ANALYTICAL REPORT

Job Number: 280-137609-2

Job Description: Cornhusker (CHAAP)

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

Attention: Corey Schwabenlander



Approved for release.
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Client Service Manager
7/30/2020 7:50 AM

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The Lab Certification ID# is 4025.

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

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

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Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

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

Glossary

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

Glossary (Continued)

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

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-137609-2

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 6/13/2020 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 15 coolers at receipt time were 0.8º C, 0.9º C, 1.0º C, 1.2º C, 1.2º C, 1.5º C, 1.5º C and 2.2º C.

Receipt Exceptions

The field sampler's name is not listed on two of the Chains of Custody.

The Chain of Custody does not list the parent sample, and no volume was provided for the parent. However, the MS/MSD samples are listed on the Chain of Custody and volume was provided for them. G0102-20A (280-137609-9), G0102-20A (280-137609-9[MS]) and G0102-20A (280-137609-9[MSD]). The client was contacted and informed that lab that the volume for the parent sample will be received on 6/13 on COC 2020085. The first Login Sample Receiving Checklist included in this data package is associated with the volume received on 6/12/2020.

The samples received on 6/12/2020 are reported under SDG 280-137609-1. The samples received on 6/13/2020 are reported under SDG 280-137609-2.

DISSOLVED GASES (GC)

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/17/2020, 06/18/2020, 06/19/2020 and 06/20/2020.

Methane failed the recovery criteria high for the MS of sample G0116-20AMS (280-137609-26) in batch 280-499435. Methane failed the recovery criteria low for the MSD of sample G0116-20AMSD (280-137609-26) in batch 280-499435. Methane exceeded the RPD limit. Refer to the QC report for details.

Samples G0117-20A (280-137609-16)[6X], G0115-20A (280-137609-20)[6X], G0100-20A (280-137609-22)[3X], G0116-20A (280-137609-26)[6X] and G0120-20A (280-137609-27)[6X] 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.

NITROAROMATICS AND NITRAMINES (HPLC)

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 06/17/2020 and analyzed on 06/22/2020, 06/23/2020, 06/24/2020 and 06/25/2020.

The following samples required filtration to reduce matrix interferences: G0117-20A (280-137609-16), G0115-20A (280-137609-20) and G0100-20A (280-137609-22).

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene, 2,4,6-Trinitrotoluene, Tetryl and HMX for the following samples in preparation batch 280-499027 and 280-499107 and analytical batch 280-499531: G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0103-20A (280-137609-24) and G0116-20A (280-137609-26).

The results from both columns has been reported and qualified in accordance with the laboratory's QAS.

Surrogate recovery for the following samples in preparation batch 280-499027 and analytical batch 280-499531 were outside control limits: G0103-20A (280-137609-24), G0116-20A (280-137609-26) and G0120-20A (280-137609-27). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within %R limit in the confirmation column.

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

ALKALINITY

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/16/2020.

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

AMMONIA

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/16/2020.

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

TOTAL KJELDAHL NITROGEN

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 06/17/2020 and analyzed on 06/19/2020.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample G0107-20AMSD (280-137609-25) in batch 280-499501. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/18/2020.

Sample G0111-20A (280-137609-23)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 06/18/2020.

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

ANIONS (28 DAYS)

Samples G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for anions (28 days) in accordance with 9056A. The samples were analyzed on 06/25/2020, 06/26/2020 and 06/29/2020.

Samples G0117-20A (280-137609-16)[5X], PZ013-20A (280-137609-17)[5X], G0104-20A (280-137609-18)[5X], PZ014-20A (280-137609-19)[5X], G0115-20A (280-137609-20)[5X], G0101-20A (280-137609-21)[5X], G0100-20A (280-137609-22)[5X], G0111-20A (280-137609-23)[5X], G0103-20A (280-137609-24)[5X], G0107-20A (280-137609-25)[10X], G0116-20A (280-137609-26)[5X], G0120-20A (280-137609-27)[5X], G0106-20A (280-137609-28)[10X] and G0095-20A (280-137609-29)[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 G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28) and G0095-20A (280-137609-29) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 06/27/2020 and 06/30/2020.

Samples G0103-20A (280-137609-24)[2X], G0116-20A (280-137609-26)[4X] and G0120-20A (280-137609-27)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following samples were filtered and preserved at the bench using sulfuric acid to bring their pH to <2, prior to analysis: G0117-20A (280-137609-16), PZ013-20A (280-137609-17), G0104-20A (280-137609-18), PZ014-20A (280-137609-19), G0115-20A (280-137609-20), G0101-20A (280-137609-21), G0100-20A (280-137609-22), G0111-20A (280-137609-23), G0103-20A (280-137609-24), G0107-20A (280-137609-25), G0116-20A (280-137609-26), G0120-20A (280-137609-27), G0106-20A (280-137609-28), G0095-20A (280-137609-29), (280-137609-M-9-A), (280-137609-M-9-B MS), (280-137609-M-9-C MSD), (280-137609-A-25-C MS) and (280-137609-A-25-D 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: 280-137609-2

Client Sample ID: G0117-20A — Lab Sample ID: 280-137609-16

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	28	D M	0.030	0.012	0.0038	mg/L	6		RSK-175	Total/NA
Ammonia	9.9		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	9.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	400	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	950		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	13		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ013-20A — Lab Sample ID: 280-137609-17

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.3		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2,4-Dinitrotoluene	0.078	J M	0.11	0.087	0.030	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	3.9	M	0.12	0.11	0.055	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	3.9	M	0.16	0.13	0.062	ug/L	1		8330A	Total/NA
Ammonia	2.1		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.7		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.4		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	280	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	780		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	9.8		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0104-20A — Lab Sample ID: 280-137609-18

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.6		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.34		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Sulfate	820	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	470		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.0		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ014-20A — Lab Sample ID: 280-137609-19

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.27		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.11		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Sulfate	480	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	470		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.3		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0115-20A — Lab Sample ID: 280-137609-20

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	23	D M	0.030	0.012	0.0038	mg/L	6		RSK-175	Total/NA
Ammonia	3.7		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.3		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	300	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	780		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	16		1.0	1.0	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: 280-137609-2

Client Sample ID: G0101-20A — Lab Sample ID: 280-137609-21

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	5.5		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
HMX	2.3	J1 M	0.24	0.23	0.099	ug/L	1		8330A	Total/NA
HMX	0.61	M J1	0.24	0.23	0.099	ug/L	1		8330A	Total/NA
Ammonia	1.2		0.50	0.25	0.11	mg/L	5		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.1		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.13		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	560	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	760		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	10		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0100-20A — Lab Sample ID: 280-137609-22

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	16	D M	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
1,3,5-Trinitrobenzene	1.5	M	0.22	0.21	0.089	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.39	J1 M	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.11	J M J1	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.83	M	0.12	0.11	0.054	ug/L	1		8330A	Total/NA
Ammonia	2.8		0.10	0.050	0.022	mg/L	1		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	0.26		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	290	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	600		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.0		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0111-20A — Lab Sample ID: 280-137609-23

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.8		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	10	M	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	12		0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.27		0.11	0.086	0.029	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	9.8		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	11		0.16	0.13	0.062	ug/L	1		8330A	Total/NA
HMX	1.8	M	0.22	0.21	0.094	ug/L	1		8330A	Total/NA
Ammonia	0.39		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	14		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	370	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	720		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.9		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0103-20A — Lab Sample ID: 280-137609-24

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.072		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	5.8	M Q J1	0.11	0.10	0.053	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0103-20A (Continued) — Lab Sample ID: 280-137609-24

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.42	J1	0.11	0.10	0.053	ug/L	1		8330A	Total/NA
Ammonia	1.7		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.1		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	24		4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	820	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	460		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	88		2.0	2.0	0.69	mg/L	2		9060A	Dissolved

Client Sample ID: G0107-20A — Lab Sample ID: 280-137609-25

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.13	M	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.25		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.83	J J1	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	1100	D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	390		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.1		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0116-20A — Lab Sample ID: 280-137609-26

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	29	D M J1	0.030	0.012	0.0038	mg/L	6		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	6.7	J1 Q	0.12	0.11	0.054	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.72	J1	0.12	0.11	0.054	ug/L	1		8330A	Total/NA
Ammonia	15		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	15		1.7	1.7	1.1	mg/L	1		351.2	Total/NA
Sulfate	250	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	900		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	23		4.0	4.0	1.4	mg/L	4		9060A	Dissolved

Client Sample ID: G0120-20A — Lab Sample ID: 280-137609-27

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	26	D M	0.030	0.012	0.0038	mg/L	6		RSK-175	Total/NA
Ammonia	16		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	15		1.7	1.7	1.1	mg/L	1		351.2	Total/NA
Sulfate	260	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	830		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	25		2.0	2.0	0.69	mg/L	2		9060A	Dissolved

Client Sample ID: G0106-20A — Lab Sample ID: 280-137609-28

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0038	J M	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.096	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.1		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.69		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	1100	D	50	30	10	mg/L	10		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0106-20A (Continued)
Lab Sample ID: 280-137609-28

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3	380		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.9		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0095-20A
Lab Sample ID: 280-137609-29

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.9	M	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	0.93	M	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
Ammonia	2.1		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.41		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	340	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	730		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	12		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0117-20A
Lab Sample ID: 280-137609-16
Date Collected: 06/12/20 11:10
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**28**	**D M**	0.030	0.012	0.0038	mg/L		06/18/20 16:14	6

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		06/23/20 08:31	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/23/20 08:31	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		06/23/20 08:31	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		06/23/20 08:31	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		06/23/20 08:31	1
2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054	ug/L		06/23/20 08:31	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		06/23/20 08:31	1
3-Nitrotoluene	0.42	U M	0.42	0.42	0.21	ug/L		06/23/20 08:31	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/23/20 08:31	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.11	ug/L		06/23/20 08:31	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		06/23/20 08:31	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/23/20 08:31	1
Nitrobenzene	0.21	U M	0.22	0.21	0.096	ug/L		06/23/20 08:31	1
RDX	0.21	U M	0.22	0.21	0.055	ug/L		06/23/20 08:31	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		06/25/20 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*109*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 08:31*	*1*
1,2-Dinitrobenzene	*118*	*M*	*83 - 119*	*06/17/20 17:11*	*06/25/20 06:40*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**9.9**		1.0	0.50	0.22	mg/L		06/16/20 14:48	10
Nitrogen, Total Kjeldahl	**9.0**		1.0	1.0	0.69	mg/L		06/19/20 18:20	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 17:31	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**400**	**D**	25	15	5.2	mg/L		06/25/20 23:19	5
Total Alkalinity as CaCO3	**950**		10	10	3.1	mg/L		06/16/20 15:13	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**13**		1.0	1.0	0.35	mg/L		06/27/20 17:01	1

Client Sample ID: PZ013-20A
Lab Sample ID: 280-137609-17
Date Collected: 06/12/20 11:30
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.3**		0.0050	0.0020	0.00063	mg/L		06/17/20 02:31	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091	ug/L		06/23/20 08:54	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040	ug/L		06/23/20 08:54	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		06/25/20 07:15	1
2,4-Dinitrotoluene	**0.078**	**J M**	0.11	0.087	0.030	ug/L		06/23/20 08:54	1

Client Sample ID: PZ013-20A
Lab Sample ID: 280-137609-17
Date Collected: 06/12/20 11:30
Matrix: Water
Date Received: 06/13/20 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.043	ug/L		06/23/20 08:54	1
2-Amino-4,6-dinitrotoluene	**3.9**	**M**	0.12	0.11	0.055	ug/L		06/23/20 08:54	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.093	ug/L		06/23/20 08:54	1
3-Nitrotoluene	0.43	U M	0.43	0.43	0.21	ug/L		06/23/20 08:54	1
4-Amino-2,6-dinitrotoluene	**3.9**	**M**	0.16	0.13	0.062	ug/L		06/23/20 08:54	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		06/23/20 08:54	1
HMX	0.22	U M	0.23	0.22	0.095	ug/L		06/25/20 07:15	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		06/23/20 08:54	1
Nitrobenzene	0.22	U M	0.23	0.22	0.099	ug/L		06/23/20 08:54	1
RDX	0.22	U M	0.23	0.22	0.056	ug/L		06/23/20 08:54	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/25/20 07:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 08:54*	*1*
1,2-Dinitrobenzene	*113*	*M*	*83 - 119*	*06/17/20 17:11*	*06/25/20 07:15*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.1**		1.0	0.50	0.22	mg/L		06/16/20 14:50	10
Nitrogen, Total Kjeldahl	**2.7**		1.0	1.0	0.69	mg/L		06/19/20 18:21	1
Nitrate Nitrite as N	**2.4**		0.10	0.050	0.019	mg/L		06/18/20 17:33	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**280**	**D**	25	15	5.2	mg/L		06/25/20 23:36	5
Total Alkalinity as CaCO3	**780**		10	10	3.1	mg/L		06/16/20 15:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**9.8**		1.0	1.0	0.35	mg/L		06/27/20 17:23	1

Client Sample ID: G0104-20A
Lab Sample ID: 280-137609-18
Date Collected: 06/12/20 08:25
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**1.6**		0.0050	0.0020	0.00063	mg/L		06/17/20 02:47	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		06/23/20 09:17	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/23/20 09:17	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		06/23/20 09:17	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		06/23/20 09:17	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		06/23/20 09:17	1
2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054	ug/L		06/23/20 09:17	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		06/23/20 09:17	1
3-Nitrotoluene	0.42	U M	0.42	0.42	0.21	ug/L		06/23/20 09:17	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/23/20 09:17	1
4-Nitrotoluene	0.42	U	0.44	0.42	0.11	ug/L		06/23/20 09:17	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		06/23/20 09:17	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/23/20 09:17	1

Client Sample ID: G0104-20A

Date Collected: 06/12/20 08:25
Date Received: 06/13/20 09:35

Lab Sample ID: 280-137609-18

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		06/23/20 09:17	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		06/23/20 09:17	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/23/20 09:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*103*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 09:17*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.34**		0.10	0.050	0.022	mg/L		06/16/20 14:52	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 18:25	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 17:35	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**820**	**D**	25	15	5.2	mg/L		06/25/20 23:52	5
Total Alkalinity as CaCO3	**470**		10	10	3.1	mg/L		06/16/20 15:28	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.0**		1.0	1.0	0.35	mg/L		06/27/20 17:45	1

Client Sample ID: PZ014-20A

Date Collected: 06/12/20 08:20
Date Received: 06/13/20 09:35

Lab Sample ID: 280-137609-19

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.27**		0.0050	0.0020	0.00063	mg/L		06/17/20 03:03	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.092	ug/L		06/23/20 09:40	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041	ug/L		06/23/20 09:40	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		06/23/20 09:40	1
2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030	ug/L		06/23/20 09:40	1
2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044	ug/L		06/23/20 09:40	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056	ug/L		06/23/20 09:40	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.094	ug/L		06/23/20 09:40	1
3-Nitrotoluene	0.44	U M	0.44	0.44	0.21	ug/L		06/23/20 09:40	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.063	ug/L		06/23/20 09:40	1
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		06/23/20 09:40	1
HMX	0.22	U	0.23	0.22	0.096	ug/L		06/23/20 09:40	1
MNX	0.44	U	2.2	0.44	0.17	ug/L		06/23/20 09:40	1
Nitrobenzene	0.22	U	0.23	0.22	0.10	ug/L		06/23/20 09:40	1
RDX	0.22	U	0.23	0.22	0.057	ug/L		06/23/20 09:40	1
Tetryl	0.11	U	0.12	0.11	0.035	ug/L		06/23/20 09:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 09:40*	*1*

Client Sample ID: PZ014-20A
Lab Sample ID: 280-137609-19

Date Collected: 06/12/20 08:20
Matrix: Water
Date Received: 06/13/20 09:35

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.11**		0.10	0.050	0.022	mg/L		06/16/20 14:54	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 18:26	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 17:37	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**480**	**D**	25	15	5.2	mg/L		06/26/20 00:09	5
Total Alkalinity as CaCO3	**470**		10	10	3.1	mg/L		06/16/20 15:34	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.3**		1.0	1.0	0.35	mg/L		06/27/20 18:08	1

Client Sample ID: G0115-20A
Lab Sample ID: 280-137609-20

Date Collected: 06/12/20 13:55
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**23**	**D M**	0.030	0.012	0.0038	mg/L		06/18/20 16:30	6

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090	ug/L		06/23/20 10:03	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		06/23/20 10:03	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		06/25/20 07:50	1
2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.029	ug/L		06/25/20 07:50	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		06/23/20 10:03	1
2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054	ug/L		06/23/20 10:03	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.092	ug/L		06/23/20 10:03	1
3-Nitrotoluene	0.43	U M	0.43	0.43	0.21	ug/L		06/23/20 10:03	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		06/23/20 10:03	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		06/23/20 10:03	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		06/23/20 10:03	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		06/23/20 10:03	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		06/23/20 10:03	1
RDX	0.21	U M	0.22	0.21	0.055	ug/L		06/23/20 10:03	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/25/20 07:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 10:03*	*1*
1,2-Dinitrobenzene	*115*	*M*	*83 - 119*	*06/17/20 17:11*	*06/25/20 07:50*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.7**		1.0	0.50	0.22	mg/L		06/16/20 14:56	10
Nitrogen, Total Kjeldahl	**4.3**		1.0	1.0	0.69	mg/L		06/19/20 18:27	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 17:51	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**300**	**D**	25	15	5.2	mg/L		06/26/20 00:25	5
Total Alkalinity as CaCO3	**780**		10	10	3.1	mg/L		06/16/20 15:42	1

Client Sample ID: G0115-20A
Lab Sample ID: 280-137609-20
Date Collected: 06/12/20 13:55
Matrix: Water
Date Received: 06/13/20 09:35

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**16**		1.0	1.0	0.35	mg/L		06/27/20 18:30	1

Client Sample ID: G0101-20A
Lab Sample ID: 280-137609-21
Date Collected: 06/12/20 14:25
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**5.5**		0.0050	0.0020	0.00063	mg/L		06/17/20 03:36	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.23	U	0.24	0.23	0.095	ug/L		06/23/20 10:26	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.042	ug/L		06/23/20 10:26	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.051	ug/L		06/23/20 10:26	1
2,4-Dinitrotoluene	0.091	U	0.11	0.091	0.031	ug/L		06/23/20 10:26	1
2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.045	ug/L		06/23/20 10:26	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057	ug/L		06/23/20 10:26	1
2-Nitrotoluene	0.23	U	0.24	0.23	0.097	ug/L		06/23/20 10:26	1
3-Nitrotoluene	0.45	U M	0.45	0.45	0.22	ug/L		06/23/20 10:26	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.065	ug/L		06/23/20 10:26	1
4-Nitrotoluene	0.45	U M	0.46	0.45	0.11	ug/L		06/23/20 10:26	1
HMX	**2.3**	**J1 M**	0.24	0.23	0.099	ug/L		06/23/20 10:26	1
HMX	**0.61**	**M J1**	0.24	0.23	0.099	ug/L		06/25/20 08:25	1
MNX	0.45	U	2.3	0.45	0.17	ug/L		06/23/20 10:26	1
Nitrobenzene	0.23	U M	0.24	0.23	0.10	ug/L		06/23/20 10:26	1
RDX	0.23	U	0.24	0.23	0.058	ug/L		06/23/20 10:26	1
Tetryl	0.11	U M	0.12	0.11	0.036	ug/L		06/23/20 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 10:26*	*1*
1,2-Dinitrobenzene	*99*		*83 - 119*	*06/17/20 17:11*	*06/25/20 08:25*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.2**		0.50	0.25	0.11	mg/L		06/16/20 14:58	5
Nitrogen, Total Kjeldahl	**2.1**		1.0	1.0	0.69	mg/L		06/19/20 18:29	1
Nitrate Nitrite as N	**0.13**		0.10	0.050	0.019	mg/L		06/18/20 17:53	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**560**	**D**	25	15	5.2	mg/L		06/26/20 00:41	5
Total Alkalinity as CaCO3	**760**		10	10	3.1	mg/L		06/16/20 15:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**10**		1.0	1.0	0.35	mg/L		06/27/20 18:53	1

Client Sample ID: G0100-20A
Lab Sample ID: 280-137609-22
Date Collected: 06/12/20 13:05
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**16**	**D M**	0.015	0.0060	0.0019	mg/L		06/18/20 16:47	3

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.5**	**M**	0.22	0.21	0.089	ug/L		06/23/20 10:49	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/23/20 10:49	1
2,4,6-Trinitrotoluene	**0.39**	**J1 M**	0.12	0.11	0.048	ug/L		06/23/20 10:49	1
2,4,6-Trinitrotoluene	**0.11**	**J M J1**	0.12	0.11	0.048	ug/L		06/25/20 09:00	1
2,4-Dinitrotoluene	0.085	U M	0.11	0.085	0.029	ug/L		06/25/20 09:00	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		06/23/20 10:49	1
2-Amino-4,6-dinitrotoluene	**0.83**	**M**	0.12	0.11	0.054	ug/L		06/23/20 10:49	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		06/23/20 10:49	1
3-Nitrotoluene	0.42	U M	0.42	0.42	0.21	ug/L		06/23/20 10:49	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/25/20 09:00	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.11	ug/L		06/23/20 10:49	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		06/25/20 09:00	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/23/20 10:49	1
Nitrobenzene	0.21	U M	0.22	0.21	0.096	ug/L		06/23/20 10:49	1
RDX	0.21	U M	0.22	0.21	0.054	ug/L		06/23/20 10:49	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		06/23/20 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 10:49*	*1*
1,2-Dinitrobenzene	*100*		*83 - 119*	*06/17/20 17:11*	*06/25/20 09:00*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.8**		0.10	0.050	0.022	mg/L		06/16/20 15:00	1
Nitrogen, Total Kjeldahl	**3.0**		1.0	1.0	0.69	mg/L		06/19/20 18:30	1
Nitrate Nitrite as N	**0.26**		0.10	0.050	0.019	mg/L		06/18/20 17:55	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**290**	**D**	25	15	5.2	mg/L		06/26/20 00:58	5
Total Alkalinity as CaCO3	**600**		10	10	3.1	mg/L		06/16/20 16:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.0**		1.0	1.0	0.35	mg/L		06/27/20 19:15	1

Client Sample ID: G0111-20A
Lab Sample ID: 280-137609-23
Date Collected: 06/12/20 12:40
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.8**		0.0050	0.0020	0.00063	mg/L		06/17/20 04:08	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**10**	**M**	0.22	0.21	0.090	ug/L		06/23/20 11:12	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/25/20 09:34	1
2,4,6-Trinitrotoluene	**12**		0.12	0.11	0.048	ug/L		06/23/20 11:12	1

Client Sample ID: G0111-20A
Lab Sample ID: 280-137609-23
Date Collected: 06/12/20 12:40
Matrix: Water
Date Received: 06/13/20 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	**0.27**		0.11	0.086	0.029	ug/L		06/23/20 11:12	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		06/23/20 11:12	1
2-Amino-4,6-dinitrotoluene	**9.8**		0.12	0.11	0.054	ug/L		06/23/20 11:12	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		06/23/20 11:12	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		06/23/20 11:12	1
4-Amino-2,6-dinitrotoluene	**11**		0.16	0.13	0.062	ug/L		06/23/20 11:12	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		06/23/20 11:12	1
HMX	**1.8**	**M**	0.22	0.21	0.094	ug/L		06/23/20 11:12	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		06/23/20 11:12	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		06/23/20 11:12	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		06/25/20 09:34	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		06/23/20 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 11:12*	*1*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*06/17/20 17:11*	*06/25/20 09:34*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.39**		0.10	0.050	0.022	mg/L		06/16/20 15:02	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 17:57	1
Nitrate Nitrite as N	**14**		0.20	0.10	0.038	mg/L		06/18/20 17:57	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**370**	**D**	25	15	5.2	mg/L		06/26/20 01:14	5
Total Alkalinity as CaCO3	**720**		10	10	3.1	mg/L		06/16/20 16:35	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.9**		1.0	1.0	0.35	mg/L		06/27/20 19:38	1

Client Sample ID: G0103-20A
Lab Sample ID: 280-137609-24
Date Collected: 06/11/20 16:45
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.072**		0.0050	0.0020	0.00063	mg/L		06/17/20 04:25	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 Q	0.22	0.21	0.088	ug/L		06/22/20 21:00	1
1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.038	ug/L		06/22/20 21:00	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		06/24/20 13:36	1
2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.029	ug/L		06/22/20 21:00	1
2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042	ug/L		06/22/20 21:00	1
2-Amino-4,6-dinitrotoluene	**5.8**	**M Q J1**	0.11	0.10	0.053	ug/L		06/22/20 21:00	1
2-Amino-4,6-dinitrotoluene	**0.42**	**J1**	0.11	0.10	0.053	ug/L		06/24/20 13:36	1
2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.089	ug/L		06/22/20 21:00	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		06/22/20 21:00	1
4-Amino-2,6-dinitrotoluene	0.13	U Q	0.16	0.13	0.060	ug/L		06/22/20 21:00	1
4-Nitrotoluene	0.42	U M Q	0.43	0.42	0.10	ug/L		06/22/20 21:00	1

Client Sample ID: G0103-20A
Lab Sample ID: 280-137609-24

Date Collected: 06/11/20 16:45
Matrix: Water
Date Received: 06/13/20 09:35

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
HMX	0.21	U Q	0.22	0.21	0.091	ug/L		06/22/20 21:00	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/24/20 13:36	1
Nitrobenzene	0.21	U Q	0.22	0.21	0.095	ug/L		06/22/20 21:00	1
RDX	0.21	U M Q	0.22	0.21	0.054	ug/L		06/22/20 21:00	1
Tetryl	0.10	U M Q	0.11	0.10	0.033	ug/L		06/22/20 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*374*	*M Q*	*83 - 119*	*06/17/20 09:26*	*06/22/20 21:00*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*06/17/20 09:26*	*06/24/20 13:36*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.7**		0.10	0.050	0.022	mg/L		06/16/20 15:22	1
Nitrogen, Total Kjeldahl	**2.1**		1.0	1.0	0.69	mg/L		06/19/20 18:42	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 18:09	1
Sulfide	**24**		4.0	1.9	0.79	mg/L		06/18/20 09:54	1
Sulfate	**820**	**D**	25	15	5.2	mg/L		06/26/20 01:31	5
Total Alkalinity as CaCO3	**460**		10	10	3.1	mg/L		06/16/20 16:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**88**		2.0	2.0	0.69	mg/L		06/30/20 13:46	2

Client Sample ID: G0107-20A
Lab Sample ID: 280-137609-25

Date Collected: 06/11/20 14:50
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.13**	**M**	0.0050	0.0020	0.00063	mg/L		06/18/20 19:13	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088	ug/L		06/22/20 21:23	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.039	ug/L		06/22/20 21:23	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		06/22/20 21:23	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		06/22/20 21:23	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		06/22/20 21:23	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.053	ug/L		06/22/20 21:23	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		06/22/20 21:23	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		06/22/20 21:23	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.060	ug/L		06/22/20 21:23	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		06/22/20 21:23	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		06/22/20 21:23	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/22/20 21:23	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		06/22/20 21:23	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		06/22/20 21:23	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		06/22/20 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*104*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 21:23*	*1*

Client Sample ID: G0107-20A
Lab Sample ID: 280-137609-25
Date Collected: 06/11/20 14:50
Matrix: Water
Date Received: 06/13/20 09:35

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.25**		0.10	0.050	0.022	mg/L		06/16/20 15:24	1
Nitrogen, Total Kjeldahl	**0.83**	**J J1**	1.0	1.0	0.69	mg/L		06/19/20 18:31	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 18:03	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 09:54	1
Sulfate	**1100**	**D**	50	30	10	mg/L		06/29/20 23:32	10
Total Alkalinity as CaCO3	**390**		10	10	3.1	mg/L		06/16/20 16:48	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.1**		1.0	1.0	0.35	mg/L		06/27/20 21:31	1

Client Sample ID: G0116-20A
Lab Sample ID: 280-137609-26
Date Collected: 06/12/20 09:50
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**29**	**D M J1**	0.030	0.012	0.0038	mg/L		06/20/20 01:00	6

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	0.089	ug/L		06/22/20 21:46	1
1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.039	ug/L		06/22/20 21:46	1
2,4,6-Trinitrotoluene	0.11	U Q	0.12	0.11	0.048	ug/L		06/22/20 21:46	1
2,4-Dinitrotoluene	0.085	U Q	0.11	0.085	0.029	ug/L		06/22/20 21:46	1
2,6-Dinitrotoluene	0.085	U Q	0.11	0.085	0.043	ug/L		06/22/20 21:46	1
2-Amino-4,6-dinitrotoluene	**6.7**	**J1 Q**	0.12	0.11	0.054	ug/L		06/22/20 21:46	1
2-Amino-4,6-dinitrotoluene	**0.72**	**J1**	0.12	0.11	0.054	ug/L		06/24/20 14:11	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.091	ug/L		06/22/20 21:46	1
3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21	ug/L		06/22/20 21:46	1
4-Amino-2,6-dinitrotoluene	0.13	U M Q	0.16	0.13	0.061	ug/L		06/22/20 21:46	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		06/24/20 14:11	1
HMX	0.21	U Q	0.22	0.21	0.093	ug/L		06/22/20 21:46	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		06/24/20 14:11	1
Nitrobenzene	0.21	U M Q	0.22	0.21	0.097	ug/L		06/22/20 21:46	1
RDX	0.21	U M Q	0.22	0.21	0.055	ug/L		06/22/20 21:46	1
Tetryl	0.11	U M Q	0.12	0.11	0.034	ug/L		06/22/20 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*122*	*M Q*	*83 - 119*	*06/17/20 09:26*	*06/22/20 21:46*	*1*
1,2-Dinitrobenzene	*119*	*M*	*83 - 119*	*06/17/20 09:26*	*06/24/20 14:11*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**15**		1.0	0.50	0.22	mg/L		06/16/20 15:26	10
Nitrogen, Total Kjeldahl	**15**		1.7	1.7	1.1	mg/L		06/19/20 18:44	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 18:23	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**250**	**D**	25	15	5.2	mg/L		06/26/20 02:36	5
Total Alkalinity as CaCO3	**900**		10	10	3.1	mg/L		06/16/20 16:56	1

Client Sample ID: G0116-20A
Lab Sample ID: 280-137609-26
Date Collected: 06/12/20 09:50
Matrix: Water
Date Received: 06/13/20 09:35

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**23**		4.0	4.0	1.4	mg/L		06/27/20 22:41	4

Client Sample ID: G0120-20A
Lab Sample ID: 280-137609-27
Date Collected: 06/12/20 11:00
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**26**	**D M**	0.030	0.012	0.0038	mg/L		06/19/20 16:24	6

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	0.088	ug/L		06/22/20 22:09	1
1,3-Dinitrobenzene	0.10	U Q	0.12	0.10	0.039	ug/L		06/22/20 22:09	1
2,4,6-Trinitrotoluene	0.10	U M Q	0.12	0.10	0.047	ug/L		06/22/20 22:09	1
2,4-Dinitrotoluene	0.084	U Q	0.10	0.084	0.029	ug/L		06/22/20 22:09	1
2,6-Dinitrotoluene	0.084	U Q	0.10	0.084	0.042	ug/L		06/22/20 22:09	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.12	0.10	0.053	ug/L		06/24/20 14:45	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089	ug/L		06/22/20 22:09	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		06/22/20 22:09	1
4-Amino-2,6-dinitrotoluene	0.13	U Q	0.16	0.13	0.060	ug/L		06/22/20 22:09	1
4-Nitrotoluene	0.42	U M Q	0.43	0.42	0.10	ug/L		06/22/20 22:09	1
HMX	0.21	U Q	0.22	0.21	0.092	ug/L		06/22/20 22:09	1
MNX	0.42	U M Q	2.1	0.42	0.16	ug/L		06/22/20 22:09	1
Nitrobenzene	0.21	U M Q	0.22	0.21	0.095	ug/L		06/22/20 22:09	1
RDX	0.21	U Q	0.22	0.21	0.054	ug/L		06/22/20 22:09	1
Tetryl	0.10	U M	0.12	0.10	0.033	ug/L		06/24/20 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*127*	*M Q*	*83 - 119*	*06/17/20 09:26*	*06/22/20 22:09*	*1*
1,2-Dinitrobenzene	*118*	*M*	*83 - 119*	*06/17/20 09:26*	*06/24/20 14:45*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**16**		1.0	0.50	0.22	mg/L		06/16/20 15:28	10
Nitrogen, Total Kjeldahl	**15**		1.7	1.7	1.1	mg/L		06/19/20 18:45	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 18:25	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**260**	**D**	25	15	5.2	mg/L		06/26/20 02:53	5
Total Alkalinity as CaCO3	**830**		10	10	3.1	mg/L		06/16/20 17:04	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**25**		2.0	2.0	0.69	mg/L		06/27/20 23:03	2

Client Sample ID: G0106-20A
Lab Sample ID: 280-137609-28
Date Collected: 06/12/20 16:05
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0038**	**J M**	0.0050	0.0020	0.00063	mg/L		06/18/20 20:02	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		06/22/20 22:32	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		06/22/20 22:32	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		06/22/20 22:32	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		06/22/20 22:32	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.041	ug/L		06/22/20 22:32	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		06/22/20 22:32	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		06/22/20 22:32	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		06/22/20 22:32	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.060	ug/L		06/22/20 22:32	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		06/22/20 22:32	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		06/22/20 22:32	1
MNX	0.41	U	2.1	0.41	0.16	ug/L		06/22/20 22:32	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		06/22/20 22:32	1
RDX	0.21	U M	0.22	0.21	0.053	ug/L		06/22/20 22:32	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		06/22/20 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 22:32*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.096**	**J**	0.10	0.050	0.022	mg/L		06/16/20 15:30	1
Nitrogen, Total Kjeldahl	**1.1**		1.0	1.0	0.69	mg/L		06/19/20 18:46	1
Nitrate Nitrite as N	**0.69**		0.10	0.050	0.019	mg/L		06/18/20 18:27	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**1100**	**D**	50	30	10	mg/L		06/29/20 23:48	10
Total Alkalinity as CaCO3	**380**		10	10	3.1	mg/L		06/16/20 17:11	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.9**		1.0	1.0	0.35	mg/L		06/27/20 23:26	1

Client Sample ID: G0095-20A
Lab Sample ID: 280-137609-29
Date Collected: 06/12/20 15:10
Matrix: Water
Date Received: 06/13/20 09:35

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.9**	**M**	0.0050	0.0020	0.00063	mg/L		06/18/20 20:19	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.93**	**M**	0.22	0.21	0.090	ug/L		06/22/20 22:55	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/22/20 22:55	1
2,4,6-Trinitrotoluene	0.11	U M	0.12	0.11	0.048	ug/L		06/22/20 22:55	1
2,4-Dinitrotoluene	0.085	U M	0.11	0.085	0.029	ug/L		06/22/20 22:55	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		06/22/20 22:55	1

Client Sample ID: G0095-20A
Date Collected: 06/12/20 15:10
Date Received: 06/13/20 09:35

Lab Sample ID: 280-137609-29
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054	ug/L		06/22/20 22:55	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		06/22/20 22:55	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		06/22/20 22:55	1
4-Amino-2,6-dinitrotoluene	0.13	U M	0.16	0.13	0.061	ug/L		06/22/20 22:55	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		06/22/20 22:55	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		06/24/20 15:20	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		06/22/20 22:55	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		06/24/20 15:20	1
RDX	0.21	U M	0.22	0.21	0.055	ug/L		06/22/20 22:55	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/24/20 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*06/17/20 09:26*	*06/22/20 22:55*	*1*
1,2-Dinitrobenzene	*117*		*83 - 119*	*06/17/20 09:26*	*06/24/20 15:20*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.1**		0.10	0.050	0.022	mg/L		06/16/20 15:32	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 17:59	1
Nitrate Nitrite as N	**0.41**		0.10	0.050	0.019	mg/L		06/18/20 18:29	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 14:09	1
Sulfate	**340**	**D**	25	15	5.2	mg/L		06/26/20 03:26	5
Total Alkalinity as CaCO3	**730**		10	10	3.1	mg/L		06/16/20 17:18	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**12**		1.0	1.0	0.35	mg/L		06/27/20 23:49	1

Default Detection Limits

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

Job ID: 280-137609-2

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: 280-137609-2

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)							
280-137609-16	G0117-20A	109 M							
280-137609-17	PZ013-20A	97 M							
280-137609-18	G0104-20A	103 M							
280-137609-19	PZ014-20A	102 M							
280-137609-20	G0115-20A	97 M							
280-137609-21	G0101-20A	102 M							
280-137609-22	G0100-20A	92 M							
280-137609-23	G0111-20A	89 M							
280-137609-24	G0103-20A	374 M Q							
280-137609-25	G0107-20A	104 M							
280-137609-26	G0116-20A	122 M Q							
280-137609-27	G0120-20A	127 M Q							
280-137609-28	G0106-20A	102 M							
280-137609-29	G0095-20A	97							
LCS 280-499027/2-A	Lab Control Sample	102							
LCS 280-499027/4-A	Lab Control Sample	109							
LCS 280-499107/2-A	Lab Control Sample	101							
LCS 280-499107/3-A	Lab Control Sample	102							
LCSD 280-499027/3-A	Lab Control Sample Dup	106							
LCSD 280-499027/5-A	Lab Control Sample Dup	106 M							
MB 280-499027/1-A	Method Blank	103							
MB 280-499107/1-A	Method Blank	100 M							

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)							
280-137609-16	G0117-20A	118 M							
280-137609-17	PZ013-20A	113 M							
280-137609-20	G0115-20A	115 M							
280-137609-21	G0101-20A	99							
280-137609-22	G0100-20A	100							
280-137609-23	G0111-20A	102 M							
280-137609-24	G0103-20A	91							
280-137609-26	G0116-20A	119 M							
280-137609-27	G0120-20A	118 M							
280-137609-29	G0095-20A	117							

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-499014/7
Matrix: Water
Analysis Batch: 499014

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/16/20 21:36	1

Lab Sample ID: LCS 280-499014/5
Matrix: Water
Analysis Batch: 499014

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0730	0.0722		mg/L		99	73 - 125

Lab Sample ID: LCSD 280-499014/6
Matrix: Water
Analysis Batch: 499014

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0730	0.0797		mg/L		109	73 - 125	10	20

Lab Sample ID: MB 280-499210/4
Matrix: Water
Analysis Batch: 499210

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/18/20 09:42	1

Lab Sample ID: LCS 280-499210/2
Matrix: Water
Analysis Batch: 499210

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0730	0.0786		mg/L		108	73 - 125

Lab Sample ID: LCSD 280-499210/3
Matrix: Water
Analysis Batch: 499210

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0730	0.0804		mg/L		110	73 - 125	2	20

Lab Sample ID: MB 280-499415/33
Matrix: Water
Analysis Batch: 499415

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/18/20 17:52	1

Lab Sample ID: LCS 280-499415/31
Matrix: Water
Analysis Batch: 499415

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0730	0.0749	M	mg/L		103	73 - 125

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: LCSD 280-499415/32
Matrix: Water
Analysis Batch: 499415

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.0730	0.0680	M	mg/L		93	73 - 125	10	20

Lab Sample ID: MB 280-499435/4
Matrix: Water
Analysis Batch: 499435

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/19/20 15:02	1

Lab Sample ID: LCS 280-499435/2
Matrix: Water
Analysis Batch: 499435

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			0.0730	0.0735		mg/L		101	73 - 125		

Lab Sample ID: LCSD 280-499435/3
Matrix: Water
Analysis Batch: 499435

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.0730	0.0665		mg/L		91	73 - 125	10	20

Lab Sample ID: 280-137609-26 MS
Matrix: Water
Analysis Batch: 499435

Client Sample ID: G0116-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	29	D M J1	0.438	37.6	D M 4	mg/L		1931	73 - 125		

Lab Sample ID: 280-137609-26 MSD
Matrix: Water
Analysis Batch: 499435

Client Sample ID: G0116-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	29	D M J1	0.438	28.1	D M 4 J1	mg/L		-223	73 - 125	29	20

Lab Sample ID: 280-137609-26 DU
Matrix: Water
Analysis Batch: 499435

Client Sample ID: G0116-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Methane	29	D M J1		26.5	D M	mg/L				9	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-499027/1-A
Matrix: Water
Analysis Batch: 499531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499027

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		06/22/20 15:16	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/22/20 15:16	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/22/20 15:16	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		06/22/20 15:16	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		06/22/20 15:16	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/22/20 15:16	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		06/22/20 15:16	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		06/22/20 15:16	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/22/20 15:16	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		06/22/20 15:16	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		06/22/20 15:16	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		06/22/20 15:16	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		06/22/20 15:16	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/22/20 15:16	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/22/20 15:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*103*		*83 - 119*	*06/17/20 09:26*	*06/22/20 15:16*	*1*

Lab Sample ID: LCS 280-499027/2-A
Matrix: Water
Analysis Batch: 499531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499027

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.15		ug/L		108	73 - 125
1,3-Dinitrobenzene	2.00	2.06		ug/L		103	78 - 120
2,4,6-Trinitrotoluene	2.00	2.07		ug/L		104	71 - 123
2,4-Dinitrotoluene	2.00	1.92		ug/L		96	78 - 120
2,6-Dinitrotoluene	2.00	2.01		ug/L		100	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.91		ug/L		95	79 - 120
2-Nitrotoluene	2.00	1.80		ug/L		90	70 - 127
3-Nitrotoluene	2.00	1.96		ug/L		98	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.74		ug/L		87	76 - 125
4-Nitrotoluene	2.00	1.85		ug/L		93	71 - 127
HMX	2.00	1.88		ug/L		94	65 - 135
Nitrobenzene	2.00	2.05		ug/L		103	65 - 134
RDX	2.00	1.93		ug/L		96	68 - 130
Tetryl	2.00	1.93		ug/L		96	64 - 128

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

Lab Sample ID: LCS 280-499027/4-A
Matrix: Water
Analysis Batch: 499531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499027

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.13	M	ug/L		91	57 - 132

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	109		83 - 119

Lab Sample ID: LCSD 280-499027/3-A
Matrix: Water
Analysis Batch: 499531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499027

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.30		ug/L		115	73 - 125	7	30
1,3-Dinitrobenzene			2.00	2.17		ug/L		109	78 - 120	5	30
2,4,6-Trinitrotoluene			2.00	2.20		ug/L		110	71 - 123	6	30
2,4-Dinitrotoluene			2.00	2.05		ug/L		102	78 - 120	6	30
2,6-Dinitrotoluene			2.00	2.06		ug/L		103	77 - 127	3	30
2-Amino-4,6-dinitrotoluene			2.00	1.99		ug/L		99	79 - 120	4	30
2-Nitrotoluene			2.00	1.81		ug/L		91	70 - 127	1	30
3-Nitrotoluene			2.00	1.97		ug/L		98	73 - 125	1	30
4-Amino-2,6-dinitrotoluene			2.00	1.80		ug/L		90	76 - 125	4	30
4-Nitrotoluene			2.00	1.87		ug/L		94	71 - 127	1	30
HMX			2.00	2.02	M	ug/L		101	65 - 135	7	30
Nitrobenzene			2.00	2.09	M	ug/L		105	65 - 134	2	30
RDX			2.00	2.00		ug/L		100	68 - 130	3	30
Tetryl			2.00	2.05		ug/L		103	64 - 128	6	30

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

Lab Sample ID: LCSD 280-499027/5-A
Matrix: Water
Analysis Batch: 499531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499027

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX			2.33	2.06	M	ug/L		88	57 - 132	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dinitrobenzene	106	M	83 - 119

Lab Sample ID: MB 280-499107/1-A
Matrix: Water
Analysis Batch: 499532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499107

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		06/23/20 02:00	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/23/20 02:00	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/23/20 02:00	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		06/23/20 02:00	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		06/23/20 02:00	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/23/20 02:00	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		06/23/20 02:00	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/23/20 02:00	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/23/20 02:00	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		06/23/20 02:00	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		06/23/20 02:00	1

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

Lab Sample ID: MB 280-499107/1-A
Matrix: Water
Analysis Batch: 499532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499107

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.40	U	2.0	0.40	0.15	ug/L		06/23/20 02:00	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		06/23/20 02:00	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/23/20 02:00	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/23/20 02:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 02:00*	*1*

Lab Sample ID: LCS 280-499107/2-A
Matrix: Water
Analysis Batch: 499532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.39		ug/L		120	73 - 125
1,3-Dinitrobenzene	2.00	2.20		ug/L		110	78 - 120
2,4,6-Trinitrotoluene	2.00	2.32		ug/L		116	71 - 123
2,4-Dinitrotoluene	2.00	2.05		ug/L		102	78 - 120
2,6-Dinitrotoluene	2.00	2.12		ug/L		106	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.94		ug/L		97	79 - 120
2-Nitrotoluene	2.00	1.62		ug/L		81	70 - 127
3-Nitrotoluene	2.00	1.82		ug/L		91	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.75		ug/L		88	76 - 125
4-Nitrotoluene	2.00	1.68		ug/L		84	71 - 127
HMX	2.00	2.12		ug/L		106	65 - 135
Nitrobenzene	2.00	2.00		ug/L		100	65 - 134
RDX	2.00	2.08		ug/L		104	68 - 130
Tetryl	2.00	2.39		ug/L		120	64 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*101*		*83 - 119*

Lab Sample ID: LCS 280-499107/3-A
Matrix: Water
Analysis Batch: 499532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.06	M	ug/L		88	57 - 132

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

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: 280-137609-25 MS
Matrix: Water
Analysis Batch: 499501

Client Sample ID: G0107-20A
Prep Type: Total/NA
Prep Batch: 499167

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	0.83	J1	3.00	3.57		mg/L		91	90 - 110

Lab Sample ID: 280-137609-25 MSD
Matrix: Water
Analysis Batch: 499501

Client Sample ID: G0107-20A
Prep Type: Total/NA
Prep Batch: 499167

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.83	J1	3.00	3.43	J1	mg/L		86	90 - 110	4	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-499351/60
Matrix: Water
Analysis Batch: 499351

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		06/18/20 18:01	1

Lab Sample ID: LCS 280-499351/59
Matrix: Water
Analysis Batch: 499351

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	5.01		mg/L		100	90 - 110

Lab Sample ID: 280-137609-25 MS
Matrix: Water
Analysis Batch: 499351

Client Sample ID: G0107-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.050	U	4.00	3.86		mg/L		97	90 - 110

Lab Sample ID: 280-137609-25 MSD
Matrix: Water
Analysis Batch: 499351

Client Sample ID: G0107-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.050	U	4.00	3.90		mg/L		98	90 - 110	1	10

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

Lab Sample ID: MB 280-499227/2-A
Matrix: Water
Analysis Batch: 499231

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499227

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		06/18/20 09:54	1

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

Lab Sample ID: LCS 280-499227/1-A
Matrix: Water
Analysis Batch: 499231

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499227

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			22.2	12.0		mg/L		54	44 - 110		

Lab Sample ID: MB 280-499253/2-A
Matrix: Water
Analysis Batch: 499306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499253

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		06/18/20 14:09	1

Lab Sample ID: LCS 280-499253/1-A
Matrix: Water
Analysis Batch: 499306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499253

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			22.2	19.2		mg/L		87	44 - 110		

Lab Sample ID: 280-137609-16 MS
Matrix: Water
Analysis Batch: 499306

Client Sample ID: G0117-20A
Prep Type: Total/NA
Prep Batch: 499253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.9	U	22.2	17.6		mg/L		79	44 - 110		

Lab Sample ID: 280-137609-16 MSD
Matrix: Water
Analysis Batch: 499306

Client Sample ID: G0117-20A
Prep Type: Total/NA
Prep Batch: 499253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	22.2	15.2		mg/L		69	44 - 110	15	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-500258/55
Matrix: Water
Analysis Batch: 500258

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	3.0	U	5.0	3.0	1.0	mg/L		06/27/20 05:19	1

Lab Sample ID: LCS 280-500258/53
Matrix: Water
Analysis Batch: 500258

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	105		mg/L		105	87 - 112		

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

Lab Sample ID: LCSD 280-500258/54
Matrix: Water
Analysis Batch: 500258

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			100	100		mg/L		100	87 - 112	5	10

Lab Sample ID: MRL 280-500258/3
Matrix: Water
Analysis Batch: 500258

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	4.31	J	mg/L		86	50 - 150		

Lab Sample ID: 280-137609-F-26 MS
Matrix: Water
Analysis Batch: 500258

Client Sample ID: 280-137609-F-26 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	270	D	250	522	D	mg/L		101	87 - 112		

Lab Sample ID: 280-137609-F-26 MSD
Matrix: Water
Analysis Batch: 500258

Client Sample ID: 280-137609-F-26 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	270	D	250	525	D	mg/L		103	87 - 112	1	10

Lab Sample ID: 280-137609-F-26 DU
Matrix: Water
Analysis Batch: 500258

Client Sample ID: 280-137609-F-26 DU
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	270	D		259	D	mg/L				4	10

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

Lab Sample ID: 280-137609-25 MS
Matrix: Water
Analysis Batch: 500423

Client Sample ID: G0107-20A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	4.1		25.0	31.2		mg/L		108	88 - 112		

Lab Sample ID: 280-137609-25 MSD
Matrix: Water
Analysis Batch: 500423

Client Sample ID: G0107-20A
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	4.1		25.0	31.4		mg/L		109	88 - 112	0	15

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

Lab Sample ID: MB 280-500528/28-A
Matrix: Water
Analysis Batch: 500683

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	1.0	U	1.0	1.0	0.35	mg/L		06/30/20 05:48	1

Lab Sample ID: LCS 280-500528/27-A
Matrix: Water
Analysis Batch: 500683

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	26.1		mg/L		104	88 - 112

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-499040/58
Matrix: Water
Analysis Batch: 499040

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	10	U	10	10	3.1	mg/L		06/16/20 16:13	1

Lab Sample ID: LCS 280-499040/57
Matrix: Water
Analysis Batch: 499040

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	184		mg/L		92	89 - 109

Lab Sample ID: 280-137609-22 DU
Matrix: Water
Analysis Batch: 499040

Client Sample ID: G0100-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	600		631		mg/L		4	10

GC VOA

Analysis Batch: 499014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-17	PZ013-20A	Total/NA	Water	RSK-175	
280-137609-18	G0104-20A	Total/NA	Water	RSK-175	
280-137609-19	PZ014-20A	Total/NA	Water	RSK-175	
280-137609-21	G0101-20A	Total/NA	Water	RSK-175	
280-137609-23	G0111-20A	Total/NA	Water	RSK-175	
280-137609-24	G0103-20A	Total/NA	Water	RSK-175	
MB 280-499014/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-499014/5	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-499014/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 499210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	RSK-175	
280-137609-20	G0115-20A	Total/NA	Water	RSK-175	
280-137609-22	G0100-20A	Total/NA	Water	RSK-175	
MB 280-499210/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-499210/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-499210/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 499415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-25	G0107-20A	Total/NA	Water	RSK-175	
280-137609-28	G0106-20A	Total/NA	Water	RSK-175	
280-137609-29	G0095-20A	Total/NA	Water	RSK-175	
MB 280-499415/33	Method Blank	Total/NA	Water	RSK-175	
LCS 280-499415/31	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-499415/32	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 499435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-26	G0116-20A	Total/NA	Water	RSK-175	
280-137609-27	G0120-20A	Total/NA	Water	RSK-175	
MB 280-499435/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-499435/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-499435/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-137609-26 MS	G0116-20A	Total/NA	Water	RSK-175	
280-137609-26 MSD	G0116-20A	Total/NA	Water	RSK-175	
280-137609-26 DU	G0116-20A	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 499027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Total/NA	Water	3535	
280-137609-25	G0107-20A	Total/NA	Water	3535	
280-137609-26	G0116-20A	Total/NA	Water	3535	
280-137609-27	G0120-20A	Total/NA	Water	3535	
280-137609-28	G0106-20A	Total/NA	Water	3535	
280-137609-29	G0095-20A	Total/NA	Water	3535	
MB 280-499027/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-499027/2-A	Lab Control Sample	Total/NA	Water	3535	

HPLC/IC (Continued)

Prep Batch: 499027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-499027/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-499027/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-499027/5-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 499107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	3535	
280-137609-17	PZ013-20A	Total/NA	Water	3535	
280-137609-18	G0104-20A	Total/NA	Water	3535	
280-137609-19	PZ014-20A	Total/NA	Water	3535	
280-137609-20	G0115-20A	Total/NA	Water	3535	
280-137609-21	G0101-20A	Total/NA	Water	3535	
280-137609-22	G0100-20A	Total/NA	Water	3535	
280-137609-23	G0111-20A	Total/NA	Water	3535	
MB 280-499107/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-499107/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-499107/3-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 499531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Total/NA	Water	8330A	499027
280-137609-25	G0107-20A	Total/NA	Water	8330A	499027
280-137609-26	G0116-20A	Total/NA	Water	8330A	499027
280-137609-27	G0120-20A	Total/NA	Water	8330A	499027
280-137609-28	G0106-20A	Total/NA	Water	8330A	499027
280-137609-29	G0095-20A	Total/NA	Water	8330A	499027
MB 280-499027/1-A	Method Blank	Total/NA	Water	8330A	499027
LCS 280-499027/2-A	Lab Control Sample	Total/NA	Water	8330A	499027
LCS 280-499027/4-A	Lab Control Sample	Total/NA	Water	8330A	499027
LCSD 280-499027/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	499027
LCSD 280-499027/5-A	Lab Control Sample Dup	Total/NA	Water	8330A	499027

Analysis Batch: 499532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	8330A	499107
280-137609-17	PZ013-20A	Total/NA	Water	8330A	499107
280-137609-18	G0104-20A	Total/NA	Water	8330A	499107
280-137609-19	PZ014-20A	Total/NA	Water	8330A	499107
280-137609-20	G0115-20A	Total/NA	Water	8330A	499107
280-137609-21	G0101-20A	Total/NA	Water	8330A	499107
280-137609-22	G0100-20A	Total/NA	Water	8330A	499107
280-137609-23	G0111-20A	Total/NA	Water	8330A	499107
MB 280-499107/1-A	Method Blank	Total/NA	Water	8330A	499107
LCS 280-499107/2-A	Lab Control Sample	Total/NA	Water	8330A	499107
LCS 280-499107/3-A	Lab Control Sample	Total/NA	Water	8330A	499107

Analysis Batch: 499860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Total/NA	Water	8330A	499027
280-137609-26	G0116-20A	Total/NA	Water	8330A	499027
280-137609-27	G0120-20A	Total/NA	Water	8330A	499027

HPLC/IC (Continued)

Analysis Batch: 499860 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-29	G0095-20A	Total/NA	Water	8330A	499027

Analysis Batch: 500016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	8330A	499107
280-137609-17	PZ013-20A	Total/NA	Water	8330A	499107
280-137609-20	G0115-20A	Total/NA	Water	8330A	499107
280-137609-21	G0101-20A	Total/NA	Water	8330A	499107
280-137609-22	G0100-20A	Total/NA	Water	8330A	499107
280-137609-23	G0111-20A	Total/NA	Water	8330A	499107

General Chemistry

Analysis Batch: 498989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	350.1	
280-137609-17	PZ013-20A	Total/NA	Water	350.1	
280-137609-18	G0104-20A	Total/NA	Water	350.1	
280-137609-19	PZ014-20A	Total/NA	Water	350.1	
280-137609-20	G0115-20A	Total/NA	Water	350.1	
280-137609-21	G0101-20A	Total/NA	Water	350.1	
280-137609-22	G0100-20A	Total/NA	Water	350.1	
280-137609-23	G0111-20A	Total/NA	Water	350.1	
280-137609-24	G0103-20A	Total/NA	Water	350.1	
280-137609-25	G0107-20A	Total/NA	Water	350.1	
280-137609-26	G0116-20A	Total/NA	Water	350.1	
280-137609-27	G0120-20A	Total/NA	Water	350.1	
280-137609-28	G0106-20A	Total/NA	Water	350.1	
280-137609-29	G0095-20A	Total/NA	Water	350.1	

Analysis Batch: 499040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	SM 2320B	
280-137609-17	PZ013-20A	Total/NA	Water	SM 2320B	
280-137609-18	G0104-20A	Total/NA	Water	SM 2320B	
280-137609-19	PZ014-20A	Total/NA	Water	SM 2320B	
280-137609-20	G0115-20A	Total/NA	Water	SM 2320B	
280-137609-21	G0101-20A	Total/NA	Water	SM 2320B	
280-137609-22	G0100-20A	Total/NA	Water	SM 2320B	
280-137609-23	G0111-20A	Total/NA	Water	SM 2320B	
280-137609-24	G0103-20A	Total/NA	Water	SM 2320B	
280-137609-25	G0107-20A	Total/NA	Water	SM 2320B	
280-137609-26	G0116-20A	Total/NA	Water	SM 2320B	
280-137609-27	G0120-20A	Total/NA	Water	SM 2320B	
280-137609-28	G0106-20A	Total/NA	Water	SM 2320B	
280-137609-29	G0095-20A	Total/NA	Water	SM 2320B	
MB 280-499040/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-499040/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-137609-22 DU	G0100-20A	Total/NA	Water	SM 2320B	

General Chemistry

Prep Batch: 499167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	351.2	
280-137609-17	PZ013-20A	Total/NA	Water	351.2	
280-137609-18	G0104-20A	Total/NA	Water	351.2	
280-137609-19	PZ014-20A	Total/NA	Water	351.2	
280-137609-20	G0115-20A	Total/NA	Water	351.2	
280-137609-21	G0101-20A	Total/NA	Water	351.2	
280-137609-22	G0100-20A	Total/NA	Water	351.2	
280-137609-23	G0111-20A	Total/NA	Water	351.2	
280-137609-24	G0103-20A	Total/NA	Water	351.2	
280-137609-25	G0107-20A	Total/NA	Water	351.2	
280-137609-26	G0116-20A	Total/NA	Water	351.2	
280-137609-27	G0120-20A	Total/NA	Water	351.2	
280-137609-28	G0106-20A	Total/NA	Water	351.2	
280-137609-29	G0095-20A	Total/NA	Water	351.2	
280-137609-25 MS	G0107-20A	Total/NA	Water	351.2	
280-137609-25 MSD	G0107-20A	Total/NA	Water	351.2	

Prep Batch: 499227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Total/NA	Water	9030B	
280-137609-25	G0107-20A	Total/NA	Water	9030B	
MB 280-499227/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-499227/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 499231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Total/NA	Water	9034	499227
280-137609-25	G0107-20A	Total/NA	Water	9034	499227
MB 280-499227/2-A	Method Blank	Total/NA	Water	9034	499227
LCS 280-499227/1-A	Lab Control Sample	Total/NA	Water	9034	499227

Prep Batch: 499253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	9030B	
280-137609-17	PZ013-20A	Total/NA	Water	9030B	
280-137609-18	G0104-20A	Total/NA	Water	9030B	
280-137609-19	PZ014-20A	Total/NA	Water	9030B	
280-137609-20	G0115-20A	Total/NA	Water	9030B	
280-137609-21	G0101-20A	Total/NA	Water	9030B	
280-137609-22	G0100-20A	Total/NA	Water	9030B	
280-137609-23	G0111-20A	Total/NA	Water	9030B	
280-137609-26	G0116-20A	Total/NA	Water	9030B	
280-137609-27	G0120-20A	Total/NA	Water	9030B	
280-137609-28	G0106-20A	Total/NA	Water	9030B	
280-137609-29	G0095-20A	Total/NA	Water	9030B	
MB 280-499253/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-499253/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-137609-16 MS	G0117-20A	Total/NA	Water	9030B	
280-137609-16 MSD	G0117-20A	Total/NA	Water	9030B	

General Chemistry

Analysis Batch: 499306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	9034	499253
280-137609-17	PZ013-20A	Total/NA	Water	9034	499253
280-137609-18	G0104-20A	Total/NA	Water	9034	499253
280-137609-19	PZ014-20A	Total/NA	Water	9034	499253
280-137609-20	G0115-20A	Total/NA	Water	9034	499253
280-137609-21	G0101-20A	Total/NA	Water	9034	499253
280-137609-22	G0100-20A	Total/NA	Water	9034	499253
280-137609-23	G0111-20A	Total/NA	Water	9034	499253
280-137609-26	G0116-20A	Total/NA	Water	9034	499253
280-137609-27	G0120-20A	Total/NA	Water	9034	499253
280-137609-28	G0106-20A	Total/NA	Water	9034	499253
280-137609-29	G0095-20A	Total/NA	Water	9034	499253
MB 280-499253/2-A	Method Blank	Total/NA	Water	9034	499253
LCS 280-499253/1-A	Lab Control Sample	Total/NA	Water	9034	499253
280-137609-16 MS	G0117-20A	Total/NA	Water	9034	499253
280-137609-16 MSD	G0117-20A	Total/NA	Water	9034	499253

Analysis Batch: 499351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	353.2	
280-137609-17	PZ013-20A	Total/NA	Water	353.2	
280-137609-18	G0104-20A	Total/NA	Water	353.2	
280-137609-19	PZ014-20A	Total/NA	Water	353.2	
280-137609-20	G0115-20A	Total/NA	Water	353.2	
280-137609-21	G0101-20A	Total/NA	Water	353.2	
280-137609-22	G0100-20A	Total/NA	Water	353.2	
280-137609-23	G0111-20A	Total/NA	Water	353.2	
280-137609-24	G0103-20A	Total/NA	Water	353.2	
280-137609-25	G0107-20A	Total/NA	Water	353.2	
280-137609-26	G0116-20A	Total/NA	Water	353.2	
280-137609-27	G0120-20A	Total/NA	Water	353.2	
280-137609-28	G0106-20A	Total/NA	Water	353.2	
280-137609-29	G0095-20A	Total/NA	Water	353.2	
MB 280-499351/60	Method Blank	Total/NA	Water	353.2	
LCS 280-499351/59	Lab Control Sample	Total/NA	Water	353.2	
280-137609-25 MS	G0107-20A	Total/NA	Water	353.2	
280-137609-25 MSD	G0107-20A	Total/NA	Water	353.2	

Analysis Batch: 499501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	351.2	499167
280-137609-17	PZ013-20A	Total/NA	Water	351.2	499167
280-137609-18	G0104-20A	Total/NA	Water	351.2	499167
280-137609-19	PZ014-20A	Total/NA	Water	351.2	499167
280-137609-20	G0115-20A	Total/NA	Water	351.2	499167
280-137609-21	G0101-20A	Total/NA	Water	351.2	499167
280-137609-22	G0100-20A	Total/NA	Water	351.2	499167
280-137609-23	G0111-20A	Total/NA	Water	351.2	499167
280-137609-24	G0103-20A	Total/NA	Water	351.2	499167
280-137609-25	G0107-20A	Total/NA	Water	351.2	499167
280-137609-26	G0116-20A	Total/NA	Water	351.2	499167

General Chemistry (Continued)

Analysis Batch: 499501 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-27	G0120-20A	Total/NA	Water	351.2	499167
280-137609-28	G0106-20A	Total/NA	Water	351.2	499167
280-137609-29	G0095-20A	Total/NA	Water	351.2	499167
280-137609-25 MS	G0107-20A	Total/NA	Water	351.2	499167
280-137609-25 MSD	G0107-20A	Total/NA	Water	351.2	499167

Analysis Batch: 500081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Total/NA	Water	9056A	
280-137609-17	PZ013-20A	Total/NA	Water	9056A	
280-137609-18	G0104-20A	Total/NA	Water	9056A	
280-137609-19	PZ014-20A	Total/NA	Water	9056A	
280-137609-20	G0115-20A	Total/NA	Water	9056A	
280-137609-21	G0101-20A	Total/NA	Water	9056A	
280-137609-22	G0100-20A	Total/NA	Water	9056A	
280-137609-23	G0111-20A	Total/NA	Water	9056A	
280-137609-24	G0103-20A	Total/NA	Water	9056A	
280-137609-26	G0116-20A	Total/NA	Water	9056A	
280-137609-27	G0120-20A	Total/NA	Water	9056A	
280-137609-29	G0095-20A	Total/NA	Water	9056A	

Analysis Batch: 500258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-500258/55	Method Blank	Total/NA	Water	9056A	
LCS 280-500258/53	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-500258/54	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-500258/3	Lab Control Sample	Total/NA	Water	9056A	
280-137609-F-26 MS	280-137609-F-26 MS	Total/NA	Water	9056A	
280-137609-F-26 MSD	280-137609-F-26 MSD	Total/NA	Water	9056A	
280-137609-F-26 DU	280-137609-F-26 DU	Total/NA	Water	9056A	

Filtration Batch: 500262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Dissolved	Water	FILTRATION	
280-137609-17	PZ013-20A	Dissolved	Water	FILTRATION	
280-137609-18	G0104-20A	Dissolved	Water	FILTRATION	
280-137609-19	PZ014-20A	Dissolved	Water	FILTRATION	
280-137609-20	G0115-20A	Dissolved	Water	FILTRATION	
280-137609-21	G0101-20A	Dissolved	Water	FILTRATION	
280-137609-22	G0100-20A	Dissolved	Water	FILTRATION	
280-137609-23	G0111-20A	Dissolved	Water	FILTRATION	
280-137609-25	G0107-20A	Dissolved	Water	FILTRATION	
280-137609-26	G0116-20A	Dissolved	Water	FILTRATION	
280-137609-27	G0120-20A	Dissolved	Water	FILTRATION	
280-137609-28	G0106-20A	Dissolved	Water	FILTRATION	
280-137609-29	G0095-20A	Dissolved	Water	FILTRATION	
280-137609-25 MS	G0107-20A	Dissolved	Water	FILTRATION	
280-137609-25 MSD	G0107-20A	Dissolved	Water	FILTRATION	

General Chemistry

Analysis Batch: 500423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-16	G0117-20A	Dissolved	Water	9060A	500262
280-137609-17	PZ013-20A	Dissolved	Water	9060A	500262
280-137609-18	G0104-20A	Dissolved	Water	9060A	500262
280-137609-19	PZ014-20A	Dissolved	Water	9060A	500262
280-137609-20	G0115-20A	Dissolved	Water	9060A	500262
280-137609-21	G0101-20A	Dissolved	Water	9060A	500262
280-137609-22	G0100-20A	Dissolved	Water	9060A	500262
280-137609-23	G0111-20A	Dissolved	Water	9060A	500262
280-137609-25	G0107-20A	Dissolved	Water	9060A	500262
280-137609-26	G0116-20A	Dissolved	Water	9060A	500262
280-137609-27	G0120-20A	Dissolved	Water	9060A	500262
280-137609-28	G0106-20A	Dissolved	Water	9060A	500262
280-137609-29	G0095-20A	Dissolved	Water	9060A	500262
280-137609-25 MS	G0107-20A	Dissolved	Water	9060A	500262
280-137609-25 MSD	G0107-20A	Dissolved	Water	9060A	500262

Analysis Batch: 500465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-25	G0107-20A	Total/NA	Water	9056A	
280-137609-28	G0106-20A	Total/NA	Water	9056A	

Filtration Batch: 500528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Dissolved	Water	FILTRATION	
MB 280-500528/28-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-500528/27-A	Lab Control Sample	Dissolved	Water	FILTRATION	

Analysis Batch: 500683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-24	G0103-20A	Dissolved	Water	9060A	500528
MB 280-500528/28-A	Method Blank	Dissolved	Water	9060A	500528
LCS 280-500528/27-A	Lab Control Sample	Dissolved	Water	9060A	500528

Client Sample ID: G0117-20A

Lab Sample ID: 280-137609-16

Date Collected: 06/12/20 11:10

Matrix: Water

Date Received: 06/13/20 09:35

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		6	18 mL	18 mL	499210	06/18/20 16:14	GPM	TAL DEN
Total/NA	Prep	3535			472.3 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 06:40	JZ	TAL DEN
Total/NA	Prep	3535			472.3 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 08:31	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	498989	06/16/20 14:48	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:20	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:31	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 23:19	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 17:01	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:13	SPG	TAL DEN

Client Sample ID: PZ013-20A

Lab Sample ID: 280-137609-17

Date Collected: 06/12/20 11:30

Matrix: Water

Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 02:31	GPM	TAL DEN
Total/NA	Prep	3535			461.7 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 07:15	JZ	TAL DEN
Total/NA	Prep	3535			461.7 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 08:54	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	498989	06/16/20 14:50	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:21	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:33	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 23:36	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 17:23	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:21	SPG	TAL DEN

Client Sample ID: G0104-20A

Lab Sample ID: 280-137609-18

Date Collected: 06/12/20 08:25

Matrix: Water

Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 02:47	GPM	TAL DEN

Client Sample ID: G0104-20A

Date Collected: 06/12/20 08:25
Date Received: 06/13/20 09:35

Lab Sample ID: 280-137609-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			470.7 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 09:17	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:52	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:25	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:35	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 23:52	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 17:45	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:28	SPG	TAL DEN

Client Sample ID: PZ014-20A

Date Collected: 06/12/20 08:20
Date Received: 06/13/20 09:35

Lab Sample ID: 280-137609-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 03:03	GPM	TAL DEN
Total/NA	Prep	3535			455.5 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 09:40	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:54	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:26	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:37	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 00:09	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 18:08	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:34	SPG	TAL DEN

Client Sample ID: G0115-20A

Date Collected: 06/12/20 13:55
Date Received: 06/13/20 09:35

Lab Sample ID: 280-137609-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		6	18 mL	18 mL	499210	06/18/20 16:30	GPM	TAL DEN
Total/NA	Prep	3535			466.9 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 07:50	JZ	TAL DEN
Total/NA	Prep	3535			466.9 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 10:03	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	498989	06/16/20 14:56	BWH	TAL DEN

Client Sample ID: G0115-20A
Lab Sample ID: 280-137609-20

Date Collected: 06/12/20 13:55
Matrix: Water
Date Received: 06/13/20 09:35

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	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:27	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:51	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 00:25	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 18:30	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:42	SPG	TAL DEN

Client Sample ID: G0101-20A
Lab Sample ID: 280-137609-21

Date Collected: 06/12/20 14:25
Matrix: Water
Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 03:36	GPM	TAL DEN
Total/NA	Prep	3535			441.6 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 08:25	JZ	TAL DEN
Total/NA	Prep	3535			441.6 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 10:26	JZ	TAL DEN
Total/NA	Analysis	350.1		5	10 mL	10 mL	498989	06/16/20 14:58	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:29	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:53	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 00:41	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 18:53	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:50	SPG	TAL DEN

Client Sample ID: G0100-20A
Lab Sample ID: 280-137609-22

Date Collected: 06/12/20 13:05
Matrix: Water
Date Received: 06/13/20 09:35

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		3	18 mL	18 mL	499210	06/18/20 16:47	GPM	TAL DEN
Total/NA	Prep	3535			472.8 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 09:00	JZ	TAL DEN
Total/NA	Prep	3535			472.8 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 10:49	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:00	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:30	SVC	TAL DEN

Client Sample ID: G0100-20A
Lab Sample ID: 280-137609-22

Date Collected: 06/12/20 13:05
Matrix: Water
Date Received: 06/13/20 09:35

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	499351	06/18/20 17:55	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 00:58	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 19:15	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 16:20	SPG	TAL DEN

Client Sample ID: G0111-20A
Lab Sample ID: 280-137609-23

Date Collected: 06/12/20 12:40
Matrix: Water
Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 04:08	GPM	TAL DEN
Total/NA	Prep	3535			467.6 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 09:34	JZ	TAL DEN
Total/NA	Prep	3535			467.6 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 11:12	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:02	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 17:57	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	499351	06/18/20 17:57	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 01:14	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 19:38	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 16:35	SPG	TAL DEN

Client Sample ID: G0103-20A
Lab Sample ID: 280-137609-24

Date Collected: 06/11/20 16:45
Matrix: Water
Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 04:25	GPM	TAL DEN
Total/NA	Prep	3535			479.5 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	499860	06/24/20 13:36	JZ	TAL DEN
Total/NA	Prep	3535			479.5 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 21:00	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:22	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:42	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 18:09	SVC	TAL DEN

Client Sample ID: G0103-20A
Lab Sample ID: 280-137609-24
Date Collected: 06/11/20 16:45
Matrix: Water
Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	499227	06/18/20 09:51	SAH	TAL DEN
Total/NA	Analysis	9034		1			499231	06/18/20 09:54	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 01:31	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500528	06/29/20 13:27	JMB	TAL DEN
Dissolved	Analysis	9060A		2	20 mL	20 mL	500683	06/30/20 13:46	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 16:42	SPG	TAL DEN

Client Sample ID: G0107-20A
Lab Sample ID: 280-137609-25
Date Collected: 06/11/20 14:50
Matrix: Water
Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499415	06/18/20 19:13	GPM	TAL DEN
Total/NA	Prep	3535			478.7 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 21:23	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:24	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:31	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 18:03	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499227	06/18/20 09:51	SAH	TAL DEN
Total/NA	Analysis	9034		1			499231	06/18/20 09:54	BWH	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	500465	06/29/20 23:32	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 21:31	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 16:48	SPG	TAL DEN

Client Sample ID: G0116-20A
Lab Sample ID: 280-137609-26
Date Collected: 06/12/20 09:50
Matrix: Water
Date Received: 06/13/20 09:35

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		6	18 mL	18 mL	499435	06/20/20 01:00	GPM	TAL DEN
Total/NA	Prep	3535			470.2 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 14:11	JZ	TAL DEN
Total/NA	Prep	3535			470.2 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 21:46	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	498989	06/16/20 15:26	BWH	TAL DEN
Total/NA	Prep	351.2			15 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:44	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 18:23	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 02:36	JAP	TAL DEN

Lab Chronicle

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

Job ID: 280-137609-2

Client Sample ID: G0116-20A

Lab Sample ID: 280-137609-26

Date Collected: 06/12/20 09:50

Matrix: Water

Date Received: 06/13/20 09:35

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	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		4	20 mL	20 mL	500423	06/27/20 22:41	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 16:56	SPG	TAL DEN

Client Sample ID: G0120-20A

Lab Sample ID: 280-137609-27

Date Collected: 06/12/20 11:00

Matrix: Water

Date Received: 06/13/20 09:35

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		6	18 mL	18 mL	499435	06/19/20 16:24	GPM	TAL DEN
Total/NA	Prep	3535			477.7 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 14:45	JZ	TAL DEN
Total/NA	Prep	3535			477.7 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 22:09	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	498989	06/16/20 15:28	BWH	TAL DEN
Total/NA	Prep	351.2			15 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:45	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 18:25	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 02:53	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		2	20 mL	20 mL	500423	06/27/20 23:03	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 17:04	SPG	TAL DEN

Client Sample ID: G0106-20A

Lab Sample ID: 280-137609-28

Date Collected: 06/12/20 16:05

Matrix: Water

Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499415	06/18/20 20:02	GPM	TAL DEN
Total/NA	Prep	3535			484.7 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 22:32	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:30	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 18:46	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 18:27	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	500465	06/29/20 23:48	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 23:26	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 17:11	SPG	TAL DEN

Lab Chronicle

Client: Brice Environmental Services, Corp
Job ID: 280-137609-2
Project/Site: Cornhusker (CHAAP)

Client Sample ID: G0095-20A
Lab Sample ID: 280-137609-29

Date Collected: 06/12/20 15:10
Matrix: Water
Date Received: 06/13/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499415	06/18/20 20:19	GPM	TAL DEN
Total/NA	Prep	3535			469.4 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 15:20	JZ	TAL DEN
Total/NA	Prep	3535			469.4 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 22:55	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:32	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 17:59	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 18:29	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499253	06/18/20 11:27	SAH	TAL DEN
Total/NA	Analysis	9034		1			499306	06/18/20 14:09	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/26/20 03:26	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	500262	06/26/20 10:43	JMB	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	500423	06/27/20 23:49	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 17:18	SPG	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: 280-137609-2
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21

Method Summary

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

Job ID: 280-137609-2

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: 280-137609-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-137609-16	G0117-20A	Water	06/12/20 11:10	06/13/20 09:35	
280-137609-17	PZ013-20A	Water	06/12/20 11:30	06/13/20 09:35	
280-137609-18	G0104-20A	Water	06/12/20 08:25	06/13/20 09:35	
280-137609-19	PZ014-20A	Water	06/12/20 08:20	06/13/20 09:35	
280-137609-20	G0115-20A	Water	06/12/20 13:55	06/13/20 09:35	
280-137609-21	G0101-20A	Water	06/12/20 14:25	06/13/20 09:35	
280-137609-22	G0100-20A	Water	06/12/20 13:05	06/13/20 09:35	
280-137609-23	G0111-20A	Water	06/12/20 12:40	06/13/20 09:35	
280-137609-24	G0103-20A	Water	06/11/20 16:45	06/13/20 09:35	
280-137609-25	G0107-20A	Water	06/11/20 14:50	06/13/20 09:35	
280-137609-26	G0116-20A	Water	06/12/20 09:50	06/13/20 09:35	
280-137609-27	G0120-20A	Water	06/12/20 11:00	06/13/20 09:35	
280-137609-28	G0106-20A	Water	06/12/20 16:05	06/13/20 09:35	
280-137609-29	G0095-20A	Water	06/12/20 15:10	06/13/20 09:35	

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 495152

Lab Sample ID: IC 280-495152/6 Client Sample ID:

Date Analyzed: 05/16/20 10:57 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethane	1.51	Peak not integrated	meierg	05/17/20 06:37

Lab Sample ID: IC 280-495152/6 Client Sample ID:

Date Analyzed: 05/16/20 10:57 Lab File ID: 001F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Shouldering	meierg	05/17/20 07:19
Ethane	4.31	Peak not integrated	meierg	05/17/20 06:37

Lab Sample ID: IC 280-495152/7 Client Sample ID:

Date Analyzed: 05/16/20 11:13 Lab File ID: 001F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.04	Peak not integrated	meierg	05/17/20 06:43

Lab Sample ID: IC 280-495152/7 Client Sample ID:

Date Analyzed: 05/16/20 11:13 Lab File ID: 001F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Shouldering	meierg	05/17/20 06:43
Acetylene	4.14	Peak not integrated	meierg	05/17/20 06:43

Lab Sample ID: IC 280-495152/8 Client Sample ID:

Date Analyzed: 05/16/20 11:30 Lab File ID: 002F0301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.04	Peak not integrated	meierg	05/17/20 06:45

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 495152

Lab Sample ID: IC 280-495152/8 Client Sample ID:

Date Analyzed: 05/16/20 11:30 Lab File ID: 002F0301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Shouldering	meierg	05/17/20 06:44
Acetylene	4.14	Peak not integrated	meierg	05/17/20 06:45

Lab Sample ID: IC 280-495152/9 Client Sample ID:

Date Analyzed: 05/16/20 11:46 Lab File ID: 003F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Shouldering	meierg	05/17/20 06:46

Lab Sample ID: ICRT 280-495152/10 Client Sample ID:

Date Analyzed: 05/16/20 12:02 Lab File ID: 004F0501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.02	Peak not integrated	meierg	05/17/20 07:07

Lab Sample ID: ICRT 280-495152/10 Client Sample ID:

Date Analyzed: 05/16/20 12:02 Lab File ID: 004F0501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Shouldering	meierg	05/17/20 07:06
Acetylene	4.14	Peak not integrated	meierg	05/17/20 07:07

Lab Sample ID: IC 280-495152/11 Client Sample ID:

Date Analyzed: 05/16/20 12:19 Lab File ID: 005F0601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Shouldering	meierg	05/17/20 07:09

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 495152

Lab Sample ID: IC 280-495152/12 Client Sample ID:

Date Analyzed: 05/16/20 12:35 Lab File ID: 006F0701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Shouldering	meierg	05/17/20 07:16

Lab Sample ID: ICV 280-495152/16 Client Sample ID:

Date Analyzed: 05/16/20 13:25 Lab File ID: 010F1001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Shouldering	meierg	05/17/20 07:28

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499014

Lab Sample ID: CCVRT 280-499014/4 Client Sample ID:

Date Analyzed: 06/16/20 20:22 Lab File ID: 033F3601a.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.95	Peak not integrated	meierg	06/18/20 10:03

Lab Sample ID: CCVRT 280-499014/4 Client Sample ID:

Date Analyzed: 06/16/20 20:22 Lab File ID: 033F3601a.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.02	Shouldering	meierg	06/18/20 10:02
Acetylene	4.13	Peak not integrated	meierg	06/18/20 10:03

Lab Sample ID: CCV 280-499014/50 Client Sample ID:

Date Analyzed: 06/17/20 01:25 Lab File ID: 003F1701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.96	Peak not integrated	meierg	06/18/20 10:18

Lab Sample ID: CCV 280-499014/50 Client Sample ID:

Date Analyzed: 06/17/20 01:25 Lab File ID: 003F1701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Shouldering	meierg	06/18/20 10:18
Acetylene	4.13	Peak not integrated	meierg	06/18/20 10:18

Lab Sample ID: CCV 280-499014/62 Client Sample ID:

Date Analyzed: 06/17/20 04:41 Lab File ID: 015F2901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Shouldering	meierg	06/18/20 10:23

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499210

Lab Sample ID: CCVRT 280-499210/1 Client Sample ID:

Date Analyzed: 06/18/20 08:54 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.27	Peak not integrated	meierg	06/18/20 10:25
Acetylene	3.95	Peak not integrated	meierg	06/18/20 10:26

Lab Sample ID: CCVRT 280-499210/1 Client Sample ID:

Date Analyzed: 06/18/20 08:54 Lab File ID: 001F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.21	Peak not integrated	meierg	06/18/20 10:25
Ethylene	4.06	Shouldering	meierg	06/18/20 10:25
Acetylene	4.16	Peak not integrated	meierg	06/18/20 10:26

Lab Sample ID: CCV 280-499210/18 Client Sample ID:

Date Analyzed: 06/18/20 13:47 Lab File ID: 019F1901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/18/20 14:01
Acetylene	3.96	Peak not integrated	meierg	06/18/20 14:01

Lab Sample ID: CCV 280-499210/18 Client Sample ID:

Date Analyzed: 06/18/20 13:47 Lab File ID: 019F1901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/18/20 14:01
Ethylene	4.02	Shouldering	meierg	06/18/20 14:01
Acetylene	4.13	Peak not integrated	meierg	06/18/20 14:02

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499210

Lab Sample ID: 280-137609-16 Client Sample ID: G0117-20A

Date Analyzed: 06/18/20 16:14 Lab File ID: 028F2801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:32

Lab Sample ID: 280-137609-16 Client Sample ID: G0117-20A

Date Analyzed: 06/18/20 16:14 Lab File ID: 028F2801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.15	Peak not integrated	meierg	06/19/20 12:32

Lab Sample ID: 280-137609-20 Client Sample ID: G0115-20A

Date Analyzed: 06/18/20 16:30 Lab File ID: 029F2901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:32

Lab Sample ID: 280-137609-20 Client Sample ID: G0115-20A

Date Analyzed: 06/18/20 16:30 Lab File ID: 029F2901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.15	Peak not integrated	meierg	06/19/20 12:32

Lab Sample ID: 280-137609-22 Client Sample ID: G0100-20A

Date Analyzed: 06/18/20 16:47 Lab File ID: 030F3001.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:33

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499210

Lab Sample ID: 280-137609-22 Client Sample ID: G0100-20A

Date Analyzed: 06/18/20 16:47 Lab File ID: 030F3001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.15	Peak not integrated	meierg	06/19/20 12:33

Lab Sample ID: CCV 280-499210/30 Client Sample ID:

Date Analyzed: 06/18/20 17:03 Lab File ID: 031F3101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 16:08
Acetylene	3.96	Peak not integrated	meierg	06/19/20 16:08

Lab Sample ID: CCV 280-499210/30 Client Sample ID:

Date Analyzed: 06/18/20 17:03 Lab File ID: 031F3101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.17	Peak not integrated	meierg	06/19/20 16:08
Ethylene	4.03	Shouldering	meierg	06/19/20 16:08
Acetylene	4.13	Peak not integrated	meierg	06/19/20 16:08

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499415

Lab Sample ID: CCVRT 280-499415/1 Client Sample ID:

Date Analyzed: 06/18/20 08:54 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.27	Peak not integrated	meierg	06/18/20 10:25
Acetylene	3.95	Peak not integrated	meierg	06/18/20 10:26

Lab Sample ID: CCVRT 280-499415/1 Client Sample ID:

Date Analyzed: 06/18/20 08:54 Lab File ID: 001F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.21	Peak not integrated	meierg	06/18/20 10:25
Ethylene	4.06	Shouldering	meierg	06/18/20 10:25
Acetylene	4.16	Peak not integrated	meierg	06/18/20 10:26

Lab Sample ID: CCV 280-499415/30 Client Sample ID:

Date Analyzed: 06/18/20 17:03 Lab File ID: 031F3101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 16:08
Acetylene	3.96	Peak not integrated	meierg	06/19/20 16:08

Lab Sample ID: CCV 280-499415/30 Client Sample ID:

Date Analyzed: 06/18/20 17:03 Lab File ID: 031F3101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.17	Peak not integrated	meierg	06/19/20 16:08
Ethylene	4.03	Shouldering	meierg	06/19/20 16:08
Acetylene	4.13	Peak not integrated	meierg	06/19/20 16:08

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499415

Lab Sample ID: LCS 280-499415/31 Client Sample ID:

Date Analyzed: 06/18/20 17:19 Lab File ID: 032F3201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/22/20 13:13

Lab Sample ID: LCS 280-499415/31 Client Sample ID:

Date Analyzed: 06/18/20 17:19 Lab File ID: 032F3201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.17	Peak not integrated	meierg	06/22/20 13:13

Lab Sample ID: LCSD 280-499415/32 Client Sample ID:

Date Analyzed: 06/18/20 17:36 Lab File ID: 033F3301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/22/20 13:14

Lab Sample ID: LCSD 280-499415/32 Client Sample ID:

Date Analyzed: 06/18/20 17:36 Lab File ID: 033F3301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.17	Peak not integrated	meierg	06/22/20 13:14

Lab Sample ID: 280-137609-25 Client Sample ID: G0107-20A

Date Analyzed: 06/18/20 19:13 Lab File ID: 039F3901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:34

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499415

Lab Sample ID: 280-137609-25 Client Sample ID: G0107-20A

Date Analyzed: 06/18/20 19:13 Lab File ID: 039F3901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/19/20 12:34

Lab Sample ID: 280-137609-28 Client Sample ID: G0106-20A

Date Analyzed: 06/18/20 20:02 Lab File ID: 042F4201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.24	Peak not integrated	meierg	06/19/20 12:35

Lab Sample ID: 280-137609-28 Client Sample ID: G0106-20A

Date Analyzed: 06/18/20 20:02 Lab File ID: 042F4201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.15	Peak not integrated	meierg	06/19/20 12:35

Lab Sample ID: 280-137609-29 Client Sample ID: G0095-20A

Date Analyzed: 06/18/20 20:19 Lab File ID: 043F4301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:35

Lab Sample ID: 280-137609-29 Client Sample ID: G0095-20A

Date Analyzed: 06/18/20 20:19 Lab File ID: 043F4301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.14	Peak not integrated	meierg	06/19/20 12:35

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499415

Lab Sample ID: CCV 280-499415/47 Client Sample ID:

Date Analyzed: 06/18/20 21:41 Lab File ID: 048F4801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/22/20 13:20
Acetylene	3.96	Peak not integrated	meierg	06/22/20 13:21

Lab Sample ID: CCV 280-499415/47 Client Sample ID:

Date Analyzed: 06/18/20 21:41 Lab File ID: 048F4801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/22/20 13:20
Ethylene	4.02	Shouldering	meierg	06/22/20 13:21
Acetylene	4.13	Peak not integrated	meierg	06/22/20 13:21

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499435

Lab Sample ID: CCVRT 280-499435/1 Client Sample ID:

Date Analyzed: 06/19/20 14:13 Lab File ID: 06192001.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.96	Peak not integrated	meierg	06/22/20 13:28

Lab Sample ID: CCVRT 280-499435/1 Client Sample ID:

Date Analyzed: 06/19/20 14:13 Lab File ID: 06192001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.06	Shouldering	meierg	06/22/20 13:28
Acetylene	4.16	Peak not integrated	meierg	06/22/20 13:28

Lab Sample ID: 280-137609-27 Client Sample ID: G0120-20A

Date Analyzed: 06/19/20 16:24 Lab File ID: 06192009.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/23/20 12:20

Lab Sample ID: 280-137609-27 Client Sample ID: G0120-20A

Date Analyzed: 06/19/20 16:24 Lab File ID: 06192009.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/23/20 12:20

Lab Sample ID: CCV 280-499435/18 Client Sample ID:

Date Analyzed: 06/19/20 18:50 Lab File ID: 06192018.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/23/20 14:21

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499435

Lab Sample ID: CCV 280-499435/18 Client Sample ID:

Date Analyzed: 06/19/20 18:50 Lab File ID: 06192018.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.17	Peak assignment corrected	meierg	06/19/20 19:17
Acetylene	4.14	Shouldering	meierg	06/19/20 19:18

Lab Sample ID: CCV 280-499435/30 Client Sample ID:

Date Analyzed: 06/20/20 00:42 Lab File ID: 06192030.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.26	Peak not integrated	meierg	06/23/20 14:06
Acetylene	3.96	Shouldering	meierg	06/23/20 14:07

Lab Sample ID: CCV 280-499435/30 Client Sample ID:

Date Analyzed: 06/20/20 00:42 Lab File ID: 06192030.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.17	Peak not integrated	meierg	06/23/20 14:06
Ethylene	4.03	Shouldering	meierg	06/23/20 14:06
Acetylene	4.13	Shouldering	meierg	06/23/20 14:07

Lab Sample ID: 280-137609-26 Client Sample ID: G0116-20A

Date Analyzed: 06/20/20 01:00 Lab File ID: 031F3101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/23/20 14:10

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499435

Lab Sample ID: 280-137609-26 Client Sample ID: G0116-20A

Date Analyzed: 06/20/20 01:00 Lab File ID: 031F3101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak assignment corrected	meierg	06/20/20 03:44

Lab Sample ID: 280-137609-26 DU Client Sample ID: G0116-20A DU

Date Analyzed: 06/20/20 01:16 Lab File ID: 032F3201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/23/20 14:09

Lab Sample ID: 280-137609-26 DU Client Sample ID: G0116-20A DU

Date Analyzed: 06/20/20 01:16 Lab File ID: 032F3201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/23/20 14:09

Lab Sample ID: 280-137609-26 MS Client Sample ID: G0116-20A MS

Date Analyzed: 06/20/20 01:32 Lab File ID: 033F3301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/23/20 14:29

Lab Sample ID: 280-137609-26 MS Client Sample ID: G0116-20A MS

Date Analyzed: 06/20/20 01:32 Lab File ID: 033F3301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/23/20 14:29

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499435

Lab Sample ID: 280-137609-26 MSD Client Sample ID: G0116-20A MSD

Date Analyzed: 06/20/20 01:48 Lab File ID: 034F3401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/23/20 14:31

Lab Sample ID: 280-137609-26 MSD Client Sample ID: G0116-20A MSD

Date Analyzed: 06/20/20 01:48 Lab File ID: 034F3401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.16	Peak not integrated	meierg	06/23/20 14:31

Lab Sample ID: CCV 280-499435/40 Client Sample ID:

Date Analyzed: 06/20/20 03:42 Lab File ID: 041F4101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Shouldering	meierg	06/23/20 14:35
Acetylene	4.14	Shouldering	meierg	06/23/20 14:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/7 Client Sample ID:

Date Analyzed: 05/14/20 16:16 Lab File ID: 05140007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	16.48	Split Peak	zhangji	05/14/20 17:09
4-Nitrotoluene	16.72	Split Peak	zhangji	05/14/20 17:09
4-Amino-2,6-dinitrotoluene	17.07	Split Peak	zhangji	05/14/20 17:08
3-Nitrotoluene	17.78	Split Peak	zhangji	05/14/20 17:08
2-Amino-4,6-dinitrotoluene	17.94	Split Peak	zhangji	05/14/20 17:08
1,3,5-Trinitrobenzene	18.83	Peak assignment corrected	zhangji	05/14/20 17:08
2,6-Dinitrotoluene	19.74	Peak assignment corrected	zhangji	05/14/20 17:08
2,4-Dinitrotoluene	20.24	Peak assignment corrected	zhangji	05/14/20 17:08
Tetryl	23.52	Peak assignment corrected	zhangji	05/14/20 17:08
2,4,6-Trinitrotoluene	24.62	Peak assignment corrected	zhangji	05/14/20 17:08

Lab Sample ID: IC 280-494886/8 Client Sample ID:

Date Analyzed: 05/14/20 16:51 Lab File ID: 05140008.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	13.03	Baseline	zhangji	05/15/20 11:34

Lab Sample ID: IC 280-494886/9 Client Sample ID:

Date Analyzed: 05/14/20 17:26 Lab File ID: 05140009.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	13.03	Baseline	zhangji	05/15/20 11:34

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/10 Client Sample ID:

Date Analyzed: 05/14/20 18:01 Lab File ID: 05140010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.27	Peak assignment corrected	zhangji	05/15/20 11:20
1,2-Dinitrobenzene	13.04	Baseline	zhangji	05/15/20 11:34
1,3-Dinitrobenzene	15.55	Baseline	zhangji	05/15/20 11:20
2-Nitrotoluene	16.54	Baseline	zhangji	05/15/20 11:20
4-Nitrotoluene	16.82	Baseline	zhangji	05/15/20 11:20
4-Amino-2,6-dinitrotoluene	17.15	Baseline	zhangji	05/15/20 11:20
3-Nitrotoluene	17.75	Baseline	zhangji	05/15/20 11:20
2-Amino-4,6-dinitrotoluene	18.04	Baseline	zhangji	05/15/20 11:20
2,6-Dinitrotoluene	19.81	Baseline	zhangji	05/15/20 11:20
2,4-Dinitrotoluene	20.29	Baseline	zhangji	05/15/20 11:20
PETN	25.28	Peak Tail	zhangji	05/15/20 11:25

Lab Sample ID: IC 280-494886/11 Client Sample ID:

Date Analyzed: 05/14/20 18:36 Lab File ID: 05140011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.30	Peak assignment corrected	zhangji	05/15/20 11:20
1,2-Dinitrobenzene	13.04	Baseline	zhangji	05/15/20 11:35
Nitroglycerin	15.85	Baseline	zhangji	05/15/20 11:32
PETN	25.28	Peak Tail	zhangji	05/15/20 11:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/12 Client Sample ID:

Date Analyzed: 05/14/20 19:11 Lab File ID: 05140012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.31	Peak assignment corrected	zhangji	05/15/20 11:22
1,3-Dinitrobenzene	15.55	Baseline	zhangji	05/15/20 11:21
Nitroglycerin	15.85	Baseline	zhangji	05/15/20 11:32
2-Nitrotoluene	16.53	Baseline	zhangji	05/15/20 11:21
4-Nitrotoluene	16.83	Baseline	zhangji	05/15/20 11:21
4-Amino-2,6-dinitrotoluene	17.15	Baseline	zhangji	05/15/20 11:21
3-Nitrotoluene	17.74	Baseline	zhangji	05/15/20 11:21
2-Amino-4,6-dinitrotoluene	18.05	Baseline	zhangji	05/15/20 11:21
1,3,5-Trinitrobenzene	18.88	Baseline	zhangji	05/15/20 11:21
2,6-Dinitrotoluene	19.79	Baseline	zhangji	05/15/20 11:21
2,4-Dinitrotoluene	20.29	Baseline	zhangji	05/15/20 11:21
PETN	25.28	Peak Tail	zhangji	05/15/20 11:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/13 Client Sample ID:

Date Analyzed: 05/14/20 19:46 Lab File ID: 05140013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.33	Baseline	zhangji	05/15/20 11:22
1,2-Dinitrobenzene	13.04	Baseline	zhangji	05/15/20 11:35
1,3-Dinitrobenzene	15.54	Baseline	zhangji	05/15/20 11:22
Nitroglycerin	15.84	Incomplete Integration	zhangji	05/15/20 11:32
2-Nitrotoluene	16.55	Baseline	zhangji	05/15/20 11:22
4-Nitrotoluene	16.84	Baseline	zhangji	05/15/20 11:22
4-Amino-2,6-dinitrotoluene	17.16	Baseline	zhangji	05/15/20 11:22
3-Nitrotoluene	17.72	Baseline	zhangji	05/15/20 11:22
2-Amino-4,6-dinitrotoluene	18.03	Baseline	zhangji	05/15/20 11:22
1,3,5-Trinitrobenzene	18.86	Baseline	zhangji	05/15/20 11:22
2,6-Dinitrotoluene	19.82	Baseline	zhangji	05/15/20 11:22
2,4-Dinitrotoluene	20.29	Baseline	zhangji	05/15/20 11:22
PETN	25.28	Peak Tail	zhangji	05/15/20 11:24

Lab Sample ID: IC 280-494886/14 Client Sample ID:

Date Analyzed: 05/14/20 20:21 Lab File ID: 05140014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.32	Peak assignment corrected	zhangji	05/15/20 11:22
1,2-Dinitrobenzene	13.02	Split Peak	zhangji	05/15/20 11:35
PETN	25.28	Split Peak	zhangji	05/15/20 11:24

Lab Sample ID: IC 280-494886/15 Client Sample ID:

Date Analyzed: 05/14/20 20:56 Lab File ID: 05140015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	19.76	Baseline	zhangji	05/15/20 11:30
2,4-Dinitrotoluene	20.30	Baseline	zhangji	05/15/20 11:30

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: ICV 280-494886/16 Client Sample ID:

Date Analyzed: 05/14/20 21:31 Lab File ID: 05140016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.23	Peak assignment corrected	zhangji	05/15/20 11:14
2-Nitrotoluene	16.49	Baseline	zhangji	05/15/20 11:33
4-Nitrotoluene	16.77	Baseline	zhangji	05/15/20 11:33
4-Amino-2,6-dinitrotoluene	17.10	Baseline	zhangji	05/15/20 11:33
3-Nitrotoluene	17.69	Baseline	zhangji	05/15/20 11:33
2-Amino-4,6-dinitrotoluene	17.99	Baseline	zhangji	05/15/20 11:33
1,3,5-Trinitrobenzene	18.83	Baseline	zhangji	05/15/20 11:33
2,6-Dinitrotoluene	19.75	Baseline	zhangji	05/15/20 11:33
2,4-Dinitrotoluene	20.24	Baseline	zhangji	05/15/20 11:33

Lab Sample ID: IC 280-494886/17 Client Sample ID:

Date Analyzed: 05/14/20 22:06 Lab File ID: 05140017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.71	Peak assignment corrected	zhangji	05/15/20 11:36

Lab Sample ID: IC 280-494886/18 Client Sample ID:

Date Analyzed: 05/14/20 22:41 Lab File ID: 05140018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.73	Peak assignment corrected	zhangji	05/15/20 11:36

Lab Sample ID: IC 280-494886/19 Client Sample ID:

Date Analyzed: 05/14/20 23:16 Lab File ID: 05140019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.74	Peak assignment corrected	zhangji	05/15/20 11:36

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/20 Client Sample ID:

Date Analyzed: 05/14/20 23:51 Lab File ID: 05140020.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.74	Peak assignment corrected	zhangji	05/15/20 11:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 499860

Lab Sample ID: CCV 280-499860/34 Client Sample ID:

Date Analyzed: 06/24/20 11:51 Lab File ID: 06230034.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.03	Baseline	zhangji	06/24/20 16:45
2-Nitrotoluene	16.73	Baseline	zhangji	06/24/20 14:09
4-Nitrotoluene	17.02	Baseline	zhangji	06/24/20 14:09
4-Amino-2,6-dinitrotoluene	17.45	Baseline	zhangji	06/24/20 14:09
3-Nitrotoluene	17.94	Baseline	zhangji	06/24/20 14:09
2-Amino-4,6-dinitrotoluene	18.39	Baseline	zhangji	06/24/20 14:09
1,3,5-Trinitrobenzene	19.12	Baseline	zhangji	06/24/20 14:09
2,6-Dinitrotoluene	20.06	Baseline	zhangji	06/24/20 14:09
2,4-Dinitrotoluene	20.57	Baseline	zhangji	06/24/20 14:09

Lab Sample ID: CCV 280-499860/35 Client Sample ID:

Date Analyzed: 06/24/20 12:26 Lab File ID: 06230035.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.52	Incomplete Integration	zhangji	06/24/20 18:20

Lab Sample ID: 280-137609-24 Client Sample ID: G0103-20A

Date Analyzed: 06/24/20 13:36 Lab File ID: 06230037.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	06/24/20 18:21
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:21
Nitrobenzene		Invalid Compound ID	zhangji	06/24/20 18:21
RDX		Invalid Compound ID	zhangji	06/24/20 18:21

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 499860

Lab Sample ID: 280-137609-26 Client Sample ID: G0116-20A

Date Analyzed: 06/24/20 14:11 Lab File ID: 06230038.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/24/20 18:22
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:22
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:22
2-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:22
MNX		Invalid Compound ID	zhangji	06/24/20 18:21
1,2-Dinitrobenzene	13.27	Baseline	zhangji	06/24/20 18:22

Lab Sample ID: 280-137609-27 Client Sample ID: G0120-20A

Date Analyzed: 06/24/20 14:45 Lab File ID: 06230039.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/24/20 18:23
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:23
2-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:23
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:23
Tetryl		Invalid Compound ID	zhangji	06/24/20 18:23
1,2-Dinitrobenzene	13.26	Baseline	zhangji	06/24/20 18:22

Lab Sample ID: 280-137609-29 Client Sample ID: G0095-20A

Date Analyzed: 06/24/20 15:20 Lab File ID: 06230040.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX		Invalid Compound ID	zhangji	06/24/20 18:23
2-Amino-4,6-dinitrotoluene	18.38	Baseline	zhangji	06/24/20 18:23
1,3,5-Trinitrobenzene	19.12	Baseline	zhangji	06/24/20 18:23
2,4,6-Trinitrotoluene	24.92	Baseline	zhangji	06/24/20 18:23

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 499860

Lab Sample ID: CCV 280-499860/44 Client Sample ID:

Date Analyzed: 06/24/20 17:40 Lab File ID: 06230044.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.05	Baseline	zhangji	06/24/20 18:26
2-Nitrotoluene	16.75	Baseline	zhangji	06/24/20 18:26
4-Nitrotoluene	17.03	Baseline	zhangji	06/24/20 18:26
4-Amino-2,6-dinitrotoluene	17.47	Baseline	zhangji	06/24/20 18:26
3-Nitrotoluene	17.96	Baseline	zhangji	06/24/20 18:26
2-Amino-4,6-dinitrotoluene	18.40	Baseline	zhangji	06/24/20 18:26
1,3,5-Trinitrobenzene	19.14	Baseline	zhangji	06/24/20 18:26
2,6-Dinitrotoluene	20.06	Baseline	zhangji	06/24/20 18:26
2,4-Dinitrotoluene	20.58	Baseline	zhangji	06/24/20 18:26

Lab Sample ID: CCV 280-499860/45 Client Sample ID:

Date Analyzed: 06/24/20 18:15 Lab File ID: 06230045.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.93	Baseline	zhangji	06/24/20 18:51

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 500016

Lab Sample ID: CCV 280-500016/17 Client Sample ID:

Date Analyzed: 06/25/20 03:46 Lab File ID: 06240017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	15.75	Baseline	zhangji	06/25/20 17:06
Nitroglycerin	15.98	Baseline	zhangji	06/25/20 17:06
2-Nitrotoluene	16.68	Baseline	zhangji	06/25/20 17:06
4-Nitrotoluene	16.97	Baseline	zhangji	06/25/20 17:06
4-Amino-2,6-dinitrotoluene	17.41	Baseline	zhangji	06/25/20 17:06
3-Nitrotoluene	17.90	Baseline	zhangji	06/25/20 17:06
2-Amino-4,6-dinitrotoluene	18.35	Baseline	zhangji	06/25/20 17:06
1,3,5-Trinitrobenzene	19.08	Baseline	zhangji	06/25/20 17:06
2,6-Dinitrotoluene	20.01	Baseline	zhangji	06/25/20 17:06
2,4-Dinitrotoluene	20.52	Baseline	zhangji	06/25/20 17:06

Lab Sample ID: 280-137609-16 Client Sample ID: G0117-20A

Date Analyzed: 06/25/20 06:40 Lab File ID: 06240022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:12
3-Nitrotoluene		Baseline	zhangji	06/25/20 17:13
HMX		Invalid Compound ID	zhangji	06/25/20 17:12
RDX		Invalid Compound ID	zhangji	06/25/20 17:12
Tetryl		Invalid Compound ID	zhangji	06/25/20 17:13
1,2-Dinitrobenzene	13.22	Baseline	zhangji	06/25/20 17:13
2-Amino-4,6-dinitrotoluene	18.33	Baseline	zhangji	06/25/20 17:13
1,3,5-Trinitrobenzene	19.05	Baseline	zhangji	06/25/20 17:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 500016

Lab Sample ID: 280-137609-17 Client Sample ID: PZ013-20A

Date Analyzed: 06/25/20 07:15 Lab File ID: 06240023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.11	Baseline	zhangji	06/25/20 17:14
2-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:13
3-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:13
1,2-Dinitrobenzene	13.21	Baseline	zhangji	06/25/20 17:15
1,3-Dinitrobenzene	15.75	Baseline	zhangji	06/25/20 17:15
4-Amino-2,6-dinitrotoluene	17.37	Baseline	zhangji	06/25/20 17:13
2,4-Dinitrotoluene	20.64	Baseline	zhangji	06/25/20 17:15

Lab Sample ID: 280-137609-20 Client Sample ID: G0115-20A

Date Analyzed: 06/25/20 07:50 Lab File ID: 06240024.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:16
2-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:16
3-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:16
RDX		Invalid Compound ID	zhangji	06/25/20 17:16
1,2-Dinitrobenzene	13.21	Baseline	zhangji	06/25/20 17:16

Lab Sample ID: 280-137609-21 Client Sample ID: G0101-20A

Date Analyzed: 06/25/20 08:25 Lab File ID: 06240025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.11	Baseline	zhangji	06/25/20 17:17
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:16
3-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 500016

Lab Sample ID: 280-137609-22 Client Sample ID: G0100-20A

Date Analyzed: 06/25/20 09:00 Lab File ID: 06240026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:17
2-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:17
3-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:17
HMX		Invalid Compound ID	zhangji	06/25/20 17:17
2,4,6-Trinitrotoluene	24.88	Baseline	zhangji	06/25/20 17:17

Lab Sample ID: 280-137609-23 Client Sample ID: G0111-20A

Date Analyzed: 06/25/20 09:34 Lab File ID: 06240027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:17
1,2-Dinitrobenzene	13.22	Baseline	zhangji	06/25/20 17:18

Lab Sample ID: CCV 280-500016/28 Client Sample ID:

Date Analyzed: 06/25/20 10:10 Lab File ID: 06240028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.00	Baseline	zhangji	06/25/20 17:18
2-Nitrotoluene	16.70	Baseline	zhangji	06/25/20 17:18
4-Nitrotoluene	16.98	Baseline	zhangji	06/25/20 17:18
4-Amino-2,6-dinitrotoluene	17.42	Baseline	zhangji	06/25/20 17:18
3-Nitrotoluene	17.92	Baseline	zhangji	06/25/20 17:18
2-Amino-4,6-dinitrotoluene	18.35	Baseline	zhangji	06/25/20 17:18
1,3,5-Trinitrobenzene	19.10	Baseline	zhangji	06/25/20 17:18
Tetryl	23.83	Baseline	zhangji	06/25/20 17:18
2,4,6-Trinitrotoluene	24.86	Baseline	zhangji	06/25/20 17:18
PETN	25.40	Baseline	zhangji	06/25/20 17:18

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 500016

Lab Sample ID: CCV 280-500016/29 Client Sample ID:

Date Analyzed: 06/25/20 10:45 Lab File ID: 06240029.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.91	Baseline	zhangji	06/25/20 17:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/7 Client Sample ID:

Date Analyzed: 03/04/20 14:07 Lab File ID: 03040007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:19

Lab Sample ID: IC 280-487658/8 Client Sample ID:

Date Analyzed: 03/04/20 14:30 Lab File ID: 03040008.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/05/20 08:21

Lab Sample ID: IC 280-487658/9 Client Sample ID:

Date Analyzed: 03/04/20 14:53 Lab File ID: 03040009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:21

Lab Sample ID: IC 280-487658/10 Client Sample ID:

Date Analyzed: 03/04/20 15:16 Lab File ID: 03040010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:21

Lab Sample ID: IC 280-487658/11 Client Sample ID:

Date Analyzed: 03/04/20 15:39 Lab File ID: 03040011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:22

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/12 Client Sample ID:

Date Analyzed: 03/04/20 16:01 Lab File ID: 03040012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:22

Lab Sample ID: IC 280-487658/13 Client Sample ID:

Date Analyzed: 03/04/20 16:24 Lab File ID: 03040013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:22

Lab Sample ID: IC 280-487658/14 Client Sample ID:

Date Analyzed: 03/04/20 16:47 Lab File ID: 03040014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:23
2-Amino-4,6-dinitrotoluene	11.62	Baseline	beckerc	03/05/20 08:23
2,6-Dinitrotoluene	11.79	Unspecified		

Lab Sample ID: ICV 280-487658/15 Client Sample ID:

Date Analyzed: 03/04/20 17:10 Lab File ID: 03040015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:23

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/25 Client Sample ID:

Date Analyzed: 03/04/20 21:00 Lab File ID: 03040025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:29
DNX	6.92	Baseline	beckerc	03/05/20 08:29
MNX	7.36	Baseline	beckerc	03/05/20 08:30

Lab Sample ID: IC 280-487658/26 Client Sample ID:

Date Analyzed: 03/04/20 21:23 Lab File ID: 03040026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:30
DNX	6.92	Baseline	beckerc	03/05/20 08:30

Lab Sample ID: IC 280-487658/27 Client Sample ID:

Date Analyzed: 03/04/20 21:45 Lab File ID: 03040027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:30
DNX	6.92	Baseline	beckerc	03/05/20 08:30

Lab Sample ID: IC 280-487658/28 Client Sample ID:

Date Analyzed: 03/04/20 22:09 Lab File ID: 03040028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:31
DNX	6.92	Baseline	beckerc	03/05/20 08:31

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/29 Client Sample ID:

Date Analyzed: 03/04/20 22:31 Lab File ID: 03040029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:31
DNX	6.92	Baseline	beckerc	03/05/20 08:31

Lab Sample ID: IC 280-487658/30 Client Sample ID:

Date Analyzed: 03/04/20 22:54 Lab File ID: 03040030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:31
DNX	6.92	Baseline	beckerc	03/05/20 08:32

Lab Sample ID: IC 280-487658/31 Client Sample ID:

Date Analyzed: 03/04/20 23:17 Lab File ID: 03040031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:32
DNX	6.91	Baseline	beckerc	03/05/20 08:32

Lab Sample ID: IC 280-487658/32 Client Sample ID:

Date Analyzed: 03/04/20 23:40 Lab File ID: 03040032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:32
DNX	6.91	Baseline	beckerc	03/05/20 08:32

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: ICV 280-487658/33 Client Sample ID:

Date Analyzed: 03/05/20 00:03 Lab File ID: 03040033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:37
DNX	6.91	Baseline	beckerc	03/05/20 08:37

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 489145

Lab Sample ID: IC 280-489145/7 Client Sample ID:

Date Analyzed: 03/18/20 11:35 Lab File ID: 03180007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/19/20 08:41
1,3-Dinitrobenzene	9.53	Baseline	beckerc	03/19/20 08:41

Lab Sample ID: IC 280-489145/8 Client Sample ID:

Date Analyzed: 03/18/20 11:58 Lab File ID: 03180008.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:41

Lab Sample ID: IC 280-489145/9 Client Sample ID:

Date Analyzed: 03/18/20 12:21 Lab File ID: 03180009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:42

Lab Sample ID: IC 280-489145/10 Client Sample ID:

Date Analyzed: 03/18/20 12:44 Lab File ID: 03180010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:42

Lab Sample ID: IC 280-489145/11 Client Sample ID:

Date Analyzed: 03/18/20 13:07 Lab File ID: 03180011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 489145

Lab Sample ID: IC 280-489145/12 Client Sample ID:

Date Analyzed: 03/18/20 13:30 Lab File ID: 03180012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:43

Lab Sample ID: IC 280-489145/13 Client Sample ID:

Date Analyzed: 03/18/20 13:53 Lab File ID: 03180013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:44

Lab Sample ID: IC 280-489145/14 Client Sample ID:

Date Analyzed: 03/18/20 14:16 Lab File ID: 03180014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:44
2-Amino-4,6-dinitrotoluene	11.63	Baseline	beckerc	03/19/20 08:44
2,6-Dinitrotoluene	11.79	Unspecified		

Lab Sample ID: IC 280-489145/15 Client Sample ID:

Date Analyzed: 03/18/20 14:39 Lab File ID: 03180015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.08	Unspecified		
2-Amino-4,6-dinitrotoluene	11.64	Baseline	beckerc	03/19/20 08:46
2,6-Dinitrotoluene	11.80	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 489145

Lab Sample ID: ICV 280-489145/16 Client Sample ID:

Date Analyzed: 03/18/20 15:02 Lab File ID: 03180016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/19/20 08:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: CCV 280-499531/7 Client Sample ID:

Date Analyzed: 06/22/20 14:07 Lab File ID: 06220007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.73	Baseline	zhangji	06/23/20 14:05

Lab Sample ID: CCV 280-499531/9 Client Sample ID:

Date Analyzed: 06/22/20 14:53 Lab File ID: 06220009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.63	Baseline	zhangji	06/23/20 14:06
DNX	6.95	Baseline	zhangji	06/23/20 14:06
MNX	7.40	Baseline	zhangji	06/23/20 14:06

Lab Sample ID: MB 280-499027/1-A Client Sample ID:

Date Analyzed: 06/22/20 15:16 Lab File ID: 06220010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:10
MNX		Invalid Compound ID	zhangji	06/23/20 14:10

Lab Sample ID: LCSD 280-499027/3-A Client Sample ID:

Date Analyzed: 06/22/20 16:02 Lab File ID: 06220012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.72	Baseline	zhangji	06/23/20 16:07
Nitrobenzene	9.94	Incomplete Integration	zhangji	06/23/20 14:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: LCS 280-499027/4-A Client Sample ID:

Date Analyzed: 06/22/20 16:25 Lab File ID: 06220013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.40	Baseline	zhangji	06/23/20 14:11

Lab Sample ID: LCSD 280-499027/5-A Client Sample ID:

Date Analyzed: 06/22/20 16:48 Lab File ID: 06220014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.39	Baseline	zhangji	06/23/20 14:12
1,2-Dinitrobenzene	8.75	Baseline	zhangji	06/23/20 14:12

Lab Sample ID: CCV 280-499531/20 Client Sample ID:

Date Analyzed: 06/22/20 19:05 Lab File ID: 06220020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.73	Baseline	zhangji	06/23/20 14:06

Lab Sample ID: CCV 280-499531/21 Client Sample ID:

Date Analyzed: 06/22/20 19:28 Lab File ID: 06220021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.63	Baseline	zhangji	06/23/20 14:06
DNX	6.96	Baseline	zhangji	06/23/20 14:06

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: 280-137609-24 Client Sample ID: G0103-20A

Date Analyzed: 06/22/20 21:00 Lab File ID: 06220025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.46	Baseline	zhangji	06/23/20 14:41
1,2-Dinitrobenzene	8.82	Baseline	zhangji	06/23/20 14:40
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:41
2-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:40
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:40
RDX		Invalid Compound ID	zhangji	06/23/20 14:41
Tetryl		Invalid Compound ID	zhangji	06/23/20 14:40
2,4,6-Trinitrotoluene	11.19	Baseline	zhangji	06/23/20 14:41
2-Amino-4,6-dinitrotoluene	11.69	Baseline	zhangji	06/23/20 14:41

Lab Sample ID: 280-137609-25 Client Sample ID: G0107-20A

Date Analyzed: 06/22/20 21:23 Lab File ID: 06220026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline	zhangji	06/23/20 14:41
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:41

Lab Sample ID: 280-137609-26 Client Sample ID: G0116-20A

Date Analyzed: 06/22/20 21:46 Lab File ID: 06220027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.40	Baseline	zhangji	06/23/20 14:42
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:42
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:42
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:42
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:42
RDX		Invalid Compound ID	zhangji	06/23/20 14:42
Tetryl		Invalid Compound ID	zhangji	06/23/20 14:42

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HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: 280-137609-27 Client Sample ID: G0120-20A

Date Analyzed: 06/22/20 22:09 Lab File ID: 06220028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline	zhangji	06/23/20 14:42
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
MNX		Invalid Compound ID	zhangji	06/23/20 14:42
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:42
Tetryl	10.24	Baseline	zhangji	06/23/20 14:43
2-Amino-4,6-dinitrotoluene	11.64	Baseline	zhangji	06/23/20 14:43

Lab Sample ID: 280-137609-28 Client Sample ID: G0106-20A

Date Analyzed: 06/22/20 22:32 Lab File ID: 06220029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline	zhangji	06/23/20 14:43
RDX		Invalid Compound ID	zhangji	06/23/20 14:43

Lab Sample ID: 280-137609-29 Client Sample ID: G0095-20A

Date Analyzed: 06/22/20 22:55 Lab File ID: 06220030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.74	Baseline	zhangji	06/23/20 14:44
1,3,5-Trinitrobenzene	8.93	Baseline	zhangji	06/23/20 14:44
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:43
MNX		Invalid Compound ID	zhangji	06/23/20 14:43
RDX		Invalid Compound ID	zhangji	06/23/20 14:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: CCV 280-499531/32 Client Sample ID:

Date Analyzed: 06/22/20 23:41 Lab File ID: 06220032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.72	Baseline	zhangji	06/23/20 14:06

Lab Sample ID: CCV 280-499531/33 Client Sample ID:

Date Analyzed: 06/23/20 00:04 Lab File ID: 06220033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/23/20 14:07
DNX	6.94	Baseline	zhangji	06/23/20 14:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: CCV 280-499532/36 Client Sample ID:

Date Analyzed: 06/23/20 01:13 Lab File ID: 06220036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.73	Baseline	zhangji	06/23/20 14:07

Lab Sample ID: CCV 280-499532/37 Client Sample ID:

Date Analyzed: 06/23/20 01:37 Lab File ID: 06220037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.63	Baseline	zhangji	06/23/20 14:07
DNX	6.95	Baseline	zhangji	06/23/20 14:07

Lab Sample ID: MB 280-499107/1-A Client Sample ID:

Date Analyzed: 06/23/20 02:00 Lab File ID: 06220038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:46
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:46

Lab Sample ID: LCS 280-499107/3-A Client Sample ID:

Date Analyzed: 06/23/20 02:46 Lab File ID: 06220040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.40	Baseline	zhangji	06/23/20 14:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: CCV 280-499532/46 Client Sample ID:

Date Analyzed: 06/23/20 05:04 Lab File ID: 06220046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.73	Baseline	zhangji	06/23/20 14:07
2,4,6-Trinitrotoluene	11.25	Baseline	zhangji	06/23/20 16:15
4-Amino-2,6-dinitrotoluene	11.41	Baseline	zhangji	06/23/20 16:15
2-Amino-4,6-dinitrotoluene	11.71	Baseline	zhangji	06/23/20 16:15
2,6-Dinitrotoluene	11.84	Baseline	zhangji	06/23/20 16:15
2,4-Dinitrotoluene	12.05	Baseline	zhangji	06/23/20 16:15
2-Nitrotoluene	12.85	Baseline	zhangji	06/23/20 14:08
4-Nitrotoluene	13.28	Baseline	zhangji	06/23/20 14:08
3-Nitrotoluene	13.87	Baseline	zhangji	06/23/20 14:08

Lab Sample ID: CCV 280-499532/47 Client Sample ID:

Date Analyzed: 06/23/20 05:27 Lab File ID: 06220047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.63	Baseline	zhangji	06/23/20 14:08
DNX	6.95	Baseline	zhangji	06/23/20 14:08

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: CCV 280-499532/53 Client Sample ID:

Date Analyzed: 06/23/20 07:45 Lab File ID: 06220053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.72	Baseline	zhangji	06/23/20 14:08
2,4,6-Trinitrotoluene	11.24	Baseline	zhangji	06/23/20 14:08
4-Amino-2,6-dinitrotoluene	11.41	Baseline	zhangji	06/23/20 14:08
2-Amino-4,6-dinitrotoluene	11.70	Baseline	zhangji	06/23/20 14:08
2,6-Dinitrotoluene	11.83	Baseline	zhangji	06/23/20 14:08
2,4-Dinitrotoluene	12.04	Baseline	zhangji	06/23/20 14:08
2-Nitrotoluene	12.85	Baseline	zhangji	06/23/20 14:08
4-Nitrotoluene	13.29	Baseline	zhangji	06/23/20 14:08
3-Nitrotoluene	13.88	Baseline	zhangji	06/23/20 14:08
PETN	14.95	Baseline	zhangji	06/23/20 14:08

Lab Sample ID: CCV 280-499532/54 Client Sample ID:

Date Analyzed: 06/23/20 08:08 Lab File ID: 06220054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/23/20 14:09
DNX	6.94	Baseline	zhangji	06/23/20 14:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-16 Client Sample ID: G0117-20A

Date Analyzed: 06/23/20 08:31 Lab File ID: 06220055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:57
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:57
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:57
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:57
MNX		Invalid Compound ID	zhangji	06/23/20 14:57
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:57
RDX		Invalid Compound ID	zhangji	06/23/20 14:57

Lab Sample ID: 280-137609-17 Client Sample ID: PZ013-20A

Date Analyzed: 06/23/20 08:54 Lab File ID: 06220056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.75	Baseline	zhangji	06/23/20 14:58
1,2-Dinitrobenzene	8.75	Baseline	zhangji	06/23/20 14:59
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:58
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:58
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:58
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:58
RDX		Invalid Compound ID	zhangji	06/23/20 14:57
Tetryl	10.21	Baseline	zhangji	06/23/20 14:58
2,4,6-Trinitrotoluene	11.23	Baseline	zhangji	06/23/20 14:59
4-Amino-2,6-dinitrotoluene	11.39	Baseline	zhangji	06/23/20 14:59
2-Amino-4,6-dinitrotoluene	11.68	Baseline	zhangji	06/23/20 14:59
2,4-Dinitrotoluene	12.01	Baseline	zhangji	06/23/20 14:59

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-18 Client Sample ID: G0104-20A

Date Analyzed: 06/23/20 09:17 Lab File ID: 06220057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline	zhangji	06/23/20 14:59
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:59
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:59
MNX		Invalid Compound ID	zhangji	06/23/20 14:59

Lab Sample ID: 280-137609-19 Client Sample ID: PZ014-20A

Date Analyzed: 06/23/20 09:40 Lab File ID: 06220058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline	zhangji	06/23/20 14:59
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:59

Lab Sample ID: 280-137609-20 Client Sample ID: G0115-20A

Date Analyzed: 06/23/20 10:03 Lab File ID: 06220059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline	zhangji	06/23/20 15:12
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:12
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:12
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:12
Nitrobenzene		Baseline	zhangji	06/23/20 15:13
RDX		Invalid Compound ID	zhangji	06/23/20 15:12
Tetryl	10.21	Baseline	zhangji	06/23/20 15:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-21 Client Sample ID: G0101-20A

Date Analyzed: 06/23/20 10:26 Lab File ID: 06220060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.75	Baseline	zhangji	06/23/20 15:13
1,2-Dinitrobenzene	8.74	Baseline	zhangji	06/23/20 15:13
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:13
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:13
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 15:13
Tetryl		Invalid Compound ID	zhangji	06/23/20 15:13

Lab Sample ID: 280-137609-22 Client Sample ID: G0100-20A

Date Analyzed: 06/23/20 10:49 Lab File ID: 06220061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.75	Baseline	zhangji	06/23/20 15:14
1,2-Dinitrobenzene	8.74	Baseline	zhangji	06/23/20 15:14
1,3,5-Trinitrobenzene	8.92	Baseline	zhangji	06/23/20 15:14
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:15
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:15
MNX		Invalid Compound ID	zhangji	06/23/20 15:14
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 15:15
RDX		Invalid Compound ID	zhangji	06/23/20 15:14
Tetryl		Invalid Compound ID	zhangji	06/23/20 15:15
2,4,6-Trinitrotoluene	11.19	Baseline	zhangji	06/23/20 15:15
4-Amino-2,6-dinitrotoluene	11.34	Baseline	zhangji	06/23/20 15:15
2-Amino-4,6-dinitrotoluene	11.63	Baseline	zhangji	06/23/20 15:15
2,4-Dinitrotoluene	11.98	Baseline	zhangji	06/23/20 15:15

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-23 Client Sample ID: G0111-20A

Date Analyzed: 06/23/20 11:12 Lab File ID: 06220062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.74	Baseline	zhangji	06/23/20 15:16
RDX	7.77	Baseline	zhangji	06/23/20 15:16
1,2-Dinitrobenzene	8.73	Baseline	zhangji	06/23/20 15:16
1,3,5-Trinitrobenzene	8.92	Baseline	zhangji	06/23/20 15:17
1,3-Dinitrobenzene	9.55	Baseline	zhangji	06/23/20 15:17
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 15:16
MNX		Invalid Compound ID	zhangji	06/23/20 15:16
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 15:16
Tetryl		Invalid Compound ID	zhangji	06/23/20 15:16

Lab Sample ID: CCV 280-499532/63 Client Sample ID:

Date Analyzed: 06/23/20 11:35 Lab File ID: 06220063.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.72	Baseline	zhangji	06/23/20 14:09
Tetryl	10.24	Baseline	zhangji	06/23/20 14:10
Nitroglycerin	10.74	Baseline	zhangji	06/23/20 14:09
2,4,6-Trinitrotoluene	11.20	Baseline	zhangji	06/23/20 14:10
4-Amino-2,6-dinitrotoluene	11.36	Baseline	zhangji	06/23/20 14:10
2-Amino-4,6-dinitrotoluene	11.66	Baseline	zhangji	06/23/20 14:10
2,6-Dinitrotoluene	11.79	Baseline	zhangji	06/23/20 14:10
2,4-Dinitrotoluene	11.99	Baseline	zhangji	06/23/20 14:10
2-Nitrotoluene	12.80	Baseline	zhangji	06/23/20 14:10
4-Nitrotoluene	13.23	Baseline	zhangji	06/23/20 14:10
3-Nitrotoluene	13.82	Baseline	zhangji	06/23/20 14:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: CCV 280-499532/64 Client Sample ID:

Date Analyzed: 06/23/20 11:58 Lab File ID: 06220064.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/23/20 14:09
DNX	6.94	Baseline	zhangji	06/23/20 14:09
MNX	7.39	Baseline	zhangji	06/23/20 14:09

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 497179

Lab Sample ID: ICV 280-497179/1 Client Sample ID:

Date Analyzed: 06/03/20 09:53 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.73	Incomplete Integration	pedrickj	06/03/20 10:18

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 497185

Lab Sample ID: STD 280-497185/2 IC Client Sample ID:

Date Analyzed: 06/03/20 10:08 Lab File ID: 02.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.41	Peak assignment corrected	pedrickj	06/03/20 11:51

Lab Sample ID: STD 280-497185/3 IC Client Sample ID:

Date Analyzed: 06/03/20 10:24 Lab File ID: 03.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.55	Peak assignment corrected	pedrickj	06/03/20 11:51

Lab Sample ID: STD 280-497185/4 IC Client Sample ID:

Date Analyzed: 06/03/20 10:41 Lab File ID: 04.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.90	Peak assignment corrected	pedrickj	06/03/20 11:51
Sulfate	9.50	Peak assignment corrected	pedrickj	06/03/20 11:51

Lab Sample ID: STD 280-497185/5 IC Client Sample ID:

Date Analyzed: 06/03/20 10:57 Lab File ID: 05.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.16	Peak assignment corrected	pedrickj	06/03/20 11:51

Lab Sample ID: STD 280-497185/6 IC Client Sample ID:

Date Analyzed: 06/03/20 11:13 Lab File ID: 06.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.06	Peak assignment corrected	pedrickj	06/03/20 11:51

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 497185

Lab Sample ID: STD 280-497185/7 IC Client Sample ID:

Date Analyzed: 06/03/20 11:30 Lab File ID: 07.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	3.09	Peak assignment corrected	pedrickj	06/03/20 11:50

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 500081

Lab Sample ID: CCV 280-500081/41 Client Sample ID:

Date Analyzed: 06/26/20 02:04 Lab File ID: 41.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	4.89	Peak assignment corrected	pedrickj	06/26/20 08:33

Lab Sample ID: CCV 280-500081/47 Client Sample ID:

Date Analyzed: 06/26/20 03:42 Lab File ID: 47.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	5.01	Peak assignment corrected	pedrickj	06/26/20 08:34

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00419	06/17/20	06/16/20	Di Water, Lot na	100 mL	NH3 CAL STD_00031	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00031	08/31/20	Ricca, Lot 2902E25			(Purchased Reagent)		Ammonia	1000 mg/L
8330 DMT_00005	03/31/20	01/21/20	Acetonitrile, Lot 231453	5 mL	MNX,TNX,DNX_00032	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00032	12/31/19	ULTRA Scientific, Lot CS-5628			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00006	02/28/21	04/15/20	Acetonitrile, Lot ACN_00232	5 mL	MNX,TNX,DNX_00043	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00043	02/28/21	ULTRA Scientific, Lot 006516106			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 LCS_00095	07/24/20	01/24/20	Acetonitrile, Lot ACN_00231	100 mL	8330LCSMix1_00113	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_00009	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_00113	07/31/24	Restek, Lot A0151407			(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_00009	05/31/24	Restek, Lot A0149387			(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00098	07/31/20	04/28/20	Acetonitrile, Lot Acetonitrile_00233	100 mL	8330LCSMix1_00111	1 mL	1,3,5-Trinitrobenzene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	10 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_00011	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_00111	10/28/20		Restek, Lot A0151407		(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_00011	10/28/20		Restek, Lot A0157533		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00099	11/11/20	06/02/20	Acetonitrile, Lot Acetonitrile_00044	25 mL	8330 LCSMix2_00106	0.25 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
					8330_NG_AUX_00001	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_AUX_00002	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_AUX_00003	0.5 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00081	0.5 mL	PETN	100 ug/mL
					8330LCSMix1_00112	0.25 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					PicricARestek_00090	0.25 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330 LCSMix2_00106	11/11/20		Restek, Lot A0141002		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.8330_NG_AUX_00001	06/02/21		Restek, Lot A0153378		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_NG_AUX_00002	06/02/21		Restek, Lot A0153378		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_NG_AUX_00003	06/02/21		Restek, Lot A0153378		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN_Stk_00081	03/31/21		Restek, Lot A0136306		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00112	11/11/20		Restek, Lot A0151407		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.PicricARestek_00090	06/02/21		Restek, Lot A0131892		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00006	02/24/21	02/24/20	Acetonitrile, Lot 0000196715	10 mL	MNX,TNX,DNX_00042	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00042	02/28/21		ULTRA Scientific, Lot 006516106		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00008	02/28/21	04/30/20	Acetonitrile, Lot 0000249516	10 mL	MNX,TNX,DNX_00046	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00046	02/28/21		ULTRA Scientific, Lot 006516106		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00061	09/09/21	01/09/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00075	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_00061	1 mL	2,4,6-Trinitrophenol	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8330_NG_Stk_00075	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22	Restek, Lot A0154763			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							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_00061	09/09/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00064	09/09/21	04/06/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00075	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00061	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00075	08/31/22		Restek, Lot A0151571		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22		Ultra Scientific, Lot CT-0801		(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							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_00061	09/09/21		AccuStandard, Lot 214121302-02		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00110	05/17/20	12/17/19	Acetonitrile, Lot ACN_00223	250 mL	8330SurrStkSS_00145	0.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00158	0.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00160	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00161	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00145	03/31/23		Restek, Lot A0135839		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00158	07/31/24		Restek, Lot A0146866		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00160	10/28/22		Restek, Lot A0150790		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00161	07/31/24		Restek, Lot A0150790		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330Surrogate_00113	10/22/20	04/22/20	Acetonitrile, Lot ACN_00234	250 mL	8330SurrStkSS_00162	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00163	0.5 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00164	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00162	04/22/21		Restek, Lot A0155113		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00163	11/30/24		Restek, Lot A0155113		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00164	04/22/21		Restek, Lot A0155113		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
8330Surrogate_00114	11/07/20	05/07/20	Acetonitrile, Lot ACN 00234	100 mL	8330SurrStkSS_00157	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00157	11/07/20		Restek, Lot A0146866		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00115	11/07/20	05/13/20	Acetonitrile, Lot Acetonitrile_00044	100 mL	8330SurrStkSS_00166	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00166	11/30/24		Restek, Lot A0155113		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_00907	06/22/20	06/15/20	Di Water, Lot na	1000 mL	Alk stk std_00017	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00017	03/30/21		Fischer, Lot 191517		(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00312	06/02/20	05/26/20	Di Water, Lot na	100 mL	IC CL cal_00060	25 mL	Chloride	250 mg/L
					IC sulfatecal_00059	25 mL	Sulfate	250 mg/L
.IC CL cal_00060	01/30/21		SPEX CertiPrep, Lot 4-176CL-2X		(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00059	01/30/21		SPEX CertiPrep, Lot 4-176SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00313	06/09/20	06/02/20	Di Water, Lot na	100 mL	IC CL cal_00060	25 mL	Chloride	250 mg/L
					IC sulfatecal_00059	25 mL	Sulfate	250 mg/L
.IC CL cal_00060	01/30/21		SPEX CertiPrep, Lot 4-176CL-2X		(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00059	01/30/21		SPEX CertiPrep, Lot 4-176SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00316	06/29/20	06/22/20	Di Water, Lot na	100 mL	IC sulfatecal_00059	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00059	01/30/21		SPEX CertiPrep, Lot 4-176SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00527	06/05/20	05/29/20	Di Water, Lot NA	100 mL	IC BR ICV_00018	5 mL	Bromide	50 mg/L
					IC FL cal_00014	5 mL	Fluoride	50 mg/L
.IC BR ICV_00018	01/31/21		ricca, Lot 2907E22		(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00014	11/30/20		Ricca, Lot 4905E80		(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01746	06/26/20	06/19/20	Di Water, Lot 27	200 mL	IC sulfatecal_00057	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00057	06/30/20		SPEX CertiPrep, Lot 4-197SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC LCS_01747	07/03/20	06/26/20	Di Water, Lot 27	200 mL	IC sulfatecal_00060	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00060	05/30/21		SPEX CertiPrep, Lot 4-197SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00021	08/31/21		ERA, Lot 100819m		(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00654	06/29/20	06/22/20	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00022	5 mL	Sulfate	5000.51 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.IC SPK 6 ANIO_00022	09/29/20	10/01/19	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00005	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00005	09/29/20	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00535	06/23/20	06/16/20	Di Water, Lot NA	100 mL	NOXT Cal STD_00023	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00023	12/31/20	RICCA, Lot 1906A84			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
RSK175methane_00010	04/16/22	Supelco Analytical, Lot 160-401480003-1			(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00027	10/24/20	Matheson, Lot 9308634170			(Purchased Reagent)		Methane	6570.3 ug/L
RSK7gasMathes_00031	03/09/22	Matheson, Lot DL0396162			(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
SFD CAL INT_01769	09/08/20	06/09/20	Di Water, Lot NA	500 mL	50% NaOH_00018	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00006	4.1498 g	Sulfide	1108 mg/L
.50% NaOH_00018	11/30/22	Fisher, Lot 1603D65			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD CAL STK_00006	10/01/23	ACROS, Lot A0390872			(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00809	07/13/20	06/10/20	Di Water, Lot 1	100 mL	TKN 100PPM_00122	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00122	07/13/20	06/10/20	Di Water, Lot 1	500 mL	TKN CAL STD_00017	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00017	01/31/21	nsi lab solutions, Lot 010617			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00043	08/31/20	Ricca, Lot 2908E72			(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_00048	06/30/21	Agilent, Lot 0006465171			(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_00018

RICCA CHEMICAL COMPANY®

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customerservice@riccachemical.com

Certificate of Analysis

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

Lot Number: 1912569 **Product Number:** 7291

Manufacture Date: DEC 05, 2019
Expiration Date: NOV 2022

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)	51 % (w/w)	723
Chloride (Cl)	max 0.002 %	< 0.002 %	
Heavy Metals (as Ag)	max 0.001 %	< 0.001 %	
Iron (Fe)	max 5 ppm	< 0.001 ppm	3126
NH_4OH Precipitate	max 0.01 %	0.004 %	
Nickel (Ni)	max 5 ppm	0.2 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)
7291-1	4 L natural poly	36 months
7291-16	500 mL natural poly	36 months

7291-5	20 L Cubitainer®	36 months

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



Israel Alamudun (12/05/2019)
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_00098

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20200429-91143.b\04290006.D

Lims ID: C18column:B16162 Inj. Date: 29-Apr-2020 19:29:58

Worklist ID: 280-0091143-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
3 HMX	0.1000	0.0988	98.8	65-135	66-115
7 RDX	0.1000	0.0968	96.8	68-130	69-122
8 2,4,6-Trinitrophenol	0.1000	0.1027	102.7	80-120	63-135
10 1,3,5-Trinitrobenzene	0.1000	0.1037	103.7	73-125	62-127
11 1,3-Dinitrobenzene	0.1000	0.1029	102.9	78-120	59-131
12 Nitrobenzene	0.1000	0.1031	103.1	65-134	46-144
14 Tetryl	0.1000	0.1003	100.3	64-128	56-131
15 Nitroglycerin	1.00	0.9742	97.4	74-127	70-125
16 2,4,6-Trinitrotoluene	0.1000	0.1014	101.4	71-123	46-139
17 4-Amino-2,6-dinitrotolu	0.1000	0.0973	97.3	76-125	43-120
18 2-Amino-4,6-dinitrotolu	0.1000	0.1006	100.6	79-120	46-124
19 2,6-Dinitrotoluene	0.1000	0.1019	101.9	77-127	51-130
20 2,4-Dinitrotoluene	0.1000	0.0984	98.4	78-120	53-127
21 o-Nitrotoluene	0.1000	0.1039	103.9	70-127	37-138
22 p-Nitrotoluene	0.1000	0.1015	101.5	71-127	41-137
23 m-Nitrotoluene	0.1000	0.1043	104.3	73-125	31-140
24 PETN	1.00	0.9068	90.7	73-127	67-127

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

280-135793-A-1-A 280-135793-A-2-A 280-135793-A-3-A
280-135793-B-4-A 280-135793-A-5-A 280-135793-A-6-A
280-135871-A-1-A 280-135930-A-1-A 280-135930-A-2-A

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

480-168872-A-18-A 480-168872-A-19-A 480-168872-A-20-A
480-168872-A-21-A 600-204066-C-1-A

Reagent

8330 LCS_00099

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20200604-92107.b\06040006.D

Lims ID: C18column:B16162 Inj. Date: 04-Jun-2020 15:10:48

Worklist ID: 280-0092107-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
3 HMX	0.4000	0.4497	112.4	65-135	66-115	
7 RDX	0.4000	0.4082	102.1	68-130	69-122	
8 2,4,6-Trinitrophenol	0.4000	0.4552	113.8	80-120	63-135	
10 1,3,5-Trinitrobenzene	0.4000	0.4670	116.7	73-125	62-127	
11 1,3-Dinitrobenzene	0.4000	0.4525	113.1	78-120	59-131	
12 Nitrobenzene	0.4000	0.4580	114.5	65-134	46-144	
14 Tetryl	0.4000	0.4204	105.1	64-128	56-131	
15 Nitroglycerin	4.00	4.24	106.0	74-127	70-125	
16 2,4,6-Trinitrotoluene	0.4000	0.4581	114.5	71-123	46-139	
17 4-Amino-2,6-dinitrotolu	0.4000	0.3915	97.9	76-125	43-120	
18 2-Amino-4,6-dinitrotolu	0.4000	0.4340	108.5	79-120	46-124	
19 2,6-Dinitrotoluene	0.4000	0.4346	108.6	77-127	51-130	
20 2,4-Dinitrotoluene	0.4000	0.4315	107.9	78-120	53-127	
21 o-Nitrotoluene	0.4000	0.4112	102.8	70-127	37-138	
22 p-Nitrotoluene	0.4000	0.4272	106.8	71-127	41-137	
23 m-Nitrotoluene	0.4000	0.4348	108.7	73-125	31-140	
24 PETN	4.00	4.20	105.1	73-127	67-127	

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

280-136151-A-2-B	320-61052-D-3-A	320-61052-D-4-A
320-61052-D-5-A	320-61052-D-6-A	320-61052-D-7-A
320-61052-D-8-A	320-61052-D-9-A	320-61052-D-10-A
320-61052-D-11-A	320-61052-D-12-A	280-136408-B-2-A
280-136410-B-1-A	280-136946-A-6-A	280-136946-A-7-A
280-136946-A-8-A	280-136946-A-9-A	

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

280-136951-C-1-A	280-136951-C-2-A	280-136951-C-3-A

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

600-205634-D-1-A

Reagent

8330 LCSMix2_00106

RESTEK®
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0141002

Description : 8330 Calibration Mix #2

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

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

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

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)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL		Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 98%	(Lot 29550-55)	1,007.4 µg/mL	+/- 5.9839 µg/mL +/- 55.1906 µg/mL +/- 64.3577 µg/mL		Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606V)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot GA01)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL		Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL		Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98%	(Lot FBO01)	1,003.5 µg/mL	+/- 5.9606 µg/mL +/- 54.9758 µg/mL +/- 64.1072 µg/mL		Gravimetric Unstressed Stressed

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

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

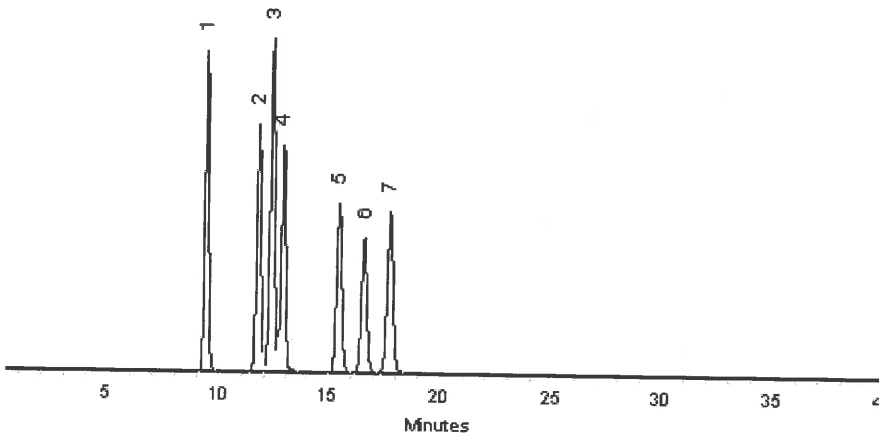
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Matt Fragassi - Mix Technician **Date Mixed:** 23-Aug-2018 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 28-Aug-2018

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

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_NG_AUX_00001

RESTEK
110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0153378

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : September 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	1,003.3 µg/mL	+/- 5.9595	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 54.9656	µg/mL	Unstressed
	Purity 99%		+/- 64.0953	µg/mL	Stressed

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

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

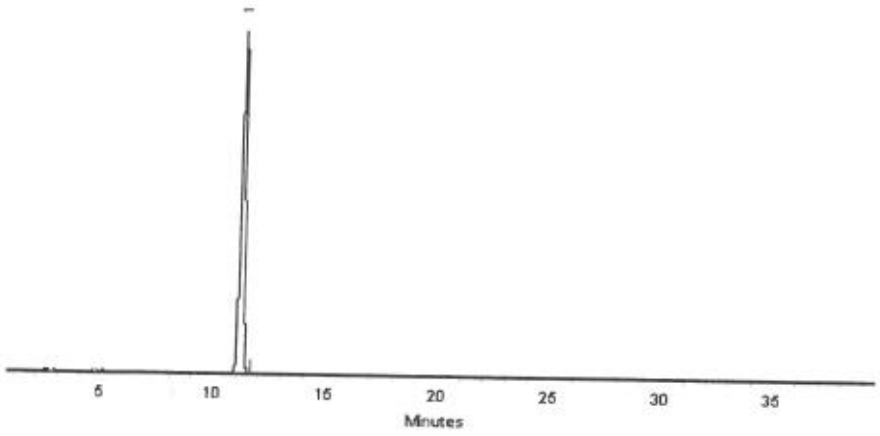
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 27-Sep-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 01-Oct-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_NG_AUX_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0153378

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : September 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin **CAS #** 55-63-0 **Purity** 99% (Lot 170616JLM)	1,003.3 µg/mL	+/- 5.9595 µg/mL +/- 54.9656 µg/mL +/- 64.0953 µg/mL		Gravimetric Unstressed Stressed

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

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

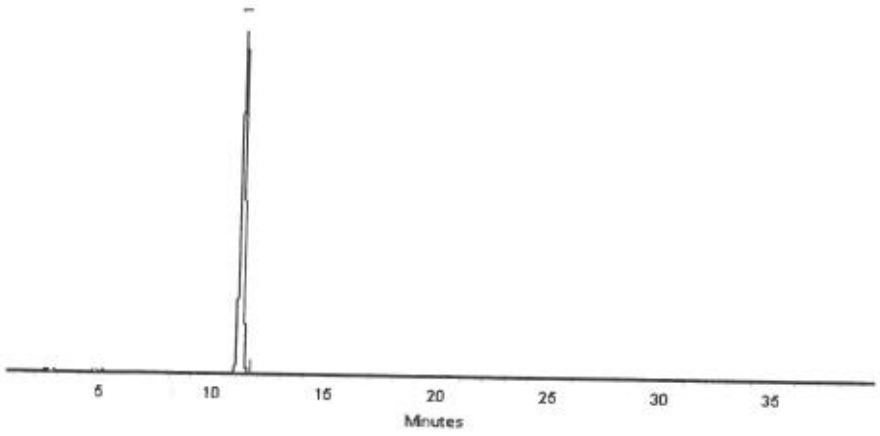
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 27-Sep-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 01-Oct-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_NG_AUX_00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0153378

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : September 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	1,003.3 µg/mL	+/- 5.9595	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 54.9656	µg/mL	Unstressed
	Purity 99%		+/- 64.0953	µg/mL	Stressed

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

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

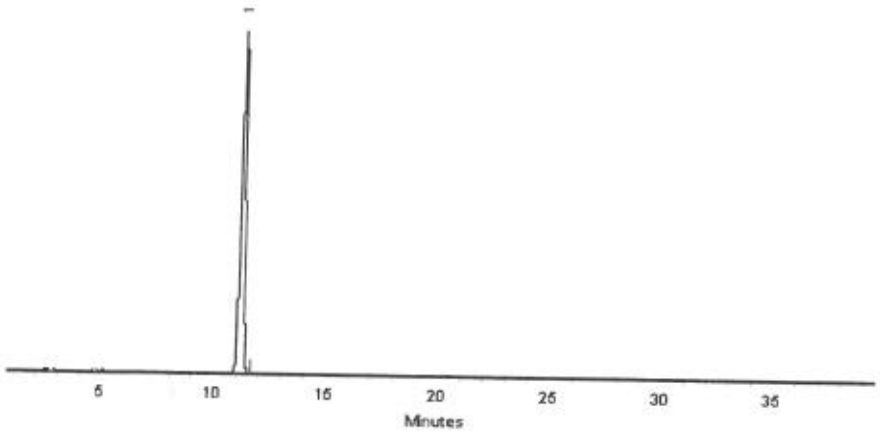
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 27-Sep-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 01-Oct-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_NG_Stk_00075

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0151571

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : August 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,036.0 µg/mL	+/- 46.8321	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 278.2306	µg/mL	Unstressed
	Purity 99%		+/- 323.7234	µg/mL	Stressed

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

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

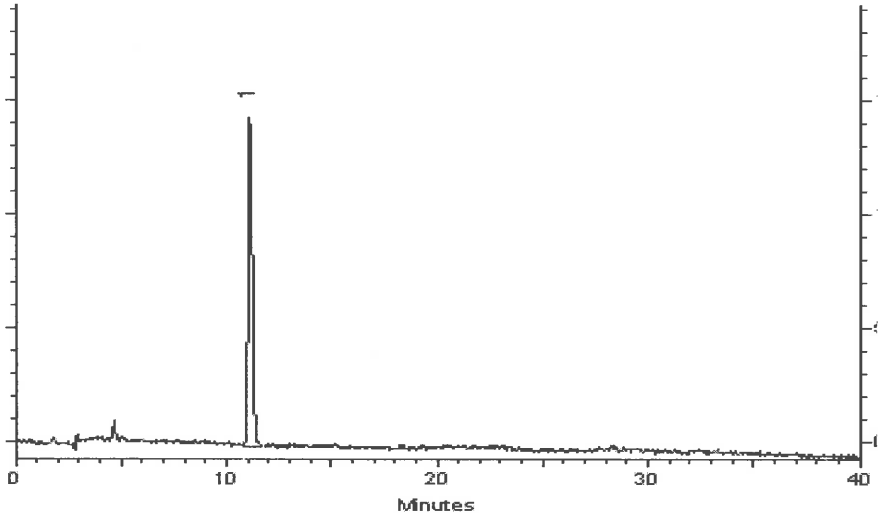
Flow Rate:
1.0 ml/min.

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.

Joseph J Jaglowski - Mix Technician **Date Mixed:** 05-Aug-2019 **Balance:** B707717271

Jennifer J Pollino - Operations Tech-ARM QC **Date Passed:** 09-Aug-2019

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

Reagent

8330_PETN_Stk_00081

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0136306

Description : Custom PETN Standard

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

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

Expiration Date : March 31, 2021 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN **CAS #** 78-11-5 (Lot 051108JLM) **Purity** 99%	5,028.0 µg/mL	+/- 46.7577 µg/mL +/- 277.7886 µg/mL +/- 323.2092 µg/mL	Gravimetric Unstressed Stressed

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

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

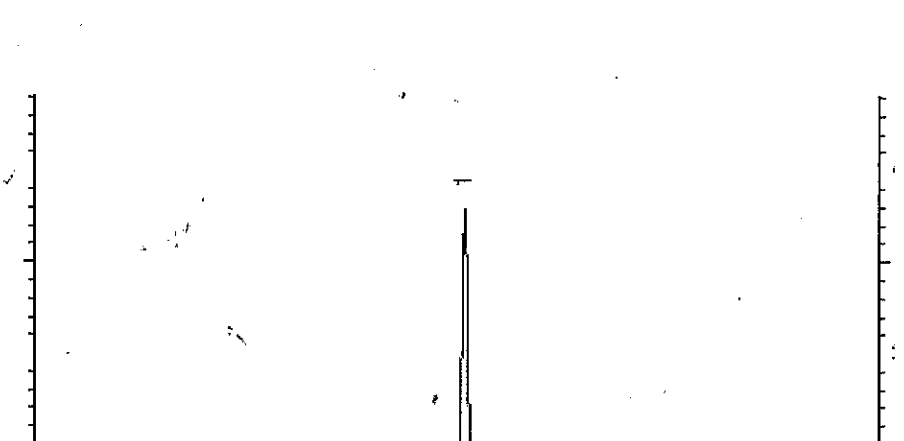
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 19-Mar-2018 **Balance:** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Mar-2018

REVIEWED

Manufactured under Restek's ISO 9001:2008
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 Guides 34 and 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

Reagent

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0154763

Description : Custom PETN Standard

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

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

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

CERTIFIED VALUES

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)

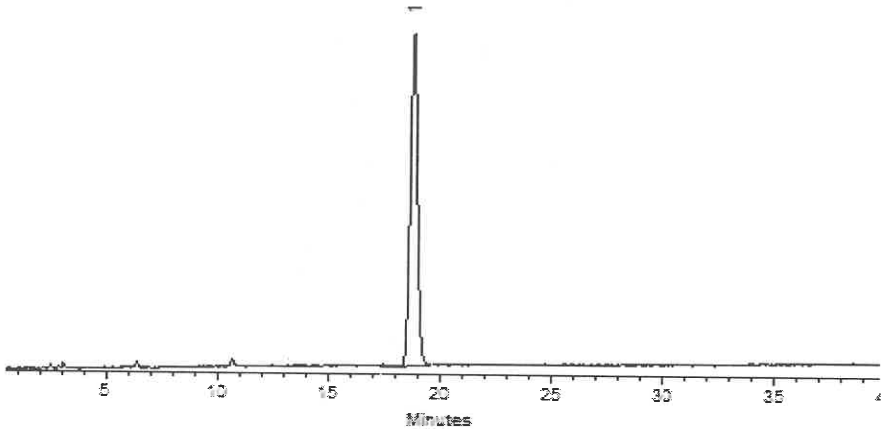
Flow Rate:
1.0 ml/min.

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

Reagent

8330LCSMix1_00111

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,004.9 µg/mL	+/- 5.9689	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 190402JLM)		+/- 55.0525	µg/mL	Unstressed
	Purity 97%			+/- 64.1967	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		1,003.0 µg/mL	+/- 5.9574	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot DJ5QO)		+/- 54.9463	µg/mL	Unstressed
	Purity 97%			+/- 64.0727	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
5	Nitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed

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

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

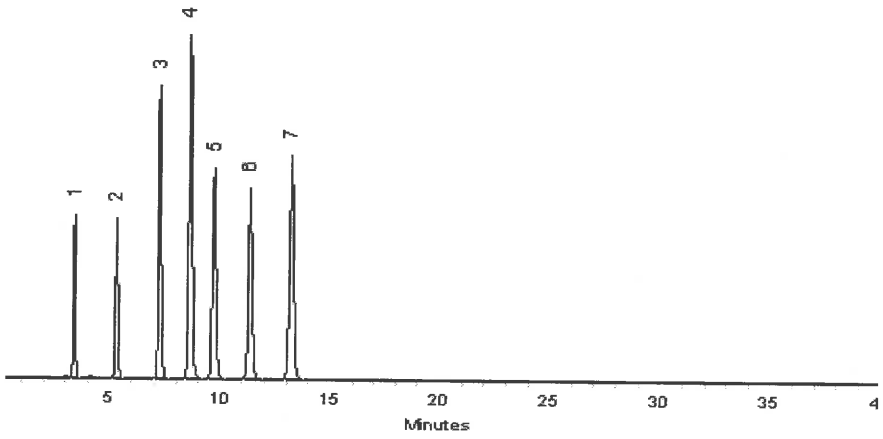
Flow Rate:
1.0 ml/min.

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.

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

8330LCSMix1_00112

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. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 (Lot 190402JLM) **Purity** 97%	1,004.9 µg/mL	+/- 5.9689 +/- 55.0525 +/- 64.1967	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 (Lot 080228JLM) **Purity** 99%	1,005.0 µg/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 (Lot DJ5QO) **Purity** 97%	1,003.0 µg/mL	+/- 5.9574 +/- 54.9463 +/- 64.0727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 (Lot BCBN4329V) **Purity** 99%	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 (Lot SHBJ3622) **Purity** 99%	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 (Lot 5737200) **Purity** 99%	1,005.0 µg/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 (Lot MKAA0690) **Purity** 99%	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

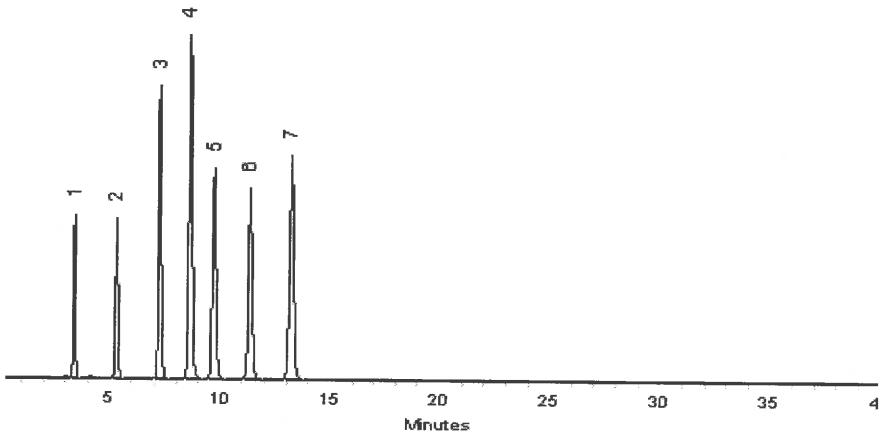
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

8330LCSMix1_00113

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

Catalog No. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,004.9 µg/mL	+/- 5.9689	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 190402JLM)		+/- 55.0525	µg/mL	Unstressed
	Purity 97%			+/- 64.1967	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		1,003.0 µg/mL	+/- 5.9574	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot DJ5QO)		+/- 54.9463	µg/mL	Unstressed
	Purity 97%			+/- 64.0727	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
5	Nitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed

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

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

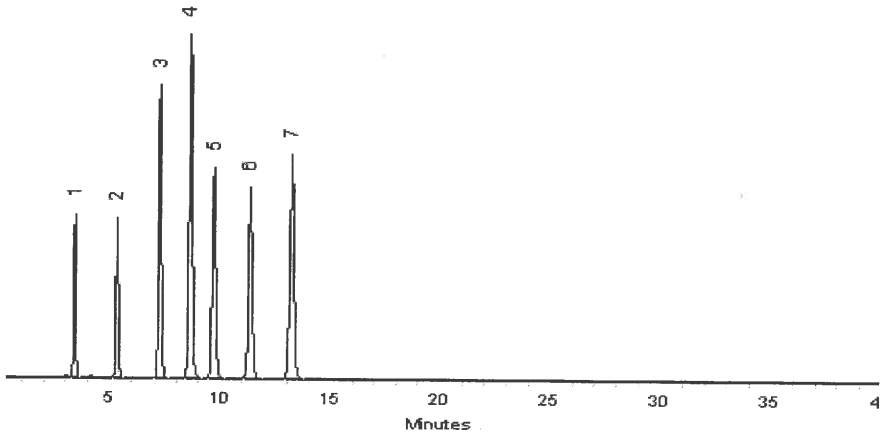
Flow Rate:
1.0 ml/min.

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.

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

8330LCSmix2_00009

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0149387

Description : 8330 Calibration Mix #2

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

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

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

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)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 98%	(Lot 29550-55)	999.6 µg/mL	+/- 5.9373 µg/mL +/- 54.7611 µg/mL +/- 63.8568 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot 1437483V)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot GA01)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98%	(Lot 07329LG)	1,007.4 µg/mL	+/- 5.9839 µg/mL +/- 55.1906 µg/mL +/- 64.3577 µg/mL	Gravimetric Unstressed Stressed

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

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

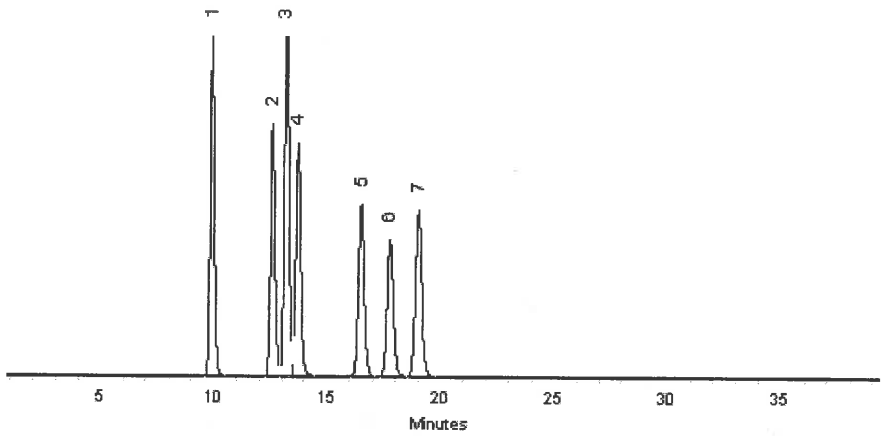
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Lane Kibe - Mix Technician

Date Mixed: 21-May-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2019

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

Reagent

8330LCSmix2_00011

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Fax: (814)353-1309

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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.:** A0157533

Description : 8330 Calibration Mix #2

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

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

Expiration Date : February 28, 2025 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl **CAS #** 479-45-8 (Lot 091120JLM) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 (Lot ER070908-01) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 (Lot 29550-55) **Purity** 98%	999.6 µg/mL	+/- 5.9373 +/- 54.7611 +/- 63.8568	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 (Lot BCBB8606) **Purity** 99%	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 (Lot BCBZ7826) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 (Lot FAU01) **Purity** 99%	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 (Lot FBO01) **Purity** 98%	1,003.5 µg/mL	+/- 5.9606 +/- 54.9758 +/- 64.1072	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

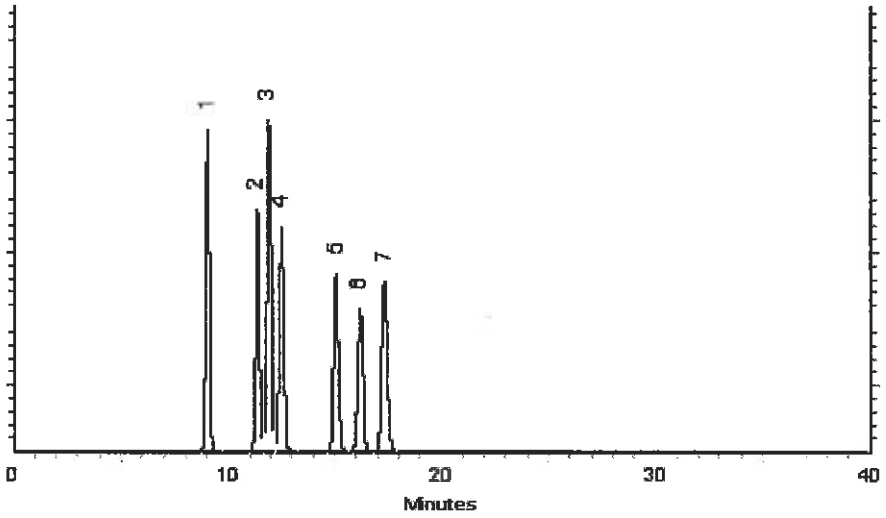
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Clara Windle - Operations Technician I

Date Mixed: 06-Feb-2020 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Feb-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)	< 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

8330PAStkPS_00061

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 214121302-02
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 9, 2019
Expiration: Sep 9, 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 Concentration² (µg/mL)	Certified Analyte Concentration¹ (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

AccuStandard, Inc.
125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers

Catalog Name: M-8330-ADD-3

Description: Picric Acid in Acetonitrile/Methanol Blend

1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

Email: edocs@accustandard.com

1.4 - Emergency Telephone Number

Emergency Phone #: AccuStandard, Inc.
1-203-502-7070 (USA)
+001-203-502-7070 (International)

24 hours / 7 days a week

SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements





Signal Word: Danger

Hazard Codes:

H225 - Highly Flammable (Flammable liquids, category 2)

H315 - Irritating to skin. (Skin corrosion/irritation, category 2)

H319 - Causes severe eye irritation. (Eye damage/irritation, category 2A)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

H336 - Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

H360 - California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

H370 - Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

Precautionary Codes:

P202 - This product should only by used by persons trained in the safe handling of hazardous chemicals.

P233 - Store in a tightly closed container. (P404)

SECTION 2 - HAZARDS IDENTIFICATION - *continued*

2.1 - GHS Label Elements - *continued*

P260 - Do not breathe vapor.

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P352 - Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

2.2 - Other Hazards

2.2.1 - Symptom of Exposure Health/Environment

Highly Flammable (Flammable liquids, category 2)

Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

After ingestion or inhalation, initial symptoms may be only that of mild intoxication, but may become severe after 12 or 18 hours.

Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

2.2.2 - Potential Health Effects

Causes severe eye irritation. (Eye damage/irritation, category 2A)

Irritating to skin. (Skin corrosion/irritation, category 2)

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Irritating to mucous membrane and upper respiratory system.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

May be harmful if swallowed. (Acute toxicity, oral, category 5)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Picric Acid in Acetonitrile/Methanol Blend

			ACGIH -TLV (mg/m³)			OSHA -PEL (mg/m³)		
Analyte	CAS #	% Concentration	TWA	STEL	Skin	TWA	STEL	Skin
Picric acid	88-89-1	0.010	0.1			0.1		
Acetonitrile	75-05-8	49.995				70		
Methanol	67-56-1	49.995				260		

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Acids
Bases
Oxidizers

Hazardous Decomposition: Hydrogen cyanide (HCN); Carbon oxides; Nitrogen oxides Forms HCN when heated to about 120 °C

Hazardous Polymerization: Will not occur

Condition to Avoid: Heat; Contact with ignition sources

SECTION 11 - TOXICOLOGICAL INFORMATION

Human Health Toxicity

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): N/A

LD50 (Dermal) : N/A

LC50 (Inhalation): N/A

No specific human health toxicity information is available for this product. Information provided is based on similar products.

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Toxicity

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): N/A

EC50 (Aquatic Invertebrate): N/A

BCF: N/A

No specific environmental toxicity information is available for this product. It is not expected to be an environmental concern.

No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)

UN Number: UN1993

Class: 3

Packing Group: II

Proper Shipping Name: Flammable liquid, n.o.s. (Acetonitrile, Methanol)

Poison by Inhalation: No

Marine Pollutant: No

SECTION 15 - REGULATORY INFORMATION

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

All components are listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations. Chemicals are classified using the Globally Harmonized System for Classification and Labeling of Chemicals and CLP Regulation (EC) No. 1272/2008.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****

Reagent

8330Surrogate_00110

eurofins | Environment Testing TestAmerica

8330Surrogate_00110

good ✓

Reagent ID: 8330Surrogate_00110

Description:	10ug/mL 1,2-Dinitrobenzene	Expiration Date:	05/17/2020
No. of Bottles:	1	Laboratory:	Eurofins TestAmerica, Denver
Storage Location:	Explosives Prep	Prepared By:	Bourgery, David F
Reagent Volume:	250.000 mL	Solvent:	Acetonitrile
Creation Date:	12/17/2019	Solvent Lot:	ACN_00223
Open Date:			
Container(s):	6017392		
Comment:	Stored Frozen. 6 month expiration date. Take 1mL of 1,2 Dinitrobenzene (8330SurrStock) and Dilute to 100 mL in ACN. Mulitply recipe as needed.		

WL 88127 → C18

POS #6

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
1,2-Dinitrobenzene	8330SurrStkSS_00145	03/31/2023	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00145	03/31/2023	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00158	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00158	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00160	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00160	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00161	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00161	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
8330SurrStkSS_00145	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	03/31/23	Restek	A0135839	31453	0.25000	mL
8330SurrStkSS_00158	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0146866	31453	0.25000	mL
8330SurrStkSS_00160	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0150790	31453	1.00000	mL
8330SurrStkSS_00161	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0150790	31453	1.00000	mL

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromna\Denver\ChromData\CHHPLC_X\20191220-88127.b\12200006.D

Lims ID: C18column:B16162 Inj. Date: 20-Dec-2019 11:19:02

Worklist ID: 280-0088127-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
$ 9 1,2-Dinitrobenzene	0.4000	0.3843	96.1	83-119	63-127	

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

280-132090-A-2-A	280-132090-A-3-A	280-132090-A-4-A
280-132090-A-5-A	280-132090-A-6-A	280-132090-A-7-A
280-132090-A-8-A	280-132031-A-1-A	280-132031-A-2-A
280-132031-A-3-A	280-132031-A-4-A	280-131963-A-1-B
280-131963-B-2-A	280-131963-A-3-A	280-131963-B-4-A
280-131977-A-1-A	280-131977-B-2-A	280-131977-B-3-A
280-131977-A-4-A	280-131977-A-5-A	280-131977-A-6-A

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

280-131996-A-4-A	280-131996-A-5-A	280-131996-A-6-A
280-131996-A-7-A	280-131996-A-8-A	280-131996-A-9-A
280-131996-A-11-A	280-131996-A-12-A	280-131996-A-13-A
280-131996-A-14-A	280-131996-A-15-A	280-131996-A-1-A
280-131996-A-2-A	280-131996-A-3-A	280-131996-A-10-A

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

280-132013-A-1-A	600-197143-C-1-A	280-131992-C-1-A
280-131988-A-1-A	280-131988-A-2-A	280-131988-A-3-A
280-131988-B-4-A		

Reagent

8330Surrogate_00113

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\G2_LUNA\20200508-91364.b\05080006.D

Lims ID: C18column:B15290 Inj. Date: 08-May-2020 15:06:14

Worklist ID: 280-0091364-006 Instrument: CHHPLC_G2_LUNA

Method: G2_8330_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
$ 10 1,2-Dinitrobenzene	0.2000	0.1859	93.0	63-127	83-119	

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

320-60549-A-1-A 320-60549-A-2-A 320-60549-A-3-A
320-60549-A-4-A 320-60549-A-5-A

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

280-136020-A-1-A 280-136020-A-2-A 600-204374-C-1-A

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

280-136017-A-5-A 280-136017-A-6-A 280-136017-A-7-A
280-136031-A-1-A 280-136031-A-2-A 280-136031-A-3-A
280-136031-A-4-A

Reagent

8330Surrogate_00114

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\G2_LUNA\20200507-91339.b\05070004.D

Lims ID: CaCl2_Sol_00054 Inj. Date: 07-May-2020 12:25:53

Worklist ID: 280-0091339-004 Instrument: CHHPLC_G2_LUNA

Method: G2_8330_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.2000	0.1868	93.4	83-122

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

280-135356-A-2-D

Reagent

8330Surrogate_00115

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20200514-91516.b\05140006.D

Lims ID: C18column:B16162 Inj. Date: 14-May-2020 13:23:12

Worklist ID: 280-0091516-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 9 1,2-Dinitrobenzene	0.5000	0.4872	97.4	83-122

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

280-135985-A-1-F	280-135985-A-2-B	280-135985-A-3-B
280-135985-A-4-B	280-135985-A-5-B	280-135985-A-6-B
280-135985-A-7-B	280-135985-A-8-B	280-135985-A-9-B
280-135985-A-10-B	280-135985-A-11-B	280-135985-A-12-B
280-135985-A-13-B	280-135985-A-14-B	280-135985-A-15-B
280-135985-A-16-B	280-135985-A-17-B	280-135985-A-18-B
280-135985-A-19-B	280-135985-A-20-B	280-135985-A-21-B
280-135985-A-22-F	280-135985-A-23-B	280-135985-A-24-B
280-135985-A-25-B	280-135985-A-26-B	280-135985-A-27-B
280-135985-A-28-B	280-135985-A-29-B	280-135985-A-30-B
280-135985-A-31-B		

Reagent

8330SurrStkSS_00145

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Certificate #3222.01

ilac-MRA

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0135839

Description : 8330 Surrogate Mix

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

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

Expiration Date : March 31, 2023 **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	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.0822	µg/mL	Unstressed
	Purity 99%		+/- 57.3938	µg/mL	Stressed

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

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

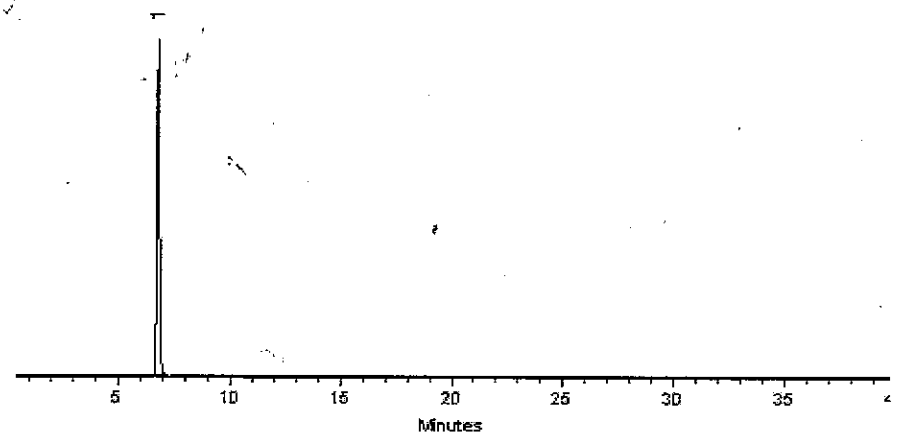
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Dustin J Lidgett

Dustin Lidgett - Mix Technician **Date Mixed:** 05-Mar-2018 **Balance:** 1128360905

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 09-Mar-2018

Manufactured under Restek's ISO 9001:2008 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 Guides 34 and 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

Reagent

8330SurrStkSS_00157

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

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0146866

Description : 8330 Surrogate Mix

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

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

Expiration Date : March 31, 2024 **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	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

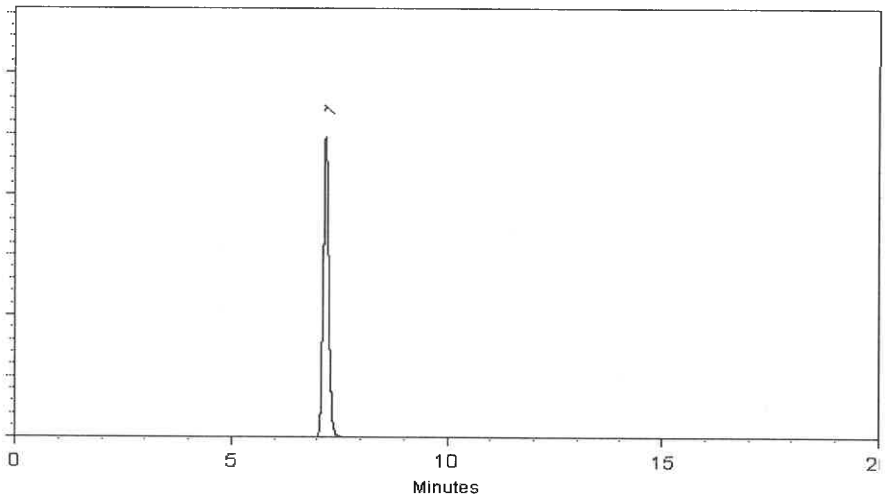
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Michael J Maye

Date Mixed: 11-Mar-2019 **Balance:** 1128353505

Fang-Yun Lo - GC Analyst

Date Passed: 14-Mar-2019

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

Reagent

8330SurrStkSS_00158

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

Expiration Date : July 31, 2024 **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	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

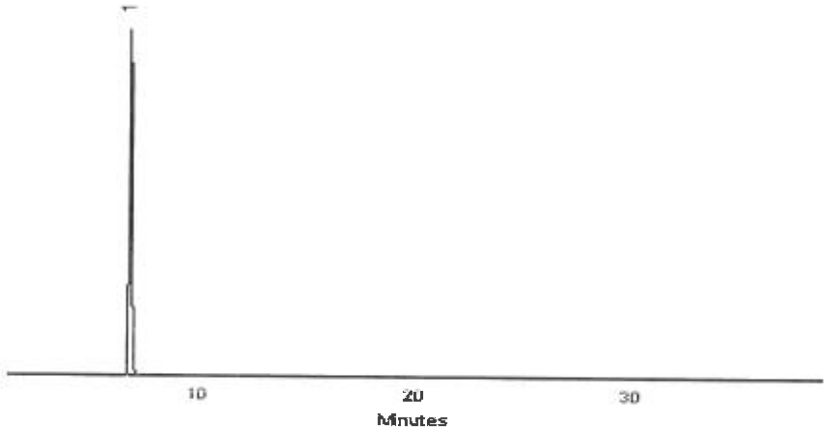
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00160

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

Expiration Date : July 31, 2024 **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	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

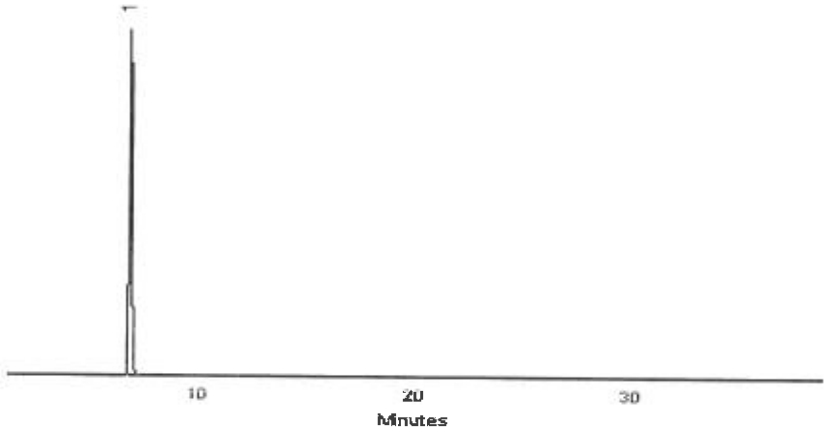
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00161

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

Expiration Date : July 31, 2024 **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	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

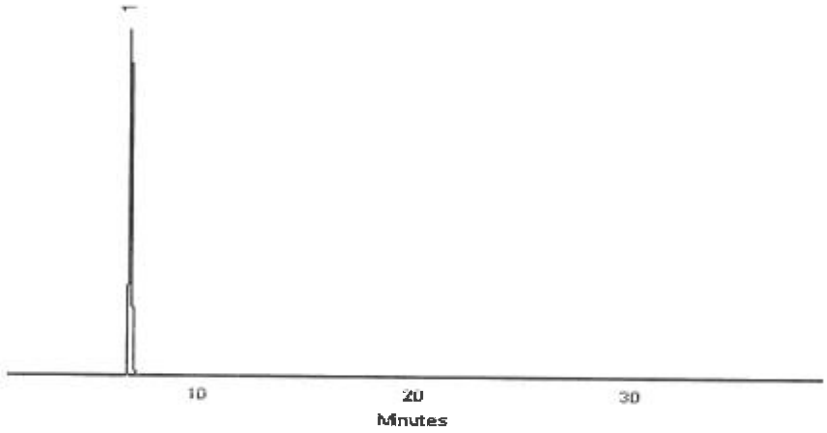
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00162

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. : 31453 **Lot No.:** A0155113

Description : 8330 Surrogate Mix

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

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

Expiration Date : November 30, 2024 **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		1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKCH6067)		+/- 56.3065	µg/mL	Unstressed
	Purity 99%			+/- 57.6234	µg/mL	Stressed

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

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

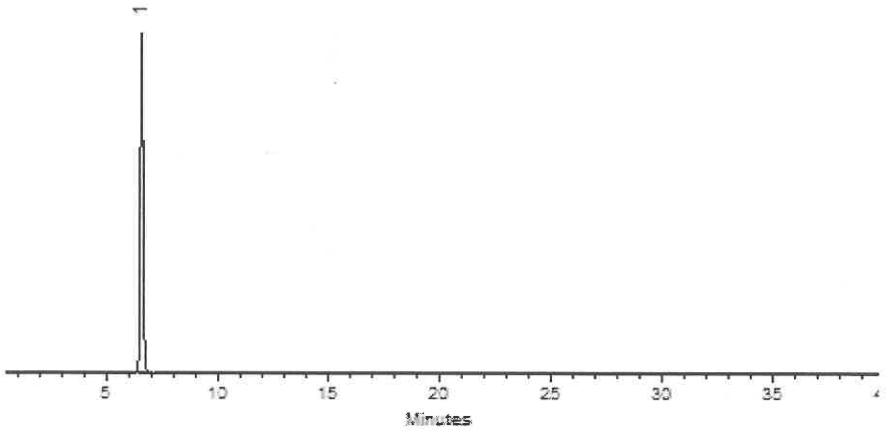
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Miranda Kline
Miranda Kline - Operations Technician I

Date Mixed: 15-Nov-2019 **Balance:** 1128342314

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-Nov-2019

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

Reagent

8330SurrStkSS_00163

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

Expiration Date : November 30, 2024 **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		1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKCH6067)		+/- 56.3065	µg/mL	Unstressed
	Purity 99%			+/- 57.6234	µg/mL	Stressed

Solvent: Methanol
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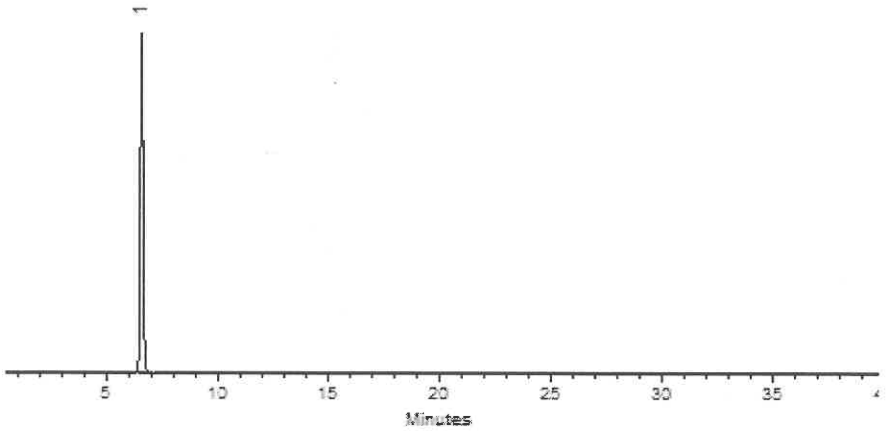
Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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Miranda Kline
Miranda Kline - Operations Technician I

Date Mixed: 15-Nov-2019 **Balance:** 1128342314

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-Nov-2019

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

Reagent

8330SurrStkSS_00164

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0155113

Description : 8330 Surrogate Mix

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

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

Expiration Date : November 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
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	CAS # 528-29-0	(Lot MKCH6067)		+/- 56.3065	µg/mL	Unstressed
	Purity 99%			+/- 57.6234	µg/mL	Stressed

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

Column:
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Ultra C18 (cat.# 9174575)

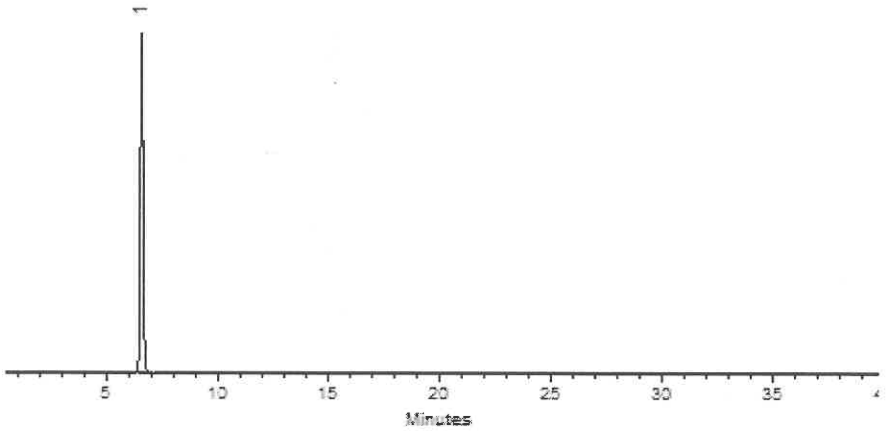
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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Miranda Kline
Miranda Kline - Operations Technician I

Date Mixed: 15-Nov-2019 **Balance:** 1128342314

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-Nov-2019

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

Reagent

8330SurrStkSS_00166

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110 Benner Circle
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Reference Material Producer
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Testing Laboratory
Certificate #3222.02

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Catalog No. : 31453 **Lot No.:** A0155113

Description : 8330 Surrogate Mix

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

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

Expiration Date : November 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
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Mobile Phase B:

Mobile Phase Composition:
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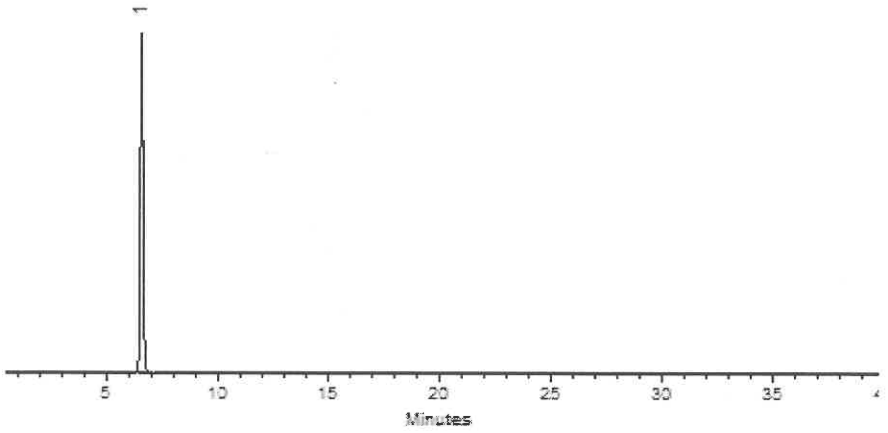
Det. Type:
Wavelength: 210 nm



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.

Miranda Kline
Miranda Kline - Operations Technician I

Date Mixed: 15-Nov-2019 **Balance:** 1128342314

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-Nov-2019

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

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

Alk stk std_00017

ThermoFisher SCIENTIFIC

Certificate of Analysis

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

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

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	SS148	Quality Test / Release Date	03/20/2019
Lot Number	191517	Expiration Date	Mar/2021
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, Colorless liquid
NORMALITY		Inclusive Between 0.995 - 1.000	0.999
COLOR	APHA	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

Reagent

IC BR ICV_00018

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 2907E22 **Product Number:** 1180

Manufacture Date: JUL 23, 2019
Expiration Date: JAN 2021

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
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
1180-8	250 mL natural poly	18 months

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



Sharon Travers (07/23/2019)
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_00060

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 4-176CL-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: 1001 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: 1004 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: JAN - - 2020 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2018 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.

Reagent

IC FL cal_00014

RICCA CHEMICAL COMPANY®

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Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

Lot Number: 4905E80 **Product Number:** 3173

Manufacture Date: MAY 23, 2019
Expiration Date: NOV 2020

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

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

Jim Gibbs (05/23/2019)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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Reagent

IC MS/MSD S04_00005

Fisher Scientific

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

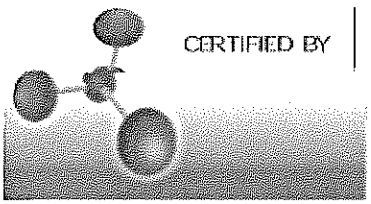
Certificate of Analysis

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

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

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

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



Lab Manager Fair Lawn

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

Reagent

IC SO4 ICV_00021

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Sulfate (SO_4)
CATALOG NUMBER:	062 -125 mL; 995 - 500 mL
LOT NUMBER:	100819m
ISSUE DATE:	August 23, 2019
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Sulfate (K_2SO_4)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9986 ± 0.0010 g/mL at 19.7°C and 757 mm Hg
TRACEABILITY[3]:	97.6%
NIST/SRM:	3181 Sulfate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 08/06/2021**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009 ACCREDITED
REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED
CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

IC sulfatecal_00057

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

Description: 1000 µg/mL Sulfate

EXPIRES JUN. 30, 2020

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: 1001 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: 1002 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	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: JUN -- 2019

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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Report of Certification

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

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

Material Source:

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

Instructions for Use:

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

Method of Preparation:

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

Homogeneity:

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

Statistical Estimator and Confidence Limits:

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

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

Certification Report:

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

Legal Notice:

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

Reagent

IC sulfatecal_00059

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

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: 1001 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: 1002 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	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: JAN - - 2020 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

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- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

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

Instructions for Use:

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

Method of Preparation:

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

Homogeneity:

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

Statistical Estimator and Confidence Limits:

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

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

Certification Report:

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

Legal Notice:

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

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 800-LAB-SPEX 732-603-9647

Reagent

IC sulfatecal_00060

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ILAC-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

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: 1001 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: 1002 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	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: MAY -- 2020 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Reagent

MNX,TNX,DNX_00032

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-23984 **Page:** 1 of 1

Lot Number: CS-5628 **Lot Issue Date:** 16-Nov-2018 **Expiration Date:** 31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. 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
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 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.

Monica Bourgeois
QMS Representative

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

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No.
AT-1937

ORG ver 1.1

250 Smith Street North Kingstown, Rhode Island 02852 **www.ultrasci.com**

Reagent

MNX,TNX,DNX_00042

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-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
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 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**

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

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

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: 2 of 2

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

ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00043

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-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
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 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**

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

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

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: 2 of 2

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

ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00046

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-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
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 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:

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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:

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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**

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

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

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: 2 of 2

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

ISO 17025 Cert
No. AT-1937

Reagent

NH3 CAL STD_00031

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
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: 2902E25 **Product Number:** 5455

Manufacture Date: FEB 25, 2019
Expiration Date: AUG 2020

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
5455-32	1 L natural poly	18 months

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



Tara Jones (02/25/2019)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

PicricARestek_00090

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 Guide 34 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.:** A0131892

Description : Picric Acid Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

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

Expiration Date : October 31, 2022 **Storage:** 10°C or colder

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)	1,004.9 µg/mL	+/- 5.9689	µg/mL	Gravimetric
			+/- 55.0525	µg/mL	Unstressed
			+/- 64.1967	µg/mL	Stressed

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

Specific Reference Material Notes:
This is a derivatized analysis.

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

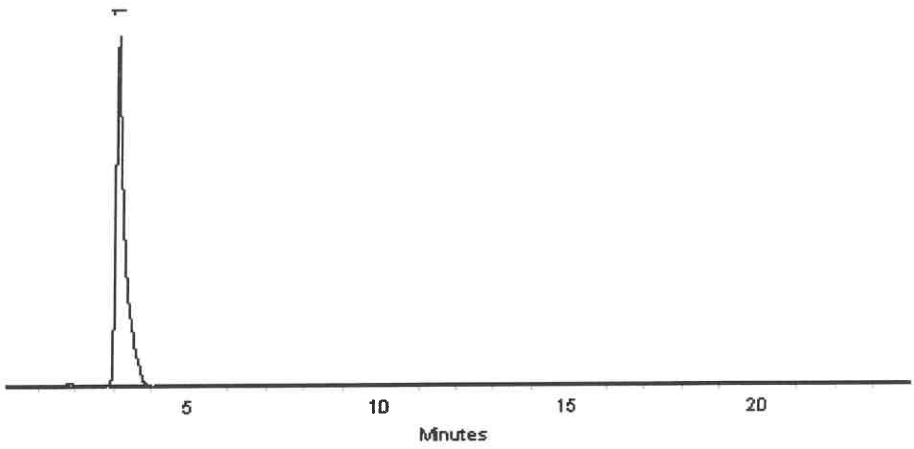
Flow Rate:
1.0 ml/min.

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.

Matt Fragassi - Mix Technician

Date Mixed: 25-Oct-2017 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Oct-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

RSK175methane_00010

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
6141 Easton Road
Bldg 1
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: CP

Customer:	SIGMA-ALDRICH		
Part Number:	ME CPP14C514	Reference Number:	160-401480003-1
Cylinder Analyzed:	ST0000198540	Cylinder Volume:	14.0 LG
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	240 PSIG
Analysis Date:	Apr 16, 2019	Valve Outlet:	160
Lot Number:	160-401480003-1		

Expiration Date: Apr 16, 2022

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
METHANE	> 99.0 %	> 99.0 %

Cylinders in Batch:

ST0000198540, ST0000198541, ST0000198542, ST0000198543

Notes:MANUFACTURE DATE 4-16-2019
PO# P481562
P/N 22562

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Approved for Release

Reagent

RSK7gasMathes_00027

MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
200 ALESSIO DR
JOLIET, IL 60433

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³; 0.21 m³

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

CYLINDER NUMBER(S)
*DL955755

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	0.995	%	±10%	±2%
Acetylene	1.00	0.995	%	±10%	±2%
Isobutylene	1.00	0.995	%	±10%	±2%
Propane	1.00	0.995	%	±10%	±2%
Ethene	1.00	0.996	%	±10%	±2%
Ethylene	1.00	0.996	%	±10%	±2%
Methane	1.00	0.999	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

Lot No: 1029602081C
Fill Date: 09/04/2019
Expiration Date: 09/09/2021
Analysis Date: 09/09/2019

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

Jennifer Fender - Analyst	09/09/2019 Date	Jennifer Fender - QA Approval	09/09/2019 Date

Reagent

RSK7gasMathes_00031

MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture
Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS
Contents:
Net: 7.57 ft³; 0.21 m³

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

CYLINDER NUMBER(S)
*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

SFD CAL STK_00006

ACROS ORGANICS

Version	02
Molecular weight	240.18
Quality Test / Release Date	09/06/2018
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 above mentioned lot number 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. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number	38706	**Quality Test / Release Date** 09/06/2018
Lot Number	A0390872	
Description	Sodium sulfide nonahydrate,98+%,extra pure	
Country of Origin	INDIA	
Declaration of Origin	synthetic	

BSE/TSE comment	
Chemical Comment	

Result name	Units	Specifications	Test Value
Appearance (Color)		Colorless to light yellow	Light yellow
Appearance (Form)		Adhering crystals and/or chunks	Adhering crystals and chunks
Titration Iodimetric		32.0 to 38.0 % (Na2S)	35.9 % (Na2S)
Total nitrogen (as N)		=<0.005 %	=<0.005 %
Sulfite (as SO2)		=<2000 ppm	=<2000 ppm
Thiosulphate (S2O3)		=<5000 ppm	=<5000 ppm



CERTIFIED BY

L. Van den Broek, QA Manager

Issued: 09-06-2018

Acros Organics
ENA23, zone1, 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 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

Reagent

TKN CAL STD_00017

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: 010617
Manufacture Date: 01/06/17
Certified Date: 01/12/17

Expiration: 01/31/2021
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-25	TKN from Glycine	56-40-6	99.4%	1000 ± 4.60

Packaging, Storage, Instructions For Use

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

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

Traceability Information

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

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

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

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

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

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

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Catalog Number: IS-009, IS-009-500
Lot Number: 010617

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

TOC LCS Std_00048

Agilent

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: 0006465171

Lot Issue Date: 10-May 2019
Expiration Date: 30-Jun 2021

Product Name: Total Organic Carbon (TOC) Standard

Description:
This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under Agilent's ISO 9001 registered quality system. The neat materials used for this product have been verified by Agilent's ISO 17025 laboratory and under Agilent's ISO Guide 34 accreditation. The analyte concentrations were verified by Agilent's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Analyte Concentration	Traceability & Method
TOC	potassium hydrogen phthalate	RM14067	99.97	1001 ± 5 µg/mL	NAA02099; TOC Analyzer

Solvent: water (low TOC, <50 ppb)

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

Traceability:
Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:
The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:
This RM was formulated and 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 and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:
Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid, within the measurement uncertainty specified, 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 ISO GUIDE 34 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 ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

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

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: 0006465171

Lot Issue Date: 10-May 2019
Expiration Date: 30-Jun 2021

Maintenance of Certification:
The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, Agilent Technologies will notify the purchaser.

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

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 037F0101.D

Lab ID: LCS 280-499014/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0722	99	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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-499210/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0786	108	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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 032F3201.D

Lab ID: LCS 280-499415/31 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0749	103	73-125	M

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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06192002.D

Lab ID: LCS 280-499435/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0735	101	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 038F0201.D

Lab ID: LCSD 280-499014/6 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0797	109	10	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.: 280-137609-2

SDG No.:

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

Lab ID: LCSD 280-499210/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0804	110	2	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 033F3301.D

Lab ID: LCSD 280-499415/32 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0680	93	10	20	73-125	M

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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06192003.D

Lab ID: LCSD 280-499435/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0665	91	10	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 033F3301.D

Lab ID: 280-137609-26 MS Client ID: G0116-20A MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.438	29	37.6	1931	73-125	D M 4

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 034F3401.D

Lab ID: 280-137609-26 MSD Client ID: G0116-20A MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.438	28.1	-223	29	20	73-125	D M 4 J1

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.: 280-137609-2

SDG No.:

Lab Sample ID: MB 280-499014/7

Matrix: Water Date Extracted:

Lab File ID:(1) 039F0301.D Lab File ID:(2) 039F0301.D

Date Analyzed:(1) 06/16/2020 21:36 Date Analyzed:(2) 06/16/2020 21:36

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 280-499014/5	06/16/2020 21:04	06/16/2020 21:04
	LCSD 280-499014/6	06/16/2020 21:20	06/16/2020 21:20
PZ013-20A	280-137609-17	06/17/2020 02:31	06/17/2020 02:31
G0104-20A	280-137609-18	06/17/2020 02:47	06/17/2020 02:47
PZ014-20A	280-137609-19	06/17/2020 03:03	06/17/2020 03:03
G0101-20A	280-137609-21	06/17/2020 03:36	06/17/2020 03:36
G0111-20A	280-137609-23	06/17/2020 04:08	06/17/2020 04:08
G0103-20A	280-137609-24	06/17/2020 04:25	06/17/2020 04:25

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: MB 280-499210/4

Matrix: Water Date Extracted:

Lab File ID:(1) 004F0401.D Lab File ID:(2) 004F0401.D

Date Analyzed:(1) 06/18/2020 09:42 Date Analyzed:(2) 06/18/2020 09:42

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 280-499210/2	06/18/2020 09:10	06/18/2020 09:10
	LCSD 280-499210/3	06/18/2020 09:26	06/18/2020 09:26
G0117-20A	280-137609-16	06/18/2020 16:14	06/18/2020 16:14
G0115-20A	280-137609-20	06/18/2020 16:30	06/18/2020 16:30
G0100-20A	280-137609-22	06/18/2020 16:47	06/18/2020 16:47

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: MB 280-499415/33

Matrix: Water Date Extracted:

Lab File ID:(1) 034F3401.D Lab File ID:(2) 034F3401.D

Date Analyzed:(1) 06/18/2020 17:52 Date Analyzed:(2) 06/18/2020 17:52

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 280-499415/31	06/18/2020 17:19	06/18/2020 17:19
	LCSD 280-499415/32	06/18/2020 17:36	06/18/2020 17:36
G0107-20A	280-137609-25	06/18/2020 19:13	06/18/2020 19:13
G0106-20A	280-137609-28	06/18/2020 20:02	06/18/2020 20:02
G0095-20A	280-137609-29	06/18/2020 20:19	06/18/2020 20:19

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: MB 280-499435/4

Matrix: Water Date Extracted:

Lab File ID:(1) 06192004.D Lab File ID:(2) 06192004.D

Date Analyzed:(1) 06/19/2020 15:02 Date Analyzed:(2) 06/19/2020 15:02

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 280-499435/2	06/19/2020 14:30	06/19/2020 14:30
	LCSD 280-499435/3	06/19/2020 14:46	06/19/2020 14:46
G0120-20A	280-137609-27	06/19/2020 16:24	06/19/2020 16:24
G0116-20A	280-137609-26	06/20/2020 01:00	06/20/2020 01:00
G0116-20A DU	280-137609-26 DU	06/20/2020 01:16	06/20/2020 01:16
G0116-20A MS	280-137609-26 MS	06/20/2020 01:32	06/20/2020 01:32
G0116-20A MSD	280-137609-26 MSD	06/20/2020 01:48	06/20/2020 01:48

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0117-20A Lab Sample ID: 280-137609-16

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

Date Analyzed (1): 06/18/2020 16:14 Date Analyzed (2): 06/18/2020 16:14

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		3.15	3.17	3.25	28		1.4
	2		1.25	1.23	1.31	28		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: PZ013-20A Lab Sample ID: 280-137609-17

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

Date Analyzed (1): 06/17/2020 02:31 Date Analyzed (2): 06/17/2020 02:31

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		3.14	3.12	3.20	6.3		6.2
	2		1.25	1.21	1.29	6.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0104-20A Lab Sample ID: 280-137609-18

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

Date Analyzed (1): 06/17/2020 02:47 Date Analyzed (2): 06/17/2020 02:47

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		3.16	3.12	3.20	1.6		5.9
	2		1.25	1.21	1.29	1.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: PZ014-20A Lab Sample ID: 280-137609-19

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

Date Analyzed (1): 06/17/2020 03:03 Date Analyzed (2): 06/17/2020 03:03

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.12	3.20	0.27		6.8
	2		1.25	1.21	1.29	0.28		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0115-20A Lab Sample ID: 280-137609-20

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

Date Analyzed (1): 06/18/2020 16:30 Date Analyzed (2): 06/18/2020 16:30

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.15	3.17	3.25	23		1.4
	2		1.25	1.23	1.31	23		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0101-20A Lab Sample ID: 280-137609-21

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

Date Analyzed (1): 06/17/2020 03:36 Date Analyzed (2): 06/17/2020 03:36

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.15	3.12	3.20	5.5		6.9
	2		1.24	1.21	1.29	5.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0100-20A Lab Sample ID: 280-137609-22

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

Date Analyzed (1): 06/18/2020 16:47 Date Analyzed (2): 06/18/2020 16:47

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		3.15	3.17	3.25	16		1.5
	2		1.25	1.23	1.31	16		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0111-20A Lab Sample ID: 280-137609-23

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

Date Analyzed (1): 06/17/2020 04:08 Date Analyzed (2): 06/17/2020 04:08

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		3.15	3.12	3.20	3.8		8.1
	2		1.24	1.21	1.29	4.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0103-20A Lab Sample ID: 280-137609-24

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

Date Analyzed (1): 06/17/2020 04:25 Date Analyzed (2): 06/17/2020 04:25

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.17	3.12	3.20	0.072		6.0
	2		1.25	1.21	1.29	0.077		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0107-20A Lab Sample ID: 280-137609-25

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

Date Analyzed (1): 06/18/2020 19:13 Date Analyzed (2): 06/18/2020 19:13

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	0.13		3.5
	2		1.25	1.23	1.31	0.13		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A Lab Sample ID: 280-137609-26

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

Date Analyzed (1): 06/20/2020 01:00 Date Analyzed (2): 06/20/2020 01:00

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		3.16	3.17	3.25	29		1.6
	2		1.25	1.22	1.30	30		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A MS Lab Sample ID: 280-137609-26 MS

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

Date Analyzed (1): 06/20/2020 01:32 Date Analyzed (2): 06/20/2020 01:32

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	37.6		0.8
	2		1.25	1.22	1.30	37.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A MSD Lab Sample ID: 280-137609-26 MSD

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

Date Analyzed (1): 06/20/2020 01:48 Date Analyzed (2): 06/20/2020 01:48

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		3.16	3.17	3.25	28.1		0.5
	2		1.25	1.22	1.30	28.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A DU Lab Sample ID: 280-137609-26 DU

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

Date Analyzed (1): 06/20/2020 01:16 Date Analyzed (2): 06/20/2020 01:16

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		3.16	3.17	3.25	26.5		1.3
	2		1.25	1.22	1.30	26.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0120-20A Lab Sample ID: 280-137609-27

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

Date Analyzed (1): 06/19/2020 16:24 Date Analyzed (2): 06/19/2020 16:24

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	26		2.0
	2		1.25	1.22	1.30	27		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0106-20A Lab Sample ID: 280-137609-28

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

Date Analyzed (1): 06/18/2020 20:02 Date Analyzed (2): 06/18/2020 20:02

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.15	3.17	3.25	0.0038		5.1
	2		1.24	1.23	1.31	0.0040		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0095-20A Lab Sample ID: 280-137609-29

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

Date Analyzed (1): 06/18/2020 20:19 Date Analyzed (2): 06/18/2020 20:19

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		3.14	3.17	3.25	6.9		3.3
	2		1.25	1.23	1.31	7.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499014/5

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

Date Analyzed (1): 06/16/2020 21:04 Date Analyzed (2): 06/16/2020 21:04

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.18	3.12	3.20	0.0722		1.6
	2		1.25	1.21	1.29	0.0734		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499014/6

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

Date Analyzed (1): 06/16/2020 21:20 Date Analyzed (2): 06/16/2020 21:20

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.17	3.12	3.20	0.0797		0.6
	2		1.25	1.21	1.29	0.0801		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499210/2

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

Date Analyzed (1): 06/18/2020 09:10 Date Analyzed (2): 06/18/2020 09:10

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.20	3.17	3.25	0.0786		0.6
	2		1.27	1.23	1.31	0.0781		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499210/3

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

Date Analyzed (1): 06/18/2020 09:26 Date Analyzed (2): 06/18/2020 09:26

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		3.19	3.17	3.25	0.0804		0.9
	2		1.26	1.23	1.31	0.0798		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499415/31

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

Date Analyzed (1): 06/18/2020 17:19 Date Analyzed (2): 06/18/2020 17:19

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		3.17	3.17	3.25	0.0749		0.8
	2		1.25	1.23	1.31	0.0743		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499415/32

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

Date Analyzed (1): 06/18/2020 17:36 Date Analyzed (2): 06/18/2020 17:36

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.17	3.17	3.25	0.0680		1.4
	2		1.25	1.23	1.31	0.0671		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499435/2

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

Date Analyzed (1): 06/19/2020 14:30 Date Analyzed (2): 06/19/2020 14:30

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.19	3.17	3.25	0.0735		0.0
	2		1.26	1.22	1.30	0.0735		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499435/3

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

Date Analyzed (1): 06/19/2020 14:46 Date Analyzed (2): 06/19/2020 14:46

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		3.18	3.17	3.25	0.0665		0.2
	2		1.26	1.22	1.30	0.0664		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0117-20A Lab Sample ID: 280-137609-16

Matrix: Water Lab File ID: 028F2801.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 11:10

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 16:14

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499210 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	28	D M	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\028F2801.D
Lims ID: 280-137609-I-16
Client ID: G0117-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 16:14:33 ALS Bottle#: 28 Worklist Smp#: 27
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-I-16
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:15 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:32:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.247	1.266	-0.019	680012148	4730.7	a
2	3.153	3.212	-0.059	319266401	4664.1	a
					RPD = 1.42	
3 Ethane						
1		1.525			ND	
2		4.327				
4 Ethylene						
1		1.805			ND	
2		4.057				
5 Propane						
1		2.506			ND	
2		5.938				
6 Acetylene						
1		3.953			ND	
2		4.160				
7 Butane						
1		4.248			ND	
2		7.380				
8 isobutylene						
1		5.146			ND	
2		7.233				

QC Flag Legend

Review Flags

a - User Assigned ID

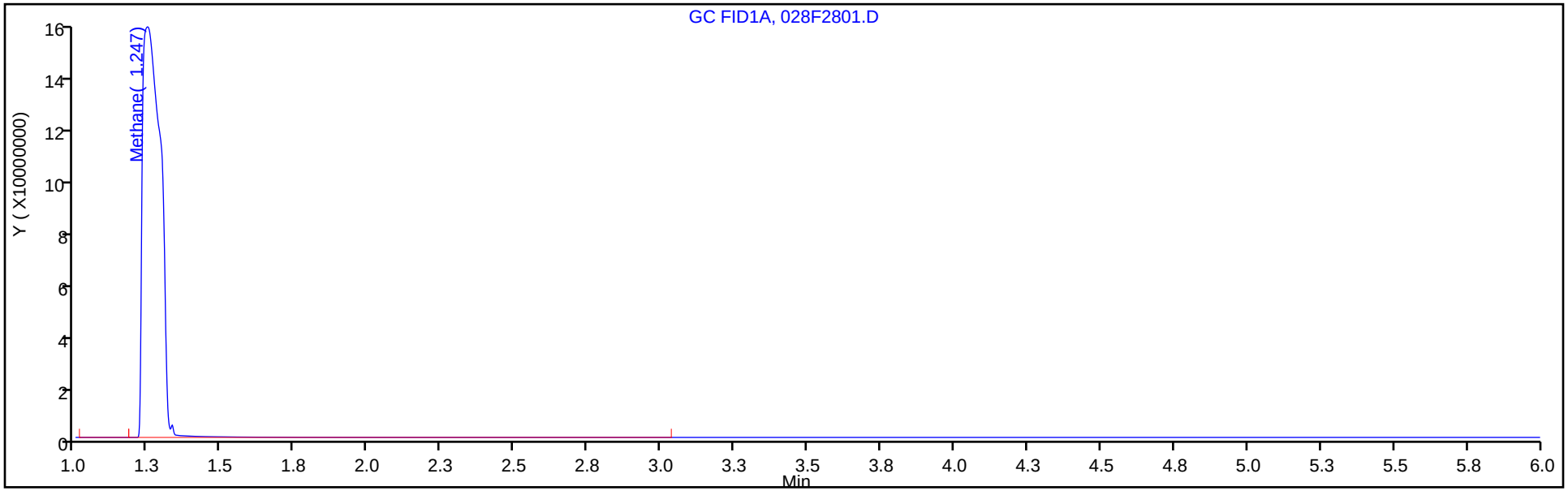
Report Date: 19-Jun-2020 12:43:20 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

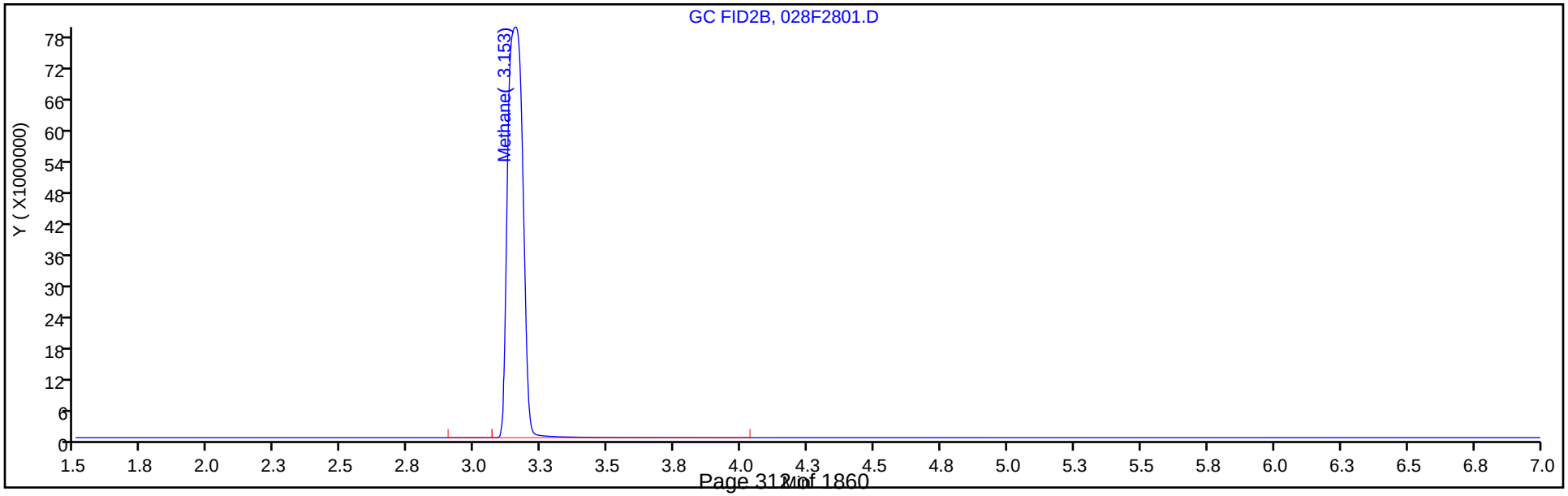
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\028F2801.D

Injection Date:	18-Jun-2020 16:14:33	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-I-16	Lab Sample ID:	280-137609-16	Worklist Smp#:	27
Client ID:	G0117-20A				
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	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

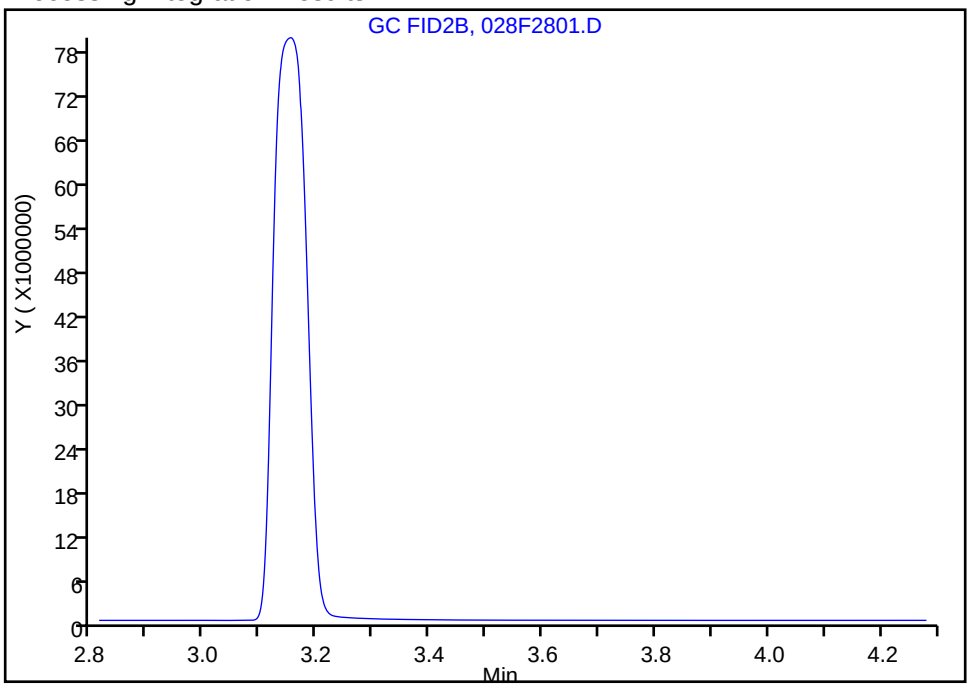
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\028F2801.D				
Injection Date:	18-Jun-2020 16:14:33	Instrument ID:	VGC_J		
Lims ID:	280-137609-I-16	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	gm	ALS Bottle#:	28	Worklist Smp#:	27
Purge Vol:	18.000 mL	Dil. Factor:	6.0000		
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

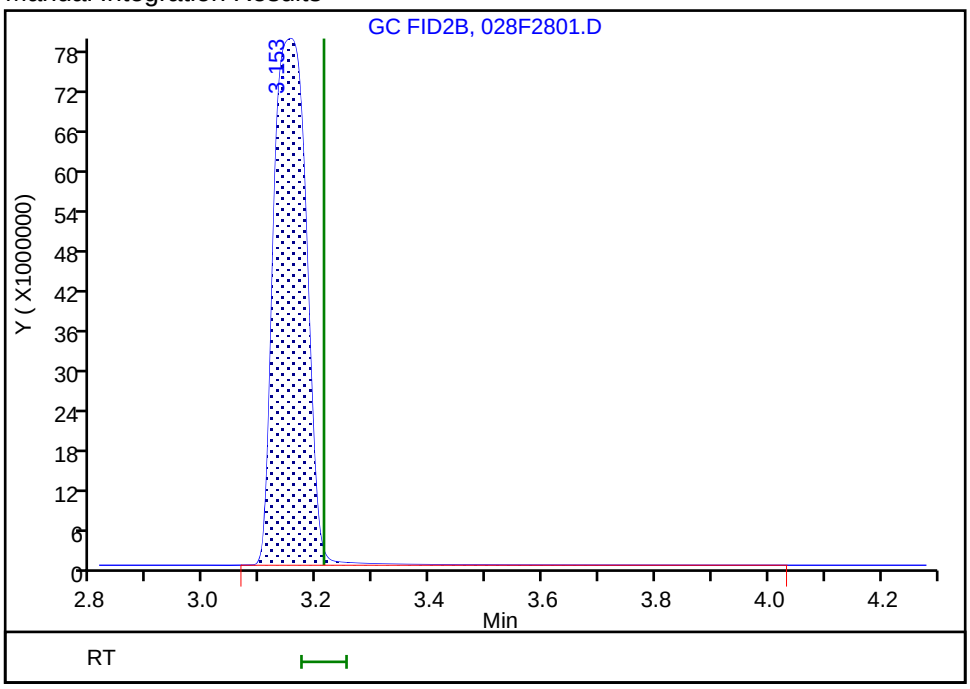
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 319266401
Amount: 4664.1031
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:32:43
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: PZ013-20A Lab Sample ID: 280-137609-17

Matrix: Water Lab File ID: 007F2101.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 11:30

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 02:31

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.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.3		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\007F2101.D
Lims ID: 280-137609-G-17
Client ID: PZ013-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 02:31:10 ALS Bottle#: 7 Worklist Smp#: 54
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-17
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:22:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.247	1.246	0.001	960634573	6683.1	
2	3.144	3.159	-0.015	430157302	6284.2	
					RPD = 6.15	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						
1		1.779			ND	
2		4.021				
5 Propane						
1		2.474			ND	
2		5.919				
6 Acetylene						
1		3.951			ND	
2		4.126				
7 Butane						
1		4.234			ND	
2		7.366				
8 isobutylene						
1		5.141			ND	
2		7.218				

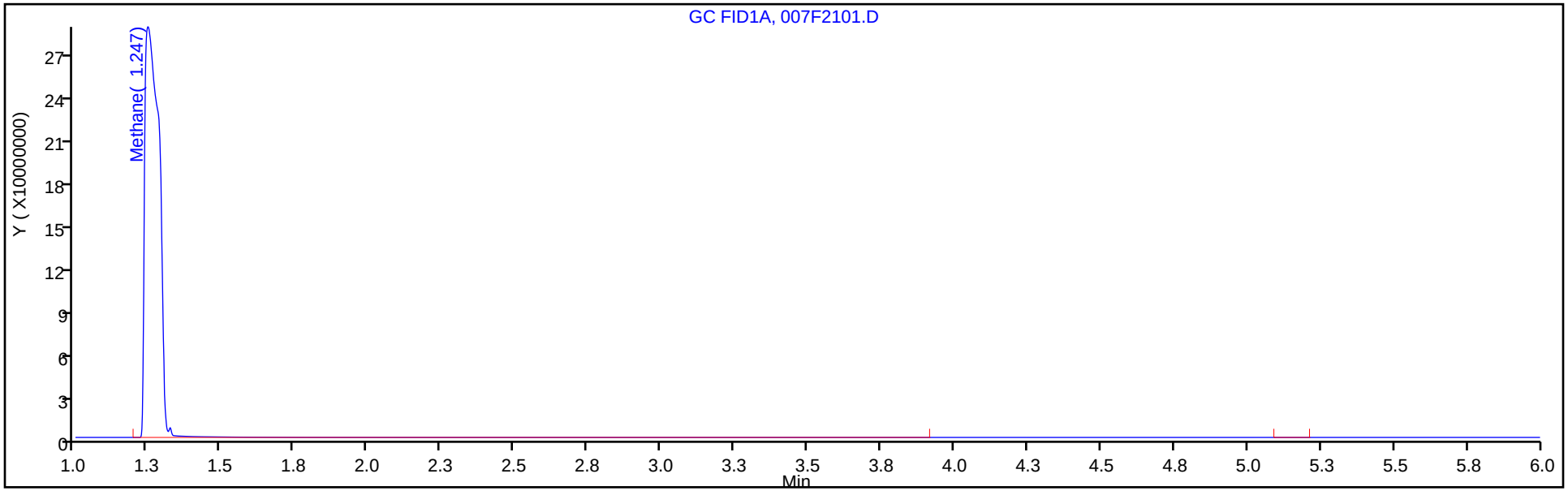
Report Date: 18-Jun-2020 10:25:03 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

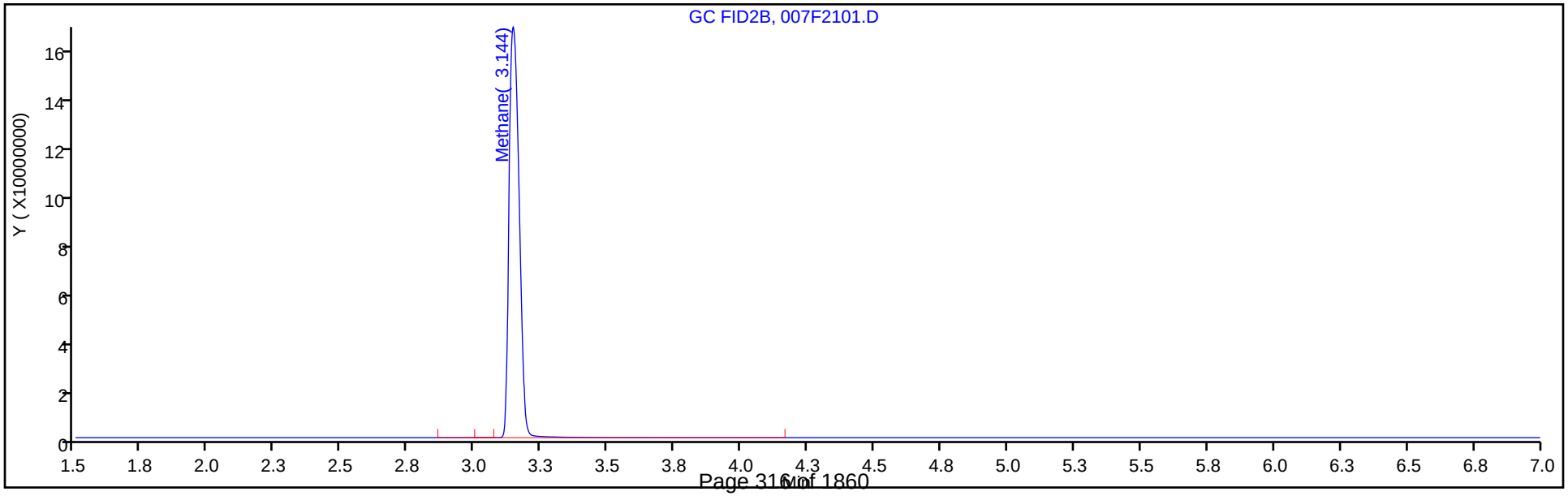
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\007F2101.D

Injection Date:	17-Jun-2020 02:31:10	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-17	Lab Sample ID:	280-137609-17	Worklist Smp#:	54
Client ID:	PZ013-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0104-20A Lab Sample ID: 280-137609-18

Matrix: Water Lab File ID: 008F2201.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 08:25

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 02:47

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.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.6		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\008F2201.D
Lims ID: 280-137609-H-18
Client ID: G0104-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 02:47:28 ALS Bottle#: 8 Worklist Smp#: 55
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-H-18
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:22:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.247	1.246	0.001	240329956	1671.7	
2	3.161	3.159	0.002	107917982	1576.4	
					RPD = 5.87	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						
1		1.779			ND	
2		4.021				
5 Propane						
1		2.474			ND	
2		5.919				
6 Acetylene						
1		3.951			ND	
2		4.126				
7 Butane						
1		4.234			ND	
2		7.366				
8 isobutylene						
1		5.141			ND	
2		7.218				

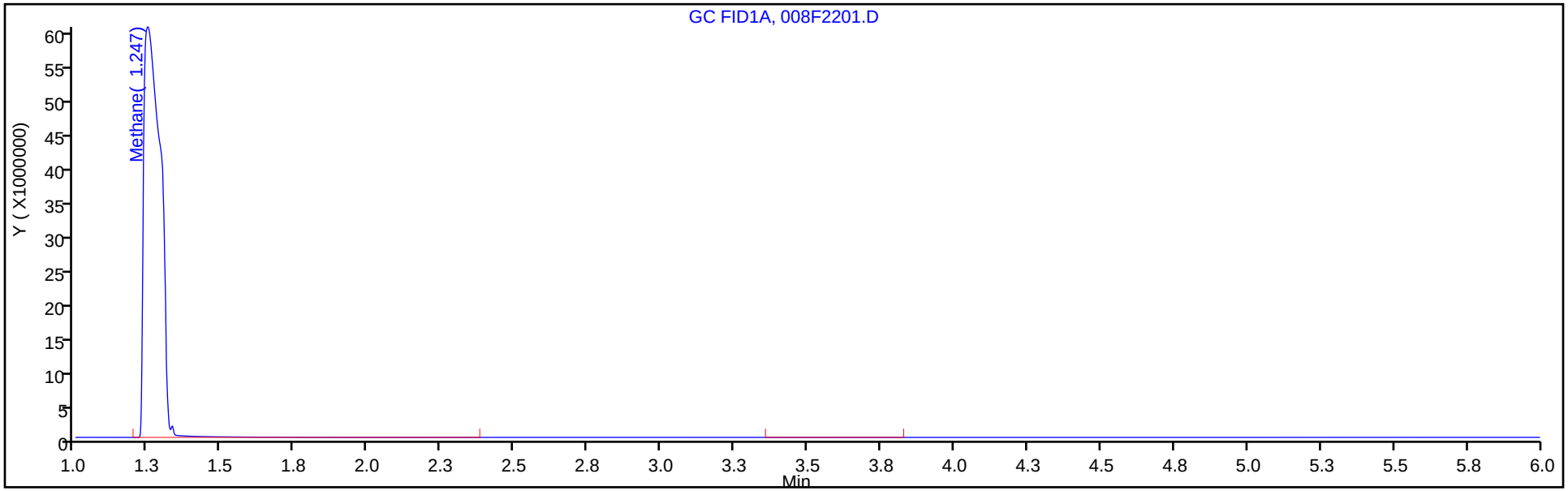
Report Date: 18-Jun-2020 10:25:03 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

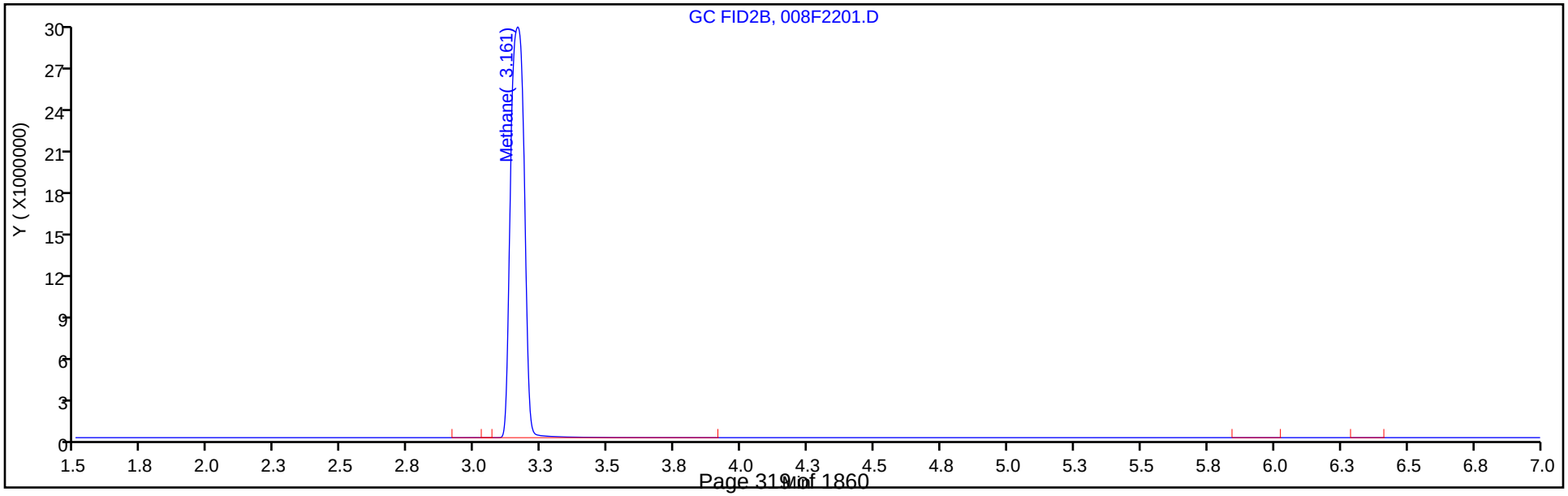
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\008F2201.D

Injection Date:	17-Jun-2020 02:47:28	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-H-18	Lab Sample ID:	280-137609-18	Worklist Smp#:	55
Client ID:	G0104-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: PZ014-20A Lab Sample ID: 280-137609-19

Matrix: Water Lab File ID: 009F2301.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 08:20

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 03:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.27		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\009F2301.D
Lims ID: 280-137609-G-19
Client ID: PZ014-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 03:03:46 ALS Bottle#: 9 Worklist Smp#: 56
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-19
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:22:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.245	1.246	-0.001	40886171	284.1	
2	3.160	3.159	0.001	18177166	265.3	
					RPD = 6.85	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						
1		1.779			ND	
2		4.021				
5 Propane						
1		2.474			ND	
2		5.919				
6 Acetylene						
1		3.951			ND	
2		4.126				
7 Butane						
1		4.234			ND	
2		7.366				
8 isobutylene						
1		5.141			ND	
2		7.218				

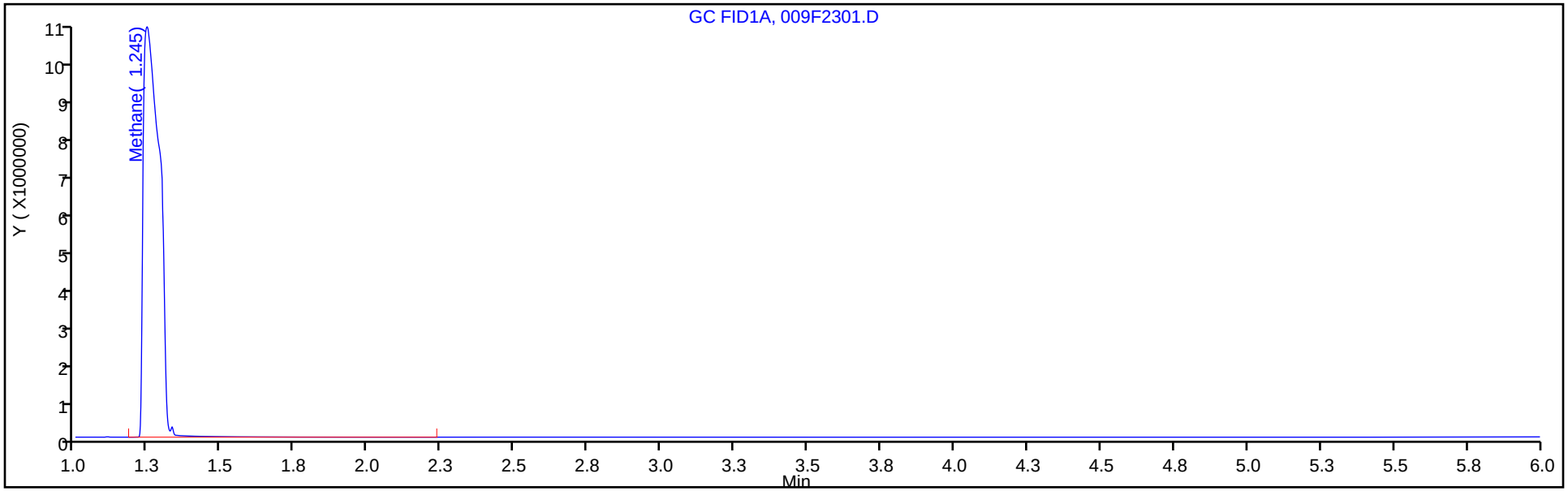
Report Date: 18-Jun-2020 10:25:04 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

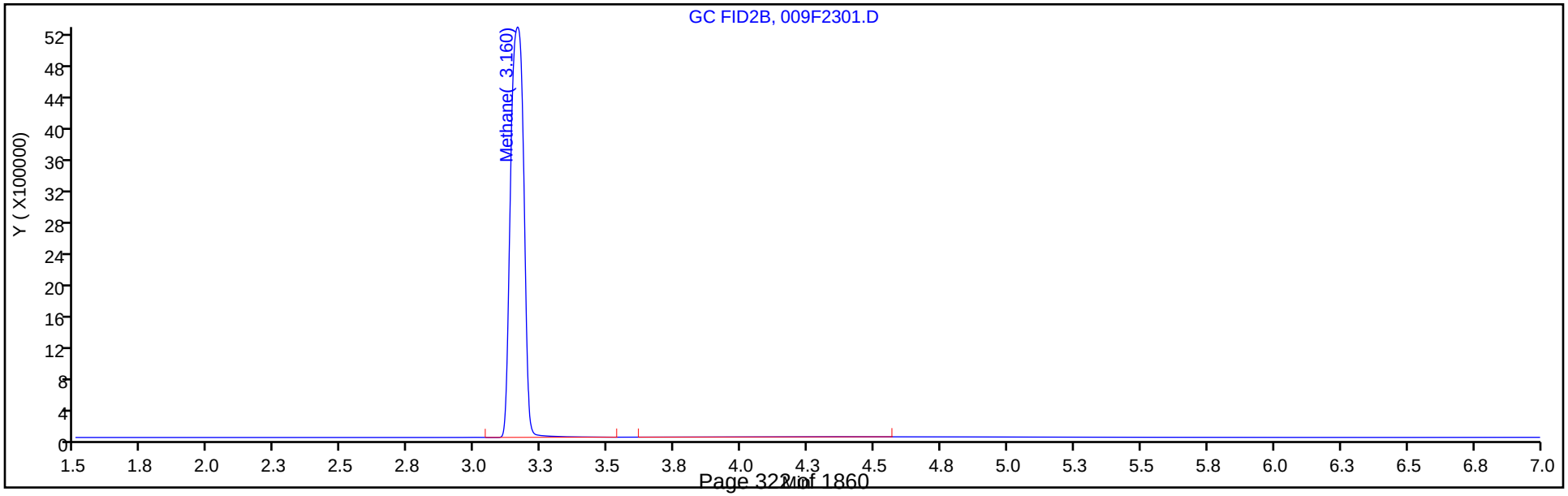
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\009F2301.D

Injection Date:	17-Jun-2020 03:03:46	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-19	Lab Sample ID:	280-137609-19	Worklist Smp#:	56
Client ID:	PZ014-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0115-20A Lab Sample ID: 280-137609-20

Matrix: Water Lab File ID: 029F2901.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 13:55

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 16:30

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499210 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	23	D M	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\029F2901.D
Lims ID: 280-137609-H-20
Client ID: G0115-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 16:30:51 ALS Bottle#: 29 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-H-20
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:15 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:33:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.246	1.266	-0.020	557356234	3877.4	a
2	3.154	3.212	-0.058	261695998	3823.0	a
					RPD = 1.41	
3 Ethane						
1		1.525			ND	
2		4.327				
4 Ethylene						
1		1.805			ND	
2		4.057				
5 Propane						
1		2.506			ND	
2		5.938				
6 Acetylene						
1		3.953			ND	
2		4.160				
7 Butane						
1		4.248			ND	
2		7.380				
8 isobutylene						
1		5.146			ND	
2		7.233				

QC Flag Legend

Review Flags

a - User Assigned ID

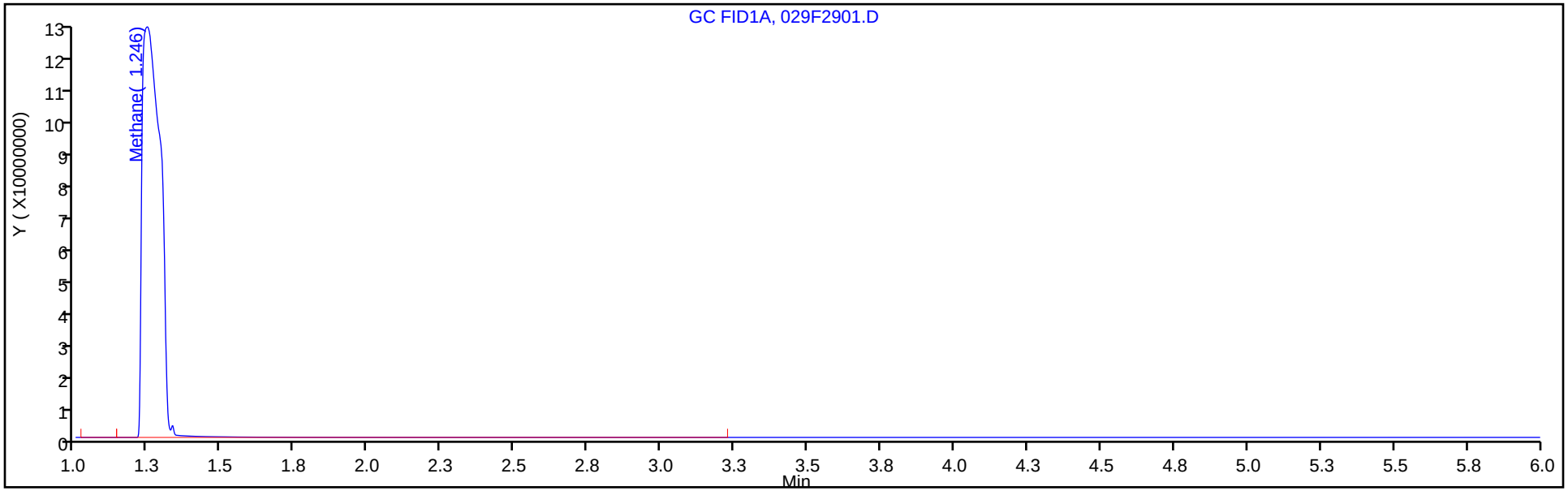
Report Date: 19-Jun-2020 12:43:20 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

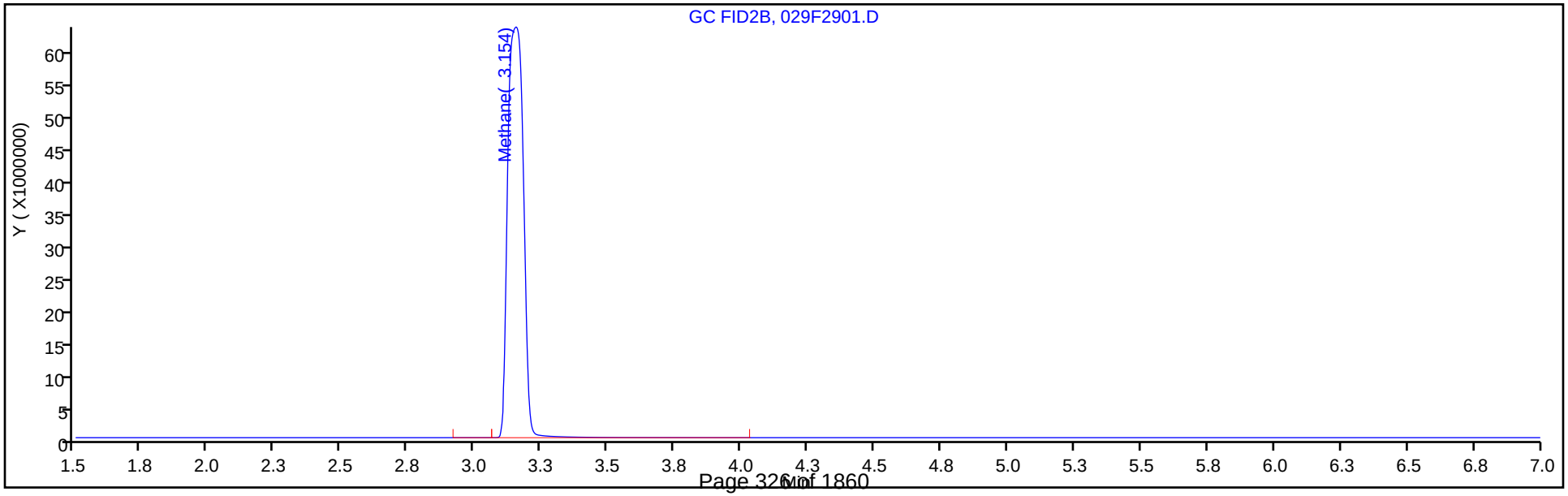
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\029F2901.D

Injection Date:	18-Jun-2020 16:30:51	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-20	Lab Sample ID:	280-137609-20	Worklist Smp#:	28
Client ID:	G0115-20A				
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	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

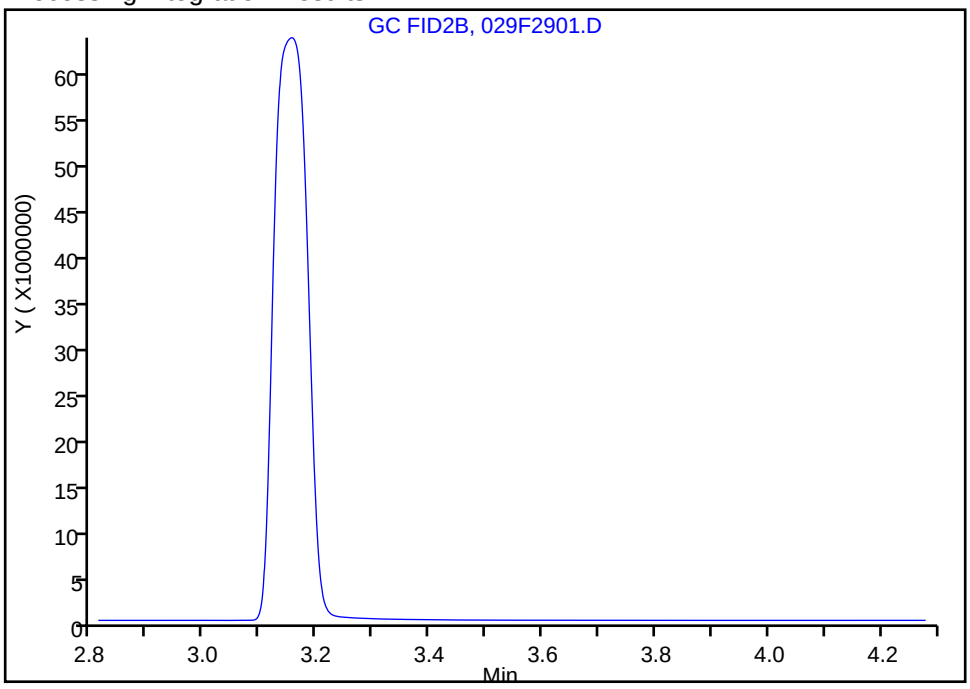
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\029F2901.D				
Injection Date:	18-Jun-2020 16:30:51	Instrument ID:	VGC_J		
Lims ID:	280-137609-H-20	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	gm	ALS Bottle#:	29	Worklist Smp#:	28
Purge Vol:	18.000 mL	Dil. Factor:	6.0000		
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

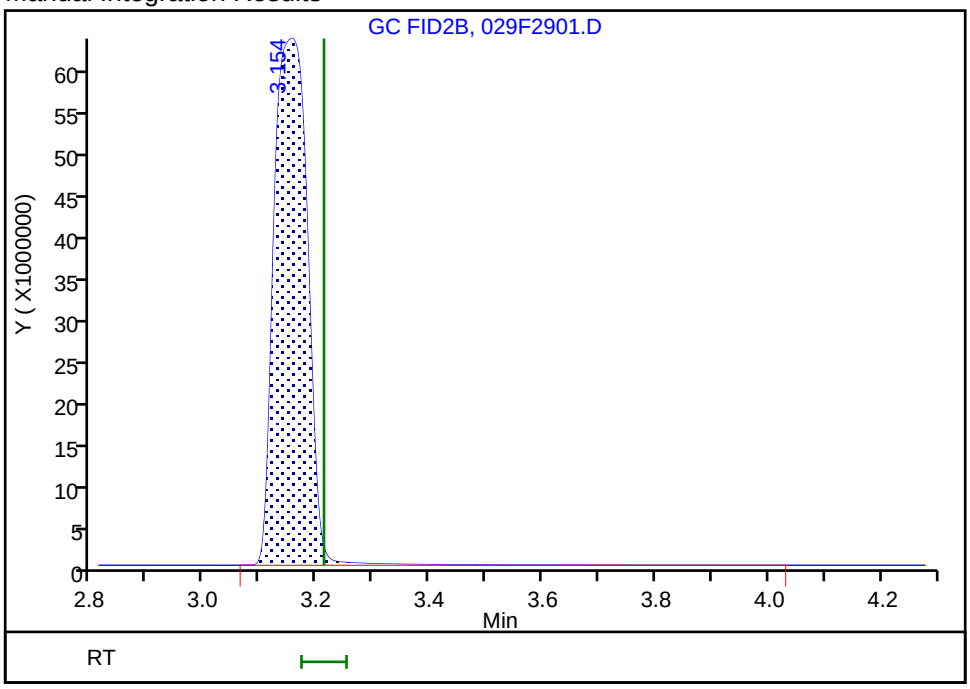
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 261695998
Amount: 3823.0222
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:32:56
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0101-20A Lab Sample ID: 280-137609-21

Matrix: Water Lab File ID: 011F2501.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 14:25

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 03:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	5.5		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\011F2501.D
Lims ID: 280-137609-I-21
Client ID: G0101-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 03:36:21 ALS Bottle#: 11 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-I-21
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:23:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.240	1.246	-0.006	847996024	5899.4	
2	3.147	3.159	-0.012	376970966	5507.1	
					RPD = 6.88	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						
1		1.779			ND	
2		4.021				
5 Propane						
1		2.474			ND	
2		5.919				
6 Acetylene						
1		3.951			ND	
2		4.126				
7 Butane						
1		4.234			ND	
2		7.366				
8 isobutylene						
1		5.141			ND	
2		7.218				

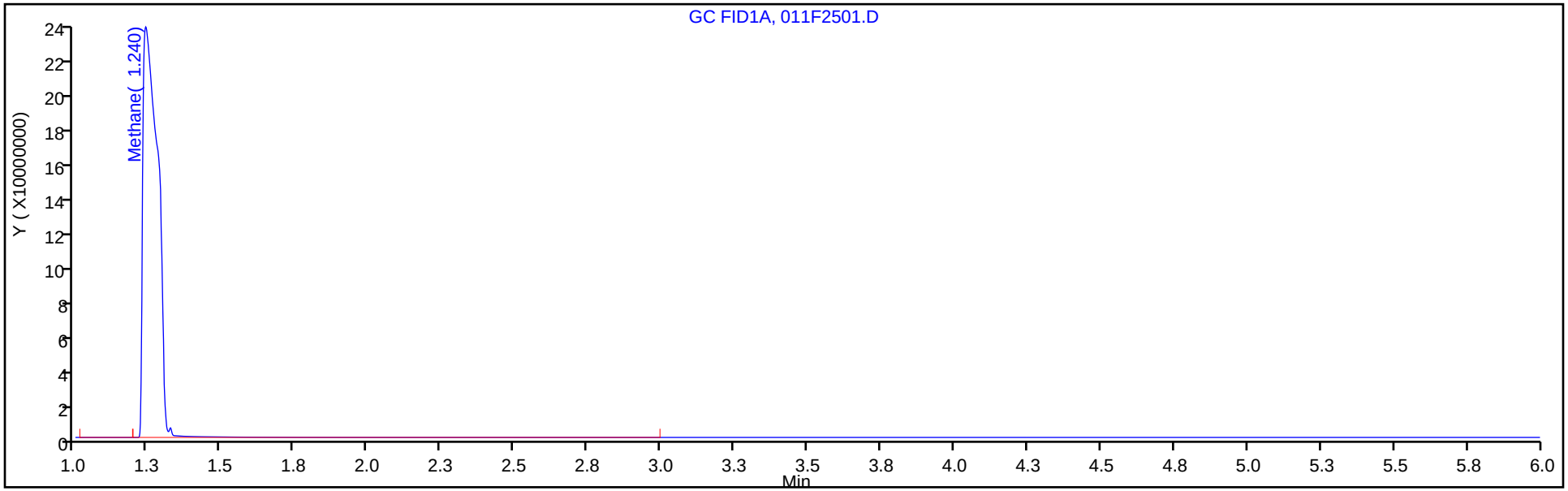
Report Date: 18-Jun-2020 10:25:05 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

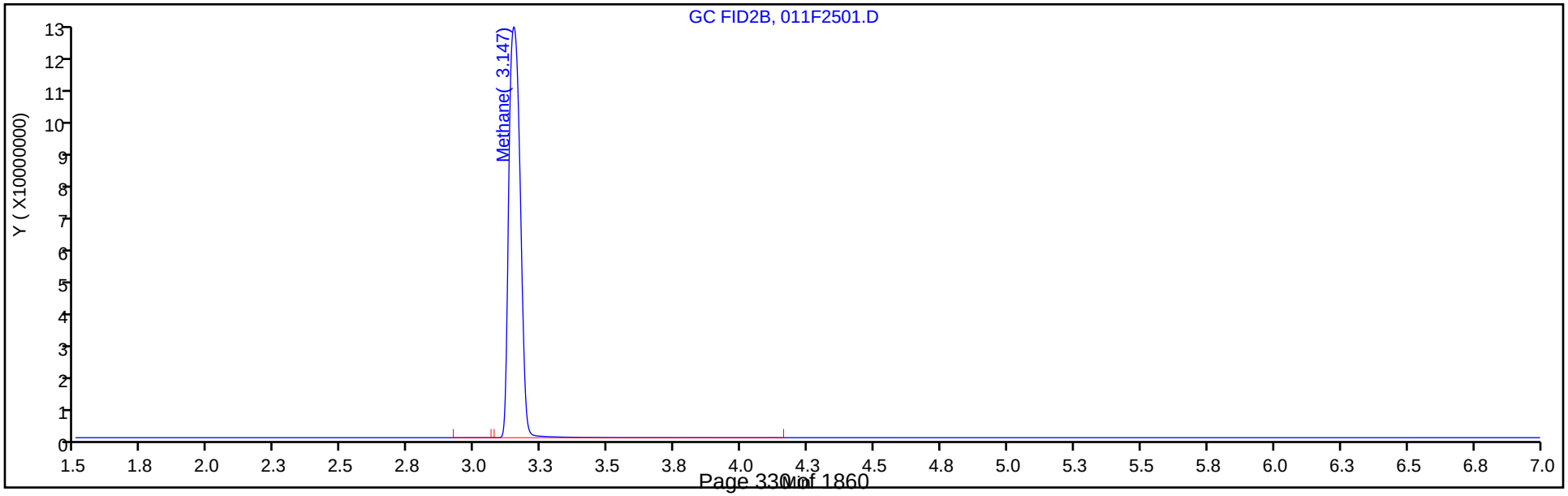
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\011F2501.D

Injection Date:	17-Jun-2020 03:36:21	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-I-21	Lab Sample ID:	280-137609-21	Worklist Smp#:	58
Client ID:	G0101-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0100-20A Lab Sample ID: 280-137609-22

Matrix: Water Lab File ID: 030F3001.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 13:05

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 16:47

Soil Aliquot Vol: Dilution Factor: 3

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499210 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	16	D M	0.015	0.0060	0.0019

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\030F3001.D
Lims ID: 280-137609-I-22
Client ID: G0100-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 16:47:12 ALS Bottle#: 30 Worklist Smp#: 29
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-137609-I-22
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:15 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:33:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.246	1.266	-0.020	768985716	5349.7	a
2	3.151	3.212	-0.061	360799932	5270.9	a
					RPD = 1.48	
3 Ethane						
1		1.525			ND	
2		4.327				
4 Ethylene						
1		1.805			ND	
2		4.057				
5 Propane						
1		2.506			ND	
2		5.938				
6 Acetylene						
1		3.953			ND	
2		4.160				
7 Butane						
1		4.248			ND	
2		7.380				
8 isobutylene						
1		5.146			ND	
2		7.233				

QC Flag Legend

Review Flags

a - User Assigned ID

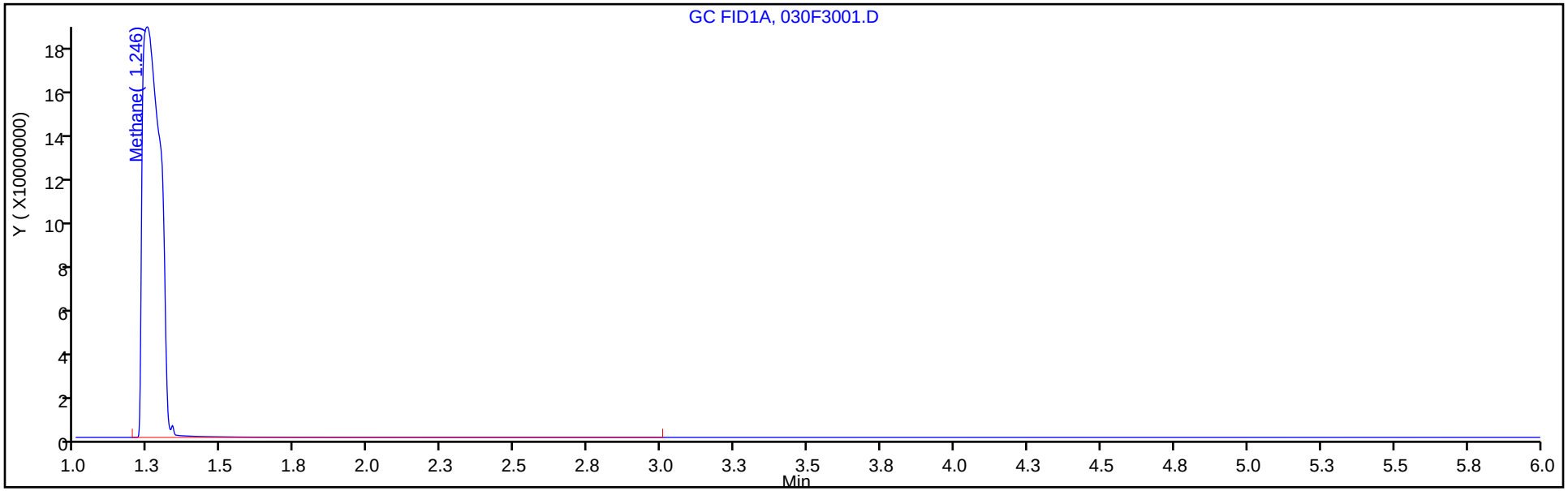
Report Date: 19-Jun-2020 12:43:20 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

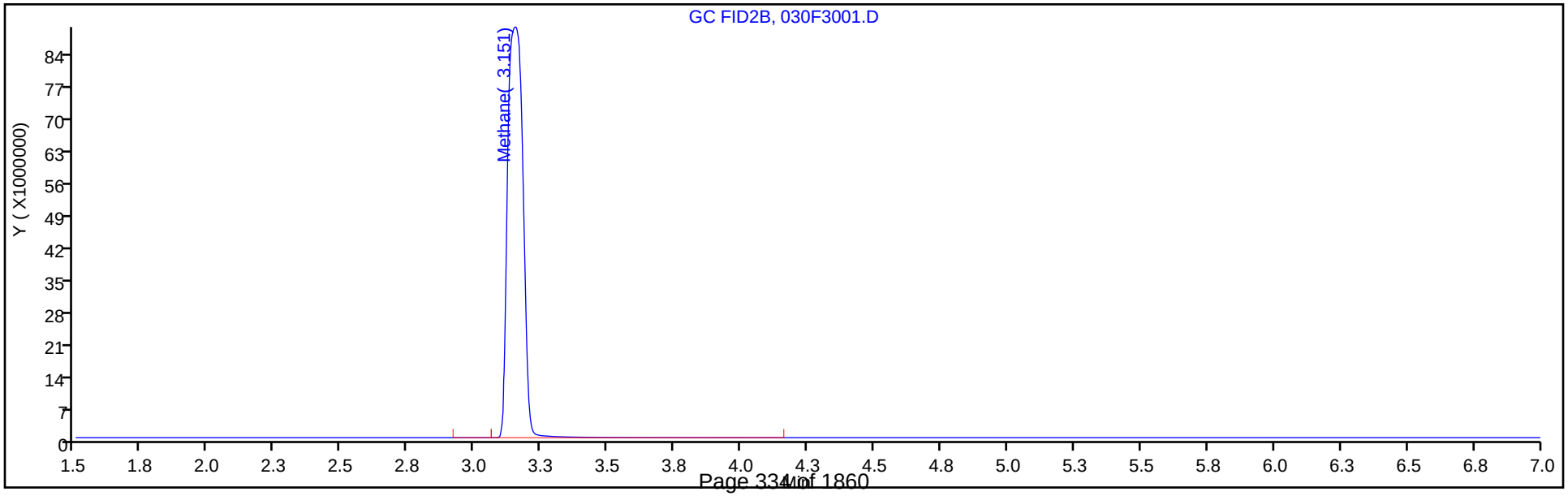
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\030F3001.D

Injection Date:	18-Jun-2020 16:47:12	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-I-22	Lab Sample ID:	280-137609-22	Worklist Smp#:	29
Client ID:	G0100-20A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

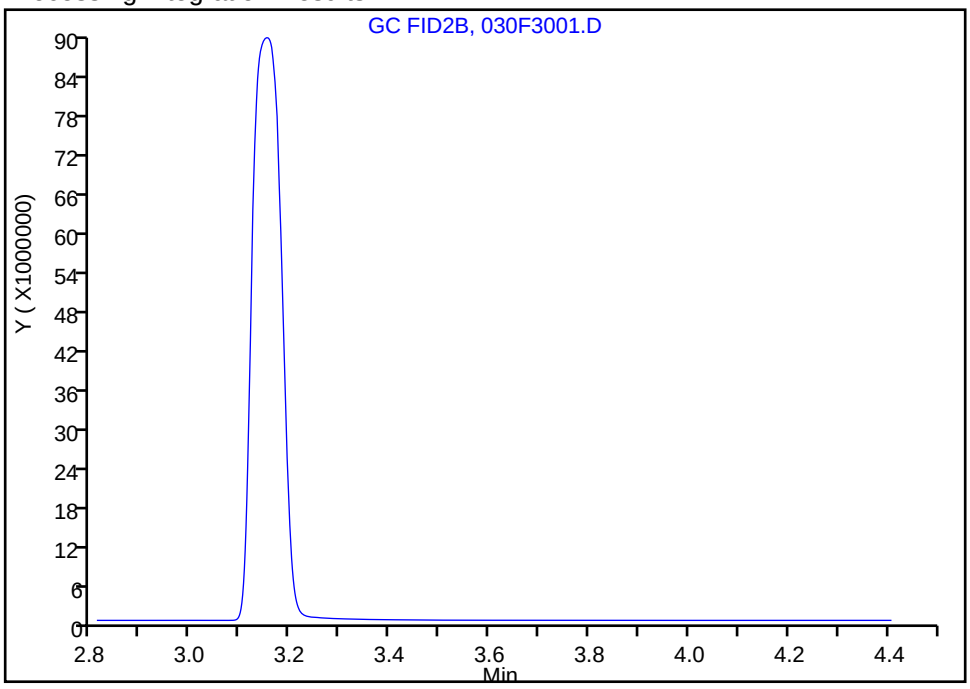
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\030F3001.D				
Injection Date:	18-Jun-2020 16:47:12	Instrument ID:	VGC_J		
Lims ID:	280-137609-I-22	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	gm	ALS Bottle#:	30	Worklist Smp#:	29
Purge Vol:	18.000 mL	Dil. Factor:	3.0000		
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

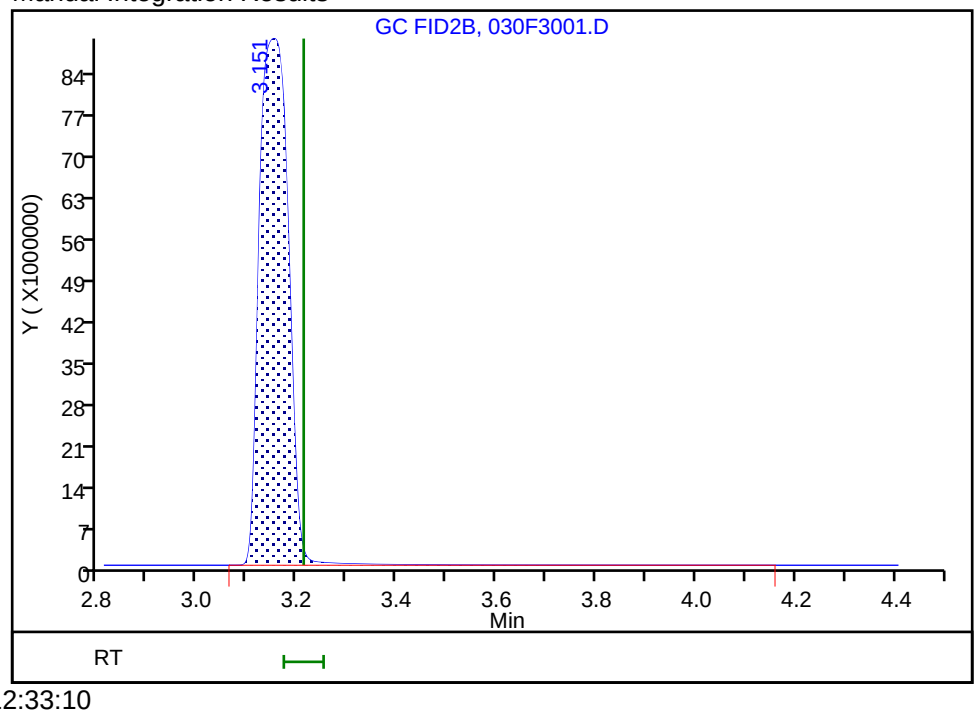
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 360799932
Amount: 5270.8915
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:33:10
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0111-20A Lab Sample ID: 280-137609-23

Matrix: Water Lab File ID: 013F2701.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 12:40

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 04:08

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.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.8		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\013F2701.D
Lims ID: 280-137609-G-23
Client ID: G0111-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 04:08:54 ALS Bottle#: 13 Worklist Smp#: 60
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-23
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:23:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.241	1.246	-0.005	585645243	4074.2	
2	3.148	3.159	-0.011	257193941	3757.2	
					RPD = 8.09	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						
1		1.779			ND	
2		4.021				
5 Propane						
1		2.474			ND	
2		5.919				
6 Acetylene						
1		3.951			ND	
2		4.126				
7 Butane						
1		4.234			ND	
2		7.366				
8 isobutylene						
1		5.141			ND	
2		7.218				

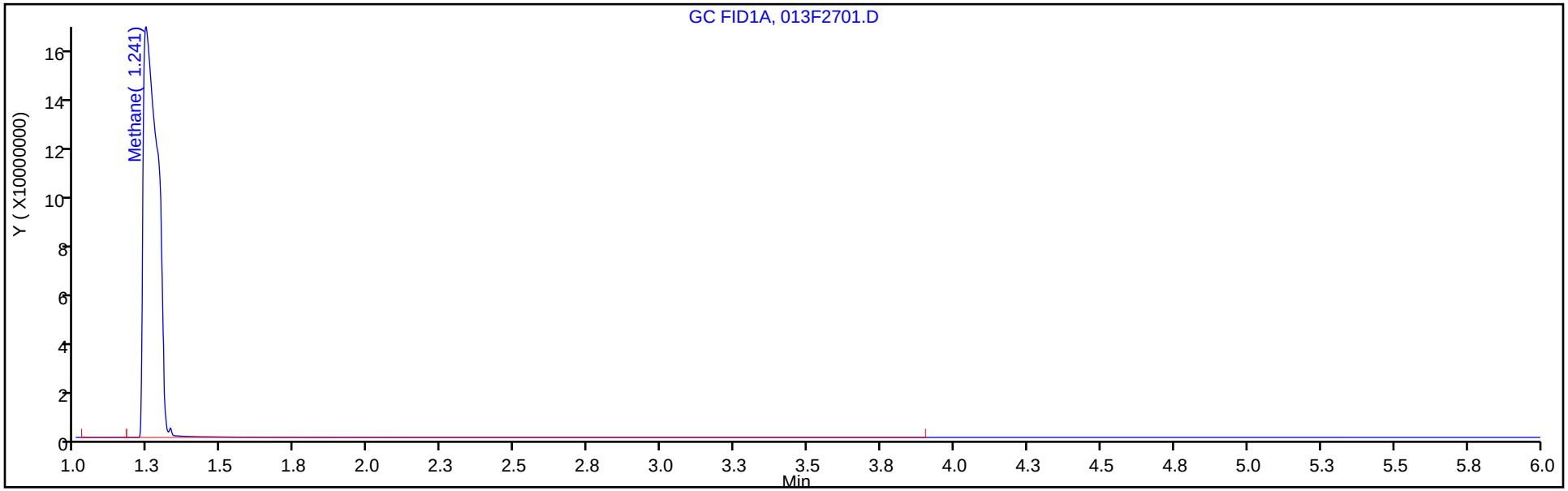
Report Date: 18-Jun-2020 10:25:05 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

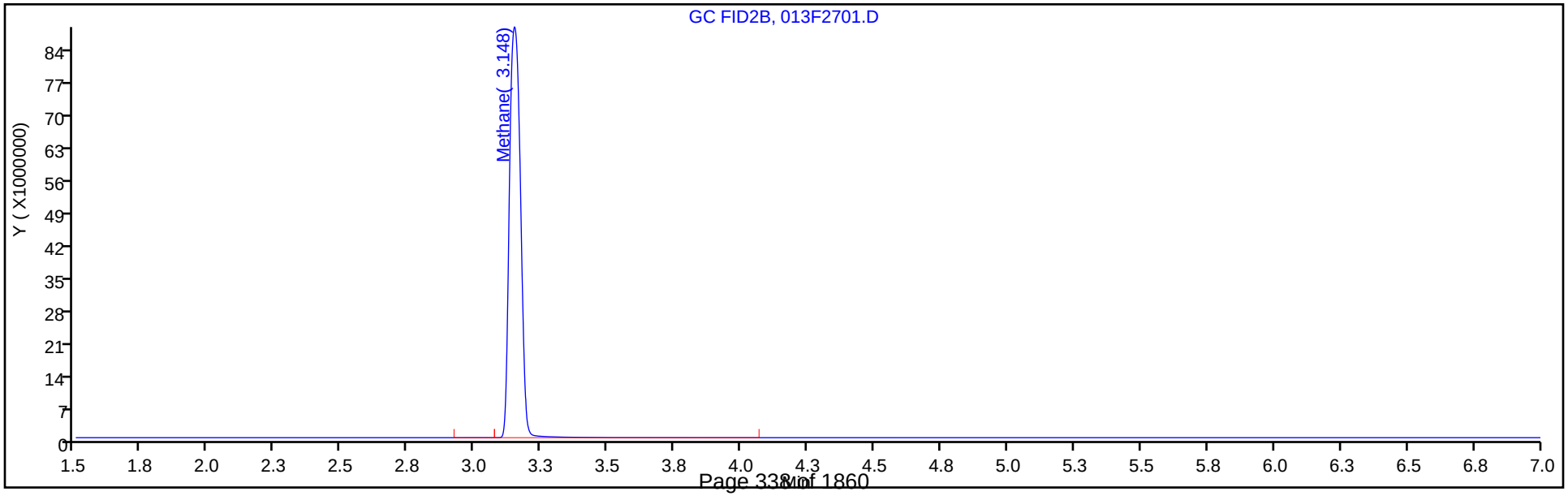
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\013F2701.D

Injection Date:	17-Jun-2020 04:08:54	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-23	Lab Sample ID:	280-137609-23	Worklist Smp#:	60
Client ID:	G0111-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0103-20A Lab Sample ID: 280-137609-24

Matrix: Water Lab File ID: 014F2801.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 16:45

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 04:25

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.072		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\014F2801.D
Lims ID: 280-137609-H-24
Client ID: G0103-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 04:25:09 ALS Bottle#: 14 Worklist Smp#: 61
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-H-24
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:23:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.249	1.246	0.003	11081488	76.8	
2	3.166	3.159	0.007	4964287	72.3	
					RPD = 6.02	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						
1		1.779			ND	
2		4.021				
5 Propane						
1		2.474			ND	
2		5.919				
6 Acetylene						
1		3.951			ND	
2		4.126				
7 Butane						
1		4.234			ND	
2		7.366				
8 isobutylene						
1		5.141			ND	
2		7.218				

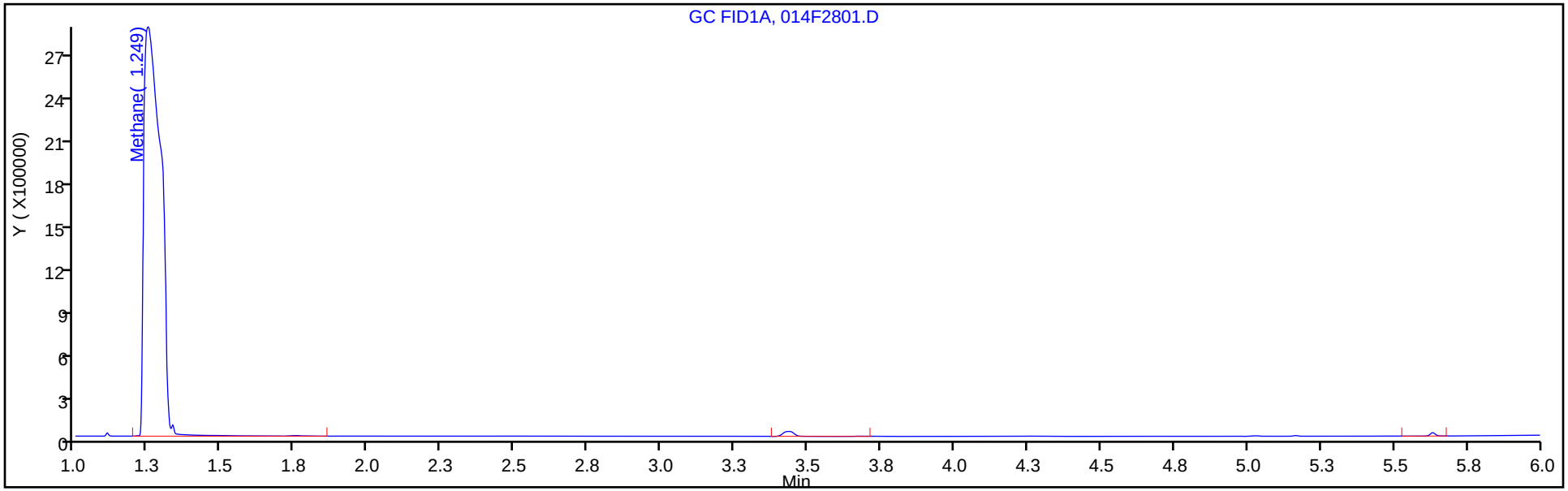
Report Date: 18-Jun-2020 10:25:06 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

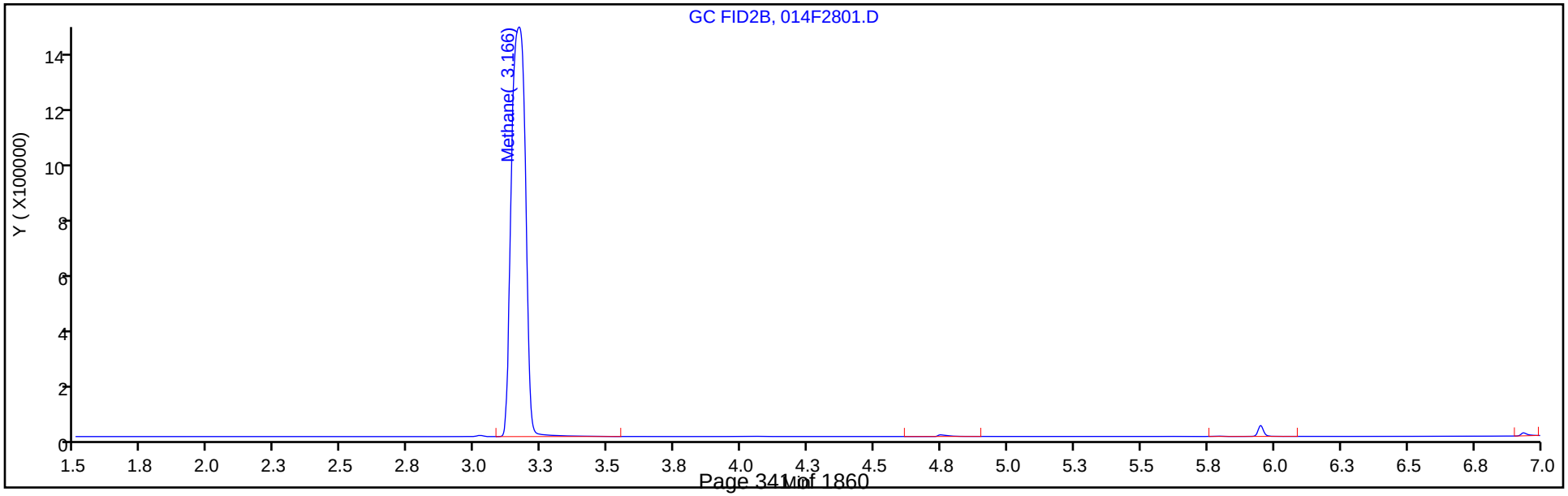
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\014F2801.D

Injection Date:	17-Jun-2020 04:25:09	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-H-24	Lab Sample ID:	280-137609-24	Worklist Smp#:	61
Client ID:	G0103-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0107-20A Lab Sample ID: 280-137609-25

Matrix: Water Lab File ID: 039F3901.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 14:50

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 19:13

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.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.13	M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\039F3901.D
Lims ID: 280-137609-I-25
Client ID: G0107-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 19:13:55 ALS Bottle#: 39 Worklist Smp#: 38
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-I-25
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:21 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:34:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.249	1.266	-0.017	18986070	131.8	a
2	3.158	3.212	-0.054	8725525	127.2	a
					RPD = 3.50	
3 Ethane						
1		1.525			ND	
2		4.327				
4 Ethylene						
1		1.805			ND	
2		4.057				
5 Propane						
1		2.506			ND	
2		5.938				
6 Acetylene						
1		3.953			ND	
2		4.160				
7 Butane						
1		4.248			ND	
2		7.380				
8 isobutylene						
1		5.146			ND	
2		7.233				

QC Flag Legend

Review Flags

a - User Assigned ID

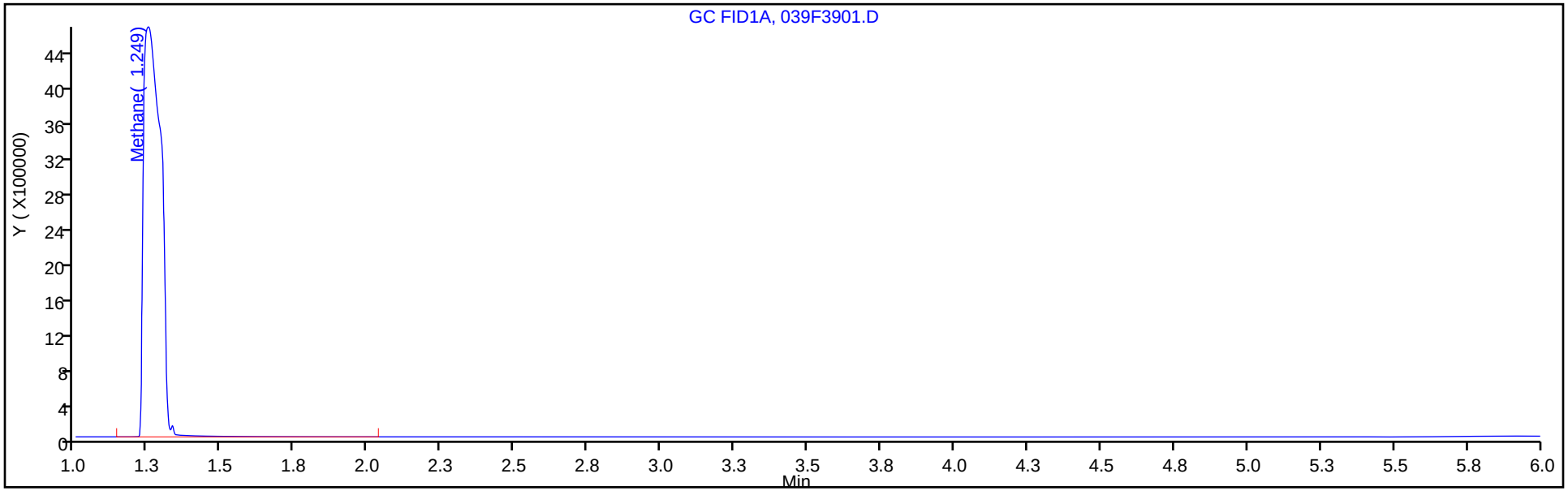
Report Date: 19-Jun-2020 12:43:24 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

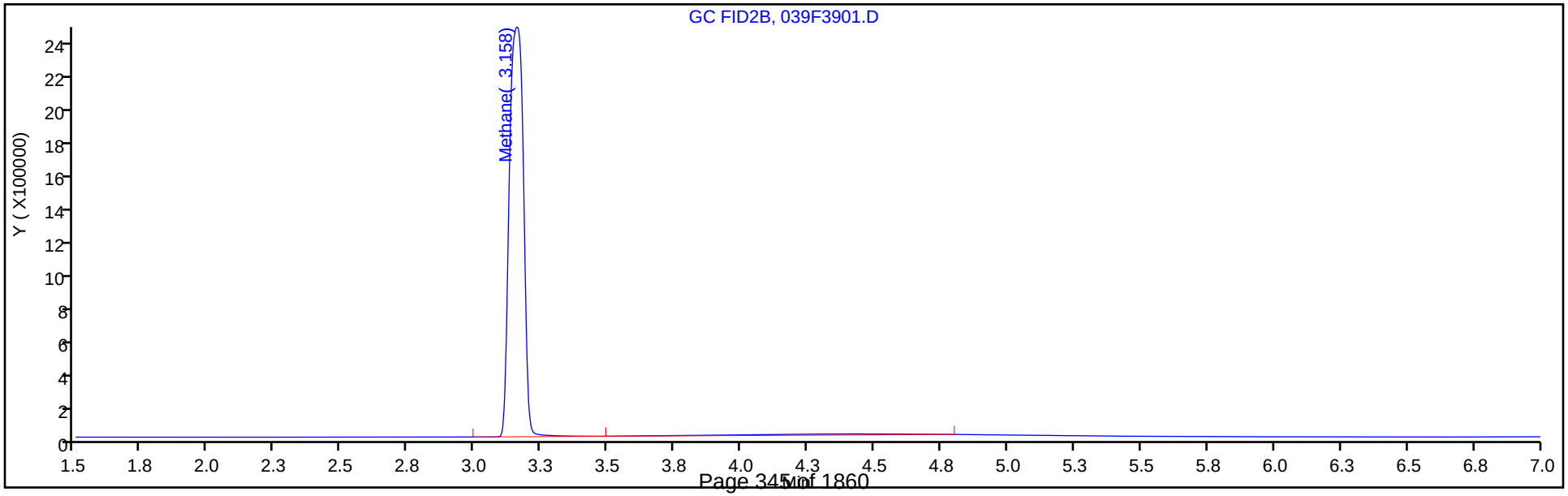
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\039F3901.D

Injection Date:	18-Jun-2020 19:13:55	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-I-25	Lab Sample ID:	280-137609-25	Worklist Smp#:	38
Client ID:	G0107-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

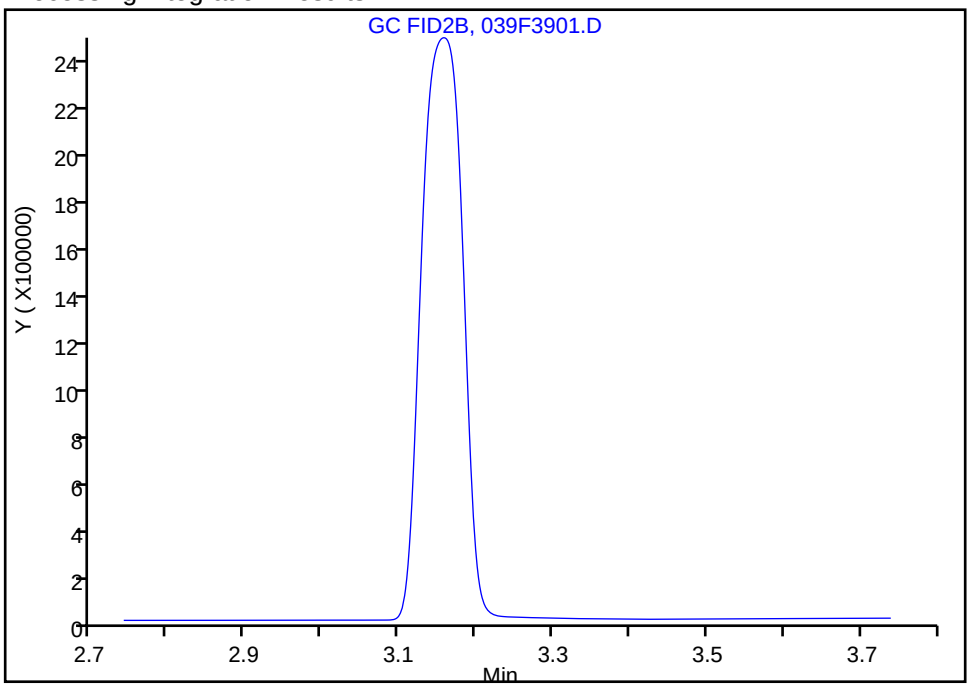
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\039F3901.D				
Injection Date:	18-Jun-2020 19:13:55	Instrument ID:	VGC_J		
Lims ID:	280-137609-I-25	Lab Sample ID:	280-137609-25		
Client ID:	G0107-20A				
Operator ID:	gm	ALS Bottle#:	39	Worklist Smp#:	38
Purge Vol:	18.000 mL	Dil. Factor:	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

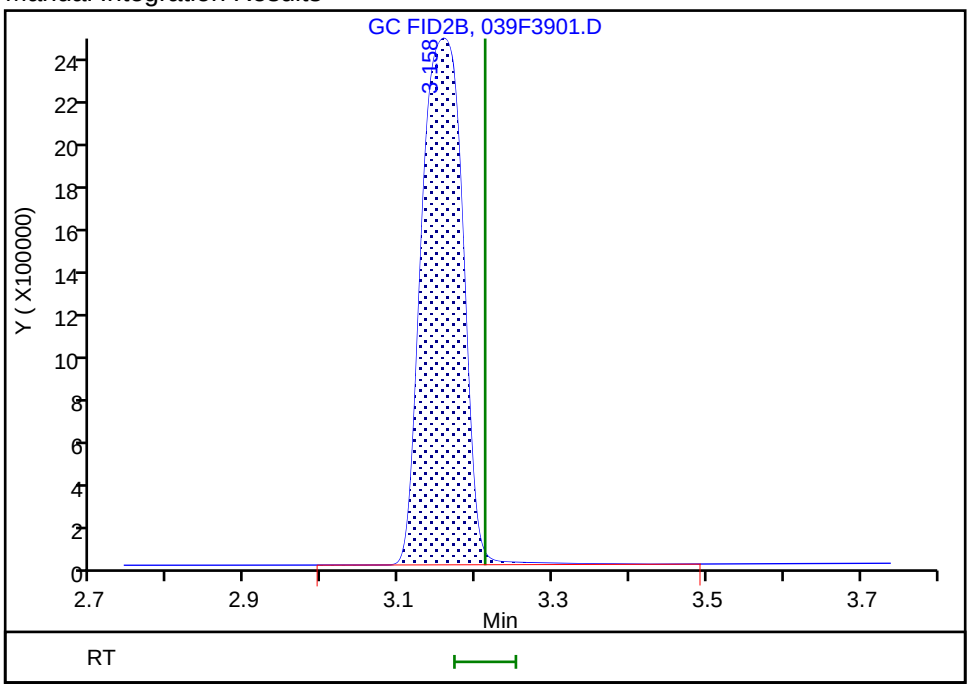
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 8725525
Amount: 127.2236
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:34:18
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A Lab Sample ID: 280-137609-26

Matrix: Water Lab File ID: 031F3101.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 09:50

Sample wt/vol: 18(mL) Date Analyzed: 06/20/2020 01:00

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	29	D M J1	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\031F3101.D
Lims ID: 280-137609-H-26
Client ID: G0116-20A
Sample Type: Client
Inject. Date: 20-Jun-2020 01:00:10 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-H-26
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:35:56 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 20-Jun-2020 03:44:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.250	1.262	-0.012	708721918	4930.5	a
2	3.160	3.212	-0.052	332053072	4850.9	a
					RPD = 1.63	
3 Ethane						
1		1.522			ND	
2		4.325				
4 Ethylene						
1		1.802			ND	
2		4.055				
5 Propane						
1		2.505			ND	
2		5.935				
6 Acetylene						
1		3.960			ND	
2		4.159				
7 Butane						
1		4.252			ND	
2		7.375				
8 isobutylene						
1		5.152			ND	
2		7.229				

QC Flag Legend

Review Flags

a - User Assigned ID

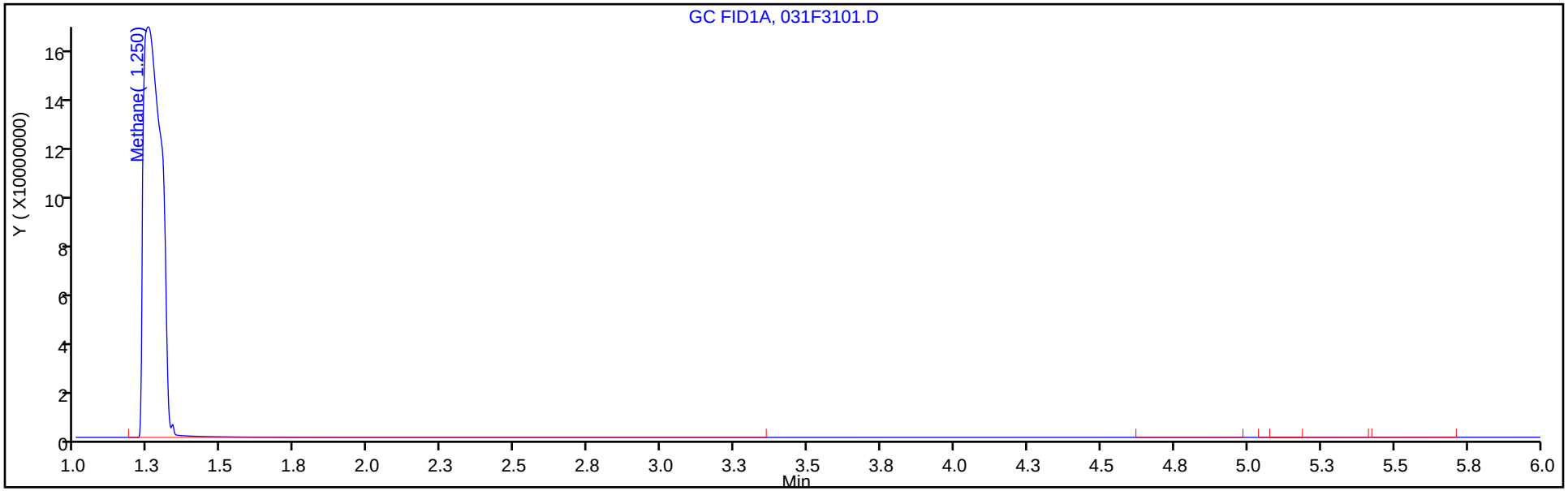
Report Date: 23-Jun-2020 14:36:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

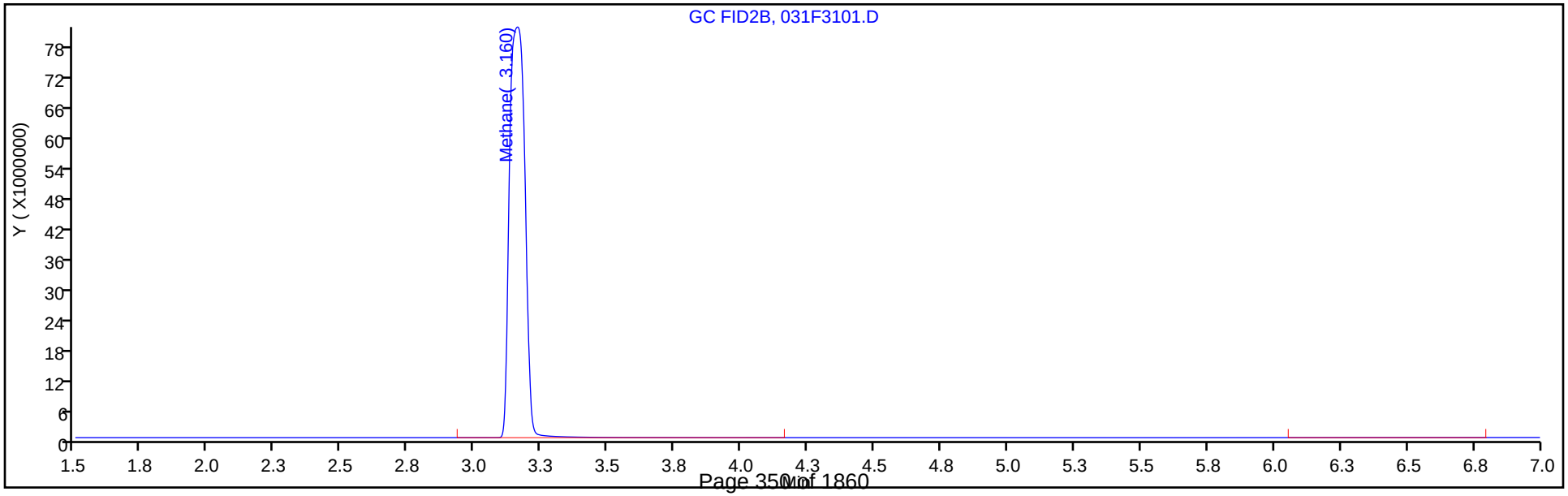
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\031F3101.D

Injection Date:	20-Jun-2020 01:00:10	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-26	Lab Sample ID:	280-137609-26	Worklist Smp#:	31
Client ID:	G0116-20A				
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

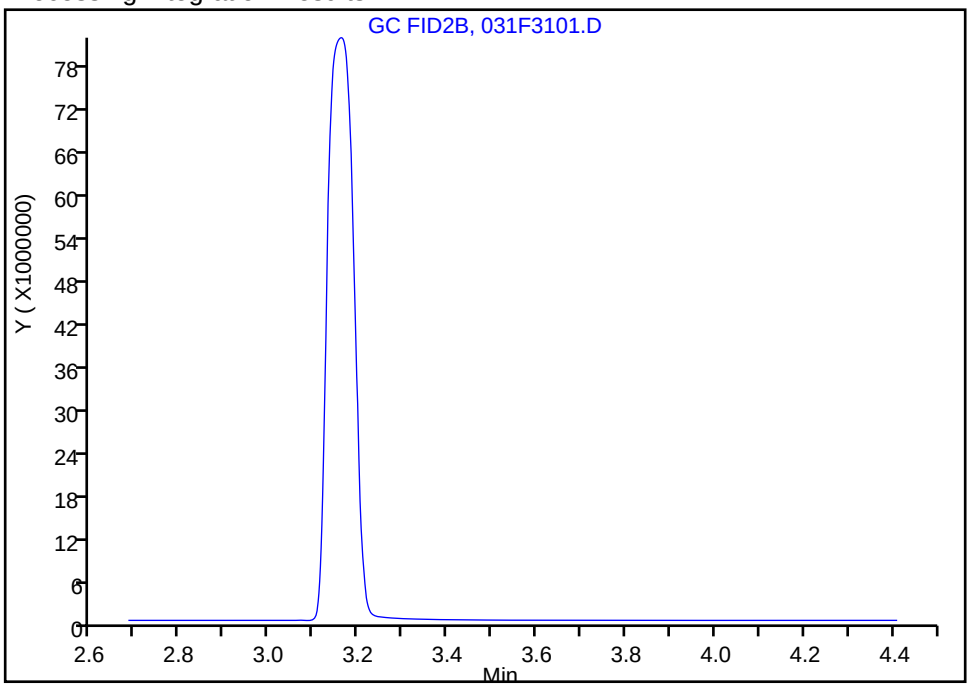
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\031F3101.D				
Injection Date:	20-Jun-2020 01:00:10	Instrument ID:	VGC_J		
Lims ID:	280-137609-H-26	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	18.000 mL	Dil. Factor:	6.0000		
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

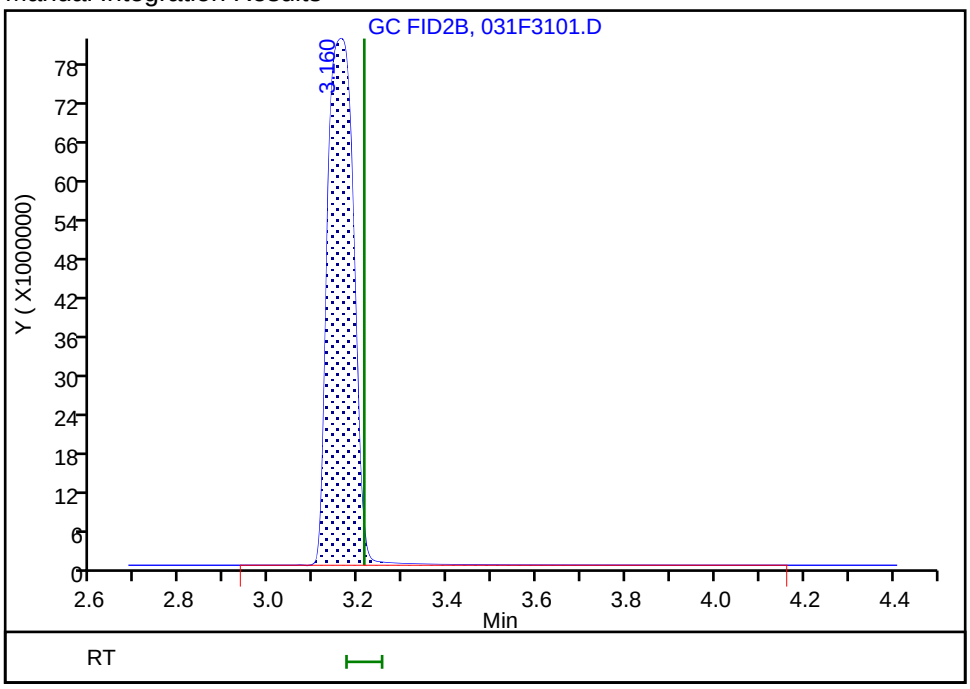
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 332053072
Amount: 4850.9113
Amount Units: ug/l



Reviewer: meierg, 20-Jun-2020 03:44:24
Audit Action: Assigned Compound ID Audit Reason:

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0120-20A Lab Sample ID: 280-137609-27

Matrix: Water Lab File ID: 06192009.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 11:00

Sample wt/vol: 18(mL) Date Analyzed: 06/19/2020 16:24

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	26	D M	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192009.D
Lims ID: 280-137609-I-27
Client ID: G0120-20A
Sample Type: Client
Inject. Date: 19-Jun-2020 16:24:11 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-I-27
Misc. Info.: 280-0092578-009
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:07:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 12:20:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.250	1.262	-0.012	636775603	4429.9	a
2	3.158	3.212	-0.054	297348351	4343.9	a
					RPD = 1.96	
3 Ethane						
1		1.522			ND	
2		4.325				
4 Ethylene						
1		1.802			ND	
2		4.055				
5 Propane						
1		2.505			ND	
2		5.935				
6 Acetylene						
1		3.960			ND	
2		4.159				
7 Butane						
1		4.252			ND	
2		7.375				
8 isobutylene						
1		5.152			ND	
2		7.229				

QC Flag Legend

Review Flags

a - User Assigned ID

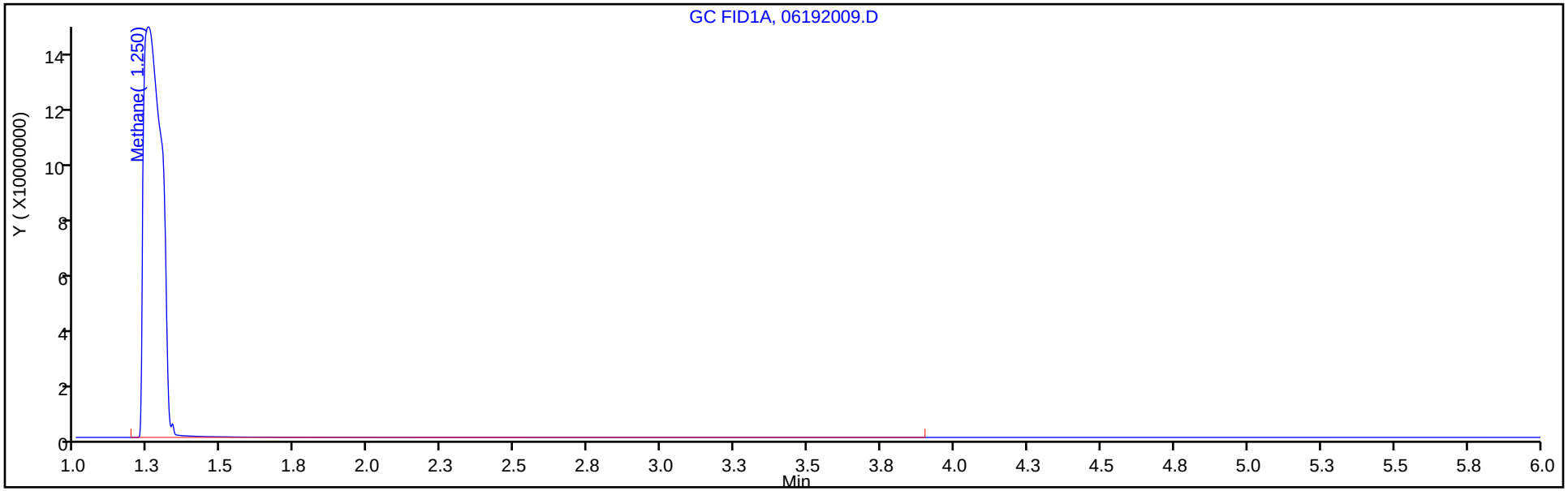
Report Date: 23-Jun-2020 14:07:53 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

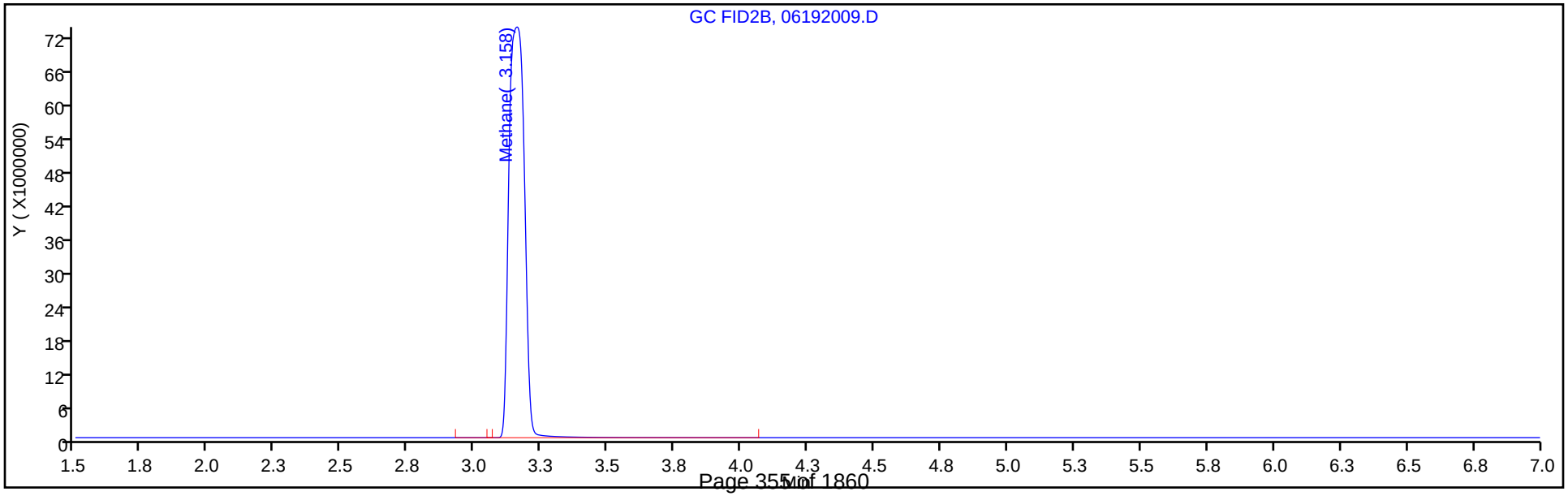
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192009.D

Injection Date:	19-Jun-2020 16:24:11	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-I-27	Lab Sample ID:	280-137609-27	Worklist Smp#:	9
Client ID:	G0120-20A				
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	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

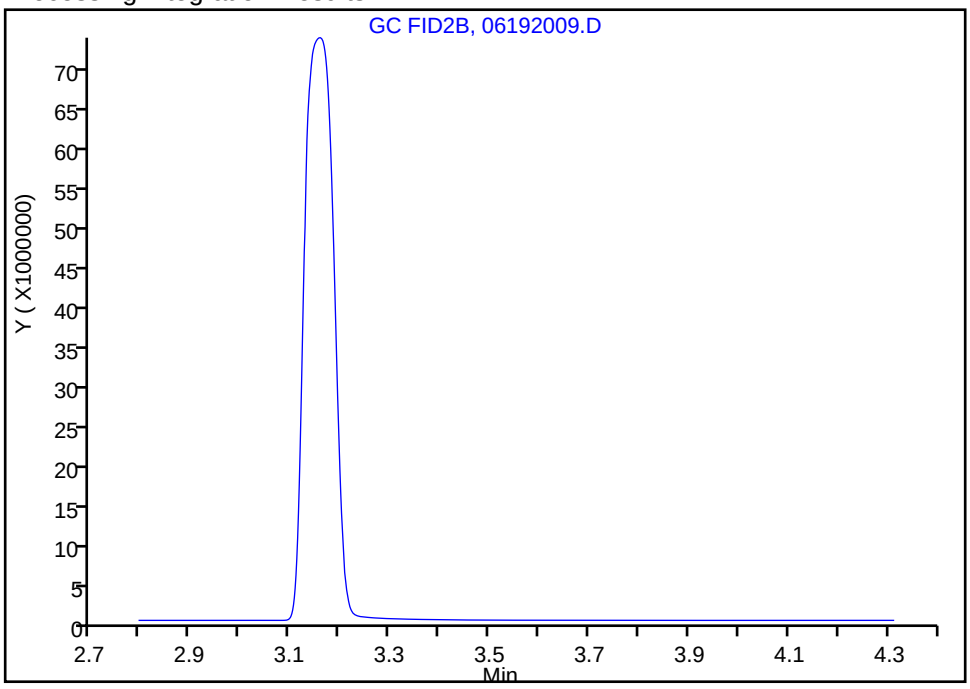
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192009.D				
Injection Date:	19-Jun-2020 16:24:11	Instrument ID:	VGC_J		
Lims ID:	280-137609-I-27	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	gm	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	18.000 mL	Dil. Factor:	6.0000		
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

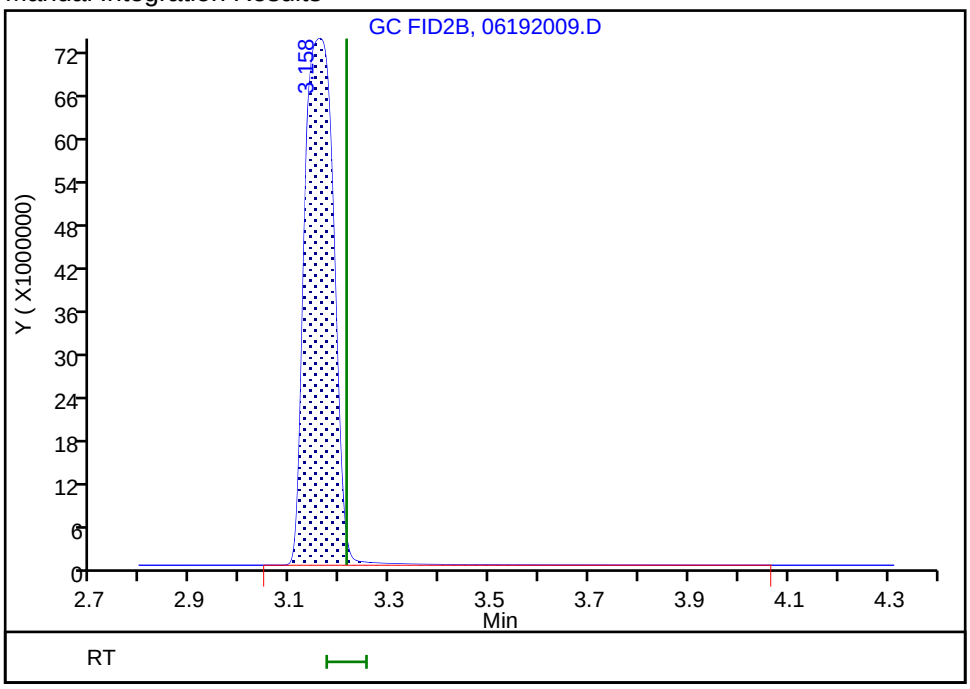
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 297348351
Amount: 4343.8890
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 12:20:37
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0106-20A Lab Sample ID: 280-137609-28

Matrix: Water Lab File ID: 042F4201.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 16:05

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 20:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0038	J M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\042F4201.D
Lims ID: 280-137609-H-28
Client ID: G0106-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 20:02:52 ALS Bottle#: 42 Worklist Smp#: 41
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-H-28
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:21 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:35:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.242	1.266	-0.024	621823	3.99	a
2	3.154	3.212	-0.058	276656	3.79	a
					RPD = 5.09	
3 Ethane						
1		1.525			ND	
2		4.327				
4 Ethylene						
1		1.805			ND	
2		4.057				
5 Propane						
1		2.506			ND	
2		5.938				
6 Acetylene						
1		3.953			ND	
2		4.160				
7 Butane						
1		4.248			ND	
2		7.380				
8 isobutylene						
1		5.146			ND	
2		7.233				

QC Flag Legend

Review Flags

a - User Assigned ID

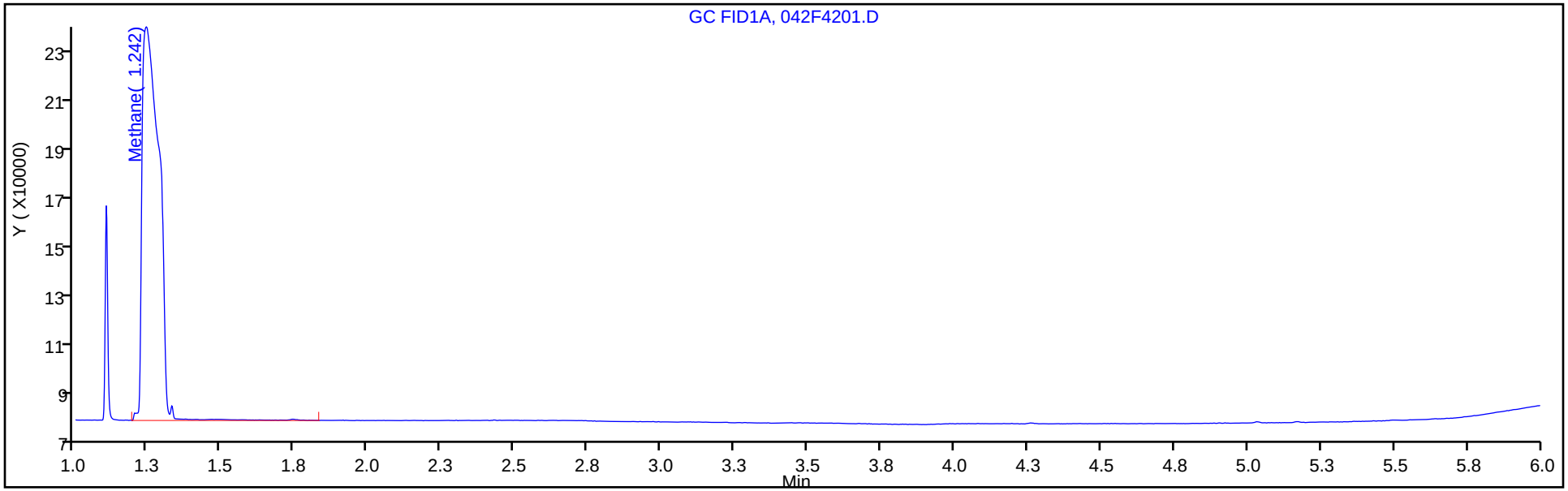
Report Date: 19-Jun-2020 12:43:26 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

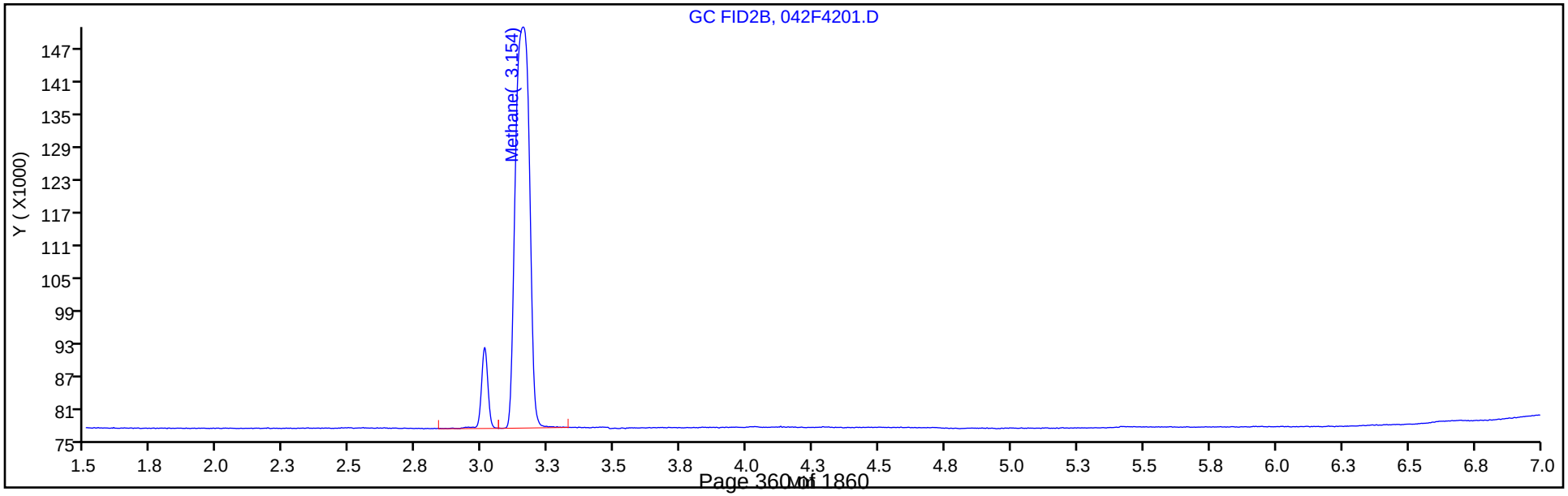
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\042F4201.D

Injection Date:	18-Jun-2020 20:02:52	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-28	Lab Sample ID:	280-137609-28	Worklist Smp#:	41
Client ID:	G0106-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

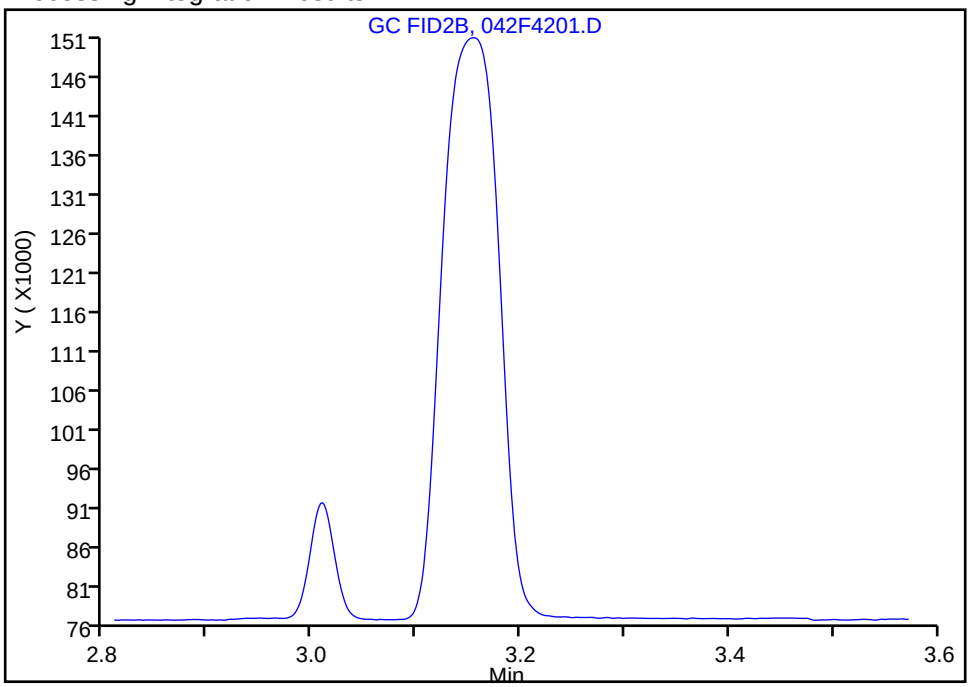
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\042F4201.D				
Injection Date:	18-Jun-2020 20:02:52	Instrument ID:	VGC_J		
Lims ID:	280-137609-H-28	Lab Sample ID:	280-137609-28		
Client ID:	G0106-20A				
Operator ID:	gm	ALS Bottle#:	42	Worklist Smp#:	41
Purge Vol:	18.000 mL	Dil. Factor:	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

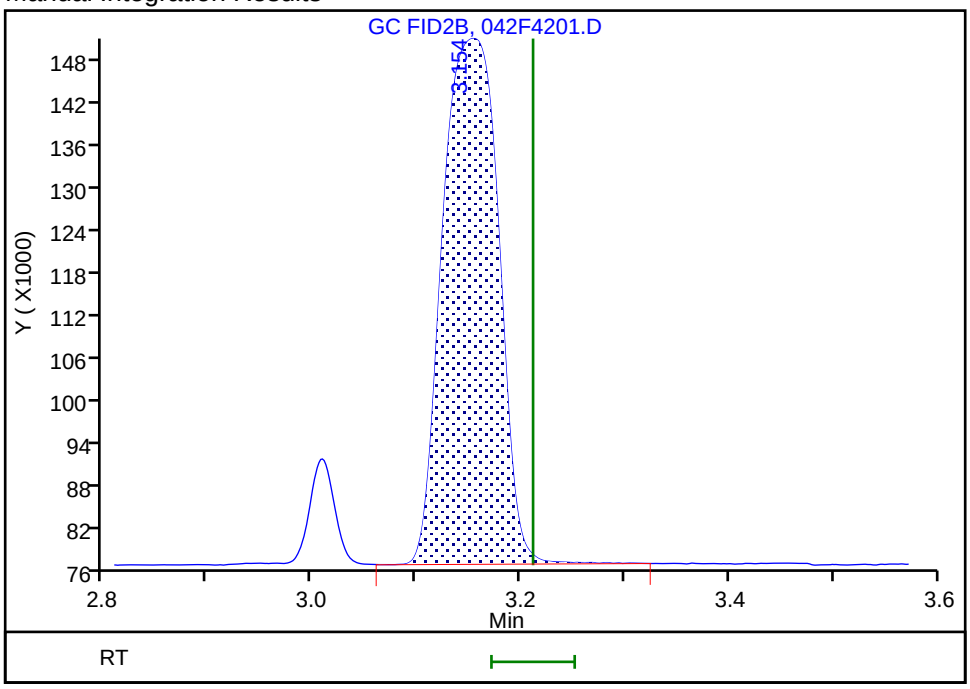
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.15
Area: 276656
Amount: 3.789009
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:35:26
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0095-20A Lab Sample ID: 280-137609-29

Matrix: Water Lab File ID: 043F4301.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 15:10

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 20:19

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.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.9	M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\043F4301.D
Lims ID: 280-137609-G-29
Client ID: G0095-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 20:19:13 ALS Bottle#: 43 Worklist Smp#: 42
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-29
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:21 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:35:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						a
1	1.249	1.266	-0.017	1029388093	7161.5	a
2	3.139	3.212	-0.073	474356270	6929.9	a
					RPD = 3.29	
3 Ethane						
1		1.525			ND	
2		4.327				
4 Ethylene						
1		1.805			ND	
2		4.057				
5 Propane						
1		2.506			ND	
2		5.938				
6 Acetylene						
1		3.953			ND	
2		4.160				
7 Butane						
1		4.248			ND	
2		7.380				
8 isobutylene						
1		5.146			ND	
2		7.233				

QC Flag Legend

Review Flags

a - User Assigned ID

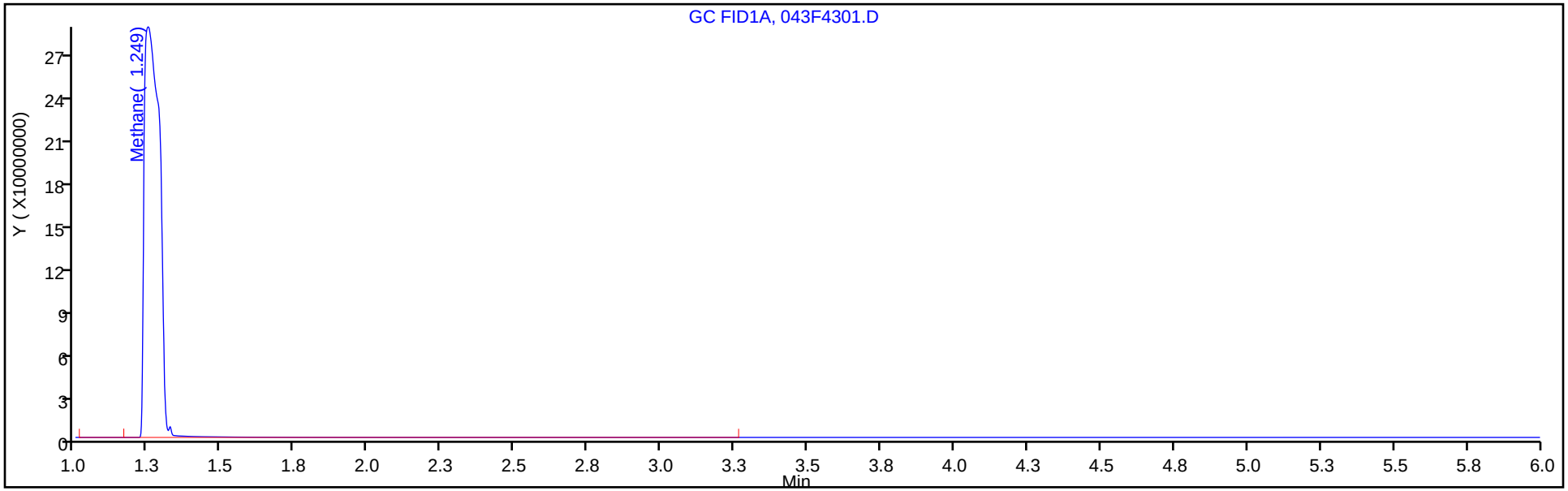
Report Date: 19-Jun-2020 12:43:26 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

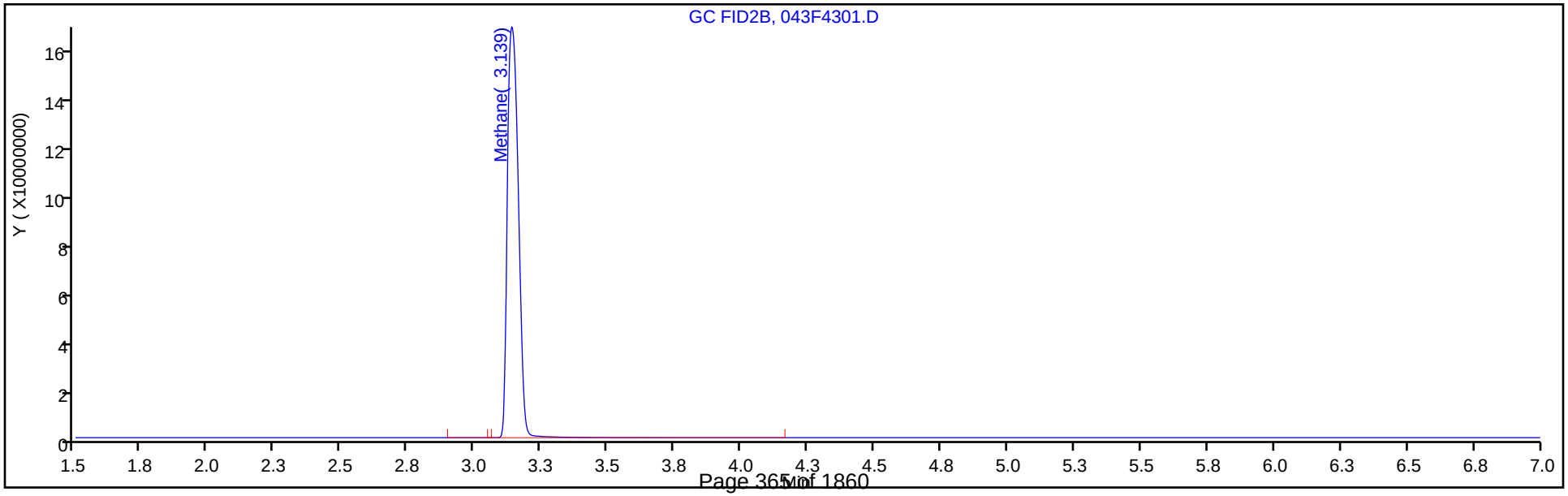
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\043F4301.D

Injection Date:	18-Jun-2020 20:19:13	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-G-29	Lab Sample ID:	280-137609-29	Worklist Smp#:	42
Client ID:	G0095-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

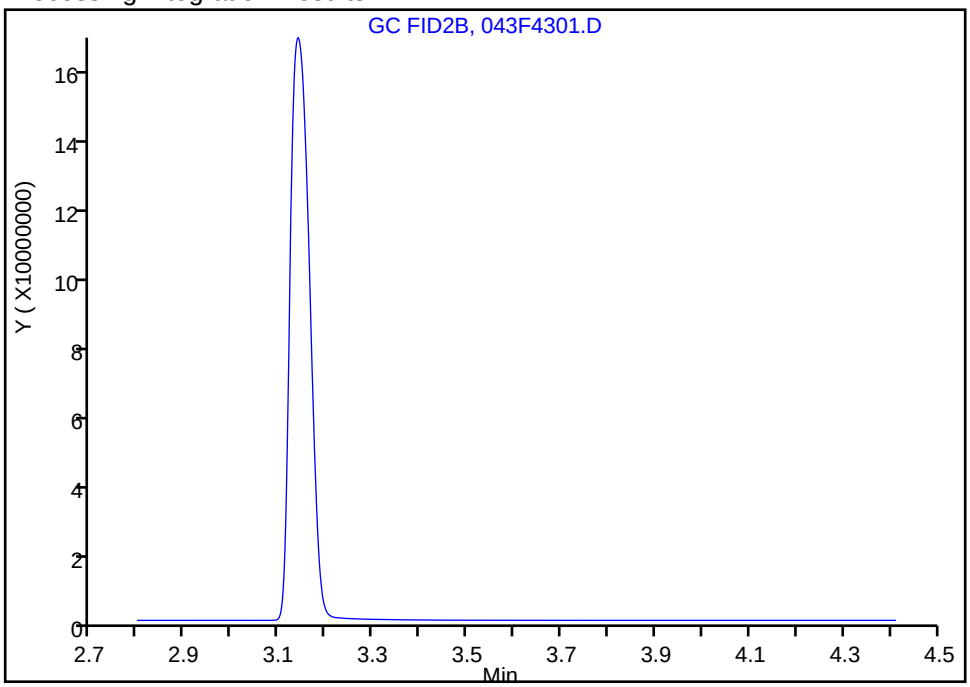
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\043F4301.D				
Injection Date:	18-Jun-2020 20:19:13	Instrument ID:	VGC_J		
Lims ID:	280-137609-G-29	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	gm	ALS Bottle#:	43	Worklist Smp#:	42
Purge Vol:	18.000 mL	Dil. Factor:	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

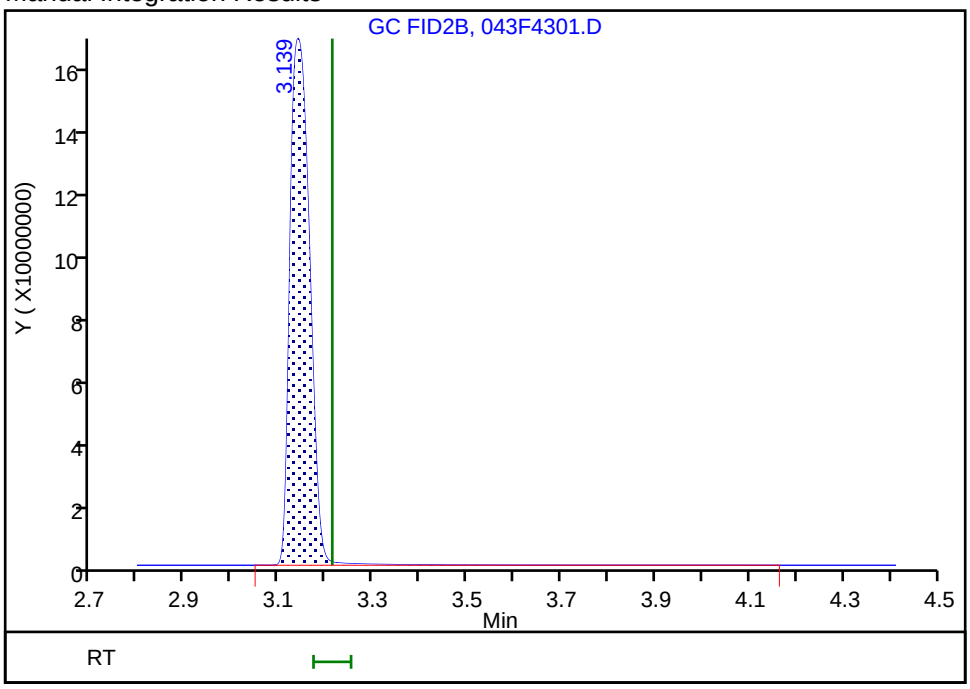
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.14
Area: 474356270
Amount: 6929.9047
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:35:40
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.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	1.250	1.251	1.248	1.249	1.250	1.250	1.243	1.248	1.245		1.210 - 1.290	1.248
Ethane	1.513	1.514	1.511	1.510	1.511	1.512	1.508				1.461 - 1.561	1.511
Ethylene	1.795	1.788	1.791	1.792	1.793	1.785	1.785				1.743 - 1.843	1.790
Acetylene	4.048	4.044	4.043	4.034	4.015	4.002	3.983				3.935 - 4.095	4.024

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.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	244228 139356 139547	206236 146223	177863 139400	150422 142004	Lin2	48790.6512	143733.270							0.9980		0.9900
Ethane	116248 135523	138788 141935	141875 135846	142086	Ave		136042.830				6.7		20.0			
Ethylene	95153 109903	112972 114358	114801 109412	114895	Ave		110213.494				6.4		20.0			
Acetylene	32541 32001	35741 34987	35768 33689	35334	Ave		34294.2686				4.5		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.: 280-137609-2 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.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	111434 21349465	188199 40706597	324614 256592942	2196261 1008615918	10173489	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethane	Ave	99432 38849075	237424 74364849	485411	3889050	18547040	0.855 274	1.71 547	3.42	27.4	137
Ethylene	Ave	75924 29199476	180285 55873290	366405	2933658	14030935	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	24105 8293493	52951 15971476	105983	837564	3792795	0.741 237	1.48 474	2.96	23.7	119

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-May-2020 10:57:08 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 1
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	111434	0.4563	0.4358	
2	3.180	3.172	0.008	47082	0.4563	0.4350	
						RPD = 0.19	
3 Ethane							Ma
1	1.513	1.511	0.002	99432	0.8553	0.7309	M
2	4.310	4.305	0.005	45402	0.8553	0.7436	a
						RPD = 1.73	
4 Ethylene							
1	1.795	1.793	0.002	75924	0.7979	0.6889	
2	4.038	4.032	0.006	33393	0.7979	0.6966	
						RPD = 1.12	
5 Propane							
1	2.535	2.528	0.007	162619	1.25	1.14	
2	5.932	5.928	0.004	68003	1.25	1.09	
						RPD = 4.45	
6 Acetylene							M
1	4.048	4.015	0.033	24105	0.7408	0.7029	
2	4.142	4.137	0.005	13119	0.7408	0.6072	M
						RPD = 14.61	
7 Butane							Ma
1	4.315	4.286	0.029	175523	1.65	1.66	M
2	7.382	7.375	0.007	85626	1.65	1.67	a
						RPD = 0.36	
8 isobutylene							
1	5.190	5.163	0.027	120280	1.60	1.35	
2	7.232	7.227	0.005	54094	1.60	1.30	
						RPD = 3.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 1.25 Units: uL

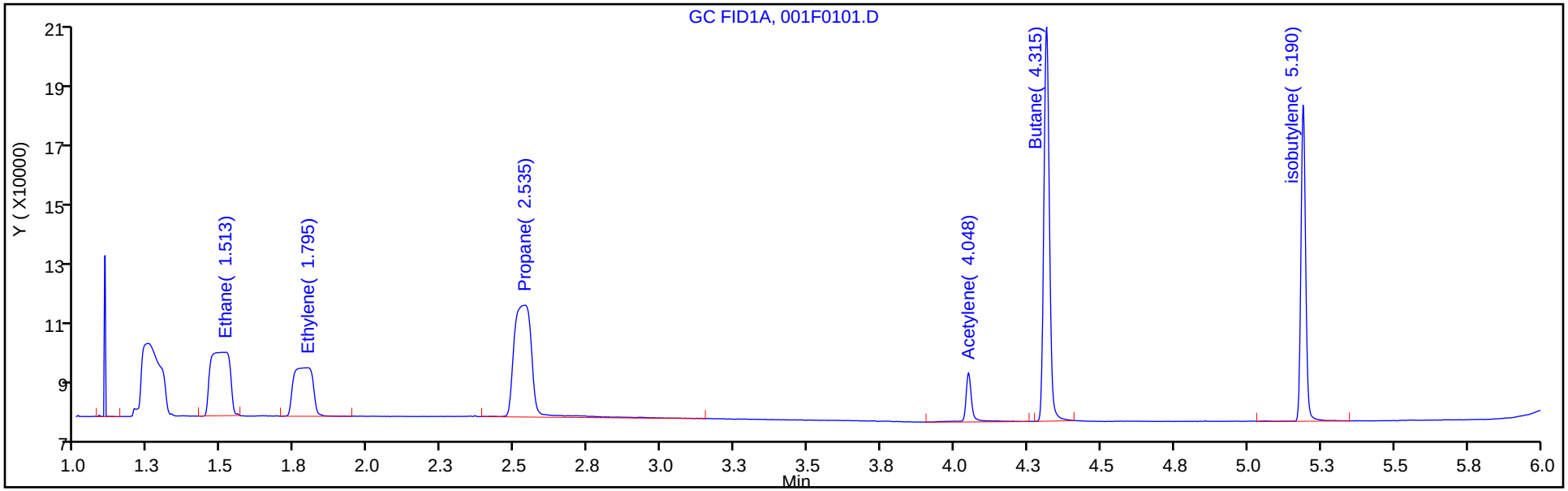
Report Date: 17-May-2020 08:59:46 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

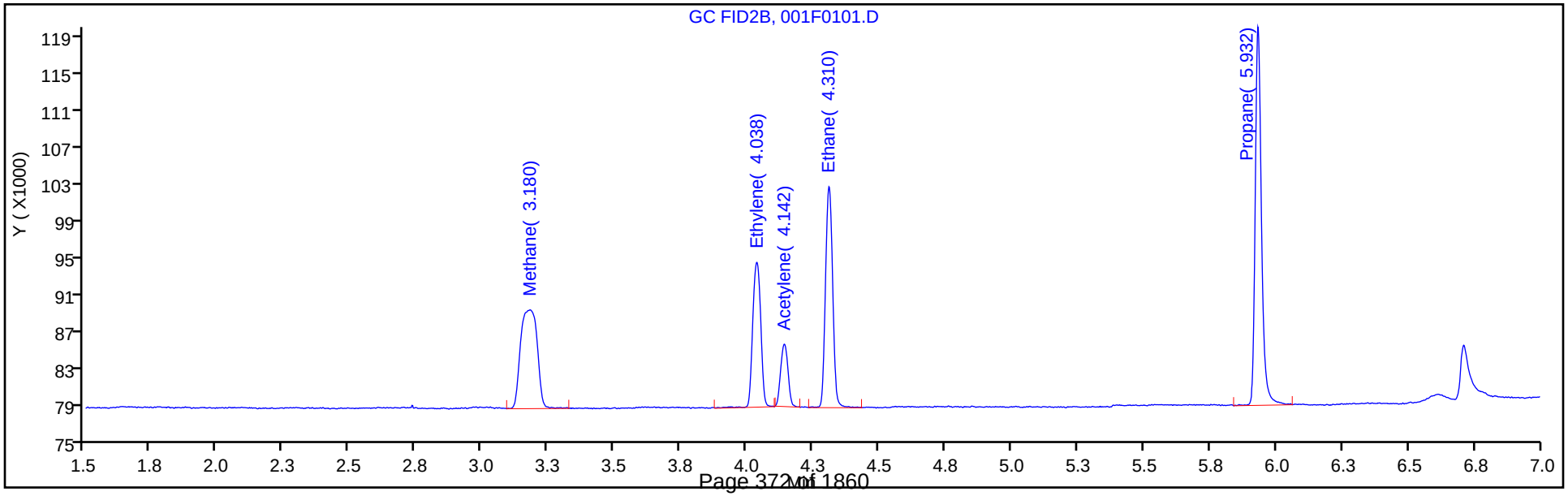
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D

Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L1			Worklist Smp#:	6
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

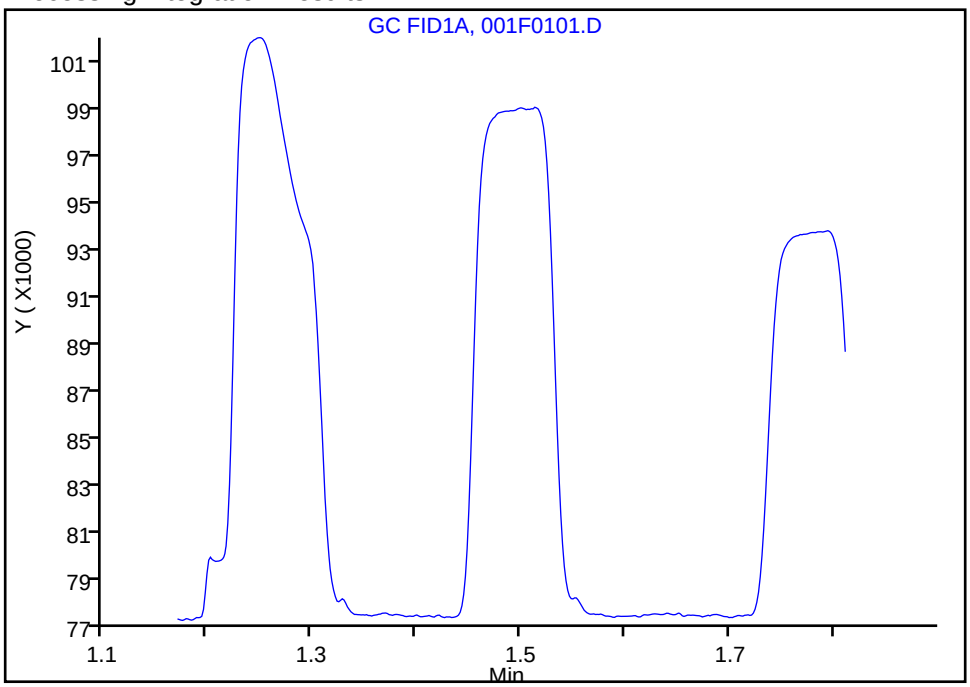
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

3 Ethane, CAS: 74-84-0

Signal: 1

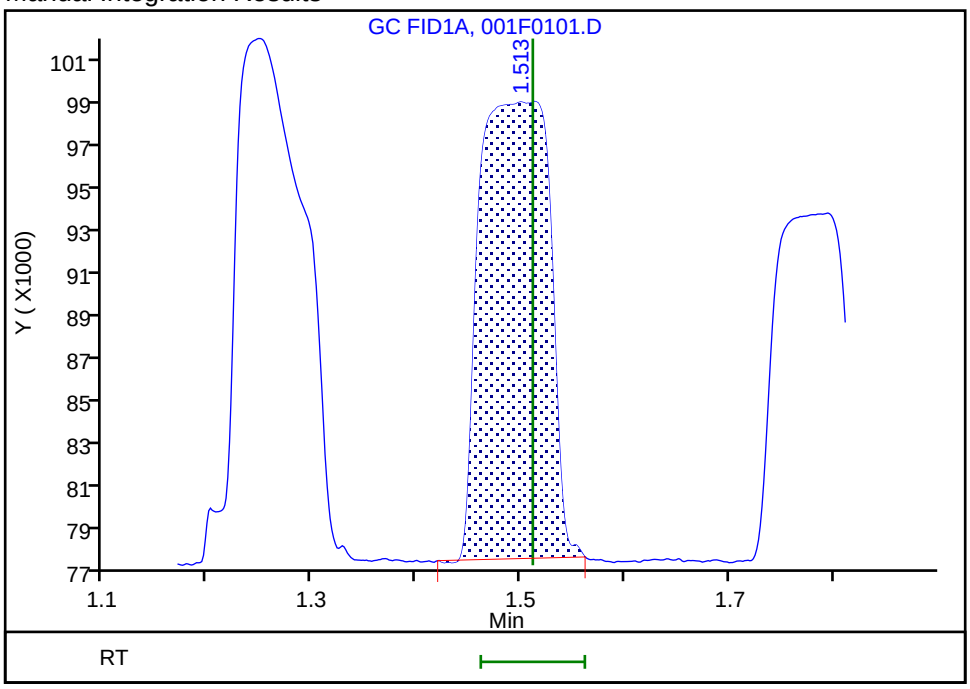
Not Detected
Expected RT: 1.51

Processing Integration Results



Manual Integration Results

RT: 1.51
Area: 99432
Amount: 0.730887
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:37:33
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-May-2020 11:13:34 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.251	1.250	0.001	188199	0.9125	0.9699	
2	3.171	3.172	-0.001	83897	0.9125	0.9729	
						RPD = 0.31	
3 Ethane							
1	1.514	1.511	0.003	237424	1.71	1.75	
2	4.306	4.305	0.001	106974	1.71	1.75	
						RPD = 0.39	
4 Ethylene							M
1	1.788	1.793	-0.005	180285	1.60	1.64	
2	4.031	4.032	-0.001	77235	1.60	1.61	M
						RPD = 1.51	
5 Propane							
1	2.534	2.528	0.006	366612	2.51	2.56	
2	5.933	5.928	0.005	156230	2.51	2.49	
						RPD = 2.56	
6 Acetylene							Ma
1	4.044	4.015	0.029	52951	1.48	1.54	a
2	4.136	4.137	-0.001	31554	1.48	1.46	M
						RPD = 5.56	
7 Butane							
1	4.311	4.286	0.025	384054	3.31	3.24	
2	7.381	7.375	0.006	184917	3.31	3.22	
						RPD = 0.55	
8 isobutylene							
1	5.186	5.163	0.023	261296	3.19	2.93	
2	7.231	7.227	0.004	119878	3.19	2.88	
						RPD = 1.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

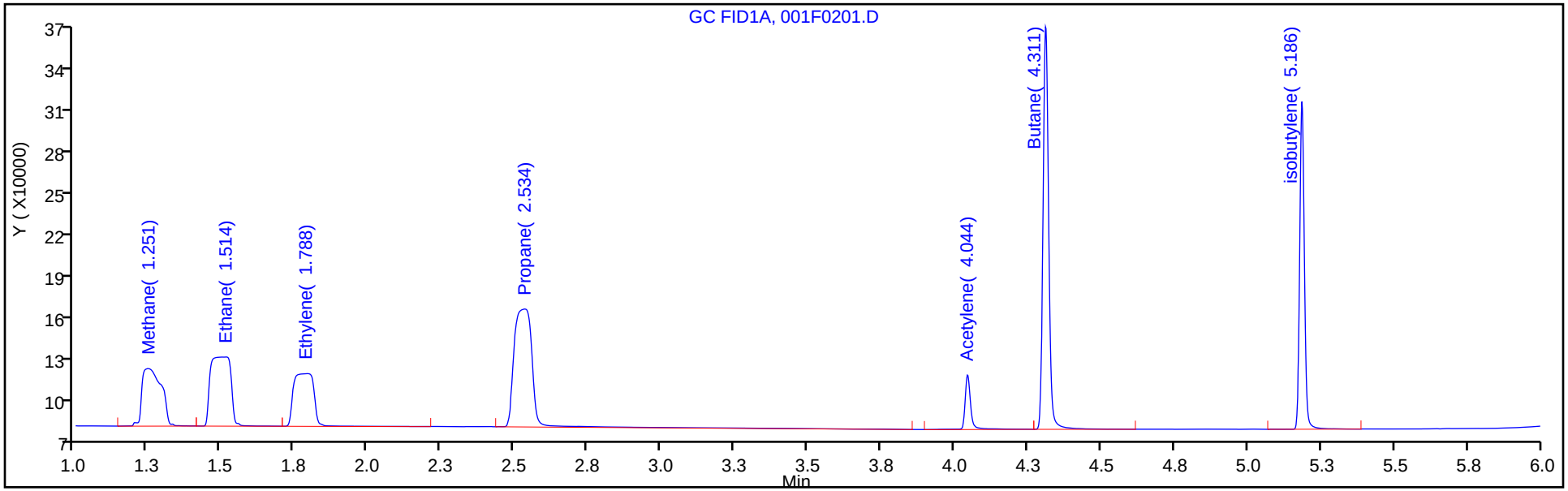
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

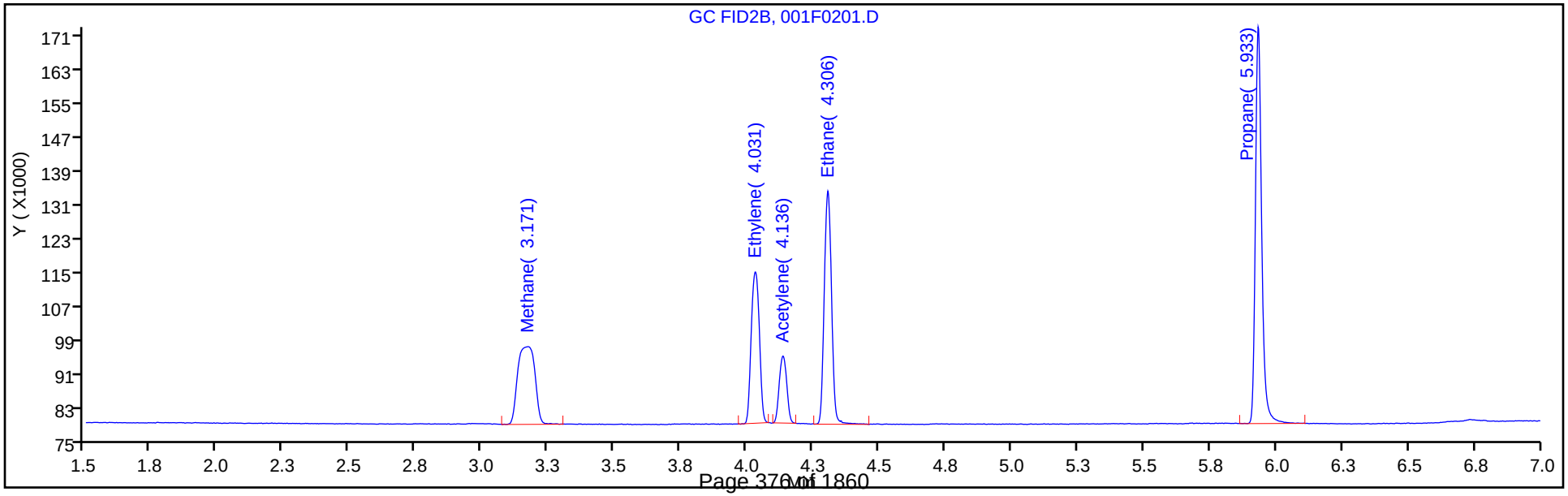
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D

Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L2			Worklist Smp#:	7
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

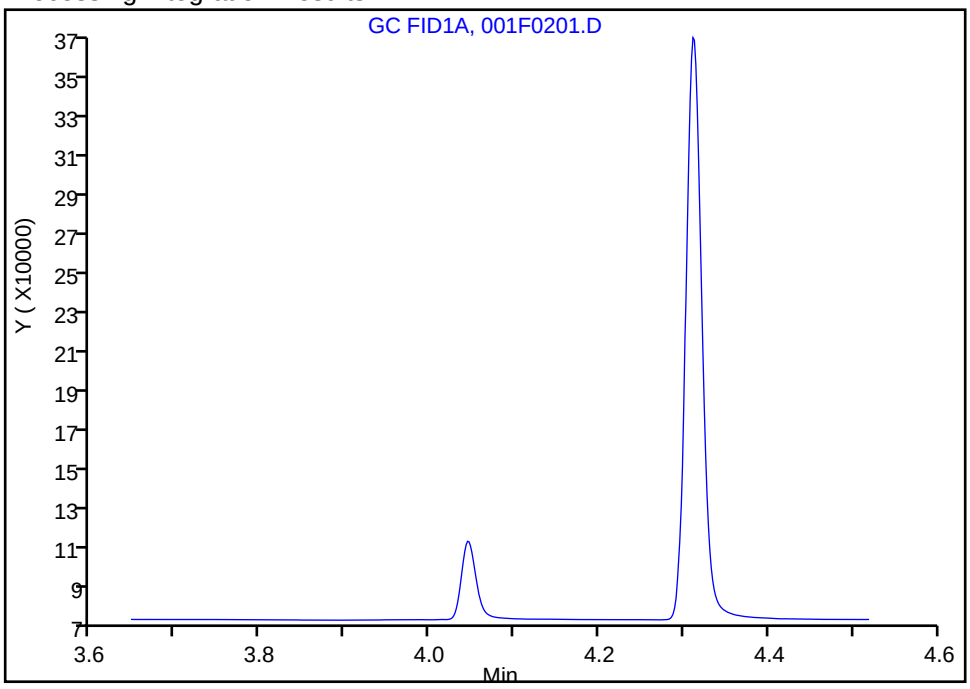
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J		
Lims ID:	IC L2				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

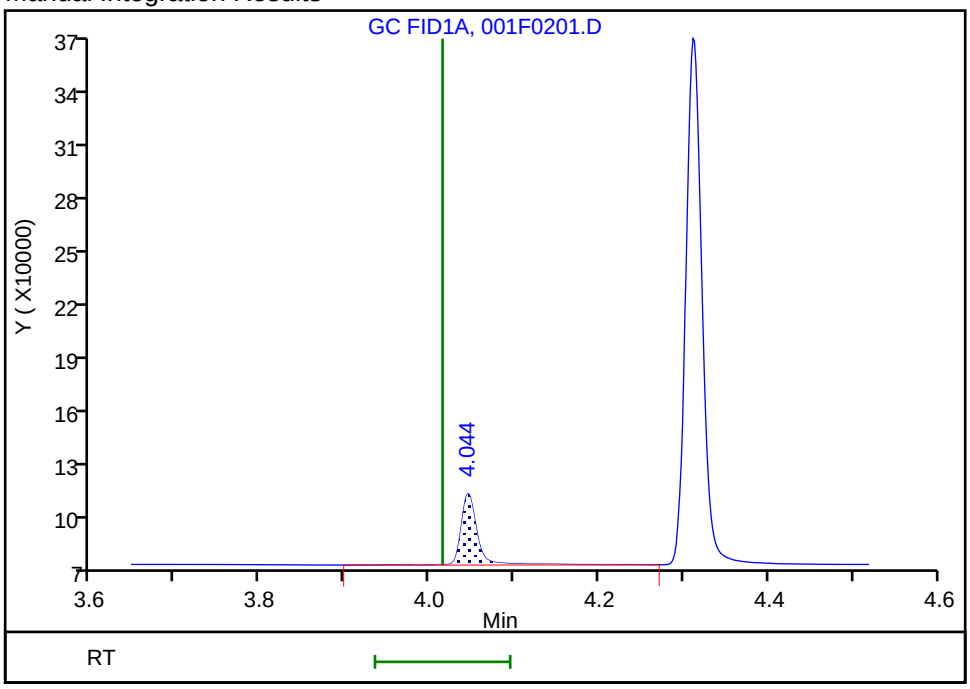
Processing Integration Results

RT: 4.01
Area: 0
Amount: 1.109766
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 52951
Amount: 1.544019
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:43:56

Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-May-2020 11:30:01 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:47 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	324614	1.83	1.92	
2	3.169	3.172	-0.003	148689	1.83	1.92	
						RPD = 0.02	
3 Ethane							
1	1.511	1.511	0.000	485411	3.42	3.57	
2	4.306	4.305	0.001	217520	3.42	3.56	
						RPD = 0.15	
4 Ethylene							M
1	1.791	1.793	-0.002	366405	3.19	3.32	
2	4.031	4.032	-0.001	157852	3.19	3.29	M
						RPD = 0.95	
5 Propane							
1	2.531	2.528	0.003	754733	5.02	5.27	
2	5.933	5.928	0.005	326853	5.02	5.22	
						RPD = 0.95	
6 Acetylene							Ma
1	4.043	4.015	0.028	105983	2.96	3.09	a
2	4.136	4.137	-0.001	66161	2.96	3.06	M
						RPD = 0.92	
7 Butane							
1	4.311	4.286	0.025	850630	6.61	6.77	
2	7.379	7.375	0.004	410288	6.61	6.75	
						RPD = 0.31	
8 isobutylene							
1	5.184	5.163	0.021	571566	6.38	6.40	
2	7.229	7.227	0.002	264983	6.38	6.38	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

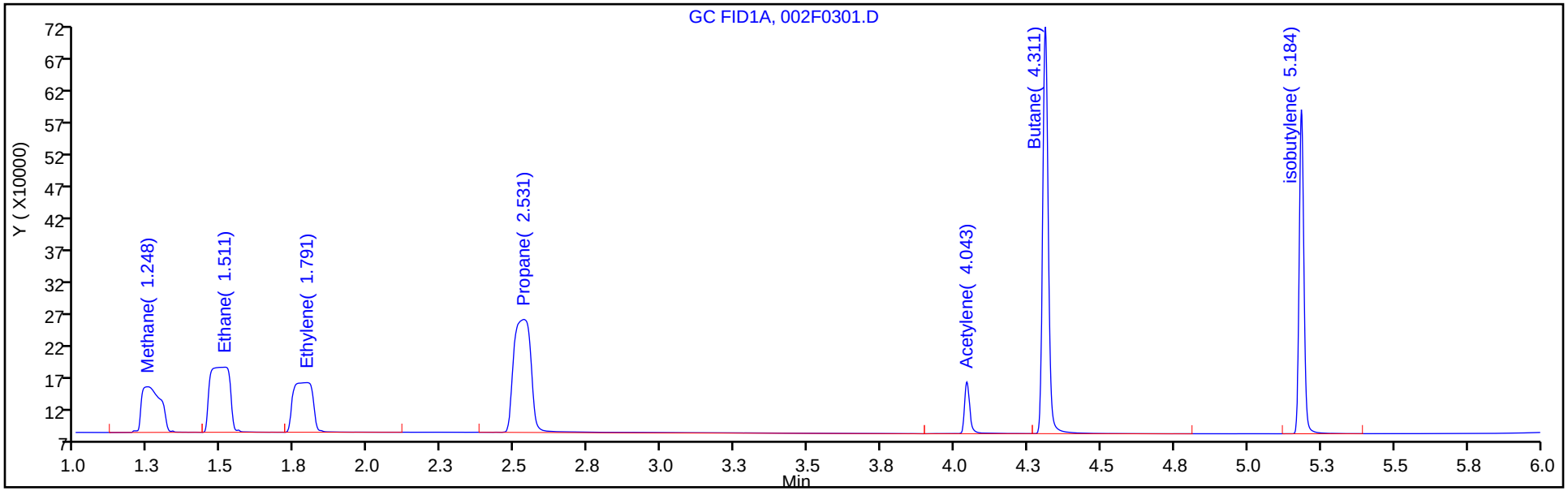
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

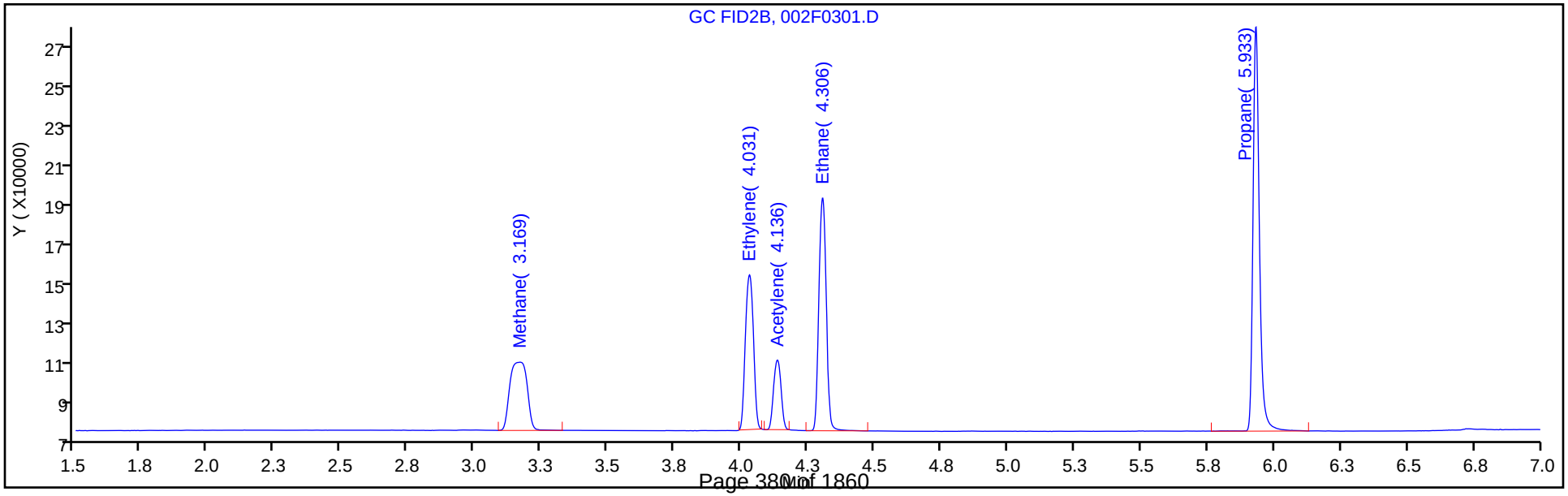
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D

Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L3			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

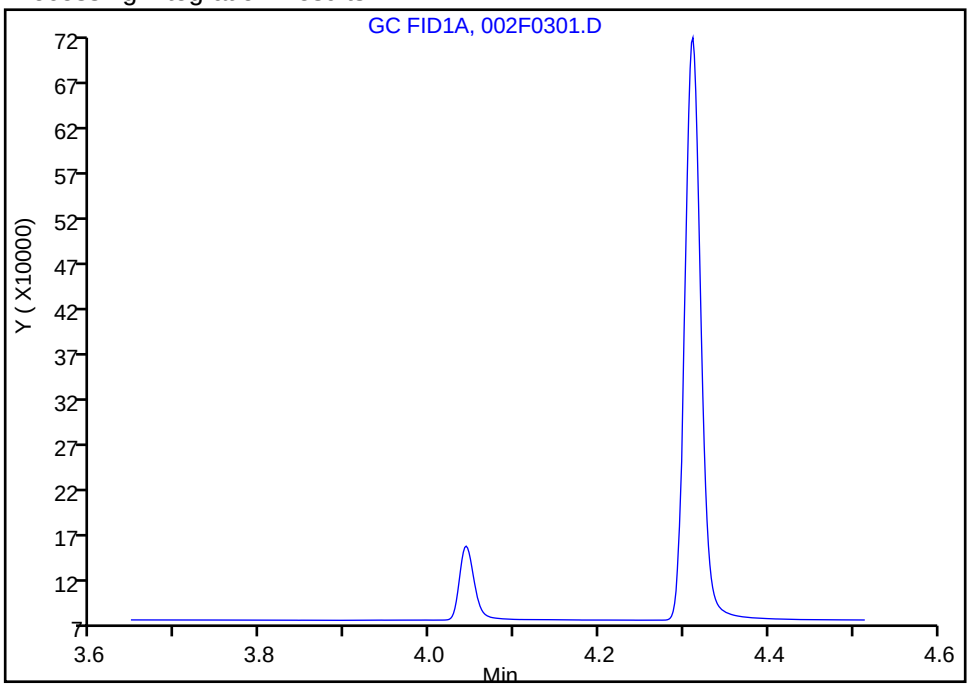
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

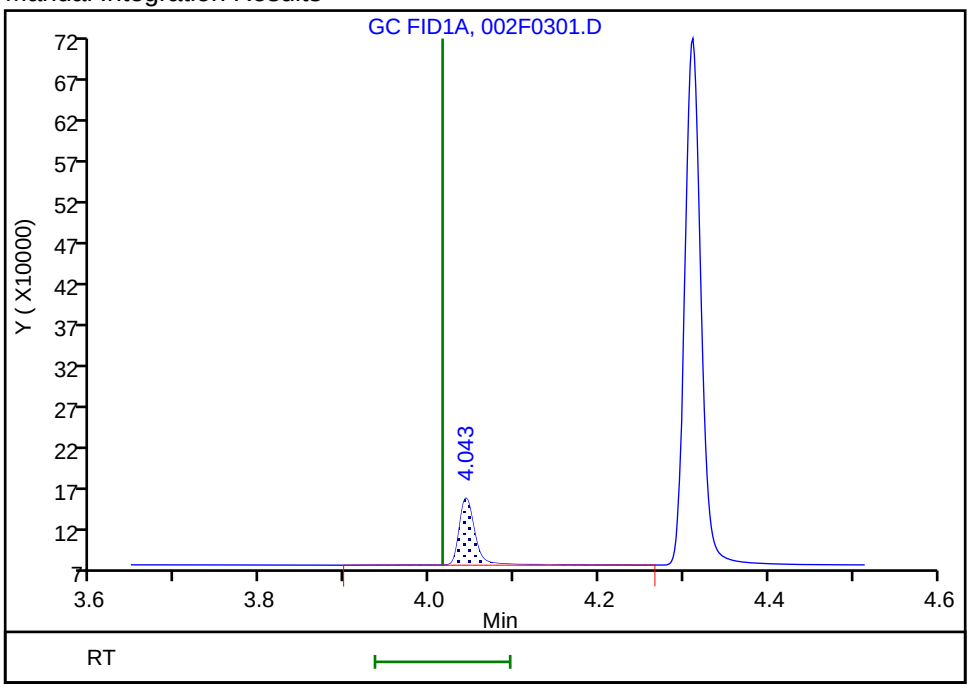
Processing Integration Results

RT: 4.01
Area: 0
Amount: 2.336755
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 105983
Amount: 3.090400
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:45:26

Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-May-2020 11:46:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	2196261	14.6	14.9	
2	3.171	3.172	-0.001	1043265	14.6	15.0	
						RPD = 0.32	
3 Ethane							
1	1.510	1.511	-0.001	3889050	27.4	28.6	
2	4.306	4.305	0.001	1745027	27.4	28.6	
						RPD = 0.02	
4 Ethylene							
1	1.792	1.793	-0.001	2933658	25.5	26.6	
2	4.032	4.032	0.000	1284690	25.5	26.8	
						RPD = 0.69	
5 Propane							
1	2.534	2.528	0.006	5864755	40.1	40.9	
2	5.932	5.928	0.004	2613101	40.1	41.7	
						RPD = 1.89	
6 Acetylene							M
1	4.034	4.015	0.019	837564	23.7	24.4	
2	4.136	4.137	-0.001	545422	23.7	25.2	M
						RPD = 3.31	
7 Butane							
1	4.304	4.286	0.018	6888912	52.9	52.5	
2	7.381	7.375	0.006	3316499	52.9	52.3	
						RPD = 0.43	
8 isobutylene							
1	5.179	5.163	0.016	4611649	51.1	51.7	
2	7.231	7.227	0.004	2147651	51.1	51.7	
						RPD = 0.03	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

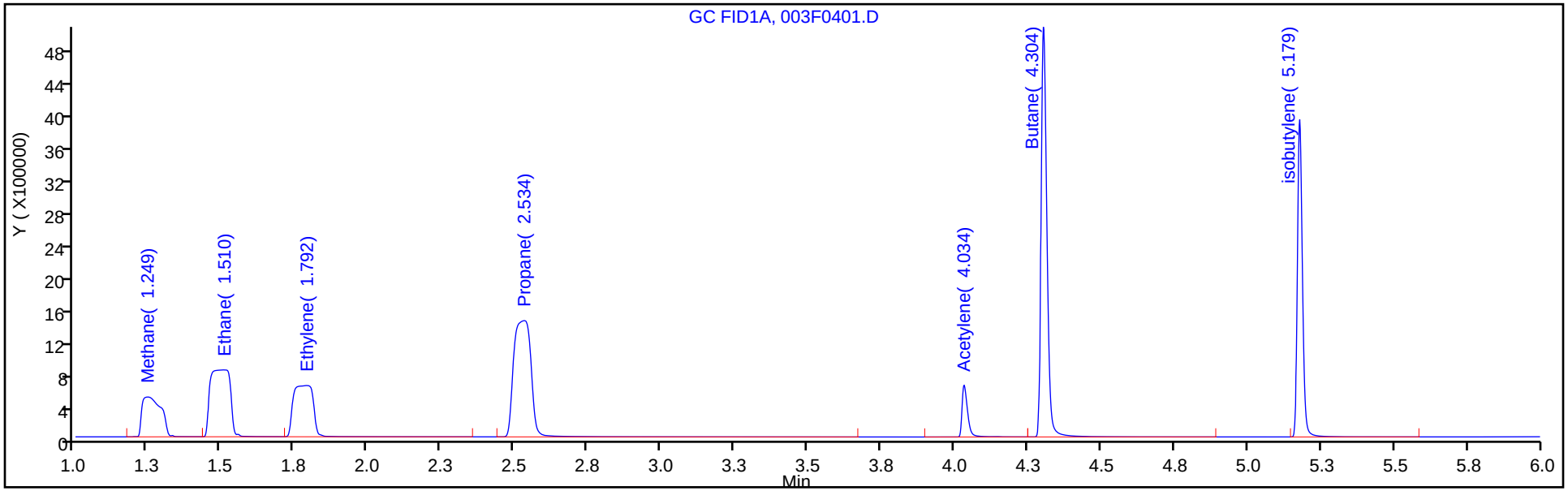
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

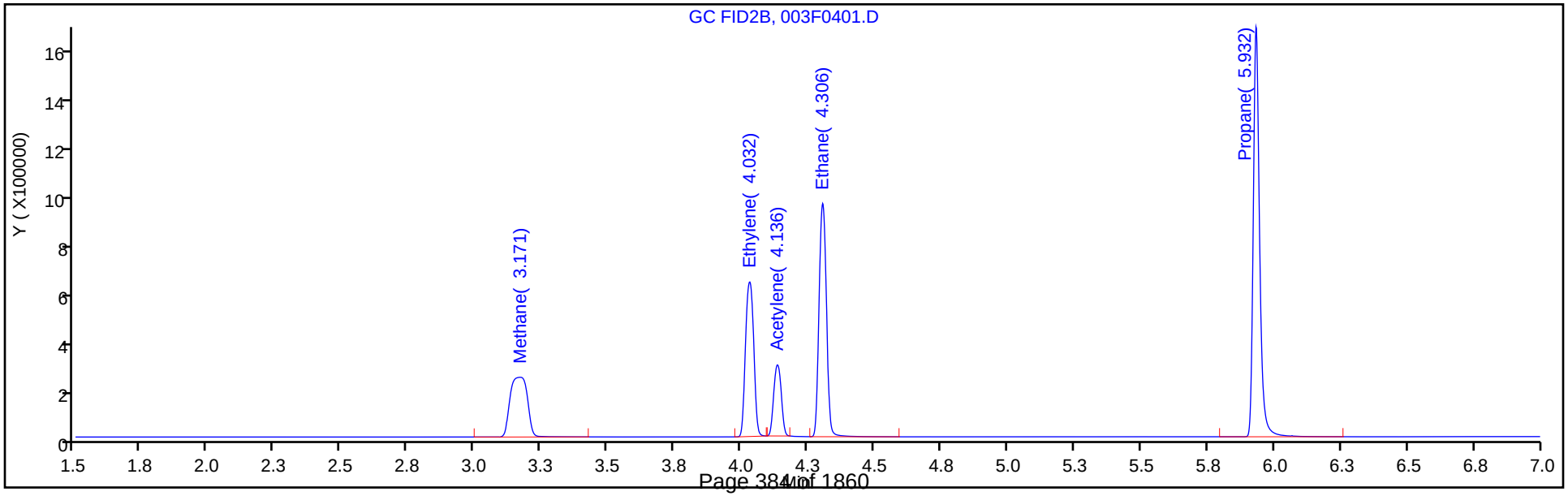
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D

Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L4			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D
Lims ID: ICRT L5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 16-May-2020 12:02:59 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT 5
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	10173489	73.0	70.4	
2	3.172	3.172	0.000	4836394	73.0	70.4	
						RPD = 0.05	
3 Ethane							
1	1.511	1.511	0.000	18547040	136.9	136.3	
2	4.305	4.305	0.000	8282362	136.9	135.7	
						RPD = 0.50	
4 Ethylene							M
1	1.793	1.793	0.000	14030935	127.7	127.3	
2	4.032	4.032	0.000	6120221	127.7	127.7	M
						RPD = 0.29	
5 Propane							
1	2.528	2.528	0.000	28325635	200.7	197.7	
2	5.928	5.928	0.000	12604888	200.7	201.3	
						RPD = 1.77	
6 Acetylene							Ma
1	4.015	4.015	0.000	3792795	118.5	110.6	M
2	4.137	4.137	0.000	2629705	118.5	121.7	M
						RPD = 9.57	
7 Butane							Ma
1	4.286	4.286	0.000	34343170	264.5	260.4	M
2	7.375	7.375	0.000	16648646	264.5	261.1	a
						RPD = 0.27	
8 isobutylene							
1	5.163	5.163	0.000	23123734	255.4	259.0	
2	7.227	7.227	0.000	10785387	255.4	259.5	
						RPD = 0.19	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

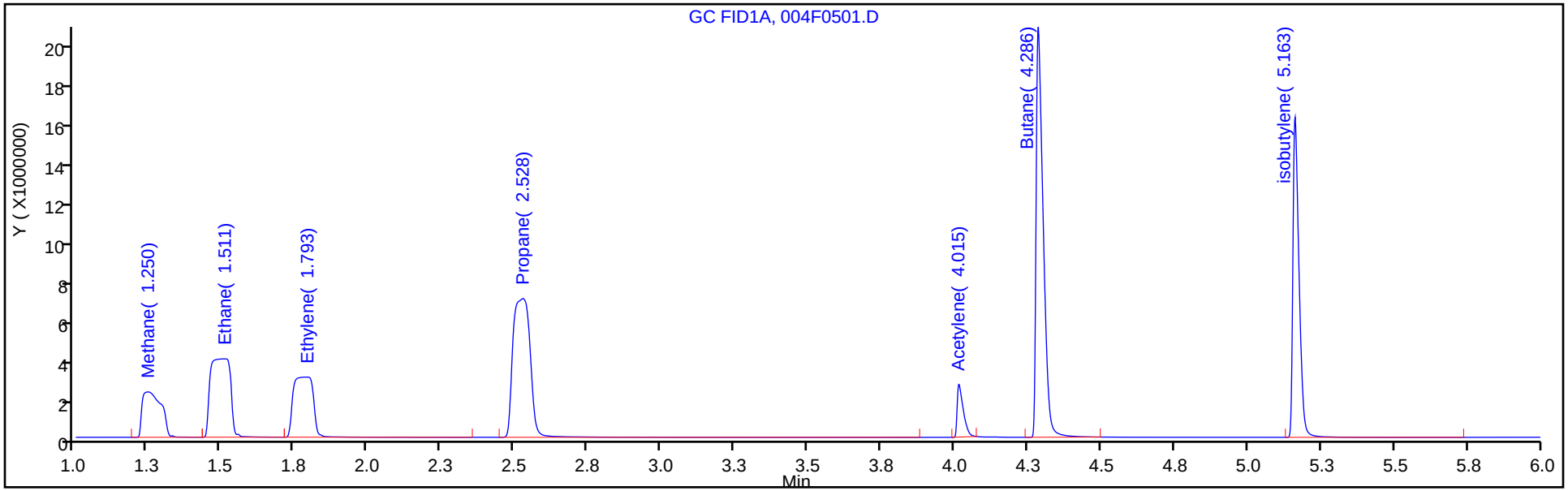
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

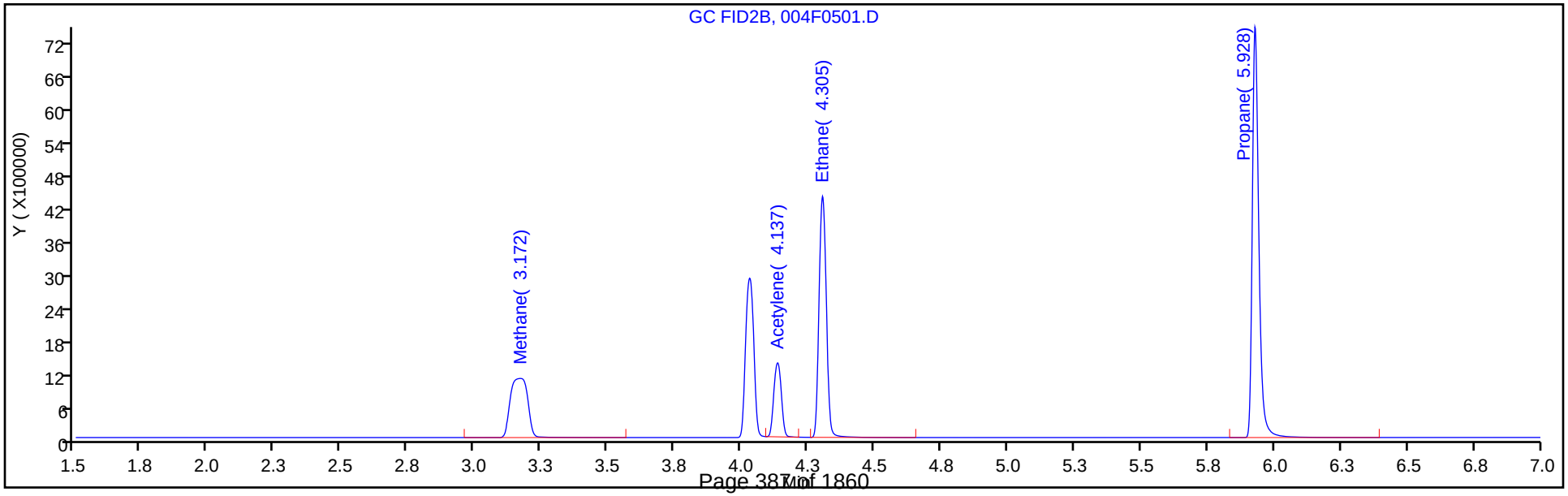
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D

Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICRT L5			Worklist Smp#:	10
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

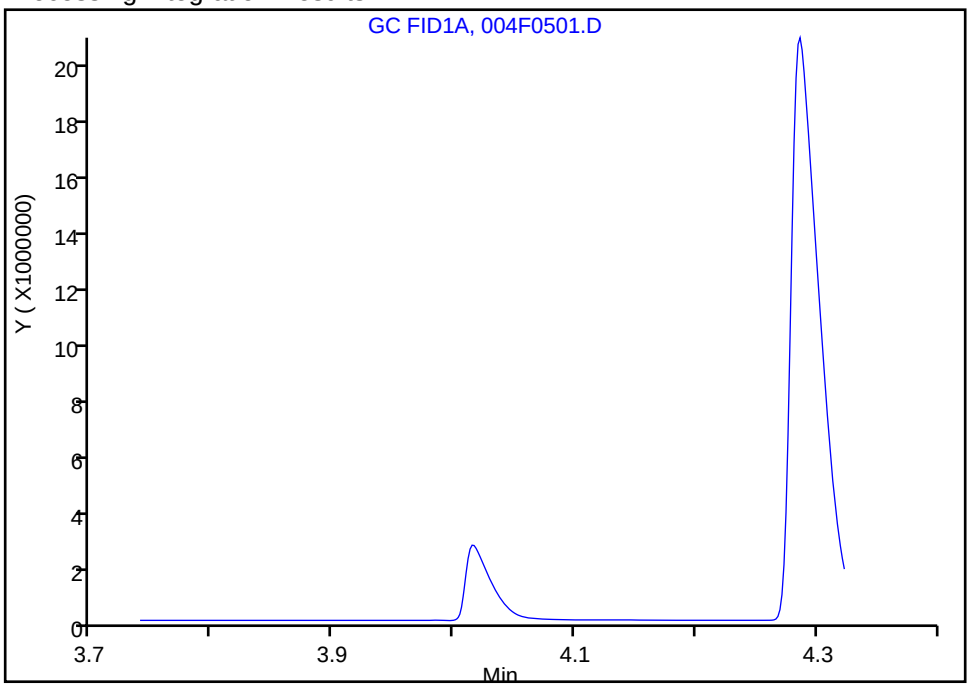
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

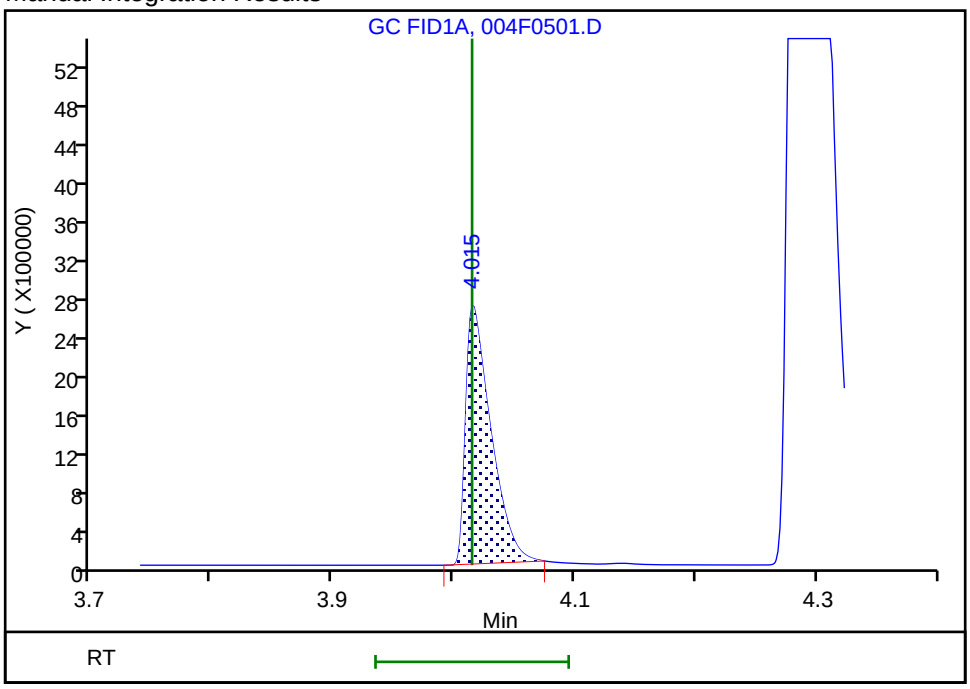
Processing Integration Results

RT: 4.01
Area: 0
Amount: 70.054658
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 3792795
Amount: 110.5956
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:07:53

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-May-2020 12:19:27 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	21349465	146.0	148.2	
2	3.172	3.172	0.000	10129316	146.0	147.7	
						RPD = 0.31	
3 Ethane							
1	1.512	1.511	0.001	38849075	273.7	285.6	
2	4.306	4.305	0.001	17331467	273.7	283.9	
						RPD = 0.60	
4 Ethylene							
1	1.785	1.793	-0.008	29199476	255.3	264.9	
2	4.032	4.032	0.000	12731776	255.3	265.6	
						RPD = 0.26	
5 Propane							
1	2.522	2.528	-0.006	59231481	401.4	413.5	
2	5.926	5.928	-0.002	26366224	401.4	421.0	
						RPD = 1.80	
6 Acetylene							M
1	4.002	4.015	-0.013	8293493	237.0	241.8	
2	4.137	4.137	0.000	5438964	237.0	251.7	M
						RPD = 4.01	
7 Butane							
1	4.270	4.286	-0.016	71750490	529.0	543.6	
2	7.369	7.375	-0.006	34602301	529.0	542.3	
						RPD = 0.25	
8 isobutylene							Ma
1	5.150	5.163	-0.013	47351348	510.8	530.4	M
2	7.222	7.227	-0.005	22287396	510.8	536.3	a
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

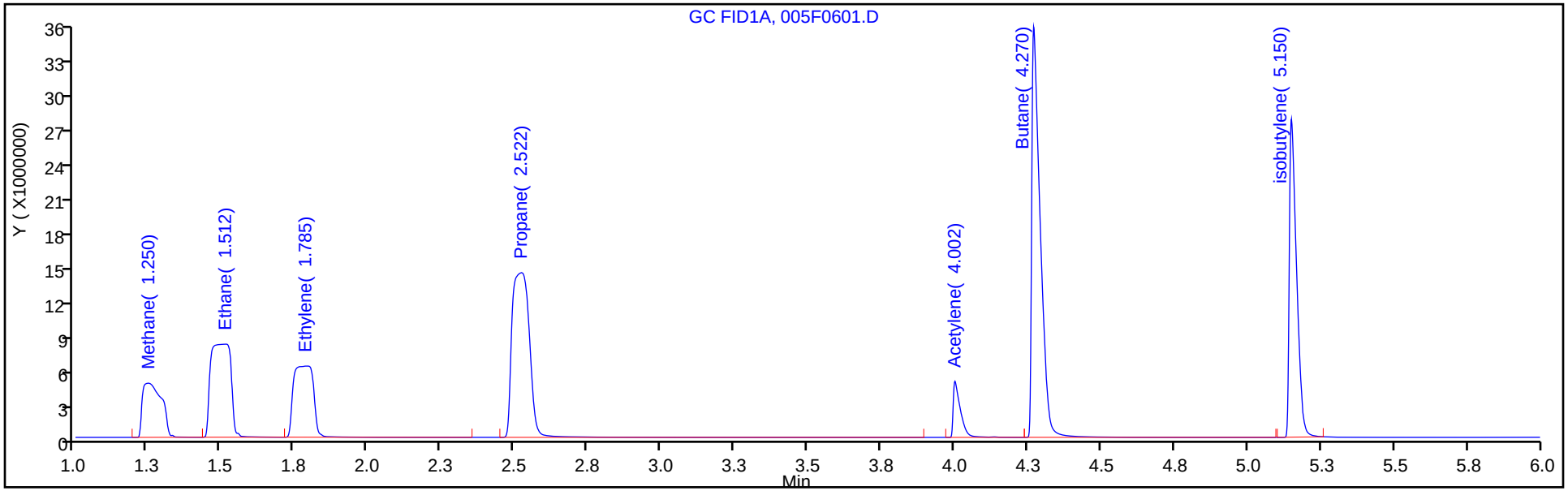
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

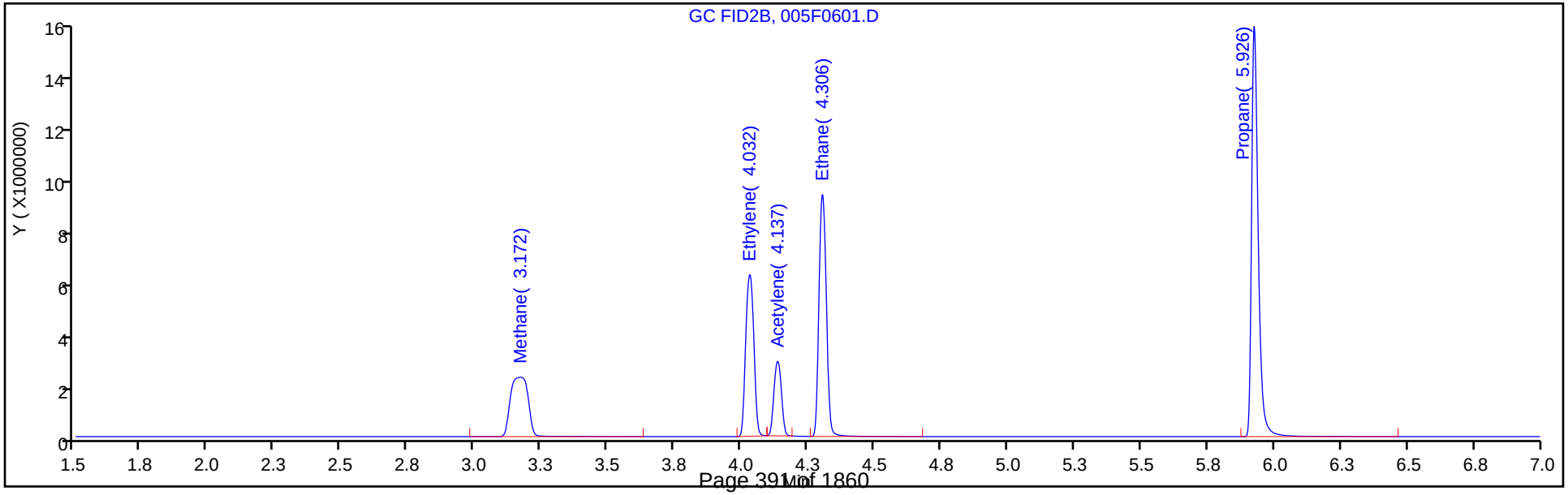
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D

Injection Date:	16-May-2020 12:19:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L6			Worklist Smp#:	11
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\20200516-91574.b\006F0701.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-May-2020 12:35:56 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.243	1.250	-0.007	40706597	292.0	282.9	
2	3.168	3.172	-0.004	19242711	292.0	280.9	
						RPD = 0.71	
3 Ethane							
1	1.508	1.511	-0.003	74364849	547.4	546.6	
2	4.302	4.305	-0.003	33180606	547.4	543.4	
						RPD = 0.58	
4 Ethylene							
1	1.785	1.793	-0.008	55873290	510.7	507.0	
2	4.028	4.032	-0.004	24365732	510.7	508.3	
						RPD = 0.27	
5 Propane							
1	2.510	2.528	-0.018	113846992	802.8	794.7	
2	5.920	5.928	-0.008	50751227	802.8	810.3	
						RPD = 1.94	
6 Acetylene							M
1	3.983	4.015	-0.032	15971476	474.1	465.7	
2	4.135	4.137	-0.002	10316086	474.1	477.5	M
						RPD = 2.49	
7 Butane							
1	4.250	4.286	-0.036	137944774	1058.1	1044.9	
2	7.362	7.375	-0.013	67311032	1058.1	1054.6	
						RPD = 0.92	
8 isobutylene							
1	5.133	5.163	-0.030	92637372	1021.5	1037.7	
2	7.217	7.227	-0.010	43289193	1021.5	1041.6	
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

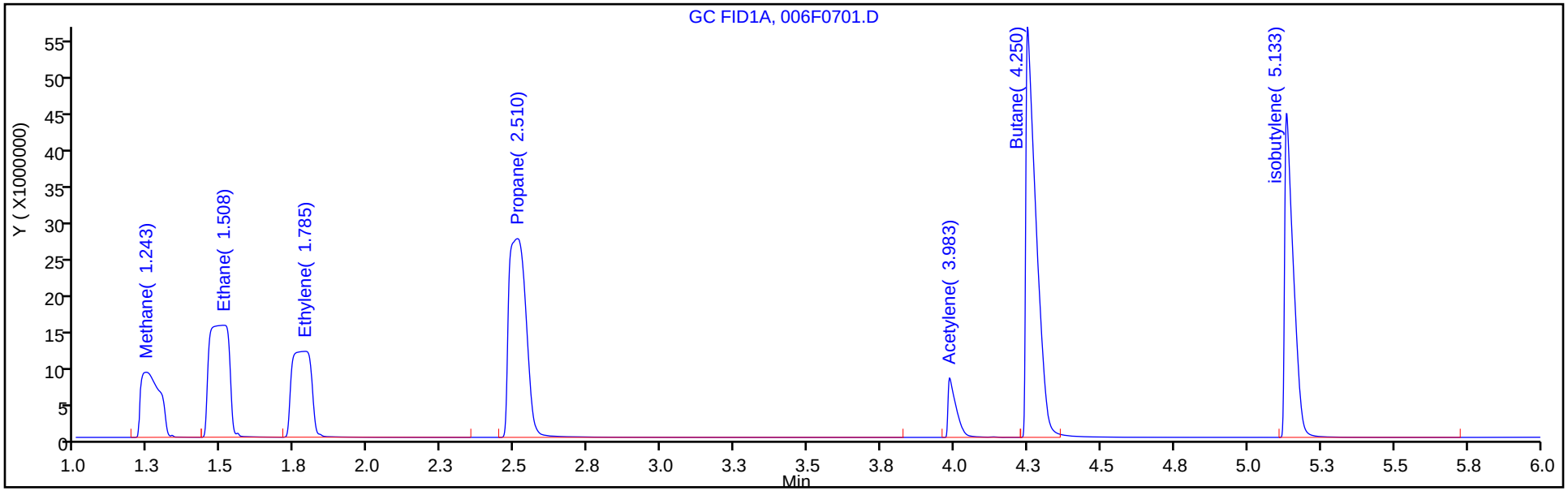
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

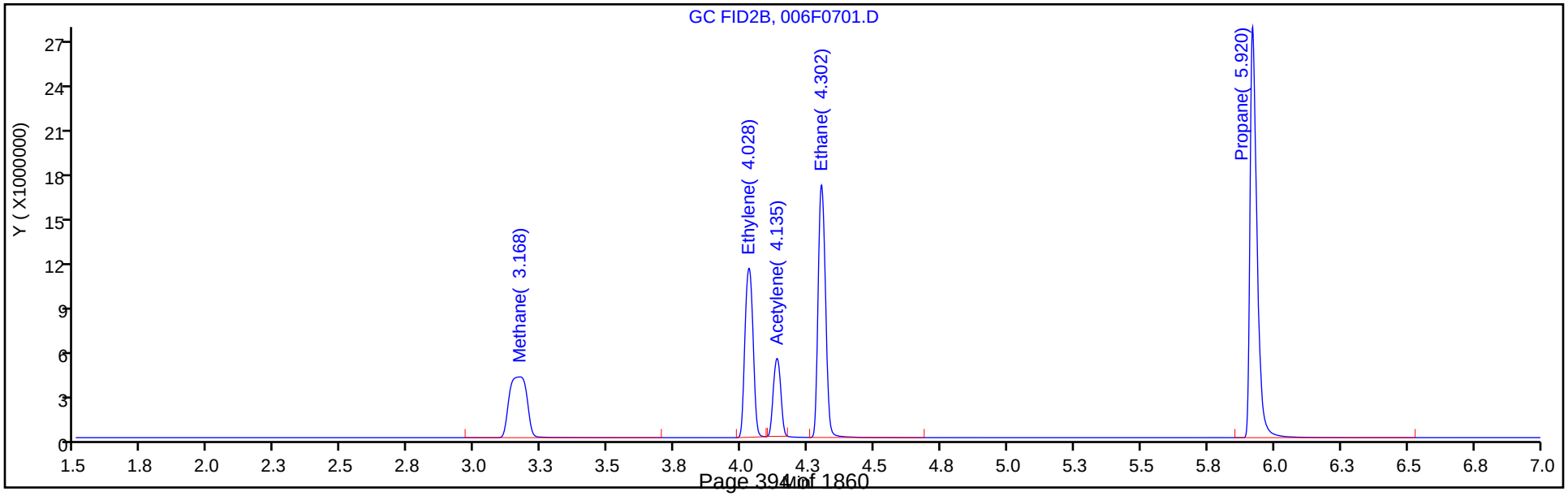
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D

Injection Date:	16-May-2020 12:35:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L7			Worklist Smp#:	12
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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D				
Lims ID:	IC L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	16-May-2020 12:52:27	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 8				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	256592942	1806.9	1784.9	
2	3.168	3.172	-0.004	121745624	1806.9	1778.4	
						RPD = 0.36	

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

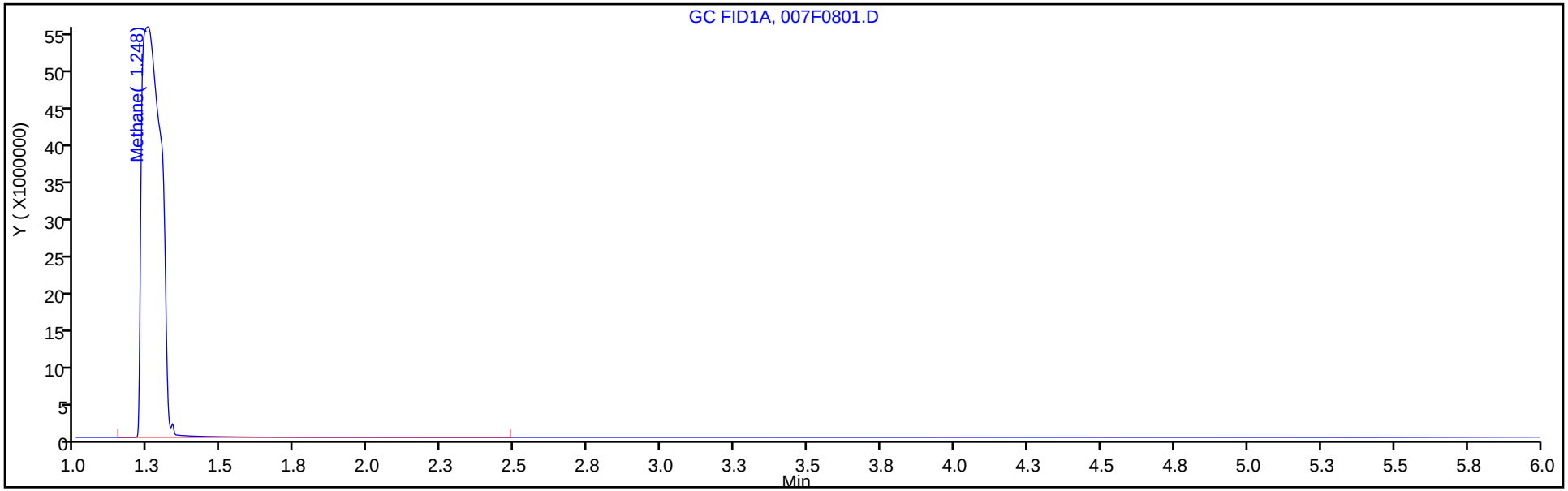
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

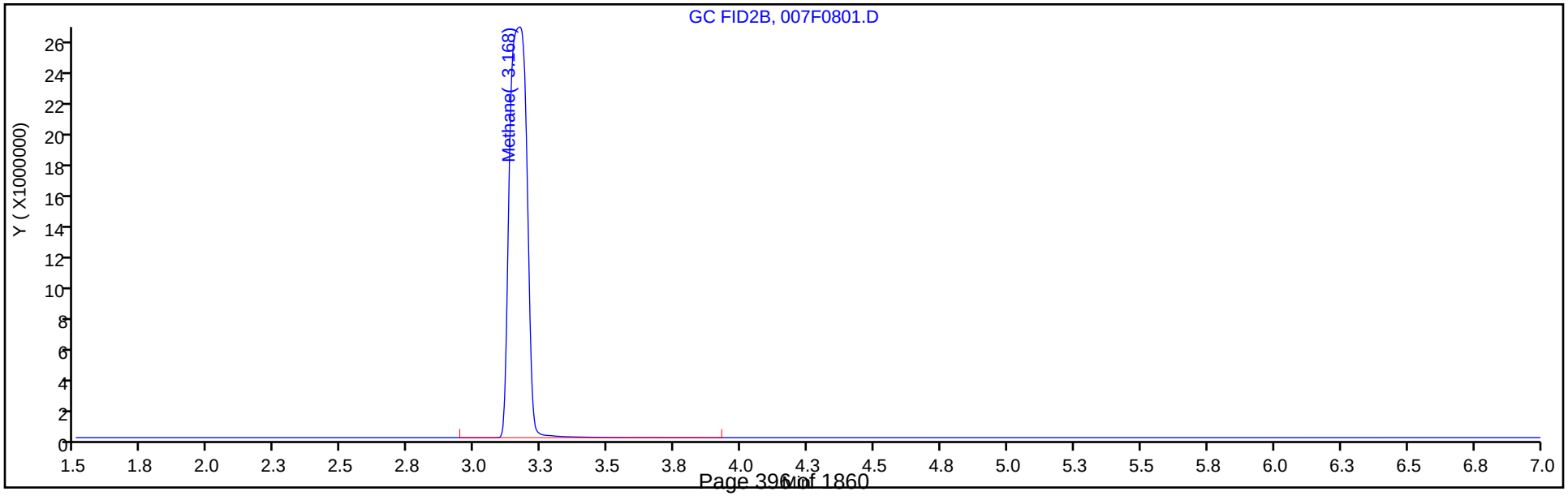
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D

Injection Date:	16-May-2020 12:52:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L8			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Lims ID:	IC L9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	16-May-2020 13:08:56	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 9				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.245	1.250	-0.005	1008615918	7227.8	7016.9	
2	3.160	3.172	-0.012	484781088	7227.8	7082.2	
						RPD = 0.93	

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

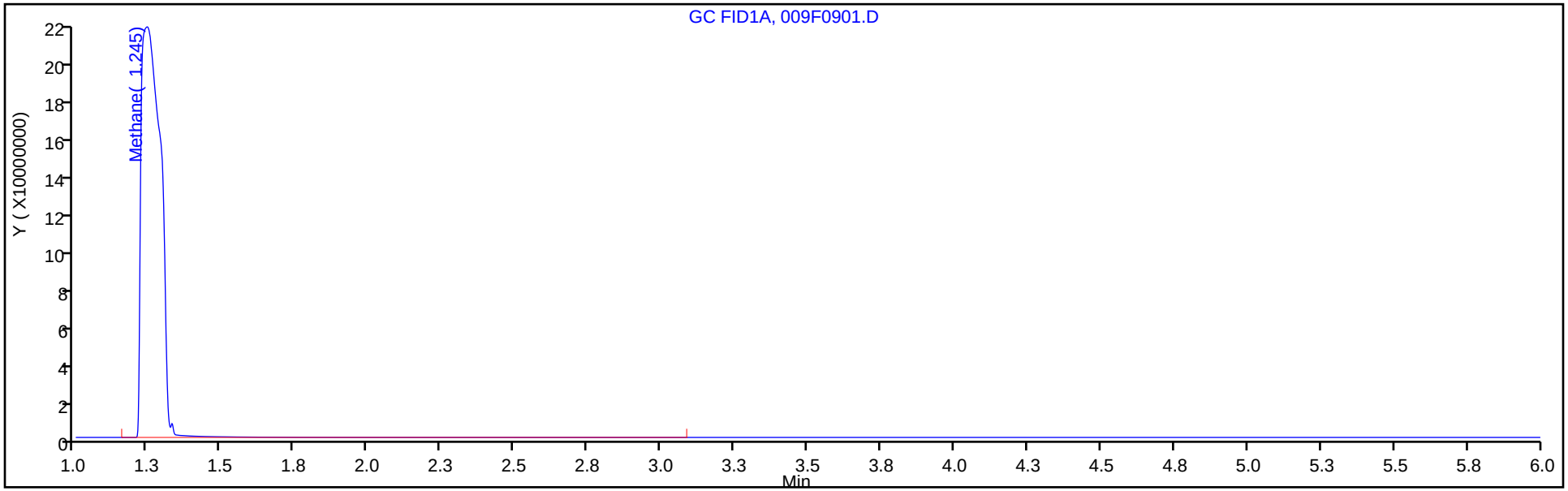
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

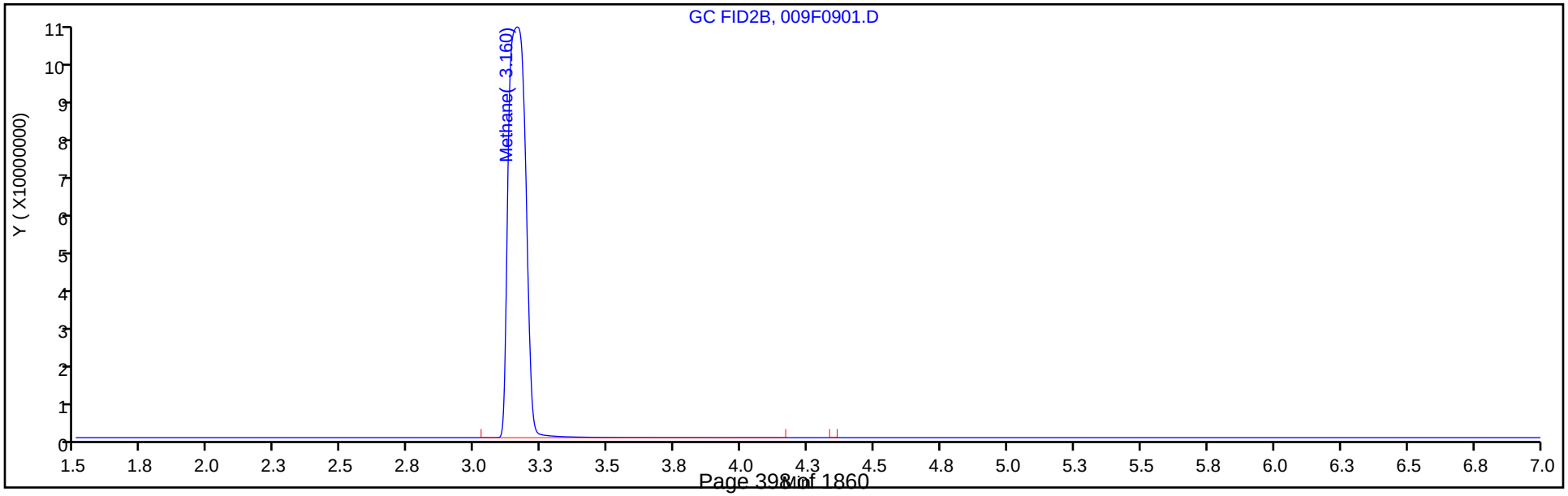
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Injection Date:	16-May-2020 13:08:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L9			Worklist Smp#:	14
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.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	3.180	3.171	3.169	3.171	3.172	3.172	3.168	3.168	3.160		3.132 - 3.212	3.170
Ethylene	4.038	4.031	4.031	4.032	4.032	4.032	4.028				3.982 - 4.082	4.032
Acetylene	4.142	4.136	4.136	4.136	4.137	4.137	4.135				4.057 - 4.217	4.137
Ethane	4.310	4.306	4.306	4.306	4.305	4.306	4.302				4.255 - 4.355	4.306

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.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	103189 66249 67072	91938 69376	81470 65897	71453 67377	Lin2	17305.4468	68448.1220							0.9980		0.9900
Ethylene	41850 47939	48398 49863	49458 47714	50314	Ave		47933.7023				6.0		20.0			
Acetylene	17710 22187	21298 22945	22329 21760	23009	Ave		21605.4944				8.4		20.0			
Ethane	53080 60519	62532 63320	63577 60612	63754	Ave		61056.4722				6.2		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.: 280-137609-2 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.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	47082 10129316	83897 19242711	148689 121745624	1043265 484781088	4836394	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethylene	Ave	33393 12731776	77235 24365732	157852	1284690	6120221	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	13119 5438964	31554 10316086	66161	545422	2629705	0.741 237	1.48 474	2.96	23.7	119
Ethane	Ave	45402 17331467	106974 33180606	217520	1745027	8282362	0.855 274	1.71 547	3.42	27.4	137

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-May-2020 10:57:08 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 1
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	111434	0.4563	0.4358	
2	3.180	3.172	0.008	47082	0.4563	0.4350	
						RPD = 0.19	
3 Ethane							Ma
1	1.513	1.511	0.002	99432	0.8553	0.7309	M
2	4.310	4.305	0.005	45402	0.8553	0.7436	a
						RPD = 1.73	
4 Ethylene							
1	1.795	1.793	0.002	75924	0.7979	0.6889	
2	4.038	4.032	0.006	33393	0.7979	0.6966	
						RPD = 1.12	
5 Propane							
1	2.535	2.528	0.007	162619	1.25	1.14	
2	5.932	5.928	0.004	68003	1.25	1.09	
						RPD = 4.45	
6 Acetylene							M
1	4.048	4.015	0.033	24105	0.7408	0.7029	
2	4.142	4.137	0.005	13119	0.7408	0.6072	M
						RPD = 14.61	
7 Butane							Ma
1	4.315	4.286	0.029	175523	1.65	1.66	M
2	7.382	7.375	0.007	85626	1.65	1.67	a
						RPD = 0.36	
8 isobutylene							
1	5.190	5.163	0.027	120280	1.60	1.35	
2	7.232	7.227	0.005	54094	1.60	1.30	
						RPD = 3.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 1.25 Units: uL

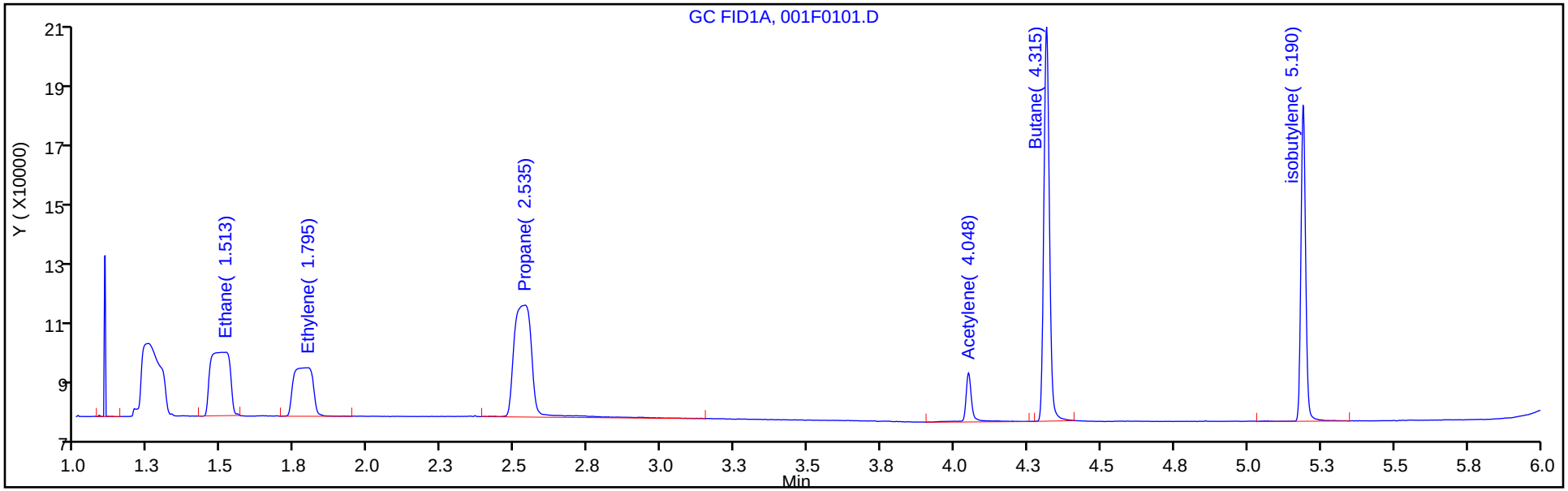
Report Date: 17-May-2020 08:59:46 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

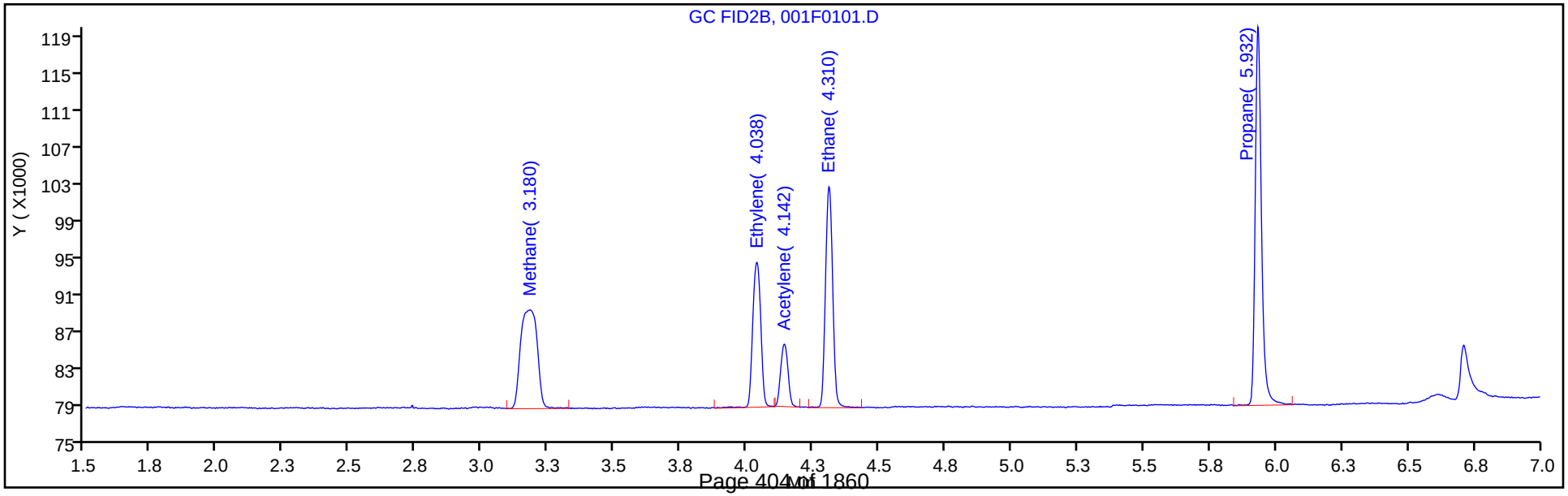
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D

Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L1			Worklist Smp#:	6
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

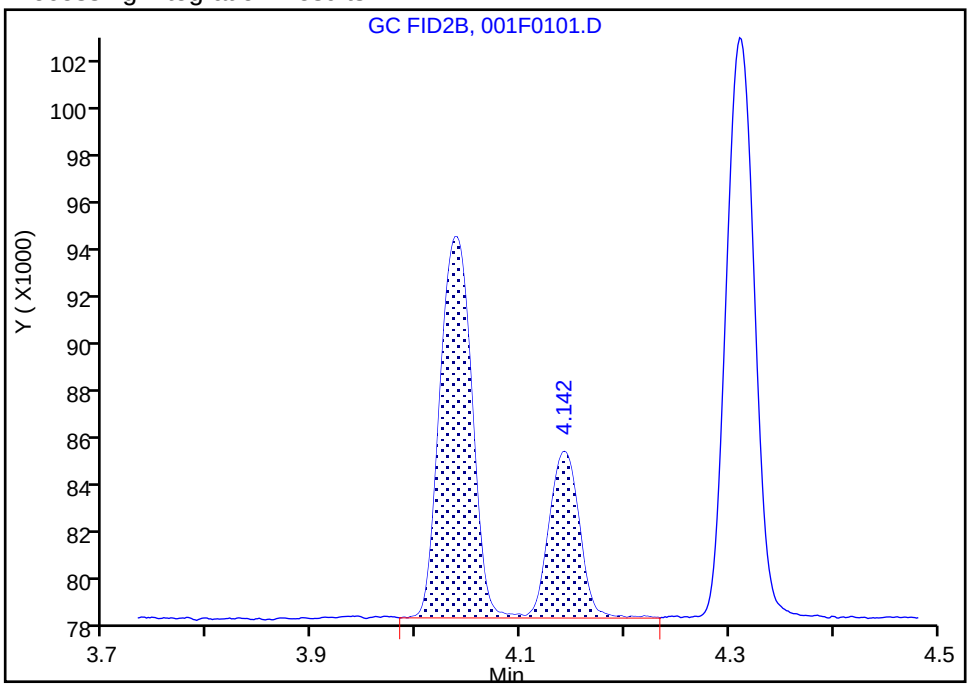
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Injection Date: 16-May-2020 10:57:08 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: MEIERG ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

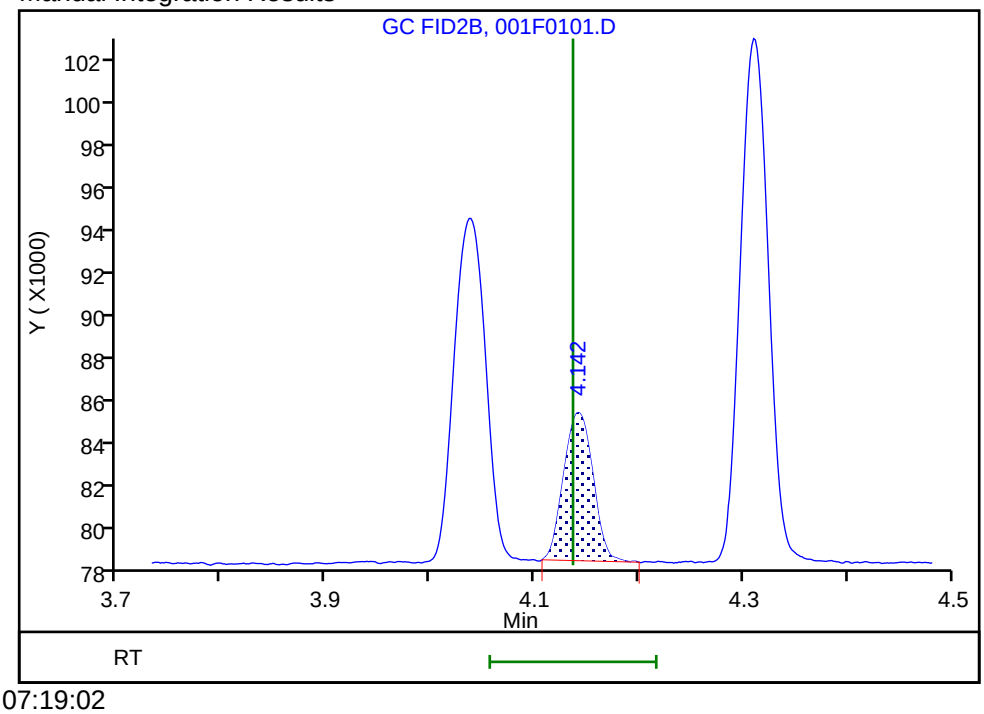
Processing Integration Results

RT: 4.14
Area: 47095
Amount: 1.672538
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 13119
Amount: 0.607207
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:19:02
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

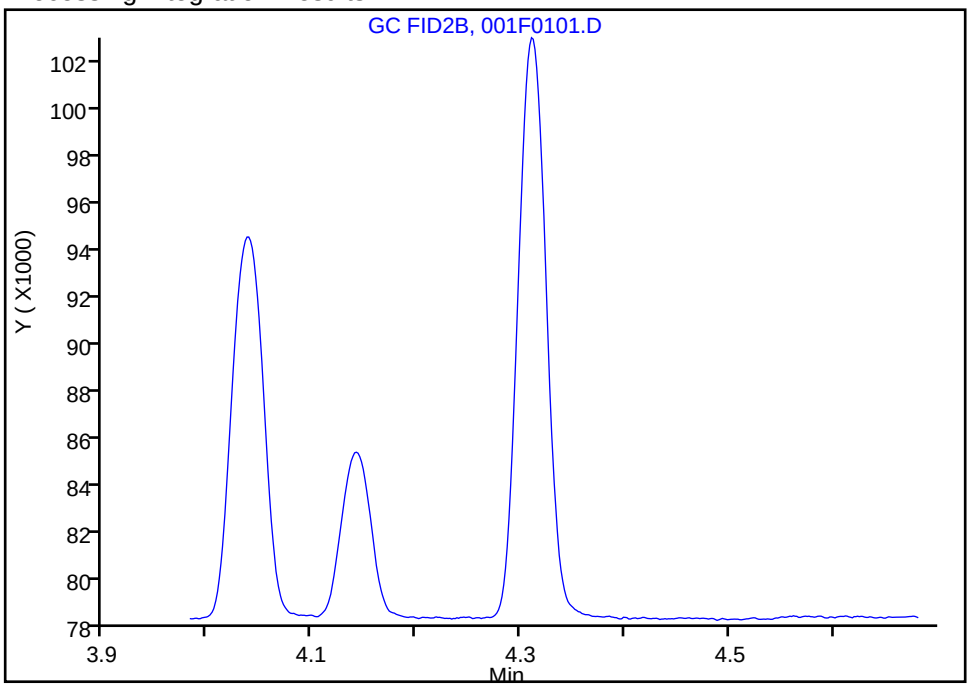
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

3 Ethane, CAS: 74-84-0

Signal: 2

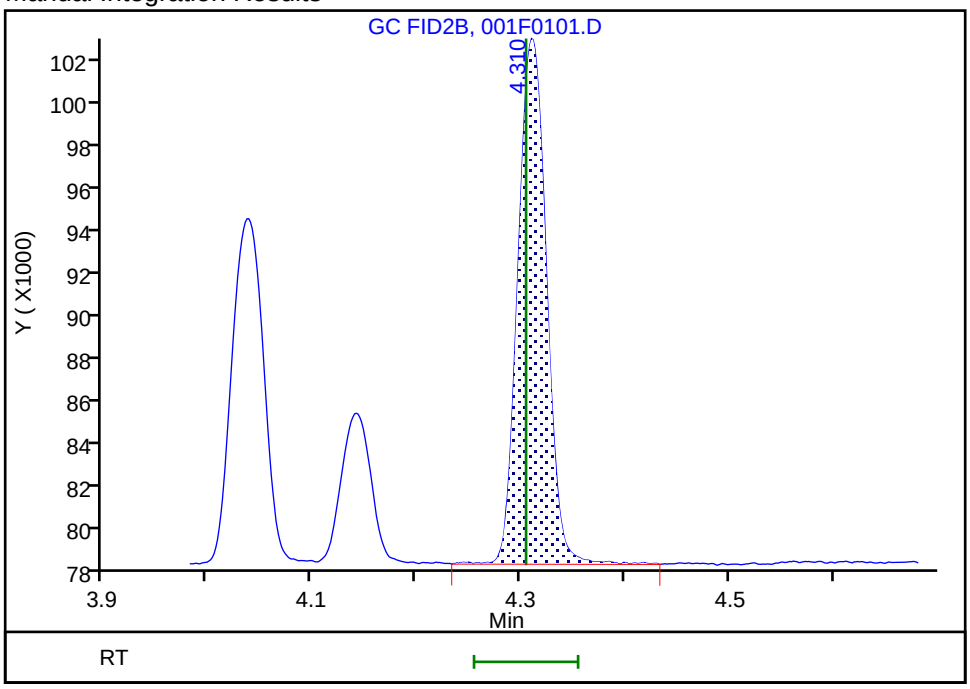
Not Detected
Expected RT: 4.30

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 45402
Amount: 0.743607
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:37:15
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-May-2020 11:13:34 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.251	1.250	0.001	188199	0.9125	0.9699	
2	3.171	3.172	-0.001	83897	0.9125	0.9729	
						RPD = 0.31	
3 Ethane							
1	1.514	1.511	0.003	237424	1.71	1.75	
2	4.306	4.305	0.001	106974	1.71	1.75	
						RPD = 0.39	
4 Ethylene							M
1	1.788	1.793	-0.005	180285	1.60	1.64	
2	4.031	4.032	-0.001	77235	1.60	1.61	M
						RPD = 1.51	
5 Propane							
1	2.534	2.528	0.006	366612	2.51	2.56	
2	5.933	5.928	0.005	156230	2.51	2.49	
						RPD = 2.56	
6 Acetylene							Ma
1	4.044	4.015	0.029	52951	1.48	1.54	a
2	4.136	4.137	-0.001	31554	1.48	1.46	M
						RPD = 5.56	
7 Butane							
1	4.311	4.286	0.025	384054	3.31	3.24	
2	7.381	7.375	0.006	184917	3.31	3.22	
						RPD = 0.55	
8 isobutylene							
1	5.186	5.163	0.023	261296	3.19	2.93	
2	7.231	7.227	0.004	119878	3.19	2.88	
						RPD = 1.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

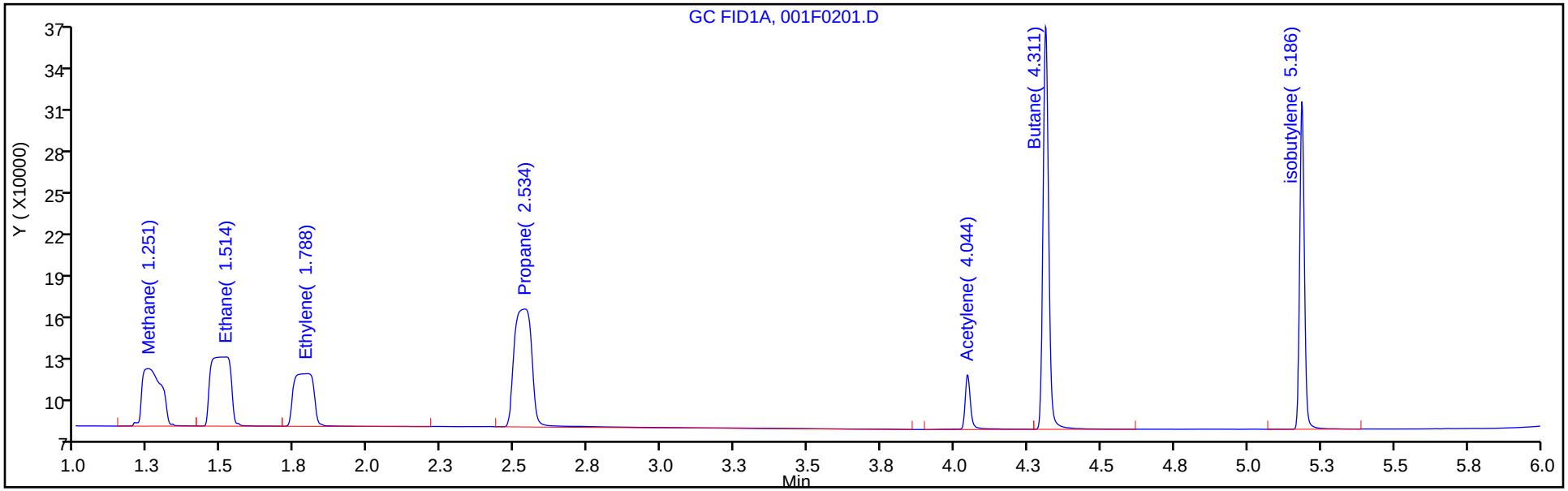
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

