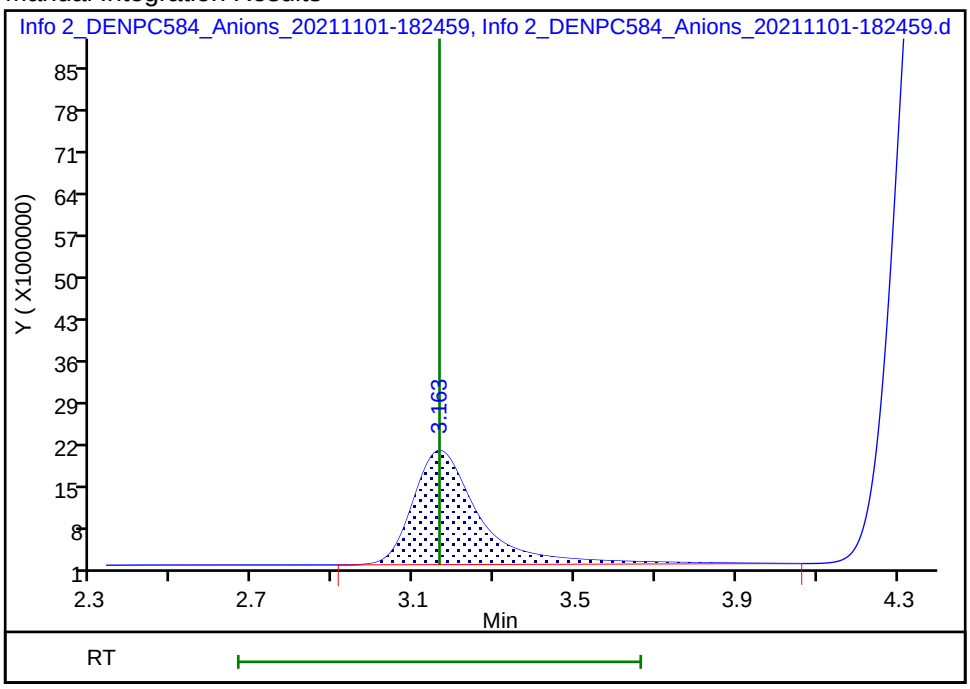
Processing Integration Results

RT: 3.16
Area: 219425100
Amount: 3.655513
Amount Units: ug/ml



Manual Integration Results

RT: 3.16
Area: 218790412
Amount: 3.997646
Amount Units: ug/ml



Reviewer: jindaratc, 01-Nov-2021 18:36:15

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-182

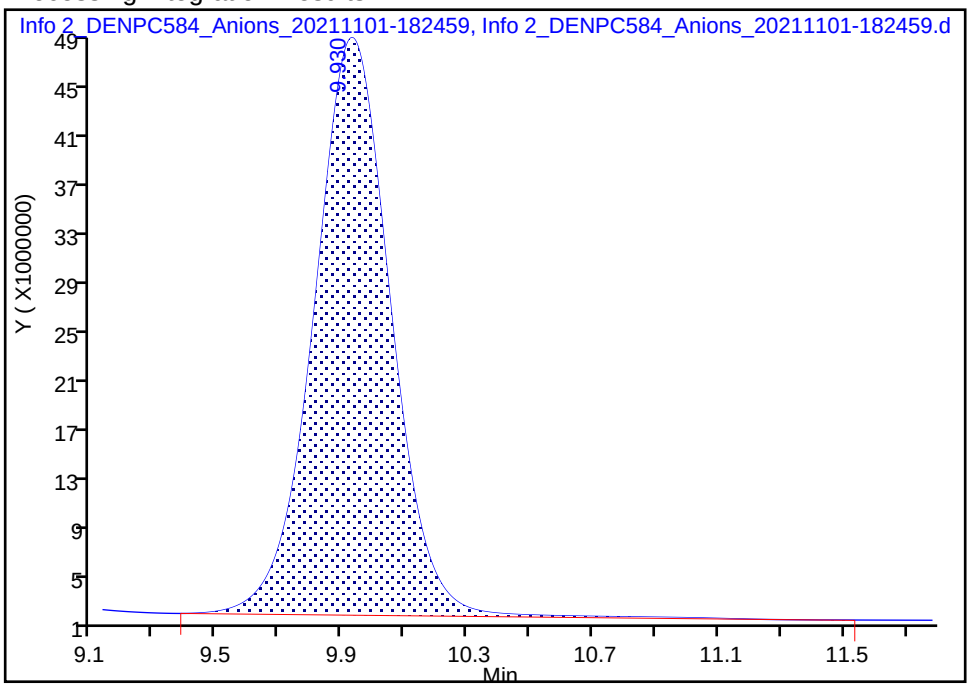
Injection Date:	01-Nov-2021 18:10:00	Instrument ID:	WC_IonChrom13		
Lims ID:	std L4				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

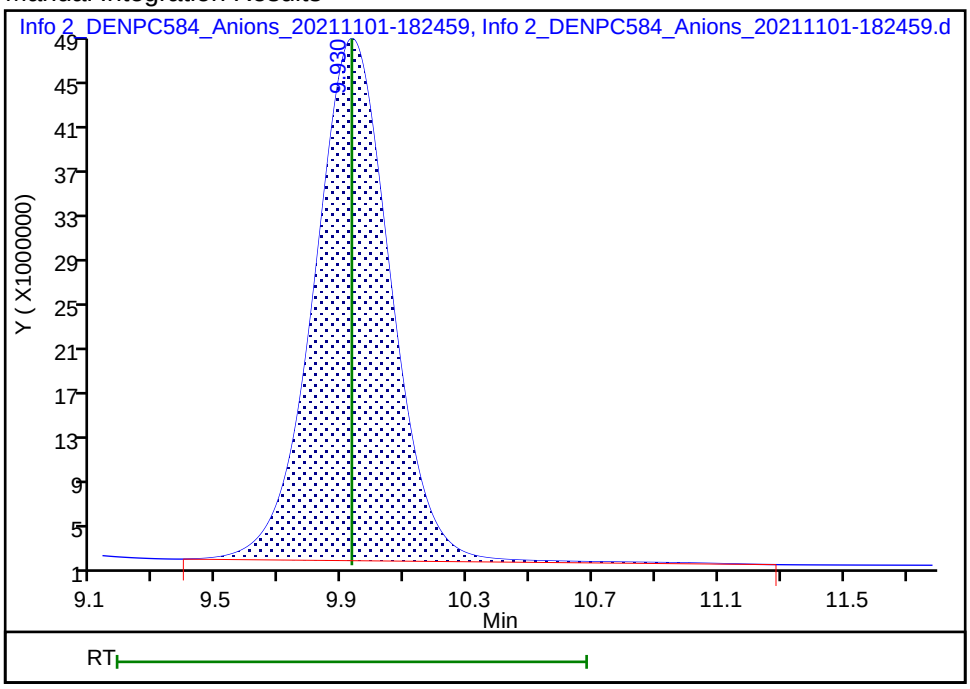
Processing Integration Results

RT: 9.93
Area: 796002033
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.93
Area: 795718184
Amount: 60.888112
Amount Units: ug/ml



Reviewer: gonzalezsp, 02-Nov-2021 12:32:31

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-183
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Nov-2021 18:25:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-006
Misc. Info.: 280-0106089-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:37:45 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

First Level Reviewer: gonzalezsp Date: 02-Nov-2021 12:33:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.180	3.180	0.000	464100629	8.00	8.28	M
2 Chloride	4.387	4.387	0.000	2110238077	120.0	119.8	
3 Nitrite as N	5.058	5.058	0.000	314132694	NC	NC	M
4 Bromide	6.327	6.327	0.000	55805529	8.00	8.00	
5 Nitrate as N	7.100	7.100	0.000	375786019	NC	NC	
7 Orthophosphate as P	8.710	8.710	0.000	244322507	NC	NC	
6 Sulfate	9.920	9.920	0.000	1577364444	120.0	120.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

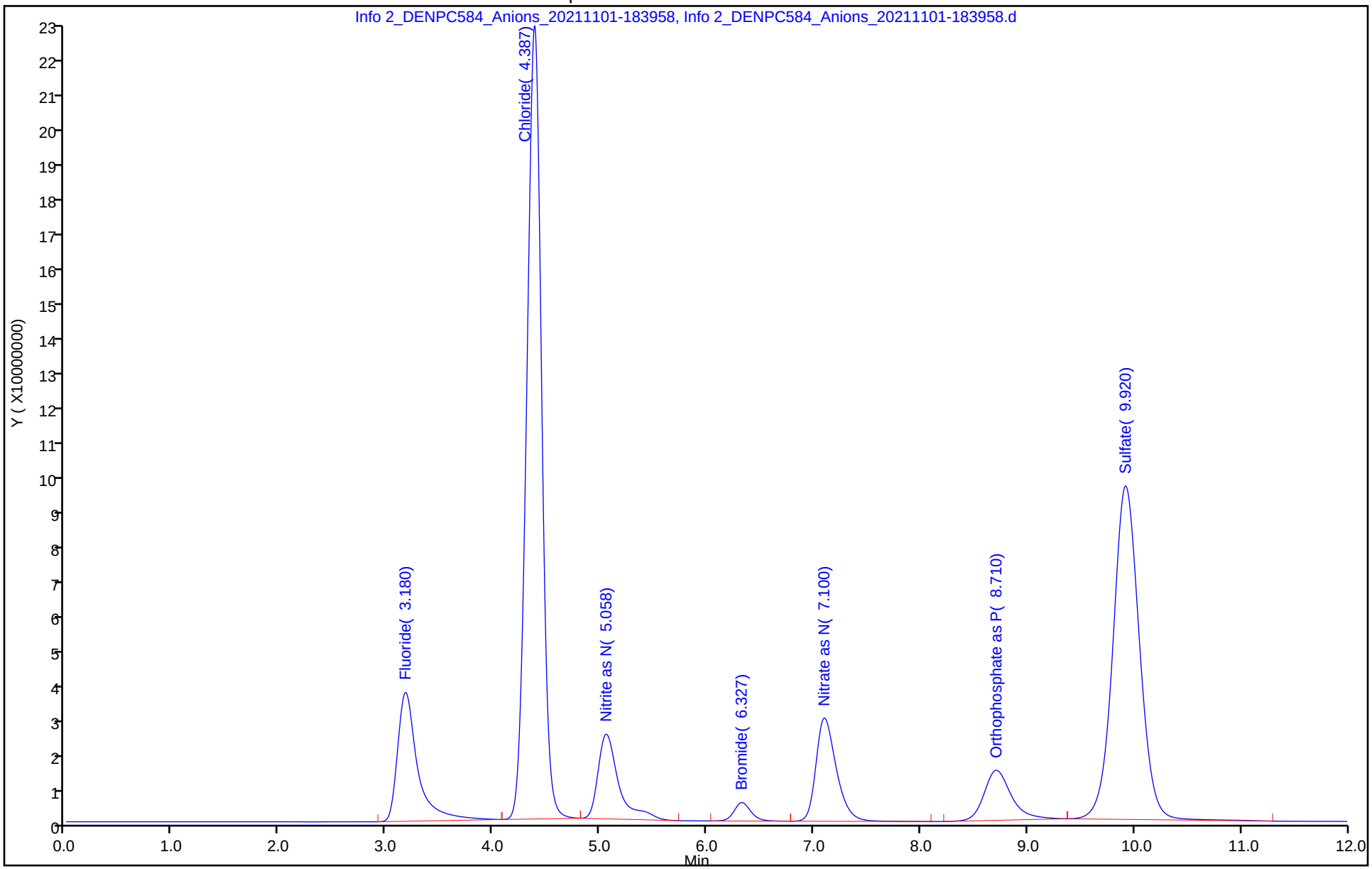
Reagents:

IC Cal low_00605 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00391 Amount Added: 2.40 Units: mL

Report Date: 03-Nov-2021 15:37:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-183958.d				
Injection Date:	01-Nov-2021 18:25:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-183

Injection Date: 01-Nov-2021 18:25:00 Instrument ID: WC_IonChrom13

Lims ID: std L5

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

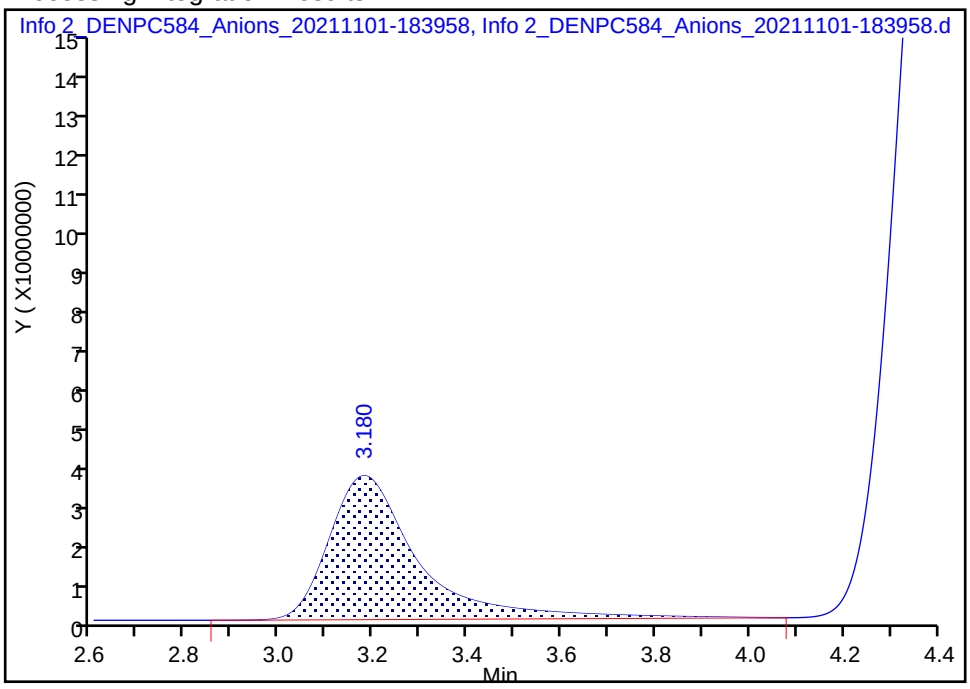
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

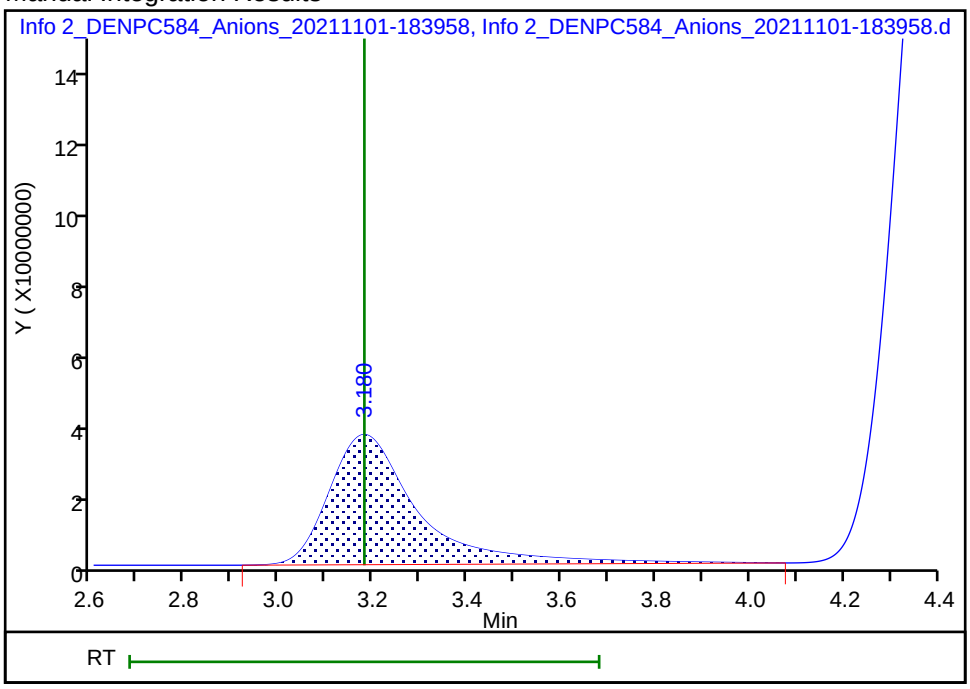
Processing Integration Results

RT: 3.18
Area: 464161037
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 3.18
Area: 464100629
Amount: 8.283982
Amount Units: ug/ml



Reviewer: gonzalezsp, 02-Nov-2021 12:32:53

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

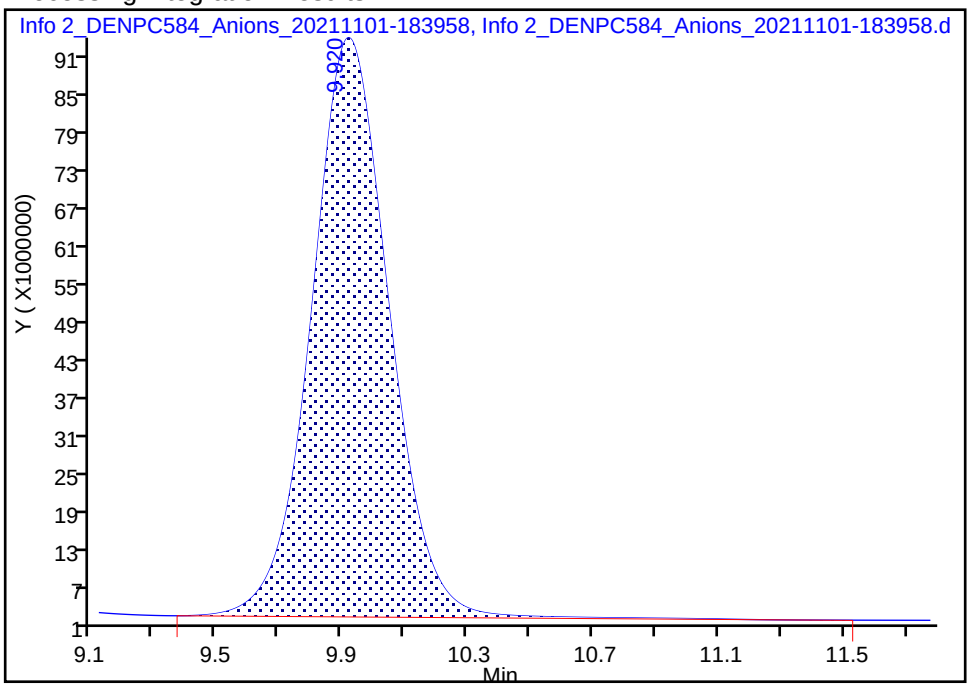
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-183				
Injection Date:	01-Nov-2021 18:25:00	Instrument ID:	WC_IonChrom13		
Lims ID:	std L5				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

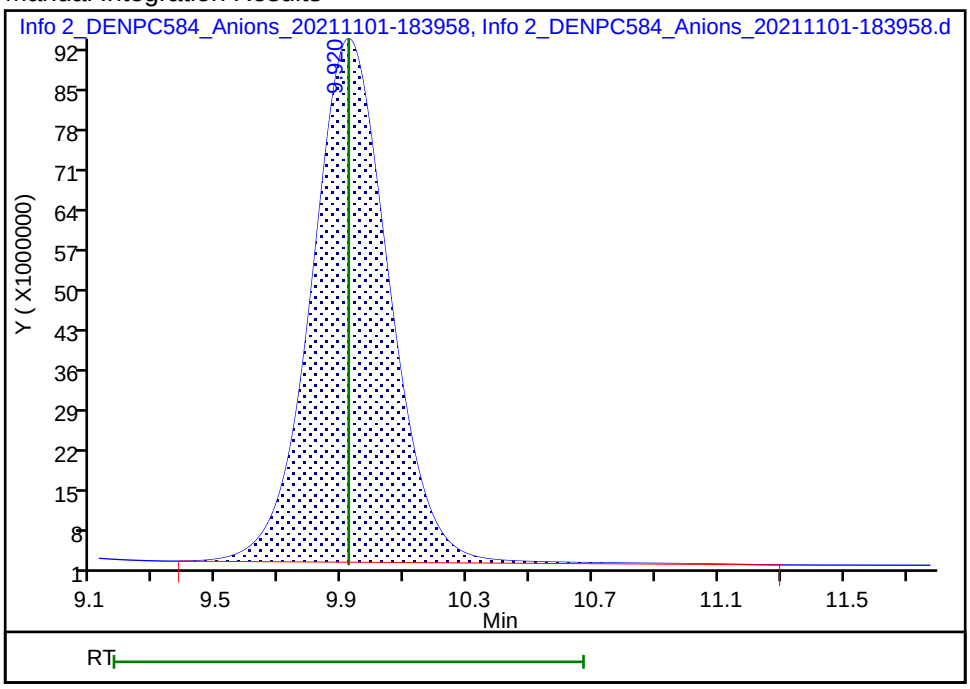
Processing Integration Results

RT: 9.92
Area: 1577579966
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.92
Area: 1577364444
Amount: 120.3237
Amount Units: ug/ml



Reviewer: gonzalezsp, 02-Nov-2021 12:32:47

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Nov-2021 18:40:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-007
Misc. Info.: 280-0106089-007
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:37:46 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

First Level Reviewer: jindaratc Date: 01-Nov-2021 19:00:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.182	3.182	0.000	559921268	10.0	9.96	
2 Chloride	4.418	4.418	0.000	3522683325	200.0	199.8	
3 Nitrite as N	5.055	5.055	0.000	390731605	NC	NC	M
4 Bromide	6.323	6.323	0.000	72264372	10.0	10.3	
5 Nitrate as N	7.088	7.088	0.000	475947663	NC	NC	
7 Orthophosphate as P	8.707	8.707	0.000	287519560	NC	NC	
6 Sulfate	9.897	9.897	0.000	2615239363	200.0	199.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

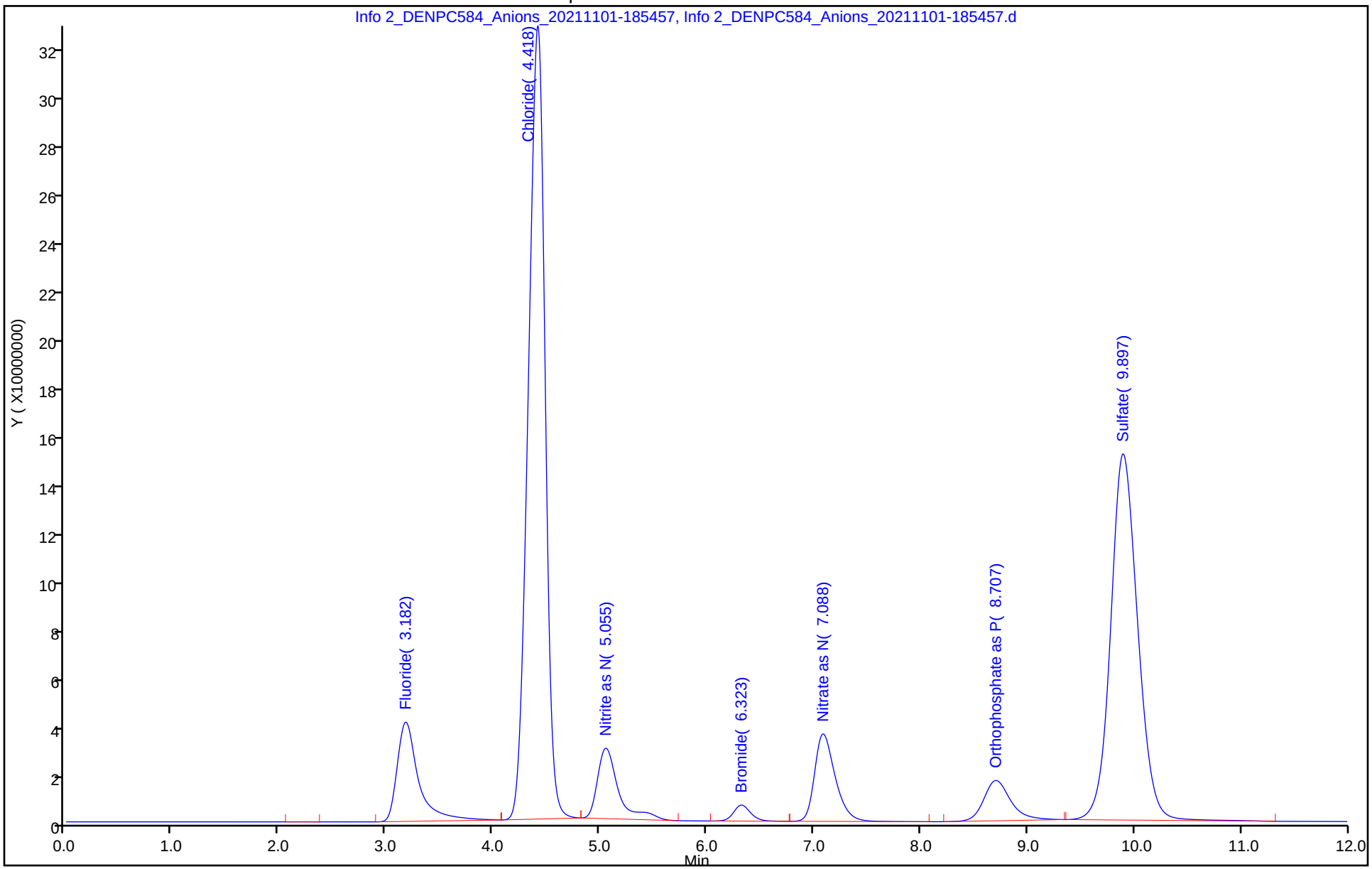
IC Cal low_00605 Amount Added: 1.00 Units: mL
IC CAL cl/so4_00391 Amount Added: 4.00 Units: mL

Report Date: 03-Nov-2021 15:37:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185457.d

Injection Date:	01-Nov-2021 18:40:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Injection Date: 01-Nov-2021 18:40:00 Instrument ID: WC_IonChrom13

Lims ID: std L6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

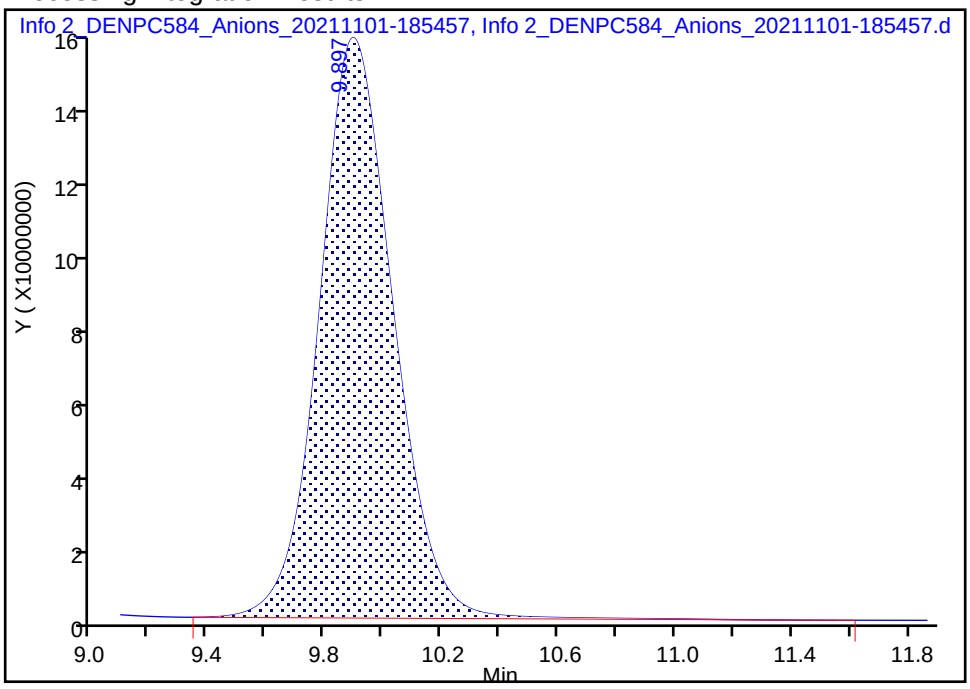
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

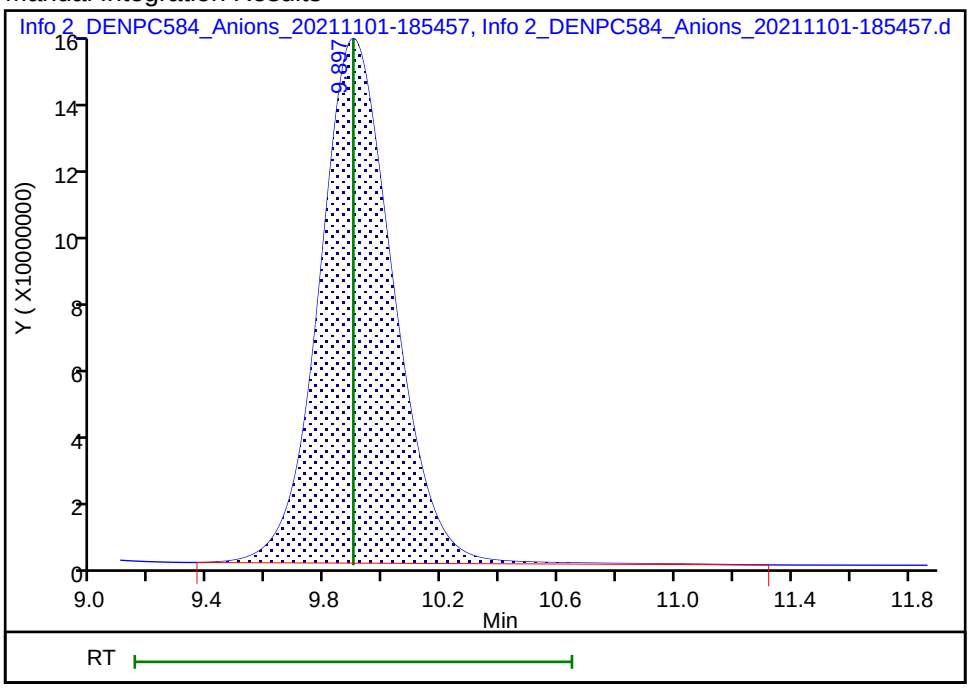
Processing Integration Results

RT: 9.90
Area: 2615830821
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.90
Area: 2615239363
Amount: 199.2428
Amount Units: ug/ml



Reviewer: gonzalezsp, 02-Nov-2021 12:33:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 106089 **Inst ID:** IC13 **Analysis Date:** 11/02/21 **Analyst:** JF

	Rush	Job No.	Samples	Anions	QC Req	HT Exp
11/1 154444	☐	~~154267~~ JF 11/2/21	8	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
11/2	☐	154267	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
11/2	☐	154269	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
11/2	☐	154274	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
11/3	☐	154552	11	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
11/2	☐	154264	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
11/3	☐	154612	13	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
444	~~267~~ JF 11/2/21	8	F (Cl) NO2 Br NO3 PO4 (SO4)	1,5,20	Test
	267	2	F (Cl) NO2 Br NO3 PO4 (SO4)	5,1,20	↓
	269	2	F (Cl) NO2 Br NO3 PO4 (SO4)	1,5,20	Test
	274	2	F (Cl) NO2 Br NO3 PO4 (SO4)	1,5	↓
	552	11	F (Cl) NO2 Br NO3 PO4 (SO4)	1	History
	264	1	F Cl NO2 Br NO3 PO4 SO4	20	Rerun
	612	13	F (Cl) NO2 Br NO3 PO4 (SO4)	1,10	Cl^- Coverage, Test
			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\20211101-106089.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	03-Nov-2021 15:45:20

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b
Inj Date : 01-Nov-2021 17:25:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-999783	5723074		0.995				
2 Chloride	-576133	1765743		1.000				
3 Nitrite as N					-296432	3937491		1.000
4 Bromide	-593473	7051230		0.999				
5 Nitrate as N					-426209	4735103		1.000
7 Orthophosphate as P					3579559	3073151	R1	).983*
6 Sulfate	-502986	1315113		1.000				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	03-Nov-2021 15:45:20

No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17400
Inj Date: 01-Nov-2021 17:25:00 Worklist: 106089 Sample#: 2

Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17550
Inj Date: 01-Nov-2021 17:40:00 Worklist: 106089 Sample#: 3

Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18100
Inj Date: 01-Nov-2021 17:55:00 Worklist: 106089 Sample#: 4

Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18245
Inj Date: 01-Nov-2021 18:10:00 Worklist: 106089 Sample#: 5

Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18395
Inj Date: 01-Nov-2021 18:25:00 Worklist: 106089 Sample#: 6

Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18545
Inj Date: 01-Nov-2021 18:40:00 Worklist: 106089 Sample#: 7

Start Cal Date: 01-Nov-2021 17:25:00 End Cal Date: 01-Nov-2021 18:40:00

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					
28887875	31051208	34053323	38794708	39266587	39073161	-2964325			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39374919		
5777575	15525604	34053323	M155178833	M314132694	M390731605				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
32883905	35825998	39468175	45238816	46973252	47594766	-4262099			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		47351033		
M6576781	M17912999	39468175	180955263	375786019	475947663				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
7 Orthophosphate as P				Signal: 1			R1		
35523675	37900272	45373745	36635892	30540313	28751956	3579559			*0.983
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		30731514		
7104735	18950136	45373745	146543567	244322507	287519560				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 03-Nov-2021 15:45:20
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17400
Inj Date: 01-Nov-2021 17:25:00 Worklist: 106089 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17550
Inj Date: 01-Nov-2021 17:40:00 Worklist: 106089 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18100
Inj Date: 01-Nov-2021 17:55:00 Worklist: 106089 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18245
Inj Date: 01-Nov-2021 18:10:00 Worklist: 106089 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18395
Inj Date: 01-Nov-2021 18:25:00 Worklist: 106089 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18545
Inj Date: 01-Nov-2021 18:40:00 Worklist: 106089 Sample#: 7

Start Cal Date: 01-Nov-2021 17:25:00 End Cal Date: 01-Nov-2021 18:40:00

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									
27709795	28426654	33814072	54697603	58012579	55992127	-9997834			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		57230746		
M5541959	M14213327	M33814072	M218790412	M464100629	559921268				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
2 Chloride				Signal: 1					
13171525	14573971	15886298	17723087	17585317	17613417	-5761338			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		17657433		
13171525	36434927	79431492	1063385204	2110238077	3522683325				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
4 Bromide				Signal: 1					
5399275	5482138	5704707	6489447	6975691	7226437	-593473			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		7051230		
M1079855	M2741069	5704707	25957786	55805529	72264372				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
9992591	10175857	11056842	13261970	13144704	13076197	-5029862			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		13151139		
M9992591	M25439643	M55284208	M795718184	M1577364444	M2615239363				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-190
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 01-Nov-2021 18:54:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-008
Misc. Info.: 280-0106089-008
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:43:24 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.150	3.150	0.000	124219980	4.00	2.35	M
2 Chloride	4.370	4.370	0.000	1403809907	80.0	79.8	
3 Nitrite as N	5.068	5.068	0.000	155866730	NC	NC	M
4 Bromide	6.318	6.318	0.000	25595823	4.00	3.71	
5 Nitrate as N	7.123	7.123	0.000	167316645	NC	NC	
7 Orthophosphate as P	8.712	8.712	0.000	114776421	NC	NC	
6 Sulfate	9.925	9.925	0.000	1065155723	80.0	81.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

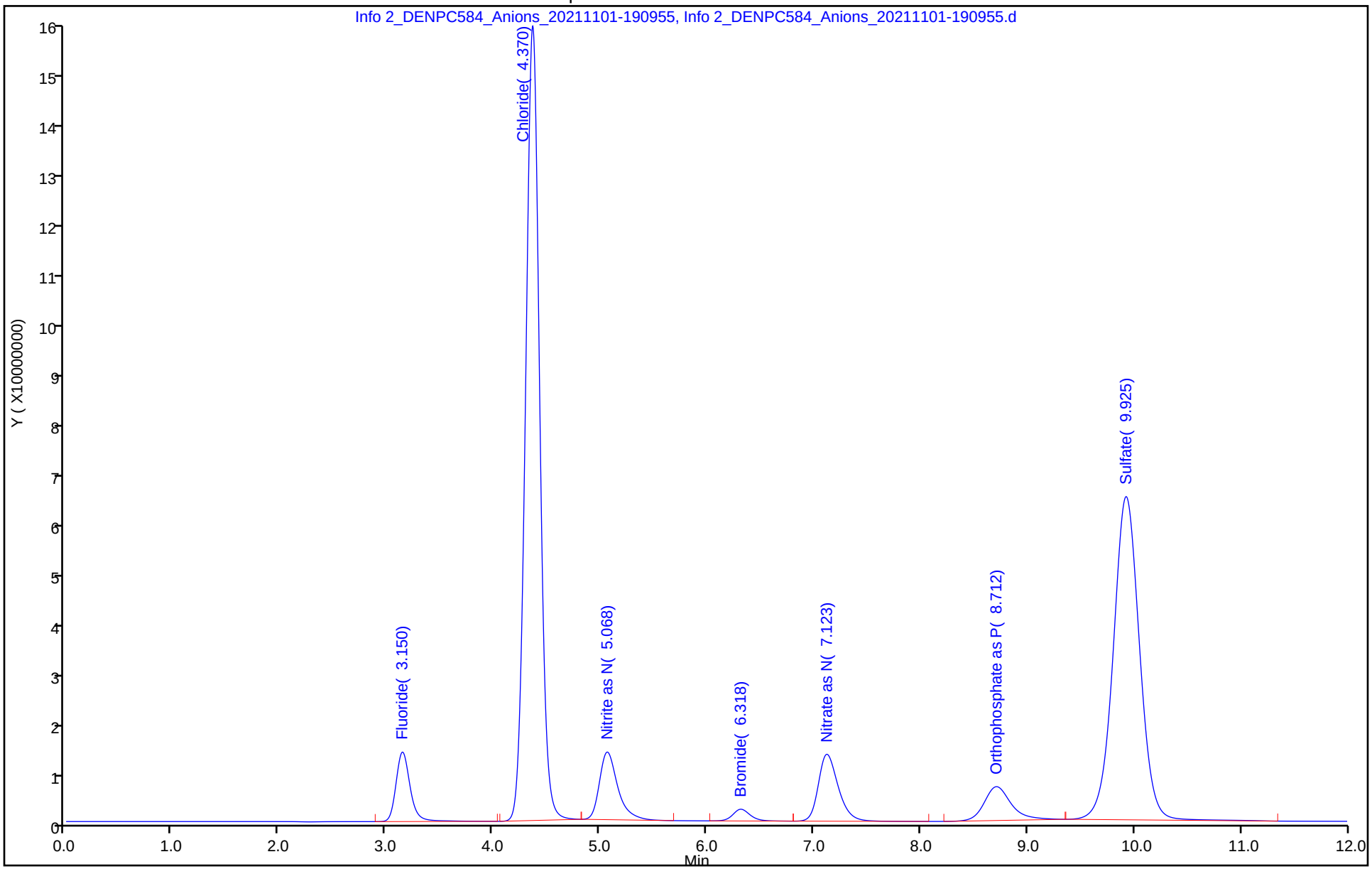
IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00340	Amount Added:	0.40	Units: mL

Report Date: 03-Nov-2021 15:43:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-190955.d

Injection Date:	01-Nov-2021 18:54:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-190

Injection Date: 01-Nov-2021 18:54:00 Instrument ID: WC_IonChrom13

Lims ID: ICV

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 8

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

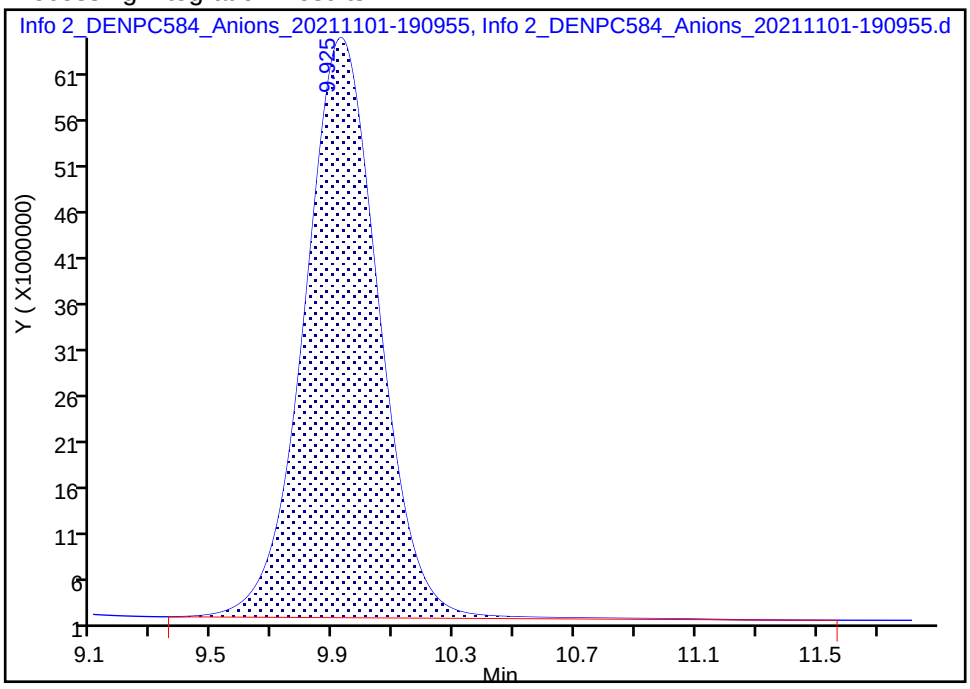
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

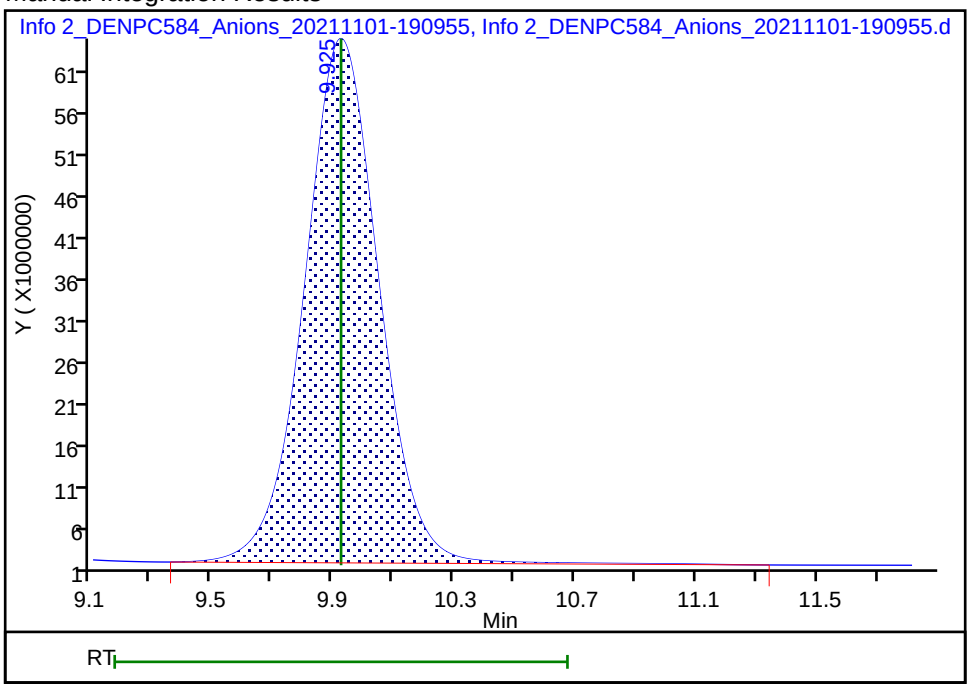
Processing Integration Results

RT: 9.93
Area: 1065412834
Amount: 81.680600
Amount Units: ug/ml



Manual Integration Results

RT: 9.93
Area: 1065155723
Amount: 81.375884
Amount Units: ug/ml



Reviewer: gonzalezsp, 03-Nov-2021 09:15:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-192
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 01-Nov-2021 19:09:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106089-009
Misc. Info.: 280-0106089-009
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Nov-2021 15:43:25 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1610