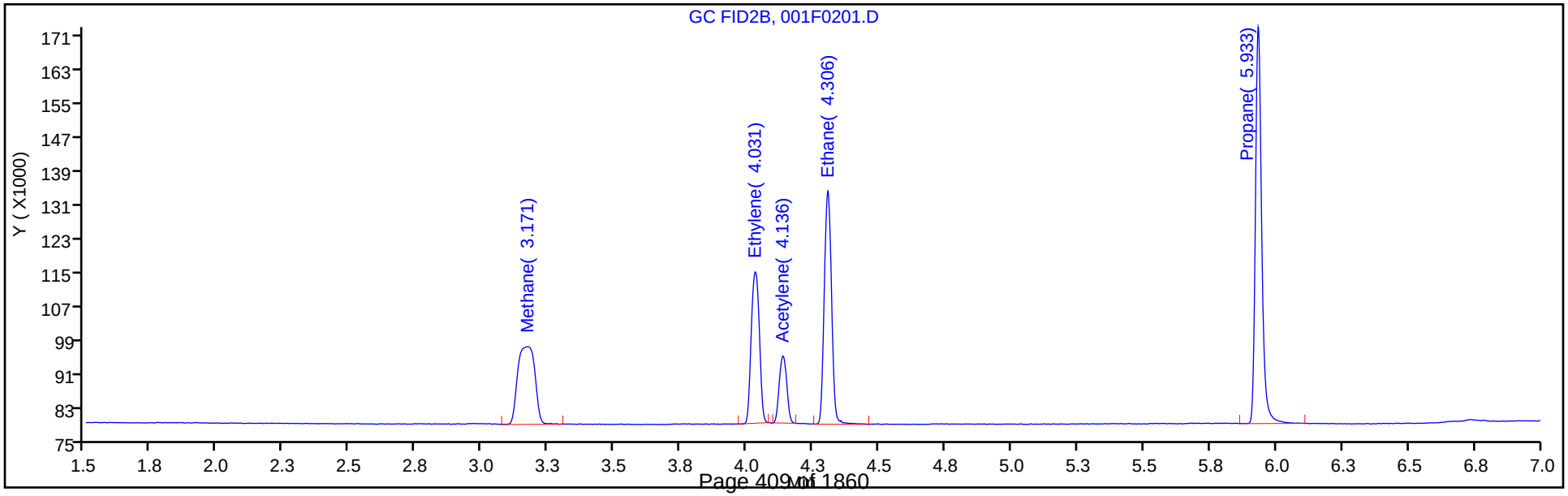
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D

Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L2			Worklist Smp#:	7
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

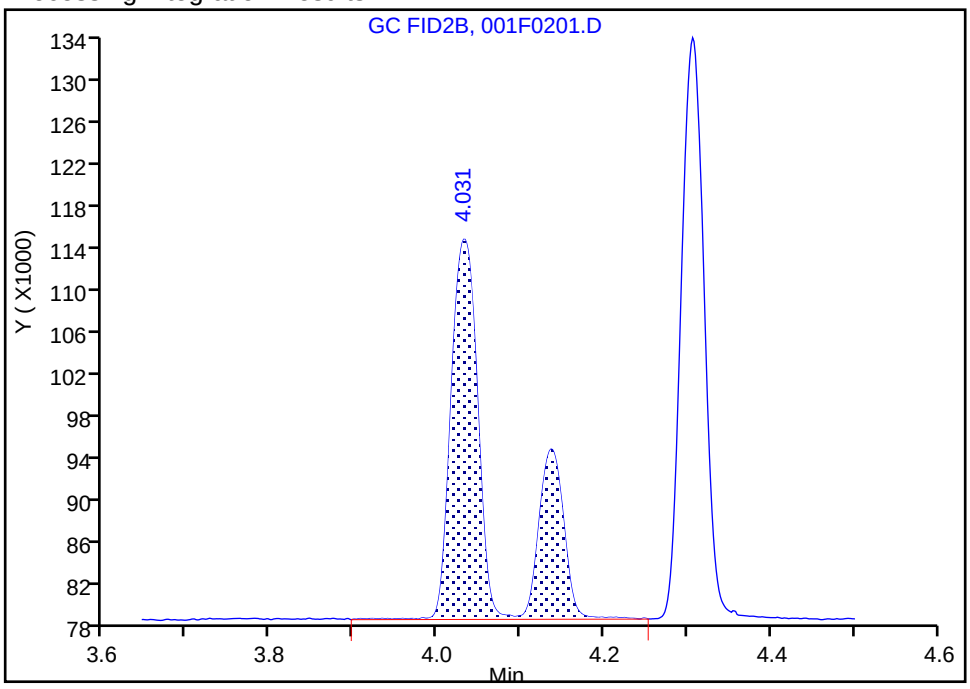
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Injection Date: 16-May-2020 11:13:34 Instrument ID: VGC_J
Lims ID: IC L2
Client ID:
Operator ID: MEIERG ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

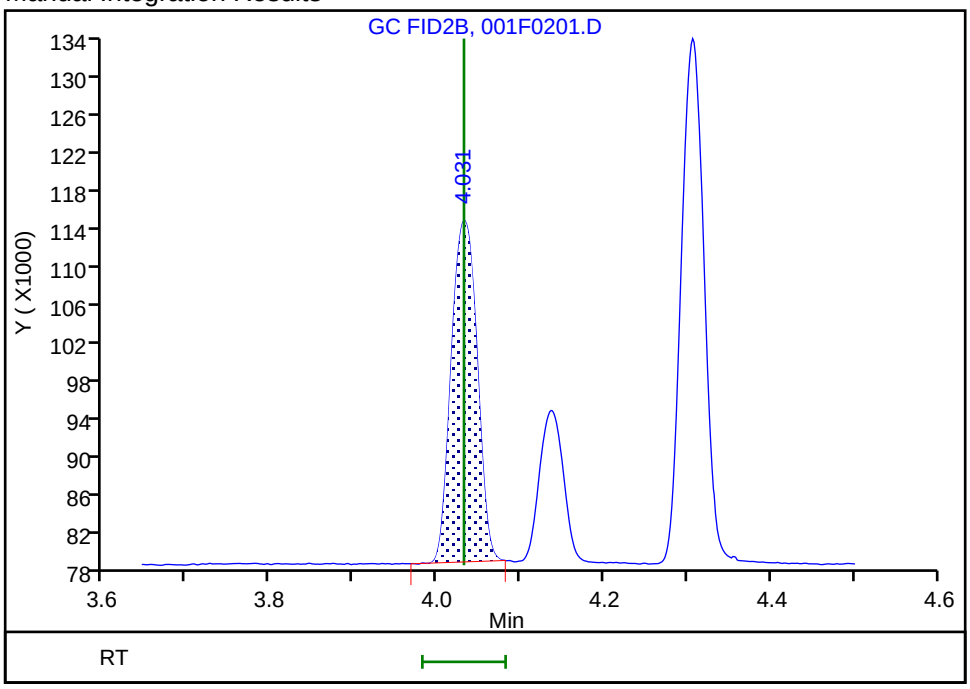
Processing Integration Results

RT: 4.03
Area: 113071
Amount: 2.160644
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 77235
Amount: 1.611288
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:43:17
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

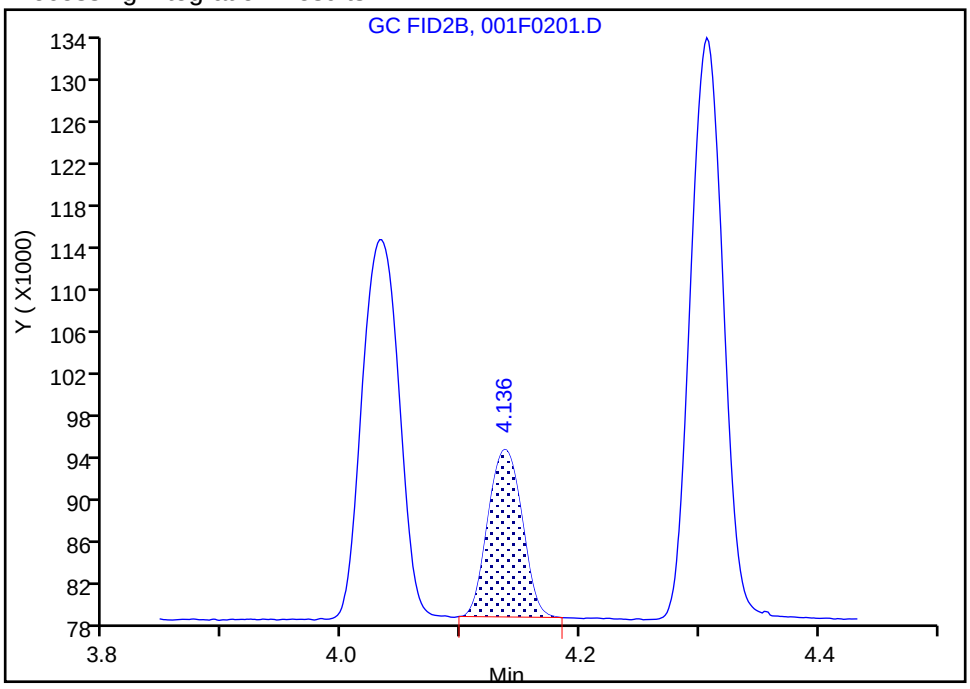
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J		
Lims ID:	IC L2				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

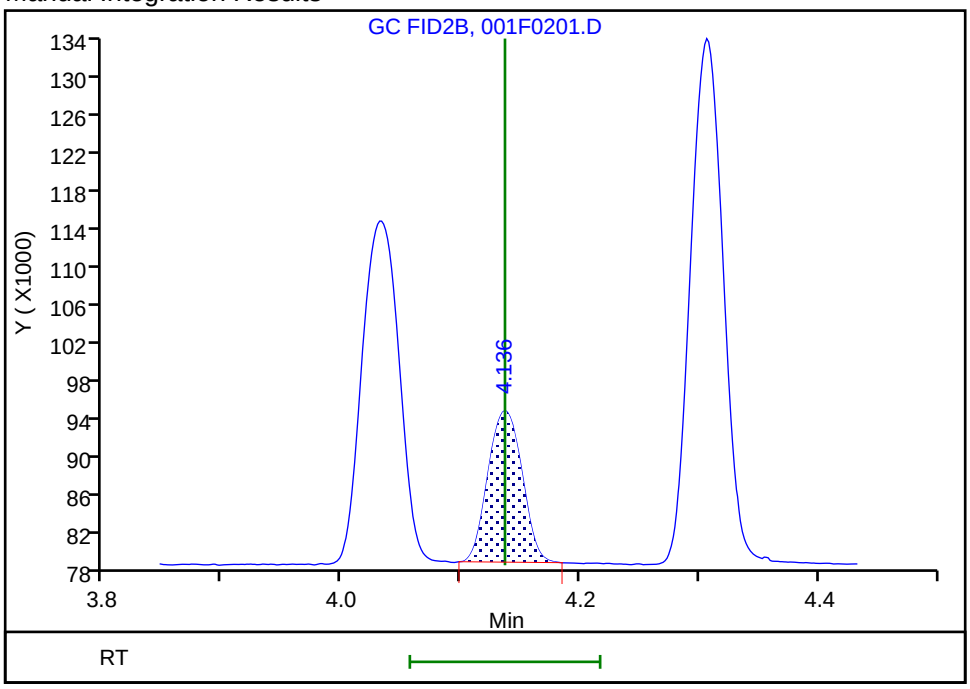
Processing Integration Results

RT: 4.14
Area: 31554
Amount: 1.109766
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 31554
Amount: 1.460462
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:43:43

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-May-2020 11:30:01 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:47 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	324614	1.83	1.92	
2	3.169	3.172	-0.003	148689	1.83	1.92	
						RPD = 0.02	
3 Ethane							
1	1.511	1.511	0.000	485411	3.42	3.57	
2	4.306	4.305	0.001	217520	3.42	3.56	
						RPD = 0.15	
4 Ethylene							M
1	1.791	1.793	-0.002	366405	3.19	3.32	
2	4.031	4.032	-0.001	157852	3.19	3.29	M
						RPD = 0.95	
5 Propane							
1	2.531	2.528	0.003	754733	5.02	5.27	
2	5.933	5.928	0.005	326853	5.02	5.22	
						RPD = 0.95	
6 Acetylene							Ma
1	4.043	4.015	0.028	105983	2.96	3.09	a
2	4.136	4.137	-0.001	66161	2.96	3.06	M
						RPD = 0.92	
7 Butane							
1	4.311	4.286	0.025	850630	6.61	6.77	
2	7.379	7.375	0.004	410288	6.61	6.75	
						RPD = 0.31	
8 isobutylene							
1	5.184	5.163	0.021	571566	6.38	6.40	
2	7.229	7.227	0.002	264983	6.38	6.38	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

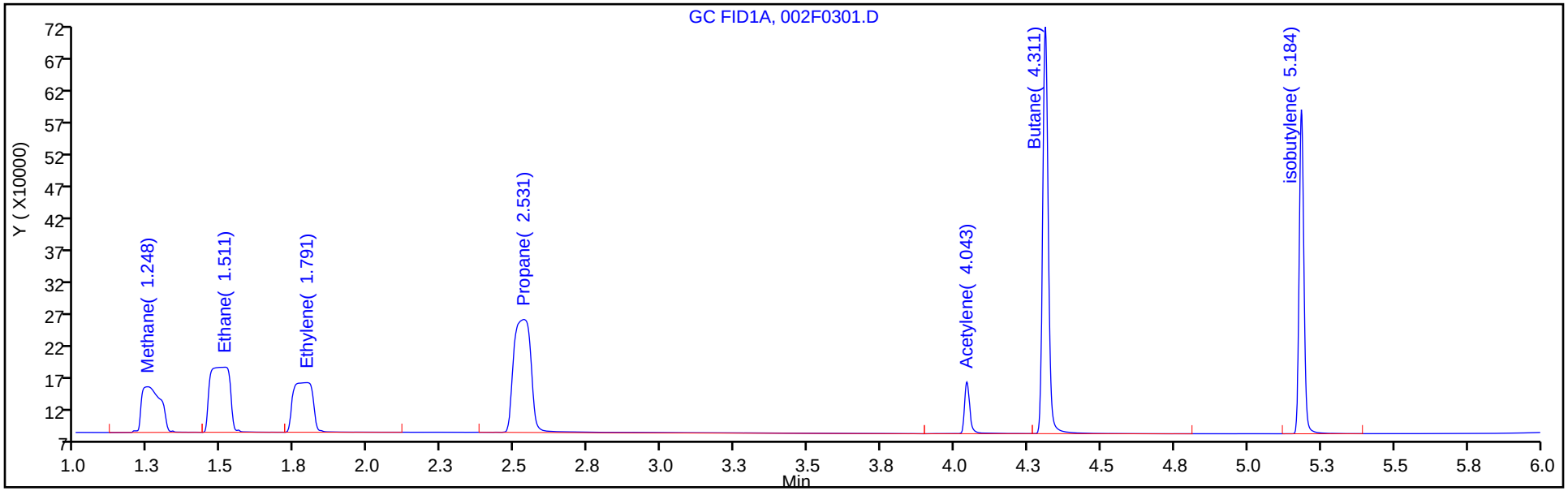
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

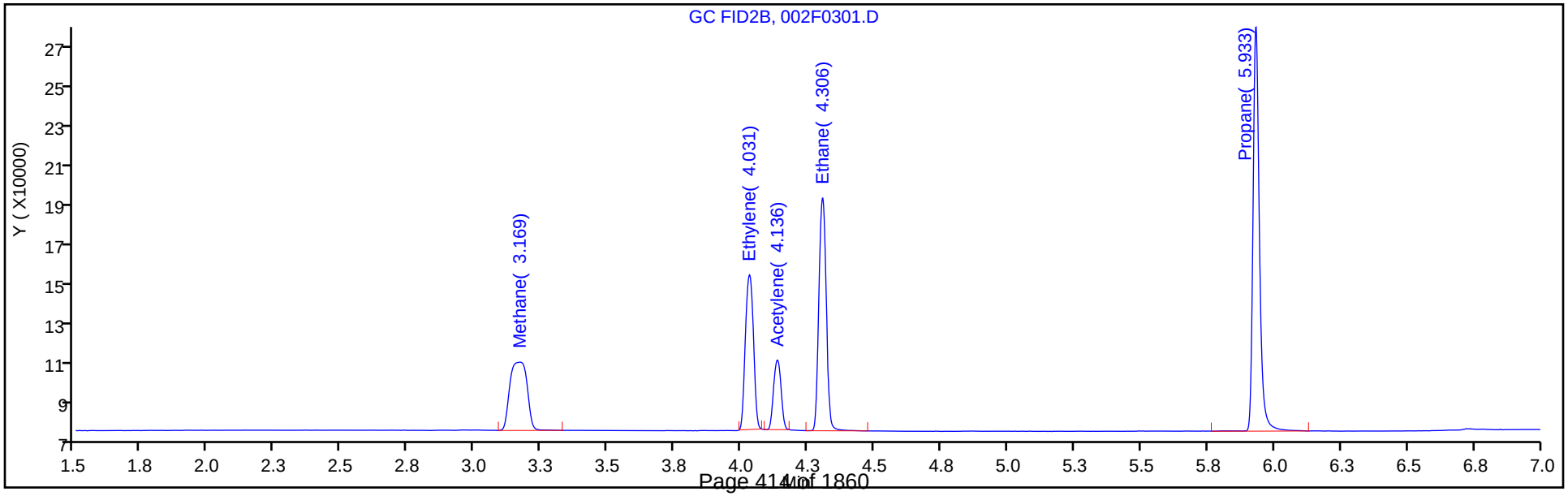
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D

Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L3			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

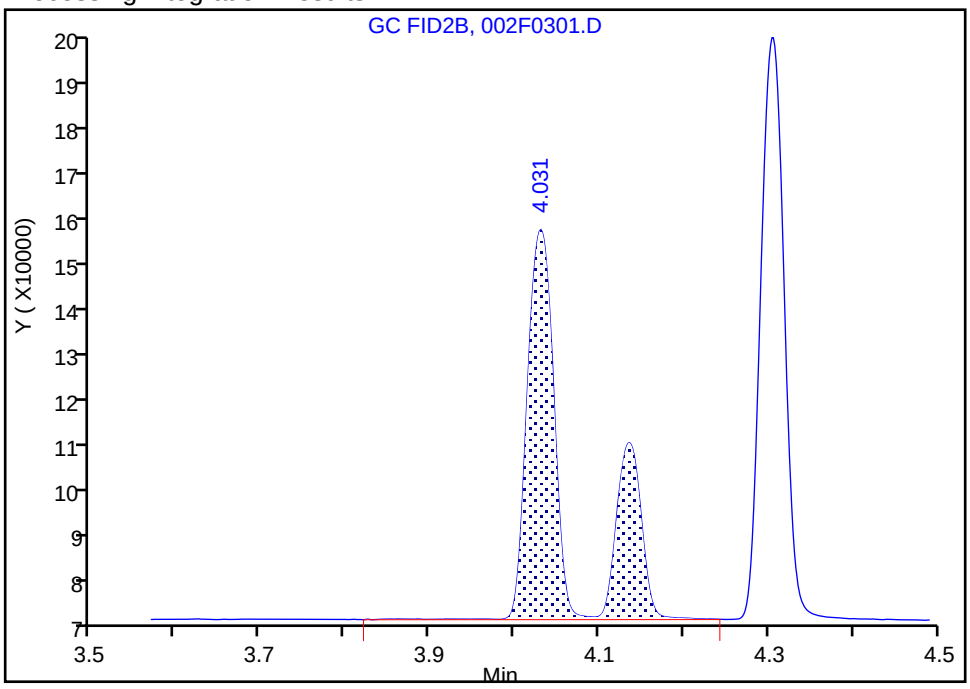
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

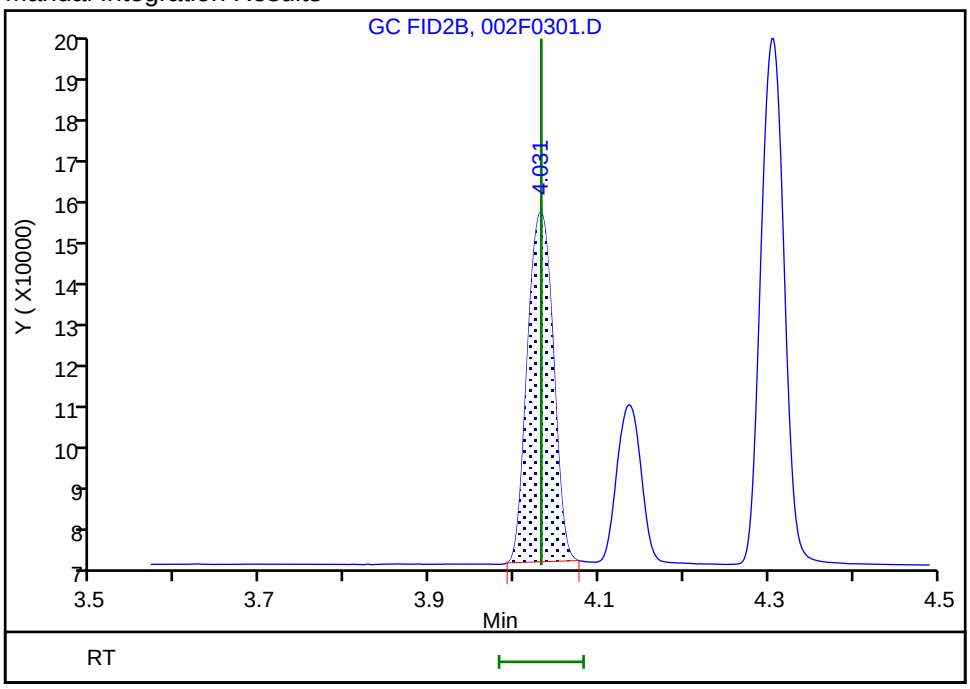
Processing Integration Results

RT: 4.03
Area: 232536
Amount: 4.445704
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 157852
Amount: 3.293132
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:44:57

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

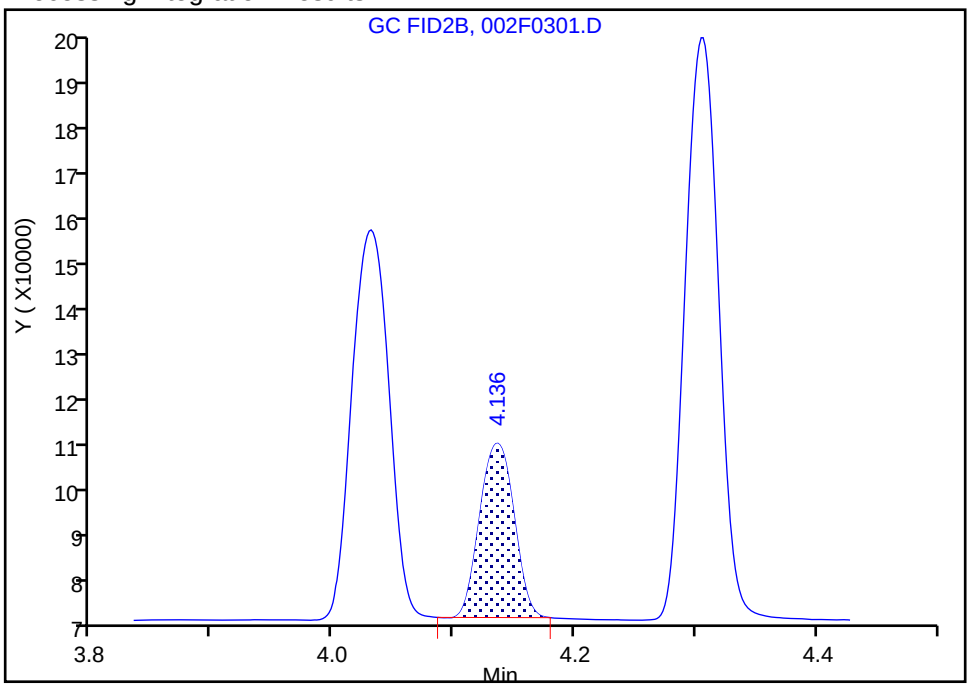
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

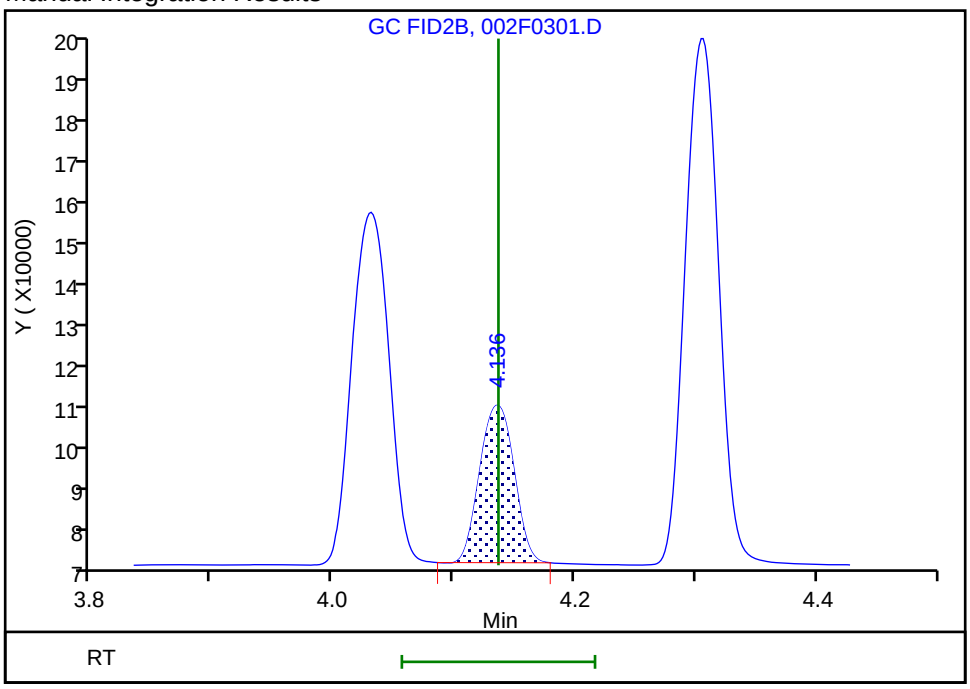
Processing Integration Results

RT: 4.14
Area: 66161
Amount: 2.336755
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 66161
Amount: 3.062230
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:45:15

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-May-2020 11:46:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	2196261	14.6	14.9	
2	3.171	3.172	-0.001	1043265	14.6	15.0	
						RPD = 0.32	
3 Ethane							
1	1.510	1.511	-0.001	3889050	27.4	28.6	
2	4.306	4.305	0.001	1745027	27.4	28.6	
						RPD = 0.02	
4 Ethylene							
1	1.792	1.793	-0.001	2933658	25.5	26.6	
2	4.032	4.032	0.000	1284690	25.5	26.8	
						RPD = 0.69	
5 Propane							
1	2.534	2.528	0.006	5864755	40.1	40.9	
2	5.932	5.928	0.004	2613101	40.1	41.7	
						RPD = 1.89	
6 Acetylene							M
1	4.034	4.015	0.019	837564	23.7	24.4	
2	4.136	4.137	-0.001	545422	23.7	25.2	M
						RPD = 3.31	
7 Butane							
1	4.304	4.286	0.018	6888912	52.9	52.5	
2	7.381	7.375	0.006	3316499	52.9	52.3	
						RPD = 0.43	
8 isobutylene							
1	5.179	5.163	0.016	4611649	51.1	51.7	
2	7.231	7.227	0.004	2147651	51.1	51.7	
						RPD = 0.03	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

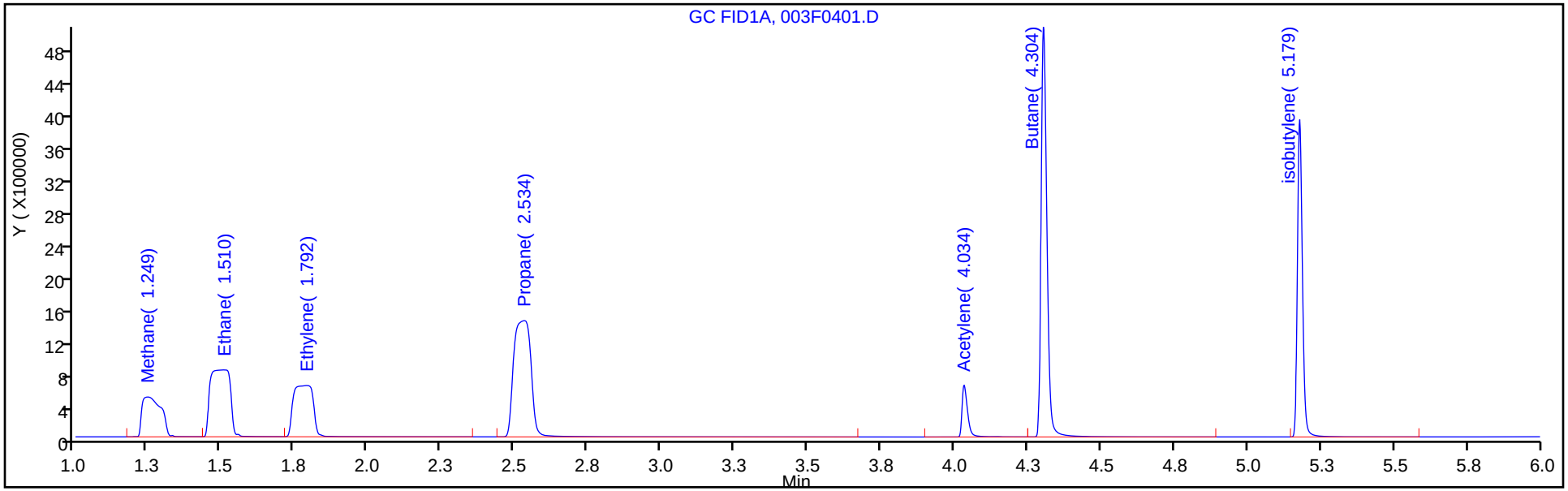
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

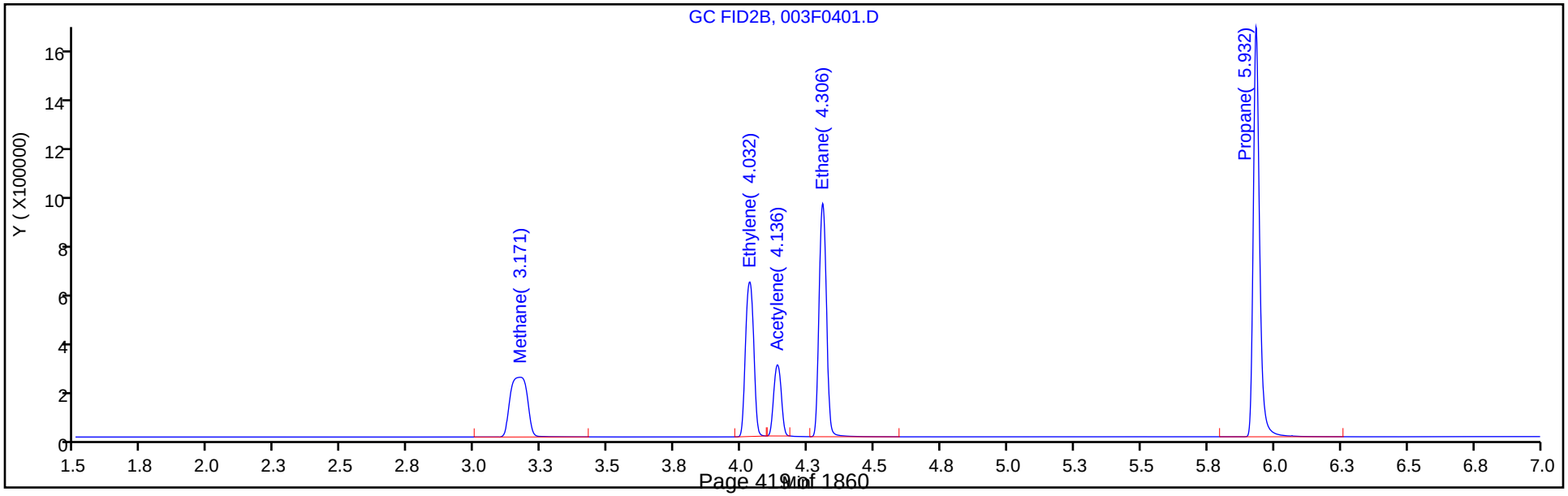
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D

Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L4			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

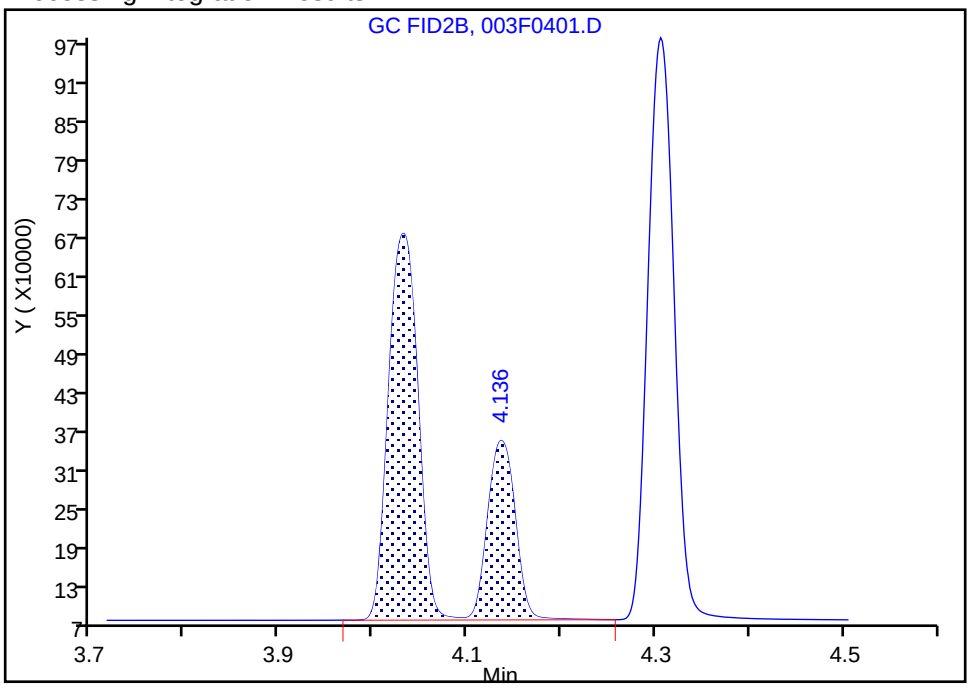
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D				
Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J		
Lims ID:	IC L4				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

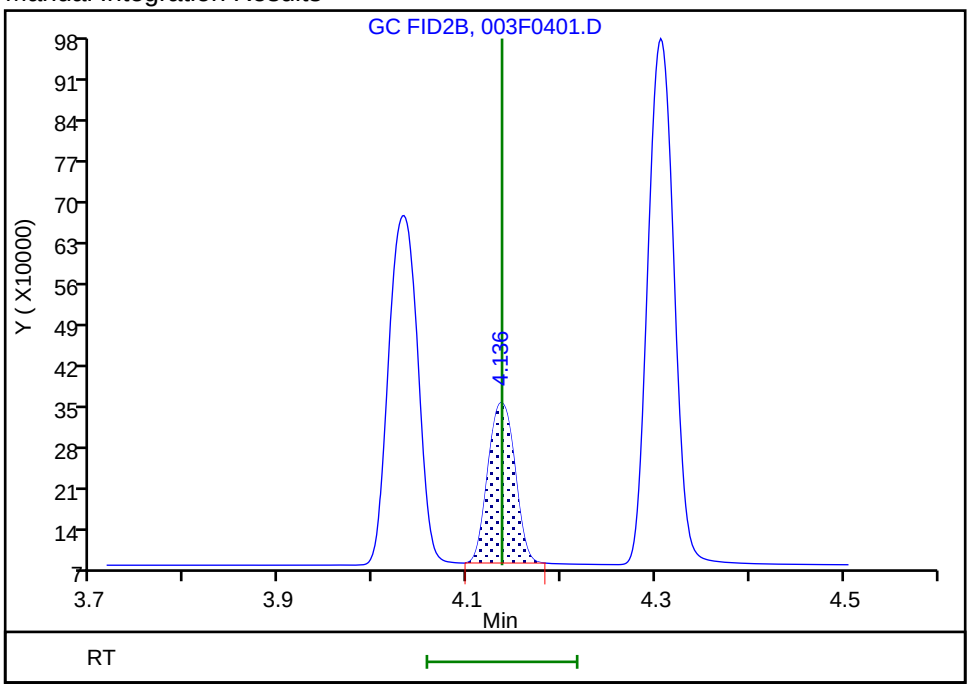
Processing Integration Results

RT: 4.14
Area: 1861367
Amount: 51.616625
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 545422
Amount: 25.244597
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:46:16

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D
Lims ID: ICRT L5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 16-May-2020 12:02:59 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT 5
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	10173489	73.0	70.4	
2	3.172	3.172	0.000	4836394	73.0	70.4	
						RPD = 0.05	
3 Ethane							
1	1.511	1.511	0.000	18547040	136.9	136.3	
2	4.305	4.305	0.000	8282362	136.9	135.7	
						RPD = 0.50	
4 Ethylene							M
1	1.793	1.793	0.000	14030935	127.7	127.3	
2	4.032	4.032	0.000	6120221	127.7	127.7	M
						RPD = 0.29	
5 Propane							
1	2.528	2.528	0.000	28325635	200.7	197.7	
2	5.928	5.928	0.000	12604888	200.7	201.3	
						RPD = 1.77	
6 Acetylene							Ma
1	4.015	4.015	0.000	3792795	118.5	110.6	M
2	4.137	4.137	0.000	2629705	118.5	121.7	M
						RPD = 9.57	
7 Butane							Ma
1	4.286	4.286	0.000	34343170	264.5	260.4	M
2	7.375	7.375	0.000	16648646	264.5	261.1	a
						RPD = 0.27	
8 isobutylene							
1	5.163	5.163	0.000	23123734	255.4	259.0	
2	7.227	7.227	0.000	10785387	255.4	259.5	
						RPD = 0.19	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

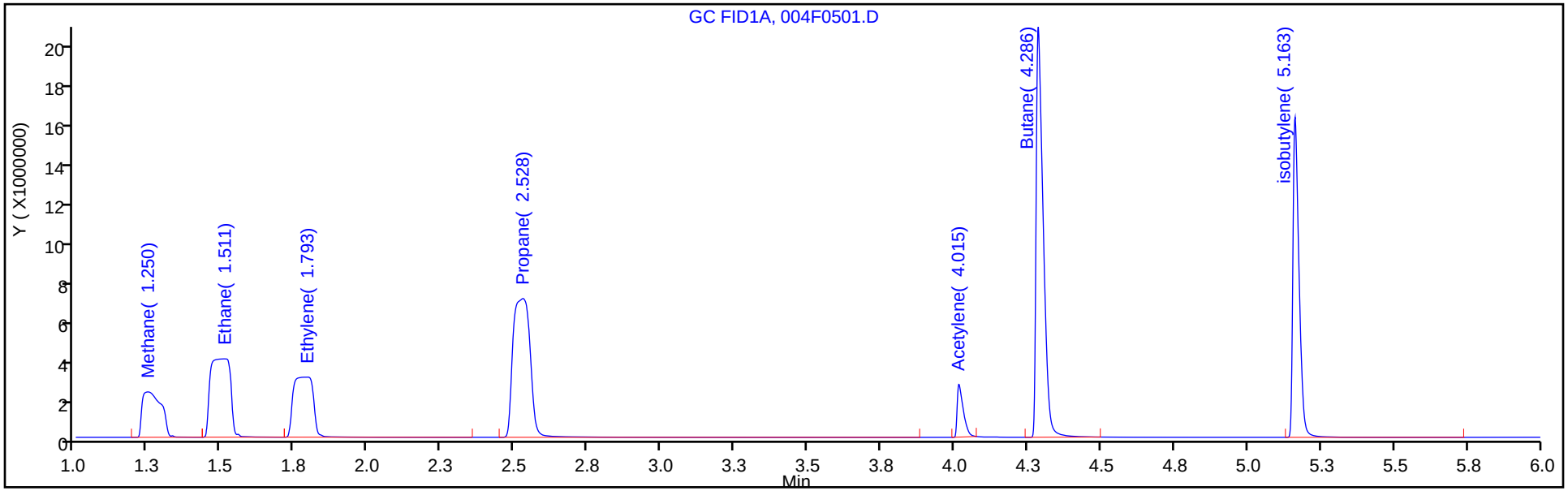
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

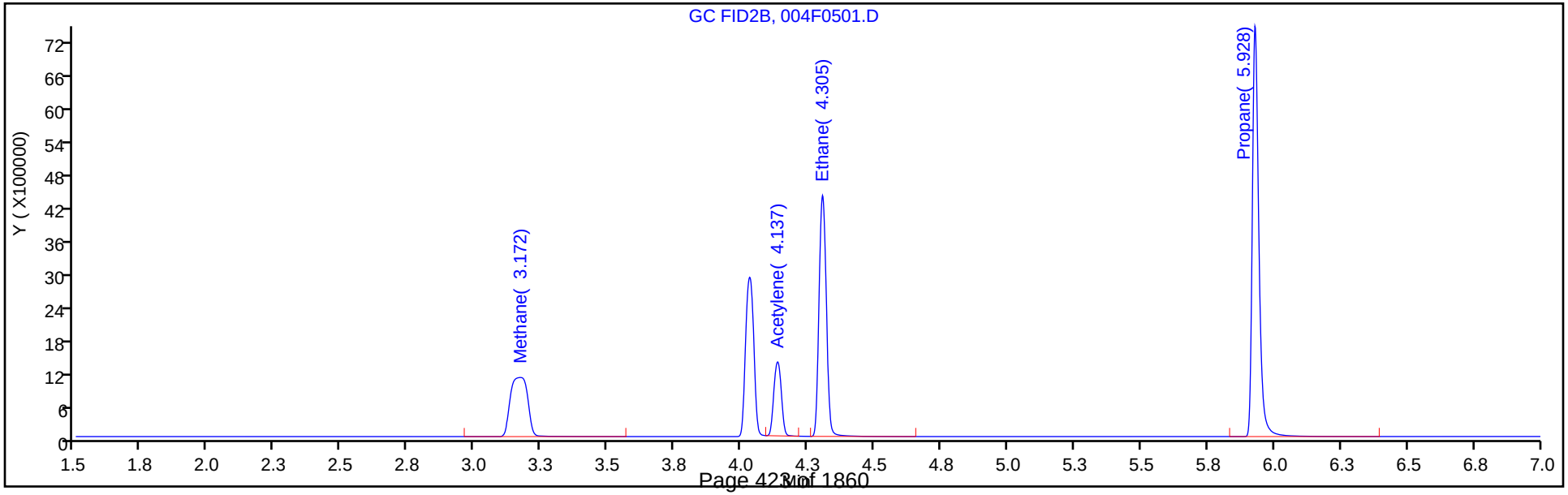
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D

Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICRT L5			Worklist Smp#:	10
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

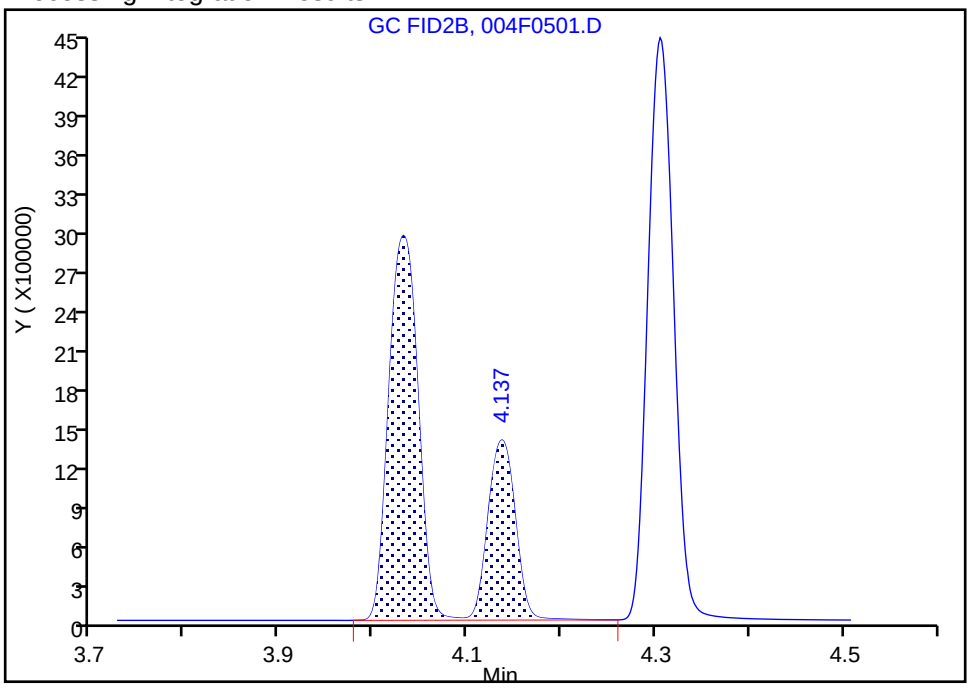
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

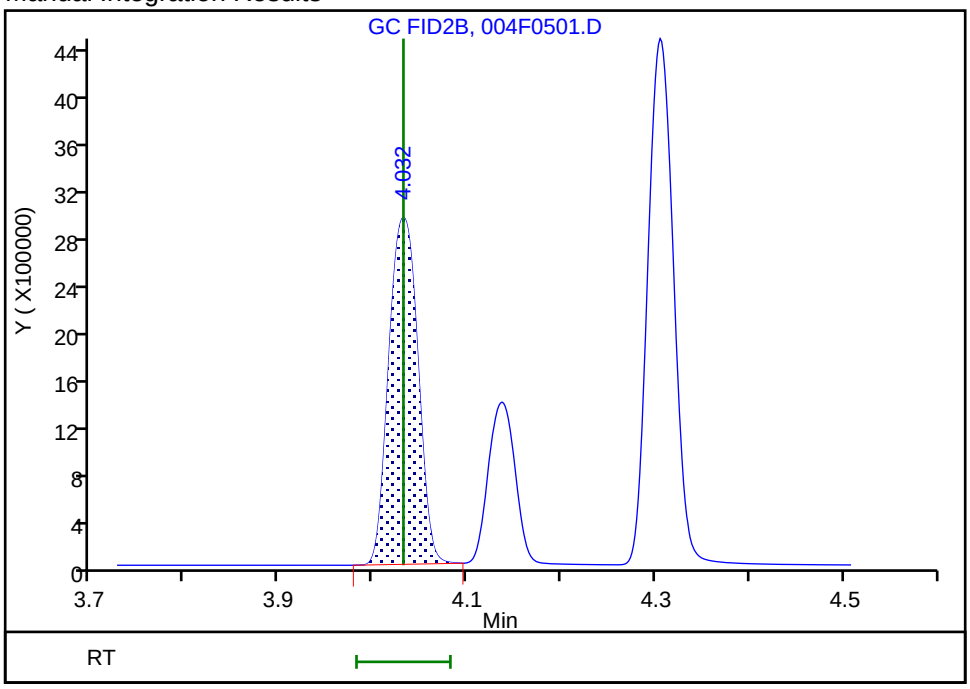
Processing Integration Results

RT: 4.14
Area: 8876599
Amount: 170.8990
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6120221
Amount: 127.6810
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:06:47

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

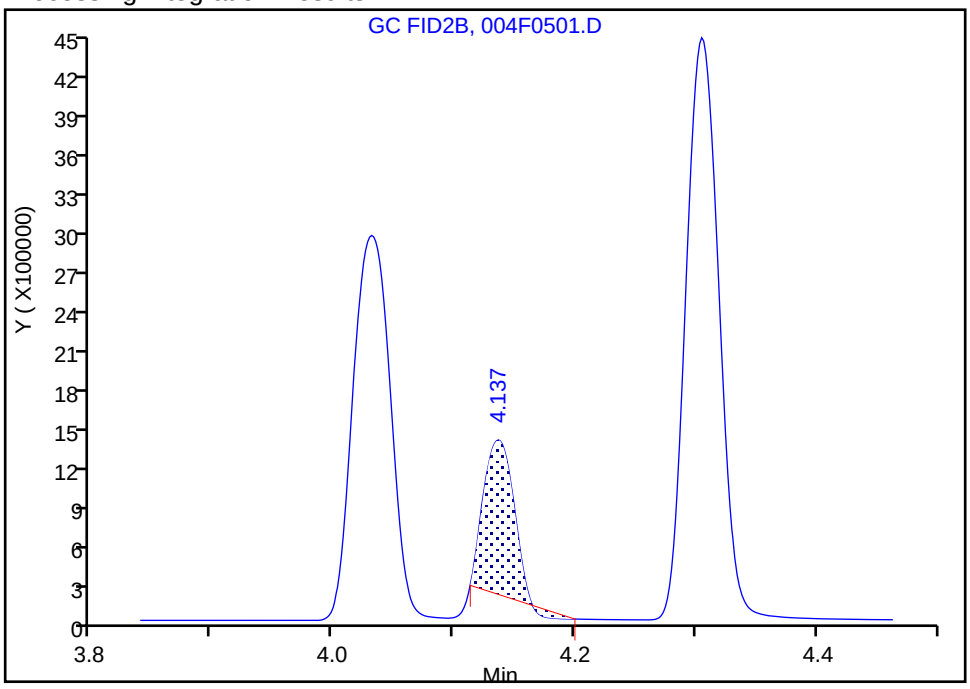
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

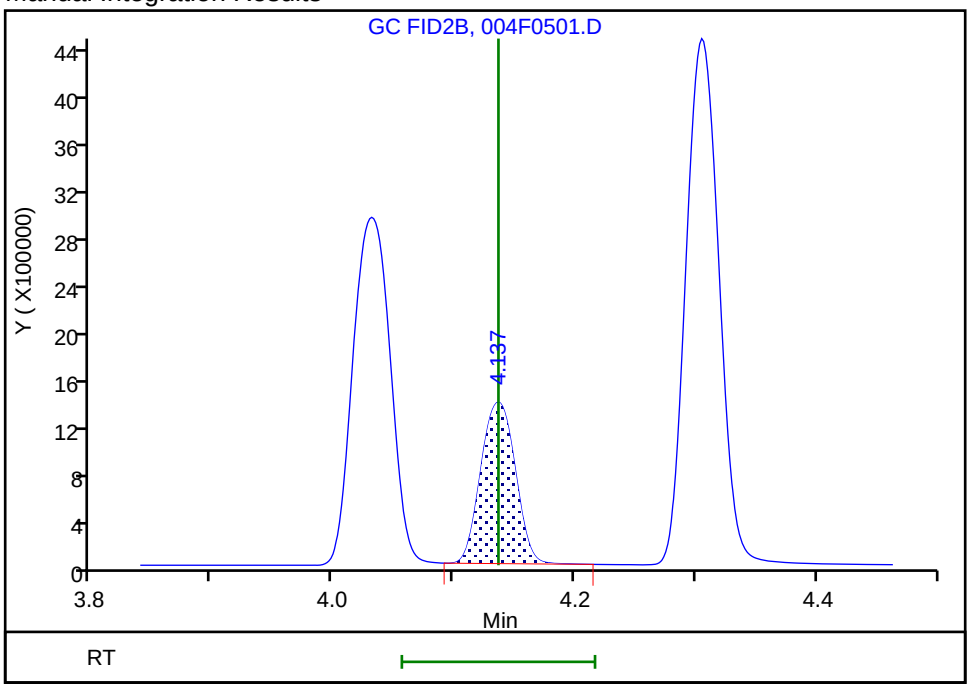
Processing Integration Results

RT: 4.14
Area: 1926231
Amount: 70.054658
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2629705
Amount: 121.7146
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:07:42

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-May-2020 12:19:27 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	21349465	146.0	148.2	
2	3.172	3.172	0.000	10129316	146.0	147.7	
						RPD = 0.31	
3 Ethane							
1	1.512	1.511	0.001	38849075	273.7	285.6	
2	4.306	4.305	0.001	17331467	273.7	283.9	
						RPD = 0.60	
4 Ethylene							
1	1.785	1.793	-0.008	29199476	255.3	264.9	
2	4.032	4.032	0.000	12731776	255.3	265.6	
						RPD = 0.26	
5 Propane							
1	2.522	2.528	-0.006	59231481	401.4	413.5	
2	5.926	5.928	-0.002	26366224	401.4	421.0	
						RPD = 1.80	
6 Acetylene							M
1	4.002	4.015	-0.013	8293493	237.0	241.8	
2	4.137	4.137	0.000	5438964	237.0	251.7	M
						RPD = 4.01	
7 Butane							
1	4.270	4.286	-0.016	71750490	529.0	543.6	
2	7.369	7.375	-0.006	34602301	529.0	542.3	
						RPD = 0.25	
8 isobutylene							Ma
1	5.150	5.163	-0.013	47351348	510.8	530.4	M
2	7.222	7.227	-0.005	22287396	510.8	536.3	a
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

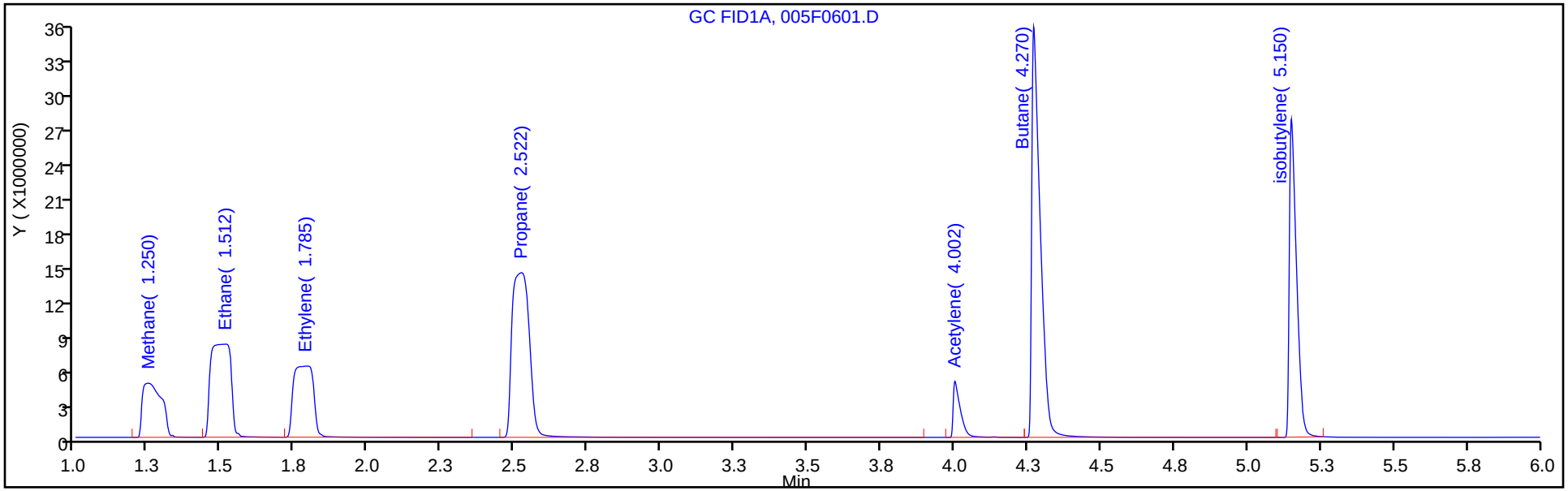
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

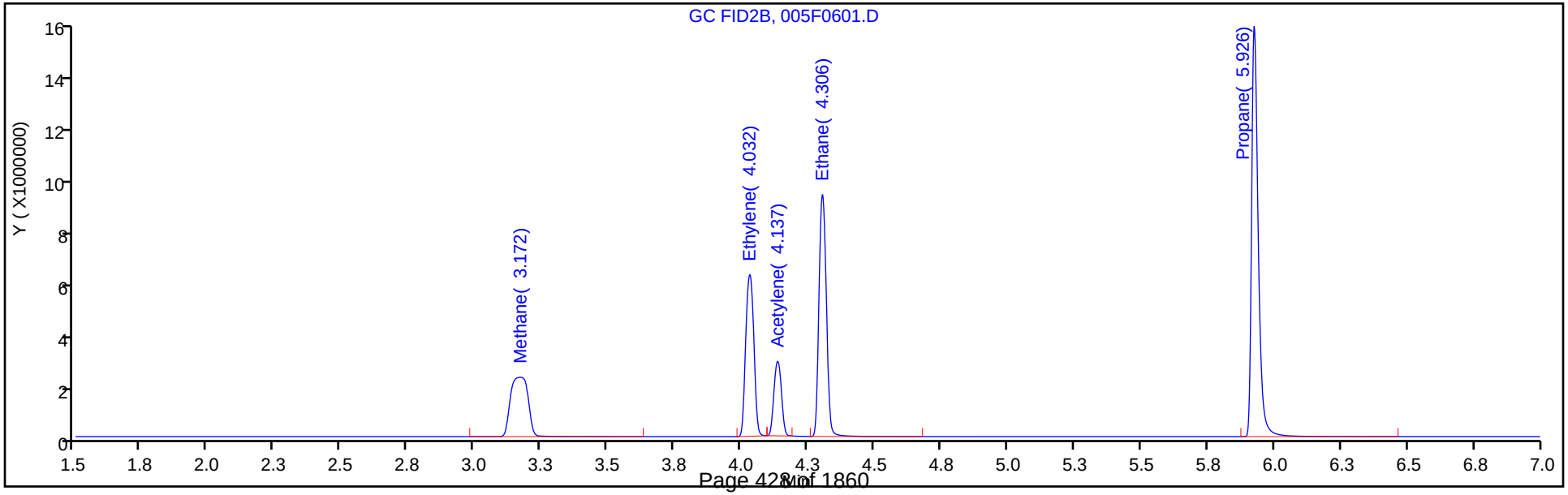
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D

Injection Date:	16-May-2020 12:19:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L6			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

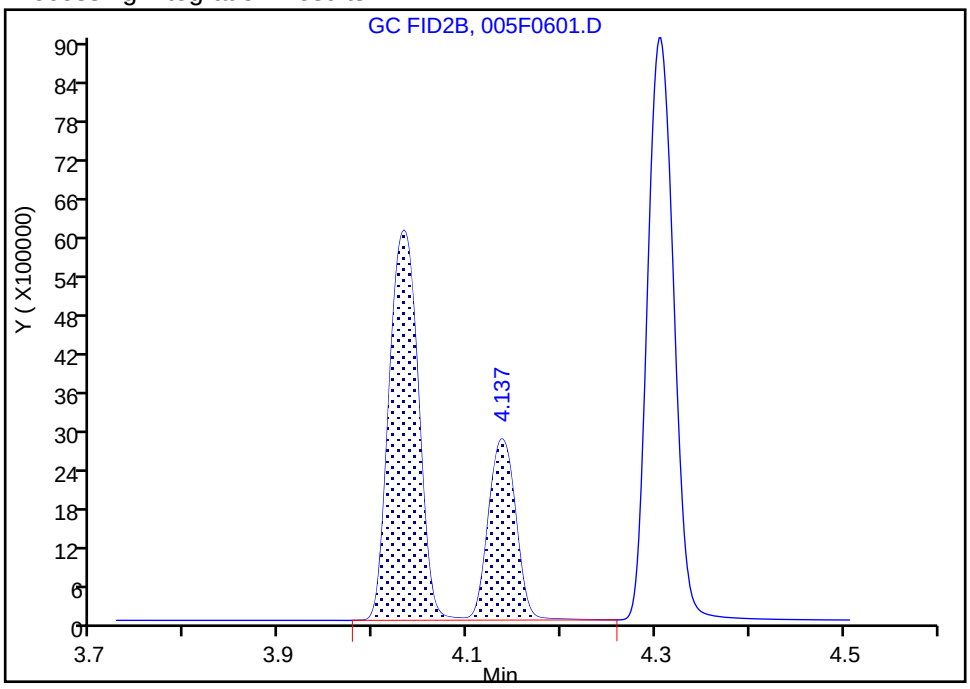
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D
Injection Date: 16-May-2020 12:19:27 Instrument ID: VGC_J
Lims ID: IC L6
Client ID:
Operator ID: MEIERG ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

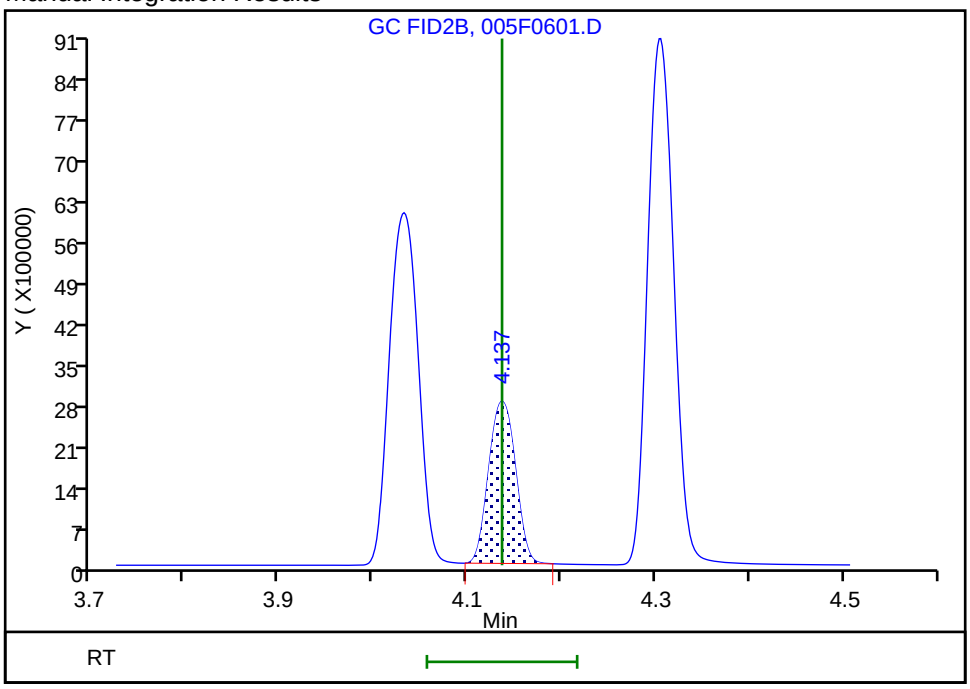
Processing Integration Results

RT: 4.14
Area: 18449274
Amount: 510.5285
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 5438964
Amount: 251.7399
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:09:29
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-May-2020 12:35:56 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.243	1.250	-0.007	40706597	292.0	282.9	
2	3.168	3.172	-0.004	19242711	292.0	280.9	
						RPD = 0.71	
3 Ethane							
1	1.508	1.511	-0.003	74364849	547.4	546.6	
2	4.302	4.305	-0.003	33180606	547.4	543.4	
						RPD = 0.58	
4 Ethylene							
1	1.785	1.793	-0.008	55873290	510.7	507.0	
2	4.028	4.032	-0.004	24365732	510.7	508.3	
						RPD = 0.27	
5 Propane							
1	2.510	2.528	-0.018	113846992	802.8	794.7	
2	5.920	5.928	-0.008	50751227	802.8	810.3	
						RPD = 1.94	
6 Acetylene							M
1	3.983	4.015	-0.032	15971476	474.1	465.7	
2	4.135	4.137	-0.002	10316086	474.1	477.5	M
						RPD = 2.49	
7 Butane							
1	4.250	4.286	-0.036	137944774	1058.1	1044.9	
2	7.362	7.375	-0.013	67311032	1058.1	1054.6	
						RPD = 0.92	
8 isobutylene							
1	5.133	5.163	-0.030	92637372	1021.5	1037.7	
2	7.217	7.227	-0.010	43289193	1021.5	1041.6	
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

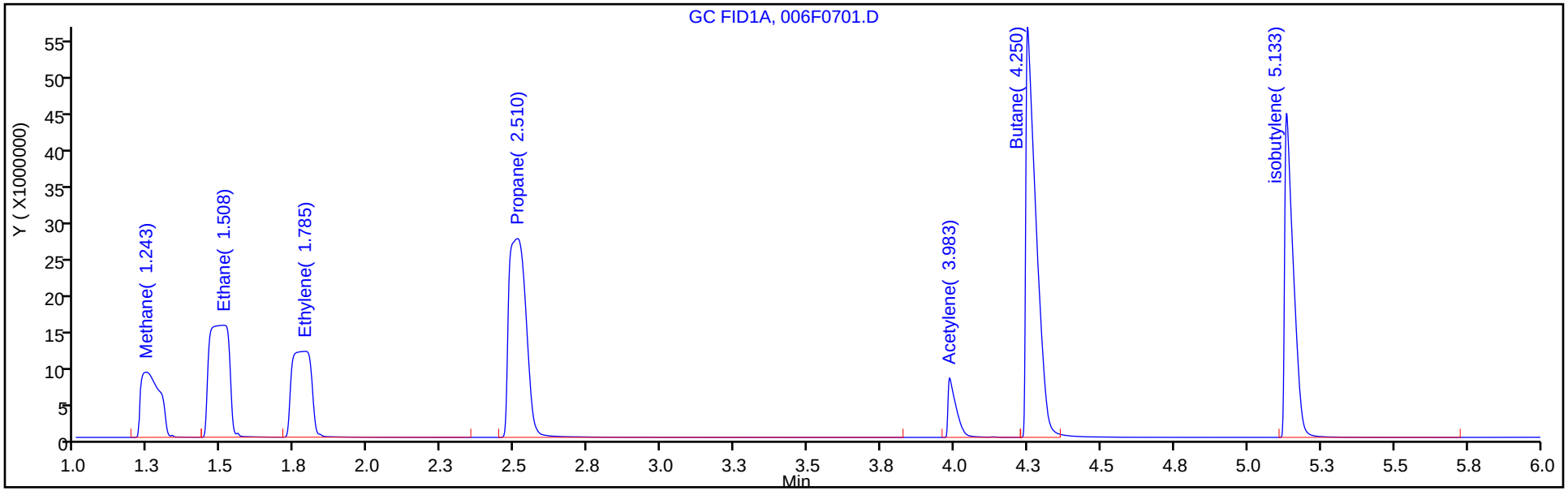
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

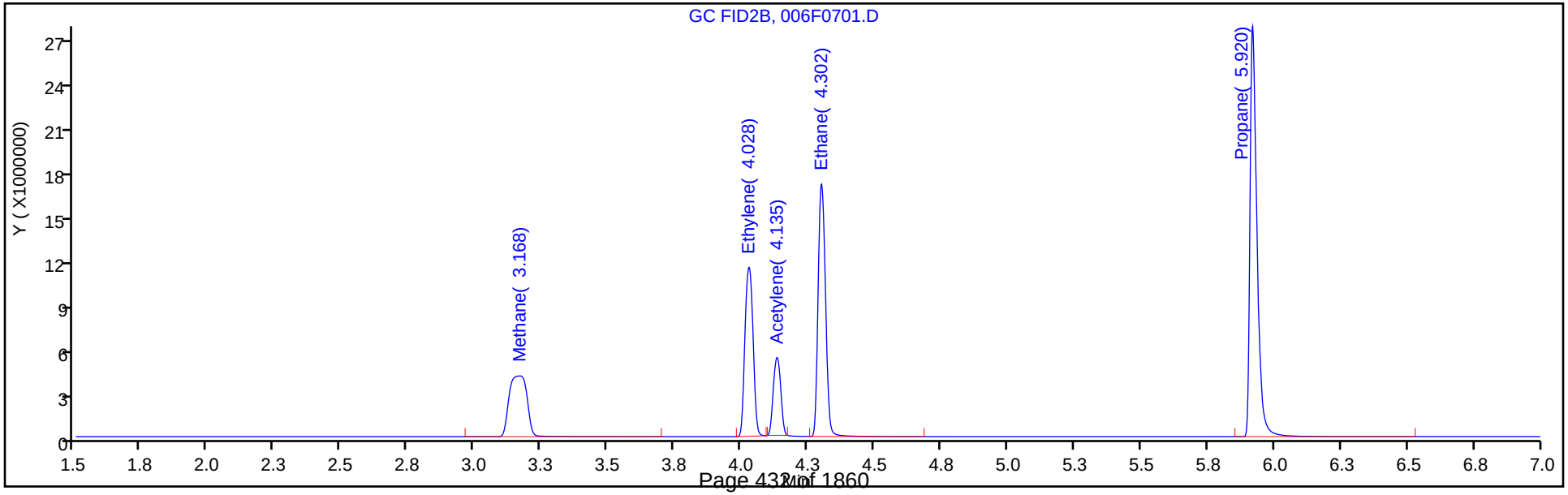
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D

Injection Date:	16-May-2020 12:35:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L7			Worklist Smp#:	12
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



Eurofins TestAmerica, Denver

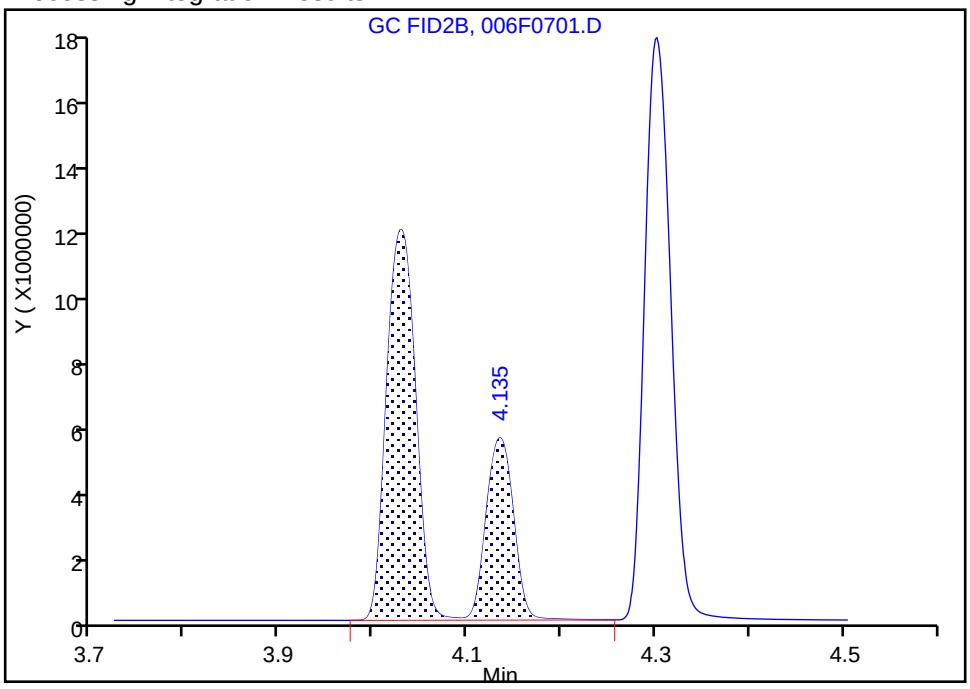
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D
Injection Date: 16-May-2020 12:35:56 Instrument ID: VGC_J
Lims ID: IC L7
Client ID:
Operator ID: MEIERG ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

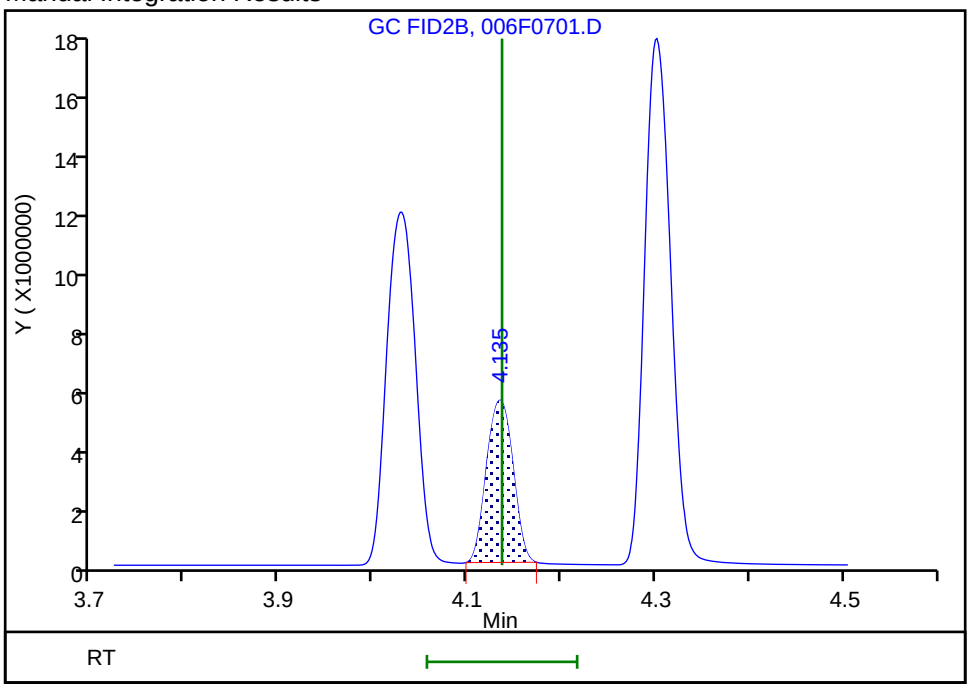
Processing Integration Results

RT: 4.13
Area: 35374141
Amount: 990.6352
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 10316086
Amount: 477.4751
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:16:23
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D				
Lims ID:	IC L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	16-May-2020 12:52:27	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 8				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	256592942	1806.9	1784.9	
2	3.168	3.172	-0.004	121745624	1806.9	1778.4	
						RPD = 0.36	

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

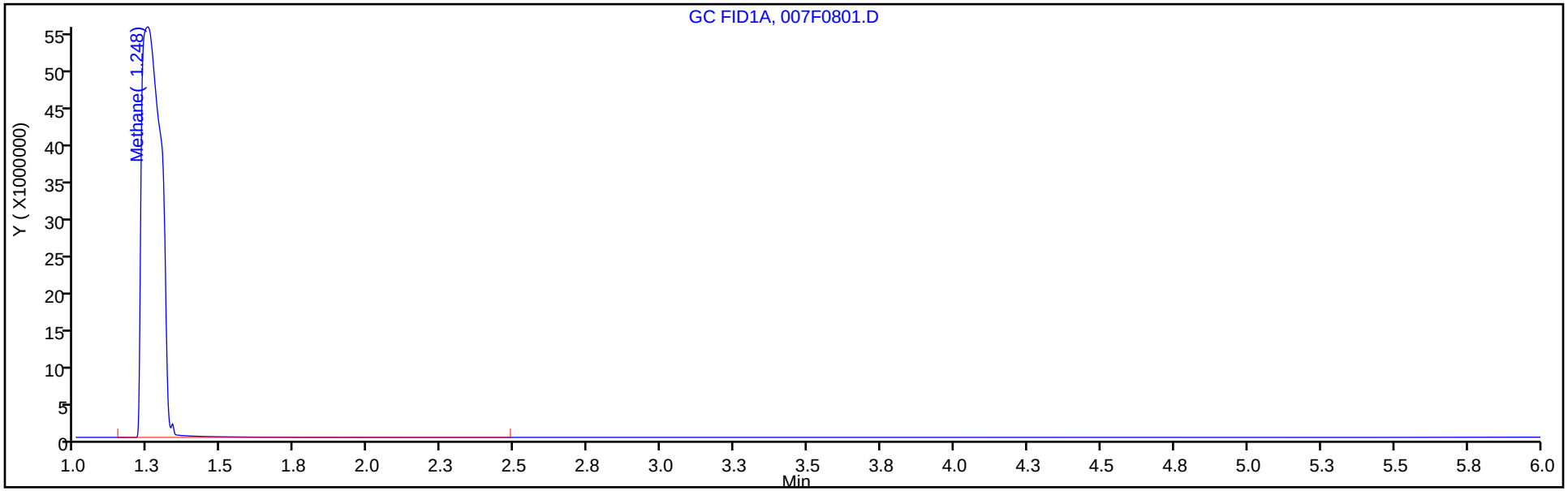
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

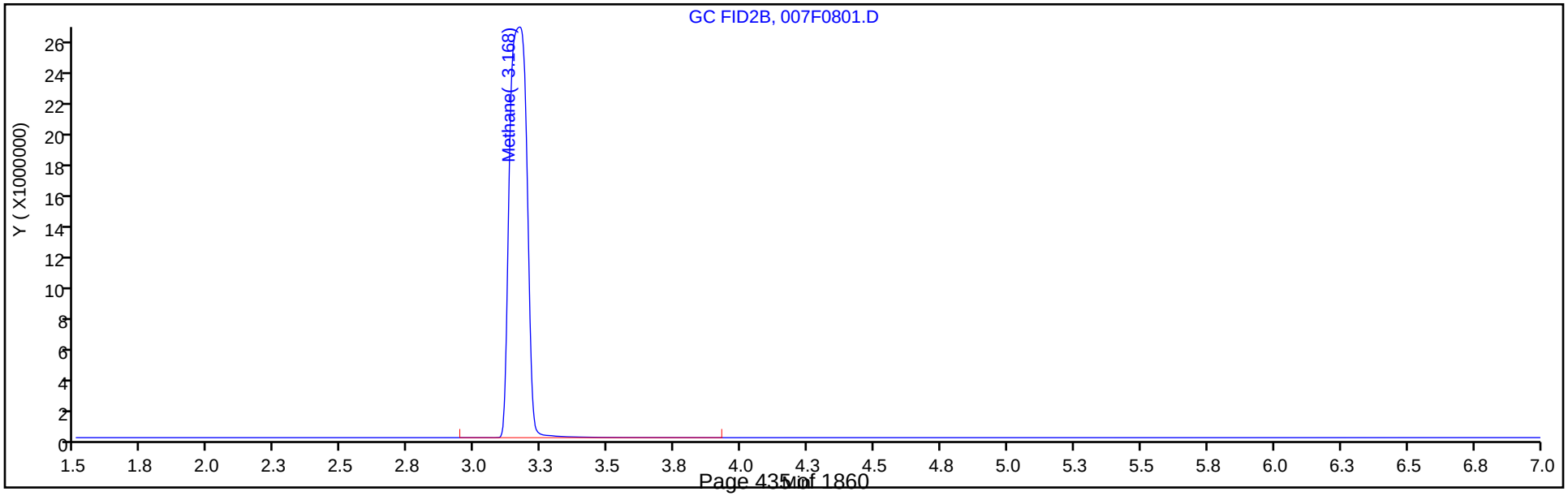
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D

Injection Date:	16-May-2020 12:52:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L8			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Lims ID:	IC L9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	16-May-2020 13:08:56	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 9				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.245	1.250	-0.005	1008615918	7227.8	7016.9	
2	3.160	3.172	-0.012	484781088	7227.8	7082.2	
						RPD = 0.93	

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

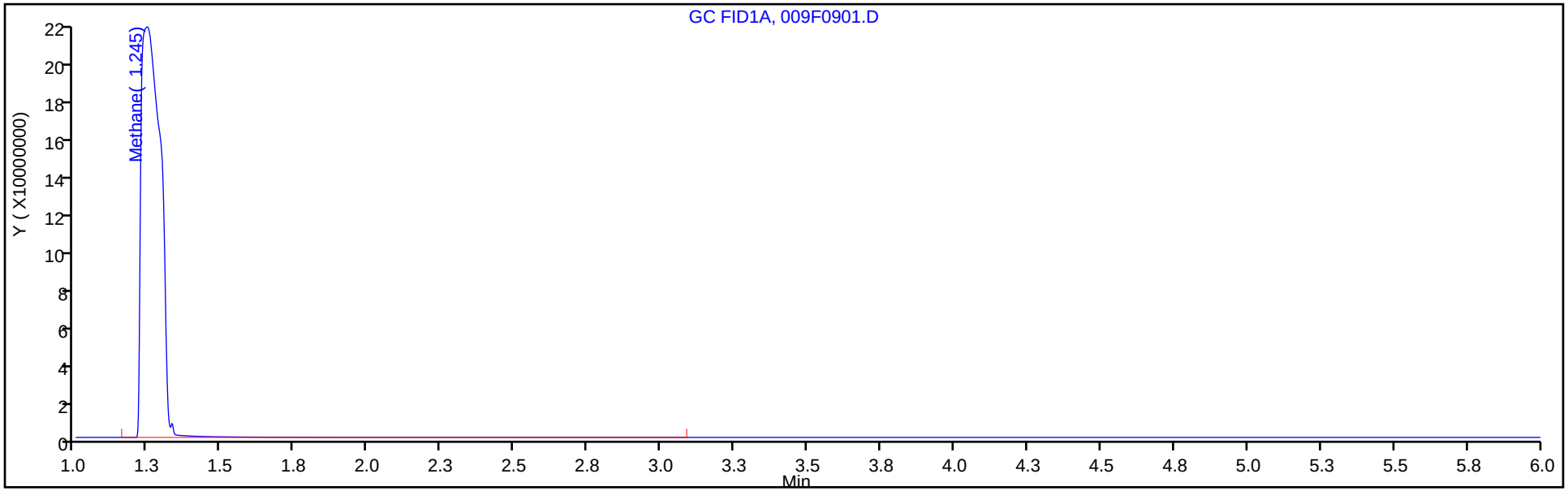
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

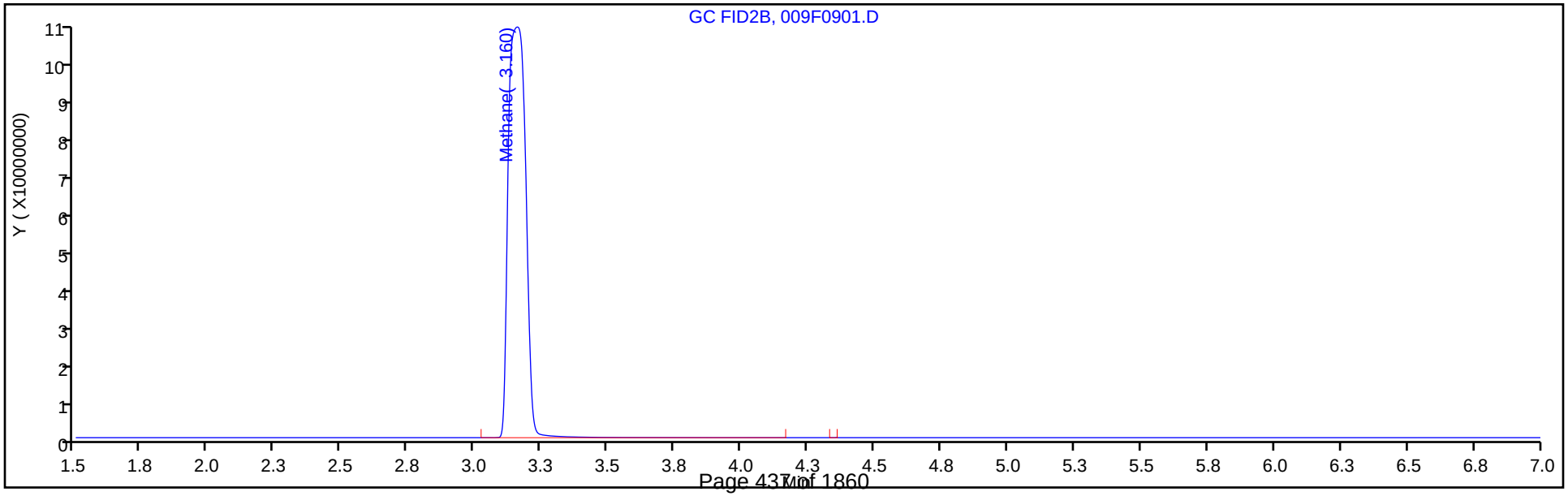
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Injection Date:	16-May-2020 13:08:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L9			Worklist Smp#:	14
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.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		158281		80.1	73.0	9.7	20.0
Ethane	Ave	136043	153595		155	137	12.9	20.0
Ethylene	Ave	110213	122313		142	128	11.0	20.0
Acetylene	Ave	34294	36540		126	119	6.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.51	1.46	1.56
Ethylene	1.79	1.74	1.84
Acetylene	4.01	3.94	4.10

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-May-2020 13:25:26 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: MEIERG Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 09:03:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	11555066	73.0	80.1	
2	3.171	3.172	-0.001	5497214	73.0	80.1	
						RPD = 0.01	
3 Ethane							
1	1.513	1.511	0.002	21020301	136.9	154.5	
2	4.305	4.305	0.000	9395211	136.9	153.9	
						RPD = 0.41	
4 Ethylene							
1	1.791	1.793	-0.002	15615273	127.7	141.7	
2	4.031	4.032	-0.001	6823571	127.7	142.4	
						RPD = 0.47	
5 Propane							
1	2.524	2.528	-0.004	32214966	200.7	224.9	
2	5.930	5.928	0.002	14336595	200.7	228.9	
						RPD = 1.77	
6 Acetylene							M
1	4.008	4.015	-0.007	4330795	118.5	126.3	
2	4.136	4.137	-0.001	2842552	118.5	131.6	M
						RPD = 4.10	
7 Butane							Ma
1	4.279	4.286	-0.007	38944801	264.5	295.2	M
2	7.373	7.375	-0.002	18966689	264.5	297.4	a
						RPD = 0.73	
8 isobutylene							
1	5.156	5.163	-0.007	25717354	255.4	288.1	
2	7.226	7.227	-0.001	12003603	255.4	288.8	
						RPD = 0.26	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

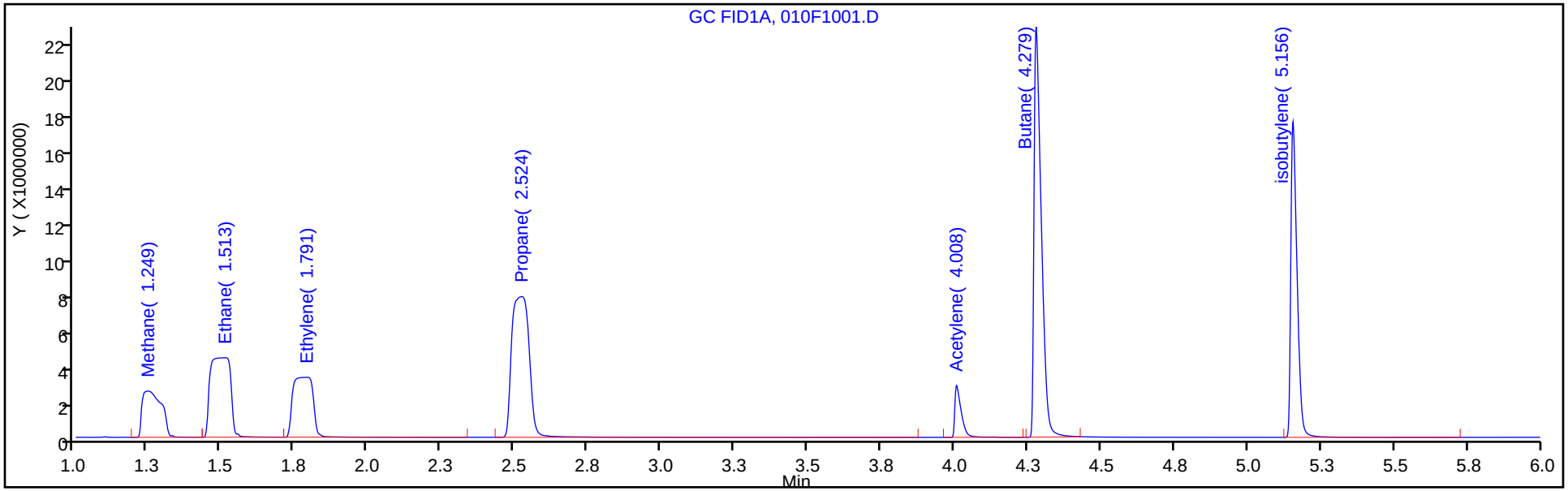
Report Date: 17-May-2020 09:03:52 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

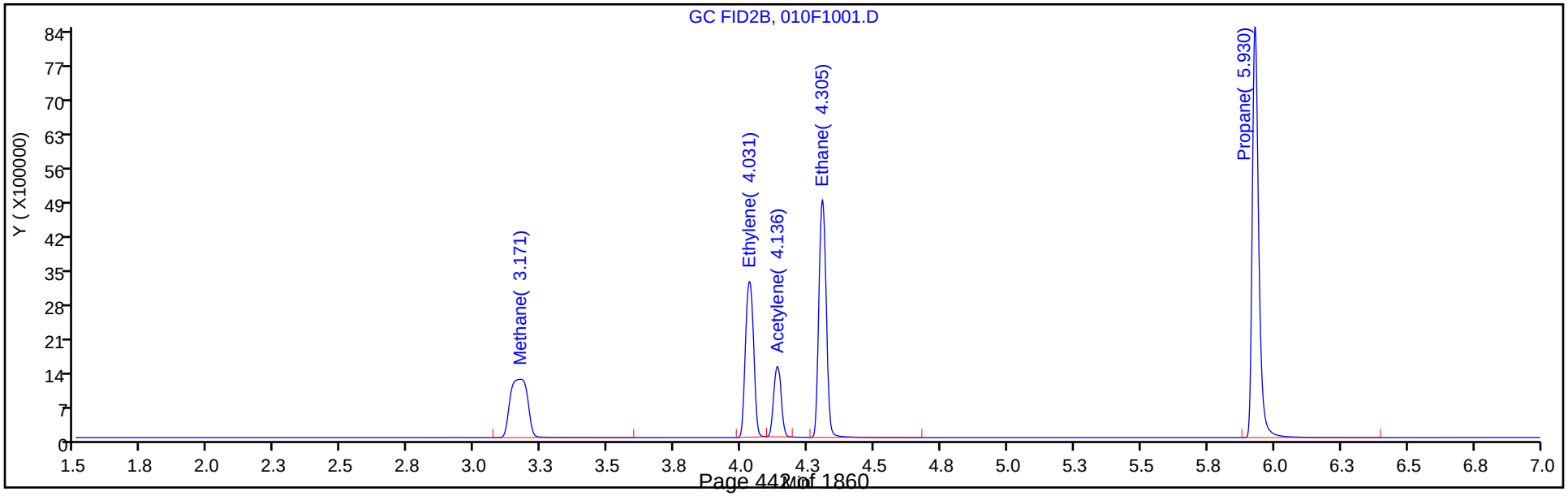
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D

Injection Date:	16-May-2020 13:25:26	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICV			Worklist Smp#:	16
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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.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		75301		80.1	73.0	9.7	20.0
Ethylene	Ave	47934	53448		142	128	11.5	20.0
Acetylene	Ave	21605	23983		132	119	11.0	20.0
Ethane	Ave	61056	68651		154	137	12.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.13	3.21
Ethylene	4.03	3.98	4.08
Acetylene	4.14	4.06	4.22
Ethane	4.31	4.26	4.36

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-May-2020 13:25:26 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: MEIERG Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 09:03:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	11555066	73.0	80.1	
2	3.171	3.172	-0.001	5497214	73.0	80.1	
						RPD = 0.01	
3 Ethane							
1	1.513	1.511	0.002	21020301	136.9	154.5	
2	4.305	4.305	0.000	9395211	136.9	153.9	
						RPD = 0.41	
4 Ethylene							
1	1.791	1.793	-0.002	15615273	127.7	141.7	
2	4.031	4.032	-0.001	6823571	127.7	142.4	
						RPD = 0.47	
5 Propane							
1	2.524	2.528	-0.004	32214966	200.7	224.9	
2	5.930	5.928	0.002	14336595	200.7	228.9	
						RPD = 1.77	
6 Acetylene							M
1	4.008	4.015	-0.007	4330795	118.5	126.3	
2	4.136	4.137	-0.001	2842552	118.5	131.6	M
						RPD = 4.10	
7 Butane							Ma
1	4.279	4.286	-0.007	38944801	264.5	295.2	M
2	7.373	7.375	-0.002	18966689	264.5	297.4	a
						RPD = 0.73	
8 isobutylene							
1	5.156	5.163	-0.007	25717354	255.4	288.1	
2	7.226	7.227	-0.001	12003603	255.4	288.8	
						RPD = 0.26	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

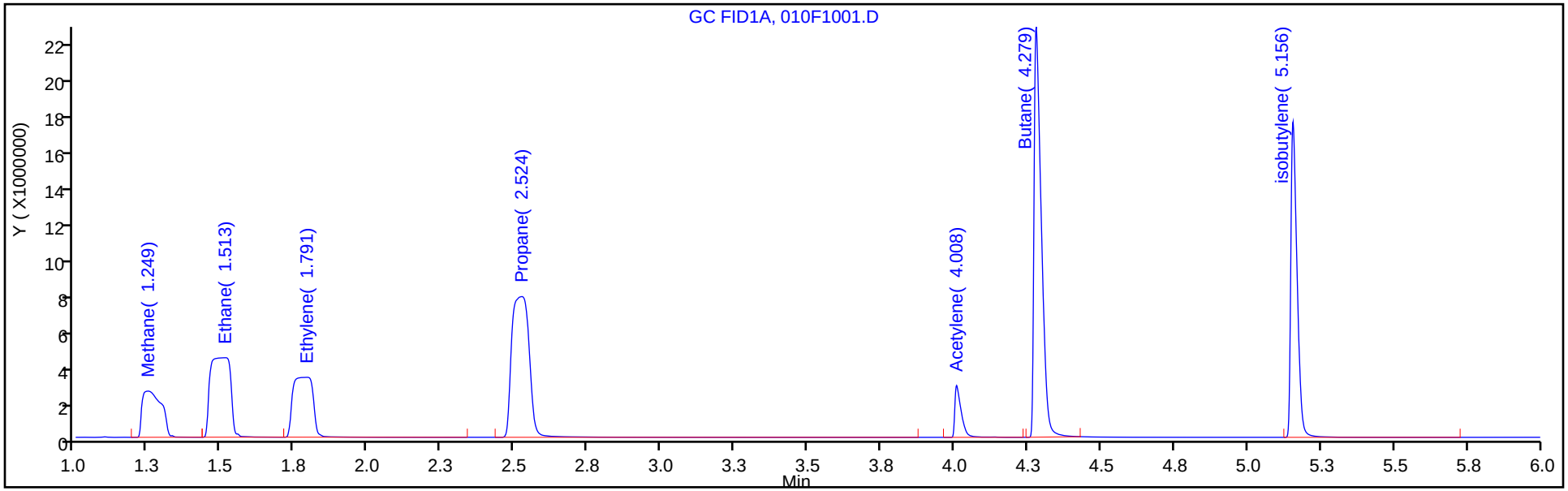
Report Date: 17-May-2020 09:03:52 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

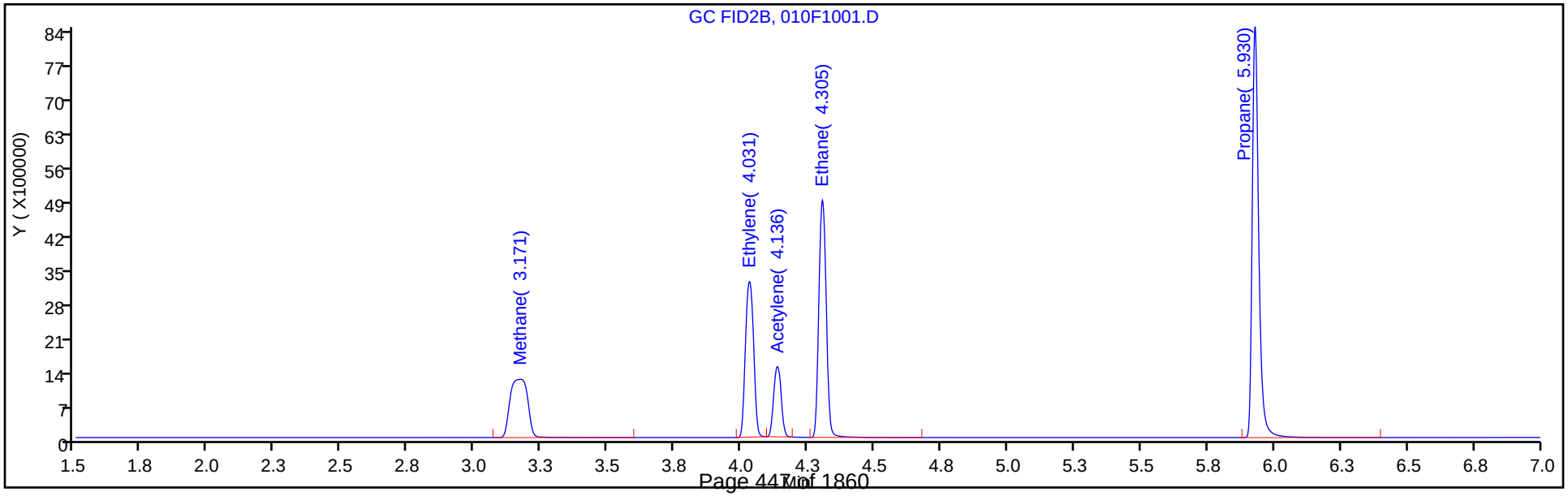
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D

Injection Date:	16-May-2020 13:25:26	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICV			Worklist Smp#:	16
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

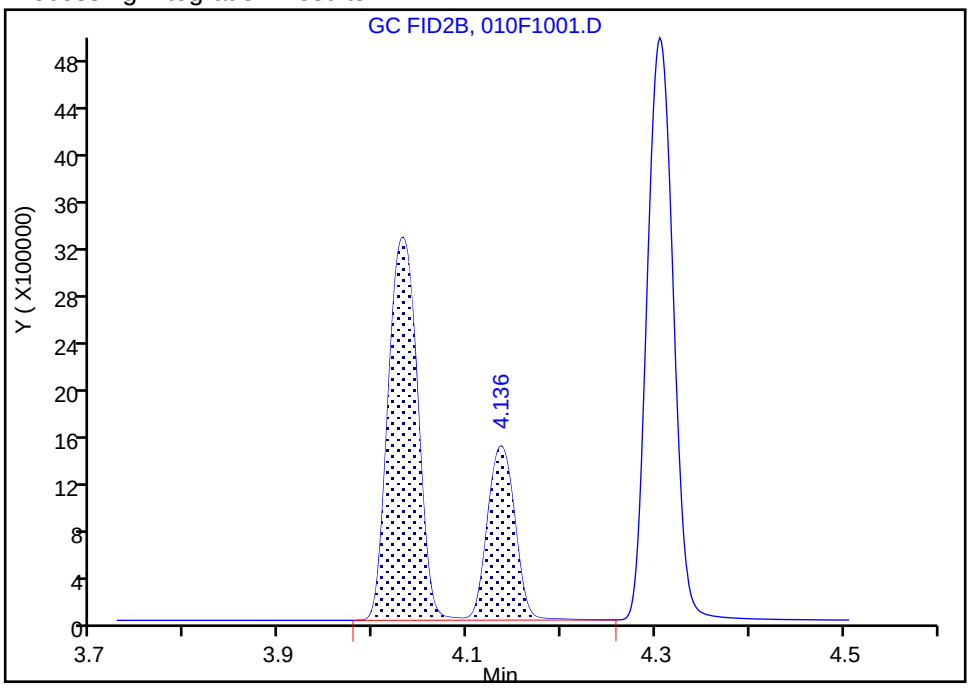
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D
Injection Date: 16-May-2020 13:25:26 Instrument ID: VGC_J
Lims ID: ICV
Client ID:
Operator ID: MEIERG ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

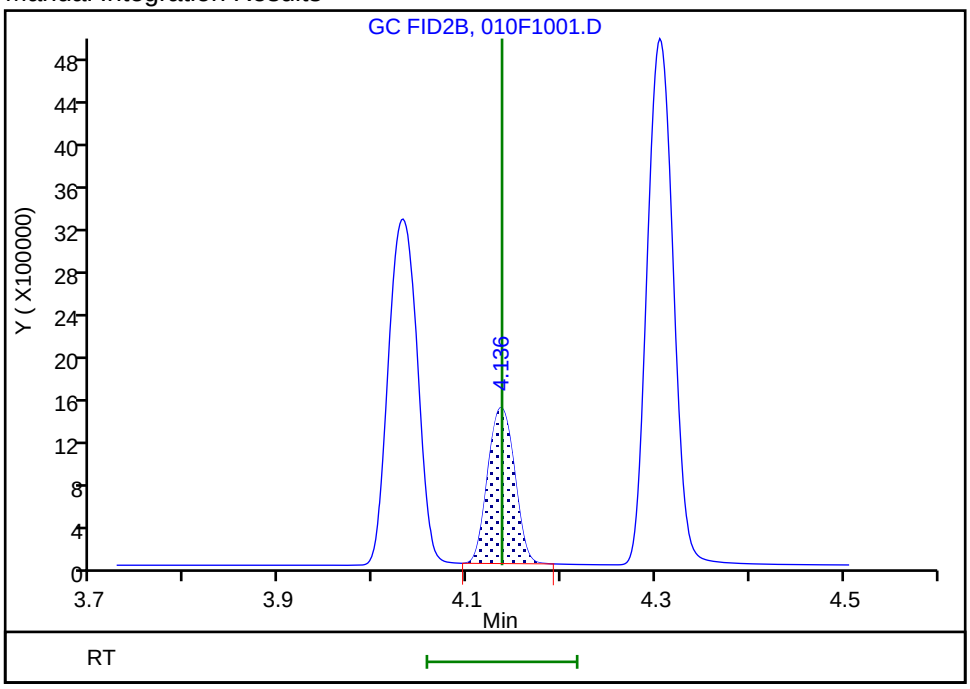
Processing Integration Results

RT: 4.14
Area: 9809067
Amount: 454.0080
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2842552
Amount: 131.5662
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:28:53
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499014/4 Calibration Date: 06/16/2020 20:22

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 033F3601a.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		150815		76.3	73.0	4.5	20.0
Ethane	Ave	136043	141243		142	137	3.8	20.0
Ethylene	Ave	110213	112547		130	128	2.1	20.0
Acetylene	Ave	34294	31962		110	119	-6.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499014/4 Calibration Date: 06/16/2020 20:22

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 033F3601a.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.50	1.45	1.55
Ethylene	1.78	1.73	1.83
Acetylene	3.95	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Jun-2020 20:22:22 ALS Bottle#: 33 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092473-033
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:02:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.246	1.246	0.000	11010026	73.0	76.3	
2	3.159	3.159	0.000	5203637	73.0	75.8	
						RPD = 0.65	
3 Ethane							
1	1.501	1.501	0.000	19329913	136.9	142.1	
2	4.294	4.294	0.000	8591822	136.9	140.7	
						RPD = 0.97	
4 Ethylene							M
1	1.779	1.779	0.000	14368460	127.7	130.4	
2	4.021	4.021	0.000	6237838	127.7	130.1	M
						RPD = 0.18	
5 Propane							
1	2.474	2.474	0.000	28525657	200.7	199.1	
2	5.919	5.919	0.000	12628277	200.7	201.6	
						RPD = 1.25	
6 Acetylene							Ma
1	3.951	3.951	0.000	3788243	118.5	110.5	M
2	4.126	4.126	0.000	2778335	118.5	128.6	M
						RPD = 15.17	
7 Butane							M
1	4.234	4.234	0.000	30842251	264.5	233.9	M
2	7.366	7.366	0.000	15001478	264.5	235.3	
						RPD = 0.60	
8 isobutylene							
1	5.141	5.141	0.000	21429809	255.4	240.1	
2	7.218	7.218	0.000	9921944	255.4	238.7	
						RPD = 0.55	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

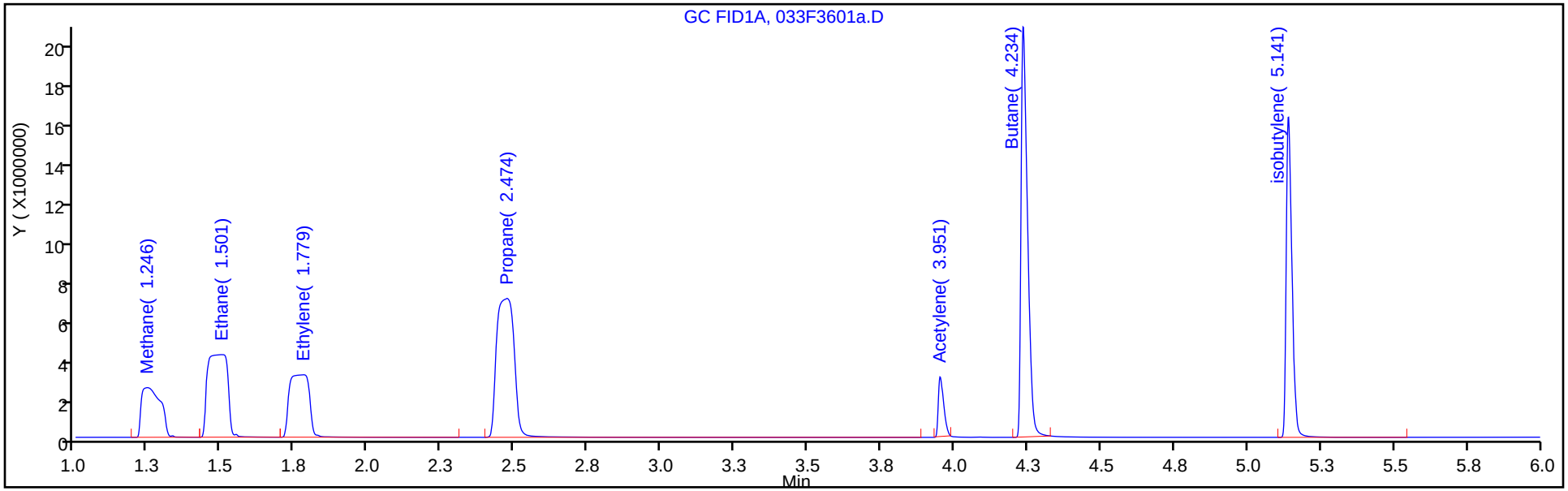
Report Date: 18-Jun-2020 10:24:52 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

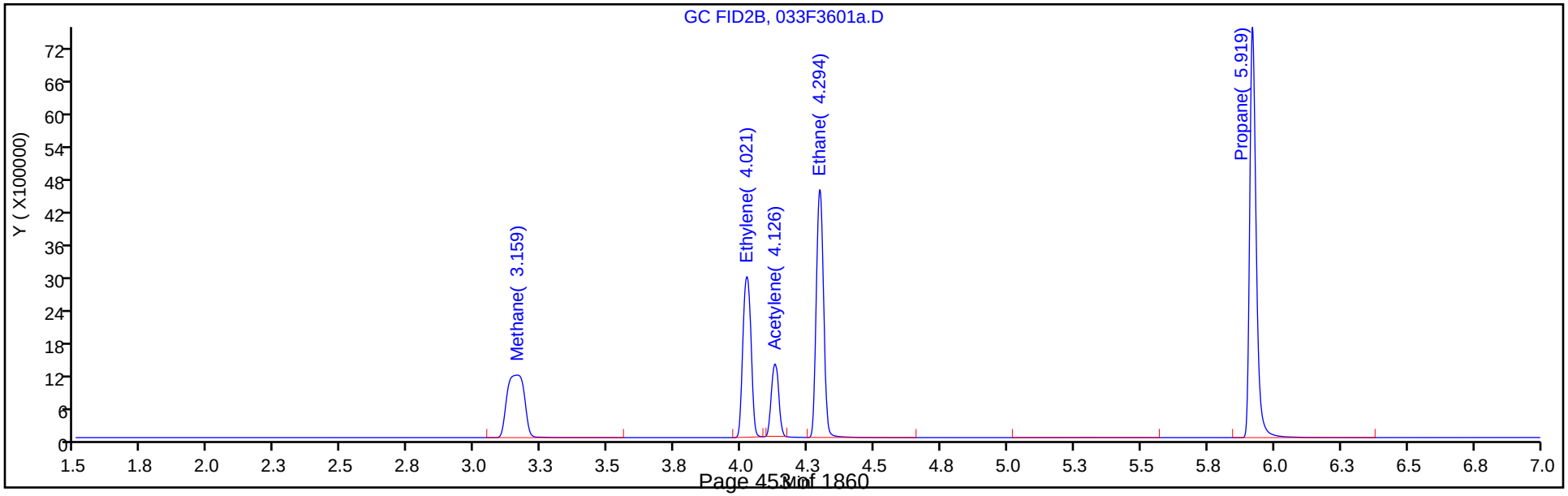
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D

Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccvrt			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

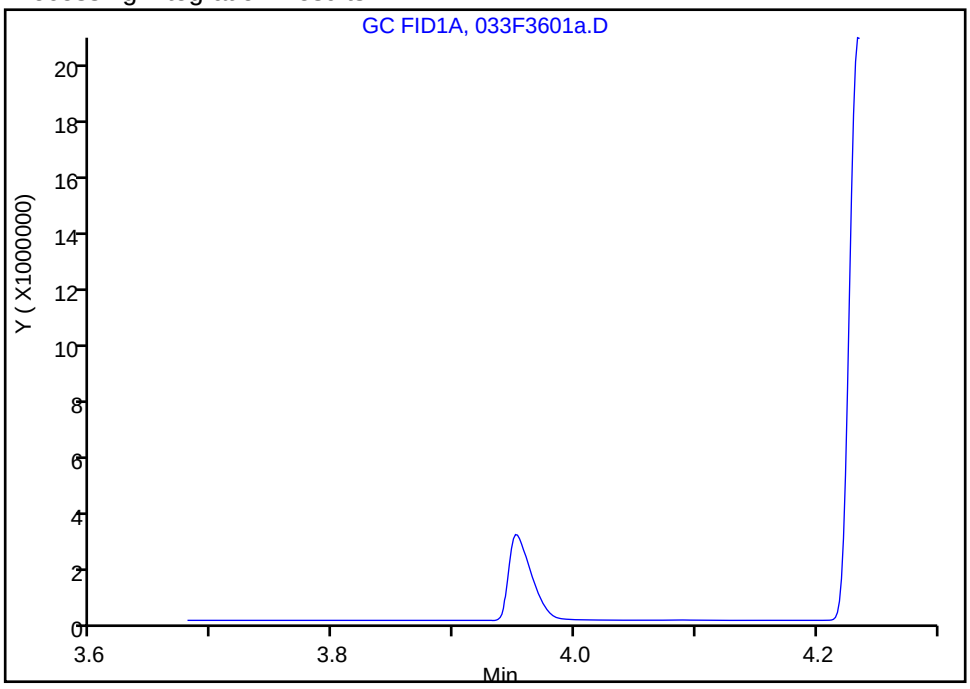
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D				
Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	33	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

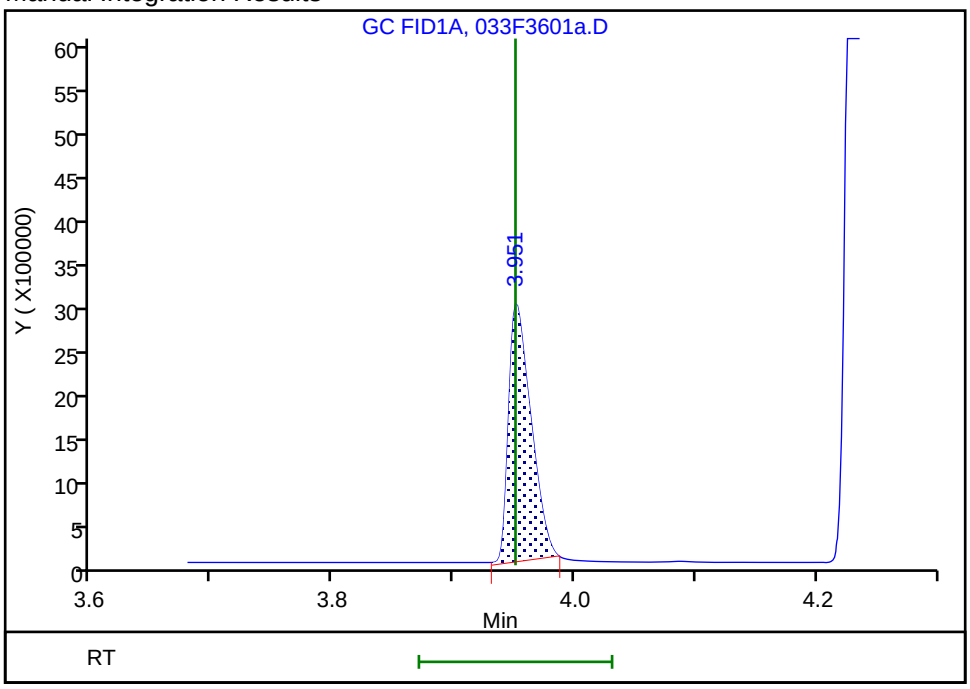
Processing Integration Results

RT: 3.94
Area: 0
Amount: 128.5939
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 3788243
Amount: 110.4629
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:03:28

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499014/4 Calibration Date: 06/16/2020 20:22

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 033F3601a.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		71279		75.8	73.0	3.8	20.0
Ethylene	Ave	47934	48860		130	128	1.9	20.0
Acetylene	Ave	21605	23441		129	119	8.5	20.0
Ethane	Ave	61056	62780		141	137	2.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499014/4 Calibration Date: 06/16/2020 20:22

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 033F3601a.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.16	3.12	3.20
Ethylene	4.02	3.97	4.07
Acetylene	4.13	4.05	4.21
Ethane	4.29	4.24	4.34

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Jun-2020 20:22:22 ALS Bottle#: 33 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092473-033
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:02:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.246	1.246	0.000	11010026	73.0	76.3	
2	3.159	3.159	0.000	5203637	73.0	75.8	
						RPD = 0.65	
3 Ethane							
1	1.501	1.501	0.000	19329913	136.9	142.1	
2	4.294	4.294	0.000	8591822	136.9	140.7	
						RPD = 0.97	
4 Ethylene							M
1	1.779	1.779	0.000	14368460	127.7	130.4	
2	4.021	4.021	0.000	6237838	127.7	130.1	M
						RPD = 0.18	
5 Propane							
1	2.474	2.474	0.000	28525657	200.7	199.1	
2	5.919	5.919	0.000	12628277	200.7	201.6	
						RPD = 1.25	
6 Acetylene							Ma
1	3.951	3.951	0.000	3788243	118.5	110.5	M
2	4.126	4.126	0.000	2778335	118.5	128.6	M
						RPD = 15.17	
7 Butane							M
1	4.234	4.234	0.000	30842251	264.5	233.9	M
2	7.366	7.366	0.000	15001478	264.5	235.3	
						RPD = 0.60	
8 isobutylene							
1	5.141	5.141	0.000	21429809	255.4	240.1	
2	7.218	7.218	0.000	9921944	255.4	238.7	
						RPD = 0.55	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

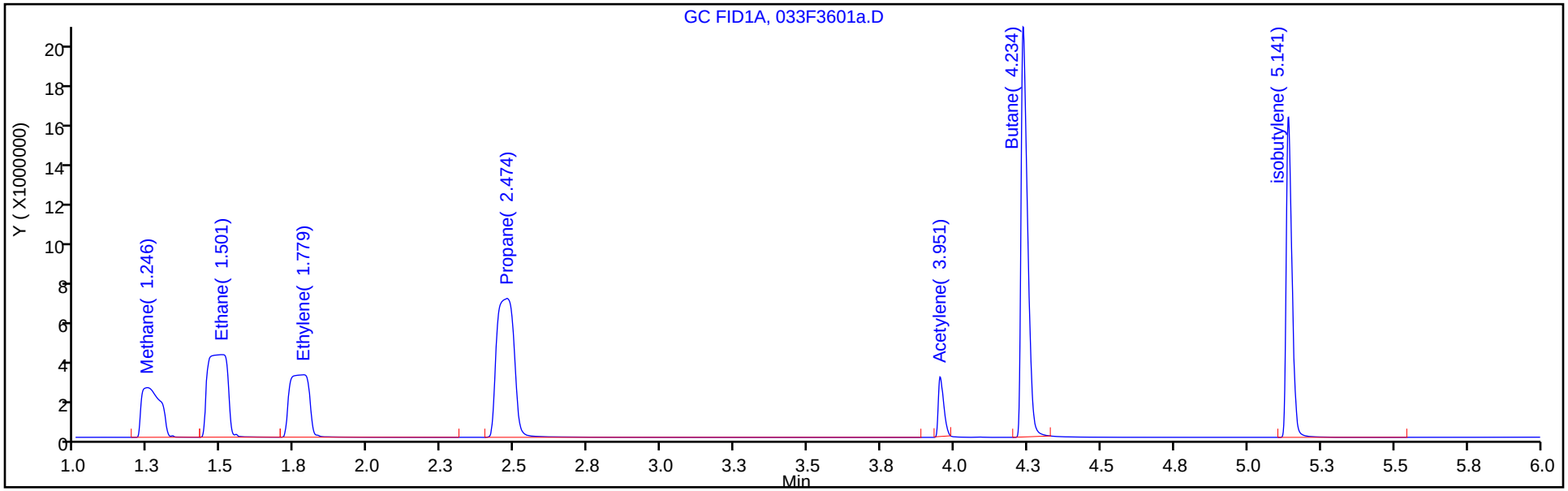
Report Date: 18-Jun-2020 10:24:52 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

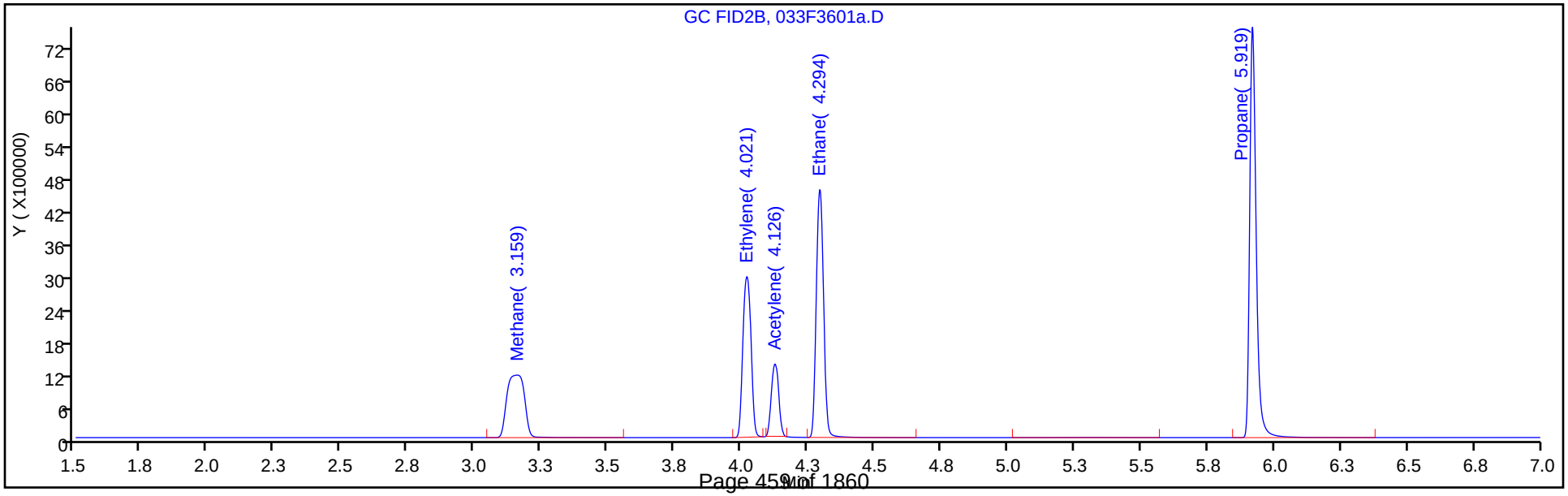
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D

Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccvrt			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

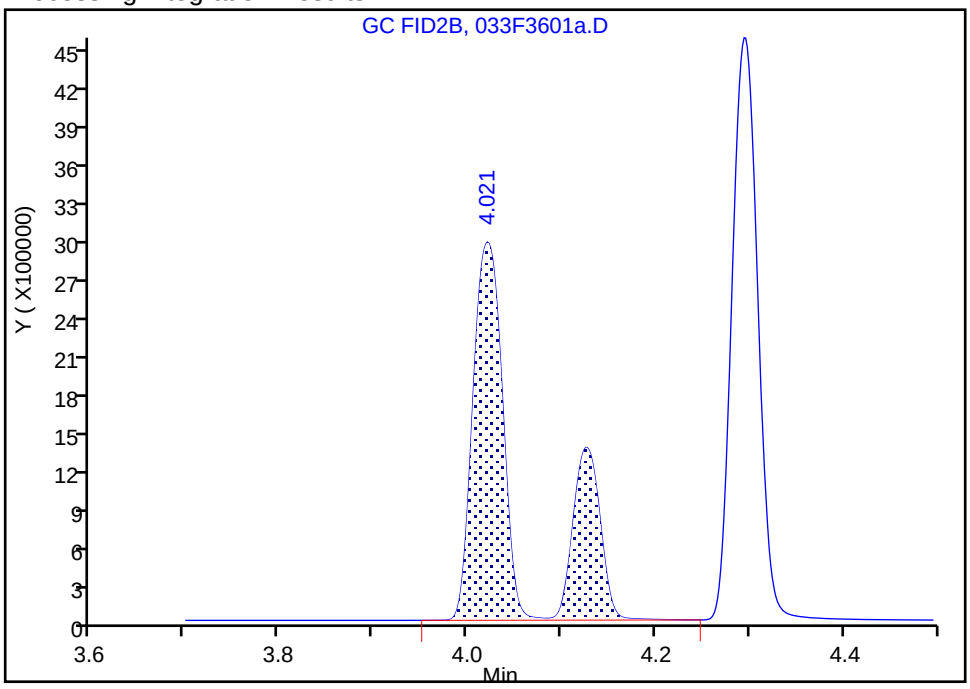
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D				
Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	33	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

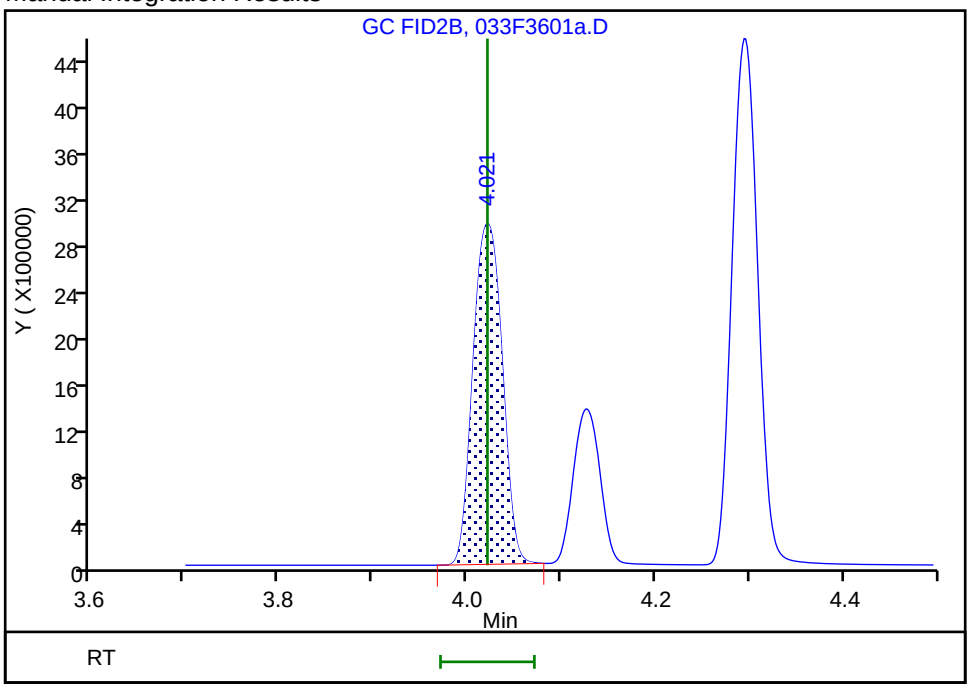
Processing Integration Results

RT: 4.02
Area: 8959696
Amount: 186.9185
Amount Units: ug/l



Manual Integration Results

RT: 4.02
Area: 6237838
Amount: 130.1347
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:02:19

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

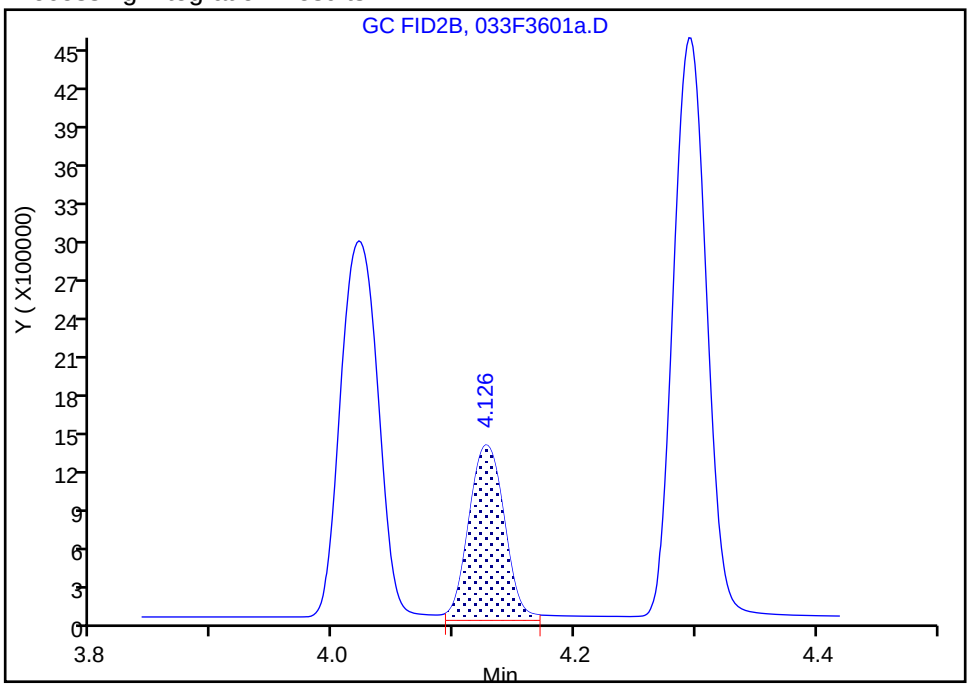
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D				
Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	33	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

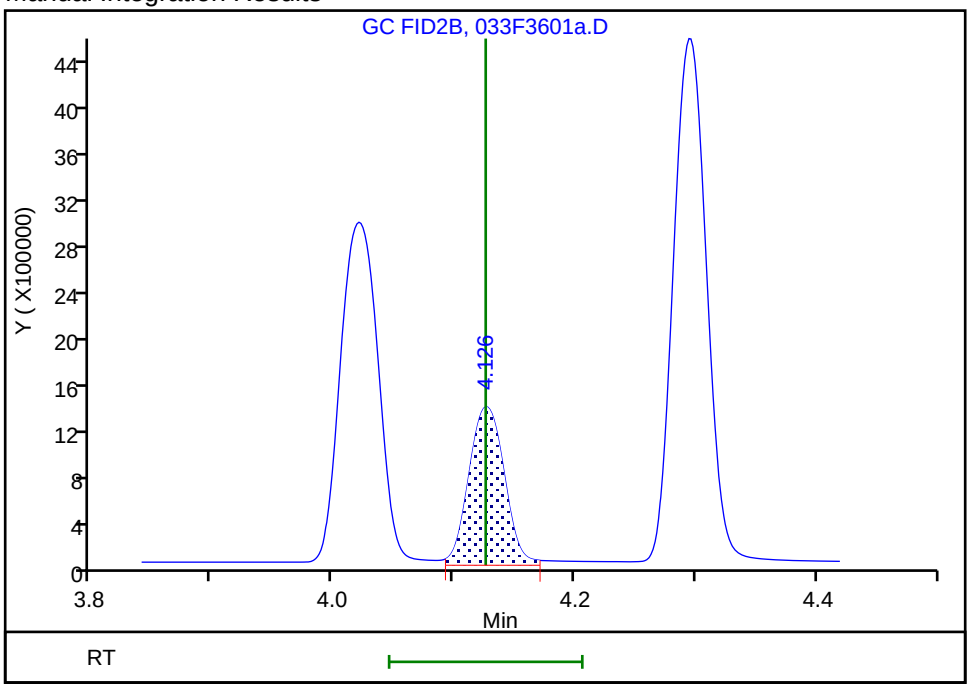
Processing Integration Results

RT: 4.13
Area: 2778335
Amount: 128.5939
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2778335
Amount: 128.5939
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:03:14

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/50 Calibration Date: 06/17/2020 01:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 003F1701.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		143712		72.7	73.0	-0.5	20.0
Ethane	Ave	136043	141691		143	137	4.2	20.0
Ethylene	Ave	110213	113099		131	128	2.6	20.0
Acetylene	Ave	34294	33657		116	119	-1.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/50 Calibration Date: 06/17/2020 01:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 003F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.51	1.45	1.55
Ethylene	1.78	1.73	1.83
Acetylene	3.96	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2020 01:25:58 ALS Bottle#: 3 Worklist Smp#: 50
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 17-Jun-2020 01:52:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.246	0.003	10491423	73.0	72.7	
2	3.166	3.159	0.007	4971285	73.0	72.4	
						RPD = 0.38	
3 Ethane							
1	1.507	1.501	0.006	19391185	136.9	142.5	
2	4.299	4.294	0.005	8627385	136.9	141.3	
						RPD = 0.87	
4 Ethylene							M
1	1.784	1.779	0.005	14439017	127.7	131.0	
2	4.026	4.021	0.005	6253056	127.7	130.5	M
						RPD = 0.43	
5 Propane							
1	2.482	2.474	0.008	30024606	200.7	209.6	
2	5.923	5.919	0.004	13302218	200.7	212.4	
						RPD = 1.33	
6 Acetylene							Ma
1	3.959	3.951	0.008	3989120	118.5	116.3	M
2	4.133	4.126	0.007	2663690	118.5	123.3	M
						RPD = 5.82	
7 Butane							
1	4.239	4.234	0.005	37449565	264.5	283.9	
2	7.368	7.366	0.002	17945473	264.5	281.4	
						RPD = 0.89	
8 isobutylene							
1	5.144	5.141	0.003	24694774	255.4	276.6	
2	7.219	7.218	0.001	11430028	255.4	275.0	
						RPD = 0.58	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

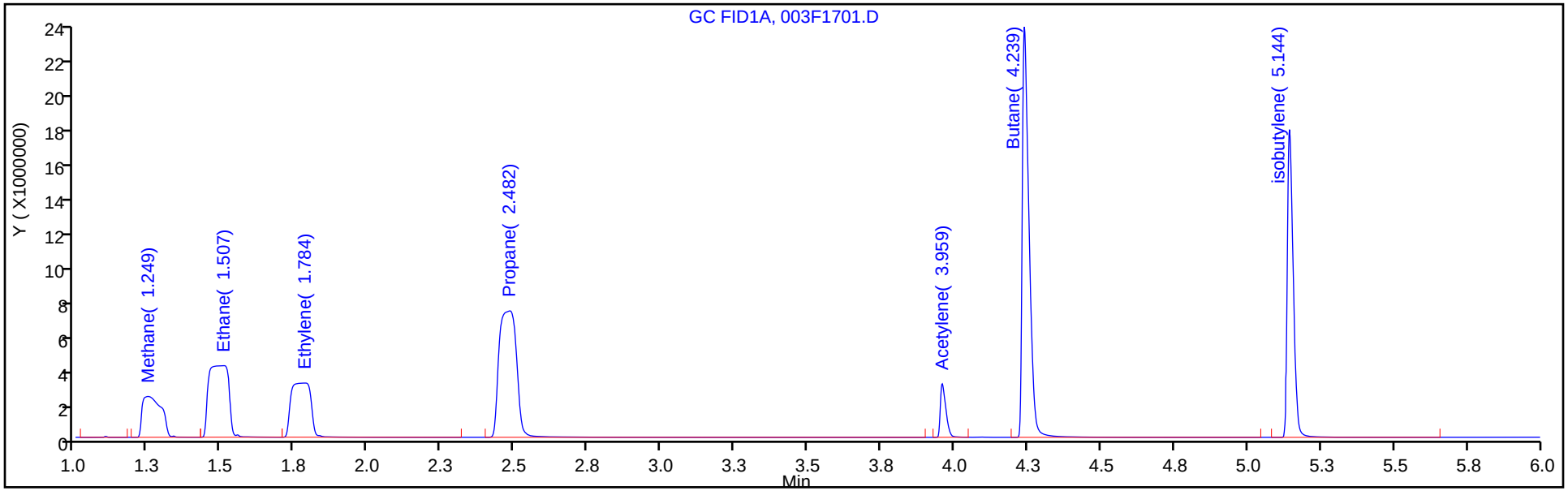
Report Date: 18-Jun-2020 10:25:00 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

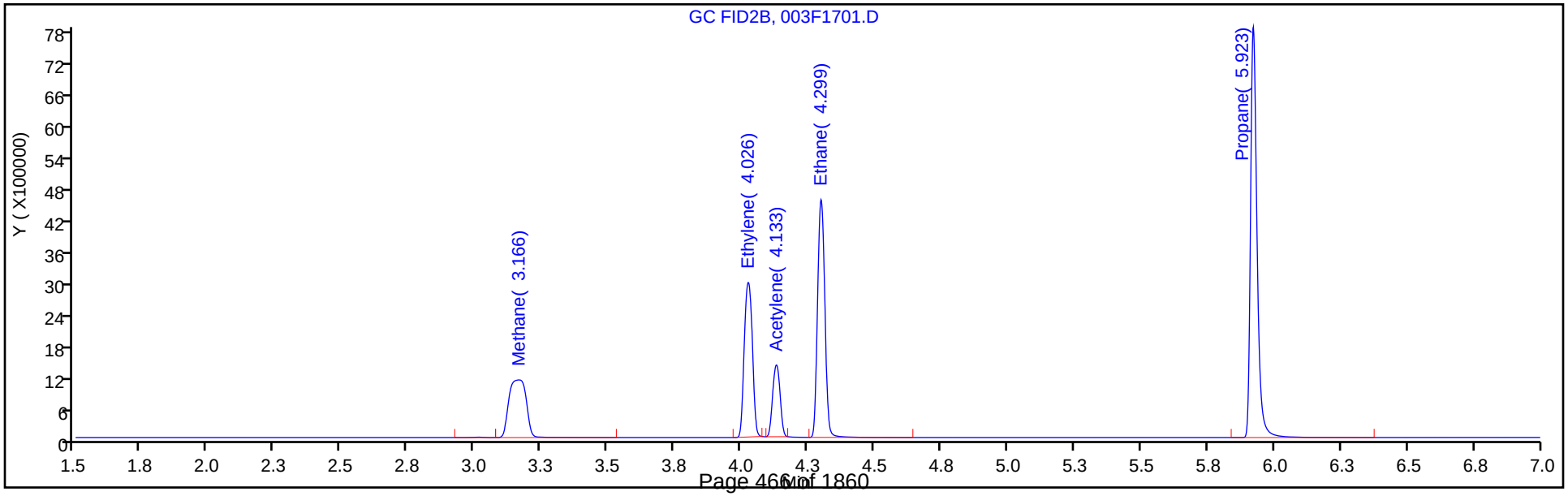
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D

Injection Date:	17-Jun-2020 01:25:58	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	50
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

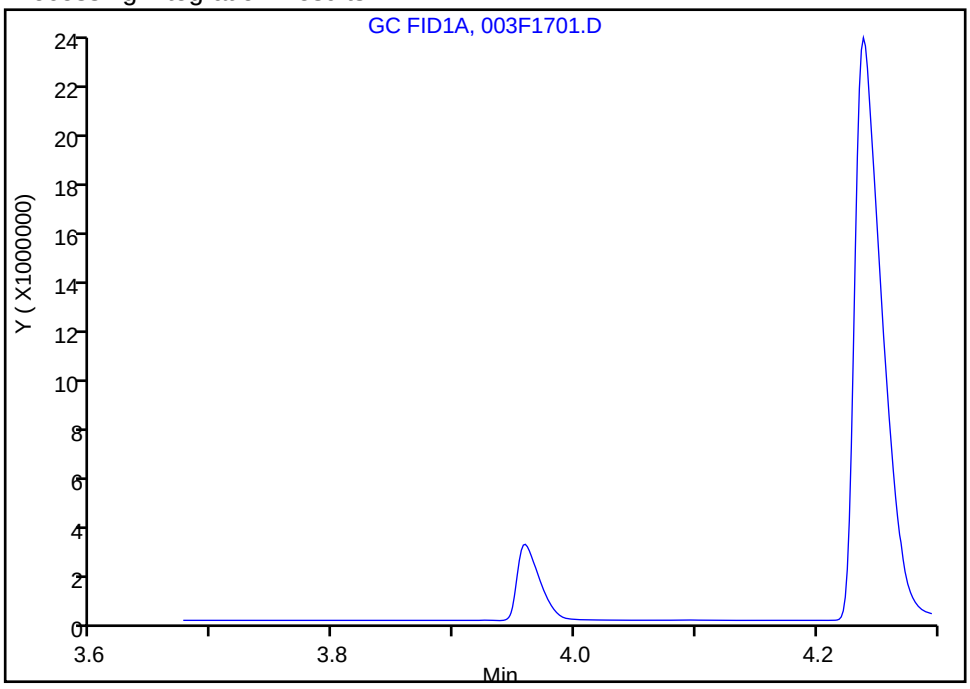
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D				
Injection Date:	17-Jun-2020 01:25:58	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	3	Worklist Smp#:	50
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

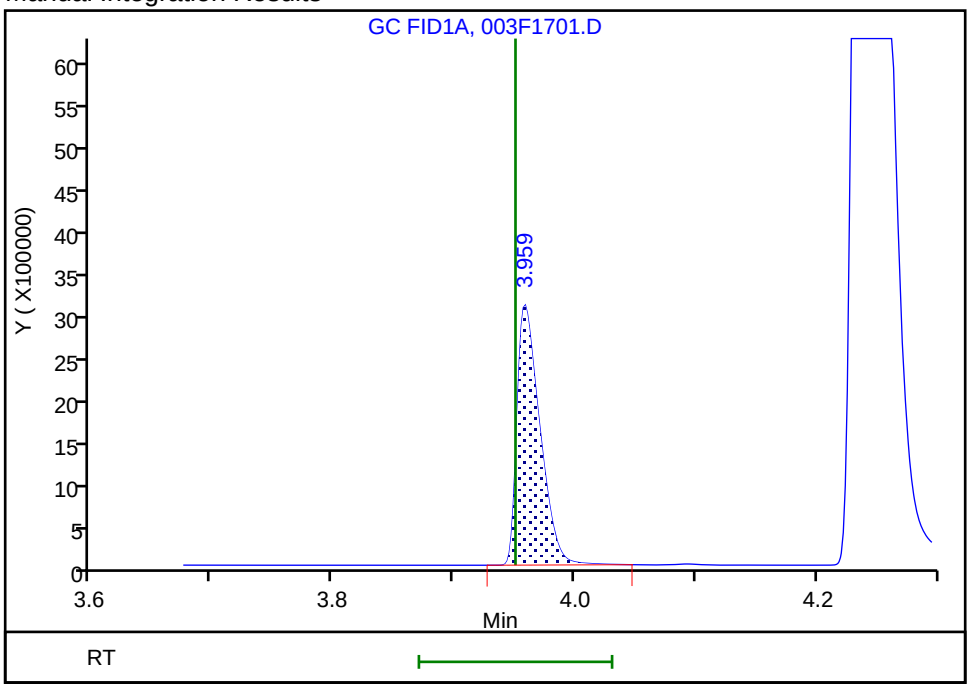
Processing Integration Results

RT: 3.95
Area: 0
Amount: 123.2876
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3989120
Amount: 116.3203
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:18:48

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/50 Calibration Date: 06/17/2020 01:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 003F1701.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		68097		72.4	73.0	-0.9	20.0
Ethylene	Ave	47934	48980		130	128	2.2	20.0
Acetylene	Ave	21605	22474		123	119	4.0	20.0
Ethane	Ave	61056	63040		141	137	3.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/50 Calibration Date: 06/17/2020 01:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 003F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.12	3.20
Ethylene	4.03	3.97	4.07
Acetylene	4.13	4.05	4.21
Ethane	4.30	4.24	4.34

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2020 01:25:58 ALS Bottle#: 3 Worklist Smp#: 50
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:59 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 17-Jun-2020 01:52:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.246	0.003	10491423	73.0	72.7	
2	3.166	3.159	0.007	4971285	73.0	72.4	
						RPD = 0.38	
3 Ethane							
1	1.507	1.501	0.006	19391185	136.9	142.5	
2	4.299	4.294	0.005	8627385	136.9	141.3	
						RPD = 0.87	
4 Ethylene							M
1	1.784	1.779	0.005	14439017	127.7	131.0	
2	4.026	4.021	0.005	6253056	127.7	130.5	M
						RPD = 0.43	
5 Propane							
1	2.482	2.474	0.008	30024606	200.7	209.6	
2	5.923	5.919	0.004	13302218	200.7	212.4	
						RPD = 1.33	
6 Acetylene							Ma
1	3.959	3.951	0.008	3989120	118.5	116.3	M
2	4.133	4.126	0.007	2663690	118.5	123.3	M
						RPD = 5.82	
7 Butane							
1	4.239	4.234	0.005	37449565	264.5	283.9	
2	7.368	7.366	0.002	17945473	264.5	281.4	
						RPD = 0.89	
8 isobutylene							
1	5.144	5.141	0.003	24694774	255.4	276.6	
2	7.219	7.218	0.001	11430028	255.4	275.0	
						RPD = 0.58	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

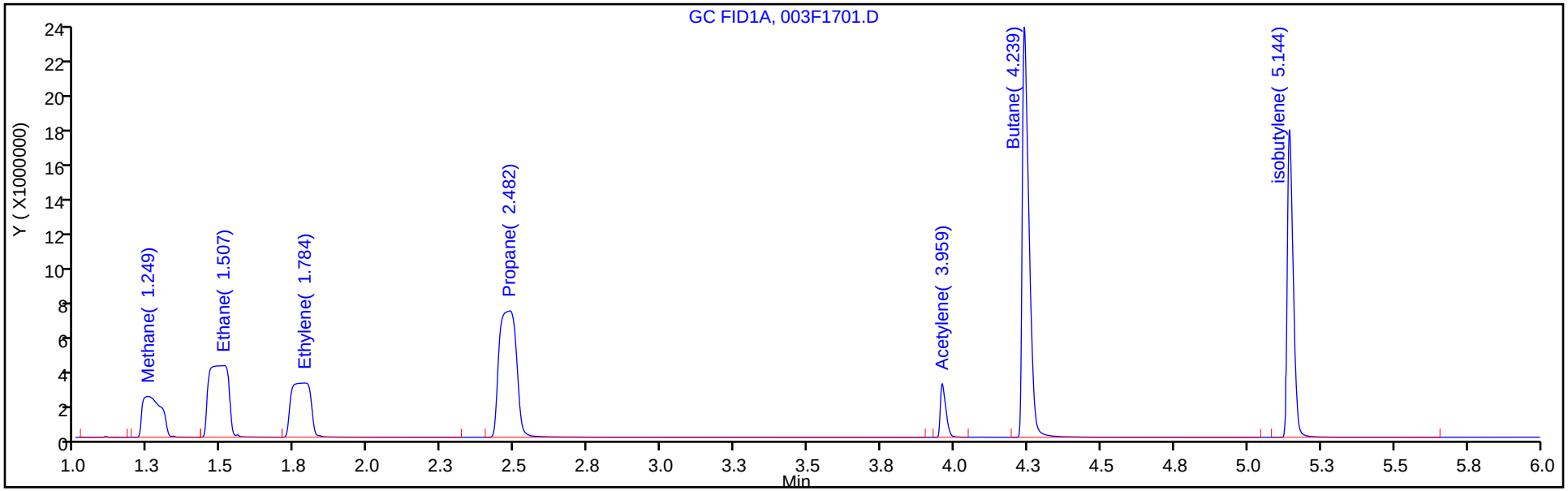
Report Date: 18-Jun-2020 10:25:00 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

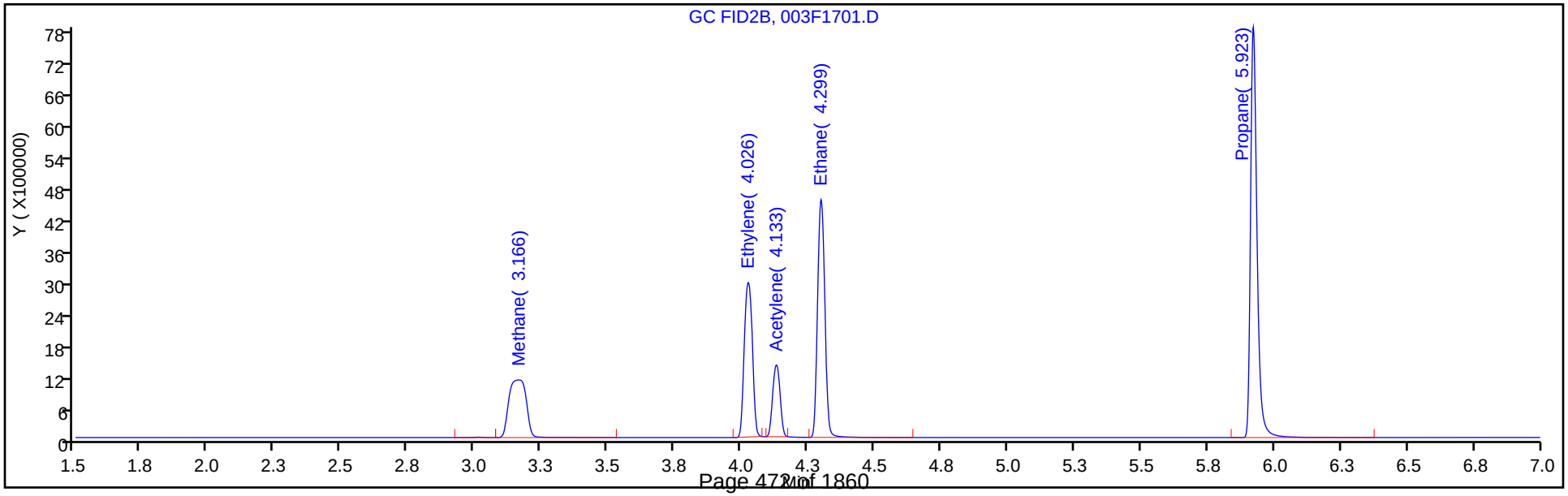
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D

Injection Date:	17-Jun-2020 01:25:58	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	50
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

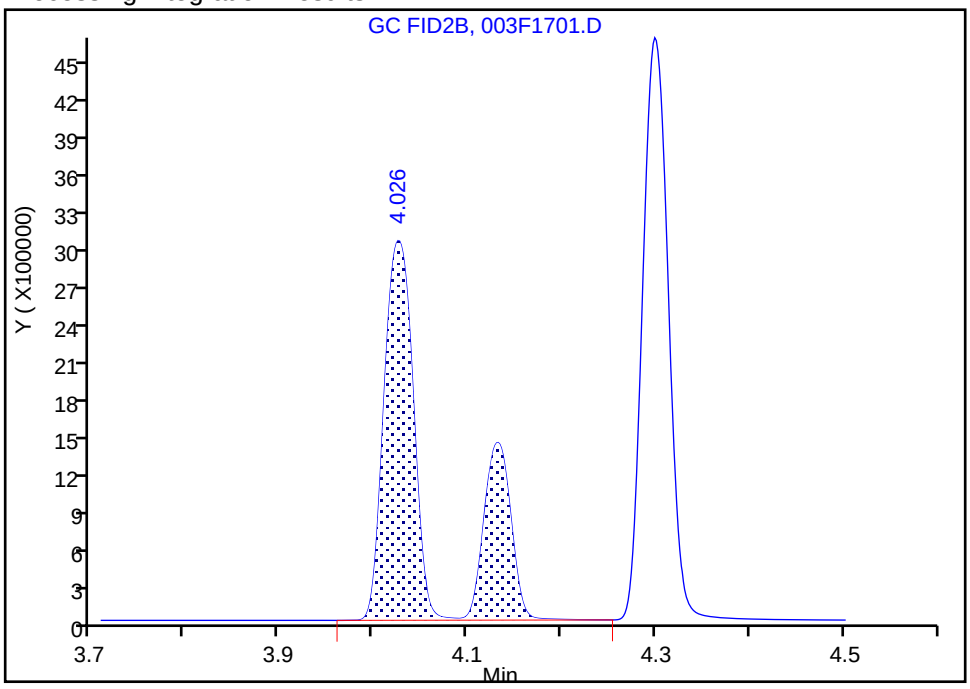
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D				
Injection Date:	17-Jun-2020 01:25:58	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	3	Worklist Smp#:	50
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

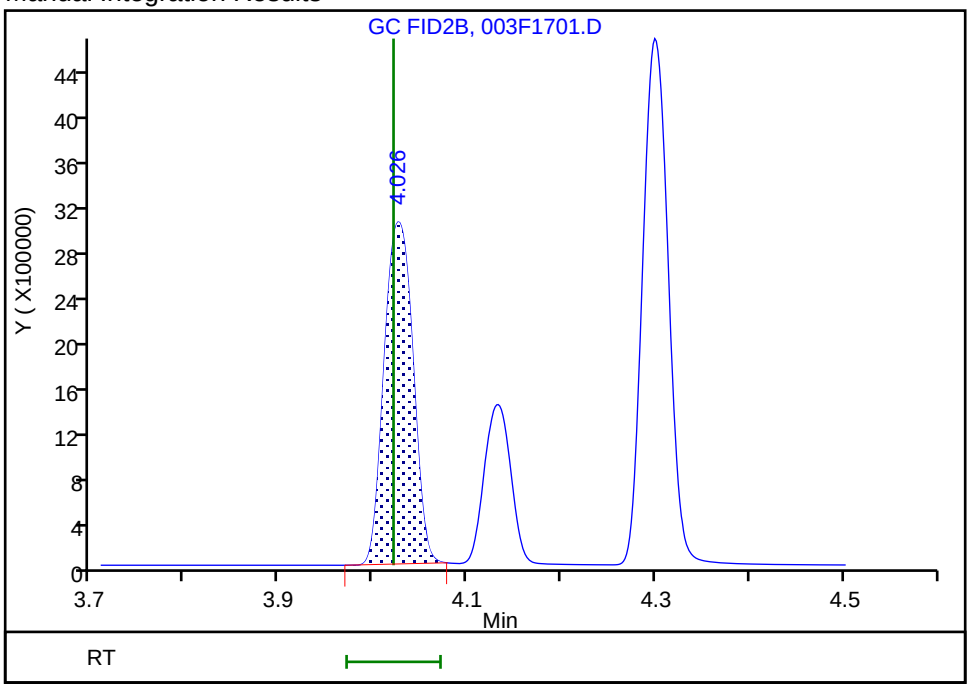
Processing Integration Results

RT: 4.03
Area: 9083363
Amount: 189.4985
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6253056
Amount: 130.4522
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:18:16

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

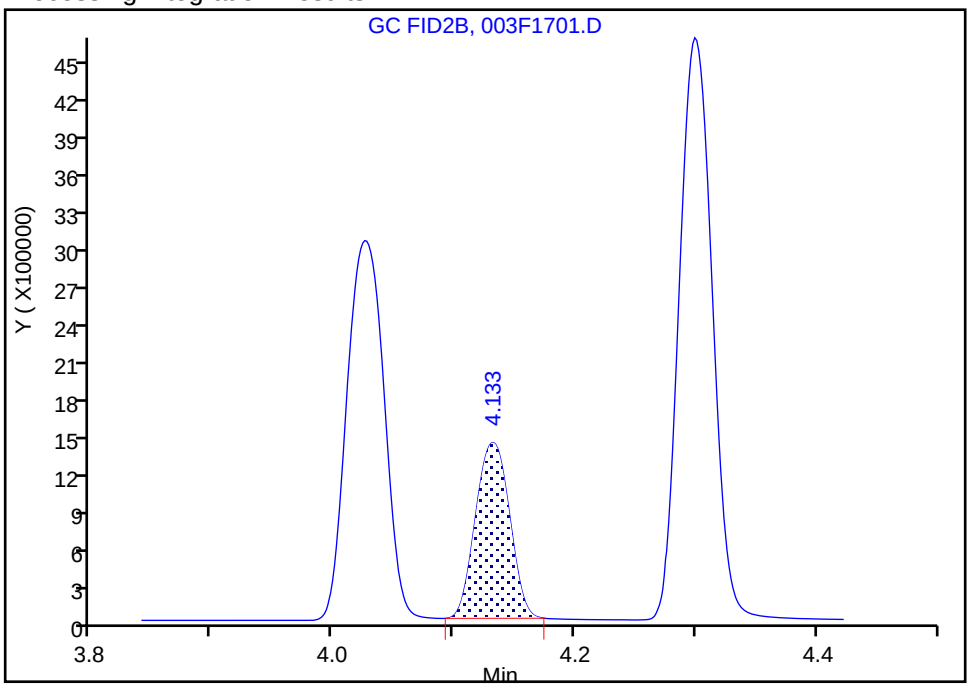
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D
Injection Date: 17-Jun-2020 01:25:58 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: SCIANNAC ALS Bottle#: 3 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

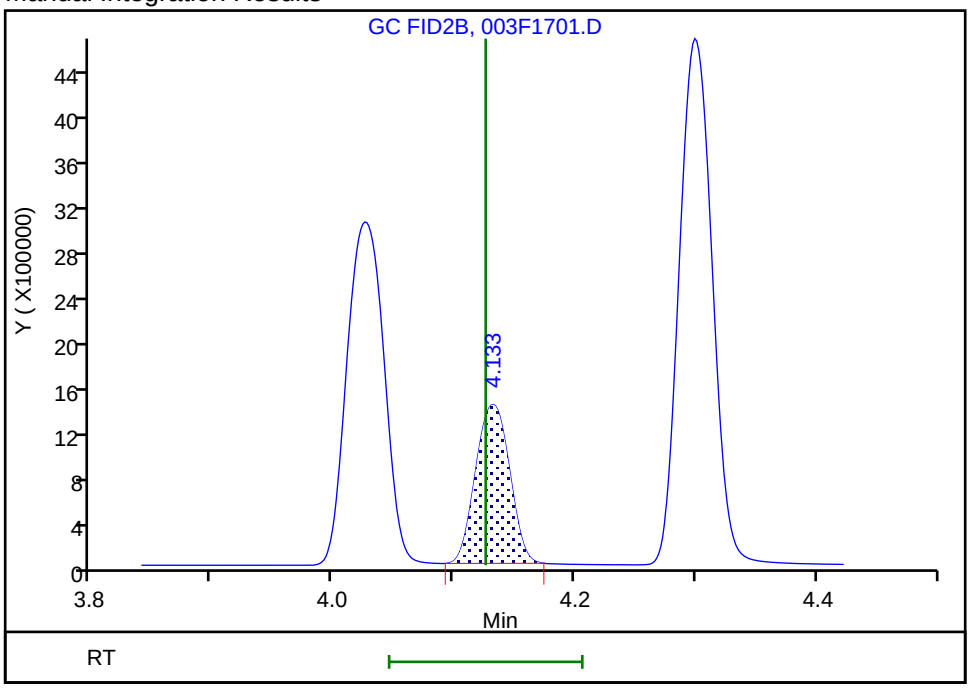
Processing Integration Results

RT: 4.13
Area: 2663690
Amount: 123.2876
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2663690
Amount: 123.2876
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:18:40
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/62 Calibration Date: 06/17/2020 04:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 015F2901.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		143409		72.5	73.0	-0.7	20.0
Ethane	Ave	136043	140537		141	137	3.3	20.0
Ethylene	Ave	110213	111849		130	128	1.5	20.0
Acetylene	Ave	34294	34242		118	119	-0.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/62 Calibration Date: 06/17/2020 04:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 015F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.21	1.29
Ethane	1.52	1.45	1.55
Ethylene	1.79	1.73	1.83
Acetylene	3.96	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2020 04:41:24 ALS Bottle#: 15 Worklist Smp#: 62
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:25:06 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 17-Jun-2020 14:14:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.257	1.246	0.011	10469306	73.0	72.5	
2	3.176	3.159	0.017	4942260	73.0	72.0	
						RPD = 0.76	
3 Ethane							
1	1.516	1.501	0.015	19233219	136.9	141.4	
2	4.306	4.294	0.012	9795448	136.9	160.4	
						RPD = 12.63	
4 Ethylene							
1	1.794	1.779	0.015	14279391	127.7	129.6	
2	4.034	4.021	0.013	6455255	127.7	134.7	
						RPD = 3.87	
5 Propane							
1	2.492	2.474	0.018	29682080	200.7	207.2	
2	5.928	5.919	0.009	13157813	200.7	210.1	
						RPD = 1.38	
6 Acetylene							M
1	3.962	3.951	0.011	4058467	118.5	118.3	
2	4.139	4.126	0.013	2690196	118.5	124.5	M
						RPD = 5.08	
7 Butane							M
1	4.242	4.234	0.008	35778434	264.5	271.3	M
2	7.371	7.366	0.005	17585713	264.5	275.8	
						RPD = 1.65	
8 isobutylene							
1	5.147	5.141	0.006	23936367	255.4	268.1	
2	7.224	7.218	0.006	11098990	255.4	267.1	
						RPD = 0.40	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

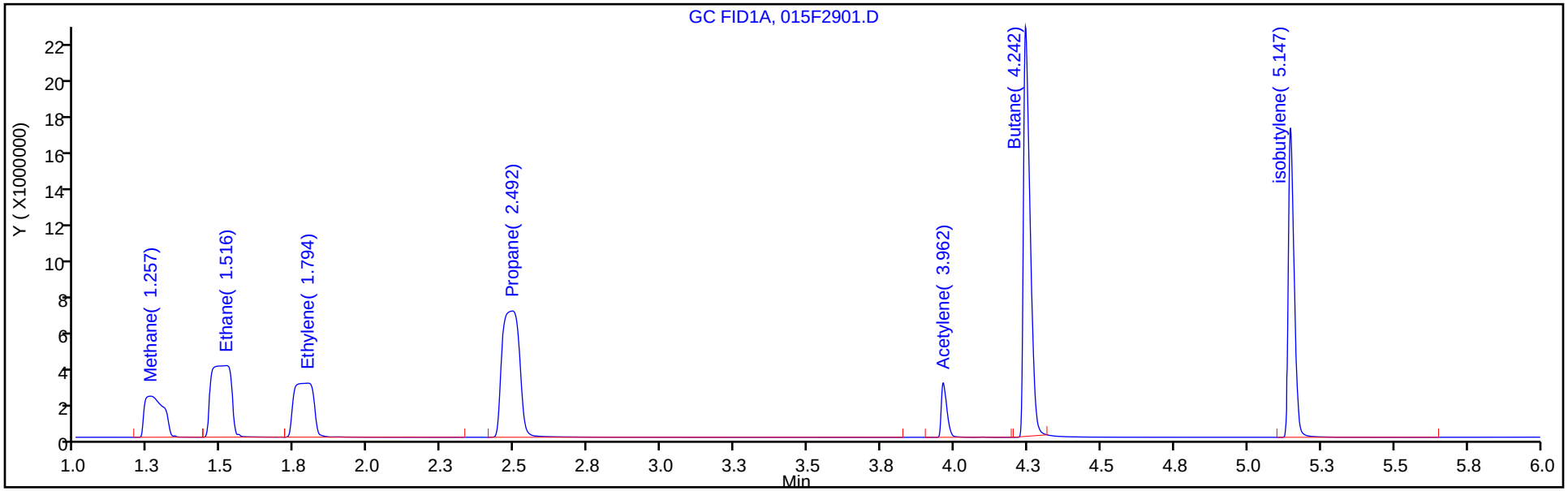
Report Date: 18-Jun-2020 10:25:06 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

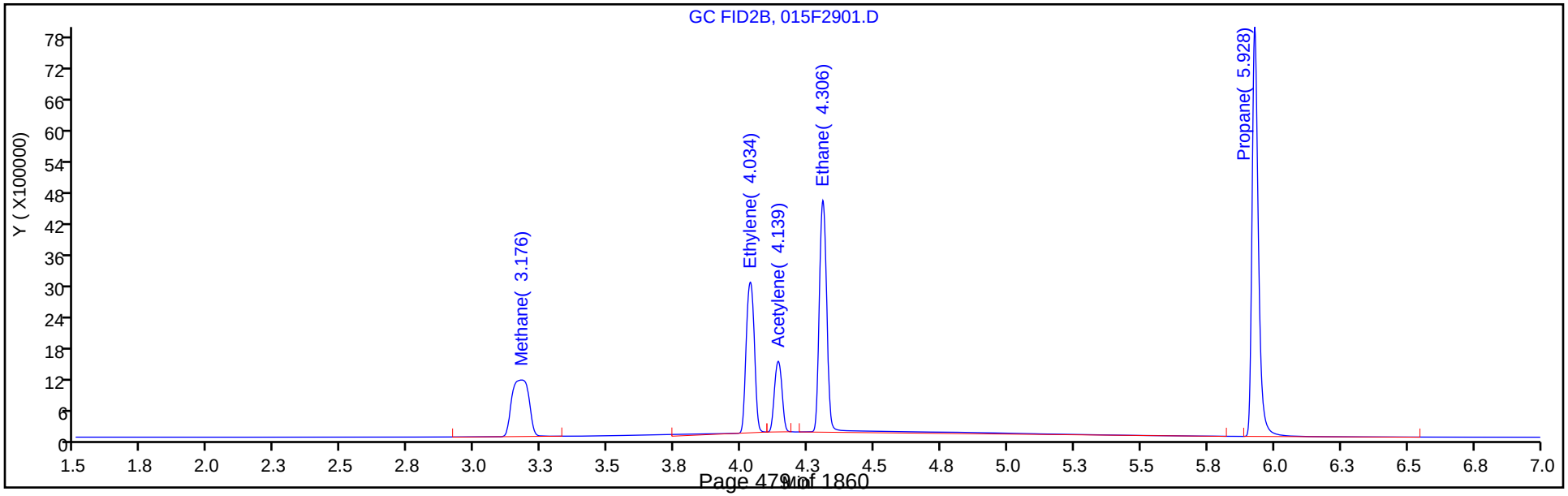
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D

Injection Date:	17-Jun-2020 04:41:24	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	62
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/62 Calibration Date: 06/17/2020 04:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 015F2901.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		67699		72.0	73.0	-1.4	20.0
Ethylene	Ave	47934	50563		135	128	5.5	20.0
Acetylene	Ave	21605	22698		125	119	5.1	20.0
Ethane	Ave	61056	71575		160	137	17.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499014/62 Calibration Date: 06/17/2020 04:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 015F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.18	3.12	3.20
Ethylene	4.03	3.97	4.07
Acetylene	4.14	4.05	4.21
Ethane	4.31	4.24	4.34

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2020 04:41:24 ALS Bottle#: 15 Worklist Smp#: 62
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:25:06 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 17-Jun-2020 14:14:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.257	1.246	0.011	10469306	73.0	72.5	
2	3.176	3.159	0.017	4942260	73.0	72.0	
						RPD = 0.76	
3 Ethane							
1	1.516	1.501	0.015	19233219	136.9	141.4	
2	4.306	4.294	0.012	9795448	136.9	160.4	
						RPD = 12.63	
4 Ethylene							
1	1.794	1.779	0.015	14279391	127.7	129.6	
2	4.034	4.021	0.013	6455255	127.7	134.7	
						RPD = 3.87	
5 Propane							
1	2.492	2.474	0.018	29682080	200.7	207.2	
2	5.928	5.919	0.009	13157813	200.7	210.1	
						RPD = 1.38	
6 Acetylene							M
1	3.962	3.951	0.011	4058467	118.5	118.3	
2	4.139	4.126	0.013	2690196	118.5	124.5	M
						RPD = 5.08	
7 Butane							M
1	4.242	4.234	0.008	35778434	264.5	271.3	M
2	7.371	7.366	0.005	17585713	264.5	275.8	
						RPD = 1.65	
8 isobutylene							
1	5.147	5.141	0.006	23936367	255.4	268.1	
2	7.224	7.218	0.006	11098990	255.4	267.1	
						RPD = 0.40	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

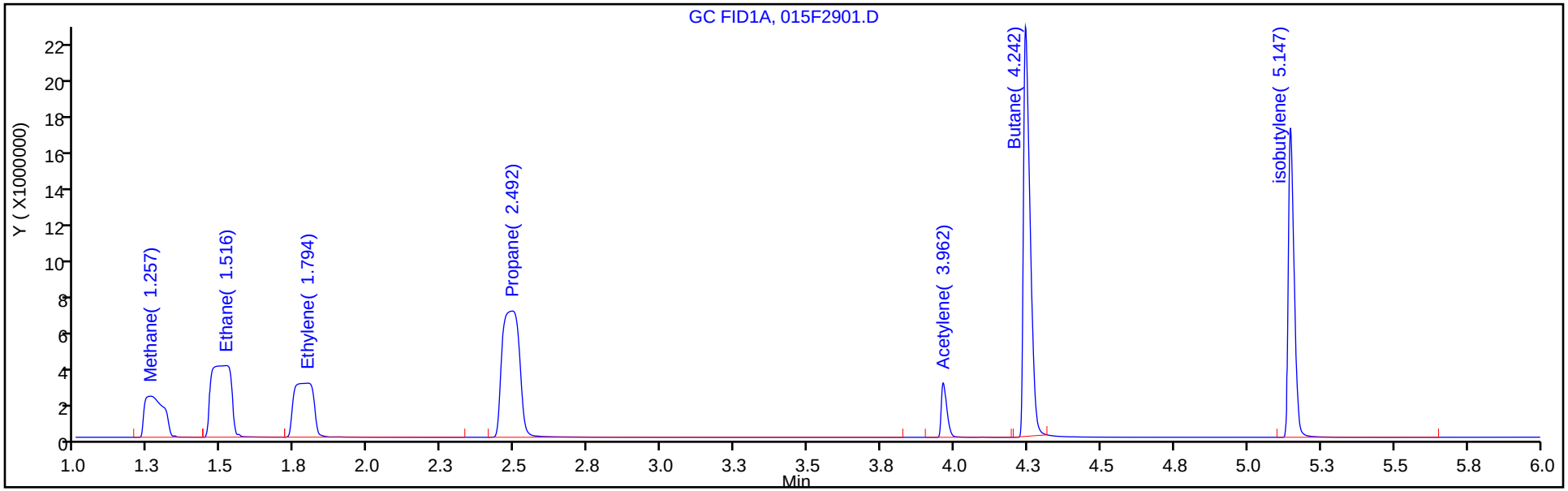
Report Date: 18-Jun-2020 10:25:06 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

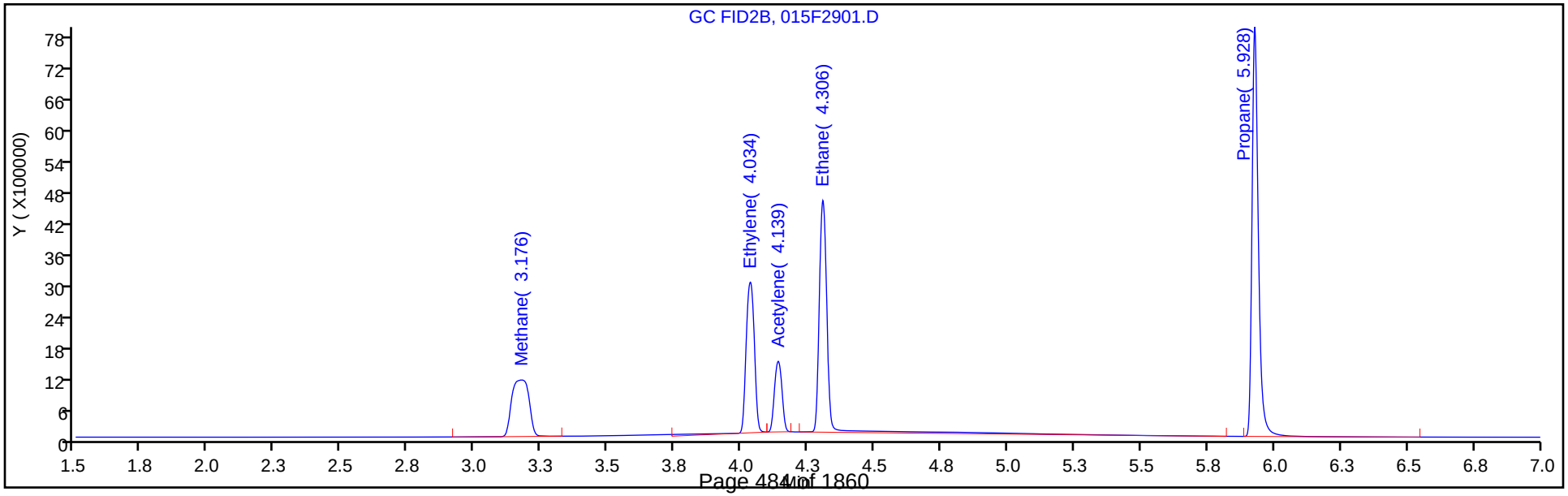
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D

Injection Date:	17-Jun-2020 04:41:24	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	62
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

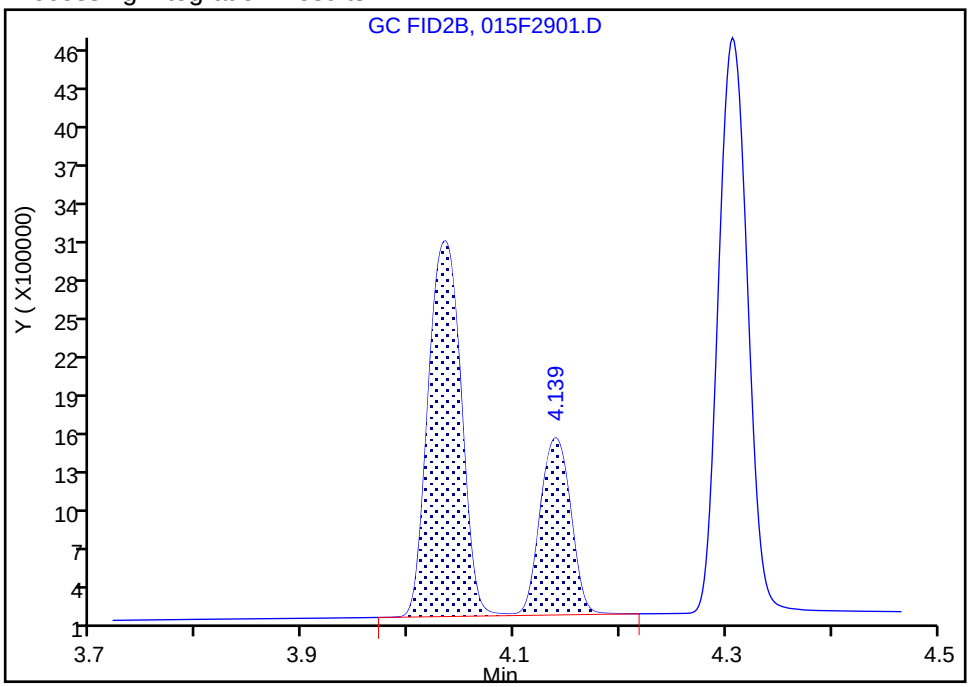
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D
Injection Date: 17-Jun-2020 04:41:24 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: SCIANNAC ALS Bottle#: 15 Worklist Smp#: 62
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

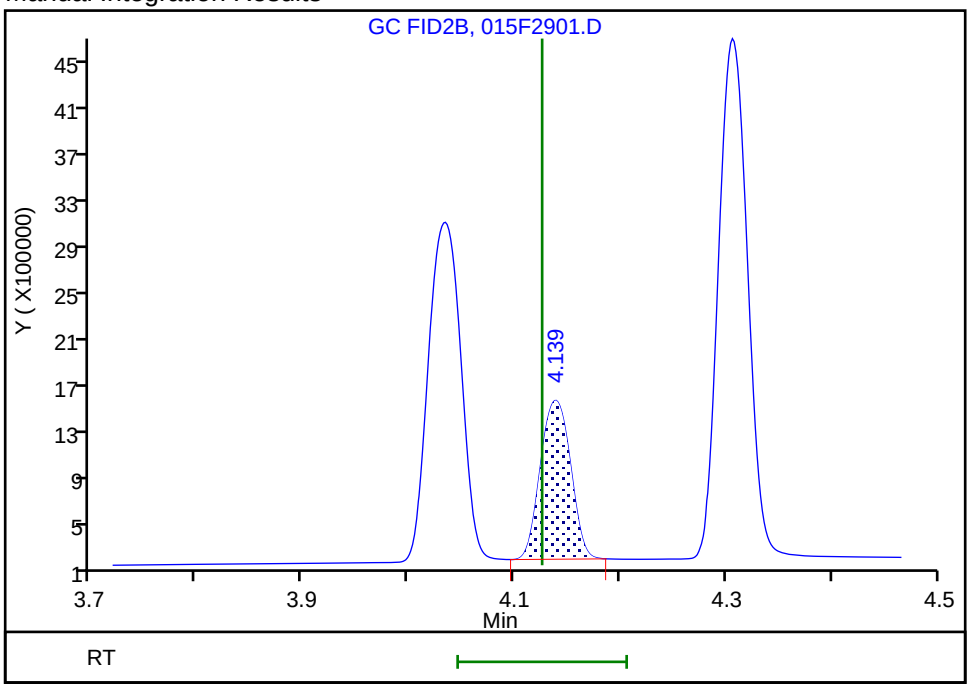
Processing Integration Results

RT: 4.14
Area: 8996989
Amount: 416.4213
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2690196
Amount: 124.5144
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:23:53
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499210/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

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		144873		73.2	73.0	0.3	20.0
Ethane	Ave	136043	139076		140	137	2.2	20.0
Ethylene	Ave	110213	112327		130	128	1.9	20.0
Acetylene	Ave	34294	32534		112	119	-5.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499415/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

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		144873		73.2	73.0	0.3	20.0
Ethane	Ave	136043	139076		140	137	2.2	20.0
Ethylene	Ave	110213	112327		130	128	1.9	20.0
Acetylene	Ave	34294	32534		112	119	-5.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499210/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.53	1.48	1.58
Ethylene	1.81	1.76	1.86
Acetylene	3.95	3.87	4.03

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499415/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.53	1.48	1.58
Ethylene	1.81	1.76	1.86
Acetylene	3.95	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 18-Jun-2020 08:54:00 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:08 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 18-Jun-2020 10:31:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.266	1.266	0.000	10576226	73.0	73.2	a
2	3.212	3.212	0.000	5027738	73.0	73.2	a
						RPD = 0.06	
3 Ethane							
1	1.525	1.525	0.000	19033298	136.9	139.9	
2	4.327	4.327	0.000	8488760	136.9	139.0	
						RPD = 0.63	
4 Ethylene							M
1	1.805	1.805	0.000	14340370	127.7	130.1	
2	4.057	4.057	0.000	6216689	127.7	129.7	M
						RPD = 0.32	
5 Propane							
1	2.506	2.506	0.000	28582630	200.7	199.5	
2	5.938	5.938	0.000	12700696	200.7	202.8	
						RPD = 1.62	
6 Acetylene							Ma
1	3.953	3.953	0.000	3856058	118.5	112.4	M
2	4.160	4.160	0.000	2506981	118.5	116.0	M
						RPD = 3.15	
7 Butane							
1	4.248	4.248	0.000	33487972	264.5	253.9	
2	7.380	7.380	0.000	16097588	264.5	252.5	
						RPD = 0.57	
8 isobutylene							
1	5.146	5.146	0.000	22425943	255.4	251.2	
2	7.233	7.233	0.000	10430251	255.4	251.0	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 18-Jun-2020 08:54:00 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:08 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 18-Jun-2020 10:31:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.266	1.266	0.000	10576226	73.0	73.2	a
2	3.212	3.212	0.000	5027738	73.0	73.2	a
						RPD = 0.06	
3 Ethane							
1	1.525	1.525	0.000	19033298	136.9	139.9	
2	4.327	4.327	0.000	8488760	136.9	139.0	
						RPD = 0.63	
4 Ethylene							M
1	1.805	1.805	0.000	14340370	127.7	130.1	
2	4.057	4.057	0.000	6216689	127.7	129.7	M
						RPD = 0.32	
5 Propane							
1	2.506	2.506	0.000	28582630	200.7	199.5	
2	5.938	5.938	0.000	12700696	200.7	202.8	
						RPD = 1.62	
6 Acetylene							Ma
1	3.953	3.953	0.000	3856058	118.5	112.4	M
2	4.160	4.160	0.000	2506981	118.5	116.0	M
						RPD = 3.15	
7 Butane							
1	4.248	4.248	0.000	33487972	264.5	253.9	
2	7.380	7.380	0.000	16097588	264.5	252.5	
						RPD = 0.57	
8 isobutylene							
1	5.146	5.146	0.000	22425943	255.4	251.2	
2	7.233	7.233	0.000	10430251	255.4	251.0	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

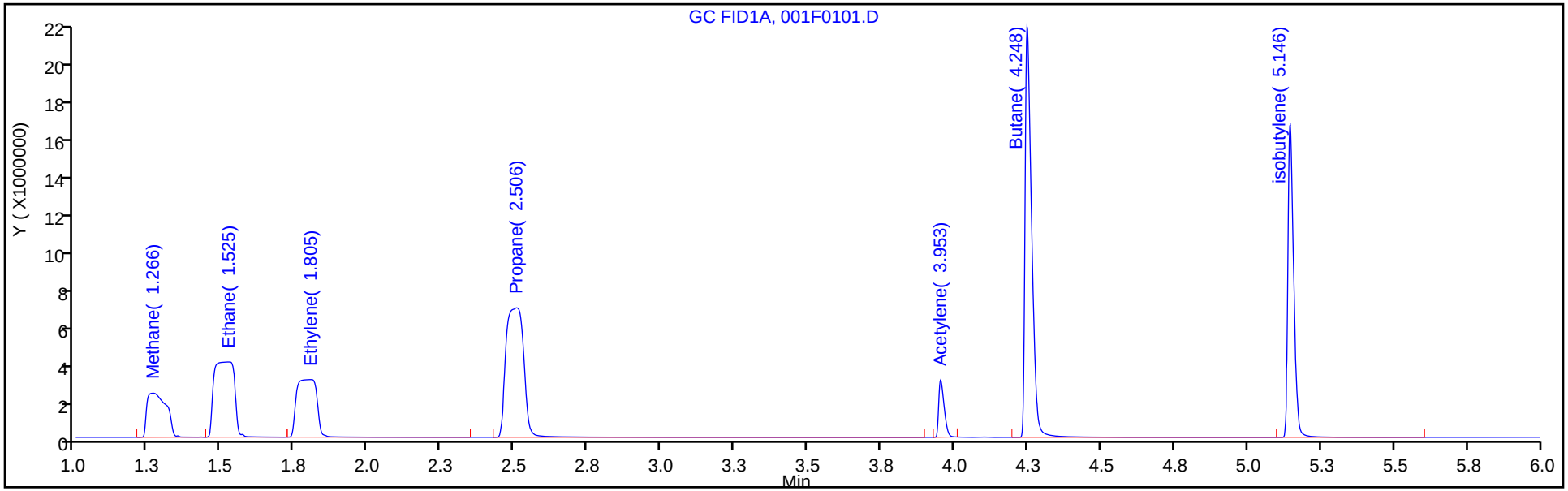
Report Date: 19-Jun-2020 12:43:09 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

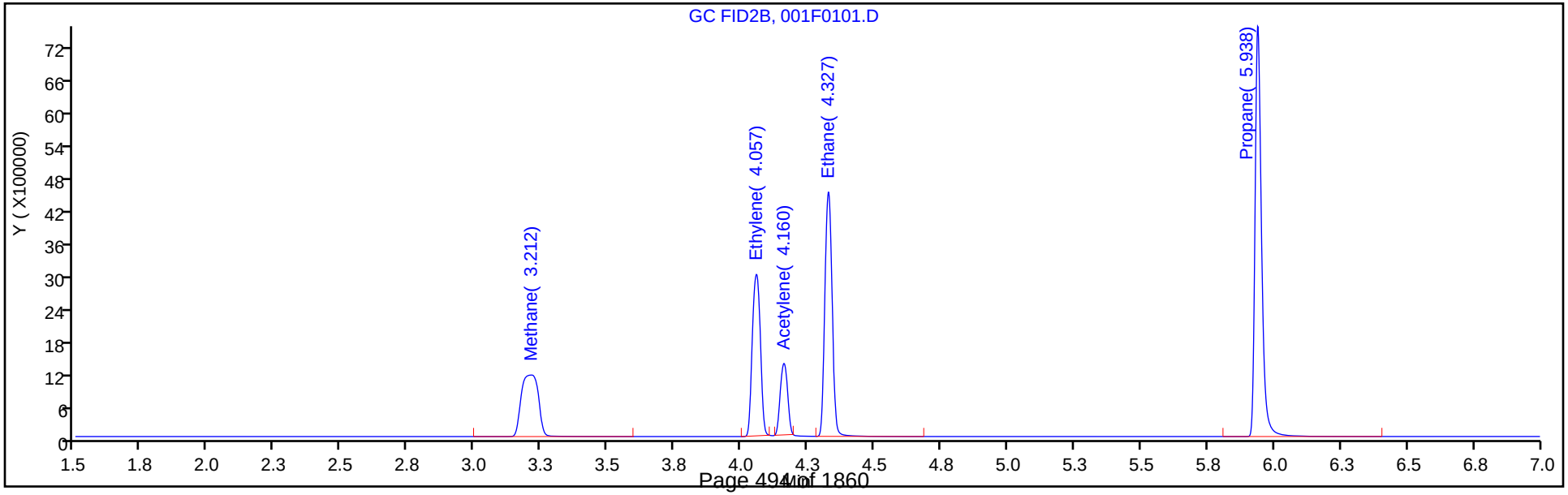
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J	Operator ID:	gm
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



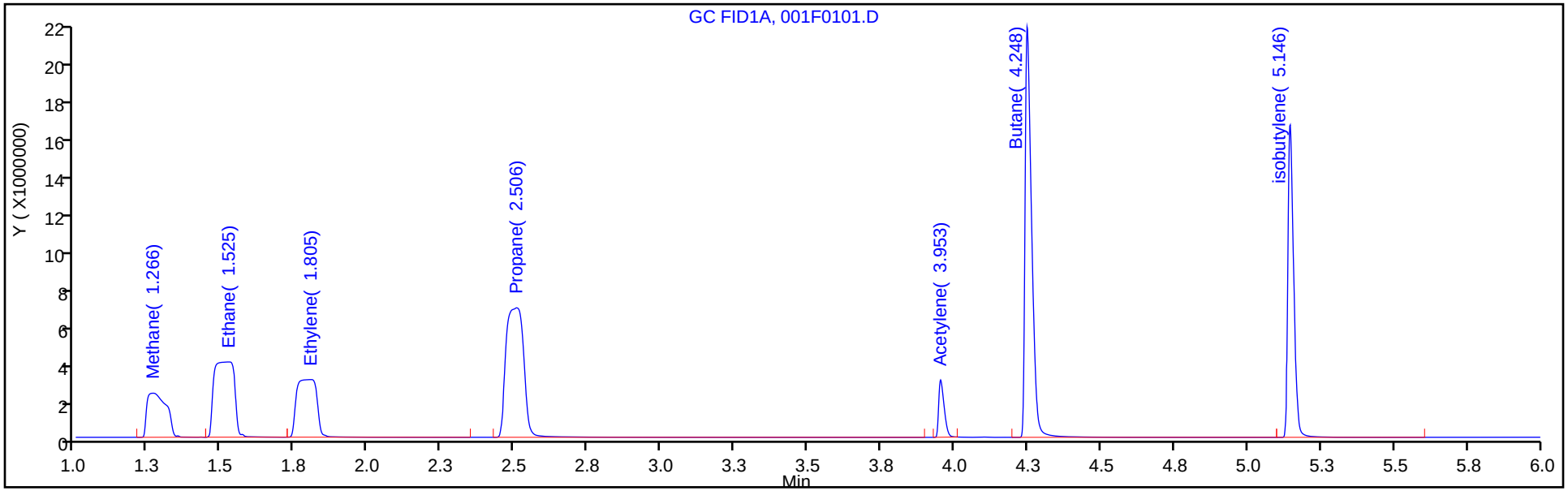
Report Date: 19-Jun-2020 12:43:08 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

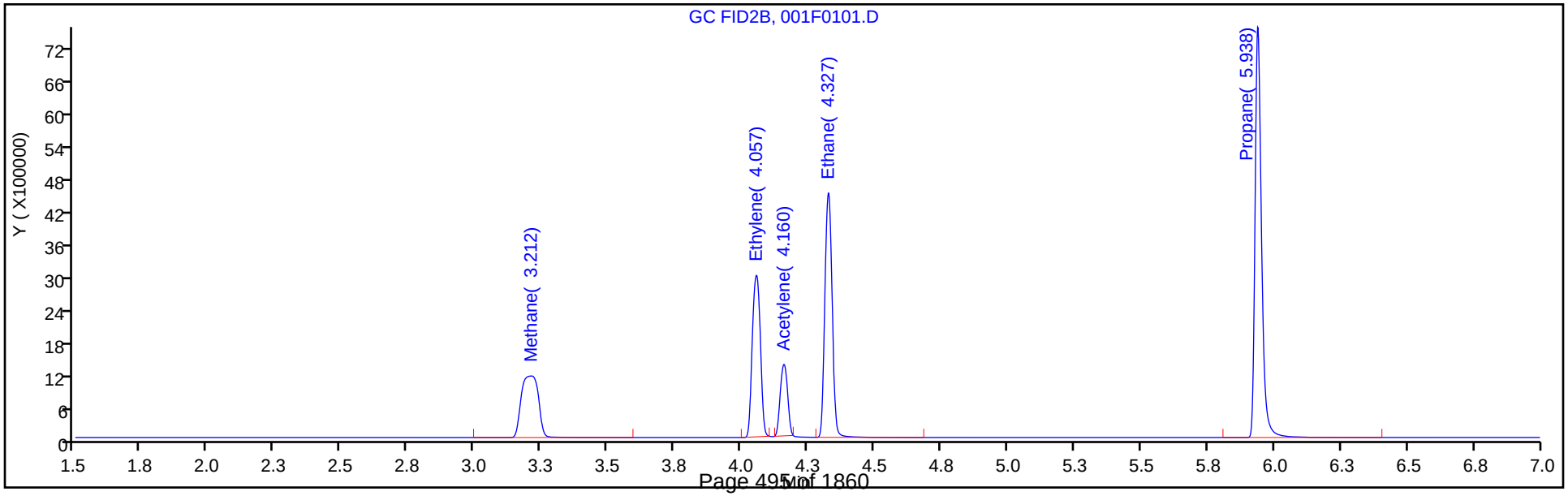
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J	Operator ID:	gm
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

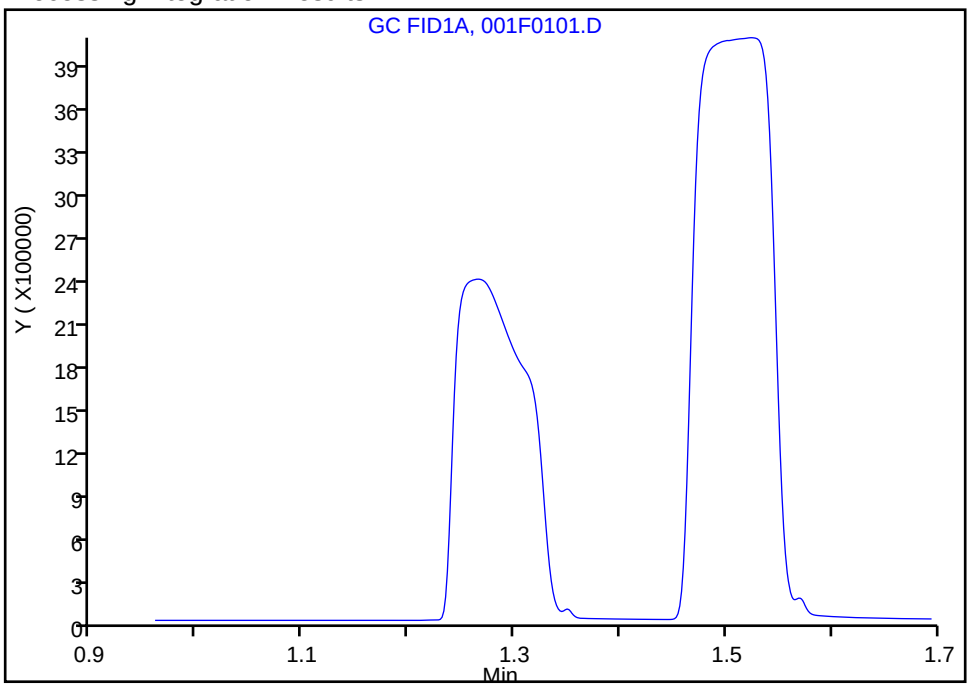
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

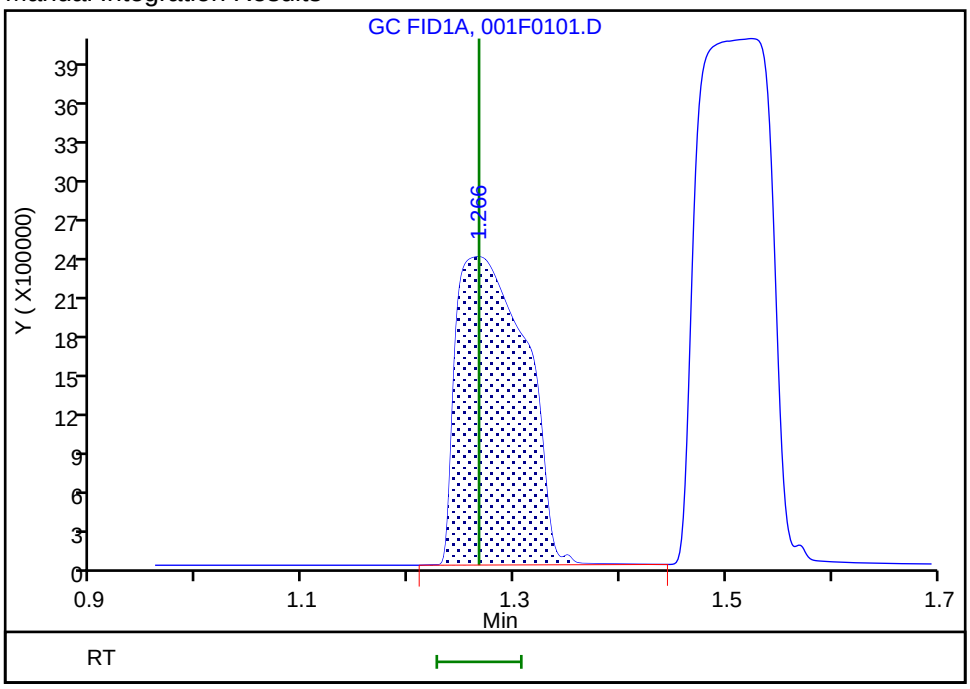
Not Detected
Expected RT: 1.27

Processing Integration Results



Manual Integration Results

RT: 1.27
Area: 10576226
Amount: 73.242857
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:25:34
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

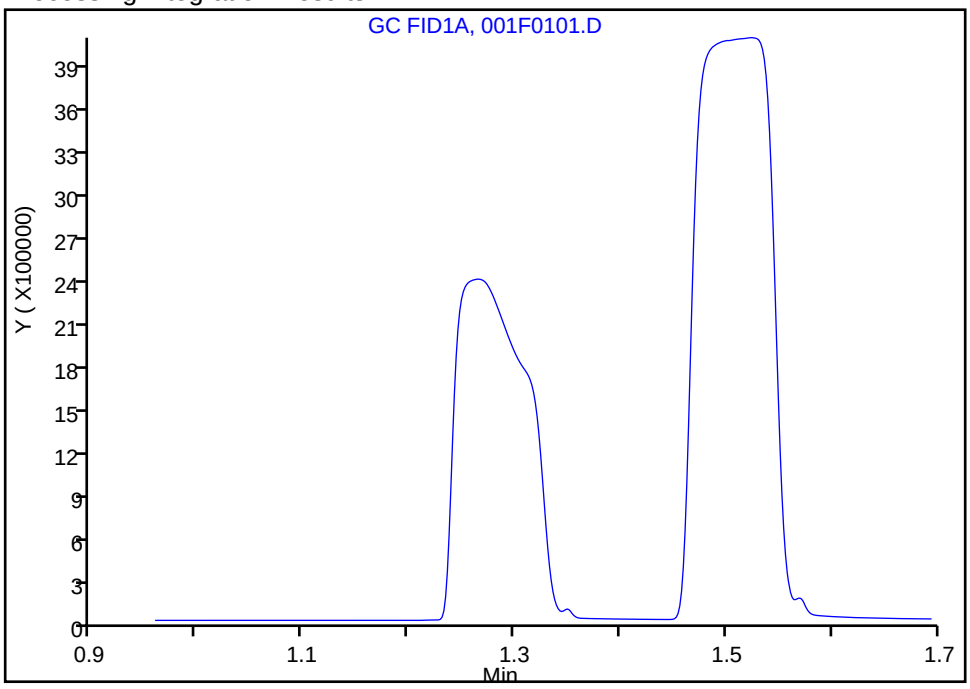
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

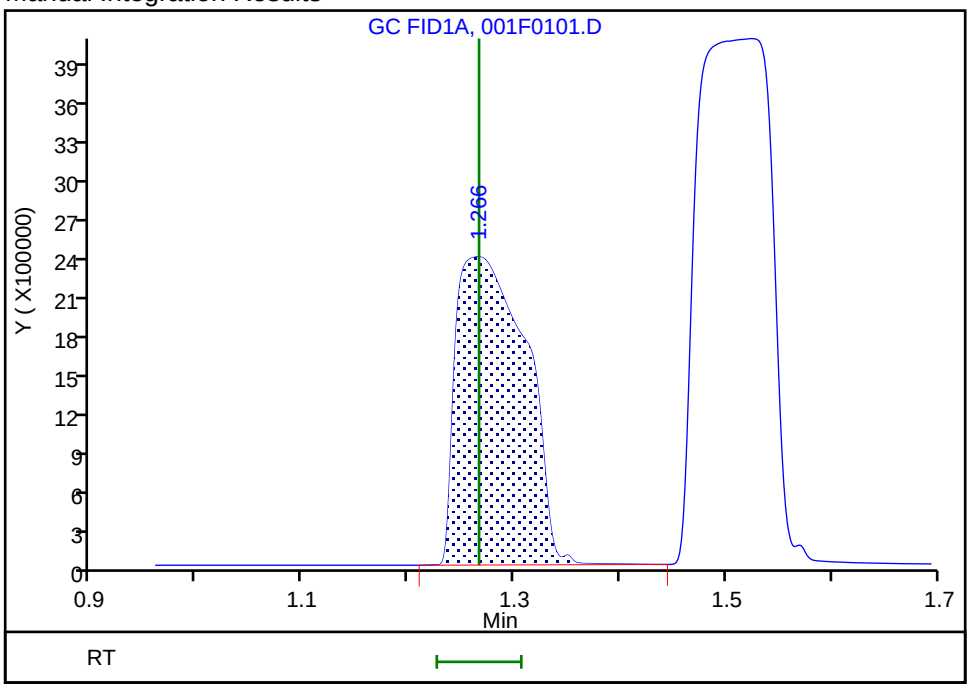
Not Detected
Expected RT: 1.27

Processing Integration Results



Manual Integration Results

RT: 1.27
Area: 10576226
Amount: 73.242857
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:25:34
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

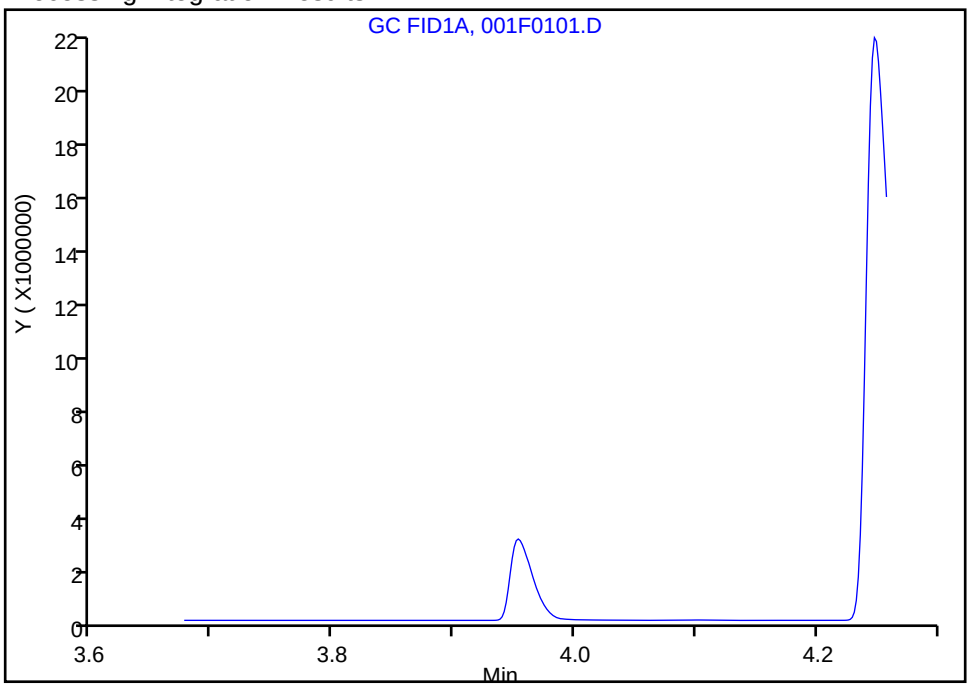
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

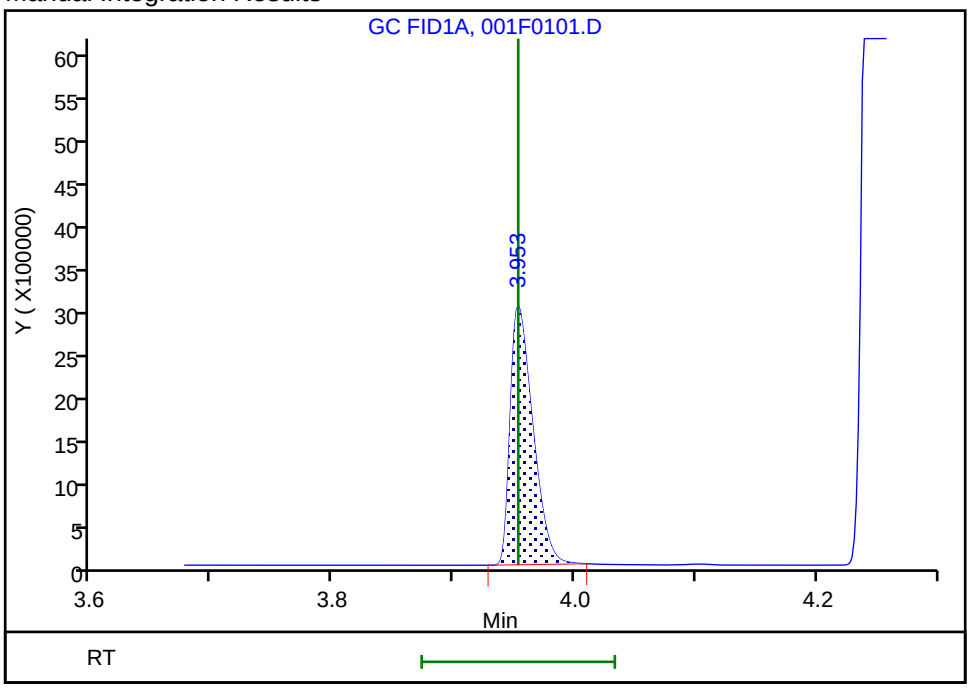
Processing Integration Results

RT: 3.94
Area: 0
Amount: 116.0344
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 3856058
Amount: 112.4403
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:26:18

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

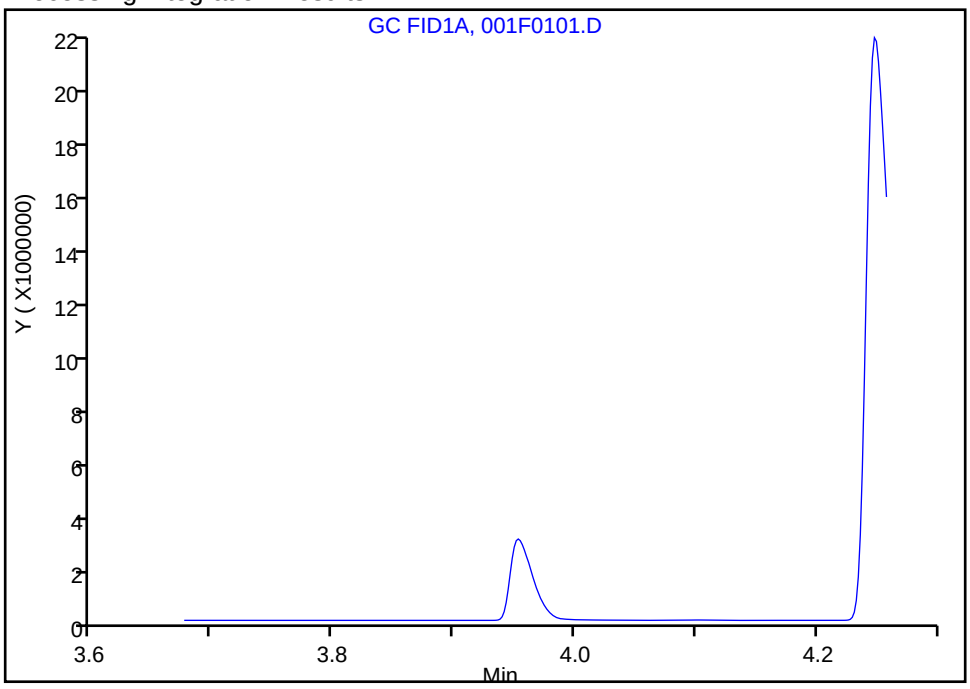
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

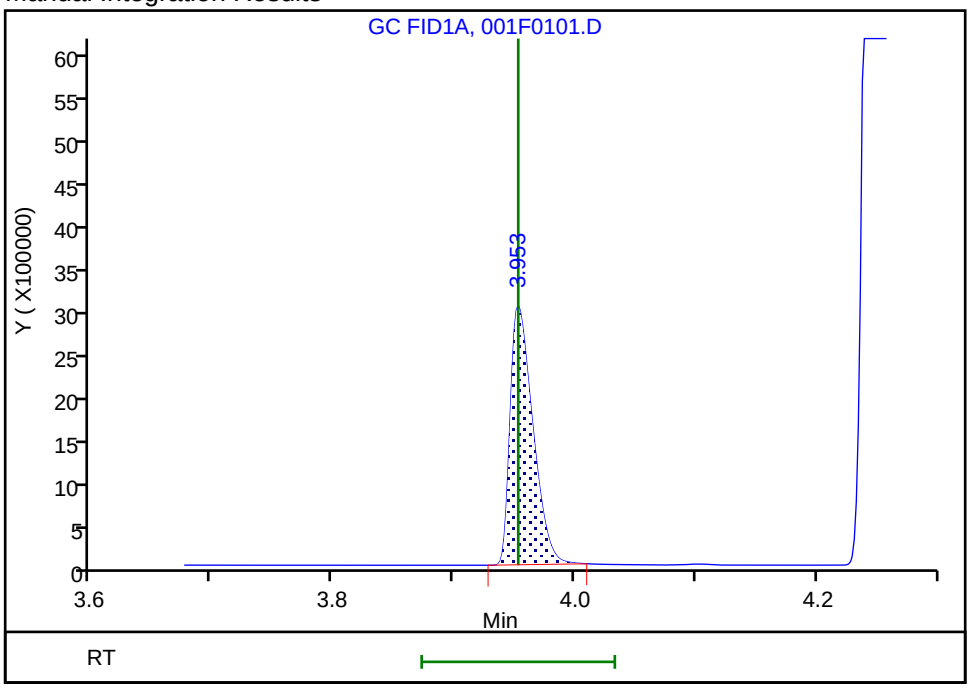
Processing Integration Results

RT: 3.94
Area: 0
Amount: 116.0344
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 3856058
Amount: 112.4403
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:26:18

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499210/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

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		68870		73.2	73.0	0.3	20.0
Ethylene	Ave	47934	48695		130	128	1.6	20.0
Acetylene	Ave	21605	21152		116	119	-2.1	20.0
Ethane	Ave	61056	62027		139	137	1.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499415/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

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		68870		73.2	73.0	0.3	20.0
Ethylene	Ave	47934	48695		130	128	1.6	20.0
Acetylene	Ave	21605	21152		116	119	-2.1	20.0
Ethane	Ave	61056	62027		139	137	1.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499210/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.21	3.17	3.25
Ethylene	4.06	4.01	4.11
Acetylene	4.16	4.08	4.24
Ethane	4.33	4.28	4.38

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499415/1 Calibration Date: 06/18/2020 08:54

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.21	3.17	3.25
Ethylene	4.06	4.01	4.11
Acetylene	4.16	4.08	4.24
Ethane	4.33	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 18-Jun-2020 08:54:00 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:08 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 18-Jun-2020 10:31:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.266	1.266	0.000	10576226	73.0	73.2	a
2	3.212	3.212	0.000	5027738	73.0	73.2	a
						RPD = 0.06	
3 Ethane							
1	1.525	1.525	0.000	19033298	136.9	139.9	
2	4.327	4.327	0.000	8488760	136.9	139.0	
						RPD = 0.63	
4 Ethylene							M
1	1.805	1.805	0.000	14340370	127.7	130.1	
2	4.057	4.057	0.000	6216689	127.7	129.7	M
						RPD = 0.32	
5 Propane							
1	2.506	2.506	0.000	28582630	200.7	199.5	
2	5.938	5.938	0.000	12700696	200.7	202.8	
						RPD = 1.62	
6 Acetylene							Ma
1	3.953	3.953	0.000	3856058	118.5	112.4	M
2	4.160	4.160	0.000	2506981	118.5	116.0	M
						RPD = 3.15	
7 Butane							
1	4.248	4.248	0.000	33487972	264.5	253.9	
2	7.380	7.380	0.000	16097588	264.5	252.5	
						RPD = 0.57	
8 isobutylene							
1	5.146	5.146	0.000	22425943	255.4	251.2	
2	7.233	7.233	0.000	10430251	255.4	251.0	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 18-Jun-2020 08:54:00 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:08 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 18-Jun-2020 10:31:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.266	1.266	0.000	10576226	73.0	73.2	a
2	3.212	3.212	0.000	5027738	73.0	73.2	a
						RPD = 0.06	
3 Ethane							
1	1.525	1.525	0.000	19033298	136.9	139.9	
2	4.327	4.327	0.000	8488760	136.9	139.0	
						RPD = 0.63	
4 Ethylene							M
1	1.805	1.805	0.000	14340370	127.7	130.1	
2	4.057	4.057	0.000	6216689	127.7	129.7	M
						RPD = 0.32	
5 Propane							
1	2.506	2.506	0.000	28582630	200.7	199.5	
2	5.938	5.938	0.000	12700696	200.7	202.8	
						RPD = 1.62	
6 Acetylene							Ma
1	3.953	3.953	0.000	3856058	118.5	112.4	M
2	4.160	4.160	0.000	2506981	118.5	116.0	M
						RPD = 3.15	
7 Butane							
1	4.248	4.248	0.000	33487972	264.5	253.9	
2	7.380	7.380	0.000	16097588	264.5	252.5	
						RPD = 0.57	
8 isobutylene							
1	5.146	5.146	0.000	22425943	255.4	251.2	
2	7.233	7.233	0.000	10430251	255.4	251.0	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

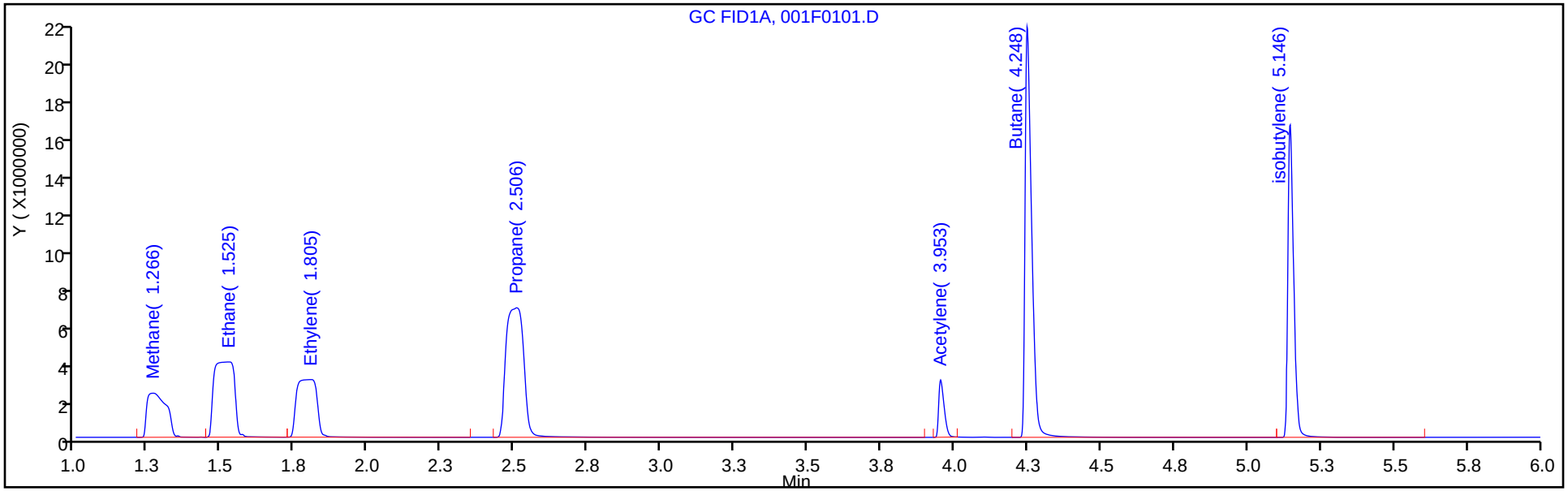
Report Date: 19-Jun-2020 12:43:09 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

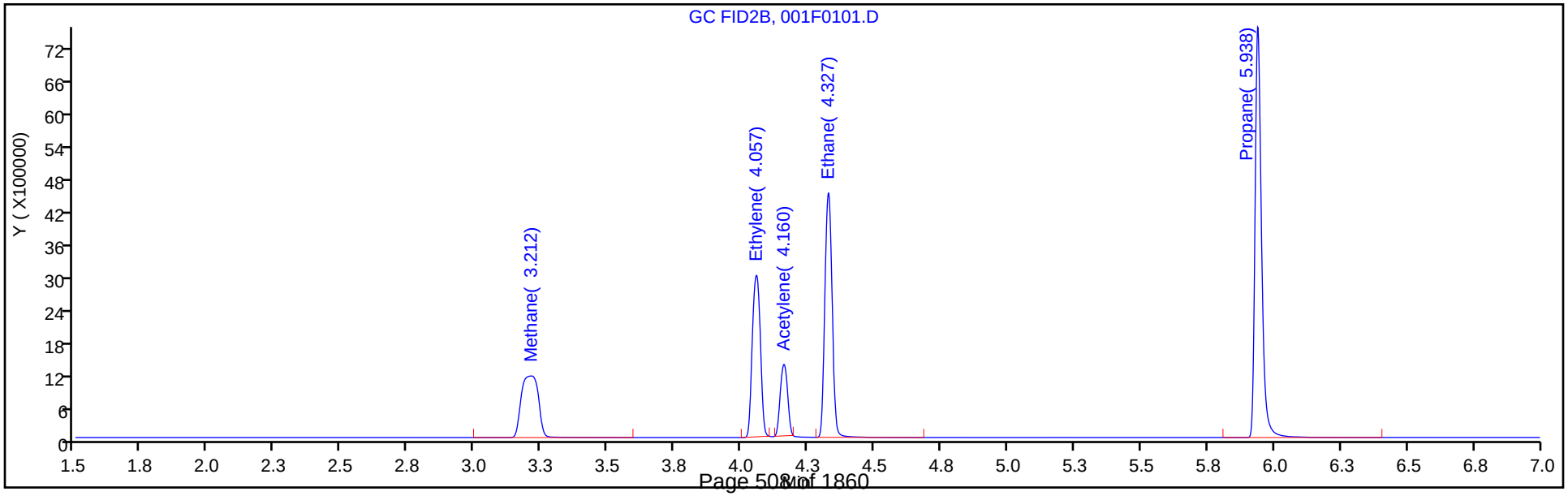
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J	Operator ID:	gm
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



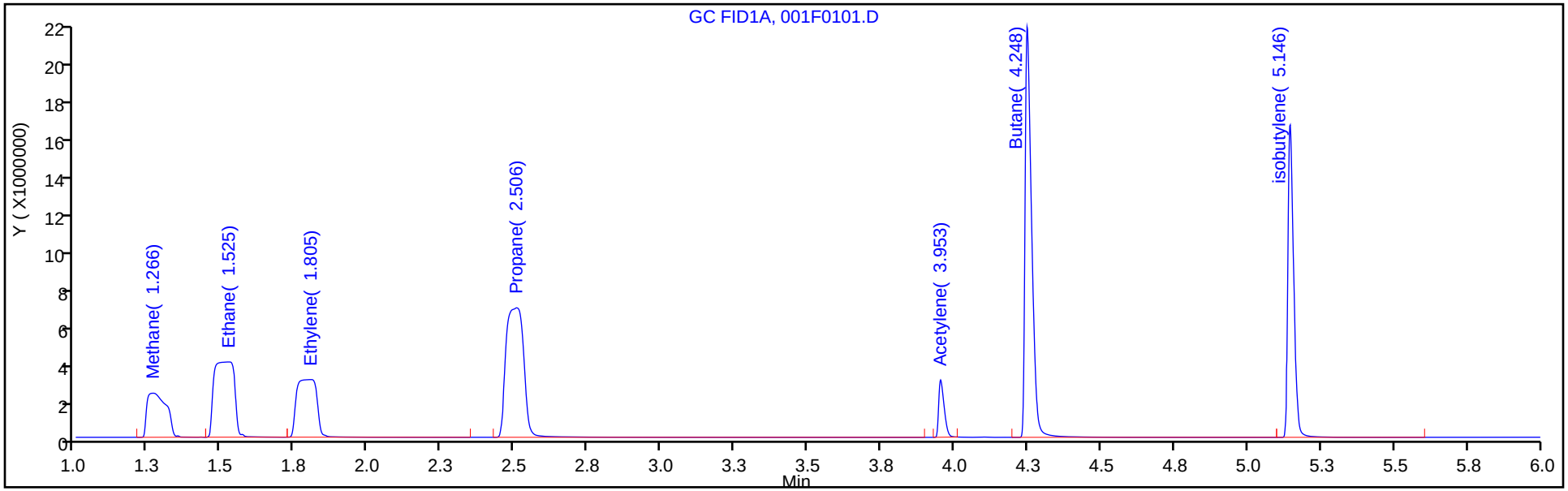
Report Date: 19-Jun-2020 12:43:08 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

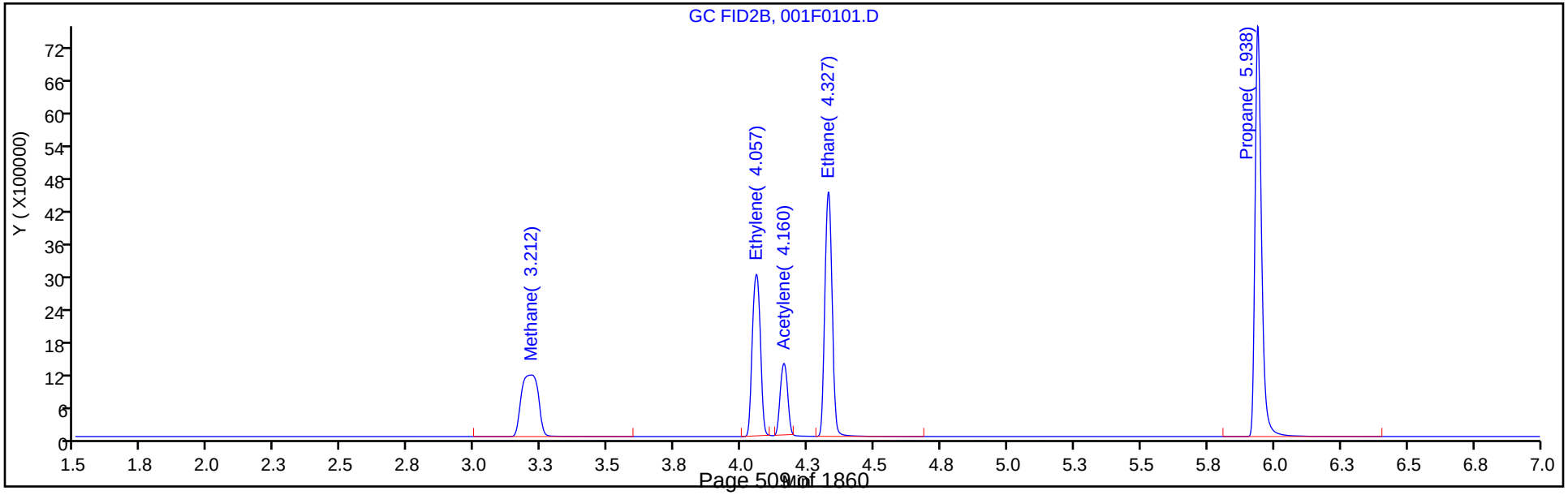
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J	Operator ID:	gm
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

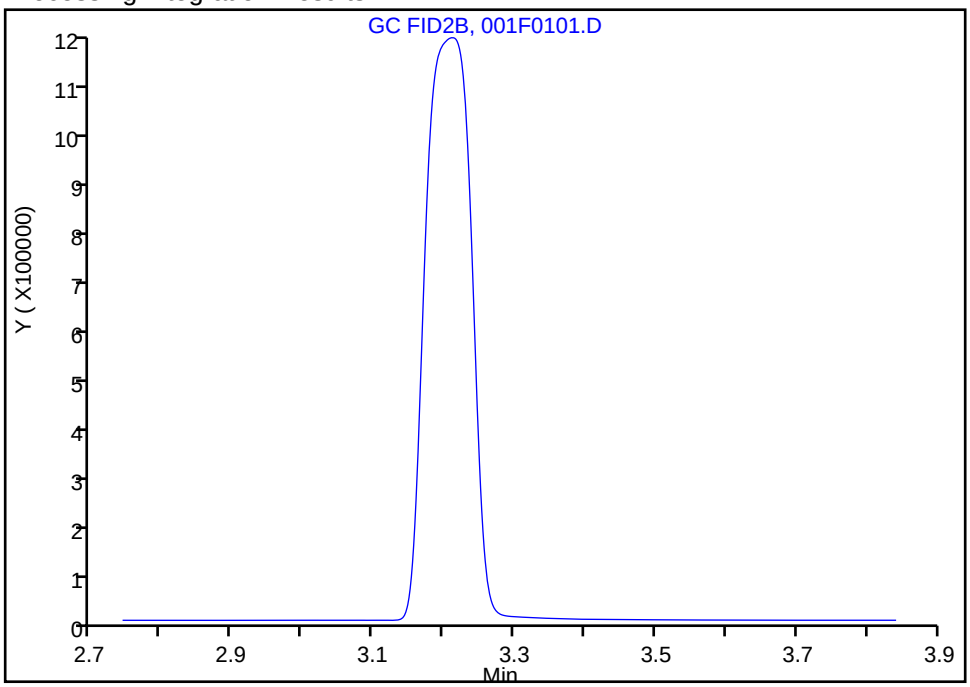
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

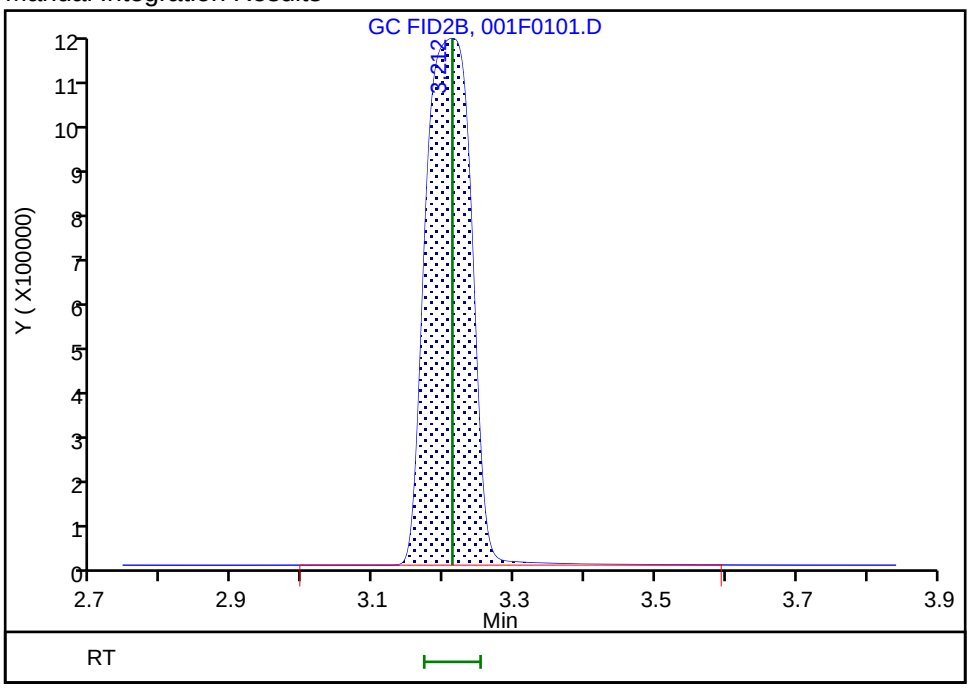
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 5027738
Amount: 73.200439
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:25:31
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

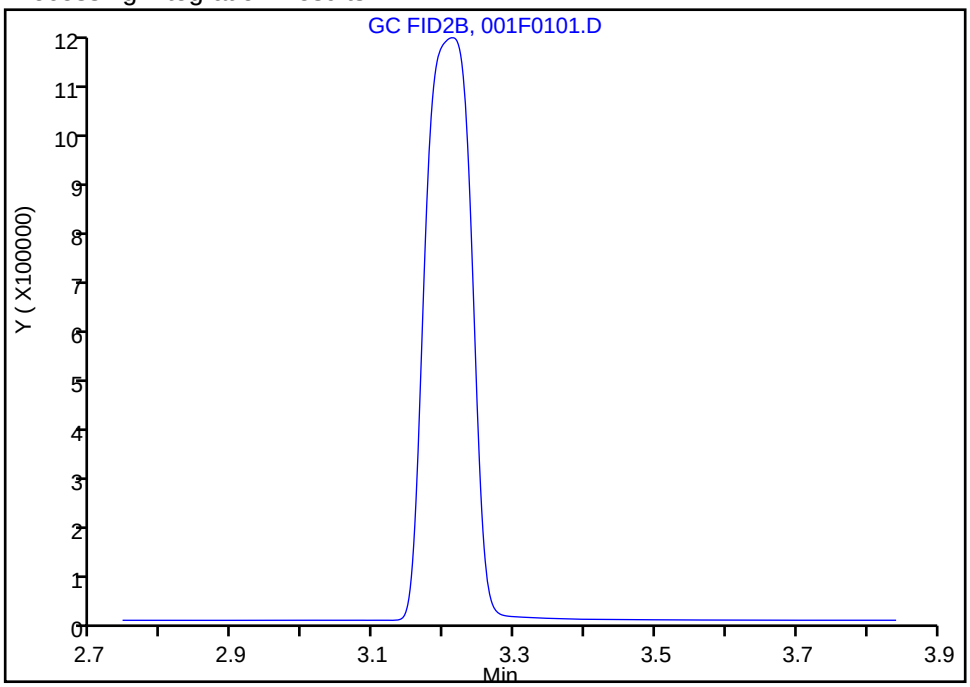
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

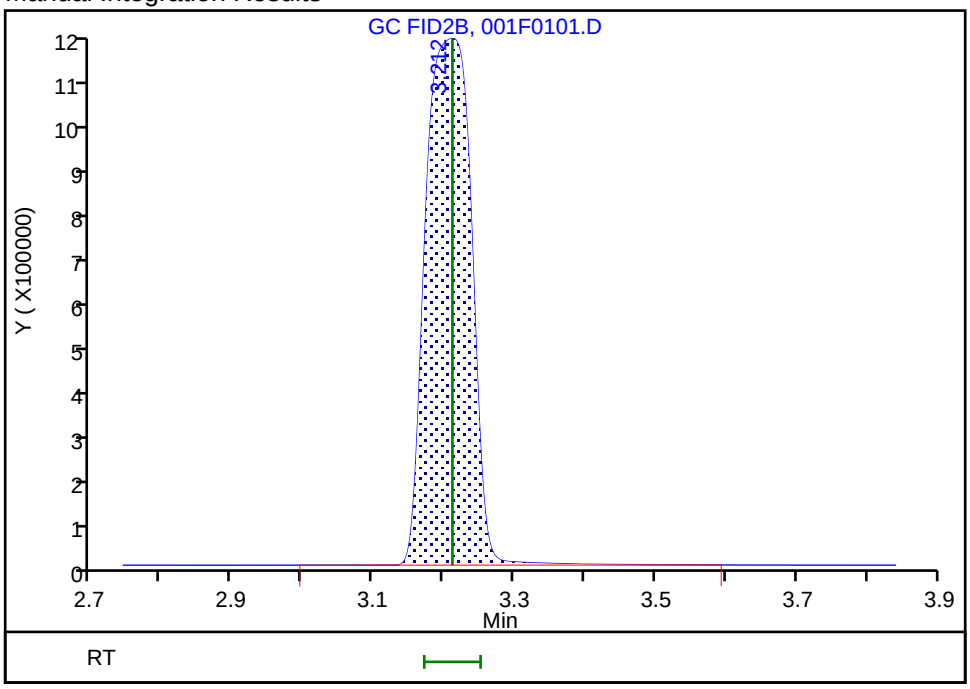
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 5027738
Amount: 73.200439
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:25:31
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

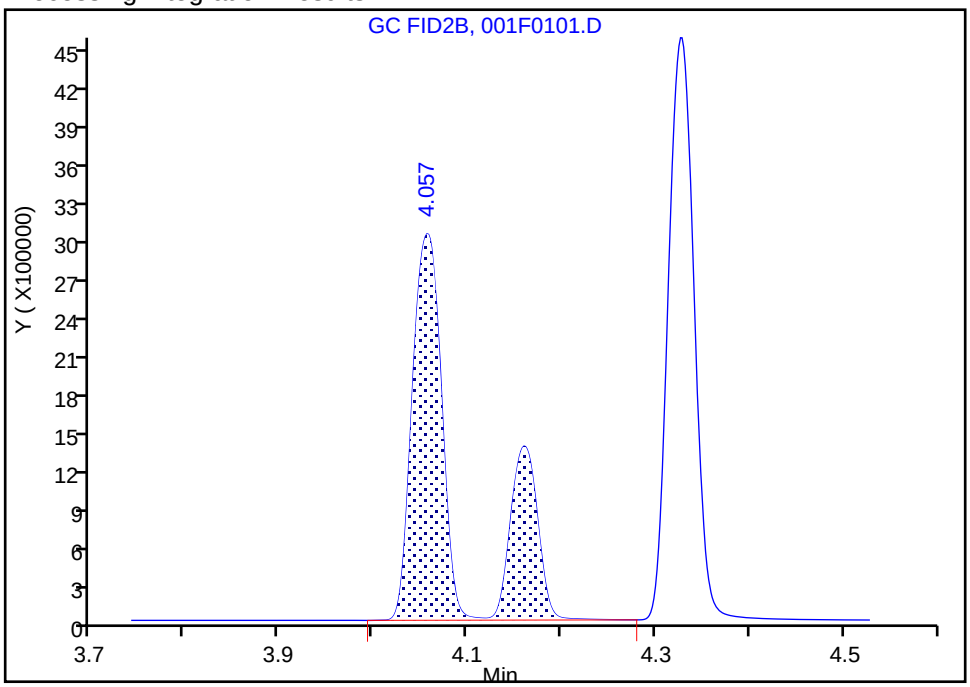
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

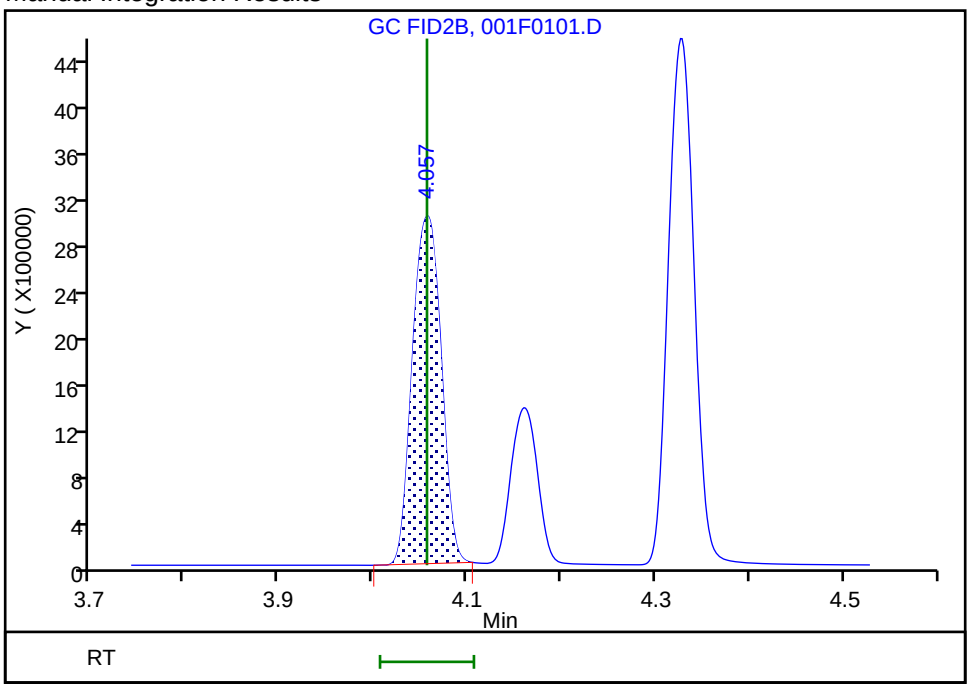
Processing Integration Results

RT: 4.06
Area: 8965175
Amount: 187.0328
Amount Units: ug/l



Manual Integration Results

RT: 4.06
Area: 6216689
Amount: 129.6935
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:25:52

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

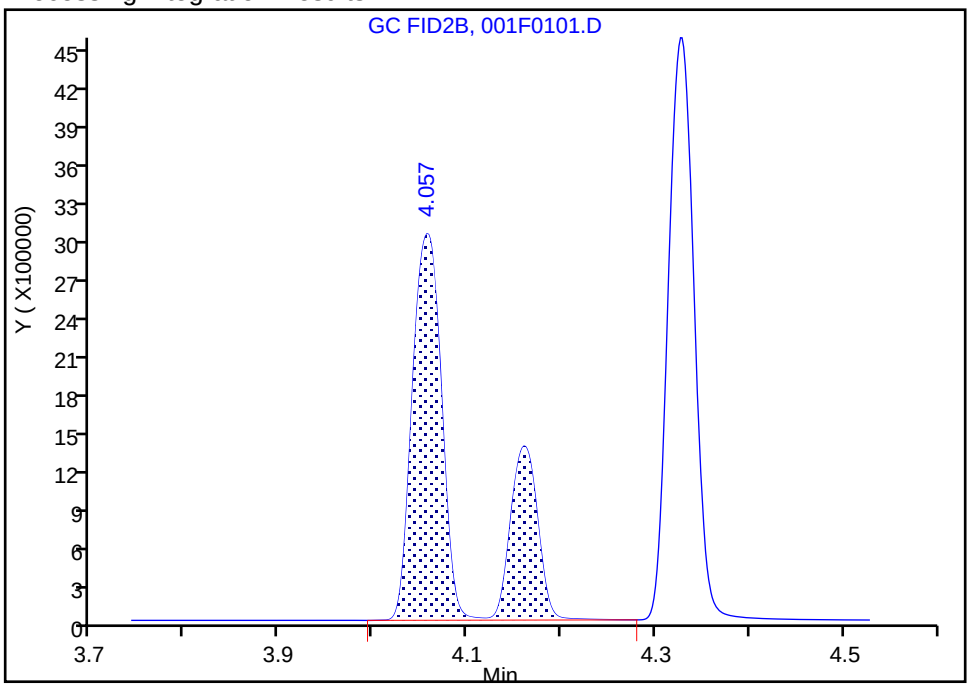
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

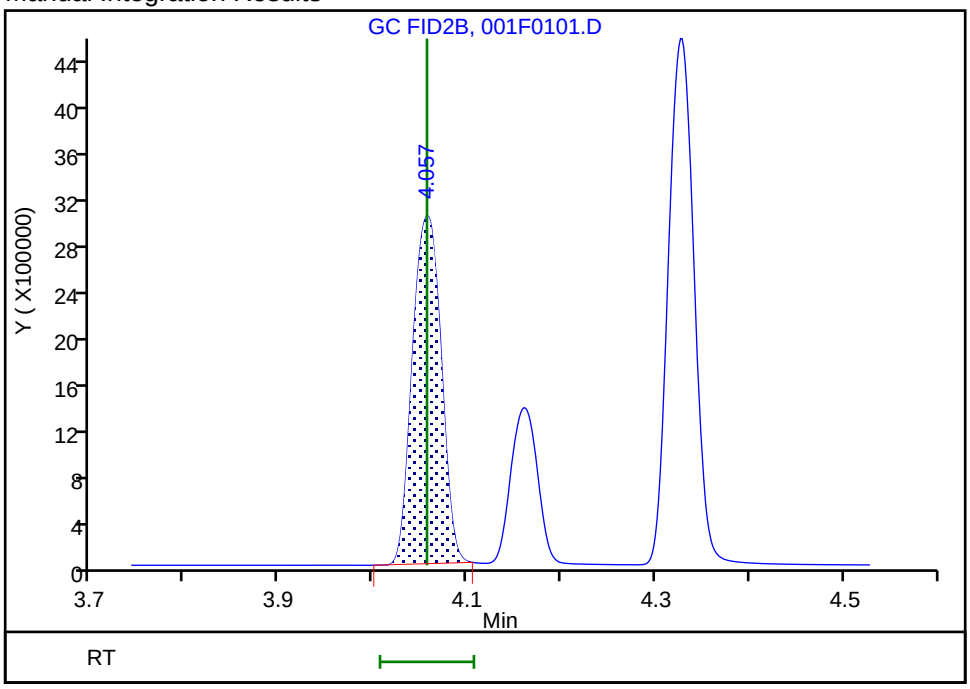
Processing Integration Results

RT: 4.06
Area: 8965175
Amount: 187.0328
Amount Units: ug/l



Manual Integration Results

RT: 4.06
Area: 6216689
Amount: 129.6935
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:25:52

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

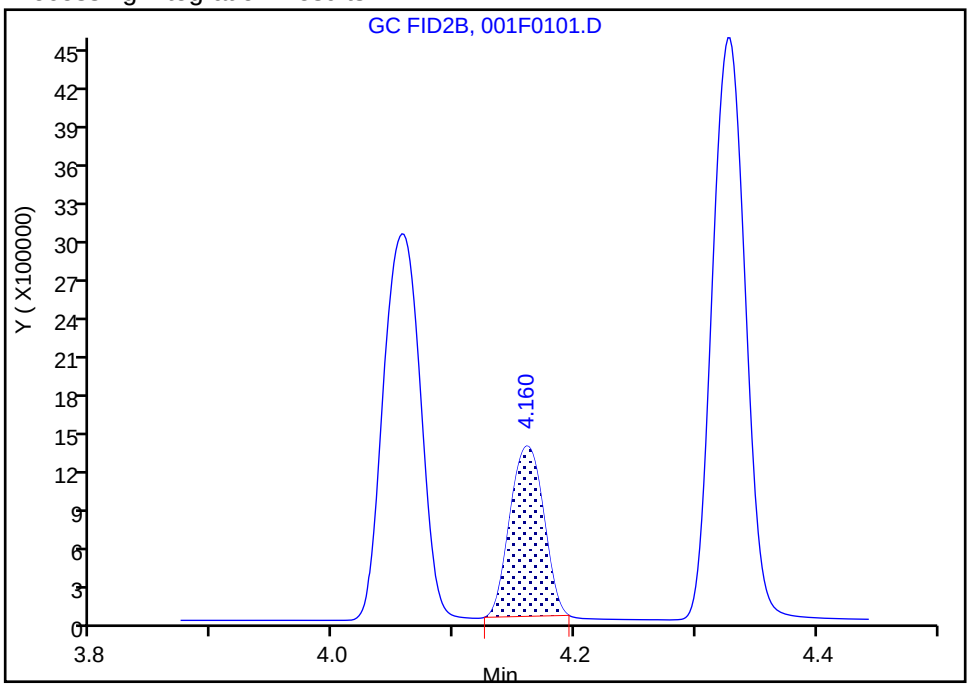
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

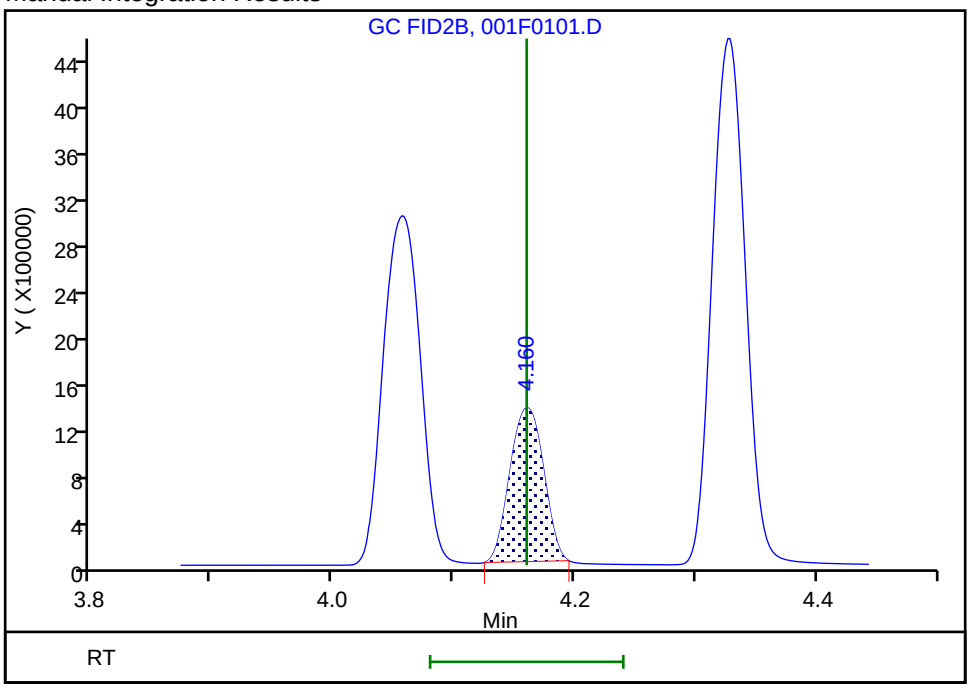
Processing Integration Results

RT: 4.16
Area: 2506981
Amount: 116.0344
Amount Units: ug/l



Manual Integration Results

RT: 4.16
Area: 2506981
Amount: 116.0344
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:26:11
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

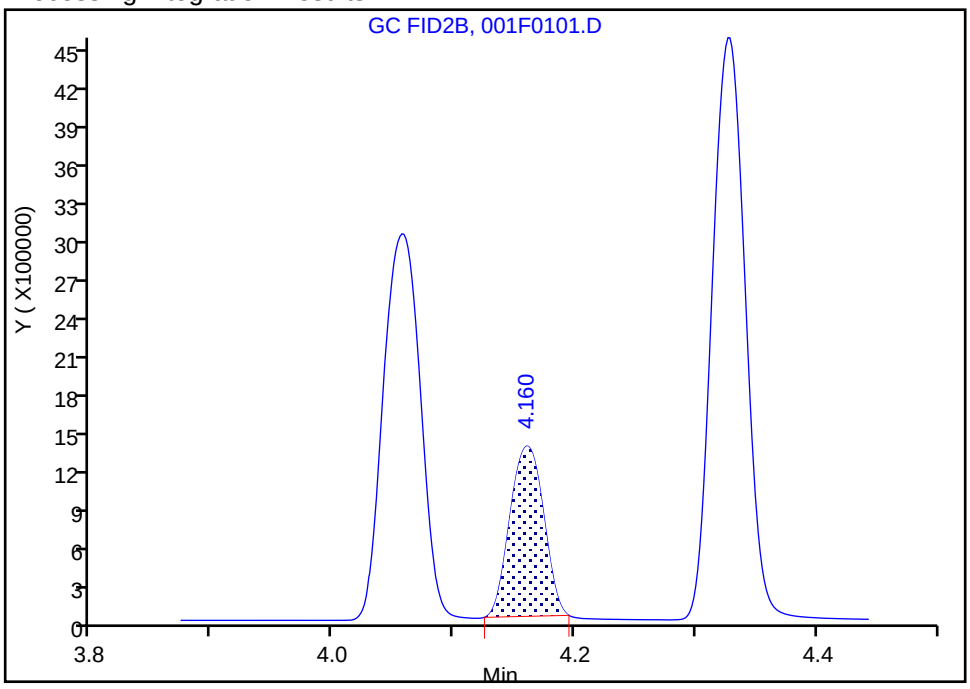
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

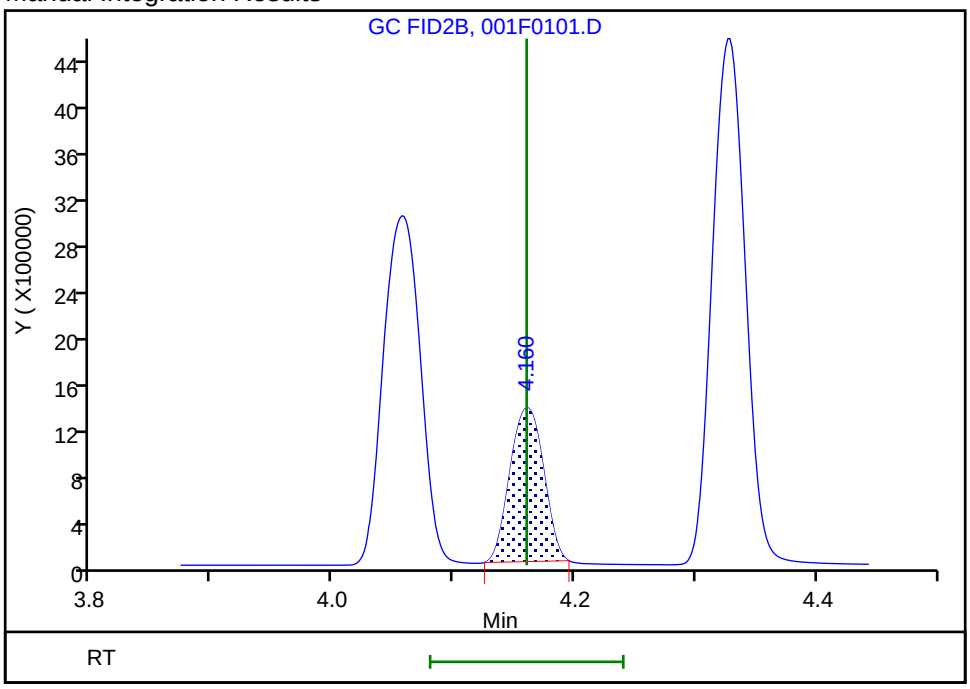
Processing Integration Results

RT: 4.16
Area: 2506981
Amount: 116.0344
Amount Units: ug/l



Manual Integration Results

RT: 4.16
Area: 2506981
Amount: 116.0344
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:26:11

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/18 Calibration Date: 06/18/2020 13:47

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 019F1901.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		156478		79.1	73.0	8.4	20.0
Ethane	Ave	136043	148036		149	137	8.8	20.0
Ethylene	Ave	110213	117902		137	128	7.0	20.0
Acetylene	Ave	34294	33470		116	119	-2.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/18 Calibration Date: 06/18/2020 13:47

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 019F1901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.23	1.31
Ethane	1.51	1.48	1.58
Ethylene	1.78	1.76	1.86
Acetylene	3.96	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 13:47:33 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ?
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:15 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 18-Jun-2020 14:02:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.249	1.266	-0.017	11423423	73.0	79.1	a
2	3.164	3.212	-0.048	5488271	73.0	79.9	a
						RPD = 1.00	
3 Ethane							
1	1.505	1.525	-0.020	20259568	136.9	148.9	
2	4.299	4.327	-0.028	9142221	136.9	149.7	
						RPD = 0.54	
4 Ethylene							M
1	1.782	1.805	-0.023	15052179	127.7	136.6	
2	4.024	4.057	-0.033	6611263	127.7	137.9	M
						RPD = 0.99	
5 Propane							
1	2.475	2.506	-0.031	30054427	200.7	209.8	
2	5.921	5.938	-0.017	13507128	200.7	215.7	
						RPD = 2.76	
6 Acetylene							Ma
1	3.957	3.953	0.004	3966882	118.5	115.7	M
2	4.129	4.160	-0.031	2698090	118.5	124.9	M
						RPD = 7.66	
7 Butane							
1	4.239	4.248	-0.009	33711282	264.5	255.6	
2	7.366	7.380	-0.014	16391001	264.5	257.1	
						RPD = 0.57	
8 isobutylene							
1	5.144	5.146	-0.002	22443956	255.4	251.4	
2	7.219	7.233	-0.014	10564480	255.4	254.2	
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

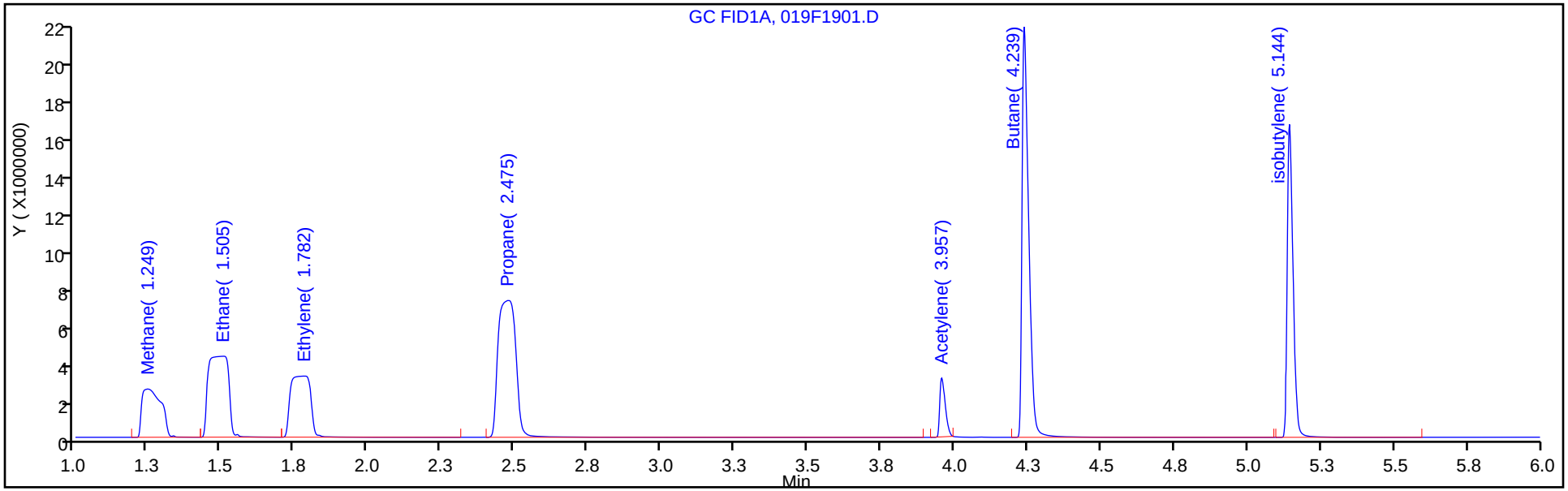
Report Date: 19-Jun-2020 12:43:15 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

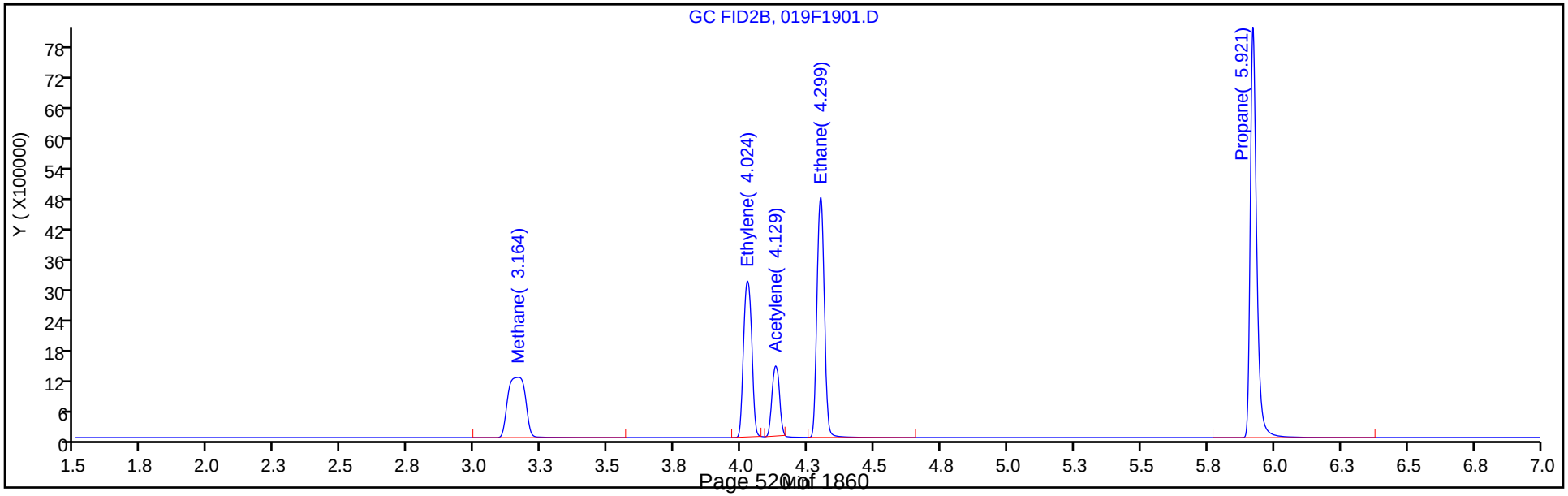
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D

Injection Date:	18-Jun-2020 13:47:33	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	18
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

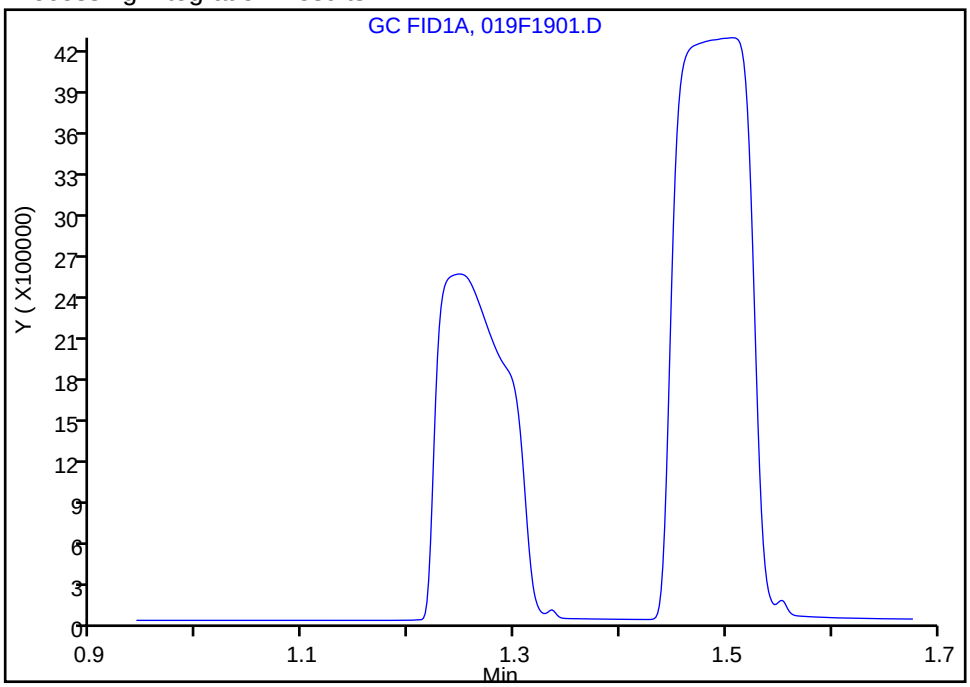
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

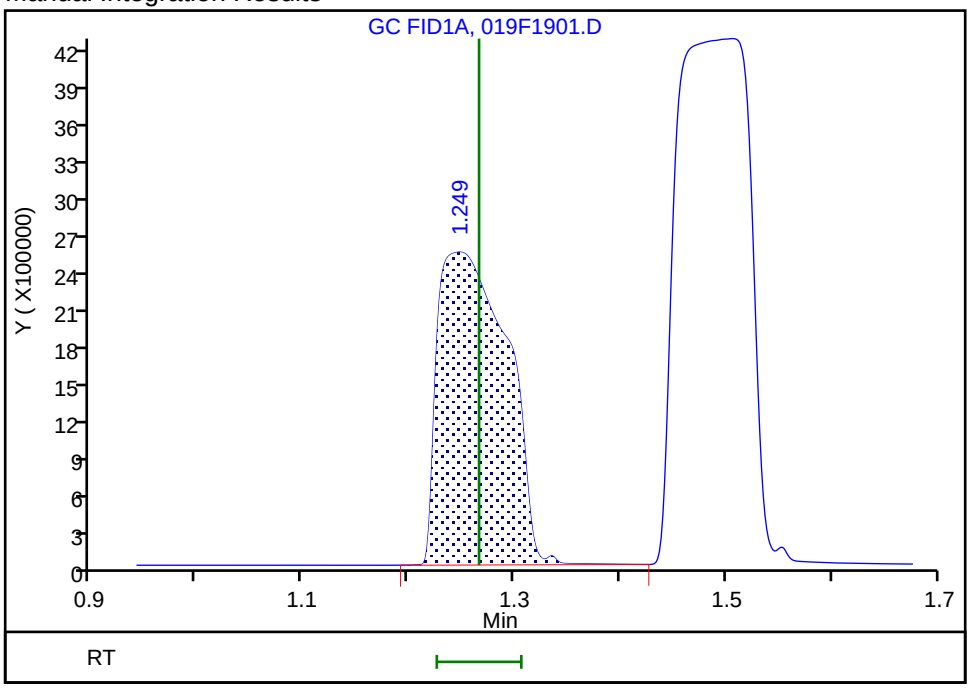
Not Detected
Expected RT: 1.27

Processing Integration Results



Manual Integration Results

RT: 1.25
Area: 11423423
Amount: 79.137088
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 14:01:08
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

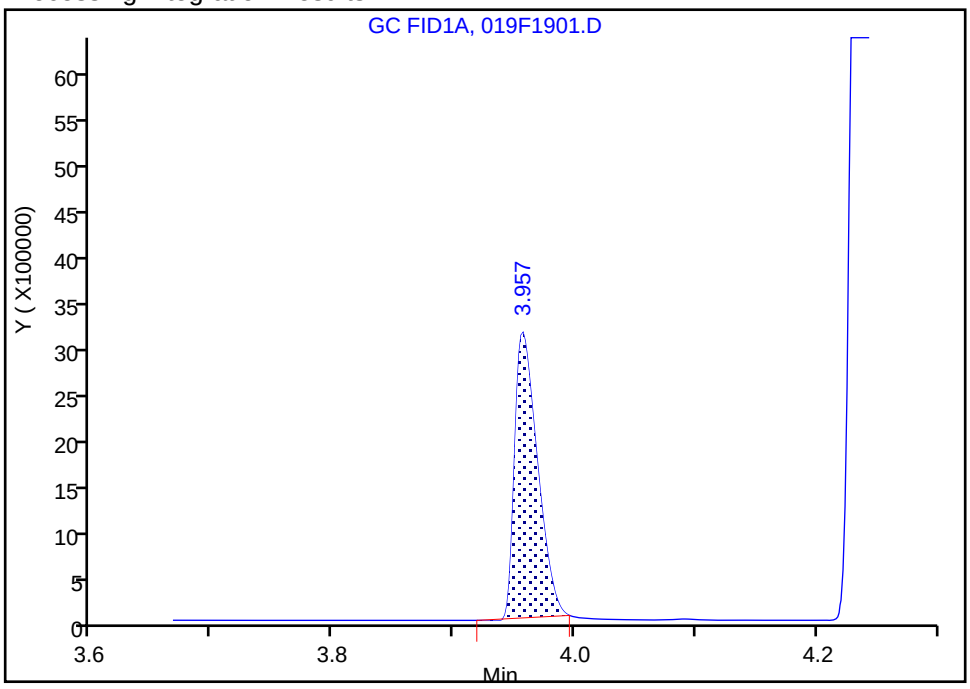
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D				
Injection Date:	18-Jun-2020 13:47:33	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

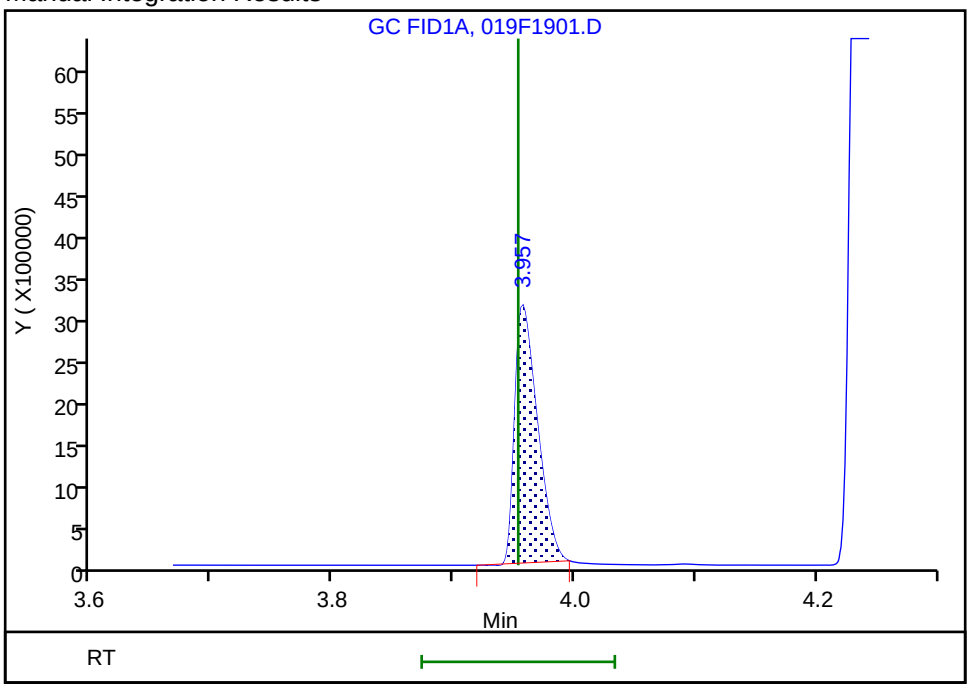
Processing Integration Results

RT: 3.96
Area: 3966882
Amount: 115.6719
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3966882
Amount: 115.6719
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 14:01:59

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/18 Calibration Date: 06/18/2020 13:47

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 019F1901.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		75178		79.9	73.0	9.5	20.0
Ethylene	Ave	47934	51785		138	128	8.0	20.0
Acetylene	Ave	21605	22764		125	119	5.4	20.0
Ethane	Ave	61056	66802		150	137	9.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/18 Calibration Date: 06/18/2020 13:47

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 019F1901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.16	3.17	3.25
Ethylene	4.02	4.01	4.11
Acetylene	4.13	4.08	4.24
Ethane	4.30	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 13:47:33 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ?
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:15 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 18-Jun-2020 14:02:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.249	1.266	-0.017	11423423	73.0	79.1	a
2	3.164	3.212	-0.048	5488271	73.0	79.9	a
						RPD = 1.00	
3 Ethane							
1	1.505	1.525	-0.020	20259568	136.9	148.9	
2	4.299	4.327	-0.028	9142221	136.9	149.7	
						RPD = 0.54	
4 Ethylene							M
1	1.782	1.805	-0.023	15052179	127.7	136.6	
2	4.024	4.057	-0.033	6611263	127.7	137.9	M
						RPD = 0.99	
5 Propane							
1	2.475	2.506	-0.031	30054427	200.7	209.8	
2	5.921	5.938	-0.017	13507128	200.7	215.7	
						RPD = 2.76	
6 Acetylene							Ma
1	3.957	3.953	0.004	3966882	118.5	115.7	M
2	4.129	4.160	-0.031	2698090	118.5	124.9	M
						RPD = 7.66	
7 Butane							
1	4.239	4.248	-0.009	33711282	264.5	255.6	
2	7.366	7.380	-0.014	16391001	264.5	257.1	
						RPD = 0.57	
8 isobutylene							
1	5.144	5.146	-0.002	22443956	255.4	251.4	
2	7.219	7.233	-0.014	10564480	255.4	254.2	
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

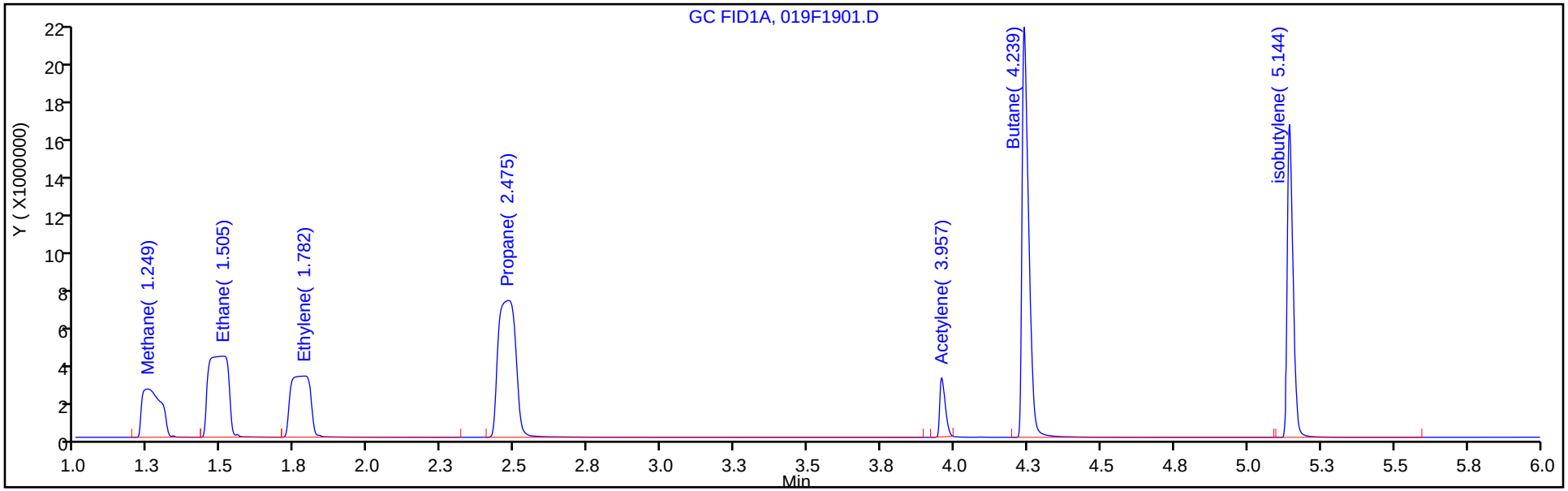
Report Date: 19-Jun-2020 12:43:16 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

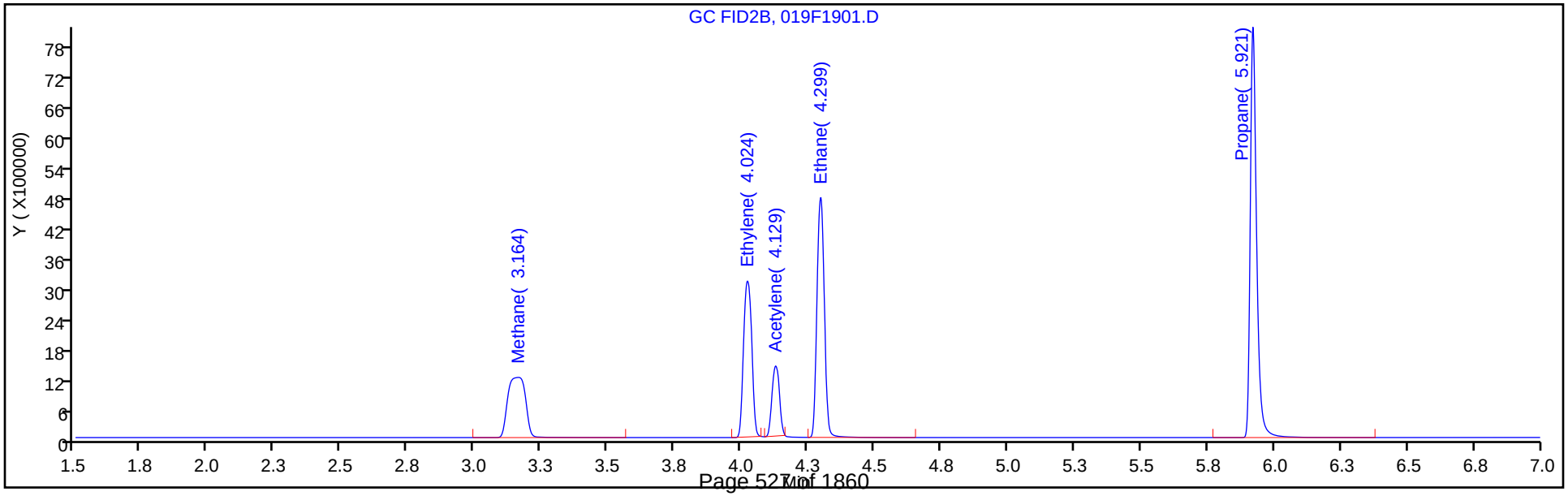
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D

Injection Date:	18-Jun-2020 13:47:33	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	18
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

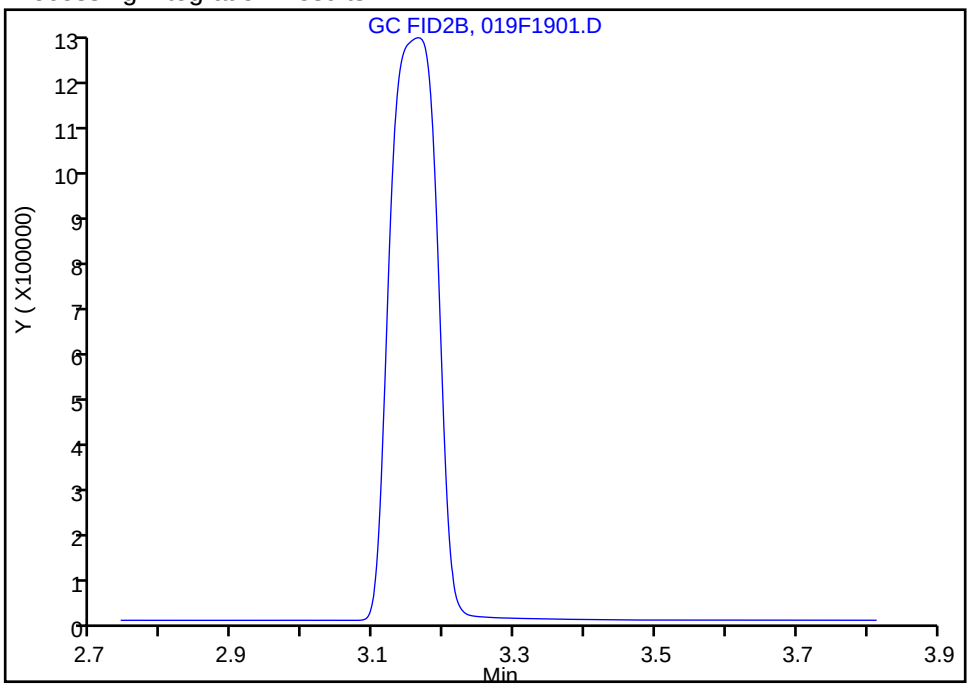
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

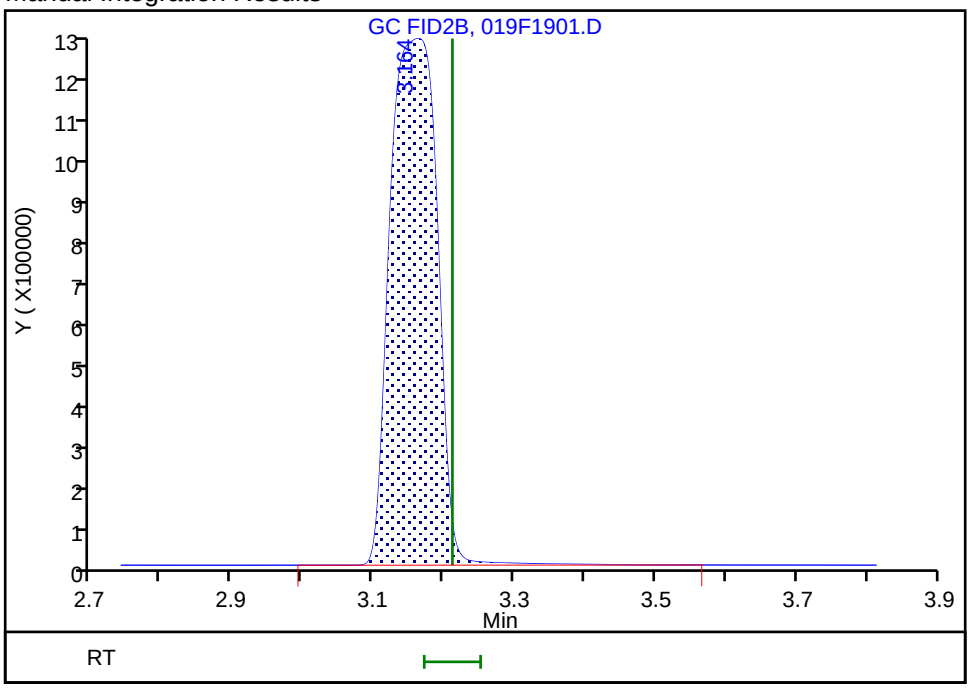
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 5488271
Amount: 79.928644
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 14:01:12
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

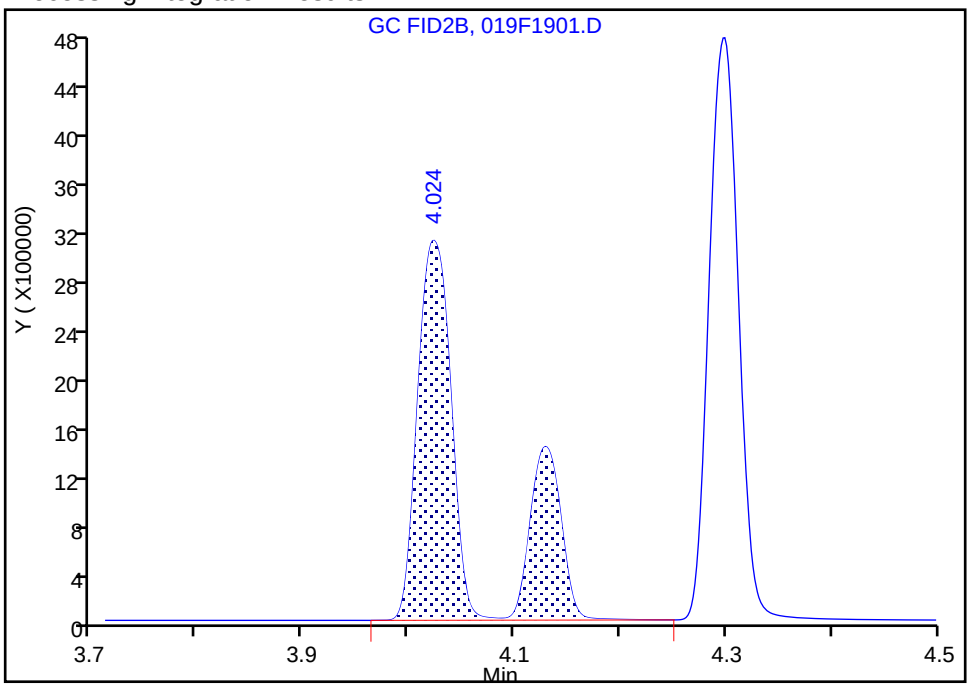
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

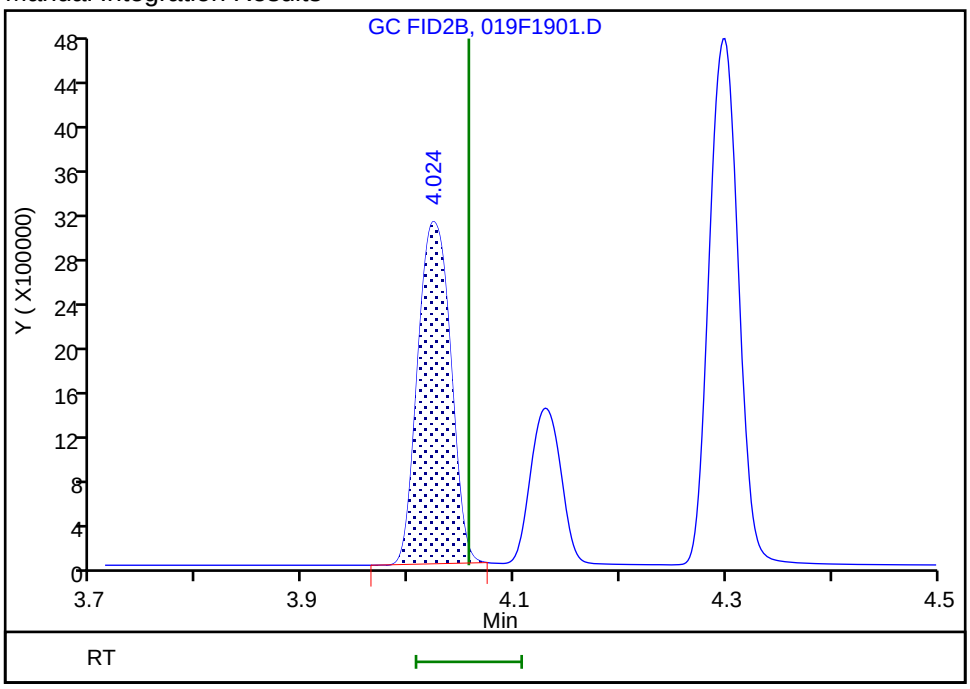
Processing Integration Results

RT: 4.02
Area: 9555620
Amount: 199.3508
Amount Units: ug/l



Manual Integration Results

RT: 4.02
Area: 6611263
Amount: 137.9251
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 14:01:35
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

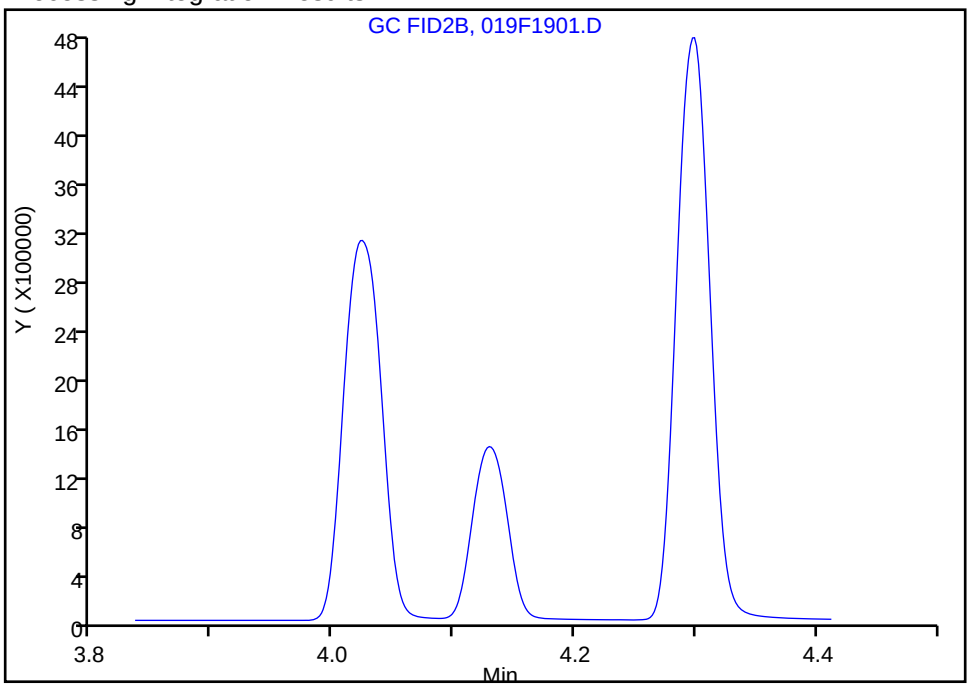
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

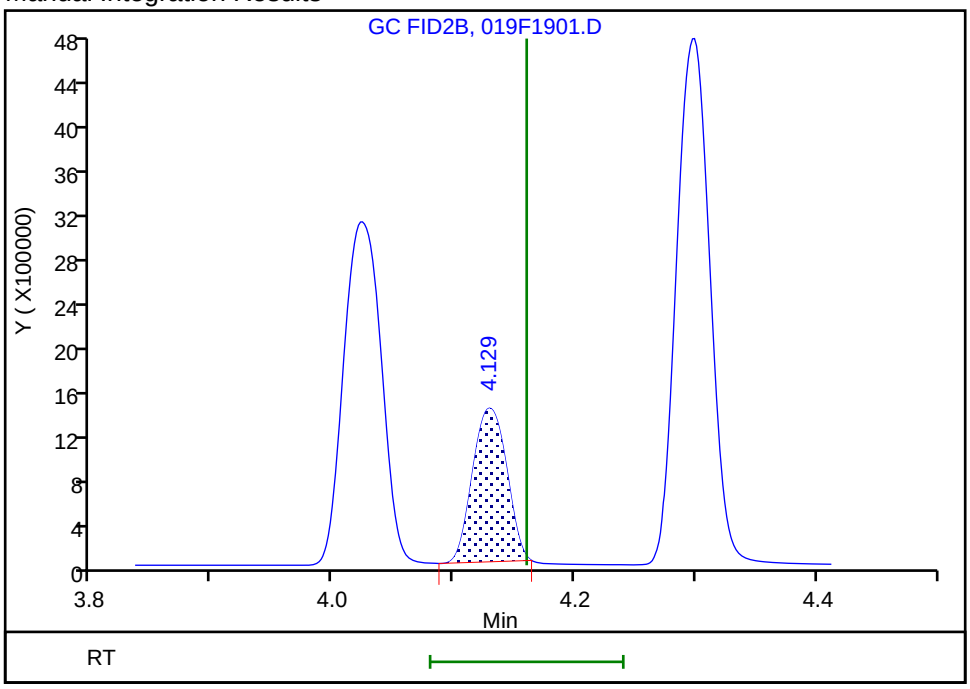
Processing Integration Results

RT: 4.16
Area: 0
Amount: 115.6719
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2698090
Amount: 124.8798
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 14:02:05
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		156488		79.1	73.0	8.4	20.0
Ethane	Ave	136043	144490		145	137	6.2	20.0
Ethylene	Ave	110213	114986		133	128	4.3	20.0
Acetylene	Ave	34294	33514		116	119	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		156488		79.1	73.0	8.4	20.0
Ethane	Ave	136043	144490		145	137	6.2	20.0
Ethylene	Ave	110213	114986		133	128	4.3	20.0
Acetylene	Ave	34294	33514		116	119	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.23	1.31
Ethane	1.51	1.48	1.58
Ethylene	1.79	1.76	1.86
Acetylene	3.96	3.87	4.03

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.23	1.31
Ethane	1.51	1.48	1.58
Ethylene	1.79	1.76	1.86
Acetylene	3.96	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 17:03:30 ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 16:09:10 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 16:09:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.248	1.266	-0.018	11424137	73.0	79.1	a
2	3.165	3.212	-0.047	5485491	73.0	79.9	a
						RPD = 0.94	
3 Ethane							
1	1.508	1.525	-0.017	19774309	136.9	145.4	
2	4.299	4.327	-0.028	8923807	136.9	146.2	
						RPD = 0.55	
4 Ethylene							M
1	1.787	1.805	-0.018	14679855	127.7	133.2	
2	4.025	4.057	-0.032	6463191	127.7	134.8	M
						RPD = 1.22	
5 Propane							
1	2.485	2.506	-0.021	28760665	200.7	200.8	
2	5.922	5.938	-0.016	12923448	200.7	206.3	
						RPD = 2.74	
6 Acetylene							Ma
1	3.962	3.953	0.009	3972160	118.5	115.8	M
2	4.132	4.160	-0.028	2757987	118.5	127.7	M
						RPD = 9.71	
7 Butane							
1	4.243	4.248	-0.005	30530385	264.5	231.5	
2	7.369	7.380	-0.011	14841683	264.5	232.8	
						RPD = 0.55	
8 isobutylene							Ma
1	5.148	5.146	0.002	20124193	255.4	225.4	M
2	7.219	7.233	-0.014	9220929	255.4	221.9	M
						RPD = 1.59	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 17:03:30 ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 16:09:10 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 16:09:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.248	1.266	-0.018	11424137	73.0	79.1	a
2	3.165	3.212	-0.047	5485491	73.0	79.9	a
						RPD = 0.94	
3 Ethane							
1	1.508	1.525	-0.017	19774309	136.9	145.4	
2	4.299	4.327	-0.028	8923807	136.9	146.2	
						RPD = 0.55	
4 Ethylene							M
1	1.787	1.805	-0.018	14679855	127.7	133.2	
2	4.025	4.057	-0.032	6463191	127.7	134.8	M
						RPD = 1.22	
5 Propane							
1	2.485	2.506	-0.021	28760665	200.7	200.8	
2	5.922	5.938	-0.016	12923448	200.7	206.3	
						RPD = 2.74	
6 Acetylene							Ma
1	3.962	3.953	0.009	3972160	118.5	115.8	M
2	4.132	4.160	-0.028	2757987	118.5	127.7	M
						RPD = 9.71	
7 Butane							
1	4.243	4.248	-0.005	30530385	264.5	231.5	
2	7.369	7.380	-0.011	14841683	264.5	232.8	
						RPD = 0.55	
8 isobutylene							Ma
1	5.148	5.146	0.002	20124193	255.4	225.4	M
2	7.219	7.233	-0.014	9220929	255.4	221.9	M
						RPD = 1.59	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

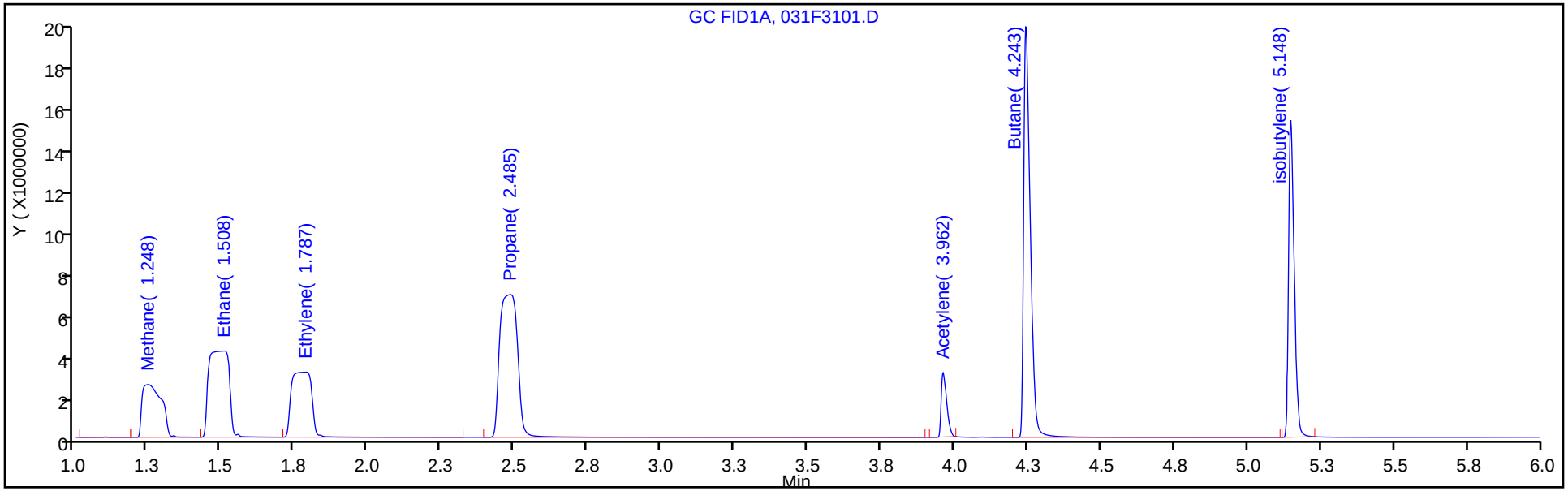
Report Date: 19-Jun-2020 16:09:11 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

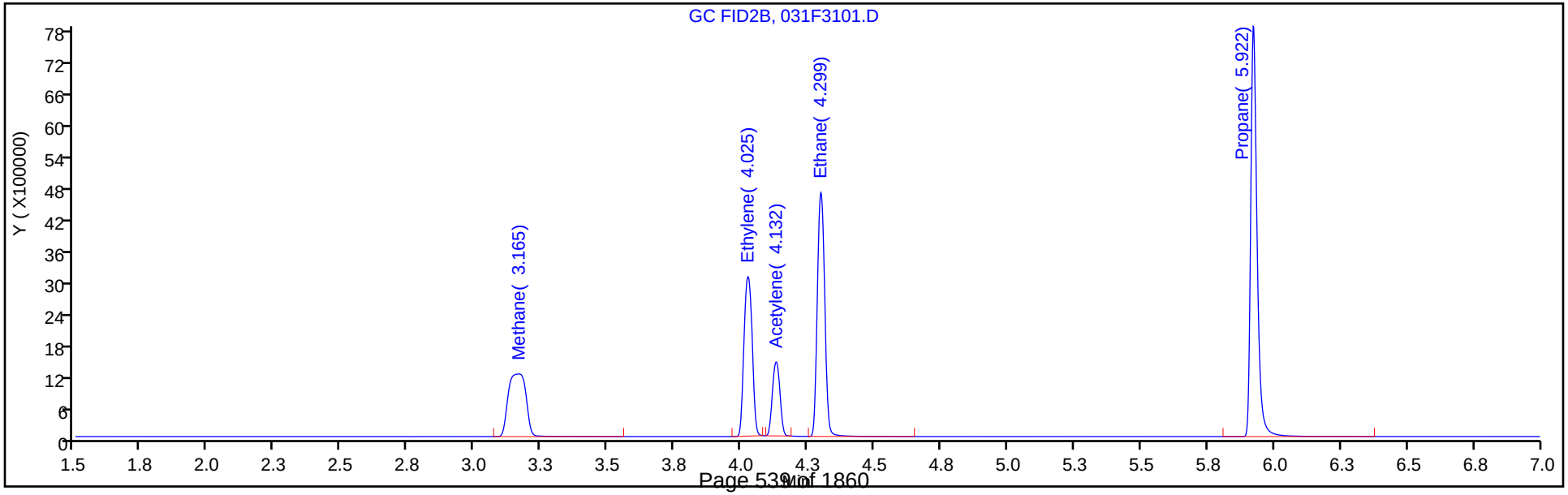
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



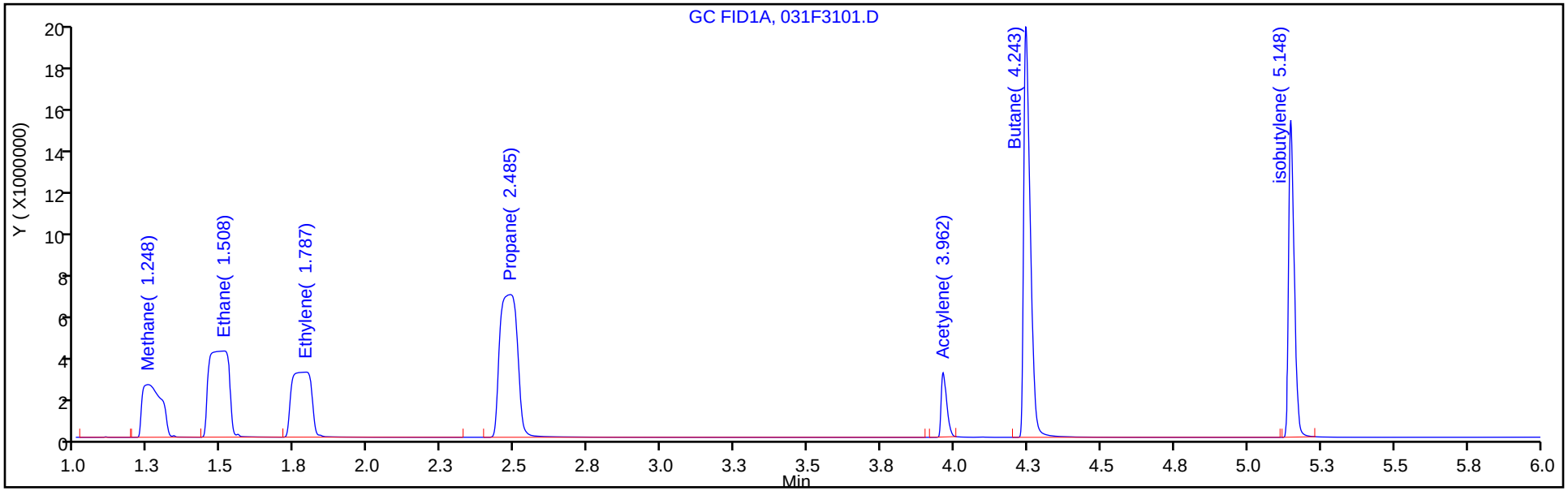
Report Date: 19-Jun-2020 16:09:10 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

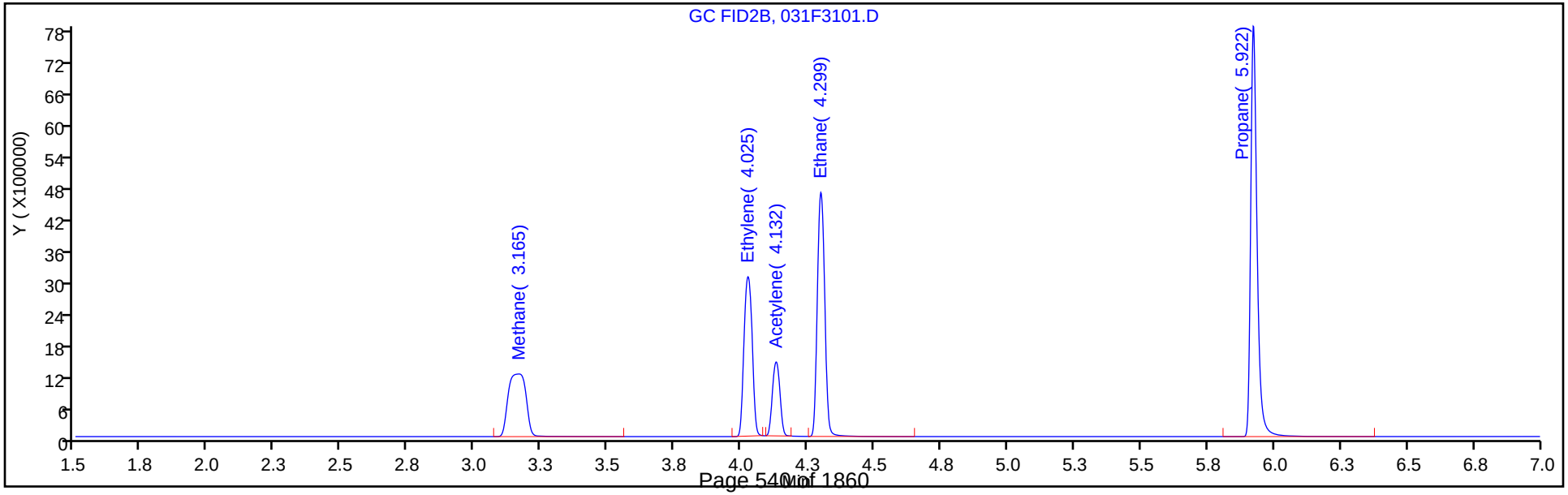
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

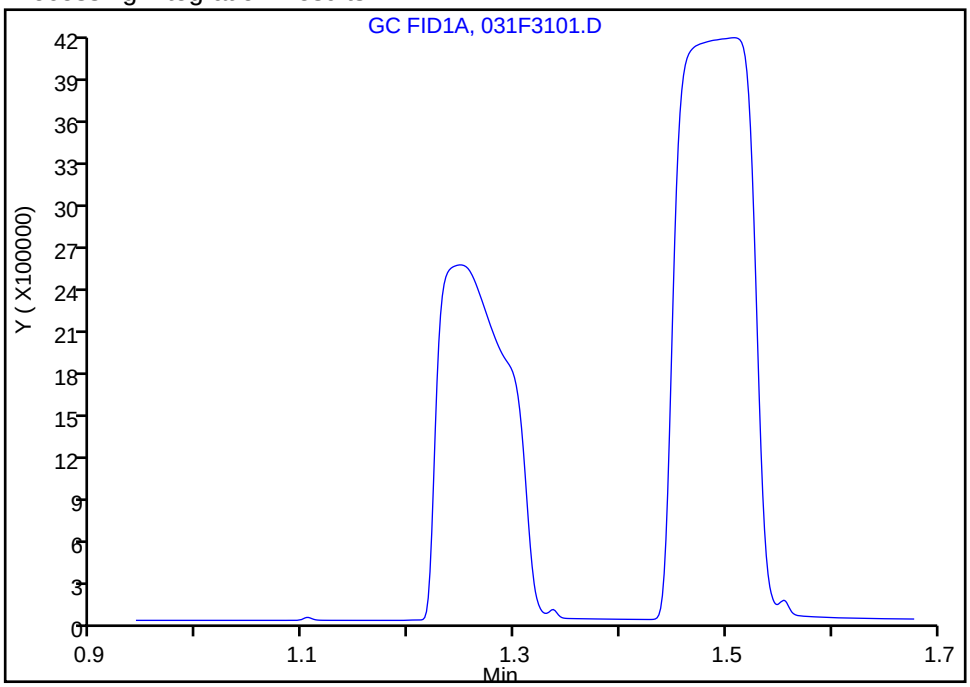
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

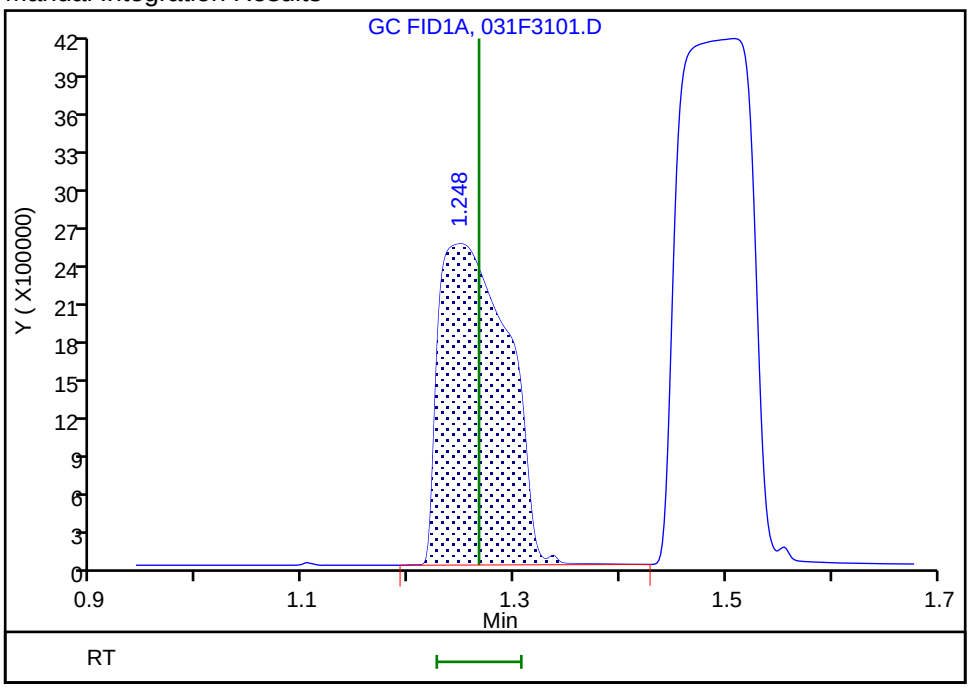
Not Detected
Expected RT: 1.27

Processing Integration Results



Manual Integration Results

RT: 1.25
Area: 11424137
Amount: 79.142055
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:06
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

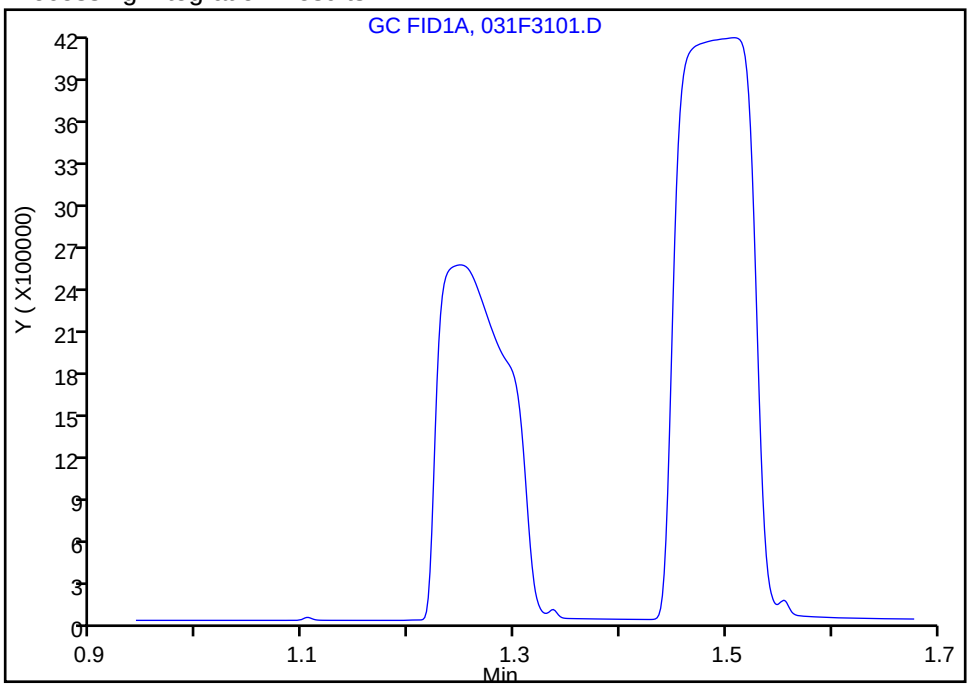
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

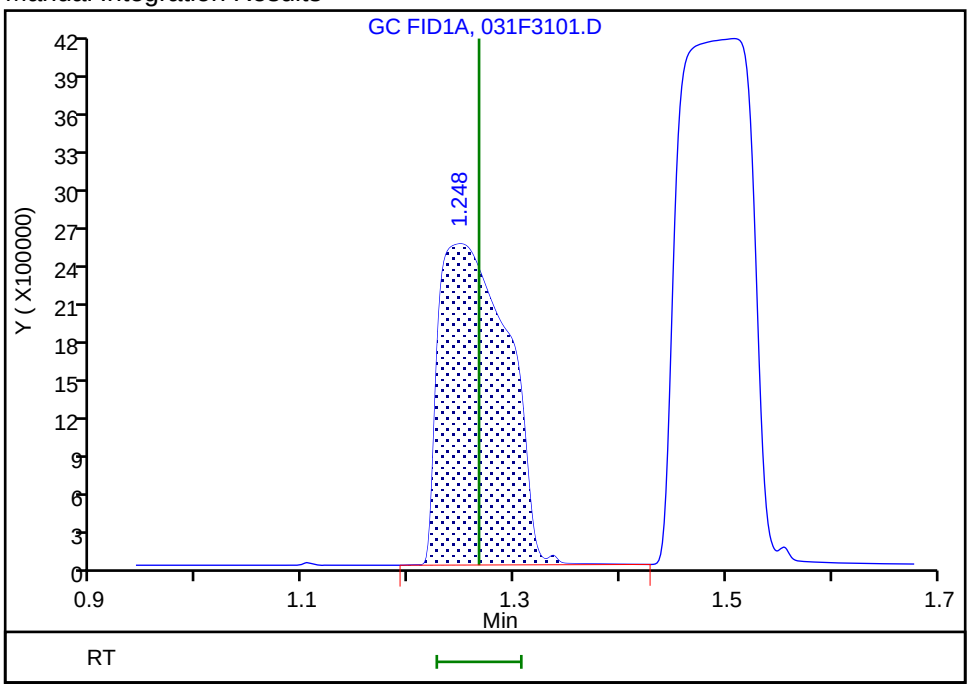
Not Detected
Expected RT: 1.27

Processing Integration Results



Manual Integration Results

RT: 1.25
Area: 11424137
Amount: 79.142055
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:06
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

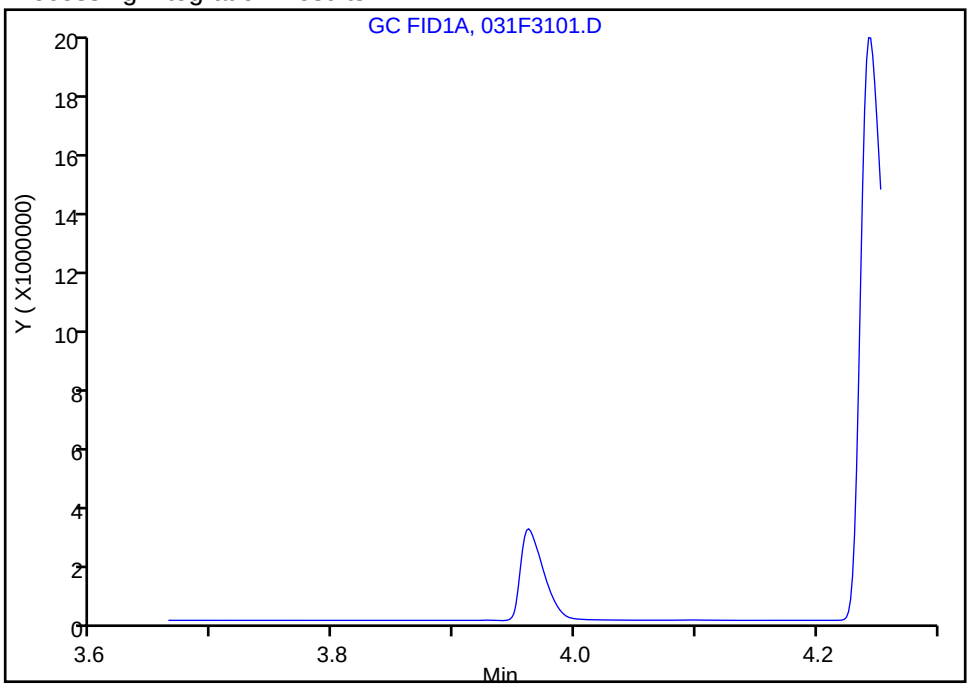
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

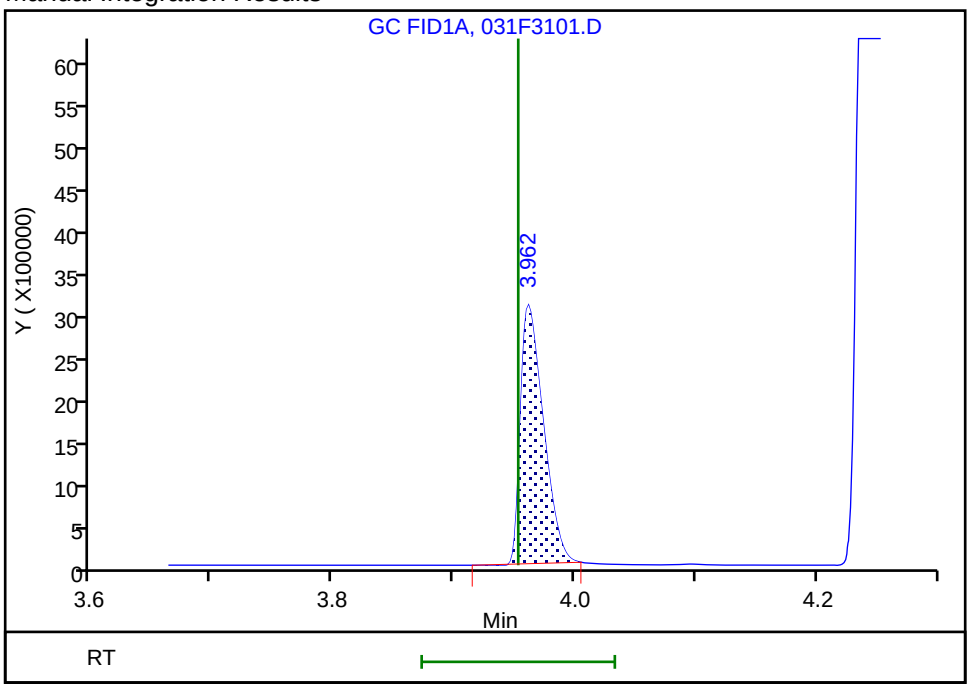
Processing Integration Results

RT: 3.95
Area: 0
Amount: 109.3069
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3972160
Amount: 115.8258
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:45

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

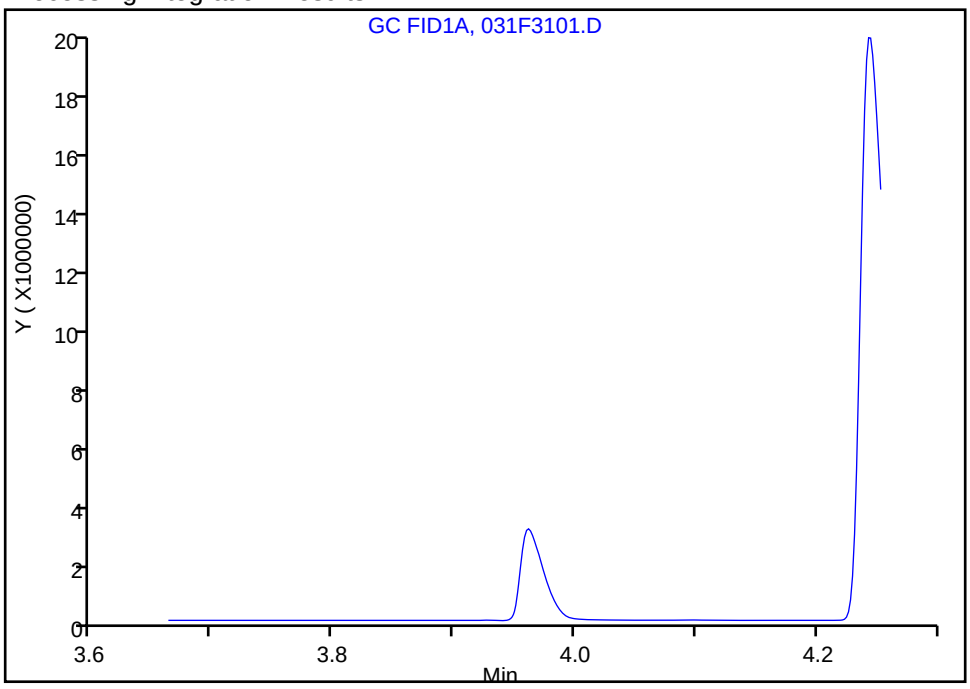
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

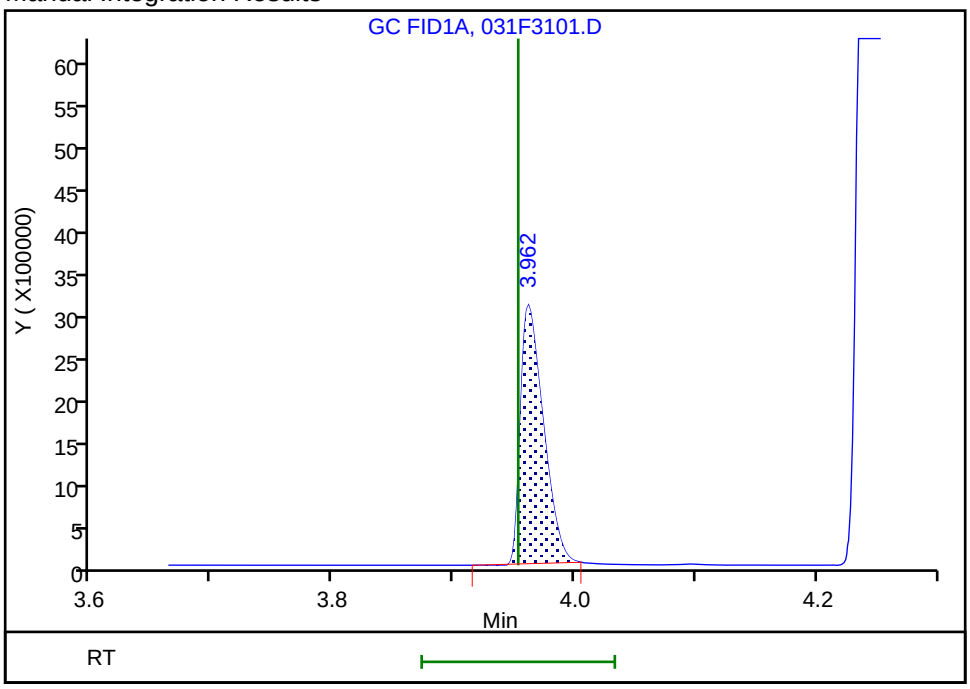
Processing Integration Results

RT: 3.95
Area: 0
Amount: 109.3069
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3972160
Amount: 115.8258
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:45
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		75140		79.9	73.0	9.4	20.0
Ethylene	Ave	47934	50626		135	128	5.6	20.0
Acetylene	Ave	21605	23270		128	119	7.7	20.0
Ethane	Ave	61056	65206		146	137	6.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		75140		79.9	73.0	9.4	20.0
Ethylene	Ave	47934	50626		135	128	5.6	20.0
Acetylene	Ave	21605	23270		128	119	7.7	20.0
Ethane	Ave	61056	65206		146	137	6.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499210/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.17	3.25
Ethylene	4.03	4.01	4.11
Acetylene	4.13	4.08	4.24
Ethane	4.30	4.28	4.38

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/30 Calibration Date: 06/18/2020 17:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.17	3.25
Ethylene	4.03	4.01	4.11
Acetylene	4.13	4.08	4.24
Ethane	4.30	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 17:03:30 ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 16:09:10 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 16:09:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.248	1.266	-0.018	11424137	73.0	79.1	a
2	3.165	3.212	-0.047	5485491	73.0	79.9	a
						RPD = 0.94	
3 Ethane							
1	1.508	1.525	-0.017	19774309	136.9	145.4	
2	4.299	4.327	-0.028	8923807	136.9	146.2	
						RPD = 0.55	
4 Ethylene							M
1	1.787	1.805	-0.018	14679855	127.7	133.2	
2	4.025	4.057	-0.032	6463191	127.7	134.8	M
						RPD = 1.22	
5 Propane							
1	2.485	2.506	-0.021	28760665	200.7	200.8	
2	5.922	5.938	-0.016	12923448	200.7	206.3	
						RPD = 2.74	
6 Acetylene							Ma
1	3.962	3.953	0.009	3972160	118.5	115.8	M
2	4.132	4.160	-0.028	2757987	118.5	127.7	M
						RPD = 9.71	
7 Butane							
1	4.243	4.248	-0.005	30530385	264.5	231.5	
2	7.369	7.380	-0.011	14841683	264.5	232.8	
						RPD = 0.55	
8 isobutylene							Ma
1	5.148	5.146	0.002	20124193	255.4	225.4	M
2	7.219	7.233	-0.014	9220929	255.4	221.9	M
						RPD = 1.59	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 17:03:30 ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 16:09:10 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 16:09:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.248	1.266	-0.018	11424137	73.0	79.1	a
2	3.165	3.212	-0.047	5485491	73.0	79.9	a
						RPD = 0.94	
3 Ethane							
1	1.508	1.525	-0.017	19774309	136.9	145.4	
2	4.299	4.327	-0.028	8923807	136.9	146.2	
						RPD = 0.55	
4 Ethylene							M
1	1.787	1.805	-0.018	14679855	127.7	133.2	
2	4.025	4.057	-0.032	6463191	127.7	134.8	M
						RPD = 1.22	
5 Propane							
1	2.485	2.506	-0.021	28760665	200.7	200.8	
2	5.922	5.938	-0.016	12923448	200.7	206.3	
						RPD = 2.74	
6 Acetylene							Ma
1	3.962	3.953	0.009	3972160	118.5	115.8	M
2	4.132	4.160	-0.028	2757987	118.5	127.7	M
						RPD = 9.71	
7 Butane							
1	4.243	4.248	-0.005	30530385	264.5	231.5	
2	7.369	7.380	-0.011	14841683	264.5	232.8	
						RPD = 0.55	
8 isobutylene							Ma
1	5.148	5.146	0.002	20124193	255.4	225.4	M
2	7.219	7.233	-0.014	9220929	255.4	221.9	M
						RPD = 1.59	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

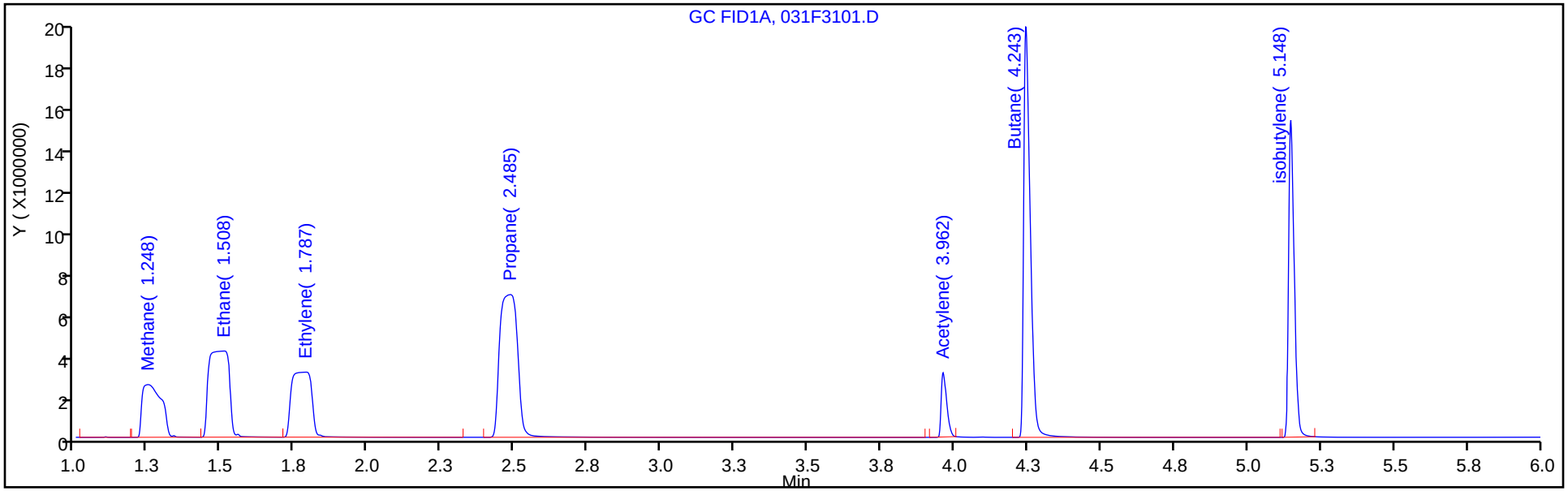
Report Date: 19-Jun-2020 16:09:11 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

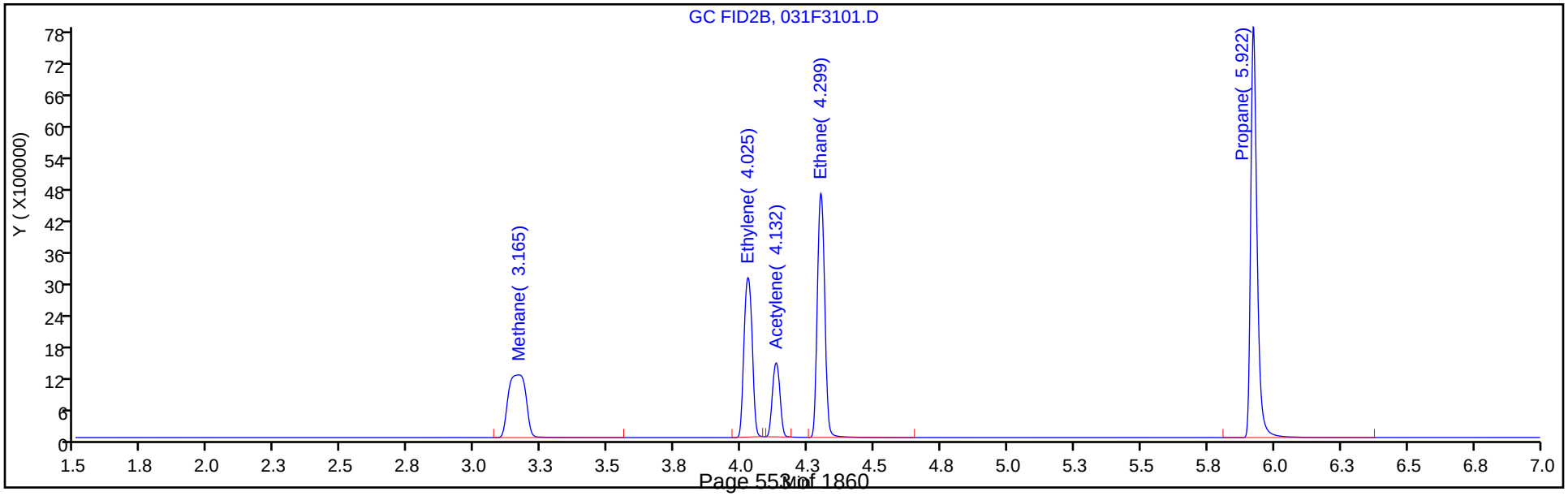
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



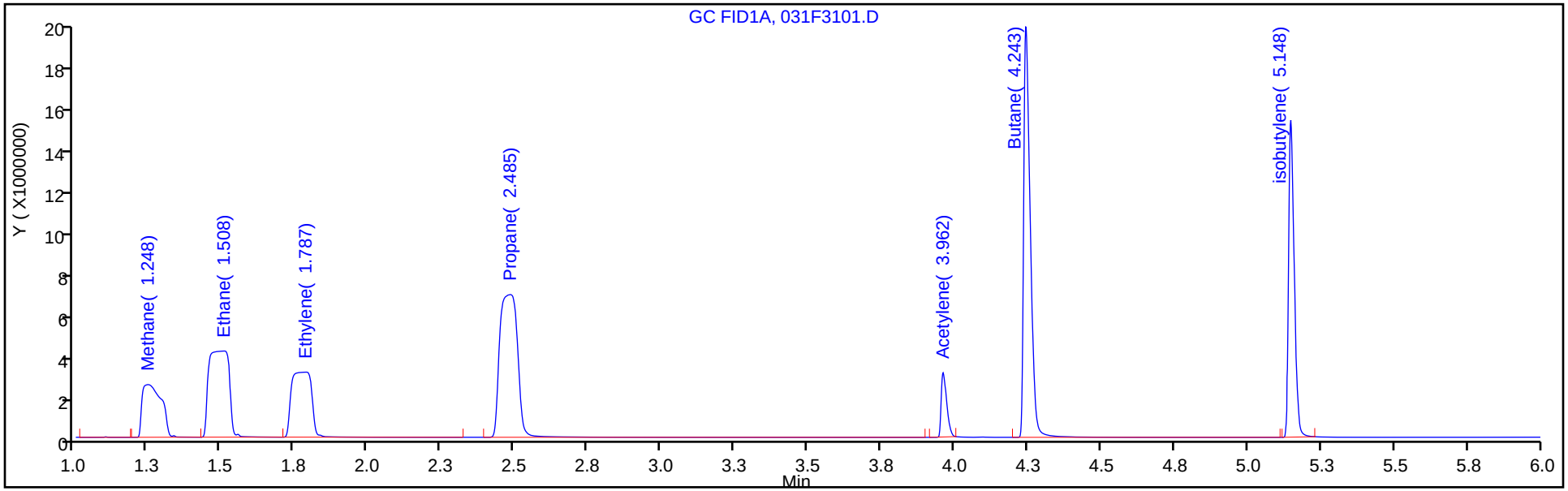
Report Date: 19-Jun-2020 16:09:10 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

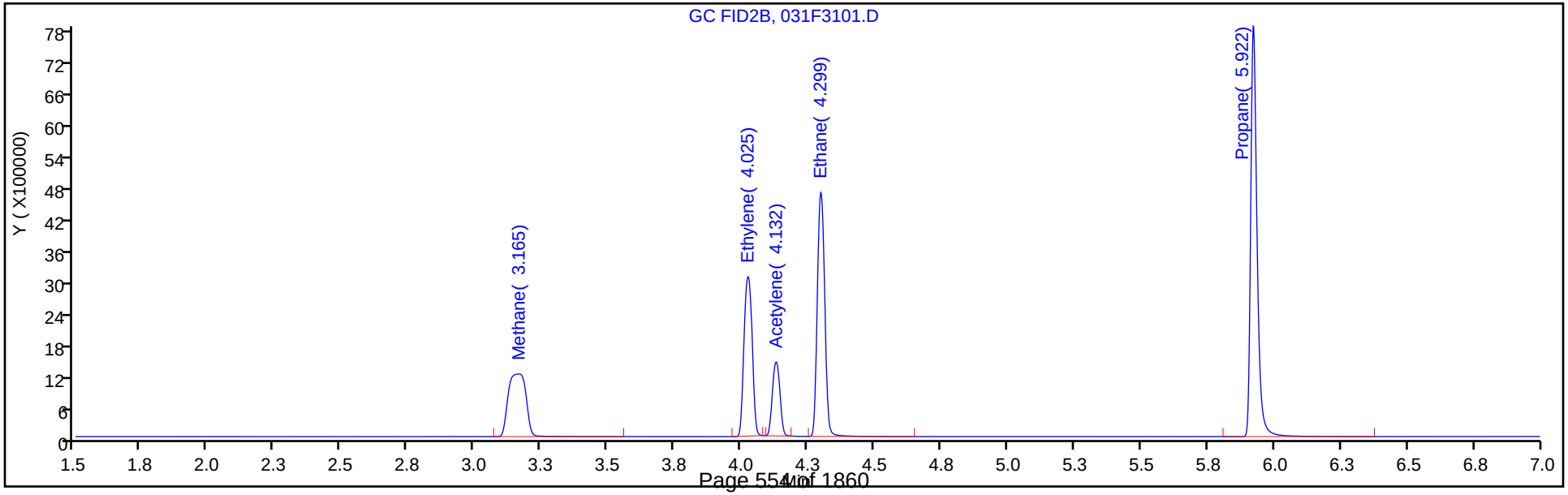
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

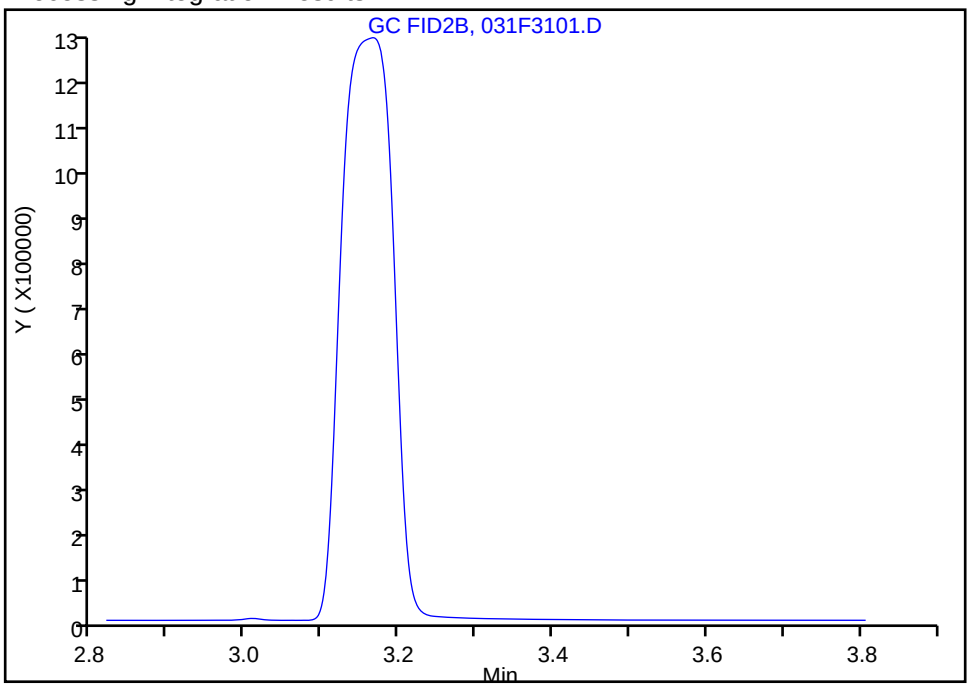
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

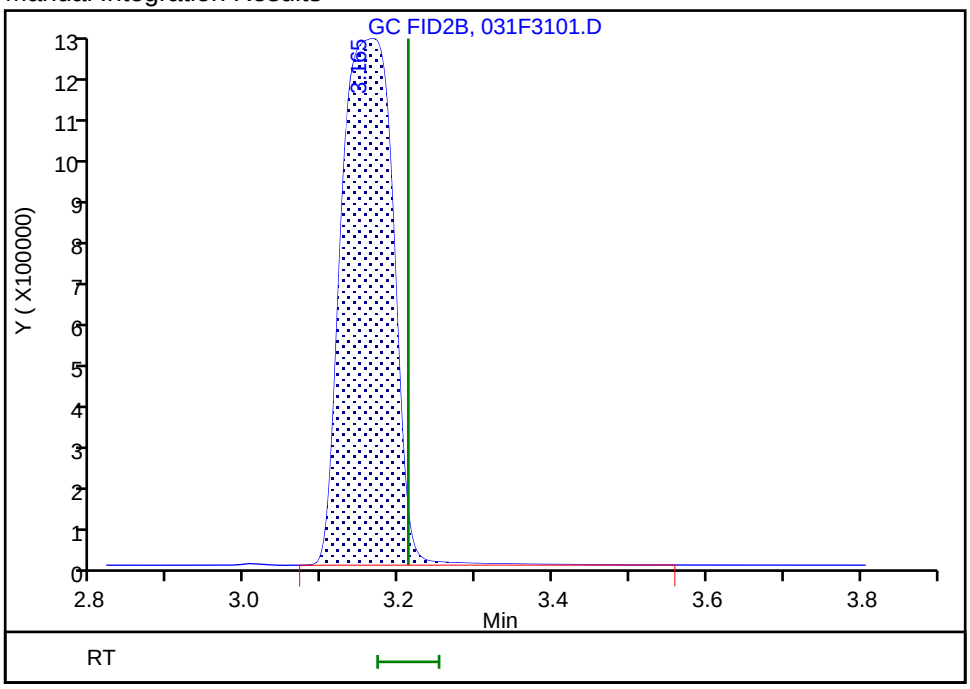
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 5485491
Amount: 79.888029
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:05
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

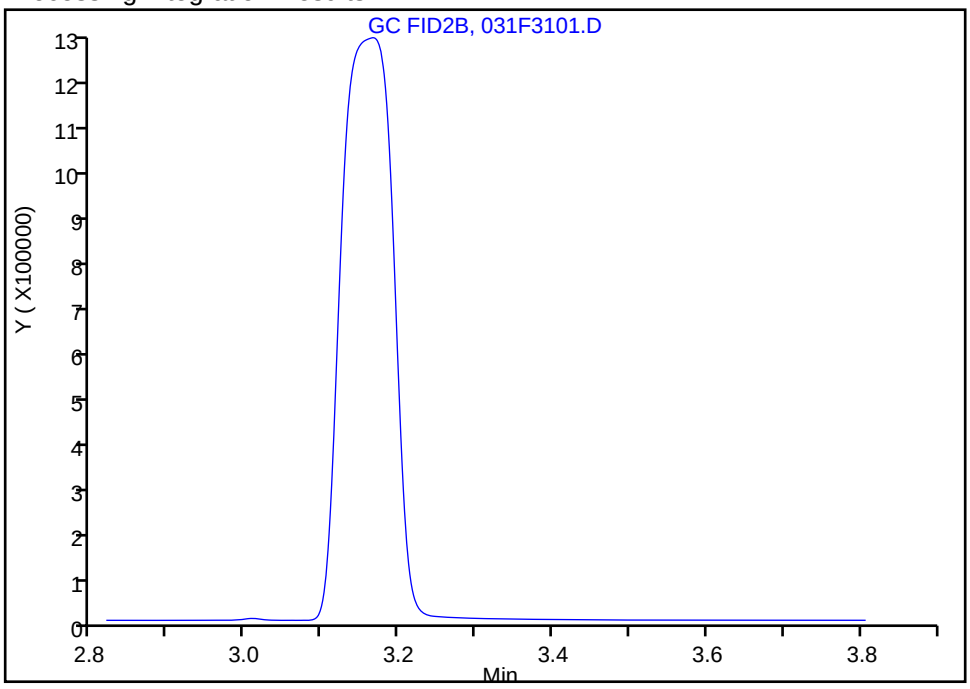
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

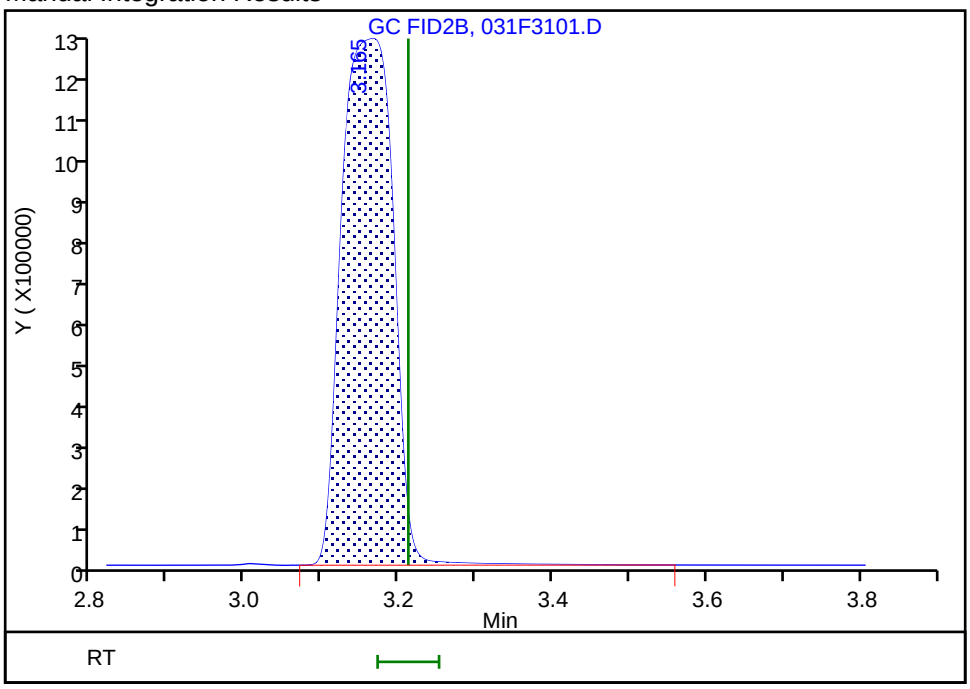
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 5485491
Amount: 79.888029
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:05
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

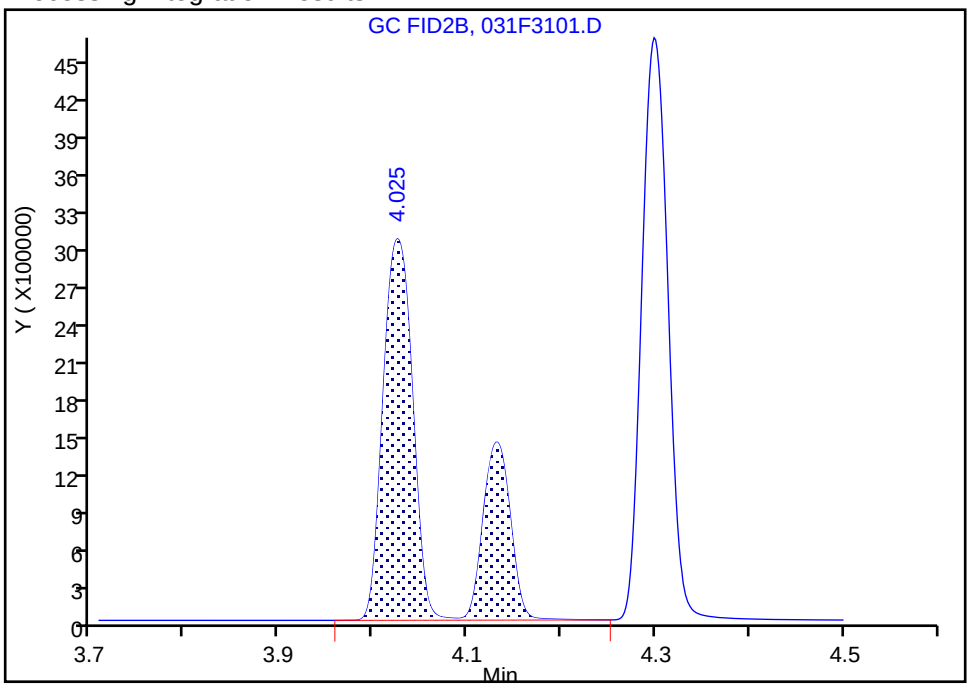
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

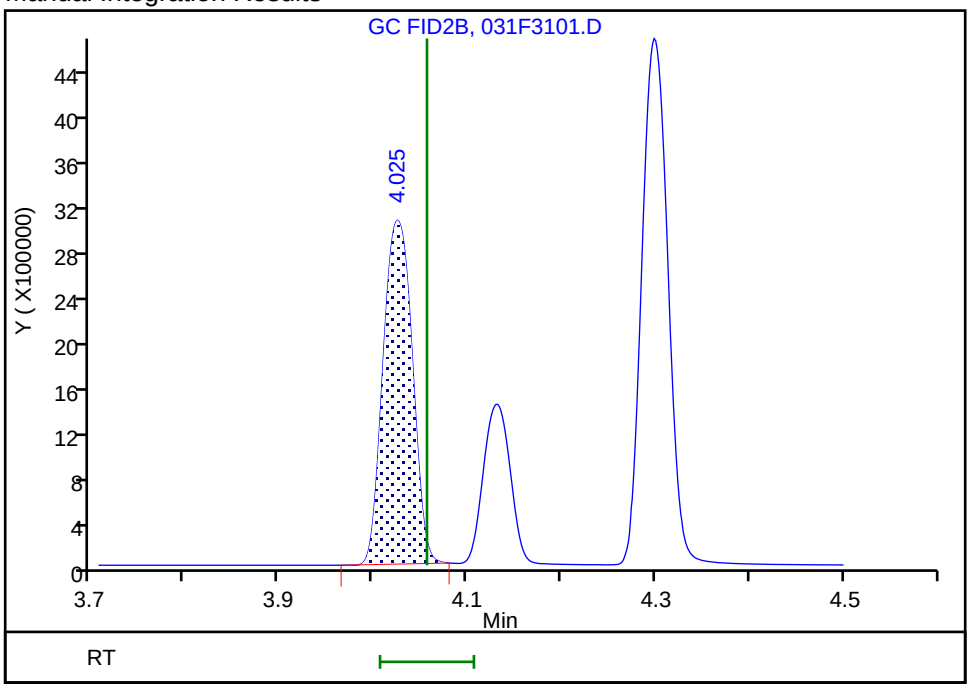
Processing Integration Results

RT: 4.03
Area: 9368004
Amount: 195.4367
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6463191
Amount: 134.8360
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:20
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

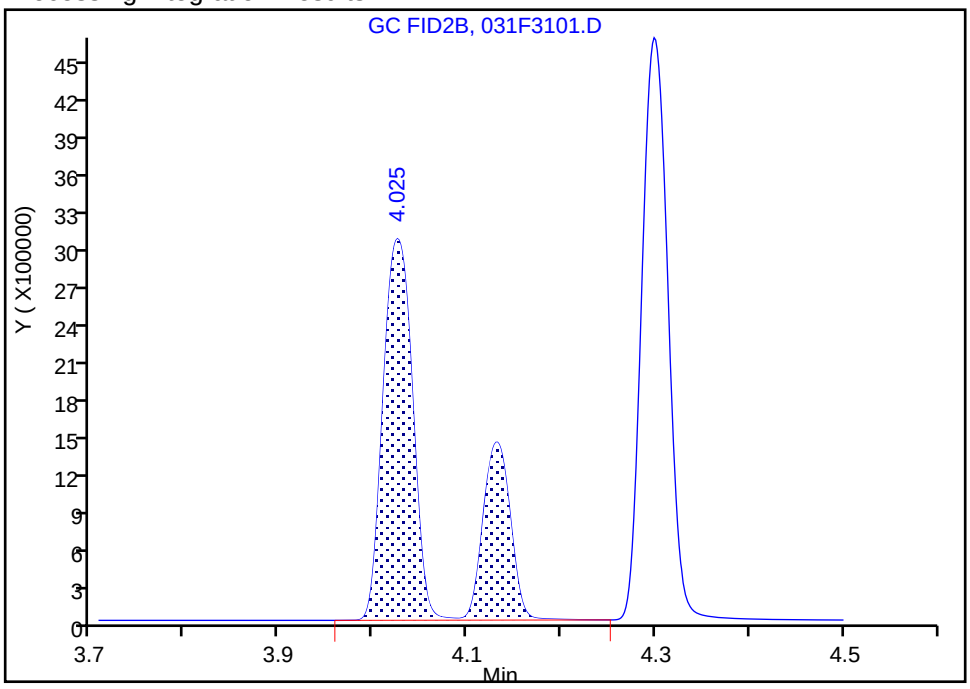
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

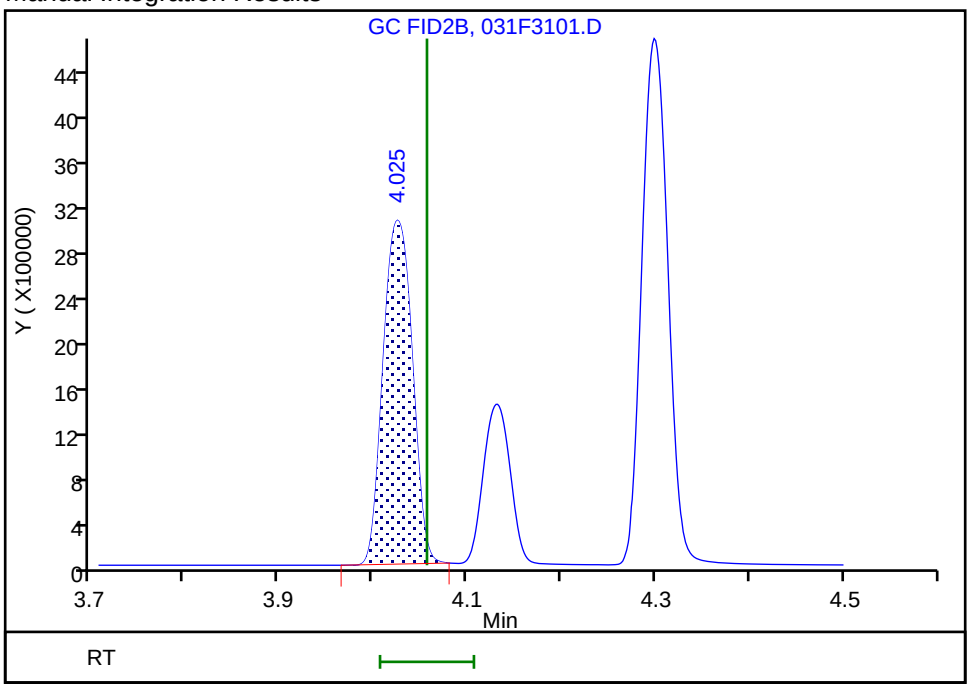
Processing Integration Results

RT: 4.03
Area: 9368004
Amount: 195.4367
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6463191
Amount: 134.8360
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:20

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

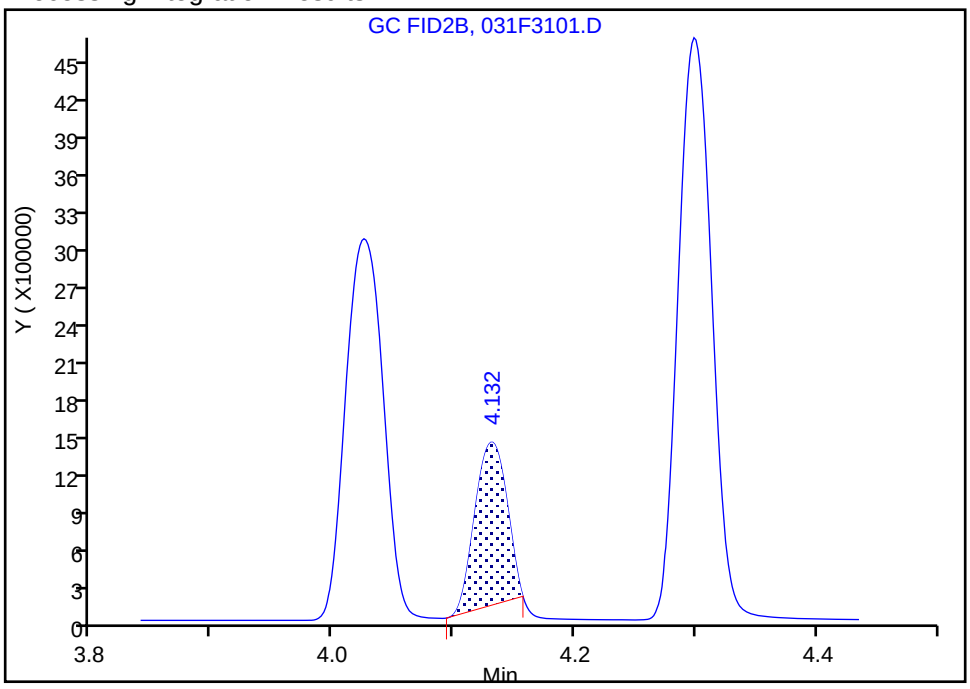
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

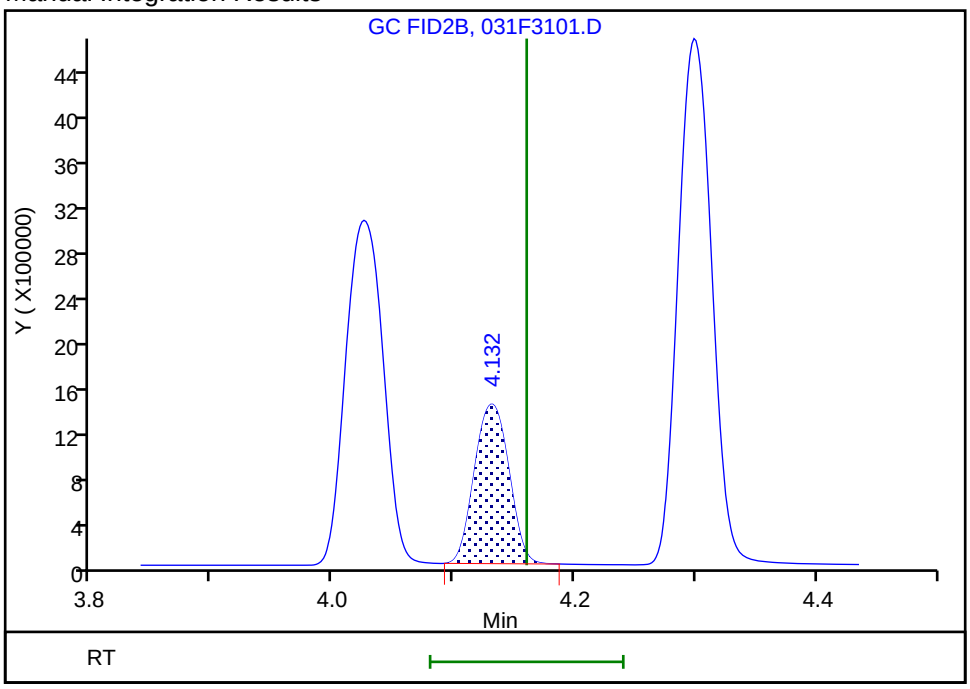
Processing Integration Results

RT: 4.13
Area: 2361629
Amount: 109.3069
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2757987
Amount: 127.6521
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:40

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

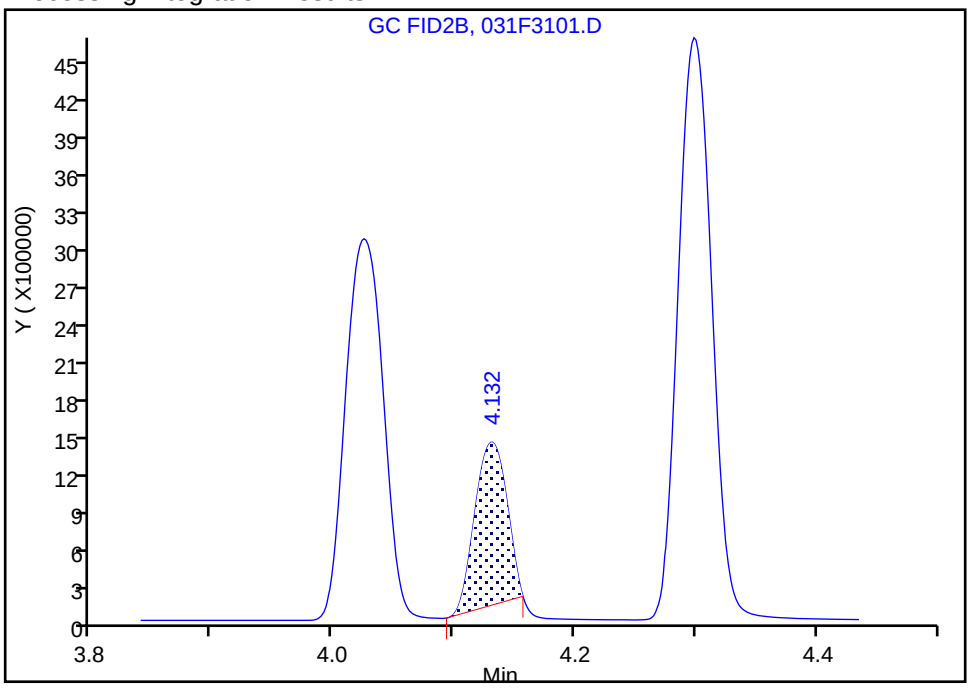
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

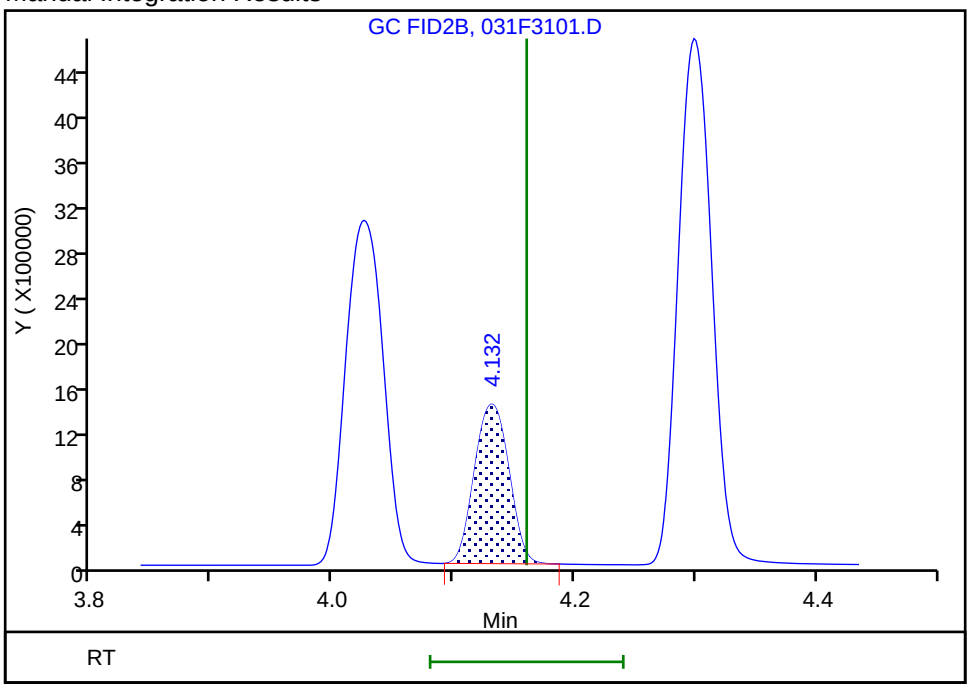
Processing Integration Results

RT: 4.13
Area: 2361629
Amount: 109.3069
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2757987
Amount: 127.6521
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:08:40

Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/47 Calibration Date: 06/18/2020 21:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 048F4801.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		140867		71.2	73.0	-2.5	20.0
Ethane	Ave	136043	134290		135	137	-1.3	20.0
Ethylene	Ave	110213	108305		125	128	-1.7	20.0
Acetylene	Ave	34294	32596		113	119	-5.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/47 Calibration Date: 06/18/2020 21:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 048F4801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.23	1.31
Ethane	1.51	1.48	1.58
Ethylene	1.79	1.76	1.86
Acetylene	3.96	3.87	4.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 21:41:06 ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 22-Jun-2020 13:22:07 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1041

First Level Reviewer: meierg Date: 22-Jun-2020 13:22:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.249	1.266	-0.017	10283731	73.0	71.2	a
2	3.161	3.212	-0.051	4936636	73.0	71.9	a
						RPD = 0.92	
3 Ethane							
1	1.508	1.525	-0.017	18378380	136.9	135.1	
2	4.296	4.327	-0.031	8286765	136.9	135.7	
						RPD = 0.47	
4 Ethylene							M
1	1.786	1.805	-0.019	13826877	127.7	125.5	
2	4.023	4.057	-0.034	6077323	127.7	126.8	M
						RPD = 1.06	
5 Propane							
1	2.484	2.506	-0.022	27445636	200.7	191.6	
2	5.920	5.938	-0.018	12326375	200.7	196.8	
						RPD = 2.69	
6 Acetylene							Ma
1	3.963	3.953	0.010	3863300	118.5	112.7	M
2	4.128	4.160	-0.032	2608365	118.5	120.7	M
						RPD = 6.92	
7 Butane							
1	4.244	4.248	-0.004	31630864	264.5	239.8	
2	7.365	7.380	-0.015	15369997	264.5	241.1	
						RPD = 0.50	
8 isobutylene							Ma
1	5.149	5.146	0.003	20598835	255.4	230.8	M
2	7.218	7.233	-0.015	9626728	255.4	231.6	M
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

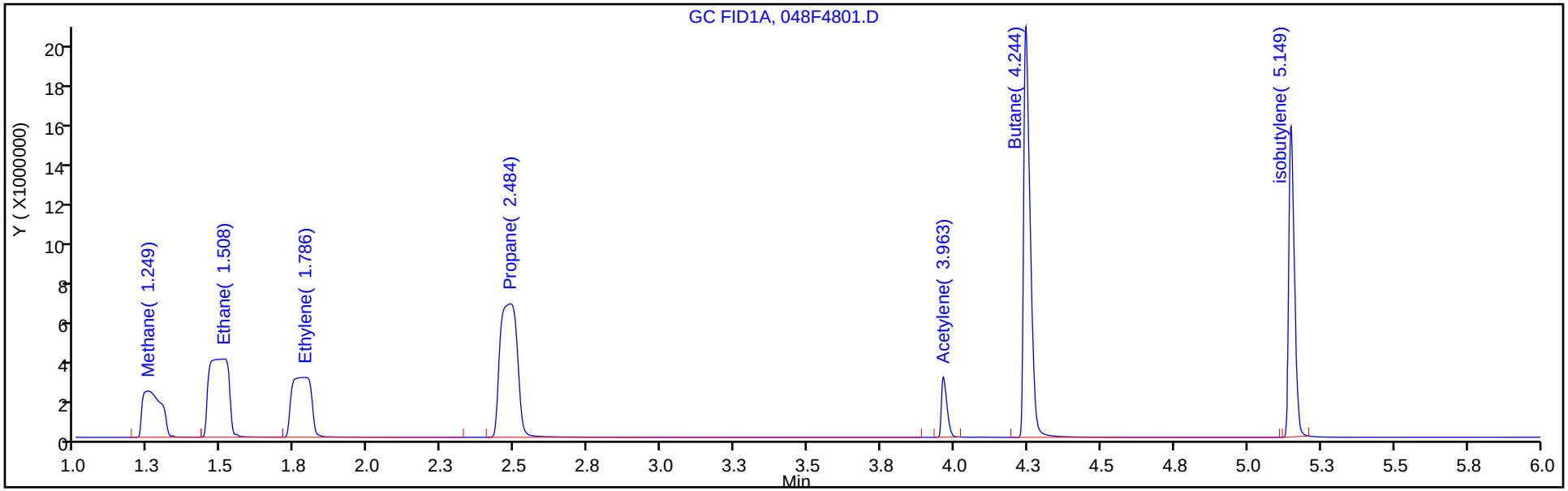
Report Date: 22-Jun-2020 13:22:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

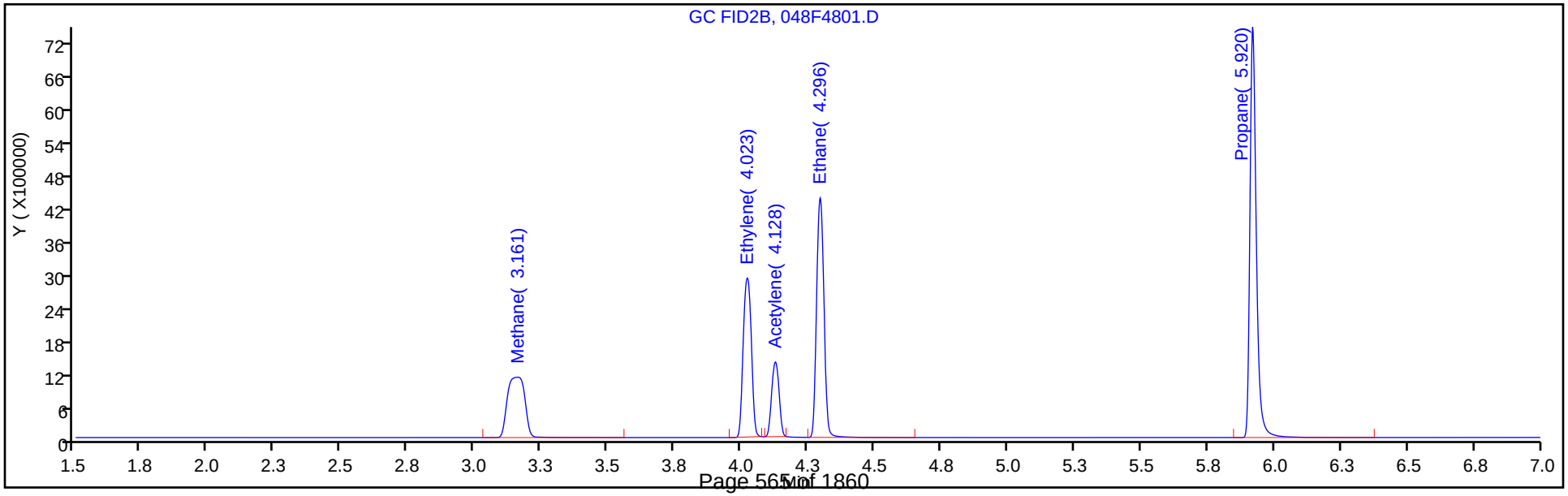
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D

Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	47
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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

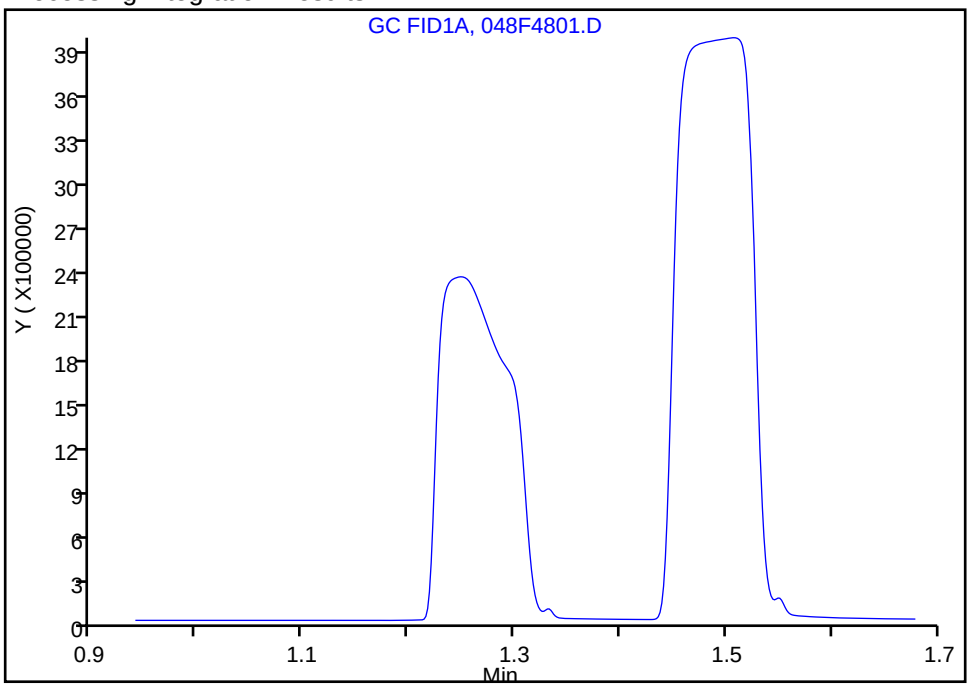
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D				
Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	48	Worklist Smp#:	47
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

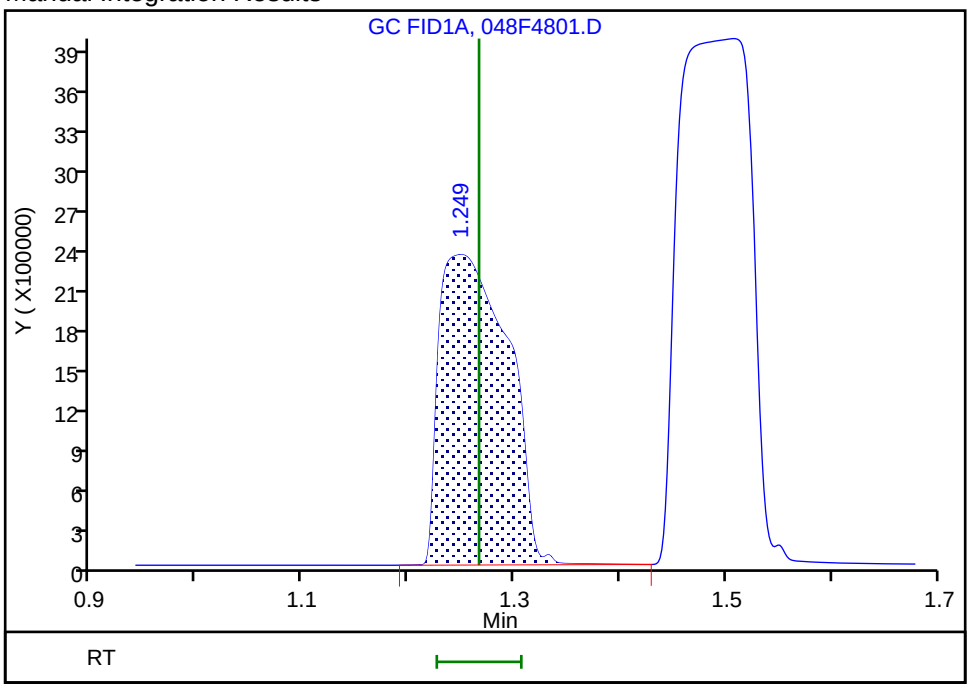
Not Detected
Expected RT: 1.27

Processing Integration Results



Manual Integration Results

RT: 1.25
Area: 10283731
Amount: 71.207873
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:20:47
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

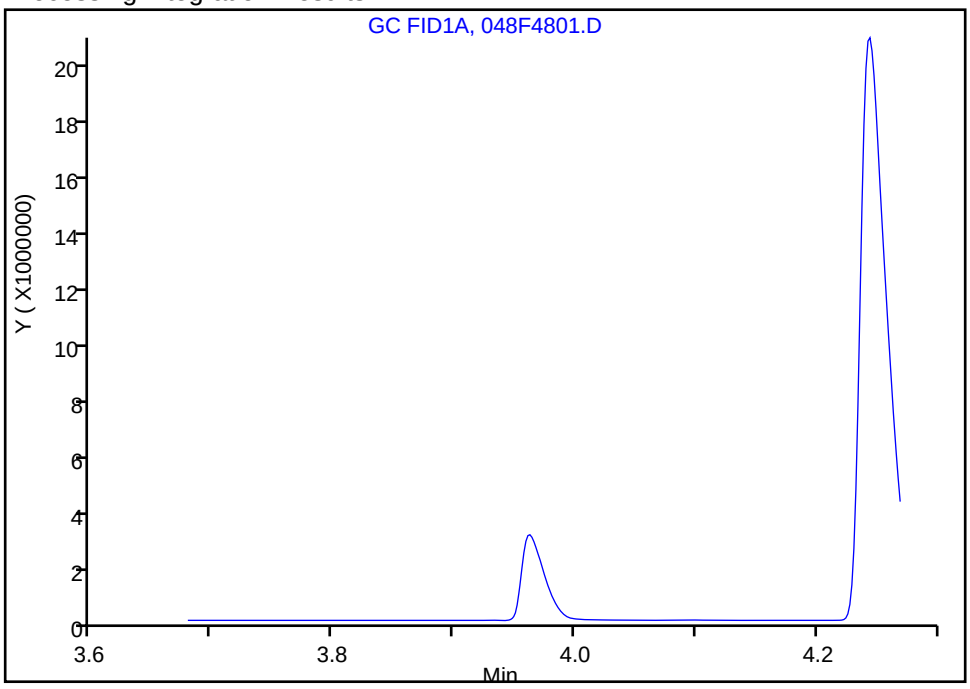
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D				
Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	48	Worklist Smp#:	47
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

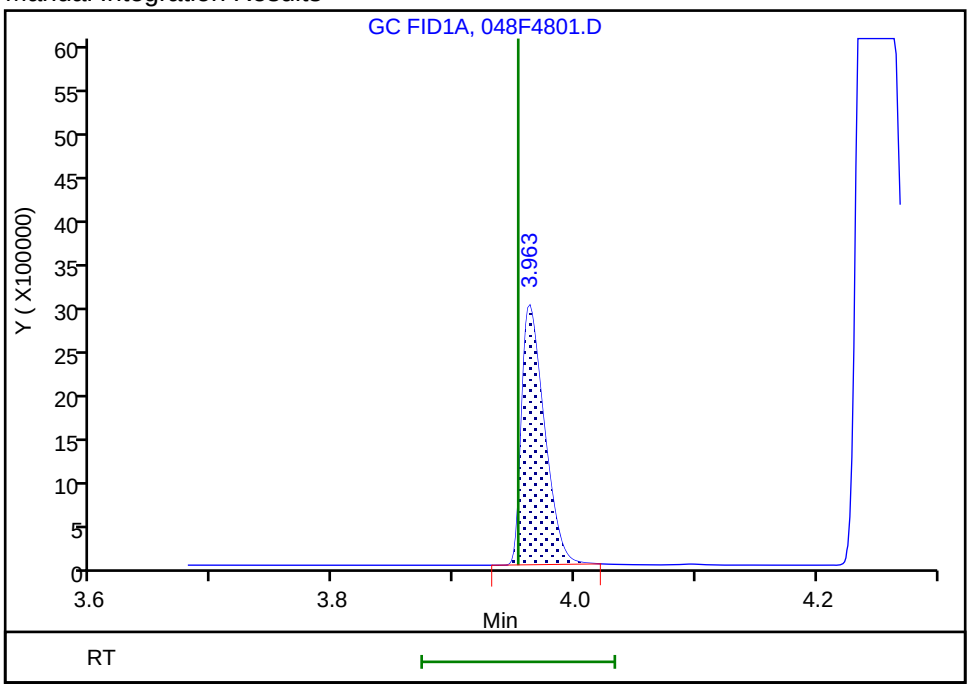
Processing Integration Results

RT: 3.95
Area: 0
Amount: 110.2251
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3863300
Amount: 112.6515
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:21:36

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/47 Calibration Date: 06/18/2020 21:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 048F4801.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		67622		71.9	73.0	-1.6	20.0
Ethylene	Ave	47934	47603		127	128	-0.7	20.0
Acetylene	Ave	21605	22007		121	119	1.9	20.0
Ethane	Ave	61056	60551		136	137	-0.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499415/47 Calibration Date: 06/18/2020 21:41

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 048F4801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.16	3.17	3.25
Ethylene	4.02	4.01	4.11
Acetylene	4.13	4.08	4.24
Ethane	4.30	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2020 21:41:06 ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 22-Jun-2020 13:22:07 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1041

First Level Reviewer: meierg Date: 22-Jun-2020 13:22:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.249	1.266	-0.017	10283731	73.0	71.2	a
2	3.161	3.212	-0.051	4936636	73.0	71.9	a
						RPD = 0.92	
3 Ethane							
1	1.508	1.525	-0.017	18378380	136.9	135.1	
2	4.296	4.327	-0.031	8286765	136.9	135.7	
						RPD = 0.47	
4 Ethylene							M
1	1.786	1.805	-0.019	13826877	127.7	125.5	
2	4.023	4.057	-0.034	6077323	127.7	126.8	M
						RPD = 1.06	
5 Propane							
1	2.484	2.506	-0.022	27445636	200.7	191.6	
2	5.920	5.938	-0.018	12326375	200.7	196.8	
						RPD = 2.69	
6 Acetylene							Ma
1	3.963	3.953	0.010	3863300	118.5	112.7	M
2	4.128	4.160	-0.032	2608365	118.5	120.7	M
						RPD = 6.92	
7 Butane							
1	4.244	4.248	-0.004	31630864	264.5	239.8	
2	7.365	7.380	-0.015	15369997	264.5	241.1	
						RPD = 0.50	
8 isobutylene							Ma
1	5.149	5.146	0.003	20598835	255.4	230.8	M
2	7.218	7.233	-0.015	9626728	255.4	231.6	M
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

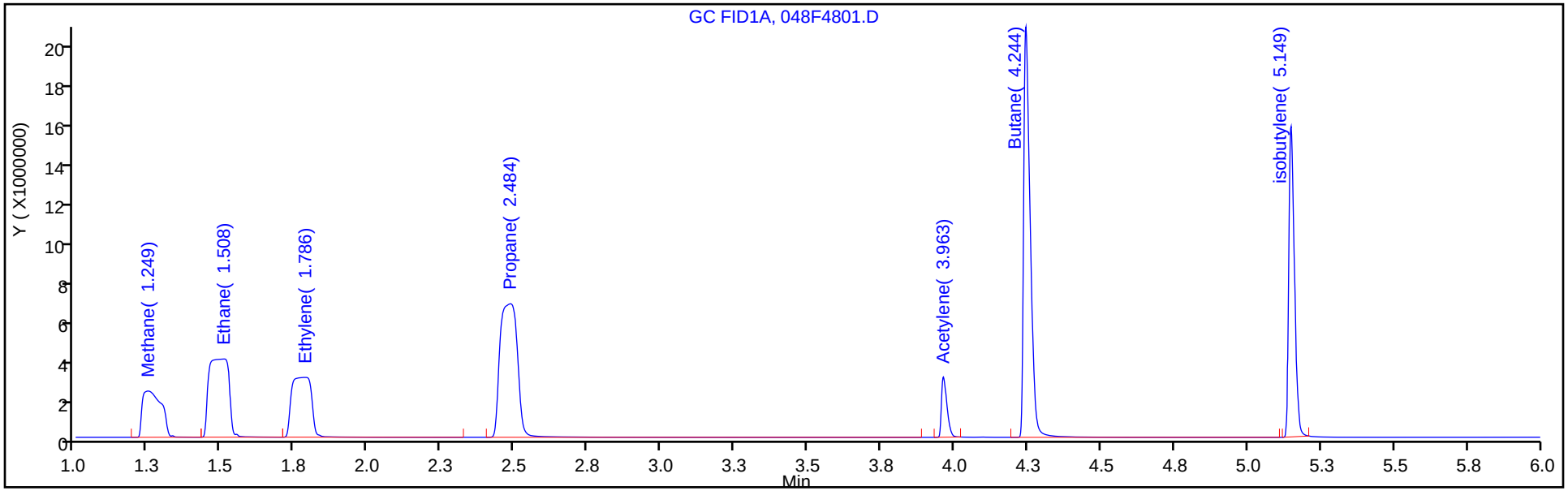
Report Date: 22-Jun-2020 13:22:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

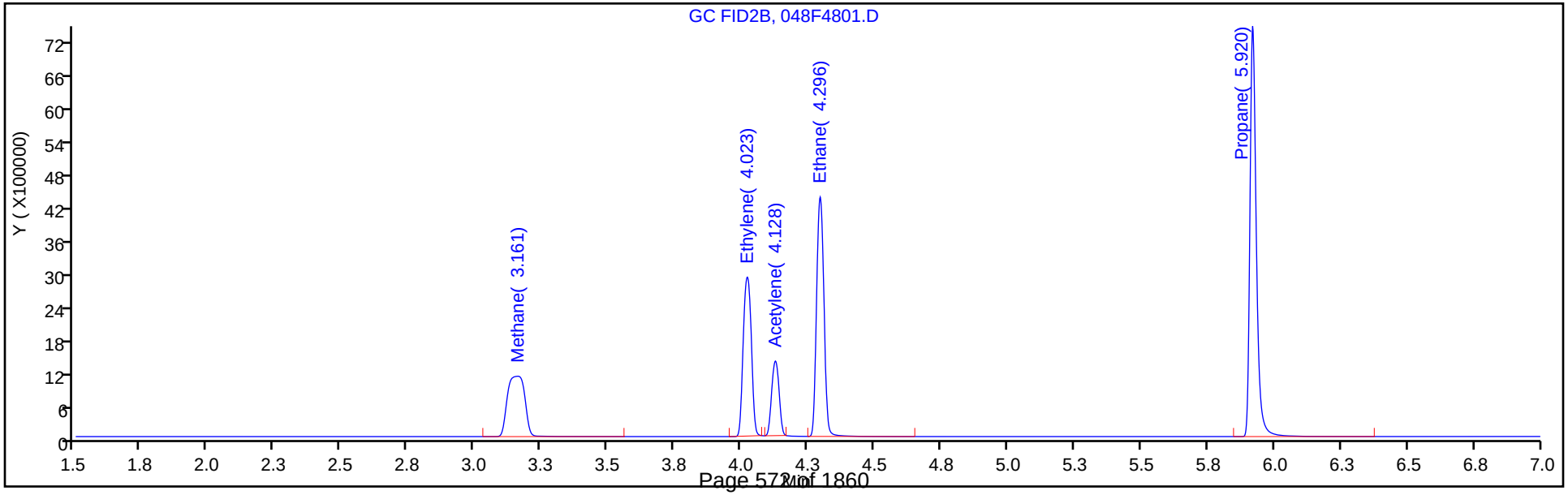
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D

Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	47
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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

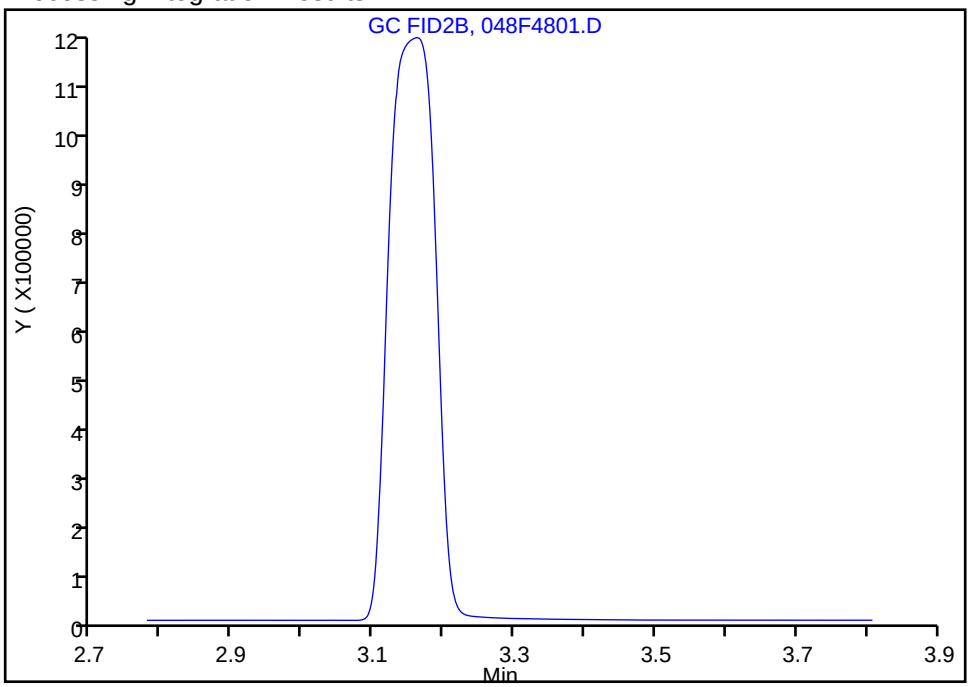
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Injection Date: 18-Jun-2020 21:41:06 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

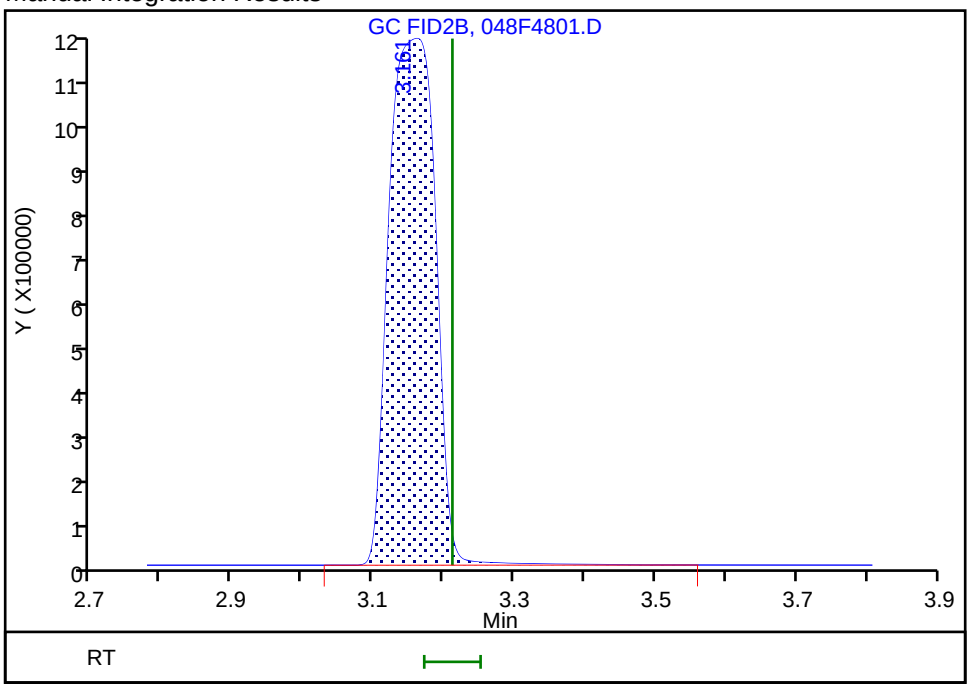
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 4936636
Amount: 71.869474
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:20:45
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

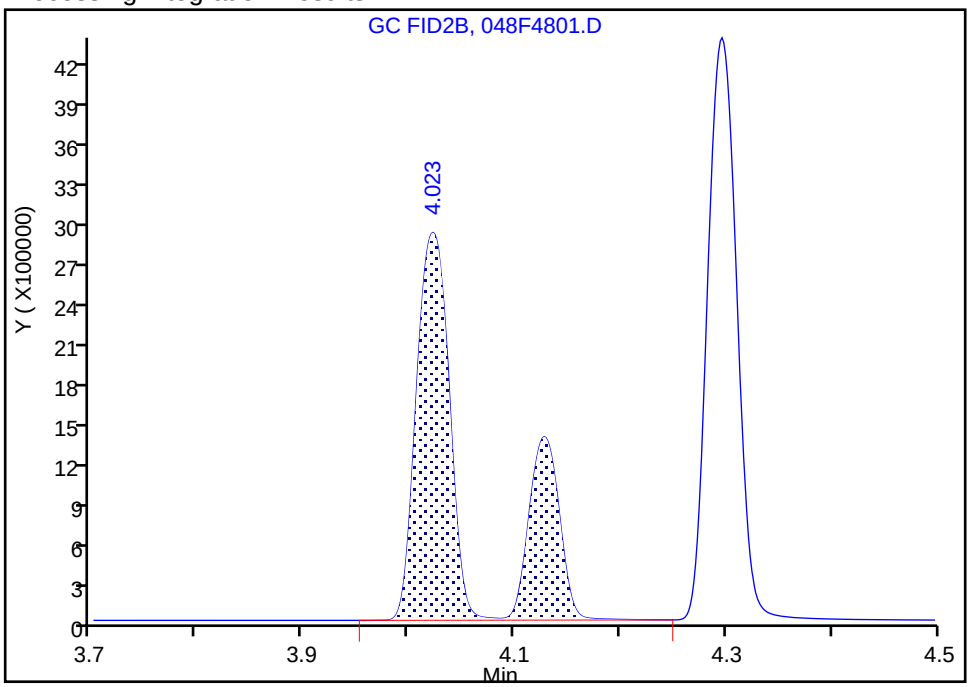
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Injection Date: 18-Jun-2020 21:41:06 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

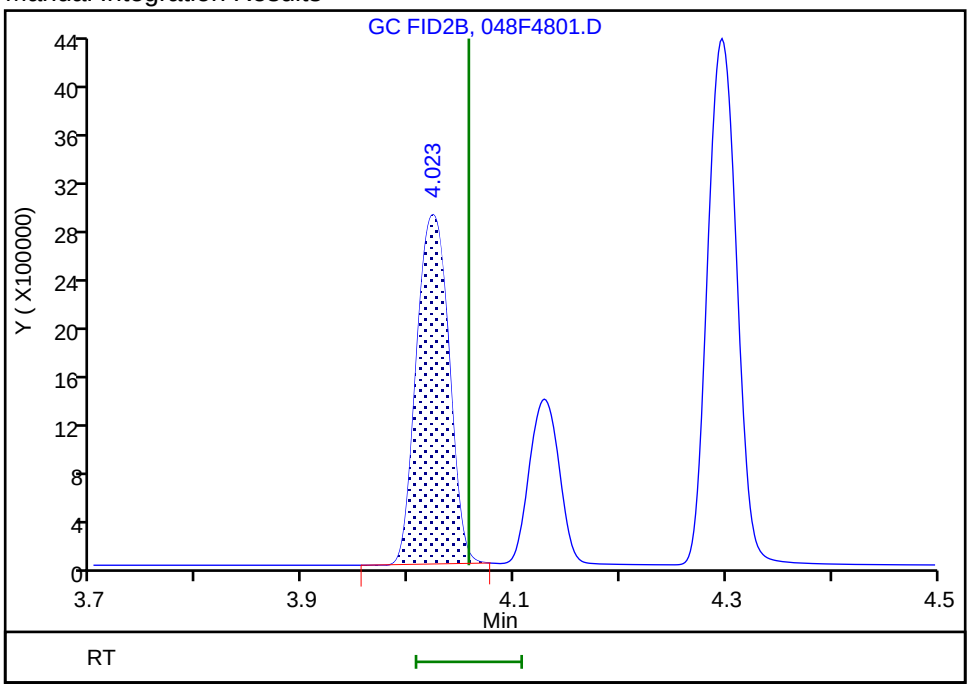
Processing Integration Results

RT: 4.02
Area: 8851539
Amount: 184.6621
Amount Units: ug/l



Manual Integration Results

RT: 4.02
Area: 6077323
Amount: 126.7860
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:21:11
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

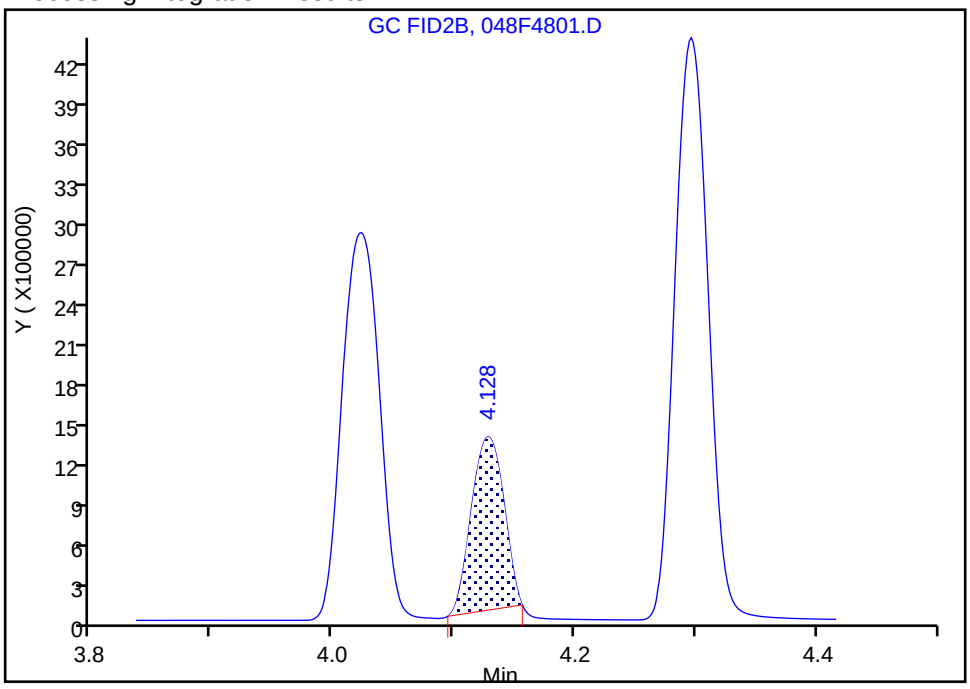
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Injection Date: 18-Jun-2020 21:41:06 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

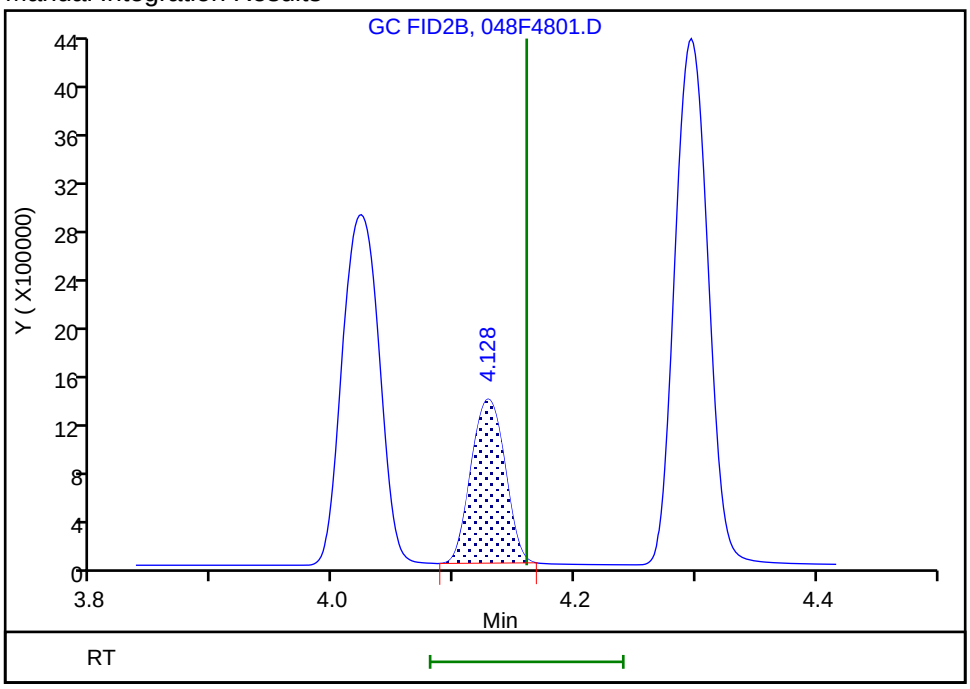
Processing Integration Results

RT: 4.13
Area: 2381467
Amount: 110.2251
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2608365
Amount: 120.7269
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:21:30
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499435/1 Calibration Date: 06/19/2020 14:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192001.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		150010		75.9	73.0	3.9	20.0
Ethane	Ave	136043	145412		146	137	6.9	20.0
Ethylene	Ave	110213	116953		135	128	6.1	20.0
Acetylene	Ave	34294	34260		118	119	-0.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499435/1 Calibration Date: 06/19/2020 14:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.80	1.75	1.85
Acetylene	3.96	3.88	4.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 19-Jun-2020 14:13:54 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Misc. Info.: 280-0092578-001
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:07:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 22-Jun-2020 13:29:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	10951223	73.0	75.9	
2	3.212	3.212	0.000	5140601	73.0	74.8	
						RPD = 1.33	
3 Ethane							
1	1.522	1.522	0.000	19900419	136.9	146.3	
2	4.325	4.325	0.000	8768790	136.9	143.6	
						RPD = 1.84	
4 Ethylene							M
1	1.802	1.802	0.000	14930971	127.7	135.5	
2	4.055	4.055	0.000	6420182	127.7	133.9	M
						RPD = 1.14	
5 Propane							
1	2.505	2.505	0.000	30213978	200.7	210.9	
2	5.935	5.935	0.000	13268980	200.7	211.9	
						RPD = 0.45	
6 Acetylene							Ma
1	3.960	3.960	0.000	4060516	118.5	118.4	M
2	4.159	4.159	0.000	2614508	118.5	121.0	M
						RPD = 2.18	
7 Butane							
1	4.252	4.252	0.000	36232475	264.5	274.7	
2	7.375	7.375	0.000	17247732	264.5	270.5	
						RPD = 1.55	
8 isobutylene							
1	5.152	5.152	0.000	24137376	255.4	270.4	
2	7.229	7.229	0.000	11086184	255.4	266.8	
						RPD = 1.35	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

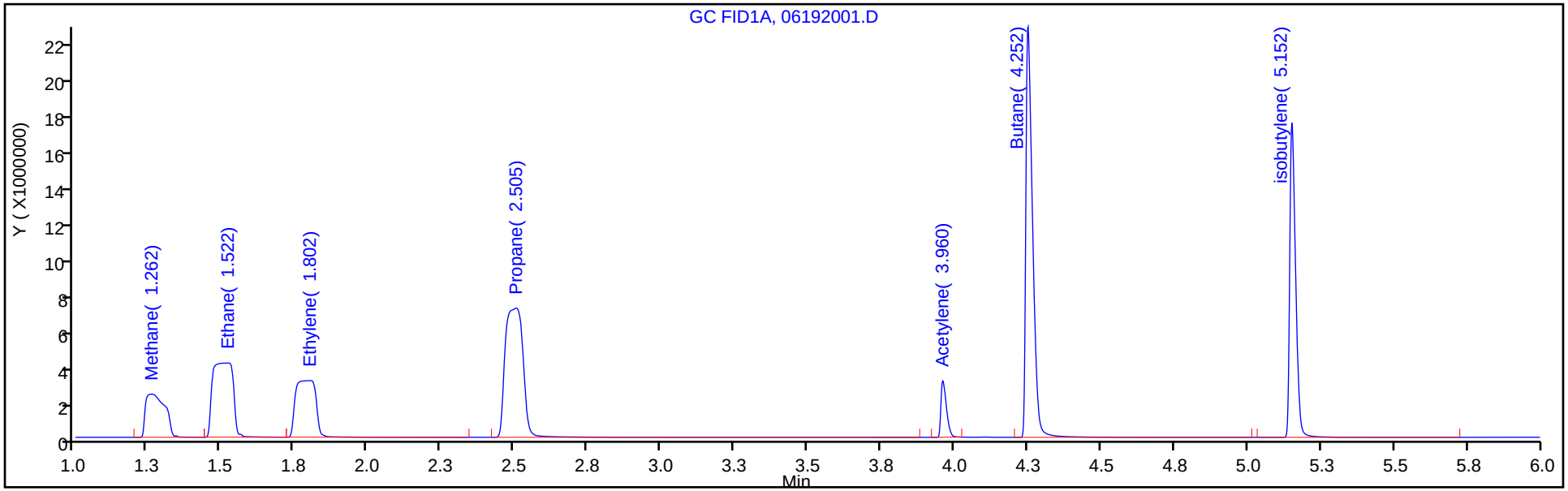
Report Date: 23-Jun-2020 14:07:48 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

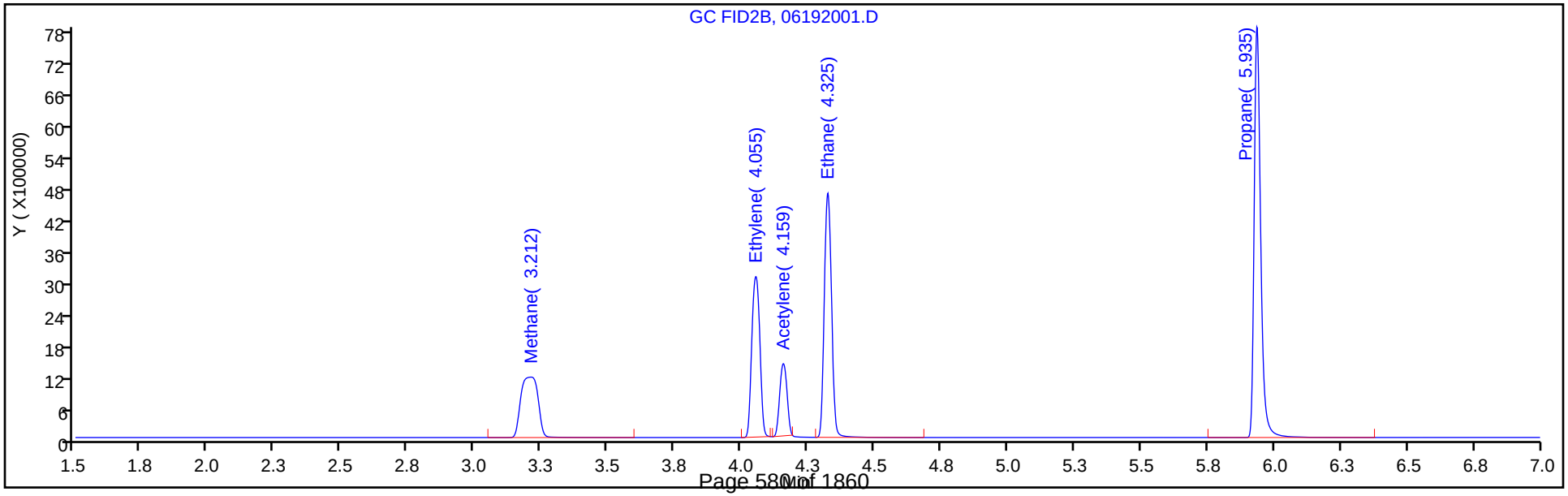
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D

Injection Date:	19-Jun-2020 14:13:54	Instrument ID:	VGC_J	Operator ID:	gm
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

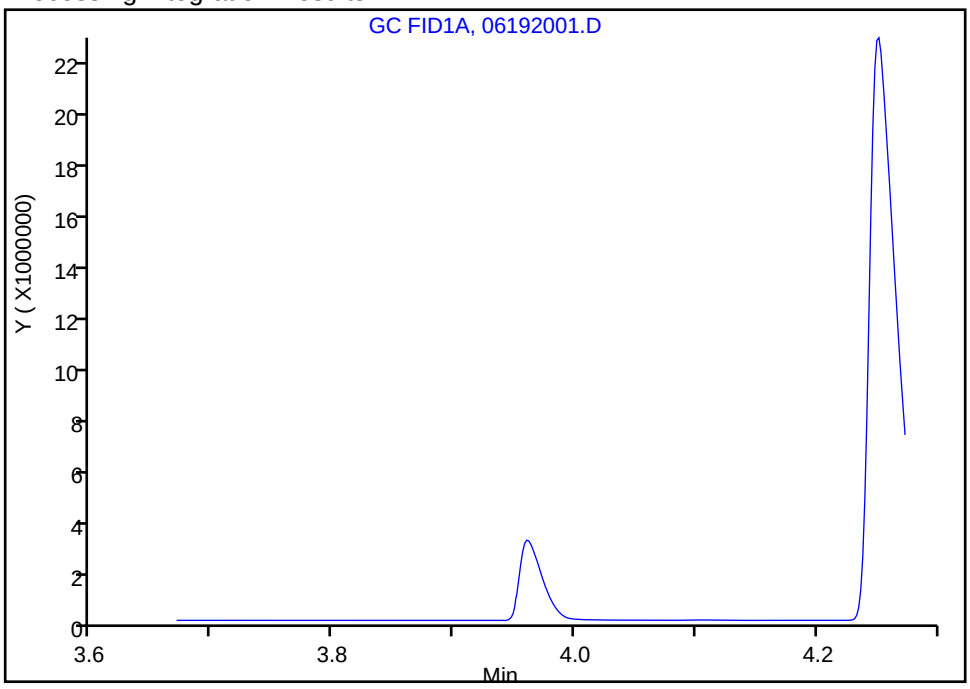
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D				
Injection Date:	19-Jun-2020 14:13:54	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

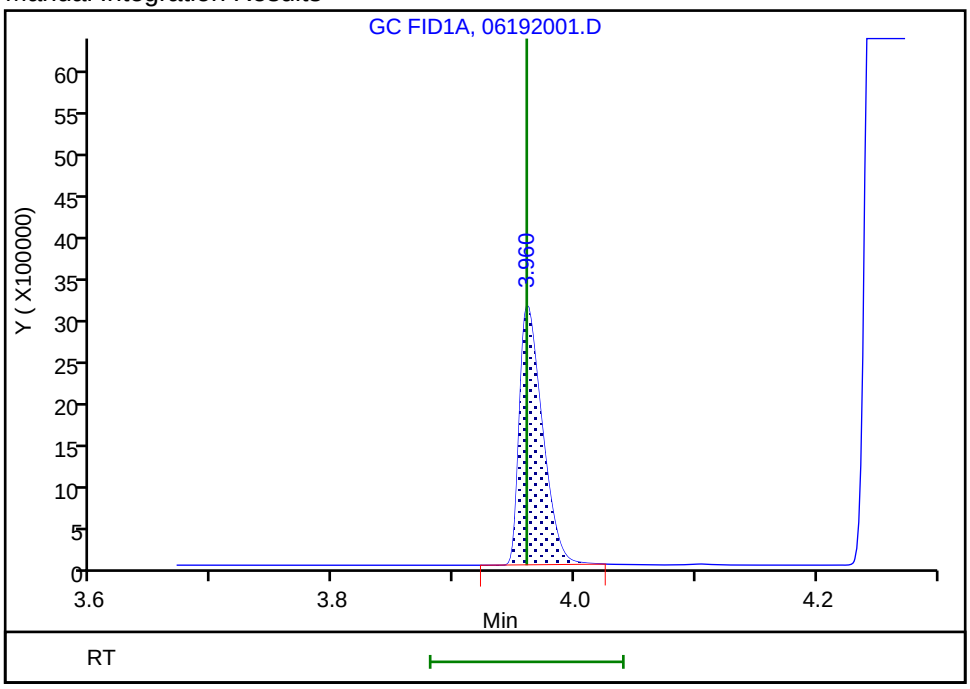
Processing Integration Results

RT: 3.95
Area: 0
Amount: 111.0338
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 4060516
Amount: 118.4022
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:28:57

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499435/1 Calibration Date: 06/19/2020 14:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192001.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		70416		74.8	73.0	2.5	20.0
Ethylene	Ave	47934	50289		134	128	4.9	20.0
Acetylene	Ave	21605	22059		121	119	2.1	20.0
Ethane	Ave	61056	64073		144	137	4.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCVRT 280-499435/1 Calibration Date: 06/19/2020 14:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.21	3.17	3.25
Ethylene	4.06	4.01	4.11
Acetylene	4.16	4.08	4.24
Ethane	4.33	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 19-Jun-2020 14:13:54 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Misc. Info.: 280-0092578-001
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:07:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 22-Jun-2020 13:29:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	10951223	73.0	75.9	
2	3.212	3.212	0.000	5140601	73.0	74.8	
						RPD = 1.33	
3 Ethane							
1	1.522	1.522	0.000	19900419	136.9	146.3	
2	4.325	4.325	0.000	8768790	136.9	143.6	
						RPD = 1.84	
4 Ethylene							M
1	1.802	1.802	0.000	14930971	127.7	135.5	
2	4.055	4.055	0.000	6420182	127.7	133.9	M
						RPD = 1.14	
5 Propane							
1	2.505	2.505	0.000	30213978	200.7	210.9	
2	5.935	5.935	0.000	13268980	200.7	211.9	
						RPD = 0.45	
6 Acetylene							Ma
1	3.960	3.960	0.000	4060516	118.5	118.4	M
2	4.159	4.159	0.000	2614508	118.5	121.0	M
						RPD = 2.18	
7 Butane							
1	4.252	4.252	0.000	36232475	264.5	274.7	
2	7.375	7.375	0.000	17247732	264.5	270.5	
						RPD = 1.55	
8 isobutylene							
1	5.152	5.152	0.000	24137376	255.4	270.4	
2	7.229	7.229	0.000	11086184	255.4	266.8	
						RPD = 1.35	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

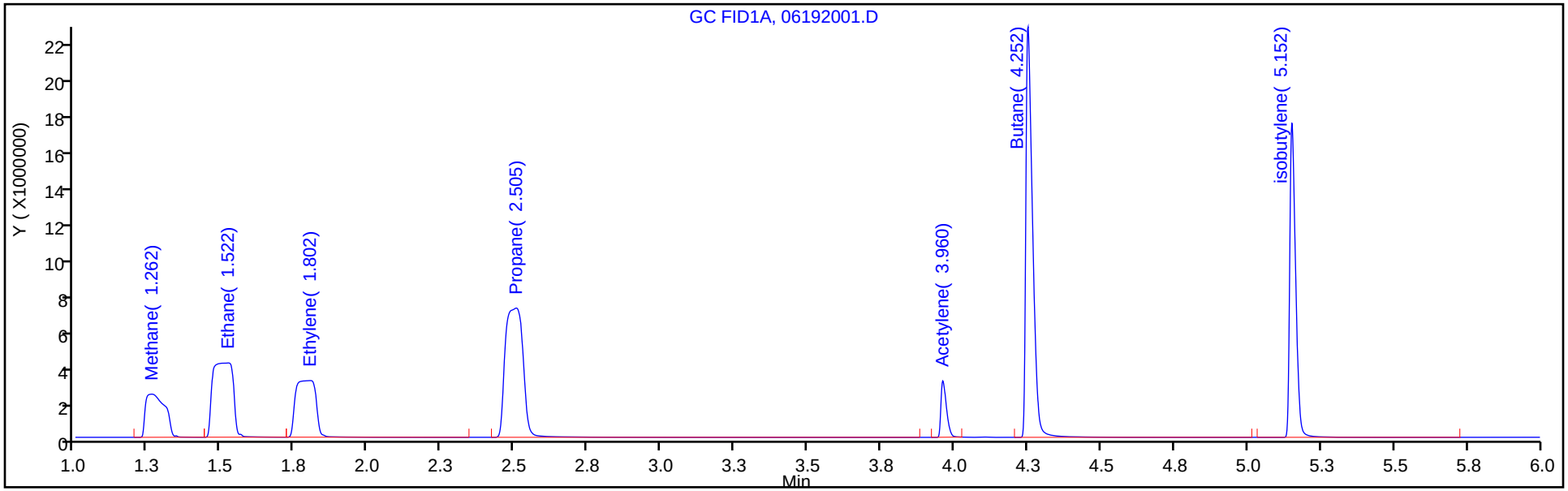
Report Date: 23-Jun-2020 14:07:48 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

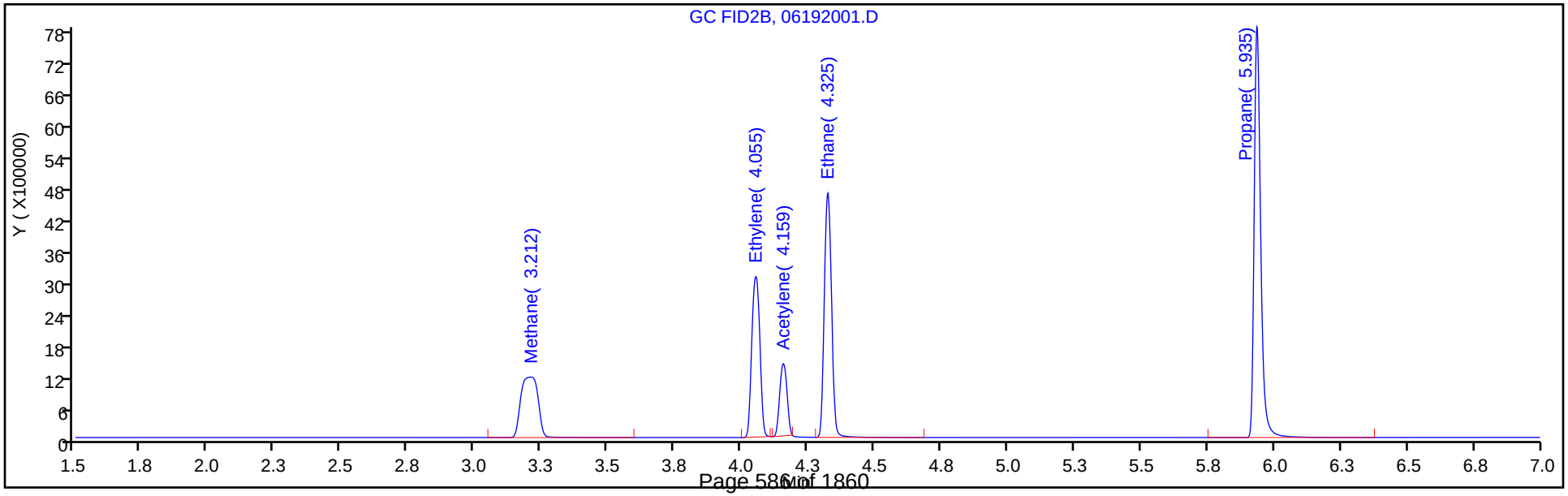
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D

Injection Date:	19-Jun-2020 14:13:54	Instrument ID:	VGC_J	Operator ID:	gm
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

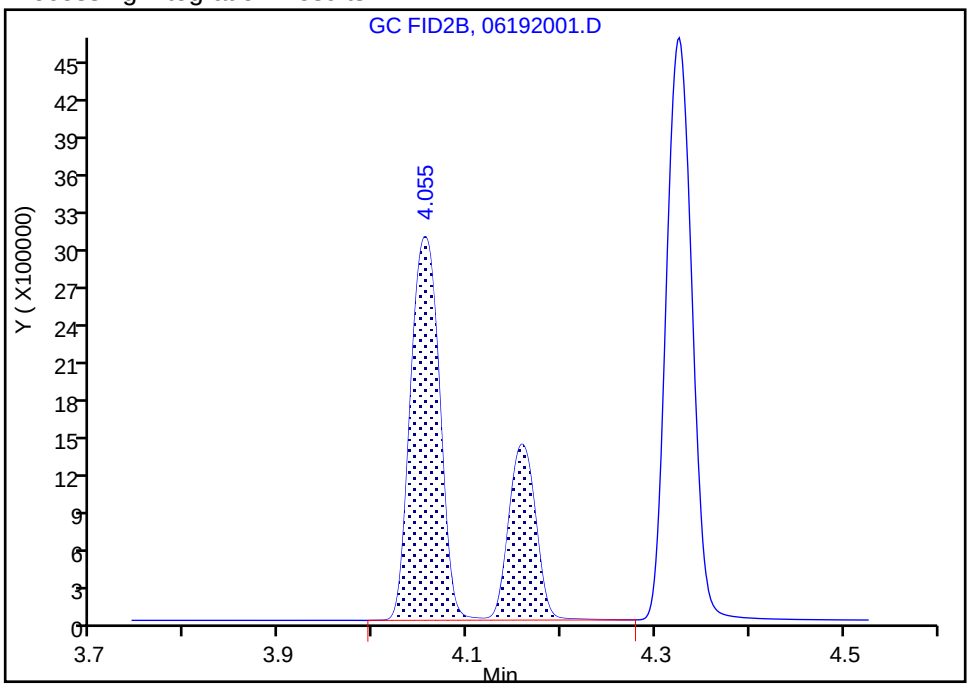
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D
Injection Date: 19-Jun-2020 14:13:54 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

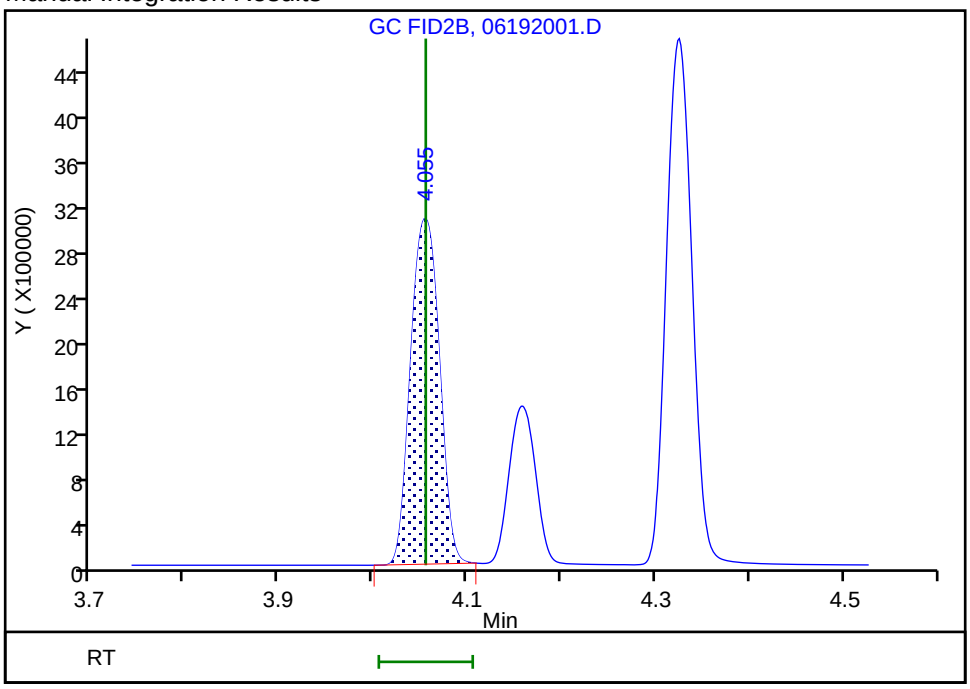
Processing Integration Results

RT: 4.06
Area: 9257574
Amount: 193.1329
Amount Units: ug/l



Manual Integration Results

RT: 4.06
Area: 6420182
Amount: 133.9388
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:28:27
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

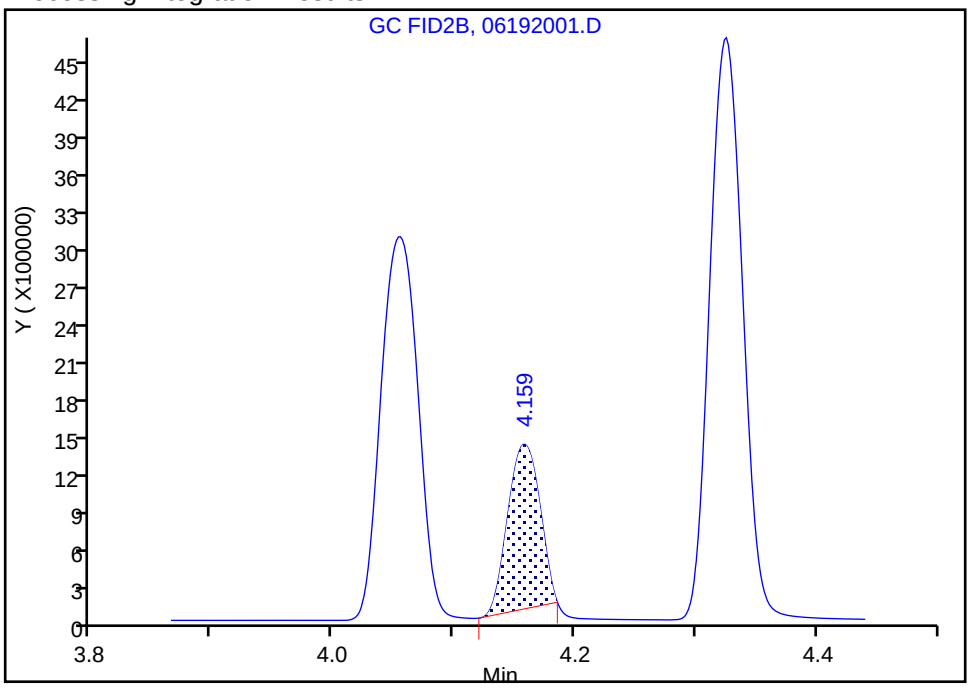
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192001.D
Injection Date: 19-Jun-2020 14:13:54 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

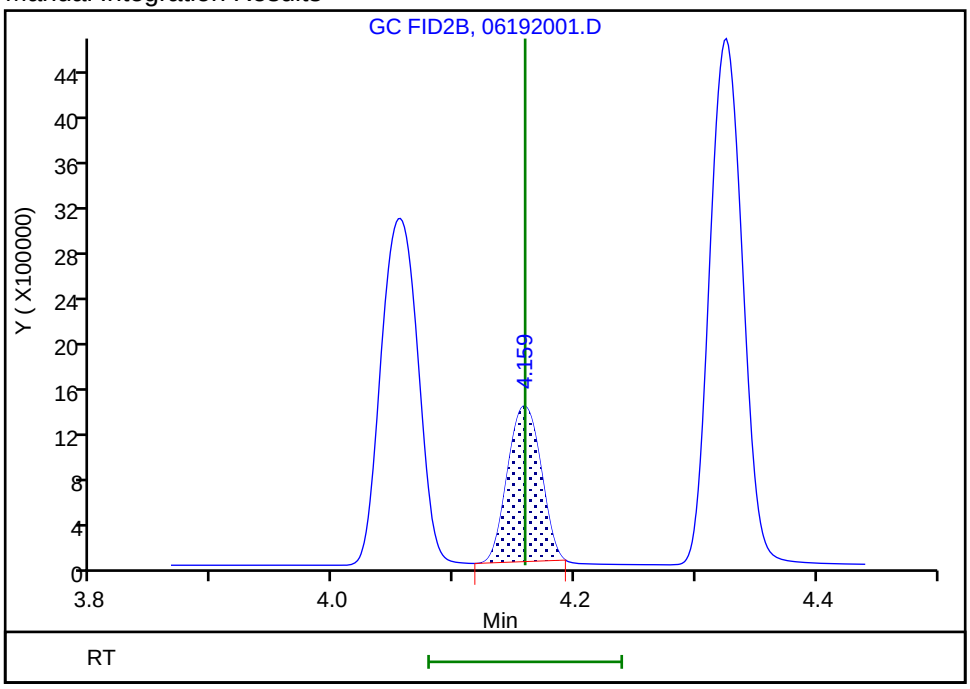
Processing Integration Results

RT: 4.16
Area: 2398940
Amount: 111.0338
Amount Units: ug/l



Manual Integration Results

RT: 4.16
Area: 2614508
Amount: 121.0113
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:28:48
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/18 Calibration Date: 06/19/2020 18:50

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192018.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		148493		75.1	73.0	2.8	20.0
Ethane	Ave	136043	142048		143	137	4.4	20.0
Ethylene	Ave	110213	113162		131	128	2.7	20.0
Acetylene	Ave	34294	34435		119	119	0.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/18 Calibration Date: 06/19/2020 18:50

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192018.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.51	1.47	1.57
Ethylene	1.79	1.75	1.85
Acetylene	3.96	3.88	4.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 19-Jun-2020 18:50:50 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Misc. Info.: 280-0092578-018
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:28:47 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:28:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.254	1.262	-0.008	10840517	73.0	75.1	a
2	3.171	3.212	-0.041	5162853	73.0	75.2	a
						RPD = 0.12	
3 Ethane							
1	1.512	1.522	-0.010	19439997	136.9	142.9	
2	4.302	4.325	-0.023	8692891	136.9	142.4	
						RPD = 0.37	
4 Ethylene							
1	1.787	1.802	-0.015	14447060	127.7	131.1	
2	4.031	4.055	-0.024	6324363	127.7	131.9	
						RPD = 0.65	
5 Propane							
1	2.489	2.505	-0.016	29510493	200.7	206.0	
2	5.924	5.935	-0.011	13143008	200.7	209.9	
						RPD = 1.85	
6 Acetylene							M
1	3.962	3.960	0.002	4081364	118.5	119.0	
2	4.136	4.159	-0.023	2645256	118.5	122.4	M
						RPD = 2.84	
7 Butane							M
1	4.242	4.252	-0.010	34536511	264.5	261.9	M
2	7.369	7.375	-0.006	17047482	264.5	267.3	
						RPD = 2.07	
8 isobutylene							Ma
1	5.147	5.152	-0.005	22621832	255.4	253.4	M
2	7.221	7.229	-0.008	10664079	255.4	256.6	a
						RPD = 1.25	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

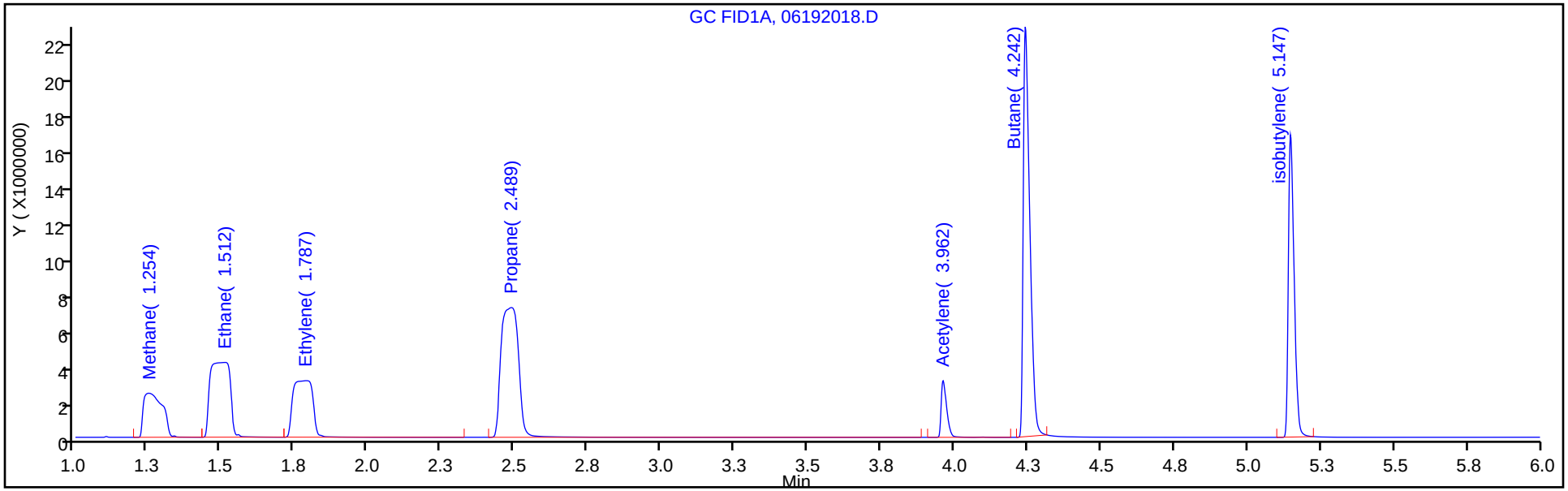
Report Date: 23-Jun-2020 14:28:48 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

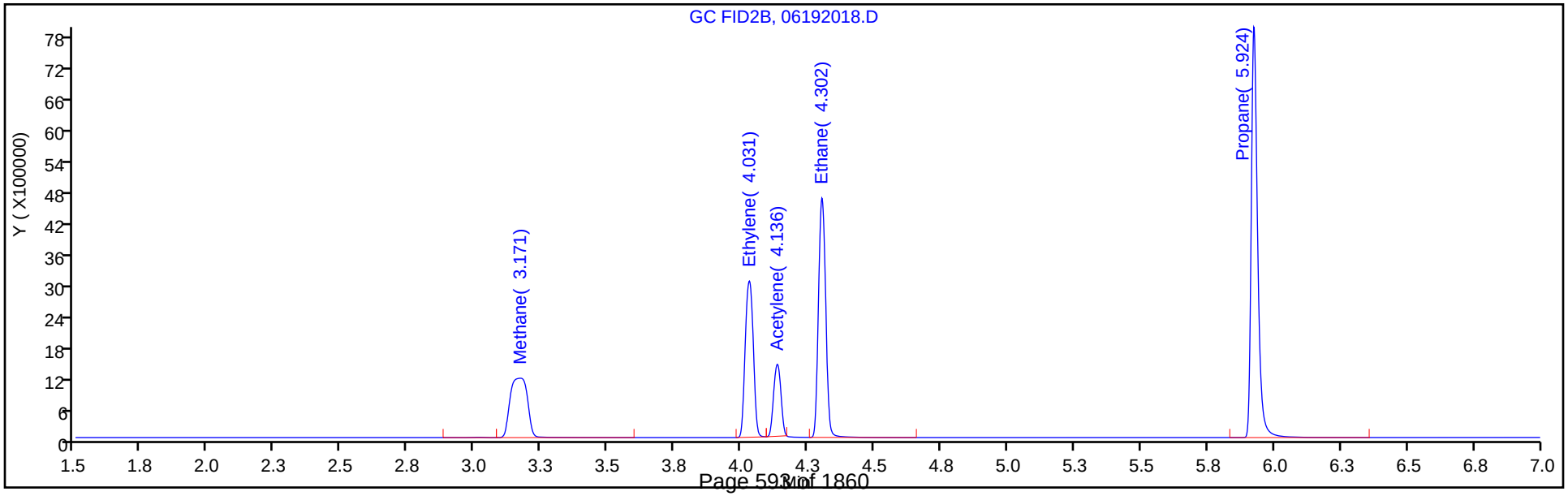
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D

Injection Date:	19-Jun-2020 18:50:50	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	18
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

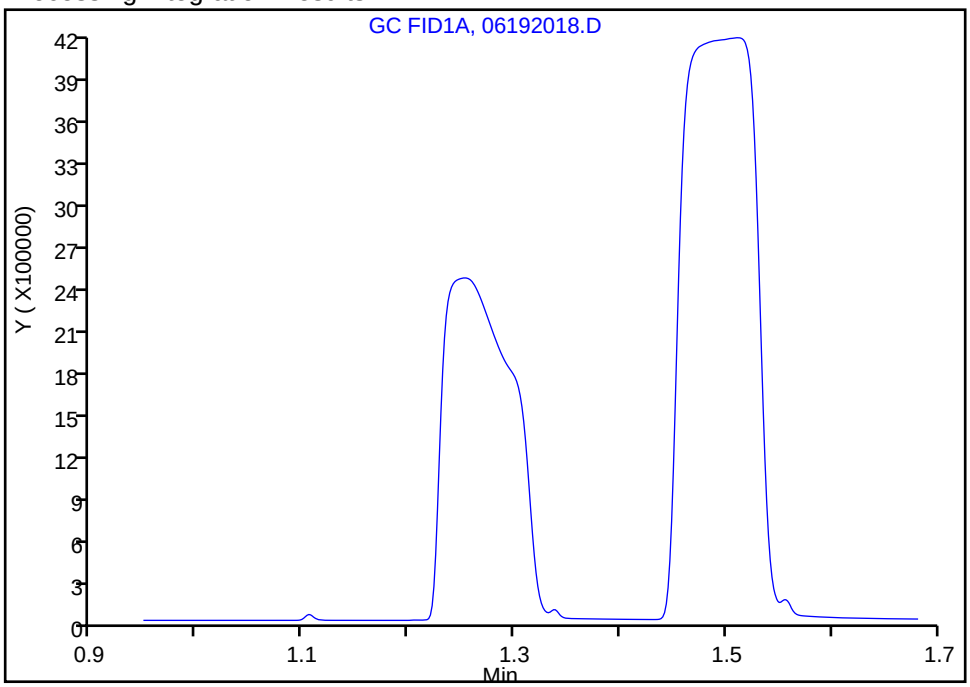
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D				
Injection Date:	19-Jun-2020 18:50:50	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

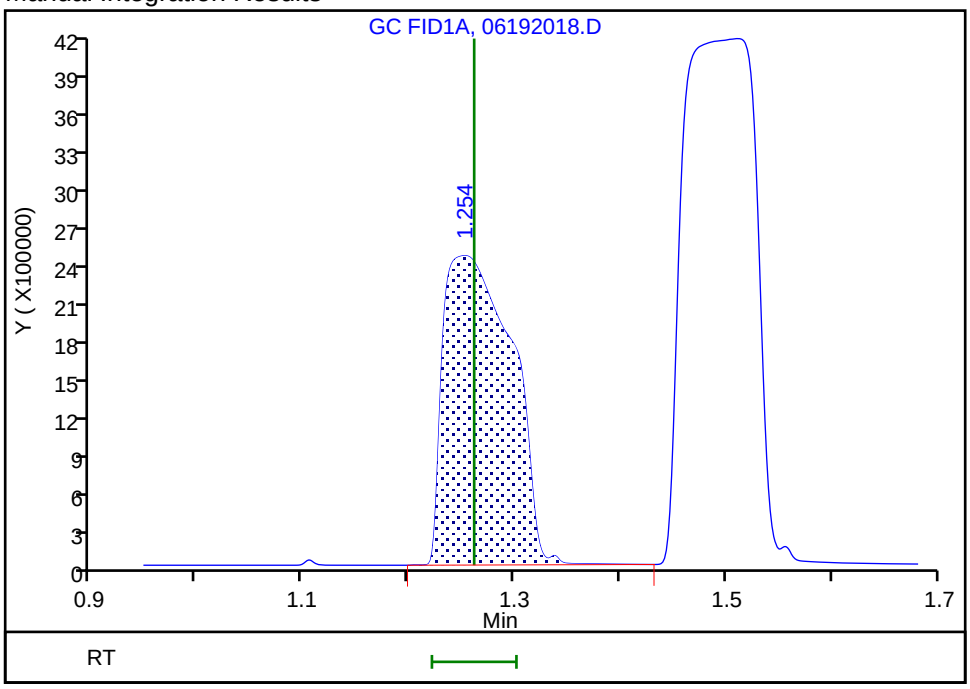
Not Detected
Expected RT: 1.26

Processing Integration Results



Manual Integration Results

RT: 1.25
Area: 10840517
Amount: 75.081617
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:21:59
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/18 Calibration Date: 06/19/2020 18:50

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192018.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		70721		75.2	73.0	3.0	20.0
Ethylene	Ave	47934	49538		132	128	3.3	20.0
Acetylene	Ave	21605	22319		122	119	3.3	20.0
Ethane	Ave	61056	63519		142	137	4.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/18 Calibration Date: 06/19/2020 18:50

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192018.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.17	3.25
Ethylene	4.03	4.01	4.11
Acetylene	4.14	4.08	4.24
Ethane	4.30	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 19-Jun-2020 18:50:50 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Misc. Info.: 280-0092578-018
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:28:47 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:28:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.254	1.262	-0.008	10840517	73.0	75.1	a
2	3.171	3.212	-0.041	5162853	73.0	75.2	a
						RPD = 0.12	
3 Ethane							
1	1.512	1.522	-0.010	19439997	136.9	142.9	
2	4.302	4.325	-0.023	8692891	136.9	142.4	
						RPD = 0.37	
4 Ethylene							
1	1.787	1.802	-0.015	14447060	127.7	131.1	
2	4.031	4.055	-0.024	6324363	127.7	131.9	
						RPD = 0.65	
5 Propane							
1	2.489	2.505	-0.016	29510493	200.7	206.0	
2	5.924	5.935	-0.011	13143008	200.7	209.9	
						RPD = 1.85	
6 Acetylene							M
1	3.962	3.960	0.002	4081364	118.5	119.0	
2	4.136	4.159	-0.023	2645256	118.5	122.4	M
						RPD = 2.84	
7 Butane							M
1	4.242	4.252	-0.010	34536511	264.5	261.9	M
2	7.369	7.375	-0.006	17047482	264.5	267.3	
						RPD = 2.07	
8 isobutylene							Ma
1	5.147	5.152	-0.005	22621832	255.4	253.4	M
2	7.221	7.229	-0.008	10664079	255.4	256.6	a
						RPD = 1.25	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

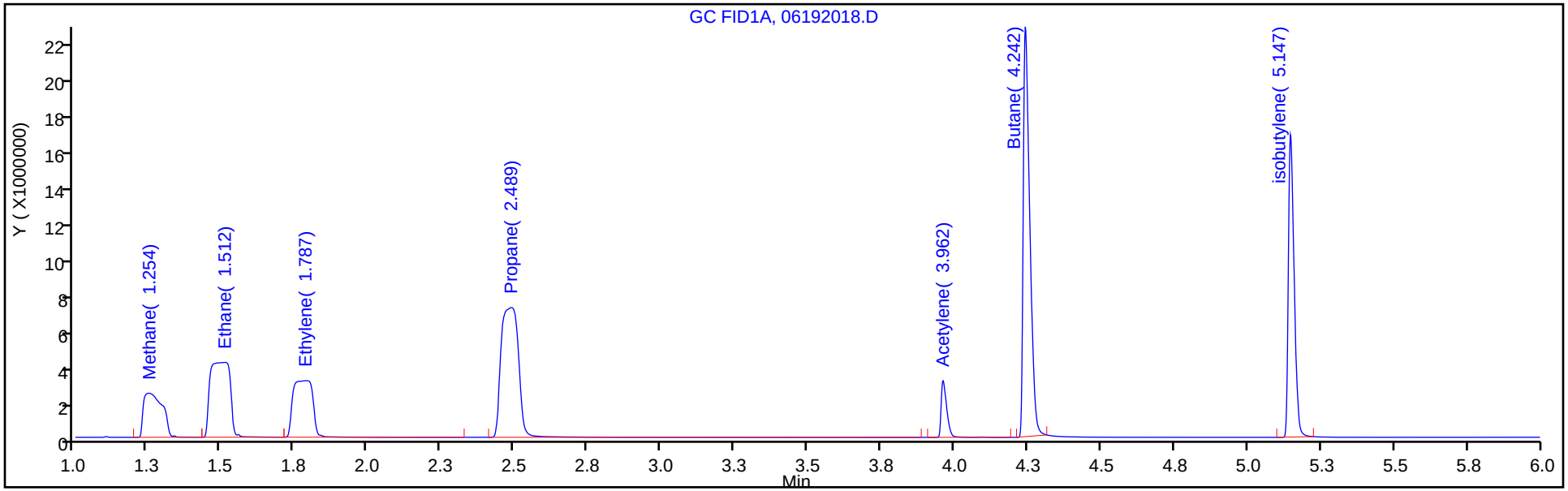
Report Date: 23-Jun-2020 14:28:48 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

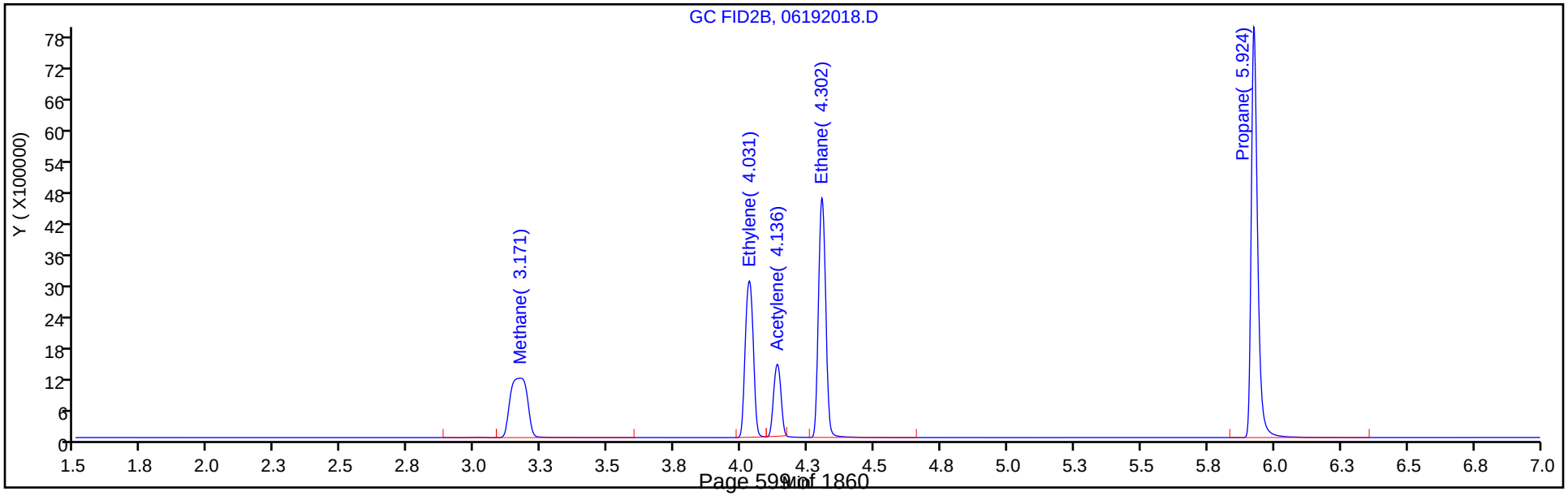
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D

Injection Date:	19-Jun-2020 18:50:50	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	18
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

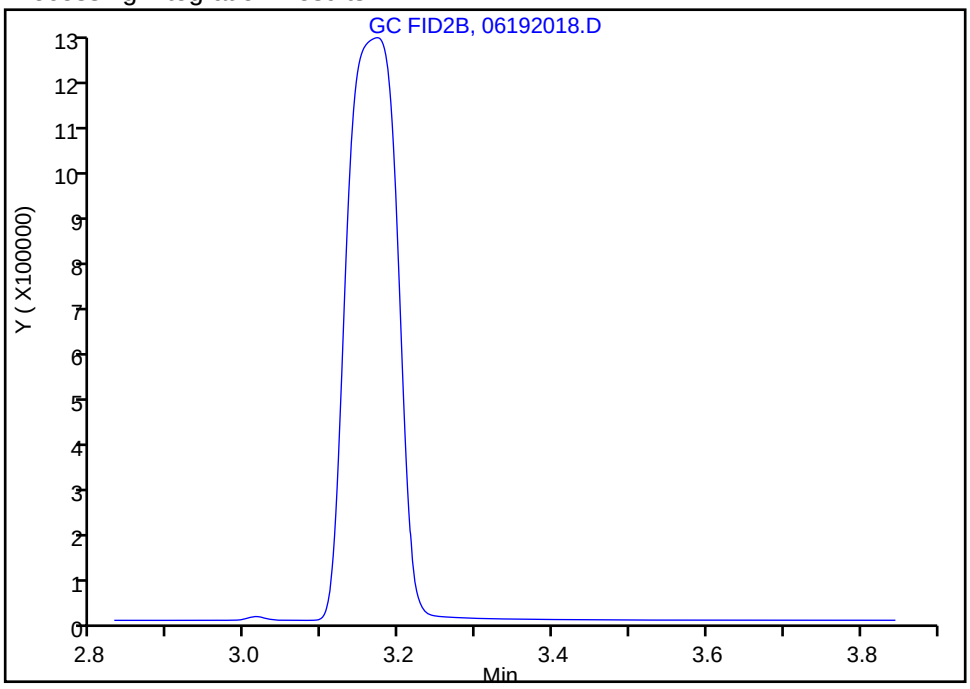
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D
Injection Date: 19-Jun-2020 18:50:50 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

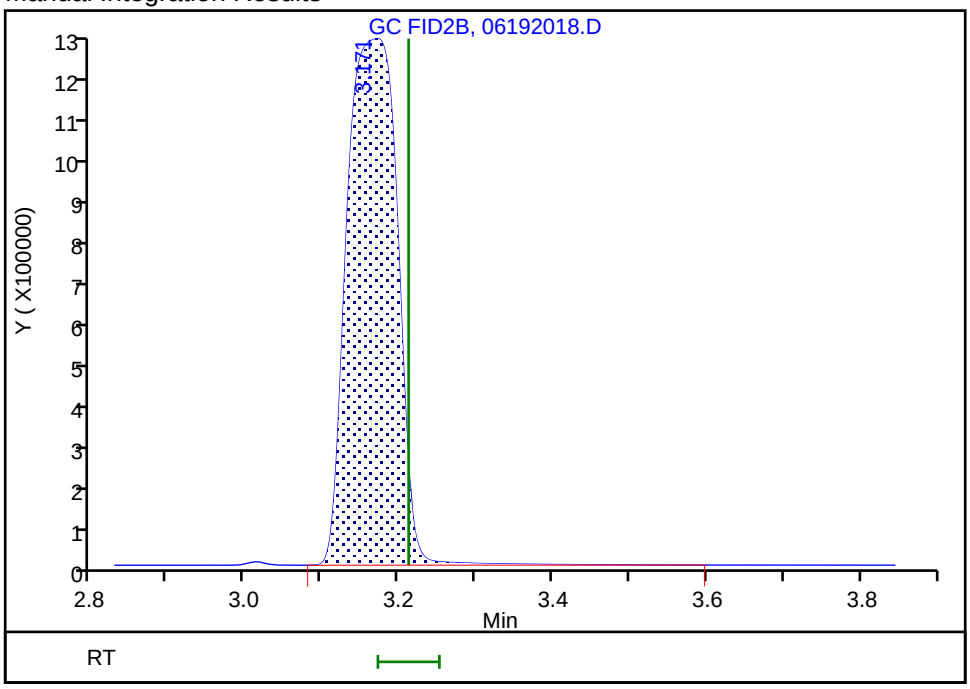
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 5162853
Amount: 75.174415
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 19:17:50
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

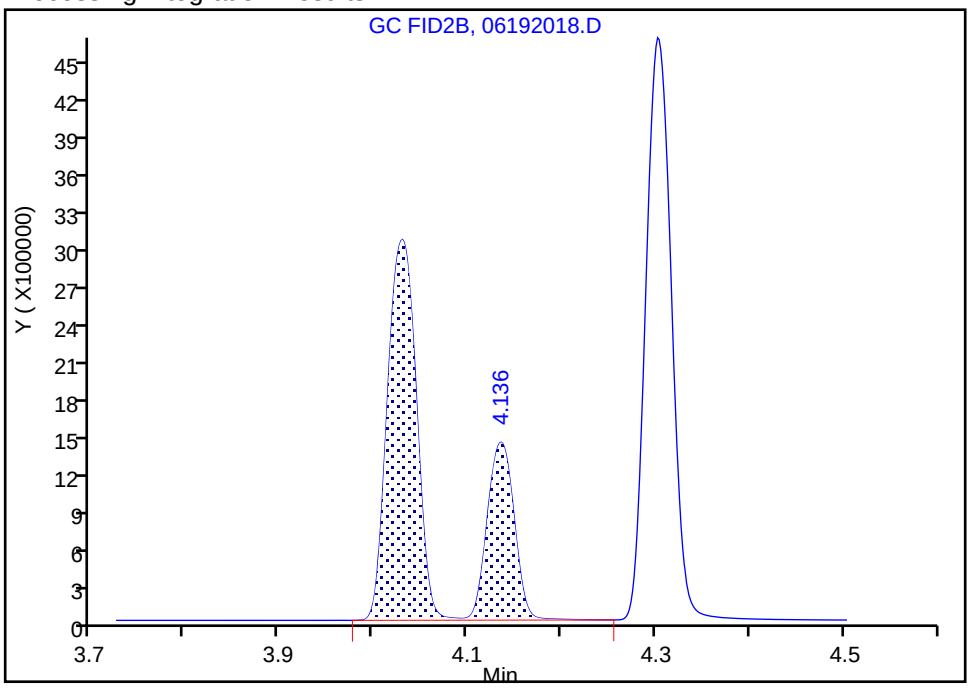
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192018.D
Injection Date: 19-Jun-2020 18:50:50 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

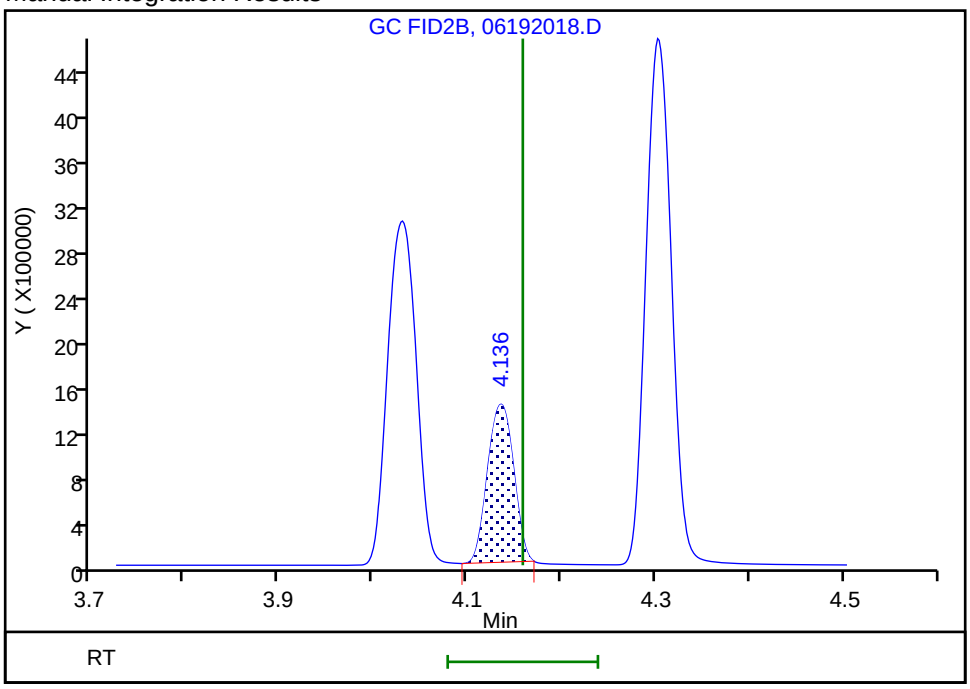
Processing Integration Results

RT: 4.14
Area: 9149392
Amount: 423.4752
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2645256
Amount: 122.4344
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 19:18:12
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/30 Calibration Date: 06/20/2020 00:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192030.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		140984		71.3	73.0	-2.4	20.0
Ethane	Ave	136043	135786		137	137	-0.2	20.0
Ethylene	Ave	110213	107385		124	128	-2.6	20.0
Acetylene	Ave	34294	32083		111	119	-6.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/30 Calibration Date: 06/20/2020 00:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192030.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.51	1.47	1.57
Ethylene	1.79	1.75	1.85
Acetylene	3.96	3.88	4.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2020 00:42:12 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Misc. Info.: 280-0092578-030
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:08:23 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:07:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.256	1.262	-0.006	10292325	73.0	71.3	a
2	3.168	3.212	-0.044	4940297	73.0	71.9	a
						RPD = 0.92	
3 Ethane							
1	1.512	1.522	-0.010	18583029	136.9	136.6	
2	4.301	4.325	-0.024	8357907	136.9	136.9	
						RPD = 0.21	
4 Ethylene							M
1	1.786	1.802	-0.016	13709544	127.7	124.4	
2	4.028	4.055	-0.027	5982678	127.7	124.8	M
						RPD = 0.34	
5 Propane							
1	2.487	2.505	-0.018	28242267	200.7	197.2	
2	5.923	5.935	-0.012	12609454	200.7	201.3	
						RPD = 2.10	
6 Acetylene							Ma
1	3.959	3.960	-0.001	3802552	118.5	110.9	M
2	4.133	4.159	-0.026	2573099	118.5	119.1	M
						RPD = 7.14	
7 Butane							
1	4.239	4.252	-0.013	33846601	264.5	256.6	
2	7.366	7.375	-0.009	16384504	264.5	256.9	
						RPD = 0.13	
8 isobutylene							
1	5.144	5.152	-0.008	21632560	255.4	242.3	
2	7.219	7.229	-0.010	10294309	255.4	247.7	
						RPD = 2.19	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

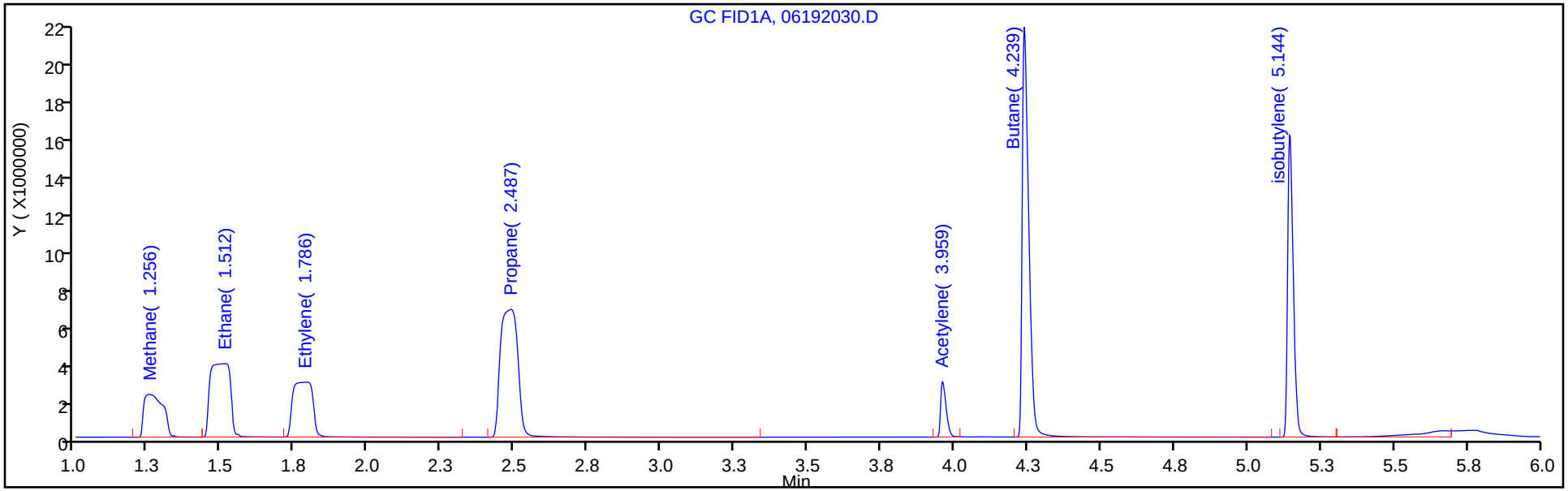
Report Date: 23-Jun-2020 14:08:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

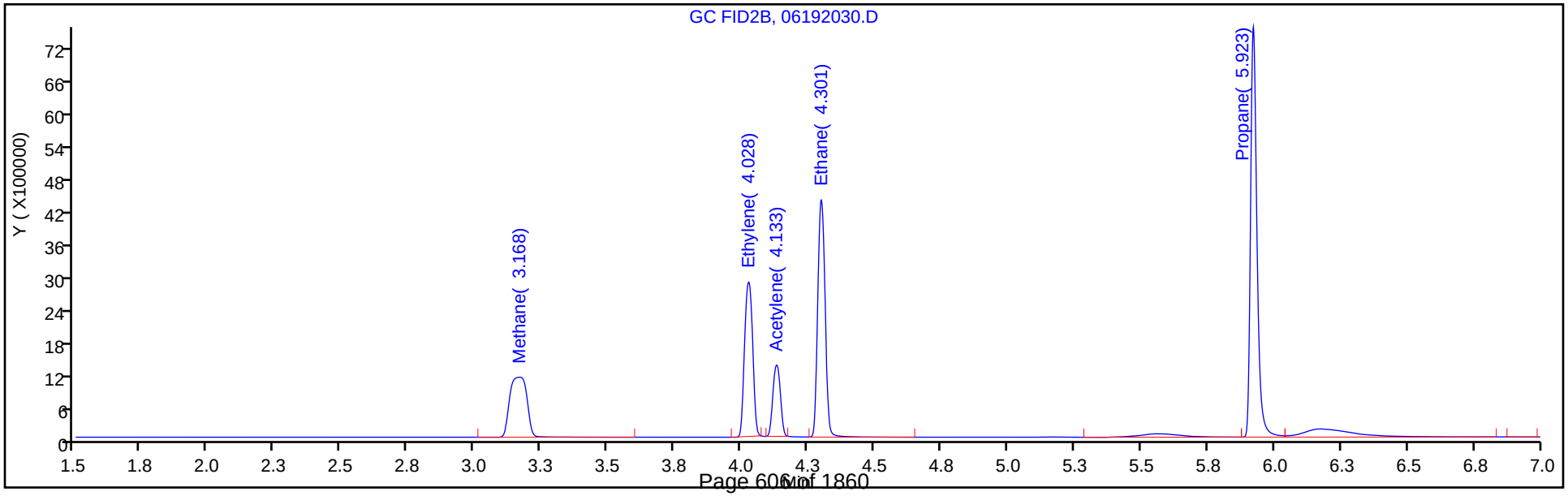
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D

Injection Date:	20-Jun-2020 00:42:12	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

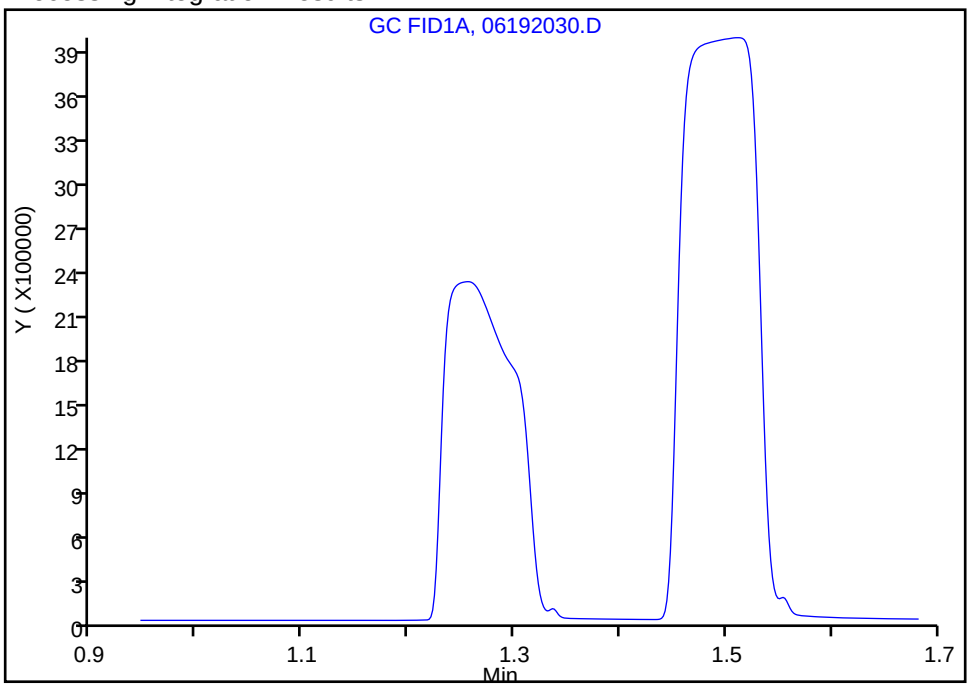
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D				
Injection Date:	20-Jun-2020 00:42:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	30	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

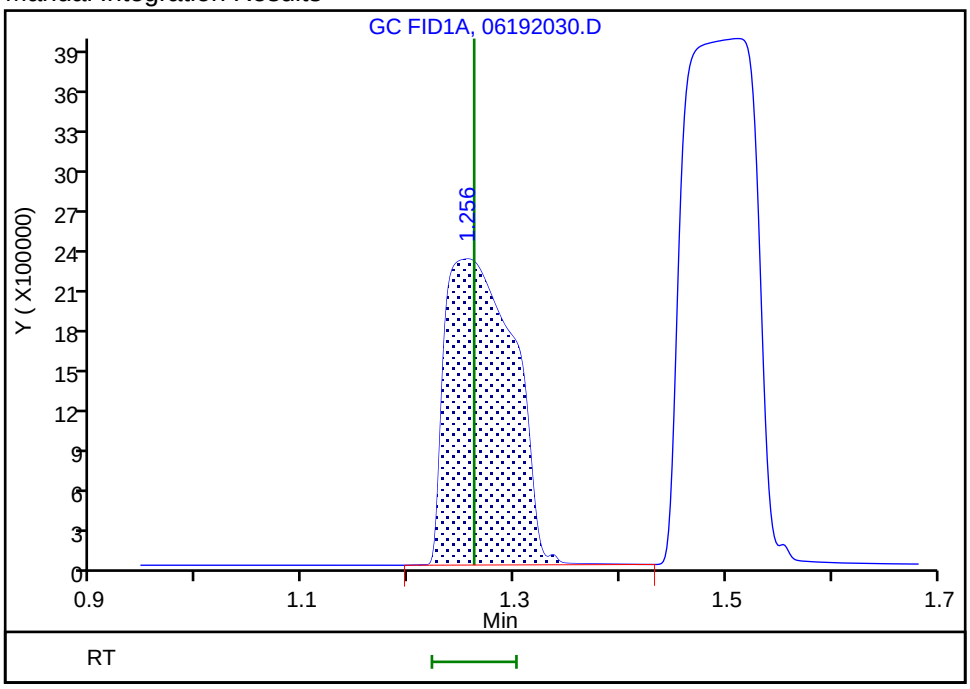
Not Detected
Expected RT: 1.26

Processing Integration Results



Manual Integration Results

RT: 1.26
Area: 10292325
Amount: 71.267664
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:06:20
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

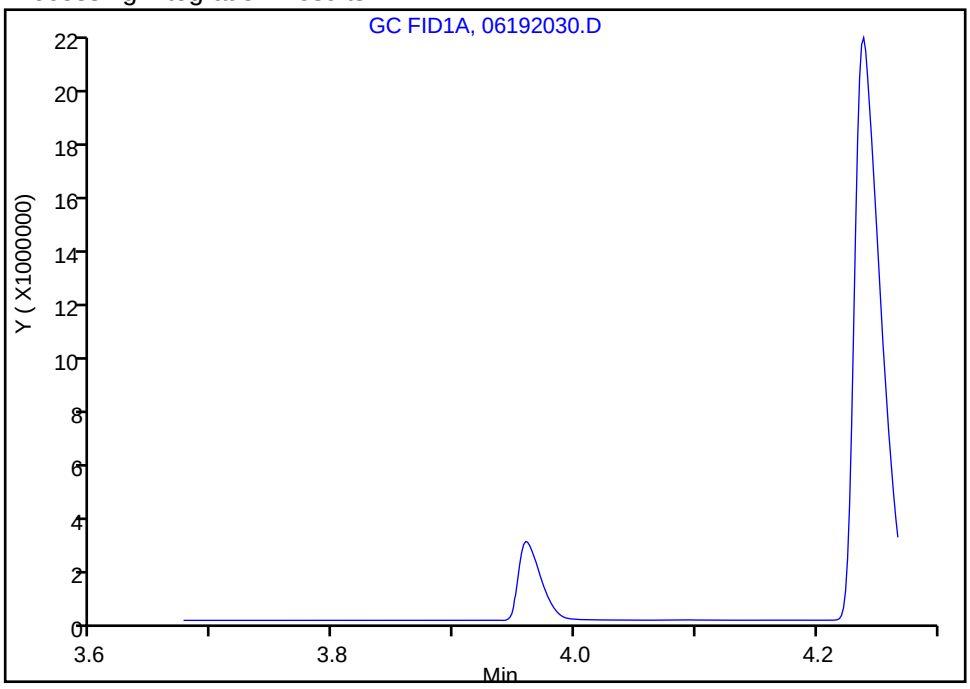
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D				
Injection Date:	20-Jun-2020 00:42:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	30	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

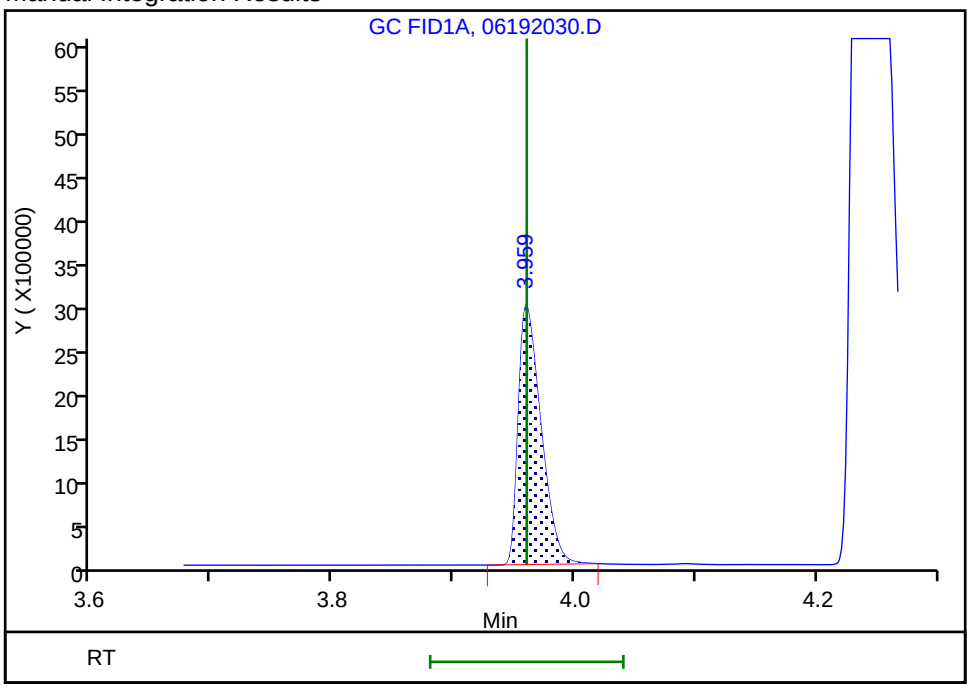
Processing Integration Results

RT: 3.96
Area: 0
Amount: 119.0947
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 3802552
Amount: 110.8801
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:07:08
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/30 Calibration Date: 06/20/2020 00:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192030.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		67672		71.9	73.0	-1.5	20.0
Ethylene	Ave	47934	46862		125	128	-2.2	20.0
Acetylene	Ave	21605	21710		119	119	0.5	20.0
Ethane	Ave	61056	61071		137	137	0.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/30 Calibration Date: 06/20/2020 00:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 06192030.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.17	3.25
Ethylene	4.03	4.01	4.11
Acetylene	4.13	4.08	4.24
Ethane	4.30	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2020 00:42:12 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Misc. Info.: 280-0092578-030
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:08:23 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:07:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.256	1.262	-0.006	10292325	73.0	71.3	a
2	3.168	3.212	-0.044	4940297	73.0	71.9	a
						RPD = 0.92	
3 Ethane							
1	1.512	1.522	-0.010	18583029	136.9	136.6	
2	4.301	4.325	-0.024	8357907	136.9	136.9	
						RPD = 0.21	
4 Ethylene							M
1	1.786	1.802	-0.016	13709544	127.7	124.4	
2	4.028	4.055	-0.027	5982678	127.7	124.8	M
						RPD = 0.34	
5 Propane							
1	2.487	2.505	-0.018	28242267	200.7	197.2	
2	5.923	5.935	-0.012	12609454	200.7	201.3	
						RPD = 2.10	
6 Acetylene							Ma
1	3.959	3.960	-0.001	3802552	118.5	110.9	M
2	4.133	4.159	-0.026	2573099	118.5	119.1	M
						RPD = 7.14	
7 Butane							
1	4.239	4.252	-0.013	33846601	264.5	256.6	
2	7.366	7.375	-0.009	16384504	264.5	256.9	
						RPD = 0.13	
8 isobutylene							
1	5.144	5.152	-0.008	21632560	255.4	242.3	
2	7.219	7.229	-0.010	10294309	255.4	247.7	
						RPD = 2.19	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

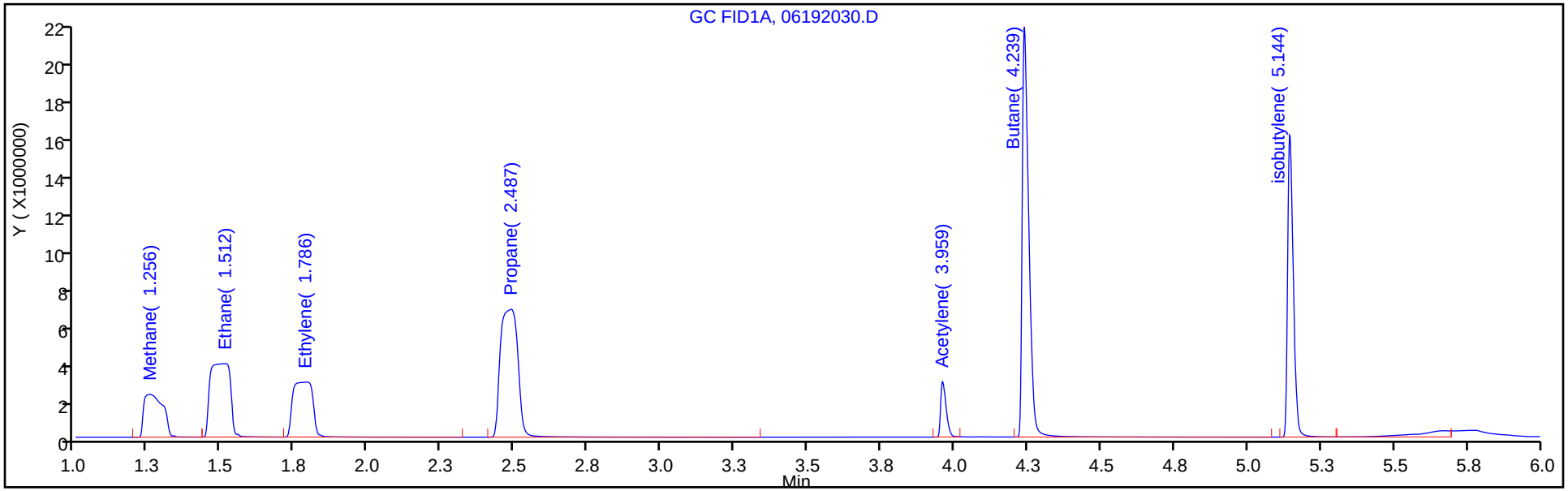
Report Date: 23-Jun-2020 14:08:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

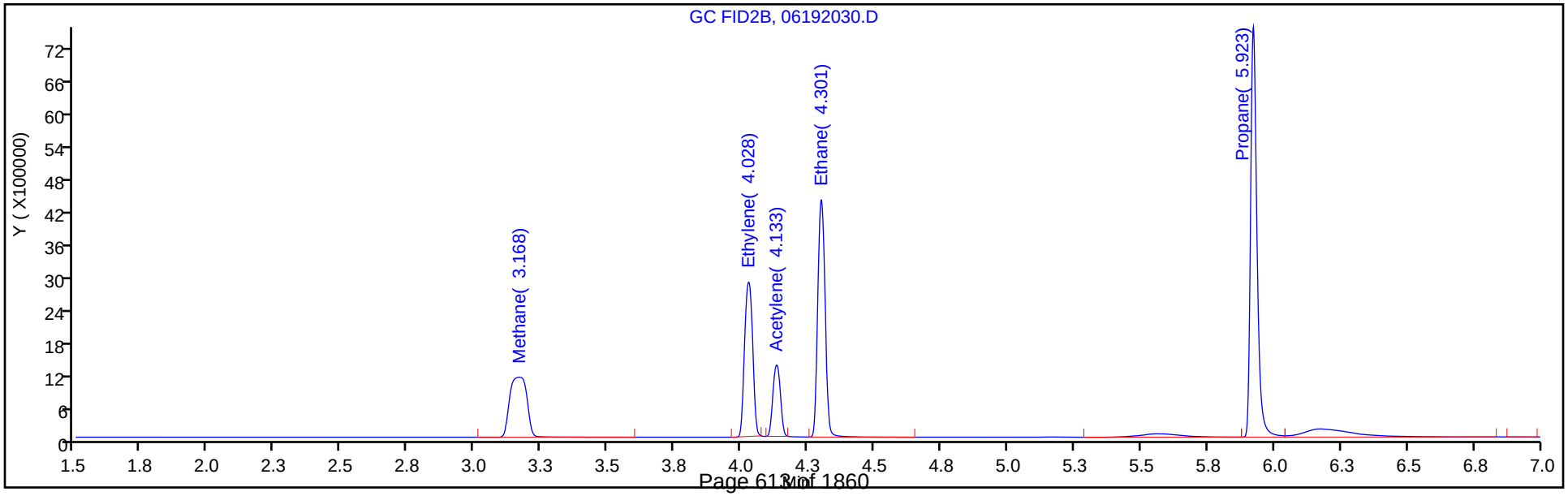
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D

Injection Date:	20-Jun-2020 00:42:12	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

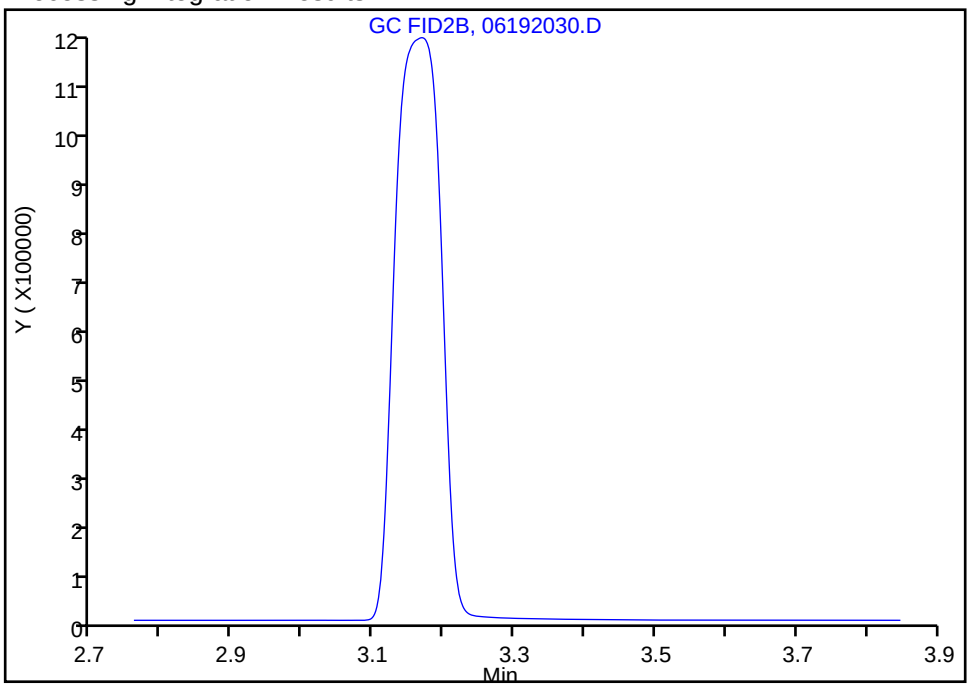
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D
Injection Date: 20-Jun-2020 00:42:12 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

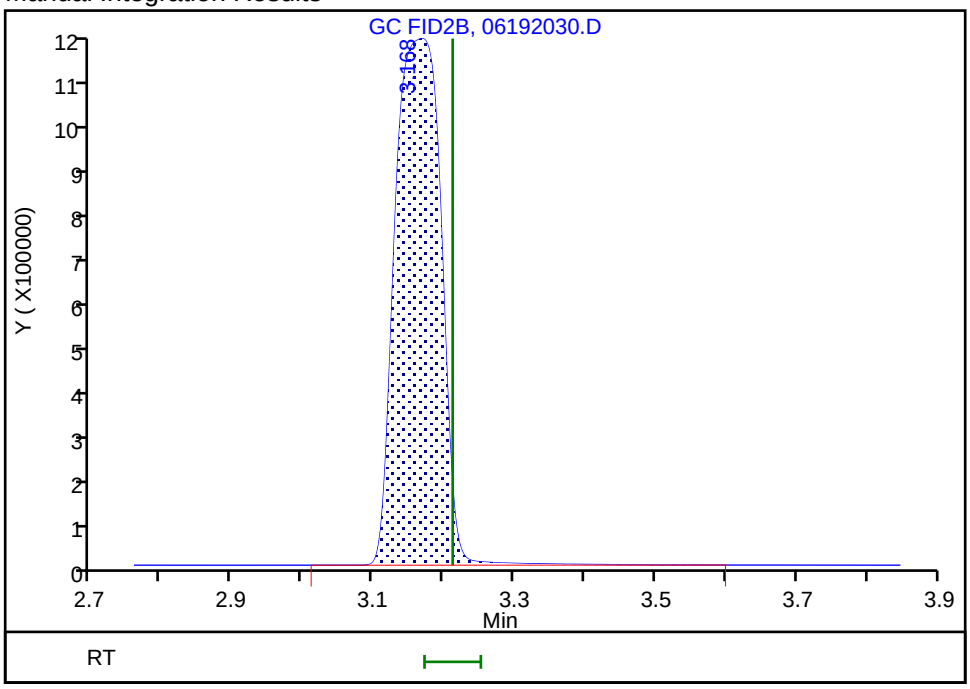
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 4940297
Amount: 71.922960
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:06:18
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

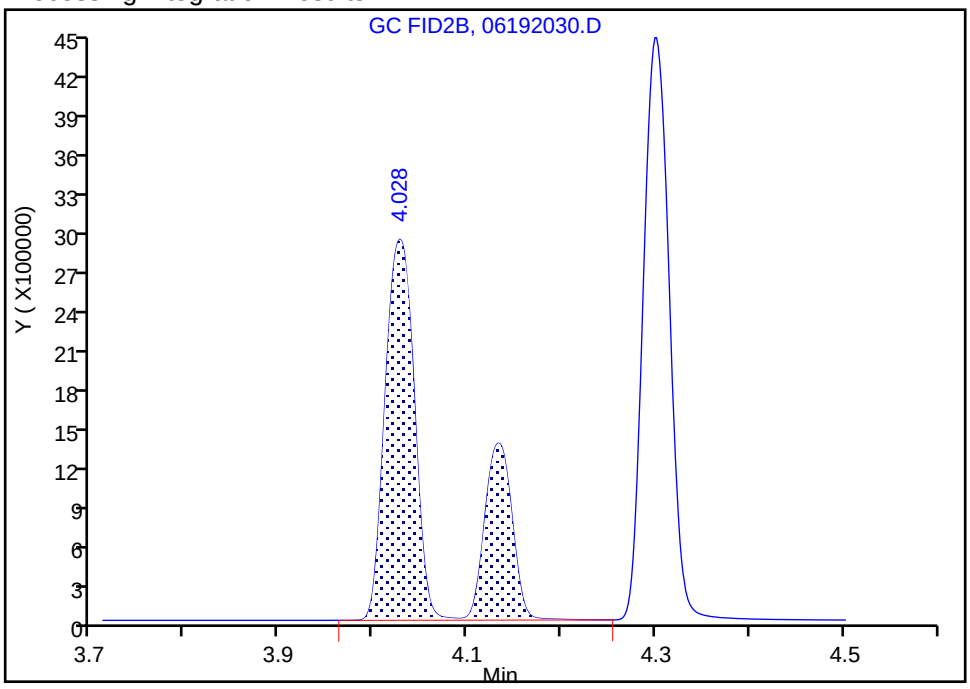
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D				
Injection Date:	20-Jun-2020 00:42:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	30	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

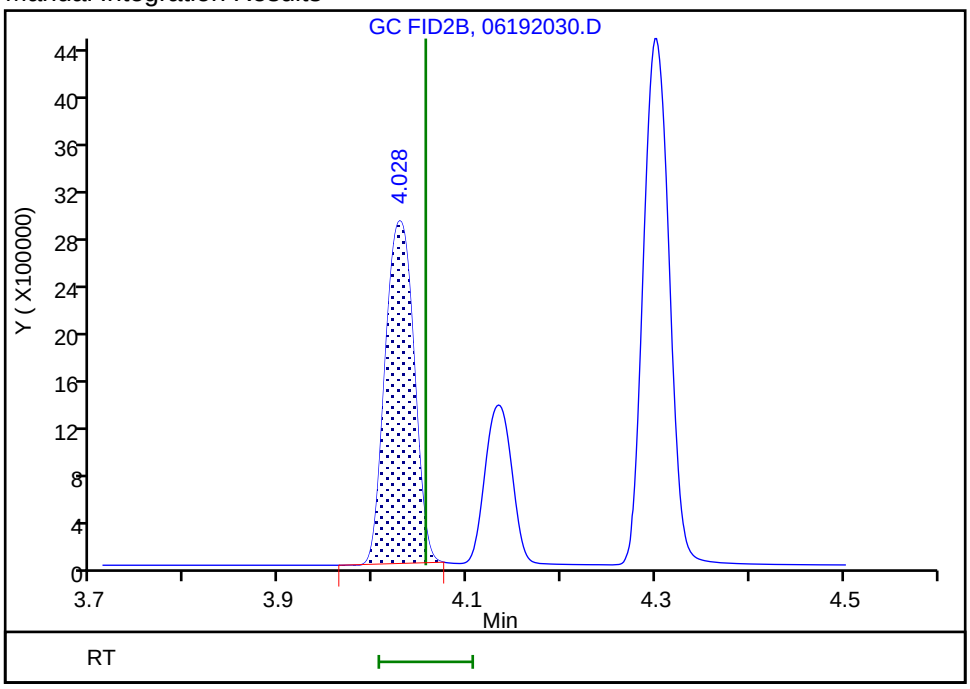
Processing Integration Results

RT: 4.03
Area: 8740831
Amount: 182.3525
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 5982678
Amount: 124.8115
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:06:41

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

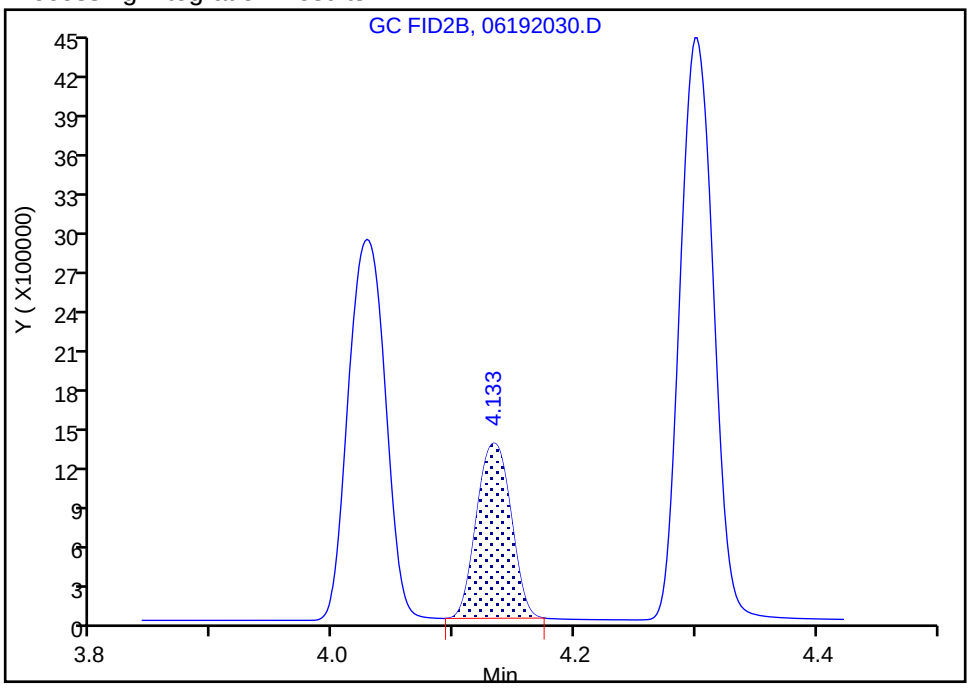
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192030.D				
Injection Date:	20-Jun-2020 00:42:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	30	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

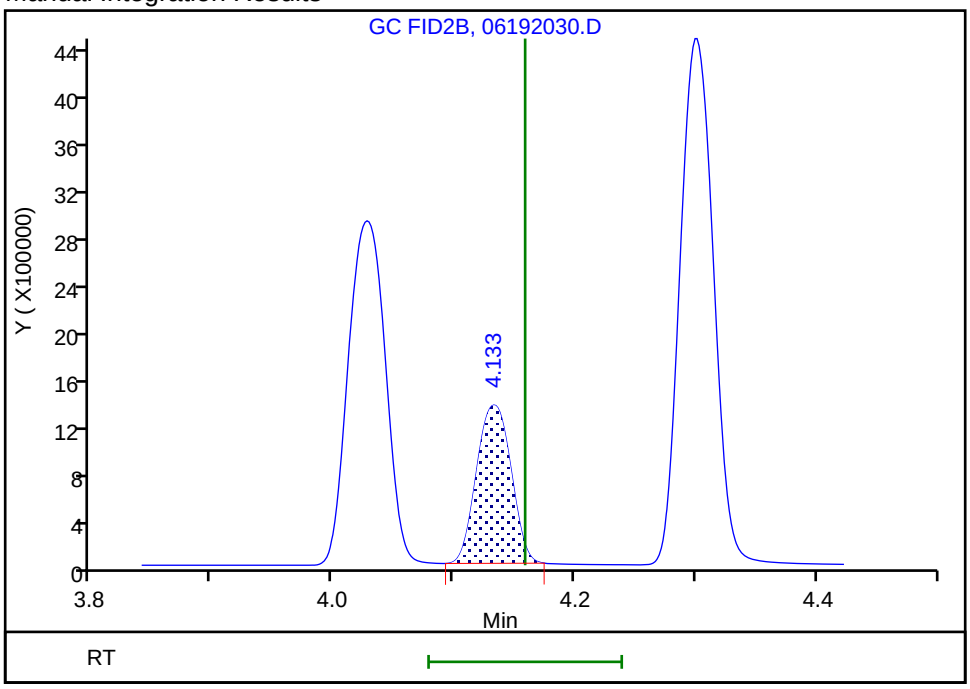
Processing Integration Results

RT: 4.13
Area: 2573099
Amount: 119.0947
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 2573099
Amount: 119.0947
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:07:01

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/40 Calibration Date: 06/20/2020 03:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 041F4101.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		142958		72.3	73.0	-1.0	20.0
Ethane	Ave	136043	137294		138	137	0.9	20.0
Ethylene	Ave	110213	110150		128	128	-0.0	20.0
Acetylene	Ave	34294	33597		116	119	-2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/40 Calibration Date: 06/20/2020 03:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 041F4101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.51	1.47	1.57
Ethylene	1.80	1.75	1.85
Acetylene	3.96	3.88	4.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\041F4101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2020 03:42:24 ALS Bottle#: 41 Worklist Smp#: 40
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:36:10 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:35:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.254	1.262	-0.008	10436423	73.0	72.3	
2	3.175	3.212	-0.037	4972823	73.0	72.4	
						RPD = 0.18	
3 Ethane							
1	1.513	1.522	-0.009	18789505	136.9	138.1	
2	4.306	4.325	-0.019	8406789	136.9	137.7	
						RPD = 0.31	
4 Ethylene							Ma
1	1.796	1.802	-0.006	14062528	127.7	127.6	
2	4.033	4.055	-0.022	6141914	127.7	128.1	M
						RPD = 0.42	
5 Propane							
1	2.493	2.505	-0.012	28397747	200.7	198.2	
2	5.926	5.935	-0.009	12654822	200.7	202.1	
						RPD = 1.91	
6 Acetylene							Ma
1	3.963	3.960	0.003	3982042	118.5	116.1	
2	4.138	4.159	-0.021	2609285	118.5	120.8	M
						RPD = 3.93	
7 Butane							
1	4.244	4.252	-0.008	33514634	264.5	254.1	
2	7.371	7.375	-0.004	16172866	264.5	253.6	
						RPD = 0.19	
8 isobutylene							
1	5.149	5.152	-0.003	21993627	255.4	246.4	
2	7.223	7.229	-0.006	10266288	255.4	247.0	
						RPD = 0.27	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

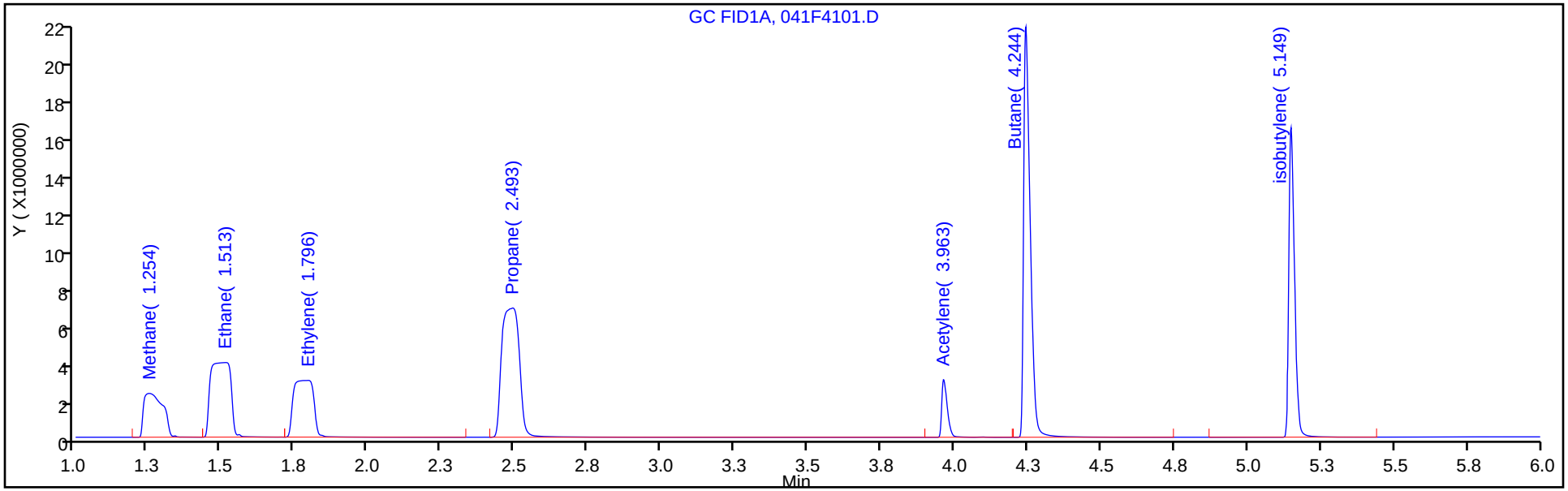
Report Date: 23-Jun-2020 14:36:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

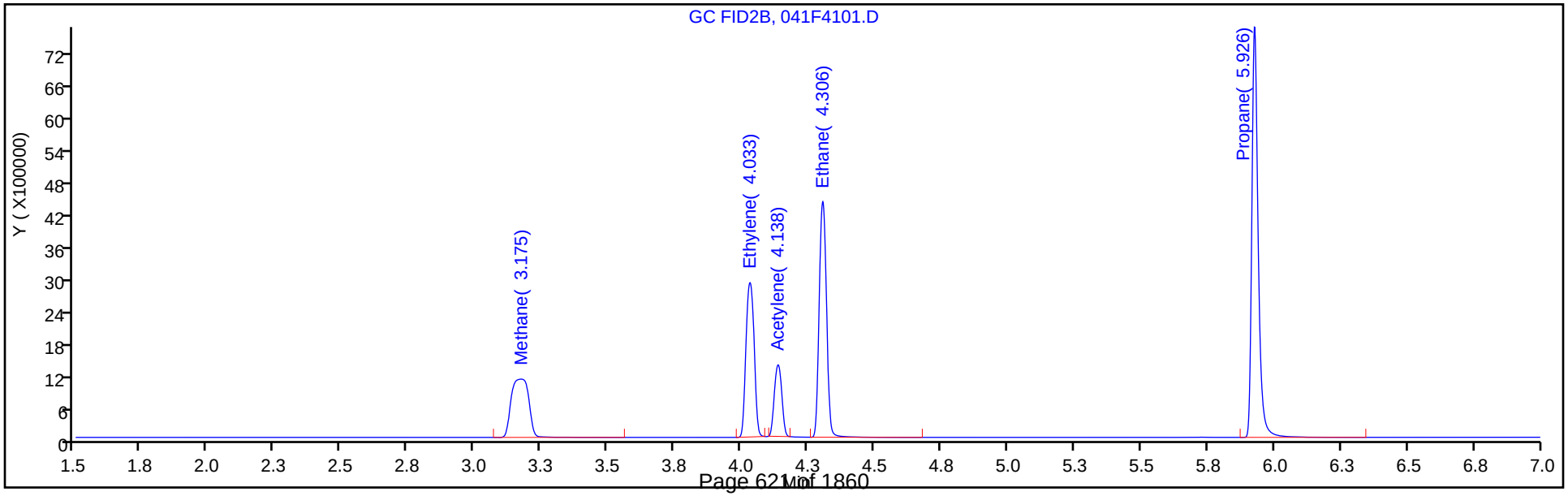
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\041F4101.D

Injection Date:	20-Jun-2020 03:42:24	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	40
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/40 Calibration Date: 06/20/2020 03:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 041F4101.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		68118		72.4	73.0	-0.8	20.0
Ethylene	Ave	47934	48109		128	128	0.4	20.0
Acetylene	Ave	21605	22015		121	119	1.9	20.0
Ethane	Ave	61056	61428		138	137	0.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499435/40 Calibration Date: 06/20/2020 03:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 041F4101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.18	3.17	3.25
Ethylene	4.03	4.01	4.11
Acetylene	4.14	4.08	4.24
Ethane	4.31	4.28	4.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\041F4101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2020 03:42:24 ALS Bottle#: 41 Worklist Smp#: 40
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:36:10 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:35:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.254	1.262	-0.008	10436423	73.0	72.3	
2	3.175	3.212	-0.037	4972823	73.0	72.4	
						RPD = 0.18	
3 Ethane							
1	1.513	1.522	-0.009	18789505	136.9	138.1	
2	4.306	4.325	-0.019	8406789	136.9	137.7	
						RPD = 0.31	
4 Ethylene							Ma
1	1.796	1.802	-0.006	14062528	127.7	127.6	
2	4.033	4.055	-0.022	6141914	127.7	128.1	M
						RPD = 0.42	
5 Propane							
1	2.493	2.505	-0.012	28397747	200.7	198.2	
2	5.926	5.935	-0.009	12654822	200.7	202.1	
						RPD = 1.91	
6 Acetylene							Ma
1	3.963	3.960	0.003	3982042	118.5	116.1	
2	4.138	4.159	-0.021	2609285	118.5	120.8	M
						RPD = 3.93	
7 Butane							
1	4.244	4.252	-0.008	33514634	264.5	254.1	
2	7.371	7.375	-0.004	16172866	264.5	253.6	
						RPD = 0.19	
8 isobutylene							
1	5.149	5.152	-0.003	21993627	255.4	246.4	
2	7.223	7.229	-0.006	10266288	255.4	247.0	
						RPD = 0.27	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

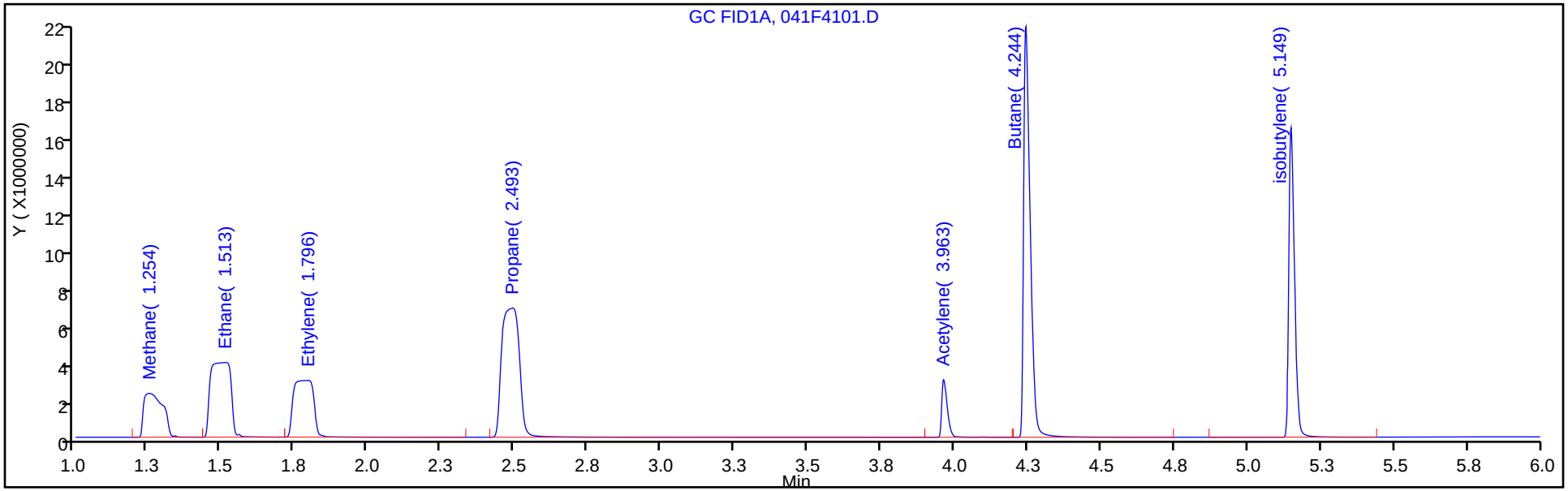
Report Date: 23-Jun-2020 14:36:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

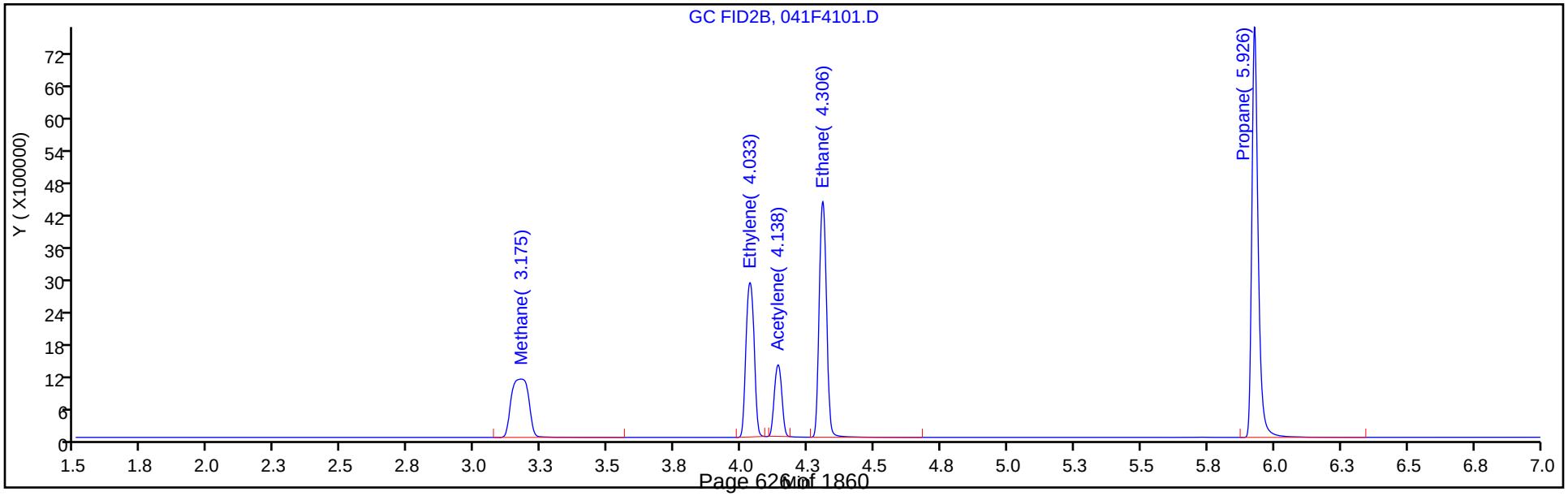
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\041F4101.D

Injection Date:	20-Jun-2020 03:42:24	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ccv			Worklist Smp#:	40
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

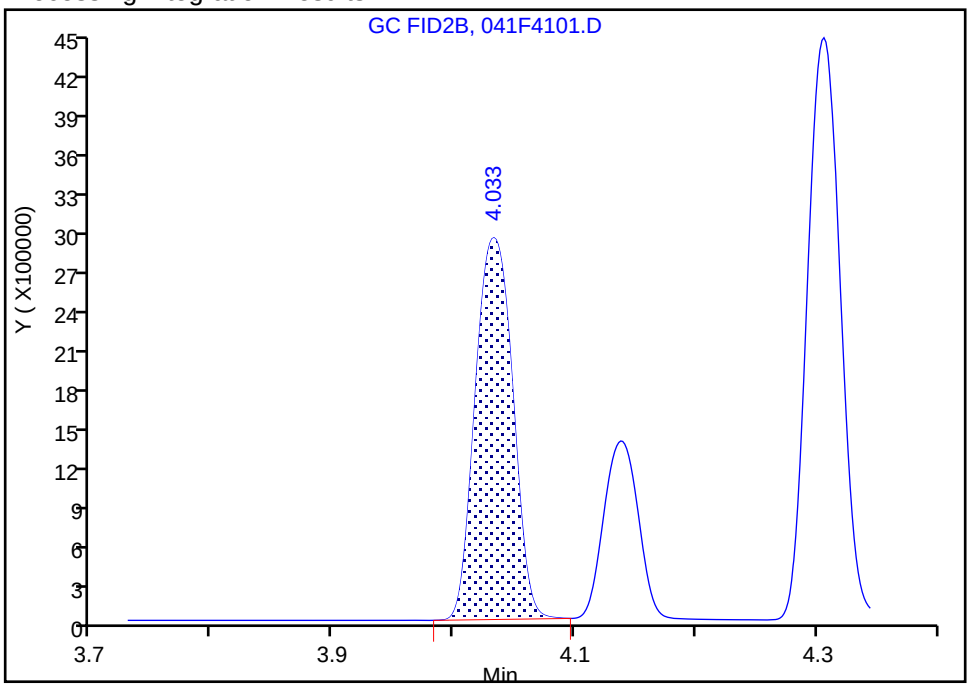
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\041F4101.D				
Injection Date:	20-Jun-2020 03:42:24	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	41	Worklist Smp#:	40
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

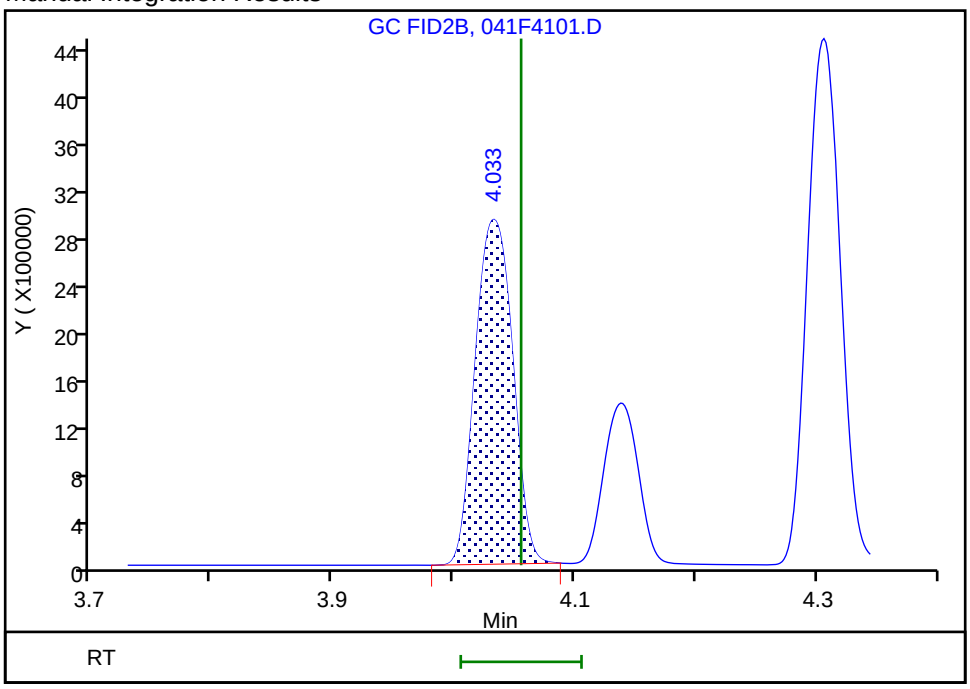
Processing Integration Results

RT: 4.03
Area: 6157742
Amount: 128.4637
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6141914
Amount: 128.1335
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:35:10
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

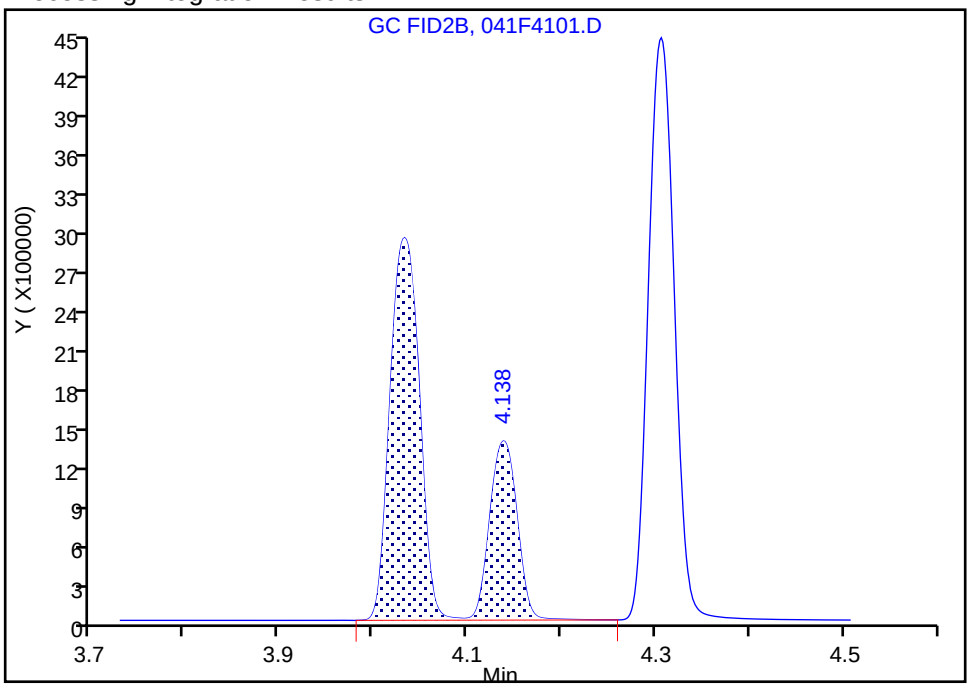
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\041F4101.D				
Injection Date:	20-Jun-2020 03:42:24	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	41	Worklist Smp#:	40
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

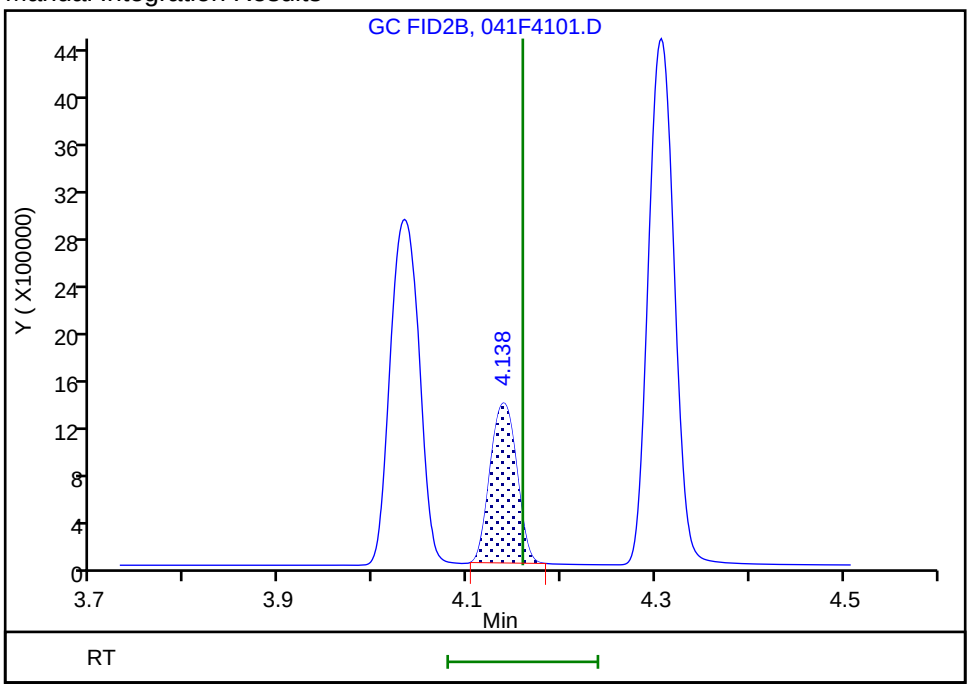
Processing Integration Results

RT: 4.14
Area: 8912876
Amount: 412.5282
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2609285
Amount: 120.7695
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:35:18

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Shouldering

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499014/7

Matrix: Water Lab File ID: 039F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 21:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\039F0301.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2020 21:36:47 ALS Bottle#: 39 Worklist Smp#: 7
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:10:33

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		4.098				ND	
2		5.458					
2 Methane							
1		1.246			73.0	ND	
2		3.159					
3 Ethane							
1		1.501			ND	ND	
2		4.294					
4 Ethylene							
1		1.779			ND	ND	
2		4.021					
5 Propane							
1		2.474			ND	ND	
2		5.919					
6 Acetylene							
1		3.951			ND	ND	
2		4.126					
7 Butane							
1		4.234			ND	ND	
2		7.366					
8 isobutylene							
1		5.141			ND	ND	
2		7.218					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

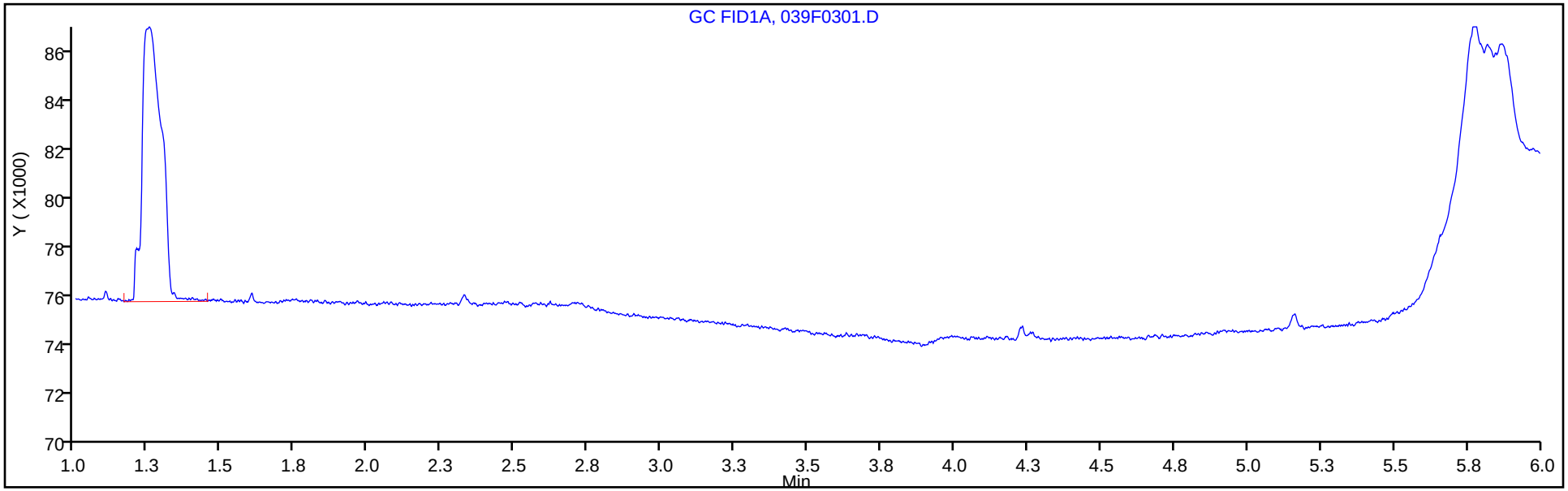
Report Date: 18-Jun-2020 10:24:54 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

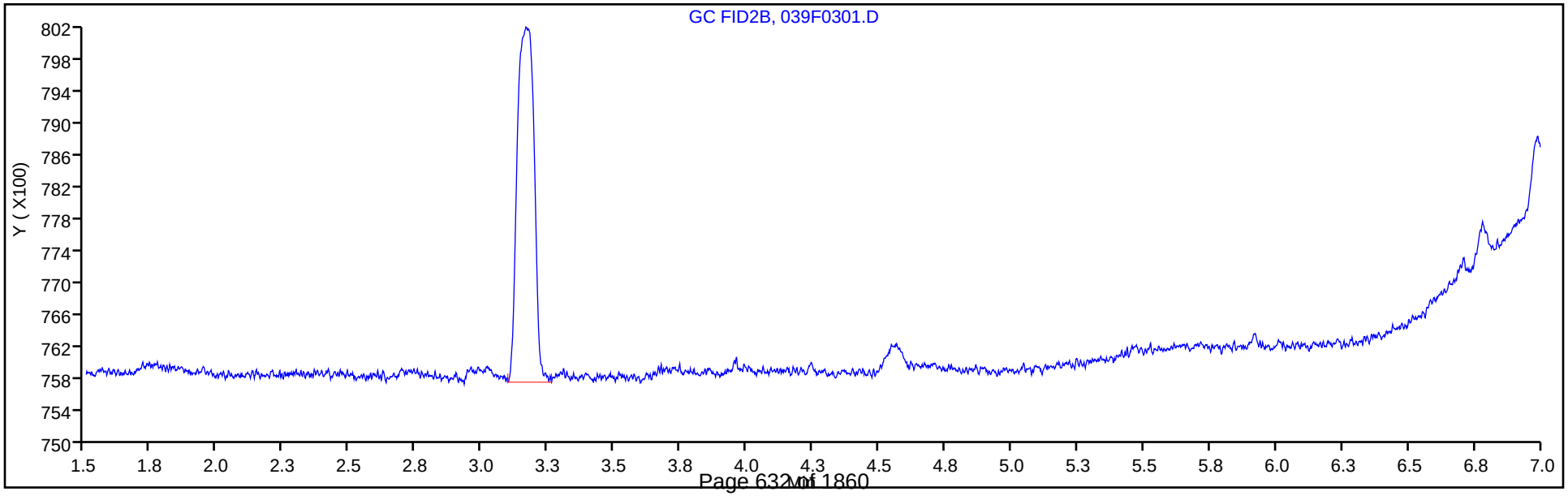
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\039F0301.D

Injection Date:	16-Jun-2020 21:36:47	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	mb			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499210/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 09:42

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.: 499210 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\004F0401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-Jun-2020 09:42:31 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:08 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

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		4.098				ND	
2		5.458					
2 Methane							
1		1.266			73.0	ND	
2		3.212					
3 Ethane							
1		1.525			ND	ND	
2		4.327					
4 Ethylene							
1		1.805			ND	ND	
2		4.057					
5 Propane							
1		2.506			ND	ND	
2		5.938					
6 Acetylene							
1		3.953			ND	ND	
2		4.160					
7 Butane							
1		4.248			ND	ND	
2		7.380					
8 isobutylene							
1		5.146			ND	ND	
2		7.233					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

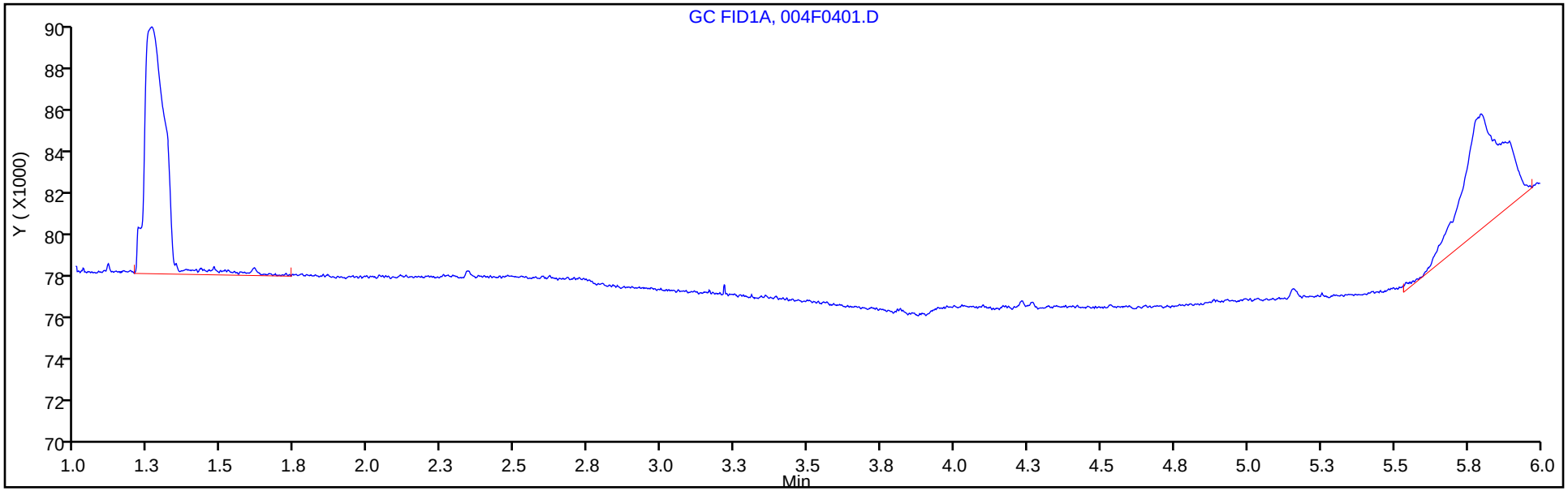
Report Date: 19-Jun-2020 12:43:10 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

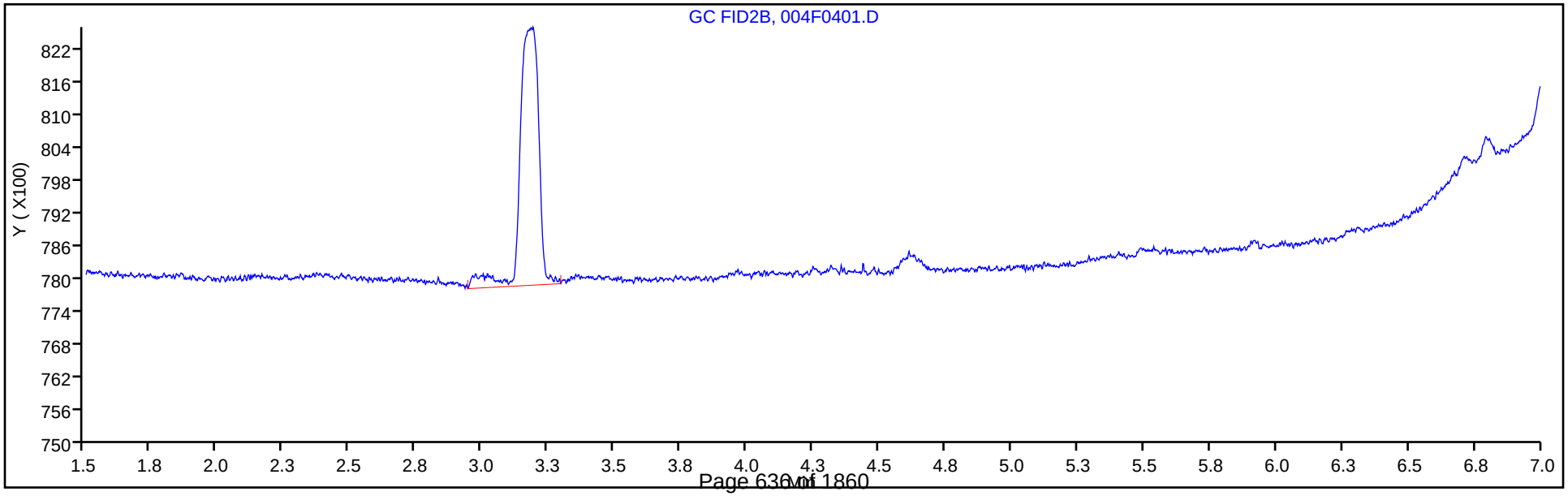
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\004F0401.D

Injection Date:	18-Jun-2020 09:42:31	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499415/33

Matrix: Water Lab File ID: 034F3401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 17:52

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.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\034F3401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-Jun-2020 17:52:27 ALS Bottle#: 34 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 12:43:21 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 12:33:34

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		4.098				ND	
2		5.458					
2 Methane							
1		1.266				ND	
2		3.212					
3 Ethane							
1		1.525				ND	
2		4.327					
4 Ethylene							
1		1.805				ND	
2		4.057					
5 Propane							
1		2.506				ND	
2		5.938					
6 Acetylene							
1		3.953				ND	
2		4.160					
7 Butane							
1		4.248				ND	
2		7.380					
8 isobutylene							
1		5.146				ND	
2		7.233					

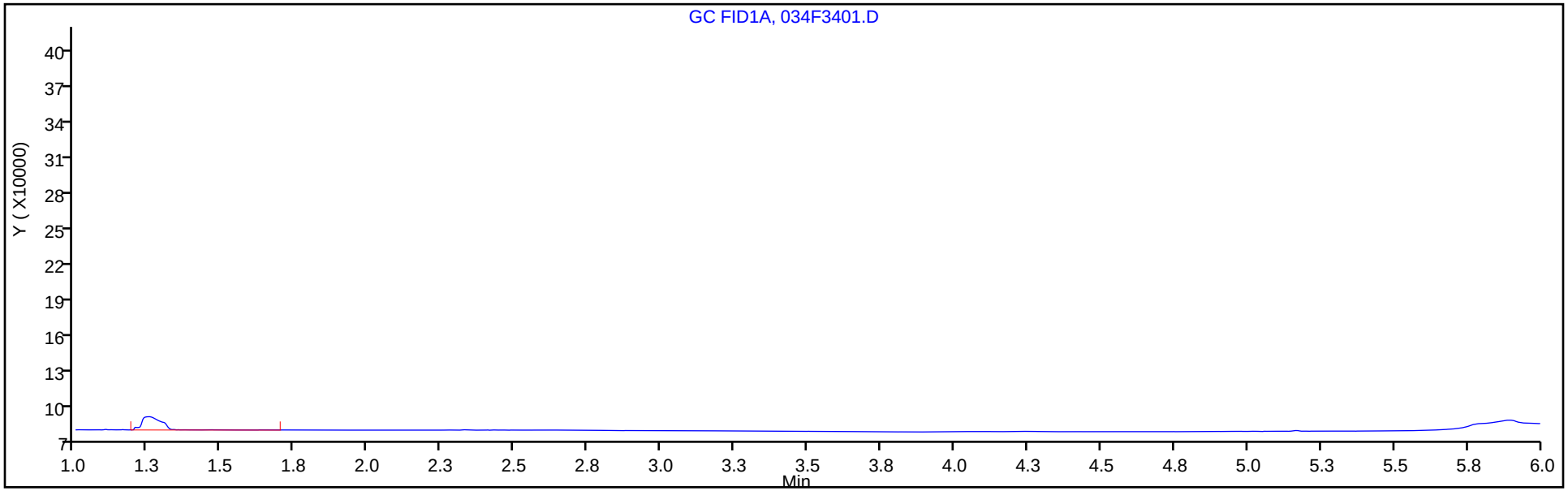
Report Date: 19-Jun-2020 12:43:22 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

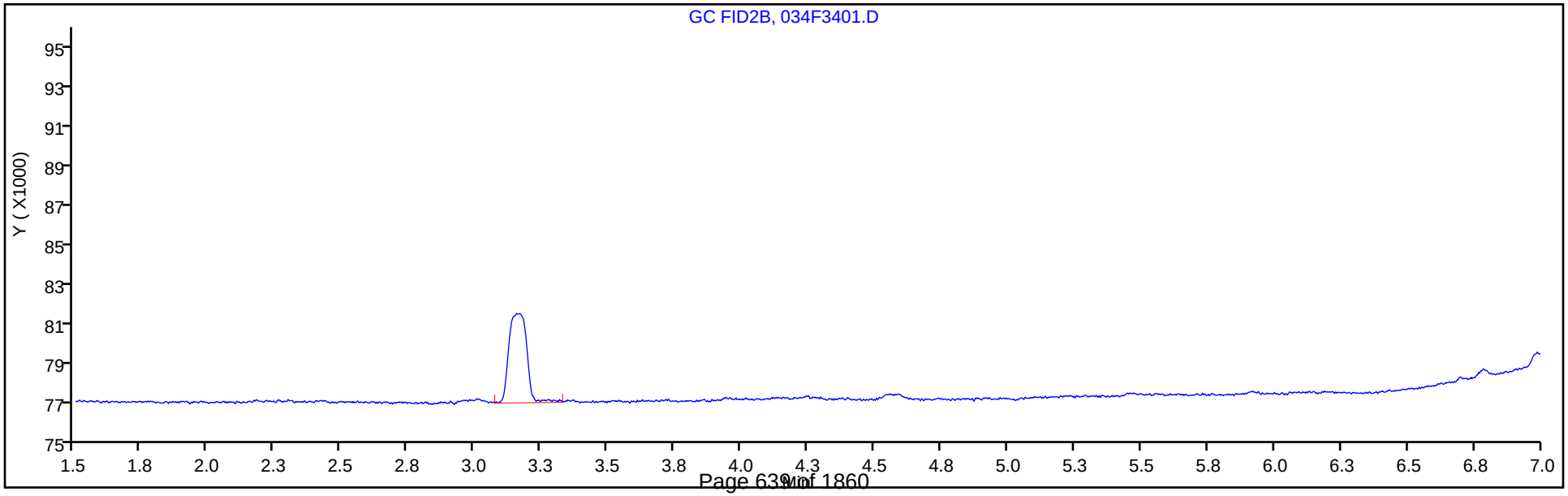
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\034F3401.D

Injection Date:	18-Jun-2020 17:52:27	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	mb			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499435/4

Matrix: Water Lab File ID: 06192004.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/19/2020 15:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 19-Jun-2020 15:02:38 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 280-0092578-004
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:07:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 22-Jun-2020 13:31:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1		1.262			73.0	ND	
2		3.212					
3 Ethane							
1		1.522			ND	ND	
2		4.325					
4 Ethylene							
1		1.802			ND	ND	
2		4.055					
5 Propane							
1		2.505			ND	ND	
2		5.935					
6 Acetylene							
1		3.960			ND	ND	
2		4.159					
7 Butane							
1		4.252			ND	ND	
2		7.375					
8 isobutylene							
1		5.152			ND	ND	
2		7.229					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

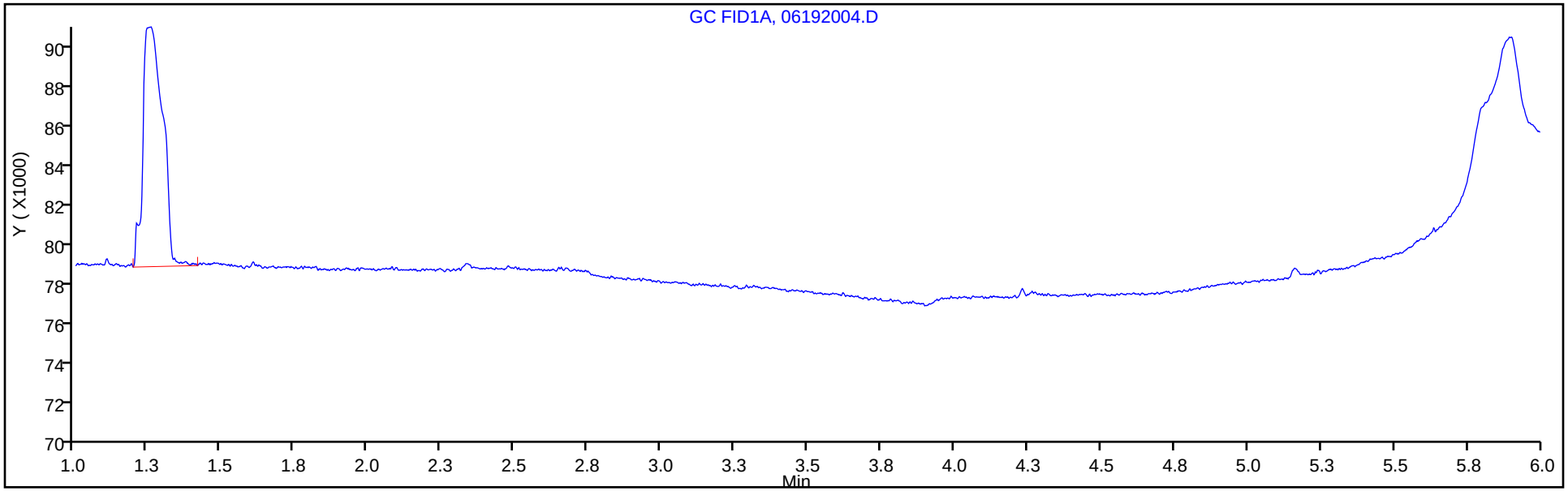
Report Date: 23-Jun-2020 14:07:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

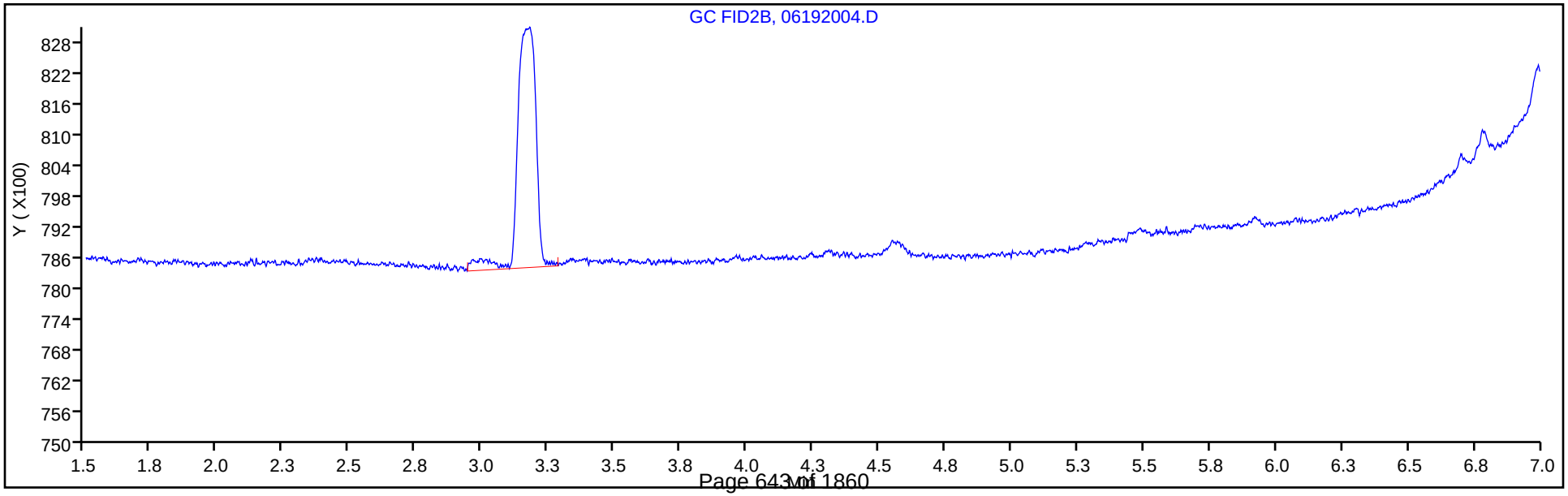
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192004.D

Injection Date:	19-Jun-2020 15:02:38	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499014/5

Matrix: Water Lab File ID: 037F0101.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 21:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0722		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\037F0101.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2020 21:04:06 ALS Bottle#: 37 Worklist Smp#: 5
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:06:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.246	0.006	10602619	73.0	73.4	
2	3.184	3.159	0.025	4961875	73.0	72.2	
						RPD = 1.63	
3 Ethane							
1	1.511	1.501	0.010	19470498	136.9	143.1	
2	4.309	4.294	0.015	8556949	136.9	140.1	
						RPD = 2.10	
4 Ethylene							
1	1.784	1.779	0.005	14564246	127.7	132.1	
2	4.038	4.021	0.017	6256228	127.7	130.5	
						RPD = 1.24	
5 Propane							
1	2.481	2.474	0.007	29770656	200.7	207.8	
2	5.928	5.919	0.009	13036757	200.7	208.2	
						RPD = 0.16	
6 Acetylene							M
1	3.956	3.951	0.005	3931528	118.5	114.6	
2	4.143	4.126	0.017	2542134	118.5	117.7	M
						RPD = 2.60	
7 Butane							
1	4.239	4.234	0.005	36066818	264.5	273.4	
2	7.371	7.366	0.005	17053432	264.5	267.4	
						RPD = 2.22	
8 isobutylene							
1	5.144	5.141	0.003	24216836	255.4	271.3	
2	7.223	7.218	0.005	11086519	255.4	266.8	
						RPD = 1.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

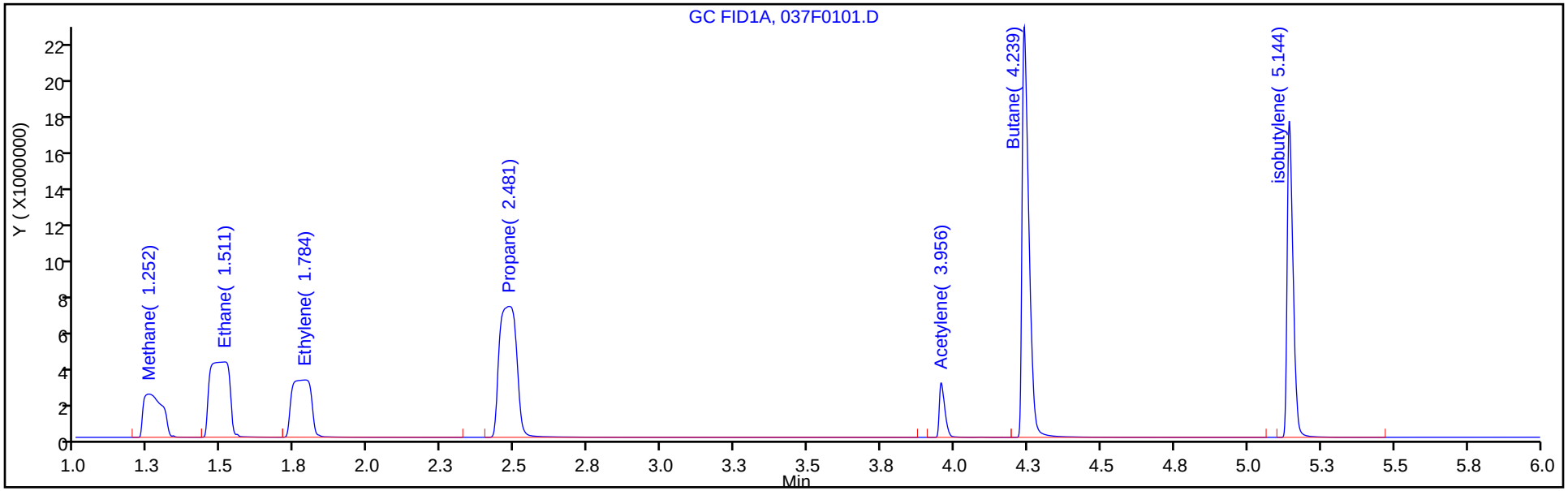
Report Date: 18-Jun-2020 10:24:53 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

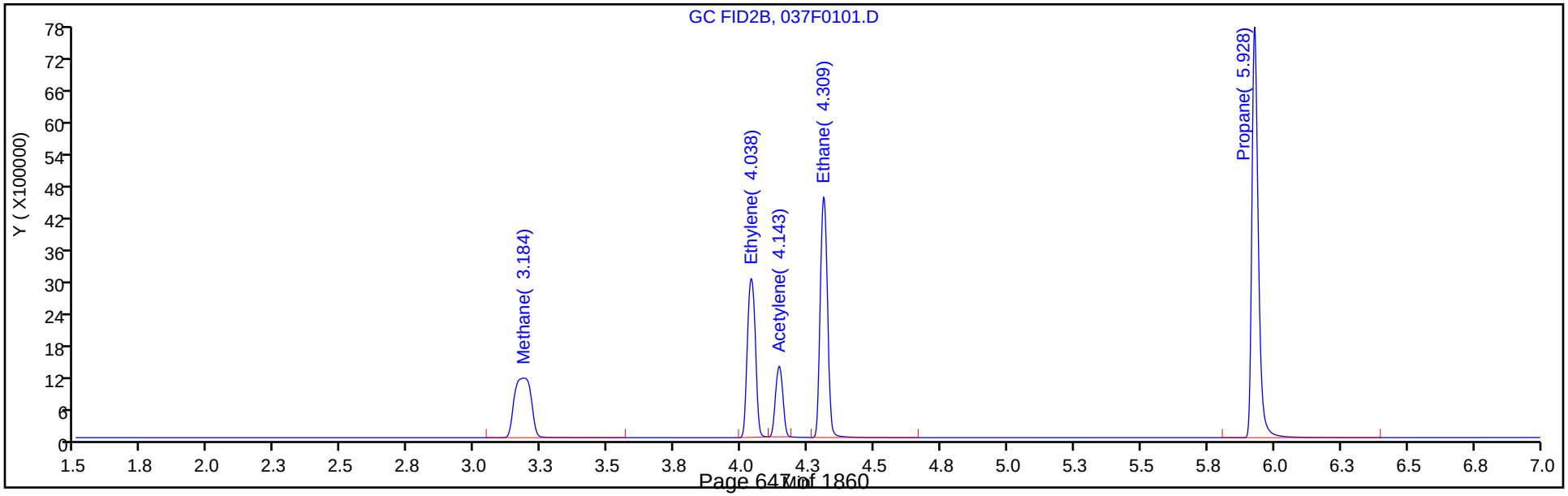
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\037F0101.D

Injection Date:	16-Jun-2020 21:04:06	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	lcs			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499210/2

Matrix: Water Lab File ID: 002F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 09:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499210 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0786		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-Jun-2020 09:10:07 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 16:02:24 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 16:01:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.266	1.266	0.000	11272716	73.0	78.1	
2	3.196	3.212	-0.016	5396097	73.0	78.6	
						RPD = 0.63	
3 Ethane							
1	1.524	1.525	-0.001	20202743	136.9	148.5	
2	4.319	4.327	-0.008	9076354	136.9	148.7	
						RPD = 0.10	
4 Ethylene							M
1	1.804	1.805	-0.001	14977880	127.7	135.9	
2	4.048	4.057	-0.009	6580795	127.7	137.3	M
						RPD = 1.02	
5 Propane							
1	2.497	2.506	-0.009	30420852	200.7	212.4	
2	5.934	5.938	-0.004	13613884	200.7	217.4	
						RPD = 2.33	
6 Acetylene							Ma
1	3.961	3.953	0.008	3889915	118.5	113.4	M
2	4.153	4.160	-0.007	2654964	118.5	122.9	M
						RPD = 8.00	
7 Butane							M
1	4.244	4.248	-0.004	35136285	264.5	266.4	M
2	7.376	7.380	-0.004	17296487	264.5	271.2	
						RPD = 1.80	
8 isobutylene							
1	5.144	5.146	-0.002	23292642	255.4	260.9	
2	7.229	7.233	-0.004	10925899	255.4	262.9	
						RPD = 0.75	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

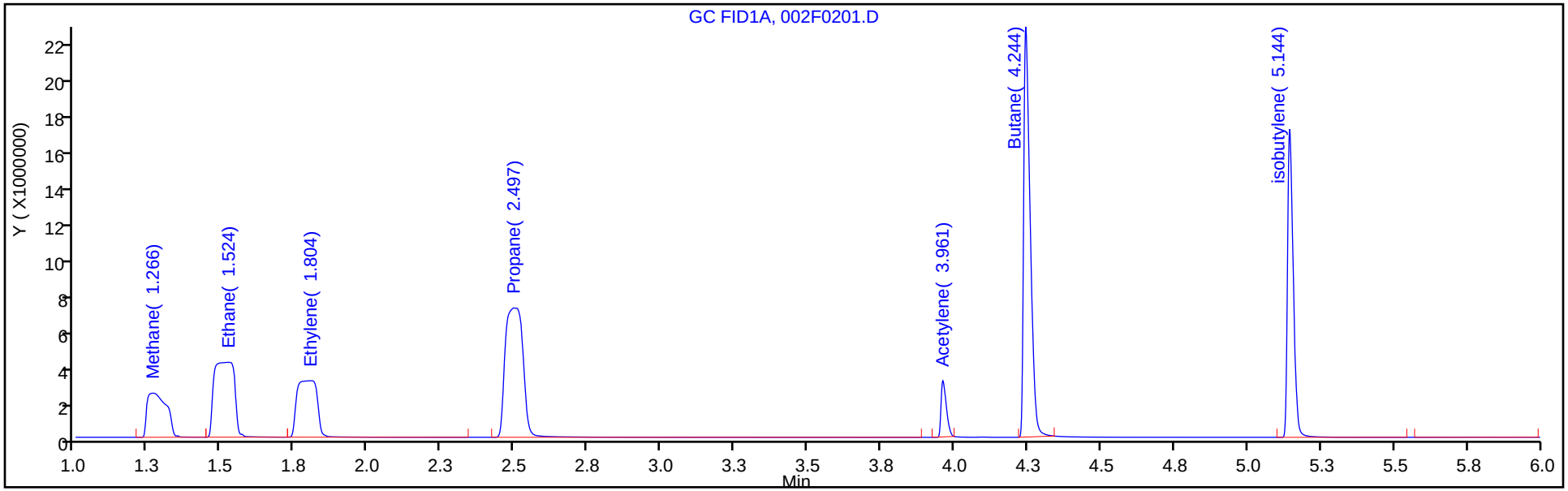
Report Date: 19-Jun-2020 16:02:25 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

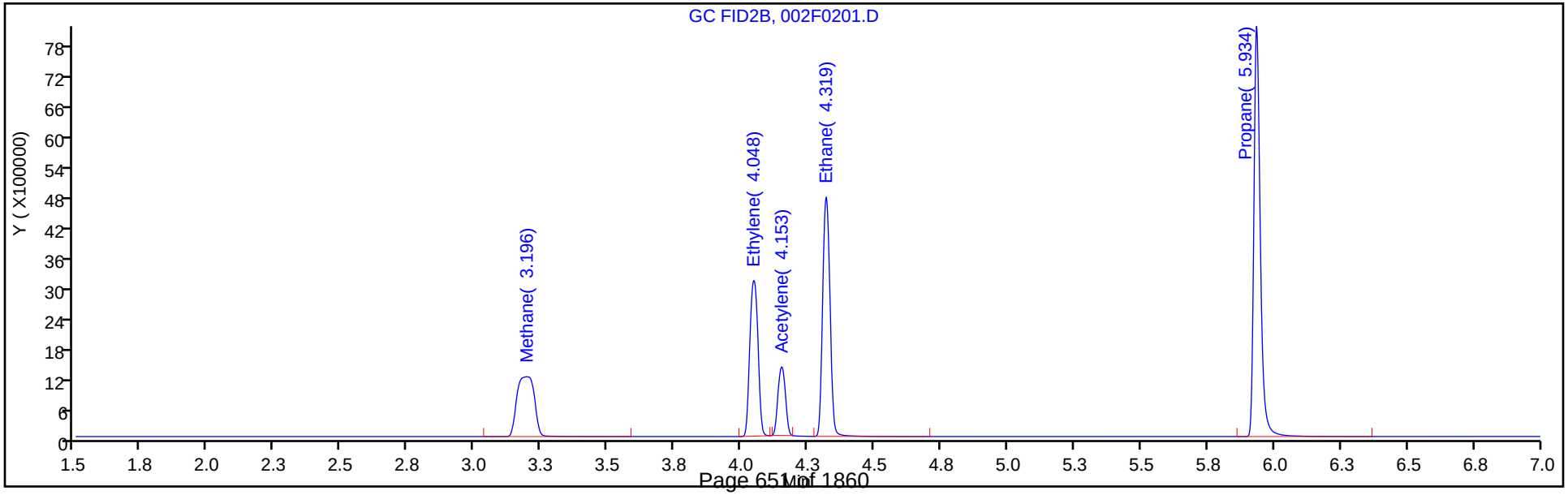
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\002F0201.D

Injection Date:	18-Jun-2020 09:10:07	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499415/31

Matrix: Water Lab File ID: 032F3201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 17:19

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.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0749	M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\032F3201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-Jun-2020 17:19:50 ALS Bottle#: 32 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 22-Jun-2020 13:14:31 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1041

First Level Reviewer: meierg Date: 22-Jun-2020 13:14:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.251	1.266	-0.015	10725690	73.0	74.3	a
2	3.166	3.212	-0.046	5142182	73.0	74.9	a
						RPD = 0.79	
3 Ethane							
1	1.509	1.525	-0.016	19192289	136.9	141.1	
2	4.300	4.327	-0.027	8643671	136.9	141.6	
						RPD = 0.35	
4 Ethylene							M
1	1.781	1.805	-0.024	14294649	127.7	129.7	
2	4.026	4.057	-0.031	6277193	127.7	131.0	M
						RPD = 0.96	
5 Propane							
1	2.488	2.506	-0.018	28774192	200.7	200.9	
2	5.921	5.938	-0.017	12909625	200.7	206.1	
						RPD = 2.58	
6 Acetylene							Ma
1	3.964	3.953	0.011	3870044	118.5	112.8	M
2	4.133	4.160	-0.027	2505701	118.5	116.0	M
						RPD = 2.73	
7 Butane							M
1	4.244	4.248	-0.004	32577787	264.5	247.0	M
2	7.366	7.380	-0.014	16220568	264.5	254.4	
						RPD = 2.94	
8 isobutylene							
1	5.149	5.146	0.003	21865036	255.4	244.9	
2	7.220	7.233	-0.013	10272782	255.4	247.2	
						RPD = 0.91	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

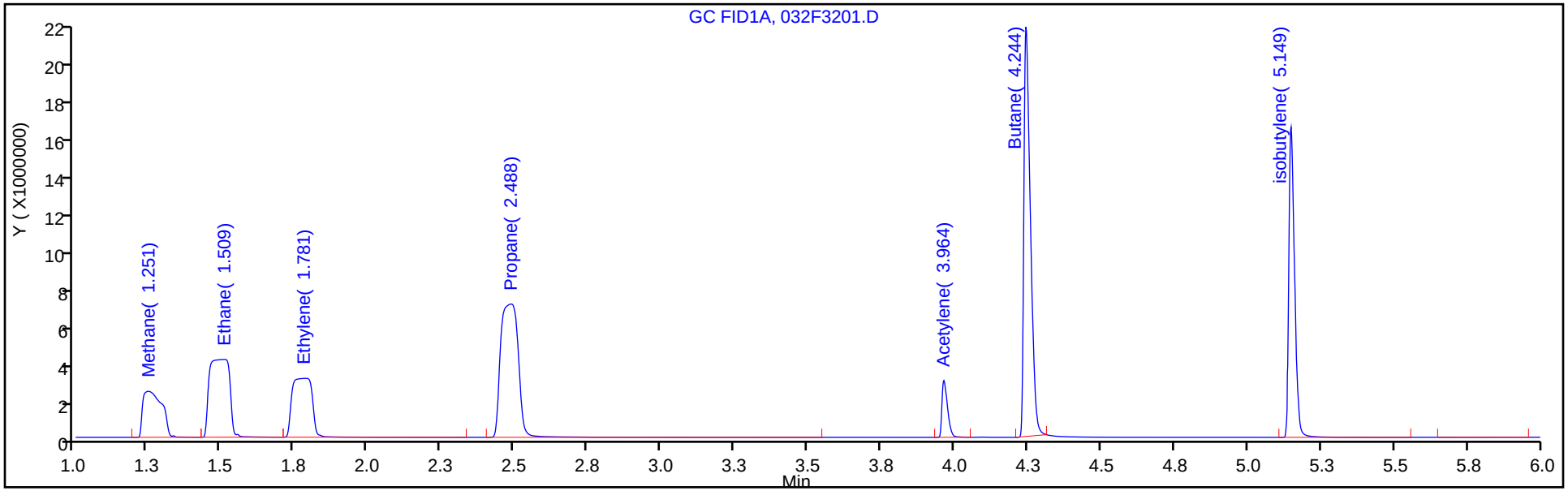
Report Date: 22-Jun-2020 13:14:32 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

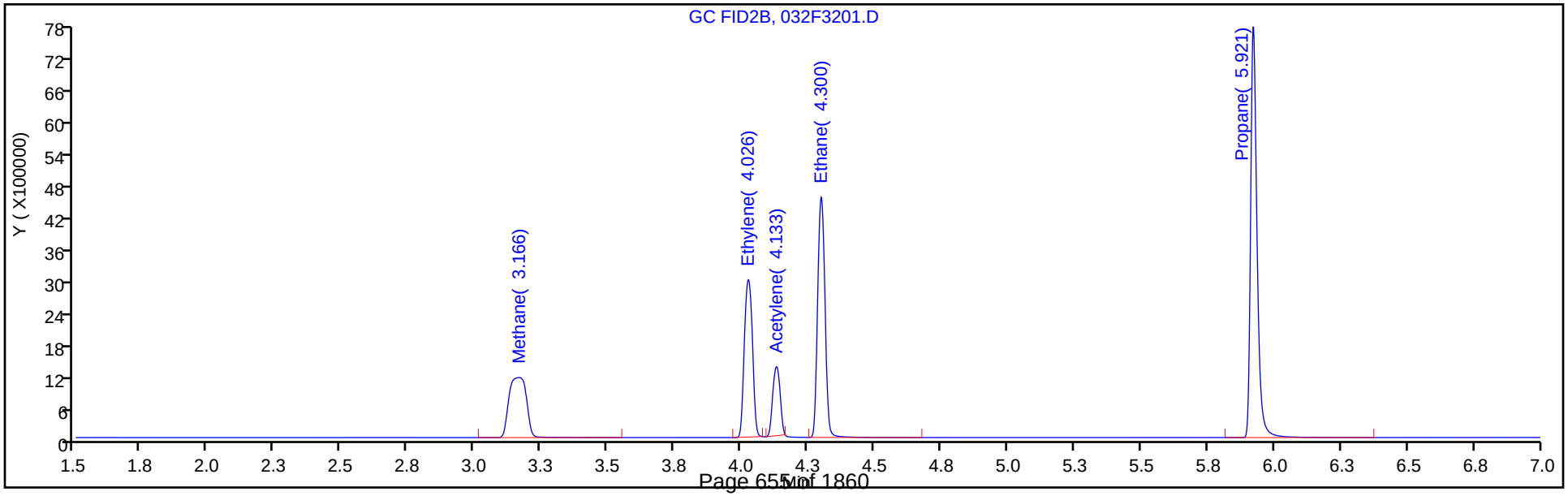
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\032F3201.D

Injection Date:	18-Jun-2020 17:19:50	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	lcs			Worklist Smp#:	31
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

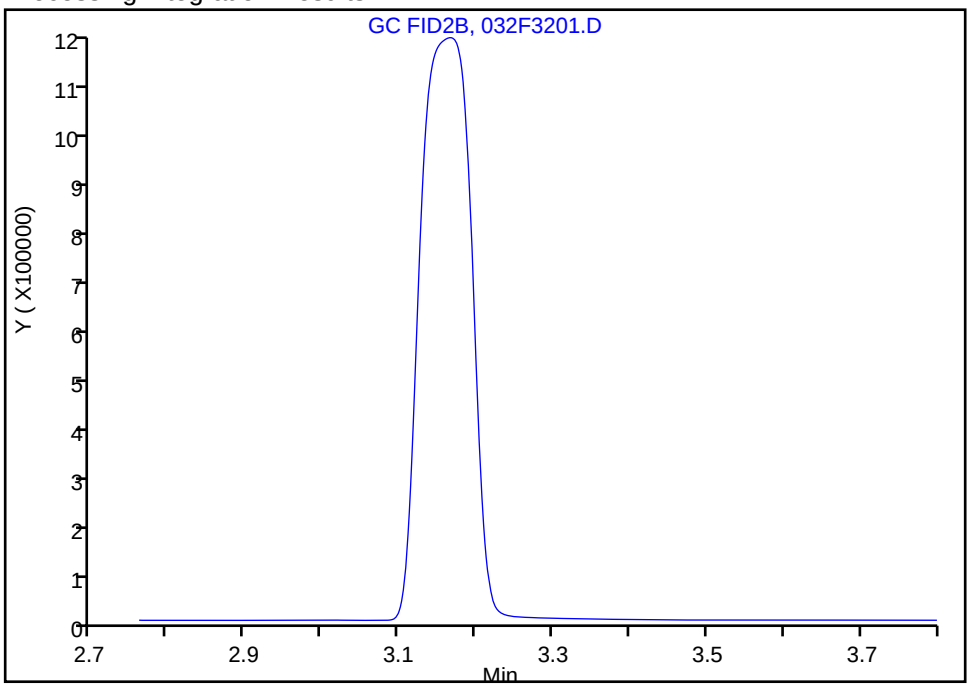
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\032F3201.D
Injection Date: 18-Jun-2020 17:19:50 Instrument ID: VGC_J
Lims ID: lcs
Client ID:
Operator ID: gm ALS Bottle#: 32 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

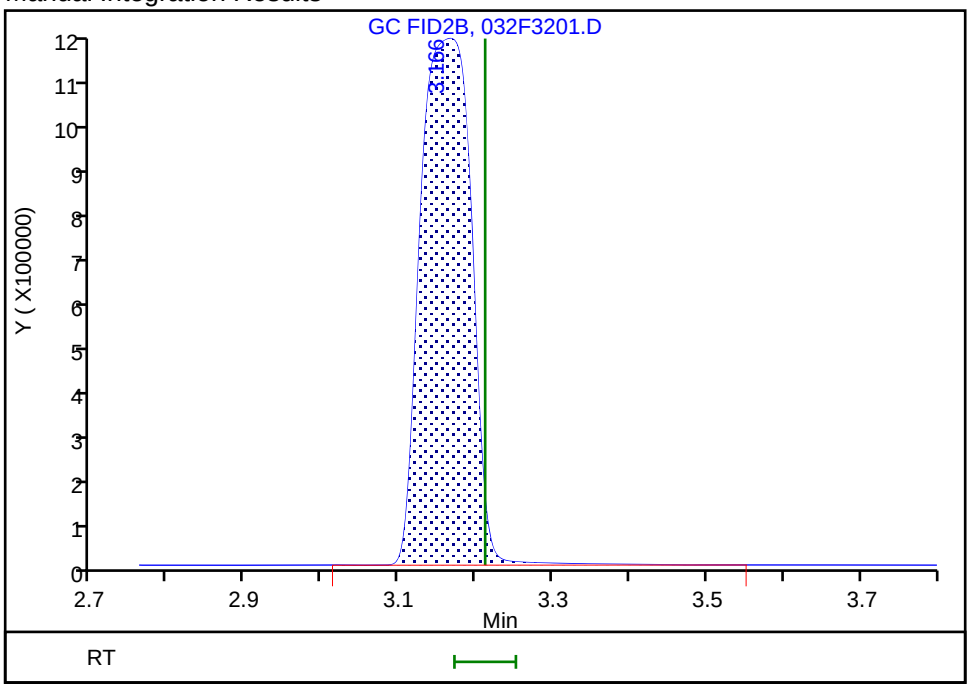
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 5142182
Amount: 74.872420
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:13:03
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499435/2

Matrix: Water Lab File ID: 06192002.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/19/2020 14:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0735		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192002.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 19-Jun-2020 14:30:02 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 280-0092578-002
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:07:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 22-Jun-2020 13:30:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.263	1.262	0.001	10611079	73.0	73.5	
2	3.190	3.212	-0.022	5045592	73.0	73.5	
						RPD = 0.03	
3 Ethane							
1	1.523	1.522	0.001	19243470	136.9	141.5	
2	4.313	4.325	-0.012	8588822	136.9	140.7	
						RPD = 0.55	
4 Ethylene							
1	1.803	1.802	0.001	14467726	127.7	131.3	
2	4.043	4.055	-0.012	6319144	127.7	131.8	
						RPD = 0.43	
5 Propane							
1	2.503	2.505	-0.002	29205500	200.7	203.9	
2	5.931	5.935	-0.004	12992418	200.7	207.4	
						RPD = 1.74	
6 Acetylene							Ma
1	3.968	3.960	0.008	4009685	118.5	116.9	M
2	4.146	4.159	-0.013	2701472	118.5	125.0	M
						RPD = 6.71	
7 Butane							Ma
1	4.248	4.252	-0.004	34301819	264.5	260.1	M
2	7.373	7.375	-0.002	16608763	264.5	260.5	M
						RPD = 0.15	
8 isobutylene							
1	5.151	5.152	-0.001	23327665	255.4	261.3	
2	7.226	7.229	-0.003	10877903	255.4	261.7	
						RPD = 0.16	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

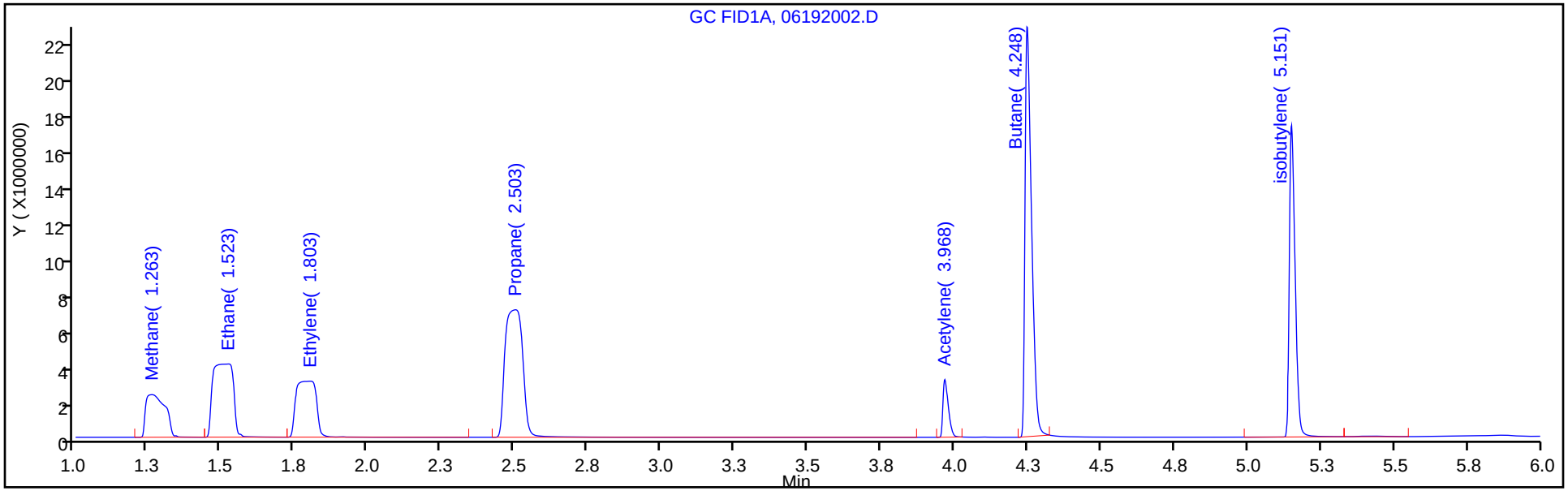
Report Date: 23-Jun-2020 14:07:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

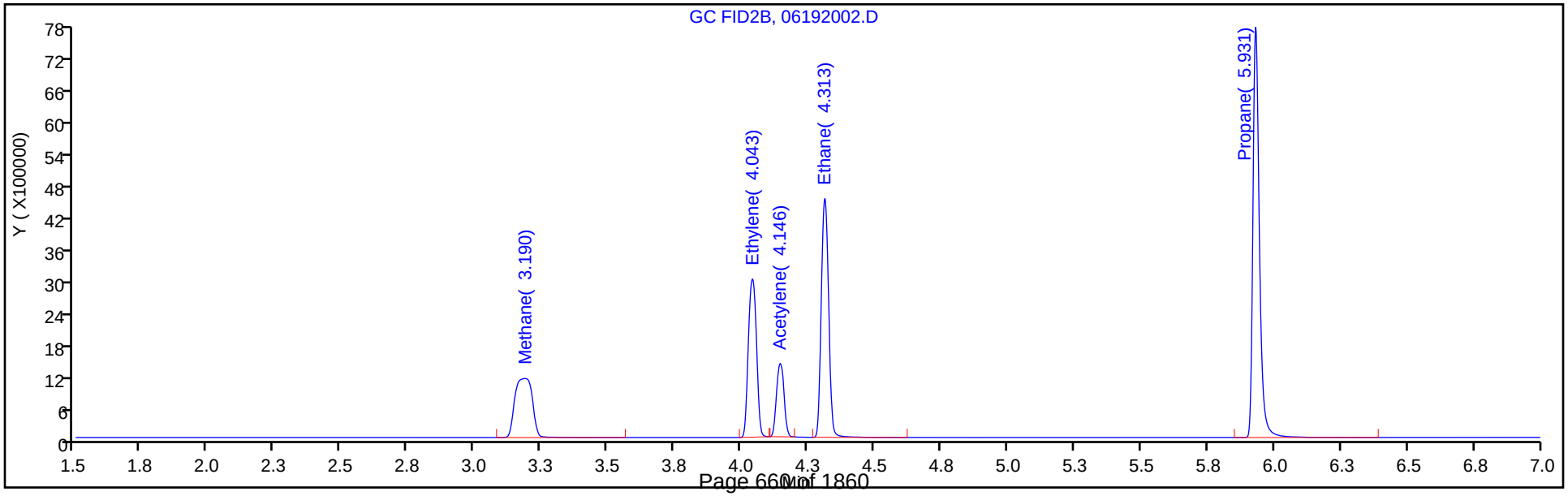
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192002.D

Injection Date:	19-Jun-2020 14:30:02	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499014/6

Matrix: Water Lab File ID: 038F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 21:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0797		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\038F0201.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 16-Jun-2020 21:20:26 ALS Bottle#: 38 Worklist Smp#: 6
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\20200616-92492.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 18-Jun-2020 10:24:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1013

First Level Reviewer: meierg Date: 18-Jun-2020 10:07:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.246	0.003	11568889	73.0	80.1	
2	3.170	3.159	0.011	5472271	73.0	79.7	
						RPD = 0.57	
3 Ethane							
1	1.508	1.501	0.007	21408616	136.9	157.4	
2	4.301	4.294	0.007	9513263	136.9	155.8	
						RPD = 0.99	
4 Ethylene							M
1	1.784	1.779	0.005	15779027	127.7	143.2	
2	4.028	4.021	0.007	6843476	127.7	142.8	M
						RPD = 0.28	
5 Propane							
1	2.481	2.474	0.007	33070456	200.7	230.9	
2	5.923	5.919	0.004	14637357	200.7	233.7	
						RPD = 1.23	
6 Acetylene							Ma
1	3.958	3.951	0.007	3991466	118.5	116.4	M
2	4.133	4.126	0.007	2640195	118.5	122.2	M
						RPD = 4.87	
7 Butane							
1	4.238	4.234	0.004	40863744	264.5	309.8	
2	7.368	7.366	0.002	19547870	264.5	306.5	
						RPD = 1.06	
8 isobutylene							
1	5.143	5.141	0.002	27101867	255.4	303.6	
2	7.220	7.218	0.002	12550694	255.4	302.0	
						RPD = 0.53	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

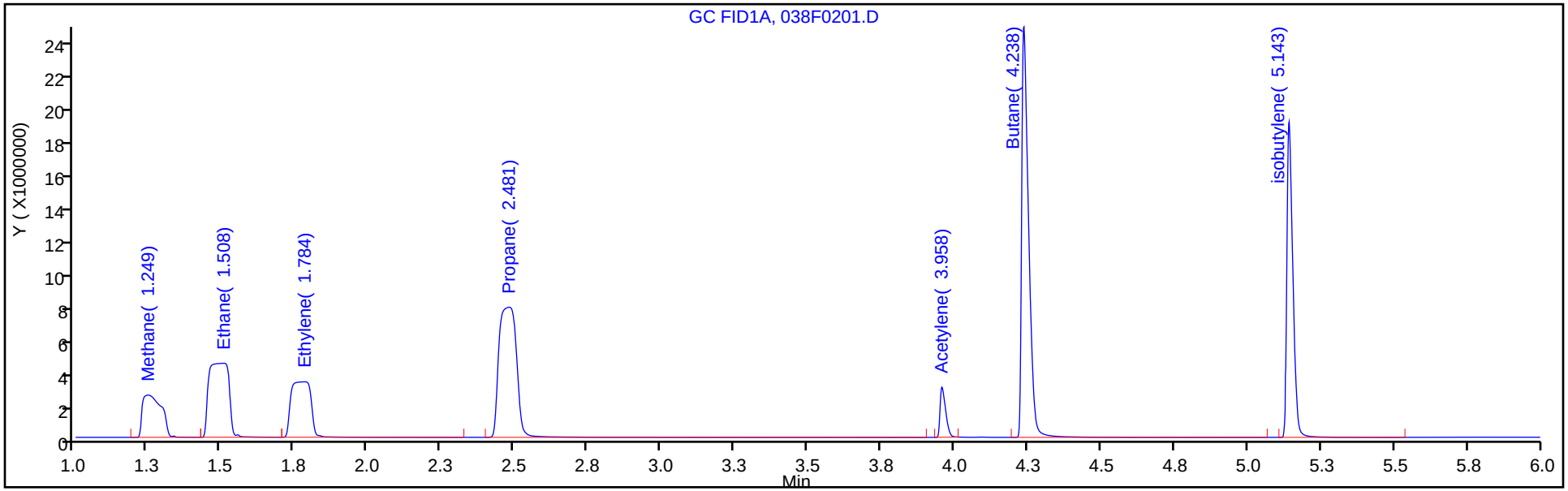
Report Date: 18-Jun-2020 10:24:53 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

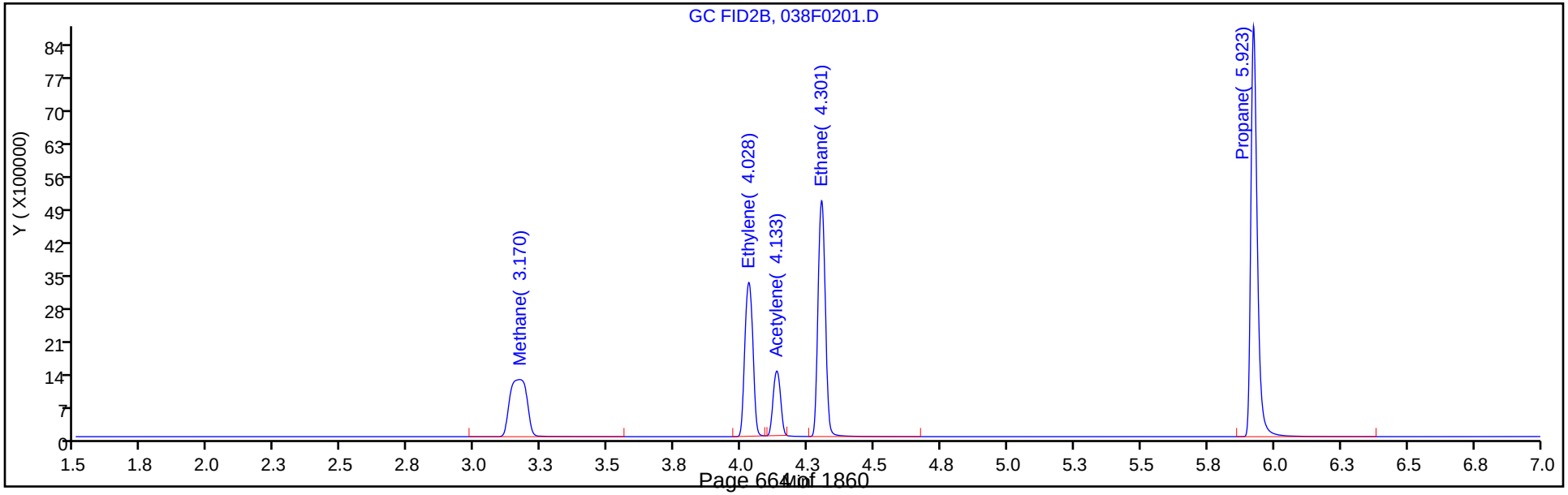
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\038F0201.D

Injection Date:	16-Jun-2020 21:20:26	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	lcsd			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499210/3

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 09:26

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.: 499210 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0804		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jun-2020 09:26:17 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 19-Jun-2020 16:02:56 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1069

First Level Reviewer: meierg Date: 19-Jun-2020 16:02:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.260	1.266	-0.006	11512040	73.0	79.8	
2	3.187	3.212	-0.025	5523810	73.0	80.4	
						RPD = 0.87	
3 Ethane							
1	1.520	1.525	-0.005	20569921	136.9	151.2	
2	4.314	4.327	-0.013	9262829	136.9	151.7	
						RPD = 0.34	
4 Ethylene							
1	1.799	1.805	-0.006	15167137	127.7	137.6	
2	4.042	4.057	-0.015	6686061	127.7	139.5	
						RPD = 1.35	
5 Propane							
1	2.495	2.506	-0.011	30977283	200.7	216.2	
2	5.932	5.938	-0.006	13897103	200.7	221.9	
						RPD = 2.58	
6 Acetylene							M
1	3.960	3.953	0.007	4110612	118.5	119.9	
2	4.147	4.160	-0.013	2720407	118.5	125.9	M
						RPD = 4.92	
7 Butane							M
1	4.242	4.248	-0.006	35551567	264.5	269.5	M
2	7.374	7.380	-0.006	17617793	264.5	276.3	
						RPD = 2.47	
8 isobutylene							
1	5.144	5.146	-0.002	23476685	255.4	263.0	
2	7.227	7.233	-0.006	11033261	255.4	265.5	
						RPD = 0.94	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

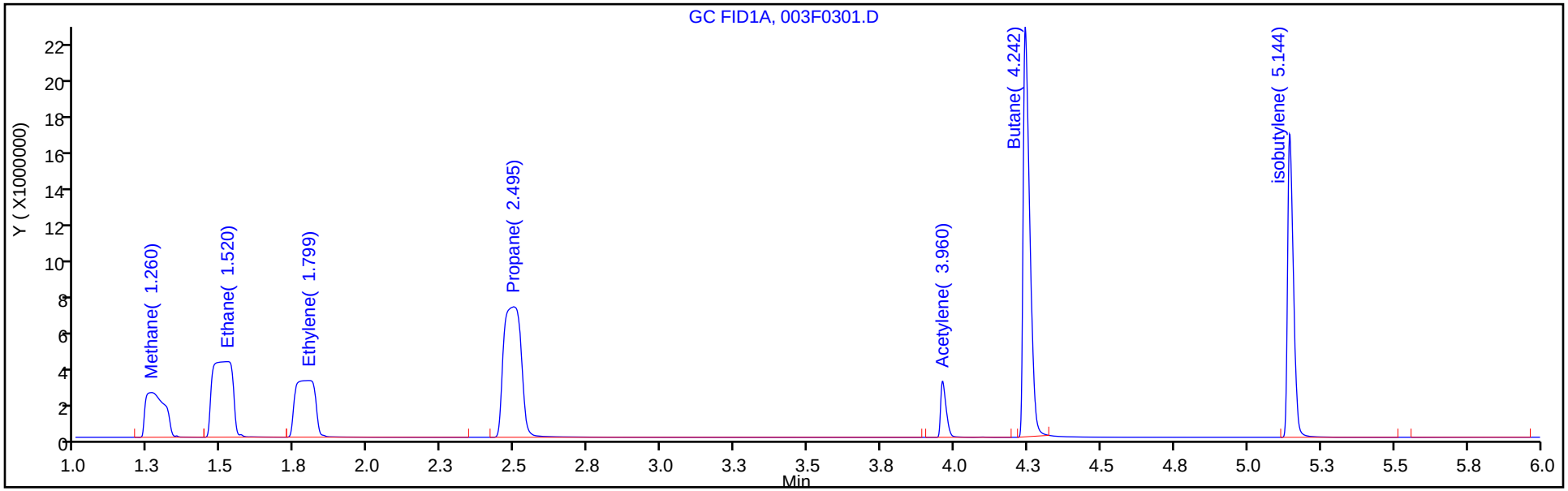
Report Date: 19-Jun-2020 16:02:56 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

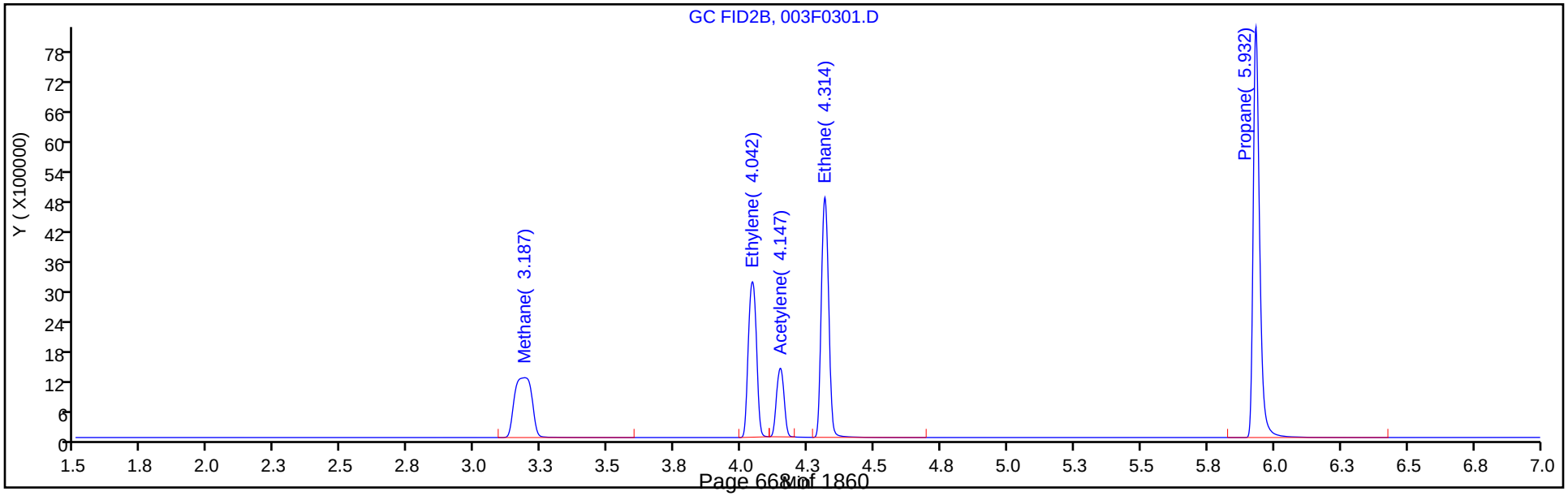
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\003F0301.D

Injection Date:	18-Jun-2020 09:26:17	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499415/32

Matrix: Water Lab File ID: 033F3301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 17:36

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0680	M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\033F3301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jun-2020 17:36:09 ALS Bottle#: 33 Worklist Smp#: 32
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 22-Jun-2020 13:15:50 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1041

First Level Reviewer: meierg Date: 22-Jun-2020 13:15:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.254	1.266	-0.012	9691223	73.0	67.1	a
2	3.166	3.212	-0.046	4672825	73.0	68.0	a
						RPD = 1.38	
3 Ethane							
1	1.507	1.525	-0.018	17415515	136.9	128.0	
2	4.299	4.327	-0.028	7861472	136.9	128.8	
						RPD = 0.58	
4 Ethylene							M
1	1.784	1.805	-0.021	12796530	127.7	116.1	
2	4.026	4.057	-0.031	5607525	127.7	117.0	M
						RPD = 0.75	
5 Propane							
1	2.489	2.506	-0.017	26271287	200.7	183.4	
2	5.923	5.938	-0.015	11810646	200.7	188.6	
						RPD = 2.79	
6 Acetylene							Ma
1	3.966	3.953	0.013	3428062	118.5	100.0	M
2	4.131	4.160	-0.029	2298217	118.5	106.4	M
						RPD = 6.21	
7 Butane							M
1	4.246	4.248	-0.002	30095270	264.5	228.2	M
2	7.366	7.380	-0.014	14976382	264.5	234.9	
						RPD = 2.88	
8 isobutylene							
1	5.151	5.146	0.005	19731459	255.4	221.0	
2	7.219	7.233	-0.014	9290593	255.4	223.6	
						RPD = 1.13	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

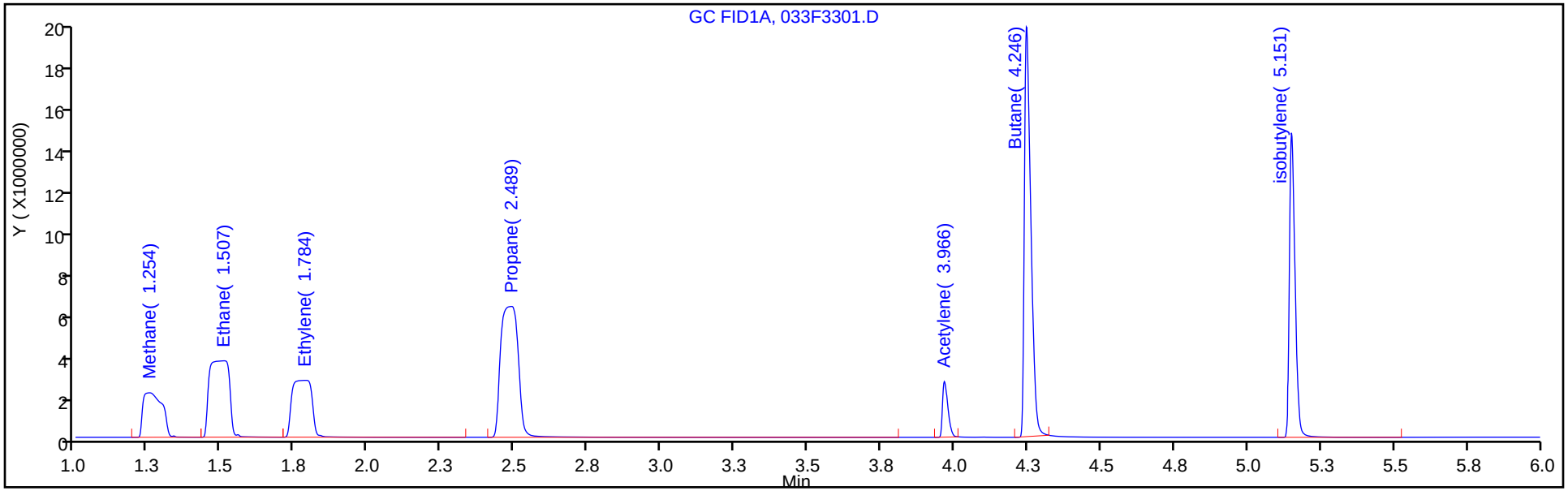
Report Date: 22-Jun-2020 13:15:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

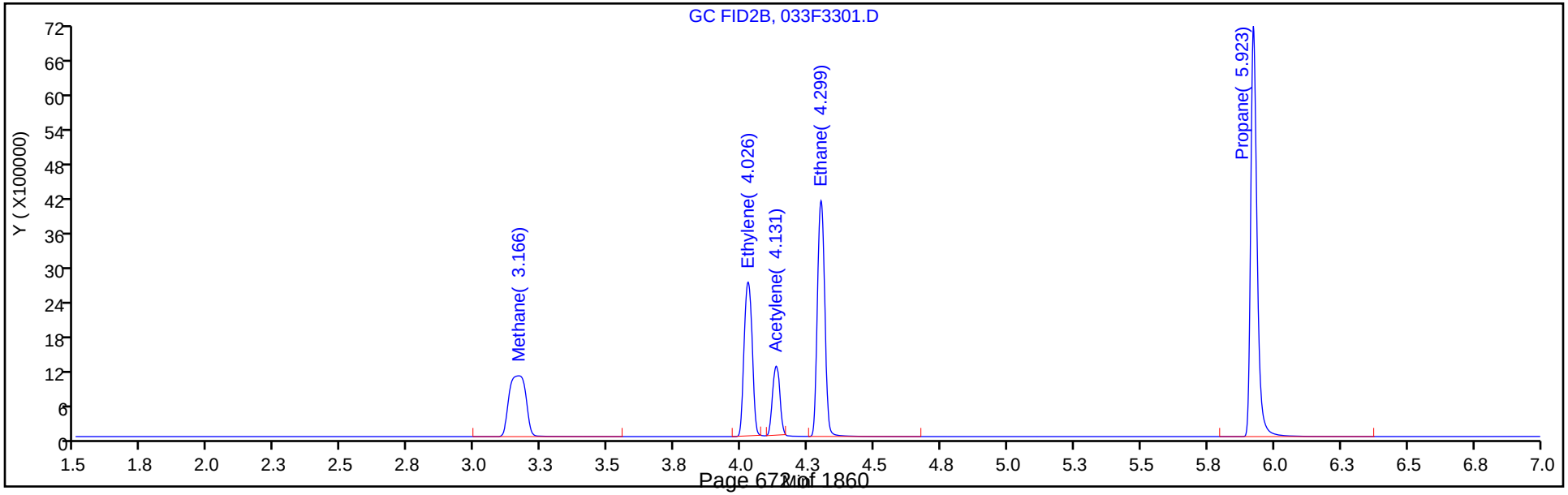
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\033F3301.D

Injection Date:	18-Jun-2020 17:36:09	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	lcsd			Worklist Smp#:	32
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

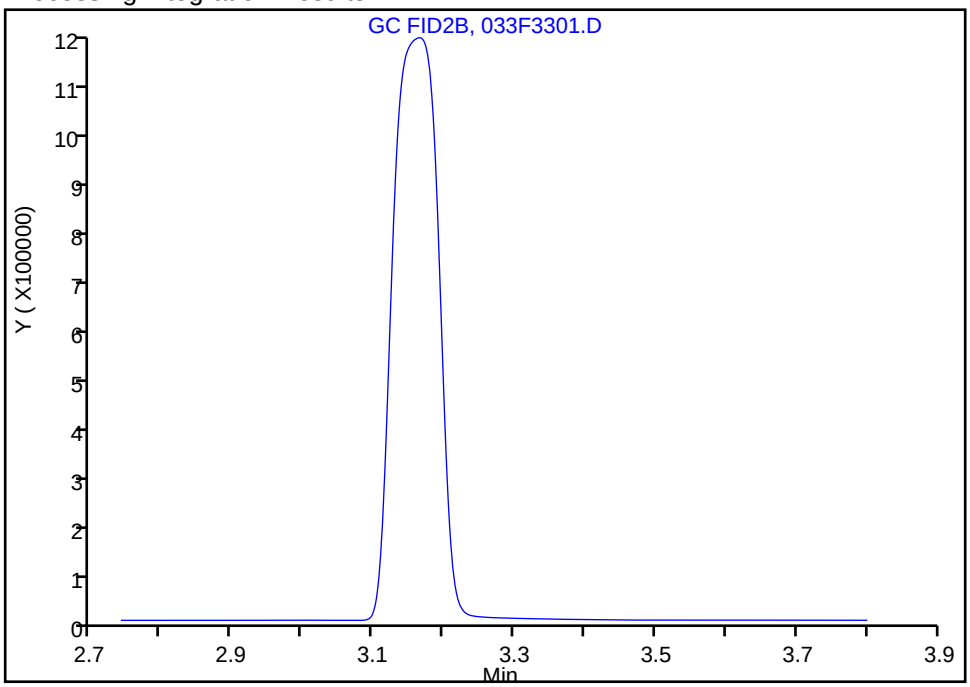
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\033F3301.D
Injection Date: 18-Jun-2020 17:36:09 Instrument ID: VGC_J
Lims ID: lcsd
Client ID:
Operator ID: gm ALS Bottle#: 33 Worklist Smp#: 32
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

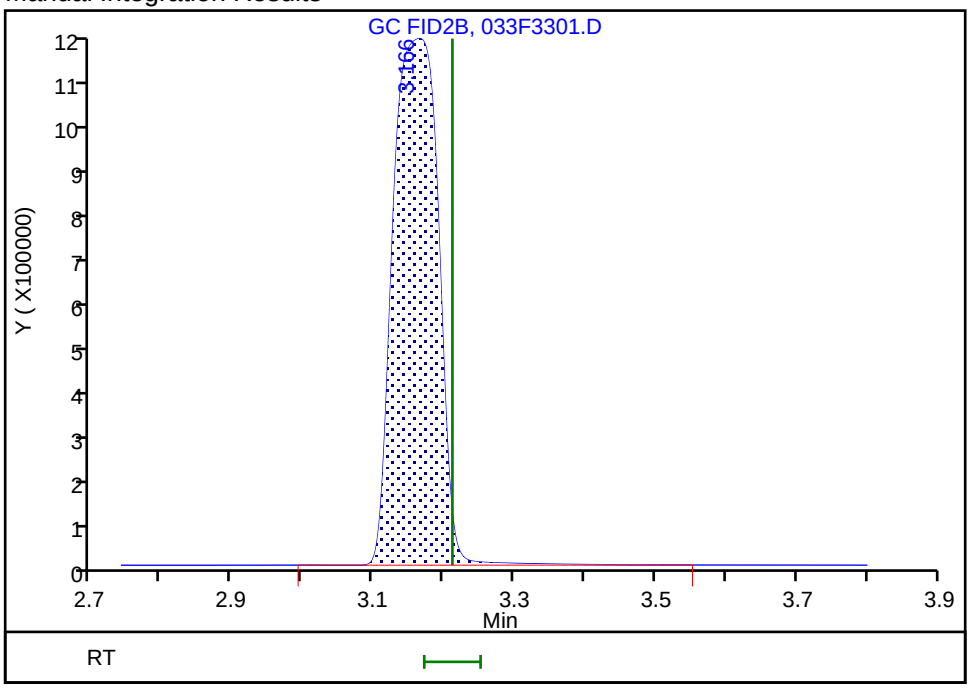
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 4672825
Amount: 68.015300
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:14:45
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499435/3

Matrix: Water Lab File ID: 06192003.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/19/2020 14:46

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.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0665		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192003.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 19-Jun-2020 14:46:18 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Misc. Info.: 280-0092578-003
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:07:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 22-Jun-2020 13:31:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.256	1.262	-0.006	9591397	73.0	66.4	
2	3.178	3.212	-0.034	4571339	73.0	66.5	
						RPD = 0.21	
3 Ethane							
1	1.516	1.522	-0.006	17438305	136.9	128.2	
2	4.308	4.325	-0.017	7795393	136.9	127.7	
						RPD = 0.40	
4 Ethylene							M
1	1.796	1.802	-0.006	13440858	127.7	122.0	
2	0.000	4.055	-4.055	0	127.7	0	
						RPD = 200.00	
5 Propane							
1	2.497	2.505	-0.008	26323752	200.7	183.8	
2	5.928	5.935	-0.007	11718731	200.7	187.1	
						RPD = 1.81	
6 Acetylene							M
1	3.966	3.960	0.006	4057398	118.5	118.3	
2	4.141	4.159	-0.018	2664656	118.5	123.3	M
						RPD = 4.16	
7 Butane							Ma
1	0.000	4.252	-4.252	0	264.5	0	
2	7.371	7.375	-0.004	15144349	264.5	237.5	
						RPD = 200.00	
8 isobutylene							Ma
1	5.151	5.152	-0.001	21366977	255.4	239.4	M
2	7.224	7.229	-0.005	9799043	255.4	235.8	M
						RPD = 1.50	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

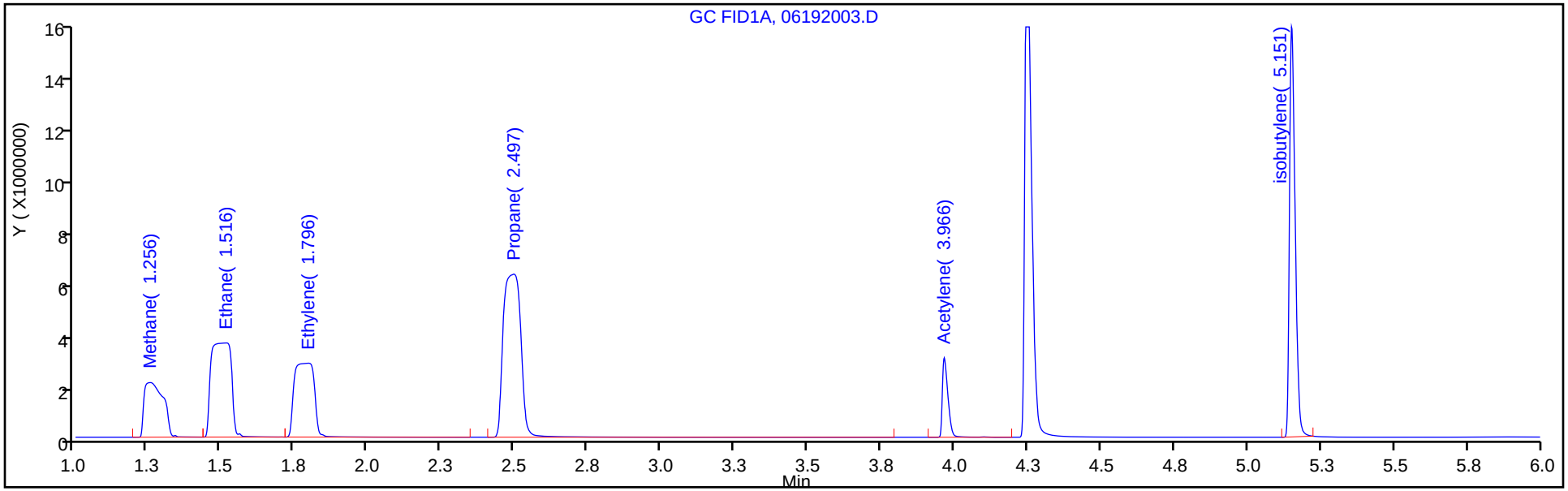
Report Date: 23-Jun-2020 14:07:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

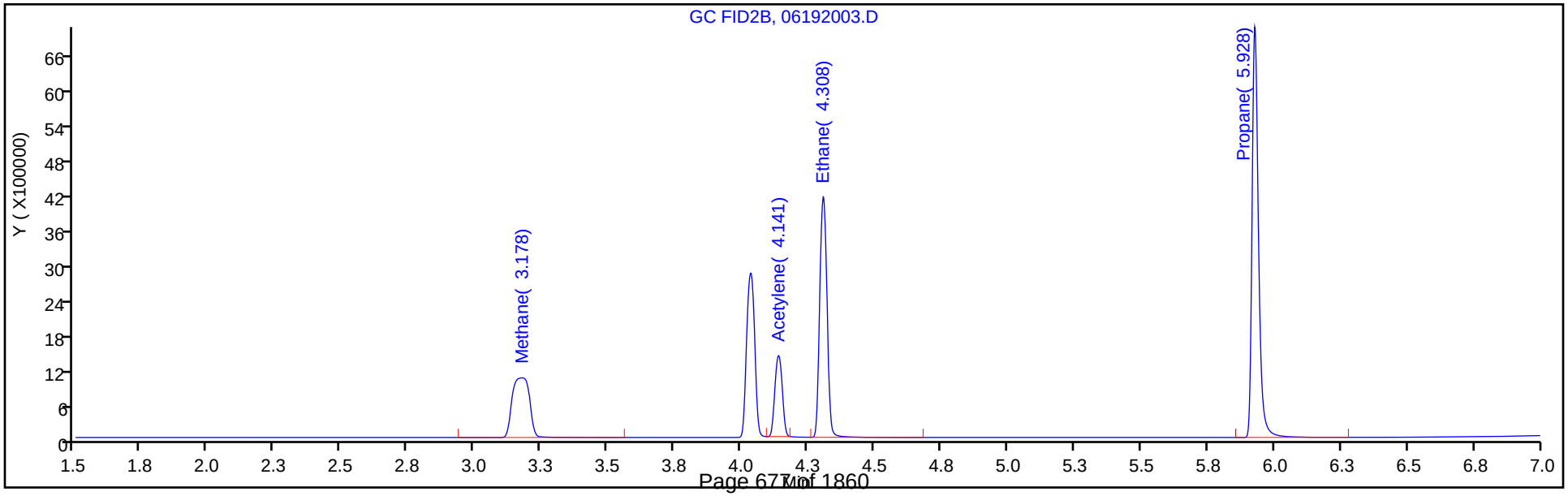
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\06192003.D

Injection Date:	19-Jun-2020 14:46:18	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A MS Lab Sample ID: 280-137609-26 MS

Matrix: Water Lab File ID: 033F3301.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 09:50

Sample wt/vol: 18(mL) Date Analyzed: 06/20/2020 01:32

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	37.6	D M 4	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\033F3301.D
Lims ID: 280-137609-H-26 MS
Client ID:
Sample Type: MS
Inject. Date: 20-Jun-2020 01:32:41 ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-H-26
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:35:56 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:30:54

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		4.098				ND	
2		5.458					
2 Methane							Ma
1	1.247	1.262	-0.015	907383534	73.0	6312.6	M
2	3.155	3.212	-0.057	428558669	73.0	6260.8	a
						RPD = 0.82	
3 Ethane							Ma
1	1.472	1.522	-0.050	17509697	136.9	128.7	M
2	4.302	4.325	-0.023	7561278	136.9	123.8	M
						RPD = 3.85	
4 Ethylene							Ma
1	1.748	1.802	-0.054	13379130	127.7	121.4	M
2	4.027	4.055	-0.028	5728350	127.7	119.5	M
						RPD = 1.57	
5 Propane							
1	2.453	2.505	-0.052	27029317	200.7	188.7	
2	5.924	5.935	-0.011	11711132	200.7	187.0	
						RPD = 0.90	
6 Acetylene							Ma
1	3.958	3.960	-0.002	3847278	118.5	112.2	M
2	4.132	4.159	-0.027	2476154	118.5	114.6	M
						RPD = 2.14	
7 Butane							
1	4.240	4.252	-0.012	32104715	264.5	243.4	
2	7.367	7.375	-0.008	15053519	264.5	236.1	
						RPD = 3.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							
1	5.150	5.152	-0.002	21536543	255.4	241.3	
2	7.220	7.229	-0.009	9827664	255.4	236.5	
						RPD = 2.00	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

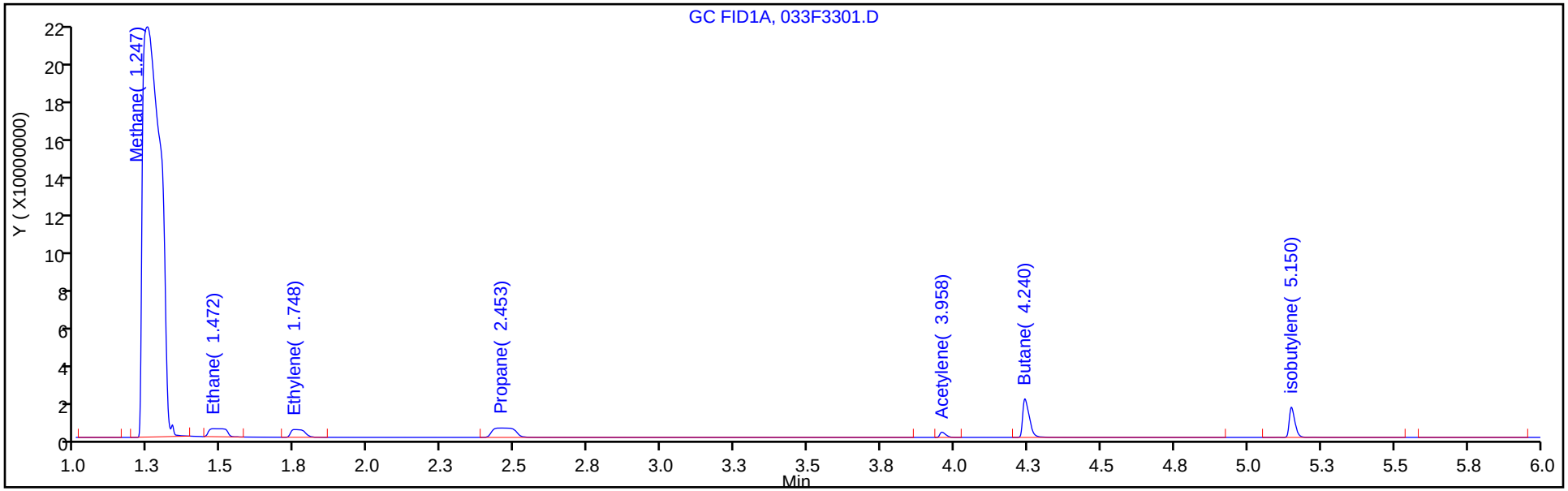
Report Date: 23-Jun-2020 14:36:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

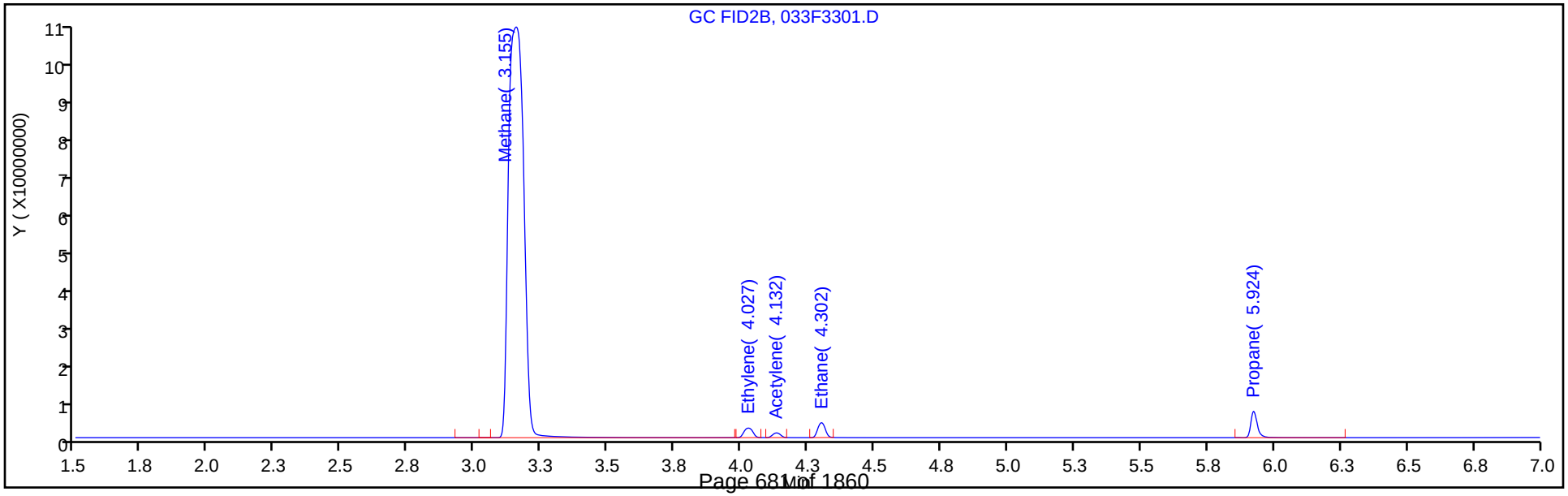
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\033F3301.D

Injection Date:	20-Jun-2020 01:32:41	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-26 MS			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	ALS Bottle#:	33
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

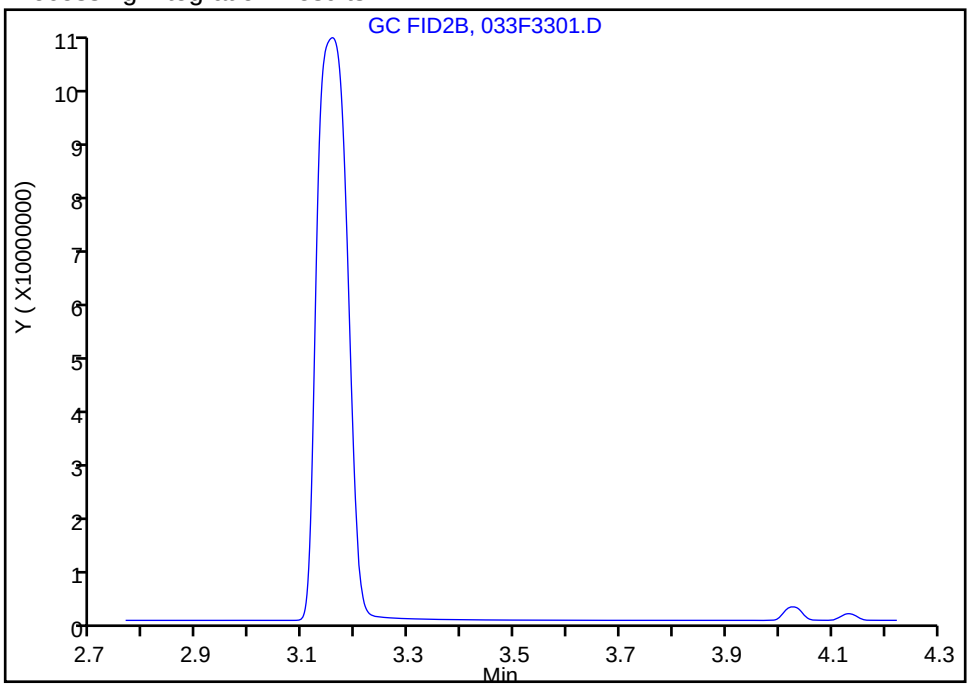
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\033F3301.D
Injection Date: 20-Jun-2020 01:32:41 Instrument ID: VGC_J
Lims ID: 280-137609-H-26 MS
Client ID:
Operator ID: gm ALS Bottle#: 33 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

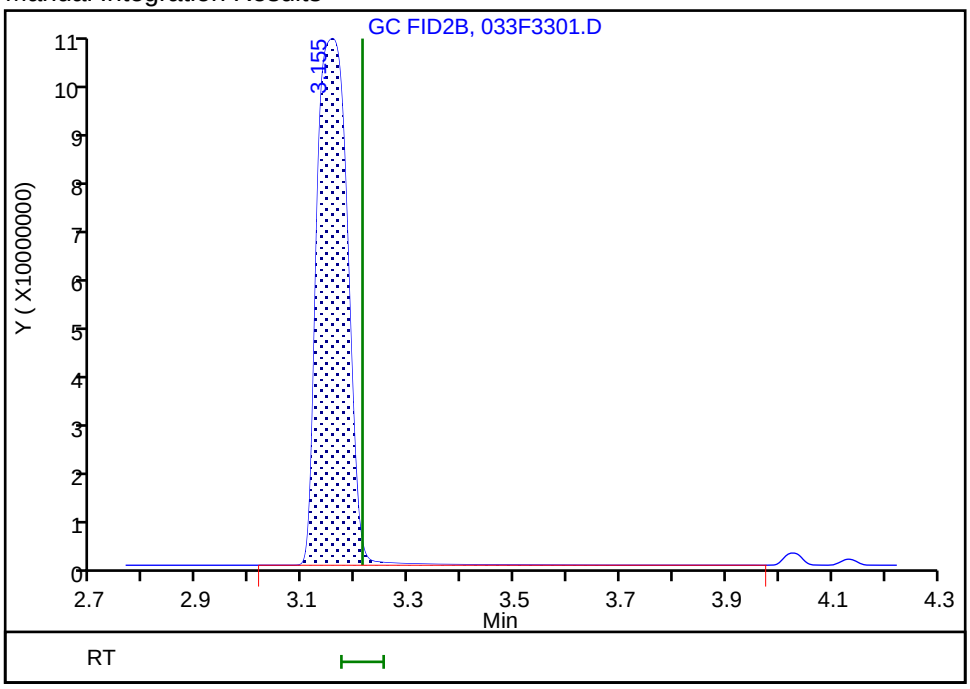
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 428558669
Amount: 6260.8199
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:29:03
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A MSD Lab Sample ID: 280-137609-26 MSD

Matrix: Water Lab File ID: 034F3401.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 09:50

Sample wt/vol: 18(mL) Date Analyzed: 06/20/2020 01:48

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	28.1	D M 4 J1	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\034F3401.D
Lims ID: 280-137609-H-26 MSD
Client ID:
Sample Type: MSD
Inject. Date: 20-Jun-2020 01:48:57 ALS Bottle#: 34 Worklist Smp#: 34
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-H-26
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:35:56 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:32:06

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		4.098				ND	
2		5.458					
2 Methane							a
1	1.248	1.262	-0.014	677398062	73.0	4712.5	a
2	3.157	3.212	-0.055	320911881	73.0	4688.1	a
						RPD = 0.52	
3 Ethane							
1	1.473	1.522	-0.049	14622432	136.9	107.5	
2	4.300	4.325	-0.025	6500374	136.9	106.5	
						RPD = 0.95	
4 Ethylene							Ma
1	1.748	1.802	-0.054	11189097	127.7	101.5	M
2	4.025	4.055	-0.030	4805759	127.7	100.3	M
						RPD = 1.25	
5 Propane							
1	2.450	2.505	-0.055	22377452	200.7	156.2	
2	5.923	5.935	-0.012	9814140	200.7	156.7	
						RPD = 0.31	
6 Acetylene							Ma
1	3.958	3.960	-0.002	3466162	118.5	101.1	M
2	4.132	4.159	-0.027	2226395	118.5	103.0	M
						RPD = 1.94	
7 Butane							
1	4.243	4.252	-0.009	26536011	264.5	201.3	
2	7.368	7.375	-0.007	12527053	264.5	196.5	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							
1	5.151	5.152	-0.001	18270149	255.4	204.7	
2	7.220	7.229	-0.009	8346225	255.4	200.8	
						RPD = 1.89	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

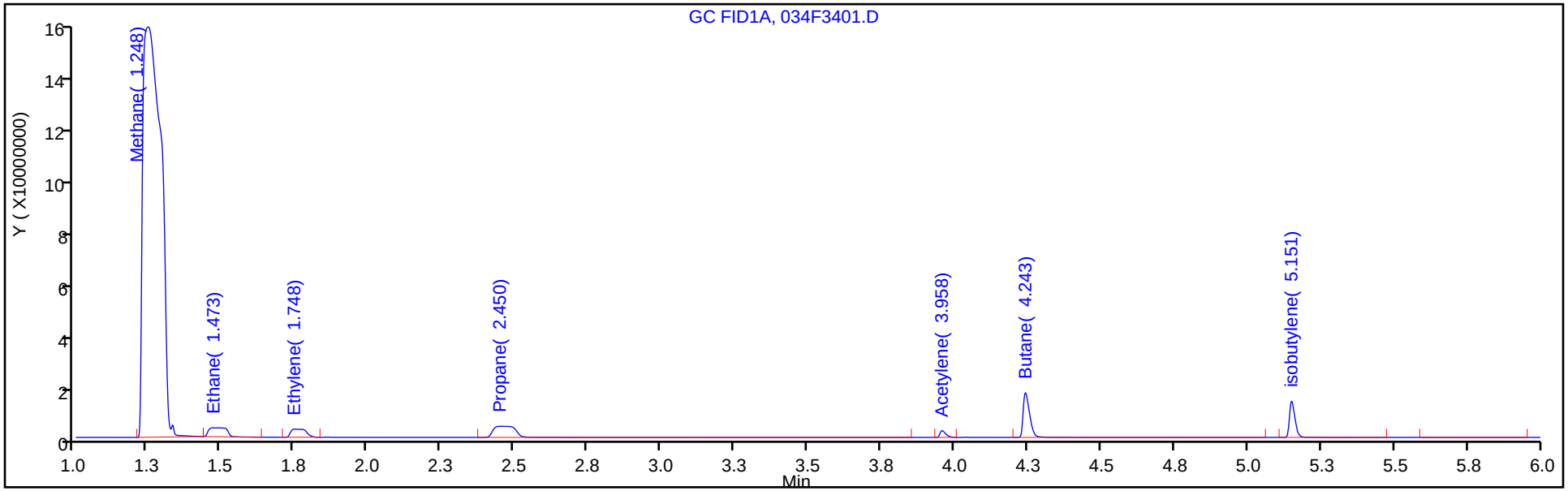
Report Date: 23-Jun-2020 14:36:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

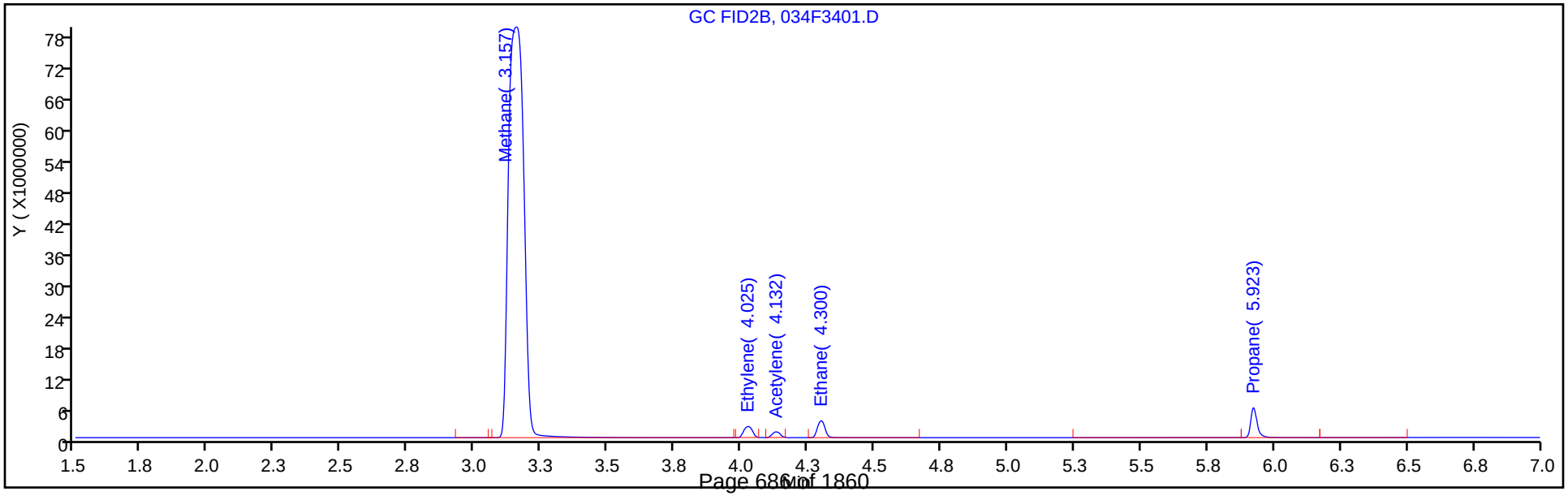
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\034F3401.D

Injection Date:	20-Jun-2020 01:48:57	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-26 MSD			Worklist Smp#:	34
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	ALS Bottle#:	34
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

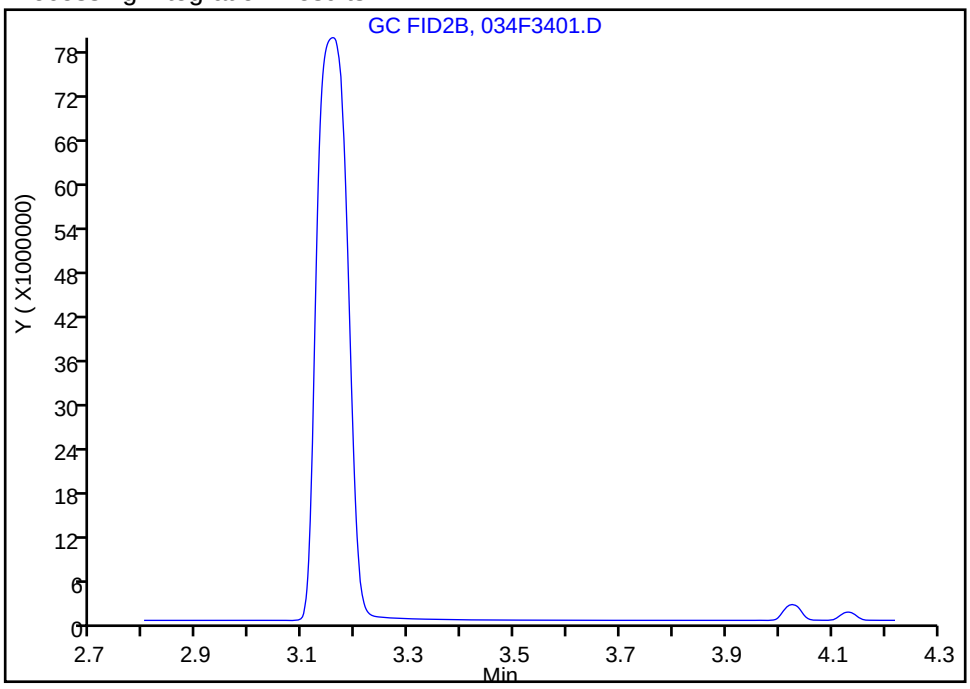
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\034F3401.D
Injection Date: 20-Jun-2020 01:48:57 Instrument ID: VGC_J
Lims ID: 280-137609-H-26 MSD
Client ID:
Operator ID: gm ALS Bottle#: 34 Worklist Smp#: 34
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

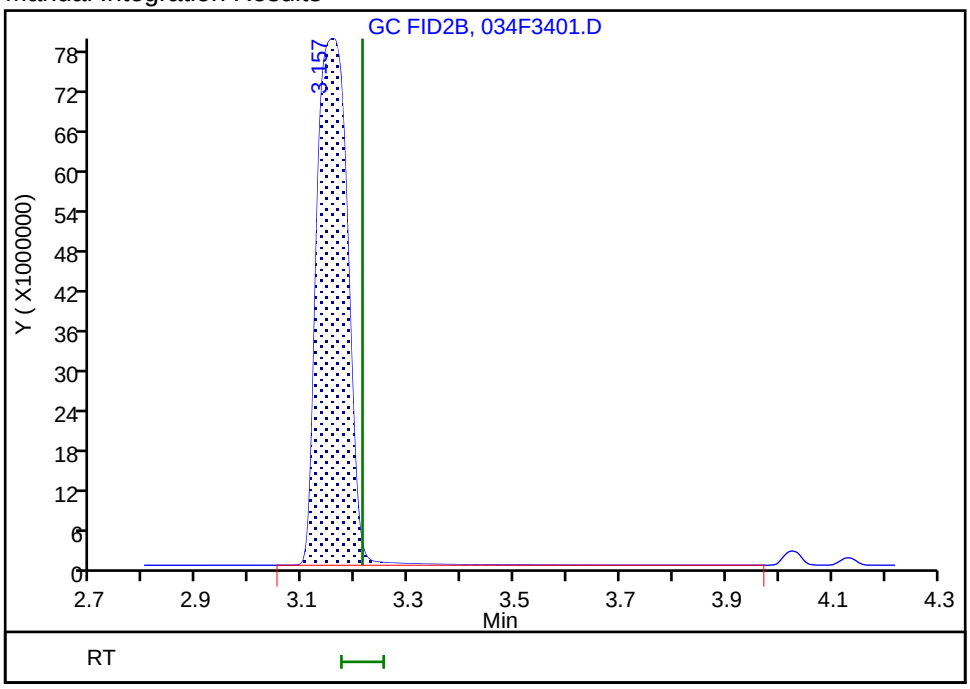
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 320911881
Amount: 4688.1429
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:31:05
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A DU Lab Sample ID: 280-137609-26 DU

Matrix: Water Lab File ID: 032F3201.D

Analysis Method: RSK-175 Date Collected: 06/12/2020 09:50

Sample wt/vol: 18(mL) Date Analyzed: 06/20/2020 01:16

Soil Aliquot Vol: Dilution Factor: 6

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499435 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	26.5	D M	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\032F3201.D
Lims ID: 280-137609-H-26 DU
Client ID:
Sample Type: DU
Inject. Date: 20-Jun-2020 01:16:24 ALS Bottle#: 32 Worklist Smp#: 32
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137609-H-26
Operator ID: gm Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 23-Jun-2020 14:35:56 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1049

First Level Reviewer: meierg Date: 23-Jun-2020 14:09:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							a
1	1.253	1.262	-0.009	643950046		4479.8	a
2	3.159	3.212	-0.053	302783214		4423.3	a
						RPD = 1.27	
3 Ethane							
1		1.522				ND	
2		4.325					
4 Ethylene							
1		1.802				ND	
2		4.055					
5 Propane							
1		2.505				ND	
2		5.935					
6 Acetylene							
1		3.960				ND	
2		4.159					
7 Butane							
1		4.252				ND	
2		7.375					
8 isobutylene							
1		5.152				ND	
2		7.229					

QC Flag Legend

Review Flags

a - User Assigned ID

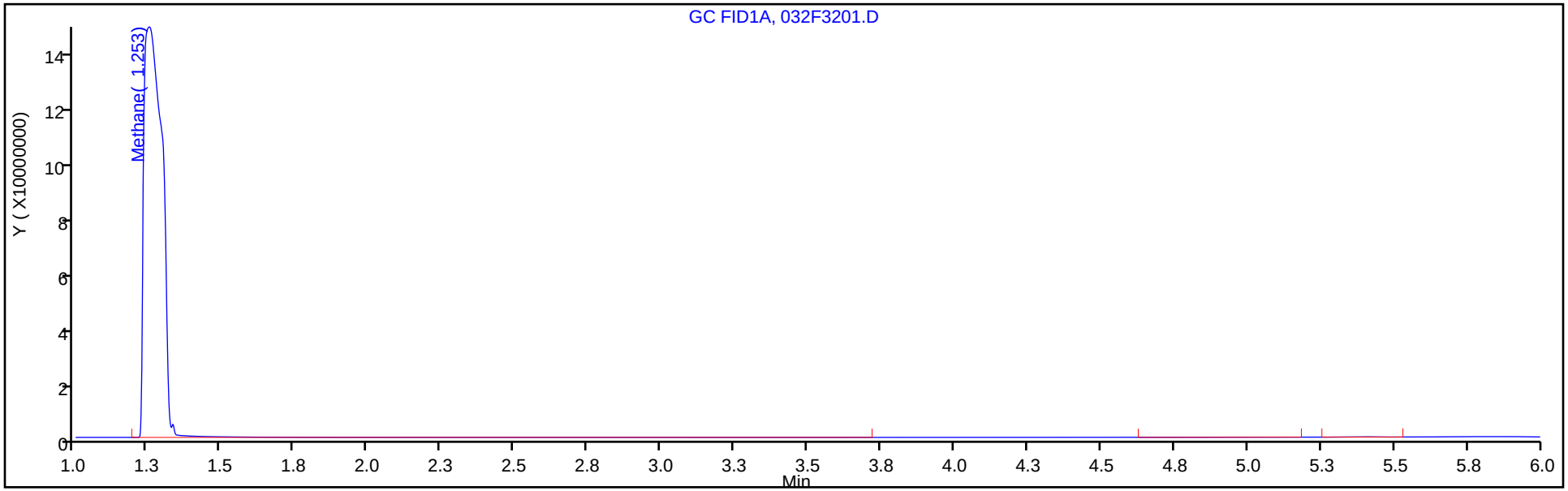
Report Date: 23-Jun-2020 14:36:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

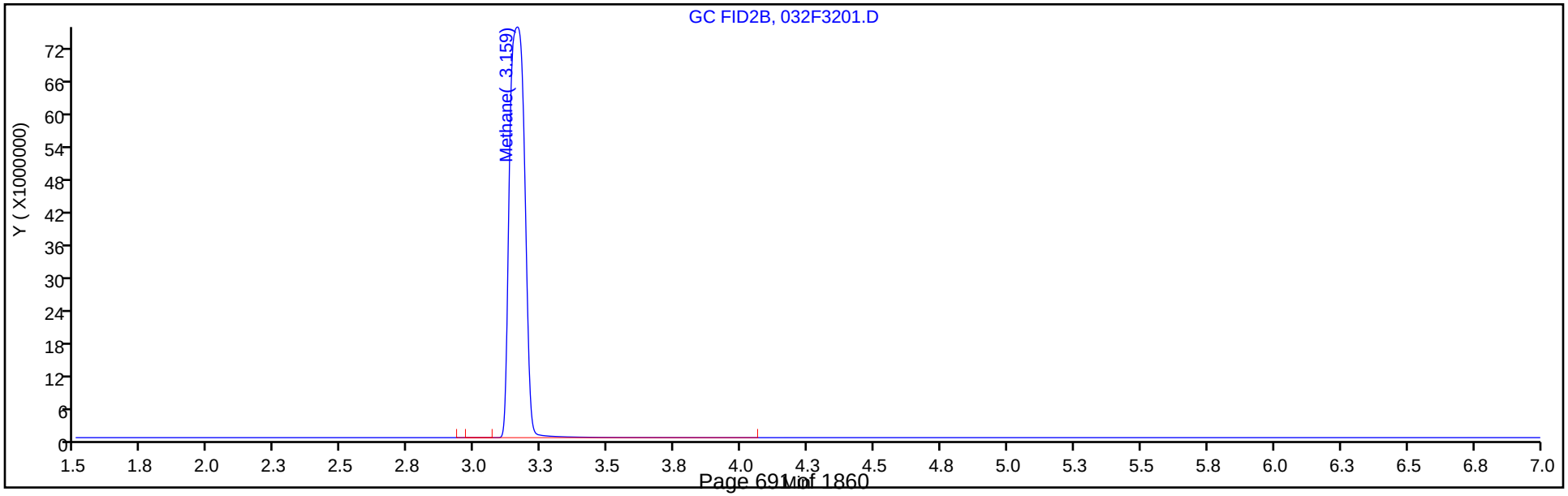
Data File: \\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\032F3201.D

Injection Date:	20-Jun-2020 01:16:24	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-26 DU			Worklist Smp#:	32
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	ALS Bottle#:	32
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

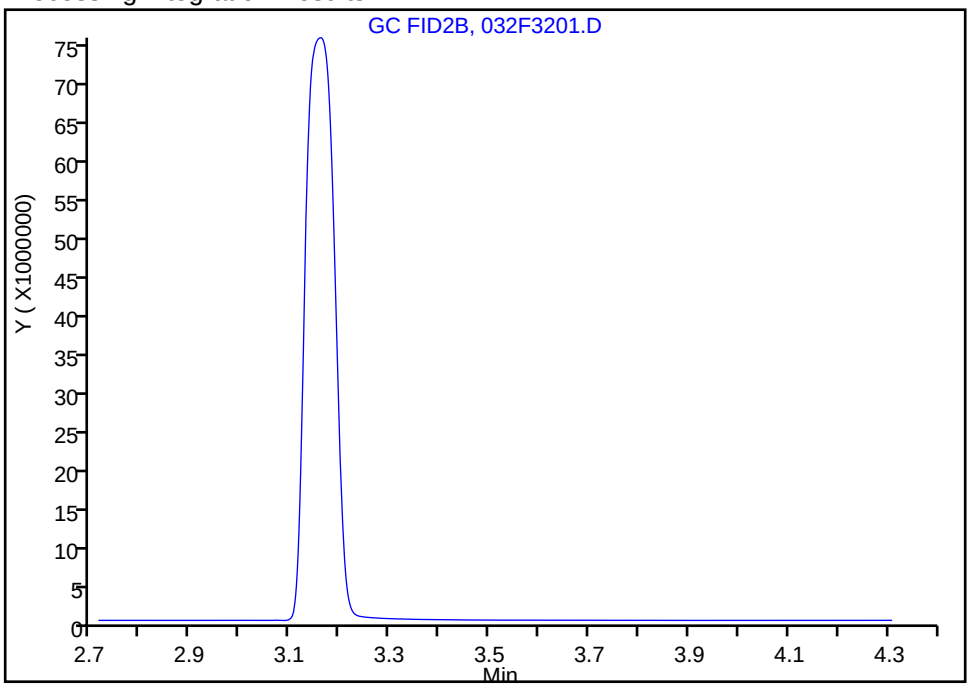
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200619-92578.b\032F3201.D				
Injection Date:	20-Jun-2020 01:16:24	Instrument ID:	VGC_J		
Lims ID:	280-137609-H-26 DU				
Client ID:					
Operator ID:	gm	ALS Bottle#:	32	Worklist Smp#:	32
Purge Vol:	18.000 mL	Dil. Factor:	6.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

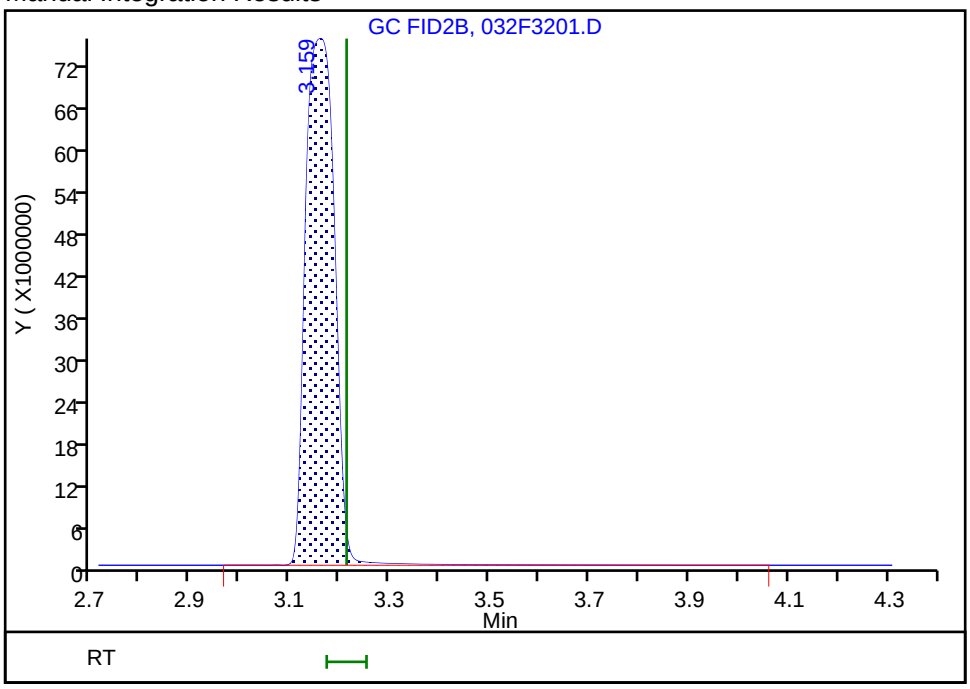
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 302783214
Amount: 4423.2902
Amount Units: ug/l



Reviewer: meierg, 23-Jun-2020 14:09:46
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 05/16/2020 10:57

Analysis Batch Number: 495152 End Date: 05/16/2020 13:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-495152/6		05/16/2020 10:57	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/6		05/16/2020 10:57	1	001F0101.D	HP-Plot Q 0.53(mm)
IC 280-495152/7		05/16/2020 11:13	1	001F0201.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/7		05/16/2020 11:13	1	001F0201.D	HP-Plot Q 0.53(mm)
IC 280-495152/8		05/16/2020 11:30	1	002F0301.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/8		05/16/2020 11:30	1	002F0301.D	HP-Plot Q 0.53(mm)
IC 280-495152/9		05/16/2020 11:46	1	003F0401.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/9		05/16/2020 11:46	1	003F0401.D	HP-Plot Q 0.53(mm)
ICRT 280-495152/10		05/16/2020 12:02	1	004F0501.D	Rt-Alumina KCl 0.53(mm)
ICRT 280-495152/10		05/16/2020 12:02	1	004F0501.D	HP-Plot Q 0.53(mm)
IC 280-495152/11		05/16/2020 12:19	1	005F0601.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/11		05/16/2020 12:19	1	005F0601.D	HP-Plot Q 0.53(mm)
IC 280-495152/12		05/16/2020 12:35	1	006F0701.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/12		05/16/2020 12:35	1	006F0701.D	HP-Plot Q 0.53(mm)
IC 280-495152/13		05/16/2020 12:52	1	007F0801.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/13		05/16/2020 12:52	1	007F0801.D	HP-Plot Q 0.53(mm)
IC 280-495152/14		05/16/2020 13:08	1	009F0901.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/14		05/16/2020 13:08	1	009F0901.D	HP-Plot Q 0.53(mm)
ICV 280-495152/16		05/16/2020 13:25	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
ICV 280-495152/16		05/16/2020 13:25	1	010F1001.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/16/2020 20:22

Analysis Batch Number: 499014 End Date: 06/17/2020 04:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-499014/4		06/16/2020 20:22	1	033F3601a.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-499014/4		06/16/2020 20:22	1	033F3601a.D	HP-Plot Q 0.53(mm)
LCS 280-499014/5		06/16/2020 21:04	1	037F0101.D	Rt-Alumina KCl 0.53(mm)
LCS 280-499014/5		06/16/2020 21:04	1	037F0101.D	HP-Plot Q 0.53(mm)
LCSD 280-499014/6		06/16/2020 21:20	1	038F0201.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-499014/6		06/16/2020 21:20	1	038F0201.D	HP-Plot Q 0.53(mm)
MB 280-499014/7		06/16/2020 21:36	1	039F0301.D	Rt-Alumina KCl 0.53(mm)
MB 280-499014/7		06/16/2020 21:36	1	039F0301.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 21:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 21:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 22:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 22:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 22:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 22:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 22:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 22:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 22:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 22:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 23:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 23:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 23:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 23:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/16/2020 23:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/16/2020 23:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 00:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 00:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 00:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 00:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 00:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 00:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 00:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 00:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 01:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 01:09	1		HP-Plot Q 0.53(mm)
CCV 280-499014/50		06/17/2020 01:25	1	003F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499014/50		06/17/2020 01:25	1	003F1701.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 01:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 01:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 01:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 01:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 02:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 02:14	1		HP-Plot Q 0.53(mm)
280-137609-17		06/17/2020 02:31	1	007F2101.D	Rt-Alumina KCl 0.53(mm)
280-137609-17		06/17/2020 02:31	1	007F2101.D	HP-Plot Q 0.53(mm)
280-137609-18		06/17/2020 02:47	1	008F2201.D	Rt-Alumina KCl 0.53(mm)

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GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/16/2020 20:22

Analysis Batch Number: 499014 End Date: 06/17/2020 04:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-137609-18		06/17/2020 02:47	1	008F2201.D	HP-Plot Q 0.53(mm)
280-137609-19		06/17/2020 03:03	1	009F2301.D	Rt-Alumina KCl 0.53(mm)
280-137609-19		06/17/2020 03:03	1	009F2301.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 03:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 03:20	1		HP-Plot Q 0.53(mm)
280-137609-21		06/17/2020 03:36	1	011F2501.D	Rt-Alumina KCl 0.53(mm)
280-137609-21		06/17/2020 03:36	1	011F2501.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 03:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 03:52	1		HP-Plot Q 0.53(mm)
280-137609-23		06/17/2020 04:08	1	013F2701.D	Rt-Alumina KCl 0.53(mm)
280-137609-23		06/17/2020 04:08	1	013F2701.D	HP-Plot Q 0.53(mm)
280-137609-24		06/17/2020 04:25	1	014F2801.D	Rt-Alumina KCl 0.53(mm)
280-137609-24		06/17/2020 04:25	1	014F2801.D	HP-Plot Q 0.53(mm)
CCV 280-499014/62		06/17/2020 04:41	1	015F2901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499014/62		06/17/2020 04:41	1	015F2901.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/18/2020 08:54

Analysis Batch Number: 499210 End Date: 06/18/2020 17:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-499210/1		06/18/2020 08:54	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-499210/1		06/18/2020 08:54	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-499210/2		06/18/2020 09:10	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-499210/2		06/18/2020 09:10	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-499210/3		06/18/2020 09:26	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-499210/3		06/18/2020 09:26	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-499210/4		06/18/2020 09:42	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-499210/4		06/18/2020 09:42	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 09:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 09:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 10:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 10:15	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 10:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 10:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 10:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 10:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 11:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 11:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 11:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 11:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 11:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 11:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 11:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 11:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 12:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 12:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 12:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 12:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 12:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 12:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 12:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 12:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 13:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 13:14	1		HP-Plot Q 0.53(mm)
CCV 280-499210/18		06/18/2020 13:47	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499210/18		06/18/2020 13:47	1	019F1901.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 14:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 14:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 14:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 14:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 14:36	6		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 14:36	6		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 14:52	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 14:52	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 15:09	3		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/18/2020 08:54

Analysis Batch Number: 499210 End Date: 06/18/2020 17:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/18/2020 15:09	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 15:25	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 15:25	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 15:41	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 15:41	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 15:58	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 15:58	3		HP-Plot Q 0.53(mm)
280-137609-16		06/18/2020 16:14	6	028F2801.D	Rt-Alumina KCl 0.53(mm)
280-137609-16		06/18/2020 16:14	6	028F2801.D	HP-Plot Q 0.53(mm)
280-137609-20		06/18/2020 16:30	6	029F2901.D	Rt-Alumina KCl 0.53(mm)
280-137609-20		06/18/2020 16:30	6	029F2901.D	HP-Plot Q 0.53(mm)
280-137609-22		06/18/2020 16:47	3	030F3001.D	Rt-Alumina KCl 0.53(mm)
280-137609-22		06/18/2020 16:47	3	030F3001.D	HP-Plot Q 0.53(mm)
CCV 280-499210/30		06/18/2020 17:03	1	031F3101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499210/30		06/18/2020 17:03	1	031F3101.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/18/2020 08:54

Analysis Batch Number: 499415 End Date: 06/19/2020 03:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-499415/1		06/18/2020 08:54	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-499415/1		06/18/2020 08:54	1	001F0101.D	HP-Plot Q 0.53(mm)
CCV 280-499415/30		06/18/2020 17:03	1	031F3101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499415/30		06/18/2020 17:03	1	031F3101.D	HP-Plot Q 0.53(mm)
LCS 280-499415/31		06/18/2020 17:19	1	032F3201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-499415/31		06/18/2020 17:19	1	032F3201.D	HP-Plot Q 0.53(mm)
LCSD 280-499415/32		06/18/2020 17:36	1	033F3301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-499415/32		06/18/2020 17:36	1	033F3301.D	HP-Plot Q 0.53(mm)
MB 280-499415/33		06/18/2020 17:52	1	034F3401.D	Rt-Alumina KCl 0.53(mm)
MB 280-499415/33		06/18/2020 17:52	1	034F3401.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 18:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 18:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 18:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 18:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 18:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 18:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 18:57	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 18:57	1		HP-Plot Q 0.53(mm)
280-137609-25		06/18/2020 19:13	1	039F3901.D	Rt-Alumina KCl 0.53(mm)
280-137609-25		06/18/2020 19:13	1	039F3901.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 19:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 19:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 19:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 19:46	1		HP-Plot Q 0.53(mm)
280-137609-28		06/18/2020 20:02	1	042F4201.D	Rt-Alumina KCl 0.53(mm)
280-137609-28		06/18/2020 20:02	1	042F4201.D	HP-Plot Q 0.53(mm)
280-137609-29		06/18/2020 20:19	1	043F4301.D	Rt-Alumina KCl 0.53(mm)
280-137609-29		06/18/2020 20:19	1	043F4301.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 20:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 20:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 20:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 20:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 21:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 21:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 21:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 21:24	1		HP-Plot Q 0.53(mm)
CCV 280-499415/47		06/18/2020 21:41	1	048F4801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499415/47		06/18/2020 21:41	1	048F4801.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 21:57	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 21:57	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 22:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 22:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 22:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 22:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 22:46	1		Rt-Alumina KCl 0.53(mm)

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GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/18/2020 08:54

Analysis Batch Number: 499415 End Date: 06/19/2020 03:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/18/2020 22:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 23:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 23:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 23:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 23:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 23:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 23:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 23:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 23:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 00:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 00:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 02:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 02:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 03:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 03:06	1		HP-Plot Q 0.53(mm)
CCV 280-499415/59		06/19/2020 03:22	1		Rt-Alumina KCl 0.53(mm)
CCV 280-499415/59		06/19/2020 03:22	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/19/2020 14:13

Analysis Batch Number: 499435 End Date: 06/20/2020 03:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-499435/1		06/19/2020 14:13	1	06192001.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-499435/1		06/19/2020 14:13	1	06192001.D	HP-Plot Q 0.53(mm)
LCS 280-499435/2		06/19/2020 14:30	1	06192002.D	Rt-Alumina KCl 0.53(mm)
LCS 280-499435/2		06/19/2020 14:30	1	06192002.D	HP-Plot Q 0.53(mm)
LCSD 280-499435/3		06/19/2020 14:46	1	06192003.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-499435/3		06/19/2020 14:46	1	06192003.D	HP-Plot Q 0.53(mm)
MB 280-499435/4		06/19/2020 15:02	1	06192004.D	Rt-Alumina KCl 0.53(mm)
MB 280-499435/4		06/19/2020 15:02	1	06192004.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 15:18	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 15:18	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 15:35	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 15:35	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 15:51	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 15:51	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 16:07	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 16:07	3		HP-Plot Q 0.53(mm)
280-137609-27		06/19/2020 16:24	6	06192009.D	Rt-Alumina KCl 0.53(mm)
280-137609-27		06/19/2020 16:24	6	06192009.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 16:40	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 16:40	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 16:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 16:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 17:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 17:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 17:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 17:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 17:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 17:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 18:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 18:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 18:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 18:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 18:34	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 18:34	1		HP-Plot Q 0.53(mm)
CCV 280-499435/18		06/19/2020 18:50	1	06192018.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499435/18		06/19/2020 18:50	1	06192018.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 21:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 21:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 21:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 21:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 22:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 22:15	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 22:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 22:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 22:48	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: VGC_J Start Date: 06/19/2020 14:13

Analysis Batch Number: 499435 End Date: 06/20/2020 03:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/19/2020 22:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 23:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 23:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 23:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 23:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 23:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 23:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/19/2020 23:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/19/2020 23:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 00:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 00:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 00:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 00:25	1		HP-Plot Q 0.53(mm)
CCV 280-499435/30		06/20/2020 00:42	1	06192030.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499435/30		06/20/2020 00:42	1	06192030.D	HP-Plot Q 0.53(mm)
280-137609-26		06/20/2020 01:00	6	031F3101.D	Rt-Alumina KCl 0.53(mm)
280-137609-26		06/20/2020 01:00	6	031F3101.D	HP-Plot Q 0.53(mm)
280-137609-26 DU		06/20/2020 01:16	6	032F3201.D	Rt-Alumina KCl 0.53(mm)
280-137609-26 DU		06/20/2020 01:16	6	032F3201.D	HP-Plot Q 0.53(mm)
280-137609-26 MS		06/20/2020 01:32	6	033F3301.D	Rt-Alumina KCl 0.53(mm)
280-137609-26 MS		06/20/2020 01:32	6	033F3301.D	HP-Plot Q 0.53(mm)
280-137609-26 MSD		06/20/2020 01:48	6	034F3401.D	Rt-Alumina KCl 0.53(mm)
280-137609-26 MSD		06/20/2020 01:48	6	034F3401.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 02:05	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 02:05	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 02:21	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 02:21	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 02:37	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 02:37	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 02:53	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 02:53	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/20/2020 03:10	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/20/2020 03:10	3		HP-Plot Q 0.53(mm)
CCV 280-499435/40		06/20/2020 03:42	1	041F4101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-499435/40		06/20/2020 03:42	1	041F4101.D	HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499014 Batch Start Date: 06/16/20 20:22 Batch Analyst: Meier, Greg P

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00031		
CCVRT 280-499014/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-499014/5		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-499014/6		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-499014/7		RSK-175		18 mL	18 mL	5 SU			
CCV 280-499014/50		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-137609-G-17	PZ013-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-18	G0104-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-19	PZ014-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-I-21	G0101-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-23	G0111-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-24	G0103-20A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-499014/62		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499210 Batch Start Date: 06/18/20 08:54 Batch Analyst: Meier, Greg P

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00031		
CCVRT 280-499210/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-499210/2		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-499210/3		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-499210/4		RSK-175		18 mL	18 mL	5 SU			
CCV 280-499210/18		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-137609-I-16	G0117-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-20	G0115-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-I-22	G0100-20A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-499210/30		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499415 Batch Start Date: 06/18/20 08:54 Batch Analyst: Meier, Greg P

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00031		
CCVRT 280-499415/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-499415/30		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-499415/31		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-499415/32		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-499415/33		RSK-175		18 mL	18 mL	5 SU			
280-137609-I-25	G0107-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-28	G0106-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-29	G0095-20A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-499415/47		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499435 Batch Start Date: 06/19/20 14:13 Batch Analyst: Meier, Greg P

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00031		
CCVRT 280-499435/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-499435/2		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-499435/3		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-499435/4		RSK-175		18 mL	18 mL	5 SU			
280-137609-I-27	G0120-20A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-499435/18		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-499435/30		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-137609-H-26	G0116-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-26 DU	G0116-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-26 MS	G0116-20A	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-137609-H-26 MSD	G0116-20A	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
CCV 280-499435/40		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

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 #
G0117-20A	280-137609-16		118 M
G0117-20A	280-137609-16	109 M	
PZ013-20A	280-137609-17		113 M
PZ013-20A	280-137609-17	97 M	
G0104-20A	280-137609-18	103 M	
PZ014-20A	280-137609-19	102 M	
G0115-20A	280-137609-20		115 M
G0115-20A	280-137609-20	97 M	
G0101-20A	280-137609-21		99
G0101-20A	280-137609-21	102 M	
G0100-20A	280-137609-22		100
G0100-20A	280-137609-22	92 M	
G0111-20A	280-137609-23		102 M
G0111-20A	280-137609-23	89 M	
G0103-20A	280-137609-24		91
G0103-20A	280-137609-24	374 M Q	
G0107-20A	280-137609-25	104 M	
G0116-20A	280-137609-26		119 M
G0116-20A	280-137609-26	122 M Q	
G0120-20A	280-137609-27		118 M
G0120-20A	280-137609-27	127 M Q	
G0106-20A	280-137609-28	102 M	
G0095-20A	280-137609-29		117
G0095-20A	280-137609-29	97	
	MB 280-499027/1-A	103	
	MB 280-499107/1-A	100 M	
	LCS 280-499027/2-A	102	
	LCS 280-499027/4-A	109	
	LCS 280-499107/2-A	101	
	LCS 280-499107/3-A	102	
	LCSD 280-499027/3-A	106	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330A

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

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 #
	LCSD 280-499027/5-A	106 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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220011.D

Lab ID: LCS 280-499027/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.15	108	73-125	
1,3-Dinitrobenzene	2.00	2.06	103	78-120	
2,4,6-Trinitrotoluene	2.00	2.07	104	71-123	
2,4-Dinitrotoluene	2.00	1.92	96	78-120	
2,6-Dinitrotoluene	2.00	2.01	100	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.91	95	79-120	
2-Nitrotoluene	2.00	1.80	90	70-127	
3-Nitrotoluene	2.00	1.96	98	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.74	87	76-125	
4-Nitrotoluene	2.00	1.85	93	71-127	
HMX	2.00	1.88	94	65-135	
Nitrobenzene	2.00	2.05	103	65-134	
RDX	2.00	1.93	96	68-130	
Tetryl	2.00	1.93	96	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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220013.D

Lab ID: LCS 280-499027/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.13	91	57-132	M

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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220039.D

Lab ID: LCS 280-499107/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.39	120	73-125	
1,3-Dinitrobenzene	2.00	2.20	110	78-120	
2,4,6-Trinitrotoluene	2.00	2.32	116	71-123	
2,4-Dinitrotoluene	2.00	2.05	102	78-120	
2,6-Dinitrotoluene	2.00	2.12	106	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.94	97	79-120	
2-Nitrotoluene	2.00	1.62	81	70-127	
3-Nitrotoluene	2.00	1.82	91	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.75	88	76-125	
4-Nitrotoluene	2.00	1.68	84	71-127	
HMX	2.00	2.12	106	65-135	
Nitrobenzene	2.00	2.00	100	65-134	
RDX	2.00	2.08	104	68-130	
Tetryl	2.00	2.39	120	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.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220040.D

Lab ID: LCS 280-499107/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.06	88	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220012.D

Lab ID: LCSD 280-499027/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.30	115	7	30	73-125	
1,3-Dinitrobenzene	2.00	2.17	109	5	30	78-120	
2,4,6-Trinitrotoluene	2.00	2.20	110	6	30	71-123	
2,4-Dinitrotoluene	2.00	2.05	102	6	30	78-120	
2,6-Dinitrotoluene	2.00	2.06	103	3	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.99	99	4	30	79-120	
2-Nitrotoluene	2.00	1.81	91	1	30	70-127	
3-Nitrotoluene	2.00	1.97	98	1	30	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.80	90	4	30	76-125	
4-Nitrotoluene	2.00	1.87	94	1	30	71-127	
HMX	2.00	2.02	101	7	30	65-135	M
Nitrobenzene	2.00	2.09	105	2	30	65-134	M
RDX	2.00	2.00	100	3	30	68-130	
Tetryl	2.00	2.05	103	6	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220014.D

Lab ID: LCSD 280-499027/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.33	2.06	88	3	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: MB 280-499027/1-A

Matrix: Water Date Extracted: 06/17/2020 09:26

Lab File ID:(1) 06220010.D Lab File ID:(2)

Date Analyzed:(1) 06/22/2020 15:16 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_G2_LUNA

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 280-499027/2-A	06/22/2020 15:39	
	LCSD 280-499027/3-A	06/22/2020 16:02	
	LCS 280-499027/4-A	06/22/2020 16:25	
	LCSD 280-499027/5-A	06/22/2020 16:48	
G0103-20A	280-137609-24	06/22/2020 21:00	06/24/2020 13:36
G0107-20A	280-137609-25	06/22/2020 21:23	
G0116-20A	280-137609-26	06/22/2020 21:46	06/24/2020 14:11
G0120-20A	280-137609-27	06/22/2020 22:09	06/24/2020 14:45
G0106-20A	280-137609-28	06/22/2020 22:32	
G0095-20A	280-137609-29	06/22/2020 22:55	06/24/2020 15:20

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: MB 280-499107/1-A

Matrix: Water Date Extracted: 06/17/2020 17:11

Lab File ID:(1) 06220038.D Lab File ID:(2)

Date Analyzed:(1) 06/23/2020 02:00 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_G2_LUNA

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 280-499107/2-A	06/23/2020 02:23	
	LCS 280-499107/3-A	06/23/2020 02:46	
G0117-20A	280-137609-16	06/23/2020 08:31	06/25/2020 06:40
PZ013-20A	280-137609-17	06/23/2020 08:54	06/25/2020 07:15
G0104-20A	280-137609-18	06/23/2020 09:17	
PZ014-20A	280-137609-19	06/23/2020 09:40	
G0115-20A	280-137609-20	06/23/2020 10:03	06/25/2020 07:50
G0101-20A	280-137609-21	06/23/2020 10:26	06/25/2020 08:25
G0100-20A	280-137609-22	06/23/2020 10:49	06/25/2020 09:00
G0111-20A	280-137609-23	06/23/2020 11:12	06/25/2020 09:34

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: PZ013-20A Lab Sample ID: 280-137609-17

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/23/2020 08:54 Date Analyzed (2): 06/25/2020 07:15

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4-Amino-2,6-dinitrotoluene	1		11.39	11.26	11.46	3.9		0.8
	2		17.37	17.32	17.62	3.9		
2-Amino-4,6-dinitrotoluene	1		11.68	11.55	11.75	3.9		2.2
	2		18.31	18.25	18.55	3.8		
2,4-Dinitrotoluene	1		12.01	11.89	12.09	0.078		31.3
	2		20.64	20.43	20.73	0.057		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0101-20A Lab Sample ID: 280-137609-21

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/23/2020 10:26 Date Analyzed (2): 06/25/2020 08:25

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.75	6.58	6.88	2.3		116.9
	2		7.11	7.00	7.30	0.61		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0100-20A Lab Sample ID: 280-137609-22

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/23/2020 10:49 Date Analyzed (2): 06/25/2020 09:00

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.92	8.78	9.08	1.5		1.4
	2		19.07	18.99	19.29	1.5		
2,4,6-Trinitrotoluene	1		11.19	11.10	11.30	0.39		113.5
	2		24.88	24.76	25.06	0.11		
2-Amino-4,6-dinitrotoluene	1		11.63	11.55	11.75	0.83		9.4
	2		18.31	18.25	18.55	0.91		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0111-20A Lab Sample ID: 280-137609-23

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/23/2020 11:12 Date Analyzed (2): 06/25/2020 09:34

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.74	6.58	6.88	1.8		28.0
	2		7.13	7.00	7.30	2.4		
1,3,5-Trinitrobenzene	1		8.92	8.78	9.08	10		11.9
	2		19.07	18.99	19.29	9.3		
2,4,6-Trinitrotoluene	1		11.18	11.10	11.30	12		5.9
	2		24.84	24.76	25.06	11		
4-Amino-2,6-dinitrotoluene	1		11.33	11.26	11.46	11		13.0
	2		17.39	17.32	17.62	10		
2-Amino-4,6-dinitrotoluene	1		11.62	11.55	11.75	9.8		7.3
	2		18.33	18.25	18.55	11		
2,4-Dinitrotoluene	1		11.96	11.89	12.09	0.27		33.8
	2		20.52	20.43	20.73	0.38		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0103-20A Lab Sample ID: 280-137609-24

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/22/2020 21:00 Date Analyzed (2): 06/24/2020 13:36

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-Amino-4,6-dinitrotoluene	1		11.69	11.55	11.75	5.8		172.8
	2		18.37	18.24	18.54	0.42		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A Lab Sample ID: 280-137609-26

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/22/2020 21:46 Date Analyzed (2): 06/24/2020 14:11

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-Amino-4,6-dinitrotoluene	1		11.66	11.55	11.75	6.7		161.5
	2		18.37	18.24	18.54	0.72		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0095-20A Lab Sample ID: 280-137609-29

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/22/2020 22:55 Date Analyzed (2): 06/24/2020 15:20

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.93	8.78	9.08	0.93		14.5
	2		19.12	18.97	19.27	1.1		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0117-20A Lab Sample ID: 280-137609-16

Matrix: Water Lab File ID: 06220055.D

Analysis Method: 8330A Date Collected: 06/12/2020 11:10

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 472.3(mL) Date Analyzed: 06/23/2020 08:31

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U M	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U M	0.43	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.093
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.096
121-82-4	RDX	0.21	U M	0.22	0.21	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	109	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220055.D
Lims ID: 280-137609-A-16-A
Client ID: G0117-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 08:31:18 ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-16-
Misc. Info.: 280-0092608-055
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:57:54

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	
	6 MNX	1		7.396			ND	U
	7 RDX	1		7.801			ND	U
$	9 1,2-Dinitrobenzene	1	8.755	8.741	0.014	30086	0.2177	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	U
	14 Tetryl	1	10.228	10.234	-0.006	3020	0.0171	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	U
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

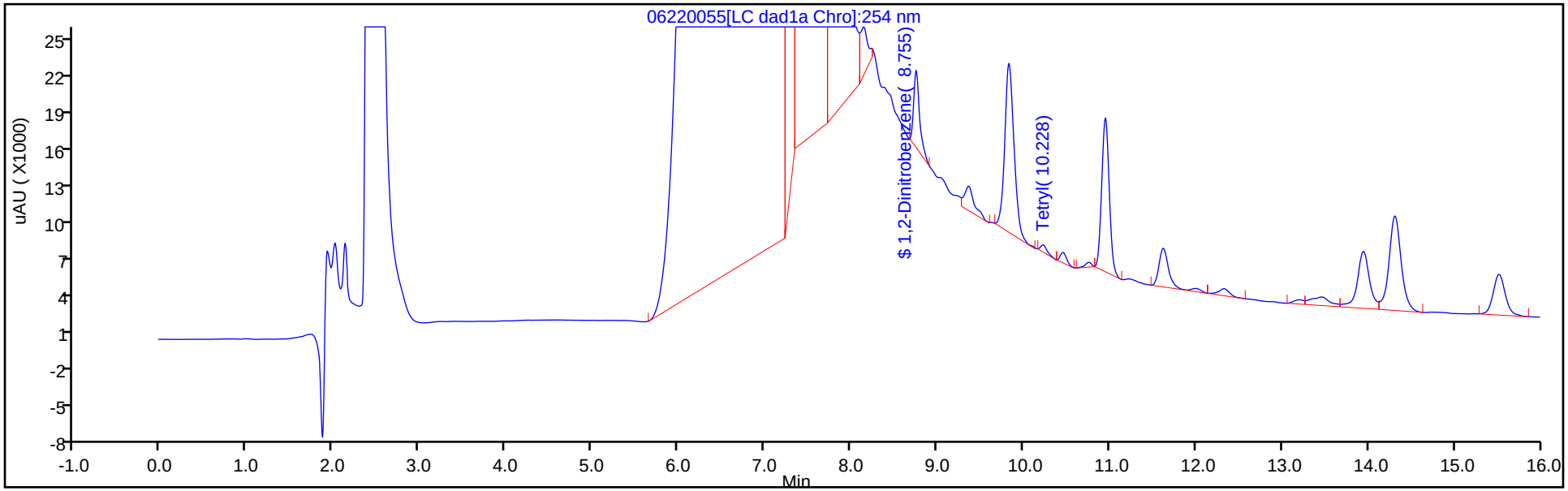
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Jun-2020 15:18:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

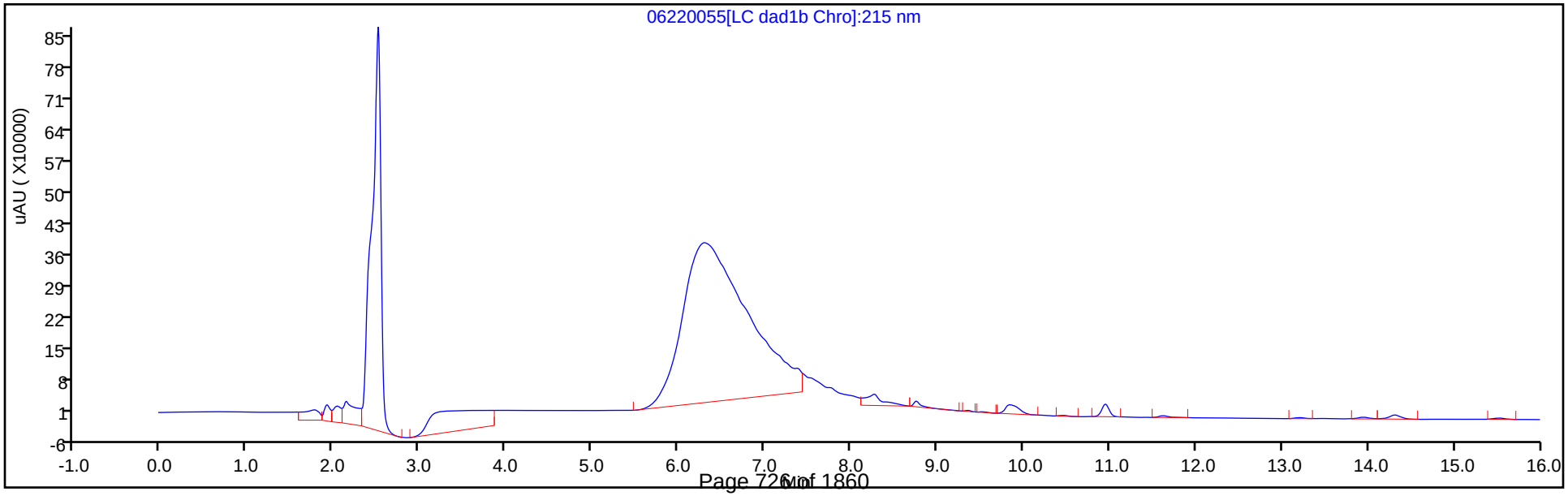
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16	Worklist Smp#:	55
Client ID:	G0117-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220055.D				
Lims ID:	280-137609-A-16-A				
Client ID:	G0117-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 08:31:18	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-16-				
Misc. Info.:	280-0092608-055				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:57:54		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2177	108.84

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

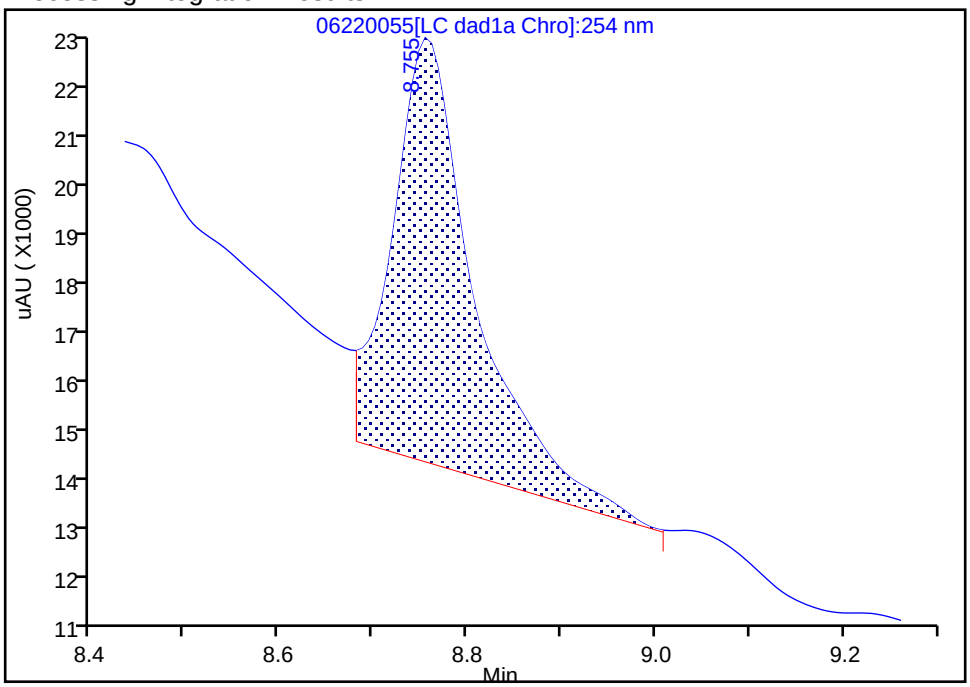
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

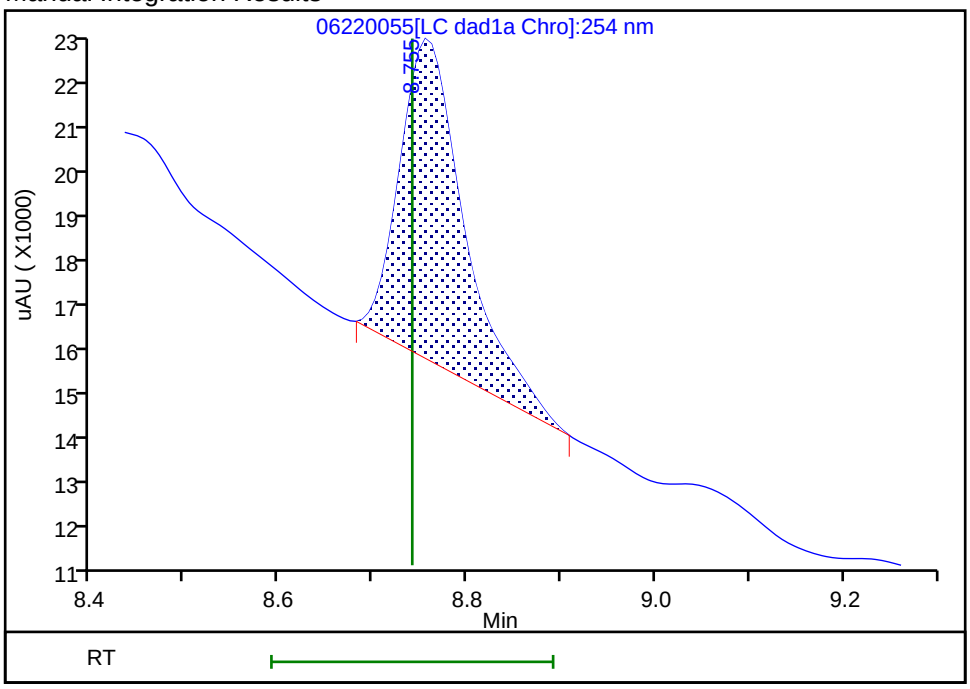
Processing Integration Results

RT: 8.75
Area: 45741
Amount: 0.330948
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 30086
Amount: 0.217680
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:57:48

Audit Action: Manually Integrated Audit Reason: Baseline

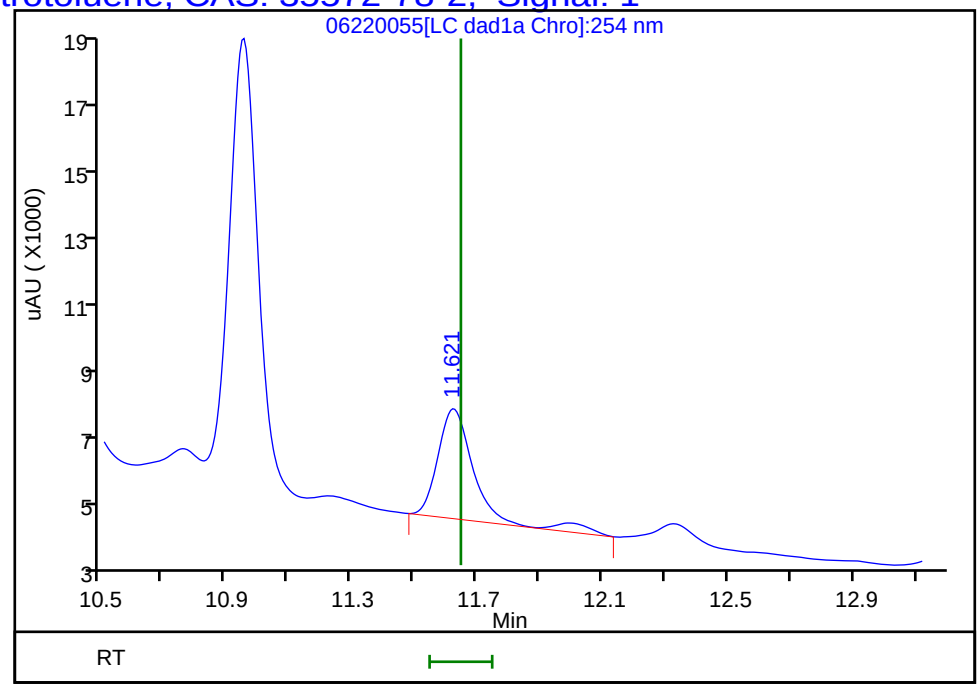
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.62
Response: 25958
Amount: 0.127987



Reviewer: zhangji, 23-Jun-2020 14:57:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

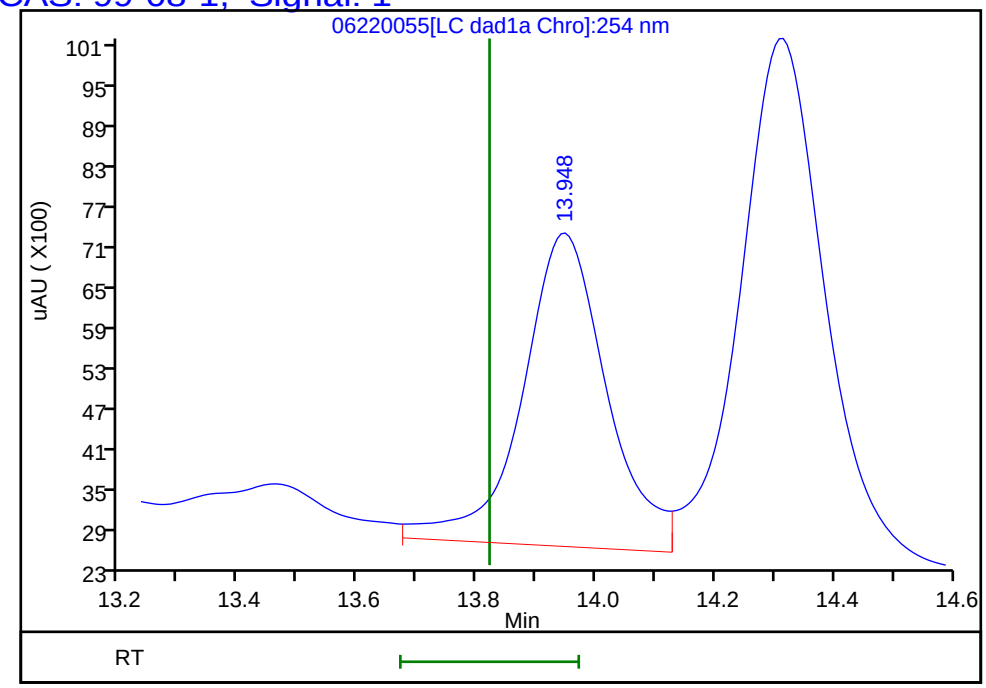
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.95
Response: 46042
Amount: 0.321908



Reviewer: zhangji, 23-Jun-2020 14:57:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

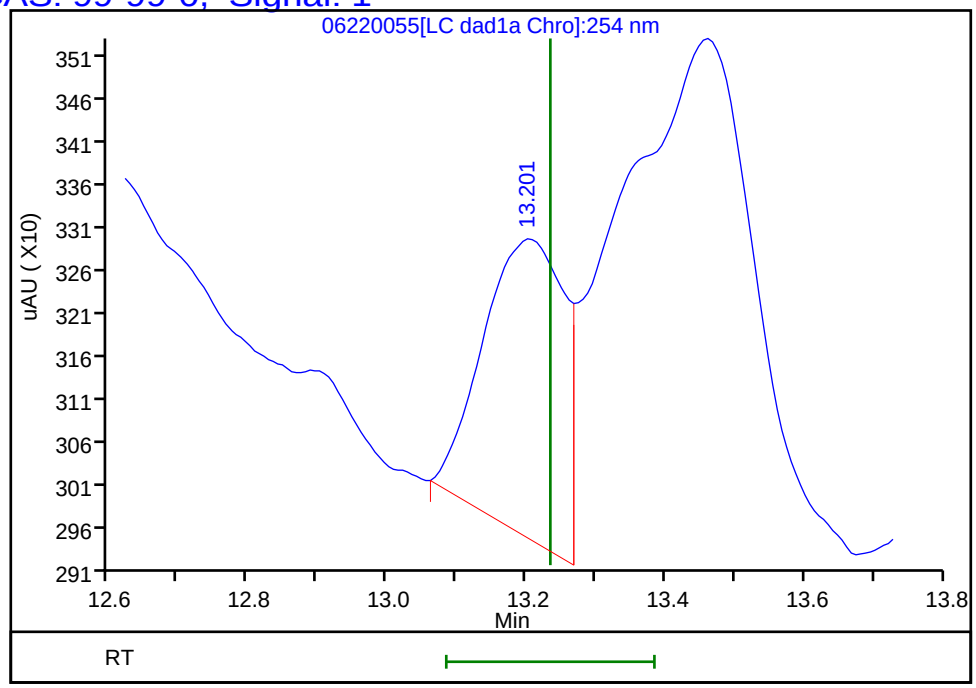
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.20
Response: 2802
Amount: 0.024795



Reviewer: zhangji, 23-Jun-2020 14:57:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

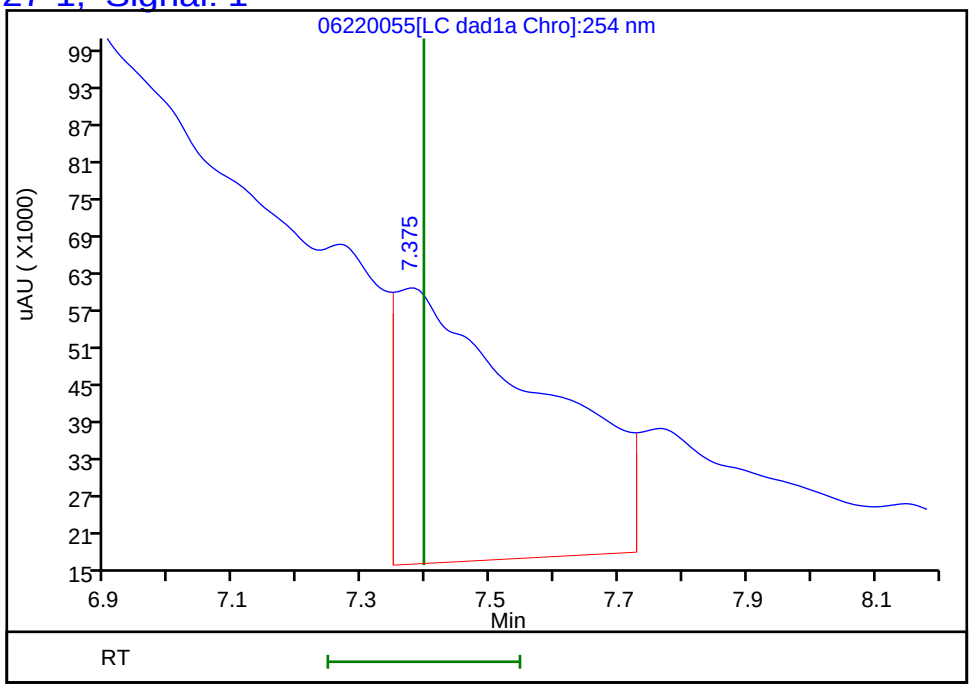
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.37
Response: 699998
Amount: 4.415160



Reviewer: zhangji, 23-Jun-2020 14:57:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

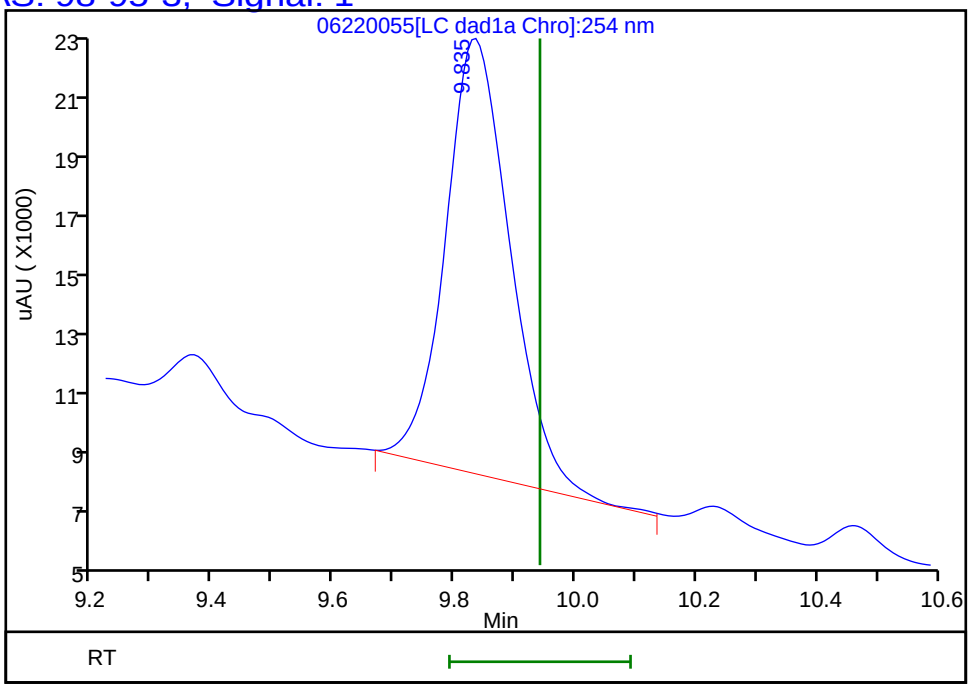
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d				
Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.83
Response: 103591
Amount: 0.516914



Reviewer: zhangji, 23-Jun-2020 14:57:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

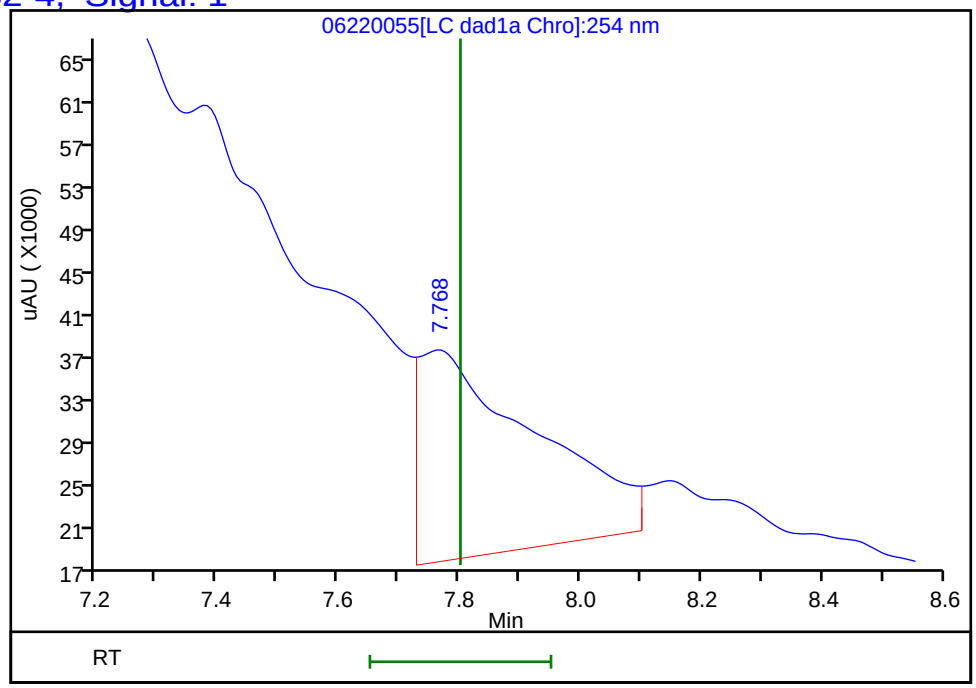
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220055.d

Injection Date:	23-Jun-2020 08:31:18	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16
Client ID:	G0117-20A		
Operator ID:	JZ	ALS Bottle#:	55 Worklist Smp#: 55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.77
Response: 258765
Amount: 2.219005



Reviewer: zhangji, 23-Jun-2020 14:57:54
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.: 280-137609-2

SDG No.:

Client Sample ID: G0117-20A Lab Sample ID: 280-137609-16

Matrix: Water Lab File ID: 06240022.D

Analysis Method: 8330A Date Collected: 06/12/2020 11:10

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 472.3(mL) Date Analyzed: 06/25/2020 06:40

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	118	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240022.D
Lims ID: 280-137609-A-16-A
Client ID: G0117-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 06:40:59 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-16-
Misc. Info.: 280-0092719-022
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:11:14

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.145			ND	U
	7 MNX	1		7.926			ND	
	8 RDX	1		9.358			ND	U
	9 Nitrobenzene	1		12.265			ND	
$	10 1,2-Dinitrobenzene	1	13.219	13.271	-0.052	67311	0.2362	M
	12 1,3-Dinitrobenzene	1		15.805			ND	
	14 o-Nitrotoluene	1		16.745			ND	U
	15 p-Nitrotoluene	1		17.031			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.465			ND	
	17 m-Nitrotoluene	1		17.958			ND	MU
	18 2-Amino-4,6-dinitrotoluene	1	18.333	18.398	-0.065	37015	0.0796	M
	19 1,3,5-Trinitrobenzene	1	19.053	19.138	-0.085	12478	0.0264	M
	20 2,6-Dinitrotoluene	1		20.065			ND	
	21 2,4-Dinitrotoluene	1		20.578			ND	
	22 Tetryl	1		23.885			ND	U
	23 2,4,6-Trinitrotoluene	1		24.905			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

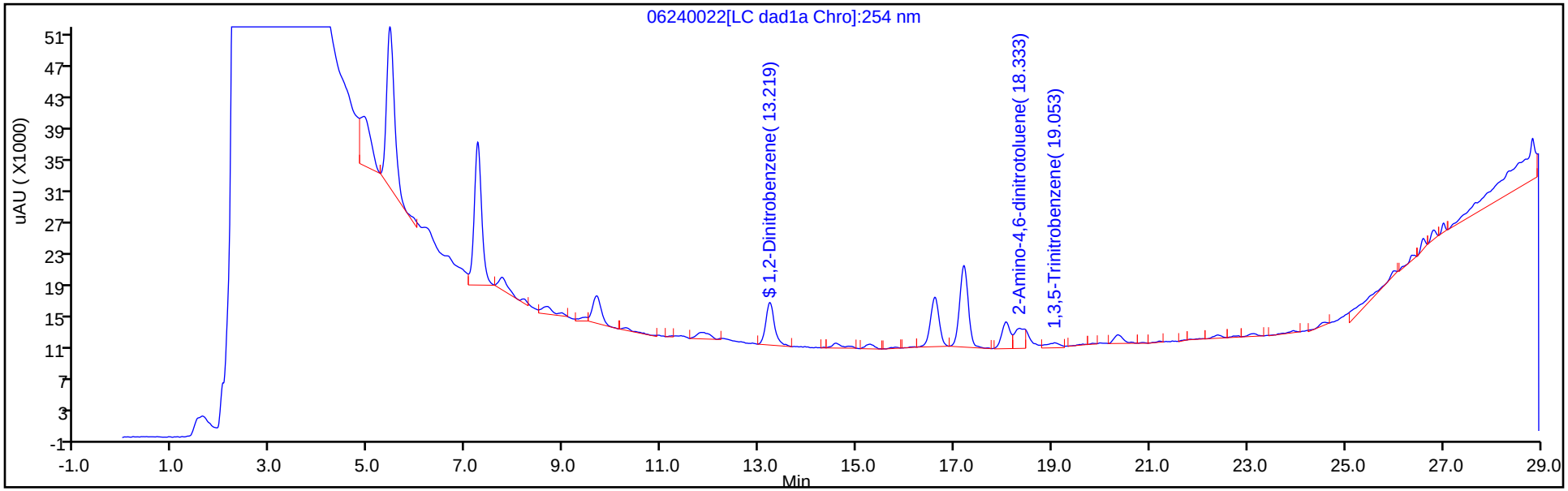
Report Date: 26-Jun-2020 16:19:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

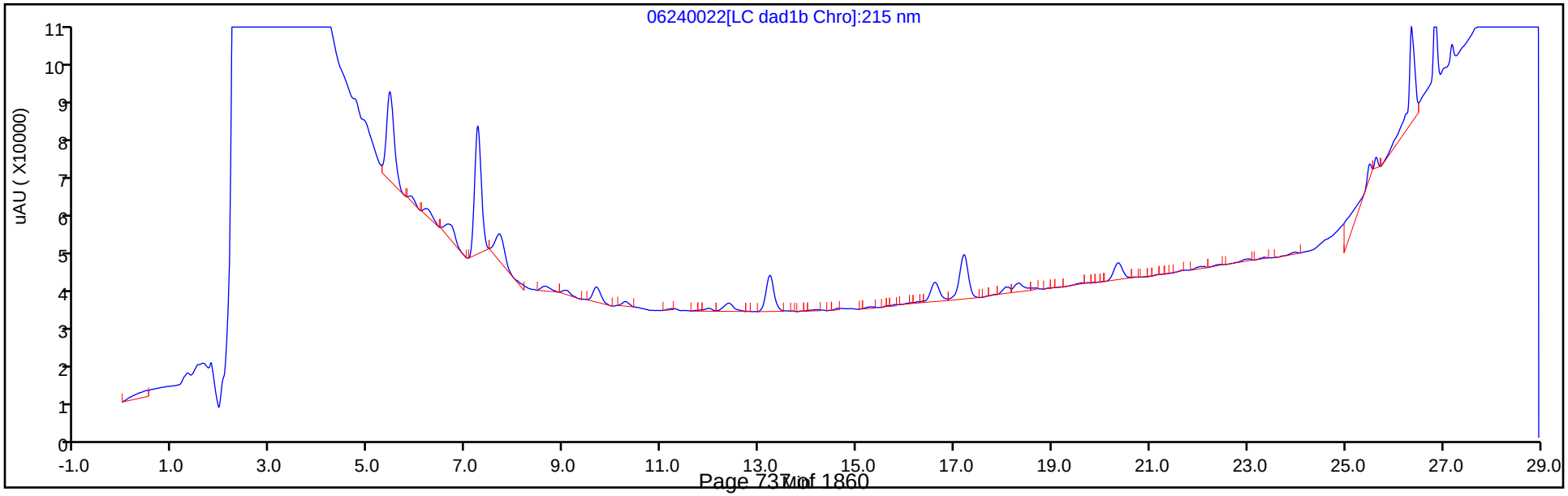
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d

Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16	Worklist Smp#:	22
Client ID:	G0117-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240022.D
Lims ID: 280-137609-A-16-A
Client ID: G0117-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 06:40:59 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-16-
Misc. Info.: 280-0092719-022
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:11:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2362	118.08

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

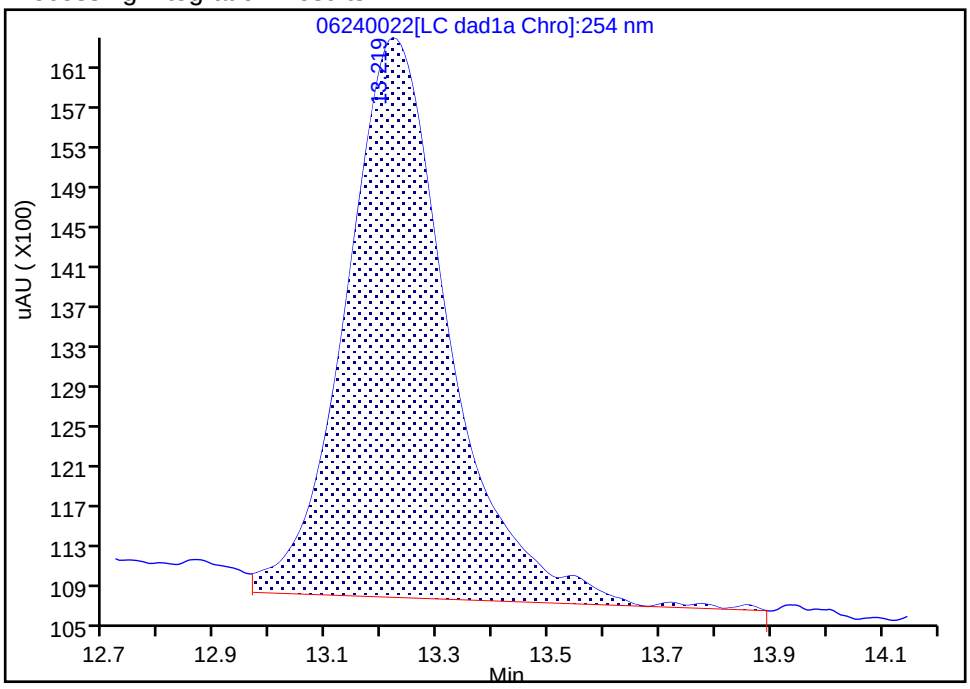
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d				
Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

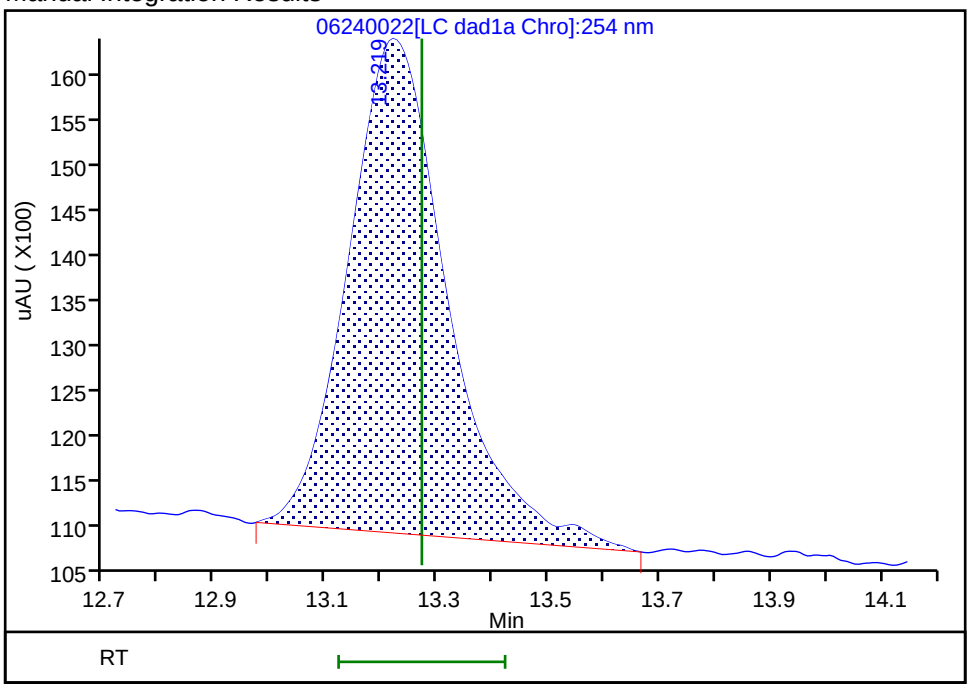
Processing Integration Results

RT: 13.22
Area: 71851
Amount: 0.252543
Amount Units: ug/ml



Manual Integration Results

RT: 13.22
Area: 67311
Amount: 0.236167
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:13:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

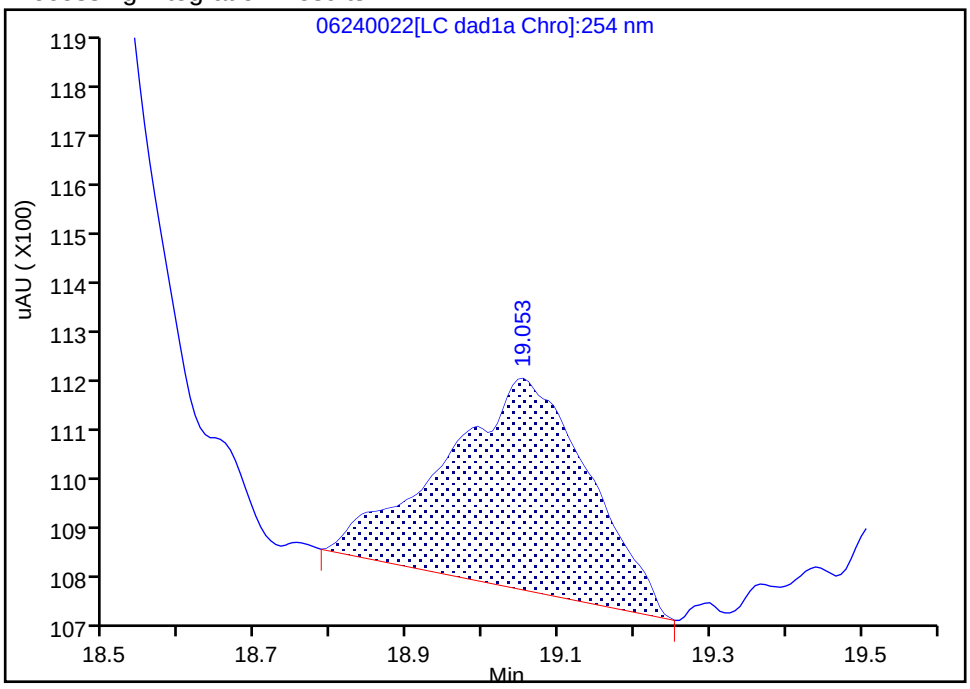
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d				
Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

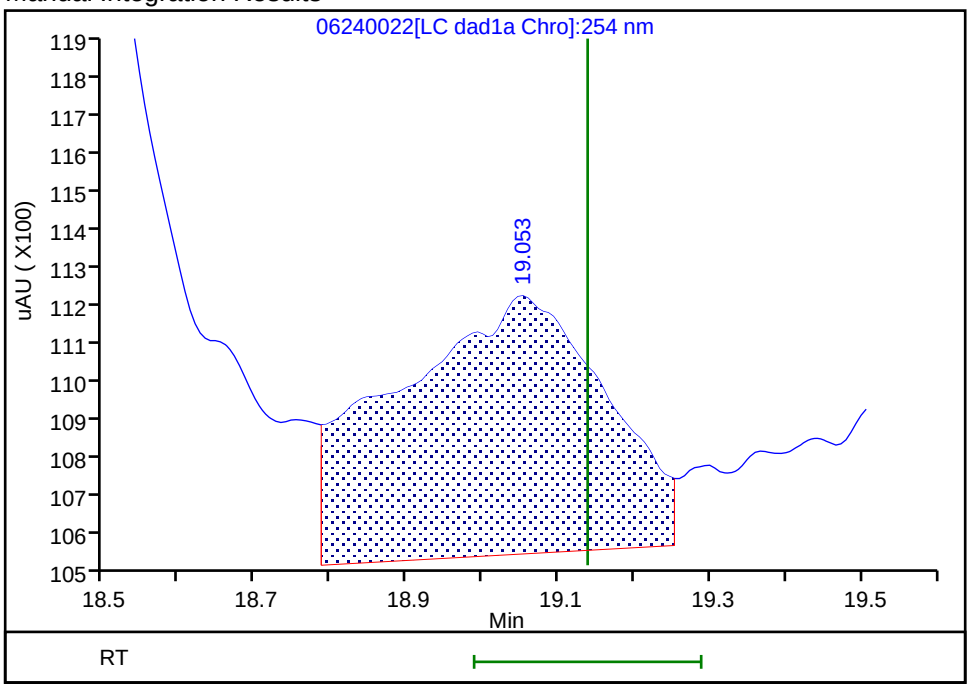
Processing Integration Results

RT: 19.05
Area: 5282
Amount: 0.011180
Amount Units: ug/ml



Manual Integration Results

RT: 19.05
Area: 12478
Amount: 0.026411
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:13:15

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

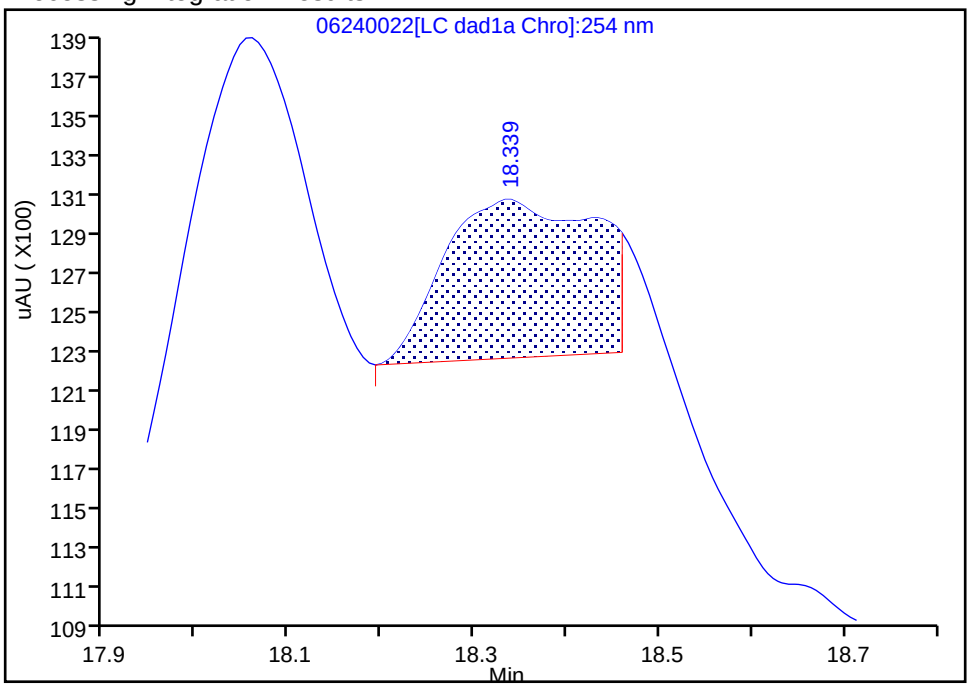
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d				
Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

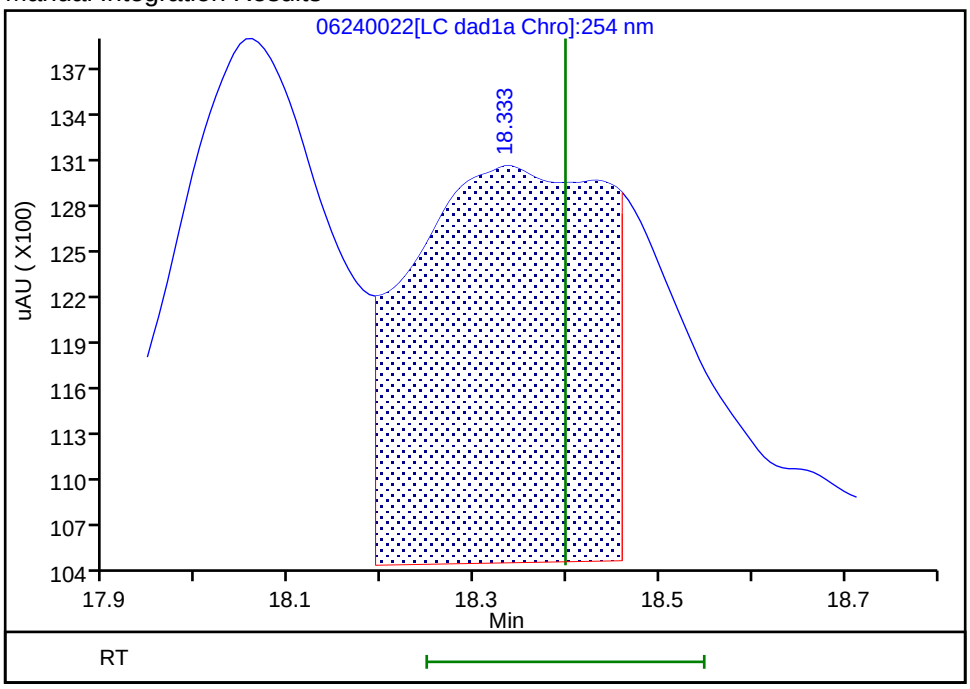
Processing Integration Results

RT: 18.34
Area: 9039
Amount: 0.019430
Amount Units: ug/ml



Manual Integration Results

RT: 18.33
Area: 37015
Amount: 0.079566
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:13:15

Audit Action: Assigned New Baseline Audit Reason: Baseline

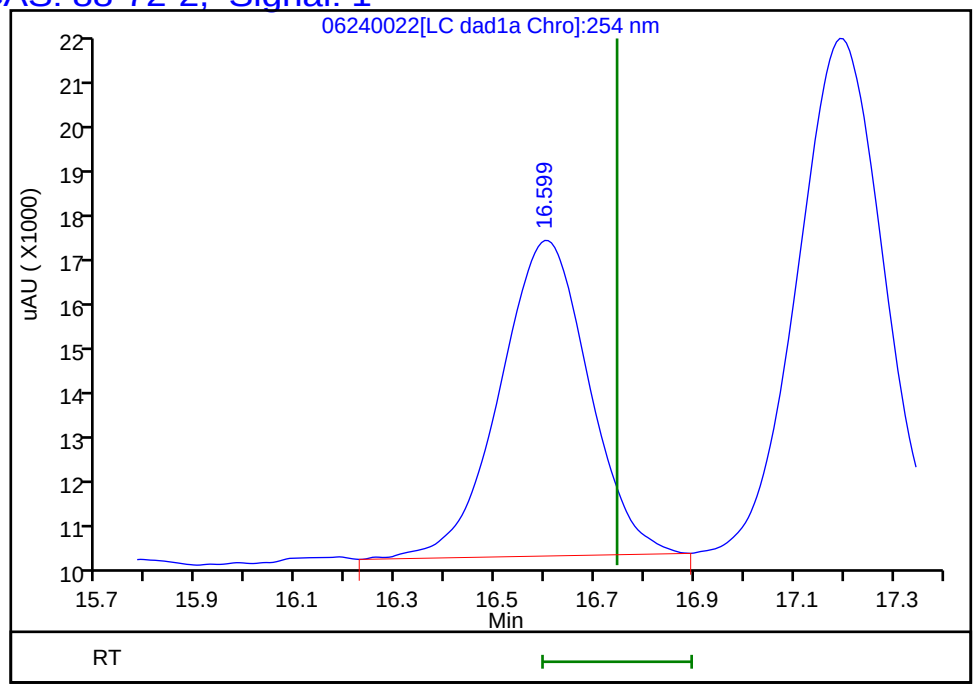
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d				
Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.60
Response: 78084
Amount: 0.286059



Reviewer: zhangji, 25-Jun-2020 17:13:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

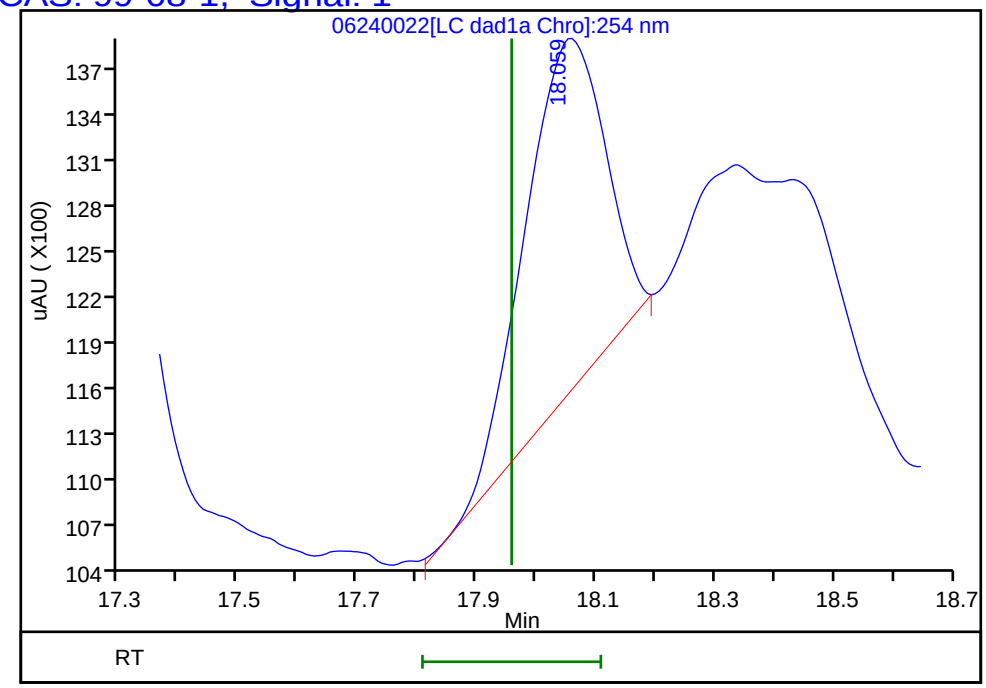
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d				
Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.06
Response: 21704
Amount: 0.072752



Reviewer: zhangji, 25-Jun-2020 17:13:19
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

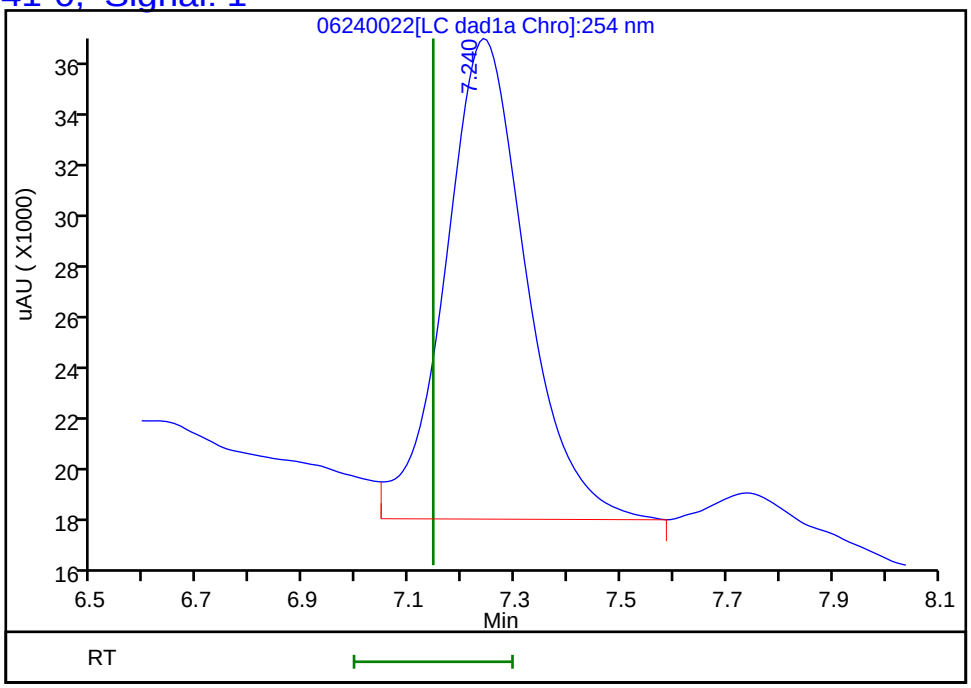
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d

Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0, Signal: 1

RT: 7.24
Response: 193568
Amount: 1.063448



Reviewer: zhangji, 25-Jun-2020 17:13:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

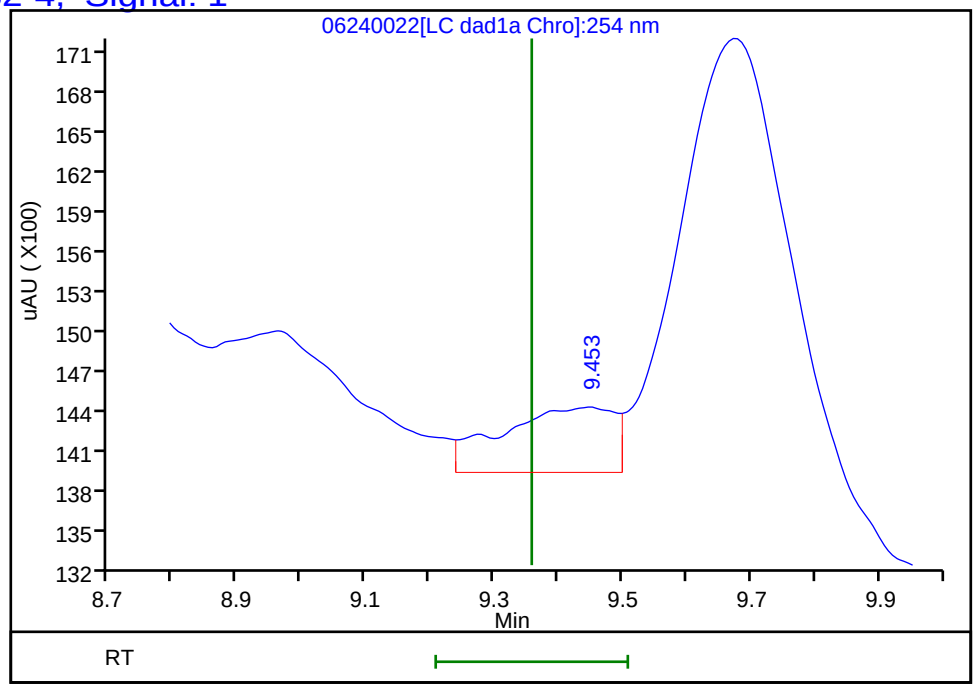
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d

Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.45
Response: 5875
Amount: 0.024042



Reviewer: zhangji, 25-Jun-2020 17:13:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

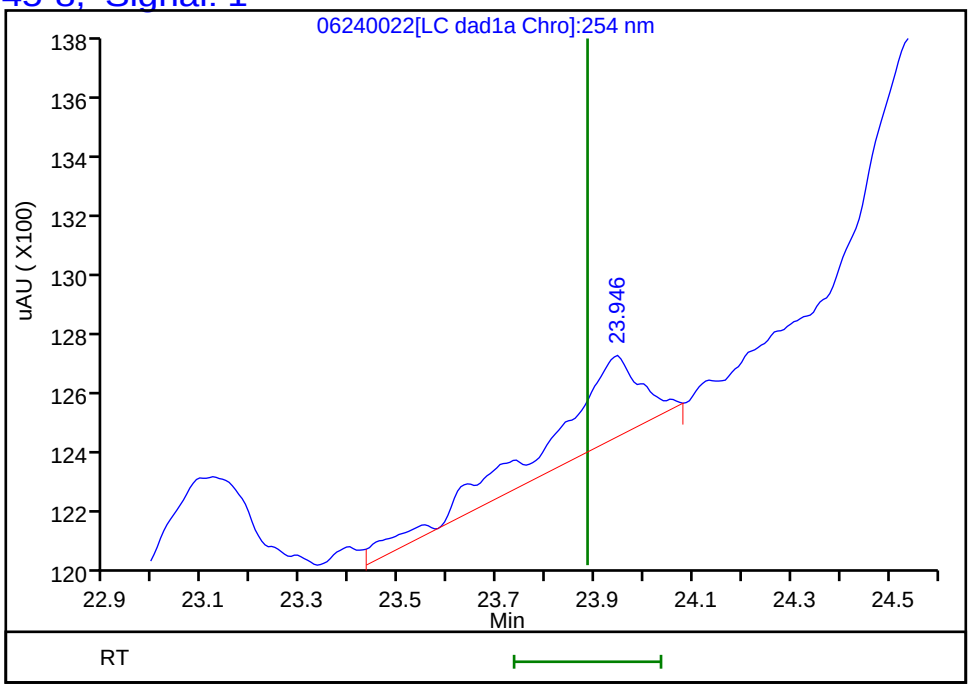
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240022.d

Injection Date:	25-Jun-2020 06:40:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-16-A	Lab Sample ID:	280-137609-16		
Client ID:	G0117-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.95
Response: 3601
Amount: 0.009767



Reviewer: zhangji, 25-Jun-2020 17:13:19

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.: 280-137609-2

SDG No.:

Client Sample ID: PZ013-20A Lab Sample ID: 280-137609-17

Matrix: Water Lab File ID: 06220056.D

Analysis Method: 8330A Date Collected: 06/12/2020 11:30

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 461.7(mL) Date Analyzed: 06/23/2020 08:54

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040
121-14-2	2,4-Dinitrotoluene	0.078	J M	0.11	0.087	0.030
606-20-2	2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	3.9	M	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.093
99-08-1	3-Nitrotoluene	0.43	U M	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	3.9	M	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
5755-27-1	MNX	0.43	U	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U M	0.23	0.22	0.099
121-82-4	RDX	0.22	U M	0.23	0.22	0.056

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220056.D
Lims ID: 280-137609-A-17-A
Client ID: PZ013-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 08:54:21 ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-17-
Misc. Info.: 280-0092608-056
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:59:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.749	6.734	0.015	11880	0.1382	M
6 MNX	1		7.396			ND	
7 RDX	1		7.801			ND	U
$ 9 1,2-Dinitrobenzene	1	8.749	8.741	0.008	26877	0.1945	M
10 1,3,5-Trinitrobenzene	1		8.928			ND	
11 1,3-Dinitrobenzene	1		9.568			ND	U
12 Nitrobenzene	1		9.941			ND	U
14 Tetryl	1	10.208	10.234	-0.026	227963	1.29	M
16 2,4,6-Trinitrotoluene	1	11.228	11.201	0.027	3491	0.0171	M
17 4-Amino-2,6-dinitrotoluene	1	11.388	11.361	0.027	62935	0.3594	M
18 2-Amino-4,6-dinitrotoluene	1	11.675	11.648	0.027	72952	0.3597	M
19 2,6-Dinitrotoluene	1		11.788			ND	
20 2,4-Dinitrotoluene	1	12.008	11.988	0.020	2199	0.007243	M
21 o-Nitrotoluene	1		12.801			ND	
22 p-Nitrotoluene	1		13.234			ND	U
23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

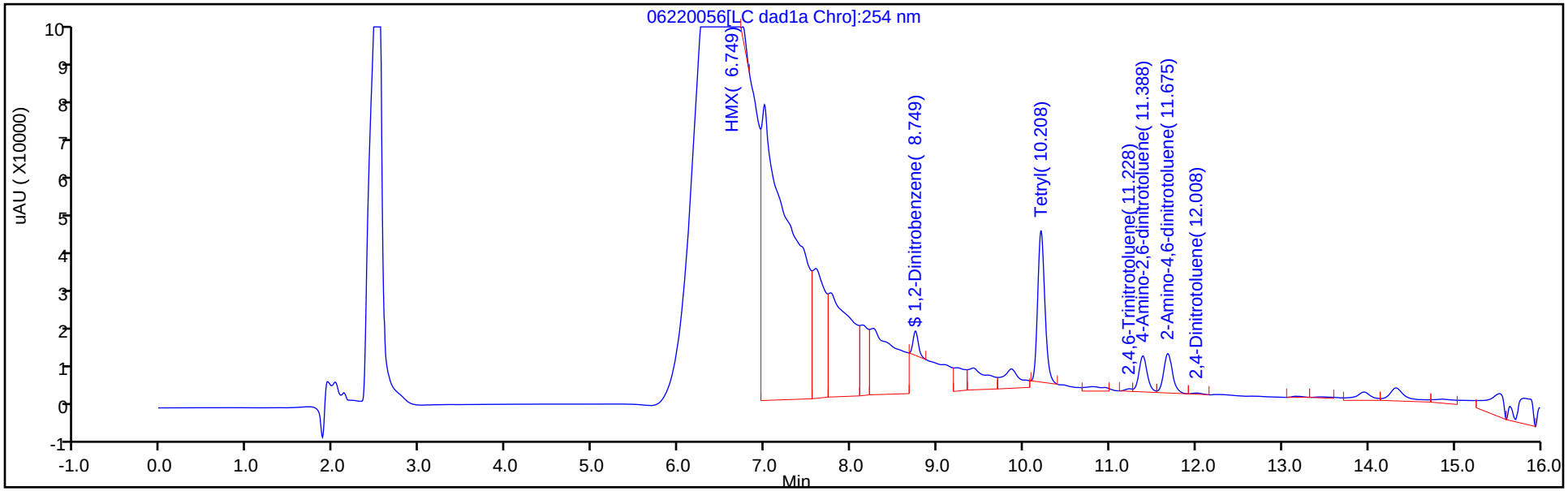
Report Date: 23-Jun-2020 15:18:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

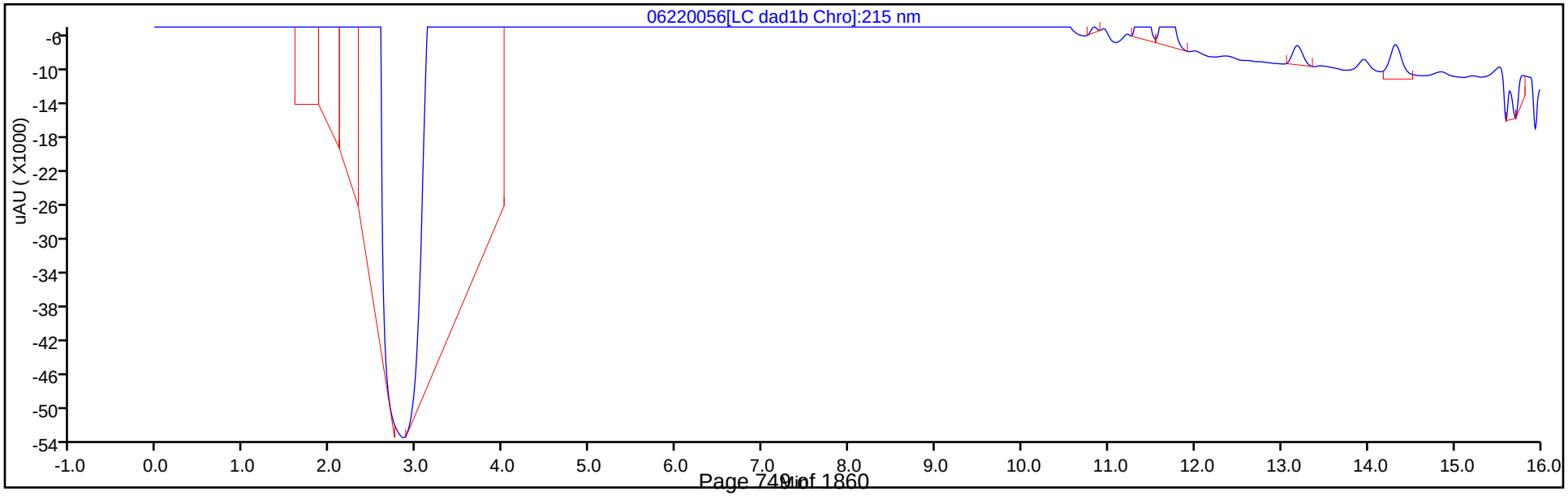
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d

Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17	Worklist Smp#:	56
Client ID:	PZ013-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220056.D				
Lims ID:	280-137609-A-17-A				
Client ID:	PZ013-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 08:54:21	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-17-				
Misc. Info.:	280-0092608-056				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				

First Level Reviewer: zhangji Date: 23-Jun-2020 14:59:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1945	97.23

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

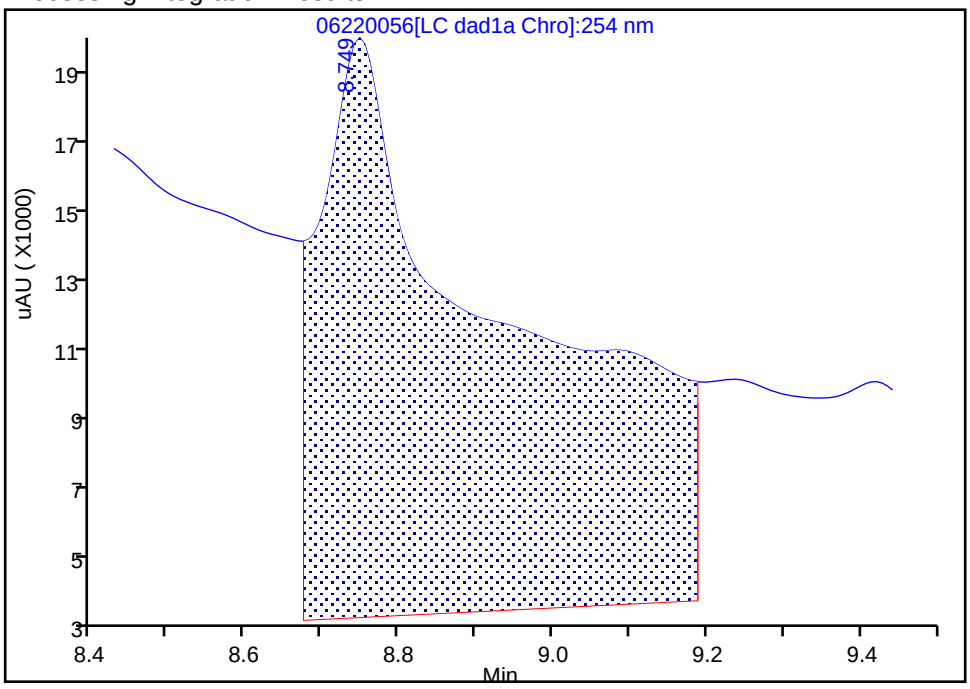
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d		
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17
Client ID:	PZ013-20A		
Operator ID:	JZ	ALS Bottle#:	56 Worklist Smp#: 56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

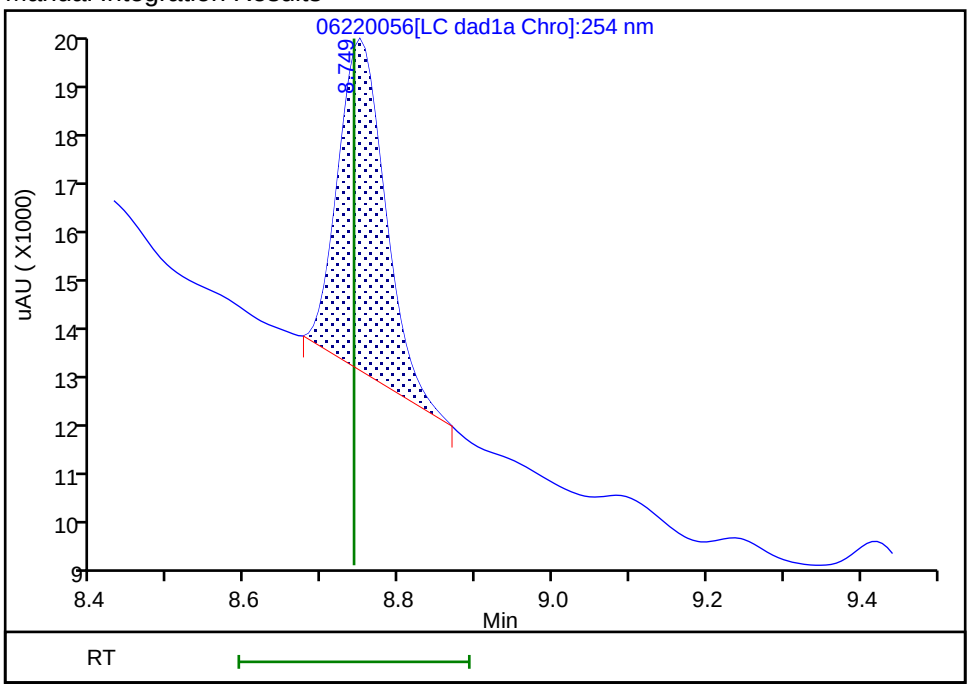
Processing Integration Results

RT: 8.75
Area: 278684
Amount: 2.016349
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 26877
Amount: 0.194462
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:05
Audit Action: Manually Integrated Audit Reason: Baseline

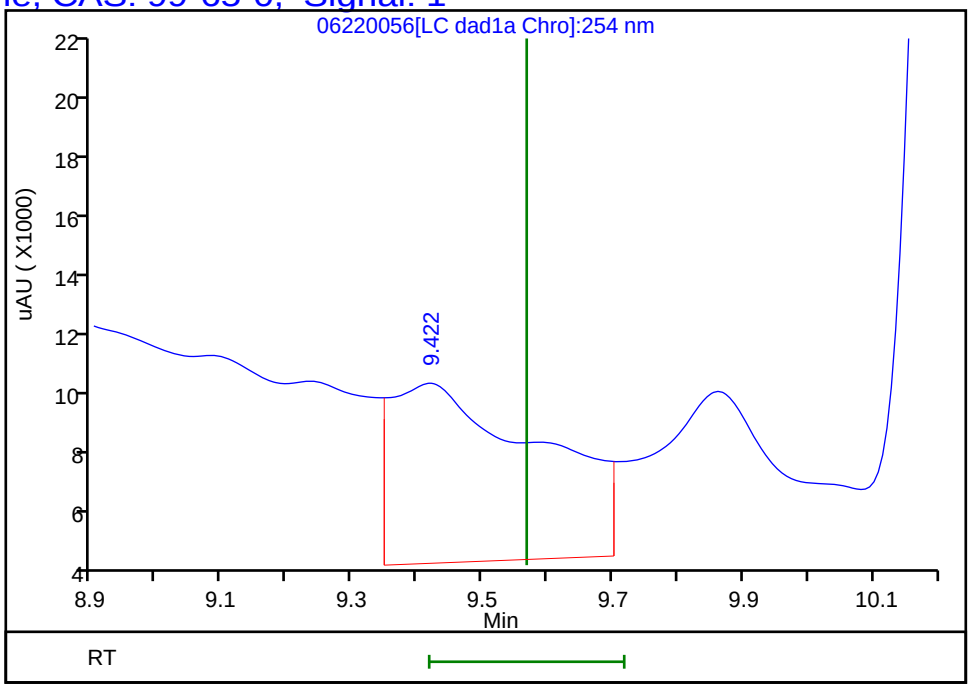
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.42
Response: 89812
Amount: 0.292847



Reviewer: zhangji, 23-Jun-2020 14:59:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

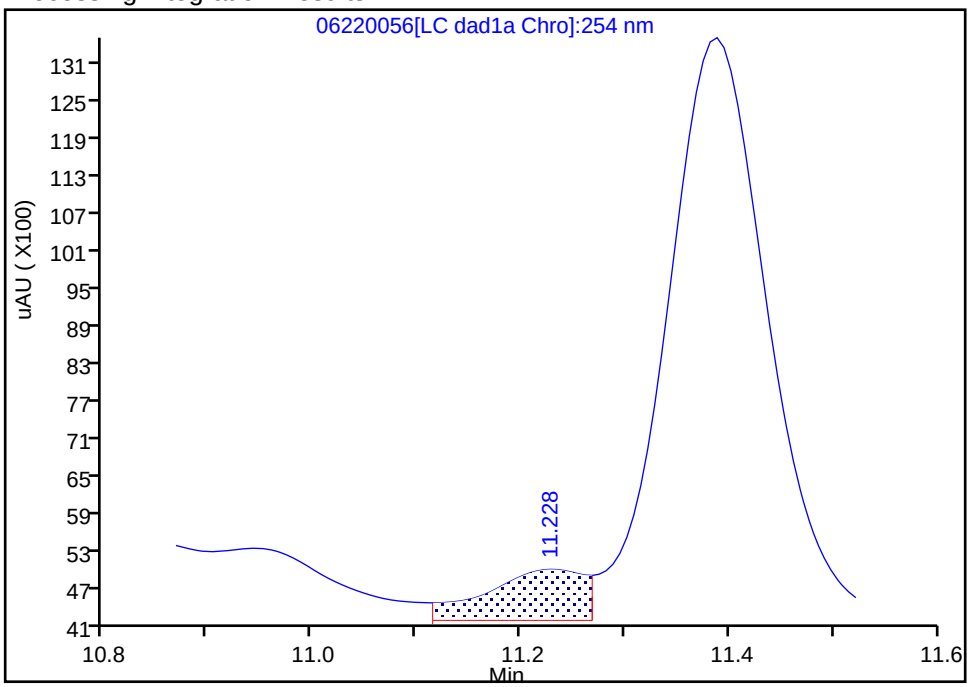
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

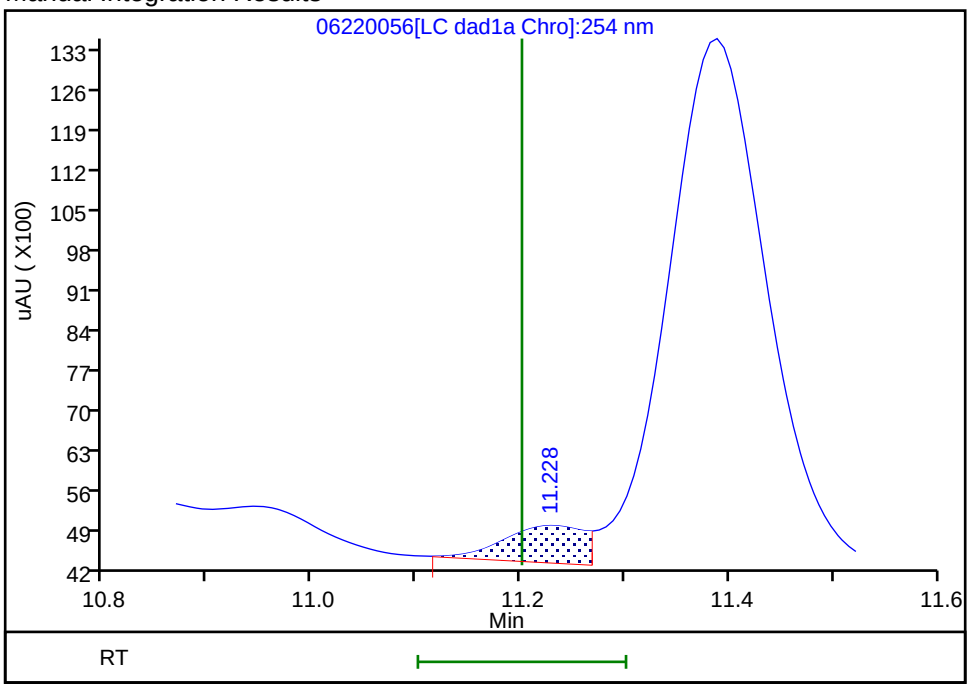
Processing Integration Results

RT: 11.23
Area: 5308
Amount: 0.026016
Amount Units: ug/mL



Manual Integration Results

RT: 11.23
Area: 3491
Amount: 0.017110
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:17

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

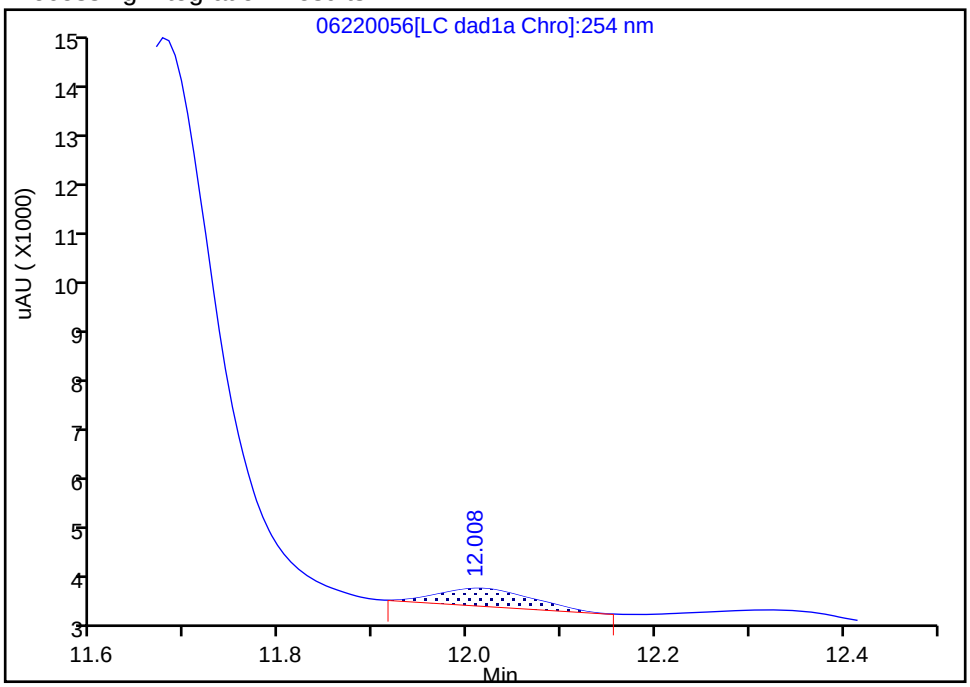
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

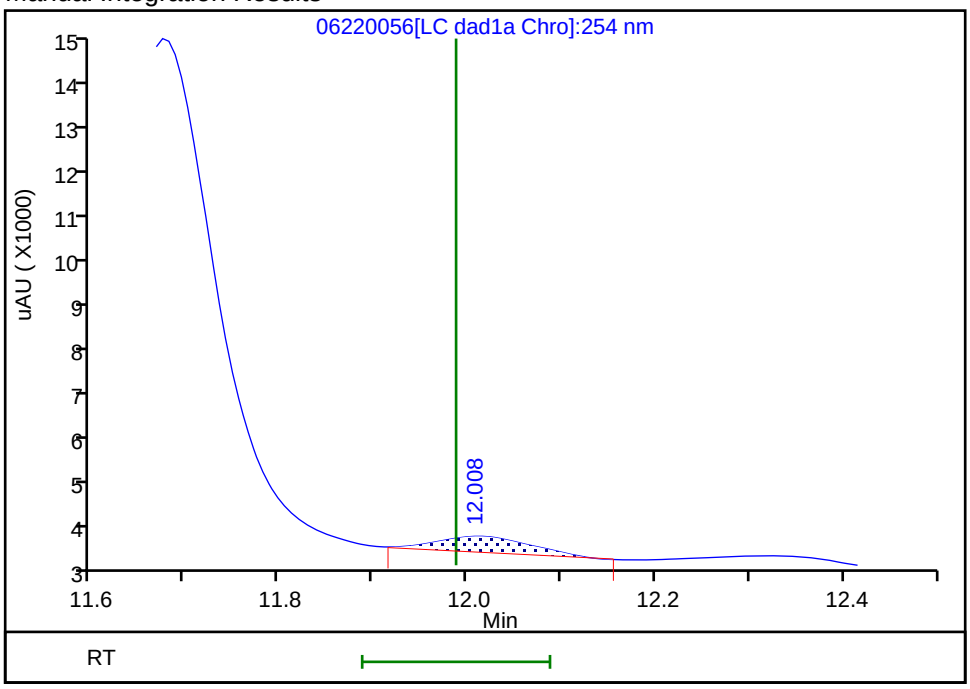
Processing Integration Results

RT: 12.01
Area: 2285
Amount: 0.007527
Amount Units: ug/mL



Manual Integration Results

RT: 12.01
Area: 2199
Amount: 0.007243
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:17

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

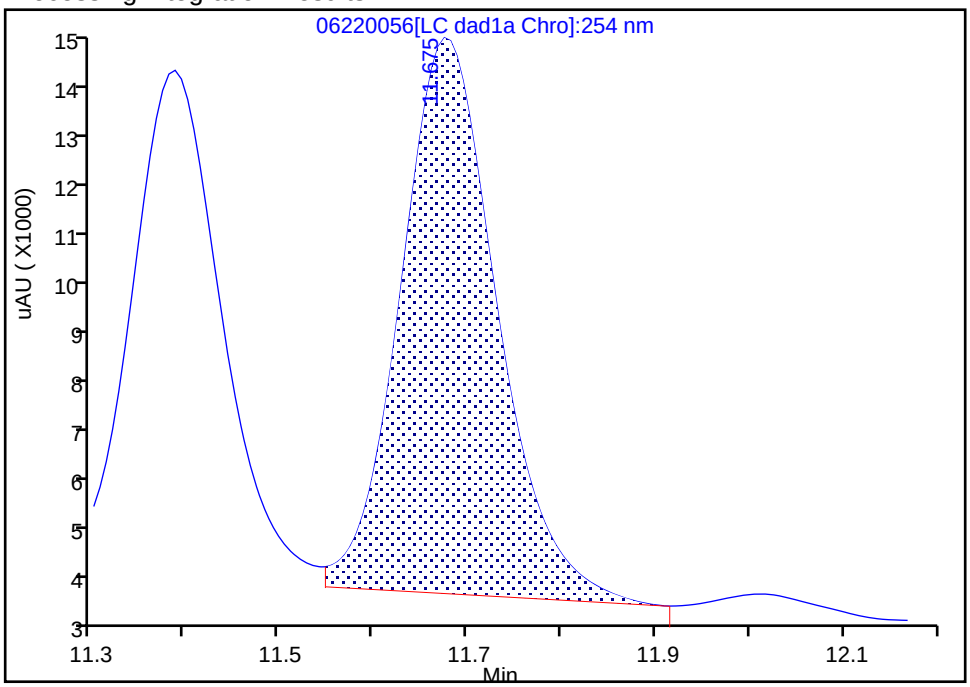
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

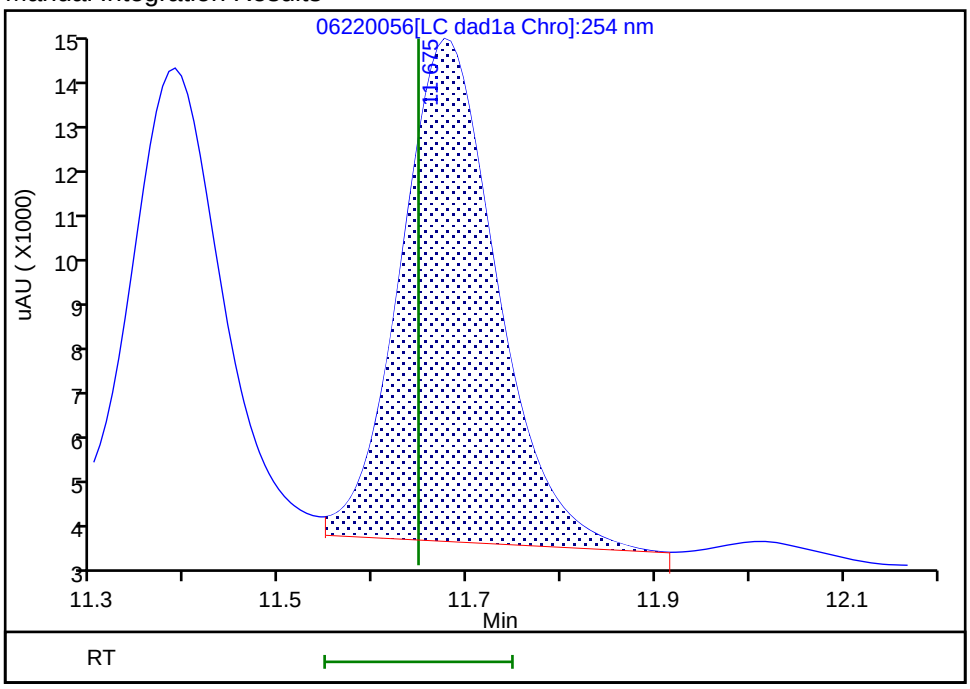
Processing Integration Results

RT: 11.68
Area: 72787
Amount: 0.358881
Amount Units: ug/mL



Manual Integration Results

RT: 11.68
Area: 72952
Amount: 0.359694
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:17

Audit Action: Assigned New Baseline Audit Reason: Baseline

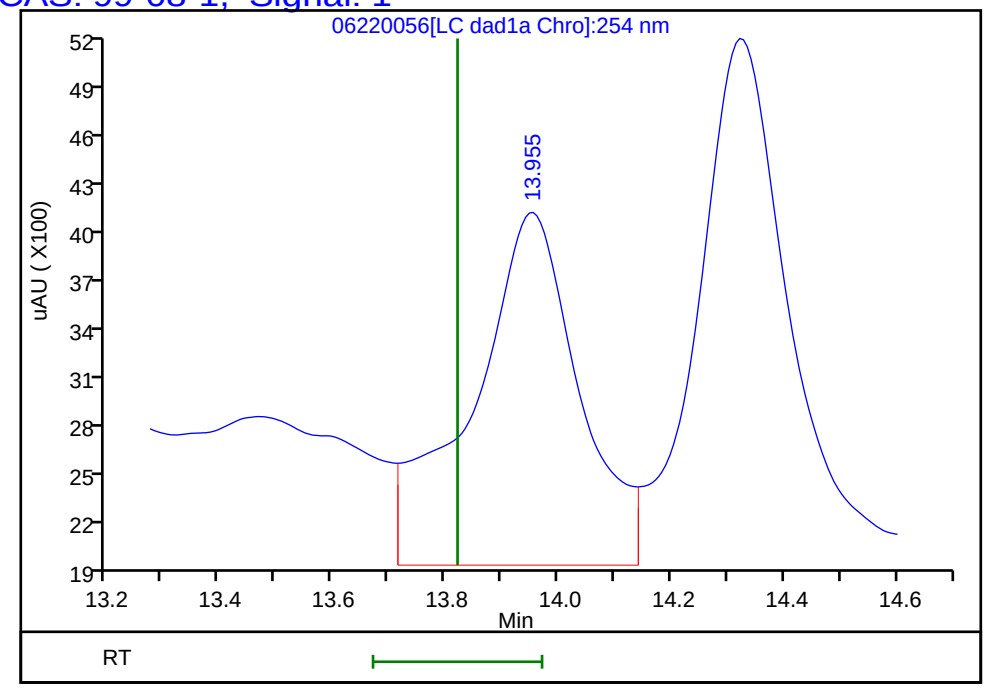
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.96
Response: 28290
Amount: 0.197793



Reviewer: zhangji, 23-Jun-2020 14:59:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

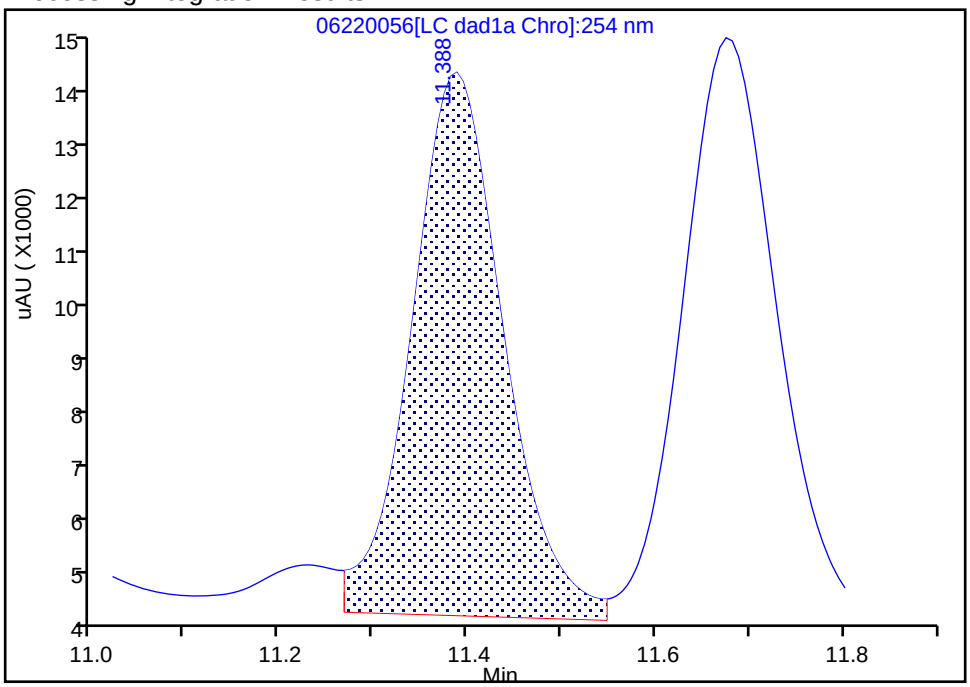
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

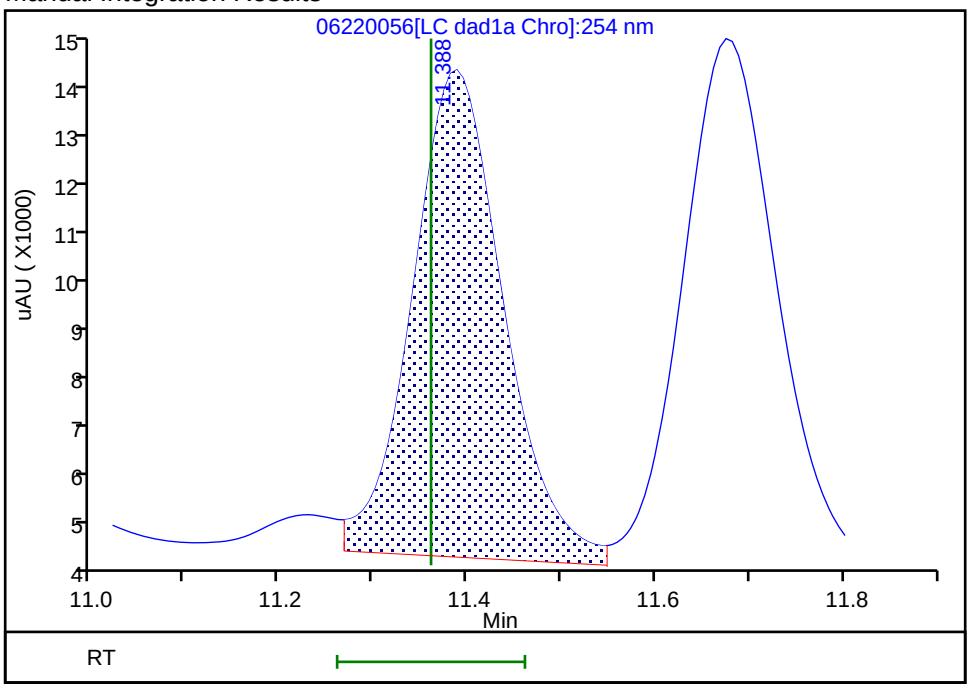
Processing Integration Results

RT: 11.39
Area: 63901
Amount: 0.364767
Amount Units: ug/mL



Manual Integration Results

RT: 11.39
Area: 62935
Amount: 0.359352
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:17
Audit Action: Assigned New Baseline Audit Reason: Baseline

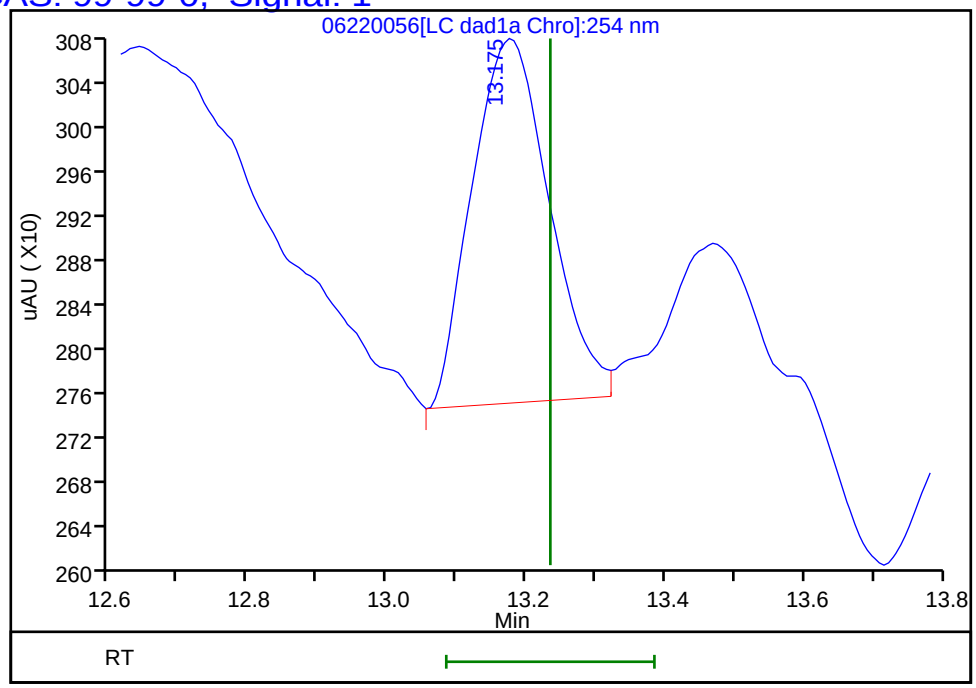
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.18
Response: 2509
Amount: 0.022203



Reviewer: zhangji, 23-Jun-2020 14:59:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

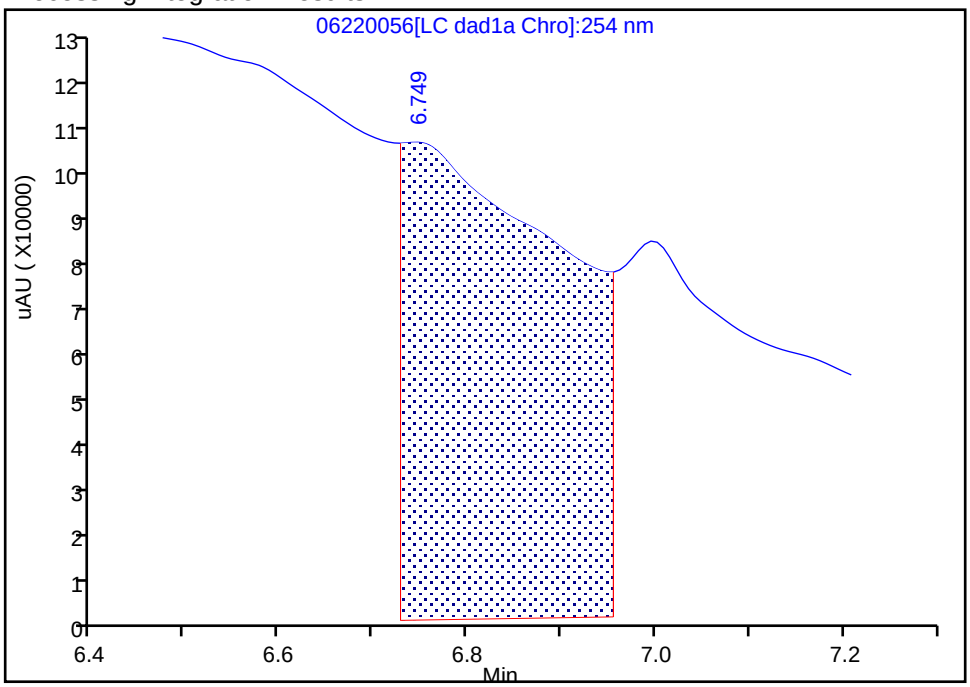
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

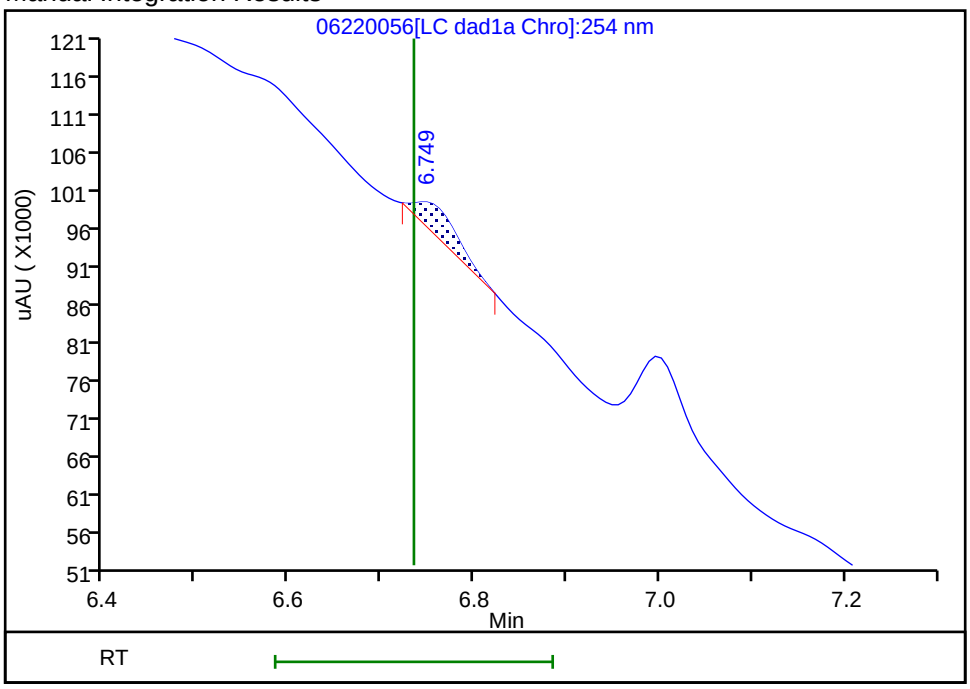
Processing Integration Results

RT: 6.75
Area: 1137759
Amount: 13.235578
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 11880
Amount: 0.138200
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:58:58

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

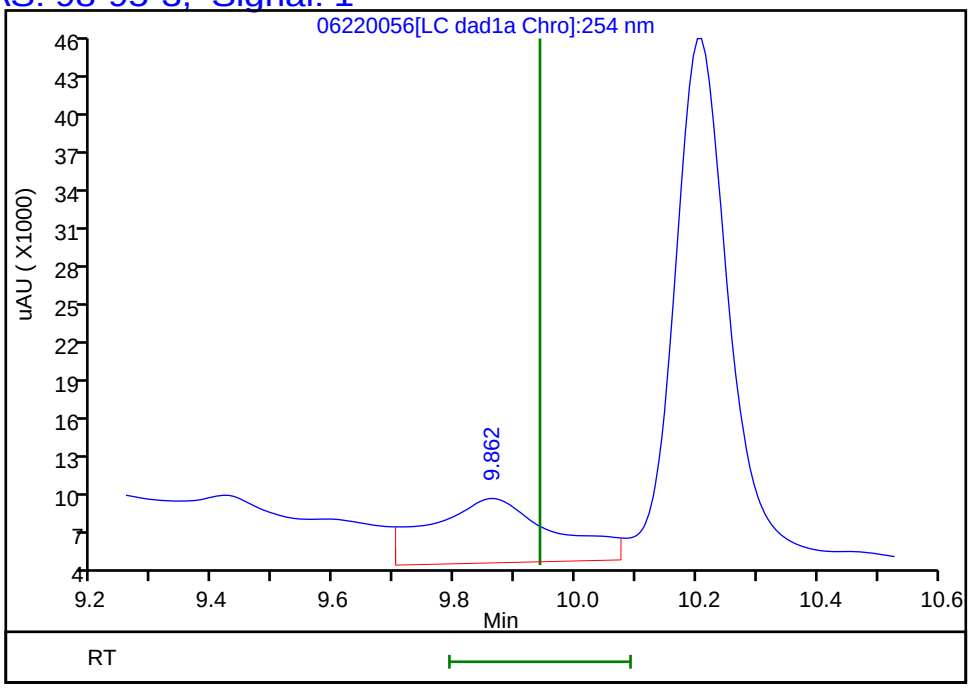
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d

Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.86
Response: 70638
Amount: 0.352480



Reviewer: zhangji, 23-Jun-2020 14:59:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

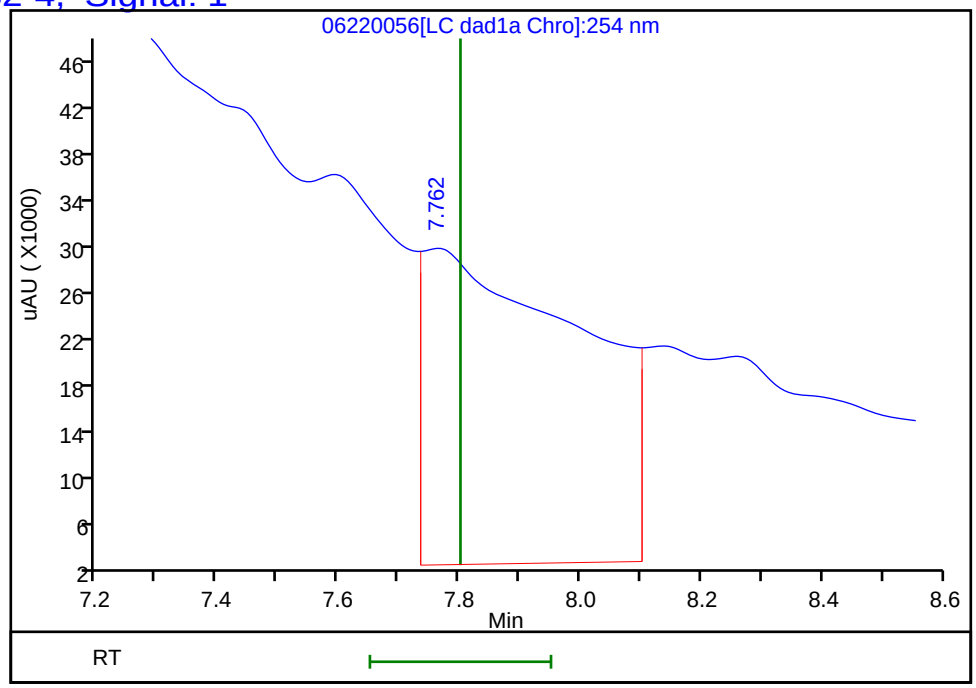
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d

Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 486829
Amount: 4.174738



Reviewer: zhangji, 23-Jun-2020 14:59:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

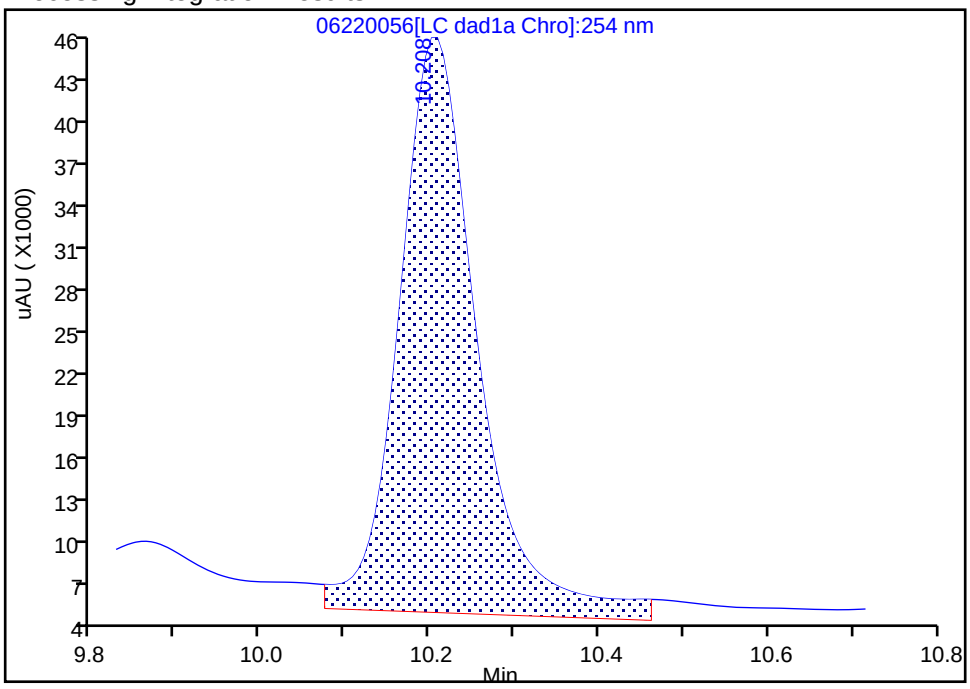
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220056.d				
Injection Date:	23-Jun-2020 08:54:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

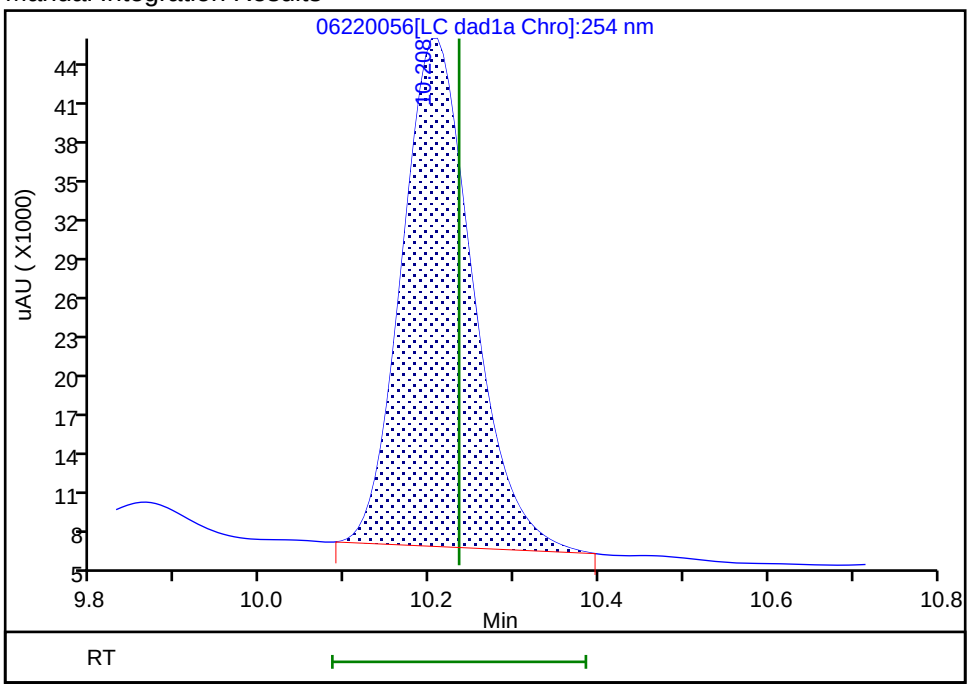
Processing Integration Results

RT: 10.21
Area: 264779
Amount: 1.495657
Amount Units: ug/mL



Manual Integration Results

RT: 10.21
Area: 227963
Amount: 1.287694
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:58:33

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: PZ013-20A Lab Sample ID: 280-137609-17

Matrix: Water Lab File ID: 06240023.D

Analysis Method: 8330A Date Collected: 06/12/2020 11:30

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 461.7(mL) Date Analyzed: 06/25/2020 07:15

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049
2691-41-0	HMX	0.22	U M	0.23	0.22	0.095
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	113	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240023.D
Lims ID: 280-137609-A-17-A
Client ID: PZ013-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 07:15:56 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-17-
Misc. Info.: 280-0092719-023
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:15:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.106	7.145	-0.039	5660	0.001898	7M
	7 MNX	1		7.926			ND	
	8 RDX	1		9.358			ND	
	9 Nitrobenzene	1		12.265			ND	
$	10 1,2-Dinitrobenzene	1	13.206	13.271	-0.065	64712	0.2268	M
	12 1,3-Dinitrobenzene	1	15.746	15.805	-0.059	4491	0.006661	M
	14 o-Nitrotoluene	1		16.745			ND	U
	15 p-Nitrotoluene	1		17.031			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.372	17.465	-0.093	125106	0.3624	M
	17 m-Nitrotoluene	1		17.958			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.306	18.398	-0.092	163758	0.3520	
	19 1,3,5-Trinitrobenzene	1		19.138			ND	
	20 2,6-Dinitrotoluene	1		20.065			ND	
	21 2,4-Dinitrotoluene	1	20.639	20.578	0.061	3381	0.005282	M
	22 Tetryl	1		23.885			ND	
	23 2,4,6-Trinitrotoluene	1		24.905			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

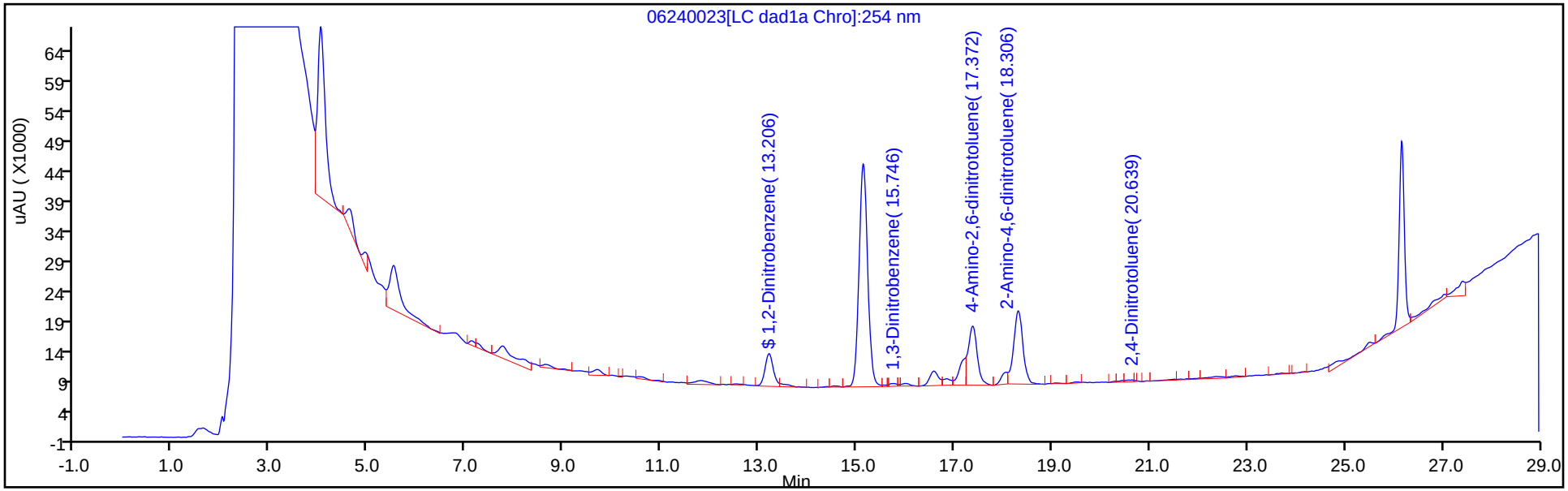
Report Date: 26-Jun-2020 16:19:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

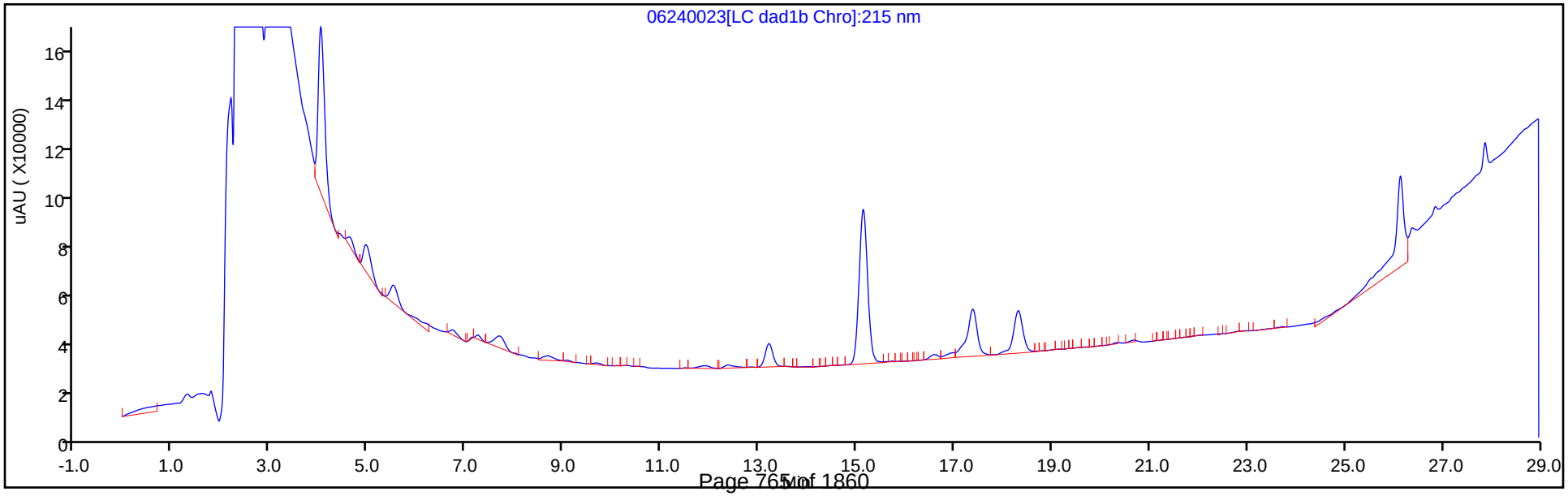
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d

Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17	Worklist Smp#:	23
Client ID:	PZ013-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240023.D				
Lims ID:	280-137609-A-17-A				
Client ID:	PZ013-20A				
Sample Type:	Client				
Inject. Date:	25-Jun-2020 07:15:56	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-17-				
Misc. Info.:	280-0092719-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Jun-2020 16:19:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:15:30		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2268	113.40

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

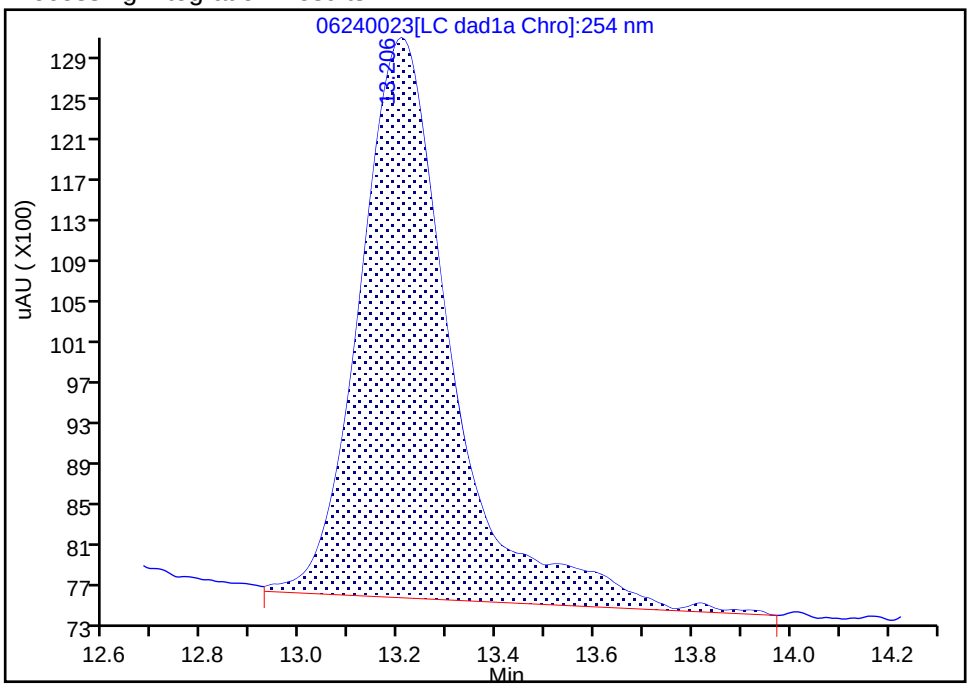
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

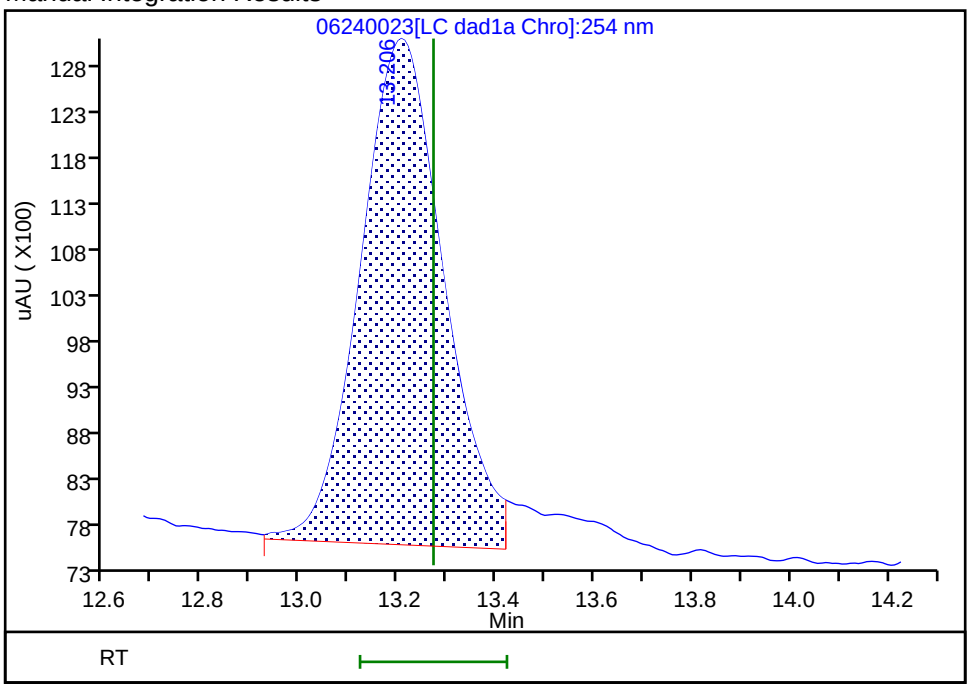
Processing Integration Results

RT: 13.21
Area: 71279
Amount: 0.250480
Amount Units: ug/ml



Manual Integration Results

RT: 13.21
Area: 64712
Amount: 0.226792
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:15:28

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

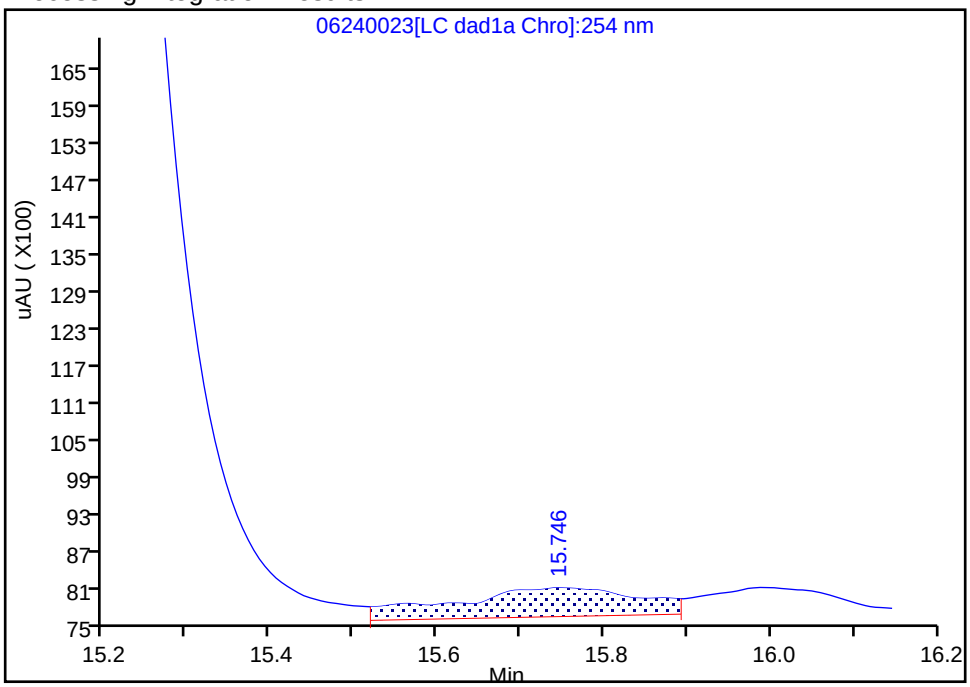
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

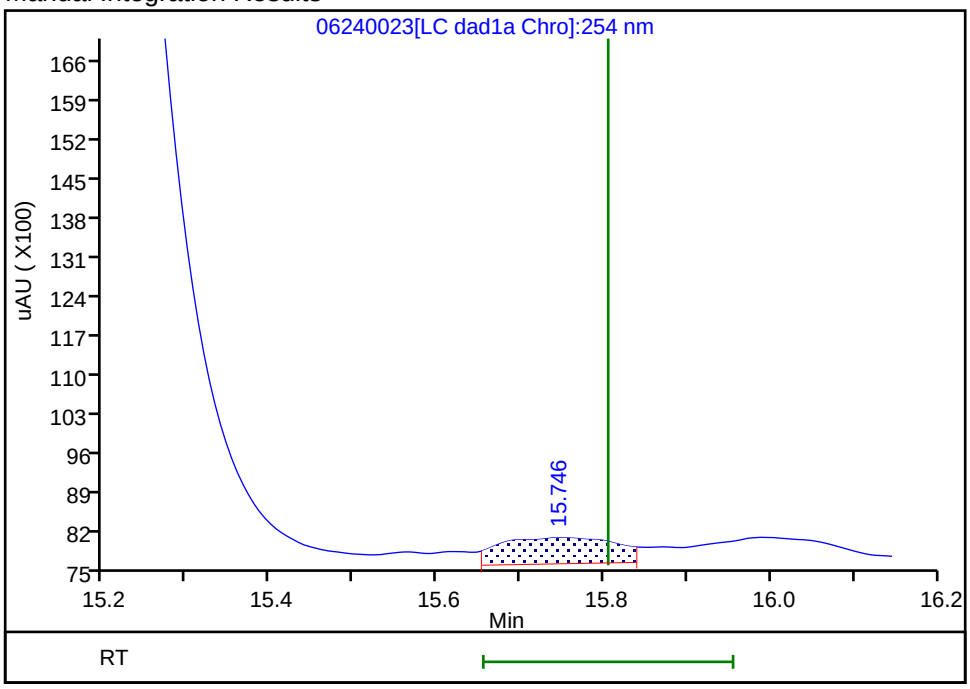
Processing Integration Results

RT: 15.75
Area: 7257
Amount: 0.010764
Amount Units: ug/ml



Manual Integration Results

RT: 15.75
Area: 4491
Amount: 0.006661
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:15:22

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

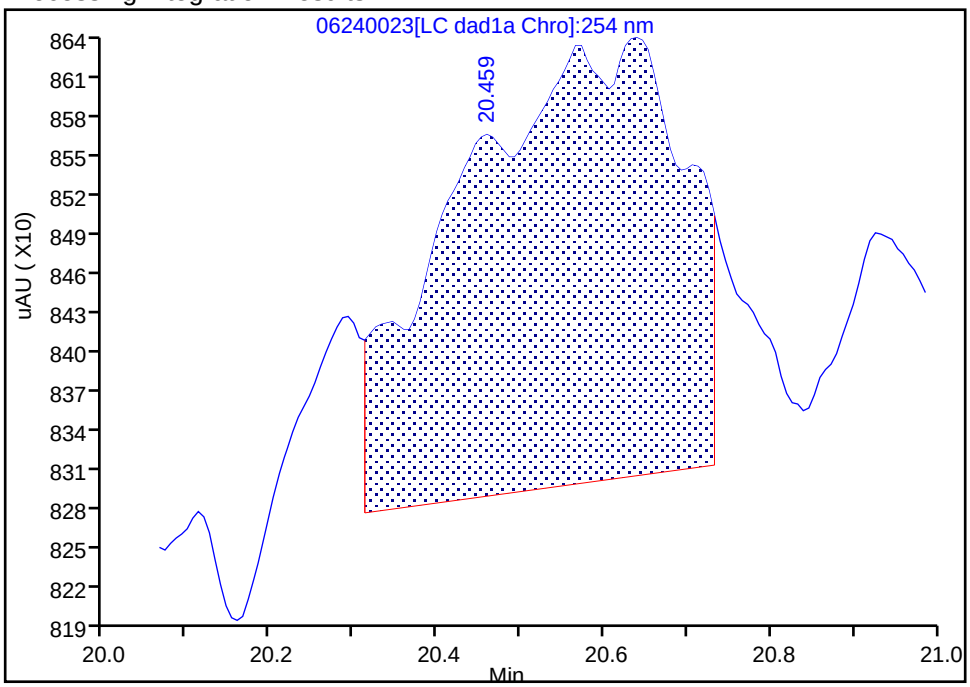
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

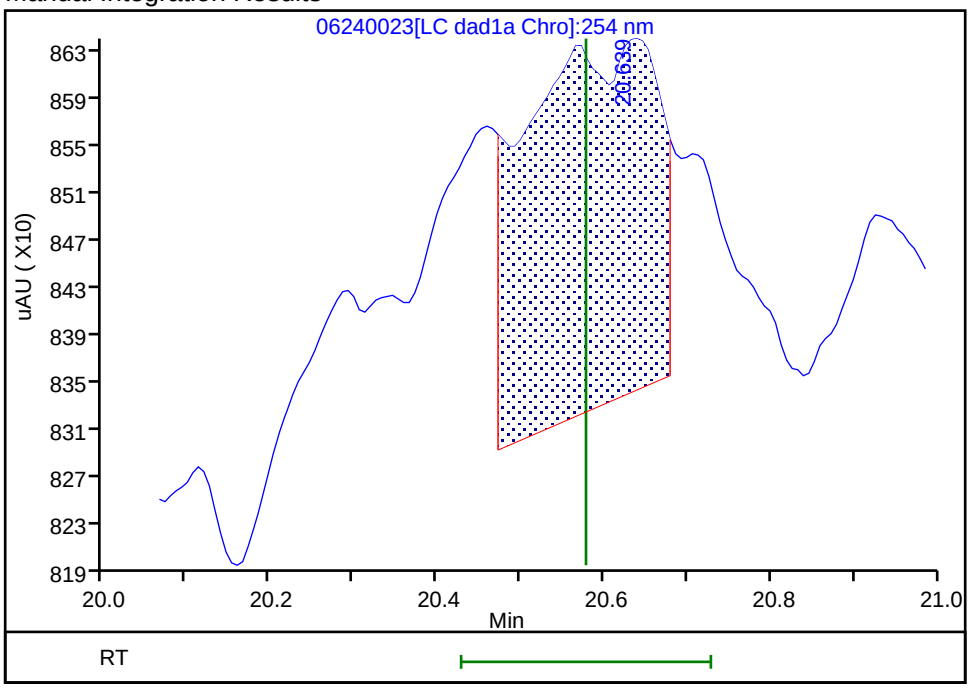
Processing Integration Results

RT: 20.46
Area: 6247
Amount: 0.009759
Amount Units: ug/ml



Manual Integration Results

RT: 20.64
Area: 3381
Amount: 0.005282
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:15:10

Audit Action: Split an Integrated Peak Audit Reason: Baseline

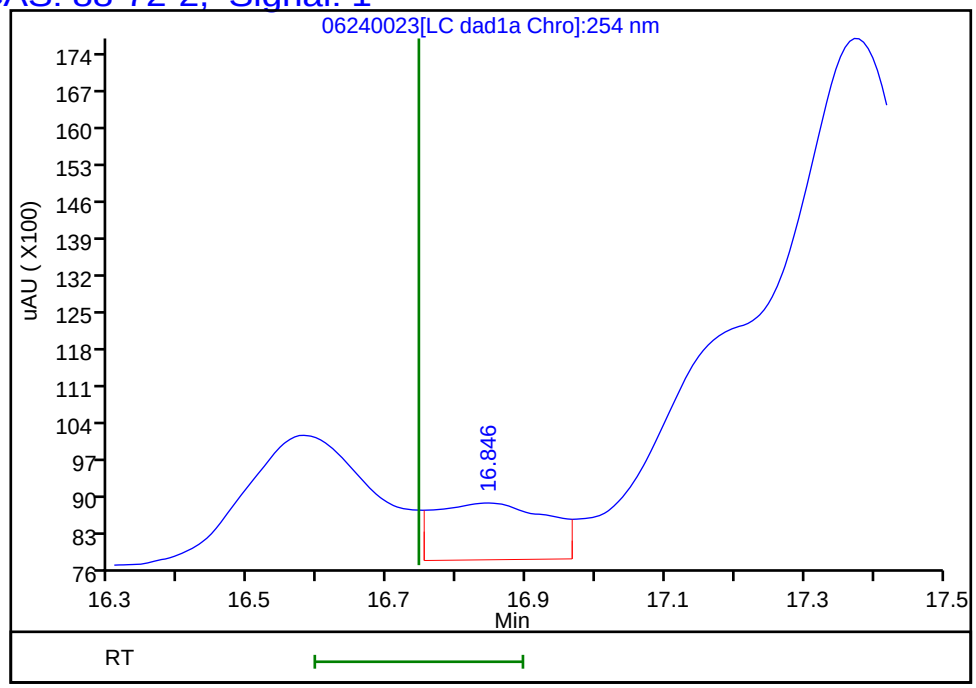
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.85
Response: 12131
Amount: 0.044442



Reviewer: zhangji, 25-Jun-2020 17:15:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

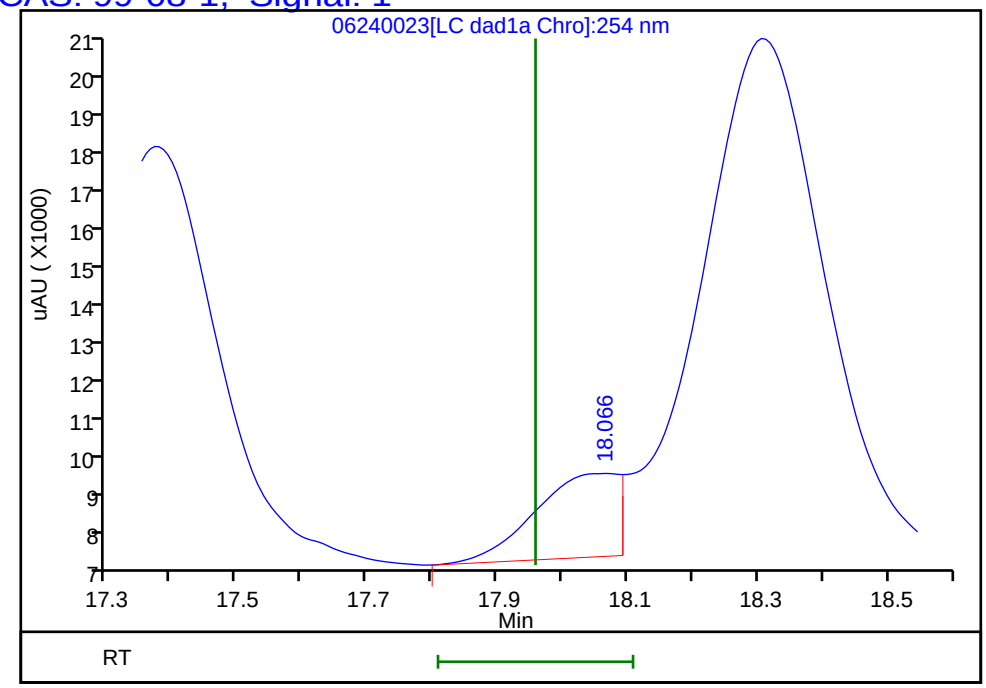
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.07
Response: 17544
Amount: 0.058808



Reviewer: zhangji, 25-Jun-2020 17:15:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

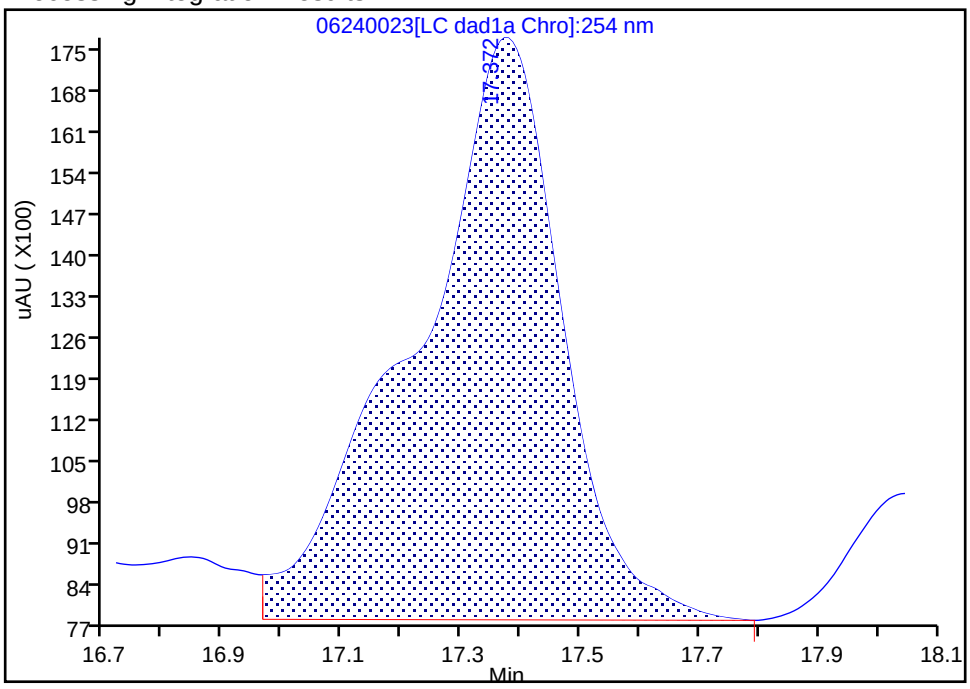
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

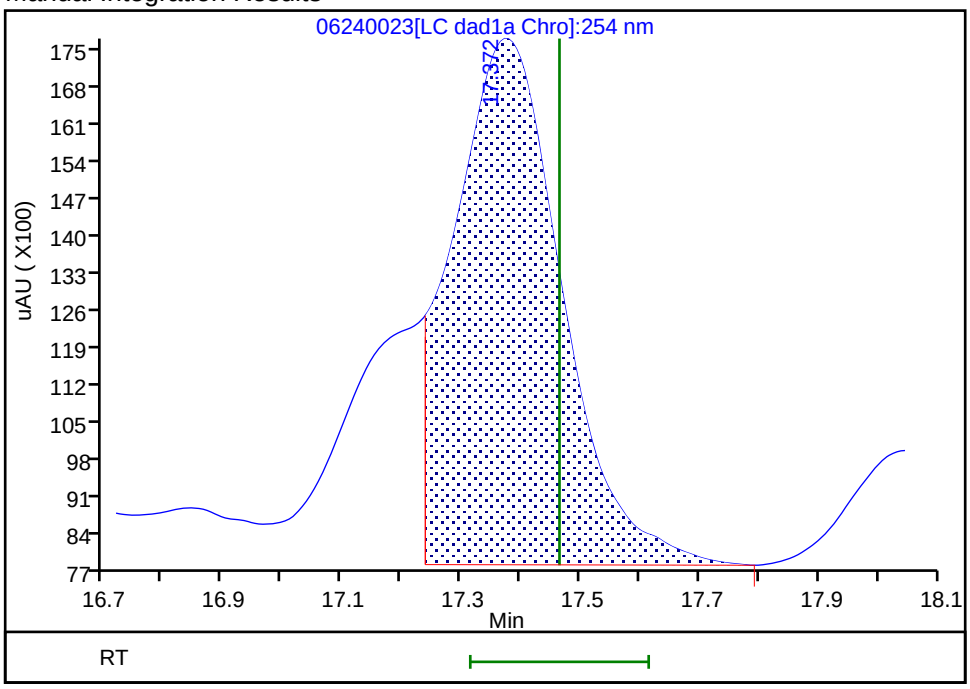
Processing Integration Results

RT: 17.37
Area: 168511
Amount: 0.488106
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 125106
Amount: 0.362380
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:13:55

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

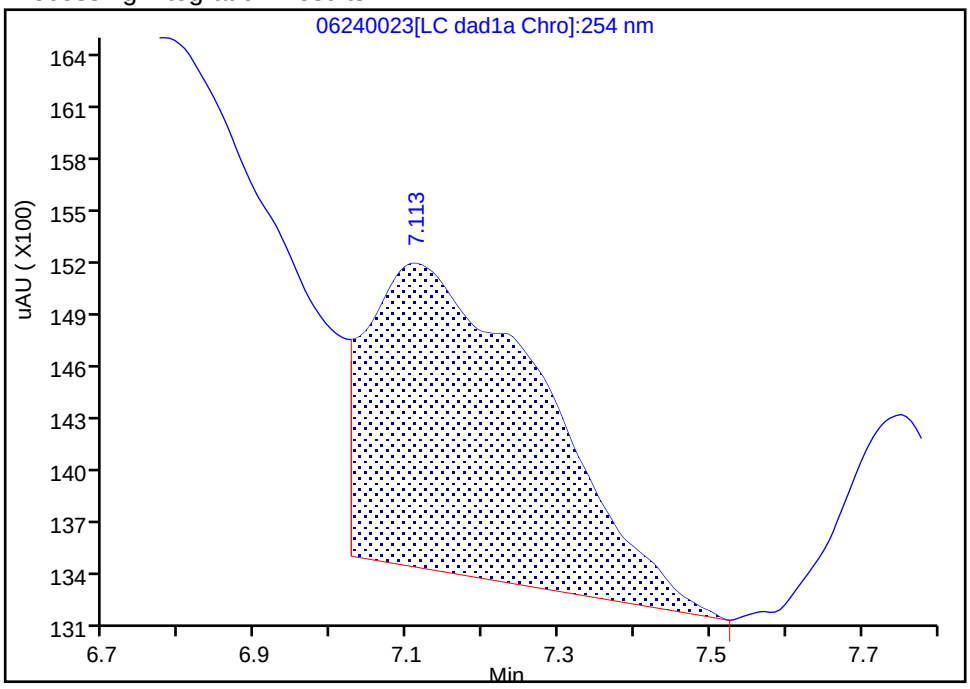
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240023.d				
Injection Date:	25-Jun-2020 07:15:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-17-A	Lab Sample ID:	280-137609-17		
Client ID:	PZ013-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

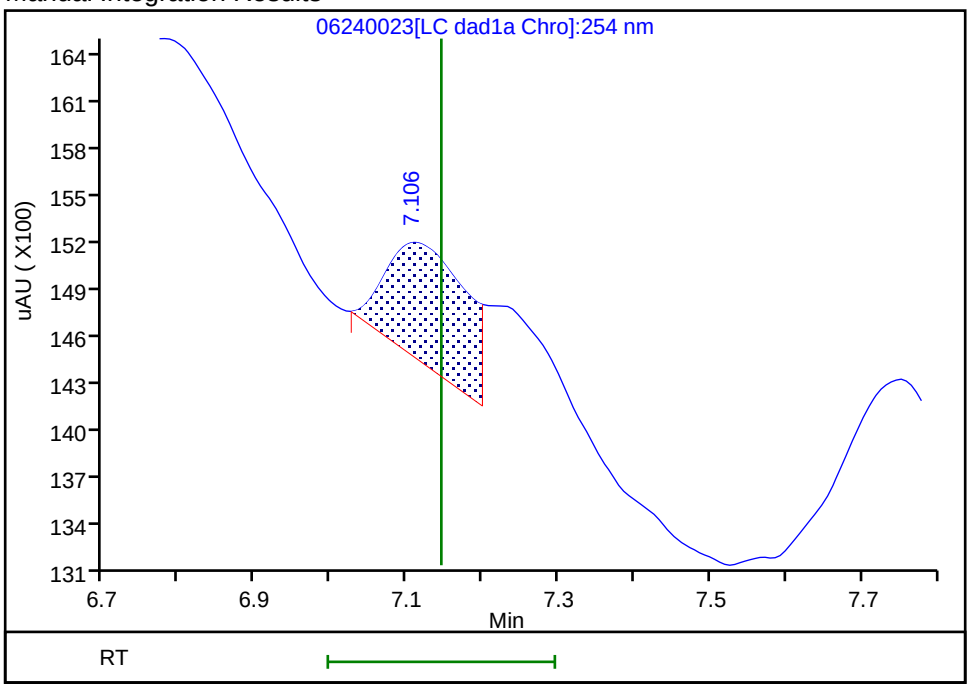
Processing Integration Results

RT: 7.11
Area: 28990
Amount: 0.133697
Amount Units: ug/ml



Manual Integration Results

RT: 7.11
Area: 5660
Amount: 0.001898
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:14:45

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0104-20A Lab Sample ID: 280-137609-18

Matrix: Water Lab File ID: 06220057.D

Analysis Method: 8330A Date Collected: 06/12/2020 08:25

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 470.7(mL) Date Analyzed: 06/23/2020 09:17

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U M	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	0.44	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.093
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	103	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220057.D
Lims ID: 280-137609-A-18-A
Client ID: G0104-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 09:17:19 ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-18-
Misc. Info.: 280-0092608-057
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:59:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	
	6 MNX	1		7.396			ND	U
	7 RDX	1		7.801			ND	
$	9 1,2-Dinitrobenzene	1	8.751	8.741	0.010	28388	0.2054	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	
	14 Tetryl	1		10.234			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	U
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	
	23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

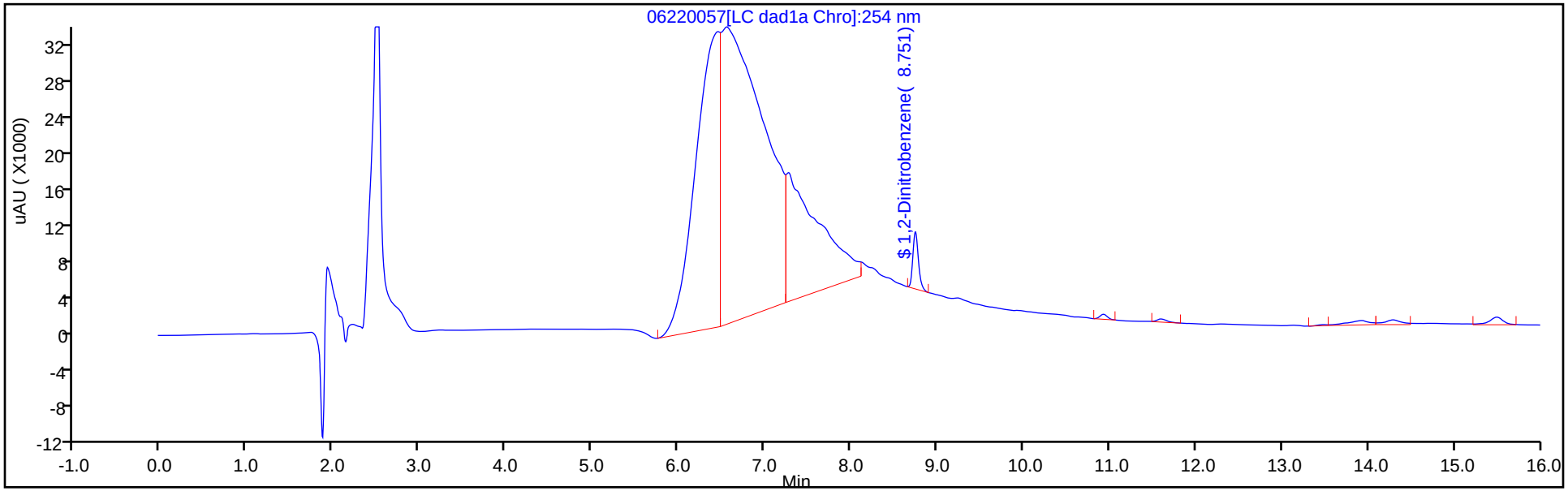
Report Date: 23-Jun-2020 15:18:17 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

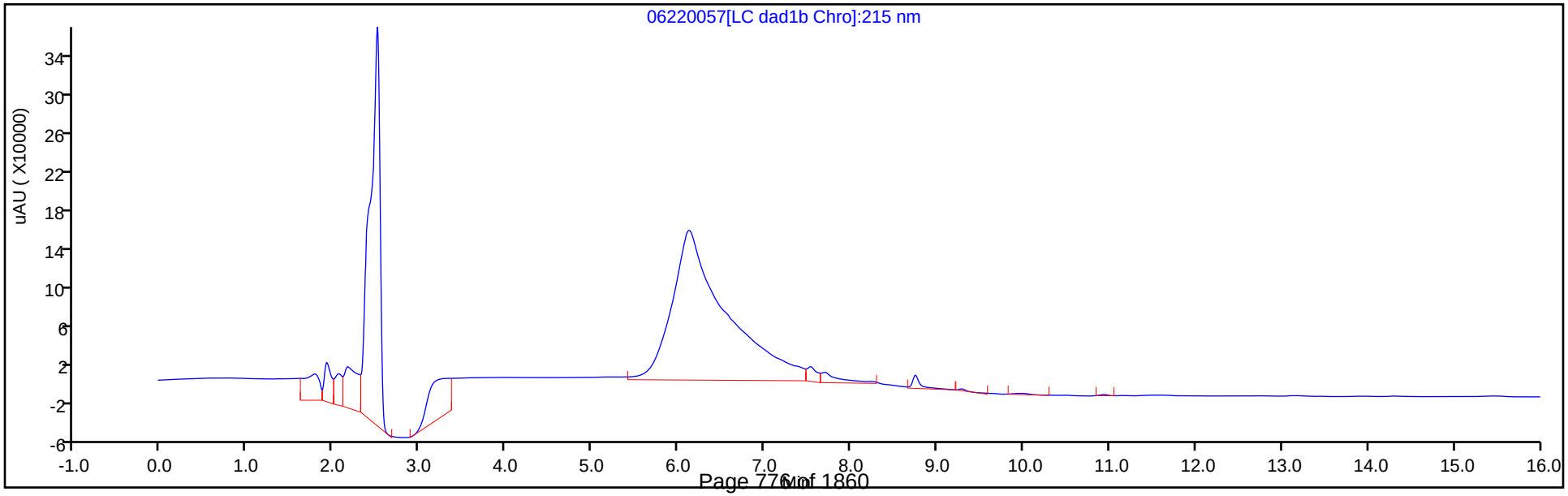
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220057.d

Injection Date:	23-Jun-2020 09:17:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-18-A	Lab Sample ID:	280-137609-18	Worklist Smp#:	57
Client ID:	G0104-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220057.D				
Lims ID:	280-137609-A-18-A				
Client ID:	G0104-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 09:17:19	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-18-				
Misc. Info.:	280-0092608-057				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				

First Level Reviewer: zhangji Date: 23-Jun-2020 14:59:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2054	102.70

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

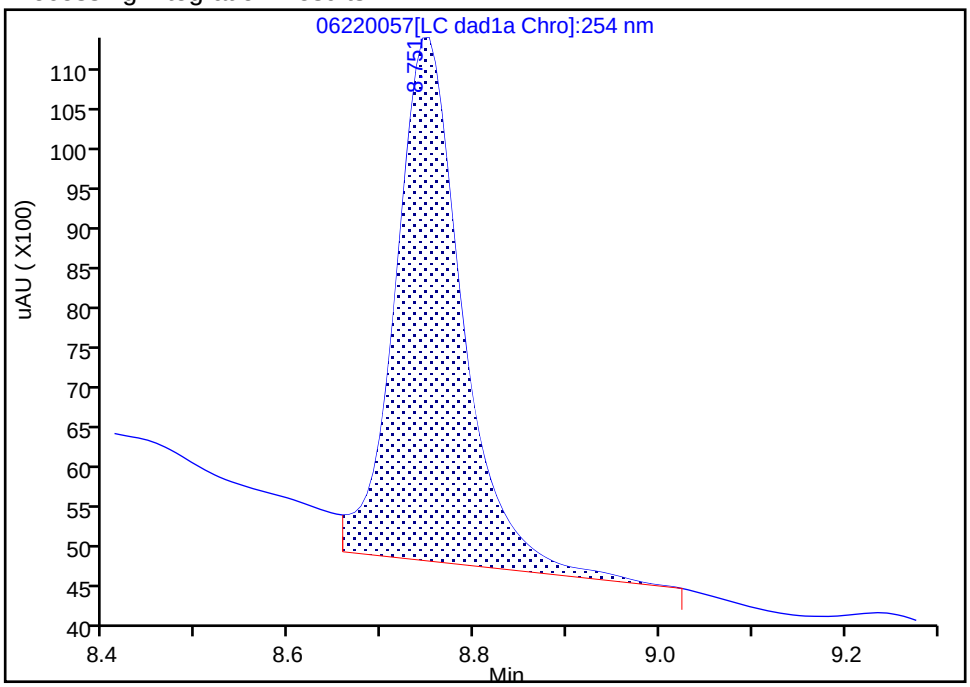
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220057.d				
Injection Date:	23-Jun-2020 09:17:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-18-A	Lab Sample ID:	280-137609-18		
Client ID:	G0104-20A				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

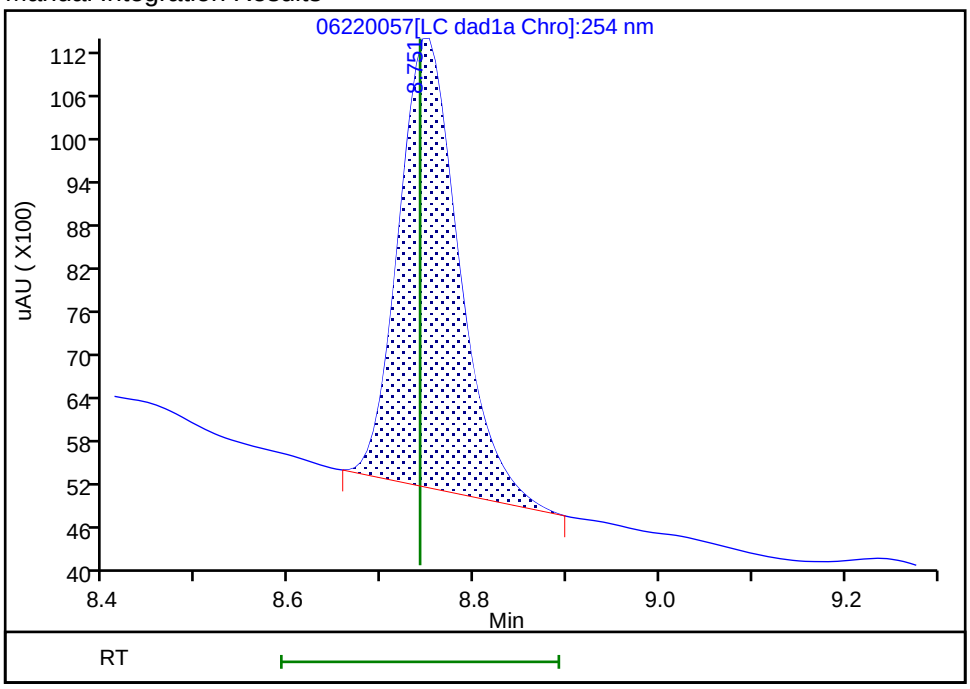
Processing Integration Results

RT: 8.75
Area: 33052
Amount: 0.239139
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 28388
Amount: 0.205394
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:41

Audit Action: Manually Integrated Audit Reason: Baseline

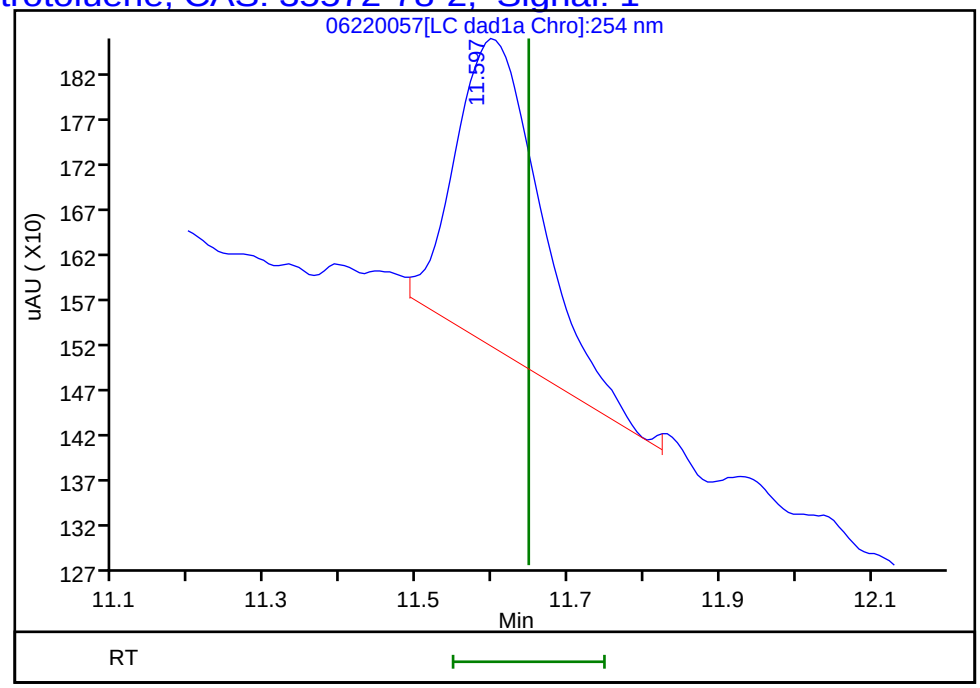
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220057.d				
Injection Date:	23-Jun-2020 09:17:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-18-A	Lab Sample ID:	280-137609-18		
Client ID:	G0104-20A				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.60
Response: 2749
Amount: 0.013554



Reviewer: zhangji, 23-Jun-2020 14:59:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

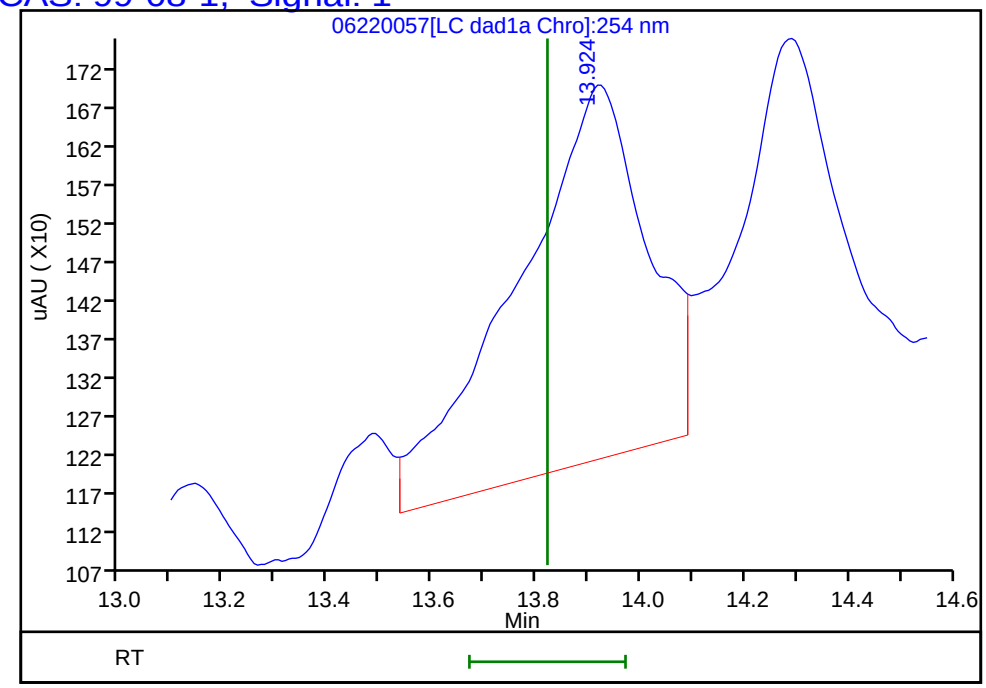
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220057.d

Injection Date:	23-Jun-2020 09:17:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-18-A	Lab Sample ID:	280-137609-18		
Client ID:	G0104-20A				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.92
Response: 8580
Amount: 0.059988



Reviewer: zhangji, 23-Jun-2020 14:59:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

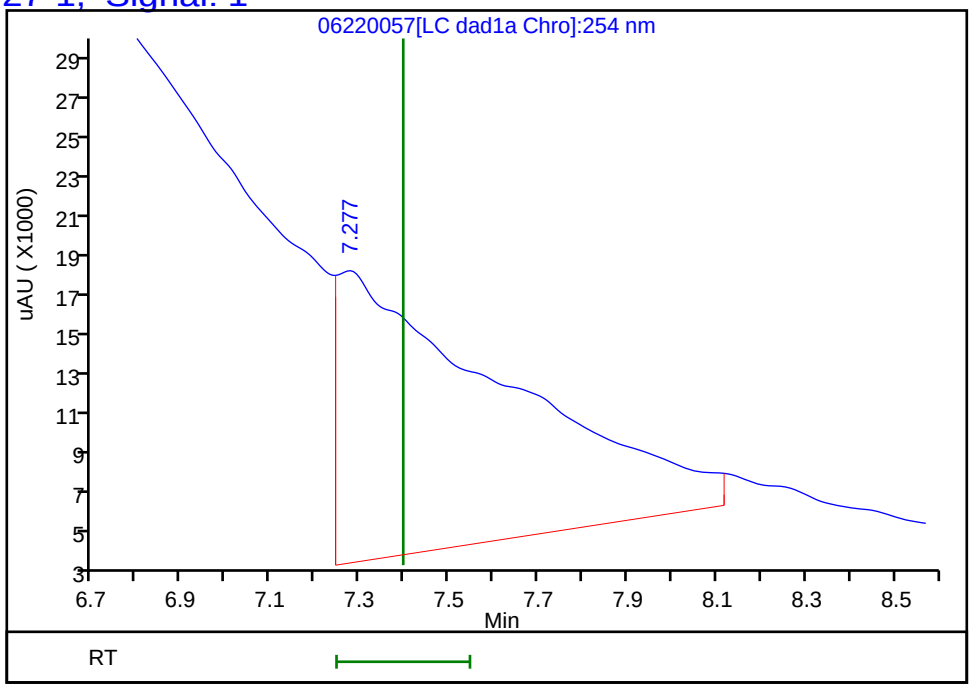
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220057.d				
Injection Date:	23-Jun-2020 09:17:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-18-A	Lab Sample ID:	280-137609-18		
Client ID:	G0104-20A				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.28
Response: 365654
Amount: 2.306322



Reviewer: zhangji, 23-Jun-2020 14:59:43
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.: 280-137609-2

SDG No.:

Client Sample ID: PZ014-20A Lab Sample ID: 280-137609-19

Matrix: Water Lab File ID: 06220058.D

Analysis Method: 8330A Date Collected: 06/12/2020 08:20

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 455.5(mL) Date Analyzed: 06/23/2020 09:40

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.092
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.094
99-08-1	3-Nitrotoluene	0.44	U M	0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.063
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11
2691-41-0	HMX	0.22	U	0.23	0.22	0.096
5755-27-1	MNX	0.44	U	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.10
121-82-4	RDX	0.22	U	0.23	0.22	0.057
479-45-8	Tetryl	0.11	U	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220058.D
Lims ID: 280-137609-A-19-A
Client ID: PZ014-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 09:40:20 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-19-
Misc. Info.: 280-0092608-058
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 15:12:26

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	
	6 MNX	1		7.396			ND	
	7 RDX	1		7.801			ND	
$	9 1,2-Dinitrobenzene	1	8.744	8.741	0.003	28099	0.2033	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	
	14 Tetryl	1		10.234			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	
	23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

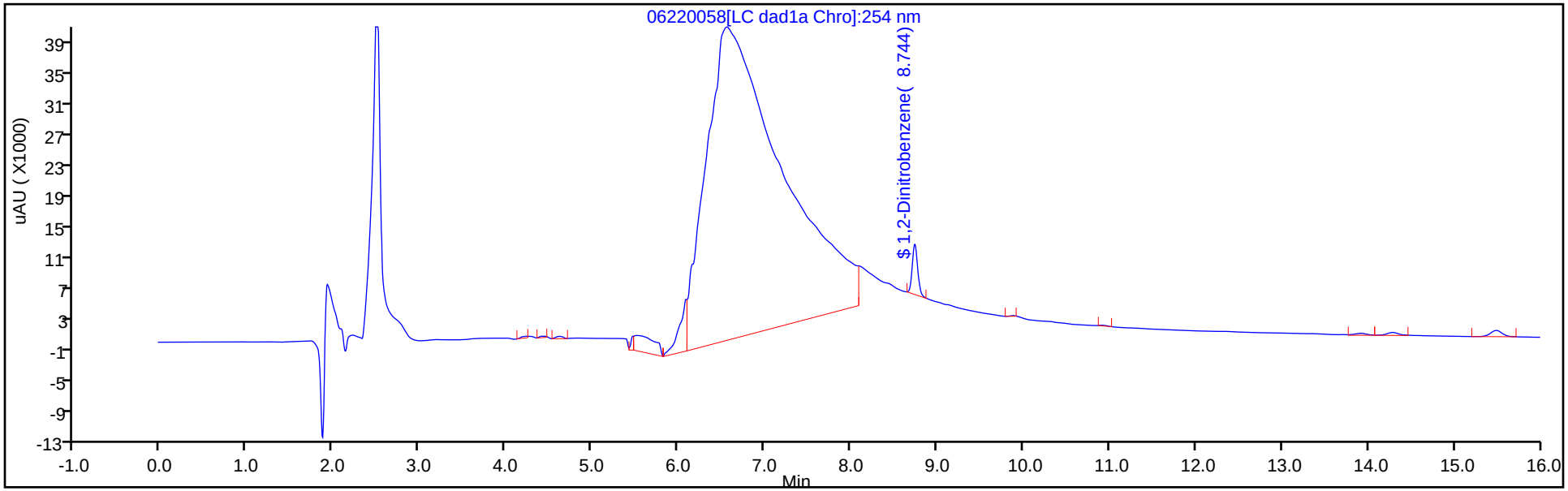
Report Date: 23-Jun-2020 15:18:17 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

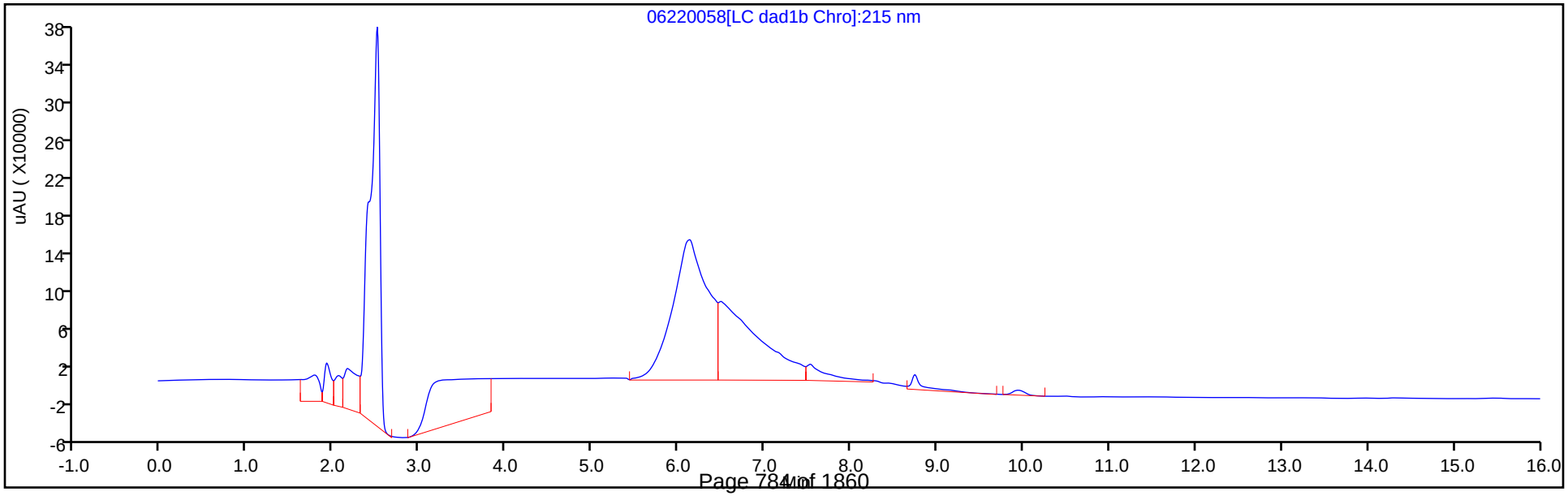
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220058.d

Injection Date:	23-Jun-2020 09:40:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-19-A	Lab Sample ID:	280-137609-19	Worklist Smp#:	58
Client ID:	PZ014-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220058.D				
Lims ID:	280-137609-A-19-A				
Client ID:	PZ014-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 09:40:20	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-19-				
Misc. Info.:	280-0092608-058				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 15:12:26		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2033	101.65

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

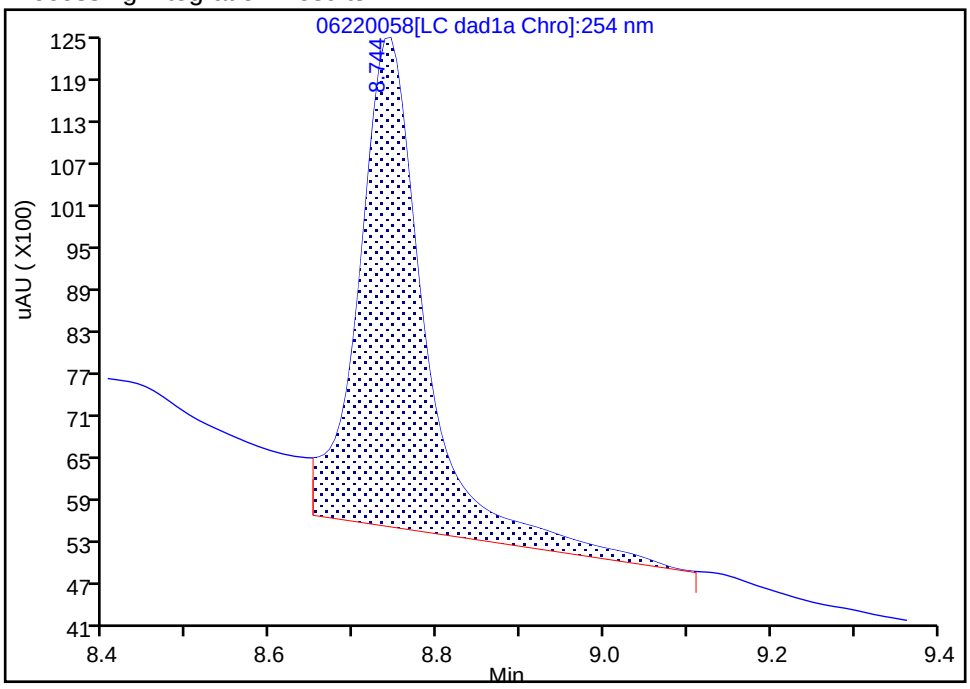
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220058.d				
Injection Date:	23-Jun-2020 09:40:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-19-A	Lab Sample ID:	280-137609-19		
Client ID:	PZ014-20A				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

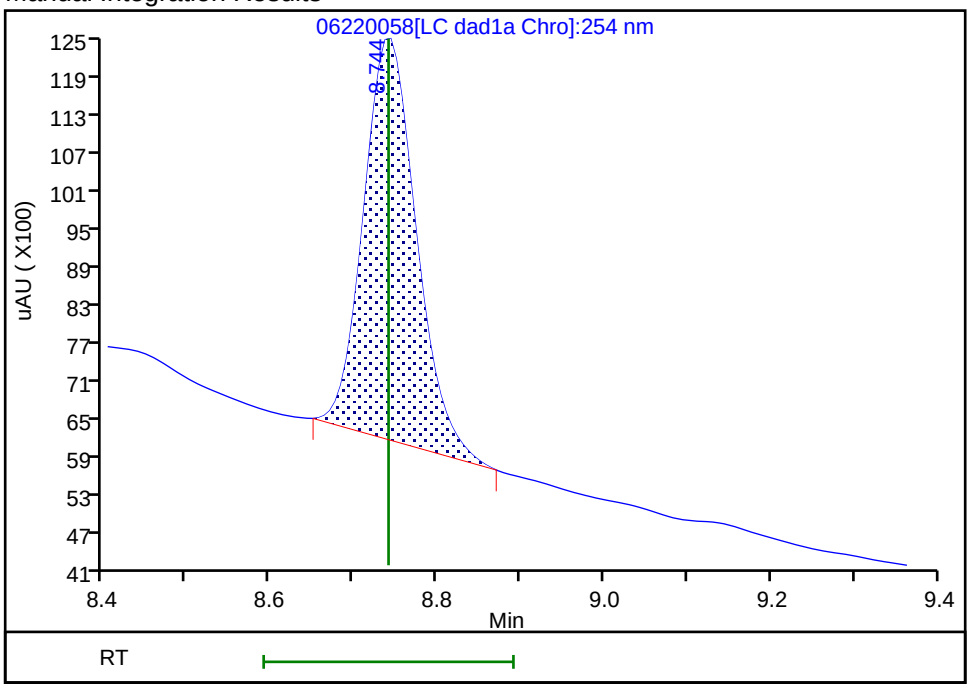
Processing Integration Results

RT: 8.74
Area: 38766
Amount: 0.280482
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 28099
Amount: 0.203303
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:59:54

Audit Action: Manually Integrated Audit Reason: Baseline

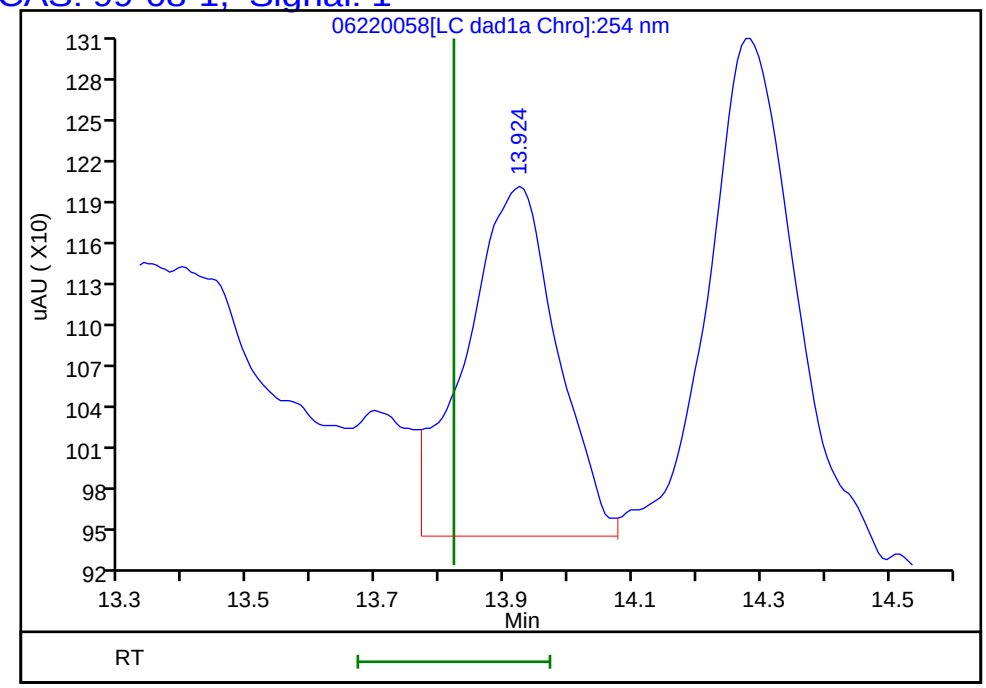
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220058.d				
Injection Date:	23-Jun-2020 09:40:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-19-A	Lab Sample ID:	280-137609-19		
Client ID:	PZ014-20A				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.92
Response: 2497
Amount: 0.017458



Reviewer: zhangji, 23-Jun-2020 15:12:26
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.: 280-137609-2

SDG No.:

Client Sample ID: G0115-20A Lab Sample ID: 280-137609-20

Matrix: Water Lab File ID: 06220059.D

Analysis Method: 8330A Date Collected: 06/12/2020 13:55

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 466.9(mL) Date Analyzed: 06/23/2020 10:03

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.092
99-08-1	3-Nitrotoluene	0.43	U M	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.094
5755-27-1	MNX	0.43	U	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.097
121-82-4	RDX	0.21	U M	0.22	0.21	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220059.D
Lims ID: 280-137609-A-20-A
Client ID: G0115-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 10:03:21 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-20-
Misc. Info.: 280-0092608-059
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 15:13:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.734			ND	
6 MNX	1		7.396			ND	
7 RDX	1		7.801			ND	U
$ 9 1,2-Dinitrobenzene	1	8.744	8.741	0.003	26768	0.1937	M
10 1,3,5-Trinitrobenzene	1		8.928			ND	
11 1,3-Dinitrobenzene	1		9.568			ND	
12 Nitrobenzene	1		9.941			ND	MU
14 Tetryl	1	10.211	10.234	-0.023	3455	0.0195	M
16 2,4,6-Trinitrotoluene	1	11.224	11.201	0.023	2883	0.0141	
17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	U
19 2,6-Dinitrotoluene	1		11.788			ND	
20 2,4-Dinitrotoluene	1	11.977	11.988	-0.011	2691	0.008864	
21 o-Nitrotoluene	1		12.801			ND	
22 p-Nitrotoluene	1		13.234			ND	U
23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

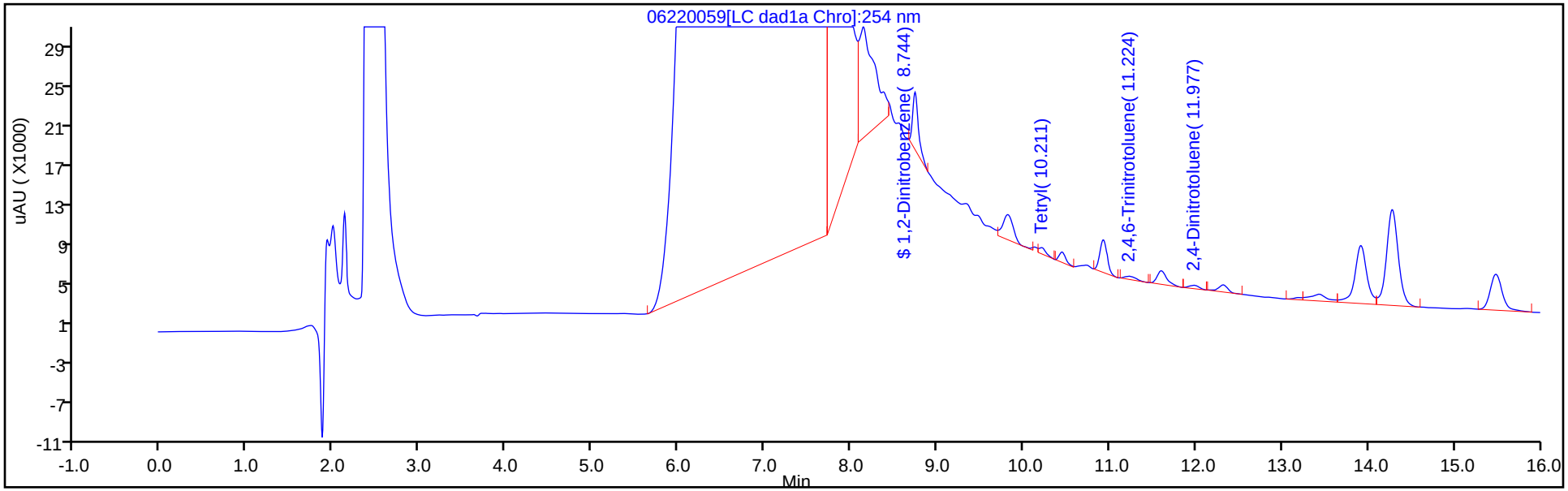
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Jun-2020 15:18:18 Chrom Revision: 2.3 21-Jun-2020 18:30:46

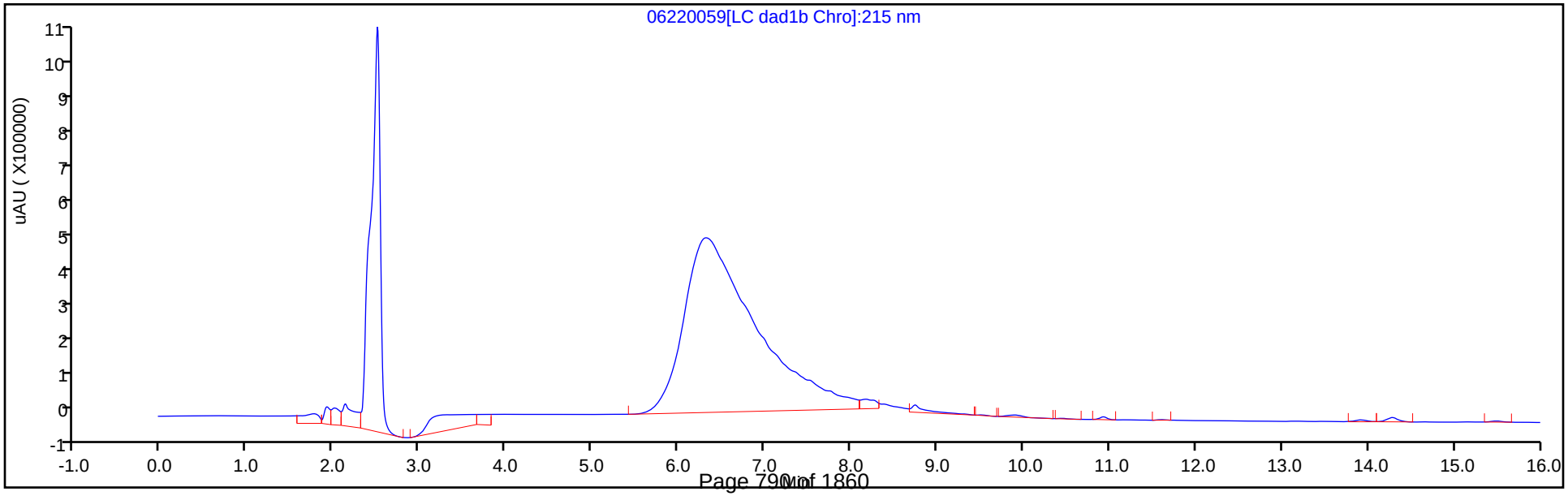
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20	Worklist Smp#:	59
Client ID:	G0115-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
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\20200620-92608.b\06220059.D				
Lims ID:	280-137609-A-20-A				
Client ID:	G0115-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 10:03:21	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-20-				
Misc. Info.:	280-0092608-059				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 15:13:15		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1937	96.84

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

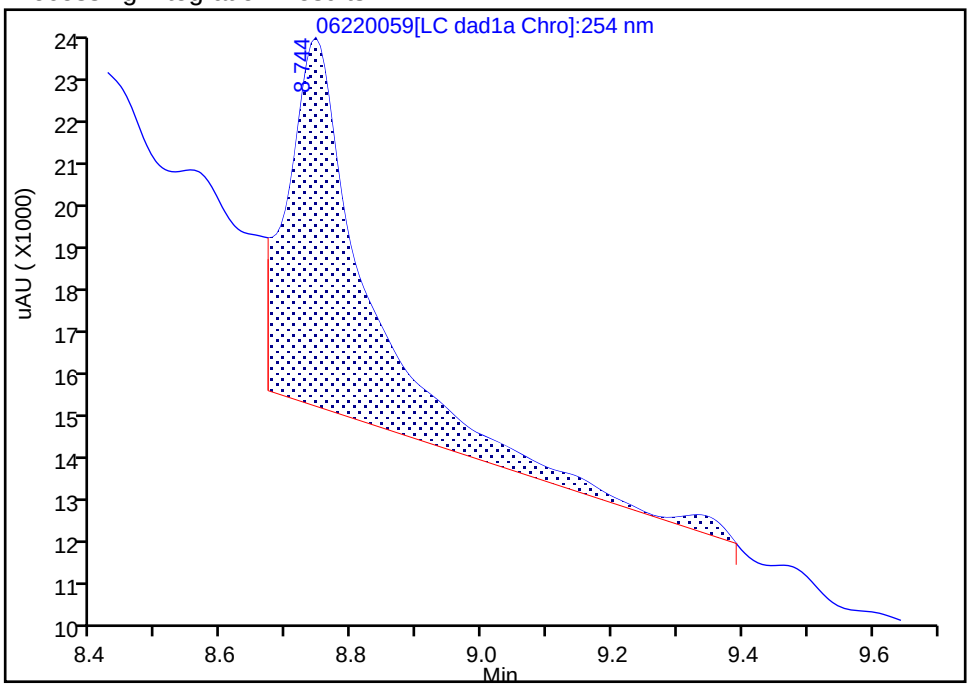
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

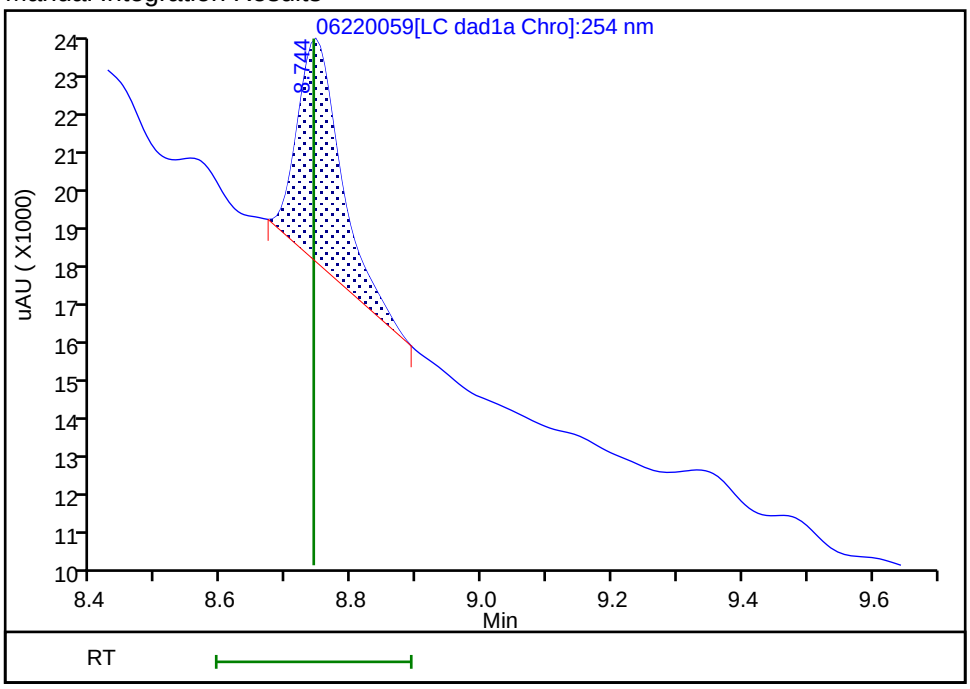
Processing Integration Results

RT: 8.74
Area: 72151
Amount: 0.522031
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 26768
Amount: 0.193673
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:12:58

Audit Action: Manually Integrated Audit Reason: Baseline

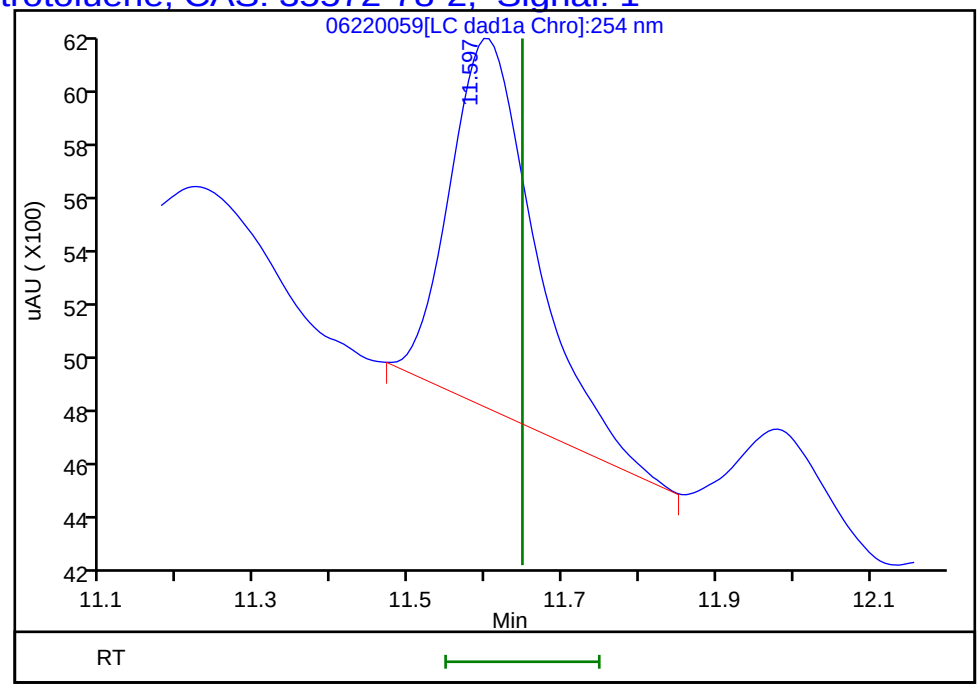
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.60
Response: 10546
Amount: 0.051998



Reviewer: zhangji, 23-Jun-2020 15:13:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

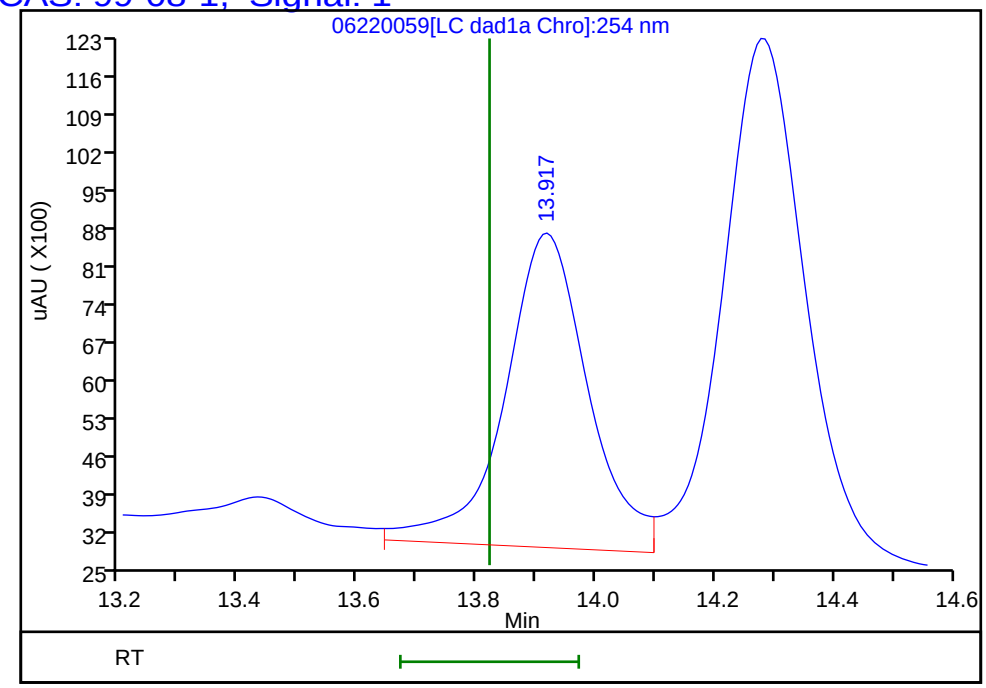
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.92
Response: 56387
Amount: 0.394236



Reviewer: zhangji, 23-Jun-2020 15:13:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

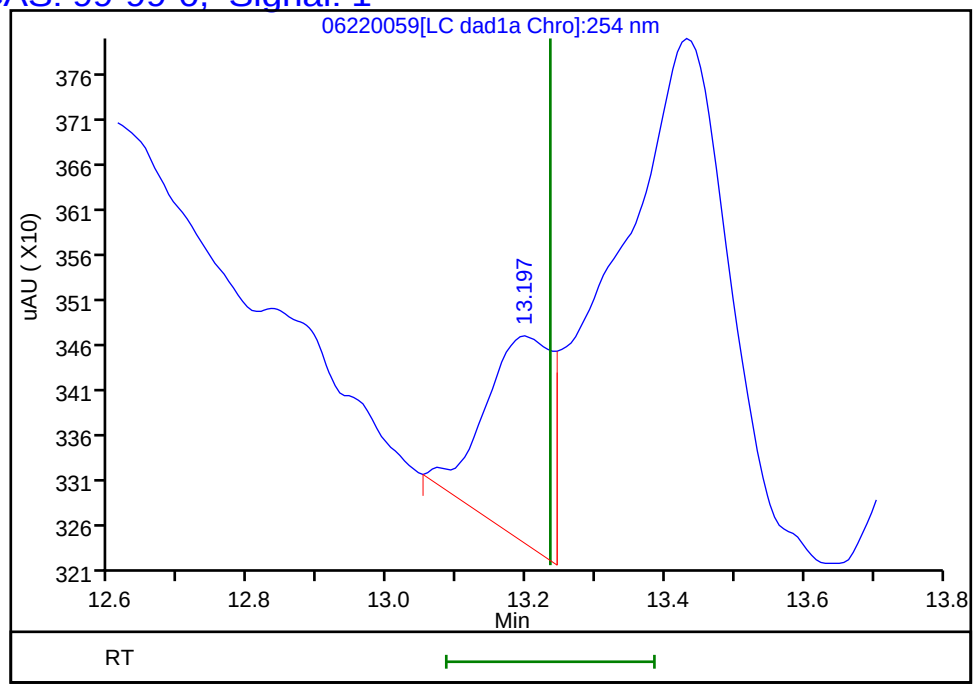
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.20
Response: 1512
Amount: 0.013380



Reviewer: zhangji, 23-Jun-2020 15:13:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

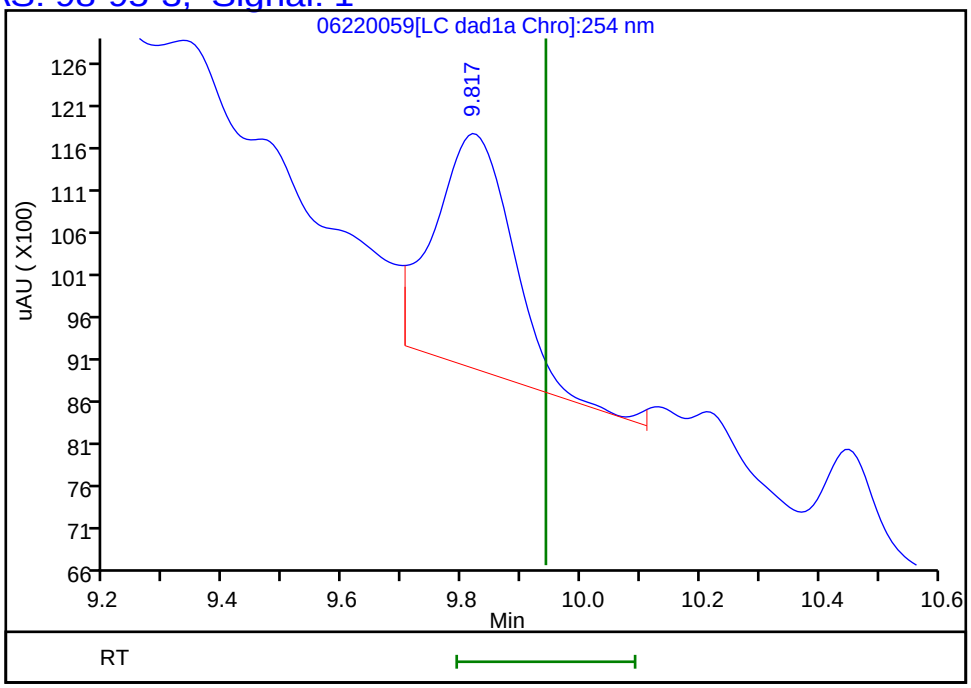
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.82
Response: 25362
Amount: 0.126555



Reviewer: zhangji, 23-Jun-2020 15:13:15
Audit Action: Assigned New Baseline Audit Reason: Baseline

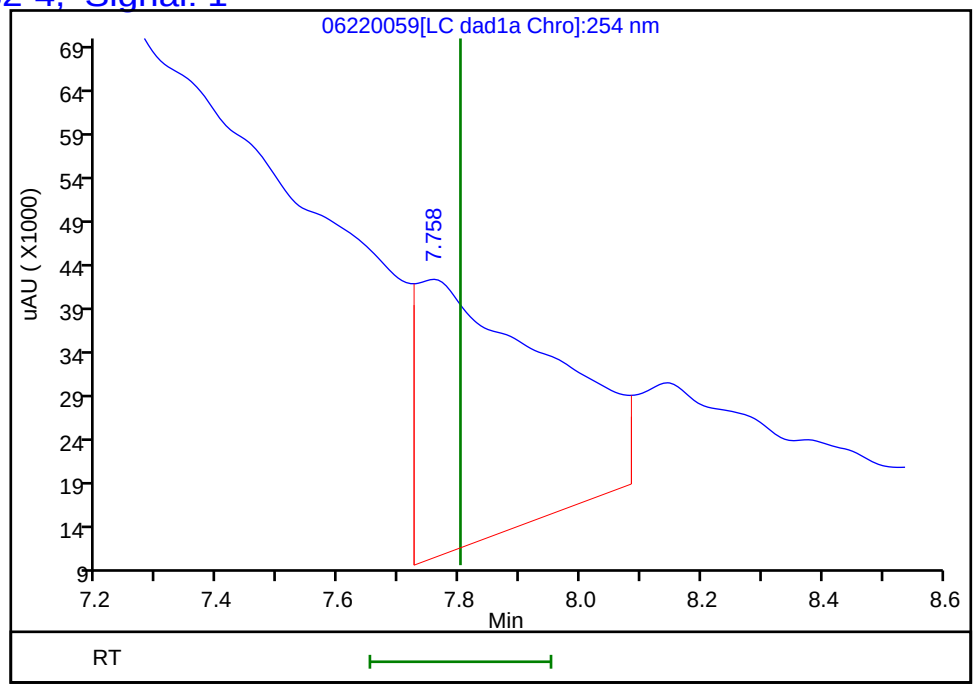
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d				
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 451674
Amount: 3.873271



Reviewer: zhangji, 23-Jun-2020 15:13:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

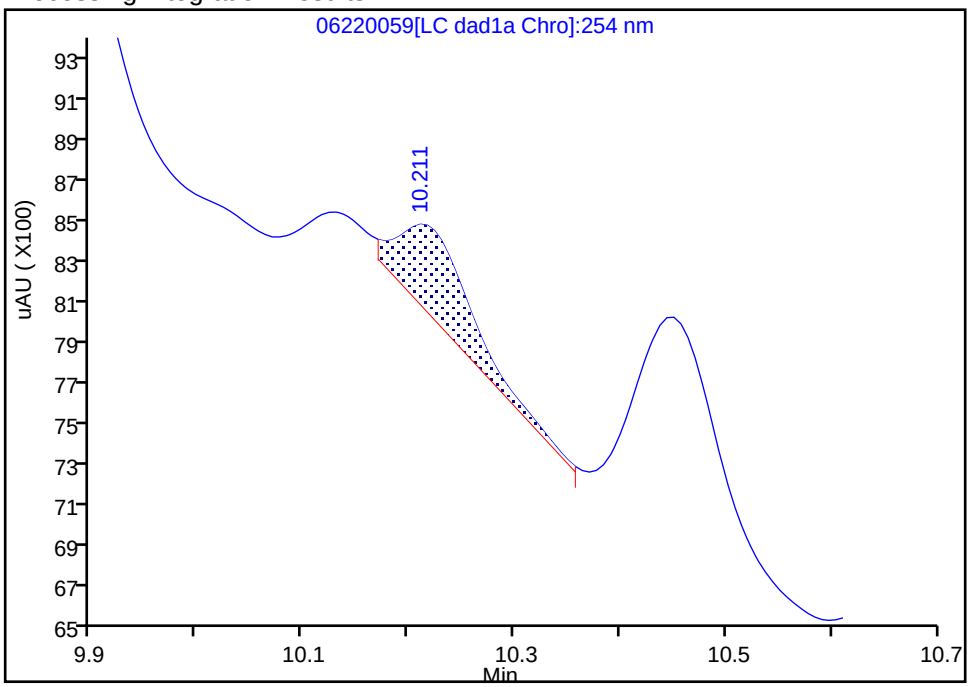
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220059.d		
Injection Date:	23-Jun-2020 10:03:21	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20
Client ID:	G0115-20A		
Operator ID:	JZ	ALS Bottle#:	59 Worklist Smp#: 59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

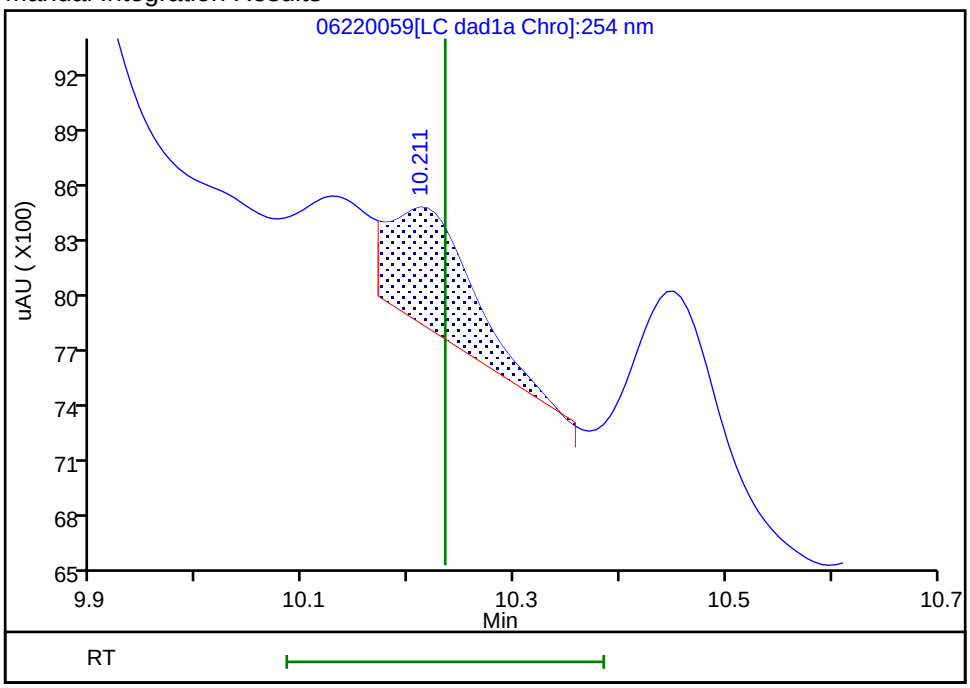
Processing Integration Results

RT: 10.21
Area: 2004
Amount: 0.011320
Amount Units: ug/mL



Manual Integration Results

RT: 10.21
Area: 3455
Amount: 0.019516
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:13:08

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0115-20A Lab Sample ID: 280-137609-20

Matrix: Water Lab File ID: 06240024.D

Analysis Method: 8330A Date Collected: 06/12/2020 13:55

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 466.9(mL) Date Analyzed: 06/25/2020 07:50

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.029
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	115	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240024.D
Lims ID: 280-137609-A-20-A
Client ID: G0115-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 07:50:53 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-20-
Misc. Info.: 280-0092719-024
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:16:47

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.159	7.145	0.014	43399	0.2151	
	7 MNX	1		7.926			ND	
	8 RDX	1		9.358			ND	U
	9 Nitrobenzene	1		12.265			ND	
$	10 1,2-Dinitrobenzene	1	13.212	13.271	-0.059	65604	0.2300	M
	12 1,3-Dinitrobenzene	1	15.738	15.805	-0.067	3878	0.005752	
	14 o-Nitrotoluene	1		16.745			ND	U
	15 p-Nitrotoluene	1		17.031			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.465			ND	
	17 m-Nitrotoluene	1		17.958			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.292	18.398	-0.106	39315	0.0845	
	19 1,3,5-Trinitrobenzene	1	19.065	19.138	-0.073	5940	0.0126	
	20 2,6-Dinitrotoluene	1		20.065			ND	
	21 2,4-Dinitrotoluene	1		20.578			ND	U
	22 Tetryl	1		23.885			ND	
	23 2,4,6-Trinitrotoluene	1		24.905			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