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.150				ND	U
2 Chloride		4.370				ND	
3 Nitrite as N		5.068				ND	
4 Bromide		6.318				ND	
5 Nitrate as N		7.123				ND	
7 Orthophosphate as P	8.807	8.712	0.095	1591193		NC	
6 Sulfate	10.000	9.925	0.075	685017		0.4346	M

QC Flag Legend

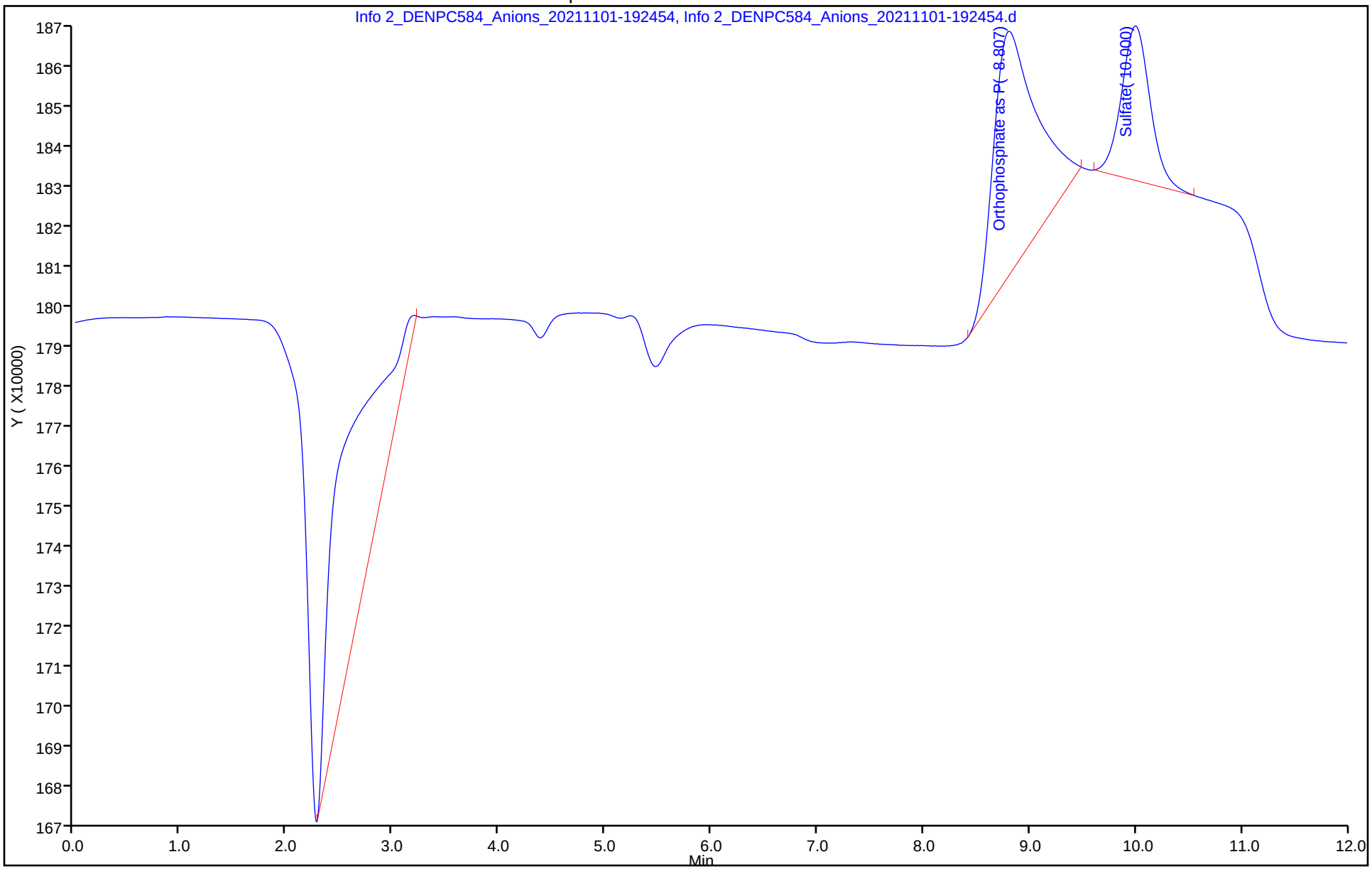
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 03-Nov-2021 15:43:25 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-192454.d

Injection Date:	01-Nov-2021 19:09:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-192

Injection Date: 01-Nov-2021 19:09:00 Instrument ID: WC_IonChrom13

Lims ID: ICB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 9

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

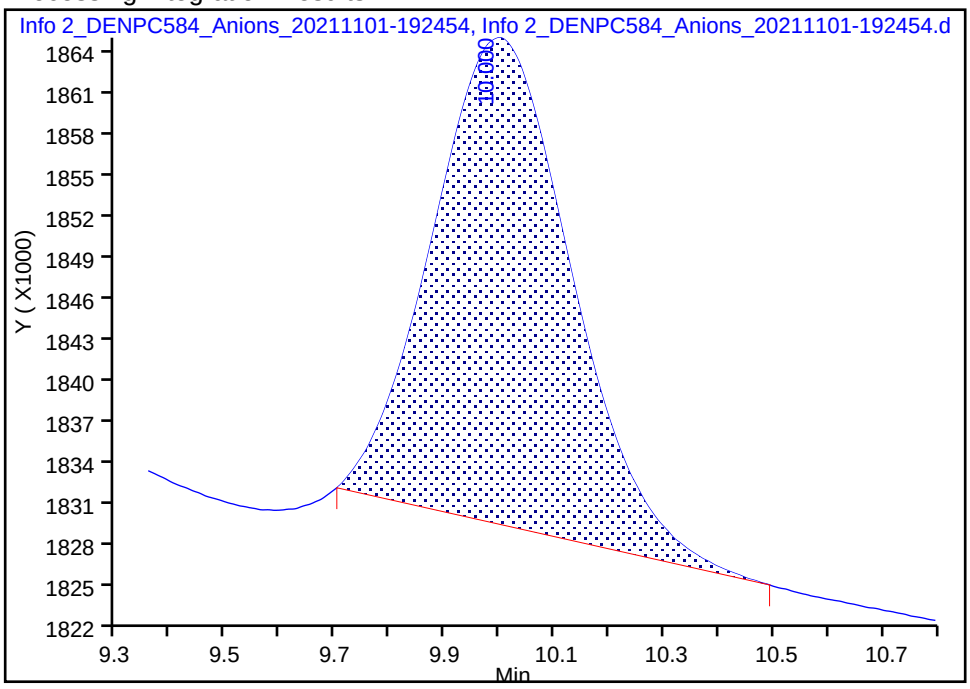
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

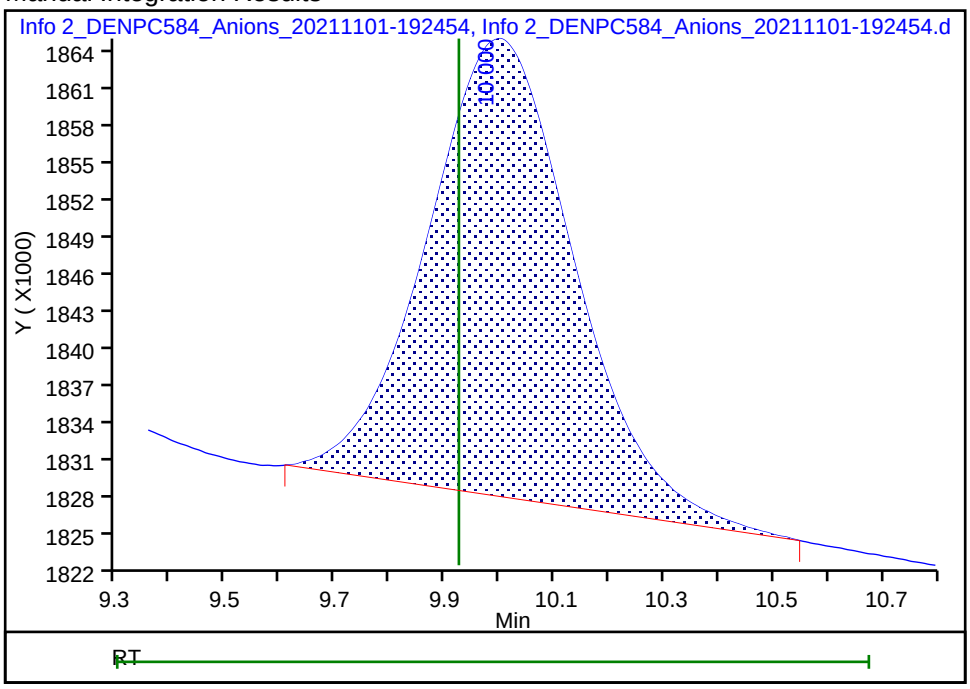
Processing Integration Results

RT: 10.00
Area: 623178
Amount: 0.422236
Amount Units: ug/ml



Manual Integration Results

RT: 10.00
Area: 685017
Amount: 0.434554
Amount Units: ug/ml



Reviewer: gonzalezsp, 03-Nov-2021 09:15:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 166653 **Inst ID:** IC13 **Analysis Date:** 11/19/21 **Analyst:** JF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	154885	3	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155292	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155293	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155294	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	155263	4	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☒	154907	5	F (Cl) NO2 Br NO3 PO4 (SO4)	(MS/D)	
☐	154948	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154973	4	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155013	3	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	155015	12	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155356	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155378	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	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
885	3	F Cl NO2 Br NO3 PO4 SO4	1,10,20,50	Test
292	1	F Cl NO2 Br NO3 PO4 SO4	1,10	
293	1	F Cl NO2 Br NO3 PO4 SO4	1,10	
294	1	F Cl NO2 Br NO3 PO4 SO4	1,10	
263	4	F (Cl) NO2 Br NO3 PO4 SO4	10,20	
907	5	F (Cl) NO2 Br NO3 PO4 (SO4)	1,5	
948	1	F (Cl) NO2 Br NO3 PO4 (SO4)	1,5	〃
973	4	F (Cl) NO2 Br NO3 PO4 (SO4)	1,10,5,20	Test
013	3	F (Cl) NO2 Br NO3 PO4 SO4	1,5	History
356	1	Cl	804	1,20 Test

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	03-Nov-2021 15:45:20

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b
Inj Date : 01-Nov-2021 17:25:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-999783	5723074		0.995				
2 Chloride	-576133	1765743		1.000				
3 Nitrite as N					-296432	3937491		1.000
4 Bromide	-593473	7051230		0.999				
5 Nitrate as N					-426209	4735103		1.000
7 Orthophosphate as P					3579559	3073151	R1	).983*
6 Sulfate	-502986	1315113		1.000				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 03-Nov-2021 15:45:20
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17400
Inj Date: 01-Nov-2021 17:25:00 Worklist: 106089 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17550
Inj Date: 01-Nov-2021 17:40:00 Worklist: 106089 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18100
Inj Date: 01-Nov-2021 17:55:00 Worklist: 106089 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18245
Inj Date: 01-Nov-2021 18:10:00 Worklist: 106089 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18395
Inj Date: 01-Nov-2021 18:25:00 Worklist: 106089 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18545
Inj Date: 01-Nov-2021 18:40:00 Worklist: 106089 Sample#: 7

Start Cal Date: 01-Nov-2021 17:25:00 End Cal Date: 01-Nov-2021 18:40:00

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					
28887875	31051208	34053323	38794708	39266587	39073161	-2964325			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39374919		
5777575	15525604	34053323	M155178833	M314132694	M390731605				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
32883905	35825998	39468175	45238816	46973252	47594766	-4262099			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		47351033		
M6576781	M17912999	39468175	180955263	375786019	475947663				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
7 Orthophosphate as P				Signal: 1			R1		
35523675	37900272	45373745	36635892	30540313	28751956	3579559			*0.983
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		30731514		
7104735	18950136	45373745	146543567	244322507	287519560				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 03-Nov-2021 15:45:20
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17400
Inj Date: 01-Nov-2021 17:25:00 Worklist: 106089 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-17550
Inj Date: 01-Nov-2021 17:40:00 Worklist: 106089 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18100
Inj Date: 01-Nov-2021 17:55:00 Worklist: 106089 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18245
Inj Date: 01-Nov-2021 18:10:00 Worklist: 106089 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18395
Inj Date: 01-Nov-2021 18:25:00 Worklist: 106089 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-18545
Inj Date: 01-Nov-2021 18:40:00 Worklist: 106089 Sample#: 7

Start Cal Date: 01-Nov-2021 17:25:00 End Cal Date: 01-Nov-2021 18:40:00

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									
27709795	28426654	33814072	54697603	58012579	55992127	-9997834			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		57230746		
M5541959	M14213327	M33814072	M218790412	M464100629	559921268				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
2 Chloride				Signal: 1					
13171525	14573971	15886298	17723087	17585317	17613417	-5761338			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		17657433		
13171525	36434927	79431492	1063385204	2110238077	3522683325				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
4 Bromide				Signal: 1					
5399275	5482138	5704707	6489447	6975691	7226437	-593473			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		7051230		
M1079855	M2741069	5704707	25957786	55805529	72264372				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
9992591	10175857	11056842	13261970	13144704	13076197	-5029862			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		13151139		
M9992591	M25439643	M55284208	M795718184	M1577364444	M2615239363				
106089(2)	106089(3)	106089(4)	106089(5)	106089(6)	106089(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-100
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 19-Nov-2021 09:50:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-001
Misc. Info.: 280-0106653-001
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 19-Nov-2021 16:50:16 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: gonzalezsp Date: 19-Nov-2021 16:45:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.140	3.140	0.000	215303306	5.00	3.94	
2 Chloride	4.365	4.365	0.000	1688338139	100.0	95.9	
3 Nitrite as N	5.062	5.062	0.000	192128947	NC	NC	
4 Bromide	6.343	6.343	0.000	32038930	5.00	4.63	
5 Nitrate as N	7.158	7.158	0.000	201693617	NC	NC	
7 Orthophosphate as P	8.610	8.610	0.000	118300091	NC	NC	
6 Sulfate	9.760	9.760	0.000	1256063915	100.0	95.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated

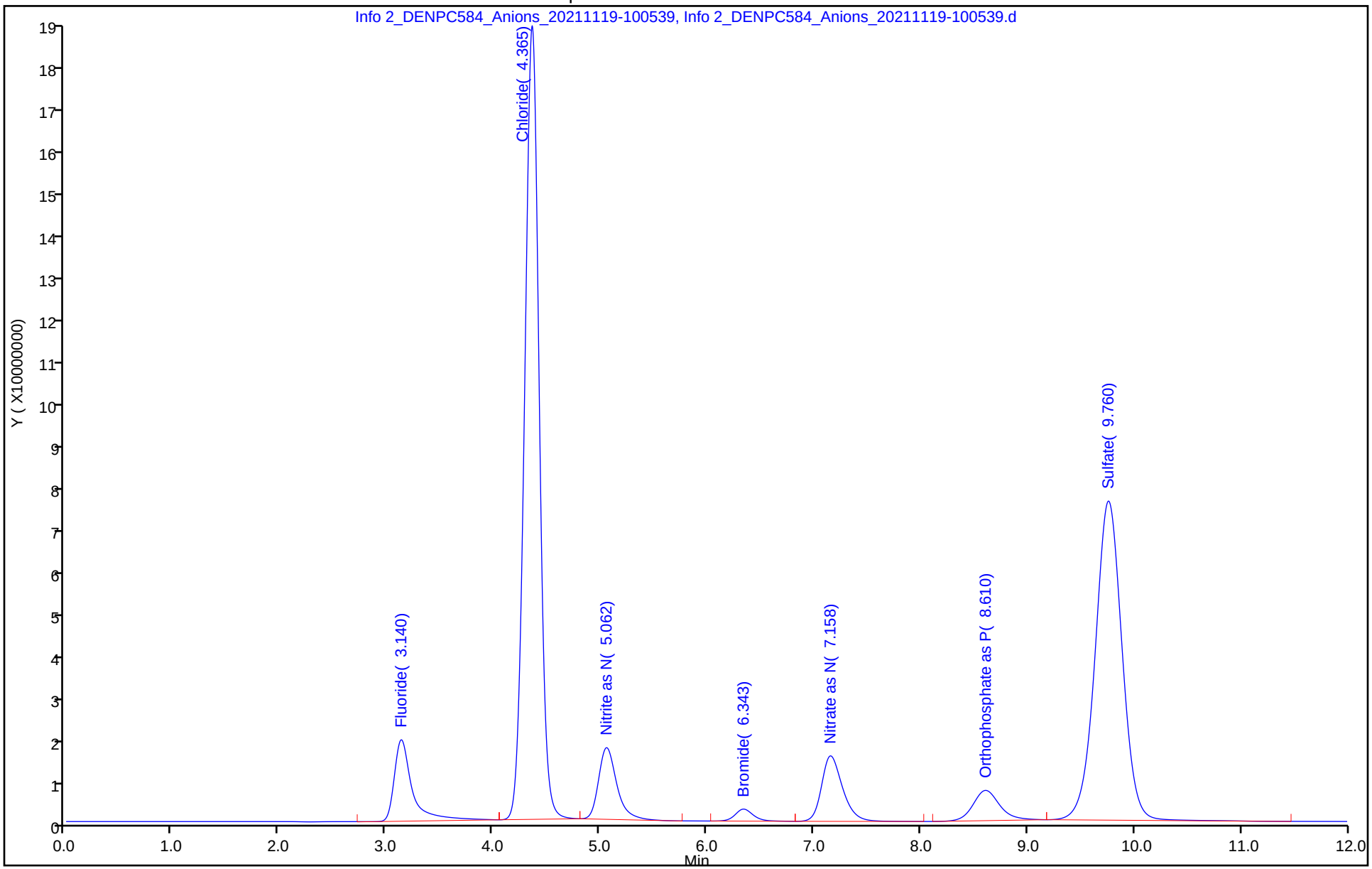
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 19-Nov-2021 16:50:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-100539.d				
Injection Date:	19-Nov-2021 09:50:00	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\20211119-106653.b\Info 2_DENPC584_Anions_20211119-102
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 19-Nov-2021 10:05:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-002
Misc. Info.: 280-0106653-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 19-Nov-2021 16:50:16 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: gonzalezsp Date: 19-Nov-2021 16:46:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride	4.335	4.365	-0.030	113975		0.3327	
3 Nitrite as N		5.062				ND	
4 Bromide	6.280	6.343	-0.063	283236		0.1243	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.695	8.610	0.085	1849849		NC	
6 Sulfate	9.825	9.760	0.065	1373688		0.4869	M

QC Flag Legend

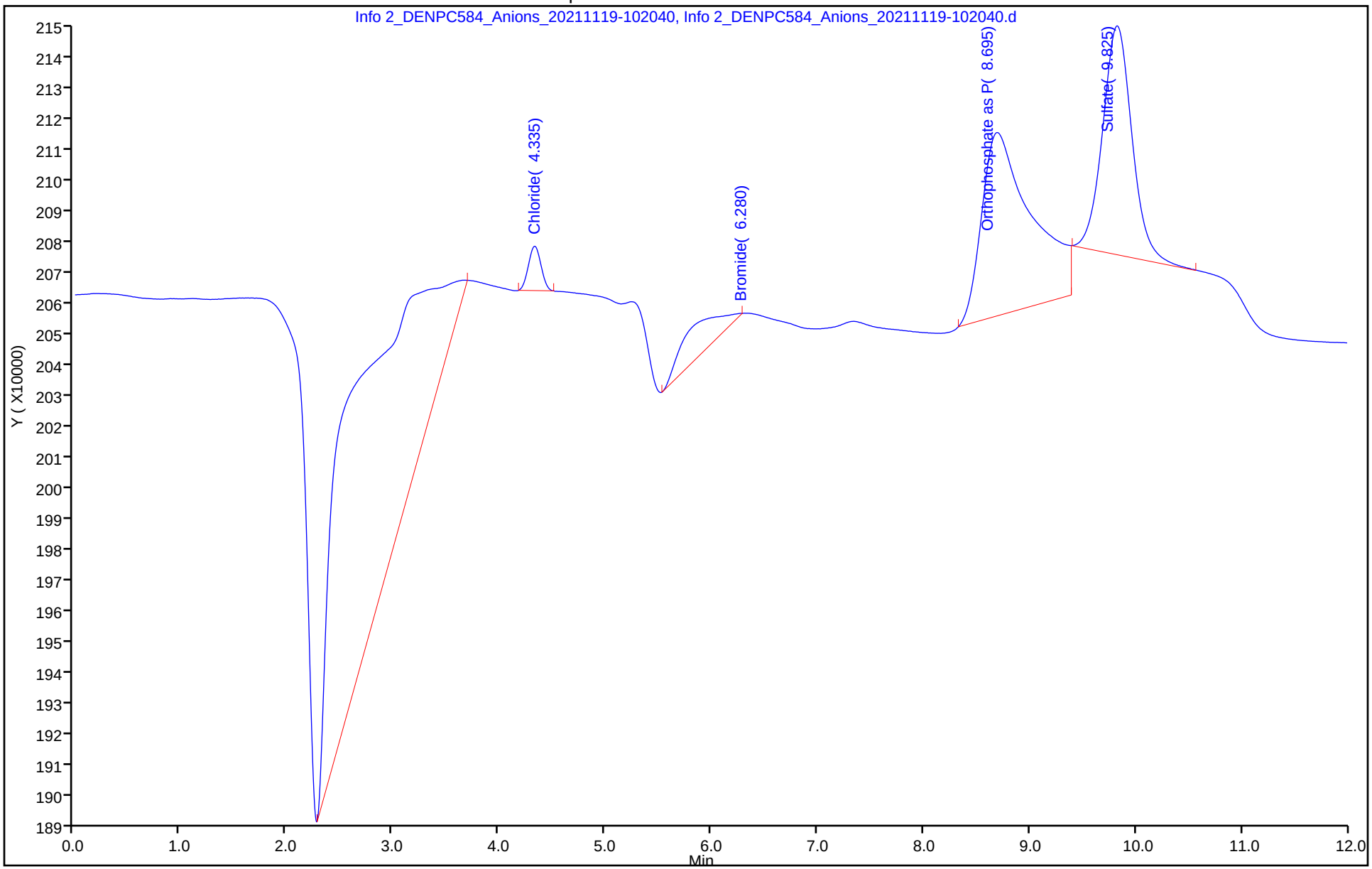
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-Nov-2021 16:50:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-102040.d

Injection Date:	19-Nov-2021 10:05:00	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

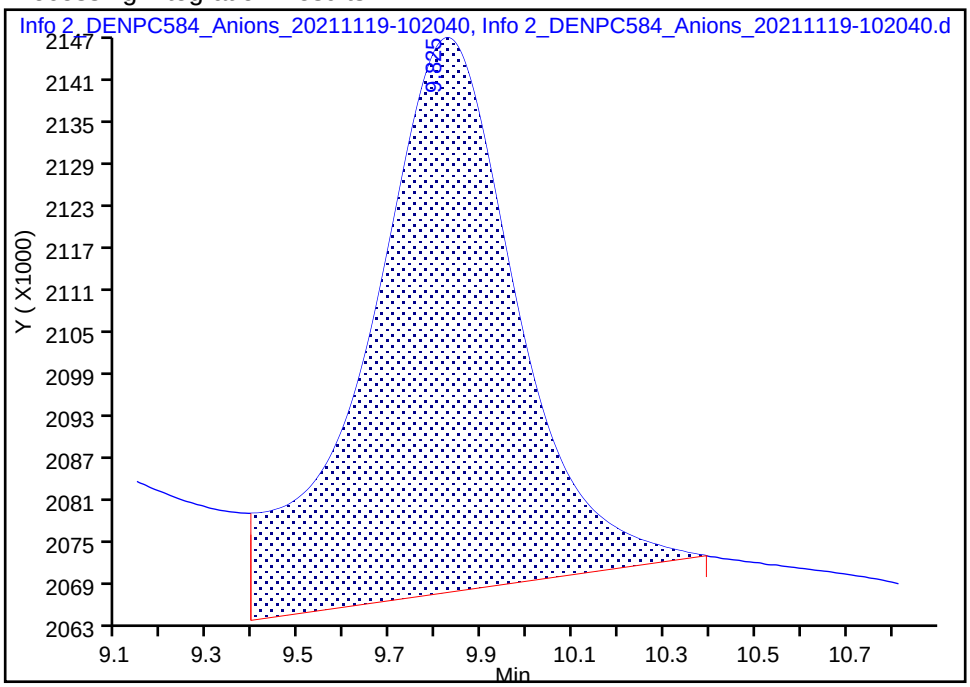
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-102
Injection Date: 19-Nov-2021 10:05:00 Instrument ID: WC_IonChrom13
Lims ID: CCB
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

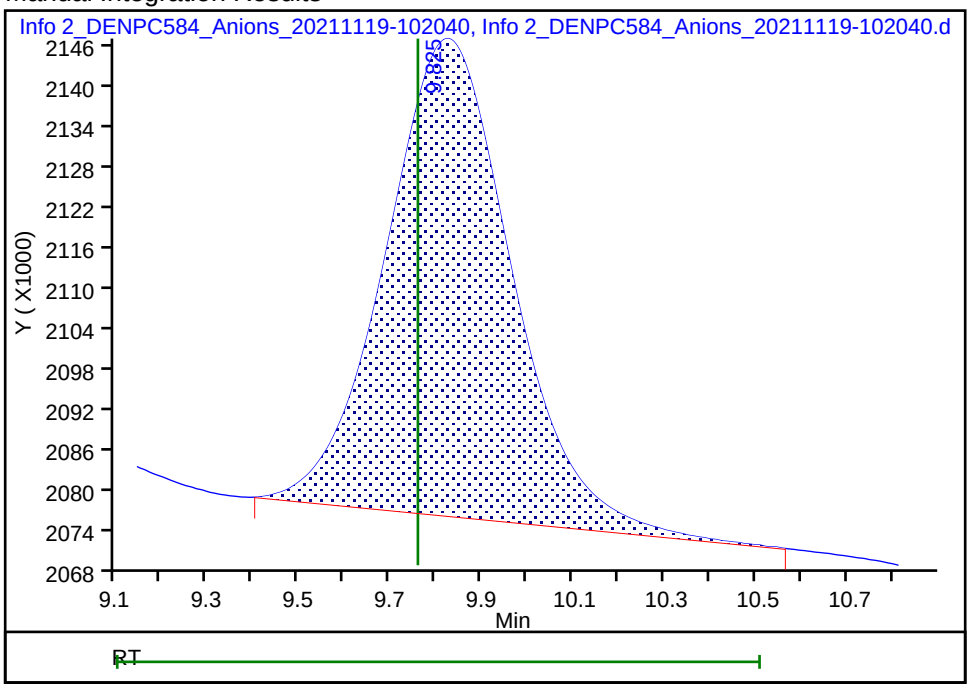
RT: 9.83
Area: 1815128
Amount: 0.520486
Amount Units: ug/ml

Processing Integration Results



RT: 9.83
Area: 1373688
Amount: 0.486920
Amount Units: ug/ml

Manual Integration Results



Reviewer: gonzalezsp, 19-Nov-2021 16:46:04
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-103
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 19-Nov-2021 10:20:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-003
Misc. Info.: 280-0106653-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 19-Nov-2021 16:50:16 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: gonzalezsp Date: 19-Nov-2021 16:46:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.132	3.140	-0.008	15381345	0.5000	0.4435	M
2 Chloride	4.335	4.365	-0.030	35767447	5.00	2.35	
3 Nitrite as N	5.078	5.062	0.016	14595562	NC	NC	
4 Bromide	6.363	6.343	0.020	2793594	0.5000	0.4804	
5 Nitrate as N	7.240	7.158	0.082	15813823	NC	NC	
7 Orthophosphate as P	8.640	8.610	0.030	14047908	NC	NC	
6 Sulfate	9.793	9.760	0.033	28431230	5.00	2.54	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

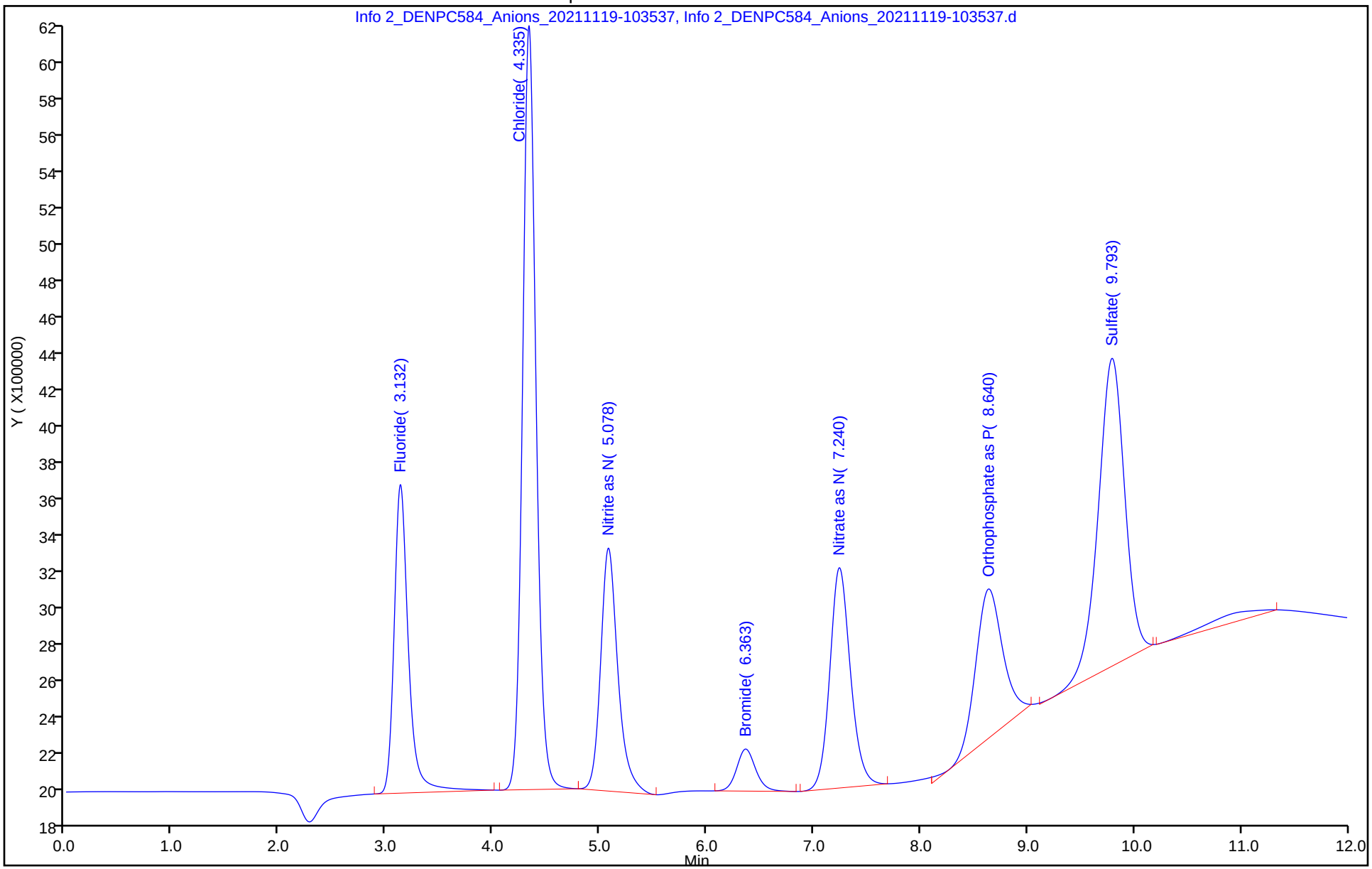
IC CAL cl/so4_00394 Amount Added: 0.20 Units: mL
IC Cal low_00608 Amount Added: 0.10 Units: mL

Report Date: 19-Nov-2021 16:50:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-103537.d

Injection Date:	19-Nov-2021 10:20:00	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\20211119-106653.b\Info 2_DENPC584_Anions_20211119-112
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Nov-2021 11:05:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-006
Misc. Info.: 280-0106653-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 19-Nov-2021 16:50:19 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: gonzalezsp Date: 19-Nov-2021 16:47:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	U
2 Chloride		4.365				ND	
3 Nitrite as N		5.062				ND	
4 Bromide	6.012	6.012	0.000	157117		0.1064	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.682	8.682	0.000	5420351		NC	
6 Sulfate	9.828	9.828	0.000	1371821		0.4868	

QC Flag Legend

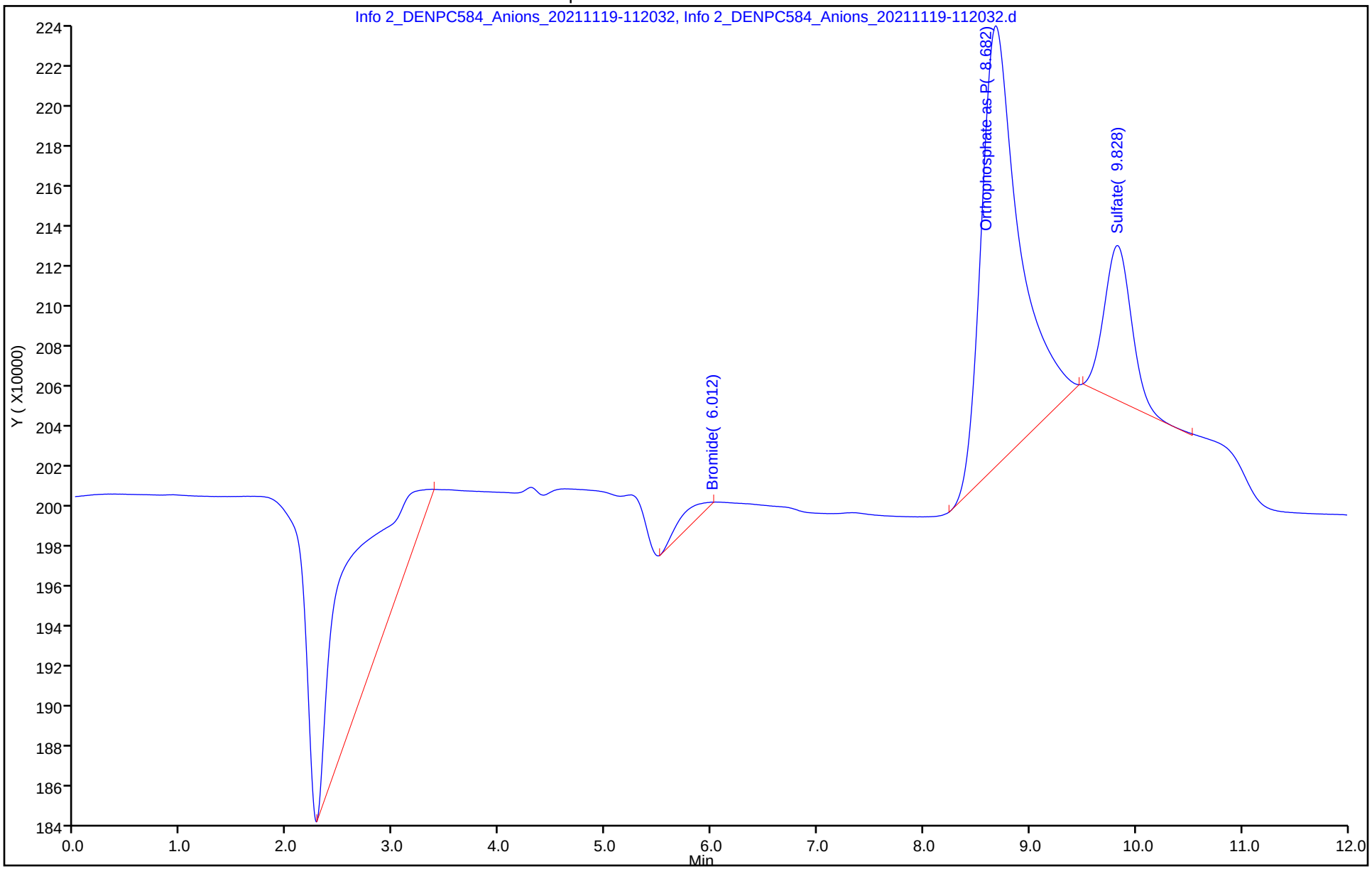
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 19-Nov-2021 16:50:19 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-112032.d

Injection Date:	19-Nov-2021 11:05:00	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		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-140
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 19-Nov-2021 13:50:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-017
Misc. Info.: 280-0106653-017
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 19-Nov-2021 16:50:23 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.140	3.140	0.000	192478791	5.00	3.54	
2 Chloride	4.358	4.365	-0.007	1739931391	100.0	98.9	
3 Nitrite as N	5.047	5.062	-0.015	192419303	NC	NC	
4 Bromide	6.317	6.012	0.305	32305164	5.00	4.67	
5 Nitrate as N	7.120	7.158	-0.038	207151057	NC	NC	
7 Orthophosphate as P	8.598	8.682	-0.084	117204692	NC	NC	
6 Sulfate	9.747	9.828	-0.081	1293988658	100.0	98.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

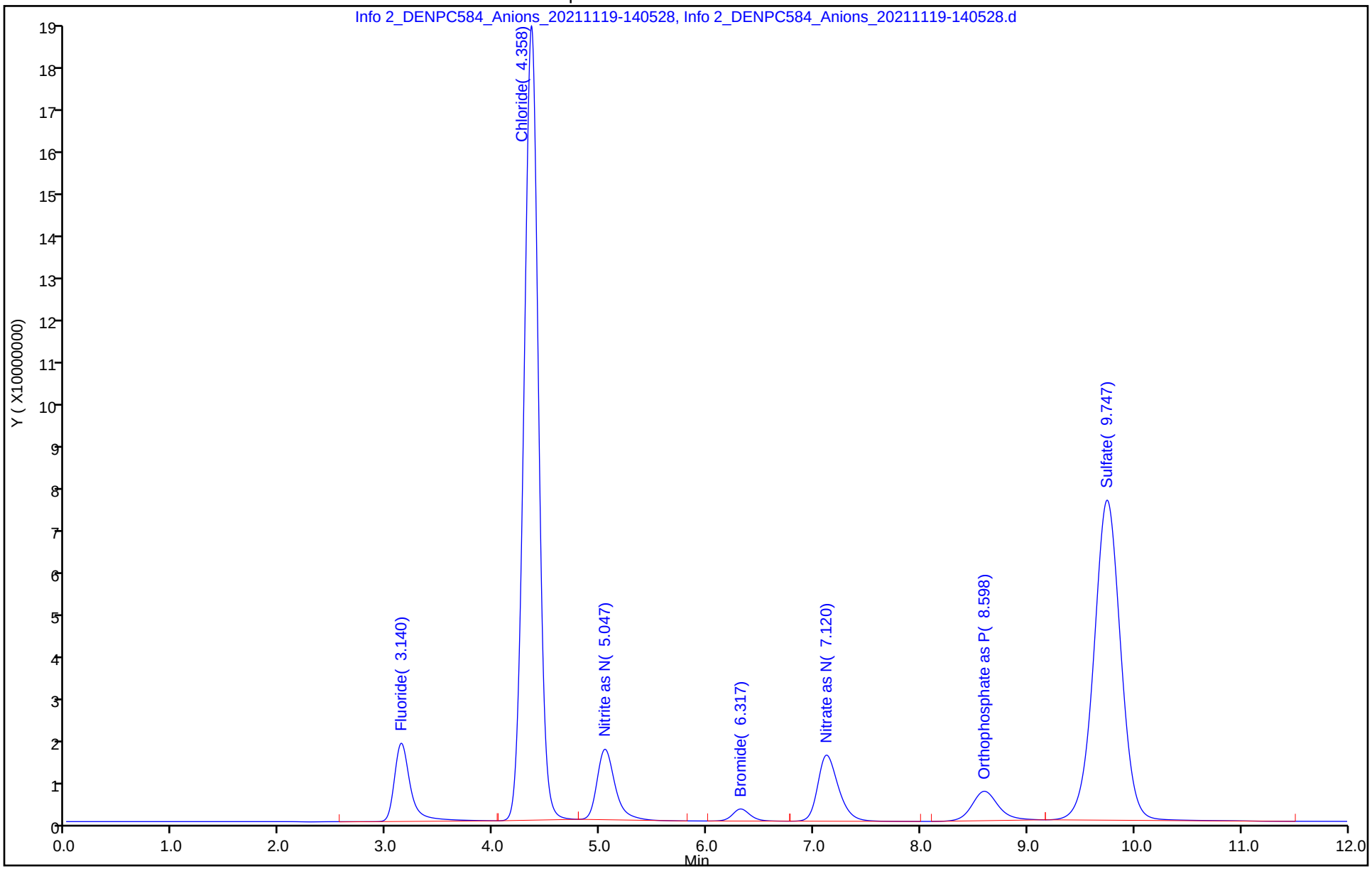
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 19-Nov-2021 16:50:23 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-140528.d				
Injection Date:	19-Nov-2021 13:50:00	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\20211119-106653.b\Info 2_DENPC584_Anions_20211119-142
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 19-Nov-2021 14:05:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-018
Misc. Info.: 280-0106653-018
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 19-Nov-2021 16:50:23 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: gonzalezsp Date: 19-Nov-2021 16:49:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	U
2 Chloride	4.335	4.365	-0.030	83894		0.3310	Ma
3 Nitrite as N		5.062				ND	
4 Bromide		6.012				ND	U
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.693	8.682	0.011	5713805		NC	
6 Sulfate	9.825	9.828	-0.003	2091796		0.5415	M