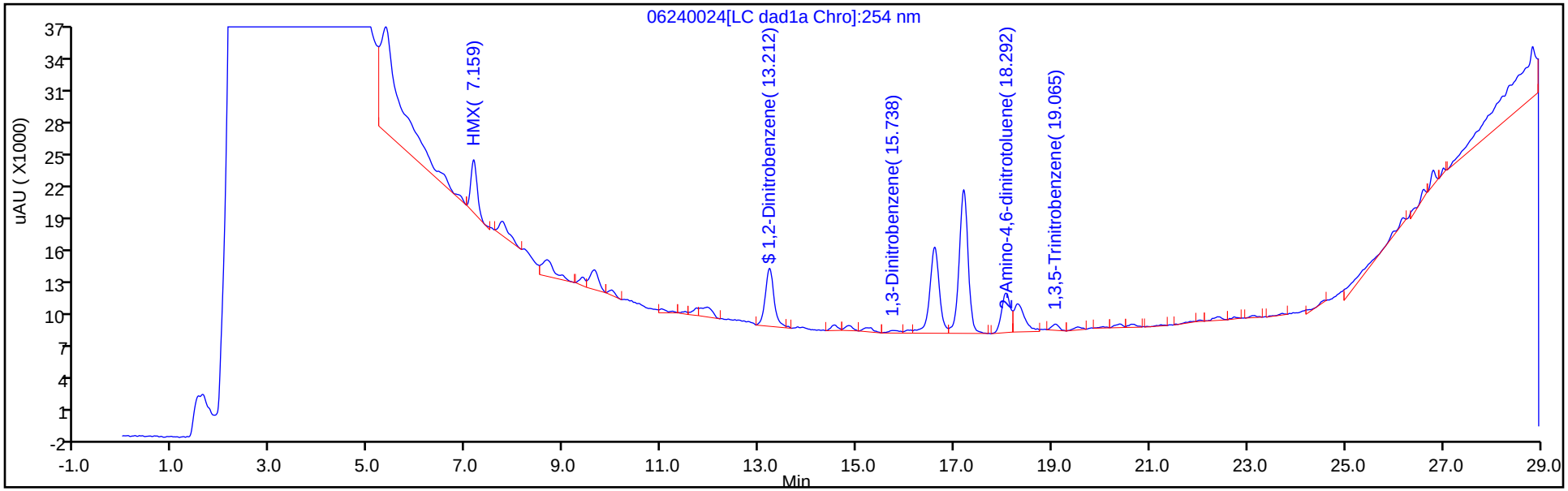
Report Date: 26-Jun-2020 16:19:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

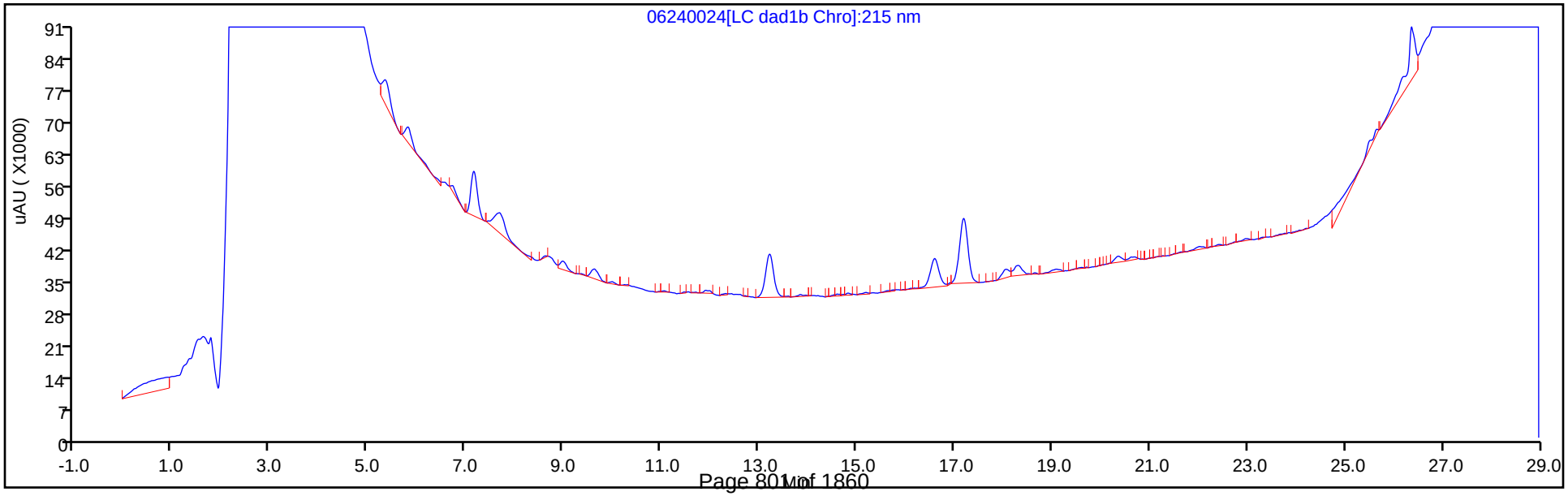
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240024.d

Injection Date:	25-Jun-2020 07:50:53	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20	Worklist Smp#:	24
Client ID:	G0115-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240024.D				
Lims ID:	280-137609-A-20-A				
Client ID:	G0115-20A				
Sample Type:	Client				
Inject. Date:	25-Jun-2020 07:50:53	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-20-				
Misc. Info.:	280-0092719-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Jun-2020 16:19:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:16:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2300	115.00

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

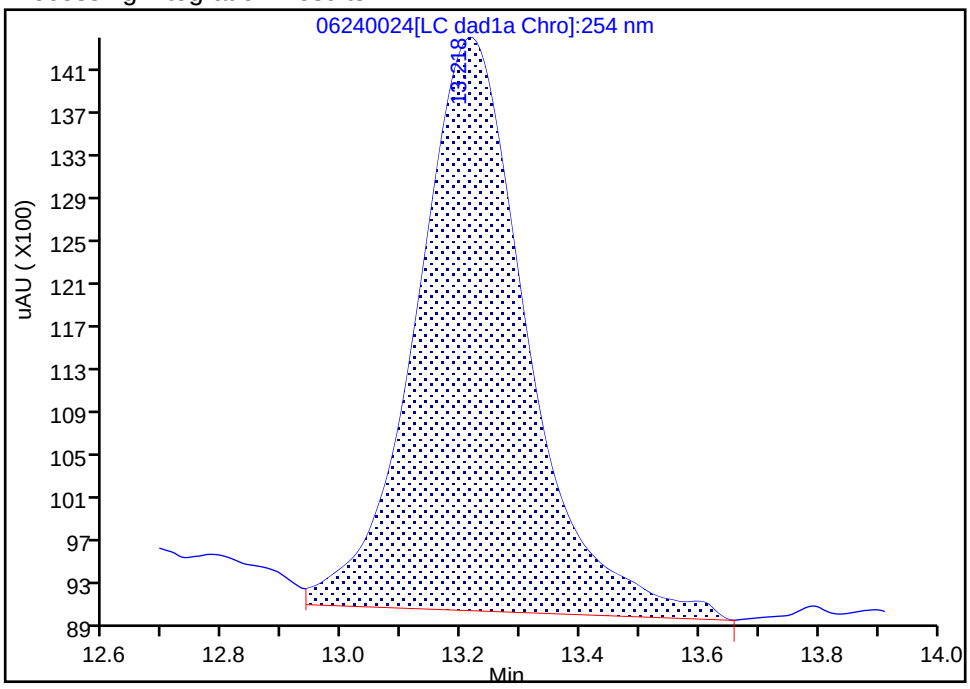
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240024.d				
Injection Date:	25-Jun-2020 07:50:53	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

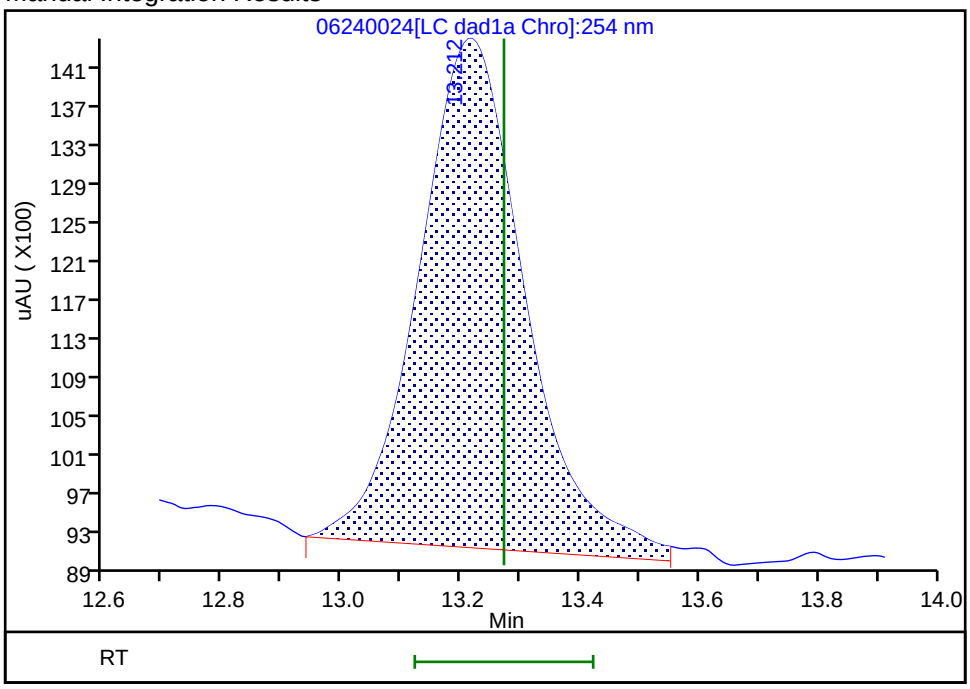
Processing Integration Results

RT: 13.22
Area: 69458
Amount: 0.243911
Amount Units: ug/ml



Manual Integration Results

RT: 13.21
Area: 65604
Amount: 0.230009
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:16:45

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

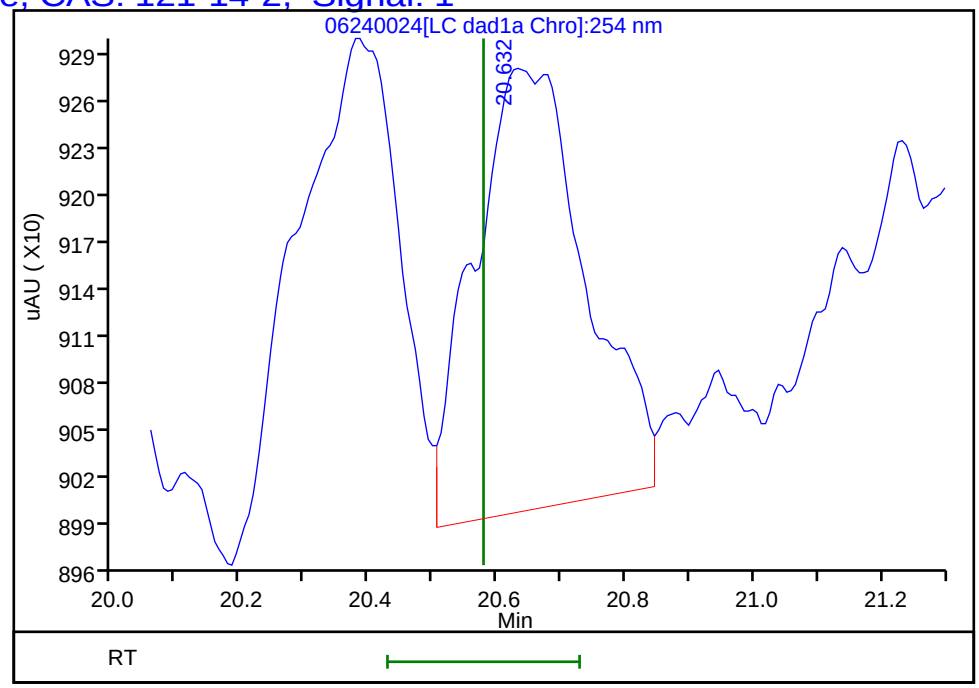
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240024.d

Injection Date:	25-Jun-2020 07:50:53	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.63
Response: 3410
Amount: 0.005327



Reviewer: zhangji, 25-Jun-2020 17:16:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

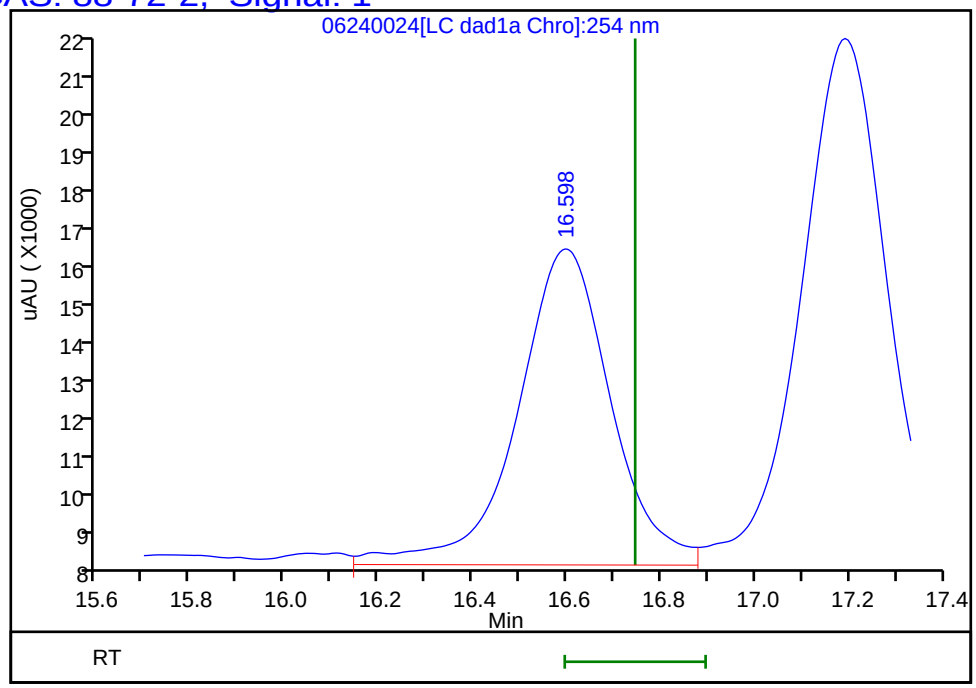
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240024.d

Injection Date:	25-Jun-2020 07:50:53	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.60
Response: 108313
Amount: 0.396802



Reviewer: zhangji, 25-Jun-2020 17:16:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

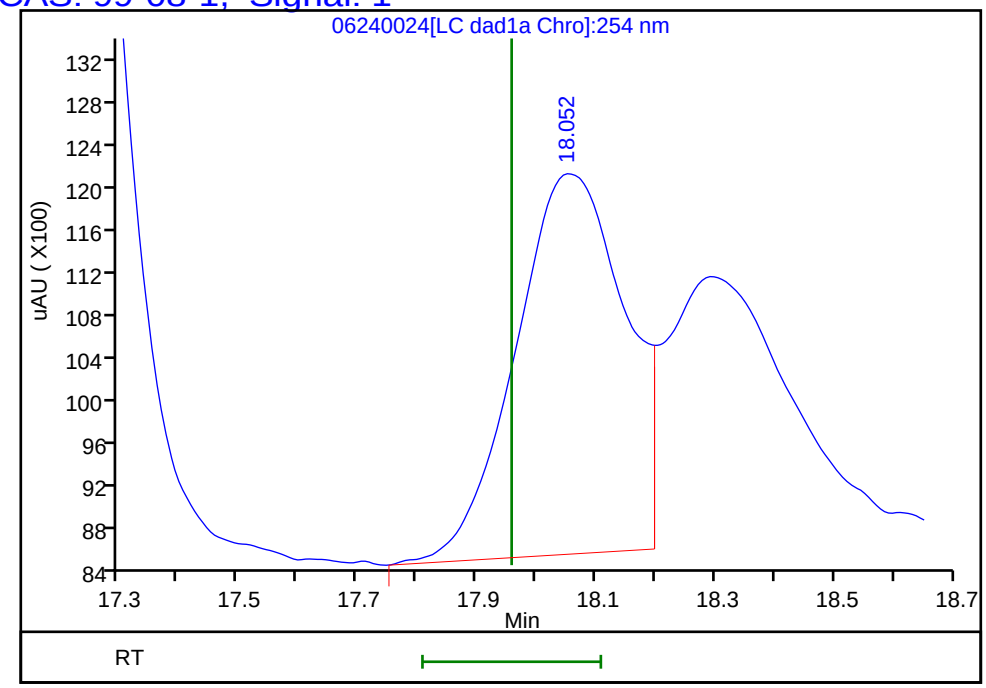
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240024.d

Injection Date:	25-Jun-2020 07:50:53	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.05
Response: 45718
Amount: 0.153248



Reviewer: zhangji, 25-Jun-2020 17:16:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

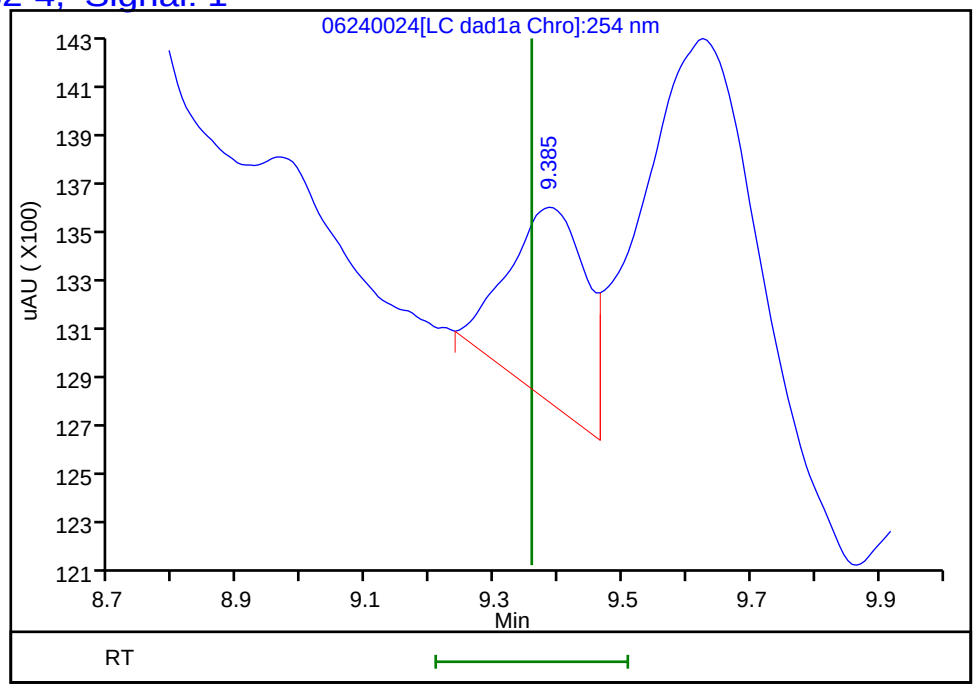
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240024.d

Injection Date:	25-Jun-2020 07:50:53	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-20-A	Lab Sample ID:	280-137609-20		
Client ID:	G0115-20A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.39
Response: 6501
Amount: 0.026604



Reviewer: zhangji, 25-Jun-2020 17:16:47

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.: 280-137609-2

SDG No.:

Client Sample ID: G0101-20A Lab Sample ID: 280-137609-21

Matrix: Water Lab File ID: 06220060.D

Analysis Method: 8330A Date Collected: 06/12/2020 14:25

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 441.6(mL) Date Analyzed: 06/23/2020 10:26

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U	0.24	0.23	0.095
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.051
121-14-2	2,4-Dinitrotoluene	0.091	U	0.11	0.091	0.031
606-20-2	2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.045
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057
88-72-2	2-Nitrotoluene	0.23	U	0.24	0.23	0.097
99-08-1	3-Nitrotoluene	0.45	U M	0.45	0.45	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.065
99-99-0	4-Nitrotoluene	0.45	U M	0.46	0.45	0.11
2691-41-0	HMX	2.3	J1 M	0.24	0.23	0.099
5755-27-1	MNX	0.45	U	2.3	0.45	0.17
98-95-3	Nitrobenzene	0.23	U M	0.24	0.23	0.10
121-82-4	RDX	0.23	U	0.24	0.23	0.058
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220060.D
Lims ID: 280-137609-A-21-A
Client ID: G0101-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 10:26:19 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-21-
Misc. Info.: 280-0092608-060
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 15:13:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.747	6.734	0.013	17733	0.2063	M
	6 MNX	1		7.396			ND	
	7 RDX	1		7.801			ND	
$	9 1,2-Dinitrobenzene	1	8.740	8.741	-0.001	28148	0.2037	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	U
	14 Tetryl	1		10.234			ND	U
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

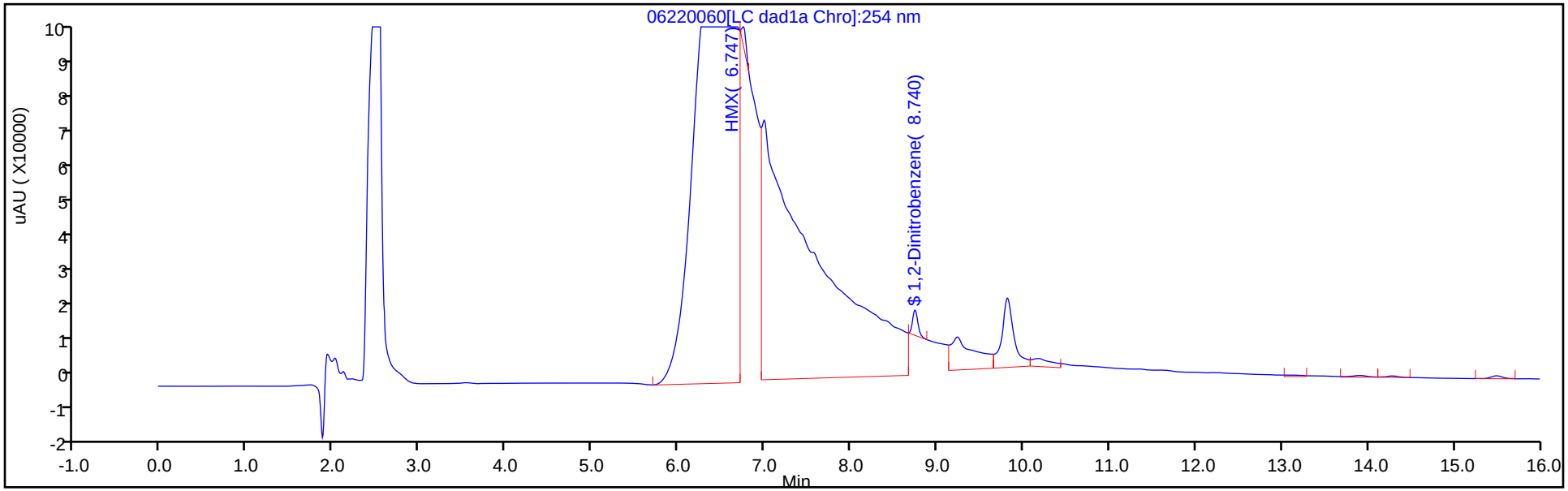
Report Date: 23-Jun-2020 15:18:18 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

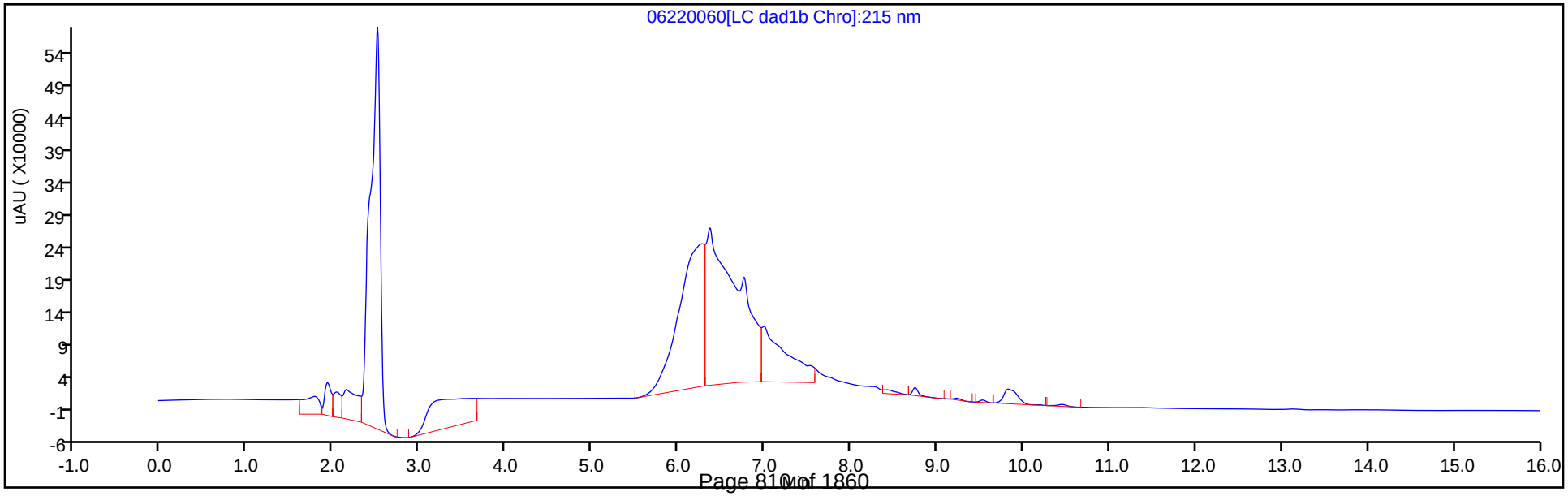
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d

Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21	Worklist Smp#:	60
Client ID:	G0101-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	60
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\20200620-92608.b\06220060.D				
Lims ID:	280-137609-A-21-A				
Client ID:	G0101-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 10:26:19	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-21-				
Misc. Info.:	280-0092608-060				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				

First Level Reviewer: zhangji Date: 23-Jun-2020 15:13:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2037	101.83

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

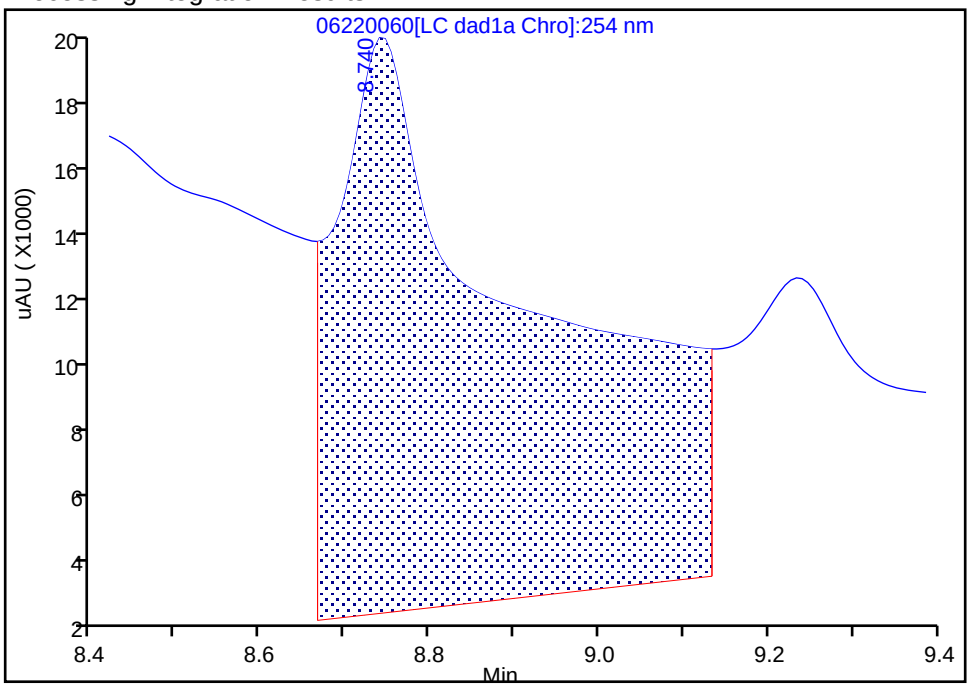
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d				
Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

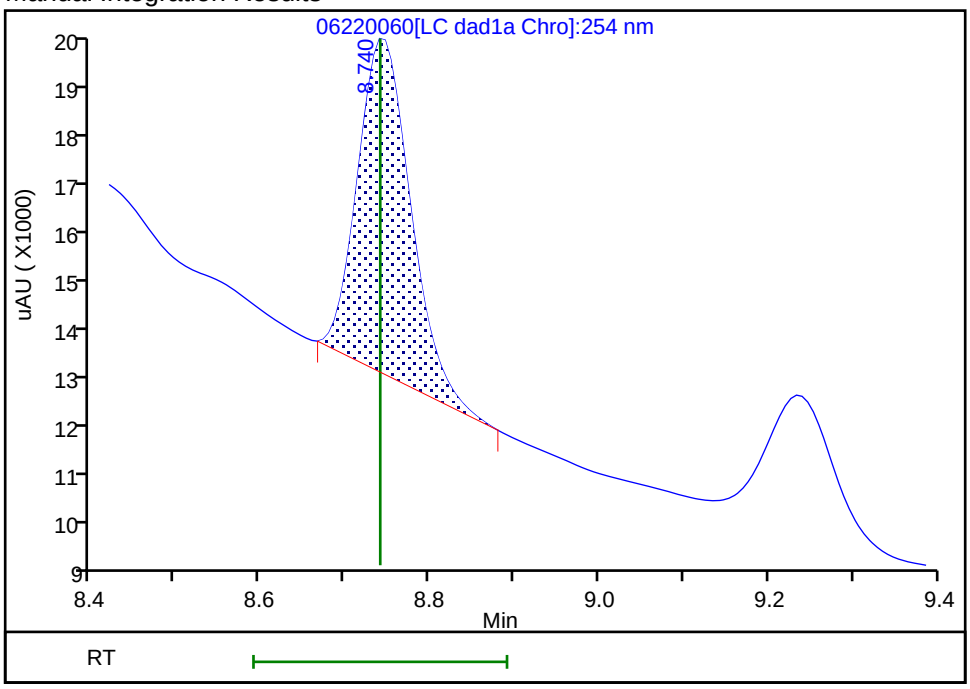
Processing Integration Results

RT: 8.74
Area: 264668
Amount: 1.914939
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 28148
Amount: 0.203658
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:13:26

Audit Action: Manually Integrated Audit Reason: Baseline

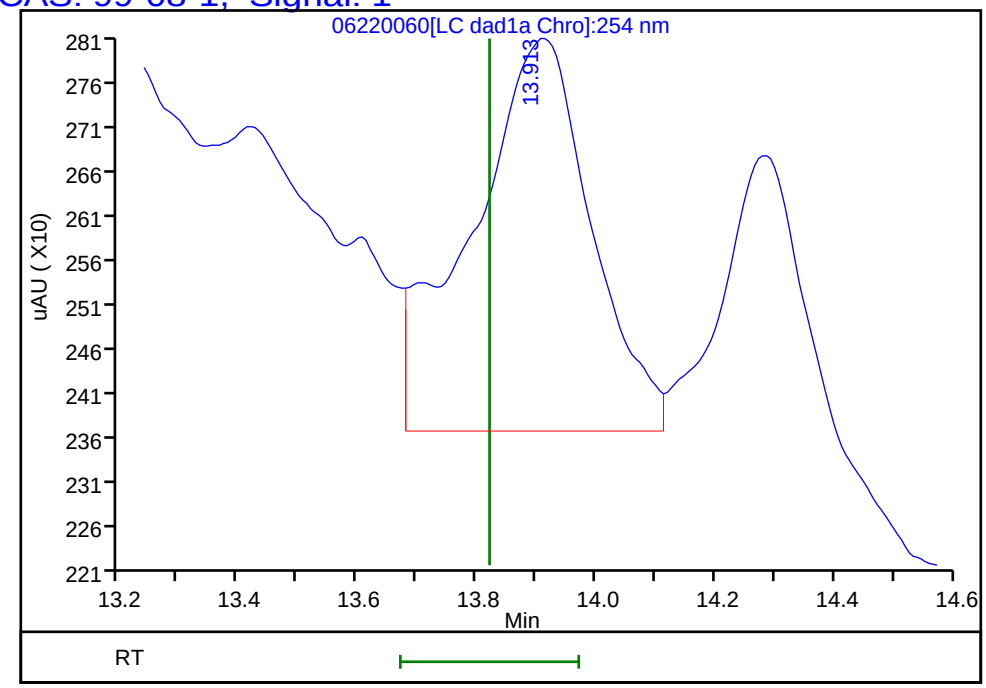
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d				
Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.91
Response: 6220
Amount: 0.043488



Reviewer: zhangji, 23-Jun-2020 15:13:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

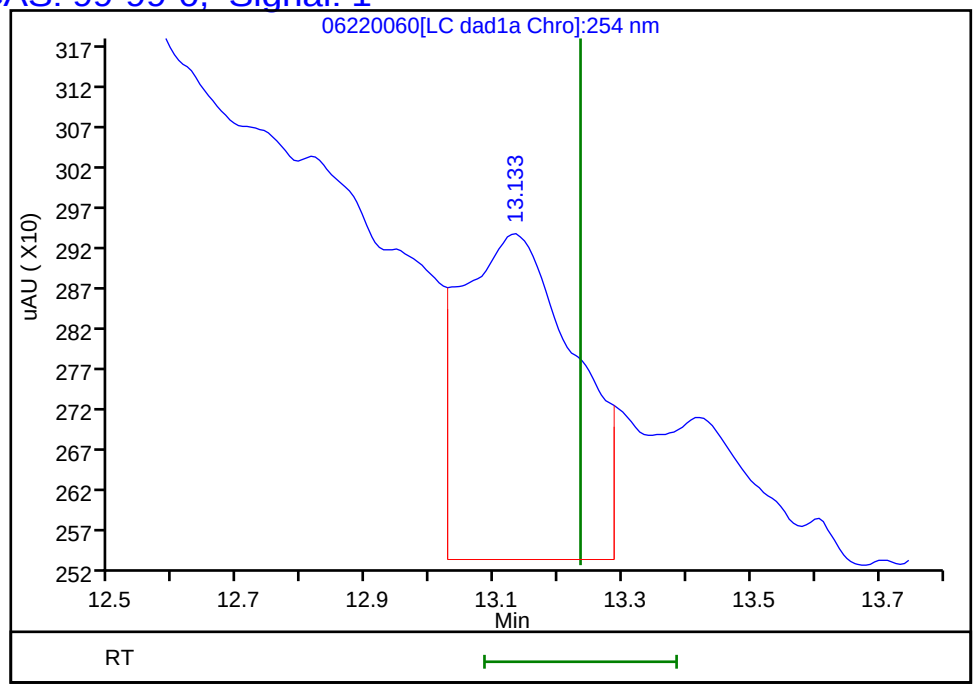
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d				
Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.13
Response: 4960
Amount: 0.043892



Reviewer: zhangji, 23-Jun-2020 15:13:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

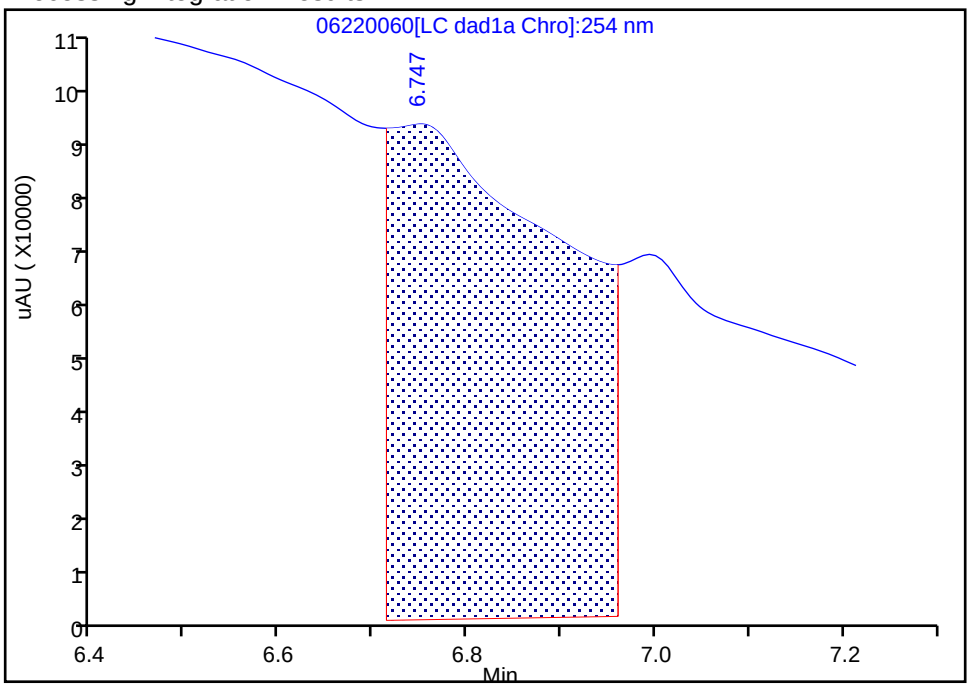
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d				
Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

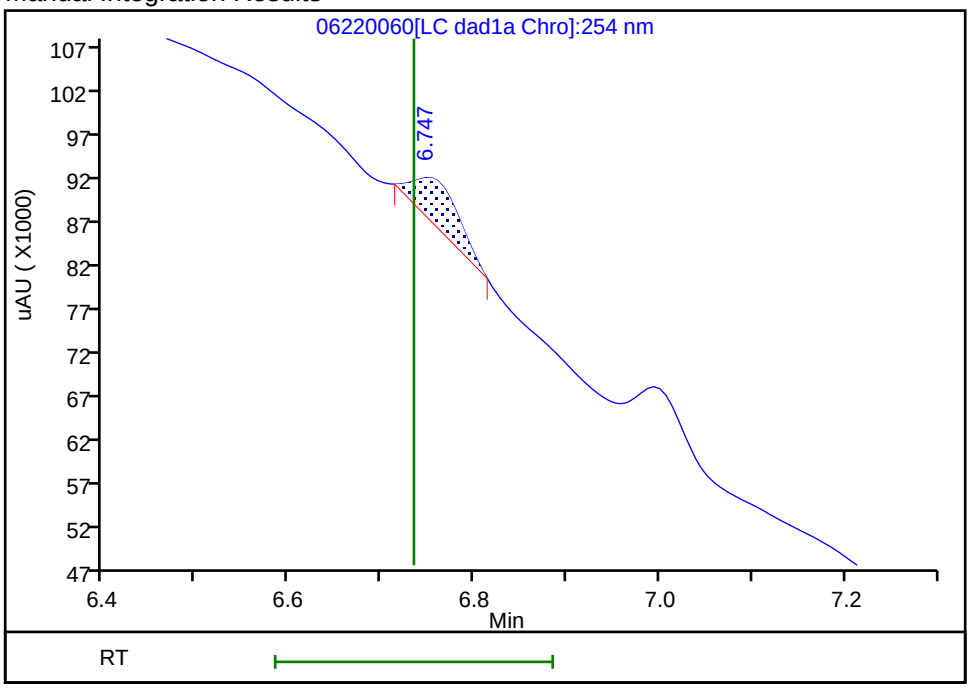
Processing Integration Results

RT: 6.75
Area: 1145994
Amount: 13.331376
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 17733
Amount: 0.206288
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:13:31

Audit Action: Manually Integrated Audit Reason: Baseline

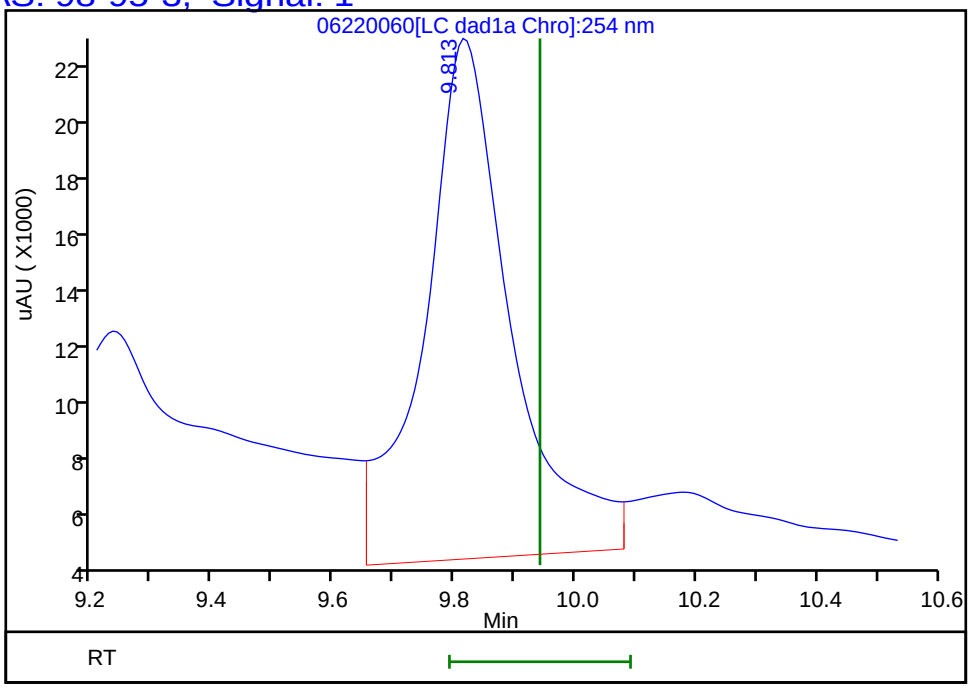
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d				
Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.81
Response: 176002
Amount: 0.878242



Reviewer: zhangji, 23-Jun-2020 15:13:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

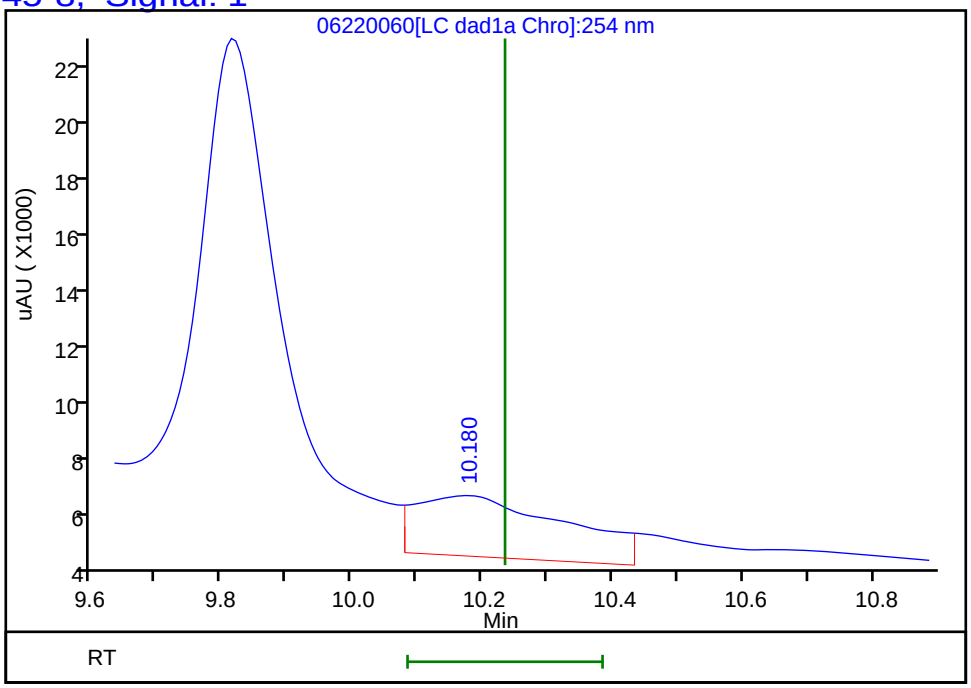
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220060.d				
Injection Date:	23-Jun-2020 10:26:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.18
Response: 32956
Amount: 0.186158



Reviewer: zhangji, 23-Jun-2020 15:13:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0101-20A Lab Sample ID: 280-137609-21

Matrix: Water Lab File ID: 06240025.D

Analysis Method: 8330A Date Collected: 06/12/2020 14:25

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 441.6(mL) Date Analyzed: 06/25/2020 08:25

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.: 500016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	*HMX*	*0.61*	*M J1*	*0.24*	0.23	*0.099*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240025.D
Lims ID: 280-137609-A-21-A
Client ID: G0101-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 08:25:54 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-21-
Misc. Info.: 280-0092719-025
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:17:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.106	7.145	-0.039	14896	0.0541	M
7 MNX	1		7.926			ND	
8 RDX	1		9.358			ND	
9 Nitrobenzene	1		12.265			ND	
$ 10 1,2-Dinitrobenzene	1	13.199	13.271	-0.072	56545	0.1973	
12 1,3-Dinitrobenzene	1		15.805			ND	
14 o-Nitrotoluene	1		16.745			ND	
15 p-Nitrotoluene	1		17.031			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.465			ND	
17 m-Nitrotoluene	1		17.958			ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.398			ND	
19 1,3,5-Trinitrobenzene	1		19.138			ND	
20 2,6-Dinitrotoluene	1		20.065			ND	
21 2,4-Dinitrotoluene	1		20.578			ND	U
22 Tetryl	1		23.885			ND	
23 2,4,6-Trinitrotoluene	1		24.905			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

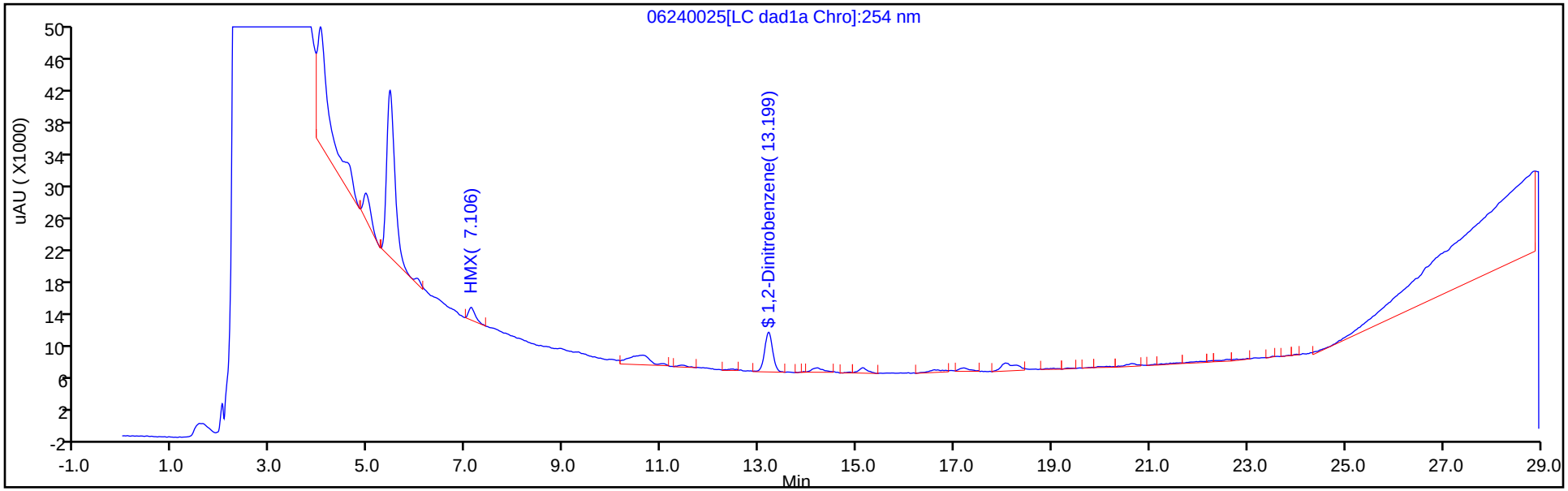
Report Date: 26-Jun-2020 16:19:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

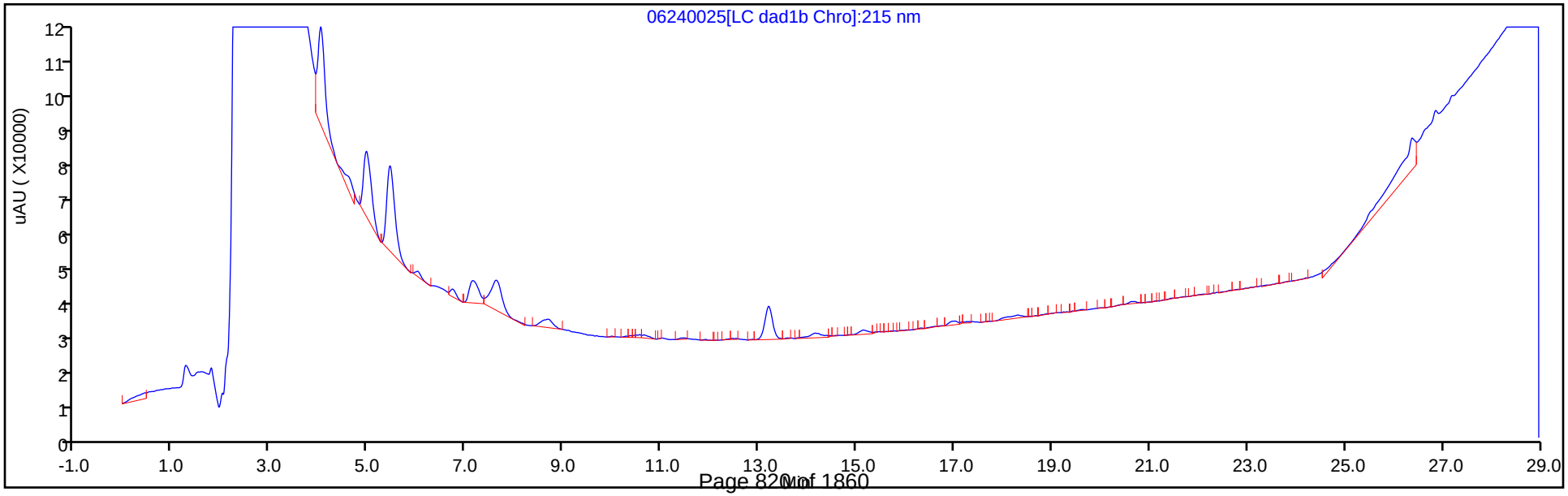
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240025.d

Injection Date:	25-Jun-2020 08:25:54	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21	Worklist Smp#:	25
Client ID:	G0101-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240025.D
Lims ID: 280-137609-A-21-A
Client ID: G0101-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 08:25:54 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-21-
Misc. Info.: 280-0092719-025
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:17:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1973	98.67

User Disabled Compound Report

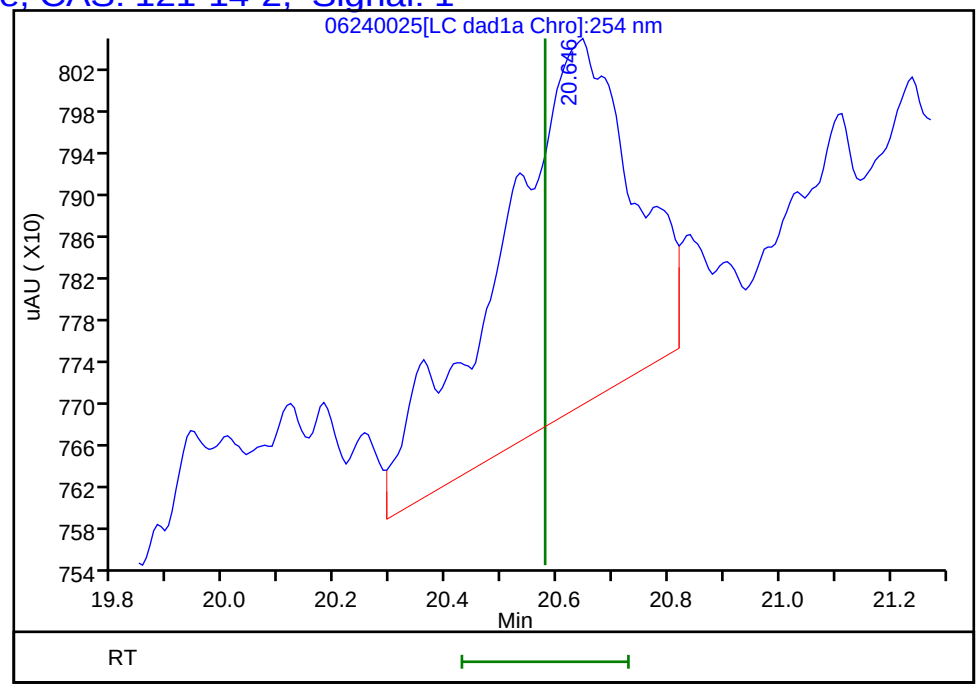
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240025.d

Injection Date:	25-Jun-2020 08:25:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.65
Response: 5961
Amount: 0.009312



Reviewer: zhangji, 25-Jun-2020 17:17:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

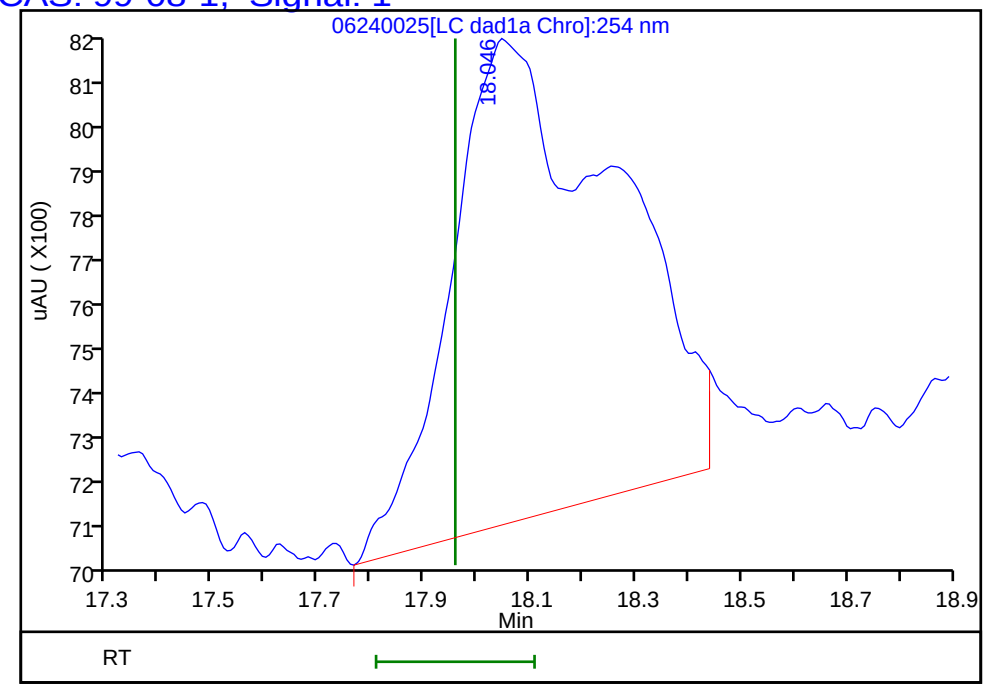
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240025.d				
Injection Date:	25-Jun-2020 08:25:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.05
Response: 21194
Amount: 0.071043



Reviewer: zhangji, 25-Jun-2020 17:17:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

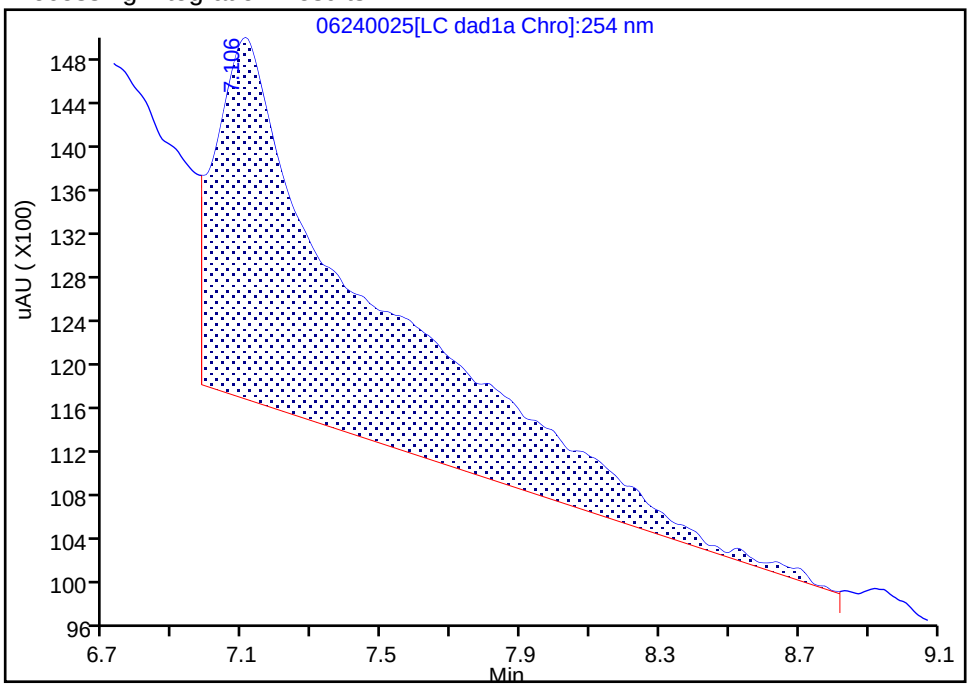
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240025.d				
Injection Date:	25-Jun-2020 08:25:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-21-A	Lab Sample ID:	280-137609-21		
Client ID:	G0101-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

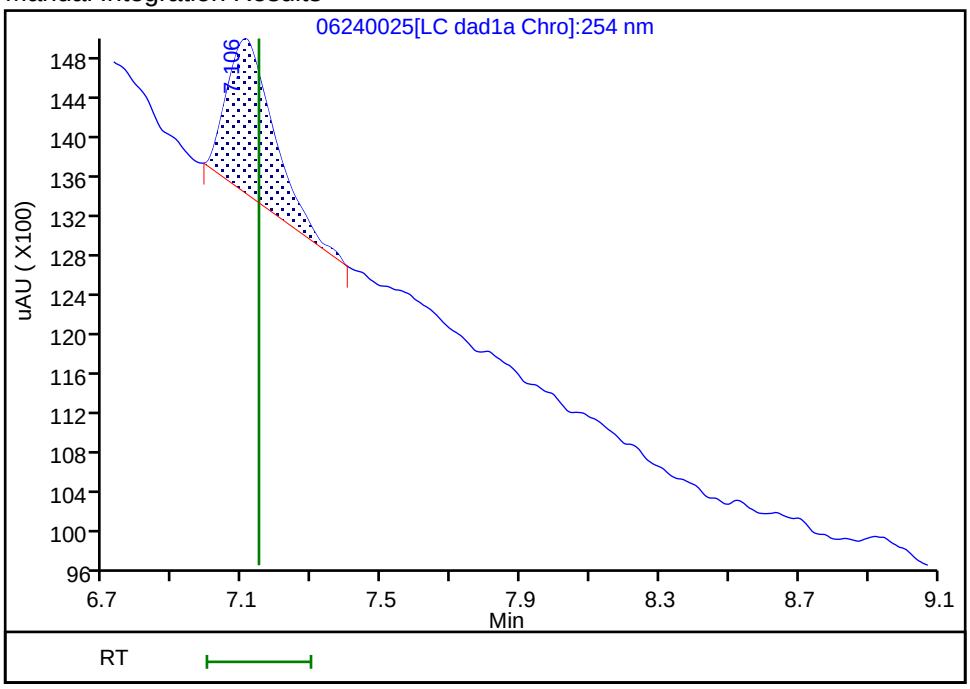
Processing Integration Results

RT: 7.11
Area: 101587
Amount: 0.543819
Amount Units: ug/ml



Manual Integration Results

RT: 7.11
Area: 14896
Amount: 0.054075
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:17:02

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0100-20A Lab Sample ID: 280-137609-22

Matrix: Water Lab File ID: 06220061.D

Analysis Method: 8330A Date Collected: 06/12/2020 13:05

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 472.8(mL) Date Analyzed: 06/23/2020 10:49

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.5	M	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.39	J1 M	0.12	0.11	0.048
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.83	M	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U M	0.42	0.42	0.21
99-99-0	4-Nitrotoluene	0.42	U M	0.43	0.42	0.11
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.096
121-82-4	RDX	0.21	U M	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220061.D
Lims ID: 280-137609-A-22-A
Client ID: G0100-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 10:49:24 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-22-
Misc. Info.: 280-0092608-061
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 15:16:11

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.749	6.734	0.015	39545	0.4600	M
	6 MNX	1		7.396			ND	MU
	7 RDX	1		7.801			ND	U
$	9 1,2-Dinitrobenzene	1	8.736	8.741	-0.005	25439	0.1841	M
	10 1,3,5-Trinitrobenzene	1	8.922	8.928	-0.006	32117	0.1395	M
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	MU
	14 Tetryl	1		10.234			ND	MU
	16 2,4,6-Trinitrotoluene	1	11.189	11.201	-0.012	7597	0.0372	M
	17 4-Amino-2,6-dinitrotoluene	1	11.342	11.361	-0.019	4044	0.0292	M
	18 2-Amino-4,6-dinitrotoluene	1	11.629	11.648	-0.019	15922	0.0785	M
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1	11.982	11.988	-0.006	3468	0.0114	M
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

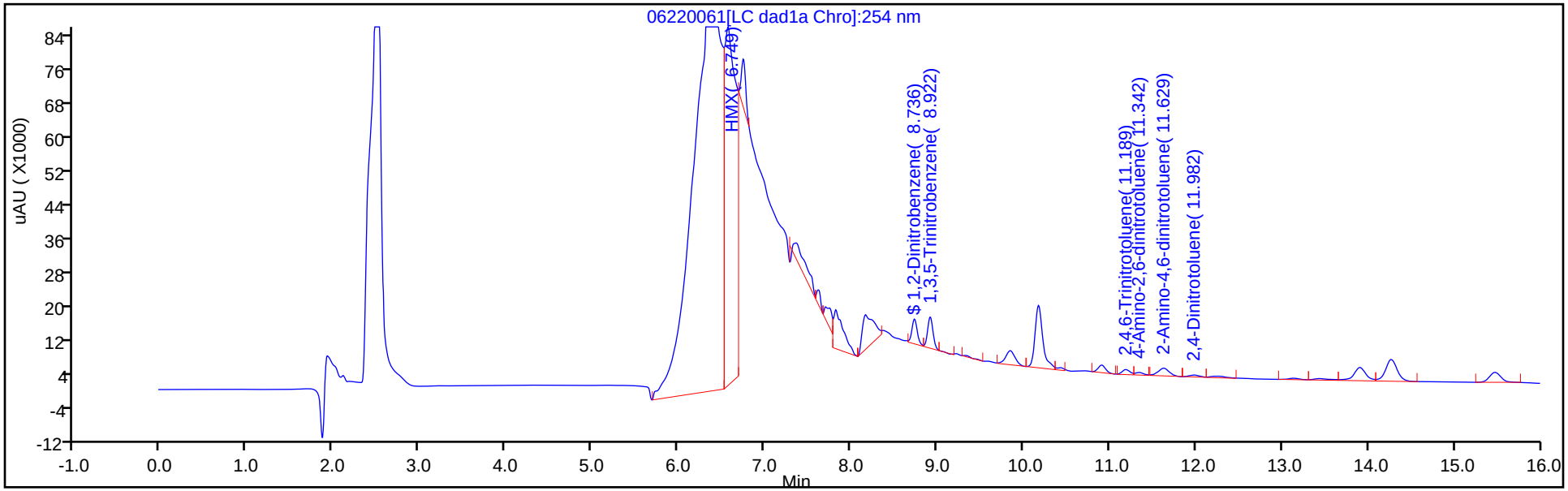
Report Date: 23-Jun-2020 15:18:19 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

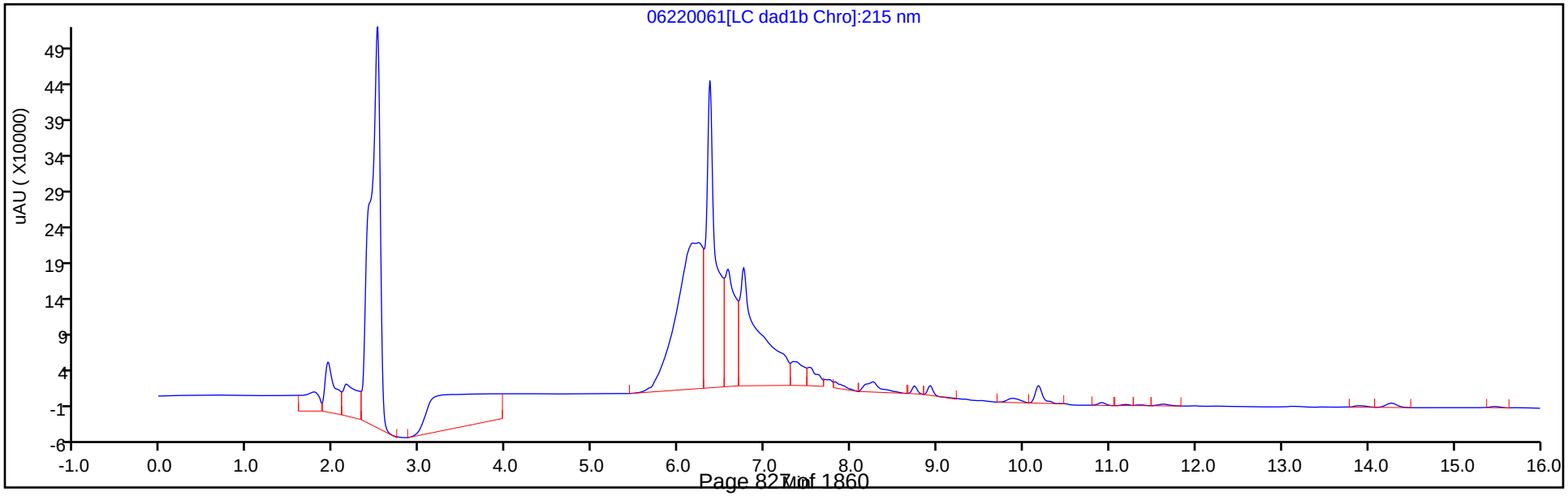
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d

Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22	Worklist Smp#:	61
Client ID:	G0100-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220061.D				
Lims ID:	280-137609-A-22-A				
Client ID:	G0100-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 10:49:24	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-22-				
Misc. Info.:	280-0092608-061				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 15:16:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1841	92.03

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

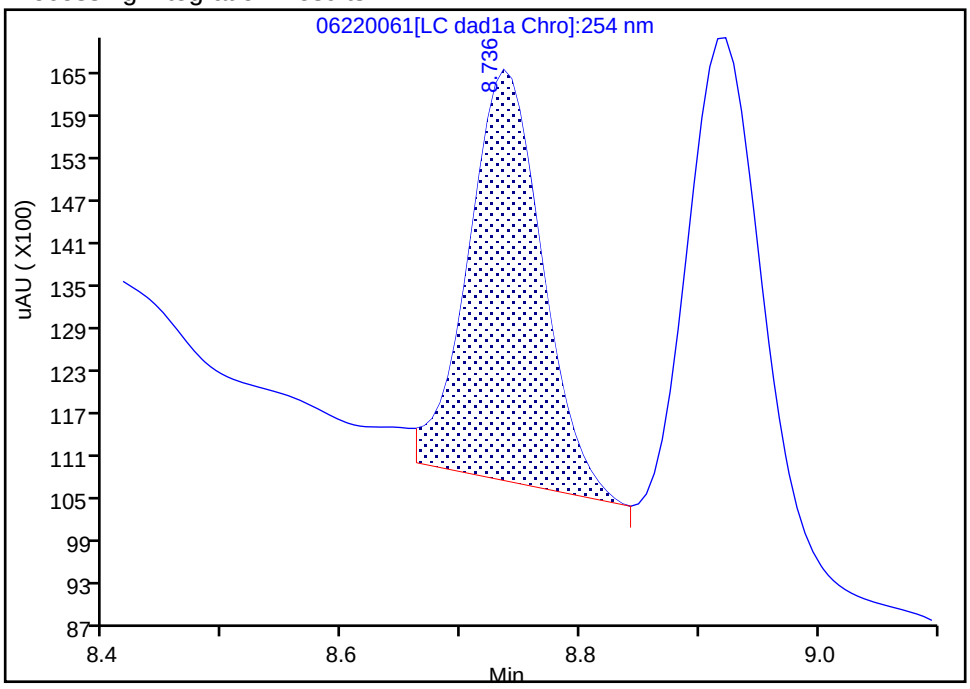
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

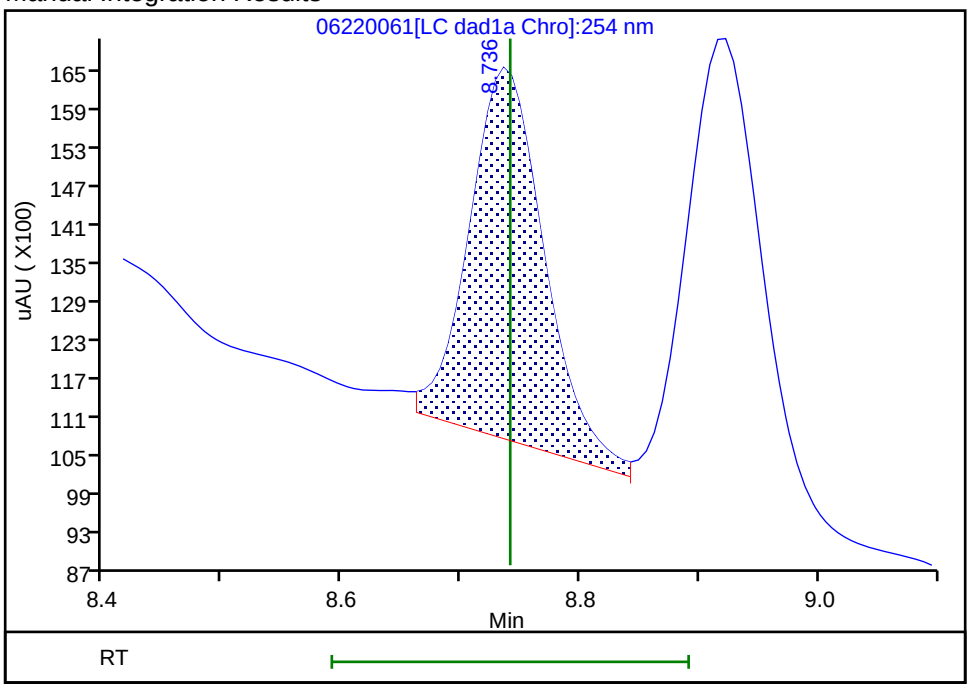
Processing Integration Results

RT: 8.74
Area: 25078
Amount: 0.181446
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 25439
Amount: 0.184058
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:14:40

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

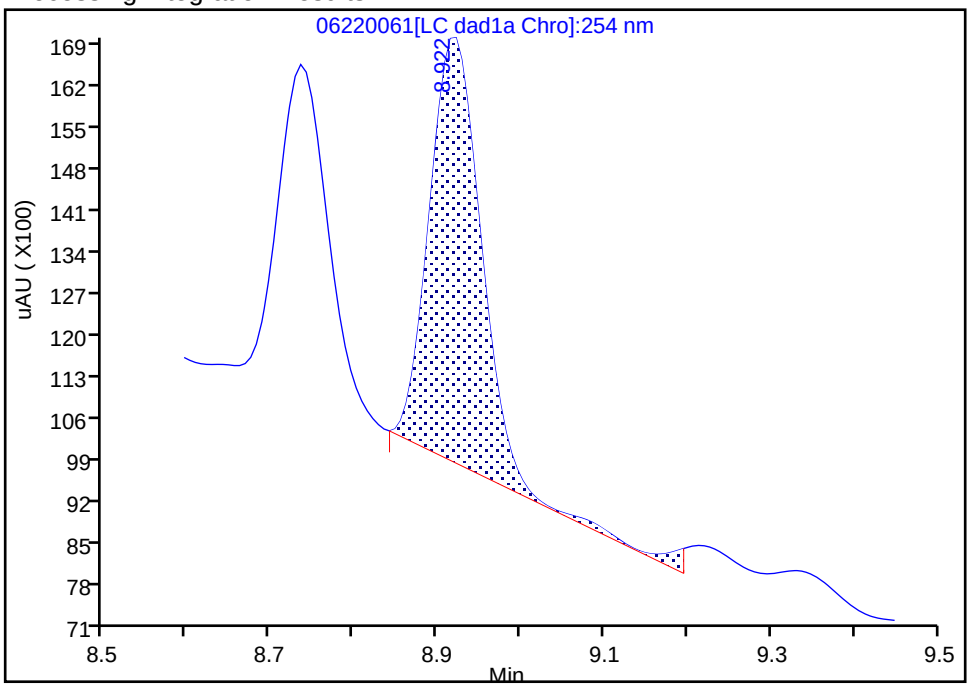
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

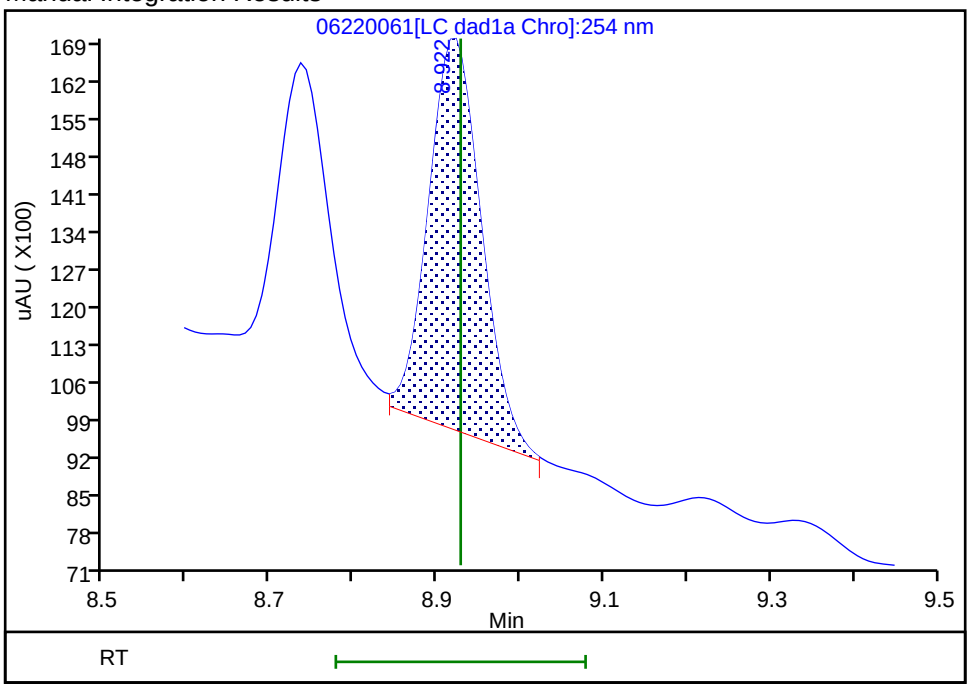
Processing Integration Results

RT: 8.92
Area: 31761
Amount: 0.137906
Amount Units: ug/mL



Manual Integration Results

RT: 8.92
Area: 32117
Amount: 0.139452
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:14:43

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

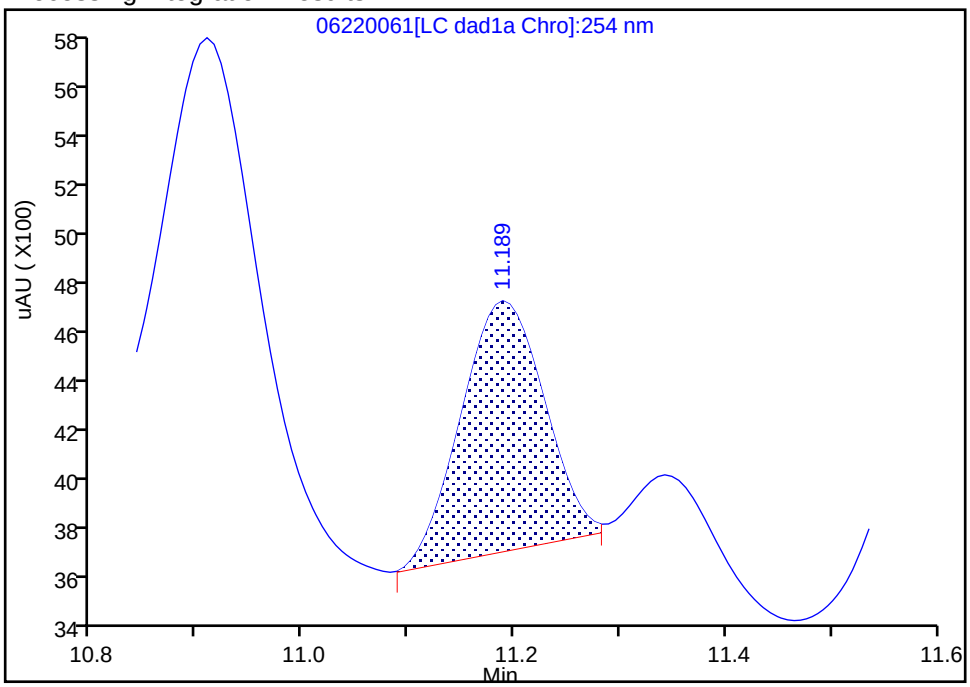
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

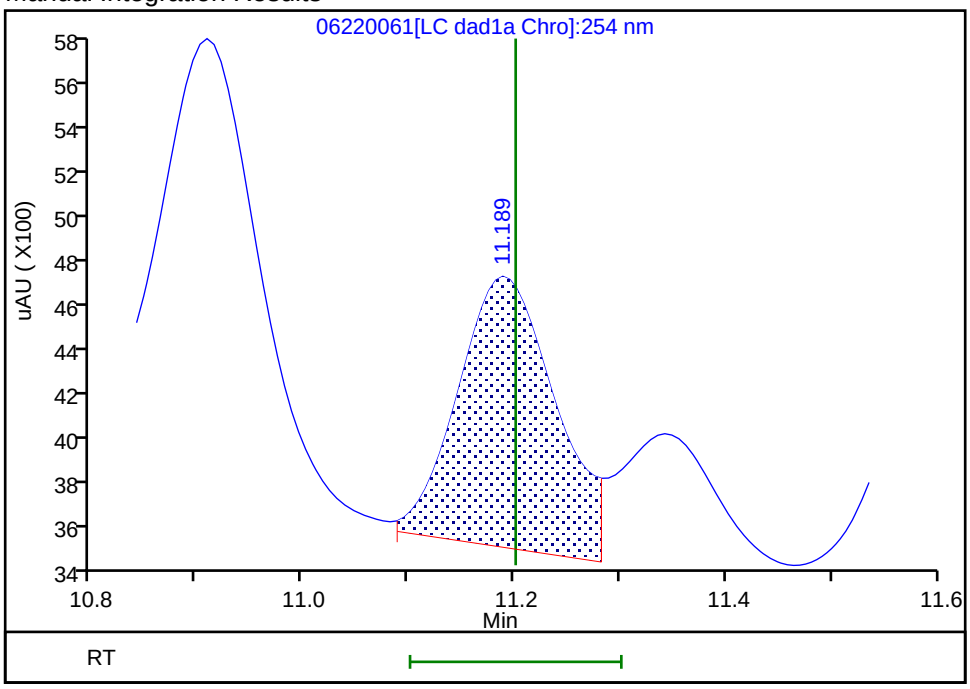
Processing Integration Results

RT: 11.19
Area: 5428
Amount: 0.026604
Amount Units: ug/mL



Manual Integration Results

RT: 11.19
Area: 7597
Amount: 0.037235
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:15:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

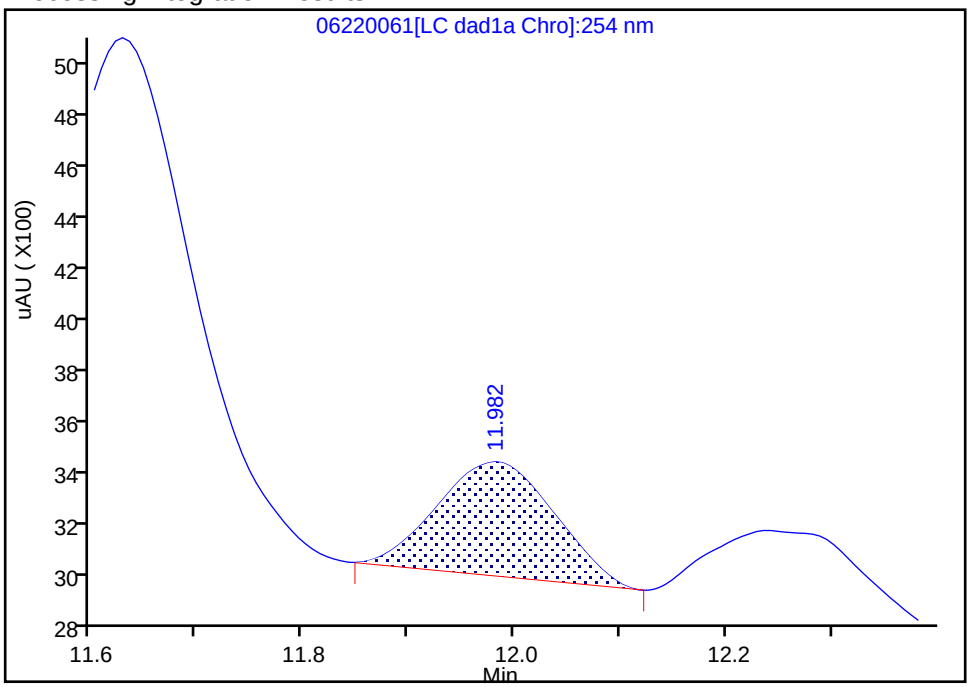
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

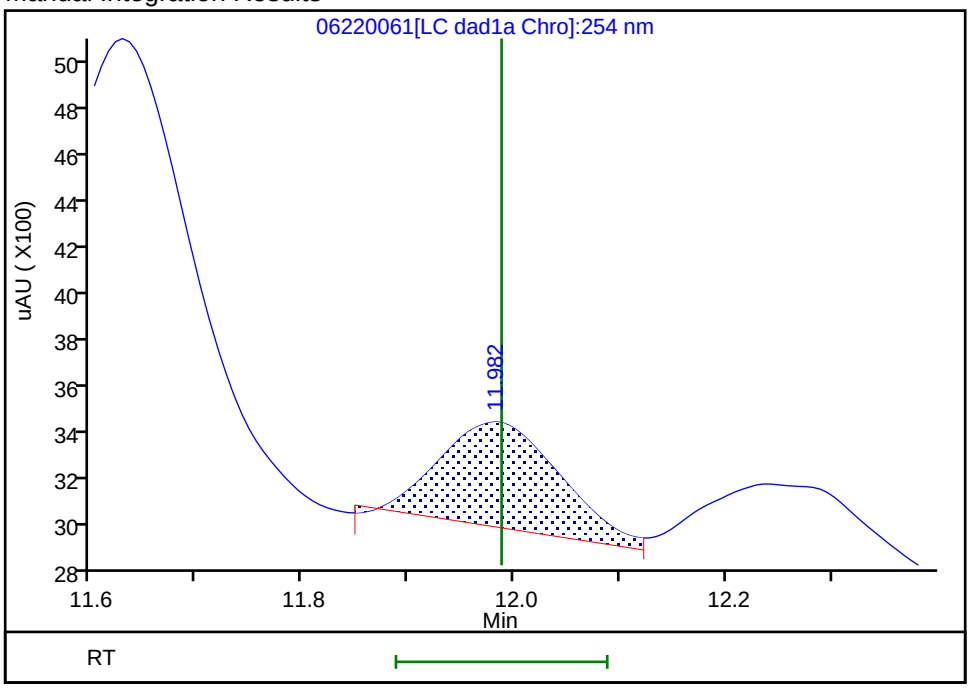
Processing Integration Results

RT: 11.98
Area: 3329
Amount: 0.010966
Amount Units: ug/mL



Manual Integration Results

RT: 11.98
Area: 3468
Amount: 0.011424
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:15:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

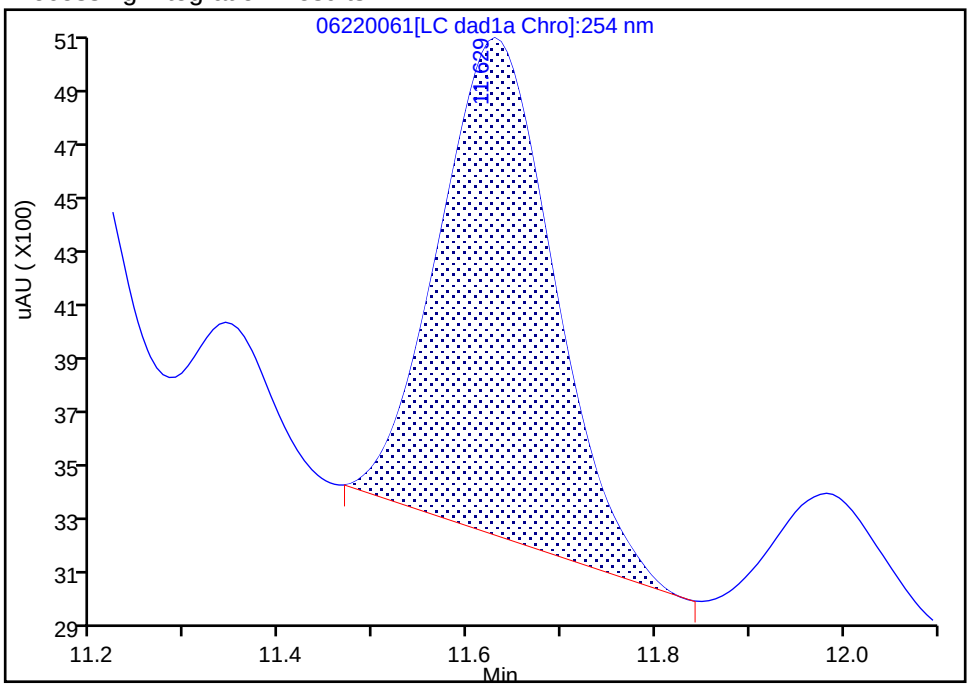
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

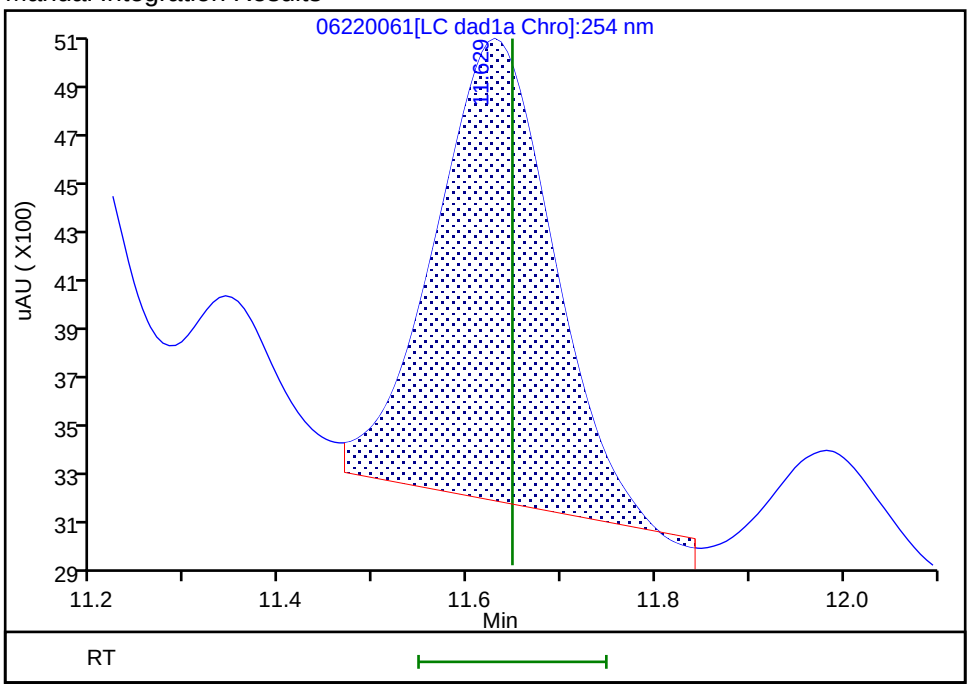
Processing Integration Results

RT: 11.63
Area: 15059
Amount: 0.074249
Amount Units: ug/mL



Manual Integration Results

RT: 11.63
Area: 15922
Amount: 0.078504
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:15:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

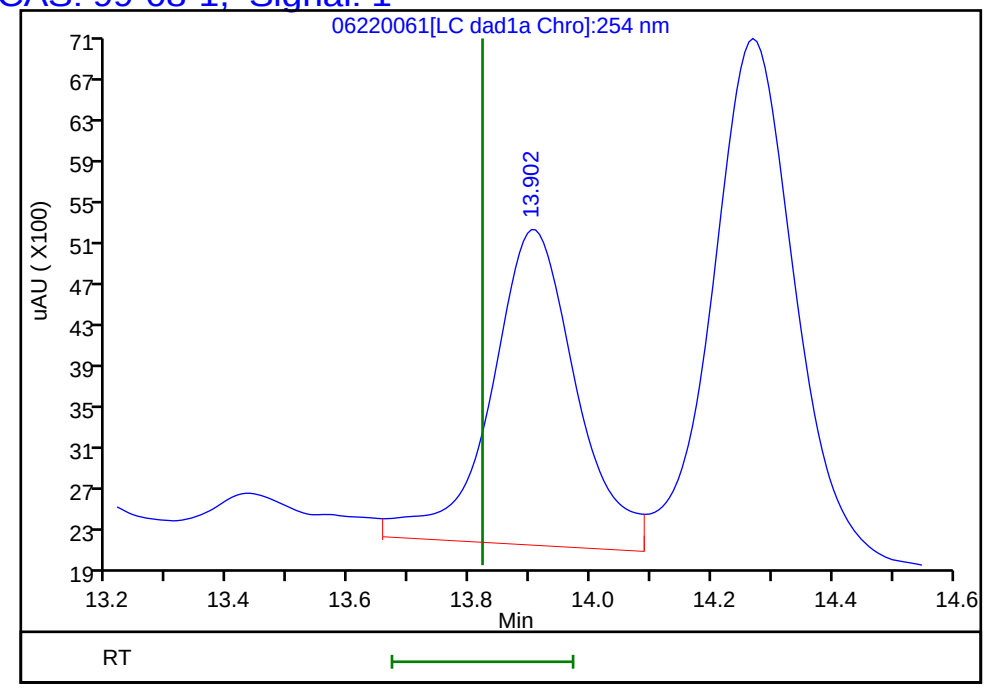
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.90
Response: 30416
Amount: 0.212657



Reviewer: zhangji, 23-Jun-2020 15:16:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

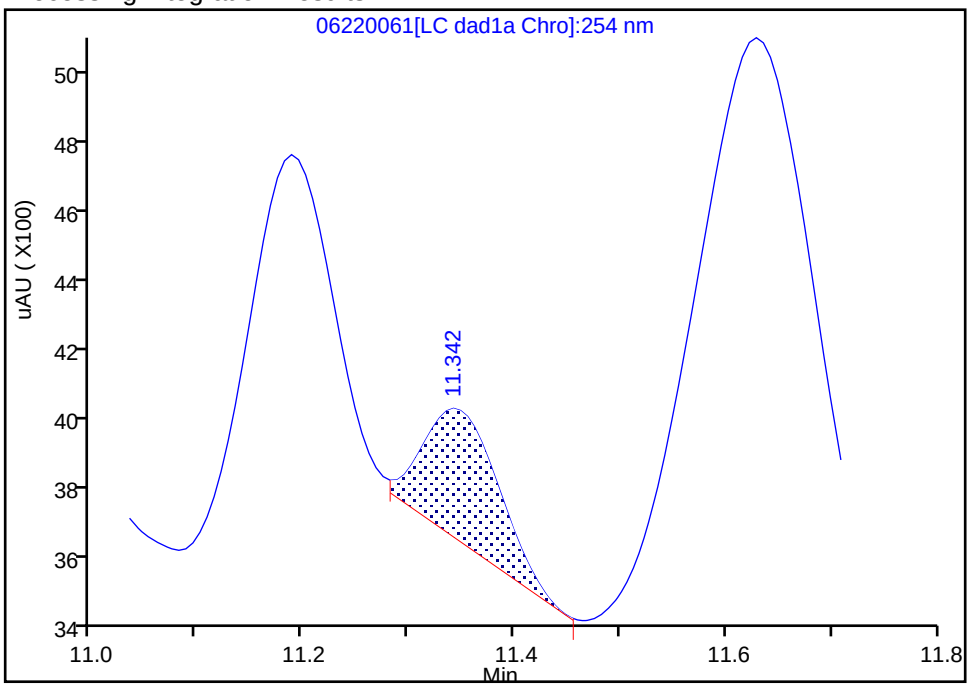
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

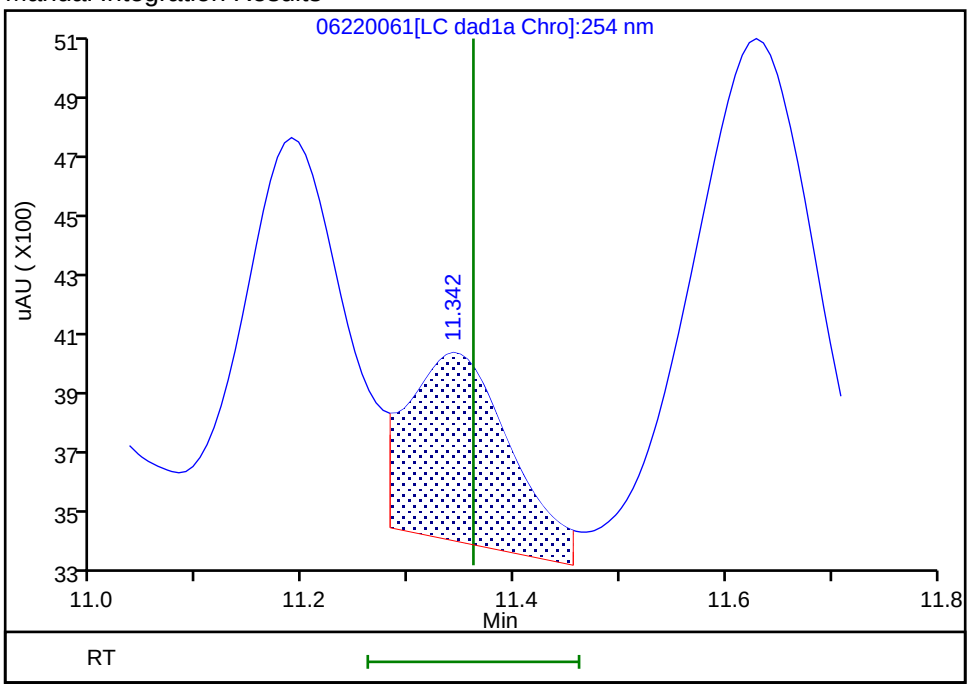
Processing Integration Results

RT: 11.34
Area: 1767
Amount: 0.016430
Amount Units: ug/mL



Manual Integration Results

RT: 11.34
Area: 4044
Amount: 0.029195
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:15:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

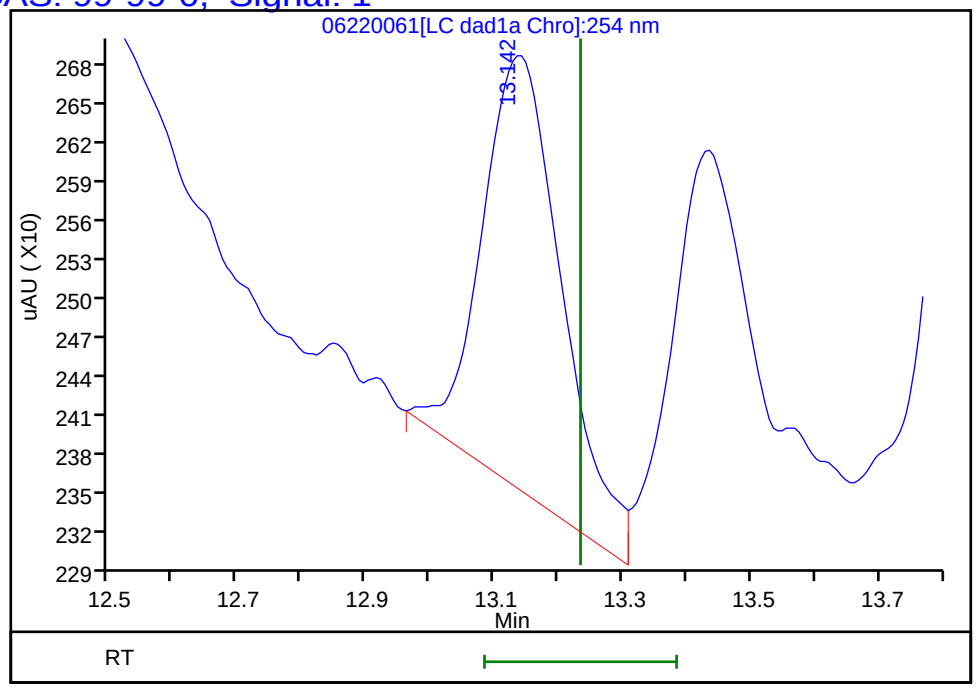
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.14
Response: 2838
Amount: 0.025114



Reviewer: zhangji, 23-Jun-2020 15:16:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

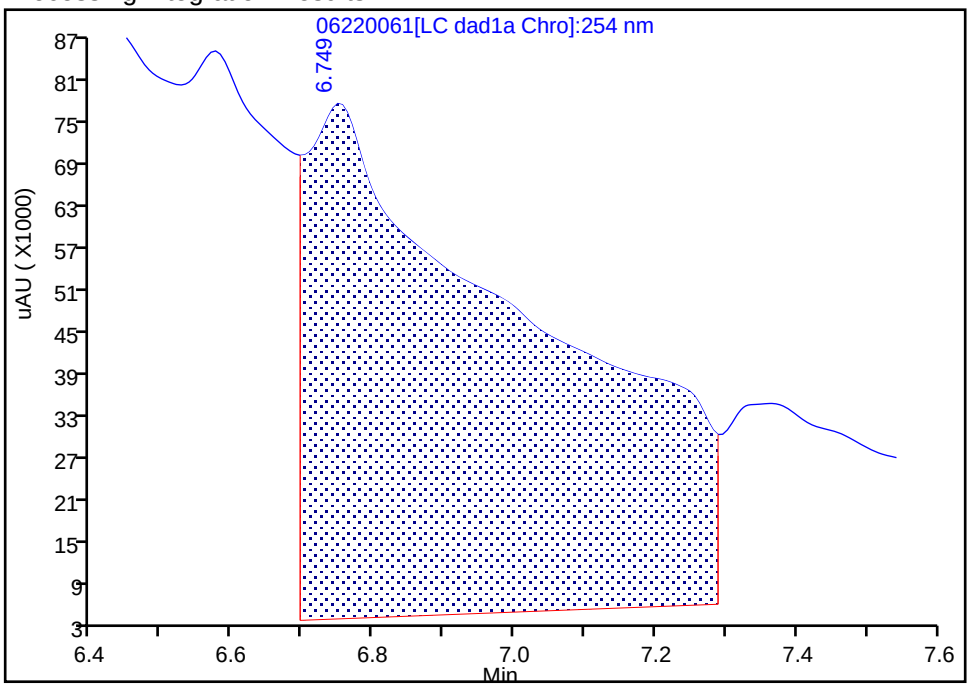
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d		
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22
Client ID:	G0100-20A		
Operator ID:	JZ	ALS Bottle#:	61 Worklist Smp#: 61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

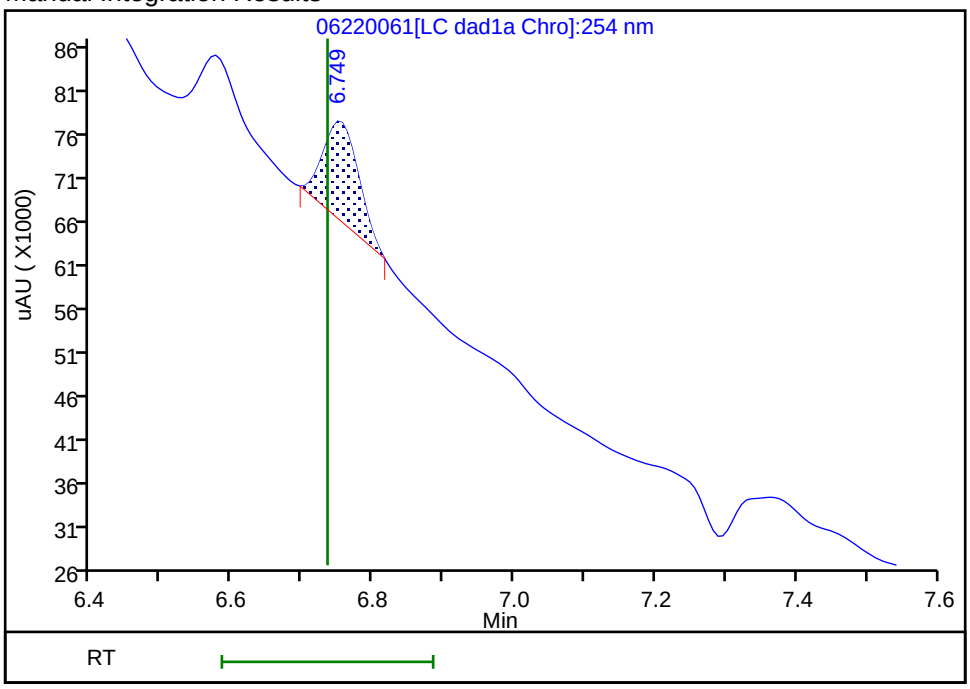
Processing Integration Results

RT: 6.75
Area: 1648613
Amount: 19.178356
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 39545
Amount: 0.460028
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:14:03
Audit Action: Manually Integrated Audit Reason: Baseline

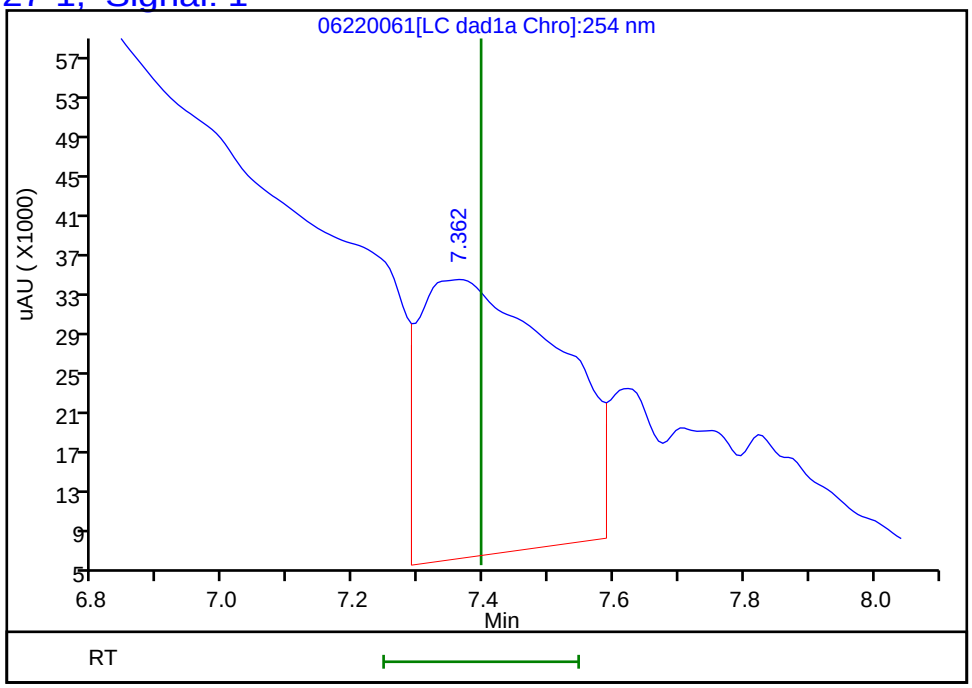
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.36
Response: 415562
Amount: 2.621111



Reviewer: zhangji, 23-Jun-2020 15:16:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

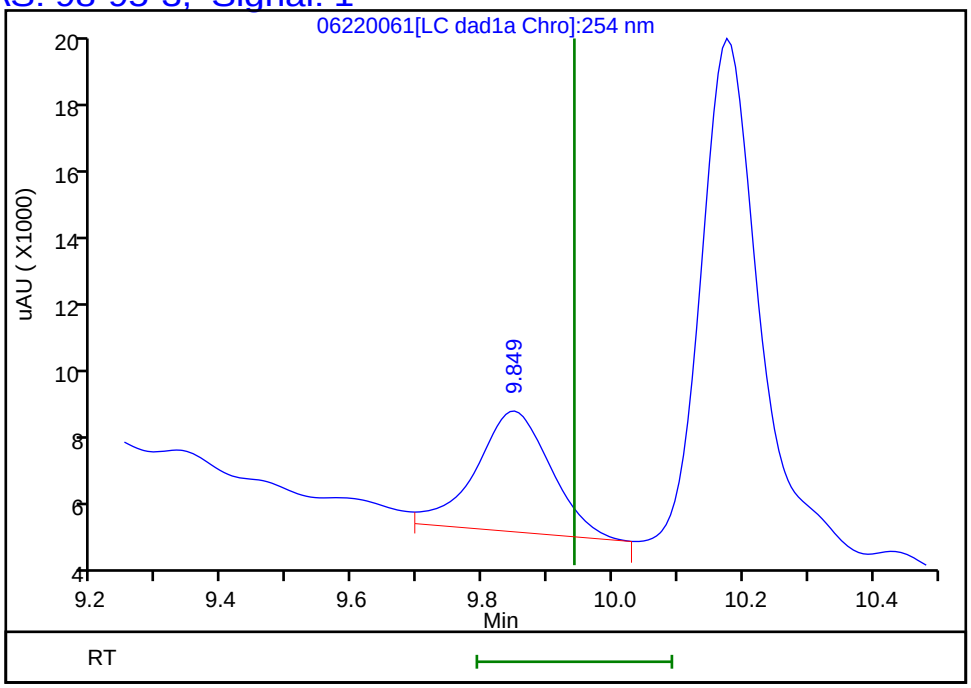
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.85
Response: 27572
Amount: 0.137583



Reviewer: zhangji, 23-Jun-2020 15:16:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

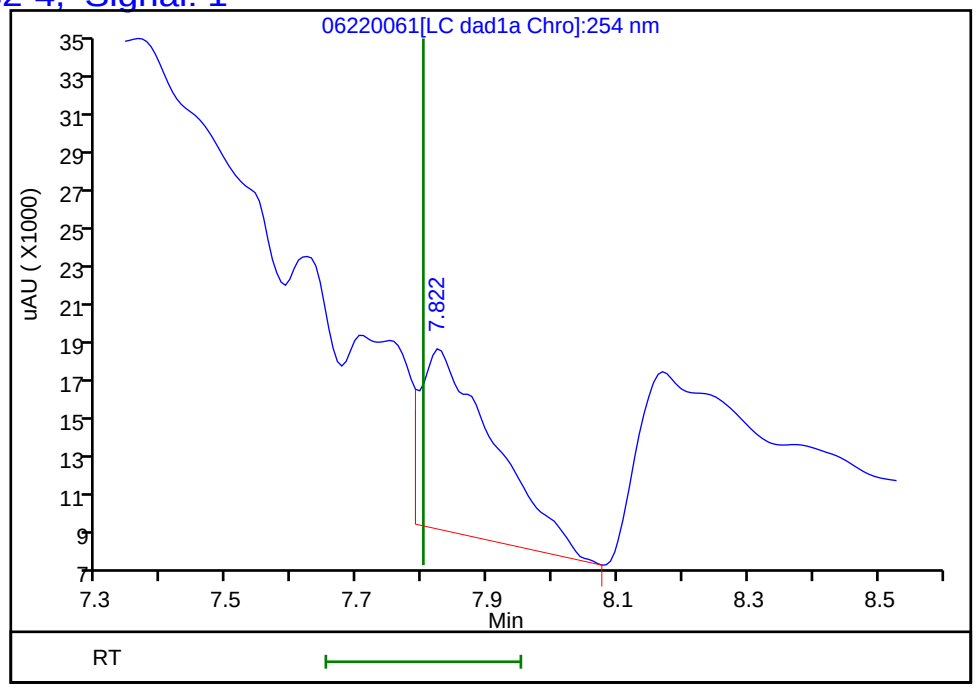
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.82
Response: 72587
Amount: 0.622460



Reviewer: zhangji, 23-Jun-2020 15:16:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

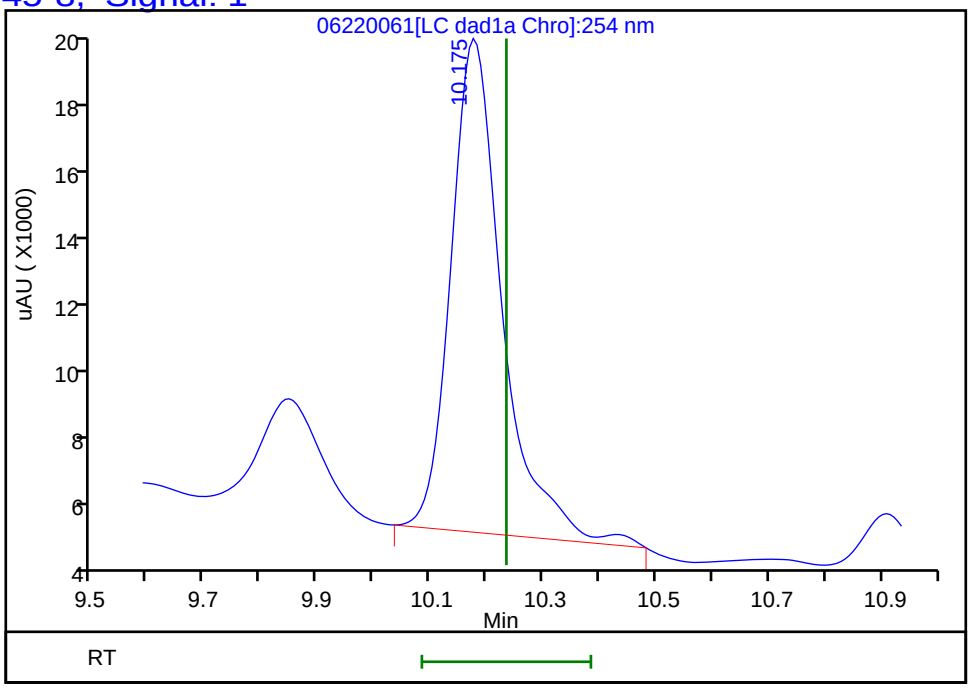
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220061.d				
Injection Date:	23-Jun-2020 10:49:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.18
Response: 92017
Amount: 0.519776



Reviewer: zhangji, 23-Jun-2020 15:16:11
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.: 280-137609-2

SDG No.:

Client Sample ID: G0100-20A Lab Sample ID: 280-137609-22

Matrix: Water Lab File ID: 06240026.D

Analysis Method: 8330A Date Collected: 06/12/2020 13:05

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 472.8(mL) Date Analyzed: 06/25/2020 09:00

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.: 500016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	*2,4,6-Trinitrotoluene*	*0.11*	*J M J1*	*0.12*	0.11	*0.048*
121-14-2	2,4-Dinitrotoluene	0.085	U M	0.11	0.085	0.029
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240026.D
Lims ID: 280-137609-A-22-A
Client ID: G0100-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 09:00:55 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-22-
Misc. Info.: 280-0092719-026
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:17:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.145			ND	U
	7 MNX	1		7.926			ND	
	8 RDX	1		9.358			ND	
	9 Nitrobenzene	1		12.265			ND	
$	10 1,2-Dinitrobenzene	1	13.218	13.271	-0.053	57160	0.1996	
	12 1,3-Dinitrobenzene	1		15.805			ND	
	14 o-Nitrotoluene	1		16.745			ND	U
	15 p-Nitrotoluene	1		17.031			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.465			ND	
	17 m-Nitrotoluene	1		17.958			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.311	18.398	-0.087	40141	0.0863	
	19 1,3,5-Trinitrobenzene	1	19.071	19.138	-0.067	64973	0.1375	
	20 2,6-Dinitrotoluene	1		20.065			ND	
	21 2,4-Dinitrotoluene	1		20.578			ND	U
	22 Tetryl	1		23.885			ND	
	23 2,4,6-Trinitrotoluene	1	24.878	24.905	-0.027	7282	0.0103	M

QC Flag Legend

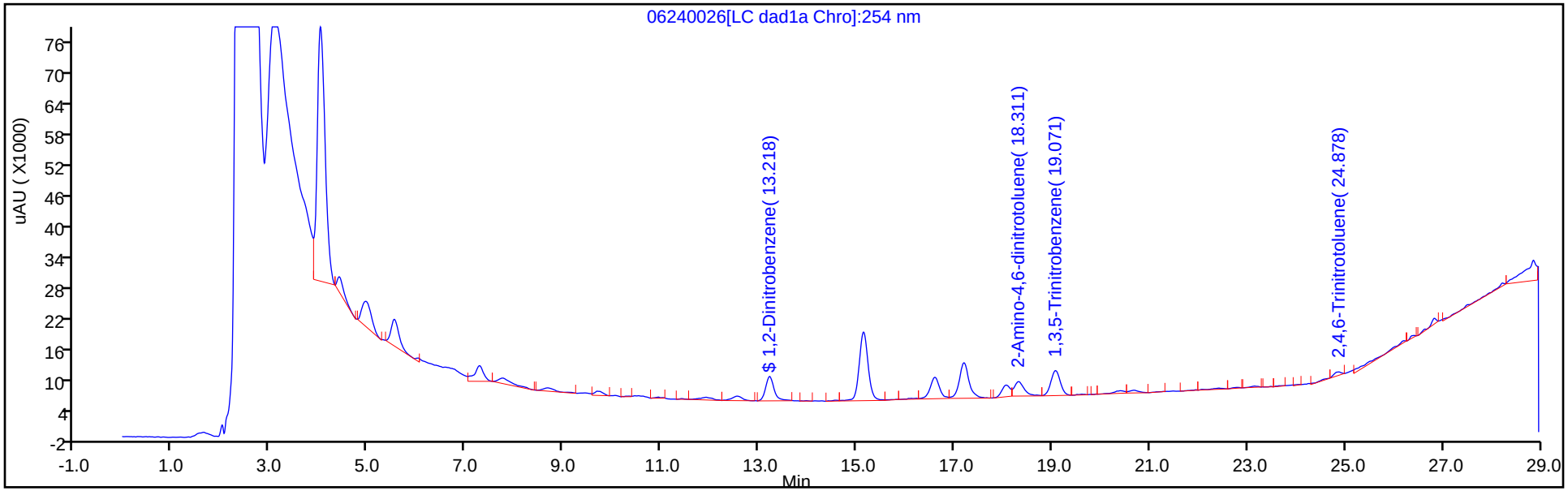
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 26-Jun-2020 16:19:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

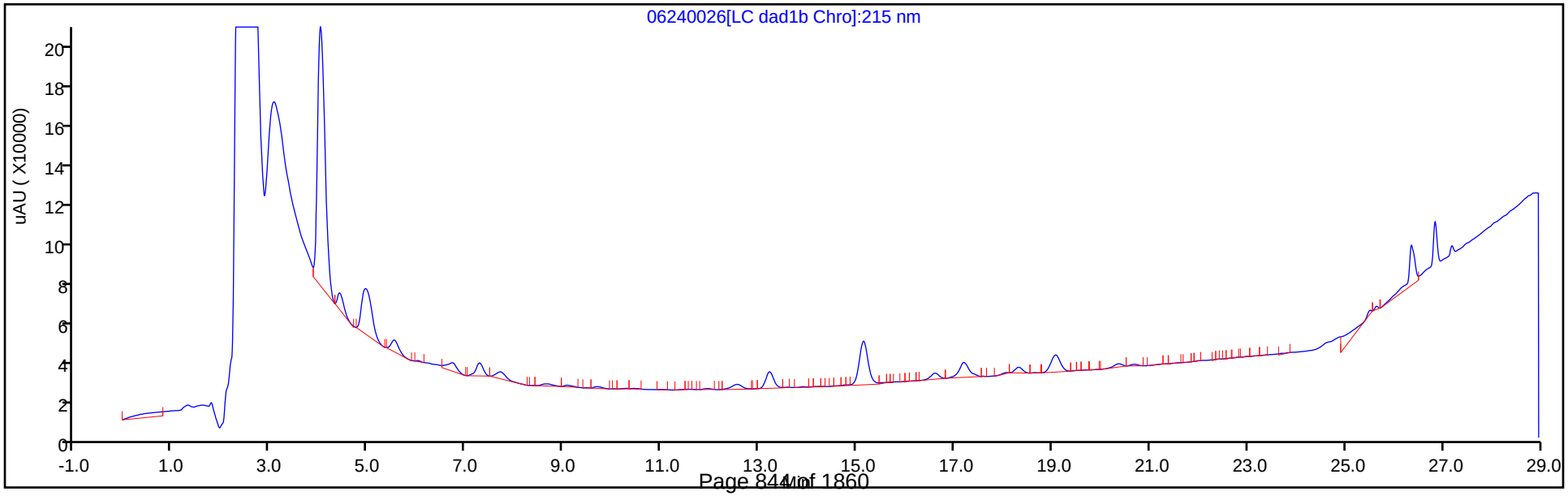
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240026.d				
Injection Date:	25-Jun-2020 09:00:55	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22	Worklist Smp#:	26
Client ID:	G0100-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240026.D				
Lims ID:	280-137609-A-22-A				
Client ID:	G0100-20A				
Sample Type:	Client				
Inject. Date:	25-Jun-2020 09:00:55	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-22-				
Misc. Info.:	280-0092719-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Jun-2020 16:19:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:17:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1996	99.78

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

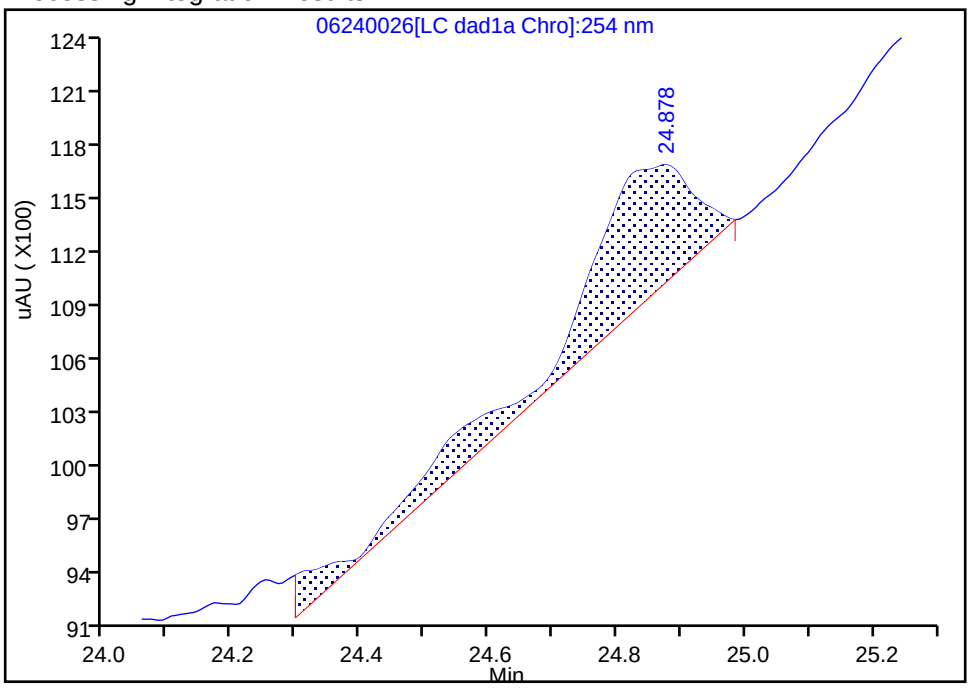
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240026.d				
Injection Date:	25-Jun-2020 09:00:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

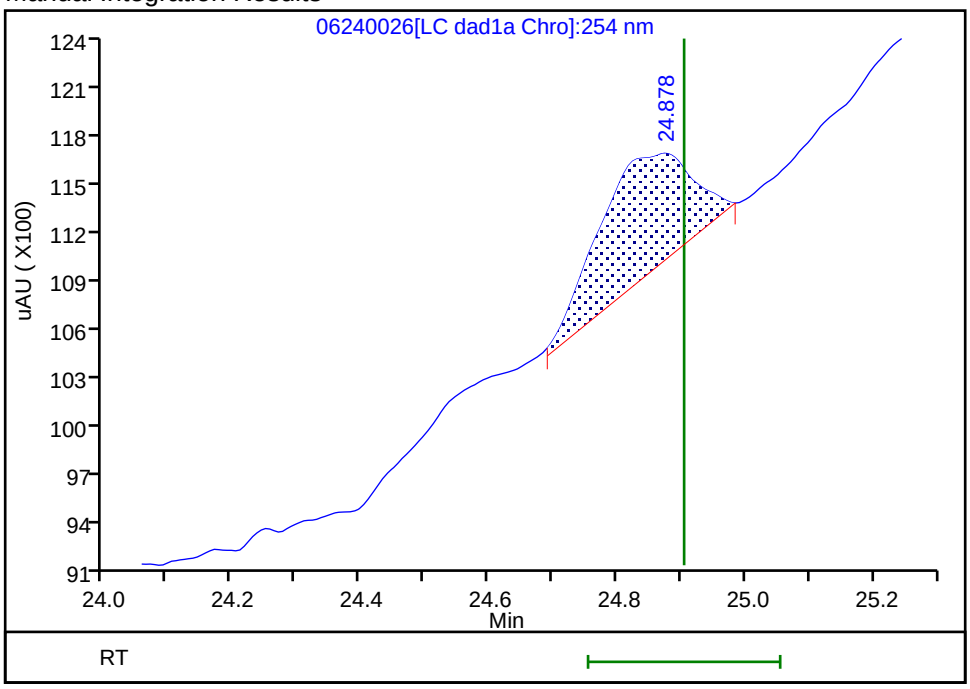
Processing Integration Results

RT: 24.88
Area: 10165
Amount: 0.017447
Amount Units: ug/ml



Manual Integration Results

RT: 24.88
Area: 7282
Amount: 0.010269
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:17:22

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

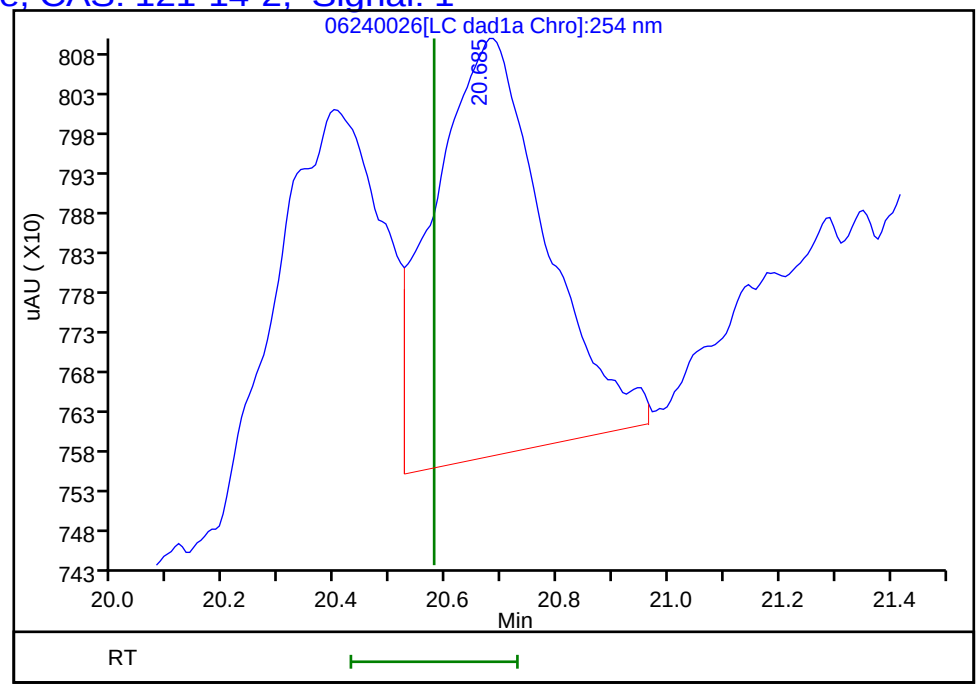
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240026.d

Injection Date:	25-Jun-2020 09:00:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.68
Response: 7291
Amount: 0.011390



Reviewer: zhangji, 25-Jun-2020 17:17:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

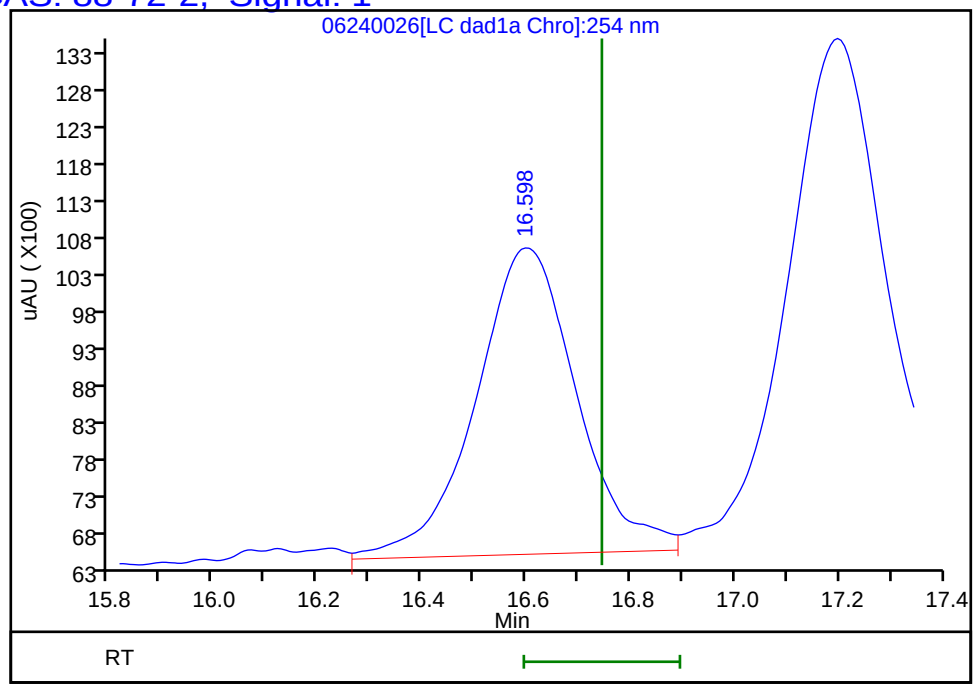
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240026.d

Injection Date:	25-Jun-2020 09:00:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.60
Response: 55682
Amount: 0.203990



Reviewer: zhangji, 25-Jun-2020 17:17:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

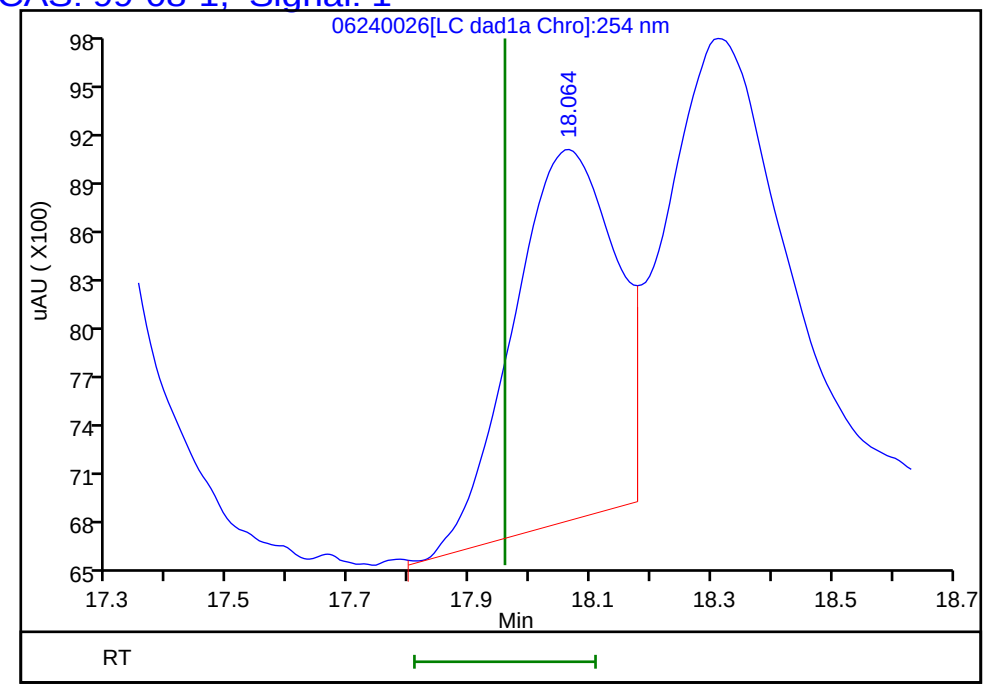
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240026.d

Injection Date:	25-Jun-2020 09:00:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.06
Response: 26532
Amount: 0.088936



Reviewer: zhangji, 25-Jun-2020 17:17:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

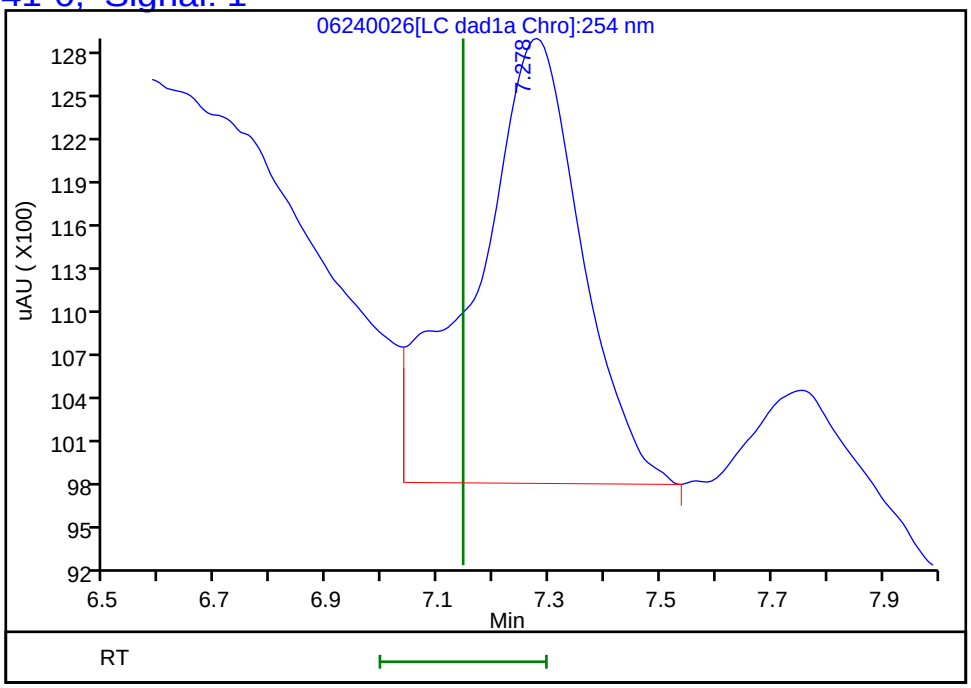
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240026.d

Injection Date:	25-Jun-2020 09:00:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-22-A	Lab Sample ID:	280-137609-22		
Client ID:	G0100-20A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0, Signal: 1

RT: 7.28
Response: 40236
Amount: 0.197229



Reviewer: zhangji, 25-Jun-2020 17:17:27

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.: 280-137609-2

SDG No.:

Client Sample ID: G0111-20A Lab Sample ID: 280-137609-23

Matrix: Water Lab File ID: 06220062.D

Analysis Method: 8330A Date Collected: 06/12/2020 12:40

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 467.6(mL) Date Analyzed: 06/23/2020 11:12

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	10	M	0.22	0.21	0.090
118-96-7	2,4,6-Trinitrotoluene	12		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.27		0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	9.8		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	11		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	1.8	M	0.22	0.21	0.094
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.097
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220062.D
Lims ID: 280-137609-A-23-A
Client ID: G0111-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 11:12:22 ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-23-
Misc. Info.: 280-0092608-062
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 15:17:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.736	6.734	0.002	14685	0.1708	M
	6 MNX	1		7.396			ND	U
	7 RDX	1	7.769	7.801	-0.032	8078	0.0693	M
$	9 1,2-Dinitrobenzene	1	8.729	8.741	-0.012	24585	0.1779	M
	10 1,3,5-Trinitrobenzene	1	8.916	8.928	-0.012	225305	0.9783	M
	11 1,3-Dinitrobenzene	1	9.549	9.568	-0.019	10057	0.0328	M
	12 Nitrobenzene	1		9.941			ND	U
	14 Tetryl	1		10.234			ND	U
	16 2,4,6-Trinitrotoluene	1	11.176	11.201	-0.025	230008	1.13	
	17 4-Amino-2,6-dinitrotoluene	1	11.329	11.361	-0.032	189579	1.07	
	18 2-Amino-4,6-dinitrotoluene	1	11.622	11.648	-0.026	185609	0.9152	
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1	11.956	11.988	-0.032	7649	0.0252	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

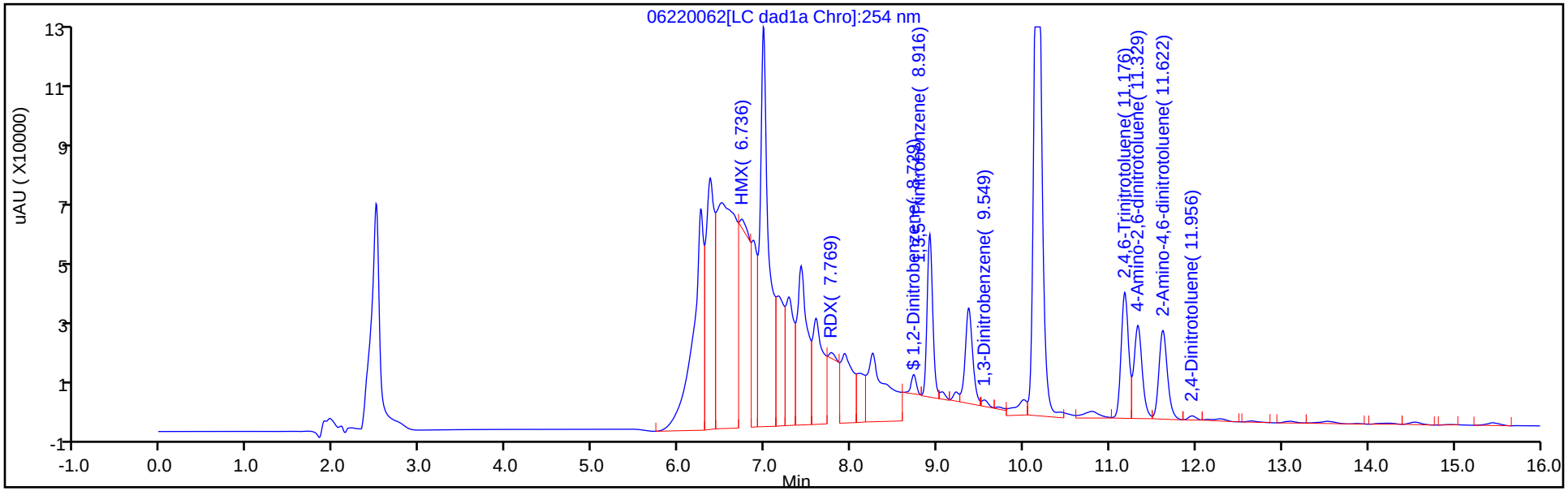
Report Date: 23-Jun-2020 15:18:19 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

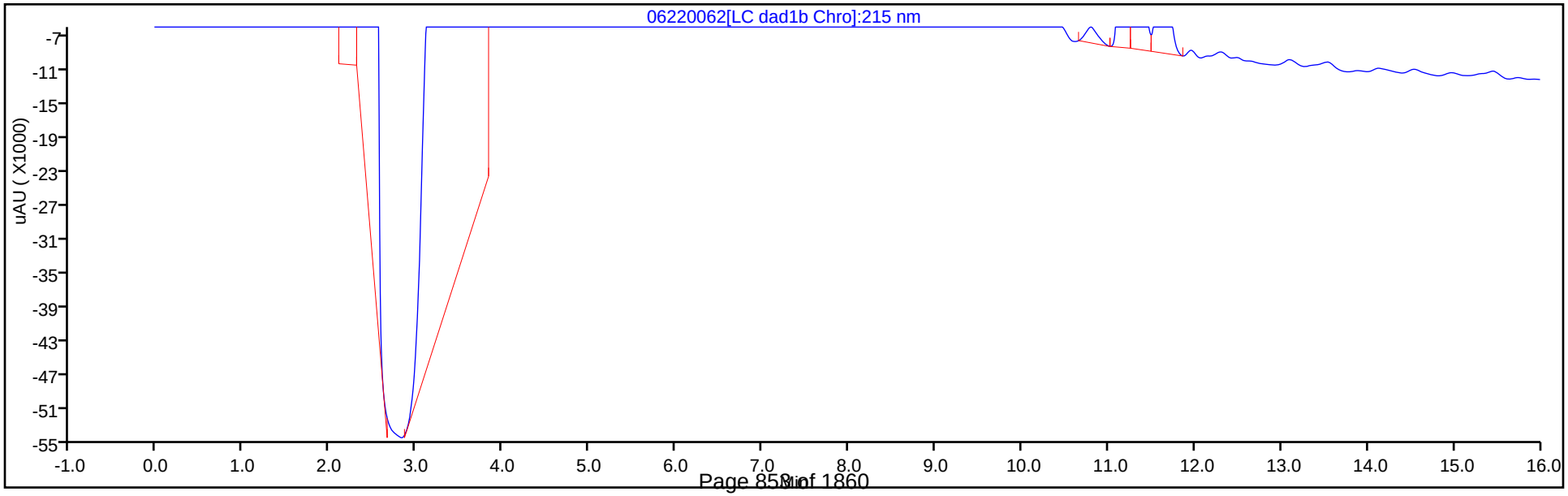
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d

Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23	Worklist Smp#:	62
Client ID:	G0111-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220062.D				
Lims ID:	280-137609-A-23-A				
Client ID:	G0111-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 11:12:22	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-23-				
Misc. Info.:	280-0092608-062				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 15:17:43		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1779	88.94

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

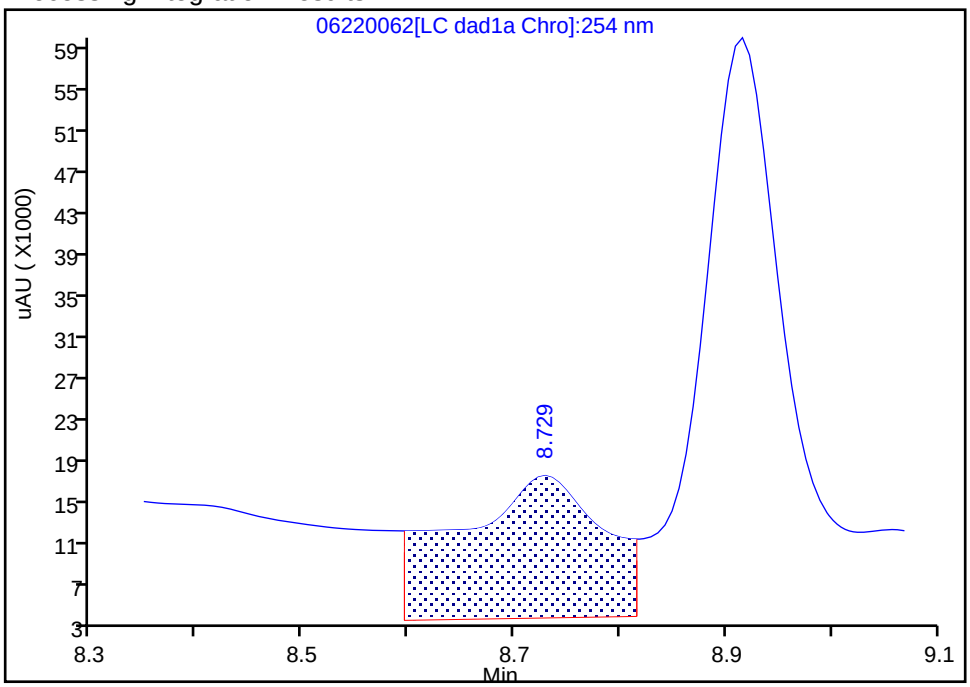
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

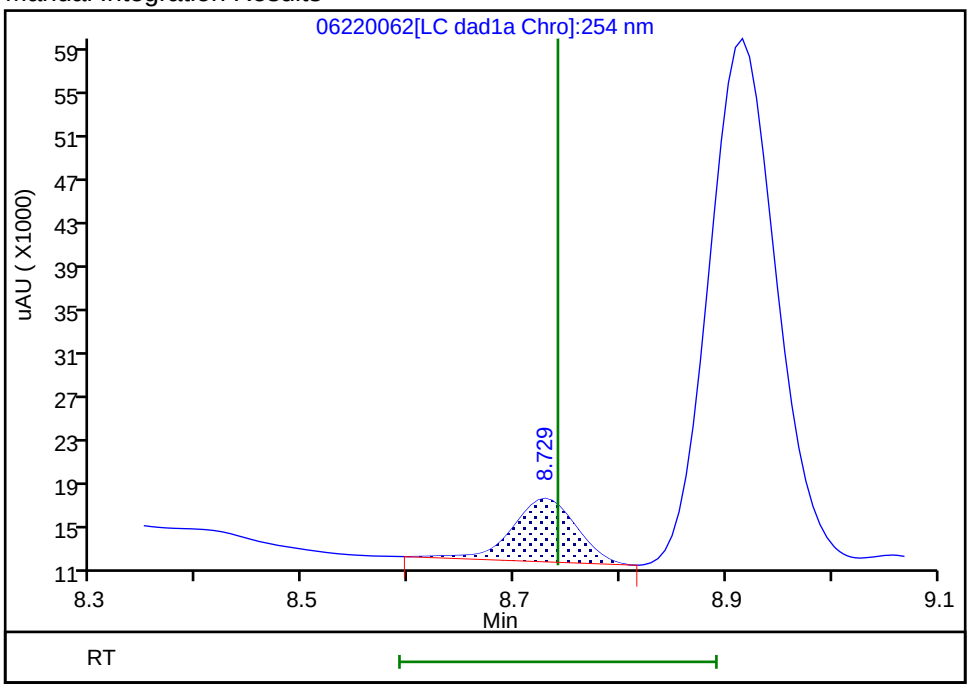
Processing Integration Results

RT: 8.73
Area: 131261
Amount: 0.949706
Amount Units: ug/mL



Manual Integration Results

RT: 8.73
Area: 24585
Amount: 0.177879
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:16:57

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

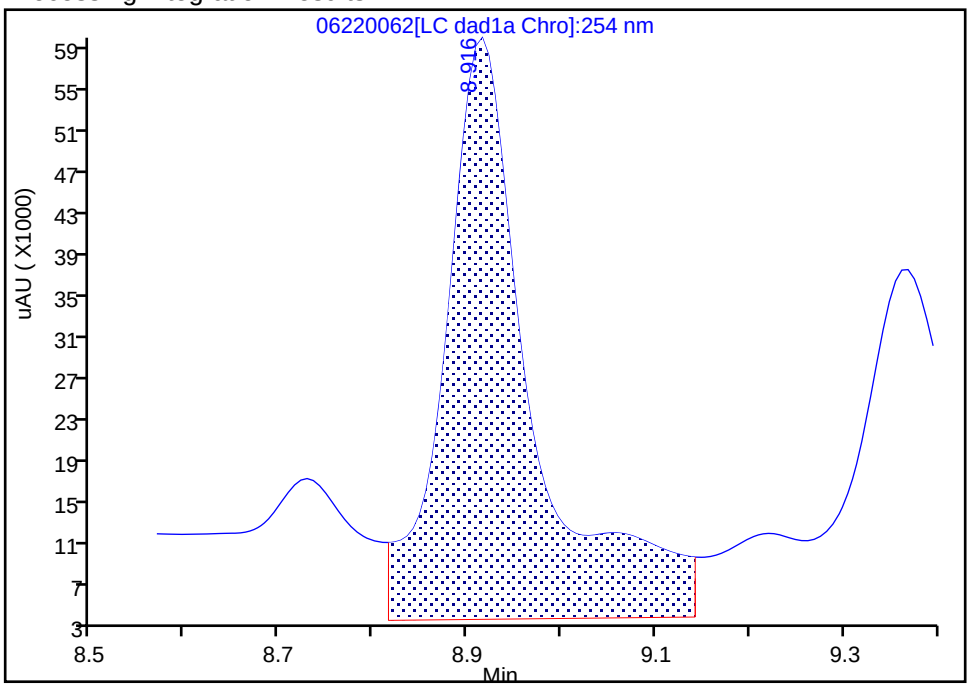
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

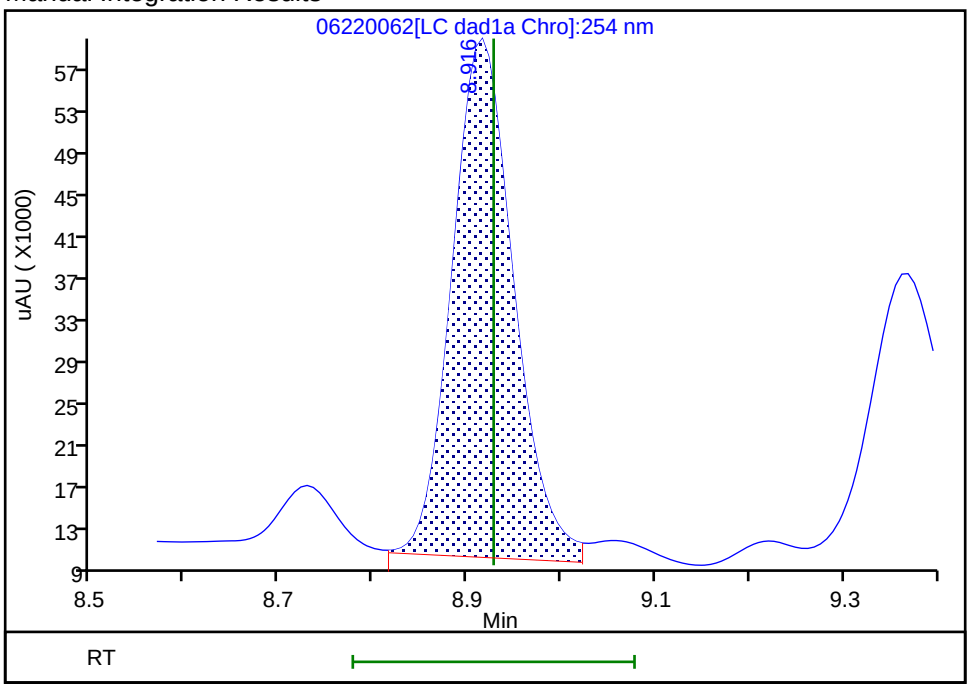
Processing Integration Results

RT: 8.92
Area: 360899
Amount: 1.567022
Amount Units: ug/mL



Manual Integration Results

RT: 8.92
Area: 225305
Amount: 0.978273
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:17:13

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

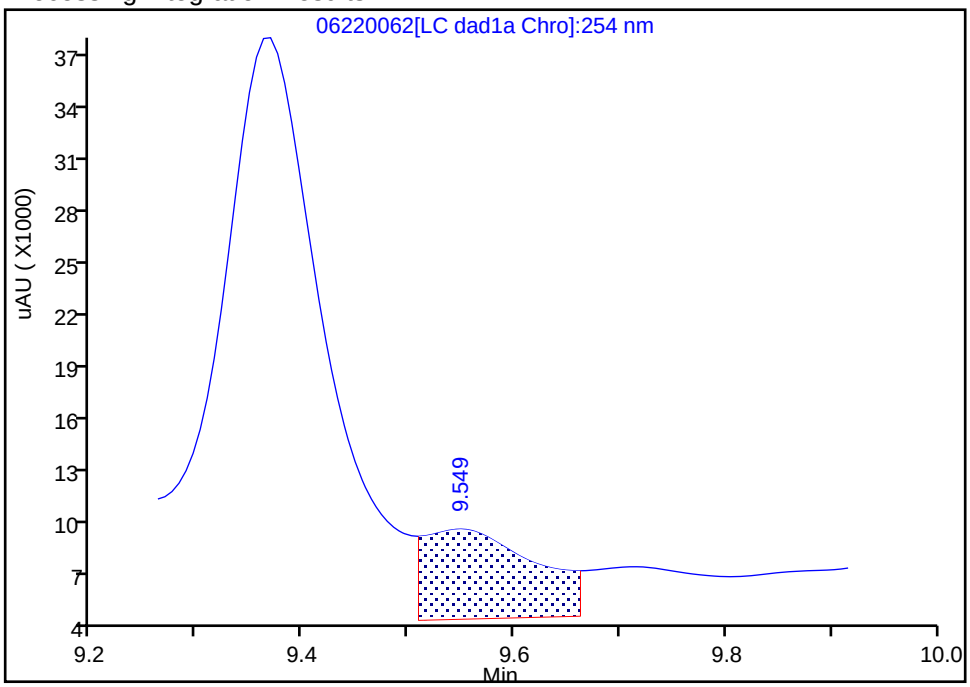
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

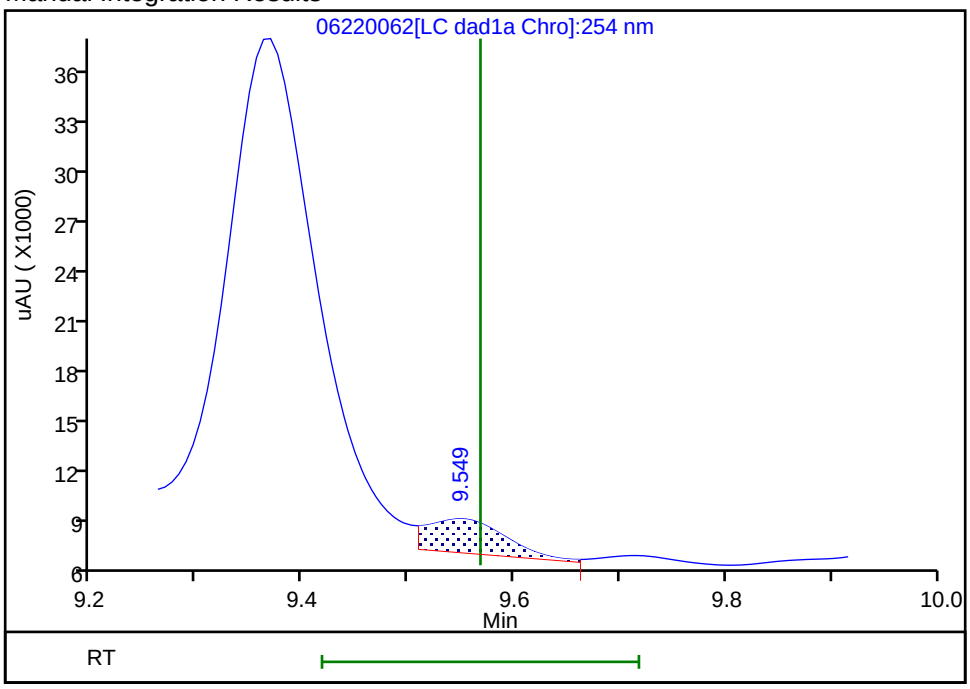
Processing Integration Results

RT: 9.55
Area: 36710
Amount: 0.119699
Amount Units: ug/mL



Manual Integration Results

RT: 9.55
Area: 10057
Amount: 0.032793
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:17:31

Audit Action: Assigned New Baseline Audit Reason: Baseline

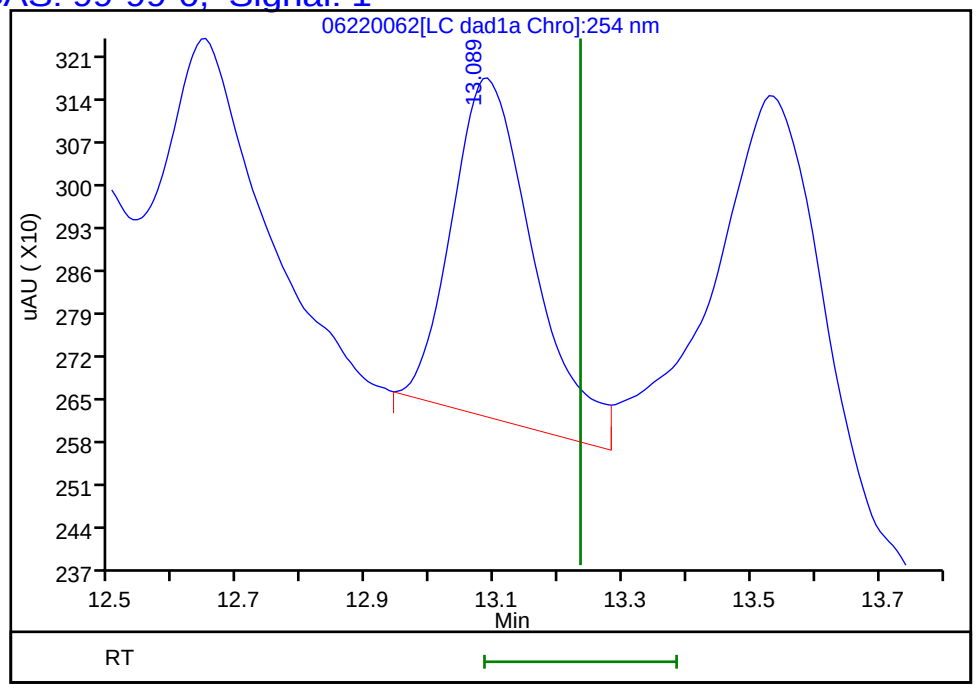
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.09
Response: 4951
Amount: 0.043812



Reviewer: zhangji, 23-Jun-2020 15:17:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

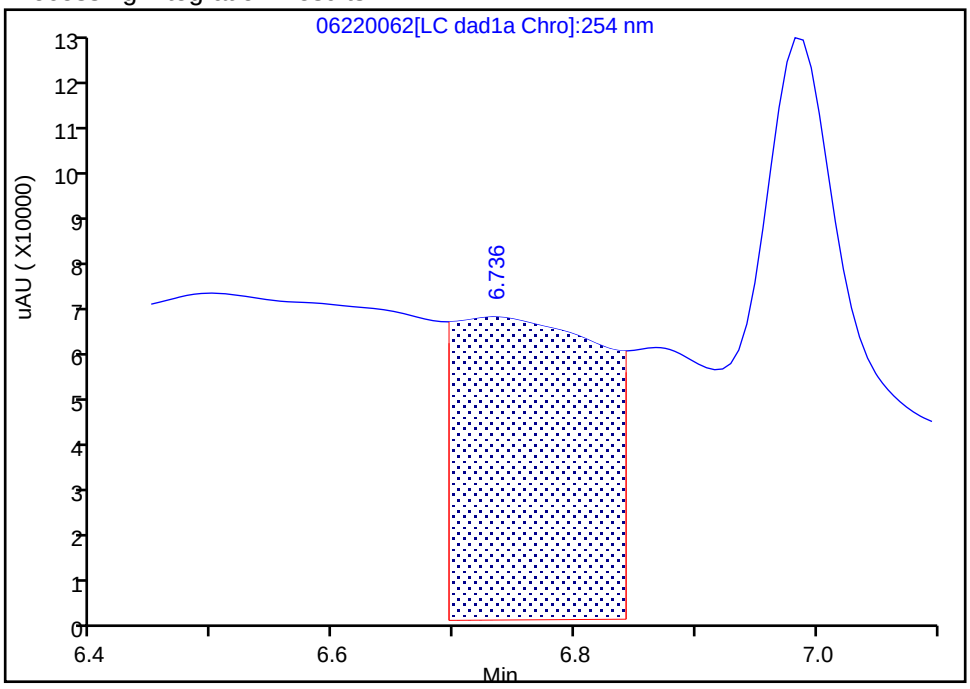
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

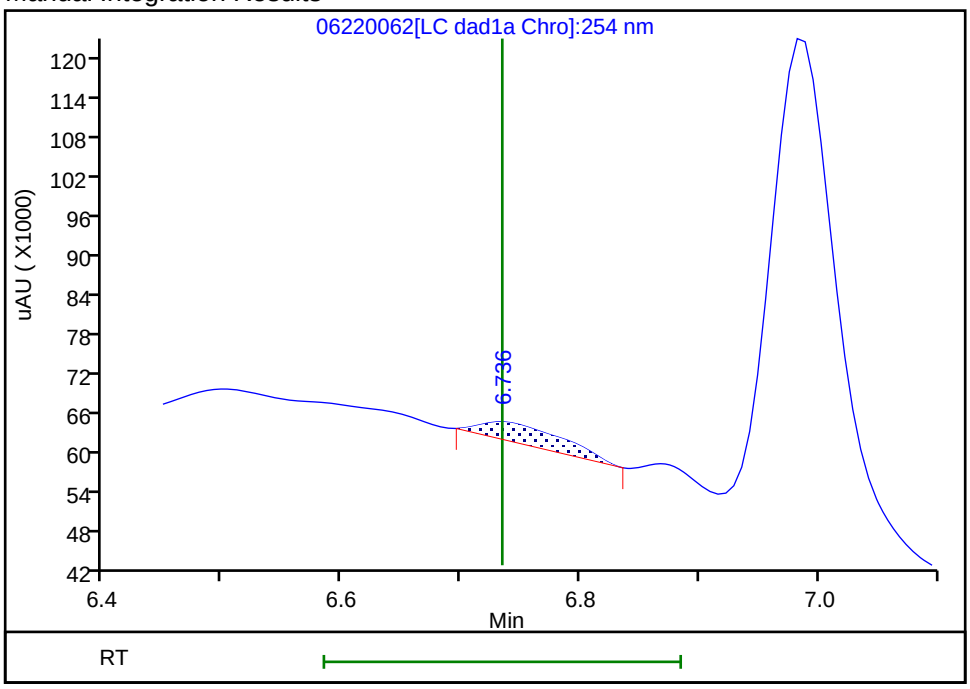
Processing Integration Results

RT: 6.74
Area: 533623
Amount: 6.207649
Amount Units: ug/mL



Manual Integration Results

RT: 6.74
Area: 14685
Amount: 0.170831
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:16:45

Audit Action: Manually Integrated Audit Reason: Baseline

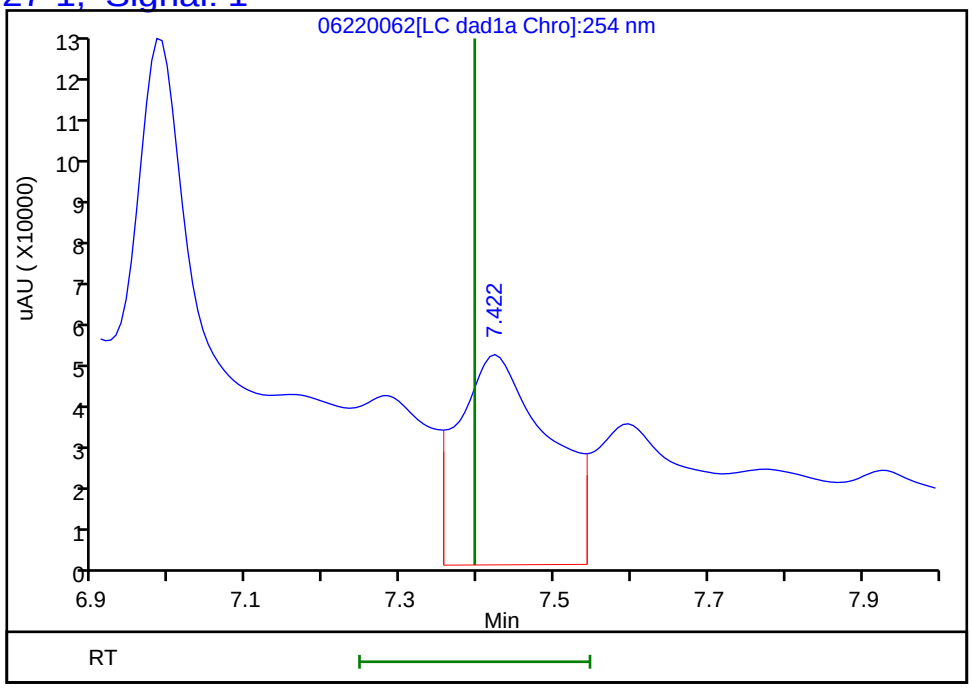
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.42
Response: 394767
Amount: 2.489949



Reviewer: zhangji, 23-Jun-2020 15:17:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

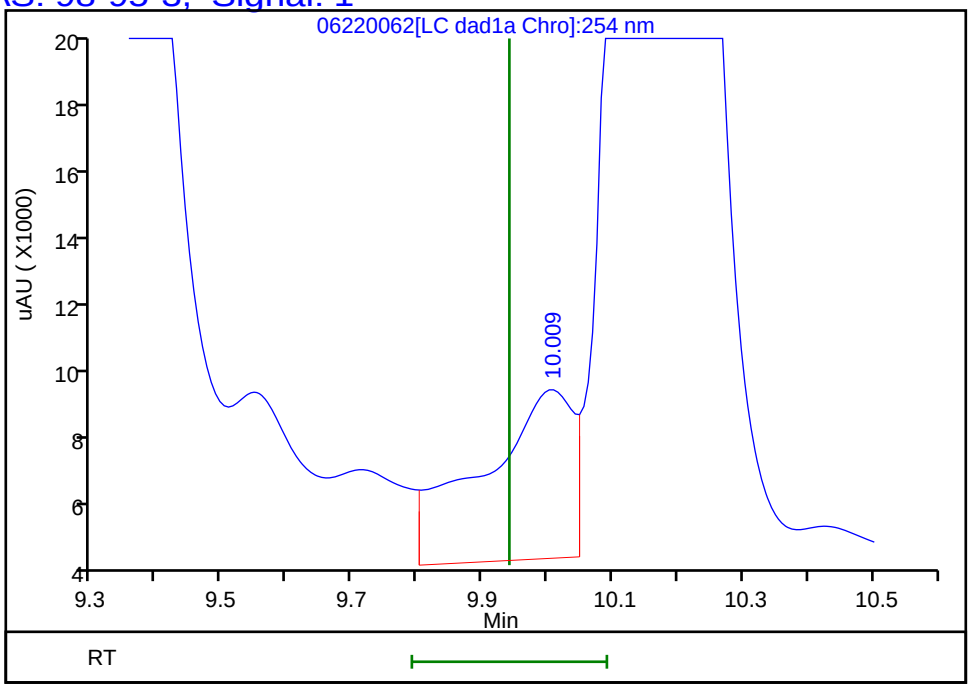
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 10.01
Response: 45509
Amount: 0.227088



Reviewer: zhangji, 23-Jun-2020 15:17:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

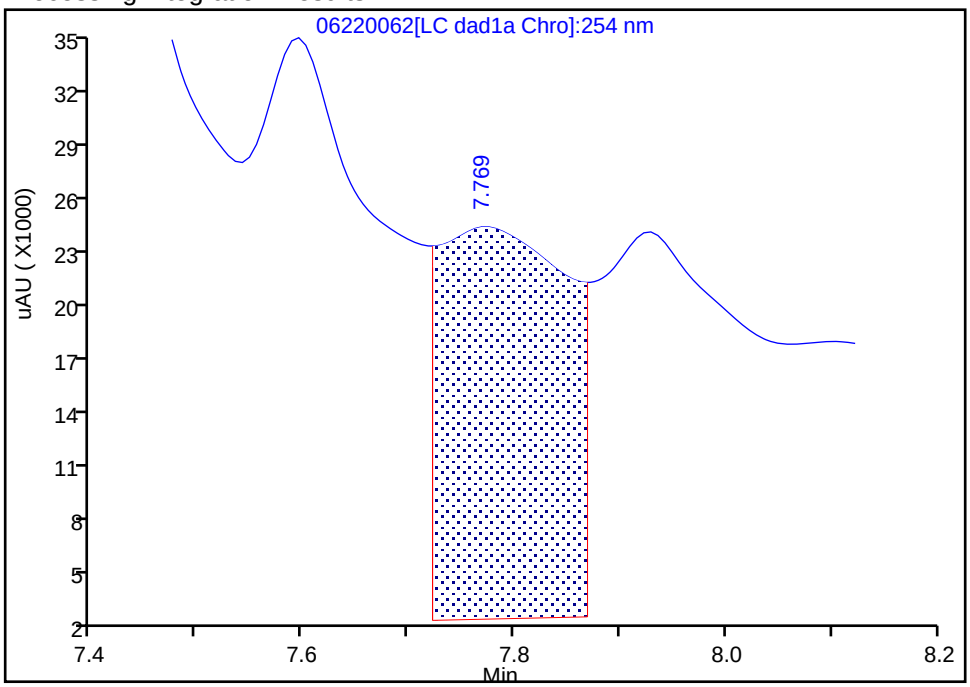
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

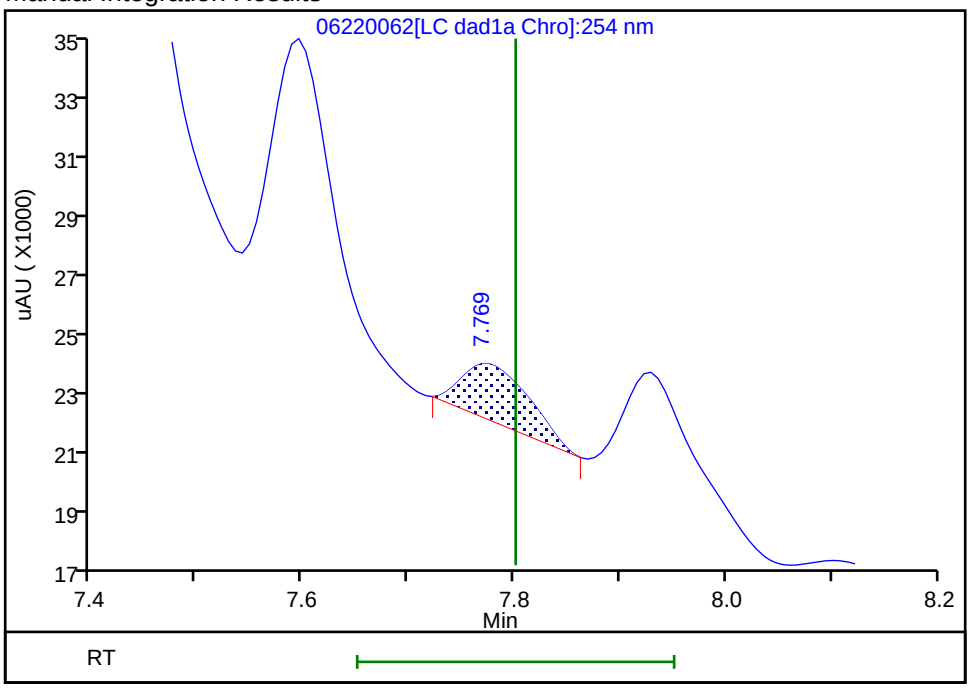
Processing Integration Results

RT: 7.77
Area: 178936
Amount: 1.534442
Amount Units: ug/mL



Manual Integration Results

RT: 7.77
Area: 8078
Amount: 0.069272
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 15:16:51

Audit Action: Manually Integrated Audit Reason: Baseline

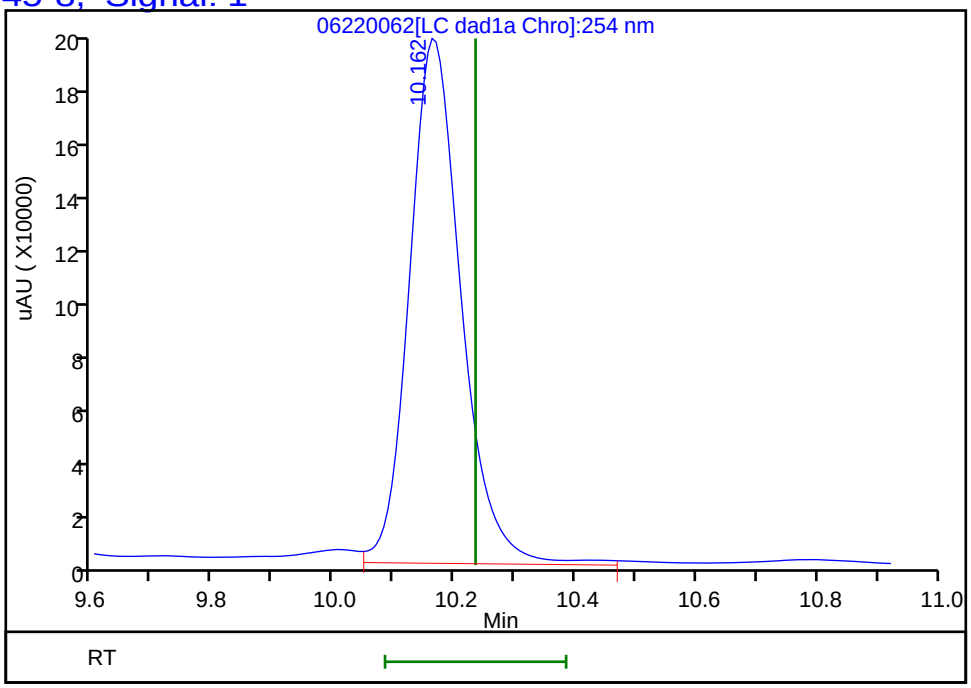
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220062.d				
Injection Date:	23-Jun-2020 11:12:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.16
Response: 1106122
Amount: 6.248149



Reviewer: zhangji, 23-Jun-2020 15:17:43
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.: 280-137609-2

SDG No.:

Client Sample ID: G0111-20A Lab Sample ID: 280-137609-23

Matrix: Water Lab File ID: 06240027.D

Analysis Method: 8330A Date Collected: 06/12/2020 12:40

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 467.6(mL) Date Analyzed: 06/25/2020 09:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500016 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
121-82-4	RDX	0.21	U	0.22	0.21	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240027.D
Lims ID: 280-137609-A-23-A
Client ID: G0111-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 09:34:56 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-23-
Misc. Info.: 280-0092719-027
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:18:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.132	7.145	-0.013	45423	0.2265	
	7 MNX	1		7.926			ND	
	8 RDX	1		9.358			ND	
	9 Nitrobenzene	1		12.265			ND	
$	10 1,2-Dinitrobenzene	1	13.219	13.271	-0.052	58304	0.2037	M
	12 1,3-Dinitrobenzene	1		15.805			ND	
	14 o-Nitrotoluene	1		16.745			ND	U
	15 p-Nitrotoluene	1		17.031			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.392	17.465	-0.073	324099	0.9388	
	17 m-Nitrotoluene	1		17.958			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.325	18.398	-0.073	458140	0.9848	
	19 1,3,5-Trinitrobenzene	1	19.072	19.138	-0.066	410387	0.8686	
	20 2,6-Dinitrotoluene	1		20.065			ND	
	21 2,4-Dinitrotoluene	1	20.519	20.578	-0.059	22684	0.0354	
	22 Tetryl	1		23.885			ND	
	23 2,4,6-Trinitrotoluene	1	24.839	24.905	-0.066	430053	1.06	

QC Flag Legend

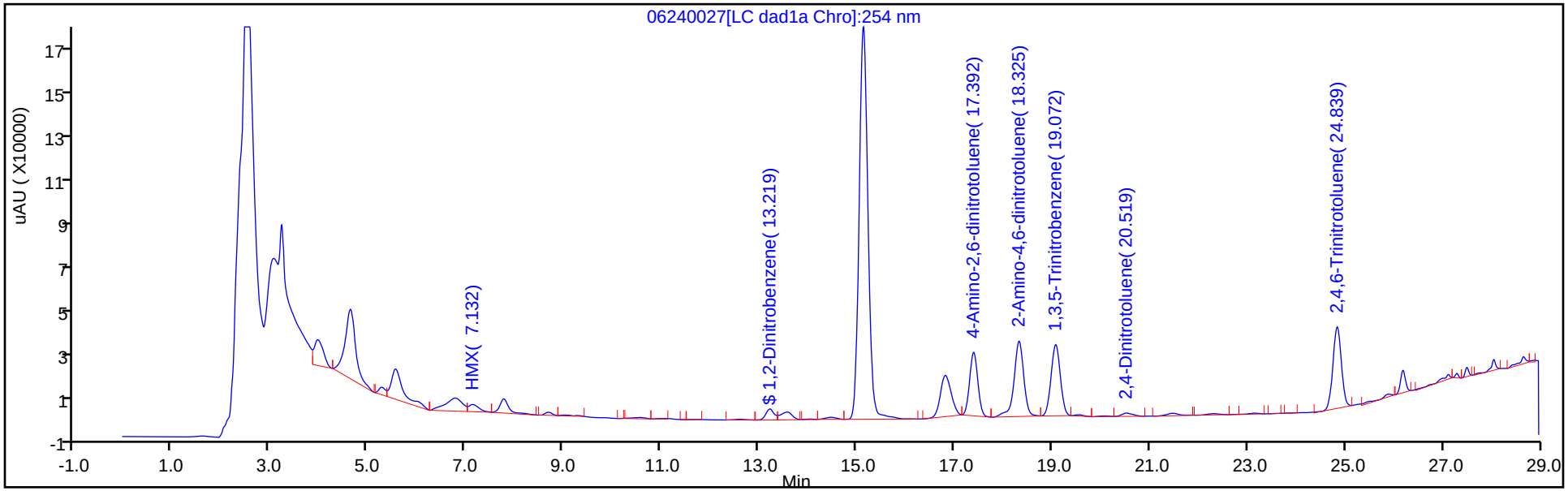
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 26-Jun-2020 16:19:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

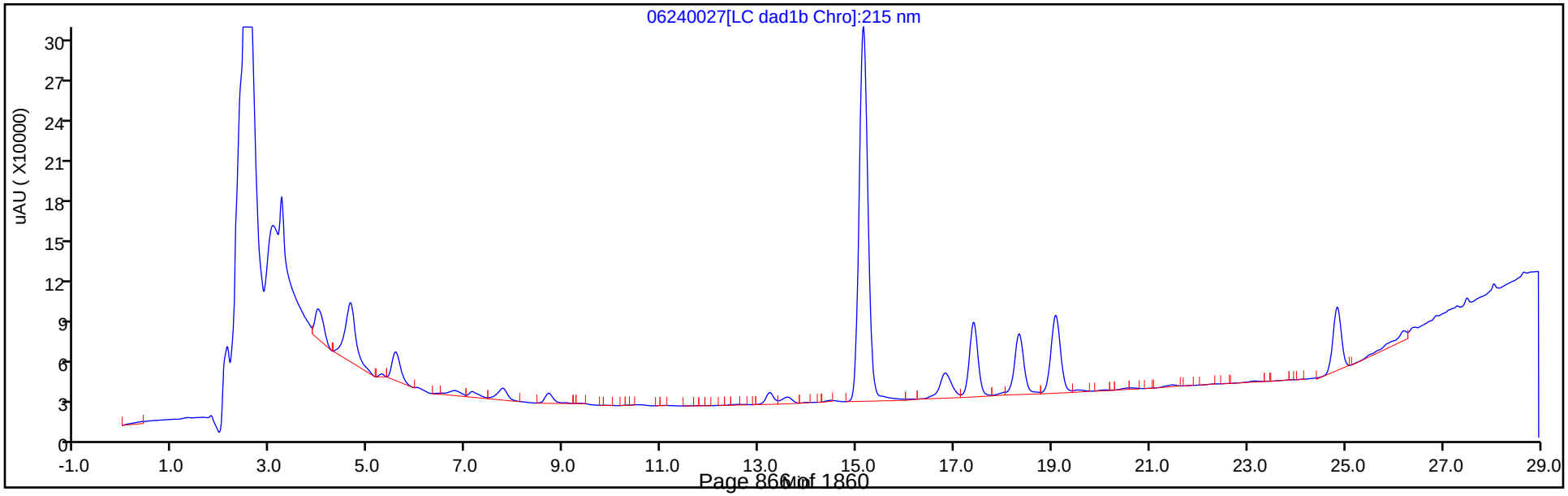
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240027.d				
Injection Date:	25-Jun-2020 09:34:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23	Worklist Smp#:	27
Client ID:	G0111-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240027.D				
Lims ID:	280-137609-A-23-A				
Client ID:	G0111-20A				
Sample Type:	Client				
Inject. Date:	25-Jun-2020 09:34:56	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-23-				
Misc. Info.:	280-0092719-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Jun-2020 16:19:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:18:13		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2037	101.84

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

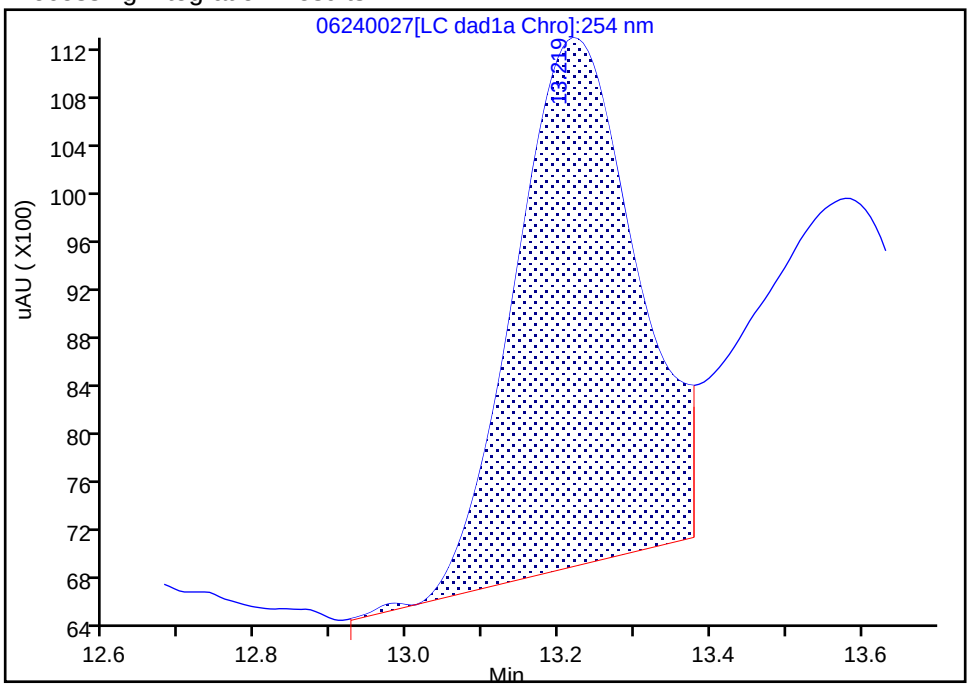
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240027.d				
Injection Date:	25-Jun-2020 09:34:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

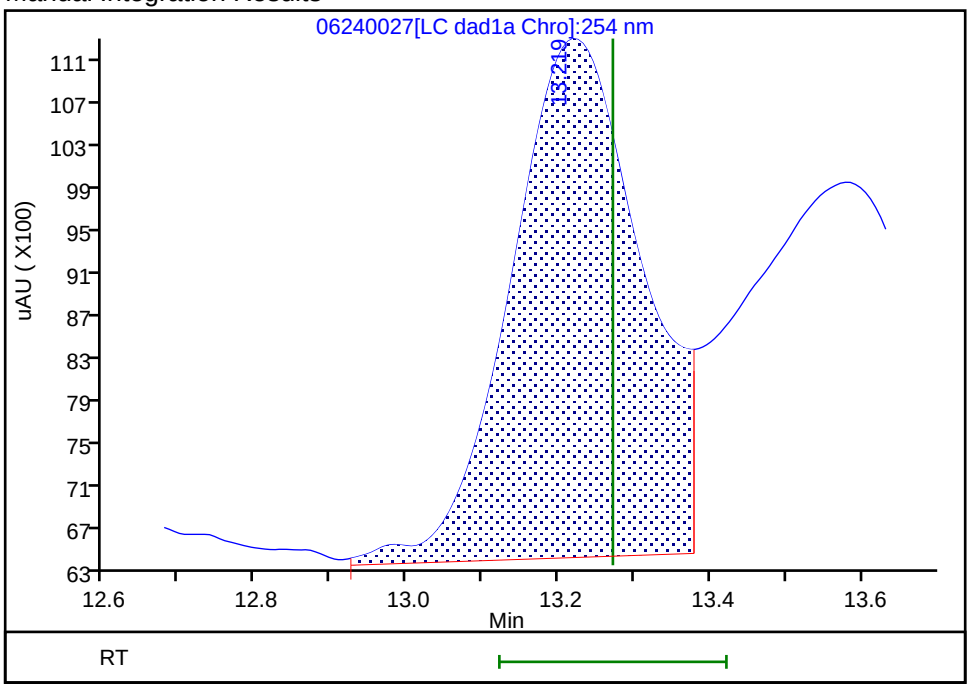
Processing Integration Results

RT: 13.22
Area: 49029
Amount: 0.170221
Amount Units: ug/ml



Manual Integration Results

RT: 13.22
Area: 58304
Amount: 0.203677
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:11

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

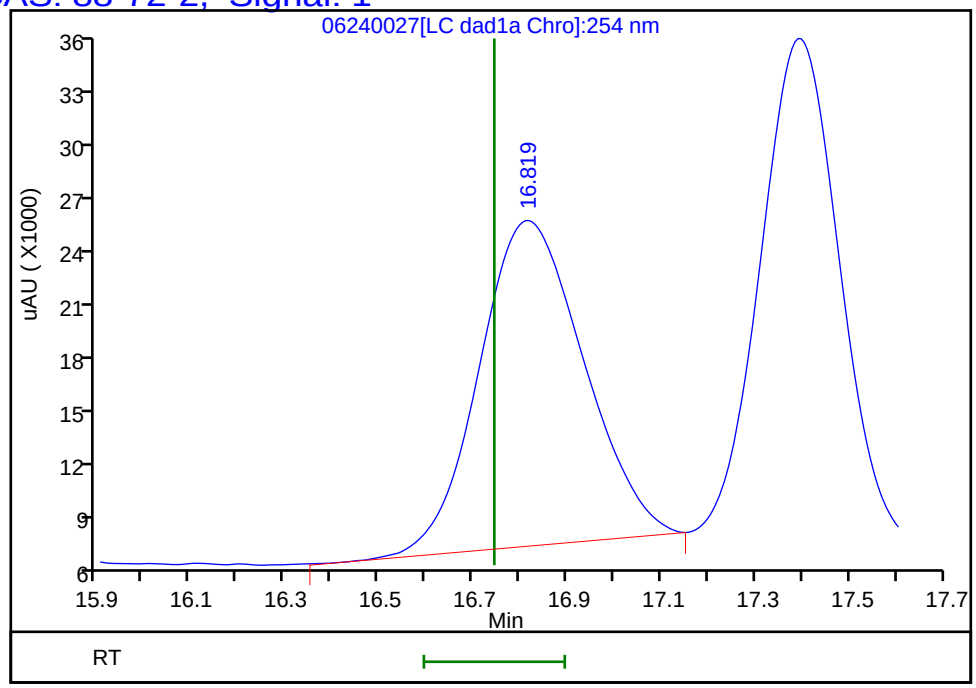
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240027.d

Injection Date:	25-Jun-2020 09:34:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-23-A	Lab Sample ID:	280-137609-23		
Client ID:	G0111-20A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.82
Response: 278016
Amount: 1.018506



Reviewer: zhangji, 25-Jun-2020 17:18:13
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.: 280-137609-2

SDG No.:

Client Sample ID: G0103-20A Lab Sample ID: 280-137609-24

Matrix: Water Lab File ID: 06220025.D

Analysis Method: 8330A Date Collected: 06/11/2020 16:45

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 479.5(mL) Date Analyzed: 06/22/2020 21:00

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.: 499531 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	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.038
121-14-2	2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.029
606-20-2	2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	5.8	M Q J1	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	0.13	U Q	0.16	0.13	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
98-95-3	Nitrobenzene	0.21	U 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	374	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220025.D
Lims ID: 280-137609-A-24-A
Client ID: G0103-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 21:00:53 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-24-
Misc. Info.: 280-0092608-025
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:41:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	
	6 MNX	1	7.461	7.396	0.065	34473	0.2174	M
	7 RDX	1		7.801			ND	U
$	9 1,2-Dinitrobenzene	1	8.821	8.741	0.080	103304	0.7474	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	U
	12 Nitrobenzene	1		9.941			ND	
	14 Tetryl	1		10.234			ND	U
	16 2,4,6-Trinitrotoluene	1	11.188	11.201	-0.013	16092	0.0789	M
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
	18 2-Amino-4,6-dinitrotoluene	1	11.688	11.648	0.040	112902	0.5567	M
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	U
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

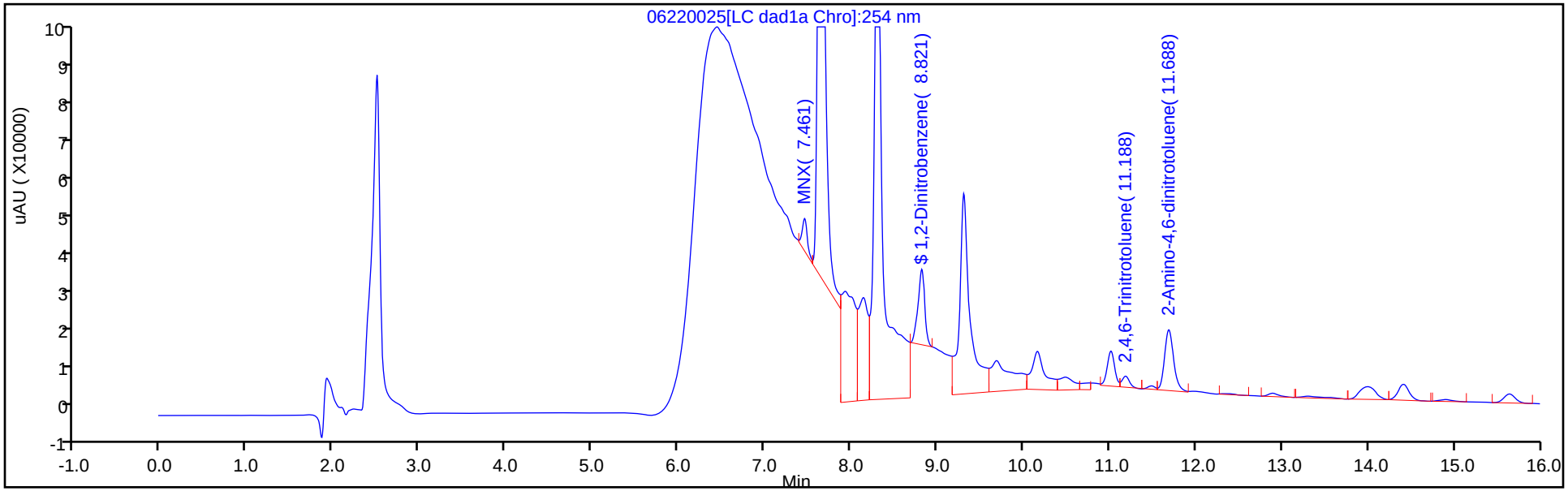
Report Date: 23-Jun-2020 15:18:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

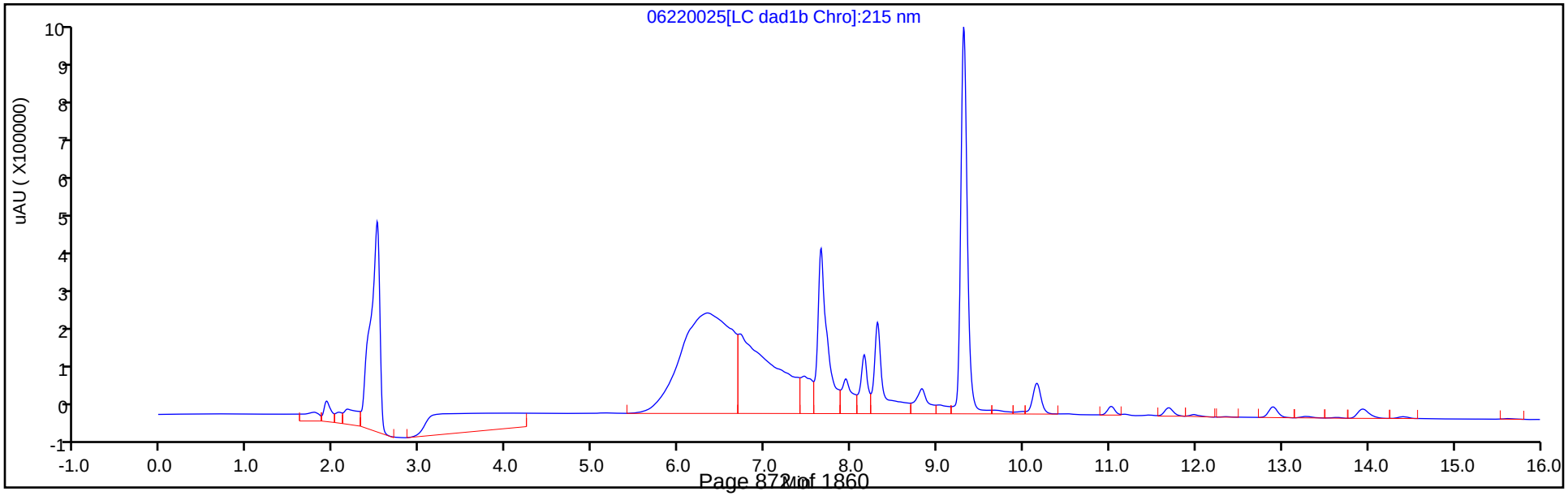
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d

Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24	Worklist Smp#:	25
Client ID:	G0103-20A				
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\20200620-92608.b\06220025.D
Lims ID: 280-137609-A-24-A
Client ID: G0103-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 21:00:53 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-24-
Misc. Info.: 280-0092608-025
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:41:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.7474	373.72

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

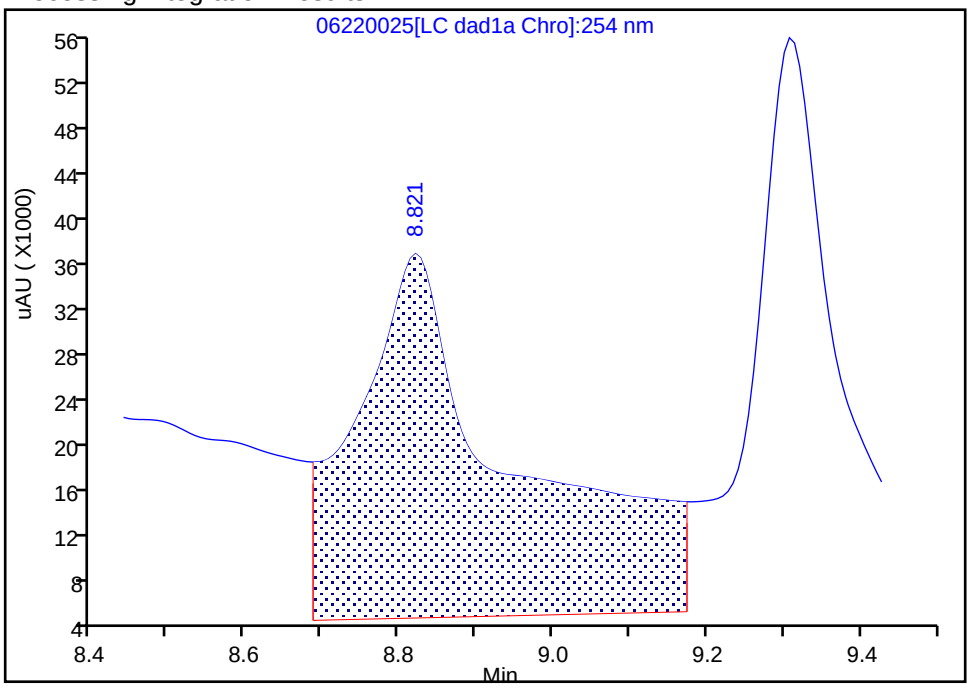
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

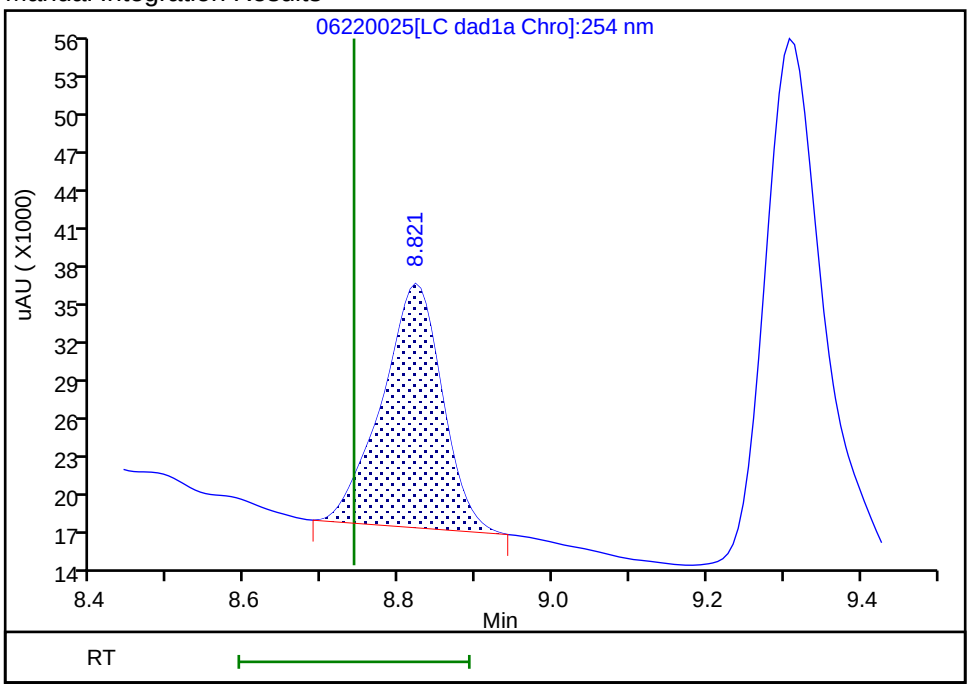
Processing Integration Results

RT: 8.82
Area: 457296
Amount: 3.308651
Amount Units: ug/mL



Manual Integration Results

RT: 8.82
Area: 103304
Amount: 0.747430
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:40:34

Audit Action: Manually Integrated Audit Reason: Baseline

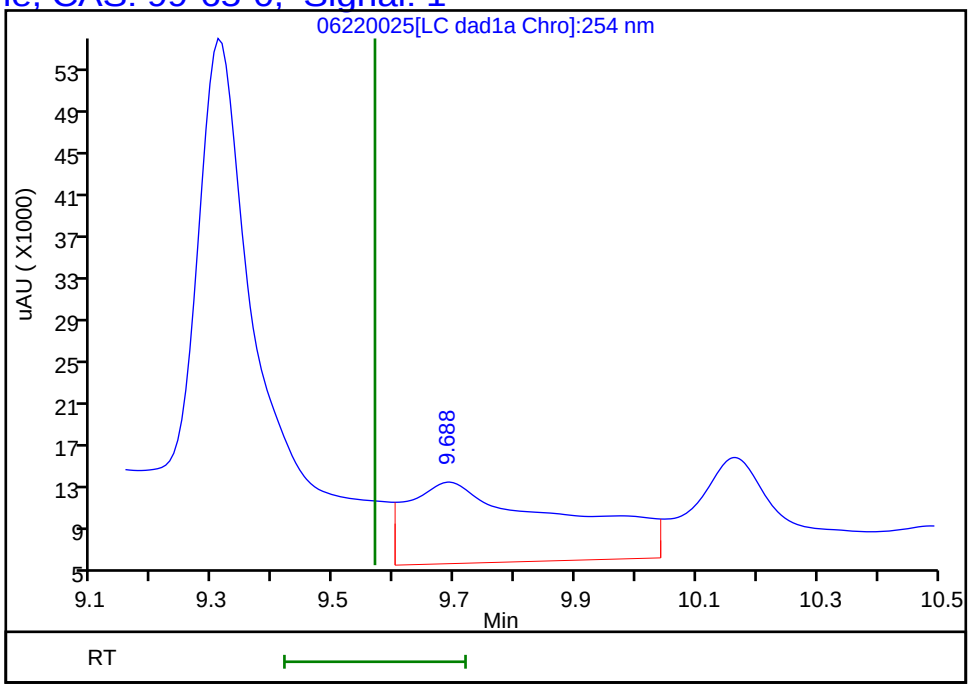
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
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		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.69
Response: 136856
Amount: 0.446242



Reviewer: zhangji, 23-Jun-2020 14:41:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

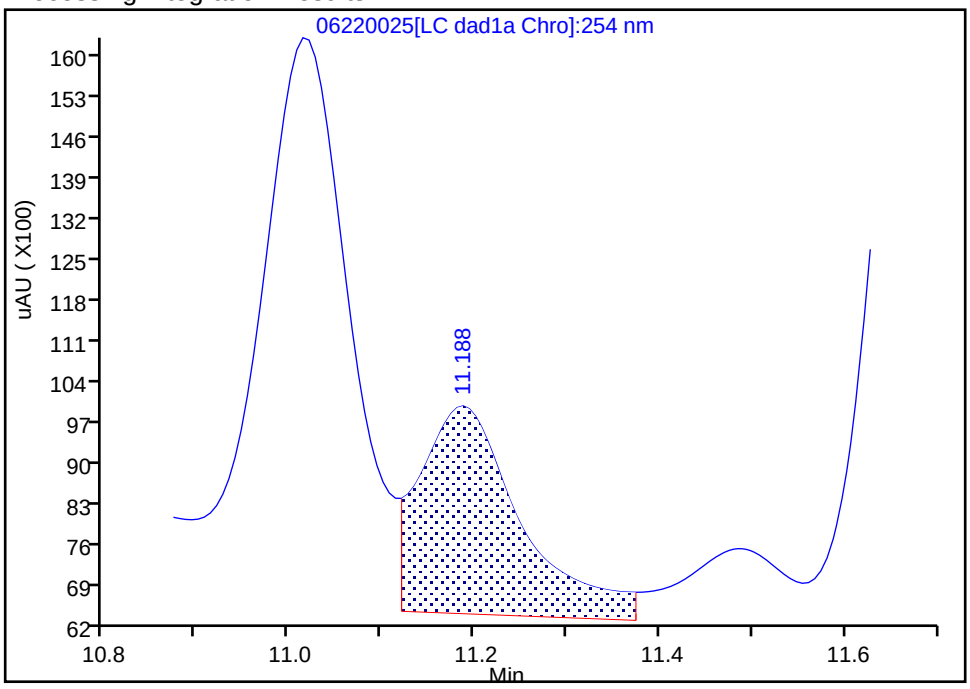
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

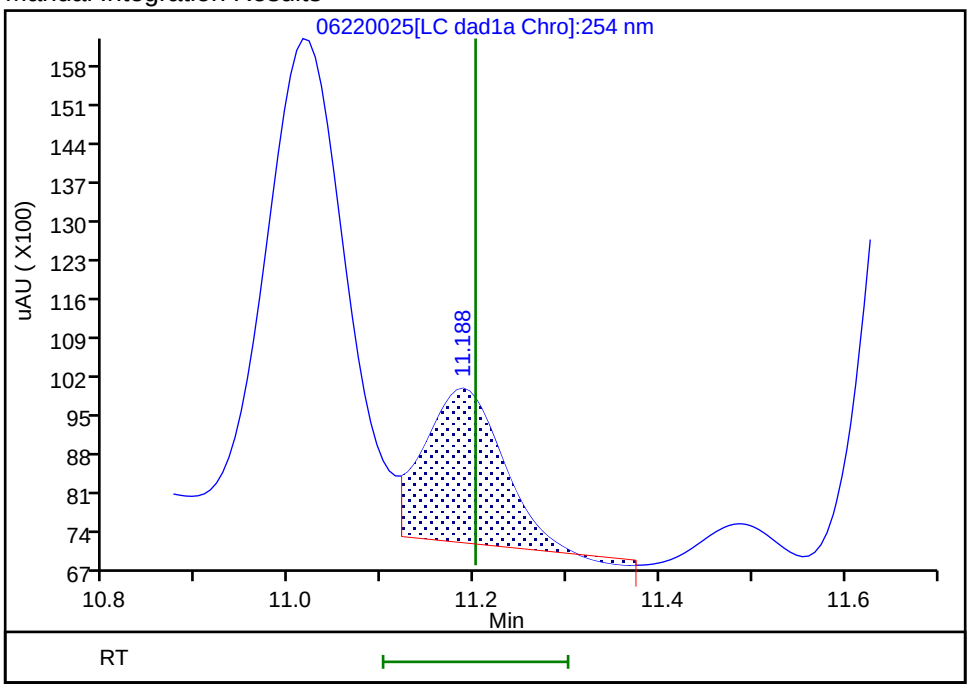
Processing Integration Results

RT: 11.19
Area: 26830
Amount: 0.131500
Amount Units: ug/mL



Manual Integration Results

RT: 11.19
Area: 16092
Amount: 0.078870
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:41:21

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

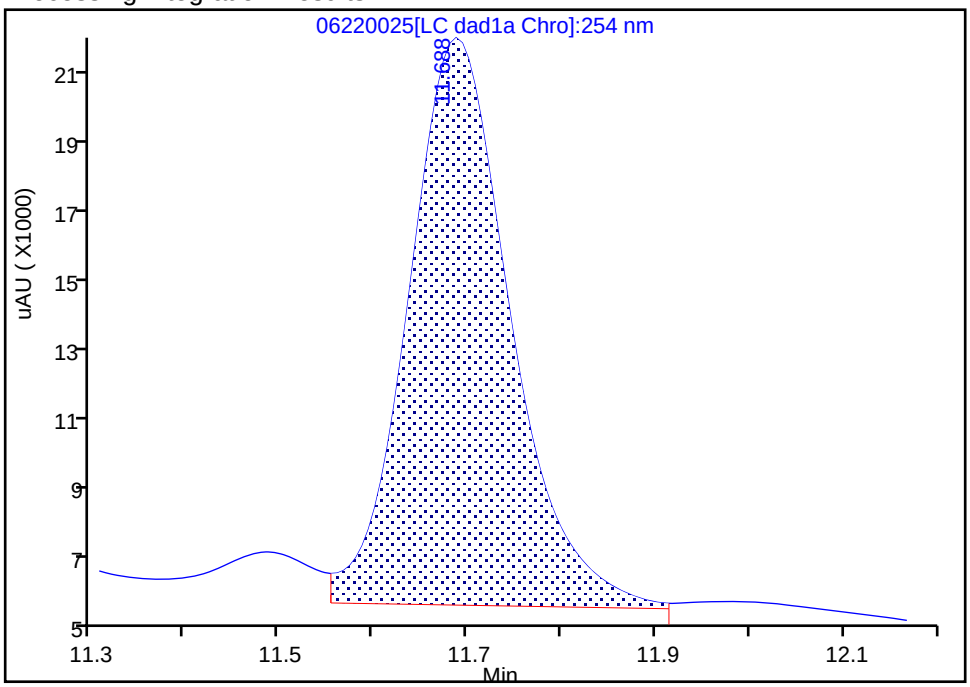
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

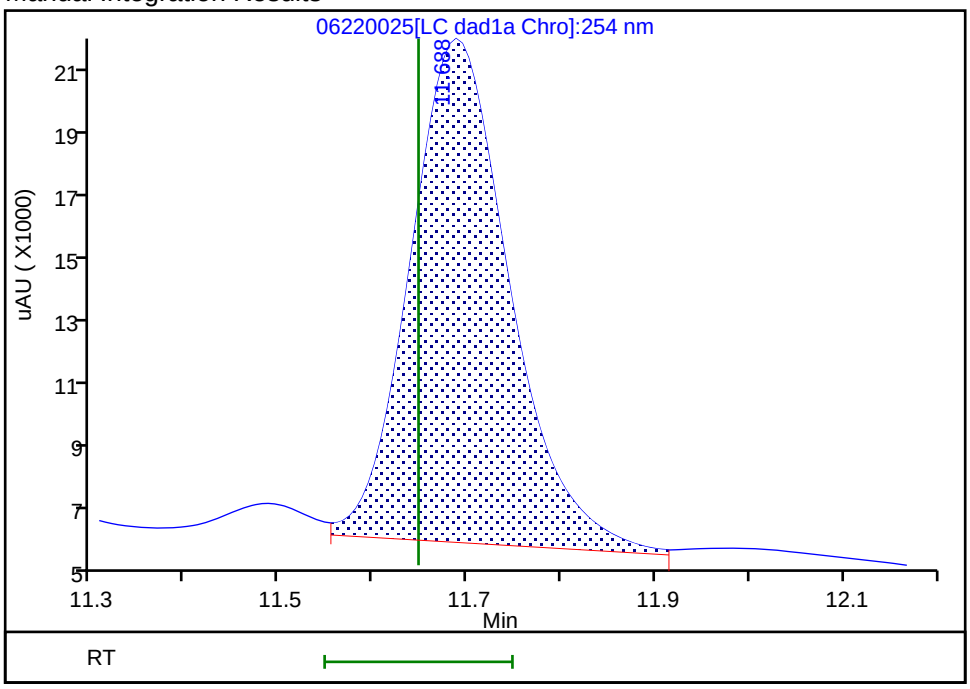
Processing Integration Results

RT: 11.69
Area: 117579
Amount: 0.579730
Amount Units: ug/mL



Manual Integration Results

RT: 11.69
Area: 112902
Amount: 0.556670
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:41:21

Audit Action: Assigned New Baseline Audit Reason: Baseline

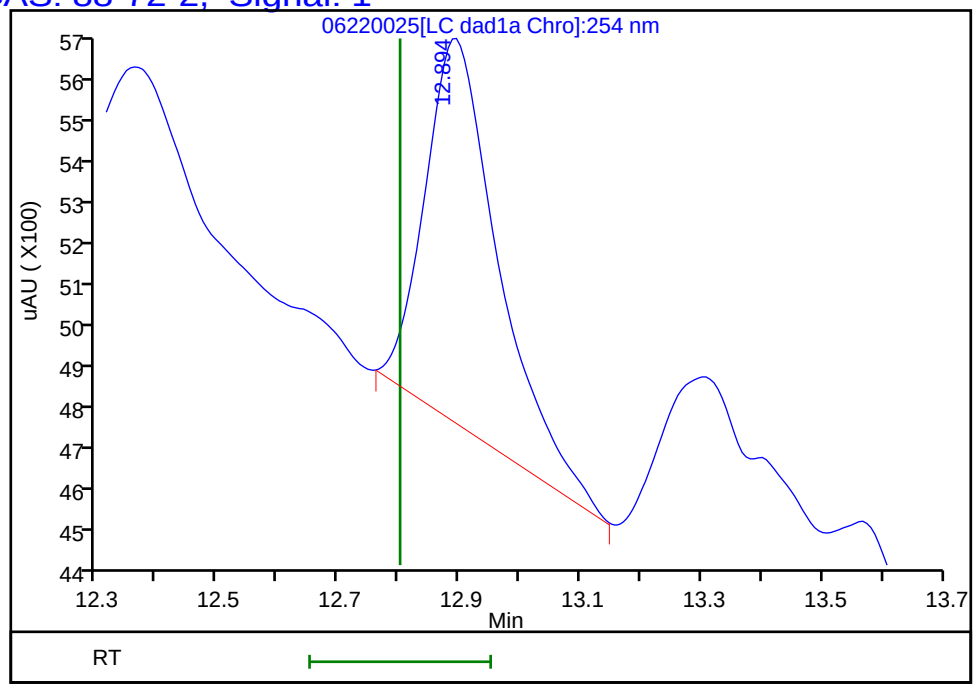
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
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		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.89
Response: 7262
Amount: 0.053772



Reviewer: zhangji, 23-Jun-2020 14:41:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

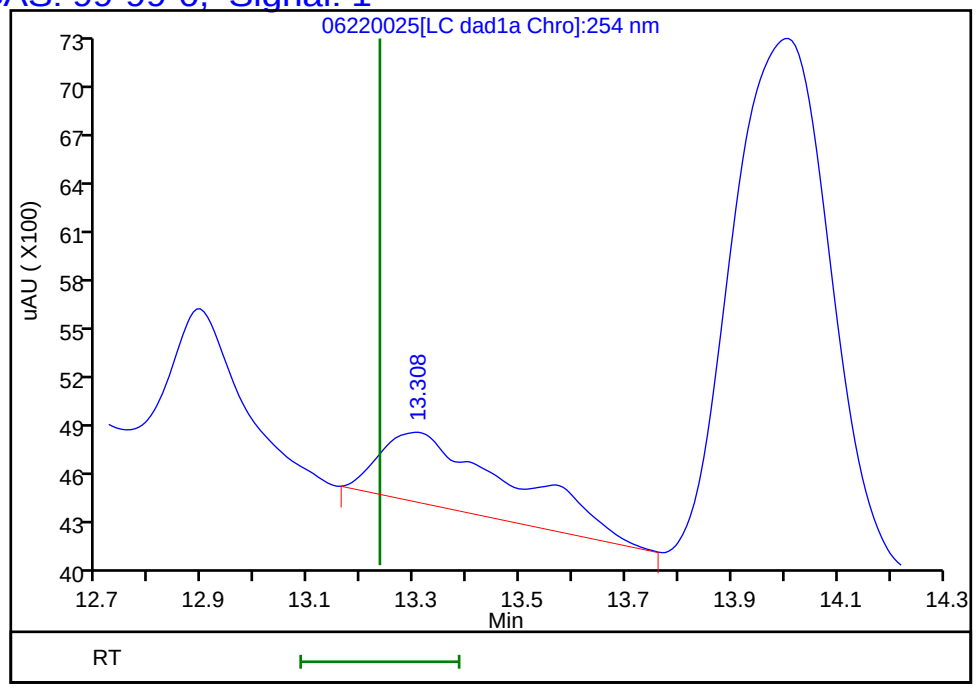
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.31
Response: 7807
Amount: 0.069085



Reviewer: zhangji, 23-Jun-2020 14:41:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

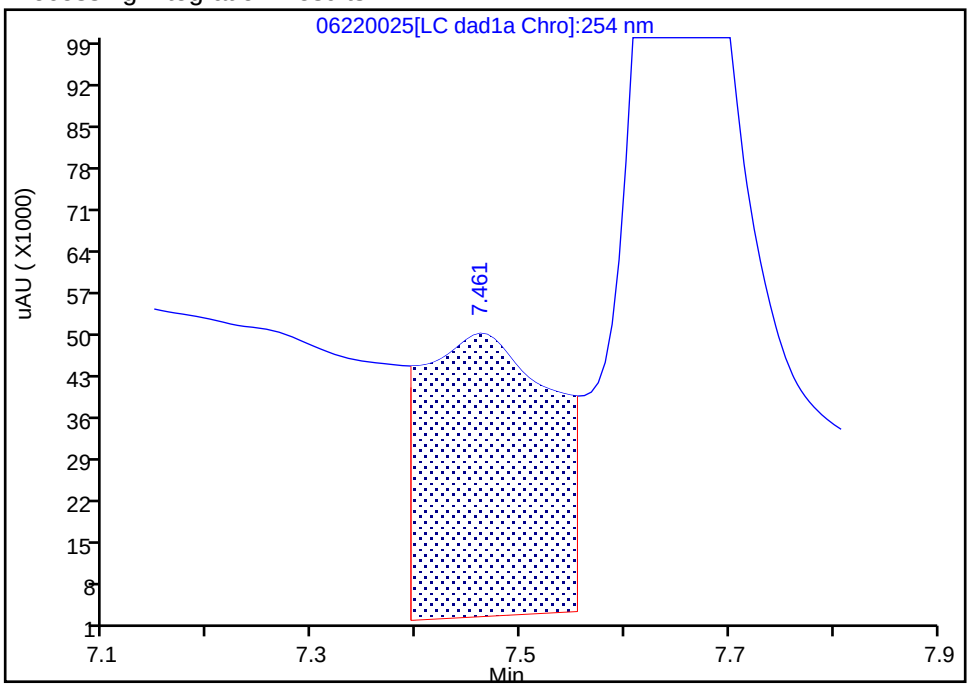
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

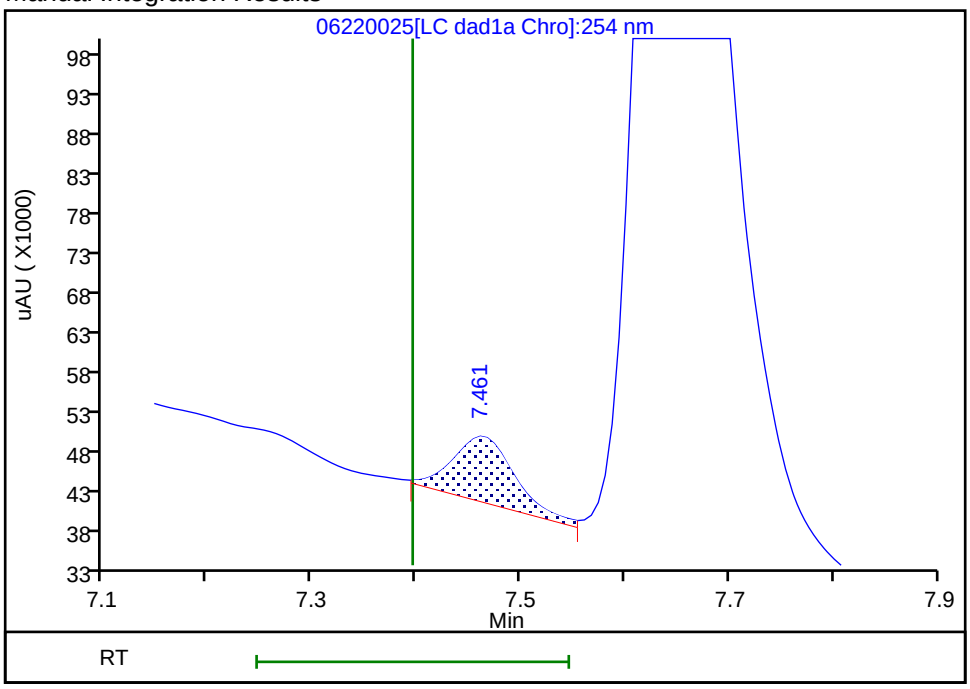
Processing Integration Results

RT: 7.46
Area: 406780
Amount: 2.565720
Amount Units: ug/mL



Manual Integration Results

RT: 7.46
Area: 34473
Amount: 0.217435
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:41:31
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

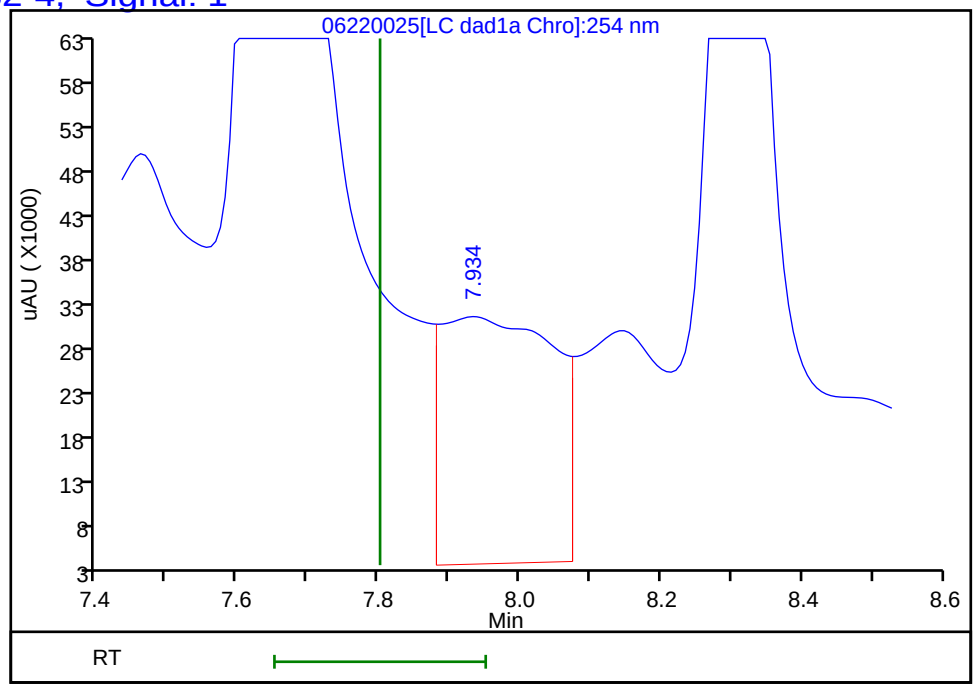
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d

Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
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 RDX, CAS: 121-82-4, Signal: 1

RT: 7.93
Response: 304663
Amount: 2.612597



Reviewer: zhangji, 23-Jun-2020 14:41:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

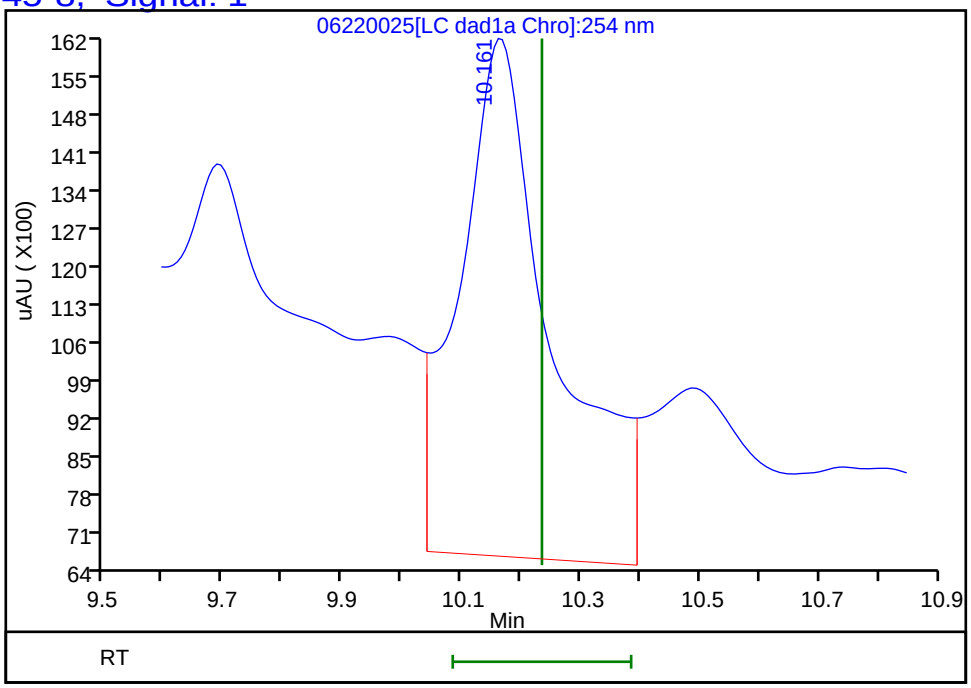
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220025.d				
Injection Date:	22-Jun-2020 21:00:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.16
Response: 104424
Amount: 0.589860



Reviewer: zhangji, 23-Jun-2020 14:41:38
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.: 280-137609-2

SDG No.:

Client Sample ID: G0103-20A Lab Sample ID: 280-137609-24

Matrix: Water Lab File ID: 06230037.D

Analysis Method: 8330A Date Collected: 06/11/2020 16:45

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 479.5(mL) Date Analyzed: 06/24/2020 13:36

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.: 499860 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.42*	*J1*	*0.11*	0.10	*0.053*
5755-27-1	MNX	0.42	U	2.1	0.42	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230037.D
Lims ID: 280-137609-A-24-A
Client ID: G0103-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 13:36:02 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-B-25-
Misc. Info.: 280-0092679-037
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 18:52:13 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 24-Jun-2020 18:21:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.150			ND	
7 MNX	1		7.876			ND	
8 RDX	1		9.363			ND	U
9 Nitrobenzene	1		12.263			ND	U
$ 10 1,2-Dinitrobenzene	1	13.271	13.263	0.008	52162	0.1815	
12 1,3-Dinitrobenzene	1		15.797			ND	
14 o-Nitrotoluene	1	16.665	16.730	-0.065	39345	0.1441	
15 p-Nitrotoluene	1		17.017			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.450			ND	
17 m-Nitrotoluene	1		17.943			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.371	18.390	-0.019	18896	0.0406	
19 1,3,5-Trinitrobenzene	1		19.123			ND	U
20 2,6-Dinitrotoluene	1		20.050			ND	
21 2,4-Dinitrotoluene	1		20.564			ND	U
22 Tetryl	1	23.892	23.870	0.022	4064	0.0110	
23 2,4,6-Trinitrotoluene	1		24.890			ND	

QC Flag Legend

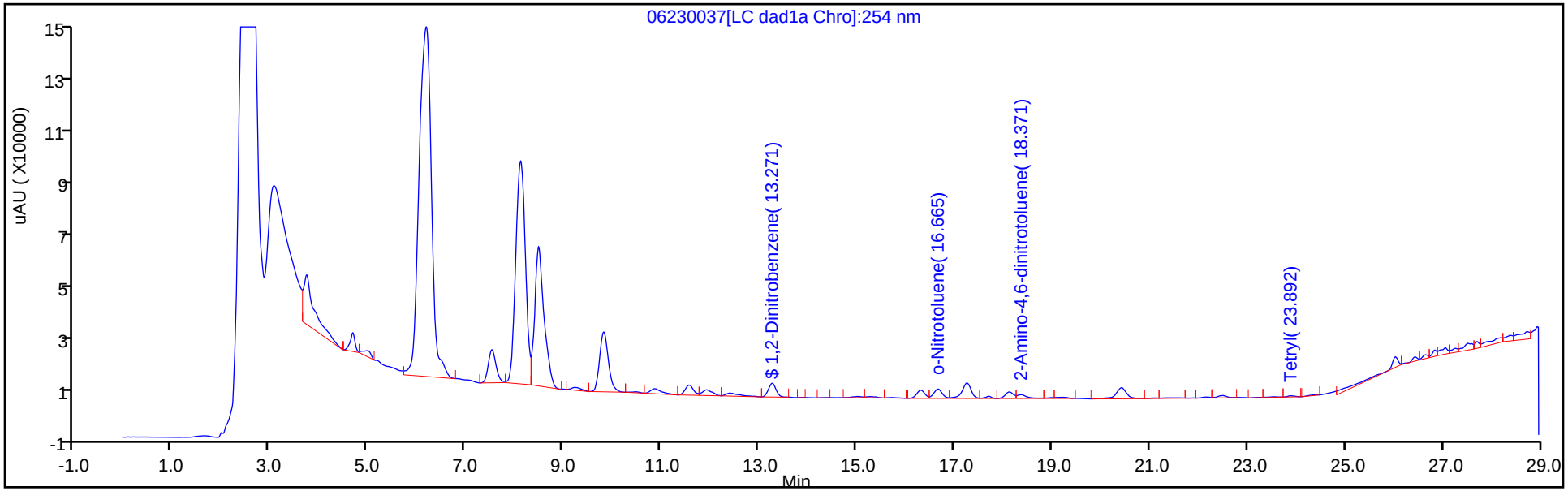
Review Flags
U - Marked Undetected

Report Date: 26-Jun-2020 17:46:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

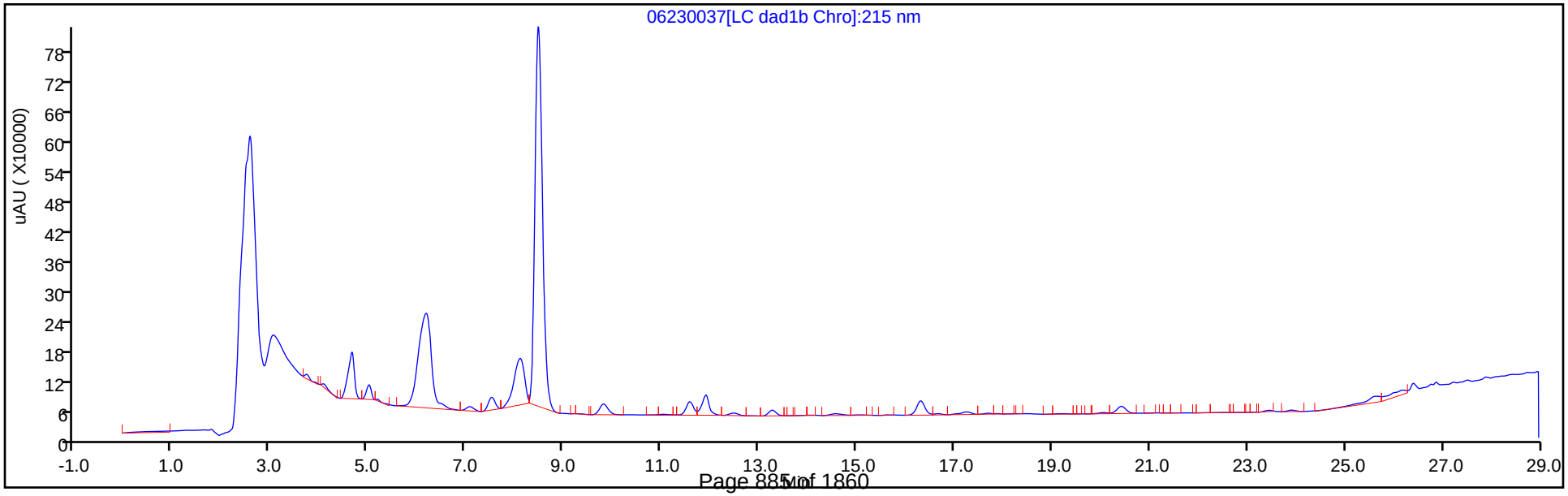
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230037.d				
Injection Date:	24-Jun-2020 13:36:02	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24	Worklist Smp#:	37
Client ID:	G0103-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230037.D				
Lims ID:	280-137609-A-24-A				
Client ID:	G0103-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 13:36:02	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-B-25-				
Misc. Info.:	280-0092679-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 18:52:13	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:21:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1815	90.76

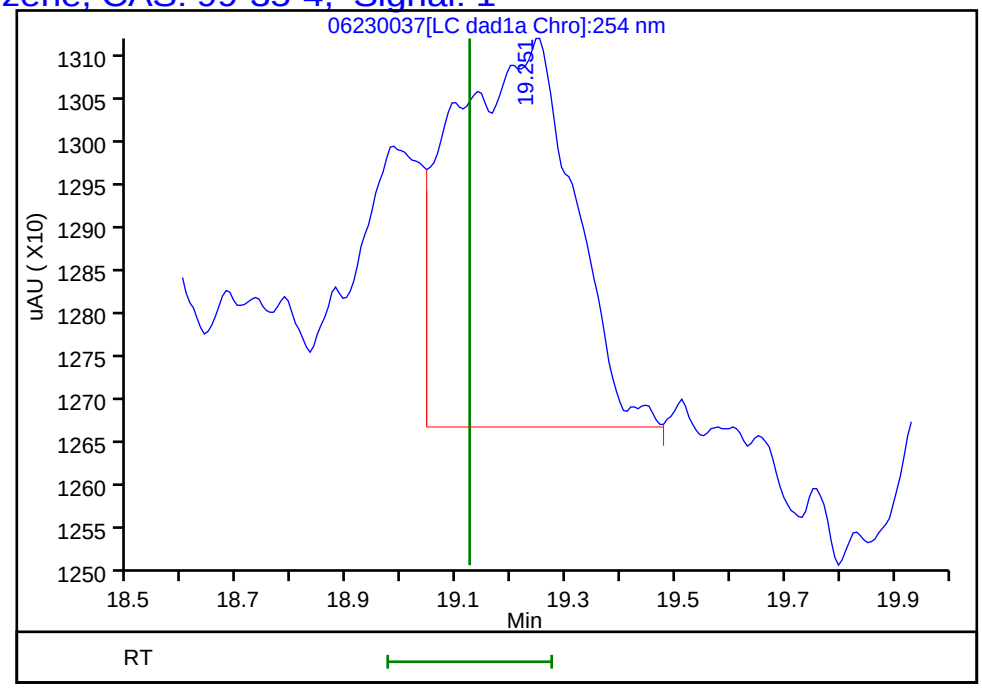
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230037.d				
Injection Date:	24-Jun-2020 13:36:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 19.25
Response: 6843
Amount: 0.014484



Reviewer: zhangji, 24-Jun-2020 18:21:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

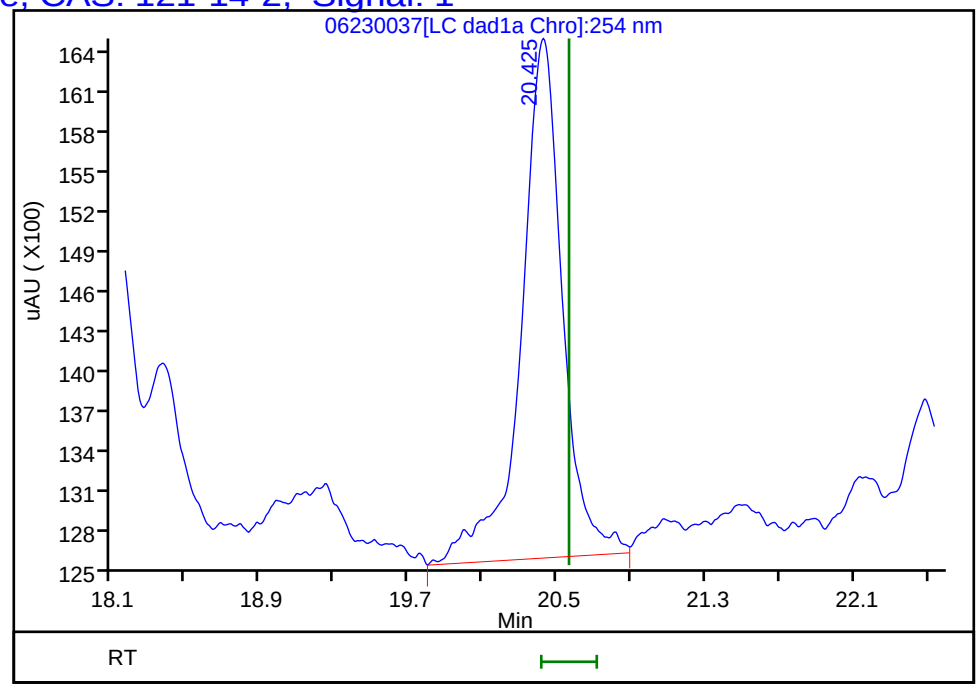
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230037.d

Injection Date:	24-Jun-2020 13:36:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.42
Response: 60095
Amount: 0.093882



Reviewer: zhangji, 24-Jun-2020 18:21:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

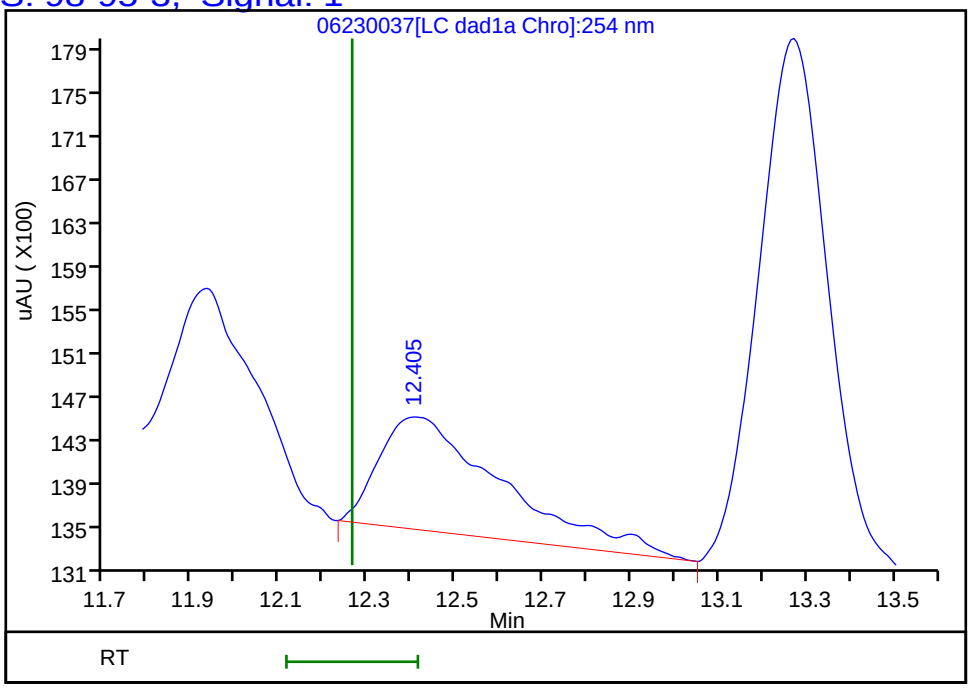
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230037.d				
Injection Date:	24-Jun-2020 13:36:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 12.40
Response: 20137
Amount: 0.045846



Reviewer: zhangji, 24-Jun-2020 18:21:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

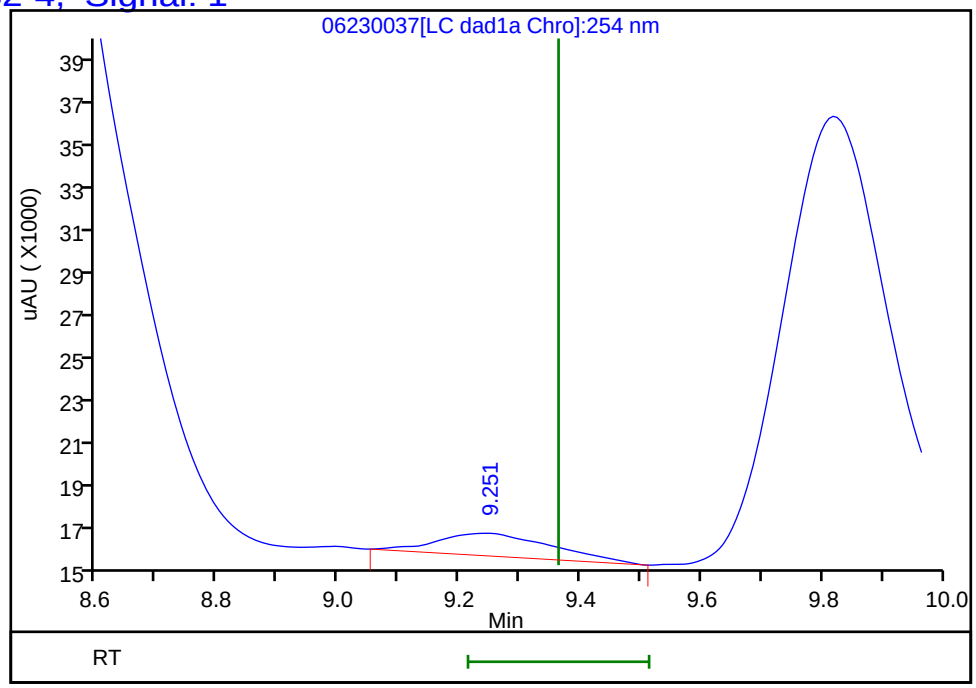
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230037.d				
Injection Date:	24-Jun-2020 13:36:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-24-A	Lab Sample ID:	280-137609-24		
Client ID:	G0103-20A				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.25
Response: 13944
Amount: 0.057063



Reviewer: zhangji, 24-Jun-2020 18:21:45

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.: 280-137609-2

SDG No.:

Client Sample ID: G0107-20A Lab Sample ID: 280-137609-25

Matrix: Water Lab File ID: 06220026.D

Analysis Method: 8330A Date Collected: 06/11/2020 14:50

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 478.7(mL) Date Analyzed: 06/22/2020 21:23

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.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.039
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.091
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	0.21	U	0.22	0.21	0.054
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	104	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220026.D				
Lims ID:	280-137609-B-25-A				
Client ID:	G0107-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 21:23:52	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-B-25-				
Misc. Info.:	280-0092608-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:41:52		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.734			ND	
6 MNX	1		7.396			ND	
7 RDX	1		7.801			ND	
$ 9 1,2-Dinitrobenzene	1	8.744	8.741	0.003	28647	0.2073	M
10 1,3,5-Trinitrobenzene	1		8.928			ND	
11 1,3-Dinitrobenzene	1		9.568			ND	
12 Nitrobenzene	1		9.941			ND	
14 Tetryl	1		10.234			ND	
16 2,4,6-Trinitrotoluene	1		11.201			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	U
19 2,6-Dinitrotoluene	1		11.788			ND	
20 2,4-Dinitrotoluene	1		11.988			ND	
21 o-Nitrotoluene	1		12.801			ND	
22 p-Nitrotoluene	1		13.234			ND	
23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

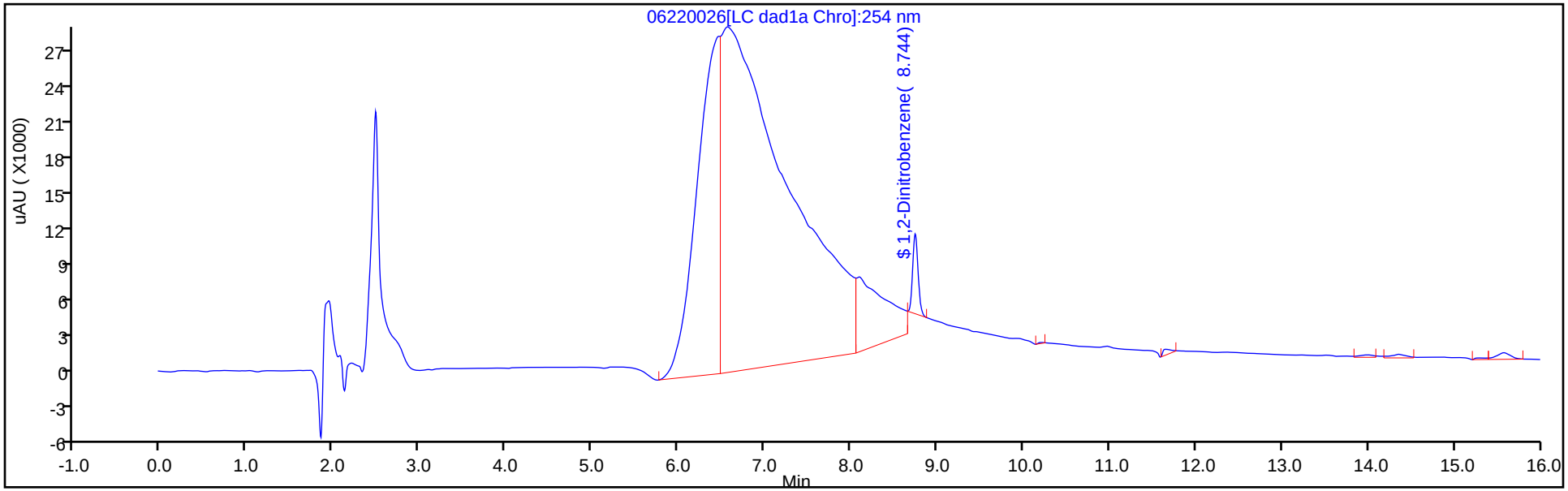
Report Date: 23-Jun-2020 15:18:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

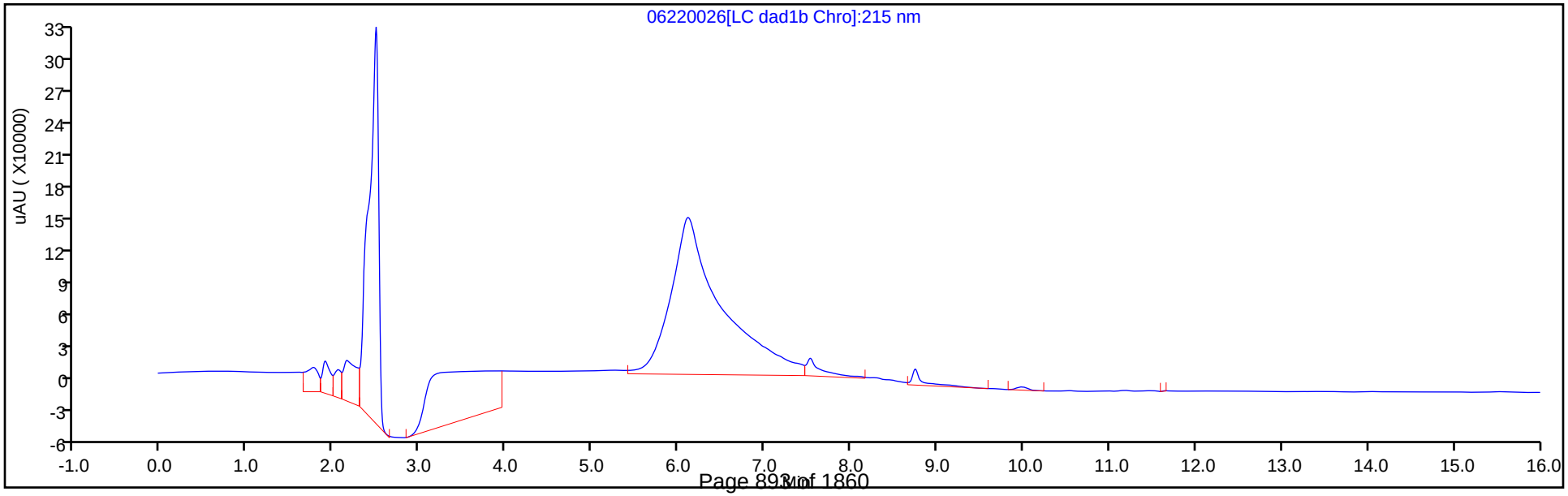
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220026.d

Injection Date:	22-Jun-2020 21:23:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-B-25-A	Lab Sample ID:	280-137609-25	Worklist Smp#:	26
Client ID:	G0107-20A				
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\20200620-92608.b\06220026.D				
Lims ID:	280-137609-B-25-A				
Client ID:	G0107-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 21:23:52	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-B-25-				
Misc. Info.:	280-0092608-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:41:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2073	103.63

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

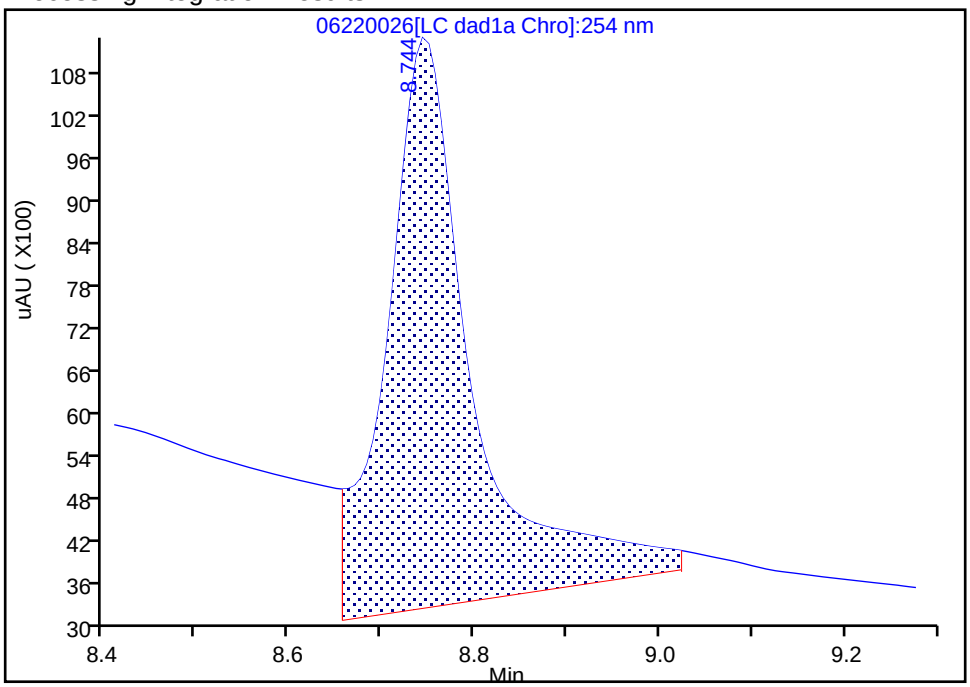
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220026.d				
Injection Date:	22-Jun-2020 21:23:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-25-A	Lab Sample ID:	280-137609-25		
Client ID:	G0107-20A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

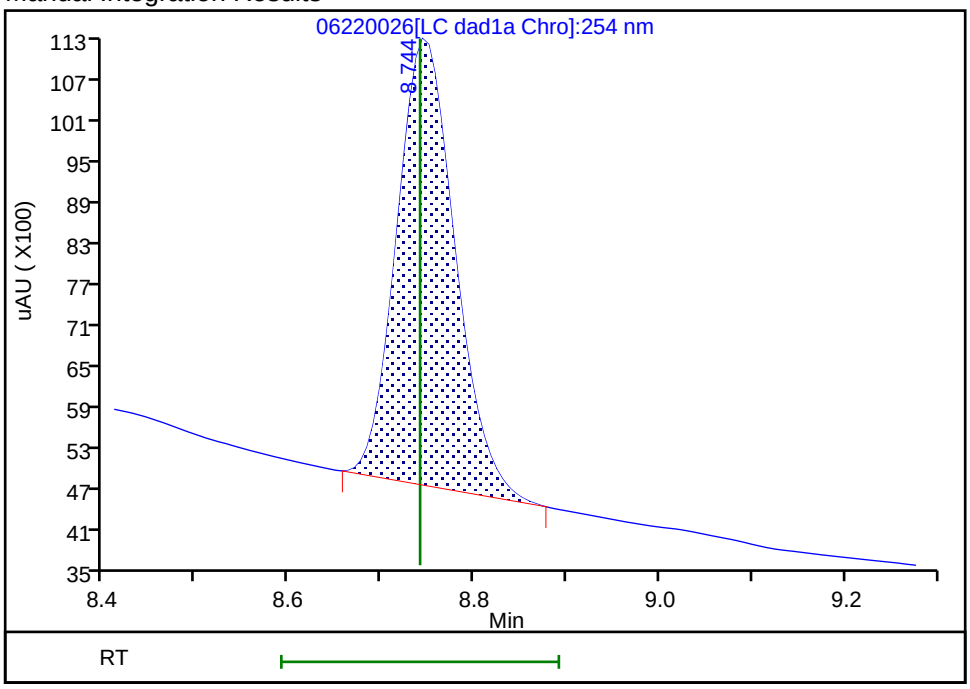
Processing Integration Results

RT: 8.74
Area: 51639
Amount: 0.373621
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 28647
Amount: 0.207268
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:41:47

Audit Action: Manually Integrated Audit Reason: Baseline

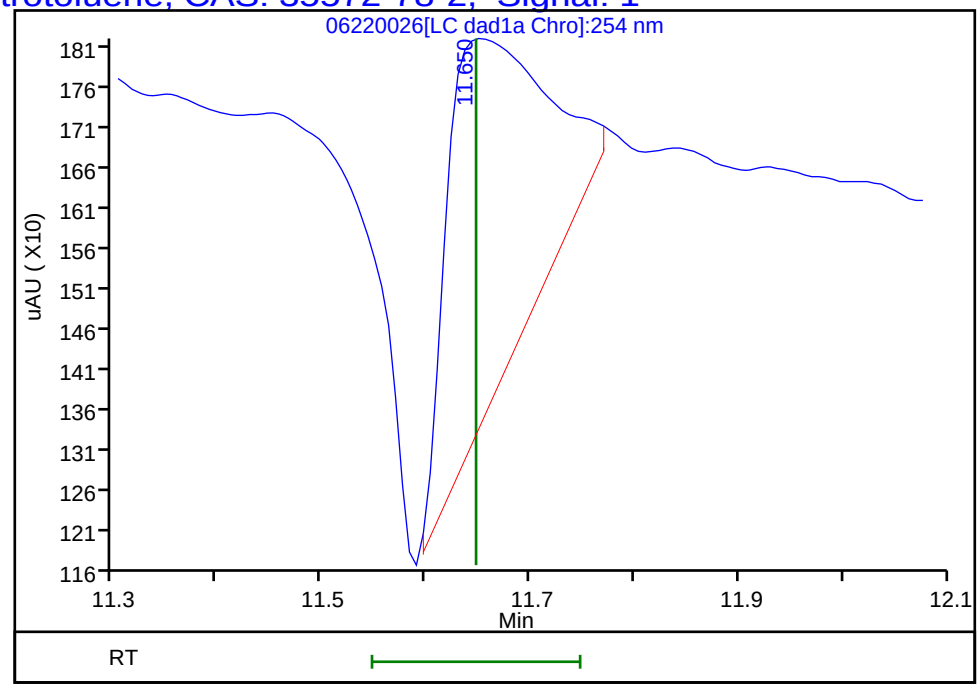
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220026.d				
Injection Date:	22-Jun-2020 21:23:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-25-A	Lab Sample ID:	280-137609-25		
Client ID:	G0107-20A				
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		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.65
Response: 2905
Amount: 0.014323



Reviewer: zhangji, 23-Jun-2020 14:41:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A Lab Sample ID: 280-137609-26

Matrix: Water Lab File ID: 06220027.D

Analysis Method: 8330A Date Collected: 06/12/2020 09:50

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 470.2(mL) Date Analyzed: 06/22/2020 21:46

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.: 499531 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	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U Q	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U Q	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U Q	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	6.7	J1 Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U M Q	0.16	0.13	0.061
2691-41-0	HMX	0.21	U Q	0.22	0.21	0.093
98-95-3	Nitrobenzene	0.21	U M Q	0.22	0.21	0.097
121-82-4	RDX	0.21	U M Q	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.034

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\20200620-92608.b\06220027.D
Lims ID: 280-137609-A-26-A
Client ID: G0116-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 21:46:50 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-26-
Misc. Info.: 280-0092608-027
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:42:44

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	
	6 MNX	1	7.398	7.396	0.002	17189	0.1084	M
	7 RDX	1		7.801			ND	U
$	9 1,2-Dinitrobenzene	1	8.764	8.741	0.023	33815	0.2447	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	U
	12 Nitrobenzene	1		9.941			ND	U
	14 Tetryl	1		10.234			ND	U
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	11.664	11.648	0.016	128720	0.6347	
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1	13.237	13.234	0.003	4761	0.0421	
	23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

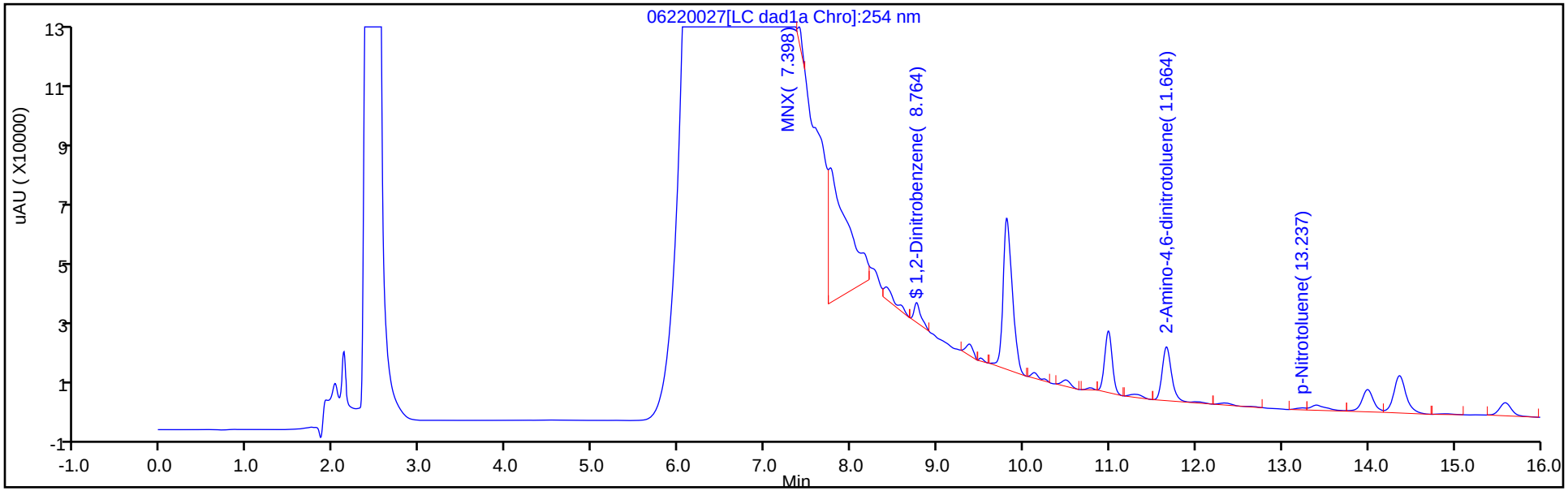
Report Date: 23-Jun-2020 15:18:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

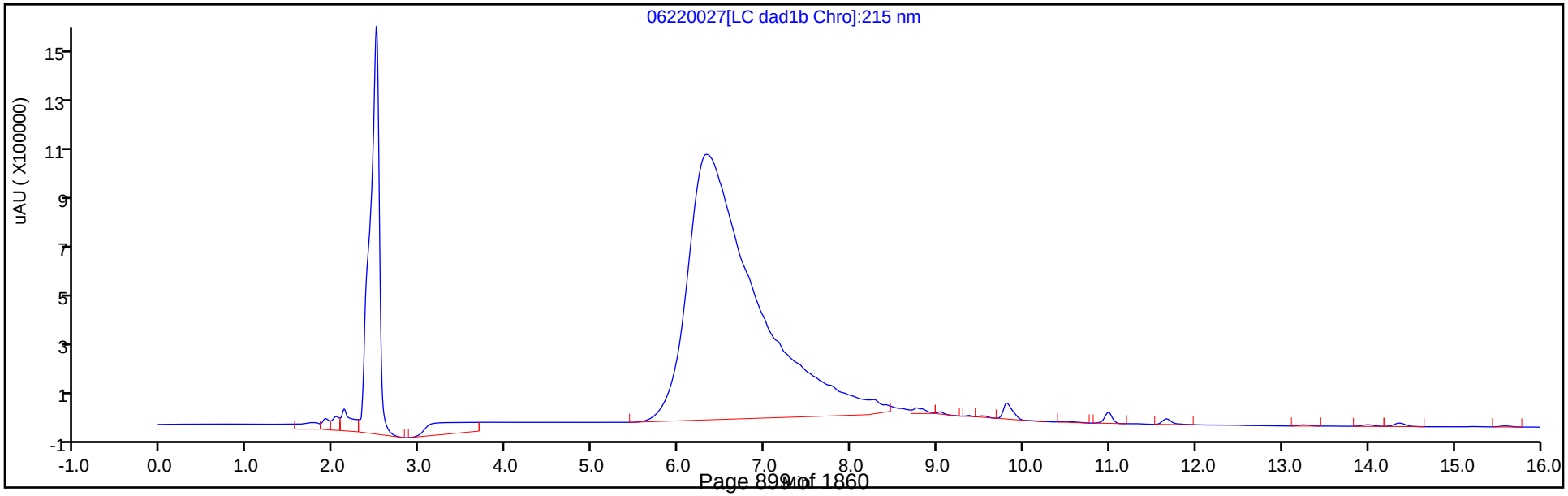
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d

Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26	Worklist Smp#:	27
Client ID:	G0116-20A				
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\20200620-92608.b\06220027.D				
Lims ID:	280-137609-A-26-A				
Client ID:	G0116-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 21:46:50	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-26-				
Misc. Info.:	280-0092608-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				

First Level Reviewer: zhangji Date: 23-Jun-2020 14:42:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2447	122.33

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

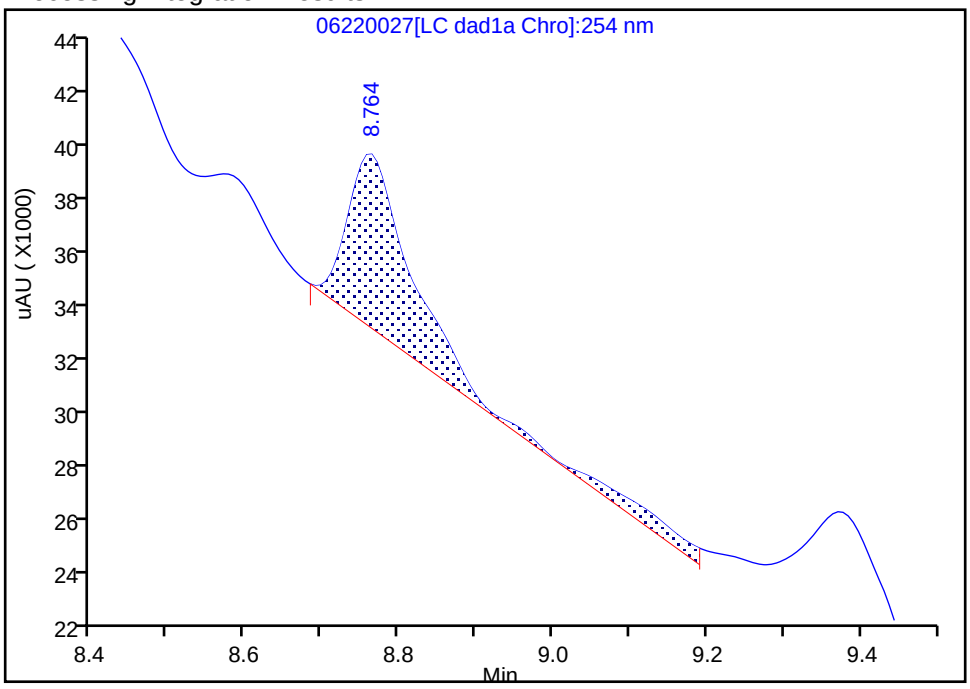
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d				
Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

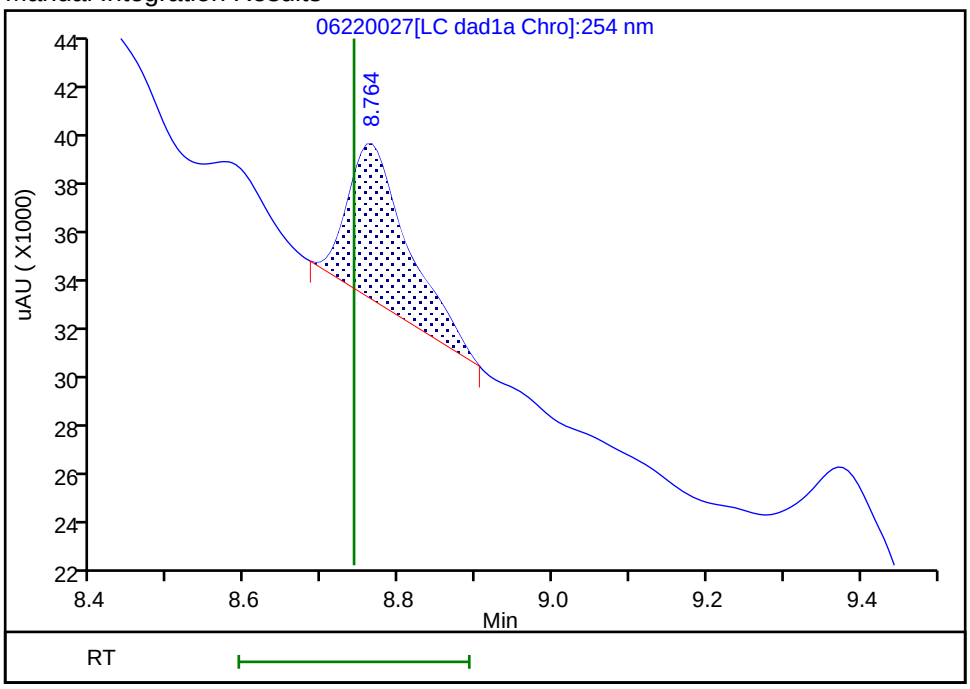
Processing Integration Results

RT: 8.76
Area: 40870
Amount: 0.295705
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 33815
Amount: 0.244660
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:42:04

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

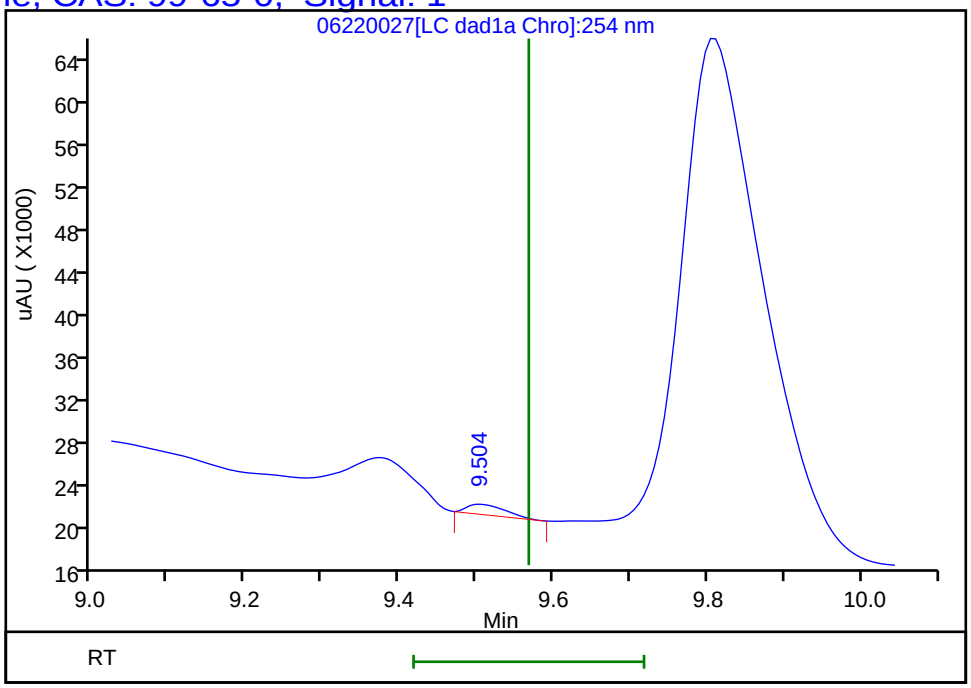
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d

Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
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		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.50
Response: 3323
Amount: 0.010835



Reviewer: zhangji, 23-Jun-2020 14:42:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

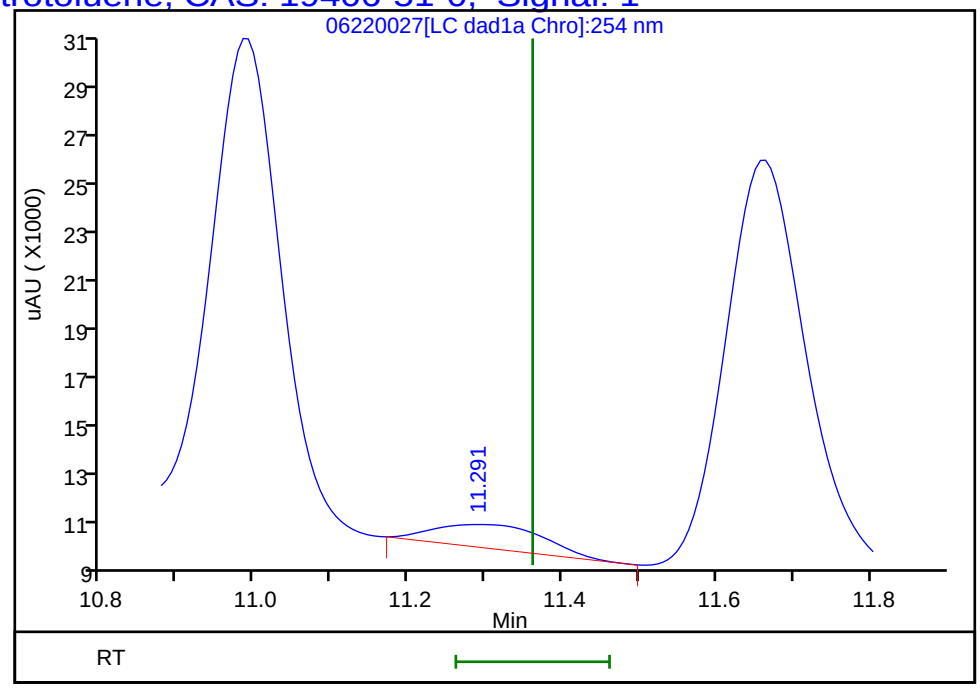
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d

Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
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		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.29
Response: 9548
Amount: 0.060052



Reviewer: zhangji, 23-Jun-2020 14:42:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

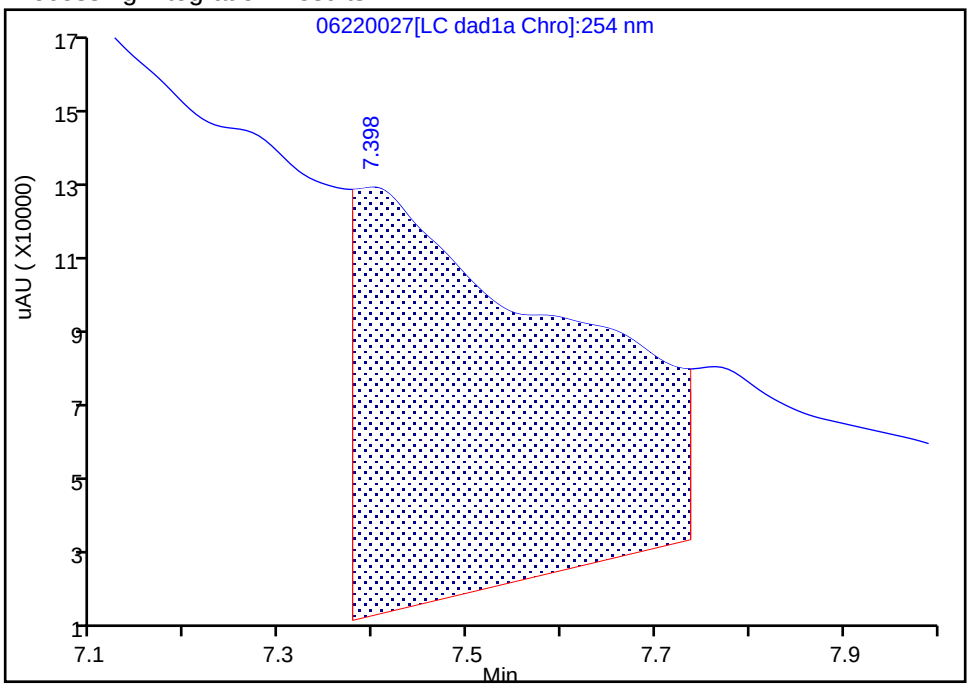
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d				
Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

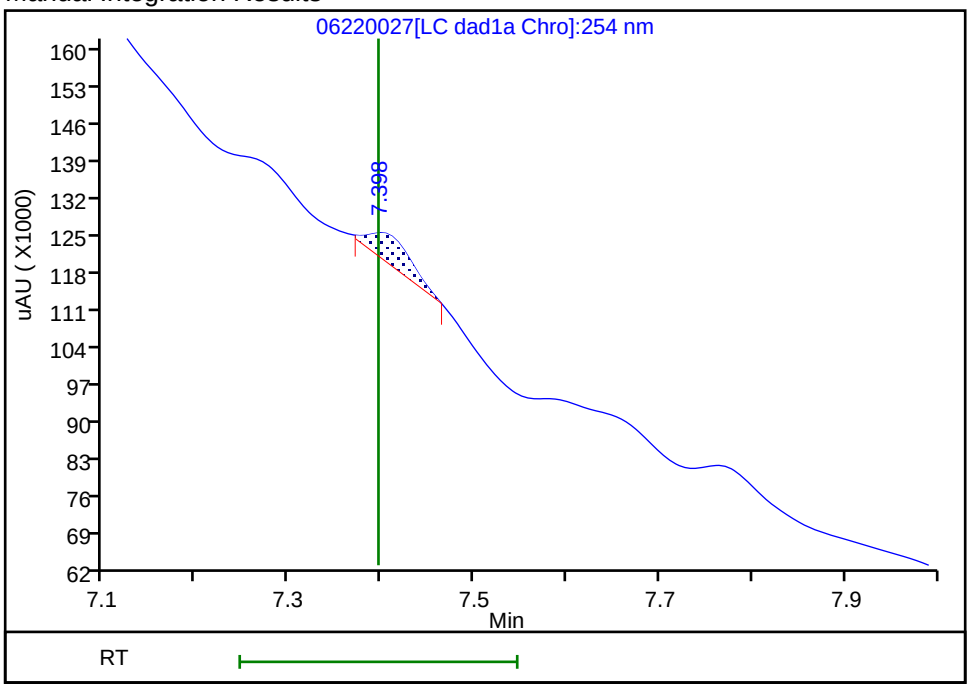
Processing Integration Results

RT: 7.40
Area: 1525908
Amount: 9.624496
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 17189
Amount: 0.108418
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:42:27
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

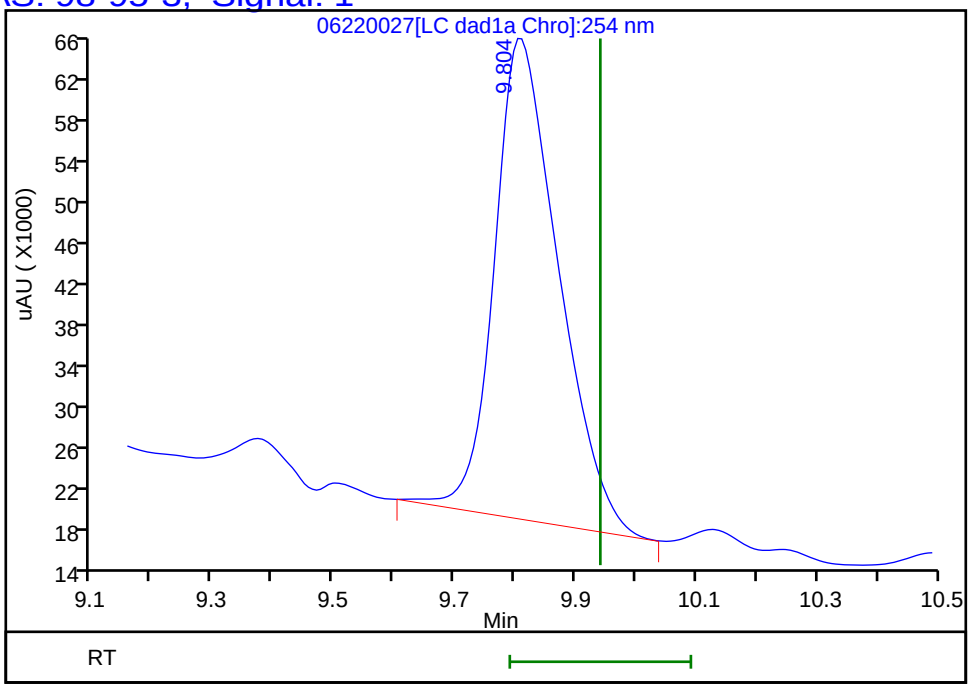
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d

Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
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 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.80
Response: 347202
Amount: 1.732522



Reviewer: zhangji, 23-Jun-2020 14:42:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

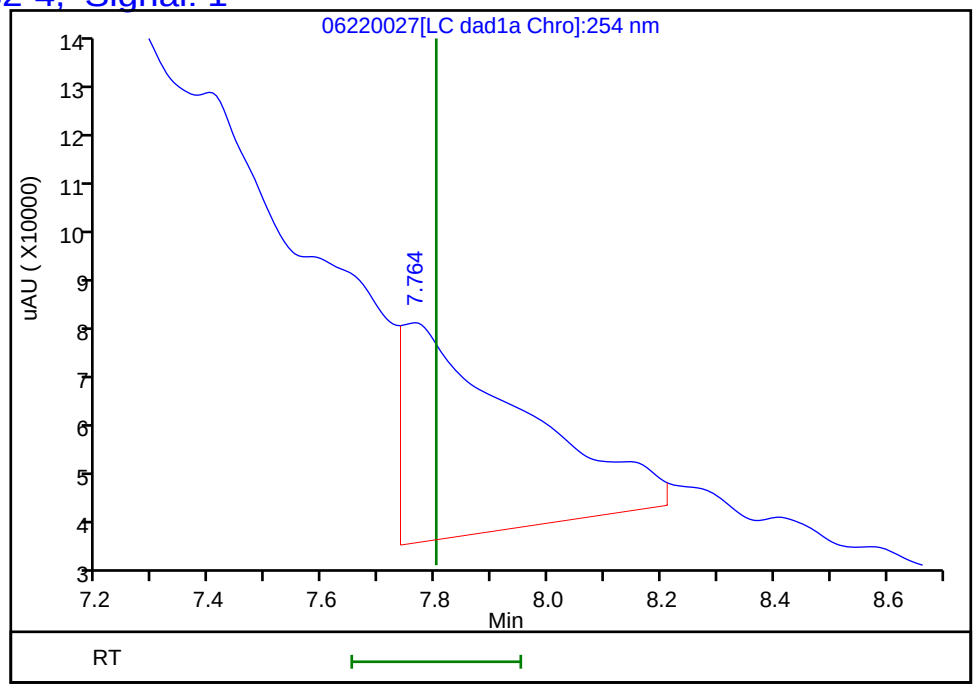
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d				
Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
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 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 605608
Amount: 5.193312



Reviewer: zhangji, 23-Jun-2020 14:42:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

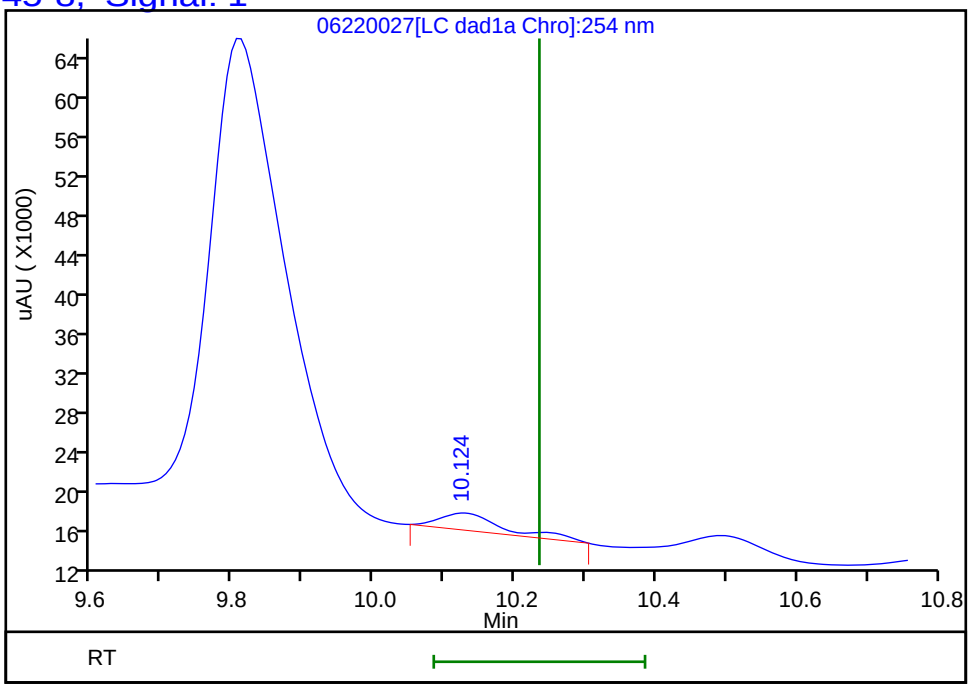
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220027.d				
Injection Date:	22-Jun-2020 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.12
Response: 11256
Amount: 0.063582



Reviewer: zhangji, 23-Jun-2020 14:42:44
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.: 280-137609-2

SDG No.:

Client Sample ID: G0116-20A Lab Sample ID: 280-137609-26

Matrix: Water Lab File ID: 06230038.D

Analysis Method: 8330A Date Collected: 06/12/2020 09:50

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 470.2(mL) Date Analyzed: 06/24/2020 14:11

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.: 499860 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.72*	*J1*	*0.12*	0.11	*0.054*
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	119	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230038.D
Lims ID: 280-137609-A-26-A
Client ID: G0116-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 14:11:02 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-26-
Misc. Info.: 280-0092679-038
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 18:52:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:22:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.150			ND	
7 MNX	1		7.876			ND	U
8 RDX	1		9.363			ND	
9 Nitrobenzene	1		12.263			ND	
$ 10 1,2-Dinitrobenzene	1	13.265	13.263	0.002	67829	0.2380	M
12 1,3-Dinitrobenzene	1		15.797			ND	U
14 o-Nitrotoluene	1		16.730			ND	U
15 p-Nitrotoluene	1		17.017			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.450			ND	
17 m-Nitrotoluene	1		17.943			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.372	18.390	-0.018	31459	0.0676	
19 1,3,5-Trinitrobenzene	1	19.185	19.123	0.062	12245	0.0259	
20 2,6-Dinitrotoluene	1	20.112	20.050	0.062	11517	0.0245	
21 2,4-Dinitrotoluene	1		20.564			ND	U
22 Tetryl	1	23.819	23.870	-0.051	6921	0.0188	
23 2,4,6-Trinitrotoluene	1		24.890			ND	U

QC Flag Legend

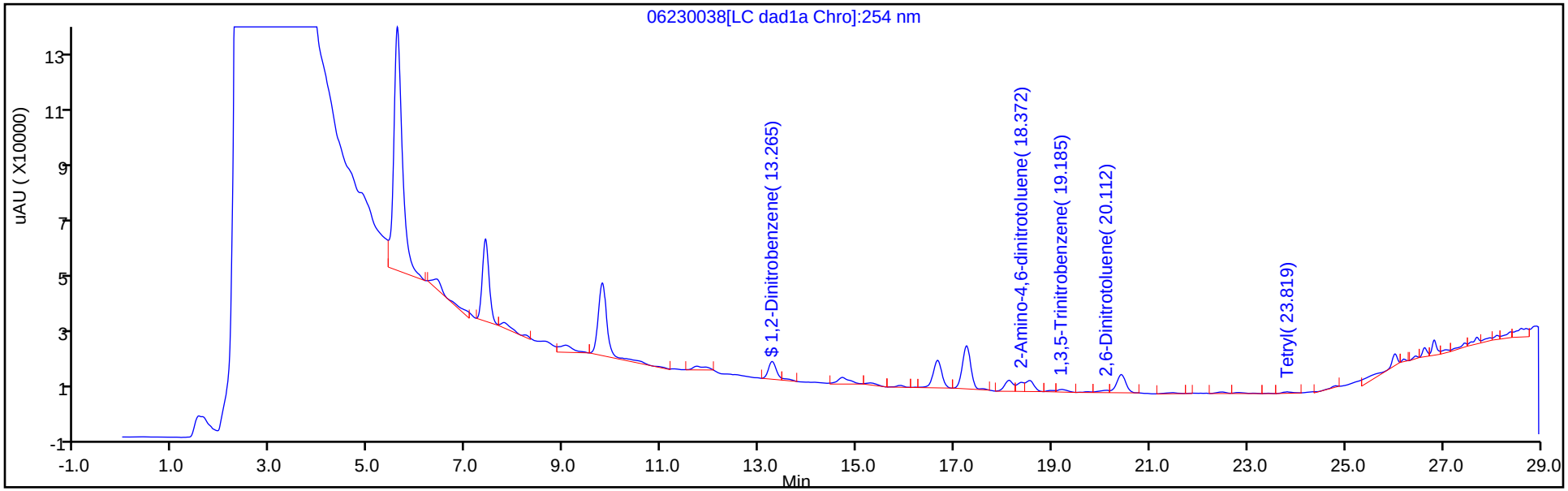
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Jun-2020 18:52:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

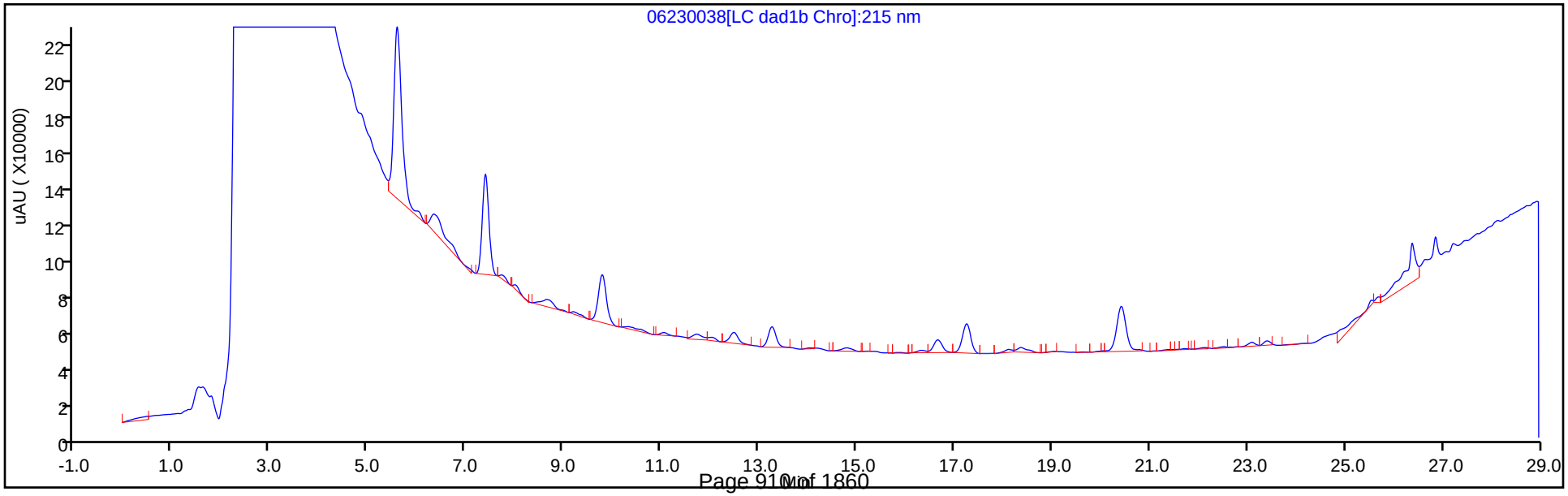
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d				
Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26	Worklist Smp#:	38
Client ID:	G0116-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230038.D				
Lims ID:	280-137609-A-26-A				
Client ID:	G0116-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 14:11:02	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-26-				
Misc. Info.:	280-0092679-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 18:52:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:22:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2380	119.02

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

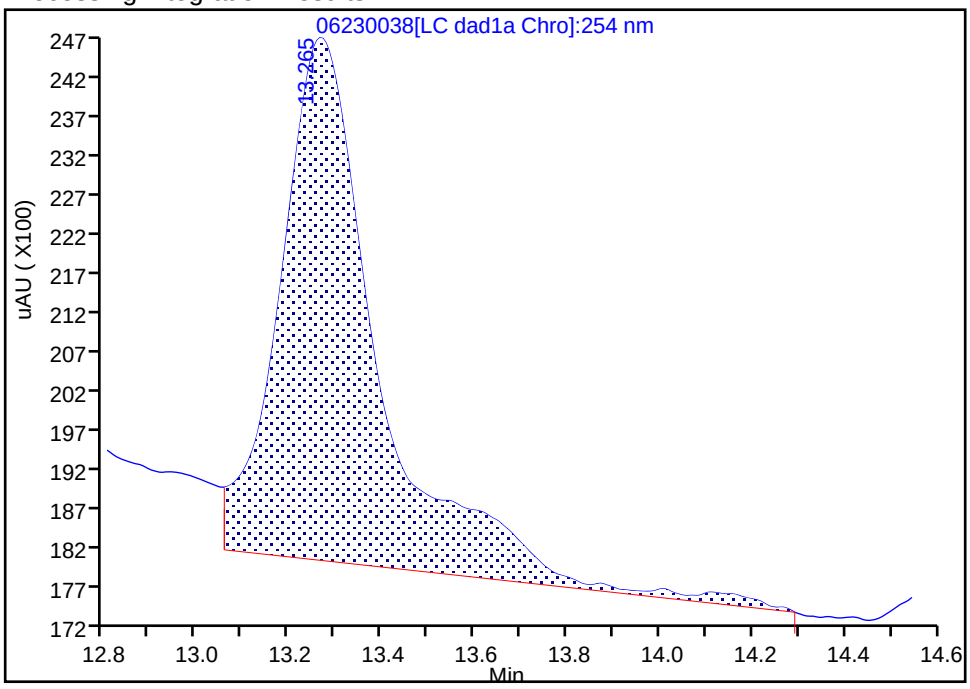
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d				
Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

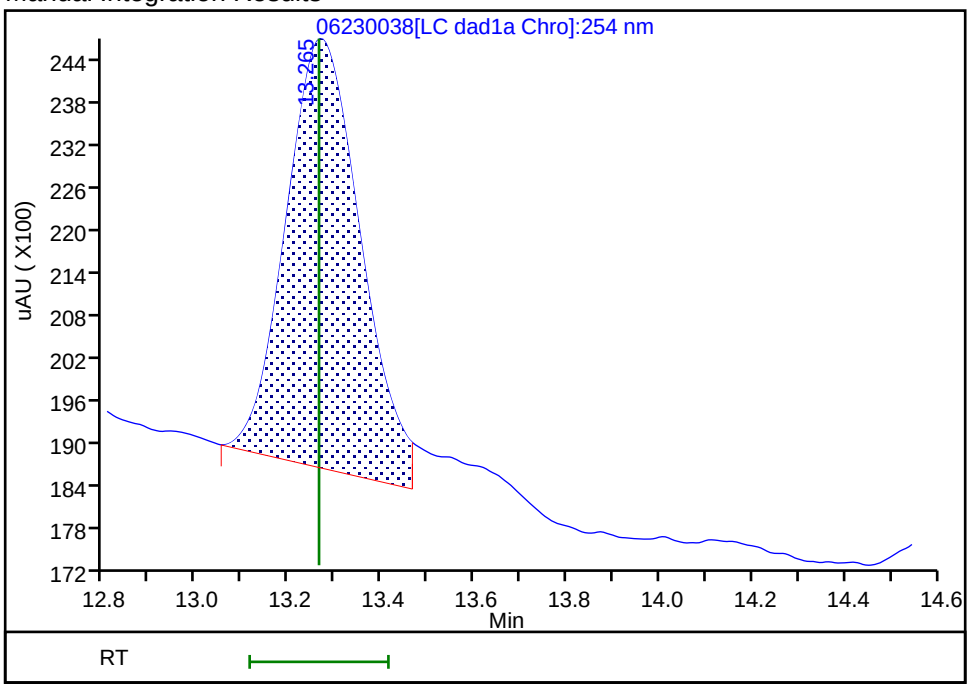
Processing Integration Results

RT: 13.27
Area: 98626
Amount: 0.349124
Amount Units: ug/ml



Manual Integration Results

RT: 13.27
Area: 67829
Amount: 0.238035
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:22:43

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

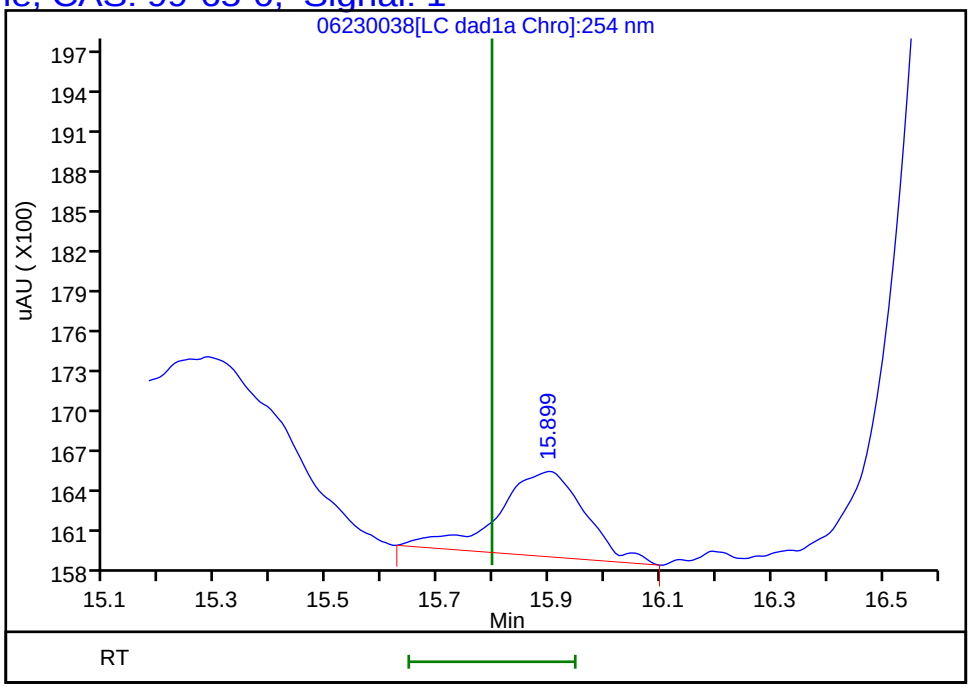
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d

Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.90
Response: 6898
Amount: 0.010232



Reviewer: zhangji, 24-Jun-2020 18:22:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

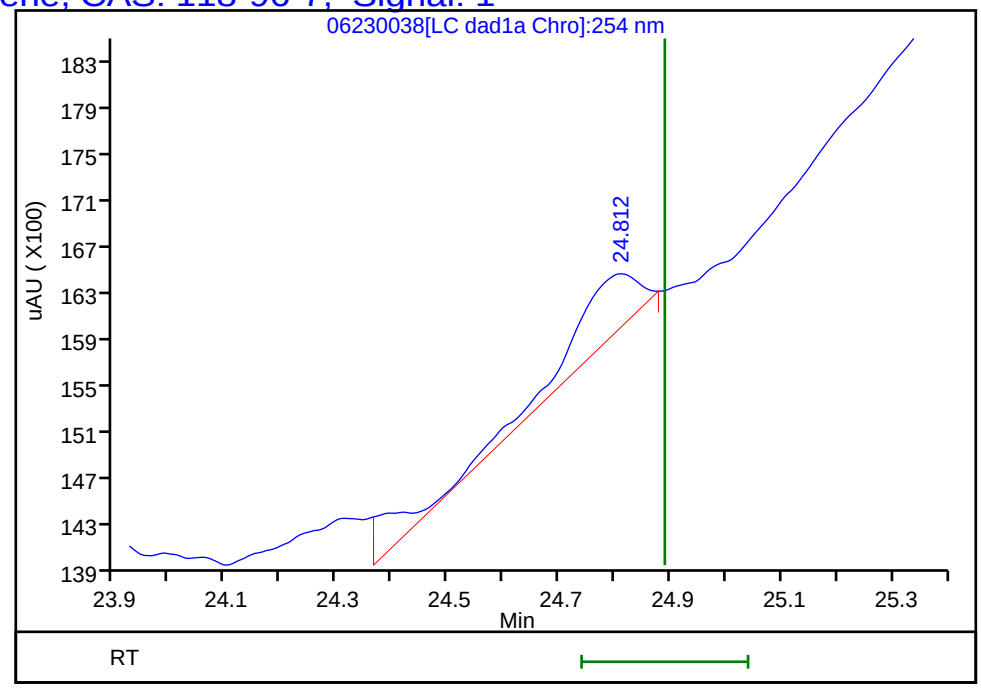
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d				
Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 24.81
Response: 5874
Amount: 0.006763



Reviewer: zhangji, 24-Jun-2020 18:22:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

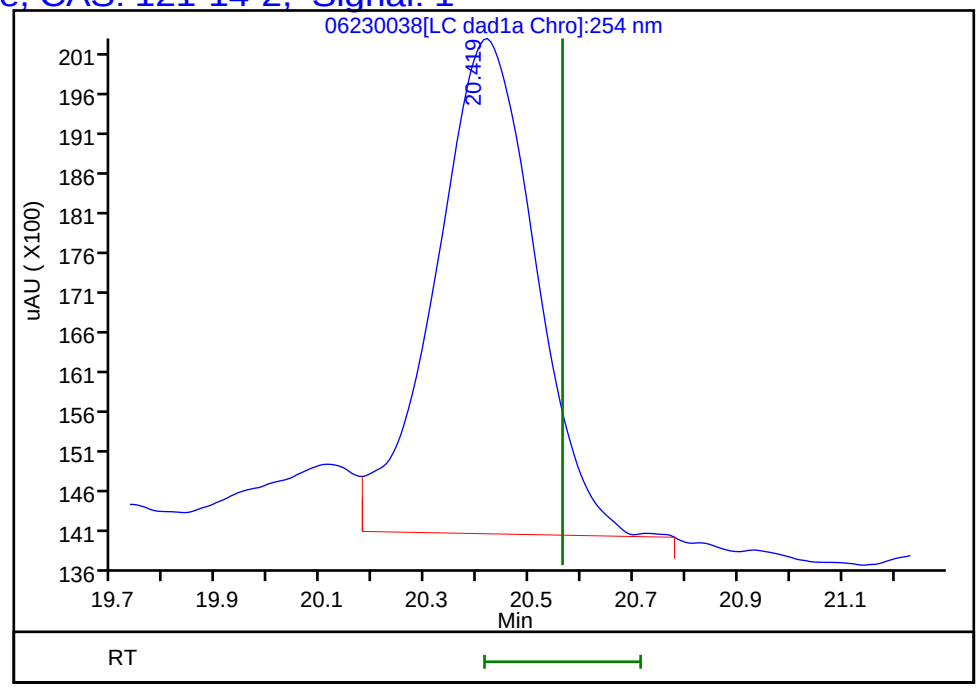
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d

Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.42
Response: 82447
Amount: 0.128801



Reviewer: zhangji, 24-Jun-2020 18:22:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

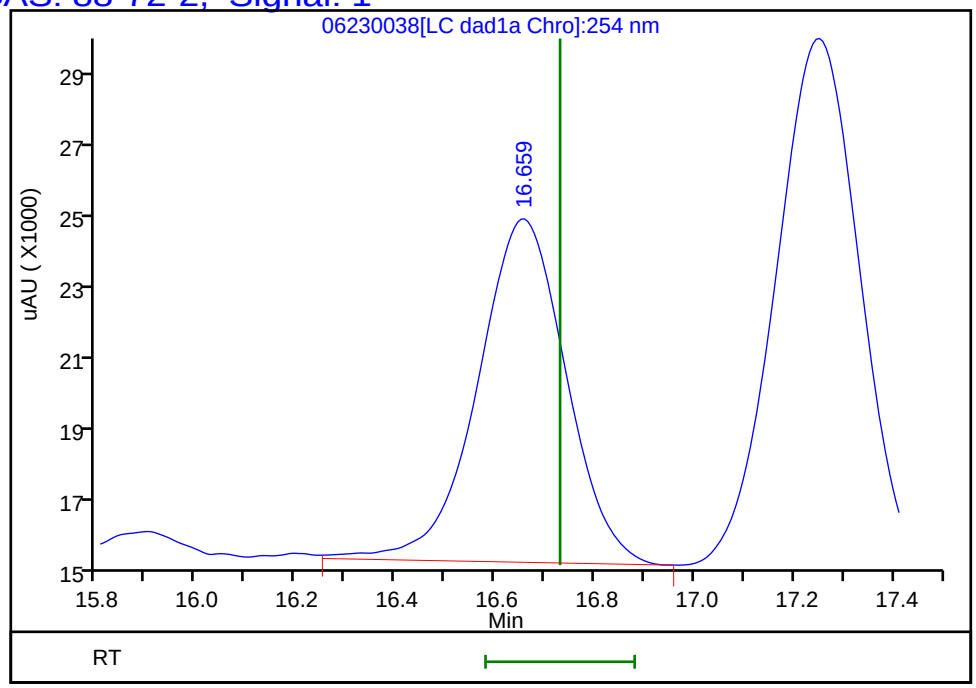
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d				
Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.66
Response: 115834
Amount: 0.424356



Reviewer: zhangji, 24-Jun-2020 18:22:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

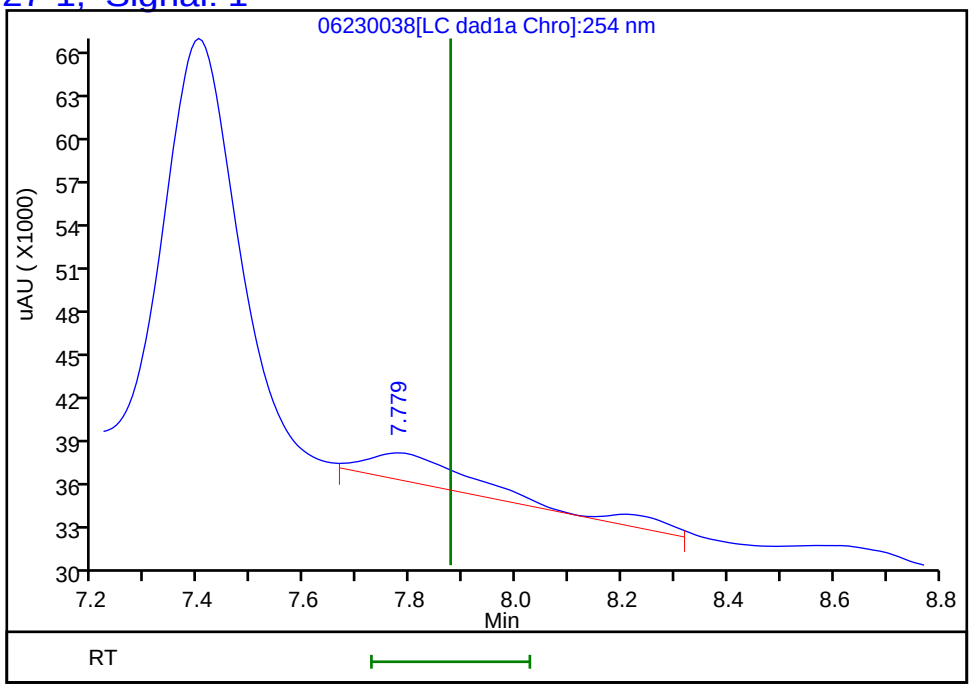
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230038.d				
Injection Date:	24-Jun-2020 14:11:02	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-26-A	Lab Sample ID:	280-137609-26		
Client ID:	G0116-20A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.78
Response: 33234
Amount: 0.104255



Reviewer: zhangji, 24-Jun-2020 18:22:45
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.: 280-137609-2

SDG No.:

Client Sample ID: G0120-20A Lab Sample ID: 280-137609-27

Matrix: Water Lab File ID: 06220028.D

Analysis Method: 8330A Date Collected: 06/12/2020 11:00

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 477.7(mL) Date Analyzed: 06/22/2020 22:09

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.: 499531 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	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U Q	0.12	0.10	0.039
118-96-7	2,4,6-Trinitrotoluene	0.10	U M Q	0.12	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U Q	0.10	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U Q	0.10	0.084	0.042
88-72-2	2-Nitrotoluene	0.21	U 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	0.13	U Q	0.16	0.13	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	0.092
5755-27-1	MNX	0.42	U M Q	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 Q	0.22	0.21	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	127	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220028.D
Lims ID: 280-137609-A-27-A
Client ID: G0120-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 22:09:51 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-27-
Misc. Info.: 280-0092608-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:43:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	
	6 MNX	1		7.396			ND	U
	7 RDX	1		7.801			ND	
$	9 1,2-Dinitrobenzene	1	8.754	8.741	0.013	35201	0.2547	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	U
	14 Tetryl	1	10.240	10.234	0.006	6576	0.0371	M
	16 2,4,6-Trinitrotoluene	1		11.201			ND	U
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
	18 2-Amino-4,6-dinitrotoluene	1	11.640	11.648	-0.008	8741	0.0431	M
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

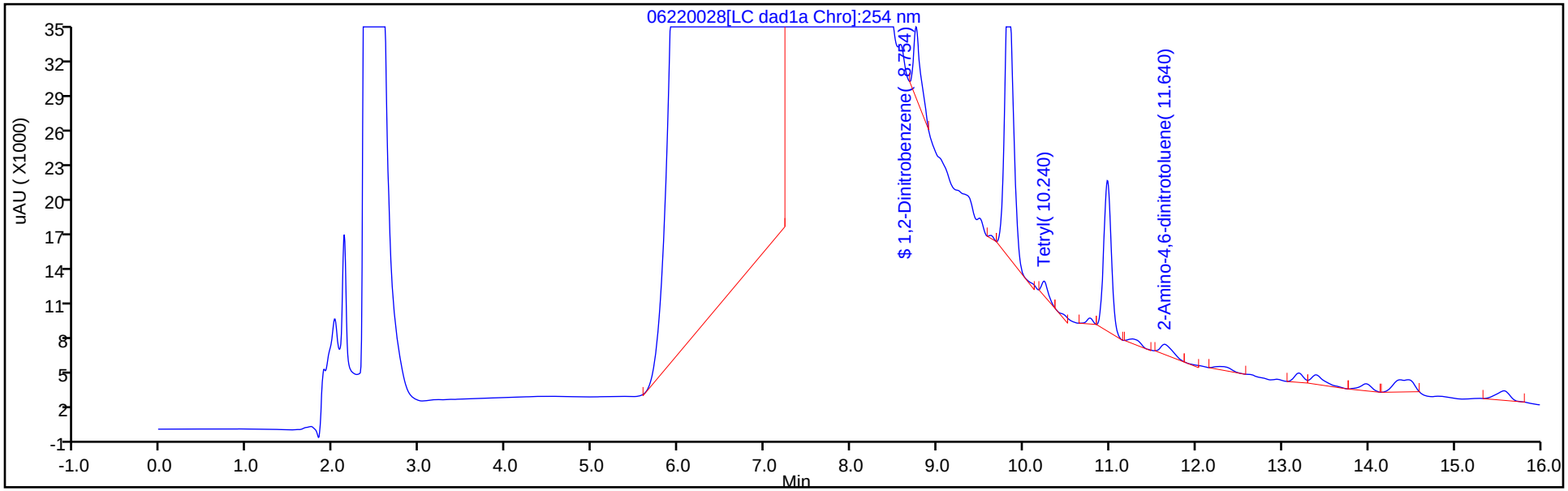
Report Date: 23-Jun-2020 15:18:04 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

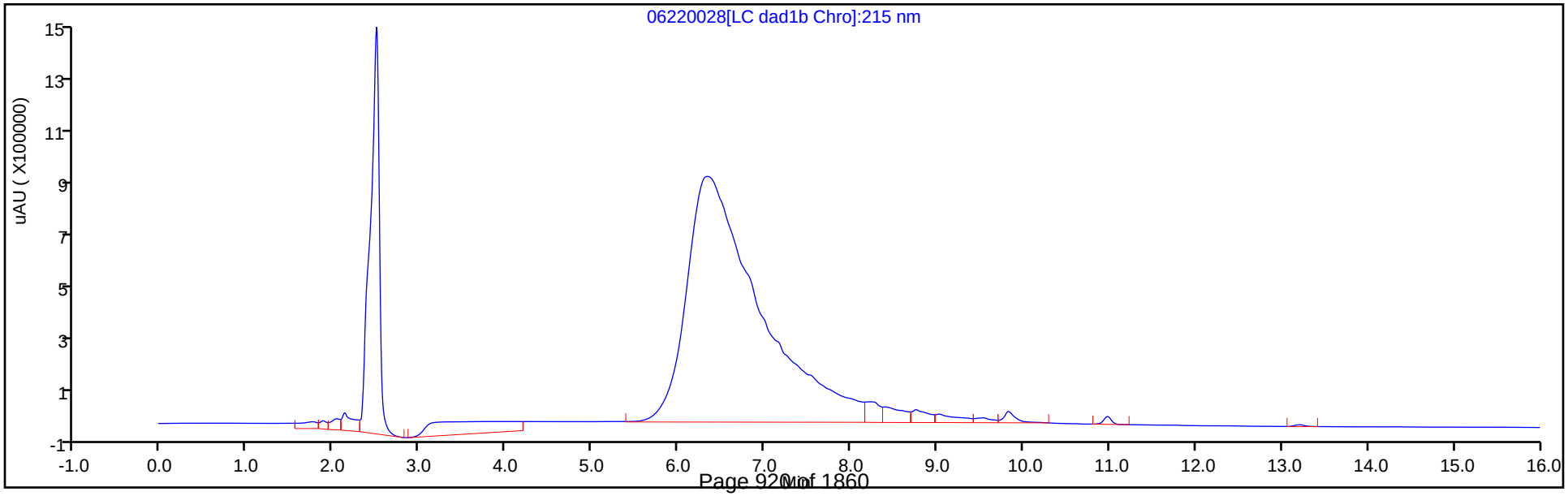
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d

Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27	Worklist Smp#:	28
Client ID:	G0120-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220028.D
Lims ID: 280-137609-A-27-A
Client ID: G0120-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 22:09:51 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-27-
Misc. Info.: 280-0092608-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:43:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2547	127.34

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

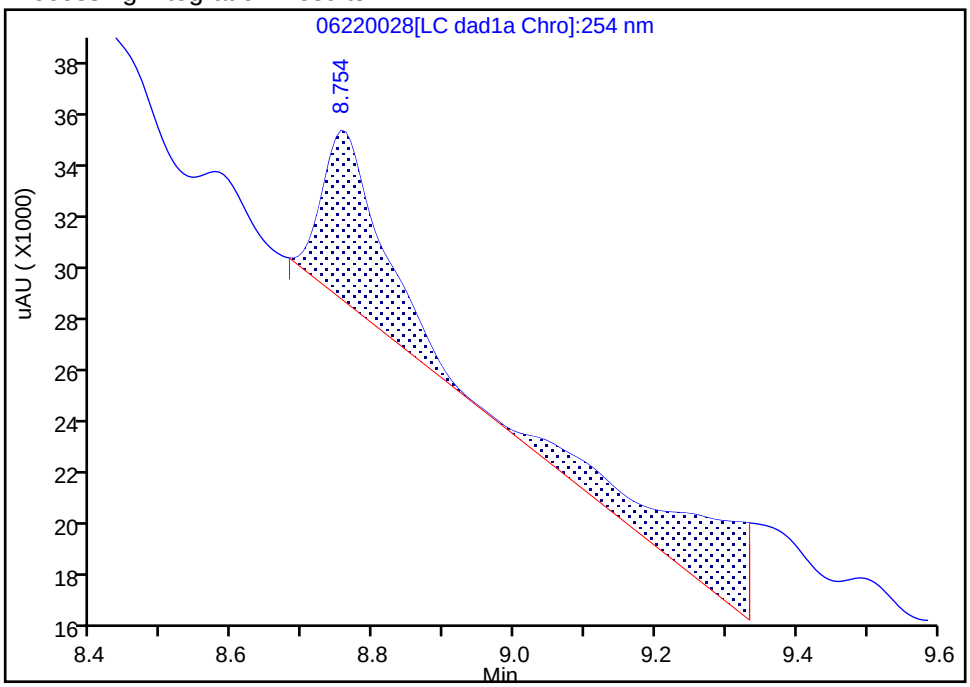
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d				
Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

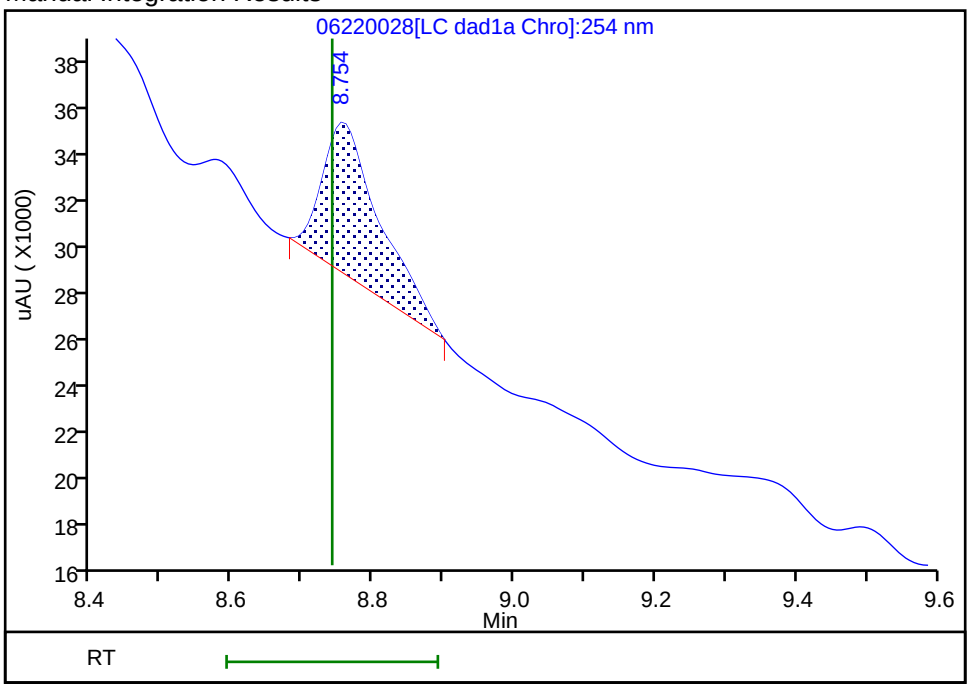
Processing Integration Results

RT: 8.75
Area: 68238
Amount: 0.493719
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 35201
Amount: 0.254688
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:42:52

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

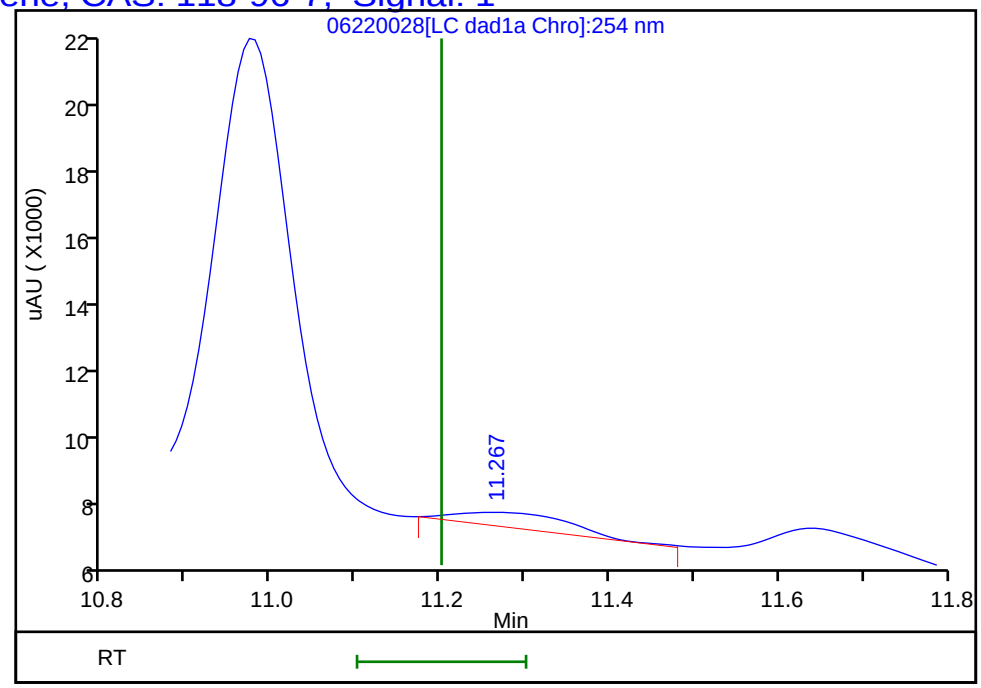
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d

Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.27
Response: 4073
Amount: 0.019963



Reviewer: zhangji, 23-Jun-2020 14:43:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

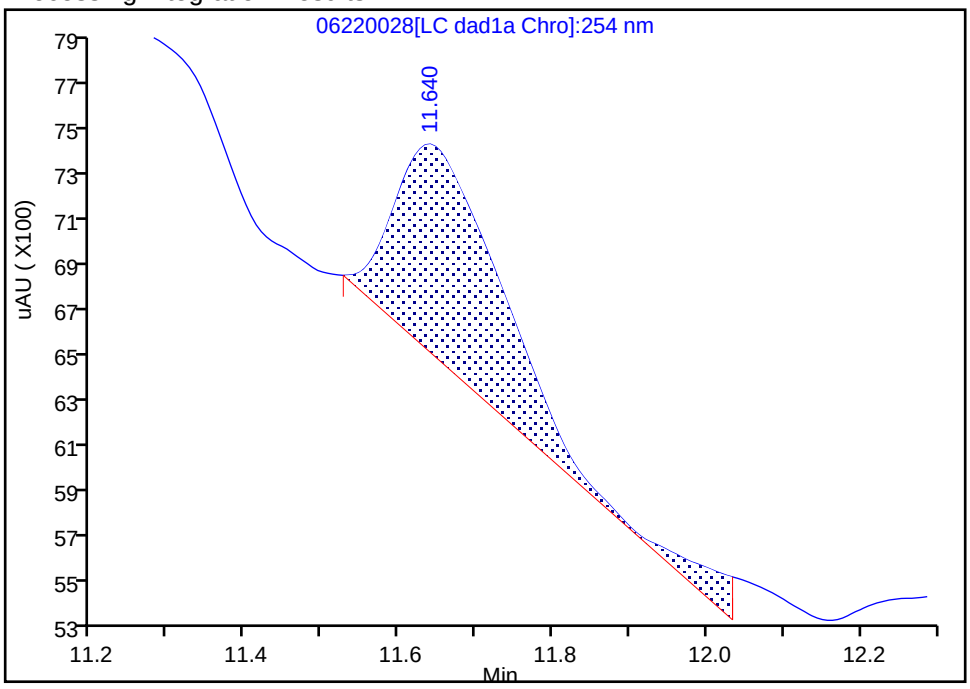
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d				
Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

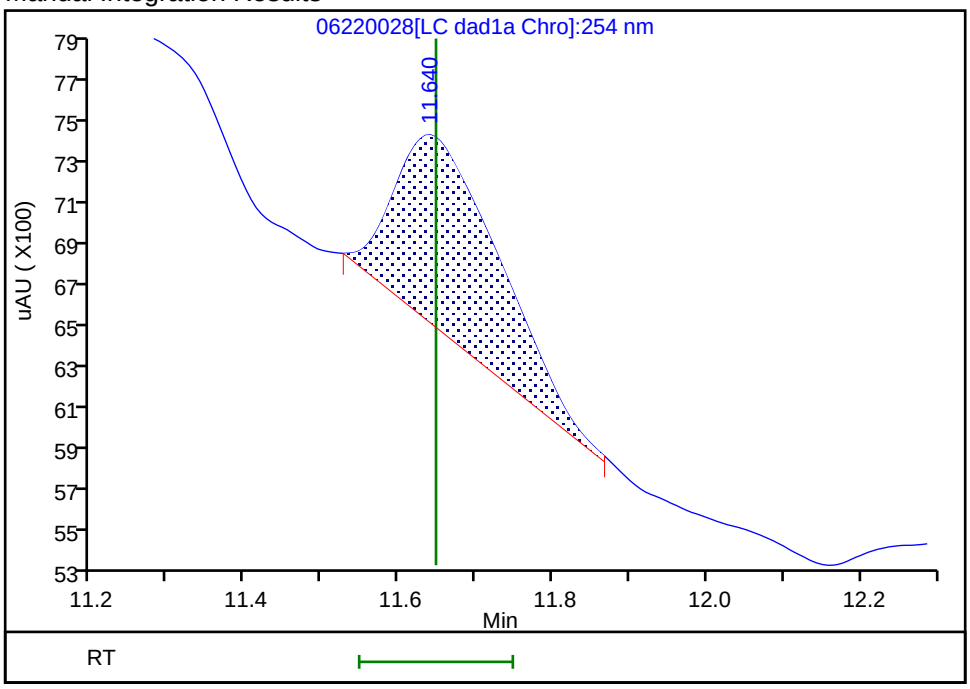
Processing Integration Results

RT: 11.64
Area: 9451
Amount: 0.046599
Amount Units: ug/mL



Manual Integration Results

RT: 11.64
Area: 8741
Amount: 0.043098
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:43:09

Audit Action: Split an Integrated Peak Audit Reason: Baseline

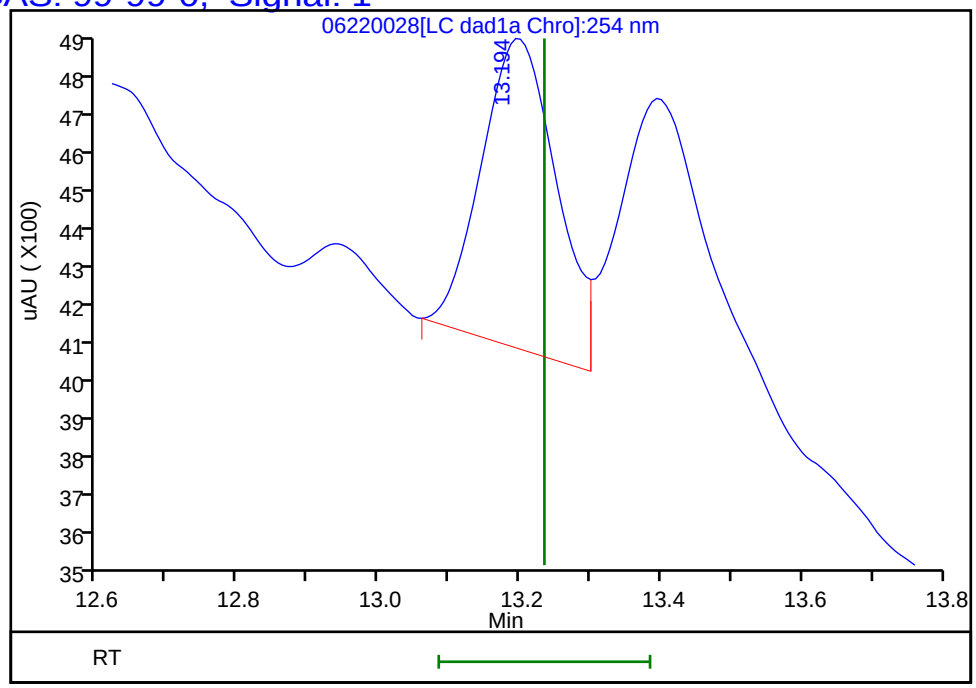
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d				
Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.19
Response: 6046
Amount: 0.053502



Reviewer: zhangji, 23-Jun-2020 14:43:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

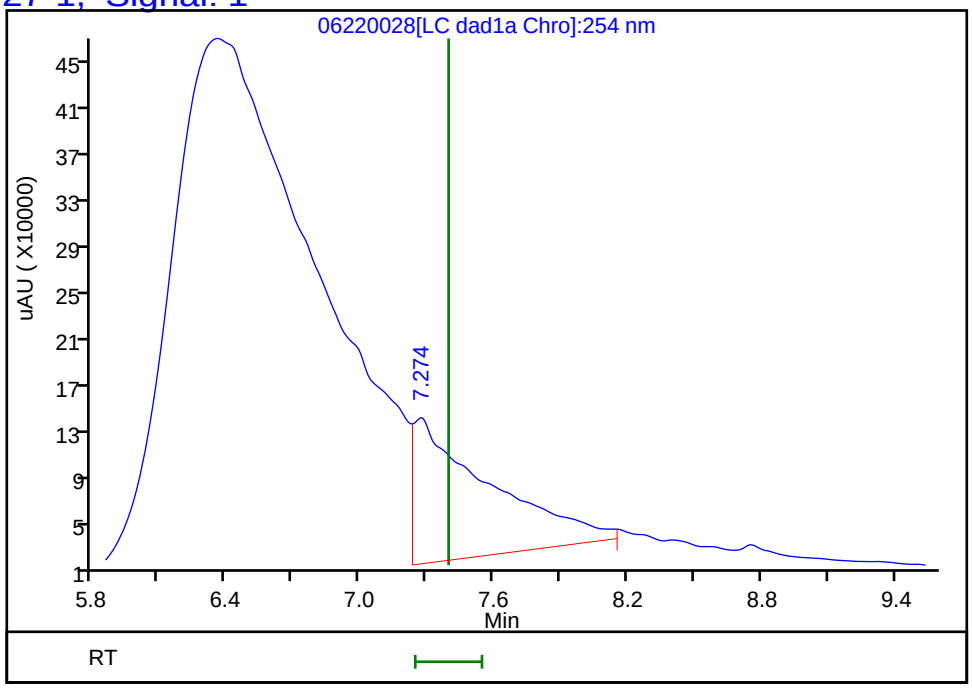
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d				
Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 2932889
Amount: 18.498873



Reviewer: zhangji, 23-Jun-2020 14:43:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

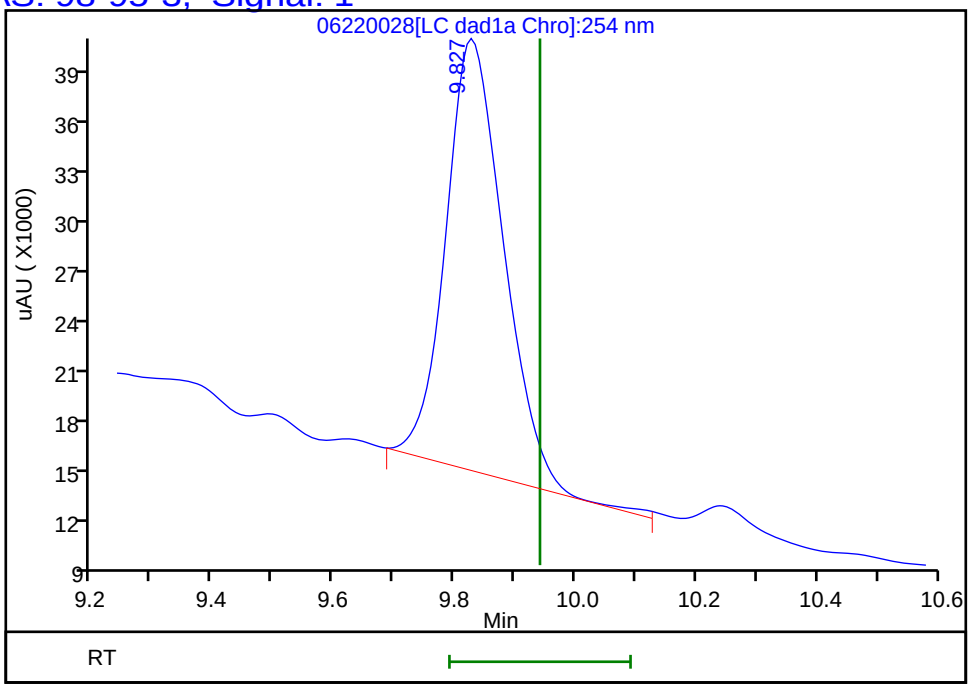
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d

Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.83
Response: 171985
Amount: 0.858197



Reviewer: zhangji, 23-Jun-2020 14:43:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

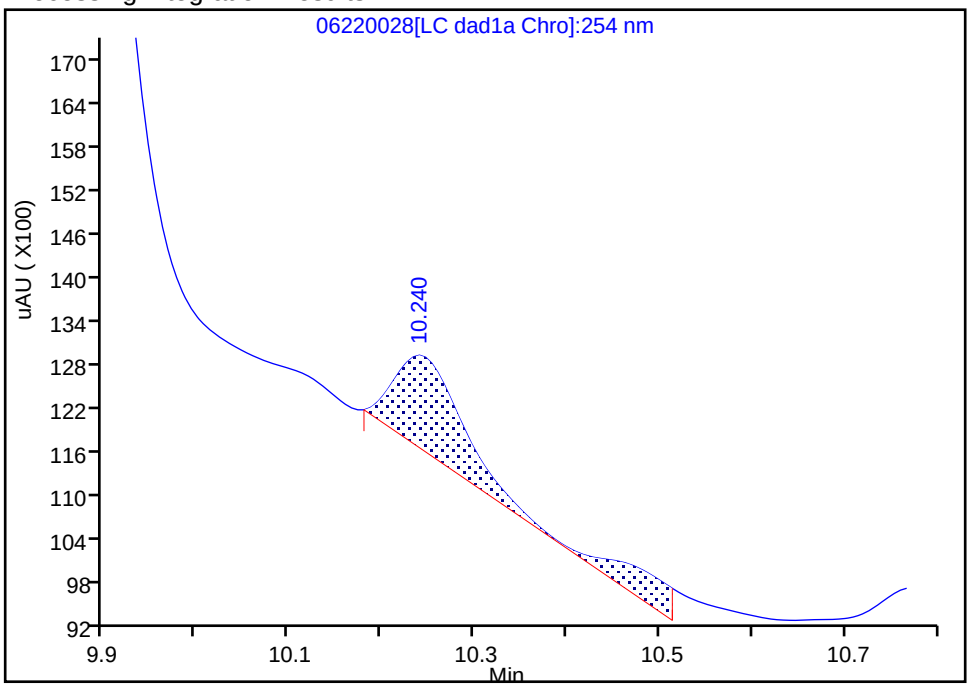
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220028.d				
Injection Date:	22-Jun-2020 22:09:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

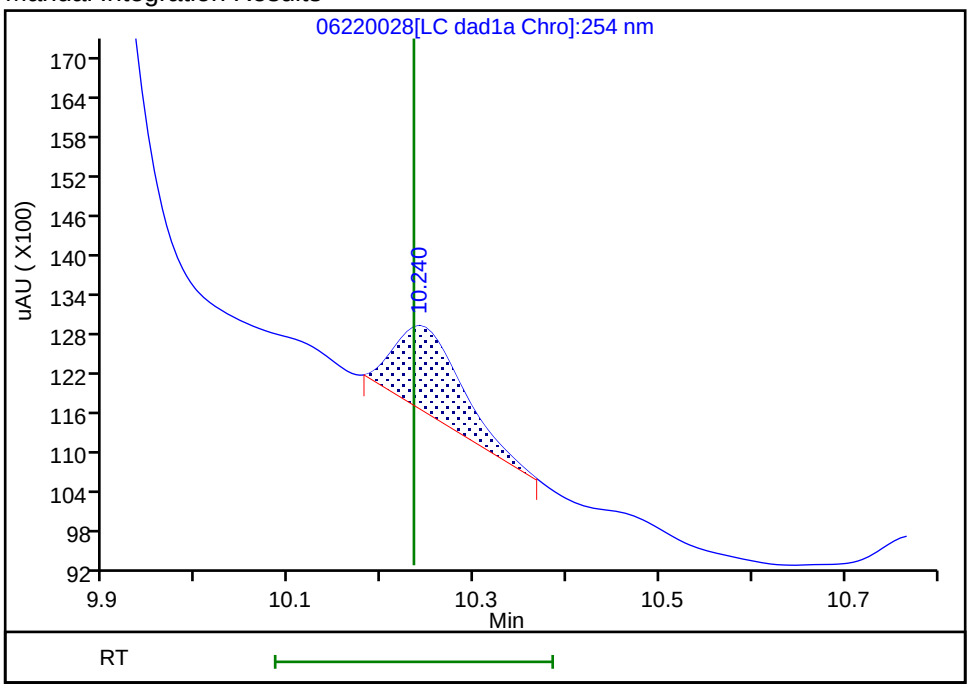
Processing Integration Results

RT: 10.24
Area: 8604
Amount: 0.048601
Amount Units: ug/mL



Manual Integration Results

RT: 10.24
Area: 6576
Amount: 0.037146
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:43:13

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0120-20A Lab Sample ID: 280-137609-27

Matrix: Water Lab File ID: 06230039.D

Analysis Method: 8330A Date Collected: 06/12/2020 11:00

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 477.7(mL) Date Analyzed: 06/24/2020 14:45

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.: 499860 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U M	0.12	0.10	0.053
479-45-8	Tetryl	0.10	U M	0.12	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	118	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230039.D
Lims ID: 280-137609-A-27-A
Client ID: G0120-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 14:45:58 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-27-
Misc. Info.: 280-0092679-039
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 18:52:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:23:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.150			ND	
	7 MNX	1		7.876			ND	
	8 RDX	1		9.363			ND	
	9 Nitrobenzene	1		12.263			ND	
$	10 1,2-Dinitrobenzene	1	13.255	13.263	-0.008	67168	0.2357	M
	12 1,3-Dinitrobenzene	1		15.797			ND	U
	14 o-Nitrotoluene	1		16.730			ND	U
	15 p-Nitrotoluene	1		17.017			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.450			ND	U
	17 m-Nitrotoluene	1		17.943			ND	
	18 2-Amino-4,6-dinitrotoluene	1		18.390			ND	U
	19 1,3,5-Trinitrobenzene	1		19.123			ND	
	20 2,6-Dinitrotoluene	1	20.069	20.050	0.019	6832	0.008285	
	21 2,4-Dinitrotoluene	1		20.564			ND	
	22 Tetryl	1		23.870			ND	U
	23 2,4,6-Trinitrotoluene	1		24.890			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

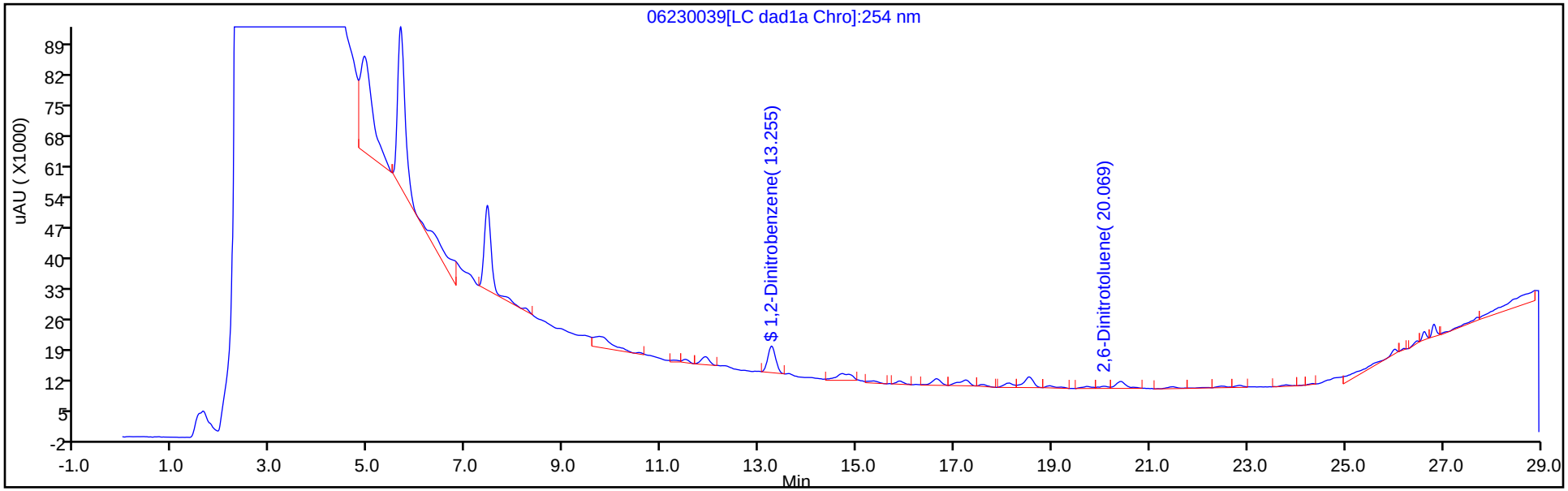
Report Date: 24-Jun-2020 18:52:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

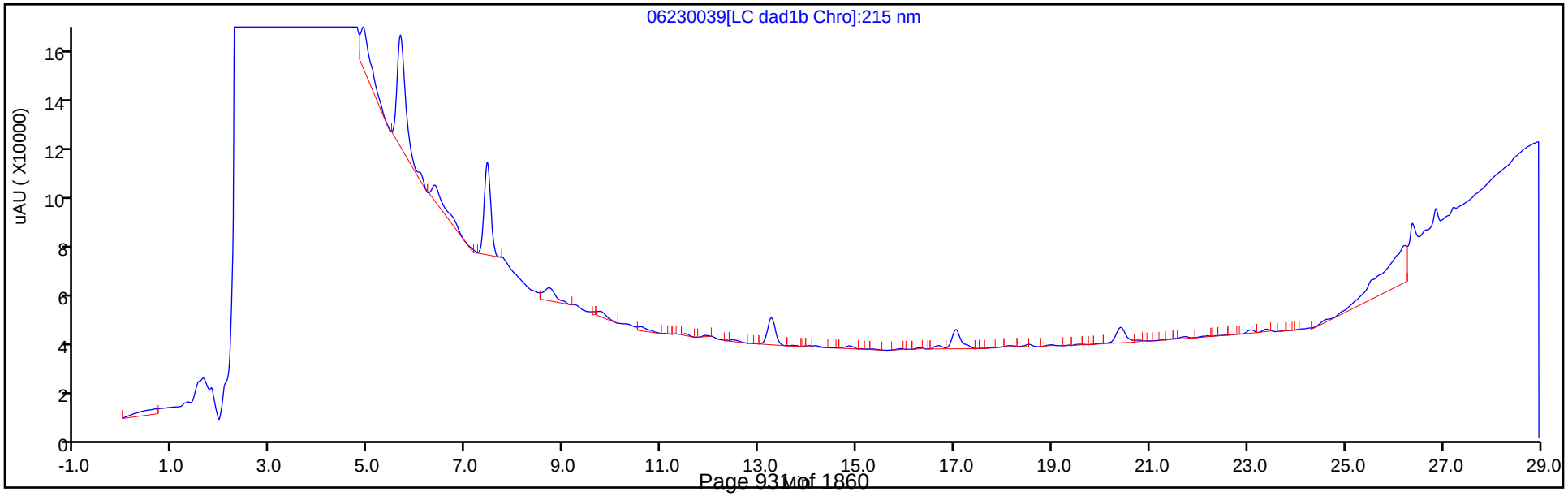
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d

Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27	Worklist Smp#:	39
Client ID:	G0120-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230039.D				
Lims ID:	280-137609-A-27-A				
Client ID:	G0120-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 14:45:58	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-27-				
Misc. Info.:	280-0092679-039				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 18:52:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:23:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2357	117.83

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

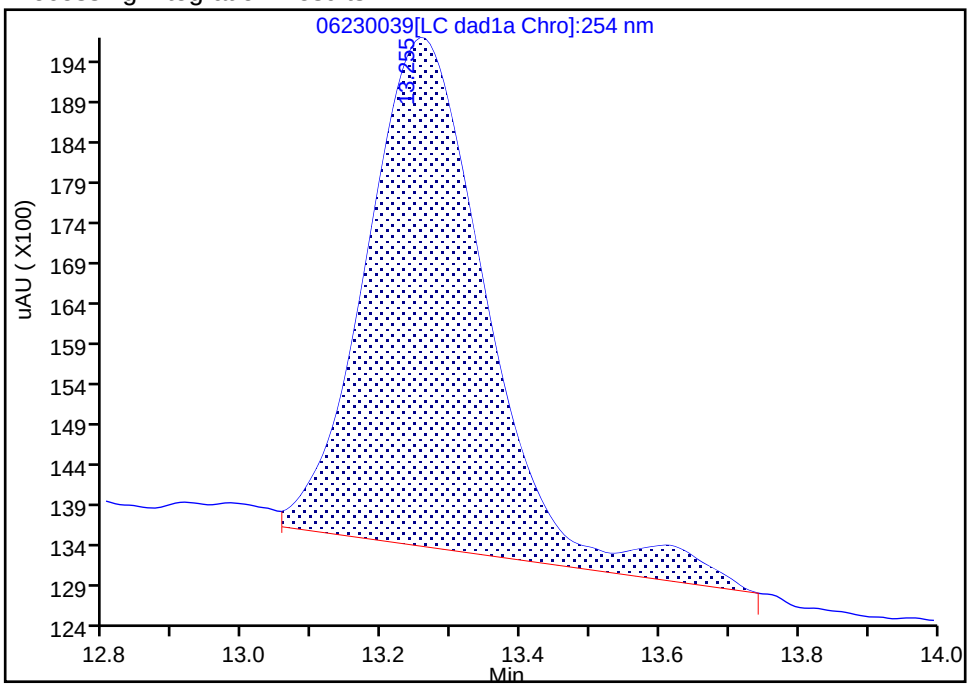
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d				
Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

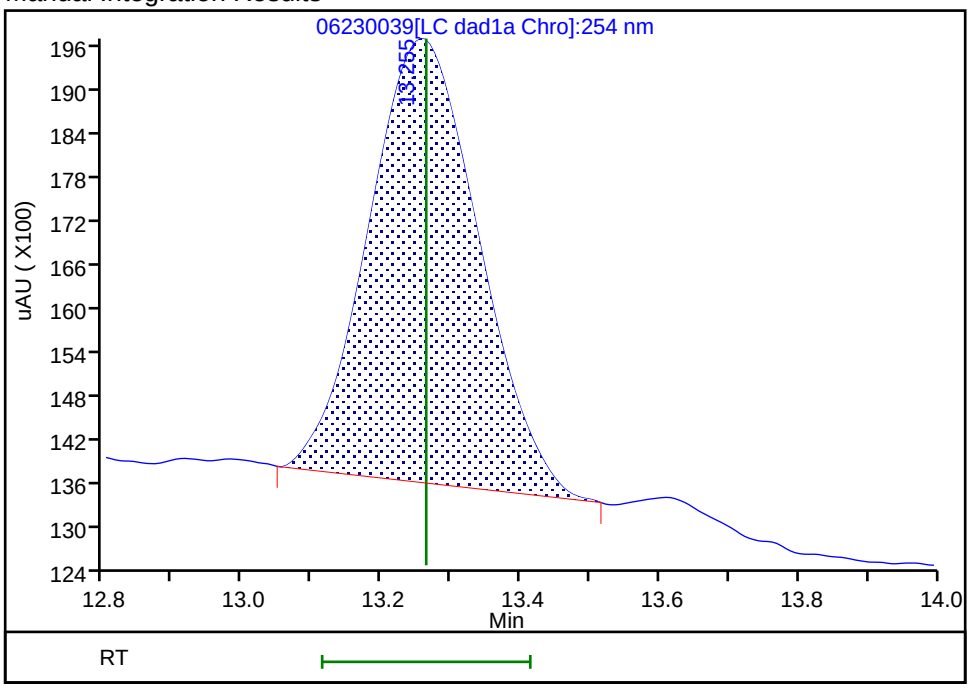
Processing Integration Results

RT: 13.26
Area: 76851
Amount: 0.270579
Amount Units: ug/ml



Manual Integration Results

RT: 13.26
Area: 67168
Amount: 0.235651
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:22:59

Audit Action: Manually Integrated Audit Reason: Baseline

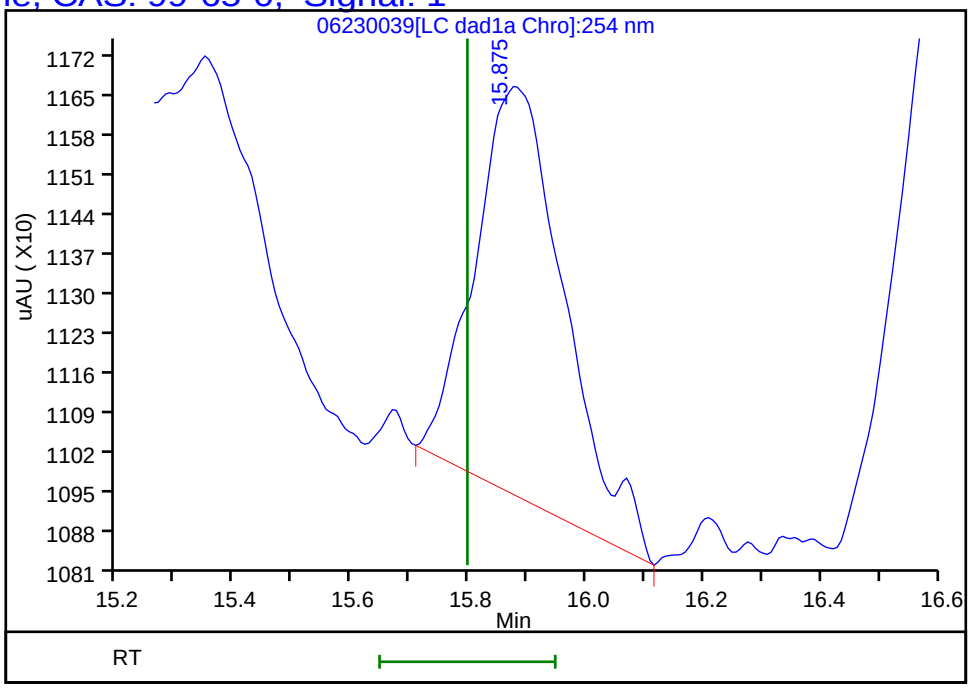
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d				
Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.88
Response: 7755
Amount: 0.011503



Reviewer: zhangji, 24-Jun-2020 18:23:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

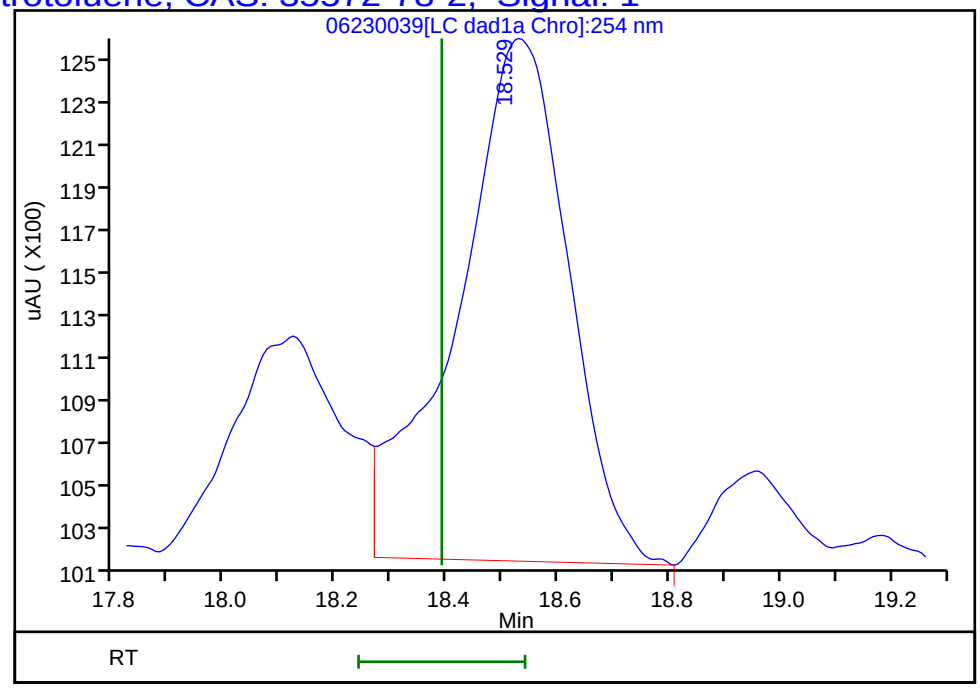
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d				
Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 18.53
Response: 33832
Amount: 0.072724



Reviewer: zhangji, 24-Jun-2020 18:23:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

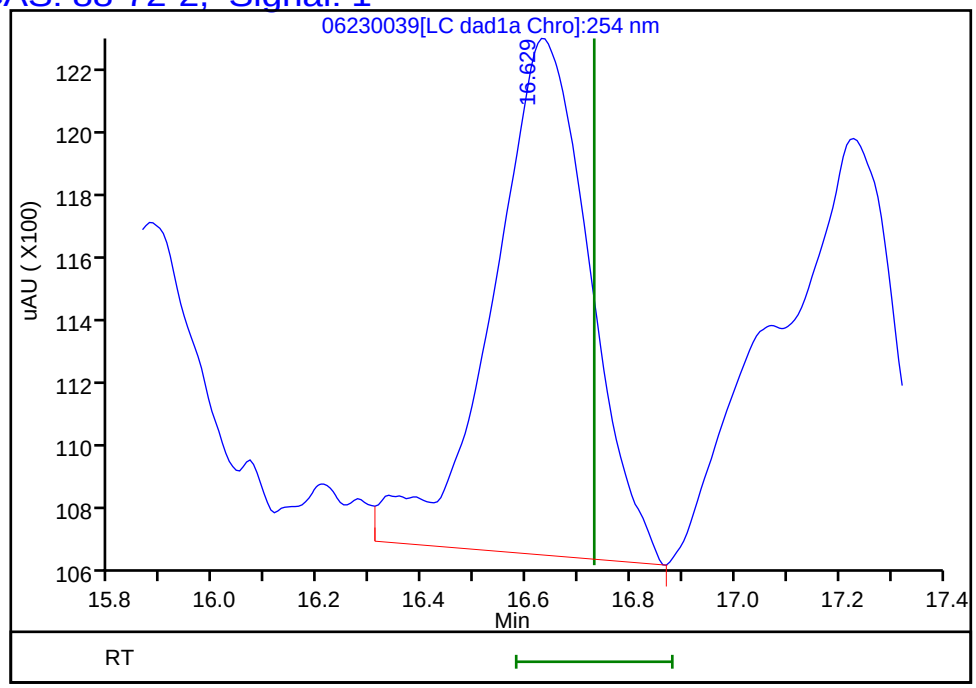
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d				
Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.63
Response: 19542
Amount: 0.071592



Reviewer: zhangji, 24-Jun-2020 18:23:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

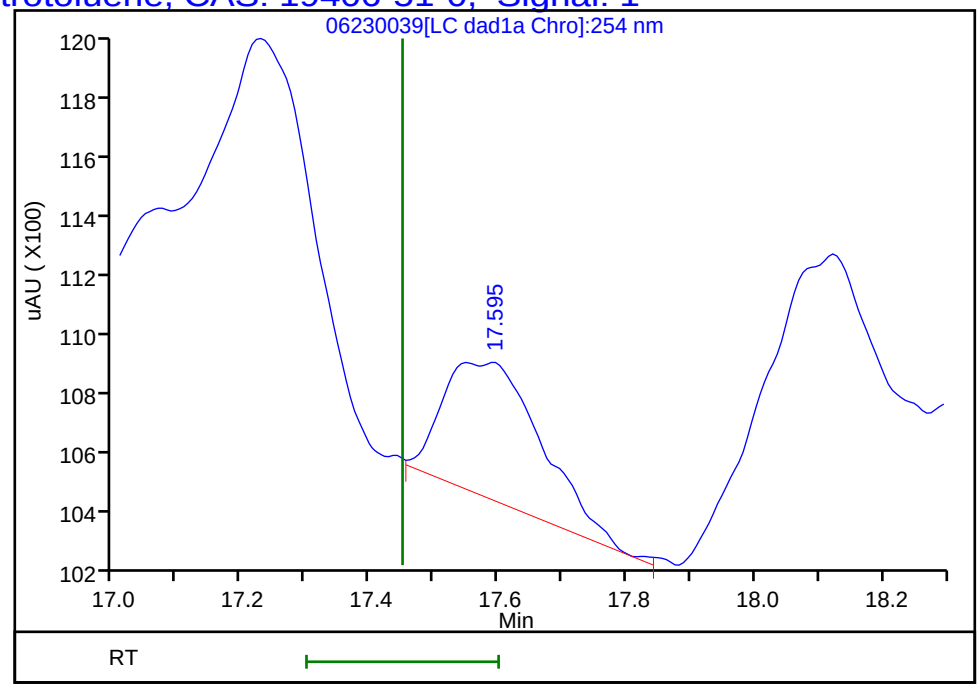
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d				
Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.60
Response: 4723
Amount: 0.013681



Reviewer: zhangji, 24-Jun-2020 18:23:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

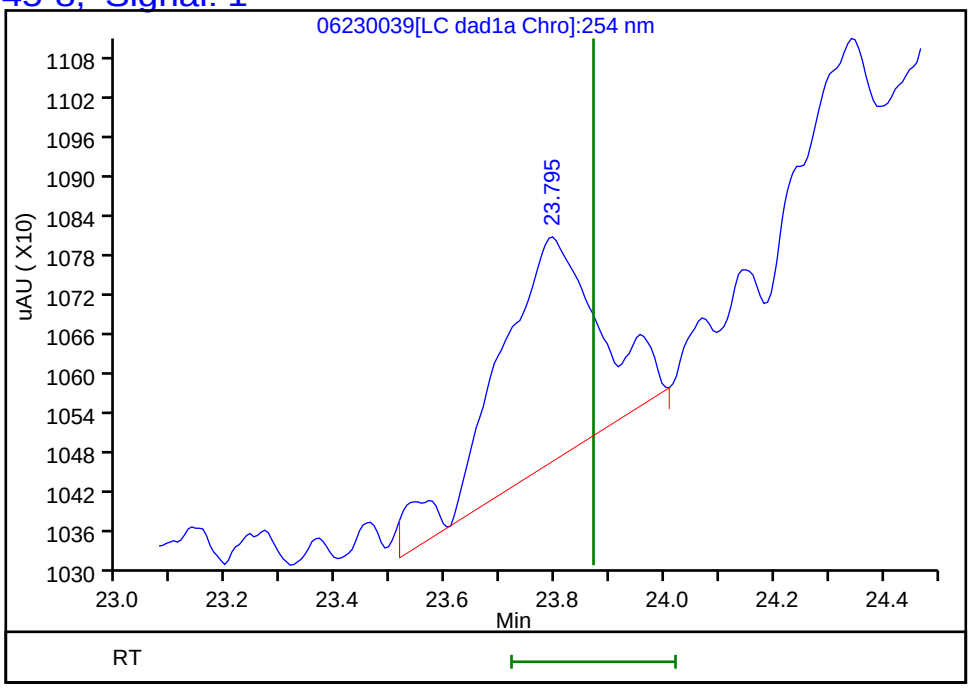
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230039.d

Injection Date:	24-Jun-2020 14:45:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-27-A	Lab Sample ID:	280-137609-27		
Client ID:	G0120-20A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.80
Response: 4429
Amount: 0.012013



Reviewer: zhangji, 24-Jun-2020 18:23:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: G0106-20A Lab Sample ID: 280-137609-28

Matrix: Water Lab File ID: 06220029.D

Analysis Method: 8330A Date Collected: 06/12/2020 16:05

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 484.7(mL) Date Analyzed: 06/22/2020 22:32

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.: 499531 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	0.083	U	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.060
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 M	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	102	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220029.D				
Lims ID:	280-137609-A-28-A				
Client ID:	G0106-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 22:32:50	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-28-				
Misc. Info.:	280-0092608-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:43:31		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.734			ND	
6 MNX	1		7.396			ND	
7 RDX	1		7.801			ND	U
$ 9 1,2-Dinitrobenzene	1	8.752	8.741	0.011	28261	0.2045	M
10 1,3,5-Trinitrobenzene	1		8.928			ND	
11 1,3-Dinitrobenzene	1		9.568			ND	
12 Nitrobenzene	1		9.941			ND	
14 Tetryl	1		10.234			ND	
16 2,4,6-Trinitrotoluene	1		11.201			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	
19 2,6-Dinitrotoluene	1		11.788			ND	
20 2,4-Dinitrotoluene	1		11.988			ND	
21 o-Nitrotoluene	1		12.801			ND	
22 p-Nitrotoluene	1		13.234			ND	
23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

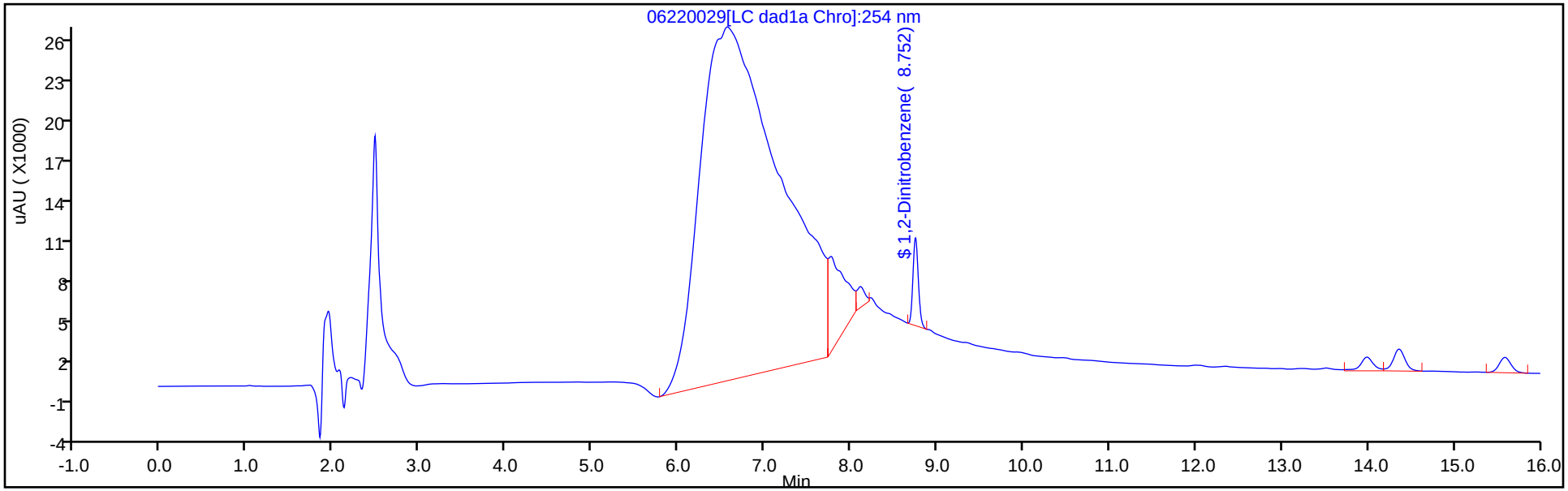
Report Date: 23-Jun-2020 15:18:04 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

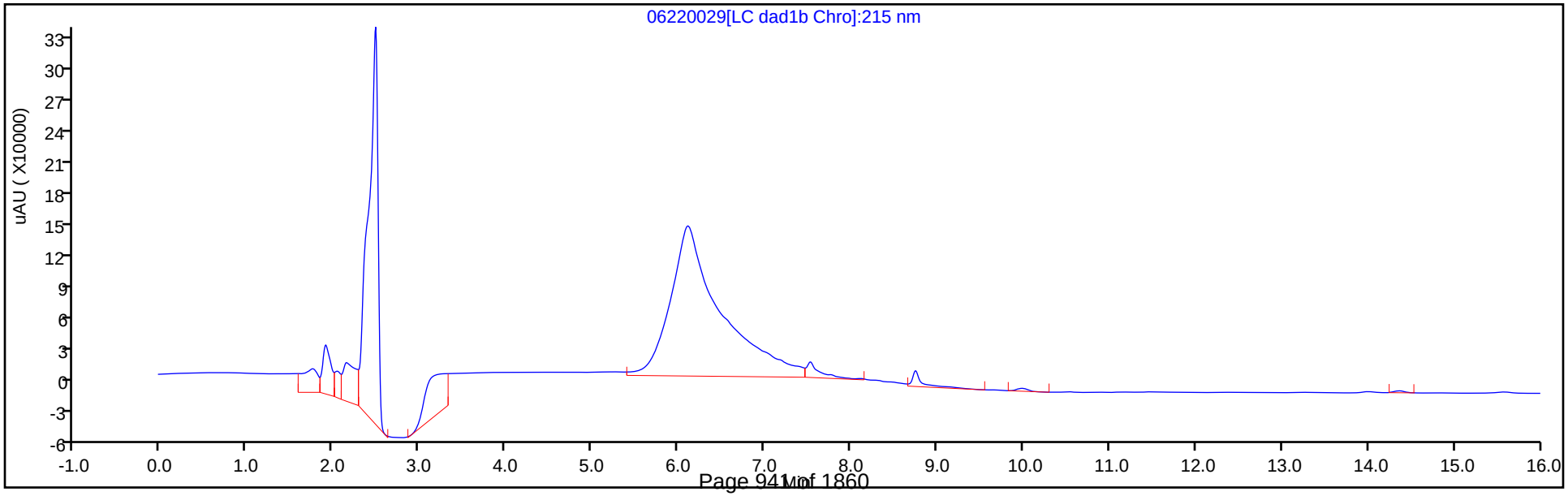
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220029.d

Injection Date:	22-Jun-2020 22:32:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-28-A	Lab Sample ID:	280-137609-28	Worklist Smp#:	29
Client ID:	G0106-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220029.D				
Lims ID:	280-137609-A-28-A				
Client ID:	G0106-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 22:32:50	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-28-				
Misc. Info.:	280-0092608-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:43:31		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2045	102.24

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

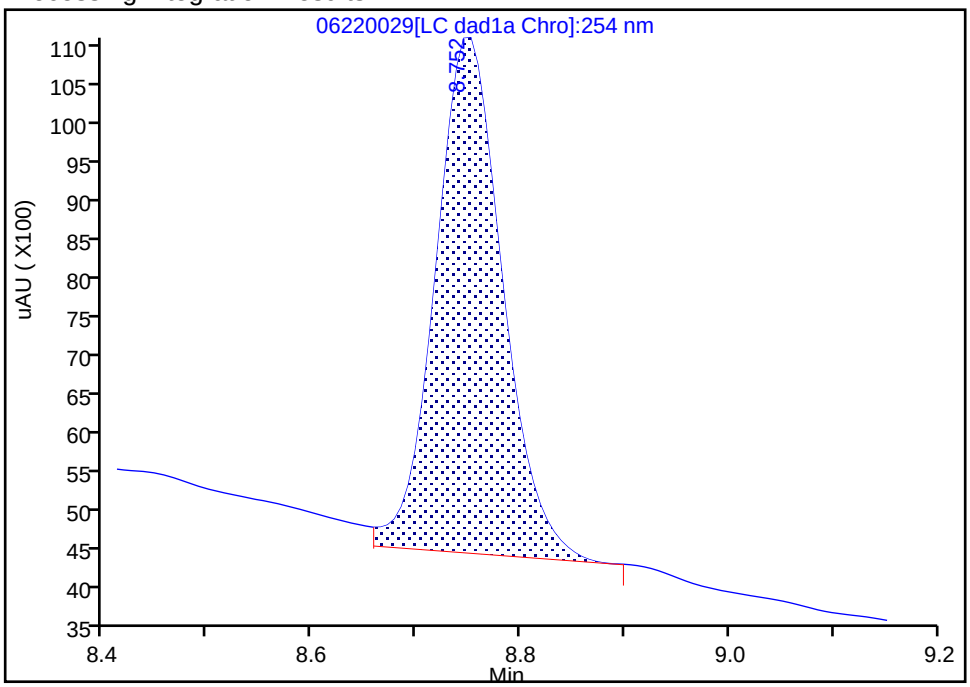
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220029.d				
Injection Date:	22-Jun-2020 22:32:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-28-A	Lab Sample ID:	280-137609-28		
Client ID:	G0106-20A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

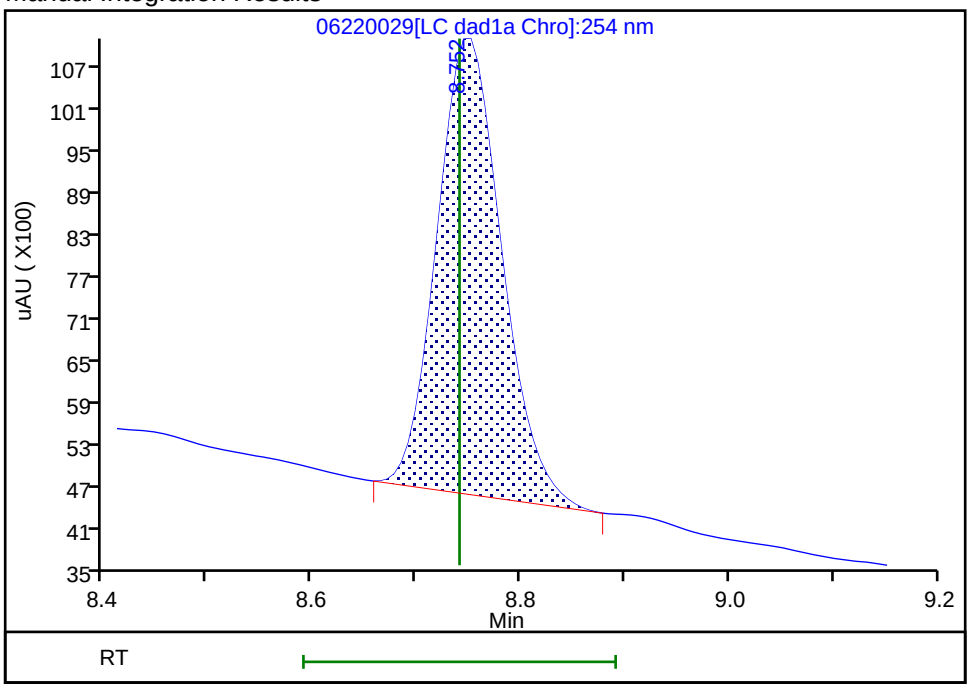
Processing Integration Results

RT: 8.75
Area: 29902
Amount: 0.216348
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 28261
Amount: 0.204475
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:43:24

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

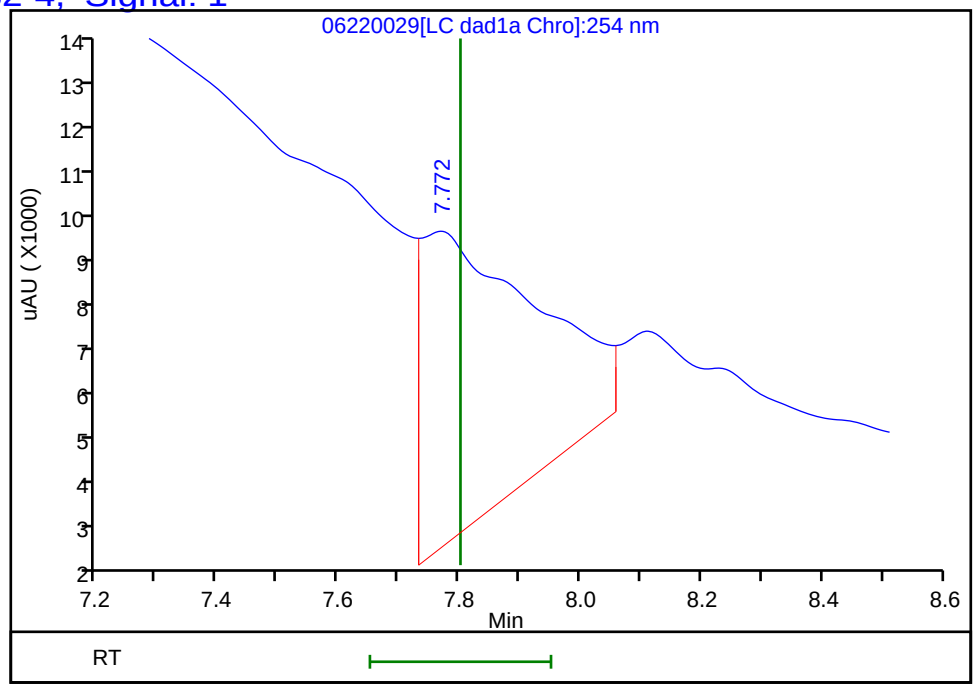
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220029.d

Injection Date:	22-Jun-2020 22:32:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-28-A	Lab Sample ID:	280-137609-28		
Client ID:	G0106-20A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.77
Response: 86659
Amount: 0.743133



Reviewer: zhangji, 23-Jun-2020 14:43:31
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.: 280-137609-2

SDG No.:

Client Sample ID: G0095-20A Lab Sample ID: 280-137609-29

Matrix: Water Lab File ID: 06220030.D

Analysis Method: 8330A Date Collected: 06/12/2020 15:10

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 469.4(mL) Date Analyzed: 06/22/2020 22:55

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.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.93	M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U M	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U M	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U M	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
121-82-4	RDX	0.21	U M	0.22	0.21	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220030.D
Lims ID: 280-137609-A-29-A
Client ID: G0095-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 22:55:50 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-29-
Misc. Info.: 280-0092608-030
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:44:57

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.739	6.734	0.005	17845	0.2076	M
	6 MNX	1		7.396			ND	U
	7 RDX	1		7.801			ND	U
$	9 1,2-Dinitrobenzene	1	8.752	8.741	0.011	26825	0.1941	
	10 1,3,5-Trinitrobenzene	1	8.932	8.928	0.004	20079	0.0872	M
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1	9.932	9.941	-0.009	15860	0.0791	
	14 Tetryl	1	10.212	10.234	-0.022	224244	1.27	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	U
	17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	U
	18 2-Amino-4,6-dinitrotoluene	1		11.648			ND	U
	19 2,6-Dinitrotoluene	1		11.788			ND	
	20 2,4-Dinitrotoluene	1		11.988			ND	U
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1		13.234			ND	U
	23 m-Nitrotoluene	1		13.821			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

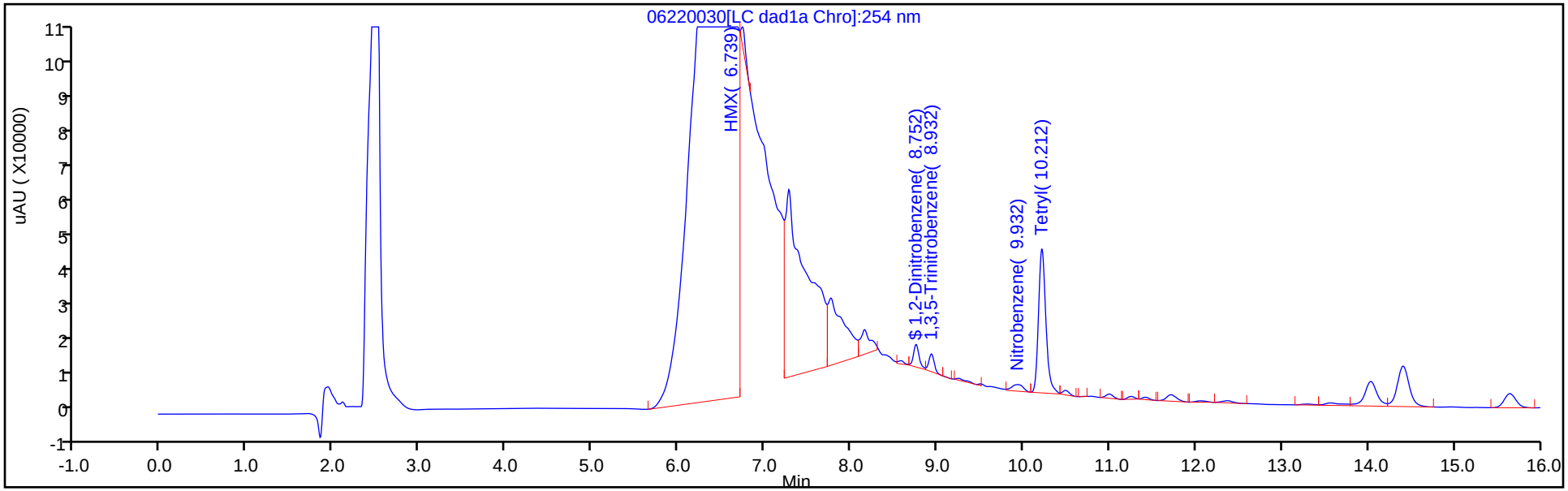
Report Date: 23-Jun-2020 15:18:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

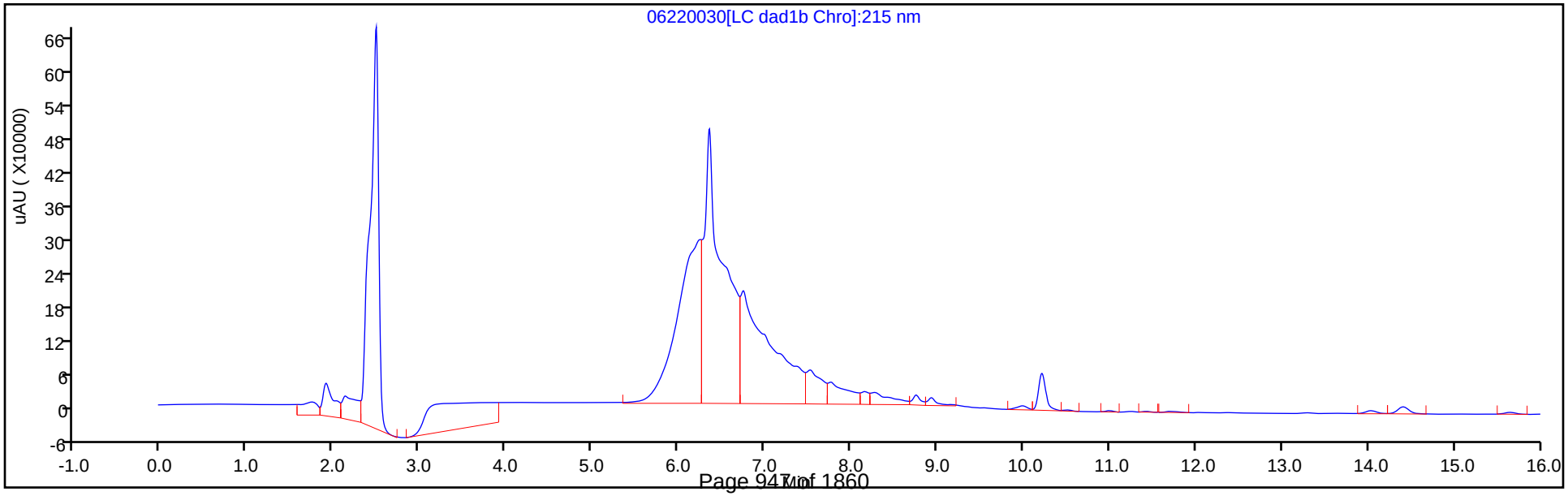
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d

Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29	Worklist Smp#:	30
Client ID:	G0095-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220030.D				
Lims ID:	280-137609-A-29-A				
Client ID:	G0095-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 22:55:50	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-29-				
Misc. Info.:	280-0092608-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:44:57		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1941	97.04

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

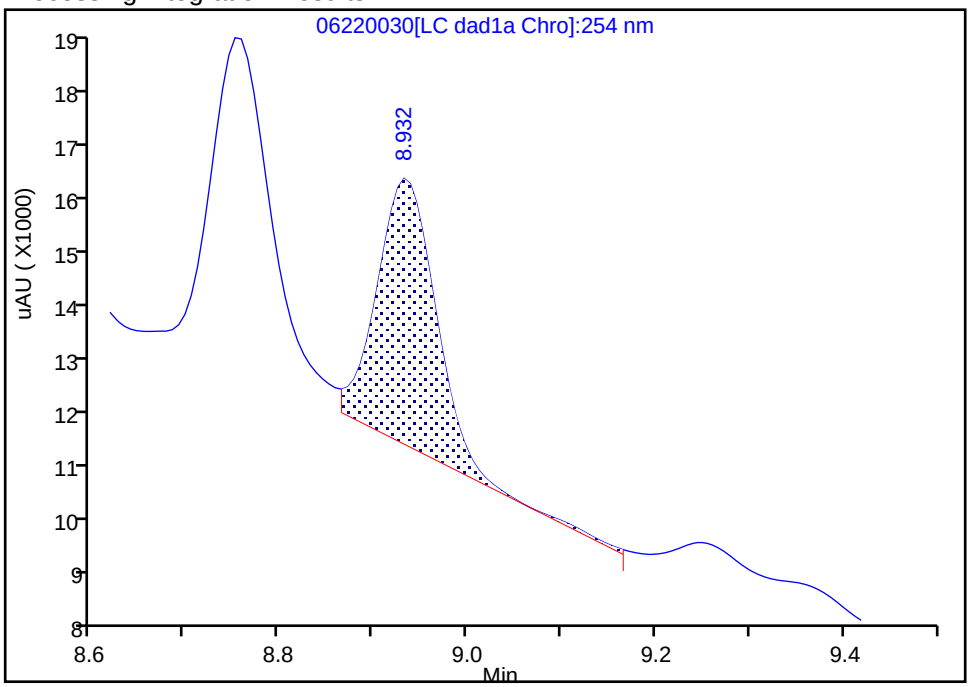
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d				
Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

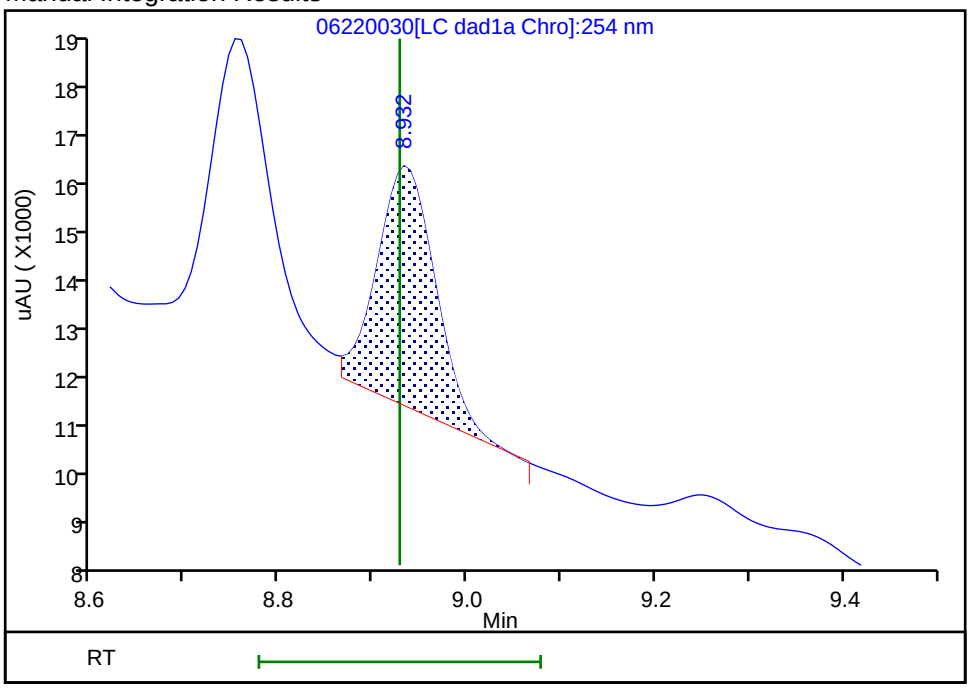
Processing Integration Results

RT: 8.93
Area: 20492
Amount: 0.088976
Amount Units: ug/mL



Manual Integration Results

RT: 8.93
Area: 20079
Amount: 0.087183
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:44:26

Audit Action: Split an Integrated Peak Audit Reason: Baseline

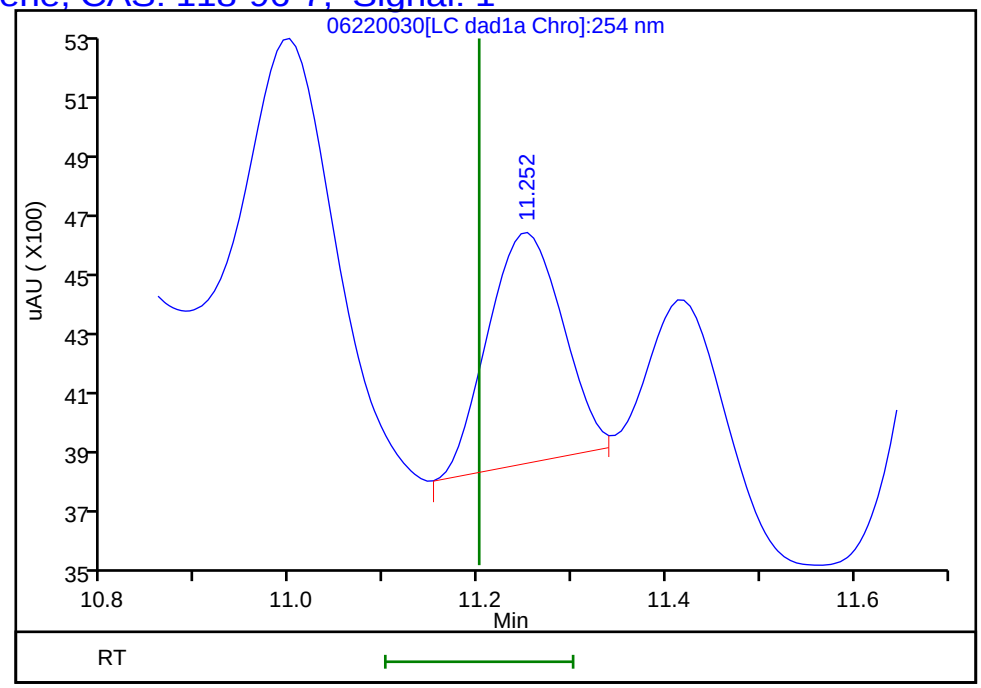
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d				
Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.25
Response: 4085
Amount: 0.020021



Reviewer: zhangji, 23-Jun-2020 14:44:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

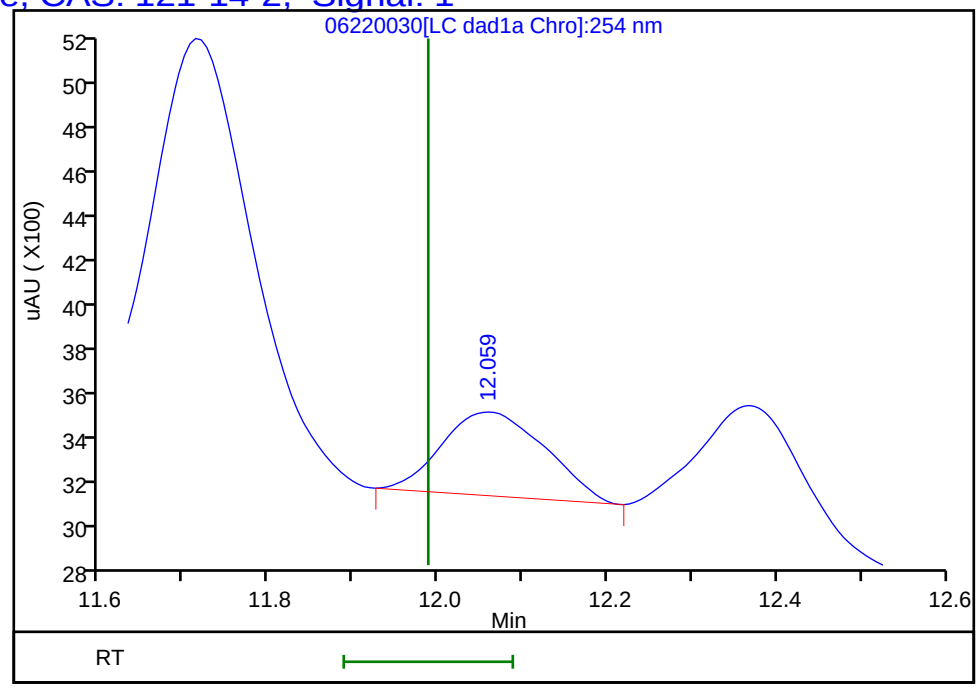
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d

Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 12.06
Response: 3082
Amount: 0.010152



Reviewer: zhangji, 23-Jun-2020 14:44:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

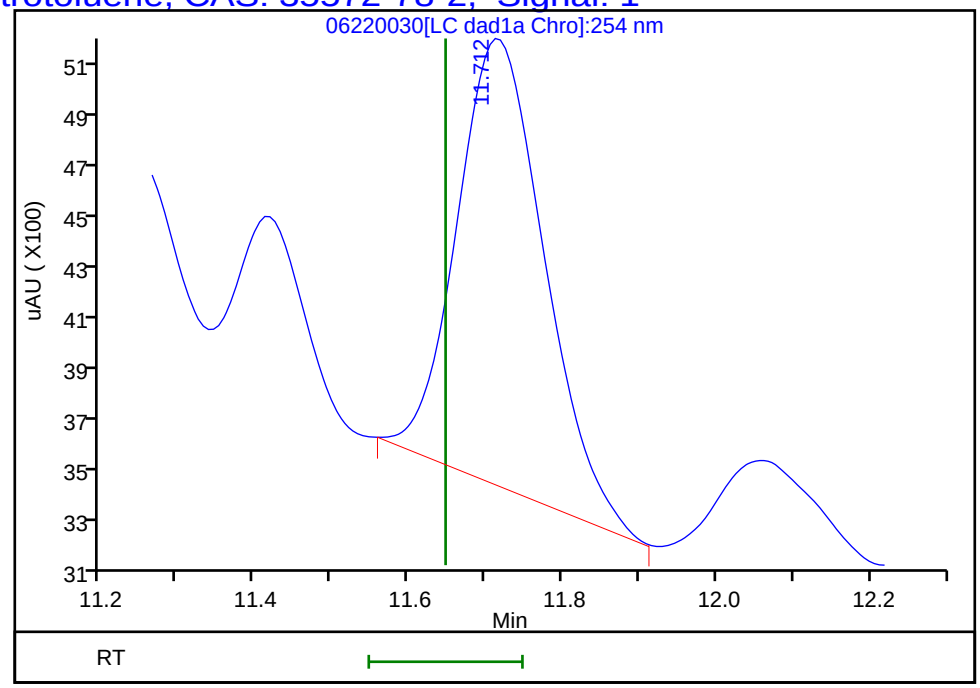
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d				
Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.71
Response: 13660
Amount: 0.067351



Reviewer: zhangji, 23-Jun-2020 14:44:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

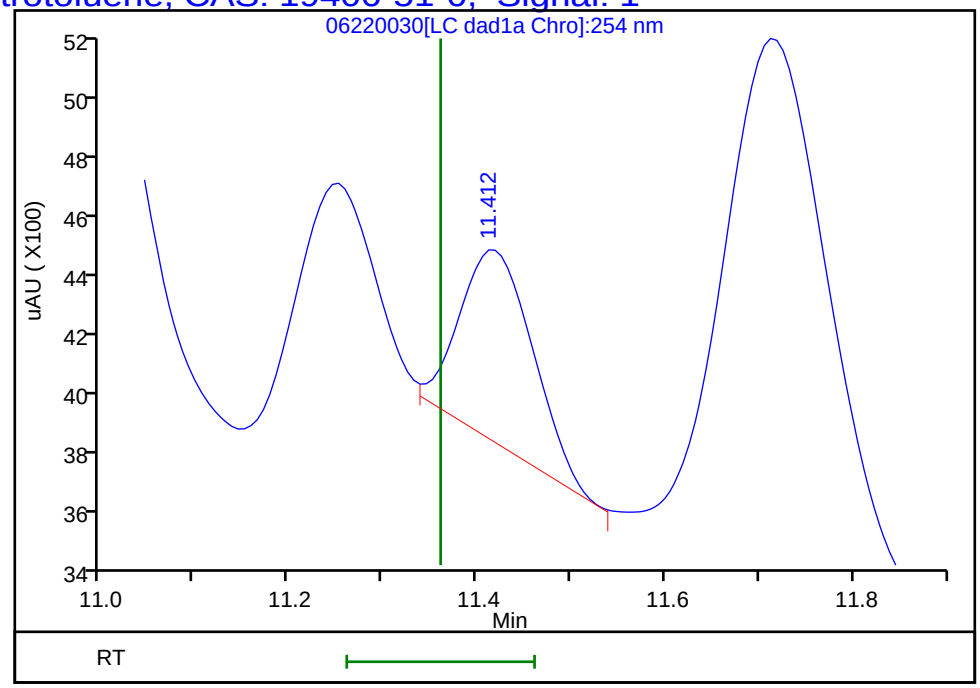
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d				
Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.41
Response: 3365
Amount: 0.025389



Reviewer: zhangji, 23-Jun-2020 14:44:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

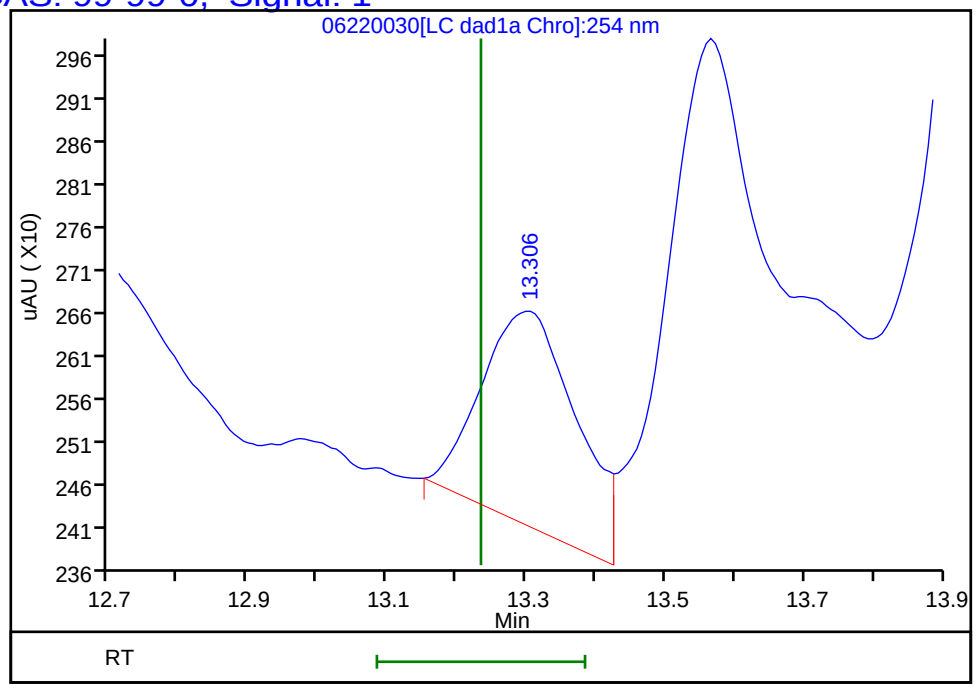
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d

Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.31
Response: 2381
Amount: 0.021070



Reviewer: zhangji, 23-Jun-2020 14:44:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

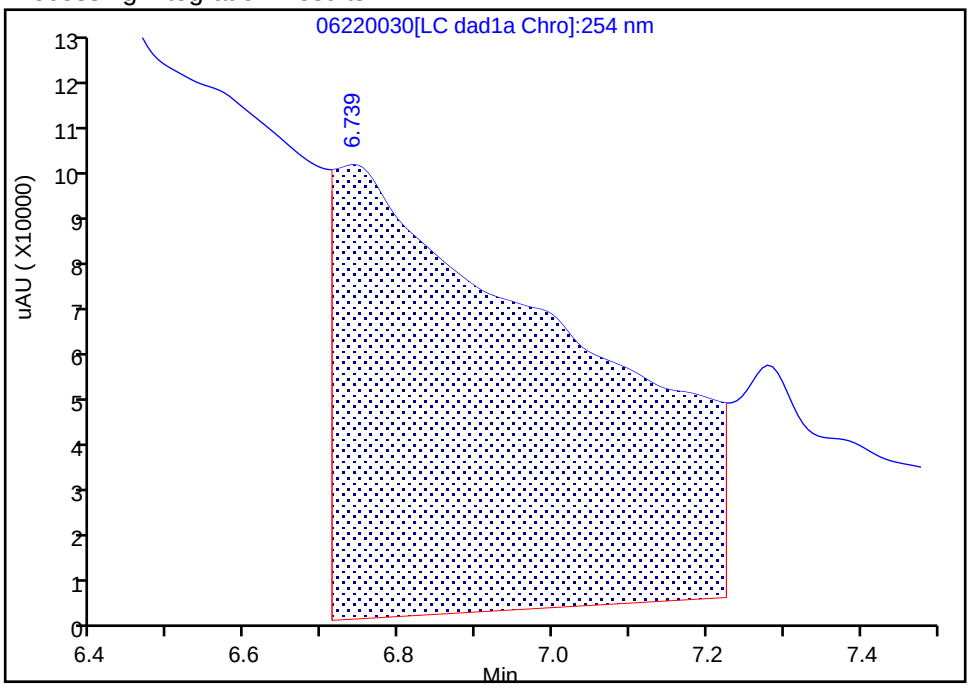
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d		
Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29
Client ID:	G0095-20A		
Operator ID:	JZ	ALS Bottle#:	30 Worklist Smp#: 30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

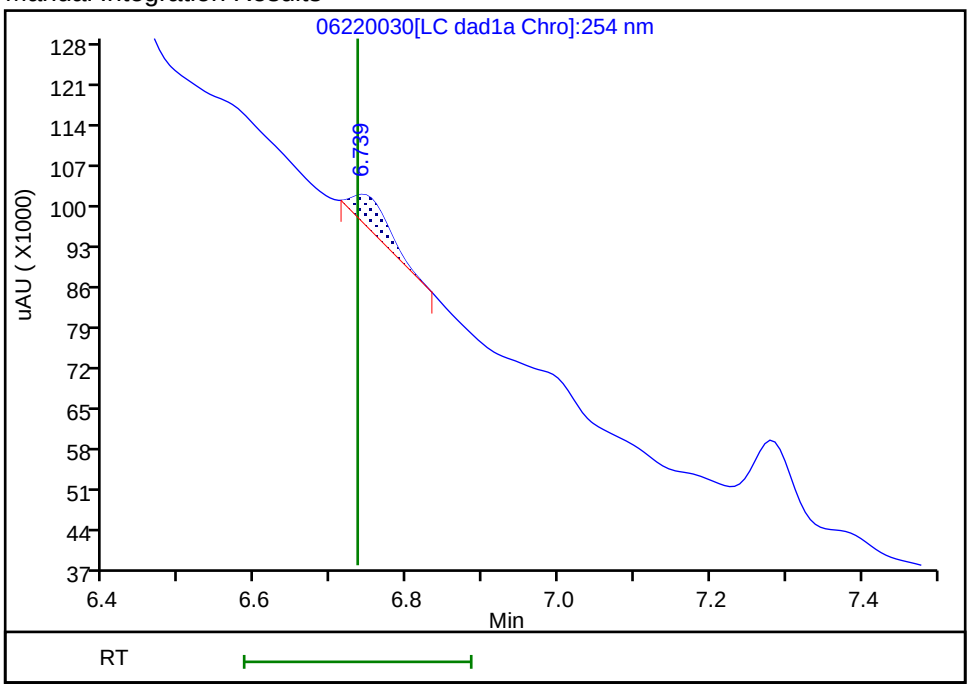
Processing Integration Results

RT: 6.74
Area: 1998430
Amount: 23.247785
Amount Units: ug/mL



Manual Integration Results

RT: 6.74
Area: 17845
Amount: 0.207591
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:44:16
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

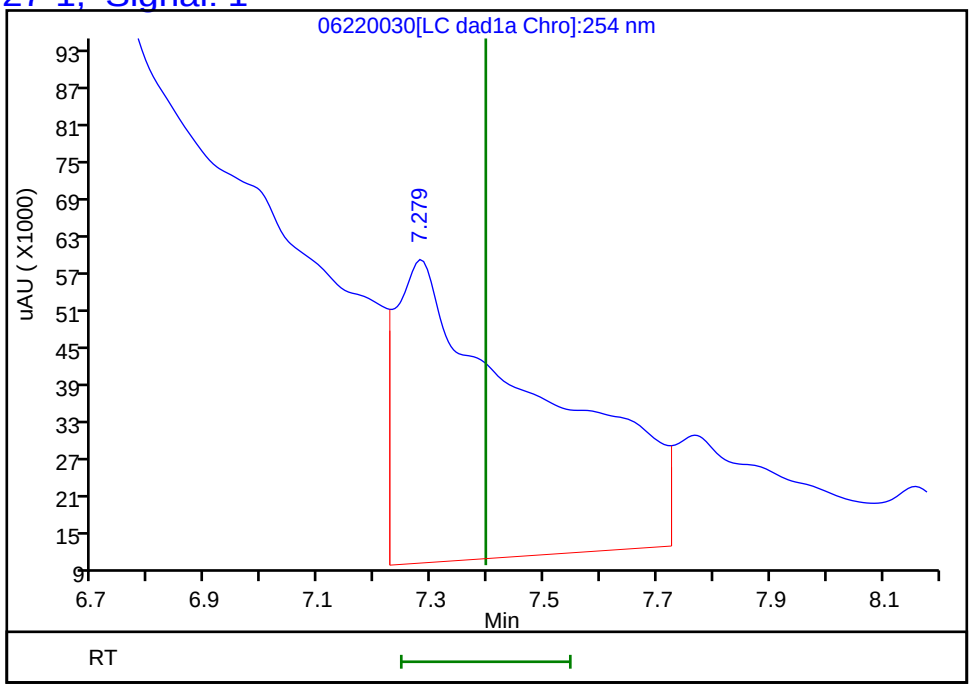
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d

Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.28
Response: 863610
Amount: 5.447124



Reviewer: zhangji, 23-Jun-2020 14:44:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

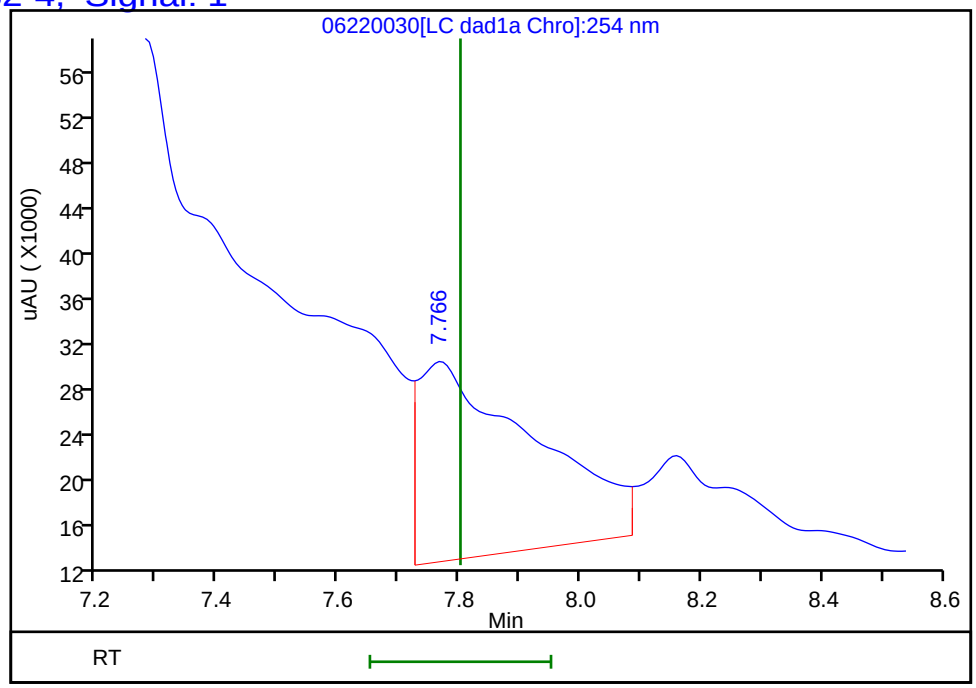
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220030.d

Injection Date:	22-Jun-2020 22:55:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.77
Response: 228739
Amount: 1.961521



Reviewer: zhangji, 23-Jun-2020 14:44:57
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.: 280-137609-2

SDG No.:

Client Sample ID: G0095-20A Lab Sample ID: 280-137609-29

Matrix: Water Lab File ID: 06230040.D

Analysis Method: 8330A Date Collected: 06/12/2020 15:10

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 469.4(mL) Date Analyzed: 06/24/2020 15:20

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499860 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.21	U	0.22	0.21	0.093
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	117		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230040.D
Lims ID: 280-137609-A-29-A
Client ID: G0095-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 15:20:56 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-29-
Misc. Info.: 280-0092679-040
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 18:52:06 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:24:00

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.150			ND	
	7 MNX	1		7.876			ND	U
	8 RDX	1		9.363			ND	
	9 Nitrobenzene	1		12.263			ND	
$	10 1,2-Dinitrobenzene	1	13.268	13.263	0.005	66927	0.2348	
	12 1,3-Dinitrobenzene	1		15.797			ND	
	14 o-Nitrotoluene	1	16.662	16.730	-0.068	112120	0.4107	
	15 p-Nitrotoluene	1		17.017			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.450			ND	
	17 m-Nitrotoluene	1		17.943			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.375	18.390	-0.015	61189	0.1315	M
	19 1,3,5-Trinitrobenzene	1	19.122	19.123	-0.001	47610	0.1008	M
	20 2,6-Dinitrotoluene	1		20.050			ND	
	21 2,4-Dinitrotoluene	1		20.564			ND	
	22 Tetryl	1		23.870			ND	
	23 2,4,6-Trinitrotoluene	1	24.922	24.890	0.032	4660	0.003740	7M

QC Flag Legend

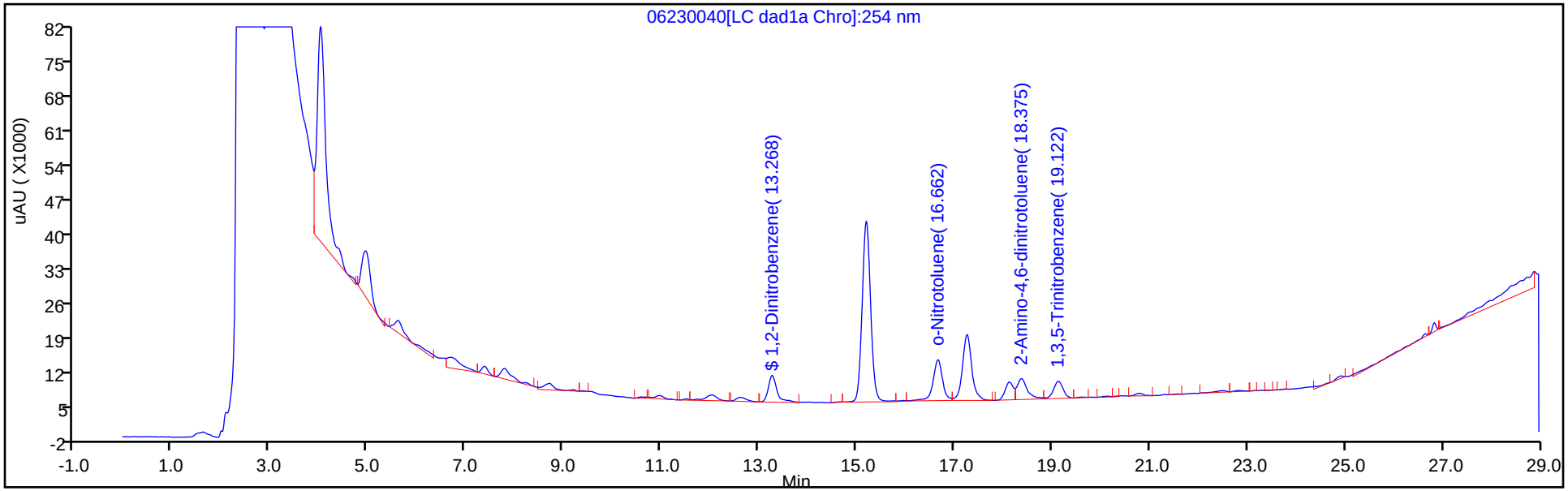
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Jun-2020 18:52:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

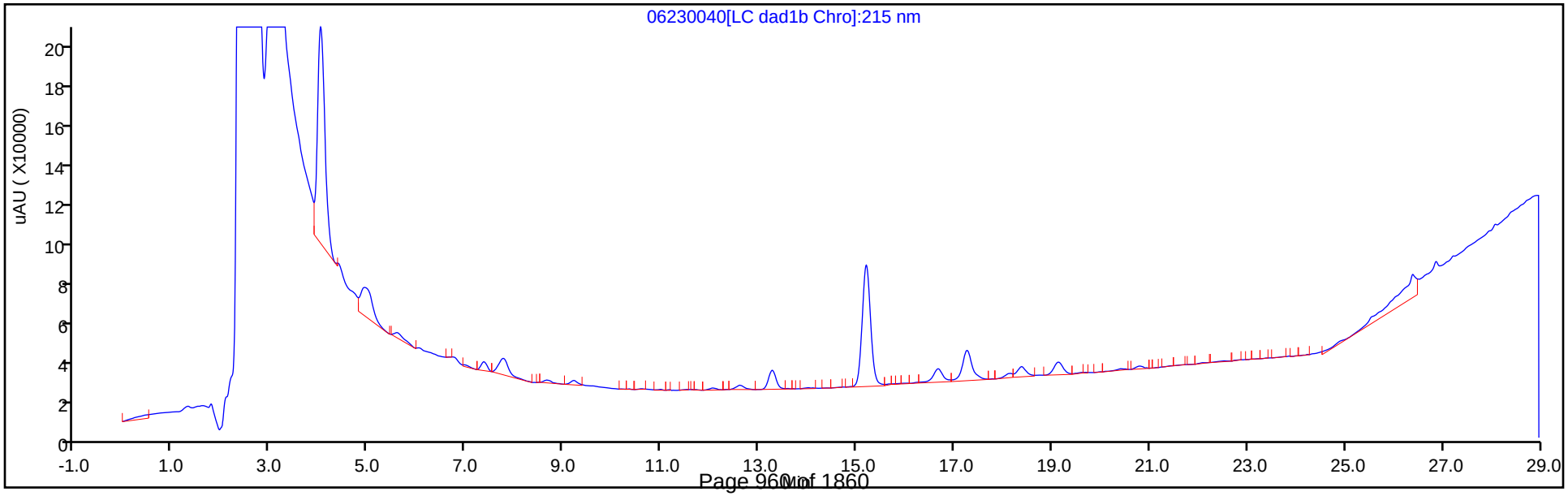
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230040.d				
Injection Date:	24-Jun-2020 15:20:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29	Worklist Smp#:	40
Client ID:	G0095-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230040.D				
Lims ID:	280-137609-A-29-A				
Client ID:	G0095-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 15:20:56	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-29-				
Misc. Info.:	280-0092679-040				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 18:52:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:24:00		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2348	117.39

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

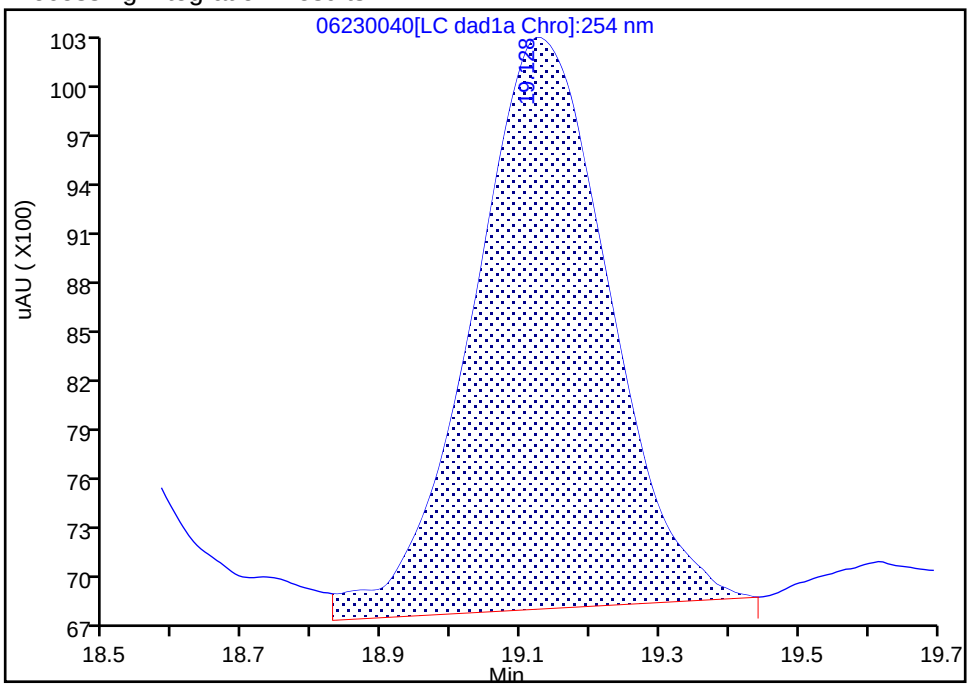
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230040.d				
Injection Date:	24-Jun-2020 15:20:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

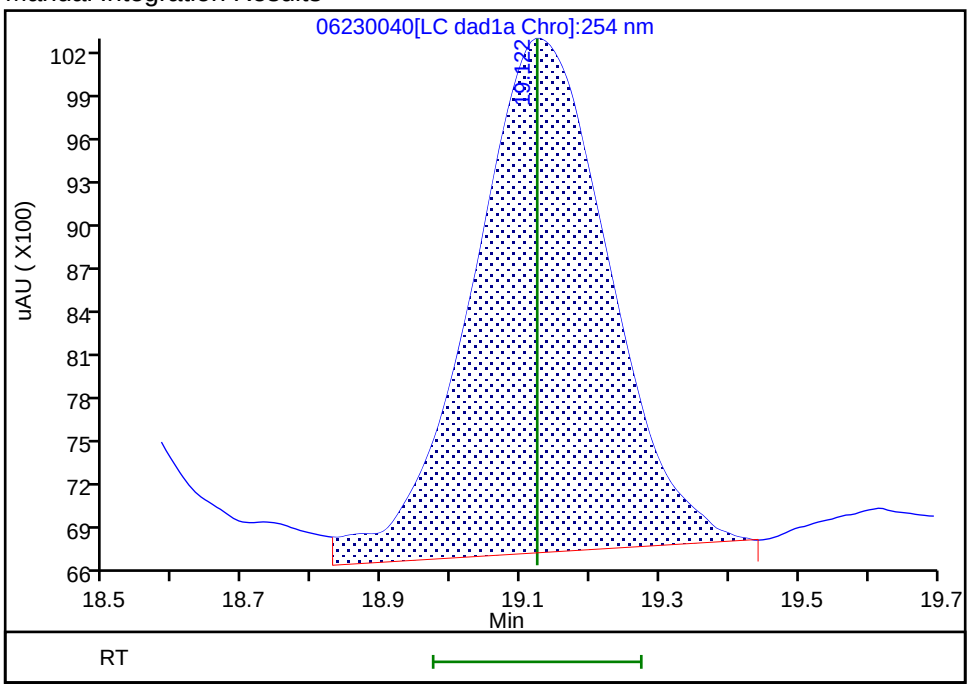
Processing Integration Results

RT: 19.13
Area: 47168
Amount: 0.099837
Amount Units: ug/ml



Manual Integration Results

RT: 19.12
Area: 47610
Amount: 0.100772
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:23:47

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

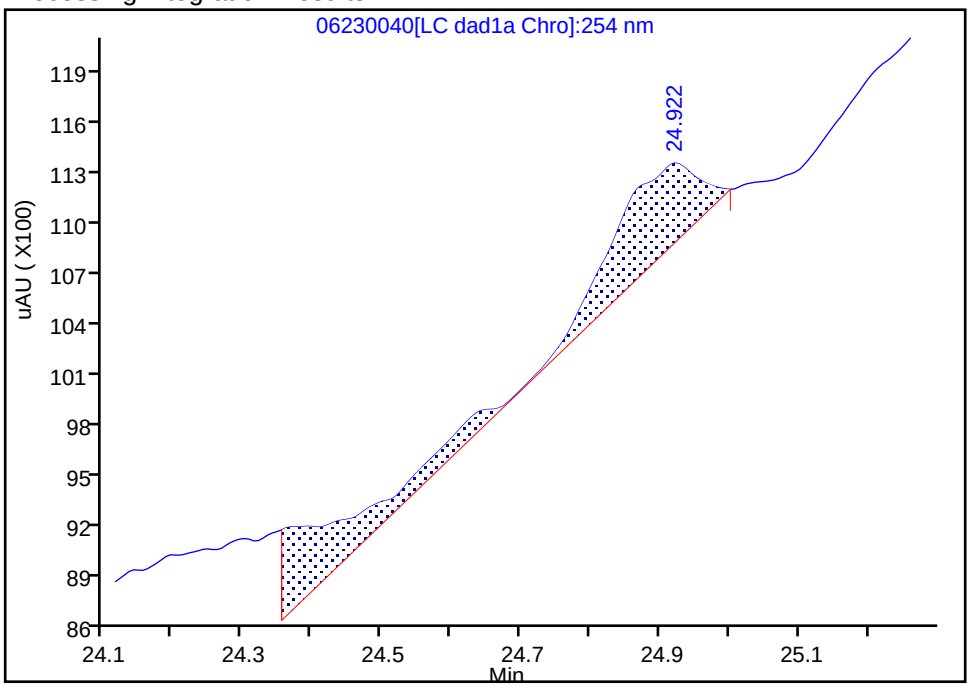
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230040.d				
Injection Date:	24-Jun-2020 15:20:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

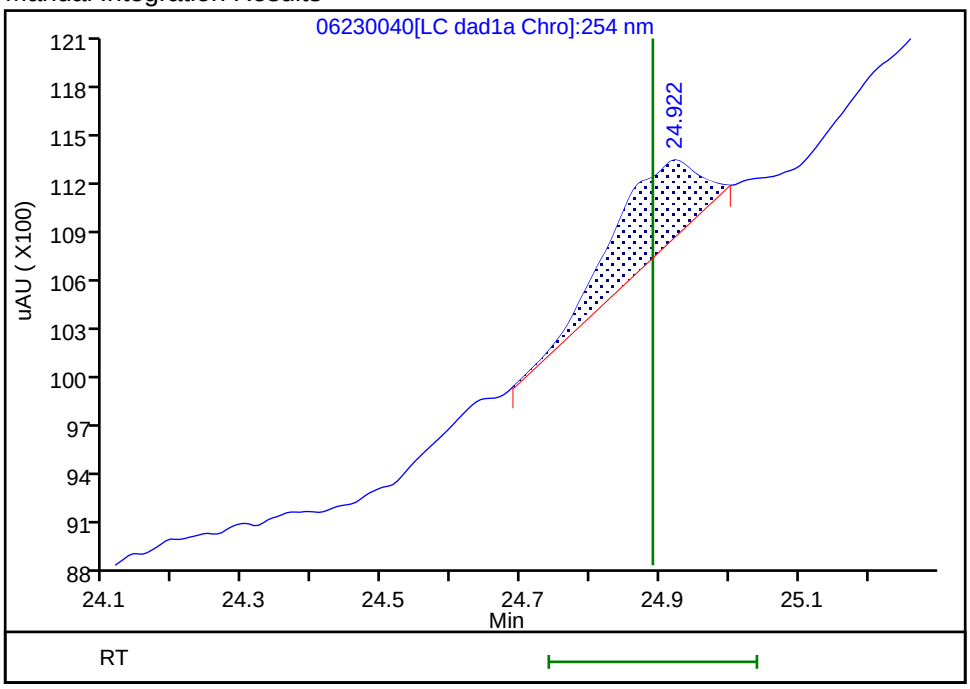
Processing Integration Results

RT: 24.92
Area: 8276
Amount: 0.012744
Amount Units: ug/ml



Manual Integration Results

RT: 24.92
Area: 4660
Amount: 0.003740
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:23:36

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

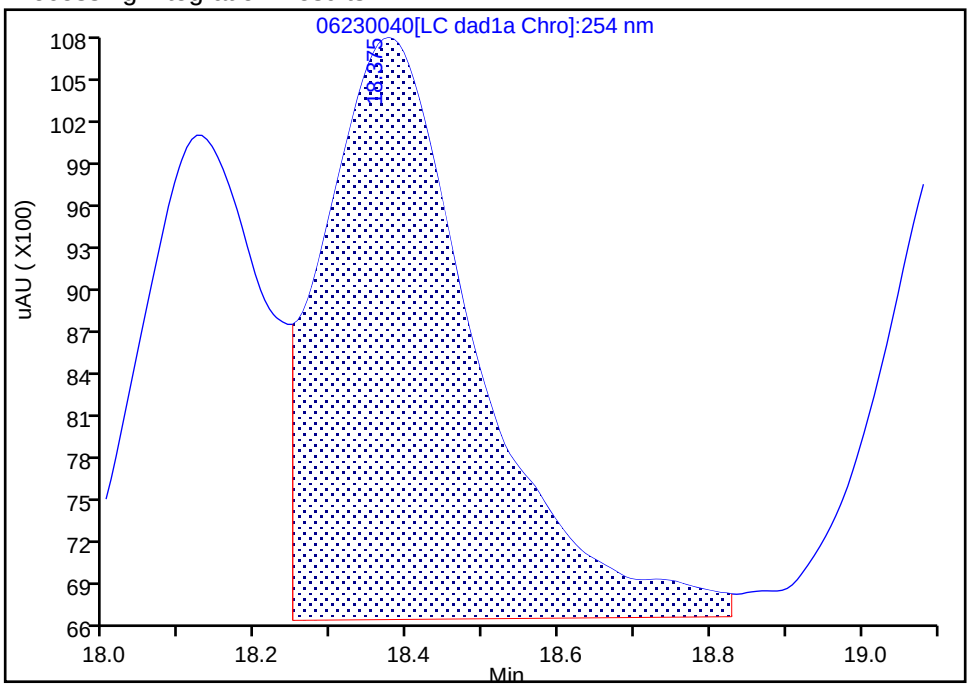
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230040.d				
Injection Date:	24-Jun-2020 15:20:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

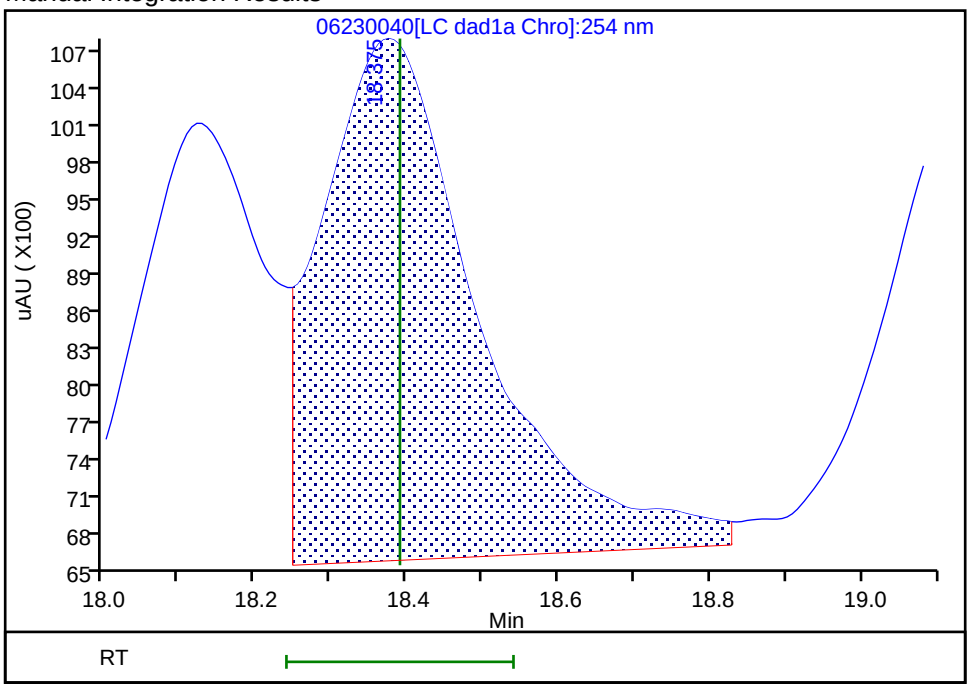
Processing Integration Results

RT: 18.38
Area: 57778
Amount: 0.124197
Amount Units: ug/ml



Manual Integration Results

RT: 18.38
Area: 61189
Amount: 0.131530
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:23:47
Audit Action: Assigned New Baseline Audit Reason: Baseline

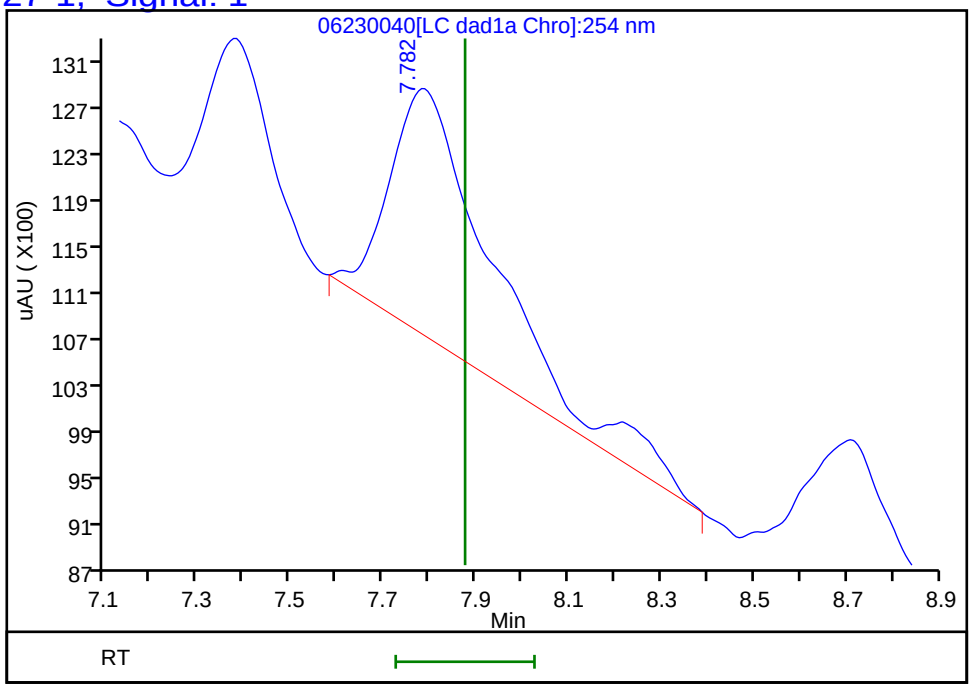
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230040.d				
Injection Date:	24-Jun-2020 15:20:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-29-A	Lab Sample ID:	280-137609-29		
Client ID:	G0095-20A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.78
Response: 33797
Amount: 0.106365



Reviewer: zhangji, 24-Jun-2020 18:24:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Picric acid		6.322	6.331	6.308	6.300	6.267	6.235	6.195	+++++		6.150 - 6.450	6.280
HMX		6.982	6.984	6.994	6.986	6.987	6.982	6.968	6.916		6.836 - 7.136	6.975
RDX		9.095	9.184	9.181	9.173	9.173	9.162	9.148	9.076		9.023 - 9.323	9.149
Nitrobenzene		12.095	12.110	12.114	12.106	12.107	12.095	12.088	11.995		11.956 - 12.256	12.089
1,3-Dinitrobenzene		15.542	15.544	15.554	15.553	15.553	15.548	15.541	15.469		15.403 - 15.703	15.538
Nitroglycerin		15.855	15.844	15.848	15.853	15.853	15.842	15.848	15.782		15.703 - 16.003	15.841
2-Nitrotoluene		16.515	16.550	16.534	16.533	16.540	16.535	16.535	16.475		16.383 - 16.683	16.527
4-Nitrotoluene		16.795	16.837	16.828	16.820	16.820	16.808	16.815	16.715		16.670 - 16.970	16.805
4-Amino-2,6-dinitrotoluene		17.155	17.157	17.148	17.146	17.153	17.142	17.141	17.069		16.996 - 17.296	17.139
3-Nitrotoluene		17.748	17.724	17.741	17.753	17.747	17.742	17.741	17.782		17.603 - 17.903	17.747
2-Amino-4,6-dinitrotoluene		18.048	18.030	18.054	18.046	18.040	18.035	18.028	17.935		17.896 - 18.196	18.027
1,3,5-Trinitrobenzene		18.855	18.864	18.881	18.886	18.887	18.875	18.881	18.829		18.736 - 19.036	18.870
2,6-Dinitrotoluene	+++++	19.828	19.817	19.794	19.806	19.807	19.795	19.801	19.742		19.656 - 19.956	19.799
2,4-Dinitrotoluene	20.295	20.295	20.290	20.288	20.293	20.293	20.288	20.288	20.235		20.143 - 20.443	20.285
Tetryl		23.529	23.557	23.548	23.553	23.553	23.542	23.555	23.516		23.403 - 23.703	23.544
2,4,6-Trinitrotoluene		24.682	24.637	24.654	24.653	24.647	24.642	24.648	24.616		24.503 - 24.803	24.647
PETN		+++++	25.277	25.281	25.280	25.280	25.275	25.281	25.269		25.130 - 25.430	25.278
1,2-Dinitrobenzene		13.022	13.037	13.048	13.040	13.040	13.028	13.028	12.949		12.890 - 13.190	13.024