QC Flag Legend

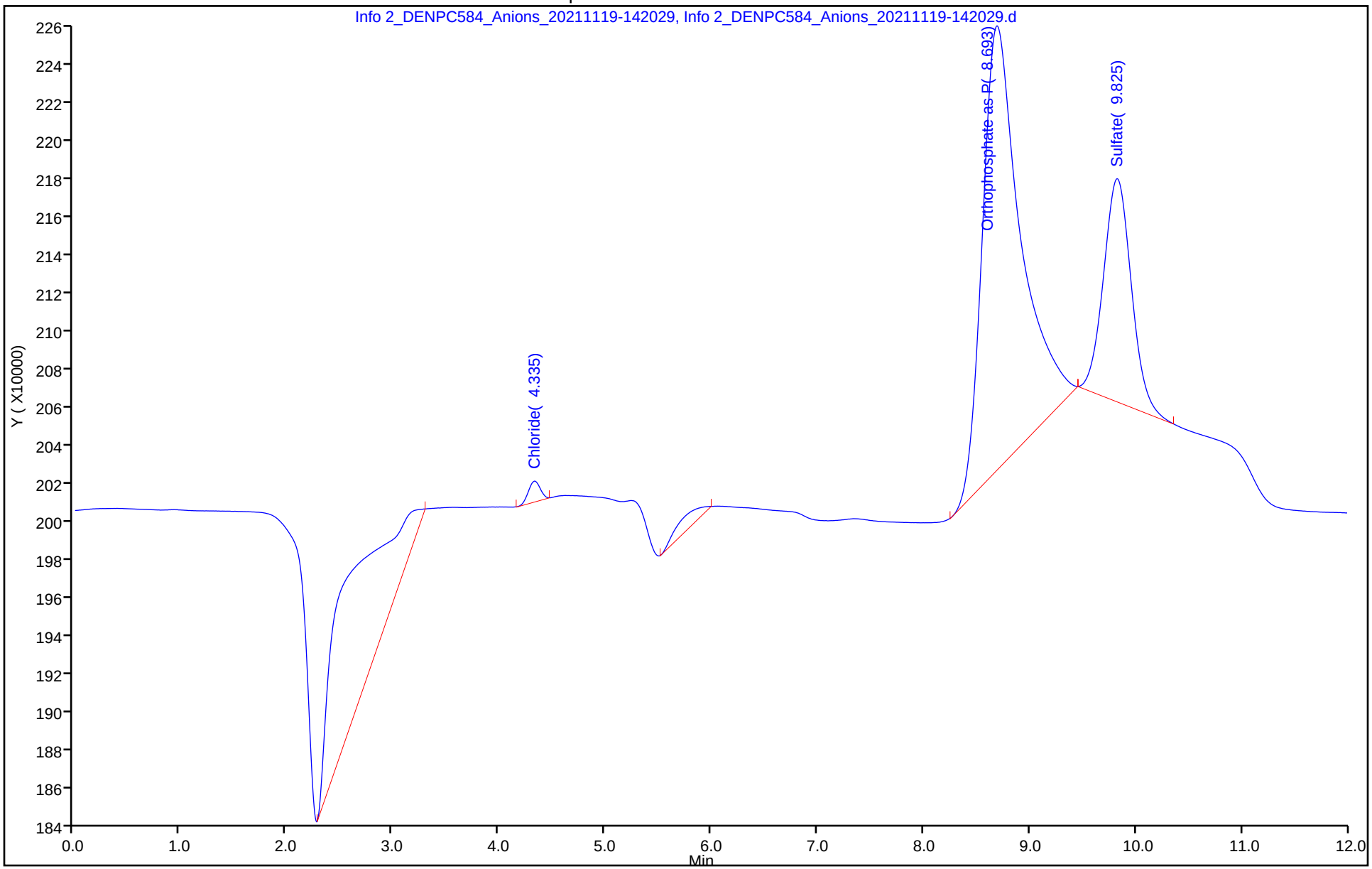
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Report Date: 19-Nov-2021 16:50:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211119-142029.d

Injection Date:	19-Nov-2021 14:05:00	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\20211119-106653.b\Info 2_DENPC584_Anions_20211119-142

Injection Date: 19-Nov-2021 14:05:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 18

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

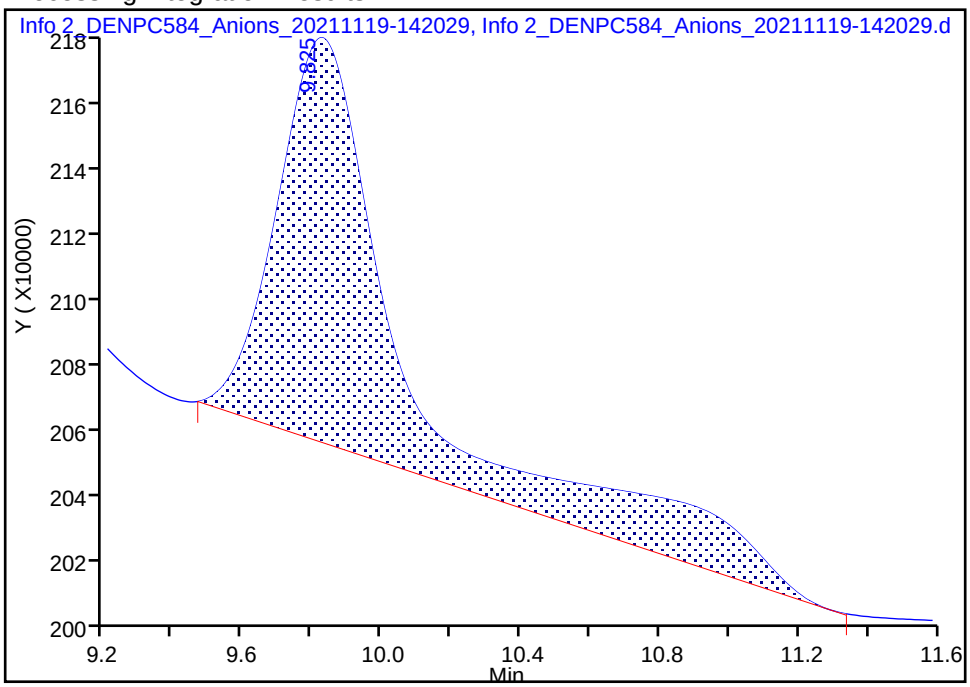
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

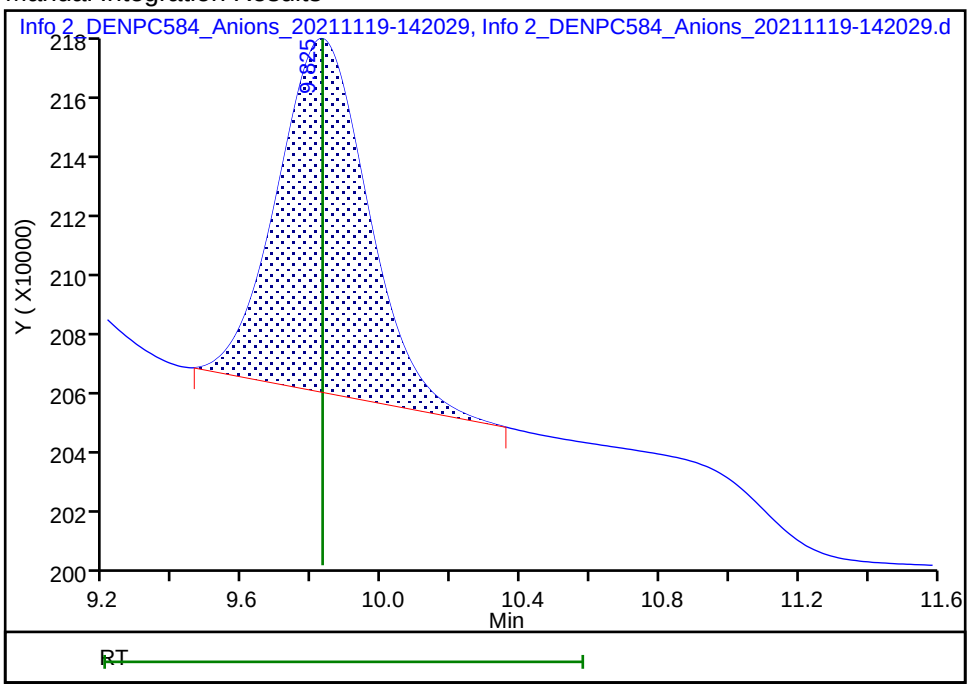
Processing Integration Results

RT: 9.83
Area: 3006137
Amount: 0.611050
Amount Units: ug/ml



Manual Integration Results

RT: 9.83
Area: 2091796
Amount: 0.541524
Amount Units: ug/ml



Reviewer: gonzalezsp, 19-Nov-2021 16:49:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-010
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 00:50:00 ALS Bottle#: 0 Worklist Smp#: 62
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-062
Misc. Info.: 280-0106653-062
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:03:54 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.140	0.023	163274081	5.00	3.03	
2 Chloride	4.387	4.365	0.022	1747251099	100.0	99.3	
3 Nitrite as N	5.073	5.062	0.011	193985356	NC	NC	
4 Bromide	6.323	6.012	0.311	32834267	5.00	4.74	
5 Nitrate as N	7.127	7.158	-0.031	207711255	NC	NC	
7 Orthophosphate as P	8.648	8.682	-0.034	108427769	NC	NC	
6 Sulfate	9.797	9.828	-0.031	1285833825	100.0	98.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

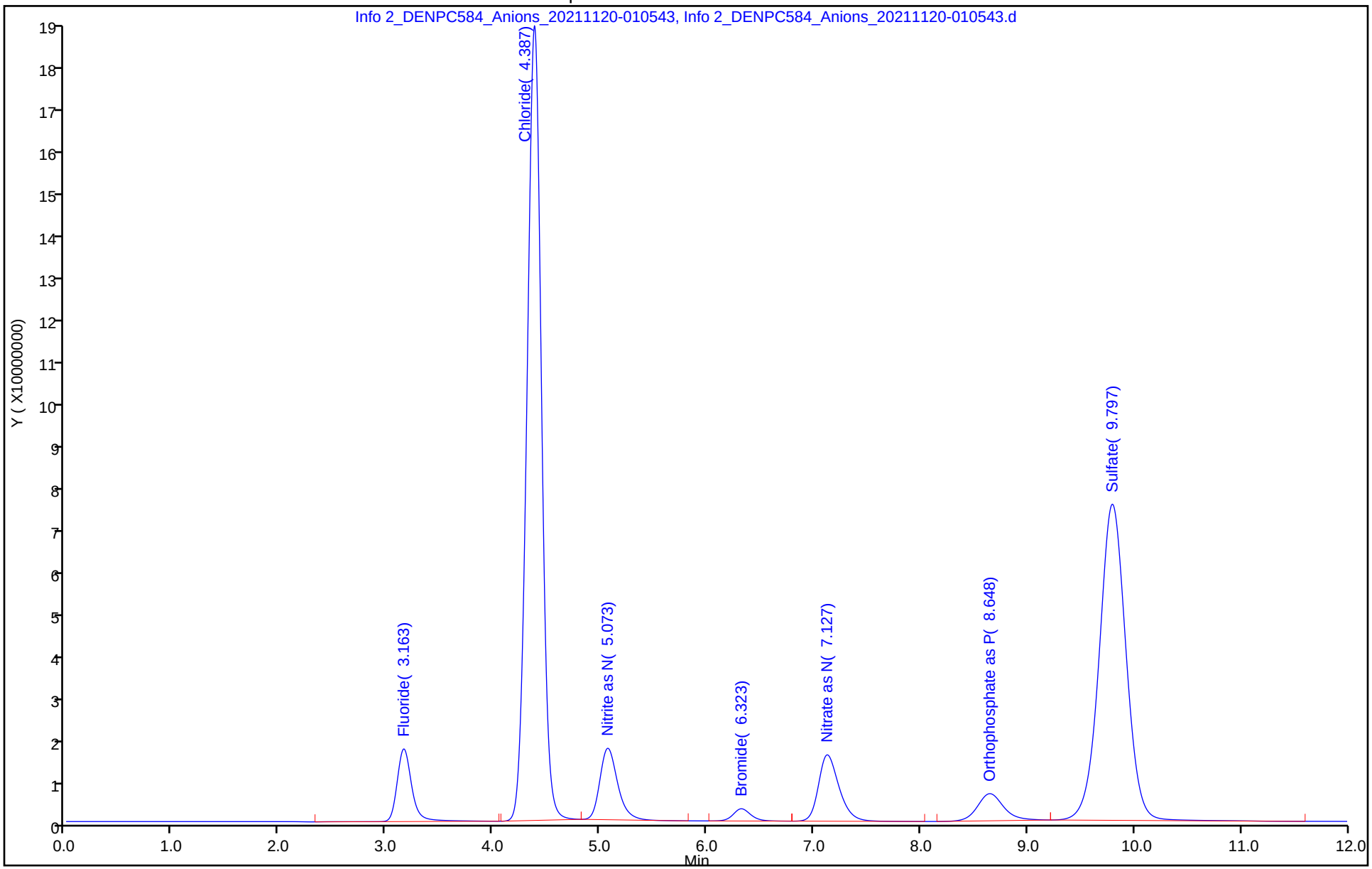
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 17:03:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-010543.d				
Injection Date:	20-Nov-2021 00:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	62
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-012
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 01:05:00 ALS Bottle#: 0 Worklist Smp#: 63
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-063
Misc. Info.: 280-0106653-063
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:03:54 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 17:00:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	U
2 Chloride		4.365				ND	
3 Nitrite as N		5.062				ND	
4 Bromide	5.972	6.012	-0.040	122788		0.1016	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.743	8.682	0.061	3566898		NC	
6 Sulfate	9.882	9.828	0.054	1479331		0.4950	

QC Flag Legend

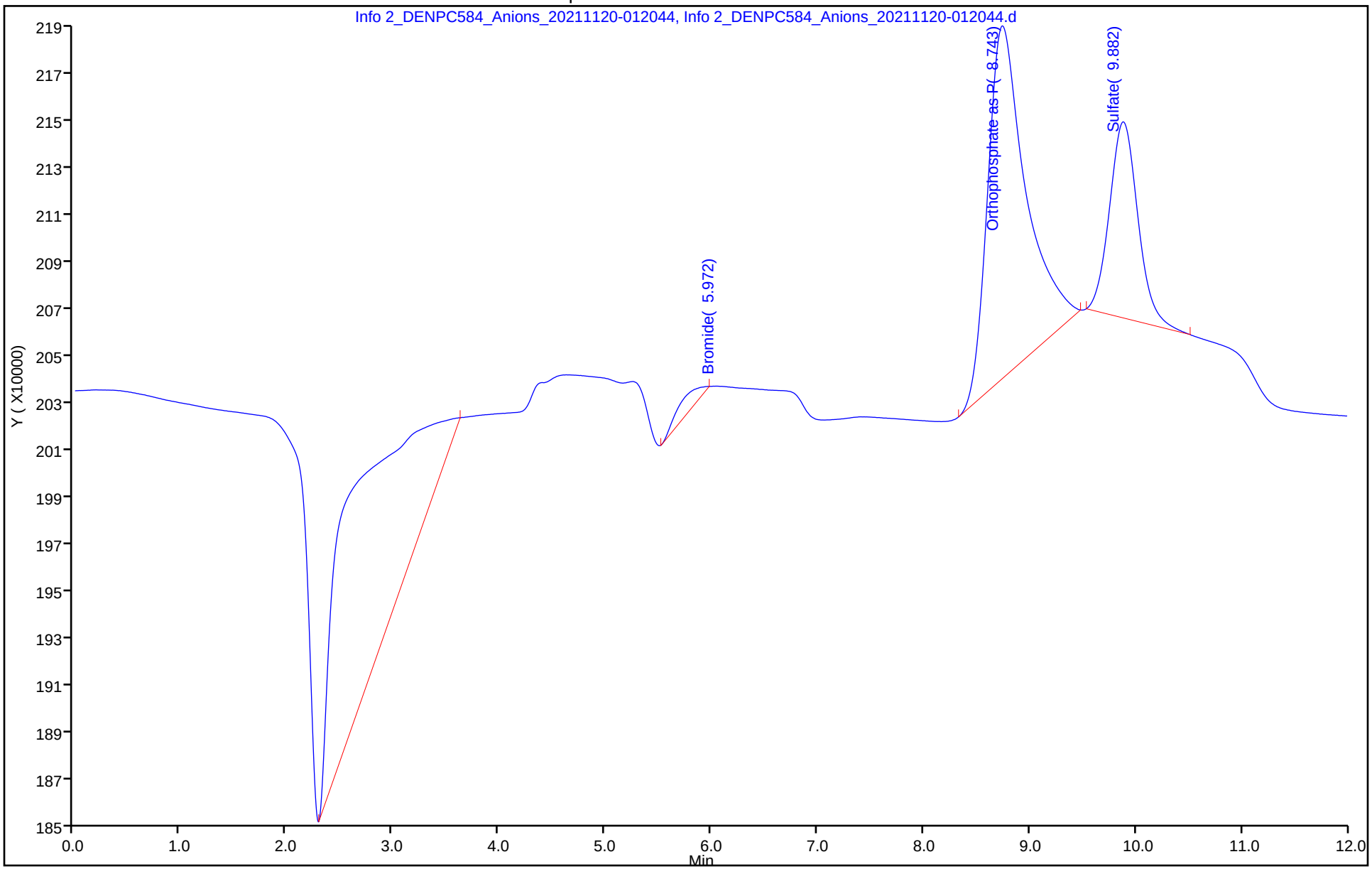
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 22-Nov-2021 17:03:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-012044.d

Injection Date:	20-Nov-2021 01:05:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	63
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-013
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 20-Nov-2021 01:20:00 ALS Bottle#: 0 Worklist Smp#: 64
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-064
Misc. Info.: 280-0106653-064
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:03:54 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.165	3.140	0.025	181428840	5.00	3.34	
2 Chloride	4.387	4.365	0.022	1750488553	100.0	99.5	
3 Nitrite as N	5.072	5.062	0.010	193784380	NC	NC	
4 Bromide	6.332	6.012	0.320	32860468	5.00	4.74	
5 Nitrate as N	7.133	7.158	-0.025	208619791	NC	NC	
7 Orthophosphate as P	8.652	8.682	-0.030	110605374	NC	NC	
6 Sulfate	9.800	9.828	-0.028	1290230783	100.0	98.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

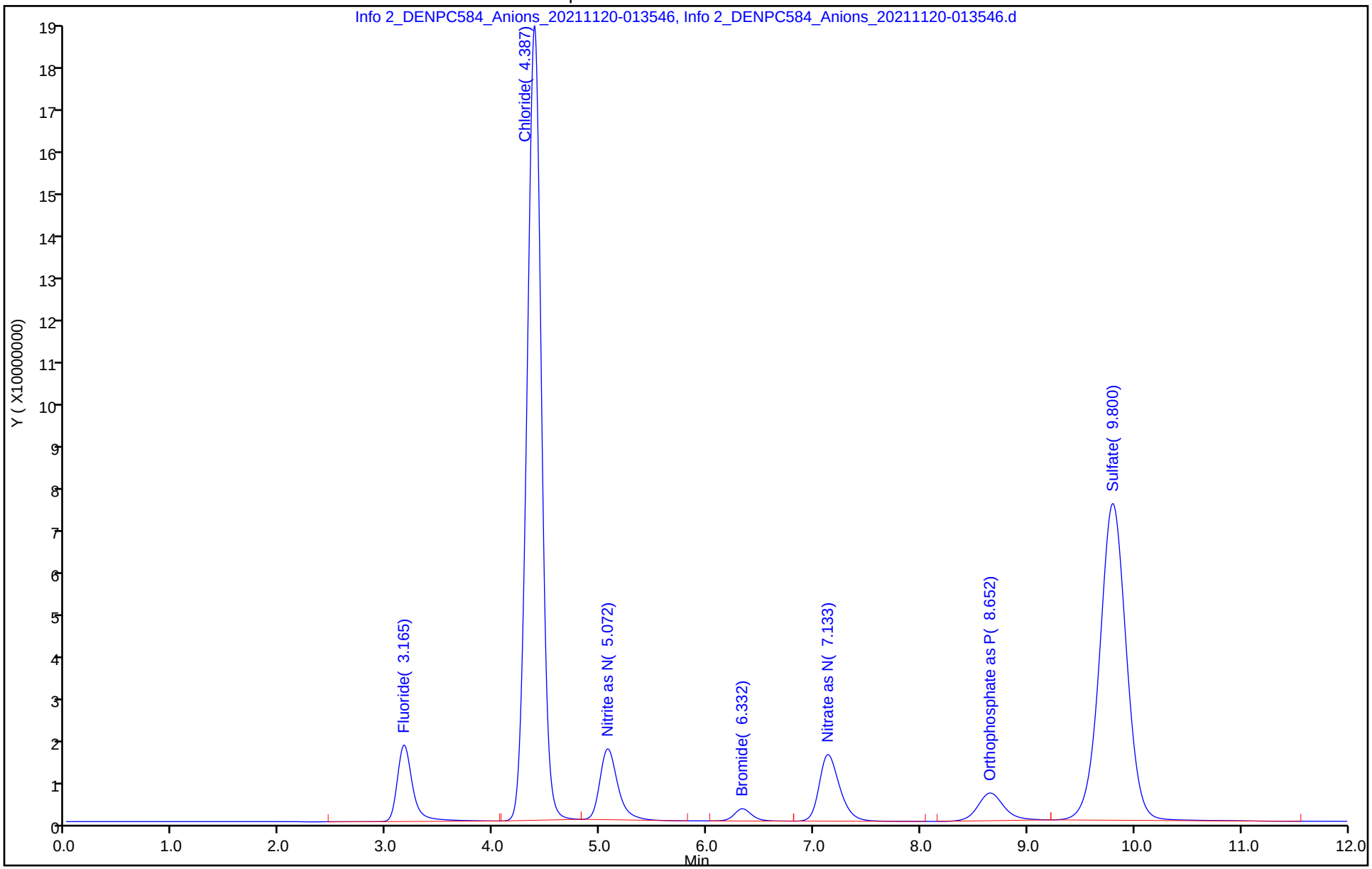
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 17:03:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-013546.d				
Injection Date:	20-Nov-2021 01:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	64
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-015
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 20-Nov-2021 01:35:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-065
Misc. Info.: 280-0106653-065
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:03:54 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.170	3.140	0.030	203652841	5.00	3.73	
2 Chloride	4.387	4.365	0.022	1748969422	100.0	99.4	
3 Nitrite as N	5.073	5.062	0.011	191048582	NC	NC	
4 Bromide	6.338	6.012	0.326	33002973	5.00	4.76	
5 Nitrate as N	7.140	7.158	-0.018	208955808	NC	NC	
7 Orthophosphate as P	8.655	8.682	-0.027	113510082	NC	NC	
6 Sulfate	9.803	9.828	-0.025	1292163114	100.0	98.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

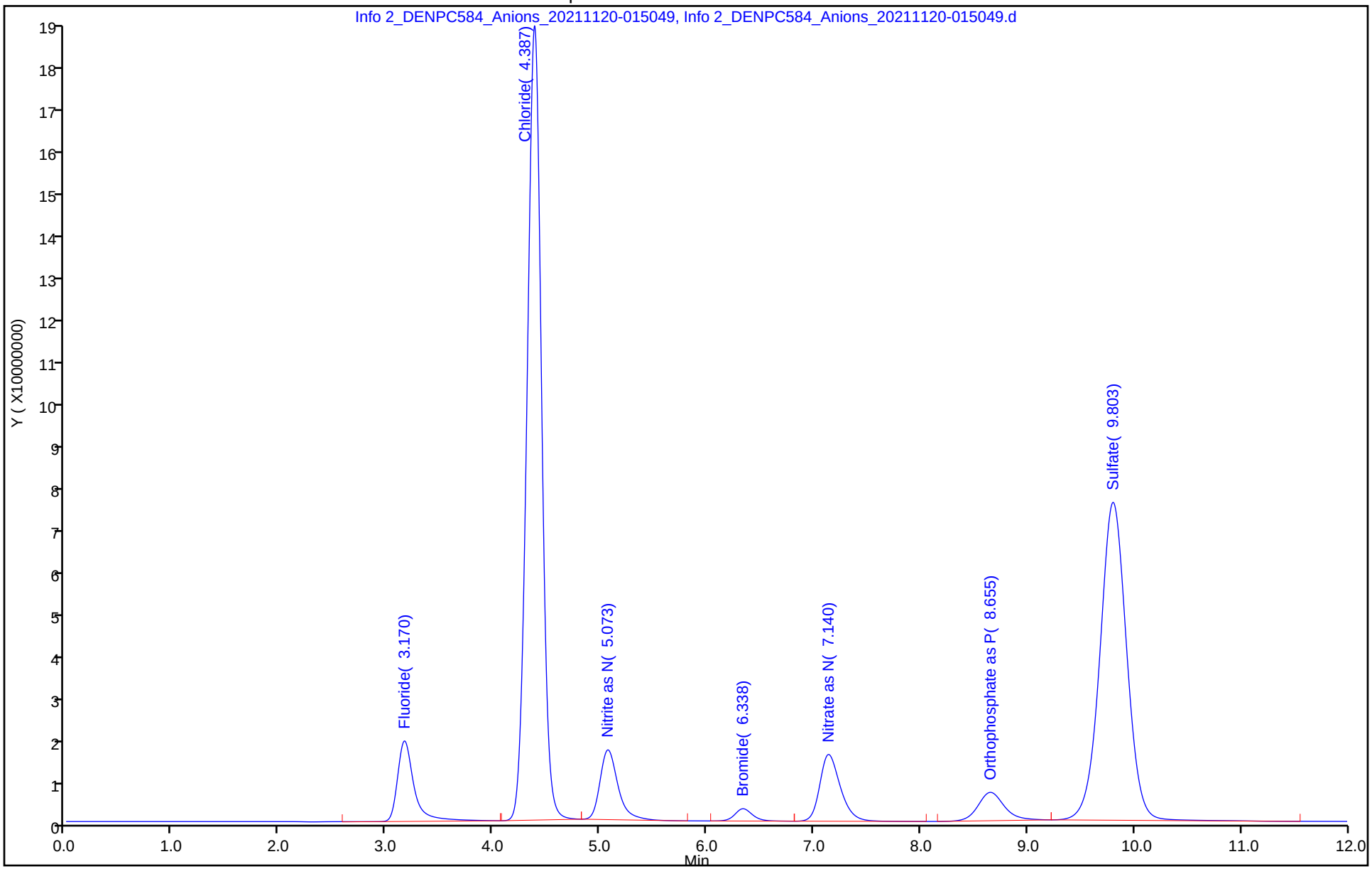
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 17:03:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-015049.d				
Injection Date:	20-Nov-2021 01:35:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	65
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-02
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Nov-2021 01:50:00 ALS Bottle#: 0 Worklist Smp#: 66
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-066
Misc. Info.: 280-0106653-066
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:03:54 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride		4.365				ND	
3 Nitrite as N		5.062				ND	
4 Bromide	6.040	6.012	0.028	169031		0.1081	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.745	8.682	0.063	5091077		NC	
6 Sulfate	9.892	9.828	0.064	1508400		0.4972	

QC Flag Legend

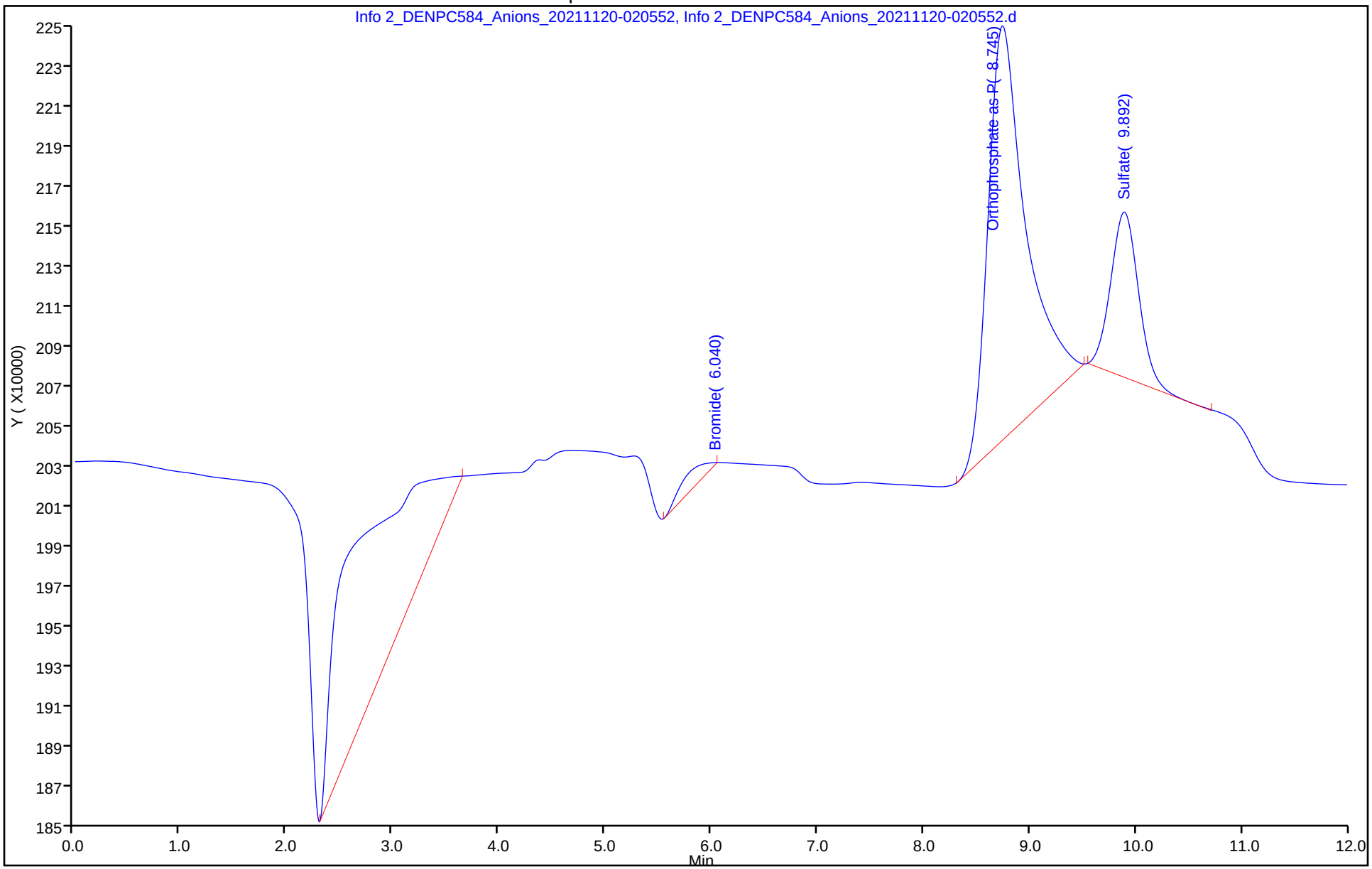
Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:03:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-020552.d

Injection Date:	20-Nov-2021 01:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	66
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-035
Lims ID: 280-155015-F-1
Client ID: EW7-PM25A-7-25
Sample Type: Client
Inject. Date: 20-Nov-2021 03:36:00 ALS Bottle#: 0 Worklist Smp#: 73
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-073
Misc. Info.: 280-0106653-073
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:03:54 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.167	3.140	0.027	12395448	0.3913	
2 Chloride	4.503	4.365	0.138	1205422933	68.6	
3 Nitrite as N		5.062			ND	
4 Bromide	6.467	6.012	0.455	1999412	0.3677	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P	8.840	8.682	0.158	1398645	NC	
6 Sulfate	9.885	9.828	0.057	48693098	4.09	

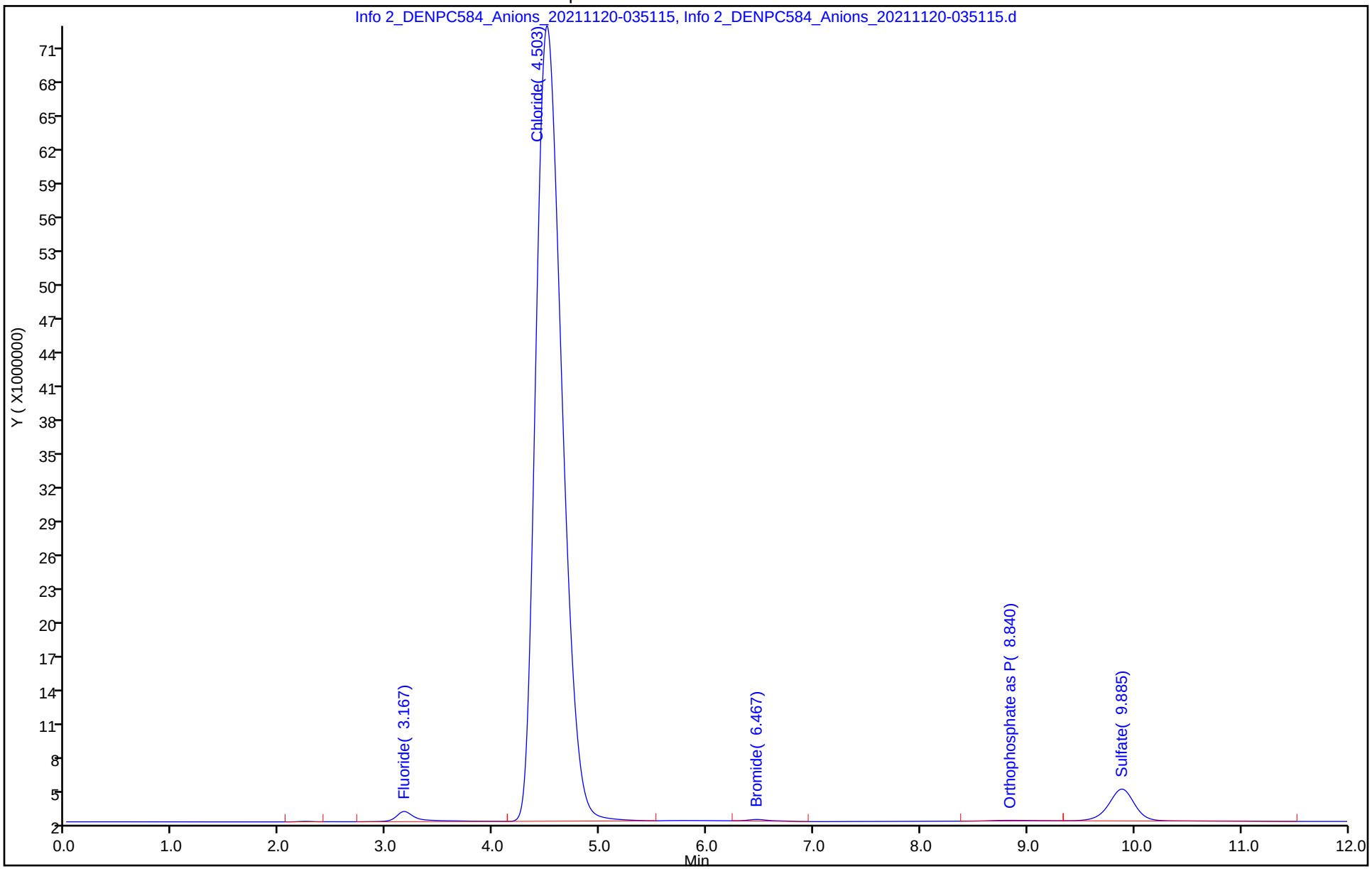
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:03:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-035115.d				
Injection Date:	20-Nov-2021 03:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-1	Lab Sample ID:	280-155015-1	Worklist Smp#:	73
Client ID:	EW7-PM25A-7-25				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-040
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 03:51:00 ALS Bottle#: 0 Worklist Smp#: 74
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-074
Misc. Info.: 280-0106653-074
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.140	0.023	160686860	5.00	2.98	
2 Chloride	4.387	4.365	0.022	1749357335	100.0	99.4	
3 Nitrite as N	5.073	5.062	0.011	196368292	NC	NC	
4 Bromide	6.323	6.012	0.311	33391714	5.00	4.82	
5 Nitrate as N	7.128	7.158	-0.030	210358813	NC	NC	
7 Orthophosphate as P	8.647	8.682	-0.035	109514013	NC	NC	
6 Sulfate	9.795	9.828	-0.033	1286281393	100.0	98.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

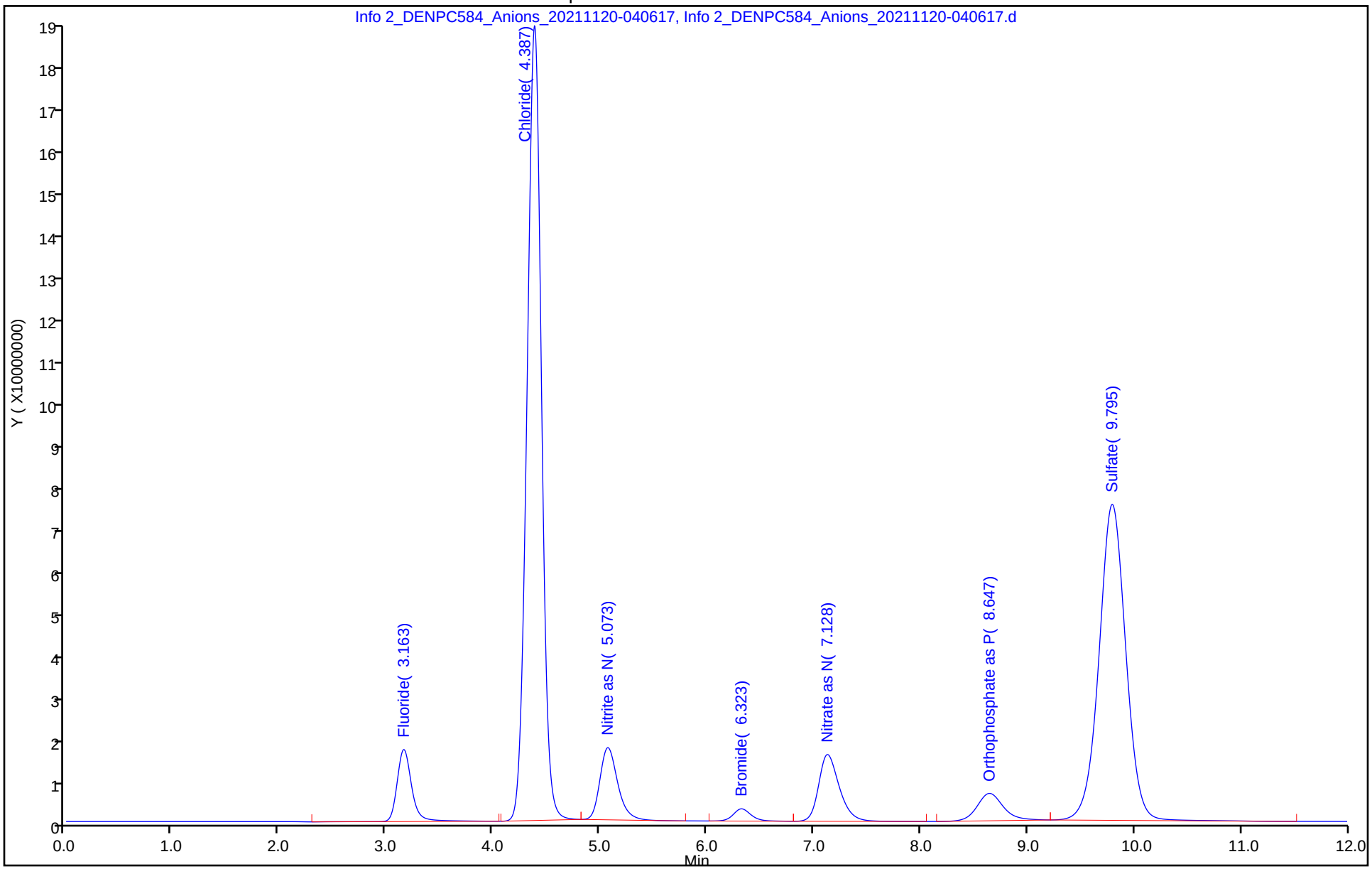
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 17:04:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-040617.d				
Injection Date:	20-Nov-2021 03:51:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	74
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-042
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 04:06:00 ALS Bottle#: 0 Worklist Smp#: 75
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-075
Misc. Info.: 280-0106653-075
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 17:01:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride		4.365				ND	U
3 Nitrite as N		5.062				ND	
4 Bromide	5.965	6.012	-0.047	110082		0.0998	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.747	8.682	0.065	3874664		NC	
6 Sulfate	9.885	9.828	0.057	1261727		0.4784	

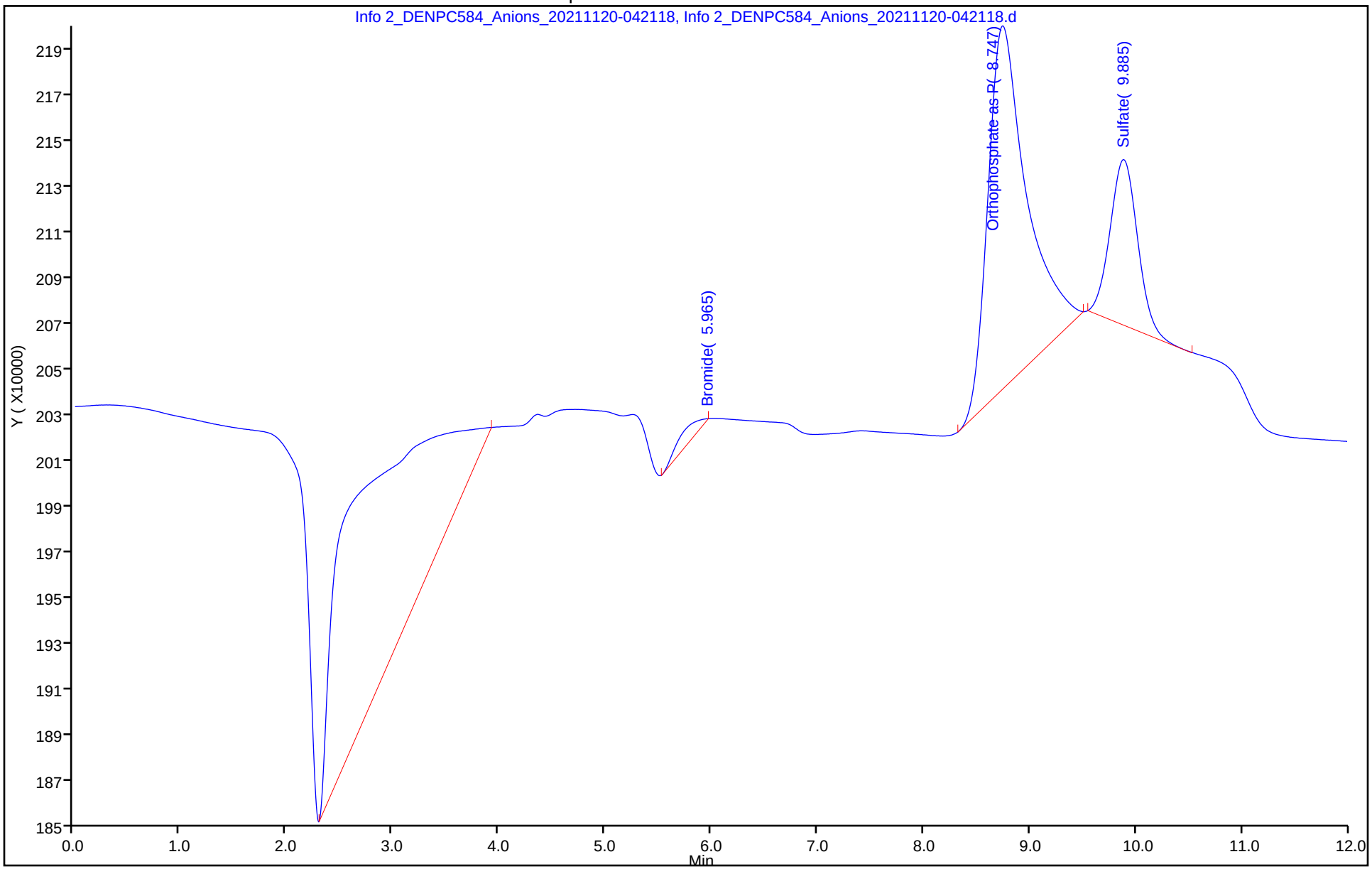
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 22-Nov-2021 17:04:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-042118.d				
Injection Date:	20-Nov-2021 04:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	75
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-043
Lims ID: 280-155015-F-2
Client ID: EW7-PM25B-7-35
Sample Type: Client
Inject. Date: 20-Nov-2021 04:21:00 ALS Bottle#: 0 Worklist Smp#: 76
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-076
Misc. Info.: 280-0106653-076
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.160	3.140	0.020	8326953	0.3202	
2 Chloride	4.443	4.365	0.078	944416826	53.8	
3 Nitrite as N		5.062			ND	
4 Bromide	5.828	6.012	-0.184	129782	0.1026	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P	8.812	8.682	0.130	1013684	NC	
6 Sulfate	9.810	9.828	-0.018	1616031411	123.3	

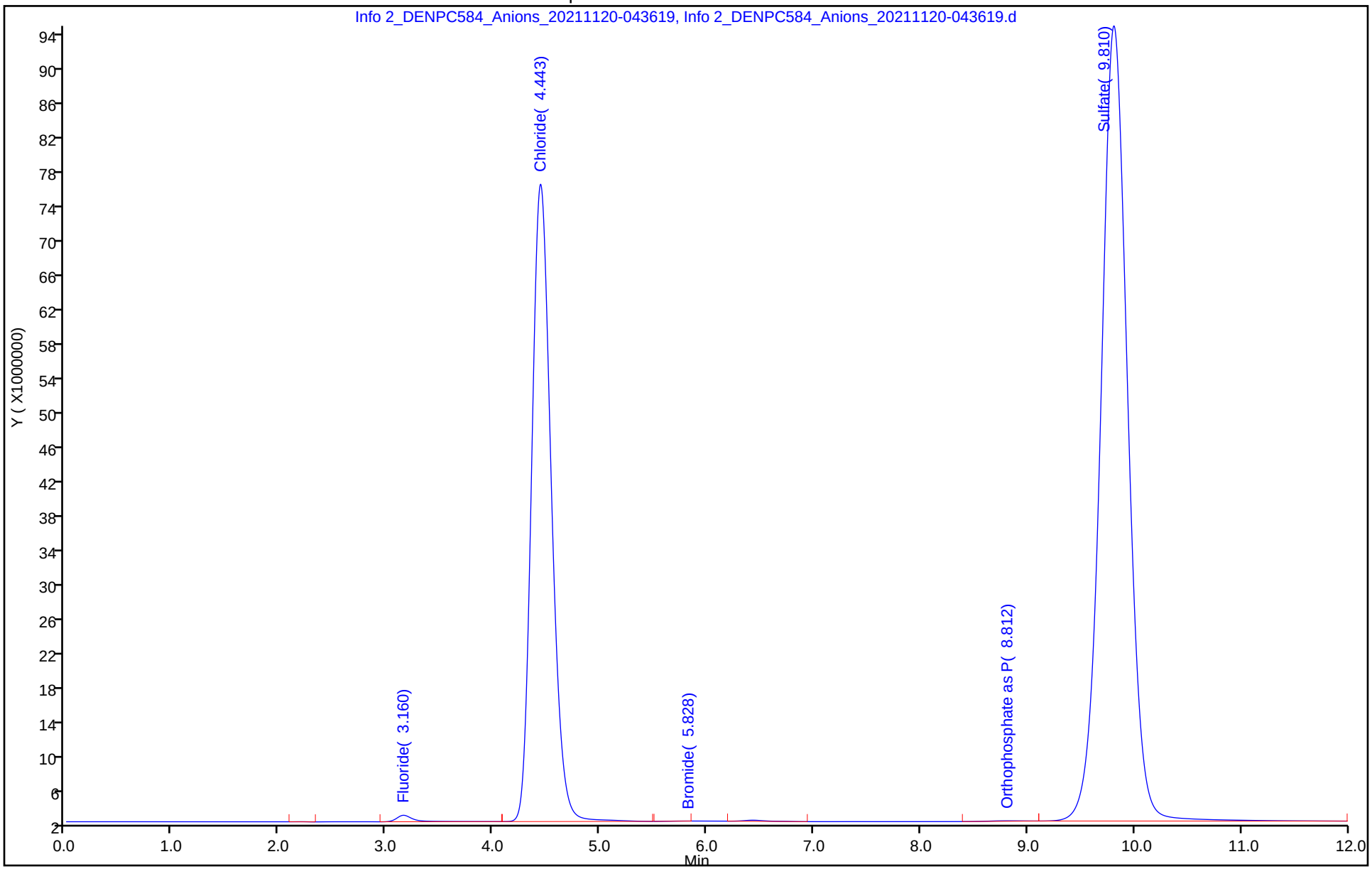
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-043619.d				
Injection Date:	20-Nov-2021 04:21:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-2	Lab Sample ID:	280-155015-2	Worklist Smp#:	76
Client ID:	EW7-PM25B-7-35				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-045
Lims ID: 280-155015-F-3
Client ID: EW7-PM27B-7-35
Sample Type: Client
Inject. Date: 20-Nov-2021 04:36:00 ALS Bottle#: 0 Worklist Smp#: 77
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-077
Misc. Info.: 280-0106653-077
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

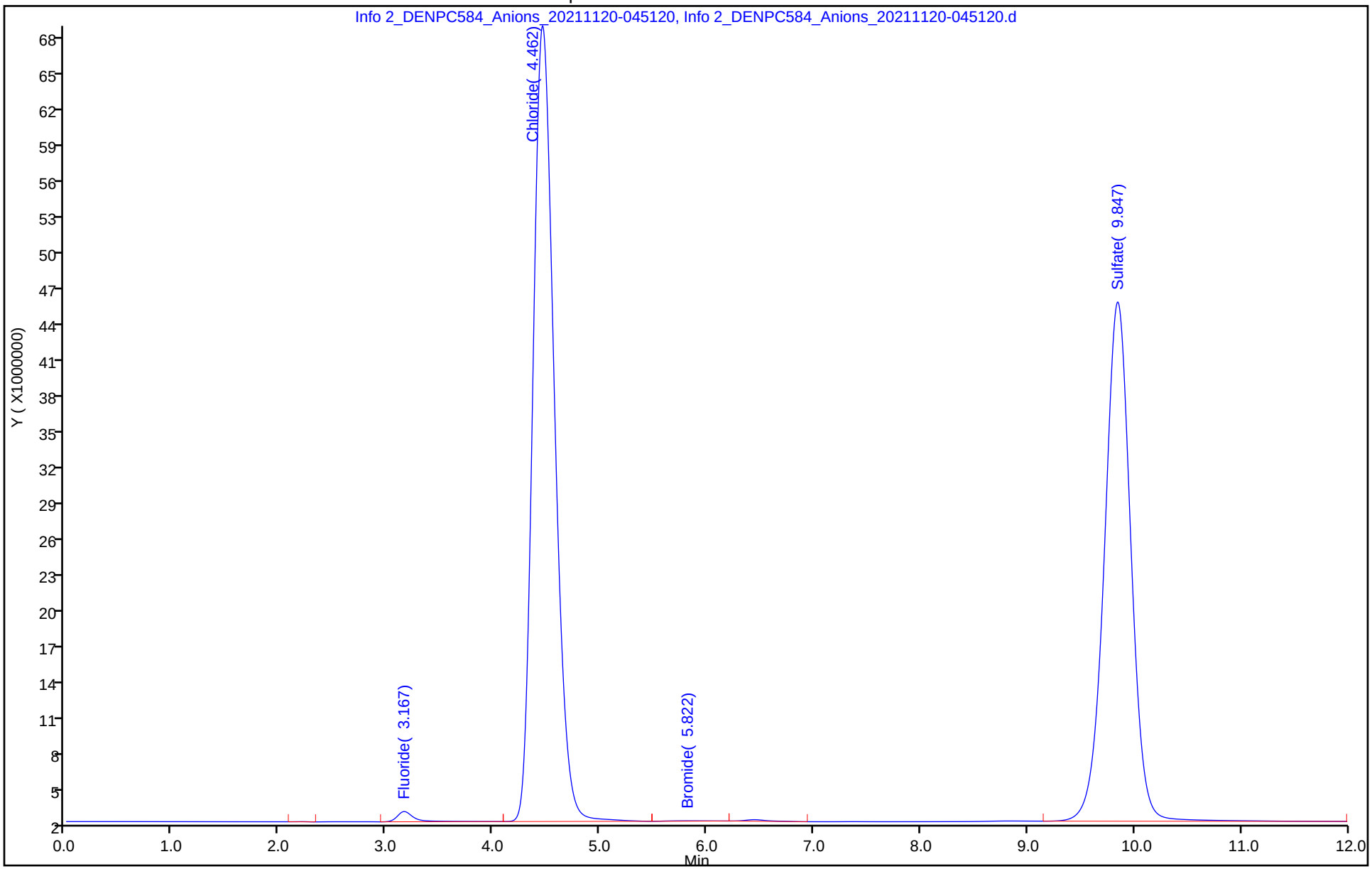
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.167	3.140	0.027	9431957	0.3395	
2 Chloride	4.462	4.365	0.097	925091302	52.7	
3 Nitrite as N		5.062			ND	
4 Bromide	5.822	6.012	-0.190	717703	0.1860	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P		8.682			ND	
6 Sulfate	9.847	9.828	0.019	745705156	57.1	

Report Date: 22-Nov-2021 17:04:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-045120.d

Injection Date:	20-Nov-2021 04:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-3	Lab Sample ID:	280-155015-3	Worklist Smp#:	77
Client ID:	EW7-PM27B-7-35				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-050
Lims ID: 280-155015-F-4
Client ID: EW7-PM26A-7-25
Sample Type: Client
Inject. Date: 20-Nov-2021 04:51:00 ALS Bottle#: 0 Worklist Smp#: 78
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-078
Misc. Info.: 280-0106653-078
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.150	3.140	0.010	10673724	0.3612	
2 Chloride	4.420	4.365	0.055	576784428	33.0	
3 Nitrite as N		5.062			ND	
4 Bromide	6.417	6.012	0.405	1244658	0.2607	
5 Nitrate as N	7.157	7.158	-0.001	237776372	NC	
7 Orthophosphate as P	8.828	8.682	0.146	451666	NC	
6 Sulfate	9.817	9.828	-0.011	1060346411	81.0	

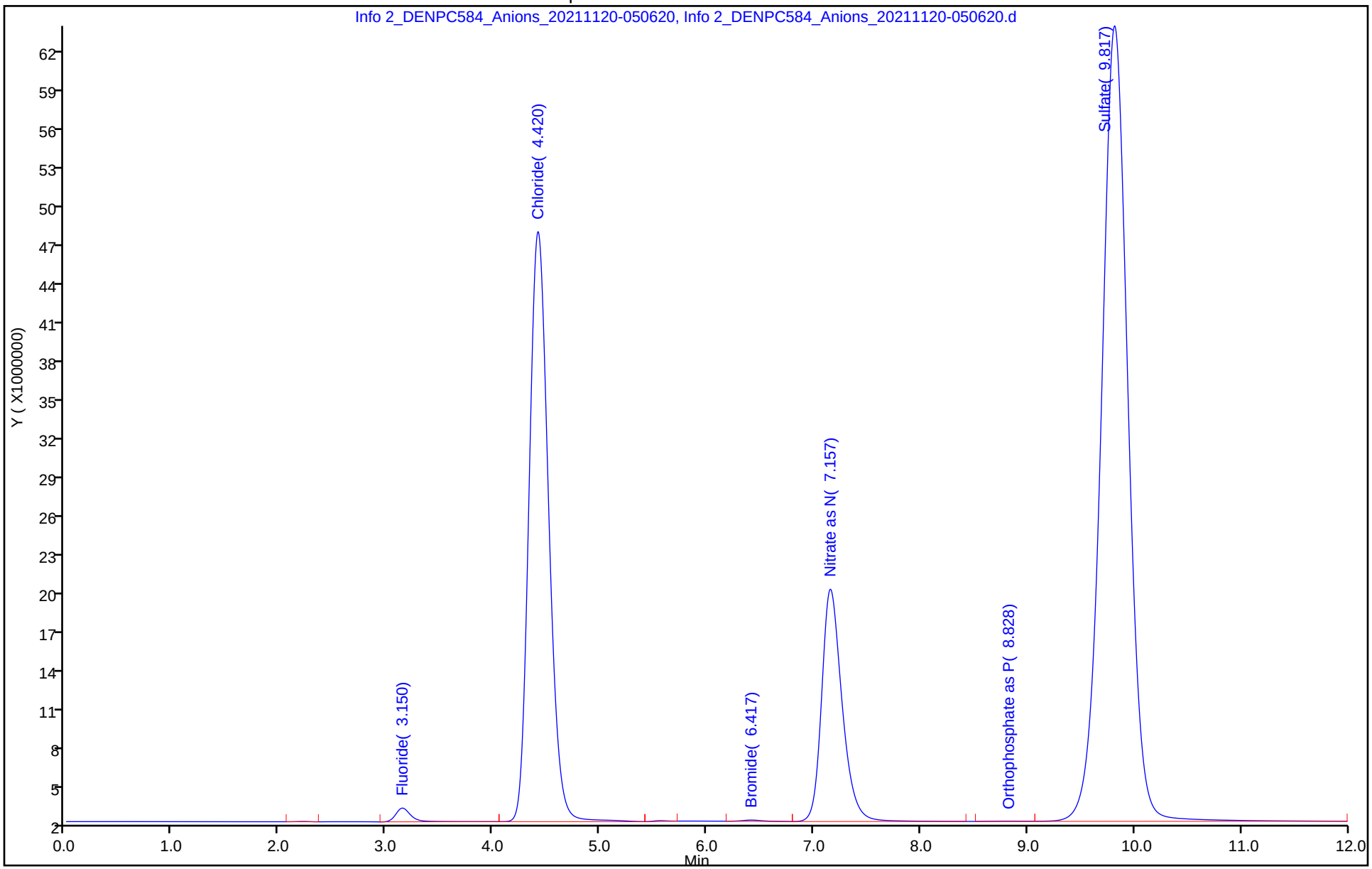
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-050620.d				
Injection Date:	20-Nov-2021 04:51:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-4	Lab Sample ID:	280-155015-4	Worklist Smp#:	78
Client ID:	EW7-PM26A-7-25				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-052
Lims ID: 280-155015-F-5
Client ID: EW7-PM26B-7-35
Sample Type: Client
Inject. Date: 20-Nov-2021 05:06:00 ALS Bottle#: 0 Worklist Smp#: 79
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-079
Misc. Info.: 280-0106653-079
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

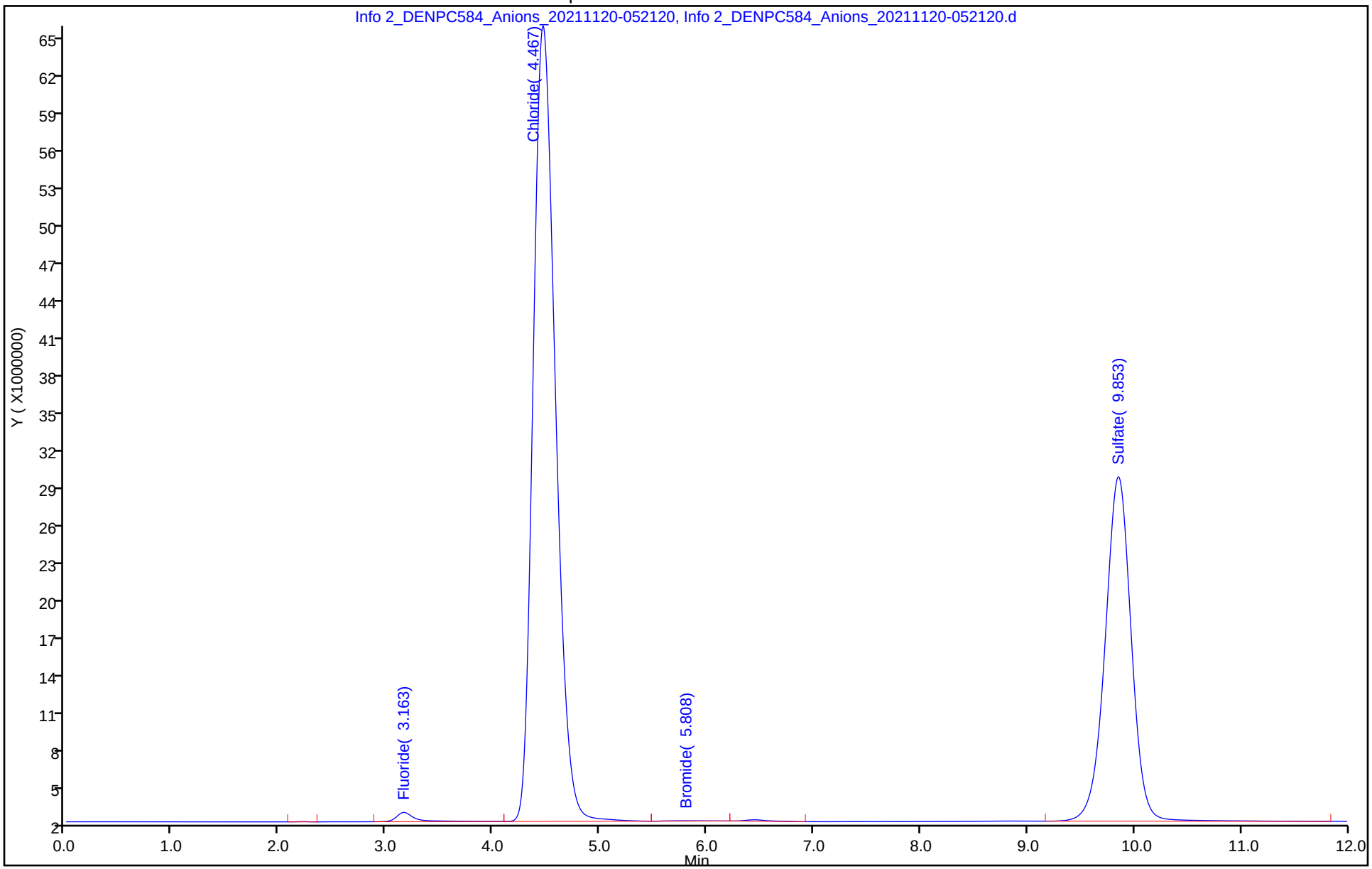
Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.140	0.023	8992484	0.3318	
2 Chloride	4.467	4.365	0.102	922015032	52.5	
3 Nitrite as N		5.062			ND	
4 Bromide	5.808	6.012	-0.204	705456	0.1842	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P		8.682			ND	
6 Sulfate	9.853	9.828	0.025	469085871	36.1	

Report Date: 22-Nov-2021 17:04:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-052120.d				
Injection Date:	20-Nov-2021 05:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-5	Lab Sample ID:	280-155015-5	Worklist Smp#:	79
Client ID:	EW7-PM26B-7-35				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-053
Lims ID: 280-155015-F-6
Client ID: EW7-PM29A-7-25
Sample Type: Client
Inject. Date: 20-Nov-2021 05:21:00 ALS Bottle#: 0 Worklist Smp#: 80
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-080
Misc. Info.: 280-0106653-080
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.153	3.140	0.013	8293050	0.3196	
2 Chloride	4.428	4.365	0.063	638518138	36.5	
3 Nitrite as N		5.062			ND	
4 Bromide	5.838	6.012	-0.174	222387	0.1157	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P	8.812	8.682	0.130	353352	NC	
6 Sulfate	9.843	9.828	0.015	407758068	31.4	

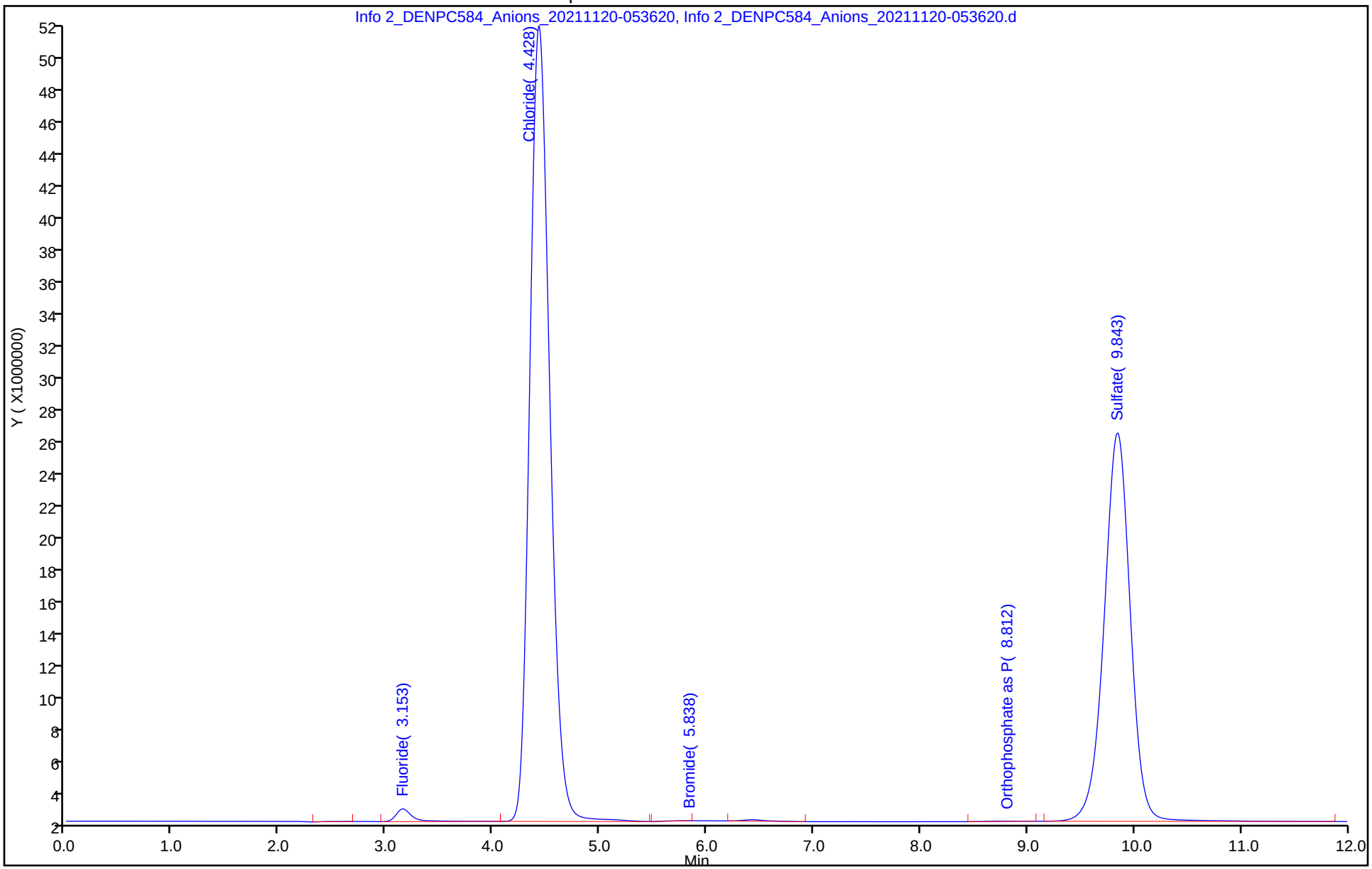
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-053620.d				
Injection Date:	20-Nov-2021 05:21:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-6	Lab Sample ID:	280-155015-6	Worklist Smp#:	80
Client ID:	EW7-PM29A-7-25				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-055
Lims ID: 280-155015-F-7
Client ID: EW7-PM29B-7-35
Sample Type: Client
Inject. Date: 20-Nov-2021 05:36:00 ALS Bottle#: 0 Worklist Smp#: 81
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-081
Misc. Info.: 280-0106653-081
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.145	3.140	0.005	7054344	0.2980	
2 Chloride	4.413	4.365	0.048	665336943	38.0	
3 Nitrite as N		5.062			ND	
4 Bromide	5.808	6.012	-0.204	220909	0.1155	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P	8.810	8.682	0.128	478572	NC	
6 Sulfate	9.792	9.828	-0.036	1416353979	108.1	

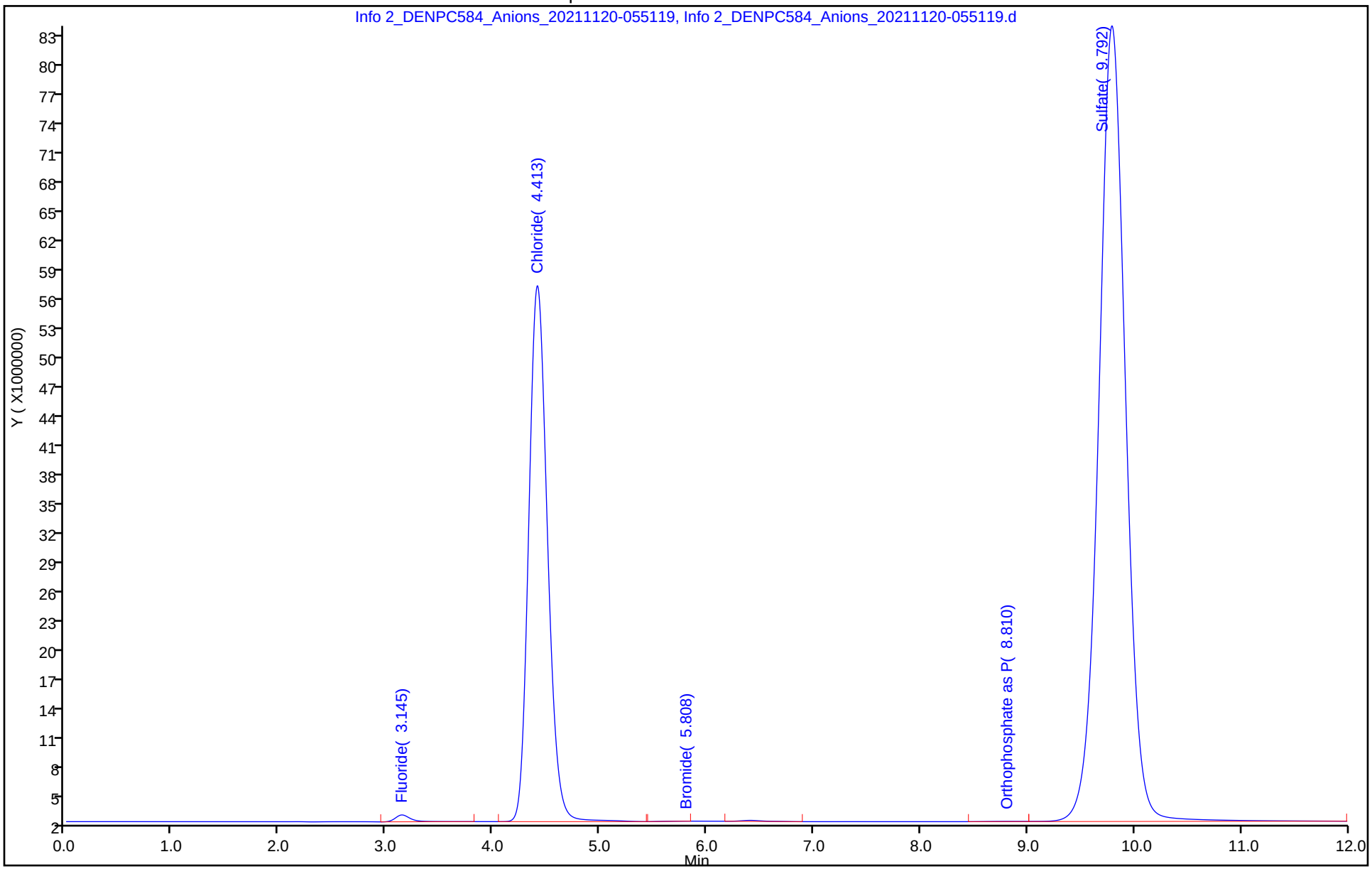
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-055119.d				
Injection Date:	20-Nov-2021 05:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-7	Lab Sample ID:	280-155015-7	Worklist Smp#:	81
Client ID:	EW7-PM29B-7-35				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-060
Lims ID: 280-155015-F-8
Client ID: EW7-PM28A-7-25
Sample Type: Client
Inject. Date: 20-Nov-2021 05:51:00 ALS Bottle#: 0 Worklist Smp#: 82
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-082
Misc. Info.: 280-0106653-082
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.140	0.023	10258441	0.3539	
2 Chloride	4.457	4.365	0.092	958407021	54.6	
3 Nitrite as N		5.062			ND	
4 Bromide	5.793	6.012	-0.219	127378	0.1022	
5 Nitrate as N		7.158			ND	
7 Orthophosphate as P	8.863	8.682	0.181	747374	NC	
6 Sulfate	9.860	9.828	0.032	287064956	22.2	

QC Flag Legend

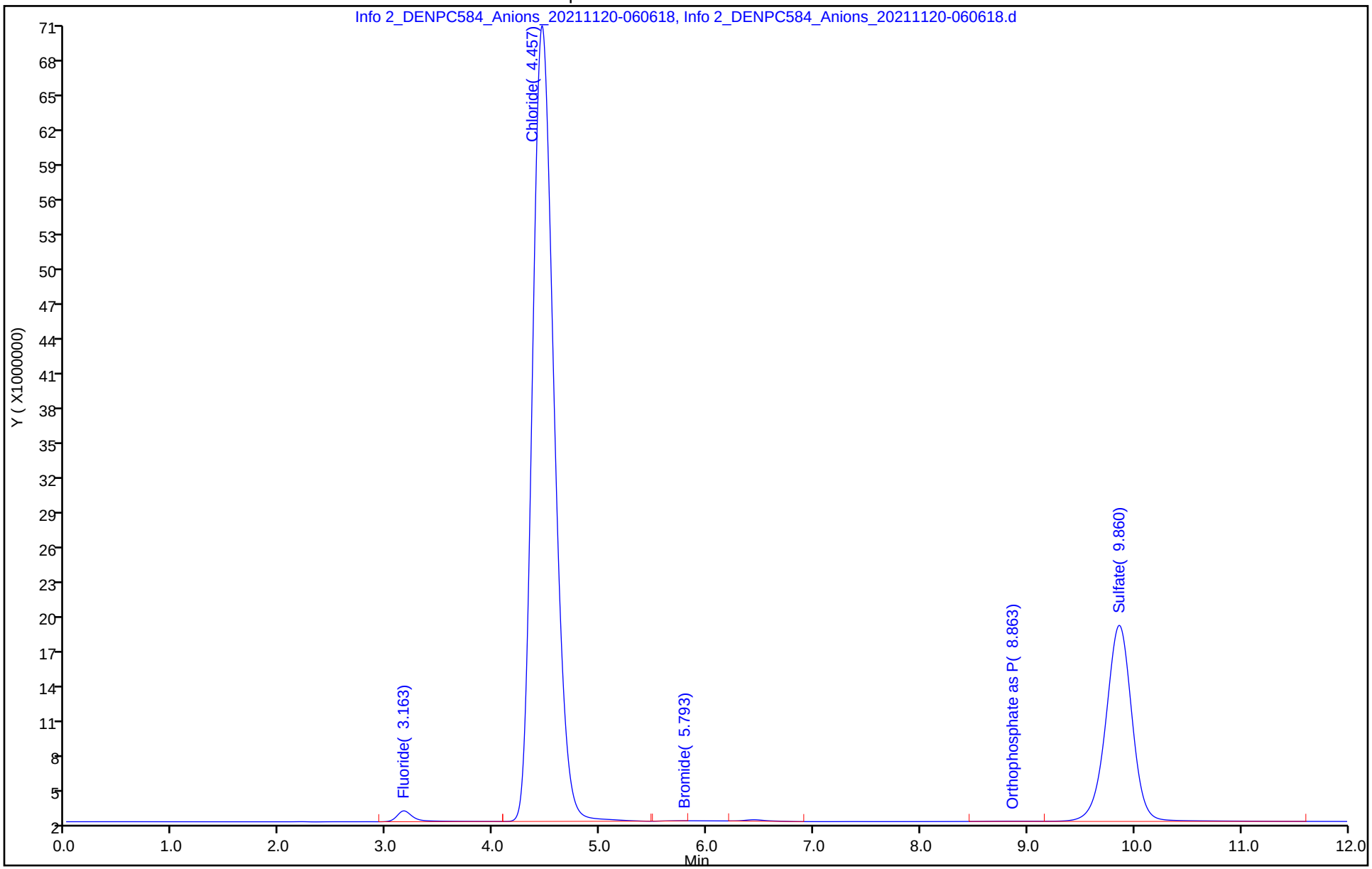
Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-060618.d

Injection Date:	20-Nov-2021 05:51:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-8	Lab Sample ID:	280-155015-8	Worklist Smp#:	82
Client ID:	EW7-PM28A-7-25				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-062
Lims ID: 280-155015-F-8 DU
Client ID:
Sample Type: DU
Inject. Date: 20-Nov-2021 06:06:00 ALS Bottle#: 0 Worklist Smp#: 83
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-083
Misc. Info.: 280-0106653-083
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

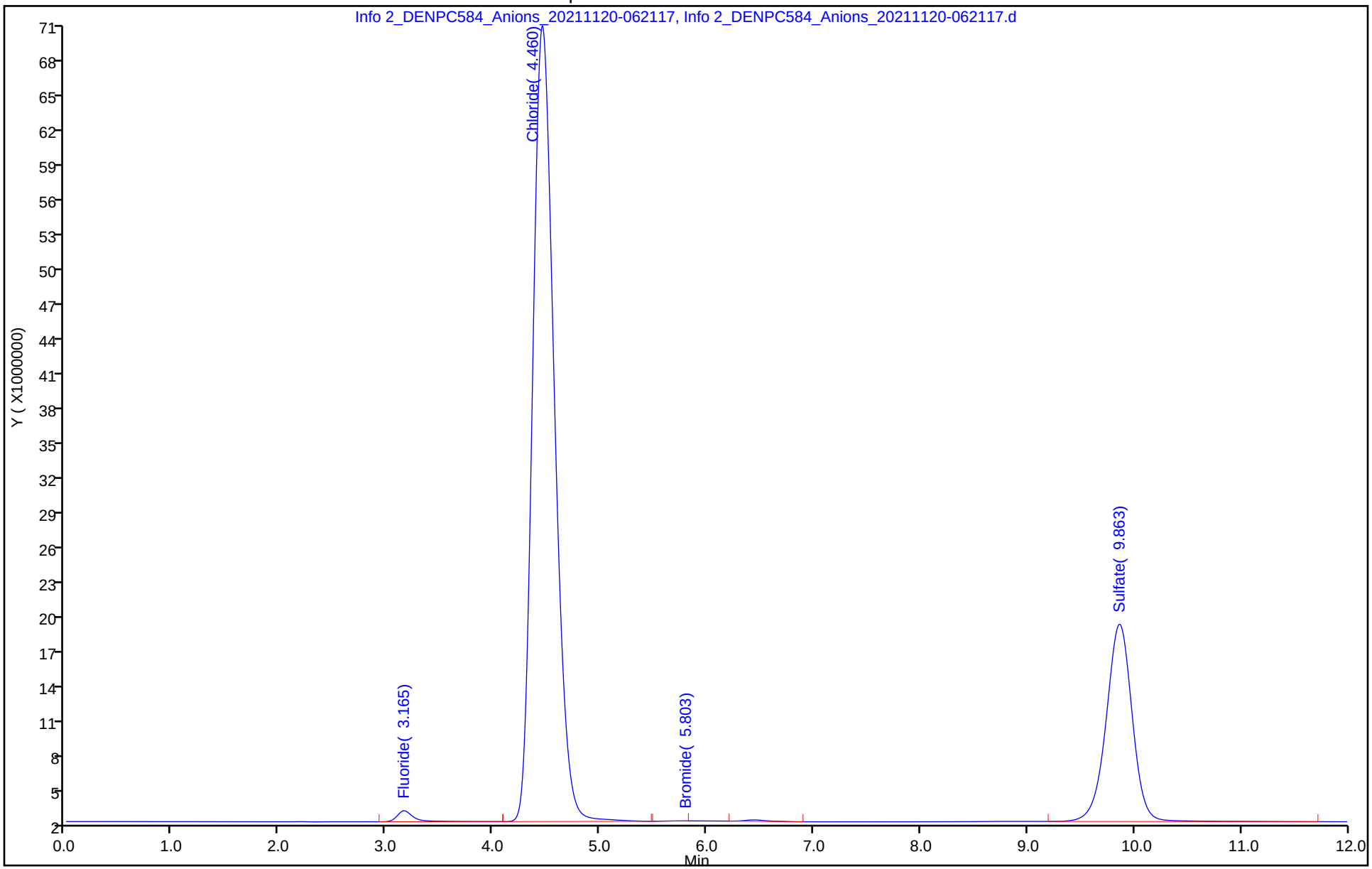
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.165	3.140	0.025	10390831		0.3563	
2 Chloride	4.460	4.365	0.095	963607618		54.9	
3 Nitrite as N		5.062				ND	
4 Bromide	5.803	6.012	-0.209	126858		0.1022	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P		8.682				ND	
6 Sulfate	9.863	9.828	0.035	287104534		22.2	

Report Date: 22-Nov-2021 17:04:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-062117.d

Injection Date:	20-Nov-2021 06:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-8 DU			Worklist Smp#:	83
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-063
Lims ID: 280-155015-F-8 MS
Client ID:
Sample Type: MS
Inject. Date: 20-Nov-2021 06:21:00 ALS Bottle#: 0 Worklist Smp#: 84
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-084
Misc. Info.: 280-0106653-084
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.168	3.140	0.028	145817004	5.00	2.72	
2 Chloride	4.443	4.365	0.078	1808391076	50.0	102.7	
3 Nitrite as N	5.560	5.062	0.498	177364517	NC	NC	
4 Bromide	6.393	6.012	0.381	31753027	5.00	4.59	
5 Nitrate as N	7.178	7.158	0.020	197934491	NC	NC	
7 Orthophosphate as P	8.700	8.682	0.018	97271988	NC	NC	
6 Sulfate	9.837	9.828	0.009	912701420	50.0	69.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

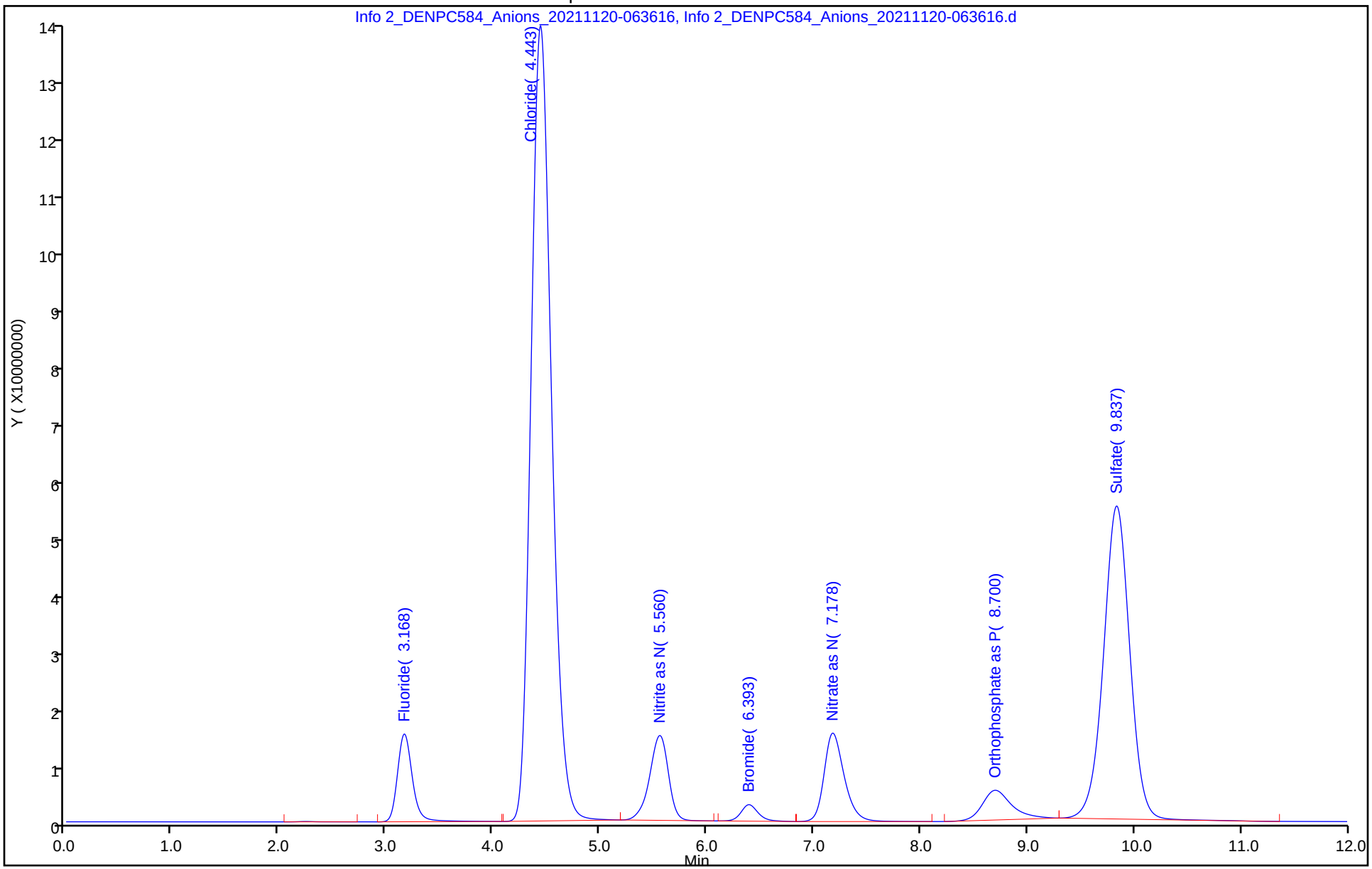
Reagents:

ICMS/MSD WEEK_00730 Amount Added: 0.10 Units: mL

Report Date: 22-Nov-2021 17:04:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-063616.d				
Injection Date:	20-Nov-2021 06:21:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-8 MS			Worklist Smp#:	84
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-065
Lims ID: 280-155015-F-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 20-Nov-2021 06:36:00 ALS Bottle#: 0 Worklist Smp#: 85
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-085
Misc. Info.: 280-0106653-085
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:00 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.167	3.140	0.027	148806546	5.00	2.77	
2 Chloride	4.440	4.365	0.075	1830066835	50.0	104.0	
3 Nitrite as N	5.555	5.062	0.493	182092254	NC	NC	
4 Bromide	6.390	6.012	0.378	32538966	5.00	4.70	
5 Nitrate as N	7.175	7.158	0.017	202758242	NC	NC	
7 Orthophosphate as P	8.695	8.682	0.013	100659755	NC	NC	
6 Sulfate	9.832	9.828	0.004	928794073	50.0	71.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