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.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								
Picric acid	194456 +++++	227320 170053	189240 169399	231700 174504	Ave		193810.153				13.5		20.0			
HMX	216260 175837	400720 186210	252920 179567	242940 183992	Lin2	5323.97093	177012.867							0.9900		0.9900
RDX	250504 220101	251440 221363	302380 217280	272330 219481	Ave		244359.838				12.7		20.0			
Nitrobenzene	422566 420057	411355 413613	566215 420302	425090 434621	Ave		439227.211				11.8		20.0			
1,3-Dinitrobenzene	687780 651230	649900 645107	741737 661018	688743 667994	Ave		674188.610				4.7		20.0			
Nitroglycerin	132151 128856	106184 127479	128084 121758	141489 128426	Ave		126803.331				7.9		20.0			
2-Nitrotoluene	252584 263350	272480 263733	320060 259206	290620 261684	Ave		272964.527				8.1		20.0			
4-Nitrotoluene	237944 205745	214531 233965	309222 235547	259042 231055	Ave		240881.296				13.2		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.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

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	316356 338348	374386 325764	441918 319452	324156 321498	Ave		345234.619				12.5		20.0			
3-Nitrotoluene	284364 280237	276523 288039	385215 286309	305554 280373	Ave		298326.800				12.1		20.0			
2-Amino-4,6-dinitrotoluene	449641 452344	413386 446609	577331 454954	473367 454056	Ave		465211.017				10.4		20.0			
1,3,5-Trinitrobenzene	473888 459025	432016 445838	531916 461195	509261 466466	Ave		472450.766				7.0		20.0			
2,6-Dinitrotoluene	+++++ 296084 293622	462869 294056	380618 294513	345209 297272	Lin2	4435.95604	289218.236							0.9990		0.9900
2,4-Dinitrotoluene	636653 610554 606816	669761 610082	743068 605778	672311 605997	Ave		640113.339				7.4		20.0			
Tetryl	368208 349575	394172 348927	403234 350489	384701 350116	Ave		368677.570				6.1		20.0			
2,4,6-Trinitrotoluene	399076 406271	460040 393653	565060 401302	430359 406644	Lin1	3158.03416	401610.023							0.9990		0.9900
PETN	135296 128081	+++++ 139434	204240 136840	132172 136576	Lin1	27366.0232	129287.517							0.9980		0.9900
1,2-Dinitrobenzene	249500 288347	337440 268080	374880 263961	306830 274673	Lin1	1839.02265	277228.024							0.9970		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Picric acid	Ave	68021	5683 118579	9462 174504	23170 +++++	48614	0.400	0.0250 0.700	0.0500 1.00	0.100 +++++	0.250
HMX	Lin2	74484	10018 125697	12646 183992	24294 439592	54065	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	88545	6286 152096	15119 219481	27233 550253	62626	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	166107	10325 295388	28424 436359	42679 1054344	106064	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	258559	16280 463638	37161 669330	69012 1631331	172289	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	509915	26546 852305	64042 1284256	141489 3221406	330378	4.00	0.250 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	105493	6812 181444	16003 261684	29062 658375	63146	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	93773	5374 165213	15492 231517	25956 515391	59605	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	130436	9369 223840	22118 321819	32448 846716	79168	0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	115331	6920 200617	19280 280653	30586 701292	71162	0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	179358	10376 319742	28982 455872	47526 1135384	112860	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	178692	10822 323482	26649 467399	51028 1149858	118709	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Lin2	+++++ 118093	11618 206984	19107 298461	34659 736990	74317	+++++ 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	7990 245009	16811 425741	37302 608421	67500 1523108	153249	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Tetryl	Ave	139850	9874 245833	20202 350816	38547 875686	92236	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Lin1	158091	11547 282035	28366 408271	43208 1019741	100168	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Lin1	557734	+++++ 957879	102120 1365764	132172 3202028	338241	4.00	+++++ 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Lin1	107232	8436 184773	18744 274673	30683 720867	62375	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140007.D
Lims ID: IC FULL 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 14-May-2020 16:16:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 9
Misc. Info.: 280-0091518-007
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:54 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 14-May-2020 17:09:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.302	4.366	-0.064	946682	2.50	2.21	M
2 2,4-diamino-6-nitrotoluene	1	4.769	4.880	-0.111	410736	2.50	1.70	M
5 2,4,6-Trinitrophenol	1	6.096	6.300	-0.204	359637	2.50	1.86	
6 HMX	1	6.916	6.986	-0.070	439592	2.50	2.45	
8 RDX	1	9.076	9.173	-0.097	550253	2.50	2.25	
9 Nitrobenzene	1	11.995	12.106	-0.111	1054344	2.51	2.40	
$ 10 1,2-Dinitrobenzene	1	12.949	13.040	-0.091	720867	2.50	2.59	
11 3,5-Dinitroaniline	1	14.795	14.886	-0.091	1218279	2.50	2.51	a
12 1,3-Dinitrobenzene	1	15.469	15.553	-0.084	1631331	2.51	2.42	
13 Nitroglycerin	2	15.782	15.853	-0.071	3221406	25.0	25.4	
14 o-Nitrotoluene	1	16.475	16.533	-0.058	658375	2.50	2.41	a
15 p-Nitrotoluene	1	16.715	16.820	-0.105	515391	2.51	2.14	a
16 4-Amino-2,6-dinitrotoluene	1	17.069	17.146	-0.077	846716	2.50	2.45	a
17 m-Nitrotoluene	1	17.782	17.753	0.029	701292	2.50	2.35	Ma
18 2-Amino-4,6-dinitrotoluene	1	17.935	18.046	-0.111	1135384	2.51	2.44	Ma
19 1,3,5-Trinitrobenzene	1	18.829	18.886	-0.057	1149858	2.51	2.43	a
20 2,6-Dinitrotoluene	1	19.742	19.806	-0.064	736990	2.51	2.53	a
21 2,4-Dinitrotoluene	1	20.235	20.293	-0.058	1523108	2.51	2.38	a
22 Tetryl	1	23.516	23.553	-0.037	875686	2.51	2.38	a
23 2,4,6-Trinitrotoluene	1	24.616	24.653	-0.037	1019741	2.51	2.53	a
24 PETN	2	25.269	25.280	-0.011	3202028	25.0	24.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added: 250.00	Units: uL
8330_ADDs_00026	Amount Added: 125.00	Units: uL

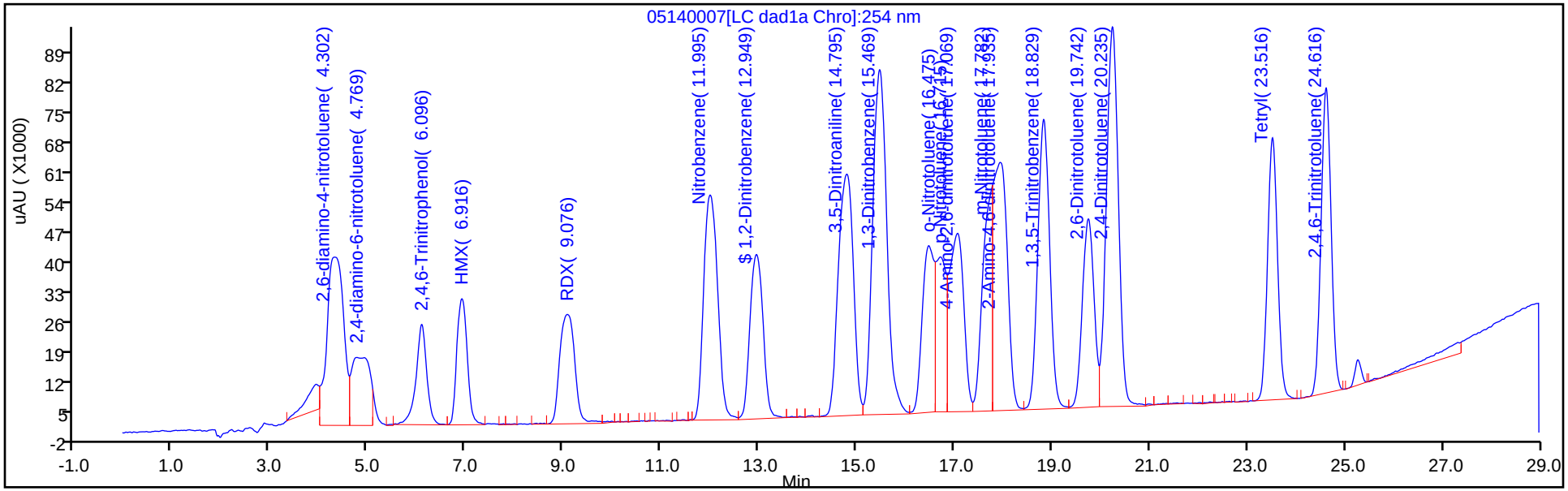
Report Date: 15-May-2020 12:00:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

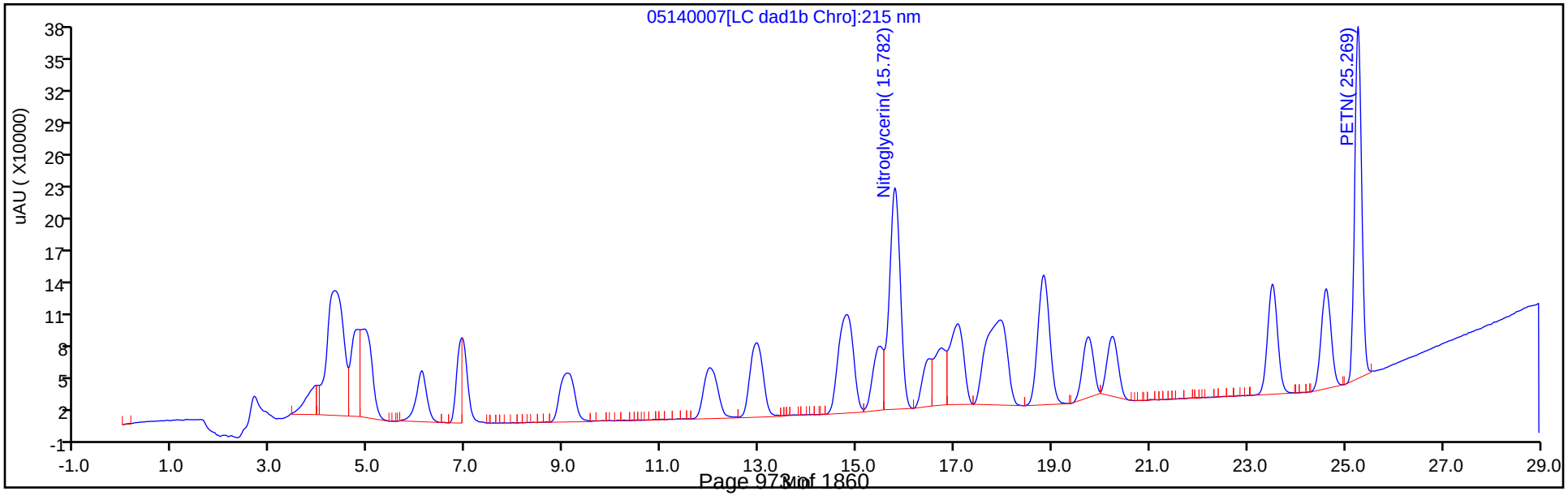
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d

Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 9			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

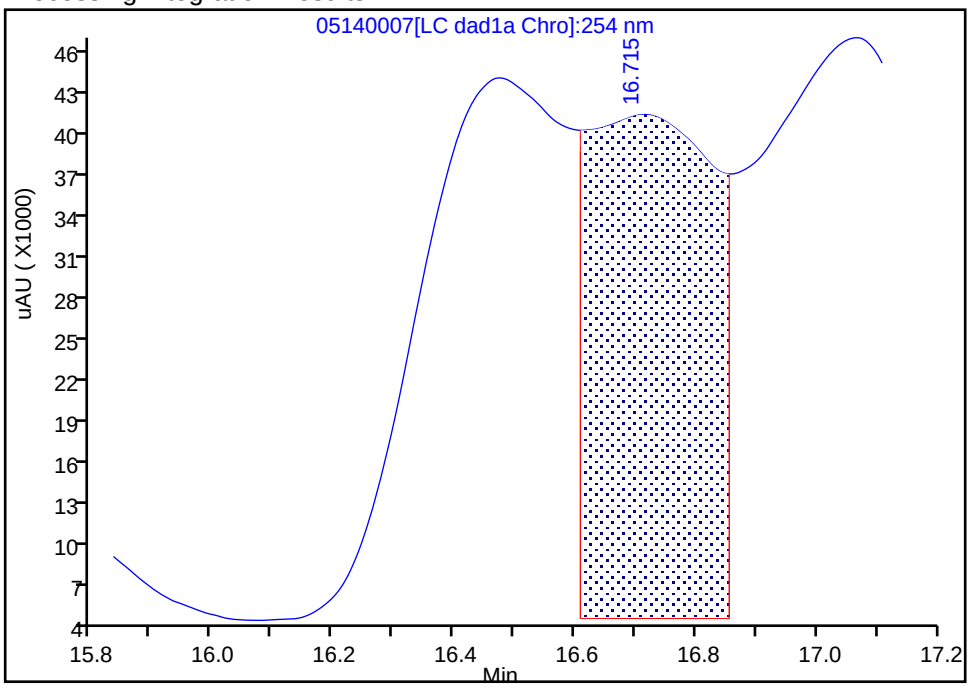
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

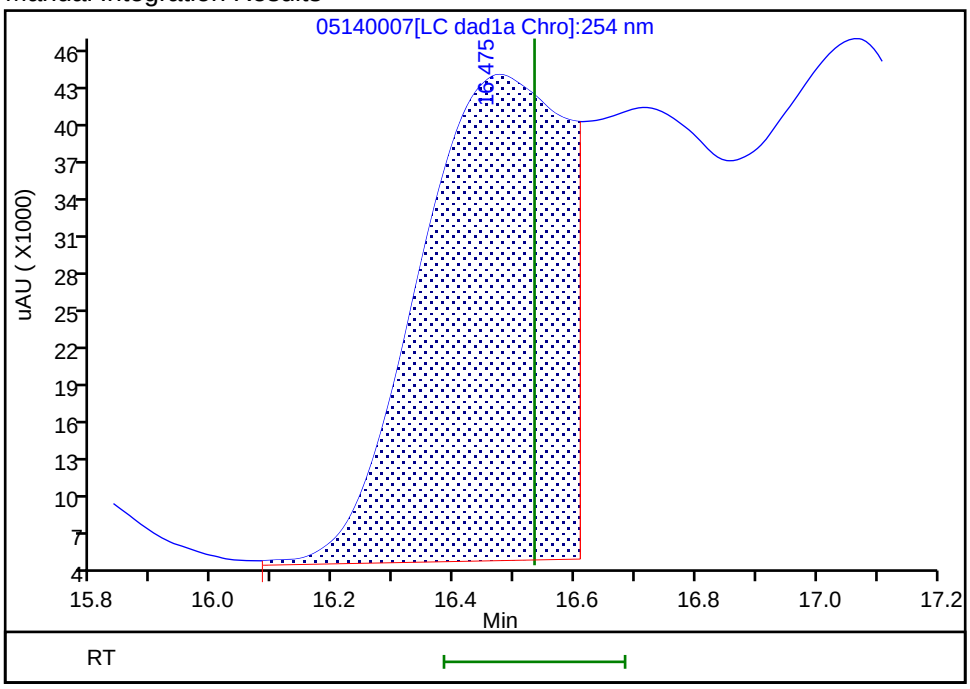
Processing Integration Results

RT: 16.72
Area: 515391
Amount: 1.955872
Amount Units: ug/ml



Manual Integration Results

RT: 16.48
Area: 658375
Amount: 2.411943
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:15
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

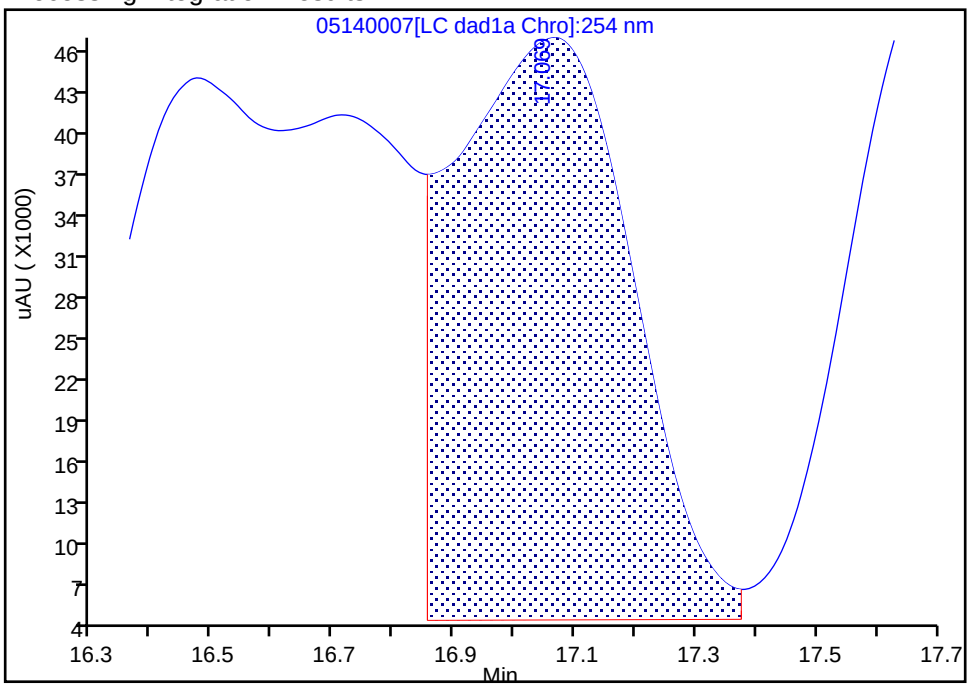
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

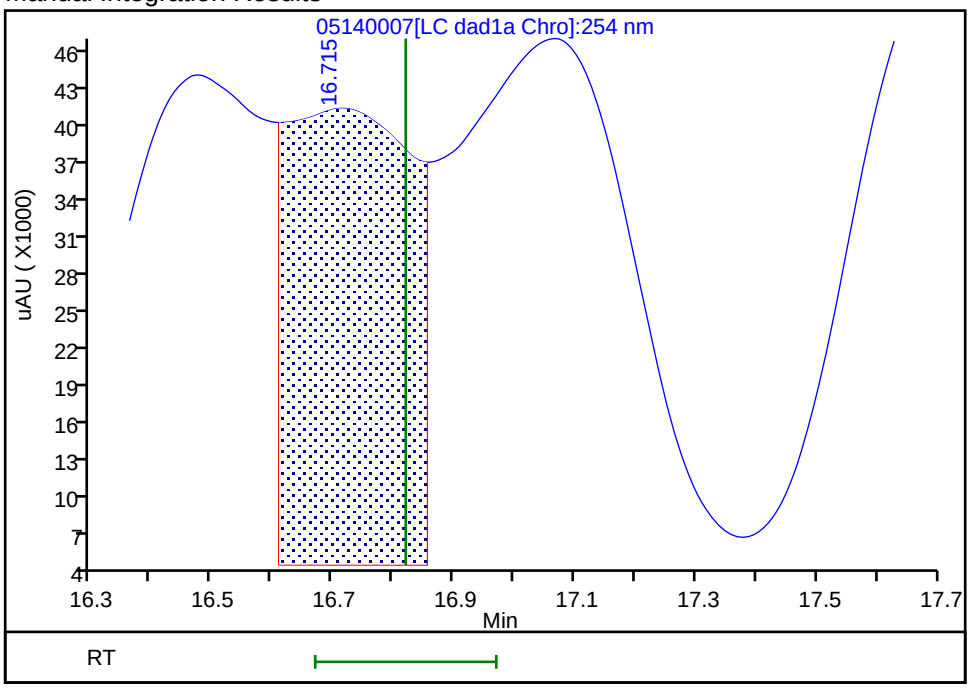
Processing Integration Results

RT: 17.07
Area: 846716
Amount: 4.099164
Amount Units: ug/ml



Manual Integration Results

RT: 16.72
Area: 515391
Amount: 2.139606
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:12
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

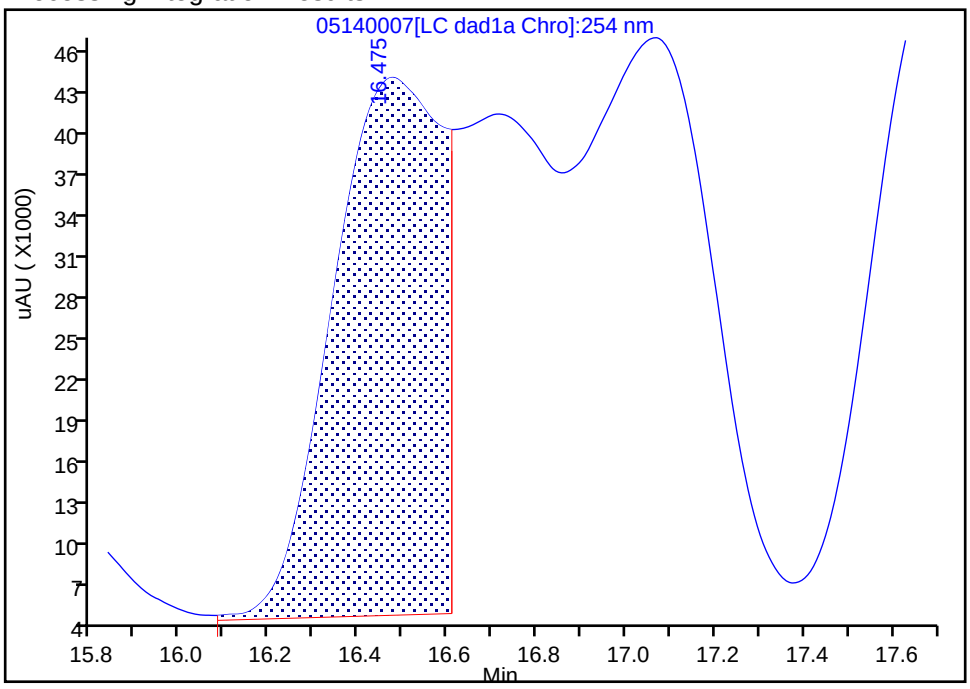
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

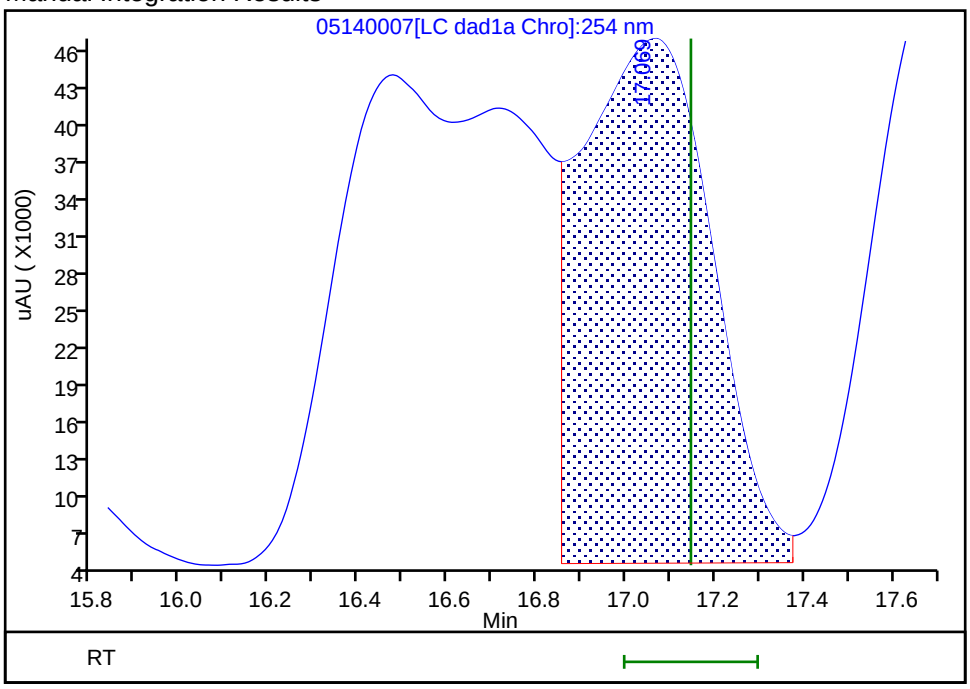
Processing Integration Results

RT: 16.48
Area: 658375
Amount: 2.145710
Amount Units: ug/ml



Manual Integration Results

RT: 17.07
Area: 846716
Amount: 2.452581
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:59

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

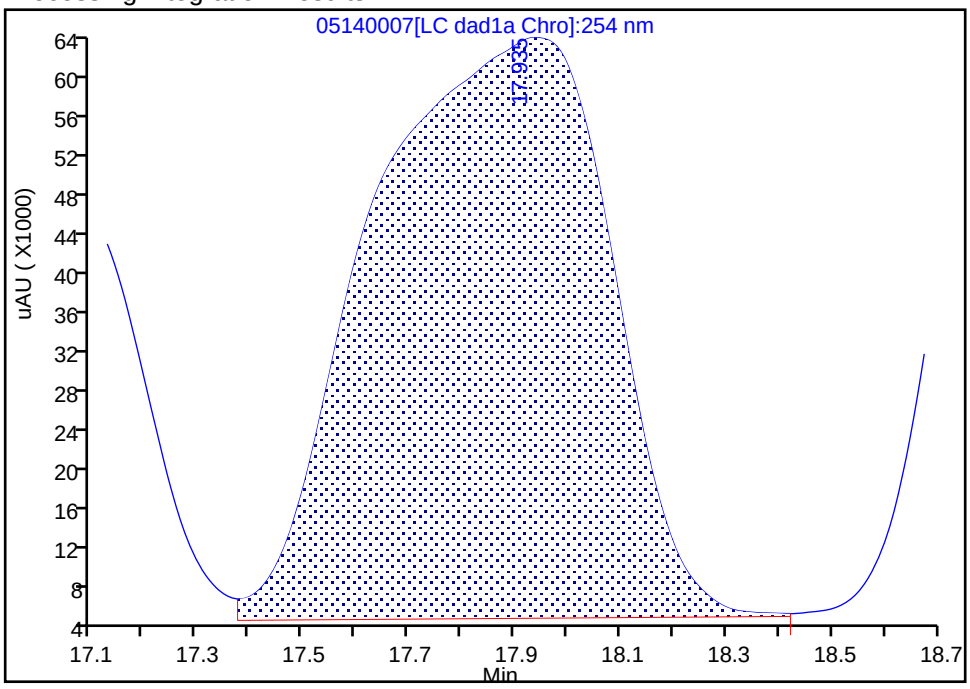
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

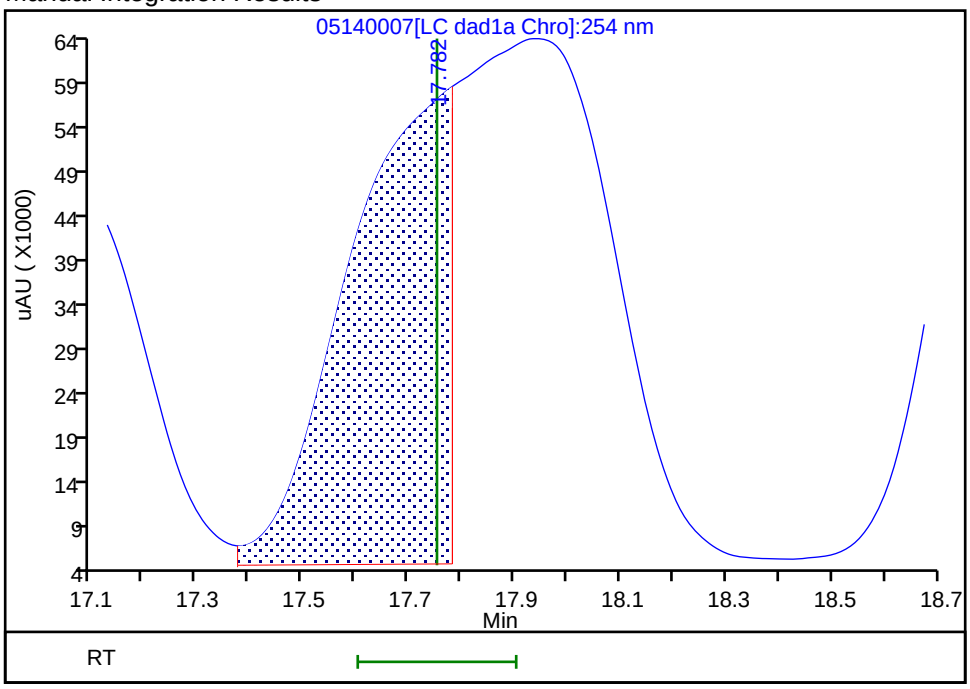
Processing Integration Results

RT: 17.94
Area: 1836650
Amount: 6.513789
Amount Units: ug/ml



Manual Integration Results

RT: 17.78
Area: 701292
Amount: 2.350751
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:45

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

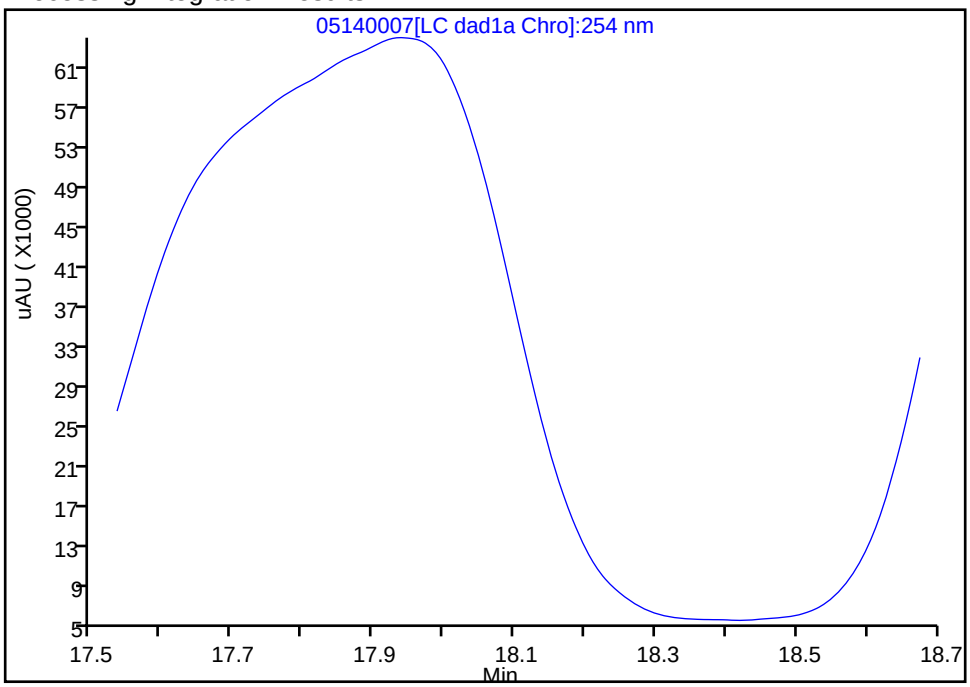
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

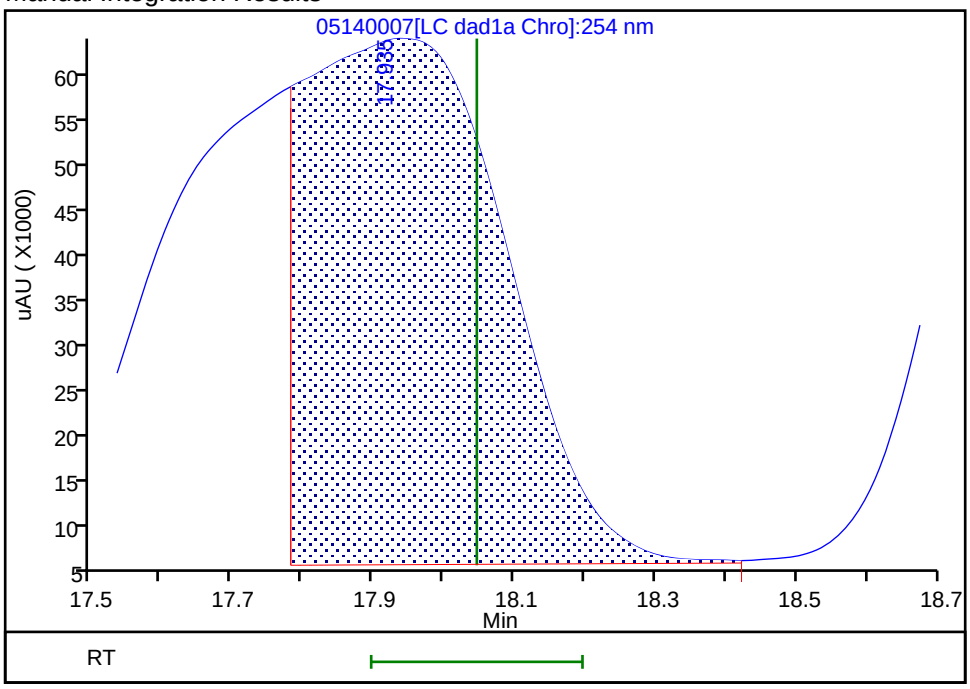
Not Detected
Expected RT: 18.05

Processing Integration Results



Manual Integration Results

RT: 17.94
Area: 1135384
Amount: 2.440578
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:40
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

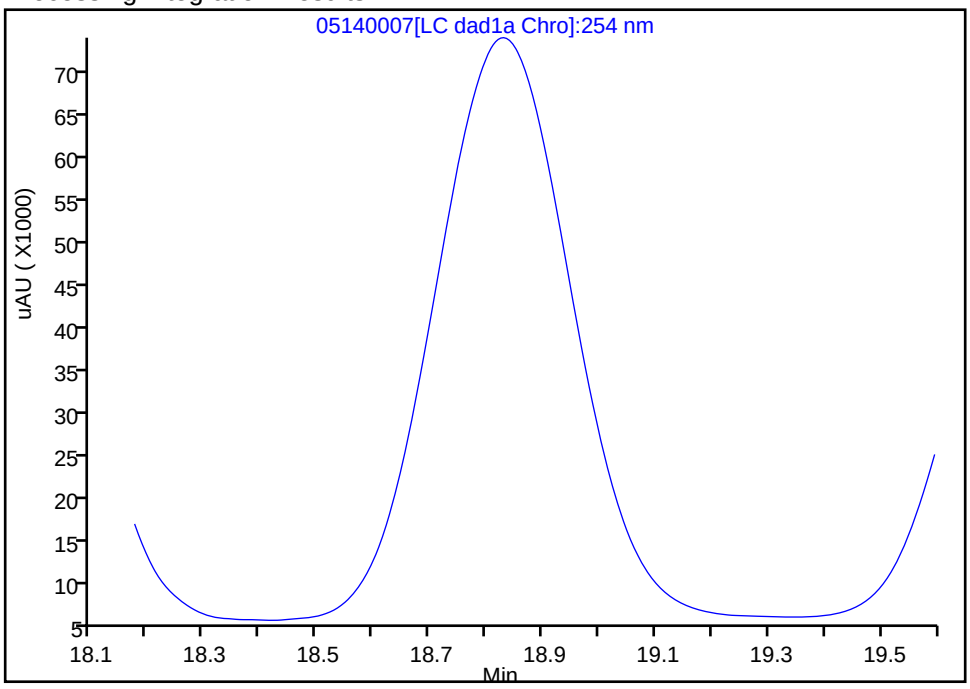
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

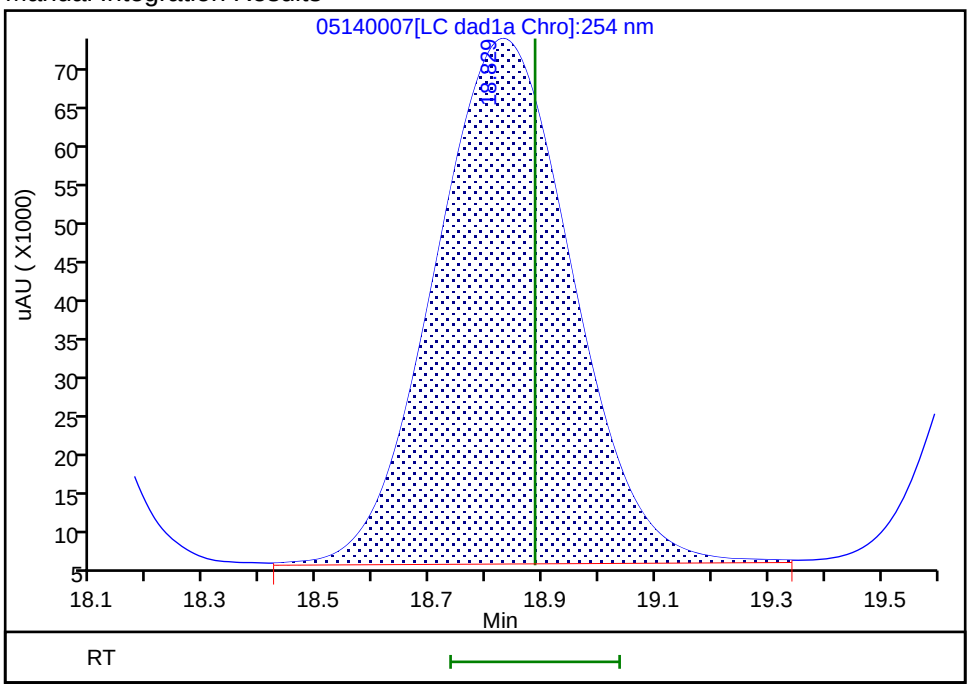
Not Detected
Expected RT: 18.89

Processing Integration Results



Manual Integration Results

RT: 18.83
Area: 1149858
Amount: 2.433816
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:26
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

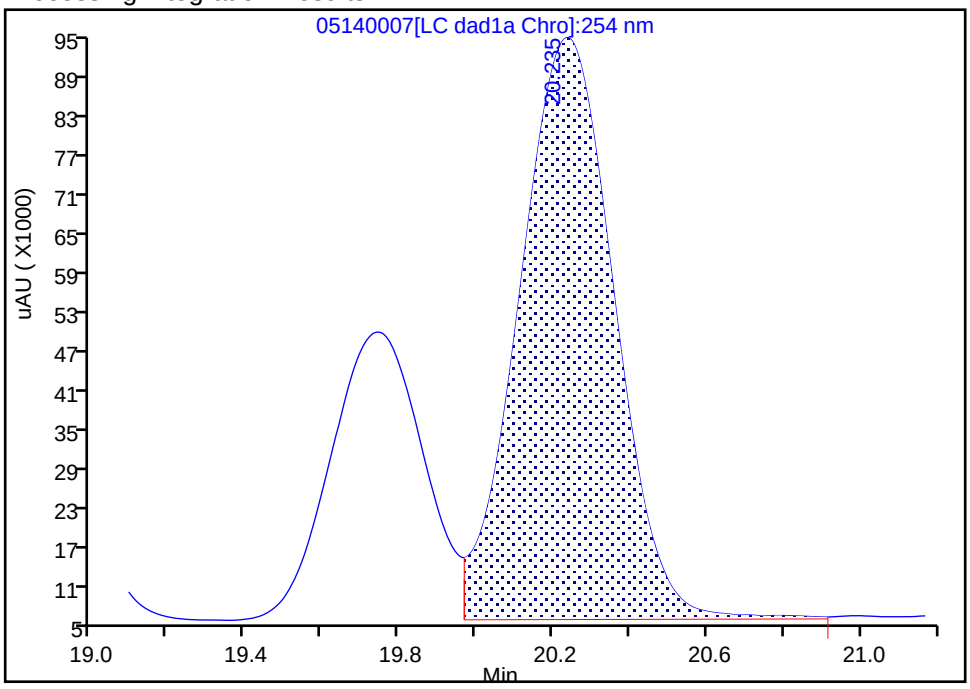
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

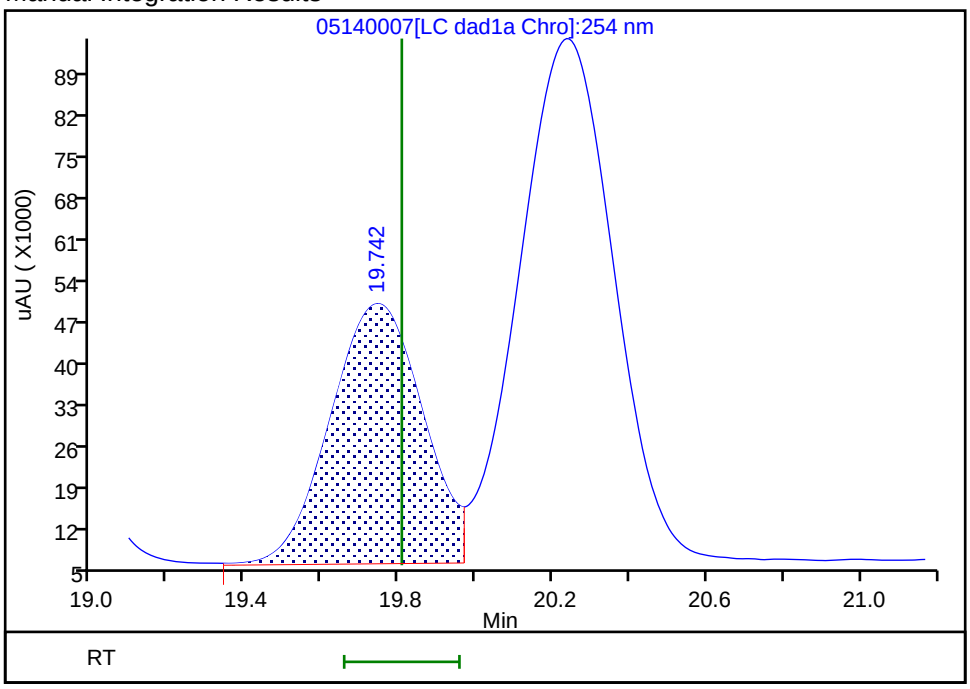
Processing Integration Results

RT: 20.24
Area: 1523108
Amount: 2.510000
Amount Units: ug/ml



Manual Integration Results

RT: 19.74
Area: 736990
Amount: 2.532876
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:23
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

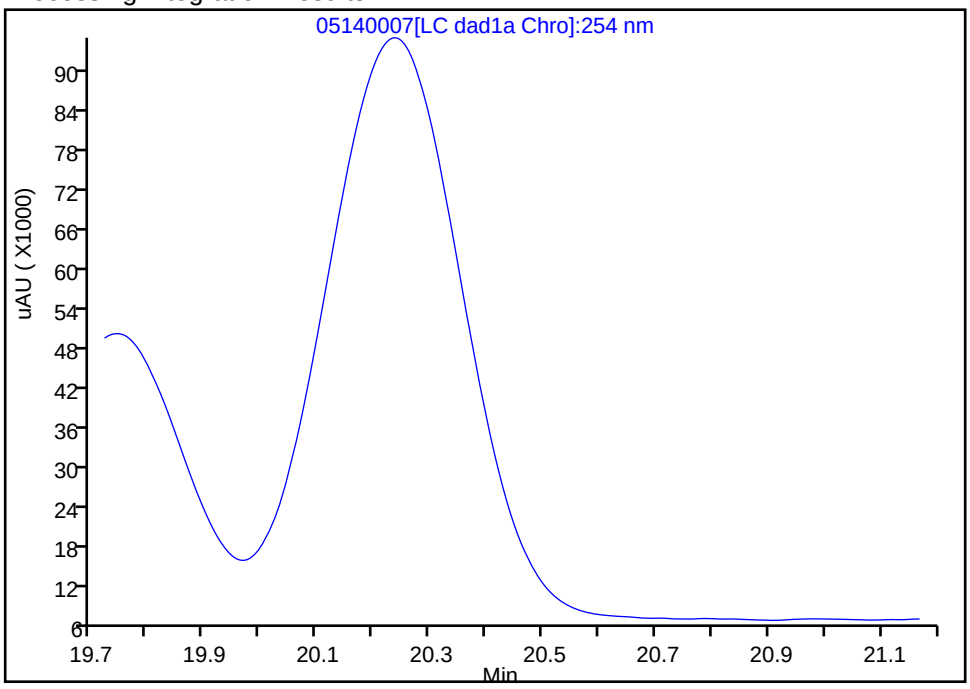
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

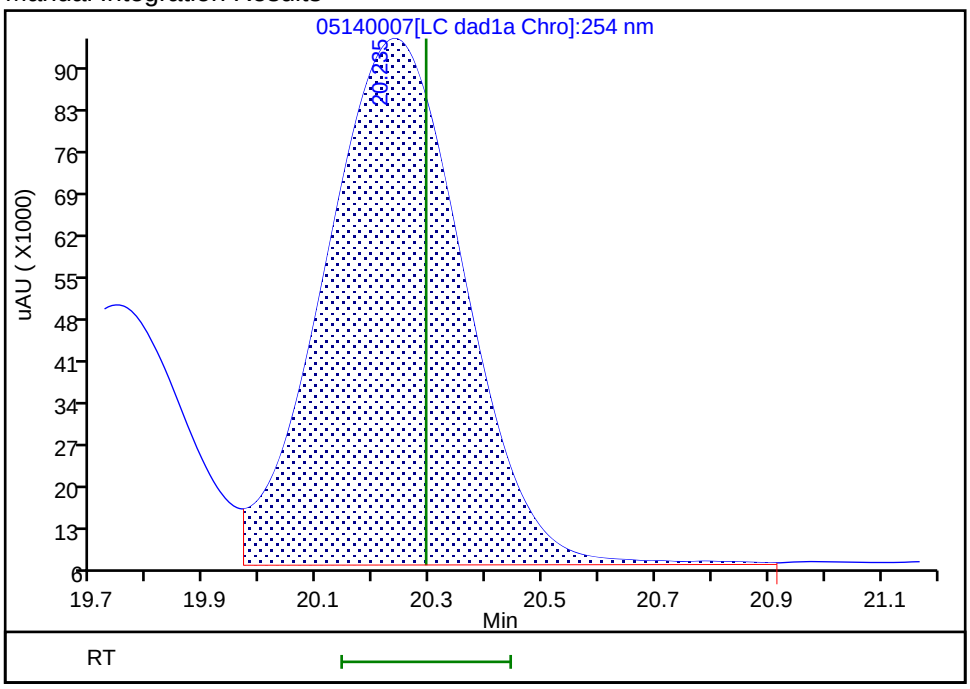
Not Detected
Expected RT: 20.29

Processing Integration Results



Manual Integration Results

RT: 20.24
Area: 1523108
Amount: 2.379435
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:20
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

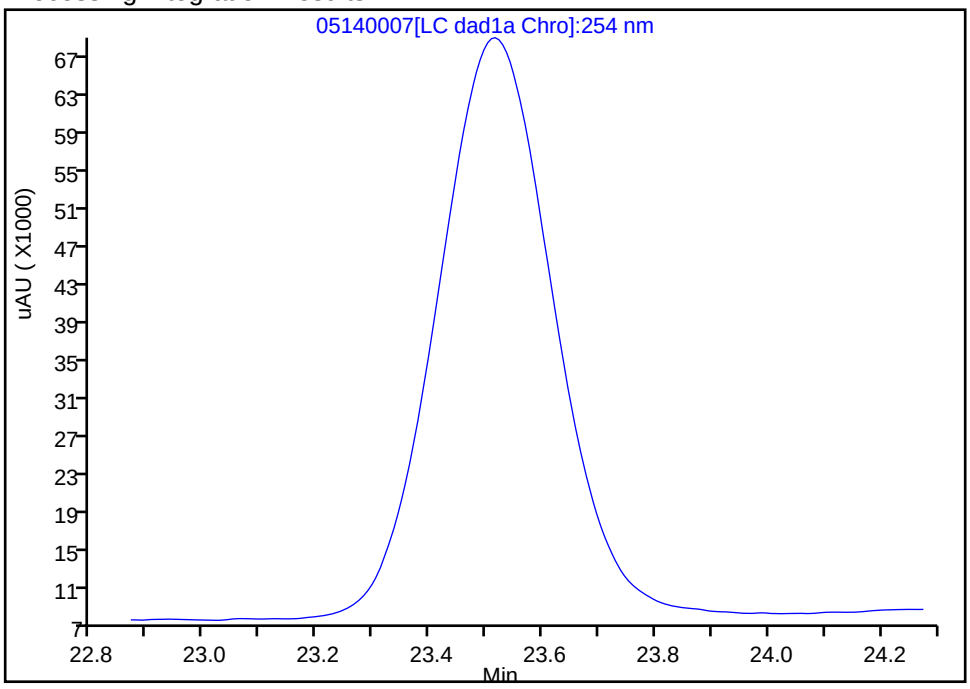
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

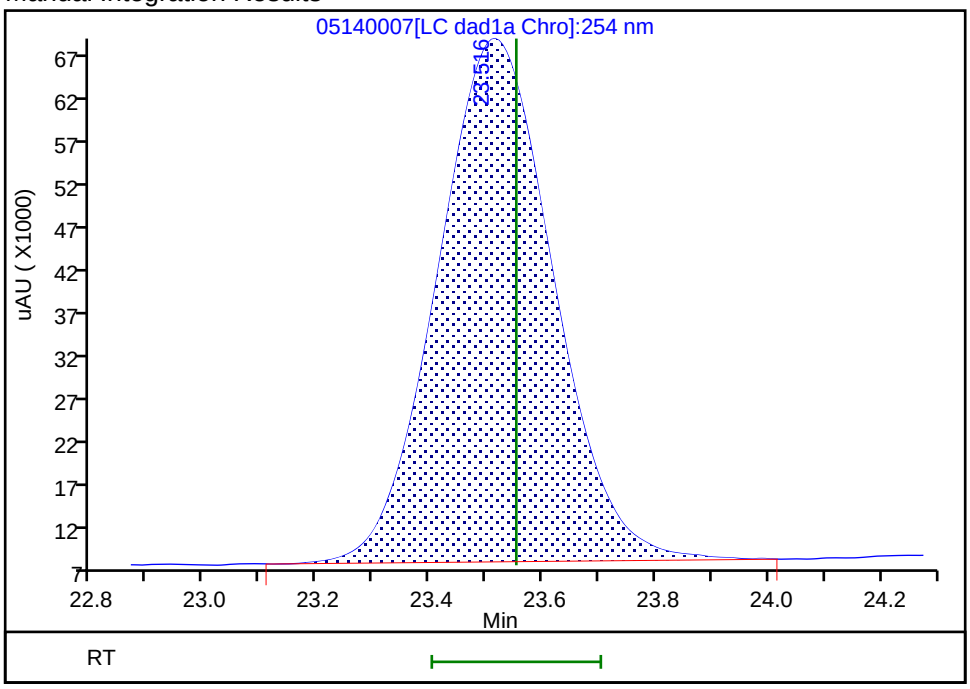
Not Detected
Expected RT: 23.55

Processing Integration Results



Manual Integration Results

RT: 23.52
Area: 875686
Amount: 2.375208
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:11
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

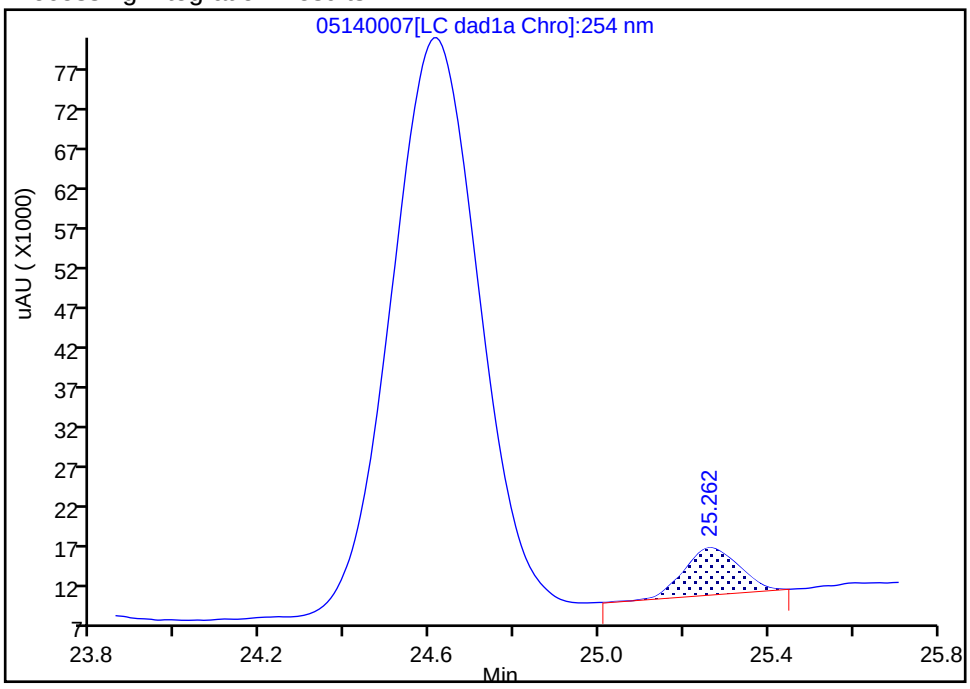
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

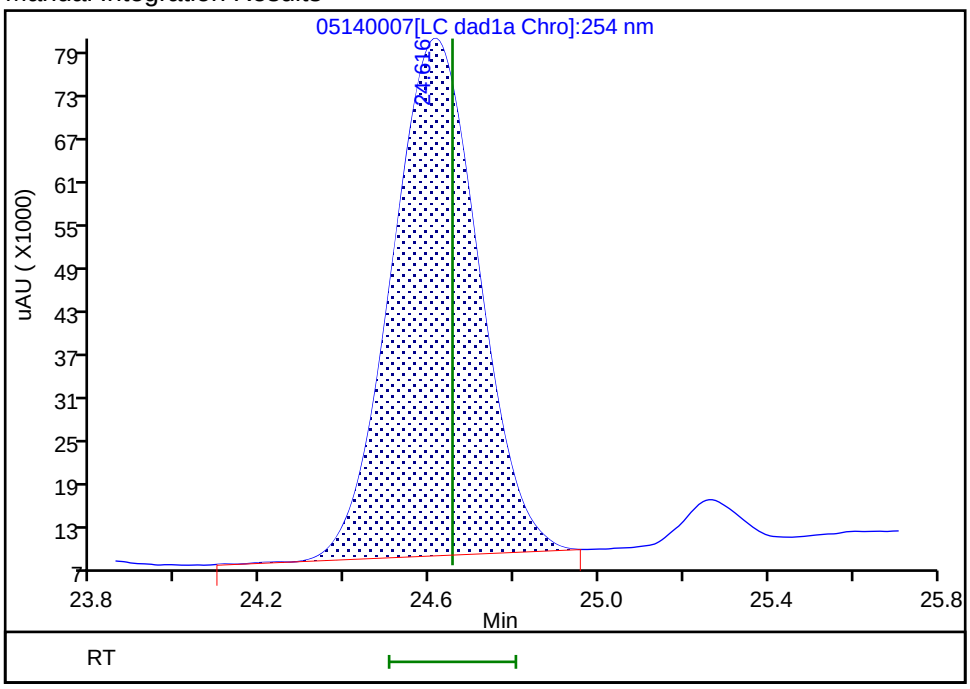
Processing Integration Results

RT: 25.26
Area: 53117
Amount: 0.098897
Amount Units: ug/ml



Manual Integration Results

RT: 24.62
Area: 1019741
Amount: 2.531269
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:08
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140008.D
Lims ID: IC FULL 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 14-May-2020 16:51:43 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 8
Misc. Info.: 280-0091518-008
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:55 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:19:25

	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	4.315	4.366	-0.051	424864	1.00	0.9896	M
	2 2,4-diamino-6-nitrotoluene	1	4.908	4.880	0.028	226554	1.00	0.9296	M
	5 2,4,6-Trinitrophenol	1	6.195	6.300	-0.105	174504	1.00	0.9004	
	6 HMX	1	6.968	6.986	-0.018	183992	1.00	1.01	
	8 RDX	1	9.148	9.173	-0.025	219481	1.00	0.8982	
	9 Nitrobenzene	1	12.088	12.106	-0.018	436359	1.00	0.99	
$	10 1,2-Dinitrobenzene	1	13.028	13.040	-0.012	274673	1.00	0.9842	M
	11 3,5-Dinitroaniline	1	14.868	14.886	-0.018	495596	1.00	1.02	
	12 1,3-Dinitrobenzene	1	15.541	15.553	-0.012	669330	1.00	0.99	
	13 Nitroglycerin	2	15.848	15.853	-0.005	1284256	10.0	10.1	
	14 o-Nitrotoluene	1	16.535	16.533	0.002	261684	1.00	0.9587	
	15 p-Nitrotoluene	1	16.815	16.820	-0.005	231517	1.00	0.9611	
	16 4-Amino-2,6-dinitrotoluene	1	17.141	17.146	-0.005	321819	1.00	0.9322	
	17 m-Nitrotoluene	1	17.741	17.753	-0.012	280653	1.00	0.9408	
	18 2-Amino-4,6-dinitrotoluene	1	18.028	18.046	-0.018	455872	1.00	0.9799	
	19 1,3,5-Trinitrobenzene	1	18.881	18.886	-0.005	467399	1.00	0.9893	
	20 2,6-Dinitrotoluene	1	19.801	19.806	-0.005	298461	1.00	1.02	
	21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	608421	1.00	0.9505	
	22 Tetryl	1	23.555	23.553	0.002	350816	1.00	0.9516	
	23 2,4,6-Trinitrotoluene	1	24.648	24.653	-0.005	408271	1.00	1.01	
	24 PETN	2	25.281	25.280	0.001	1365764	10.0	10.4	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00064	Amount Added: 100.00	Units: uL
8330_ADDs_00026	Amount Added: 50.00	Units: uL

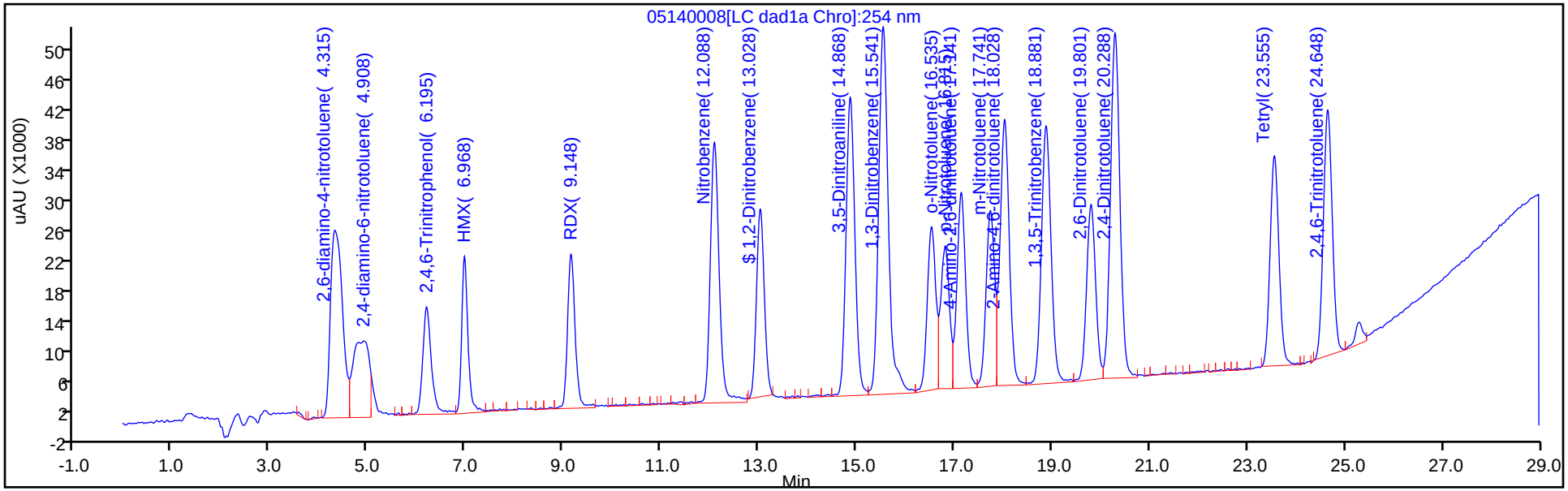
Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

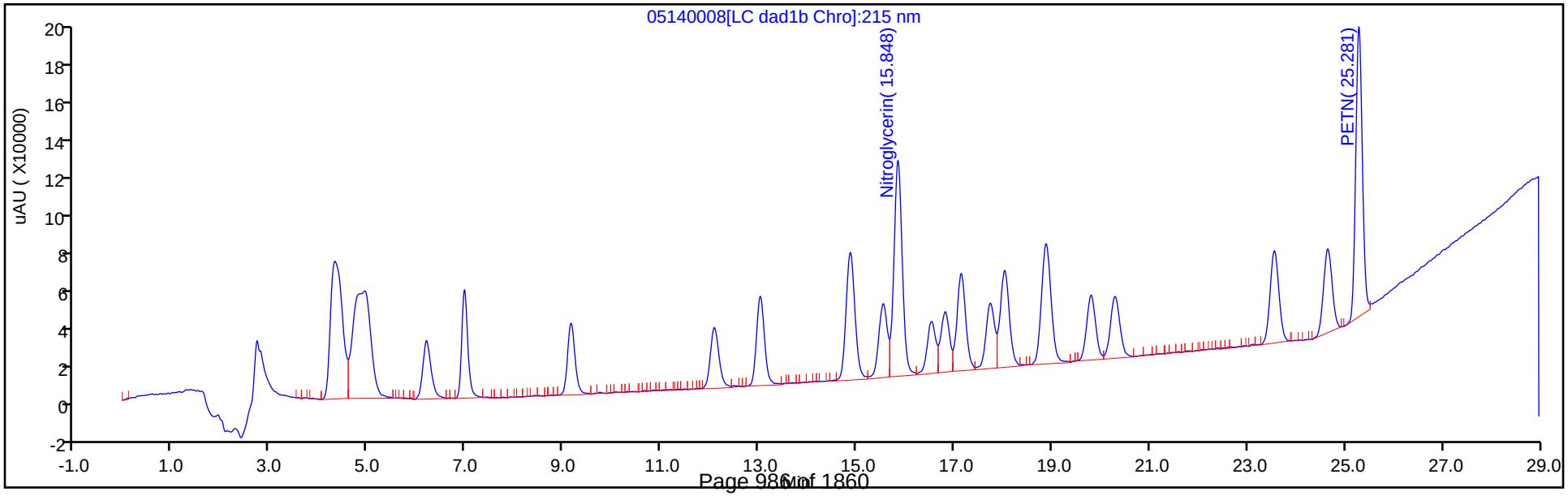
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140008.d

Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 8			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

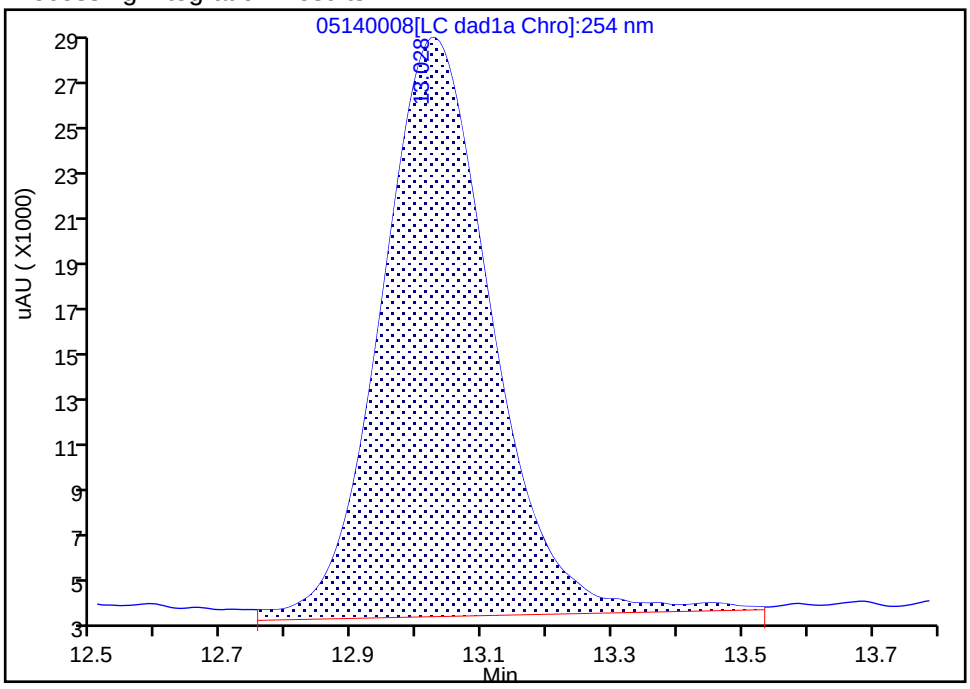
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140008.d				
Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

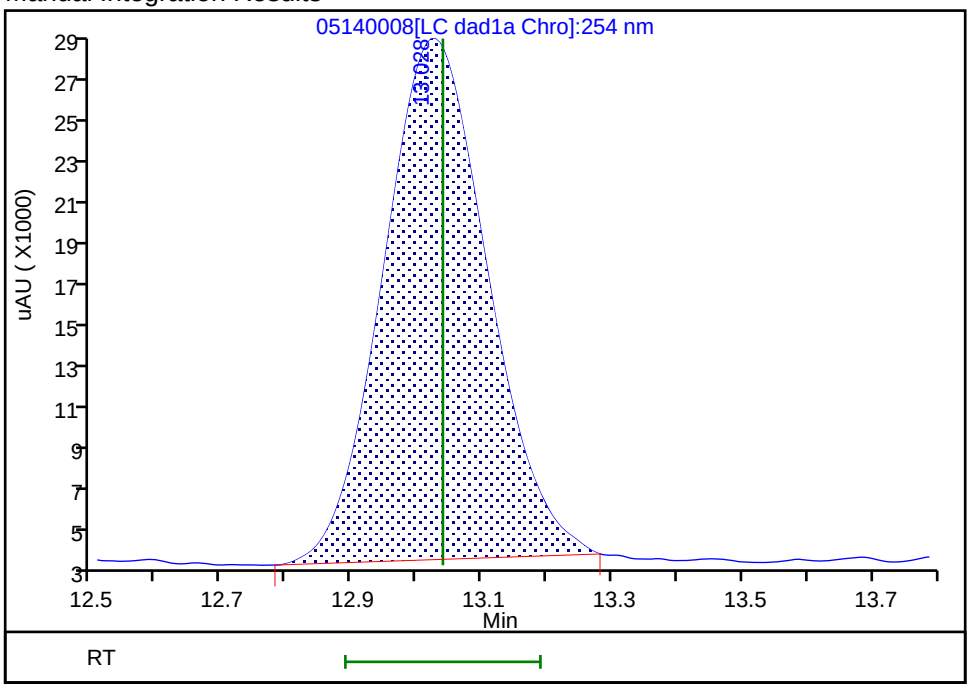
Processing Integration Results

RT: 13.03
Area: 297550
Amount: 0.923853
Amount Units: ug/ml



Manual Integration Results

RT: 13.03
Area: 274673
Amount: 0.984150
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:32

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140009.D
Lims ID: IC FULL 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-May-2020 17:26:40 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 7
Misc. Info.: 280-0091518-009
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:55 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:20:09

	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	4.342	4.366	-0.024	272072	0.7000	0.6337	
2	2,4-diamino-6-nitrotoluene	1	4.915	4.880	0.035	176663	0.7000	0.7197	
5	2,4,6-Trinitrophenol	1	6.235	6.300	-0.065	118579	0.7000	0.6118	
6	HMX	1	6.982	6.986	-0.004	125697	0.7000	0.6800	
8	RDX	1	9.162	9.173	-0.011	152096	0.7000	0.6224	
9	Nitrobenzene	1	12.095	12.106	-0.011	295388	0.7028	0.6725	
$ 10	1,2-Dinitrobenzene	1	13.028	13.040	-0.012	184773	0.7000	0.6599	M
11	3,5-Dinitroaniline	1	14.875	14.886	-0.011	320559	0.7000	0.6552	
12	1,3-Dinitrobenzene	1	15.548	15.553	-0.005	463638	0.7014	0.6877	
13	Nitroglycerin	2	15.842	15.853	-0.011	852305	7.00	6.72	
14	o-Nitrotoluene	1	16.535	16.533	0.002	181444	0.7000	0.6647	
15	p-Nitrotoluene	1	16.808	16.820	-0.012	165213	0.7014	0.6859	
16	4-Amino-2,6-dinitrotoluene	1	17.142	17.146	-0.004	223840	0.7007	0.6484	
17	m-Nitrotoluene	1	17.742	17.753	-0.011	200617	0.7007	0.6725	
18	2-Amino-4,6-dinitrotoluene	1	18.035	18.046	-0.011	319742	0.7028	0.6873	
19	1,3,5-Trinitrobenzene	1	18.875	18.886	-0.011	323482	0.7014	0.6847	
20	2,6-Dinitrotoluene	1	19.795	19.806	-0.011	206984	0.7028	0.7003	
21	2,4-Dinitrotoluene	1	20.288	20.293	-0.005	425741	0.7028	0.6651	
22	Tetryl	1	23.542	23.553	-0.011	245833	0.7014	0.6668	
23	2,4,6-Trinitrotoluene	1	24.642	24.653	-0.011	282035	0.7028	0.6944	
24	PETN	2	25.275	25.280	-0.005	957879	7.00	7.20	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00026	Amount Added:	35.00	Units: uL
8330IntermStk_00064	Amount Added:	70.00	Units: uL

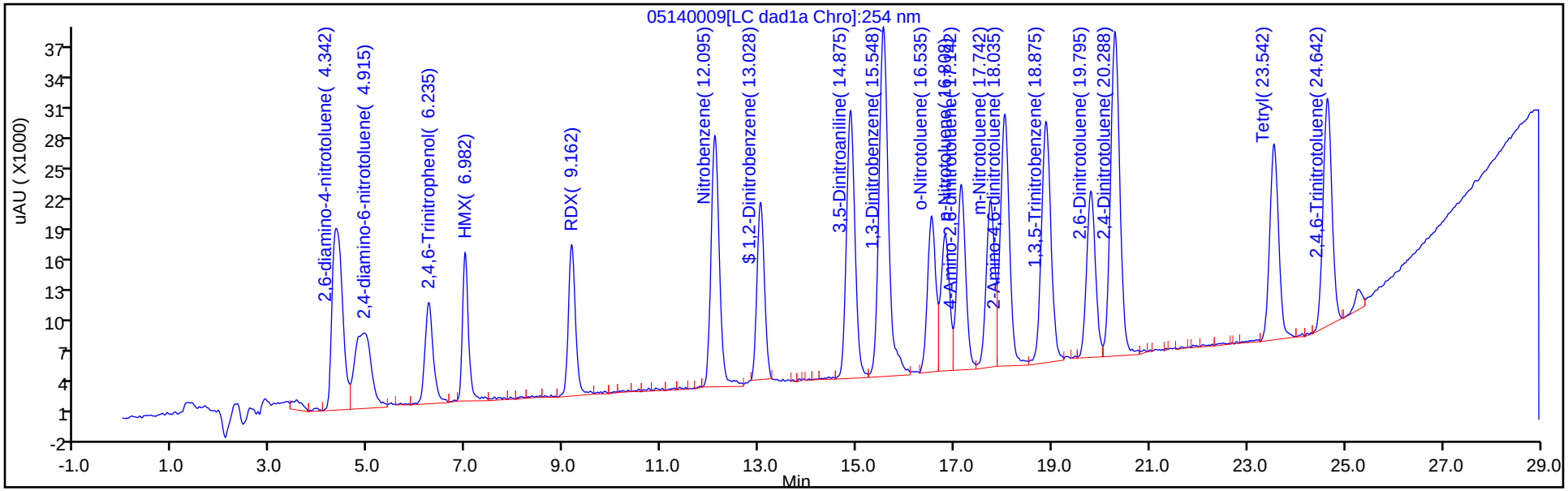
Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

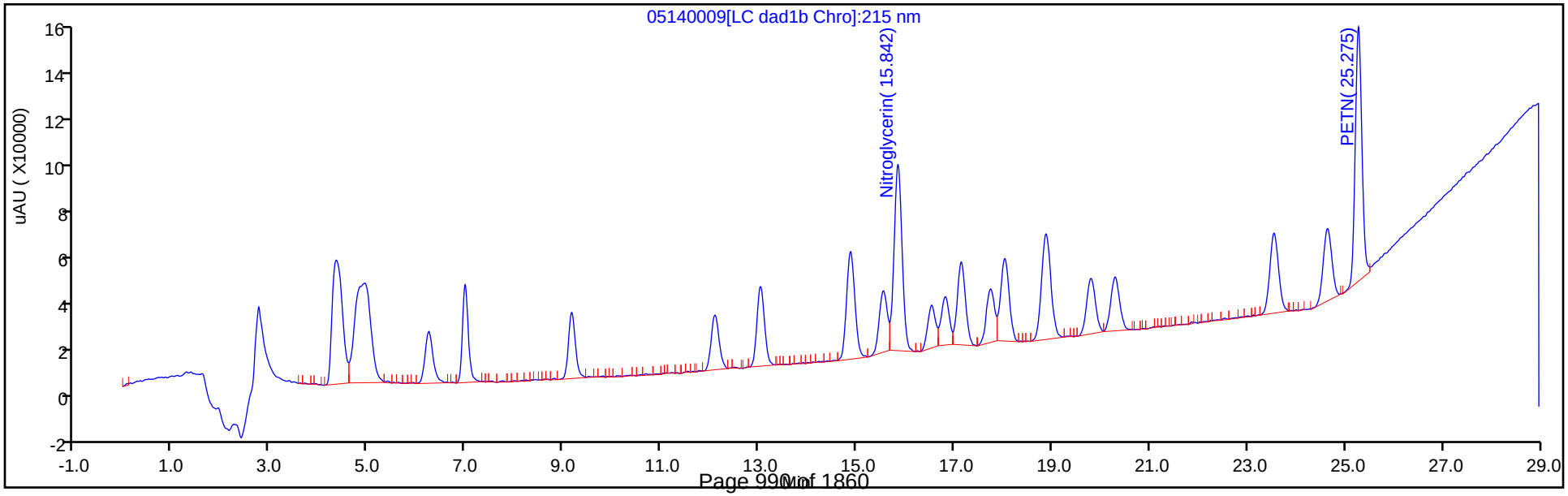
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140009.d

Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 7			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

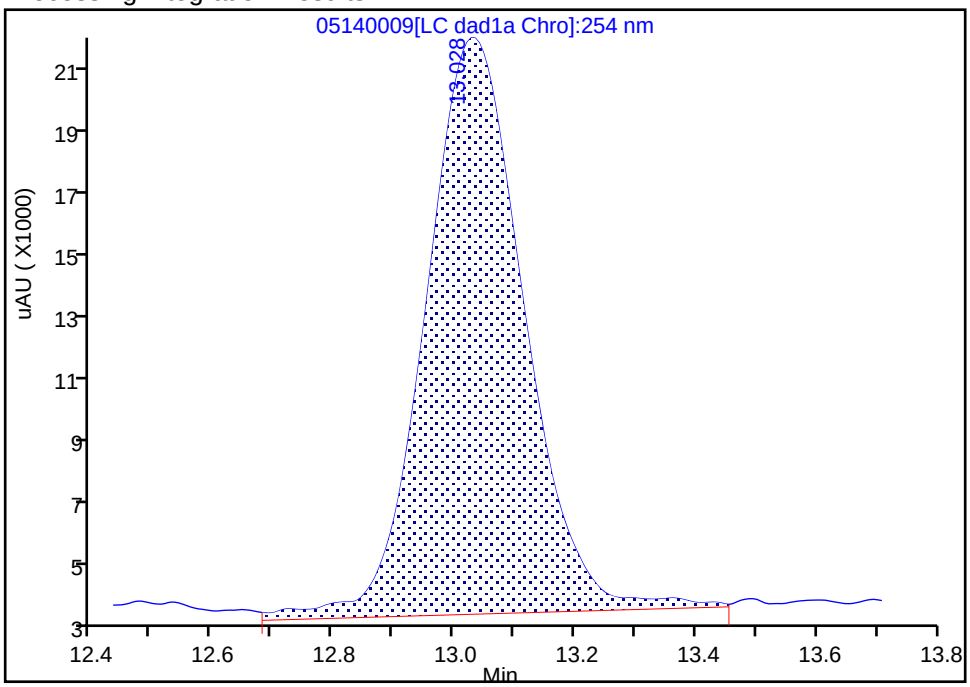
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140009.d				
Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

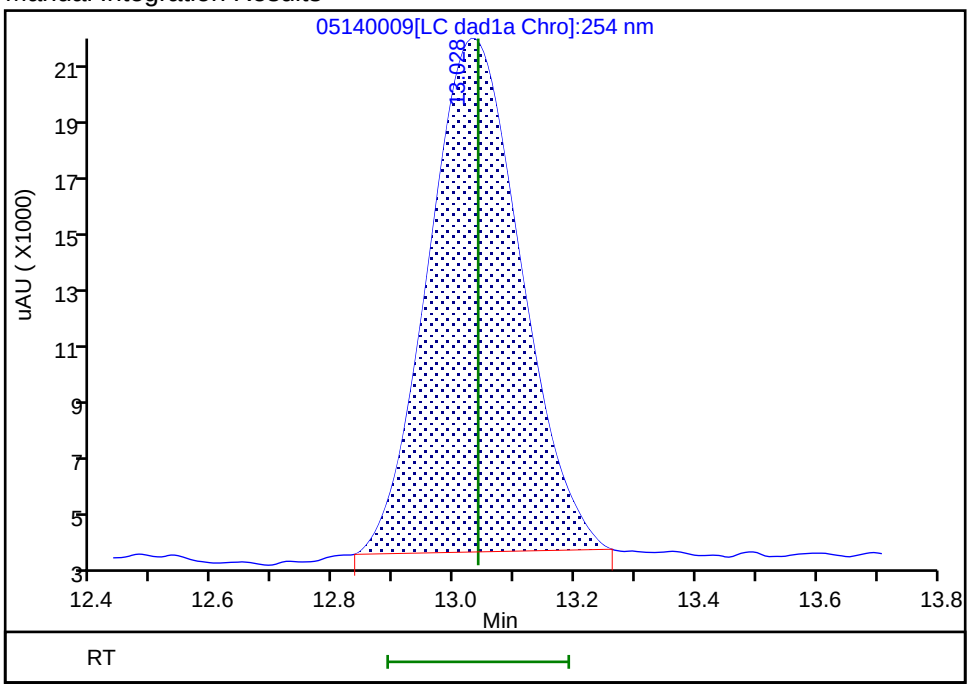
Processing Integration Results

RT: 13.03
Area: 203295
Amount: 0.637674
Amount Units: ug/ml



Manual Integration Results

RT: 13.03
Area: 184773
Amount: 0.659868
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140010.D
Lims ID: IC FULL 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2020 18:01:41 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 6
Misc. Info.: 280-0091518-010
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:56 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:52:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.347	4.366	-0.019	161291	0.4000	0.3757	M
2	2,4-diamino-6-nitrotoluene	1	4.940	4.880	0.060	100170	0.4000	0.3980	M
5	2,4,6-Trinitrophenol	1	6.267	6.300	-0.033	68021	0.4000	0.3510	a
6	HMX	1	6.987	6.986	0.001	74484	0.4000	0.3907	
8	RDX	1	9.173	9.173	0.000	88545	0.4000	0.3624	
9	Nitrobenzene	1	12.107	12.106	0.001	166107	0.4016	0.3782	
$ 10	1,2-Dinitrobenzene	1	13.040	13.040	0.000	107232	0.4000	0.3802	M
11	3,5-Dinitroaniline	1	14.887	14.886	0.001	190015	0.4000	0.3861	M
12	1,3-Dinitrobenzene	1	15.553	15.553	0.000	258559	0.4008	0.3835	M
13	Nitroglycerin	2	15.853	15.853	0.000	509915	4.00	4.02	
14	o-Nitrotoluene	1	16.540	16.533	0.007	105493	0.4000	0.3865	M
15	p-Nitrotoluene	1	16.820	16.820	0.000	93773	0.4008	0.3893	M
16	4-Amino-2,6-dinitrotoluene	1	17.153	17.146	0.007	130436	0.4004	0.3778	M
17	m-Nitrotoluene	1	17.747	17.753	-0.006	115331	0.4004	0.3866	M
18	2-Amino-4,6-dinitrotoluene	1	18.040	18.046	-0.006	179358	0.4016	0.3855	M
19	1,3,5-Trinitrobenzene	1	18.887	18.886	0.001	178692	0.4008	0.3782	
20	2,6-Dinitrotoluene	1	19.807	19.806	0.001	118093	0.4016	0.3930	M
21	2,4-Dinitrotoluene	1	20.293	20.293	0.000	245009	0.4016	0.3828	M
22	Tetryl	1	23.553	23.553	0.000	139850	0.4008	0.3793	
23	2,4,6-Trinitrotoluene	1	24.647	24.653	-0.006	158091	0.4016	0.3858	
24	PETN	2	25.280	25.280	0.000	557734	4.00	4.10	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	40.00	Units: uL
8330_ADDs_00026	Amount Added:	20.00	Units: uL

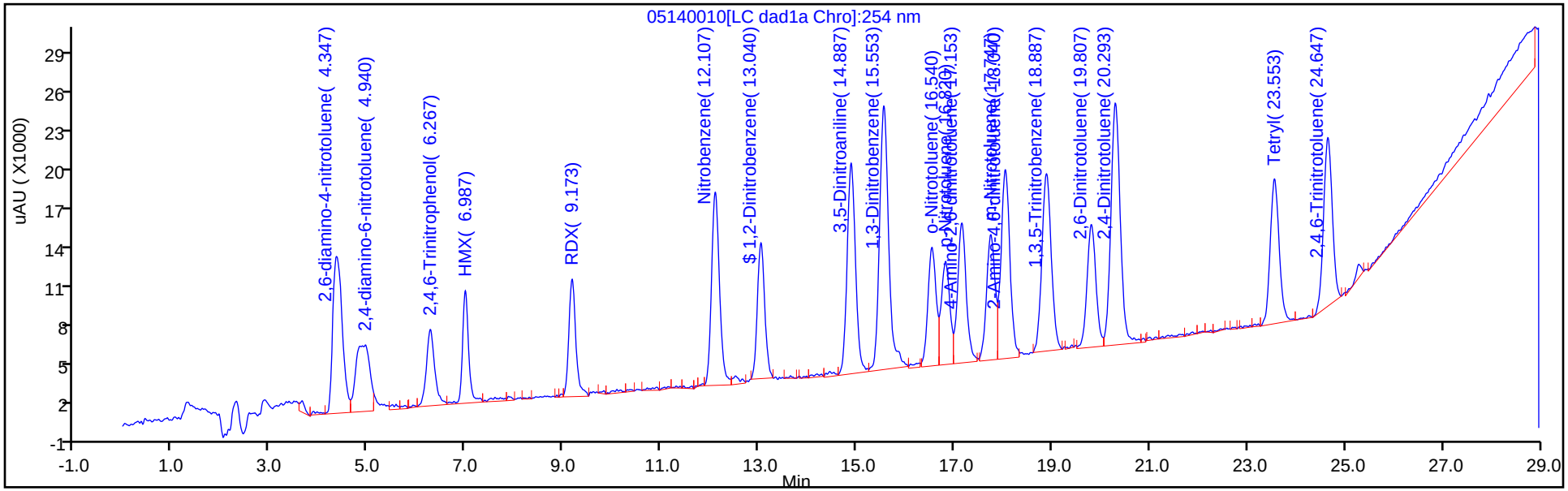
Report Date: 15-May-2020 12:00:56 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

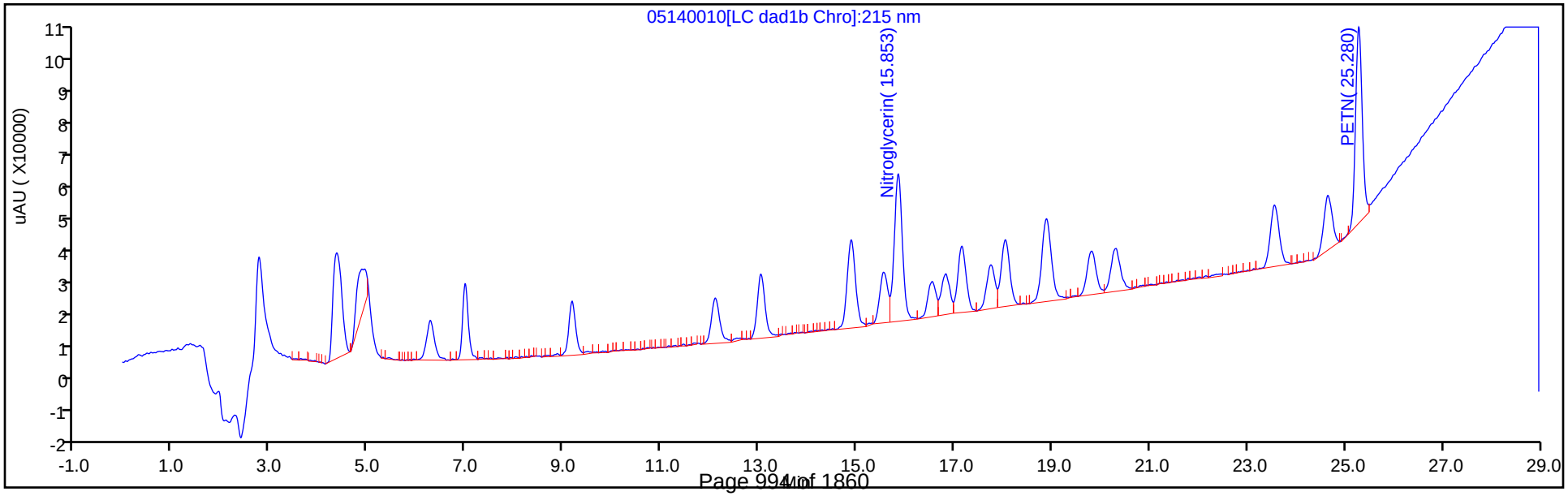
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d

Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 6			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

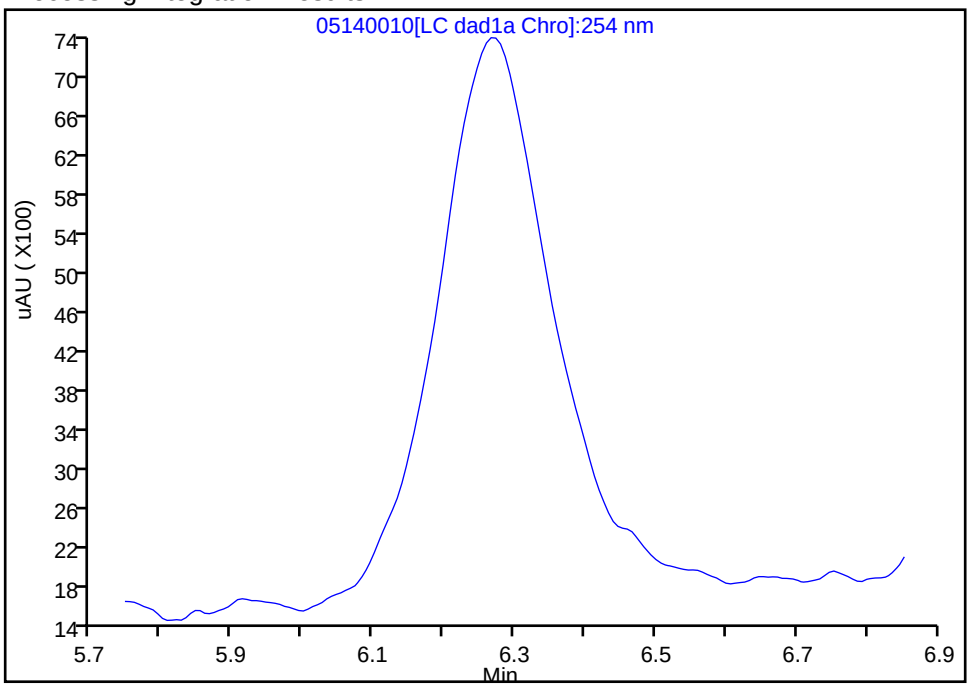
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

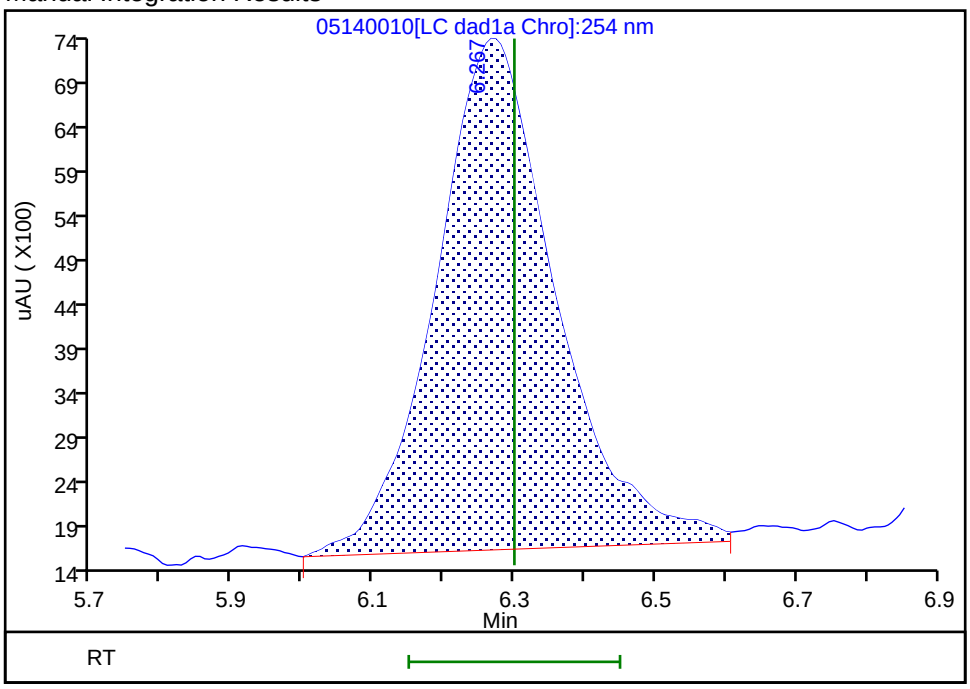
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.27
Area: 68021
Amount: 0.350967
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:14
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

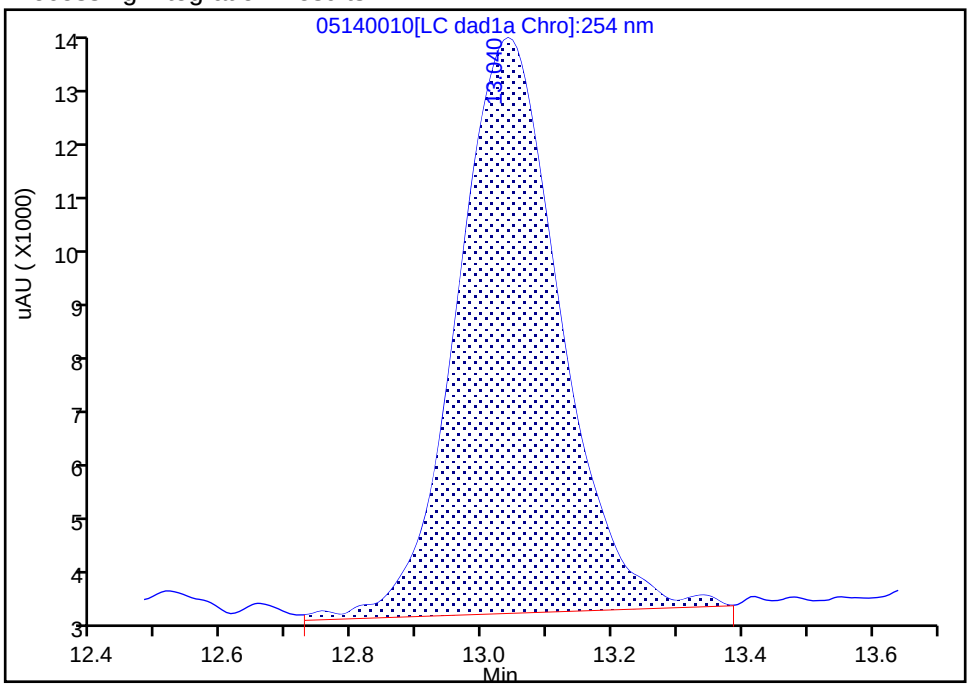
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

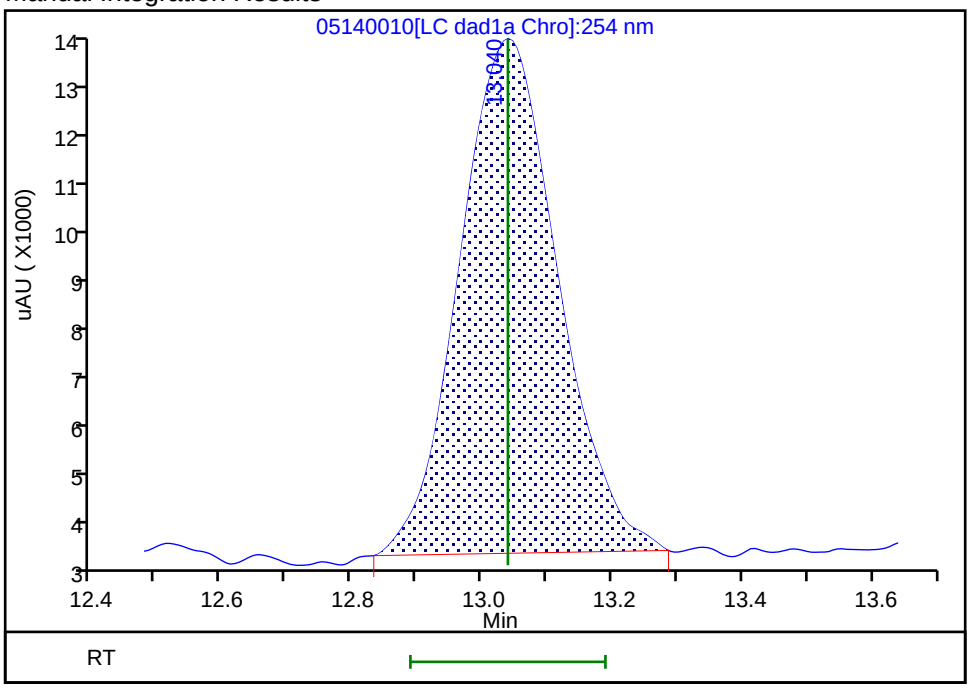
Processing Integration Results

RT: 13.04
Area: 114682
Amount: 0.364039
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 107232
Amount: 0.380167
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:50

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

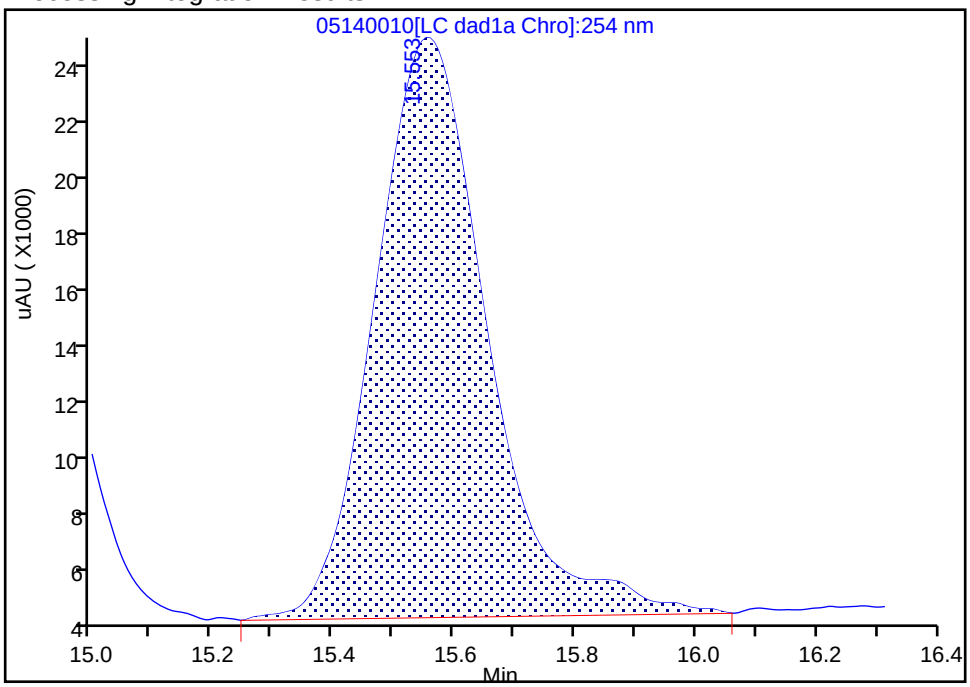
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

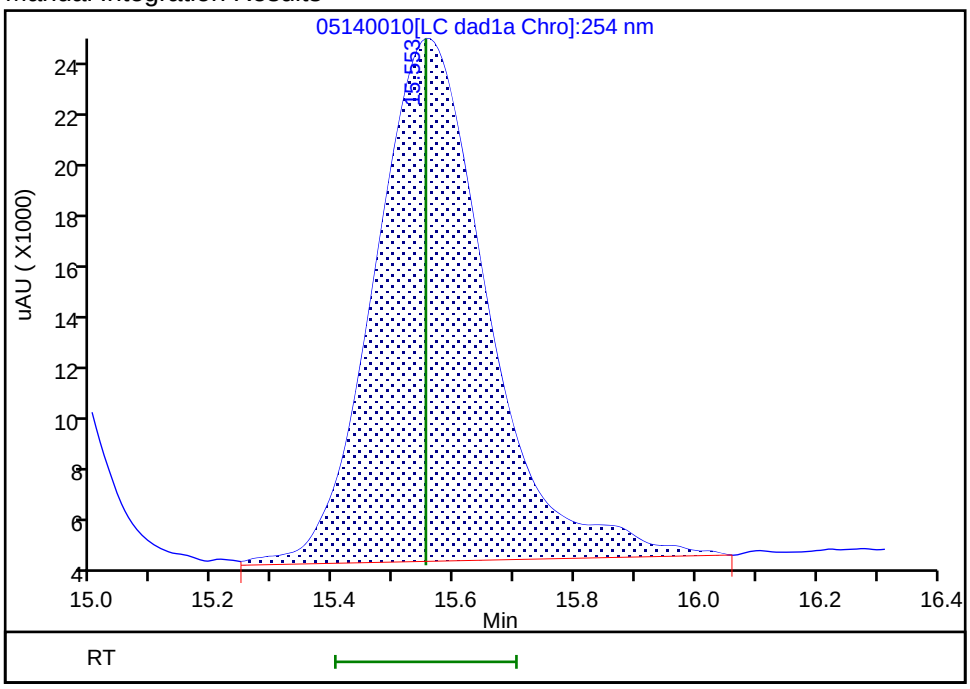
Processing Integration Results

RT: 15.55
Area: 255534
Amount: 0.374138
Amount Units: ug/ml



Manual Integration Results

RT: 15.55
Area: 258559
Amount: 0.383511
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

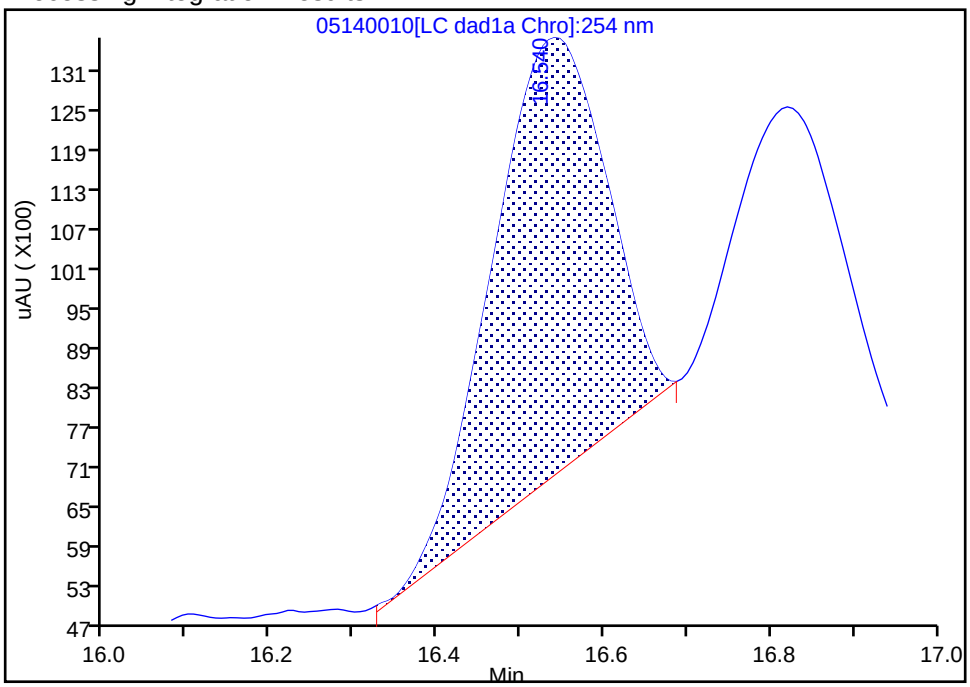
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

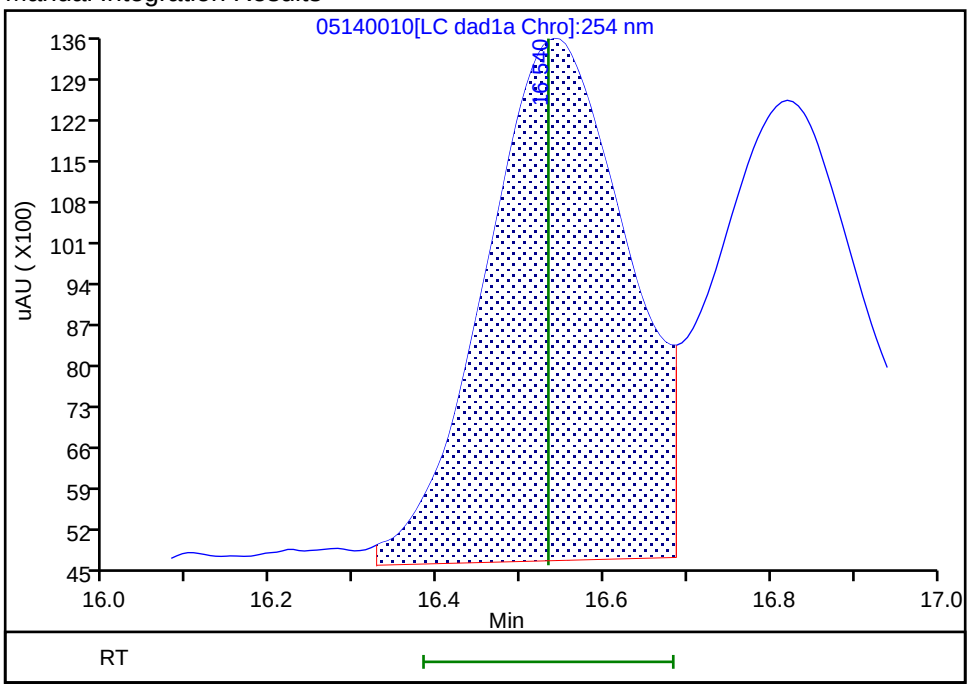
Processing Integration Results

RT: 16.54
Area: 63784
Amount: 0.238403
Amount Units: ug/ml



Manual Integration Results

RT: 16.54
Area: 105493
Amount: 0.386471
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

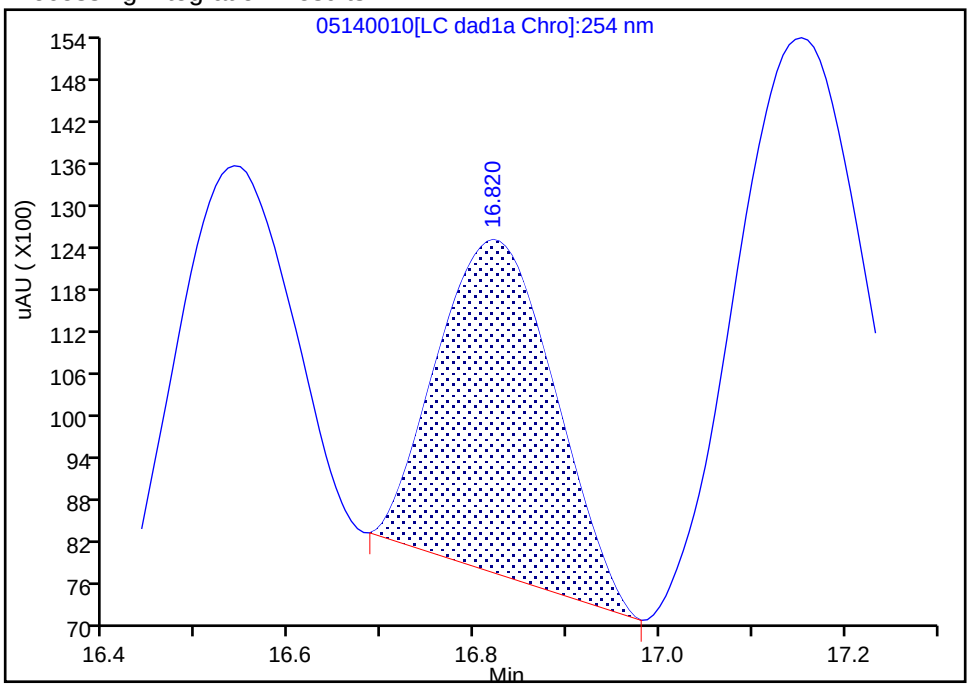
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

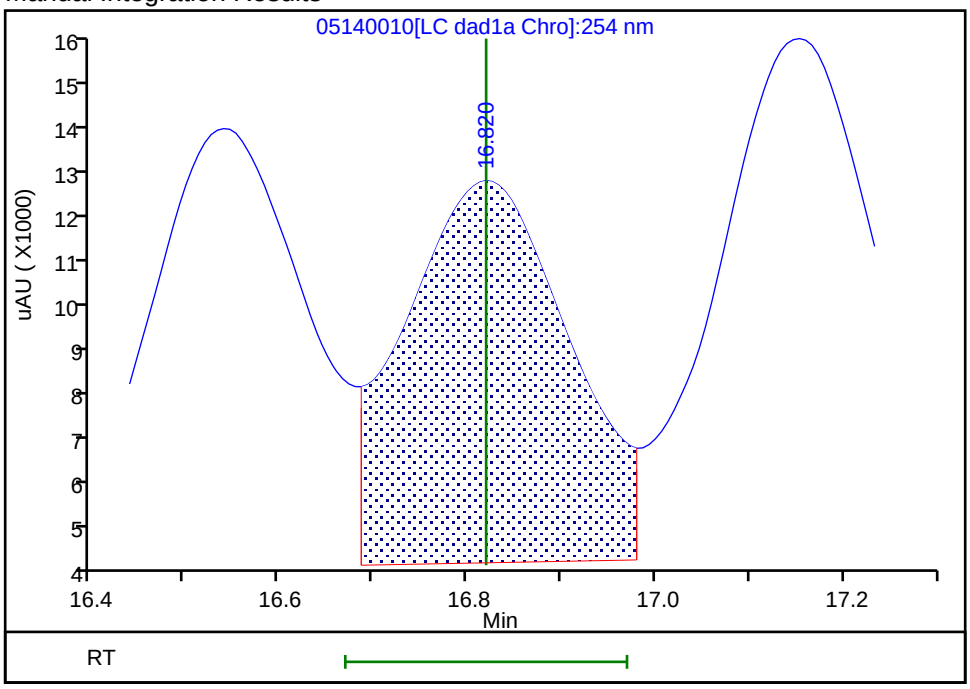
Processing Integration Results

RT: 16.82
Area: 42038
Amount: 0.176152
Amount Units: ug/ml



Manual Integration Results

RT: 16.82
Area: 93773
Amount: 0.389291
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

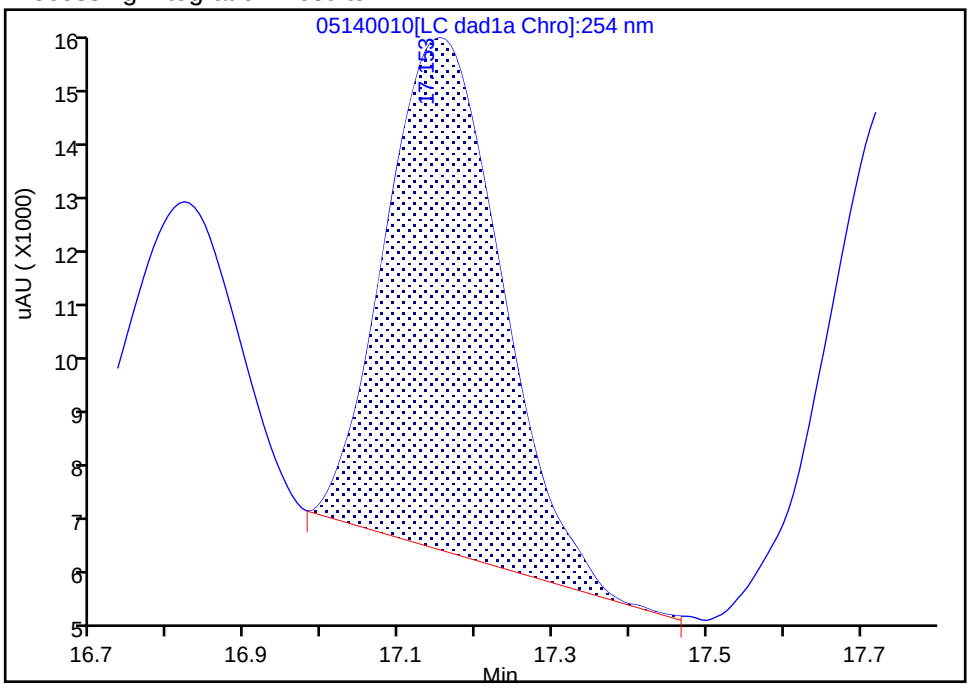
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

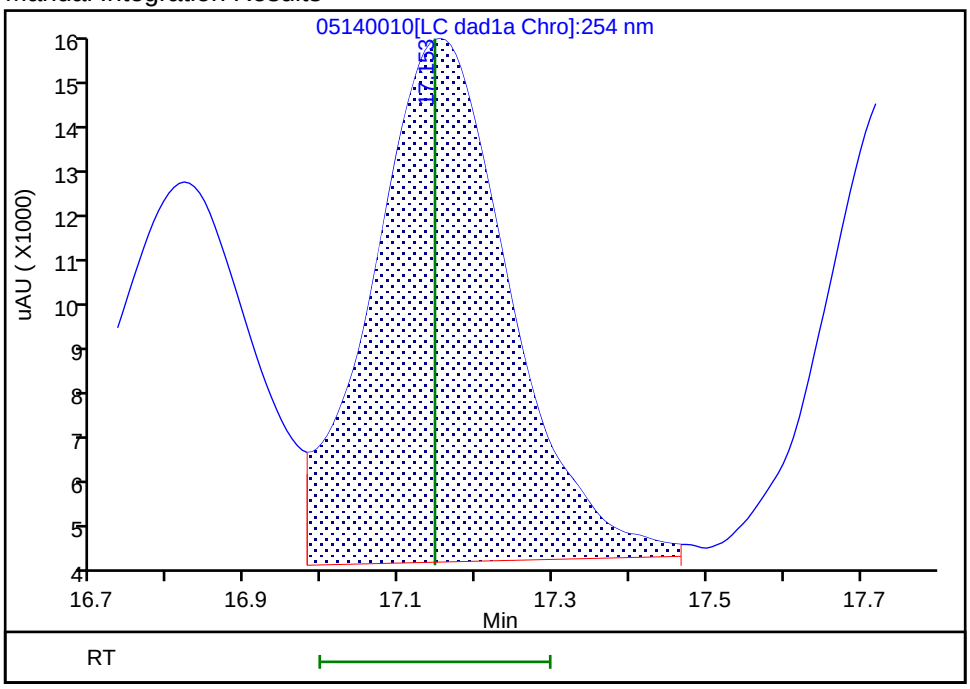
Processing Integration Results

RT: 17.15
Area: 95002
Amount: 0.278639
Amount Units: ug/ml



Manual Integration Results

RT: 17.15
Area: 130436
Amount: 0.377818
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

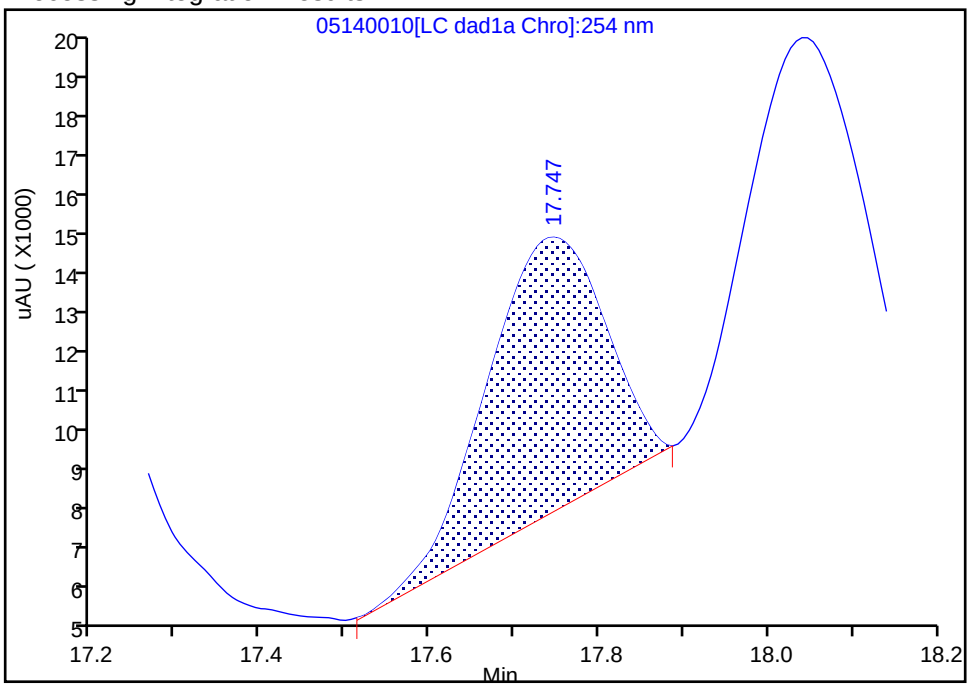
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

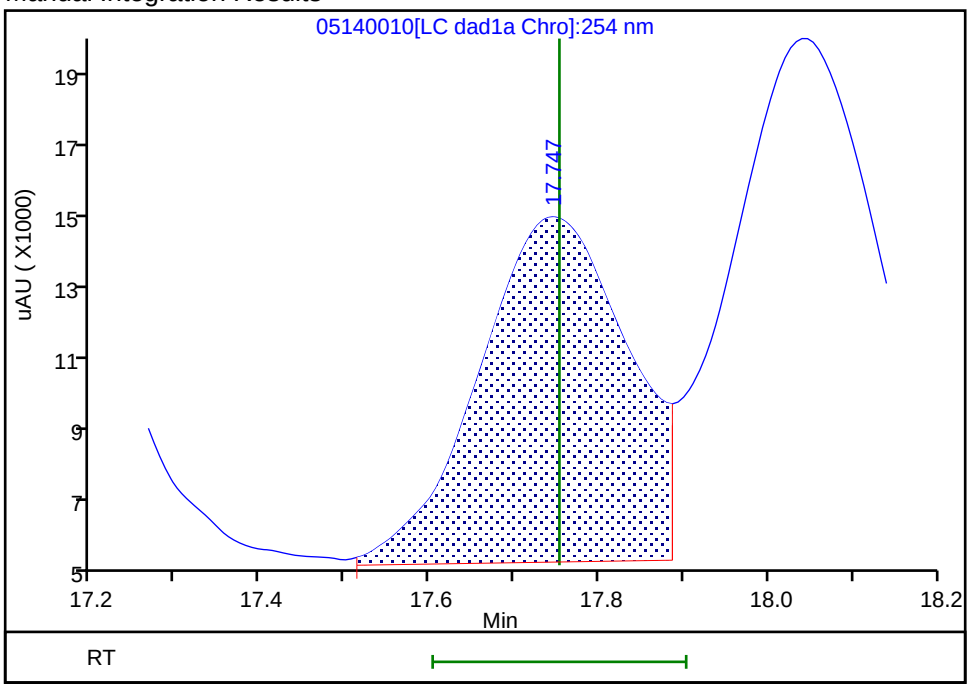
Processing Integration Results

RT: 17.75
Area: 65895
Amount: 0.232967
Amount Units: ug/ml



Manual Integration Results

RT: 17.75
Area: 115331
Amount: 0.386593
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

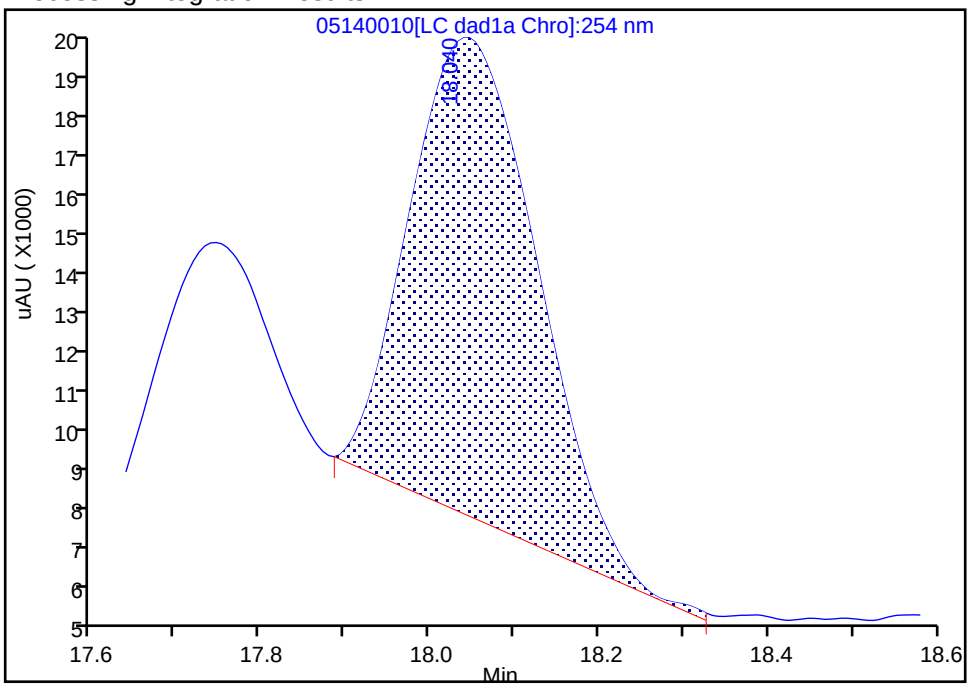
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

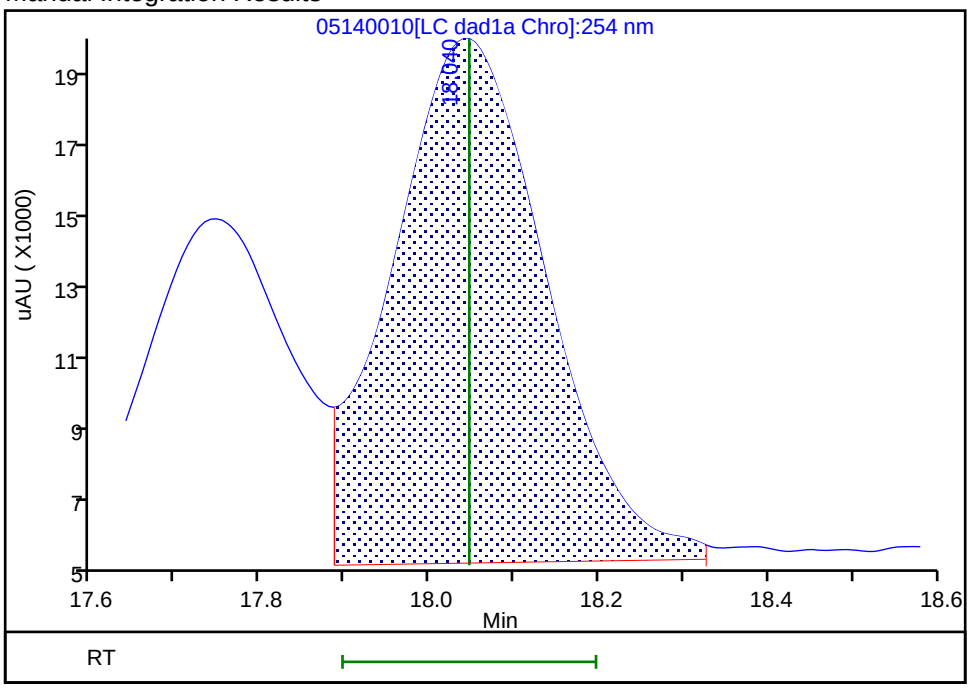
Processing Integration Results

RT: 18.04
Area: 120261
Amount: 0.277181
Amount Units: ug/ml



Manual Integration Results

RT: 18.04
Area: 179358
Amount: 0.385541
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

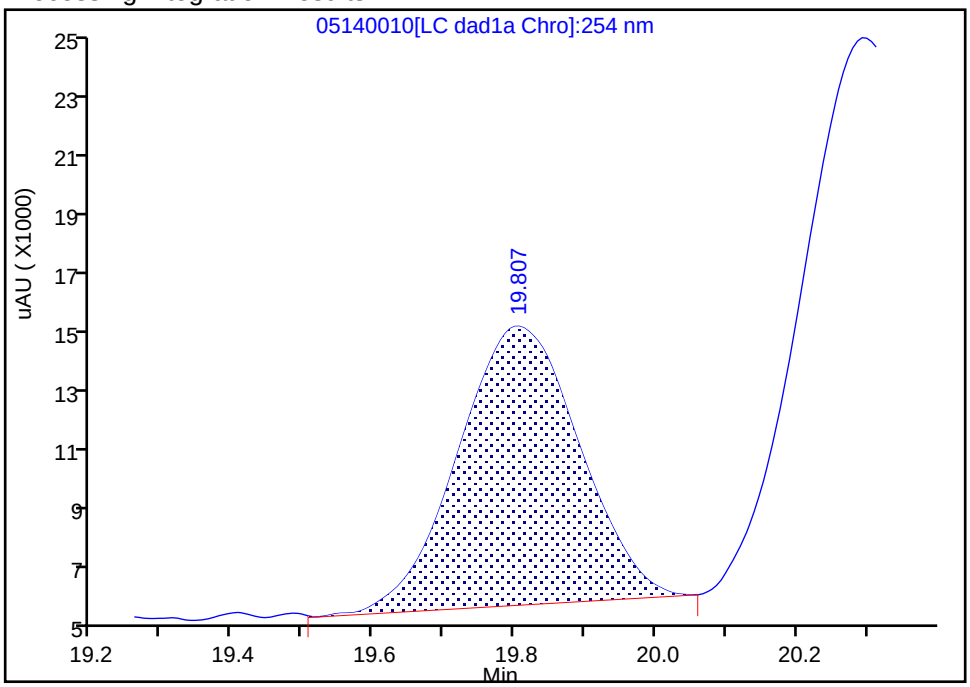
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

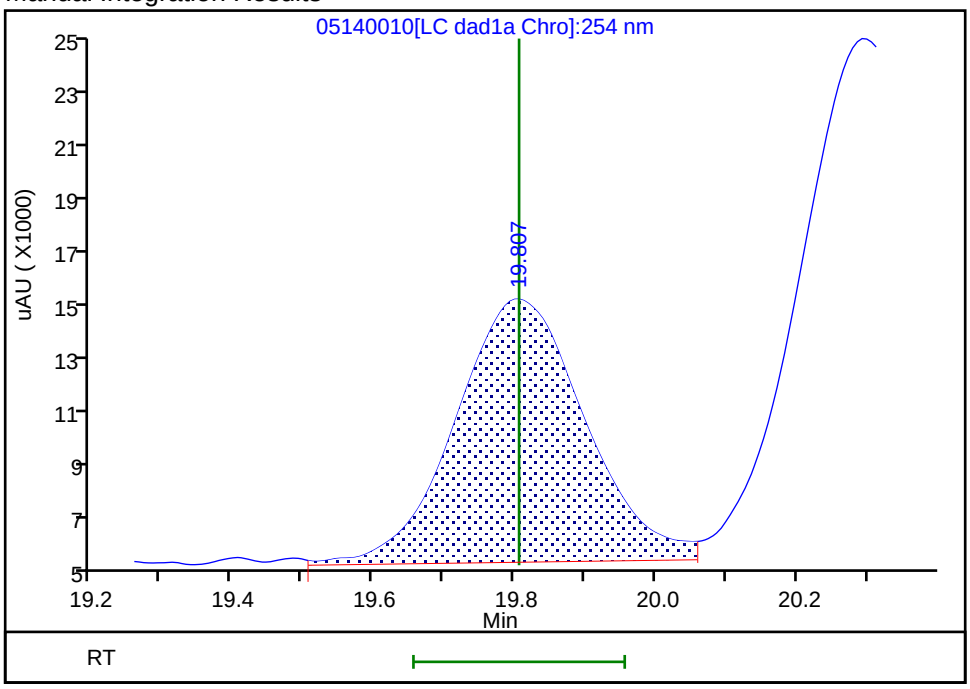
Processing Integration Results

RT: 19.81
Area: 105710
Amount: 0.311662
Amount Units: ug/ml



Manual Integration Results

RT: 19.81
Area: 118093
Amount: 0.392980
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:40

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

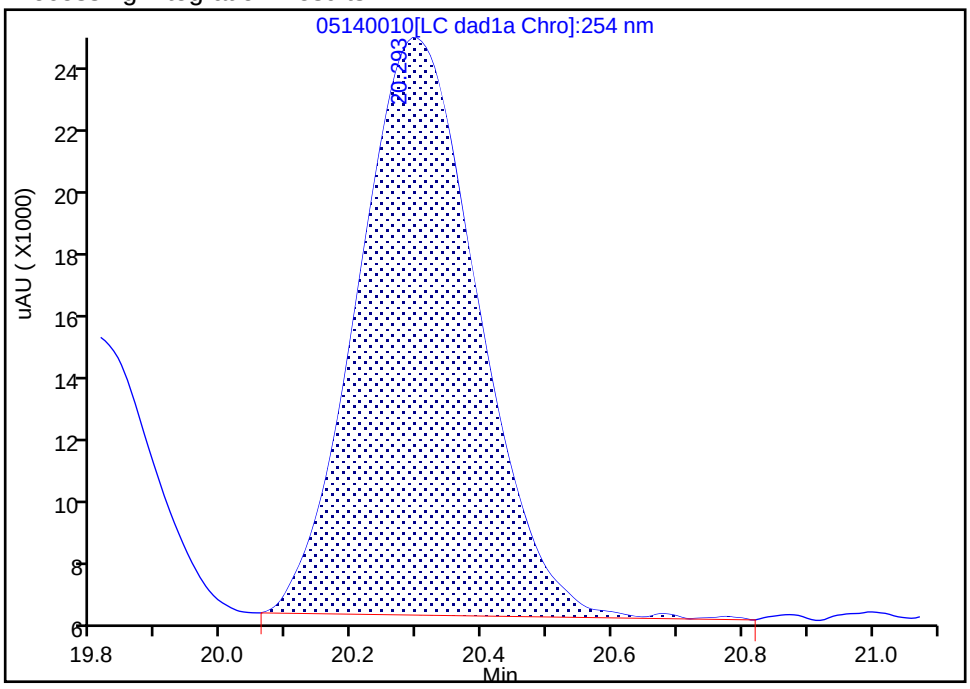
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

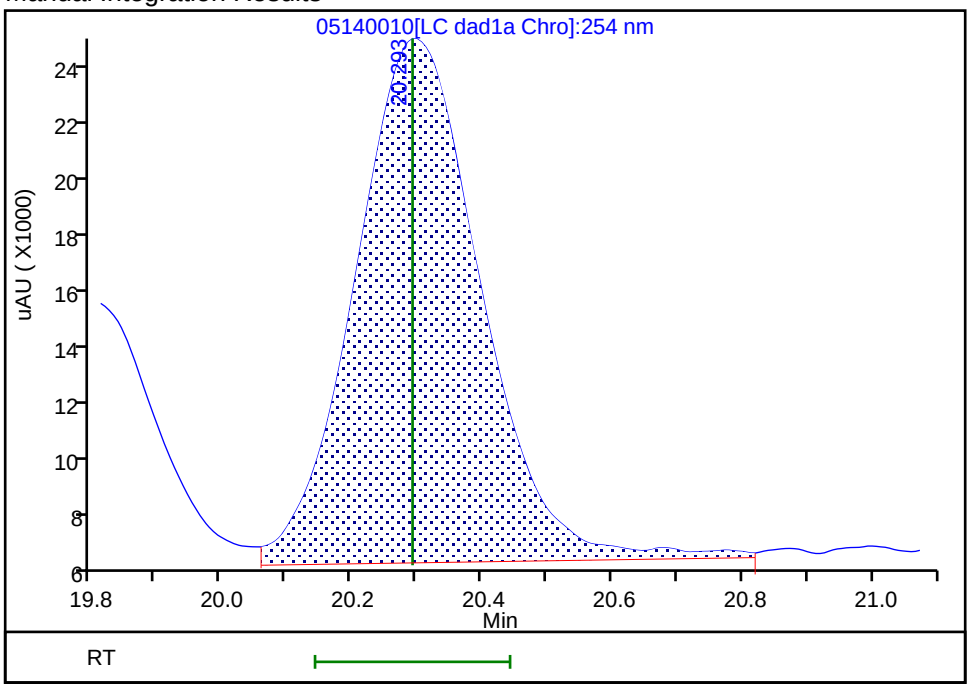
Processing Integration Results

RT: 20.29
Area: 226951
Amount: 0.348081
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 245009
Amount: 0.382759
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:40
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

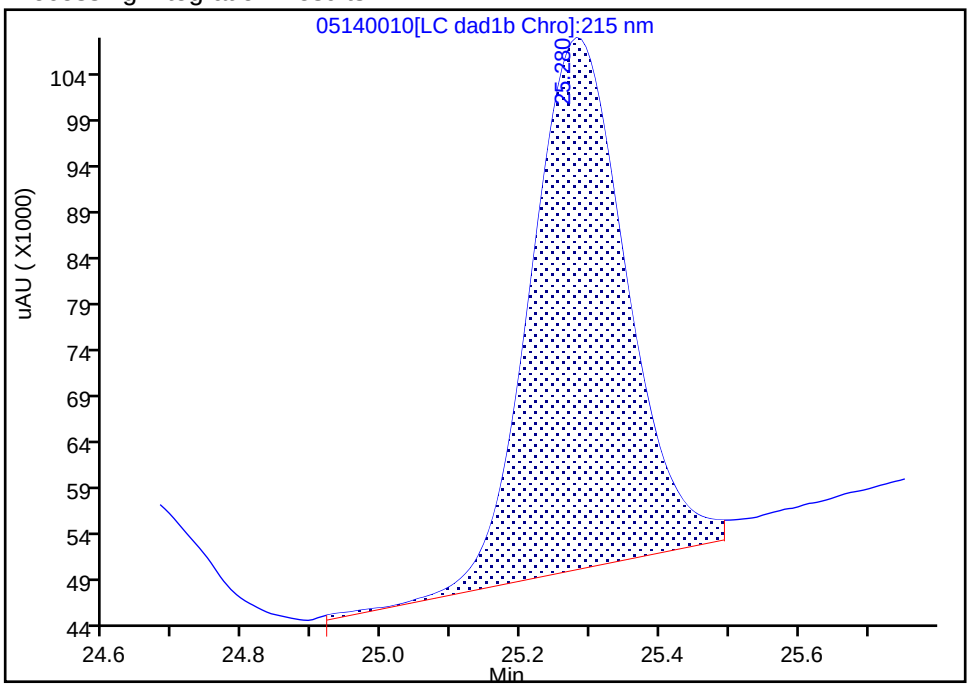
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

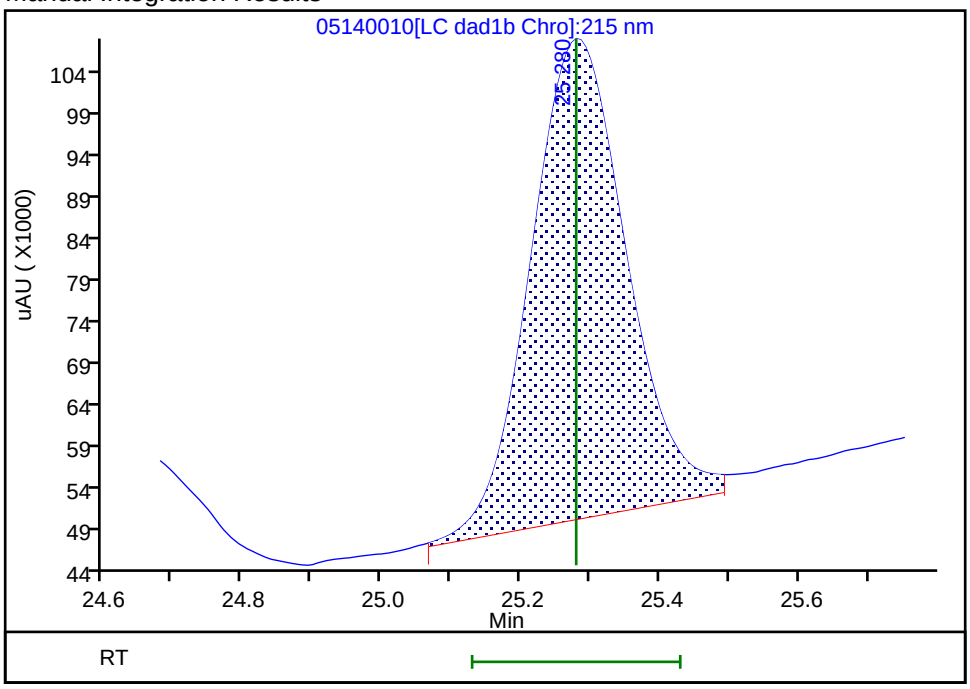
Processing Integration Results

RT: 25.28
Area: 559852
Amount: 4.200524
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 557734
Amount: 4.102237
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:25:18
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140011.D
Lims ID: IC FULL 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-May-2020 18:36:40 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 5
Misc. Info.: 280-0091518-011
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:56 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:20:54

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	4.366	4.366	0.000	106754	0.2500	0.2487	
2 2,4-diamino-6-nitrotoluene	1	4.880	4.880	0.000	74938	0.2500	0.2919	
5 2,4,6-Trinitrophenol	1	6.300	6.300	0.000	48614	0.2500	0.2508	a
6 HMX	1	6.986	6.986	0.000	54065	0.2500	0.2754	
8 RDX	1	9.173	9.173	0.000	62626	0.2500	0.2563	
9 Nitrobenzene	1	12.106	12.106	0.000	106064	0.2510	0.2415	
$ 10 1,2-Dinitrobenzene	1	13.040	13.040	0.000	62375	0.2500	0.2184	M
11 3,5-Dinitroaniline	1	14.886	14.886	0.000	130301	0.2500	0.2629	
12 1,3-Dinitrobenzene	1	15.553	15.553	0.000	172289	0.2505	0.2556	
13 Nitroglycerin	2	15.853	15.853	0.000	330378	2.50	2.61	M
14 o-Nitrotoluene	1	16.533	16.533	0.000	63146	0.2500	0.2313	
15 p-Nitrotoluene	1	16.820	16.820	0.000	59605	0.2505	0.2474	
16 4-Amino-2,6-dinitrotoluene	1	17.146	17.146	0.000	79168	0.2503	0.2293	
17 m-Nitrotoluene	1	17.753	17.753	0.000	71162	0.2503	0.2385	
18 2-Amino-4,6-dinitrotoluene	1	18.046	18.046	0.000	112860	0.2510	0.2426	
19 1,3,5-Trinitrobenzene	1	18.886	18.886	0.000	118709	0.2505	0.2513	
20 2,6-Dinitrotoluene	1	19.806	19.806	0.000	74317	0.2510	0.2416	
21 2,4-Dinitrotoluene	1	20.293	20.293	0.000	153249	0.2510	0.2394	
22 Tetryl	1	23.553	23.553	0.000	92236	0.2505	0.2502	
23 2,4,6-Trinitrotoluene	1	24.653	24.653	0.000	100168	0.2510	0.2416	
24 PETN	2	25.280	25.280	0.000	338241	2.50	2.40	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00026	Amount Added:	12.50	Units: uL

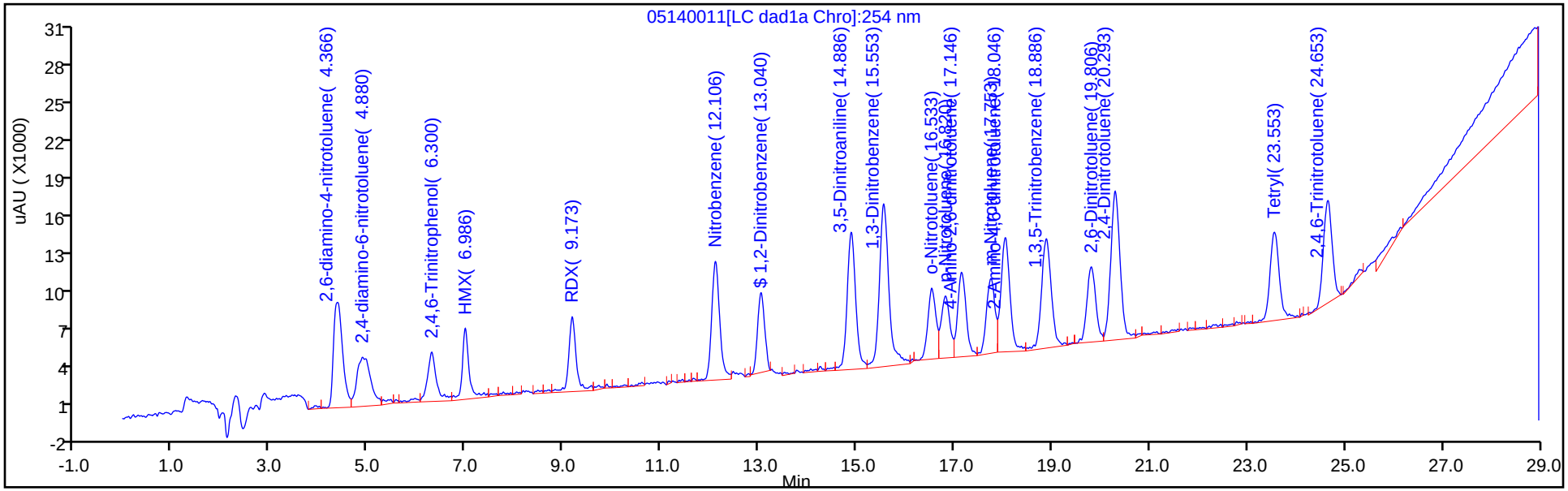
Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

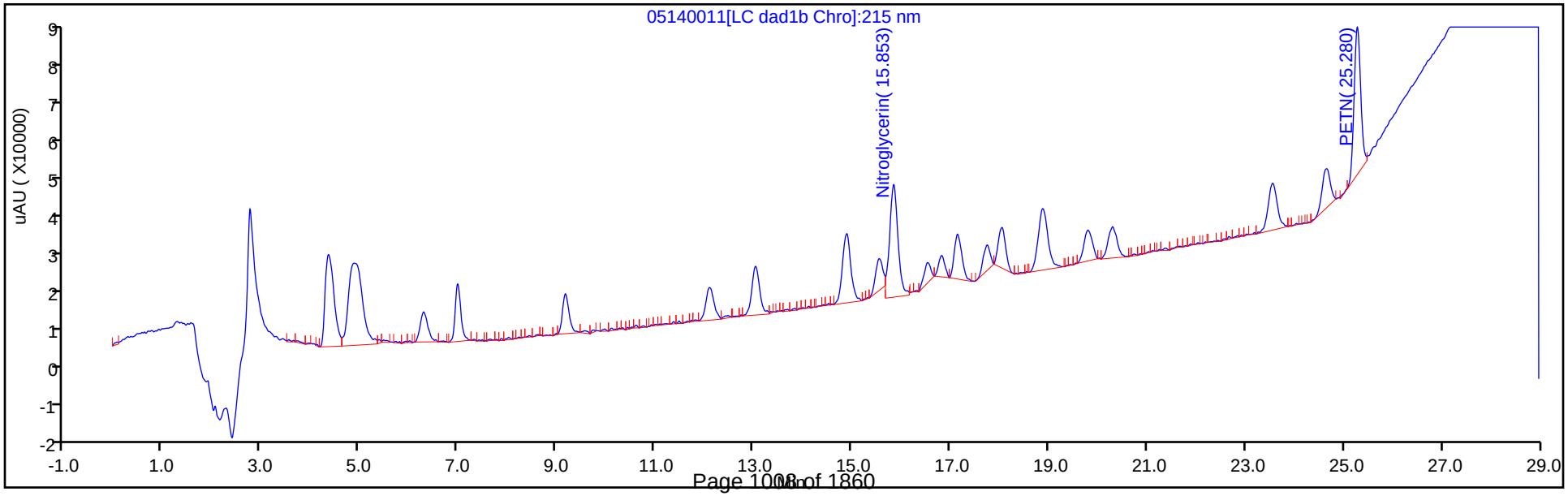
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d

Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 5			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

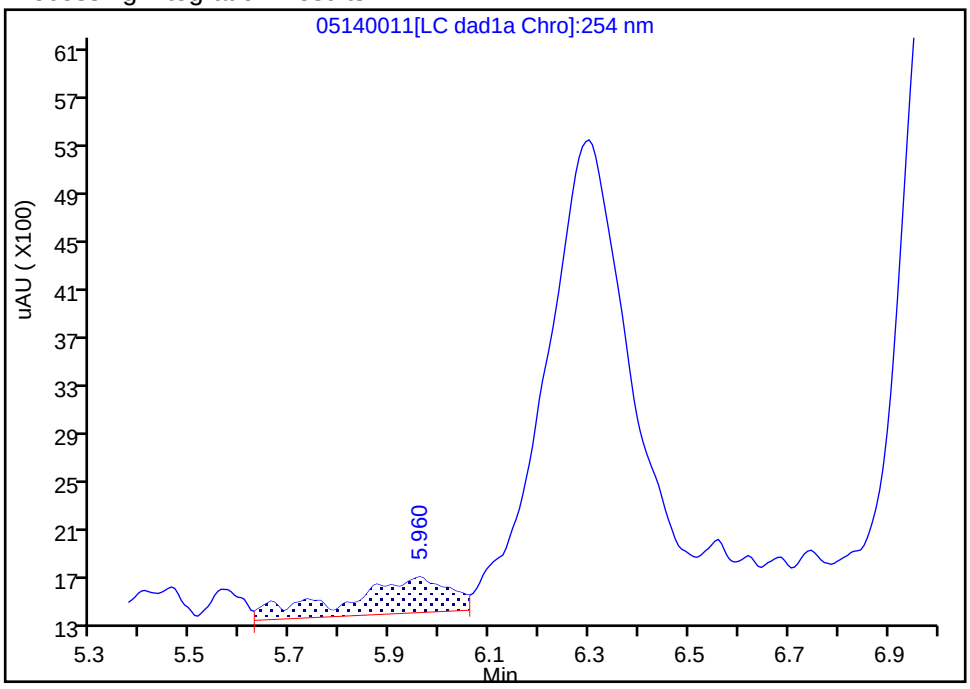
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

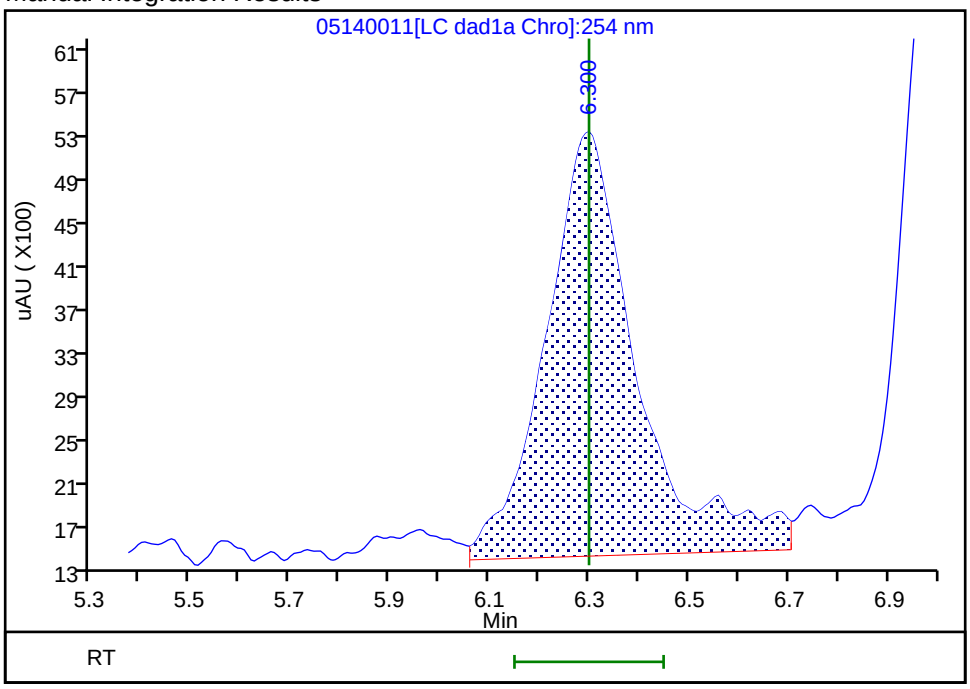
Processing Integration Results

RT: 5.96
Area: 4251
Amount: 0.036696
Amount Units: ug/ml



Manual Integration Results

RT: 6.30
Area: 48614
Amount: 0.250833
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:52
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

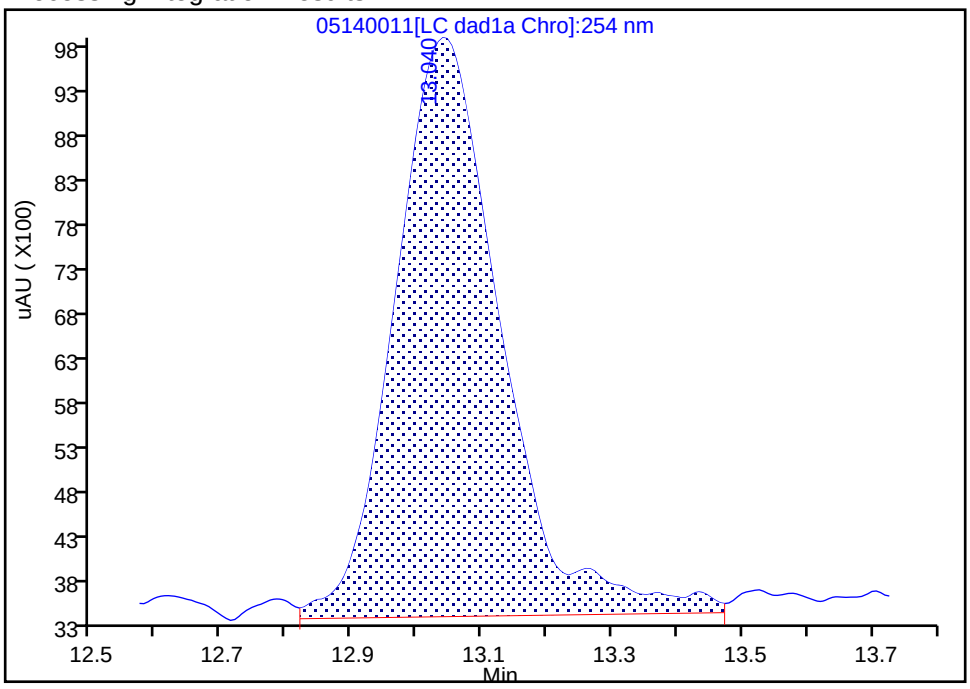
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

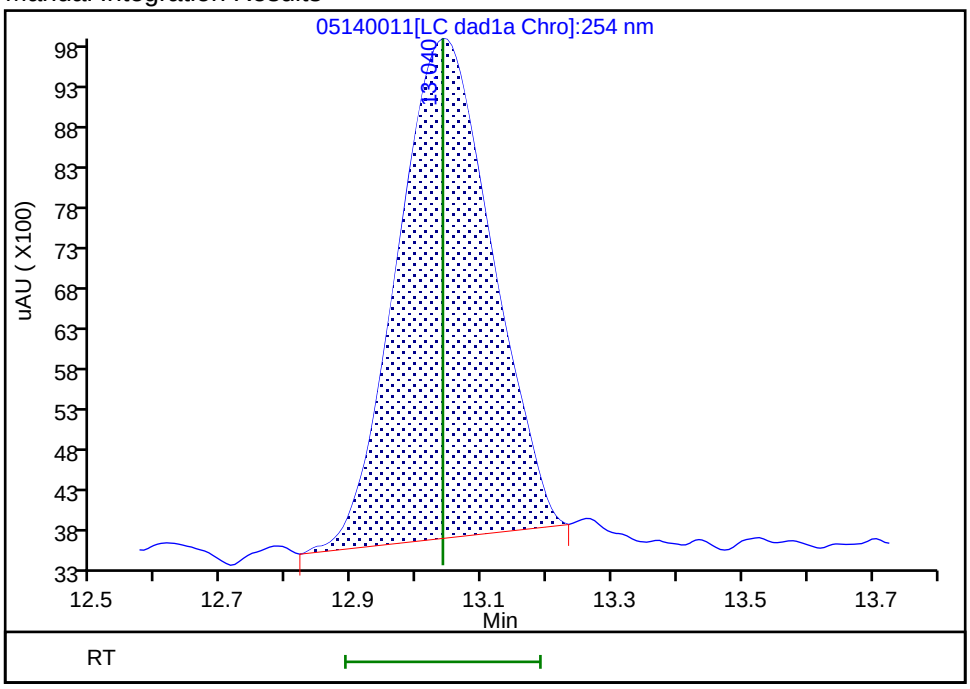
Processing Integration Results

RT: 13.04
Area: 73345
Amount: 0.234804
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 62375
Amount: 0.218362
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:01

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

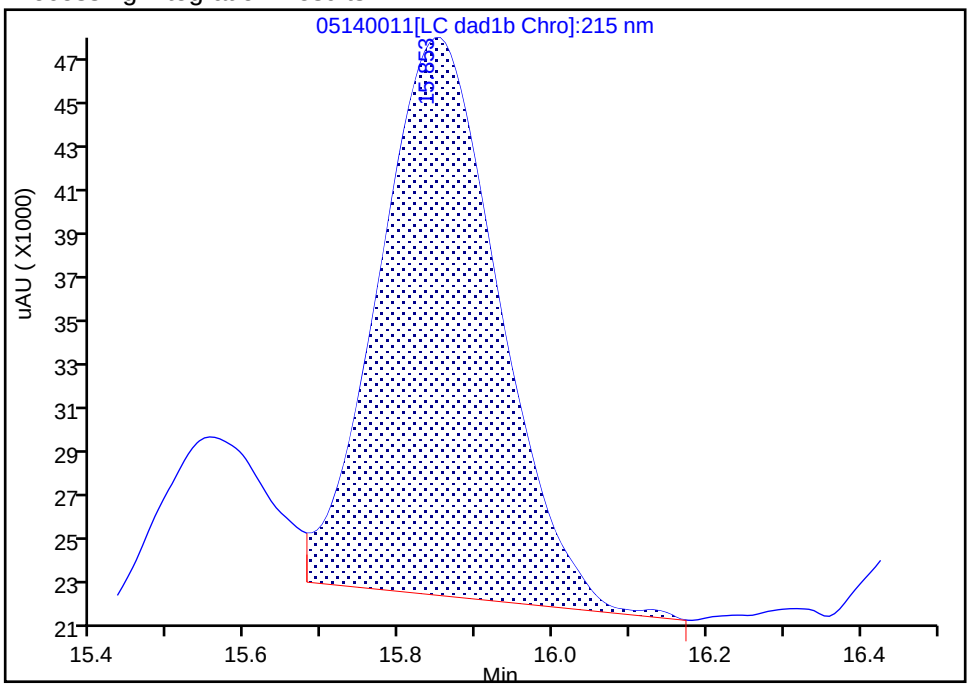
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

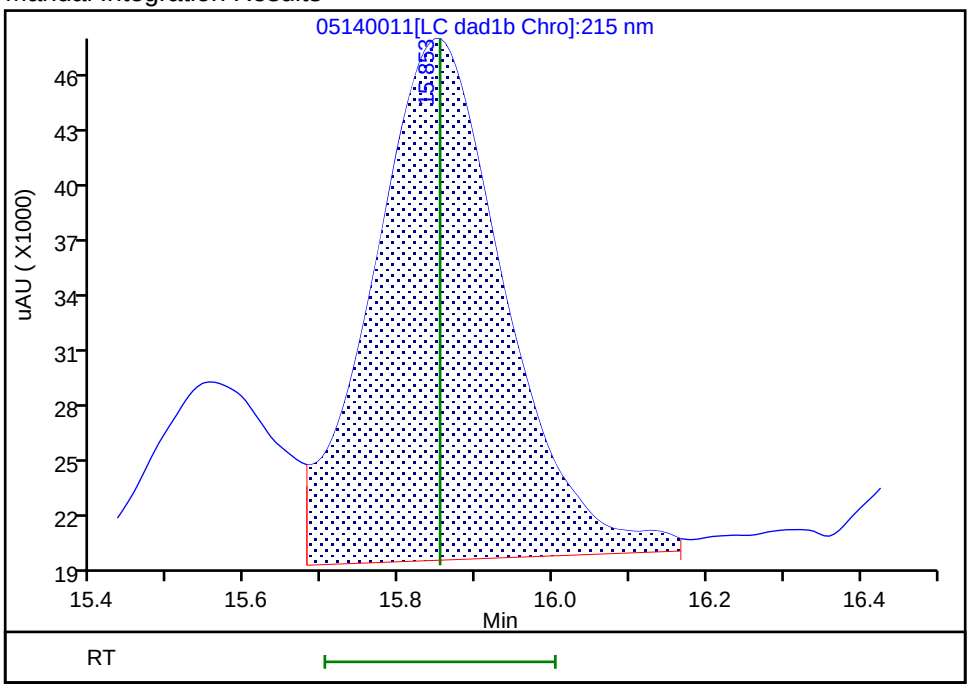
Processing Integration Results

RT: 15.85
Area: 276053
Amount: 2.464482
Amount Units: ug/ml



Manual Integration Results

RT: 15.85
Area: 330378
Amount: 2.605436
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:11

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

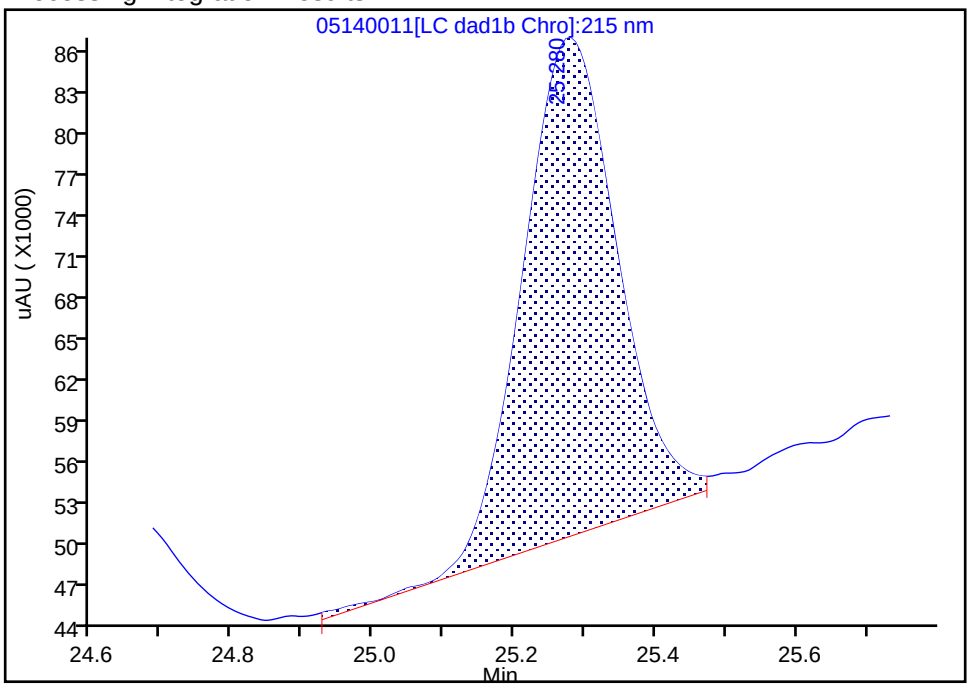
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d
Injection Date: 14-May-2020 18:36:40 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 5
Client ID:
Operator ID: CB ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

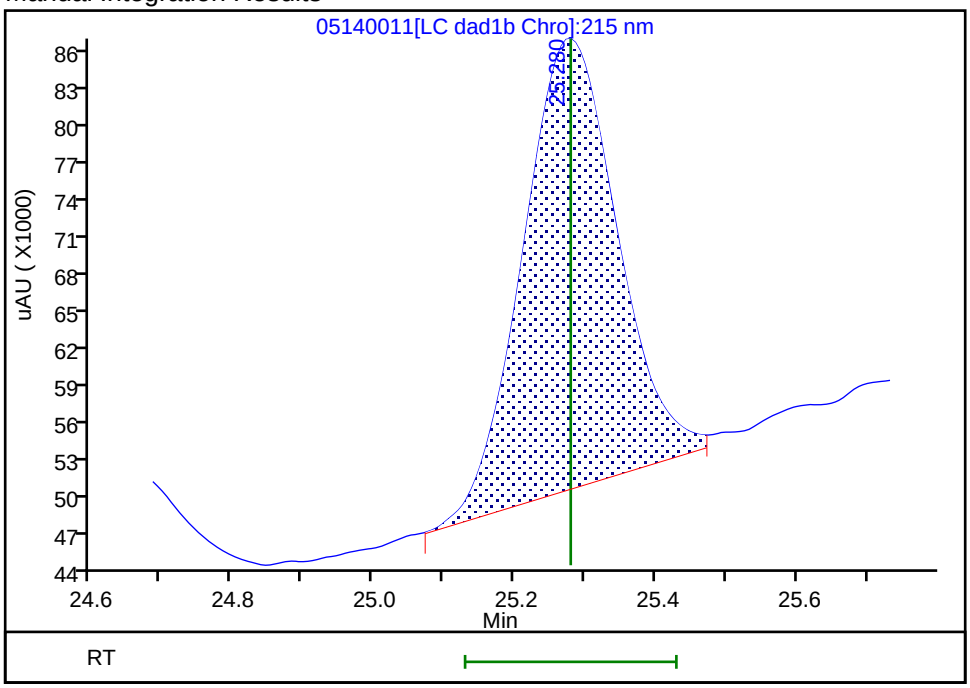
Processing Integration Results

RT: 25.28
Area: 339815
Amount: 2.534573
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 338241
Amount: 2.404524
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:25:08
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140012.D
Lims ID: IC FULL 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-May-2020 19:11:37 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 4
Misc. Info.: 280-0091518-012
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:57 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:21:52

	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	4.361	4.366	-0.005	44739	0.1000	0.1042	
2	2,4-diamino-6-nitrotoluene	1	4.941	4.880	0.061	33889	0.1000	0.1193	
5	2,4,6-Trinitrophenol	1	6.308	6.300	0.008	23170	0.1000	0.1195	a
6	HMX	1	6.994	6.986	0.008	24294	0.1000	0.1072	
8	RDX	1	9.181	9.173	0.008	27233	0.1000	0.1114	
9	Nitrobenzene	1	12.114	12.106	0.008	42679	0.1004	0.0972	
$ 10	1,2-Dinitrobenzene	1	13.048	13.040	0.008	30683	0.1000	0.1040	
11	3,5-Dinitroaniline	1	14.901	14.886	0.015	51716	0.1000	0.1009	M
12	1,3-Dinitrobenzene	1	15.554	15.553	0.001	69012	0.1002	0.1024	M
13	Nitroglycerin	2	15.848	15.853	-0.005	141489	1.00	1.12	M
14	o-Nitrotoluene	1	16.534	16.533	0.001	29062	0.1000	0.1065	M
15	p-Nitrotoluene	1	16.828	16.820	0.008	25956	0.1002	0.1078	M
16	4-Amino-2,6-dinitrotoluene	1	17.148	17.146	0.002	32448	0.1001	0.0940	M
17	m-Nitrotoluene	1	17.741	17.753	-0.012	30586	0.1001	0.1025	M
18	2-Amino-4,6-dinitrotoluene	1	18.054	18.046	0.008	47526	0.1004	0.1022	M
19	1,3,5-Trinitrobenzene	1	18.881	18.886	-0.005	51028	0.1002	0.1080	M
20	2,6-Dinitrotoluene	1	19.794	19.806	-0.012	34659	0.1004	0.1045	M
21	2,4-Dinitrotoluene	1	20.288	20.293	-0.005	67500	0.1004	0.1055	M
22	Tetryl	1	23.548	23.553	-0.005	38547	0.1002	0.1046	
23	2,4,6-Trinitrotoluene	1	24.654	24.653	0.001	43208	0.1004	0.0997	
24	PETN	2	25.281	25.280	0.001	132172	1.00	0.8106	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	10.00	Units: uL
8330_ADDs_00026	Amount Added:	5.00	Units: uL

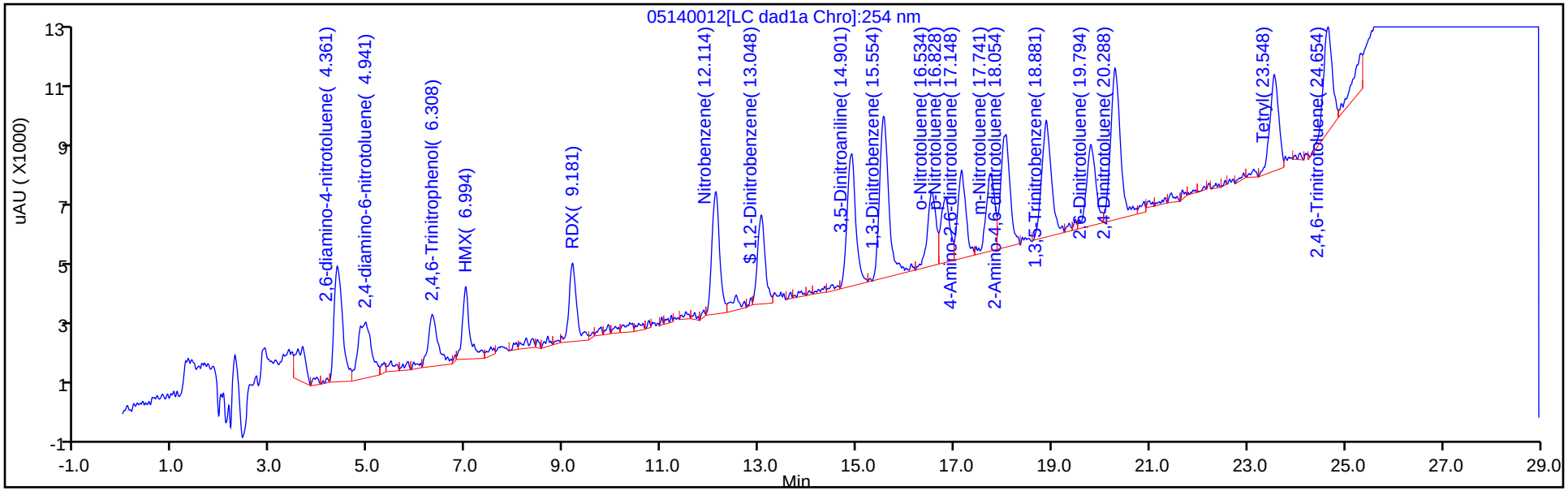
Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

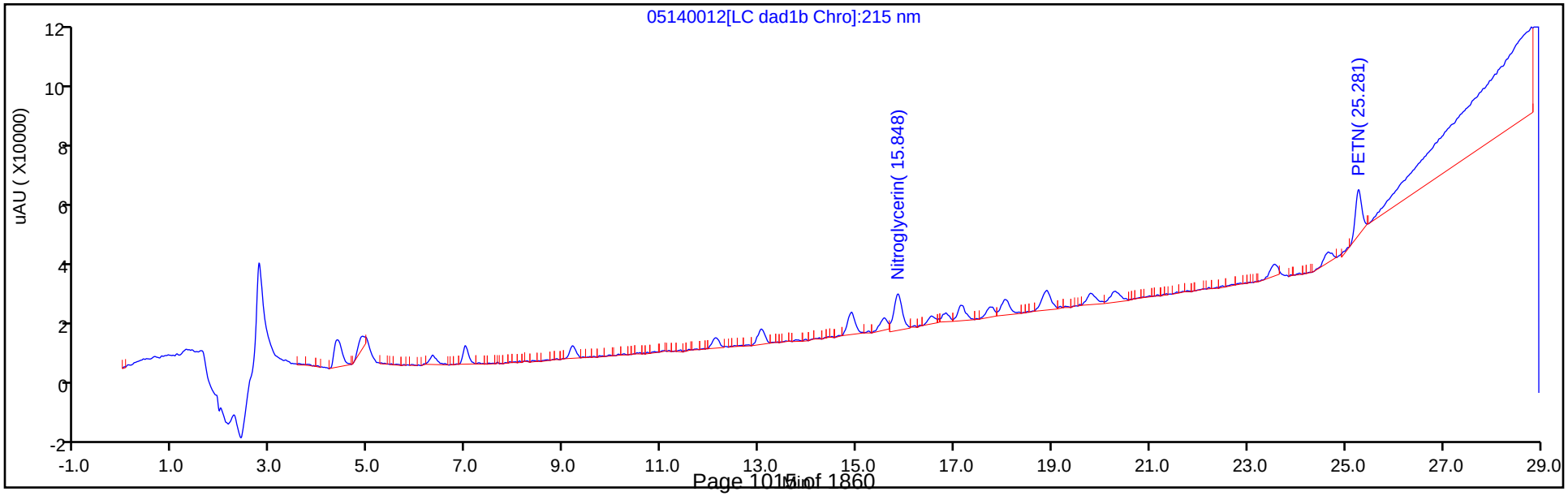
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d

Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 4			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

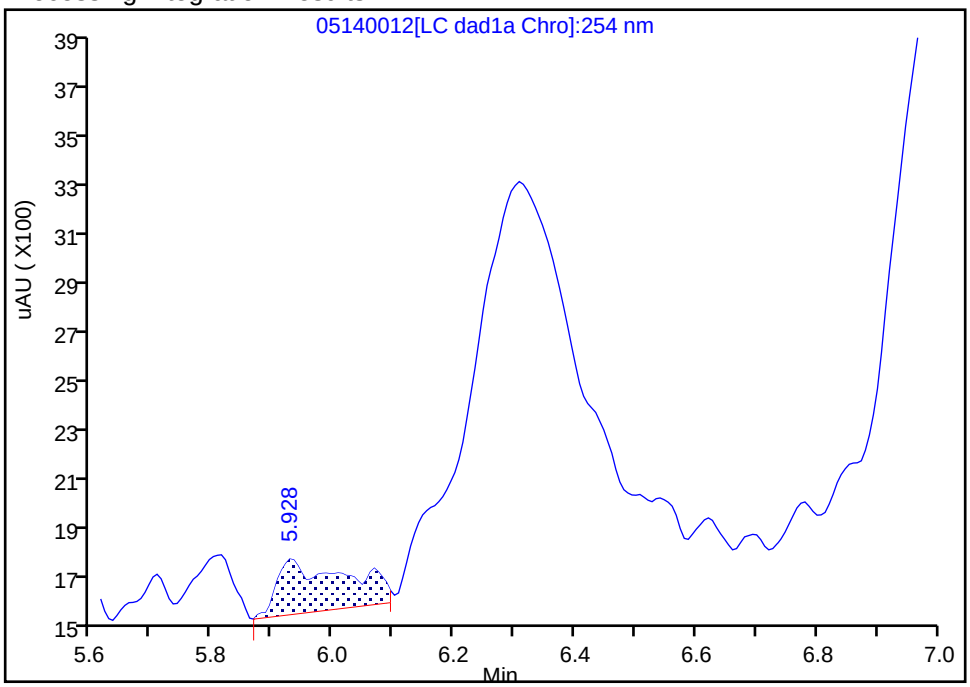
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

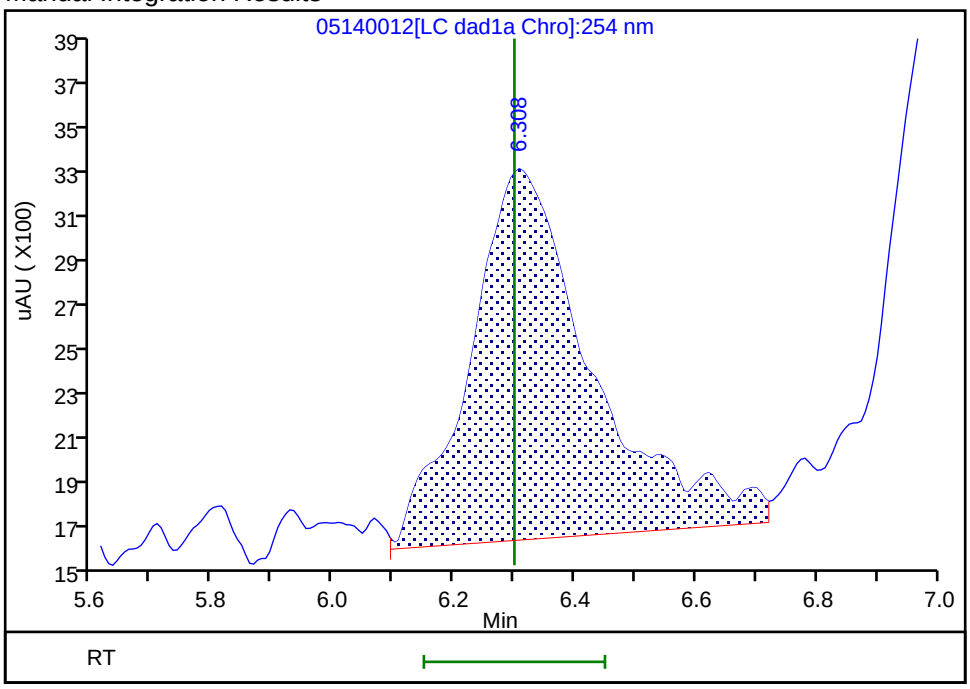
Processing Integration Results

RT: 5.93
Area: 1700
Amount: 0.010784
Amount Units: ug/ml



Manual Integration Results

RT: 6.31
Area: 23170
Amount: 0.119550
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:21
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

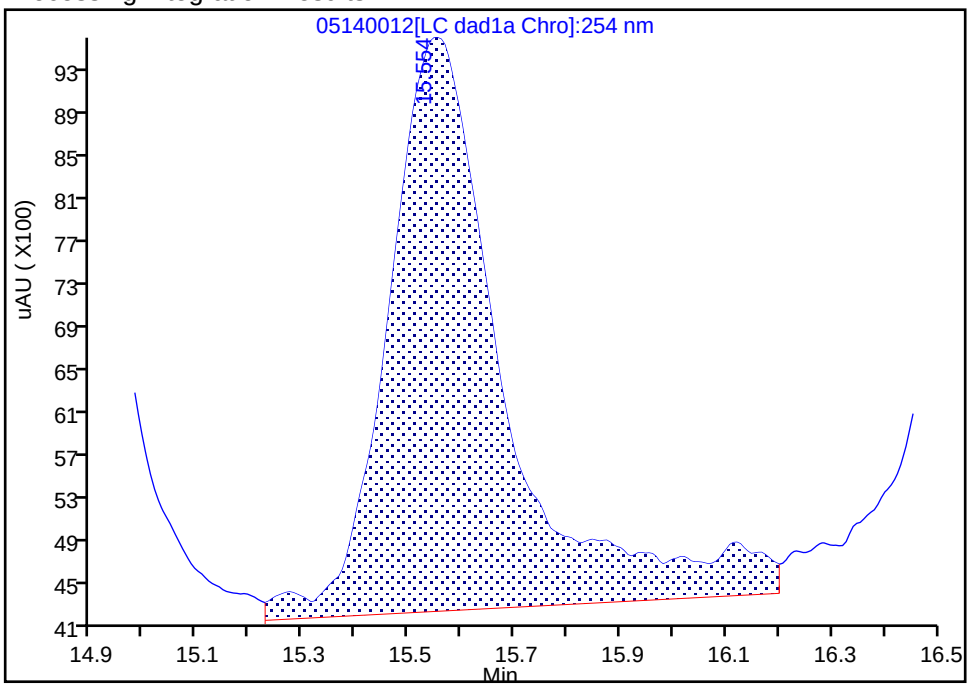
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

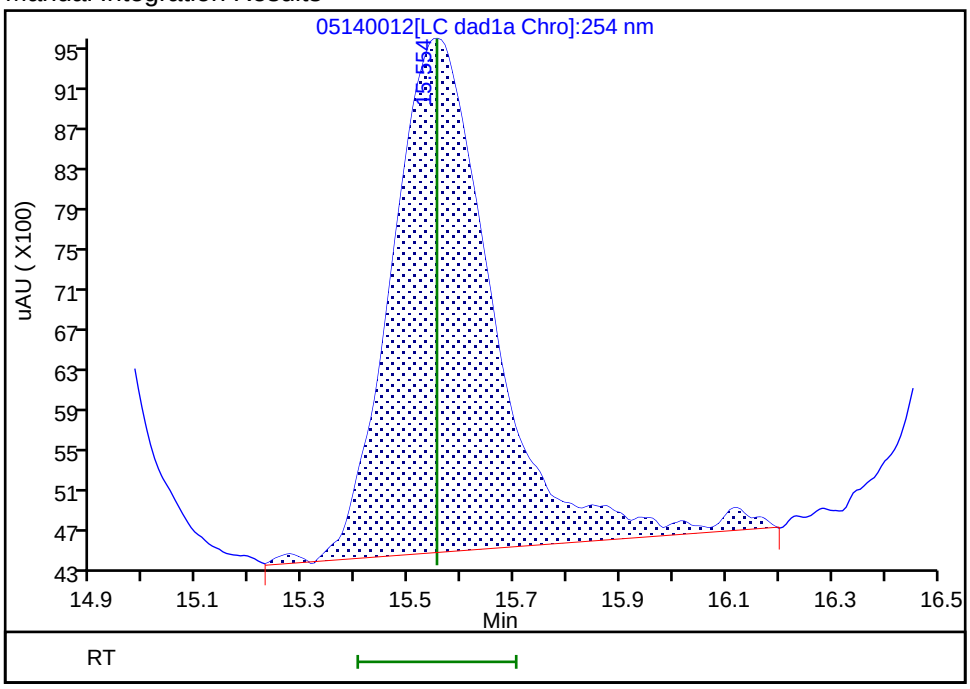
Processing Integration Results

RT: 15.55
Area: 81626
Amount: 0.119366
Amount Units: ug/ml



Manual Integration Results

RT: 15.55
Area: 69012
Amount: 0.102363
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

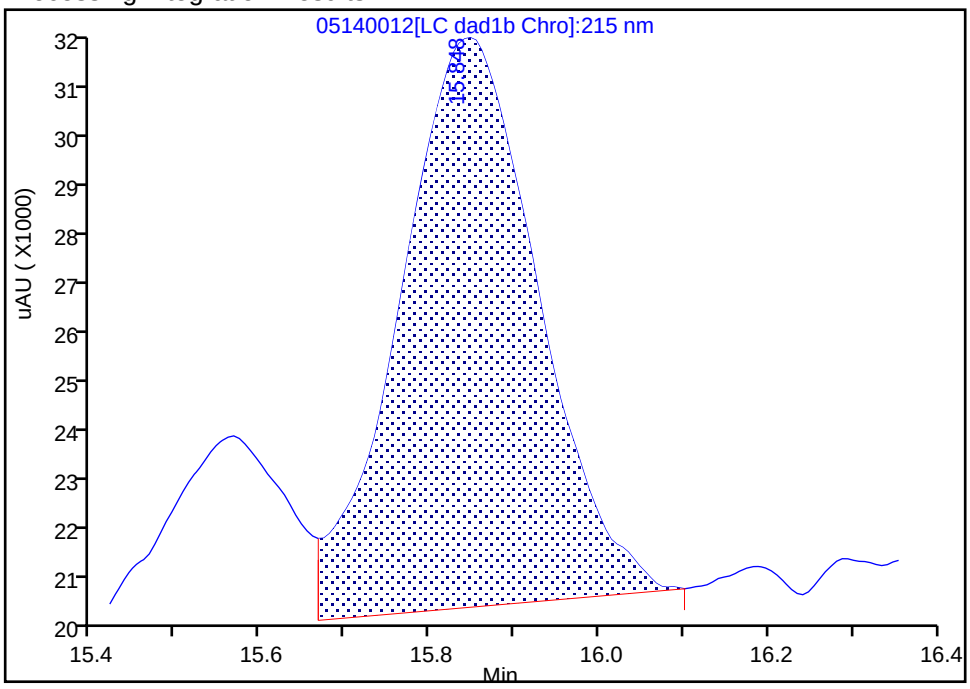
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

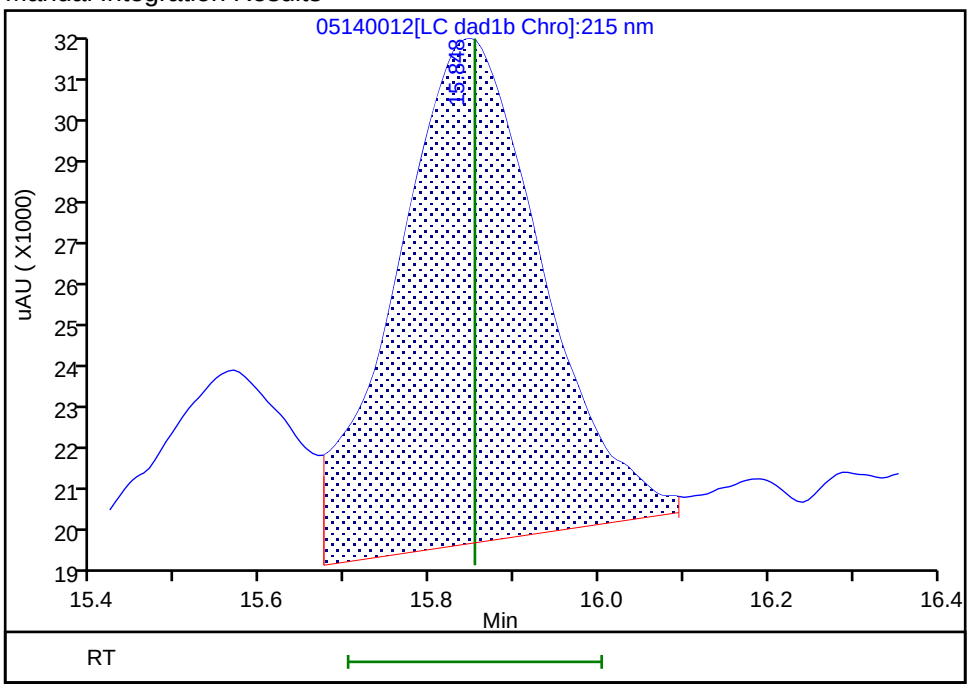
Processing Integration Results

RT: 15.85
Area: 125471
Amount: 1.093631
Amount Units: ug/ml



Manual Integration Results

RT: 15.85
Area: 141489
Amount: 1.115815
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

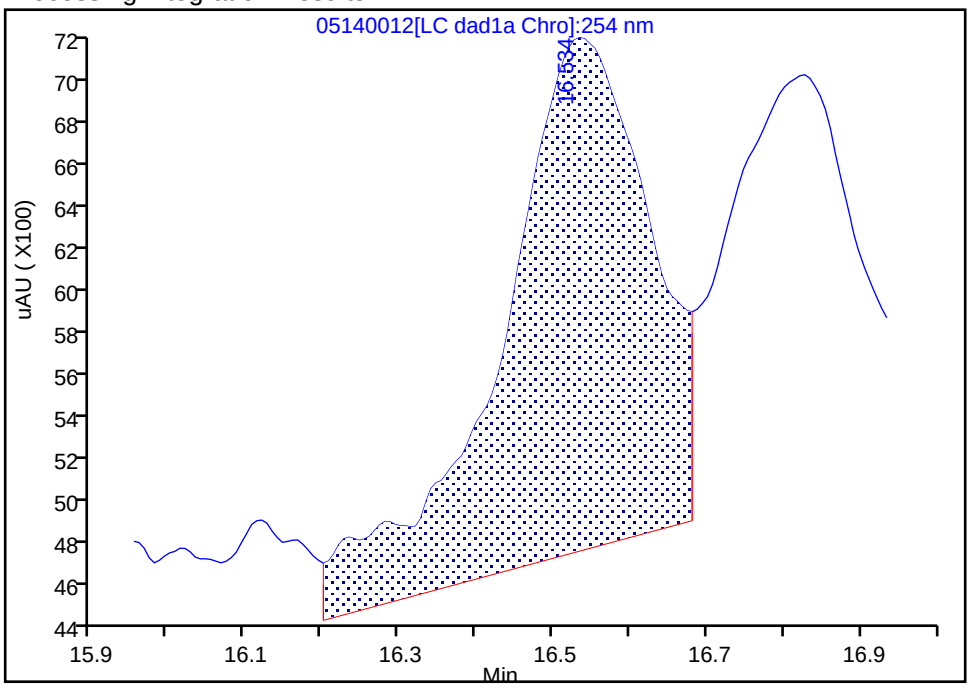
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

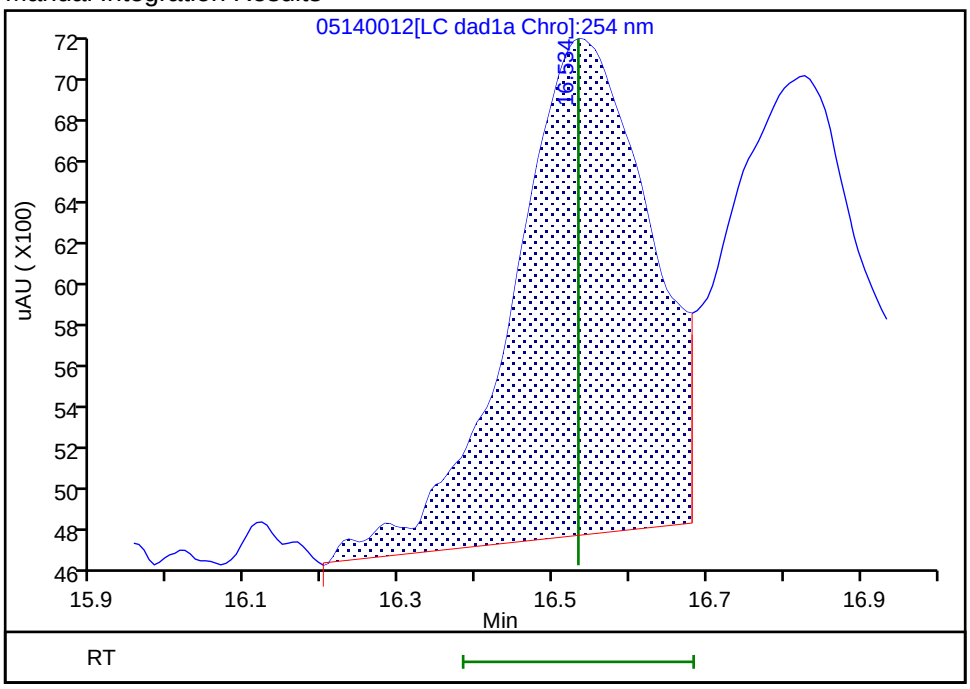
Processing Integration Results

RT: 16.53
Area: 33080
Amount: 0.118510
Amount Units: ug/ml



Manual Integration Results

RT: 16.53
Area: 29062
Amount: 0.106468
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

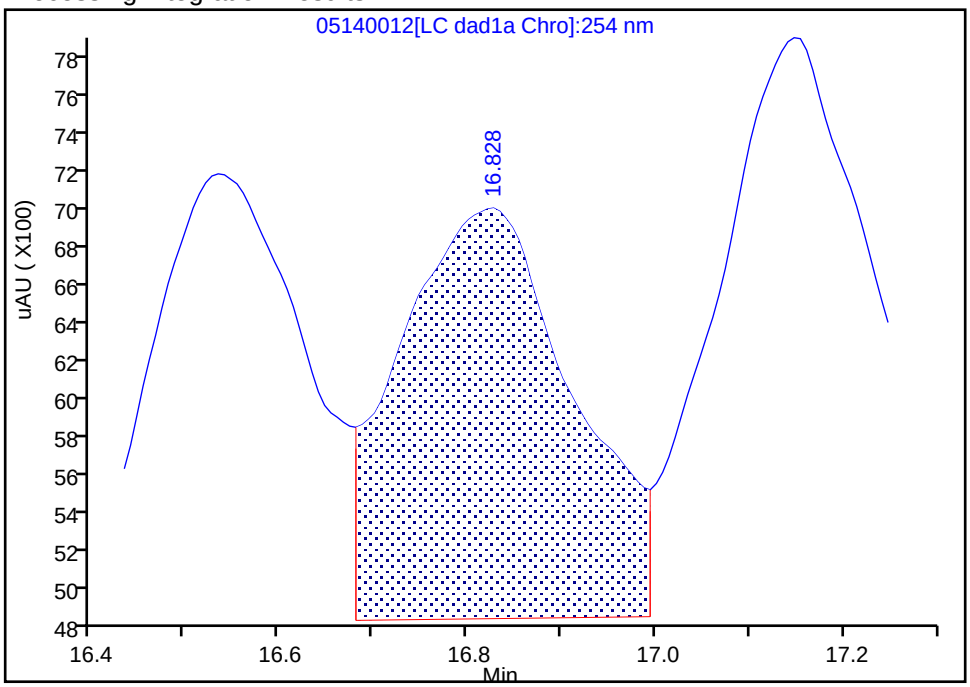
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

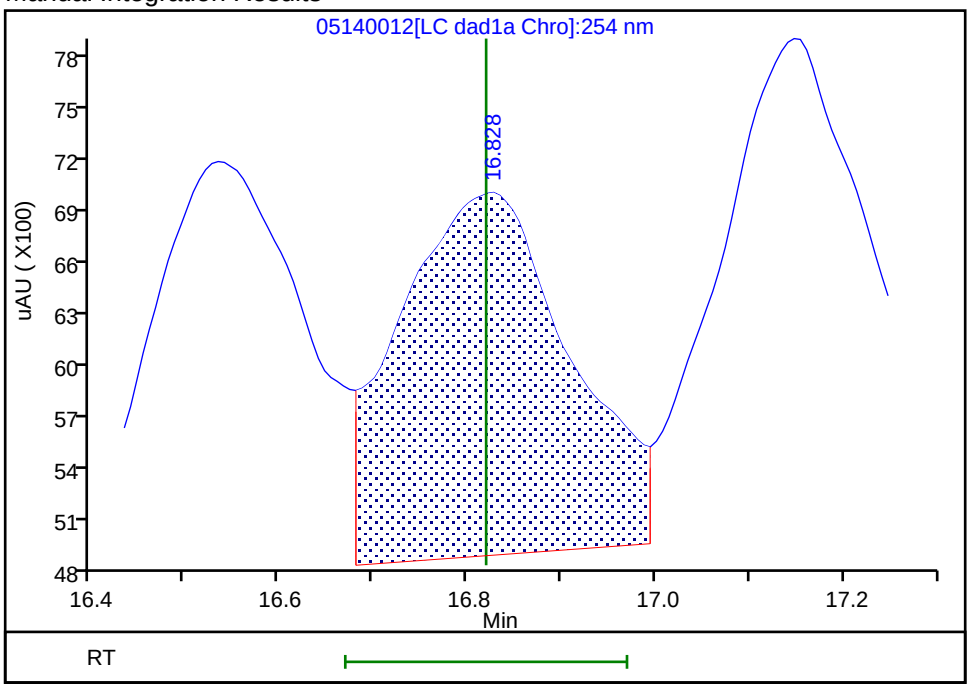
Processing Integration Results

RT: 16.83
Area: 26887
Amount: 0.106277
Amount Units: ug/ml



Manual Integration Results

RT: 16.83
Area: 25956
Amount: 0.107754
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

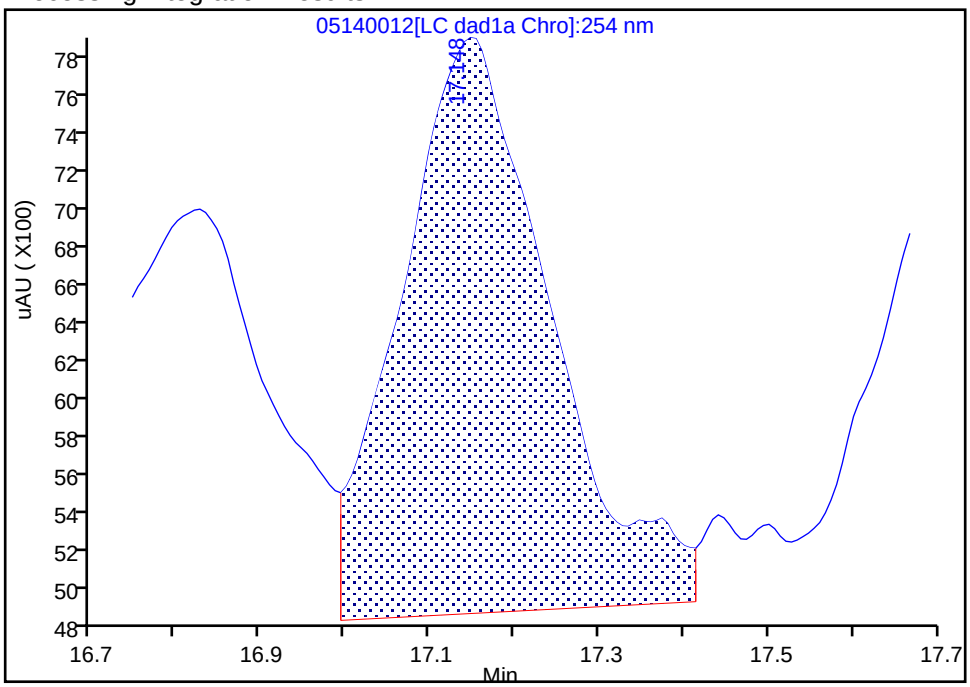
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

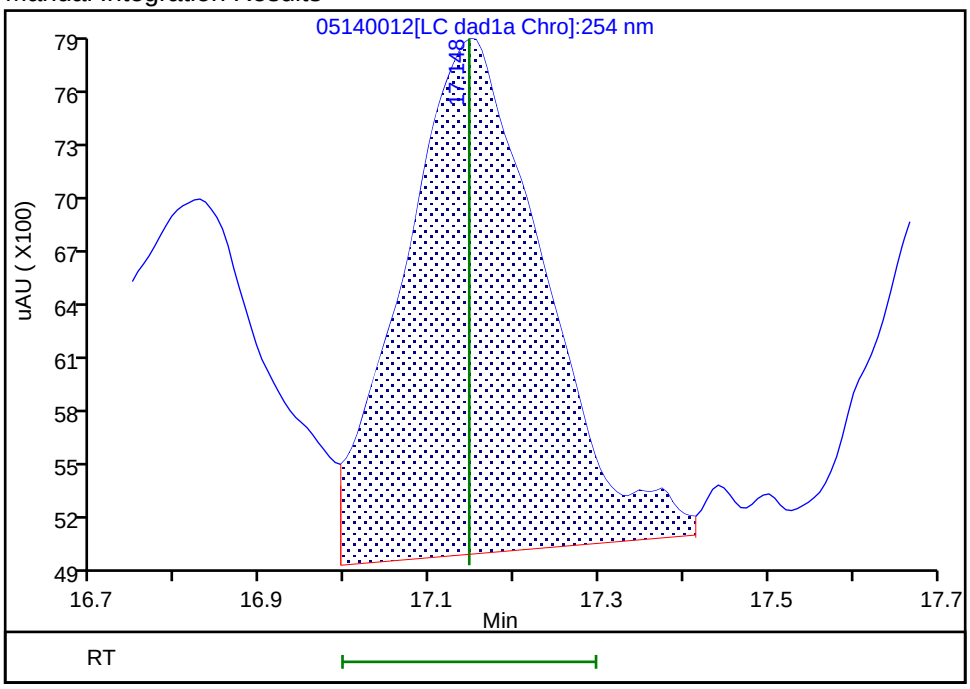
Processing Integration Results

RT: 17.15
Area: 35863
Amount: 0.102237
Amount Units: ug/ml



Manual Integration Results

RT: 17.15
Area: 32448
Amount: 0.093988
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

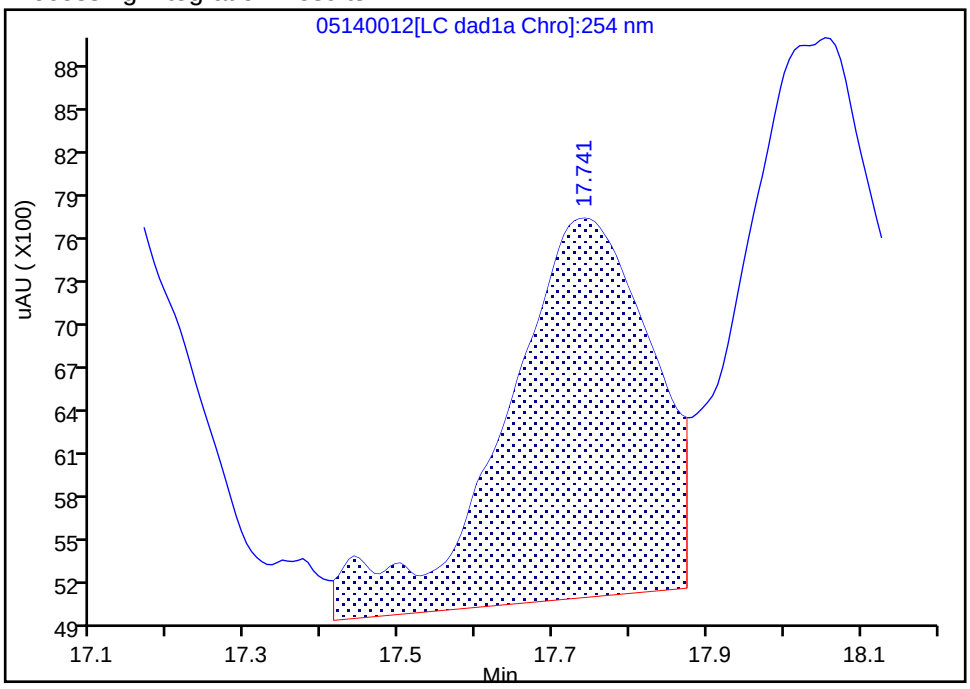
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

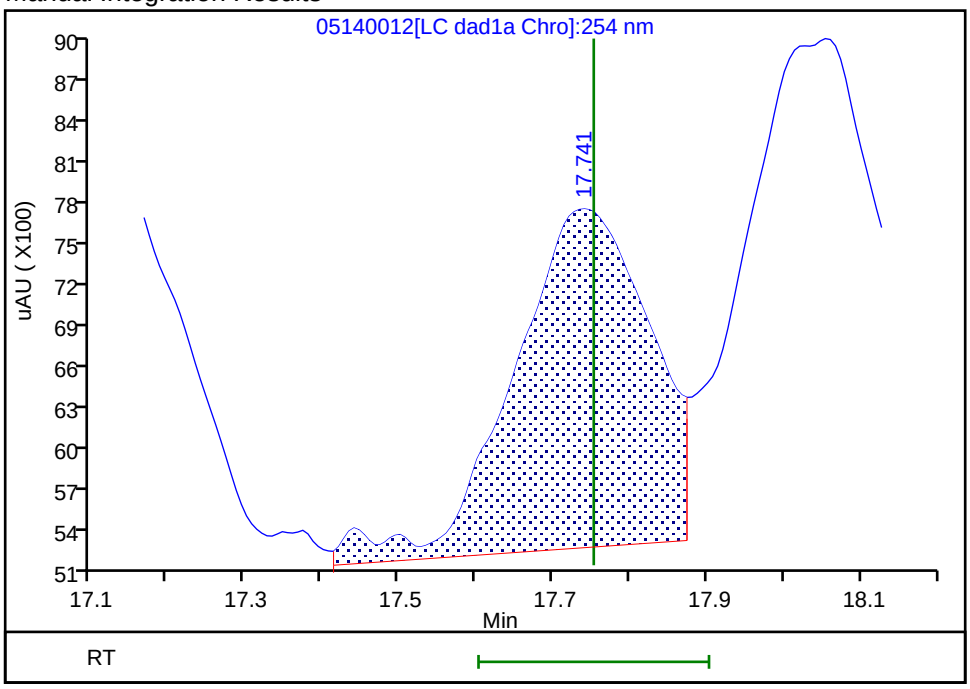
Processing Integration Results

RT: 17.74
Area: 34712
Amount: 0.117045
Amount Units: ug/ml



Manual Integration Results

RT: 17.74
Area: 30586
Amount: 0.102525
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

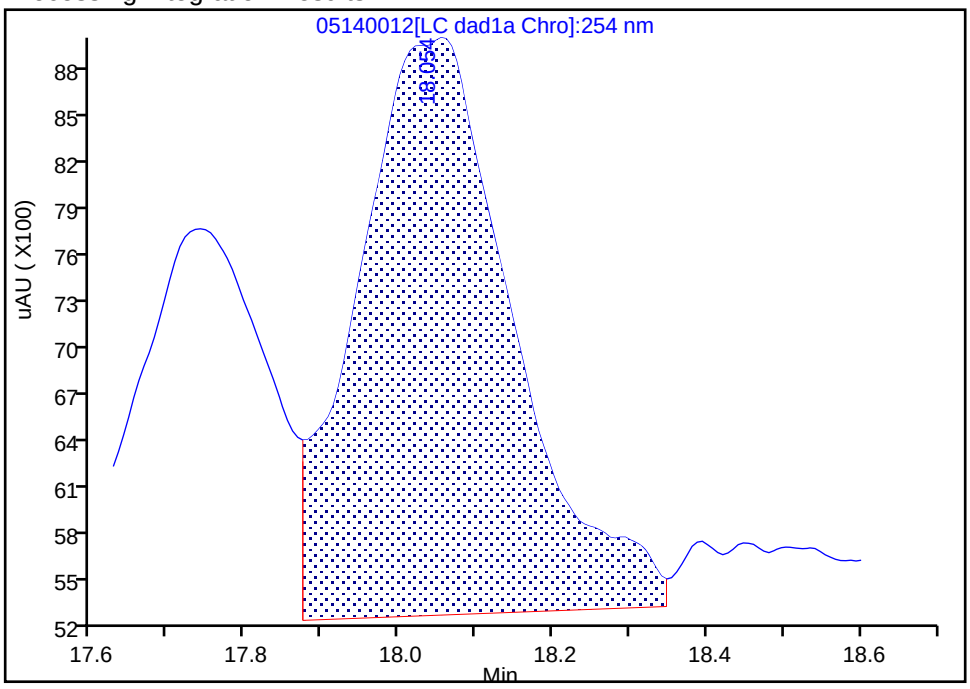
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

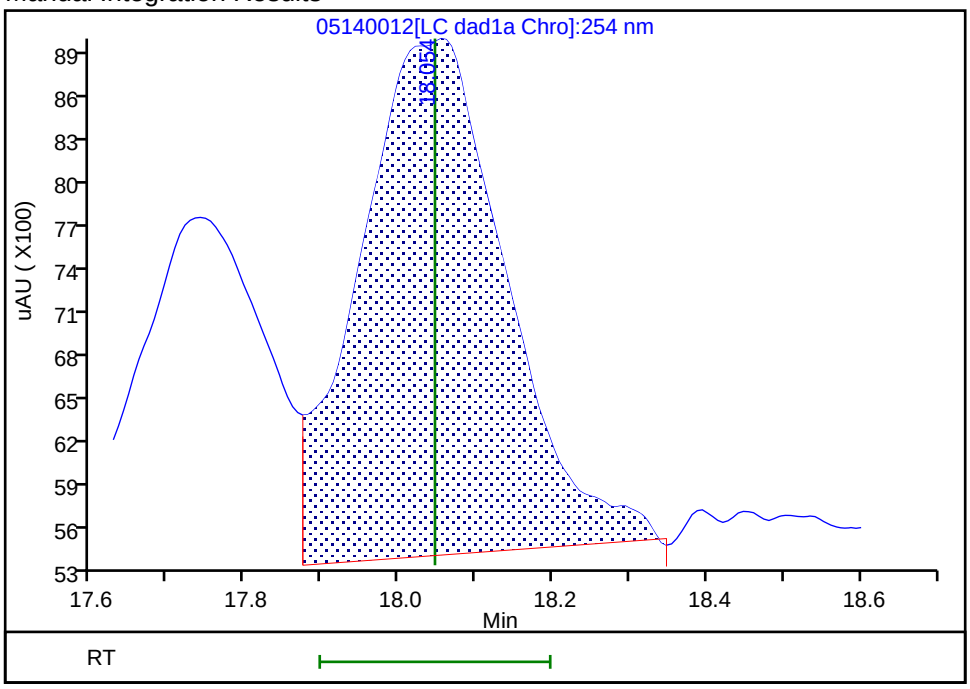
Processing Integration Results

RT: 18.05
Area: 52538
Amount: 0.110599
Amount Units: ug/ml



Manual Integration Results

RT: 18.05
Area: 47526
Amount: 0.102160
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

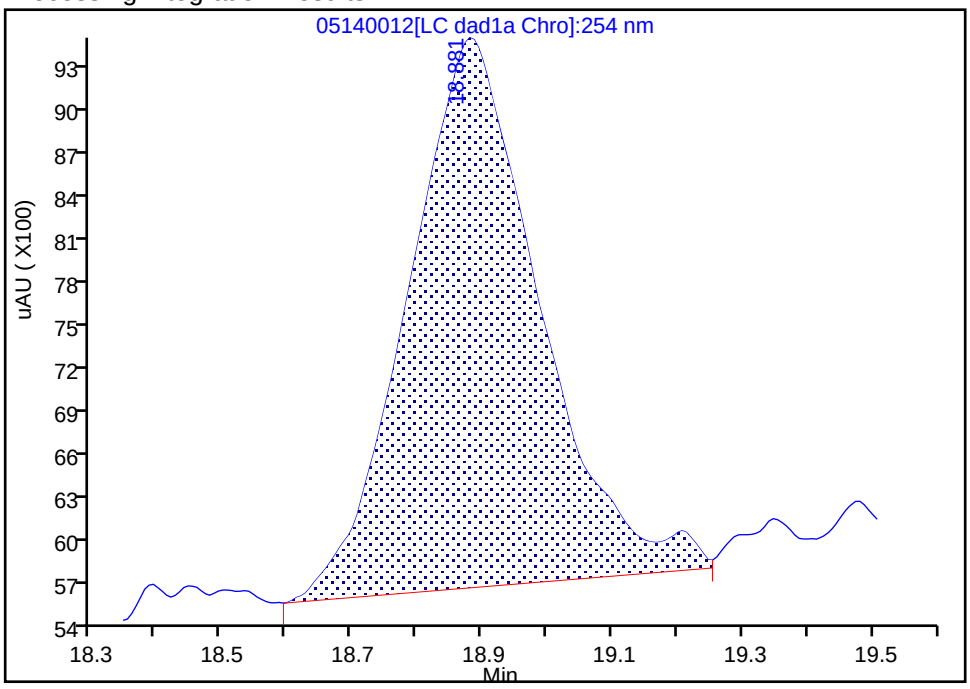
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

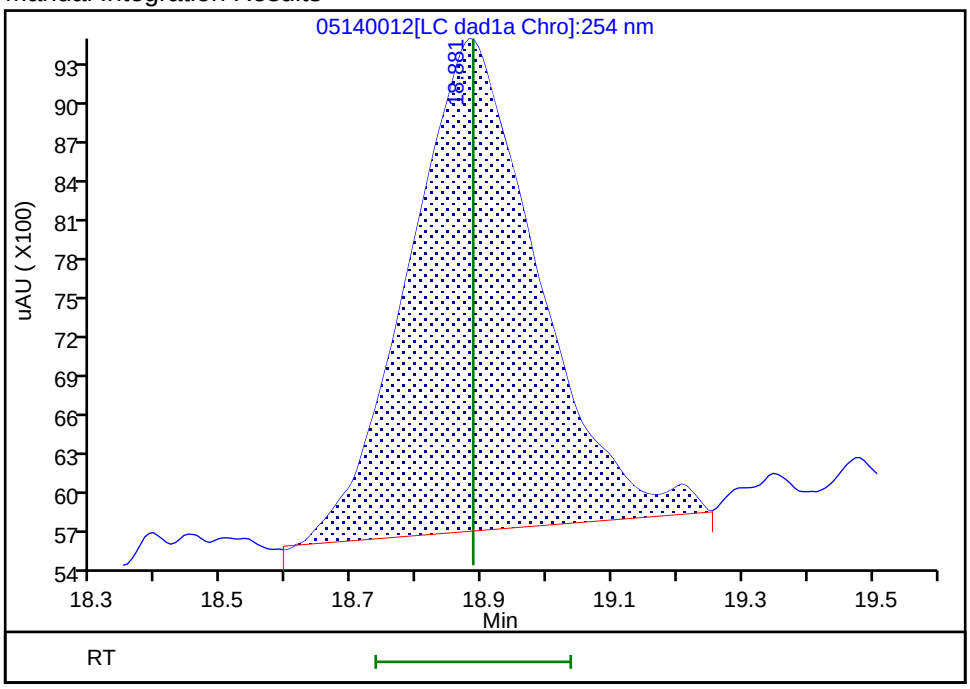
Processing Integration Results

RT: 18.88
Area: 52433
Amount: 0.109995
Amount Units: ug/ml



Manual Integration Results

RT: 18.88
Area: 51028
Amount: 0.108007
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

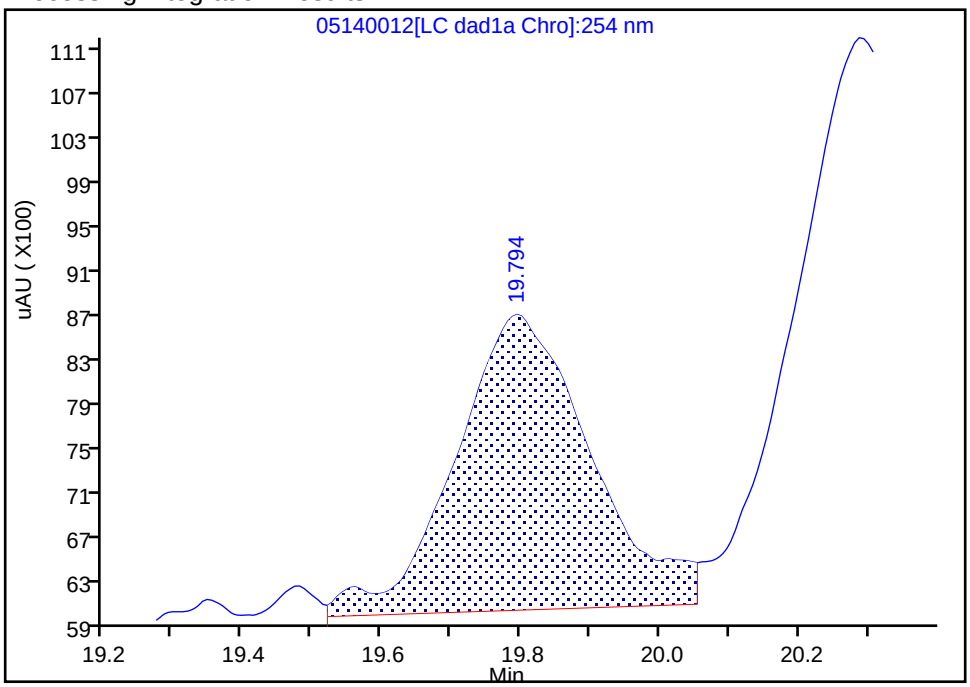
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

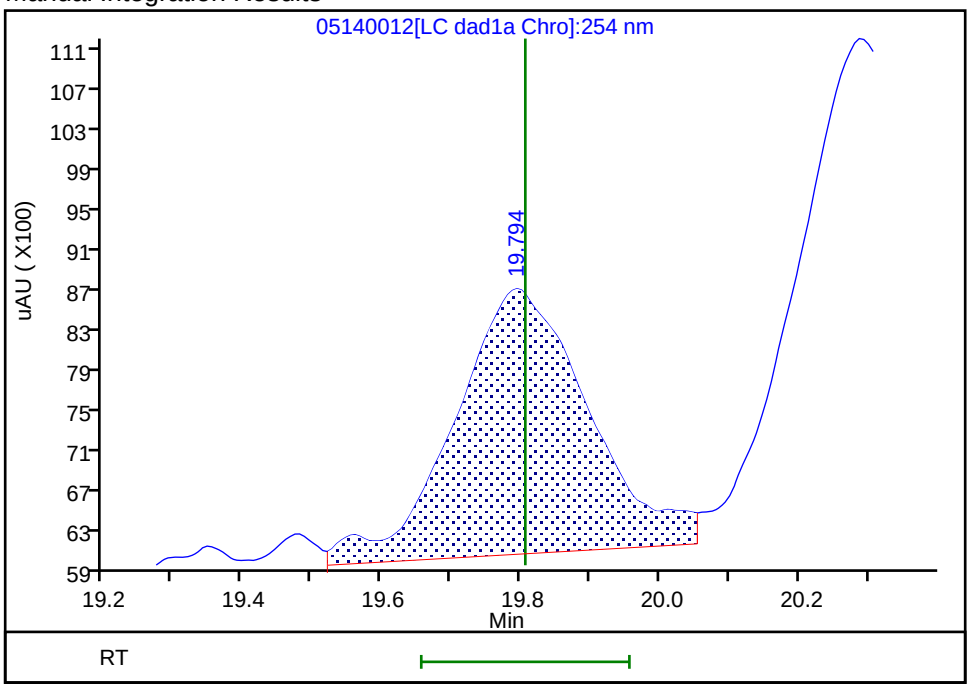
Processing Integration Results

RT: 19.79
Area: 35123
Amount: 0.102517
Amount Units: ug/ml



Manual Integration Results

RT: 19.79
Area: 34659
Amount: 0.104499
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

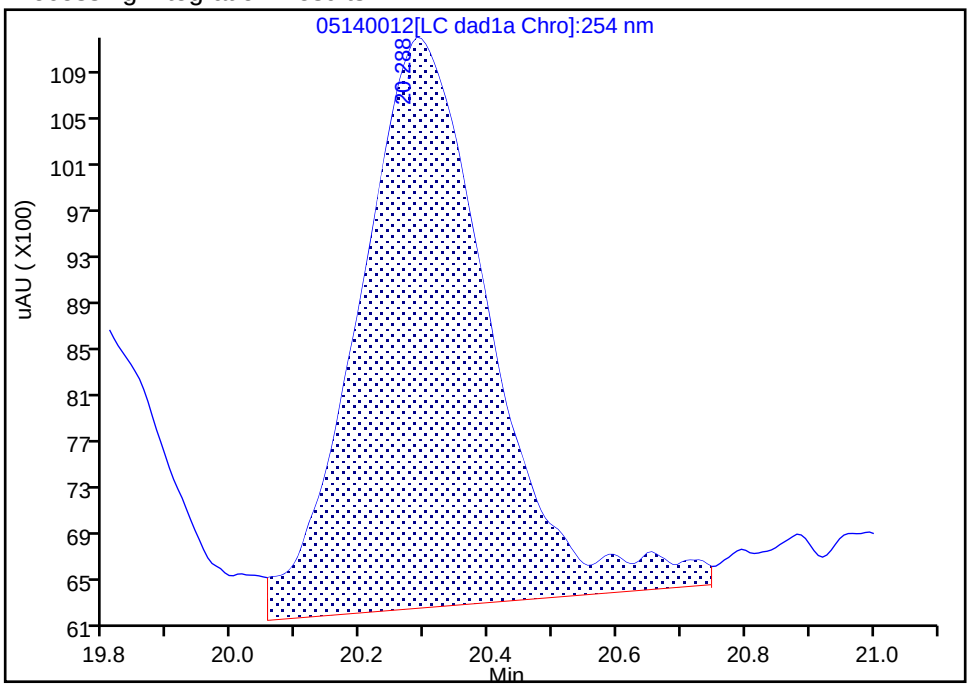
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

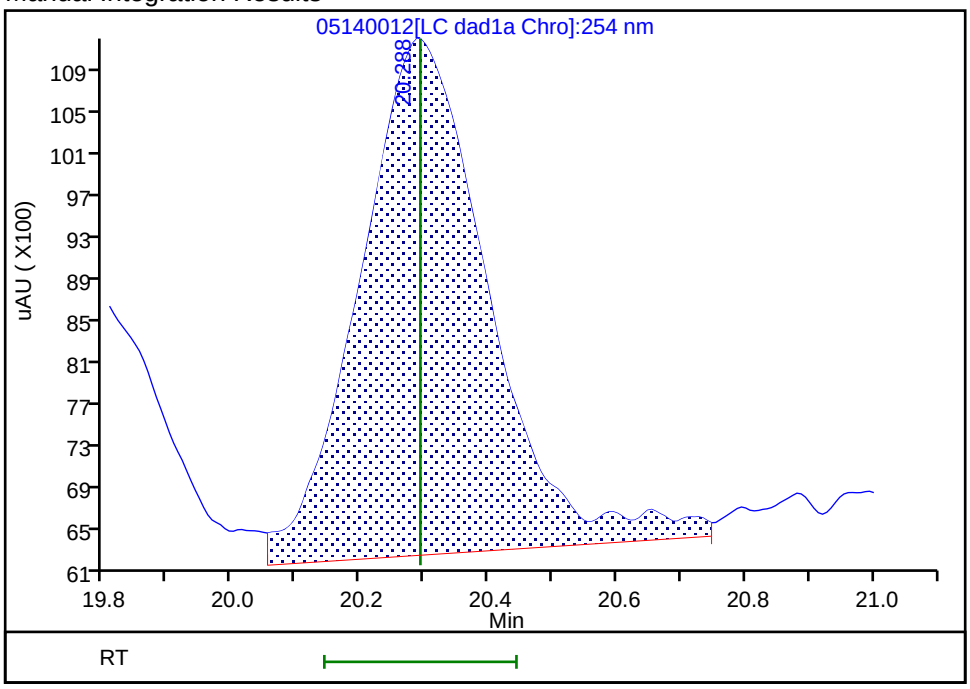
Processing Integration Results

RT: 20.29
Area: 69455
Amount: 0.105715
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 67500
Amount: 0.105450
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

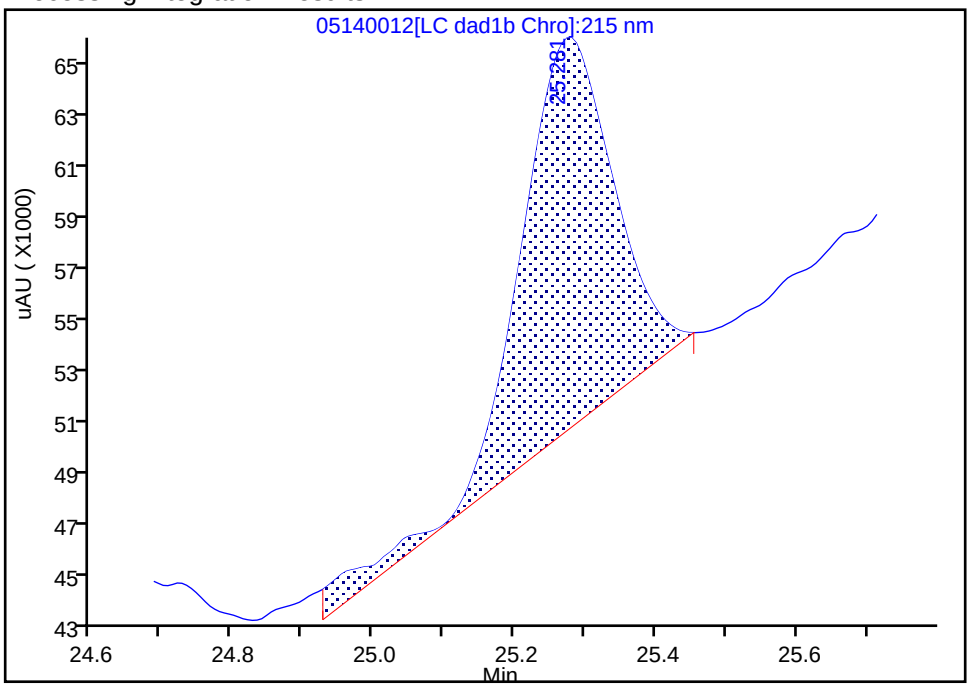
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d
Injection Date: 14-May-2020 19:11:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 4
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

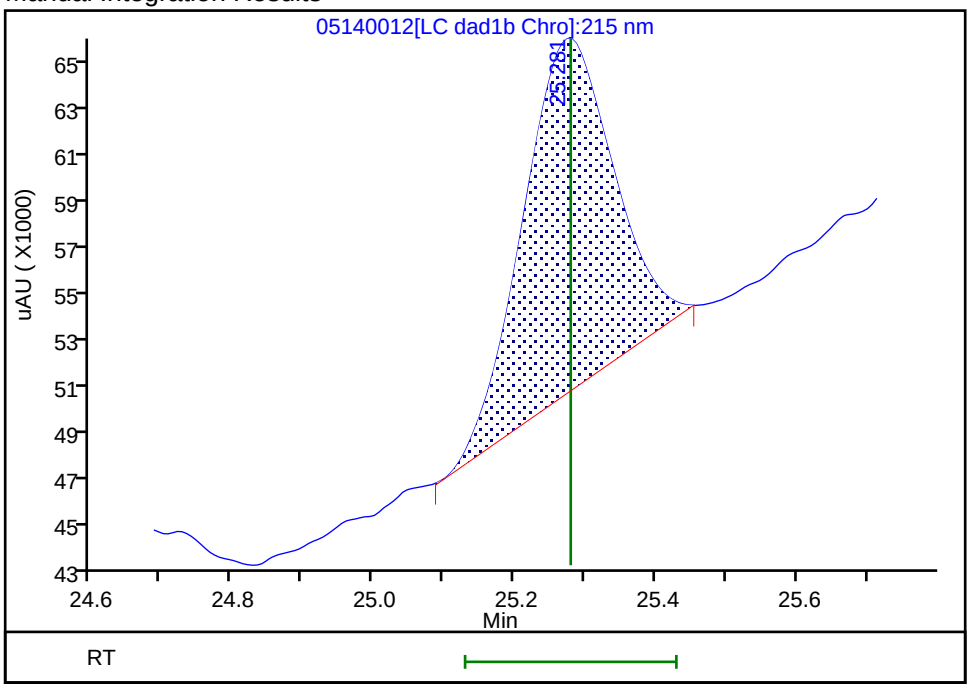
Processing Integration Results

RT: 25.28
Area: 139443
Amount: 1.011611
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 132172
Amount: 0.810643
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:59
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140013.D
Lims ID: IC FULL 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-May-2020 19:46:37 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 3
Misc. Info.: 280-0091518-013
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:58 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:22:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.357	4.366	-0.009	22969	0.0500	0.0535	
	2 2,4-diamino-6-nitrotoluene	1	4.851	4.880	-0.029	16562	0.0500	0.0464	
	5 2,4,6-Trinitrophenol	1	6.331	6.300	0.031	9462	0.0500	0.0488	a
	6 HMX	1	6.984	6.986	-0.002	12646	0.0500	0.0414	
	8 RDX	1	9.184	9.173	0.011	15119	0.0500	0.0619	
	9 Nitrobenzene	1	12.110	12.106	0.004	28424	0.0502	0.0647	
$	10 1,2-Dinitrobenzene	1	13.037	13.040	-0.003	18744	0.0500	0.0610	M
	11 3,5-Dinitroaniline	1	14.890	14.886	0.004	27916	0.0500	0.0518	M
	12 1,3-Dinitrobenzene	1	15.544	15.553	-0.009	37161	0.0501	0.0551	M
	13 Nitroglycerin	2	15.844	15.853	-0.009	64042	0.5000	0.5050	M
	14 o-Nitrotoluene	1	16.550	16.533	0.017	16003	0.0500	0.0586	M
	15 p-Nitrotoluene	1	16.837	16.820	0.017	15492	0.0501	0.0643	M
	16 4-Amino-2,6-dinitrotoluene	1	17.157	17.146	0.011	22118	0.0501	0.0641	M
	17 m-Nitrotoluene	1	17.724	17.753	-0.029	19280	0.0501	0.0646	M
	18 2-Amino-4,6-dinitrotoluene	1	18.030	18.046	-0.016	28982	0.0502	0.0623	M
	19 1,3,5-Trinitrobenzene	1	18.864	18.886	-0.022	26649	0.0501	0.0564	M
	20 2,6-Dinitrotoluene	1	19.817	19.806	0.011	19107	0.0502	0.0507	M
	21 2,4-Dinitrotoluene	1	20.290	20.293	-0.003	37302	0.0502	0.0583	M
	22 Tetryl	1	23.557	23.553	0.004	20202	0.0501	0.0548	
	23 2,4,6-Trinitrotoluene	1	24.637	24.653	-0.016	28366	0.0502	0.0628	
	24 PETN	2	25.277	25.280	-0.003	102120	0.5000	0.5782	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	5.00	Units: uL
8330_ADDs_00026	Amount Added:	2.50	Units: uL

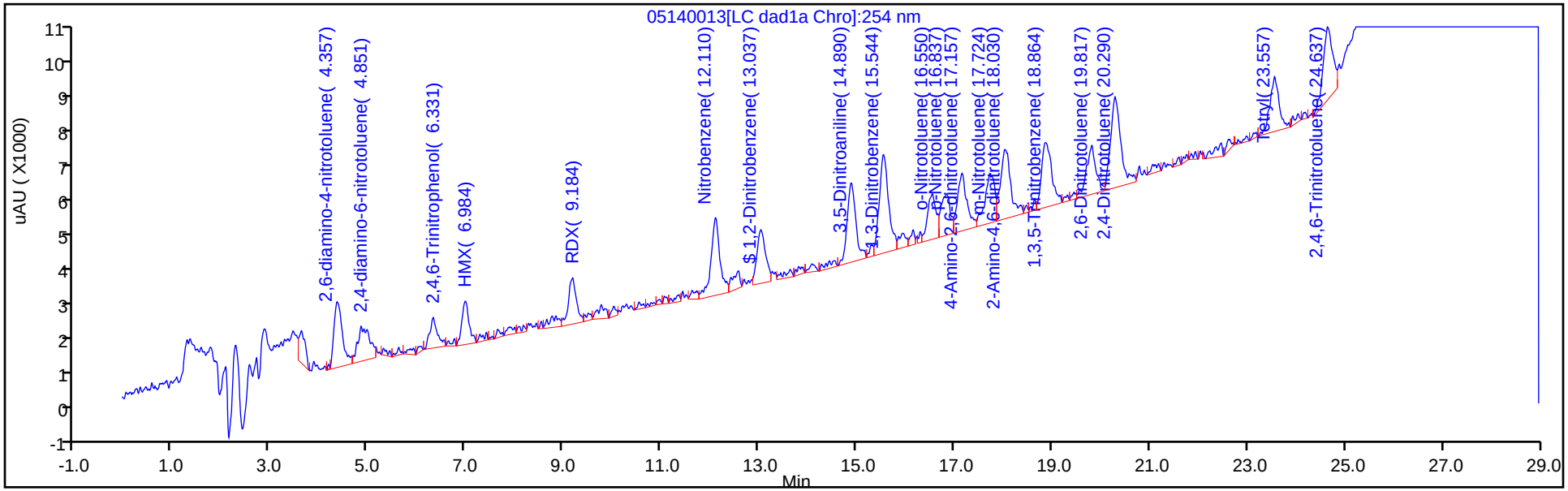
Report Date: 15-May-2020 12:00:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

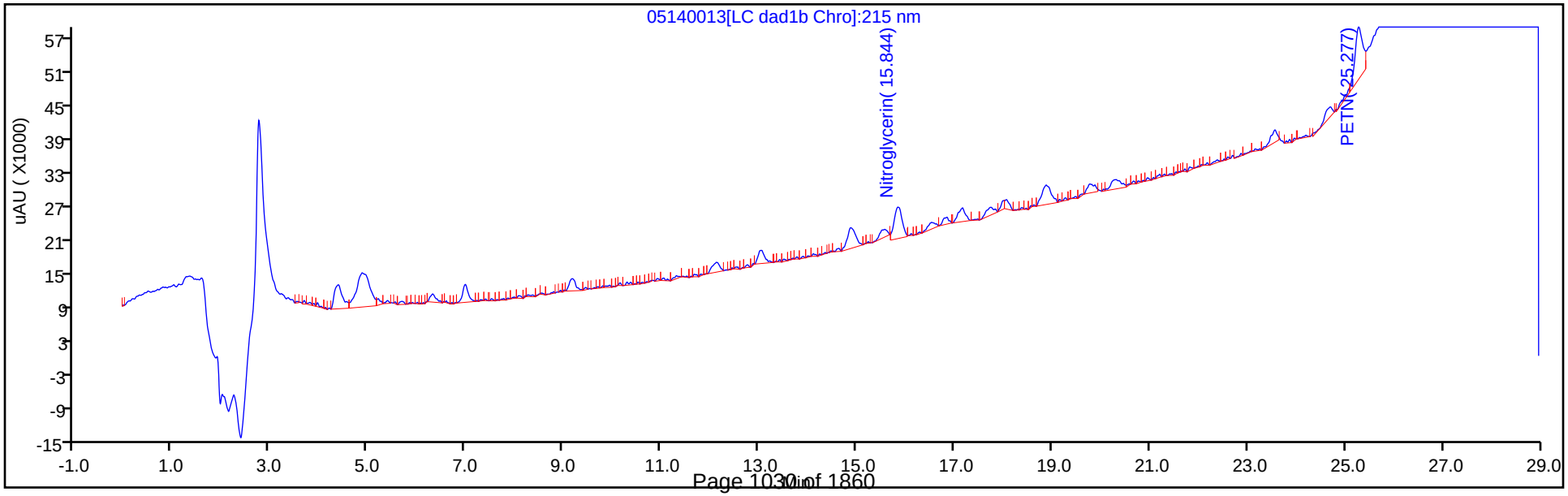
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d

Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 3			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

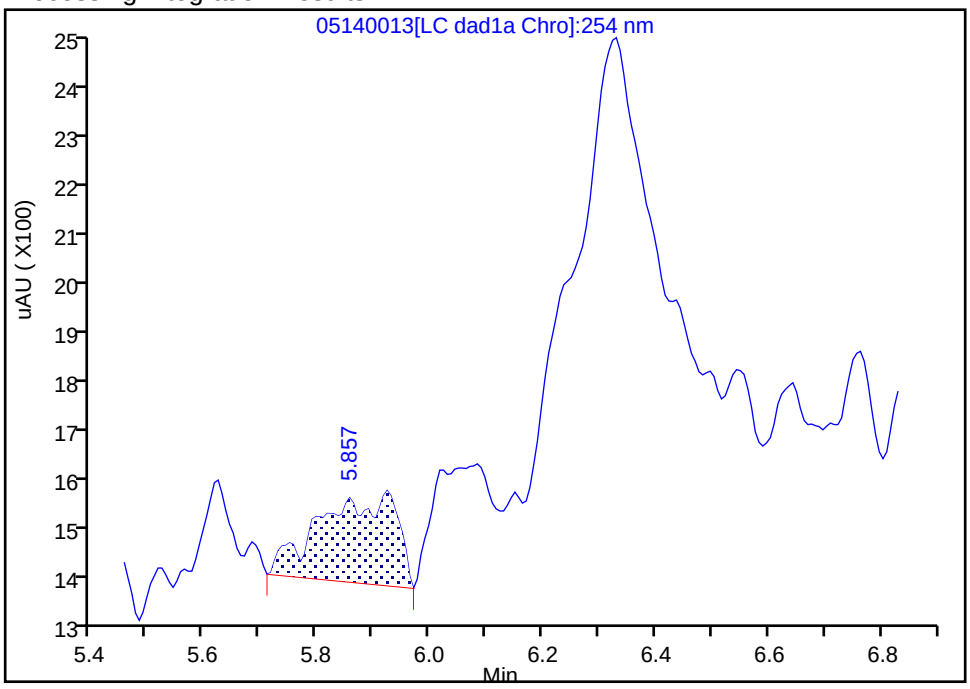
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

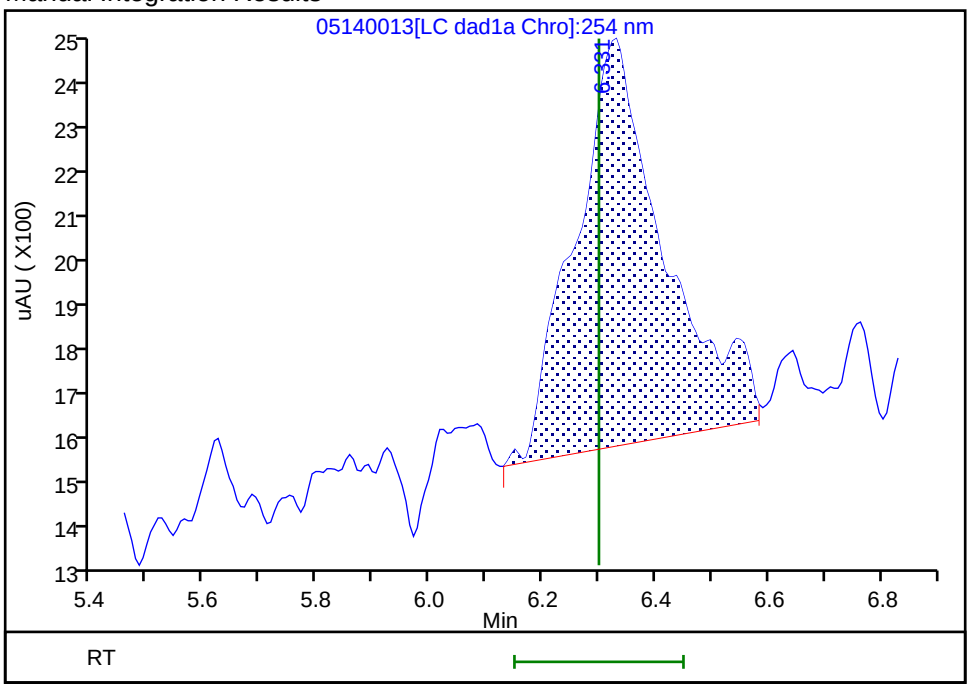
Processing Integration Results

RT: 5.86
Area: 1615
Amount: 0.011701
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 9462
Amount: 0.048821
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:16
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

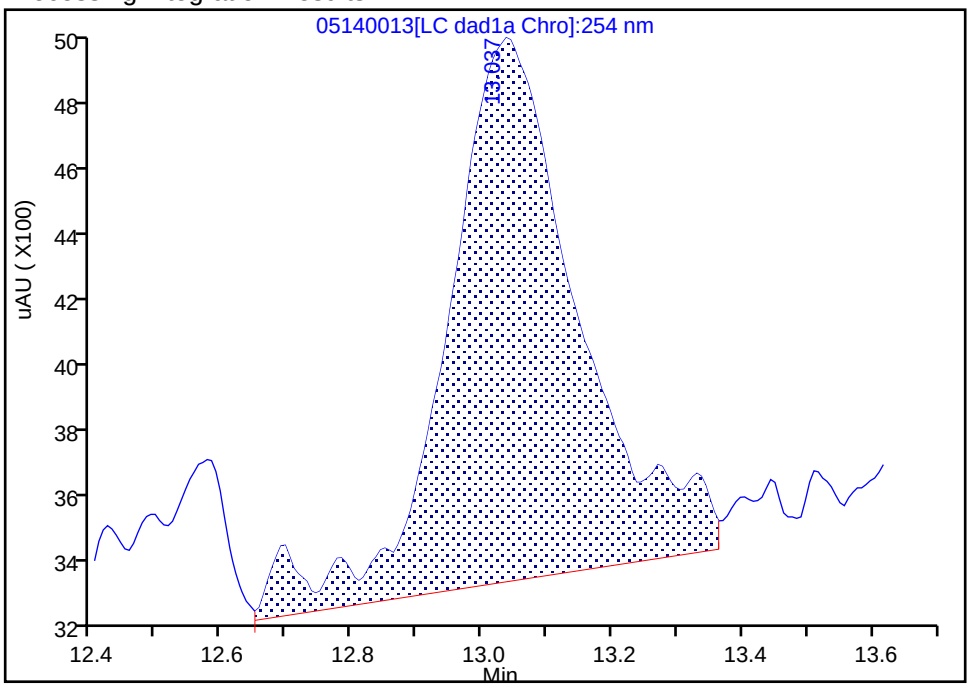
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

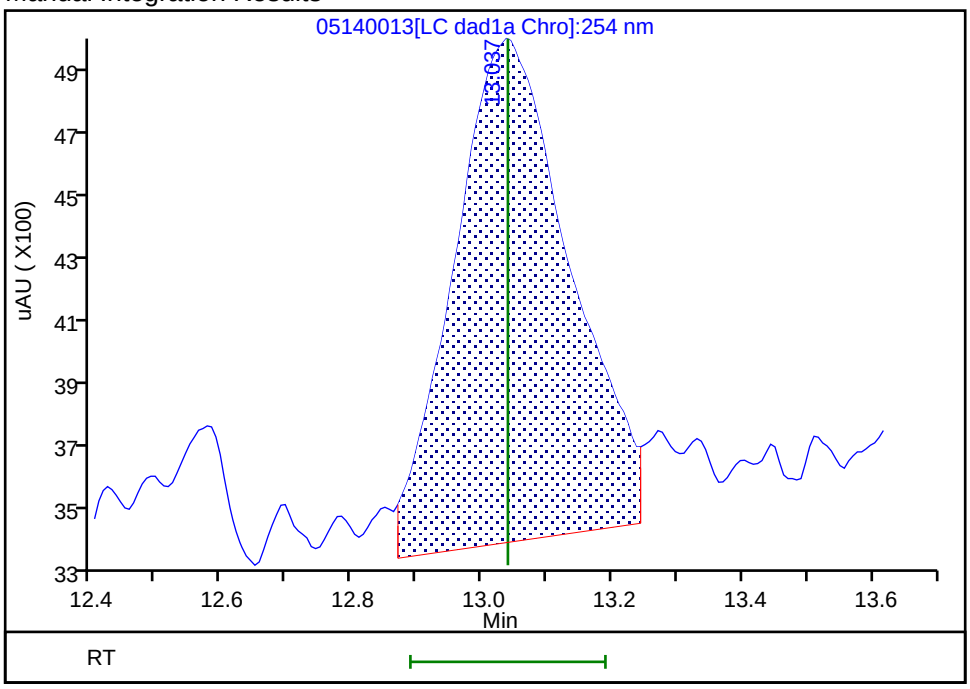
Processing Integration Results

RT: 13.04
Area: 21320
Amount: 0.066490
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 18744
Amount: 0.060979
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

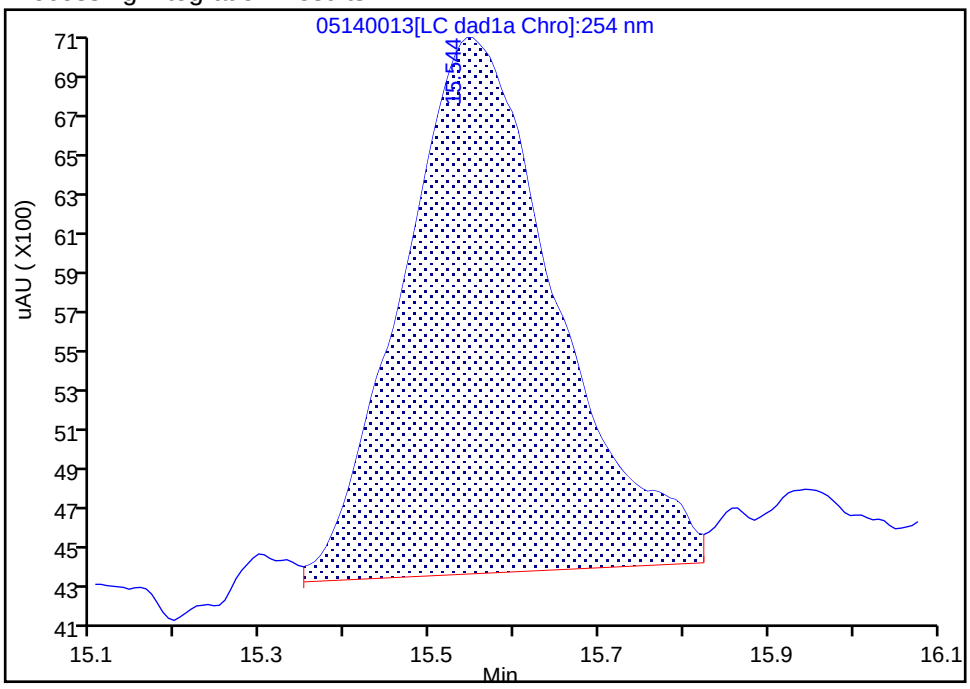
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

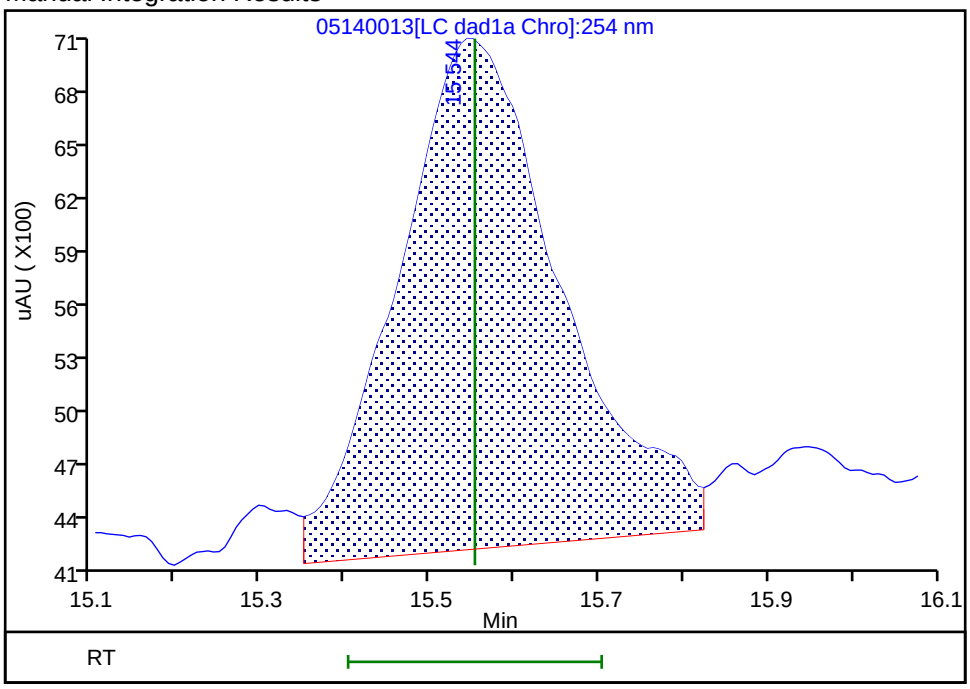
Processing Integration Results

RT: 15.54
Area: 33327
Amount: 0.049753
Amount Units: ug/ml



Manual Integration Results

RT: 15.54
Area: 37161
Amount: 0.055120
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

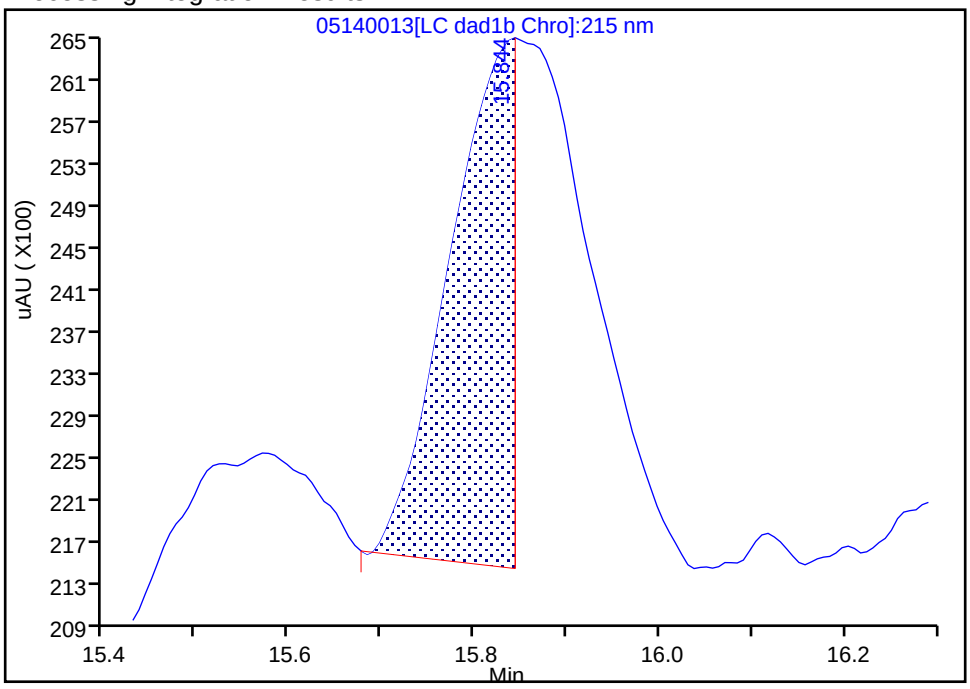
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

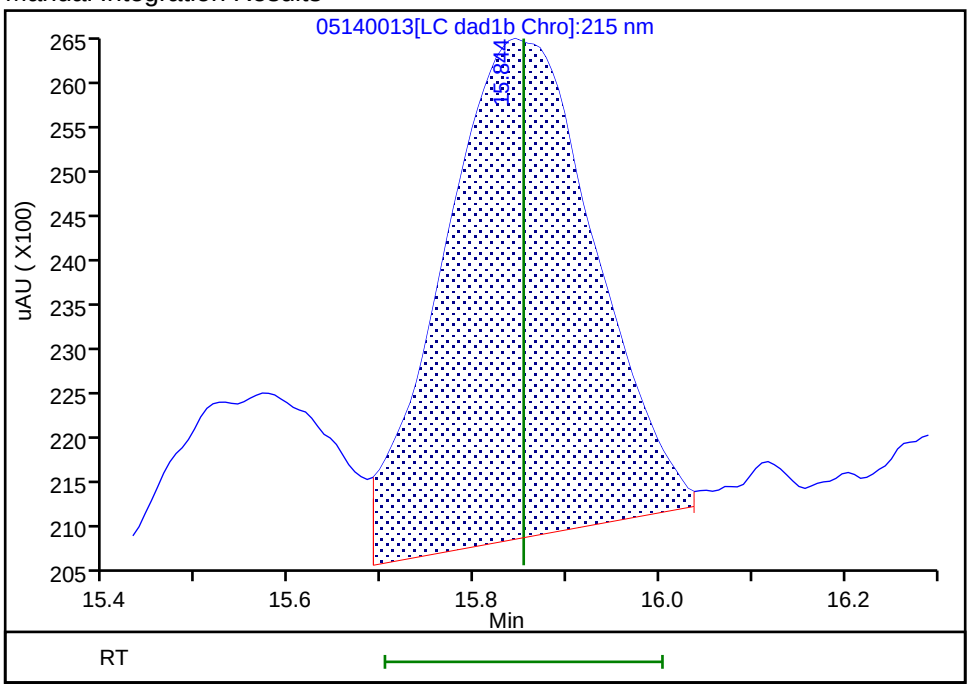
Processing Integration Results

RT: 15.84
Area: 23753
Amount: 0.203485
Amount Units: ug/ml



Manual Integration Results

RT: 15.84
Area: 64042
Amount: 0.505050
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

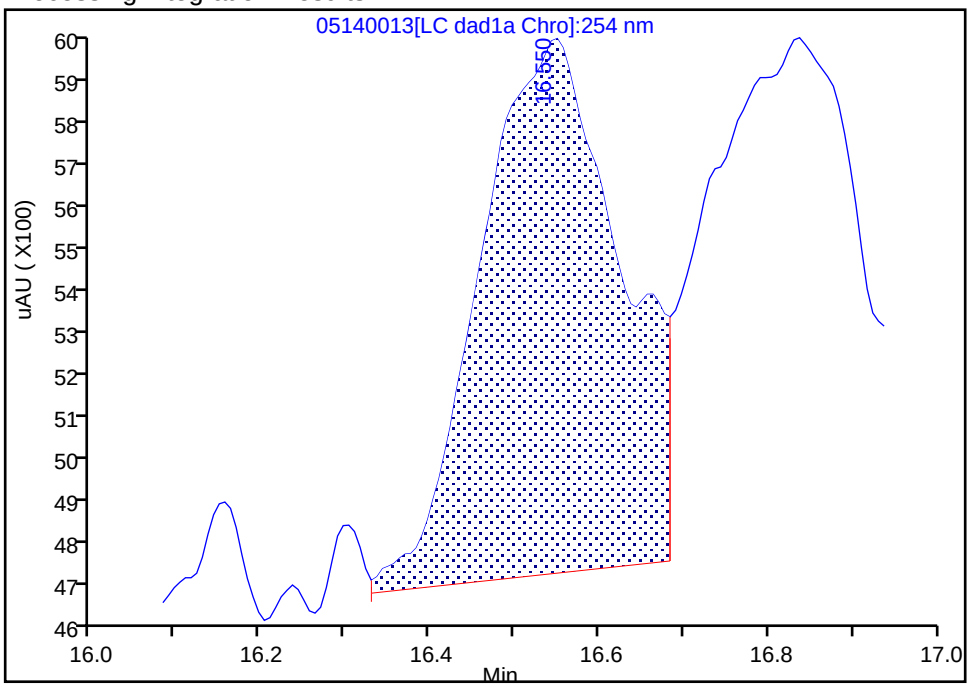
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d
Injection Date: 14-May-2020 19:46:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

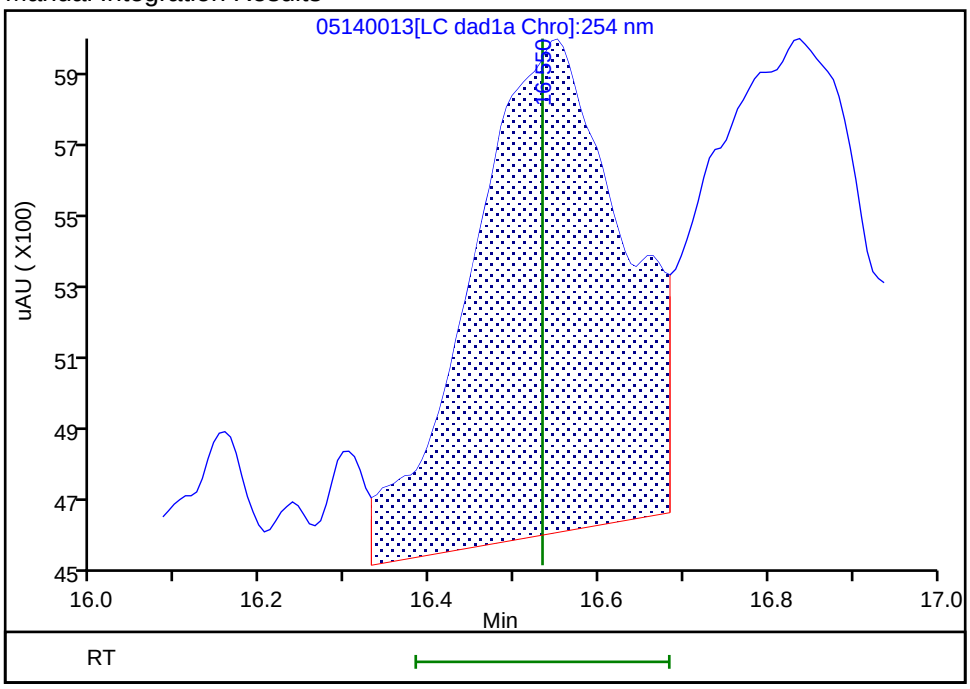
Processing Integration Results

RT: 16.55
Area: 13586
Amount: 0.049463
Amount Units: ug/ml



Manual Integration Results

RT: 16.55
Area: 16003
Amount: 0.058627
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

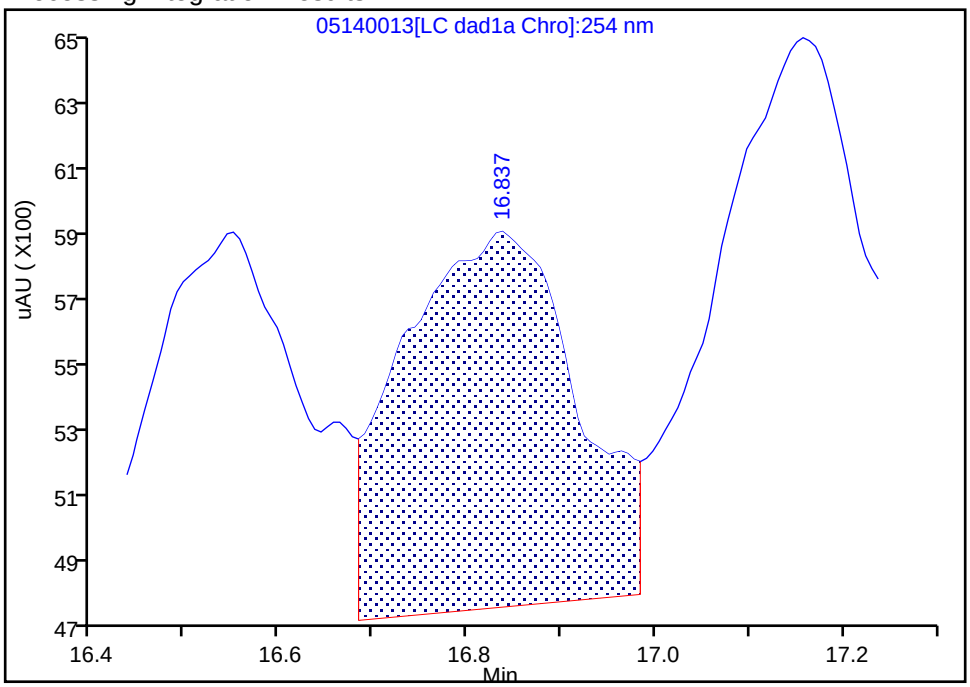
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

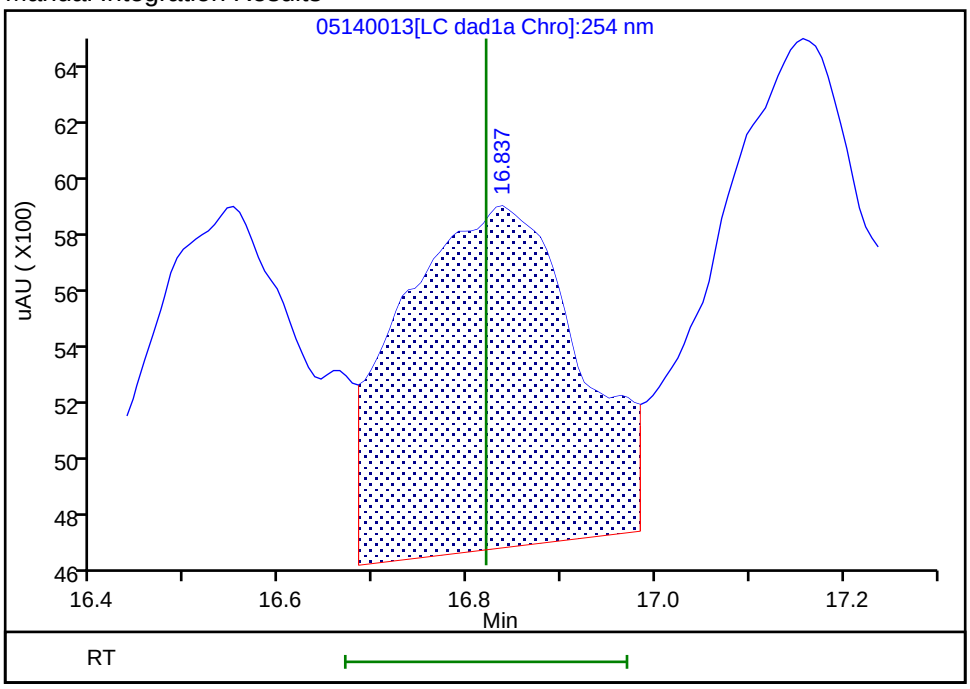
Processing Integration Results

RT: 16.84
Area: 14394
Amount: 0.057129
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 15492
Amount: 0.064314
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

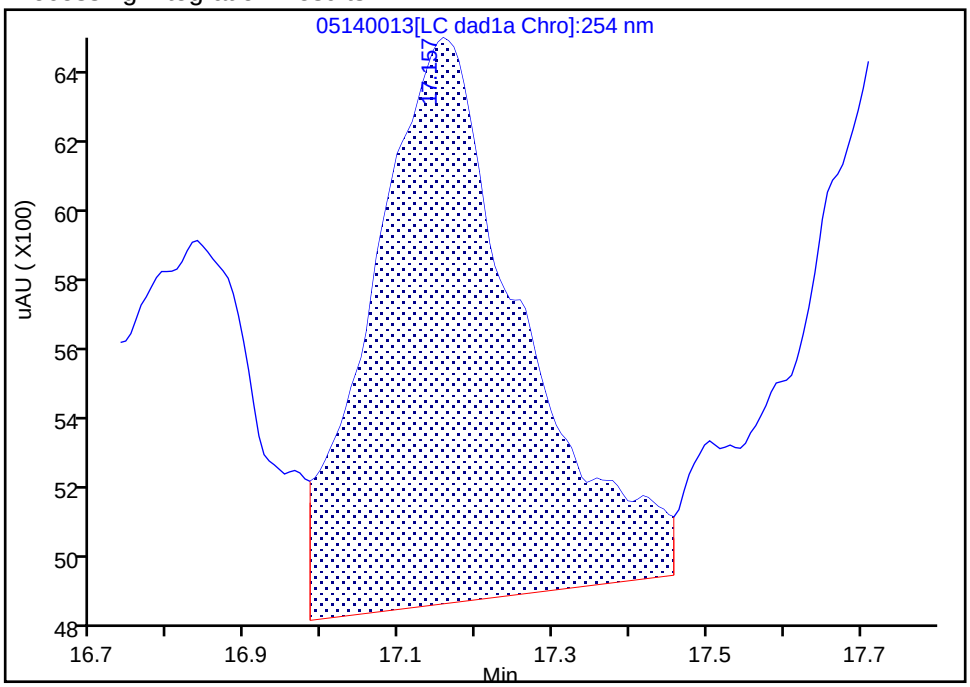
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

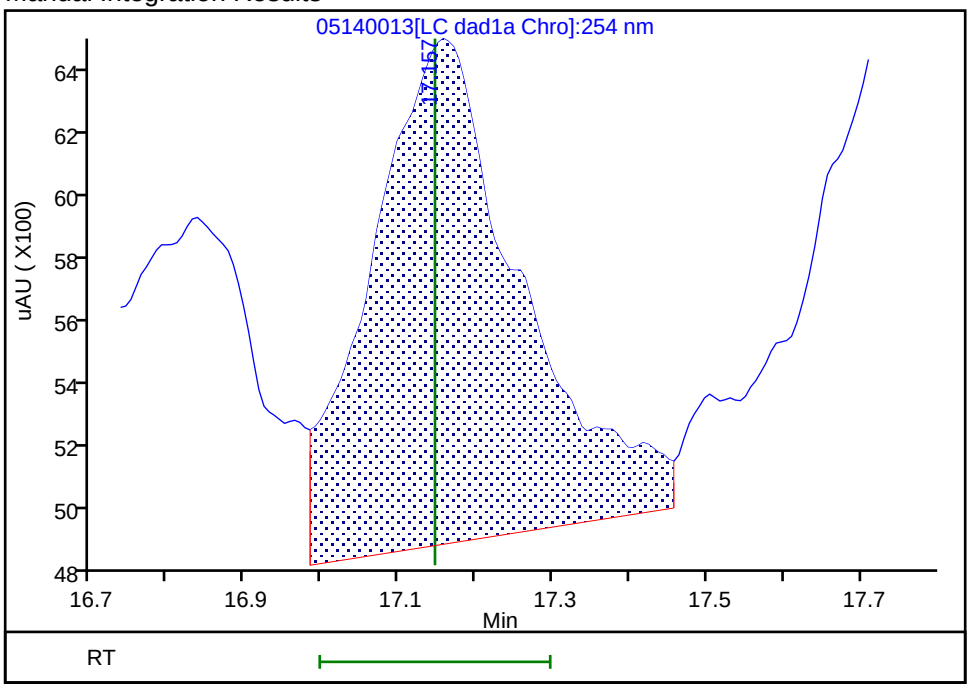
Processing Integration Results

RT: 17.16
Area: 21749
Amount: 0.062679
Amount Units: ug/ml



Manual Integration Results

RT: 17.16
Area: 22118
Amount: 0.064067
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

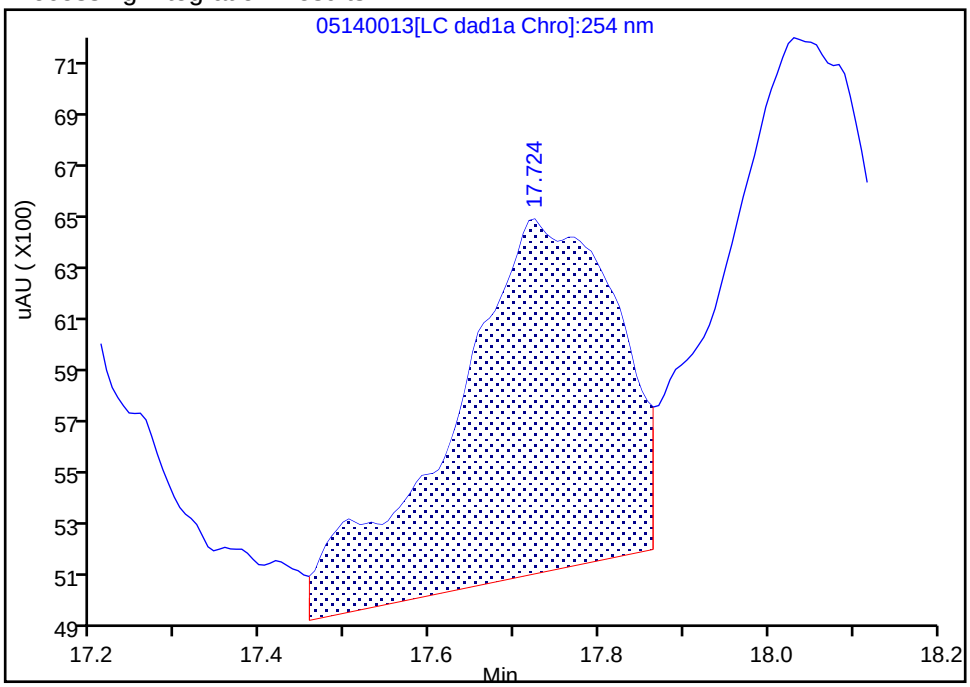
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

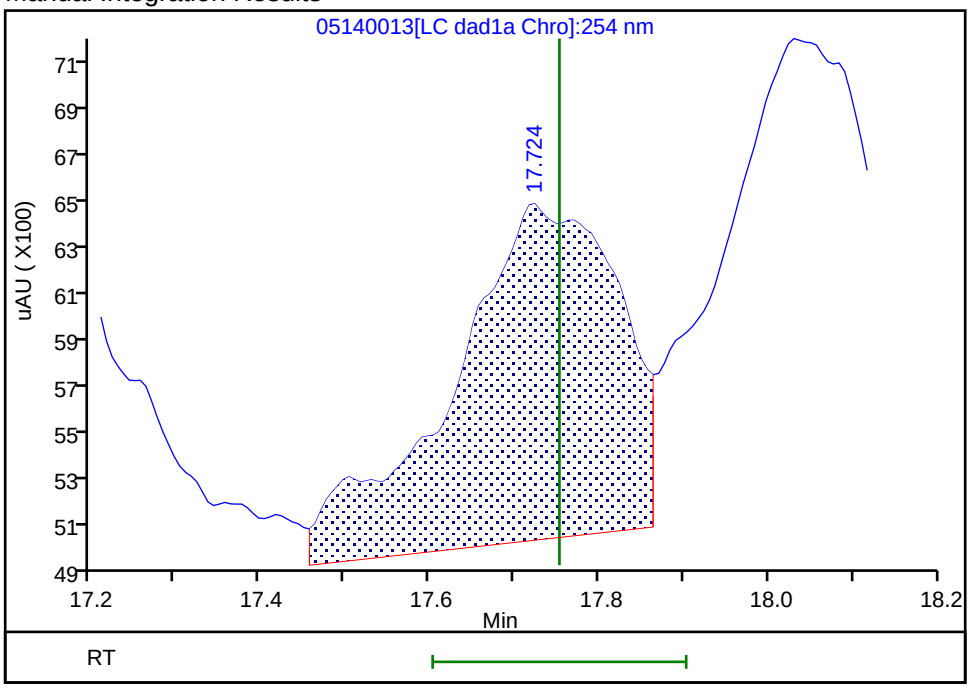
Processing Integration Results

RT: 17.72
Area: 18317
Amount: 0.062732
Amount Units: ug/ml



Manual Integration Results

RT: 17.72
Area: 19280
Amount: 0.064627
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

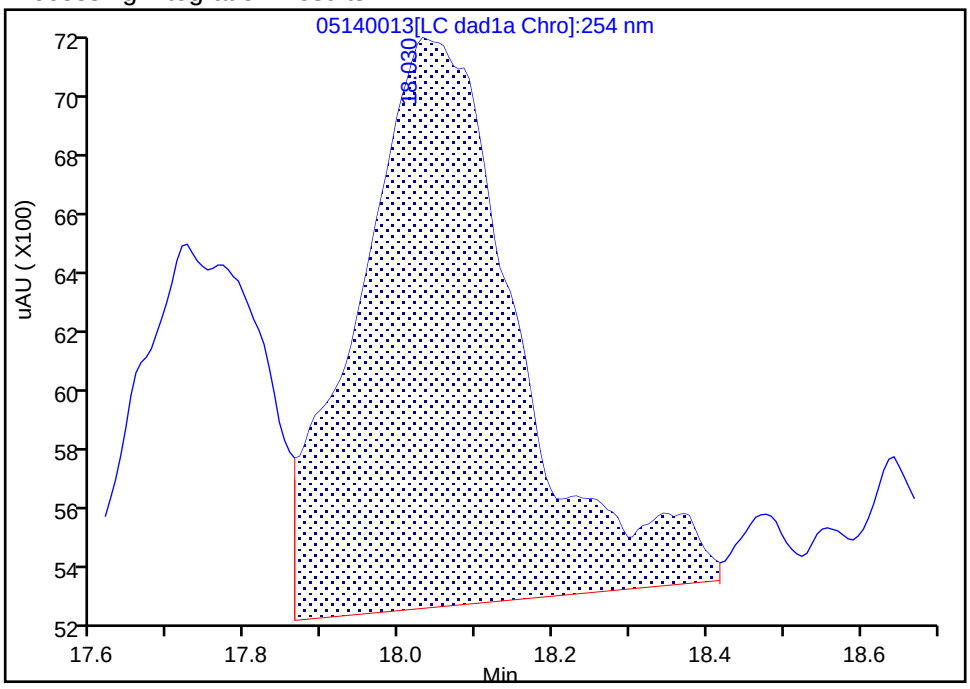
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

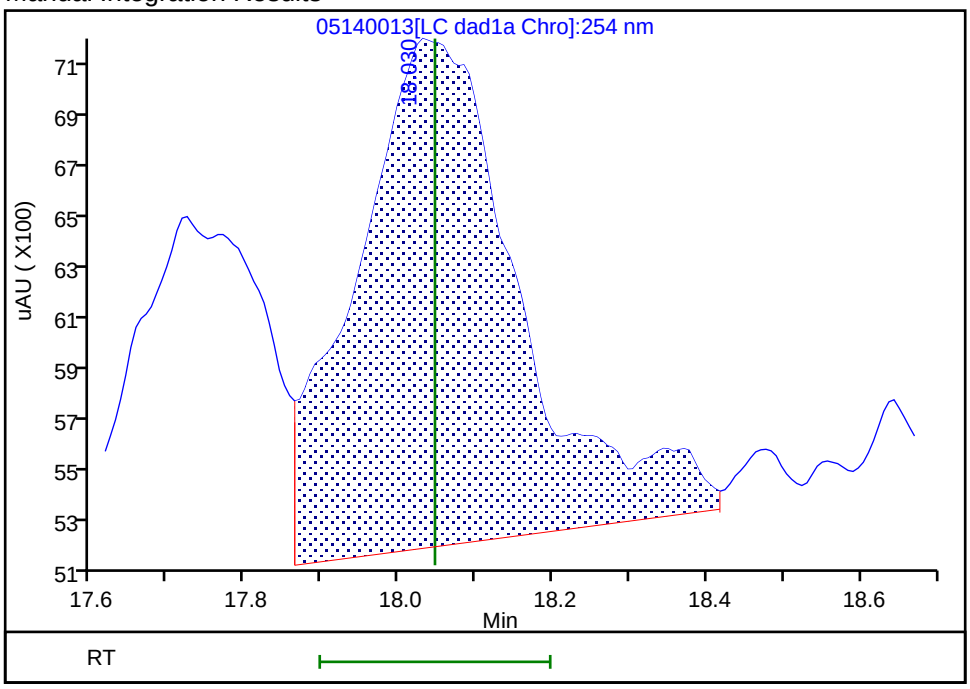
Processing Integration Results

RT: 18.03
Area: 27239
Amount: 0.055134
Amount Units: ug/ml



Manual Integration Results

RT: 18.03
Area: 28982
Amount: 0.062299
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

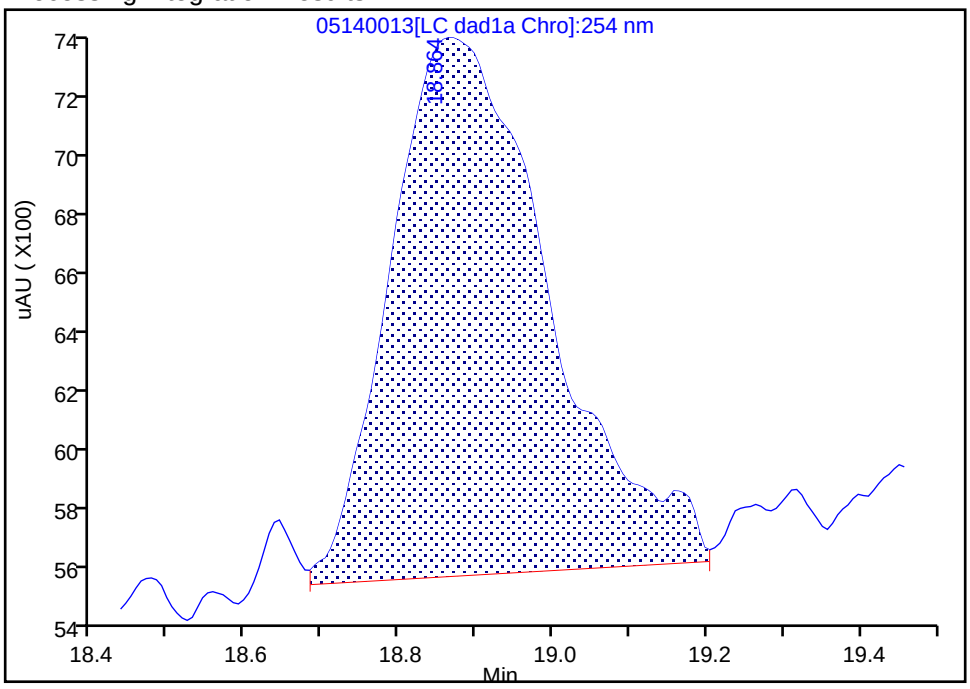
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

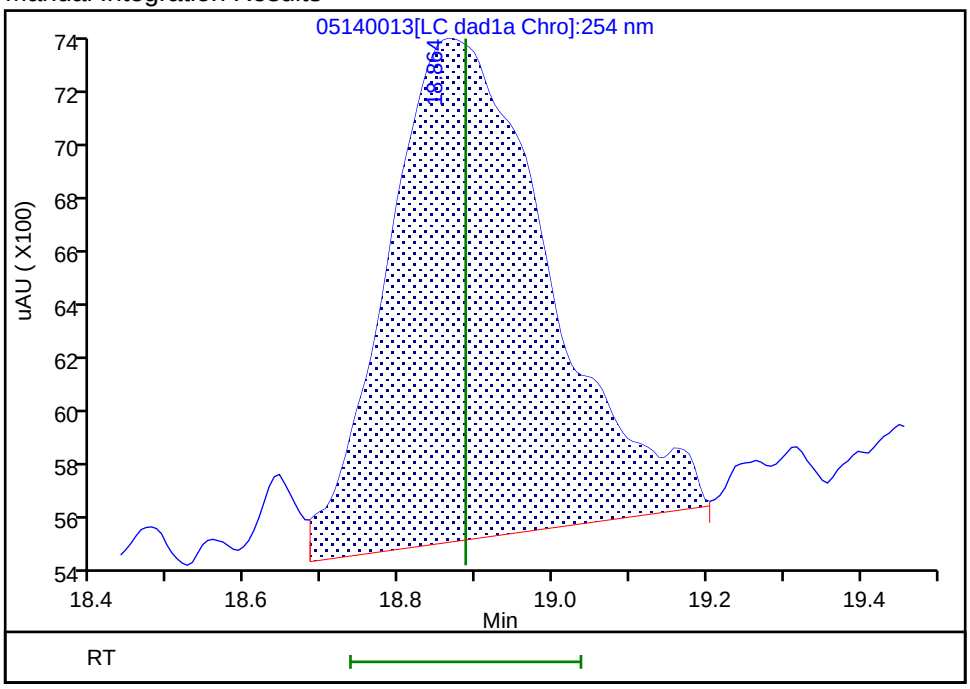
Processing Integration Results

RT: 18.86
Area: 25370
Amount: 0.053396
Amount Units: ug/ml



Manual Integration Results

RT: 18.86
Area: 26649
Amount: 0.056406
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

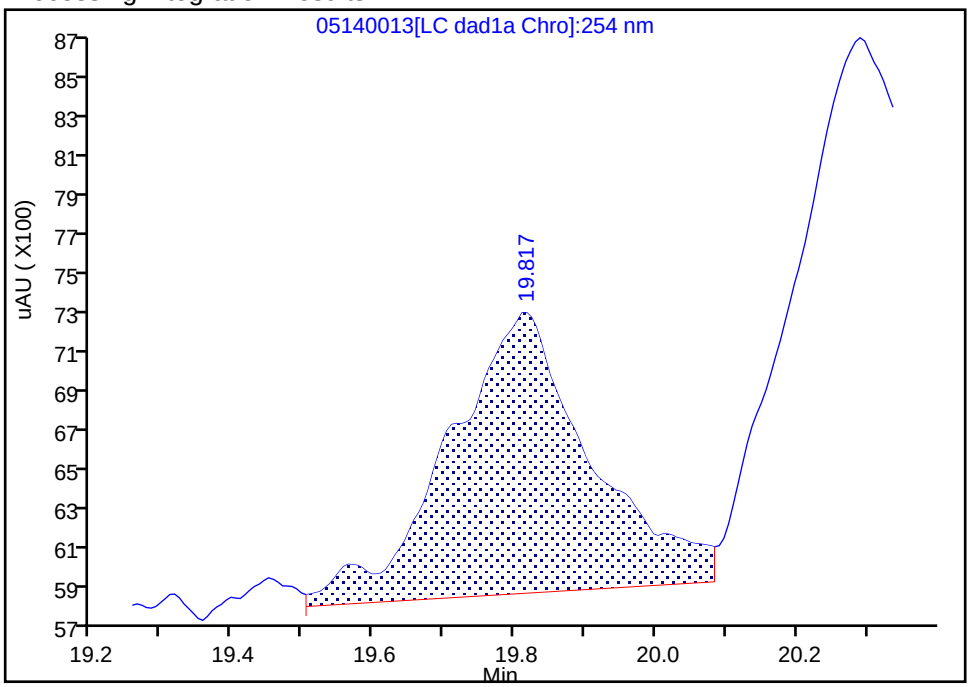
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

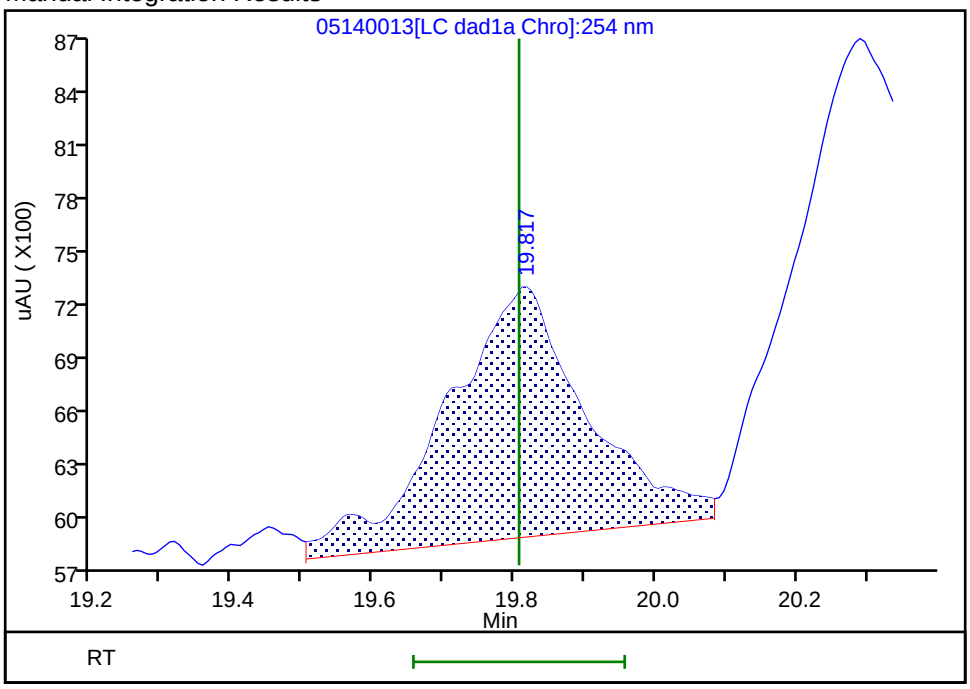
Processing Integration Results

RT: 19.82
Area: 19664
Amount: 0.057481
Amount Units: ug/ml



Manual Integration Results

RT: 19.82
Area: 19107
Amount: 0.050727
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

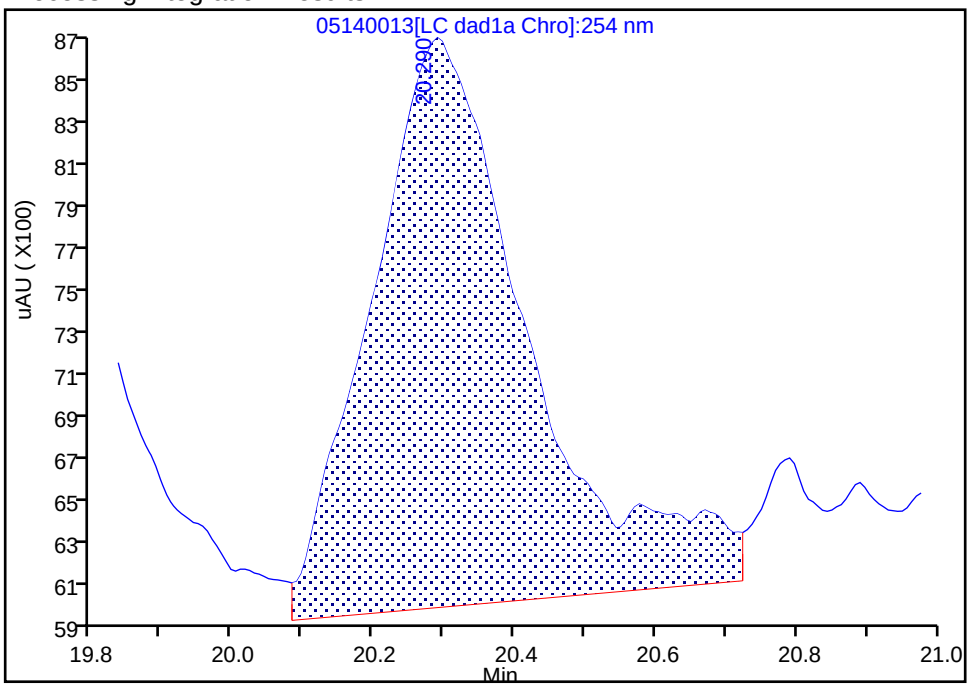
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

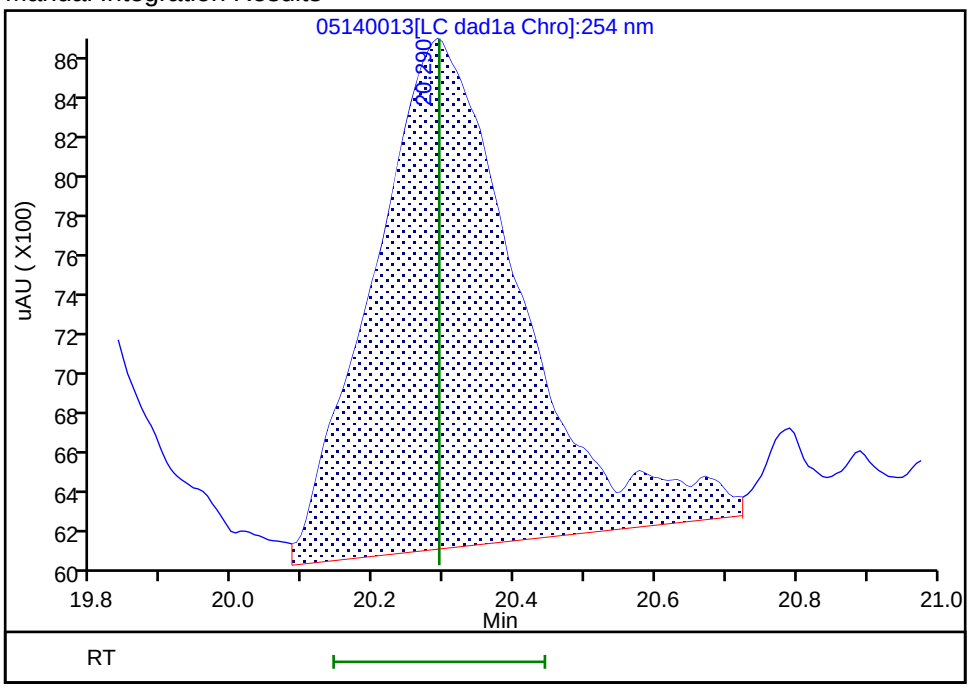
Processing Integration Results

RT: 20.29
Area: 41123
Amount: 0.062799
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 37302
Amount: 0.058274
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

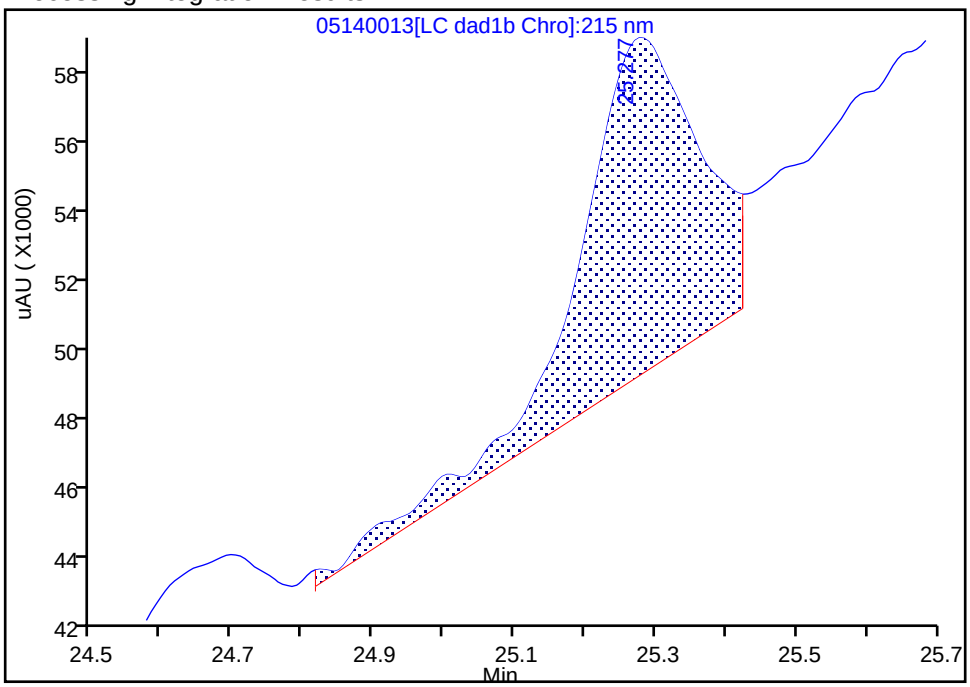
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d
Injection Date: 14-May-2020 19:46:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

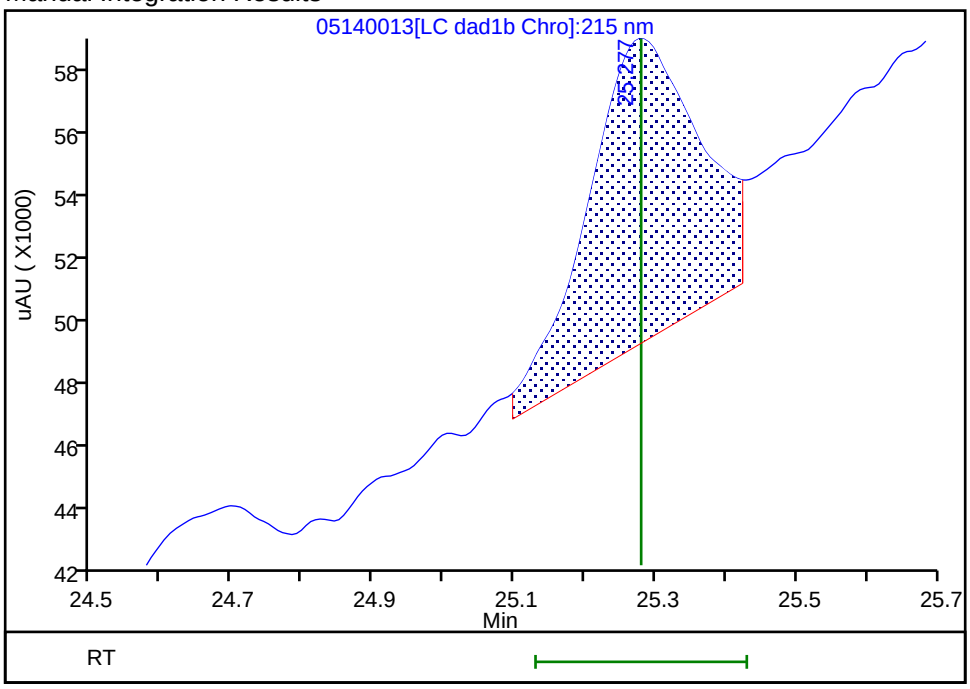
Processing Integration Results

RT: 25.28
Area: 109947
Amount: 0.773174
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 102120
Amount: 0.578199
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:48
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140014.D
Lims ID: IC FULL 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-May-2020 20:21:33 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 2
Misc. Info.: 280-0091518-014
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:58 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:22:32

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	4.375	4.366	0.009	10106	0.0200	0.0235	
2 2,4-diamino-6-nitrotoluene	1	4.855	4.880	-0.025	9147	0.0200	0.0152	
5 2,4,6-Trinitrophenol	1	6.322	6.300	0.022	5683	0.0250	0.0293	a
6 HMX	1	6.982	6.986	-0.004	10018	0.0250	0.0265	
8 RDX	1	9.095	9.173	-0.078	6286	0.0250	0.0257	
9 Nitrobenzene	1	12.095	12.106	-0.011	10325	0.0251	0.0235	
$ 10 1,2-Dinitrobenzene	1	13.022	13.040	-0.018	8436	0.0250	0.0238	M
11 3,5-Dinitroaniline	1	14.862	14.886	-0.024	12305	0.0200	0.0197	
12 1,3-Dinitrobenzene	1	15.542	15.553	-0.011	16280	0.0251	0.0241	
13 Nitroglycerin	2	15.855	15.853	0.002	26546	0.2500	0.2093	
14 o-Nitrotoluene	1	16.515	16.533	-0.018	6812	0.0250	0.0250	
15 p-Nitrotoluene	1	16.795	16.820	-0.025	5374	0.0251	0.0223	
16 4-Amino-2,6-dinitrotoluene	1	17.155	17.146	0.009	9369	0.0250	0.0271	
17 m-Nitrotoluene	1	17.748	17.753	-0.005	6920	0.0250	0.0232	
18 2-Amino-4,6-dinitrotoluene	1	18.048	18.046	0.002	10376	0.0251	0.0223	
19 1,3,5-Trinitrobenzene	1	18.855	18.886	-0.031	10822	0.0251	0.0229	
20 2,6-Dinitrotoluene	1	19.828	19.806	0.022	11618	0.0251	0.0248	
21 2,4-Dinitrotoluene	1	20.295	20.293	0.002	16811	0.0251	0.0263	
22 Tetryl	1	23.529	23.553	-0.024	9874	0.0251	0.0268	
23 2,4,6-Trinitrotoluene	1	24.682	24.653	0.029	11547	0.0251	0.0209	
24 PETN	2	25.282	25.280	0.002	20453	0.2500	-0.0535	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	2.50	Units: uL
8330_ADDs_00026	Amount Added:	1.00	Units: uL

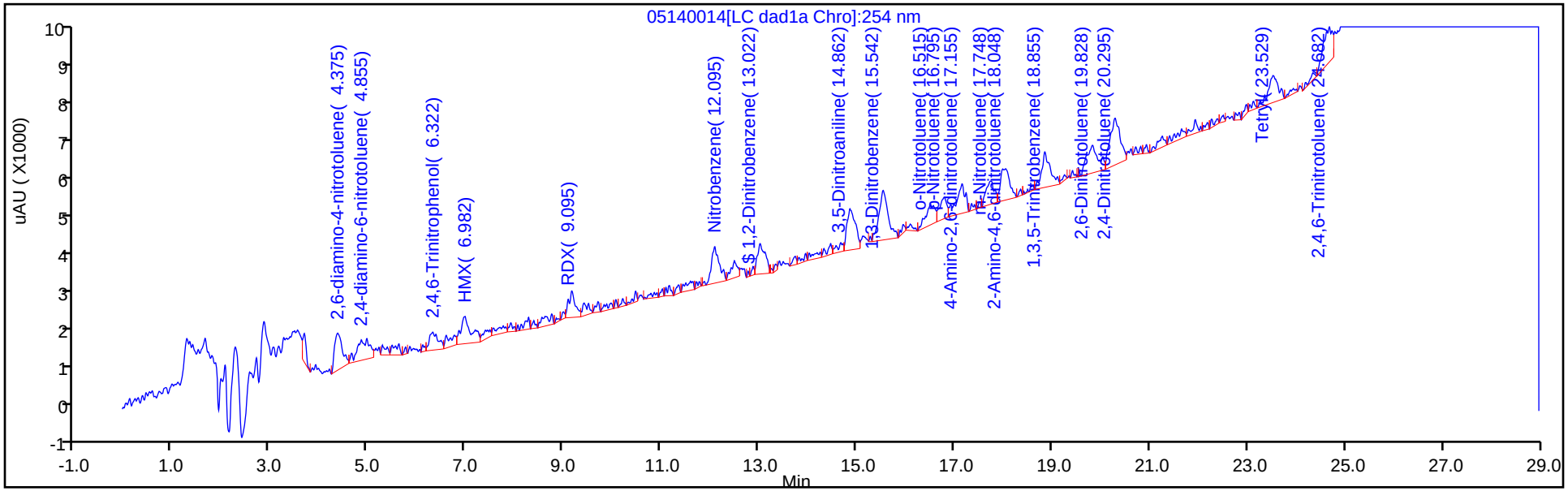
Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

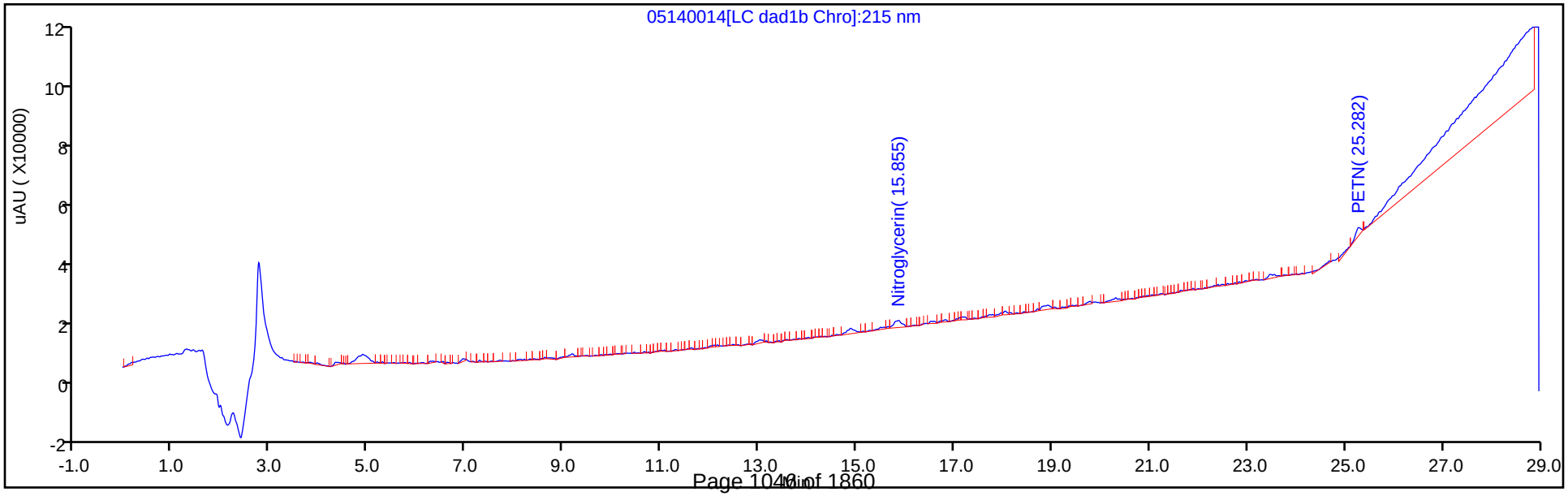
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d

Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 2			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

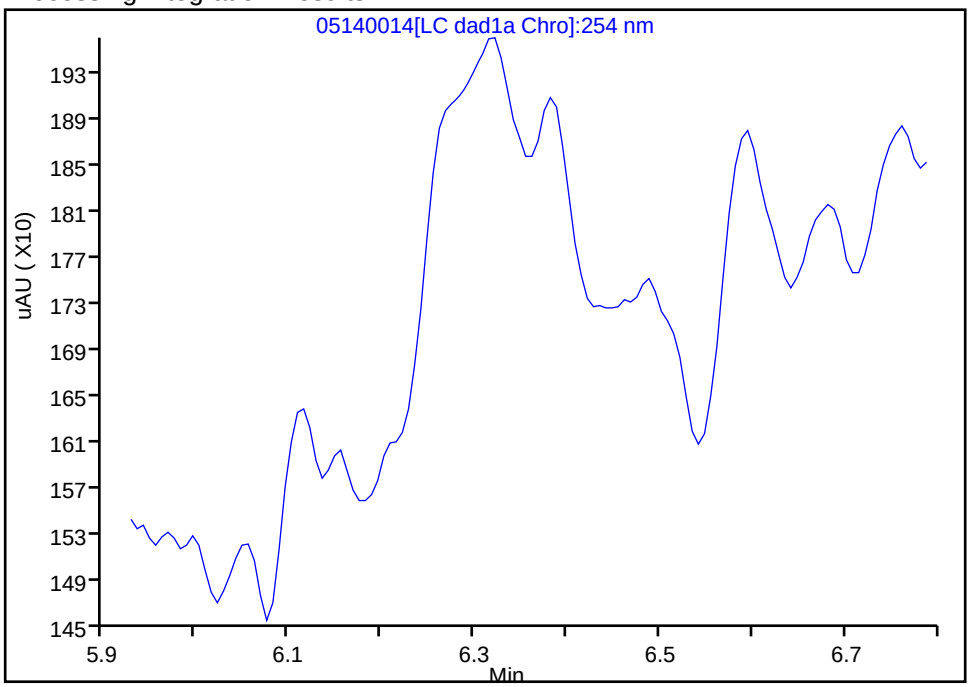
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

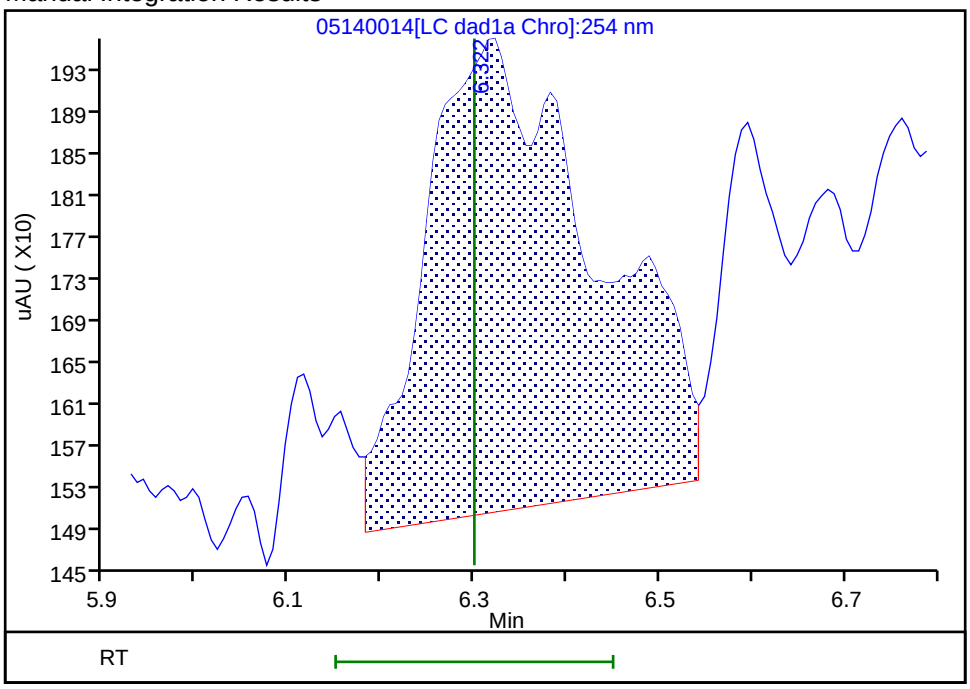
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.32
Area: 5683
Amount: 0.029323
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:29
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

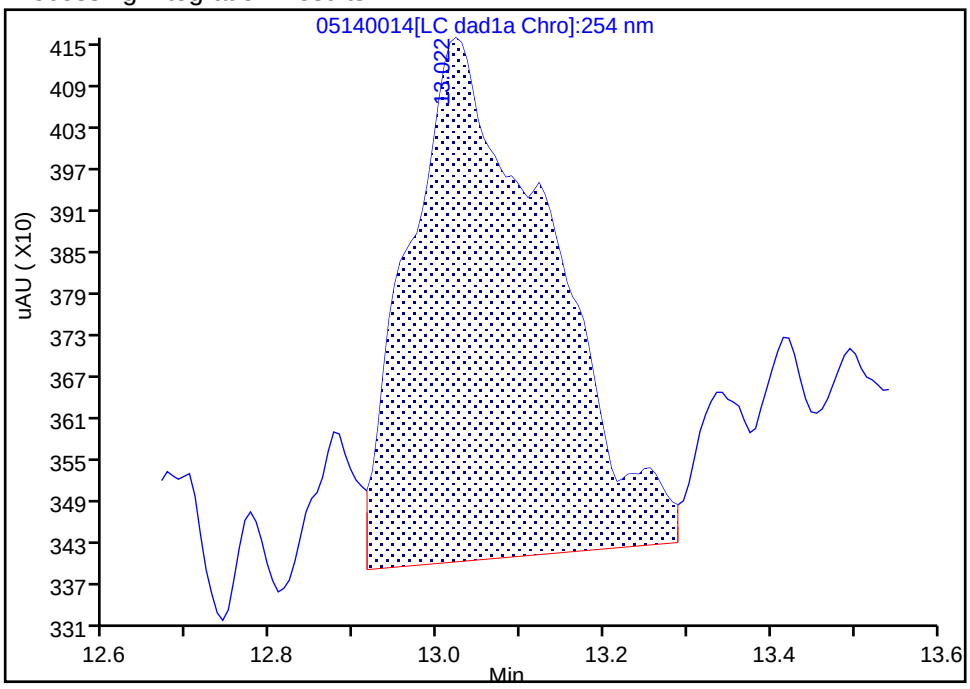
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

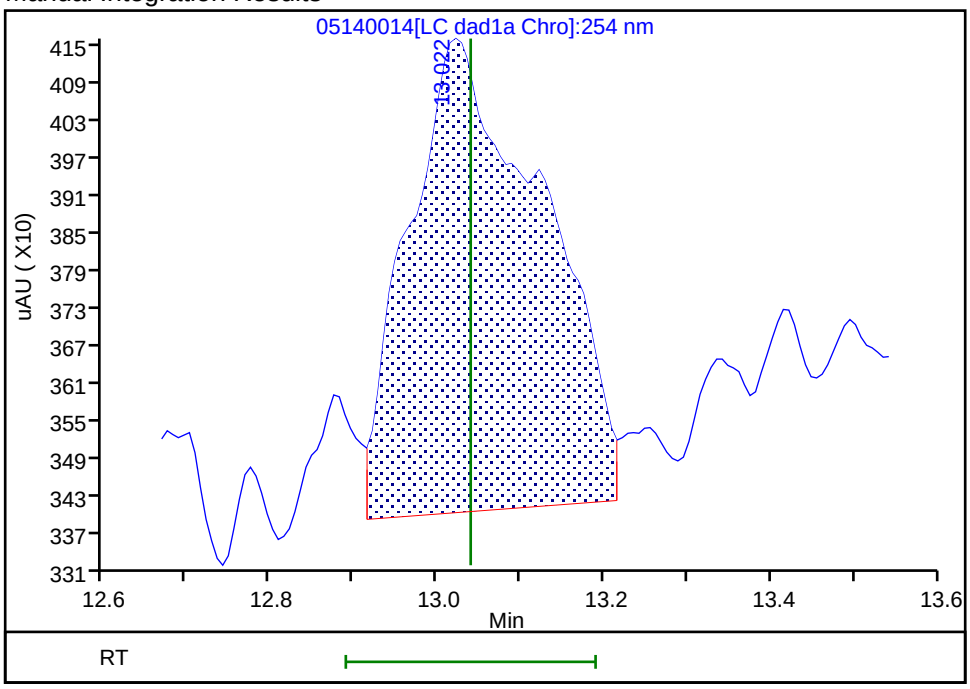
Processing Integration Results

RT: 13.02
Area: 8831
Amount: 0.029561
Amount Units: ug/ml



Manual Integration Results

RT: 13.02
Area: 8436
Amount: 0.023796
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:34

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

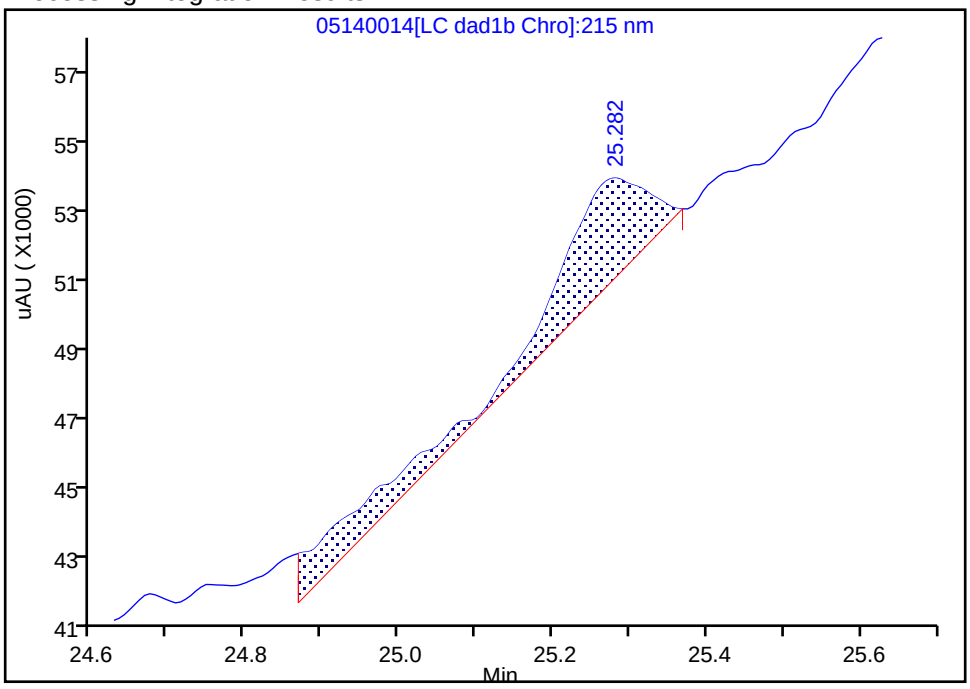
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

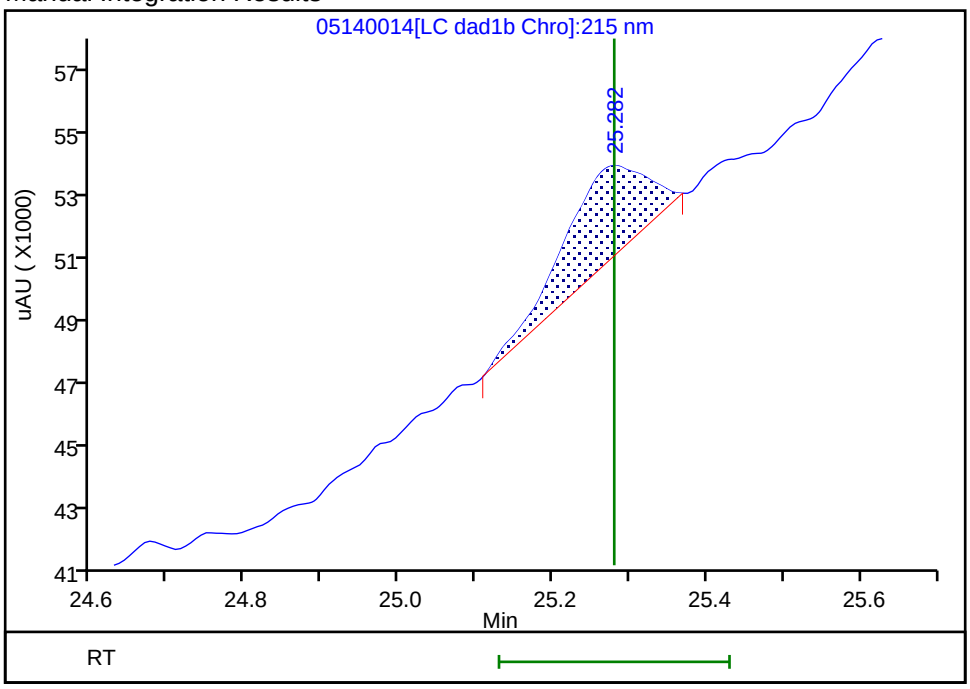
Processing Integration Results

RT: 25.28
Area: 31007
Amount: 0.129673
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 20453
Amount: -0.053470
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:34

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140015.D
Lims ID: IC FULL 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-May-2020 20:56:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 1
Misc. Info.: 280-0091518-015
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:59 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:24:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.366			ND	ND	U
2 2,4-diamino-6-nitrotoluene	1		4.880			ND	ND	U
5 2,4,6-Trinitrophenol	1		6.300			ND	ND	U
6 HMX	1		6.986			ND	ND	U
8 RDX	1		9.173			ND	ND	U
9 Nitrobenzene	1		12.106			ND	ND	U
$ 10 1,2-Dinitrobenzene	1		13.040			ND	ND	U
11 3,5-Dinitroaniline	1		14.886			ND	ND	U
12 1,3-Dinitrobenzene	1		15.553			ND	ND	U
13 Nitroglycerin	2		15.853			ND	ND	U
14 o-Nitrotoluene	1		16.533			ND	ND	U
15 p-Nitrotoluene	1		16.820			ND	ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.146			ND	ND	U
17 m-Nitrotoluene	1		17.753			ND	ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.046			ND	ND	U
19 1,3,5-Trinitrobenzene	1		18.886			ND	ND	U
20 2,6-Dinitrotoluene	1	19.755	19.806	-0.051	4758	0.0126	0.001113	M
21 2,4-Dinitrotoluene	1	20.295	20.293	0.002	7990	0.0126	0.0125	M
22 Tetryl	1		23.553			ND	ND	U
23 2,4,6-Trinitrotoluene	1		24.653			ND	ND	U
24 PETN	2		25.280			ND	ND	U

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

8330IntermStk_00064	Amount Added:	1.25	Units: uL
8330_ADDs_00026	Amount Added:	0.50	Units: uL

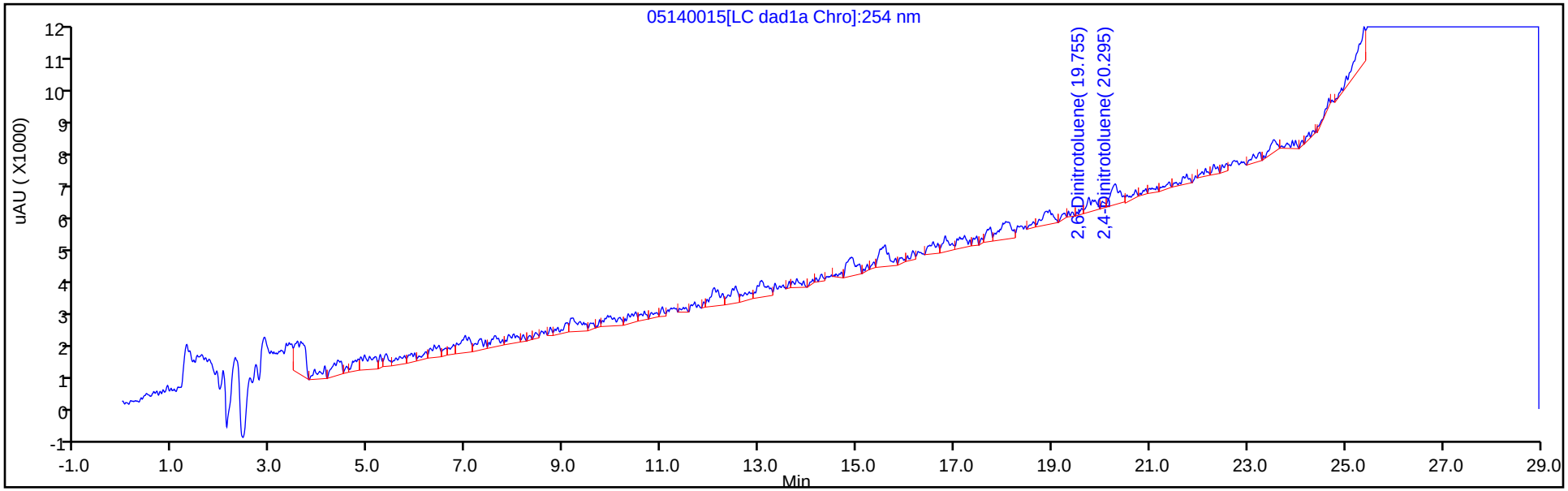
Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

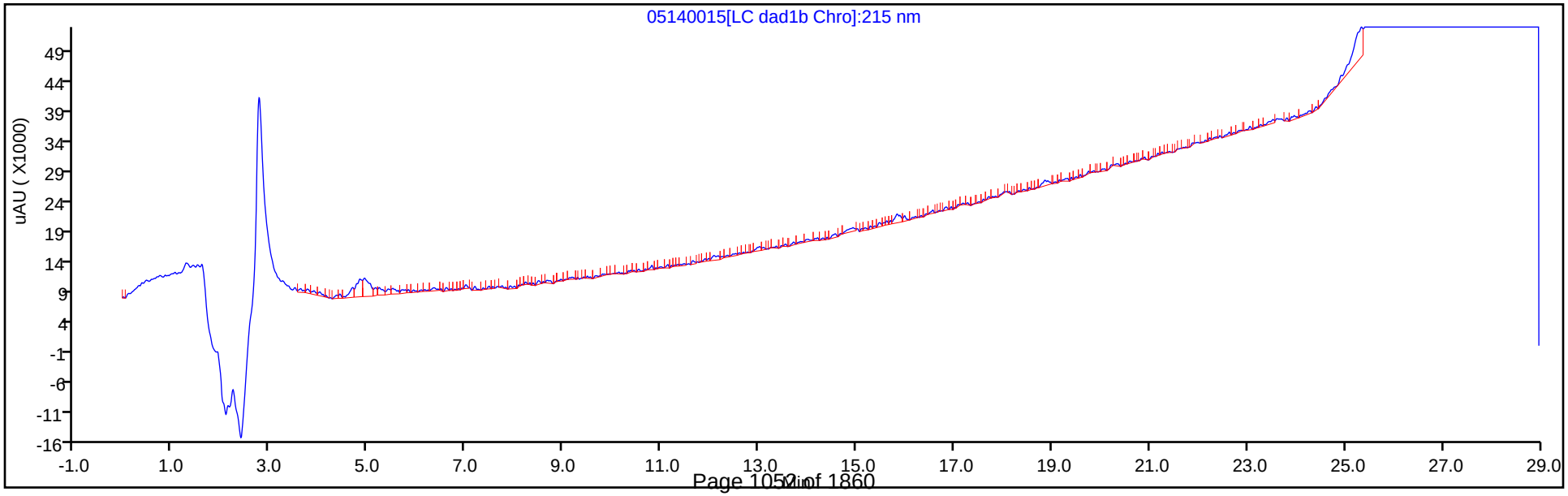
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d

Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 1			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

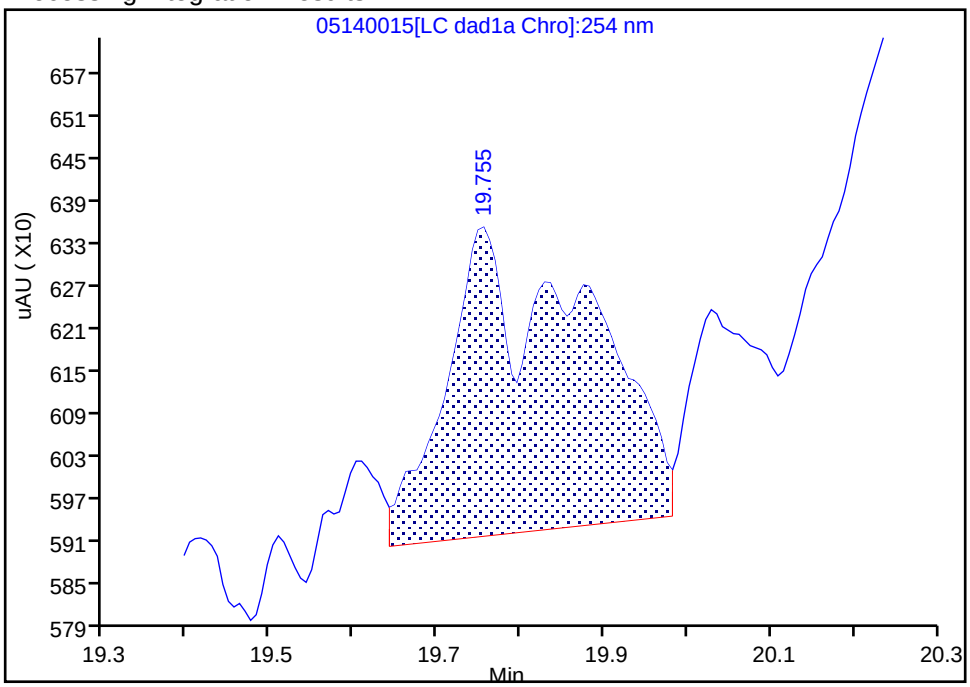
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

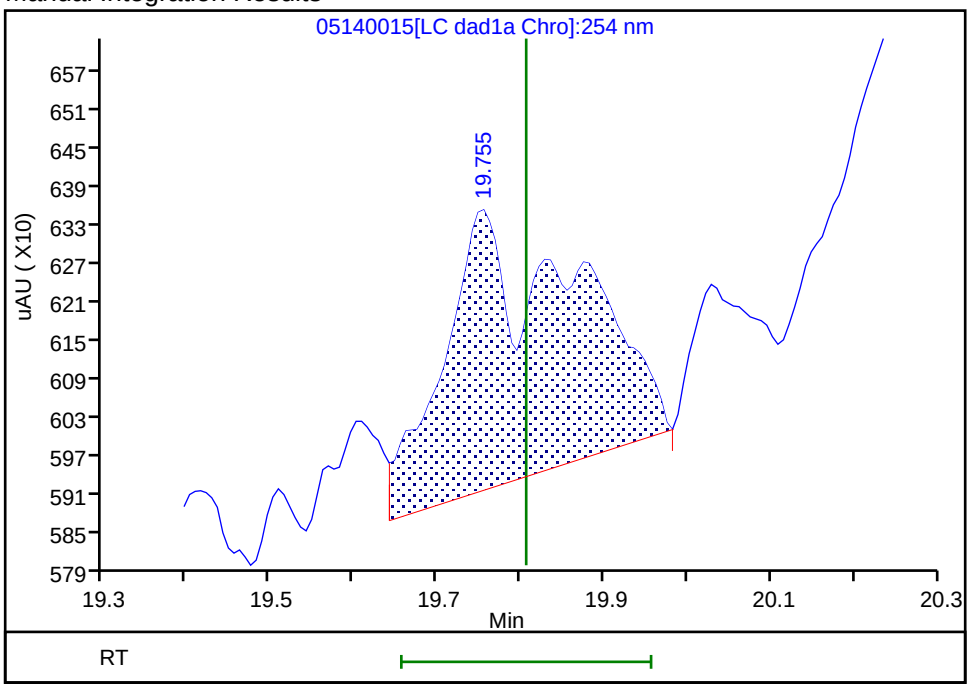
Processing Integration Results

RT: 19.76
Area: 5064
Amount: 0.014857
Amount Units: ug/ml



Manual Integration Results

RT: 19.76
Area: 4758
Amount: 0.001113
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:30:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

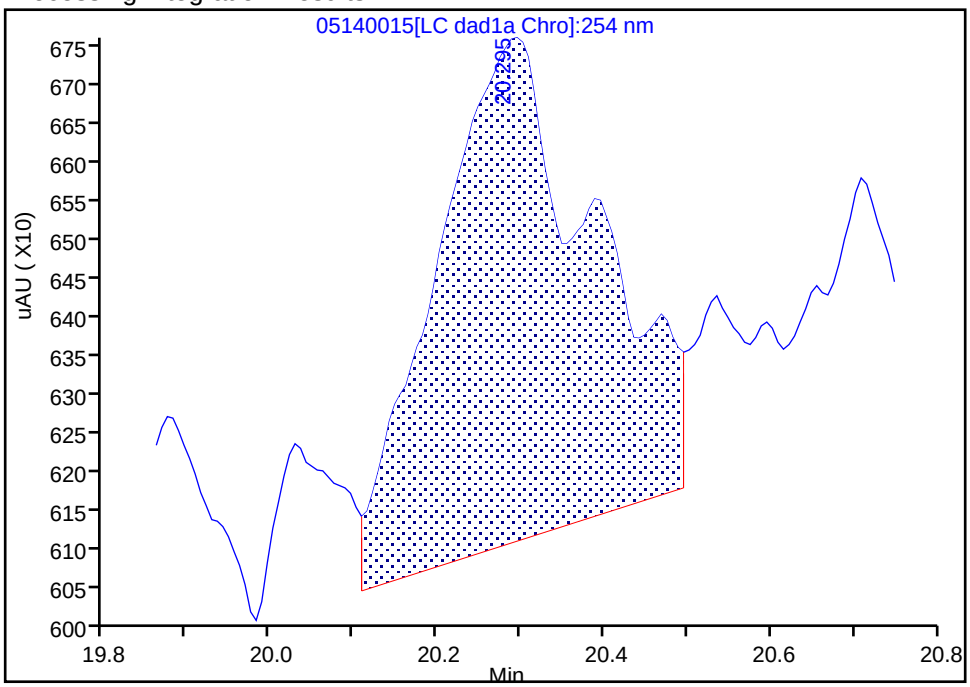
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

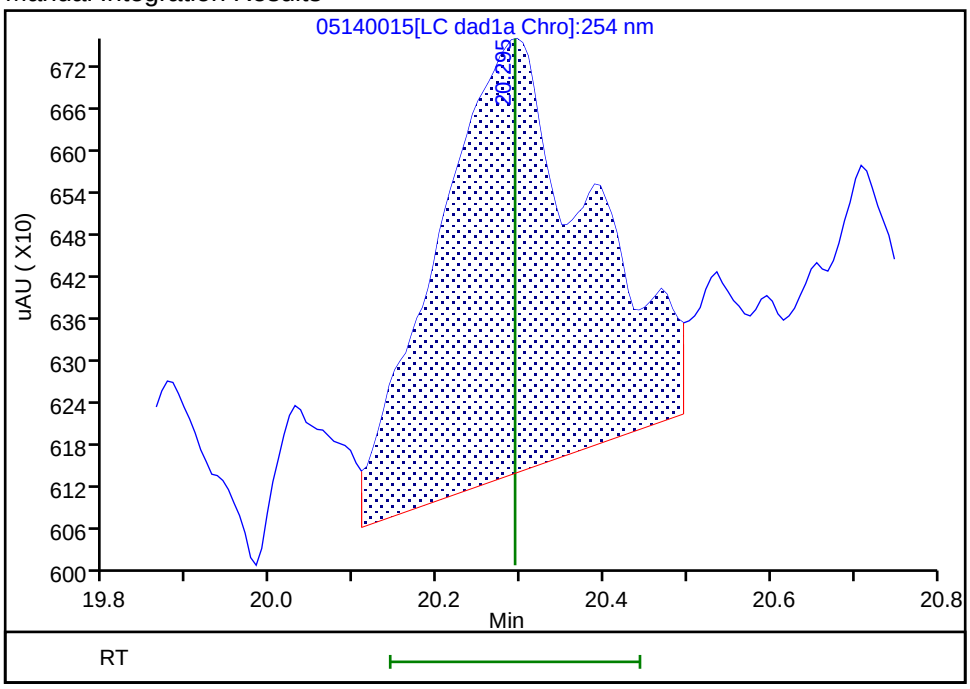
Processing Integration Results

RT: 20.30
Area: 8698
Amount: 0.013456
Amount Units: ug/ml



Manual Integration Results

RT: 20.30
Area: 7990
Amount: 0.012482
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:30:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 22:06 Calibration End Date: 05/15/2020 02:46 Calibration ID: 44235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/24	05140024.D
Level 2	IC 280-494886/23	05140023.D
Level 3	IC 280-494886/22	05140022.D
Level 4	IC 280-494886/21	05140021.D
Level 5	IC 280-494886/20	05140020.D
Level 6	IC 280-494886/19	05140019.D
Level 7	IC 280-494886/18	05140018.D
Level 8	IC 280-494886/17	05140017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.430	5.411	5.420	5.417	5.419	5.416	5.408	5.395			5.267 - 5.567	5.415
DNX	6.217	6.224	6.226	6.231	6.226	6.223	6.214	6.202			6.081 - 6.381	6.220
MNX	7.737	7.744	7.740	7.744	7.739	7.736	7.728	7.709			7.594 - 7.894	7.735

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 22:06 Calibration End Date: 05/15/2020 02:46 Calibration ID: 44235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/24	05140024.D
Level 2	IC 280-494886/23	05140023.D
Level 3	IC 280-494886/22	05140022.D
Level 4	IC 280-494886/21	05140021.D
Level 5	IC 280-494886/20	05140020.D
Level 6	IC 280-494886/19	05140019.D
Level 7	IC 280-494886/18	05140018.D
Level 8	IC 280-494886/17	05140017.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	552048 411823	425974 414575	452338 409749	404831 415188	Ave		435815.884				11.3		20.0			
DNX	380619 318914	320939 302202	322807 308244	308000 307920	Ave		321205.643				7.8		20.0			
MNX	510454 287059	337087 281216	295227 270908	285954 281272	Lin2	5408.61434	266896.431							0.9970		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 22:06 Calibration End Date: 05/15/2020 02:46 Calibration ID: 44235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/24	05140024.D
Level 2	IC 280-494886/23	05140023.D
Level 3	IC 280-494886/22	05140022.D
Level 4	IC 280-494886/21	05140021.D
Level 5	IC 280-494886/20	05140020.D
Level 6	IC 280-494886/19	05140019.D
Level 7	IC 280-494886/18	05140018.D
Level 8	IC 280-494886/17	05140017.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	11052 290493	21320 410159	45279 1039009	101309	164894	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	7620 211753	16063 308552	32313 770570	77077	127693	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Lin2	11914 229725	19669 316150	34453 820612	83427	133999	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140017.D				
Lims ID:	IC DMT 9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	14-May-2020 22:06:26	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 9				
Misc. Info.:	280-0091518-017				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:02	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				
First Level Reviewer: zhangji		Date:	15-May-2020 11:36:21		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.395	5.417	-0.022	1039009	2.50	2.38	
4 DNX	1	6.202	6.231	-0.029	770570	2.50	2.40	
7 MNX	1	7.709	7.744	-0.035	820612	2.92	3.05	a

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00006 Amount Added: 125.00 Units: uL

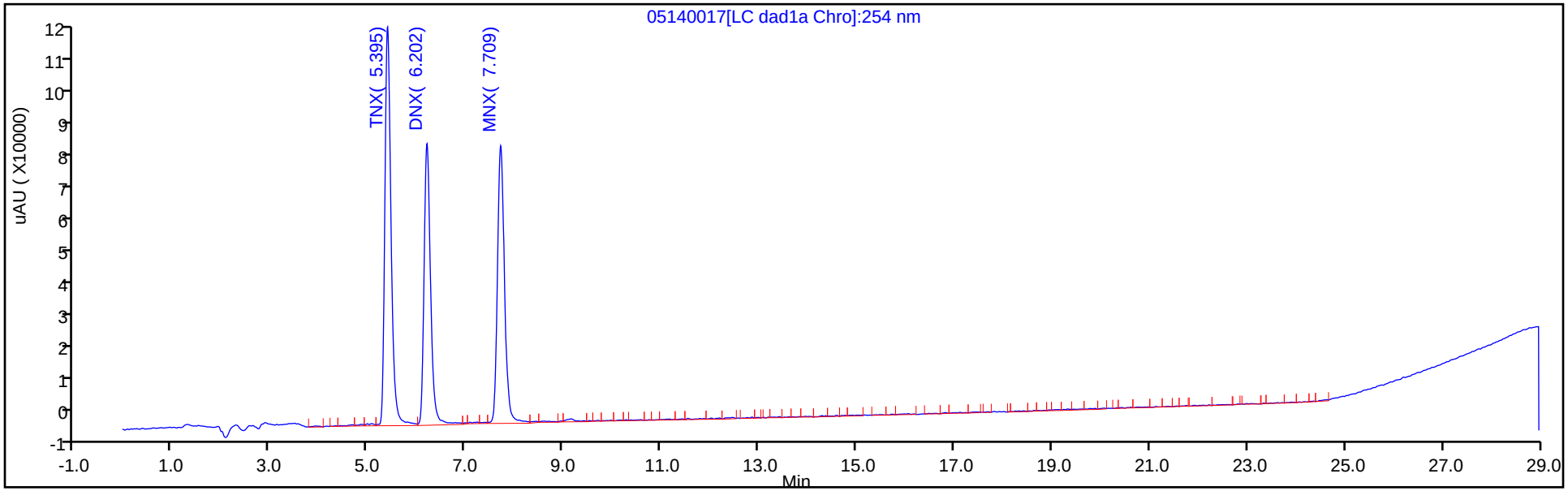
Report Date: 15-May-2020 12:01:02 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

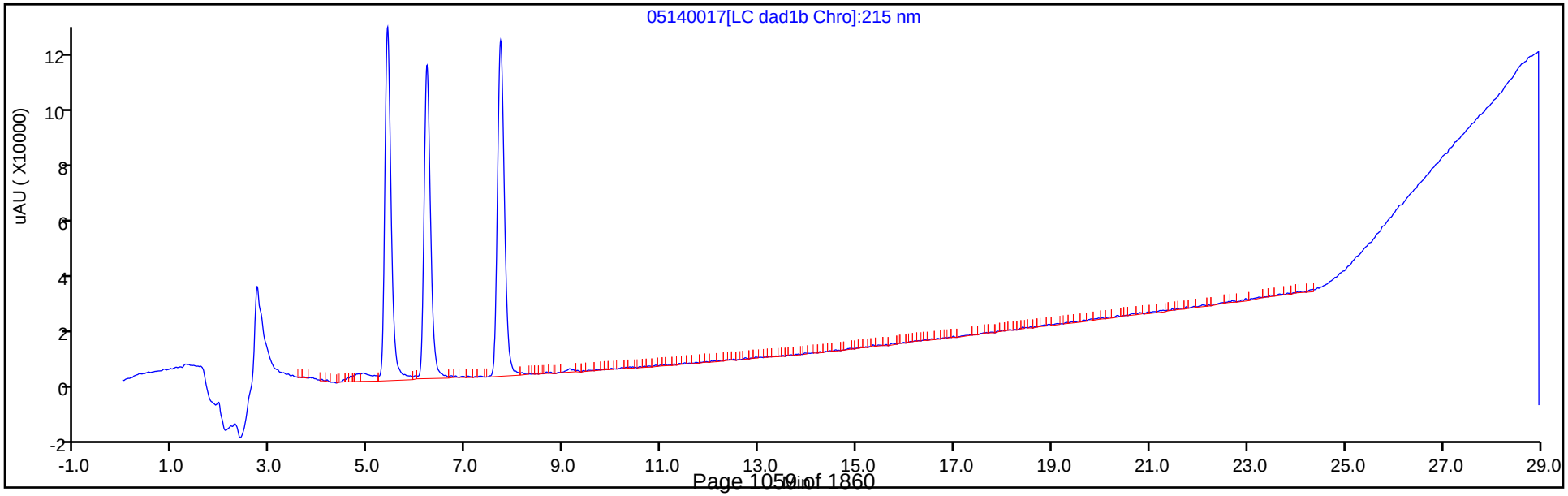
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140017.d

Injection Date:	14-May-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 9			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

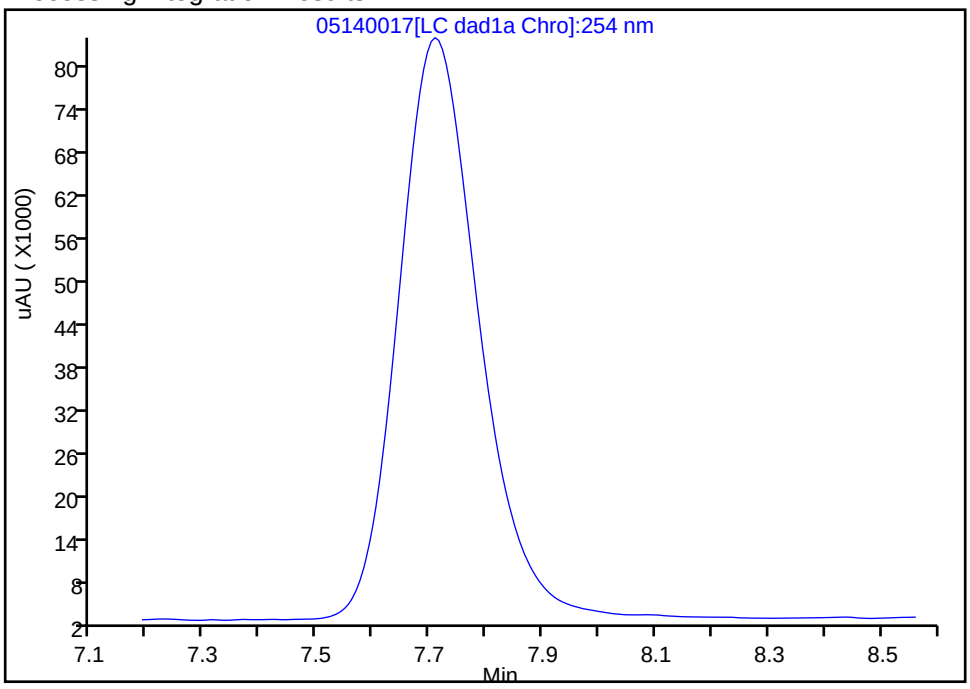
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140017.d				
Injection Date:	14-May-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

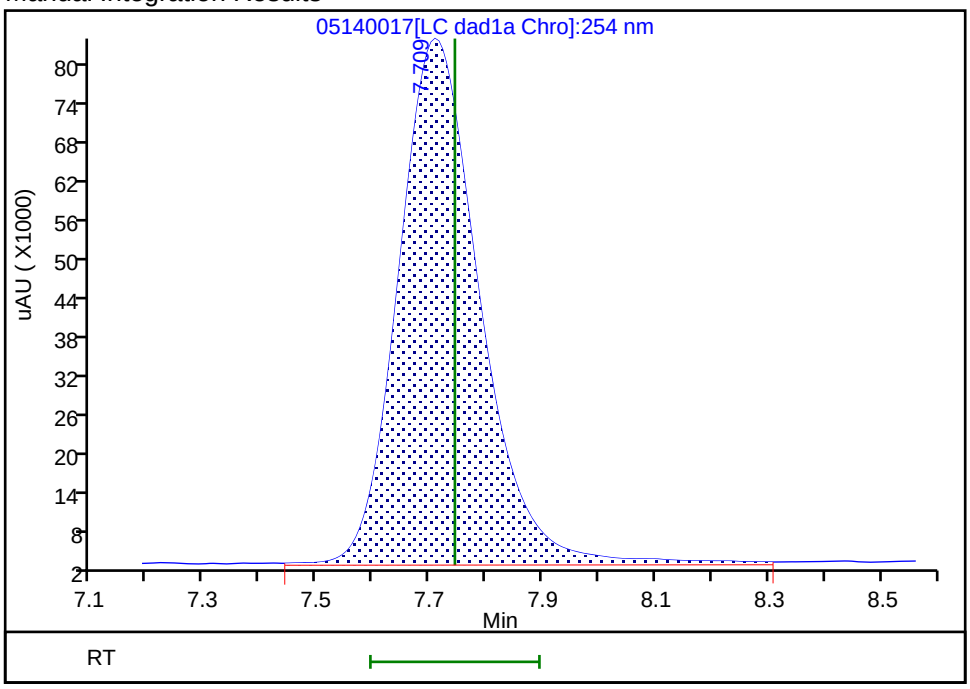
Not Detected
Expected RT: 7.74

Processing Integration Results



Manual Integration Results

RT: 7.71
Area: 820612
Amount: 3.054381
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:36:42
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140018.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	14-May-2020 22:41:23	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0091518-018				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:02	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				
First Level Reviewer: zhangji		Date:	15-May-2020 11:36:48		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.408	5.417	-0.009	410159	1.00	0.9411	
4 DNX	1	6.214	6.231	-0.017	308552	1.00	0.9606	
7 MNX	1	7.728	7.744	-0.016	316150	1.17	1.16	a

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00006 Amount Added: 50.00 Units: uL

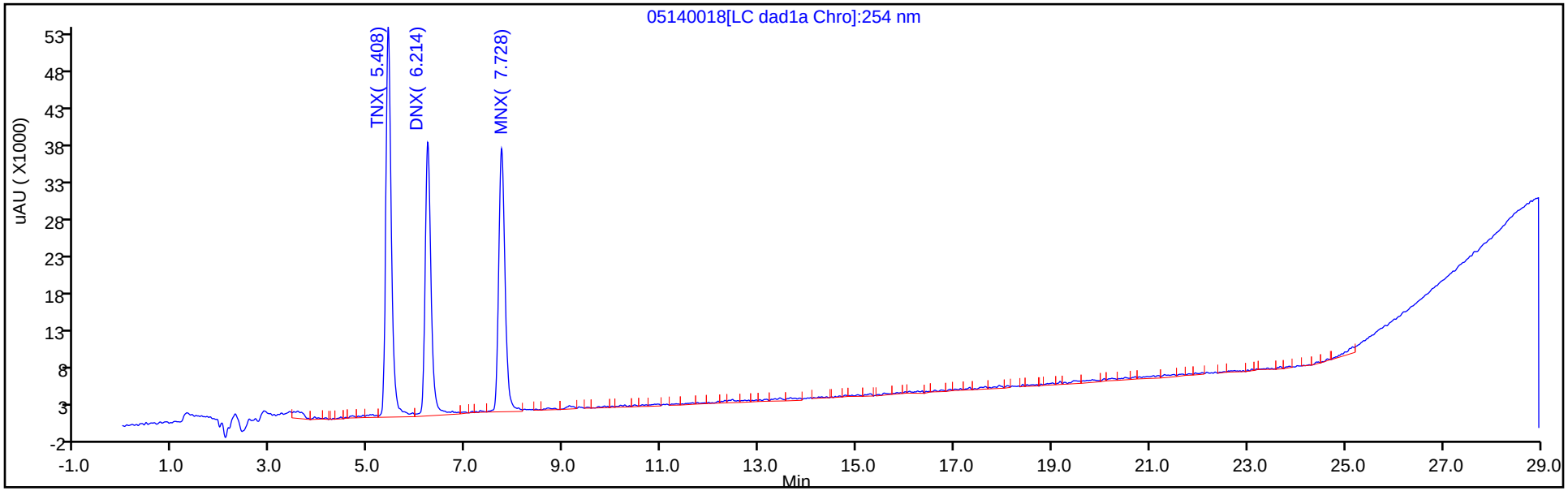
Report Date: 15-May-2020 12:01:03 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

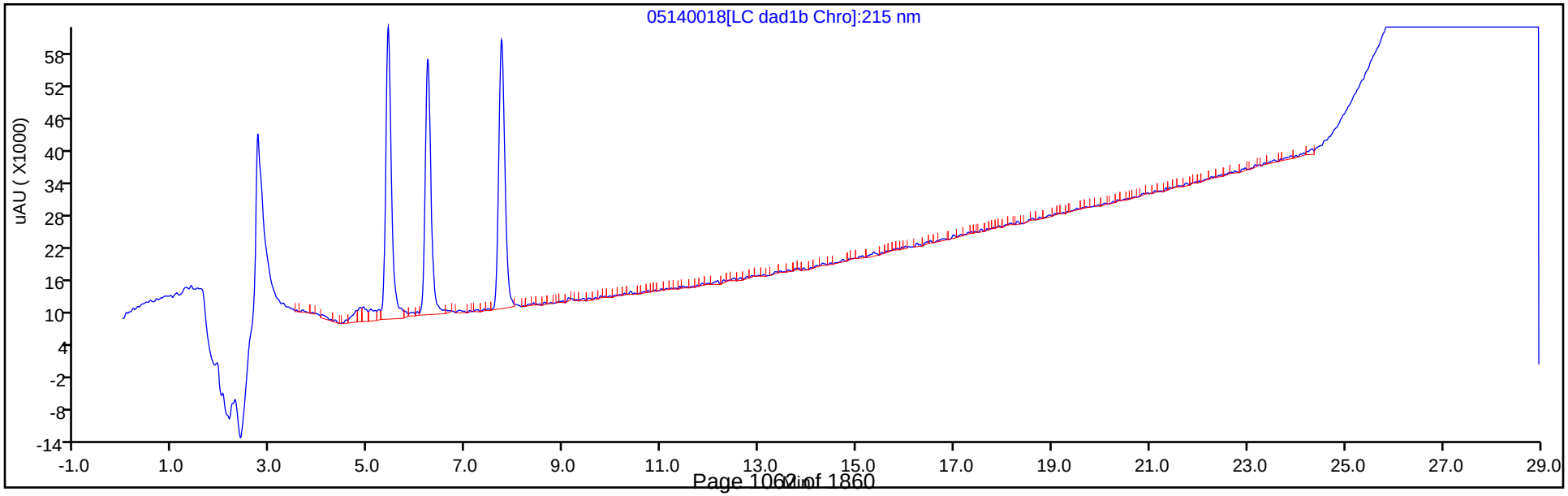
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140018.d

Injection Date:	14-May-2020 22:41:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 8			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

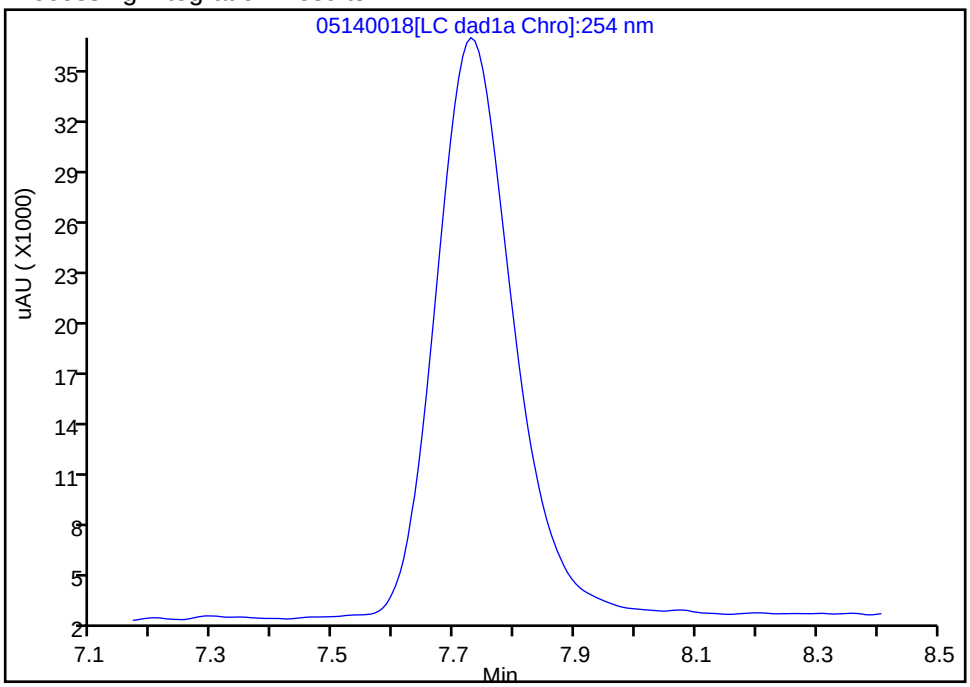
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140018.d				
Injection Date:	14-May-2020 22:41:23	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

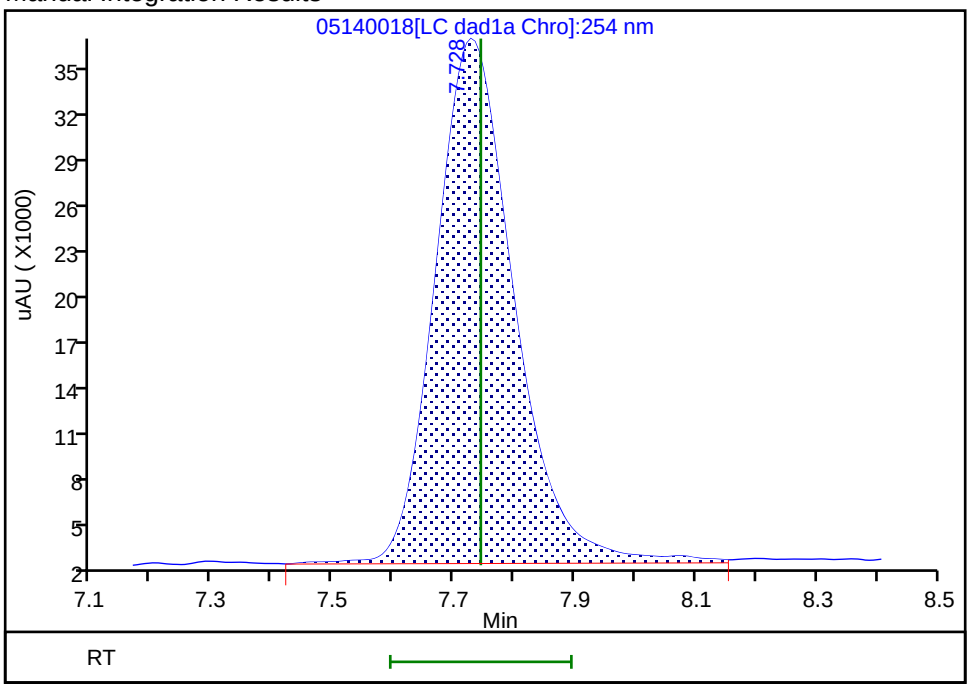
Not Detected
Expected RT: 7.74

Processing Integration Results



Manual Integration Results

RT: 7.73
Area: 316150
Amount: 1.164277
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:36:46
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140019.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	14-May-2020 23:16:26	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0091518-019				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:03	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				
First Level Reviewer: zhangji		Date:	15-May-2020 11:36:56		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.416	5.417	-0.001	290493	0.7007	0.6665	
4 DNX	1	6.223	6.231	-0.008	211753	0.7007	0.6592	
7 MNX	1	7.736	7.744	-0.008	229725	0.8169	0.8405	a

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00006 Amount Added: 35.00 Units: uL

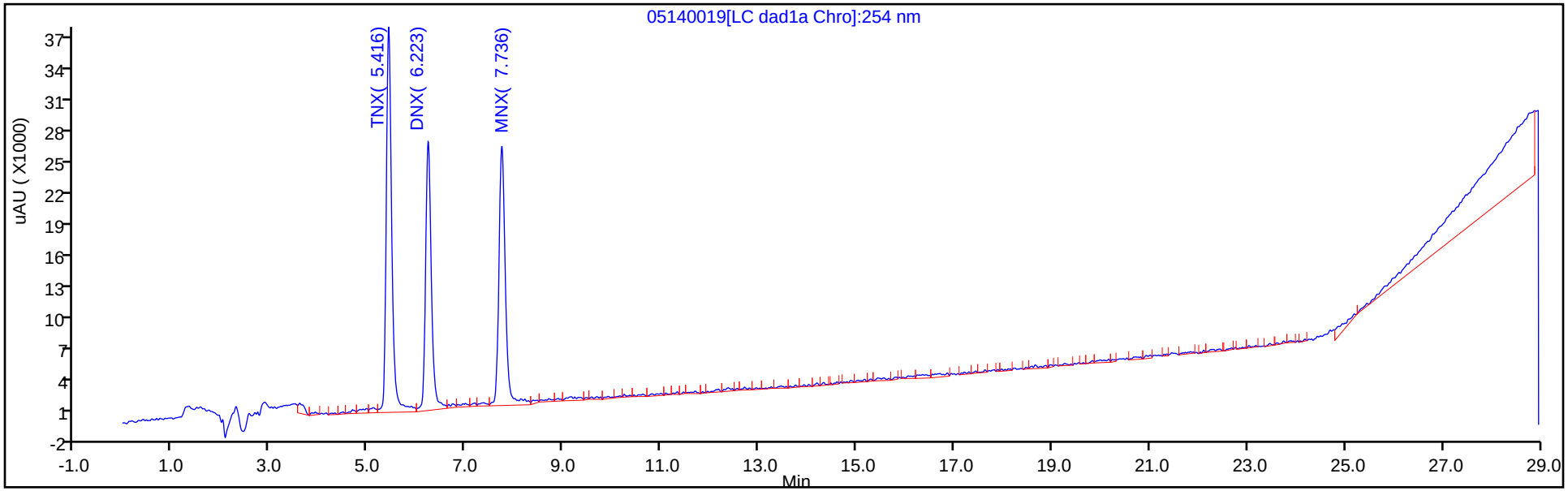
Report Date: 15-May-2020 12:01:03 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

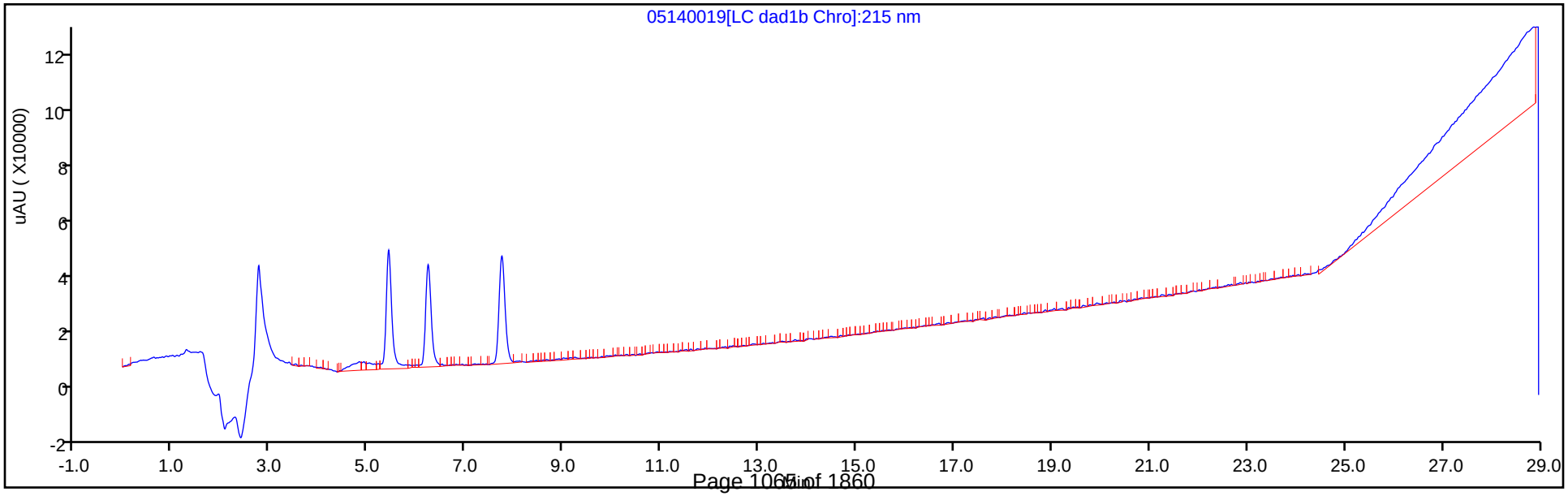
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140019.d

Injection Date:	14-May-2020 23:16:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 7			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

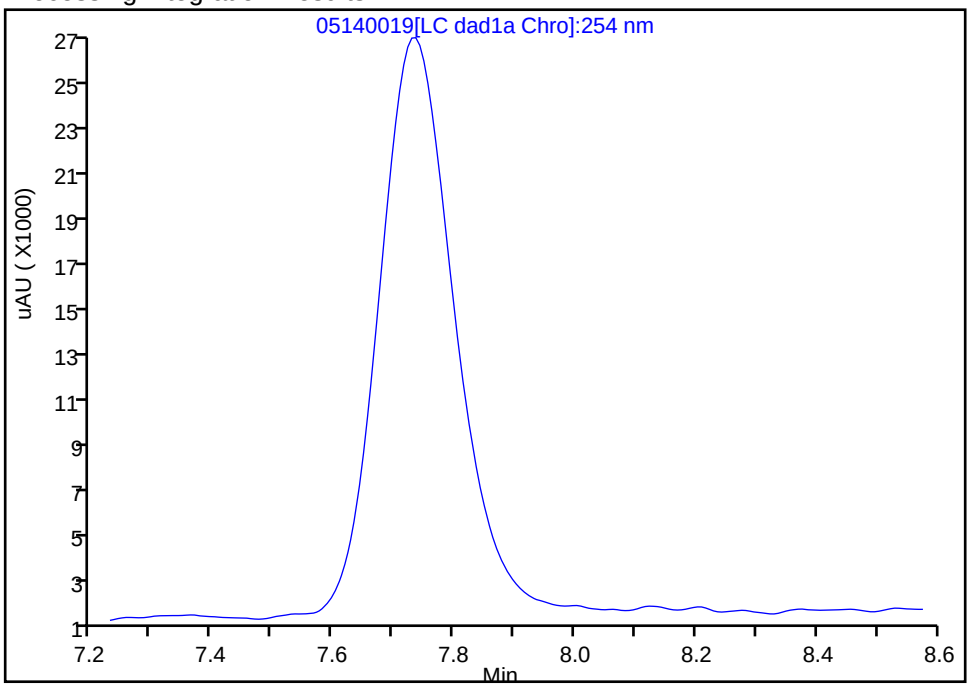
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140019.d				
Injection Date:	14-May-2020 23:16:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

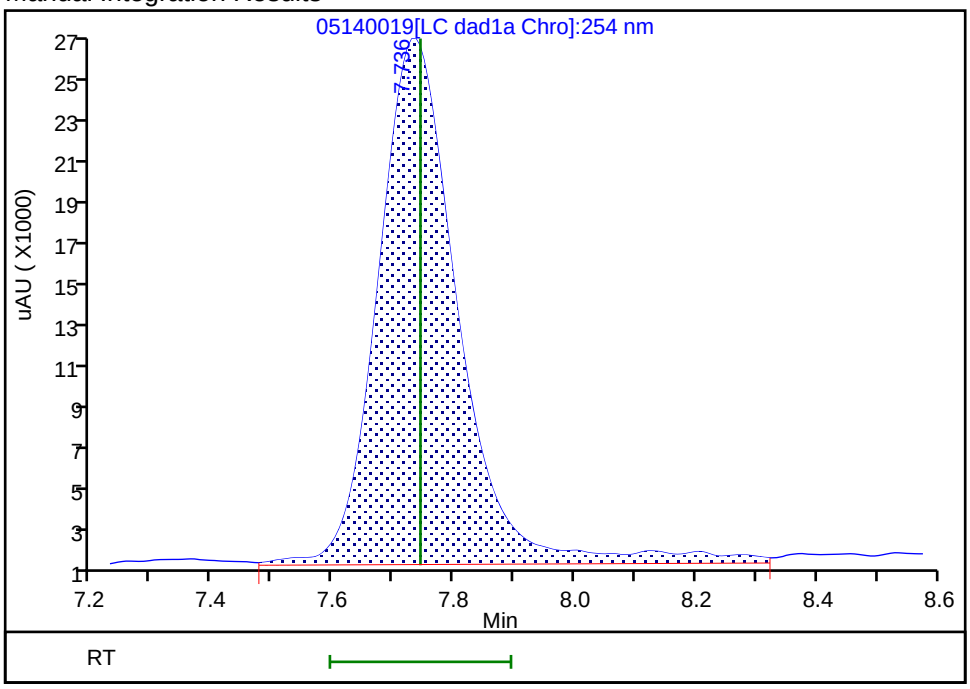
Not Detected
Expected RT: 7.74

Processing Integration Results



Manual Integration Results

RT: 7.74
Area: 229725
Amount: 0.840462
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:36:55
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140020.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	14-May-2020 23:51:28	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0091518-020				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:03	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				
First Level Reviewer: zhangji		Date:	15-May-2020 11:37:01		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.419	5.417	0.002	164894	0.4004	0.3784	
4 DNX	1	6.226	6.231	-0.005	127693	0.4004	0.3975	
7 MNX	1	7.739	7.744	-0.005	133999	0.4668	0.4818	a

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00006 Amount Added: 20.00 Units: uL

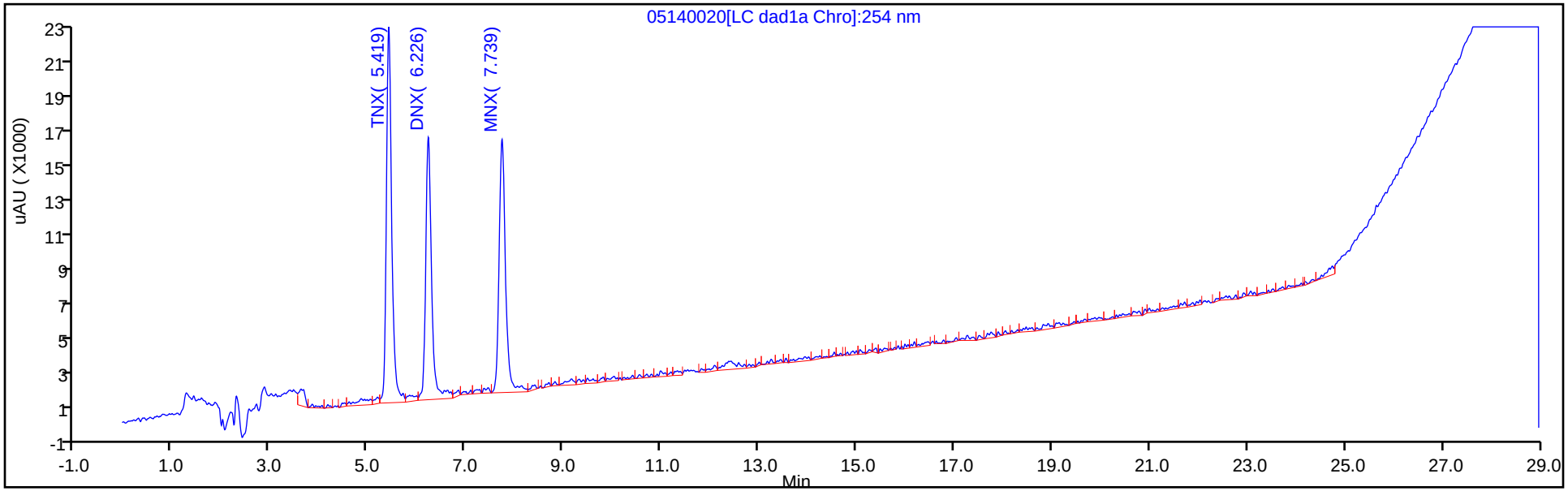
Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

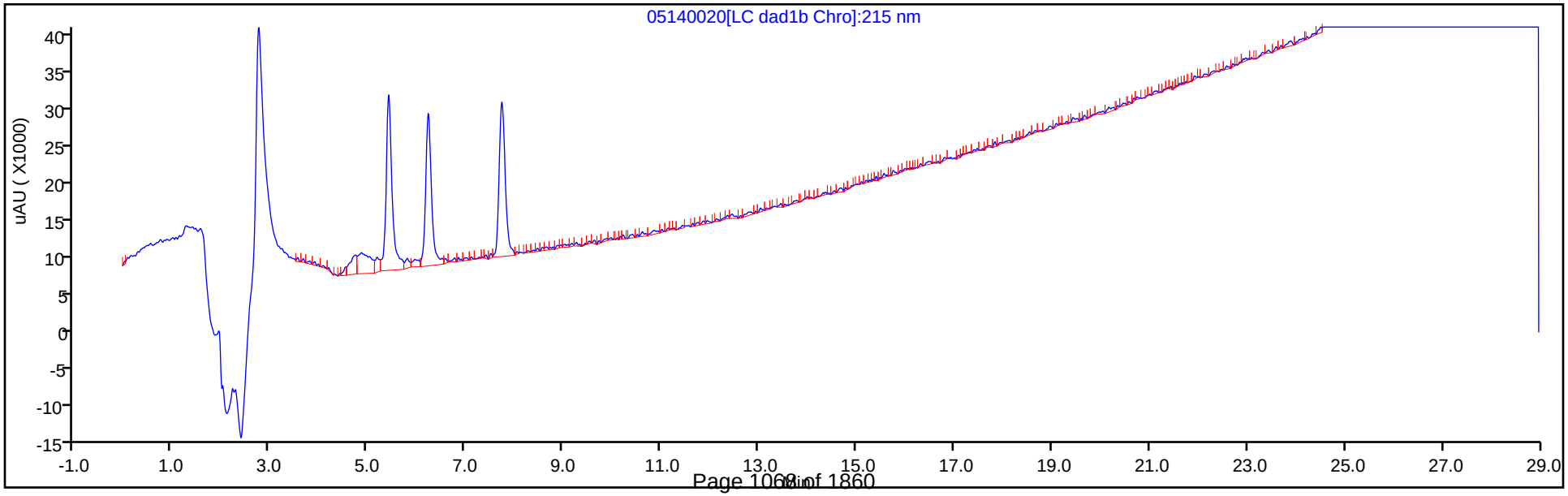
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140020.d

Injection Date:	14-May-2020 23:51:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 6			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

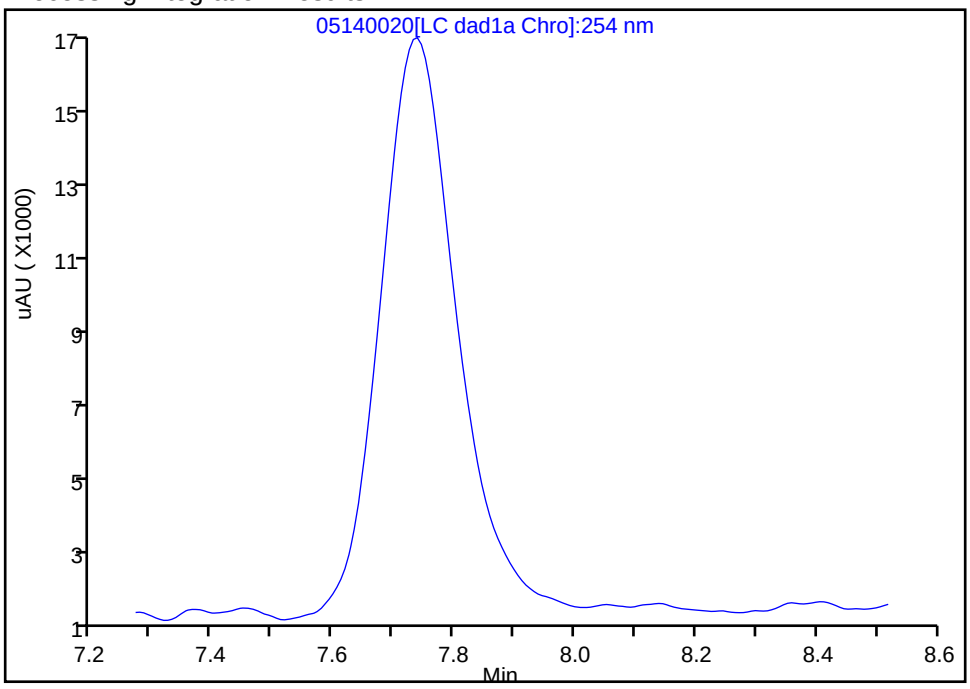
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140020.d				
Injection Date:	14-May-2020 23:51:28	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

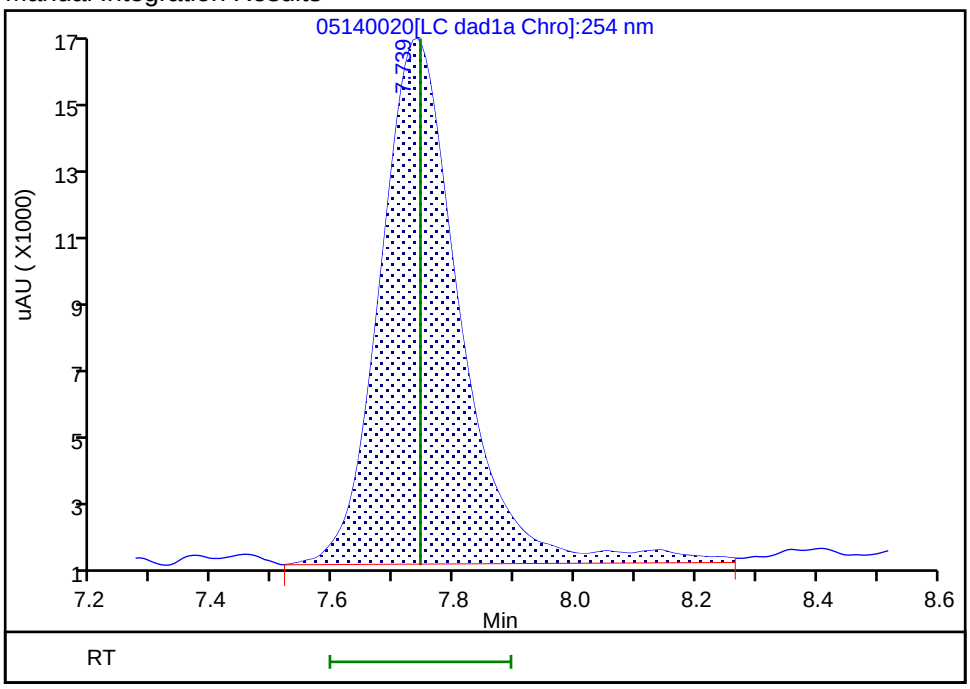
Not Detected
Expected RT: 7.74

Processing Integration Results



Manual Integration Results

RT: 7.74
Area: 133999
Amount: 0.481799
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:36:59
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140021.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	15-May-2020 00:26:25	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0091518-021				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:04	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.417	5.417	0.000	101309	0.2503	0.2325	
4 DNX	1	6.231	6.231	0.000	77077	0.2503	0.2400	
7 MNX	1	7.744	7.744	0.000	83427	0.2918	0.2923	

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

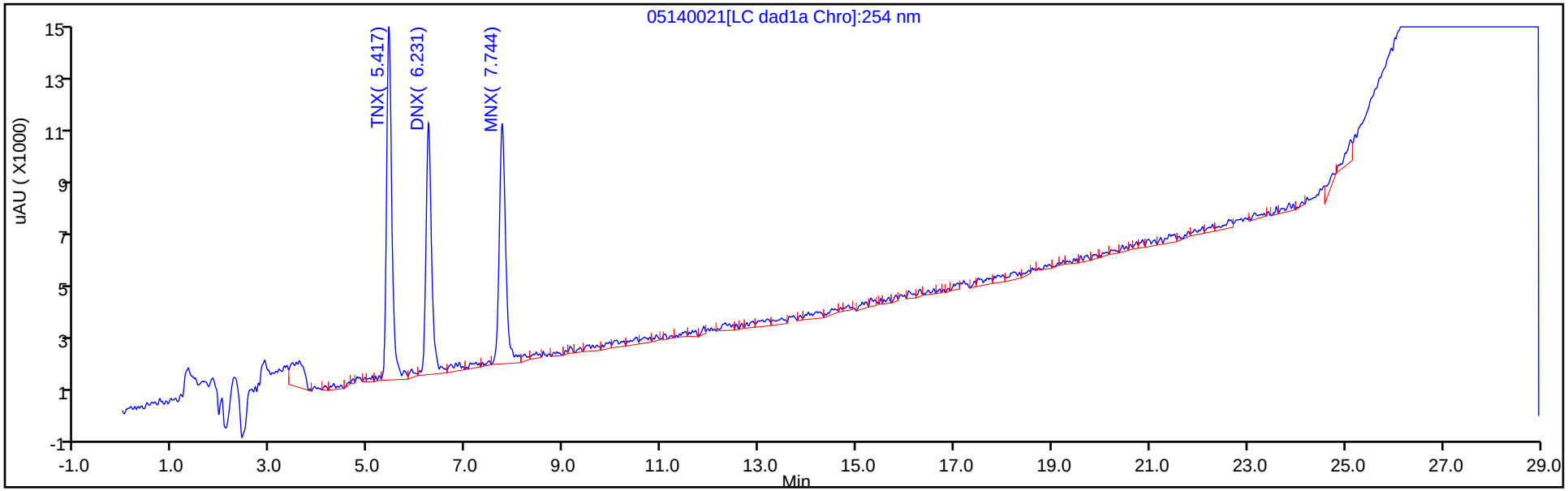
Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

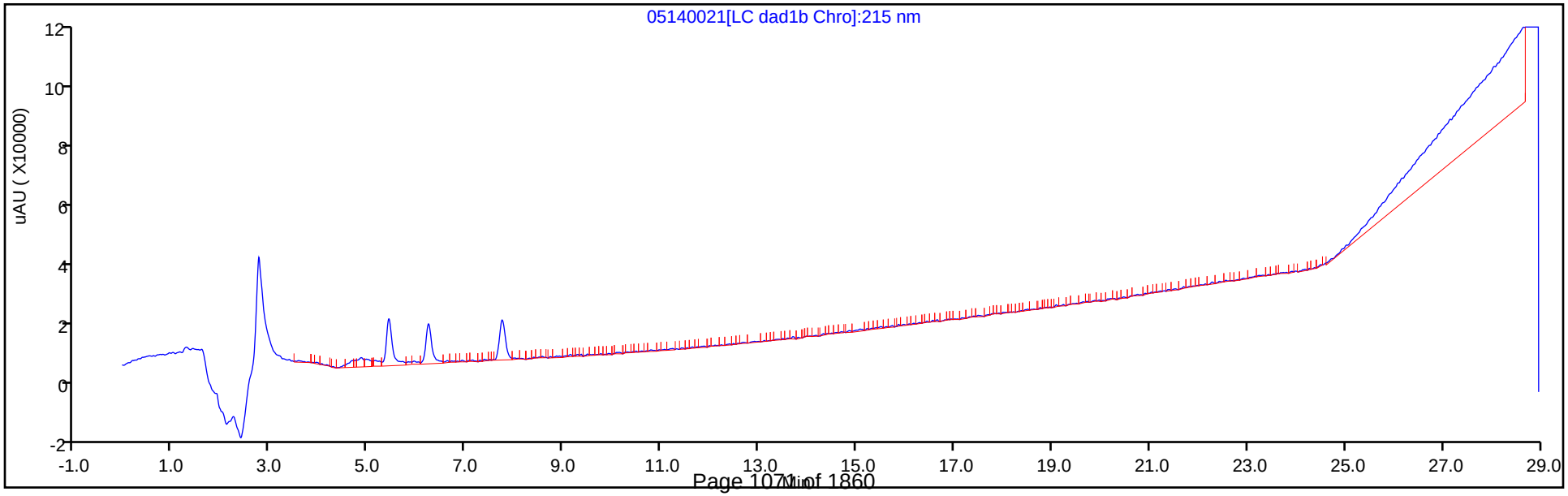
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140021.d

Injection Date:	15-May-2020 00:26:25	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 5			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140022.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	15-May-2020 01:01:25	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Misc. Info.:	280-0091518-022				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:04	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.420	5.417	0.003	45279	0.1001	0.1039	
4 DNX	1	6.226	6.231	-0.005	32313	0.1001	0.1006	
7 MNX	1	7.740	7.744	-0.004	34453	0.1167	0.1088	

Reagents:

8330 DMT_00006 Amount Added: 5.00 Units: uL

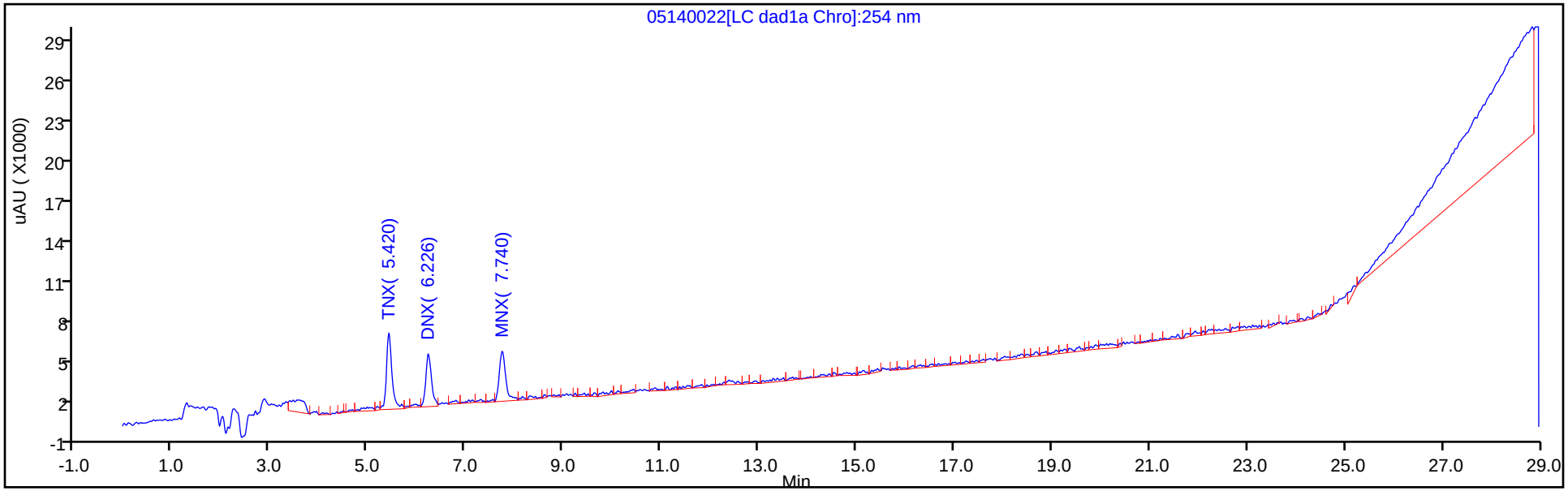
Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

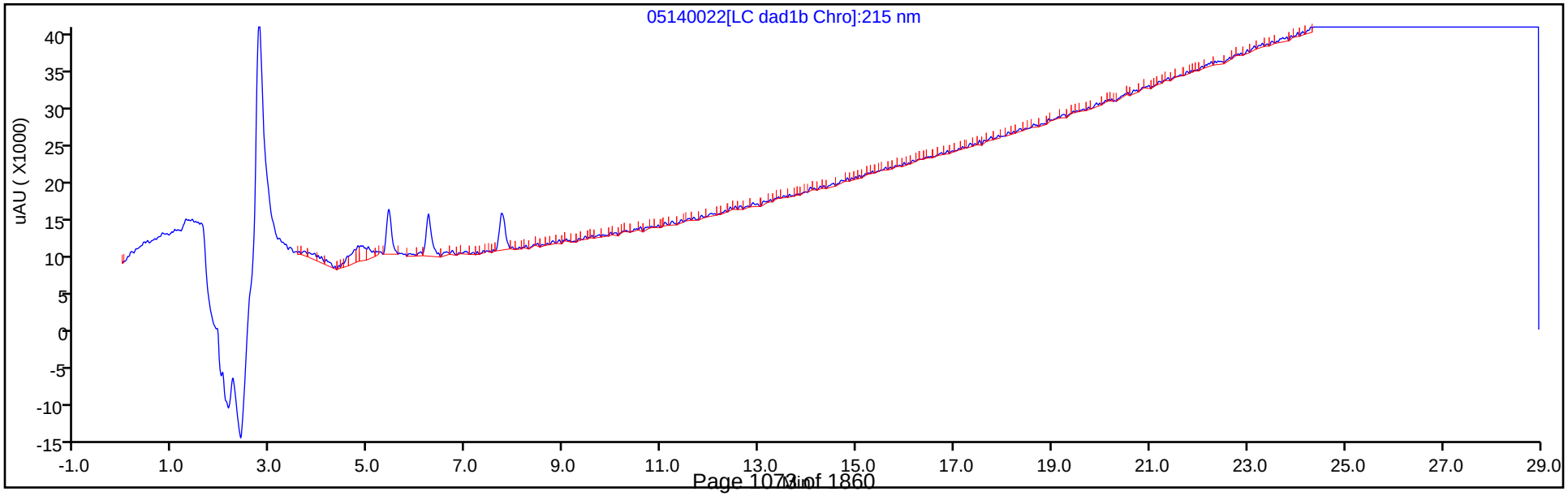
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140022.d

Injection Date:	15-May-2020 01:01:25	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 4			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140023.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	15-May-2020 01:36:23	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Misc. Info.:	280-0091518-023				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:05	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.411	5.417	-0.006	21320	0.0501	0.0489	
4 DNX	1	6.224	6.231	-0.007	16063	0.0501	0.0500	
7 MNX	1	7.744	7.744	0.000	19669	0.0584	0.0534	

Reagents:

8330 DMT_00006 Amount Added: 2.50 Units: uL

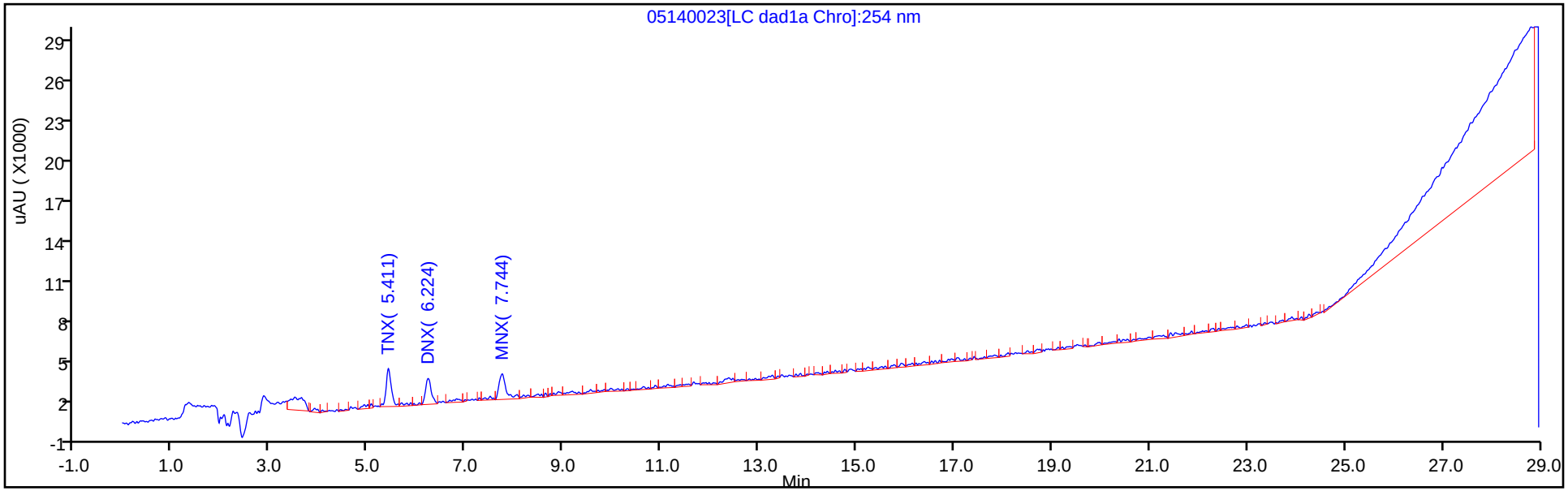
Report Date: 15-May-2020 12:01:05 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

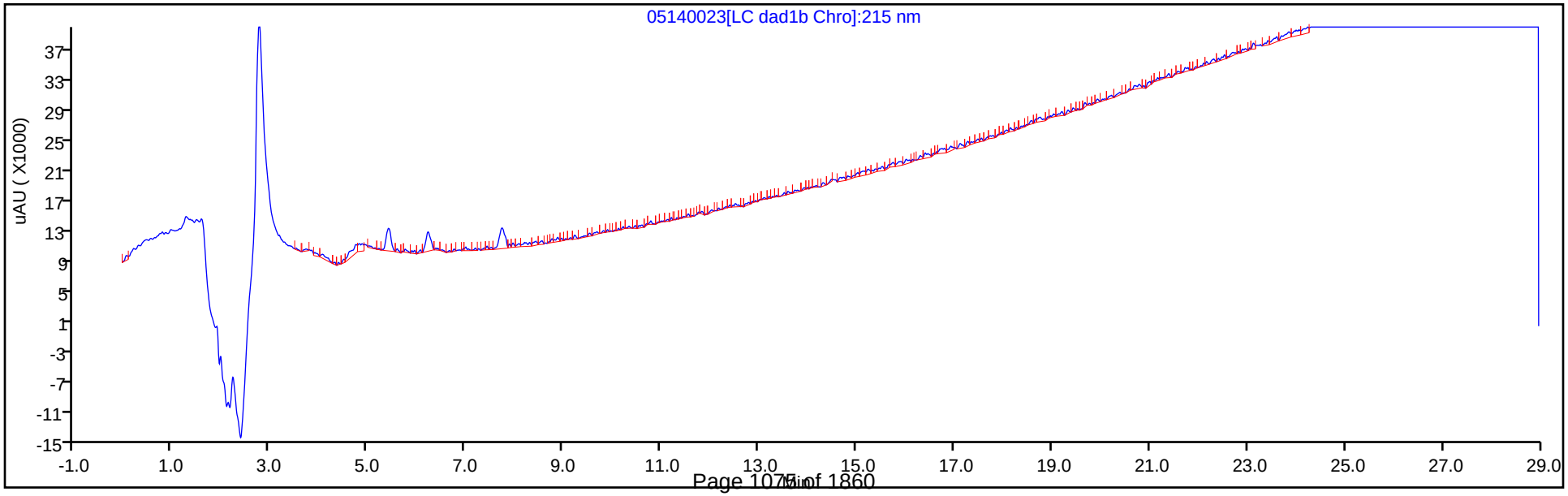
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140023.d

Injection Date:	15-May-2020 01:36:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 3			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	15-May-2020 02:11:20	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0091518-024				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:05	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.430	5.417	0.013	11052	0.0200	0.0254	
4 DNX	1	6.217	6.231	-0.014	7620	0.0200	0.0237	
7 MNX	1	7.737	7.744	-0.007	11914	0.0233	0.0244	

Reagents:

8330 DMT_00006 Amount Added: 1.00 Units: uL

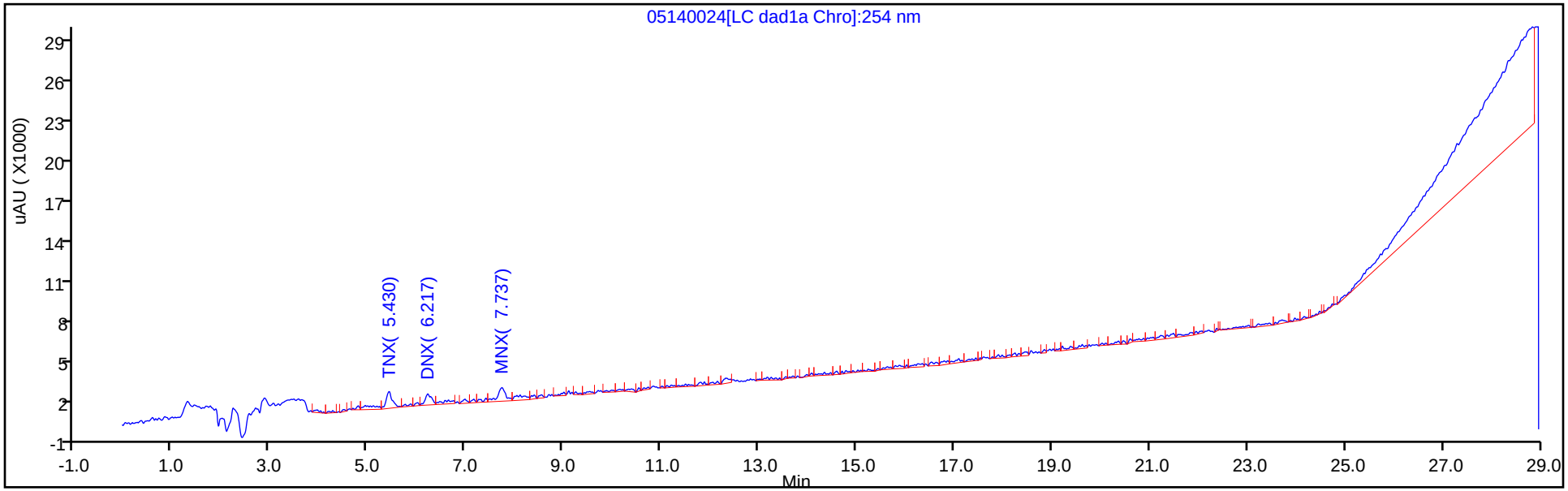
Report Date: 15-May-2020 12:01:05 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

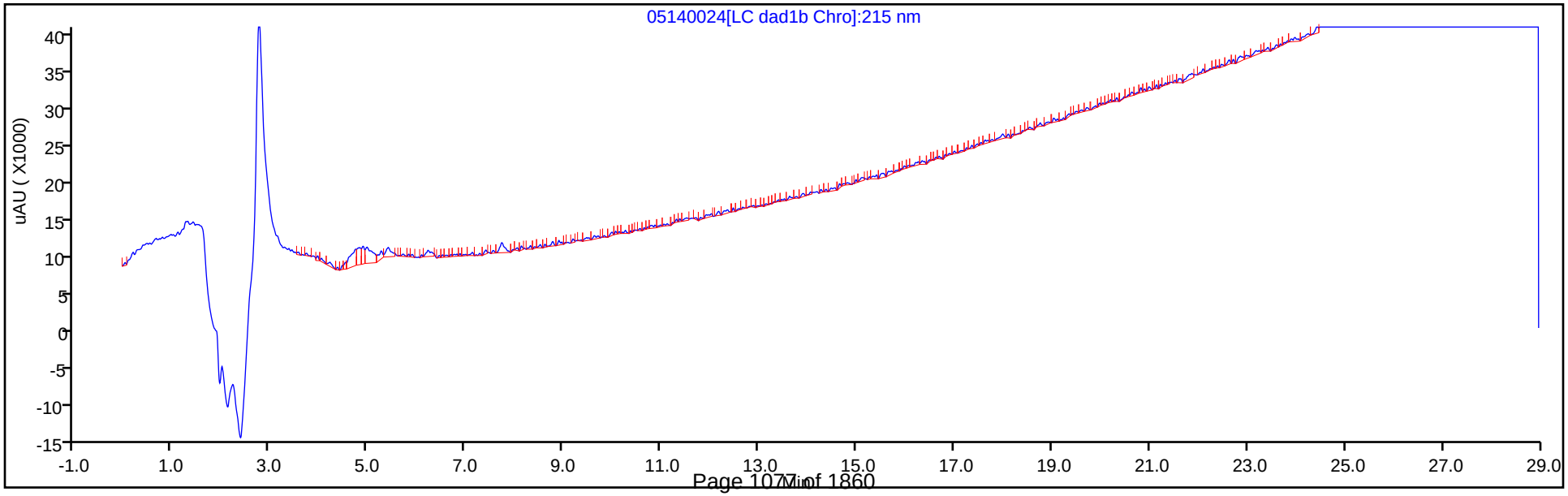
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140024.d

Injection Date:	15-May-2020 02:11:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 2			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/14	03040014.D
Level 2	IC 280-487658/13	03040013.D
Level 3	IC 280-487658/12	03040012.D
Level 4	IC 280-487658/11	03040011.D
Level 5	IC 280-487658/10	03040010.D
Level 6	IC 280-487658/9	03040009.D
Level 7	IC 280-487658/8	03040008.D
Level 8	IC 280-487658/7	03040007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.682	6.684	6.682	6.683	6.684	6.683	6.685	6.682			6.533 - 6.833	6.683
RDX	7.755	7.750	7.749	7.750	7.758	7.756	7.759	7.748			7.600 - 7.900	7.753
Picric acid	8.082	8.077	8.069	8.063	8.058	8.043	8.032	7.982			7.906 - 8.206	8.051
1,3,5-Trinitrobenzene	8.882	8.884	8.882	8.883	8.884	8.883	8.885	8.875			8.733 - 9.033	8.882
1,3-Dinitrobenzene	9.535	9.530	9.529	9.536	9.531	9.529	9.532	9.522			9.379 - 9.679	9.531
Nitrobenzene	9.922	9.917	9.915	9.923	9.917	9.916	9.912	9.908			9.766 - 10.066	9.916
Tetryl	10.215	10.217	10.215	10.216	10.217	10.216	10.212	10.208			10.066 - 10.366	10.215
Nitroglycerin	10.728	10.730	10.722	10.730	10.731	10.729	10.719	10.708			10.579 - 10.879	10.725
2,4,6-Trinitrotoluene	11.182	11.183	11.175	11.183	11.184	11.182	11.172	11.175			11.083 - 11.283	11.180
4-Amino-2,6-dinitrotoluene	11.342	11.337	11.329	11.336	11.344	11.336	11.325	11.322			11.236 - 11.436	11.334
2-Amino-4,6-dinitrotoluene	11.622	11.623	11.615	11.623	11.631	11.622	11.612	11.608			11.523 - 11.723	11.620
2,6-Dinitrotoluene	11.788	11.790	11.782	11.790	11.791	11.789	11.779	11.775			11.689 - 11.889	11.786
2,4-Dinitrotoluene	11.988	11.983	11.975	11.983	11.991	11.982	11.972	11.968			11.883 - 12.083	11.980
o-Nitrotoluene	12.828	12.830	12.822	12.830	12.831	12.822	12.819	12.815			12.679 - 12.979	12.825
p-Nitrotoluene	13.268	13.263	13.255	13.263	13.271	13.262	13.252	13.248			13.119 - 13.419	13.260
m-Nitrotoluene	13.868	13.863	13.855	13.863	13.871	13.856	13.852	13.842			13.713 - 14.013	13.859
PETN	14.962	14.963	14.962	14.963	14.971	14.956	14.952	14.942			14.819 - 15.119	14.959
1,2-Dinitrobenzene	8.715	8.710	8.709	8.710	8.711	8.709	8.712	8.702			8.560 - 8.860	8.710

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/14	03040014.D
Level 2	IC 280-487658/13	03040013.D
Level 3	IC 280-487658/12	03040012.D
Level 4	IC 280-487658/11	03040011.D
Level 5	IC 280-487658/10	03040010.D
Level 6	IC 280-487658/9	03040009.D
Level 7	IC 280-487658/8	03040008.D
Level 8	IC 280-487658/7	03040007.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								
HMX	76000 92195	84000 92901	90690 91886	91556 94192	Ave		89177.5536				6.9		20.0			
RDX	135800 113668	121280 113474	118060 112538	114104 114027	Ave		117868.823				6.6		20.0			
Picric acid	85600 87078	86880 87800	86250 87686	86696 89985	Ave		87246.8375				1.5		20.0			
1,3,5-Trinitrobenzene	241317 243301	243114 244799	242255 243367	242443 247077	Ave		243459.240				0.7		20.0			
1,3-Dinitrobenzene	317016 326305	319760 327946	324012 325028	322762 331181	Ave		324251.264				1.4		20.0			
Nitrobenzene	213496 213700	206972 215276	212400 212102	209502 218063	Ave		212688.862				1.6		20.0			
Tetryl	201248 192630	193054 193253	192365 192871	189457 196083	Ave		193870.110				1.8		20.0			
Nitroglycerin	65725 73511	68592 73876	71710 73303	73524 74137	Ave		71797.3561				4.2		20.0			
2,4,6-Trinitrotoluene	221713 220022	223725 219599	219920 221109	216454 224745	Ave		220910.986				1.2		20.0			
4-Amino-2,6-dinitrotoluene	172827 171731	179960 174551	170849 170344	174965 172519	Ave		173468.308				1.8		20.0			
2-Amino-4,6-dinitrotoluene	221713 216511	215040 216363	215538 218189	214008 222947	Ave		217538.754				1.5		20.0			
2,6-Dinitrotoluene	159512 159933	160657 161471	158845 155997	160088 158732	Ave		159404.313				1.0		20.0			
2,4-Dinitrotoluene	316285 321230	320458 323479	317131 322066	320327 328339	Ave		321164.424				1.2		20.0			
o-Nitrotoluene	165800 137323	156020 137486	142550 135008	137560 138961	Ave		143838.427				7.7		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.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

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								
p-Nitrotoluene	127495 118346	123273 118529	119112 116856	118255 120524	Ave		120298.779				2.9		20.0			
m-Nitrotoluene	160639 152110	161319 152488	152188 149787	150997 154421	Ave		154243.594				2.8		20.0			
PETN	66740 82493	74332 83187	80671 82517	81690 84015	Ave		79455.6132				7.5		20.0			
1,2-Dinitrobenzene	149050 144823	148380 145561	145890 144385	144548 147083	Ave		146215.016				1.2		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.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/14	03040014.D
Level 2	IC 280-487658/13	03040013.D
Level 3	IC 280-487658/12	03040012.D
Level 4	IC 280-487658/11	03040011.D
Level 5	IC 280-487658/10	03040010.D
Level 6	IC 280-487658/9	03040009.D
Level 7	IC 280-487658/8	03040008.D
Level 8	IC 280-487658/7	03040007.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
HMX	Ave	1520 65031	4200 91886	9069 235480	22889	36878	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2716 79432	6064 112538	11806 285067	28526	45467	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	1712 61460	4344 87686	8625 224963	21674	34831	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4836 171702	12180 243854	24274 618928	60732	97515	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
1,3-Dinitrobenzene	Ave	6353 230021	16020 325678	32466 829608	80852	130783	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitrobenzene	Ave	4287 151296	10390 212950	21325 547337	52585	85822	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
Tetryl	Ave	4033 135548	9672 193257	19275 491187	47459	77206	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitroglycerin	Ave	13145 517135	34296 733033	71710 1853418	183811	294044	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4452 154334	11231 221993	22080 564111	54330	88361	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3460 122308	9007 170514	17102 431730	43785	68761	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
2-Amino-4,6-dinitrotoluene	Ave	4452 152060	10795 219062	21640 559598	53716	86951	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2,6-Dinitrotoluene	Ave	3203 113482	8065 156621	15948 398417	40182	64229	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2,4-Dinitrotoluene	Ave	6351 227341	16087 323354	31840 824132	80402	129006	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
o-Nitrotoluene	Ave	3316 96240	7801 135008	14255 347403	34390	54929	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
p-Nitrotoluene	Ave	2555 83136	6176 117090	11935 301912	29623	47433	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

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
m-Nitrotoluene	Ave	3216 106848	8074 149937	15234 386438	37787	60905	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
PETN	Ave	13348 582311	37166 825168	80671 2100383	204225	329970	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2981 101893	7419 144385	14589 367708	36137	57929	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040007.D
Lims ID: IC MAIN L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Mar-2020 14:07:07 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L8
Misc. Info.: 280-0089779-007
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:24:59 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:21:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.683	-0.001	235480	2.50	2.64	M
7 RDX	1	7.748	7.750	-0.002	285067	2.50	2.42	
8 2,4,6-Trinitrophenol	1	7.982	8.056	-0.074	224963	2.50	2.58	
$ 9 1,2-Dinitrobenzene	1	8.702	8.710	-0.008	367708	2.50	2.51	
10 1,3,5-Trinitrobenzene	1	8.875	8.883	-0.008	618928	2.51	2.54	
11 1,3-Dinitrobenzene	1	9.522	9.529	-0.007	829608	2.51	2.56	
12 Nitrobenzene	1	9.908	9.916	-0.008	547337	2.51	2.57	
14 Tetryl	1	10.208	10.216	-0.008	491187	2.51	2.53	
15 Nitroglycerin	2	10.708	10.729	-0.021	1853418	25.0	25.8	
16 2,4,6-Trinitrotoluene	1	11.175	11.183	-0.008	564111	2.51	2.55	
17 4-Amino-2,6-dinitrotoluene	1	11.322	11.336	-0.014	431730	2.50	2.49	
18 2-Amino-4,6-dinitrotoluene	1	11.608	11.623	-0.015	559598	2.51	2.57	
19 2,6-Dinitrotoluene	1	11.775	11.789	-0.014	398417	2.51	2.50	
20 2,4-Dinitrotoluene	1	11.968	11.983	-0.015	824132	2.51	2.57	
21 o-Nitrotoluene	1	12.815	12.829	-0.014	347403	2.50	2.42	
22 p-Nitrotoluene	1	13.248	13.269	-0.021	301912	2.51	2.51	
23 m-Nitrotoluene	1	13.842	13.863	-0.021	386438	2.50	2.51	
24 PETN	2	14.942	14.969	-0.027	2100383	25.0	26.4	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 250.00 Units: uL

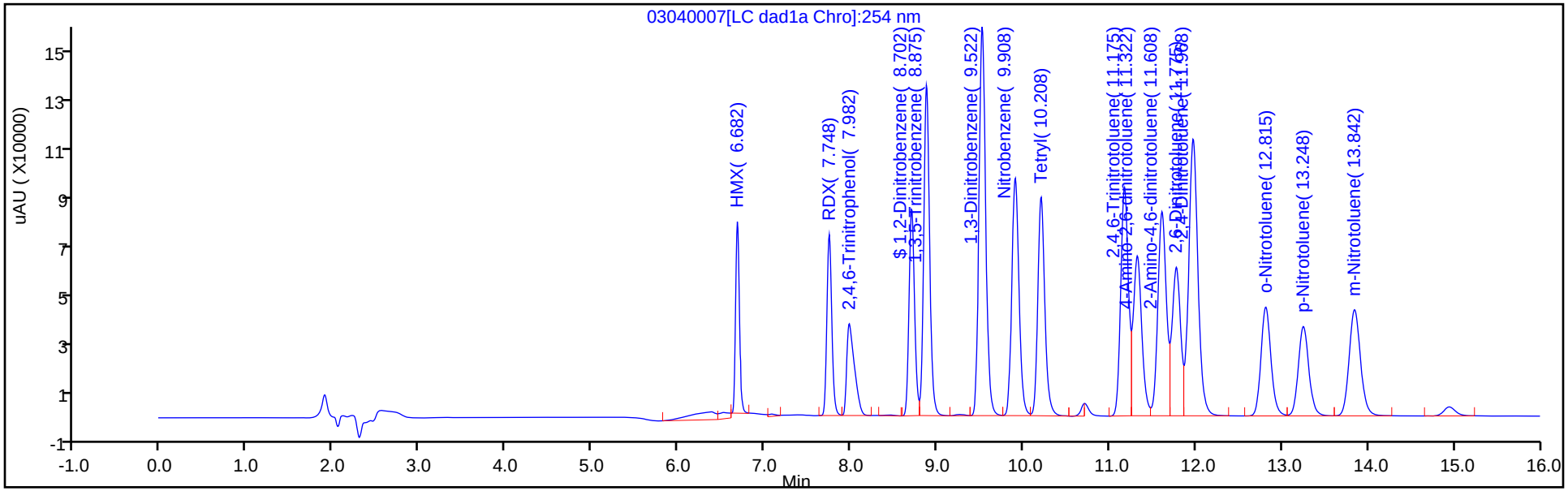
Report Date: 06-Mar-2020 10:24:59 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

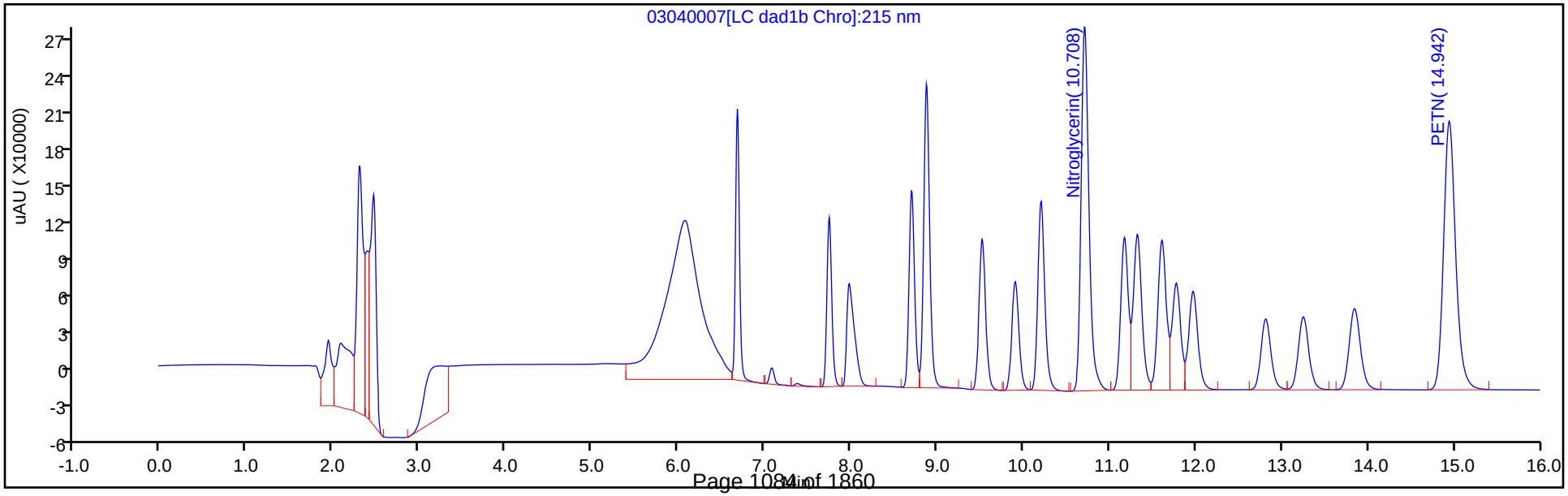
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040007.d

Injection Date:	04-Mar-2020 14:07:07	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L8			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

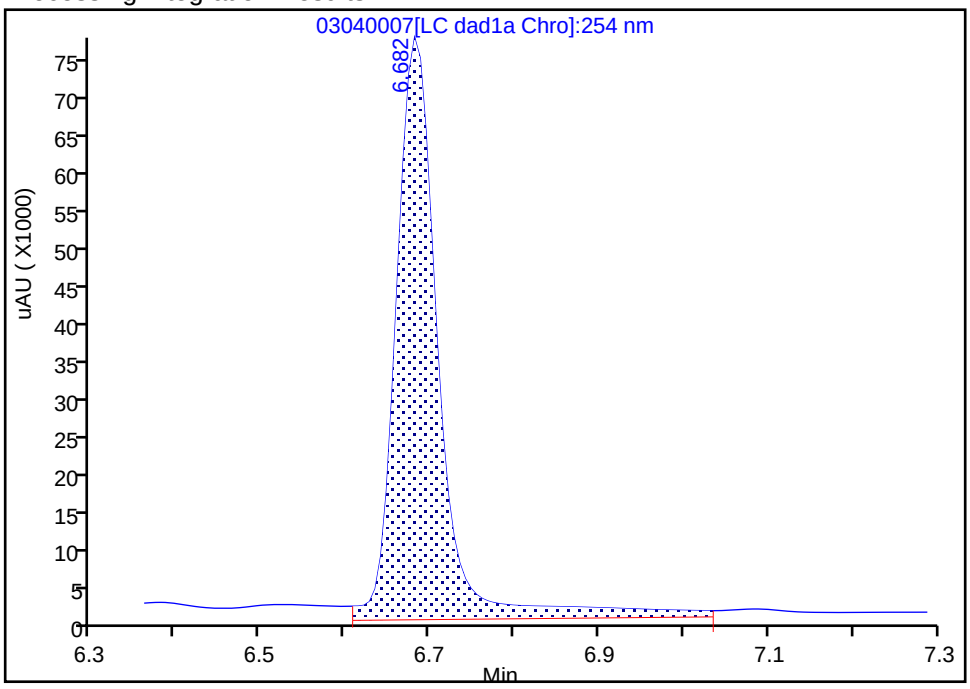
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040007.d				
Injection Date:	04-Mar-2020 14:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

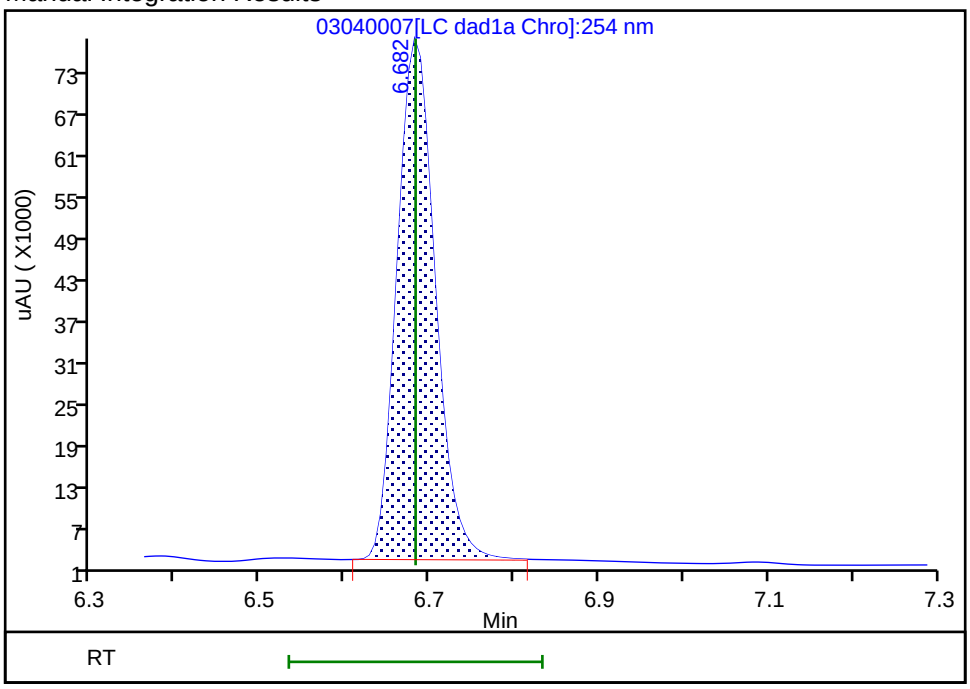
Processing Integration Results

RT: 6.68
Area: 273190
Amount: 2.501188
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 235480
Amount: 2.640575
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:19:14
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040008.D
Lims ID: IC MAIN L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Mar-2020 14:30:11 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L7
Misc. Info.: 280-0089779-008
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:01 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:21:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.685	6.683	0.002	91886	1.00	1.03	M
7 RDX	1	7.759	7.750	0.009	112538	1.00	0.9548	
8 2,4,6-Trinitrophenol	1	8.032	8.056	-0.024	87686	1.00	1.01	
$ 9 1,2-Dinitrobenzene	1	8.712	8.710	0.002	144385	1.00	0.9875	
10 1,3,5-Trinitrobenzene	1	8.885	8.883	0.002	243854	1.00	1.00	
11 1,3-Dinitrobenzene	1	9.532	9.529	0.003	325678	1.00	1.00	
12 Nitrobenzene	1	9.912	9.916	-0.004	212950	1.00	1.00	
14 Tetryl	1	10.212	10.216	-0.004	193257	1.00	1.00	
15 Nitroglycerin	2	10.719	10.729	-0.010	733033	10.0	10.2	
16 2,4,6-Trinitrotoluene	1	11.172	11.183	-0.011	221993	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	11.325	11.336	-0.011	170514	1.00	0.9830	
18 2-Amino-4,6-dinitrotoluene	1	11.612	11.623	-0.011	219062	1.00	1.01	
19 2,6-Dinitrotoluene	1	11.779	11.789	-0.010	156621	1.00	0.9825	
20 2,4-Dinitrotoluene	1	11.972	11.983	-0.011	323354	1.00	1.01	
21 o-Nitrotoluene	1	12.819	12.829	-0.010	135008	1.00	0.9386	
22 p-Nitrotoluene	1	13.252	13.269	-0.017	117090	1.00	0.9733	
23 m-Nitrotoluene	1	13.852	13.863	-0.011	149937	1.00	0.9721	
24 PETN	2	14.952	14.969	-0.017	825168	10.0	10.4	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 100.00 Units: uL

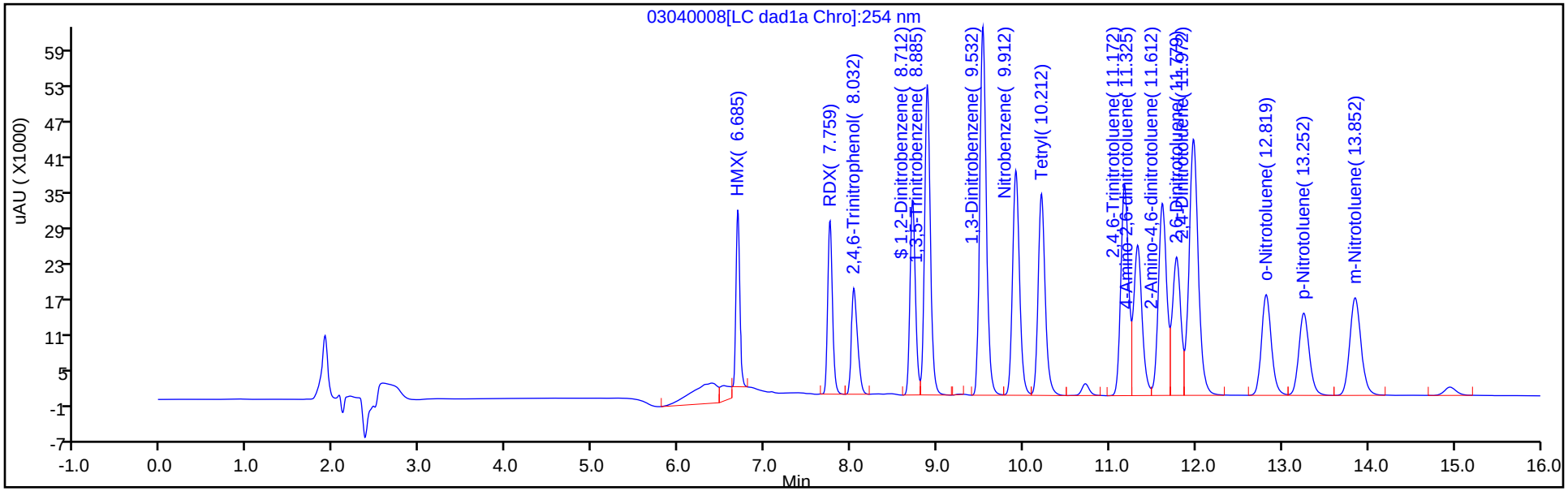
Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

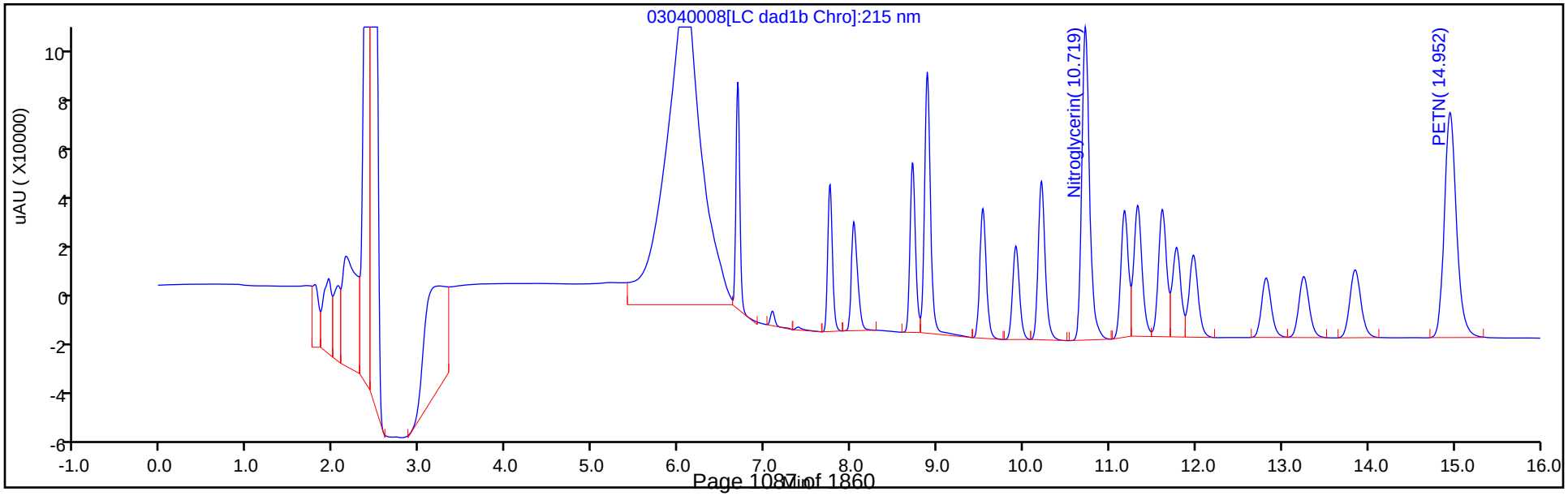
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040008.d

Injection Date:	04-Mar-2020 14:30:11	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L7			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
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

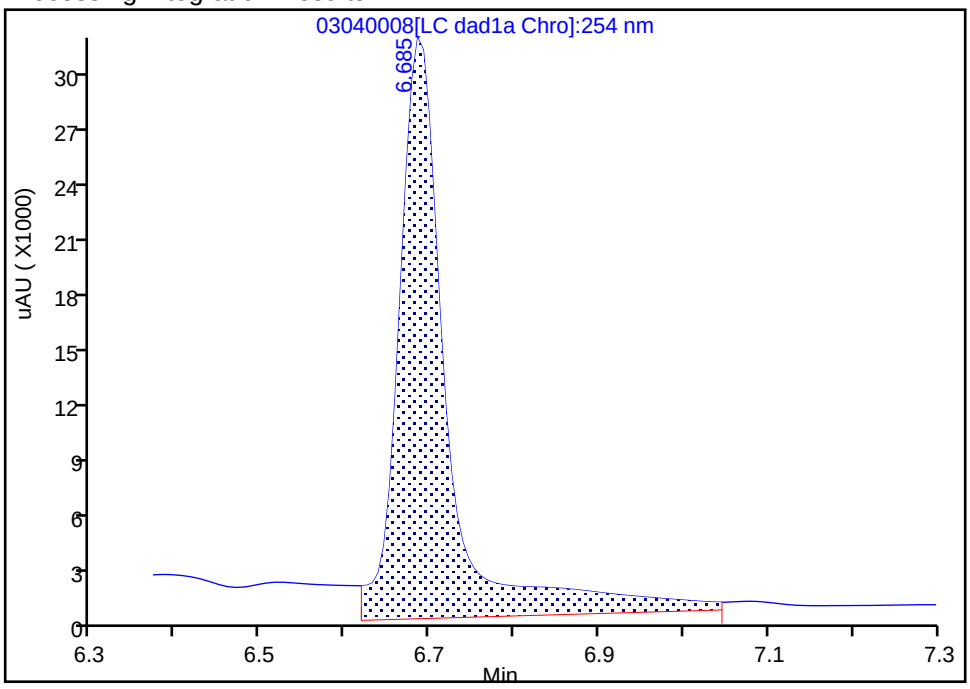
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040008.d				
Injection Date:	04-Mar-2020 14:30:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

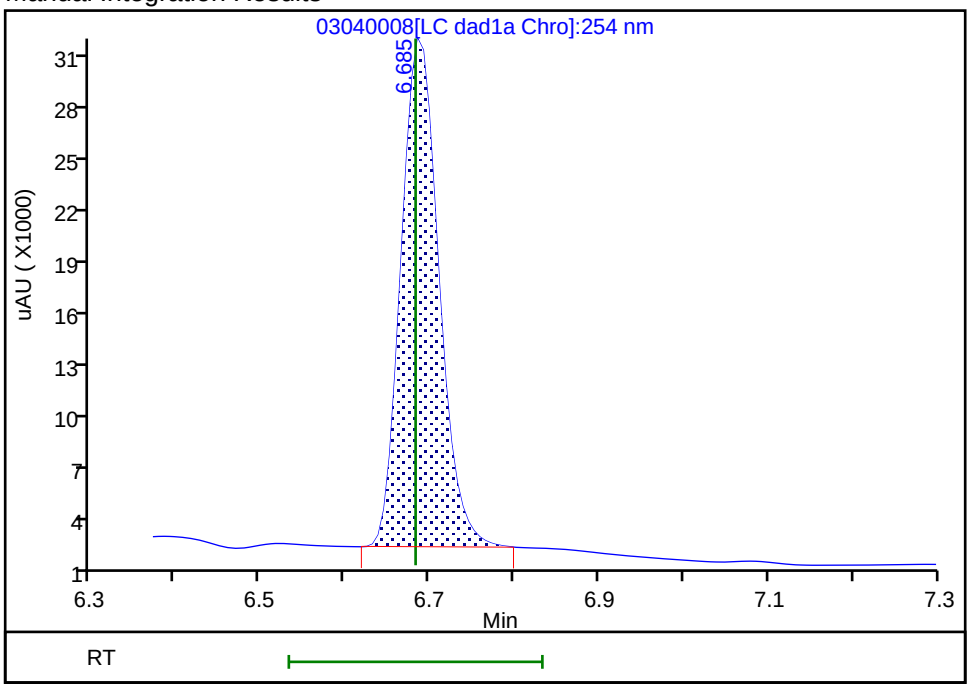
Processing Integration Results

RT: 6.69
Area: 125872
Amount: 0.749140
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 91886
Amount: 1.030371
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:21:25
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040009.D
Lims ID: IC MAIN L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Mar-2020 14:53:07 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L6
Misc. Info.: 280-0089779-009
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:02 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:21:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.683	6.683	0.000	65031	0.7000	0.7292	M
7 RDX	1	7.756	7.750	0.006	79432	0.7000	0.6739	
8 2,4,6-Trinitrophenol	1	8.043	8.056	-0.013	61460	0.7000	0.7044	
$ 9 1,2-Dinitrobenzene	1	8.709	8.710	-0.001	101893	0.7000	0.6969	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	171702	0.7014	0.7053	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	230021	0.7014	0.7094	
12 Nitrobenzene	1	9.916	9.916	0.000	151296	0.7028	0.7113	
14 Tetryl	1	10.216	10.216	0.000	135548	0.7014	0.6992	
15 Nitroglycerin	2	10.729	10.729	0.000	517135	7.00	7.20	
16 2,4,6-Trinitrotoluene	1	11.182	11.183	-0.001	154334	0.7028	0.6986	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	122308	0.7007	0.7051	
18 2-Amino-4,6-dinitrotoluene	1	11.622	11.623	-0.001	152060	0.7028	0.6990	
19 2,6-Dinitrotoluene	1	11.789	11.789	0.000	113482	0.7028	0.7119	
20 2,4-Dinitrotoluene	1	11.982	11.983	-0.001	227341	0.7028	0.7079	
21 o-Nitrotoluene	1	12.822	12.829	-0.007	96240	0.7000	0.6691	
22 p-Nitrotoluene	1	13.262	13.269	-0.007	83136	0.7014	0.6911	
23 m-Nitrotoluene	1	13.856	13.863	-0.007	106848	0.7007	0.6927	
24 PETN	2	14.956	14.969	-0.013	582311	7.00	7.33	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 70.00 Units: uL

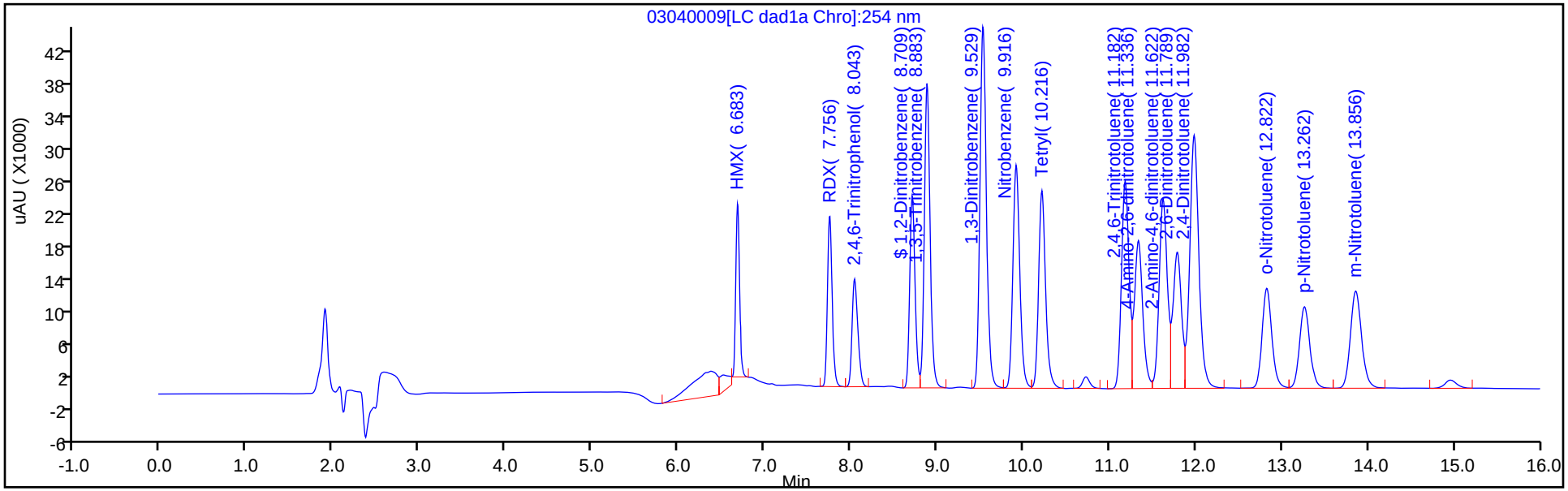
Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

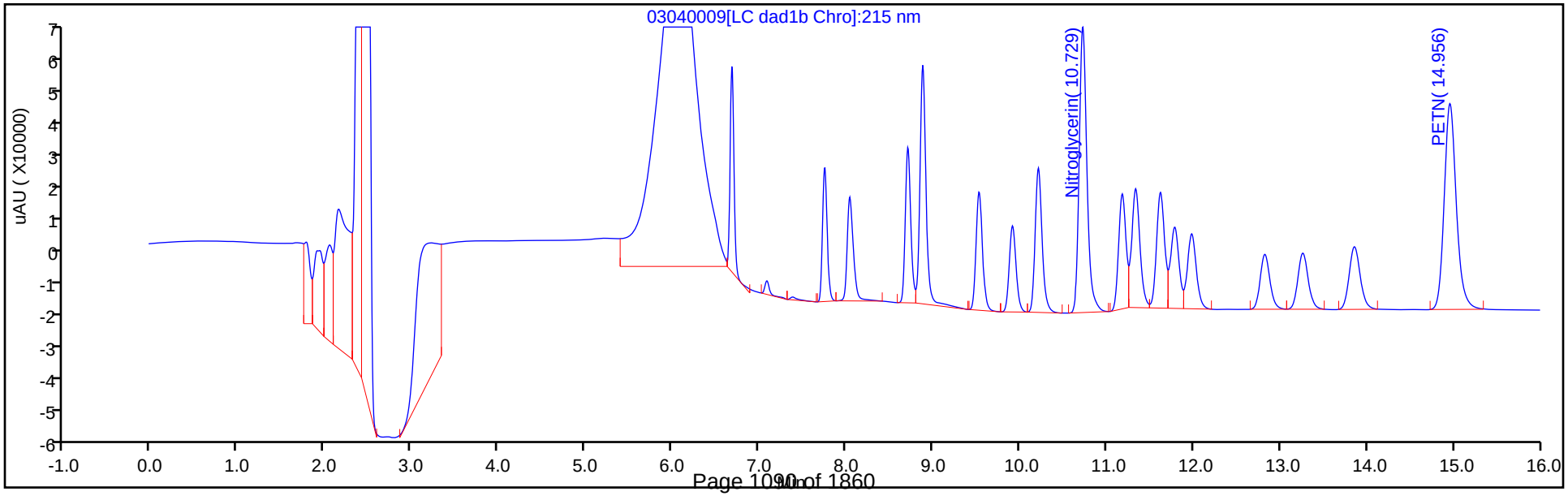
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040009.d