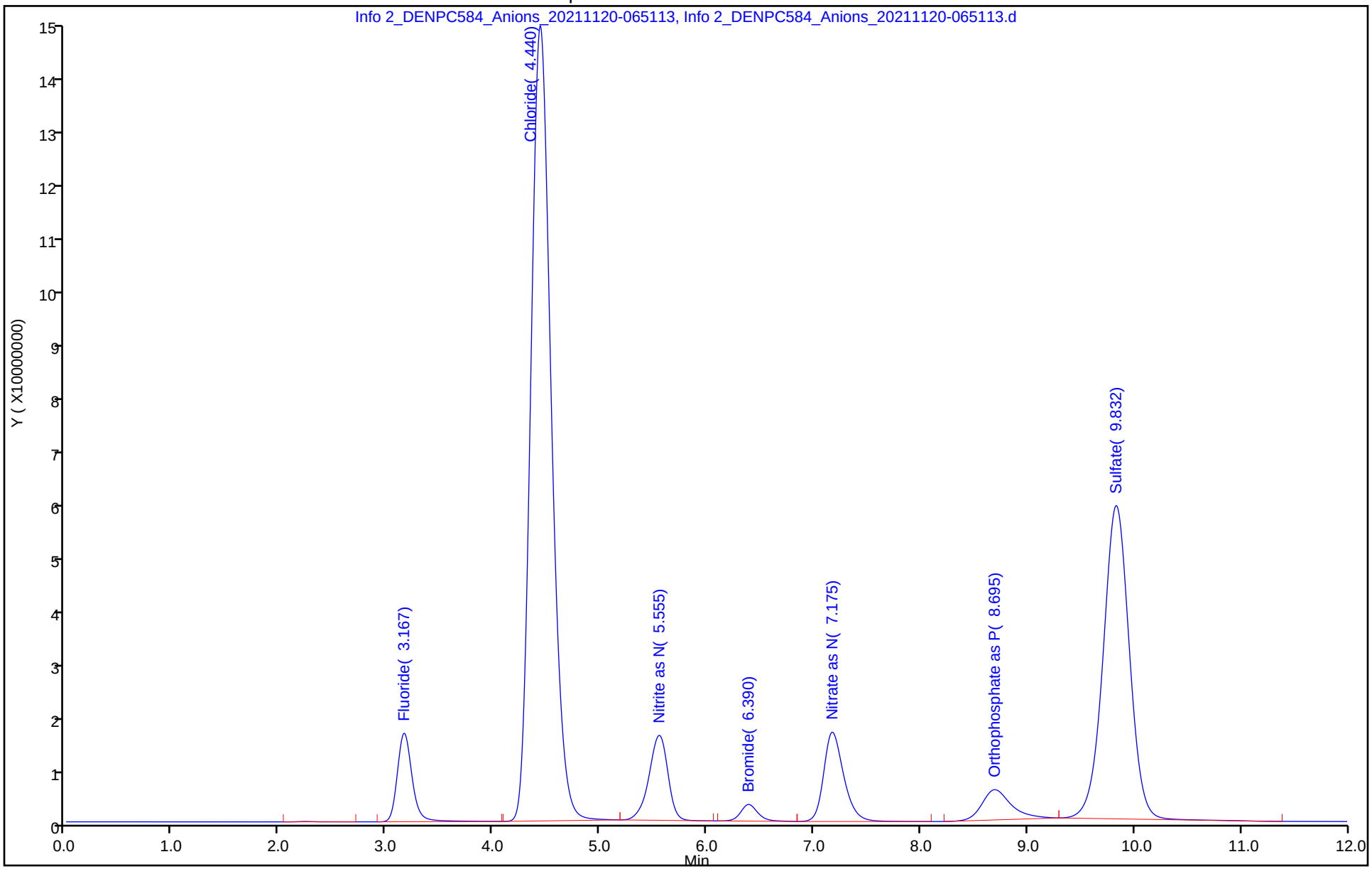
Reagents:

ICMS/MSD WEEK_00730 Amount Added: 0.10 Units: mL

Report Date: 22-Nov-2021 17:04:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-065113.d				
Injection Date:	20-Nov-2021 06:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-8 MSD			Worklist Smp#:	85
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-07(
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 06:51:00 ALS Bottle#: 0 Worklist Smp#: 86
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-086
Misc. Info.: 280-0106653-086
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:05 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.178	3.140	0.038	159342584	5.00	2.96	
2 Chloride	4.403	4.365	0.038	1744109492	100.0	99.1	
3 Nitrite as N	5.088	5.062	0.026	195432820	NC	NC	
4 Bromide	6.337	6.012	0.325	33544655	5.00	4.84	
5 Nitrate as N	7.142	7.158	-0.016	210614793	NC	NC	
7 Orthophosphate as P	8.660	8.682	-0.022	108329525	NC	NC	
6 Sulfate	9.812	9.828	-0.016	1283033029	100.0	97.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated

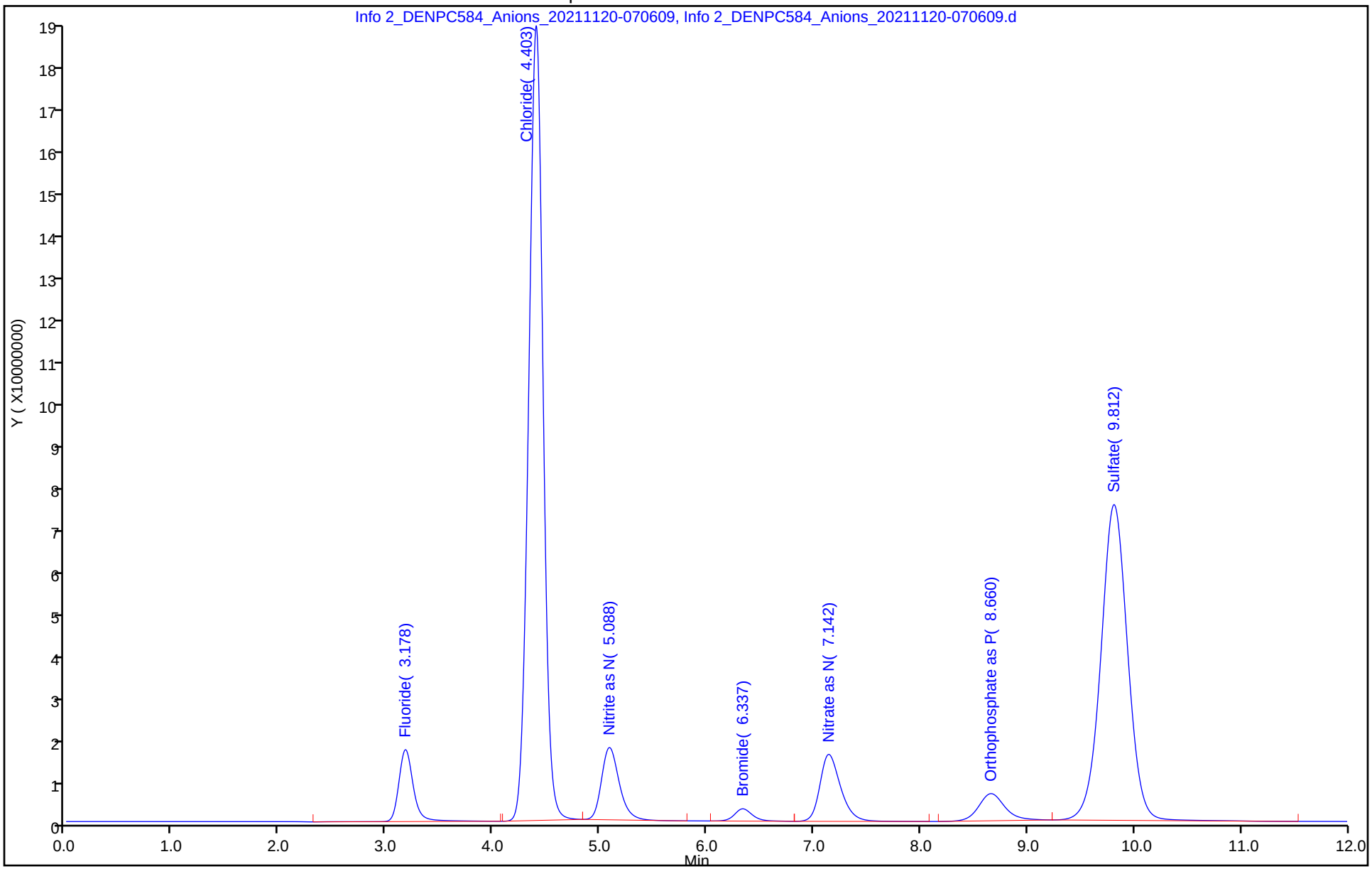
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 17:04:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-070609.d				
Injection Date:	20-Nov-2021 06:51:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	86
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-072
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 07:06:00 ALS Bottle#: 0 Worklist Smp#: 87
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-087
Misc. Info.: 280-0106653-087
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:05 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 17:01:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride		4.365				ND	U
3 Nitrite as N		5.062				ND	
4 Bromide	6.002	6.012	-0.010	131229		0.1028	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.748	8.682	0.066	3746441		NC	
6 Sulfate	9.887	9.828	0.059	1298864		0.4812	

QC Flag Legend

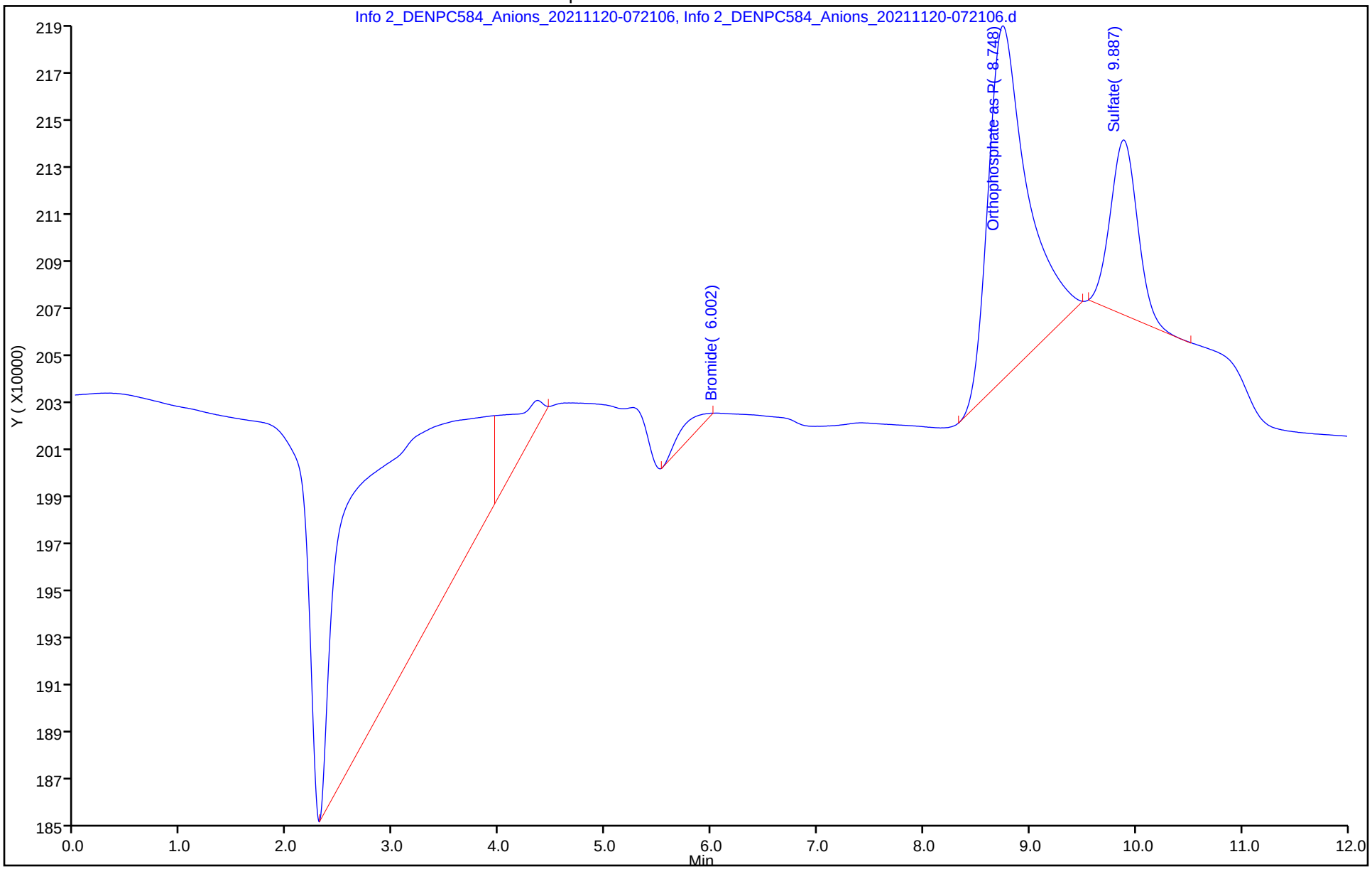
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 22-Nov-2021 17:04:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-072106.d

Injection Date:	20-Nov-2021 07:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	87
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-073
Lims ID: 280-155015-F-9
Client ID: G0080-7
Sample Type: Client
Inject. Date: 20-Nov-2021 07:21:00 ALS Bottle#: 0 Worklist Smp#: 88
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-088
Misc. Info.: 280-0106653-088
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:05 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.158	3.140	0.018	6557843	0.2893	
2 Chloride	4.400	4.365	0.035	471630960	27.0	
3 Nitrite as N	5.558	5.062	0.496	2120354	NC	
4 Bromide	6.405	6.012	0.393	1076723	0.2369	
5 Nitrate as N	7.168	7.158	0.010	152103878	NC	
7 Orthophosphate as P	8.762	8.682	0.080	4150048	NC	
6 Sulfate	9.825	9.828	-0.003	1065880093	81.4	

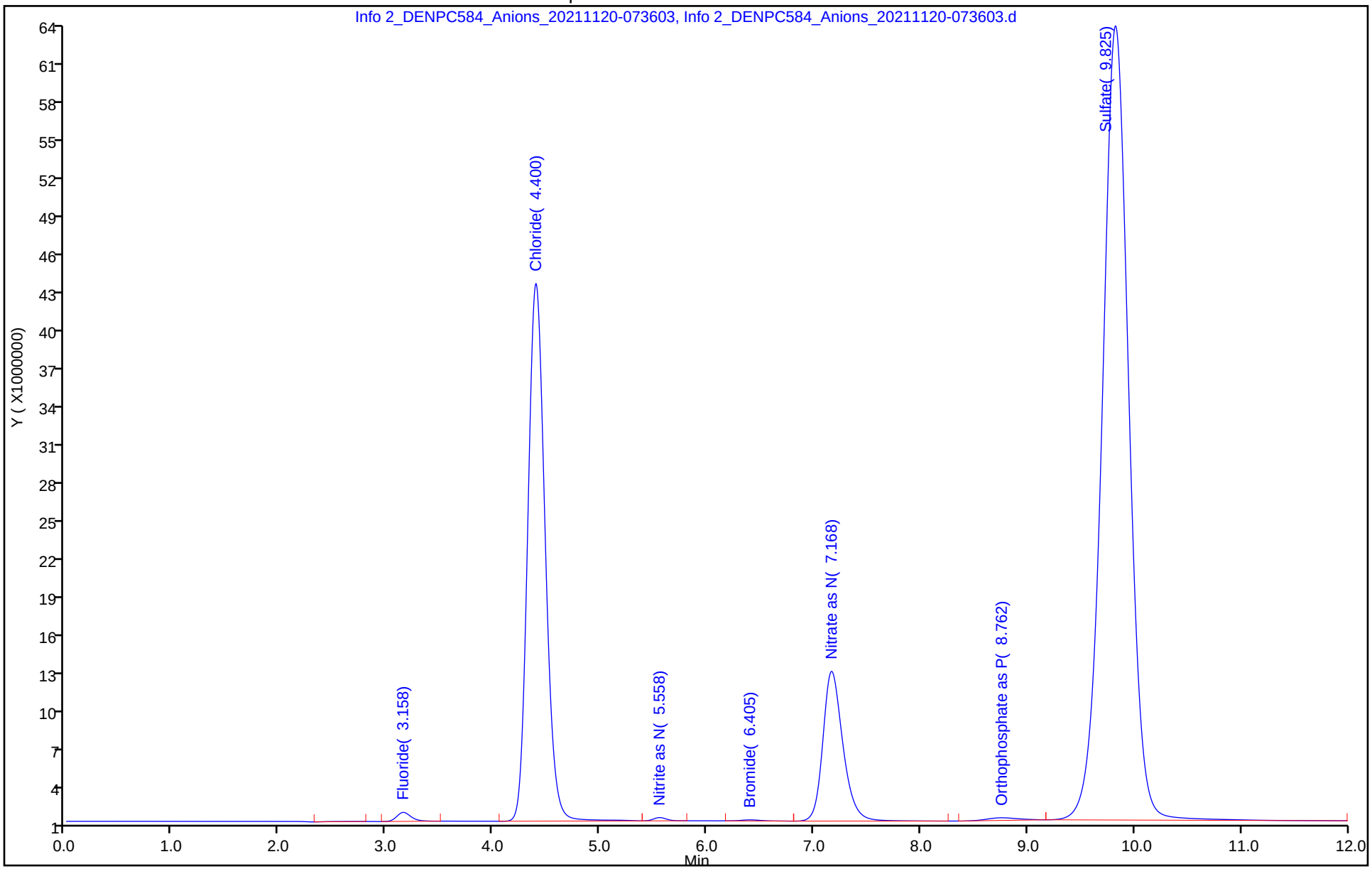
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-073603.d				
Injection Date:	20-Nov-2021 07:21:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-9	Lab Sample ID:	280-155015-9	Worklist Smp#:	88
Client ID:	G0080-7				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-075
Lims ID: 280-155015-F-10
Client ID: EW7-PM24A-7-25
Sample Type: Client
Inject. Date: 20-Nov-2021 07:36:00 ALS Bottle#: 0 Worklist Smp#: 89
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-089
Misc. Info.: 280-0106653-089
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:05 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.162	3.140	0.022	9167292	0.3349	
2 Chloride	4.445	4.365	0.080	629528510	36.0	
3 Nitrite as N		5.062			ND	
4 Bromide	6.423	6.012	0.411	1404634	0.2834	
5 Nitrate as N	7.235	7.158	0.077	46794506	NC	
7 Orthophosphate as P	8.842	8.682	0.160	688415	NC	
6 Sulfate	9.848	9.828	0.020	593281658	45.5	

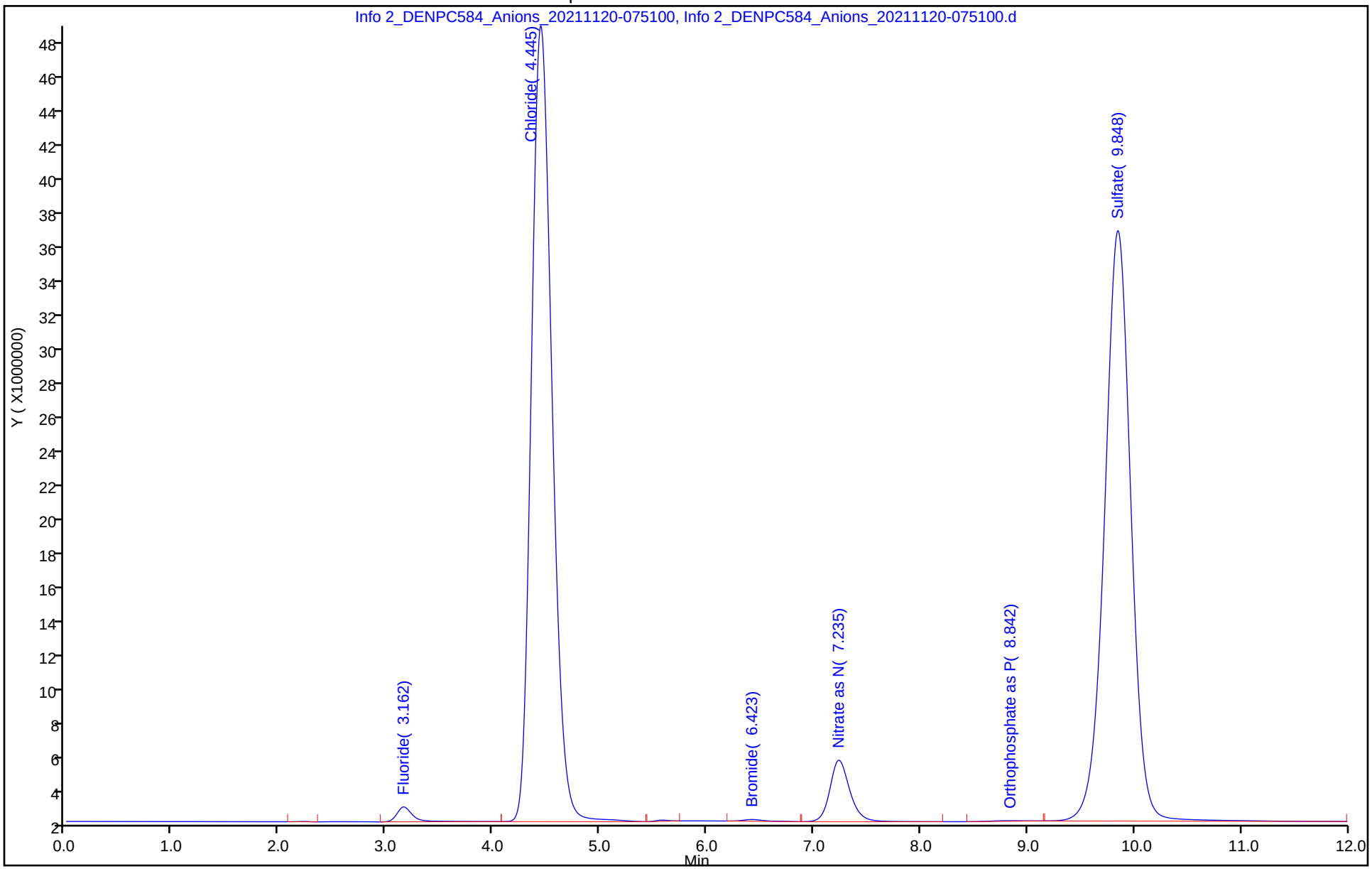
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-075100.d				
Injection Date:	20-Nov-2021 07:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-10	Lab Sample ID:	280-155015-10	Worklist Smp#:	89
Client ID:	EW7-PM24A-7-25				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-080
Lims ID: 280-155015-F-11
Client ID: G0079-7
Sample Type: Client
Inject. Date: 20-Nov-2021 07:51:00 ALS Bottle#: 0 Worklist Smp#: 90
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-090
Misc. Info.: 280-0106653-090
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:05 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.157	3.140	0.017	8658656	0.3260	
2 Chloride	4.362	4.365	-0.003	286722553	16.6	
3 Nitrite as N		5.062			ND	
4 Bromide	5.867	6.012	-0.145	127678	0.1023	
5 Nitrate as N	7.265	7.158	0.107	6887143	NC	
7 Orthophosphate as P	8.718	8.682	0.036	11574760	NC	
6 Sulfate	9.843	9.828	0.015	399208493	30.7	

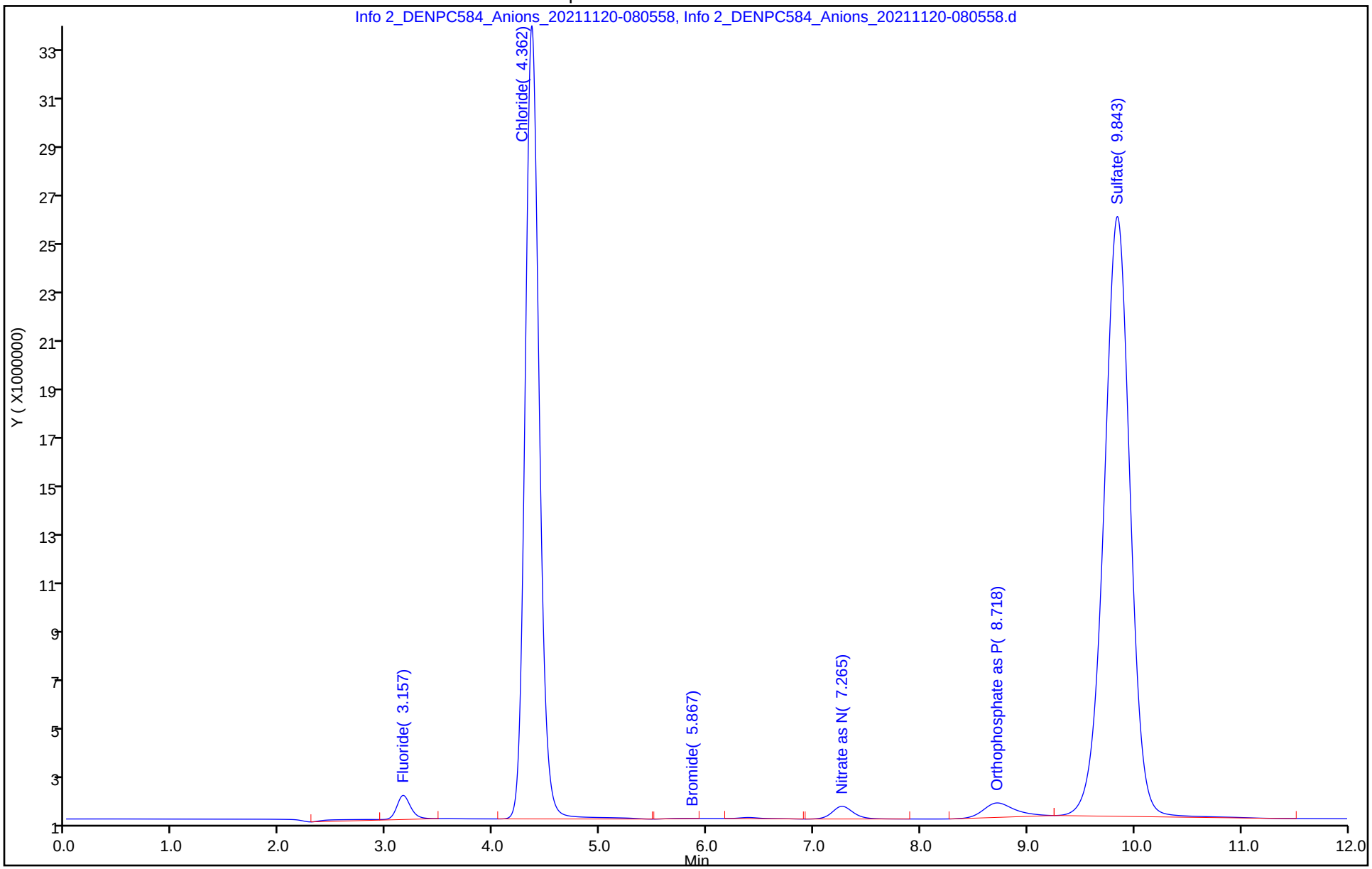
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 17:04:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-080558.d				
Injection Date:	20-Nov-2021 07:51:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-155015-F-11	Lab Sample ID:	280-155015-11	Worklist Smp#:	90
Client ID:	G0079-7				
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-093				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	20-Nov-2021 09:20:00	ALS Bottle#:	0	Worklist Smp#:	96
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0106653-096				
Misc. Info.:	280-0106653-096				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Sublist:	chrom-Anions-IC13*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	22-Nov-2021 17:04:09	Calib Date:	01-Nov-2021 18:40:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185				
Column 1 :			Det: 0005		
Process Host:	CTX1607				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.173	3.140	0.033	158188038	5.00	2.94	
2 Chloride	4.393	4.365	0.028	1746398669	100.0	99.2	
3 Nitrite as N	5.075	5.062	0.013	199998460	NC	NC	
4 Bromide	6.315	6.012	0.303	32760838	5.00	4.73	
5 Nitrate as N	7.115	7.158	-0.043	209103474	NC	NC	
7 Orthophosphate as P	8.662	8.682	-0.020	106104100	NC	NC	
6 Sulfate	9.817	9.828	-0.011	1285695259	100.0	98.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

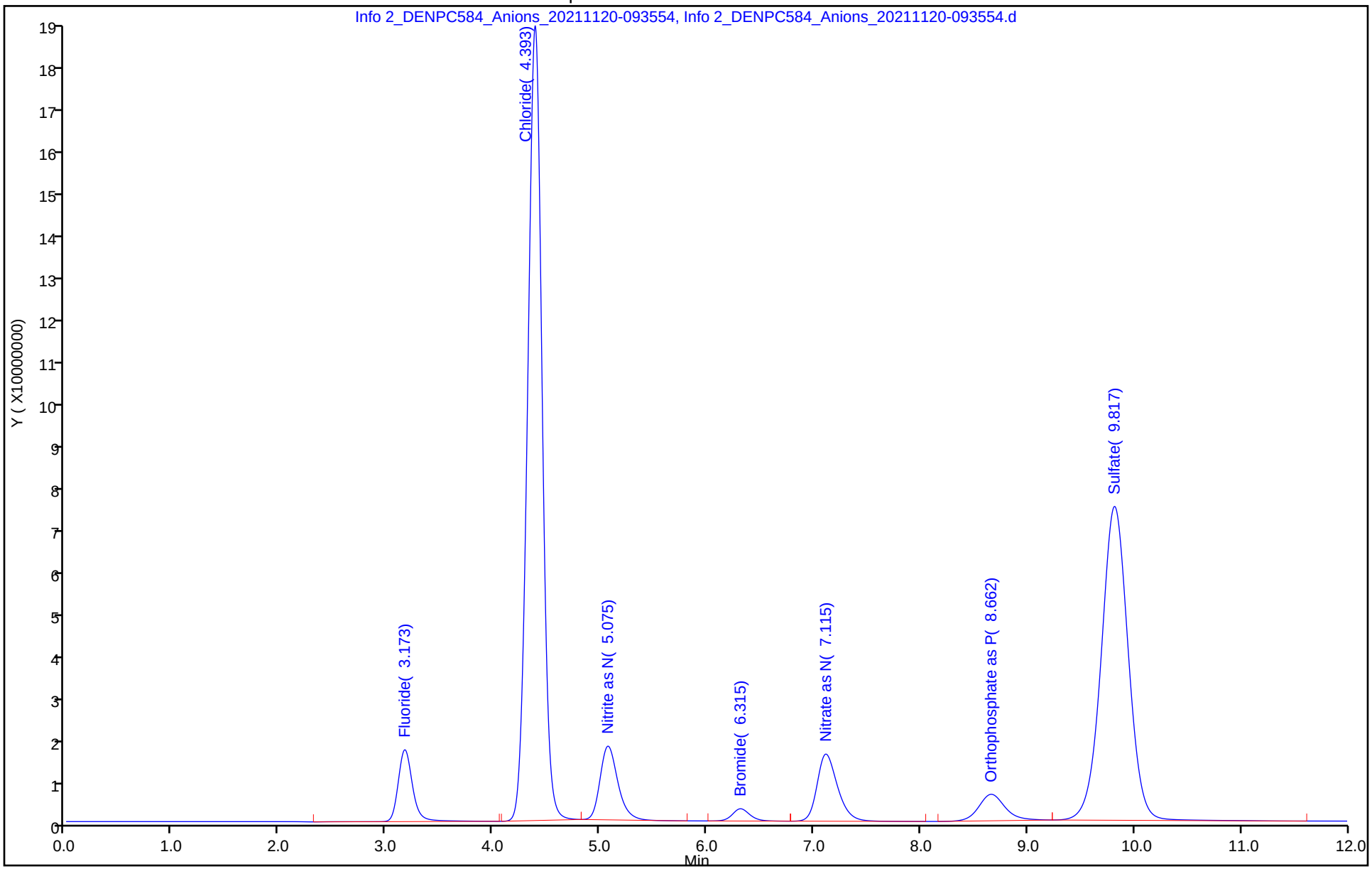
IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 17:04:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-093554.d

Injection Date:	20-Nov-2021 09:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	96
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\20211119-106653.b\Info 2_DENPC584_Anions_20211120-095
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 09:35:00 ALS Bottle#: 0 Worklist Smp#: 97
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106653-097
Misc. Info.: 280-0106653-097
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 17:04:09 Calib Date: 01-Nov-2021 18:40:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211101-106089.b\Info 2_DENPC584_Anions_20211101-185

Column 1 : Det: 0005
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 17:03:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride	4.372	4.365	0.007	497109		0.3544	M
3 Nitrite as N		5.062				ND	
4 Bromide	5.995	6.012	-0.017	131758		0.1029	
5 Nitrate as N		7.158				ND	
7 Orthophosphate as P	8.772	8.682	0.090	2523811		NC	
6 Sulfate	9.887	9.828	0.059	6695996		0.8916	

QC Flag Legend

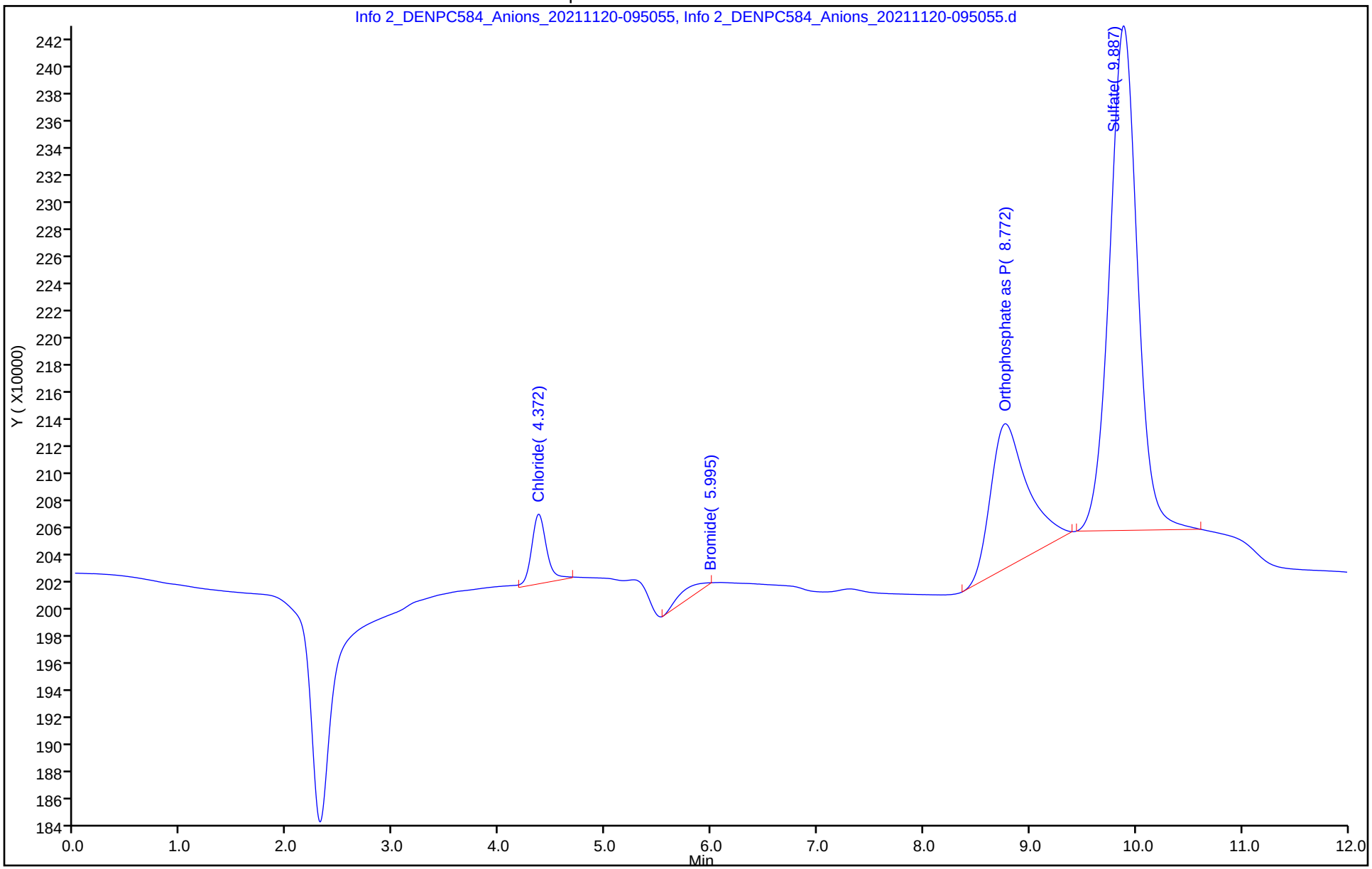
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 22-Nov-2021 17:04:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20211119-106653.b\Info 2_DENPC584_Anions_20211120-095055.d

Injection Date:	20-Nov-2021 09:35:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	97
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	C	Status
1	Unknow	NPOC	ICV		NPOC.met	1.000	NPOC:19.08mg/L			Completed
2	Unknow	NPOC	ICB		NPOC.met	1.000	NPOC:0.09116mg/L			Completed
3	Unknow	NPOC	LCS		NPOC.met	1.000	NPOC:24.27mg/L			Completed
4	Unknow	NPOC	MB		NPOC.met	1.000	NPOC:0.1018mg/L			Completed
5	Unknow	NPOC	TIC		NPOC.met	1.000	NPOC:0.1447mg/L			Completed
6	Unknow	NPOC	280-154997-b-1		NPOC.met	1.000	NPOC:0.4452mg/L			Completed
7	Unknow	NPOC	MS 280-154997-b-1		NPOC.met	1.000	NPOC:25.40mg/L			Completed
8	Unknow	NPOC	MSD 280-154997-b-1		NPOC.met	1.000	NPOC:25.40mg/L			Completed
9	Unknow	NPOC	280-154997-b-2		NPOC.met	1.000	NPOC:0.4207mg/L			Completed
10	Unknow	NPOC	280-154997-b-3		NPOC.met	1.000	NPOC:0.3945mg/L			Completed
11	Unknow	NPOC	280-154997-b-4		NPOC.met	1.000	NPOC:0.4508mg/L			Completed
12	Unknow	NPOC	280-154997-c-5		NPOC.met	1.000	NPOC:0.4157mg/L			Completed
13	Unknow	NPOC	280-154937-a-13		NPOC.met	2.000	NPOC:59.24mg/L			Completed
14	Unknow	NPOC	280-155002-c-2		NPOC.met	10.00	NPOC:127.5mg/L			Completed
15	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:24.30mg/L			Completed
16	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.09718mg/L			Completed
17	Unknow	NPOC	280-155002-c-3		NPOC.met	20.00	NPOC:358.2mg/L			Completed
18	Unknow	NPOC	280-155002-c-4		NPOC.met	20.00	NPOC:382.3mg/L			Completed
19	Unknow	NPOC	280-154996-e-1		NPOC.met	1.000	NPOC:43.11mg/L			Completed
20	Unknow	NPOC	580-106856-f-1		NPOC.met	1.000	NPOC:2.407mg/L			Completed
21	Unknow	NPOC	MS 580-106856-f-1		NPOC.met	1.000	NPOC:26.74mg/L			Completed
22	Unknow	NPOC	MSD 580-106856-f-1		NPOC.met	1.000	NPOC:26.81mg/L			Completed
23	Unknow	NPOC	580-106856-f-2		NPOC.met	1.000	NPOC:3.579mg/L			Completed
24	Unknow	NPOC	580-106856-f-3		NPOC.met	1.000	NPOC:2.775mg/L			Completed
25	Unknow	NPOC	580-106856-f-4		NPOC.met	1.000	NPOC:2.560mg/L			Completed
26	Unknow	NPOC	580-106856-f-5		NPOC.met	1.000	NPOC:4.759mg/L			Completed
27	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:24.71mg/L			Completed
28	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1221mg/L			Completed
29	Unknow	NPOC	580-106856-f-6		NPOC.met	1.000	NPOC:1.513mg/L			Completed
30	Unknow	NPOC	580-106856-f-7		NPOC.met	1.000	NPOC:1.979mg/L			Completed
31	Unknow	NPOC	580-106856-f-8		NPOC.met	1.000	NPOC:1.893mg/L			Completed
32	Unknow	NPOC	580-106856-f-9		NPOC.met	1.000	NPOC:1.955mg/L			Completed
33	Unknow	NPOC	580-106856-f-10		NPOC.met	1.000	NPOC:3.990mg/L			Completed
34	Unknow	NPOC	lcs 280-556007/1-a		NPOC.met	1.000	NPOC:24.61mg/L			Completed
35	Unknow	NPOC	mb 280-556007/2-a		NPOC.met	1.000	NPOC:0.2214mg/L			Completed
36	Unknow	NPOC	280-154948-d-1-a		NPOC.met	1.000	NPOC:5.016mg/L			Completed
37	Unknow	NPOC	280-154948-d-1-b ms		NPOC.met	1.000	NPOC:30.09mg/L			Completed
38	Unknow	NPOC	280-154948-d-1-c msd		NPOC.met	1.000	NPOC:30.21mg/L			Completed
39	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:25.10mg/L			Completed
40	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1234mg/L			Completed
41	Unknow	NPOC	280-155015-d-1-a		NPOC.met	1.000	NPOC:31.64mg/L			Completed
42	Unknow	NPOC	280-155015-d-2-a		NPOC.met	1.000	NPOC:11.88mg/L			Completed
43	Unknow	NPOC	280-155015-d-3-a		NPOC.met	1.000	NPOC:13.15mg/L			Completed
44	Unknow	NPOC	280-155015-d-4-a		NPOC.met	1.000	NPOC:6.444mg/L			Completed
45	Unknow	NPOC	280-155015-d-5-a		NPOC.met	1.000	NPOC:17.53mg/L			Completed
46	Unknow	NPOC	280-155015-d-6-a		NPOC.met	1.000	NPOC:9.671mg/L			Completed
47	Unknow	NPOC	280-155015-d-7-a		NPOC.met	1.000	NPOC:7.555mg/L			Completed
48	Unknow	NPOC	280-155015-d-8-a		NPOC.met	1.000	NPOC:14.13mg/L			Completed
49	Unknow	NPOC	280-155015-d-9-a		NPOC.met	1.000	NPOC:4.048mg/L			Completed
50	Unknow	NPOC	280-155015-d-10-a		NPOC.met	1.000	NPOC:8.412mg/L			Completed
51	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:24.74mg/L			Completed
52	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1301mg/L			Completed
53	Unknow	NPOC	280-155015-d-10-b ms		NPOC.met	1.000	NPOC:34.17mg/L			Completed

	A	Date / Time	Vial
1		11/3/2021 4:03:40 PM	1
2		11/3/2021 4:18:31 PM	2
3		11/3/2021 4:33:23 PM	3
4		11/3/2021 4:48:14 PM	4
5		11/3/2021 5:03:05 PM	5
6		11/3/2021 5:17:56 PM	6
7		11/3/2021 5:32:47 PM	7
8		11/3/2021 5:47:38 PM	8
9		11/3/2021 6:02:29 PM	9
10		11/3/2021 6:17:20 PM	10
11		11/3/2021 6:34:16 PM	11
12		11/3/2021 6:51:11 PM	12
13		11/3/2021 7:06:01 PM	13
14		11/3/2021 7:20:52 PM	14
15		11/3/2021 7:35:43 PM	15
16		11/3/2021 7:50:34 PM	16
17		11/3/2021 8:05:25 PM	17
18		11/3/2021 8:20:16 PM	18
19		11/3/2021 8:35:07 PM	19
20		11/3/2021 8:54:09 PM	20
21		11/3/2021 9:08:53 PM	21
22		11/3/2021 9:23:44 PM	22
23		11/3/2021 9:40:40 PM	23
24		11/3/2021 9:55:30 PM	24
25		11/3/2021 10:16:31 PM	25
26		11/3/2021 10:31:15 PM	26
27		11/3/2021 10:46:07 PM	27
28		11/3/2021 11:00:59 PM	28
29		11/3/2021 11:17:56 PM	29
30		11/3/2021 11:32:46 PM	30
31		11/3/2021 11:49:42 PM	31
32		11/4/2021 12:06:58 AM	32
33		11/4/2021 12:21:48 AM	33
34		11/4/2021 12:36:41 AM	34
35		11/4/2021 12:51:33 AM	35
36		11/4/2021 1:06:25 AM	36
37		11/4/2021 1:21:17 AM	37
38		11/4/2021 1:36:09 AM	38
39		11/4/2021 1:51:01 AM	39
40		11/4/2021 2:05:53 AM	40
41		11/4/2021 2:20:45 AM	41
42		11/4/2021 2:35:37 AM	42
43		11/4/2021 2:50:29 AM	43
44		11/4/2021 3:05:21 AM	44
45		11/4/2021 3:20:13 AM	45
46		11/4/2021 3:35:05 AM	46
47		11/4/2021 3:49:57 AM	47
48		11/4/2021 4:04:49 AM	48
49		11/4/2021 4:19:41 AM	49
50		11/4/2021 4:34:33 AM	50
51		11/4/2021 4:49:25 AM	51
52		11/4/2021 5:04:17 AM	52
53		11/4/2021 5:19:09 AM	53