Injection Date:	04-Mar-2020 14:53:07	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L6			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

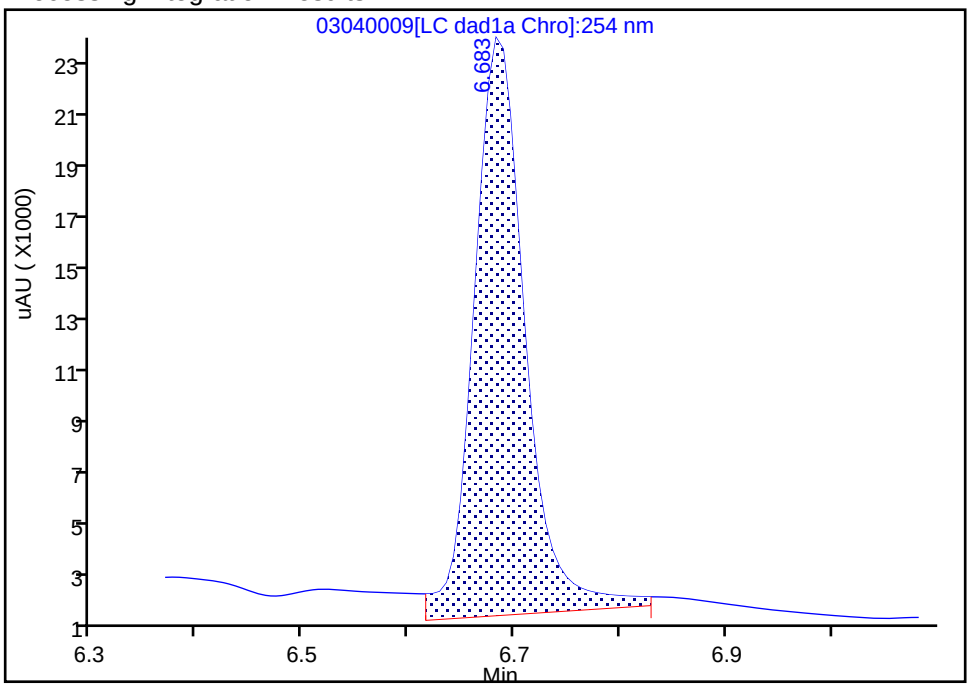
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040009.d				
Injection Date:	04-Mar-2020 14:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

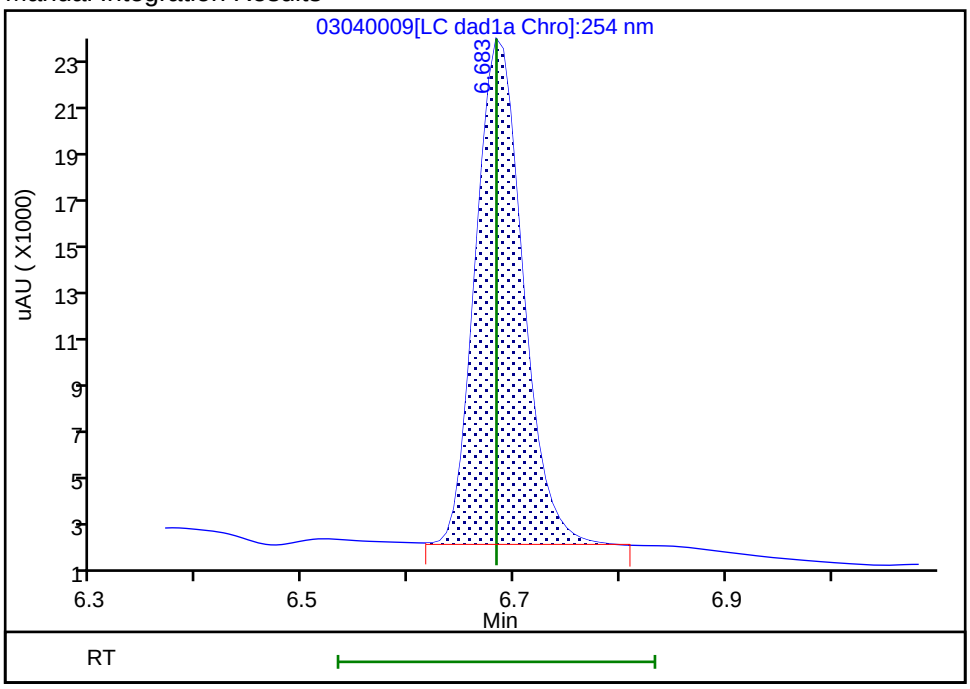
Processing Integration Results

RT: 6.68
Area: 73442
Amount: 0.448436
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 65031
Amount: 0.729231
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:21:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040010.D
Lims ID: IC MAIN L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Mar-2020 15:16:04 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L5
Misc. Info.: 280-0089779-010
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:03 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:22:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.684	6.683	0.001	36878	0.4000	0.4135	M
7 RDX	1	7.758	7.750	0.008	45467	0.4000	0.3857	
8 2,4,6-Trinitrophenol	1	8.058	8.056	0.002	34831	0.4000	0.3992	
$ 9 1,2-Dinitrobenzene	1	8.711	8.710	0.001	57929	0.4000	0.3962	
10 1,3,5-Trinitrobenzene	1	8.884	8.883	0.001	97515	0.4008	0.4005	
11 1,3-Dinitrobenzene	1	9.531	9.529	0.002	130783	0.4008	0.4033	
12 Nitrobenzene	1	9.917	9.916	0.001	85822	0.4016	0.4035	
14 Tetryl	1	10.217	10.216	0.001	77206	0.4008	0.3982	
15 Nitroglycerin	2	10.731	10.729	0.002	294044	4.00	4.10	
16 2,4,6-Trinitrotoluene	1	11.184	11.183	0.001	88361	0.4016	0.4000	
17 4-Amino-2,6-dinitrotoluene	1	11.344	11.336	0.008	68761	0.4004	0.3964	
18 2-Amino-4,6-dinitrotoluene	1	11.631	11.623	0.008	86951	0.4016	0.3997	
19 2,6-Dinitrotoluene	1	11.791	11.789	0.002	64229	0.4016	0.4029	
20 2,4-Dinitrotoluene	1	11.991	11.983	0.008	129006	0.4016	0.4017	
21 o-Nitrotoluene	1	12.831	12.829	0.002	54929	0.4000	0.3819	
22 p-Nitrotoluene	1	13.271	13.269	0.002	47433	0.4008	0.3943	
23 m-Nitrotoluene	1	13.871	13.863	0.008	60905	0.4004	0.3949	
24 PETN	2	14.971	14.969	0.002	329970	4.00	4.15	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 40.00 Units: uL

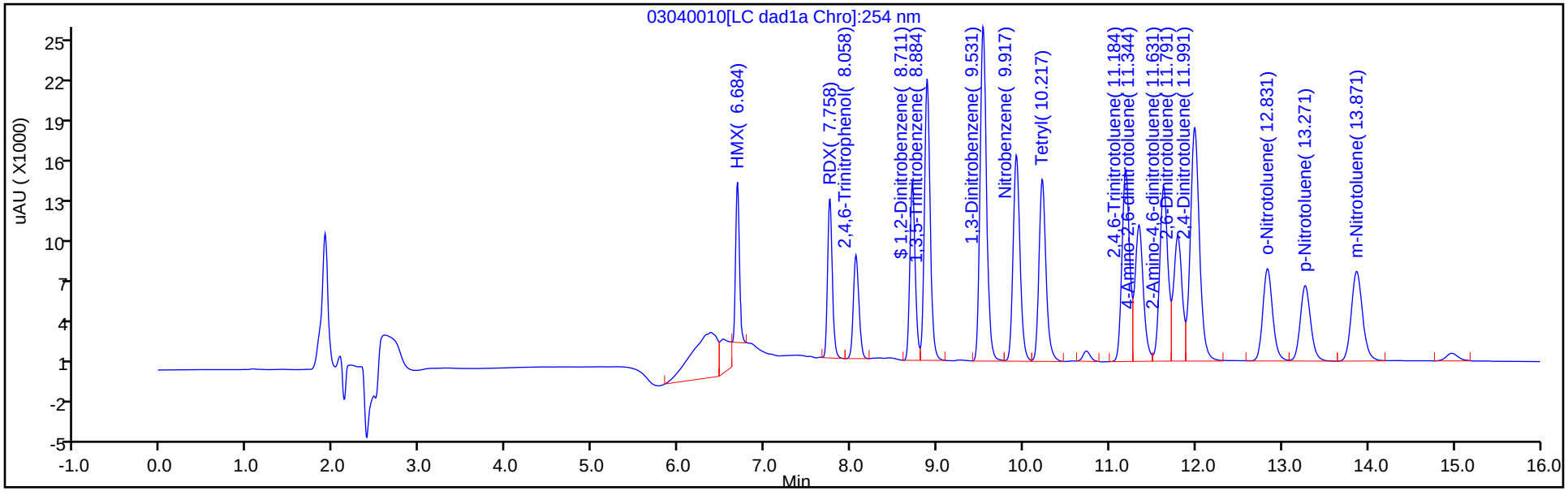
Report Date: 06-Mar-2020 10:25:04 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

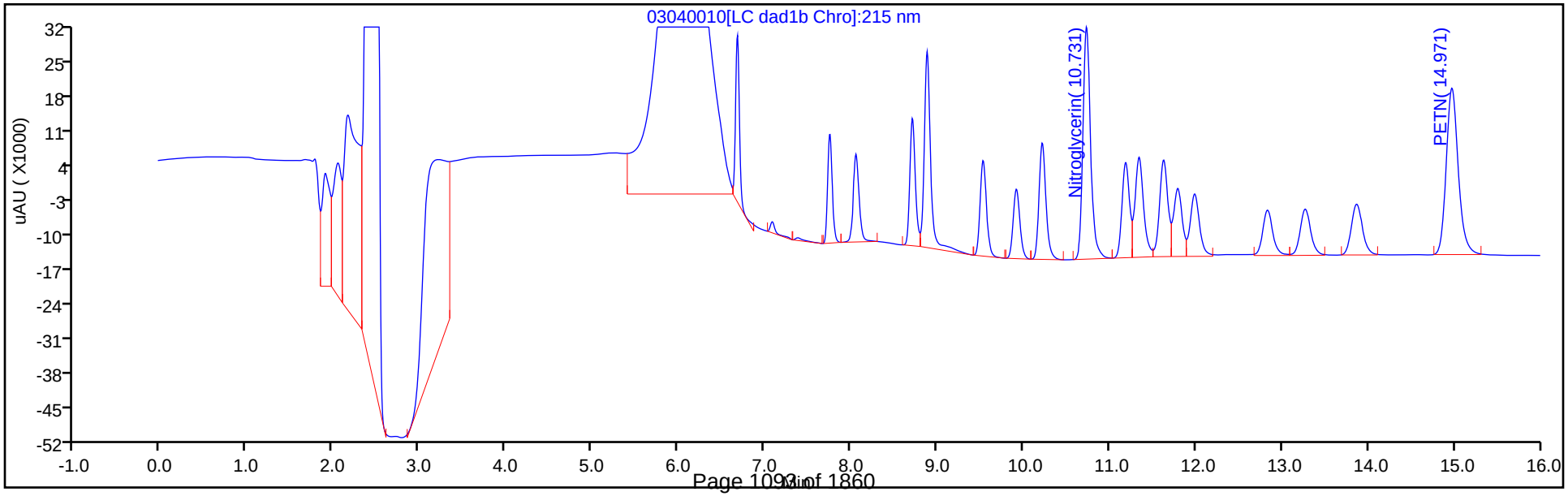
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040010.d

Injection Date:	04-Mar-2020 15:16:04	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
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

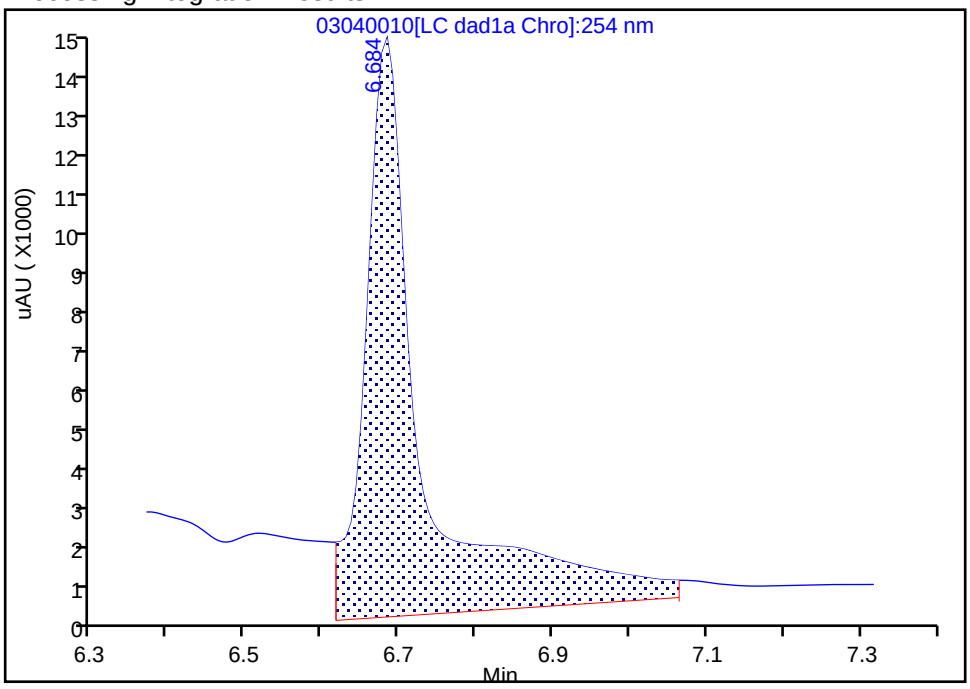
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040010.d				
Injection Date:	04-Mar-2020 15:16:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

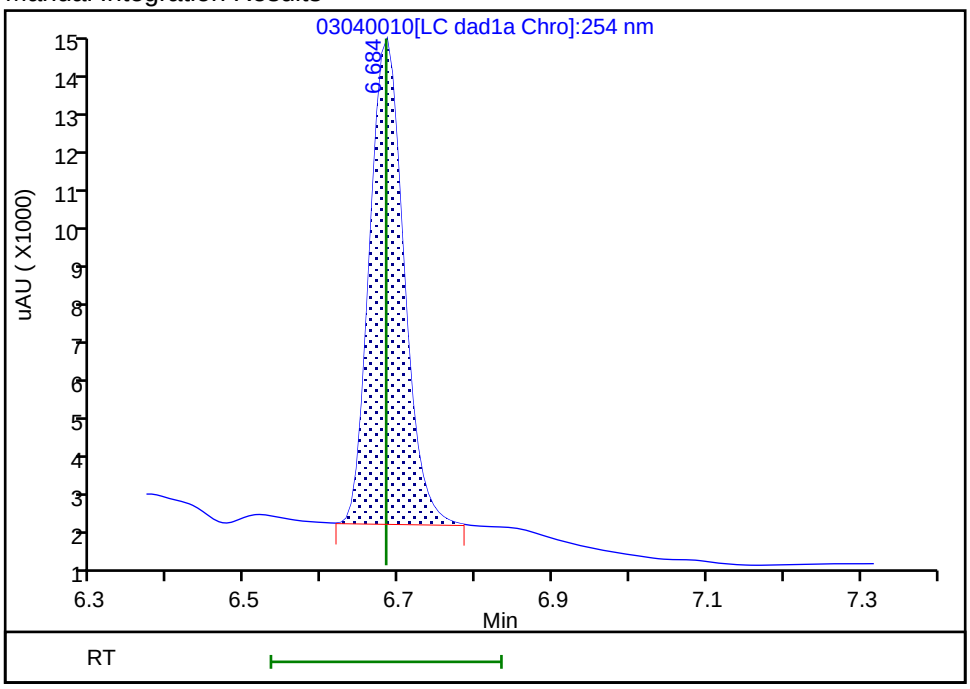
Processing Integration Results

RT: 6.68
Area: 70815
Amount: 0.436397
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 36878
Amount: 0.413535
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:21:59
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040011.D
Lims ID: IC MAIN L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Mar-2020 15:39:01 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L4
Misc. Info.: 280-0089779-011
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:05 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:22:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.683	6.683	0.000	22889	0.2500	0.2567	M
7 RDX	1	7.750	7.750	0.000	28526	0.2500	0.2420	
8 2,4,6-Trinitrophenol	1	8.063	8.056	0.007	21674	0.2500	0.2484	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	36137	0.2500	0.2471	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	60732	0.2505	0.2495	
11 1,3-Dinitrobenzene	1	9.536	9.529	0.007	80852	0.2505	0.2493	
12 Nitrobenzene	1	9.923	9.916	0.007	52585	0.2510	0.2472	
14 Tetryl	1	10.216	10.216	0.000	47459	0.2505	0.2448	
15 Nitroglycerin	2	10.730	10.729	0.001	183811	2.50	2.56	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	54330	0.2510	0.2459	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	43785	0.2503	0.2524	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	53716	0.2510	0.2469	
19 2,6-Dinitrotoluene	1	11.790	11.789	0.001	40182	0.2510	0.2521	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	80402	0.2510	0.2503	
21 o-Nitrotoluene	1	12.830	12.829	0.001	34390	0.2500	0.2391	
22 p-Nitrotoluene	1	13.263	13.269	-0.006	29623	0.2505	0.2462	
23 m-Nitrotoluene	1	13.863	13.863	0.000	37787	0.2503	0.2450	
24 PETN	2	14.963	14.969	-0.006	204225	2.50	2.57	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

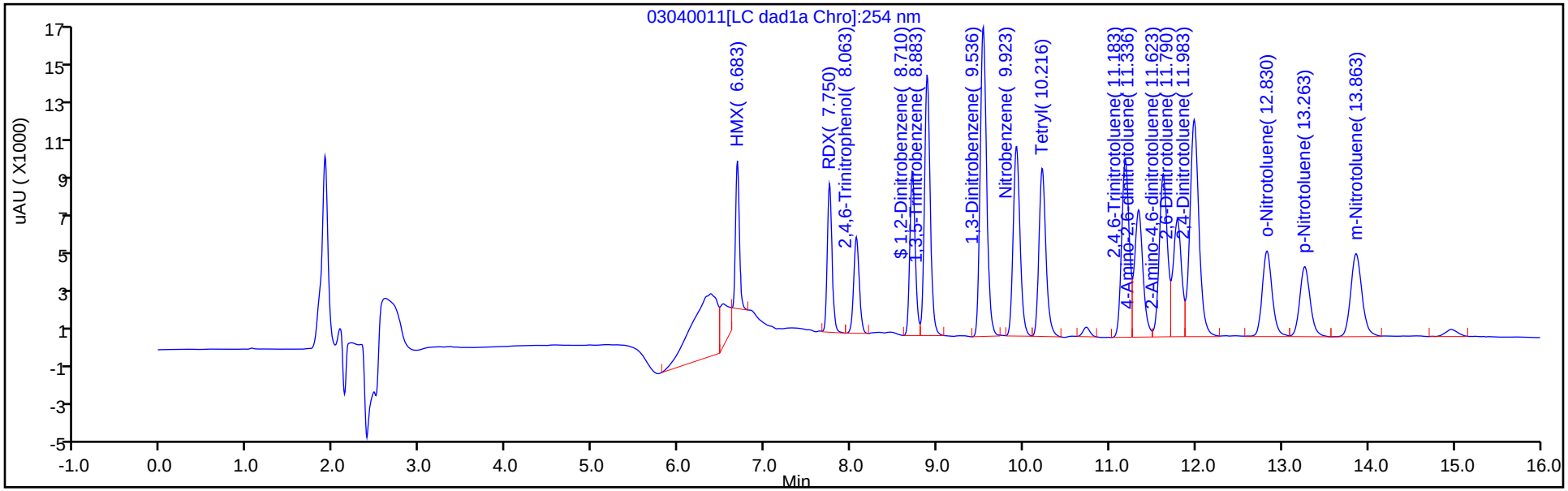
Report Date: 06-Mar-2020 10:25:05 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

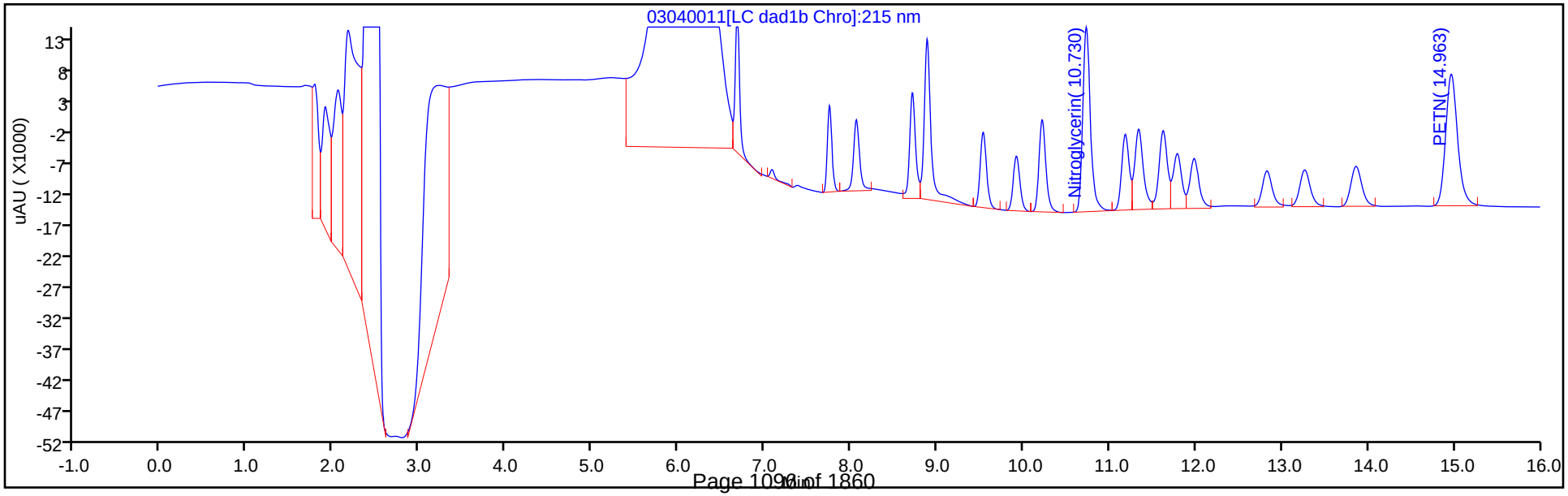
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040011.d

Injection Date:	04-Mar-2020 15:39:01	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L4			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

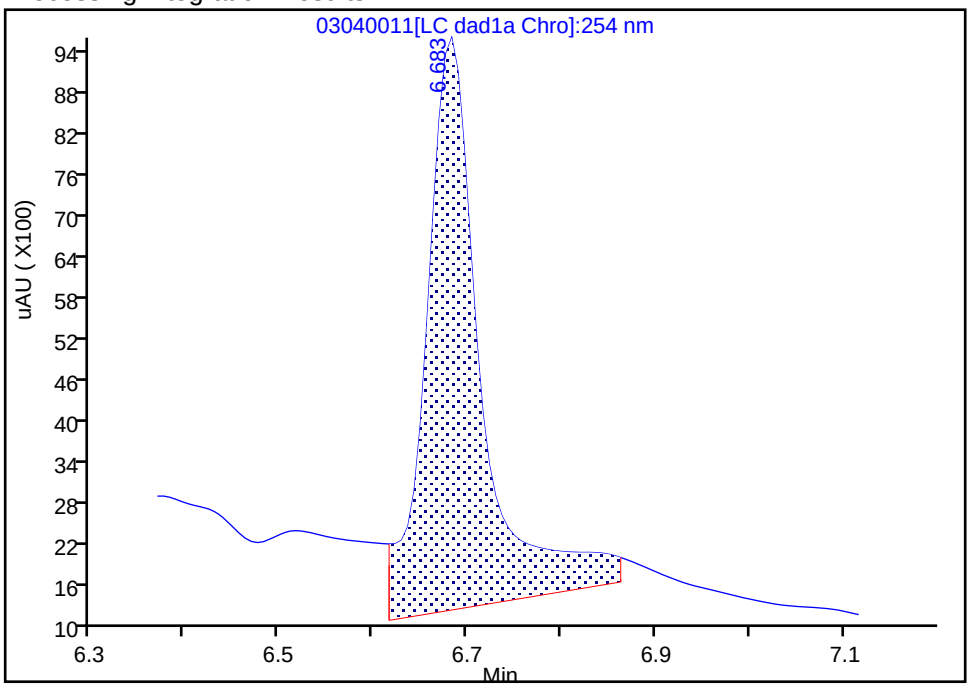
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040011.d				
Injection Date:	04-Mar-2020 15:39:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

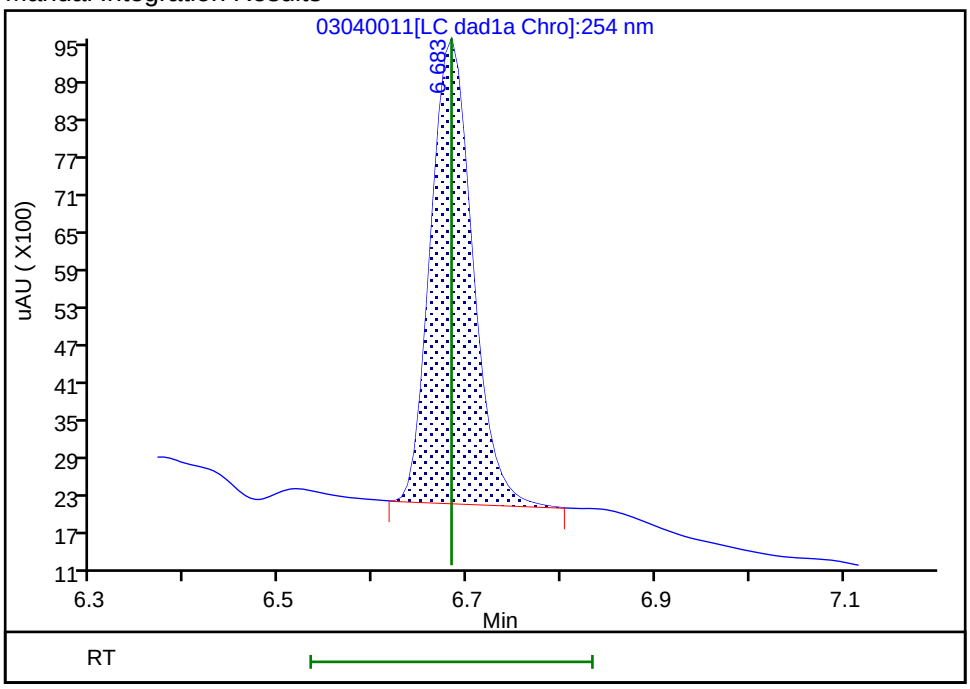
Processing Integration Results

RT: 6.68
Area: 33992
Amount: 0.316859
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 22889
Amount: 0.256668
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:22:17

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040012.D
Lims ID: IC MAIN L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Mar-2020 16:01:56 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L3
Misc. Info.: 280-0089779-012
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:06 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:22:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.683	-0.001	9069	0.1000	0.1017	M
7 RDX	1	7.749	7.750	-0.001	11806	0.1000	0.1002	
8 2,4,6-Trinitrophenol	1	8.069	8.056	0.013	8625	0.1000	0.0989	
$ 9 1,2-Dinitrobenzene	1	8.709	8.710	-0.001	14589	0.1000	0.0998	
10 1,3,5-Trinitrobenzene	1	8.882	8.883	-0.001	24274	0.1002	0.0997	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	32466	0.1002	0.1001	
12 Nitrobenzene	1	9.915	9.916	-0.001	21325	0.1004	0.1003	
14 Tetryl	1	10.215	10.216	-0.001	19275	0.1002	0.0994	
15 Nitroglycerin	2	10.722	10.729	-0.007	71710	1.00	1.00	
16 2,4,6-Trinitrotoluene	1	11.175	11.183	-0.008	22080	0.1004	0.0999	
17 4-Amino-2,6-dinitrotoluene	1	11.329	11.336	-0.007	17102	0.1001	0.0986	
18 2-Amino-4,6-dinitrotoluene	1	11.615	11.623	-0.008	21640	0.1004	0.0995	
19 2,6-Dinitrotoluene	1	11.782	11.789	-0.007	15948	0.1004	0.1000	
20 2,4-Dinitrotoluene	1	11.975	11.983	-0.008	31840	0.1004	0.0991	
21 o-Nitrotoluene	1	12.822	12.829	-0.007	14255	0.1000	0.0991	
22 p-Nitrotoluene	1	13.255	13.269	-0.014	11935	0.1002	0.0992	
23 m-Nitrotoluene	1	13.855	13.863	-0.008	15234	0.1001	0.0988	
24 PETN	2	14.962	14.969	-0.007	80671	1.00	1.02	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 10.00 Units: uL

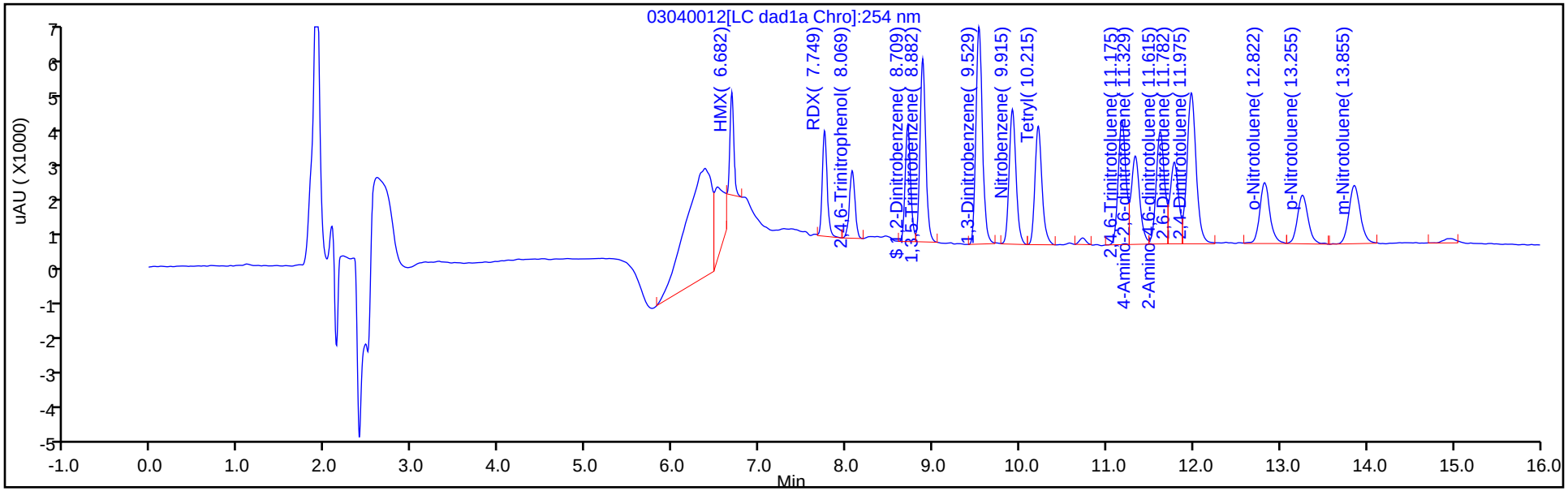
Report Date: 06-Mar-2020 10:25:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

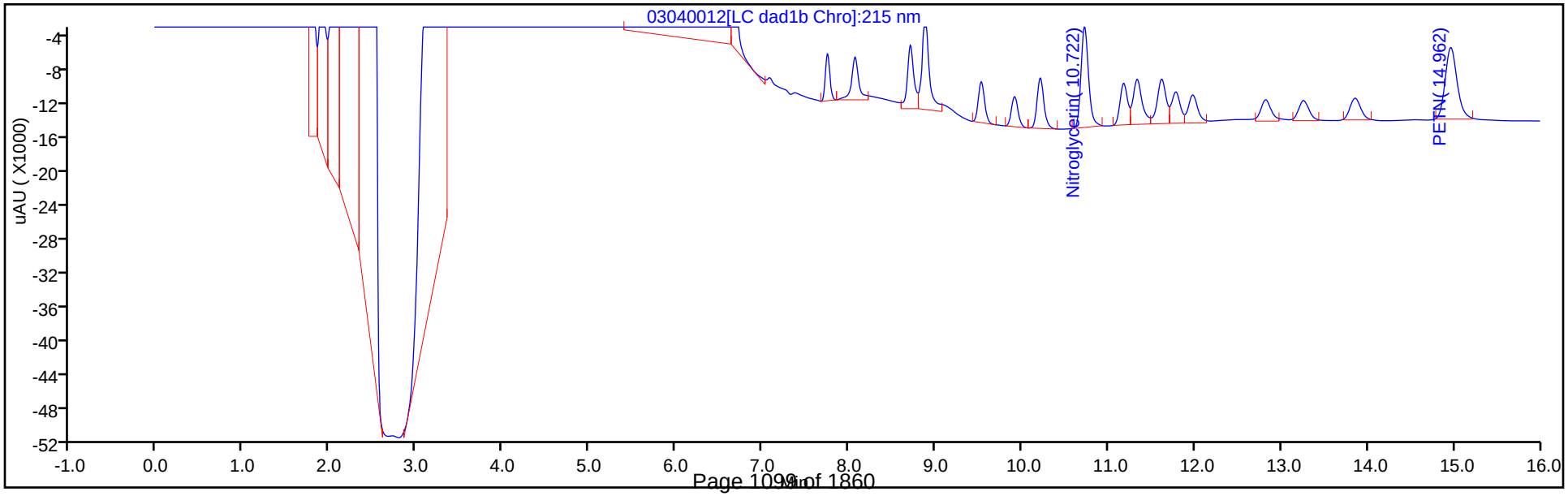
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040012.d

Injection Date:	04-Mar-2020 16:01:56	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L3			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

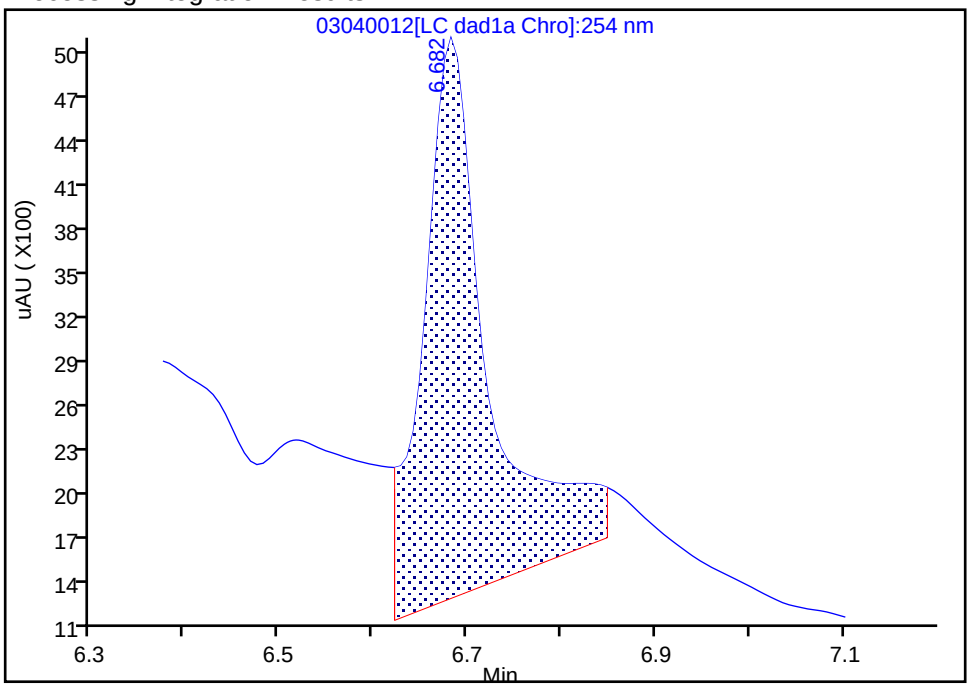
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040012.d				
Injection Date:	04-Mar-2020 16:01:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

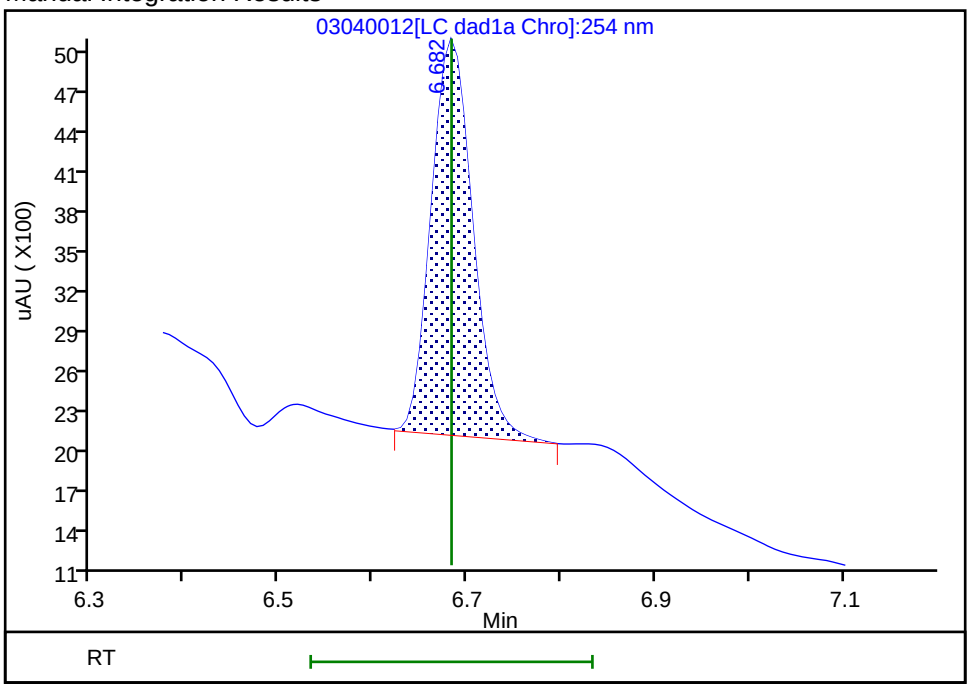
Processing Integration Results

RT: 6.68
Area: 18300
Amount: 0.148246
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 9069
Amount: 0.101696
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:22:39

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040013.D
Lims ID: IC MAIN L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Mar-2020 16:24:51 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L2
Misc. Info.: 280-0089779-013
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:07 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:23:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.684	6.683	0.001	4200	0.0500	0.0471	M
7 RDX	1	7.750	7.750	0.000	6064	0.0500	0.0514	
8 2,4,6-Trinitrophenol	1	8.077	8.056	0.021	4344	0.0500	0.0498	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	7419	0.0500	0.0507	
10 1,3,5-Trinitrobenzene	1	8.884	8.883	0.001	12180	0.0501	0.0500	
11 1,3-Dinitrobenzene	1	9.530	9.529	0.001	16020	0.0501	0.0494	
12 Nitrobenzene	1	9.917	9.916	0.001	10390	0.0502	0.0489	
14 Tetryl	1	10.217	10.216	0.001	9672	0.0501	0.0499	
15 Nitroglycerin	2	10.730	10.729	0.001	34296	0.5000	0.4777	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	11231	0.0502	0.0508	
17 4-Amino-2,6-dinitrotoluene	1	11.337	11.336	0.001	9007	0.0501	0.0519	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	10795	0.0502	0.0496	
19 2,6-Dinitrotoluene	1	11.790	11.789	0.001	8065	0.0502	0.0506	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	16087	0.0502	0.0501	
21 o-Nitrotoluene	1	12.830	12.829	0.001	7801	0.0500	0.0542	
22 p-Nitrotoluene	1	13.263	13.269	-0.006	6176	0.0501	0.0513	
23 m-Nitrotoluene	1	13.863	13.863	0.000	8074	0.0501	0.0523	
24 PETN	2	14.963	14.969	-0.006	37166	0.5000	0.4678	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 5.00 Units: uL

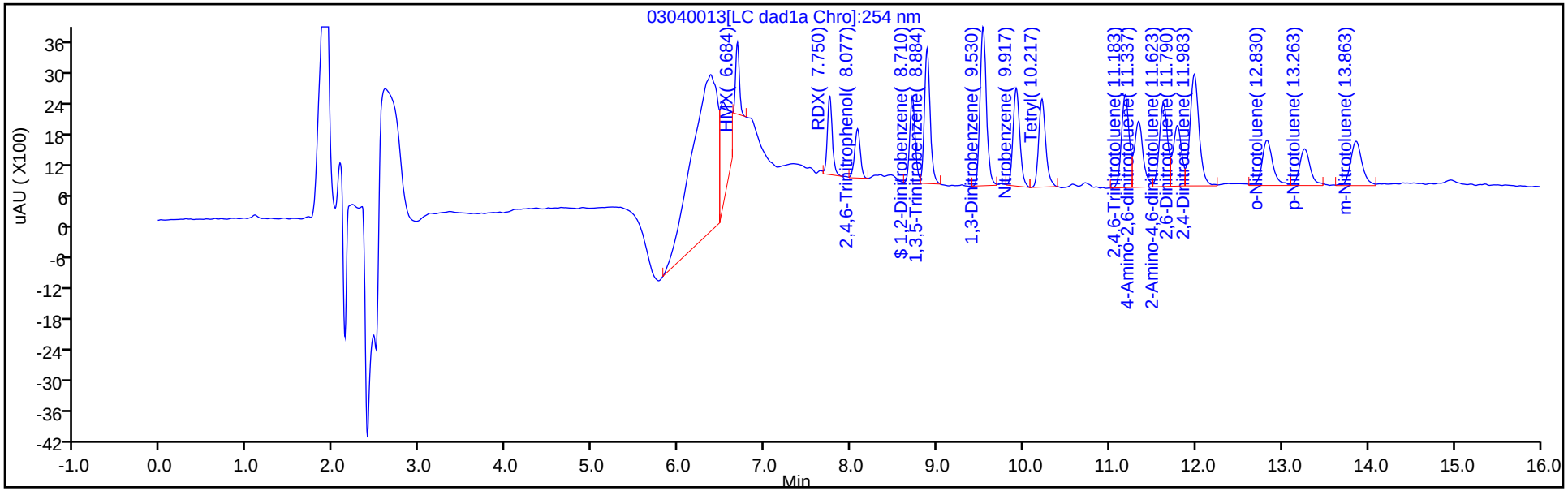
Report Date: 06-Mar-2020 10:25:07 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

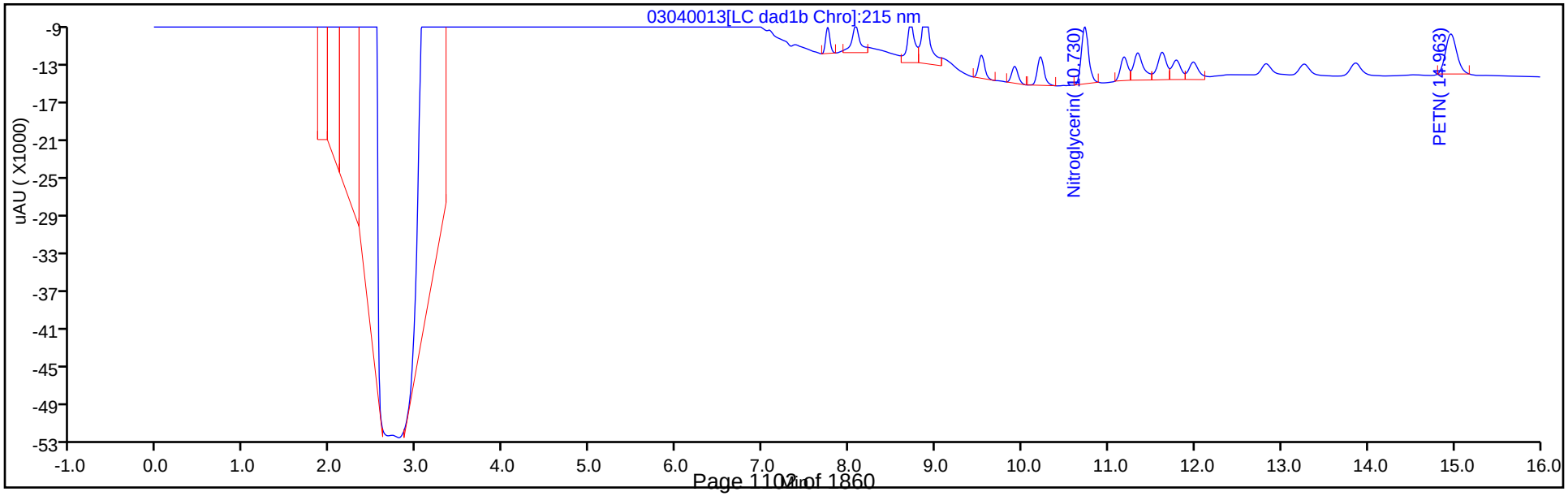
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040013.d

Injection Date:	04-Mar-2020 16:24:51	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L2			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

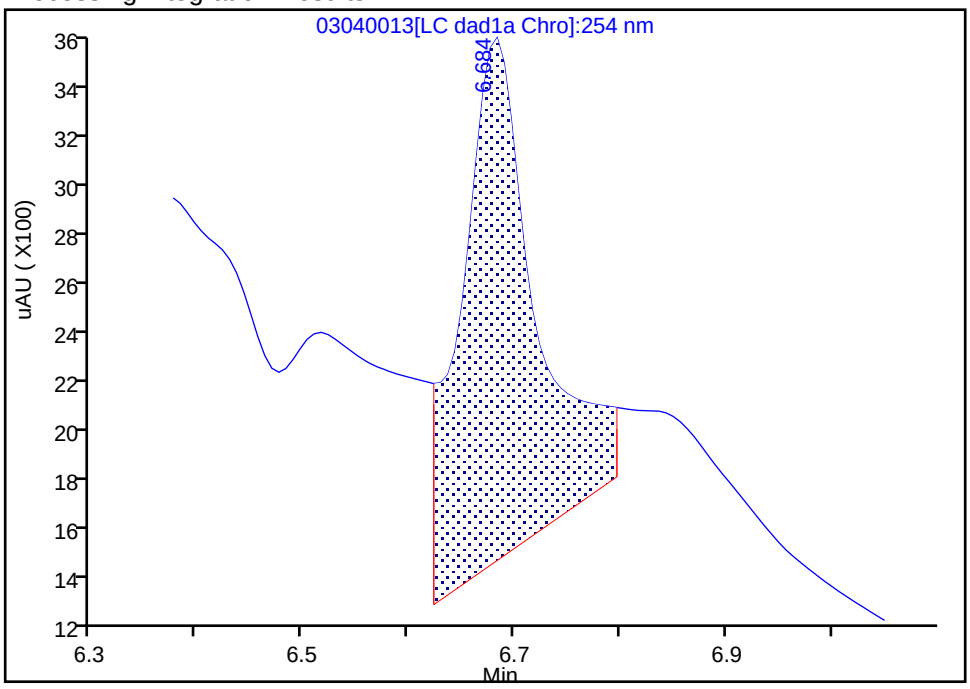
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040013.d				
Injection Date:	04-Mar-2020 16:24:51	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

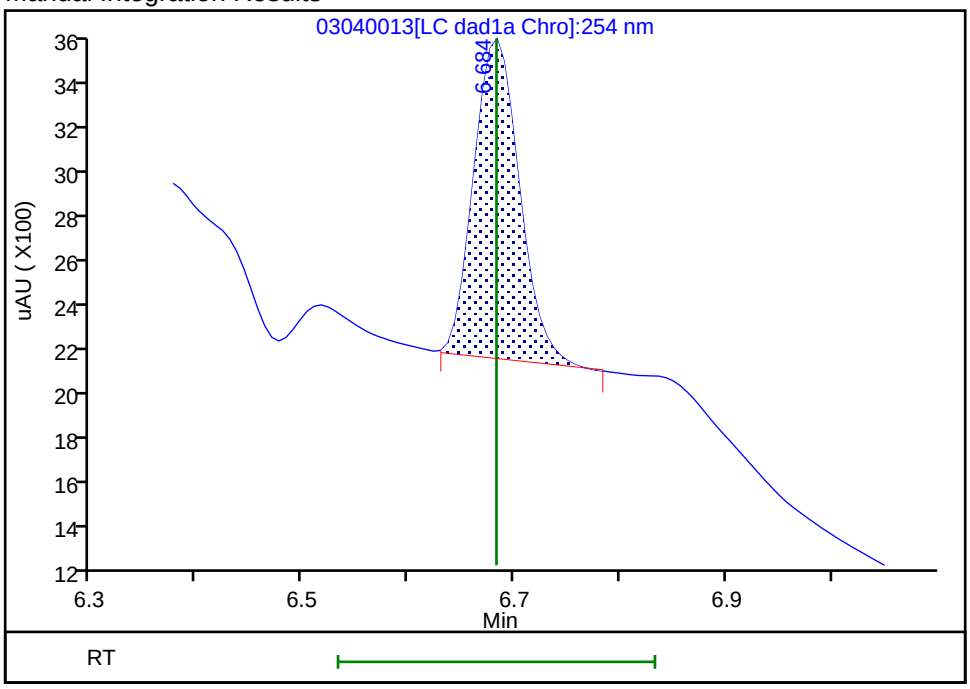
Processing Integration Results

RT: 6.68
Area: 10197
Amount: 0.075771
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 4200
Amount: 0.047097
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:22:58

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040014.D
Lims ID: IC MAIN L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Mar-2020 16:47:48 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L1
Misc. Info.: 280-0089779-014
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:08 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:23:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.683	-0.001	1520	0.0200	0.0170	M
7 RDX	1	7.755	7.750	0.005	2716	0.0200	0.0230	
8 2,4,6-Trinitrophenol	1	8.082	8.056	0.026	1712	0.0200	0.0196	
$ 9 1,2-Dinitrobenzene	1	8.715	8.710	0.005	2981	0.0200	0.0204	
10 1,3,5-Trinitrobenzene	1	8.882	8.883	-0.001	4836	0.0200	0.0199	
11 1,3-Dinitrobenzene	1	9.535	9.529	0.006	6353	0.0200	0.0196	
12 Nitrobenzene	1	9.922	9.916	0.006	4287	0.0201	0.0202	
14 Tetryl	1	10.215	10.216	-0.001	4033	0.0200	0.0208	
15 Nitroglycerin	2	10.728	10.729	-0.001	13145	0.2000	0.1831	
16 2,4,6-Trinitrotoluene	1	11.182	11.183	-0.001	4452	0.0201	0.0202	
17 4-Amino-2,6-dinitrotoluene	1	11.342	11.336	0.006	3460	0.0200	0.0199	
18 2-Amino-4,6-dinitrotoluene	1	11.622	11.623	-0.001	4452	0.0201	0.0205	M
19 2,6-Dinitrotoluene	1	11.788	11.789	-0.001	3203	0.0201	0.0201	M
20 2,4-Dinitrotoluene	1	11.988	11.983	0.005	6351	0.0201	0.0198	
21 o-Nitrotoluene	1	12.828	12.829	-0.001	3316	0.0200	0.0231	
22 p-Nitrotoluene	1	13.268	13.269	-0.001	2555	0.0200	0.0212	
23 m-Nitrotoluene	1	13.868	13.863	0.005	3216	0.0200	0.0209	
24 PETN	2	14.962	14.969	-0.007	13348	0.2000	0.1680	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 2.00 Units: uL

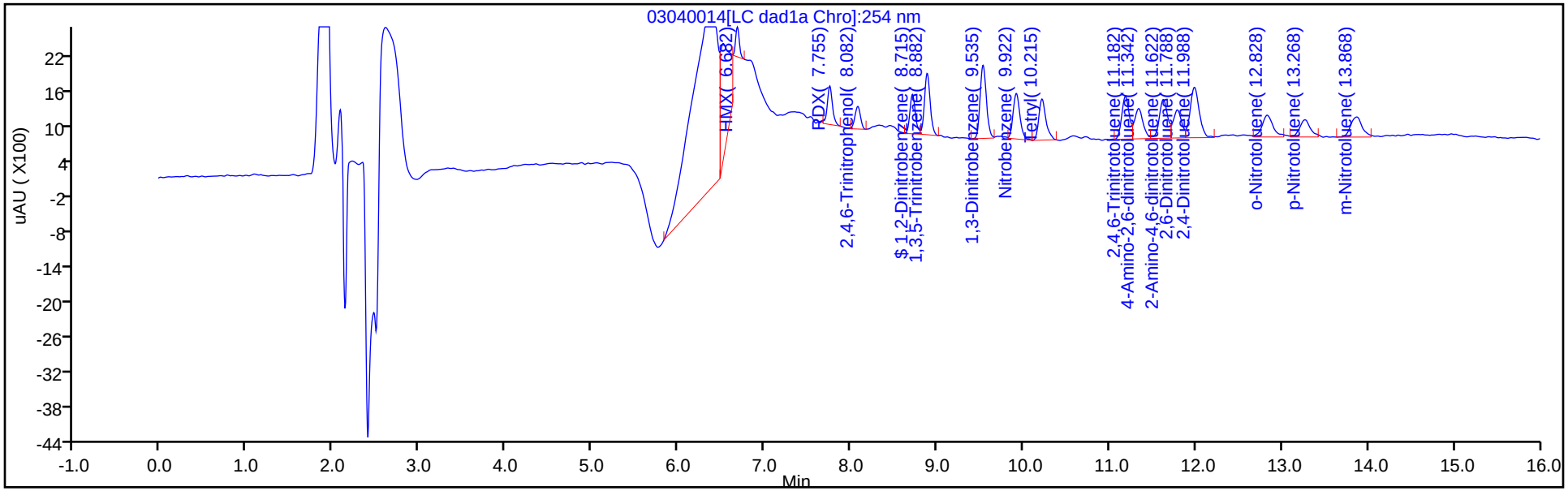
Report Date: 06-Mar-2020 10:25:09 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

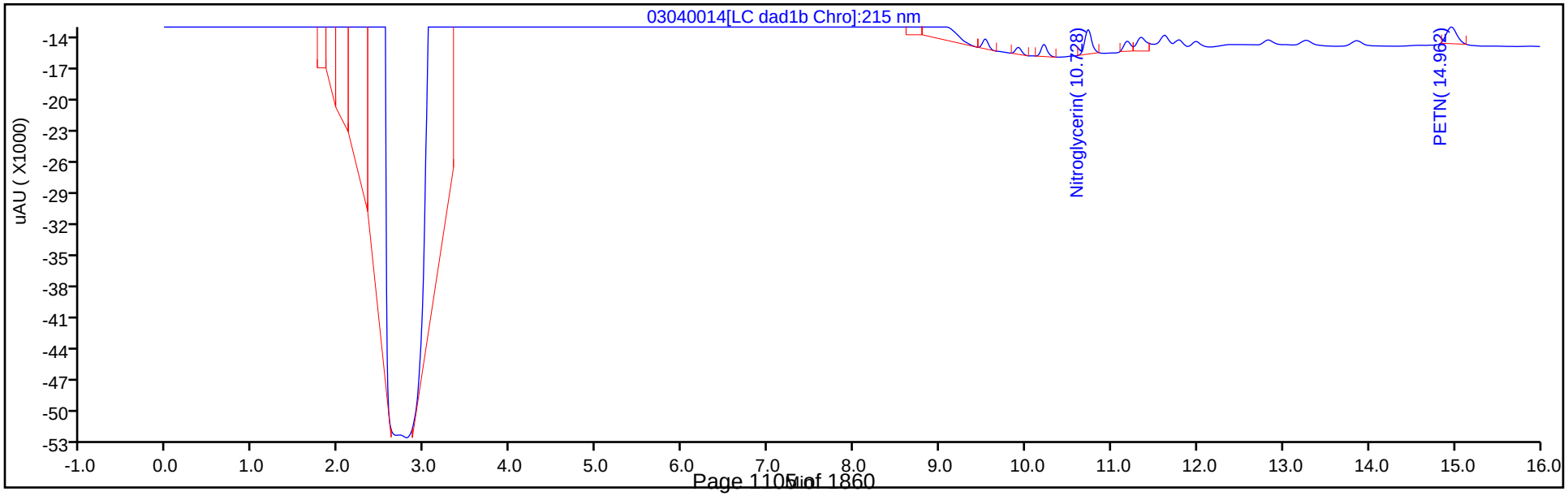
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d

Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L1			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

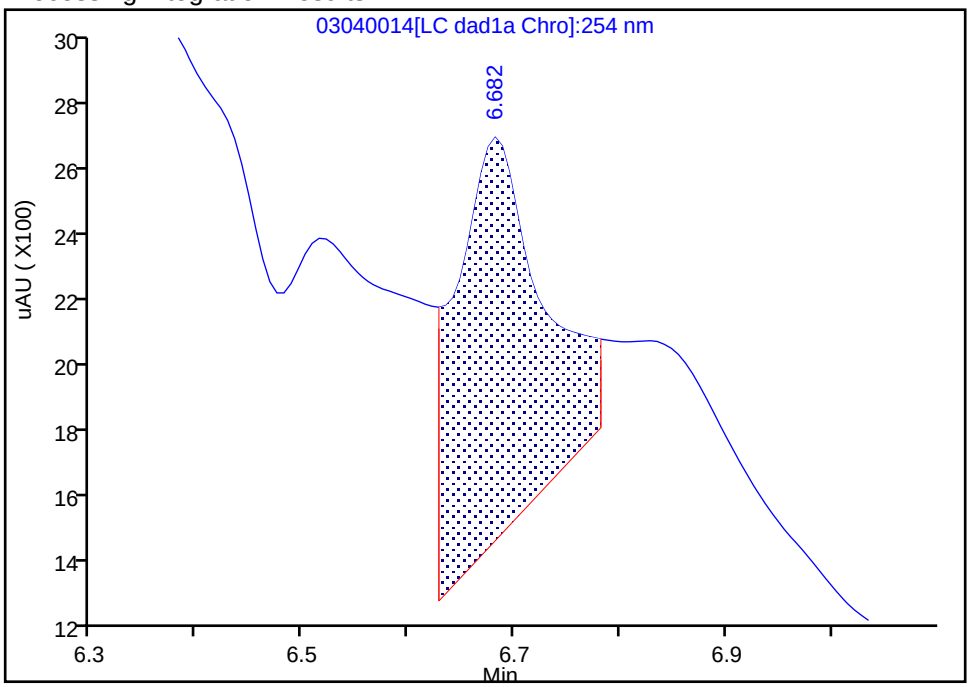
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

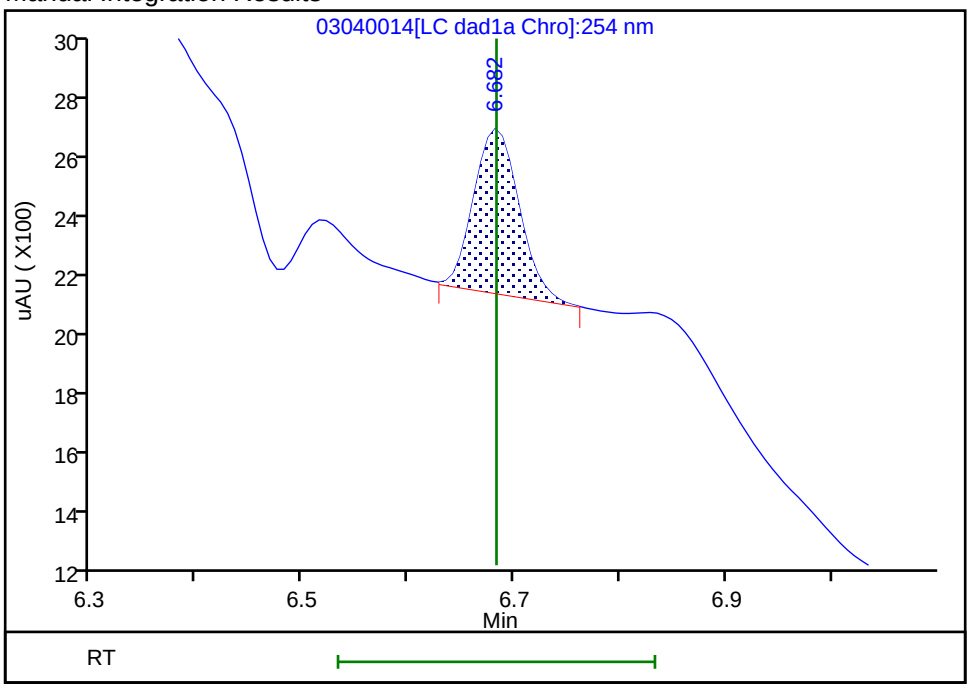
Processing Integration Results

RT: 6.68
Area: 6385
Amount: 0.053394
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 1520
Amount: 0.017045
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:23:15
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

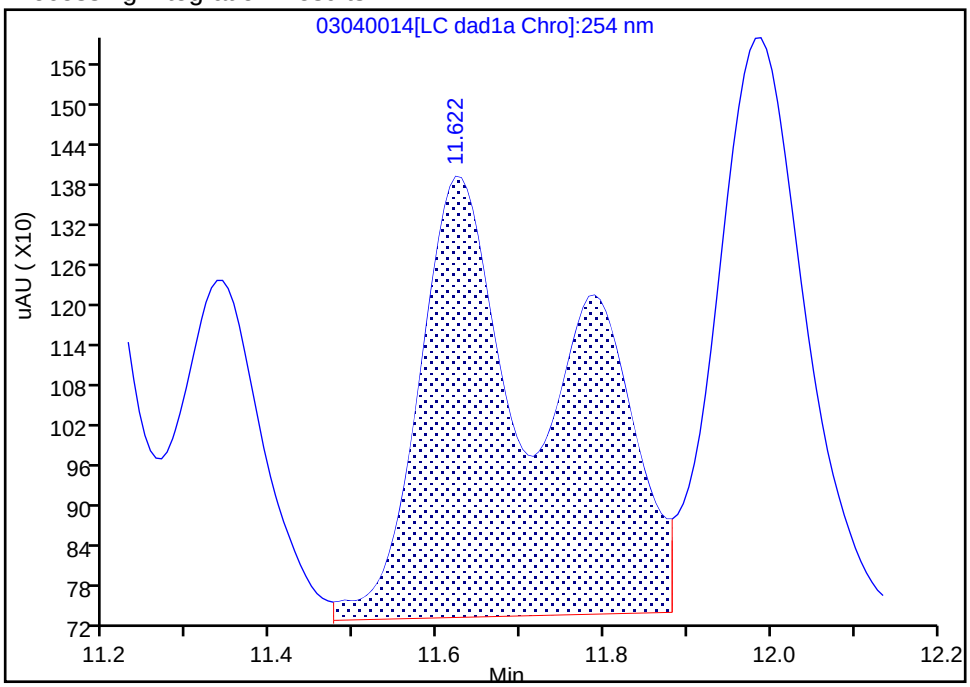
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

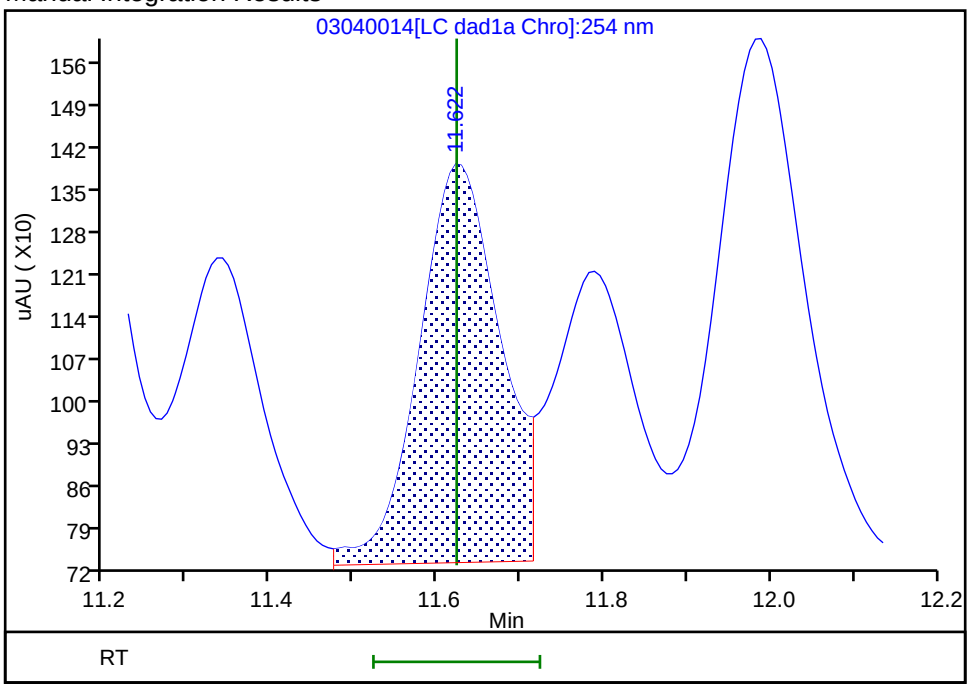
Processing Integration Results

RT: 11.62
Area: 7655
Amount: 0.026996
Amount Units: ug/mL



Manual Integration Results

RT: 11.62
Area: 4452
Amount: 0.020465
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:23:29
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.592	6.588	6.589	6.591	6.591	6.591	6.591	6.590			6.491 - 6.691	6.590
DNX	6.912	6.914	6.915	6.918	6.917	6.918	6.918	6.916			6.818 - 7.018	6.916
MNX	7.359	7.354	7.355	7.358	7.357	7.358	7.358	7.356			7.208 - 7.508	7.357

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.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	216933 212722	213207 212002	209810 219067	231497 225632	Ave		217608.702				3.5		20.0			
DNX	117133 161214	137942 160624	149221 163997	167576 165720	Ave		152928.307				11.5		20.0			
MNX	175621 156707	161285 152355	156238 154895	157686 153564	Ave		158544.202				4.7		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.: 280-137609-2 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.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	4343 148550	10671 219286	21002 564643	57932	85174	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2345 112549	6904 164161	14937 414714	41936	64550	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	4099 124459	9411 180763	18233 448024	46005	73151	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: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040025.D
Lims ID: IC DMT L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Mar-2020 21:00:00 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L8
Misc. Info.: 280-0089779-025
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:20 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.591	-0.001	564643	2.50	2.59	M
5 DNX	1	6.916	6.918	-0.002	414714	2.50	2.71	M
6 MNX	1	7.356	7.358	-0.002	448024	2.92	2.83	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 125.00 Units: uL

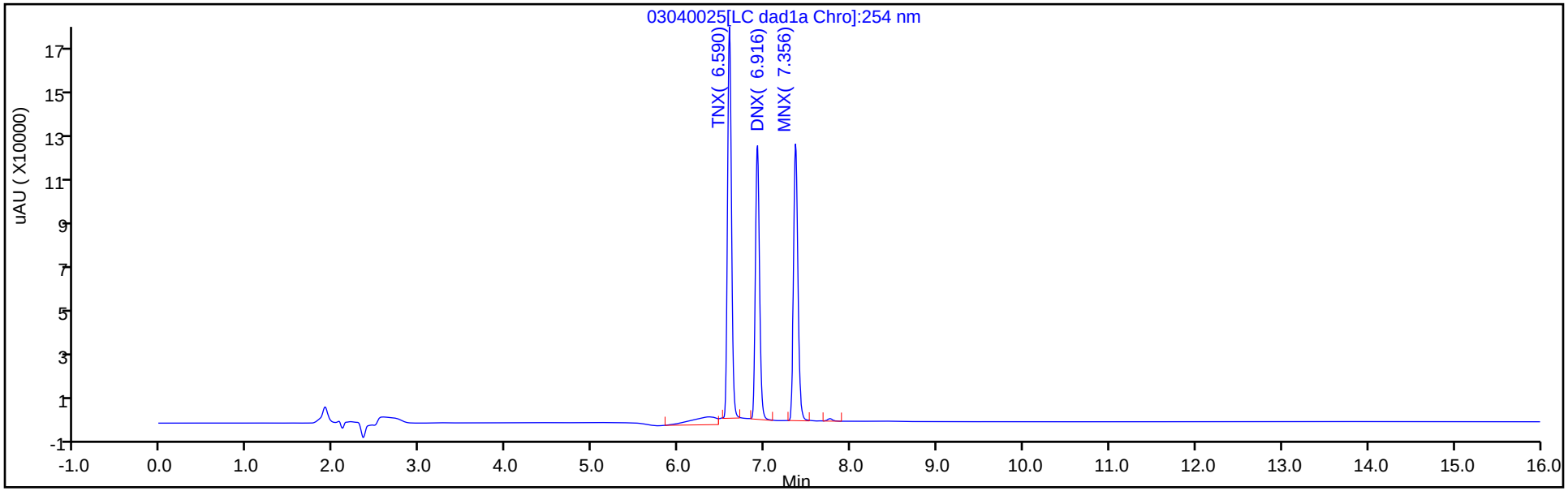
Report Date: 06-Mar-2020 10:25:21 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

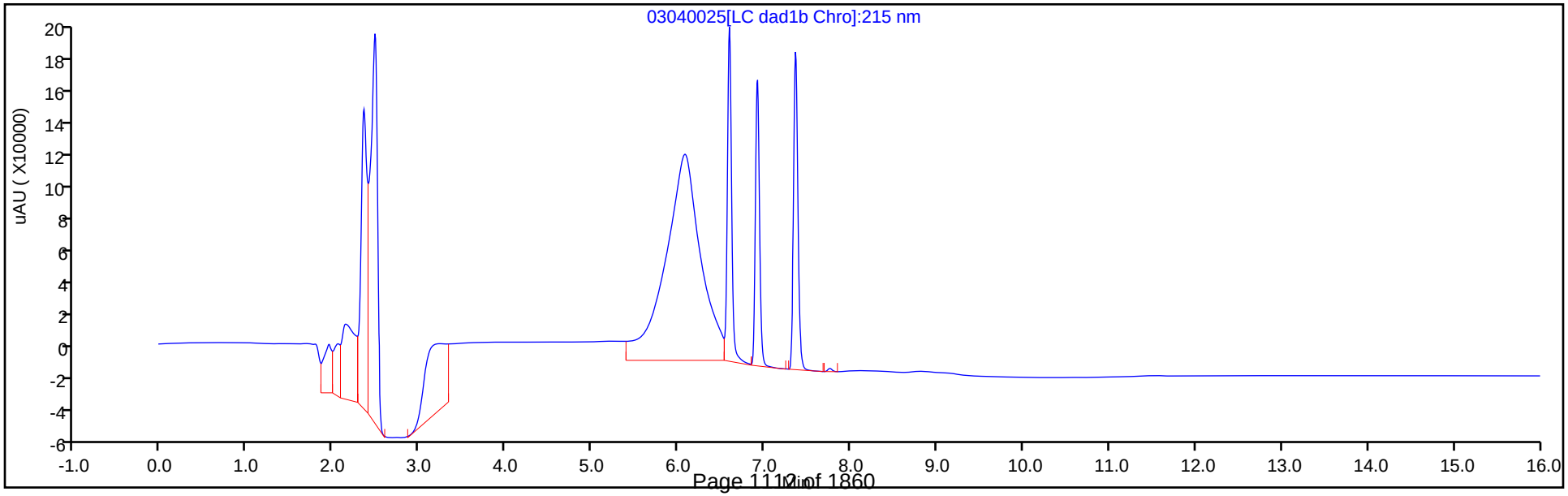
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d

Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L8			Worklist Smp#:	25
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

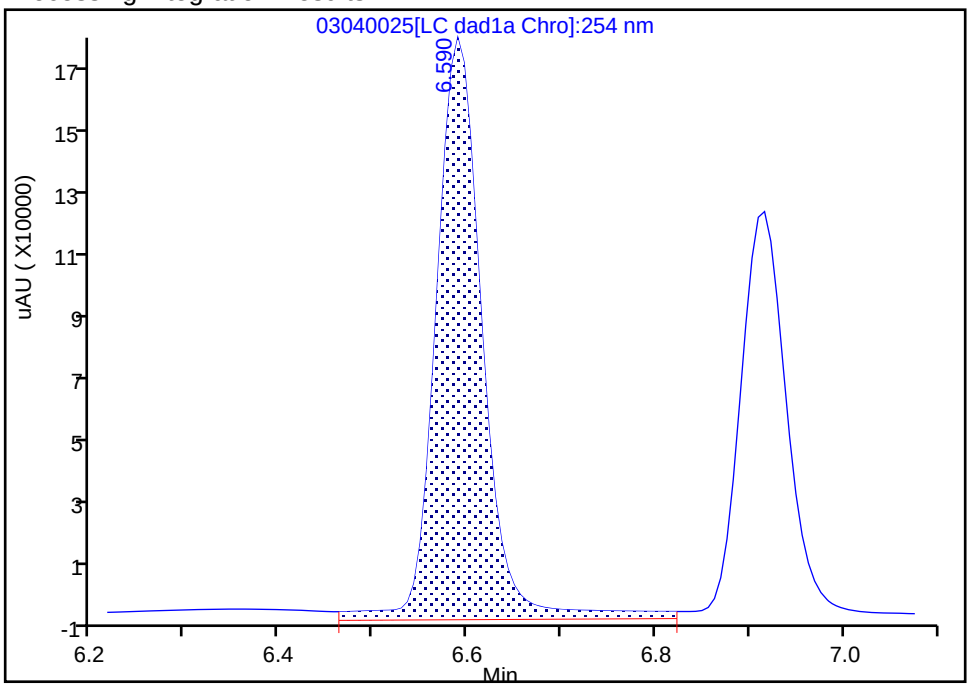
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

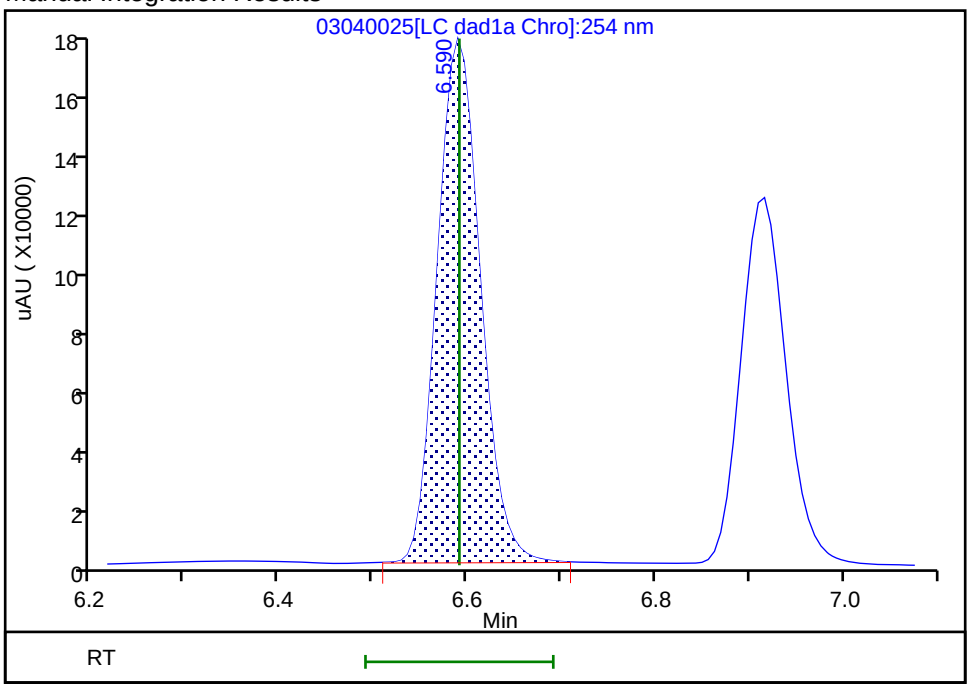
Processing Integration Results

RT: 6.59
Area: 620676
Amount: 2.450904
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 564643
Amount: 2.594763
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:29:45

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

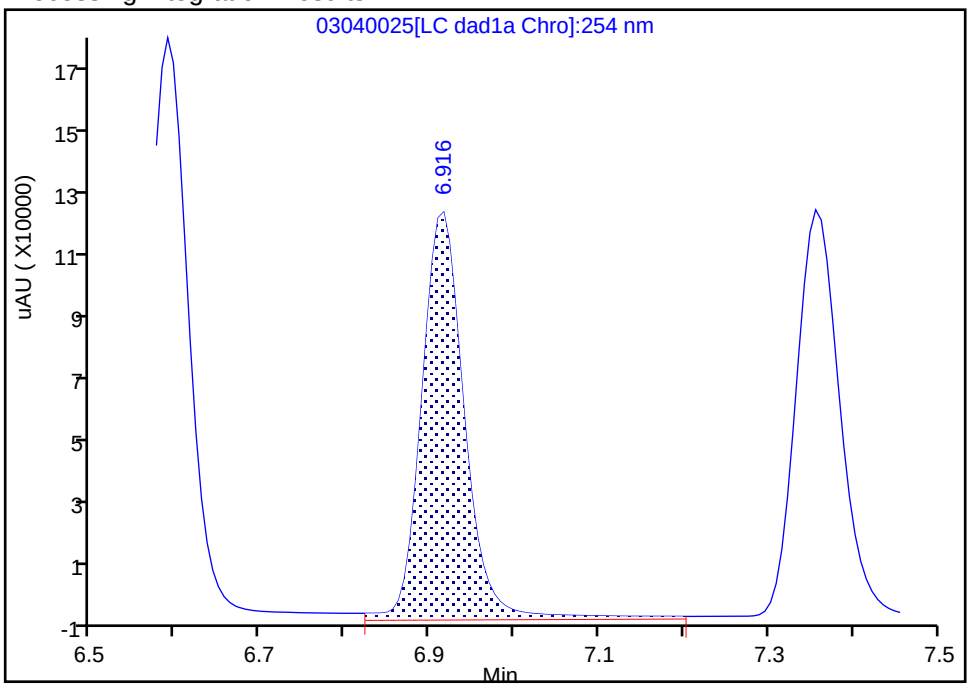
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

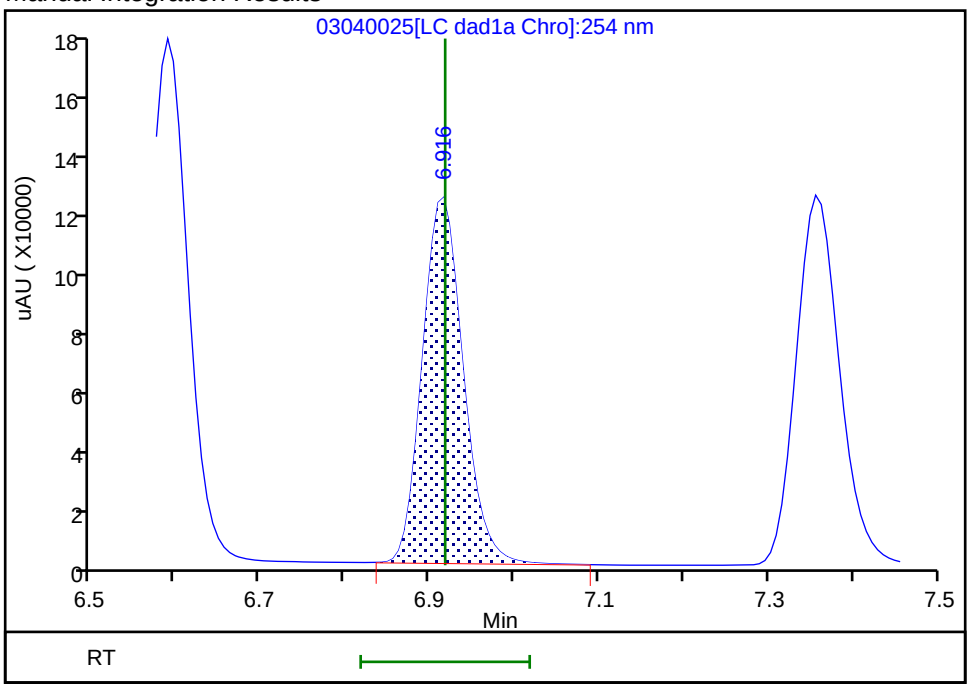
Processing Integration Results

RT: 6.92
Area: 445633
Amount: 2.254277
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 414714
Amount: 2.711820
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:29:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

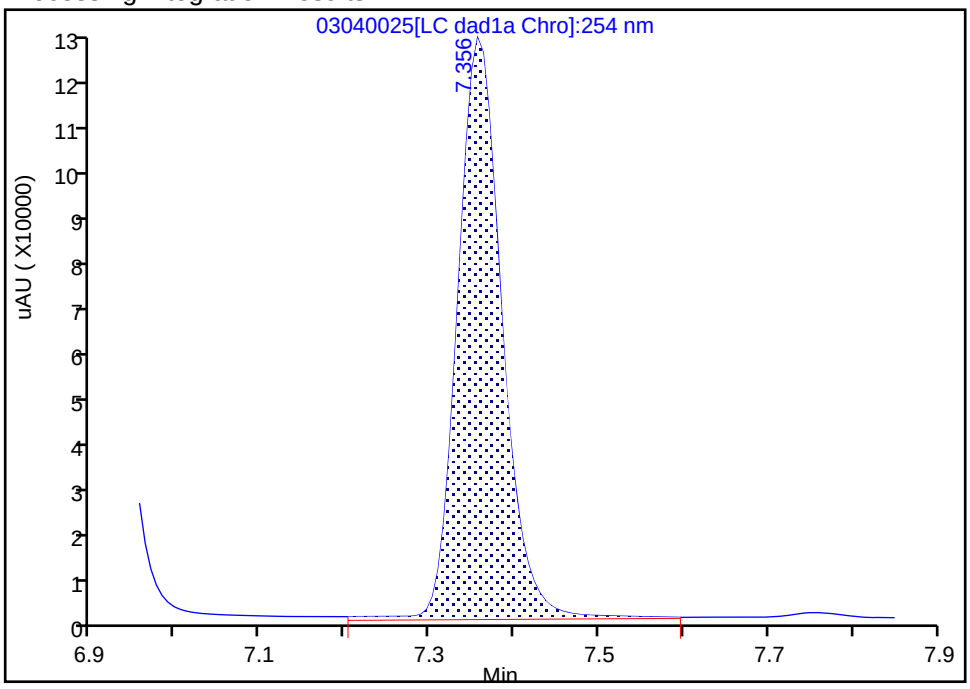
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

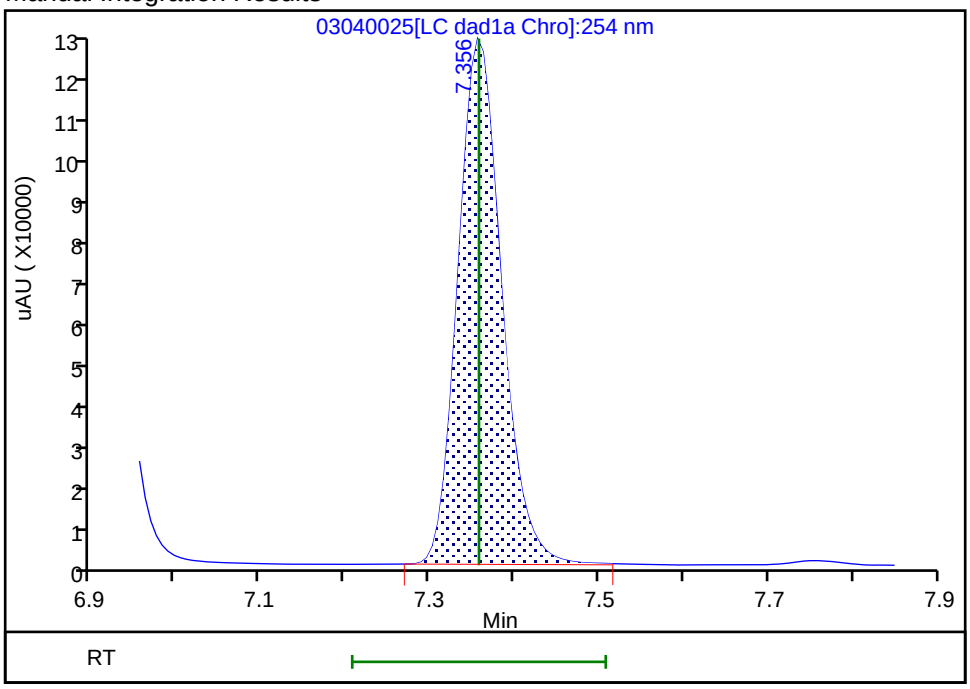
Processing Integration Results

RT: 7.36
Area: 461400
Amount: 2.899748
Amount Units: ug/mL



Manual Integration Results

RT: 7.36
Area: 448024
Amount: 2.825862
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:00
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040026.D
Lims ID: IC DMT L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Mar-2020 21:23:03 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L7
Misc. Info.: 280-0089779-026
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:21 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	219286	1.00	1.01	M
5 DNX	1	6.918	6.918	0.000	164161	1.00	1.07	M
6 MNX	1	7.358	7.358	0.000	180763	1.17	1.14	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 50.00 Units: uL

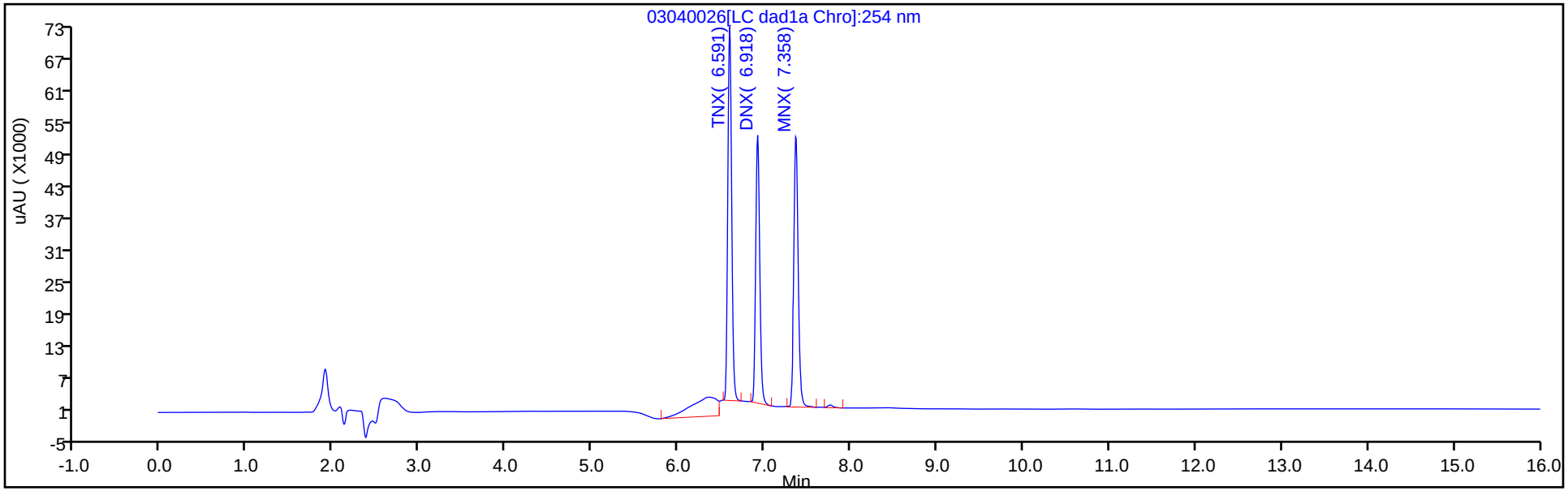
Report Date: 06-Mar-2020 10:25:22 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

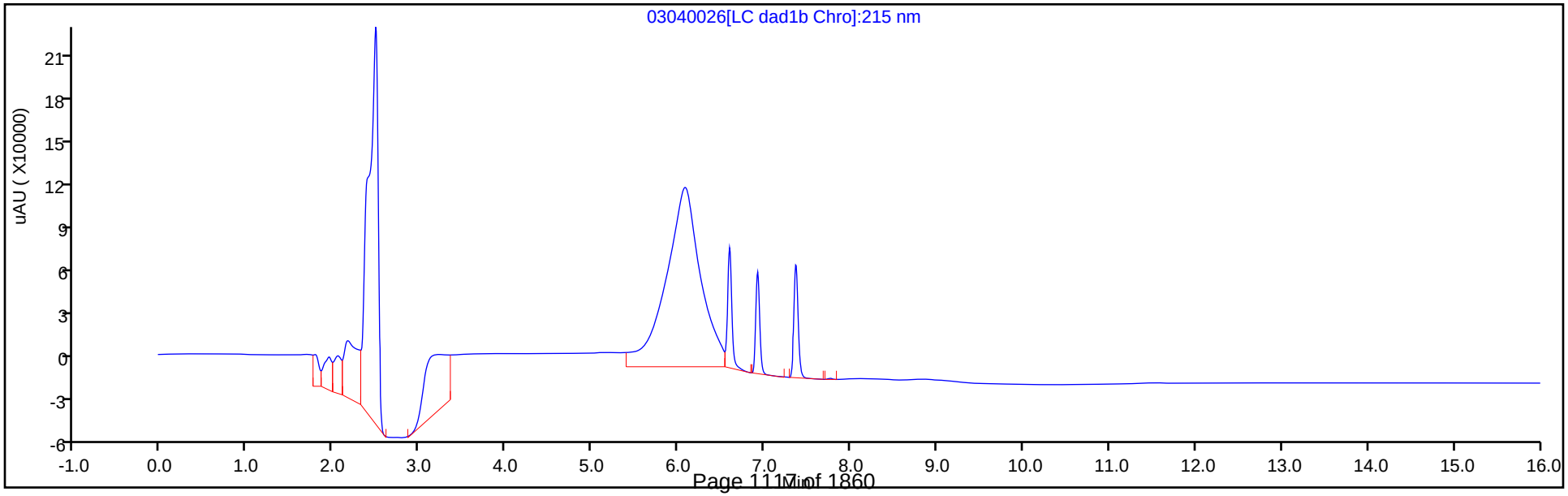
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d

Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L7			Worklist Smp#:	26
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

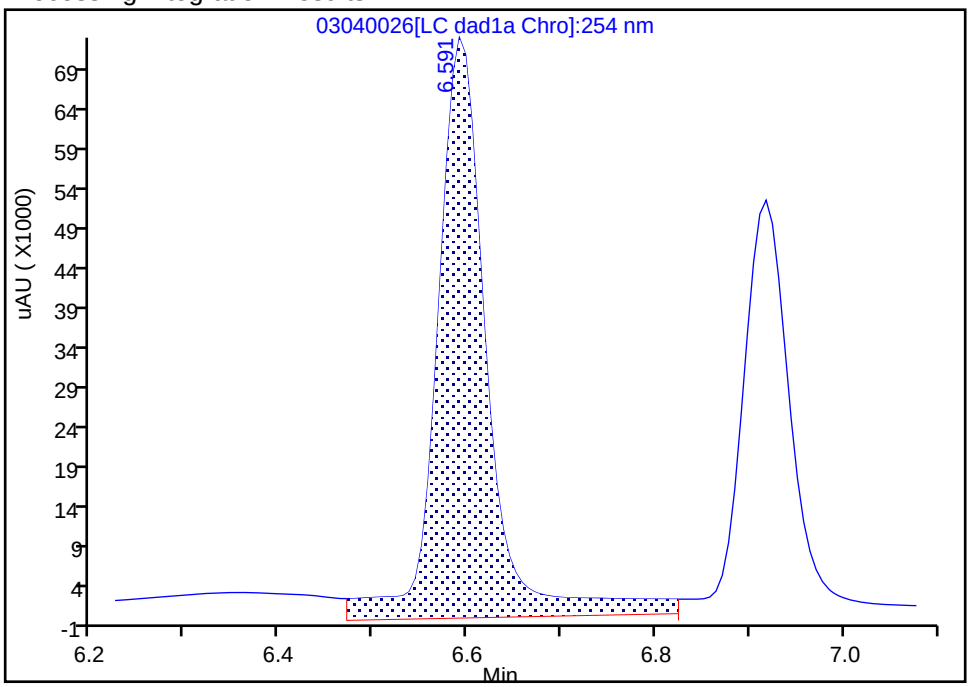
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d
Injection Date: 04-Mar-2020 21:23:03 Instrument ID: CHHPLC_X3
Lims ID: IC DMT L7
Client ID:
Operator ID: CB ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

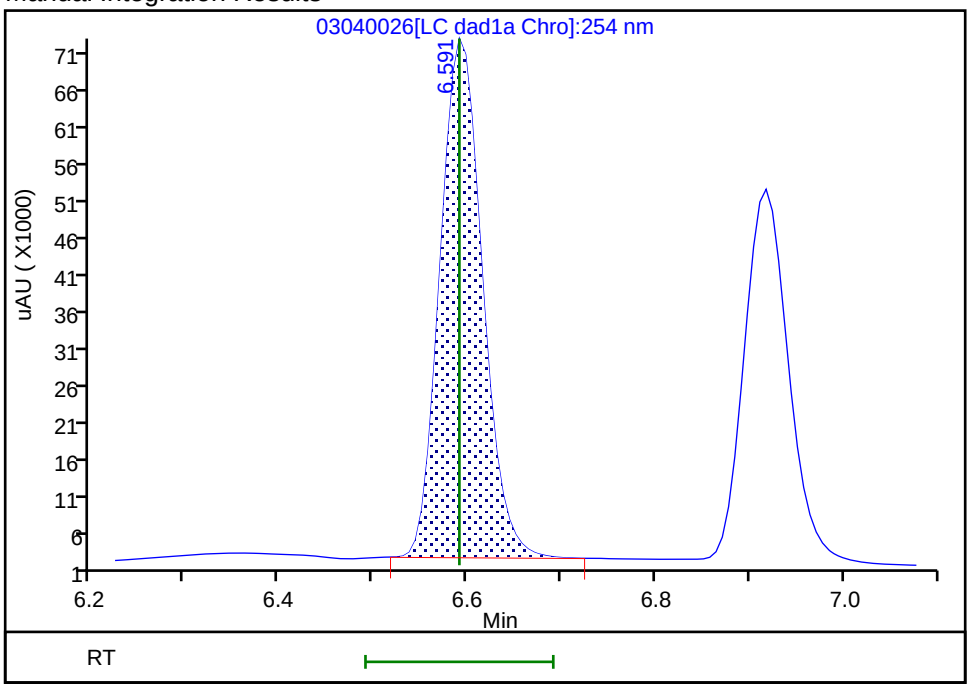
Processing Integration Results

RT: 6.59
Area: 269369
Amount: 1.068967
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 219286
Amount: 1.007708
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

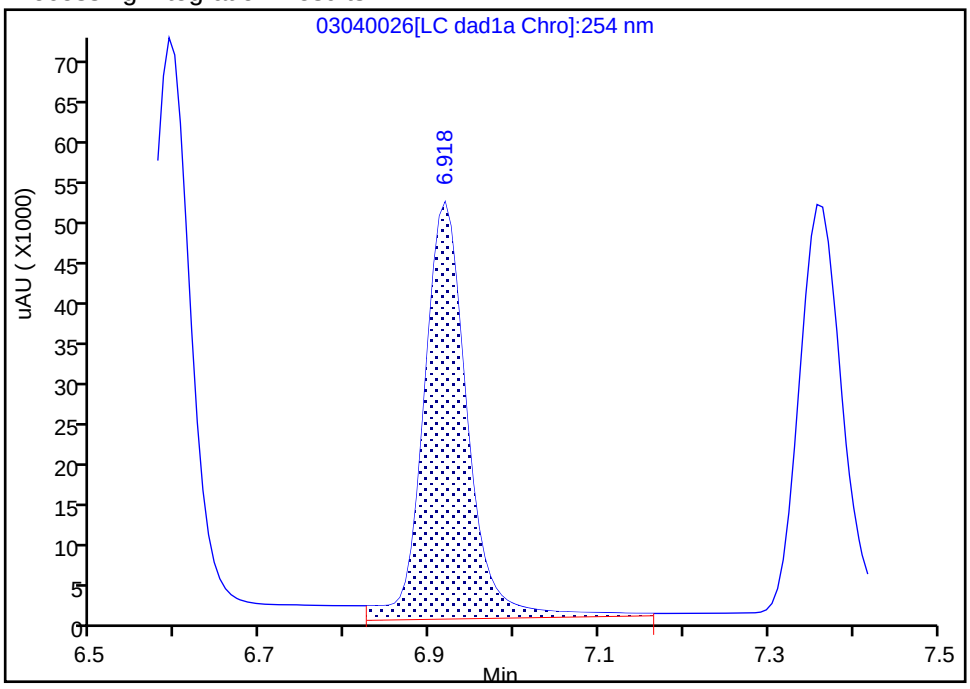
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

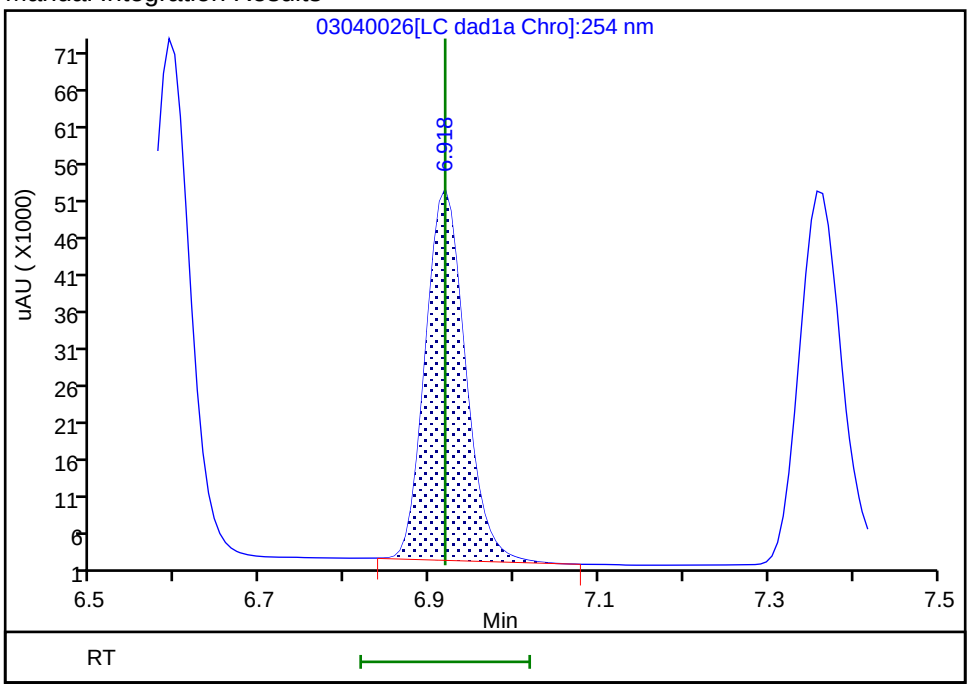
Processing Integration Results

RT: 6.92
Area: 184230
Amount: 0.939283
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 164161
Amount: 1.073451
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:26
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040027.D
Lims ID: IC DMT L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Mar-2020 21:45:58 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L6
Misc. Info.: 280-0089779-027
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:23 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	148550	0.7007	0.6826	M
5 DNX	1	6.918	6.918	0.000	112549	0.7007	0.7360	M
6 MNX	1	7.358	7.358	0.000	124459	0.8169	0.7850	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 35.00 Units: uL

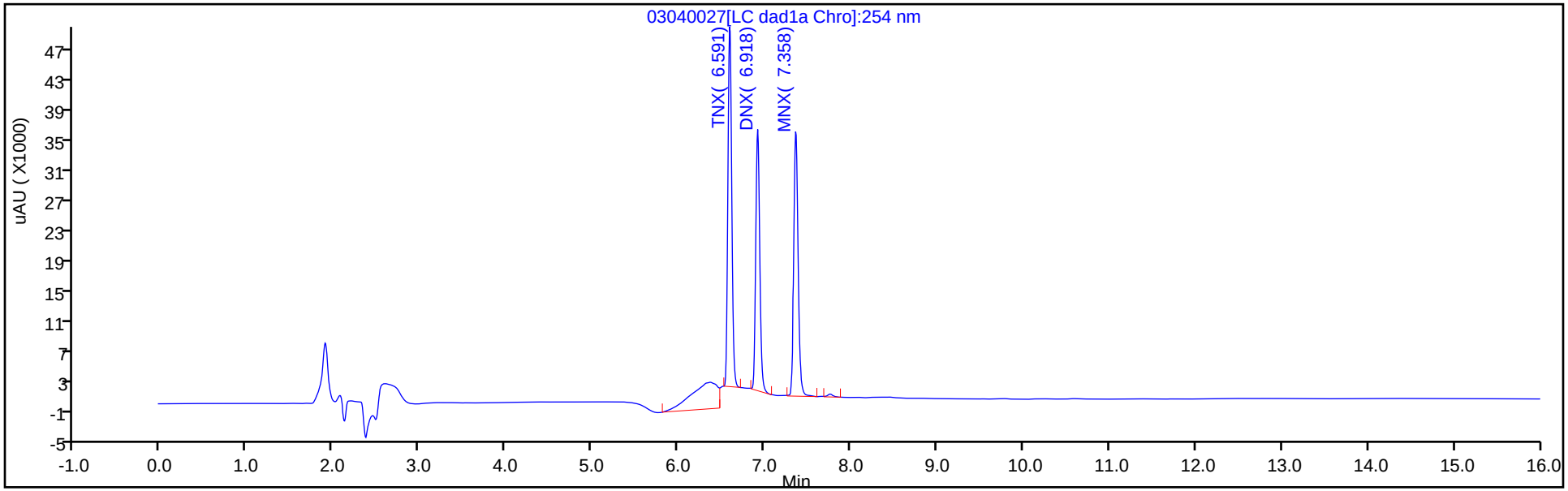
Report Date: 06-Mar-2020 10:25:23 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

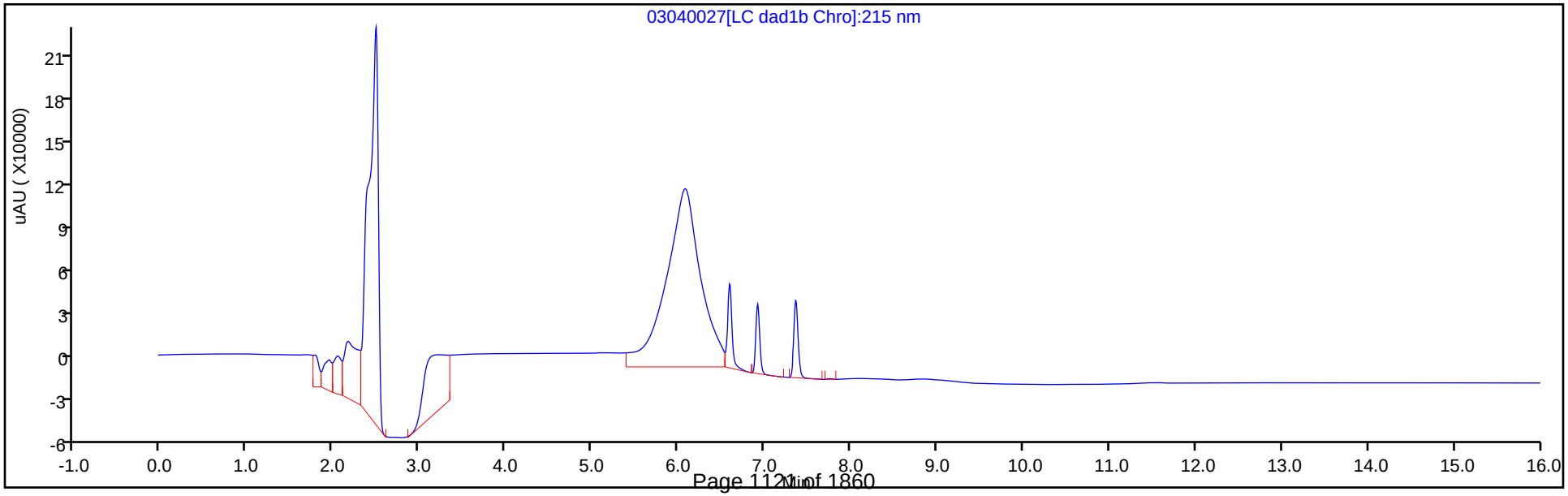
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d

Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L6			Worklist Smp#:	27
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

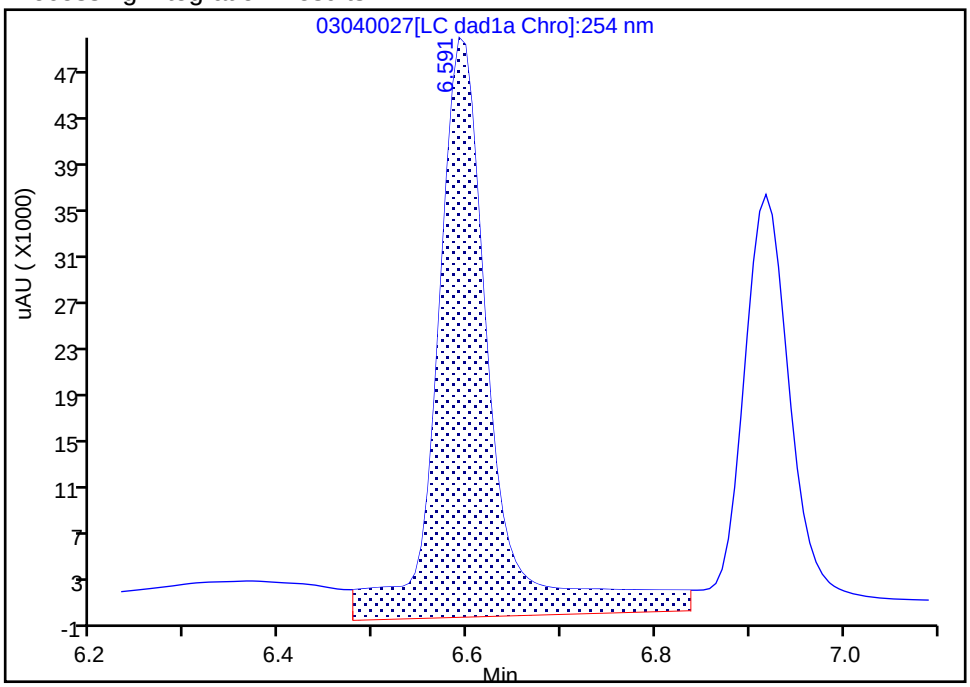
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

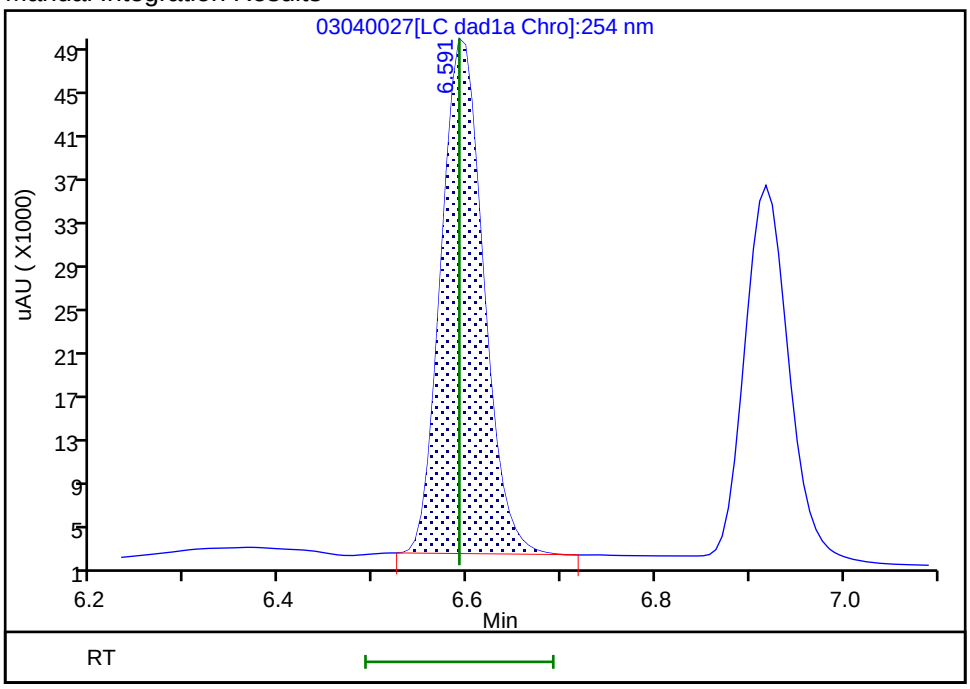
Processing Integration Results

RT: 6.59
Area: 198883
Amount: 0.812342
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 148550
Amount: 0.682647
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

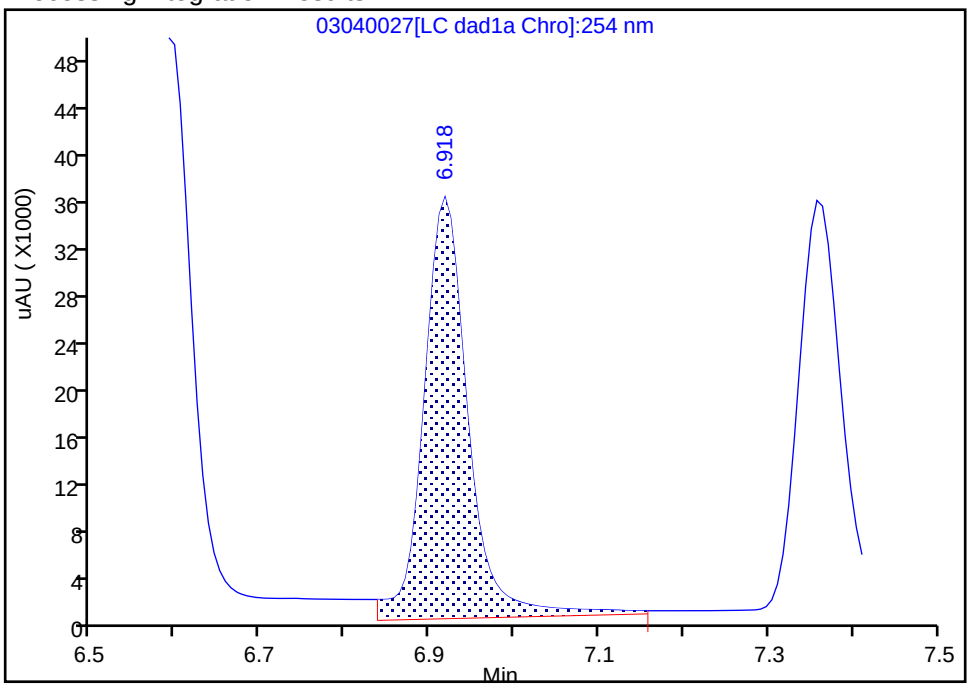
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

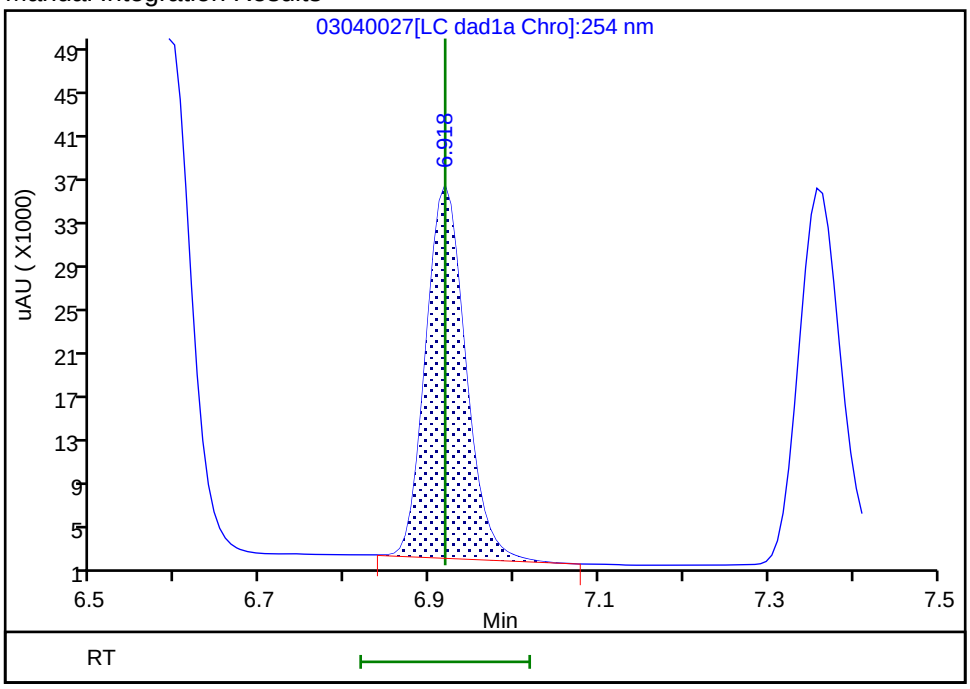
Processing Integration Results

RT: 6.92
Area: 130368
Amount: 0.673274
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 112549
Amount: 0.735959
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:49
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040028.D
Lims ID: IC DMT L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Mar-2020 22:09:00 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L5
Misc. Info.: 280-0089779-028
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:24 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:31:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	85174	0.4004	0.3914	M
5 DNX	1	6.917	6.918	-0.001	64550	0.4004	0.4221	M
6 MNX	1	7.357	7.358	-0.001	73151	0.4668	0.4614	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 20.00 Units: uL

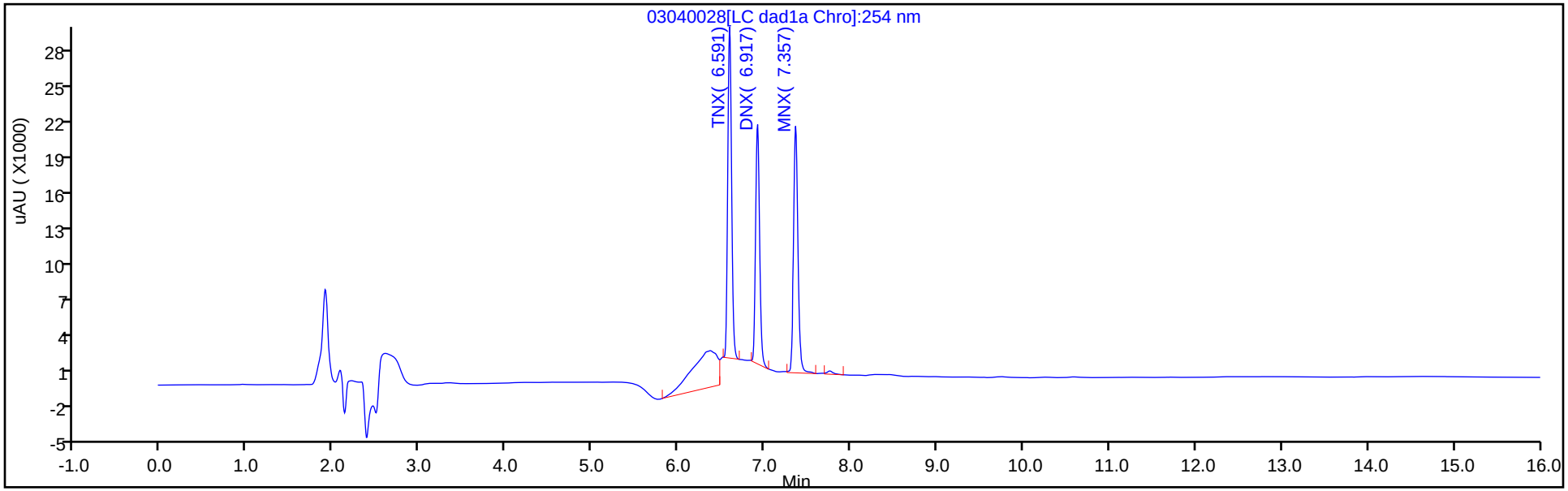
Report Date: 06-Mar-2020 10:25:24 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

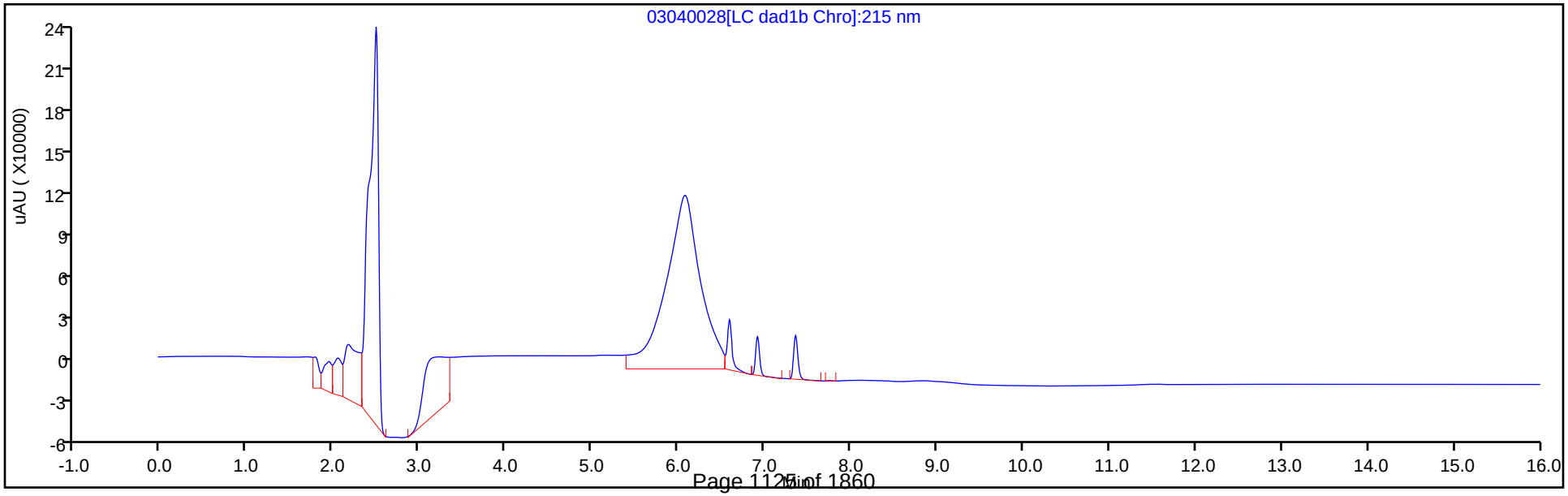
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d

Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L5			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

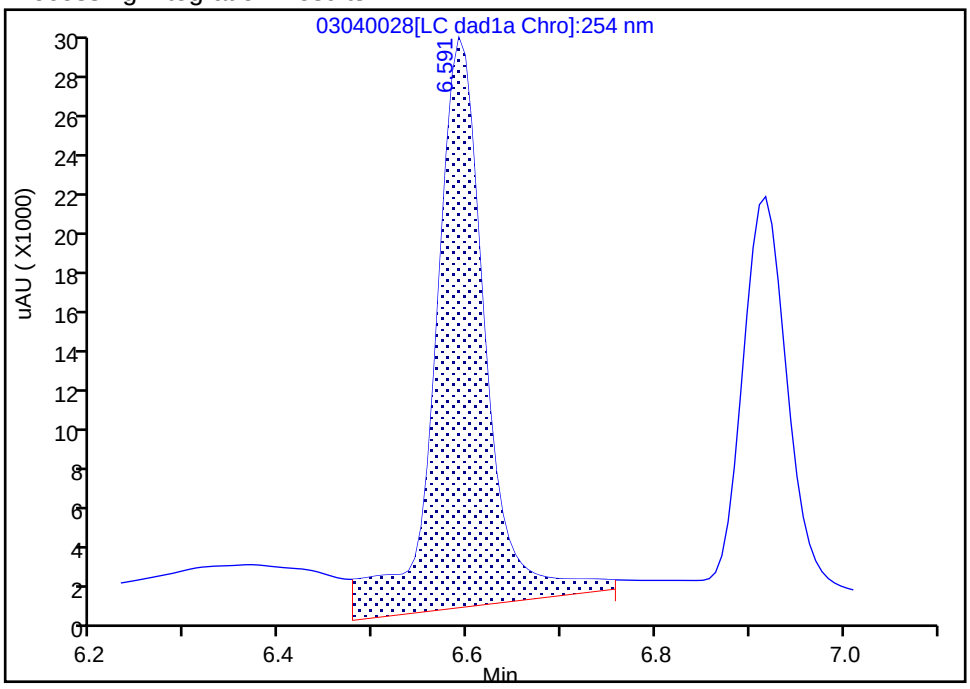
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d
Injection Date: 04-Mar-2020 22:09:00 Instrument ID: CHHPLC_X3
Lims ID: IC DMT L5
Client ID:
Operator ID: CB ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

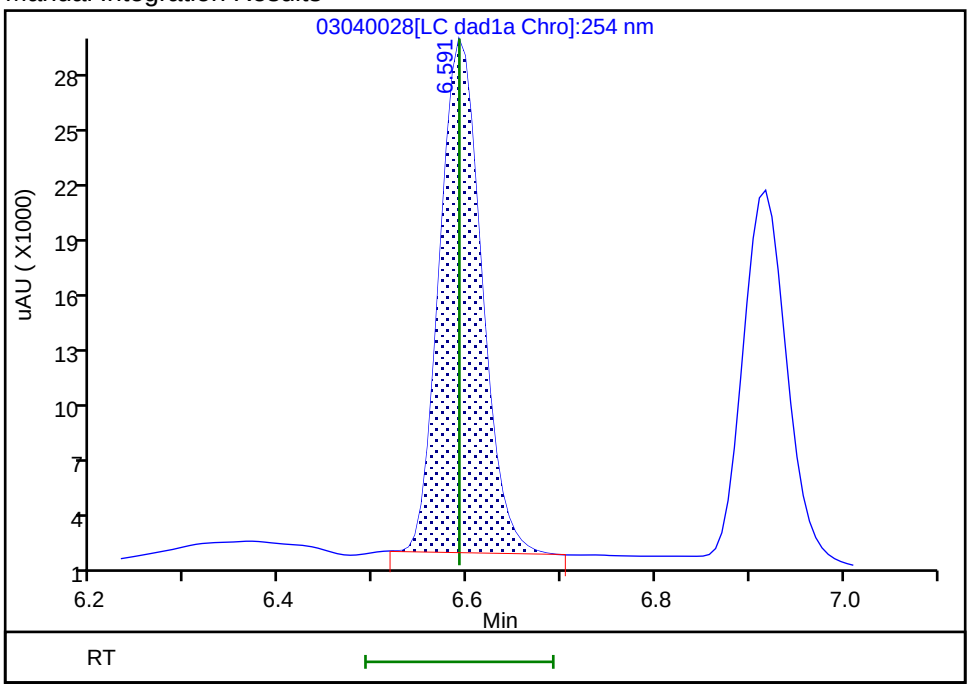
Processing Integration Results

RT: 6.59
Area: 108455
Amount: 0.455381
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 85174
Amount: 0.391409
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

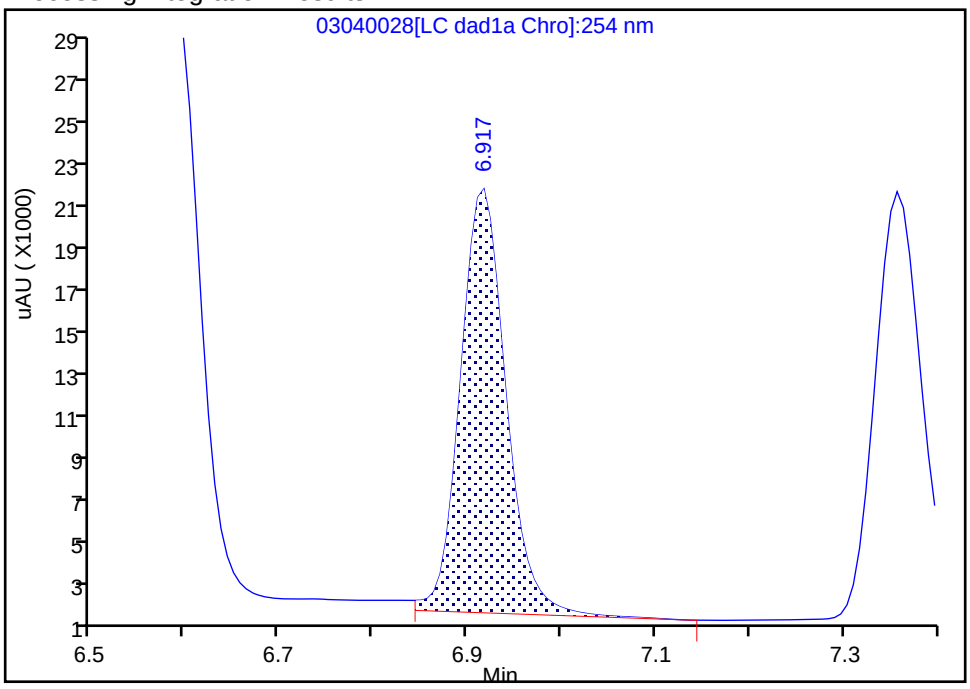
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

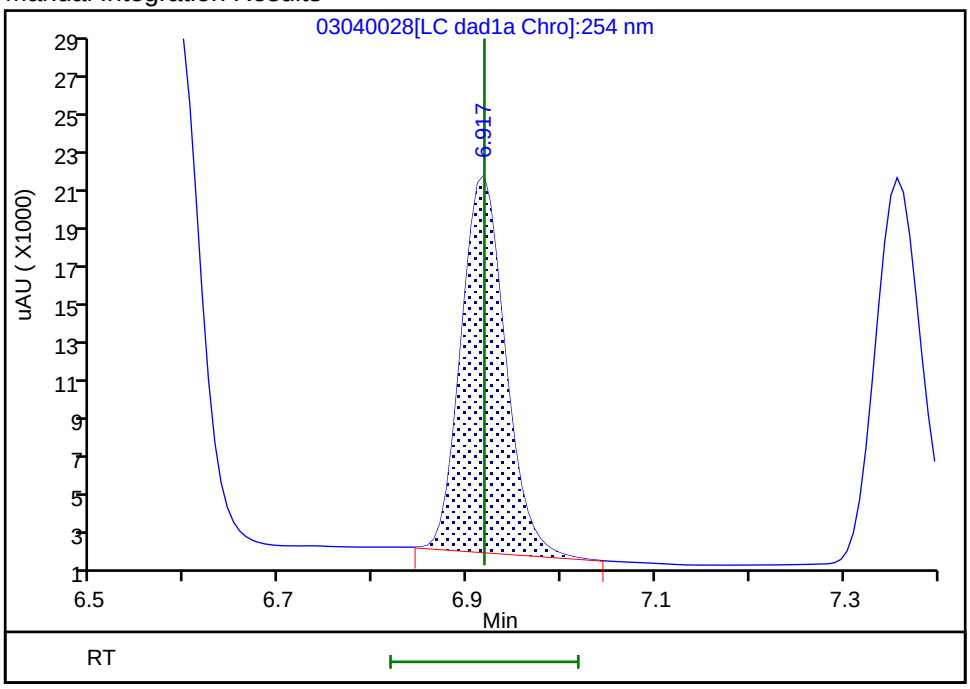
Processing Integration Results

RT: 6.92
Area: 67686
Amount: 0.396160
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 64550
Amount: 0.422093
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:13
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040029.D
Lims ID: IC DMT L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Mar-2020 22:31:57 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L4
Misc. Info.: 280-0089779-029
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:24 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:31:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	57932	0.2503	0.2662	M
5 DNX	1	6.918	6.918	0.000	41936	0.2503	0.2742	M
6 MNX	1	7.358	7.358	0.000	46005	0.2918	0.2902	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 12.50 Units: uL

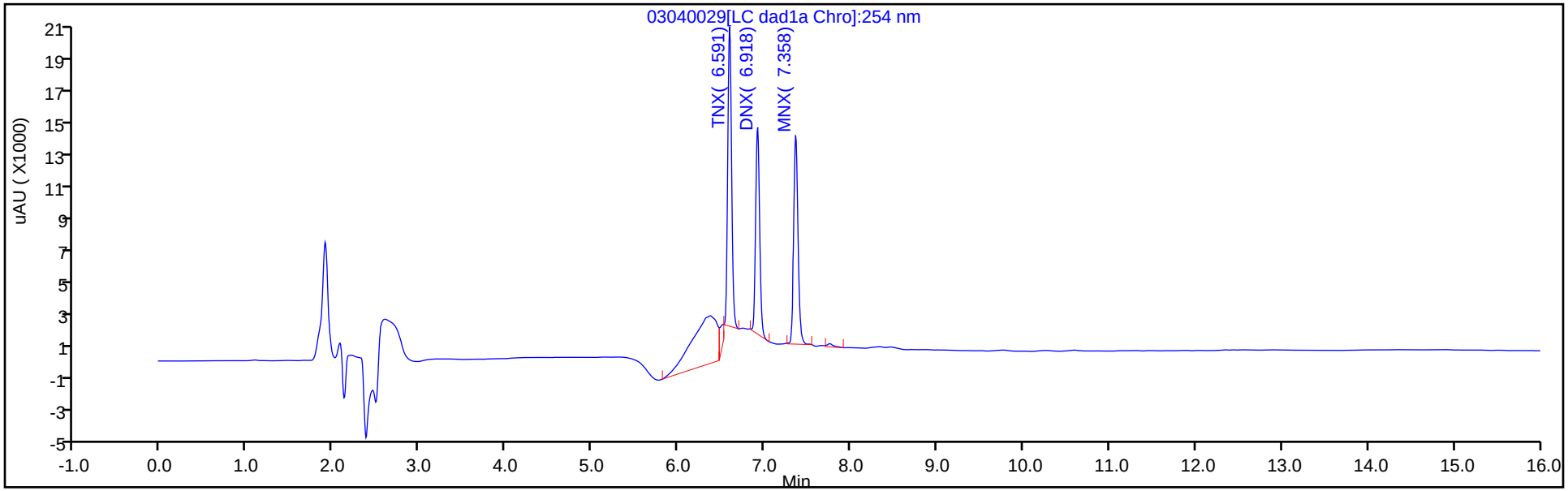
Report Date: 06-Mar-2020 10:25:25 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

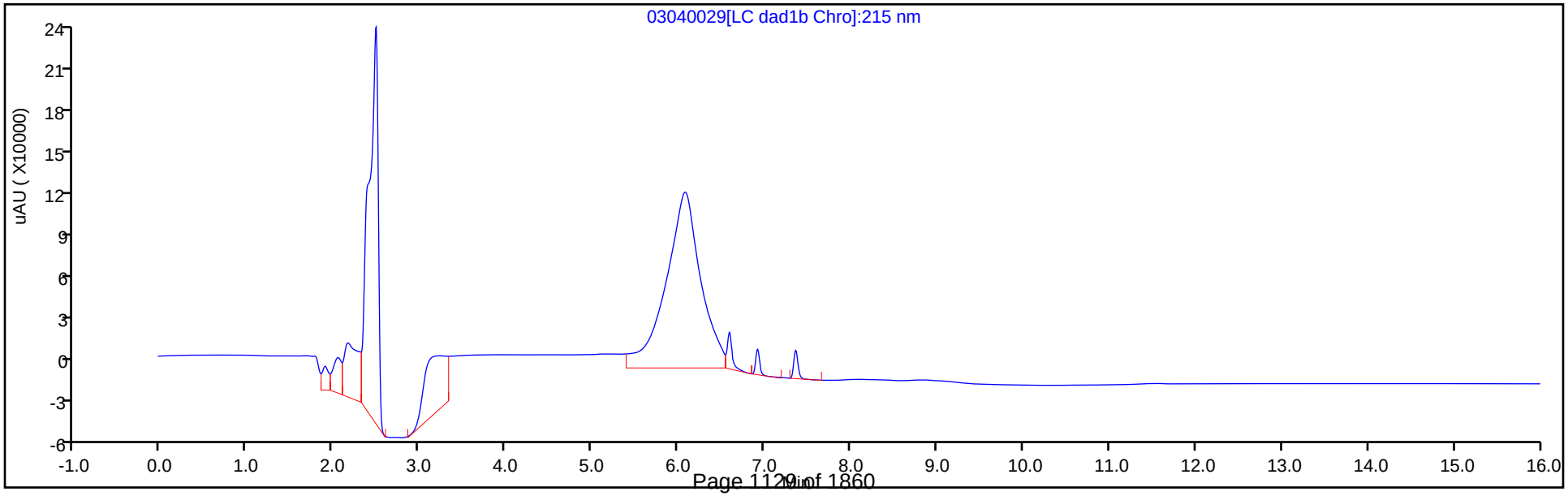
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d

Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L4			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

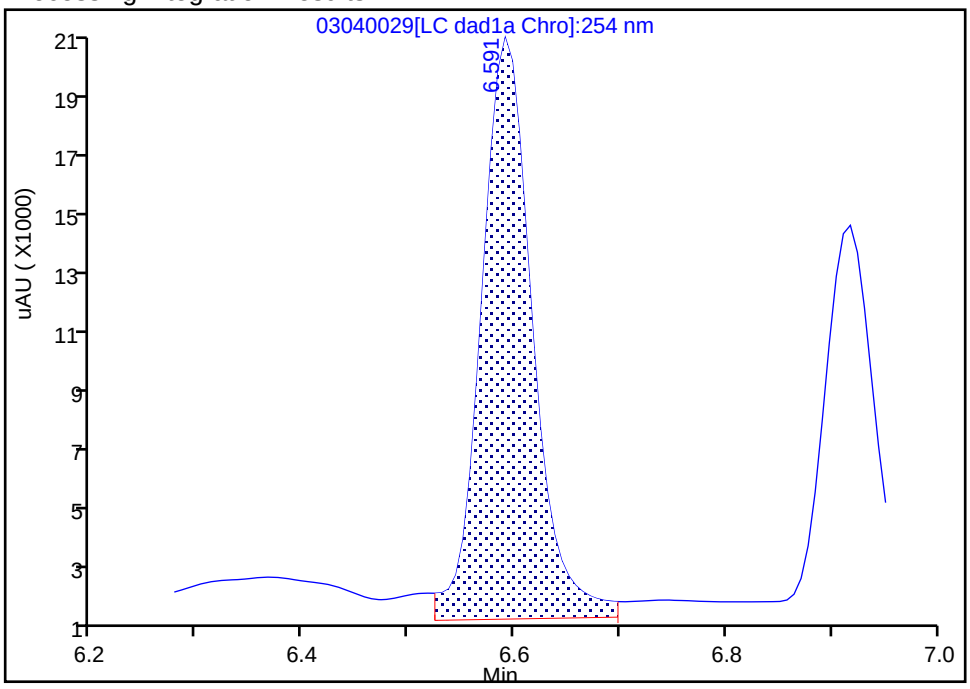
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

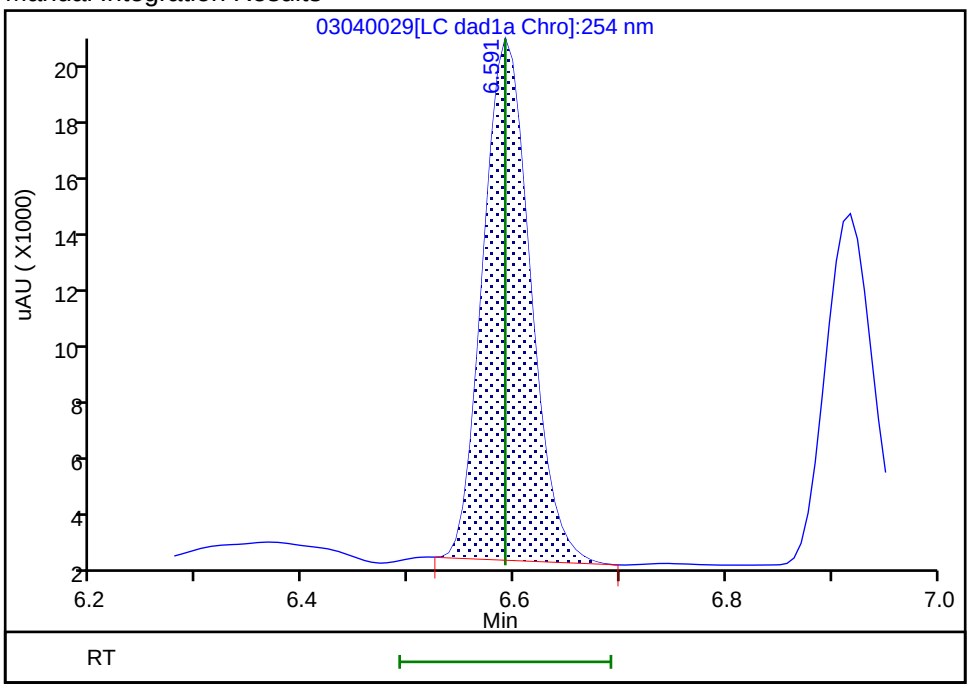
Processing Integration Results

RT: 6.59
Area: 65279
Amount: 0.274722
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 57932
Amount: 0.266221
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:35
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

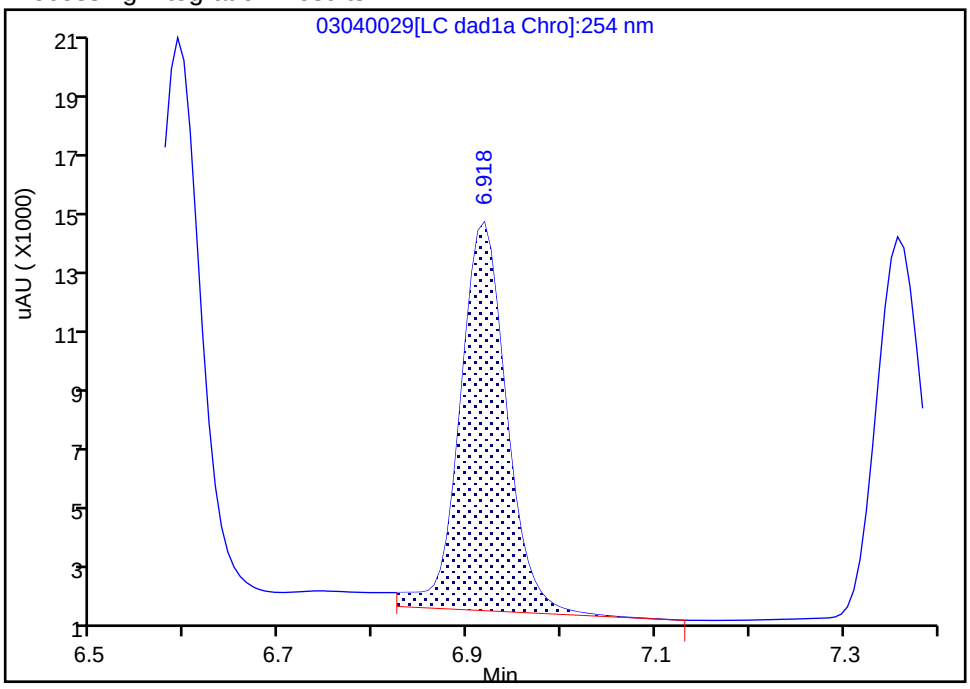
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

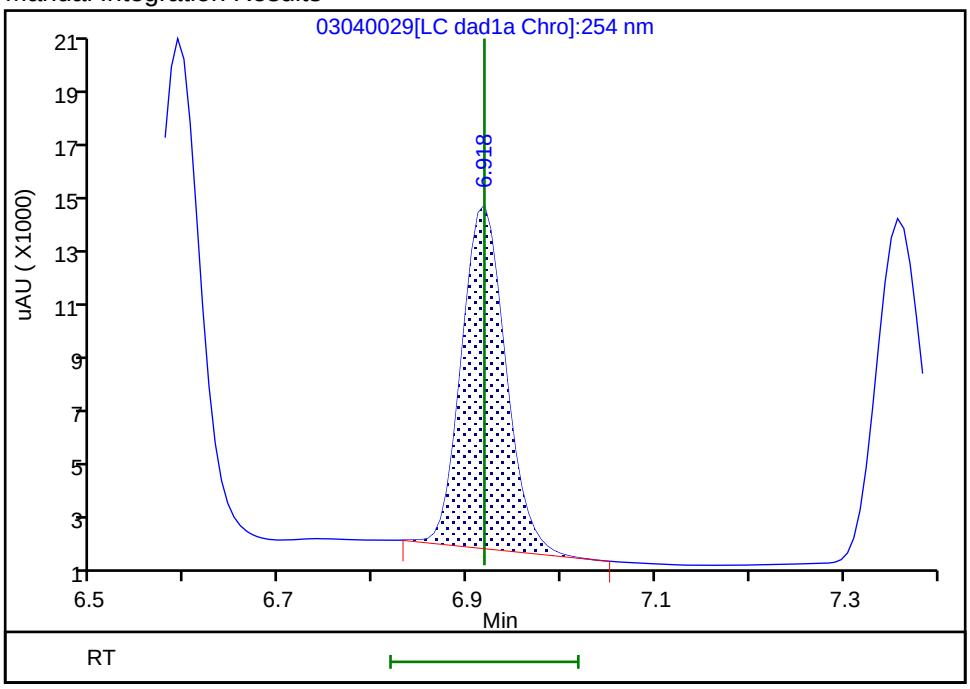
Processing Integration Results

RT: 6.92
Area: 45380
Amount: 0.263025
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 41936
Amount: 0.274220
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:40
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040030.D
Lims ID: IC DMT L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Mar-2020 22:54:53 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L3
Misc. Info.: 280-0089779-030
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:25 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.589	6.591	-0.002	21002	0.1001	0.0965	M
5 DNX	1	6.915	6.918	-0.003	14937	0.1001	0.0977	M
6 MNX	1	7.355	7.358	-0.003	18233	0.1167	0.1150	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 5.00 Units: uL

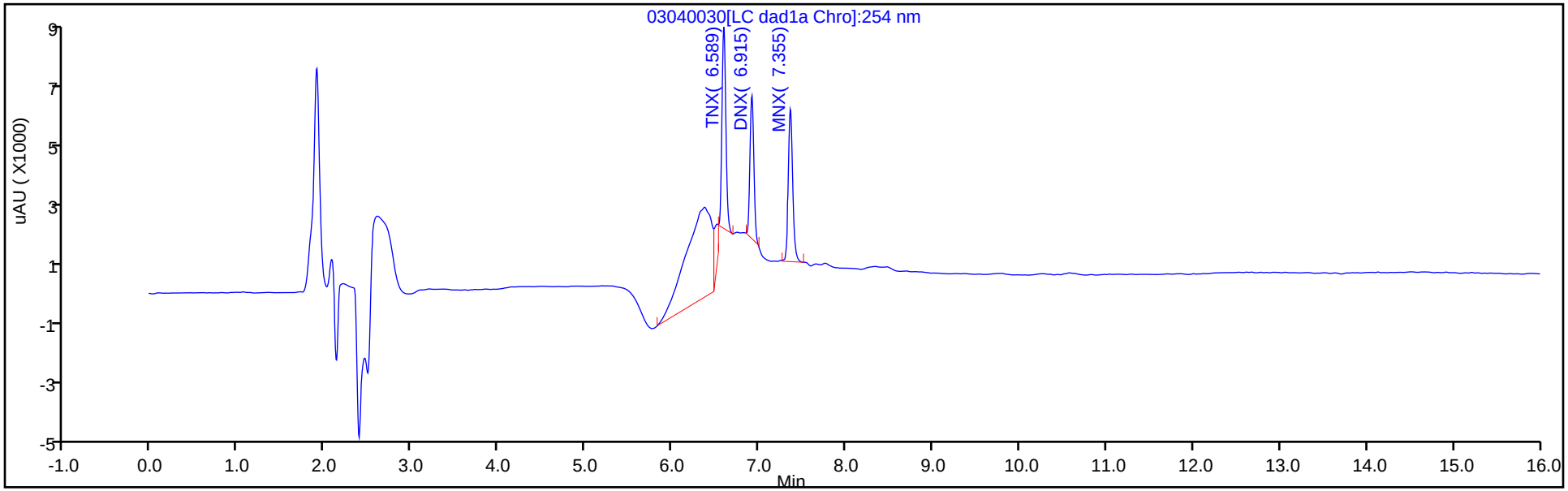
Report Date: 06-Mar-2020 10:25:26 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

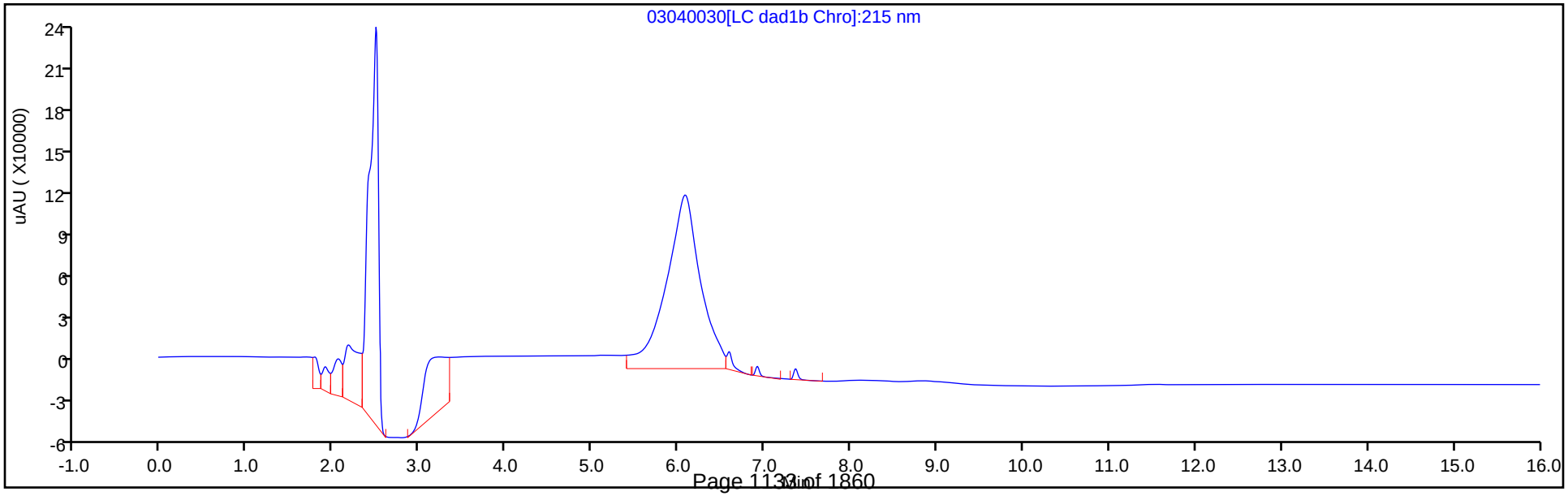
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d

Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L3			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

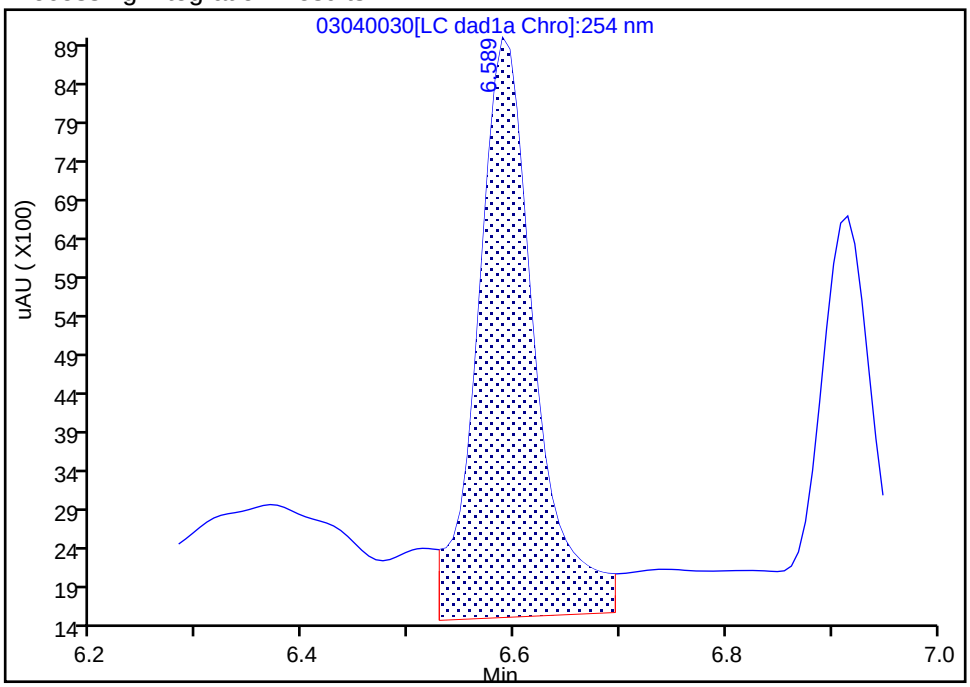
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

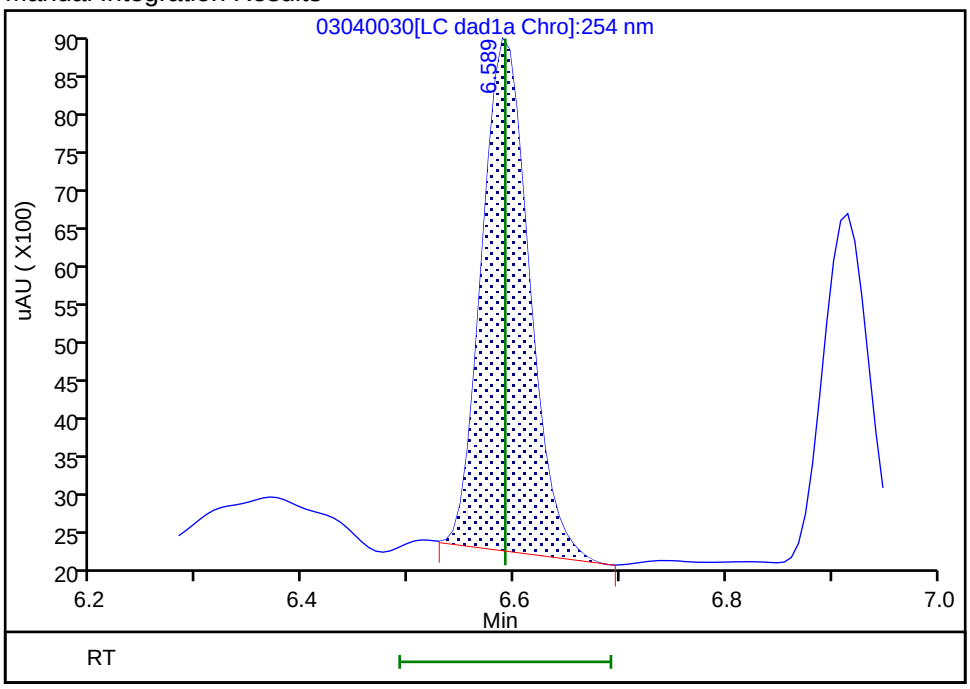
Processing Integration Results

RT: 6.59
Area: 27927
Amount: 0.102862
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 21002
Amount: 0.096513
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:59
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

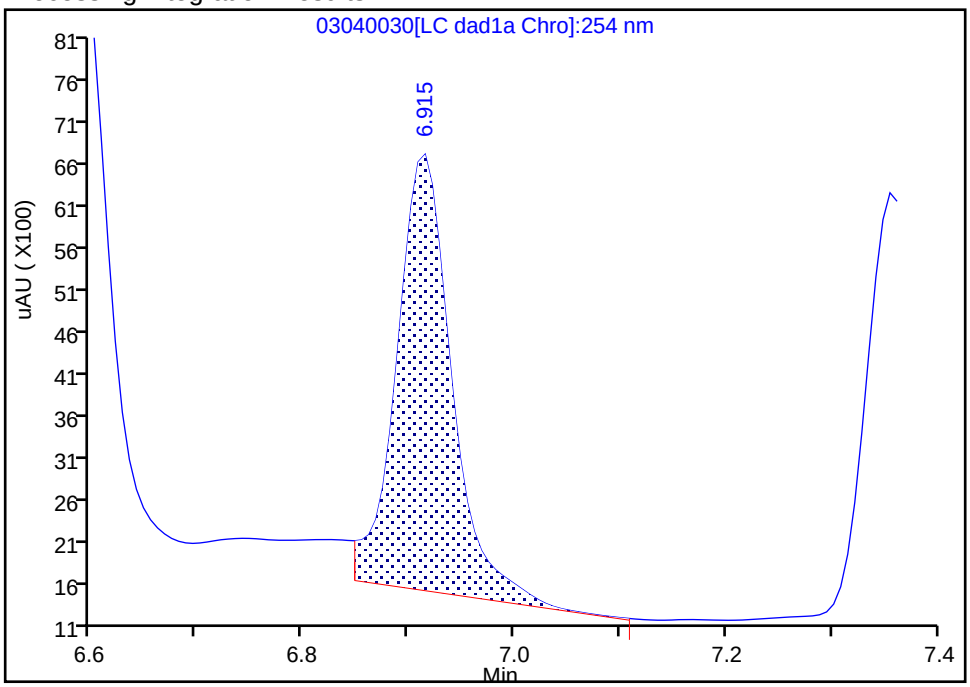
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

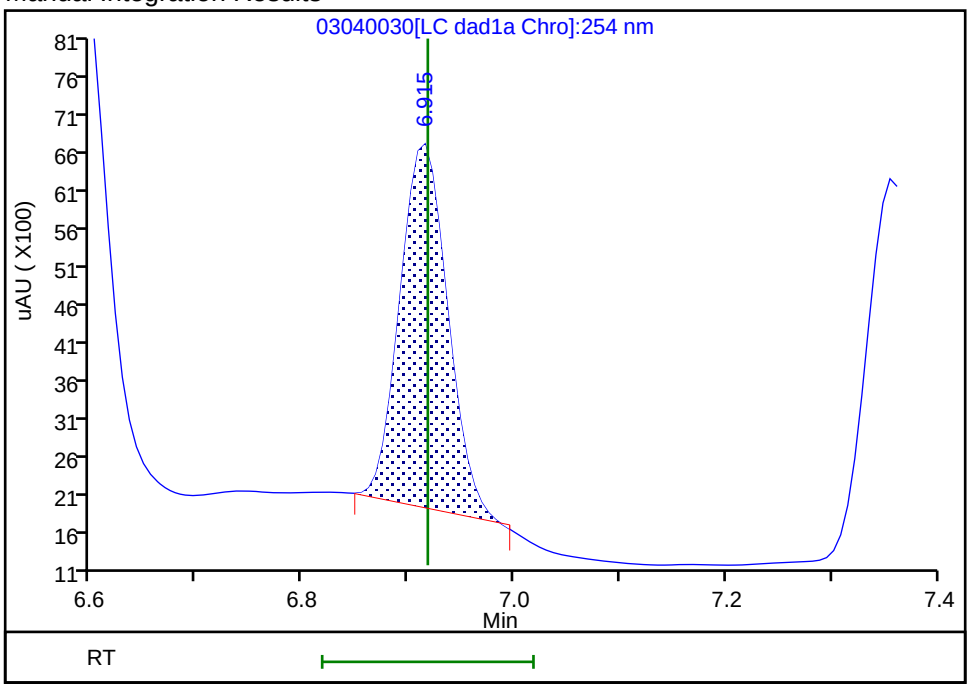
Processing Integration Results

RT: 6.92
Area: 18794
Amount: 0.101797
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 14937
Amount: 0.097673
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:04
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040031.D
Lims ID: IC DMT L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Mar-2020 23:17:52 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L2
Misc. Info.: 280-0089779-031
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:26 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.588	6.591	-0.003	10671	0.0501	0.0490	M
5 DNX	1	6.914	6.918	-0.004	6904	0.0501	0.0451	M
6 MNX	1	7.354	7.358	-0.004	9411	0.0584	0.0594	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 2.50 Units: uL

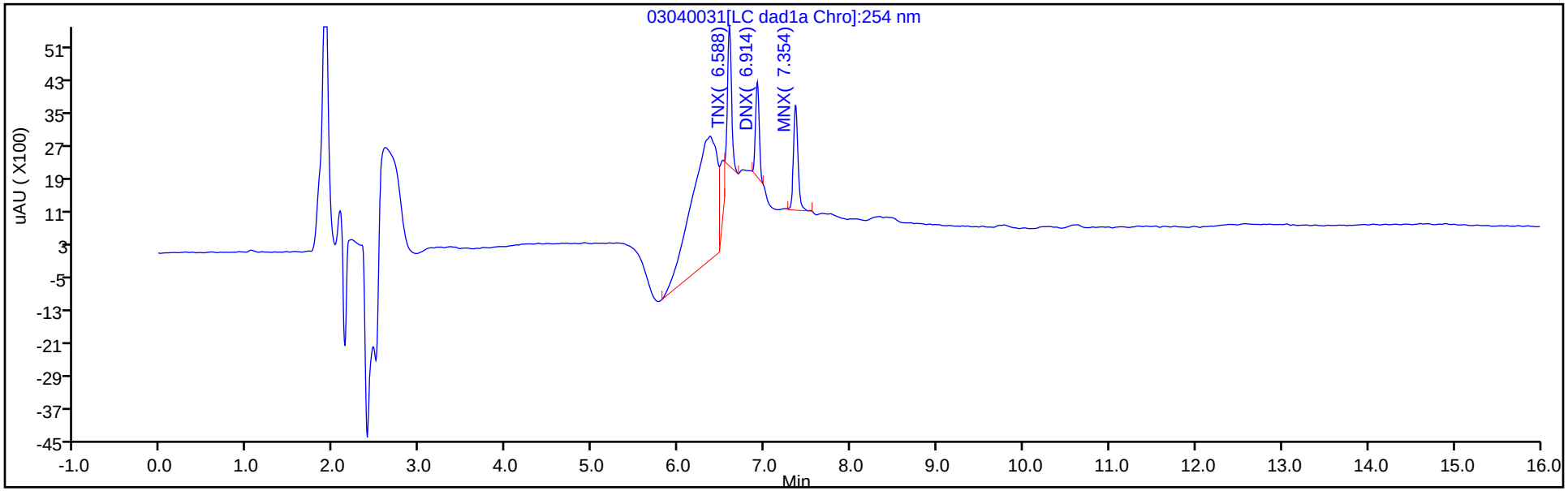
Report Date: 06-Mar-2020 10:25:27 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

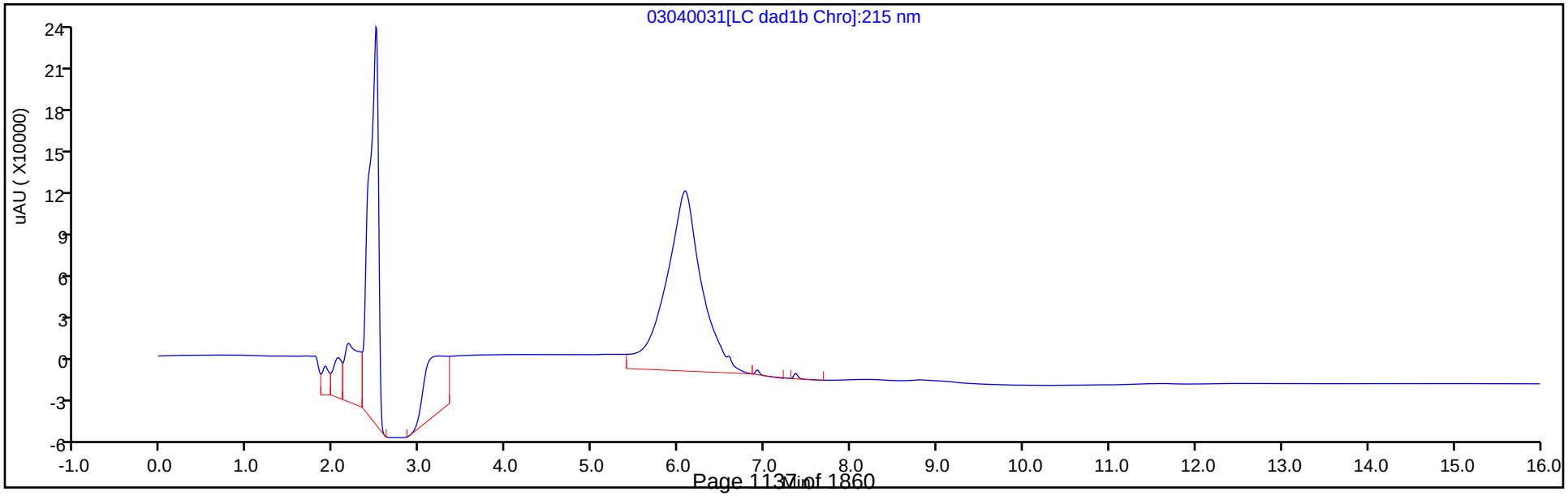
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d

Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L2			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

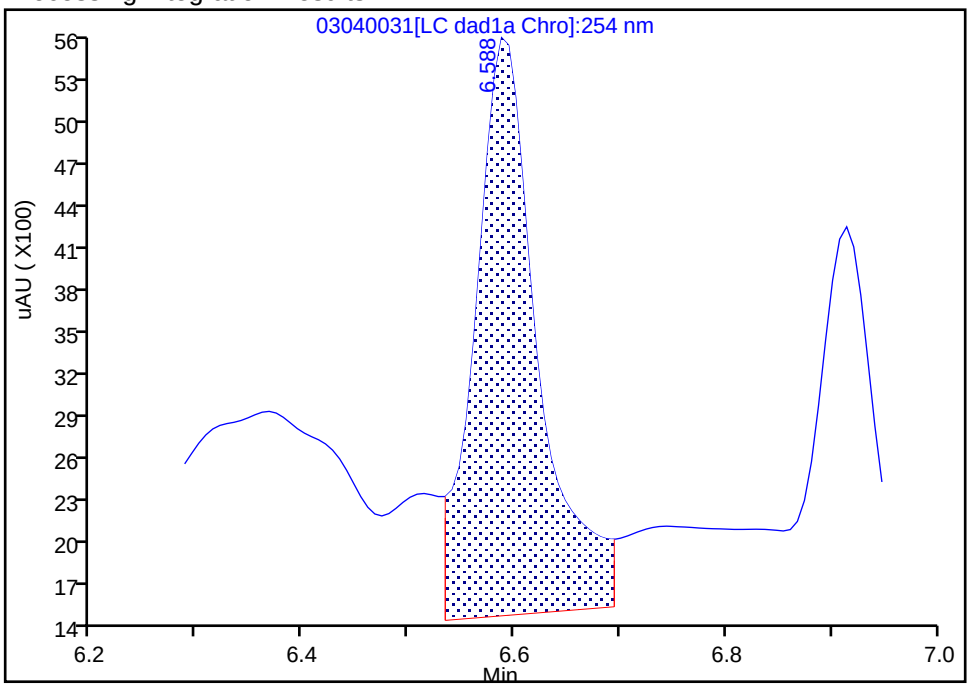
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

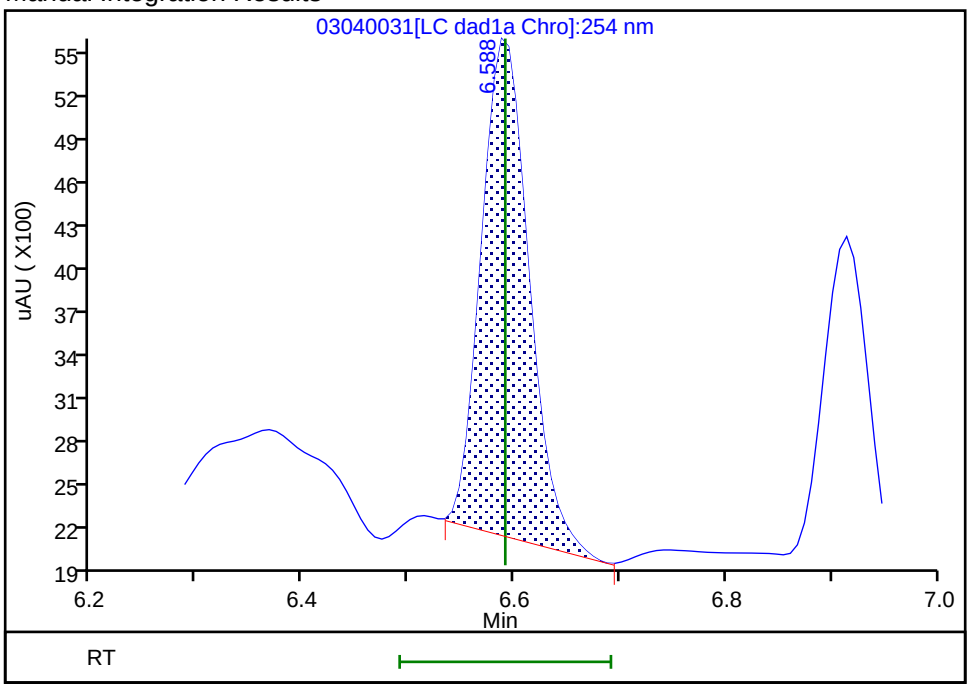
Processing Integration Results

RT: 6.59
Area: 17098
Amount: 0.055915
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 10671
Amount: 0.049038
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

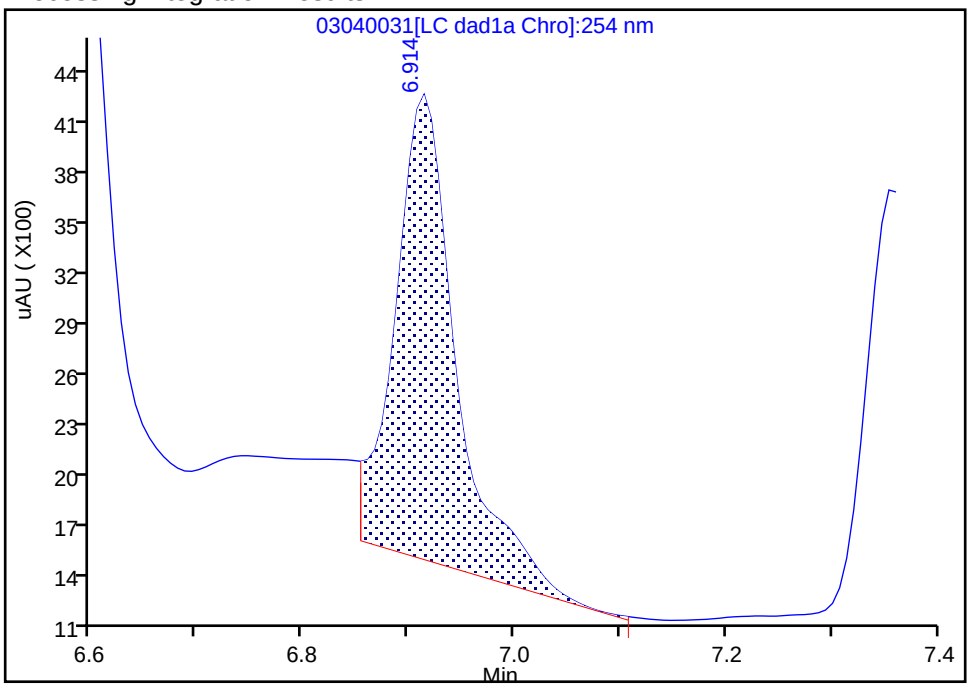
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

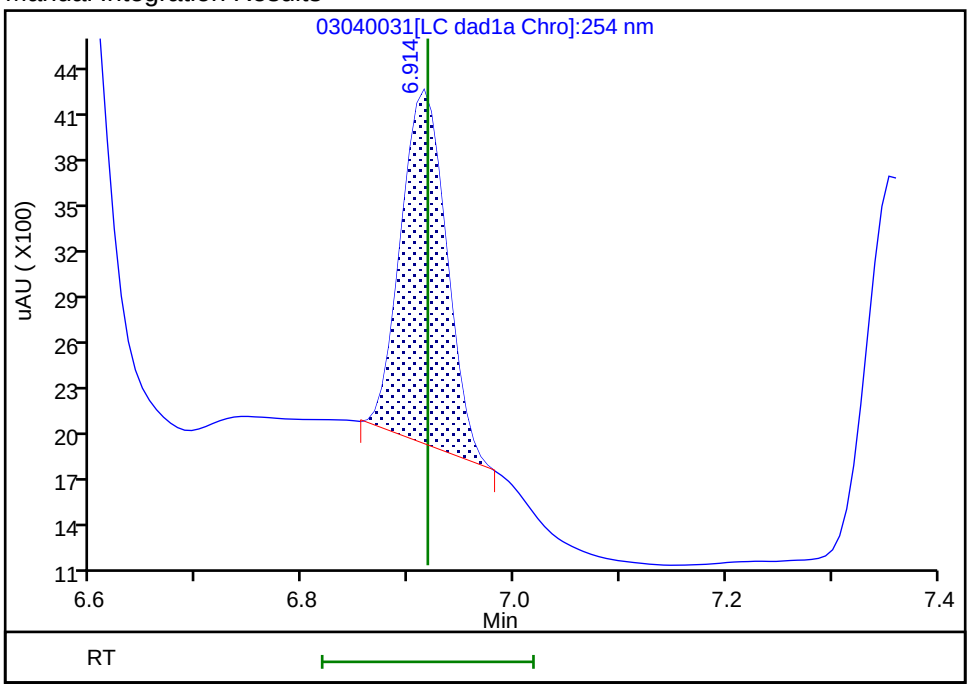
Processing Integration Results

RT: 6.91
Area: 11060
Amount: 0.055514
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 6904
Amount: 0.045145
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:28

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D
Lims ID: IC DMT L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Mar-2020 23:40:46 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L1
Misc. Info.: 280-0089779-032
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:27 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.592	6.591	0.001	4343	0.0200	0.0200	M
5 DNX	1	6.912	6.918	-0.006	2345	0.0200	0.0153	M
6 MNX	1	7.359	7.358	0.001	4099	0.0233	0.0259	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00005 Amount Added: 1.00 Units: uL

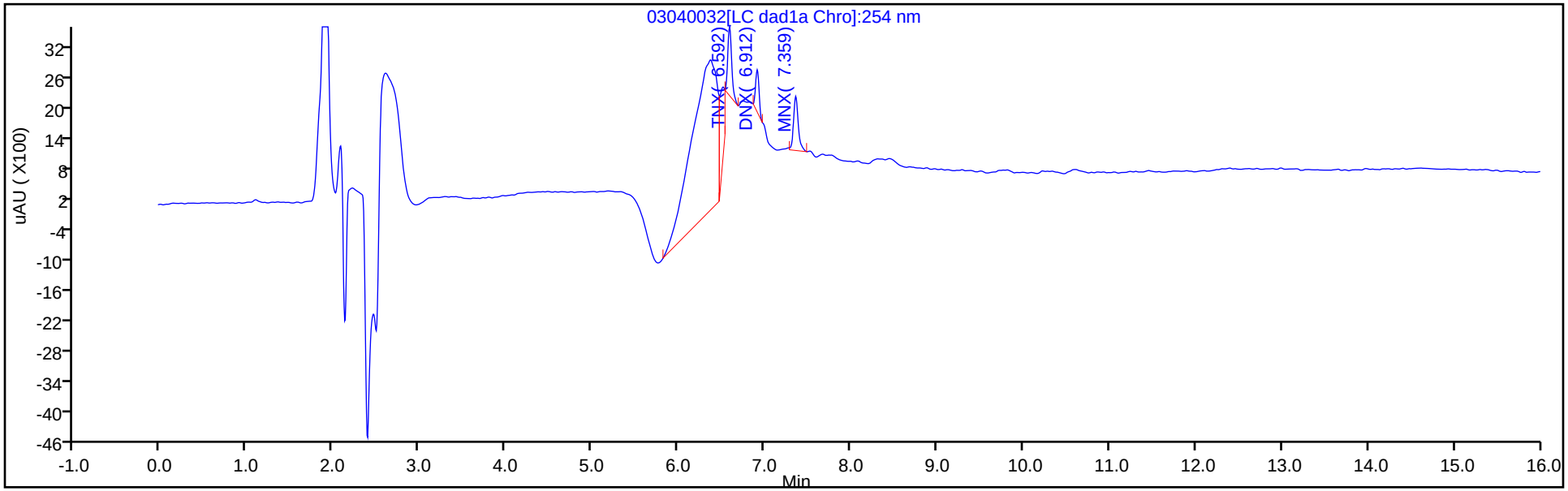
Report Date: 06-Mar-2020 10:25:28 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

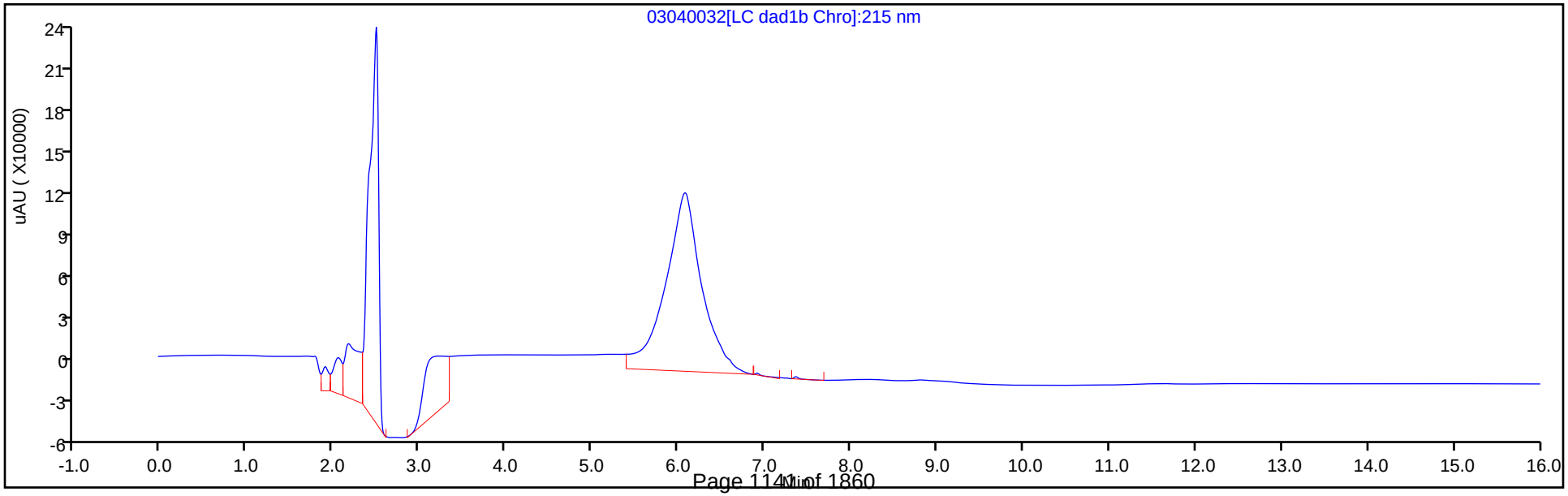
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d

Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L1			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

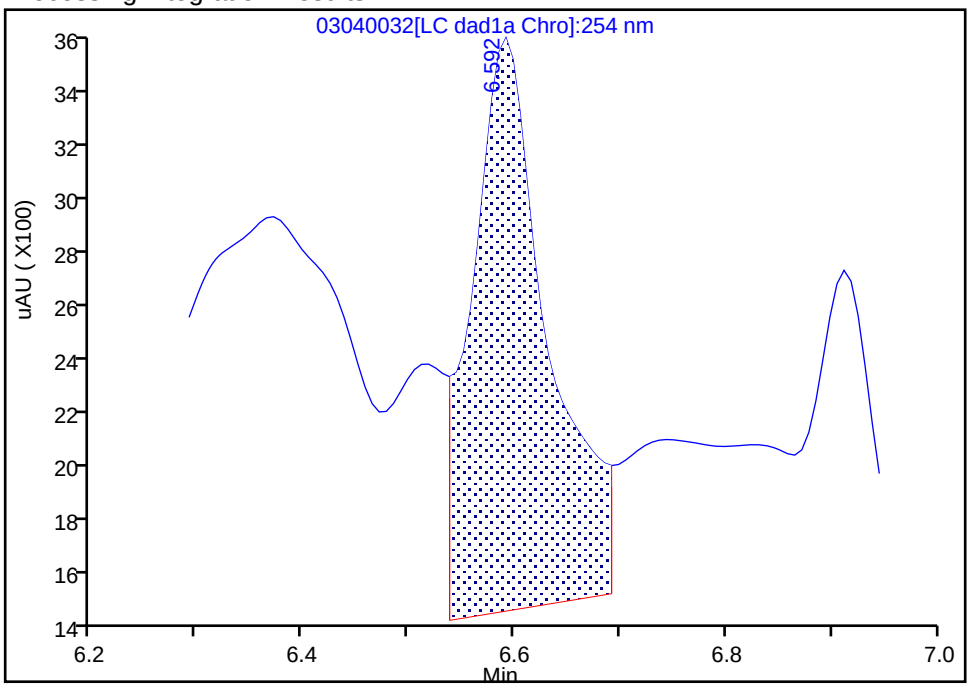
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

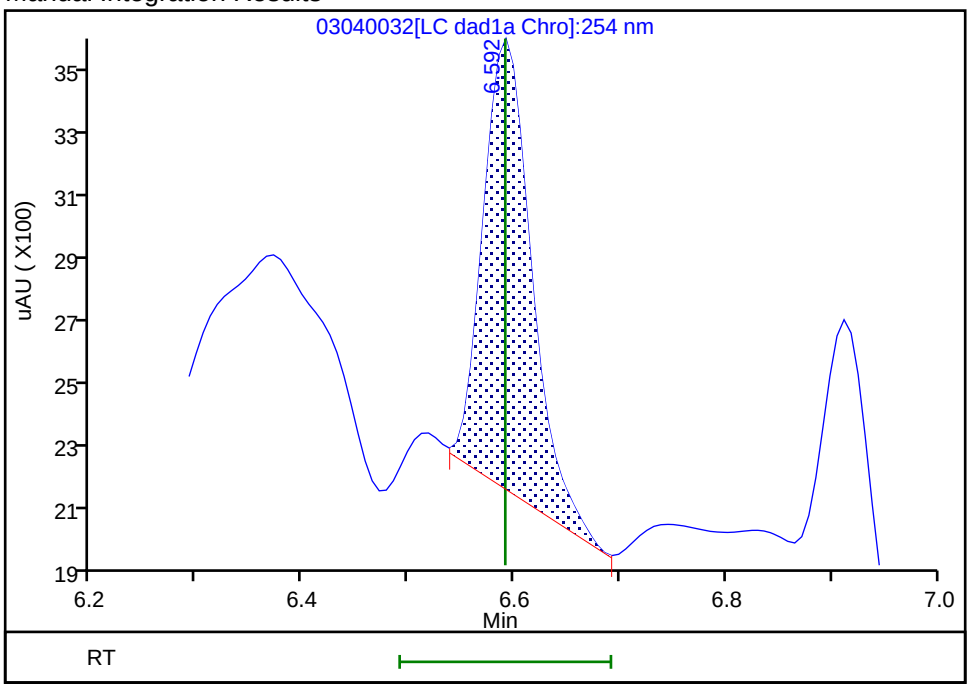
Processing Integration Results

RT: 6.59
Area: 10465
Amount: 0.032149
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 4343
Amount: 0.019958
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:43

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

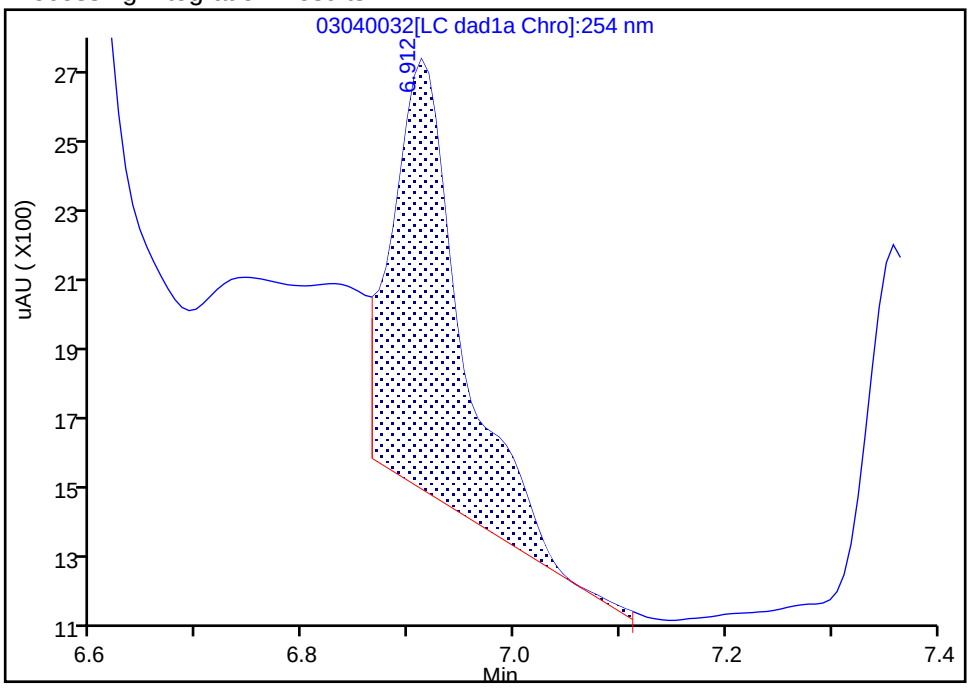
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

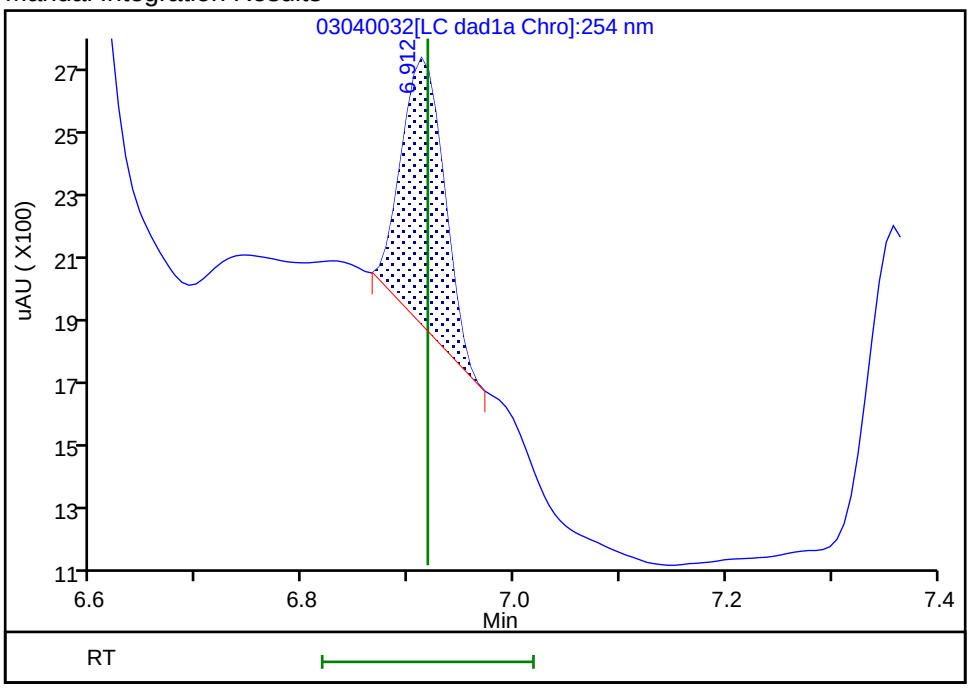
Processing Integration Results

RT: 6.91
Area: 5489
Amount: 0.028357
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 2345
Amount: 0.015334
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:46
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-489145/15	03180015.D
Level 2	IC 280-489145/14	03180014.D
Level 3	IC 280-489145/13	03180013.D
Level 4	IC 280-489145/12	03180012.D
Level 5	IC 280-489145/11	03180011.D
Level 6	IC 280-489145/10	03180010.D
Level 7	IC 280-489145/9	03180009.D
Level 8	IC 280-489145/8	03180008.D
Level 9	IC 280-489145/7	03180007.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		6.689	6.687	6.689	6.688	6.687	6.687	6.687	6.678		6.539 - 6.839	6.687
RDX		7.755	7.753	7.749	7.754	7.754	7.754	7.754	7.745		7.599 - 7.899	7.752
Picric acid	8.082	8.082	8.080	8.076	8.068	8.054	8.041	8.034	7.978		7.926 - 8.226	8.055
1,3,5-Trinitrobenzene	8.888	8.889	8.887	8.883	8.888	8.887	8.881	8.887	8.878		8.733 - 9.033	8.885
1,3-Dinitrobenzene	9.535	9.535	9.533	9.529	9.534	9.527	9.527	9.534	9.525		9.379 - 9.679	9.531
Nitrobenzene	9.915	9.922	9.920	9.916	9.921	9.914	9.914	9.914	9.911		9.766 - 10.066	9.916
Tetryl	10.221	10.215	10.220	10.216	10.221	10.221	10.214	10.221	10.218		10.066 - 10.366	10.219
Nitroglycerin	10.735	10.735	10.733	10.729	10.734	10.734	10.727	10.727	10.725		10.579 - 10.879	10.731
2,4,6-Trinitrotoluene	11.195	11.189	11.186	11.183	11.194	11.187	11.181	11.187	11.185		11.083 - 11.283	11.187
4-Amino-2,6-dinitrotoluene	11.341	11.342	11.340	11.336	11.347	11.341	11.334	11.334	11.331		11.236 - 11.436	11.338
2-Amino-4,6-dinitrotoluene	11.635	11.629	11.633	11.623	11.634	11.627	11.621	11.621	11.618		11.523 - 11.723	11.627
2,6-Dinitrotoluene	11.795	11.789	11.793	11.783	11.794	11.787	11.781	11.787	11.785		11.683 - 11.883	11.788
2,4-Dinitrotoluene	11.995	11.989	11.986	11.983	11.987	11.987	11.981	11.981	11.978		11.883 - 12.083	11.985
2-Nitrotoluene	12.828	12.822	12.833	12.823	12.827	12.827	12.814	12.821	12.818		12.673 - 12.973	12.824
4-Nitrotoluene	13.268	13.269	13.260	13.256	13.261	13.261	13.254	13.254	13.251		13.106 - 13.406	13.259
3-Nitrotoluene	13.855	13.849	13.853	13.849	13.854	13.854	13.841	13.847	13.845		13.699 - 13.999	13.850
PETN		+++++	14.946	14.936	14.941	14.941	14.927	14.941	14.945		14.786 - 15.086	14.940
1,2-Dinitrobenzene	8.715	8.709	8.713	8.709	8.714	8.714	8.714	8.714	8.705		8.559 - 8.859	8.712

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-489145/15	03180015.D
Level 2	IC 280-489145/14	03180014.D
Level 3	IC 280-489145/13	03180013.D
Level 4	IC 280-489145/12	03180012.D
Level 5	IC 280-489145/11	03180011.D
Level 6	IC 280-489145/10	03180010.D
Level 7	IC 280-489145/9	03180009.D
Level 8	IC 280-489145/8	03180008.D
Level 9	IC 280-489145/7	03180007.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	91008 92308	61440 91473	86460 91820	90800 92351	Ave		85962.1667				12.3		20.0			
RDX	112944 111897	112680 113215	121400 111841	117010 112730	Ave		116613.070				6.7		20.0			
Picric acid	86560 86468 88192	70960 86698	86100 86851	86470 87876	Ave		85130.5476				6.3		20.0			
1,3,5-Trinitrobenzene	192016 239677 242392	193413 242552	239242 242052	236826 244610	Ave		230308.873				9.3		20.0			
1,3-Dinitrobenzene	254770 321218 326628	250299 322290	322275 320369	318333 323988	Ave		306685.717				10.0		20.0			
Nitrobenzene	173386 209084 210856	165538 209462	208865 209202	207759 209472	Ave		200402.631				8.8		20.0			
Tetryl	132854 188850 191963	139401 190152	182355 189763	184900 193048	Ave		177031.954				13.3		20.0			
Nitroglycerin	54320 73708 72647	54804 73682	66982 72630	71269 73160	Ave		68133.4679				11.7		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.: 280-137609-2 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

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	143984 216888 217948	171594 215762	214622 218499	217430 219552	Ave		204030.971				13.3		20.0			
4-Amino-2,6-dinitrotoluene	78402 173379 171541	137582 174883	169630 168893	172757 173075	Lin2	-1163.6365	178372.945							0.9980		0.9900
2-Amino-4,6-dinitrotoluene	169163 213685 217128	161195 213177	209223 213799	209592 218387	Ave		202816.698				10.7		20.0			
2,6-Dinitrotoluene	120159 159558 155029	119004 160244	157012 158940	158576 156549	Ave		149452.337				11.4		20.0			
2,4-Dinitrotoluene	250359 318972 321972	249960 319980	313566 317703	316753 322992	Ave		303584.095				10.0		20.0			
2-Nitrotoluene	129200 138416 134514	122720 134575	151060 133944	137330 133699	Ave		135050.876				5.6		20.0			
4-Nitrotoluene	86228 119058 116822	100160 116285	128064 116245	117874 116311	Ave		113005.083				10.9		20.0			
3-Nitrotoluene	112128 149894 149503	125035 150095	155005 148550	148232 148816	Ave		143028.635				10.0		20.0			
PETN	 80472 82059	+++++ 82077	74814 81281	78947 82446	Ave		78604.5748				6.9		20.0			
1,2-Dinitrobenzene	122480 142220 143478	119840 142918	144780 142683	141270 144242	Ave		138212.217				7.1		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.: 280-137609-2 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-489145/15	03180015.D
Level 2	IC 280-489145/14	03180014.D
Level 3	IC 280-489145/13	03180013.D
Level 4	IC 280-489145/12	03180012.D
Level 5	IC 280-489145/11	03180011.D
Level 6	IC 280-489145/10	03180010.D
Level 7	IC 280-489145/9	03180009.D
Level 8	IC 280-489145/8	03180008.D
Level 9	IC 280-489145/7	03180007.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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	36589	1536 64274	4323 92351	9080 230770	22752	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	45286	2817 78289	6070 112730	11701 279743	28236	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1082 34679	1774 60796	4305 87876	8647 220480	21617	0.0125 0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2405 97215	4845 169775	11986 245099	23730 607193	60039	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	3191 129174	6270 224707	16146 324636	31897 818202	80465	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	2176 84120	4155 147027	10485 210310	20859 529249	52480	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1664 76213	3492 133100	9136 193434	18527 480867	47307	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	6790 294728	13701 508407	33491 731600	71269 1816166	184270	0.125 4.00	0.250 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	1807 86650	4307 153561	10774 220430	21830 547050	54439	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Lin2	981 70023	3443 118343	8490 173248	17293 429281	43388	0.0125 0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2123 85612	4046 150258	10503 219261	21043 544991	53635	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1508 64354	2987 111703	7882 157175	15921 389124	40049	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	3142 128504	6274 223282	15741 324284	31802 808149	80062	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2-Nitrotoluene	Ave	1615 53830	3068 93761	7553 133699	13733 336284	34604	0.0125 0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

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
4-Nitrotoluene	Ave	1080 46607	2509 81534	6416 116544	11811 292638	29824	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
3-Nitrotoluene	Ave	1403 60098	3129 104089	7758 148965	14838 374131	37511	0.0125 0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
PETN	Ave	 328307	+++++ 568970	37407 824461	78947 2051483	201180	 4.00	+++++ 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1531 57167	2996 99878	7239 144242	14127 358694	35555	0.0125 0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Report Date: 26-Mar-2020 15:45:39 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180007.D
Lims ID: IC MAIN L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 18-Mar-2020 11:35:53 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L9
Misc. Info.: 280-0090150-007
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:39 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:41:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.678	6.689	-0.011	230770	2.50	2.68	M
7 RDX	1	7.745	7.749	-0.004	279743	2.50	2.40	
8 2,4,6-Trinitrophenol	1	7.978	8.076	-0.098	220480	2.50	2.59	
$ 9 1,2-Dinitrobenzene	1	8.705	8.709	-0.004	358694	2.50	2.60	
10 1,3,5-Trinitrobenzene	1	8.878	8.883	-0.005	607193	2.51	2.64	
11 1,3-Dinitrobenzene	1	9.525	9.529	-0.004	818202	2.51	2.67	M
12 Nitrobenzene	1	9.911	9.916	-0.005	529249	2.51	2.64	
14 Tetryl	1	10.218	10.216	0.002	480867	2.51	2.72	
15 Nitroglycerin	2	10.725	10.729	-0.004	1816166	25.0	26.7	
16 2,4,6-Trinitrotoluene	1	11.185	11.183	0.002	547050	2.51	2.68	
17 4-Amino-2,6-dinitrotoluene	1	11.331	11.336	-0.005	429281	2.50	2.41	
18 2-Amino-4,6-dinitrotoluene	1	11.618	11.623	-0.005	544991	2.51	2.69	
19 2,6-Dinitrotoluene	1	11.785	11.783	0.002	389124	2.51	2.60	
20 2,4-Dinitrotoluene	1	11.978	11.983	-0.005	808149	2.51	2.66	
21 o-Nitrotoluene	1	12.818	12.823	-0.005	336284	2.50	2.49	
22 p-Nitrotoluene	1	13.251	13.256	-0.005	292638	2.51	2.59	
23 m-Nitrotoluene	1	13.845	13.849	-0.004	374131	2.50	2.62	
24 PETN	2	14.945	14.936	0.009	2051483	25.0	26.1	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 250.00 Units: uL

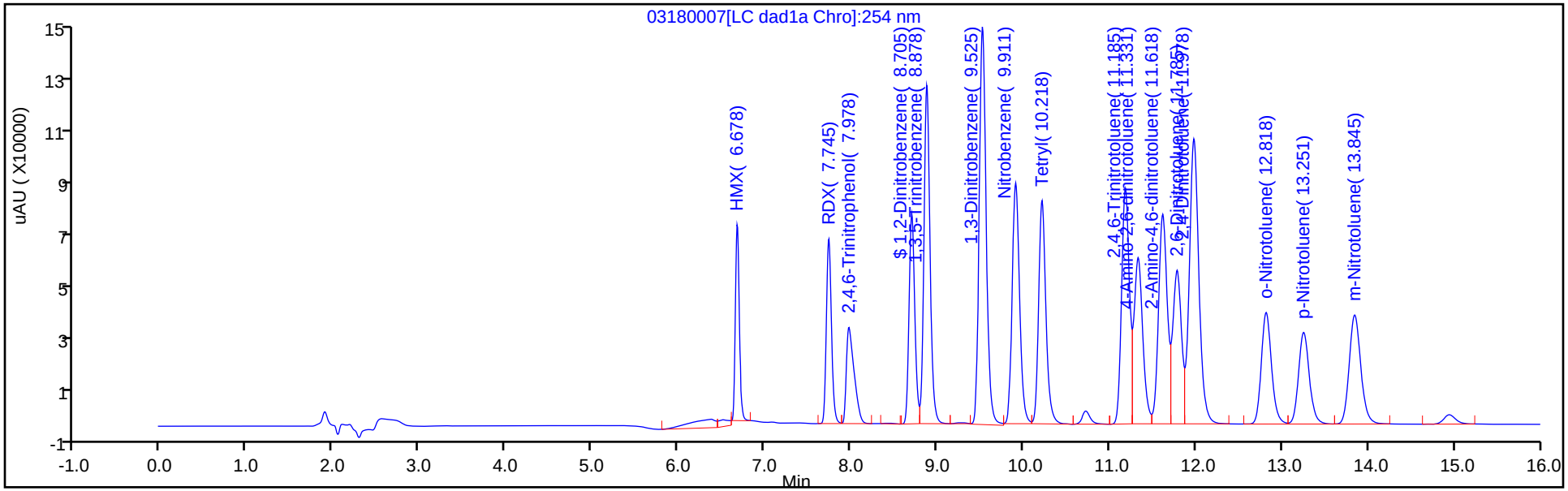
Report Date: 26-Mar-2020 15:45:39 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

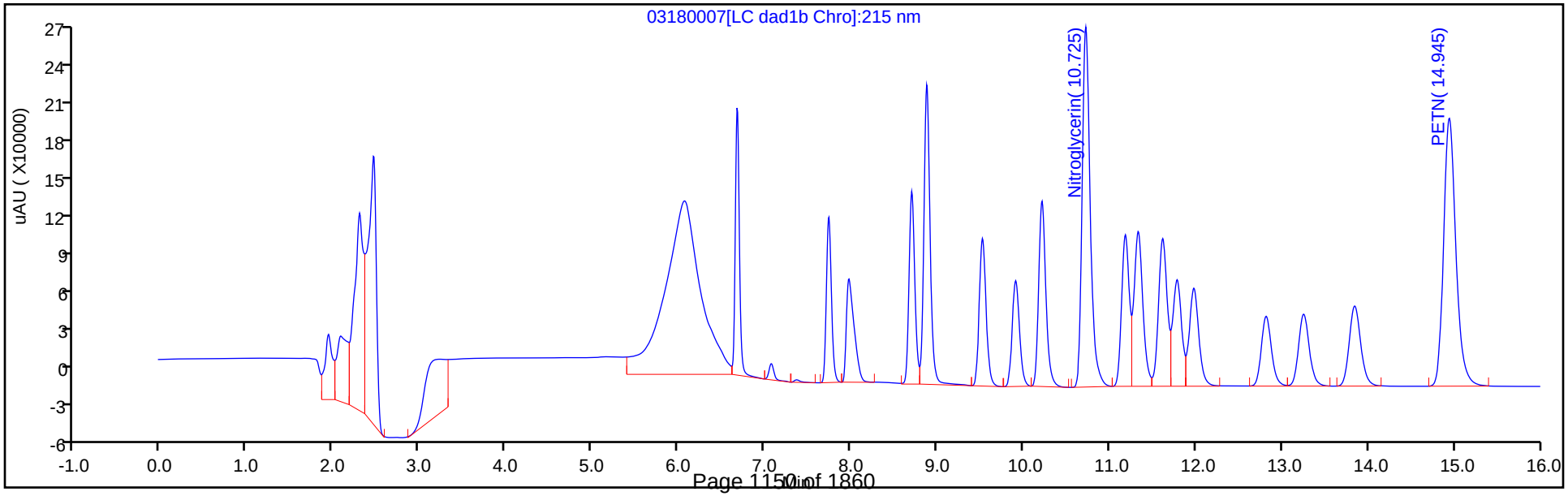
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d

Injection Date:	18-Mar-2020 11:35:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L9			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

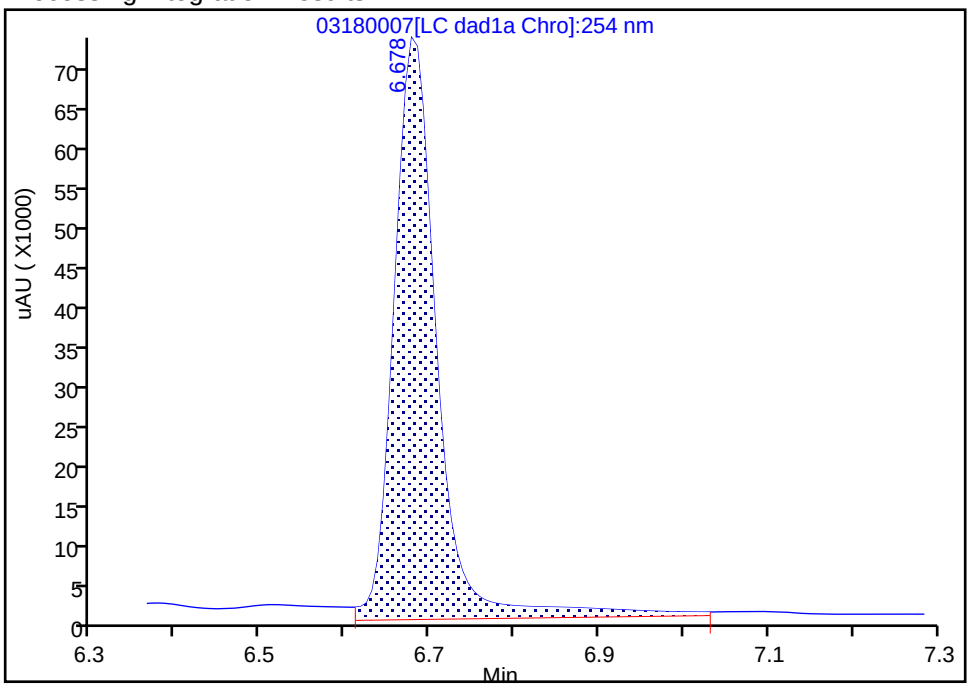
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d				
Injection Date:	18-Mar-2020 11:35:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

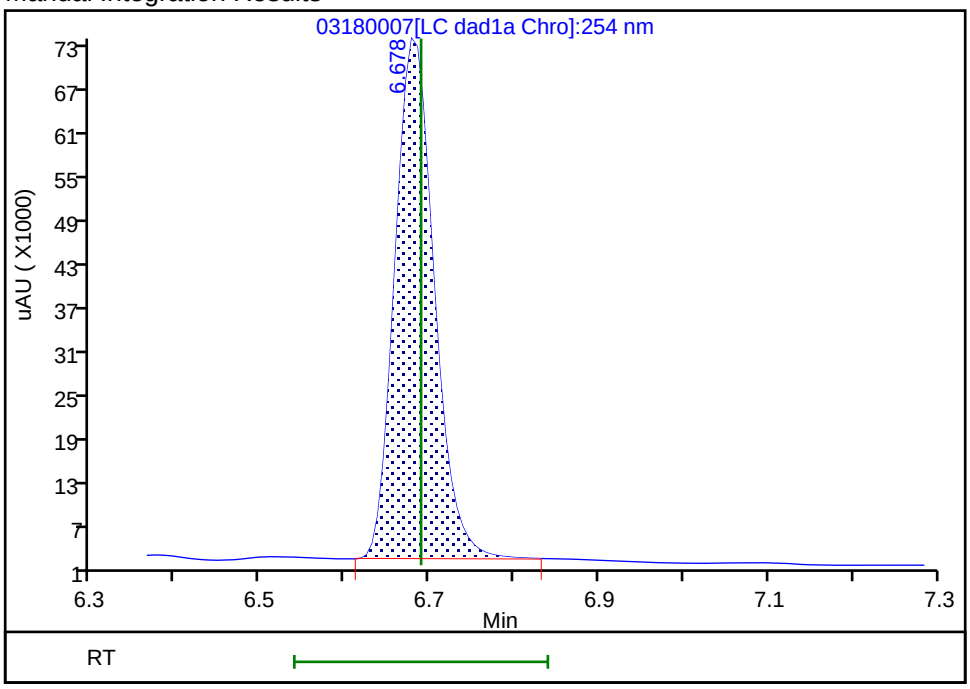
Processing Integration Results

RT: 6.68
Area: 261160
Amount: 2.488946
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 230770
Amount: 2.684553
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:41:25
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

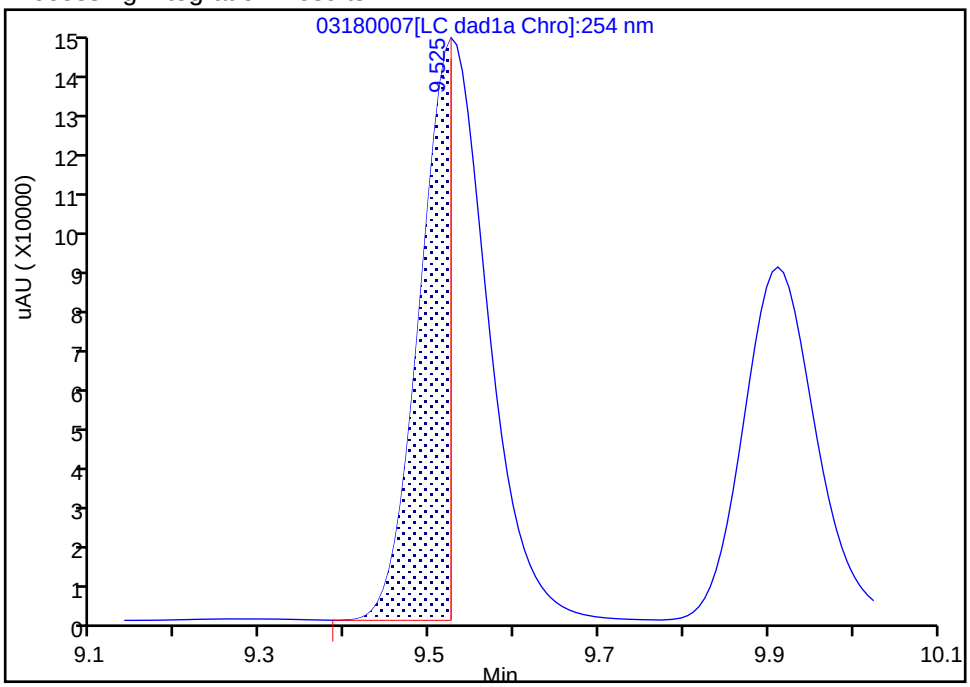
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d
Injection Date: 18-Mar-2020 11:35:53 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

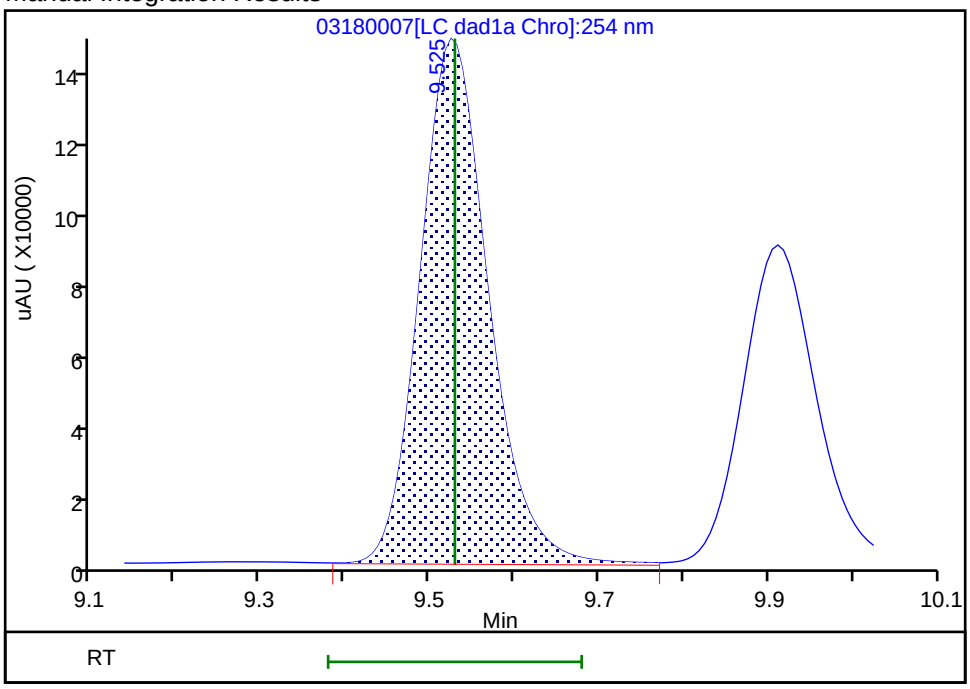
Processing Integration Results

RT: 9.52
Area: 362918
Amount: 1.345398
Amount Units: ug/mL



Manual Integration Results

RT: 9.52
Area: 818202
Amount: 2.667884
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:41:39
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180008.D
Lims ID: IC MAIN L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Mar-2020 11:58:50 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L8
Misc. Info.: 280-0090150-008
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:40 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:42:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	92351	1.00	1.07	M
7 RDX	1	7.754	7.749	0.005	112730	1.00	0.9667	
8 2,4,6-Trinitrophenol	1	8.034	8.076	-0.042	87876	1.00	1.03	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	144242	1.00	1.04	
10 1,3,5-Trinitrobenzene	1	8.887	8.883	0.004	245099	1.00	1.06	
11 1,3-Dinitrobenzene	1	9.534	9.529	0.005	324636	1.00	1.06	
12 Nitrobenzene	1	9.914	9.916	-0.002	210310	1.00	1.05	
14 Tetryl	1	10.221	10.216	0.005	193434	1.00	1.09	
15 Nitroglycerin	2	10.727	10.729	-0.002	731600	10.0	10.7	
16 2,4,6-Trinitrotoluene	1	11.187	11.183	0.004	220430	1.00	1.08	
17 4-Amino-2,6-dinitrotoluene	1	11.334	11.336	-0.002	173248	1.00	0.9778	
18 2-Amino-4,6-dinitrotoluene	1	11.621	11.623	-0.002	219261	1.00	1.08	
19 2,6-Dinitrotoluene	1	11.787	11.783	0.004	157175	1.00	1.05	
20 2,4-Dinitrotoluene	1	11.981	11.983	-0.002	324284	1.00	1.07	
21 o-Nitrotoluene	1	12.821	12.823	-0.002	133699	1.00	0.9900	
22 p-Nitrotoluene	1	13.254	13.256	-0.002	116544	1.00	1.03	
23 m-Nitrotoluene	1	13.847	13.849	-0.002	148965	1.00	1.04	
24 PETN	2	14.941	14.936	0.005	824461	10.0	10.5	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 100.00 Units: uL

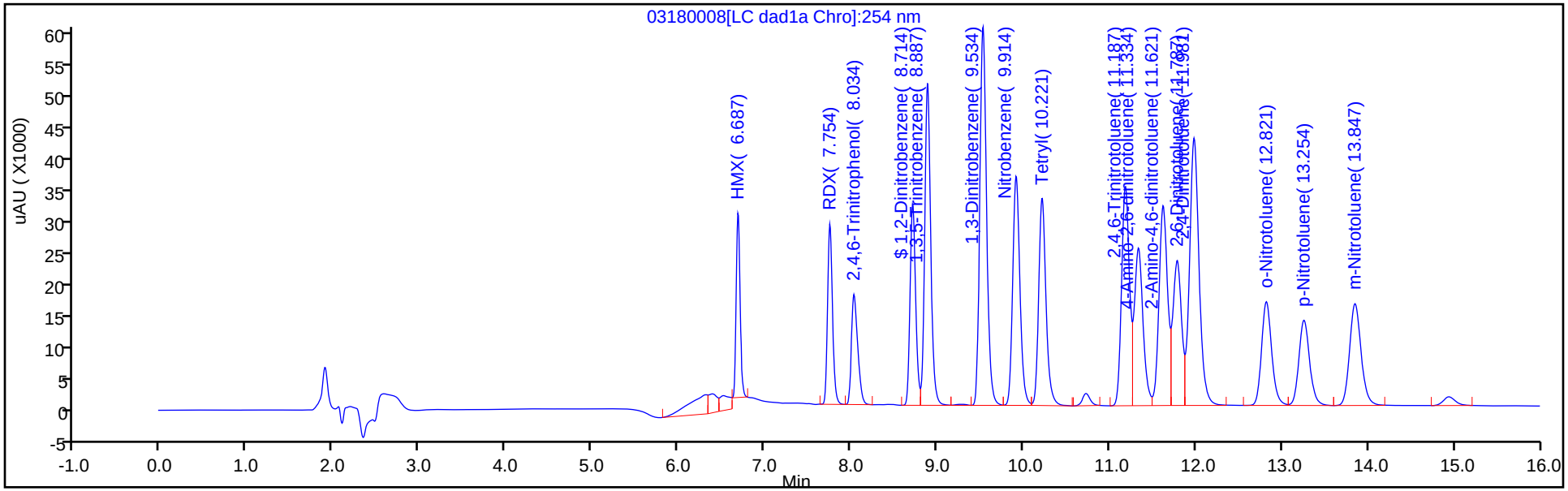
Report Date: 26-Mar-2020 15:45:40 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

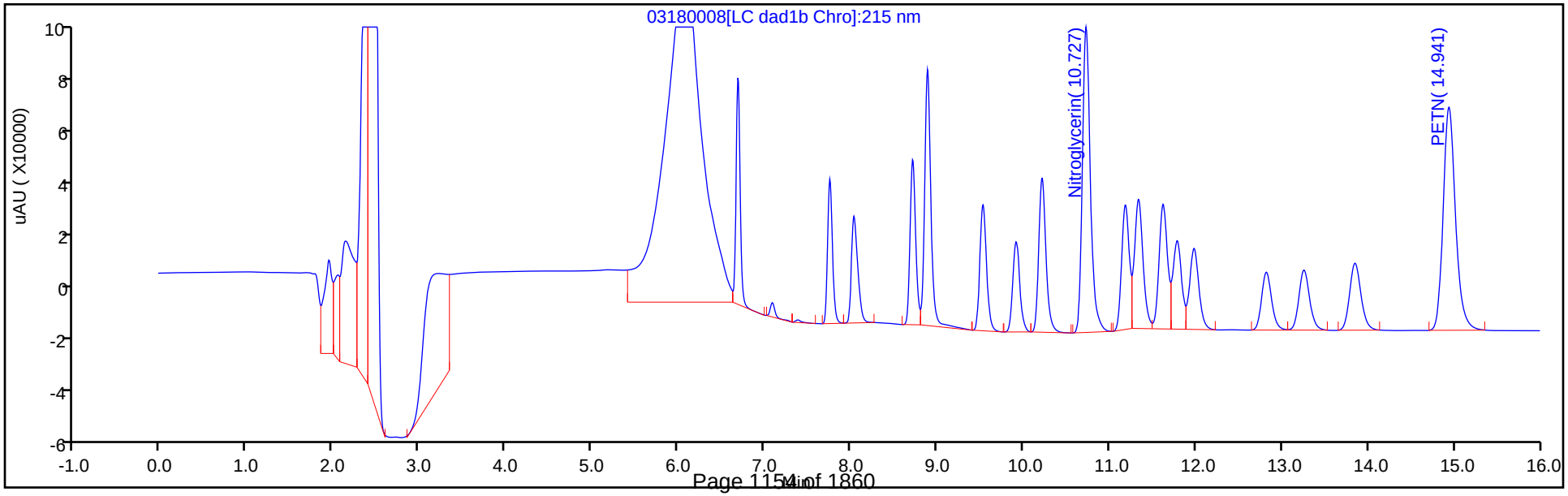
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180008.d

Injection Date:	18-Mar-2020 11:58:50	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L8			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
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

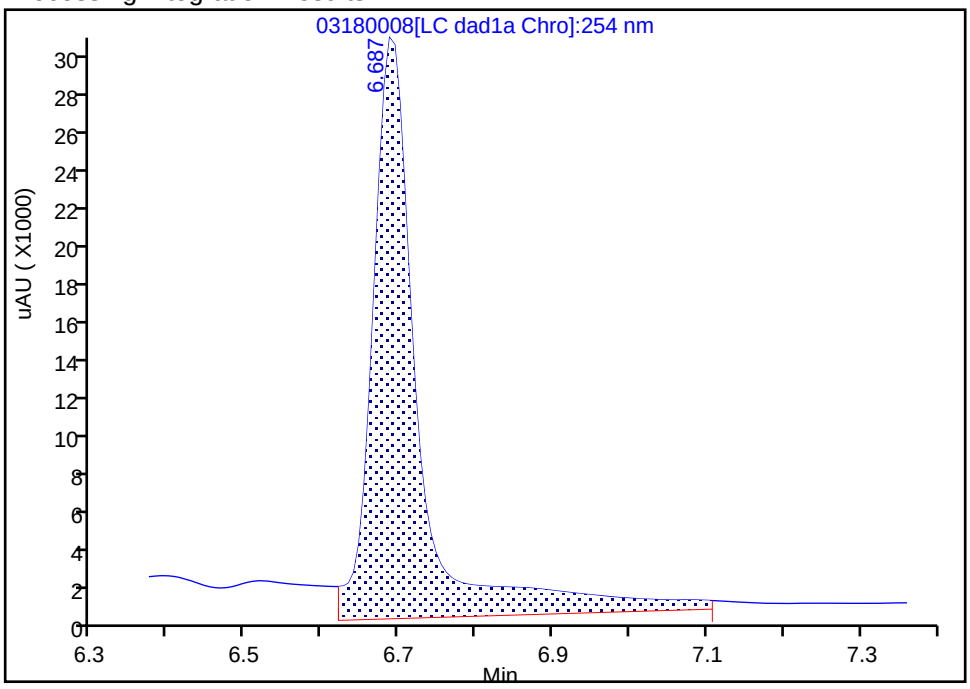
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180008.d
Injection Date: 18-Mar-2020 11:58:50 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L8
Client ID:
Operator ID: CB ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

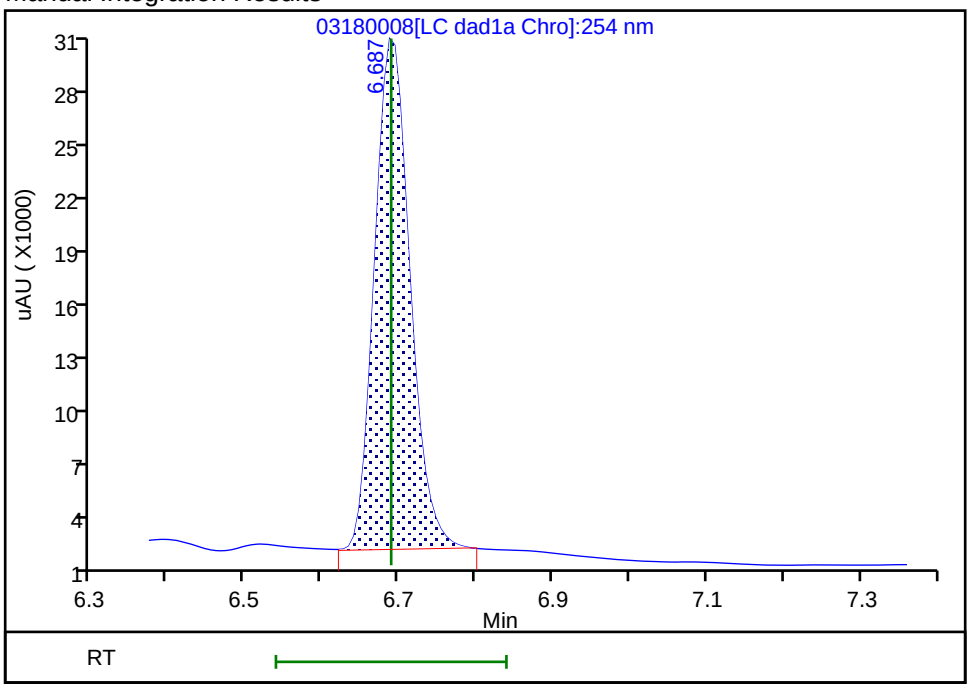
Processing Integration Results

RT: 6.69
Area: 128593
Amount: 1.149770
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 92351
Amount: 1.074321
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:41:59
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180009.D
Lims ID: IC MAIN L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Mar-2020 12:21:47 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L7
Misc. Info.: 280-0090150-009
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:41 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:42:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	64274	0.7000	0.7477	M
7 RDX	1	7.754	7.749	0.005	78289	0.7000	0.6714	
8 2,4,6-Trinitrophenol	1	8.041	8.076	-0.035	60796	0.7000	0.7142	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	99878	0.7000	0.7226	
10 1,3,5-Trinitrobenzene	1	8.881	8.883	-0.002	169775	0.7014	0.7372	
11 1,3-Dinitrobenzene	1	9.527	9.529	-0.002	224707	0.7014	0.7327	
12 Nitrobenzene	1	9.914	9.916	-0.002	147027	0.7028	0.7337	
14 Tetryl	1	10.214	10.216	-0.002	133100	0.7014	0.7518	
15 Nitroglycerin	2	10.727	10.729	-0.002	508407	7.00	7.46	
16 2,4,6-Trinitrotoluene	1	11.181	11.183	-0.002	153561	0.7028	0.7526	
17 4-Amino-2,6-dinitrotoluene	1	11.334	11.336	-0.002	118343	0.7007	0.6700	
18 2-Amino-4,6-dinitrotoluene	1	11.621	11.623	-0.002	150258	0.7028	0.7409	
19 2,6-Dinitrotoluene	1	11.781	11.783	-0.002	111703	0.7028	0.7474	
20 2,4-Dinitrotoluene	1	11.981	11.983	-0.002	223282	0.7028	0.7355	
21 o-Nitrotoluene	1	12.814	12.823	-0.009	93761	0.7000	0.6943	
22 p-Nitrotoluene	1	13.254	13.256	-0.002	81534	0.7014	0.7215	
23 m-Nitrotoluene	1	13.841	13.849	-0.008	104089	0.7007	0.7277	
24 PETN	2	14.927	14.936	-0.009	568970	7.00	7.24	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 70.00 Units: uL

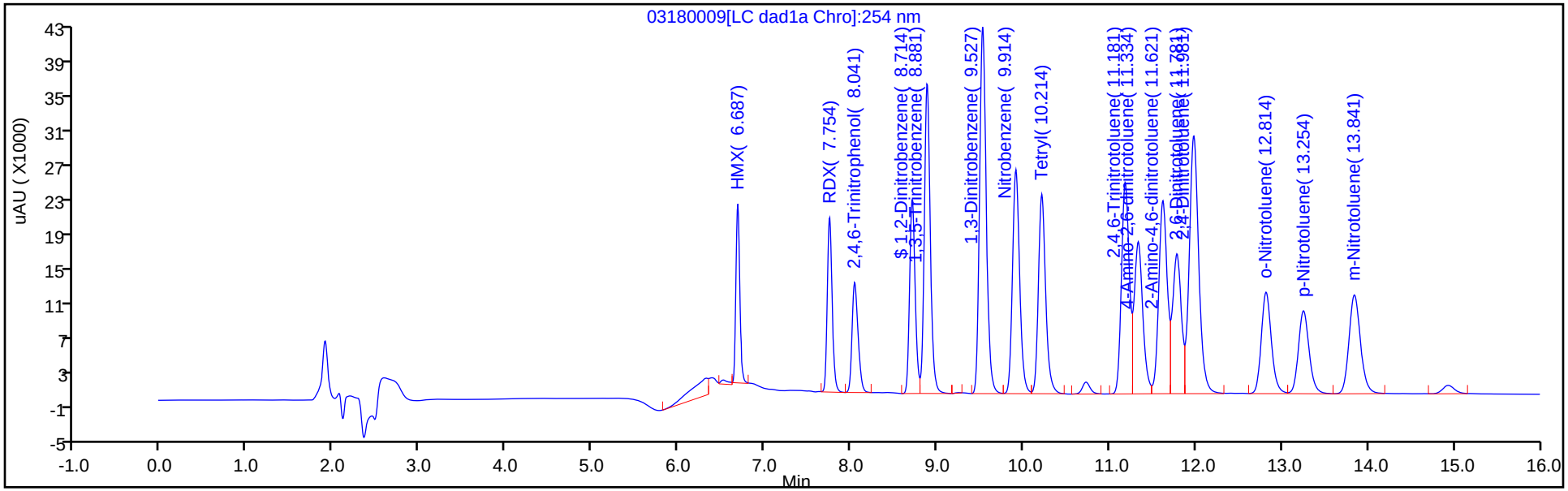
Report Date: 26-Mar-2020 15:45:41 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

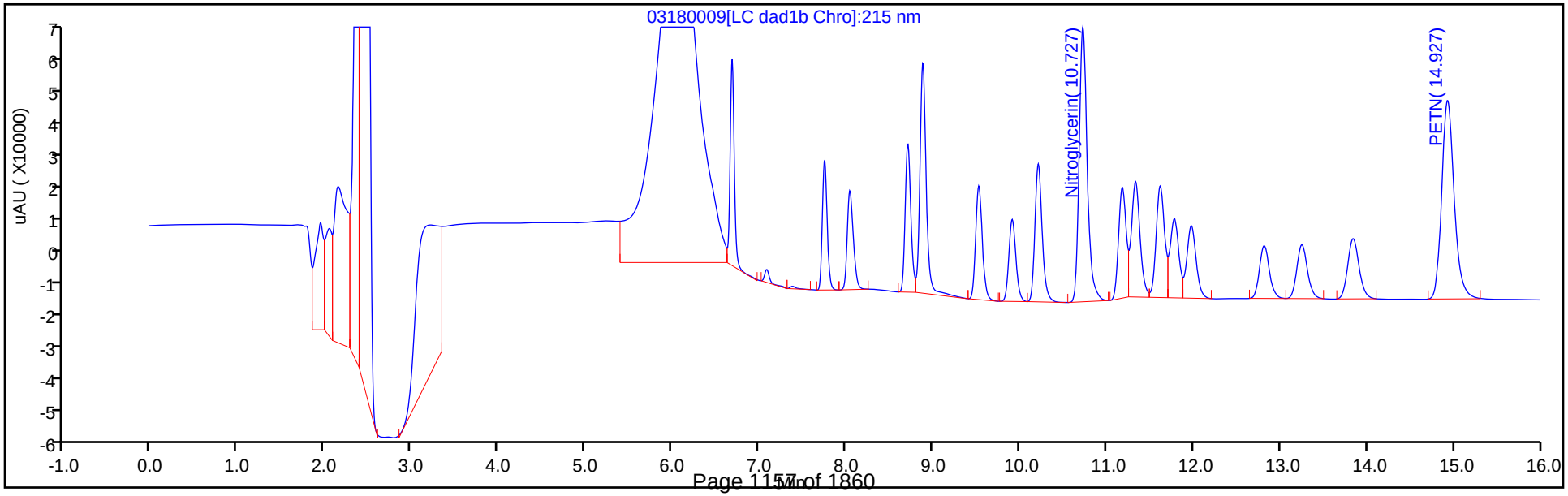
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180009.d

Injection Date:	18-Mar-2020 12:21:47	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L7			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

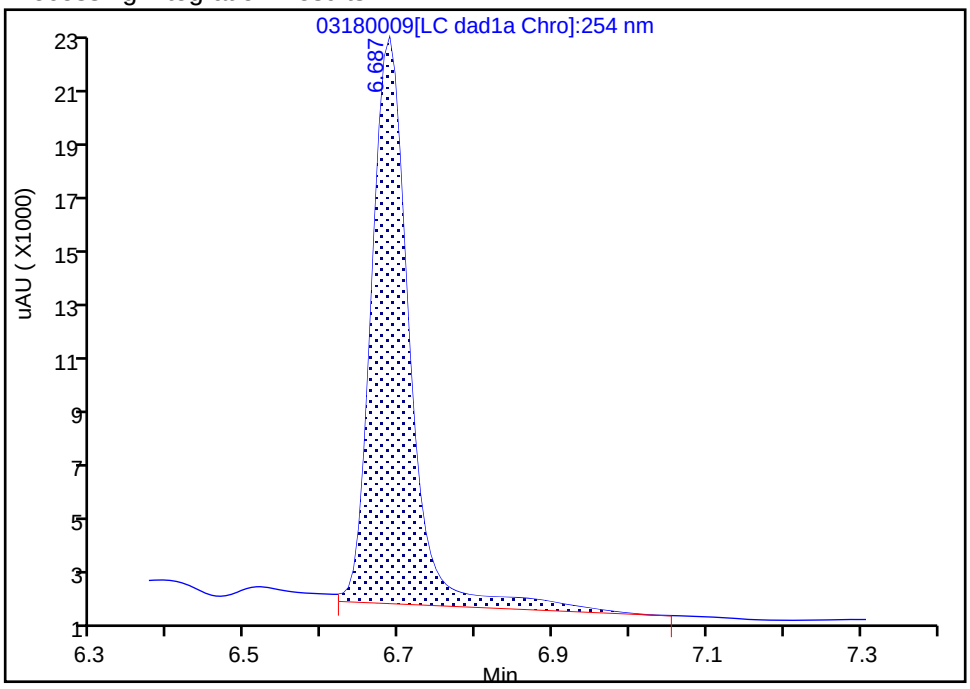
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180009.d
Injection Date: 18-Mar-2020 12:21:47 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L7
Client ID:
Operator ID: CB ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

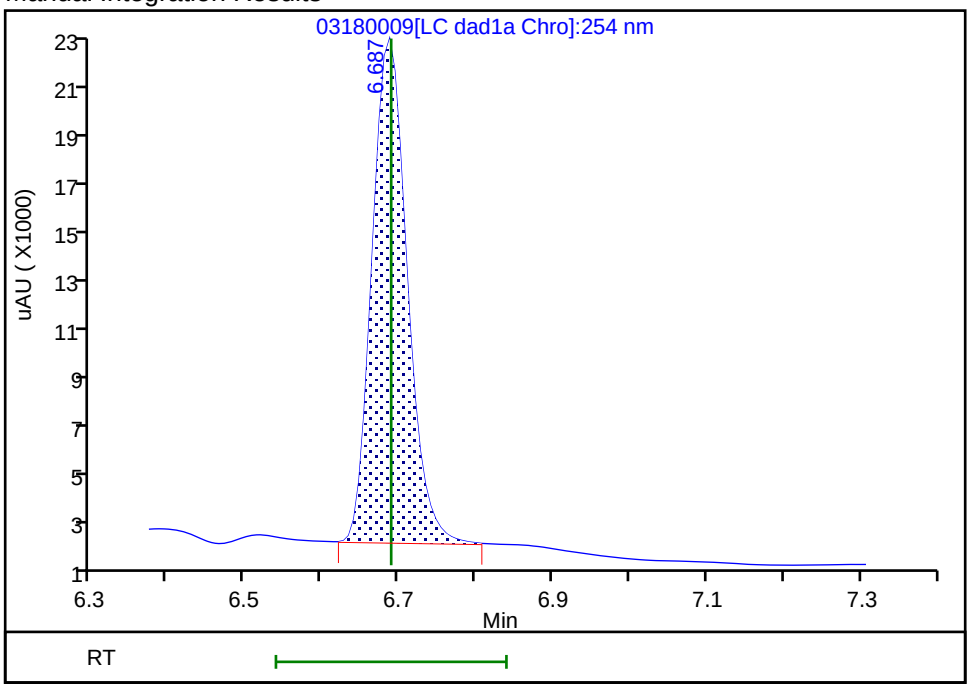
Processing Integration Results

RT: 6.69
Area: 70764
Amount: 0.364265
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 64274
Amount: 0.747701
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:42:26
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180010.D
Lims ID: IC MAIN L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Mar-2020 12:44:45 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L6
Misc. Info.: 280-0090150-010
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:41 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:43:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.687	6.689	-0.002	36589	0.4000	0.4256	M
	7 RDX	1	7.754	7.749	0.005	45286	0.4000	0.3883	
	8 2,4,6-Trinitrophenol	1	8.054	8.076	-0.022	34679	0.4000	0.4074	
$	9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	57167	0.4000	0.4136	
	10 1,3,5-Trinitrobenzene	1	8.887	8.883	0.004	97215	0.4008	0.4221	
	11 1,3-Dinitrobenzene	1	9.527	9.529	-0.002	129174	0.4008	0.4212	
	12 Nitrobenzene	1	9.914	9.916	-0.002	84120	0.4016	0.4198	
	14 Tetryl	1	10.221	10.216	0.005	76213	0.4008	0.4305	
	15 Nitroglycerin	2	10.734	10.729	0.005	294728	4.00	4.33	
	16 2,4,6-Trinitrotoluene	1	11.187	11.183	0.004	86650	0.4016	0.4247	
	17 4-Amino-2,6-dinitrotoluene	1	11.341	11.336	0.005	70023	0.4004	0.3991	
	18 2-Amino-4,6-dinitrotoluene	1	11.627	11.623	0.004	85612	0.4016	0.4221	
	19 2,6-Dinitrotoluene	1	11.787	11.783	0.004	64354	0.4016	0.4306	
	20 2,4-Dinitrotoluene	1	11.987	11.983	0.004	128504	0.4016	0.4233	
	21 o-Nitrotoluene	1	12.827	12.823	0.004	53830	0.4000	0.3986	
	22 p-Nitrotoluene	1	13.261	13.256	0.005	46607	0.4008	0.4124	
	23 m-Nitrotoluene	1	13.854	13.849	0.005	60098	0.4004	0.4202	
	24 PETN	2	14.941	14.936	0.005	328307	4.00	4.18	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 40.00 Units: uL

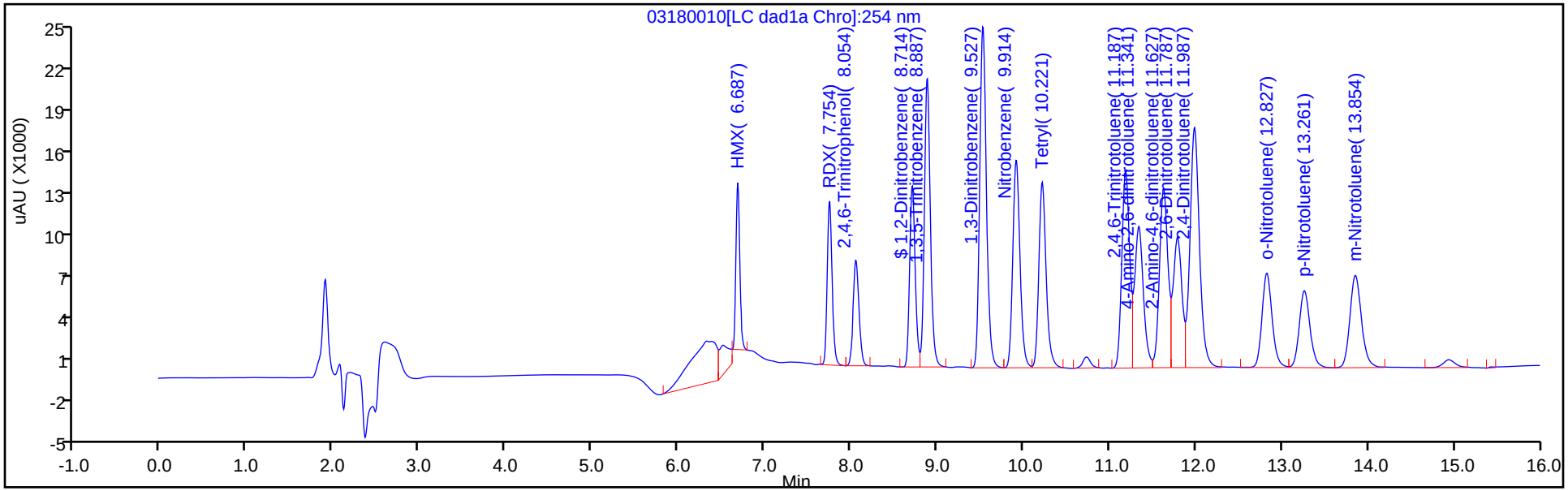
Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

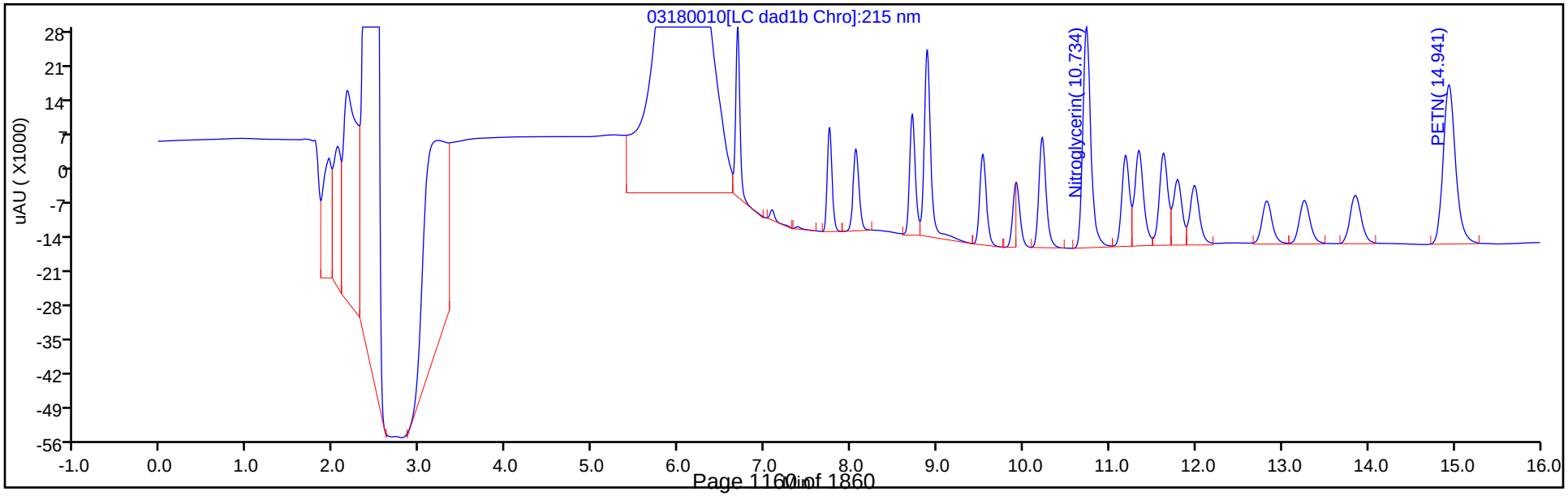
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180010.d

Injection Date:	18-Mar-2020 12:44:45	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L6			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
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

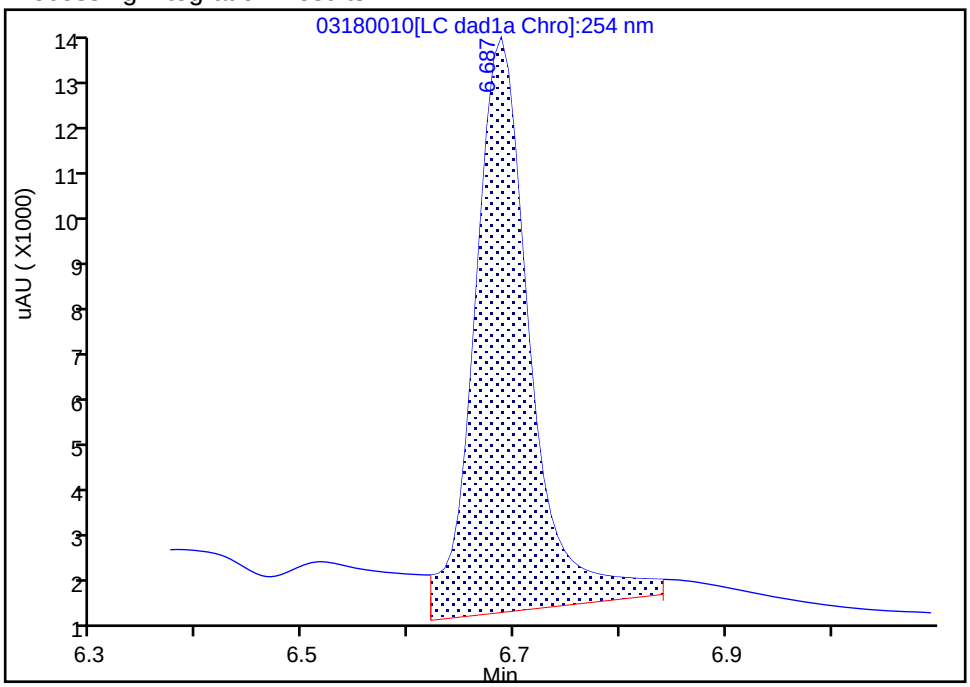
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180010.d				
Injection Date:	18-Mar-2020 12:44:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

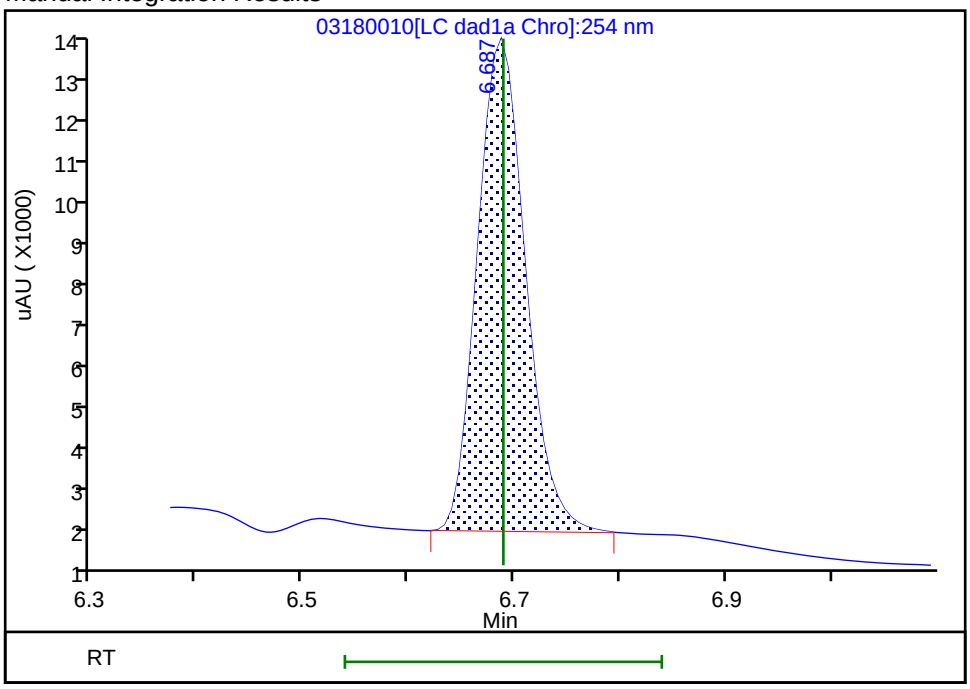
Processing Integration Results

RT: 6.69
Area: 45375
Amount: 0.234818
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 36589
Amount: 0.425641
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:42:54

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180011.D
Lims ID: IC MAIN L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Mar-2020 13:07:42 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L5
Misc. Info.: 280-0090150-011
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:42 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:43:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.688	6.689	-0.001	22752	0.2500	0.2647	M
7 RDX	1	7.754	7.749	0.005	28236	0.2500	0.2421	
8 2,4,6-Trinitrophenol	1	8.068	8.076	-0.008	21617	0.2500	0.2539	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	35555	0.2500	0.2572	
10 1,3,5-Trinitrobenzene	1	8.888	8.883	0.005	60039	0.2505	0.2607	
11 1,3-Dinitrobenzene	1	9.534	9.529	0.005	80465	0.2505	0.2624	
12 Nitrobenzene	1	9.921	9.916	0.005	52480	0.2510	0.2619	
14 Tetryl	1	10.221	10.216	0.005	47307	0.2505	0.2672	
15 Nitroglycerin	2	10.734	10.729	0.005	184270	2.50	2.70	
16 2,4,6-Trinitrotoluene	1	11.194	11.183	0.011	54439	0.2510	0.2668	
17 4-Amino-2,6-dinitrotoluene	1	11.347	11.336	0.011	43388	0.2503	0.2498	
18 2-Amino-4,6-dinitrotoluene	1	11.634	11.623	0.011	53635	0.2510	0.2645	
19 2,6-Dinitrotoluene	1	11.794	11.783	0.011	40049	0.2510	0.2680	
20 2,4-Dinitrotoluene	1	11.987	11.983	0.004	80062	0.2510	0.2637	
21 o-Nitrotoluene	1	12.827	12.823	0.004	34604	0.2500	0.2562	
22 p-Nitrotoluene	1	13.261	13.256	0.005	29824	0.2505	0.2639	
23 m-Nitrotoluene	1	13.854	13.849	0.005	37511	0.2503	0.2623	
24 PETN	2	14.941	14.936	0.005	201180	2.50	2.56	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

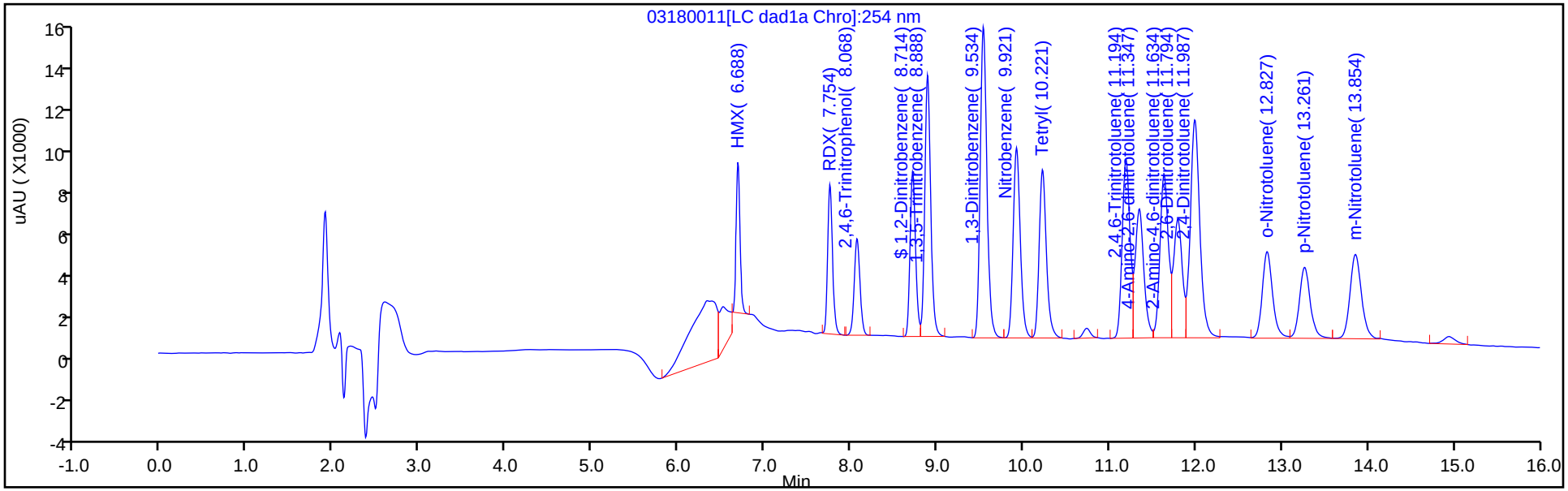
Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

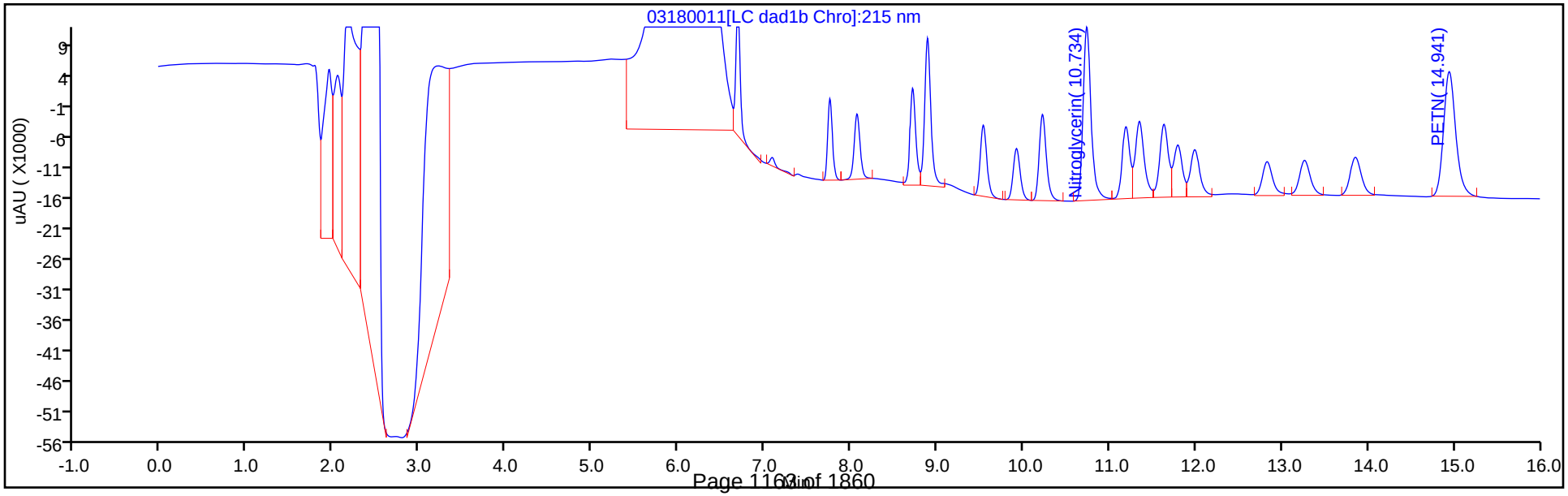
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180011.d

Injection Date:	18-Mar-2020 13:07:42	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L5			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

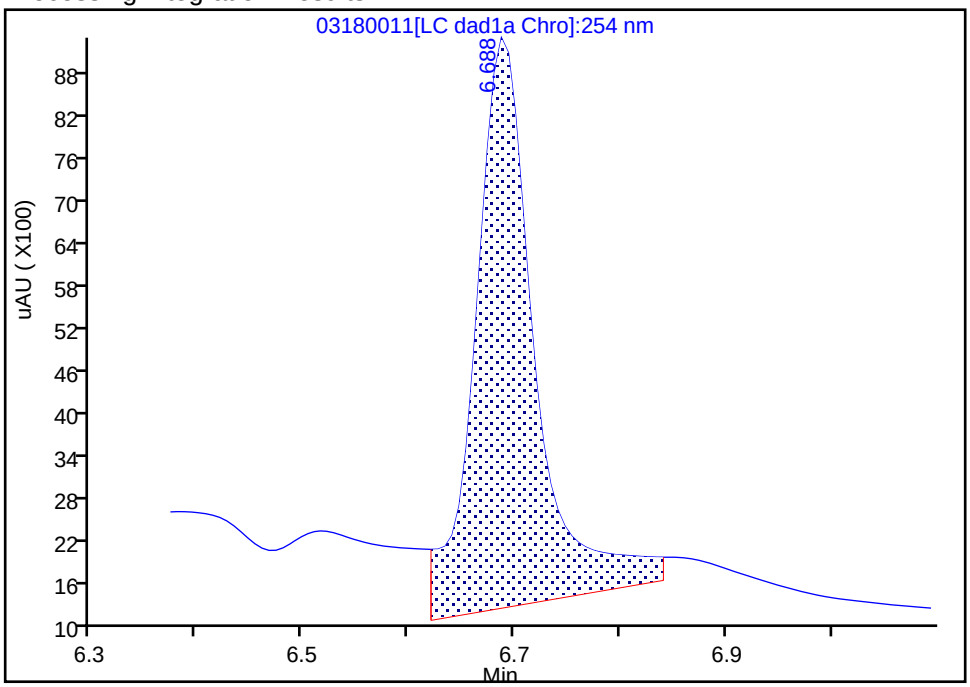
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180011.d				
Injection Date:	18-Mar-2020 13:07:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

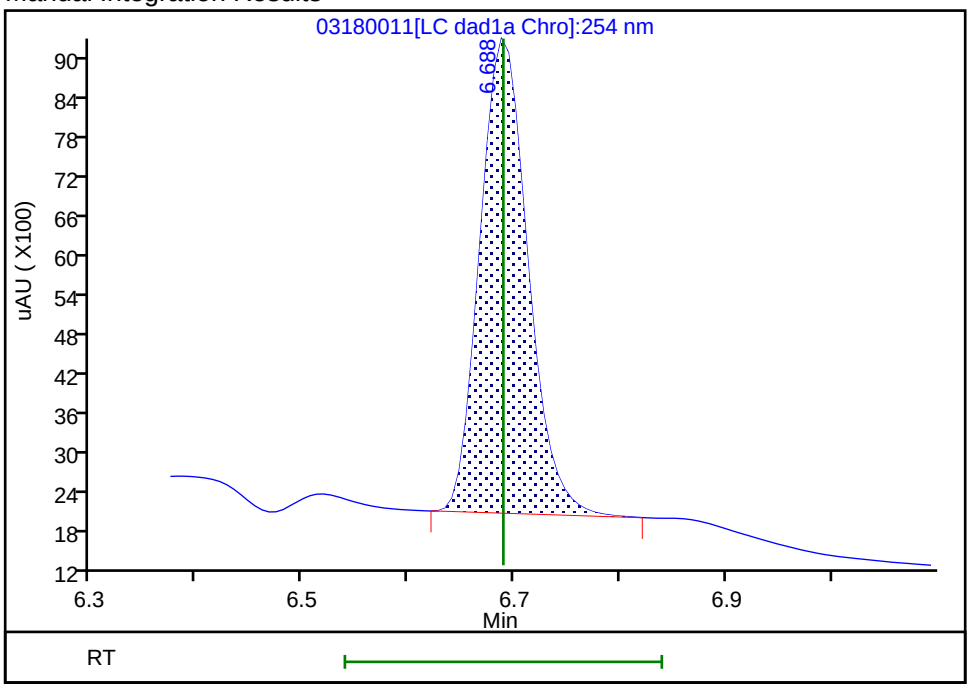
Processing Integration Results

RT: 6.69
Area: 31475
Amount: 0.164968
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 22752
Amount: 0.264675
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:43:23
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180012.D
Lims ID: IC MAIN L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Mar-2020 13:30:35 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L4
Misc. Info.: 280-0090150-012
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:43 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:43:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.689	6.689	0.000	9080	0.1000	0.1056	M
7 RDX	1	7.749	7.749	0.000	11701	0.1000	0.1003	
8 2,4,6-Trinitrophenol	1	8.076	8.076	0.000	8647	0.1000	0.1016	
$ 9 1,2-Dinitrobenzene	1	8.709	8.709	0.000	14127	0.1000	0.1022	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	23730	0.1002	0.1030	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	31897	0.1002	0.1040	
12 Nitrobenzene	1	9.916	9.916	0.000	20859	0.1004	0.1041	
14 Tetryl	1	10.216	10.216	0.000	18527	0.1002	0.1047	
15 Nitroglycerin	2	10.729	10.729	0.000	71269	1.00	1.05	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	21830	0.1004	0.1070	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	17293	0.1001	0.1035	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	21043	0.1004	0.1038	
19 2,6-Dinitrotoluene	1	11.783	11.783	0.000	15921	0.1004	0.1065	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	31802	0.1004	0.1048	
21 o-Nitrotoluene	1	12.823	12.823	0.000	13733	0.1000	0.1017	
22 p-Nitrotoluene	1	13.256	13.256	0.000	11811	0.1002	0.1045	
23 m-Nitrotoluene	1	13.849	13.849	0.000	14838	0.1001	0.1037	
24 PETN	2	14.936	14.936	0.000	78947	1.00	1.00	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 10.00 Units: uL

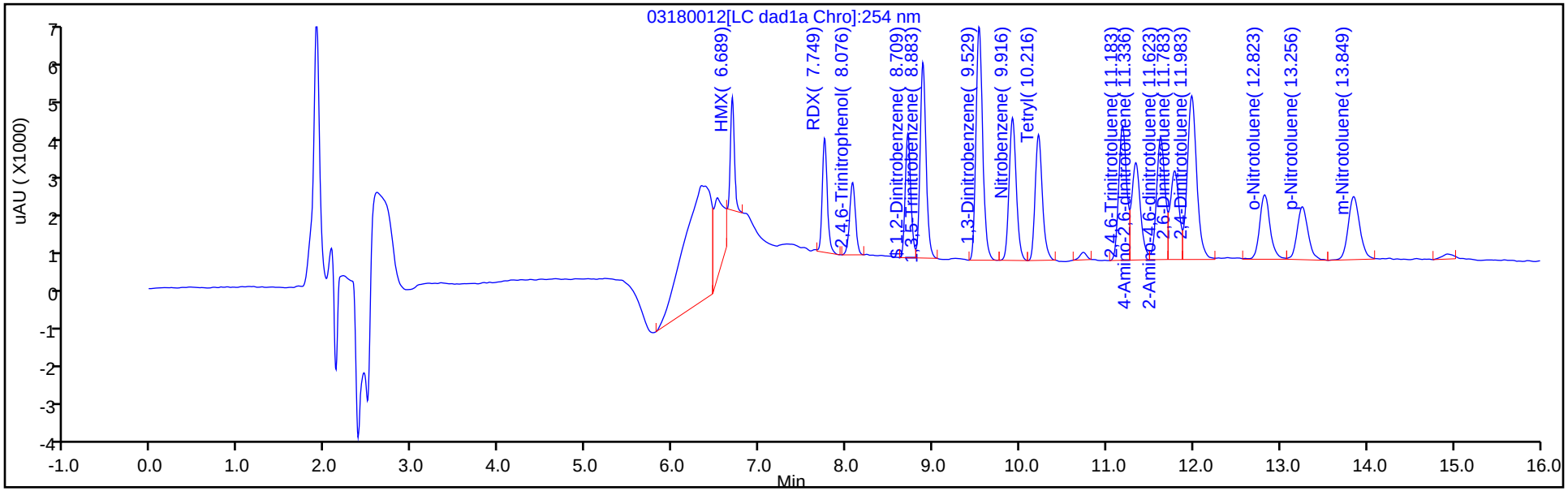
Report Date: 26-Mar-2020 15:45:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

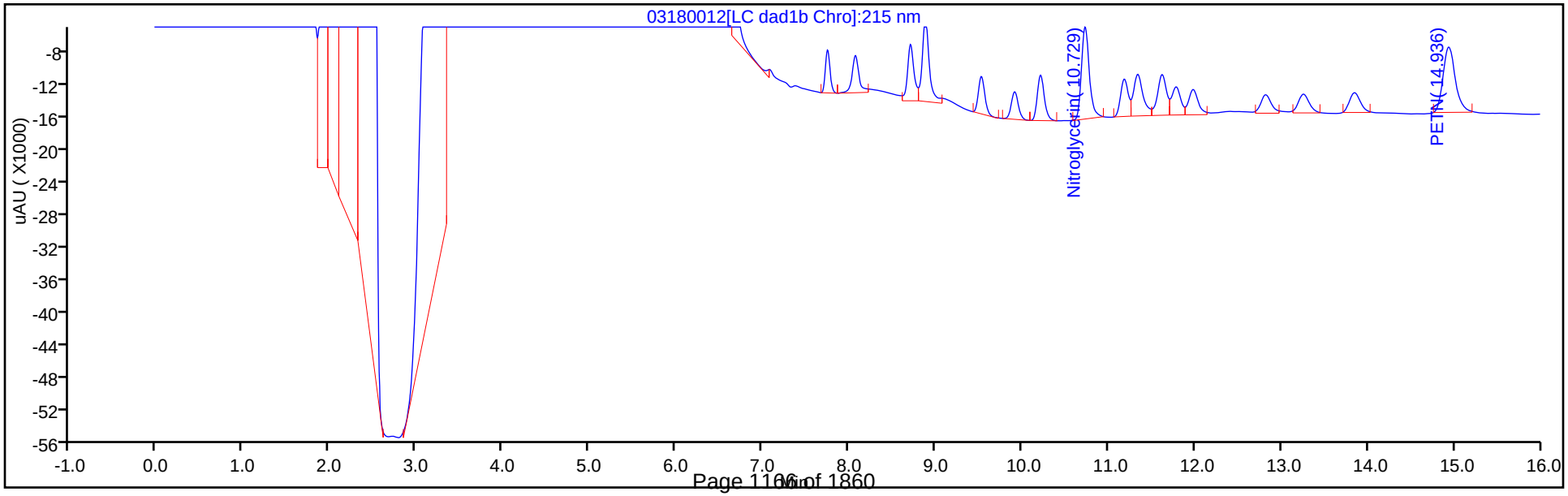
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180012.d

Injection Date:	18-Mar-2020 13:30:35	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L4			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

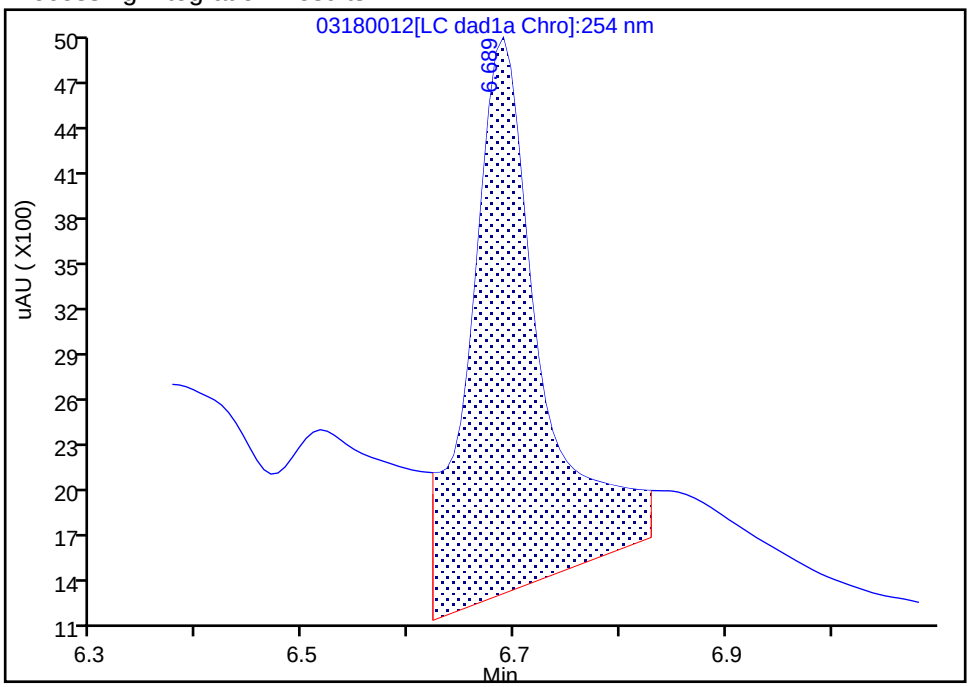
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180012.d
Injection Date: 18-Mar-2020 13:30:35 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L4
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

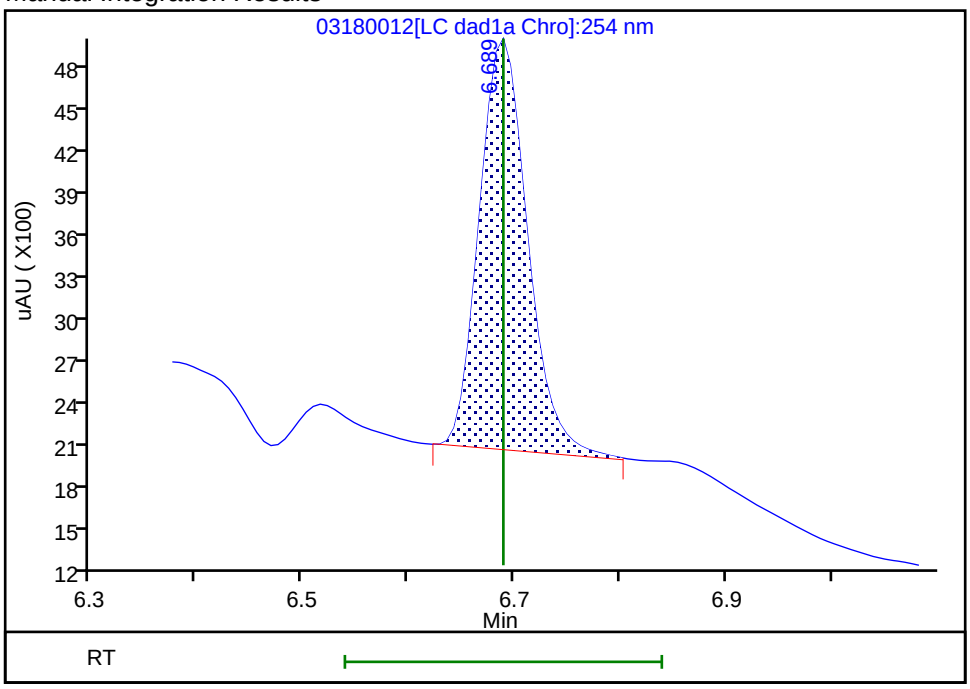
Processing Integration Results

RT: 6.69
Area: 16912
Amount: 0.090478
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 9080
Amount: 0.105628
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:43:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180013.D
Lims ID: IC MAIN L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Mar-2020 13:53:37 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L3
Misc. Info.: 280-0090150-013
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:44 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:44:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	4323	0.0500	0.0503	M
7 RDX	1	7.753	7.749	0.004	6070	0.0500	0.0521	
8 2,4,6-Trinitrophenol	1	8.080	8.076	0.004	4305	0.0500	0.0506	
$ 9 1,2-Dinitrobenzene	1	8.713	8.709	0.004	7239	0.0500	0.0524	
10 1,3,5-Trinitrobenzene	1	8.887	8.883	0.004	11986	0.0501	0.0520	
11 1,3-Dinitrobenzene	1	9.533	9.529	0.004	16146	0.0501	0.0526	
12 Nitrobenzene	1	9.920	9.916	0.004	10485	0.0502	0.0523	
14 Tetryl	1	10.220	10.216	0.004	9136	0.0501	0.0516	
15 Nitroglycerin	2	10.733	10.729	0.004	33491	0.5000	0.4915	
16 2,4,6-Trinitrotoluene	1	11.186	11.183	0.003	10774	0.0502	0.0528	
17 4-Amino-2,6-dinitrotoluene	1	11.340	11.336	0.004	8490	0.0501	0.0541	
18 2-Amino-4,6-dinitrotoluene	1	11.633	11.623	0.010	10503	0.0502	0.0518	
19 2,6-Dinitrotoluene	1	11.793	11.783	0.010	7882	0.0502	0.0527	
20 2,4-Dinitrotoluene	1	11.986	11.983	0.003	15741	0.0502	0.0519	
21 o-Nitrotoluene	1	12.833	12.823	0.010	7553	0.0500	0.0559	
22 p-Nitrotoluene	1	13.260	13.256	0.004	6416	0.0501	0.0568	
23 m-Nitrotoluene	1	13.853	13.849	0.004	7758	0.0501	0.0542	
24 PETN	2	14.946	14.936	0.010	37407	0.5000	0.4759	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 5.00 Units: uL

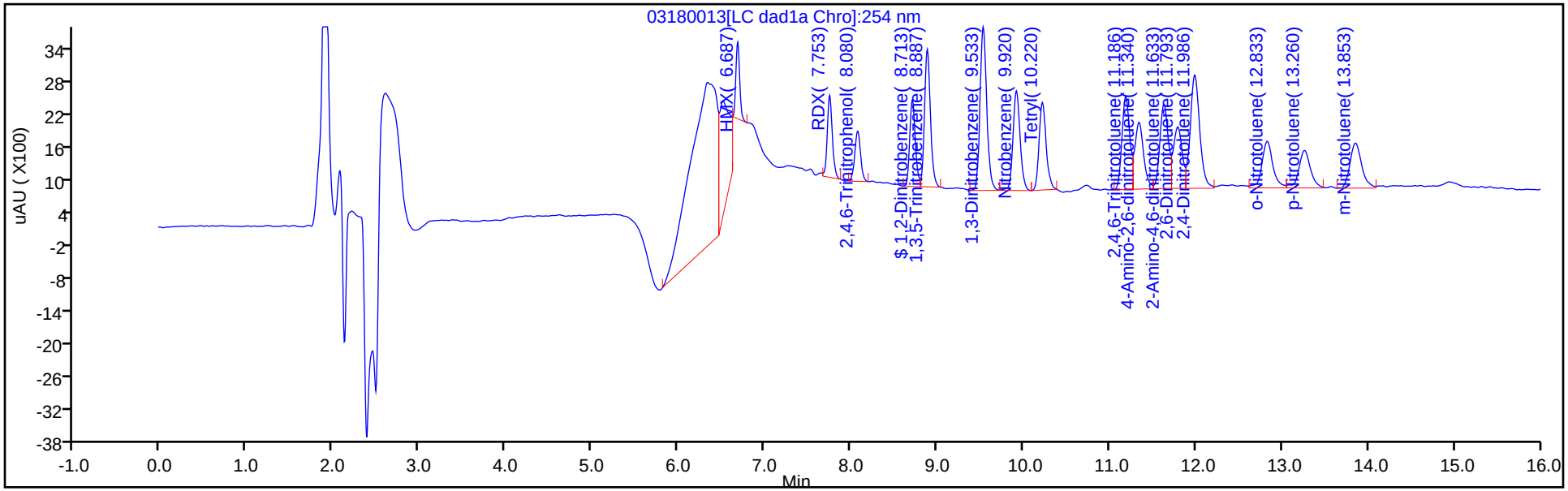
Report Date: 26-Mar-2020 15:45:44 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

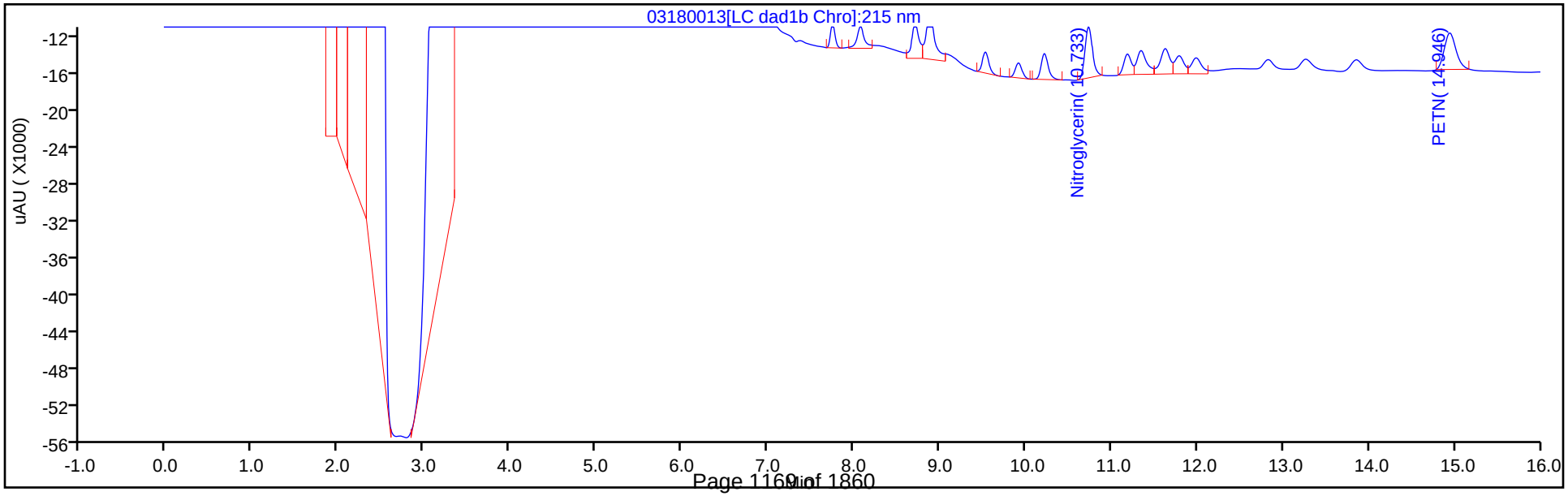
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180013.d

Injection Date:	18-Mar-2020 13:53:37	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L3			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

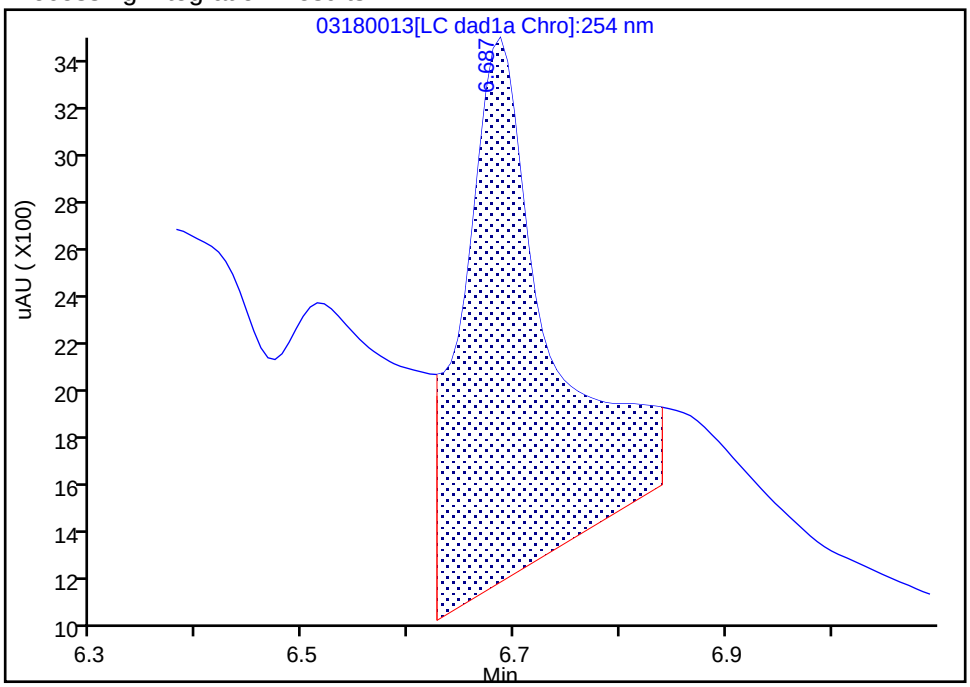
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180013.d
Injection Date: 18-Mar-2020 13:53:37 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

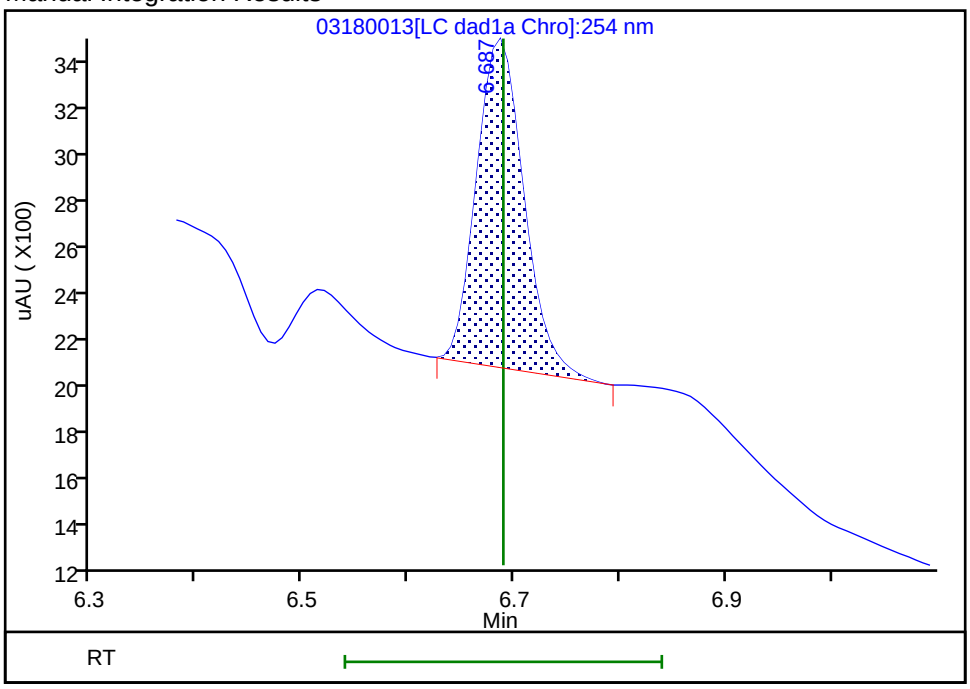
Processing Integration Results

RT: 6.69
Area: 12509
Amount: 0.070190
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 4323
Amount: 0.050290
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:44:00
Audit Action: Manually Integrated Audit Reason: Baseline

Report Date: 26-Mar-2020 15:45:45 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180014.D
Lims ID: IC MAIN L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Mar-2020 14:16:32 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L2
Misc. Info.: 280-0090150-014
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:44 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:44:44

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.689	6.689	0.000	1536	0.0250	0.0179	M
	7 RDX	1	7.755	7.749	0.006	2817	0.0250	0.0242	
	8 2,4,6-Trinitrophenol	1	8.082	8.076	0.006	1774	0.0250	0.0208	
$	9 1,2-Dinitrobenzene	1	8.709	8.709	0.000	2996	0.0250	0.0217	
	10 1,3,5-Trinitrobenzene	1	8.889	8.883	0.006	4845	0.0251	0.0210	
	11 1,3-Dinitrobenzene	1	9.535	9.529	0.006	6270	0.0251	0.0204	
	12 Nitrobenzene	1	9.922	9.916	0.006	4155	0.0251	0.0207	
	14 Tetryl	1	10.215	10.216	-0.001	3492	0.0251	0.0197	
	15 Nitroglycerin	2	10.735	10.729	0.006	13701	0.2500	0.2011	
	16 2,4,6-Trinitrotoluene	1	11.189	11.183	0.006	4307	0.0251	0.0211	
	17 4-Amino-2,6-dinitrotoluene	1	11.342	11.336	0.006	3443	0.0250	0.0258	
	18 2-Amino-4,6-dinitrotoluene	1	11.629	11.623	0.006	4046	0.0251	0.0199	M
	19 2,6-Dinitrotoluene	1	11.789	11.783	0.006	2987	0.0251	0.0200	M
	20 2,4-Dinitrotoluene	1	11.989	11.983	0.006	6274	0.0251	0.0207	
	21 o-Nitrotoluene	1	12.822	12.823	-0.001	3068	0.0250	0.0227	
	22 p-Nitrotoluene	1	13.269	13.256	0.013	2509	0.0251	0.0222	
	23 m-Nitrotoluene	1	13.849	13.849	0.000	3129	0.0250	0.0219	
	24 PETN	2	14.942	14.936	0.006	11624	0.2500	0.1479	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 2.50 Units: uL

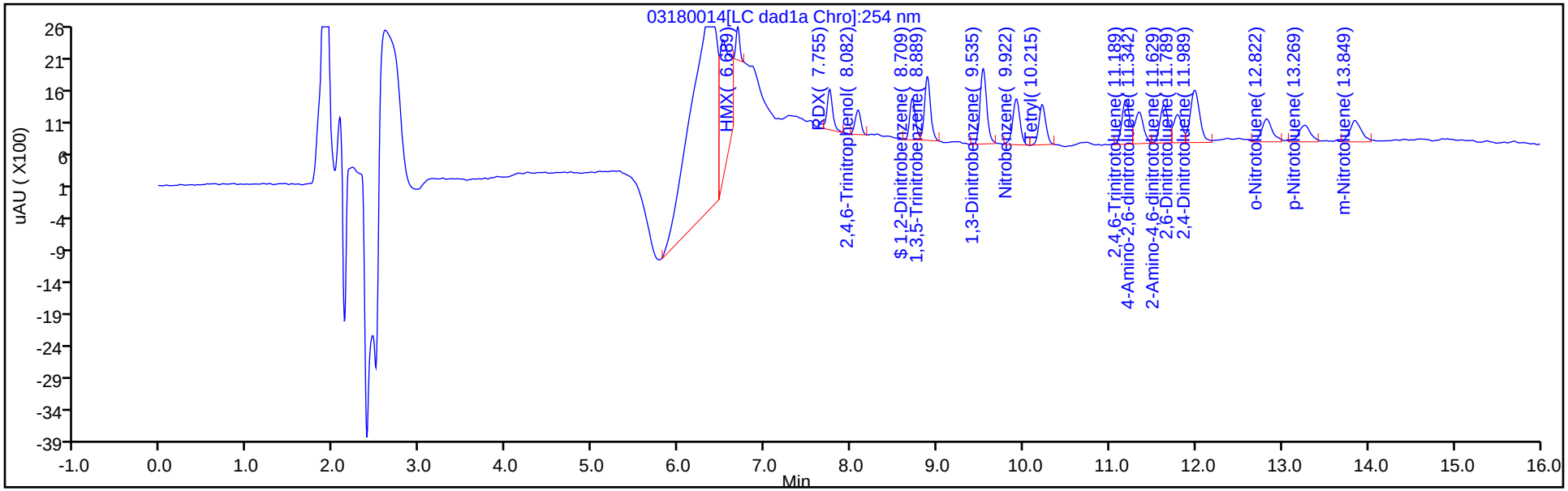
Report Date: 26-Mar-2020 15:45:45 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

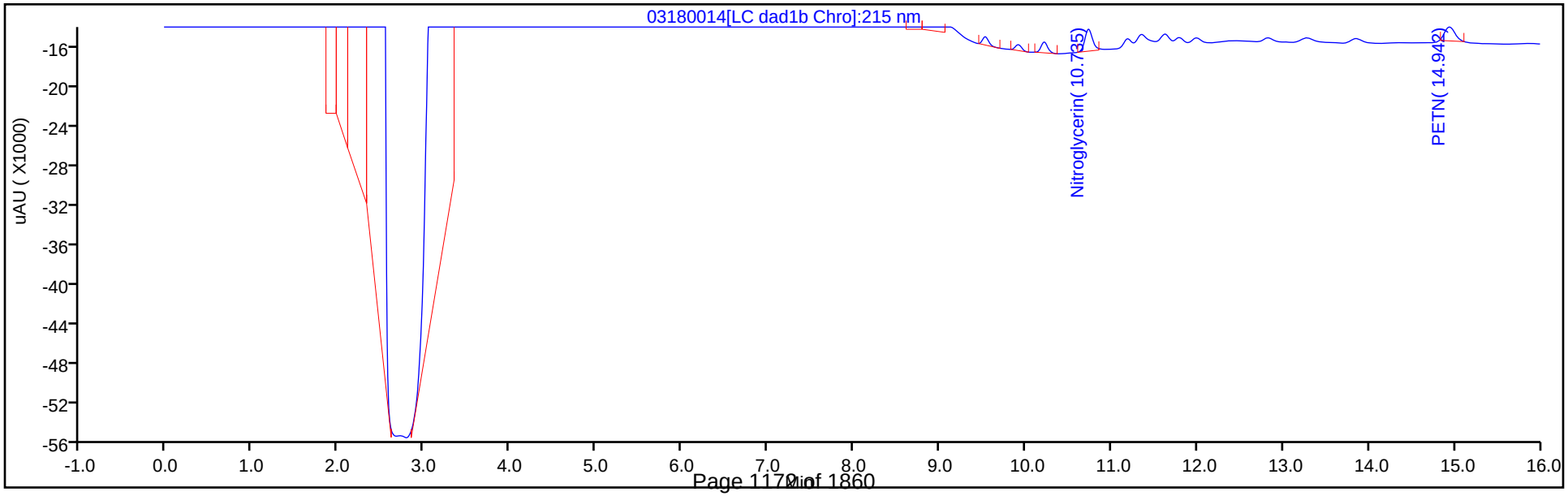
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d

Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L2			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

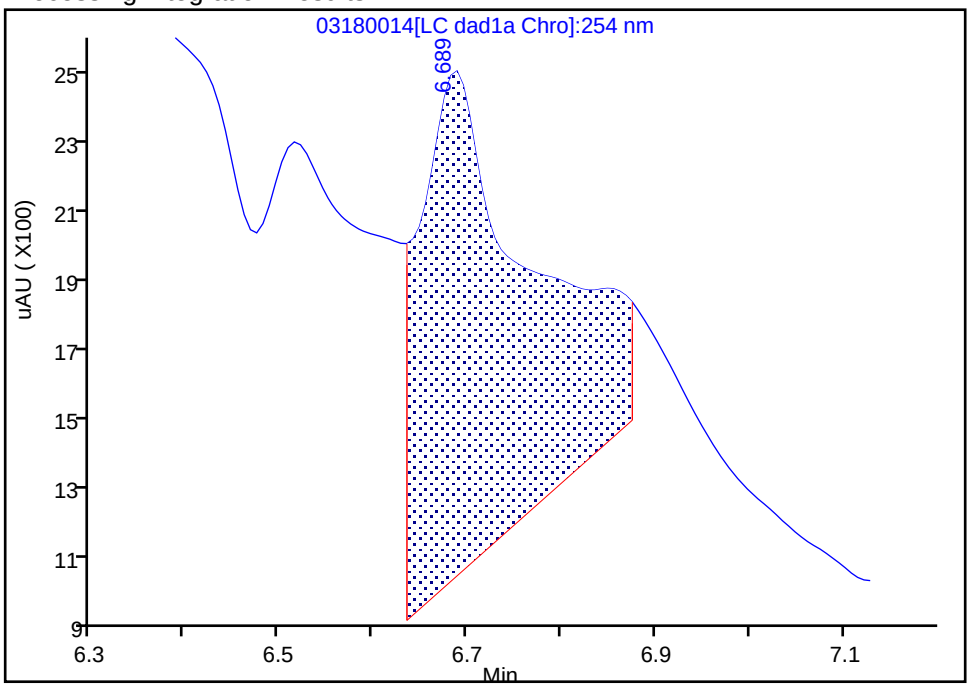
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d				
Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

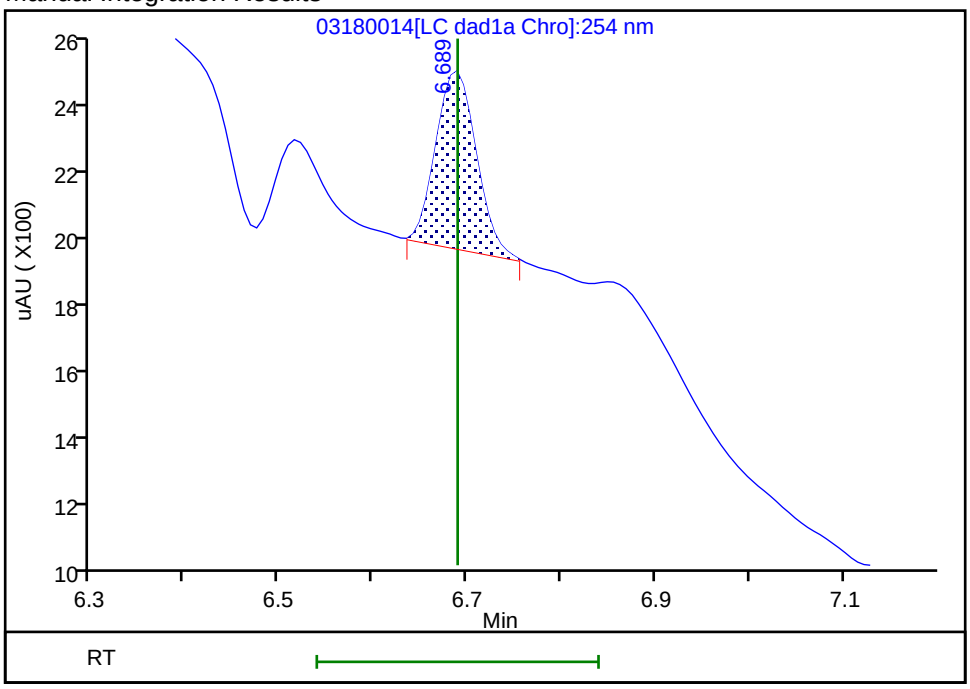
Processing Integration Results

RT: 6.69
Area: 11606
Amount: 0.072526
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 1536
Amount: 0.017868
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:44:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

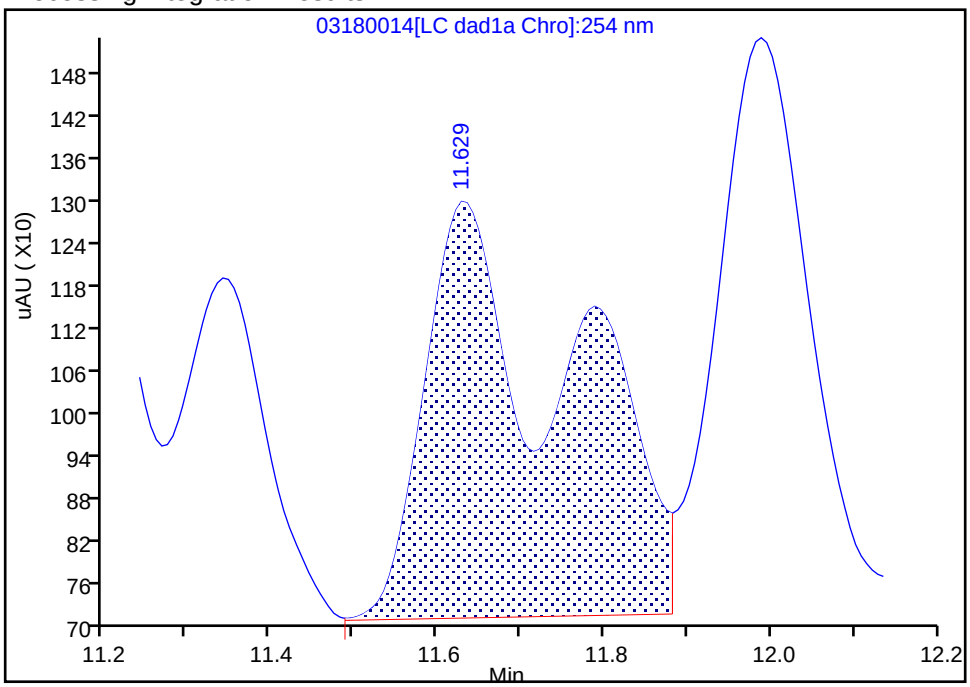
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d
Injection Date: 18-Mar-2020 14:16:32 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L2
Client ID:
Operator ID: CB ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

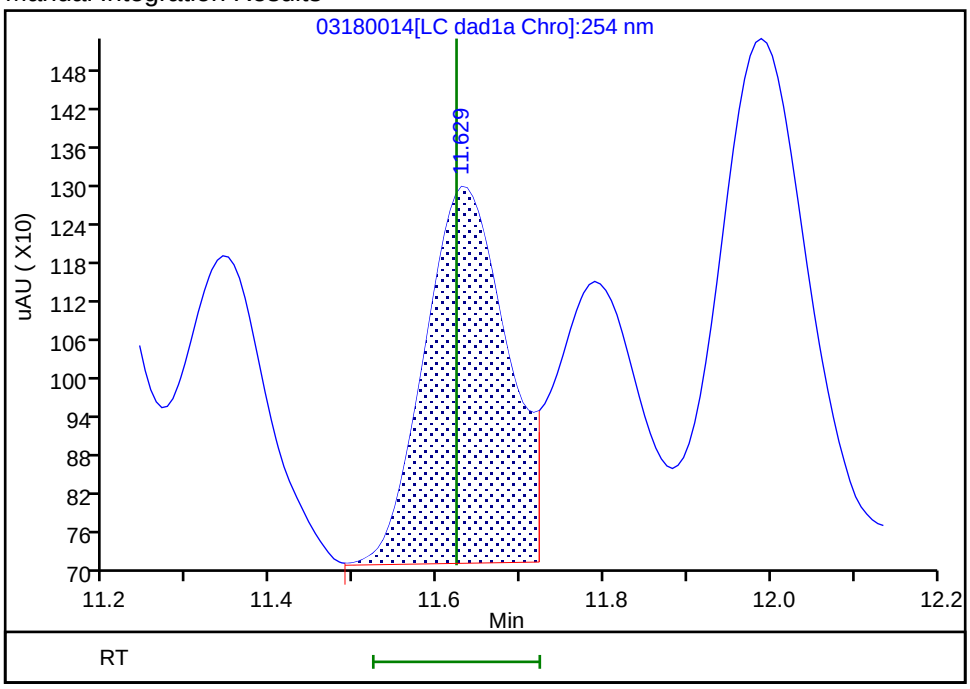
Processing Integration Results

RT: 11.63
Area: 7030
Amount: 0.030654
Amount Units: ug/mL



Manual Integration Results

RT: 11.63
Area: 4046
Amount: 0.019949
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:44:36
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D
Lims ID: IC MAIN L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Mar-2020 14:39:27 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L1
Misc. Info.: 280-0090150-015
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:45 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:46:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1		6.689			ND	ND	MU
	7 RDX	1		7.749			ND	ND	MU
	8 2,4,6-Trinitrophenol	1	8.082	8.076	0.006	1082	0.0125	0.0127	M
$	9 1,2-Dinitrobenzene	1	8.715	8.709	0.006	1531	0.0125	0.0111	
	10 1,3,5-Trinitrobenzene	1	8.888	8.883	0.005	2405	0.0125	0.0104	
	11 1,3-Dinitrobenzene	1	9.535	9.529	0.006	3191	0.0125	0.0104	
	12 Nitrobenzene	1	9.915	9.916	-0.001	2176	0.0126	0.0109	
	14 Tetryl	1	10.221	10.216	0.005	1664	0.0125	0.009399	
	15 Nitroglycerin	2	10.735	10.729	0.006	6790	0.1250	0.0997	
	16 2,4,6-Trinitrotoluene	1	11.195	11.183	0.012	1807	0.0126	0.008856	
	17 4-Amino-2,6-dinitrotoluene	1	11.341	11.336	0.005	981	0.0125	0.0120	
	18 2-Amino-4,6-dinitrotoluene	1	11.635	11.623	0.012	2123	0.0126	0.0105	M
	19 2,6-Dinitrotoluene	1	11.795	11.783	0.012	1508	0.0126	0.0101	M
	20 2,4-Dinitrotoluene	1	11.995	11.983	0.012	3142	0.0126	0.0103	
	21 o-Nitrotoluene	1	12.828	12.823	0.005	1615	0.0125	0.0120	
	22 p-Nitrotoluene	1	13.268	13.256	0.012	1080	0.0125	0.009557	
	23 m-Nitrotoluene	1	13.855	13.849	0.006	1403	0.0125	0.009809	
	24 PETN	2		14.936			ND	ND	MU

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

8330IntermStk_00061 Amount Added: 1.25 Units: uL

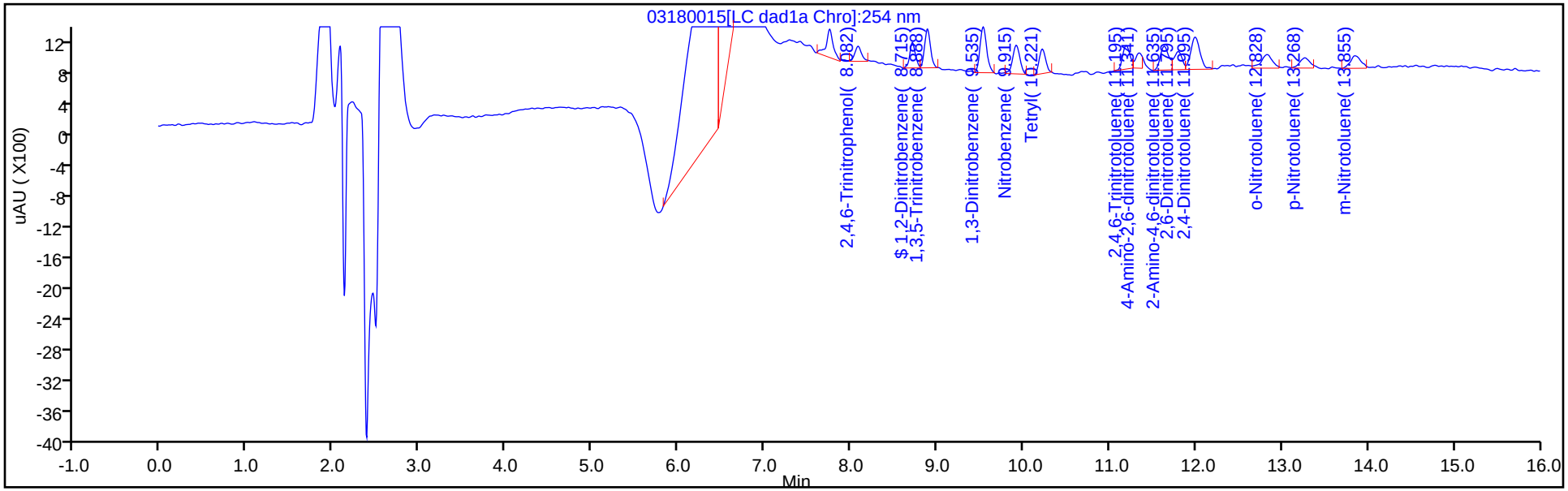
Report Date: 26-Mar-2020 15:45:46 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

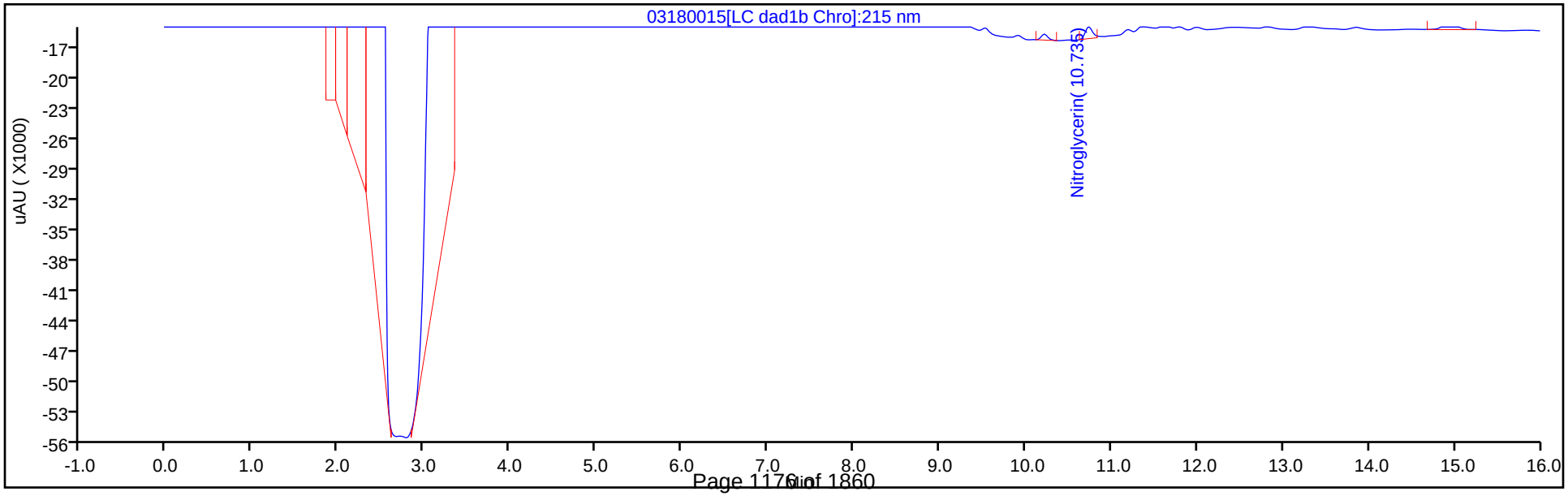
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180015.d

Injection Date:	18-Mar-2020 14:39:27	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L1			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

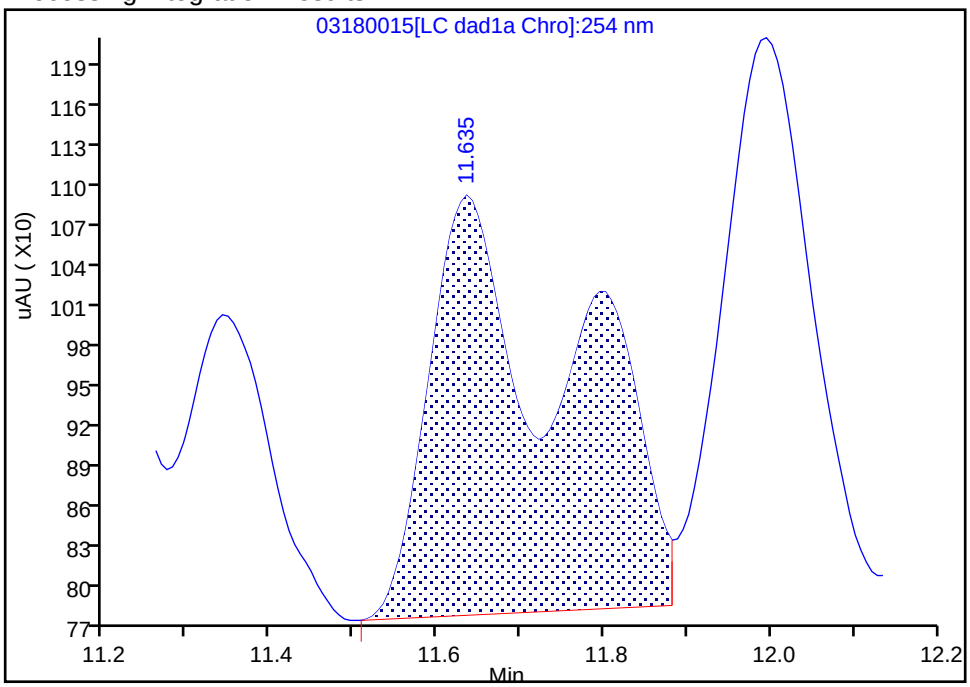
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180015.d
Injection Date: 18-Mar-2020 14:39:27 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L1
Client ID:
Operator ID: CB ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

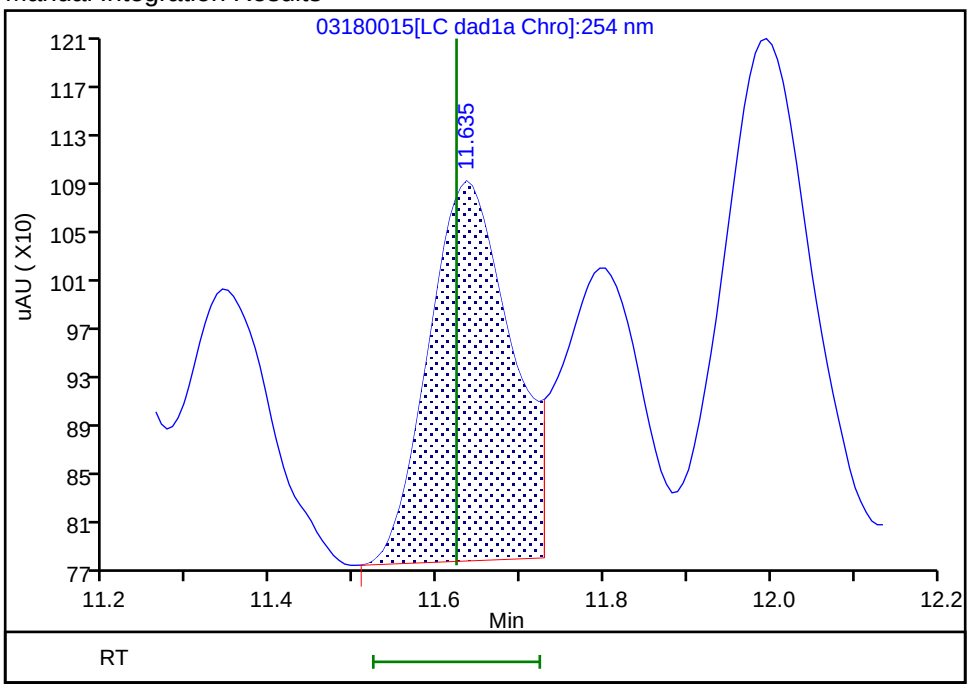
Processing Integration Results

RT: 11.63
Area: 3626
Amount: 0.016777
Amount Units: ug/mL



Manual Integration Results

RT: 11.63
Area: 2123
Amount: 0.010468
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:46:18
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-494886/16 Calibration Date: 05/14/2020 21:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 05140016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	193810	184585		381	400	-4.8	15.0
HMX	Lin2		178815		374	400	-6.5	15.0
RDX	Ave	244360	211628		346	400	-13.4	15.0
Nitrobenzene	Ave	439227	438053		399	400	-0.3	15.0
1,3-Dinitrobenzene	Ave	674189	636963		378	400	-5.5	15.0
Nitroglycerin	Ave	126803	122258		3860	4000	-3.6	15.0
2-Nitrotoluene	Ave	272965	263495		386	400	-3.5	15.0
4-Nitrotoluene	Ave	240881	229805		382	400	-4.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	318460		369	400	-7.8	15.0
3-Nitrotoluene	Ave	298327	286883		385	400	-3.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	446188		384	400	-4.1	15.0
1,3,5-Trinitrobenzene	Ave	472451	495920		420	400	5.0	15.0
2,6-Dinitrotoluene	Lin2		302720		403	400	0.8	15.0
2,4-Dinitrotoluene	Ave	640113	590383		369	400	-7.8	15.0
Tetryl	Ave	368678	347680		377	400	-5.7	15.0
2,4,6-Trinitrotoluene	Lin1		390228		381	400	-4.8	15.0
PETN	Lin1		124707		3650	4000	-8.8	15.0
1,2-Dinitrobenzene	Lin1		250760		355	400	-11.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-494886/16 Calibration Date: 05/14/2020 21:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 05140016.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.23	6.15	6.45
HMX	6.95	6.84	7.14
RDX	9.12	9.02	9.32
Nitrobenzene	12.05	11.96	12.26
1,3-Dinitrobenzene	15.50	15.40	15.70
Nitroglycerin	15.81	15.70	16.00
2-Nitrotoluene	16.49	16.38	16.68
4-Nitrotoluene	16.77	16.67	16.97
4-Amino-2,6-dinitrotoluene	17.10	17.00	17.30
3-Nitrotoluene	17.69	17.60	17.90
2-Amino-4,6-dinitrotoluene	17.99	17.90	18.20
1,3,5-Trinitrobenzene	18.83	18.74	19.04
2,6-Dinitrotoluene	19.75	19.66	19.96
2,4-Dinitrotoluene	20.24	20.14	20.44
Tetryl	23.51	23.40	23.70
2,4,6-Trinitrotoluene	24.61	24.50	24.80
PETN	25.25	25.13	25.43
1,2-Dinitrobenzene	12.99	12.89	13.19

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140016.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 14-May-2020 21:31:26 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 280-0091518-016
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:59 Calib Date: 14-May-2020 20:56:30
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140015.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:55:09

	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	4.307	4.366	-0.059	179307	0.4000	0.4177	M
2	2,4-diamino-6-nitrotoluene	1	4.840	4.880	-0.040	97723	0.4000	0.3877	M
5	2,4,6-Trinitrophenol	1	6.234	6.300	-0.066	73834	0.4000	0.3810	a
6	HMX	1	6.954	6.986	-0.032	71526	0.4000	0.3740	
8	RDX	1	9.120	9.173	-0.053	84651	0.4000	0.3464	
9	Nitrobenzene	1	12.053	12.106	-0.053	175221	0.4000	0.3989	
$ 10	1,2-Dinitrobenzene	1	12.987	13.040	-0.053	100304	0.4000	0.3552	
11	3,5-Dinitroaniline	1	14.827	14.886	-0.059	185478	0.4000	0.3767	
12	1,3-Dinitrobenzene	1	15.500	15.553	-0.053	254785	0.4000	0.3779	
13	Nitroglycerin	2	15.807	15.853	-0.046	489033	4.00	3.86	
14	o-Nitrotoluene	1	16.493	16.533	-0.040	105398	0.4000	0.3861	M
15	p-Nitrotoluene	1	16.767	16.820	-0.053	91922	0.4000	0.3816	M
16	4-Amino-2,6-dinitrotoluene	1	17.100	17.146	-0.046	127384	0.4000	0.3690	M
17	m-Nitrotoluene	1	17.693	17.753	-0.060	114753	0.4000	0.3847	M
18	2-Amino-4,6-dinitrotoluene	1	17.987	18.046	-0.059	178475	0.4000	0.3836	M
19	1,3,5-Trinitrobenzene	1	18.833	18.886	-0.053	198368	0.4000	0.4199	M
20	2,6-Dinitrotoluene	1	19.753	19.806	-0.053	121088	0.4000	0.4033	M
21	2,4-Dinitrotoluene	1	20.240	20.293	-0.053	236153	0.4000	0.3689	M
22	Tetryl	1	23.507	23.553	-0.046	139072	0.4000	0.3772	
23	2,4,6-Trinitrotoluene	1	24.607	24.653	-0.046	156091	0.4000	0.3808	
24	PETN	2	25.254	25.280	-0.026	498829	4.00	3.65	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330Surrogate_00114	Amount Added:	40.00	Units: uL
3,5-DNA LCS_00036	Amount Added:	40.00	Units: uL
8330 LCS_00098	Amount Added:	40.00	Units: uL
8330DiaminLCS_00038	Amount Added:	40.00	Units: uL

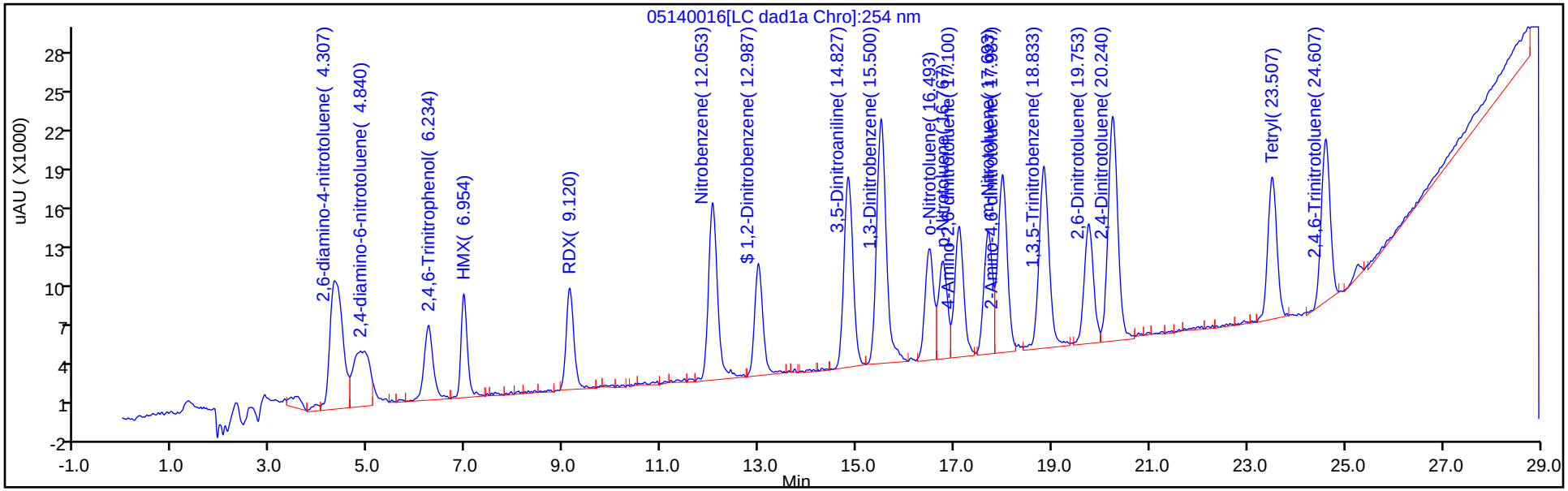
Report Date: 15-May-2020 12:01:01 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

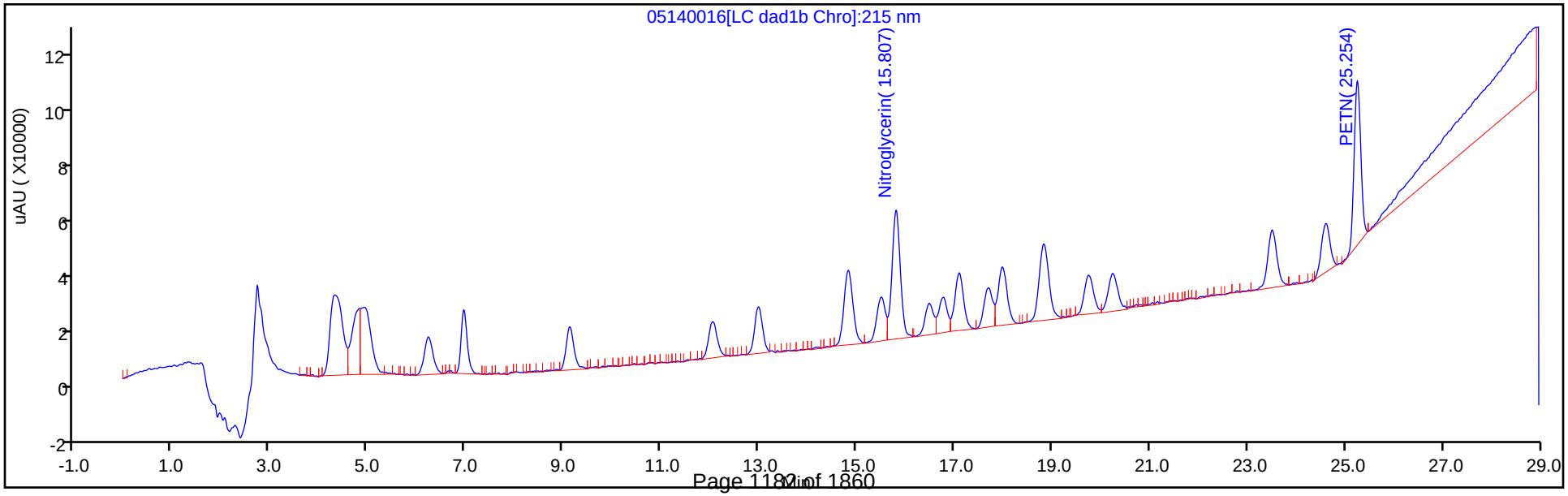
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d

Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV FULL			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

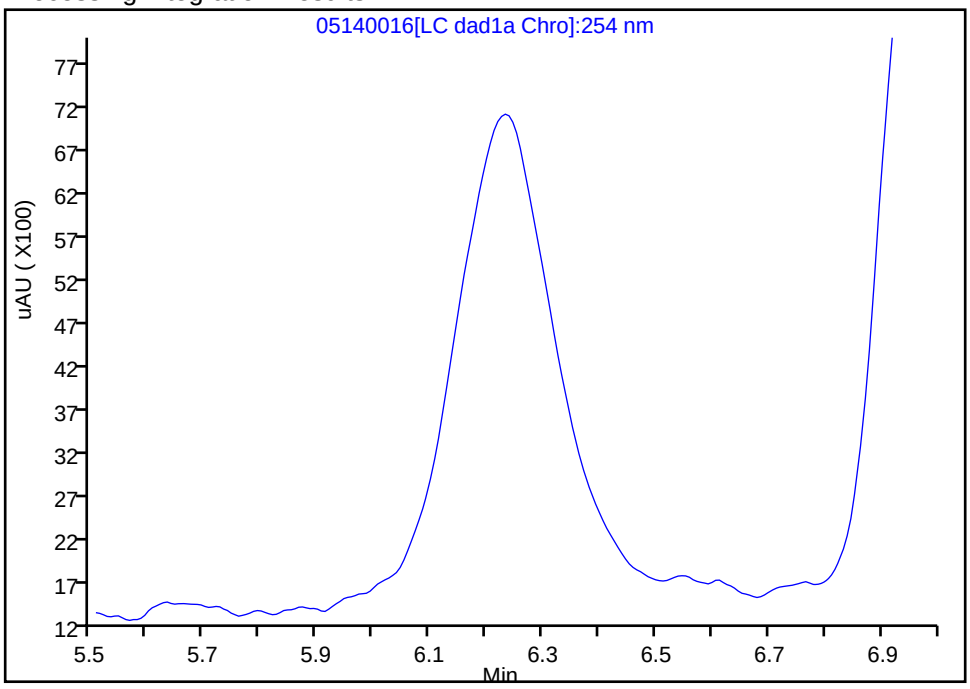
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

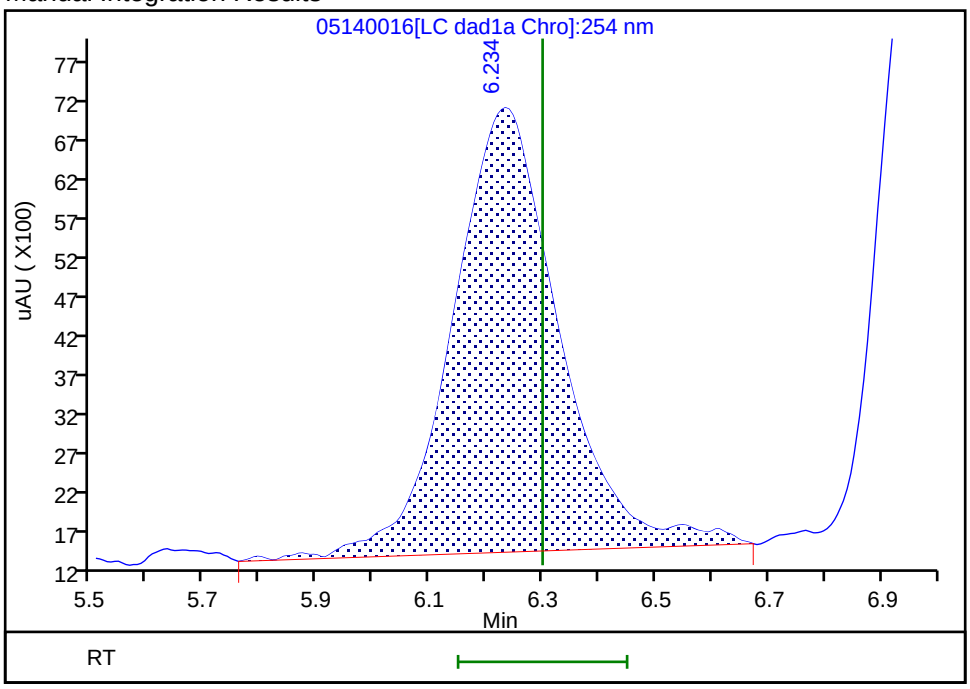
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.23
Area: 73834
Amount: 0.380960
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:14:55
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

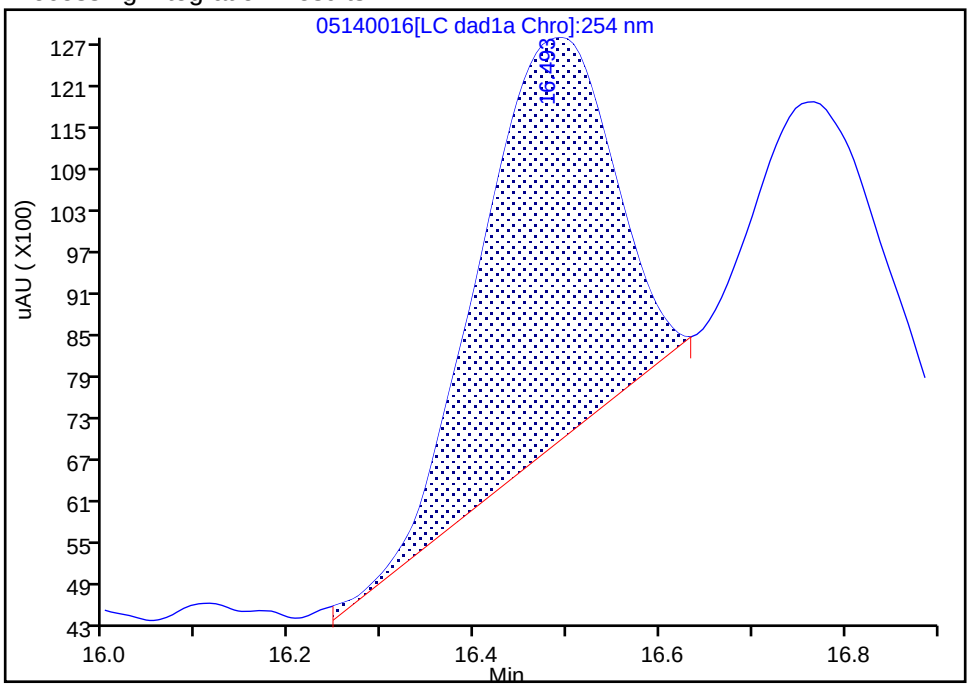
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d
Injection Date: 14-May-2020 21:31:26 Instrument ID: CHHPLC_G2_LUNA
Lims ID: ICV FULL
Client ID:
Operator ID: CB ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

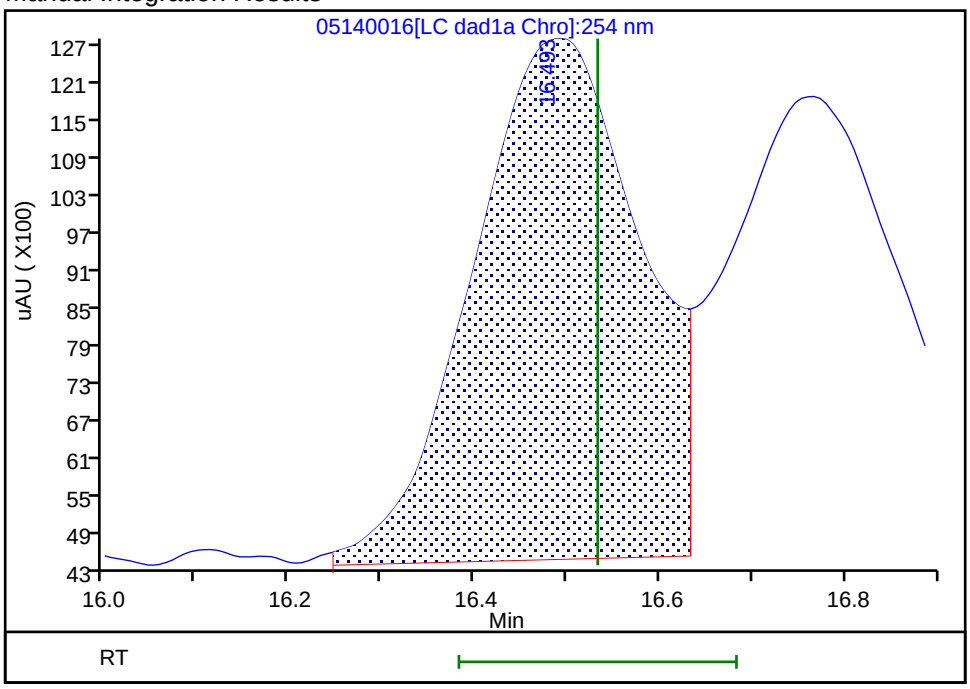
Processing Integration Results

RT: 16.49
Area: 59335
Amount: 0.217373
Amount Units: ug/ml



Manual Integration Results

RT: 16.49
Area: 105398
Amount: 0.386123
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

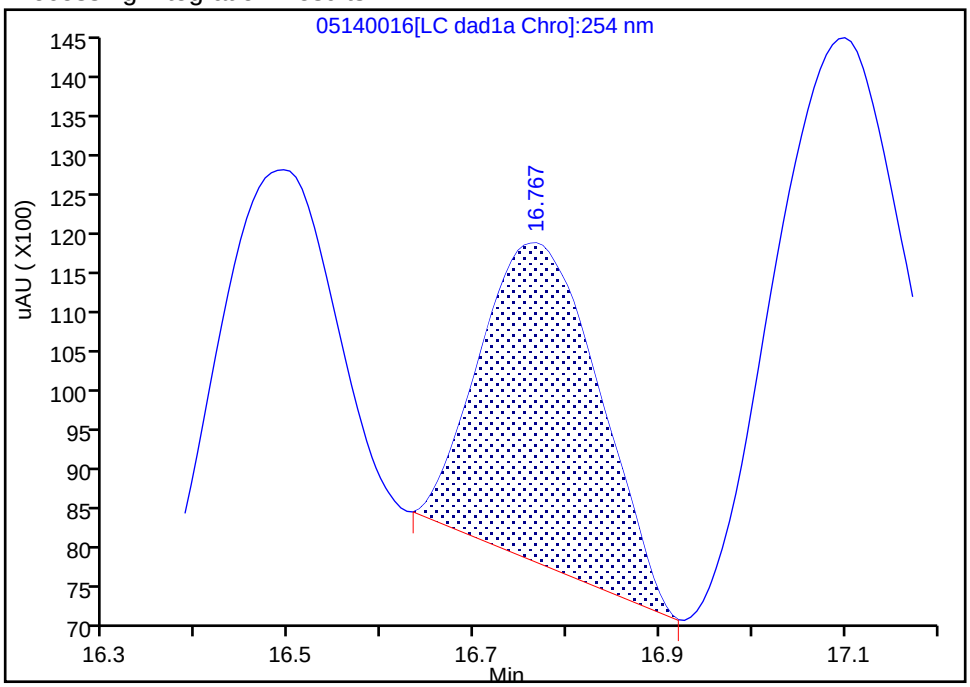
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

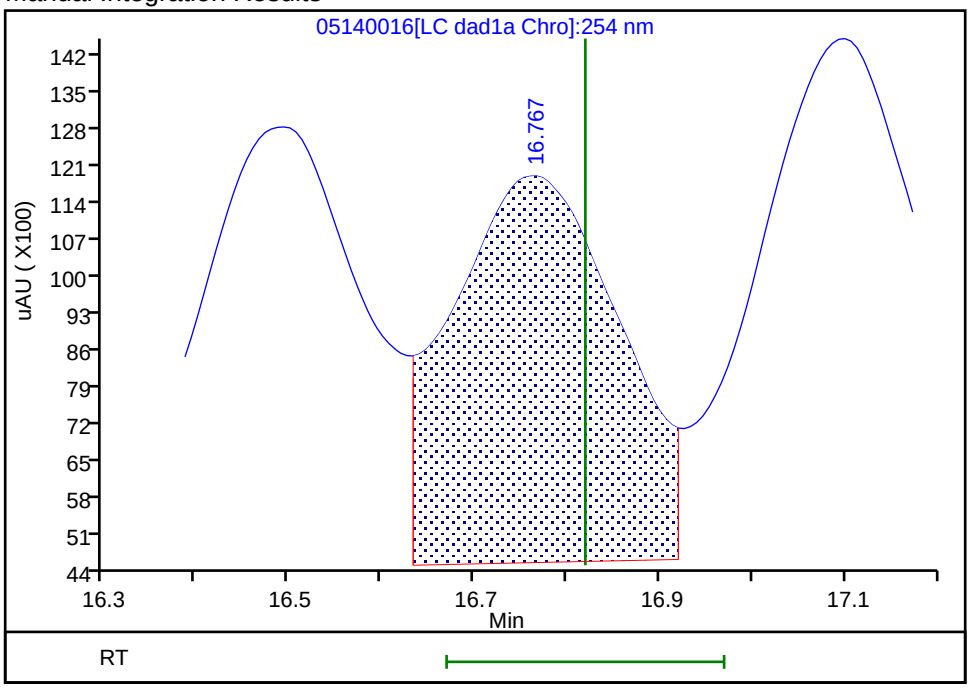
Processing Integration Results

RT: 16.77
Area: 36452
Amount: 0.151328
Amount Units: ug/ml



Manual Integration Results

RT: 16.77
Area: 91922
Amount: 0.381607
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

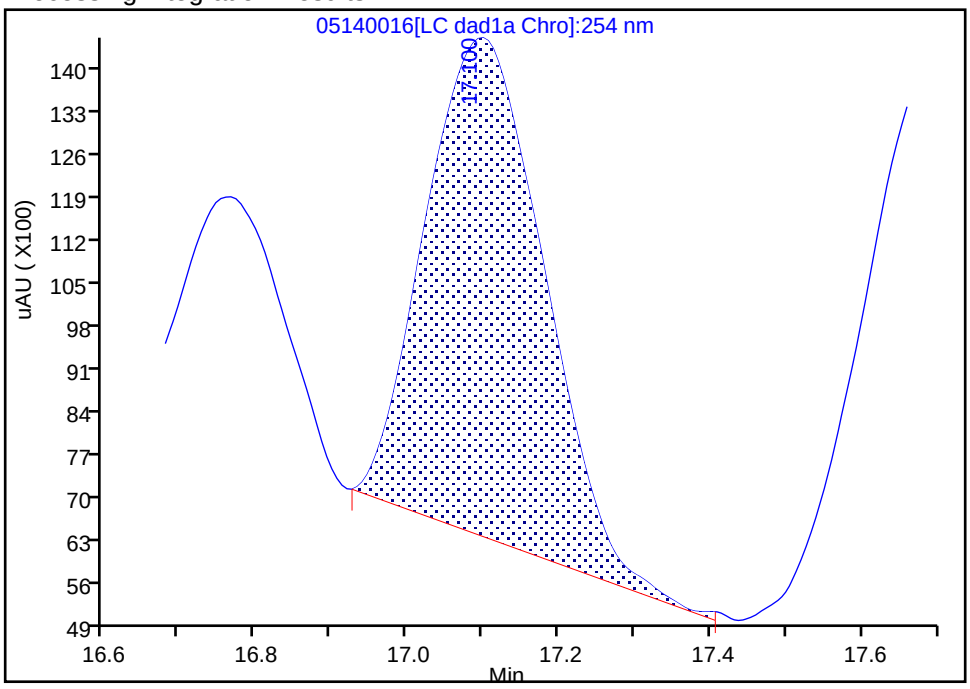
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

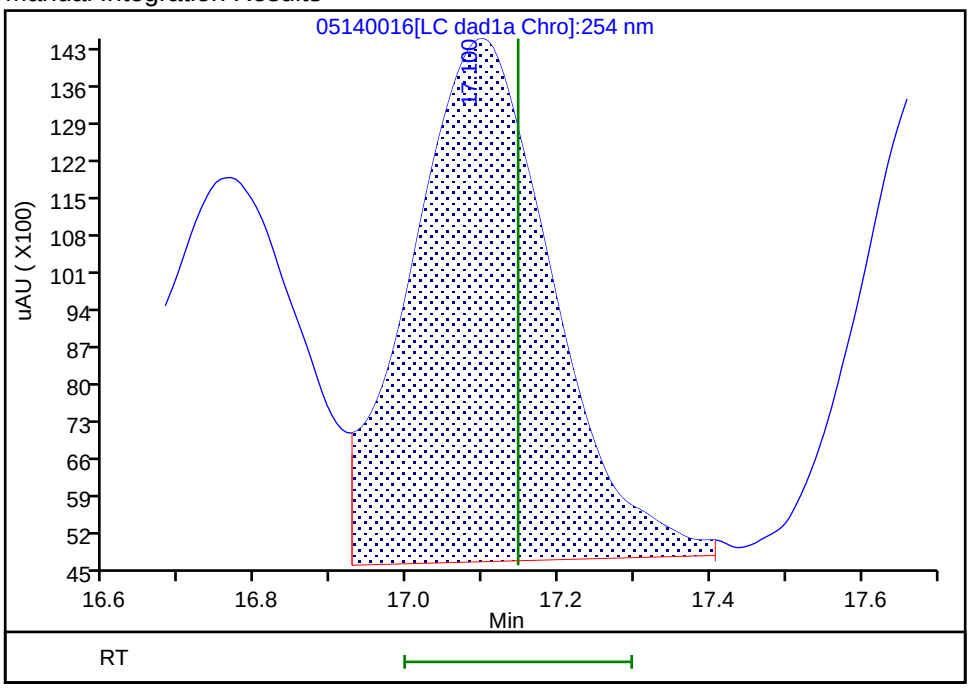
Processing Integration Results

RT: 17.10
Area: 89570
Amount: 0.259447
Amount Units: ug/ml



Manual Integration Results

RT: 17.10
Area: 127384
Amount: 0.368978
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

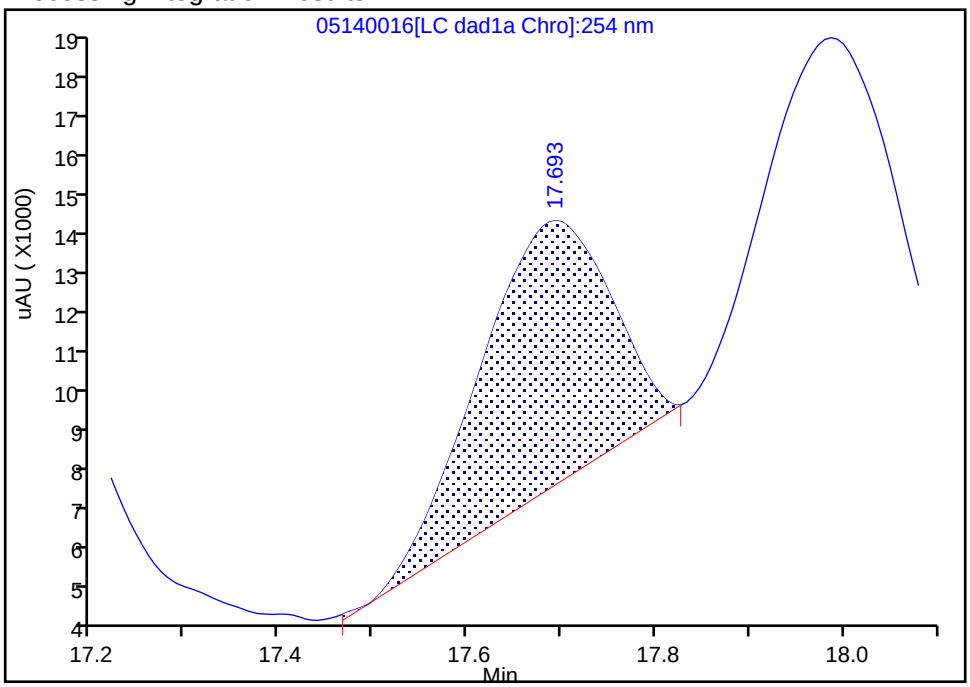
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

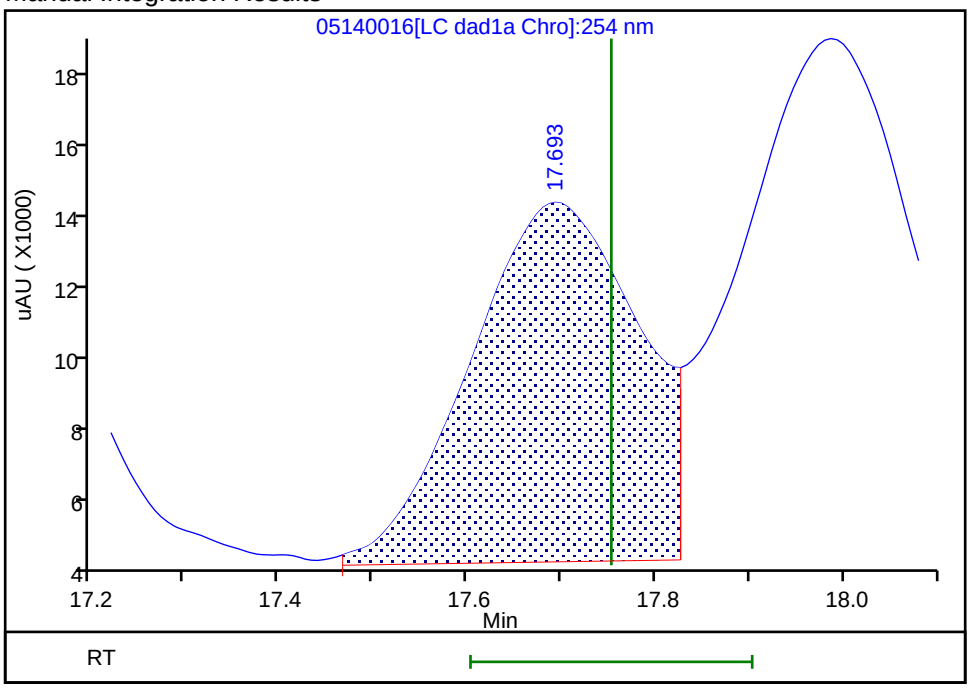
Processing Integration Results

RT: 17.69
Area: 60008
Amount: 0.201149
Amount Units: ug/ml



Manual Integration Results

RT: 17.69
Area: 114753
Amount: 0.384655
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

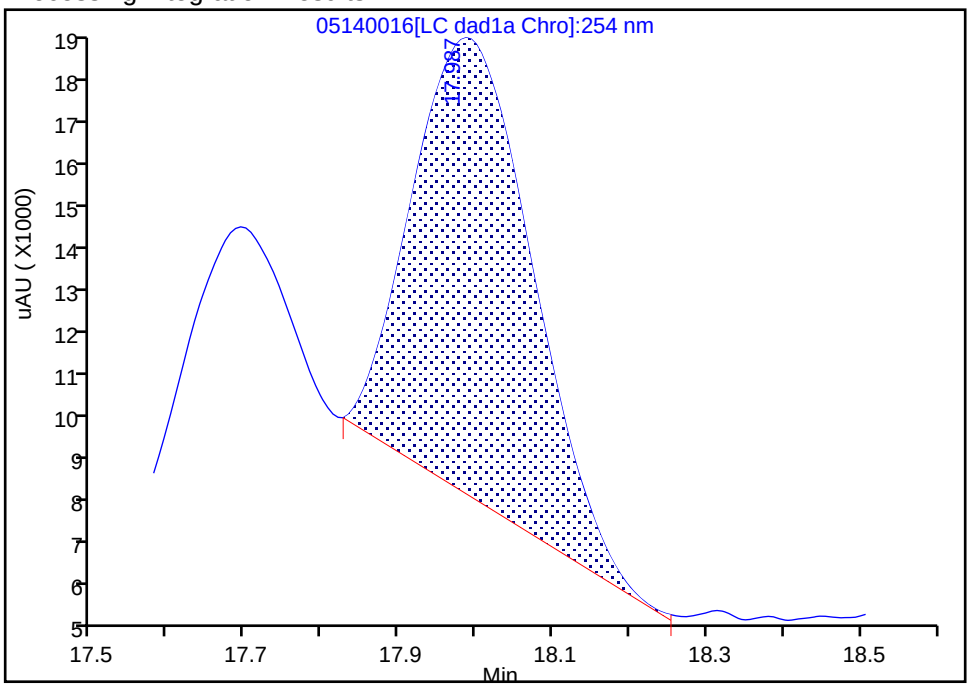
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

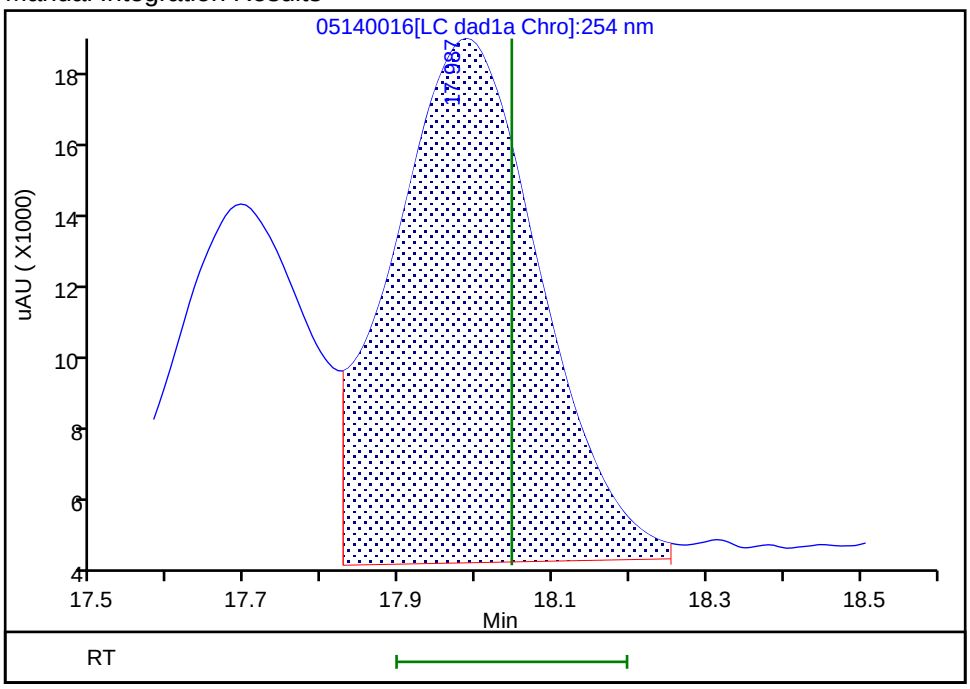
Processing Integration Results

RT: 17.99
Area: 111749
Amount: 0.240211
Amount Units: ug/ml



Manual Integration Results

RT: 17.99
Area: 178475
Amount: 0.383643
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

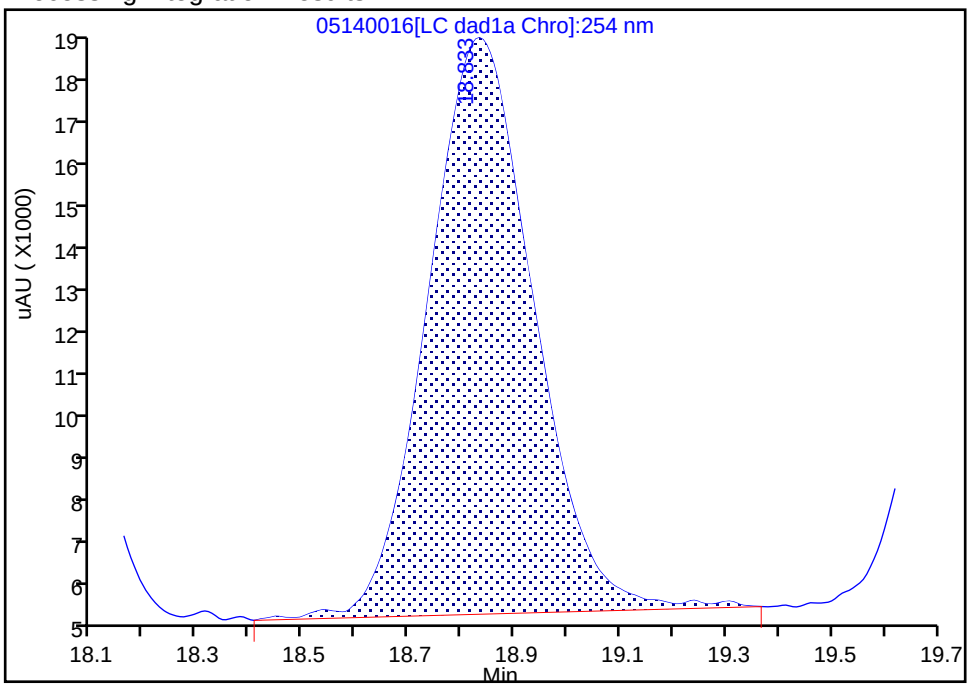
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

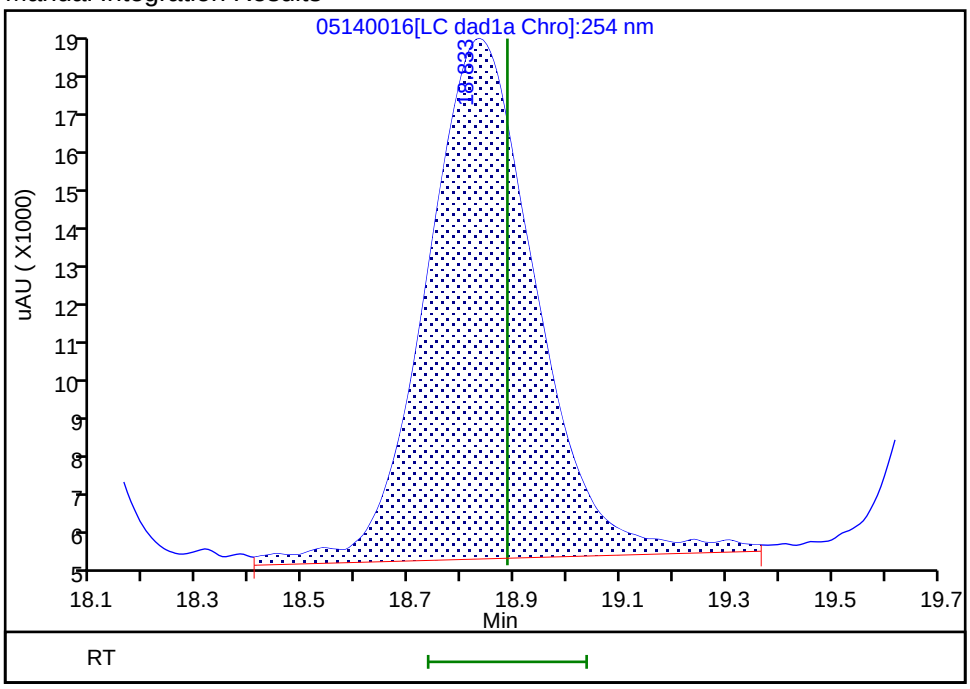
Processing Integration Results

RT: 18.83
Area: 187655
Amount: 0.397195
Amount Units: ug/ml



Manual Integration Results

RT: 18.83
Area: 198368
Amount: 0.419870
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

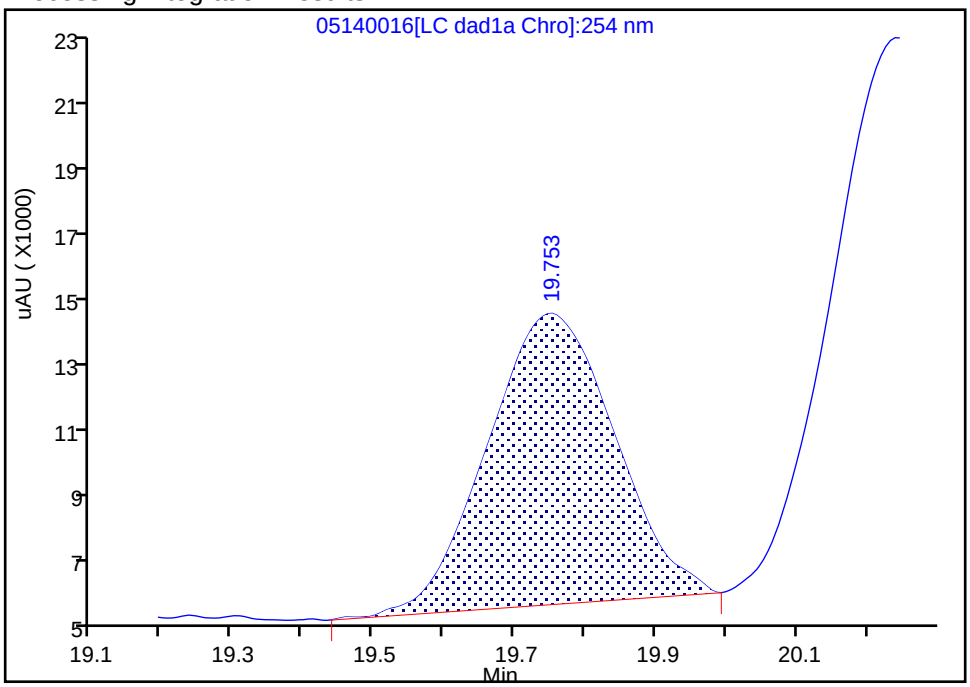
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d
Injection Date: 14-May-2020 21:31:26 Instrument ID: CHHPLC_G2_LUNA
Lims ID: ICV FULL
Client ID:
Operator ID: CB ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

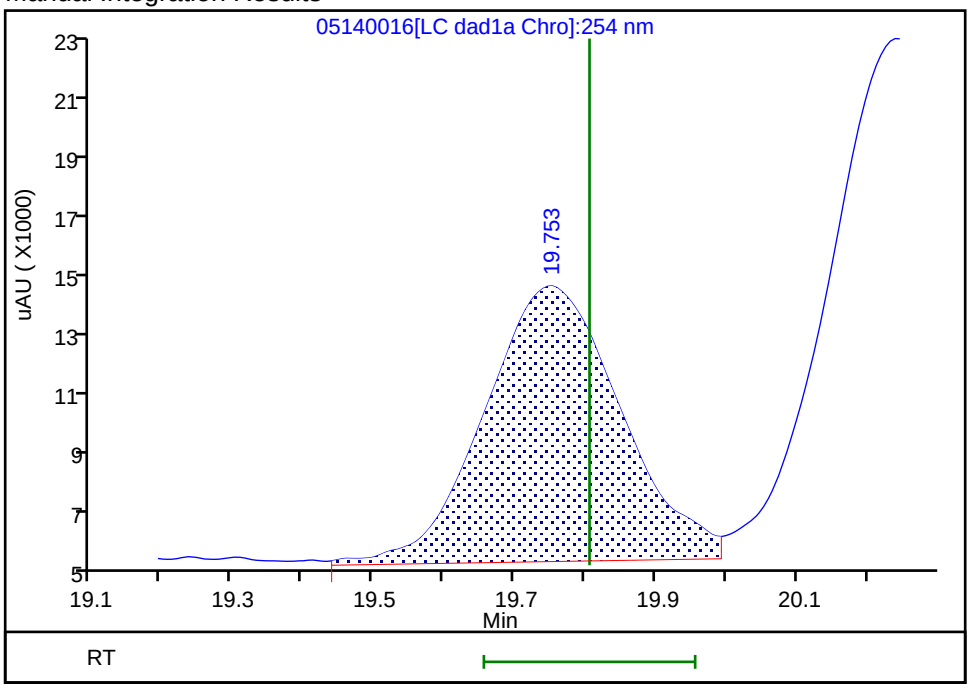
Processing Integration Results

RT: 19.75
Area: 106845
Amount: 0.315968
Amount Units: ug/ml



Manual Integration Results

RT: 19.75
Area: 121088
Amount: 0.403336
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

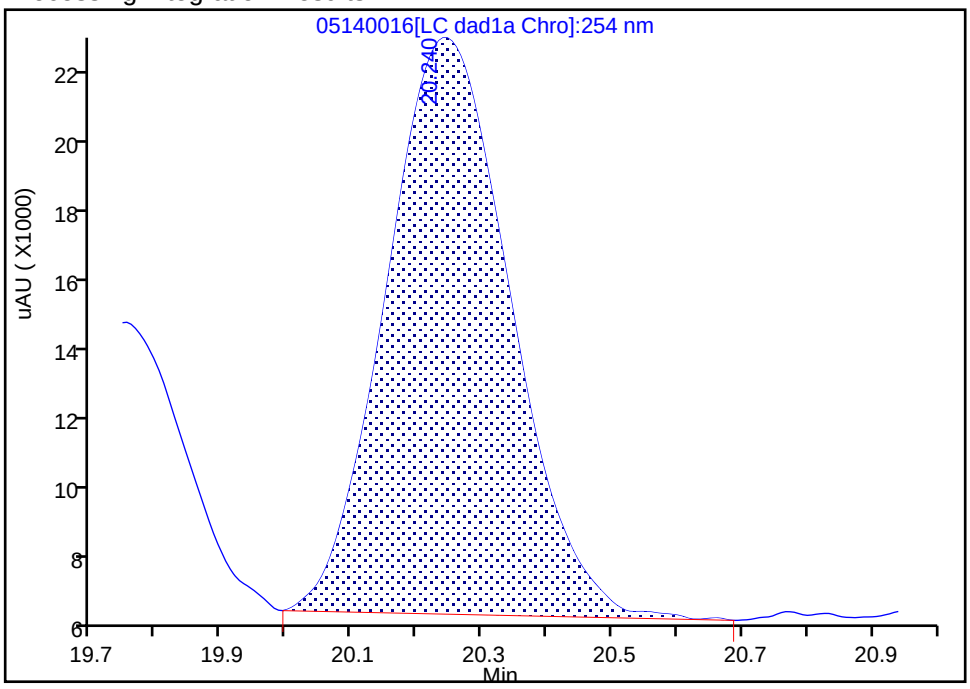
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

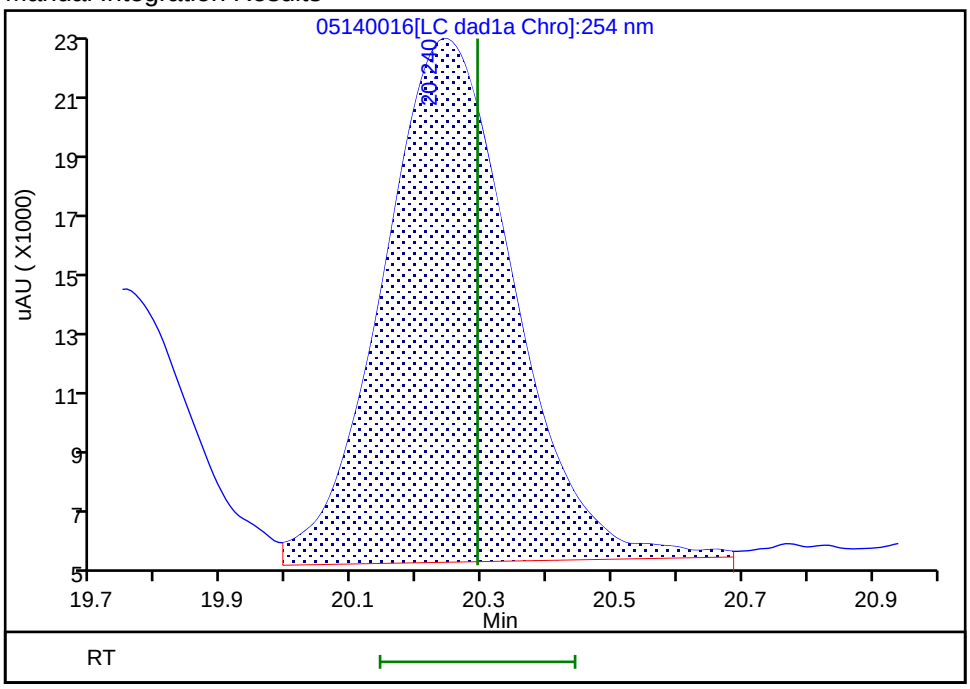
Processing Integration Results

RT: 20.24
Area: 217350
Amount: 0.339549
Amount Units: ug/ml



Manual Integration Results

RT: 20.24
Area: 236153
Amount: 0.368924
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-494886/26 Calibration Date: 05/15/2020 03:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 05140026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	391496		360	400	-10.2	15.0
DNX	Ave	321206	289486		361	400	-9.9	15.0
MNX	Lin2		268209		449	467	-3.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-494886/26 Calibration Date: 05/15/2020 03:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 05140026.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.41	5.27	5.57
DNX	6.22	6.08	6.38
MNX	7.73	7.59	7.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140026.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 15-May-2020 03:21:17 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0091518-026
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:01:05 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:38:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.408	5.417	-0.009	156755	0.4004	0.3597	
4 DNX	1	6.215	6.231	-0.016	115910	0.4004	0.3609	
7 MNX	1	7.728	7.744	-0.016	125200	0.4668	0.4488	

Reagents:

8330_OP_DMT_00008 Amount Added: 40.00 Units: uL

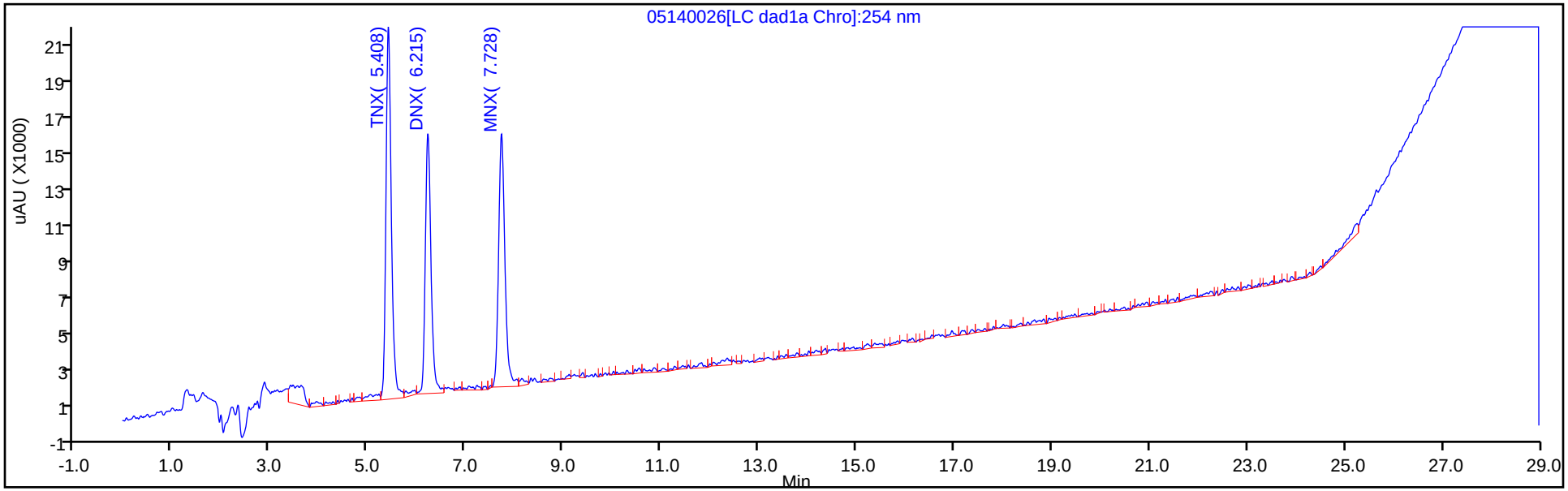
Report Date: 15-May-2020 12:01:06 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

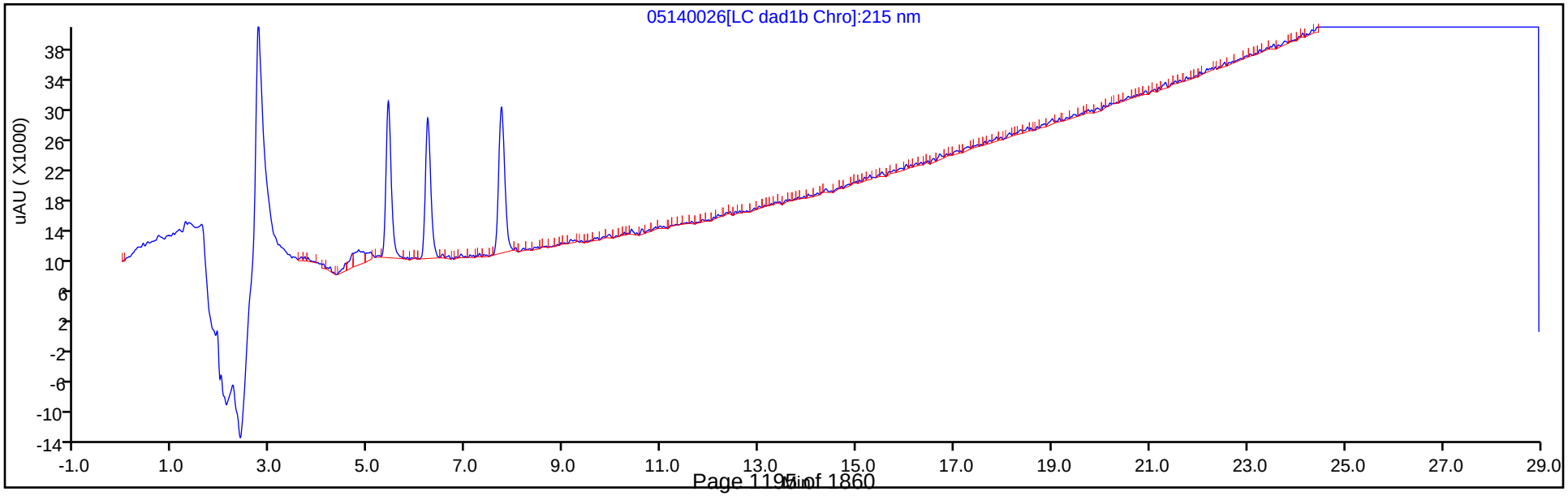
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140026.d

Injection Date:	15-May-2020 03:21:17	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV DMT			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/34 Calibration Date: 06/24/2020 11:51

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06230034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		187336		235	250	-6.2	15.0
Picric acid	Ave	193810	186332		240	250	-3.9	15.0
RDX	Ave	244360	239628		245	250	-1.9	15.0
Nitrobenzene	Ave	439227	415948		238	251	-5.3	15.0
1,3-Dinitrobenzene	Ave	674189	659824		245	251	-2.1	15.0
Nitroglycerin	Ave	126803	139817		2760	2500	10.3	15.0
2-Nitrotoluene	Ave	272965	256712		235	250	-6.0	15.0
4-Nitrotoluene	Ave	240881	237948		247	251	-1.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	324935		236	250	-5.9	15.0
3-Nitrotoluene	Ave	298327	292348		245	250	-2.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	457721		247	251	-1.6	15.0
1,3,5-Trinitrobenzene	Ave	472451	476559		253	251	0.9	15.0
2,6-Dinitrotoluene	Lin2		308100		252	251	0.4	15.0
2,4-Dinitrotoluene	Ave	640113	622163		244	251	-2.8	15.0
Tetryl	Ave	368678	349222		237	251	-5.3	15.0
2,4,6-Trinitrotoluene	Lin1		399920		242	251	-3.6	15.0
PETN	Lin1		142828		2550	2500	2.0	15.0
1,2-Dinitrobenzene	Lin1		309352		272	250	8.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/34 Calibration Date: 06/24/2020 11:51

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06230034.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.14	7.00	7.30
Picric acid	8.43	8.32	8.62
RDX	9.36	9.21	9.51
Nitrobenzene	12.26	12.11	12.41
1,3-Dinitrobenzene	15.79	15.65	15.95
Nitroglycerin	16.03	15.88	16.18
2-Nitrotoluene	16.73	16.58	16.88
4-Nitrotoluene	17.02	16.87	17.17
4-Amino-2,6-dinitrotoluene	17.45	17.30	17.60
3-Nitrotoluene	17.94	17.79	18.09
2-Amino-4,6-dinitrotoluene	18.39	18.24	18.54
1,3,5-Trinitrobenzene	19.12	18.97	19.27
2,6-Dinitrotoluene	20.06	19.90	20.20
2,4-Dinitrotoluene	20.57	20.41	20.71
Tetryl	23.88	23.72	24.02
2,4,6-Trinitrotoluene	24.90	24.74	25.04
PETN	25.43	25.28	25.58
1,2-Dinitrobenzene	13.26	13.11	13.41

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230034.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 24-Jun-2020 11:51:05 ALS Bottle#: 7 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092679-034
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 18:52:05 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 14:10:07

	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	4.424	4.417	0.007	108507	0.2500	0.2527	
	2 2,4-diamino-6-nitrotoluene	1	4.971	4.930	0.041	68617	0.2500	0.2653	
	6 HMX	1	7.144	7.150	-0.006	46834	0.2500	0.2345	
	5 2,4,6-Trinitrophenol	1	8.431	8.470	-0.039	46583	0.2500	0.2404	
	8 RDX	1	9.357	9.363	-0.006	59907	0.2500	0.2452	
	9 Nitrobenzene	1	12.257	12.263	-0.006	104403	0.2510	0.2377	
$	10 1,2-Dinitrobenzene	1	13.264	13.263	0.001	77338	0.2500	0.2723	
	11 3,5-Dinitroaniline	1	15.197	15.203	-0.006	121544	0.2500	0.2449	
	12 1,3-Dinitrobenzene	1	15.791	15.797	-0.006	165286	0.2505	0.2452	
	13 Nitroglycerin	2	16.031	16.030	0.001	349543	2.50	2.76	M
	14 o-Nitrotoluene	1	16.731	16.730	0.001	64178	0.2500	0.2351	M
	15 p-Nitrotoluene	1	17.017	17.017	0.000	59606	0.2505	0.2474	M
	16 4-Amino-2,6-dinitrotoluene	1	17.451	17.450	0.001	81315	0.2503	0.2355	M
	17 m-Nitrotoluene	1	17.944	17.943	0.001	73160	0.2503	0.2452	M
	18 2-Amino-4,6-dinitrotoluene	1	18.391	18.390	0.001	114888	0.2510	0.2470	M
	19 1,3,5-Trinitrobenzene	1	19.124	19.123	0.001	119378	0.2505	0.2527	M
	20 2,6-Dinitrotoluene	1	20.057	20.050	0.007	77333	0.2510	0.2520	M
	21 2,4-Dinitrotoluene	1	20.571	20.564	0.008	156163	0.2510	0.2440	M
	22 Tetryl	1	23.878	23.870	0.008	87480	0.2505	0.2373	
	23 2,4,6-Trinitrotoluene	1	24.898	24.890	0.008	100380	0.2510	0.2421	
	24 PETN	2	25.431	25.430	0.001	357069	2.50	2.55	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

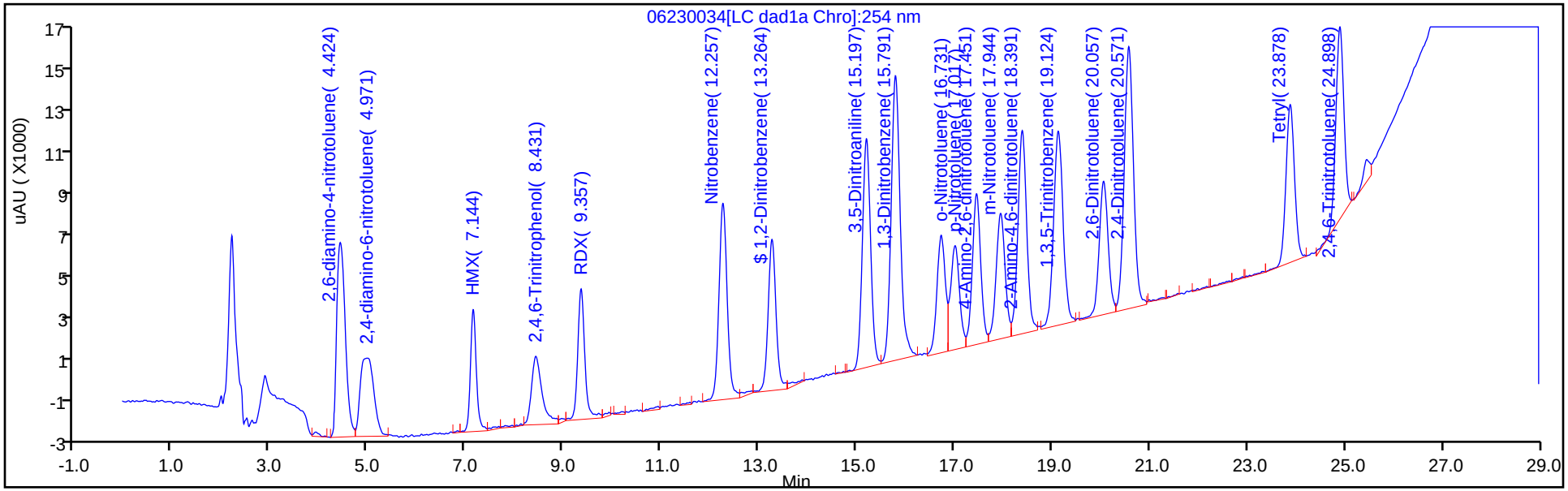
Report Date: 24-Jun-2020 18:52:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

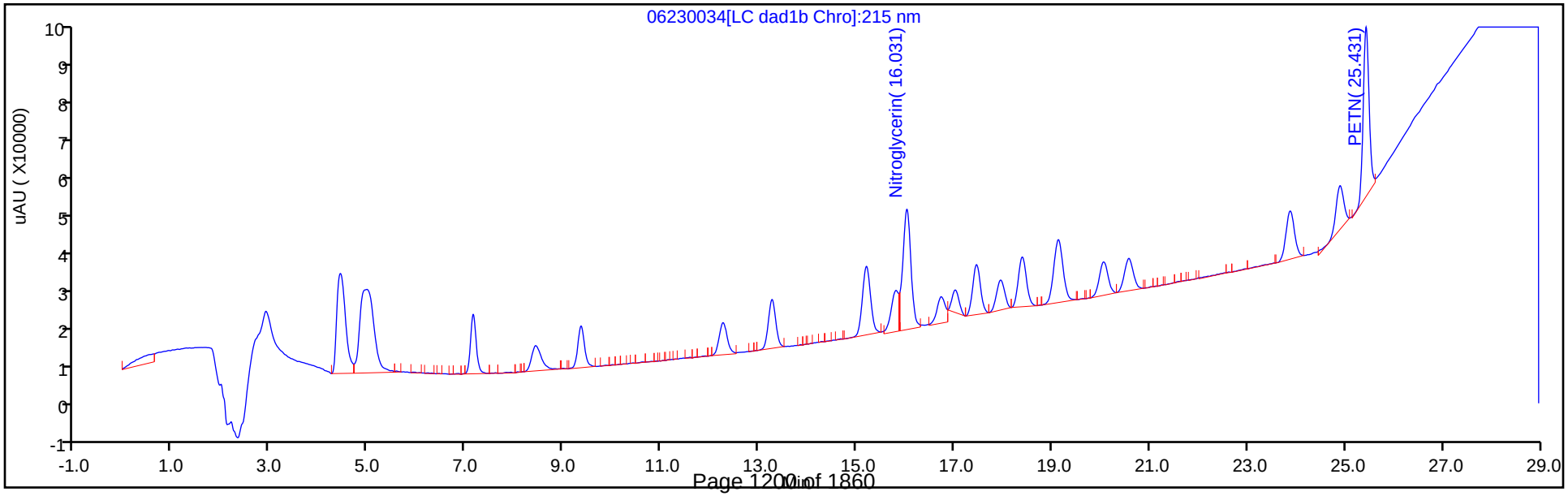
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d

Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

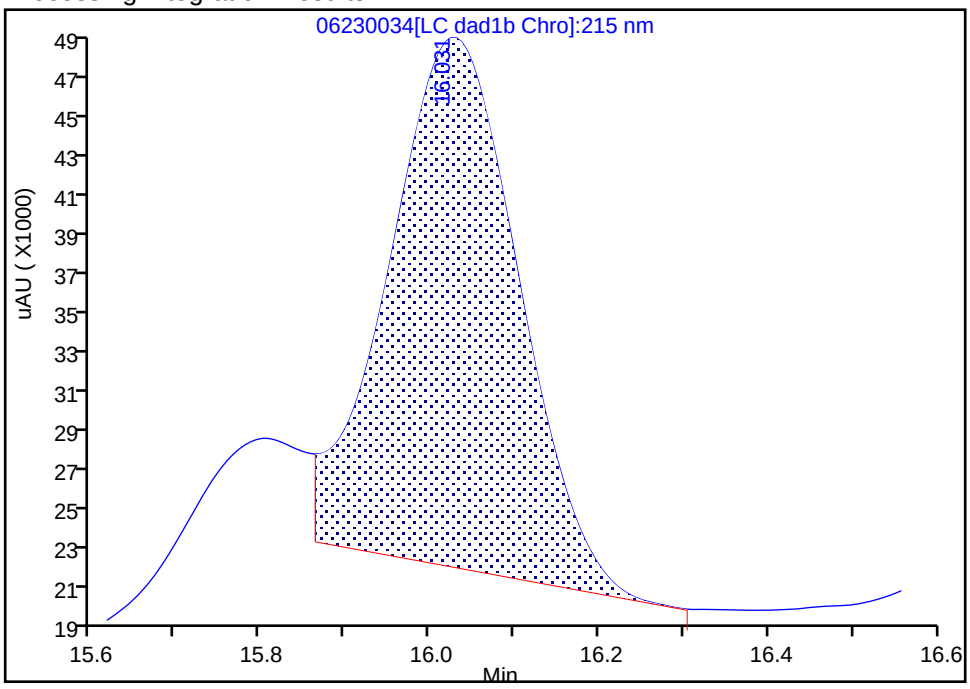
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

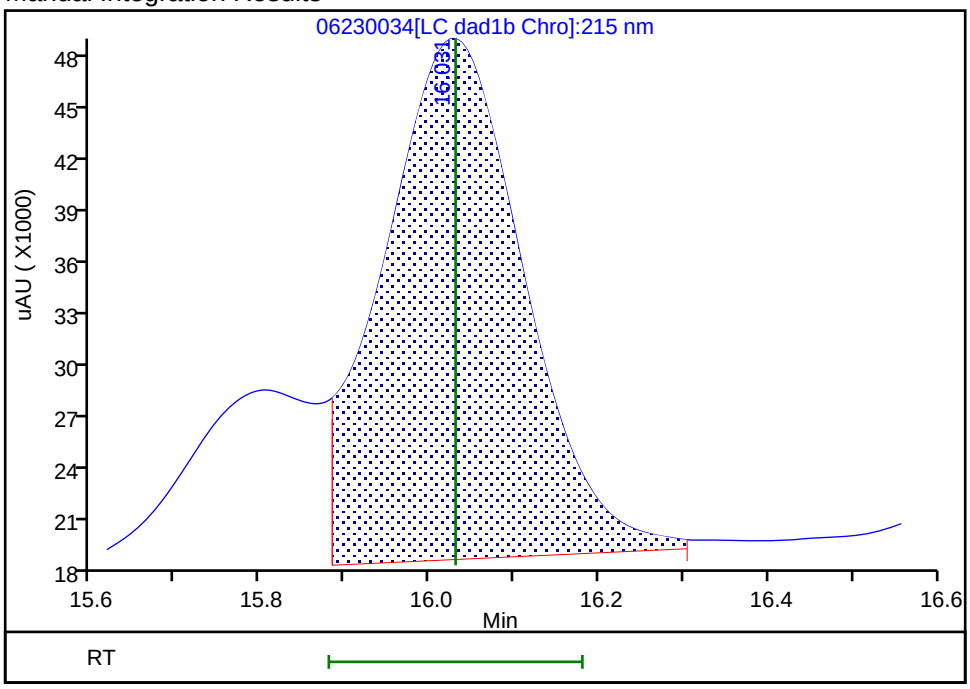
Processing Integration Results

RT: 16.03
Area: 289654
Amount: 2.284278
Amount Units: ug/ml



Manual Integration Results

RT: 16.03
Area: 349543
Amount: 2.756576
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 16:45:12

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

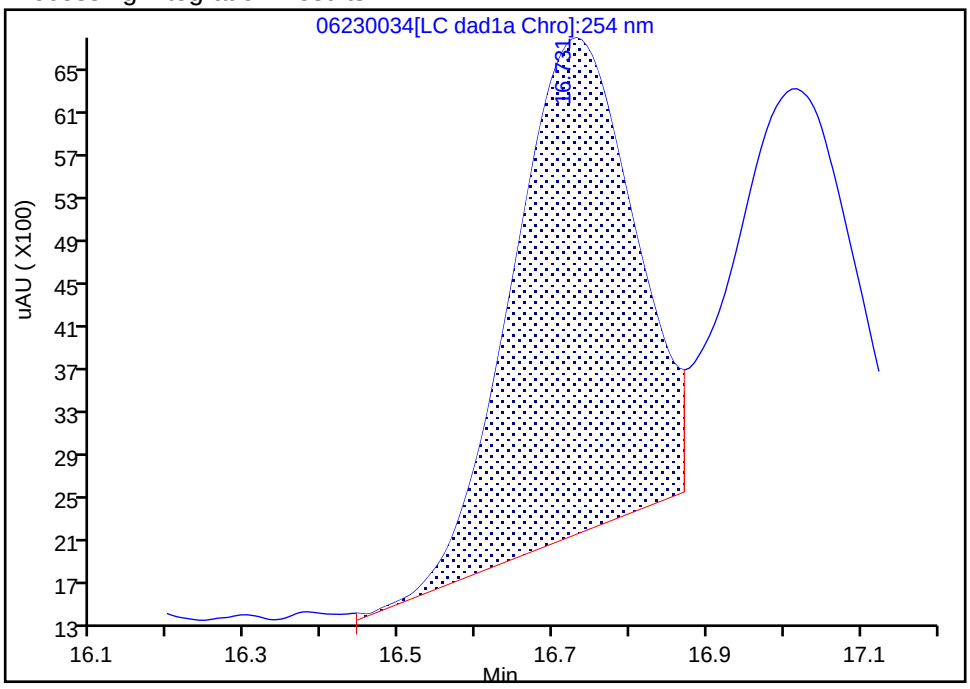
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

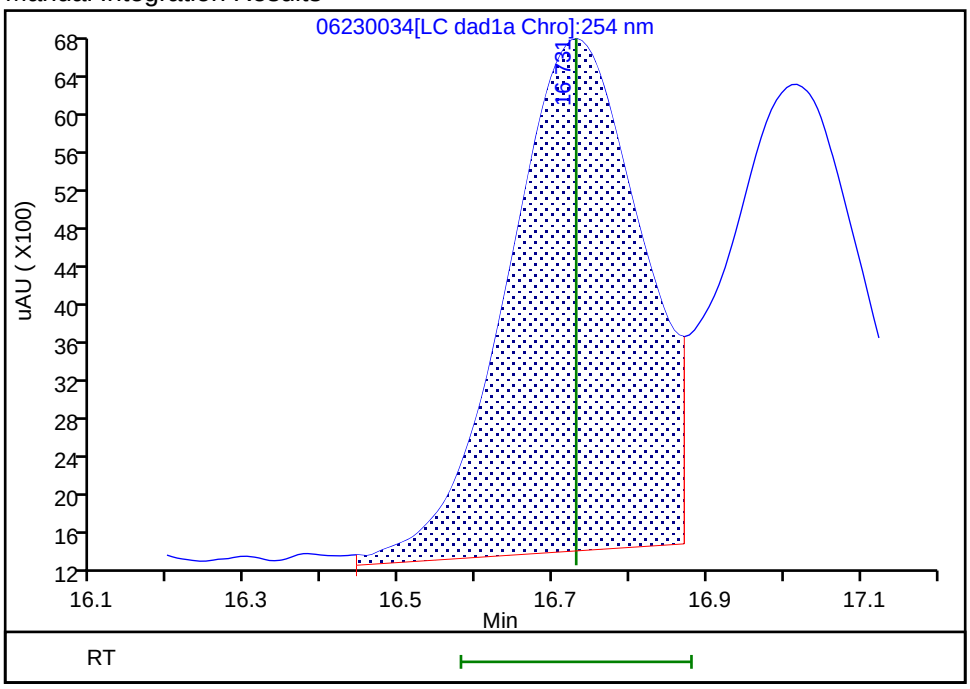
Processing Integration Results

RT: 16.73
Area: 50726
Amount: 0.185834
Amount Units: ug/ml



Manual Integration Results

RT: 16.73
Area: 64178
Amount: 0.235115
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

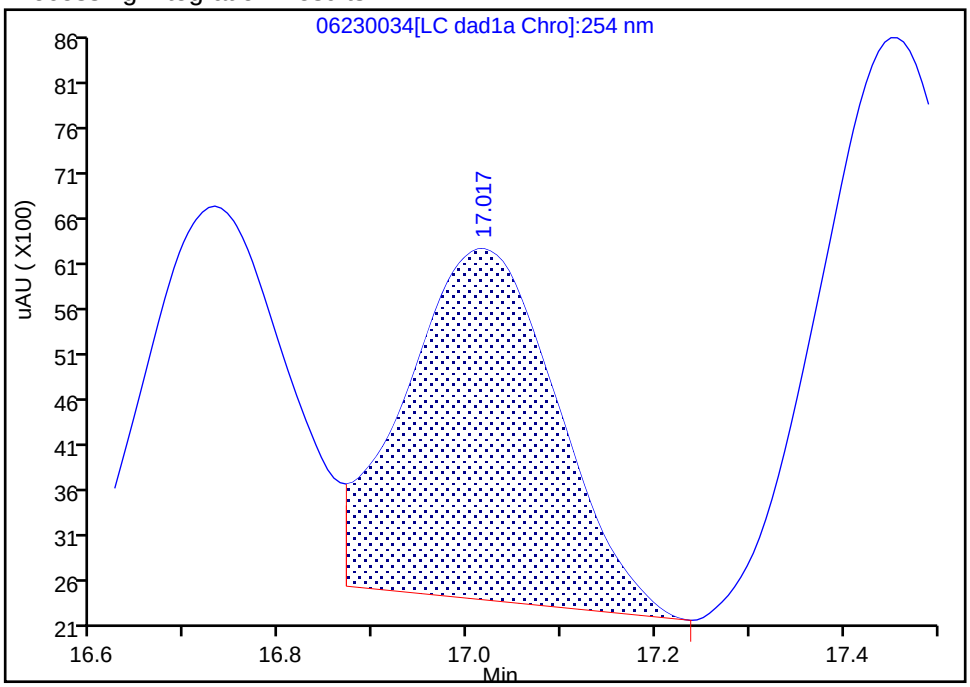
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

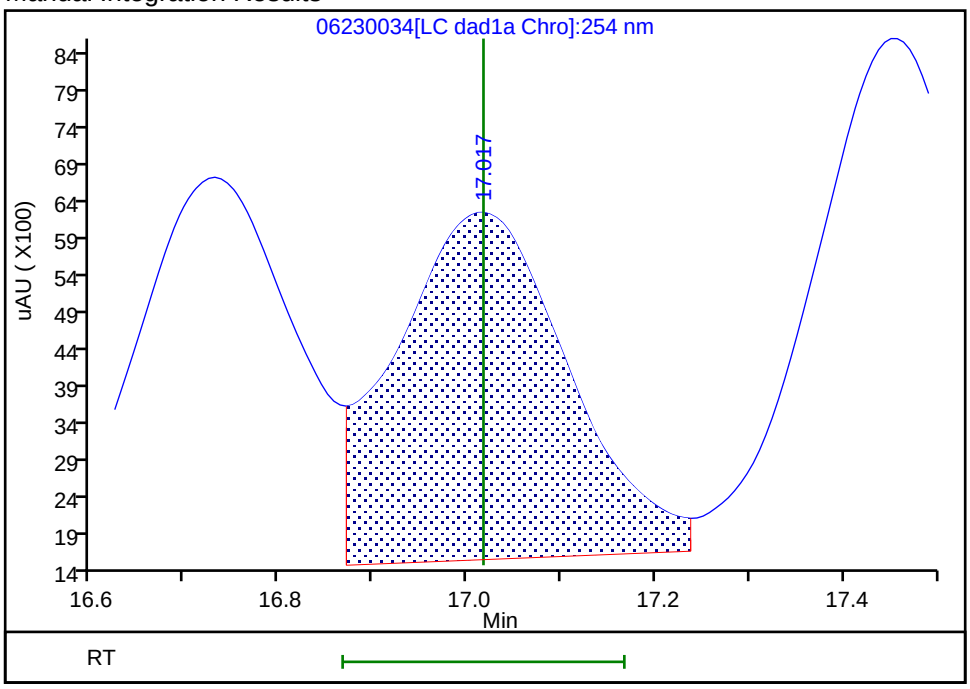
Processing Integration Results

RT: 17.02
Area: 43634
Amount: 0.181143
Amount Units: ug/ml



Manual Integration Results

RT: 17.02
Area: 59606
Amount: 0.247450
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

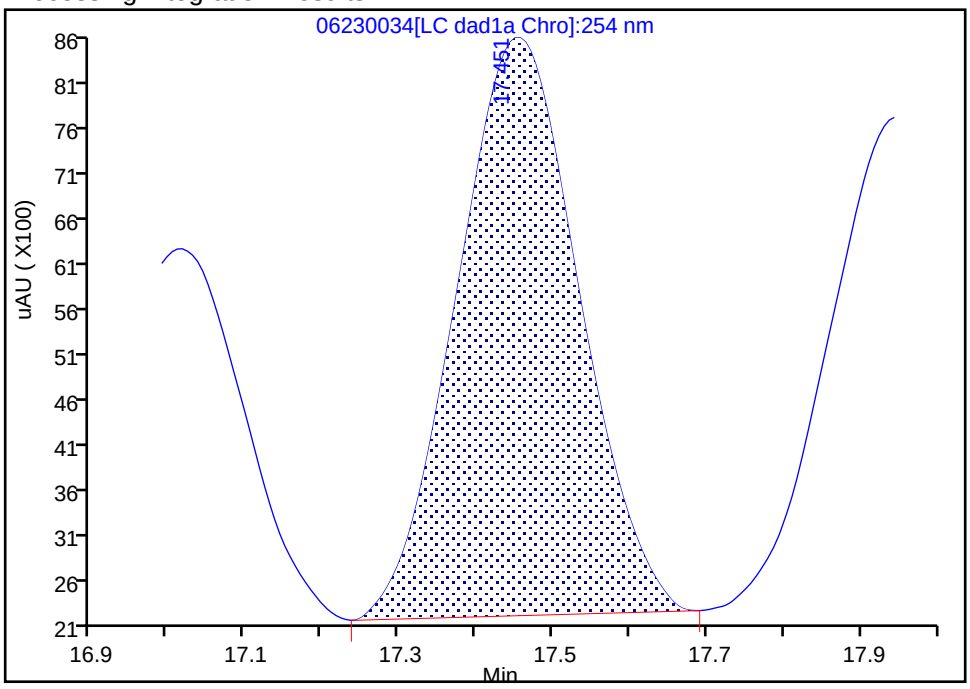
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

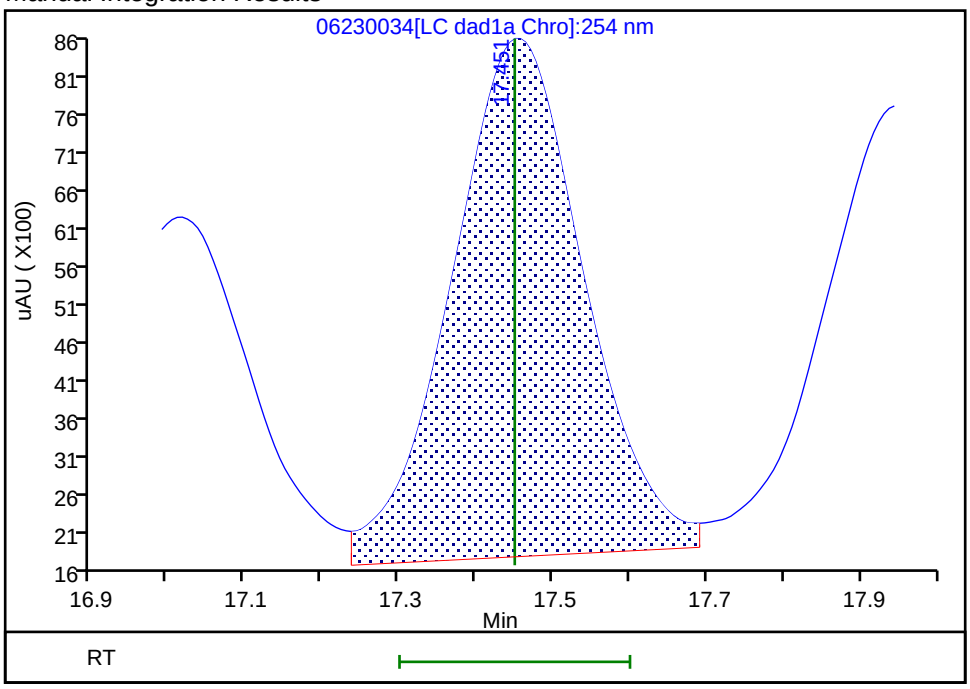
Processing Integration Results

RT: 17.45
Area: 71020
Amount: 0.205715
Amount Units: ug/ml



Manual Integration Results

RT: 17.45
Area: 81315
Amount: 0.235535
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

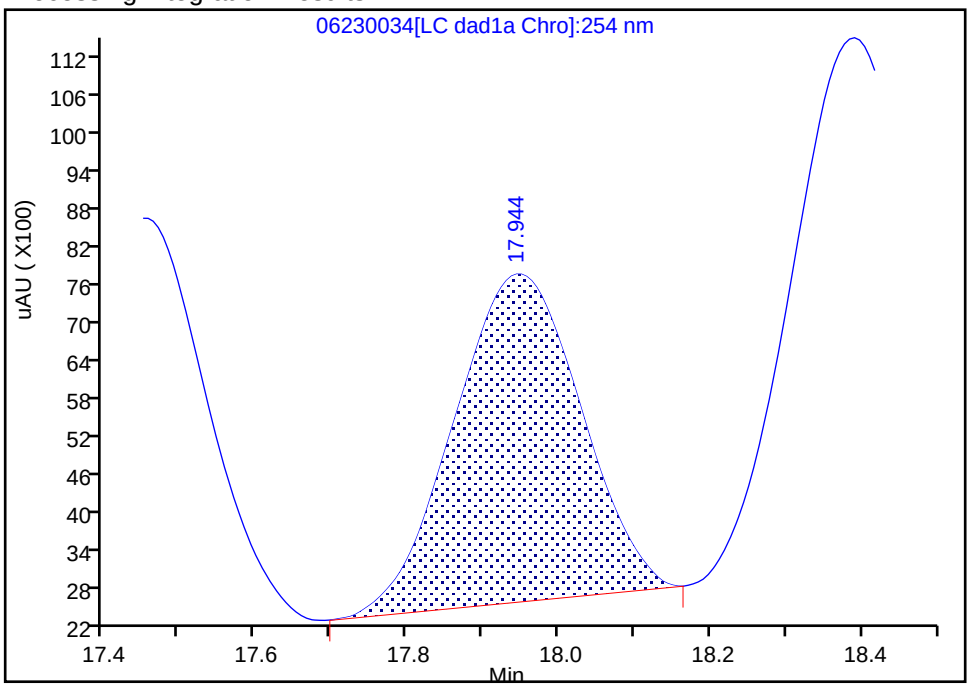
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

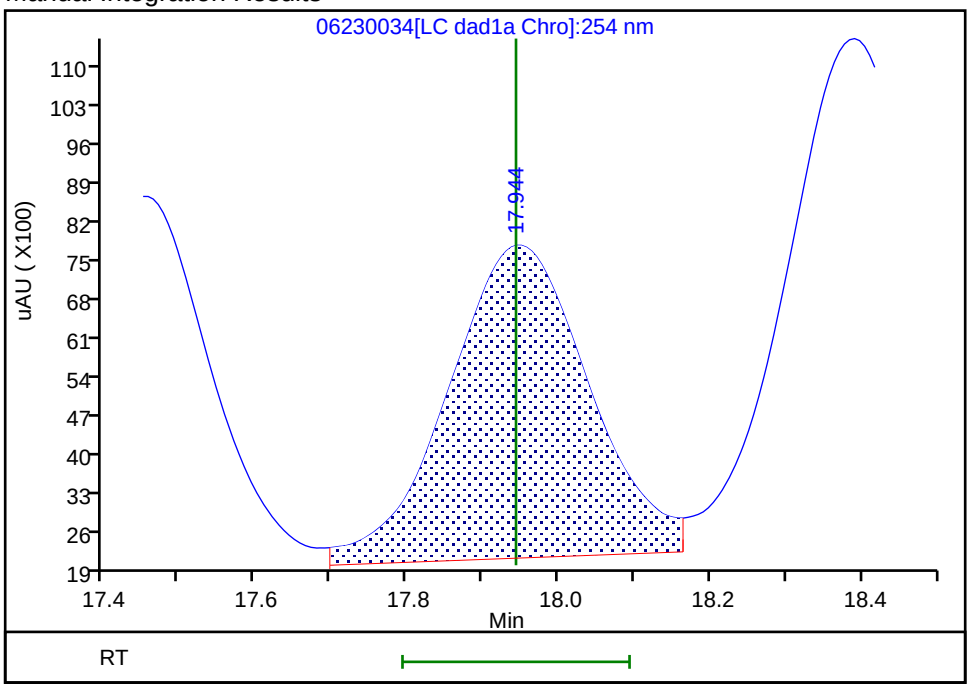
Processing Integration Results

RT: 17.94
Area: 60266
Amount: 0.202013
Amount Units: ug/ml



Manual Integration Results

RT: 17.94
Area: 73160
Amount: 0.245234
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

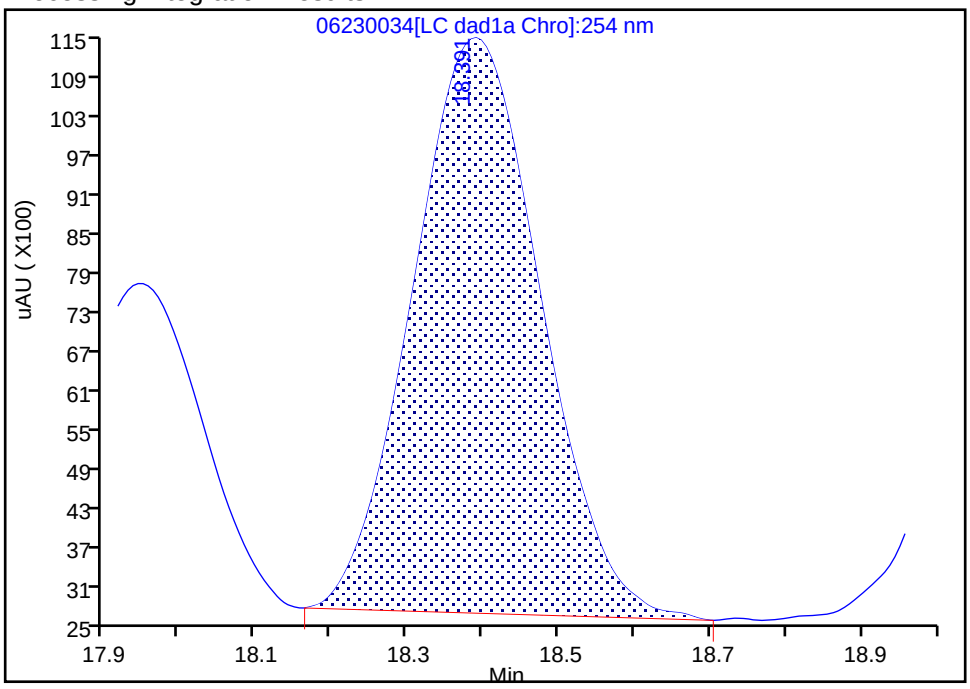
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

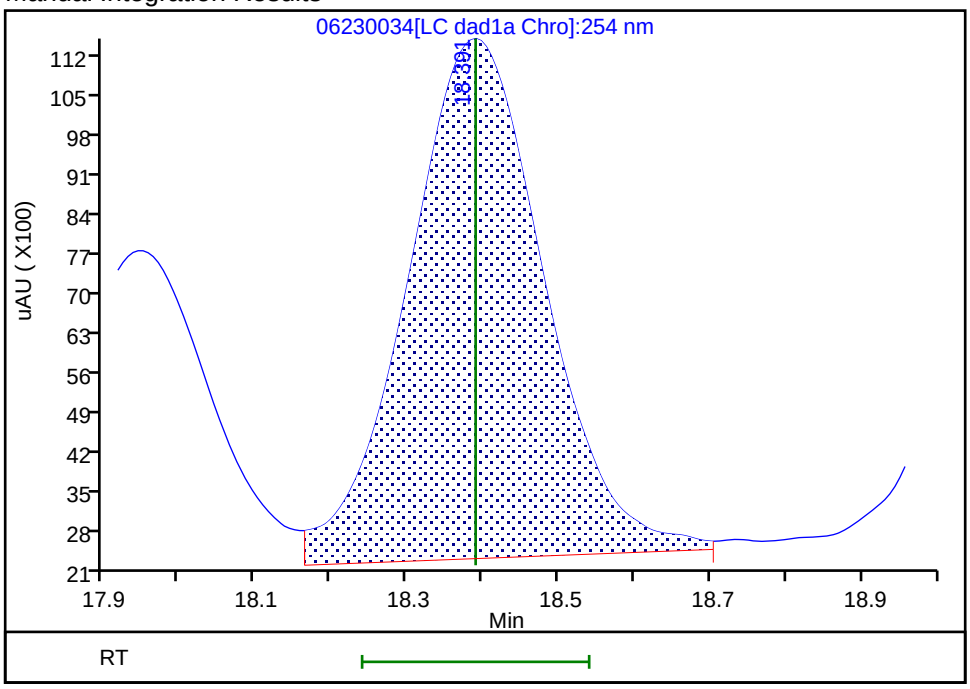
Processing Integration Results

RT: 18.39
Area: 102721
Amount: 0.220805
Amount Units: ug/ml



Manual Integration Results

RT: 18.39
Area: 114888
Amount: 0.246959
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

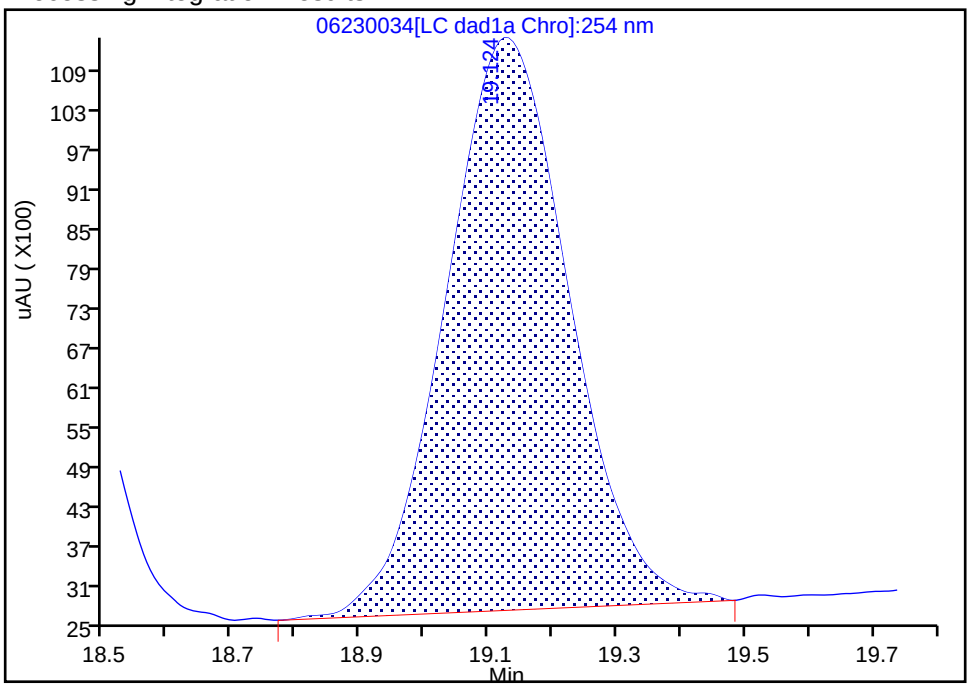
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

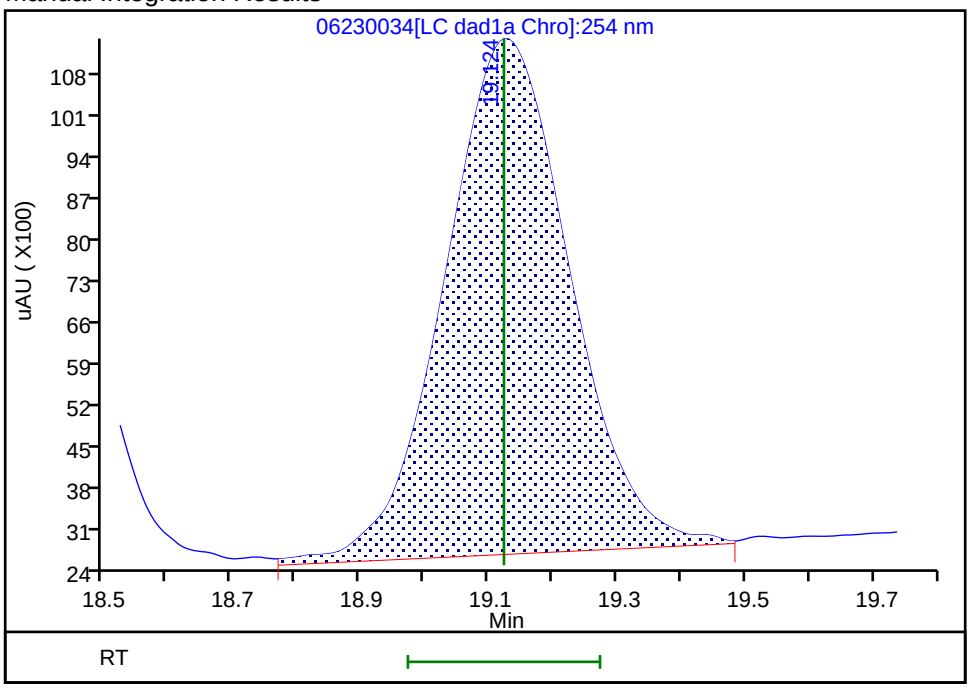
Processing Integration Results

RT: 19.12
Area: 116211
Amount: 0.245975
Amount Units: ug/ml



Manual Integration Results

RT: 19.12
Area: 119378
Amount: 0.252678
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

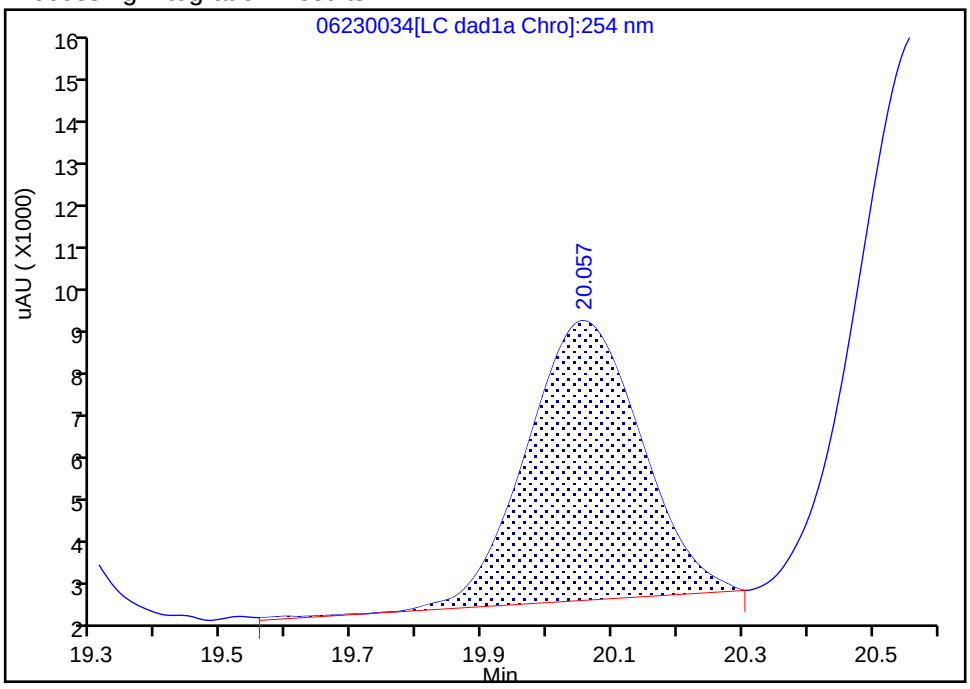
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

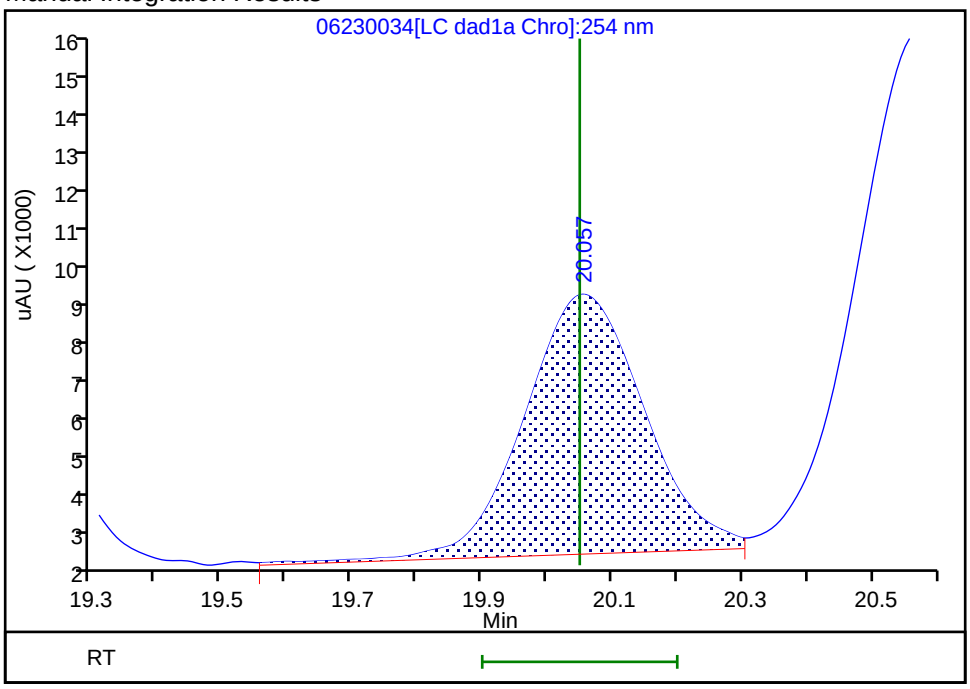
Processing Integration Results

RT: 20.06
Area: 71823
Amount: 0.232997
Amount Units: ug/ml



Manual Integration Results

RT: 20.06
Area: 77333
Amount: 0.252049
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

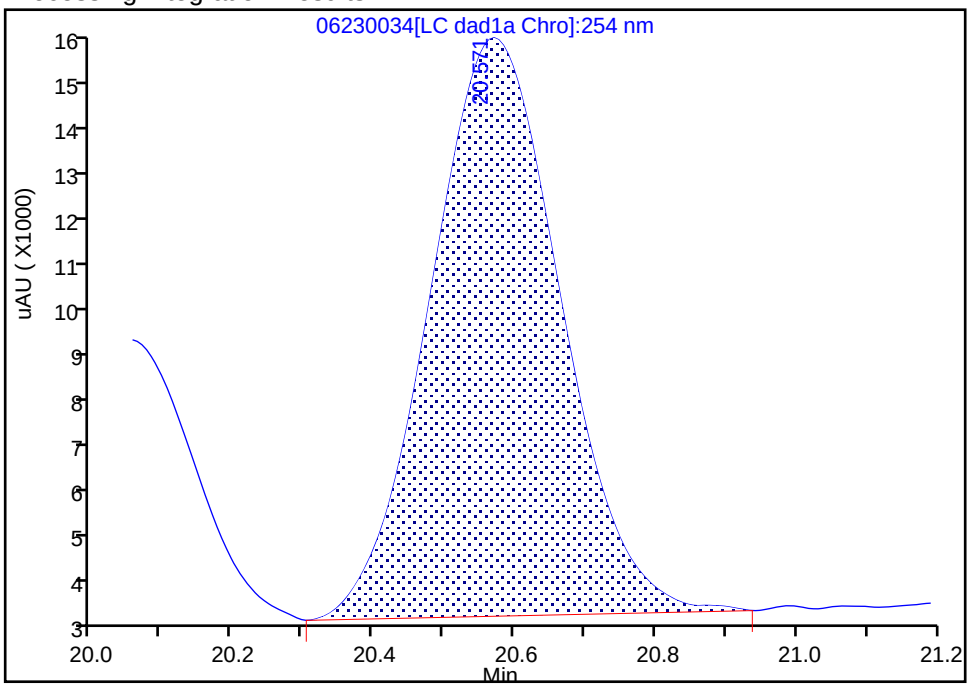
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

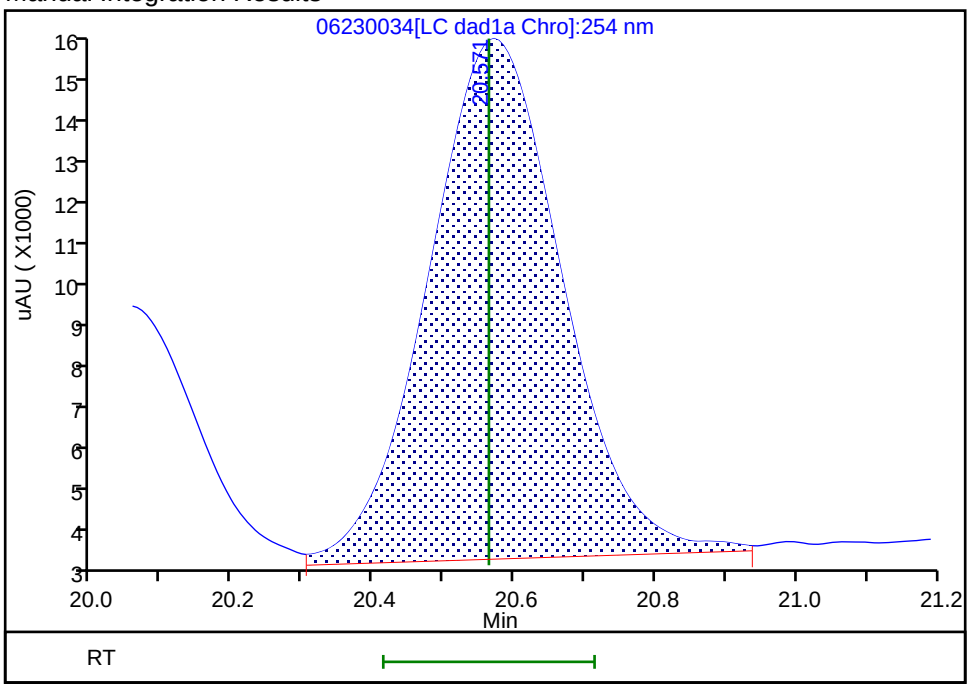
Processing Integration Results

RT: 20.57
Area: 149437
Amount: 0.233454
Amount Units: ug/ml



Manual Integration Results

RT: 20.57
Area: 156163
Amount: 0.243961
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 14:09:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/35 Calibration Date: 06/24/2020 12:26

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06230035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	395421		227	250	-9.3	15.0
DNX	Ave	321206	309526		241	250	-3.6	15.0
MNX	Lin2		286732		293	292	0.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/35 Calibration Date: 06/24/2020 12:26

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06230035.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.36	5.66
DNX	6.36	6.19	6.49
MNX	7.92	7.73	8.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230035.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	24-Jun-2020 12:26:04	ALS Bottle#:	8	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092679-035				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 18:52:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:20:24		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.516	5.509	0.007	98954	0.2503	0.2271	M
4 DNX	1	6.356	6.336	0.020	77459	0.2503	0.2412	
7 MNX	1	7.916	7.876	0.040	83654	0.2918	0.2932	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

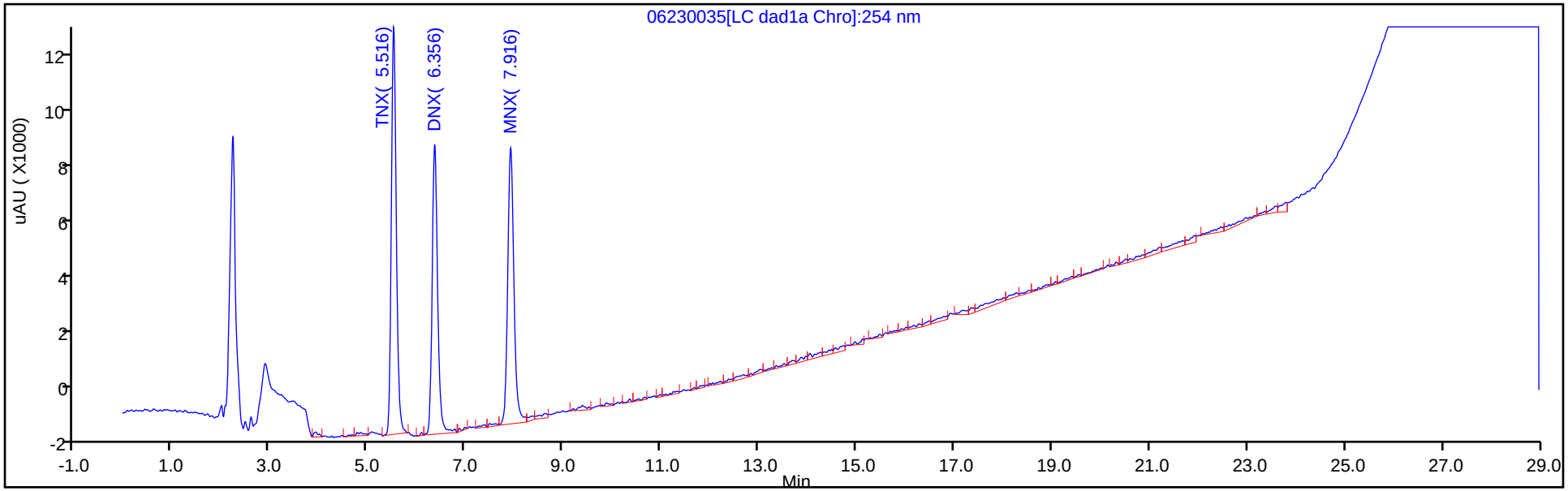
Report Date: 24-Jun-2020 18:52:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

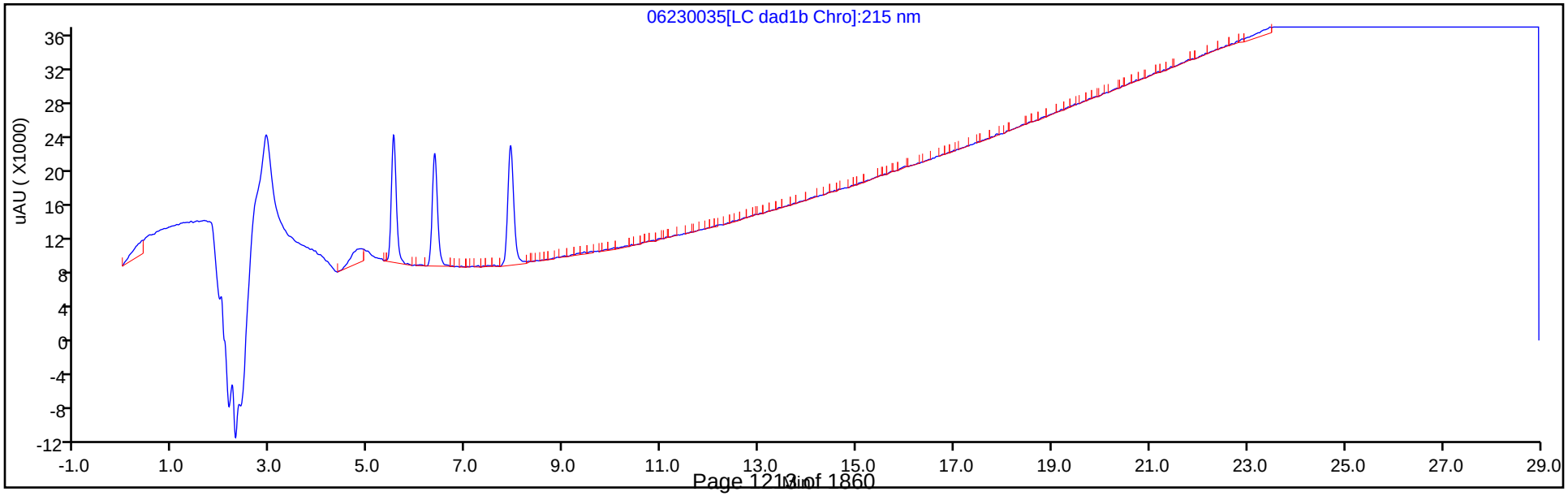
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230035.d

Injection Date:	24-Jun-2020 12:26:04	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

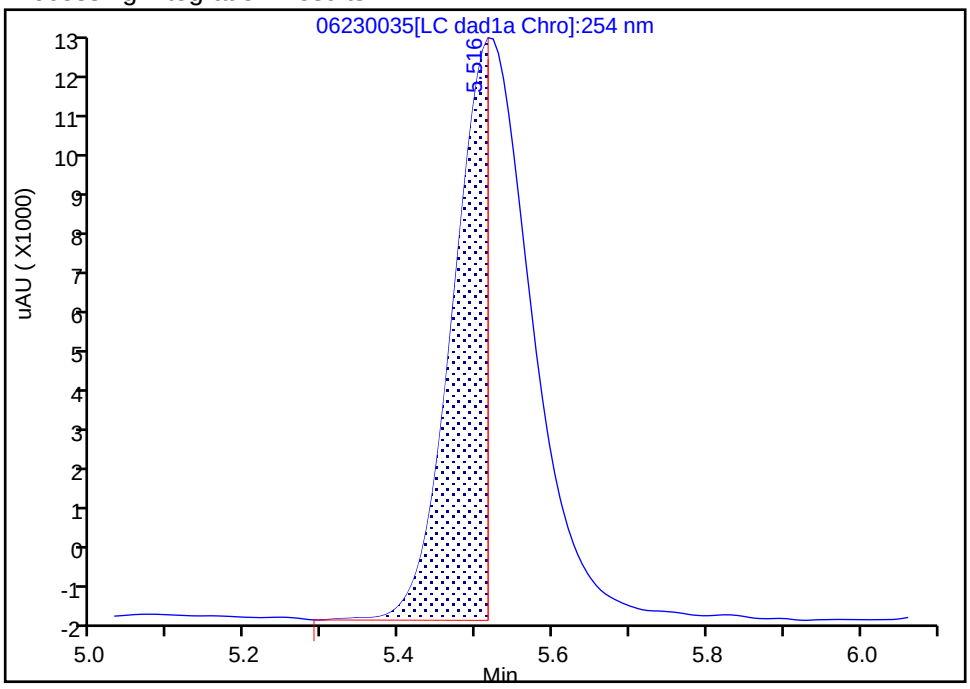
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230035.d				
Injection Date:	24-Jun-2020 12:26:04	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

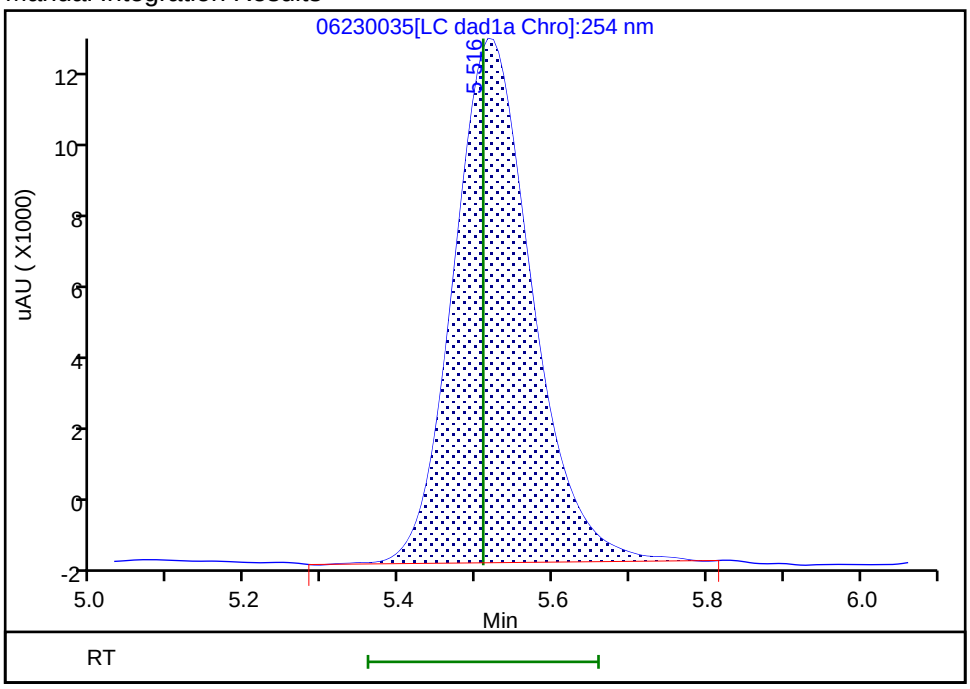
Processing Integration Results

RT: 5.52
Area: 43647
Amount: 0.100150
Amount Units: ug/ml



Manual Integration Results

RT: 5.52
Area: 98954
Amount: 0.227055
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:20:17

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/44 Calibration Date: 06/24/2020 17:40

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06230044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		182928		228	250	-8.7	15.0
Picric acid	Ave	193810	189396		244	250	-2.3	15.0
RDX	Ave	244360	229896		235	250	-5.9	15.0
Nitrobenzene	Ave	439227	393016		225	251	-10.5	15.0
1,3-Dinitrobenzene	Ave	674189	656244		244	251	-2.7	15.0
Nitroglycerin	Ave	126803	142914		2820	2500	12.7	15.0
2-Nitrotoluene	Ave	272965	242460		222	250	-11.2	15.0
4-Nitrotoluene	Ave	240881	223601		233	251	-7.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	320879		233	250	-7.1	15.0
3-Nitrotoluene	Ave	298327	275956		231	250	-7.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	447777		242	251	-3.7	15.0
1,3,5-Trinitrobenzene	Ave	472451	460559		244	251	-2.5	15.0
2,6-Dinitrotoluene	Lin2		293430		239	251	-4.7	15.0
2,4-Dinitrotoluene	Ave	640113	605825		238	251	-5.4	15.0
Tetryl	Ave	368678	349844		238	251	-5.1	15.0
2,4,6-Trinitrotoluene	Lin1		402012		243	251	-3.0	15.0
PETN	Lin1		143689		2570	2500	2.7	15.0
1,2-Dinitrobenzene	Lin1		300572		264	250	5.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/44 Calibration Date: 06/24/2020 17:40