	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	C	Status
54	Unknow	NPOC	280-155015-d-10-c msd		NPOC.met	1.000	NPOC:34.16mg/L			Completed
55	Unknow	NPOC	280-155015-d-11-a		NPOC.met	1.000	NPOC:5.986mg/L			Completed
56	Unknow	NPOC	280-155015-d-12-a		NPOC.met	1.000	NPOC:3.203mg/L			Completed
57	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:24.92mg/L			Completed
58	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1340mg/L			Completed

	A	Date / Time	Vial
54		11/4/2021 5:34:01 AM	54
55		11/4/2021 5:48:53 AM	55
56		11/4/2021 6:03:45 AM	56
57		11/4/2021 6:18:37 AM	57
58		11/4/2021 6:33:29 AM	58

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥NPOC.2021_10_14_16_58_48.cal

Date of Creation 6:05:13 PM 10/14/2021
User
System TOC-V CPN

Cal. Curve

Sample Name: CAL
Sample ID:
Object ID 0A-100612-04635090-134654622668-0000
Cal. Curve: NPOC.2021_10_14_16_58_48.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.000	50uL	1	*******	E	10/14/2021 5:07:10 P
2	0.3334	50uL	1	*******		10/14/2021 5:09:16 P
3	0.2859	50uL	1	*******		10/14/2021 5:11:21 P

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 0.3096
SD Area 0.03359
CV Area 10.85%
Vial 88

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.680	50uL	1	*******		10/14/2021 5:20:00 P
2	3.772	50uL	1	*******		10/14/2021 5:22:06 P

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 3.726
SD Area 0.06505
CV Area 1.75%
Vial 89

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	12.90	50uL	1	*******		10/14/2021 5:30:45 P
2	13.01	50uL	1	*******		10/14/2021 5:32:51 P

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 12.96
SD Area 0.07778
CV Area 0.60%
Vial 90

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	27.37	50uL	1	*******		10/14/2021 5:41:31 P
2	27.07	50uL	1	*******		10/14/2021 5:43:37 P

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 27.22
SD Area 0.2121
CV Area 0.78%
Vial 91

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	68.60	50uL	1	*******		10/14/2021 5:52:16 P
2	66.78	50uL	1	*******		10/14/2021 5:54:27 P

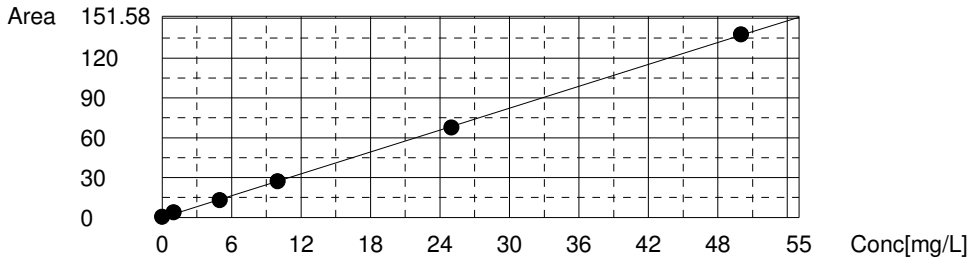
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 67.69
SD Area 1.287
CV Area 1.90%
Vial 92

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	139.3	50uL	1	*******		10/14/2021 6:03:07 P
2	136.3	50uL	1	*******		10/14/2021 6:05:13 P

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 137.8
SD Area 2.121
CV Area 1.54%
Vial 93

Slope: 2.745
Intercept -0.01886
r^2 0.9998
r 0.9999
Zero Shift No



Instr.Information

System	TOC-V CPN
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	ICV
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

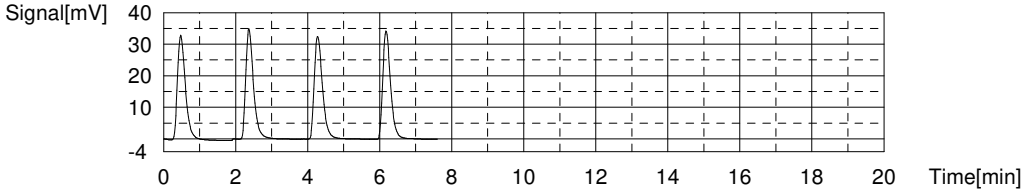
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.97	18.94mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 3:57:23 PM
2	52.96	19.30mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 3:59:29 PM
3	52.31	19.06mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:01:34 PM
4	52.17	19.01mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:03:40 PM

Mean Area 52.35
Mean Conc. 19.08mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

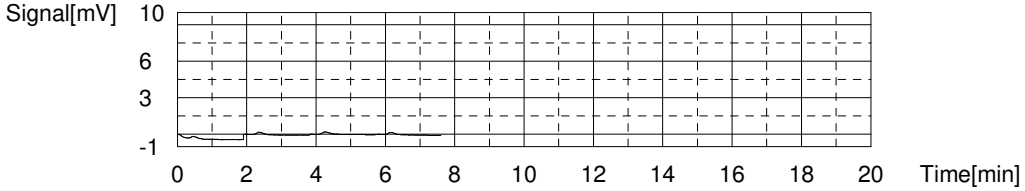
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09116mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1332	0.05539mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:12:14 PM
2	0.2621	0.1023mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:14:20 PM
3	0.3077	0.1190mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:16:25 PM
4	0.2226	0.08796mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:18:31 PM

Mean Area 0.2314
Mean Conc. 0.09116mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

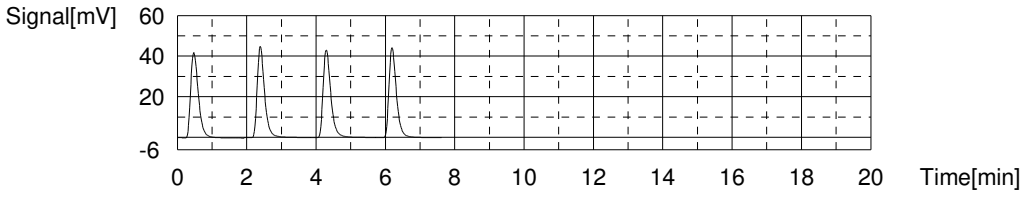
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.44	24.21mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:27:06 PM
2	66.68	24.30mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:29:12 PM
3	66.70	24.30mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:31:17 PM
4	66.58	24.26mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:33:23 PM

Mean Area 66.60
Mean Conc. 24.27mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

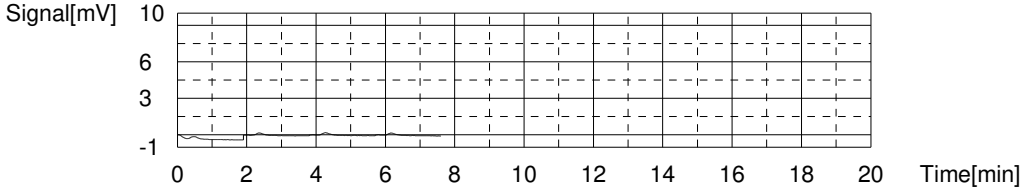
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1018mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2207	0.08727mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:41:57 PM
2	0.2522	0.09874mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:44:03 PM
3	0.3021	0.1169mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:46:08 PM
4	0.2673	0.1042mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:48:14 PM

Mean Area 0.2606
Mean Conc. 0.1018mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

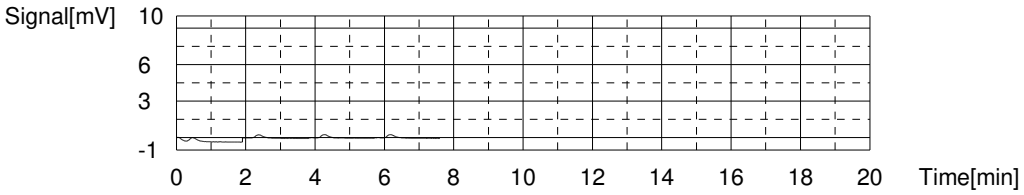
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1447mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3637	0.1394mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:56:48 PM
2	0.3750	0.1435mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 4:58:54 PM
3	0.3986	0.1521mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:00:59 PM
4	0.3763	0.1439mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:03:05 PM

Mean Area 0.3784
Mean Conc. 0.1447mg/L



Sample

Sample Name: 280-154997-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

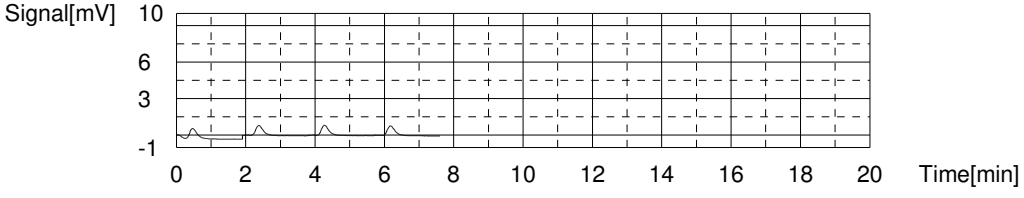
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4452mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.159	0.4291mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:11:39 PM
2	1.221	0.4516mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:13:45 PM
3	1.237	0.4575mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:15:50 PM
4	1.196	0.4425mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:17:56 PM

Mean Area 1.203
Mean Conc. 0.4452mg/L



Sample

Sample Name: MS 280-154997-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

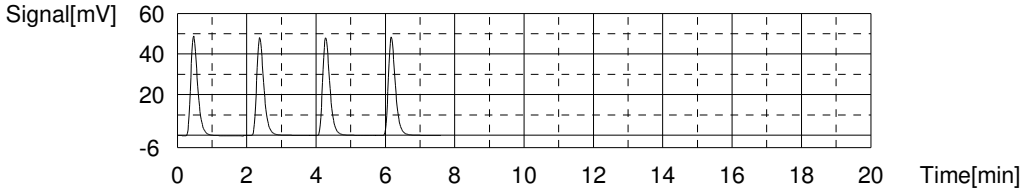
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.18	25.21mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:26:30 PM
2	70.01	25.51mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:28:36 PM
3	70.26	25.60mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:30:41 PM
4	69.36	25.27mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:32:47 PM

Mean Area 69.70
Mean Conc. 25.40mg/L



Sample

Sample Name: MSD 280-154997-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

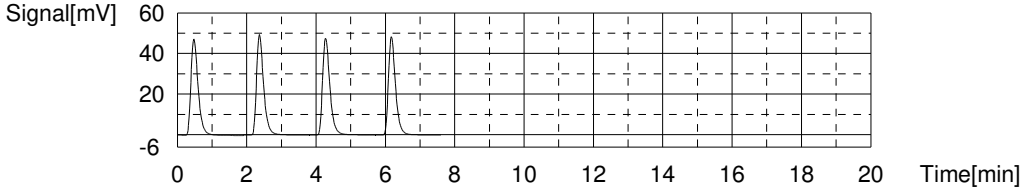
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.15	25.20mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:41:21 PM
2	70.55	25.71mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:43:27 PM
3	69.91	25.47mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:45:32 PM
4	69.24	25.23mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:47:38 PM

Mean Area 69.71
Mean Conc. 25.40mg/L



Sample

Sample Name: 280-154997-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

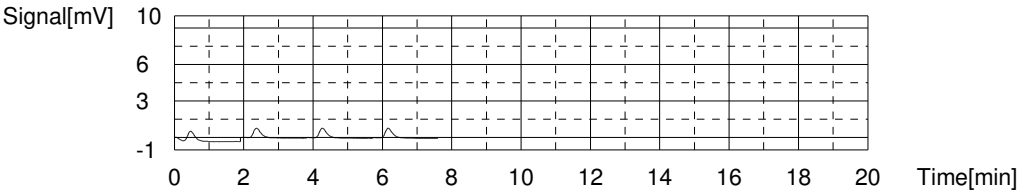
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4207mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.089	0.4036mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:56:12 PM
2	1.139	0.4218mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 5:58:18 PM
3	1.174	0.4345mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:00:23 PM
4	1.142	0.4229mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:02:29 PM

Mean Area 1.136
Mean Conc. 0.4207mg/L



Sample

Sample Name: 280-154997-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

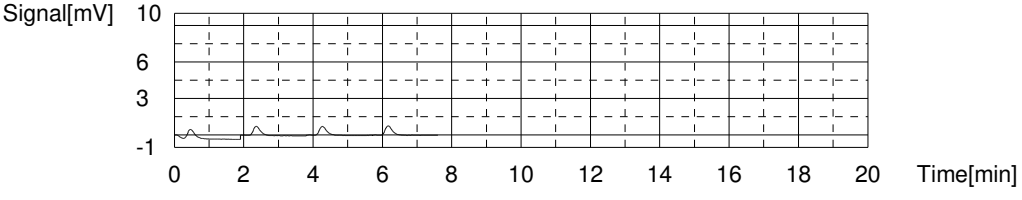
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3945mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.016	0.3770mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:11:03 PM
2	1.068	0.3959mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:13:09 PM
3	1.062	0.3937mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:15:14 PM
4	1.110	0.4112mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:17:20 PM

Mean Area 1.064
Mean Conc. 0.3945mg/L



Sample

Sample Name: 280-154997-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

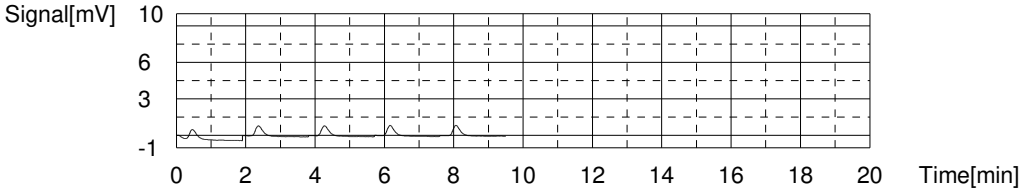
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4508mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9340	0.3471mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:25:54 PM
2	1.221	0.4516mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:28:00 PM
3	1.203	0.4451mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:30:05 PM
4	1.206	0.4462mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:32:11 PM
5	1.245	0.4604mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:34:16 PM

Mean Area 1.219
Mean Conc. 0.4508mg/L



Sample

Sample Name: 280-154997-c-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

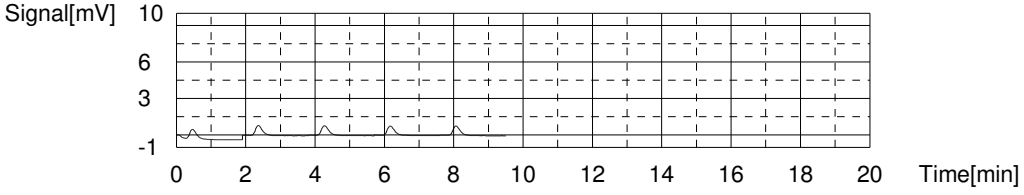
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4157mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9336	0.3470mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:42:49 PM
2	1.157	0.4283mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:44:55 PM
3	1.148	0.4251mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:47:00 PM
4	1.113	0.4123mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:49:06 PM
5	1.071	0.3970mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:51:11 PM

Mean Area 1.122
Mean Conc. 0.4157mg/L



Sample

Sample Name: 280-154937-a-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

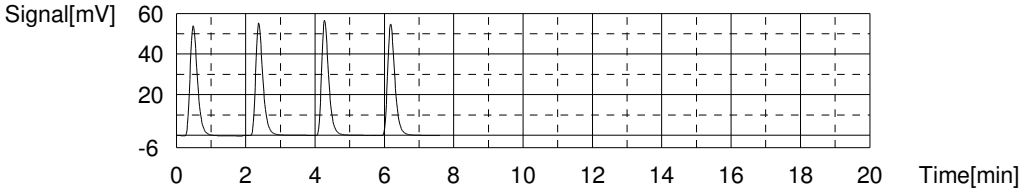
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:59.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.43	59.34mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 6:59:44 PM
2	81.35	59.28mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:01:50 PM
3	81.20	59.17mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:03:55 PM
4	81.17	59.15mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:06:01 PM

Mean Area 81.29
Mean Conc. 59.24mg/L



Sample

Sample Name: 280-155002-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

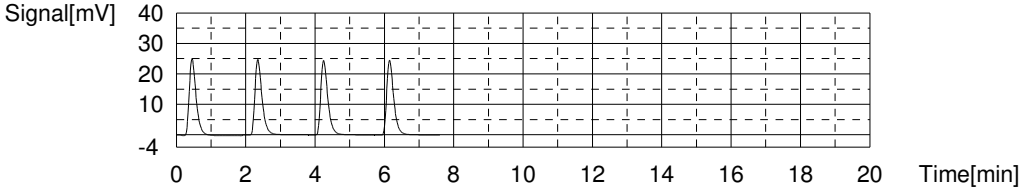
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:127.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.82	126.9mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:14:35 PM
2	35.53	129.5mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:16:41 PM
3	34.79	126.8mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:18:46 PM
4	34.84	127.0mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:20:52 PM

Mean Area 34.99
Mean Conc. 127.5mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

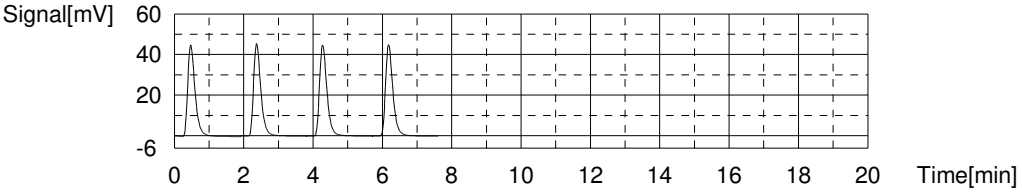
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.42	24.20mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:29:26 PM
2	66.99	24.41mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:31:32 PM
3	66.62	24.27mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:33:37 PM
4	66.71	24.31mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:35:43 PM

Mean Area 66.69
Mean Conc. 24.30mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

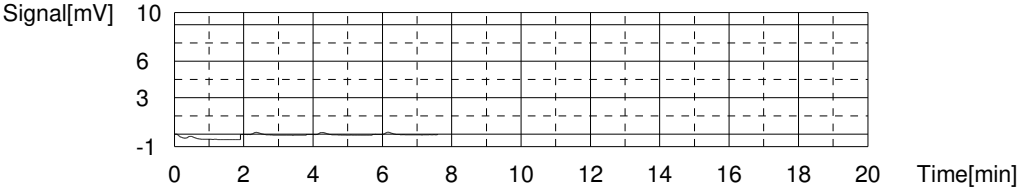
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09718mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1855	0.07444mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:44:17 PM
2	0.2782	0.1082mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:46:23 PM
3	0.2629	0.1026mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:48:28 PM
4	0.2651	0.1034mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:50:34 PM

Mean Area 0.2479
Mean Conc. 0.09718mg/L



Sample

Sample Name: 280-155002-c-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

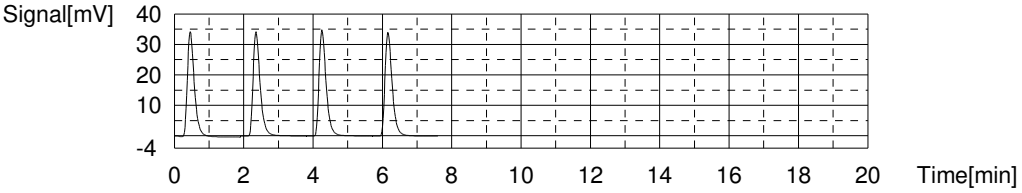
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:358.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.67	354.7mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 7:59:08 PM
2	48.92	356.5mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:01:14 PM
3	49.57	361.3mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:03:19 PM
4	49.45	360.4mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:05:25 PM

Mean Area 49.15
Mean Conc. 358.2mg/L



Sample

Sample Name: 280-155002-c-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

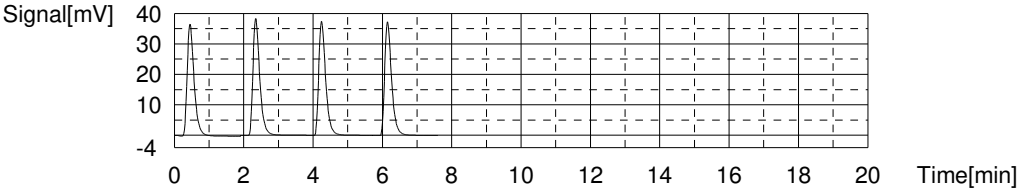
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:382.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.72	376.9mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:13:59 PM
2	53.21	387.8mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:16:05 PM
3	52.44	382.2mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:18:10 PM
4	52.45	382.3mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:20:16 PM

Mean Area 52.45
Mean Conc. 382.3mg/L



Sample

Sample Name: 280-154996-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

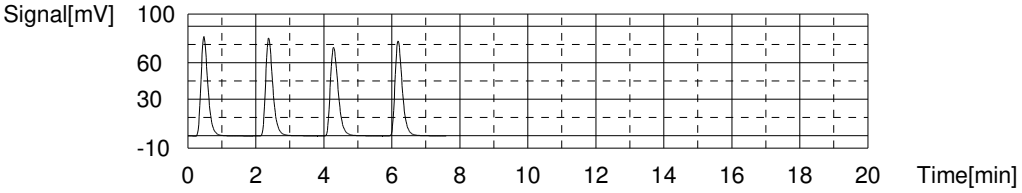
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:43.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	117.5	42.81mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:28:50 PM
2	119.8	43.65mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:30:56 PM
3	118.3	43.10mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:33:01 PM
4	117.7	42.88mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:35:07 PM

Mean Area 118.3
Mean Conc. 43.11mg/L



Sample

Sample Name: 580-106856-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

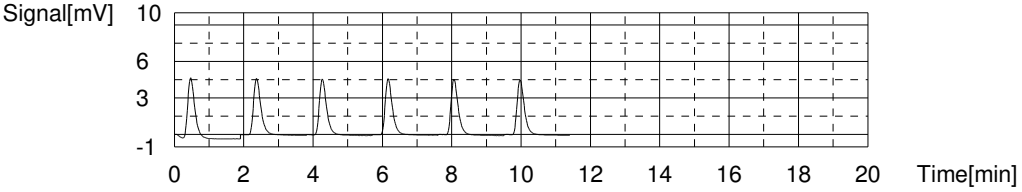
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.407mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.923	2.529mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:43:41 PM
2	6.835	2.497mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:45:47 PM
3	6.641	2.426mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:47:52 PM
4	6.598	2.410mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:49:58 PM
5	6.523	2.383mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:52:03 PM
6	6.593	2.409mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 8:54:09 PM

Mean Area 6.589
Mean Conc. 2.407mg/L



Sample

Sample Name: MS 580-106856-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

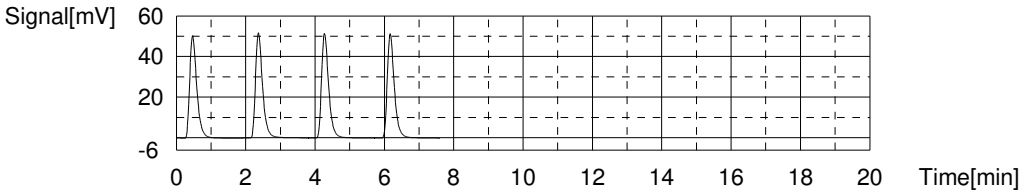
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.30	26.71mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:02:36 PM
2	73.62	26.82mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:04:42 PM
3	73.67	26.84mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:06:47 PM
4	72.91	26.57mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:08:53 PM

Mean Area 73.38
Mean Conc. 26.74mg/L



Sample

Sample Name: MSD 580-106856-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

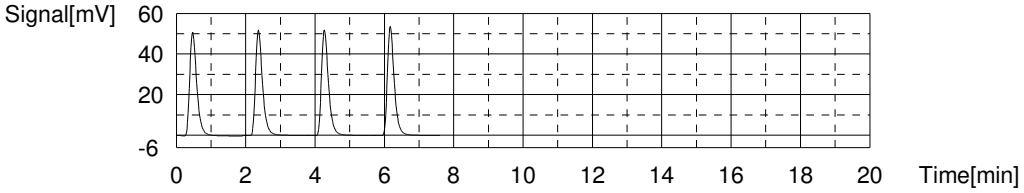
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.66	26.47mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:17:27 PM
2	73.48	26.77mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:19:33 PM
3	73.81	26.89mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:21:38 PM
4	74.42	27.12mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:23:44 PM

Mean Area 73.59
Mean Conc. 26.81mg/L



Sample

Sample Name: 580-106856-f-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

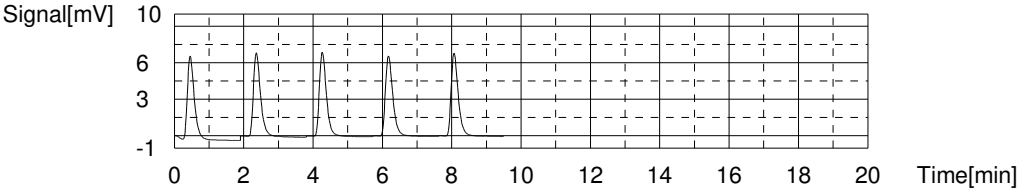
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.579mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.167	3.346mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:32:18 PM
2	9.880	3.606mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:34:24 PM
3	9.702	3.541mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:36:29 PM
4	9.886	3.608mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:38:35 PM
5	9.758	3.561mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:40:40 PM

Mean Area 9.807
Mean Conc. 3.579mg/L



Sample

Sample Name: 580-106856-f-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

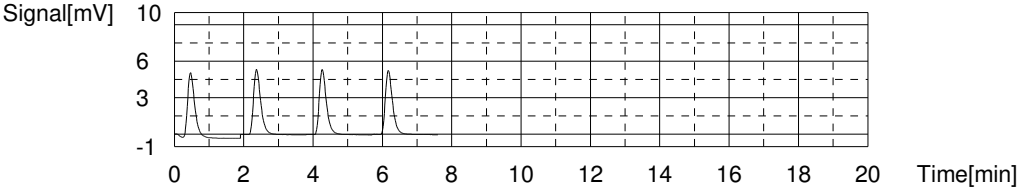
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.775mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.426	2.712mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:49:13 PM
2	7.763	2.835mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:51:19 PM
3	7.559	2.760mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:53:24 PM
4	7.653	2.795mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 9:55:30 PM

Mean Area 7.600
Mean Conc. 2.775mg/L



Sample

Sample Name: 580-106856-f-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

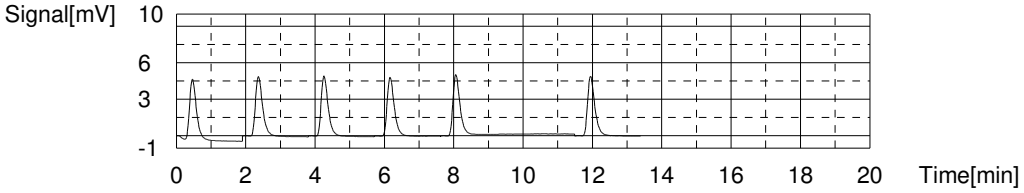
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.560mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.667	2.435mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:04:04 PM
2	7.054	2.576mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:06:10 PM
3	6.848	2.501mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:08:15 PM
4	6.977	2.548mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:10:21 PM
5	8.240	3.008mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:14:25 PM
6	7.153	2.613mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:16:31 PM

Mean Area 7.008
Mean Conc. 2.560mg/L



Sample

Sample Name: 580-106856-f-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

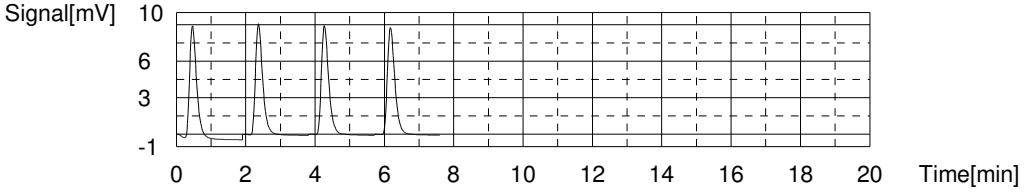
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.759mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.67	4.622mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:24:58 PM
2	13.20	4.815mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:27:04 PM
3	13.14	4.793mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:29:09 PM
4	13.17	4.804mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:31:15 PM

Mean Area 13.05
Mean Conc. 4.759mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

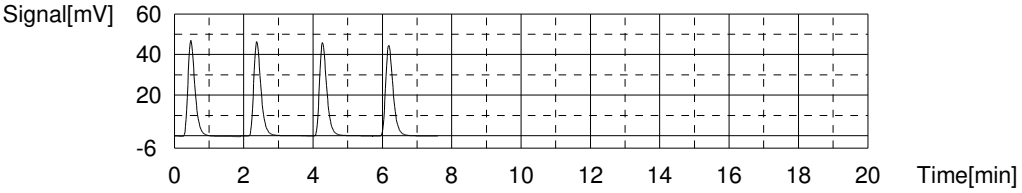
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.71mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.85	24.72mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:39:49 PM
2	67.96	24.76mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:41:55 PM
3	67.57	24.62mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:44:01 PM
4	67.93	24.75mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:46:07 PM

Mean Area 67.83
Mean Conc. 24.71mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

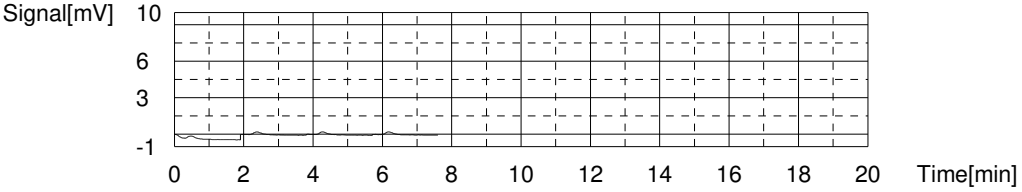
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1221mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2053	0.08166mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:54:43 PM
2	0.3651	0.1399mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:56:48 PM
3	0.3525	0.1353mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 10:58:54 PM
4	0.3426	0.1317mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:00:59 PM

Mean Area 0.3164
Mean Conc. 0.1221mg/L



Sample

Sample Name: 580-106856-f-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

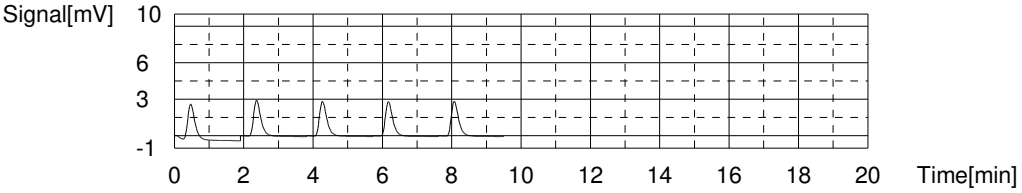
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.513mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.057	1.485mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:09:34 PM
2	4.271	1.563mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:11:39 PM
3	4.209	1.540mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:13:45 PM
4	4.086	1.495mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:15:50 PM
5	4.185	1.531mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:17:56 PM

Mean Area 4.134
Mean Conc. 1.513mg/L



Sample

Sample Name: 580-106856-f-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

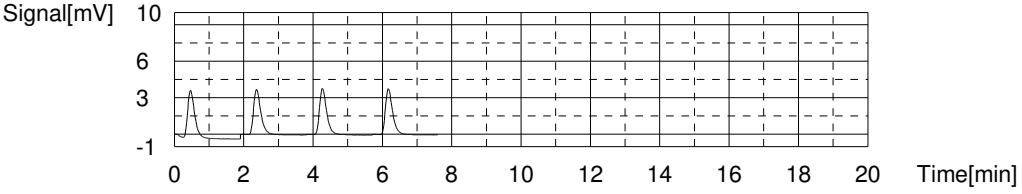
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.979mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.332	1.949mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:26:29 PM
2	5.415	1.979mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:28:34 PM
3	5.454	1.994mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:30:40 PM
4	5.454	1.994mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:32:46 PM

Mean Area 5.414
Mean Conc. 1.979mg/L



Sample

Sample Name: 580-106856-f-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

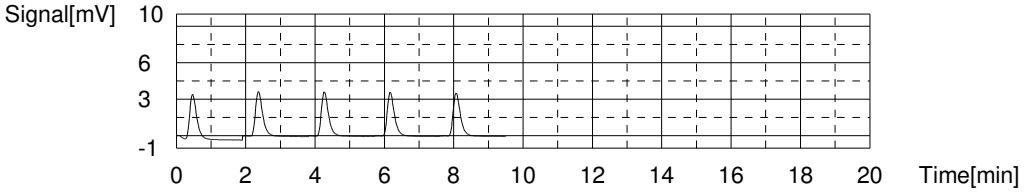
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.893mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.901	1.792mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:41:20 PM
2	5.291	1.934mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:43:25 PM
3	5.186	1.896mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:45:31 PM
4	5.137	1.878mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:47:37 PM
5	5.092	1.862mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:49:42 PM

Mean Area 5.177
Mean Conc. 1.893mg/L



Sample

Sample Name: 580-106856-f-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

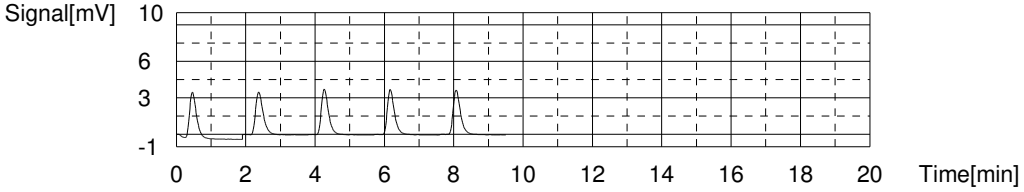
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.955mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.091	1.861mg/L	50uL	1	E	NPOC.2021_10_14_16_58_48.cal	11/3/2021 11:58:36 PM
2	5.334	1.950mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:00:41 AM
3	5.344	1.954mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:02:47 AM
4	5.315	1.943mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:04:53 AM
5	5.402	1.975mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:06:58 AM

Mean Area 5.349
Mean Conc. 1.955mg/L



Sample

Sample Name: 580-106856-f-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

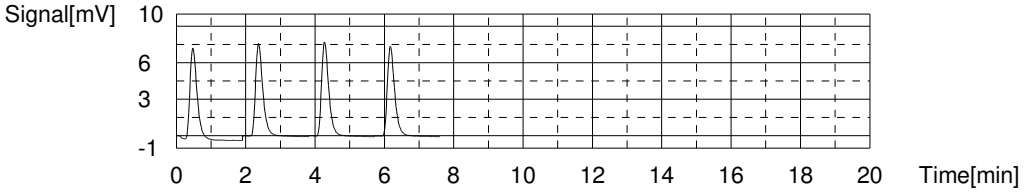
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.990mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.71	3.908mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:15:32 AM
2	11.06	4.036mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:17:37 AM
3	11.12	4.058mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:19:43 AM
4	10.85	3.959mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:21:48 AM

Mean Area 10.94
Mean Conc. 3.990mg/L



Sample

Sample Name: lcs 280-556007/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

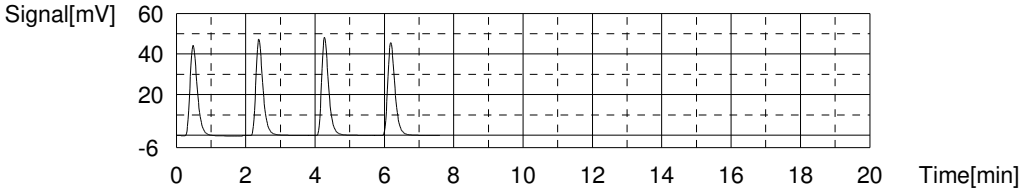
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.61mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.65	24.29mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:30:24 AM
2	68.18	24.84mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:32:29 AM
3	68.00	24.78mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:34:35 AM
4	67.38	24.55mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:36:41 AM

Mean Area 67.55
Mean Conc. 24.61mg/L



Sample

Sample Name: mb 280-556007/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

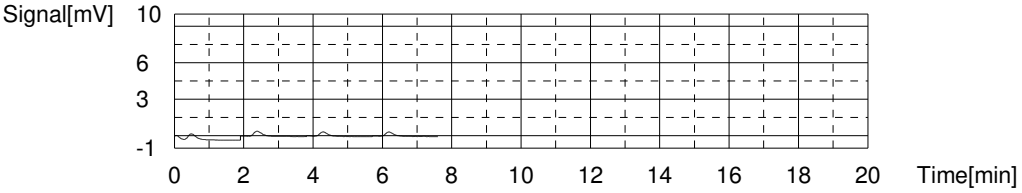
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2214mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6370	0.2389mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:45:16 AM
2	0.6349	0.2381mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:47:21 AM
3	0.5547	0.2089mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:49:27 AM
4	0.5296	0.1998mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 12:51:33 AM

Mean Area 0.5891
Mean Conc. 0.2214mg/L



Sample

Sample Name: 280-154948-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

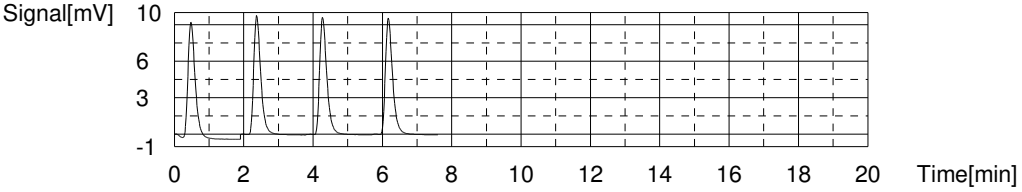
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.016mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.51	4.928mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:00:08 AM
2	13.78	5.027mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:02:13 AM
3	13.91	5.074mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:04:19 AM
4	13.80	5.034mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:06:25 AM

Mean Area 13.75
Mean Conc. 5.016mg/L



Sample

Sample Name: 280-154948-d-1-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

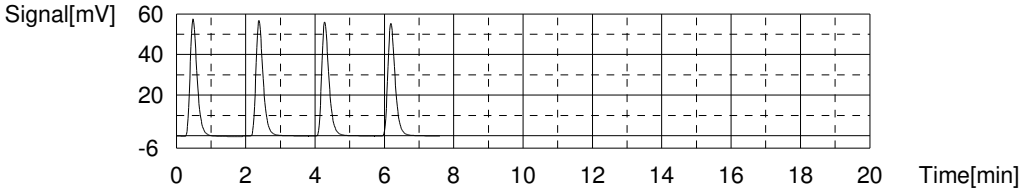
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.09mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.64	30.11mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:15:00 AM
2	82.81	30.17mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:17:05 AM
3	82.40	30.02mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:19:11 AM
4	82.51	30.06mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:21:17 AM

Mean Area 82.59
Mean Conc. 30.09mg/L



Sample

Sample Name: 280-154948-d-1-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

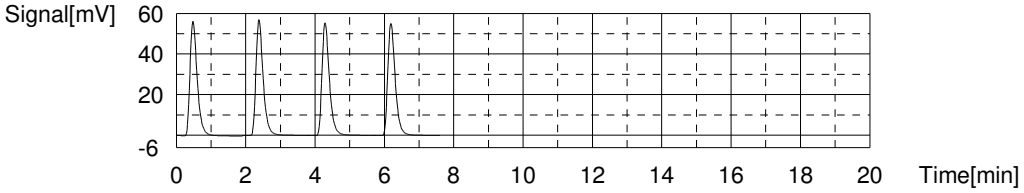
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.90	30.20mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:29:52 AM
2	83.16	30.30mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:31:57 AM
3	82.63	30.11mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:34:03 AM
4	83.01	30.25mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:36:09 AM

Mean Area 82.92
Mean Conc. 30.21mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

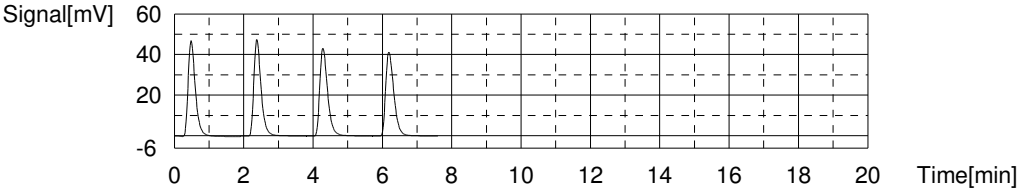
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.30	25.25mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:44:44 AM
2	69.49	25.32mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:46:49 AM
3	68.33	24.90mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:48:55 AM
4	68.45	24.94mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:51:01 AM

Mean Area 68.89
Mean Conc. 25.10mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

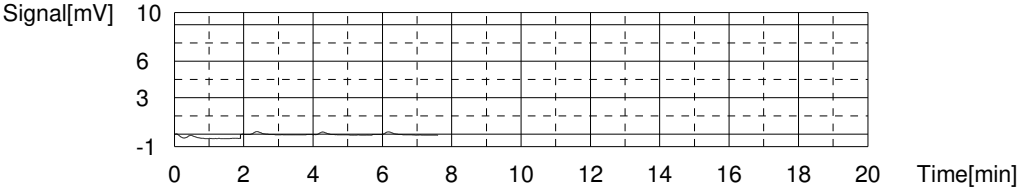
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1234mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2389	0.09390mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 1:59:36 AM
2	0.3783	0.1447mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:01:41 AM
3	0.3131	0.1209mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:03:47 AM
4	0.3494	0.1341mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:05:53 AM

Mean Area 0.3199
Mean Conc. 0.1234mg/L



Sample

Sample Name: 280-155015-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

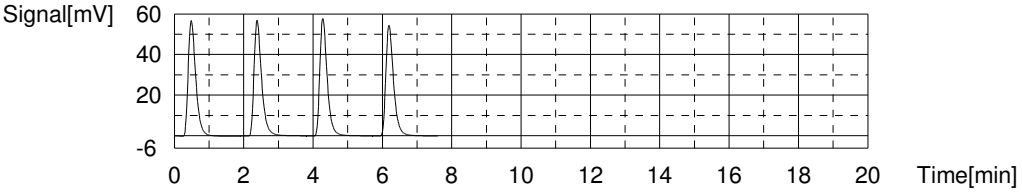
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.64mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.12	32.11mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:14:28 AM
2	87.94	32.04mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:16:33 AM
3	86.04	31.35mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:18:39 AM
4	85.31	31.08mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:20:45 AM

Mean Area 86.85
Mean Conc. 31.64mg/L



Sample

Sample Name: 280-155015-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

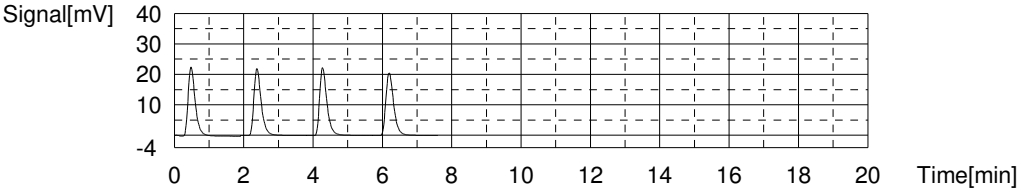
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.53	11.86mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:29:20 AM
2	32.60	11.88mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:31:25 AM
3	32.63	11.89mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:33:31 AM
4	32.60	11.88mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:35:37 AM