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06230044.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.16	7.00	7.30
Picric acid	8.44	8.32	8.62
RDX	9.37	9.21	9.51
Nitrobenzene	12.28	12.11	12.41
1,3-Dinitrobenzene	15.81	15.65	15.95
Nitroglycerin	16.05	15.88	16.18
2-Nitrotoluene	16.75	16.58	16.88
4-Nitrotoluene	17.03	16.87	17.17
4-Amino-2,6-dinitrotoluene	17.47	17.30	17.60
3-Nitrotoluene	17.96	17.79	18.09
2-Amino-4,6-dinitrotoluene	18.40	18.24	18.54
1,3,5-Trinitrobenzene	19.14	18.97	19.27
2,6-Dinitrotoluene	20.06	19.90	20.20
2,4-Dinitrotoluene	20.58	20.41	20.71
Tetryl	23.89	23.72	24.02
2,4,6-Trinitrotoluene	24.91	24.74	25.04
PETN	25.44	25.28	25.58
1,2-Dinitrobenzene	13.28	13.11	13.41

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230044.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 24-Jun-2020 17:40:51 ALS Bottle#: 7 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092679-044
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 18:52:12 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:26:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.433	4.417	0.016	108483	0.2500	0.2527	
	2 2,4-diamino-6-nitrotoluene	1	4.973	4.930	0.043	71690	0.2500	0.2782	
	6 HMX	1	7.159	7.150	0.009	45732	0.2500	0.2283	
	5 2,4,6-Trinitrophenol	1	8.439	8.470	-0.031	47349	0.2500	0.2443	
	8 RDX	1	9.372	9.363	0.009	57474	0.2500	0.2352	
	9 Nitrobenzene	1	12.279	12.263	0.016	98647	0.2510	0.2246	
$	10 1,2-Dinitrobenzene	1	13.279	13.263	0.016	75143	0.2500	0.2644	
	11 3,5-Dinitroaniline	1	15.212	15.203	0.009	121360	0.2500	0.2445	
	12 1,3-Dinitrobenzene	1	15.812	15.797	0.015	164389	0.2505	0.2438	
	13 Nitroglycerin	2	16.046	16.030	0.016	357284	2.50	2.82	M
	14 o-Nitrotoluene	1	16.752	16.730	0.022	60615	0.2500	0.2221	M
	15 p-Nitrotoluene	1	17.032	17.017	0.015	56012	0.2505	0.2325	M
	16 4-Amino-2,6-dinitrotoluene	1	17.472	17.450	0.022	80300	0.2503	0.2326	M
	17 m-Nitrotoluene	1	17.959	17.943	0.016	69058	0.2503	0.2315	M
	18 2-Amino-4,6-dinitrotoluene	1	18.399	18.390	0.009	112392	0.2510	0.2416	M
	19 1,3,5-Trinitrobenzene	1	19.139	19.123	0.016	115370	0.2505	0.2442	M
	20 2,6-Dinitrotoluene	1	20.059	20.050	0.009	73651	0.2510	0.2393	M
	21 2,4-Dinitrotoluene	1	20.579	20.564	0.016	152062	0.2510	0.2376	M
	22 Tetryl	1	23.886	23.870	0.016	87636	0.2505	0.2377	
	23 2,4,6-Trinitrotoluene	1	24.906	24.890	0.016	100905	0.2510	0.2434	
	24 PETN	2	25.439	25.430	0.009	359223	2.50	2.57	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

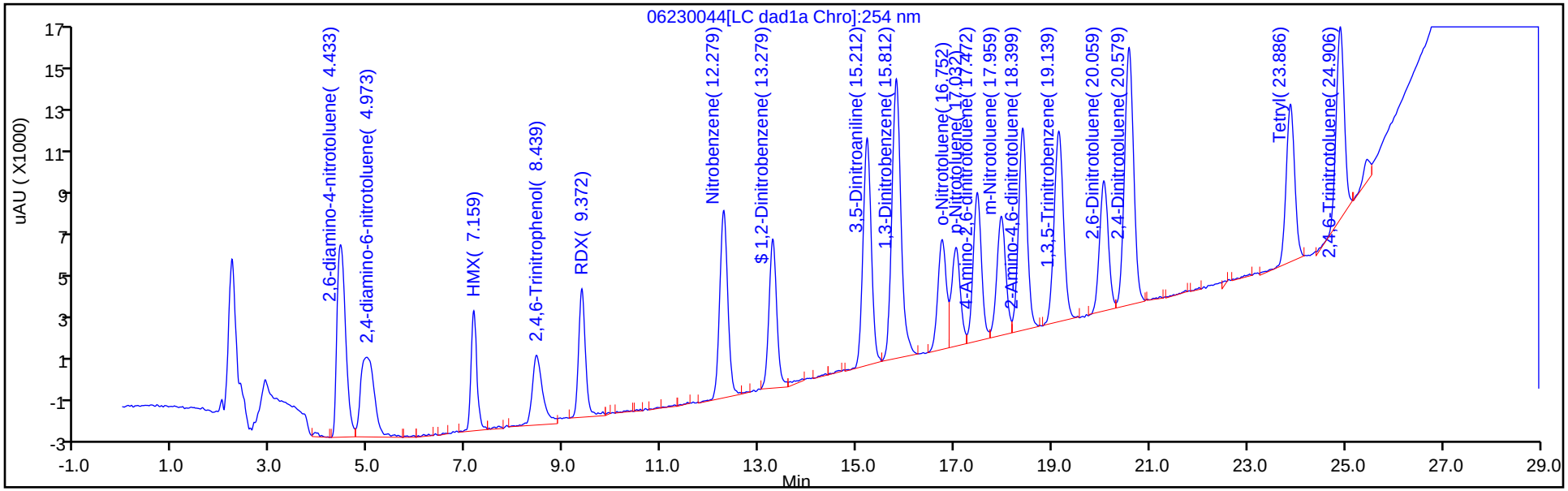
Report Date: 24-Jun-2020 18:52:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

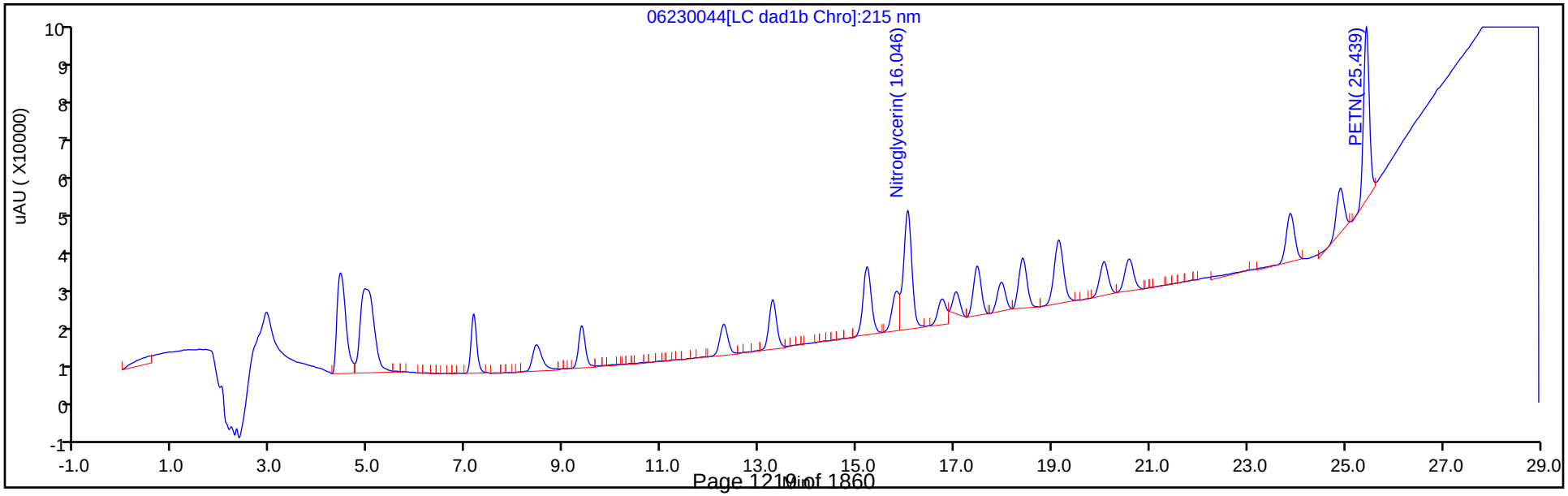
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d

Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	44
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

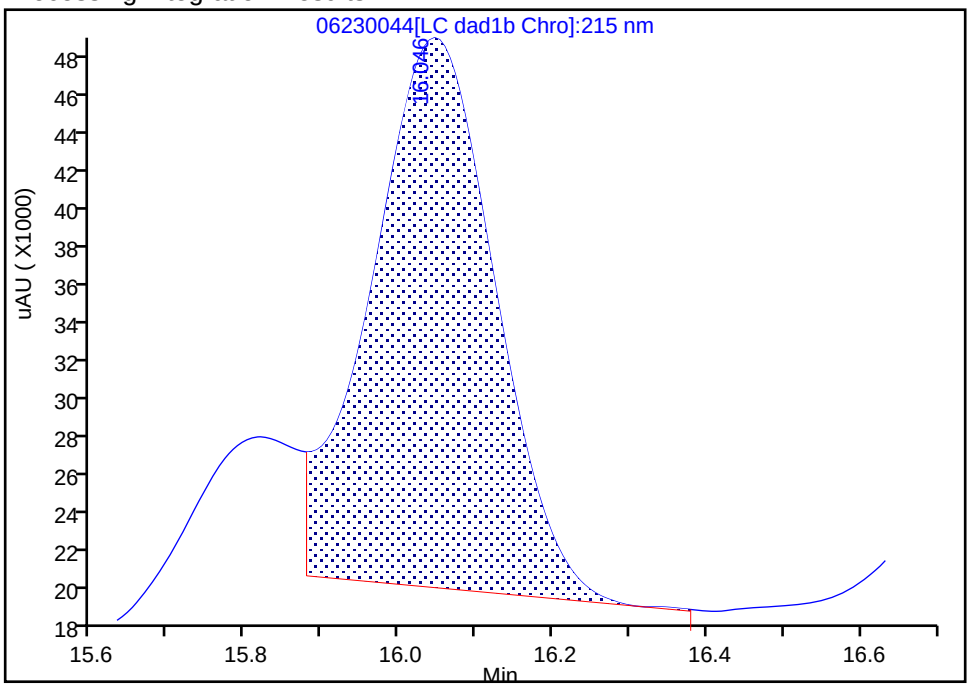
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d		
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA
Lims ID:	CCV		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	7 Worklist Smp#: 44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330
Column:		Detector	LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

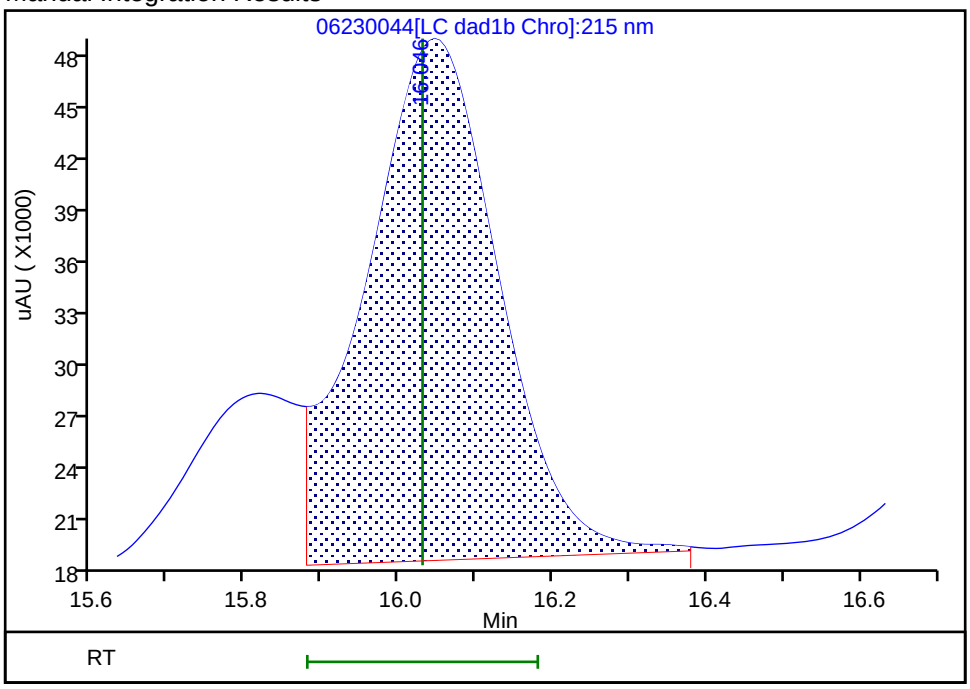
Processing Integration Results

RT: 16.05
Area: 313754
Amount: 2.474336
Amount Units: ug/ml



Manual Integration Results

RT: 16.05
Area: 357284
Amount: 2.817623
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:33

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

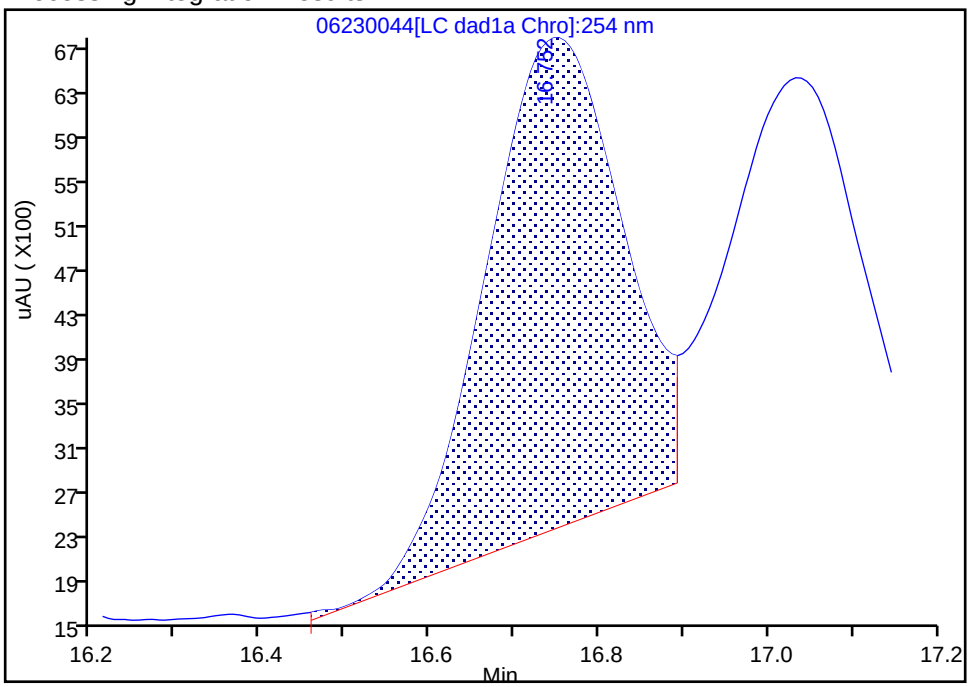
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

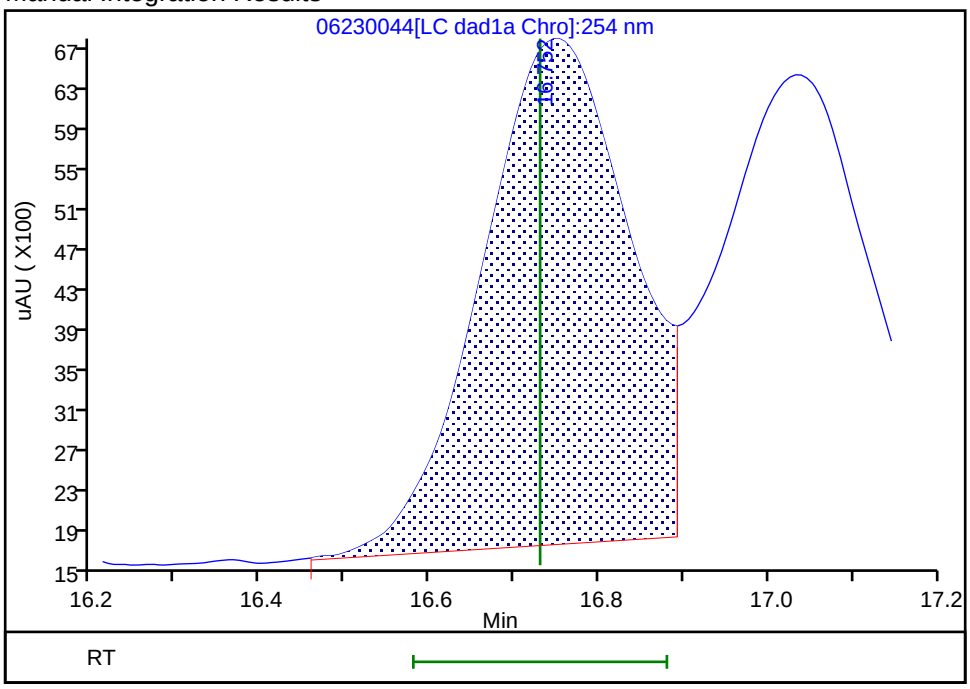
Processing Integration Results

RT: 16.75
Area: 49032
Amount: 0.179628
Amount Units: ug/ml



Manual Integration Results

RT: 16.75
Area: 60615
Amount: 0.222062
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

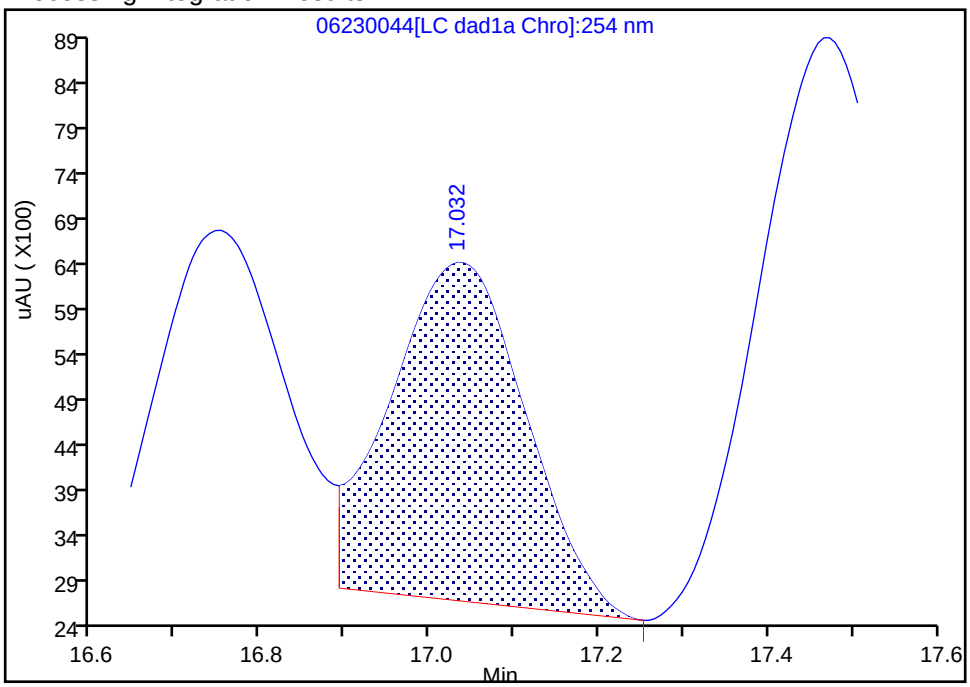
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

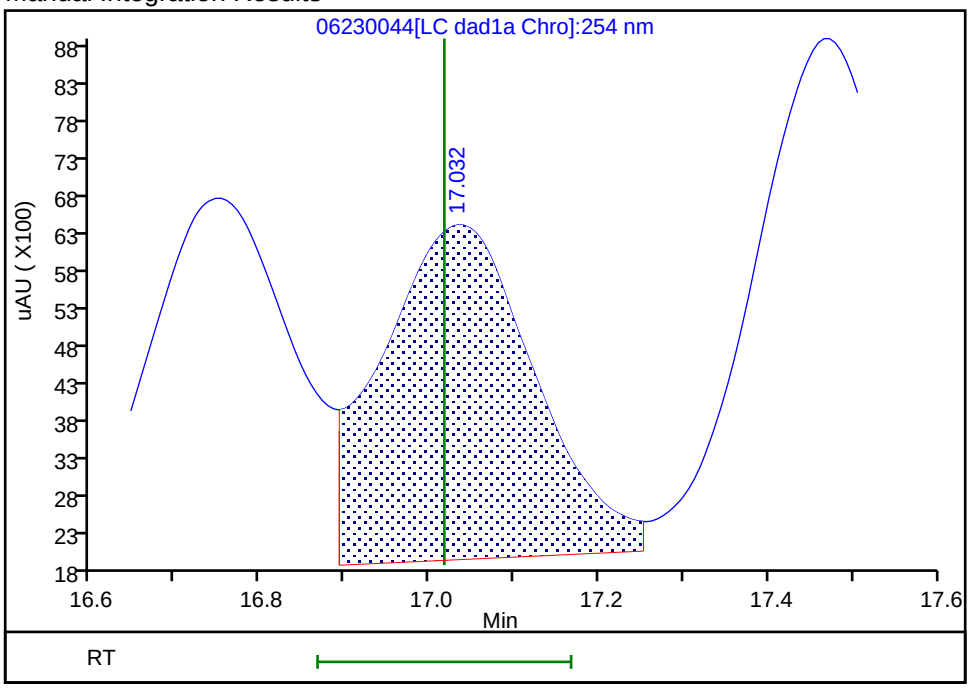
Processing Integration Results

RT: 17.03
Area: 41562
Amount: 0.172541
Amount Units: ug/ml



Manual Integration Results

RT: 17.03
Area: 56012
Amount: 0.232529
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

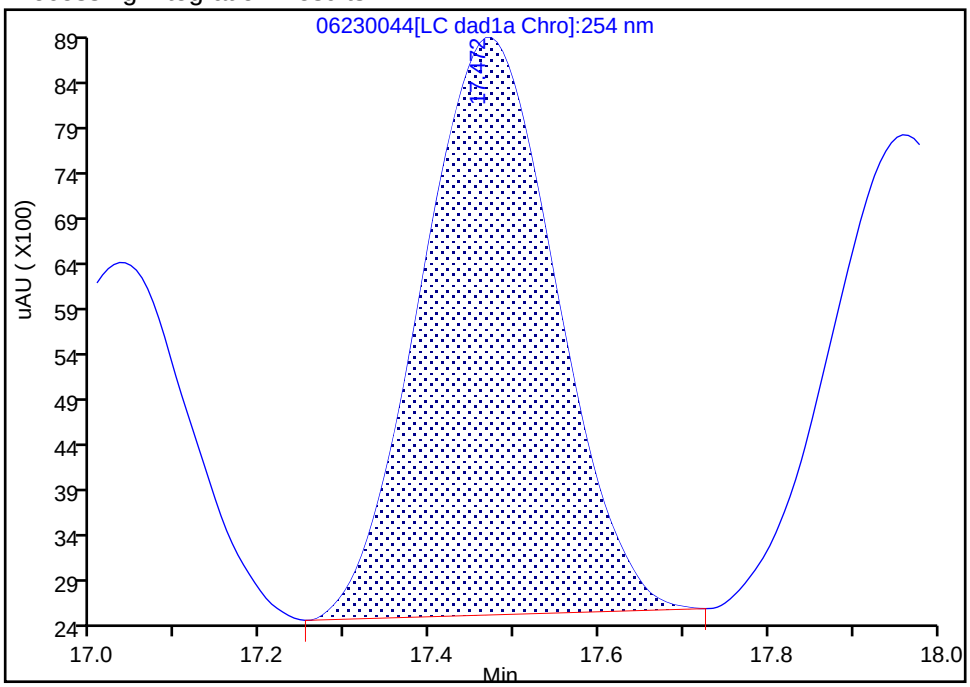
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

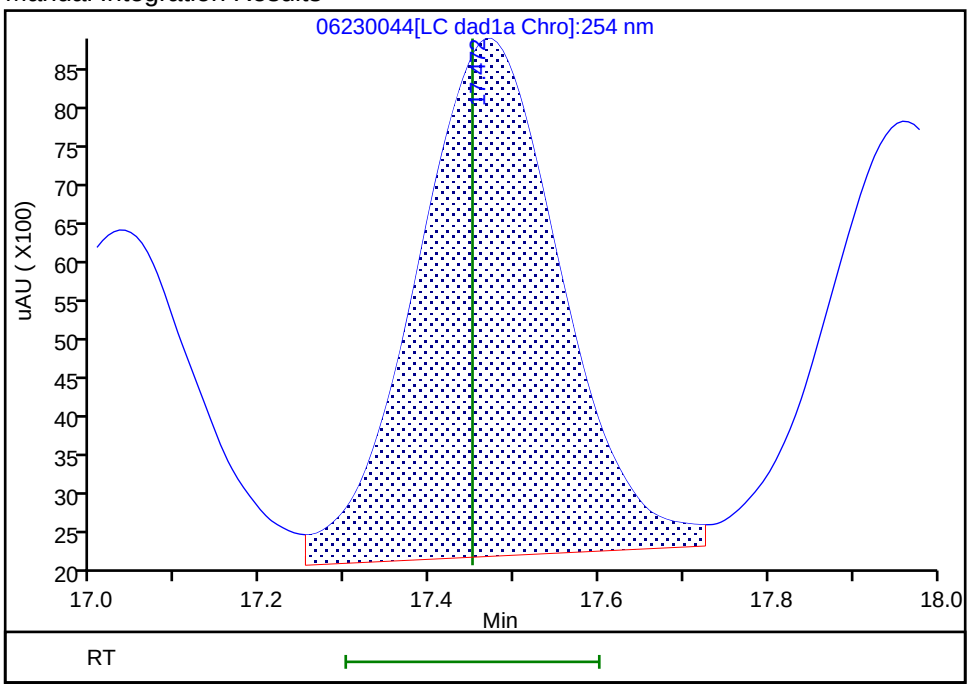
Processing Integration Results

RT: 17.47
Area: 70758
Amount: 0.204956
Amount Units: ug/ml



Manual Integration Results

RT: 17.47
Area: 80300
Amount: 0.232595
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

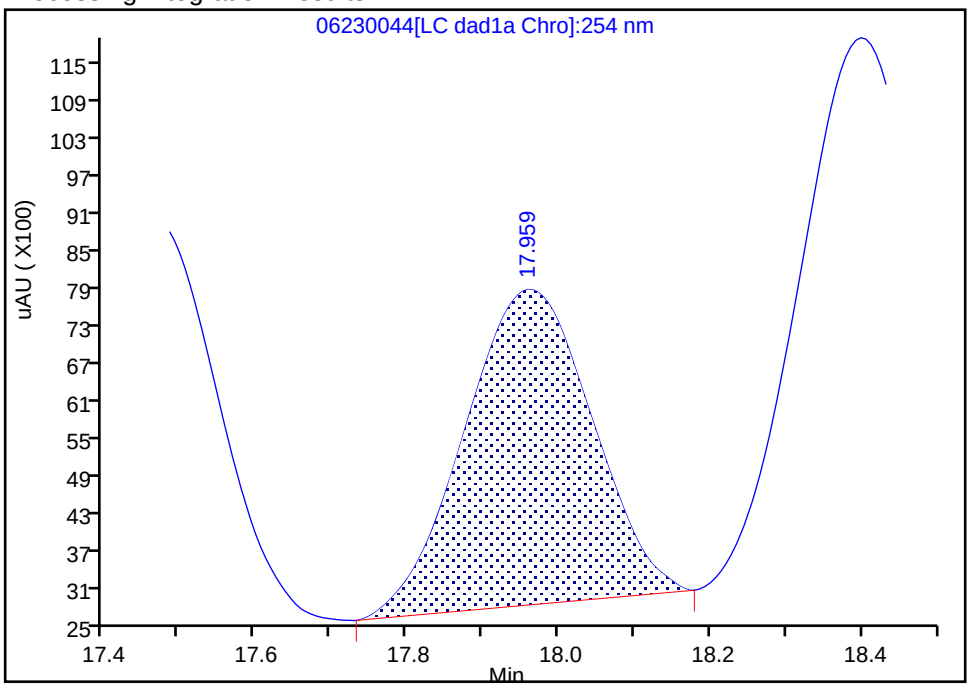
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

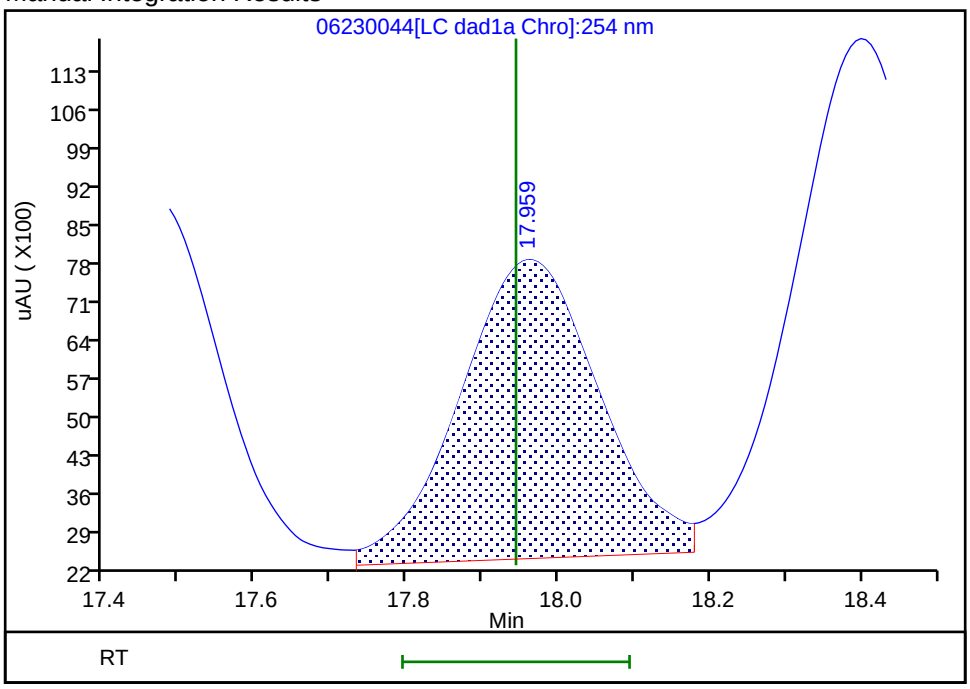
Processing Integration Results

RT: 17.96
Area: 58485
Amount: 0.196043
Amount Units: ug/ml



Manual Integration Results

RT: 17.96
Area: 69058
Amount: 0.231484
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

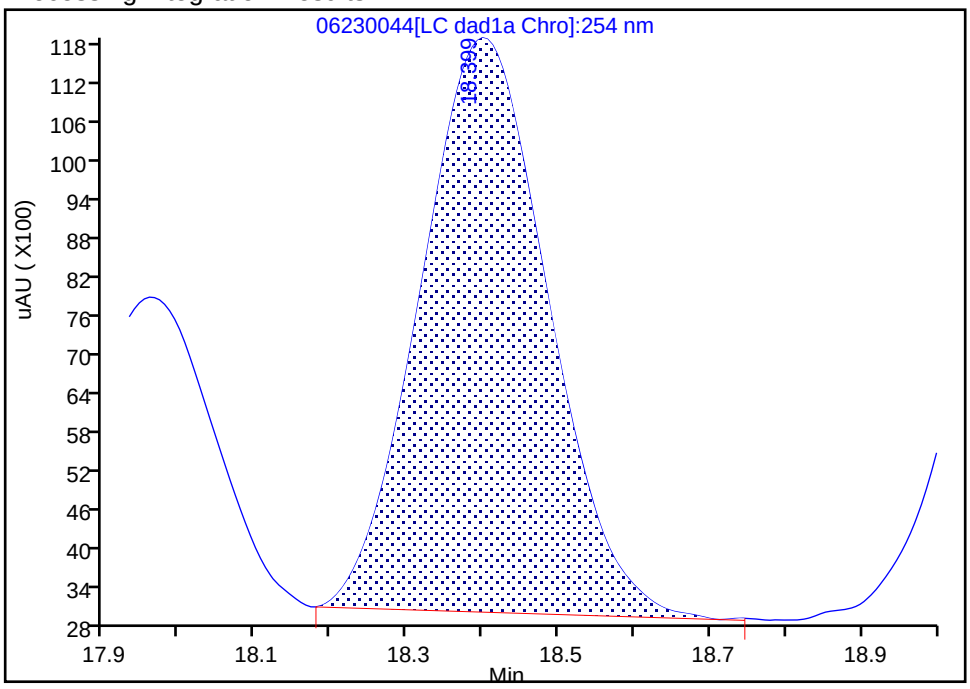
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

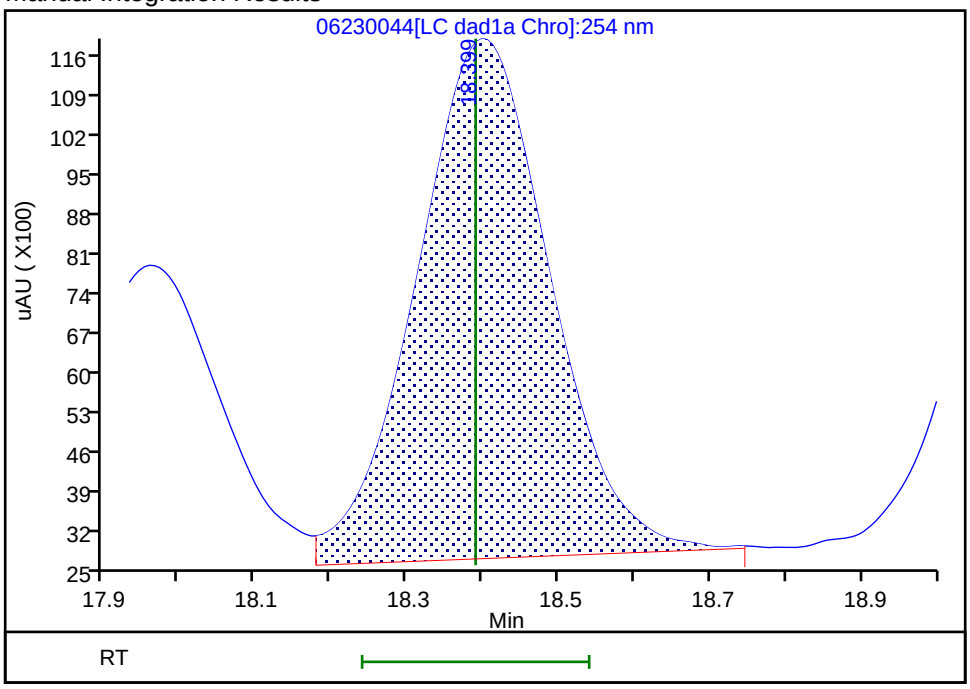
Processing Integration Results

RT: 18.40
Area: 103450
Amount: 0.222372
Amount Units: ug/ml



Manual Integration Results

RT: 18.40
Area: 112392
Amount: 0.241594
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

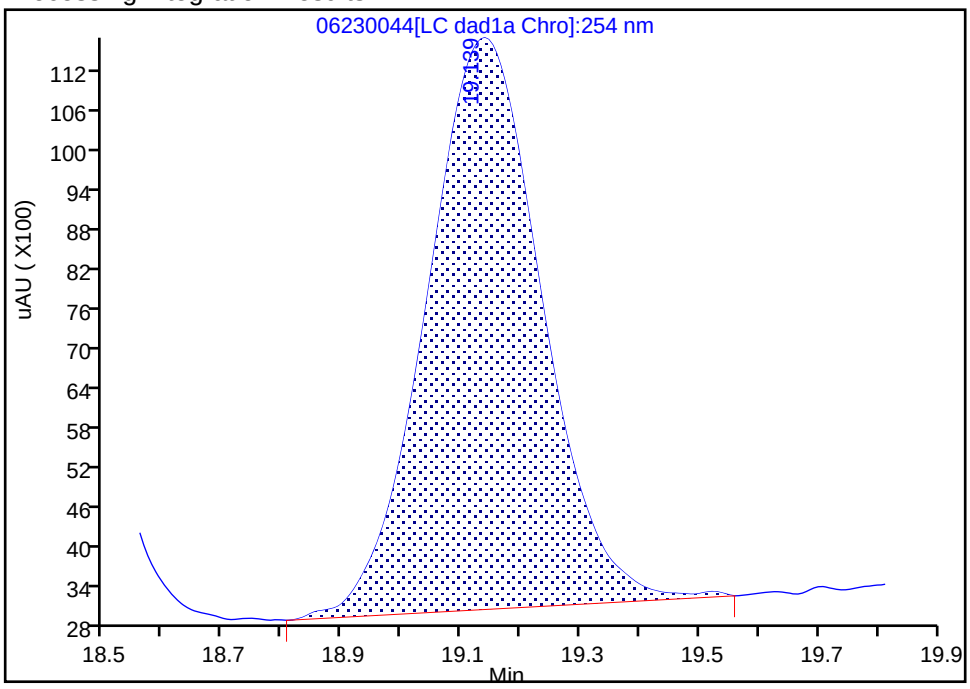
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

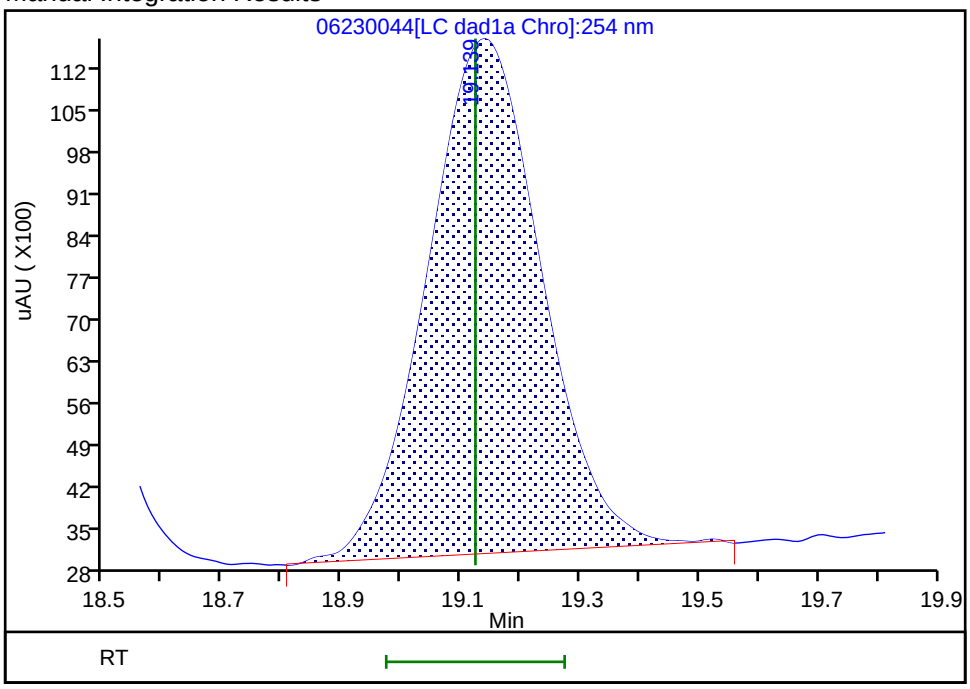
Processing Integration Results

RT: 19.14
Area: 116884
Amount: 0.247399
Amount Units: ug/ml



Manual Integration Results

RT: 19.14
Area: 115370
Amount: 0.244195
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

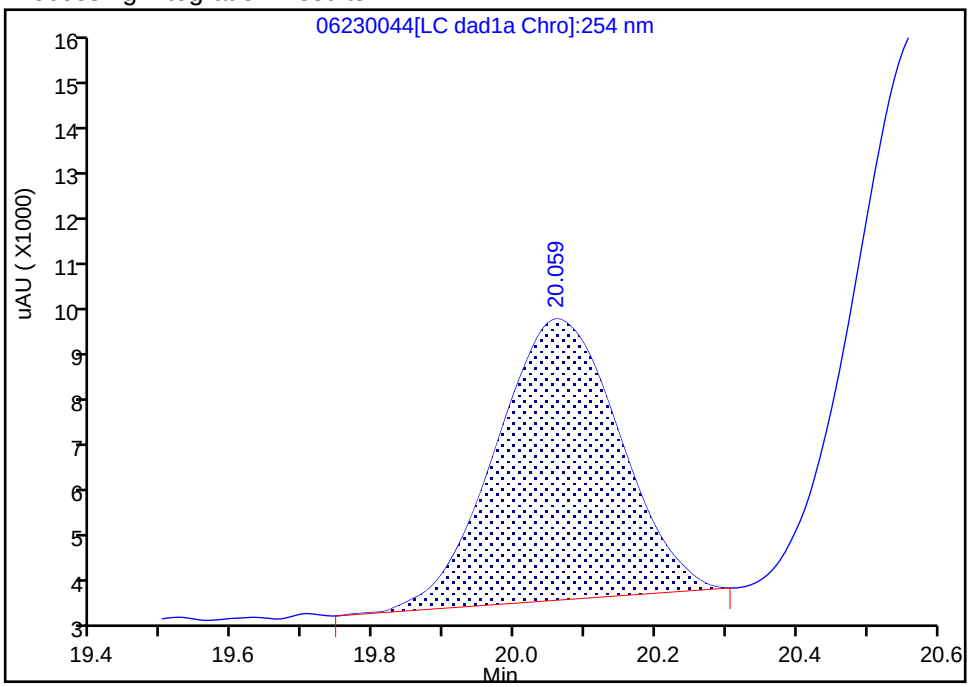
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

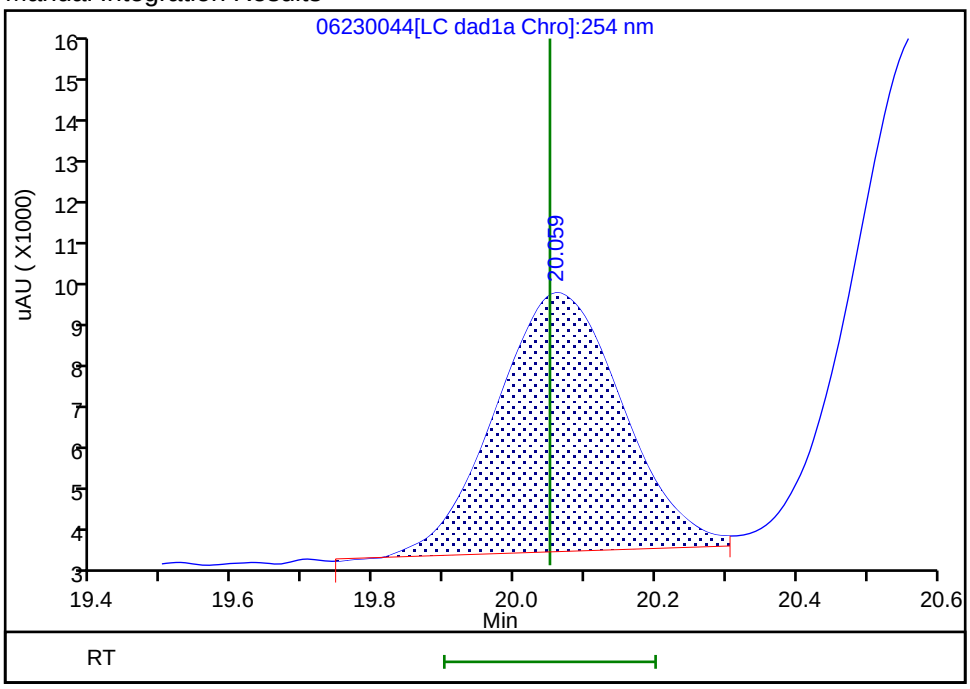
Processing Integration Results

RT: 20.06
Area: 70694
Amount: 0.229094
Amount Units: ug/ml



Manual Integration Results

RT: 20.06
Area: 73651
Amount: 0.239318
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

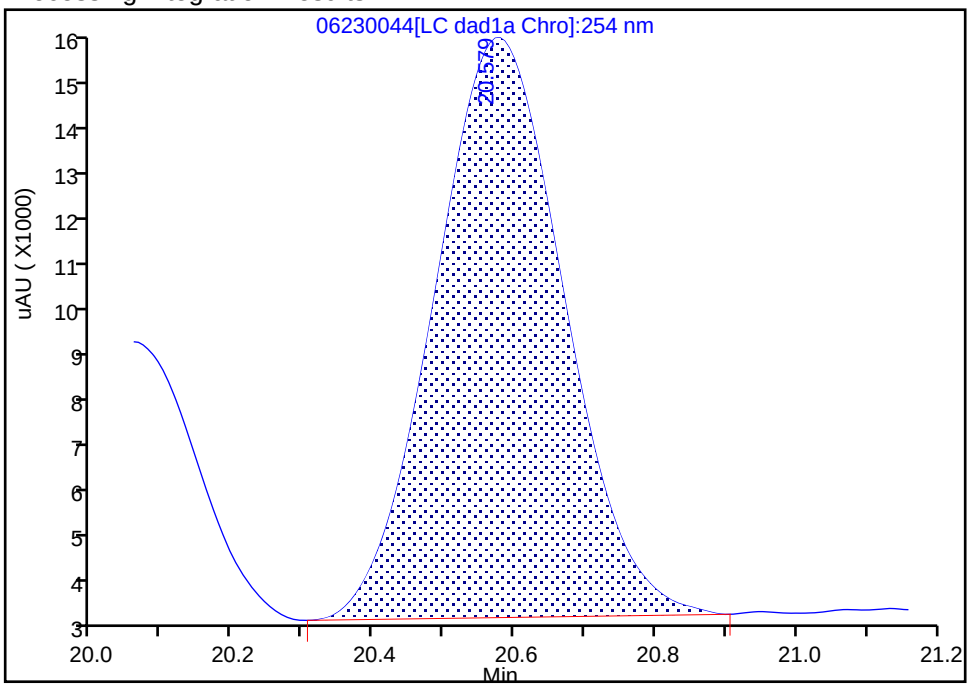
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

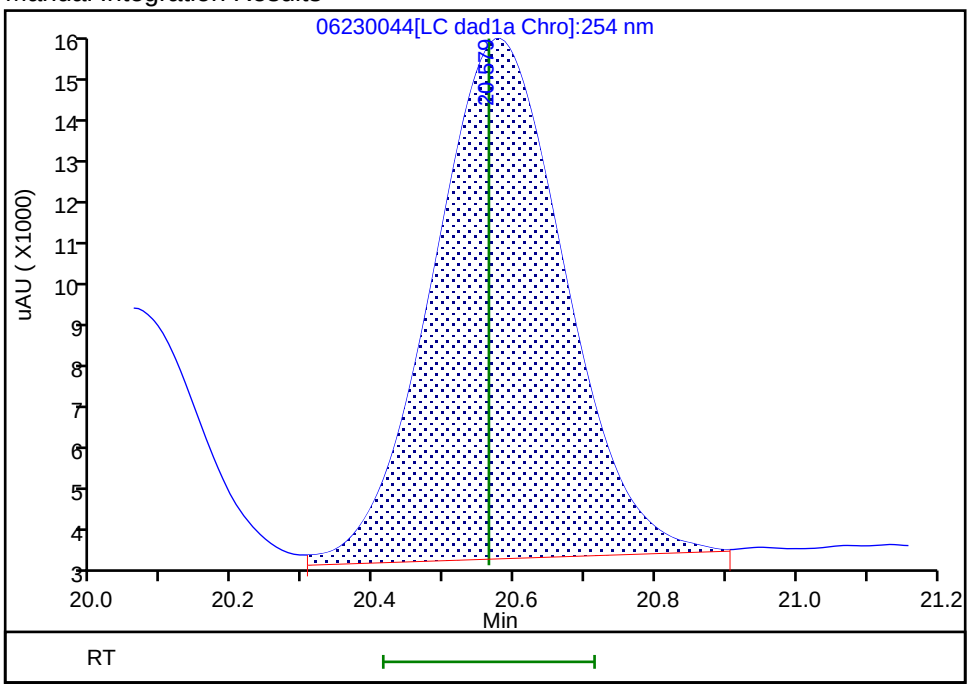
Processing Integration Results

RT: 20.58
Area: 147328
Amount: 0.230159
Amount Units: ug/ml



Manual Integration Results

RT: 20.58
Area: 152062
Amount: 0.237555
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:26:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/45 Calibration Date: 06/24/2020 18:15

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06230045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	396476		228	250	-9.0	15.0
DNX	Ave	321206	307704		240	250	-4.2	15.0
MNX	Lin2		267914		273	292	-6.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499860/45 Calibration Date: 06/24/2020 18:15

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06230045.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.53	5.36	5.66
DNX	6.37	6.19	6.49
MNX	7.93	7.73	8.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230045.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	24-Jun-2020 18:15:50	ALS Bottle#:	8	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092679-045				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 18:52:13	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:51:46		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.534	5.509	0.025	99218	0.2503	0.2277	
4 DNX	1	6.374	6.336	0.038	77003	0.2503	0.2397	
7 MNX	1	7.934	7.876	0.058	78164	0.2918	0.2726	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

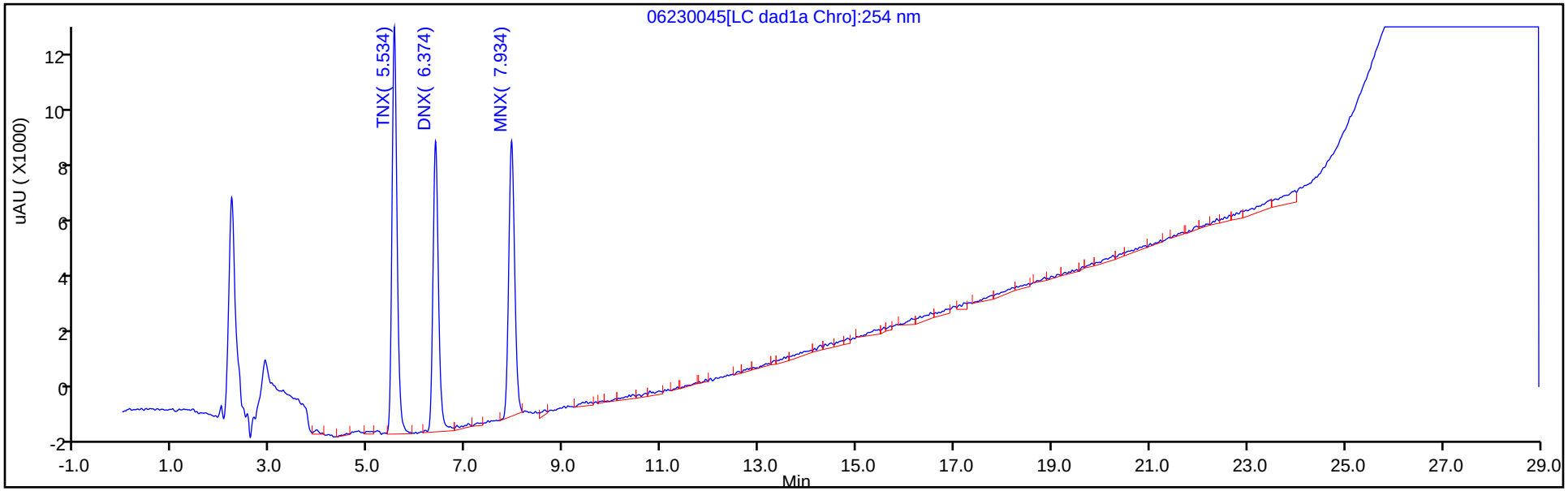
Report Date: 24-Jun-2020 18:52:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

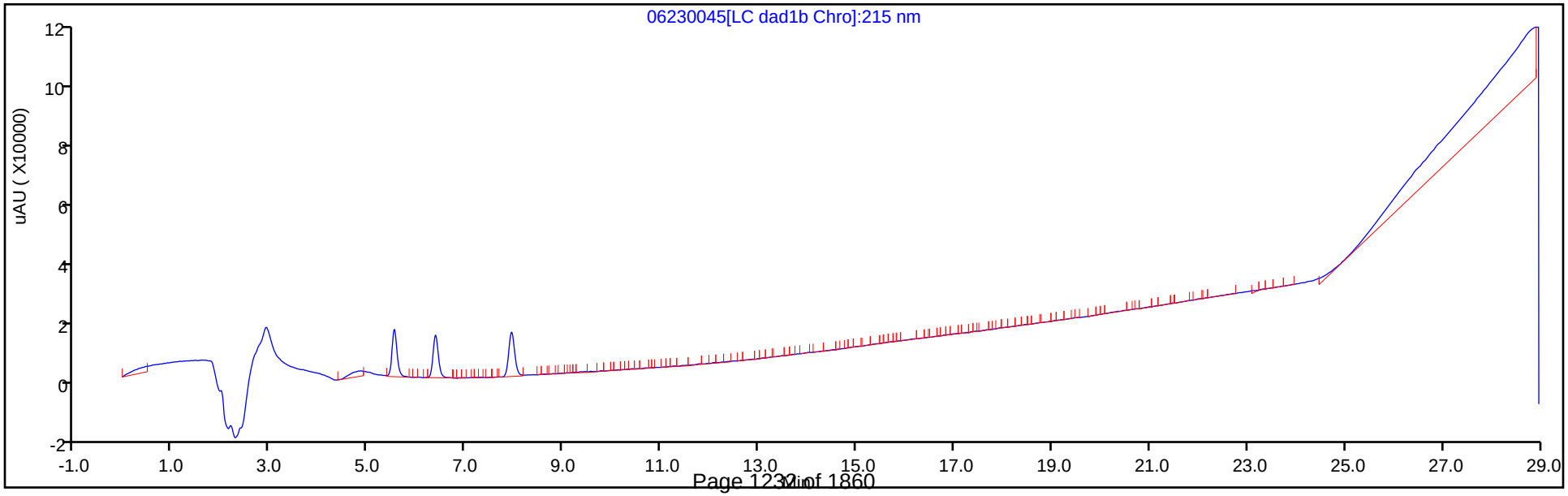
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230045.d

Injection Date:	24-Jun-2020 18:15:50	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	45
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

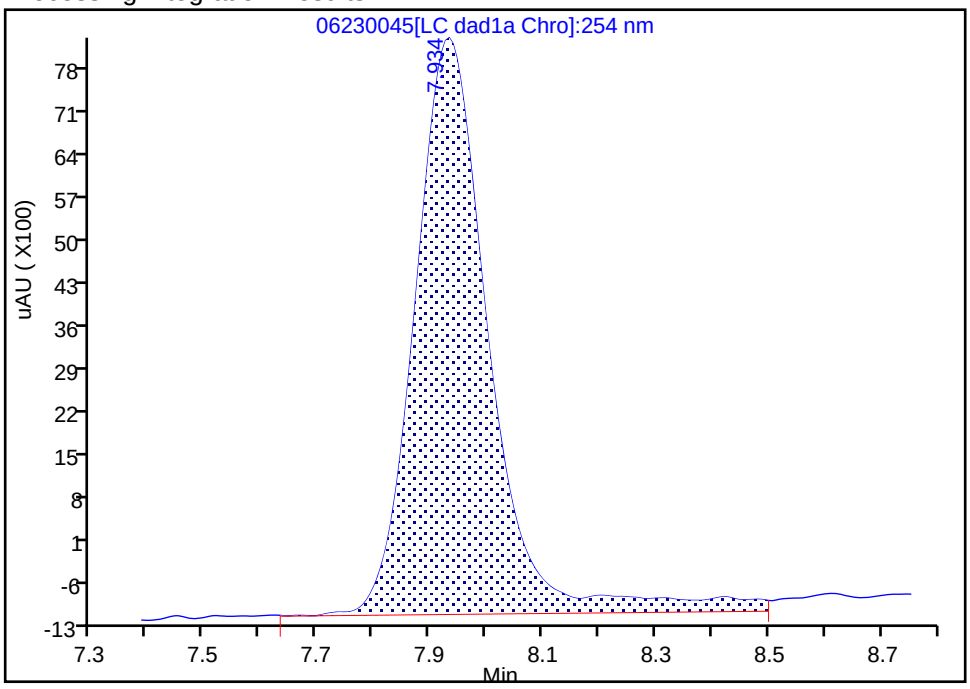
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230045.d				
Injection Date:	24-Jun-2020 18:15:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

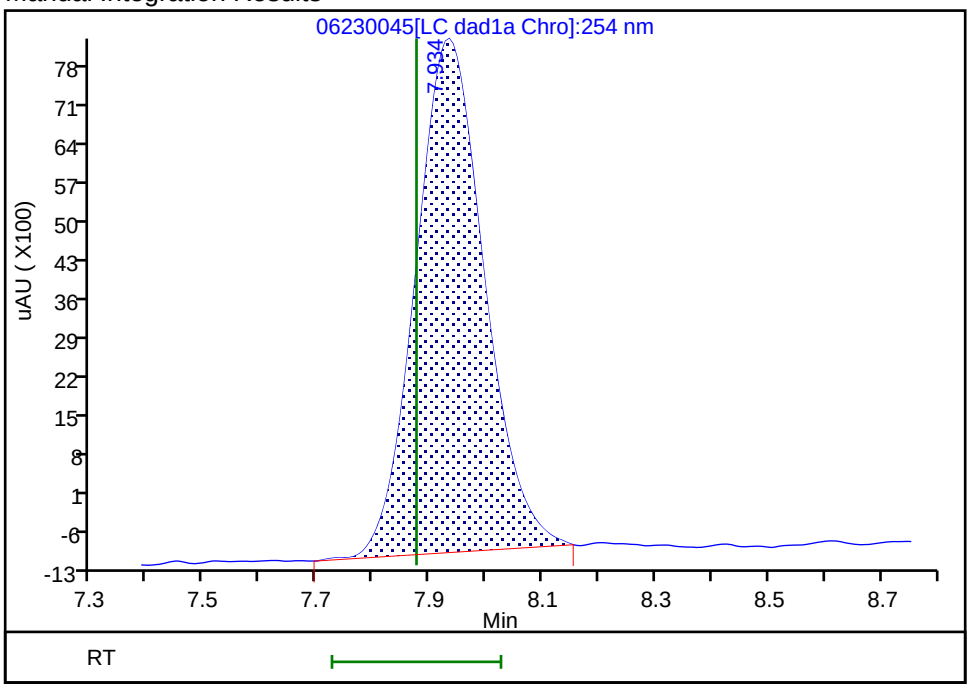
Processing Integration Results

RT: 7.93
Area: 86379
Amount: 0.303378
Amount Units: ug/ml



Manual Integration Results

RT: 7.93
Area: 78164
Amount: 0.272598
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:51:39

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/17 Calibration Date: 06/25/2020 03:46

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06240017.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		188804		237	250	-5.4	15.0
Picric acid	Ave	193810	183464		237	250	-5.3	15.0
RDX	Ave	244360	232600		238	250	-4.8	15.0
Nitrobenzene	Ave	439227	434785		248	251	-1.0	15.0
1,3-Dinitrobenzene	Ave	674189	678076		252	251	0.6	15.0
Nitroglycerin	Ave	126803	145282		2860	2500	14.6	15.0
2-Nitrotoluene	Ave	272965	264156		242	250	-3.2	15.0
4-Nitrotoluene	Ave	240881	232331		242	251	-3.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	323217		234	250	-6.4	15.0
3-Nitrotoluene	Ave	298327	296164		248	250	-0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	451147		243	251	-3.0	15.0
1,3,5-Trinitrobenzene	Ave	472451	474587		252	251	0.5	15.0
2,6-Dinitrotoluene	Lin2		308570		252	251	0.6	15.0
2,4-Dinitrotoluene	Ave	640113	623745		245	251	-2.6	15.0
Tetryl	Ave	368678	350838		238	251	-4.8	15.0
2,4,6-Trinitrotoluene	Lin1		386040		233	251	-7.0	15.0
PETN	Lin1		137561		2450	2500	-2.1	15.0
1,2-Dinitrobenzene	Lin1		300556		264	250	5.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/17 Calibration Date: 06/25/2020 03:46

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06240017.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.11	7.00	7.30
Picric acid	8.38	8.32	8.62
RDX	9.32	9.21	9.51
Nitrobenzene	12.23	12.12	12.42
1,3-Dinitrobenzene	15.75	15.66	15.96
Nitroglycerin	15.98	15.90	16.20
2-Nitrotoluene	16.68	16.60	16.90
4-Nitrotoluene	16.97	16.88	17.18
4-Amino-2,6-dinitrotoluene	17.41	17.32	17.62
3-Nitrotoluene	17.90	17.81	18.11
2-Amino-4,6-dinitrotoluene	18.35	18.25	18.55
1,3,5-Trinitrobenzene	19.08	18.99	19.29
2,6-Dinitrotoluene	20.01	19.92	20.22
2,4-Dinitrotoluene	20.52	20.43	20.73
Tetryl	23.81	23.74	24.04
2,4,6-Trinitrotoluene	24.84	24.76	25.06
PETN	25.38	25.29	25.59
1,2-Dinitrobenzene	13.22	13.12	13.42

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240017.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2020 03:46:00 ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092719-017
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:05 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:06:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.405	4.425	-0.020	107738	0.2500	0.2510	
2 2,4-diamino-6-nitrotoluene	1	4.938	4.938	0.000	68220	0.2500	0.2636	
6 HMX	1	7.111	7.145	-0.034	47201	0.2500	0.2366	
5 2,4,6-Trinitrophenol	1	8.378	8.465	-0.087	45866	0.2500	0.2367	
8 RDX	1	9.318	9.358	-0.040	58150	0.2500	0.2380	
9 Nitrobenzene	1	12.225	12.265	-0.040	109131	0.2510	0.2485	
$ 10 1,2-Dinitrobenzene	1	13.218	13.271	-0.053	75139	0.2500	0.2644	
11 3,5-Dinitroaniline	1	15.151	15.205	-0.054	123672	0.2500	0.2493	
12 1,3-Dinitrobenzene	1	15.751	15.805	-0.054	169858	0.2505	0.2519	M
13 Nitroglycerin	2	15.978	16.045	-0.067	363206	2.50	2.86	M
14 o-Nitrotoluene	1	16.678	16.745	-0.067	66039	0.2500	0.2419	M
15 p-Nitrotoluene	1	16.965	17.031	-0.066	58199	0.2505	0.2416	M
16 4-Amino-2,6-dinitrotoluene	1	17.405	17.465	-0.060	80885	0.2503	0.2343	M
17 m-Nitrotoluene	1	17.898	17.958	-0.060	74115	0.2503	0.2484	M
18 2-Amino-4,6-dinitrotoluene	1	18.345	18.398	-0.053	113238	0.2510	0.2434	M
19 1,3,5-Trinitrobenzene	1	19.078	19.138	-0.060	118884	0.2505	0.2516	M
20 2,6-Dinitrotoluene	1	20.005	20.065	-0.060	77451	0.2510	0.2525	M
21 2,4-Dinitrotoluene	1	20.518	20.578	-0.060	156560	0.2510	0.2446	M
22 Tetryl	1	23.811	23.885	-0.074	87885	0.2505	0.2384	
23 2,4,6-Trinitrotoluene	1	24.838	24.905	-0.067	96896	0.2510	0.2334	
24 PETN	2	25.378	25.438	-0.060	343902	2.50	2.45	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

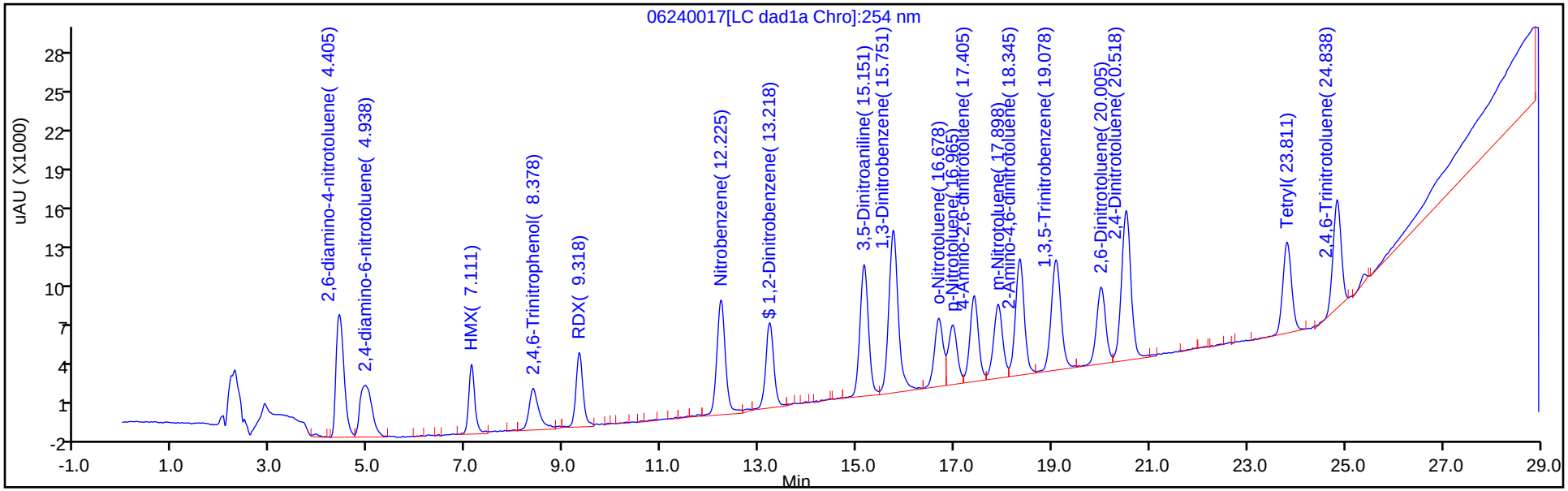
Report Date: 26-Jun-2020 16:19:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

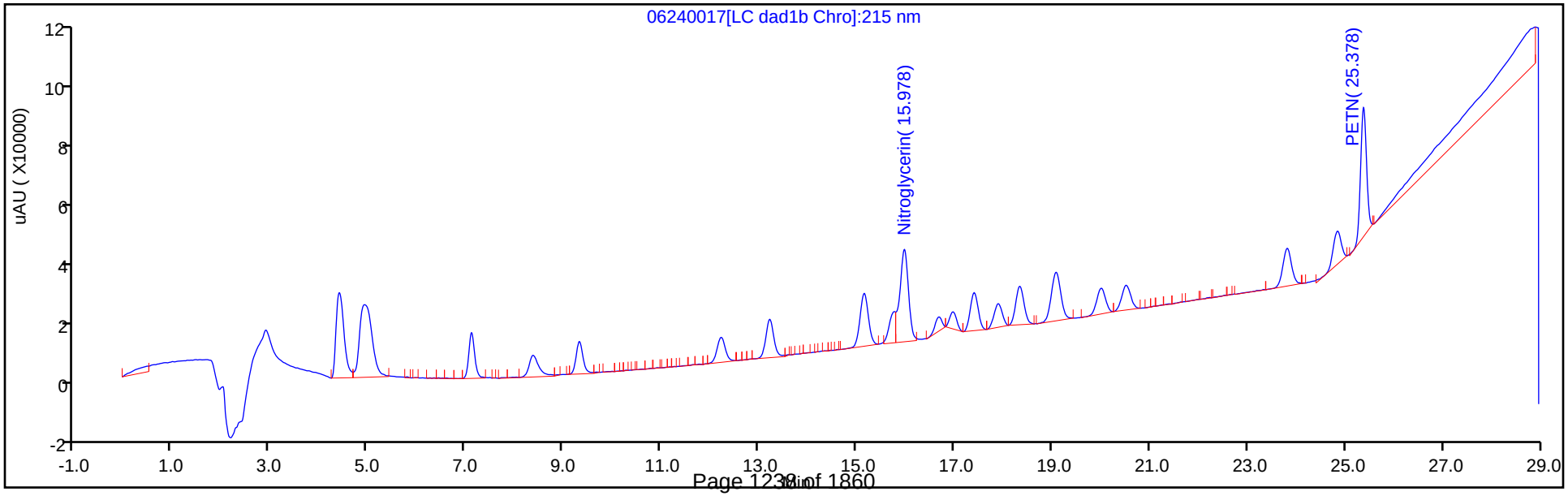
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d

Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

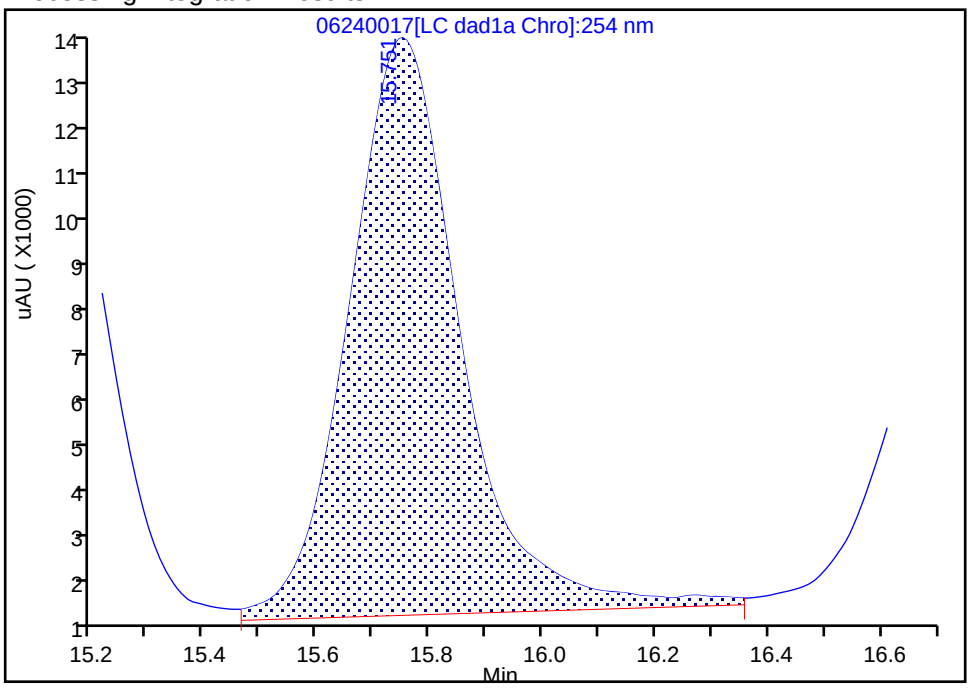
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

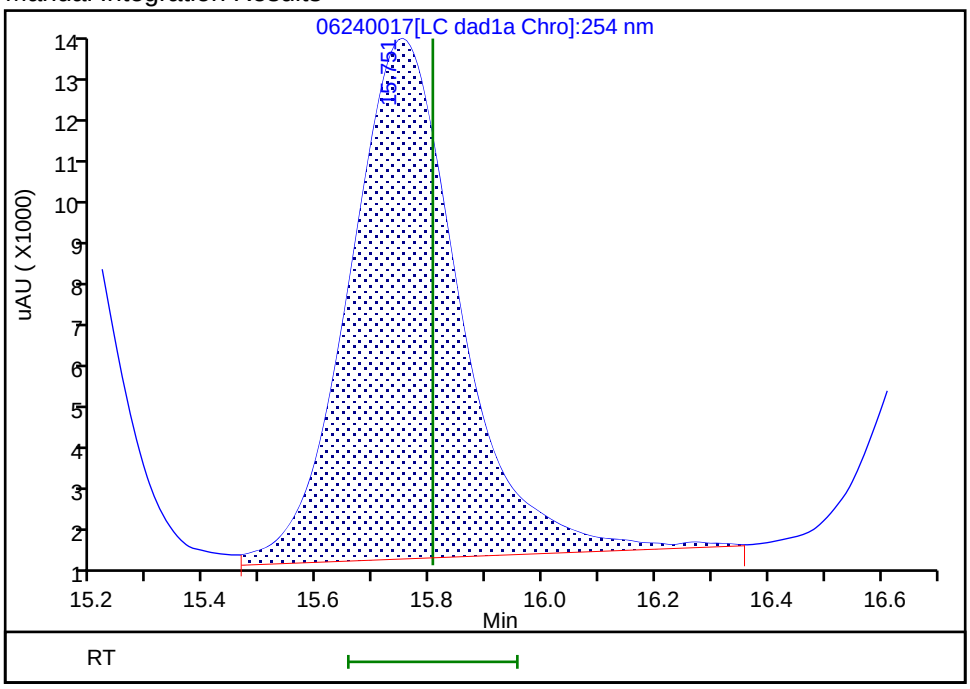
Processing Integration Results

RT: 15.75
Area: 172940
Amount: 0.256516
Amount Units: ug/ml



Manual Integration Results

RT: 15.75
Area: 169858
Amount: 0.251944
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

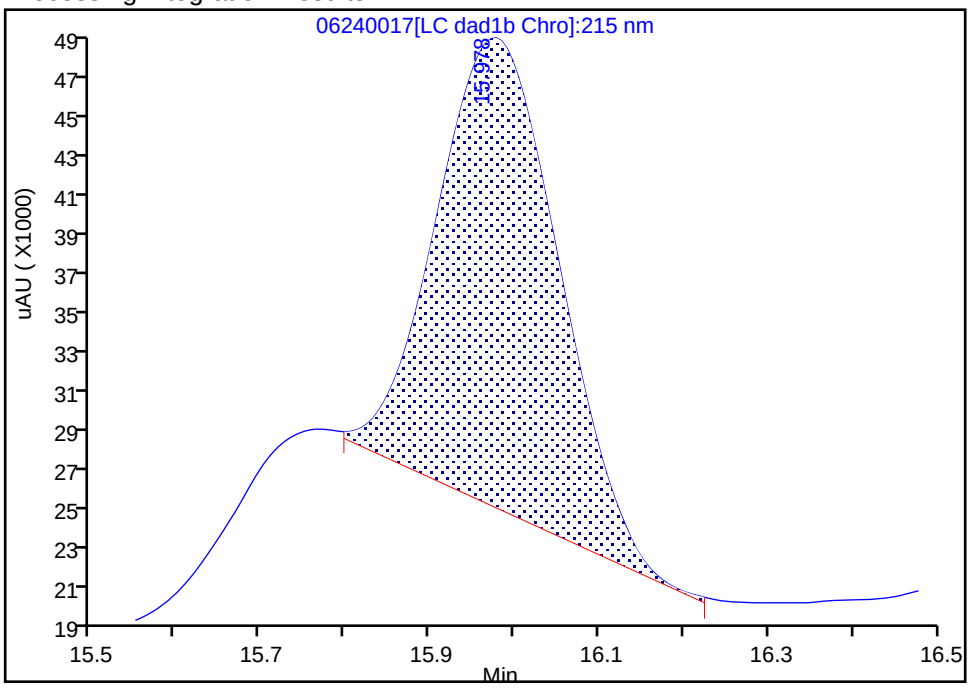
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

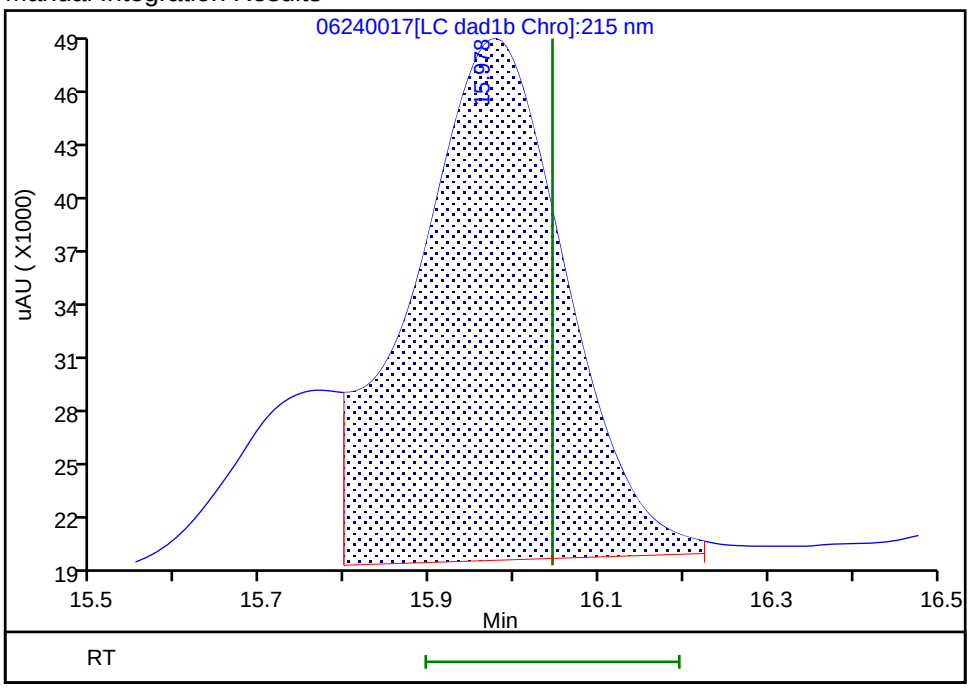
Processing Integration Results

RT: 15.98
Area: 238892
Amount: 1.883957
Amount Units: ug/ml



Manual Integration Results

RT: 15.98
Area: 363206
Amount: 2.864325
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:38
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

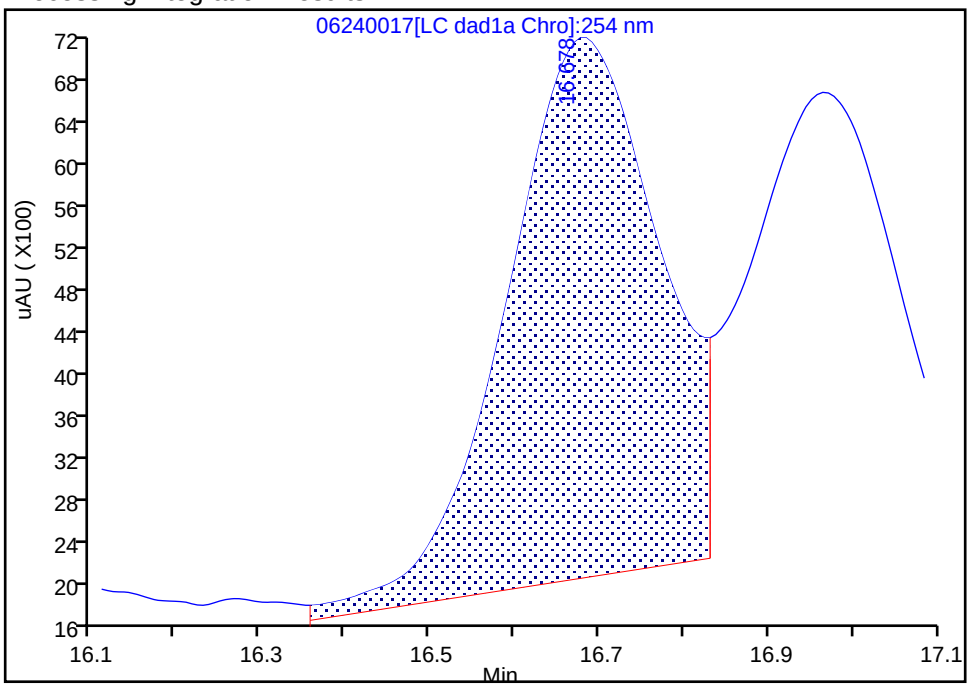
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

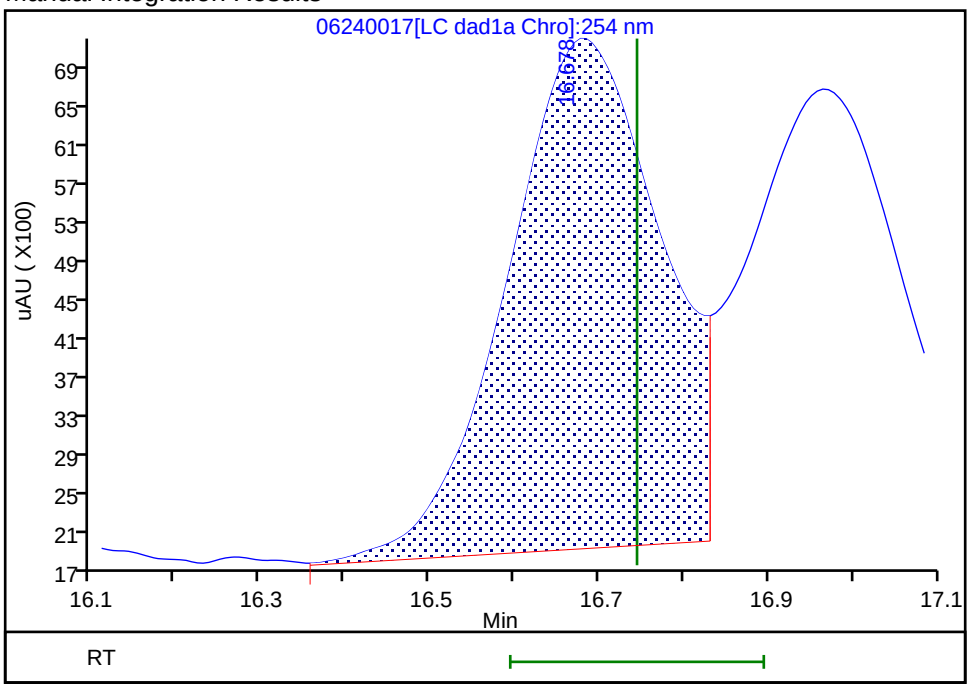
Processing Integration Results

RT: 16.68
Area: 64662
Amount: 0.236888
Amount Units: ug/ml



Manual Integration Results

RT: 16.68
Area: 66039
Amount: 0.241933
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

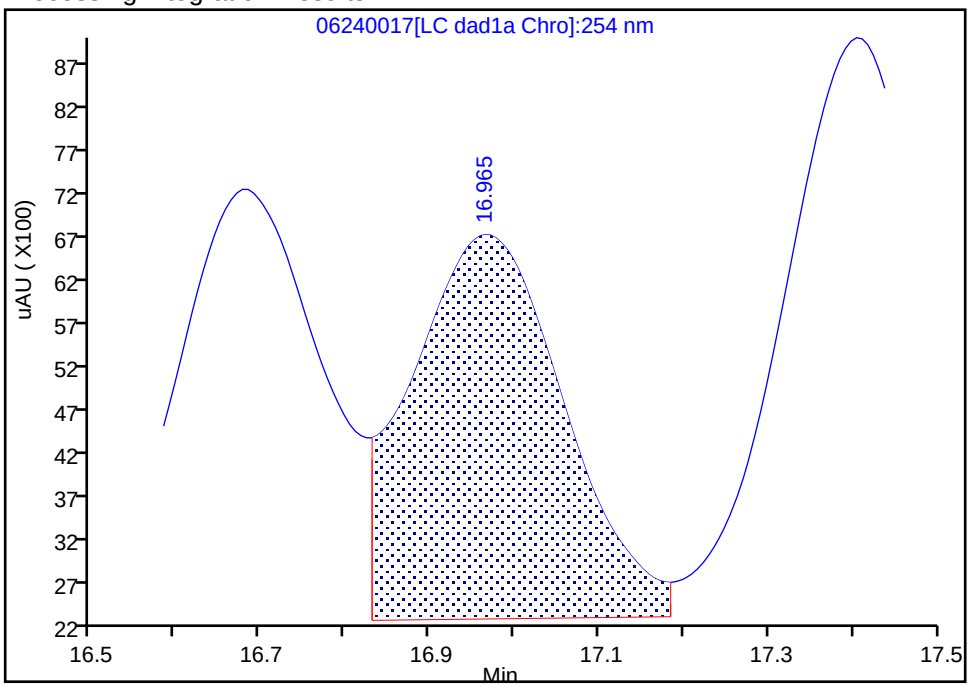
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

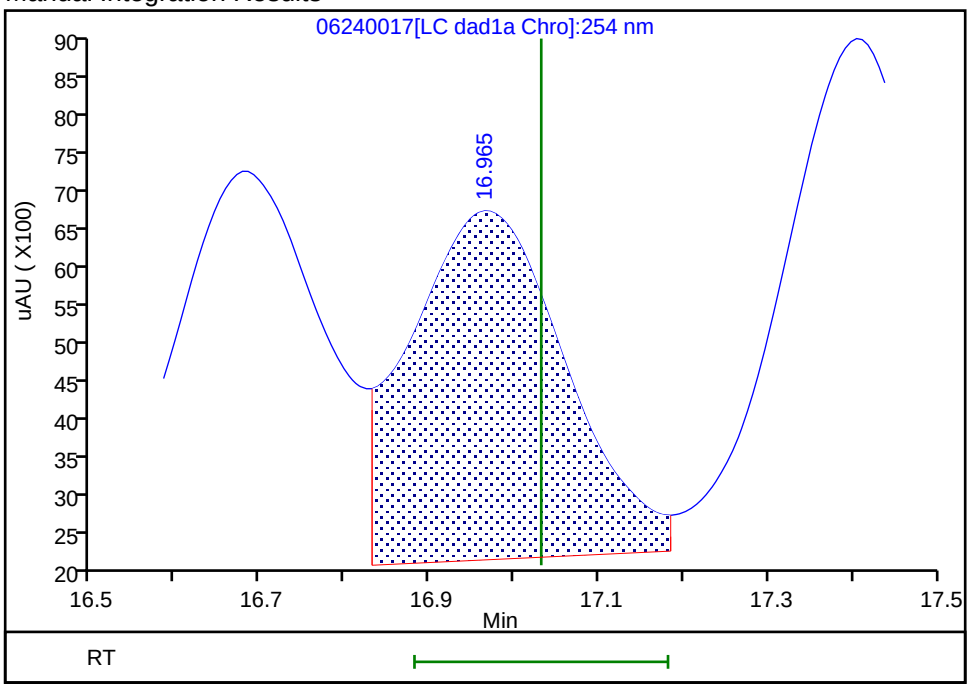
Processing Integration Results

RT: 16.96
Area: 55072
Amount: 0.228627
Amount Units: ug/ml



Manual Integration Results

RT: 16.96
Area: 58199
Amount: 0.241609
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

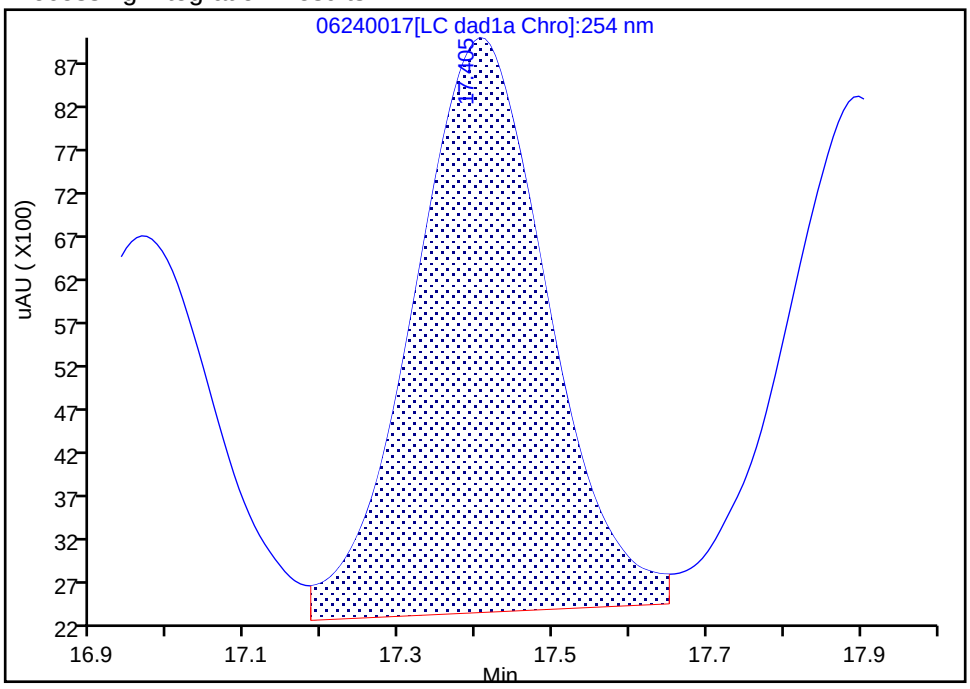
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

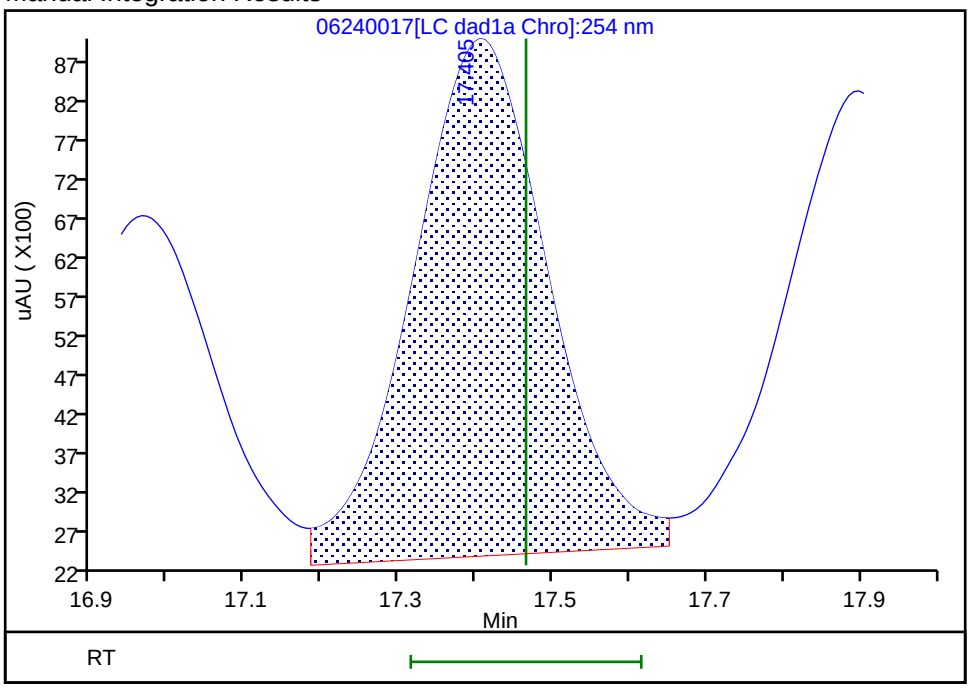
Processing Integration Results

RT: 17.40
Area: 79541
Amount: 0.230397
Amount Units: ug/ml



Manual Integration Results

RT: 17.40
Area: 80885
Amount: 0.234290
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

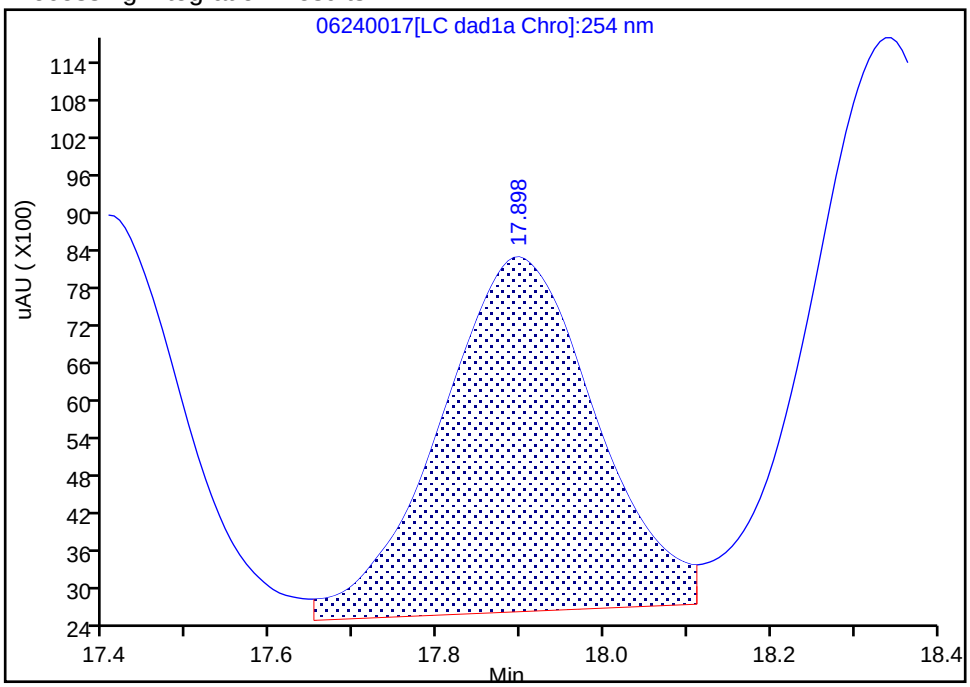
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

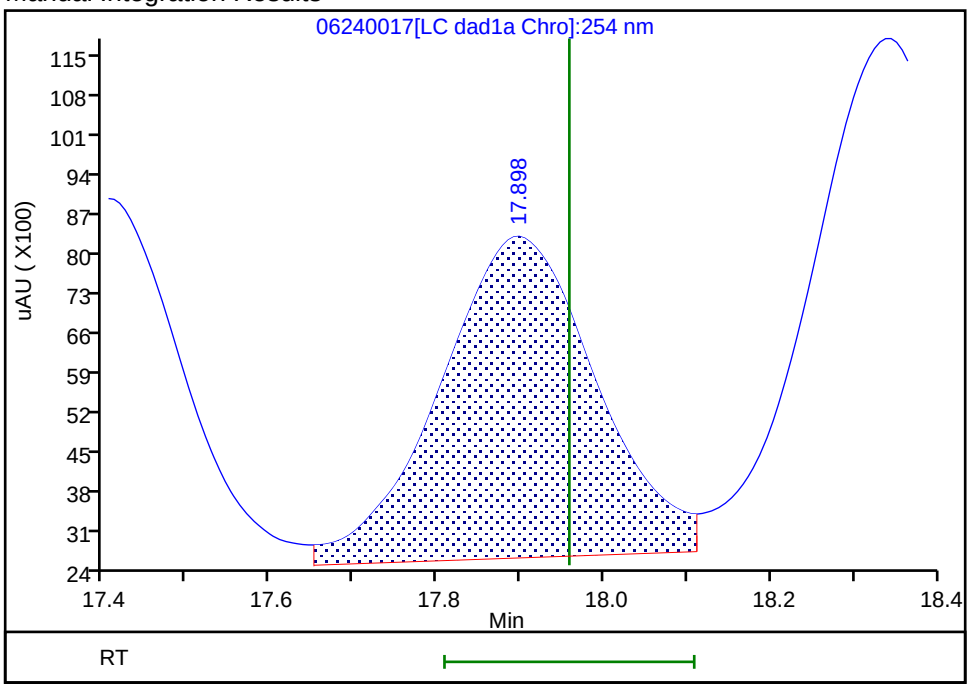
Processing Integration Results

RT: 17.90
Area: 73329
Amount: 0.245801
Amount Units: ug/ml



Manual Integration Results

RT: 17.90
Area: 74115
Amount: 0.248436
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

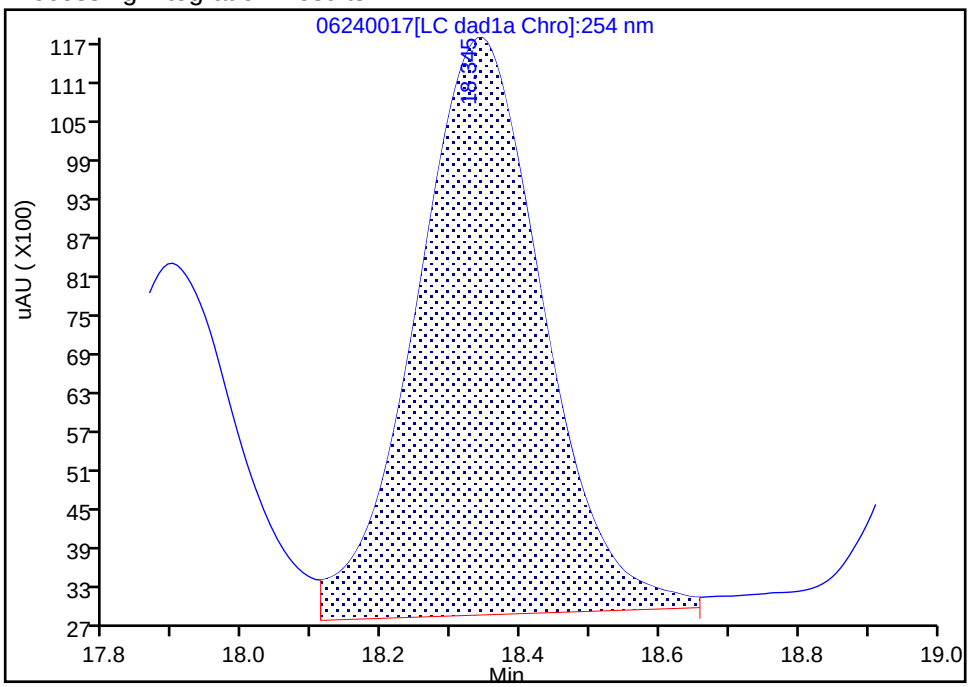
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

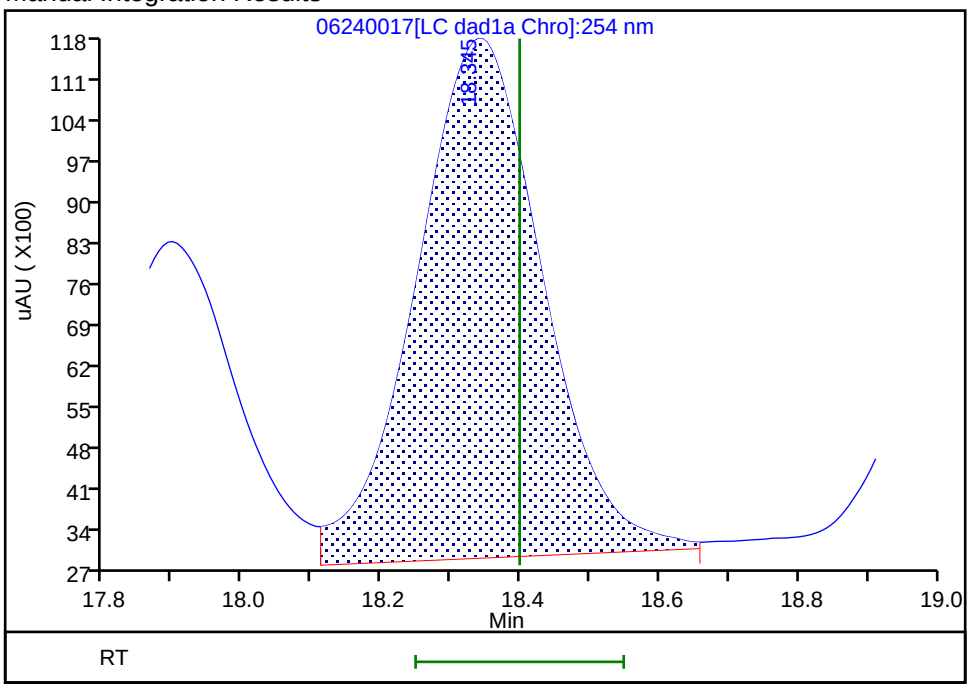
Processing Integration Results

RT: 18.34
Area: 113484
Amount: 0.243941
Amount Units: ug/ml



Manual Integration Results

RT: 18.34
Area: 113238
Amount: 0.243412
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

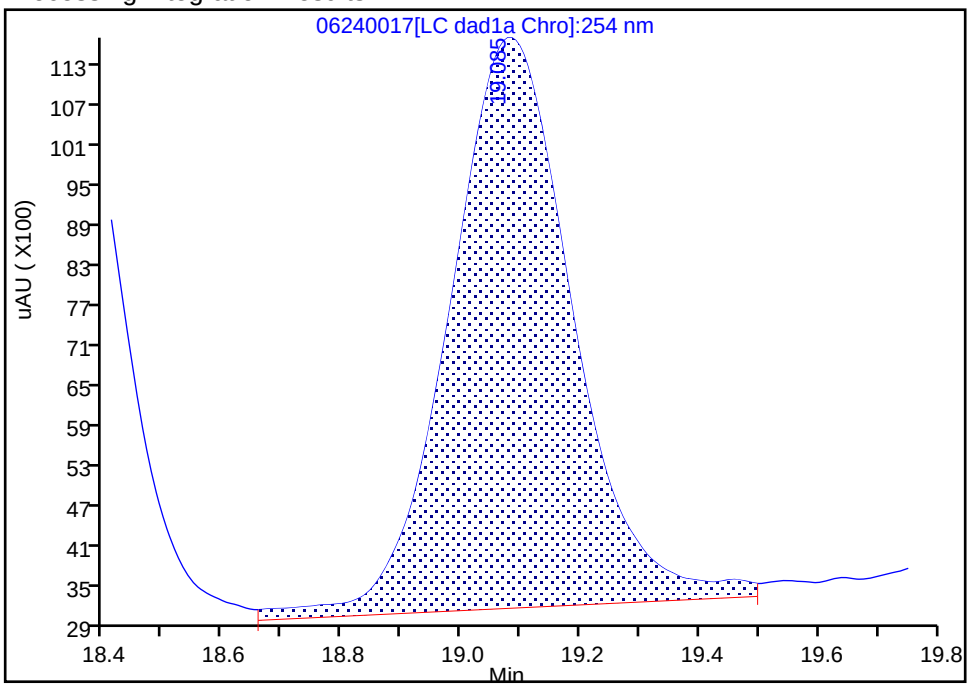
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

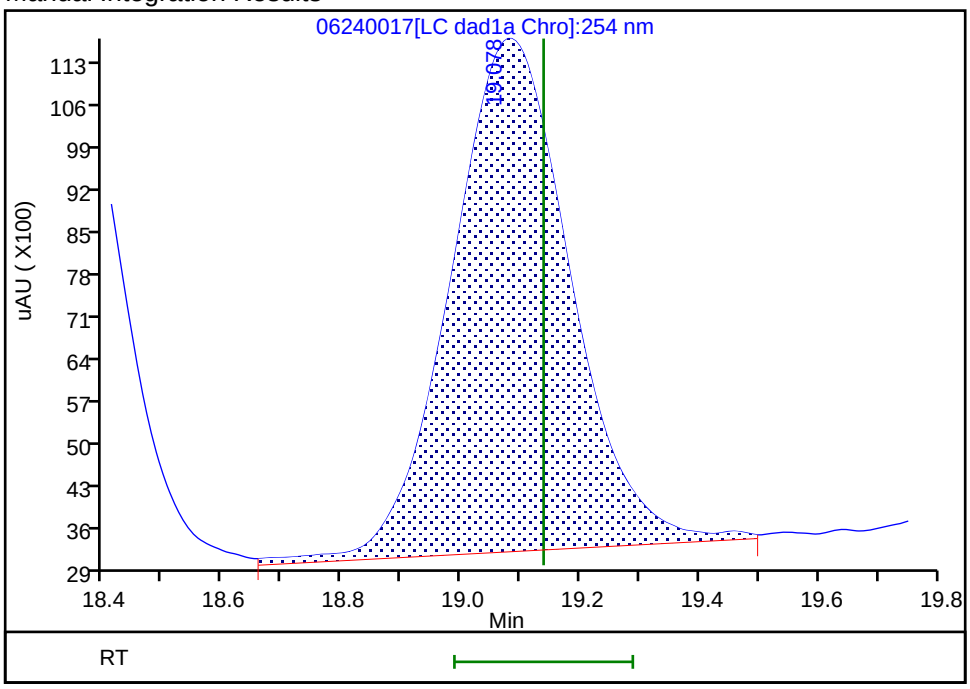
Processing Integration Results

RT: 19.08
Area: 123546
Amount: 0.261500
Amount Units: ug/ml



Manual Integration Results

RT: 19.08
Area: 118884
Amount: 0.251633
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

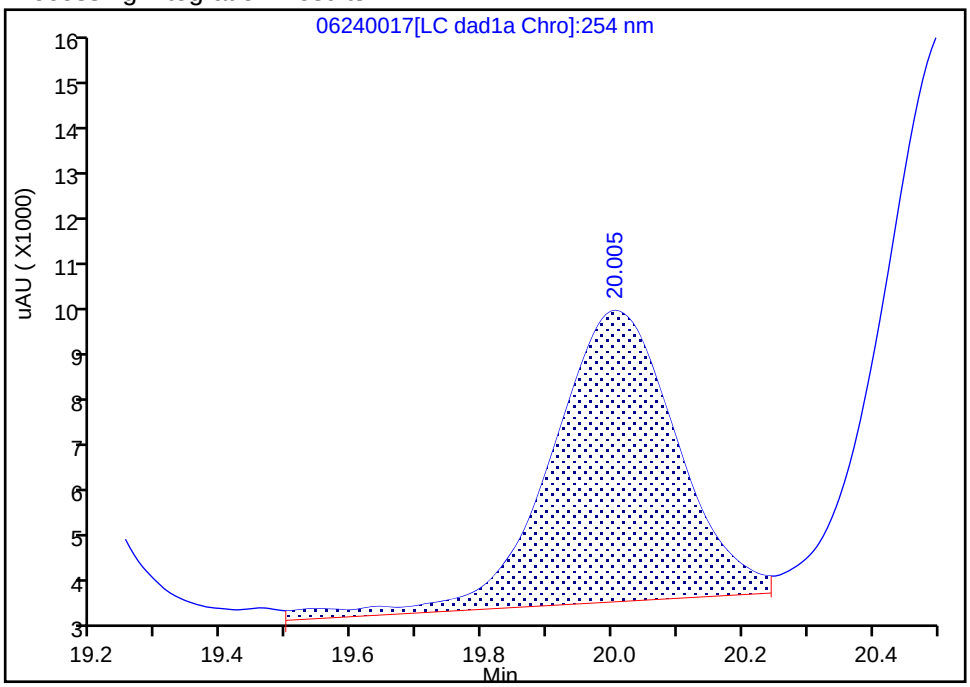
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

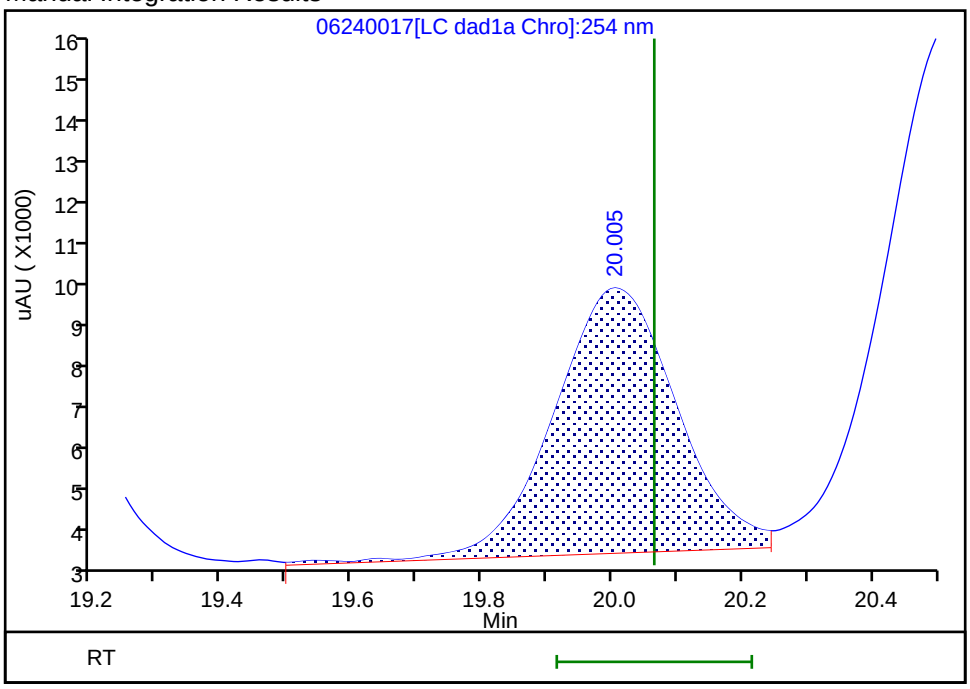
Processing Integration Results

RT: 20.00
Area: 79736
Amount: 0.260357
Amount Units: ug/ml



Manual Integration Results

RT: 20.00
Area: 77451
Amount: 0.252457
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

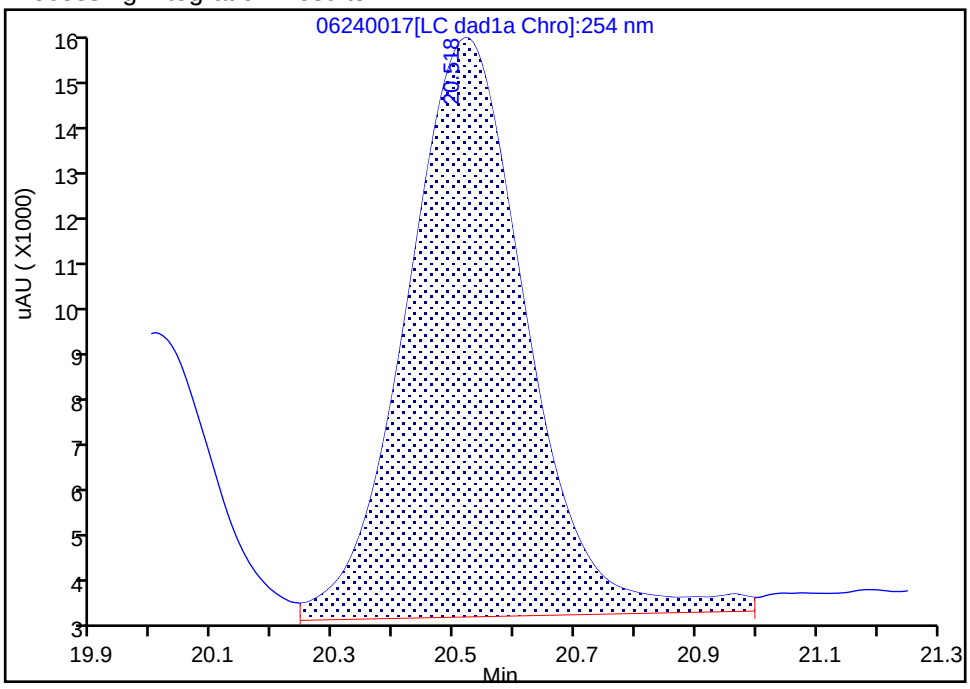
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

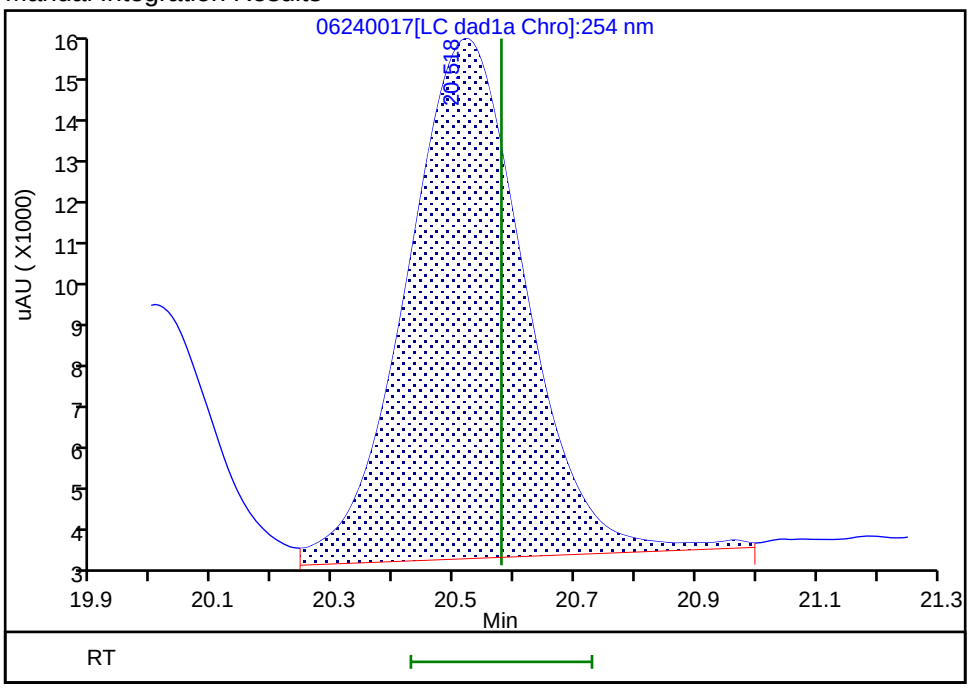
Processing Integration Results

RT: 20.52
Area: 159882
Amount: 0.249771
Amount Units: ug/ml



Manual Integration Results

RT: 20.52
Area: 156560
Amount: 0.244582
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:06:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/18 Calibration Date: 06/25/2020 04:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06240018.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	406925		234	250	-6.6	15.0
DNX	Ave	321206	305738		238	250	-4.8	15.0
MNX	Lin2		287380		294	292	0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/18 Calibration Date: 06/25/2020 04:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06240018.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.51	5.38	5.68
DNX	6.35	6.22	6.52
MNX	7.91	7.78	8.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240018.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	25-Jun-2020 04:21:00	ALS Bottle#:	8	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092719-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Jun-2020 16:19:06	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:06:50		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.512	5.532	-0.020	101833	0.2503	0.2337	
4 DNX	1	6.352	6.372	-0.020	76511	0.2503	0.2382	
7 MNX	1	7.905	7.926	-0.021	83843	0.2918	0.2939	

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

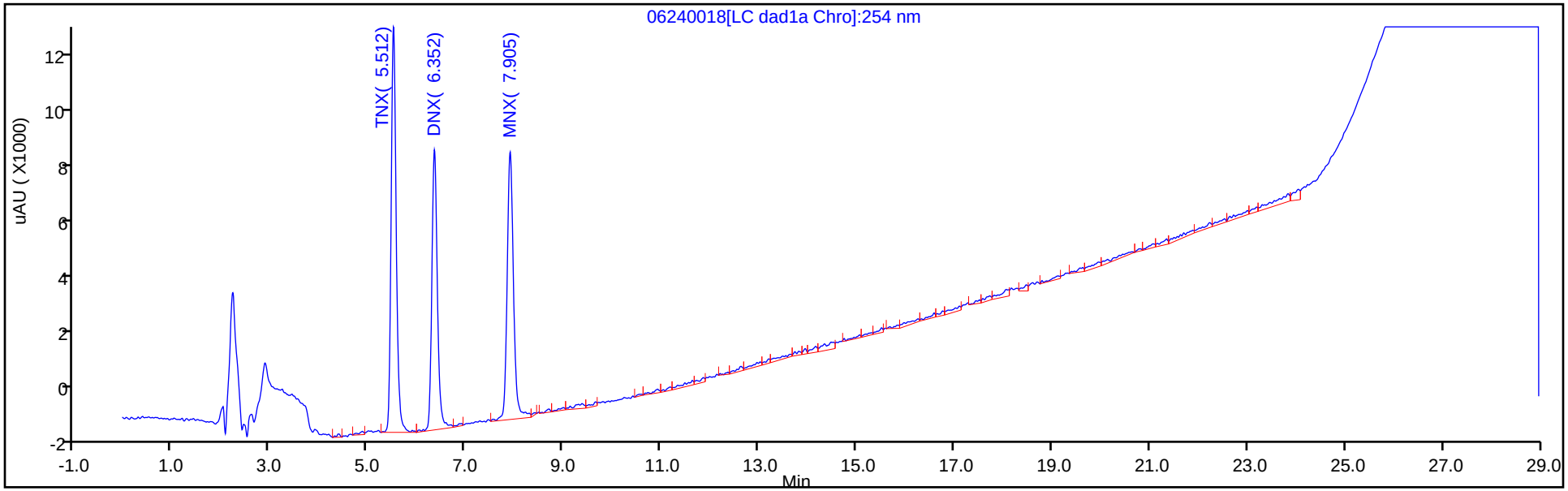
Report Date: 26-Jun-2020 16:19:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

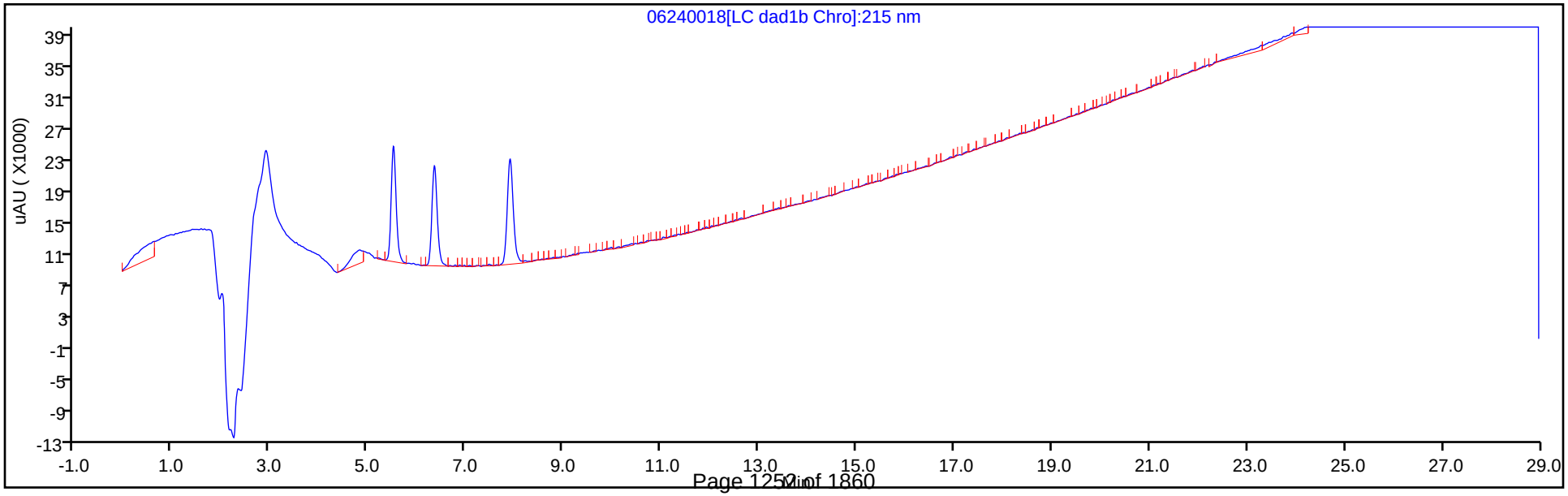
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240018.d

Injection Date:	25-Jun-2020 04:21:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/28 Calibration Date: 06/25/2020 10:10

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06240028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		187572		235	250	-6.1	15.0
Picric acid	Ave	193810	189176		244	250	-2.4	15.0
RDX	Ave	244360	226148		231	250	-7.5	15.0
Nitrobenzene	Ave	439227	407319		233	251	-7.3	15.0
1,3-Dinitrobenzene	Ave	674189	674200		251	251	0.0	15.0
Nitroglycerin	Ave	126803	131077		2580	2500	3.4	15.0
2-Nitrotoluene	Ave	272965	252360		231	250	-7.5	15.0
4-Nitrotoluene	Ave	240881	233960		243	251	-2.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	323177		234	250	-6.4	15.0
3-Nitrotoluene	Ave	298327	287397		241	250	-3.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	453904		245	251	-2.4	15.0
1,3,5-Trinitrobenzene	Ave	472451	477285		253	251	1.0	15.0
2,6-Dinitrotoluene	Lin2		302406		247	251	-1.6	15.0
2,4-Dinitrotoluene	Ave	640113	627295		246	251	-2.0	15.0
Tetryl	Ave	368678	347768		236	251	-5.7	15.0
2,4,6-Trinitrotoluene	Lin1		393924		238	251	-5.0	15.0
PETN	Lin1		136281		2420	2500	-3.1	15.0
1,2-Dinitrobenzene	Lin1		288472		254	250	1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/28 Calibration Date: 06/25/2020 10:10

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06240028.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.13	7.00	7.30
Picric acid	8.36	8.32	8.62
RDX	9.34	9.21	9.51
Nitrobenzene	12.24	12.12	12.42
1,3-Dinitrobenzene	15.76	15.66	15.96
Nitroglycerin	16.00	15.90	16.20
2-Nitrotoluene	16.70	16.60	16.90
4-Nitrotoluene	16.98	16.88	17.18
4-Amino-2,6-dinitrotoluene	17.42	17.32	17.62
3-Nitrotoluene	17.92	17.81	18.11
2-Amino-4,6-dinitrotoluene	18.35	18.25	18.55
1,3,5-Trinitrobenzene	19.10	18.99	19.29
2,6-Dinitrotoluene	20.02	19.92	20.22
2,4-Dinitrotoluene	20.53	20.43	20.73
Tetryl	23.83	23.74	24.04
2,4,6-Trinitrotoluene	24.86	24.76	25.06
PETN	25.40	25.29	25.59
1,2-Dinitrobenzene	13.24	13.12	13.42

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240028.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2020 10:10:54 ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092719-028
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Jun-2020 16:19:11 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 14:06:53

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	4.422	4.425	-0.003	106691	0.2500	0.2485	
2 2,4-diamino-6-nitrotoluene	1	4.949	4.938	0.011	69879	0.2500	0.2706	
6 HMX	1	7.129	7.145	-0.016	46893	0.2500	0.2348	
5 2,4,6-Trinitrophenol	1	8.362	8.465	-0.103	47294	0.2500	0.2440	
8 RDX	1	9.335	9.358	-0.023	56537	0.2500	0.2314	
9 Nitrobenzene	1	12.242	12.265	-0.023	102237	0.2510	0.2328	
$ 10 1,2-Dinitrobenzene	1	13.235	13.271	-0.036	72118	0.2500	0.2535	
11 3,5-Dinitroaniline	1	15.162	15.205	-0.043	121416	0.2500	0.2446	
12 1,3-Dinitrobenzene	1	15.762	15.805	-0.043	168887	0.2505	0.2505	
13 Nitroglycerin	2	15.995	16.045	-0.050	327692	2.50	2.58	M
14 o-Nitrotoluene	1	16.702	16.745	-0.043	63090	0.2500	0.2311	M
15 p-Nitrotoluene	1	16.982	17.031	-0.049	58607	0.2505	0.2433	M
16 4-Amino-2,6-dinitrotoluene	1	17.415	17.465	-0.050	80875	0.2503	0.2343	M
17 m-Nitrotoluene	1	17.915	17.958	-0.043	71921	0.2503	0.2411	M
18 2-Amino-4,6-dinitrotoluene	1	18.349	18.398	-0.049	113930	0.2510	0.2449	M
19 1,3,5-Trinitrobenzene	1	19.095	19.138	-0.043	119560	0.2505	0.2531	M
20 2,6-Dinitrotoluene	1	20.015	20.065	-0.050	75904	0.2510	0.2471	
21 2,4-Dinitrotoluene	1	20.529	20.578	-0.049	157451	0.2510	0.2460	
22 Tetryl	1	23.829	23.885	-0.056	87116	0.2505	0.2363	M
23 2,4,6-Trinitrotoluene	1	24.855	24.905	-0.050	98875	0.2510	0.2383	M
24 PETN	2	25.402	25.438	-0.036	340702	2.50	2.42	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

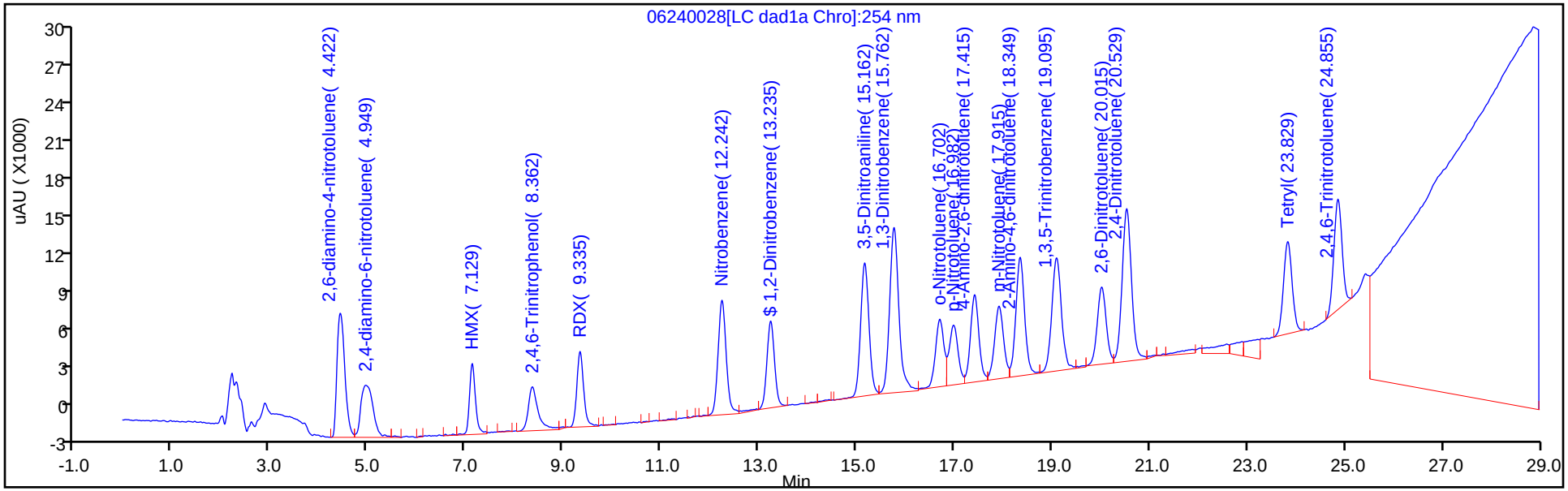
Report Date: 26-Jun-2020 16:19:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

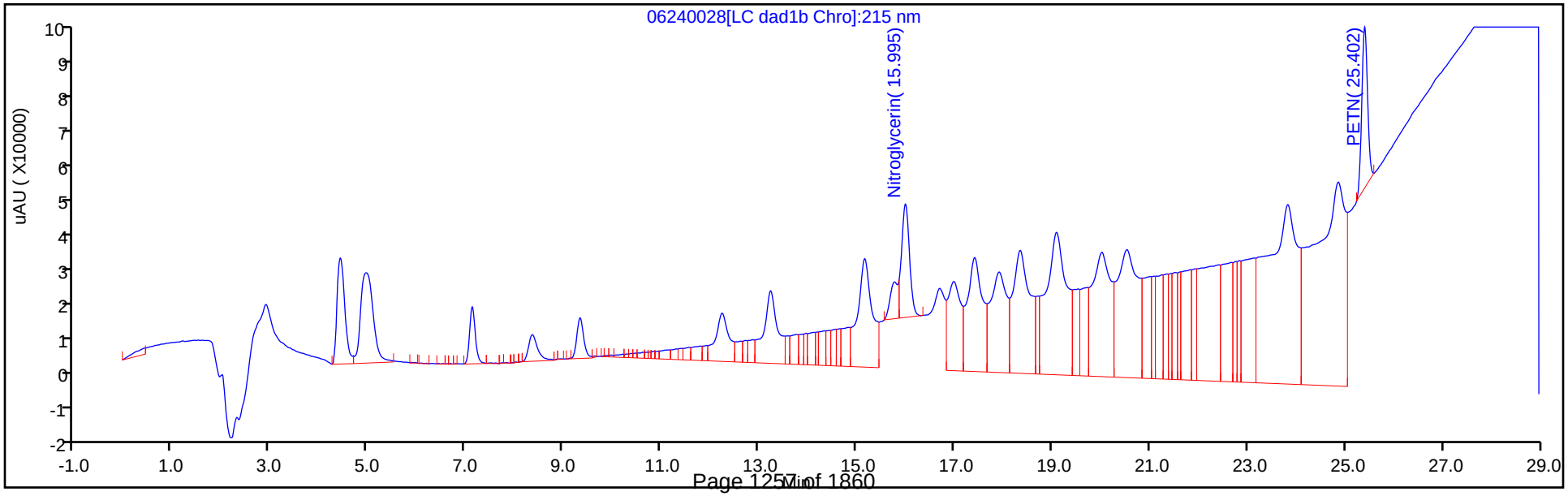
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d

Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

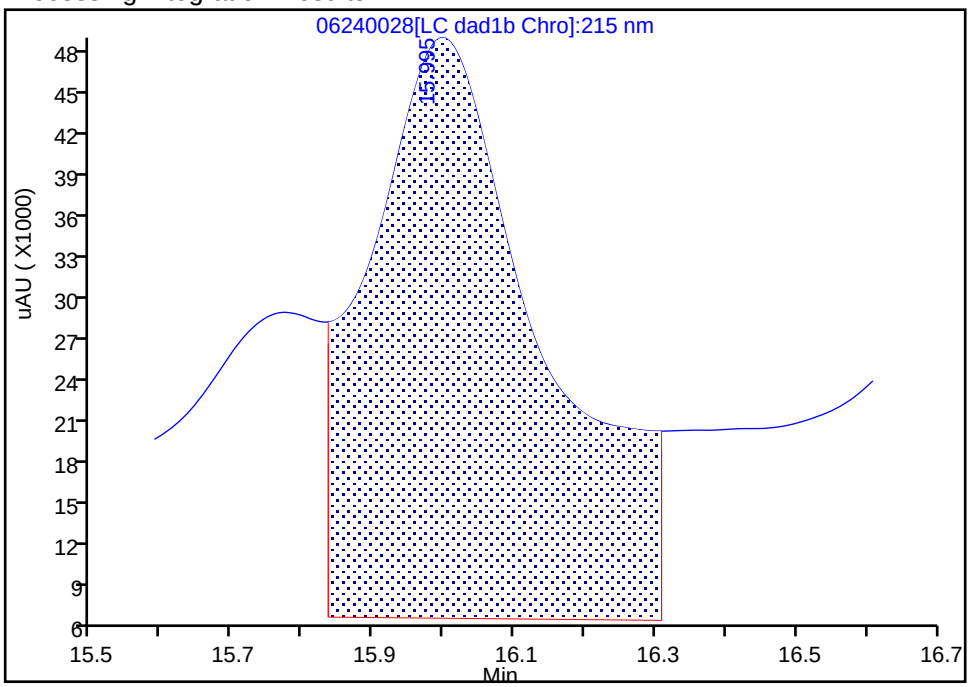
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

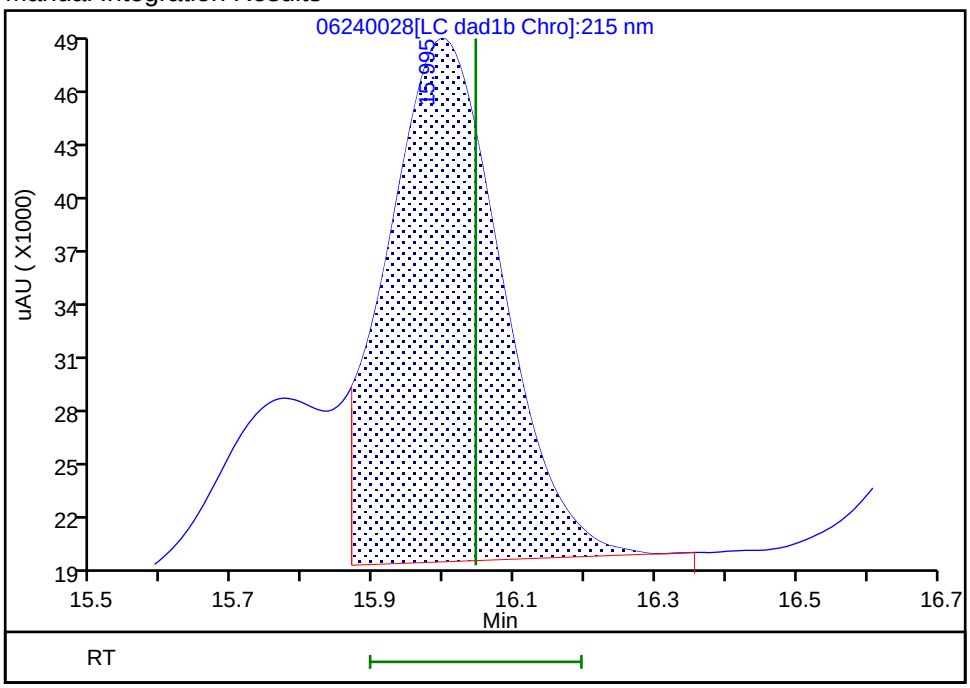
Processing Integration Results

RT: 16.00
Area: 724823
Amount: 5.716120
Amount Units: ug/ml



Manual Integration Results

RT: 16.00
Area: 327692
Amount: 2.584254
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:29
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

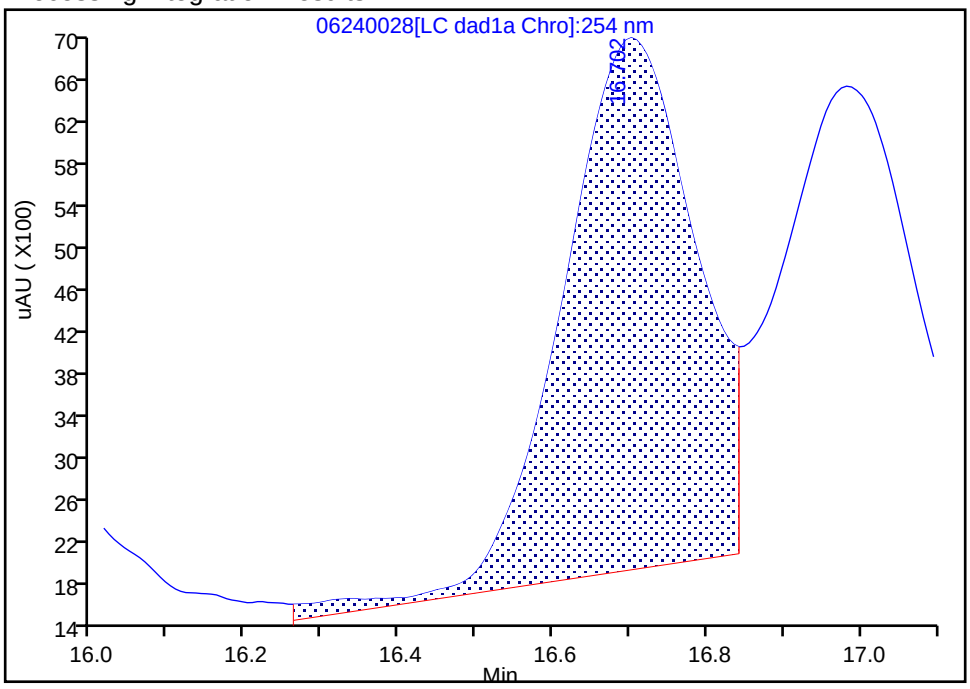
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

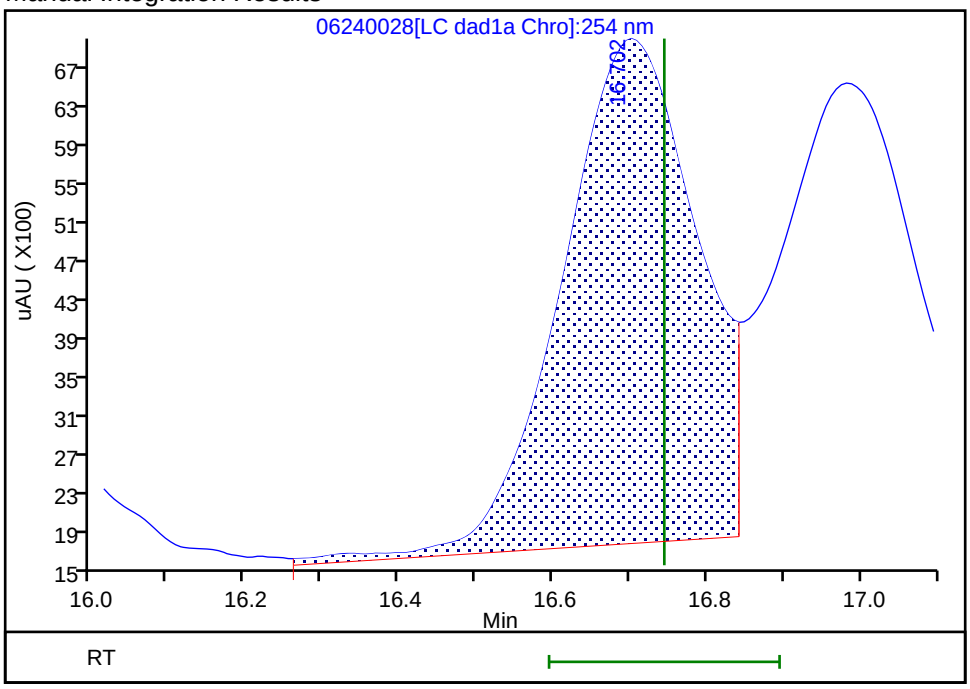
Processing Integration Results

RT: 16.70
Area: 60219
Amount: 0.220611
Amount Units: ug/ml



Manual Integration Results

RT: 16.70
Area: 63090
Amount: 0.231129
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:55

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

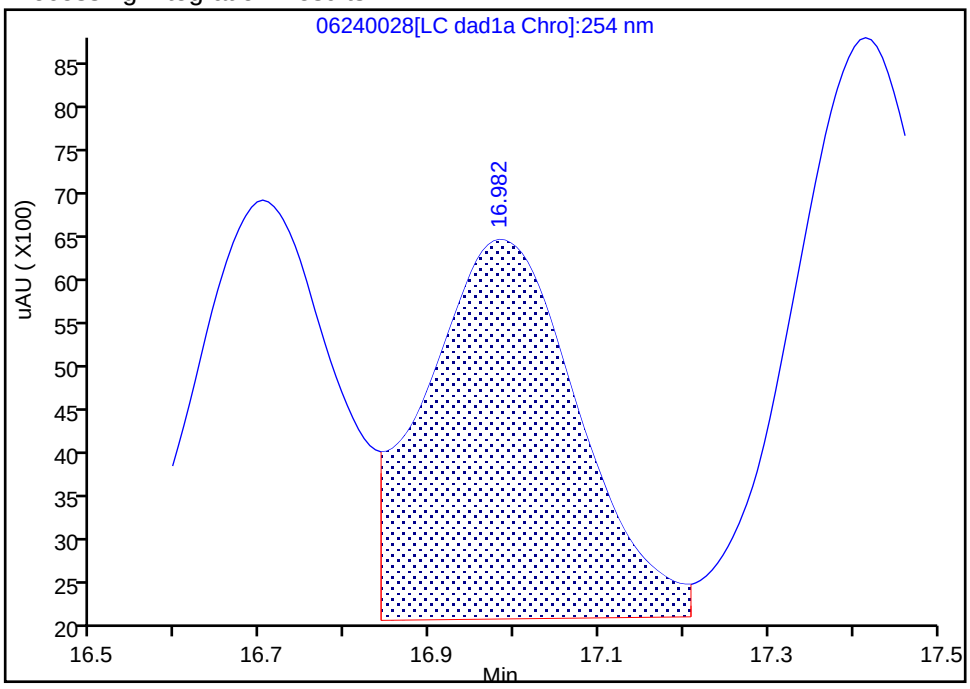
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

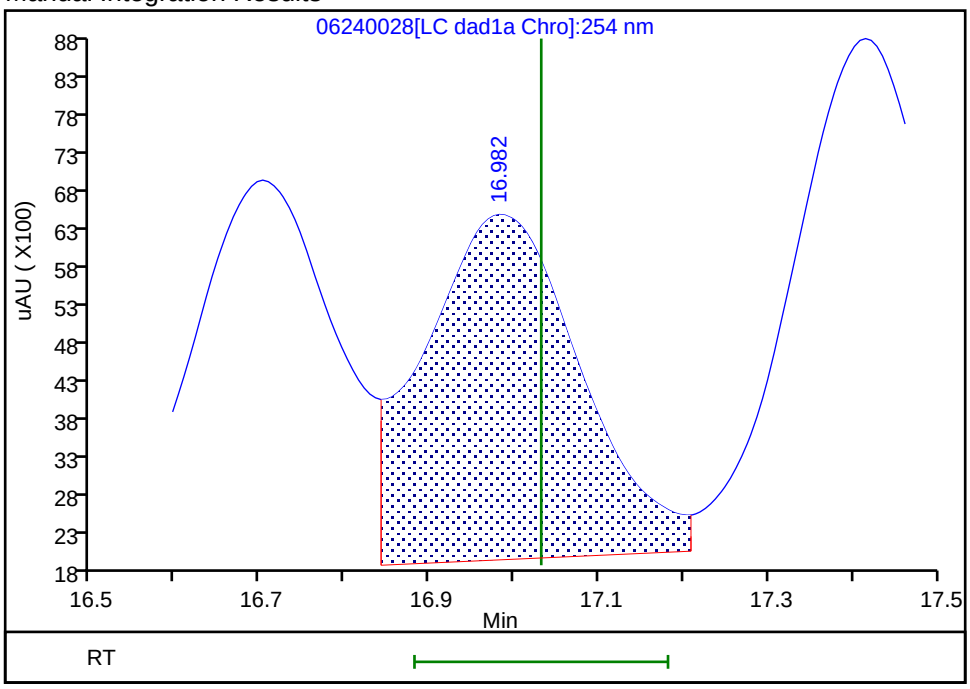
Processing Integration Results

RT: 16.98
Area: 54724
Amount: 0.227182
Amount Units: ug/ml



Manual Integration Results

RT: 16.98
Area: 58607
Amount: 0.243302
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:55

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

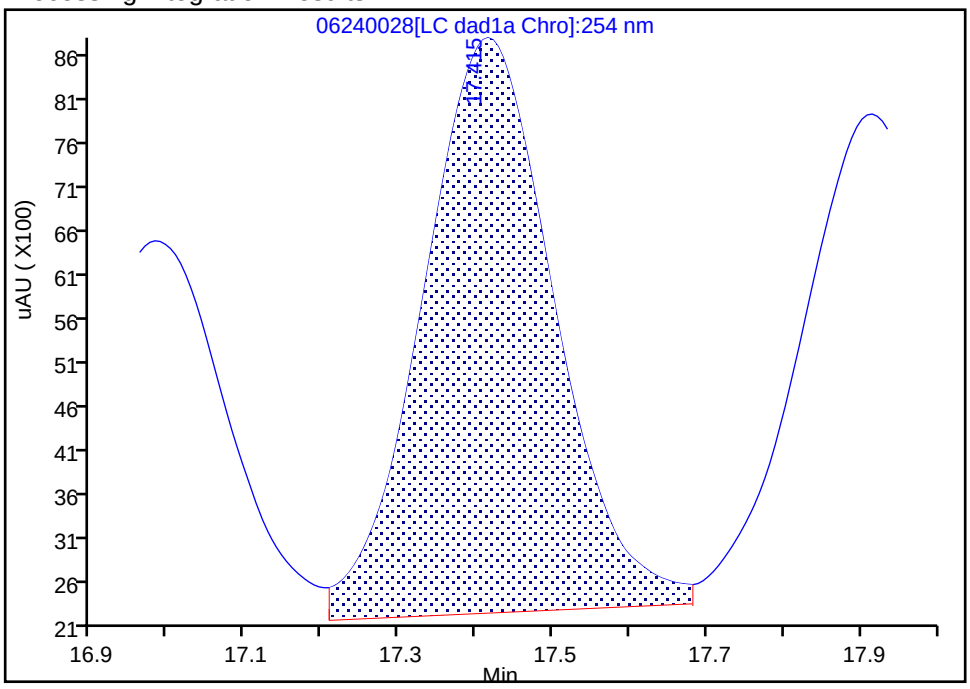
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

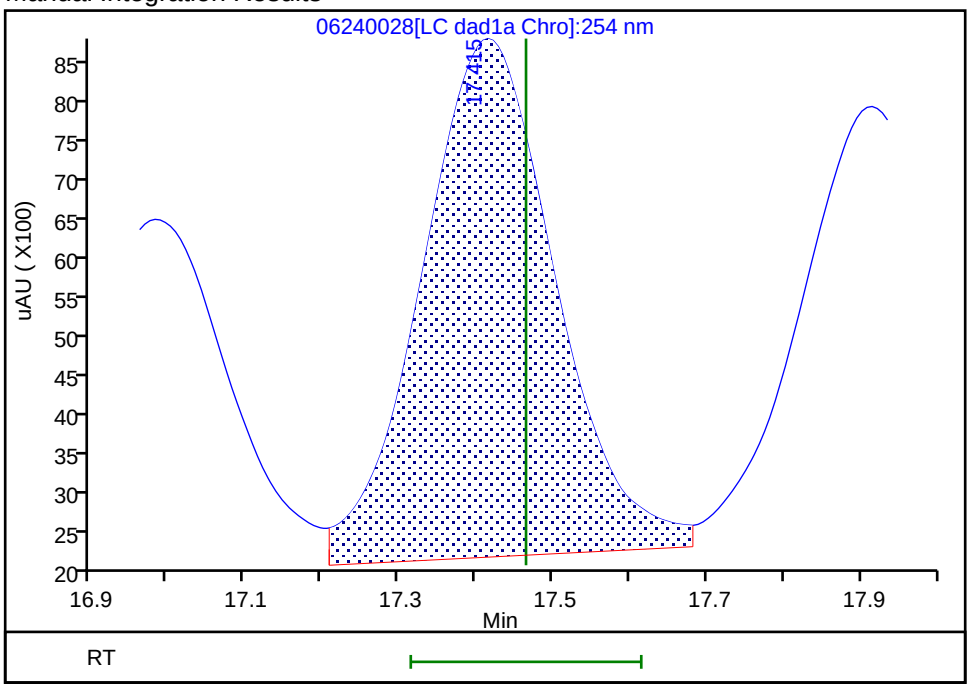
Processing Integration Results

RT: 17.42
Area: 78617
Amount: 0.227720
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 80875
Amount: 0.234261
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

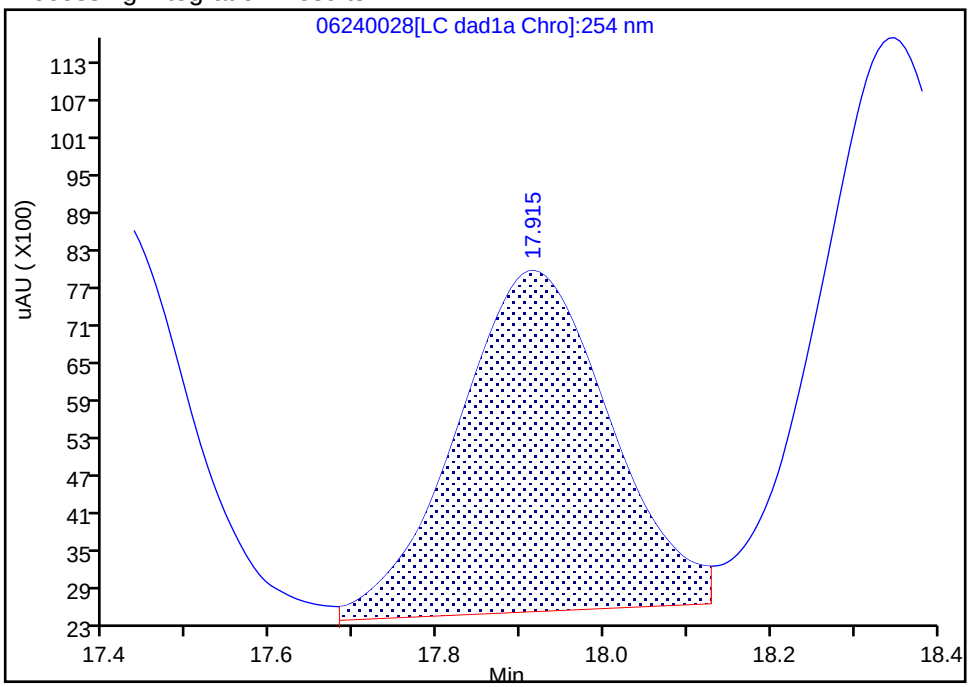
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

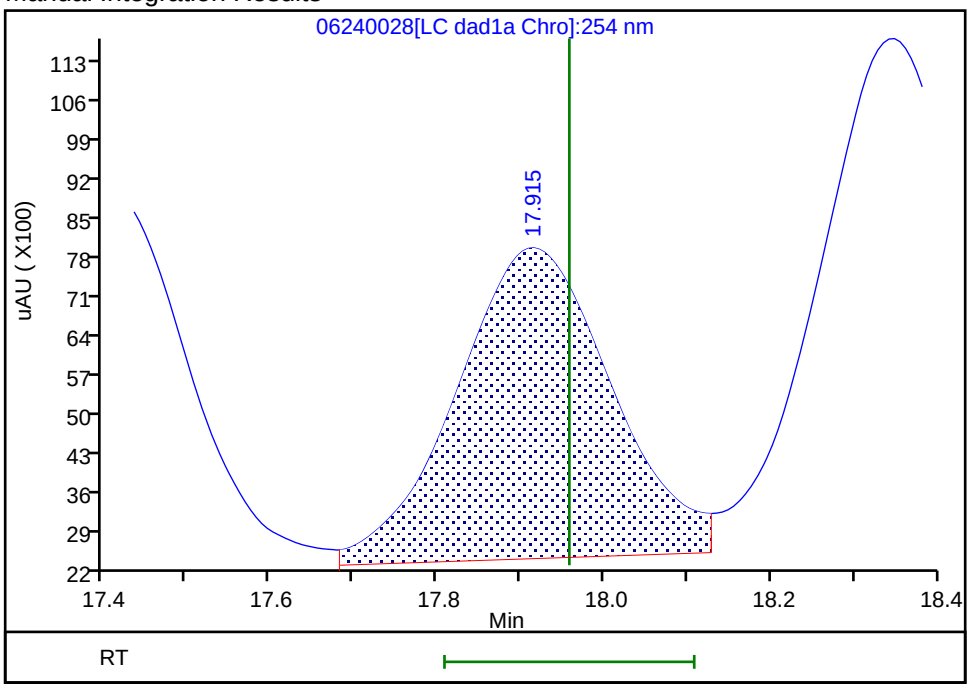
Processing Integration Results

RT: 17.92
Area: 69898
Amount: 0.234300
Amount Units: ug/ml



Manual Integration Results

RT: 17.92
Area: 71921
Amount: 0.241081
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

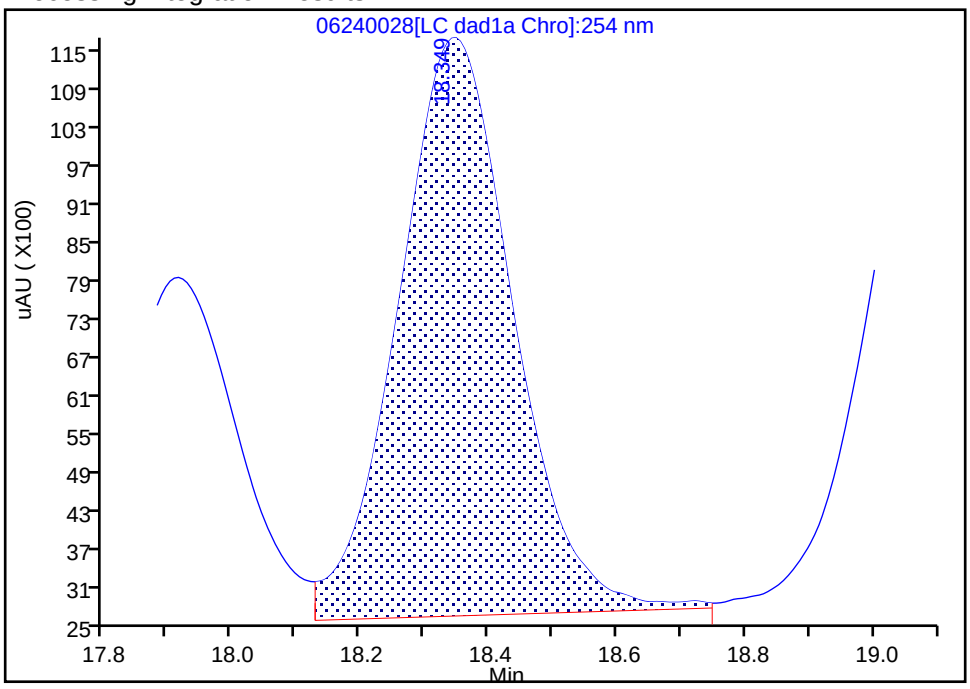
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

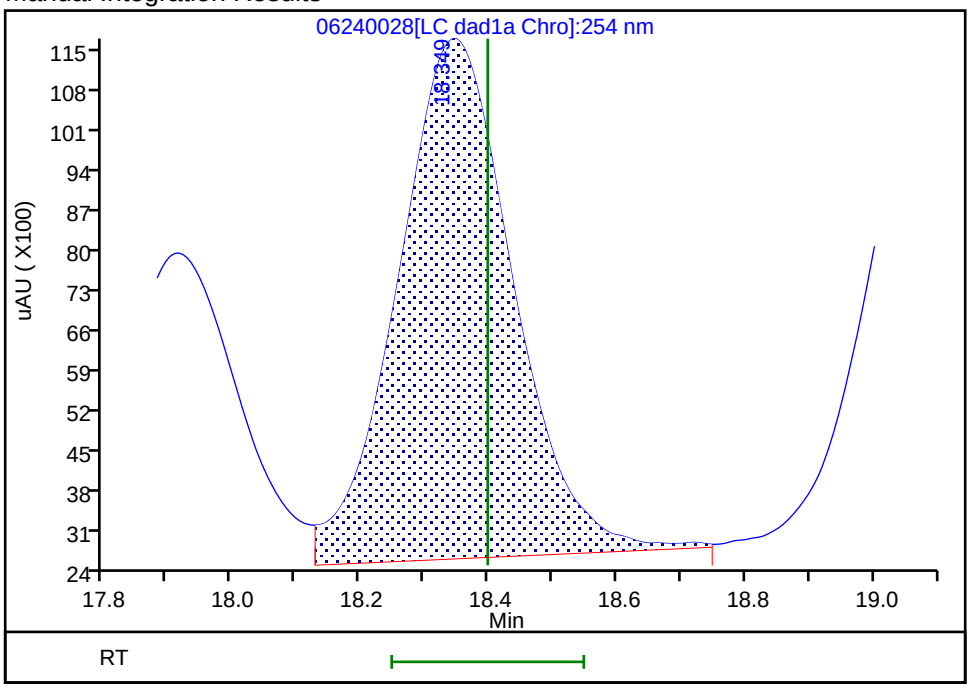
Processing Integration Results

RT: 18.35
Area: 112590
Amount: 0.242019
Amount Units: ug/ml



Manual Integration Results

RT: 18.35
Area: 113930
Amount: 0.244900
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

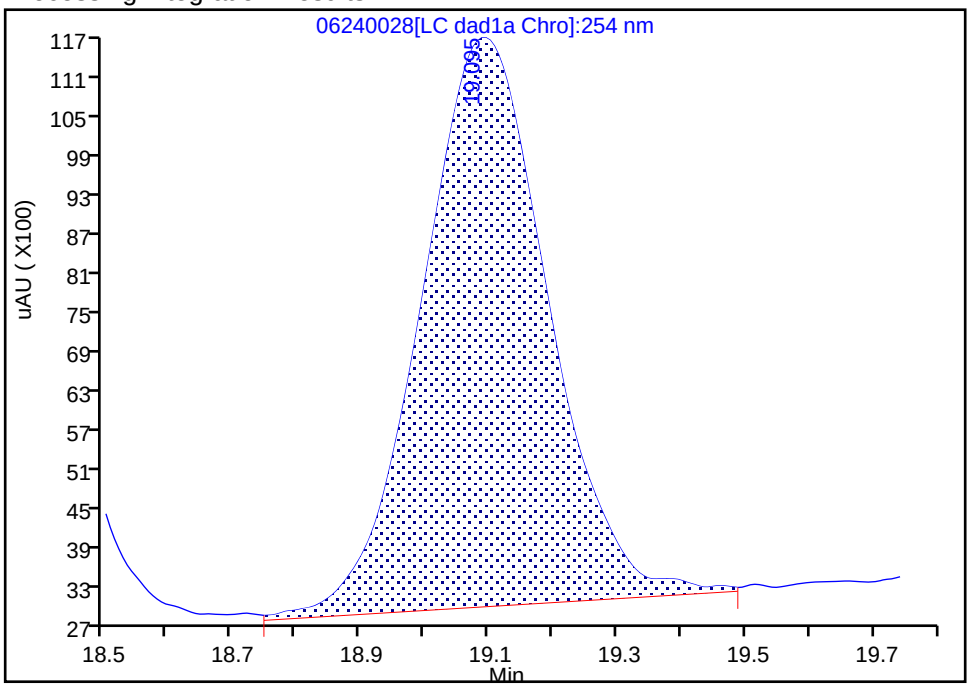
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

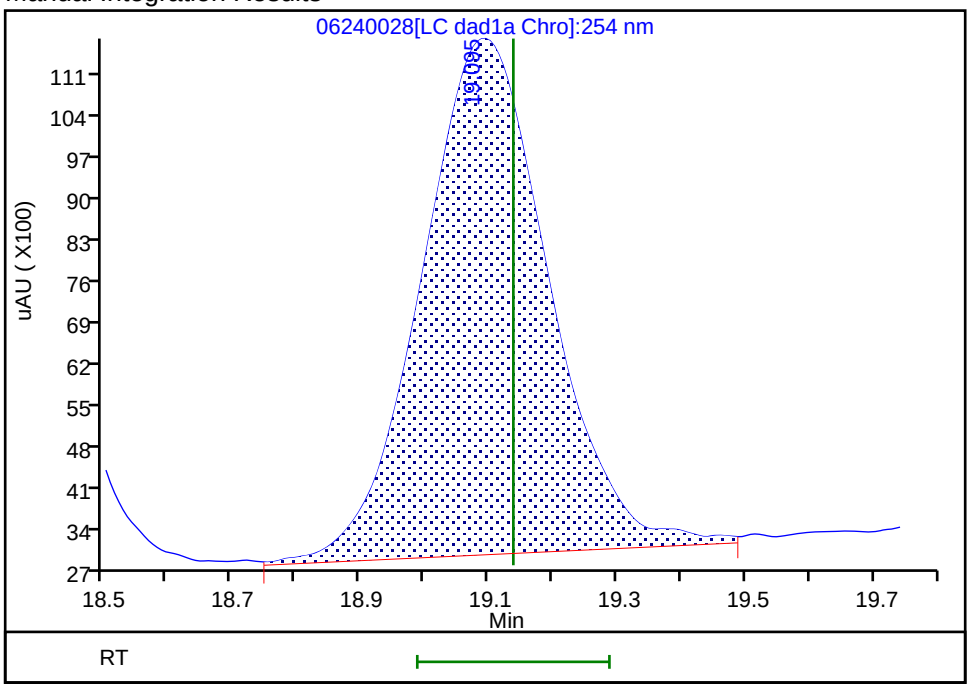
Processing Integration Results

RT: 19.10
Area: 119138
Amount: 0.252170
Amount Units: ug/ml



Manual Integration Results

RT: 19.10
Area: 119560
Amount: 0.253063
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:55

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

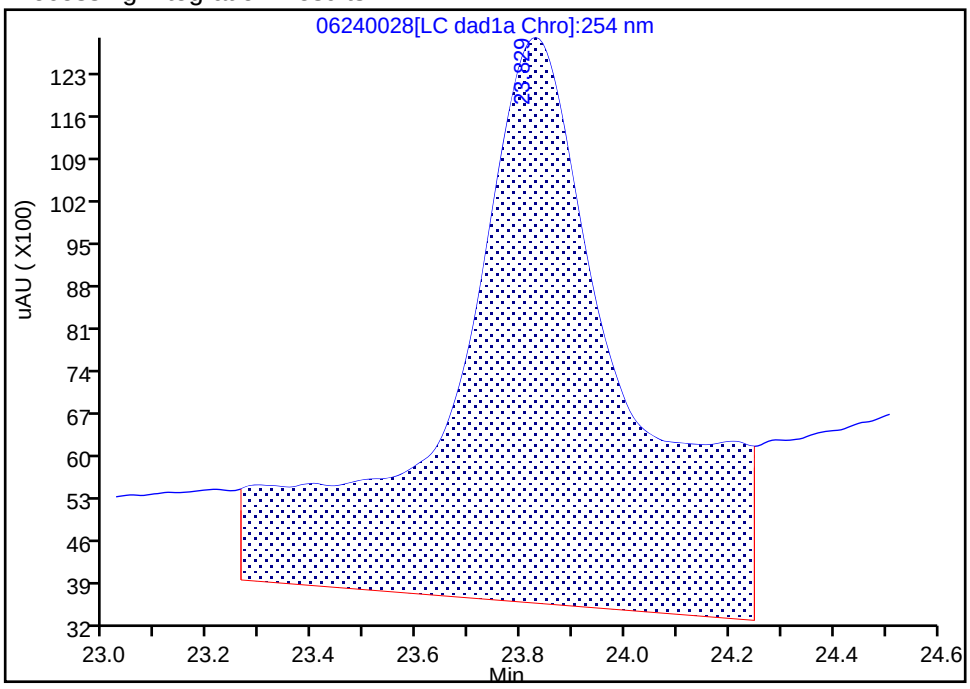
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

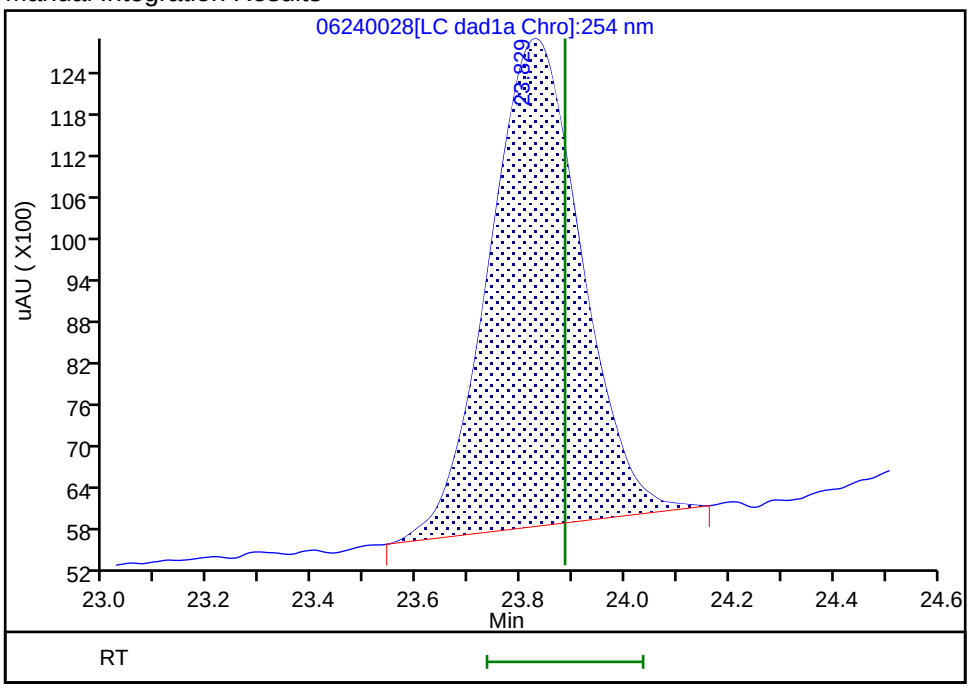
Processing Integration Results

RT: 23.83
Area: 218233
Amount: 0.591935
Amount Units: ug/ml



Manual Integration Results

RT: 23.83
Area: 87116
Amount: 0.236293
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:36

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

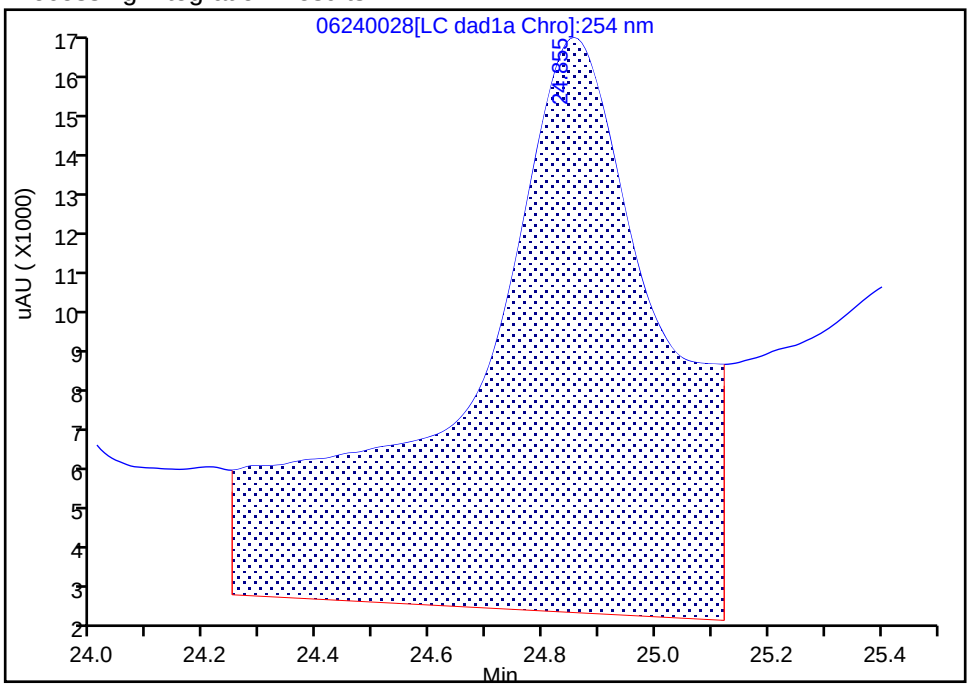
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

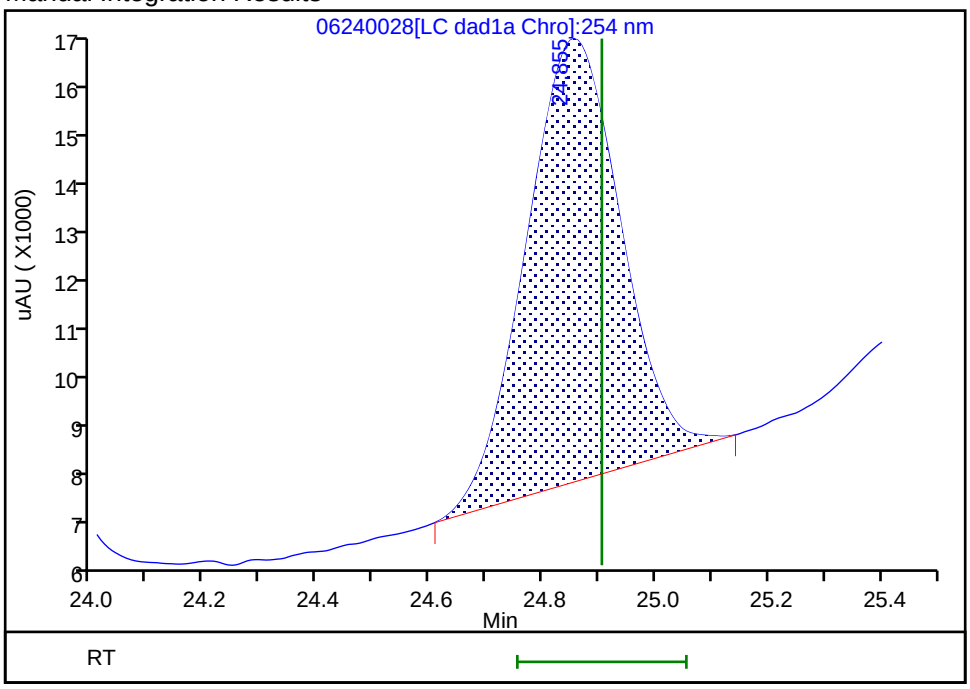
Processing Integration Results

RT: 24.86
Area: 322790
Amount: 0.795876
Amount Units: ug/ml



Manual Integration Results

RT: 24.86
Area: 98875
Amount: 0.238333
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:40

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

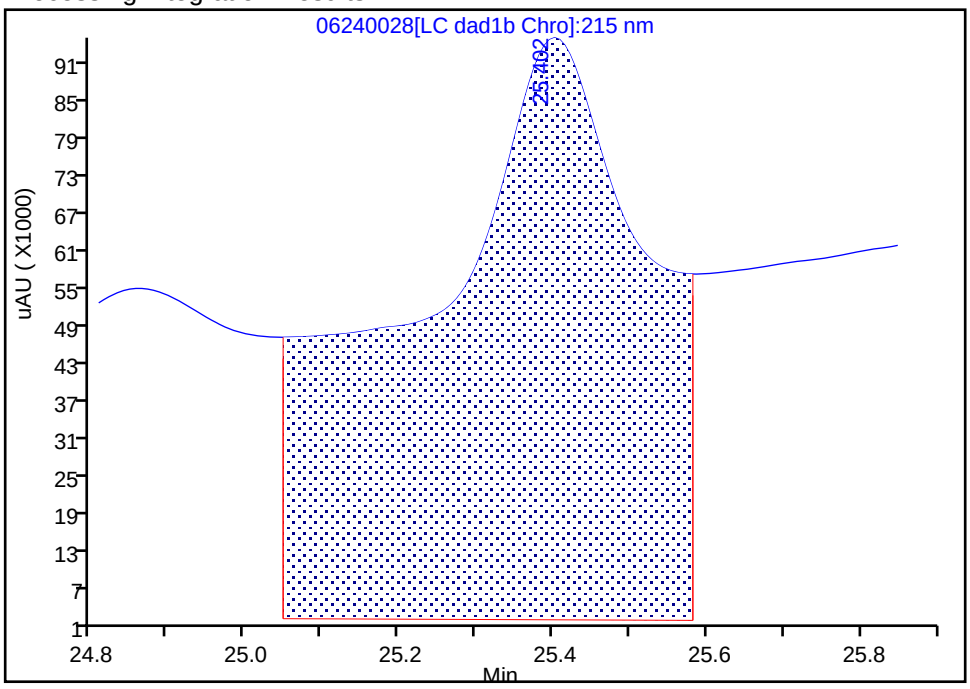
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

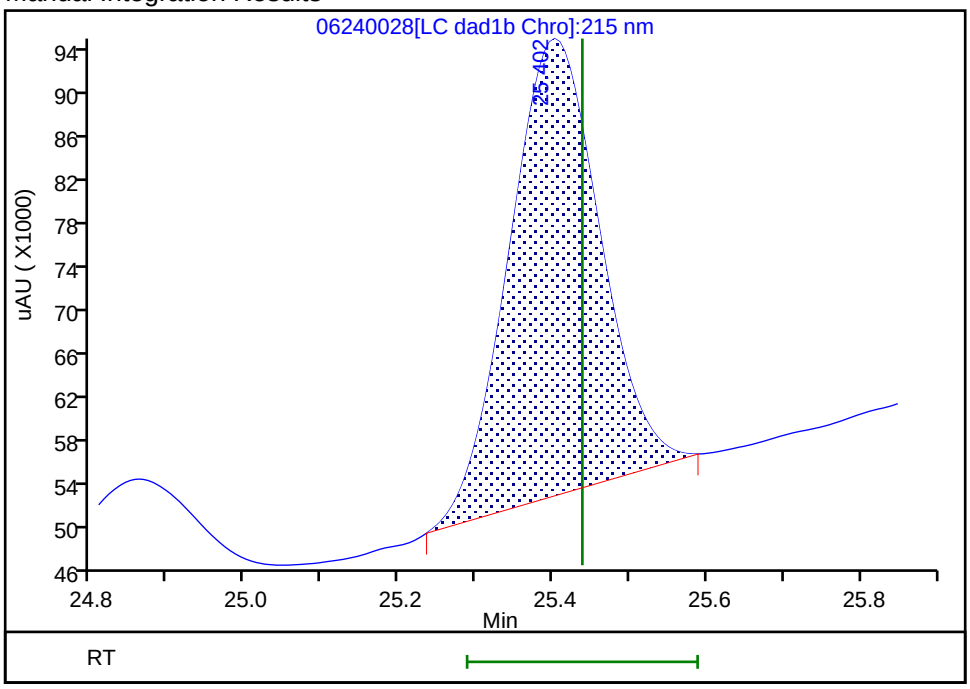
Processing Integration Results

RT: 25.40
Area: 1921290
Amount: 14.648932
Amount Units: ug/ml



Manual Integration Results

RT: 25.40
Area: 340702
Amount: 2.423559
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:18:43
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/29 Calibration Date: 06/25/2020 10:45

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06240029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	401722		231	250	-7.8	15.0
DNX	Ave	321206	303988		237	250	-5.4	15.0
MNX	Lin2		266783		271	292	-7.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-500016/29 Calibration Date: 06/25/2020 10:45

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06240029.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.38	5.68
DNX	6.36	6.22	6.52
MNX	7.91	7.78	8.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240029.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	25-Jun-2020 10:45:57	ALS Bottle#:	8	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092719-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Jun-2020 16:19:12	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:22:24		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.522	5.532	-0.010	100531	0.2503	0.2307	
4 DNX	1	6.362	6.372	-0.010	76073	0.2503	0.2368	
7 MNX	1	7.909	7.926	-0.017	77834	0.2918	0.2714	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

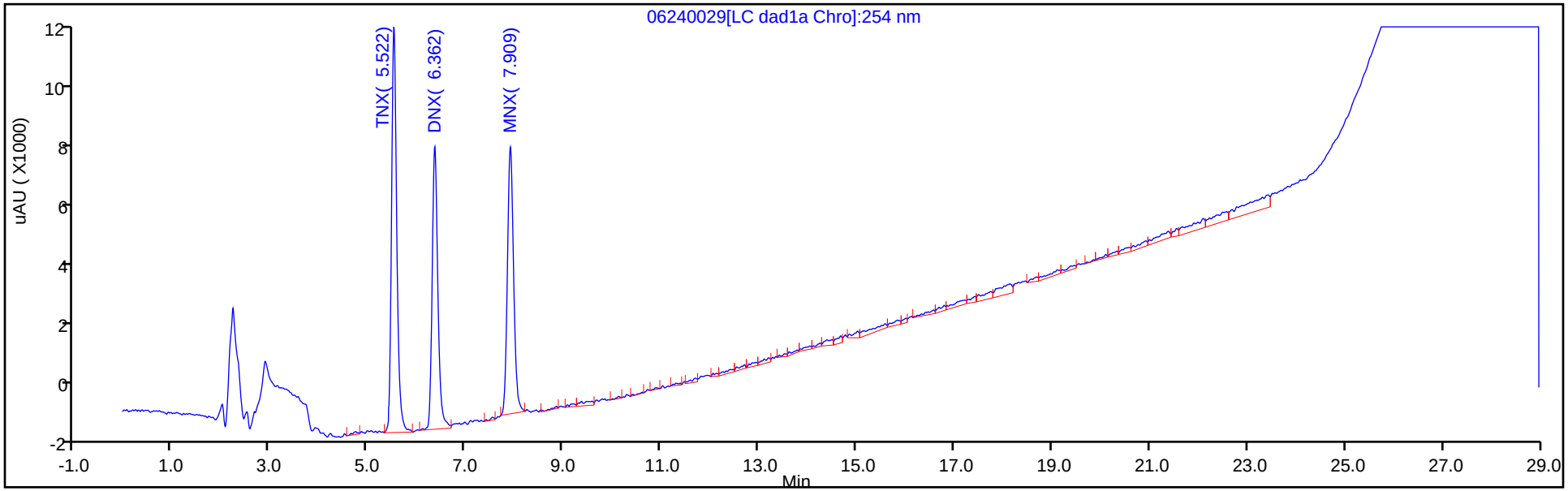
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 26-Jun-2020 16:19:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

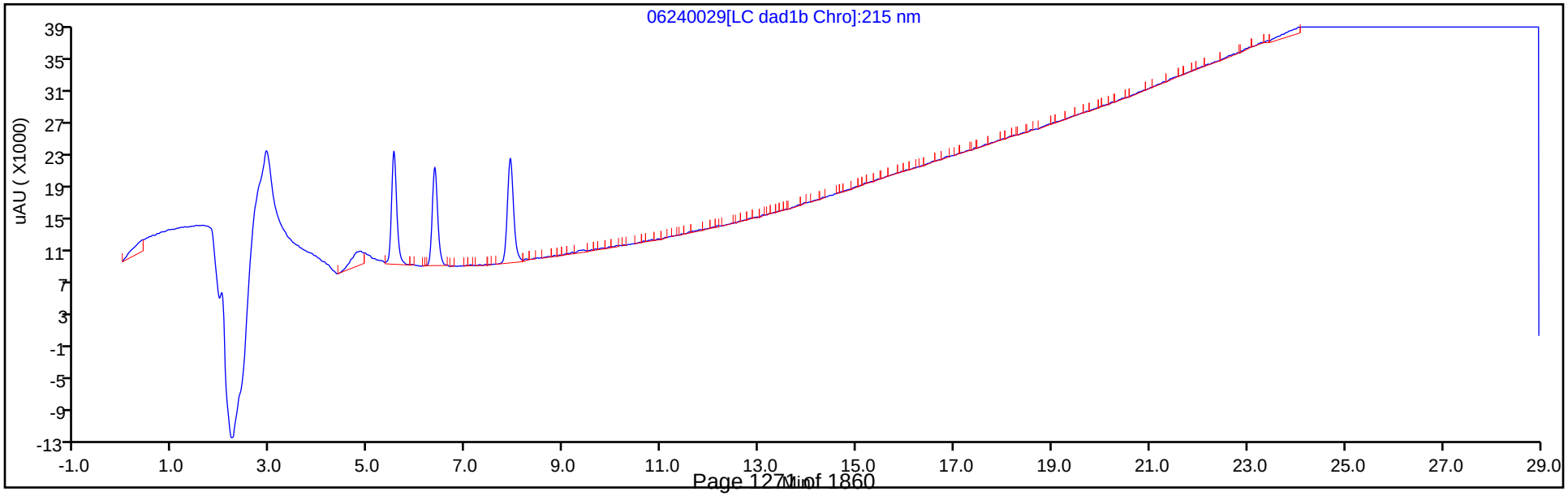
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240029.d				
Injection Date:	25-Jun-2020 10:45:57	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

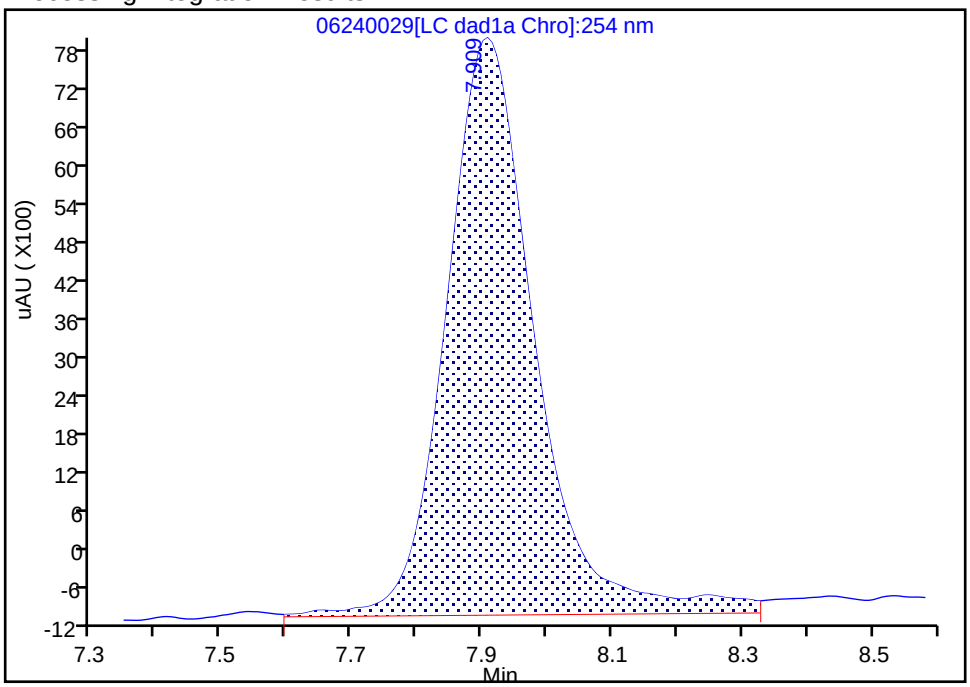
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240029.d
Injection Date: 25-Jun-2020 10:45:57 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 8 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

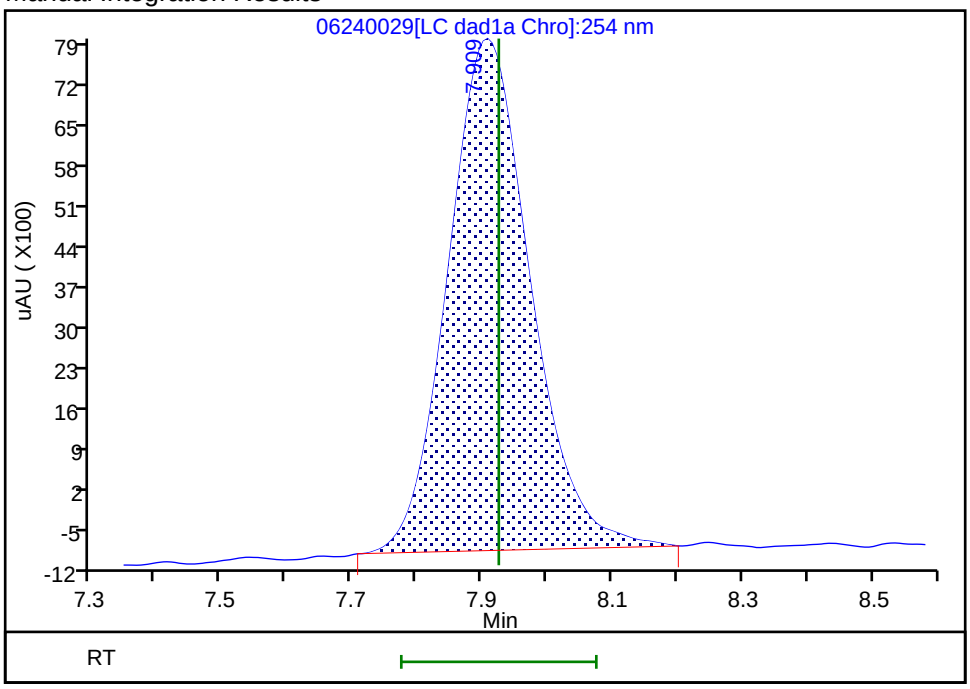
Processing Integration Results

RT: 7.91
Area: 85559
Amount: 0.300305
Amount Units: ug/ml



Manual Integration Results

RT: 7.91
Area: 77834
Amount: 0.271361
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:19:08
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-487658/15 Calibration Date: 03/04/2020 17:10

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89178	84438		379	400	-5.3	15.0
RDX	Ave	117869	105313		357	400	-10.7	15.0
Picric acid	Ave	87247	85318		391	400	-2.2	15.0
1,3,5-Trinitrobenzene	Ave	243459	237765		391	400	-2.3	15.0
1,3-Dinitrobenzene	Ave	324251	307115		379	400	-5.3	15.0
Nitrobenzene	Ave	212689	202485		381	400	-4.8	15.0
Tetryl	Ave	193870	175735		363	400	-9.4	15.0
Nitroglycerin	Ave	71797	66747		3720	4000	-7.0	15.0
2,4,6-Trinitrotoluene	Ave	220911	205103		371	400	-7.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	173468	158943		367	400	-8.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	217539	202095		372	400	-7.1	15.0
2,6-Dinitrotoluene	Ave	159404	150648		378	400	-5.5	15.0
2,4-Dinitrotoluene	Ave	321164	290578		362	400	-9.5	15.0
o-Nitrotoluene	Ave	143838	128300		357	400	-10.8	15.0
p-Nitrotoluene	Ave	120299	111828		372	400	-7.0	15.0
m-Nitrotoluene	Ave	154244	144728		375	400	-6.2	15.0
PETN	Ave	79456	76256		3840	4000	-4.0	15.0
1,2-Dinitrobenzene	Ave	146215	131020		358	400	-10.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-487658/15 Calibration Date: 03/04/2020 17:10

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.75	7.60	7.90
Picric acid	8.06	7.91	8.21
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.58	10.88
2,4,6-Trinitrotoluene	11.18	11.08	11.28
4-Amino-2,6-dinitrotoluene	11.34	11.24	11.44
2-Amino-4,6-dinitrotoluene	11.62	11.52	11.72
2,6-Dinitrotoluene	11.79	11.69	11.89
2,4-Dinitrotoluene	11.98	11.88	12.08
o-Nitrotoluene	12.83	12.68	12.98
p-Nitrotoluene	13.27	13.12	13.42
m-Nitrotoluene	13.86	13.71	14.01
PETN	14.97	14.82	15.12
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040015.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 04-Mar-2020 17:10:41 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0089779-015
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:10 Calib Date: 04-Mar-2020 16:47:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:23:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.683	6.683	0.000	33775	0.4000	0.3787	M
7 RDX	1	7.750	7.750	0.000	42125	0.4000	0.3574	
8 2,4,6-Trinitrophenol	1	8.056	8.056	0.000	34127	0.4000	0.3912	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	52408	0.4000	0.3584	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	95106	0.4000	0.3906	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	122846	0.4000	0.3789	
12 Nitrobenzene	1	9.916	9.916	0.000	80994	0.4000	0.3808	
14 Tetryl	1	10.216	10.216	0.000	70294	0.4000	0.3626	
15 Nitroglycerin	2	10.729	10.729	0.000	266988	4.00	3.72	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	82041	0.4000	0.3714	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	63577	0.4000	0.3665	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	80838	0.4000	0.3716	
19 2,6-Dinitrotoluene	1	11.789	11.789	0.000	60259	0.4000	0.3780	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	116231	0.4000	0.3619	
21 o-Nitrotoluene	1	12.829	12.829	0.000	51320	0.4000	0.3568	
22 p-Nitrotoluene	1	13.269	13.269	0.000	44731	0.4000	0.3718	
23 m-Nitrotoluene	1	13.863	13.863	0.000	57891	0.4000	0.3753	
24 PETN	2	14.969	14.969	0.000	305025	4.00	3.84	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00110 Amount Added: 40.00 Units: uL
8330 LCS_00095 Amount Added: 40.00 Units: uL

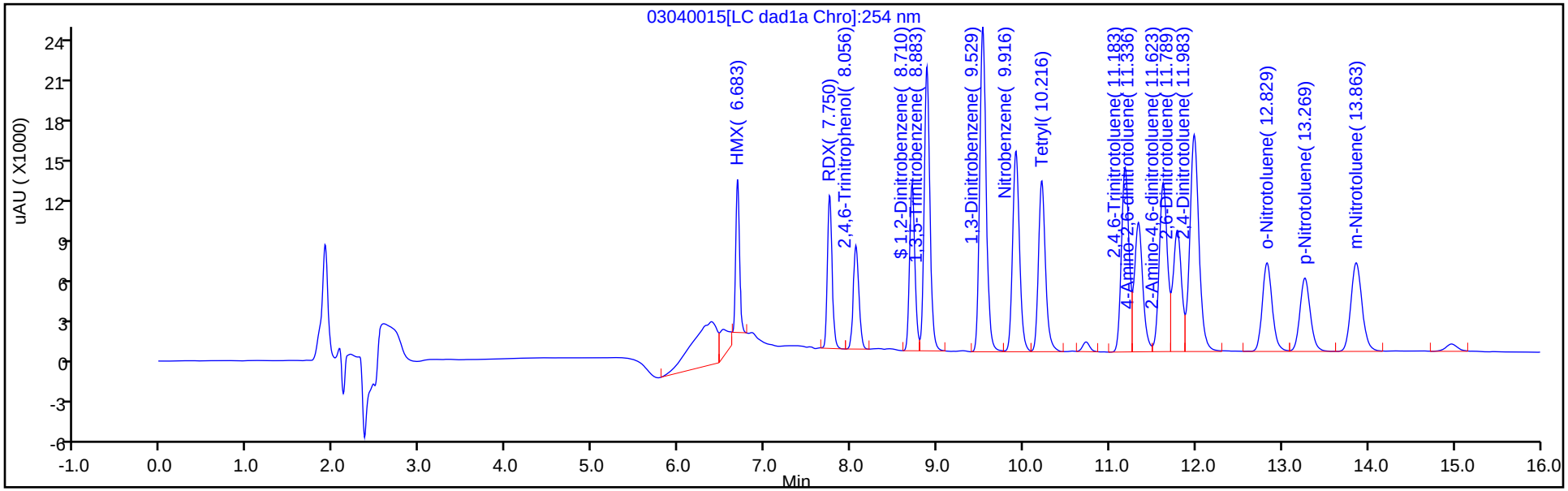
Report Date: 06-Mar-2020 10:25:10 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

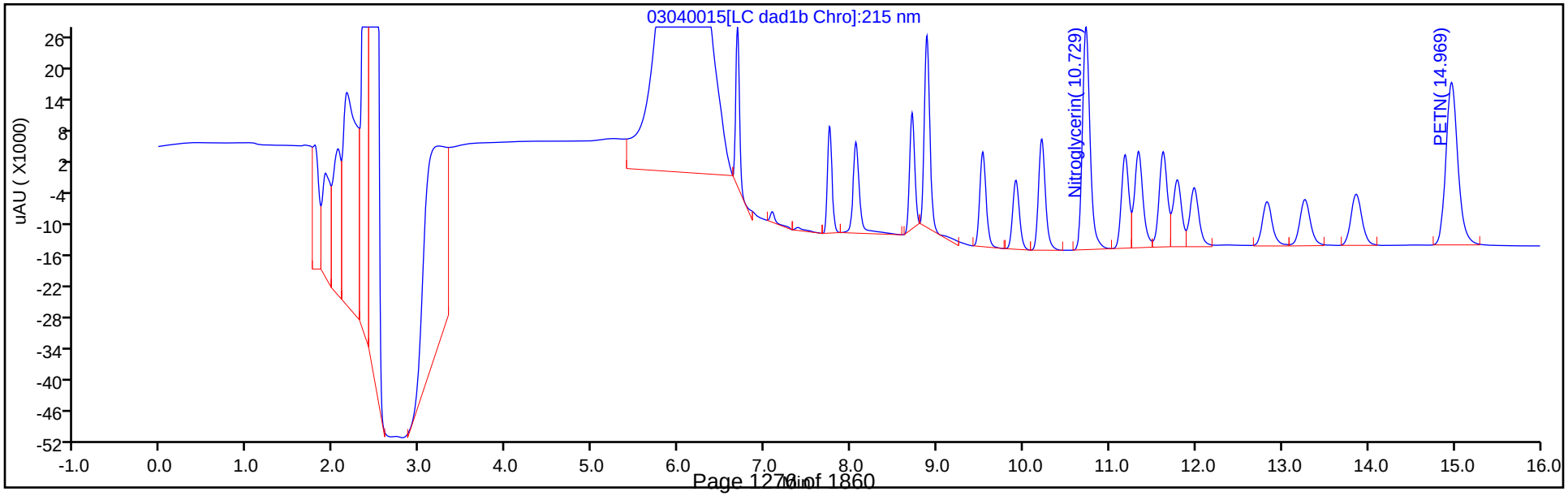
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040015.d

Injection Date:	04-Mar-2020 17:10:41	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV MAIN			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

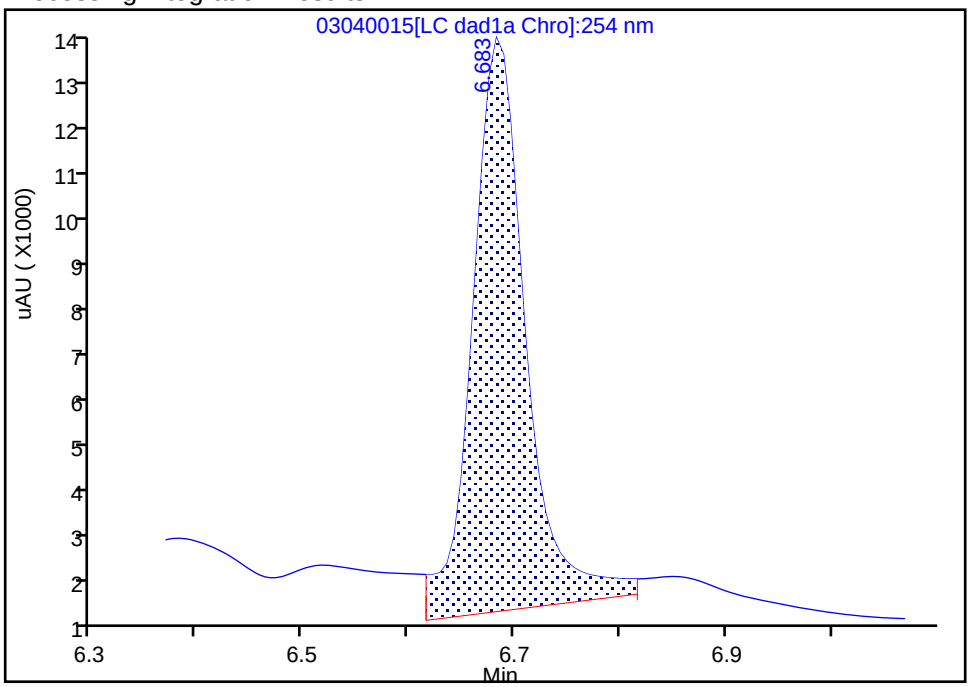
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040015.d				
Injection Date:	04-Mar-2020 17:10:41	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

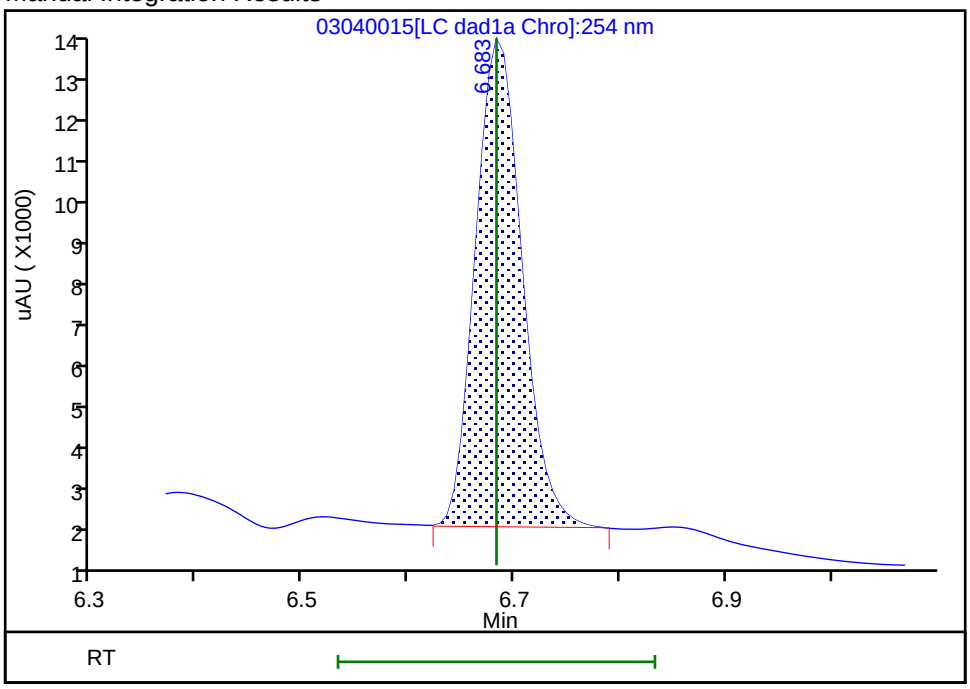
Processing Integration Results

RT: 6.68
Area: 41329
Amount: 0.463446
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 33775
Amount: 0.378739
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:23:51

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-487658/33 Calibration Date: 03/05/2020 00:03

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	189186		348	400	-13.1	15.0
DNX	Ave	152928	145270		380	400	-5.0	15.0
MNX	Ave	158544	136780		403	467	-13.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-487658/33 Calibration Date: 03/05/2020 00:03

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040033.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 05-Mar-2020 00:03:48 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0089779-033
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:28 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:37:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.594	0.000	75750	0.4004	0.3481	M
5 DNX	1	6.914	6.914	0.000	58166	0.4004	0.3803	M
6 MNX	1	7.361	7.361	0.000	63849	0.4668	0.4027	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00006 Amount Added: 40.00 Units: uL

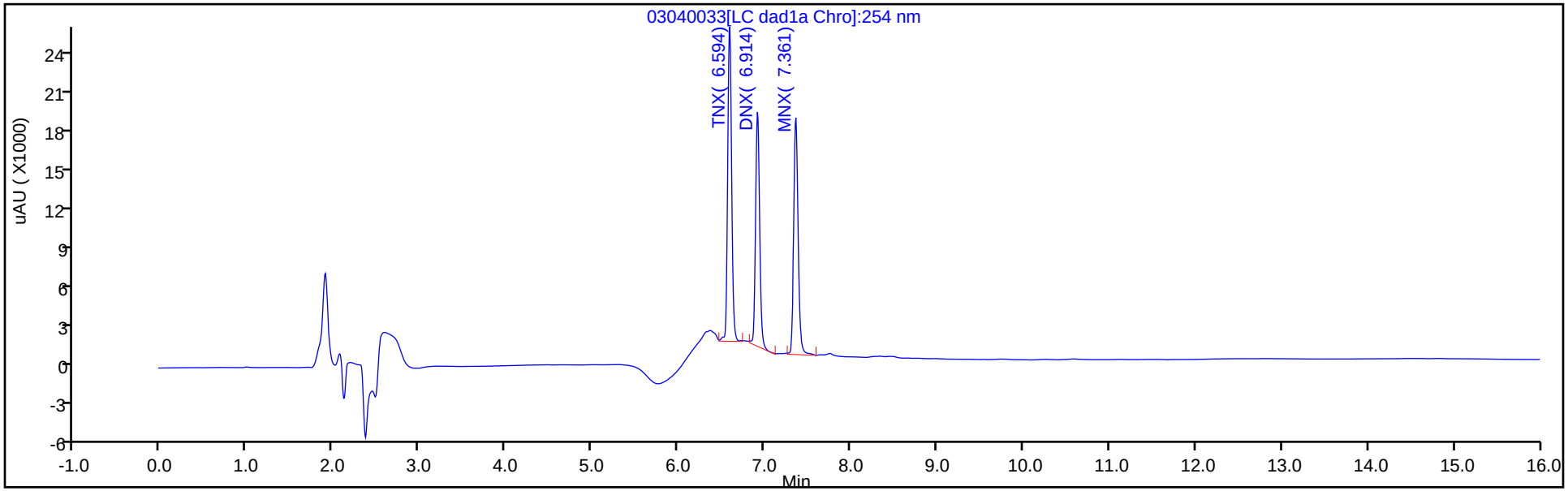
Report Date: 06-Mar-2020 10:25:29 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

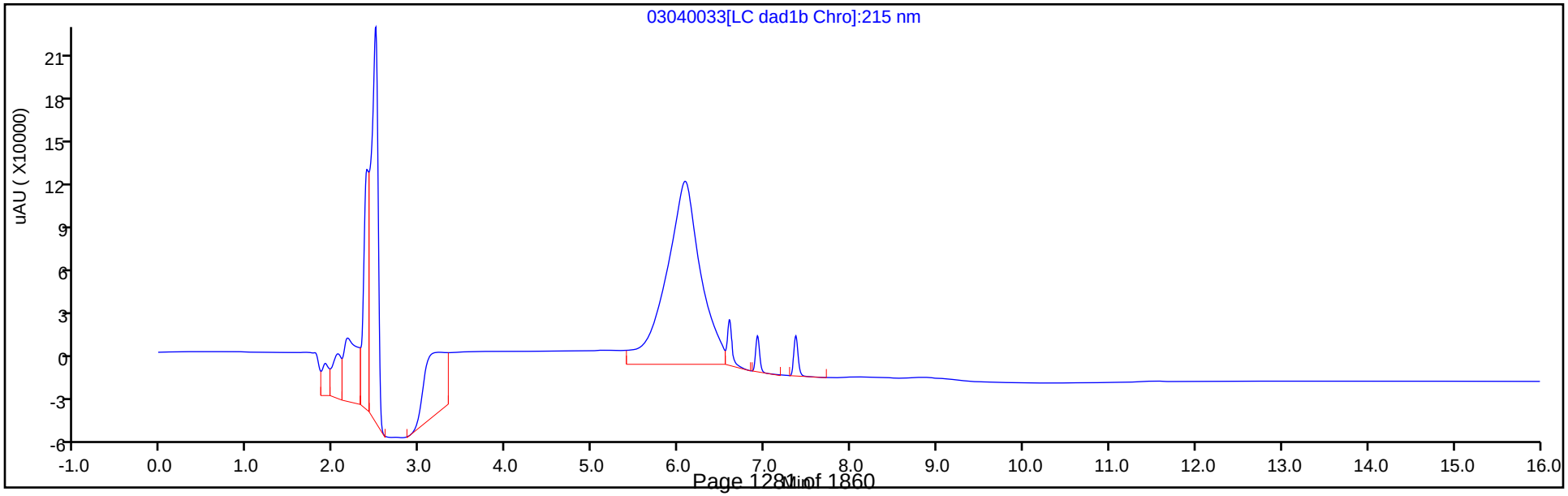
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d

Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV DMT			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

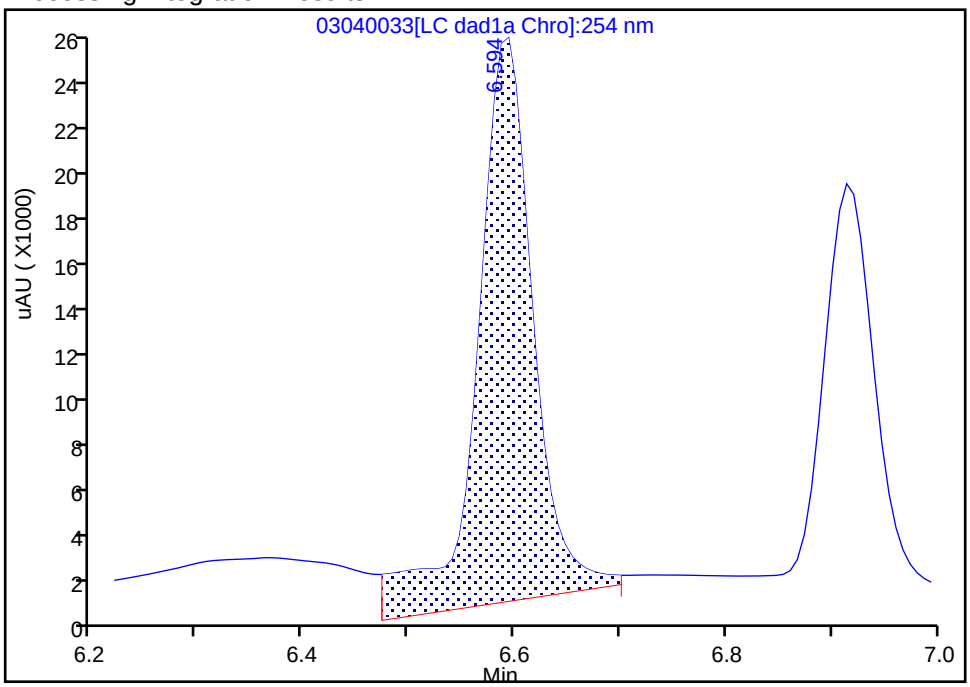
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

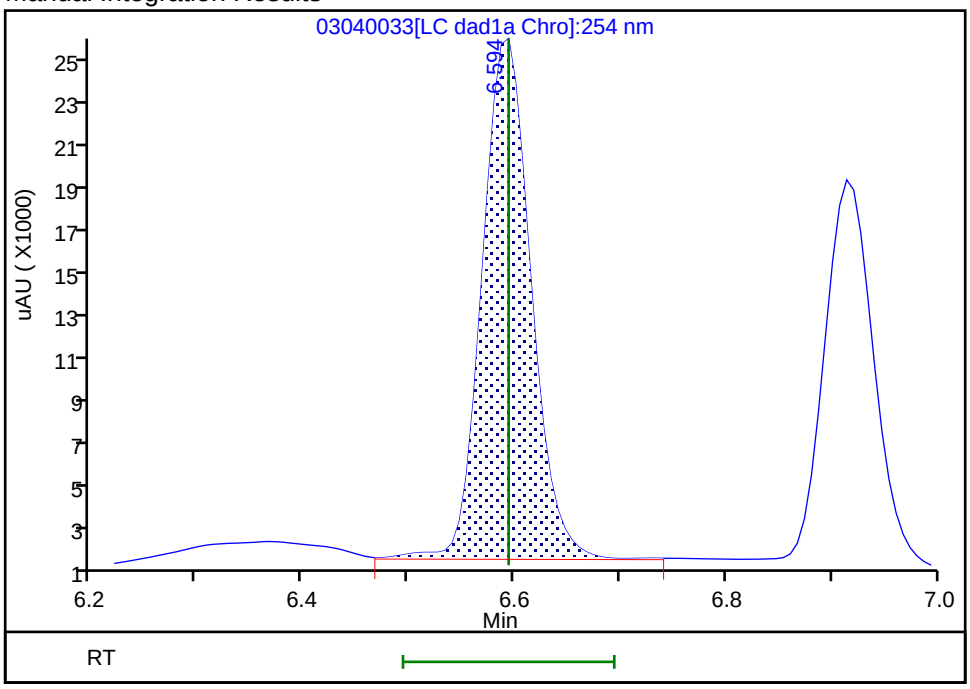
Processing Integration Results

RT: 6.59
Area: 91215
Amount: 0.419170
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 75750
Amount: 0.348102
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:37:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

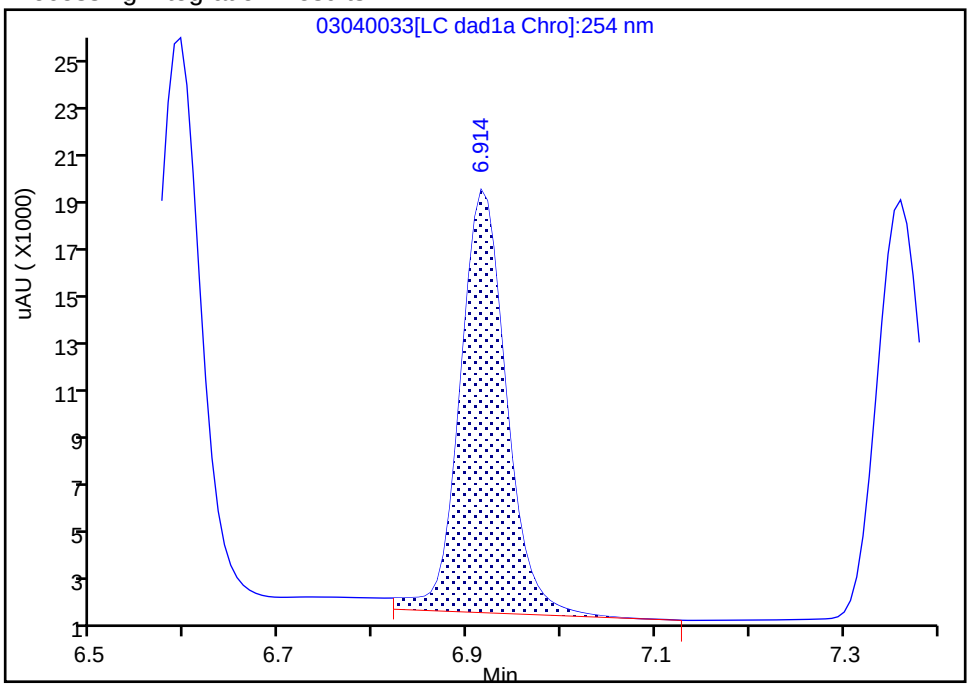
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

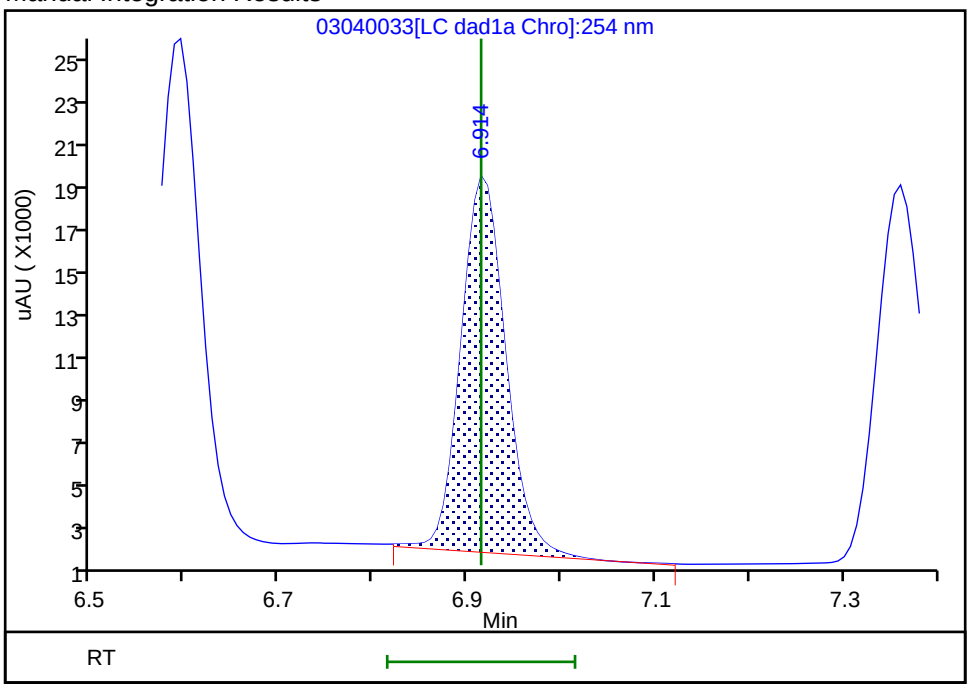
Processing Integration Results

RT: 6.91
Area: 60901
Amount: 0.398232
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 58166
Amount: 0.380348
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:37:39

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-489145/16 Calibration Date: 03/18/2020 15:02

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 03180016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	85080		396	400	-1.0	15.0
RDX	Ave	116613	105640		362	400	-9.4	15.0
Picric acid	Ave	85131	85323		401	400	0.2	15.0
1,3,5-Trinitrobenzene	Ave	230309	238740		415	400	3.7	15.0
1,3-Dinitrobenzene	Ave	306686	307370		401	400	0.2	15.0
Nitrobenzene	Ave	200403	202493		404	400	1.0	15.0
Tetryl	Ave	177032	175175		396	400	-1.0	15.0
Nitroglycerin	Ave	68133	67461		3960	4000	-1.0	15.0
2,4,6-Trinitrotoluene	Ave	204031	204823		402	400	0.4	15.0
4-Amino-2,6-dinitrotoluene	Lin2		159183		363	400	-9.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	202785		400	400	-0.0	15.0
2,6-Dinitrotoluene	Ave	149452	151720		406	400	1.5	15.0
2,4-Dinitrotoluene	Ave	303584	291863		385	400	-3.9	15.0
2-Nitrotoluene	Ave	135051	128890		382	400	-4.6	15.0
4-Nitrotoluene	Ave	113005	112495		398	400	-0.5	15.0
3-Nitrotoluene	Ave	143029	145235		406	400	1.5	15.0
PETN	Ave	78605	75679		3850	4000	-3.7	15.0
1,2-Dinitrobenzene	Ave	138212	136648		395	400	-1.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: ICV 280-489145/16 Calibration Date: 03/18/2020 15:02

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 03180016.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.54	6.84
RDX	7.75	7.60	7.90
Picric acid	8.06	7.91	8.21
1,3,5-Trinitrobenzene	8.89	8.74	9.04
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.58	10.88
2,4,6-Trinitrotoluene	11.18	11.08	11.28
4-Amino-2,6-dinitrotoluene	11.34	11.24	11.44
2-Amino-4,6-dinitrotoluene	11.63	11.53	11.73
2,6-Dinitrotoluene	11.79	11.69	11.89
2,4-Dinitrotoluene	11.98	11.88	12.08
2-Nitrotoluene	12.82	12.67	12.97
4-Nitrotoluene	13.26	13.11	13.41
3-Nitrotoluene	13.85	13.70	14.00
PETN	14.94	14.79	15.09
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180016.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 18-Mar-2020 15:02:22 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0090150-016
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:46 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:47:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.685	6.685	0.000	34032	0.4000	0.3959	M
7 RDX	1	7.751	7.751	0.000	42256	0.4000	0.3624	
8 2,4,6-Trinitrophenol	1	8.058	8.058	0.000	34129	0.4000	0.4009	
$ 9 1,2-Dinitrobenzene	1	8.711	8.711	0.000	54659	0.4000	0.3955	
10 1,3,5-Trinitrobenzene	1	8.885	8.885	0.000	95496	0.4000	0.4146	
11 1,3-Dinitrobenzene	1	9.531	9.531	0.000	122948	0.4000	0.4009	
12 Nitrobenzene	1	9.918	9.918	0.000	80997	0.4000	0.4042	
14 Tetryl	1	10.218	10.218	0.000	70070	0.4000	0.3958	
15 Nitroglycerin	2	10.731	10.731	0.000	269842	4.00	3.96	
16 2,4,6-Trinitrotoluene	1	11.184	11.184	0.000	81929	0.4000	0.4016	
17 4-Amino-2,6-dinitrotoluene	1	11.344	11.344	0.000	63673	0.4000	0.3635	
18 2-Amino-4,6-dinitrotoluene	1	11.631	11.631	0.000	81114	0.4000	0.3999	
19 2,6-Dinitrotoluene	1	11.791	11.791	0.000	60688	0.4000	0.4061	
20 2,4-Dinitrotoluene	1	11.984	11.984	0.000	116745	0.4000	0.3846	
21 o-Nitrotoluene	1	12.824	12.824	0.000	51556	0.4000	0.3818	
22 p-Nitrotoluene	1	13.264	13.264	0.000	44998	0.4000	0.3982	
23 m-Nitrotoluene	1	13.851	13.851	0.000	58094	0.4000	0.4062	
24 PETN	2	14.938	14.938	0.000	302716	4.00	3.85	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00110 Amount Added: 40.00 Units: uL
8330 LCS_00095 Amount Added: 40.00 Units: uL

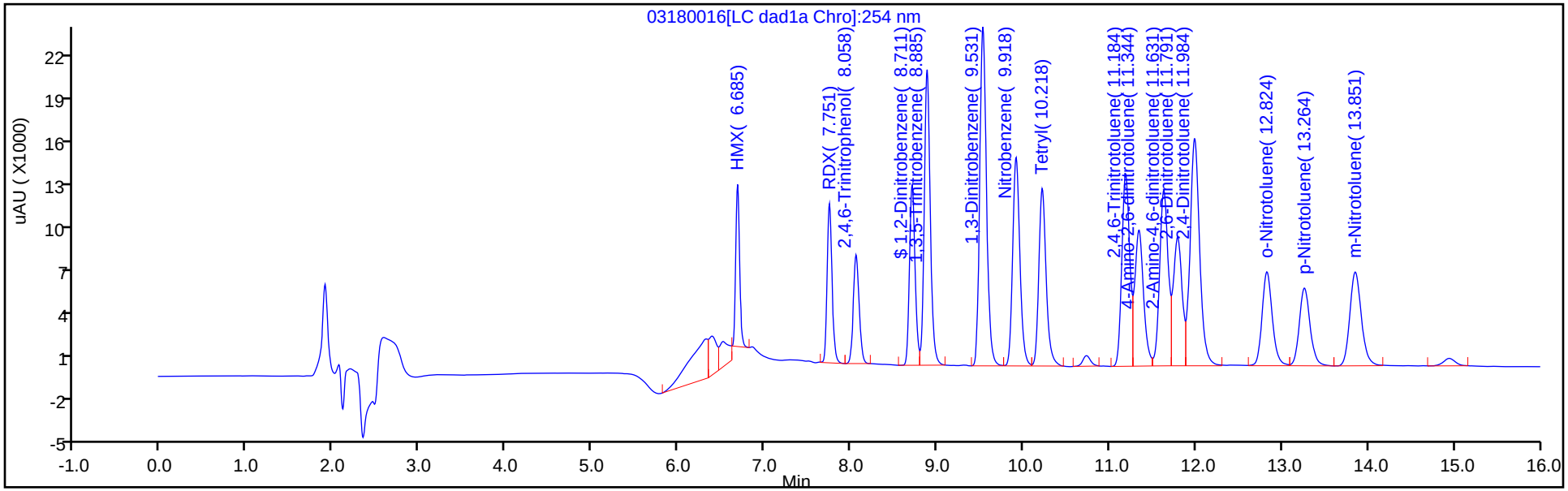
Report Date: 26-Mar-2020 15:45:47 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

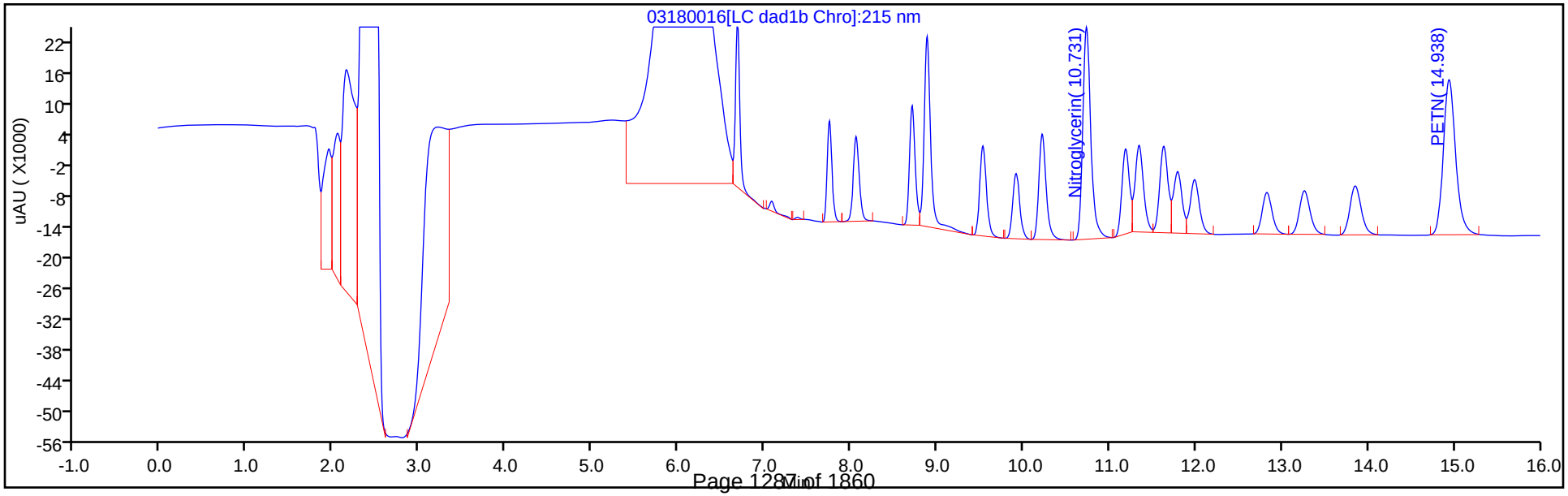
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180016.d

Injection Date:	18-Mar-2020 15:02:22	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV MAIN			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

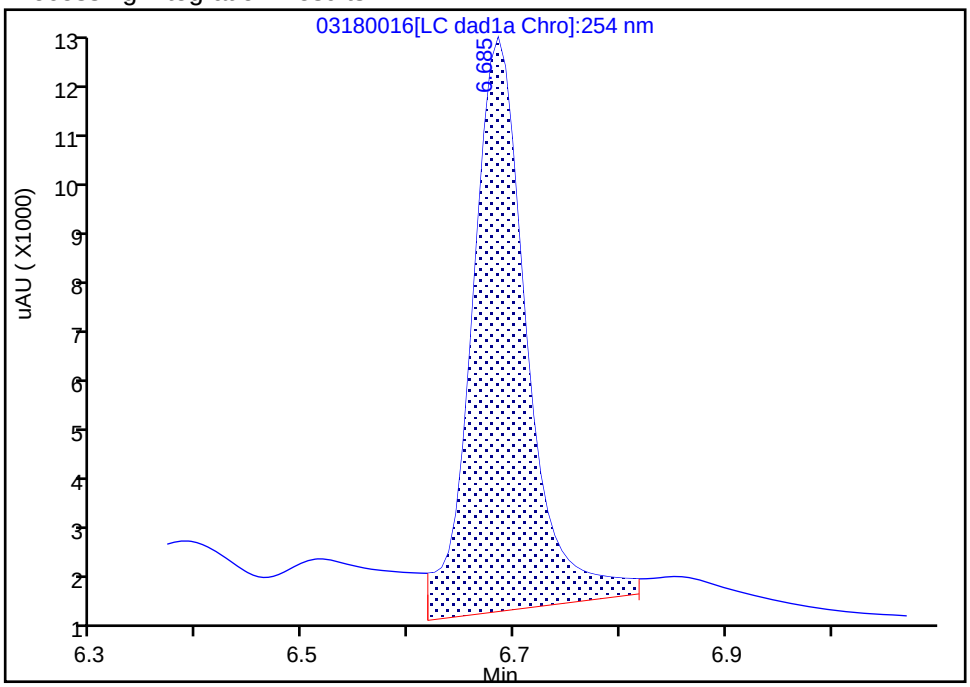
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180016.d				
Injection Date:	18-Mar-2020 15:02:22	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

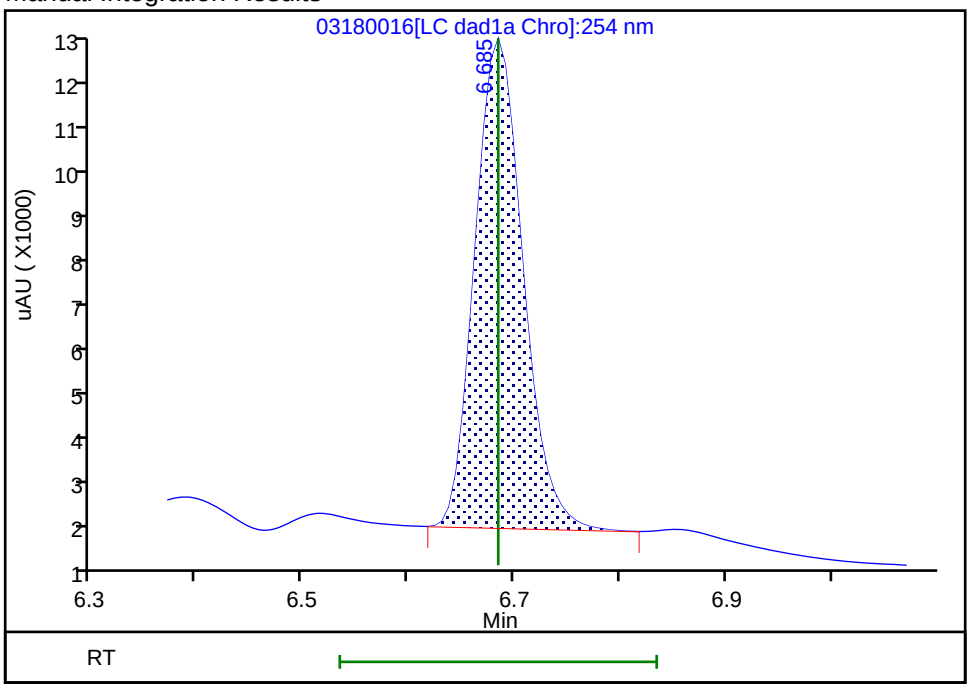
Processing Integration Results

RT: 6.68
Area: 41406
Amount: 0.494354
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 34032
Amount: 0.395895
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:47:09

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/7 Calibration Date: 06/22/2020 14:07

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	87712		255	250	2.0	15.0
RDX	Ave	116613	111052		238	250	-4.8	15.0
Picric acid	Ave	85131	89304		262	250	4.9	15.0
1,3,5-Trinitrobenzene	Ave	230309	243613		265	251	5.8	15.0
1,3-Dinitrobenzene	Ave	306686	325170		266	251	6.0	15.0
Nitrobenzene	Ave	200403	209000		262	251	4.3	15.0
Tetryl	Ave	177032	185437		262	251	4.7	15.0
Nitroglycerin	Ave	68133	72760		2670	2500	6.8	15.0
2,4,6-Trinitrotoluene	Ave	204031	218096		268	251	6.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		168304		243	250	-3.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	211829		262	251	4.4	15.0
2,6-Dinitrotoluene	Ave	149452	159681		268	251	6.8	15.0
2,4-Dinitrotoluene	Ave	303584	318163		263	251	4.8	15.0
2-Nitrotoluene	Ave	135051	136096		252	250	0.8	15.0
4-Nitrotoluene	Ave	113005	117756		261	251	4.2	15.0
3-Nitrotoluene	Ave	143029	149455		261	250	4.5	15.0
PETN	Ave	78605	85851		2730	2500	9.2	15.0
1,2-Dinitrobenzene	Ave	138212	147164		266	250	6.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/7 Calibration Date: 06/22/2020 14:07

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.73	6.58	6.88
RDX	7.80	7.65	7.95
Picric acid	8.09	7.94	8.24
1,3,5-Trinitrobenzene	8.93	8.78	9.08
1,3-Dinitrobenzene	9.57	9.42	9.72
Nitrobenzene	9.94	9.79	10.09
Tetryl	10.23	10.08	10.38
Nitroglycerin	10.75	10.60	10.90
2,4,6-Trinitrotoluene	11.20	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.36	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.65	11.55	11.75
2,6-Dinitrotoluene	11.79	11.69	11.89
2,4-Dinitrotoluene	11.99	11.89	12.09
2-Nitrotoluene	12.80	12.65	12.95
4-Nitrotoluene	13.23	13.08	13.38
3-Nitrotoluene	13.82	13.67	13.97
PETN	14.89	14.74	15.04
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2020 14:07:01 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:17:54 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:03:22

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.734	6.734	0.000	21928	0.2500	0.2551	M
	7 RDX	1	7.801	7.801	0.000	27763	0.2500	0.2381	
	8 2,4,6-Trinitrophenol	1	8.094	8.094	0.000	22326	0.2500	0.2623	
$	9 1,2-Dinitrobenzene	1	8.741	8.741	0.000	36791	0.2500	0.2662	
	10 1,3,5-Trinitrobenzene	1	8.928	8.928	0.000	61025	0.2505	0.2650	
	11 1,3-Dinitrobenzene	1	9.568	9.568	0.000	81455	0.2505	0.2656	
	12 Nitrobenzene	1	9.941	9.941	0.000	52459	0.2510	0.2618	
	14 Tetryl	1	10.234	10.234	0.000	46452	0.2505	0.2624	
	15 Nitroglycerin	2	10.748	10.748	0.000	181900	2.50	2.67	
	16 2,4,6-Trinitrotoluene	1	11.201	11.201	0.000	54742	0.2510	0.2683	
	17 4-Amino-2,6-dinitrotoluene	1	11.361	11.361	0.000	42118	0.2503	0.2426	
	18 2-Amino-4,6-dinitrotoluene	1	11.648	11.648	0.000	53169	0.2510	0.2622	
	19 2,6-Dinitrotoluene	1	11.788	11.788	0.000	40080	0.2510	0.2682	
	20 2,4-Dinitrotoluene	1	11.988	11.988	0.000	79859	0.2510	0.2631	
	21 o-Nitrotoluene	1	12.801	12.801	0.000	34024	0.2500	0.2519	
	22 p-Nitrotoluene	1	13.234	13.234	0.000	29498	0.2505	0.2610	
	23 m-Nitrotoluene	1	13.821	13.821	0.000	37401	0.2503	0.2615	
	24 PETN	2	14.888	14.888	0.000	214627	2.50	2.73	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

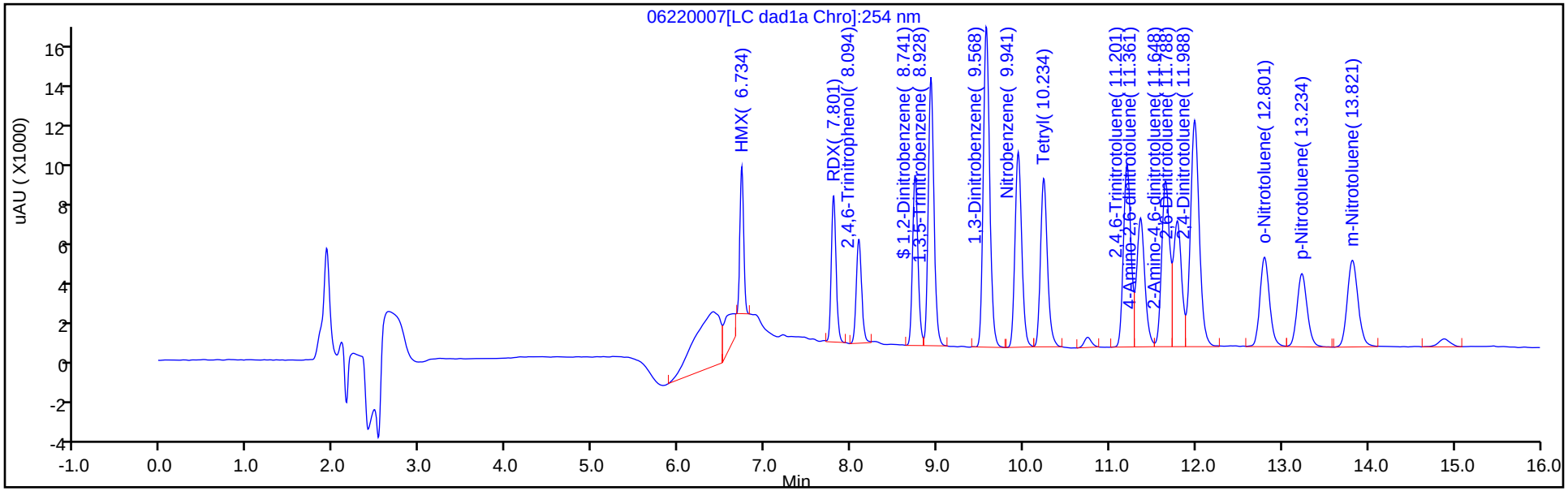
Report Date: 23-Jun-2020 15:17:54 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

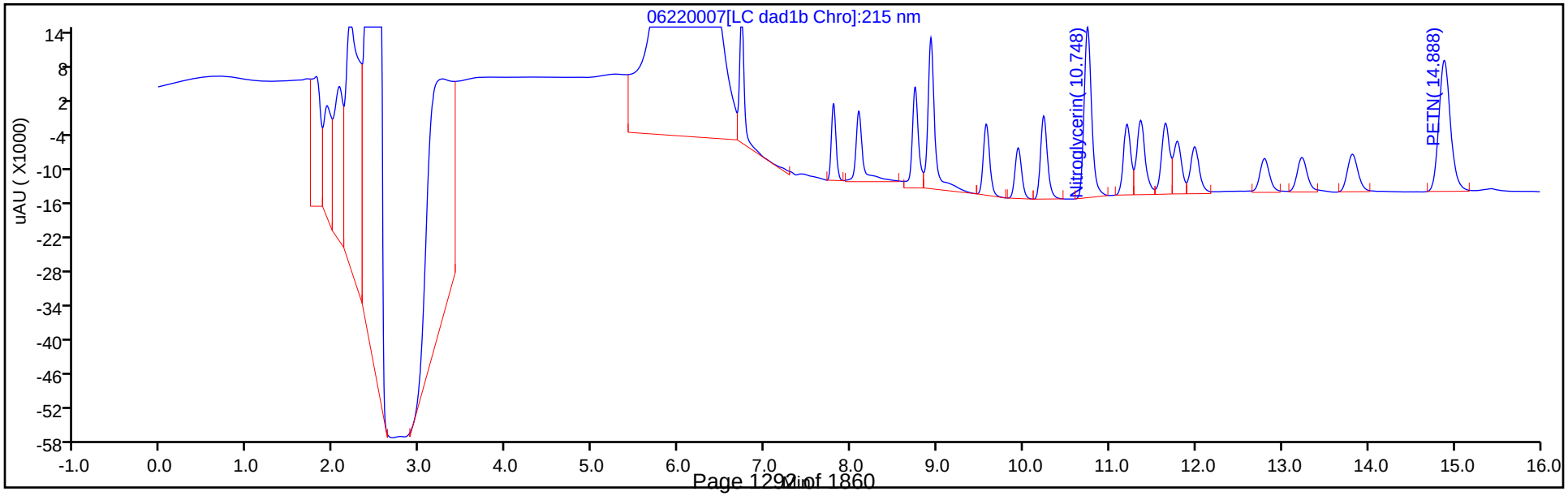
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220007.d

Injection Date:	22-Jun-2020 14:07:01	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

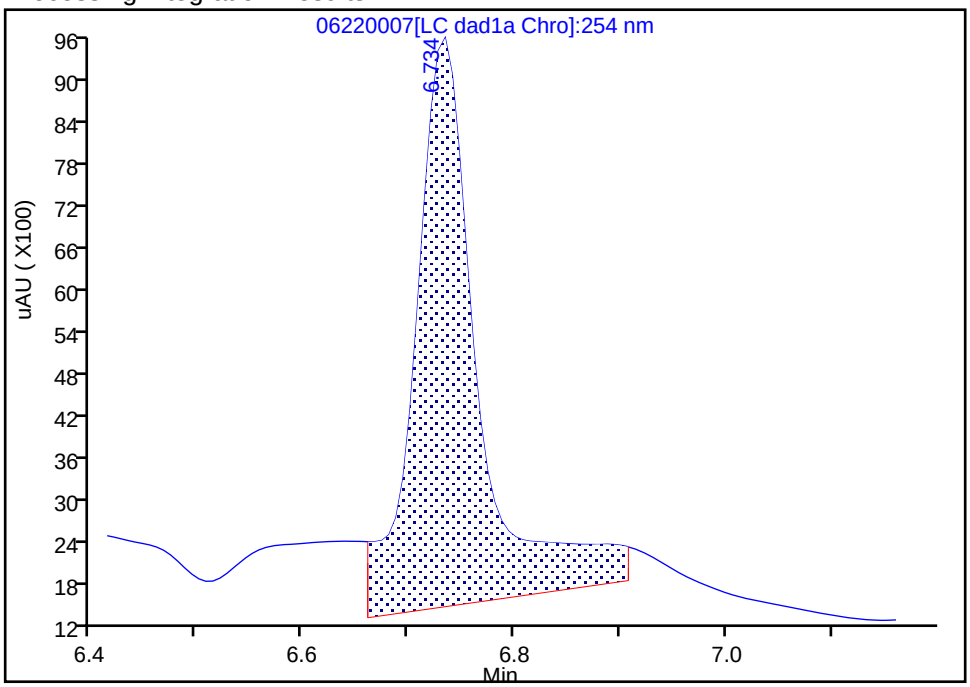
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220007.d				
Injection Date:	22-Jun-2020 14:07:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

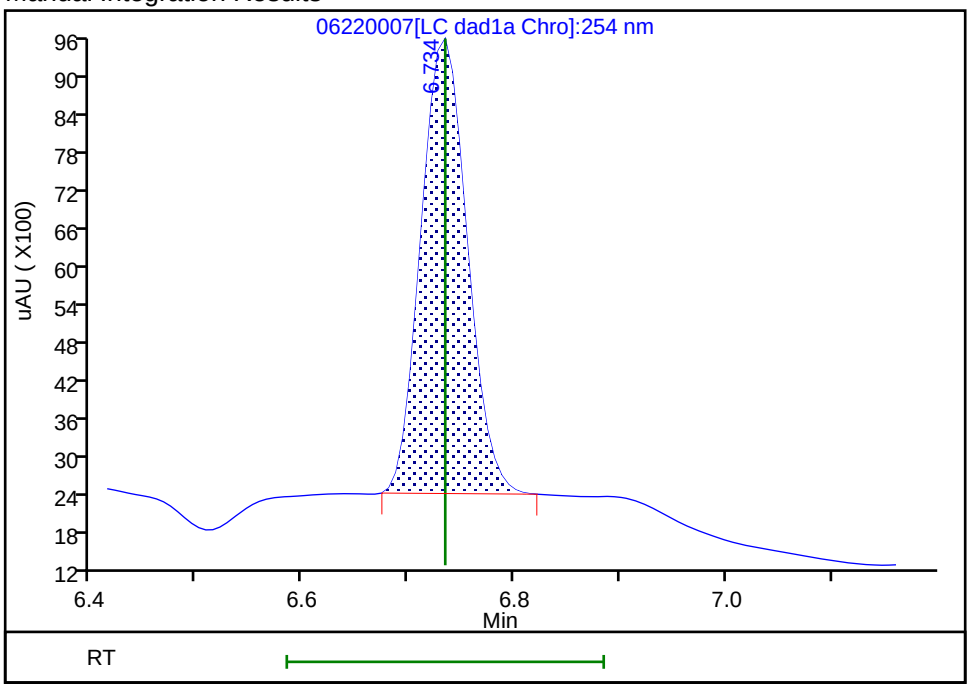
Processing Integration Results

RT: 6.73
Area: 34034
Amount: 0.395918
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 21928
Amount: 0.255089
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:05:22

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/9 Calibration Date: 06/22/2020 14:53

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	212843		245	250	-2.2	15.0
DNX	Ave	152928	152683		250	250	-0.2	15.0
MNX	Ave	158544	142437		262	292	-10.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/9 Calibration Date: 06/22/2020 14:53

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.63	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.40	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	22-Jun-2020 14:53:01	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:17:55	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:04:11		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.629	6.629	0.000	53264	0.2503	0.2448	M
5 DNX	1	6.949	6.949	0.000	38209	0.2503	0.2498	M
6 MNX	1	7.396	7.396	0.000	41556	0.2918	0.2621	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

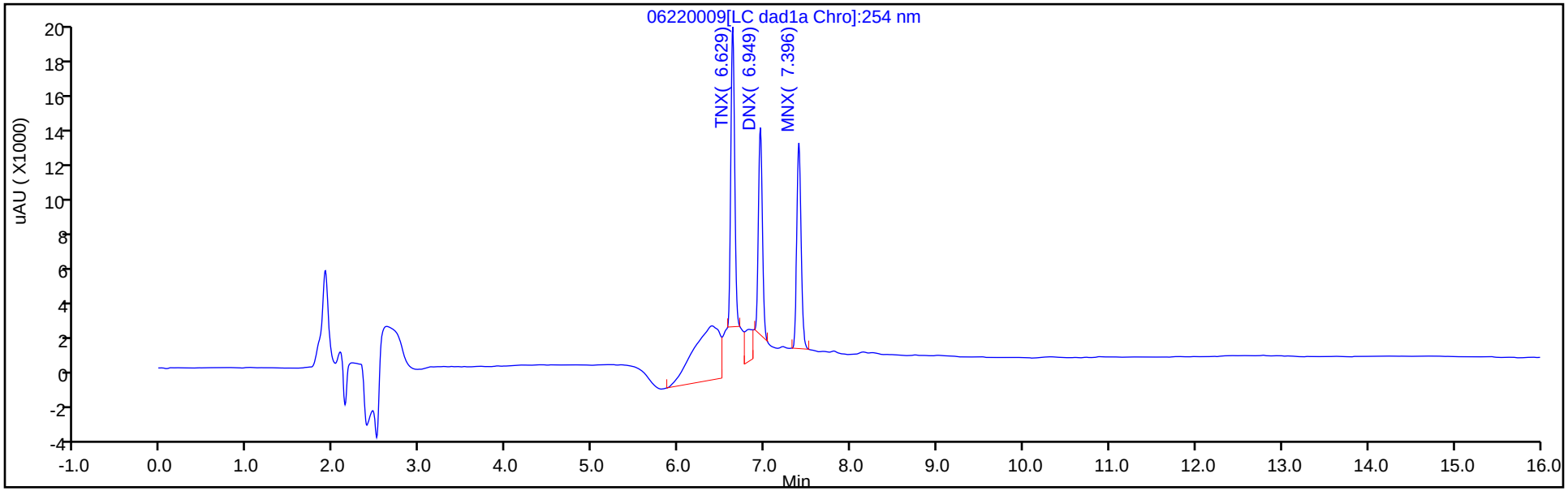
Report Date: 23-Jun-2020 15:17:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

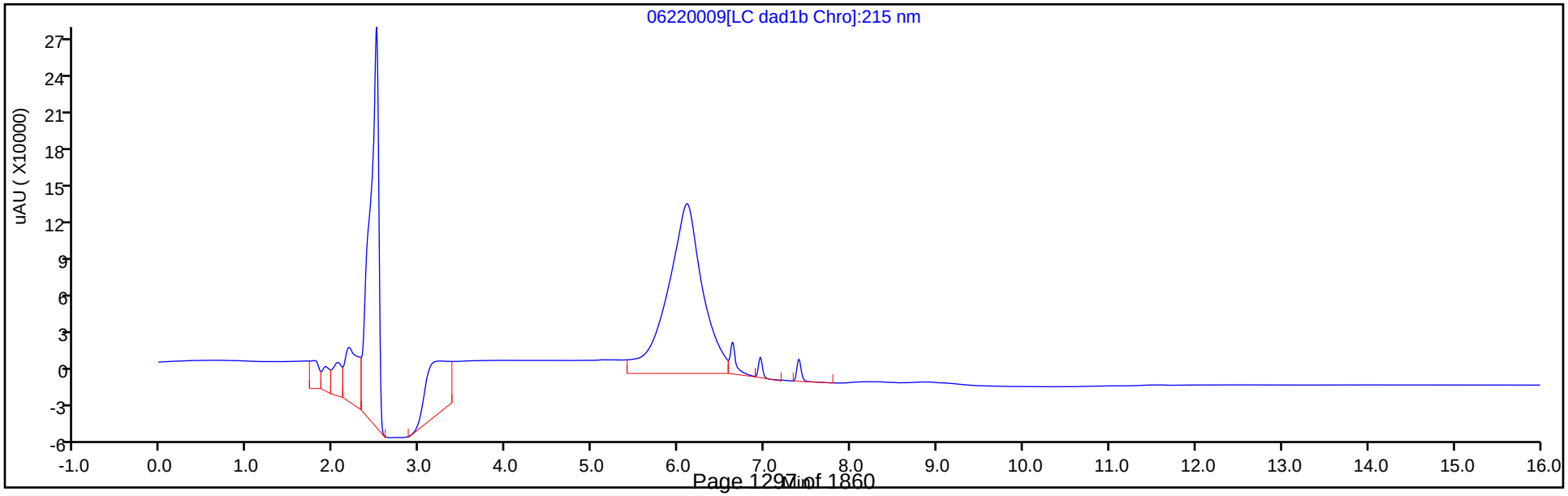
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d

Injection Date:	22-Jun-2020 14:53:01	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

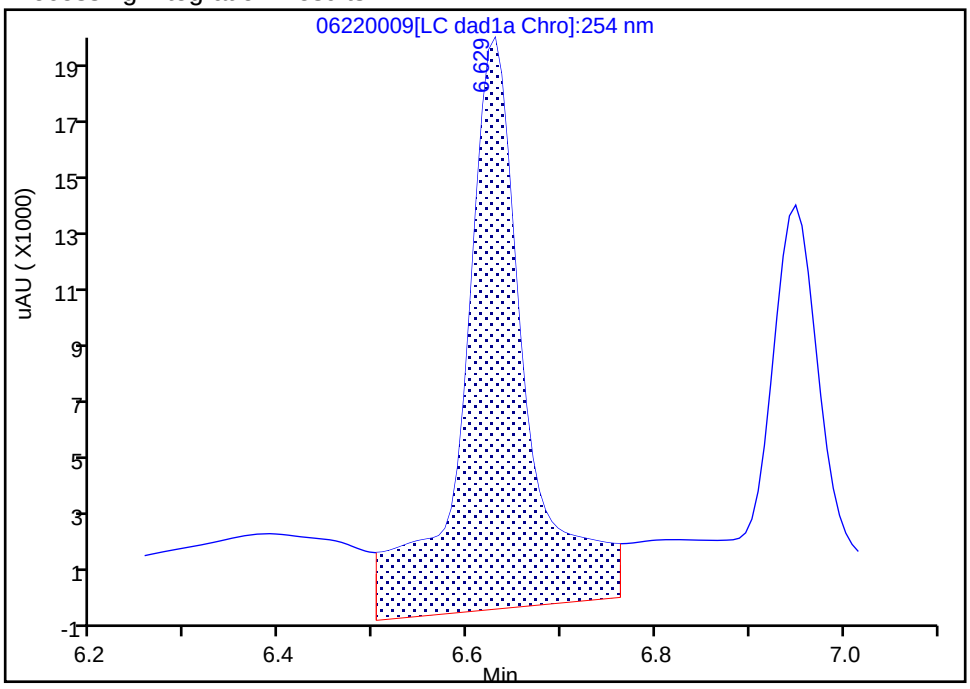
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d				
Injection Date:	22-Jun-2020 14:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

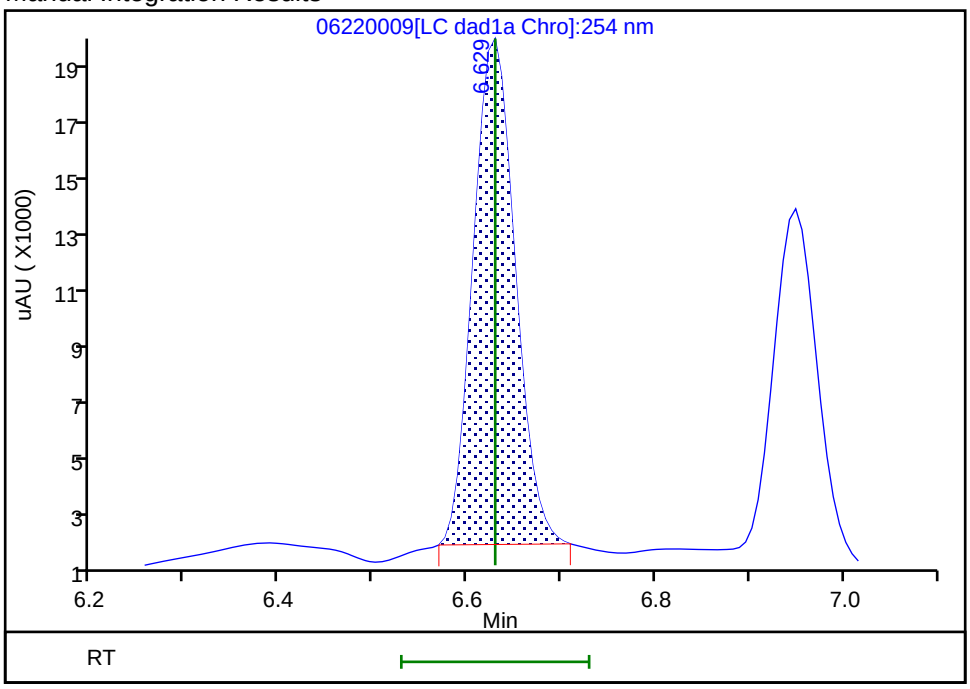
Processing Integration Results

RT: 6.63
Area: 91085
Amount: 0.418572
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 53264
Amount: 0.244770
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

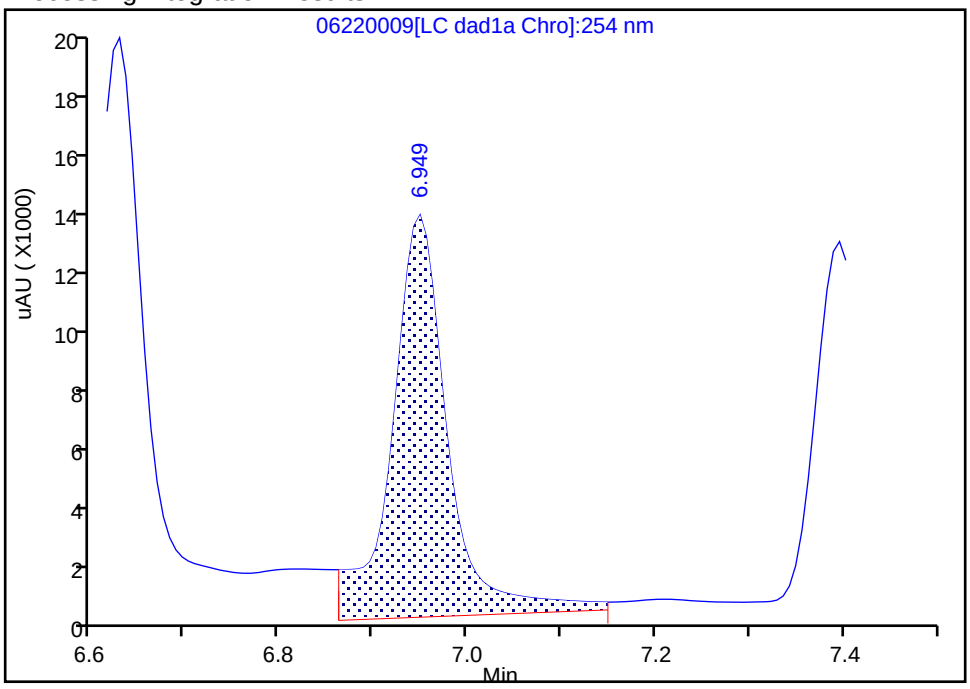
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d				
Injection Date:	22-Jun-2020 14:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

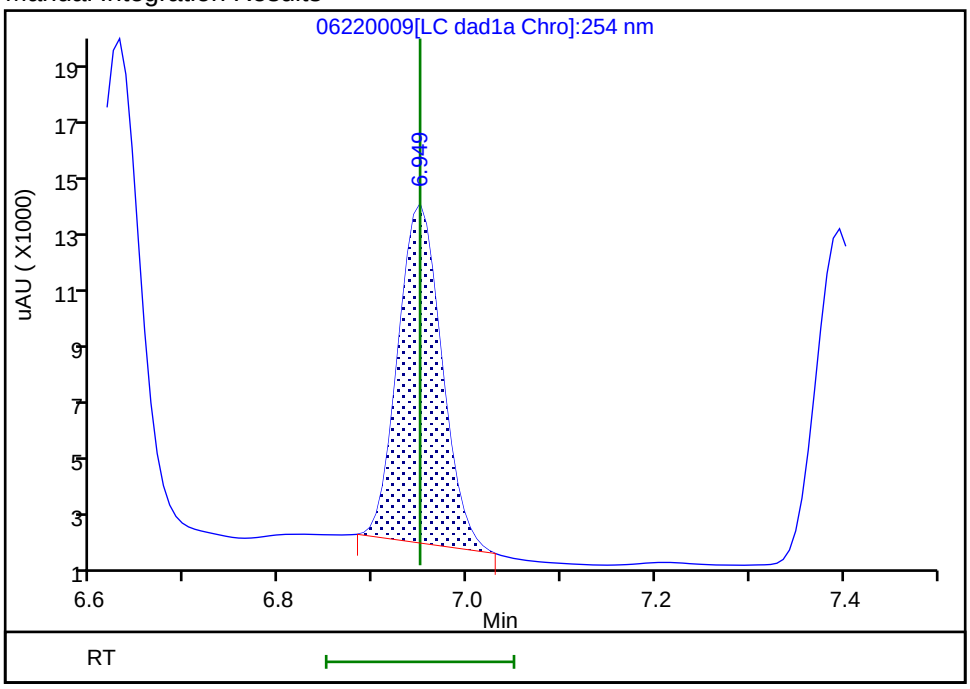
Processing Integration Results

RT: 6.95
Area: 54130
Amount: 0.353957
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 38209
Amount: 0.249849
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:14

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

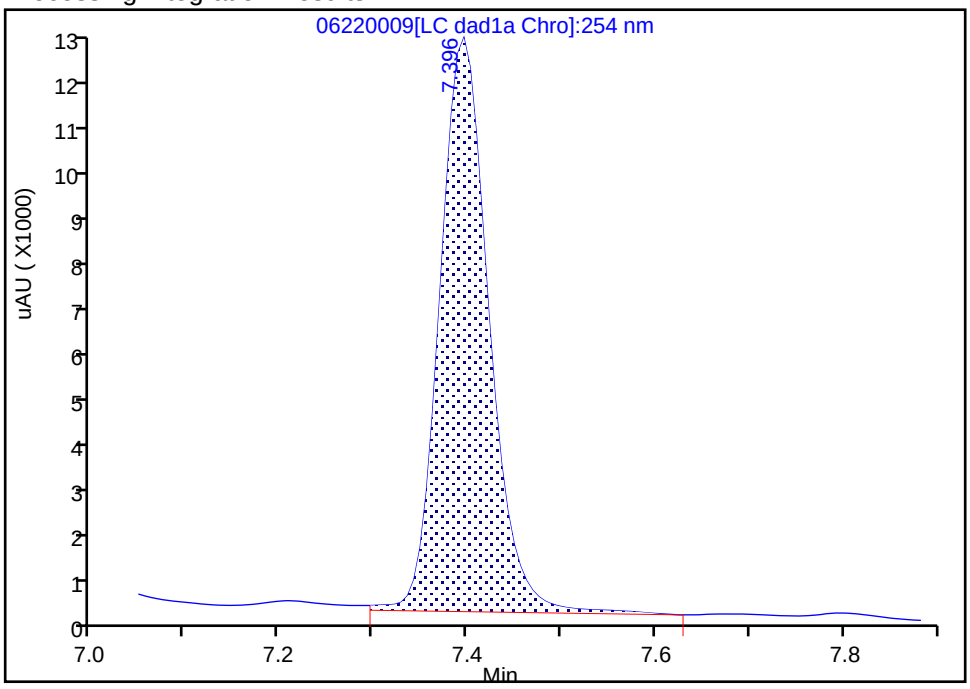
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d				
Injection Date:	22-Jun-2020 14:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

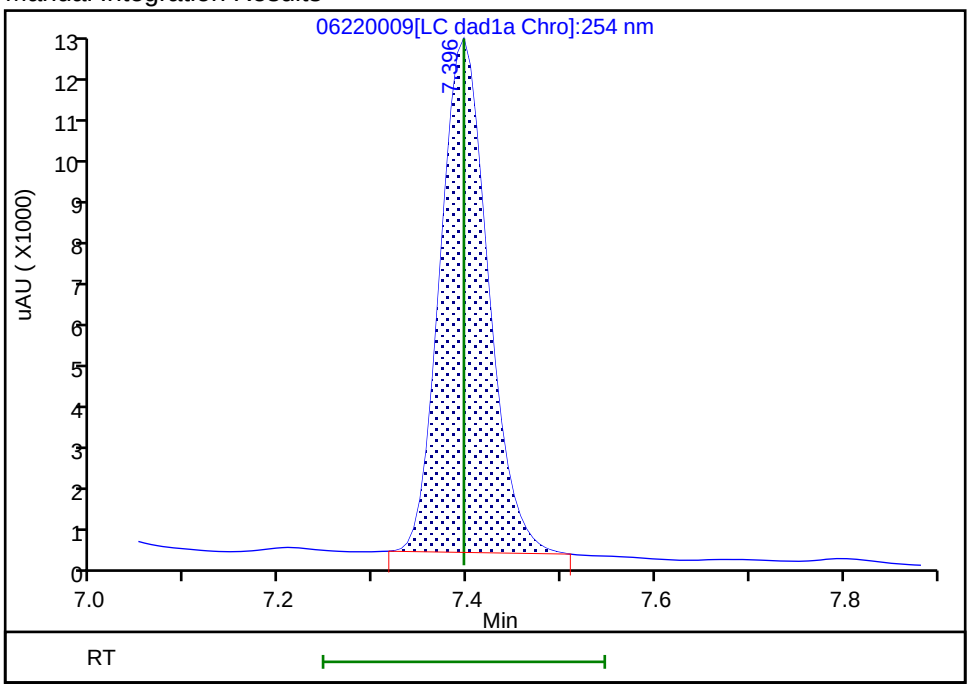
Processing Integration Results

RT: 7.40
Area: 43349
Amount: 0.273419
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 41556
Amount: 0.262110
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:19
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/20 Calibration Date: 06/22/2020 19:05

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	87632		255	250	1.9	15.0
RDX	Ave	116613	111760		240	250	-4.2	15.0
Picric acid	Ave	85131	88100		259	250	3.5	15.0
1,3,5-Trinitrobenzene	Ave	230309	245034		267	251	6.4	15.0
1,3-Dinitrobenzene	Ave	306686	325210		266	251	6.0	15.0
Nitrobenzene	Ave	200403	206363		258	251	3.0	15.0
Tetryl	Ave	177032	185657		263	251	4.9	15.0
Nitroglycerin	Ave	68133	73131		2680	2500	7.3	15.0
2,4,6-Trinitrotoluene	Ave	204031	219920		271	251	7.8	15.0
4-Amino-2,6-dinitrotoluene	Lin2		169630		245	250	-2.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	212223		263	251	4.6	15.0
2,6-Dinitrotoluene	Ave	149452	162303		273	251	8.6	15.0
2,4-Dinitrotoluene	Ave	303584	323104		267	251	6.4	15.0
2-Nitrotoluene	Ave	135051	136272		252	250	0.9	15.0
4-Nitrotoluene	Ave	113005	117888		261	251	4.3	15.0
3-Nitrotoluene	Ave	143029	146925		257	250	2.7	15.0
PETN	Ave	78605	84286		2680	2500	7.2	15.0
1,2-Dinitrobenzene	Ave	138212	146360		265	250	5.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/20 Calibration Date: 06/22/2020 19:05

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.73	6.58	6.88
RDX	7.80	7.65	7.95
Picric acid	8.10	7.94	8.24
1,3,5-Trinitrobenzene	8.94	8.78	9.08
1,3-Dinitrobenzene	9.59	9.42	9.72
Nitrobenzene	9.96	9.79	10.09
Tetryl	10.27	10.08	10.38
Nitroglycerin	10.78	10.60	10.90
2,4,6-Trinitrotoluene	11.24	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.40	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.69	11.55	11.75
2,6-Dinitrotoluene	11.83	11.69	11.89
2,4-Dinitrotoluene	12.03	11.89	12.09
2-Nitrotoluene	12.84	12.65	12.95
4-Nitrotoluene	13.28	13.08	13.38
3-Nitrotoluene	13.86	13.67	13.97
PETN	14.93	14.74	15.04
1,2-Dinitrobenzene	8.76	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220020.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2020 19:05:55 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-020
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:00 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:06:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.726	6.734	-0.008	21908	0.2500	0.2549	M
7 RDX	1	7.799	7.801	-0.002	27940	0.2500	0.2396	
8 2,4,6-Trinitrophenol	1	8.099	8.094	0.005	22025	0.2500	0.2587	
$ 9 1,2-Dinitrobenzene	1	8.759	8.741	0.018	36590	0.2500	0.2647	
10 1,3,5-Trinitrobenzene	1	8.939	8.928	0.011	61381	0.2505	0.2665	
11 1,3-Dinitrobenzene	1	9.585	9.568	0.017	81465	0.2505	0.2656	
12 Nitrobenzene	1	9.959	9.941	0.018	51797	0.2510	0.2585	
14 Tetryl	1	10.265	10.234	0.031	46507	0.2505	0.2627	
15 Nitroglycerin	2	10.779	10.748	0.031	182828	2.50	2.68	
16 2,4,6-Trinitrotoluene	1	11.239	11.201	0.038	55200	0.2510	0.2705	
17 4-Amino-2,6-dinitrotoluene	1	11.399	11.361	0.038	42450	0.2503	0.2445	
18 2-Amino-4,6-dinitrotoluene	1	11.692	11.648	0.044	53268	0.2510	0.2626	
19 2,6-Dinitrotoluene	1	11.825	11.788	0.037	40738	0.2510	0.2726	
20 2,4-Dinitrotoluene	1	12.025	11.988	0.037	81099	0.2510	0.2671	
21 o-Nitrotoluene	1	12.839	12.801	0.038	34068	0.2500	0.2523	
22 p-Nitrotoluene	1	13.279	13.234	0.045	29531	0.2505	0.2613	
23 m-Nitrotoluene	1	13.859	13.821	0.038	36768	0.2503	0.2571	
24 PETN	2	14.932	14.888	0.044	210716	2.50	2.68	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

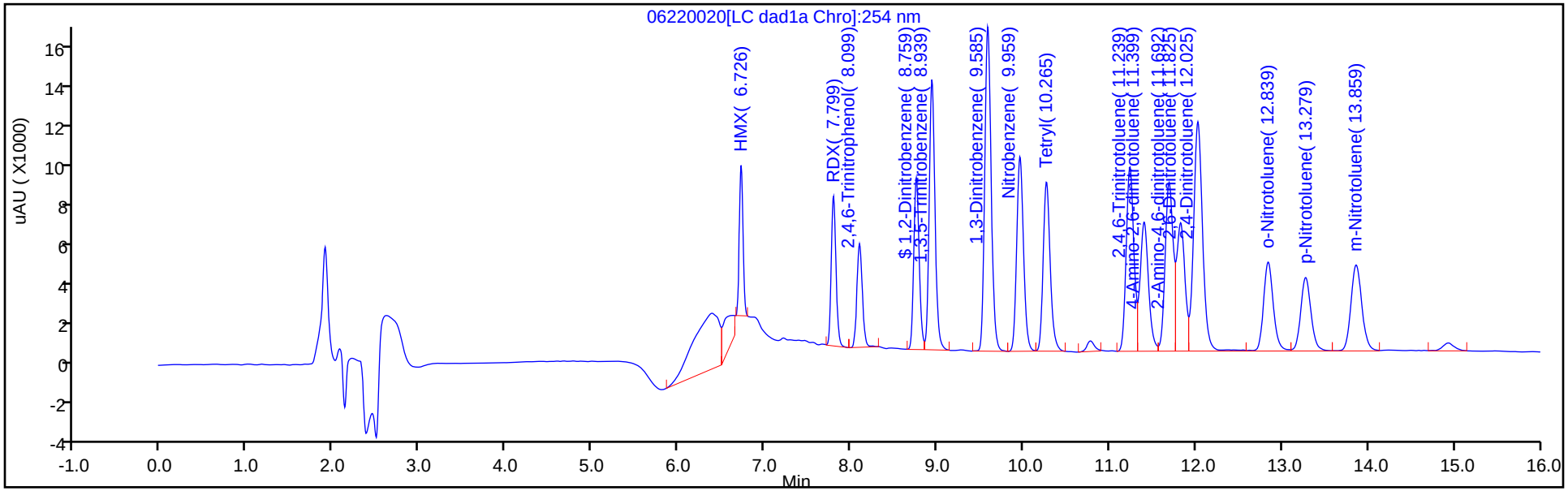
Report Date: 23-Jun-2020 15:18:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

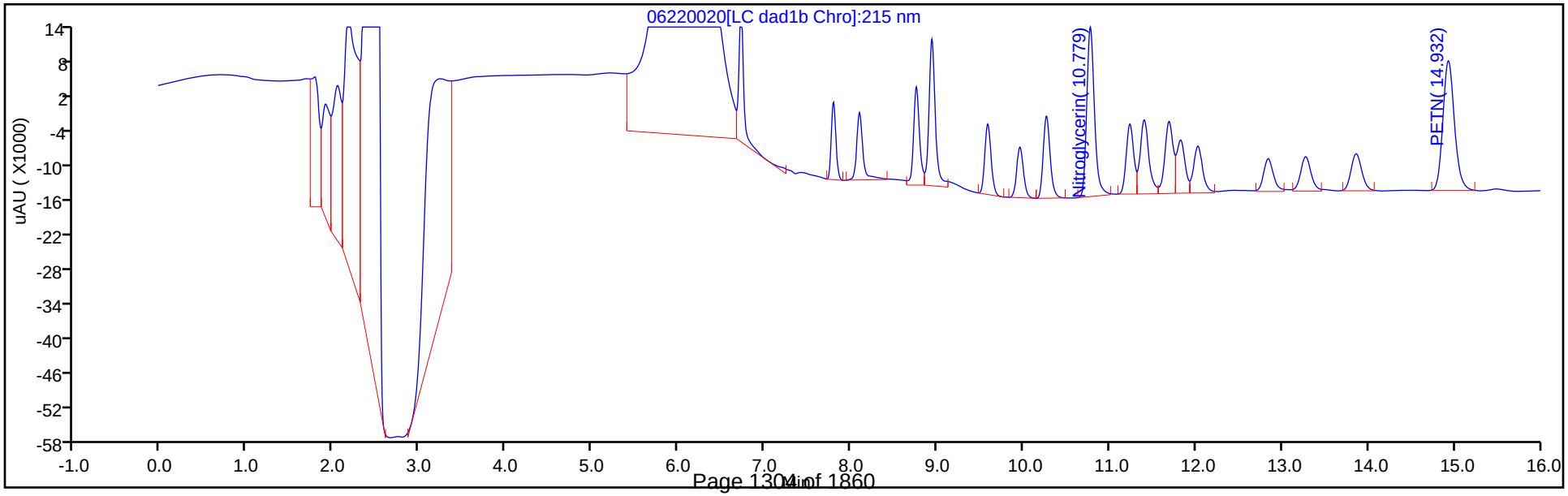
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220020.d

Injection Date:	22-Jun-2020 19:05:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	20
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

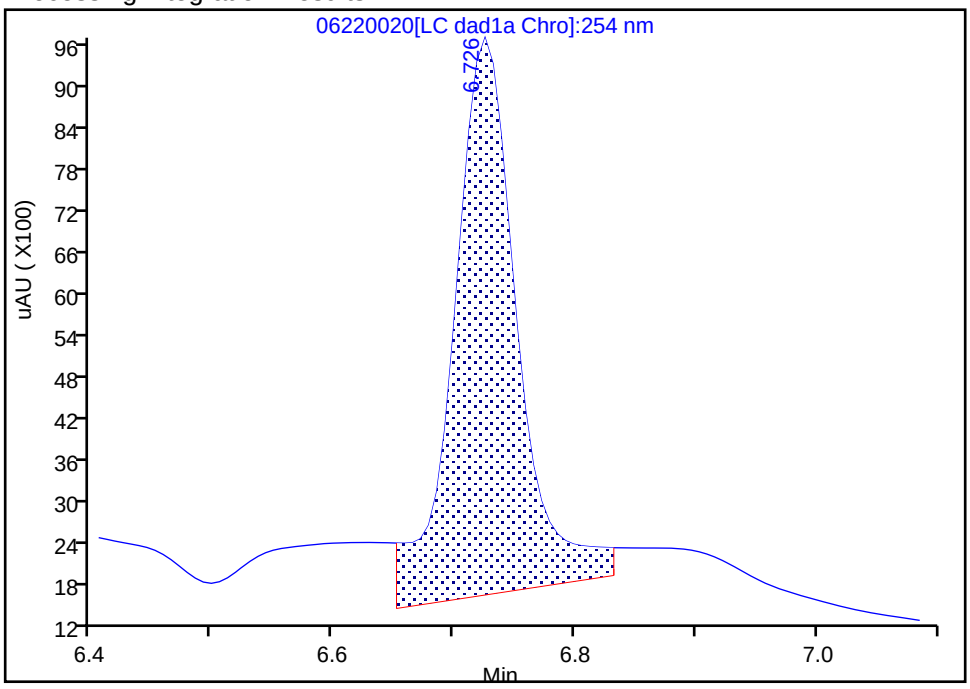
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220020.d				
Injection Date:	22-Jun-2020 19:05:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

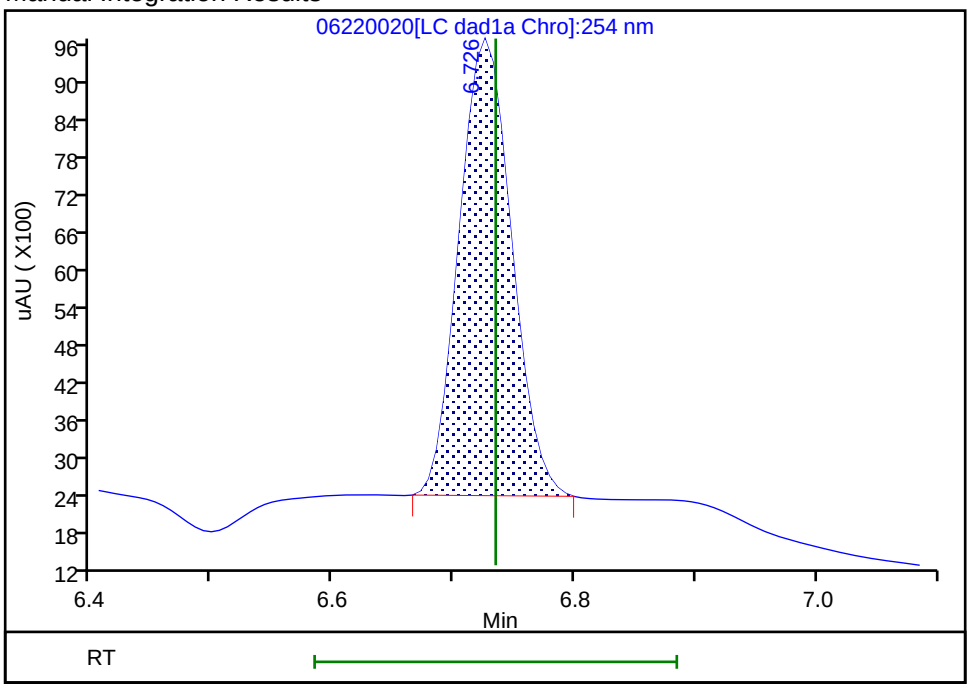
Processing Integration Results

RT: 6.73
Area: 29348
Amount: 0.341406
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 21908
Amount: 0.254856
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:28

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/21 Calibration Date: 06/22/2020 19:28

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	211069		243	250	-3.0	15.0
DNX	Ave	152928	153183		251	250	0.2	15.0
MNX	Ave	158544	145820		268	292	-8.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/21 Calibration Date: 06/22/2020 19:28

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.63	6.53	6.73
DNX	6.96	6.85	7.05
MNX	7.40	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220021.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	22-Jun-2020 19:28:55	ALS Bottle#:	9	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:00	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:06:47		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.628	6.629	-0.001	52820	0.2503	0.2427	M
5 DNX	1	6.955	6.949	0.006	38334	0.2503	0.2507	M
6 MNX	1	7.401	7.396	0.005	42543	0.2918	0.2683	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

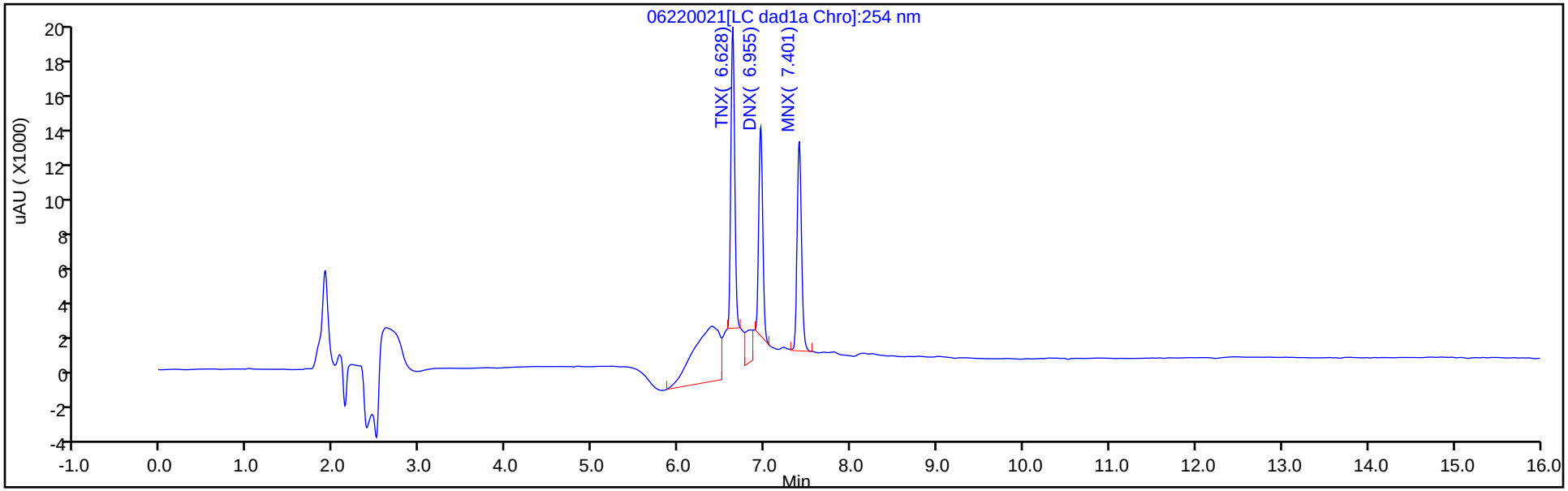
Report Date: 23-Jun-2020 15:18:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

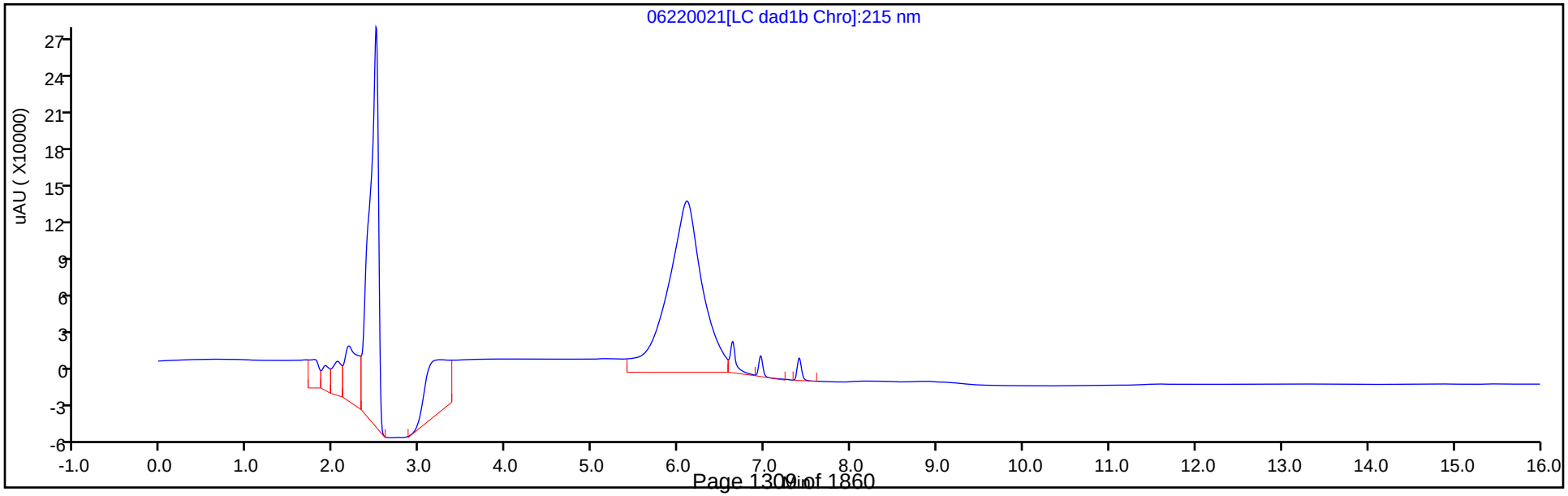
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220021.d

Injection Date:	22-Jun-2020 19:28:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	21
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

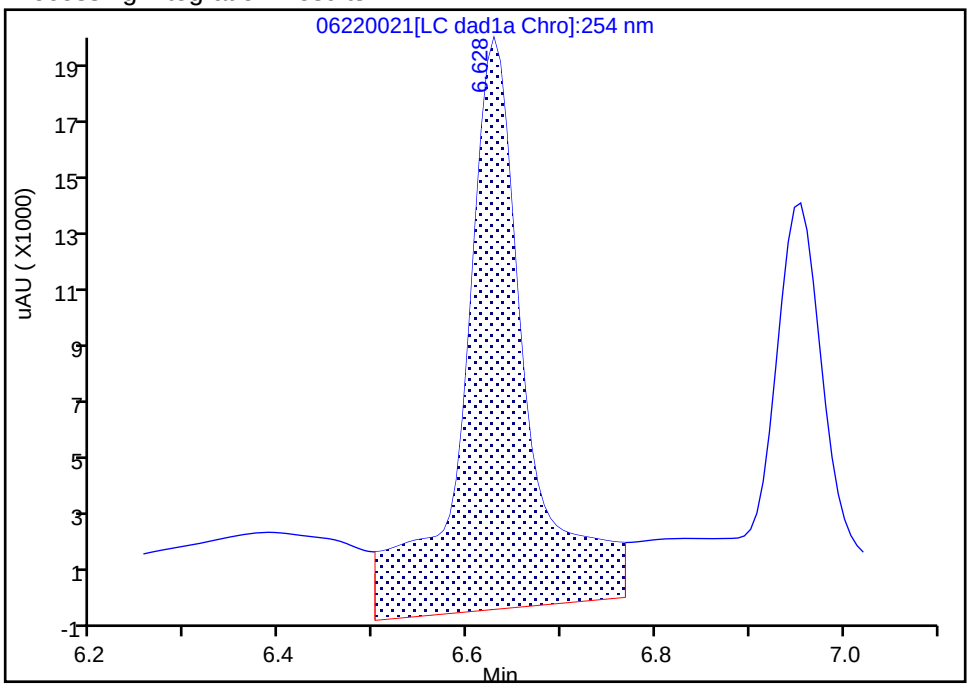
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220021.d				
Injection Date:	22-Jun-2020 19:28:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

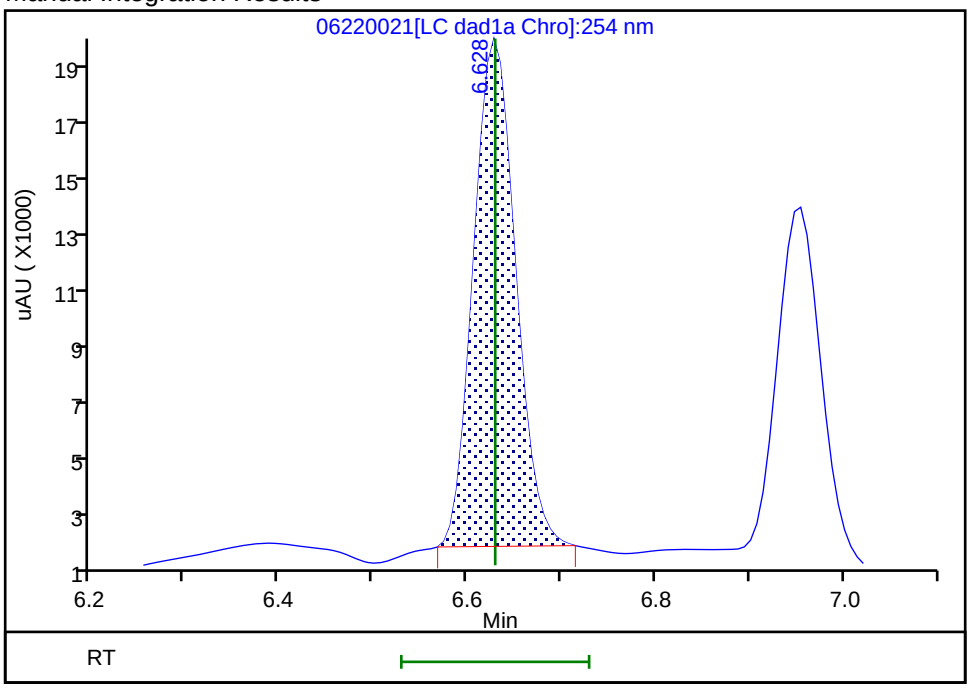
Processing Integration Results

RT: 6.63
Area: 91440
Amount: 0.420204
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 52820
Amount: 0.242729
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:39

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

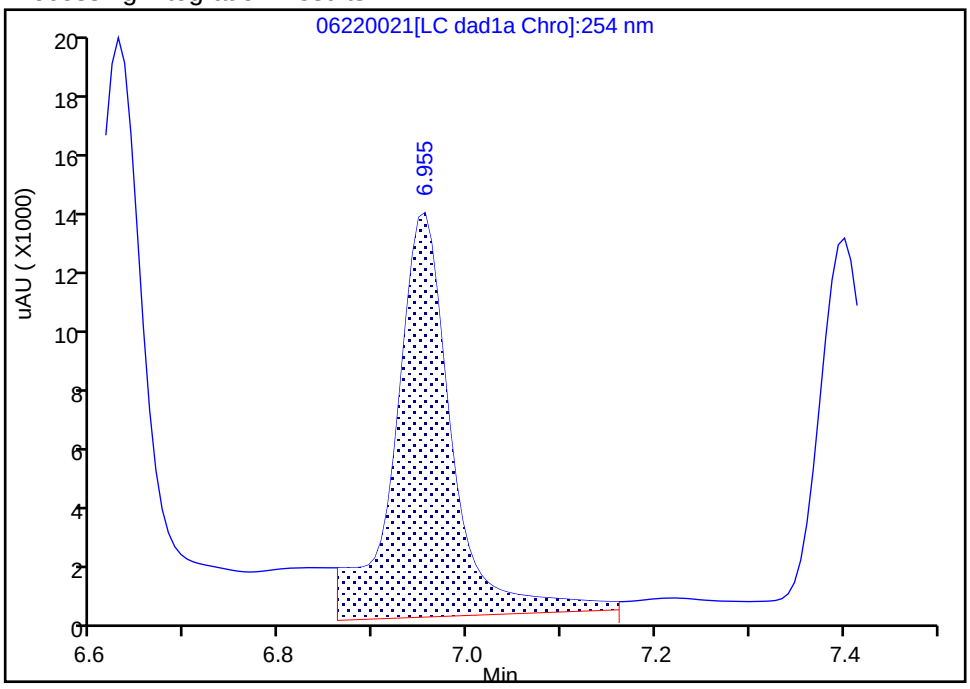
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220021.d				
Injection Date:	22-Jun-2020 19:28:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

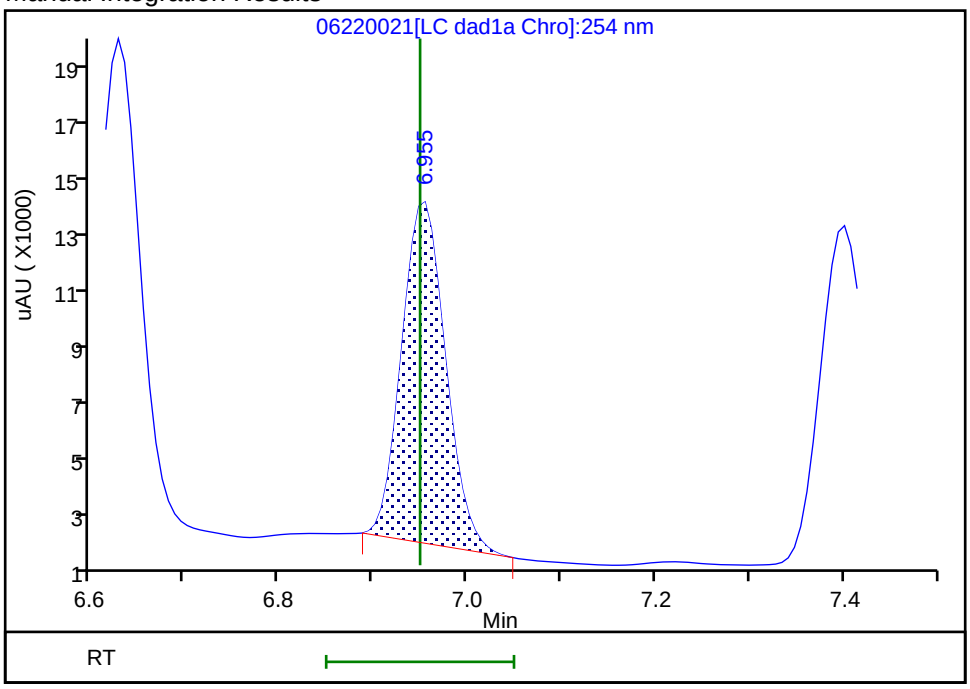
Processing Integration Results

RT: 6.95
Area: 55108
Amount: 0.360352
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 38334
Amount: 0.250666
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:42

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/32 Calibration Date: 06/22/2020 23:41

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	87912		256	250	2.3	15.0
RDX	Ave	116613	111068		238	250	-4.8	15.0
Picric acid	Ave	85131	87212		256	250	2.4	15.0
1,3,5-Trinitrobenzene	Ave	230309	242778		264	251	5.4	15.0
1,3-Dinitrobenzene	Ave	306686	325389		266	251	6.1	15.0
Nitrobenzene	Ave	200403	203713		255	251	1.7	15.0
Tetryl	Ave	177032	186204		263	251	5.2	15.0
Nitroglycerin	Ave	68133	71948		2640	2500	5.6	15.0
2,4,6-Trinitrotoluene	Ave	204031	219837		270	251	7.7	15.0
4-Amino-2,6-dinitrotoluene	Lin2		169487		244	250	-2.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	212570		263	251	4.8	15.0
2,6-Dinitrotoluene	Ave	149452	160155		269	251	7.2	15.0
2,4-Dinitrotoluene	Ave	303584	320665		265	251	5.6	15.0
2-Nitrotoluene	Ave	135051	135660		251	250	0.5	15.0
4-Nitrotoluene	Ave	113005	121253		269	251	7.3	15.0
3-Nitrotoluene	Ave	143029	145558		255	250	1.8	15.0
PETN	Ave	78605	83630		2660	2500	6.4	15.0
1,2-Dinitrobenzene	Ave	138212	145832		264	250	5.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/32 Calibration Date: 06/22/2020 23:41

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.58	6.88
RDX	7.80	7.65	7.95
Picric acid	8.10	7.94	8.24
1,3,5-Trinitrobenzene	8.94	8.78	9.08
1,3-Dinitrobenzene	9.58	9.42	9.72
Nitrobenzene	9.95	9.79	10.09
Tetryl	10.25	10.08	10.38
Nitroglycerin	10.76	10.60	10.90
2,4,6-Trinitrotoluene	11.22	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.38	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.67	11.55	11.75
2,6-Dinitrotoluene	11.80	11.69	11.89
2,4-Dinitrotoluene	12.00	11.89	12.09
2-Nitrotoluene	12.82	12.65	12.95
4-Nitrotoluene	13.26	13.08	13.38
3-Nitrotoluene	13.84	13.67	13.97
PETN	14.90	14.74	15.04
1,2-Dinitrobenzene	8.76	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220032.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2020 23:41:53 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-032
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:05 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:07:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.724	6.734	-0.010	21978	0.2500	0.2557	M
7 RDX	1	7.797	7.801	-0.004	27767	0.2500	0.2381	
8 2,4,6-Trinitrophenol	1	8.097	8.094	0.003	21803	0.2500	0.2561	
$ 9 1,2-Dinitrobenzene	1	8.757	8.741	0.016	36458	0.2500	0.2638	
10 1,3,5-Trinitrobenzene	1	8.937	8.928	0.009	60816	0.2505	0.2641	
11 1,3-Dinitrobenzene	1	9.577	9.568	0.009	81510	0.2505	0.2658	
12 Nitrobenzene	1	9.950	9.941	0.009	51132	0.2510	0.2551	
14 Tetryl	1	10.250	10.234	0.016	46644	0.2505	0.2635	
15 Nitroglycerin	2	10.757	10.748	0.009	179870	2.50	2.64	
16 2,4,6-Trinitrotoluene	1	11.217	11.201	0.016	55179	0.2510	0.2704	
17 4-Amino-2,6-dinitrotoluene	1	11.377	11.361	0.016	42414	0.2503	0.2443	
18 2-Amino-4,6-dinitrotoluene	1	11.670	11.648	0.022	53355	0.2510	0.2631	
19 2,6-Dinitrotoluene	1	11.804	11.788	0.016	40199	0.2510	0.2690	
20 2,4-Dinitrotoluene	1	12.004	11.988	0.016	80487	0.2510	0.2651	
21 o-Nitrotoluene	1	12.824	12.801	0.023	33915	0.2500	0.2511	
22 p-Nitrotoluene	1	13.257	13.234	0.023	30374	0.2505	0.2688	
23 m-Nitrotoluene	1	13.837	13.821	0.016	36426	0.2503	0.2547	
24 PETN	2	14.897	14.888	0.009	209076	2.50	2.66	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

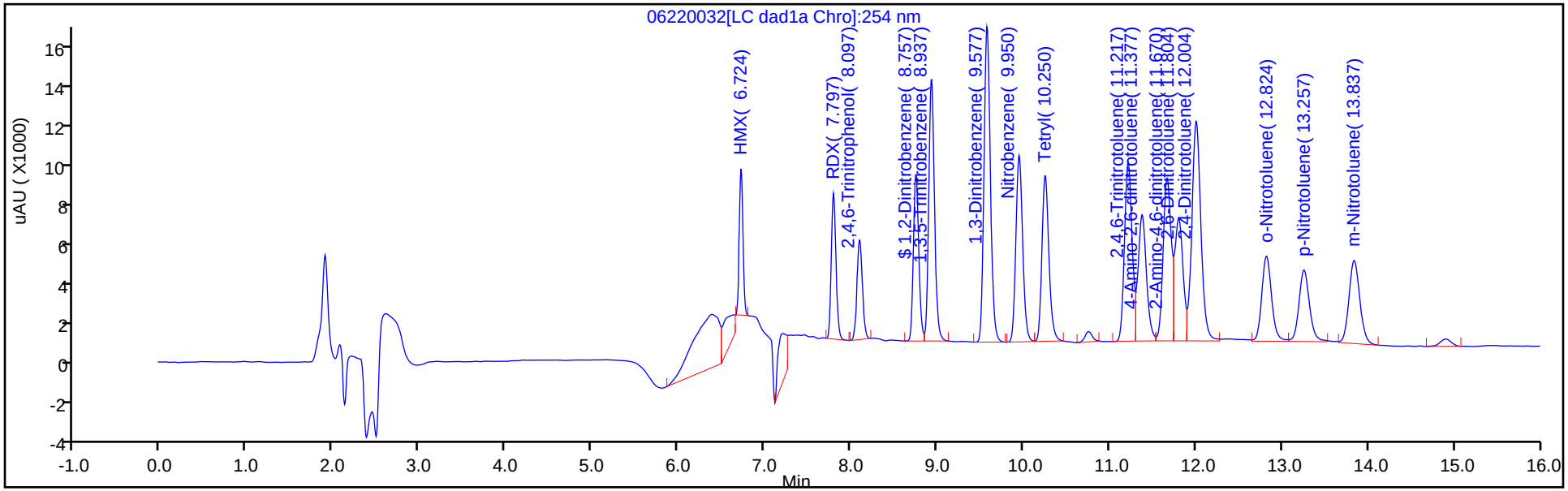
Report Date: 23-Jun-2020 15:18:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

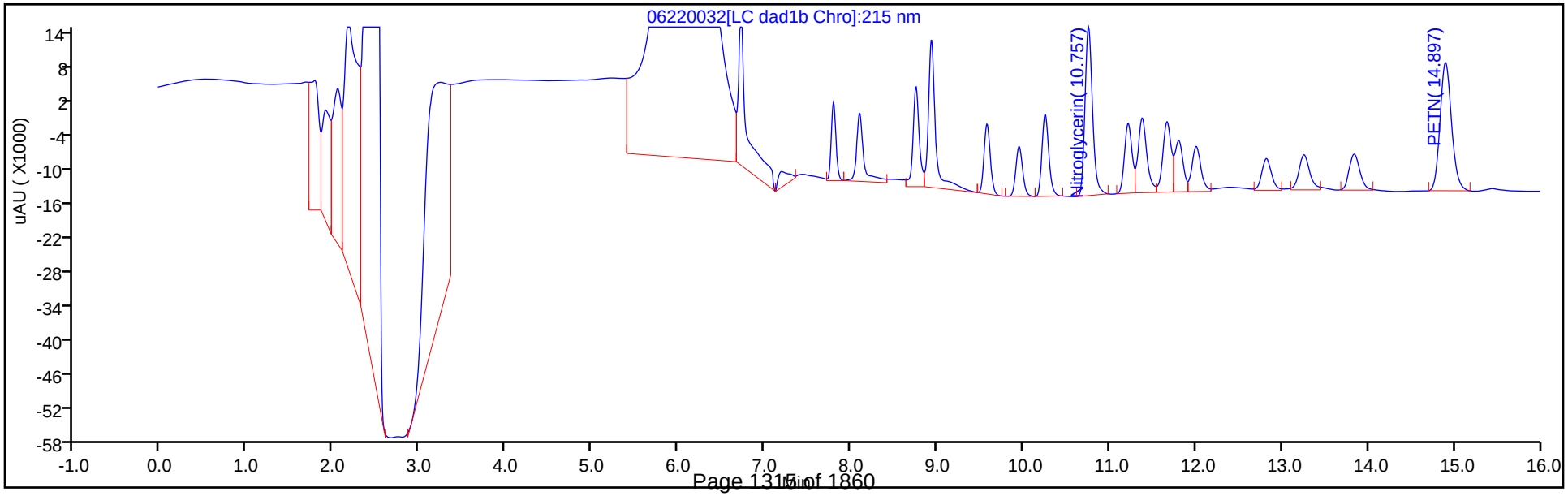
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220032.d

Injection Date:	22-Jun-2020 23:41:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

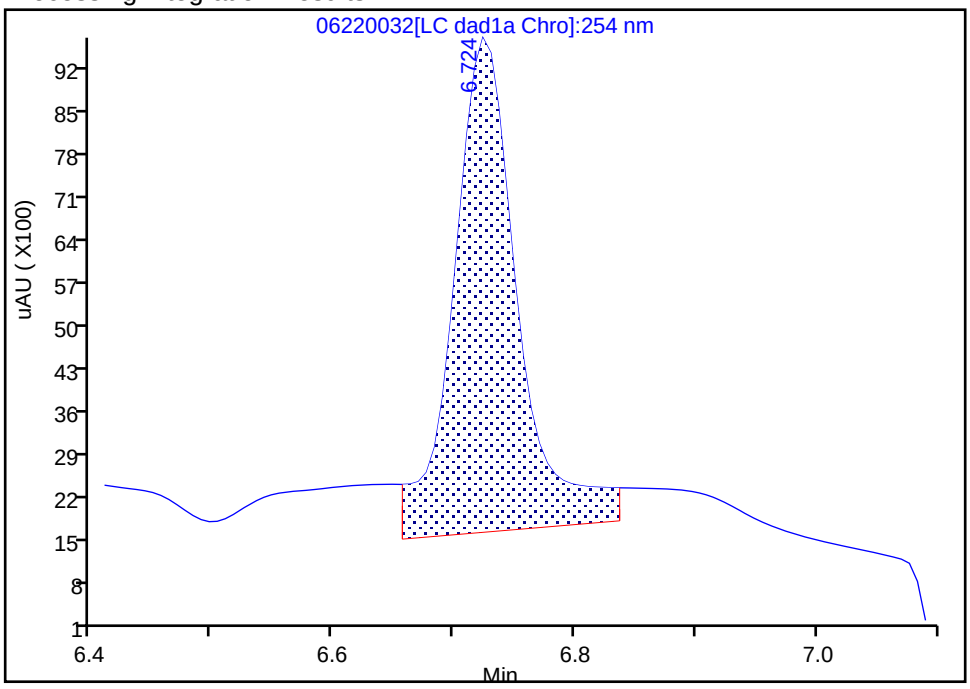
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220032.d				
Injection Date:	22-Jun-2020 23:41:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

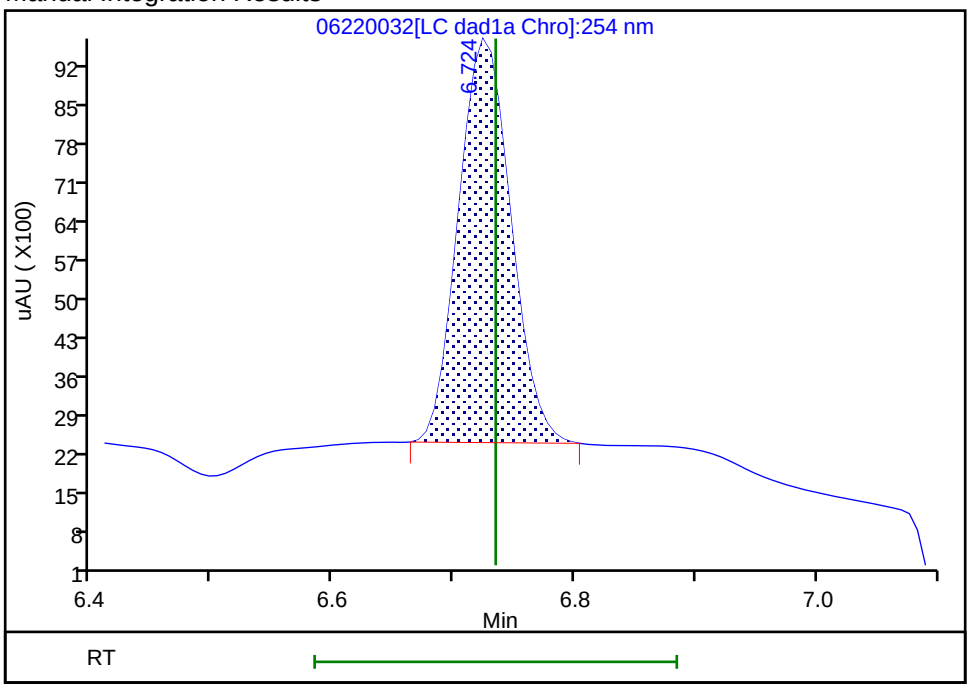
Processing Integration Results

RT: 6.72
Area: 29875
Amount: 0.347537
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 21978
Amount: 0.255671
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:06:57

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/33 Calibration Date: 06/23/2020 00:04

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	208783		240	250	-4.1	15.0
DNX	Ave	152928	151489		248	250	-0.9	15.0
MNX	Ave	158544	144370		266	292	-8.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499531/33 Calibration Date: 06/23/2020 00:04

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.53	6.73
DNX	6.94	6.85	7.05
MNX	7.40	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220033.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	23-Jun-2020 00:04:55	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:06	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:07:16		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.624	6.629	-0.005	52248	0.2503	0.2401	M
5 DNX	1	6.944	6.949	-0.005	37910	0.2503	0.2479	M
6 MNX	1	7.397	7.396	0.001	42120	0.2918	0.2657	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

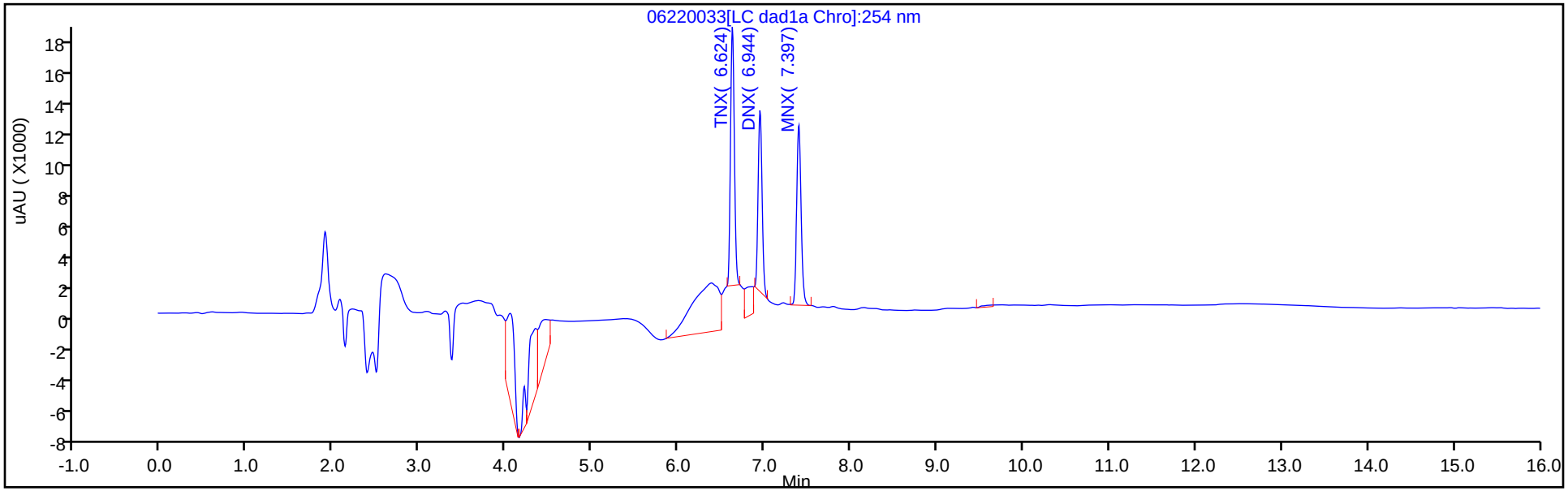
Report Date: 23-Jun-2020 15:18:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

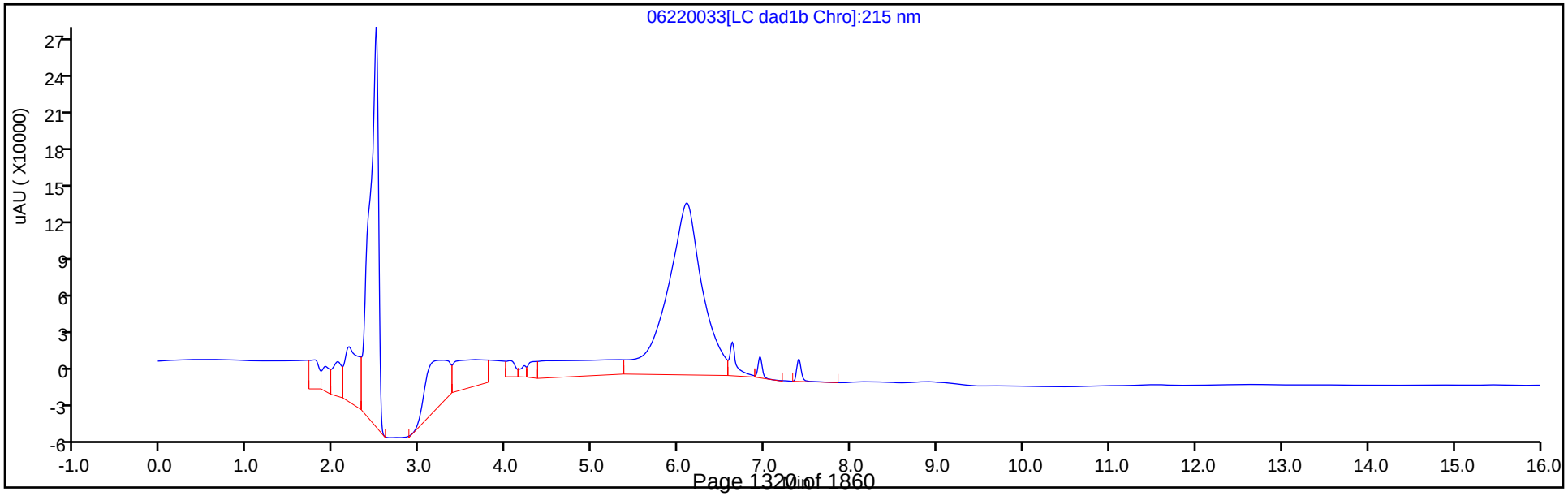
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220033.d

Injection Date:	23-Jun-2020 00:04:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

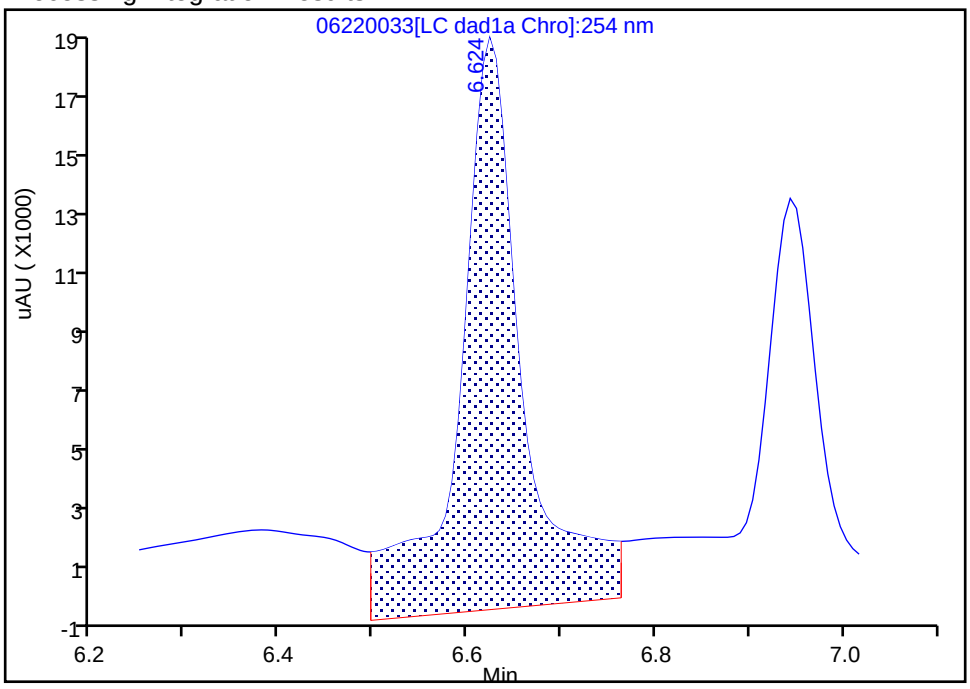
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220033.d				
Injection Date:	23-Jun-2020 00:04:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

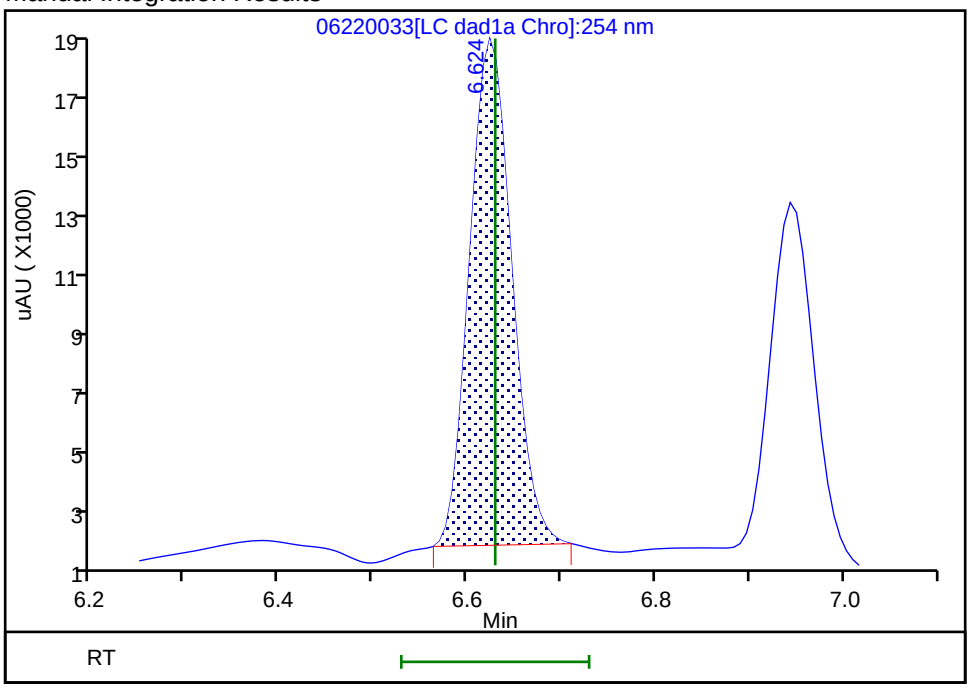
Processing Integration Results

RT: 6.62
Area: 90993
Amount: 0.418150
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 52248
Amount: 0.240101
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:07:07

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

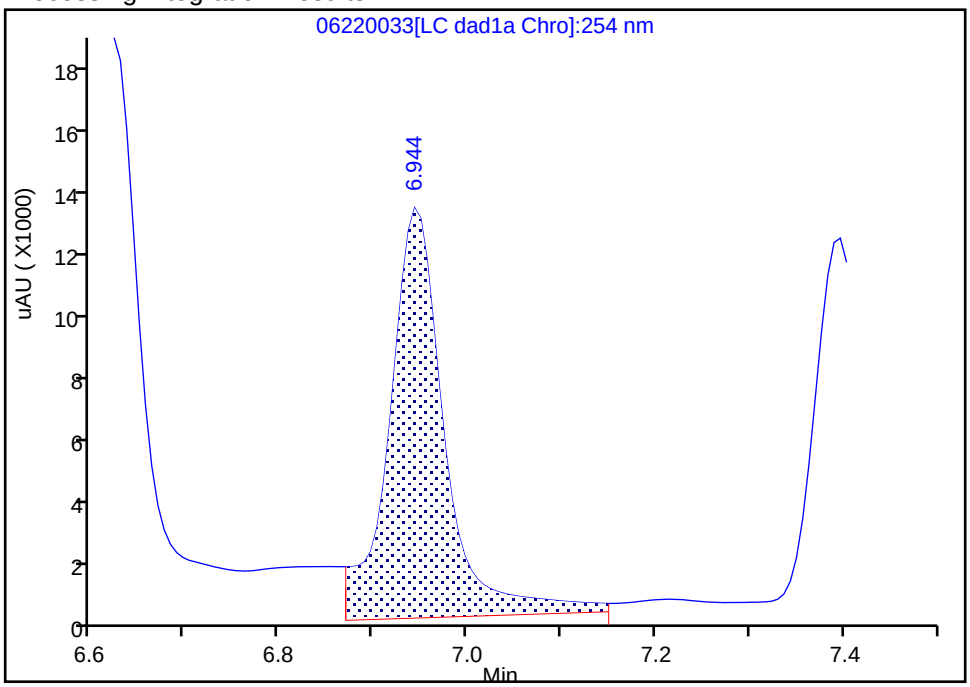
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220033.d				
Injection Date:	23-Jun-2020 00:04:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

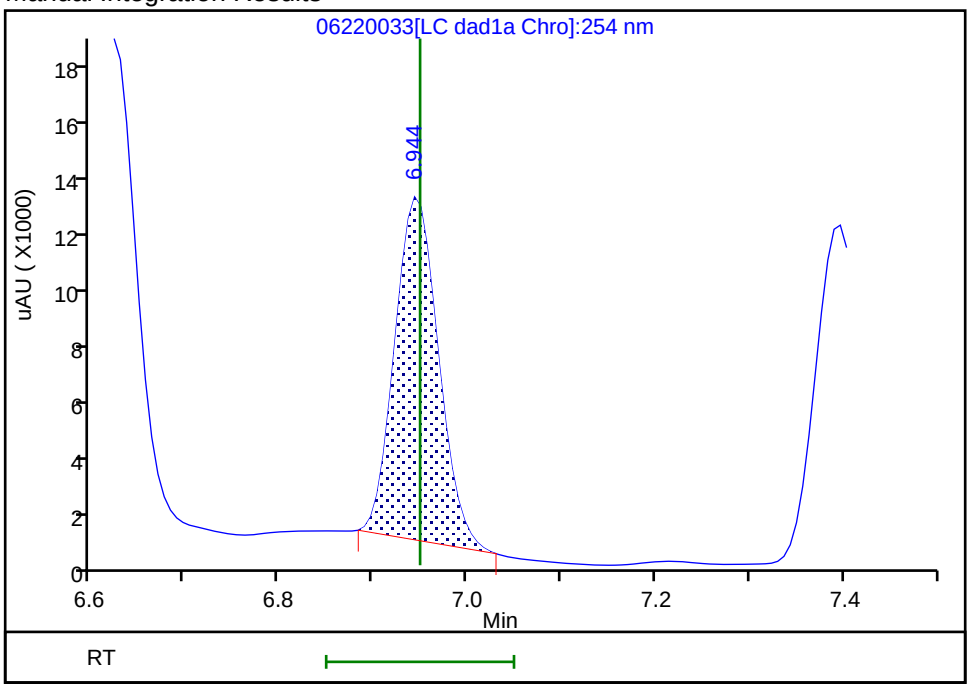
Processing Integration Results

RT: 6.94
Area: 53572
Amount: 0.350308
Amount Units: ug/mL



Manual Integration Results

RT: 6.94
Area: 37910
Amount: 0.247894
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:07:11
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/36 Calibration Date: 06/23/2020 01:13

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	88244		257	250	2.7	15.0
RDX	Ave	116613	112112		240	250	-3.9	15.0
Picric acid	Ave	85131	90216		265	250	6.0	15.0
1,3,5-Trinitrobenzene	Ave	230309	245210		267	251	6.5	15.0
1,3-Dinitrobenzene	Ave	306686	327956		268	251	6.9	15.0
Nitrobenzene	Ave	200403	201582		252	251	0.6	15.0
Tetryl	Ave	177032	185645		263	251	4.9	15.0
Nitroglycerin	Ave	68133	73314		2690	2500	7.6	15.0
2,4,6-Trinitrotoluene	Ave	204031	220124		271	251	7.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		166190		240	250	-4.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	209044		259	251	3.1	15.0
2,6-Dinitrotoluene	Ave	149452	166363		279	251	11.3	15.0
2,4-Dinitrotoluene	Ave	303584	318430		263	251	4.9	15.0
2-Nitrotoluene	Ave	135051	130380		241	250	-3.5	15.0
4-Nitrotoluene	Ave	113005	112527		249	251	-0.4	15.0
3-Nitrotoluene	Ave	143029	142577		249	250	-0.3	15.0
PETN	Ave	78605	83865		2670	2500	6.7	15.0
1,2-Dinitrobenzene	Ave	138212	147424		267	250	6.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/36 Calibration Date: 06/23/2020 01:13

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220036.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.73	6.58	6.88
RDX	7.80	7.65	7.95
Picric acid	8.11	7.94	8.24
1,3,5-Trinitrobenzene	8.95	8.78	9.08
1,3-Dinitrobenzene	9.59	9.42	9.72
Nitrobenzene	9.97	9.79	10.09
Tetryl	10.27	10.08	10.38
Nitroglycerin	10.78	10.60	10.90
2,4,6-Trinitrotoluene	11.23	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.40	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.69	11.55	11.75
2,6-Dinitrotoluene	11.83	11.69	11.89
2,4-Dinitrotoluene	12.03	11.89	12.09
2-Nitrotoluene	12.84	12.65	12.95
4-Nitrotoluene	13.27	13.08	13.38
3-Nitrotoluene	13.85	13.67	13.97
PETN	14.91	14.74	15.04
1,2-Dinitrobenzene	8.77	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220036.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 01:13:59 ALS Bottle#: 7 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-036
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:07:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.726	6.734	-0.008	22061	0.2500	0.2566	M
7 RDX	1	7.799	7.801	-0.002	28028	0.2500	0.2404	
8 2,4,6-Trinitrophenol	1	8.106	8.094	0.012	22554	0.2500	0.2649	
$ 9 1,2-Dinitrobenzene	1	8.766	8.741	0.025	36856	0.2500	0.2667	
10 1,3,5-Trinitrobenzene	1	8.946	8.928	0.018	61425	0.2505	0.2667	
11 1,3-Dinitrobenzene	1	9.592	9.568	0.024	82153	0.2505	0.2679	
12 Nitrobenzene	1	9.966	9.941	0.025	50597	0.2510	0.2525	
14 Tetryl	1	10.272	10.234	0.038	46504	0.2505	0.2627	
15 Nitroglycerin	2	10.779	10.748	0.031	183285	2.50	2.69	
16 2,4,6-Trinitrotoluene	1	11.232	11.201	0.031	55251	0.2510	0.2708	
17 4-Amino-2,6-dinitrotoluene	1	11.399	11.361	0.038	41589	0.2503	0.2397	
18 2-Amino-4,6-dinitrotoluene	1	11.692	11.648	0.044	52470	0.2510	0.2587	
19 2,6-Dinitrotoluene	1	11.826	11.788	0.038	41757	0.2510	0.2794	
20 2,4-Dinitrotoluene	1	12.026	11.988	0.038	79926	0.2510	0.2633	
21 o-Nitrotoluene	1	12.839	12.801	0.038	32595	0.2500	0.2414	
22 p-Nitrotoluene	1	13.266	13.234	0.032	28188	0.2505	0.2494	
23 m-Nitrotoluene	1	13.852	13.821	0.031	35680	0.2503	0.2495	
24 PETN	2	14.912	14.888	0.024	209663	2.50	2.67	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

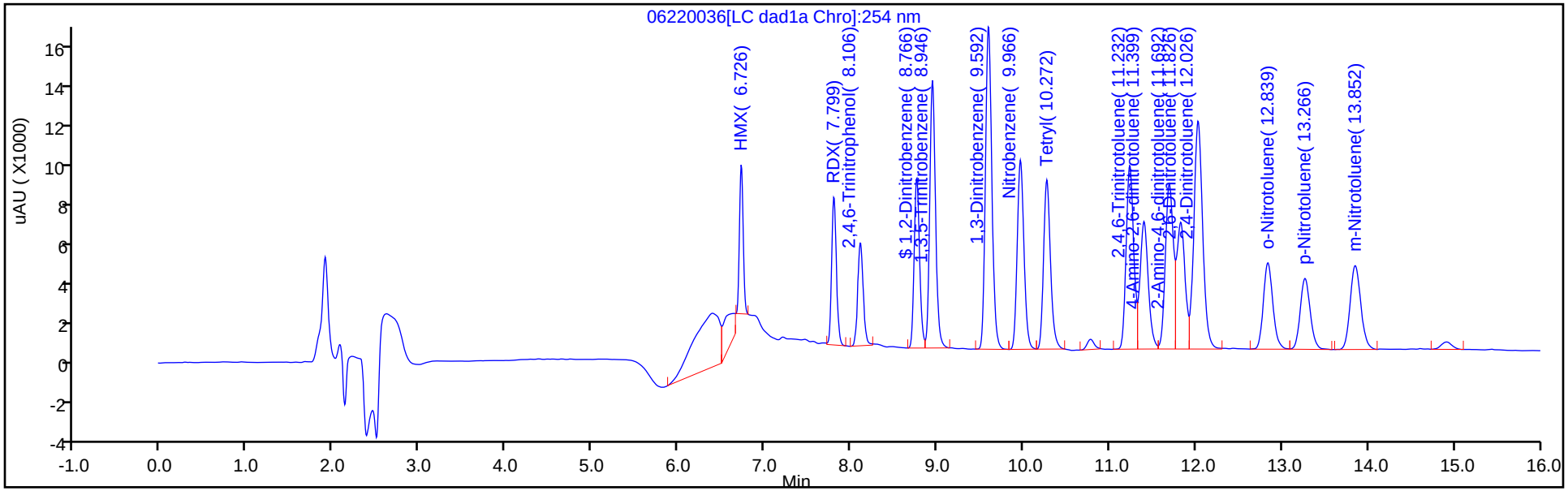
Report Date: 23-Jun-2020 15:18:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

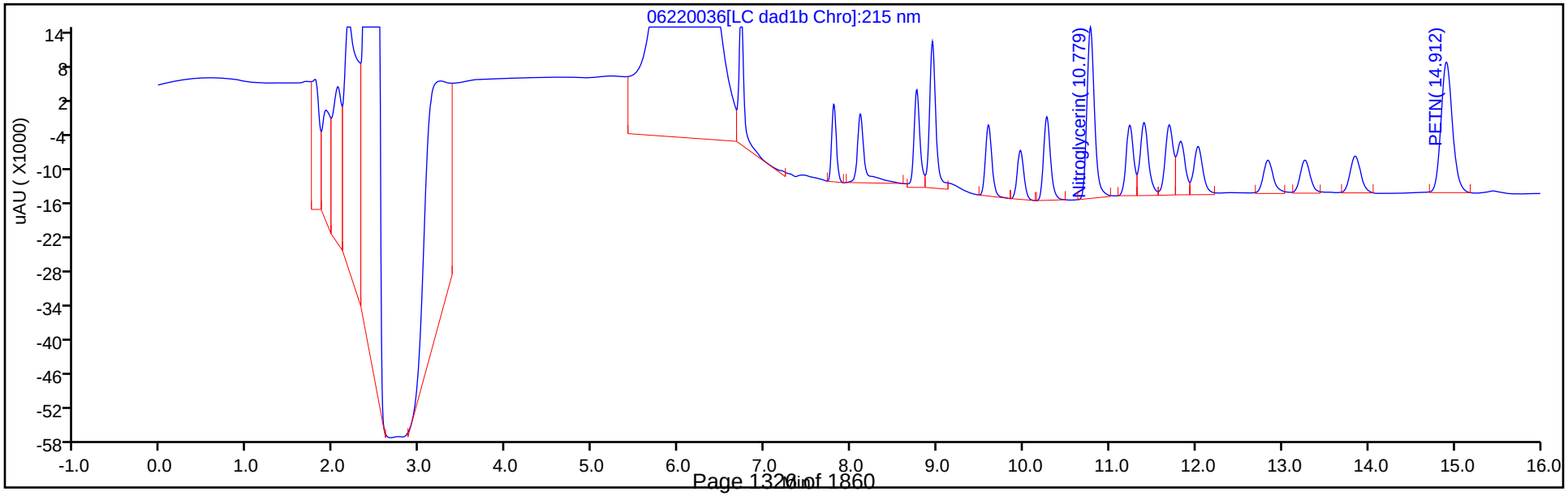
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220036.d

Injection Date:	23-Jun-2020 01:13:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	36
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

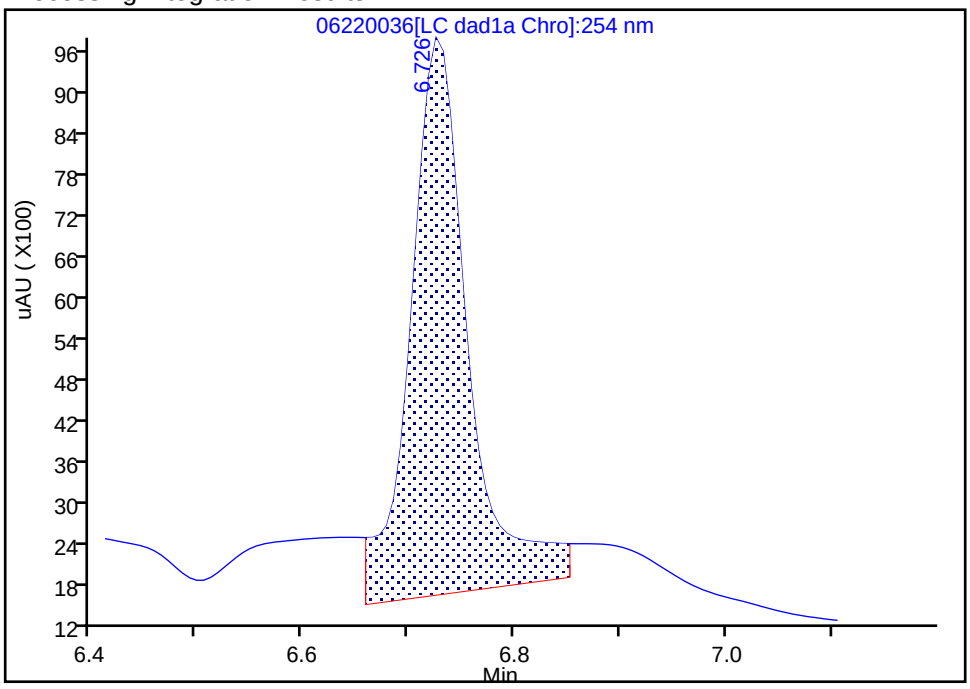
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220036.d				
Injection Date:	23-Jun-2020 01:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

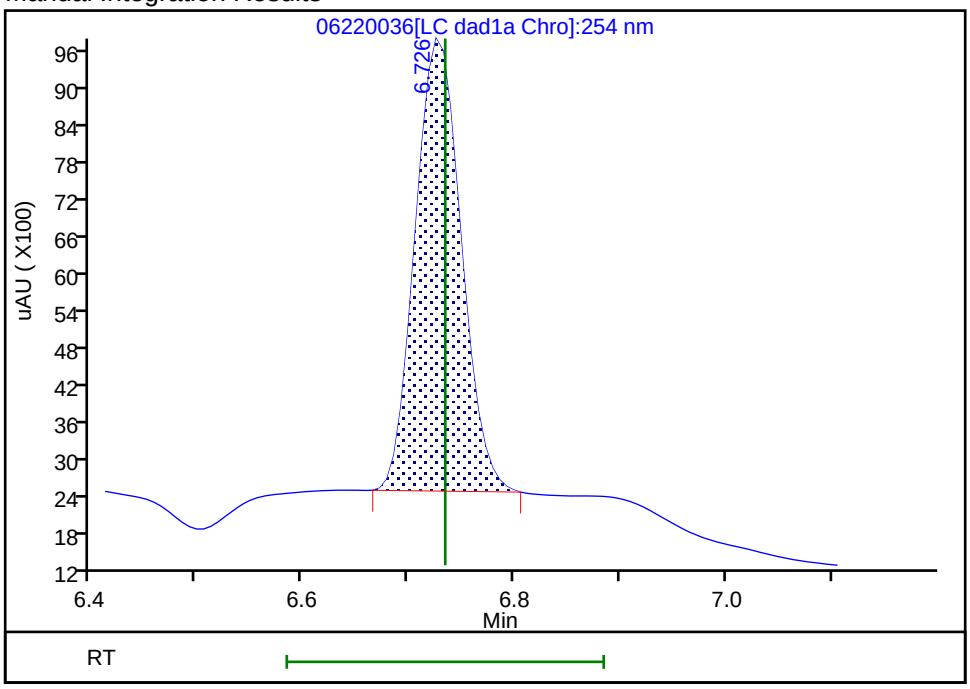
Processing Integration Results

RT: 6.73
Area: 30805
Amount: 0.358355
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 22061
Amount: 0.256636
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:07:24

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/37 Calibration Date: 06/23/2020 01:37

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220037.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	208607		240	250	-4.1	15.0
DNX	Ave	152928	152308		249	250	-0.4	15.0
MNX	Ave	158544	147448		271	292	-7.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/37 Calibration Date: 06/23/2020 01:37

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.63	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.40	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220037.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	23-Jun-2020 01:37:01	ALS Bottle#:	9	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:07	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:07:47		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.630	6.629	0.001	52204	0.2503	0.2399	M
5 DNX	1	6.950	6.949	0.001	38115	0.2503	0.2492	M
6 MNX	1	7.396	7.396	0.000	43018	0.2918	0.2713	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

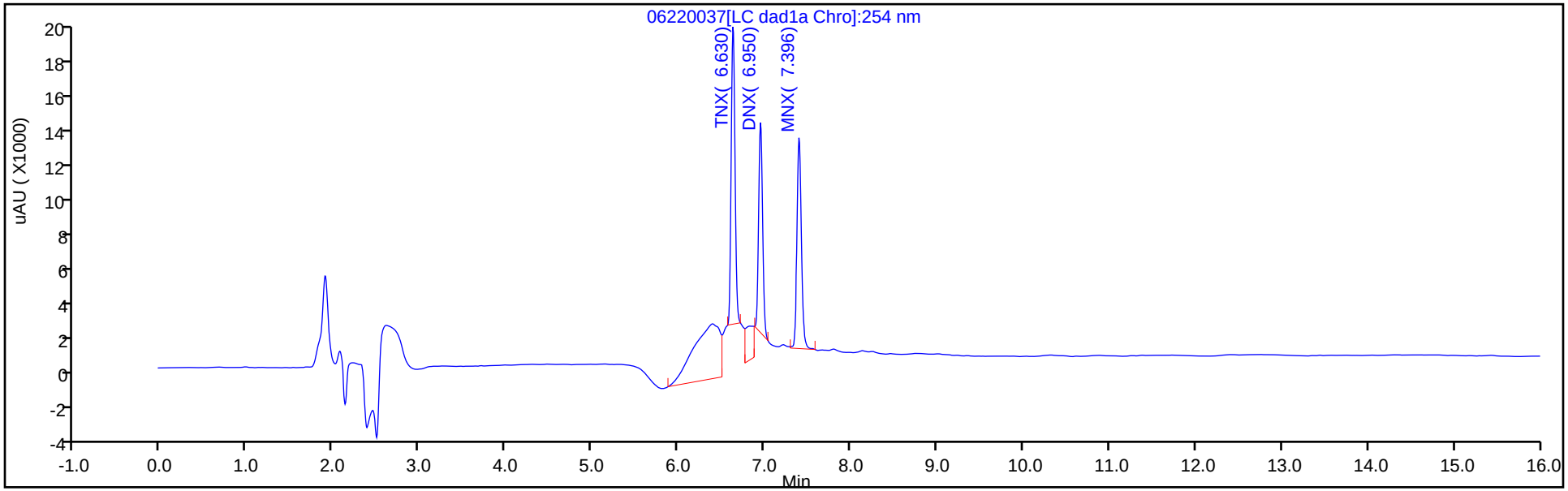
Report Date: 23-Jun-2020 15:18:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

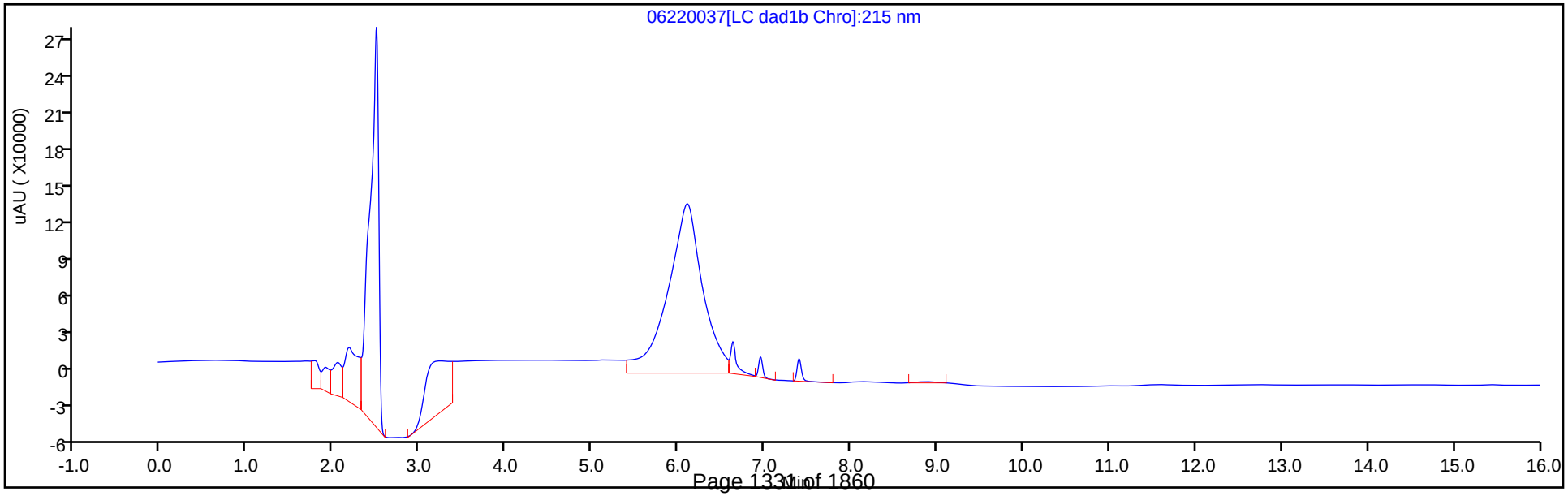
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220037.d

Injection Date:	23-Jun-2020 01:37:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	37
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

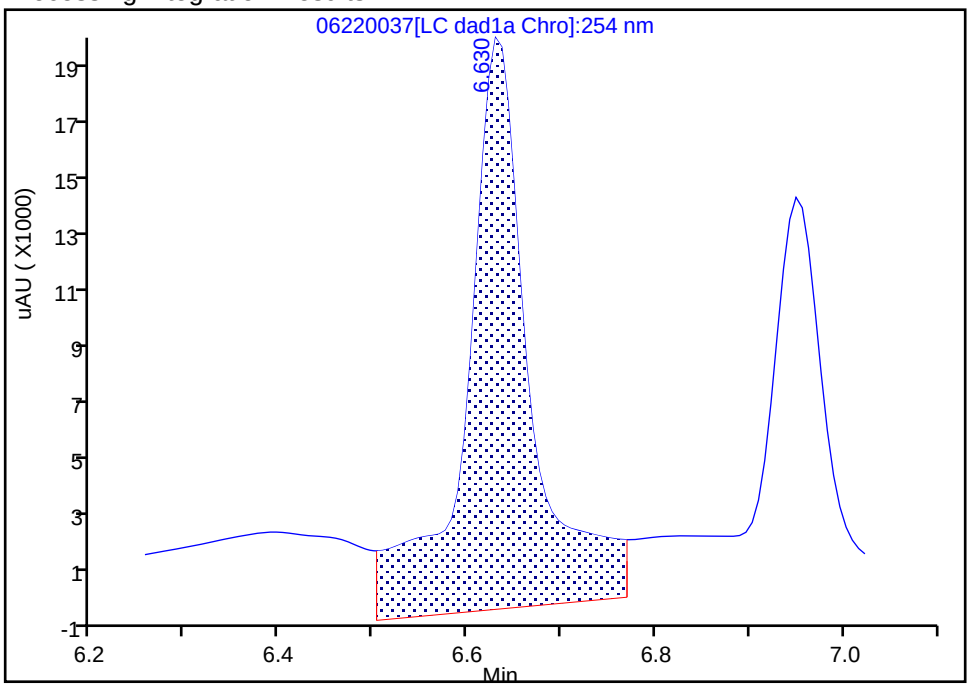
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220037.d				
Injection Date:	23-Jun-2020 01:37:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

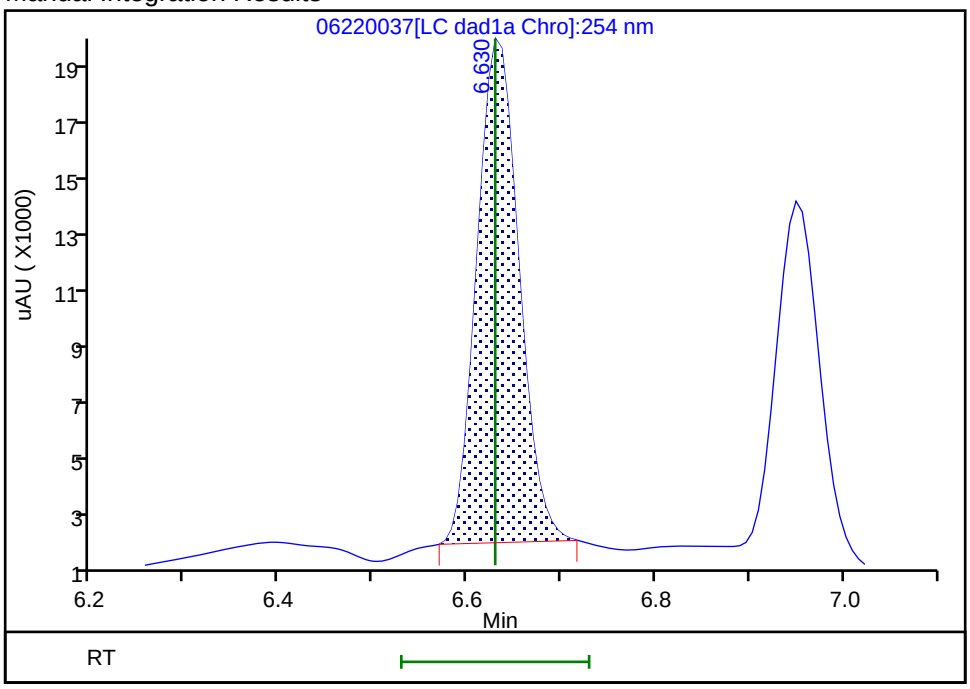
Processing Integration Results

RT: 6.63
Area: 92025
Amount: 0.422892
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 52204
Amount: 0.239898
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:07:34

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

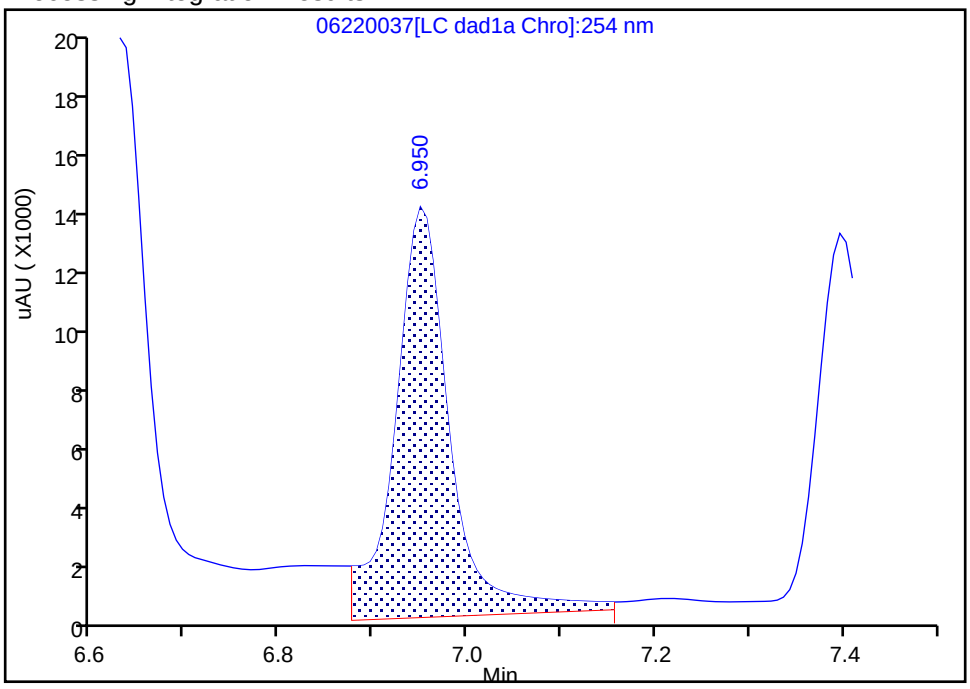
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220037.d				
Injection Date:	23-Jun-2020 01:37:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

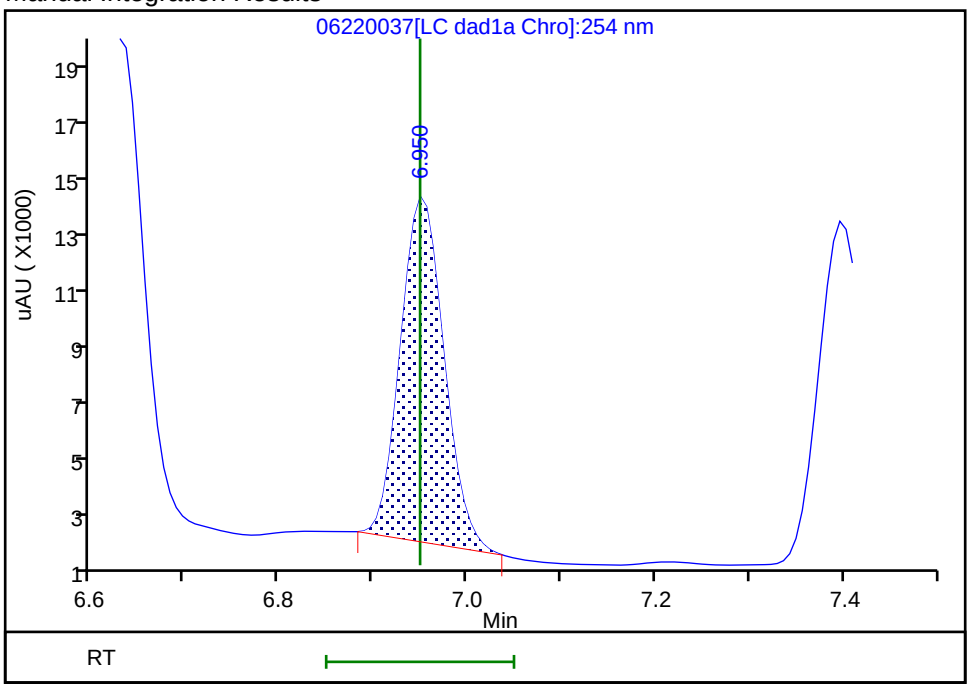
Processing Integration Results

RT: 6.95
Area: 53222
Amount: 0.348019
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 38115
Amount: 0.249234
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:07:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/46 Calibration Date: 06/23/2020 05:04

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220046.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	88132		256	250	2.5	15.0
RDX	Ave	116613	113100		242	250	-3.0	15.0
Picric acid	Ave	85131	89980		264	250	5.7	15.0
1,3,5-Trinitrobenzene	Ave	230309	246072		268	251	6.8	15.0
1,3-Dinitrobenzene	Ave	306686	327138		267	251	6.7	15.0
Nitrobenzene	Ave	200403	201040		252	251	0.3	15.0
Tetryl	Ave	177032	187441		265	251	5.9	15.0
Nitroglycerin	Ave	68133	72604		2660	2500	6.6	15.0
2,4,6-Trinitrotoluene	Ave	204031	222183		273	251	8.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		167365		241	250	-3.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	208363		258	251	2.7	15.0
2,6-Dinitrotoluene	Ave	149452	167773		282	251	12.3	15.0
2,4-Dinitrotoluene	Ave	303584	318813		264	251	5.0	15.0
2-Nitrotoluene	Ave	135051	121888		226	250	-9.7	15.0
4-Nitrotoluene	Ave	113005	109904		244	251	-2.7	15.0
3-Nitrotoluene	Ave	143029	138234		242	250	-3.4	15.0
PETN	Ave	78605	93291		2970	2500	18.7*	15.0
1,2-Dinitrobenzene	Ave	138212	147232		266	250	6.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/46 Calibration Date: 06/23/2020 05:04

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220046.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.73	6.58	6.88
RDX	7.81	7.65	7.95
Picric acid	8.11	7.94	8.24
1,3,5-Trinitrobenzene	8.95	8.78	9.08
1,3-Dinitrobenzene	9.60	9.42	9.72
Nitrobenzene	9.97	9.79	10.09
Tetryl	10.28	10.08	10.38
Nitroglycerin	10.79	10.60	10.90
2,4,6-Trinitrotoluene	11.25	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.41	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.71	11.55	11.75
2,6-Dinitrotoluene	11.84	11.69	11.89
2,4-Dinitrotoluene	12.05	11.89	12.09
2-Nitrotoluene	12.85	12.65	12.95
4-Nitrotoluene	13.28	13.08	13.38
3-Nitrotoluene	13.87	13.67	13.97
PETN	14.93	14.74	15.04
1,2-Dinitrobenzene	8.77	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220046.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 05:04:04 ALS Bottle#: 7 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-046
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 16:15:30 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:08:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.732	6.734	-0.002	22033	0.2500	0.2563	M
7 RDX	1	7.805	7.801	0.004	28275	0.2500	0.2425	
8 2,4,6-Trinitrophenol	1	8.112	8.094	0.018	22495	0.2500	0.2642	
$ 9 1,2-Dinitrobenzene	1	8.765	8.741	0.024	36808	0.2500	0.2663	
10 1,3,5-Trinitrobenzene	1	8.945	8.928	0.017	61641	0.2505	0.2676	
11 1,3-Dinitrobenzene	1	9.598	9.568	0.030	81948	0.2505	0.2672	
12 Nitrobenzene	1	9.972	9.941	0.031	50461	0.2510	0.2518	
14 Tetryl	1	10.278	10.234	0.044	46954	0.2505	0.2652	
15 Nitroglycerin	2	10.785	10.748	0.037	181510	2.50	2.66	
16 2,4,6-Trinitrotoluene	1	11.245	11.201	0.044	55768	0.2510	0.2733	M
17 4-Amino-2,6-dinitrotoluene	1	11.412	11.361	0.051	41883	0.2503	0.2413	M
18 2-Amino-4,6-dinitrotoluene	1	11.712	11.648	0.064	52299	0.2510	0.2579	M
19 2,6-Dinitrotoluene	1	11.838	11.788	0.050	42111	0.2510	0.2818	M
20 2,4-Dinitrotoluene	1	12.045	11.988	0.057	80022	0.2510	0.2636	M
21 o-Nitrotoluene	1	12.852	12.801	0.051	30472	0.2500	0.2256	M
22 p-Nitrotoluene	1	13.278	13.234	0.044	27531	0.2505	0.2436	M
23 m-Nitrotoluene	1	13.865	13.821	0.044	34593	0.2503	0.2419	M
24 PETN	2	14.932	14.888	0.044	233228	2.50	2.97	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

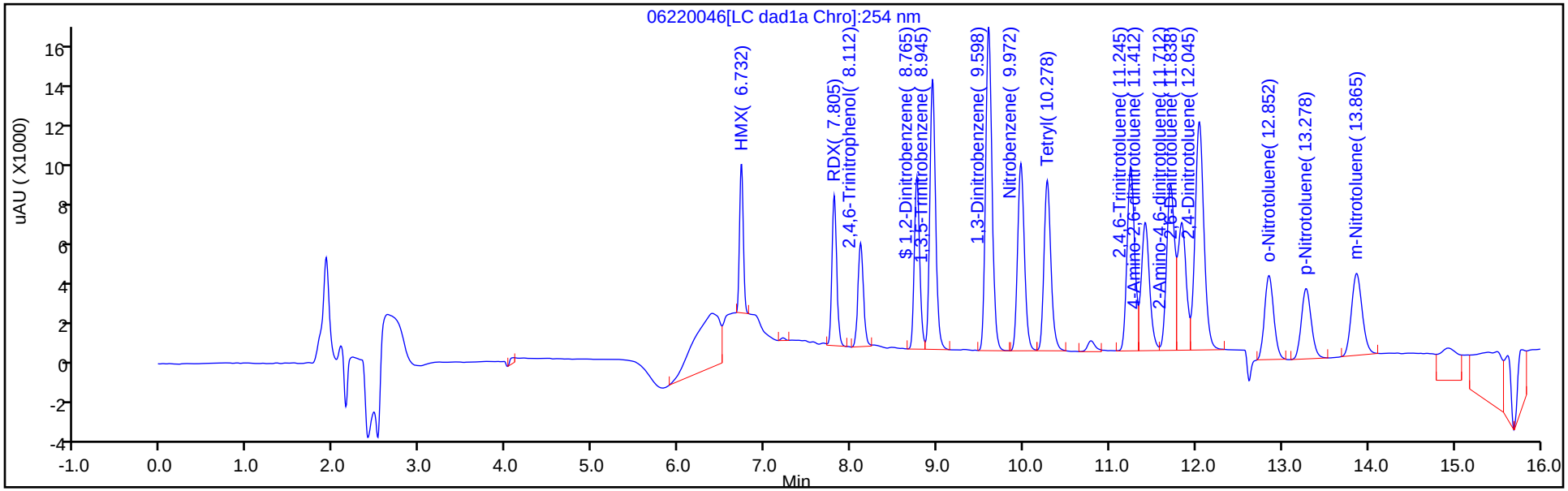
Report Date: 23-Jun-2020 16:15:30 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

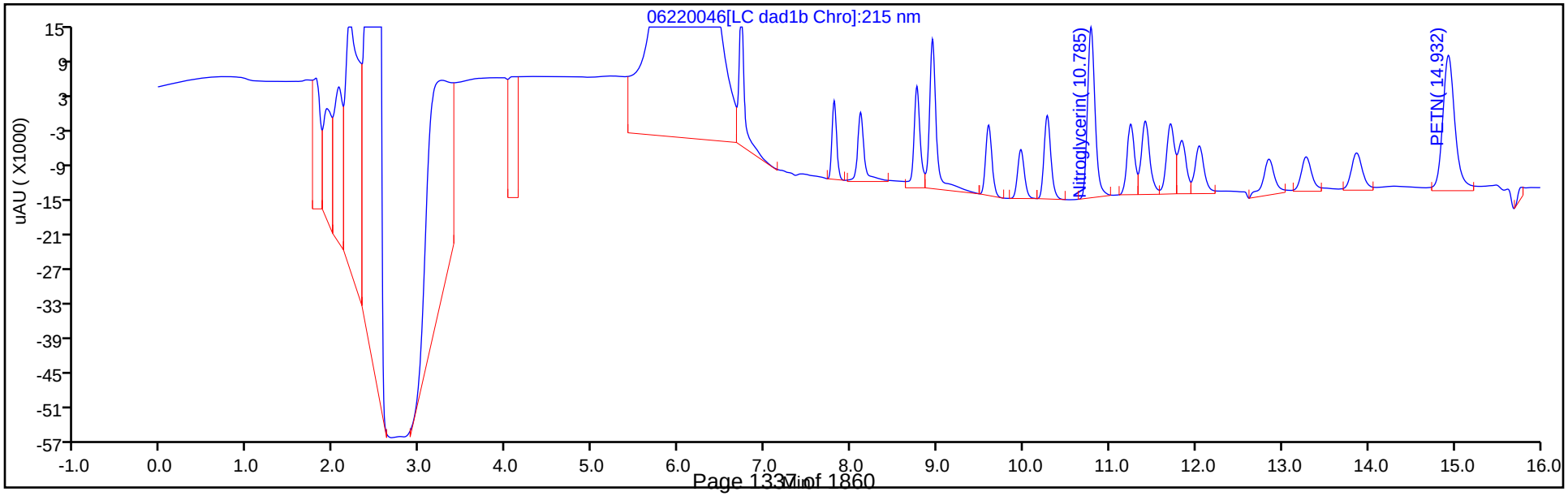
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d

Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	46
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

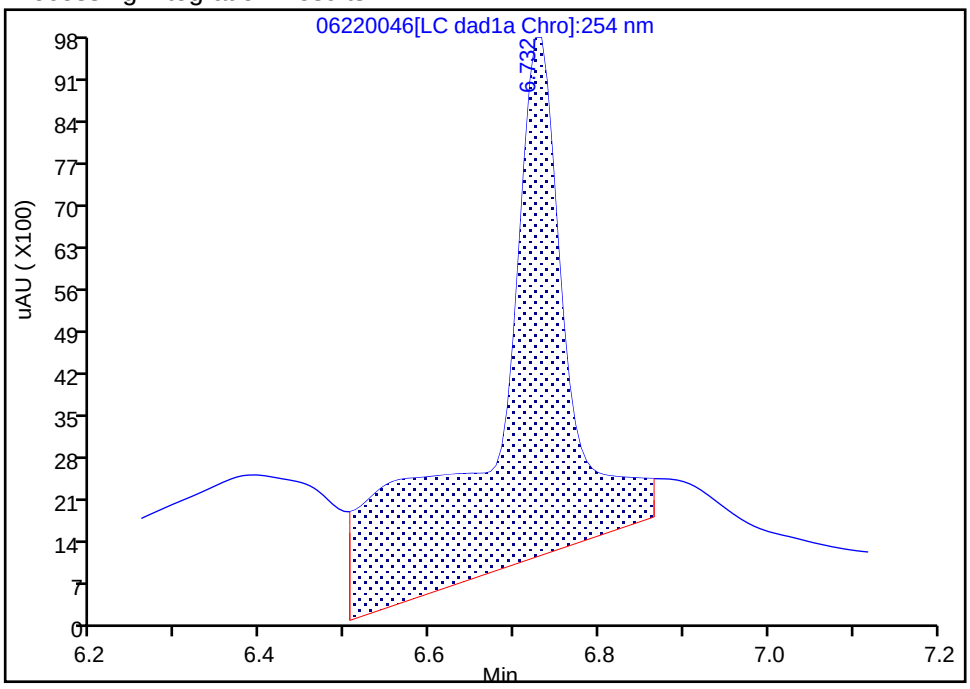
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

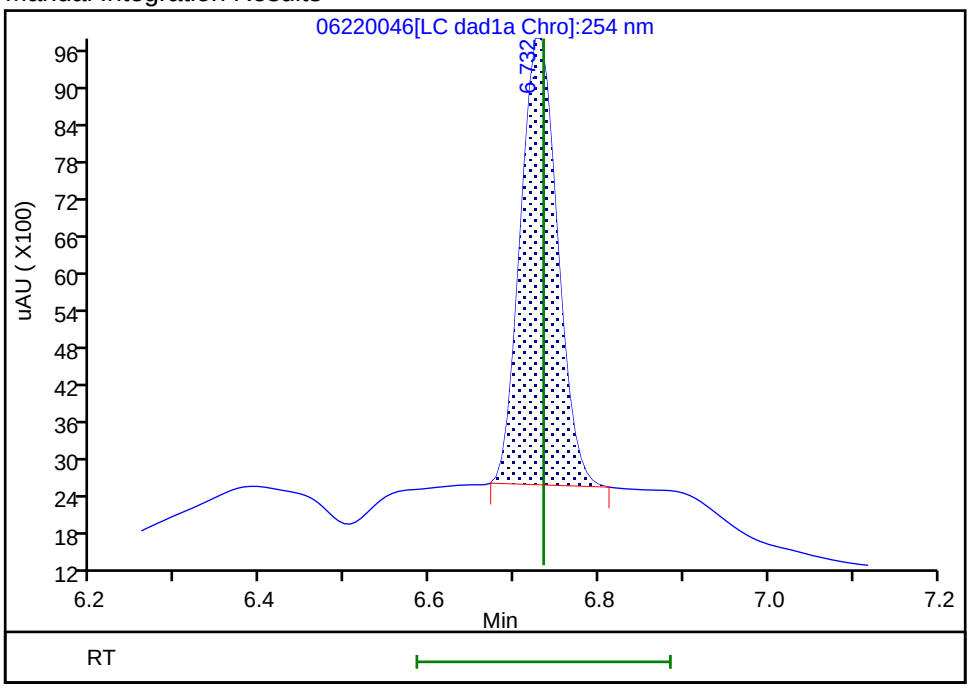
Processing Integration Results

RT: 6.73
Area: 54492
Amount: 0.633907
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 22033
Amount: 0.256310
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:07:56

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

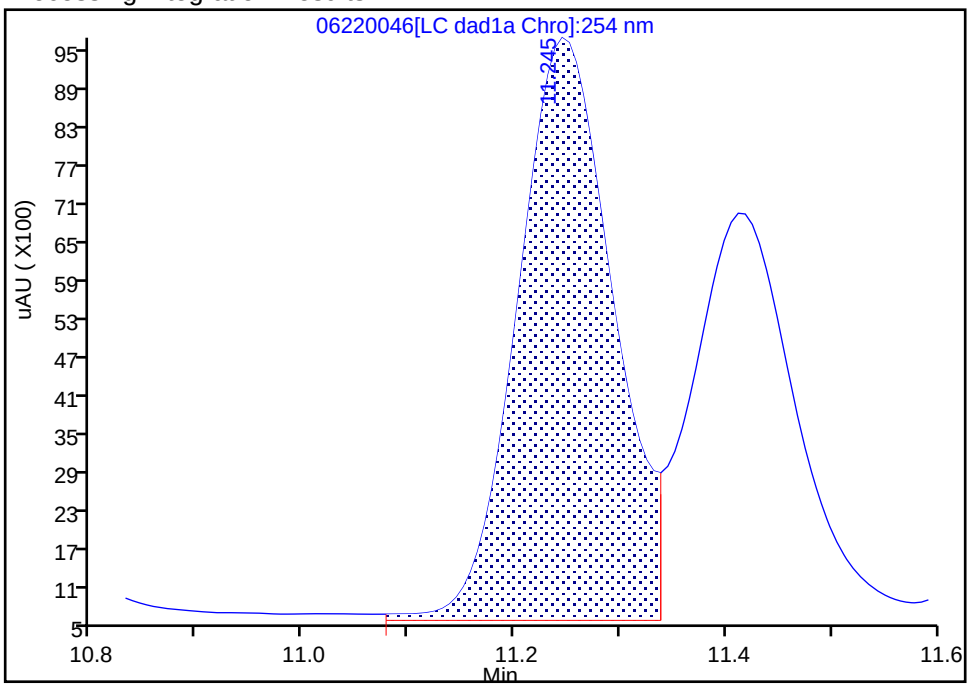
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

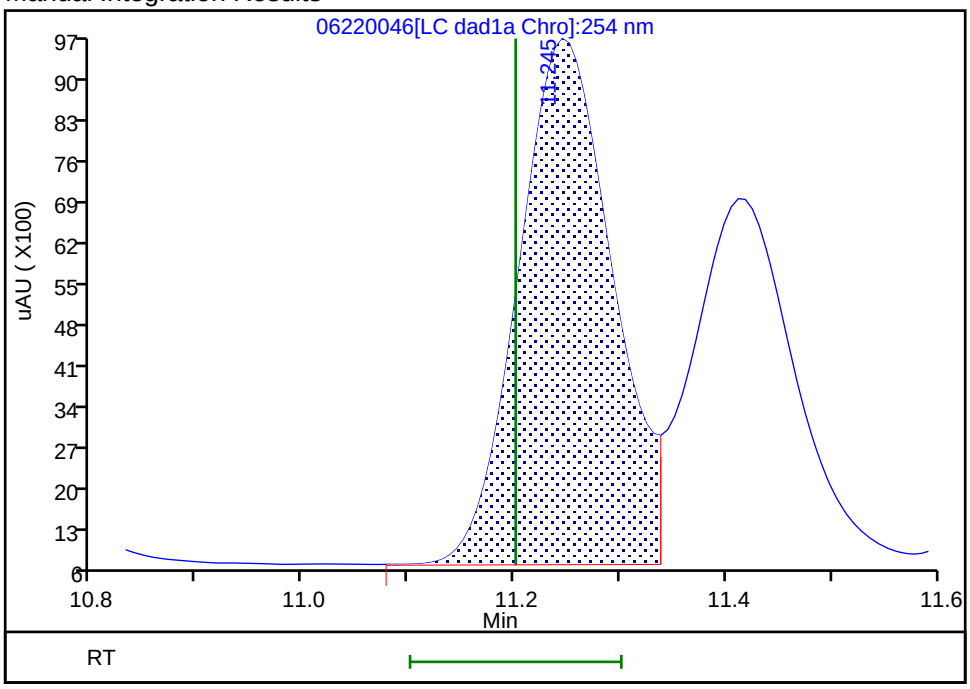
Processing Integration Results

RT: 11.24
Area: 57156
Amount: 0.280134
Amount Units: ug/mL



Manual Integration Results

RT: 11.24
Area: 55768
Amount: 0.273331
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 16:15:13

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

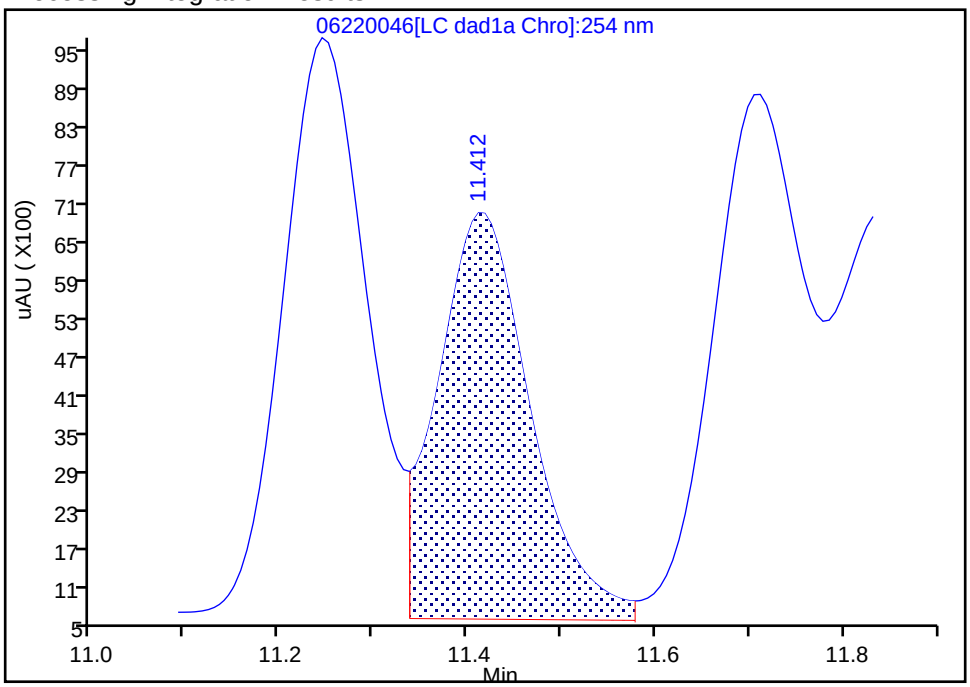
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

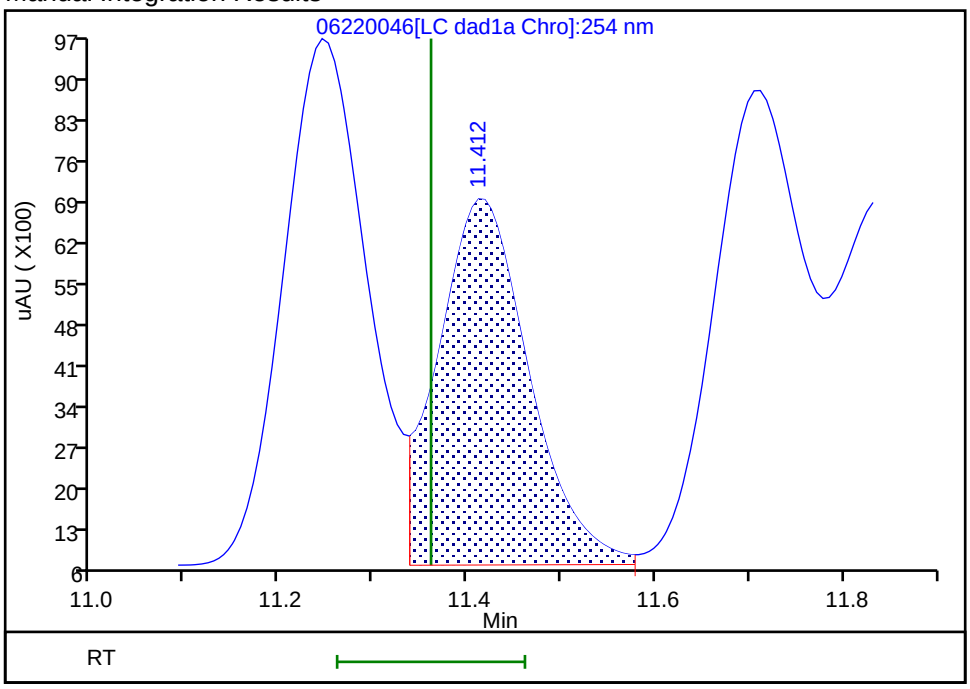
Processing Integration Results

RT: 11.41
Area: 43568
Amount: 0.250776
Amount Units: ug/mL



Manual Integration Results

RT: 11.41
Area: 41883
Amount: 0.241329
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 16:15:13

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

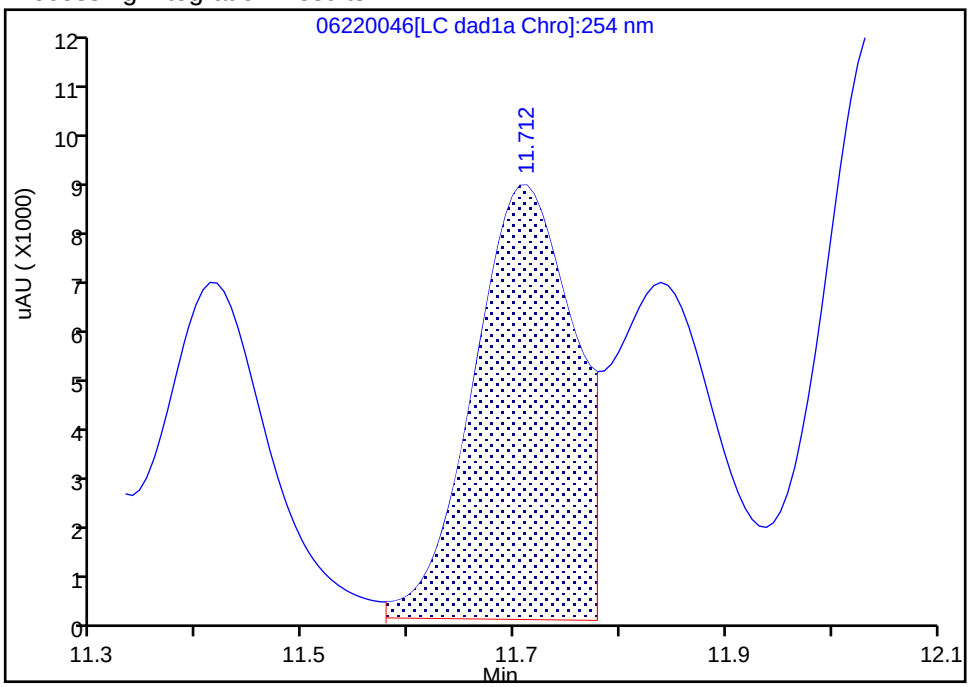
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

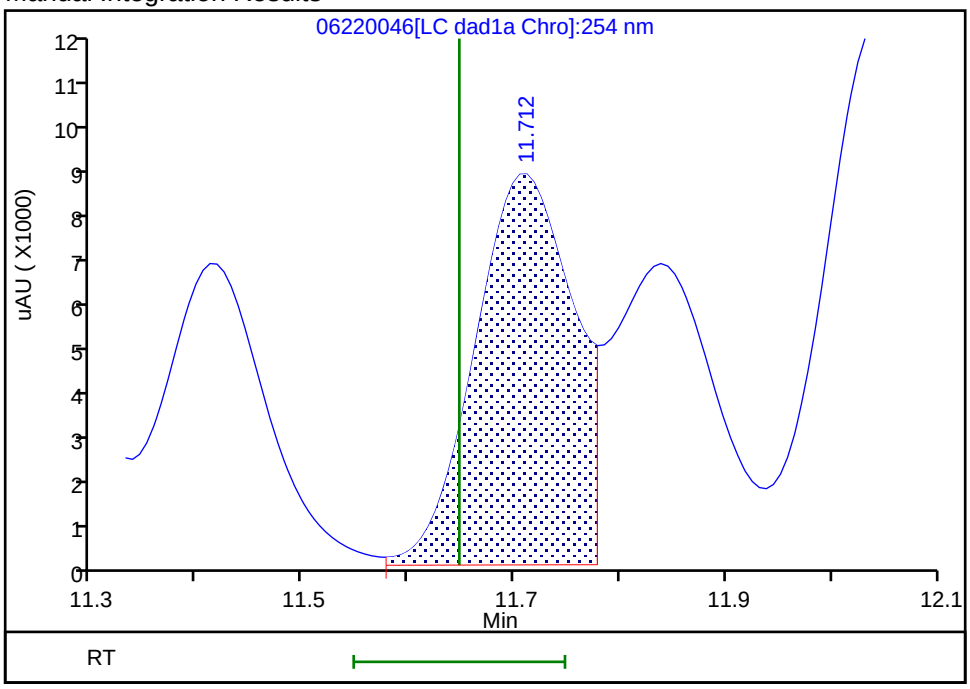
Processing Integration Results

RT: 11.71
Area: 54303
Amount: 0.267744
Amount Units: ug/mL



Manual Integration Results

RT: 11.71
Area: 52299
Amount: 0.257863
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 16:15:13

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

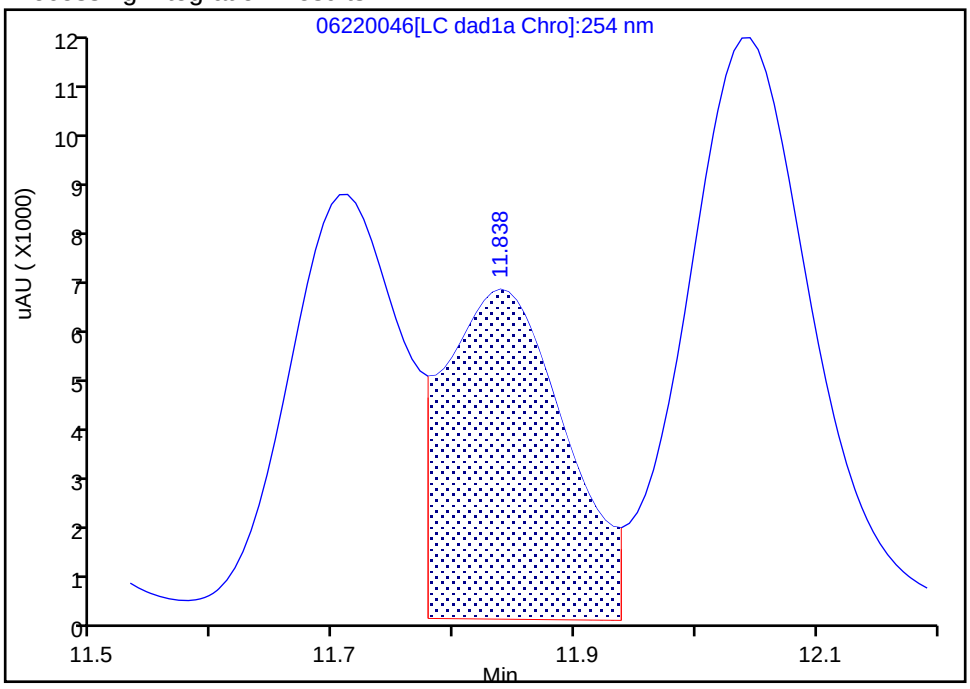
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

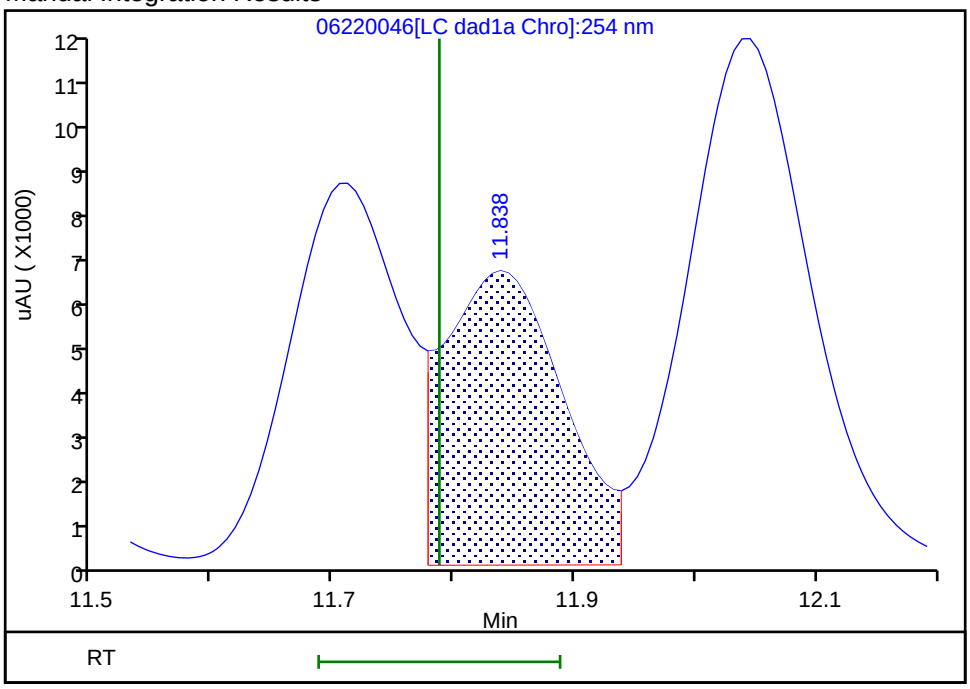
Processing Integration Results

RT: 11.84
Area: 44214
Amount: 0.295840
Amount Units: ug/mL



Manual Integration Results

RT: 11.84
Area: 42111
Amount: 0.281769
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 16:15:13
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

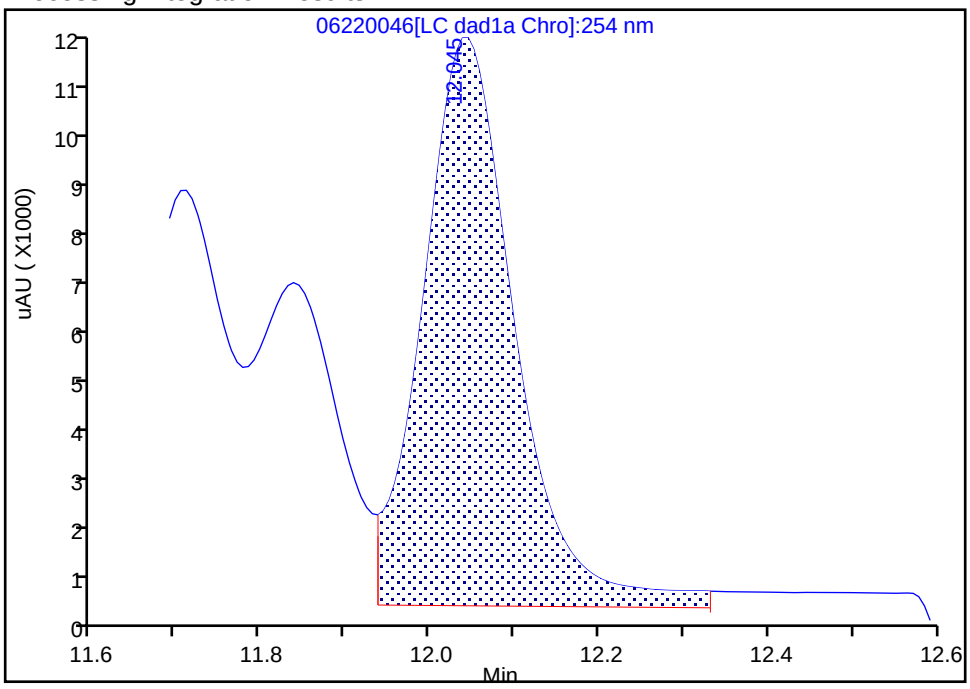
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

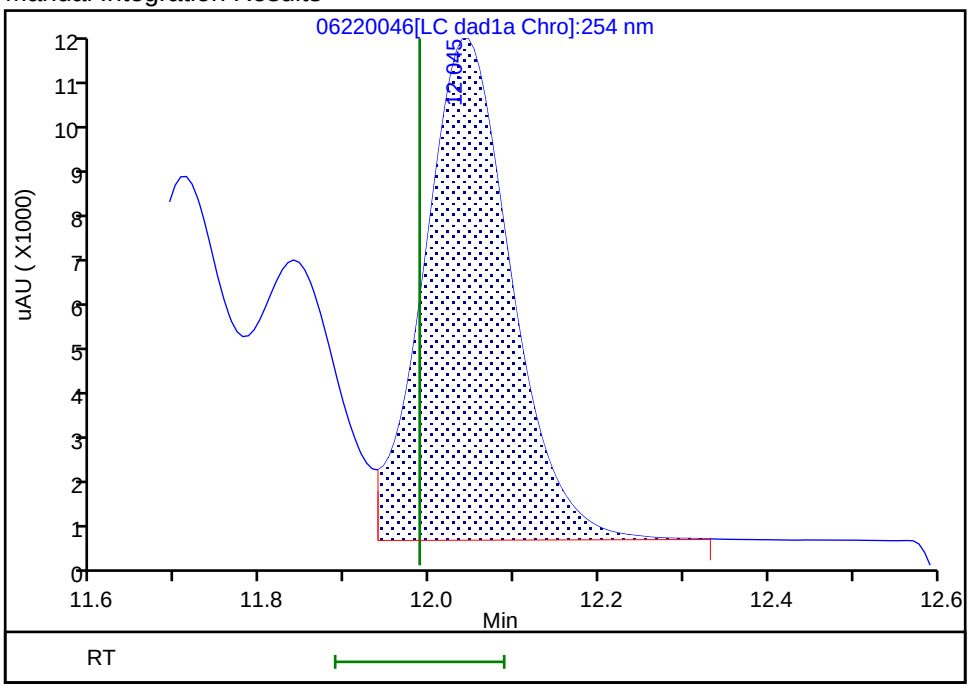
Processing Integration Results

RT: 12.04
Area: 86653
Amount: 0.285433
Amount Units: ug/mL



Manual Integration Results

RT: 12.04
Area: 80022
Amount: 0.263591
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 16:15:13
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

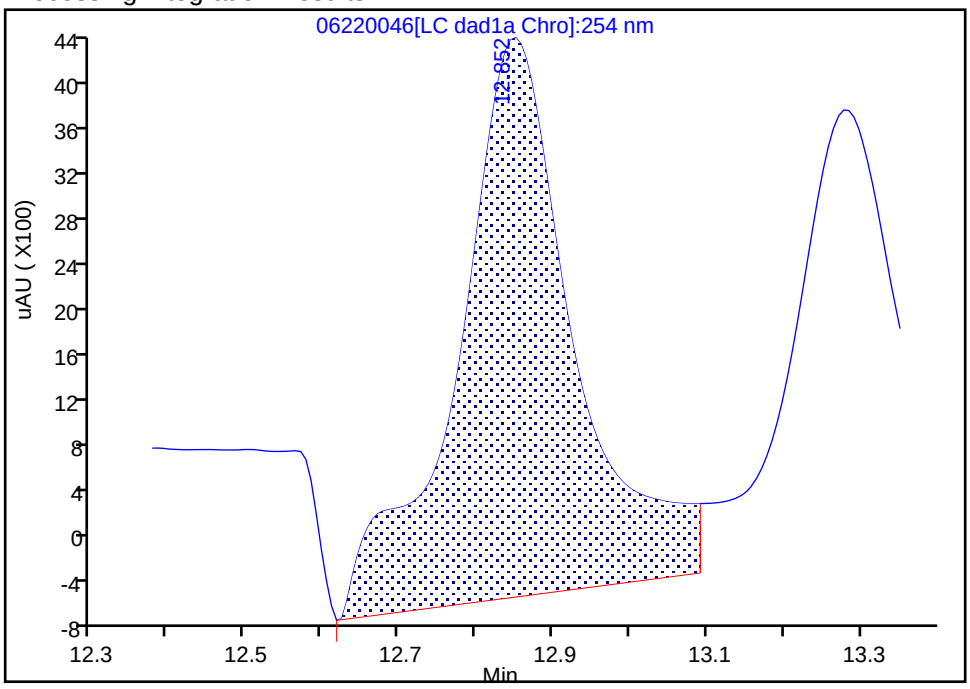
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

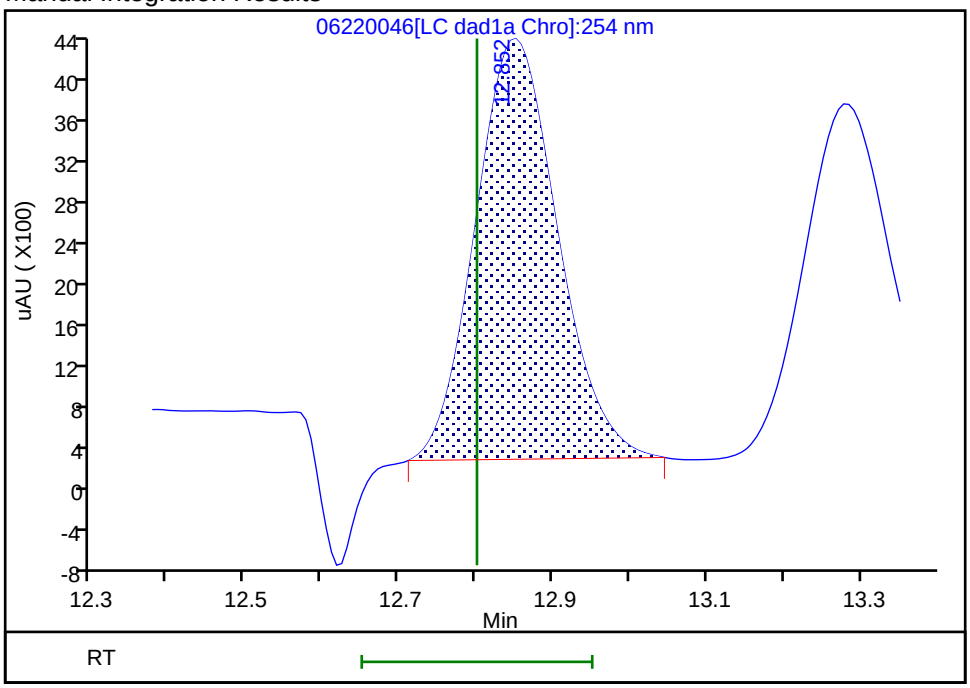
Processing Integration Results

RT: 12.85
Area: 52110
Amount: 0.385855
Amount Units: ug/mL



Manual Integration Results

RT: 12.85
Area: 30472
Amount: 0.225633
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:01

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

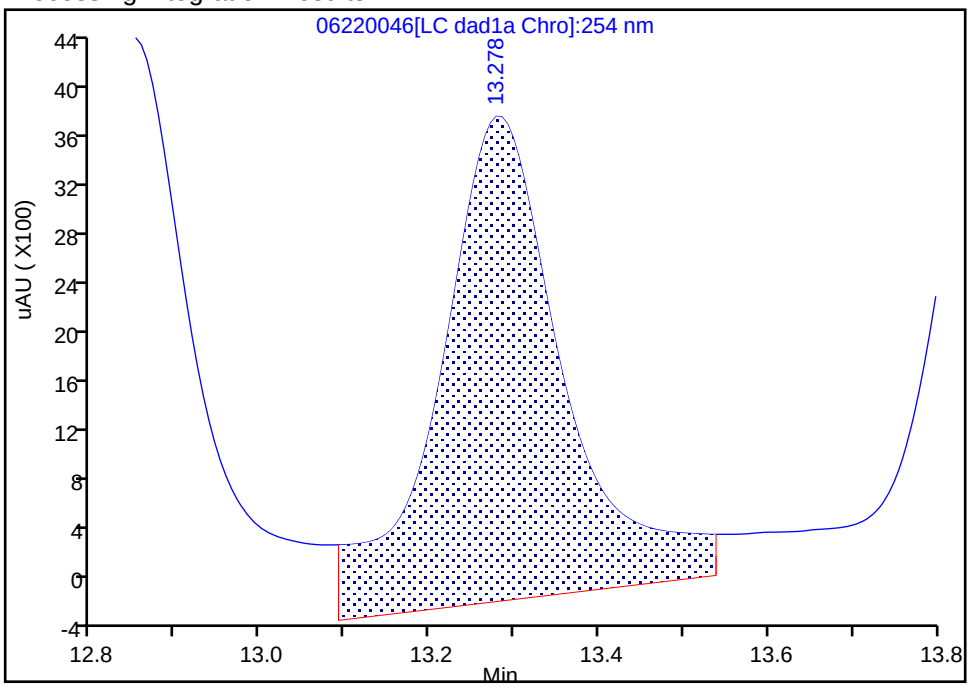
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

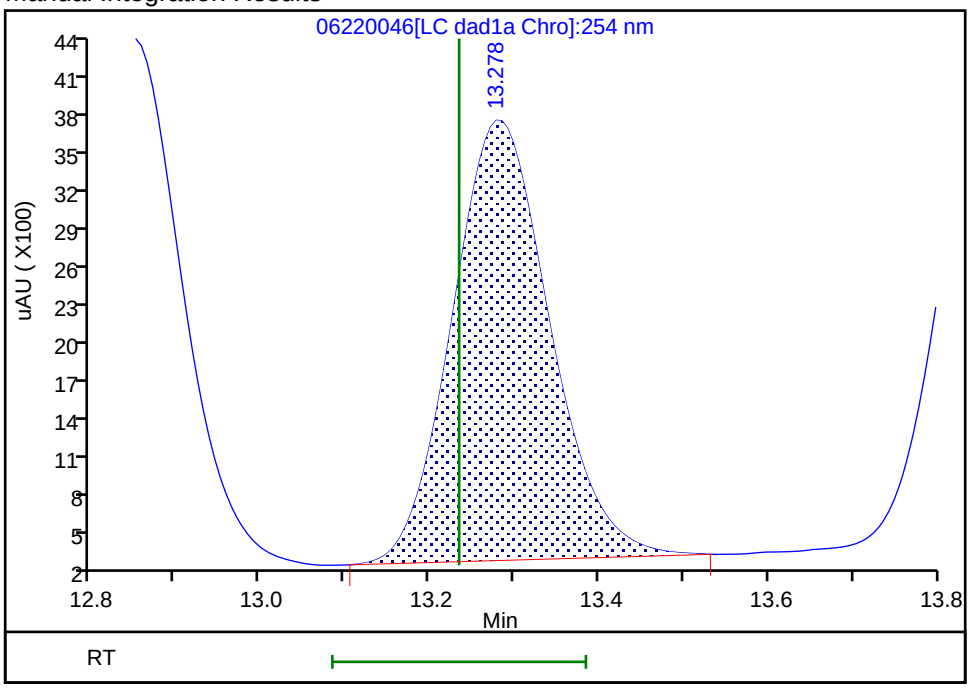
Processing Integration Results

RT: 13.28
Area: 40190
Amount: 0.355648
Amount Units: ug/mL



Manual Integration Results

RT: 13.28
Area: 27531
Amount: 0.243626
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:06
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

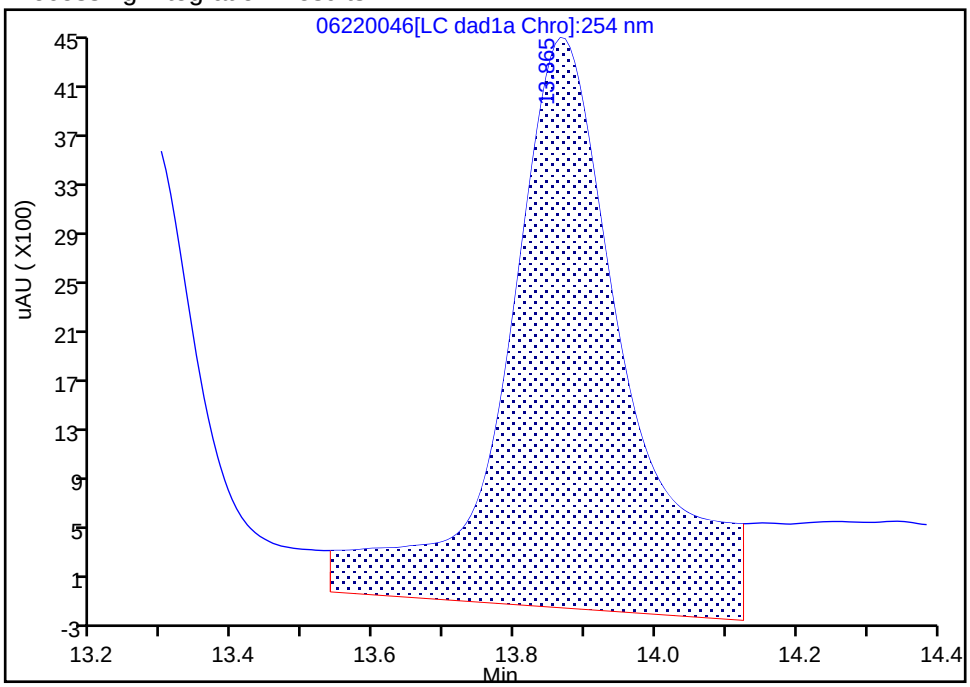
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

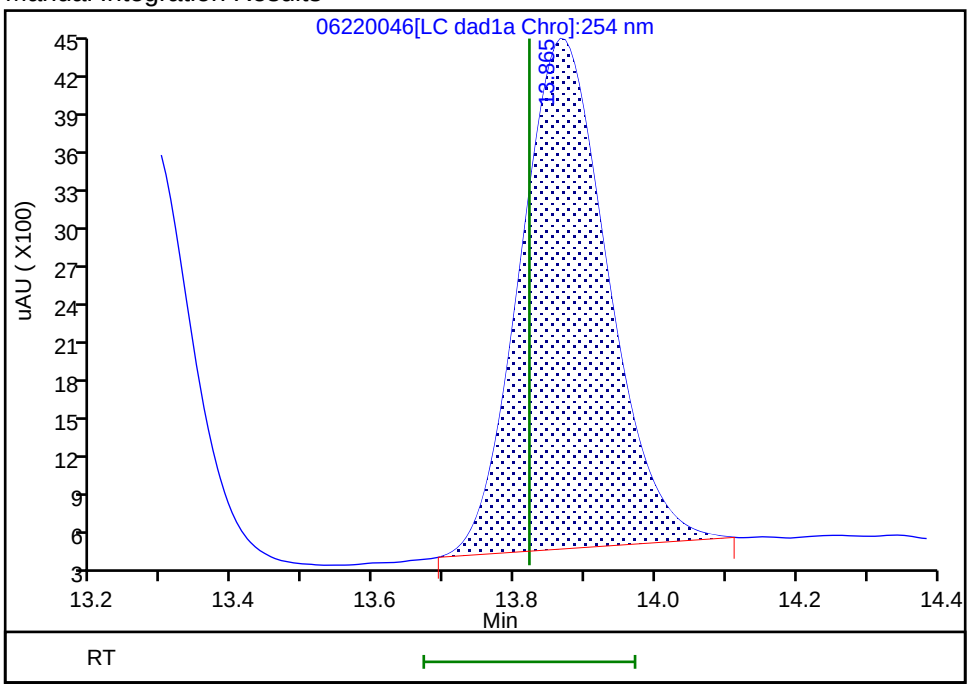
Processing Integration Results

RT: 13.86
Area: 54219
Amount: 0.379078
Amount Units: ug/mL



Manual Integration Results

RT: 13.86
Area: 34593
Amount: 0.241861
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:11

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/47 Calibration Date: 06/23/2020 05:27

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	208999		240	250	-4.0	15.0
DNX	Ave	152928	151756		248	250	-0.8	15.0
MNX	Ave	158544	144860		267	292	-8.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/47 Calibration Date: 06/23/2020 05:27

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220047.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.63	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.40	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220047.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	23-Jun-2020 05:27:04	ALS Bottle#:	9	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-047				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:12	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:08:31		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.629	6.629	0.000	52302	0.2503	0.2403	M
5 DNX	1	6.949	6.949	0.000	37977	0.2503	0.2483	M
6 MNX	1	7.403	7.396	0.007	42263	0.2918	0.2666	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

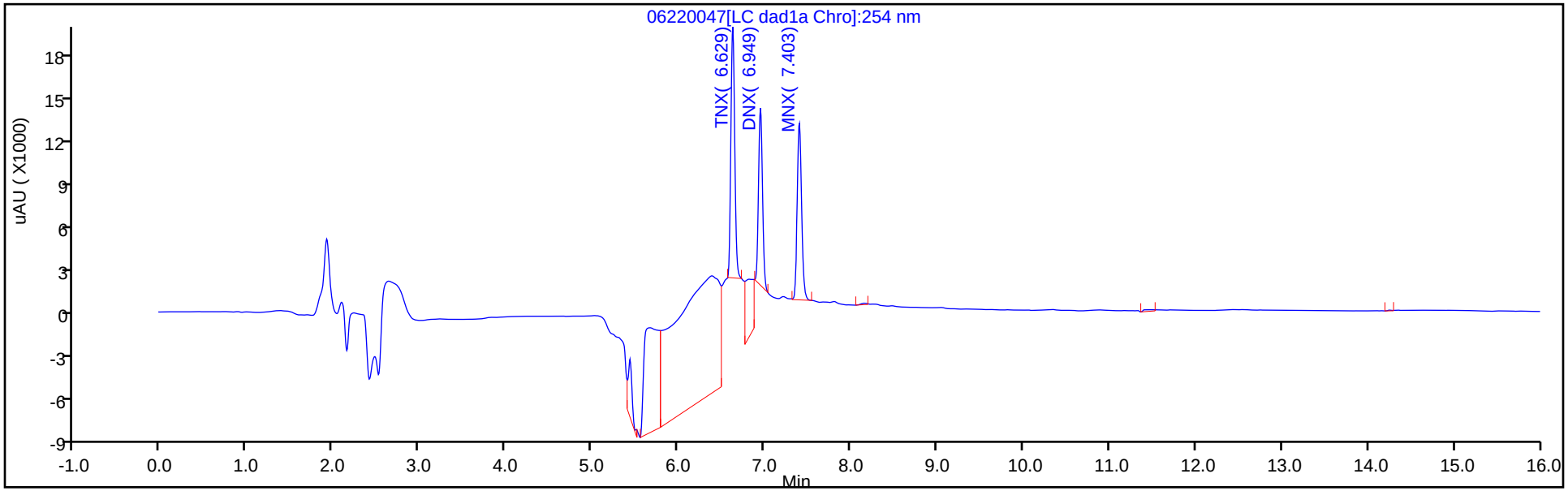
Report Date: 23-Jun-2020 15:18:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

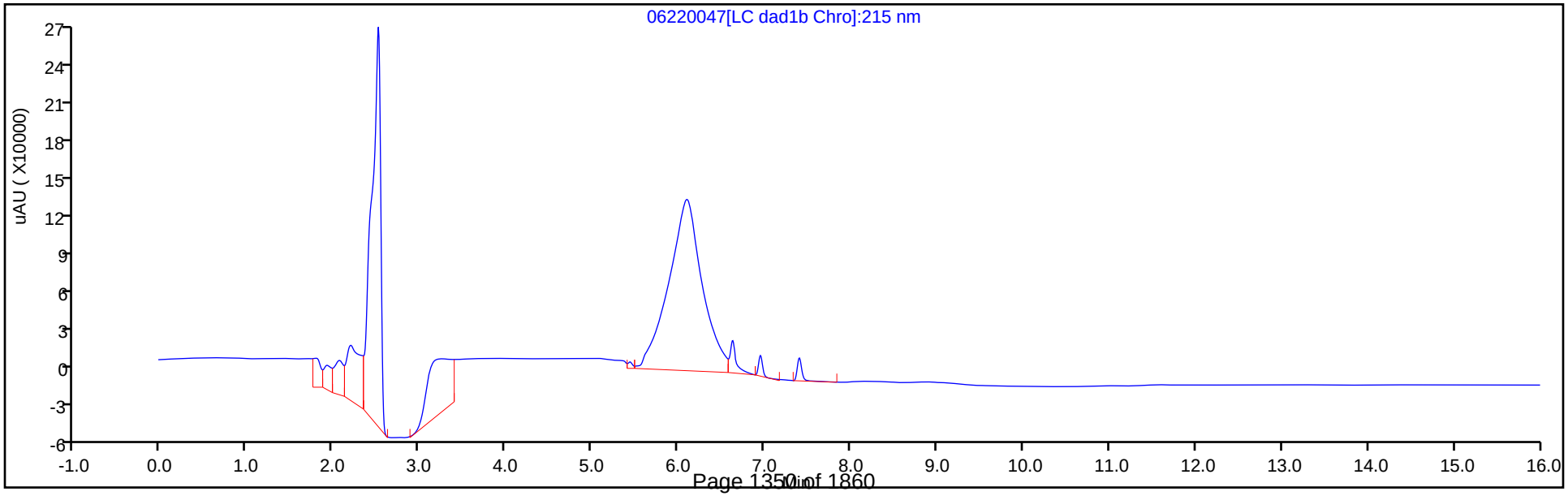
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220047.d

Injection Date:	23-Jun-2020 05:27:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	47
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

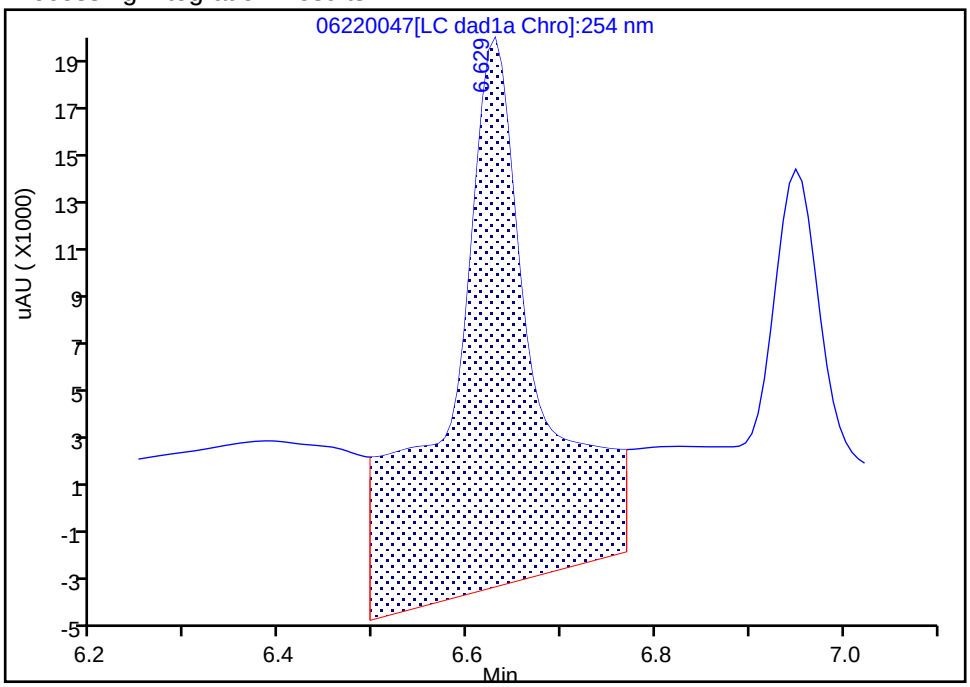
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220047.d				
Injection Date:	23-Jun-2020 05:27:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

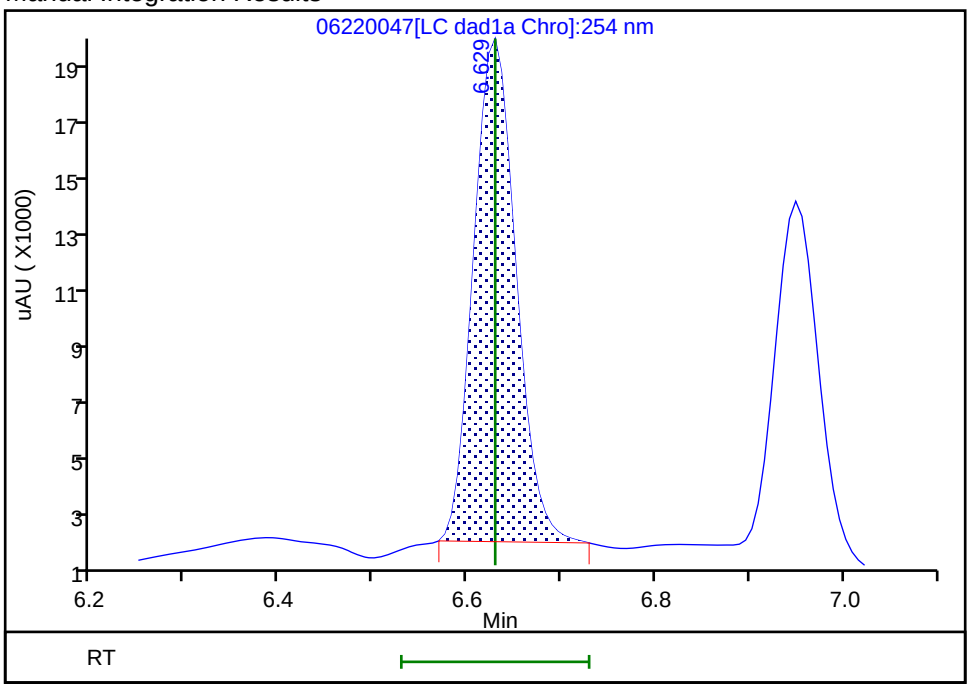
Processing Integration Results

RT: 6.63
Area: 146455
Amount: 0.673020
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 52302
Amount: 0.240349
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

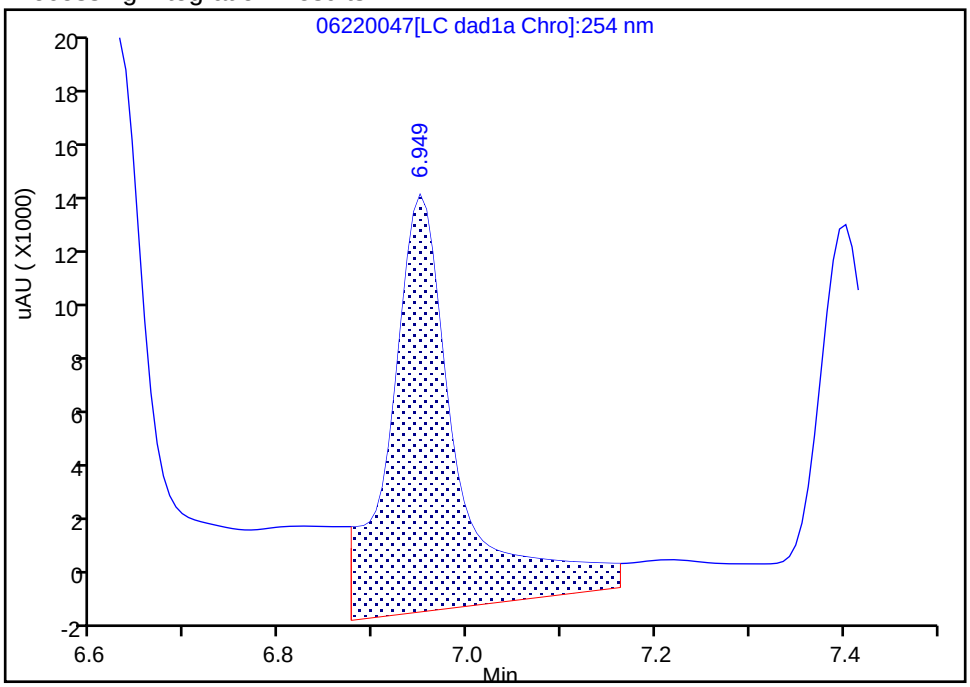
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220047.d				
Injection Date:	23-Jun-2020 05:27:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

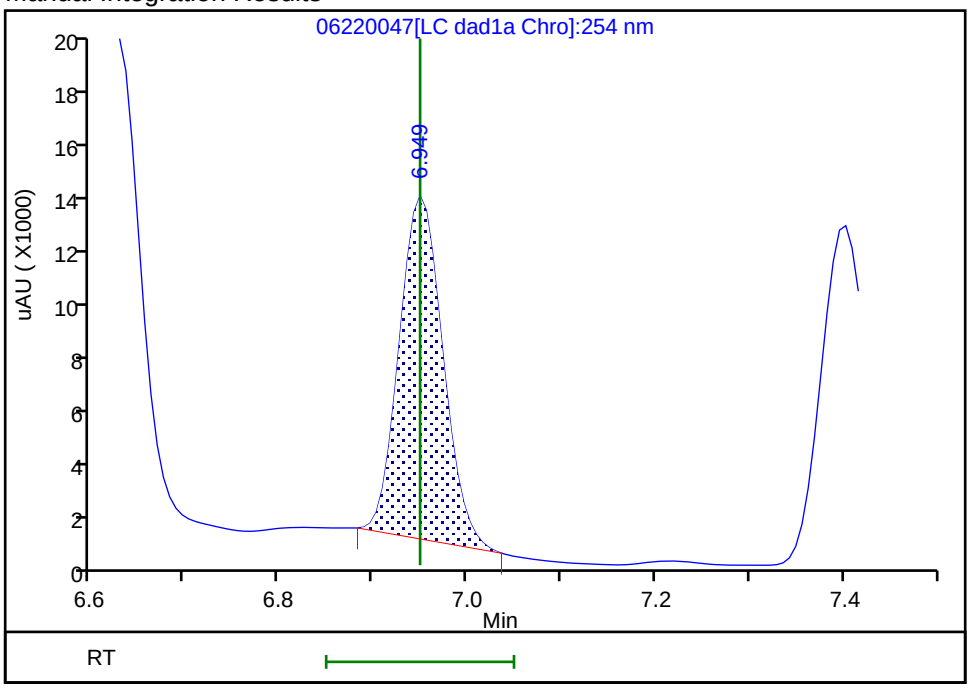
Processing Integration Results

RT: 6.95
Area: 71019
Amount: 0.464394
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 37977
Amount: 0.248332
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:27
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/53 Calibration Date: 06/23/2020 07:45

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	88540		257	250	3.0	15.0
RDX	Ave	116613	112072		240	250	-3.9	15.0
Picric acid	Ave	85131	87984		258	250	3.4	15.0
1,3,5-Trinitrobenzene	Ave	230309	244754		266	251	6.3	15.0
1,3-Dinitrobenzene	Ave	306686	326754		267	251	6.5	15.0
Nitrobenzene	Ave	200403	199422		250	251	-0.5	15.0
Tetryl	Ave	177032	186663		264	251	5.4	15.0
Nitroglycerin	Ave	68133	72902		2670	2500	7.0	15.0
2,4,6-Trinitrotoluene	Ave	204031	224777		277	251	10.2	15.0
4-Amino-2,6-dinitrotoluene	Lin2		174150		251	250	0.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	213012		264	251	5.0	15.0
2,6-Dinitrotoluene	Ave	149452	170669		287	251	14.2	15.0
2,4-Dinitrotoluene	Ave	303584	322657		267	251	6.3	15.0
2-Nitrotoluene	Ave	135051	128632		238	250	-4.8	15.0
4-Nitrotoluene	Ave	113005	112715		250	251	-0.3	15.0
3-Nitrotoluene	Ave	143029	138521		242	250	-3.2	15.0
PETN	Ave	78605	86144		2740	2500	9.6	15.0
1,2-Dinitrobenzene	Ave	138212	146824		266	250	6.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/53 Calibration Date: 06/23/2020 07:45

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220053.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.58	6.88
RDX	7.80	7.65	7.95
Picric acid	8.11	7.94	8.24
1,3,5-Trinitrobenzene	8.94	8.78	9.08
1,3-Dinitrobenzene	9.59	9.42	9.72
Nitrobenzene	9.96	9.79	10.09
Tetryl	10.27	10.08	10.38
Nitroglycerin	10.78	10.60	10.90
2,4,6-Trinitrotoluene	11.24	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.41	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.70	11.55	11.75
2,6-Dinitrotoluene	11.83	11.69	11.89
2,4-Dinitrotoluene	12.04	11.89	12.09
2-Nitrotoluene	12.85	12.65	12.95
4-Nitrotoluene	13.29	13.08	13.38
3-Nitrotoluene	13.88	13.67	13.97
PETN	14.95	14.74	15.04
1,2-Dinitrobenzene	8.76	8.59	8.89

Report Date: 23-Jun-2020 15:18:15 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220053.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 07:45:13 ALS Bottle#: 7 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-053
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:15 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:09:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.719	6.734	-0.015	22135	0.2500	0.2575	M
7 RDX	1	7.799	7.801	-0.002	28018	0.2500	0.2403	
8 2,4,6-Trinitrophenol	1	8.106	8.094	0.012	21996	0.2500	0.2584	
$ 9 1,2-Dinitrobenzene	1	8.759	8.741	0.018	36706	0.2500	0.2656	
10 1,3,5-Trinitrobenzene	1	8.939	8.928	0.011	61311	0.2505	0.2662	
11 1,3-Dinitrobenzene	1	9.586	9.568	0.018	81852	0.2505	0.2669	
12 Nitrobenzene	1	9.959	9.941	0.018	50055	0.2510	0.2498	
14 Tetryl	1	10.266	10.234	0.032	46759	0.2505	0.2641	
15 Nitroglycerin	2	10.779	10.748	0.031	182256	2.50	2.67	
16 2,4,6-Trinitrotoluene	1	11.239	11.201	0.038	56419	0.2510	0.2765	M
17 4-Amino-2,6-dinitrotoluene	1	11.406	11.361	0.045	43581	0.2503	0.2508	M
18 2-Amino-4,6-dinitrotoluene	1	11.699	11.648	0.051	53466	0.2510	0.2636	M
19 2,6-Dinitrotoluene	1	11.832	11.788	0.044	42838	0.2510	0.2866	M
20 2,4-Dinitrotoluene	1	12.039	11.988	0.051	80987	0.2510	0.2668	M
21 o-Nitrotoluene	1	12.852	12.801	0.051	32158	0.2500	0.2381	M
22 p-Nitrotoluene	1	13.286	13.234	0.052	28235	0.2505	0.2499	M
23 m-Nitrotoluene	1	13.879	13.821	0.058	34665	0.2503	0.2424	M
24 PETN	2	14.952	14.888	0.064	215361	2.50	2.74	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

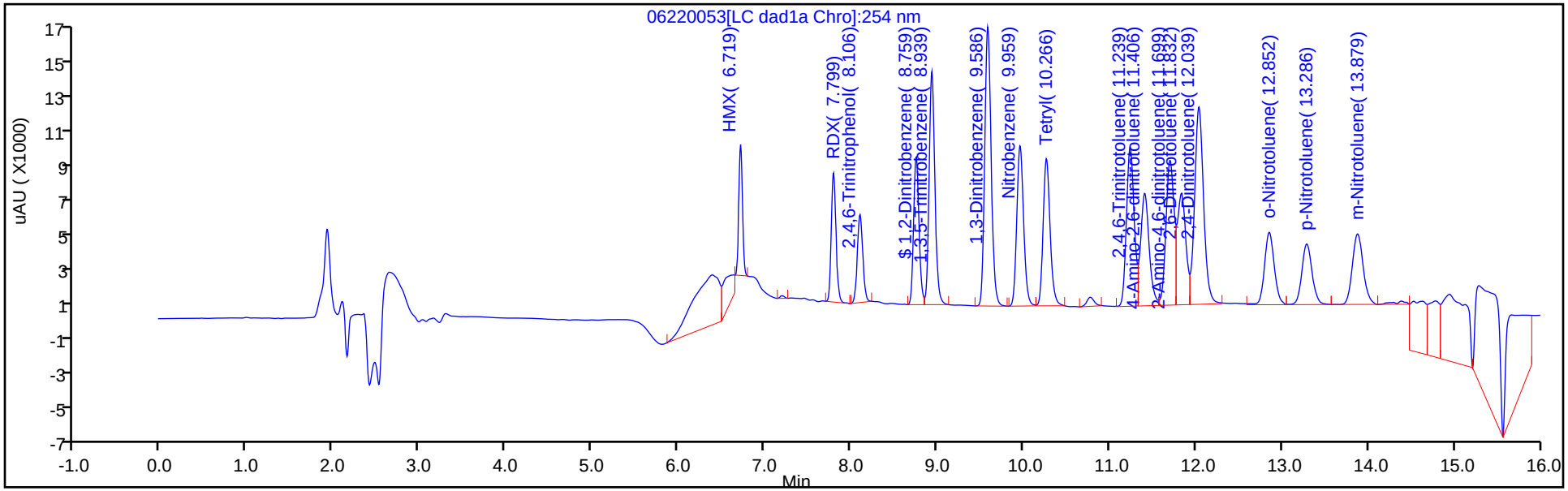
Report Date: 23-Jun-2020 15:18:15 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

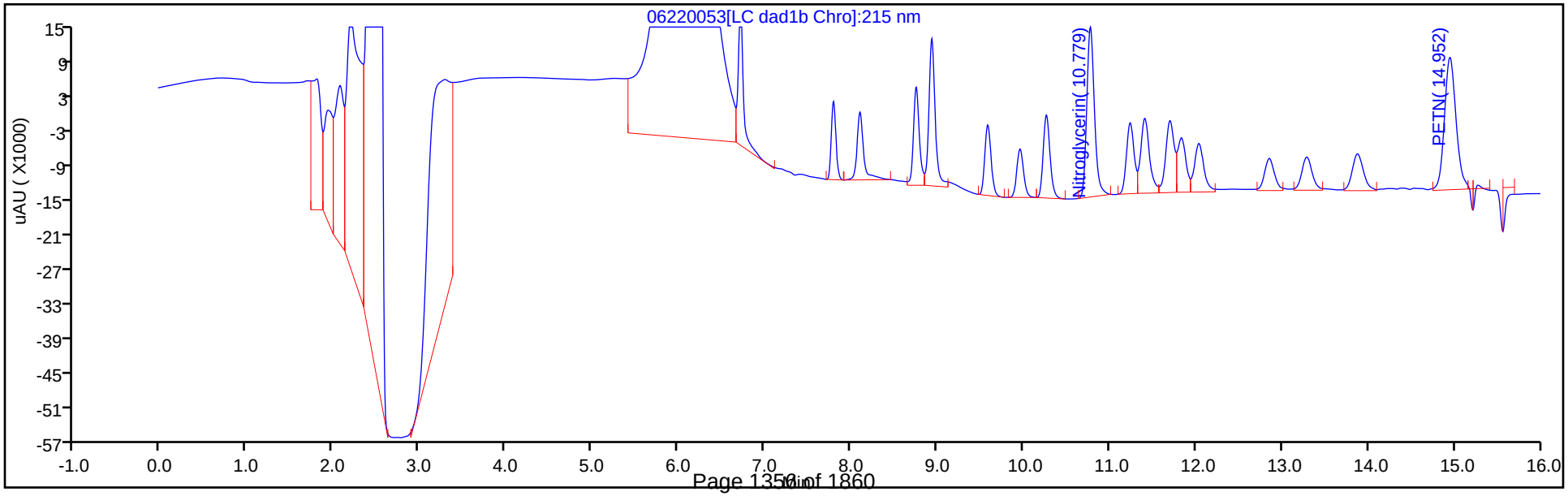
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d

Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	53
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

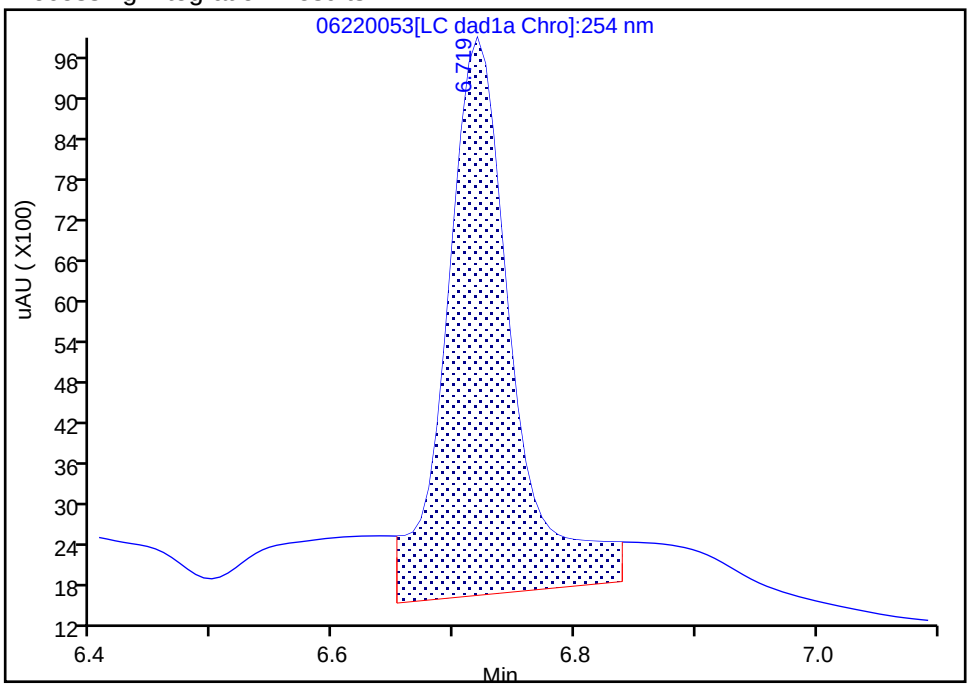
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

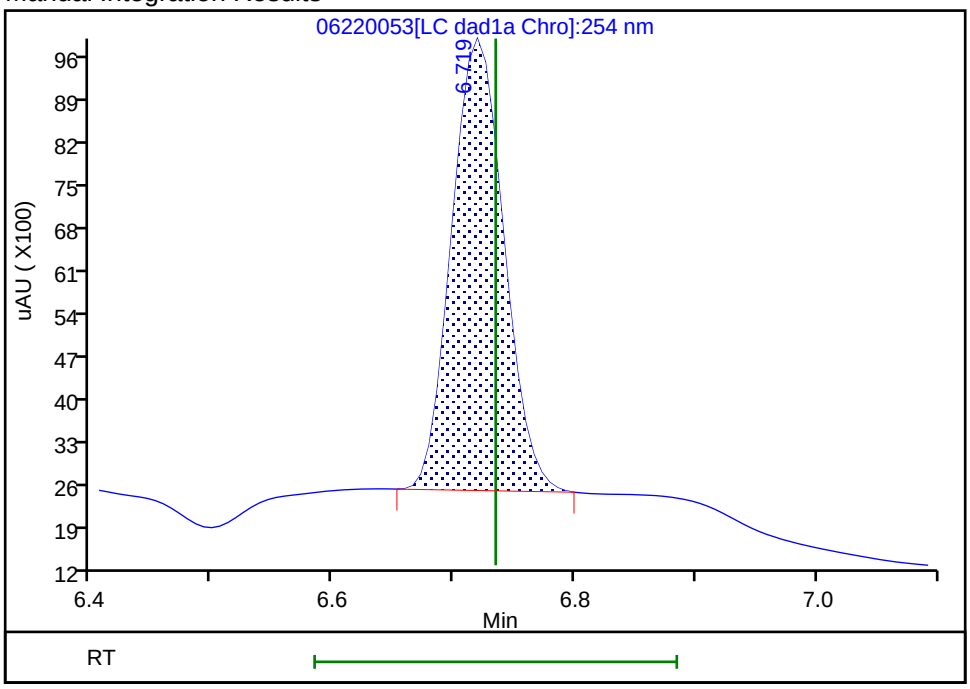
Processing Integration Results

RT: 6.72
Area: 31003
Amount: 0.360659
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 22135
Amount: 0.257497
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:39

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

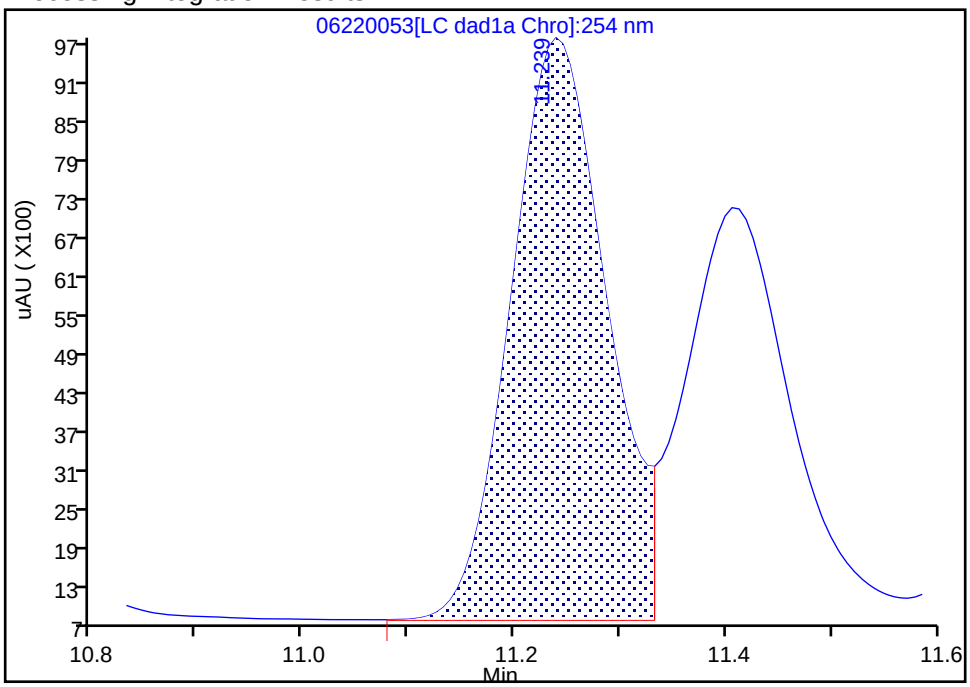
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