Mean Area 32.59
Mean Conc. 11.88mg/L



Sample

Sample Name: 280-155015-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

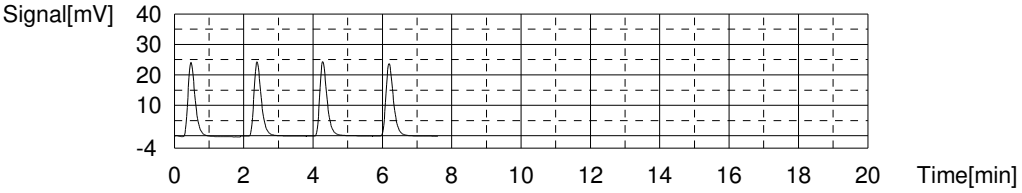
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.15mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.78	13.04mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:44:12 AM
2	36.16	13.18mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:46:17 AM
3	36.03	13.13mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:48:23 AM
4	36.36	13.25mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:50:29 AM

Mean Area 36.08
Mean Conc. 13.15mg/L



Sample

Sample Name: 280-155015-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

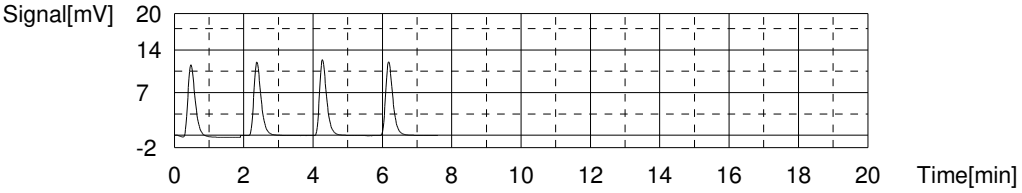
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.444mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.40	6.345mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 2:59:04 AM
2	17.73	6.465mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:01:09 AM
3	17.79	6.487mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:03:15 AM
4	17.76	6.476mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:05:21 AM

Mean Area 17.67
Mean Conc. 6.444mg/L



Sample

Sample Name: 280-155015-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

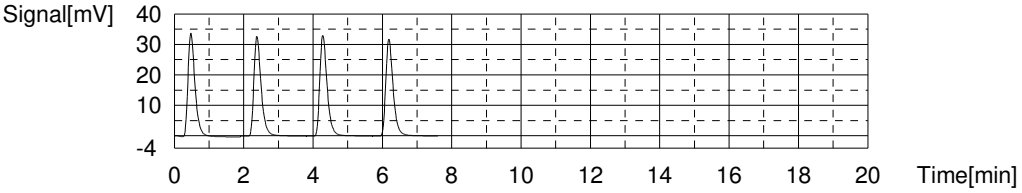
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.53	17.68mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:13:56 AM
2	47.96	17.48mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:16:01 AM
3	48.57	17.70mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:18:07 AM
4	47.33	17.25mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:20:13 AM

Mean Area 48.10
Mean Conc. 17.53mg/L



Sample

Sample Name: 280-155015-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

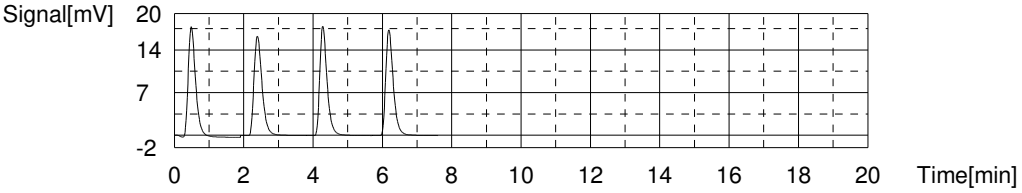
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.671mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.87	9.795mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:28:48 AM
2	26.43	9.635mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:30:53 AM
3	26.35	9.605mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:32:59 AM
4	26.47	9.649mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:35:05 AM

Mean Area 26.53
Mean Conc. 9.671mg/L



Sample

Sample Name: 280-155015-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

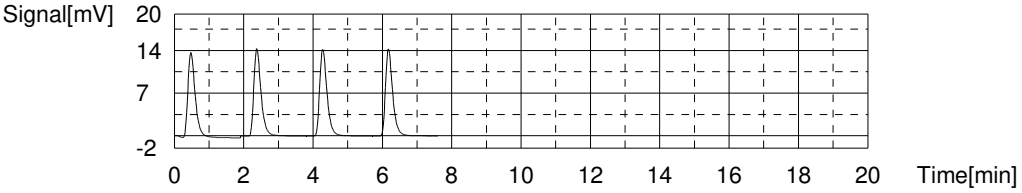
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.555mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.24	7.380mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:43:40 AM
2	20.94	7.635mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:45:45 AM
3	20.98	7.649mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:47:51 AM
4	20.73	7.558mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:49:57 AM

Mean Area 20.72
Mean Conc. 7.555mg/L



Sample

Sample Name: 280-155015-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

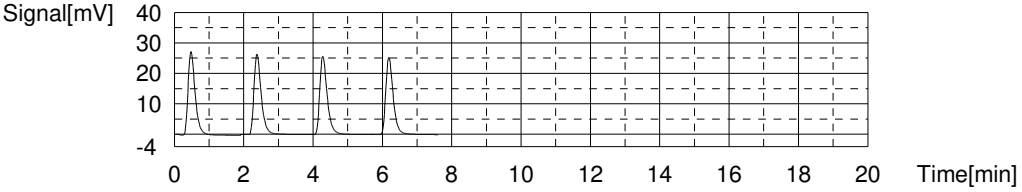
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.60	14.43mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 3:58:32 AM
2	38.86	14.16mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:00:37 AM
3	38.55	14.05mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:02:43 AM
4	38.08	13.88mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:04:49 AM

Mean Area 38.77
Mean Conc. 14.13mg/L



Sample

Sample Name: 280-155015-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

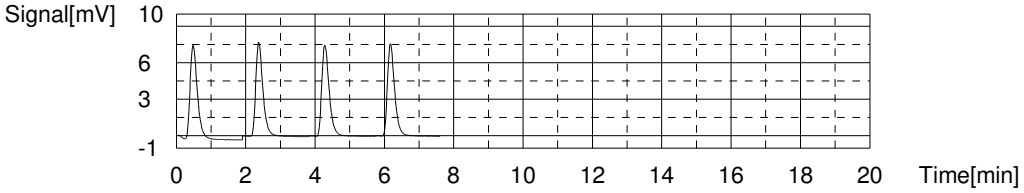
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.048mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.19	4.083mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:13:24 AM
2	11.16	4.072mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:15:30 AM
3	11.10	4.050mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:17:35 AM
4	10.93	3.988mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:19:41 AM

Mean Area 11.10
Mean Conc. 4.048mg/L



Sample

Sample Name: 280-155015-d-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

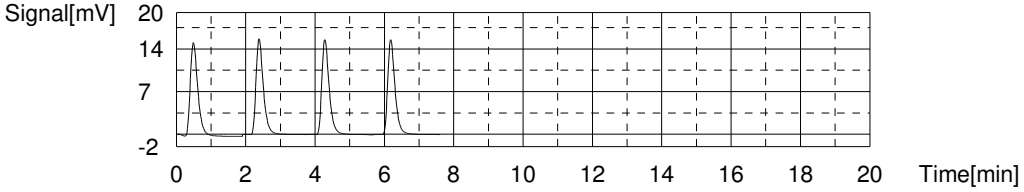
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.12	8.429mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:28:16 AM
2	23.30	8.494mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:30:21 AM
3	23.09	8.418mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:32:27 AM
4	22.79	8.309mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:34:33 AM

Mean Area 23.08
Mean Conc. 8.412mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

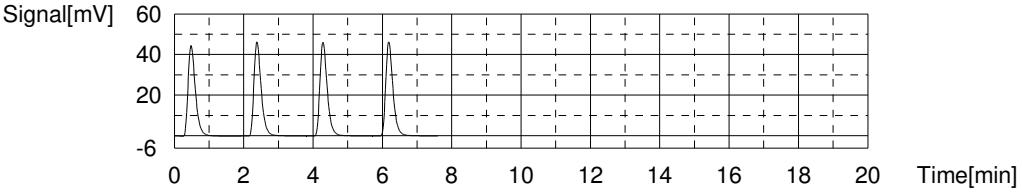
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.12	24.46mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:43:08 AM
2	68.21	24.85mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:45:13 AM
3	68.50	24.96mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:47:19 AM
4	67.74	24.68mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:49:25 AM

Mean Area 67.89
Mean Conc. 24.74mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

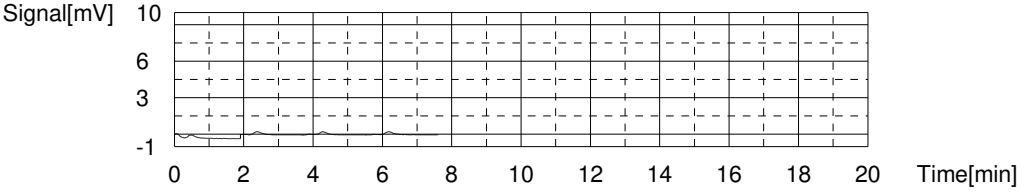
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1301mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3085	0.1192mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 4:58:00 AM
2	0.3841	0.1468mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:00:05 AM
3	0.3115	0.1203mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:02:11 AM
4	0.3494	0.1341mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:04:17 AM

Mean Area 0.3384
Mean Conc. 0.1301mg/L



Sample

Sample Name: 280-155015-d-10-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

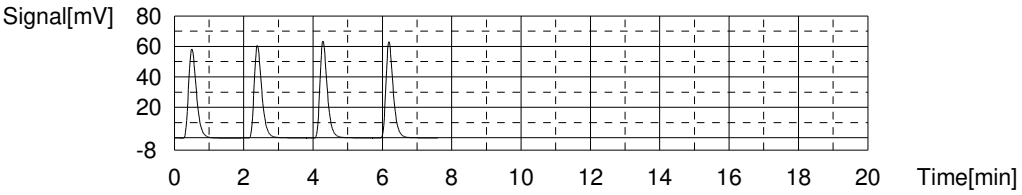
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:34.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	94.20	34.32mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:12:52 AM
2	94.37	34.38mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:14:58 AM
3	93.59	34.10mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:17:03 AM
4	93.03	33.90mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:19:09 AM

Mean Area 93.80
Mean Conc. 34.17mg/L



Sample

Sample Name: 280-155015-d-10-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

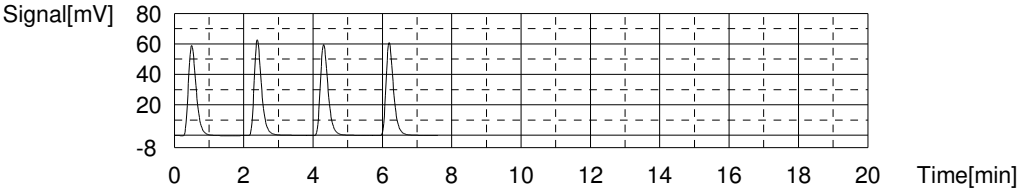
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:34.16mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	94.31	34.36mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:27:44 AM
2	94.25	34.34mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:29:50 AM
3	93.67	34.13mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:31:55 AM
4	92.76	33.80mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:34:01 AM

Mean Area 93.75
Mean Conc. 34.16mg/L



Sample

Sample Name: 280-155015-d-11-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

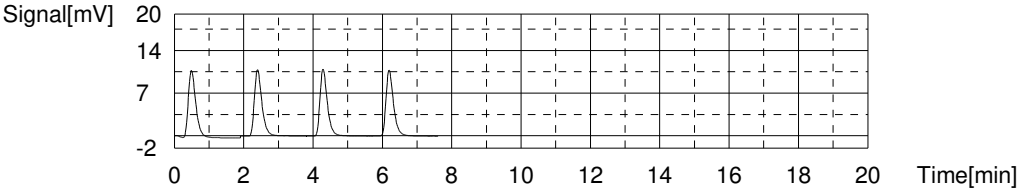
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.986mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.59	6.050mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:42:36 AM
2	16.53	6.028mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:44:41 AM
3	16.20	5.908mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:46:47 AM
4	16.34	5.959mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:48:53 AM

Mean Area 16.42
Mean Conc. 5.986mg/L



Sample

Sample Name: 280-155015-d-12-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

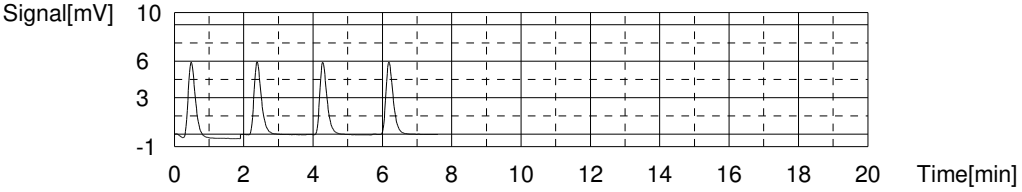
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.203mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.760	3.198mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:57:28 AM
2	8.874	3.239mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 5:59:33 AM
3	8.665	3.163mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:01:39 AM
4	8.792	3.210mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:03:45 AM

Mean Area 8.773
Mean Conc. 3.203mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

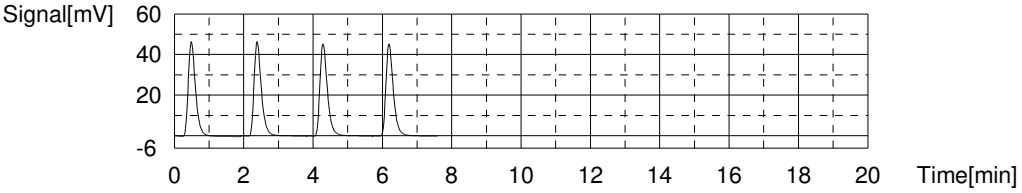
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.92mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.73	25.04mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:12:20 AM
2	68.49	24.96mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:14:26 AM
3	68.46	24.94mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:16:31 AM
4	67.90	24.74mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:18:37 AM

Mean Area 68.40
Mean Conc. 24.92mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

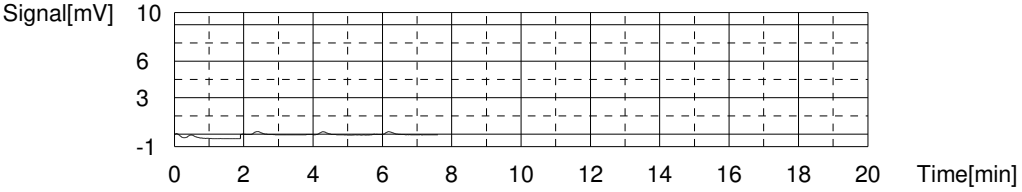
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1340mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3048	0.1179mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:27:12 AM
2	0.3843	0.1469mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:29:18 AM
3	0.3669	0.1405mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:31:23 AM
4	0.3397	0.1306mg/L	50uL	1		NPOC.2021_10_14_16_58_48.cal	11/4/2021 6:33:29 AM

Mean Area 0.3489
Mean Conc. 0.1340mg/L



 Sh:4

9060A

	Type	Analysis	Sample Name	Sa	O	M	Result (pH <2)	Notes	C	St	A	D	Vial
1*	Unknow	NPOC	ICV		N	1	✓			D			1
2*	Unknow	NPOC	ICB		N	1	✓			D			2
3*	Unknow	NPOC	LCS		N	1	✓			D			3
4*	Unknow	NPOC	MB		N	1	✓			D			4
5*	Unknow	NPOC	TIC		N	1	✓			D			5
6*	Unknow	NPOC	280-154997-b-1		N	1	✓			D			6
7*	Unknow	NPOC	MS 280-154997-b-1		N	1	✓			D			7
8*	Unknow	NPOC	MSD 280-154997-b-1		N	1	✓			D			8
9*	Unknow	NPOC	280-154997-b-2		N	1	✓			D			9
10*	Unknow	NPOC	280-154997-b-3		N	1	✓			D			10
11*	Unknow	NPOC	280-154997-b-4		N	1	✓			D			11
12*	Unknow	NPOC	280-154997-c-5		N	1	✓			D			12
13*	Unknow	NPOC	280-154937-a-13		N	1	✓	2X Dil-rerun		D			13
14*	Unknow	NPOC	280-155002-c-2		N	1	✓	10X Dil-odor		D			14
15*	Unknow	NPOC	CCV		N	1	✓			D			15
16*	Unknow	NPOC	CCB		N	1	✓			D			16
17*	Unknow	NPOC	280-155002-c-3		N	1	✓	20X Dil-odor		D			17
18*	Unknow	NPOC	280-155002-c-4		N	1	✓	20X Dil-odor		D			18
19*	Unknow	NPOC	280-154996-e-1		N	1	✓			D			19
20*	Unknow	NPOC	580-106856-f-1		N	1	✓			D			20
21*	Unknow	NPOC	MS 580-106856-f-1		N	1	✓			D			21
22*	Unknow	NPOC	MSD 580-106856-f-1		N	1	✓			D			22
23*	Unknow	NPOC	580-106856-f-2		N	1	✓			D			23
24*	Unknow	NPOC	580-106856-f-3		N	1	✓			D			24
25*	Unknow	NPOC	580-106856-f-4		N	1	✓			D			25
26*	Unknow	NPOC	580-106856-f-5		N	1	✓			D			26
27*	Unknow	NPOC	CCV		N	1	✓			D			27
28*	Unknow	NPOC	CCB		N	1	✓			D			28
29*	Unknow	NPOC	580-106856-f-6		N	1	✓			D			29
30*	Unknow	NPOC	580-106856-f-7		N	1	✓			D			30
31*	Unknow	NPOC	580-106856-f-8		N	1	✓			D			31
32*	Unknow	NPOC	580-106856-f-9		N	1	✓			D			32
33*	Unknow	NPOC	580-106856-f-10		N	1	✓			D			33
34*	Unknow	NPOC	lcs 280-556007/1-a		N	1	✓	filtration		D			34
35*	Unknow	NPOC	mb 280-556007/2-a		N	1	✓			D			35
36*	Unknow	NPOC	280-154948-d-1-a		N	1	>2	DOC		D			36
37*	Unknow	NPOC	280-154948-d-1-b ms		N	1	>2	DOC		D			37
38*	Unknow	NPOC	280-154948-d-1-c msd		N	1	>2	DOC		D			38
39*	Unknow	NPOC	CCV		N	1	✓			D			39
40*	Unknow	NPOC	CCB		N	1	✓			D			40
41*	Unknow	NPOC	280-155015-d-1-a		N	1	>2	DOC		D			41
42*	Unknow	NPOC	280-155015-d-2-a		N	1	>2	DOC		D			42
43*	Unknow	NPOC	280-155015-d-3-a		N	1	>2	DOC		D			43
44*	Unknow	NPOC	280-155015-d-4-a		N	1	>2	DOC		D			44
45*	Unknow	NPOC	280-155015-d-5-a		N	1	>2	DOC		D			45
46*	Unknow	NPOC	280-155015-d-6-a		N	1	>2	DOC		D			46
47*	Unknow	NPOC	280-155015-d-7-a		N	1	>2	DOC		D			47
48*	Unknow	NPOC	280-155015-d-8-a		N	1	>2	DOC		D			48
49*	Unknow	NPOC	280-155015-d-9-a		N	1	>2	DOC		D			49
50*	Unknow	NPOC	280-155015-d-10-a		N	1	>2	DOC		D			50
51*	Unknow	NPOC	CCV		N	1	✓			D			51

 SM 4

9060A

	Type	Analysis	Sample Name	Sa	O	M	PH Result	Notes	C	St	A	D	Vial
52*	Unknow	NPOC	CCB		N	1	✓			D			52
53*	Unknow	NPOC	280-155015-d-10-b ms		N	1	<2	DOC filtration		D			53
54*	Unknow	NPOC	280-155015-d-10-c msd		N	1	<2	DOC		D			54
55*	Unknow	NPOC	280-155015-d-11-a		N	1	<2	DOC		D			55
56*	Unknow	NPOC	280-155015-d-12-a		N	1	<2	DOC		D			56
57*	Unknow	NPOC	CCV		N	1	✓			D			57
58*	Unknow	NPOC	CCB		N	1	✓			D			58

BWH 5000

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556007

Analyst: Fox, Regan A

Batch Open: 11/3/2021 10:54:00AM

Batch End:

11/23/2021

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~280-556007/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-556007/2 N/A	N/A				N/A	N/A	N/A		
3	280-154948-D-1 (9060A_Diss)	N/A (280-154948-1)	Water			11/17/21	18_Days	4		
4	280-154948-D-1~MS (9060A_Diss)	N/A (280-154948-1)	Water			11/17/21	18_Days	4		
5	280-154948-D-1~MSD (9060A_Diss)	N/A (280-154948-1)	Water			11/17/21	18_Days	4		
6	280-155015-D-1 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
7	280-155015-D-2 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
8	280-155015-D-3 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
9	280-155015-D-4 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
10	280-155015-D-5 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
11	280-155015-D-6 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
12	280-155015-D-7 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
13	280-155015-D-8 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		
14	280-155015-D-9 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556007

Analyst: Fox, Regan A

Batch Open: 11/3/2021 10:54:00AM

Batch End:

15	280-155015-D-10 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4	
16	280-155015-D-10~MS (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4	
17	280-155015-D-10~MSD (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4	
18	280-155015-D-11 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4	
19	280-155015-D-12 (9060A_Diss)	N/A (280-155015-1)	Water			11/20/21	18_Days	4	
20	N/A	N/A				N/A	N/A	N/A	

11/23/2021

Page 1457 of 1486

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556007

Analyst: Fox, Regan A

Batch Open: 11/3/2021 10:54:00AM

Batch End:

11/23/2021

Batch Notes

Pipette/Syringe/Dispenser ID	1082991
Filter ID	9743727, 16876568
Nitric Acid ID	N/A
Batch Comment	DOC filtration

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556007

Analyst: Fox, Regan A

Batch Open: 11/3/2021 10:54:00AM

Batch End:

11/23/2021

Comments

280-154948-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-154948-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-154948-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-10~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-10~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155015-D-11		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

11/23/2021

Batch Number: 280-556007

Analyst: Fox, Regan A

Batch Open: 11/3/2021 10:54:00AM

Batch End:

280-155015-D-12	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556007

Analyst: Fox, Regan A

Batch Open: 11/3/2021 10:54:00AM

Batch End:

11/23/2021

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

Calibration Record # 1034

Calibration Settings

Calibration ID	PH	Date	11/12/2021	
Channel	1	Time	10:25 AM	
Probe Type	pH	Temperature	296.88 K	23.73 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-59.171	CorrCoeff	1.0000
Intercept	-14.842	Equation: Y = (-59.171) X + (-14.842)	

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-59.171	-65.00	-54.00
Intercept	-14.842	-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	281.25
	4.00	162.10
	7.00	-15.13
	10.00	-190.55
	12.00	-311.88

133 - end
01006
01005 1-13)

Water Analysis Historical Data Report

Run Number 3731 **Order Number** 20211112-10

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	pH2	pH3	Acid	palk ppm	talk ppm	bcarb ppm	carb ppm	hydr ppm	mL @8.3	mL @4.5	mL @4.2	tcon
RINSE	11/12/2021	7:00 PM	22.75	-1.00	5.78	-1.00	-1.00	-1.00	.00	1.59	1.59	.00	.00	.00	.03	.05	.02
INITIAL CHECK	11/12/2021	7:03 PM	22.52	-1.00	10.59	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
BUFFER 7	11/12/2021	7:15 PM	22.14	-1.00	7.02	-1.00	-1.00	-1.00	.00	1,321.92	1,321.92	.00	.00	.00	13.22	-1.00	.02
LCS	11/12/2021	7:21 PM	22.52	-1.00	10.62	-1.00	-1.00	-1.00	147.07	202.78	.00	111.41	91.37	1.47	2.03	-1.00	.02
LCSD	11/12/2021	7:28 PM	22.37	-1.00	10.62	-1.00	-1.00	-1.00	149.64	226.06	.00	152.84	73.22	1.50	2.26	-1.00	.02
MB	11/12/2021	7:32 PM	22.32	-1.00	7.91	-1.00	-1.00	-1.00	.00	4.83	4.83	.00	.00	.00	.05	.06	.02
280-155495-a-1	11/12/2021	7:38 PM	22.22	-1.00	6.79	-1.00	-1.00	-1.00	.00	178.88	178.88	.00	.00	.00	1.79	-1.00	.02
DU	11/12/2021	7:43 PM	22.17	-1.00	6.88	-1.00	-1.00	-1.00	.00	181.74	181.74	.00	.00	.00	1.82	-1.00	.02
280-155081-a-1	11/12/2021	7:47 PM	22.26	-1.00	6.11	-1.00	-1.00	-1.00	.00	37.60	37.60	.00	.00	.00	.38	-1.00	.02
280-155081-a-13	11/12/2021	7:52 PM	22.37	-1.00	6.33	-1.00	-1.00	-1.00	.00	83.84	83.84	.00	.00	.00	.84	-1.00	.02
280-155081-a-9	11/12/2021	7:56 PM	22.34	-1.00	5.99	-1.00	-1.00	-1.00	.00	43.93	43.93	.00	.00	.00	.44	-1.00	.02
280-155081-a-17	11/12/2021	8:00 PM	22.20	-1.00	6.13	-1.00	-1.00	-1.00	.00	50.81	50.81	.00	.00	.00	.51	-1.00	.02
280-155081-a-5	11/12/2021	8:05 PM	21.98	-1.00	5.96	-1.00	-1.00	-1.00	.00	44.16	44.16	.00	.00	.00	.44	-1.00	.02
280-155078-a-5	11/12/2021	8:09 PM	21.86	-1.00	5.43	-1.00	-1.00	-1.00	.00	12.59	12.59	.00	.00	.00	.13	.14	.02
280-155070-e-2	11/12/2021	8:21 PM	21.79	-1.00	7.53	-1.00	-1.00	-1.00	.00	1,268.13	1,268.13	.00	.00	.00	12.68	-1.00	.02
280-155070-e-3	11/12/2021	8:33 PM	22.17	-1.00	9.26	-1.00	-1.00	-1.00	73.02	785.20	639.17	146.04	.00	.73	7.85	-1.00	.02
CCV	11/12/2021	8:39 PM	22.29	-1.00	10.58	-1.00	-1.00	-1.00	141.54	205.82	.00	128.57	77.25	1.42	2.06	-1.00	.02
CCB	11/12/2021	8:44 PM	22.19	-1.00	7.64	-1.00	-1.00	-1.00	.00	3.58	3.58	.00	.00	.00	.05	.06	.02
280-154997-a-1	11/12/2021	8:50 PM	22.23	-1.00	6.89	-1.00	-1.00	-1.00	.00	178.19	178.19	.00	.00	.00	1.78	-1.00	.02
280-154997-a-5	11/12/2021	8:55 PM	22.39	-1.00	6.92	-1.00	-1.00	-1.00	.00	158.61	158.61	.00	.00	.00	1.59	-1.00	.02
280-154997-a-4	11/12/2021	9:00 PM	22.35	-1.00	6.88	-1.00	-1.00	-1.00	.00	153.47	153.47	.00	.00	.00	1.53	-1.00	.02
280-154997-a-3	11/12/2021	9:05 PM	22.08	-1.00	6.96	-1.00	-1.00	-1.00	.00	155.33	155.33	.00	.00	.00	1.55	-1.00	.02
280-154997-a-2	11/12/2021	9:11 PM	22.02	-1.00	6.85	-1.00	-1.00	-1.00	.00	151.41	151.41	.00	.00	.00	1.51	-1.00	.02
280-155138-f-6	11/12/2021	9:15 PM	21.98	-1.00	6.58	-1.00	-1.00	-1.00	.00	103.95	103.95	.00	.00	.00	1.04	-1.00	.02
280-155138-f-7	11/12/2021	9:20 PM	21.89	-1.00	6.95	-1.00	-1.00	-1.00	.00	138.92	138.92	.00	.00	.00	1.39	-1.00	.02
280-155138-f-9	11/12/2021	9:26 PM	21.90	-1.00	7.11	-1.00	-1.00	-1.00	.00	188.34	188.34	.00	.00	.00	1.88	-1.00	.02
280-155138-f-8	11/12/2021	9:32 PM	22.00	-1.00	6.80	-1.00	-1.00	-1.00	.00	349.91	349.91	.00	.00	.00	3.50	-1.00	.02
280-154848-d-5	11/12/2021	9:40 PM	22.13	-1.00	7.49	-1.00	-1.00	-1.00	.00	433.37	433.37	.00	.00	.00	4.33	-1.00	.02
CCV	11/12/2021	9:46 PM	22.39	-1.00	10.57	-1.00	-1.00	-1.00	143.61	198.24	.00	109.26	88.99	1.44	1.98	-1.00	.02

Run Number 3731 **Order Number** 20211112-10

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	pH2	pH3	Acid	palk ppm	talk ppm	bcarb ppm	carb ppm	hydr ppm	mL @8.3	mL @4.5	mL @4.2	tcon
CCB	11/12/2021	9:51 PM	22.60	-1.00	7.95	-1.00	-1.00	-1.00	.00	3.07	3.07	.00	.00	.00	.04	.05	.02
LCS	11/12/2021	9:56 PM	22.51	-1.00	10.55	-1.00	-1.00	-1.00	149.40	209.39	.00	120.00	89.40	1.49	2.09	-1.00	.02
MB	11/12/2021	10:01 PM	22.34	-1.00	8.19	-1.00	-1.00	-1.00	.00	3.47	3.47	.00	.00	.00	.04	.05	.02
280-154996-b-1	11/12/2021	10:13 PM	22.07	-1.00	7.70	-1.00	-1.00	-1.00	.00	1,079.54	1,079.54	.00	.00	.00	10.80	-1.00	.02
DU	11/12/2021	10:25 PM	22.20	-1.00	7.68	-1.00	-1.00	-1.00	.00	1,089.30	1,089.30	.00	.00	.00	10.89	-1.00	.02
280-154988-a-3	11/12/2021	10:31 PM	22.25	-1.00	7.55	-1.00	-1.00	-1.00	.00	421.17	421.17	.00	.00	.00	4.21	-1.00	.02
280-154988-a-1	11/12/2021	10:41 PM	22.07	-1.00	7.64	-1.00	-1.00	-1.00	.00	821.06	821.06	.00	.00	.00	8.21	-1.00	.02
280-154988-a-2	11/12/2021	10:48 PM	22.13	-1.00	7.69	-1.00	-1.00	-1.00	.00	578.33	578.33	.00	.00	.00	5.78	-1.00	.02
280-155327-a-5	11/12/2021	10:54 PM	22.13	-1.00	7.00	-1.00	-1.00	-1.00	.00	156.26	156.26	.00	.00	.00	1.56	-1.00	.02
280-155327-a-6	11/12/2021	11:00 PM	22.14	-1.00	6.52	-1.00	-1.00	-1.00	.00	246.16	246.16	.00	.00	.00	2.46	-1.00	.02
280-155327-a-7	11/12/2021	11:06 PM	22.29	-1.00	7.19	-1.00	-1.00	-1.00	.00	171.65	171.65	.00	.00	.00	1.72	-1.00	.02
280-155327-a-2	11/12/2021	11:10 PM	22.46	-1.00	6.30	-1.00	-1.00	-1.00	.00	75.05	75.05	.00	.00	.00	.75	-1.00	.02
280-155327-a-3	11/12/2021	11:16 PM	22.19	-1.00	7.02	-1.00	-1.00	-1.00	.00	239.56	239.56	.00	.00	.00	2.40	-1.00	.02
CCV	11/12/2021	11:22 PM	22.13	-1.00	10.53	-1.00	-1.00	-1.00	147.73	206.69	.00	117.93	88.77	1.48	2.07	-1.00	.02
CCB	11/12/2021	11:27 PM	22.08	-1.00	7.86	-1.00	-1.00	-1.00	.00	3.21	3.21	.00	.00	.00	.04	.05	.02
280-155327-a-4	11/12/2021	11:32 PM	21.87	-1.00	6.95	-1.00	-1.00	-1.00	.00	172.82	172.82	.00	.00	.00	1.73	-1.00	.02
280-155002-a-5	11/12/2021	11:42 PM	21.83	-1.00	7.34	-1.00	-1.00	-1.00	.00	905.02	905.02	.00	.00	.00	9.05	-1.00	.02
280-155002-a-6	11/12/2021	11:47 PM	21.83	-1.00	4.68	-1.00	-1.00	-1.00	.00	85.23	85.23	.00	.00	.00	.85	-1.00	.02
280-155002-a-7	11/12/2021	11:57 PM	21.90	-1.00	7.25	-1.00	-1.00	-1.00	.00	791.95	791.95	.00	.00	.00	7.92	-1.00	.02
280-155002-a-2	11/13/2021	12:06 AM	22.17	-1.00	6.94	-1.00	-1.00	-1.00	.00	734.13	734.13	.00	.00	.00	7.34	-1.00	.02
280-155002-a-3	11/13/2021	12:26 AM	22.25	-1.00	7.83	-1.00	-1.00	-1.00	.00	2,228.28	2,228.28	.00	.00	.00	22.28	-1.00	.02
280-155002-a-4	11/13/2021	12:38 AM	22.48	-1.00	6.95	-1.00	-1.00	-1.00	.00	1,156.30	1,156.30	.00	.00	.00	11.56	-1.00	.02
280-155048-f-4	11/13/2021	12:45 AM	22.57	-1.00	7.31	-1.00	-1.00	-1.00	.00	377.83	377.83	.00	.00	.00	3.78	-1.00	.02
280-155048-f-3	11/13/2021	12:51 AM	22.29	-1.00	7.30	-1.00	-1.00	-1.00	.00	297.11	297.11	.00	.00	.00	2.97	-1.00	.02
280-155048-f-1	11/13/2021	12:56 AM	22.11	-1.00	6.83	-1.00	-1.00	-1.00	.00	223.37	223.37	.00	.00	.00	2.23	-1.00	.02
CCV	11/13/2021	1:02 AM	21.92	-1.00	10.51	-1.00	-1.00	-1.00	144.55	198.82	.00	108.53	90.28	1.45	1.99	-1.00	.02
CCB	11/13/2021	1:07 AM	21.89	-1.00	7.78	-1.00	-1.00	-1.00	.00	2.40	2.40	.00	.00	.00	.04	.05	.02
LCS	11/13/2021	1:13 AM	21.77	-1.00	10.49	-1.00	-1.00	-1.00	143.02	206.86	.00	127.66	79.19	1.43	2.07	-1.00	.02
MB	11/13/2021	1:18 AM	21.87	-1.00	7.85	-1.00	-1.00	-1.00	.00	3.11	3.11	.00	.00	.00	.04	.05	.02
280-155048-f-6	11/13/2021	1:25 AM	21.86	-1.00	7.01	-1.00	-1.00	-1.00	.00	410.66	410.66	.00	.00	.00	4.11	-1.00	.02
DU 280-155048-f-6	11/13/2021	1:32 AM	21.90	-1.00	7.09	-1.00	-1.00	-1.00	.00	415.98	415.98	.00	.00	.00	4.16	-1.00	.02

Run Number 3731 **Order Number** 20211112-10

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	pH2	pH3	Acid	palk ppm	talk ppm	bcarb ppm	carb ppm	hydr ppm	mL @8.3	mL @4.5	mL @4.2	tcon
280-155048-f-7	11/13/2021	1:38 AM	21.99	-1.00	7.37	-1.00	-1.00	-1.00	.00	288.33	288.33	.00	.00	.00	2.88	-1.00	.02
280-155048-f-8	11/13/2021	1:43 AM	22.17	-1.00	7.21	-1.00	-1.00	-1.00	.00	227.06	227.06	.00	.00	.00	2.27	-1.00	.02
280-155048-f-2	11/13/2021	1:50 AM	22.51	-1.00	6.91	-1.00	-1.00	-1.00	.00	201.90	201.90	.00	.00	.00	2.02	-1.00	.02
280-155048-f-5	11/13/2021	1:54 AM	22.35	-1.00	6.47	-1.00	-1.00	-1.00	.00	58.37	58.37	.00	.00	.00	.58	-1.00	.02
280-155057-e-10	11/13/2021	2:01 AM	22.16	-1.00	7.26	-1.00	-1.00	-1.00	.00	406.41	406.41	.00	.00	.00	4.06	-1.00	.02
280-155057-e-4	11/13/2021	2:05 AM	22.07	-1.00	6.80	-1.00	-1.00	-1.00	.00	99.50	99.50	.00	.00	.00	1.00	-1.00	.02
280-155057-e-11	11/13/2021	2:12 AM	21.92	-1.00	7.70	-1.00	-1.00	-1.00	.00	269.60	269.60	.00	.00	.00	2.70	-1.00	.02
280-155057-e-6	11/13/2021	2:17 AM	21.90	-1.00	7.39	-1.00	-1.00	-1.00	.00	218.96	218.96	.00	.00	.00	2.19	-1.00	.02
CCV	11/13/2021	2:23 AM	21.92	-1.00	10.47	-1.00	-1.00	-1.00	141.93	206.81	.00	129.75	77.06	1.42	2.07	-1.00	.02
CCB	11/13/2021	2:28 AM	21.99	-1.00	8.07	-1.00	-1.00	-1.00	.00	3.08	3.08	.00	.00	.00	.04	.05	.02
280-155057-e-7	11/13/2021	2:34 AM	21.96	-1.00	7.10	-1.00	-1.00	-1.00	.00	213.25	213.25	.00	.00	.00	2.13	-1.00	.02
280-155057-e-2	11/13/2021	2:40 AM	22.08	-1.00	7.41	-1.00	-1.00	-1.00	.00	257.97	257.97	.00	.00	.00	2.58	-1.00	.02
280-155057-e-8	11/13/2021	2:45 AM	22.22	-1.00	7.19	-1.00	-1.00	-1.00	.00	250.11	250.11	.00	.00	.00	2.50	-1.00	.02
280-155057-e-3	11/13/2021	2:52 AM	22.39	-1.00	6.83	-1.00	-1.00	-1.00	.00	218.32	218.32	.00	.00	.00	2.18	-1.00	.02
280-155057-e-9	11/13/2021	2:58 AM	22.55	-1.00	7.24	-1.00	-1.00	-1.00	.00	299.73	299.73	.00	.00	.00	3.00	-1.00	.02
280-155057-e-5	11/13/2021	3:06 AM	22.37	-1.00	7.31	-1.00	-1.00	-1.00	.00	529.46	529.46	.00	.00	.00	5.29	-1.00	.02
280-155015-f-1	11/13/2021	3:15 AM	22.22	-1.00	6.99	-1.00	-1.00	-1.00	.00	687.35	687.35	.00	.00	.00	6.87	-1.00	.02
280-155015-f-2	11/13/2021	3:22 AM	22.16	-1.00	7.04	-1.00	-1.00	-1.00	.00	435.52	435.52	.00	.00	.00	4.36	-1.00	.02
280-155015-f-3	11/13/2021	3:29 AM	22.07	-1.00	7.00	-1.00	-1.00	-1.00	.00	478.38	478.38	.00	.00	.00	4.78	-1.00	.02
280-155015-f-7	11/13/2021	3:36 AM	22.13	-1.00	7.11	-1.00	-1.00	-1.00	.00	387.60	387.60	.00	.00	.00	3.88	-1.00	.02
CCV	11/13/2021	3:42 AM	22.10	-1.00	10.44	-1.00	-1.00	-1.00	138.85	207.52	.00	137.35	70.17	1.39	2.08	-1.00	.02
CCB	11/13/2021	3:47 AM	22.10	-1.00	7.69	-1.00	-1.00	-1.00	.00	2.91	2.91	.00	.00	.00	.04	.05	.02

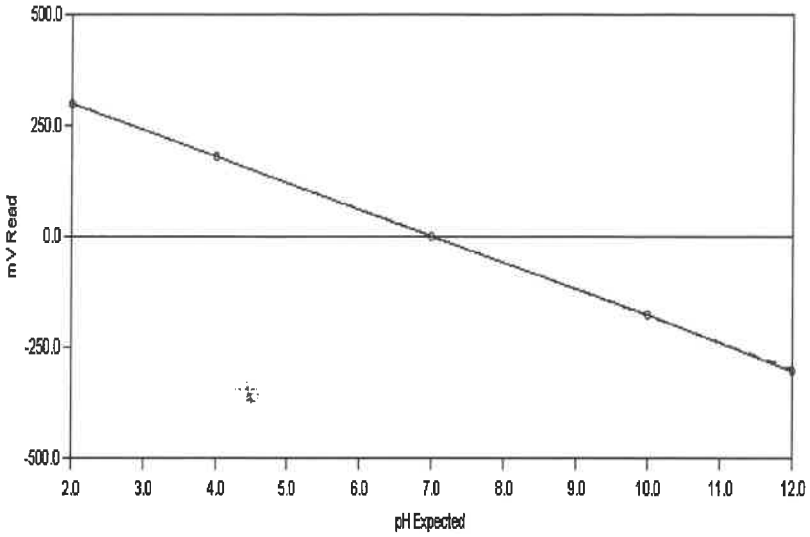
MANTECH

MANTECH INC.

Report Date: 11/16/2021 : 2:19 PM

Calibration Report

Calibration Record # 407



Calibration Settings

Calibration ID	PH	Date	11/16/2021	
Channel	1	Time	1:40 PM	
Probe Type	pH	Temperature	295.28 K	22.13 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.142	CorrCoeff	1.0000
Intercept	-0.246	Equation:	Y = (-60.142) X + (-0.246)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.142	-65.00	-53.00
Intercept	-0.246	-100.00	100.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	2.00	299.31
	4.00	180.78
	7.00	0.12
	10.00	-178.22
	12.00	-303.22

10281
01006

Test America
Water Analysis Report

AT4 Analyst:_____

Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	11/16/2021	5:36 PM	21.41	-1.00	5.27	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	11/16/2021	5:43 PM	21.27	-1.00	10.59	124.37	209.82	.00	170.89	38.92	1.24	2.10	-1.00	.02
BUFFER 7	11/16/2021	5:46 PM	21.02	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	11/16/2021	5:53 PM	21.12	-1.00	10.59	113.80	211.65	.00	195.70	15.95	1.14	2.12	-1.00	.02
LCSD	11/16/2021	6:00 PM	21.30	-1.00	10.64	123.94	209.04	.00	170.22	38.83	1.24	2.09	-1.00	.02
MB	11/16/2021	6:06 PM	21.35	-1.00	8.90	2.95	5.37	.00	4.82	.54	.03	.06	.07	.02
280-155609-A-7	11/16/2021	6:11 PM	21.24	-1.00	6.69	.00	73.01	73.01	.00	.00	.00	.73	-1.00	.02
du 280-155609-A-7	11/16/2021	6:17 PM	21.12	-1.00	6.79	.00	74.50	74.50	.00	.00	.00	.75	-1.00	.02
280-155495-A-1	11/16/2021	6:23 PM	21.09	-1.00	7.27	.00	186.33	186.33	.00	.00	.00	1.86	-1.00	.02
280-155081-A-5	11/16/2021	6:28 PM	21.19	-1.00	6.19	.00	42.13	42.13	.00	.00	.00	.42	-1.00	.02
280-155081-A-9	11/16/2021	6:33 PM	21.32	-1.00	6.18	.00	40.29	40.29	.00	.00	.00	.40	-1.00	.02
280-155081-A-1	11/16/2021	6:38 PM	21.21	-1.00	6.23	.00	34.50	34.50	.00	.00	.00	.35	-1.00	.02
280-155081-A-13	11/16/2021	6:44 PM	21.02	-1.00	6.46	.00	84.50	84.50	.00	.00	.00	.84	-1.00	.02
280-155081-A-17	11/16/2021	6:49 PM	20.92	-1.00	6.28	.00	46.63	46.63	.00	.00	.00	.47	-1.00	.02
280-155078-A-5	11/16/2021	6:54 PM	20.91	-1.00	5.66	.00	12.20	12.20	.00	.00	.00	.13	.14	.02
280-155118-C-2	11/16/2021	7:03 PM	20.99	-1.00	7.51	.00	490.85	490.85	.00	.00	.00	4.91	-1.00	.02
CCV	11/16/2021	7:09 PM	21.12	-1.00	10.58	138.07	214.02	.00	151.90	62.12	1.38	2.14	-1.00	.02
CCB	11/16/2021	7:15 PM	21.30	-1.00	8.42	.30	4.04	3.43	.60	.00	.00	.05	.06	.02
280-155118-D-1	11/16/2021	7:23 PM	21.32	-1.00	7.63	.00	383.12	383.12	.00	.00	.00	3.83	-1.00	.02
280-155125-E-6	11/16/2021	7:30 PM	21.44	-1.00	7.54	.00	234.63	234.63	.00	.00	.00	2.35	-1.00	.02
280-155125-E-9	11/16/2021	7:37 PM	21.54	-1.00	7.71	.00	265.75	265.75	.00	.00	.00	2.66	-1.00	.02
280-155125-E-18	11/16/2021	7:45 PM	21.70	-1.00	7.21	.00	370.75	370.75	.00	.00	.00	3.71	-1.00	.02
280-155070-E-3	11/16/2021	7:56 PM	21.76	-1.00	9.06	47.02	799.35	705.31	94.04	.00	.47	7.99	-1.00	.02
280-155070-E-2	11/16/2021	8:12 PM	21.70	-1.00	7.75	.00	1,367.10	1,367.10	.00	.00	.00	13.67	-1.00	.02
280-154848-E-5	11/16/2021	8:21 PM	21.53	-1.00	7.65	.00	453.79	453.79	.00	.00	.00	4.54	-1.00	.02
280-155002-A-6	11/16/2021	8:26 PM	21.09	-1.00	4.66	.00	78.12	78.12	.00	.00	.00	.78	-1.00	.02
280-155204-A-1	11/16/2021	8:37 PM	21.14	-1.00	7.62	.00	708.57	708.57	.00	.00	.00	7.09	-1.00	.02

TitratiON PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

Copyright Hinterland Software Ltd.

Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-155015-F-3	11/16/2021	8:46 PM	21.19	-1.00	7.09	.00	512.63	512.63	.00	.00	.00	5.13	-1.00	.02
CCV	11/16/2021	8:53 PM	21.03	-1.00	10.55	120.59	212.59	.00	183.98	28.60	1.21	2.13	-1.00	.02
CCB	11/16/2021	8:59 PM	21.06	-1.00	8.34	.00	4.21	4.21	.00	.00	.00	.05	.06	.02
LCS	11/16/2021	9:05 PM	20.96	-1.00	10.58	119.89	211.58	.00	183.37	28.21	1.20	2.12	-1.00	.02
MB	11/16/2021	9:11 PM	21.09	-1.00	8.47	1.05	4.41	2.31	2.10	.00	.01	.05	.06	.02
280-155015-F-5	11/16/2021	9:21 PM	21.18	-1.00	7.05	.00	563.53	563.53	.00	.00	.00	5.64	-1.00	.02
du 280-155015-F-5	11/16/2021	9:30 PM	21.40	-1.00	7.13	.00	567.37	567.37	.00	.00	.00	5.67	-1.00	.02
280-155015-F-1	11/16/2021	9:41 PM	21.40	-1.00	7.19	.00	725.44	725.44	.00	.00	.00	7.25	-1.00	.02
280-155015-F-8	11/16/2021	9:51 PM	21.19	-1.00	7.16	.00	524.89	524.89	.00	.00	.00	5.25	-1.00	.02
280-155015-F-9	11/16/2021	9:58 PM	21.01	-1.00	7.22	.00	339.78	339.78	.00	.00	.00	3.40	-1.00	.02
280-155015-F-2	11/16/2021	10:07 PM	20.87	-1.00	7.14	.00	455.29	455.29	.00	.00	.00	4.55	-1.00	.02
280-155015-F-6	11/16/2021	10:16 PM	20.76	-1.00	7.11	.00	430.13	430.13	.00	.00	.00	4.30	-1.00	.02
280-155015-F-4	11/16/2021	10:24 PM	20.66	-1.00	7.21	.00	460.98	460.98	.00	.00	.00	4.61	-1.00	.02
280-155015-F-7	11/16/2021	10:32 PM	20.65	-1.00	7.24	.00	396.09	396.09	.00	.00	.00	3.96	-1.00	.02
280-155015-F-10	11/16/2021	10:42 PM	20.87	-1.00	7.25	.00	520.23	520.23	.00	.00	.00	5.20	-1.00	.02
CCV	11/16/2021	10:49 PM	21.40	-1.00	10.50	120.23	214.22	.00	187.98	26.24	1.20	2.14	-1.00	.02
CCB	11/16/2021	10:55 PM	21.67	-1.00	8.28	.00	3.77	3.77	.00	.00	.00	.05	.06	.02
280-155119-G-7	11/16/2021	11:04 PM	21.99	-1.00	7.95	.00	525.93	525.93	.00	.00	.00	5.26	-1.00	.02
280-155119-G-8	11/16/2021	11:16 PM	22.48	-1.00	7.86	.00	881.68	881.68	.00	.00	.00	8.82	-1.00	.02
280-155119-G-9	11/16/2021	11:26 PM	22.51	-1.00	7.66	.00	522.55	522.55	.00	.00	.00	5.23	-1.00	.02
280-155119-G-4	11/16/2021	11:34 PM	22.32	-1.00	7.79	.00	433.72	433.72	.00	.00	.00	4.34	-1.00	.02
280-155119-G-6	11/16/2021	11:43 PM	22.19	-1.00	7.61	.00	483.24	483.24	.00	.00	.00	4.83	-1.00	.02
280-155119-G-5	11/16/2021	11:54 PM	22.10	-1.00	7.89	.00	702.98	702.98	.00	.00	.00	7.03	-1.00	.02
280-155119-G-1	11/17/2021	12:06 AM	22.10	-1.00	7.55	.00	781.24	781.24	.00	.00	.00	7.81	-1.00	.02
280-155119-G-3	11/17/2021	12:14 AM	22.02	-1.00	7.79	.00	409.19	409.19	.00	.00	.00	4.09	-1.00	.02
280-155119-G-2	11/17/2021	12:23 AM	22.00	-1.00	7.76	.00	451.29	451.29	.00	.00	.00	4.51	-1.00	.02
280-155130-M-1	11/17/2021	12:34 AM	21.99	-1.00	7.72	.00	722.03	722.03	.00	.00	.00	7.22	-1.00	.02
CCV	11/17/2021	12:40 AM	21.96	-1.00	10.49	116.35	218.37	.00	204.03	14.34	1.16	2.18	-1.00	.02
CCB	11/17/2021	12:46 AM	22.14	-1.00	8.24	.00	3.79	3.79	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	12:53 AM	22.20	-1.00	10.49	118.38	218.93	.00	201.11	17.82	1.18	2.19	-1.00	.02

Copyright Hinterland Software Ltd.
PC-TitratION PLUS by Man-Tech Associates, Inc.

Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
MB	11/17/2021	12:59 AM	22.34	-1.00	8.29	.00	4.04	4.04	.00	.00	.00	.05	.06	.02
280-155130-M-2	11/17/2021	1:05 AM	22.13	-1.00	7.32	.00	186.82	186.82	.00	.00	.00	1.87	-1.00	.02
du 280-155130-M-2	11/17/2021	1:12 AM	21.98	-1.00	7.40	.00	186.97	186.97	.00	.00	.00	1.87	-1.00	.02
280-155117-A-5	11/17/2021	1:20 AM	21.86	-1.00	7.03	.00	358.33	358.33	.00	.00	.00	3.58	-1.00	.02
280-155117-A-4	11/17/2021	1:26 AM	21.83	-1.00	6.69	.00	173.26	173.26	.00	.00	.00	1.73	-1.00	.02
280-155117-A-3	11/17/2021	1:31 AM	21.77	-1.00	4.73	.00	.06	.06	.00	.00	.00	.04	.08	.02
280-155117-A-2	11/17/2021	1:39 AM	21.70	-1.00	7.09	.00	310.87	310.87	.00	.00	.00	3.11	-1.00	.02
280-155117-A-1	11/17/2021	1:42 AM	21.64	-1.00	3.78	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-155117-A-9	11/17/2021	1:47 AM	21.71	-1.00	6.28	.00	89.51	89.51	.00	.00	.00	.90	-1.00	.02
280-155117-A-8	11/17/2021	1:53 AM	21.86	-1.00	6.03	.00	1.07	1.07	.00	.00	.00	.03	.04	.02
280-155117-A-7	11/17/2021	1:58 AM	22.02	-1.00	6.26	.00	76.38	76.38	.00	.00	.00	.76	-1.00	.02
CCV	11/17/2021	2:06 AM	22.31	-1.00	10.45	115.87	214.81	.00	197.89	16.93	1.16	2.15	-1.00	.02
CCB	11/17/2021	2:11 AM	22.22	-1.00	8.37	.34	4.11	3.44	.67	.00	.00	.05	.06	.02
280-155117-A-6	11/17/2021	2:17 AM	21.99	-1.00	6.24	.00	78.09	78.09	.00	.00	.00	.78	-1.00	.02
280-155210-F-1	11/17/2021	2:30 AM	21.92	-1.00	8.42	21.45	1,005.41	962.51	42.91	.00	.21	10.05	-1.00	.02
280-155210-F-2	11/17/2021	2:42 AM	21.95	-1.00	8.43	20.43	822.61	781.74	40.87	.00	.20	8.23	-1.00	.02
280-155220-F-2	11/17/2021	2:55 AM	21.92	-1.00	8.56	37.34	950.56	875.87	74.68	.00	.37	9.51	-1.00	.02
280-155220-F-1	11/17/2021	3:11 AM	21.93	-1.00	8.62	54.13	1,396.38	1,288.12	108.26	.00	.54	13.96	-1.00	.02
280-155132-E-1	11/17/2021	3:19 AM	21.98	-1.00	7.62	.00	266.22	266.22	.00	.00	.00	2.66	-1.00	.02
280-155132-E-7	11/17/2021	3:27 AM	21.87	-1.00	7.86	.00	413.38	413.38	.00	.00	.00	4.13	-1.00	.02
280-155132-E-3	11/17/2021	3:35 AM	21.95	-1.00	7.84	.00	364.80	364.80	.00	.00	.00	3.65	-1.00	.02
280-155132-E-2	11/17/2021	3:42 AM	22.03	-1.00	7.98	.00	295.52	295.52	.00	.00	.00	2.96	-1.00	.02
280-155132-E-4	11/17/2021	3:49 AM	22.25	-1.00	8.03	.00	291.44	291.44	.00	.00	.00	2.91	-1.00	.02
CCV	11/17/2021	3:57 AM	22.42	-1.00	10.43	116.01	219.25	.00	206.50	12.76	1.16	2.19	-1.00	.02
CCB	11/17/2021	4:03 AM	22.31	-1.00	8.22	.00	3.79	3.79	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	4:09 AM	22.07	-1.00	10.45	114.49	216.00	.00	203.02	12.97	1.14	2.16	-1.00	.02
MB	11/17/2021	4:14 AM	22.07	-1.00	8.32	.00	4.59	4.59	.00	.00	.00	.05	.06	.02
280-155132-E-5	11/17/2021	4:22 AM	22.02	-1.00	7.80	.00	292.01	292.01	.00	.00	.00	2.92	-1.00	.02
du 280-155132-E-5	11/17/2021	4:29 AM	22.07	-1.00	7.84	.00	292.29	292.29	.00	.00	.00	2.92	-1.00	.02
280-155138-F-7	11/17/2021	4:35 AM	22.10	-1.00	7.52	.00	144.87	144.87	.00	.00	.00	1.45	-1.00	.02

Copyright Hinterland Software Ltd.

Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-155138-F-9	11/17/2021	4:41 AM	22.16	-1.00	7.58	.00	191.37	191.37	.00	.00	.00	1.91	-1.00	.02
280-155138-F-8	11/17/2021	4:49 AM	22.19	-1.00	7.31	.00	372.16	372.16	.00	.00	.00	3.72	-1.00	.02
280-155138-F-6	11/17/2021	4:55 AM	22.35	-1.00	7.00	.00	111.86	111.86	.00	.00	.00	1.12	-1.00	.02
280-155138-F-1	11/17/2021	5:03 AM	22.52	-1.00	7.71	.00	376.44	376.44	.00	.00	.00	3.76	-1.00	.02
280-155138-F-5	11/17/2021	5:11 AM	22.78	-1.00	7.60	.00	318.52	318.52	.00	.00	.00	3.19	-1.00	.02
280-155138-F-3	11/17/2021	5:19 AM	22.70	-1.00	7.89	.00	444.10	444.10	.00	.00	.00	4.44	-1.00	.02
280-155138-F-4	11/17/2021	5:27 AM	22.49	-1.00	7.25	.00	289.93	289.93	.00	.00	.00	2.90	-1.00	.02
CCV	11/17/2021	5:34 AM	22.40	-1.00	10.41	114.37	219.91	.00	211.08	8.84	1.14	2.20	-1.00	.02
CCB	11/17/2021	5:40 AM	22.37	-1.00	8.21	.00	3.86	3.86	.00	.00	.00	.05	.06	.02
280-155138-F-10	11/17/2021	5:45 AM	22.29	-1.00	6.67	.00	111.32	111.32	.00	.00	.00	1.11	-1.00	.02
280-155138-F-2	11/17/2021	5:53 AM	22.28	-1.00	7.57	.00	363.80	363.80	.00	.00	.00	3.64	-1.00	.02
280-155218-E-1	11/17/2021	6:07 AM	22.32	-1.00	8.60	44.47	1,123.24	1,034.29	88.95	.00	.44	11.23	-1.00	.02
280-155218-E-2	11/17/2021	6:22 AM	22.54	-1.00	8.47	32.87	1,257.62	1,191.89	65.73	.00	.33	12.58	-1.00	.02
280-155208-D-3	11/17/2021	6:30 AM	22.67	-1.00	7.87	.00	294.24	294.24	.00	.00	.00	2.94	-1.00	.02
280-155208-D-1	11/17/2021	6:38 AM	22.69	-1.00	7.92	.00	371.01	371.01	.00	.00	.00	3.71	-1.00	.02
280-155208-D-2	11/17/2021	6:46 AM	22.83	-1.00	8.02	.00	357.16	357.16	.00	.00	.00	3.57	-1.00	.02
280-155208-C-4	11/17/2021	6:54 AM	22.81	-1.00	7.86	.00	327.47	327.47	.00	.00	.00	3.27	-1.00	.02
280-155208-D-5	11/17/2021	7:01 AM	22.72	-1.00	7.80	.00	221.22	221.22	.00	.00	.00	2.21	-1.00	.02
280-155150-d-1	11/17/2021	7:12 AM	22.55	-1.00	8.05	.00	758.93	758.93	.00	.00	.00	7.59	-1.00	.02
CCV	11/17/2021	7:19 AM	22.60	-1.00	10.38	117.93	219.98	.00	204.10	15.88	1.18	2.20	-1.00	.02
CCB	11/17/2021	7:25 AM	22.46	-1.00	8.05	.00	3.97	3.97	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	7:32 AM	22.40	-1.00	10.41	113.01	219.40	.00	212.77	6.63	1.13	2.19	-1.00	.02
MB	11/17/2021	7:38 AM	22.55	-1.00	8.24	.00	3.84	3.84	.00	.00	.00	.05	.06	.02
280-155150-d-2	11/17/2021	7:46 AM	22.48	-1.00	8.12	.00	366.42	366.42	.00	.00	.00	3.66	-1.00	.02
DU 280-155150-d-2	11/17/2021	7:54 AM	22.61	-1.00	8.17	.00	369.05	369.05	.00	.00	.00	3.69	-1.00	.02
280-155150-d-3	11/17/2021	8:00 AM	22.72	-1.00	7.67	.00	172.89	172.89	.00	.00	.00	1.73	-1.00	.02
280-155141-e-6	11/17/2021	8:10 AM	22.84	-1.00	7.93	.00	565.84	565.84	.00	.00	.00	5.66	-1.00	.02
280-155141-e-4	11/17/2021	8:17 AM	23.12	-1.00	7.69	.00	171.55	171.55	.00	.00	.00	1.72	-1.00	.02
280-155141-e-5	11/17/2021	8:24 AM	22.90	-1.00	7.87	.00	320.30	320.30	.00	.00	.00	3.20	-1.00	.02
280-155141-d-3	11/17/2021	8:33 AM	22.81	-1.00	7.79	.00	446.09	446.09	.00	.00	.00	4.46	-1.00	.02

PC-TitratION PLUS by Man-Tech Associates, Inc.
Copyright Hinterland Software Ltd.

Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-155141-e-1	11/17/2021	8:40 AM	22.75	-1.00	7.52	.00	227.29	227.29	.00	.00	.00	2.27	-1.00	.02
280-155141-f-2	11/17/2021	8:49 AM	22.66	-1.00	7.88	.00	559.52	559.52	.00	.00	.00	5.60	-1.00	.02
280-155225-f-3	11/17/2021	8:57 AM	22.75	-1.00	7.73	.00	349.92	349.92	.00	.00	.00	3.50	-1.00	.02
CCV	11/17/2021	9:04 AM	22.67	-1.00	10.37	110.17	223.80	3.47	220.34	.00	1.10	2.24	-1.00	.02
CCB	11/17/2021	9:10 AM	22.74	-1.00	8.00	.00	3.49	3.49	.00	.00	.00	.05	.06	.02
280-155225-d-1	11/17/2021	9:16 AM	22.66	-1.00	7.24	.00	211.56	211.56	.00	.00	.00	2.12	-1.00	.02
280-155225-d-2	11/17/2021	9:24 AM	22.72	-1.00	7.75	.00	366.50	366.50	.00	.00	.00	3.66	-1.00	.02
280-155225-f-4	11/17/2021	9:33 AM	22.83	-1.00	7.99	.00	416.75	416.75	.00	.00	.00	4.17	-1.00	.02
280-155225-f-5	11/17/2021	9:40 AM	22.90	-1.00	7.69	.00	276.53	276.53	.00	.00	.00	2.77	-1.00	.02
280-155225-f-6	11/17/2021	9:48 AM	22.93	-1.00	7.81	.00	338.78	338.78	.00	.00	.00	3.39	-1.00	.02
280-155225-f-7	11/17/2021	9:57 AM	22.78	-1.00	7.54	.00	598.10	598.10	.00	.00	.00	5.98	-1.00	.02
280-155225-f-8	11/17/2021	10:06 AM	22.67	-1.00	7.17	.00	471.11	471.11	.00	.00	.00	4.71	-1.00	.02
280-155225-f-9	11/17/2021	10:16 AM	22.58	-1.00	7.43	.00	597.14	597.14	.00	.00	.00	5.97	-1.00	.02
280-155289-e-1	11/17/2021	10:23 AM	22.52	-1.00	7.39	.00	147.77	147.77	.00	.00	.00	1.48	-1.00	.02
280-155290-e-1	11/17/2021	10:29 AM	22.51	-1.00	7.07	.00	122.73	122.73	.00	.00	.00	1.23	-1.00	.02
CCV	11/17/2021	10:37 AM	22.48	-1.00	10.33	111.54	222.47	.00	221.85	.62	1.12	2.22	-1.00	.02
CCB	11/17/2021	10:42 AM	22.61	-1.00	8.16	.00	3.65	3.65	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	10:50 AM	22.60	-1.00	10.34	109.74	220.39	.91	219.48	.00	1.10	2.20	-1.00	.02
MB	11/17/2021	10:55 AM	22.70	-1.00	8.15	.00	6.87	6.87	.00	.00	.00	.07	.08	.02
280-155293-e-1	11/17/2021	11:01 AM	22.78	-1.00	7.06	.00	123.81	123.81	.00	.00	.00	1.24	-1.00	.02
DU 280-155293-e-1	11/17/2021	11:07 AM	23.07	-1.00	7.11	.00	123.45	123.45	.00	.00	.00	1.23	-1.00	.02
280-155292-e-1	11/17/2021	11:13 AM	22.92	-1.00	6.44	.00	2.11	2.11	.00	.00	.00	.03	.05	.02
280-155291-e-1	11/17/2021	11:19 AM	22.78	-1.00	6.39	.00	99.30	99.30	.00	.00	.00	.99	-1.00	.02
680-207006-c-9	11/17/2021	11:24 AM	22.75	-1.00	6.40	.00	27.73	27.73	.00	.00	.00	.28	-1.00	.02
680-207006-c-2	11/17/2021	11:29 AM	22.69	-1.00	6.58	.00	60.86	60.86	.00	.00	.00	.61	-1.00	.02
680-207006-c-3	11/17/2021	11:34 AM	22.64	-1.00	6.33	.00	83.37	83.37	.00	.00	.00	.83	-1.00	.02
680-207006-c-10	11/17/2021	11:39 AM	22.55	-1.00	6.41	.00	34.76	34.76	.00	.00	.00	.35	-1.00	.02
680-207006-c-13	11/17/2021	11:45 AM	22.51	-1.00	6.73	.00	138.90	138.90	.00	.00	.00	1.39	-1.00	.02
680-207006-c-1	11/17/2021	11:50 AM	22.57	-1.00	6.49	.00	35.02	35.02	.00	.00	.00	.35	-1.00	.02
CCV	11/17/2021	11:57 AM	22.60	-1.00	10.32	107.84	219.72	4.05	215.67	.00	1.08	2.20	-1.00	.02

Copyright Hinterland Software Ltd.

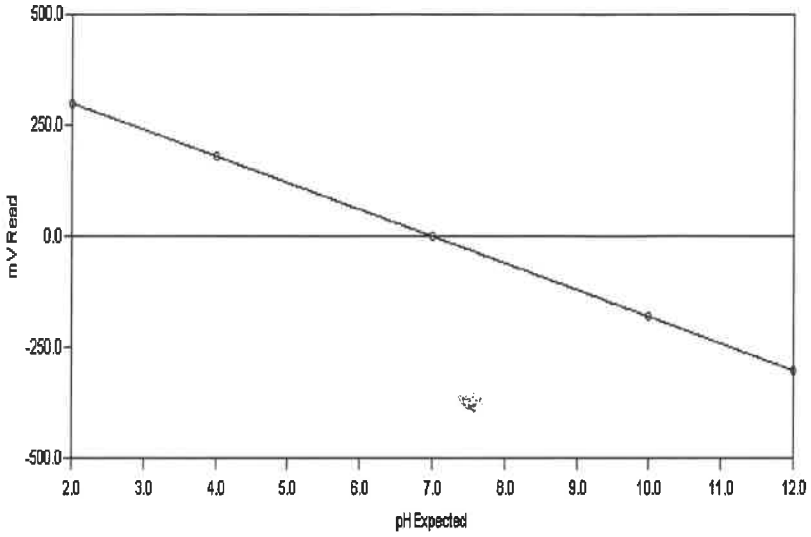
Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCB	11/17/2021	12:03 PM	22.70	-1.00	8.27	.00	4.13	4.13	.00	.00	.00	.05	.06	.02
680-207006-c-8	11/17/2021	12:08 PM	22.74	-1.00	6.48	.00	43.59	43.59	.00	.00	.00	.44	-1.00	.02
680-207006-c-17	11/17/2021	12:14 PM	22.84	-1.00	7.18	.00	148.07	148.07	.00	.00	.00	1.48	-1.00	.02
680-207006-c-18	11/17/2021	12:19 PM	22.75	-1.00	6.47	.00	37.63	37.63	.00	.00	.00	.38	-1.00	.02
680-207006-c-11	11/17/2021	12:25 PM	22.67	-1.00	6.82	.00	84.33	84.33	.00	.00	.00	.84	-1.00	.02
680-207006-c-12	11/17/2021	12:30 PM	22.61	-1.00	6.34	.00	13.51	13.51	.00	.00	.00	.15	.16	.02
680-207006-c-5	11/17/2021	12:36 PM	22.60	-1.00	6.82	.00	150.43	150.43	.00	.00	.00	1.50	-1.00	.02
680-207006-c-6	11/17/2021	12:42 PM	22.67	-1.00	6.92	.00	192.76	192.76	.00	.00	.00	1.93	-1.00	.02
680-207006-c-16	11/17/2021	12:48 PM	22.67	-1.00	6.68	.00	85.31	85.31	.00	.00	.00	.85	-1.00	.02
680-207006-c-4	11/17/2021	12:53 PM	22.75	-1.00	6.01	.00	1.25	1.25	.00	.00	.00	.03	.04	.02
680-207006-c-14	11/17/2021	12:58 PM	22.77	-1.00	6.34	.00	28.35	28.35	.00	.00	.00	.28	-1.00	.02
CCV	11/17/2021	1:05 PM	22.81	-1.00	10.29	108.95	223.32	5.41	217.91	.00	1.09	2.23	-1.00	.02
CCV	11/17/2021	1:11 PM	22.93	-1.00	8.25	.00	4.07	4.07	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	1:17 PM	23.14	-1.00	10.28	106.32	223.81	11.17	212.64	.00	1.06	2.24	-1.00	.02
MB	11/17/2021	1:23 PM	23.17	-1.00	8.24	.00	3.86	3.86	.00	.00	.00	.05	.06	.02
680-207006-c-15	11/17/2021	1:28 PM	23.11	-1.00	6.52	.00	57.32	57.32	.00	.00	.00	.57	-1.00	.02
DU 680-207006-c-15	11/17/2021	1:34 PM	23.12	-1.00	6.57	.00	56.41	56.41	.00	.00	.00	.56	-1.00	.02
680-207006-c-7	11/17/2021	1:39 PM	23.09	-1.00	6.78	.00	111.47	111.47	.00	.00	.00	1.11	-1.00	.02
CCV	11/17/2021	1:45 PM	22.98	-1.00	10.29	106.13	222.75	10.49	212.26	.00	1.06	2.23	-1.00	.02
CCB	11/17/2021	1:51 PM	22.99	-1.00	8.15	.00	5.89	5.89	.00	.00	.00	.06	.07	.02

Copyright Hinterland Software Ltd.

Calibration Report

Calibration Record # 408



Calibration Settings

Calibration ID	PH	Date	11/17/2021	
Channel	1	Time	2:19 PM	
Probe Type	pH	Temperature	295.58 K	22.43 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.282	CorrCoeff	1.0000
Intercept	-0.194	Equation:	Y = (-60.282) X + (-0.194)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.282	-65.00	-53.00
Intercept	-0.194	-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	300.78
	4.00	180.66
	7.00	-0.12
	10.00	-179.07
	12.00	-303.22

Test America

Water Analysis Report

AT4 Analyst:_____

Run Number 1210 **Order Number** 20211117-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	11/17/2021	3:59 PM	22.10	-1.00	5.33	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	11/17/2021	4:06 PM	22.03	-1.00	10.59	121.95	206.66	.00	169.43	37.24	1.22	2.07	-1.00	.02
BUFFER 7	11/17/2021	4:09 PM	21.73	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	11/17/2021	4:16 PM	21.85	-1.00	10.59	117.47	212.46	.00	189.98	22.48	1.17	2.12	-1.00	.02
MB	11/17/2021	4:22 PM	21.86	-1.00	9.15	3.37	5.76	.00	4.78	.99	.03	.07	.07	.02
280-155202-J-1	11/17/2021	4:34 PM	21.61	-1.00	7.43	.00	791.70	791.70	.00	.00	.00	7.92	-1.00	.02
du 280-155202-J-1	11/17/2021	4:45 PM	21.79	-1.00	7.48	.00	791.30	791.30	.00	.00	.00	7.91	-1.00	.02
280-155202-J-2	11/17/2021	4:55 PM	21.82	-1.00	7.98	.00	553.24	553.24	.00	.00	.00	5.53	-1.00	.02
280-155202-I-3	11/17/2021	5:03 PM	21.89	-1.00	7.64	.00	397.89	397.89	.00	.00	.00	3.98	-1.00	.02
280-155015-F-11	11/17/2021	5:09 PM	22.10	-1.00	6.92	.00	117.07	117.07	.00	.00	.00	1.17	-1.00	.02
280-155015-F-12	11/17/2021	5:17 PM	22.34	-1.00	7.37	.00	352.16	352.16	.00	.00	.00	3.52	-1.00	.02
280-155399-A-1	11/17/2021	5:25 PM	22.23	-1.00	7.66	.00	385.47	385.47	.00	.00	.00	3.85	-1.00	.02
280-155399-A-2	11/17/2021	5:35 PM	22.08	-1.00	7.49	.00	596.74	596.74	.00	.00	.00	5.97	-1.00	.02
280-155399-A-3	11/17/2021	5:44 PM	22.07	-1.00	7.66	.00	498.21	498.21	.00	.00	.00	4.98	-1.00	.02
280-155399-A-4	11/17/2021	5:54 PM	22.07	-1.00	7.28	.00	700.16	700.16	.00	.00	.00	7.00	-1.00	.02
CCV	11/17/2021	6:02 PM	22.17	-1.00	10.55	122.05	213.42	.00	182.74	30.67	1.22	2.13	-1.00	.02
CCB	11/17/2021	6:08 PM	22.16	-1.00	8.53	1.08	4.42	2.25	2.16	.00	.01	.05	.06	.02
280-155207-b-7	11/17/2021	6:19 PM	22.13	-1.00	7.61	.00	765.81	765.81	.00	.00	.00	7.66	-1.00	.02
280-155207-b-8	11/17/2021	6:28 PM	22.35	-1.00	7.54	.00	461.67	461.67	.00	.00	.00	4.62	-1.00	.02
280-155207-a-3	11/17/2021	6:36 PM	22.37	-1.00	7.53	.00	394.39	394.39	.00	.00	.00	3.94	-1.00	.02
280-155207-b-5	11/17/2021	6:43 PM	22.43	-1.00	6.93	.00	281.85	281.85	.00	.00	.00	2.82	-1.00	.02
280-155207-a-2	11/17/2021	6:52 PM	22.63	-1.00	7.59	.00	445.22	445.22	.00	.00	.00	4.45	-1.00	.02
280-155207-b-1	11/17/2021	7:01 PM	22.78	-1.00	7.62	.00	456.03	456.03	.00	.00	.00	4.56	-1.00	.02
280-155207-b-6	11/17/2021	7:11 PM	22.66	-1.00	7.34	.00	682.76	682.76	.00	.00	.00	6.83	-1.00	.02
280-155207-a-4	11/17/2021	7:21 PM	22.51	-1.00	7.50	.00	535.25	535.25	.00	.00	.00	5.35	-1.00	.02
280-154997-a-2	11/17/2021	7:27 PM	22.48	-1.00	7.28	.00	159.31	159.31	.00	.00	.00	1.59	-1.00	.02
280-154997-a-4	11/17/2021	7:33 PM	22.32	-1.00	7.21	.00	161.37	161.37	.00	.00	.00	1.61	-1.00	.02

GENERAL RESULTS REPORT.SRW

PC-TitratION PLUS by Man-Tech Associates, Inc.

Copyright Hinterland Software Ltd.

Run Number 1210 **Order Number** 20211117-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCV	11/17/2021	7:39 PM	22.20	-1.00	10.54	120.25	215.22	.00	189.94	25.28	1.20	2.15	-1.00	.02
CCB	11/17/2021	7:45 PM	22.32	-1.00	8.36	.00	4.46	4.46	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	7:52 PM	22.31	-1.00	10.55	121.37	215.23	.00	187.71	27.52	1.21	2.15	-1.00	.02
MB	11/17/2021	7:58 PM	22.49	-1.00	8.55	1.11	4.17	1.95	2.23	.00	.01	.05	.06	.02
280-154997-a-3	11/17/2021	8:04 PM	22.51	-1.00	7.26	.00	163.94	163.94	.00	.00	.00	1.64	-1.00	.02
DU 280-154997-a-3	11/17/2021	8:11 PM	22.67	-1.00	7.39	.00	164.52	164.52	.00	.00	.00	1.65	-1.00	.02
280-154997-a-1	11/17/2021	8:17 PM	22.84	-1.00	7.48	.00	189.84	189.84	.00	.00	.00	1.90	-1.00	.02
280-154997-a-5	11/17/2021	8:23 PM	22.86	-1.00	7.35	.00	163.23	163.23	.00	.00	.00	1.63	-1.00	.02
280-155295-f-2	11/17/2021	8:32 PM	22.72	-1.00	7.29	.00	421.97	421.97	.00	.00	.00	4.22	-1.00	.02
280-155295-f-3	11/17/2021	8:39 PM	22.61	-1.00	6.91	.00	369.50	369.50	.00	.00	.00	3.69	-1.00	.02
280-155295-f-12	11/17/2021	8:48 PM	22.61	-1.00	6.86	.00	453.66	453.66	.00	.00	.00	4.54	-1.00	.02
280-155295-f-11	11/17/2021	8:56 PM	22.61	-1.00	6.94	.00	434.07	434.07	.00	.00	.00	4.34	-1.00	.02
280-155295-f-1	11/17/2021	9:07 PM	22.61	-1.00	7.67	.00	626.41	626.41	.00	.00	.00	6.26	-1.00	.02
280-155295-f-10	11/17/2021	9:14 PM	22.69	-1.00	7.33	.00	345.57	345.57	.00	.00	.00	3.46	-1.00	.02
CCV	11/17/2021	9:21 PM	22.57	-1.00	10.49	117.61	217.08	.00	198.94	18.14	1.18	2.17	-1.00	.02
CCB	11/17/2021	9:26 PM	22.77	-1.00	8.31	.00	7.01	7.01	.00	.00	.00	.07	.08	.02
280-155336-c-7	11/17/2021	9:37 PM	22.77	-1.00	7.58	.00	827.27	827.27	.00	.00	.00	8.27	-1.00	.02
280-155336-c-3	11/17/2021	9:50 PM	23.04	-1.00	7.60	.00	943.52	943.52	.00	.00	.00	9.44	-1.00	.02
280-155336-c-4	11/17/2021	10:11 PM	23.23	-1.00	8.83	839.88	.00	-1,679.76	1,679.76	.00	8.40	.00	.00	.02
280-155336-c-2	11/17/2021	10:24 PM	23.27	-1.00	7.68	.00	847.99	847.99	.00	.00	.00	8.48	-1.00	.02
280-155336-c-1	11/17/2021	10:34 PM	23.06	-1.00	7.58	.00	595.70	595.70	.00	.00	.00	5.96	-1.00	.02
280-155275-a-3	11/17/2021	10:38 PM	22.89	-1.00	5.39	.00	14.02	14.02	.00	.00	.00	.17	.19	.02
280-155275-a-4	11/17/2021	10:41 PM	22.72	-1.00	3.62	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-155275-a-1	11/17/2021	10:49 PM	22.69	-1.00	7.01	.00	403.29	403.29	.00	.00	.00	4.03	-1.00	.02
280-155275-a-2	11/17/2021	10:53 PM	22.67	-1.00	3.92	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-155275-a-5	11/17/2021	10:58 PM	22.69	-1.00	4.67	.00	-.79	-.79	.00	.00	.00	.02	.05	.02
CCV	11/17/2021	11:05 PM	22.70	-1.00	10.41	111.99	211.37	.00	198.75	12.62	1.12	2.11	-1.00	.02
CCB	11/17/2021	11:10 PM	22.90	-1.00	8.62	2.24	5.14	.67	4.47	.00	.02	.06	.07	.02
LCS	11/17/2021	11:17 PM	22.96	-1.00	10.44	116.68	214.86	.00	196.36	18.50	1.17	2.15	-1.00	.02
MB	11/17/2021	11:22 PM	23.25	-1.00	8.56	1.49	5.17	2.20	2.97	.00	.01	.06	.07	.02

Copyright Hinterland Software Ltd.

Run Number 1210 **Order Number** 20211117-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-155393-c-1	11/17/2021	11:30 PM	23.27	-1.00	8.09	.00	321.21	321.21	.00	.00	.00	3.21	-1.00	.02
DU 280-155393-c-1	11/17/2021	11:38 PM	23.20	-1.00	8.16	.00	319.16	319.16	.00	.00	.00	3.19	-1.00	.02
280-155393-c-2	11/17/2021	11:45 PM	23.22	-1.00	8.18	.00	320.46	320.46	.00	.00	.00	3.20	-1.00	.02
280-155393-c-5	11/17/2021	11:53 PM	23.15	-1.00	8.15	.00	296.87	296.87	.00	.00	.00	2.97	-1.00	.02
280-155393-c-3	11/18/2021	12:01 AM	23.17	-1.00	8.28	.00	342.77	342.77	.00	.00	.00	3.43	-1.00	.02
280-155393-c-4	11/18/2021	12:08 AM	23.17	-1.00	8.19	.00	346.99	346.99	.00	.00	.00	3.47	-1.00	.02
280-155393-c-6	11/18/2021	12:14 AM	23.17	-1.00	6.97	.00	3.55	3.55	.00	.00	.00	.05	.06	.02
280-155221-c-1	11/18/2021	12:28 AM	23.12	-1.00	8.22	.00	1,015.28	1,015.28	.00	.00	.00	10.15	-1.00	.02
280-155221-c-2	11/18/2021	12:39 AM	23.31	-1.00	8.11	.00	760.61	760.61	.00	.00	.00	7.61	-1.00	.02
280-155224-e-1	11/18/2021	12:50 AM	23.30	-1.00	9.95	302.96	908.52	302.61	605.91	.00	3.03	9.09	-1.00	.02
CCV	11/18/2021	12:57 AM	23.47	-1.00	10.46	117.48	224.33	.00	213.70	10.63	1.17	2.24	-1.00	.02
CCB	11/18/2021	1:03 AM	23.75	-1.00	8.40	.51	4.76	3.74	1.01	.00	.01	.06	.07	.02
280-155397-e-1	11/18/2021	1:16 AM	23.60	-1.00	8.44	24.33	1,042.57	993.91	48.67	.00	.24	10.43	-1.00	.02
280-155397-f-2	11/18/2021	1:31 AM	23.67	-1.00	8.53	39.64	1,192.62	1,113.34	79.28	.00	.40	11.93	-1.00	.02
280-155241-a-8	11/18/2021	1:40 AM	23.70	-1.00	7.91	.00	518.99	518.99	.00	.00	.00	5.19	-1.00	.02
280-155241-a-3	11/18/2021	1:50 AM	23.64	-1.00	7.79	.00	643.36	643.36	.00	.00	.00	6.43	-1.00	.02
280-155241-a-10	11/18/2021	1:59 AM	23.65	-1.00	7.30	.00	436.23	436.23	.00	.00	.00	4.36	-1.00	.02
280-155241-a-11	11/18/2021	2:08 AM	23.60	-1.00	8.01	.00	475.46	475.46	.00	.00	.00	4.75	-1.00	.02
280-155241-a-13	11/18/2021	2:16 AM	23.60	-1.00	7.84	.00	339.97	339.97	.00	.00	.00	3.40	-1.00	.02
280-155241-a-16	11/18/2021	2:25 AM	23.62	-1.00	7.83	.00	519.06	519.06	.00	.00	.00	5.19	-1.00	.02
CCV	11/18/2021	2:31 AM	23.59	-1.00	10.41	114.98	222.41	.00	214.86	7.55	1.15	2.22	-1.00	.02
CCB	11/18/2021	2:37 AM	23.72	-1.00	8.17	.00	4.11	4.11	.00	.00	.00	.05	.06	.02

PC TitratION PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

Copyright Hinterland Software Ltd.

Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE KD	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2-NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	
10-31-21	1245		X	EW7-PM25A-7-25	AQ	9	ABCDEF	X	X	X	X	X	X	6°C
10 31 21	1450		X	EW7-PM25B-7-35	AQ	9	ABCDEF	X	X	X	X	X	X	
10 31 21	1105		X	EW7-PM27B-7-35	AQ	9	ABCDEF	X	X	X	X	X	X	

280-155015 Chain of Custody

Signatures	Date	Time
Relinquished by:	11-1-21	1700
Received by:	11/2/21	1100
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 535539785732

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

11/23/2021

1.6 IR11 CF-0.1.0

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020576

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE KD	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
10-30-21	0925		X	EW7-PM26A-7-25	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
10-30-21	1100		X	EW7-PM26B-7-35	AQ	9	ABCDEF	X	X	X	X	X	X		
10-30-21	1230		X	EW7-PM29A-7-25	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-1-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/2/21	1100	Airbill Number: 535539785754	(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:				

2.1 IR11 CF +1.0

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

11/29/2021

2020574

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE KD	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
10-30-21	1435		X	EW7-PM29B-7-35	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
10-30-21	1610		X	EW7-PM28A-7-25	↓	9	ABCDEF	X	X	X	X	X	X		↓
10-31-21	1235		X	GW80-7	↓	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-1-21	1200	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/2/21	1100	Airbill Number: 535539785743	(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

0.9 IR11 CF +1.0

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020577

11/23/2021

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355	Bill to: Brice Engineering
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse	Remarks
Sampler(s): BE KD		standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2 NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
10-31-21	1620		X	EW7-PM24A-7-25	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-1-21	1040		X	GW079-7	AQ	9	ABCDEF	X	X	X	X	X	X		
11-1-21	1205		X	GW075-7	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-1-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/2/21	1100	Airbill Number: 535539785721	(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

-0.6 IR11 CF +1.0

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

11/23/2021

2020578


eurofins
Environment Testing
TestAmerica
1801492
1801493
1801487
1801489
ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET
GRAND ISLAND, NE 68803
UNITED STATES US
SHIP DATE: 190CT21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3507
TO
EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517
(303) 736-0100
REF: S280-113339
RMA:
FedEx
Express
TUE - 02 NOV 10:30
PRIORITY OVERNIGHT
TRK# 0221 5355 3978 5754
TRK# 0221 5355 3978 5732
XH LAAA
CO-US
DEN
2.1
1.6
#5046225 11/01 56DJ3/14BA/FE4A
Part # 159470-434 RITE EXP 07/22
280-155015 Waybill



RT 650 4 11:30 E 5743 11.02

FZ

eurofins | Environment Testing TestAmerica

eurofins | Environment Testing TestAmerica

1801490

ORIGIN ID:PHDA (308) 379
GARY CARSON
BRICE ENGINEERING (WATER
7502 WEST 13TH STREET.

GRAND ISLAND, NE 68803
UNITED STATES US

TO

EUROFINS TESTA
4955 YARROW ST

ARVADA CO 800024517
(303) 736-0100
REF: S280-113339

RMA:

FedEx Express

E

J211020121101uv

Part # 159470-434 RIT2 EXP 07/22

FedEx
TRK# 0221 5355 3978 5743

TUE - 02 NOV 10:30A
PRIORITY OVERNIGHT

XH LAAA 0.9

80002
CO-US DEN

#5046225 11/01 56DJ3/14BA/FE4A

ORITY OVERNIGHT Master 5355 3978 5478
TRCK: 5355 3978 5721

eurofins | Environment Testing TestAmerica

1801497

RT 650

FZ

urofins | Environment Testing TestAmerica

1801494

IN ID:PHDA
CARSON
CE ENGINEERING (WA
WEST 13TH STREET

ND ISLAND, NE 68803
TED STATES US

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-113339

MA:

FedEx Express

E

J211020121101uv

Part # 159470-434 RIT2 EXP 07/22

FedEx
TRK# 0221 5355 3978 5721

TUE - 02 NOV 10:30
PRIORITY OVERNIGH

XH LAAA -0.6

80002
CO-US DEN

#5046225 11/01 56DJ3/14BA/FE4A

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-155015-1

Login Number: 155015
List Number: 1
Creator: Dubicki, Adam L

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	