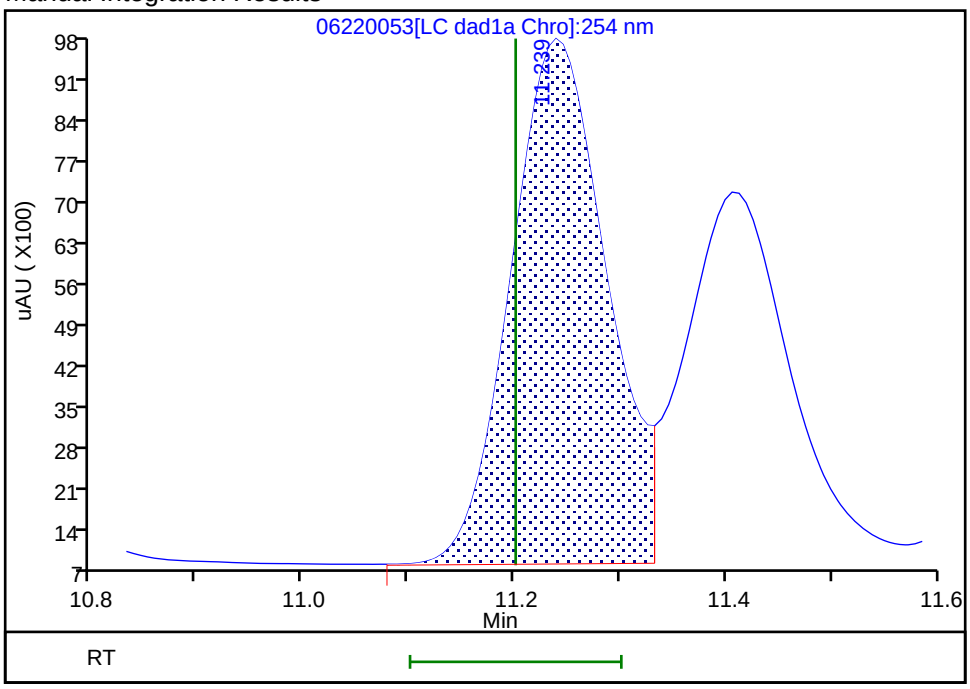
Processing Integration Results

RT: 11.24
Area: 56586
Amount: 0.277340
Amount Units: ug/mL



Manual Integration Results

RT: 11.24
Area: 56419
Amount: 0.276522
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:45
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

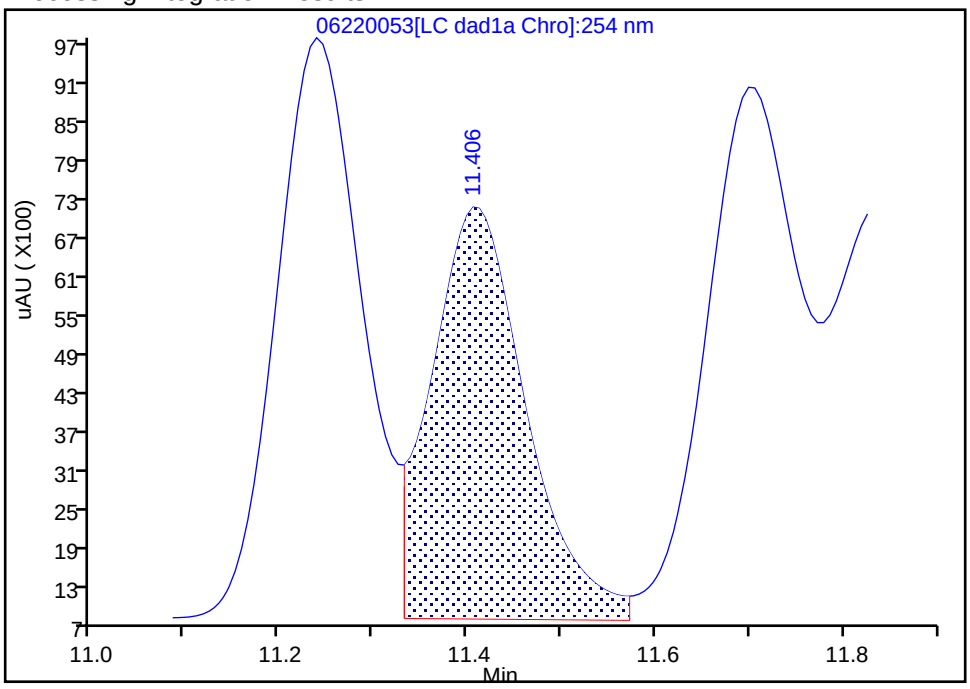
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

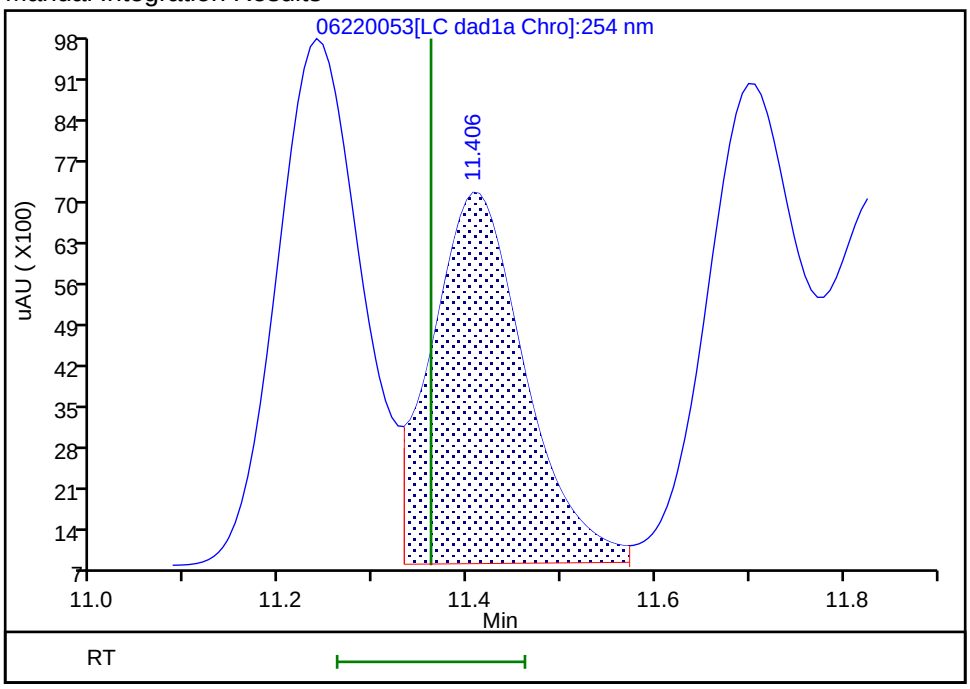
Processing Integration Results

RT: 11.41
Area: 44438
Amount: 0.255653
Amount Units: ug/mL



Manual Integration Results

RT: 11.41
Area: 43581
Amount: 0.250849
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:45
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

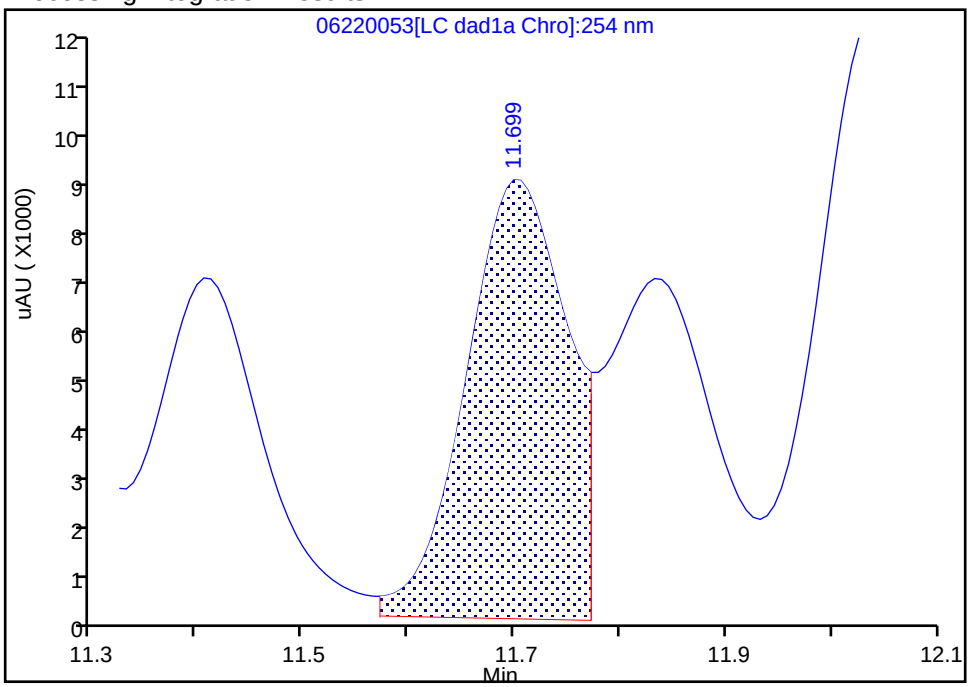
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

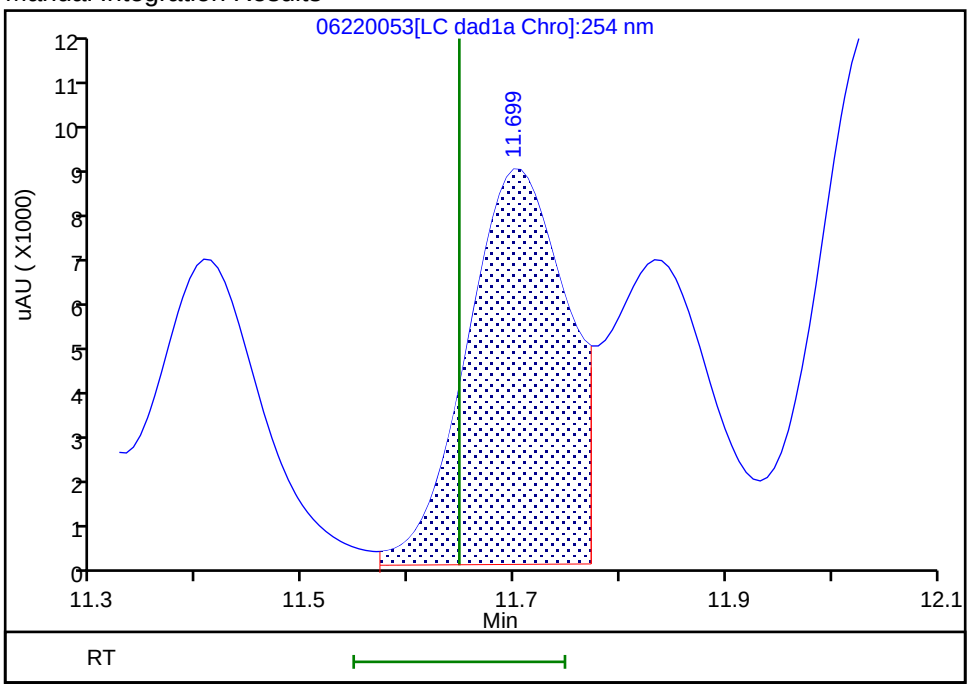
Processing Integration Results

RT: 11.70
Area: 55218
Amount: 0.272256
Amount Units: ug/mL



Manual Integration Results

RT: 11.70
Area: 53466
Amount: 0.263617
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:45
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

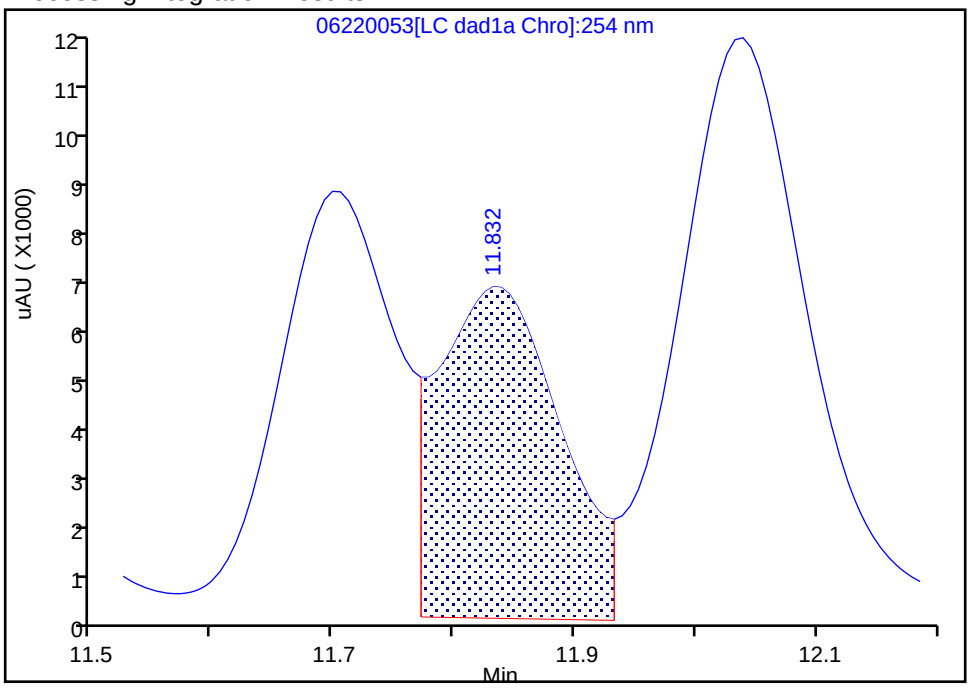
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

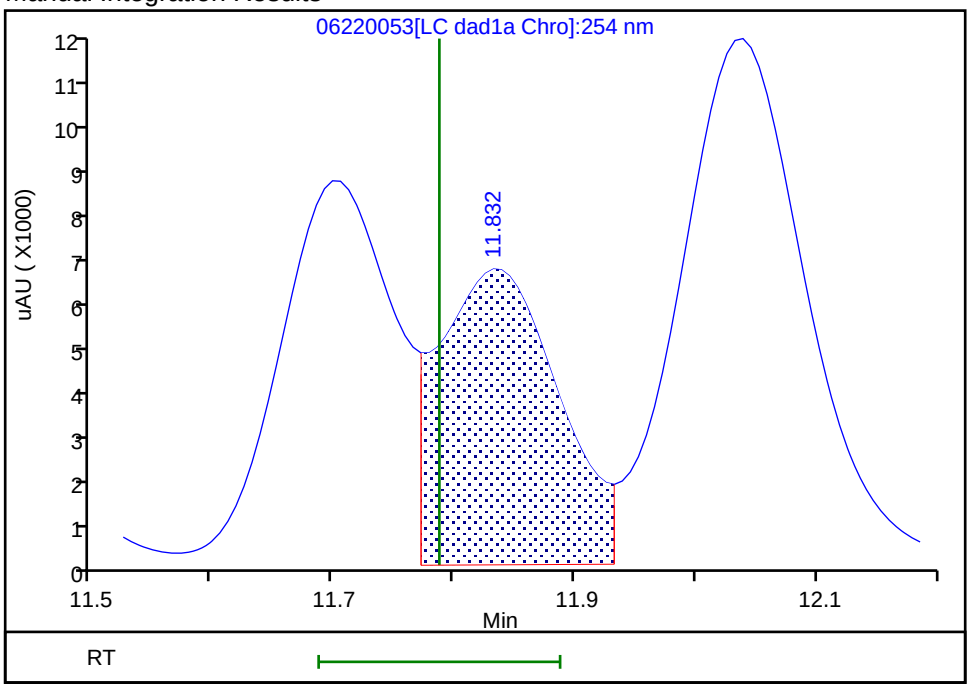
Processing Integration Results

RT: 11.83
Area: 45195
Amount: 0.302404
Amount Units: ug/mL



Manual Integration Results

RT: 11.83
Area: 42838
Amount: 0.286633
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:45
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

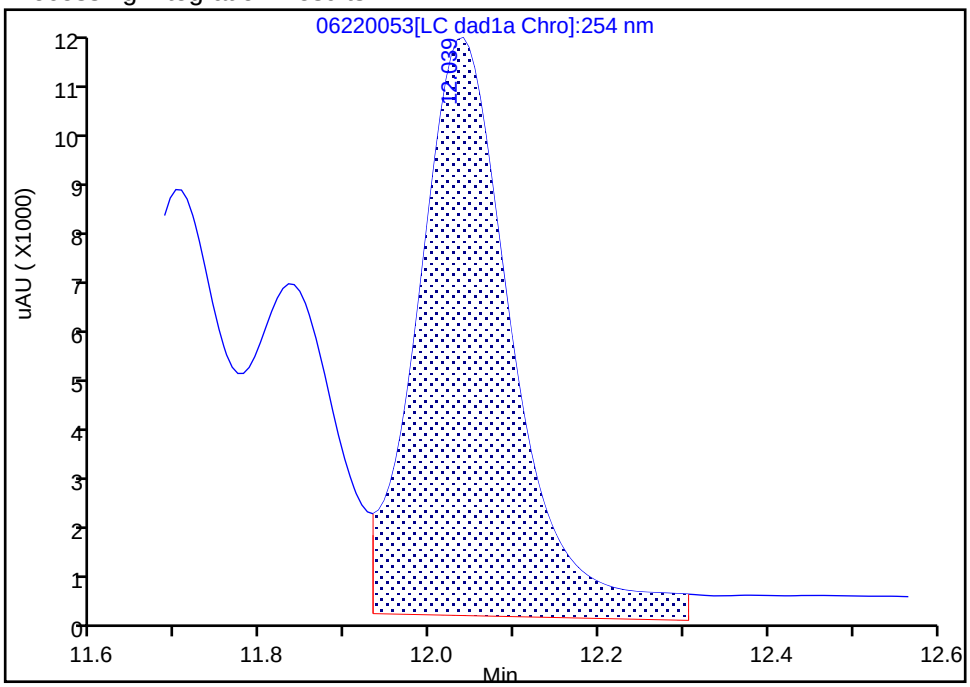
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

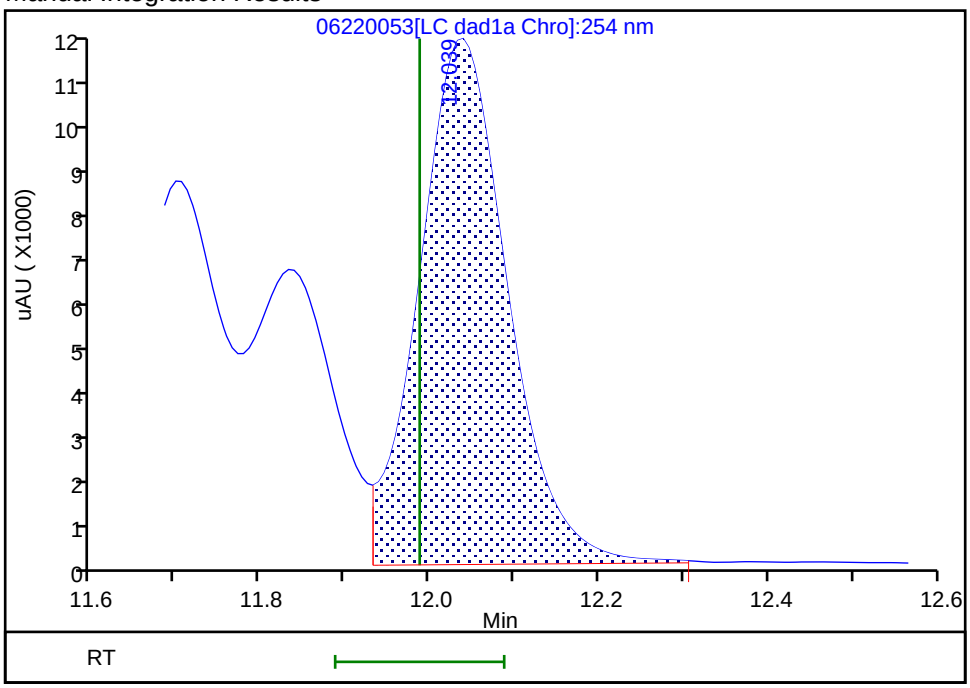
Processing Integration Results

RT: 12.04
Area: 89555
Amount: 0.294992
Amount Units: ug/mL



Manual Integration Results

RT: 12.04
Area: 80987
Amount: 0.266770
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:45
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

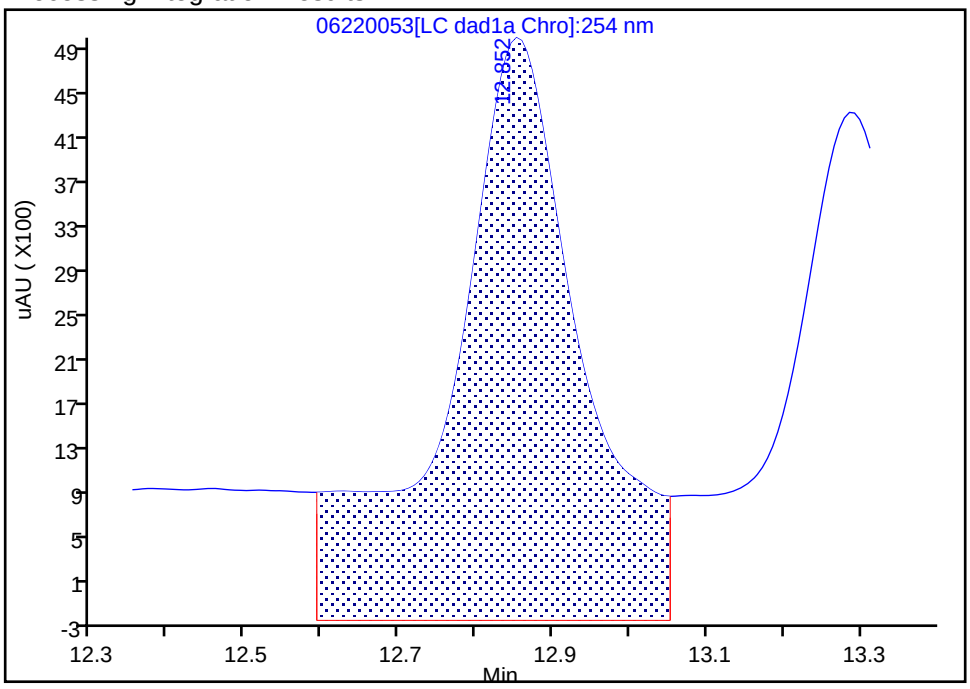
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

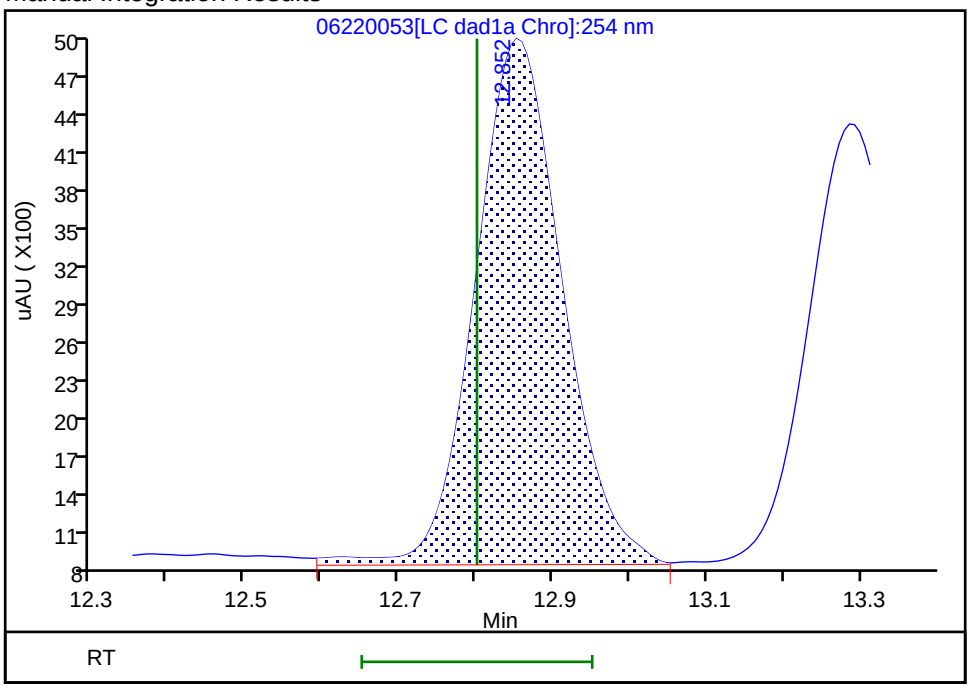
Processing Integration Results

RT: 12.85
Area: 62091
Amount: 0.459760
Amount Units: ug/mL



Manual Integration Results

RT: 12.85
Area: 32158
Amount: 0.238118
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:51
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

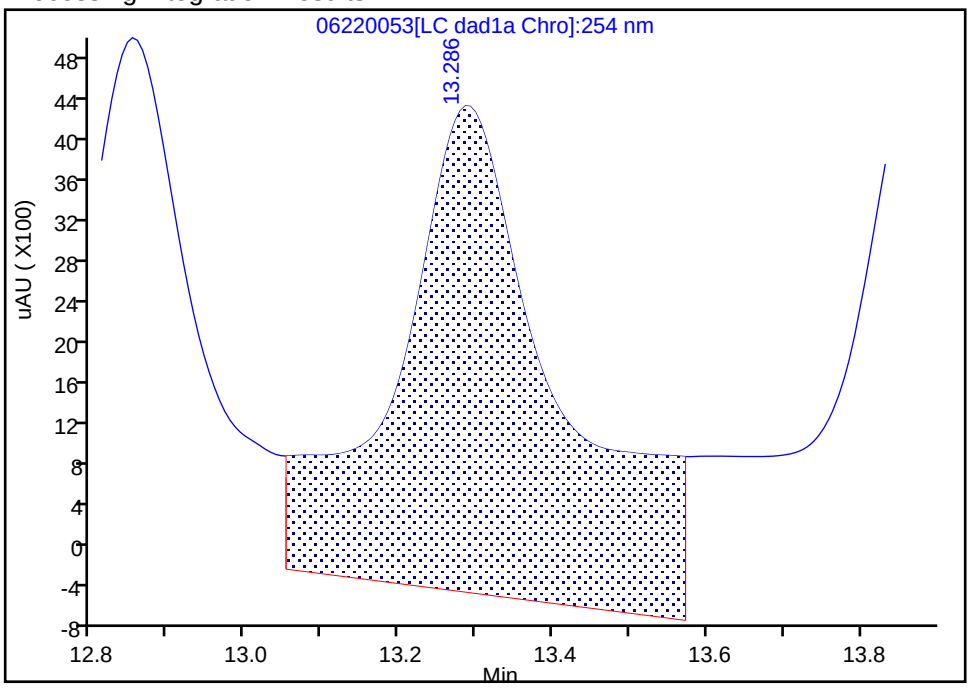
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

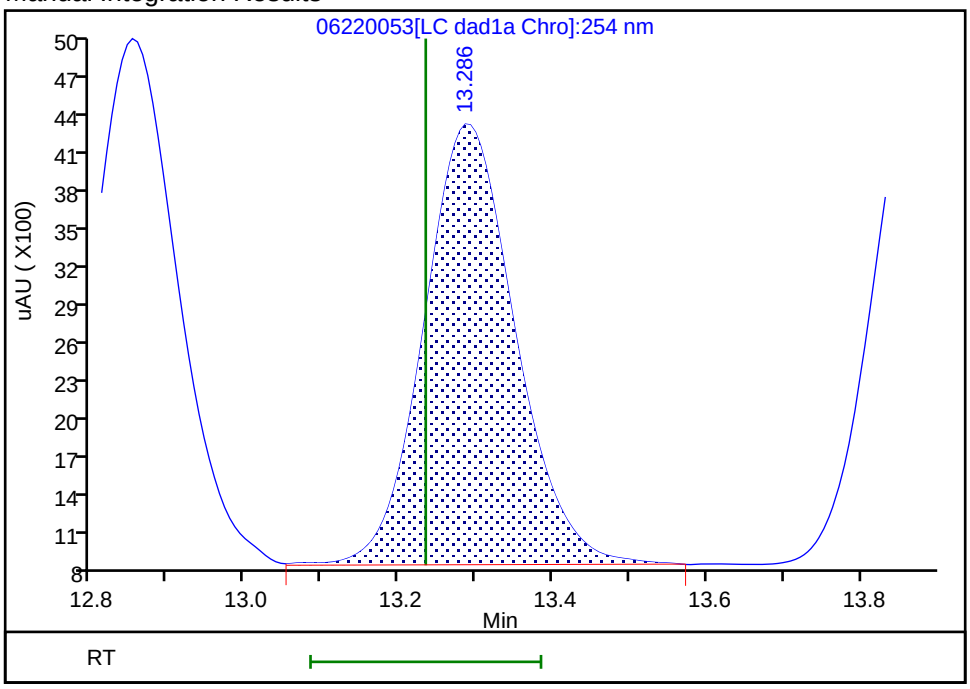
Processing Integration Results

RT: 13.29
Area: 70090
Amount: 0.620238
Amount Units: ug/mL



Manual Integration Results

RT: 13.29
Area: 28235
Amount: 0.249856
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:51
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

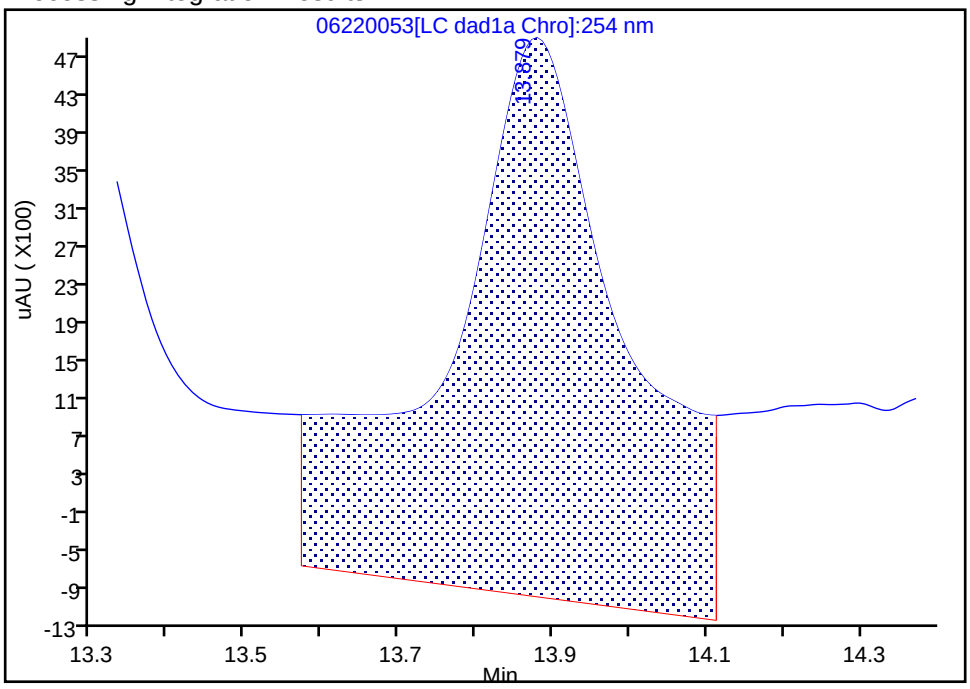
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

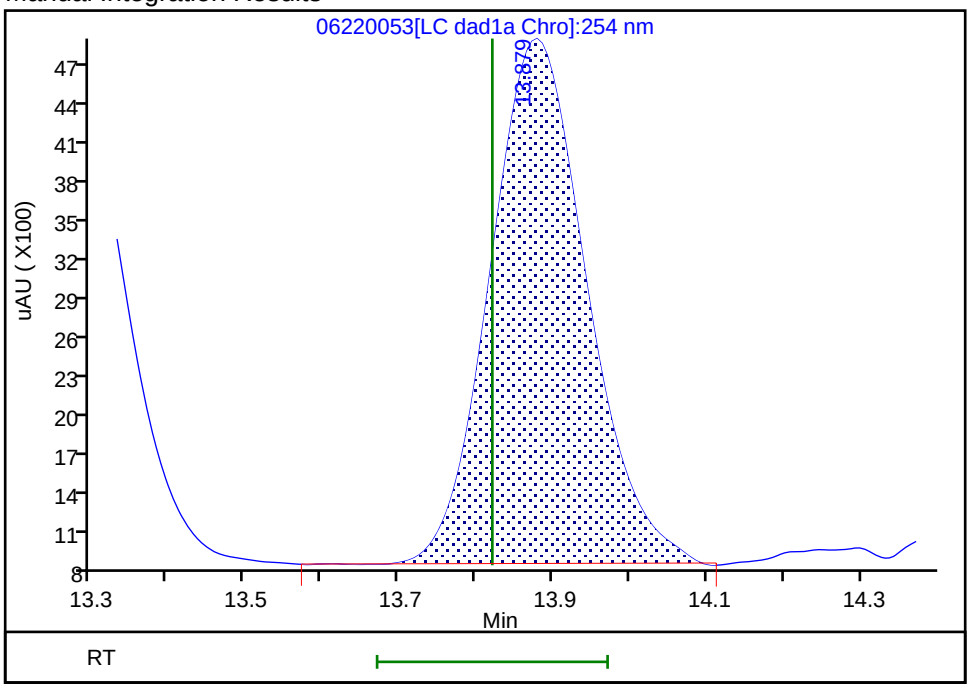
Processing Integration Results

RT: 13.88
Area: 95788
Amount: 0.669712
Amount Units: ug/mL



Manual Integration Results

RT: 13.88
Area: 34665
Amount: 0.242364
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:51
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

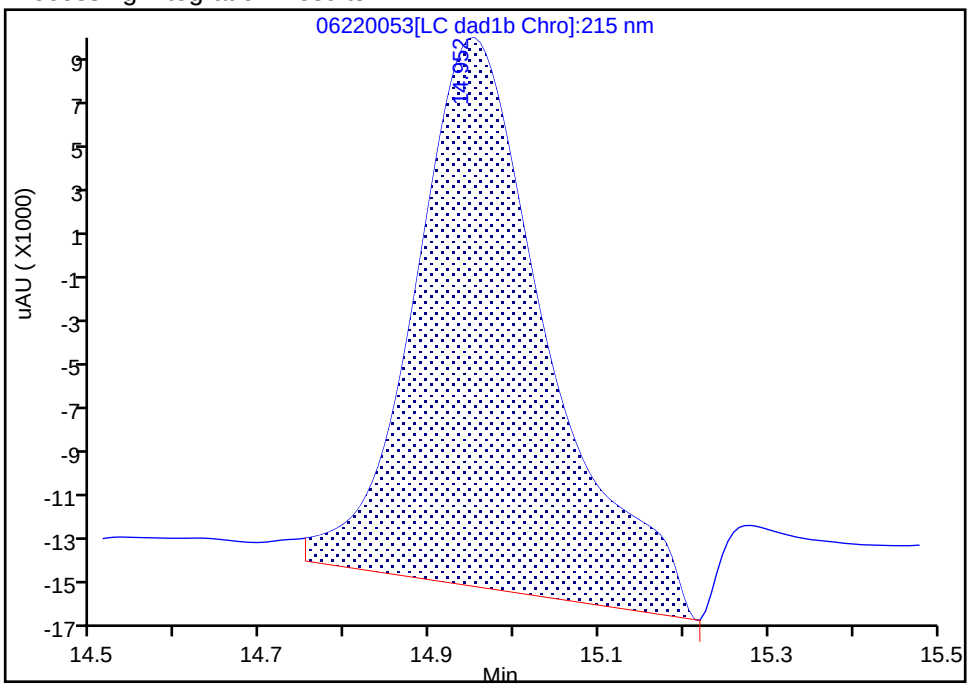
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d		
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3
Lims ID:	CCV INT		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	7 Worklist Smp#: 53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:		Detector	LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

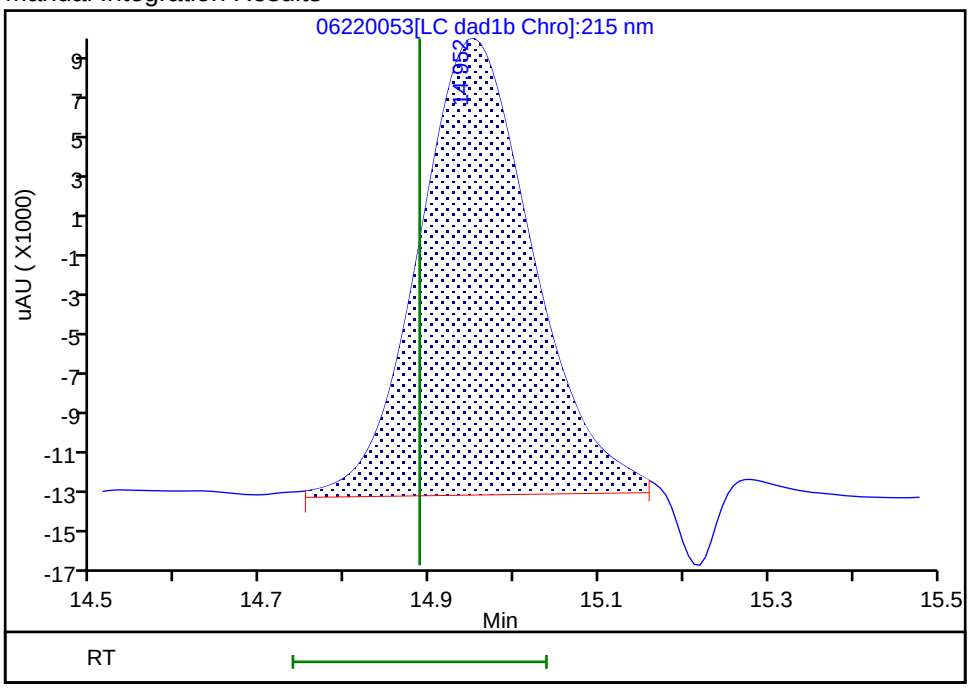
Processing Integration Results

RT: 14.95
Area: 271830
Amount: 3.458196
Amount Units: ug/mL



Manual Integration Results

RT: 14.95
Area: 215361
Amount: 2.739802
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:08:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/54 Calibration Date: 06/23/2020 08:08

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220054.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	207792		239	250	-4.5	15.0
DNX	Ave	152928	151065		247	250	-1.2	15.0
MNX	Ave	158544	144247		265	292	-9.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/54 Calibration Date: 06/23/2020 08:08

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220054.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.53	6.73
DNX	6.94	6.85	7.05
MNX	7.39	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220054.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	23-Jun-2020 08:08:15	ALS Bottle#:	9	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-054				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:15	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:09:18		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.620	6.629	-0.009	52000	0.2503	0.2390	M
5 DNX	1	6.940	6.949	-0.009	37804	0.2503	0.2472	M
6 MNX	1	7.394	7.396	-0.002	42084	0.2918	0.2654	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

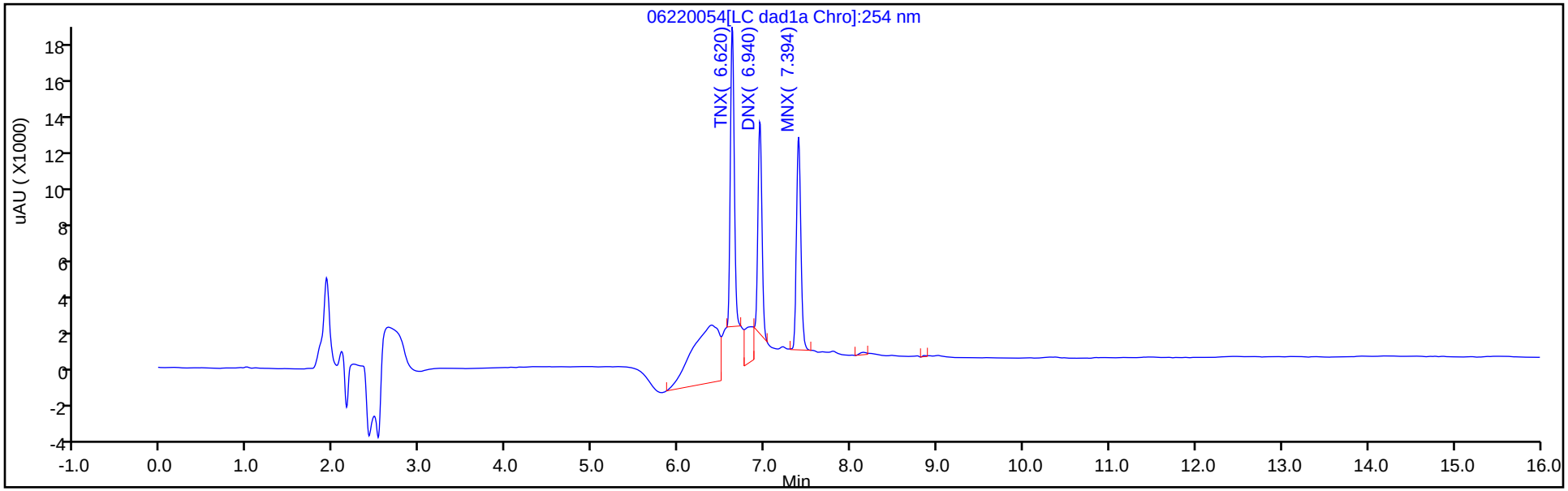
Report Date: 23-Jun-2020 15:18:15 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

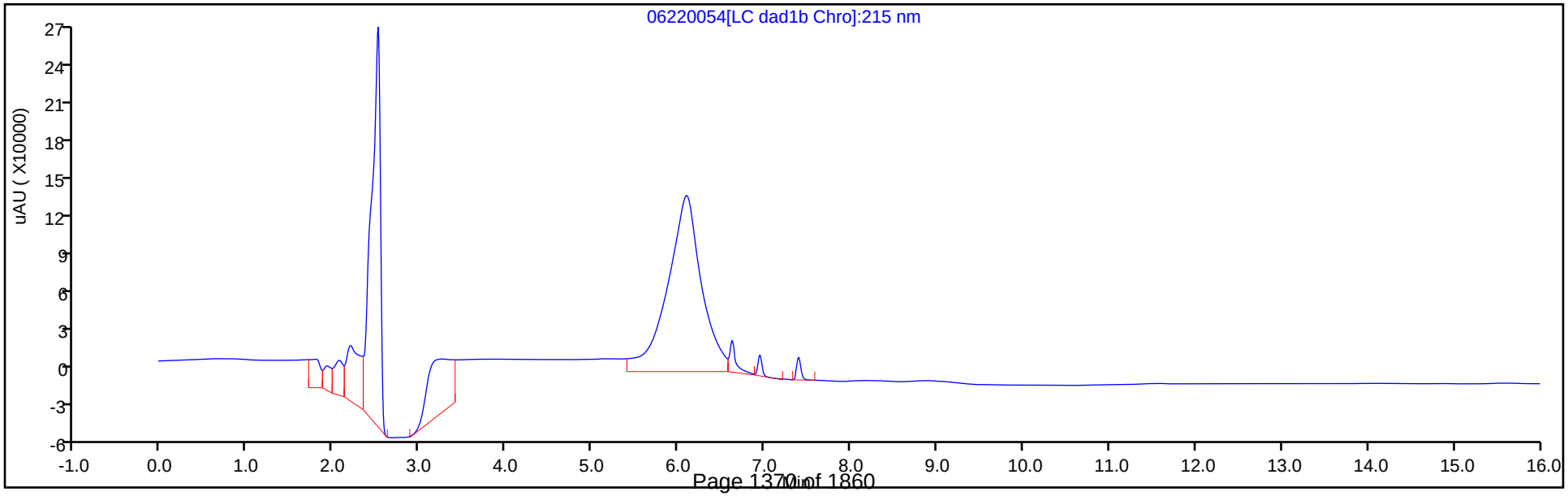
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220054.d

Injection Date:	23-Jun-2020 08:08:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	54
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

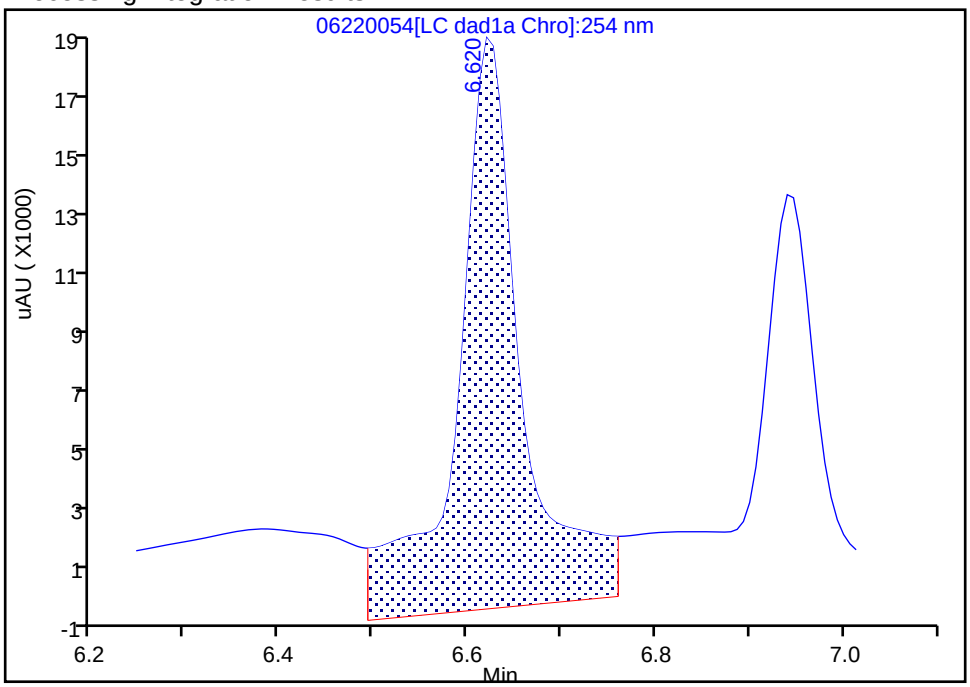
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220054.d				
Injection Date:	23-Jun-2020 08:08:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

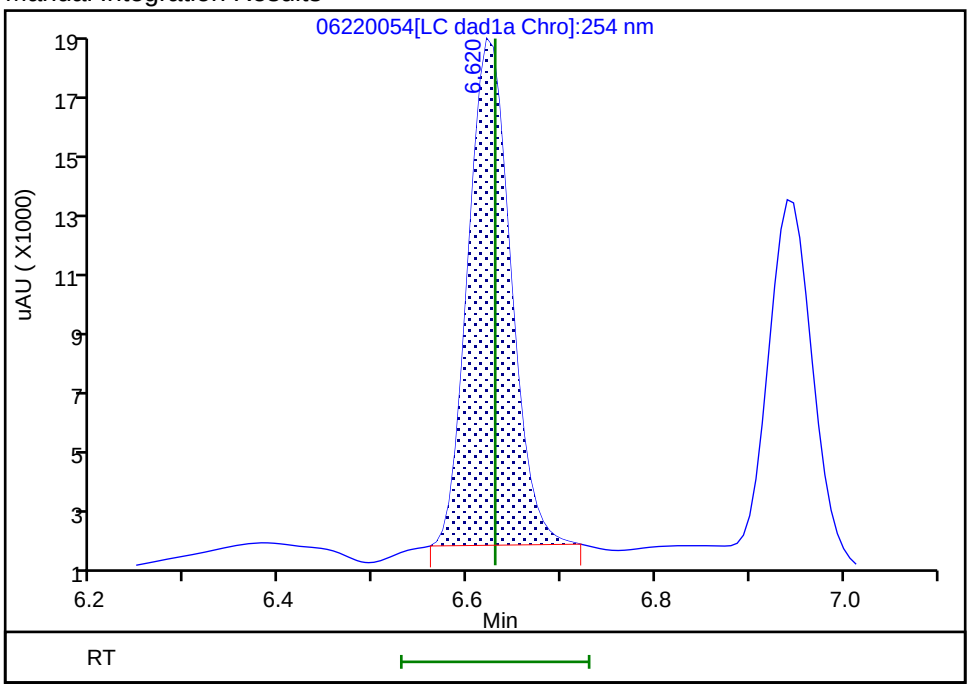
Processing Integration Results

RT: 6.62
Area: 91989
Amount: 0.422727
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 52000
Amount: 0.238961
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:09

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

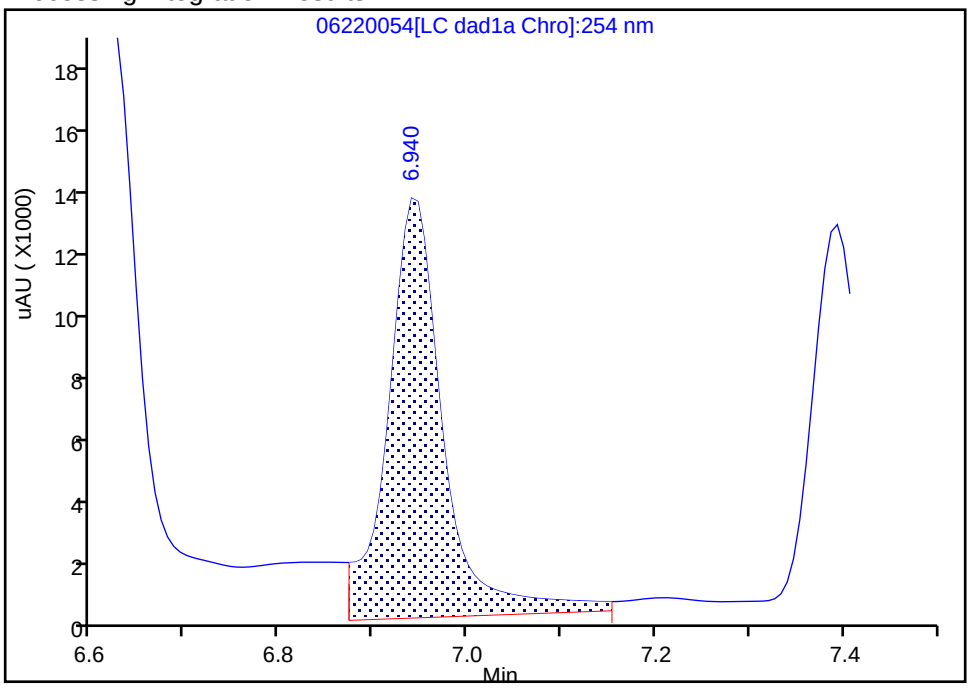
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220054.d				
Injection Date:	23-Jun-2020 08:08:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

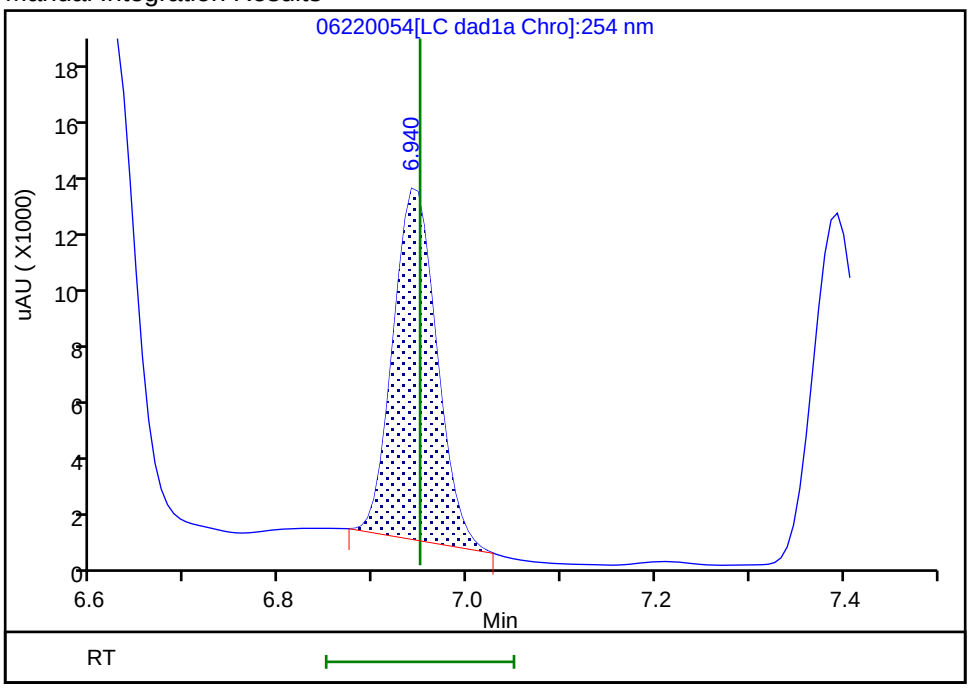
Processing Integration Results

RT: 6.94
Area: 53239
Amount: 0.348130
Amount Units: ug/mL



Manual Integration Results

RT: 6.94
Area: 37804
Amount: 0.247201
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:14
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/63 Calibration Date: 06/23/2020 11:35

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220063.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	88624		258	250	3.1	15.0
RDX	Ave	116613	111808		240	250	-4.1	15.0
Picric acid	Ave	85131	87588		257	250	2.9	15.0
1,3,5-Trinitrobenzene	Ave	230309	245717		267	251	6.7	15.0
1,3-Dinitrobenzene	Ave	306686	327844		268	251	6.9	15.0
Nitrobenzene	Ave	200403	194032		243	251	-3.2	15.0
Tetryl	Ave	177032	186723		264	251	5.5	15.0
Nitroglycerin	Ave	68133	69192		2540	2500	1.6	15.0
2,4,6-Trinitrotoluene	Ave	204031	222351		274	251	9.0	15.0
4-Amino-2,6-dinitrotoluene	Lin2		172611		249	250	-0.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	211892		262	251	4.5	15.0
2,6-Dinitrotoluene	Ave	149452	165064		277	251	10.4	15.0
2,4-Dinitrotoluene	Ave	303584	317434		262	251	4.6	15.0
2-Nitrotoluene	Ave	135051	123016		228	250	-8.9	15.0
4-Nitrotoluene	Ave	113005	108359		240	251	-4.1	15.0
3-Nitrotoluene	Ave	143029	137439		240	250	-3.9	15.0
PETN	Ave	78605	85399		2720	2500	8.6	15.0
1,2-Dinitrobenzene	Ave	138212	147200		266	250	6.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/63 Calibration Date: 06/23/2020 11:35

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06220063.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.58	6.88
RDX	7.78	7.65	7.95
Picric acid	8.09	7.94	8.24
1,3,5-Trinitrobenzene	8.92	8.78	9.08
1,3-Dinitrobenzene	9.57	9.42	9.72
Nitrobenzene	9.94	9.79	10.09
Tetryl	10.24	10.08	10.38
Nitroglycerin	10.74	10.60	10.90
2,4,6-Trinitrotoluene	11.20	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.36	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.66	11.55	11.75
2,6-Dinitrotoluene	11.79	11.69	11.89
2,4-Dinitrotoluene	11.99	11.89	12.09
2-Nitrotoluene	12.80	12.65	12.95
4-Nitrotoluene	13.23	13.08	13.38
3-Nitrotoluene	13.82	13.67	13.97
PETN	14.87	14.74	15.04
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220063.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 11:35:25 ALS Bottle#: 7 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092608-063
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:19 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:10:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.717	6.734	-0.017	22156	0.2500	0.2577	M
7 RDX	1	7.783	7.801	-0.018	27952	0.2500	0.2397	
8 2,4,6-Trinitrophenol	1	8.090	8.094	-0.004	21897	0.2500	0.2572	
$ 9 1,2-Dinitrobenzene	1	8.737	8.741	-0.004	36800	0.2500	0.2663	
10 1,3,5-Trinitrobenzene	1	8.923	8.928	-0.005	61552	0.2505	0.2673	
11 1,3-Dinitrobenzene	1	9.570	9.568	0.002	82125	0.2505	0.2678	
12 Nitrobenzene	1	9.943	9.941	0.002	48702	0.2510	0.2430	
14 Tetryl	1	10.243	10.234	0.009	46774	0.2505	0.2642	M
15 Nitroglycerin	2	10.743	10.748	-0.005	172981	2.50	2.54	M
16 2,4,6-Trinitrotoluene	1	11.203	11.201	0.002	55810	0.2510	0.2735	M
17 4-Amino-2,6-dinitrotoluene	1	11.363	11.361	0.002	43196	0.2503	0.2487	M
18 2-Amino-4,6-dinitrotoluene	1	11.657	11.648	0.009	53185	0.2510	0.2622	M
19 2,6-Dinitrotoluene	1	11.790	11.788	0.002	41431	0.2510	0.2772	M
20 2,4-Dinitrotoluene	1	11.990	11.988	0.002	79676	0.2510	0.2625	M
21 o-Nitrotoluene	1	12.803	12.801	0.002	30754	0.2500	0.2277	M
22 p-Nitrotoluene	1	13.230	13.234	-0.004	27144	0.2505	0.2402	M
23 m-Nitrotoluene	1	13.817	13.821	-0.004	34394	0.2503	0.2405	M
24 PETN	2	14.870	14.888	-0.018	213497	2.50	2.72	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

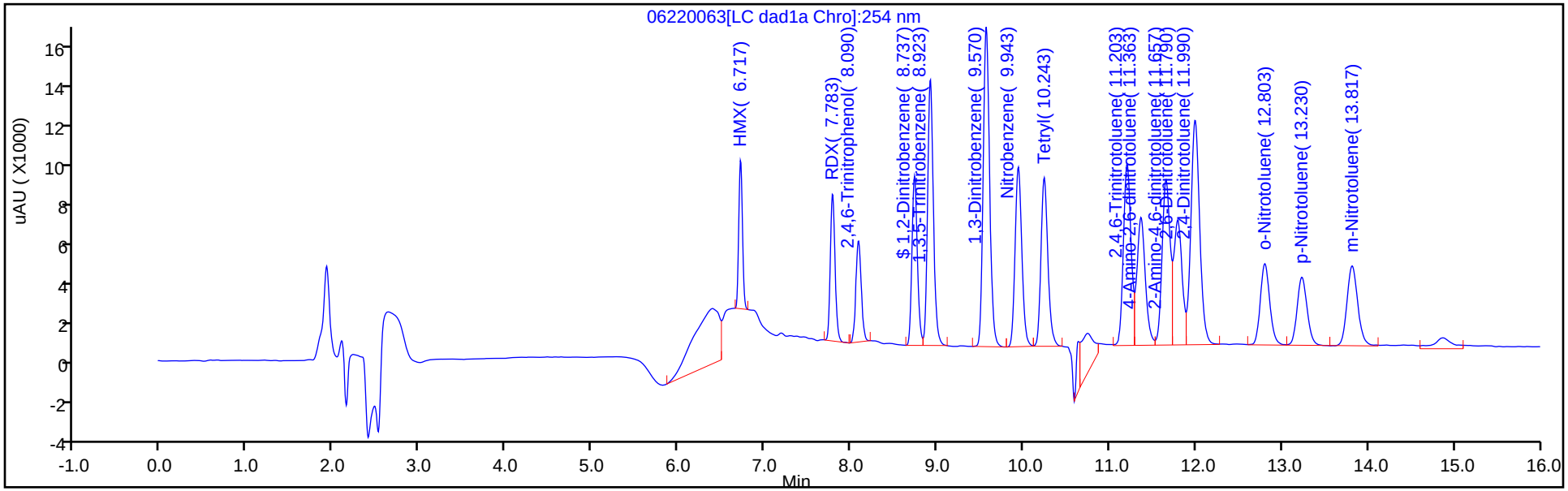
Report Date: 23-Jun-2020 15:18:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

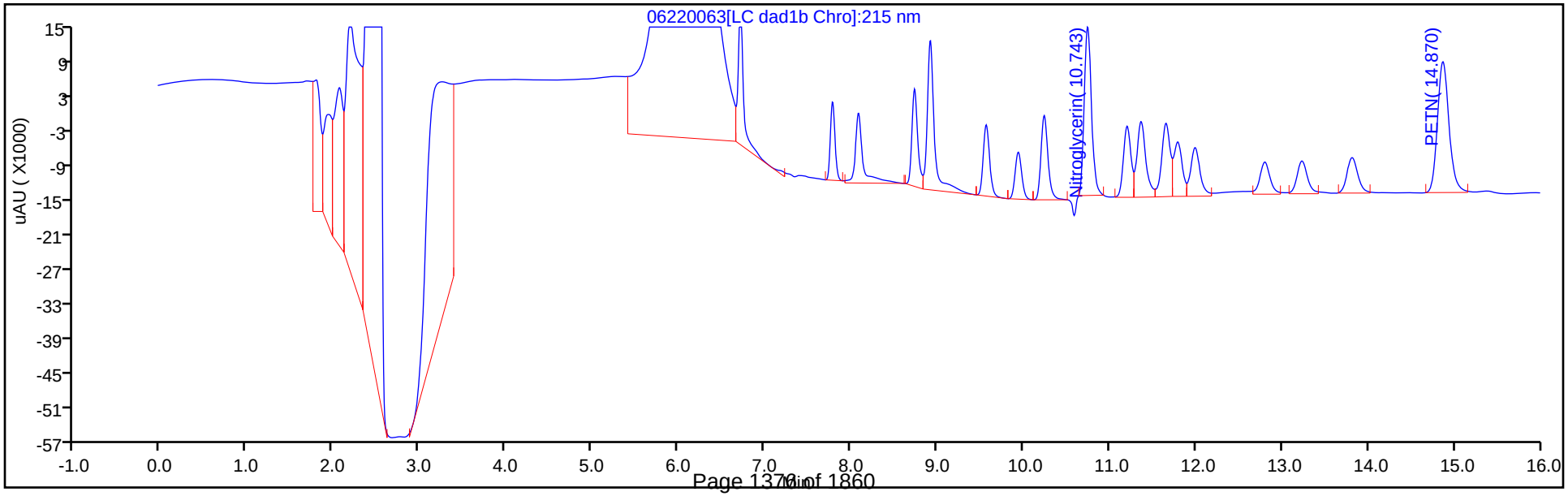
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d

Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	63
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

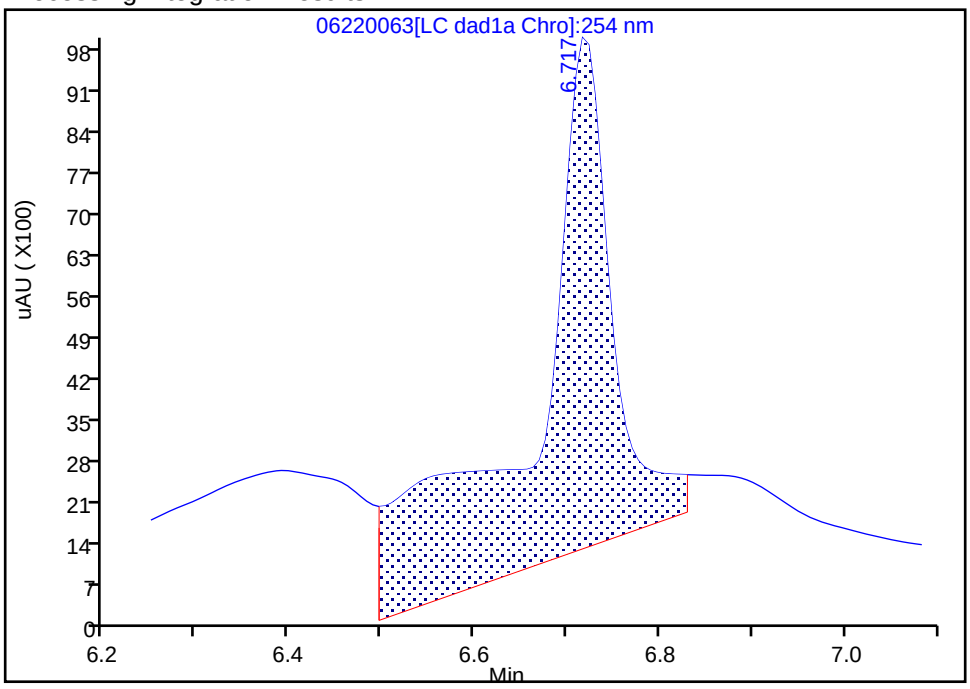
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d
Injection Date: 23-Jun-2020 11:35:25 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

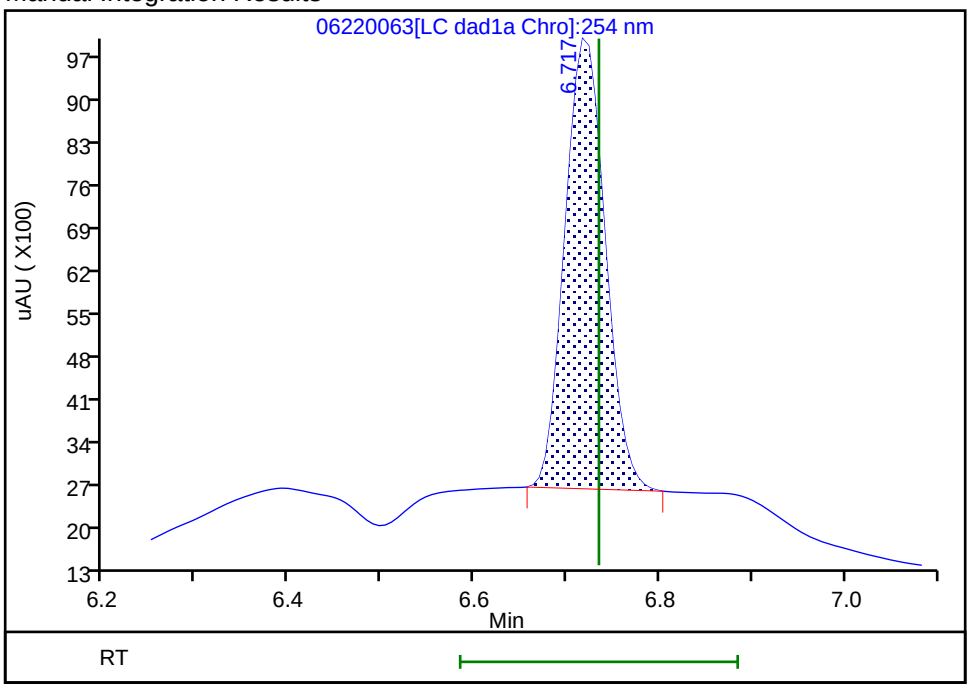
Processing Integration Results

RT: 6.72
Area: 52922
Amount: 0.615643
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 22156
Amount: 0.257741
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:47
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

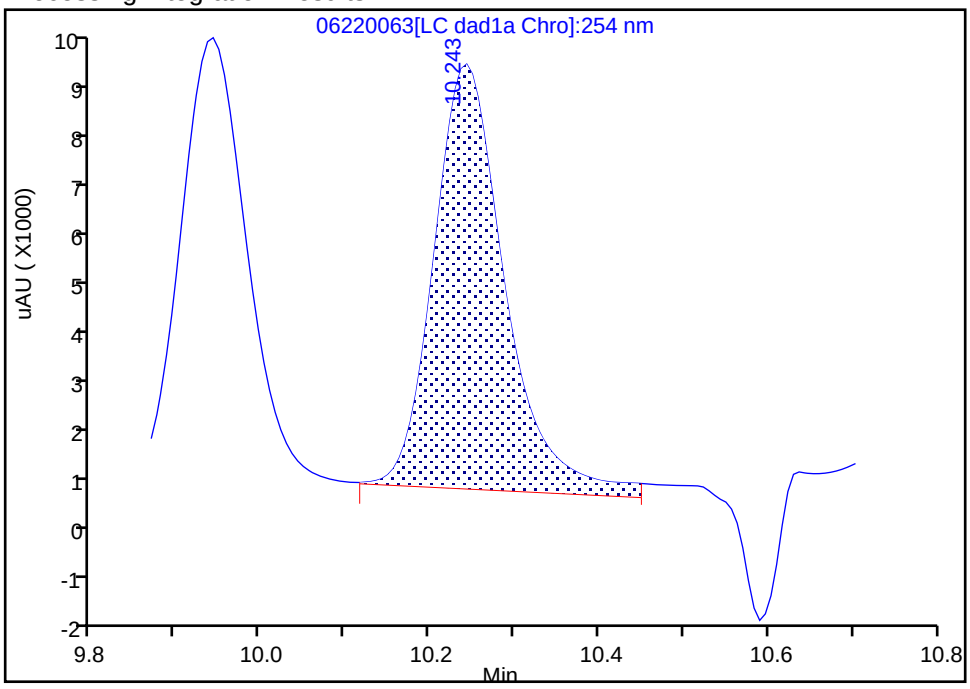
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

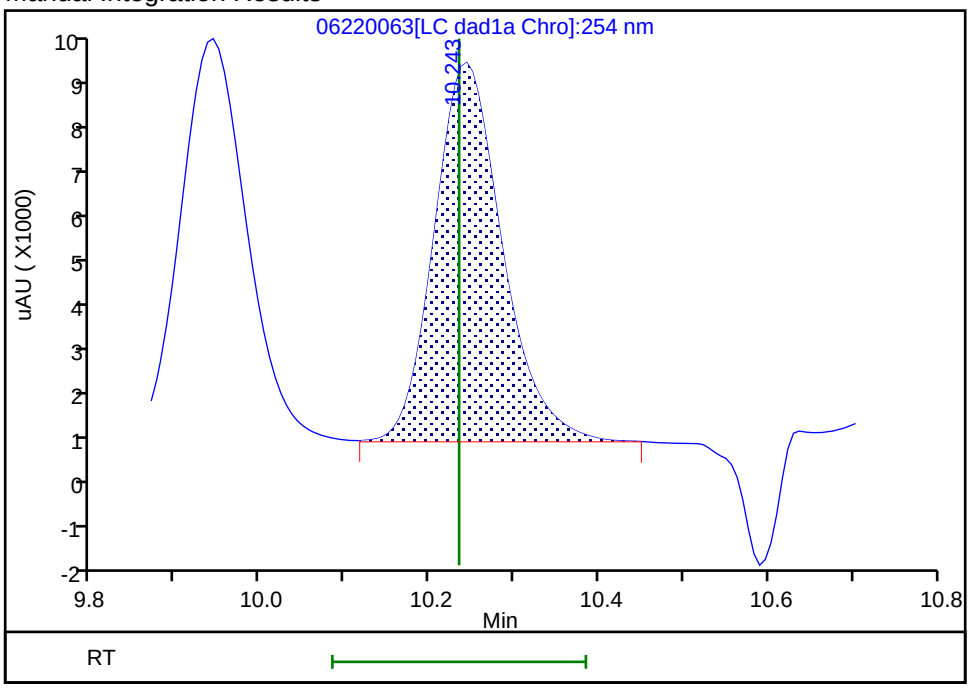
Processing Integration Results

RT: 10.24
Area: 49504
Amount: 0.279633
Amount Units: ug/mL



Manual Integration Results

RT: 10.24
Area: 46774
Amount: 0.264212
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:17
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

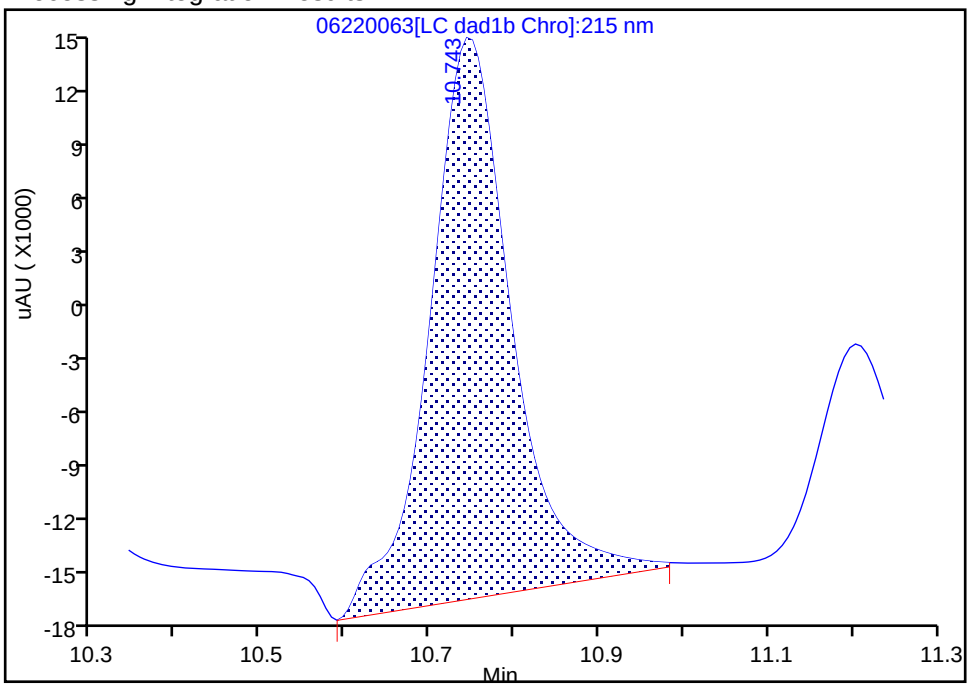
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d
Injection Date: 23-Jun-2020 11:35:25 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

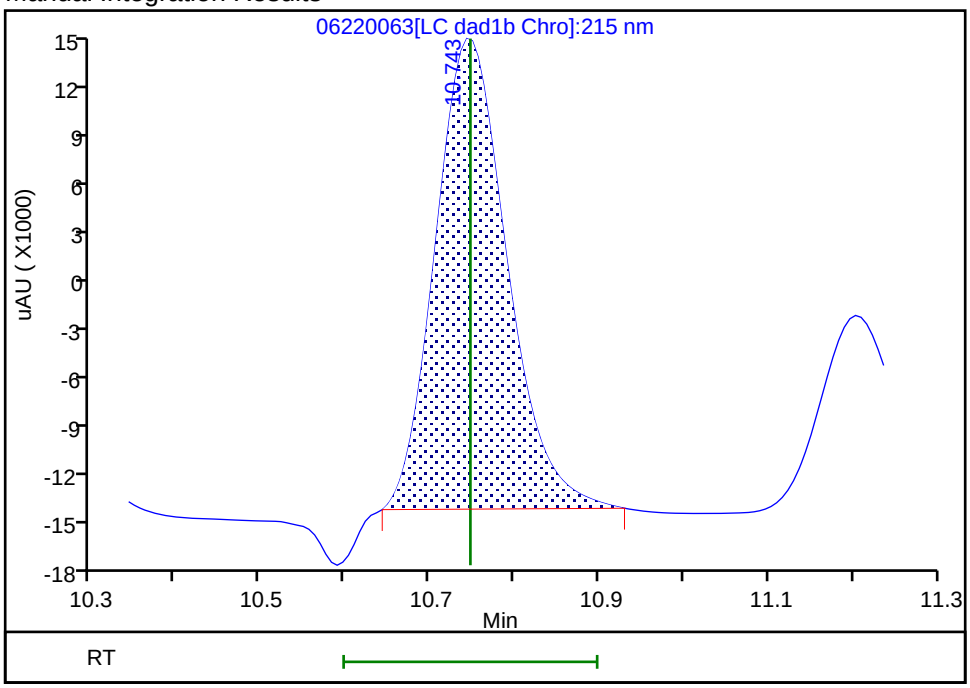
Processing Integration Results

RT: 10.74
Area: 214559
Amount: 3.149098
Amount Units: ug/mL



Manual Integration Results

RT: 10.74
Area: 172981
Amount: 2.538855
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

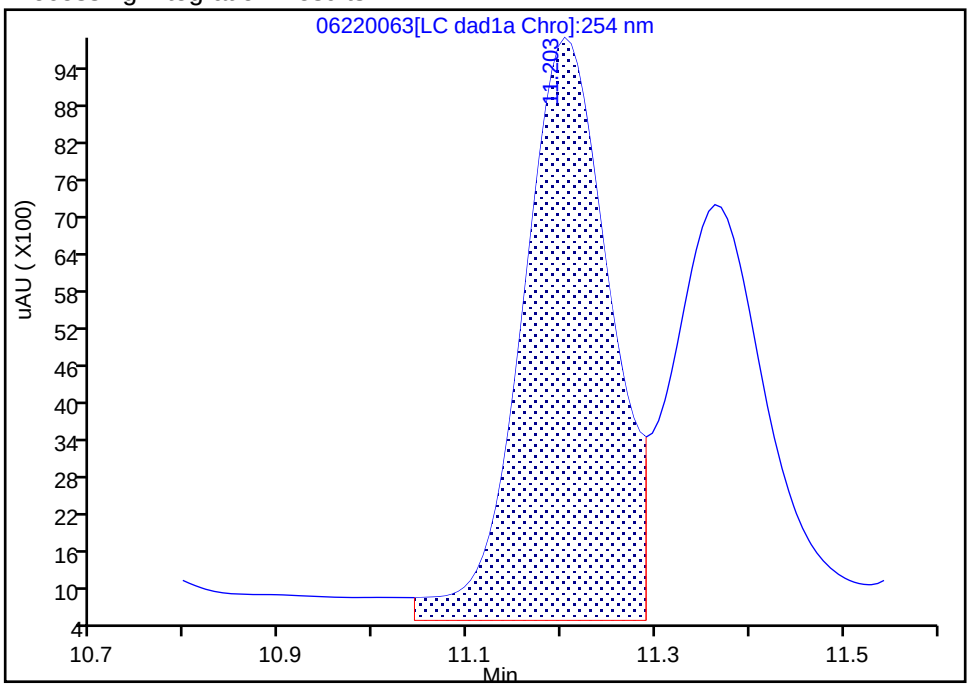
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

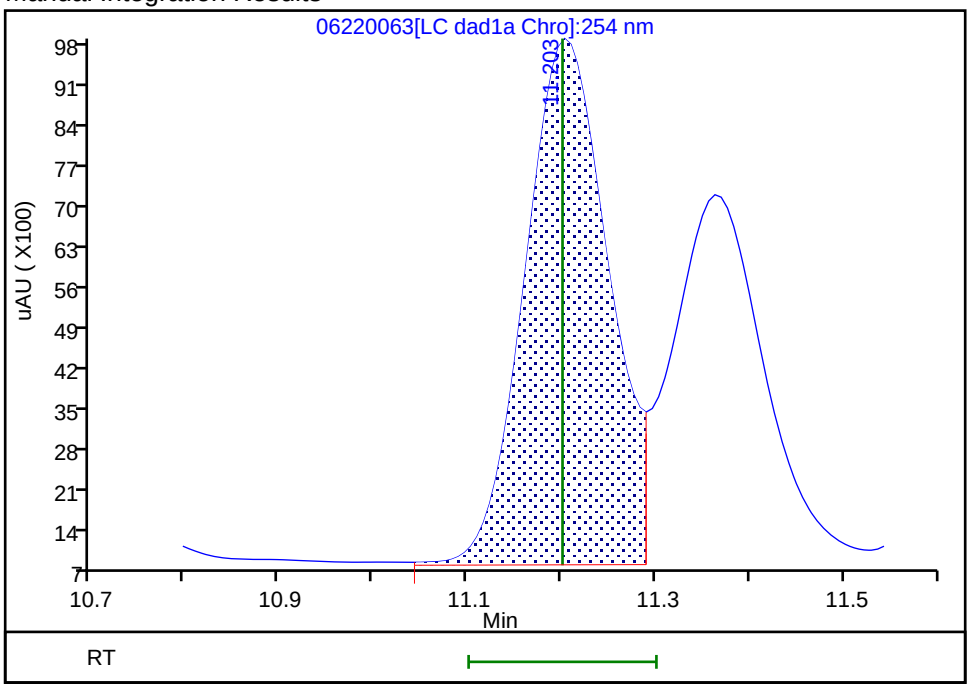
Processing Integration Results

RT: 11.20
Area: 60539
Amount: 0.296715
Amount Units: ug/mL



Manual Integration Results

RT: 11.20
Area: 55810
Amount: 0.273537
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

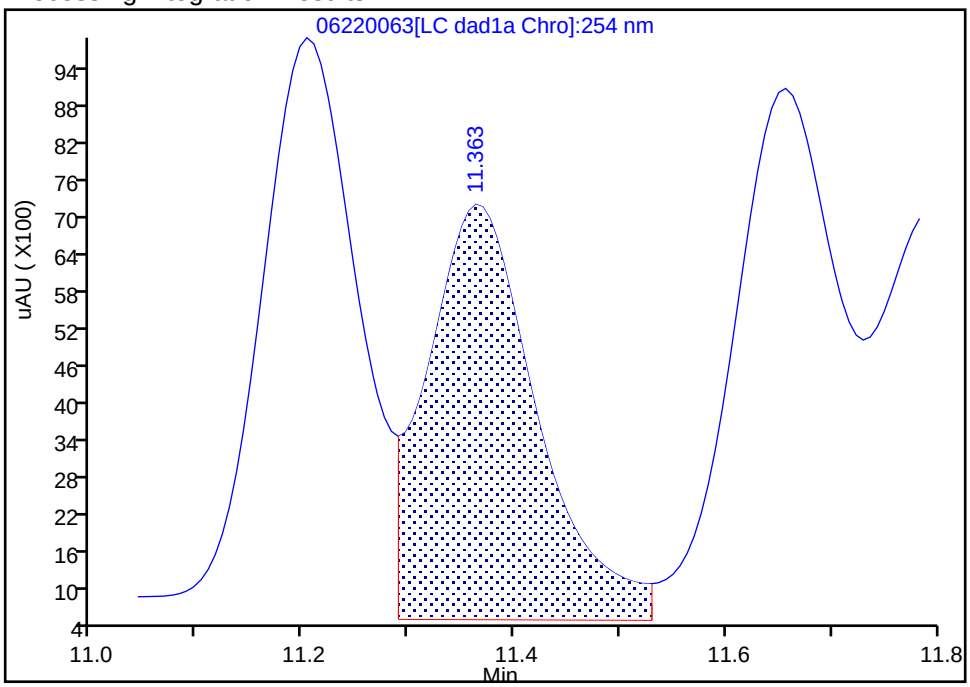
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

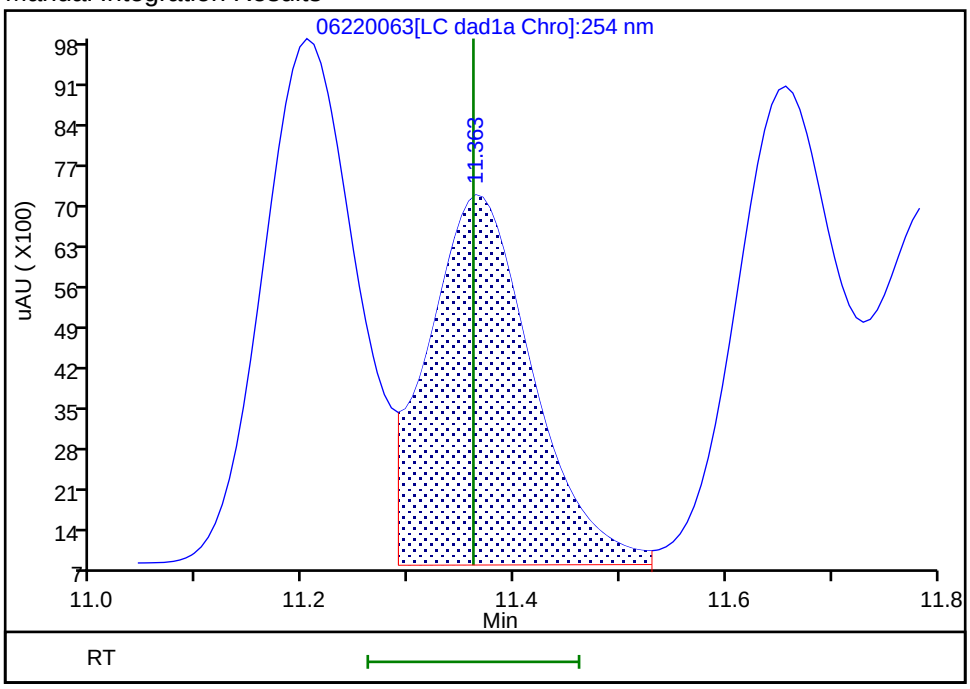
Processing Integration Results

RT: 11.36
Area: 48078
Amount: 0.276060
Amount Units: ug/mL



Manual Integration Results

RT: 11.36
Area: 43196
Amount: 0.248690
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

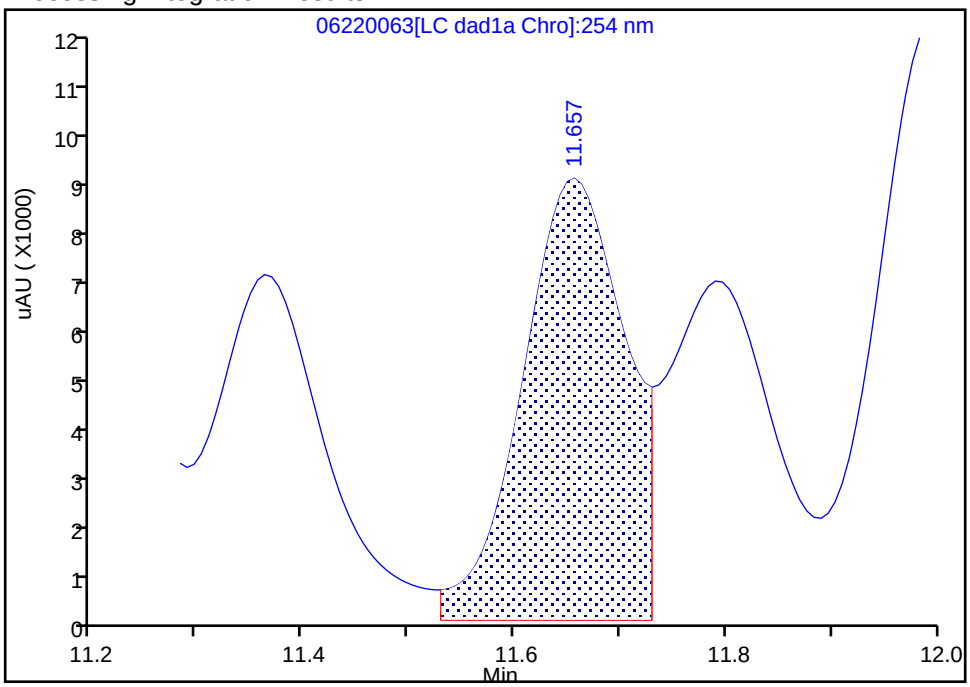
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

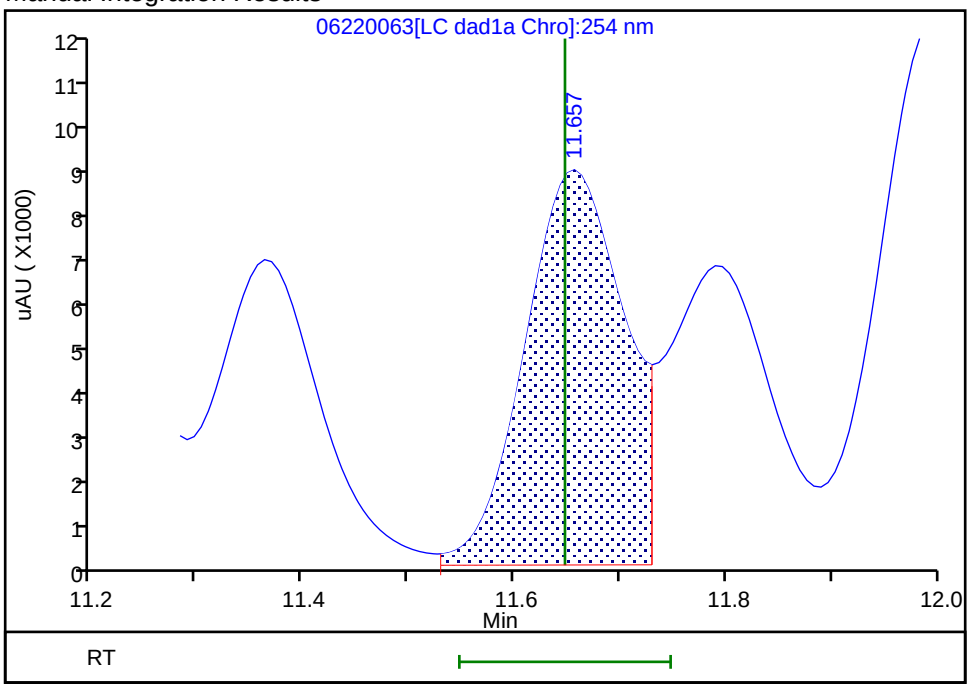
Processing Integration Results

RT: 11.66
Area: 57481
Amount: 0.283414
Amount Units: ug/mL



Manual Integration Results

RT: 11.66
Area: 53185
Amount: 0.262232
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

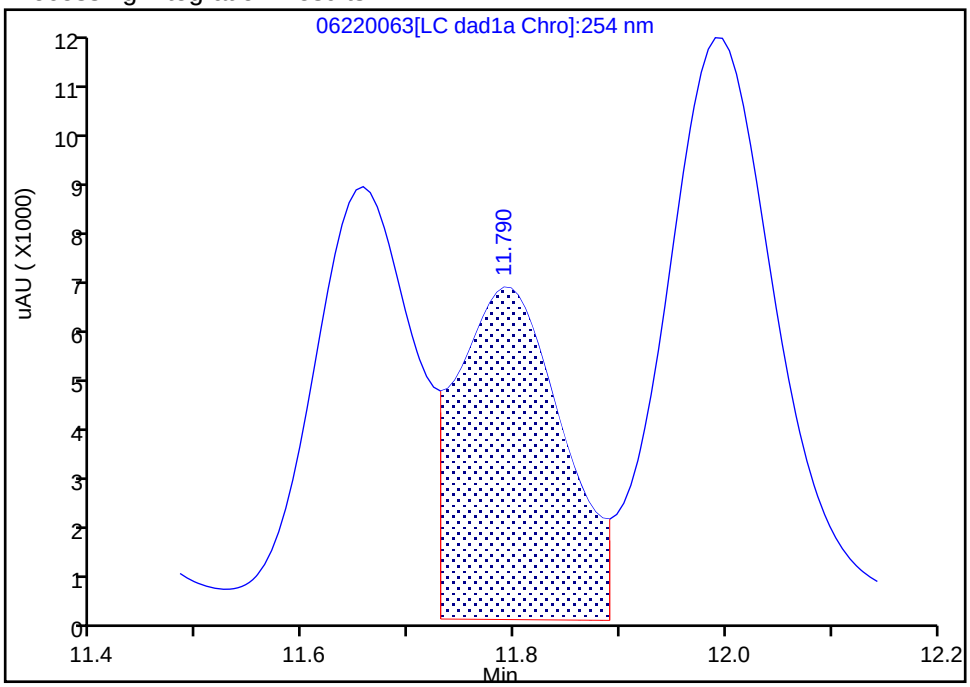
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

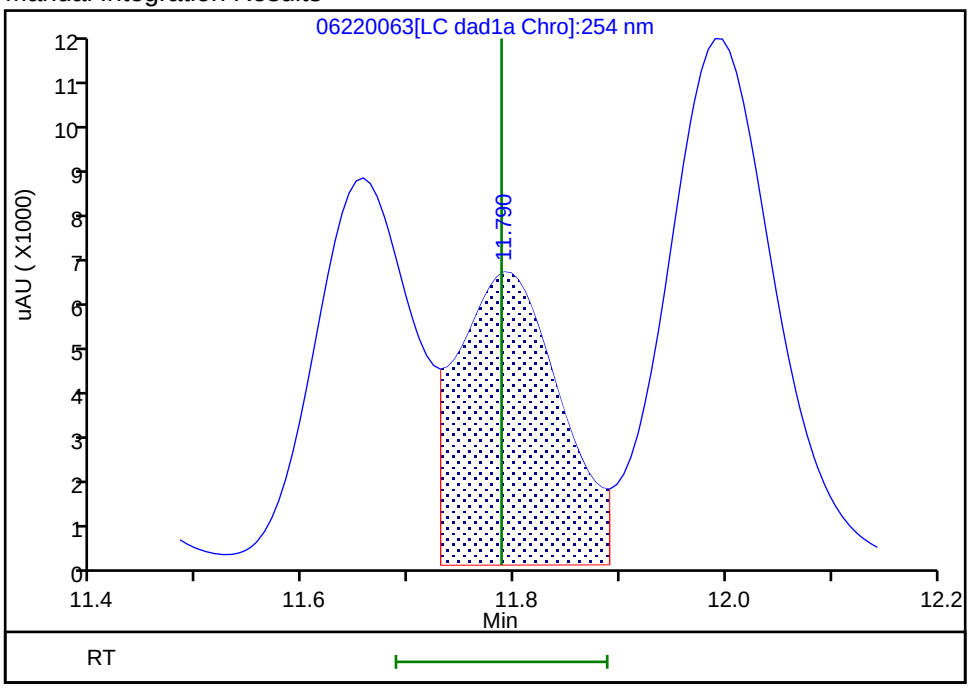
Processing Integration Results

RT: 11.79
Area: 45084
Amount: 0.301661
Amount Units: ug/mL



Manual Integration Results

RT: 11.79
Area: 41431
Amount: 0.277219
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

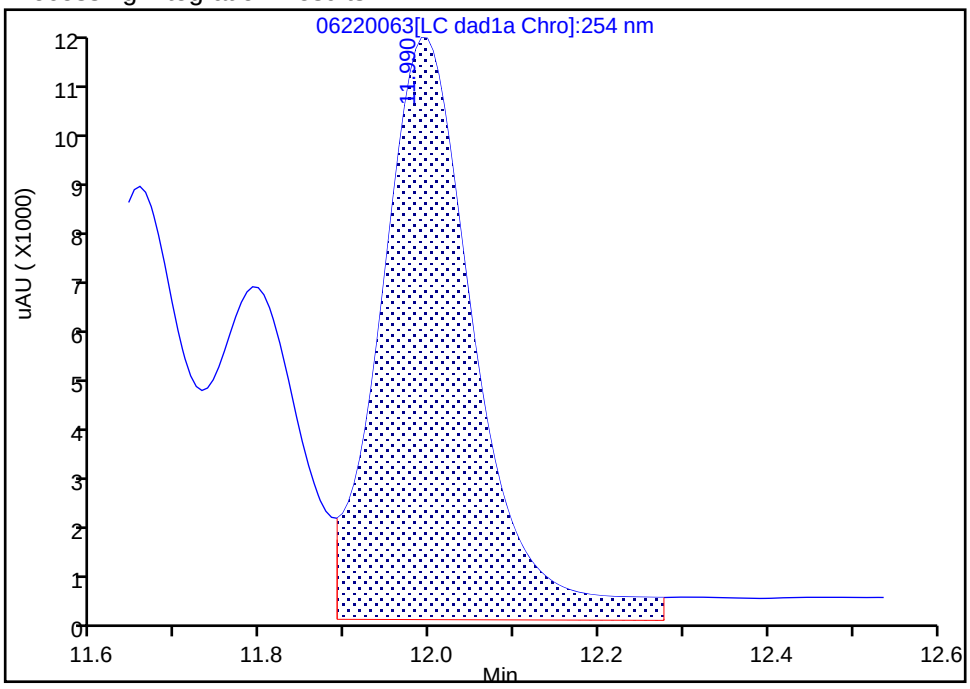
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

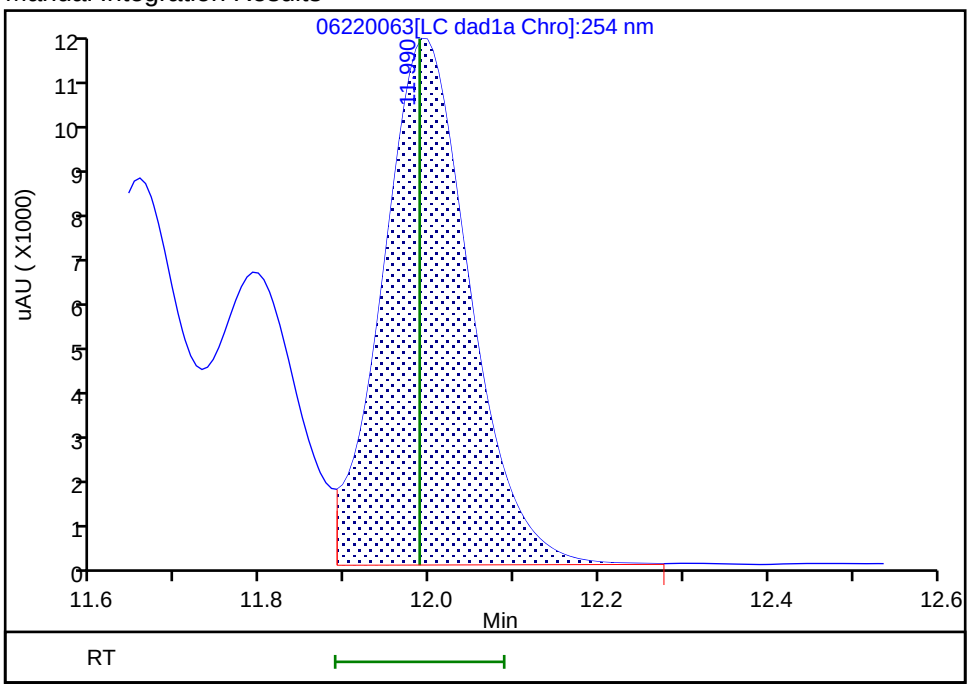
Processing Integration Results

RT: 11.99
Area: 89362
Amount: 0.294357
Amount Units: ug/mL



Manual Integration Results

RT: 11.99
Area: 79676
Amount: 0.262451
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

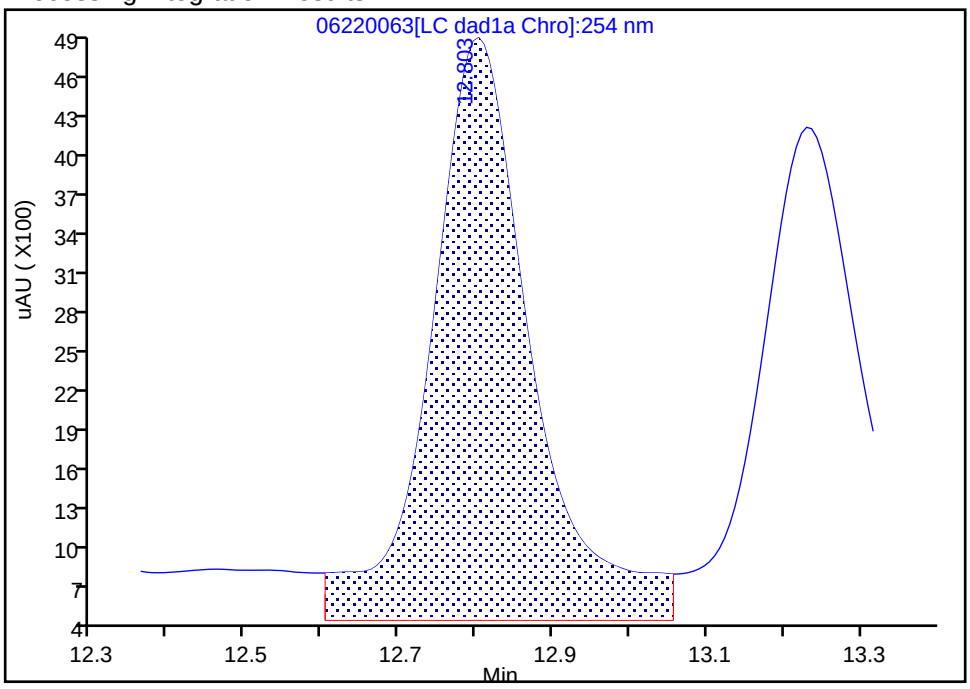
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

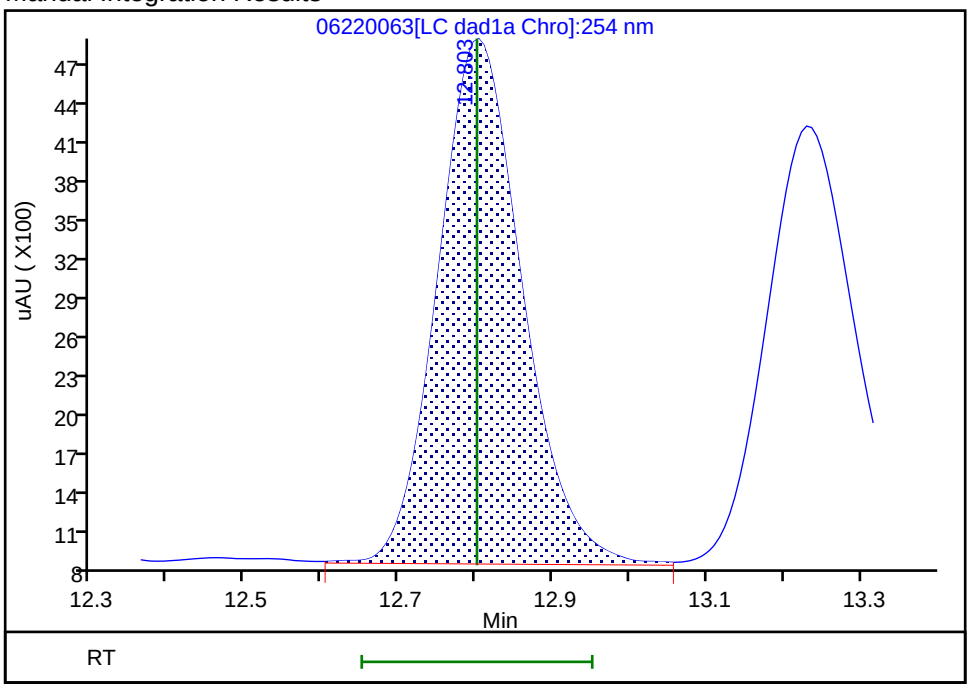
Processing Integration Results

RT: 12.80
Area: 39825
Amount: 0.294889
Amount Units: ug/mL



Manual Integration Results

RT: 12.80
Area: 30754
Amount: 0.227722
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:08
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

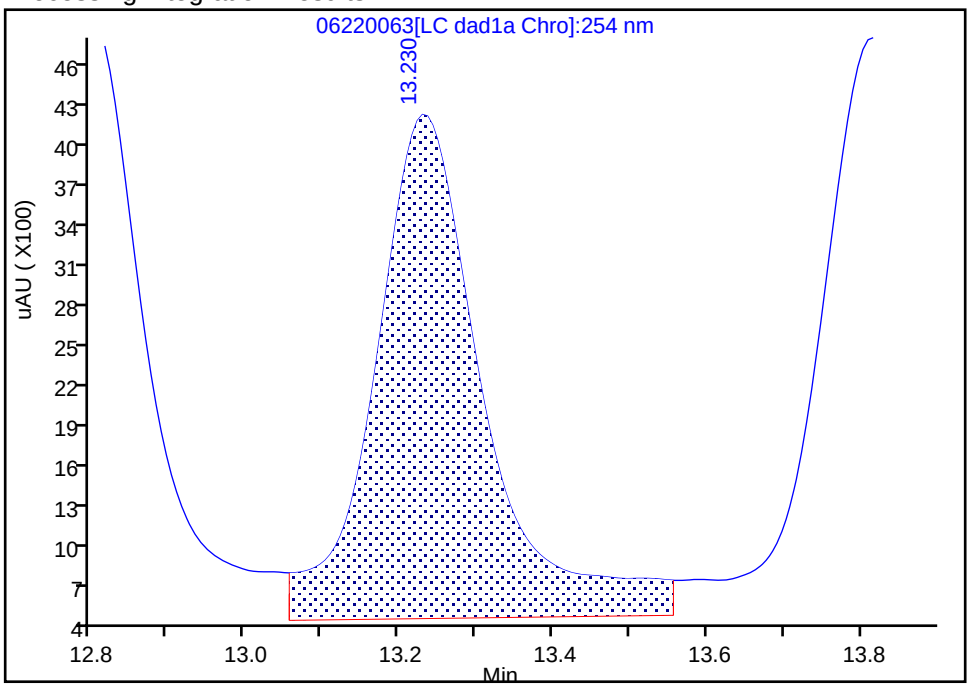
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

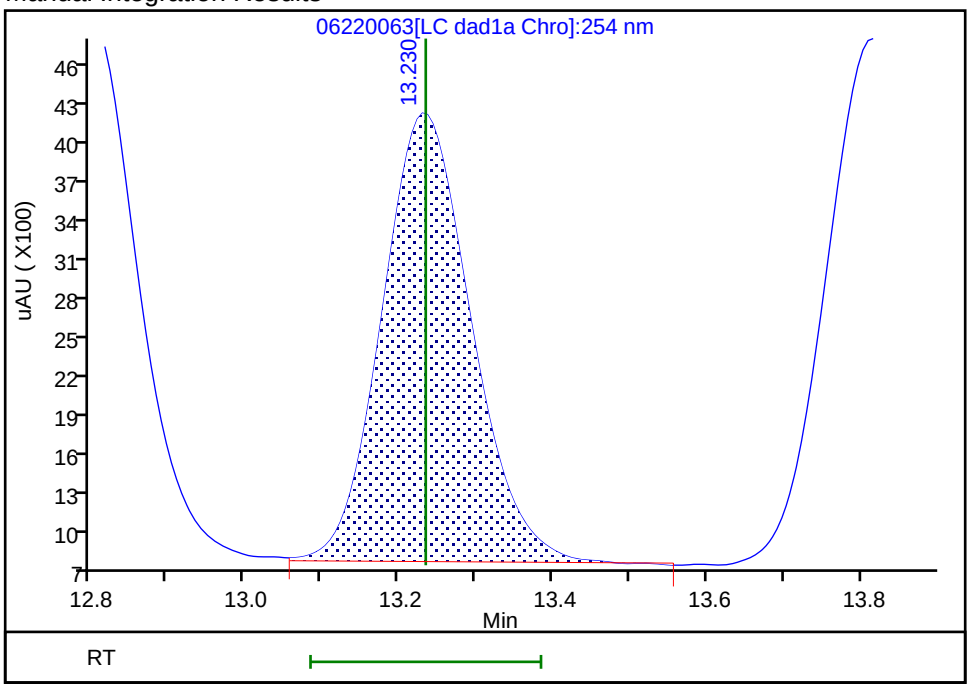
Processing Integration Results

RT: 13.23
Area: 36069
Amount: 0.319180
Amount Units: ug/mL



Manual Integration Results

RT: 13.23
Area: 27144
Amount: 0.240202
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:08
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

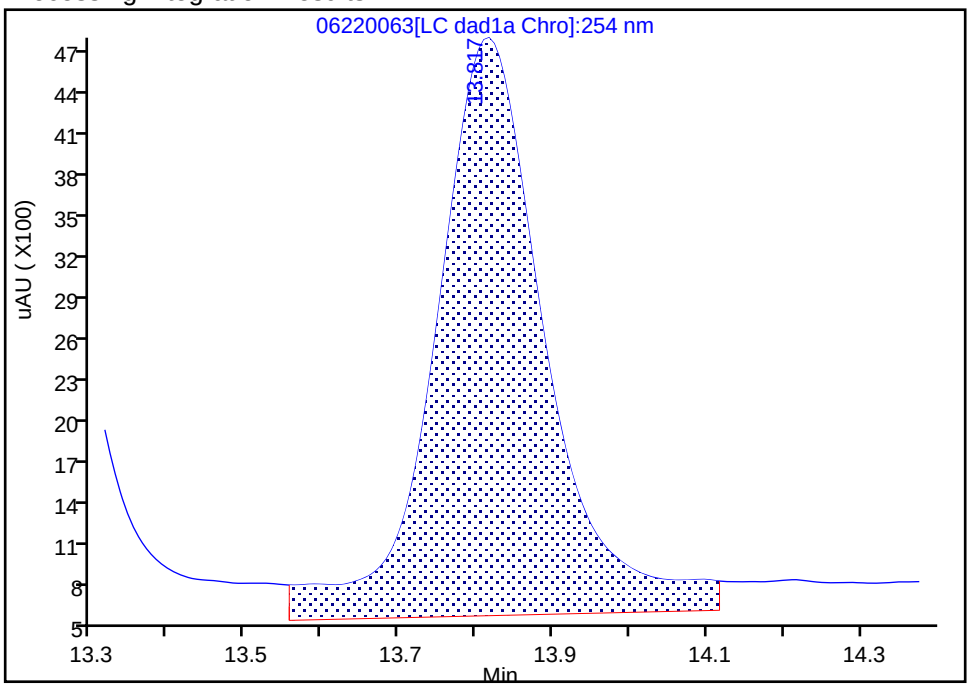
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220063.d				
Injection Date:	23-Jun-2020 11:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

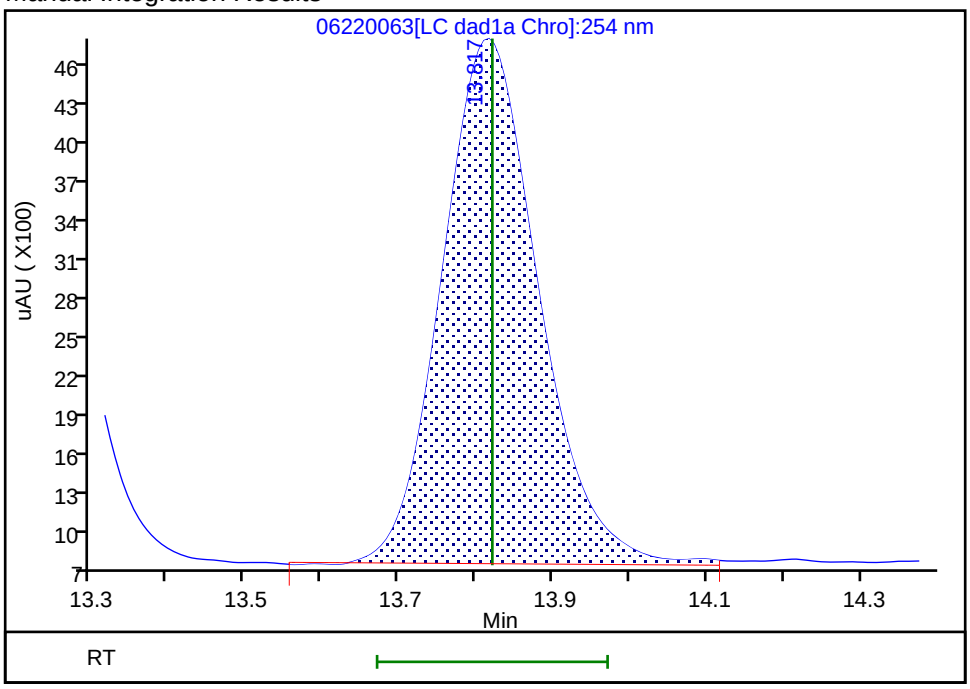
Processing Integration Results

RT: 13.82
Area: 41870
Amount: 0.292739
Amount Units: ug/mL



Manual Integration Results

RT: 13.82
Area: 34394
Amount: 0.240469
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:10:08
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/64 Calibration Date: 06/23/2020 11:58

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220064.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	206705		238	250	-5.0	15.0
DNX	Ave	152928	150697		247	250	-1.5	15.0
MNX	Ave	158544	141258		260	292	-10.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Lab Sample ID: CCV 280-499532/64 Calibration Date: 06/23/2020 11:58

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06220064.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.53	6.73
DNX	6.94	6.85	7.05
MNX	7.39	7.25	7.55

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220064.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	23-Jun-2020 11:58:25	ALS Bottle#:	9	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092608-064				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:18:20	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:09:38		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.622	6.629	-0.007	51728	0.2503	0.2377	M
5 DNX	1	6.942	6.949	-0.007	37712	0.2503	0.2466	M
6 MNX	1	7.388	7.396	-0.008	41212	0.2918	0.2599	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

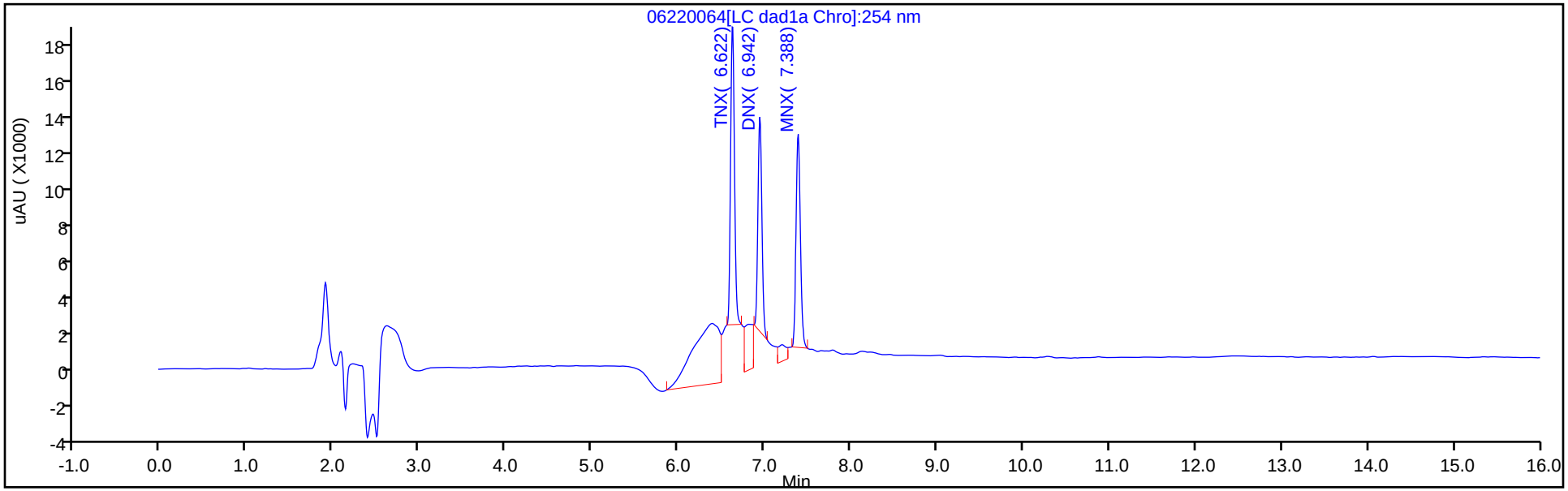
Report Date: 23-Jun-2020 15:18:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

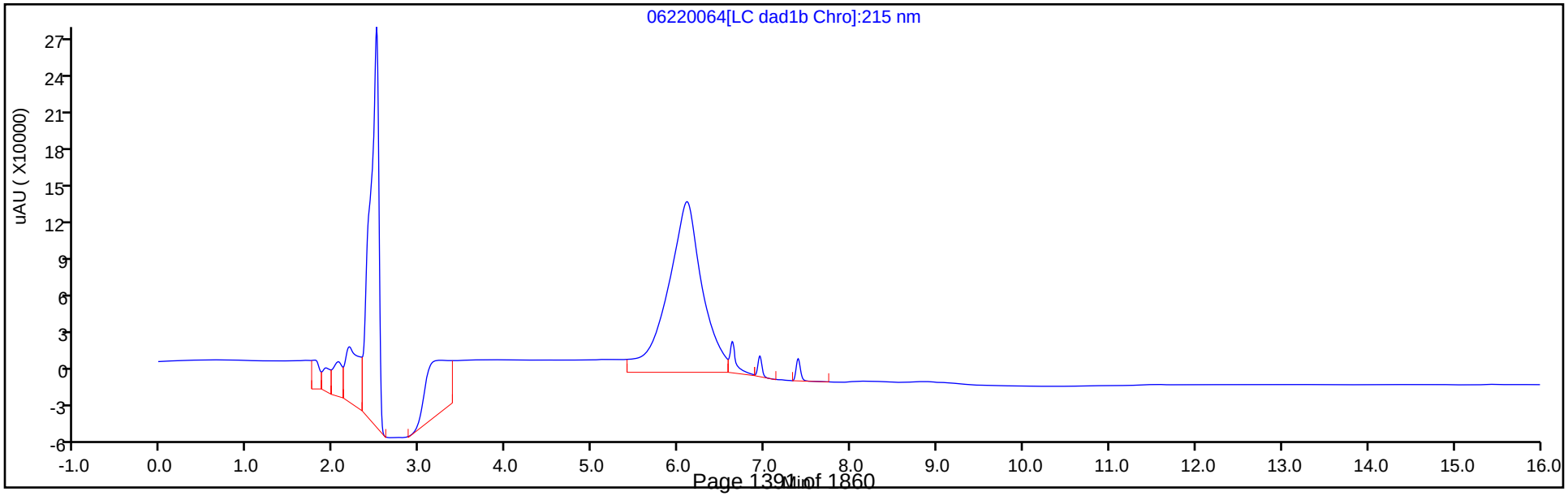
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220064.d

Injection Date:	23-Jun-2020 11:58:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	64
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

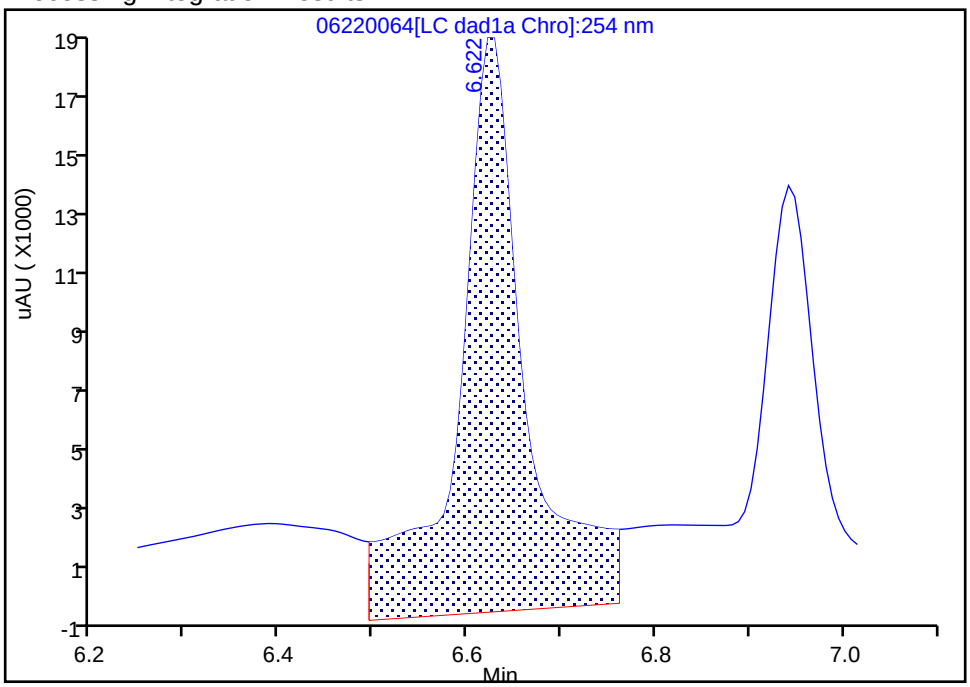
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220064.d				
Injection Date:	23-Jun-2020 11:58:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

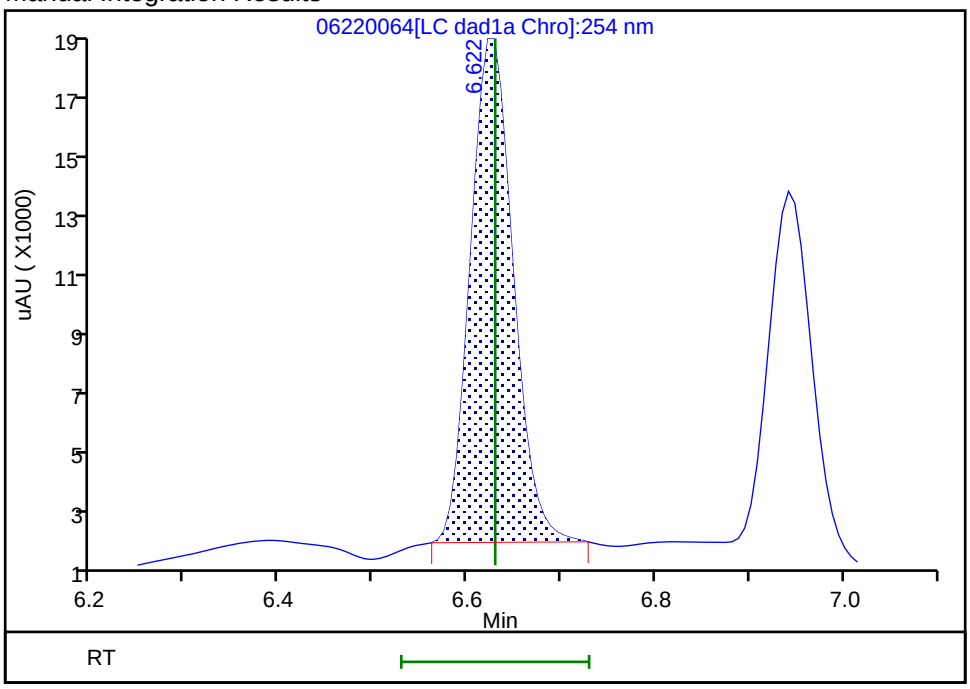
Processing Integration Results

RT: 6.62
Area: 96736
Amount: 0.444541
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 51728
Amount: 0.237711
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:36

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

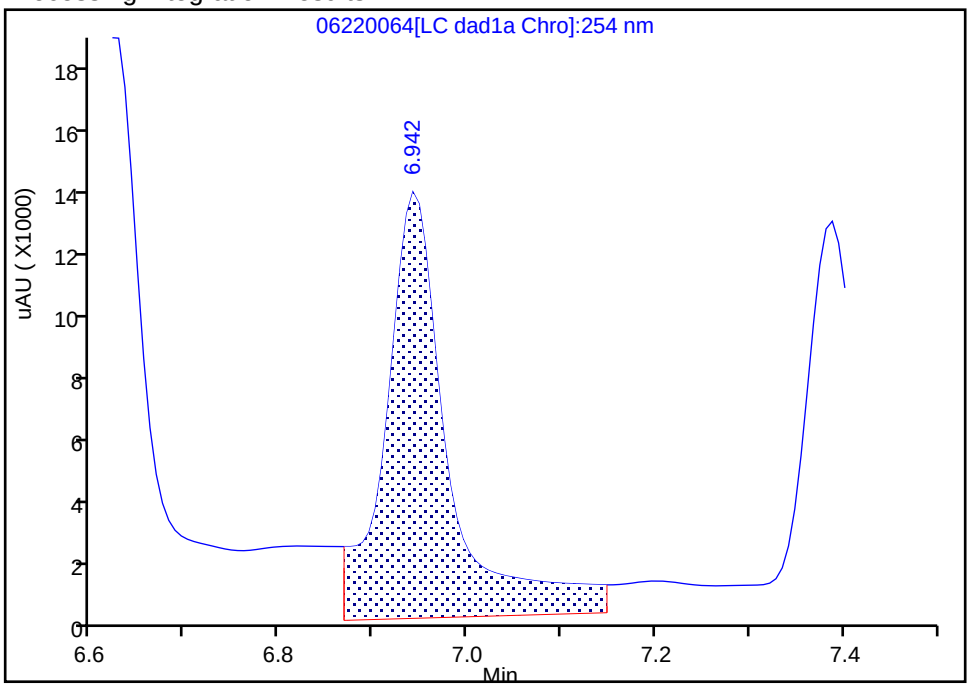
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220064.d				
Injection Date:	23-Jun-2020 11:58:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

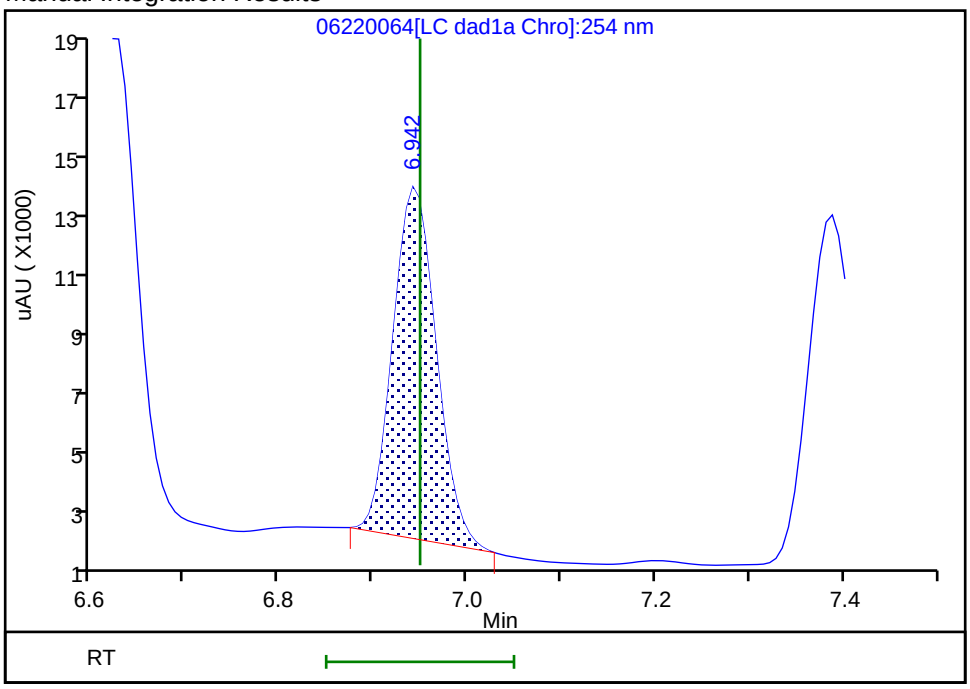
Processing Integration Results

RT: 6.94
Area: 63585
Amount: 0.415783
Amount Units: ug/mL



Manual Integration Results

RT: 6.94
Area: 37712
Amount: 0.246599
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:32
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

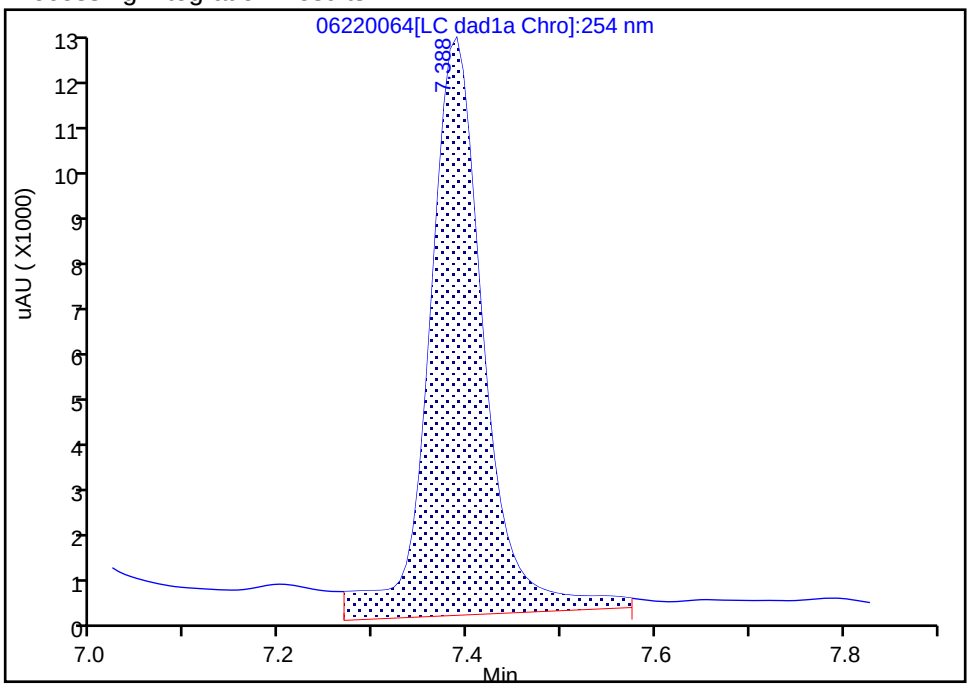
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220064.d				
Injection Date:	23-Jun-2020 11:58:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

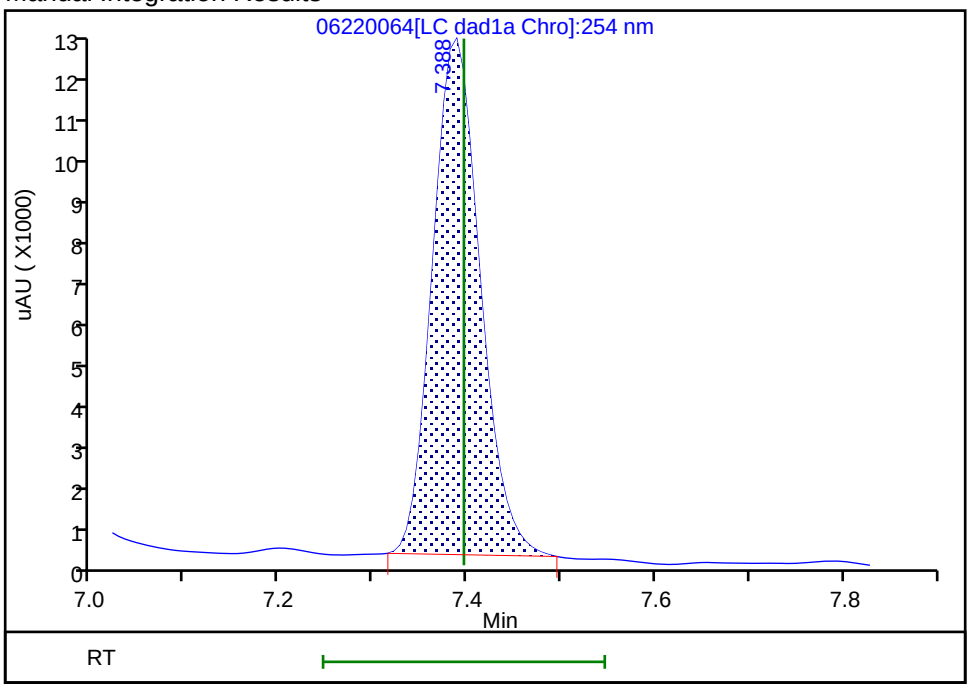
Processing Integration Results

RT: 7.39
Area: 49524
Amount: 0.312367
Amount Units: ug/mL



Manual Integration Results

RT: 7.39
Area: 41212
Amount: 0.259940
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:09:28

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499027/1-A

Matrix: Water Lab File ID: 06220010.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 500(mL) Date Analyzed: 06/22/2020 15:16

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 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 M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
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	103		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220010.D
Lims ID: MB 280-499027/1-A
Client ID:
Sample Type: MB
Inject. Date: 22-Jun-2020 15:16:04 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-499027/1-
Misc. Info.: 280-0092608-010
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:17:55 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:10:42

	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		6.584				ND	U
2	TNX	1		6.629				ND	
3	HMX	1		6.734				ND	
4	2,4-diamino-6-nitrotoluene	1		6.764				ND	
5	DNX	1		6.949				ND	
6	MNX	1		7.396				ND	U
7	RDX	1		7.801				ND	
8	2,4,6-Trinitrophenol	1	8.121	8.094	0.027	1959		0.0230	
$ 9	1,2-Dinitrobenzene	1	8.761	8.741	0.020	28600	0.2000	0.2069	
10	1,3,5-Trinitrobenzene	1		8.928				ND	
11	1,3-Dinitrobenzene	1		9.568				ND	
12	Nitrobenzene	1		9.941				ND	
13	3,5-Dinitroaniline	1		10.204				ND	
14	Tetryl	1		10.234				ND	
15	Nitroglycerin	2		10.748				ND	
16	2,4,6-Trinitrotoluene	1		11.201				ND	
17	4-Amino-2,6-dinitrotoluene	1		11.361				ND	
18	2-Amino-4,6-dinitrotoluene	1		11.648				ND	
19	2,6-Dinitrotoluene	1		11.788				ND	
20	2,4-Dinitrotoluene	1		11.988				ND	
21	o-Nitrotoluene	1		12.801				ND	
22	p-Nitrotoluene	1		13.234				ND	
23	m-Nitrotoluene	1		13.821				ND	U
24	PETN	2		14.888				ND	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

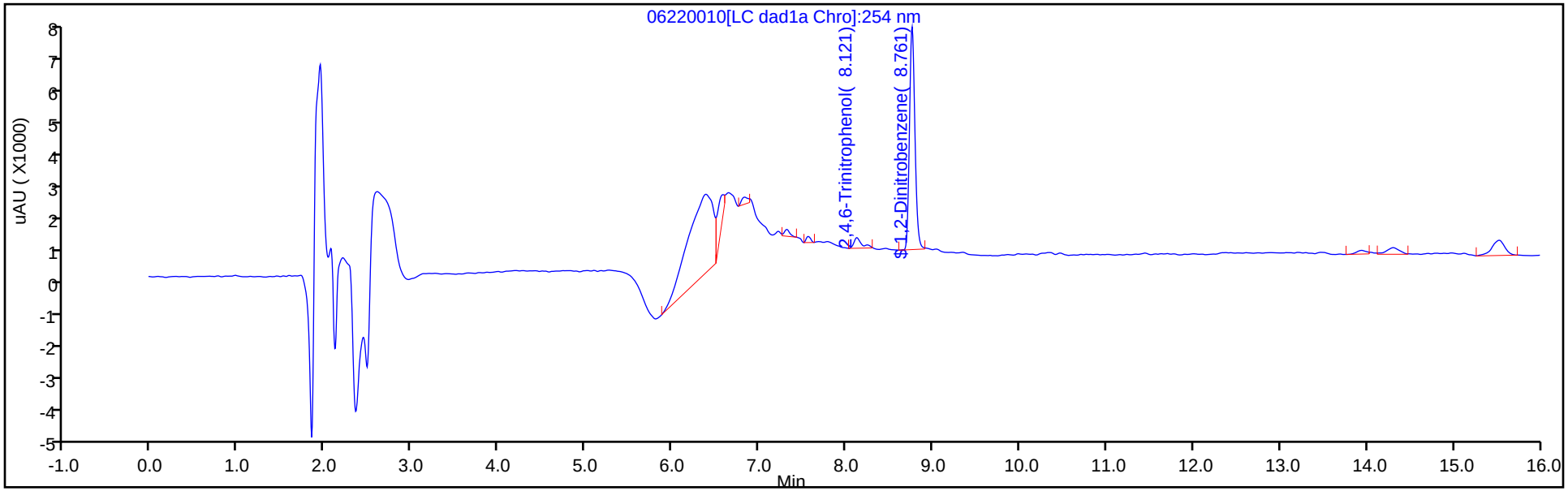
Report Date: 23-Jun-2020 15:17:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

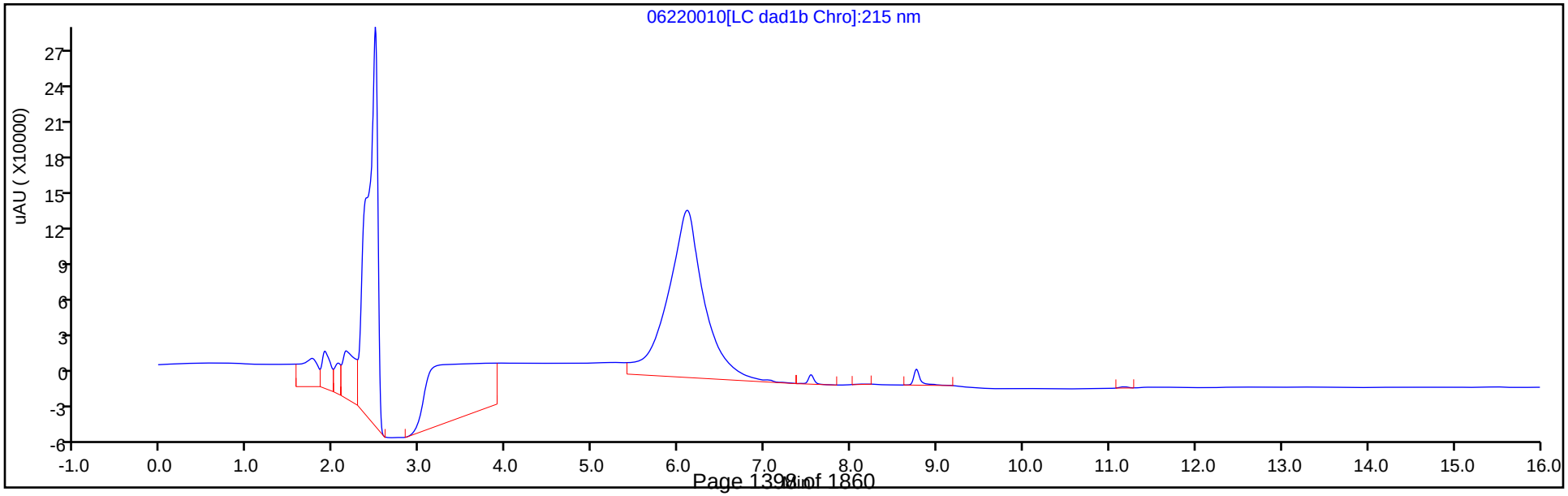
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220010.d

Injection Date:	22-Jun-2020 15:16:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-499027/1-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
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\20200620-92608.b\06220010.D
Lims ID: MB 280-499027/1-A
Client ID:
Sample Type: MB
Inject. Date: 22-Jun-2020 15:16:04 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-499027/1-
Misc. Info.: 280-0092608-010
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:17:55 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:10:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2069	103.46

User Disabled Compound Report

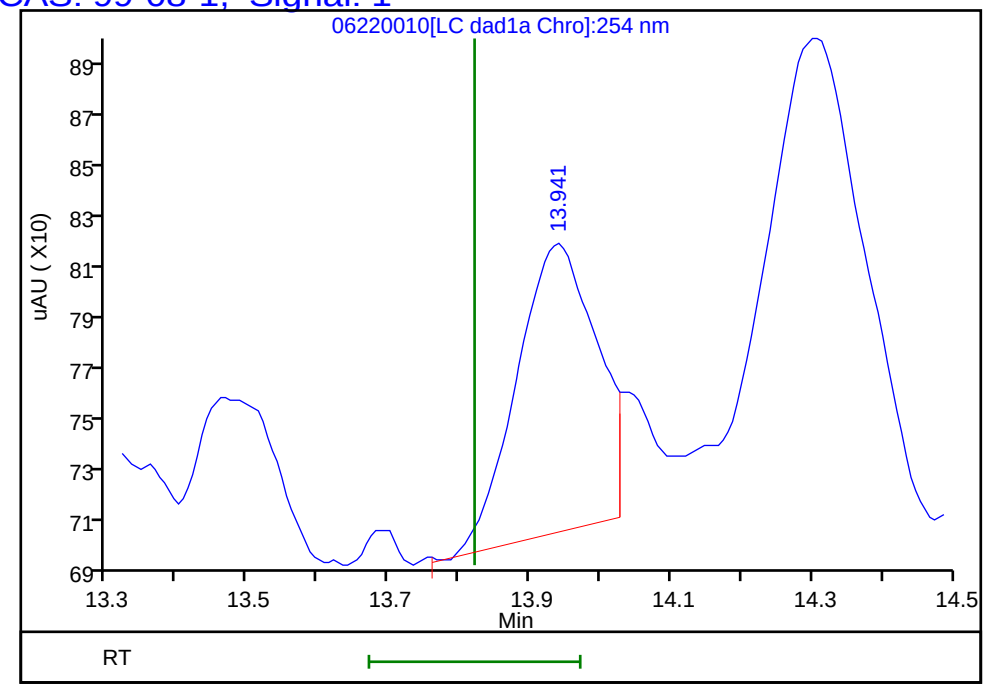
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220010.d
Injection Date: 22-Jun-2020 15:16:04 Instrument ID: CHHPLC_X3
Lims ID: MB 280-499027/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.94
Response: 851
Amount: 0.005950



Reviewer: zhangji, 23-Jun-2020 14:10:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

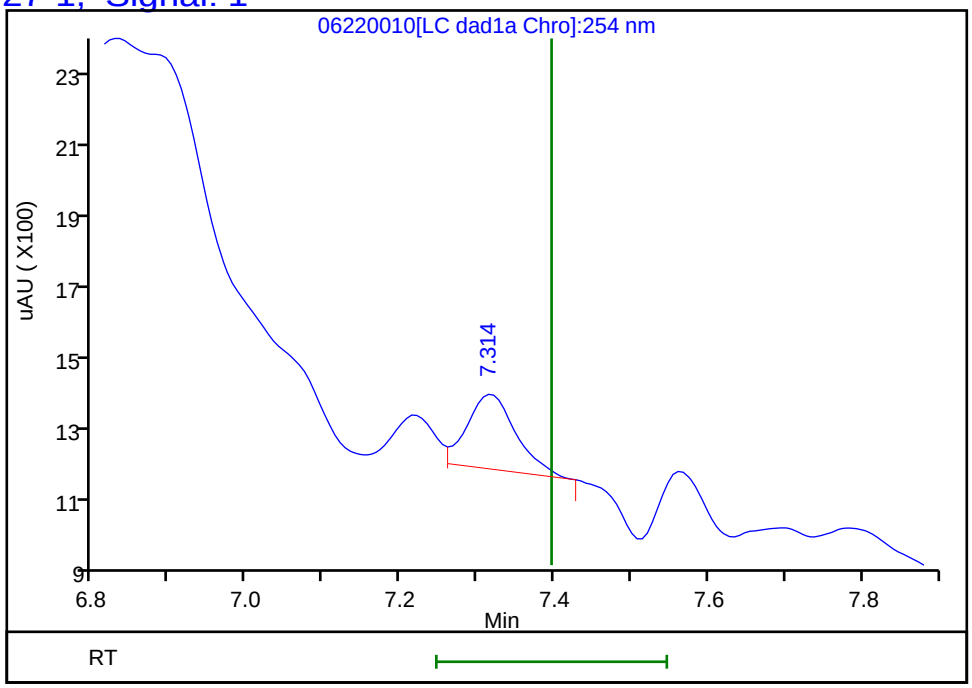
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220010.d
Injection Date: 22-Jun-2020 15:16:04 Instrument ID: CHHPLC_X3
Lims ID: MB 280-499027/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.31
Response: 871
Amount: 0.005494



Reviewer: zhangji, 23-Jun-2020 14:10:42
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.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499107/1-A

Matrix: Water Lab File ID: 06220038.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 500(mL) Date Analyzed: 06/23/2020 02:00

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
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	100	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220038.D
Lims ID: MB 280-499107/1-A
Client ID:
Sample Type: MB
Inject. Date: 23-Jun-2020 02:00:01 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-499107/1-
Misc. Info.: 280-0092608-038
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:47:16

	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		6.584				ND	
	2 TNX	1		6.629				ND	U
	3 HMX	1		6.734				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.764				ND	U
	5 DNX	1		6.949				ND	
	6 MNX	1		7.396				ND	
	7 RDX	1		7.801				ND	
	8 2,4,6-Trinitrophenol	1		8.094				ND	
$	9 1,2-Dinitrobenzene	1	8.760	8.741	0.019	27641	0.2000	0.2000	M
	10 1,3,5-Trinitrobenzene	1		8.928				ND	U
	11 1,3-Dinitrobenzene	1		9.568				ND	
	12 Nitrobenzene	1		9.941				ND	
	13 3,5-Dinitroaniline	1		10.204				ND	
	14 Tetryl	1		10.234				ND	
	15 Nitroglycerin	2		10.748				ND	U
	16 2,4,6-Trinitrotoluene	1		11.201				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.361				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.648				ND	
	19 2,6-Dinitrotoluene	1		11.788				ND	
	20 2,4-Dinitrotoluene	1		11.988				ND	
	21 o-Nitrotoluene	1		12.801				ND	
	22 p-Nitrotoluene	1		13.234				ND	
	23 m-Nitrotoluene	1		13.821				ND	
	24 PETN	2		14.888				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

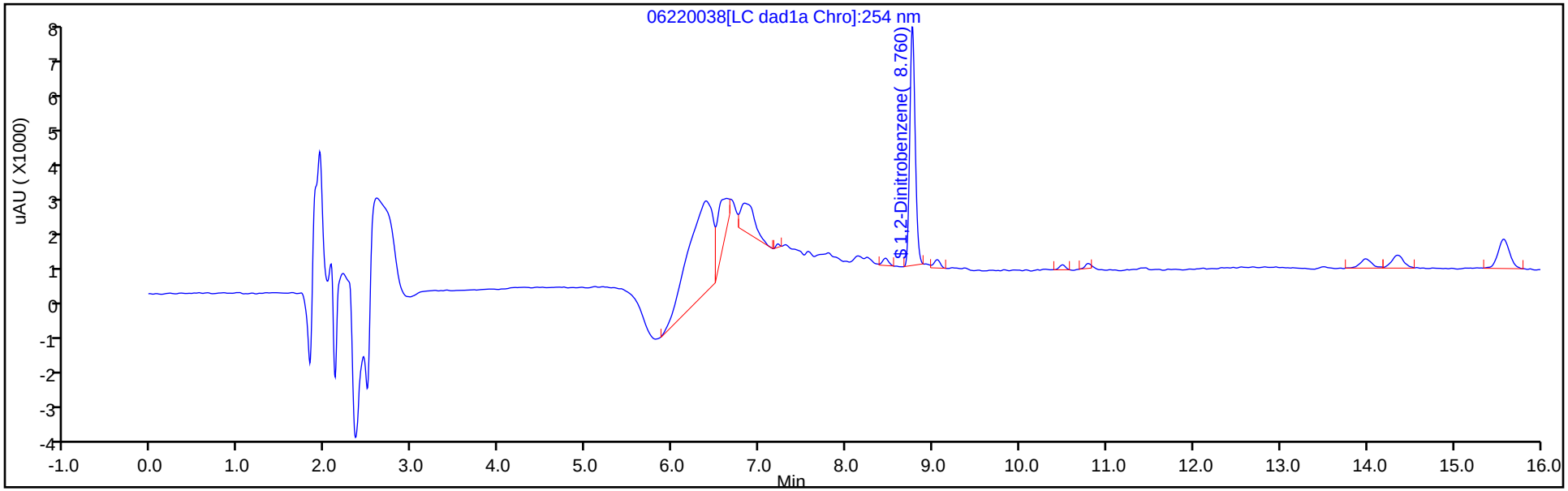
Report Date: 23-Jun-2020 15:18:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

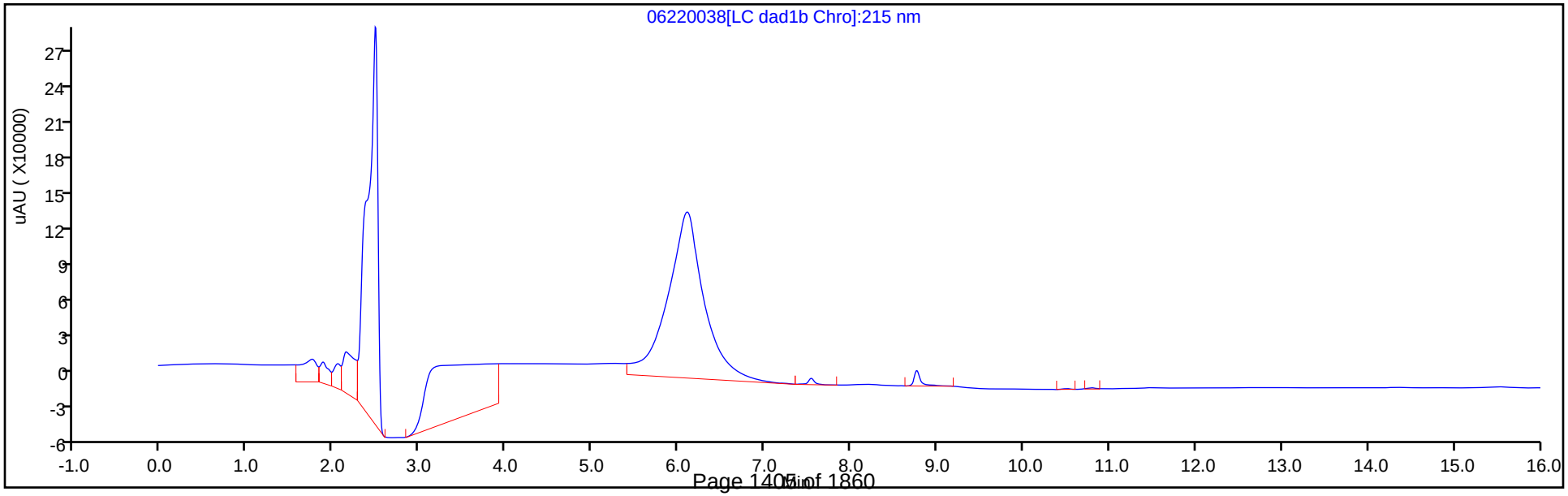
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220038.d

Injection Date:	23-Jun-2020 02:00:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-499107/1-A			Worklist Smp#:	38
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220038.D
Lims ID: MB 280-499107/1-A
Client ID:
Sample Type: MB
Inject. Date: 23-Jun-2020 02:00:01 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-499107/1-
Misc. Info.: 280-0092608-038
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:47:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2000	99.99

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

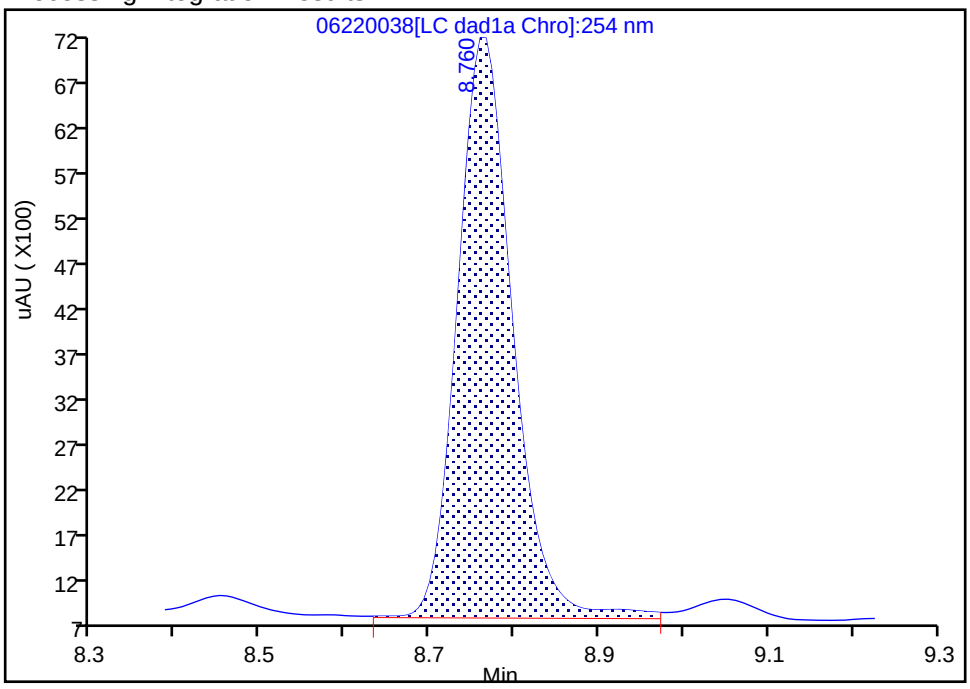
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220038.d				
Injection Date:	23-Jun-2020 02:00:01	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-499107/1-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

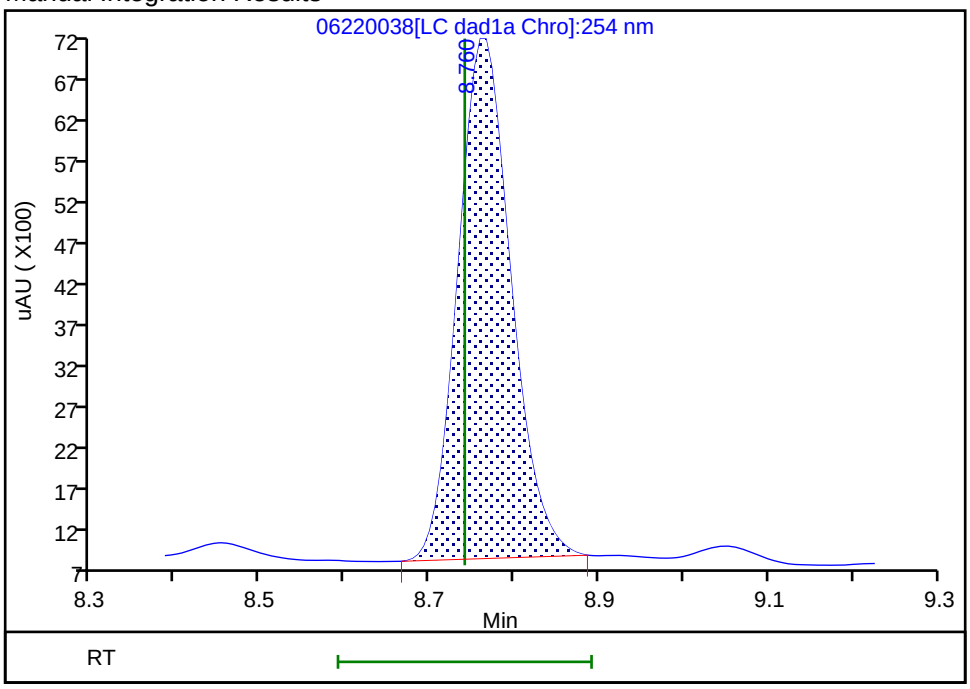
Processing Integration Results

RT: 8.76
Area: 28924
Amount: 0.209272
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 27641
Amount: 0.199990
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:46:57

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

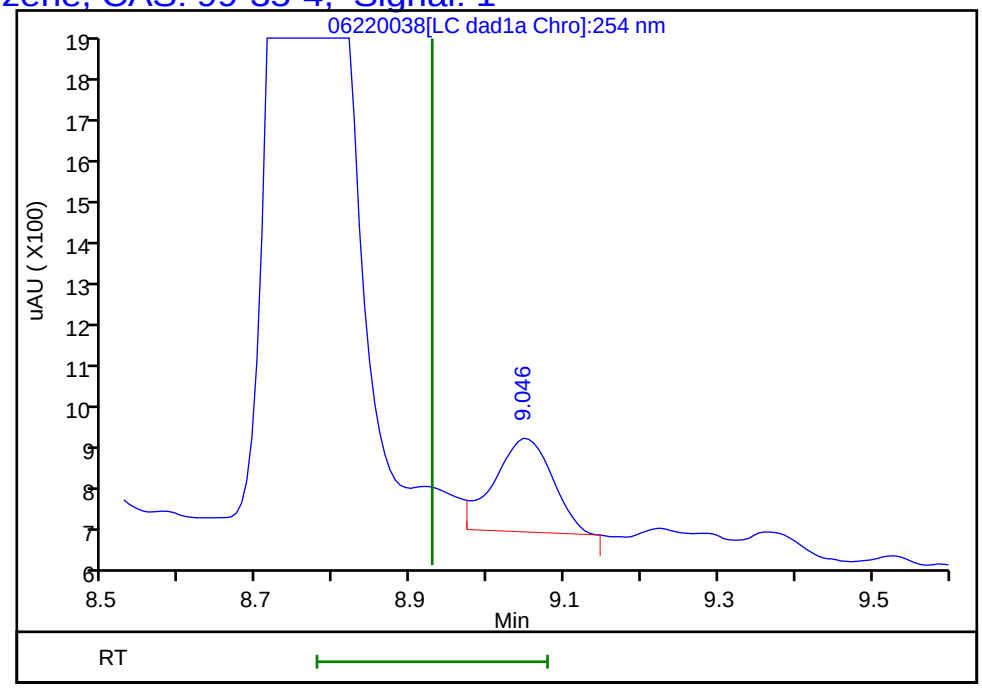
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220038.d
Injection Date: 23-Jun-2020 02:00:01 Instrument ID: CHHPLC_X3
Lims ID: MB 280-499107/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 9.05
Response: 1157
Amount: 0.005024



Reviewer: zhangji, 23-Jun-2020 14:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499027/2-A

Matrix: Water Lab File ID: 06220011.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 500(mL) Date Analyzed: 06/22/2020 15:39

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.15		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.06		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.07		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.92		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.01		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.91		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.80		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.96		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.74		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.85		0.41	0.40	0.10
2691-41-0	HMX	1.88		0.21	0.20	0.088
98-95-3	Nitrobenzene	2.05		0.21	0.20	0.091
121-82-4	RDX	1.93		0.21	0.20	0.052
479-45-8	Tetryl	1.93		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220011.D
Lims ID: LCS 280-499027/2-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Jun-2020 15:39:06 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-499027/2
Misc. Info.: 280-0092608-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:17:55 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:10:46

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.719	6.734	-0.015	16151	0.2000	0.1879	
	7 RDX	1	7.799	7.801	-0.002	22486	0.2000	0.1928	
	8 2,4,6-Trinitrophenol	1	8.086	8.094	-0.008	20263	0.2000	0.2380	
$	9 1,2-Dinitrobenzene	1	8.752	8.741	0.011	28178	0.2000	0.2039	
	10 1,3,5-Trinitrobenzene	1	8.932	8.928	0.004	49622	0.2000	0.2155	
	11 1,3-Dinitrobenzene	1	9.579	9.568	0.011	63166	0.2000	0.2060	
	12 Nitrobenzene	1	9.946	9.941	0.005	41152	0.2000	0.2053	
	14 Tetryl	1	10.252	10.234	0.018	34115	0.2000	0.1927	
	15 Nitroglycerin	2	10.759	10.748	0.011	125635	2.00	1.84	
	16 2,4,6-Trinitrotoluene	1	11.212	11.201	0.011	42303	0.2000	0.2073	
	17 4-Amino-2,6-dinitrotoluene	1	11.372	11.361	0.011	29825	0.2000	0.1737	
	18 2-Amino-4,6-dinitrotoluene	1	11.666	11.648	0.018	38663	0.2000	0.1906	
	19 2,6-Dinitrotoluene	1	11.799	11.788	0.011	30000	0.2000	0.2007	
	20 2,4-Dinitrotoluene	1	11.999	11.988	0.011	58294	0.2000	0.1920	
	21 o-Nitrotoluene	1	12.806	12.801	0.005	24315	0.2000	0.1800	
	22 p-Nitrotoluene	1	13.239	13.234	0.005	20959	0.2000	0.1855	
	23 m-Nitrotoluene	1	13.826	13.821	0.005	27989	0.2000	0.1957	
	24 PETN	2	14.892	14.888	0.004	141350	2.00	1.80	

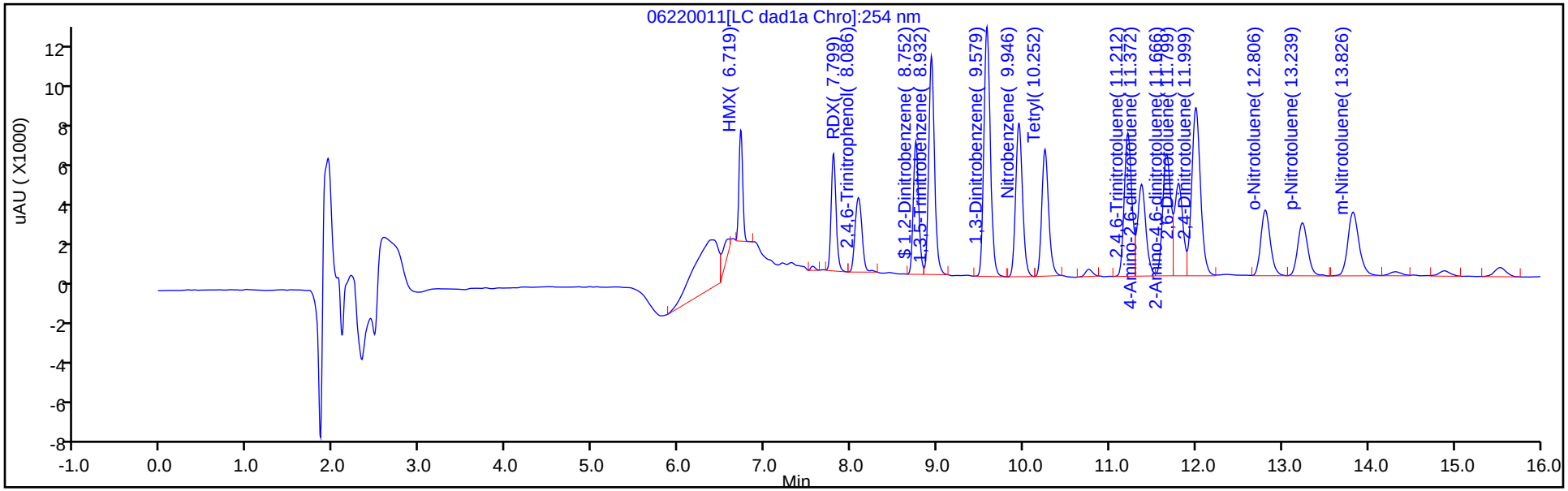
Report Date: 23-Jun-2020 15:17:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

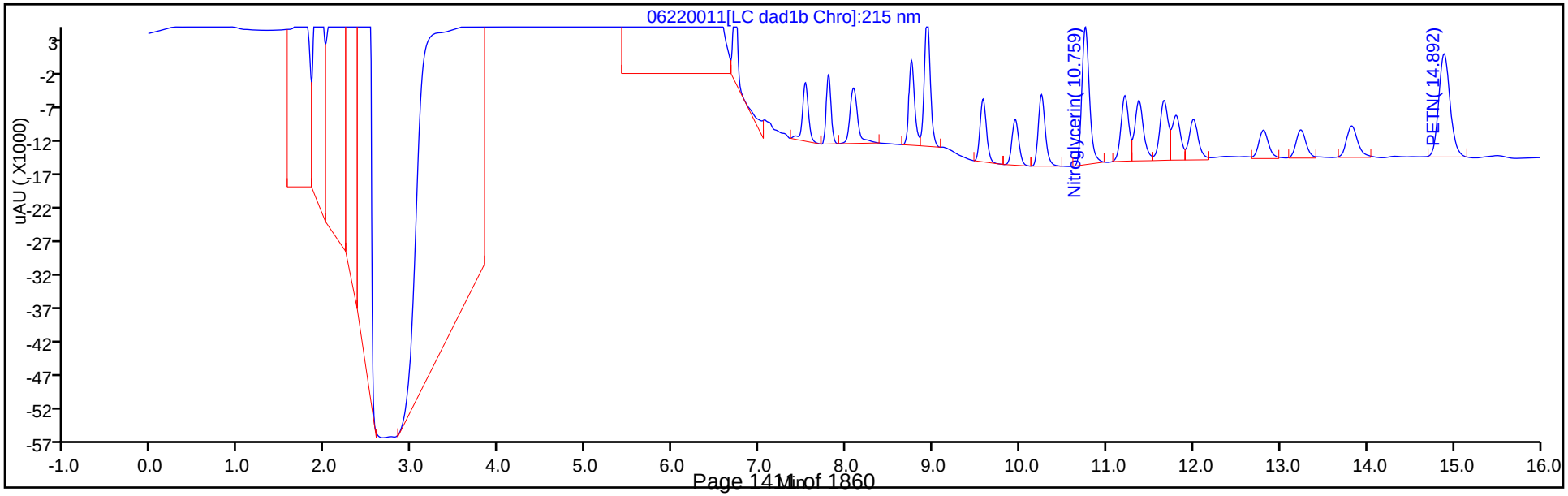
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220011.d

Injection Date:	22-Jun-2020 15:39:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-499027/2-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\20200620-92608.b\06220011.D
Lims ID: LCS 280-499027/2-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Jun-2020 15:39:06 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-499027/2
Misc. Info.: 280-0092608-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:17:55 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:10:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2039	101.94

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499027/4-A

Matrix: Water Lab File ID: 06220013.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 500(mL) Date Analyzed: 06/22/2020 16:25

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.13	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	109		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220013.D				
Lims ID:	LCS 280-499027/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	22-Jun-2020 16:25:03	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-499027/4				
Misc. Info.:	280-0092608-013				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:17:55	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:11:50		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.628	6.629	-0.001	43033	0.2002	0.1978	M
5 DNX	1	6.954	6.949	0.005	31104	0.2002	0.2034	M
6 MNX	1	7.401	7.396	0.005	33697	0.2334	0.2125	M
$ 9 1,2-Dinitrobenzene	1	8.748	8.741	0.007	30257	0.2000	0.2189	

QC Flag Legend

Review Flags

M - Manually Integrated

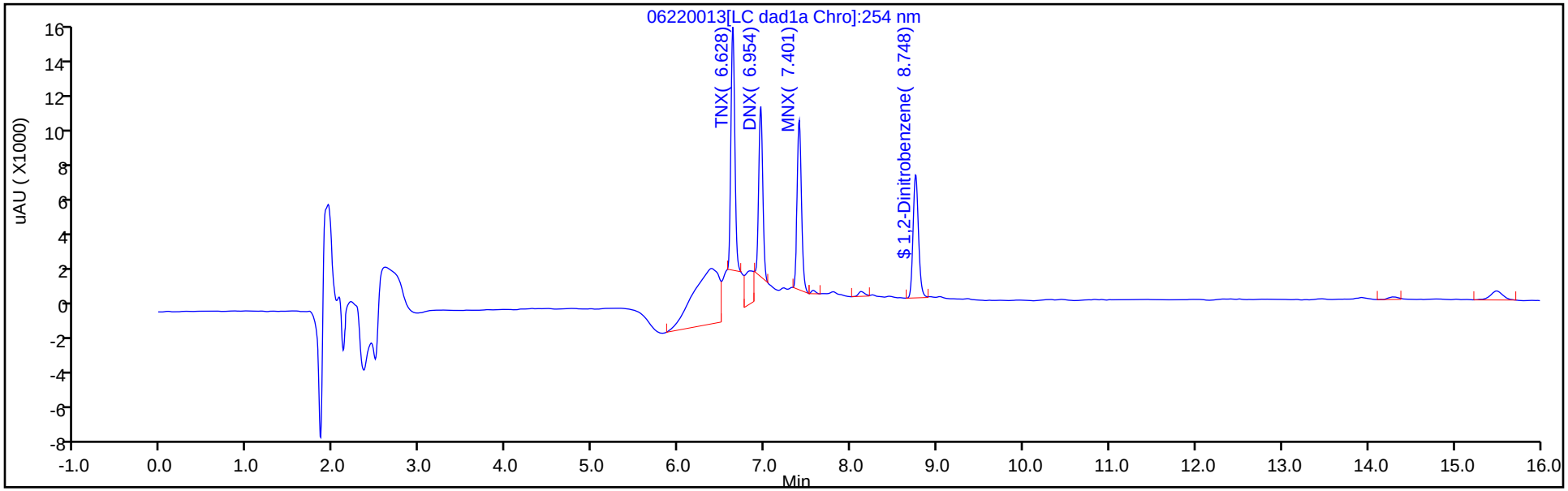
Report Date: 23-Jun-2020 15:17:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

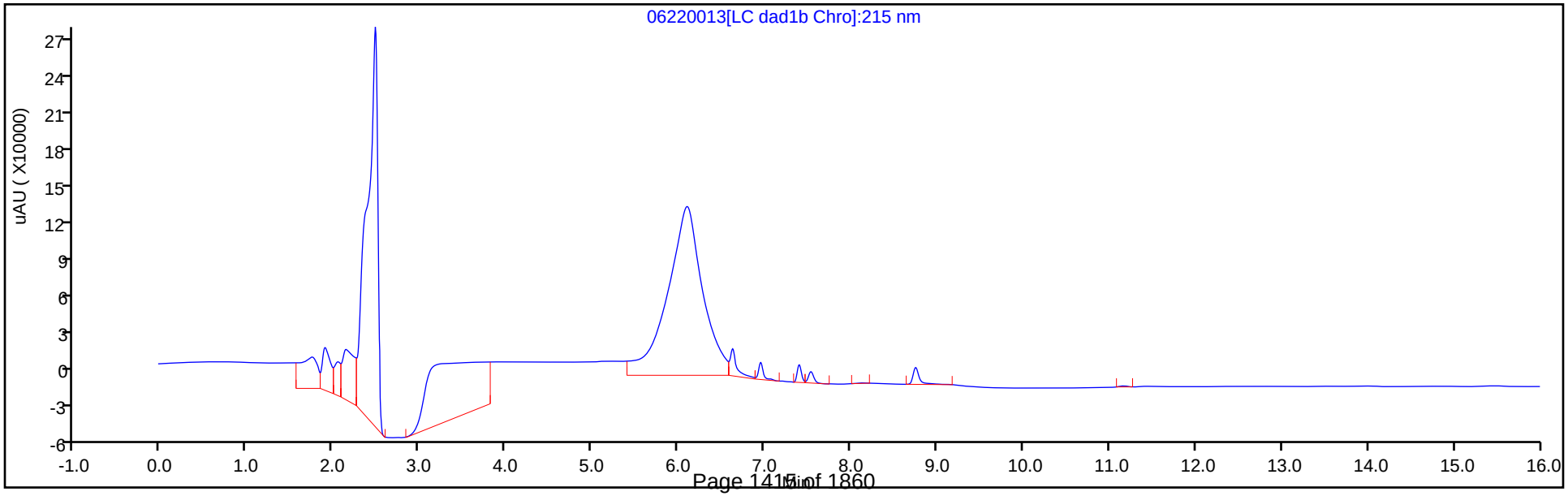
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220013.d

Injection Date:	22-Jun-2020 16:25:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-499027/4-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\20200620-92608.b\06220013.D				
Lims ID:	LCS 280-499027/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	22-Jun-2020 16:25:03	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-499027/4				
Misc. Info.:	280-0092608-013				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:17:55	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:11:50		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2189	109.46

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

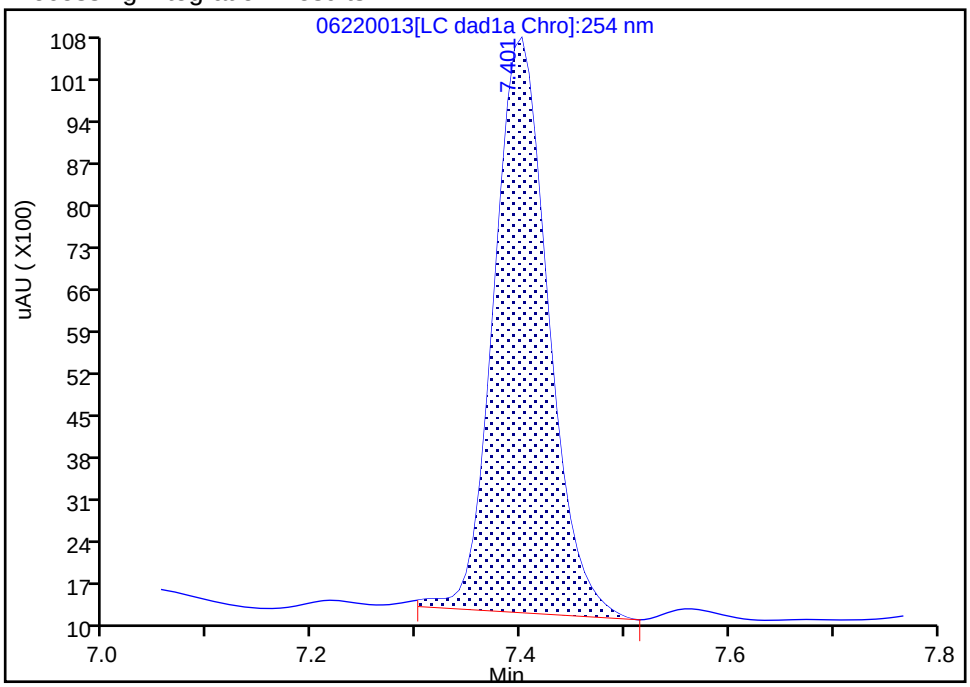
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220013.d
Injection Date: 22-Jun-2020 16:25:03 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-499027/4-A
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

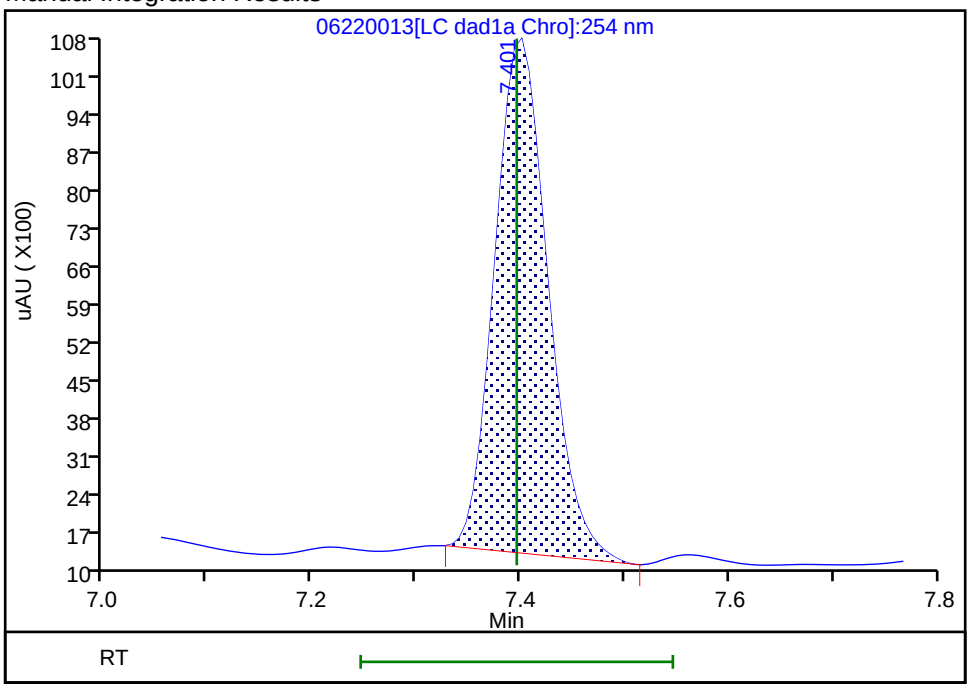
Processing Integration Results

RT: 7.40
Area: 34808
Amount: 0.219548
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 33697
Amount: 0.212540
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:11:47
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499107/2-A

Matrix: Water Lab File ID: 06220039.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 500(mL) Date Analyzed: 06/23/2020 02:23

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.39		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.20		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.32		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.05		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.12		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.94		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.62		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.82		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.75		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.68		0.41	0.40	0.10
2691-41-0	HMX	2.12		0.21	0.20	0.088
98-95-3	Nitrobenzene	2.00		0.21	0.20	0.091
121-82-4	RDX	2.08		0.21	0.20	0.052
479-45-8	Tetryl	2.39		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220039.D
Lims ID: LCS 280-499107/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Jun-2020 02:23:02 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-499107/2
Misc. Info.: 280-0092608-039
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:47:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.723	6.734	-0.011	18252	0.2000	0.2123	
7 RDX	1	7.803	7.801	0.002	24255	0.2000	0.2080	
8 2,4,6-Trinitrophenol	1	8.103	8.094	0.009	19758	0.2000	0.2321	
$ 9 1,2-Dinitrobenzene	1	8.763	8.741	0.022	27983	0.2000	0.2025	
10 1,3,5-Trinitrobenzene	1	8.943	8.928	0.015	55085	0.2000	0.2392	
11 1,3-Dinitrobenzene	1	9.589	9.568	0.021	67523	0.2000	0.2202	
12 Nitrobenzene	1	9.969	9.941	0.028	40109	0.2000	0.2001	
14 Tetryl	1	10.276	10.234	0.042	42332	0.2000	0.2391	
15 Nitroglycerin	2	10.789	10.748	0.041	141551	2.00	2.08	
16 2,4,6-Trinitrotoluene	1	11.249	11.201	0.048	47297	0.2000	0.2318	
17 4-Amino-2,6-dinitrotoluene	1	11.416	11.361	0.055	30053	0.2000	0.1750	
18 2-Amino-4,6-dinitrotoluene	1	11.703	11.648	0.055	39362	0.2000	0.1941	
19 2,6-Dinitrotoluene	1	11.836	11.788	0.048	31615	0.2000	0.2115	
20 2,4-Dinitrotoluene	1	12.036	11.988	0.048	62168	0.2000	0.2048	
21 o-Nitrotoluene	1	12.849	12.801	0.048	21928	0.2000	0.1624	
22 p-Nitrotoluene	1	13.276	13.234	0.042	18959	0.2000	0.1678	
23 m-Nitrotoluene	1	13.863	13.821	0.042	26014	0.2000	0.1819	
24 PETN	2	14.929	14.888	0.041	163025	2.00	2.07	

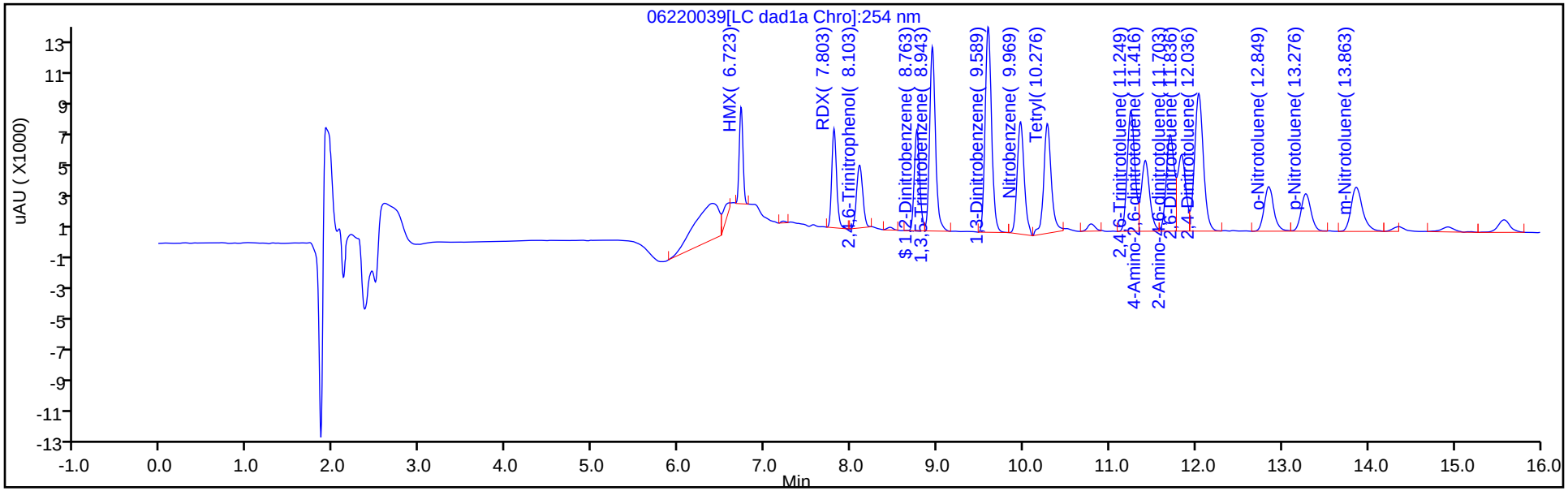
Report Date: 23-Jun-2020 15:18:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

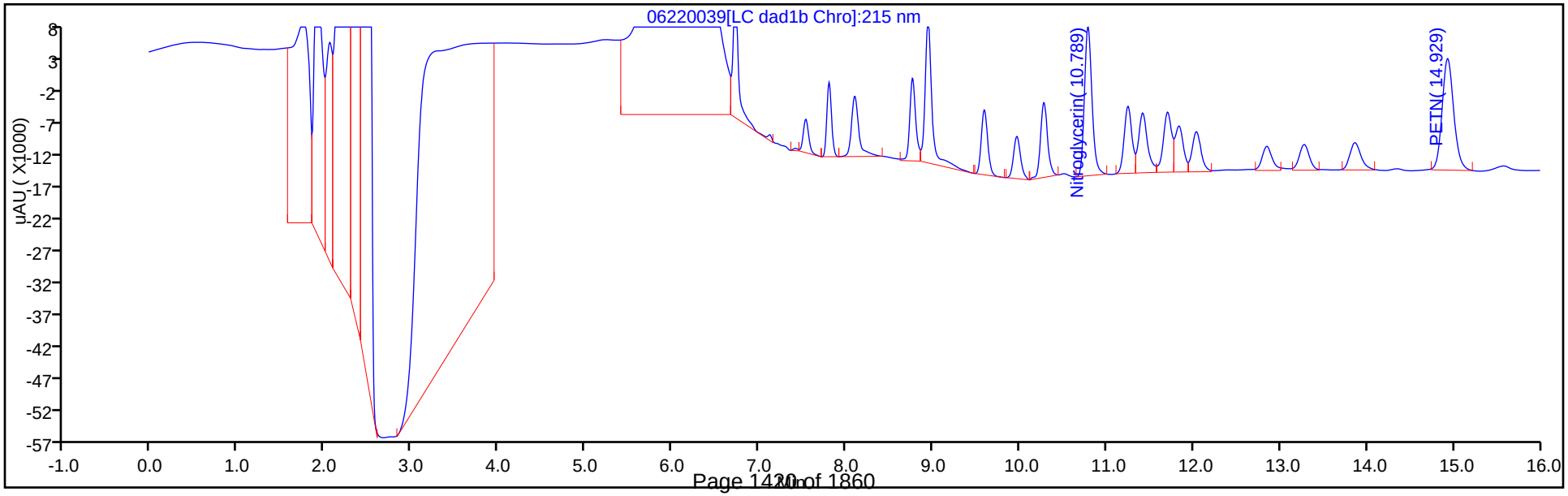
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220039.d

Injection Date:	23-Jun-2020 02:23:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-499107/2-A			Worklist Smp#:	39
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220039.D
Lims ID: LCS 280-499107/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Jun-2020 02:23:02 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-499107/2
Misc. Info.: 280-0092608-039
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:47:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2025	101.23

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499107/3-A

Matrix: Water Lab File ID: 06220040.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 500(mL) Date Analyzed: 06/23/2020 02:46

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.06	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220040.D
Lims ID: LCS 280-499107/3-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Jun-2020 02:46:01 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-499107/3
Misc. Info.: 280-0092608-040
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:47:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.630	6.629	0.001	39528	0.2002	0.1816	M
5 DNX	1	6.950	6.949	0.001	29376	0.2002	0.1921	M
6 MNX	1	7.397	7.396	0.001	32584	0.2334	0.2055	M
$ 9 1,2-Dinitrobenzene	1	8.764	8.741	0.023	28223	0.2000	0.2042	

QC Flag Legend

Review Flags
M - Manually Integrated

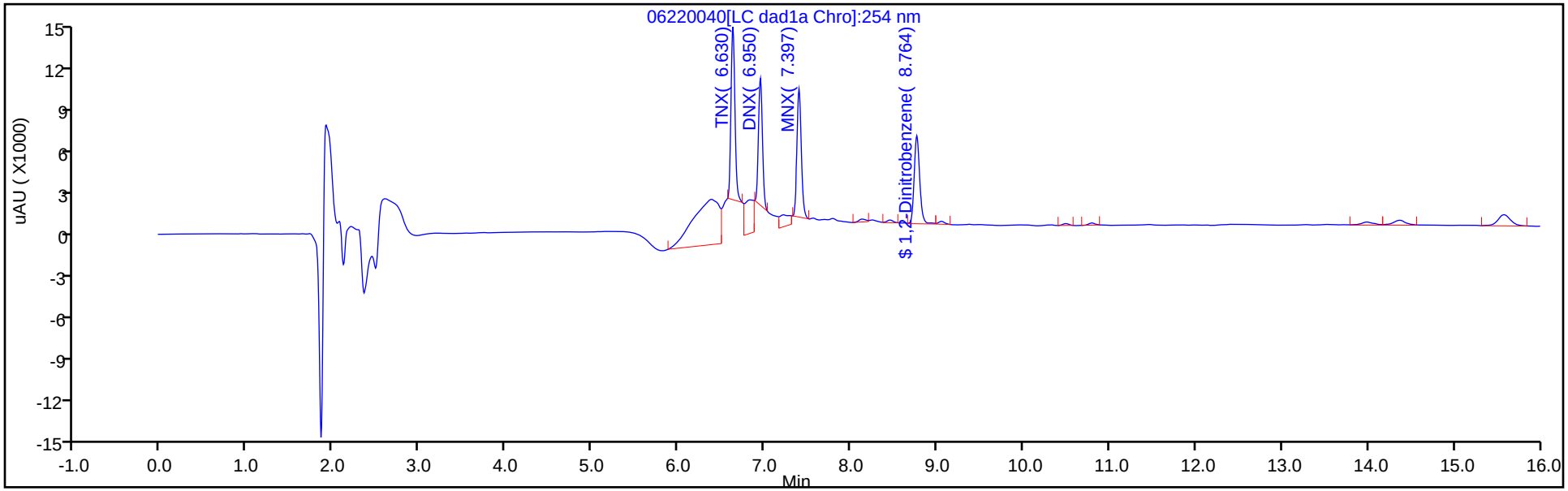
Report Date: 23-Jun-2020 15:18:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

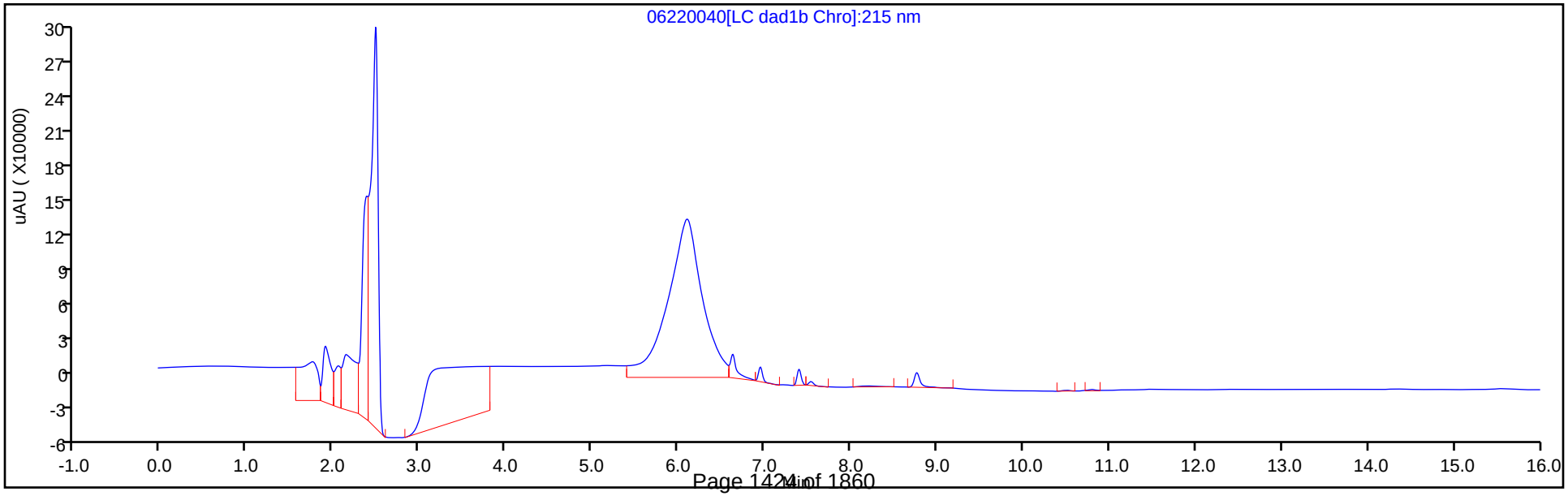
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220040.d

Injection Date:	23-Jun-2020 02:46:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-499107/3-A			Worklist Smp#:	40
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220040.D
Lims ID: LCS 280-499107/3-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Jun-2020 02:46:01 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-499107/3
Misc. Info.: 280-0092608-040
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 15:18:07 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:47:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2042	102.10

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

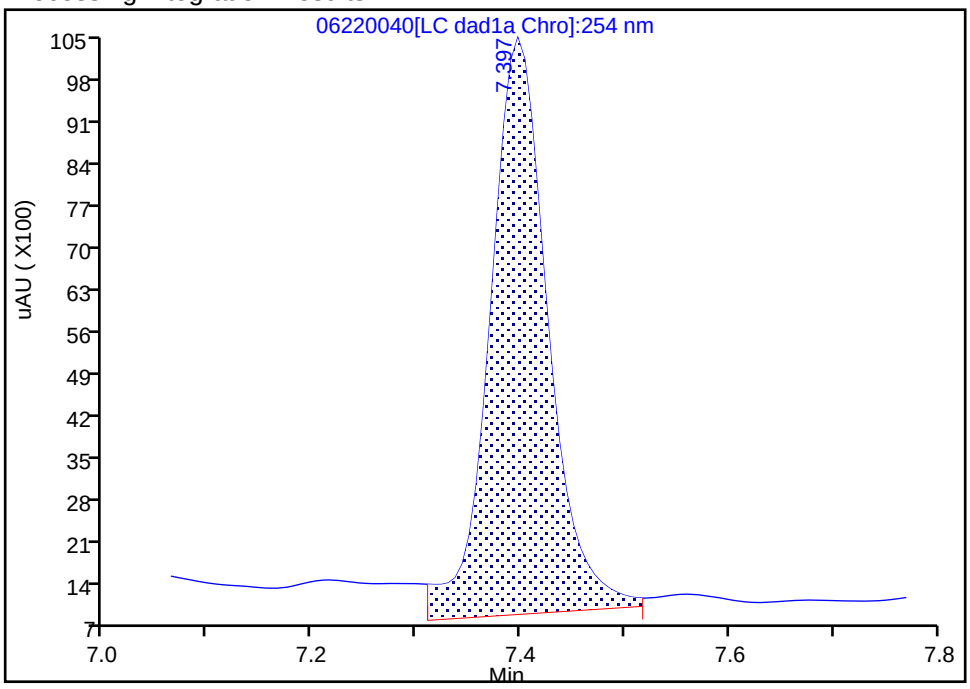
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220040.d				
Injection Date:	23-Jun-2020 02:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-499107/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

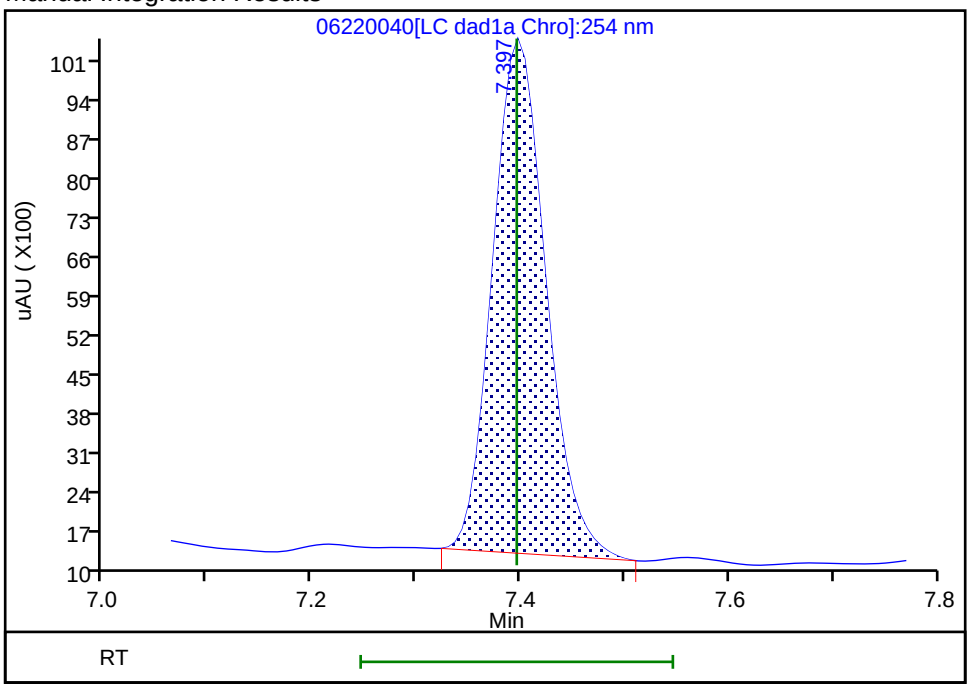
Processing Integration Results

RT: 7.40
Area: 37215
Amount: 0.234729
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 32584
Amount: 0.205520
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:47:56

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499027/3-A

Matrix: Water Lab File ID: 06220012.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 500(mL) Date Analyzed: 06/22/2020 16:02

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.30		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.17		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.20		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.05		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.06		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.99		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.81		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.97		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.80		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.87		0.41	0.40	0.10
2691-41-0	HMX	2.02	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	2.09	M	0.21	0.20	0.091
121-82-4	RDX	2.00		0.21	0.20	0.052
479-45-8	Tetryl	2.05		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220012.D
Lims ID: LCSD 280-499027/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 22-Jun-2020 16:02:03 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-499027/
Misc. Info.: 280-0092608-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 23-Jun-2020 16:07:55 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1017

First Level Reviewer: zhangji Date: 23-Jun-2020 14:11:31

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.723	6.734	-0.011	17378	0.2000	0.2022	M
	7 RDX	1	7.797	7.801	-0.004	23281	0.2000	0.1996	
	8 2,4,6-Trinitrophenol	1	8.083	8.094	-0.011	20264	0.2000	0.2380	
$	9 1,2-Dinitrobenzene	1	8.750	8.741	0.009	29296	0.2000	0.2120	
	10 1,3,5-Trinitrobenzene	1	8.930	8.928	0.002	53081	0.2000	0.2305	
	11 1,3-Dinitrobenzene	1	9.570	9.568	0.002	66688	0.2000	0.2174	
	12 Nitrobenzene	1	9.937	9.941	-0.004	41937	0.2000	0.2093	M
	14 Tetryl	1	10.237	10.234	0.003	36315	0.2000	0.2051	
	15 Nitroglycerin	2	10.743	10.748	-0.005	134725	2.00	1.98	
	16 2,4,6-Trinitrotoluene	1	11.197	11.201	-0.004	44971	0.2000	0.2204	
	17 4-Amino-2,6-dinitrotoluene	1	11.357	11.361	-0.004	30941	0.2000	0.1800	
	18 2-Amino-4,6-dinitrotoluene	1	11.643	11.648	-0.005	40324	0.2000	0.1988	
	19 2,6-Dinitrotoluene	1	11.783	11.788	-0.005	30854	0.2000	0.2064	
	20 2,4-Dinitrotoluene	1	11.983	11.988	-0.005	62174	0.2000	0.2048	
	21 o-Nitrotoluene	1	12.797	12.801	-0.004	24510	0.2000	0.1815	
	22 p-Nitrotoluene	1	13.223	13.234	-0.011	21184	0.2000	0.1875	
	23 m-Nitrotoluene	1	13.810	13.821	-0.011	28167	0.2000	0.1969	
	24 PETN	2	14.870	14.888	-0.018	157116	2.00	2.00	

QC Flag Legend

Review Flags
M - Manually Integrated

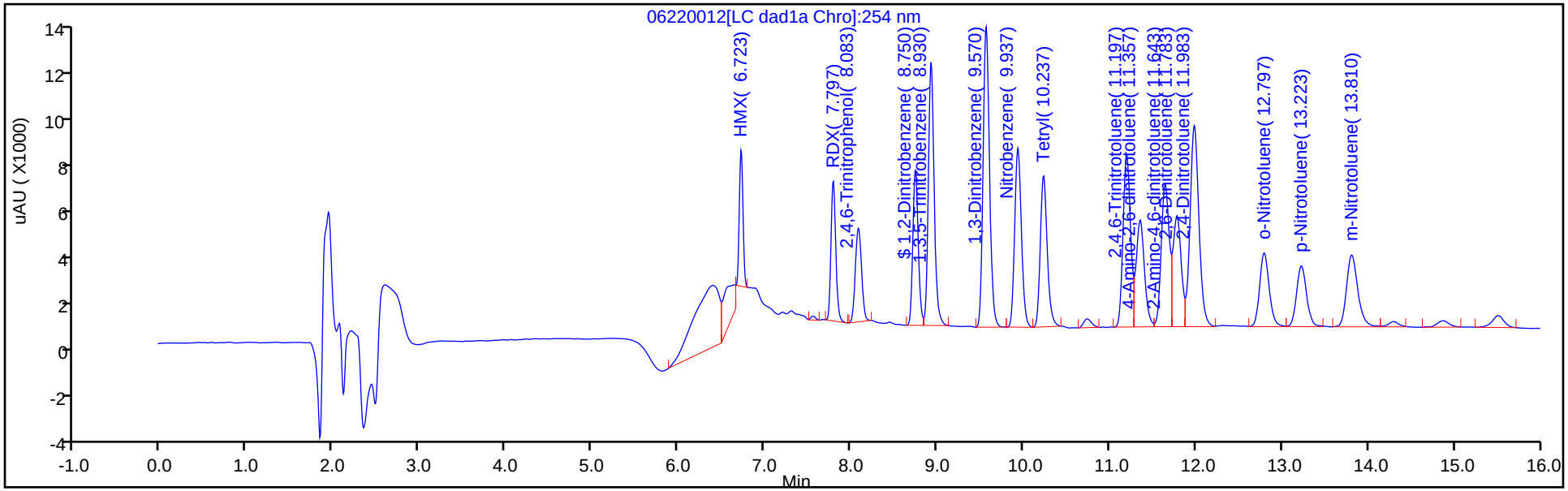
Report Date: 23-Jun-2020 16:07:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

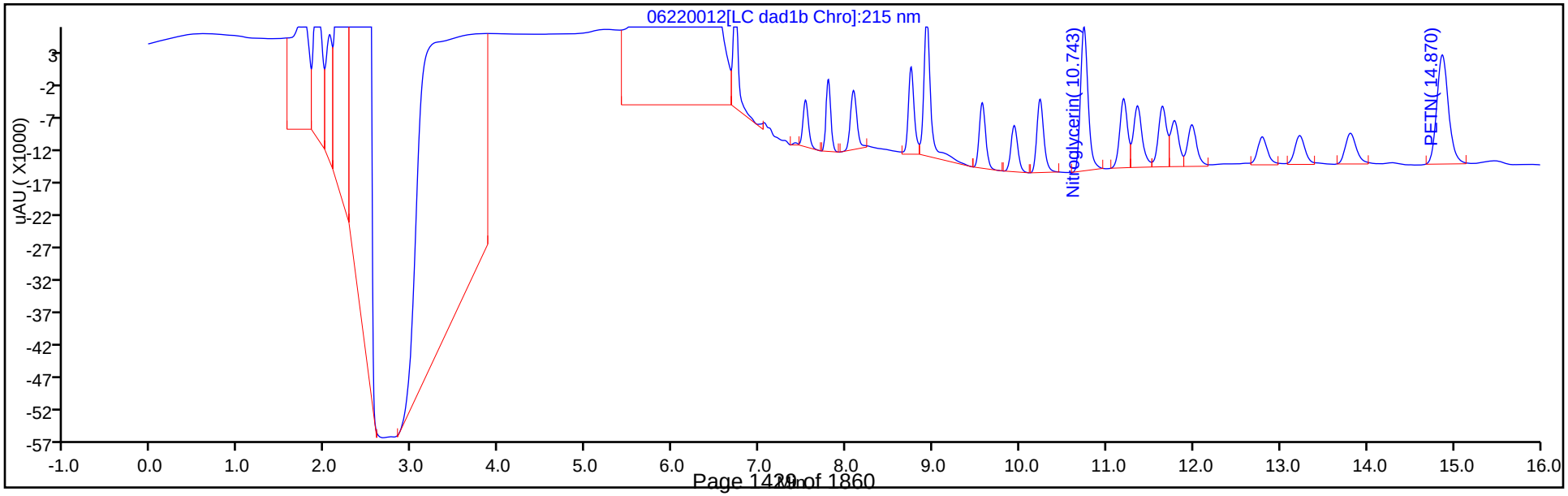
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220012.d

Injection Date:	22-Jun-2020 16:02:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCSD 280-499027/3-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\20200620-92608.b\06220012.D				
Lims ID:	LCSD 280-499027/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	22-Jun-2020 16:02:03	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-499027/				
Misc. Info.:	280-0092608-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 16:07:55	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:11:31		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2120	105.98

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

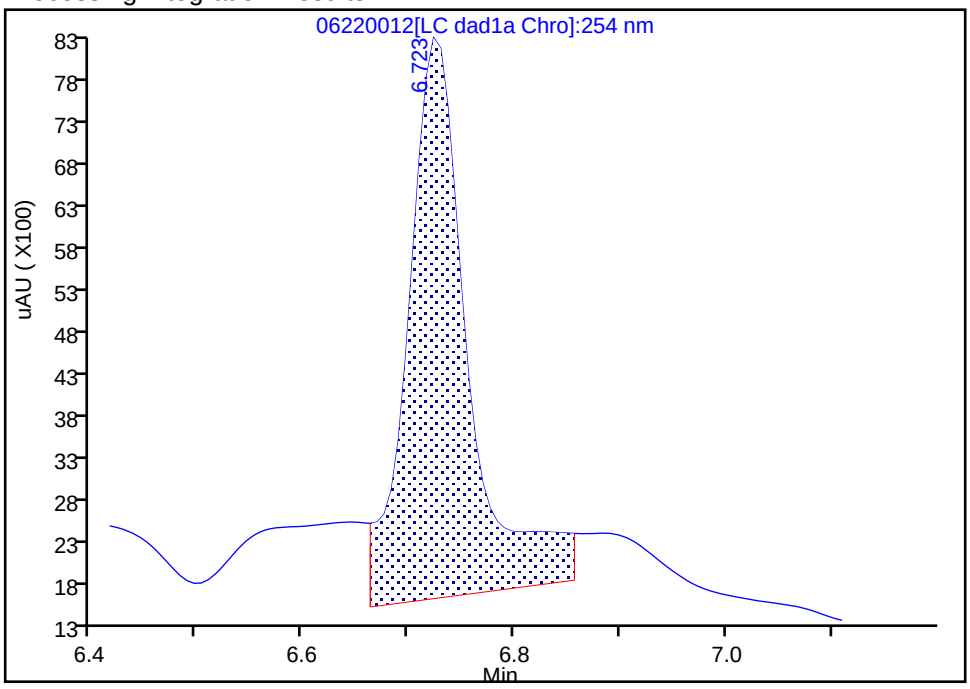
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220012.d				
Injection Date:	22-Jun-2020 16:02:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

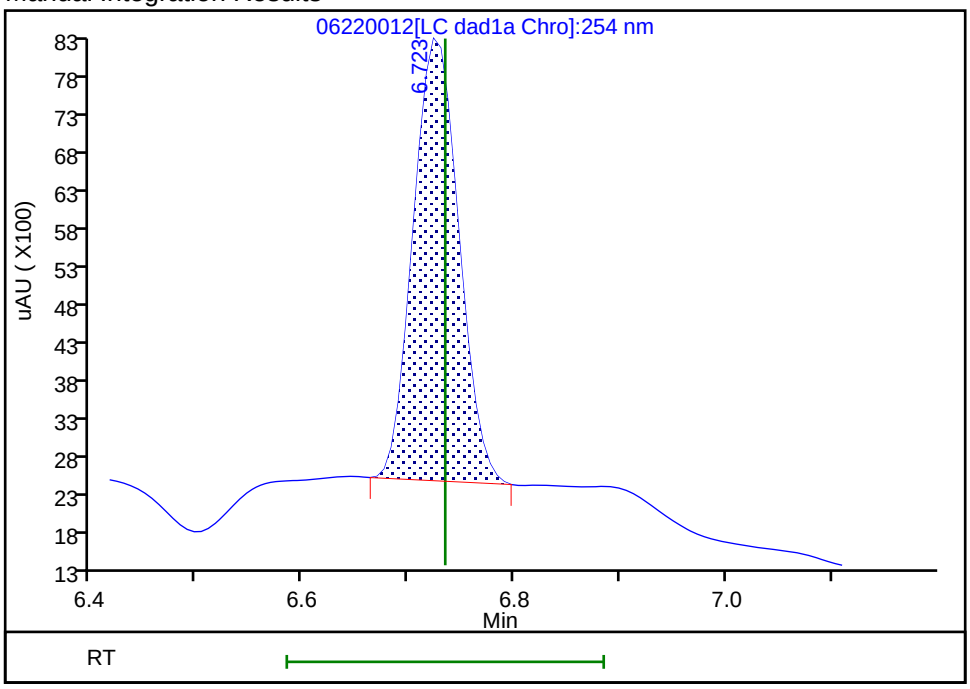
Processing Integration Results

RT: 6.72
Area: 26298
Amount: 0.305925
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 17378
Amount: 0.202159
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 16:07:52

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

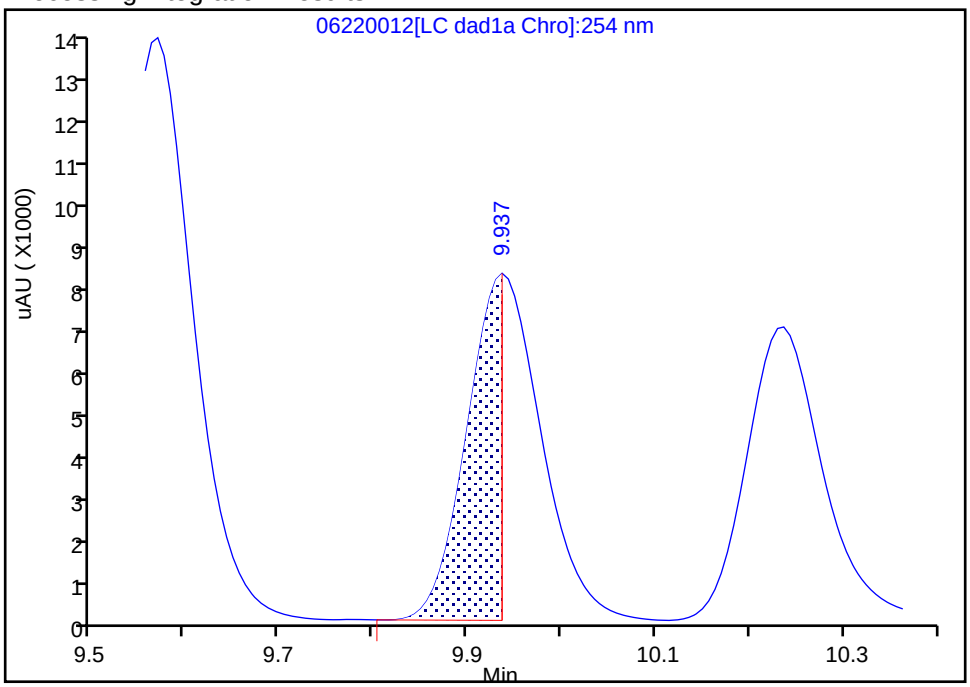
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220012.d				
Injection Date:	22-Jun-2020 16:02:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

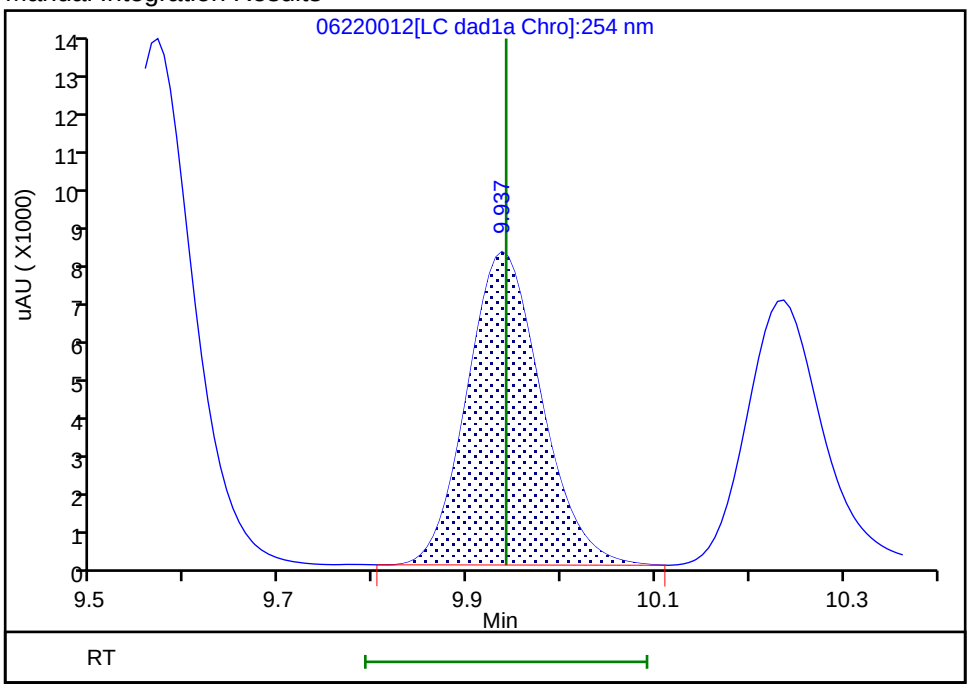
Processing Integration Results

RT: 9.94
Area: 19525
Amount: 0.097429
Amount Units: ug/mL



Manual Integration Results

RT: 9.94
Area: 41937
Amount: 0.209264
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:11:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499027/5-A

Matrix: Water Lab File ID: 06220014.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 500(mL) Date Analyzed: 06/22/2020 16:48

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.06	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220014.D				
Lims ID:	LCSD 280-499027/5-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	22-Jun-2020 16:48:01	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-499027/				
Misc. Info.:	280-0092608-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:17:55	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:12:14		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.627	6.629	-0.002	41905	0.2002	0.1926	M
5 DNX	1	6.947	6.949	-0.002	30109	0.2002	0.1969	M
6 MNX	1	7.394	7.396	-0.002	32639	0.2334	0.2059	M
$ 9 1,2-Dinitrobenzene	1	8.754	8.741	0.013	29199	0.2000	0.2113	M

QC Flag Legend

Review Flags

M - Manually Integrated

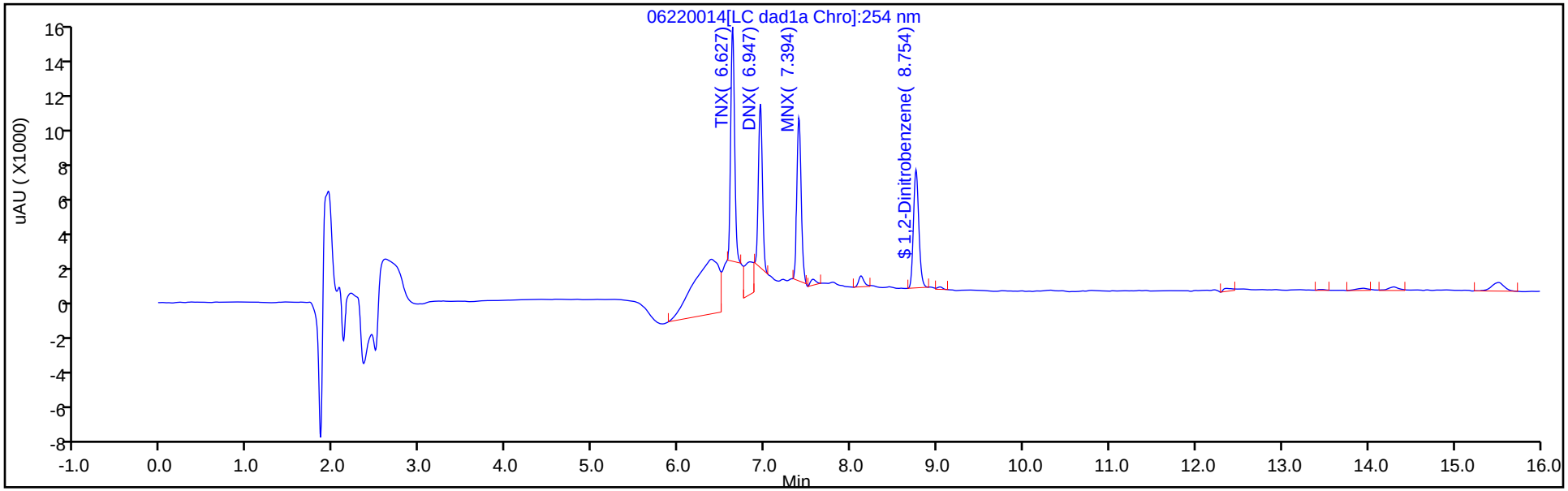
Report Date: 23-Jun-2020 15:17:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

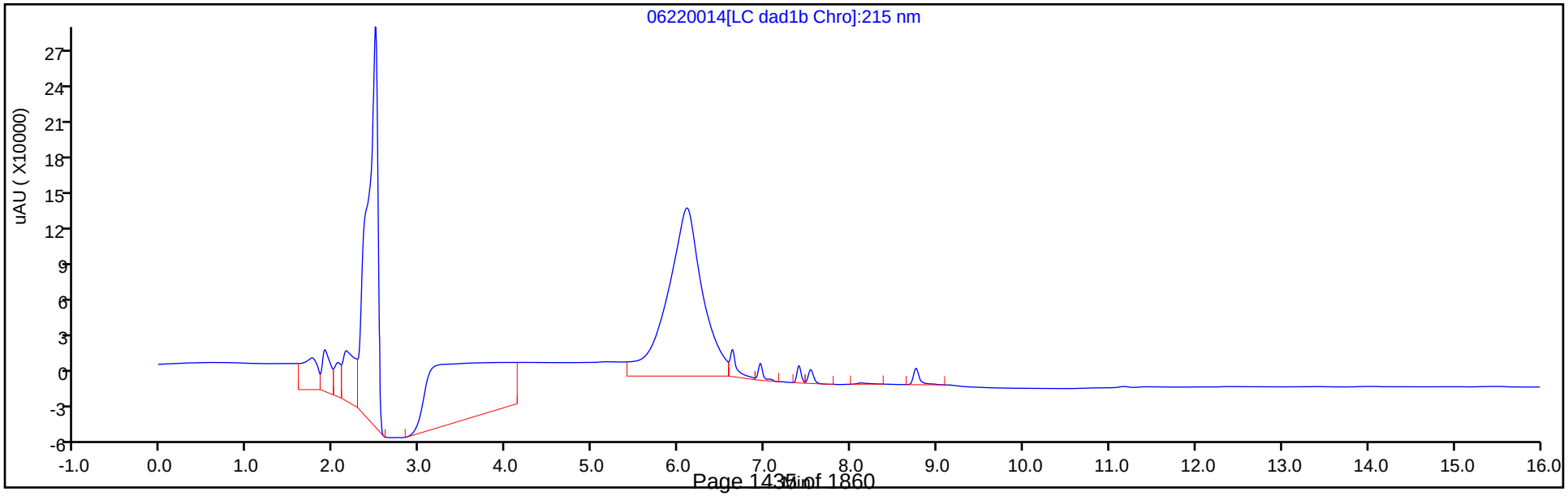
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220014.d

Injection Date:	22-Jun-2020 16:48:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCSD 280-499027/5-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220014.D				
Lims ID:	LCSD 280-499027/5-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	22-Jun-2020 16:48:01	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-499027/				
Misc. Info.:	280-0092608-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	23-Jun-2020 15:17:55	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1017				
First Level Reviewer: zhangji		Date:	23-Jun-2020 14:12:14		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2113	105.63

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

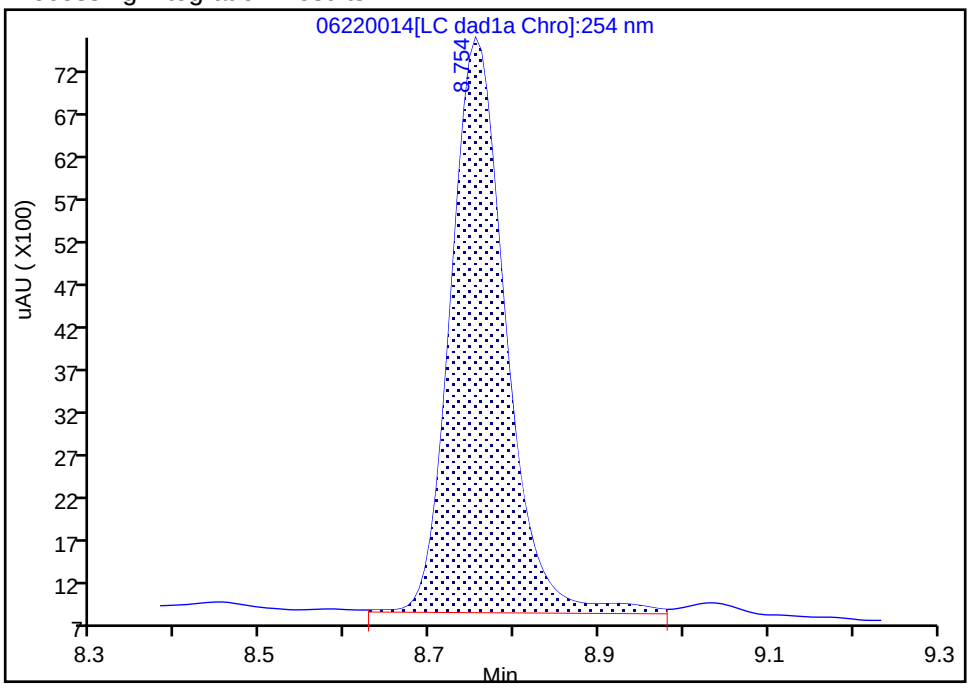
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220014.d				
Injection Date:	22-Jun-2020 16:48:01	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/5-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

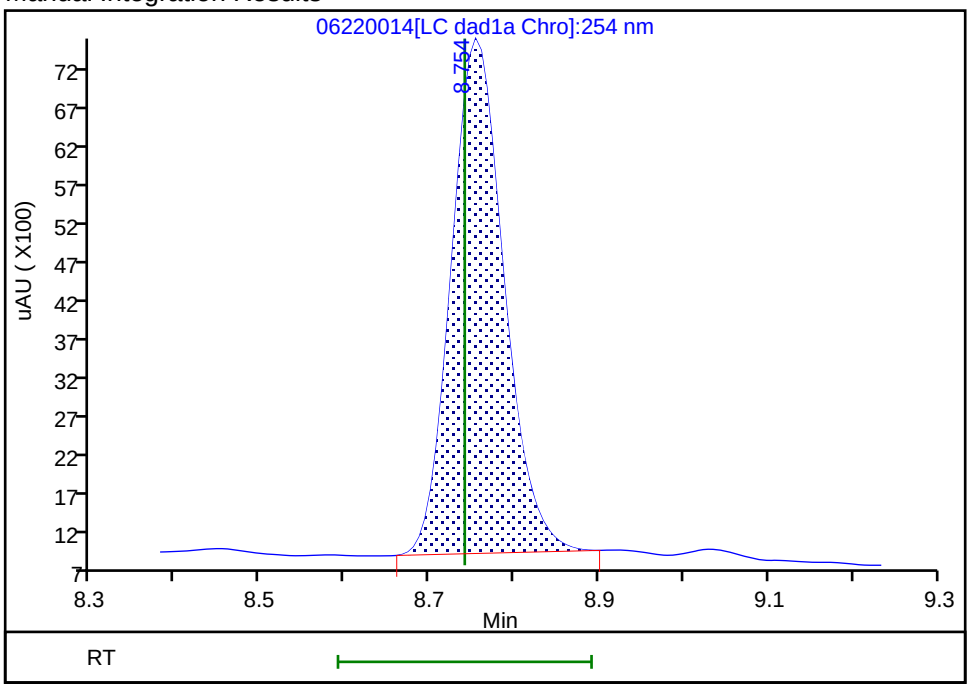
Processing Integration Results

RT: 8.75
Area: 30742
Amount: 0.222426
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 29199
Amount: 0.211262
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:12:12

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

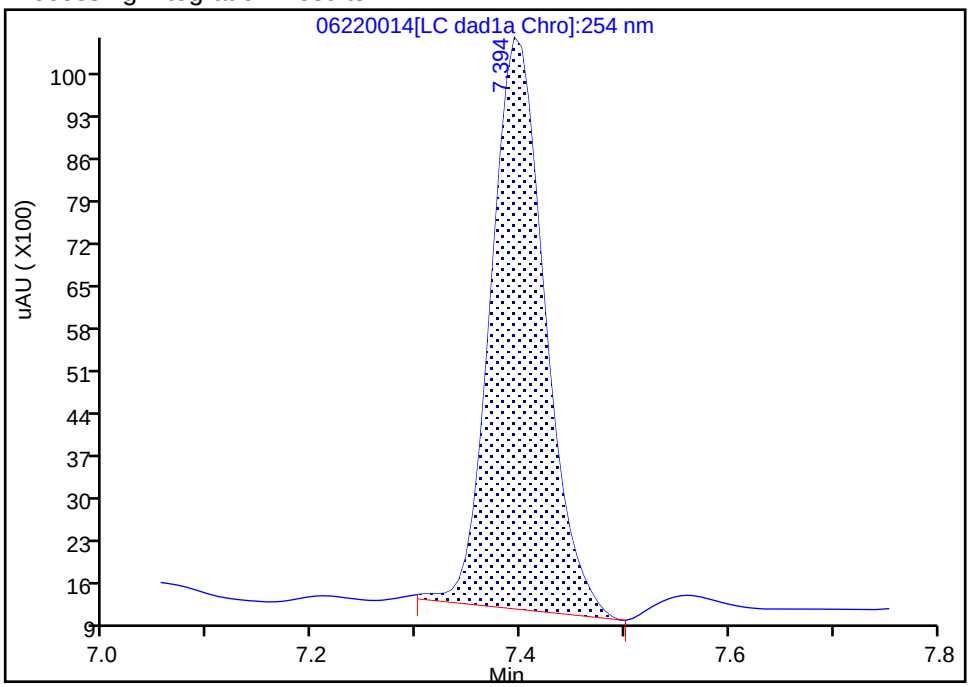
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220014.d
Injection Date: 22-Jun-2020 16:48:01 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-499027/5-A
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

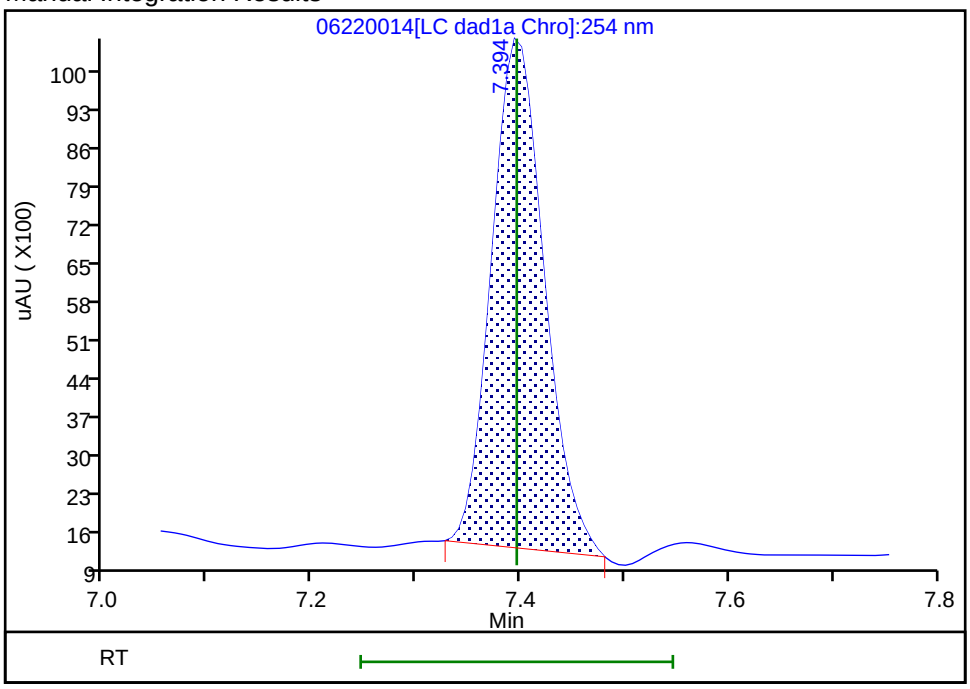
Processing Integration Results

RT: 7.39
Area: 34038
Amount: 0.214691
Amount Units: ug/mL



Manual Integration Results

RT: 7.39
Area: 32639
Amount: 0.205867
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:12:06
Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/04/2020 14:07

Analysis Batch Number: 487658 End Date: 03/05/2020 00:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-487658/7		03/04/2020 14:07	1	03040007.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/8		03/04/2020 14:30	1	03040008.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/9		03/04/2020 14:53	1	03040009.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/10		03/04/2020 15:16	1	03040010.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/11		03/04/2020 15:39	1	03040011.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/12		03/04/2020 16:01	1	03040012.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/13		03/04/2020 16:24	1	03040013.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/14		03/04/2020 16:47	1	03040014.D	UltraCarb5uODS 4.6(mm)
ICV 280-487658/15		03/04/2020 17:10	1	03040015.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/16		03/04/2020 17:33	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/17		03/04/2020 17:56	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/18		03/04/2020 18:19	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/19		03/04/2020 18:42	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/20		03/04/2020 19:05	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/21		03/04/2020 19:28	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/22		03/04/2020 19:51	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/23		03/04/2020 20:14	1		UltraCarb5uODS 4.6(mm)
ICV 280-487658/24		03/04/2020 20:37	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/25		03/04/2020 21:00	1	03040025.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/26		03/04/2020 21:23	1	03040026.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/27		03/04/2020 21:45	1	03040027.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/28		03/04/2020 22:09	1	03040028.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/29		03/04/2020 22:31	1	03040029.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/30		03/04/2020 22:54	1	03040030.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/31		03/04/2020 23:17	1	03040031.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/32		03/04/2020 23:40	1	03040032.D	UltraCarb5uODS 4.6(mm)
ICV 280-487658/33		03/05/2020 00:03	1	03040033.D	UltraCarb5uODS 4.6(mm)

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HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/18/2020 11:35

Analysis Batch Number: 489145 End Date: 03/18/2020 15:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-489145/7		03/18/2020 11:35	1	03180007.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/8		03/18/2020 11:58	1	03180008.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/9		03/18/2020 12:21	1	03180009.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/10		03/18/2020 12:44	1	03180010.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/11		03/18/2020 13:07	1	03180011.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/12		03/18/2020 13:30	1	03180012.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/13		03/18/2020 13:53	1	03180013.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/14		03/18/2020 14:16	1	03180014.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/15		03/18/2020 14:39	1	03180015.D	UltraCarb5uODS 4.6(mm)
ICV 280-489145/16		03/18/2020 15:02	1	03180016.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/14/2020 16:16

Analysis Batch Number: 494886 End Date: 05/15/2020 20:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-494886/7		05/14/2020 16:16	1	05140007.D	Luna-phenylhex 4.6(mm)
IC 280-494886/8		05/14/2020 16:51	1	05140008.D	Luna-phenylhex 4.6(mm)
IC 280-494886/9		05/14/2020 17:26	1	05140009.D	Luna-phenylhex 4.6(mm)
IC 280-494886/10		05/14/2020 18:01	1	05140010.D	Luna-phenylhex 4.6(mm)
IC 280-494886/11		05/14/2020 18:36	1	05140011.D	Luna-phenylhex 4.6(mm)
IC 280-494886/12		05/14/2020 19:11	1	05140012.D	Luna-phenylhex 4.6(mm)
IC 280-494886/13		05/14/2020 19:46	1	05140013.D	Luna-phenylhex 4.6(mm)
IC 280-494886/14		05/14/2020 20:21	1	05140014.D	Luna-phenylhex 4.6(mm)
IC 280-494886/15		05/14/2020 20:56	1	05140015.D	Luna-phenylhex 4.6(mm)
ICV 280-494886/16		05/14/2020 21:31	1	05140016.D	Luna-phenylhex 4.6(mm)
IC 280-494886/17		05/14/2020 22:06	1	05140017.D	Luna-phenylhex 4.6(mm)
IC 280-494886/18		05/14/2020 22:41	1	05140018.D	Luna-phenylhex 4.6(mm)
IC 280-494886/19		05/14/2020 23:16	1	05140019.D	Luna-phenylhex 4.6(mm)
IC 280-494886/20		05/14/2020 23:51	1	05140020.D	Luna-phenylhex 4.6(mm)
IC 280-494886/21		05/15/2020 00:26	1	05140021.D	Luna-phenylhex 4.6(mm)
IC 280-494886/22		05/15/2020 01:01	1	05140022.D	Luna-phenylhex 4.6(mm)
IC 280-494886/23		05/15/2020 01:36	1	05140023.D	Luna-phenylhex 4.6(mm)
IC 280-494886/24		05/15/2020 02:11	1	05140024.D	Luna-phenylhex 4.6(mm)
IC 280-494886/25		05/15/2020 02:46	1		Luna-phenylhex 4.6(mm)
ICV 280-494886/26		05/15/2020 03:21	1	05140026.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 03:56	50		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 04:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 05:06	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/30		05/15/2020 05:41	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/31		05/15/2020 06:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 06:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 07:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 08:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 08:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 09:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 09:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 10:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 10:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 11:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 12:06	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/42		05/15/2020 12:40	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/43		05/15/2020 13:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 13:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 14:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 15:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 15:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 16:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 16:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 17:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 17:55	1		Luna-phenylhex 4.6(mm)

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HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/14/2020 16:16

Analysis Batch Number: 494886 End Date: 05/15/2020 20:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/15/2020 18:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 19:05	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/54		05/15/2020 19:40	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/55		05/15/2020 20:15	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/22/2020 14:07

Analysis Batch Number: 499531 End Date: 06/23/2020 01:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-499531/7		06/22/2020 14:07	1	06220007.D	UltraCarb5uODS 4.6(mm)
CCV 280-499531/8		06/22/2020 14:30	1		UltraCarb5uODS 4.6(mm)
CCV 280-499531/9		06/22/2020 14:53	1	06220009.D	UltraCarb5uODS 4.6(mm)
MB 280-499027/1-A		06/22/2020 15:16	1	06220010.D	UltraCarb5uODS 4.6(mm)
LCS 280-499027/2-A		06/22/2020 15:39	1	06220011.D	UltraCarb5uODS 4.6(mm)
LCSD 280-499027/3-A		06/22/2020 16:02	1	06220012.D	UltraCarb5uODS 4.6(mm)
LCS 280-499027/4-A		06/22/2020 16:25	1	06220013.D	UltraCarb5uODS 4.6(mm)
LCSD 280-499027/5-A		06/22/2020 16:48	1	06220014.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 17:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 17:34	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 17:56	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 18:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 18:42	1		UltraCarb5uODS 4.6(mm)
CCV 280-499531/20		06/22/2020 19:05	1	06220020.D	UltraCarb5uODS 4.6(mm)
CCV 280-499531/21		06/22/2020 19:28	1	06220021.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 19:51	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 20:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 20:37	1		UltraCarb5uODS 4.6(mm)
280-137609-24		06/22/2020 21:00	1	06220025.D	UltraCarb5uODS 4.6(mm)
280-137609-25		06/22/2020 21:23	1	06220026.D	UltraCarb5uODS 4.6(mm)
280-137609-26		06/22/2020 21:46	1	06220027.D	UltraCarb5uODS 4.6(mm)
280-137609-27		06/22/2020 22:09	1	06220028.D	UltraCarb5uODS 4.6(mm)
280-137609-28		06/22/2020 22:32	1	06220029.D	UltraCarb5uODS 4.6(mm)
280-137609-29		06/22/2020 22:55	1	06220030.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 23:18	1		UltraCarb5uODS 4.6(mm)
CCV 280-499531/32		06/22/2020 23:41	1	06220032.D	UltraCarb5uODS 4.6(mm)
CCV 280-499531/33		06/23/2020 00:04	1	06220033.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 00:27	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 00:50	1		UltraCarb5uODS 4.6(mm)
CCV 280-499531/36		06/23/2020 01:13	1		UltraCarb5uODS 4.6(mm)
CCV 280-499531/37		06/23/2020 01:37	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/23/2020 01:13

Analysis Batch Number: 499532 End Date: 06/23/2020 11:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-499532/36		06/23/2020 01:13	1	06220036.D	UltraCarb5uODS 4.6(mm)
CCV 280-499532/37		06/23/2020 01:37	1	06220037.D	UltraCarb5uODS 4.6(mm)
MB 280-499107/1-A		06/23/2020 02:00	1	06220038.D	UltraCarb5uODS 4.6(mm)
LCS 280-499107/2-A		06/23/2020 02:23	1	06220039.D	UltraCarb5uODS 4.6(mm)
LCS 280-499107/3-A		06/23/2020 02:46	1	06220040.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 03:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 03:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 03:55	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 04:18	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 04:41	1		UltraCarb5uODS 4.6(mm)
CCV 280-499532/46		06/23/2020 05:04	1	06220046.D	UltraCarb5uODS 4.6(mm)
CCV 280-499532/47		06/23/2020 05:27	1	06220047.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 05:50	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 06:13	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 06:36	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 06:59	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 07:22	1		UltraCarb5uODS 4.6(mm)
CCV 280-499532/53		06/23/2020 07:45	1	06220053.D	UltraCarb5uODS 4.6(mm)
CCV 280-499532/54		06/23/2020 08:08	1	06220054.D	UltraCarb5uODS 4.6(mm)
280-137609-16		06/23/2020 08:31	1	06220055.D	UltraCarb5uODS 4.6(mm)
280-137609-17		06/23/2020 08:54	1	06220056.D	UltraCarb5uODS 4.6(mm)
280-137609-18		06/23/2020 09:17	1	06220057.D	UltraCarb5uODS 4.6(mm)
280-137609-19		06/23/2020 09:40	1	06220058.D	UltraCarb5uODS 4.6(mm)
280-137609-20		06/23/2020 10:03	1	06220059.D	UltraCarb5uODS 4.6(mm)
280-137609-21		06/23/2020 10:26	1	06220060.D	UltraCarb5uODS 4.6(mm)
280-137609-22		06/23/2020 10:49	1	06220061.D	UltraCarb5uODS 4.6(mm)
280-137609-23		06/23/2020 11:12	1	06220062.D	UltraCarb5uODS 4.6(mm)
CCV 280-499532/63		06/23/2020 11:35	1	06220063.D	UltraCarb5uODS 4.6(mm)
CCV 280-499532/64		06/23/2020 11:58	1	06220064.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 06/24/2020 04:51

Analysis Batch Number: 499860 End Date: 06/24/2020 18:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-499860/22		06/24/2020 04:51	1		Luna-phenylhex 4.6(mm)
CCV 280-499860/23		06/24/2020 05:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 06:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 06:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 07:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 07:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 08:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 08:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 09:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 10:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 10:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 11:16	1		Luna-phenylhex 4.6(mm)
CCV 280-499860/34		06/24/2020 11:51	1	06230034.D	Luna-phenylhex 4.6(mm)
CCV 280-499860/35		06/24/2020 12:26	1	06230035.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 13:01	1		Luna-phenylhex 4.6(mm)
280-137609-24		06/24/2020 13:36	1	06230037.D	Luna-phenylhex 4.6(mm)
280-137609-26		06/24/2020 14:11	1	06230038.D	Luna-phenylhex 4.6(mm)
280-137609-27		06/24/2020 14:45	1	06230039.D	Luna-phenylhex 4.6(mm)
280-137609-29		06/24/2020 15:20	1	06230040.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 15:55	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 16:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 17:05	1		Luna-phenylhex 4.6(mm)
CCV 280-499860/44		06/24/2020 17:40	1	06230044.D	Luna-phenylhex 4.6(mm)
CCV 280-499860/45		06/24/2020 18:15	1	06230045.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 06/24/2020 21:56

Analysis Batch Number: 500016 End Date: 06/25/2020 10:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-500016/7		06/24/2020 21:56	1		Luna-phenylhex 4.6(mm)
CCV 280-500016/8		06/24/2020 22:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 23:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 23:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 00:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 00:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 01:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 02:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 02:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 03:11	1		Luna-phenylhex 4.6(mm)
CCV 280-500016/17		06/25/2020 03:46	1	06240017.D	Luna-phenylhex 4.6(mm)
CCV 280-500016/18		06/25/2020 04:21	1	06240018.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 04:55	10		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 05:30	10		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 06:05	10		Luna-phenylhex 4.6(mm)
280-137609-16		06/25/2020 06:40	1	06240022.D	Luna-phenylhex 4.6(mm)
280-137609-17		06/25/2020 07:15	1	06240023.D	Luna-phenylhex 4.6(mm)
280-137609-20		06/25/2020 07:50	1	06240024.D	Luna-phenylhex 4.6(mm)
280-137609-21		06/25/2020 08:25	1	06240025.D	Luna-phenylhex 4.6(mm)
280-137609-22		06/25/2020 09:00	1	06240026.D	Luna-phenylhex 4.6(mm)
280-137609-23		06/25/2020 09:34	1	06240027.D	Luna-phenylhex 4.6(mm)
CCV 280-500016/28		06/25/2020 10:10	1	06240028.D	Luna-phenylhex 4.6(mm)
CCV 280-500016/29		06/25/2020 10:45	1	06240029.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499027 Batch Start Date: 06/17/20 09:26 Batch Analyst: Adams, Marisa L

Batch Method: 3535 Batch End Date: 06/17/20 11:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00099	8330_OP_DMT 00008
MB 280-499027/1		3535, 8330A				500 mL	5 mL		
LCS 280-499027/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCSD 280-499027/3		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-499027/4		3535, 8330A				500 mL	5 mL		0.1 mL
LCSD 280-499027/5		3535, 8330A				500 mL	5 mL		0.1 mL
280-137609-A-24	G0103-20A	3535, 8330A	T	731.2 g	251.7 g	479.5 mL	5 mL		
280-137609-B-25	G0107-20A	3535, 8330A	T	727.7 g	249.0 g	478.7 mL	5 mL		
280-137609-A-26	G0116-20A	3535, 8330A	T	725.2 g	255.0 g	470.2 mL	5 mL		
280-137609-A-27	G0120-20A	3535, 8330A	T	727.2 g	249.5 g	477.7 mL	5 mL		
280-137609-A-28	G0106-20A	3535, 8330A	T	734.8 g	250.1 g	484.7 mL	5 mL		
280-137609-A-29	G0095-20A	3535, 8330A	T	724.6 g	255.2 g	469.4 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00113	AnalysisComment				
MB 280-499027/1		3535, 8330A		0.1 mL					
LCS 280-499027/2		3535, 8330A		0.1 mL	8330				
LCSD 280-499027/3		3535, 8330A		0.1 mL	8330				
LCS 280-499027/4		3535, 8330A		0.1 mL	DMT				
LCSD 280-499027/5		3535, 8330A		0.1 mL	DMT				
280-137609-A-24	G0103-20A	3535, 8330A	T	0.1 mL					
280-137609-B-25	G0107-20A	3535, 8330A	T	0.1 mL					
280-137609-A-26	G0116-20A	3535, 8330A	T	0.1 mL					
280-137609-A-27	G0120-20A	3535, 8330A	T	0.1 mL					
280-137609-A-28	G0106-20A	3535, 8330A	T	0.1 mL					
280-137609-A-29	G0095-20A	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.: 280-137609-2

SDG No.:

Batch Number: 499027 Batch Start Date: 06/17/20 09:26 Batch Analyst: Adams, Marisa L

Batch Method: 3535 Batch End Date: 06/17/20 11:25

Batch Notes	
Acid ID	CaCl2_Sol_00071
Acid Name	CaCl2
Balance ID	24350888
Batch Comment	DV-OP-0017 Mantel:A/B
First End time	06/17/2020 11:03
Pipette/Syringe/Dispenser ID	Jiji, DOD, Soot
Rinse Solvent Lot	0.1%AAinACN_00138
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	ACN_00234
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005130024A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	MA
Analyst ID - Spike Witness Analyst	Reviewer:MB
First Start time	06/17/2020 09:32

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499107 Batch Start Date: 06/17/20 17:11 Batch Analyst: Appenzeller, Kayla S

Batch Method: 3535 Batch End Date: 06/17/20 19:44

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00099	8330_OP_DMT 00008
MB 280-499107/1		3535, 8330A				500 mL	5 mL		
LCS 280-499107/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-499107/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-137609-A-16	G0117-20A	3535, 8330A	T	727.8 g	255.5 g	472.3 mL	5 mL		
280-137609-A-17	PZ013-20A	3535, 8330A	T	711.1 g	249.4 g	461.7 mL	5 mL		
280-137609-A-18	G0104-20A	3535, 8330A	T	720.1 g	249.4 g	470.7 mL	5 mL		
280-137609-A-19	PZ014-20A	3535, 8330A	T	710.3 g	254.8 g	455.5 mL	5 mL		
280-137609-A-20	G0115-20A	3535, 8330A	T	715.5 g	248.6 g	466.9 mL	5 mL		
280-137609-A-21	G0101-20A	3535, 8330A	T	689.1 g	247.5 g	441.6 mL	5 mL		
280-137609-A-22	G0100-20A	3535, 8330A	T	722.6 g	249.8 g	472.8 mL	5 mL		
280-137609-A-23	G0111-20A	3535, 8330A	T	716.8 g	249.2 g	467.6 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00115	AnalysisComment				
MB 280-499107/1		3535, 8330A		0.1 mL					
LCS 280-499107/2		3535, 8330A		0.1 mL					
LCS 280-499107/3		3535, 8330A		0.1 mL					
280-137609-A-16	G0117-20A	3535, 8330A	T	0.1 mL	filtered				
280-137609-A-17	PZ013-20A	3535, 8330A	T	0.1 mL					
280-137609-A-18	G0104-20A	3535, 8330A	T	0.1 mL					
280-137609-A-19	PZ014-20A	3535, 8330A	T	0.1 mL					
280-137609-A-20	G0115-20A	3535, 8330A	T	0.1 mL	filtered				
280-137609-A-21	G0101-20A	3535, 8330A	T	0.1 mL					
280-137609-A-22	G0100-20A	3535, 8330A	T	0.1 mL	filtered				
280-137609-A-23	G0111-20A	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.: 280-137609-2

SDG No.:

Batch Number: 499107 Batch Start Date: 06/17/20 17:11 Batch Analyst: Appenzeller, Kayla S

Batch Method: 3535 Batch End Date: 06/17/20 19:44

Batch Notes	
Acid ID	CaCl2_Sol_00071
Acid Name	CaCl2
Balance ID	24350888
Batch Comment	DV-OP-0017 Mantel:A/B
First End time	06/17/2020 19:25
Pipette/Syringe/Dispenser ID	Jiji, DOD, Soot
Rinse Solvent Lot	0.1%AAinACN_00138
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	ACN_00234
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005130024A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	KA
Analyst ID - Spike Witness Analyst	Reviewer:MJD
First Start time	06/17/2020 17:26

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: 280-137609-2

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
G0117-20A	280-137609-16
PZ013-20A	280-137609-17
G0104-20A	280-137609-18
PZ014-20A	280-137609-19
G0115-20A	280-137609-20
G0101-20A	280-137609-21
G0100-20A	280-137609-22
G0111-20A	280-137609-23
G0103-20A	280-137609-24
G0107-20A	280-137609-25
G0116-20A	280-137609-26
G0120-20A	280-137609-27
G0106-20A	280-137609-28
G0095-20A	280-137609-29

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0117-20A
Lab Sample ID: 280-137609-16
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 11:10
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	9.9	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	9.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	400	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	950	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0117-20A
Lab Sample ID: 280-137609-16
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 11:10
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	13	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ013-20A
Lab Sample ID: 280-137609-17
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 11:30
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.1	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	2.7	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	2.4	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	280	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	780	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ013-20A
Lab Sample ID: 280-137609-17
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 11:30
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	9.8	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0104-20A
Lab Sample ID: 280-137609-18
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 08:25
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.34	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	820	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	470	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0104-20A
Lab Sample ID: 280-137609-18
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 08:25
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.0	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ014-20A
Lab Sample ID: 280-137609-19
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 08:20
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.11	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	480	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	470	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ014-20A
Lab Sample ID: 280-137609-19
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 08:20
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.3	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0115-20A
Lab Sample ID: 280-137609-20
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 13:55
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.7	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	4.3	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	300	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	780	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0115-20A
Lab Sample ID: 280-137609-20
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 13:55
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	16	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0101-20A
Lab Sample ID: 280-137609-21
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 14:25
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.2	0.50	0.25	0.11	mg/L			5	350.1
Nitrogen, Total Kjeldahl	2.1	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.13	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	560	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	760	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0101-20A
Lab Sample ID: 280-137609-21
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 14:25
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	10	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0100-20A
Lab Sample ID: 280-137609-22
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 13:05
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.8	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.26	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	290	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	600	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0100-20A
Lab Sample ID: 280-137609-22
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 13:05
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.0	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0111-20A
Lab Sample ID: 280-137609-23
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 12:40
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.39	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	14	0.20	0.10	0.038	mg/L			2	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	370	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	720	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0111-20A
Lab Sample ID: 280-137609-23
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 12:40
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.9	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0103-20A
Lab Sample ID: 280-137609-24
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 16:45
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.7	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.1	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	24	4.0	1.9	0.79	mg/L			1	9034
Sulfate	820	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	460	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0103-20A
Lab Sample ID: 280-137609-24
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 16:45
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	88	2.0	2.0	0.69	mg/L			2	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0107-20A
Lab Sample ID: 280-137609-25
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 14:50
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.25	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.83	1.0	1.0	0.69	mg/L	J	J1	1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1100	50	30	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	390	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0107-20A
Lab Sample ID: 280-137609-25
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 14:50
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.1	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0116-20A
Lab Sample ID: 280-137609-26
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 09:50
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	15	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	15	1.7	1.7	1.1	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	250	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	900	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0116-20A
Lab Sample ID: 280-137609-26
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 09:50
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	23	4.0	4.0	1.4	mg/L			4	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0120-20A
Lab Sample ID: 280-137609-27
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 11:00
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	16	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	15	1.7	1.7	1.1	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	260	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	830	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0120-20A
Lab Sample ID: 280-137609-27
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 11:00
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	25	2.0	2.0	0.69	mg/L			2	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0106-20A
Lab Sample ID: 280-137609-28
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 16:05
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.096	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.1	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.69	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	1100	50	30	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	380	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0106-20A
Lab Sample ID: 280-137609-28
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 16:05
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.9	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0095-20A
Lab Sample ID: 280-137609-29
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 15:10
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.1	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.41	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	340	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	730	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0095-20A
Lab Sample ID: 280-137609-29
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-2
SDG ID.:
Matrix: Water
Date Sampled: 06/12/2020 15:10
Reporting Basis: WET
Date Received: 06/13/2020 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	12	1.0	1.0	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Analyst: BWH Batch Start Date: 06/16/2020

Reporting Units: mg/L Analytical Batch No.: 498989

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
80	CCVL	15:12	Ammonia	0.498	0.500	100	90-110		350.1 cal_00419
81	CCV	15:14	Ammonia	2.56	2.50	102	90-110		350.1 cal_00419
82	CCB	15:16	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.: 280-137609-2

SDG No.:

Analyst: SVC Batch Start Date: 06/19/2020

Reporting Units: mg/L Analytical Batch No.: 499501

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
93	CCV	17:50	Nitrogen, Total Kjeldahl	4.81	5.00	96	90-110		TKN 25ppm_00809
94	CCB	17:51	Nitrogen, Total Kjeldahl	1.0				U	
113	CCV	18:15	Nitrogen, Total Kjeldahl	5.34	5.00	107	90-110		TKN 25ppm_00809
114	CCB	18:16	Nitrogen, Total Kjeldahl	1.0				U	
147	CCV	18:57	Nitrogen, Total Kjeldahl	4.51	5.00	90	90-110		TKN 25ppm_00809
148	CCB	18:59	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.: 280-137609-2

SDG No.:

Analyst: SVC Batch Start Date: 06/18/2020

Reporting Units: mg/L Analytical Batch No.: 499351

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
51	CCV	17:43	Nitrate Nitrite as N	5.08	5.00	102	90-110		NXN CAL INT_00535
67	CCV	18:15	Nitrate Nitrite as N	5.11	5.00	102	90-110		NXN CAL INT_00535
68	CCVL	18:17	Nitrate Nitrite as N	1.04	1.00	104	90-110		NXN CAL INT_00535
69	CCB	18:19	Nitrate Nitrite as N	0.050				U	
83	CCV	18:47	Nitrate Nitrite as N	4.94	5.00	99	90-110		NXN CAL INT_00535
84	CCVL	18:49	Nitrate Nitrite as N	1.01	1.00	101	90-110		NXN CAL INT_00535
85	CCB	18:51	Nitrate Nitrite as N	0.050				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Analyst: JAP Batch Start Date: 06/03/2020

Reporting Units: mg/L Analytical Batch No.: 497179

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	09:53	Sulfate	81.7	80.0	102	90-110		IC SO4 ICV_00021
2	ICB	10:10	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.: 280-137609-2

SDG No.:

Analyst: JAP Batch Start Date: 06/26/2020

Reporting Units: mg/L Analytical Batch No.: 500081

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
41	CCV	02:04	Sulfate	98.1	100	98	90-110		IC LCS_01746
42	CCB	02:20	Sulfate	2.5				U	
47	CCV	03:42	Sulfate	98.4	100	98	90-110		IC LCS_01746
48	CCB	03:59	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.: 280-137609-2

SDG No.:

Analyst: JAP Batch Start Date: 06/27/2020

Reporting Units: mg/L Analytical Batch No.: 500258

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
51	CCV	04:10	Sulfate	103	100	103	90-110		IC LCS_01747
52	CCB	04:27	Sulfate	2.5				U	
56	CCV	05:37	Sulfate	100	100	100	90-110		IC LCS_01747
57	CCB	05:54	Sulfate	2.5				U	
68	CCV	00:14	Sulfate	103	100	103	90-110		IC LCS_01747
69	CCB	00:32	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.: 280-137609-2

SDG No.:

Analyst: SGB Batch Start Date: 06/28/2020

Reporting Units: mg/L Analytical Batch No.: 500423

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
60	CCV	00:12	Dissolved Organic Carbon - Quad	26.7	25.0	107	90-110		TOC LCS Std_00048
61	CCB	00:39	Dissolved Organic Carbon - Quad	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.: 280-137609-2

SDG No.:

Analyst: JMB Batch Start Date: 06/29/2020

Reporting Units: mg/L Analytical Batch No.: 500683

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	16:24	Dissolved Organic Carbon - Quad	20.6	20.0	103	90-110		TOC ICV Std_00043
2	ICB	16:51	Dissolved Organic Carbon - Quad	1.0				U	
27	CCV	02:35	Dissolved Organic Carbon - Quad	26.0	25.0	104	90-110		TOC LCS Std_00048
28	CCB	02:58	Dissolved Organic Carbon - Quad	1.0				U	
39	CCV	07:29	Dissolved Organic Carbon - Quad	26.4	25.0	105	90-110		TOC LCS Std_00048
40	CCB	07:53	Dissolved Organic Carbon - Quad	1.0				U	
51	CCV	12:04	Dissolved Organic Carbon - Quad	26.4	25.0	105	90-110		TOC LCS Std_00048
52	CCB	12:28	Dissolved Organic Carbon - Quad	1.0				U	
56	CCV	14:18	Dissolved Organic Carbon - Quad	26.3	25.0	105	90-110		TOC LCS Std_00048
57	CCB	14:41	Dissolved Organic Carbon - Quad	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.: 280-137609-2

SDG No.:

Analyst: SPG Batch Start Date: 06/16/2020

Reporting Units: mg/L Analytical Batch No.: 499040

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
68	CCV	17:25	Total Alkalinity as CaCO3	188	200	94	90-110		Alk daily lcs 00907
69	CCB	17:30	Total Alkalinity as CaCO3	10				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 499351	Date: 06/18/2020 18:01						
353.2	MB 280-499351/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 499231	Date: 06/18/2020 09:54	Prep Batch: 499227	Date: 06/18/2020 09:51				
9034	MB 280-499227/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 499306	Date: 06/18/2020 14:09	Prep Batch: 499253	Date: 06/18/2020 11:27				
9034	MB 280-499253/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 500258	Date: 06/27/2020 05:19						
9056A	MB 280-500258/55	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 500683	Date: 06/30/2020 05:48						
9060A	MB 280-500528/28-A	Dissolved Organic Carbon - Quad	1.0	U	mg/L	1.0	1
Batch ID: 499040	Date: 06/16/2020 16:13						
SM 2320B	MB 280-499040/58	Total Alkalinity as CaCO3	10	U	mg/L	10	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 499501	Date: 06/19/2020 18:40		Prep Batch: 499167		Date: 06/17/2020 16:38						
351.2	280-137609-25	Nitrogen, Total Kjeldahl	0.83	J	mg/L						J1
351.2	280-137609-25 MS	Nitrogen, Total Kjeldahl	3.57		mg/L	3.00	91	90-110			
Batch ID: 499351	Date: 06/18/2020 18:05										
353.2	280-137609-25	Nitrate Nitrite as N	0.050	U	mg/L						
353.2	280-137609-25 MS	Nitrate Nitrite as N	3.86		mg/L	4.00	97	90-110			
Batch ID: 499306	Date: 06/18/2020 14:09		Prep Batch: 499253		Date: 06/18/2020 11:27						
9034	280-137609-16	Sulfide	1.9	U	mg/L						
9034	280-137609-16 MS	Sulfide	17.6		mg/L	22.2	79	44-110			
Batch ID: 500258	Date: 06/27/2020 23:39										
9056A	280-137609-F-26	Sulfate	270		mg/L						D
9056A	280-137609-F-26 MS	Sulfate	522		mg/L	250	101	87-112			D
Batch ID: 500423	Date: 06/27/2020 21:54										
9060A	280-137609-25	Dissolved Organic Carbon - Quad	4.1		mg/L						
9060A	280-137609-25 MS	Dissolved Organic Carbon - Quad	31.2		mg/L	25.0	108	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.: 280-137609-2

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 499501	Date: 06/19/2020 18:41		Prep Batch: 499167		Date: 06/17/2020 16:38						
351.2	280-137609-25 MSD	Nitrogen, Total Kjeldahl	3.43		mg/L	3.00	86	90-110	4	25	J1
Batch ID: 499351	Date: 06/18/2020 18:07										
353.2	280-137609-25 MSD	Nitrate Nitrite as N	3.90		mg/L	4.00	98	90-110	1	10	
Batch ID: 499306	Date: 06/18/2020 14:09		Prep Batch: 499253		Date: 06/18/2020 11:27						
9034	280-137609-16 MSD	Sulfide	15.2		mg/L	22.2	69	44-110	15	20	
Batch ID: 500258	Date: 06/27/2020 23:57										
9056A	280-137609-F-26 MSD	Sulfate	525		mg/L	250	103	87-112	1	10	D
Batch ID: 500423	Date: 06/27/2020 22:17										
9060A	280-137609-25 MSD	Dissolved Organic Carbon - Quad	31.4		mg/L	25.0	109	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.: 280-137609-2

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 500258 Date: 06/27/2020 23:22								
9056A		280-137609-F-26	Sulfate	270	mg/L			
9056A		280-137609-F-26 DU	Sulfate	259	mg/L	4	10	D
Batch ID: 499040 Date: 06/16/2020 16:27								
SM 2320B	G0100-20A	280-137609-22	Total Alkalinity as CaCO3	600	mg/L			
SM 2320B	G0100-20A	280-137609-22 DU	Total Alkalinity as CaCO3	631	mg/L	4	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.: 280-137609-2

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 499351	Date: 06/18/2020 17:59										
						LCS Source: NXN CAL INT_00535					
353.2	LCS 280-499351/59	Nitrate Nitrite as N	5.01		mg/L	5.00	100	90-110			
Batch ID: 499231	Date: 06/18/2020 09:54	Prep Batch: 499227	Date: 06/18/2020 09:51								
						LCS Source: SFD CAL INT_01769					
9034	LCS 280-499227/1-A	Sulfide	12.0		mg/L	22.2	54	44-110			
Batch ID: 499306	Date: 06/18/2020 14:09	Prep Batch: 499253	Date: 06/18/2020 11:27								
						LCS Source: SFD CAL INT_01769					
9034	LCS 280-499253/1-A	Sulfide	19.2		mg/L	22.2	87	44-110			
Batch ID: 500258	Date: 06/27/2020 04:44										
						LCS Source: IC LCS_01747					
9056A	LCS 280-500258/53	Sulfate	105		mg/L	100	105	87-112	5	10	
Batch ID: 500683	Date: 06/30/2020 05:20										
						LCS Source: TOC LCS Std_00048					
9060A	LCS 280-500528/27-A	Dissolved Organic Carbon - Quad	26.1		mg/L	25.0	104	88-112			
Batch ID: 499040	Date: 06/16/2020 16:08										
						LCS Source: Alk daily lcs_00907					
SM 2320B	LCS 280-499040/57	Total Alkalinity as CaCO3	184		mg/L	200	92	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.: 280-137609-2

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 500258	Date: 06/27/2020 05:02										
						LCSD Source: IC LCS_01747					
9056A	LCSD 280-500258/54	Sulfate	100		mg/L	100	100	87-112	5	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.: 280-137609-2

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 500258	Date: 06/26/2020 11:42										
						LCS Source: IC CAL cl/so4_00316					
9056A	MRL 280-500258/3	Sulfate	4.31	J	mg/L	5.00	86	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: 280-137609-2

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: 280-137609-2

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: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

Method: 351.2 DL Date: 02/03/2019 00:00

Prep Method: 351.2

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

Method: 351.2 XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-2

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: 280-137609-2

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: 280-137609-2

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: 280-137609-2

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: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_SHI2

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: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_SHI2

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: 280-137609-2

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: 280-137609-2

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO3		10	3.08

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
280-137609-16	06/17/2020 16:38	499167		25	25
280-137609-17	06/17/2020 16:38	499167		25	25
280-137609-18	06/17/2020 16:38	499167		25	25
280-137609-19	06/17/2020 16:38	499167		25	25
280-137609-20	06/17/2020 16:38	499167		25	25
280-137609-21	06/17/2020 16:38	499167		25	25
280-137609-22	06/17/2020 16:38	499167		25	25
280-137609-25	06/17/2020 16:38	499167		25	25
280-137609-25 MS	06/17/2020 16:38	499167		25	25
280-137609-25 MSD	06/17/2020 16:38	499167		25	25
280-137609-23	06/17/2020 16:38	499167		25	25
280-137609-24	06/17/2020 16:38	499167		25	25
280-137609-26	06/17/2020 16:38	499167		15	25
280-137609-27	06/17/2020 16:38	499167		15	25
280-137609-28	06/17/2020 16:38	499167		25	25
280-137609-29	06/17/2020 16:38	499167		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-499227/1-A	06/18/2020 09:51	499227		50	50
MB 280-499227/2-A	06/18/2020 09:51	499227		50	50
280-137609-25	06/18/2020 09:51	499227		50	50
280-137609-24	06/18/2020 09:51	499227		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-499253/1-A	06/18/2020 11:27	499253		50	50
MB 280-499253/2-A	06/18/2020 11:27	499253		50	50
280-137609-16	06/18/2020 11:27	499253		50	50
280-137609-16 MS	06/18/2020 11:27	499253		50	50
280-137609-16 MSD	06/18/2020 11:27	499253		50	50
280-137609-17	06/18/2020 11:27	499253		50	50
280-137609-18	06/18/2020 11:27	499253		50	50
280-137609-19	06/18/2020 11:27	499253		50	50
280-137609-20	06/18/2020 11:27	499253		50	50
280-137609-21	06/18/2020 11:27	499253		50	50
280-137609-22	06/18/2020 11:27	499253		50	50
280-137609-23	06/18/2020 11:27	499253		50	50
280-137609-26	06/18/2020 11:27	499253		50	50
280-137609-27	06/18/2020 11:27	499253		50	50
280-137609-28	06/18/2020 11:27	499253		50	50
280-137609-29	06/18/2020 11:27	499253		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/16/2020 12:34 End Date: 06/16/2020 16:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
IC 280-498989/4			12:40	X																								
IC 280-498989/5			12:42	X																								
IC 280-498989/6			12:44	X																								
IC 280-498989/7			12:46	X																								
IC 280-498989/8			12:48	X																								
IC 280-498989/9			12:50	X																								
IC 280-498989/10			12:52	X																								
IC 280-498989/11			12:54	X																								
ZZZZZZ			12:56																									
ZZZZZZ			12:58																									
ICVL 280-498989/14			13:00																									
ICV 280-498989/15			13:02																									
ICB 280-498989/16			13:04																									
ZZZZZZ			13:06																									
ZZZZZZ			13:08																									
ZZZZZZ			13:10																									
ZZZZZZ			13:12																									
ZZZZZZ			13:14																									
ZZZZZZ			13:16																									
ZZZZZZ			13:18																									
ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
ZZZZZZ			13:24																									
ZZZZZZ			13:26																									
ZZZZZZ			13:28																									
ZZZZZZ			13:30																									
RINSE 280-498989/30			13:32																									
ZZZZZZ			13:34																									
CCVL 280-498989/32			13:36																									
CCV 280-498989/33			13:38																									
CCB 280-498989/34			13:40																									
ZZZZZZ			13:42																									
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
ZZZZZZ			13:54																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/16/2020 12:34 End Date: 06/16/2020 16:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:02																									
RINSE 280-498989/46			14:04																									
ZZZZZZ			14:06																									
CCVL 280-498989/48			14:08																									
CCV 280-498989/49			14:10																									
CCB 280-498989/50			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
ZZZZZZ			14:18																									
ZZZZZZ			14:20																									
ZZZZZZ			14:22																									
ZZZZZZ			14:24																									
ZZZZZZ			14:26																									
ZZZZZZ			14:28																									
ZZZZZZ			14:30																									
ZZZZZZ			14:32																									
ZZZZZZ			14:34																									
RINSE 280-498989/62			14:36																									
ZZZZZZ			14:38																									
CCVL 280-498989/64			14:40																									
CCV 280-498989/65			14:42																									
CCB 280-498989/66			14:44																									
ZZZZZZ			14:46																									
280-137609-16	10	T	14:48	X																								
280-137609-17	10	T	14:50	X																								
280-137609-18	1	T	14:52	X																								
280-137609-19	1	T	14:54	X																								
280-137609-20	10	T	14:56	X																								
280-137609-21	5	T	14:58	X																								
280-137609-22	1	T	15:00	X																								
280-137609-23	1	T	15:02	X																								
ZZZZZZ			15:04																									
ZZZZZZ			15:06																									
RINSE 280-498989/78			15:08																									
ZZZZZZ			15:10																									
CCVL 280-498989/80	1		15:12	X																								
CCV 280-498989/81	1		15:14	X																								
CCB 280-498989/82	1		15:16	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/16/2020 12:34 End Date: 06/16/2020 16:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			15:18																									
ZZZZZZ			15:20																									
280-137609-24	1	T	15:22	X																								
280-137609-25	1	T	15:24	X																								
280-137609-26	10	T	15:26	X																								
280-137609-27	10	T	15:28	X																								
280-137609-28	1	T	15:30	X																								
280-137609-29	1	T	15:32	X																								
ZZZZZZ			15:34																									
ZZZZZZ			15:36																									
ZZZZZZ			15:42																									
RINSE 280-498989/94			15:44																									
ZZZZZZ			15:46																									
CCVL 280-498989/96			15:48																									
CCV 280-498989/97			15:50																									
CCB 280-498989/98			15:52																									
ZZZZZZ			15:54																									
ZZZZZZ			15:56																									
RINSE 280-498989/101			15:58																									
ZZZZZZ			16:00																									
CCVL 280-498989/103			16:02																									
CCV 280-498989/104			16:04																									
CCB 280-498989/105			16:06																									
ZZZZZZ			16:08																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/19/2020 15:56 End Date: 06/19/2020 19:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			15:56																									
ZZZZZZ			15:56																									
ZZZZZZ			15:57																									
ZZZZZZ			15:59																									
IC 280-498263/27-A			16:00	X																								
IC 280-498263/28-A			16:01	X																								
IC 280-498263/29-A			16:02	X																								
IC 280-498263/30-A			16:04	X																								
IC 280-498263/31-A			16:05	X																								
IC 280-498263/32-A			16:06	X																								
ZZZZZZ			16:07																									
ZZZZZZ			16:09																									
ICV 280-498263/33-A			16:10																									
ICB 280-498263/34-A			16:11																									
ZZZZZZ			16:12																									
ZZZZZZ			16:14																									
ZZZZZZ			16:15																									
ZZZZZZ			16:16																									
ZZZZZZ			16:17																									
ZZZZZZ			16:19																									
ZZZZZZ			16:20																									
ZZZZZZ			16:21																									
ZZZZZZ			16:22																									
ZZZZZZ			16:24																									
ZZZZZZ			16:25																									
ZZZZZZ			16:26																									
ZZZZZZ			16:27																									
ZZZZZZ			16:29																									
ZZZZZZ			16:30																									
ZZZZZZ			16:31																									
CCV 280-498263/35-A			16:32																									
CCB 280-498263/36-A			16:34																									
ZZZZZZ			16:35																									
ZZZZZZ			16:36																									
ZZZZZZ			16:37																									
ZZZZZZ			16:39																									
ZZZZZZ			16:40																									
ZZZZZZ			16:41																									
ZZZZZZ			16:42																									
ZZZZZZ			16:44																									
ZZZZZZ			16:45																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/19/2020 15:56 End Date: 06/19/2020 19:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			16:46																									
ZZZZZZ			16:47																									
ZZZZZZ			16:49																									
ZZZZZZ			16:50																									
ZZZZZZ			16:51																									
ZZZZZZ			16:52																									
ZZZZZZ			16:54																									
CCV 280-498263/35-A			16:55																									
CCB 280-498263/36-A			16:56																									
ZZZZZZ			16:57																									
ZZZZZZ			16:59																									
ZZZZZZ			17:00																									
ZZZZZZ			17:01																									
ZZZZZZ			17:02																									
ZZZZZZ			17:04																									
ZZZZZZ			17:05																									
ZZZZZZ			17:06																									
ZZZZZZ			17:07																									
ZZZZZZ			17:09																									
ZZZZZZ			17:10																									
ZZZZZZ			17:11																									
ZZZZZZ			17:12																									
ZZZZZZ			17:14																									
CCV 280-498263/35-A			17:15																									
CCB 280-498263/36-A			17:16																									
ZZZZZZ			17:17																									
ZZZZZZ			17:19																									
ZZZZZZ			17:20																									
ZZZZZZ			17:21																									
ZZZZZZ			17:22																									
ZZZZZZ			17:24																									
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ZZZZZZ			17:26																									
ZZZZZZ			17:27																									
ZZZZZZ			17:29																									
ZZZZZZ			17:30																									
ZZZZZZ			17:31																									
ZZZZZZ			17:32																									
CCV 280-498263/35-A			17:34																									
CCB 280-498263/36-A			17:35																									
ZZZZZZ			17:36																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/19/2020 15:56 End Date: 06/19/2020 19:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			17:37																									
ZZZZZZ			17:39																									
ZZZZZZ			17:40																									
ZZZZZZ			17:41																									
ZZZZZZ			17:42																									
ZZZZZZ			17:44																									
ZZZZZZ			17:45																									
ZZZZZZ			17:46																									
CCV 280-498263/35-A			17:47																									
CCV 280-498263/35-A			17:49																									
CCV 280-498263/35-A	1		17:50	X																								
CCB 280-498263/36-A	1		17:51	X																								
ZZZZZZ			17:52																									
ZZZZZZ			17:54																									
ZZZZZZ			17:55																									
ZZZZZZ			17:56																									
280-137609-23	1	T	17:57	X																								
280-137609-29	1	T	17:59	X																								
ZZZZZZ			18:00																									
ZZZZZZ			18:01																									
ZZZZZZ			18:02																									
ZZZZZZ			18:04																									
ZZZZZZ			18:05																									
ZZZZZZ			18:06																									
ZZZZZZ			18:07																									
ZZZZZZ			18:09																									
ZZZZZZ			18:10																									
ZZZZZZ			18:11																									
ZZZZZZ			18:12																									
ZZZZZZ			18:14																									
CCV 280-498263/35-A	1		18:15	X																								
CCB 280-498263/36-A	1		18:16	X																								
ZZZZZZ			18:17																									
ZZZZZZ			18:19																									
280-137609-16	1	T	18:20	X																								
280-137609-17	1	T	18:21	X																								
ZZZZZZ			18:22																									
ZZZZZZ			18:24																									
280-137609-18	1	T	18:25	X																								
280-137609-19	1	T	18:26	X																								
280-137609-20	1	T	18:27	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/19/2020 15:56 End Date: 06/19/2020 19:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
280-137609-21	1	T	18:29	X																								
280-137609-22	1	T	18:30	X																								
280-137609-25	1	T	18:31	X																								
ZZZZZZ			18:32																									
ZZZZZZ			18:34																									
CCV 280-498263/35-A			18:35																									
CCB 280-498263/36-A			18:36																									
ZZZZZZ			18:37																									
ZZZZZZ			18:39																									
280-137609-25 MS	1	T	18:40	X																								
280-137609-25 MSD	1	T	18:41	X																								
280-137609-24	1	T	18:42	X																								
280-137609-26	1	T	18:44	X																								
280-137609-27	1	T	18:45	X																								
280-137609-28	1	T	18:46	X																								
ZZZZZZ			18:47																									
ZZZZZZ			18:49																									
ZZZZZZ			18:50																									
ZZZZZZ			18:51																									
ZZZZZZ			18:52																									
ZZZZZZ			18:54																									
ZZZZZZ			18:55																									
ZZZZZZ			18:56																									
CCV 280-498263/35-A	1		18:57	X																								
CCB 280-498263/36-A	1		18:59	X																								
ZZZZZZ			19:00																									
ZZZZZZ			19:01																									
ZZZZZZ			19:02																									
ZZZZZZ			19:04																									
ZZZZZZ			19:05																									
ZZZZZZ			19:06																									
ZZZZZZ			19:07																									
ZZZZZZ			19:09																									
ZZZZZZ			19:10																									
CCV 280-498263/35-A			19:11																									
CCB 280-498263/36-A			19:12																									
ZZZZZZ			19:14																									
ZZZZZZ			19:15																									
ZZZZZZ			19:16																									
ZZZZZZ			19:17																									
ZZZZZZ			19:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/19/2020 15:56 End Date: 06/19/2020 19:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/18/2020 16:03 End Date: 06/18/2020 20:59

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			16:03	
ZZZZZZ			16:05	
ZZZZZZ			16:07	
ZZZZZZ			16:09	
IC 280-499351/5			16:11	X
IC 280-499351/6			16:13	X
IC 280-499351/7			16:15	X
IC 280-499351/8			16:17	X
IC 280-499351/9			16:19	X
IC 280-499351/10			16:21	X
IC 280-499351/11			16:23	X
IC 280-499351/12			16:25	X
IC 280-499351/13			16:27	X
ZZZZZZ			16:29	
ZZZZZZ			16:31	
ZZZZZZ			16:33	
ICV 280-499351/17			16:35	
ICVL 280-499351/18			16:37	
ICB 280-499351/19			16:39	
ZZZZZZ			16:41	
ZZZZZZ			16:43	
ZZZZZZ			16:45	
ZZZZZZ			16:47	
ZZZZZZ			16:49	
ZZZZZZ			16:51	
ZZZZZZ			16:53	
ZZZZZZ			16:55	
ZZZZZZ			16:57	
ZZZZZZ			16:59	
ZZZZZZ			17:01	
ZZZZZZ			17:03	
ZZZZZZ			17:05	
RINSE 280-499351/33			17:07	
ZZZZZZ			17:09	
CCV 280-499351/35			17:11	
CCVL 280-499351/36			17:13	
CCB 280-499351/37			17:15	
ZZZZZZ			17:17	
ZZZZZZ			17:19	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/18/2020 16:03 End Date: 06/18/2020 20:59

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:21	
ZZZZZZ			17:23	
ZZZZZZ			17:25	
ZZZZZZ			17:27	
ZZZZZZ			17:29	
280-137609-16	1	T	17:31	X
280-137609-17	1	T	17:33	X
280-137609-18	1	T	17:35	X
280-137609-19	1	T	17:37	X
RINSE 280-499351/49			17:39	
ZZZZZZ			17:41	
CCV 280-499351/51	1		17:43	X
CCVL 280-499351/52			17:45	
CCB 280-499351/53			17:47	
ZZZZZZ			17:49	
280-137609-20	1	T	17:51	X
280-137609-21	1	T	17:53	X
280-137609-22	1	T	17:55	X
280-137609-23	2	T	17:57	X
LCS 280-499351/59	1	T	17:59	X
MB 280-499351/60	1	T	18:01	X
280-137609-25	1	T	18:03	X
280-137609-25 MS	1	T	18:05	X
280-137609-25 MSD	1	T	18:07	X
280-137609-24	1	T	18:09	X
RINSE 280-499351/65			18:11	
ZZZZZZ			18:13	
CCV 280-499351/67	1		18:15	X
CCVL 280-499351/68	1		18:17	X
CCB 280-499351/69	1		18:19	X
ZZZZZZ			18:21	
280-137609-26	1	T	18:23	X
280-137609-27	1	T	18:25	X
280-137609-28	1	T	18:27	X
280-137609-29	1	T	18:29	X
ZZZZZZ			18:31	
ZZZZZZ			18:33	
ZZZZZZ			18:35	
ZZZZZZ			18:37	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/18/2020 16:03 End Date: 06/18/2020 20:59

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			18:39	
ZZZZZZ			18:41	
RINSE 280-499351/81			18:43	
ZZZZZZ			18:45	
CCV 280-499351/83	1		18:47	X
CCVL 280-499351/84	1		18:49	X
CCB 280-499351/85	1		18:51	X
ZZZZZZ			18:53	
ZZZZZZ			18:55	
ZZZZZZ			18:57	
ZZZZZZ			18:59	
ZZZZZZ			19:01	
ZZZZZZ			19:03	
ZZZZZZ			19:05	
ZZZZZZ			19:07	
ZZZZZZ			19:09	
ZZZZZZ			19:11	
RINSE 280-499351/96			19:13	
ZZZZZZ			19:15	
CCV 280-499351/98			19:17	
CCVL 280-499351/99			19:19	
CCB 280-499351/100			19:21	
ZZZZZZ			19:23	
ZZZZZZ			19:25	
ZZZZZZ			19:27	
ZZZZZZ			19:29	
ZZZZZZ			19:31	
ZZZZZZ			19:33	
ZZZZZZ			19:35	
ZZZZZZ			19:37	
ZZZZZZ			19:39	
ZZZZZZ			19:41	
ZZZZZZ			19:43	
RINSE 280-499351/112			19:45	
ZZZZZZ			19:47	
CCV 280-499351/114			19:49	
CCVL 280-499351/115			19:51	
CCB 280-499351/116			19:53	
ZZZZZZ			19:55	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/18/2020 16:03 End Date: 06/18/2020 20:59

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			20:02	
ZZZZZZ			20:04	
ZZZZZZ			20:06	
ZZZZZZ			20:08	
ZZZZZZ			20:10	
ZZZZZZ			20:12	
ZZZZZZ			20:14	
ZZZZZZ			20:16	
RINSE 280-499351/126			20:18	
ZZZZZZ			20:20	
CCV 280-499351/128			20:22	
CCVL 280-499351/129			20:24	
CCB 280-499351/130			20:26	
ZZZZZZ			20:28	
ZZZZZZ			20:35	
ZZZZZZ			20:37	
ZZZZZZ			20:39	
ZZZZZZ			20:41	
ZZZZZZ			20:43	
ZZZZZZ			20:45	
ZZZZZZ			20:47	
RINSE 280-499351/139			20:49	
ZZZZZZ			20:51	
CCV 280-499351/141			20:53	
CCVL 280-499351/142			20:55	
CCB 280-499351/143			20:57	
ZZZZZZ			20:59	

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/18/2020 09:54 End Date: 06/18/2020 09:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-499227/1-A	1	T	09:54	X																								
MB 280-499227/2-A	1	T	09:54	X																								
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
280-137609-25	1	T	09:54	X																								
280-137609-24	1	T	09:54	X																								
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									
ZZZZZZ			09:54																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/18/2020 14:09 End Date: 06/18/2020 14:09

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-499253/1-A	1	T	14:09	X																								
MB 280-499253/2-A	1	T	14:09	X																								
280-137609-16	1	T	14:09	X																								
280-137609-16 MS	1	T	14:09	X																								
280-137609-16 MSD	1	T	14:09	X																								
280-137609-17	1	T	14:09	X																								
280-137609-18	1	T	14:09	X																								
280-137609-19	1	T	14:09	X																								
280-137609-20	1	T	14:09	X																								
280-137609-21	1	T	14:09	X																								
280-137609-22	1	T	14:09	X																								
280-137609-23	1	T	14:09	X																								
280-137609-26	1	T	14:09	X																								
280-137609-27	1	T	14:09	X																								
280-137609-28	1	T	14:09	X																								
280-137609-29	1	T	14:09	X																								
ZZZZZZ			14:09																									
ZZZZZZ			14:09																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 06/03/2020 09:53 End Date: 06/05/2020 08:36

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ICV 280-497179/1	1		09:53	X																								
ICB 280-497179/2	1		10:10	X																								
ZZZZZZ			10:28																									
ZZZZZZ			10:45																									
ZZZZZZ			11:02																									
ZZZZZZ			11:20																									
ZZZZZZ			12:48																									
ZZZZZZ			13:05																									
ZZZZZZ			13:23																									
ZZZZZZ			13:40																									
ZZZZZZ			13:58																									
ZZZZZZ			14:15																									
ZZZZZZ			15:25																									
CCV 280-497179/17			15:42																									
CCB 280-497179/18			16:00																									
ZZZZZZ			11:02																									
ZZZZZZ			11:20																									
ZZZZZZ			11:37																									
ZZZZZZ			11:55																									
ZZZZZZ			12:12																									
ZZZZZZ			12:29																									
ZZZZZZ			12:47																									
ZZZZZZ			13:04																									
ZZZZZZ			13:22																									
CCV 280-497179/28			13:39																									
CCB 280-497179/29			13:57																									
ZZZZZZ			14:14																									
ZZZZZZ			14:32																									
ZZZZZZ			14:49																									
ZZZZZZ			15:07																									
ZZZZZZ			15:24																									
ZZZZZZ			15:42																									
ZZZZZZ			15:59																									
ZZZZZZ			16:17																									
ZZZZZZ			16:34																									
ZZZZZZ			16:52																									
CCV 280-497179/40			17:09																									
CCB 280-497179/41			17:27																									
ZZZZZZ			17:44																									
ZZZZZZ			18:02																									
ZZZZZZ			18:19																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 06/03/2020 09:53 End Date: 06/05/2020 08:36

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
ZZZZZZ			18:37																										
ZZZZZZ			18:54																										
ZZZZZZ			19:12																										
ZZZZZZ			19:30																										
ZZZZZZ			19:47																										
ZZZZZZ			20:05																										
ZZZZZZ			20:22																										
CCV 280-497179/52			20:40																										
CCB 280-497179/53			20:57																										
ZZZZZZ			21:15																										
ZZZZZZ			21:32																										
ZZZZZZ			21:50																										
ZZZZZZ			22:07																										
CCV 280-497179/58			22:24																										
CCB 280-497179/59			22:42																										
ZZZZZZ			22:59																										
ZZZZZZ			23:17																										
ZZZZZZ			23:34																										
ZZZZZZ			23:52																										
ZZZZZZ			00:09																										
ZZZZZZ			00:27																										
ZZZZZZ			00:44																										
ZZZZZZ			01:01																										
ZZZZZZ			01:19																										
ZZZZZZ			01:36																										
CCV 280-497179/70			01:54																										
CCB 280-497179/71			02:11																										
ZZZZZZ			02:29																										
ZZZZZZ			02:46																										
ZZZZZZ			03:04																										
ZZZZZZ			03:21																										
ZZZZZZ			03:39																										
ZZZZZZ			03:56																										
ZZZZZZ			04:13																										
ZZZZZZ			04:31																										
ZZZZZZ			04:48																										
ZZZZZZ			05:06																										
CCV 280-497179/82			05:24																										
CCB 280-497179/83			05:41																										
ZZZZZZ			05:59																										
ZZZZZZ			06:16																										

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 06/03/2020 09:53 End Date: 06/05/2020 08:36

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			06:34																									
ZZZZZZ			06:51																									
ZZZZZZ			07:09																									
ZZZZZZ			07:26																									
ZZZZZZ			07:44																									
ZZZZZZ			08:01																									
CCV 280-497179/92			08:19																									
CCB 280-497179/93			08:36																									

Prep Types:
=

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 06/26/2020 11:08 End Date: 06/28/2020 00:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-500258/1			11:08																									
CCB 280-500258/2			11:25																									
MRL 280-500258/3	1	T	11:42	X																								
ZZZZZZ			12:00																									
ZZZZZZ			12:17																									
ZZZZZZ			12:35																									
ZZZZZZ			15:20																									
ZZZZZZ			15:38																									
ZZZZZZ			15:55																									
ZZZZZZ			16:13																									
ZZZZZZ			16:30																									
ZZZZZZ			16:47																									
ZZZZZZ			17:05																									
ZZZZZZ			17:22																									
ZZZZZZ			17:40																									
ZZZZZZ			17:57																									
CCV 280-500258/17			18:15																									
CCB 280-500258/18			18:32																									
ZZZZZZ			18:50																									
ZZZZZZ			19:07																									
ZZZZZZ			19:25																									
ZZZZZZ			19:42																									
ZZZZZZ			20:00																									
ZZZZZZ			20:18																									
ZZZZZZ			20:35																									
ZZZZZZ			20:53																									
ZZZZZZ			21:10																									
ZZZZZZ			21:28																									
CCV 280-500258/29			21:45																									
CCB 280-500258/30			22:03																									
ZZZZZZ			22:20																									
ZZZZZZ			22:38																									
ZZZZZZ			22:55																									
ZZZZZZ			23:13																									
ZZZZZZ			23:30																									
ZZZZZZ			23:48																									
ZZZZZZ			00:05																									
ZZZZZZ			00:23																									
ZZZZZZ			00:40																									
ZZZZZZ			00:58																									
CCV 280-500258/41			01:15																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 06/26/2020 11:08 End Date: 06/28/2020 00:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-500258/42			01:33																									
ZZZZZZ			01:50																									
ZZZZZZ			02:08																									
ZZZZZZ			02:25																									
ZZZZZZ			02:42																									
ZZZZZZ			03:00																									
ZZZZZZ			03:17																									
ZZZZZZ			03:35																									
ZZZZZZ			03:52																									
CCV 280-500258/51	1		04:10	X																								
CCB 280-500258/52	1		04:27	X																								
LCS 280-500258/53	1	T	04:44	X																								
LCSD 280-500258/54	1	T	05:02	X																								
MB 280-500258/55	1	T	05:19	X																								
CCV 280-500258/56	1		05:37	X																								
CCB 280-500258/57	1		05:54	X																								
ZZZZZZ			21:19																									
ZZZZZZ			21:37																									
ZZZZZZ			21:54																									
ZZZZZZ			22:12																									
ZZZZZZ			22:29																									
ZZZZZZ			22:47																									
ZZZZZZ			23:04																									
280-137609-F-26 DU	5		23:22	X																								
280-137609-F-26 MS	5		23:39	X																								
280-137609-F-26 MSD	5		23:57	X																								
CCV 280-500258/68	1		00:14	X																								
CCB 280-500258/69	1		00:32	X																								

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/25/2020 09:35 End Date: 06/26/2020 03:59

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-500081/1			09:35																									
CCB 280-500081/2			09:51																									
ZZZZZZ			10:07																									
ZZZZZZ			10:24																									
ZZZZZZ			10:40																									
ZZZZZZ			10:57																									
ZZZZZZ			16:46																									
ZZZZZZ			17:02																									
ZZZZZZ			17:18																									
ZZZZZZ			17:34																									
ZZZZZZ			17:51																									
ZZZZZZ			18:07																									
ZZZZZZ			18:24																									
ZZZZZZ			18:40																									
ZZZZZZ			18:57																									
ZZZZZZ			19:13																									
CCV 280-500081/17			19:29																									
CCB 280-500081/18			19:46																									
ZZZZZZ			20:02																									
ZZZZZZ			20:19																									
ZZZZZZ			20:35																									
ZZZZZZ			20:51																									
ZZZZZZ			21:08																									
ZZZZZZ			21:24																									
ZZZZZZ			21:41																									
ZZZZZZ			21:57																									
ZZZZZZ			22:14																									
ZZZZZZ			22:30																									
CCV 280-500081/29			22:46																									
CCB 280-500081/30			23:03																									
280-137609-16	5	T	23:19	X																								
280-137609-17	5	T	23:36	X																								
280-137609-18	5	T	23:52	X																								
280-137609-19	5	T	00:09	X																								
280-137609-20	5	T	00:25	X																								
280-137609-21	5	T	00:41	X																								
280-137609-22	5	T	00:58	X																								
280-137609-23	5	T	01:14	X																								
280-137609-24	5	T	01:31	X																								
ZZZZZZ			01:47																									
CCV 280-500081/41	1		02:04	X																								

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/25/2020 09:35 End Date: 06/26/2020 03:59

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-500081/42	1		02:20	X																								
280-137609-26	5	T	02:36	X																								
280-137609-27	5	T	02:53	X																								
ZZZZZZ			03:09																									
280-137609-29	5	T	03:26	X																								
CCV 280-500081/47	1		03:42	X																								
CCB 280-500081/48	1		03:59	X																								

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/29/2020 09:54 End Date: 06/30/2020 01:11

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-500465/1			09:54																									
CCB 280-500465/2			10:10																									
ZZZZZZ			10:26																									
ZZZZZZ			10:43																									
ZZZZZZ			10:59																									
ZZZZZZ			11:15																									
ZZZZZZ			14:47																									
ZZZZZZ			15:03																									
ZZZZZZ			15:19																									
ZZZZZZ			15:36																									
ZZZZZZ			15:52																									
ZZZZZZ			16:09																									
ZZZZZZ			16:25																									
ZZZZZZ			16:41																									
ZZZZZZ			16:58																									
ZZZZZZ			17:14																									
CCV 280-500465/17			17:31																									
CCB 280-500465/18			17:47																									
ZZZZZZ			18:04																									
ZZZZZZ			18:20																									
ZZZZZZ			18:36																									
ZZZZZZ			18:53																									
ZZZZZZ			19:09																									
ZZZZZZ			19:26																									
ZZZZZZ			19:42																									
ZZZZZZ			19:59																									
ZZZZZZ			20:15																									
ZZZZZZ			20:31																									
CCV 280-500465/29			20:48																									
CCB 280-500465/30			21:04																									
ZZZZZZ			21:21																									
ZZZZZZ			21:37																									
ZZZZZZ			21:54																									
ZZZZZZ			22:10																									
ZZZZZZ			22:26																									
ZZZZZZ			22:43																									
ZZZZZZ			22:59																									
ZZZZZZ			23:16																									
280-137609-25	10	T	23:32	X																								
280-137609-28	10	T	23:48	X																								
CCV 280-500465/41			00:05																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/29/2020 09:54 End Date: 06/30/2020 01:11

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-500465/42			00:21																									
ZZZZZZ			00:38																									
CCV 280-500465/44			00:54																									
CCB 280-500465/45			01:11																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_SHI2 Analysis Method: 9060A

Start Date: 06/26/2020 18:25 End Date: 06/28/2020 00:39

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-500423/1			18:25	
ICB 280-500423/2			18:48	
ZZZZZZ			19:15	
ZZZZZZ			19:38	
ZZZZZZ			20:00	
ZZZZZZ			20:23	
ZZZZZZ			20:45	
ZZZZZZ			21:08	
ZZZZZZ			21:31	
ZZZZZZ			21:53	
ZZZZZZ			22:16	
ZZZZZZ			22:38	
ZZZZZZ			23:01	
ZZZZZZ			23:28	
CCV 280-500423/15			00:00	
CCB 280-500423/16			00:27	
ZZZZZZ			00:50	
ZZZZZZ			01:21	
ZZZZZZ			01:44	
ZZZZZZ			02:06	
ZZZZZZ			02:28	
ZZZZZZ			02:52	
ZZZZZZ			03:19	
ZZZZZZ			03:51	
ZZZZZZ			04:13	
ZZZZZZ			04:40	
CCV 280-500423/27			05:03	
CCB 280-500423/28			05:26	
ZZZZZZ			05:48	
ZZZZZZ			12:11	
ZZZZZZ			12:43	
ZZZZZZ			13:10	
ZZZZZZ			13:33	
ZZZZZZ			14:00	
ZZZZZZ			14:23	
ZZZZZZ			14:45	
ZZZZZZ			15:07	
ZZZZZZ			15:30	
CCV 280-500423/39			15:53	
CCB 280-500423/40			16:15	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_SHI2 Analysis Method: 9060A

Start Date: 06/26/2020 18:25 End Date: 06/28/2020 00:39

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			16:38																										
280-137609-16	1	D	17:01	X																									
280-137609-17	1	D	17:23	X																									
280-137609-18	1	D	17:45	X																									
280-137609-19	1	D	18:08	X																									
280-137609-20	1	D	18:30	X																									
280-137609-21	1	D	18:53	X																									
280-137609-22	1	D	19:15	X																									
280-137609-23	1	D	19:38	X																									
ZZZZZZ			20:00																										
CCV 280-500423/51			20:46																										
CCB 280-500423/52			21:09																										
280-137609-25	1	D	21:31	X																									
280-137609-25 MS	1	D	21:54	X																									
280-137609-25 MSD	1	D	22:17	X																									
280-137609-26	4	D	22:41	X																									
280-137609-27	2	D	23:03	X																									
280-137609-28	1	D	23:26	X																									
280-137609-29	1	D	23:49	X																									
CCV 280-500423/60	1		00:12	X																									
CCB 280-500423/61	1		00:39	X																									

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_SHI2 Analysis Method: 9060A

Start Date: 06/29/2020 16:24 End Date: 06/30/2020 14:41

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-500683/1	1		16:24	X
ICB 280-500683/2	1		16:51	X
ZZZZZZ			17:18	
ZZZZZZ			17:41	
ZZZZZZ			18:08	
ZZZZZZ			18:30	
ZZZZZZ			18:53	
ZZZZZZ			19:16	
ZZZZZZ			19:39	
ZZZZZZ			20:01	
ZZZZZZ			20:24	
ZZZZZZ			20:51	
ZZZZZZ			21:13	
ZZZZZZ			21:35	
CCV 280-500683/15			21:58	
CCB 280-500683/16			22:21	
ZZZZZZ			22:43	
ZZZZZZ			23:06	
ZZZZZZ			23:28	
ZZZZZZ			23:51	
ZZZZZZ			00:13	
ZZZZZZ			00:36	
ZZZZZZ			00:59	
ZZZZZZ			01:22	
ZZZZZZ			01:49	
ZZZZZZ			02:12	
CCV 280-500683/27	1		02:35	X
CCB 280-500683/28	1		02:58	X
ZZZZZZ			03:21	
ZZZZZZ			03:44	
ZZZZZZ			04:06	
ZZZZZZ			04:30	
ZZZZZZ			04:57	
LCS 280-500528/27-A	1	D	05:20	X
MB 280-500528/28-A	1	D	05:48	X
ZZZZZZ			06:11	
ZZZZZZ			06:38	
ZZZZZZ			07:01	
CCV 280-500683/39	1		07:29	X
CCB 280-500683/40	1		07:53	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_SHI2 Analysis Method: 9060A

Start Date: 06/29/2020 16:24 End Date: 06/30/2020 14:41

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			08:16																										
ZZZZZZ			08:39																										
ZZZZZZ			09:02																										
ZZZZZZ			09:25																										
ZZZZZZ			09:47																										
ZZZZZZ			10:10																										
ZZZZZZ			10:33																										
ZZZZZZ			10:56																										
ZZZZZZ			11:19																										
ZZZZZZ			11:41																										
CCV 280-500683/51	1		12:04	X																									
CCB 280-500683/52	1		12:28	X																									
ZZZZZZ			12:50																										
ZZZZZZ			13:14																										
280-137609-24	2	D	13:46	X																									
CCV 280-500683/56	1		14:18	X																									
CCB 280-500683/57	1		14:41	X																									

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/16/2020 10:16 End Date: 06/16/2020 17:30

Lab Sample Id	D/F	Type	Time	Analytes																									
				Alk																									
RINSE 280-499040/1			10:16																										
ZZZZZZ			10:22																										
ZZZZZZ			10:25																										
ZZZZZZ			10:31																										
ZZZZZZ			10:37																										
ZZZZZZ			10:43																										
ZZZZZZ			10:49																										
ZZZZZZ			10:56																										
ZZZZZZ			11:02																										
ZZZZZZ			11:08																										
ZZZZZZ			11:13																										
ZZZZZZ			11:19																										
ZZZZZZ			11:25																										
ZZZZZZ			11:31																										
ZZZZZZ			11:38																										
CCV 280-499040/16			11:45																										
CCB 280-499040/17			11:50																										
ZZZZZZ			11:57																										
ZZZZZZ			12:04																										
ZZZZZZ			12:10																										
ZZZZZZ			12:16																										
ZZZZZZ			12:21																										
ZZZZZZ			12:27																										
ZZZZZZ			12:33																										
ZZZZZZ			12:38																										
ZZZZZZ			12:45																										
ZZZZZZ			12:52																										
CCV 280-499040/28			12:58																										
CCB 280-499040/29			13:04																										
ZZZZZZ			13:10																										
ZZZZZZ			13:15																										
ZZZZZZ			13:23																										
ZZZZZZ			13:30																										
ZZZZZZ			13:37																										
ZZZZZZ			13:44																										
ZZZZZZ			13:51																										
ZZZZZZ			13:57																										
ZZZZZZ			14:04																										
ZZZZZZ			14:11																										
ZZZZZZ			14:17																										
ZZZZZZ			14:23																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/16/2020 10:16 End Date: 06/16/2020 17:30

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-499040/42			14:30																									
CCB 280-499040/43			14:35																									
ZZZZZZ			14:42																									
ZZZZZZ			14:48																									
ZZZZZZ			14:54																									
ZZZZZZ			15:00																									
ZZZZZZ			15:05																									
280-137609-16	1	T	15:13	X																								
280-137609-17	1	T	15:21	X																								
280-137609-18	1	T	15:28	X																								
280-137609-19	1	T	15:34	X																								
280-137609-20	1	T	15:42	X																								
280-137609-21	1	T	15:50	X																								
CCV 280-499040/55			15:56																									
CCB 280-499040/56			16:02																									
LCS 280-499040/57	1	T	16:08	X																								
MB 280-499040/58	1	T	16:13	X																								
280-137609-22	1	T	16:20	X																								
280-137609-22 DU	1	T	16:27	X																								
280-137609-23	1	T	16:35	X																								
280-137609-24	1	T	16:42	X																								
280-137609-25	1	T	16:48	X																								
280-137609-26	1	T	16:56	X																								
280-137609-27	1	T	17:04	X																								
280-137609-28	1	T	17:11	X																								
280-137609-29	1	T	17:18	X																								
CCV 280-499040/68	1		17:25	X																								
CCB 280-499040/69	1		17:30	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 498989 Batch Start Date: 06/16/20 12:34 Batch Analyst: Hunter, Brandon W

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00419	
280-137609-C-16	G0117-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-17	PZ013-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-18	G0104-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-19	PZ014-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-20	G0115-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-21	G0101-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-22	G0100-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-23	G0111-20A	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-498989/80		350.1			100 mL	100 mL		0.5 mL	
CCV 280-498989/81		350.1			100 mL	100 mL		2.5 mL	
CCB 280-498989/82		350.1			10 mL	10 mL			
280-137609-C-24	G0103-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-25	G0107-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-26	G0116-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-27	G0120-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-28	G0106-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-29	G0095-20A	350.1	T	No	10 mL	10 mL	<2 SU		

Batch Notes	
Batch Comment	BWH
Carrier Identification	350.1 complex_00484
Hypochlorite ID	350.1 bleach_01257
Sodium Nitroprusside ID	350.1 color_00204
Pipette/Syringe/Dispenser ID	BWH100, BWH1000, BWH5000

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.: 280-137609-2

SDG No.:

Batch Number: 498263 Batch Start Date: 06/10/20 18:12 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TKN 25ppm 00809			
CCV 280-498263/35		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-498263/36		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestion End time	06/10/20 2340
Block Digestion Start time	06/10/20 1840
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00135
Oven, Bath or Block Temperature 1	165 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C

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.: 280-137609-2

SDG No.:

Batch Number: 499167 Batch Start Date: 06/17/20 16:37 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 00809		
280-137609-C-16	G0117-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-17	PZ013-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-18	G0104-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-19	PZ014-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-20	G0115-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-21	G0101-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-22	G0100-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-25	G0107-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-25 MS	G0107-20A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-137609-C-25 MSD	G0107-20A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-137609-C-23	G0111-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-24	G0103-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-26	G0116-20A	351.2, 351.2	T	<2	15 mL	25 mL			
280-137609-C-27	G0120-20A	351.2, 351.2	T	<2	15 mL	25 mL			
280-137609-C-28	G0106-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-29	G0095-20A	351.2, 351.2	T	<2	25 mL	25 mL			

Batch Notes	
Block Digestion End time	06/17/20 2355
Block Digestion Start time	06/17/20 1755
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00135
Oven, Bath or Block Temperature 1	165 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C

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.: 280-137609-2

SDG No.:

Batch Number: 499501 Batch Start Date: 06/19/20 15:56 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
CCV 280-498263/35-A		351.2		4 mL					
CCB 280-498263/36-A		351.2		4 mL					
280-137609-C-23 -A	G0111-20A	351.2	T	4 mL					
280-137609-C-29 -A	G0095-20A	351.2	T	4 mL					
CCV 280-498263/35-A		351.2		4 mL					
CCB 280-498263/36-A		351.2		4 mL					
280-137609-C-16 -A	G0117-20A	351.2	T	4 mL					
280-137609-C-17 -A	PZ013-20A	351.2	T	4 mL					
280-137609-C-18 -A	G0104-20A	351.2	T	4 mL					
280-137609-C-19 -A	PZ014-20A	351.2	T	4 mL					
280-137609-C-20 -A	G0115-20A	351.2	T	4 mL					
280-137609-C-21 -A	G0101-20A	351.2	T	4 mL					
280-137609-C-22 -A	G0100-20A	351.2	T	4 mL					
280-137609-C-25 -A	G0107-20A	351.2	T	4 mL					
280-137609-C-25 -B MS	G0107-20A	351.2	T	4 mL					
280-137609-C-25 -C MSD	G0107-20A	351.2	T	4 mL					
280-137609-C-24 -A	G0103-20A	351.2	T	4 mL					
280-137609-C-26 -A	G0116-20A	351.2	T	4 mL					
280-137609-C-27 -A	G0120-20A	351.2	T	4 mL					
280-137609-C-28 -A	G0106-20A	351.2	T	4 mL					
CCV 280-498263/35-A		351.2		4 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499501 Batch Start Date: 06/19/20 15:56 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
CCB 280-498263/36-A		351.2		4 mL					

Batch Notes	
Buffer Reagent ID	TKN buffer_00125
Hypochlorite ID	TKN hypo_00669
Sodium Nitroprusside ID	sodium nitro_00100
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499351 Batch Start Date: 06/18/20 16:03 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 00535			
280-137609-C-16	G0117-20A	353.2	T	100 mL	100 mL				
280-137609-C-17	PZ013-20A	353.2	T	100 mL	100 mL				
280-137609-C-18	G0104-20A	353.2	T	100 mL	100 mL				
280-137609-C-19	PZ014-20A	353.2	T	100 mL	100 mL				
CCV 280-499351/51		353.2		100 mL	100 mL	5 mL			
280-137609-C-20	G0115-20A	353.2	T	100 mL	100 mL				
280-137609-C-21	G0101-20A	353.2	T	100 mL	100 mL				
280-137609-C-22	G0100-20A	353.2	T	100 mL	100 mL				
280-137609-C-23	G0111-20A	353.2	T	100 mL	100 mL				
LCS 280-499351/59		353.2		100 mL	100 mL	5 mL			
MB 280-499351/60		353.2		100 mL	100 mL				
280-137609-C-25	G0107-20A	353.2	T	100 mL	100 mL				
280-137609-C-25 MS	G0107-20A	353.2	T	5 mL	5 mL	0.2 mL			
280-137609-C-25 MSD	G0107-20A	353.2	T	5 mL	5 mL	0.2 mL			
280-137609-C-24	G0103-20A	353.2	T	100 mL	100 mL				
CCV 280-499351/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-499351/68		353.2		100 mL	100 mL	1 mL			
CCB 280-499351/69		353.2		100 mL	100 mL				
280-137609-C-26	G0116-20A	353.2	T	100 mL	100 mL				
280-137609-C-27	G0120-20A	353.2	T	100 mL	100 mL				
280-137609-C-28	G0106-20A	353.2	T	100 mL	100 mL				
280-137609-C-29	G0095-20A	353.2	T	100 mL	100 mL				
CCV 280-499351/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-499351/84		353.2		100 mL	100 mL	1 mL			
CCB 280-499351/85		353.2		100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499351 Batch Start Date: 06/18/20 16:03 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Batch Notes	
Buffer Reagent ID	NOXT Buffer_00210
Color Reagent ID	NOXT cr_00108
Copper Sulfate ID	CuSO4 NOXT_0008
Hydrochloric Acid ID	0.5N HCl_0076
pH Indicator ID	hc989495
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499227 Batch Start Date: 06/18/20 09:50 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-499227/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-499227/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-137609-E-25	G0107-20A	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-137609-E-24	G0103-20A	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01769					
LCS 280-499227/1		9030B, 9034		1 mL					
MB 280-499227/2		9030B, 9034							
280-137609-E-25	G0107-20A	9030B, 9034	T						
280-137609-E-24	G0103-20A	9030B, 9034	T						

Batch Notes	
Batch Comment	AD trained by SAH
Distillation End Time	02/17/2020 19:09
Distillation Start Time	02/17/2020 18:03
Formaldehyde ID	Form_00117
pH Indicator ID	HC989495 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00203
Zinc Acetate Buffer ID	Znac_00115

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.: 280-137609-2

SDG No.:

Batch Number: 499231 Batch Start Date: 06/18/20 09:03 Batch Analyst: Hunter, Brandon W

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-499227/1-A		9034		0.00 mL	3.5 mL	5 mL	3.5 mL	50 mL	
MB 280-499227/2-A		9034		3.6 mL	4.6 mL	1 mL	1 mL	50 mL	
280-137609-E-25 -A	G0107-20A	9034	T	16.1 mL	17.1 mL	1 mL	1 mL	50 mL	
280-137609-E-24 -A	G0103-20A	9034	T	17.1 mL	19.1 mL	5 mL	2 mL	50 mL	

Batch Notes	
Batch Comment	SAH/ADD/BWH
Hydrochloric Acid ID	HCL Sol_00181
Iodine ID	Iod_00257
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00166
Pipette/Syringe/Dispenser ID	5000 Condor & 1000 Intercessor
Starch Reagent ID	Starch Ind_00062
Normality of First Titrant	0.0250 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499253 Batch Start Date: 06/18/20 11:27 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-499253/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-499253/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-137609-E-16	G0117-20A	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-137609-E-16 MS	G0117-20A	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-137609-E-16 MSD	G0117-20A	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-137609-E-17	PZ013-20A	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-137609-E-18	G0104-20A	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-137609-E-19	PZ014-20A	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-137609-E-20	G0115-20A	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-137609-E-21	G0101-20A	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-137609-E-22	G0100-20A	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-137609-E-23	G0111-20A	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-137609-E-26	G0116-20A	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL
280-137609-E-27	G0120-20A	9030B, 9034	T	50 mL	50 mL	14	>9 SU	<2 SU	5 mL
280-137609-E-28	G0106-20A	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL
280-137609-E-29	G0095-20A	9030B, 9034	T	50 mL	50 mL	16	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01769					
LCS 280-499253/1		9030B, 9034		1 mL					
MB 280-499253/2		9030B, 9034							
280-137609-E-16	G0117-20A	9030B, 9034	T						
280-137609-E-16 MS	G0117-20A	9030B, 9034	T	1 mL					
280-137609-E-16 MSD	G0117-20A	9030B, 9034	T	1 mL					
280-137609-E-17	PZ013-20A	9030B, 9034	T						
280-137609-E-18	G0104-20A	9030B, 9034	T						
280-137609-E-19	PZ014-20A	9030B, 9034	T						
280-137609-E-20	G0115-20A	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.: 280-137609-2

SDG No.:

Batch Number: 499253 Batch Start Date: 06/18/20 11:27 Batch Analyst: Hohulin, Sierra A

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01769					
280-137609-E-21	G0101-20A	9030B, 9034	T						
280-137609-E-22	G0100-20A	9030B, 9034	T						
280-137609-E-23	G0111-20A	9030B, 9034	T						
280-137609-E-26	G0116-20A	9030B, 9034	T						
280-137609-E-27	G0120-20A	9030B, 9034	T						
280-137609-E-28	G0106-20A	9030B, 9034	T						
280-137609-E-29	G0095-20A	9030B, 9034	T						

Batch Notes	
Batch Comment	AD/BWH trained by SAH. SAH
Distillation End Time	02/17/2020 19:09
Distillation Start Time	02/17/2020 18:03
Formaldehyde ID	Form_00117
pH Indicator ID	HC989495 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00203
Zinc Acetate Buffer ID	Znac_00115

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.: 280-137609-2

SDG No.:

Batch Number: 499306 Batch Start Date: 06/18/20 14:09 Batch Analyst: Hunter, Brandon W

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-499253/1-A		9034		0.00 mL	2.60 mL	5 mL	2.6 mL	50 mL	
MB 280-499253/2-A		9034		2.60 mL	3.6 mL	1 mL	1 mL	50 mL	
280-137609-E-16-A	G0117-20A	9034	T	3.60 mL	4.6 mL	1 mL	1 mL	50 mL	
280-137609-E-16-B MS	G0117-20A	9034	T	4.6 mL	7.4 mL	5 mL	2.8 mL	50 mL	
280-137609-E-16-C MSD	G0117-20A	9034	T	7.4 mL	10.5 mL	5 mL	3.1 mL	50 mL	
280-137609-E-17-A	PZ013-20A	9034	T	10.5 mL	11.5 mL	1 mL	1 mL	50 mL	
280-137609-E-18-A	G0104-20A	9034	T	11.5 mL	12.5 mL	1 mL	1 mL	50 mL	
280-137609-E-19-A	PZ014-20A	9034	T	12.5 mL	13.5 mL	1 mL	1 mL	50 mL	
280-137609-E-20-A	G0115-20A	9034	T	13.5 mL	14.5 mL	1 mL	1 mL	50 mL	
280-137609-E-21-A	G0101-20A	9034	T	14.5 mL	15.4 mL	1 mL	0.9 mL	50 mL	
280-137609-E-22-A	G0100-20A	9034	T	14.5 mL	16.4 mL	1 mL	1.9 mL	50 mL	
280-137609-E-23-A	G0111-20A	9034	T	15.4 mL	17.4 mL	1 mL	2 mL	50 mL	
280-137609-E-26-A	G0116-20A	9034	T	16.4 mL	18.4 mL	1 mL	2 mL	50 mL	
280-137609-E-27-A	G0120-20A	9034	T	17.4 mL	19.4 mL	1 mL	2 mL	50 mL	
280-137609-E-28-A	G0106-20A	9034	T	18.4 mL	20.4 mL	1 mL	2 mL	50 mL	
280-137609-E-29-A	G0095-20A	9034	T	19.4 mL	21.4 mL	1 mL	2 mL	50 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.: 280-137609-2

SDG No.:

Batch Number: 499306 Batch Start Date: 06/18/20 14:09 Batch Analyst: Hunter, Brandon W

Batch Method: 9034 Batch End Date:

Batch Notes	
Batch Comment	AD/BWH trained by SAH. SAH
Hydrochloric Acid ID	HCL Sol_00181
Iodine ID	Iod_00257
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00166
Pipette/Syringe/Dispenser ID	5000 CONDOR & 1000 INTERCESSOR
Starch Reagent ID	Starch Ind_00062
Normality of First Titrant	0.0250 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 496903 Batch Start Date: 06/01/20 12:47 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00312	IC Cal low 00527		
STD1 280-496903/2 IC		9056A		5 mL	5 mL	0.04 mL	0.04 mL		
STD2 280-496903/3 IC		9056A		5 mL	5 mL	0.1 mL	0.1 mL		
STD3 280-496903/4 IC		9056A		5 mL	5 mL	0.2 mL	0.2 mL		
STD4 280-496903/5 IC		9056A		5 mL	5 mL	2.4 mL	0.8 mL		
STD5 280-496903/6 IC		9056A		5 mL	5 mL	4.8 mL	1.6 mL		
STD6 280-496903/7 IC		9056A		5 mL	5 mL	8 mL	2 mL		

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	ic10 H3PO4_00003
Sufficient Volume for Batch QC	Yes

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 497179 Batch Start Date: 06/03/20 09:53 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CL ICV 00018	IC ICV 5 00272	IC SO4 ICV 00021	
ICV 280-497179/1		9056A		5 mL	5 mL	0.8 mL	0.8 mL	0.8 mL	
ICB 280-497179/2		9056A		5 mL	5 mL				

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	ic10 H3PO4_00003
Sufficient Volume for Batch QC	Yes

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 497185 Batch Start Date: 06/03/20 10:08 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00313	IC Cal low 00527		
STD 280-497185/2 IC		9056A		5 mL	5 mL	0.02 mL	0.02 mL		
STD 280-497185/3 IC		9056A		5 mL	5 mL	0.05 mL	0.05 mL		
STD 280-497185/4 IC		9056A		5 mL	5 mL	0.1 mL	0.1 mL		
STD 280-497185/5 IC		9056A		5 mL	5 mL	1.2 mL	0.4 mL		
STD 280-497185/6 IC		9056A		5 mL	5 mL	2.4 mL	0.8 mL		
STD 280-497185/7 IC		9056A		5 mL	5 mL	4 mL	1 mL		

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	191251298017
Sufficient Volume for Batch QC	Yes

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 500081 Batch Start Date: 06/25/20 09:35 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC LCS 01746			
280-137609-F-16	G0117-20A	9056A	T	5 mL	5 mL				
280-137609-F-17	PZ013-20A	9056A	T	5 mL	5 mL				
280-137609-F-18	G0104-20A	9056A	T	5 mL	5 mL				
280-137609-F-19	PZ014-20A	9056A	T	5 mL	5 mL				
280-137609-F-20	G0115-20A	9056A	T	5 mL	5 mL				
280-137609-F-21	G0101-20A	9056A	T	5 mL	5 mL				
280-137609-F-22	G0100-20A	9056A	T	5 mL	5 mL				
280-137609-F-23	G0111-20A	9056A	T	5 mL	5 mL				
280-137609-F-24	G0103-20A	9056A	T	5 mL	5 mL				
CCV 280-500081/41		9056A		5 mL	5 mL	5 mL			
CCB 280-500081/42		9056A		5 mL	5 mL				
280-137609-F-26	G0116-20A	9056A	T	5 mL	5 mL				
280-137609-F-27	G0120-20A	9056A	T	5 mL	5 mL				
280-137609-F-29	G0095-20A	9056A	T	5 mL	5 mL				
CCV 280-500081/47		9056A		5 mL	5 mL	5 mL			
CCB 280-500081/48		9056A		5 mL	5 mL				

Batch Notes	
Eluent 1 ID	191251298017
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 500258 Batch Start Date: 06/26/20 11:08 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00316	IC Cal low 00531	IC LCS 01747	ICMS/MSD WEEK 00654
MRL 280-500258/3		9056A		5 mL	5 mL	0.2 mL	0.1 mL		
CCV 280-500258/51		9056A		5 mL	5 mL			10 mL	
CCB 280-500258/52		9056A		5 mL	5 mL				
LCS 280-500258/53		9056A		5 mL	5 mL			10 mL	
LCSD 280-500258/54		9056A		5 mL	5 mL			10 mL	
MB 280-500258/55		9056A		5 mL	5 mL				
CCV 280-500258/56		9056A		5 mL	5 mL			10 mL	
CCB 280-500258/57		9056A		5 mL	5 mL				
280-137609-F-25	G0107-20A	9056A	T	5 mL	5 mL				
280-137609-F-26 DU		9056A		5 mL	5 mL				
280-137609-F-26 MS		9056A		5 mL	5 mL				0.1 mL
280-137609-F-26 MSD		9056A		5 mL	5 mL				0.1 mL
CCV 280-500258/68		9056A		5 mL	5 mL			10 mL	
CCB 280-500258/69		9056A		5 mL	5 mL				

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	ic10 H3PO4_00003
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 500465 Batch Start Date: 06/29/20 09:54 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
280-137609-F-25	G0107-20A	9056A	T	5 mL	5 mL				
280-137609-F-28	G0106-20A	9056A	T	5 mL	5 mL				

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	191251298017
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 500423 Batch Start Date: 06/26/20 18:25 Batch Analyst: Barker, Scott G

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC LCS Std 00048		
280-137609-D-16 -A	G0117-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-17 -A	PZ013-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-18 -A	G0104-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-19 -A	PZ014-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-20 -A	G0115-20A	9060A	D	20 mL	20 mL	6 SU			
280-137609-D-21 -A	G0101-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-22 -A	G0100-20A	9060A	D	20 mL	20 mL	6 SU			
280-137609-D-23 -A	G0111-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-A-25 -B	G0107-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-A-25 -C MS	G0107-20A	9060A	D	50 mL	50 mL	7 SU	1.25 mL		
280-137609-A-25 -D MSD	G0107-20A	9060A	D	50 mL	50 mL	7 SU	1.25 mL		
280-137609-D-26 -B	G0116-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-27 -B	G0120-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-28 -B	G0106-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-29 -B	G0095-20A	9060A	D	20 mL	20 mL	7 SU			
CCV 280-500423/60		9060A		200 mL	200 mL	<2 SU	5 mL		
CCB 280-500423/61		9060A		20 mL	20 mL	<2 SU			

Batch Notes	
Acid ID	H2SO4_00205, 0.2% H2SO4_00350
Pipette/Syringe/Dispenser ID	BMF 5000

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.: 280-137609-2

SDG No.:

Batch Number: 500423 Batch Start Date: 06/26/20 18:25 Batch Analyst: Barker, Scott G

Batch Method: 9060A Batch End Date:

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 500683 Batch Start Date: 06/29/20 16:24 Batch Analyst: Battillo, Jenna M

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00043	TOC LCS Std 00048	
ICV 280-500683/1		9060A		50 mL	50 mL	<2 SU	1 mL		
ICB 280-500683/2		9060A		20 mL	20 mL	<2 SU			
CCV 280-500683/27		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500683/28		9060A		20 mL	20 mL	<2 SU			
LCS 280-500528/27-A		9060A		200 mL	200 mL	<2 SU		5 mL	
MB 280-500528/28-A		9060A		20 mL	20 mL	<2 SU			
CCV 280-500683/39		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500683/40		9060A		20 mL	20 mL	<2 SU			
CCV 280-500683/51		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500683/52		9060A		20 mL	20 mL	<2 SU			
280-137609-D-24 -B	G0103-20A	9060A	D	20 mL	20 mL	7 SU			
CCV 280-500683/56		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500683/57		9060A		20 mL	20 mL	<2 SU			

Batch Notes	
Acid ID	H2SO4_00205, 0.2% H2SO4_00350
Pipette/Syringe/Dispenser ID	BMF 5000

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-2

SDG No.:

Batch Number: 499040 Batch Start Date: 06/16/20 10:16 Batch Analyst: Gonzalez, Sofie P

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00907				
280-137609-F-16	G0117-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-17	PZ013-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-18	G0104-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-19	PZ014-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-20	G0115-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-21	G0101-20A	SM 2320B	T	InitialAmount is blank					
LCS 280-499040/57		SM 2320B		InitialAmount is blank	10 mL				
MB 280-499040/58		SM 2320B		InitialAmount is blank					
280-137609-F-22	G0100-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-22 DU	G0100-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-23	G0111-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-24	G0103-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-25	G0107-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-26	G0116-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-27	G0120-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-28	G0106-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-29	G0095-20A	SM 2320B	T	InitialAmount is blank					
CCV 280-499040/68		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-499040/69		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.: 280-137609-2

SDG No.:

Batch Number: 499040 Batch Start Date: 06/16/20 10:16 Batch Analyst: Gonzalez, Sofie P

Batch Method: SM 2320B Batch End Date:

Batch Notes	
Acid ID	0.02 H2SO4 00273
Batch Comment	SG training RF
pH Buffer 1 ID	pH 2.0 Buffer 00085
pH Buffer 2 ID	pH 4.0 Buffer 00188
pH Buffer 3 ID	pH 7.0 Buffer 00280
pH Buffer 4 ID	pH 10 Buffer 00150
pH Buffer 5 ID	pH 12 Buffer 00163
pH Buffer 6 ID	pH 7.0 Buffer 00281
Sodium Carbonate ID	Alk Stk Std 00017
Nominal Amount Used	10 mL
Pipette/Syringe/Dispenser ID	5000SM
Probe ID	PCE 80 pH 1200C
Normality of First Titrant	0.02 N N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 16-Jun-20

BWH
350.1 color_00204
350.1 bleach_01257
350.1 complex_00484

Cup	Name	Type	R	Dil	Wt	Vial	Comment	pH	Cl⁻
106	Sync	SYNC	1	1	1				
0	Carry Over	CO	1	1	1				
0	Blank	RB	1	1	1				
101	Cal 0 ppb	C	1	1	1				
102	Cal 25 ppb	C	1	1	1				
103	Cal 50 ppb	C	1	1	1				
104	Cal 100 ppb	C	1	1	1				
105	Cal 500 ppb	C	1	1	1				
106	Cal 1000 ppb	C	1	1	1				
107	Cal 2500 ppb	C	1	1	1				
108	Cal 5000 ppb	C	1	1	1				
0	Blank	BLNK	1	1	1				
0	Read Baseline	RB	1	1	1				
109	ICVL 500.0 ppb	U	1	1	1				
110	ICV 2500.0 ppb	U	1	1	1				
111	ICB	U	1	1	1				
0	read baseline	RB	1	1	1				
107	LCS	U	1	1	1				
111	MB	U	1	1	1				
201	280-137530-c-1	U	1	1	1			L2	n
202	MS 280-137530-c-1	U	1	1	1			L2	n
203	MSD 280-137530-c-1	U	1	1	1			L2	n
204	280-137549-c-1	U	1	1	1			L2	n
205	280-137549-c-2	U	1	1	1			L2	n
206	280-137549-c-3	U	1	1	1			L2	n
207	280-137549-c-4	U	1	1	1			L2	n
208	280-137549-c-5	U	1	1	1			L2	n
209	280-137549-c-6	U	1	5	1			L2	n
210	280-137549-c-7	U	1	1	1				
0	RINSE	U	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	280-137549-c-8	U	1	1	1			L2	n
212	280-137549-c-10	U	1	1	1			L2	n
213	280-137549-c-9	U	1	1	1			L2	n
214	MS 280-137549-c-9	U	1	1	1			L2	n
215	MSD 280-137549-c-9	U	1	1	1			L2	n
216	280-137549-c-11	U	1	1	1			L2	n
217	280-137549-c-12	U	1	1	1			L2	n
218	280-137552-a-1	U	1	1	1			L2	n
219	280-137609-c-2	U	1	1	1			L2	n
220	280-137609-c-3	U	1	1	1				
0	RINSE	U	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	280-137609-c-4	U	1	1	1			L2	n
222	280-137609-c-5 X	U	1	2	1			L2	n
223	280-137609-c-6	U	1	1	1			L2	n
224	280-137609-c-7	U	1	1	1			L2	n
107	LCS	U	1	1	1				

Cup	Name	Type	R	Dil	Wt	Vial	Comment	pH	Cl⁻
111	MB	U	1	1	1	1		L2	n
225	280-137609-c-1	U	1	1	1	1		L2	n
226	MS 280-137609-c-1	U	1	1	1	1		L2	n
227	MSD 280-137609-c-1	U	1	1	1	1		L2	n
228	280-137609-c-8 X	U	1	10	1	1			
0	RINSE	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
105	CCVL 500.0 PPB	U	1	1	1	1			
107	CCV 2500.0 PPB	U	1	1	1	1			
111	CCB	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
229	280-137609-c-16	U	1	10	1	1		L2	n
230	280-137609-c-17	U	1	10	1	1		L2	n
231	280-137609-c-18	U	1	1	1	1		L2	n
232	280-137609-c-19	U	1	1	1	1		L2	n
233	280-137609-c-20	U	1	10	1	1		L2	n
234	280-137609-c-21	U	1	5	1	1		L2	n
235	280-137609-c-22	U	1	1	1	1		L2	n
236	280-137609-c-23	U	1	1	1	1		L2	n
237	280-137609-l-9	U	1	1	1	1		L2	n
238	MS 280-137609-l-9	U	1	1	1	1		L2	n
0	RINSE	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
105	CCVL 500.0 PPB	U	1	1	1	1			
107	CCV 2500.0 PPB	U	1	1	1	1			
111	CCB	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
239	MSD 280-137609-l-9	U	1	1	1	1		L2	n
240	280-137609-c-24	U	1	1	1	1		L2	n
241	280-137609-c-25	U	1	1	1	1		L2	n
242	280-137609-c-26	U	1	10	1	1		L2	n
243	280-137609-c-27	U	1	10	1	1		L2	n
244	280-137609-c-28	U	1	1	1	1		L2	n
245	280-137609-c-29	U	1	1	1	1		L2	n
246	280-137647-c-4	U	1	1	1	1		L2	n
247	280-137669-d-2	U	1	1	1	1		L2	n
248	280-137609-c-5	U	1	1	1	1		L2	n
0	RINSE	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
105	CCVL 500.0 PPB	U	1	1	1	1			
107	CCV 2500.0 PPB	U	1	1	1	1			
111	CCB	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
249	280-137609-c-8	U	1	1	1	1		L2	n
0	RINSE	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
105	CCVL 500.0 PPB	U	1	1	1	1			
107	CCV 2500.0 PPB	U	1	1	1	1			
111	CCB	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	BWH
Operator ID	BWH
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	57
Result path	C:\FLOW_4\061620.RST
Sample table path	C:\FLOW_4\061620.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	16-Jun-20
Time acquired	16:14

Date	Time	Cup	Name
16-Jun-20	12:34	106	Sync
16-Jun-20	12:36	0	Carry Over
16-Jun-20	12:38	0	Blank
16-Jun-20	12:40	101	Cal 0 ppb
16-Jun-20	12:42	102	Cal 25 ppb
16-Jun-20	12:44	103	Cal 50 ppb
16-Jun-20	12:46	104	Cal 100 ppb
16-Jun-20	12:48	105	Cal 500 ppb
16-Jun-20	12:50	106	Cal 1000 ppb
16-Jun-20	12:52	107	Cal 2500 ppb
16-Jun-20	12:54	108	Cal 5000 ppb
16-Jun-20	12:56	0	Blank
16-Jun-20	12:58	0	Read Baseline
16-Jun-20	13:00	109	ICVL 500.0 ppb
16-Jun-20	13:02	110	ICV 2500.0 ppb
16-Jun-20	13:04	111	ICB
16-Jun-20	13:06	0	read baseline
16-Jun-20	13:08	107	LCS
16-Jun-20	13:10	111	MB
16-Jun-20	13:12	201	280-137530-c-1
16-Jun-20	13:14	202	MS 280-137530-c-1
16-Jun-20	13:16	203	MSD 280-137530-c-1
16-Jun-20	13:18	204	280-137549-c-1
16-Jun-20	13:20	205	280-137549-c-2
16-Jun-20	13:22	206	280-137549-c-3
16-Jun-20	13:24	207	280-137549-c-4
16-Jun-20	13:26	208	280-137549-c-5
16-Jun-20	13:28	209	280-137549-c-6
16-Jun-20	13:30	210	280-137549-c-7
16-Jun-20	13:32	0	RINSE
16-Jun-20	13:34	0	READ BASELINE
16-Jun-20	13:36	105	CCVL 500.0 PPB
16-Jun-20	13:38	107	CCV 2500.0 PPB
16-Jun-20	13:40	111	CCB
16-Jun-20	13:42	0	READ BASELINE
16-Jun-20	13:44	211	280-137549-c-8
16-Jun-20	13:46	212	280-137549-c-10
16-Jun-20	13:48	213	280-137549-c-9
16-Jun-20	13:50	214	MS 280-137549-c-9
16-Jun-20	13:52	215	MSD 280-137549-c-9
16-Jun-20	13:54	216	280-137549-c-11
16-Jun-20	13:56	217	280-137549-c-12
16-Jun-20	13:58	218	280-137552-a-1
16-Jun-20	14:00	219	280-137609-c-2
16-Jun-20	14:02	220	280-137609-c-3

Result path	C:\FLOW_4\061620.RST
Sample table path	C:\FLOW_4\061620.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	16-Jun-20
Time acquired	16:14

Date	Time	Cup	Name
16-Jun-20	14:04	0	RINSE
16-Jun-20	14:06	0	READ BASELINE
16-Jun-20	14:08	105	CCVL 500.0 PPB
16-Jun-20	14:10	107	CCV 2500.0 PPB
16-Jun-20	14:12	111	CCB
16-Jun-20	14:14	0	READ BASELINE
16-Jun-20	14:16	221	280-137609-c-4
16-Jun-20	14:18	222	280-137609-c-5 X
16-Jun-20	14:20	223	280-137609-c-6
16-Jun-20	14:22	224	280-137609-c-7
16-Jun-20	14:24	107	LCS
16-Jun-20	14:26	111	MB
16-Jun-20	14:28	225	280-137609-c-1
16-Jun-20	14:30	226	MS 280-137609-c-1
16-Jun-20	14:32	227	MSD 280-137609-c-1
16-Jun-20	14:34	228	280-137609-c-8 X
16-Jun-20	14:36	0	RINSE
16-Jun-20	14:38	0	READ BASELINE
16-Jun-20	14:40	105	CCVL 500.0 PPB
16-Jun-20	14:42	107	CCV 2500.0 PPB
16-Jun-20	14:44	111	CCB
16-Jun-20	14:46	0	READ BASELINE
16-Jun-20	14:48	229	280-137609-c-16
16-Jun-20	14:50	230	280-137609-c-17
16-Jun-20	14:52	231	280-137609-c-18
16-Jun-20	14:54	232	280-137609-c-19
16-Jun-20	14:56	233	280-137609-c-20
16-Jun-20	14:58	234	280-137609-c-21
16-Jun-20	15:00	235	280-137609-c-22
16-Jun-20	15:02	236	280-137609-c-23
16-Jun-20	15:04	237	280-137609-l-9
16-Jun-20	15:06	238	MS 280-137609-l-9
16-Jun-20	15:08	0	RINSE
16-Jun-20	15:10	0	READ BASELINE
16-Jun-20	15:12	105	CCVL 500.0 PPB
16-Jun-20	15:14	107	CCV 2500.0 PPB
16-Jun-20	15:16	111	CCB
16-Jun-20	15:18	0	READ BASELINE
16-Jun-20	15:20	239	MSD 280-137609-l-9
16-Jun-20	15:22	240	280-137609-c-24
16-Jun-20	15:24	241	280-137609-c-25
16-Jun-20	15:26	242	280-137609-c-26
16-Jun-20	15:28	243	280-137609-c-27
16-Jun-20	15:30	244	280-137609-c-28
16-Jun-20	15:32	245	280-137609-c-29
16-Jun-20	15:34	246	280-137647-c-4
16-Jun-20	15:36	247	280-137669-d-2
16-Jun-20	15:42	248	280-137609-c-5
16-Jun-20	15:44	0	RINSE
16-Jun-20	15:46	0	READ BASELINE
16-Jun-20	15:48	105	CCVL 500.0 PPB
16-Jun-20	15:50	107	CCV 2500.0 PPB
16-Jun-20	15:52	111	CCB
16-Jun-20	15:54	0	READ BASELINE
16-Jun-20	15:56	249	280-137609-c-8
16-Jun-20	15:58	0	RINSE
16-Jun-20	16:00	0	READ BASELINE

Result path	C:\FLOW_4\061620.RST
Sample table path	C:\FLOW_4\061620.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	16-Jun-20
Time acquired	16:14

Date	Time	Cup	Name
16-Jun-20	16:02	105	CCVL 500.0 PPB
16-Jun-20	16:04	107	CCV 2500.0 PPB
16-Jun-20	16:06	111	CCB
16-Jun-20	16:08	0	READ BASELINE

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	BWH
Operator ID	BWH
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	57
Result path	C:\FLOW_4\061620.RST
Sample table path	C:\FLOW_4\061620.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	16-Jun-20
Time acquired	16:14

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Sync	12604	1009.467			
Carry Over	20	4.230			
Blank	0	2.819	BL		
Cal 0 ppb	23	4.429			
Cal 25 ppb	356	27.995			
Cal 50 ppb	699	52.375			
Cal 100 ppb	1287	94.655			
Cal 500 ppb	6350	480.117			
Cal 1000 ppb	12743	1021.879			
Cal 2500 ppb	27371	2492.143			
Cal 5000 ppb	47225	5001.408	HI		
Blank	-75	-2.443	LO		
Read Baseline	0	2.819	BL		
ICVL 500.0 ppb	7076	538.604			
ICV 2500.0 ppb	27709	2529.956			
ICB	-12	2.002			
read baseline	0	2.819	BL		
LCS	27064	2457.949			
MB	-17	1.636			
280-137530-c-1	388	30.269			
MS 280-137530-c-1	12941	1039.635			
MSD 280-137530-c-1	12838	1030.361			
280-137549-c-1	12260	978.764			
280-137549-c-2	4866	363.169			
280-137549-c-3	655	49.283			
280-137549-c-4	43755	4520.169			
280-137549-c-5	154	13.714			
280-137549-c-6	15198	6230.909			
280-137549-c-7	103	10.070			
RINSE	9	3.453			
READ BASELINE	0	2.819	BL		
CCVL 500.0 PPB	6458	488.821			
CCV 2500.0 PPB	27435	2499.252			
CCB	-6	2.400			
READ BASELINE	0	2.819	BL		
280-137549-c-8	61	7.130			
280-137549-c-10	140	12.691			
280-137549-c-9	372	29.124			
MS 280-137549-c-9	12379	989.417			
MSD 280-137549-c-9	12549	1004.560			
280-137549-c-11	461	35.418			
280-137549-c-12	11428	905.417			
280-137552-a-1	1030	76.103			
280-137609-c-2	28751	2647.442			
280-137609-c-3	11835	941.184			

Result path	C:\FLOW_4\061620.RST
Sample table path	C:\FLOW_4\061620.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	16-Jun-20
Time acquired	16:14

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
RINSE	-19	1.459			
READ BASELINE	0	2.819	BL		
CCVL 500.0 PPB	6413	485.219			
CCV 2500.0 PPB	27505	2507.089			
CCB	-13	1.929			
READ BASELINE	0	2.819	BL		
280-137609-c-4	10596	833.060			
280-137609-c-5 X	30	9.802			
280-137609-c-6	394	30.689			
280-137609-c-7	34920	3376.561			
LCS	27163	2468.963			
MB	33	5.121			
280-137609-c-1	549	41.705			
MS 280-137609-c-1	12799	1026.912			
MSD 280-137609-c-1	12930	1038.593			
280-137609-c-8 X	211	177.413			
RINSE	-5	2.481			
READ BASELINE	0	2.819	BL		
CCVL 500.0 PPB	6419	485.697			
CCV 2500.0 PPB	27405	2495.942			
CCB	-5	2.467			
READ BASELINE	0	2.819	BL		
280-137609-c-16	12368	9884.376			
280-137609-c-17	2904	2136.310			
280-137609-c-18	4534	337.489			
280-137609-c-19	1461	107.264			
280-137609-c-20	4931	3682.010			
280-137609-c-21	3267	1204.198			
280-137609-c-22	29977	2787.791			
280-137609-c-23	5203	389.421			
280-137609-l-9	979	72.439			
MS 280-137609-l-9	13196	1062.608			
RINSE	-20	1.408			
READ BASELINE	0	2.819	BL		
CCVL 500.0 PPB	6578	498.439			
CCV 2500.0 PPB	27954	2557.438			
CCB	-28	0.867			
READ BASELINE	0	2.819	BL		
MSD 280-137609-l-9	13401	1081.120			
280-137609-c-24	20306	1741.929			
280-137609-c-25	3345	246.713			
280-137609-c-26	18006	15138.546			
280-137609-c-27	19059	16173.355			
280-137609-c-28	1304	95.877			
280-137609-c-29	24080	2133.370			
280-137647-c-4	84	8.761			
280-137669-d-2	101	9.944			
280-137609-c-5	301	24.091			
RINSE	0	2.833			
READ BASELINE	0	2.819	BL		
CCVL 500.0 PPB	6510	492.934			
CCV 2500.0 PPB	27563	2513.574			
CCB	-17	1.598			
READ BASELINE	0	2.819	BL		
280-137609-c-8	1591	116.739			
RINSE	-34	0.427			
READ BASELINE	0	2.819	BL		

Result path	C:\FLOW_4\061620.RST
Sample table path	C:\FLOW_4\061620.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	16-Jun-20
Time acquired	16:14

	NH3					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
CCVL 500.0 PPB	6619	501.718				
CCV 2500.0 PPB	27605	2518.237				
CCB	-21	1.330				
READ BASELINE	0	2.819	BL			

Peak Table:NH3

File name: C:\FLOW_4\061620.RST
Date: 16-Jun-20
Operator: BWH

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	12604	1009.466980	
2	0	Carry Over	1	CO	1	1	20	4.229619	
B	0	Blank	1	RB	1	1	0	2.818566	BL
4	101	Cal 0 ppb	1	C	1	1	23	4.429363	
5	102	Cal 25 ppb	1	C	1	1	356	27.994722	
6	103	Cal 50 ppb	1	C	1	1	699	52.374805	
7	104	Cal 100 ppb	1	C	1	1	1287	94.654716	
8	105	Cal 500 ppb	1	C	1	1	6350	480.117279	
9	106	Cal 1000 ppb	1	C	1	1	12743	1021.879211	
10	107	Cal 2500 ppb	1	C	1	1	27371	2492.143311	
11	108	Cal 5000 ppb	1	C	1	1	47225	5001.408203	HI
12	0	Blank	1	BLNK	1	1	-75	-2.442779	LO
B	0	Read Baseline	1	RB	1	1	0	2.818566	BL
14	109	ICVL 500.0 ppb	1	U	1	1	7076	538.604370	
15	110	ICV 2500.0 ppb	1	U	1	1	27709	2529.955566	
16	111	ICB	1	U	1	1	-12	2.001726	
B	0	read baseline	1	RB	1	1	0	2.818566	BL
18	107	LCS	1	U	1	1	27064	2457.949463	
19	111	MB	1	U	1	1	-17	1.635634	
20	201	280-137530-c-1	1	U	1	1	388	30.269152	
21	202	MS 280-137530-c-1	1	U	1	1	12941	1039.634644	
22	203	MSD 280-137530-c-1	1	U	1	1	12838	1030.361328	
23	204	280-137549-c-1	1	U	1	1	12260	978.763550	
24	205	280-137549-c-2	1	U	1	1	4866	363.168701	
25	206	280-137549-c-3	1	U	1	1	655	49.283279	
26	207	280-137549-c-4	1	U	1	1	43755	4520.168945	
27	208	280-137549-c-5	1	U	1	1	154	13.713752	
28	209	280-137549-c-6	1	U	5	1	15198	6230.909180	
29	210	280-137549-c-7	1	U	1	1	103	10.069782	
30	0	RINSE	1	U	1	1	9	3.453137	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
32	105	CCVL 500.0 PPB	1	U	1	1	6458	488.821075	
33	107	CCV 2500.0 PPB	1	U	1	1	27435	2499.251953	
34	111	CCB	1	U	1	1	-6	2.400093	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
36	211	280-137549-c-8	1	U	1	1	61	7.129690	
37	212	280-137549-c-10	1	U	1	1	140	12.691282	
38	213	280-137549-c-9	1	U	1	1	372	29.124493	
39	214	MS 280-137549-c-9	1	U	1	1	12379	989.417175	
40	215	MSD 280-137549-c-9	1	U	1	1	12549	1004.559875	
41	216	280-137549-c-11	1	U	1	1	461	35.418316	
42	217	280-137549-c-12	1	U	1	1	11428	905.417053	
43	218	280-137552-a-1	1	U	1	1	1030	76.102882	
44	219	280-137609-c-2	1	U	1	1	28751	2647.442139	
45	220	280-137609-c-3	1	U	1	1	11835	941.183533	
46	0	RINSE	1	U	1	1	-19	1.459155	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
48	105	CCVL 500.0 PPB	1	U	1	1	6413	485.219360	
49	107	CCV 2500.0 PPB	1	U	1	1	27505	2507.089111	
50	111	CCB	1	U	1	1	-13	1.928799	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
52	221	280-137609-c-4	1	U	1	1	10596	833.060364	
53	222	280-137609-c-5 X	1	U	2	1	30	9.802280	
54	223	280-137609-c-6	1	U	1	1	394	30.689419	
55	224	280-137609-c-7	1	U	1	1	34920	3376.561035	
56	107	LCS	1	U	1	1	27163	2468.963135	
57	111	MB	1	U	1	1	33	5.121339	
58	225	280-137609-c-1	1	U	1	1	549	41.705444	
59	226	MS 280-137609-c-1	1	U	1	1	12799	1026.911743	
60	227	MSD 280-137609-c-1	1	U	1	1	12930	1038.593262	
61	228	280-137609-c-8 X	1	U	10	1	211	177.413208	
62	0	RINSE	1	U	1	1	-5	2.480894	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
64	105	CCVL 500.0 PPB	1	U	1	1	6419	485.696594	
65	107	CCV 2500.0 PPB	1	U	1	1	27405	2495.941895	
66	111	CCB	1	U	1	1	-5	2.466934	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
68	229	280-137609-c-16	1	U	10	1	12368	9884.375977	
69	230	280-137609-c-17	1	U	10	1	2904	2136.309814	
70	231	280-137609-c-18	1	U	1	1	4534	337.488892	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	232	280-137609-c-19	1	U	1	1	1461	107.263504	
72	233	280-137609-c-20	1	U	10	1	4931	3682.010254	
73	234	280-137609-c-21	1	U	5	1	3267	1204.197510	
74	235	280-137609-c-22	1	U	1	1	29977	2787.791016	
75	236	280-137609-c-23	1	U	1	1	5203	389.421143	
76	237	280-137609-l-9	1	U	1	1	979	72.439064	
77	238	MS 280-137609-l-9	1	U	1	1	13196	1062.608032	
78	0	RINSE	1	U	1	1	-20	1.407593	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
80	105	CCVL 500.0 PPB	1	U	1	1	6578	498.438568	
81	107	CCV 2500.0 PPB	1	U	1	1	27954	2557.438477	
82	111	CCB	1	U	1	1	-28	0.866538	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
84	239	MSD 280-137609-l-9	1	U	1	1	13401	1081.120239	
85	240	280-137609-c-24	1	U	1	1	20306	1741.928589	
86	241	280-137609-c-25	1	U	1	1	3345	246.713364	
87	242	280-137609-c-26	1	U	10	1	18006	15138.545898	
88	243	280-137609-c-27	1	U	10	1	19059	16173.355469	
89	244	280-137609-c-28	1	U	1	1	1304	95.876953	
90	245	280-137609-c-29	1	U	1	1	24080	2133.369873	
91	246	280-137647-c-4	1	U	1	1	84	8.761350	
92	247	280-137669-d-2	1	U	1	1	101	9.944413	
93	248	280-137609-c-5	1	U	1	1	301	24.090738	
94	0	RINSE	1	U	1	1	0	2.833439	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
96	105	CCVL 500.0 PPB	1	U	1	1	6510	492.933563	
97	107	CCV 2500.0 PPB	1	U	1	1	27563	2513.573975	
98	111	CCB	1	U	1	1	-17	1.597986	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
100	249	280-137609-c-8	1	U	1	1	1591	116.738678	
101	0	RINSE	1	U	1	1	-34	0.426502	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL
103	105	CCVL 500.0 PPB	1	U	1	1	6619	501.718201	
104	107	CCV 2500.0 PPB	1	U	1	1	27605	2518.237305	
105	111	CCB	1	U	1	1	-21	1.330191	
B	0	READ BASELINE	1	RB	1	1	0	2.818566	BL

NH3:Calibration 1: Peak 4-106

File name: C:\FLOW_4\061620.RST
Date: 16-Jun-20
Operator: BWH

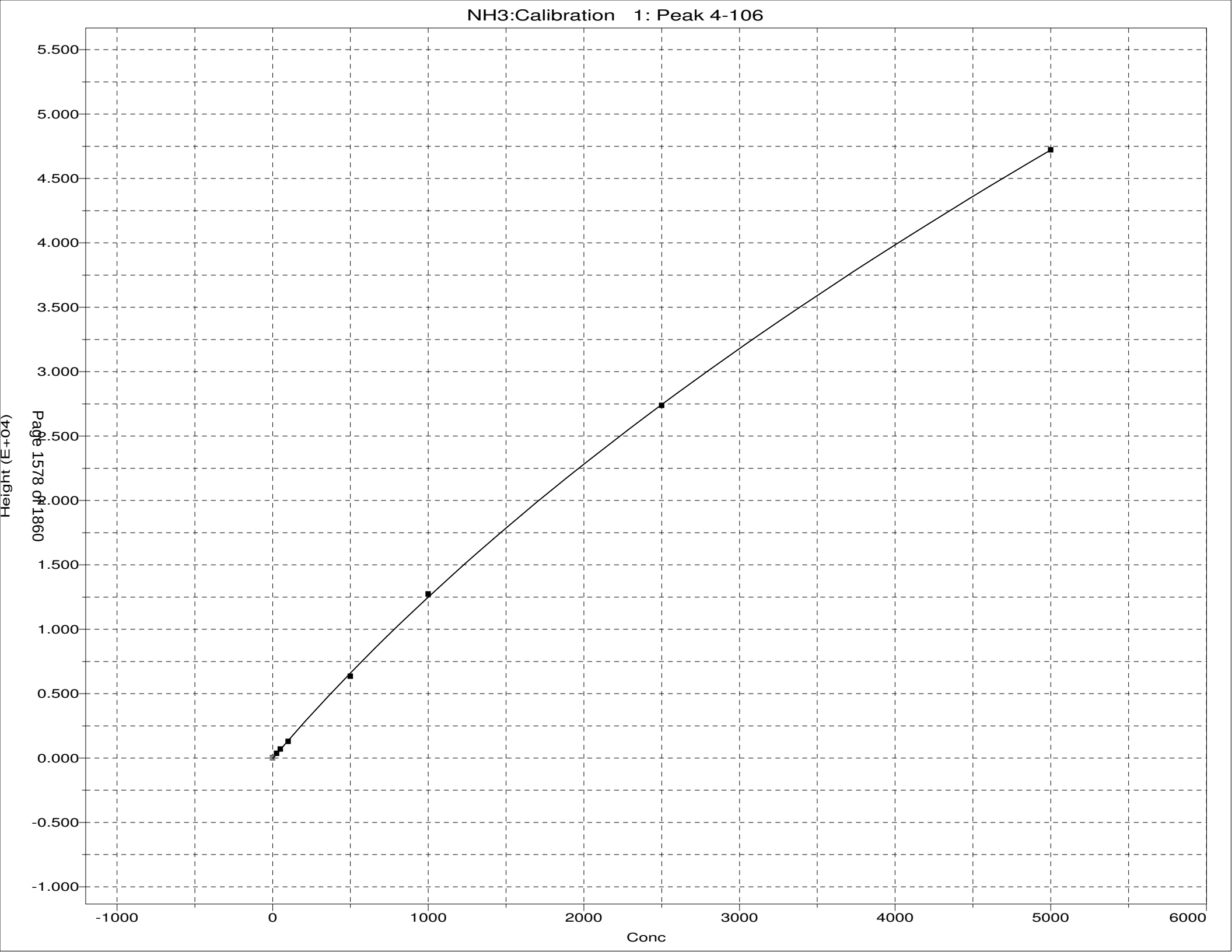
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	22.873283
*	Cal 25 ppb	25.000000	356.235229
*	Cal 50 ppb	50.000000	698.665649
*	Cal 100 ppb	100.000000	1286.739990
*	Cal 500 ppb	500.000000	6349.527832
*	Cal 1000 ppb	1000.000000	12743.179688
*	Cal 2500 ppb	2500.000000	27371.099609
*	Cal 5000 ppb	5000.000000	47224.644531

Calib Coef:
x=cyy+by+a
a: (intercept) 2.8186e+00
b: 7.0405e-02
c: 7.5049e-07

Corr Coef: 0.999977

Carryover: 0.159%

No Drift Peaks


NH3:Calibration 1: Peak 4-106
Height (E+04)
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4.500
4.000
3.500
3.000
2.500
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-0.500
-1.000
-1000
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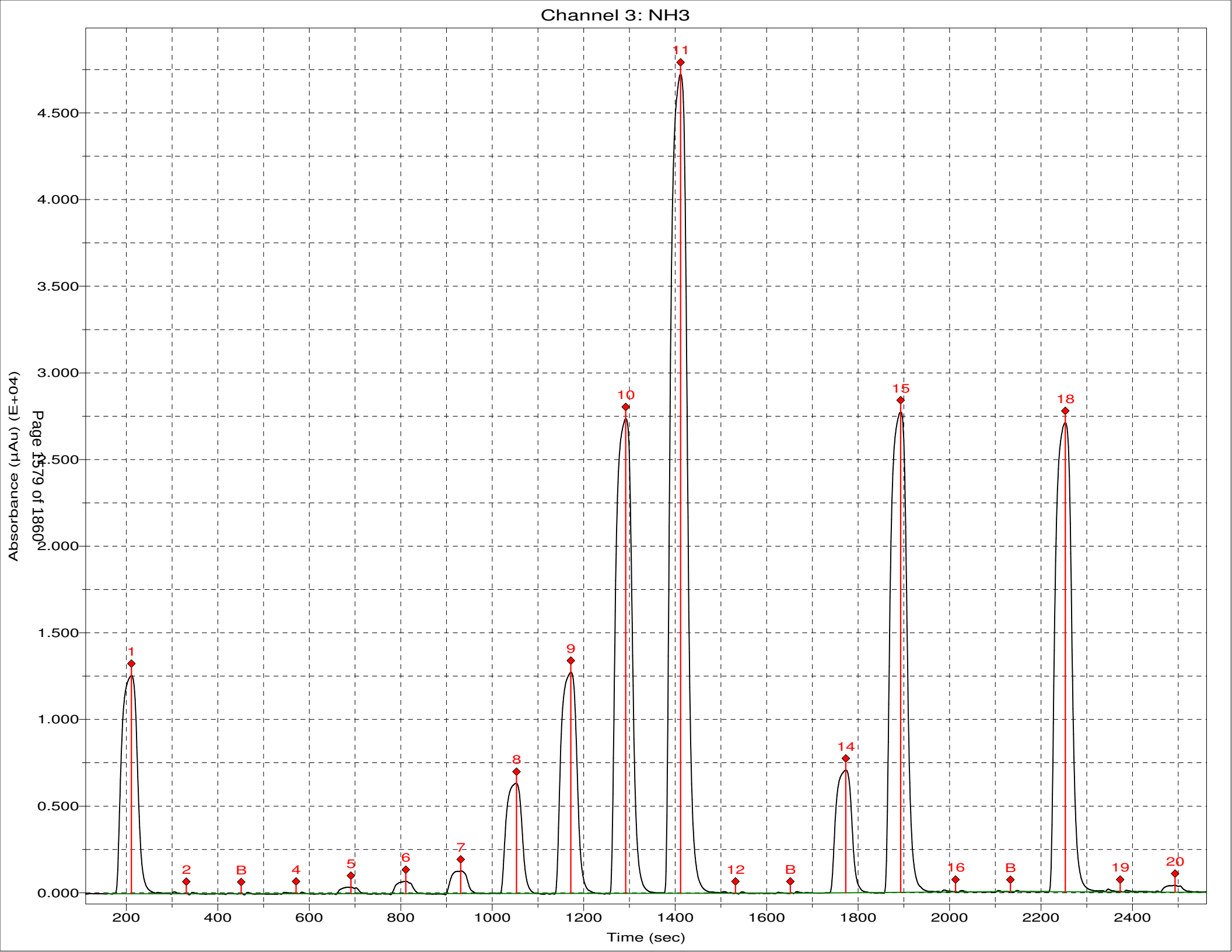
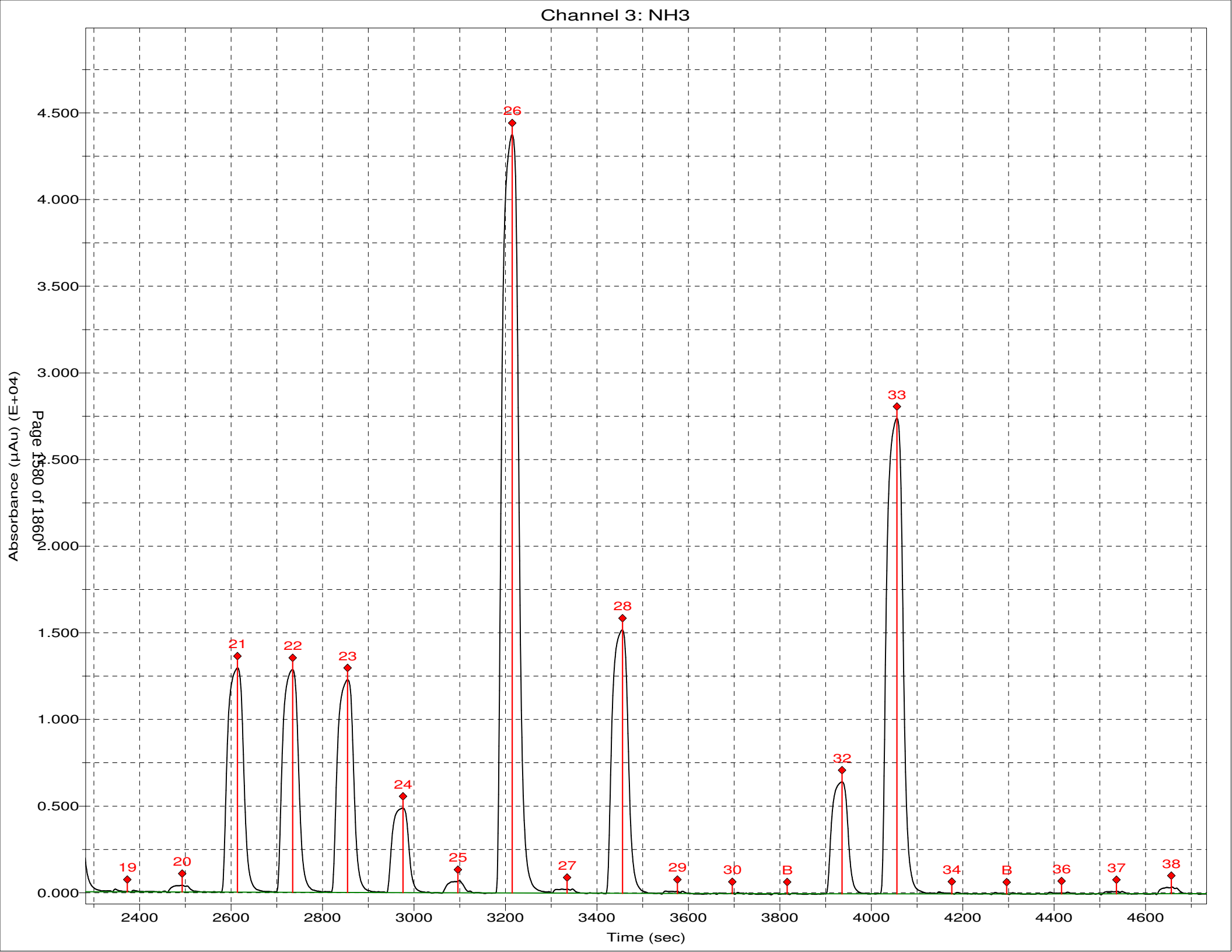
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 1579 of 1860
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
1
2
B
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 3: NH3
Absorbance (µAu) (E+04)
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4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
Page 1580 of 1860
19
20
21
22
23
24
25
26
27
28
29
30
B
32
33
34
B
36
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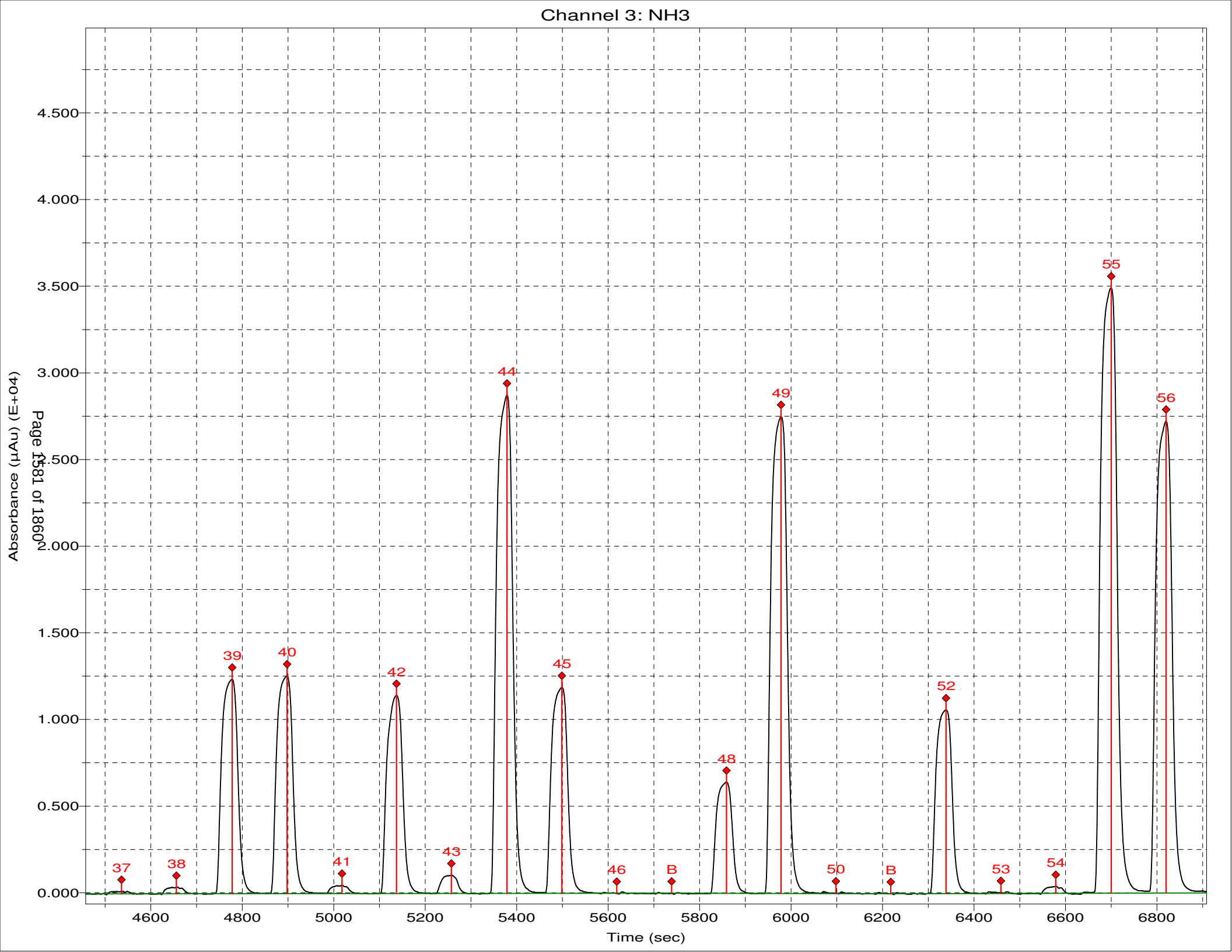
4200
4400
4600
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 1581 of 18602
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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
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41
42
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45
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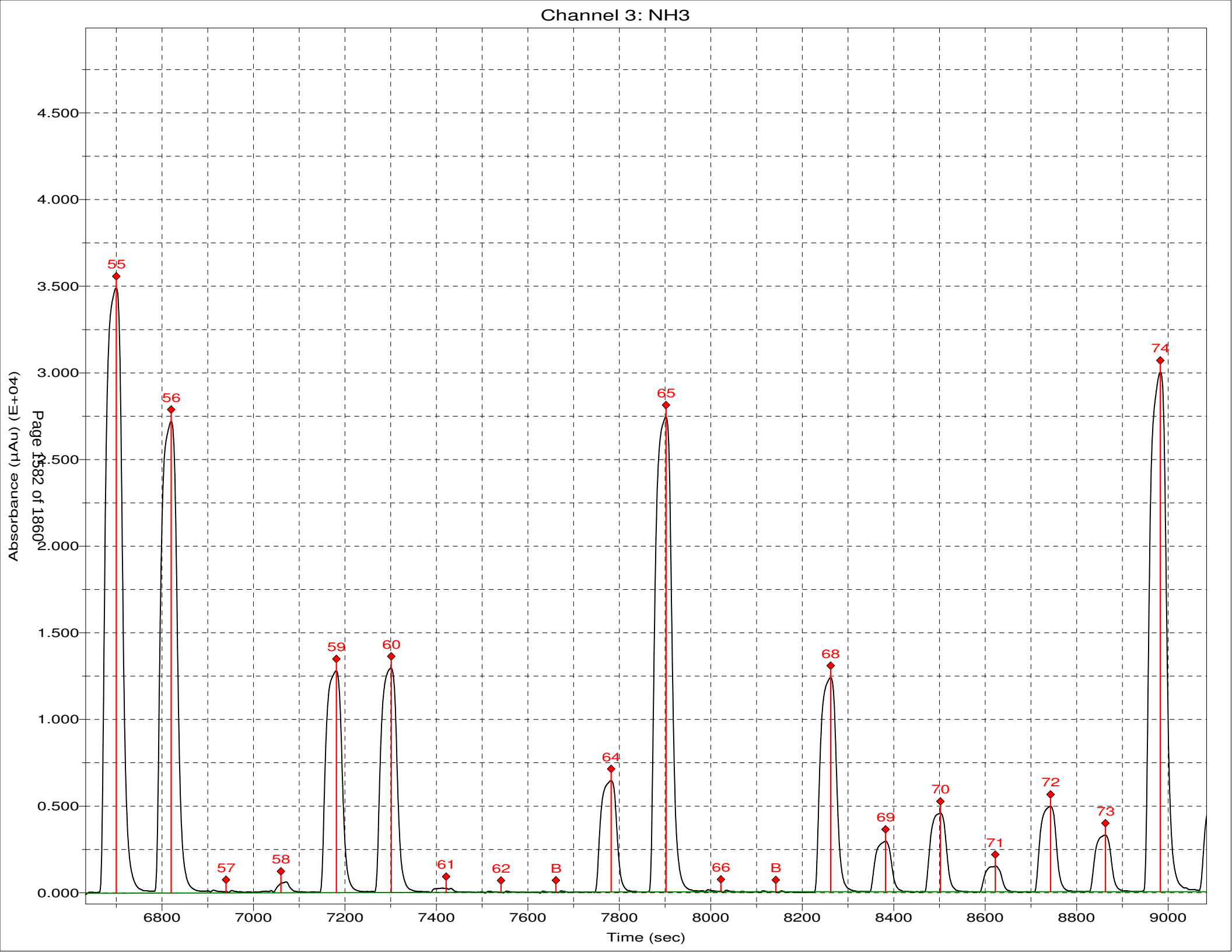
B
48
49
50
B
52
53
54
55
56


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 1582 of 1860
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4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
55
56
57
58
59
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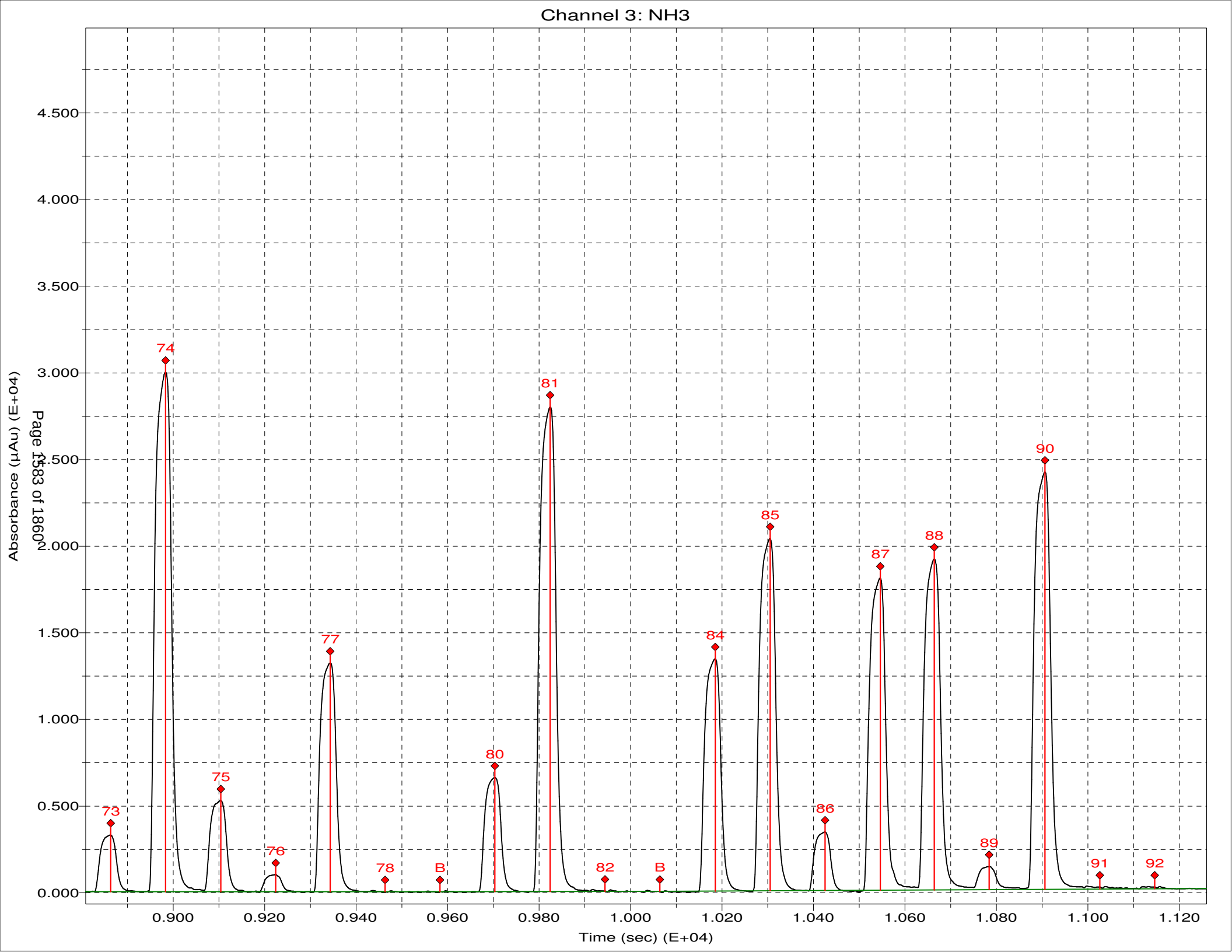
69
70
71
72
73
74


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
Page 1583 of 1860
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
1.100
1.120
73
74
75
76
77
78
B
80
81
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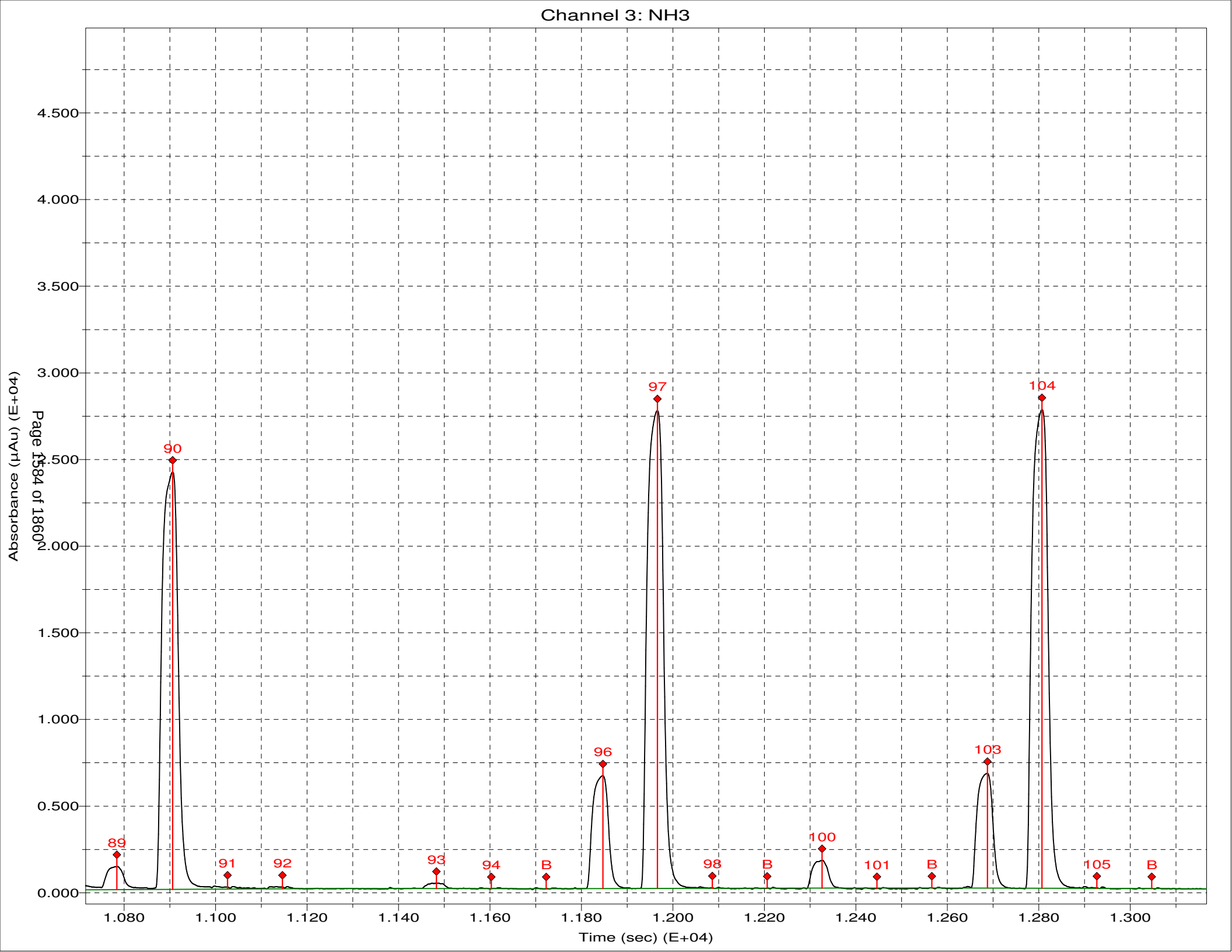
87
88
89
90
91
92


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
Page 1584 of 18600
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4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1.080
1.100
1.120
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
1.300
89
90
91
92
93
94
B
96
97
98
B
100
101
B
103
104
105
B

Sample Table for 061920

	Position	Identifier	Type	Cup Type
1	1:1	SYNC	SYNC	4 ml
2	1:2	CO	Carry over	4 ml
3	1:3	w	Blank	4 ml
4	1:4	W	Wash	4 ml
5	1:5	C1	Calibrant	4 ml
6	1:6	C2	Calibrant	4 ml
7	1:7	C3	Calibrant	4 ml
8	1:8	C4	Calibrant	4 ml
9	1:9	C5	Calibrant	4 ml
10	1:10	C6	Calibrant	4 ml
11	1:13	w	Blank	4 ml
12	1:14	W	Wash	4 ml
13	1:15	ICV 280-498263/33-A	Unknown	4 ml
14	1:16	ICB 280-498263/34-A	Unknown	4 ml
15	1:17	LCS 280-499167/1-A	Unknown	4 ml
16	1:18	MB 280-499167/2-A	Unknown	4 ml
17	1:19	280-137512-C-1-A	Unknown	4 ml
18	1:20	280-137512-C-1-B MS	Unknown	4 ml
19	1:21	280-137512-C-1-C MSD	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-137512-C-2-A	Unknown	4 ml
22	1:24	280-137512-C-3-A	Unknown	4 ml
23	1:25	280-137512-C-4-A	Unknown	4 ml
24	1:26	280-137512-C-5-A	Unknown	4 ml
25	1:27	280-137512-C-6-A	Unknown	4 ml
26	1:28	280-137512-C-7-A	Unknown	4 ml
27	1:29	280-137512-C-8-A	Unknown	4 ml
28	1:30	w	Blank	4 ml
29	1:31	CCV 280-498263/35-A	Unknown	4 ml
30	1:32	CCB 280-498263/36-A	Unknown	4 ml
31	1:33	590-13312-D-2-B	Unknown	4 ml
32	1:34	590-13312-D-3-B	Unknown	4 ml
33	1:35	280-137609-C-1-A	Unknown	4 ml
34	1:36	280-137609-C-1-B MS	Unknown	4 ml
35	1:37	280-137609-C-1-C MSD	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	580-95217-M-1-A	Unknown	4 ml
38	1:40	410-4095-E-5-A	Unknown	4 ml
39	1:41	280-137618-N-1-B	Unknown	4 ml
40	1:42	280-137486-H-2-A	Unknown	4 ml
41	1:43	280-137609-C-2-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-498263/35-A	Unknown	4 ml
44	1:46	CCB 280-498263/36-A	Unknown	4 ml

	Position	Identifier	Type	Cup Type
45	1:47	280-137609-C-3-A	Unknown	4 ml
46	1:48	280-137609-C-4-A	Unknown	4 ml
47	1:49	280-137609-C-5-A	Unknown	4 ml
48	1:50	280-137609-C-6-A	Unknown	4 ml
49	1:51	w	Blank	4 ml
50	1:52	LCS 280-499167/27-A	Unknown	4 ml
51	1:53	MB 280-499167/28-A	Unknown	4 ml
52	1:54	280-137609-L-9-A	Unknown	4 ml
53	1:55	280-137609-L-9-B MS	Unknown	4 ml
54	1:56	280-137609-L-9-C MSD	Unknown	4 ml
55	1:57	w	Blank	4 ml
56	1:58	w	Blank	4 ml
57	1:59	CCV 280-498263/35-A	Unknown	4 ml
58	1:60	CCB 280-498263/36-A	Unknown	4 ml
59	2:1	280-137609-C-7-A	Unknown	4 ml
60	2:2	280-137609-C-8-A	Unknown	4 ml
61	2:3	280-137609-C-16-A	Unknown	4 ml
62	2:4	280-137609-C-17-A	Unknown	4 ml
63	2:5	280-137609-C-18-A	Unknown	4 ml
64	2:6	280-137609-C-19-A	Unknown	4 ml
65	2:7	280-137609-C-20-A	Unknown	4 ml
66	2:8	280-137609-C-21-A	Unknown	4 ml
67	2:9	280-137609-C-22-A	Unknown	4 ml
68	2:10	280-137609-C-25-A	Unknown	4 ml
69	2:11	w	Blank	4 ml
70	2:12	CCV 280-498263/35-A	Unknown	4 ml
71	2:13	CCB 280-498263/36-A	Unknown	4 ml
72	2:14	280-137609-C-25-B MS	Unknown	4 ml
73	2:15	280-137609-C-25-C MSD	Unknown	4 ml
74	2:16	w	Blank	4 ml
75	2:17	280-137609-C-24-A	Unknown	4 ml
76	2:18	280-137609-C-26-A	Unknown	4 ml
77	2:19	280-137609-C-27-A	Unknown	4 ml
78	2:20	280-137609-C-28-A	Unknown	4 ml
79	2:21	CCV 280-498263/35-A	Unknown	4 ml
80	2:22	CCV 280-498263/35-A	Unknown	4 ml
81	2:23	CCV 280-498263/35-A	Unknown	4 ml
82	2:24	CCB 280-498263/36-A	Unknown	4 ml
83	2:25	280-137582-D-1-A	Unknown	4 ml
84	2:26	w	Blank	4 ml
85	2:27	280-137609-C-23-A	Unknown	4 ml
86	2:28	280-137609-C-29-A	Unknown	4 ml
87	2:29	280-137582-D-1-B MS	Unknown	4 ml
88	2:30	280-137582-D-1-C MSD	Unknown	4 ml

	Position	Identifier	Type	Cup Type
89	2:31	280-137512-C-1-B MS	Unknown	4 ml
90	2:32	280-137512-C-1-C MSD	Unknown	4 ml
91	2:33	w	Blank	4 ml
92	2:34	580-95217-M-1-A	Unknown	4 ml
93	2:35	w	Blank	4 ml
94	2:39	w	Blank	4 ml
95	2:40	280-137582-D-1-B MS	Unknown	4 ml
96	2:41	w	Blank	4 ml
97	2:42	CCV 280-498263/35-A	Unknown	4 ml
98	2:43	CCB 280-498263/36-A	Unknown	4 ml
99	2:1	280-137609-C-7-A	Unknown	4 ml
100	2:2	280-137609-C-8-A	Unknown	4 ml
101	2:3	280-137609-C-16-A	Unknown	4 ml
102	2:4	280-137609-C-17-A	Unknown	4 ml
103	2:5	280-137609-C-18-A	Unknown	4 ml
104	2:6	280-137609-C-19-A	Unknown	4 ml
105	2:7	280-137609-C-20-A	Unknown	4 ml
106	2:8	280-137609-C-21-A	Unknown	4 ml
107	2:9	280-137609-C-22-A	Unknown	4 ml
108	2:10	280-137609-C-25-A	Unknown	4 ml
109	2:40	w	Blank	4 ml
110	2:41	w	Blank	4 ml
111	2:42	CCV 280-498263/35-A	Unknown	4 ml
112	2:43	CCB 280-498263/36-A	Unknown	4 ml
113	2:44	280-137609-C-25-B MS	Unknown	4 ml
114	2:45	280-137609-C-25-C MSD	Unknown	4 ml
115	2:46	280-137609-C-24-A	Unknown	4 ml
116	2:47	280-137609-C-26-A	Unknown	4 ml
117	2:48	280-137609-C-27-A	Unknown	4 ml
118	2:49	280-137609-C-28-A	Unknown	4 ml
119	2:50	LCS 280-499167/50-A	Unknown	4 ml
120	2:51	MB 280-499167/51-A	Unknown	4 ml
121	2:52	280-137582-D-1-A	Unknown	4 ml
122	2:53	280-137582-D-1-B MS	Unknown	4 ml
123	2:54	280-137582-D-1-C MSD	Unknown	4 ml
124	2:55	w	Blank	4 ml
125	2:56	CCV 280-498263/35-A	Unknown	4 ml
126	2:57	CCB 280-498263/36-A	Unknown	4 ml
127	2:58	580-95217-M-1-A	Unknown	4 ml
128	2:59	280-137486-H-2-A	Unknown	4 ml
129	2:60	w	Blank	4 ml
130	3:1	280-137582-D-1-A	Unknown	4 ml
131	3:2	280-137582-D-1-B MS	Unknown	4 ml
132	3:3	280-137582-D-1-C MSD	Unknown	4 ml

Sample Table for 061920

	Position	Identifier	Type	Cup Type
133	3:4	w	Blank	4 ml
134	2:56	CCV 280-498263/35-A	Unknown	4 ml
135	2:57	CCB 280-498263/36-A	Unknown	4 ml
136	2:58	w	Blank	4 ml
137	2:59	w	Blank	4 ml
138	2:60	w	Blank	4 ml

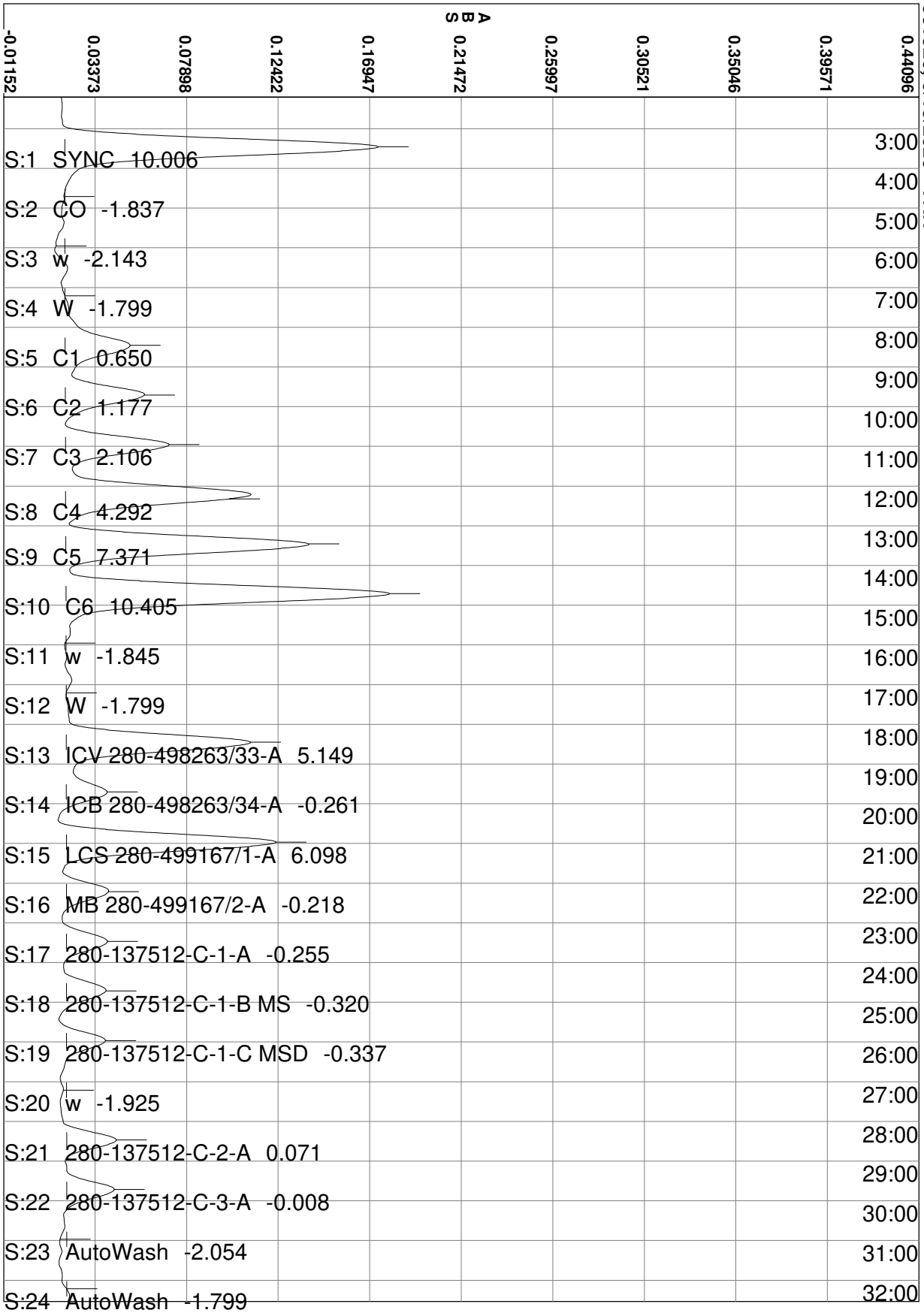
Run Name: 061920
Configuration: TKN
Run date: 6/19/2020

	Position	Identifier	Type	Comme	Date	Time	otal	TKN Cor Ht	mg/l
1	1:1	SYNC	SYNC	50;351.2	6/19/2020	3:56:11 PM	1	0.15458	10.006
2	1:2	CO	Carry over		6/19/2020	3:56:41 PM	1	-0.00051	-1.837
3	1:3	w	Blank		6/19/2020	3:57:56 PM	1	-0.00451	-2.143
4	1:4	W	Wash		6/19/2020	3:59:11 PM	1	0.00000	-1.799
5	1:5	C1	Calibrant		6/19/2020	4:00:26 PM	1	0.03207	0.650
6	1:6	C2	Calibrant		6/19/2020	4:01:41 PM	1	0.03896	1.177
7	1:7	C3	Calibrant		6/19/2020	4:02:56 PM	1	0.05113	2.106
8	1:8	C4	Calibrant		6/19/2020	4:04:12 PM	1	0.07975	4.292
9	1:9	C5	Calibrant		6/19/2020	4:05:27 PM	1	0.12007	7.371
10	1:10	C6	Calibrant		6/19/2020	4:06:42 PM	1	0.15979	10.405
		Curve #:							1
		Curve Type:							Linear
		Correlation:							0.99498
		Intercept:							0.023551
		Linear coef:							0.013095
11	1:13	w	Blank		6/19/2020	4:07:57 PM	1	-0.00061	-1.845
12	1:14	W	Wash		6/19/2020	4:09:12 PM	1	0.00000	-1.799
13	1:15	ICV 280-498263/33-A	Unknown		6/19/2020	4:10:27 PM	1	0.09097	5.149
14	1:16	ICB 280-498263/34-A	Unknown		6/19/2020	4:11:42 PM	1	0.02014	-0.261
15	1:17	LCS 280-499167/1-A	Unknown		6/19/2020	4:12:56 PM	1	0.10340	6.098
16	1:18	MB 280-499167/2-A	Unknown		6/19/2020	4:14:11 PM	1	0.02069	-0.218
17	1:19	280-137512-C-1-A	Unknown		6/19/2020	4:15:26 PM	1	0.02021	-0.255
18	1:20	280-137512-C-1-B MS	Unknown		6/19/2020	4:16:41 PM	1	0.01936	-0.320
19	1:21	280-137512-C-1-C MSD	Unknown		6/19/2020	4:17:56 PM	1	0.01914	-0.337
20	1:22	w	Blank		6/19/2020	4:19:11 PM	1	-0.00165	-1.925
21	1:23	280-137512-C-2-A	Unknown		6/19/2020	4:20:26 PM	1	0.02448	0.071
22	1:24	280-137512-C-3-A	Unknown		6/19/2020	4:21:41 PM	1	0.02344	-0.008
23	0	AutoWash	AutoWash		6/19/2020	4:22:56 PM	1	-0.00335	-2.054
24	0	AutoWash	AutoWash		6/19/2020	4:24:11 PM	1	0.00000	-1.799
25	1:25	280-137512-C-4-A	Unknown		6/19/2020	4:25:26 PM	1	0.04115	1.344
26	1:26	280-137512-C-5-A	Unknown		6/19/2020	4:26:41 PM	1	0.02539	0.140
27	1:27	280-137512-C-6-A	Unknown		6/19/2020	4:27:56 PM	1	0.03303	0.724
28	1:28	280-137512-C-7-A	Unknown		6/19/2020	4:29:11 PM	1	0.02590	0.179
29	1:29	280-137512-C-8-A	Unknown		6/19/2020	4:30:26 PM	1	0.02583	0.174
30	1:30	w	Blank		6/19/2020	4:31:41 PM	1	0.00476	-1.435
31	1:31	CCV 280-498263/35-A	Unknown		6/19/2020	4:32:56 PM	1	0.08887	4.988
32	1:32	CCB 280-498263/36-A	Unknown		6/19/2020	4:34:11 PM	1	0.02880	0.401
33	1:33	590-13312-D-2-B	Unknown		6/19/2020	4:35:26 PM	1	0.10294	6.063
34	1:34	590-13312-D-3-B	Unknown		6/19/2020	4:36:41 PM	1	0.08150	4.426
35	0	AutoWash	AutoWash		6/19/2020	4:37:56 PM	1	0.00015	-1.787
36	0	AutoWash	AutoWash		6/19/2020	4:39:12 PM	1	0.00000	-1.799
37	1:35	280-137609-C-1-A	Unknown		6/19/2020	4:40:27 PM	1	0.03288	0.713
38	1:36	280-137609-C-1-B MS	Unknown		6/19/2020	4:41:42 PM	1	0.06859	3.439

	Position	Identifier	Type	Comme	Date	Time	otal	Cor Ht	TKN mg/l
39	1:37	280-137609-C-1-C MSD	Unknown		6/19/2020	4:42:57 PM	1	0.06896	3.467
40	1:38	w	Blank		6/19/2020	4:44:12 PM	1	0.00012	-1.790
41	1:39	580-95217-M-1-A	Unknown		6/19/2020	4:45:27 PM	1	0.43291	31.262
42	1:40	410-4095-E-5-A	Unknown		6/19/2020	4:46:42 PM	1	0.03557	0.917
43	1:41	280-137618-N-1-B	Unknown		6/19/2020	4:47:56 PM	1	0.12158	7.487
44	1:42	280-137486-H-2-A	Unknown		6/19/2020	4:49:11 PM	1	0.48535	35.267
45	1:43	280-137609-C-2-A	Unknown		6/19/2020	4:50:26 PM	1	0.08434	4.642
46	1:44	w	Blank		6/19/2020	4:51:41 PM	1	-0.00052	-1.838
47	0	AutoWash	AutoWash		6/19/2020	4:52:56 PM	1	-0.00041	-1.830
48	0	AutoWash	AutoWash		6/19/2020	4:54:11 PM	1	0.00000	-1.799
49	1:45	CCV 280-498263/35-A	Unknown		6/19/2020	4:55:26 PM	1	0.08996	5.071
50	1:46	CCB 280-498263/36-A	Unknown		6/19/2020	4:56:41 PM	1	0.02655	0.229
51	1:47	280-137609-C-3-A	Unknown		6/19/2020	4:57:56 PM	1	0.04576	1.696
52	1:48	280-137609-C-4-A	Unknown		6/19/2020	4:59:11 PM	1	0.03623	0.968
53	1:49	280-137609-C-5-A	Unknown		6/19/2020	5:00:26 PM	1	0.03421	0.814
54	1:50	280-137609-C-6-A	Unknown		6/19/2020	5:01:41 PM	1	0.03728	1.049
55	1:51	w	Blank		6/19/2020	5:02:56 PM	1	0.00361	-1.523
56	1:52	LCS 280-499167/27-A	Unknown		6/19/2020	5:04:11 PM	1	0.10866	6.499
57	1:53	MB 280-499167/28-A	Unknown		6/19/2020	5:05:26 PM	1	0.02632	0.211
58	1:54	280-137609-L-9-A	Unknown		6/19/2020	5:06:41 PM	1	0.02923	0.433
59	0	AutoWash	AutoWash		6/19/2020	5:07:56 PM	1	0.00029	-1.776
60	0	AutoWash	AutoWash		6/19/2020	5:09:11 PM	1	0.00000	-1.799
61	1:55	280-137609-L-9-B MS	Unknown		6/19/2020	5:10:26 PM	1	0.06193	2.931
62	1:56	280-137609-L-9-C MSD	Unknown		6/19/2020	5:11:41 PM	1	0.06393	3.084
63	1:57	w	Blank		6/19/2020	5:12:56 PM	1	0.00235	-1.619
64	1:58	w	Blank		6/19/2020	5:14:12 PM	1	0.00250	-1.607
65	1:59	CCV 280-498263/35-A	Unknown		6/19/2020	5:15:27 PM	1	0.09124	5.169
66	1:60	CCB 280-498263/36-A	Unknown		6/19/2020	5:16:42 PM	1	0.02959	0.461
67	2:1	280-137609-C-7-A	Unknown		6/19/2020	5:17:57 PM	1	0.08430	4.639
68	2:2	280-137609-C-8-A	Unknown		6/19/2020	5:19:12 PM	1	0.02725	0.282
69	2:3	280-137609-C-16-A	Unknown		6/19/2020	5:20:27 PM	1	0.13610	8.595
70	2:4	280-137609-C-17-A	Unknown		6/19/2020	5:21:41 PM	1	0.05695	2.550
71	0	AutoWash	AutoWash		6/19/2020	5:22:56 PM	1	-0.00116	-1.887
72	0	AutoWash	AutoWash		6/19/2020	5:24:11 PM	1	0.00000	-1.799
73	2:5	280-137609-C-18-A	Unknown		6/19/2020	5:25:26 PM	1	0.03089	0.561
74	2:6	280-137609-C-19-A	Unknown		6/19/2020	5:26:41 PM	1	0.02973	0.472
75	2:7	280-137609-C-20-A	Unknown		6/19/2020	5:27:56 PM	1	0.08050	4.349
76	2:8	280-137609-C-21-A	Unknown		6/19/2020	5:29:11 PM	1	0.04973	1.999
77	2:9	280-137609-C-22-A	Unknown		6/19/2020	5:30:26 PM	1	0.05925	2.726
78	2:10	280-137609-C-25-A	Unknown		6/19/2020	5:31:41 PM	1	0.03329	0.744
79	2:11	w	Blank		6/19/2020	5:32:56 PM	1	-0.00004	-1.802
80	2:12	CCV 280-498263/35-A	Unknown		6/19/2020	5:34:11 PM	1	0.07072	3.602
81	2:13	CCB 280-498263/36-A	Unknown		6/19/2020	5:35:26 PM	1	0.02196	-0.122
82	2:14	280-137609-C-25-B MS	Unknown		6/19/2020	5:36:41 PM	1	0.06099	2.859
83	0	AutoWash	AutoWash		6/19/2020	5:37:56 PM	1	0.00030	-1.776
84	0	AutoWash	AutoWash		6/19/2020	5:39:11 PM	1	0.00000	-1.799
85	2:15	280-137609-C-25-C MSD	Unknown		6/19/2020	5:40:26 PM	1	0.07170	3.677
86	2:16	w	Blank		6/19/2020	5:41:41 PM	1	0.06795	3.391

	Position	Identifier	Type	Comme	Date	Time	otal	Cor Ht	TKN mg/l
87	2:17	280-137609-C-24-A	Unknown		6/19/2020	5:42:56 PM	1	0.02378	0.018
88	2:18	280-137609-C-26-A	Unknown		6/19/2020	5:44:11 PM	1	0.13844	8.773
89	2:19	280-137609-C-27-A	Unknown		6/19/2020	5:45:26 PM	1	0.13606	8.592
90	2:20	280-137609-C-28-A	Unknown		6/19/2020	5:46:41 PM	1	0.03642	0.983
91	2:21	CCV 280-498263/35-A	Unknown		6/19/2020	5:47:56 PM	1	0.09504	5.459
92	2:22	CCV 280-498263/35-A	Unknown		6/19/2020	5:49:12 PM	1	0.09524	5.475
93	2:23	CCV 280-498263/35-A	Unknown		6/19/2020	5:50:27 PM	1	0.08647	4.805
94	2:24	CCB 280-498263/36-A	Unknown		6/19/2020	5:51:42 PM	1	0.02414	0.045
95	0	AutoWash	AutoWash		6/19/2020	5:52:57 PM	1	0.00221	-1.629
96	0	AutoWash	AutoWash		6/19/2020	5:54:12 PM	1	0.00000	-1.799
97	2:25	280-137582-D-1-A	Unknown		6/19/2020	5:55:27 PM	1	0.37749	27.029
98	2:26	w	Blank		6/19/2020	5:56:41 PM	1	0.00247	-1.610
99	2:27	280-137609-C-23-A	Unknown		6/19/2020	5:57:56 PM	1	0.02614	0.198
100	2:28	280-137609-C-29-A	Unknown		6/19/2020	5:59:11 PM	1	0.02566	0.161
101	2:29	280-137582-D-1-B MS	Unknown		6/19/2020	6:00:26 PM	1	0.06424	3.107
102	2:30	280-137582-D-1-C MSD	Unknown		6/19/2020	6:01:41 PM	1	0.40622	29.223
103	2:31	280-137512-C-1-B MS	Unknown		6/19/2020	6:02:56 PM	1	0.04234	1.435
104	2:32	280-137512-C-1-C MSD	Unknown		6/19/2020	6:04:11 PM	1	0.04435	1.588
105	2:33	w	Blank		6/19/2020	6:05:26 PM	1	0.00091	-1.729
106	2:34	580-95217-M-1-A	Unknown		6/19/2020	6:06:41 PM	10	0.05340	22.792
107	0	AutoWash	AutoWash		6/19/2020	6:07:56 PM	1	0.00092	-1.728
108	0	AutoWash	AutoWash		6/19/2020	6:09:11 PM	1	0.00000	-1.799
109	2:35	w	Blank		6/19/2020	6:10:26 PM	1	0.06147	2.896
110	2:39	w	Blank		6/19/2020	6:11:41 PM	1	0.00105	-1.718
111	2:40	280-137582-D-1-B MS	Unknown		6/19/2020	6:12:56 PM	1	0.40971	29.490
112	2:41	w	Blank		6/19/2020	6:14:11 PM	1	0.01935	-0.320
113	2:42	CCV 280-498263/35-A	Unknown		6/19/2020	6:15:26 PM	1	0.09351	5.343
114	2:43	CCB 280-498263/36-A	Unknown		6/19/2020	6:16:41 PM	1	0.02364	0.007
115	2:1	280-137609-C-7-A	Unknown		6/19/2020	6:17:56 PM	1	0.06659	3.287
116	2:2	280-137609-C-8-A	Unknown		6/19/2020	6:19:11 PM	1	0.03436	0.825
117	2:3	280-137609-C-16-A	Unknown		6/19/2020	6:20:26 PM	1	0.14186	9.035
118	2:4	280-137609-C-17-A	Unknown		6/19/2020	6:21:41 PM	1	0.05930	2.730
119	0	AutoWash	AutoWash		6/19/2020	6:22:56 PM	1	-0.00036	-1.826
120	0	AutoWash	AutoWash		6/19/2020	6:24:11 PM	1	0.00000	-1.799
121	2:5	280-137609-C-18-A	Unknown		6/19/2020	6:25:26 PM	1	0.03114	0.579
122	2:6	280-137609-C-19-A	Unknown		6/19/2020	6:26:42 PM	1	0.02949	0.454
123	2:7	280-137609-C-20-A	Unknown		6/19/2020	6:27:57 PM	1	0.08017	4.324
124	2:8	280-137609-C-21-A	Unknown		6/19/2020	6:29:12 PM	1	0.05104	2.100
125	2:9	280-137609-C-22-A	Unknown		6/19/2020	6:30:26 PM	1	0.06253	2.977
126	2:10	280-137609-C-25-A	Unknown		6/19/2020	6:31:41 PM	1	0.03446	0.833
127	2:40	w	Blank		6/19/2020	6:32:56 PM	1	0.23597	16.222
128	2:41	w	Blank		6/19/2020	6:34:11 PM	1	0.01770	-0.447
129	2:42	CCV 280-498263/35-A	Unknown		6/19/2020	6:35:26 PM	1	0.09368	5.355
130	2:43	CCB 280-498263/36-A	Unknown		6/19/2020	6:36:41 PM	1	0.02546	0.146
131	0	AutoWash	AutoWash		6/19/2020	6:37:56 PM	1	0.00064	-1.750
132	0	AutoWash	AutoWash		6/19/2020	6:39:11 PM	1	0.00000	-1.799
133	2:44	280-137609-C-25-B MS	Unknown		6/19/2020	6:40:26 PM	1	0.07035	3.574
134	2:45	280-137609-C-25-C MSD	Unknown		6/19/2020	6:41:41 PM	1	0.06842	3.427

	Position	Identifier	Type	Comme	Date	Time	otal	TKN Cor Ht	mg/l
135	2:46	280-137609-C-24-A	Unknown		6/19/2020	6:42:56 PM	1	0.05087	2.086
136	2:47	280-137609-C-26-A	Unknown		6/19/2020	6:44:11 PM	1	0.14384	9.186
137	2:48	280-137609-C-27-A	Unknown		6/19/2020	6:45:26 PM	1	0.14286	9.111
138	2:49	280-137609-C-28-A	Unknown		6/19/2020	6:46:41 PM	1	0.03808	1.109
139	2:50	LCS 280-499167/50-A	Unknown		6/19/2020	6:47:56 PM	1	0.10409	6.150
140	2:51	MB 280-499167/51-A	Unknown		6/19/2020	6:49:11 PM	1	0.02591	0.180
141	2:52	280-137582-D-1-A	Unknown		6/19/2020	6:50:26 PM	5	0.14182	45.160
142	2:53	280-137582-D-1-B MS	Unknown		6/19/2020	6:51:41 PM	5	0.15603	50.586
143	0	AutoWash	AutoWash		6/19/2020	6:52:56 PM	1	0.00100	-1.722
144	0	AutoWash	AutoWash		6/19/2020	6:54:11 PM	1	0.00000	-1.799
145	2:54	280-137582-D-1-C MSD	Unknown		6/19/2020	6:55:26 PM	5	0.14846	47.693
146	2:55	w	Blank		6/19/2020	6:56:41 PM	1	0.05941	2.738
147	2:56	CCV 280-498263/35-A	Unknown		6/19/2020	6:57:56 PM	1	0.08260	4.510
148	2:57	CCB 280-498263/36-A	Unknown		6/19/2020	6:59:11 PM	1	0.02391	0.027
149	2:58	580-95217-M-1-A	Unknown		6/19/2020	7:00:26 PM	10	0.06781	33.796
150	2:59	280-137486-H-2-A	Unknown		6/19/2020	7:01:42 PM	10	0.07505	39.327
151	2:60	w	Blank		6/19/2020	7:02:57 PM	1	0.00040	-1.768
152	3:1	280-137582-D-1-A	Unknown		6/19/2020	7:04:12 PM	10	0.08531	47.164
153	3:2	280-137582-D-1-B MS	Unknown		6/19/2020	7:05:26 PM	10	0.09184	52.151
154	3:3	280-137582-D-1-C MSD	Unknown		6/19/2020	7:06:41 PM	10	0.09281	52.892
155	0	AutoWash	AutoWash		6/19/2020	7:07:56 PM	1	0.00074	-1.742
156	0	AutoWash	AutoWash		6/19/2020	7:09:11 PM	1	0.00000	-1.799
157	3:4	w	Blank		6/19/2020	7:10:26 PM	1	0.00077	-1.740
158	2:56	CCV 280-498263/35-A	Unknown		6/19/2020	7:11:41 PM	1	0.08583	4.756
159	2:57	CCB 280-498263/36-A	Unknown		6/19/2020	7:12:56 PM	1	0.02276	-0.060
160	2:58	w	Blank		6/19/2020	7:14:11 PM	1	0.06923	3.488
161	2:59	w	Blank		6/19/2020	7:15:26 PM	1	0.07585	3.994
162	2:60	w	Blank		6/19/2020	7:16:41 PM	1	0.00064	-1.750
163	0	AutoWash	AutoWash		6/19/2020	7:17:56 PM	1	0.00132	-1.698
164	0	AutoWash	AutoWash		6/19/2020	7:19:11 PM	1	0.00000	-1.799


061920, 6/19/2020 - TKN
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0.03373
0.07898
0.12422
0.16947
0.21472
0.25997
0.30521
0.35046
0.39571
0.44096
S:1 SYNC 10.006
S:2 CO -1.837
S:3 w -2.143
S:4 W -1.799
S:5 C1 0.650
S:6 C2 1.177
S:7 C3 2.106
S:8 C4 4.292
S:9 C5 7.371
S:10 C6 10.405
S:11 w -1.845
S:12 W -1.799
S:13 ICV 280-498263/33-A 5.149
S:14 ICB 280-498263/34-A -0.261
S:15 LCS 280-499167/1-A 6.098
S:16 MB 280-499167/2-A -0.218
S:17 280-137512-C-1-A -0.255
S:18 280-137512-C-1-B MS -0.320
S:19 280-137512-C-1-C MSD -0.337
S:20 w -1.925
S:21 280-137512-C-2-A 0.071
S:22 280-137512-C-3-A -0.008
S:23 AutoWash -2.054
S:24 AutoWash -1.799
3:00
4:00
5:00
6:00
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10:00
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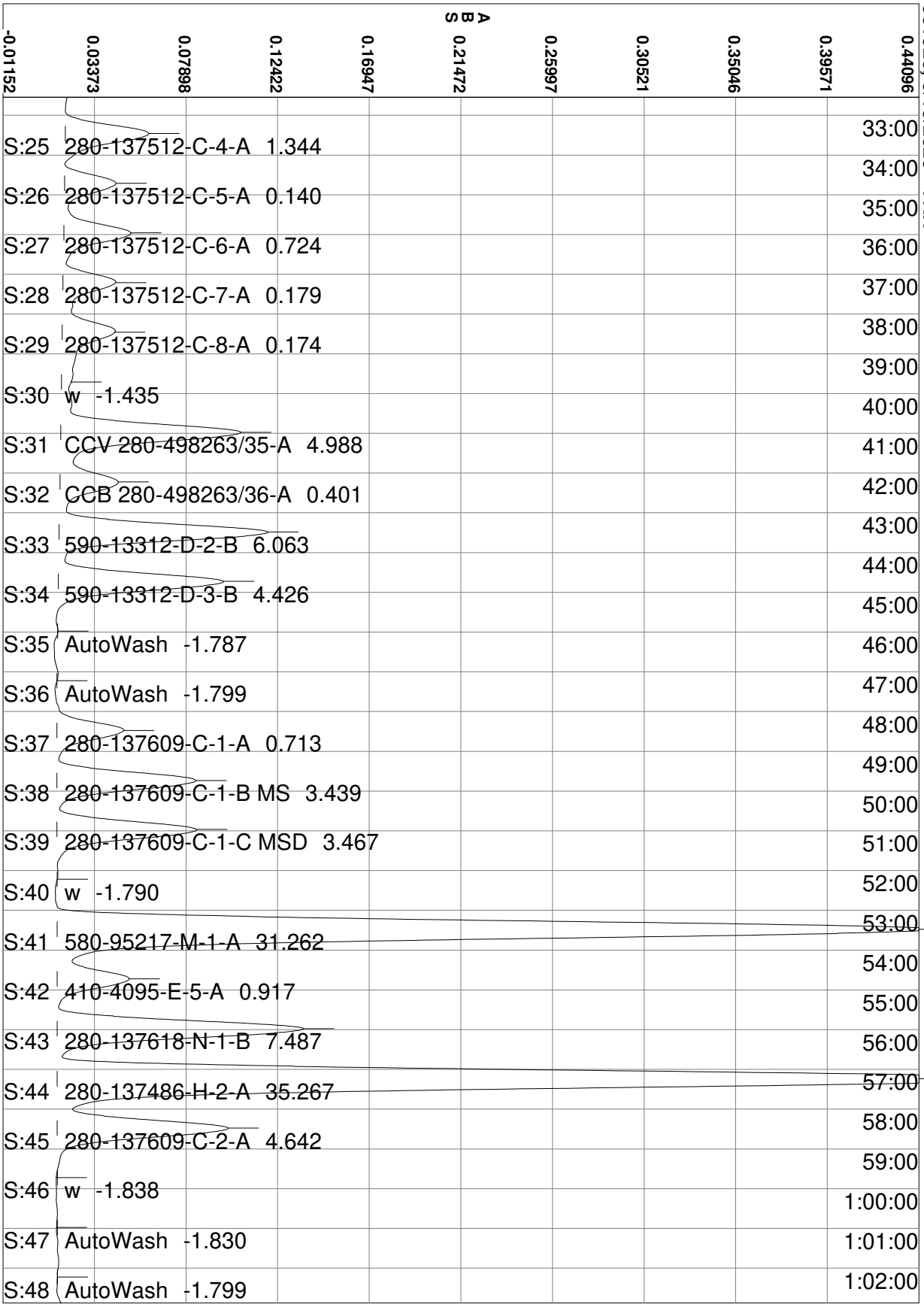
061920, 6/19/2020 - TKN
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0.30521
0.35046
0.39571
0.44096
S:25 280-137512-C-4-A 1.344
S:26 280-137512-C-5-A 0.140
S:27 280-137512-C-6-A 0.724
S:28 280-137512-C-7-A 0.179
S:29 280-137512-C-8-A 0.174
S:30 w -1.435
S:31 CCV 280-498263/35-A 4.988
S:32 CCB 280-498263/36-A 0.401
S:33 590-13312-D-2-B 6.063
S:34 590-13312-D-3-B 4.426
S:35 AutoWash -1.787
S:36 AutoWash -1.799
S:37 280-137609-C-1-A 0.713
S:38 280-137609-C-1-B MS 3.439
S:39 280-137609-C-1-C MSD 3.467
S:40 w -1.790
S:41 580-95217-M-1-A 31.262
S:42 410-4095-E-5-A 0.917
S:43 280-137618-N-1-B 7.487
S:44 280-137486-H-2-A 35.267
S:45 280-137609-C-2-A 4.642
S:46 w -1.838
S:47 AutoWash -1.830
S:48 AutoWash -1.799
33:00
34:00
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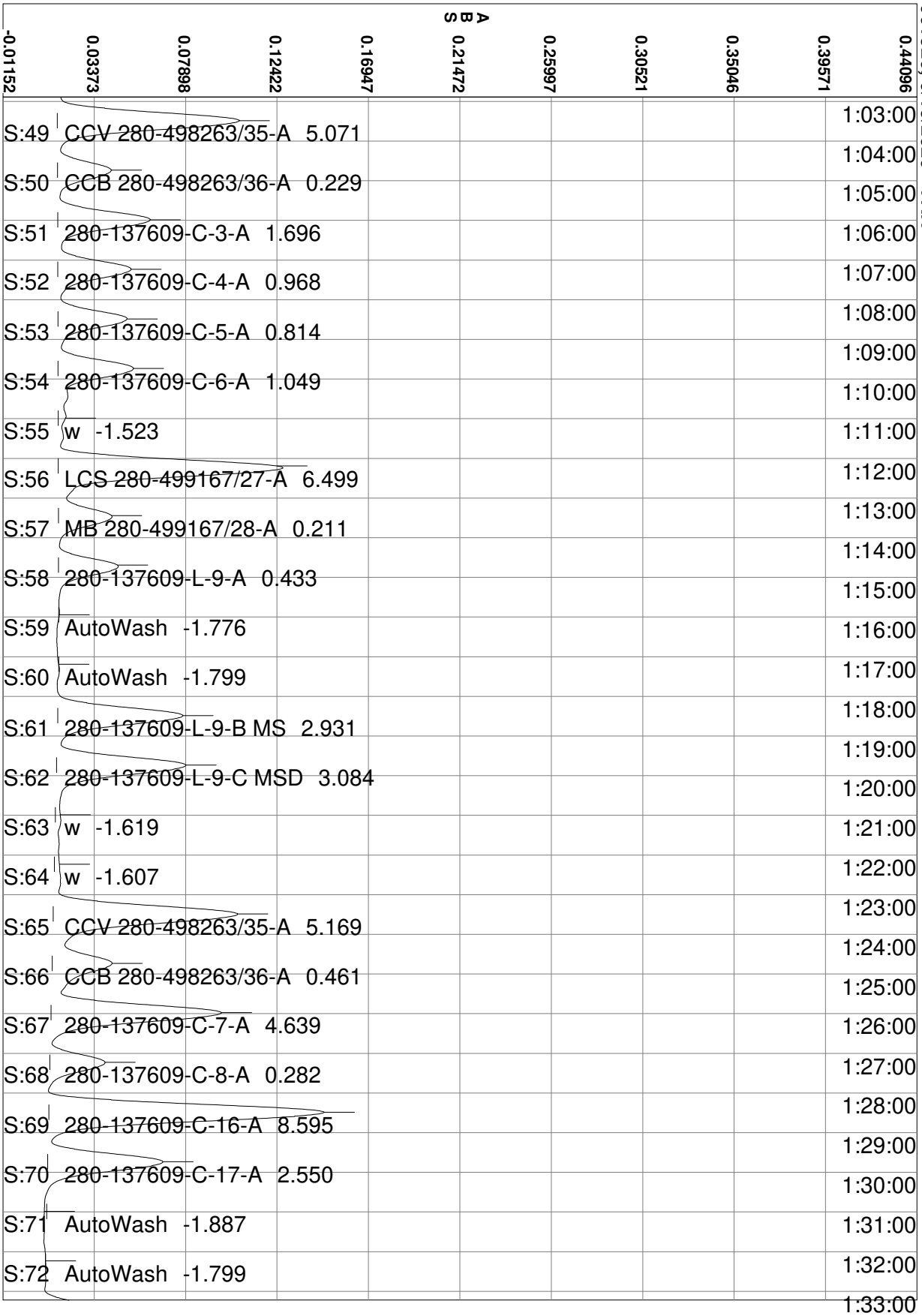
061920, 6/19/2020 - TKN
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0.07898
0.12422
0.16947
0.21472
0.25997
0.30521
0.35046
0.39571
0.44096
S:49 CCV 280-498263/35-A 5.071
S:50 CCB 280-498263/36-A 0.229
S:51 280-137609-C-3-A 1.696
S:52 280-137609-C-4-A 0.968
S:53 280-137609-C-5-A 0.814
S:54 280-137609-C-6-A 1.049
S:55 w -1.523
S:56 LCS 280-499167/27-A 6.499
S:57 MB 280-499167/28-A 0.211
S:58 280-137609-L-9-A 0.433
S:59 AutoWash -1.776
S:60 AutoWash -1.799
S:61 280-137609-L-9-B MS 2.931
S:62 280-137609-L-9-C MSD 3.084
S:63 w -1.619
S:64 w -1.607
S:65 CCV 280-498263/35-A 5.169
S:66 CCB 280-498263/36-A 0.461
S:67 280-137609-C-7-A 4.639
S:68 280-137609-C-8-A 0.282
S:69 280-137609-C-16-A 8.595
S:70 280-137609-C-17-A 2.550
S:71 AutoWash -1.887
S:72 AutoWash -1.799
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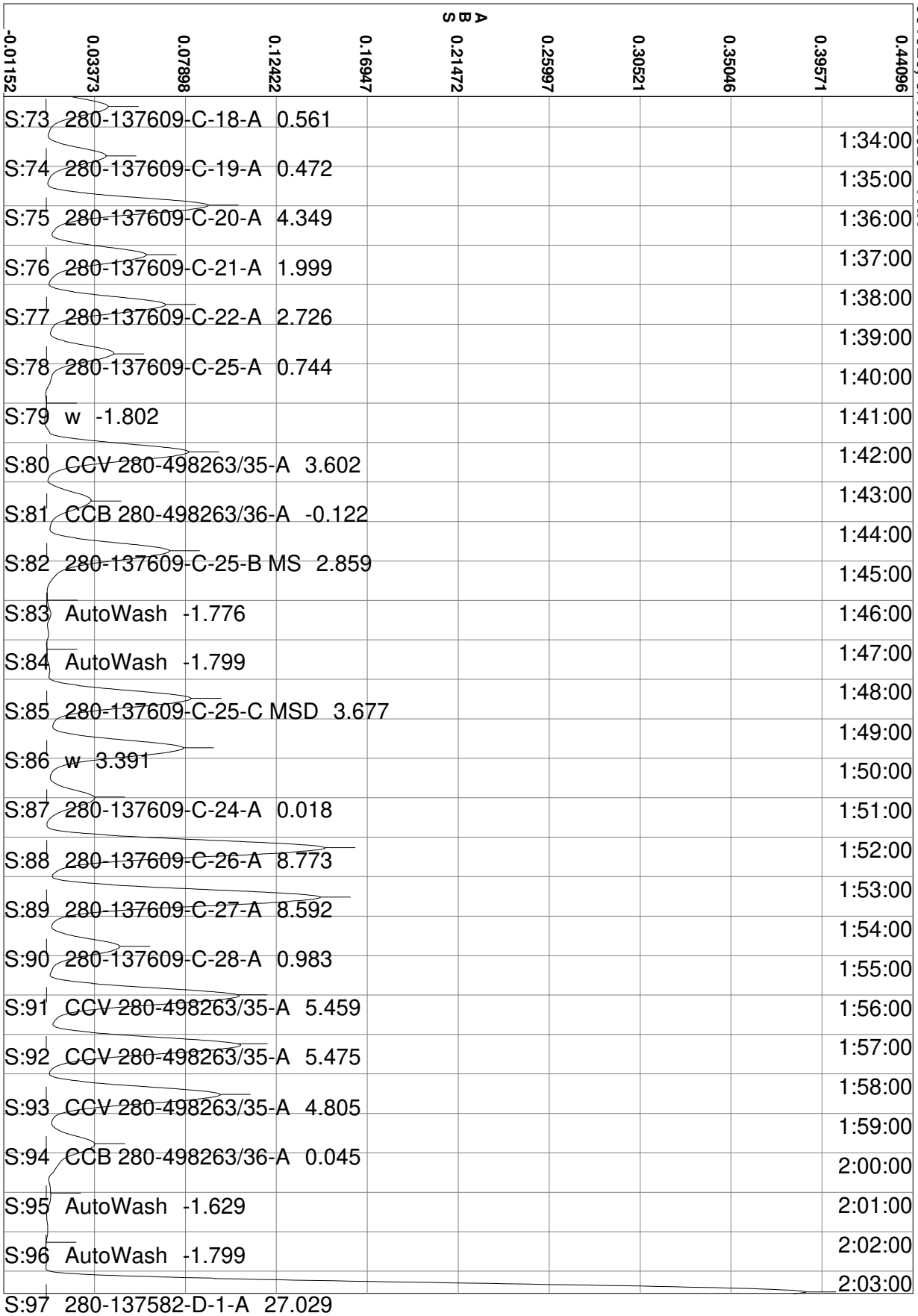
061920, 6/19/2020 - TKN
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0.03373
0.07898
0.12422
0.16947
0.21472
0.25997
0.30521
0.35046
0.39571
0.44096
S:73 280-137609-C-18-A 0.561
S:74 280-137609-C-19-A 0.472
S:75 280-137609-C-20-A 4.349
S:76 280-137609-C-21-A 1.999
S:77 280-137609-C-22-A 2.726
S:78 280-137609-C-25-A 0.744
S:79 w -1.802
S:80 CCV 280-498263/35-A 3.602
S:81 CCB 280-498263/36-A -0.122
S:82 280-137609-C-25-B MS 2.859
S:83 AutoWash -1.776
S:84 AutoWash -1.799
S:85 280-137609-C-25-C MSD 3.677
S:86 w 3.391
S:87 280-137609-C-24-A 0.018
S:88 280-137609-C-26-A 8.773
S:89 280-137609-C-27-A 8.592
S:90 280-137609-C-28-A 0.983
S:91 CCV 280-498263/35-A 5.459
S:92 CCV 280-498263/35-A 5.475
S:93 CCV 280-498263/35-A 4.805
S:94 CCB 280-498263/36-A 0.045
S:95 AutoWash -1.629
S:96 AutoWash -1.799
S:97 280-137582-D-1-A 27.029
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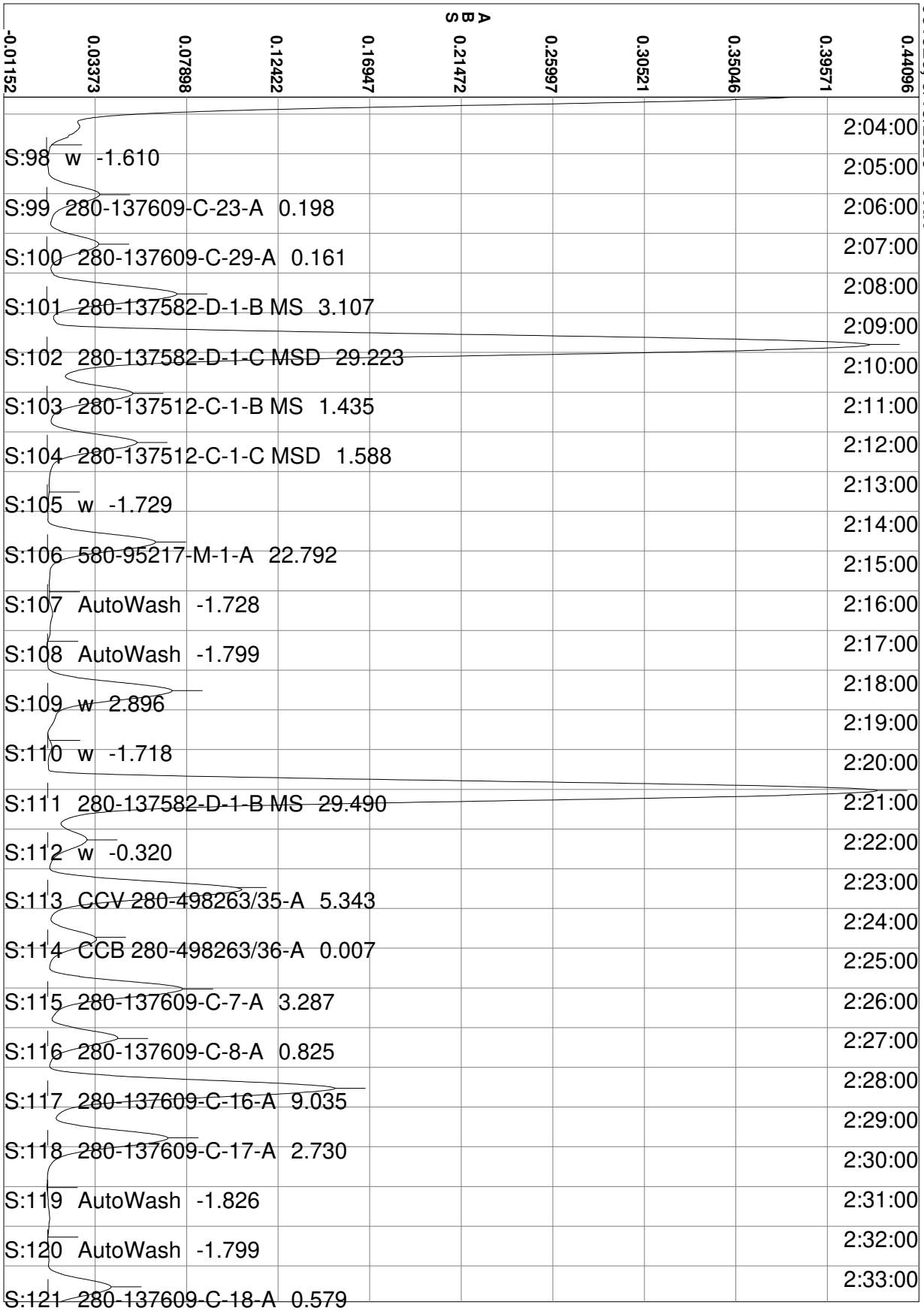
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0.12422
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0.21472
0.25997
0.30521
0.35046
0.39571
0.44096
S:98 w -1.610
S:99 280-137609-C-23-A 0.198
S:100 280-137609-C-29-A 0.161
S:101 280-137582-D-1-B MS 3.107
S:102 280-137582-D-1-C MSD 29.223
S:103 280-137512-C-1-B MS 1.435
S:104 280-137512-C-1-C MSD 1.588
S:105 w -1.729
S:106 580-95217-M-1-A 22.792
S:107 AutoWash -1.728
S:108 AutoWash -1.799
S:109 w 2.896
S:110 w -1.718
S:111 280-137582-D-1-B MS 29.490
S:112 w -0.320
S:113 CCV 280-498263/35-A 5.343
S:114 CCB 280-498263/36-A 0.007
S:115 280-137609-C-7-A 3.287
S:116 280-137609-C-8-A 0.825
S:117 280-137609-C-16-A 9.035
S:118 280-137609-C-17-A 2.730
S:119 AutoWash -1.826
S:120 AutoWash -1.799
S:121 280-137609-C-18-A 0.579
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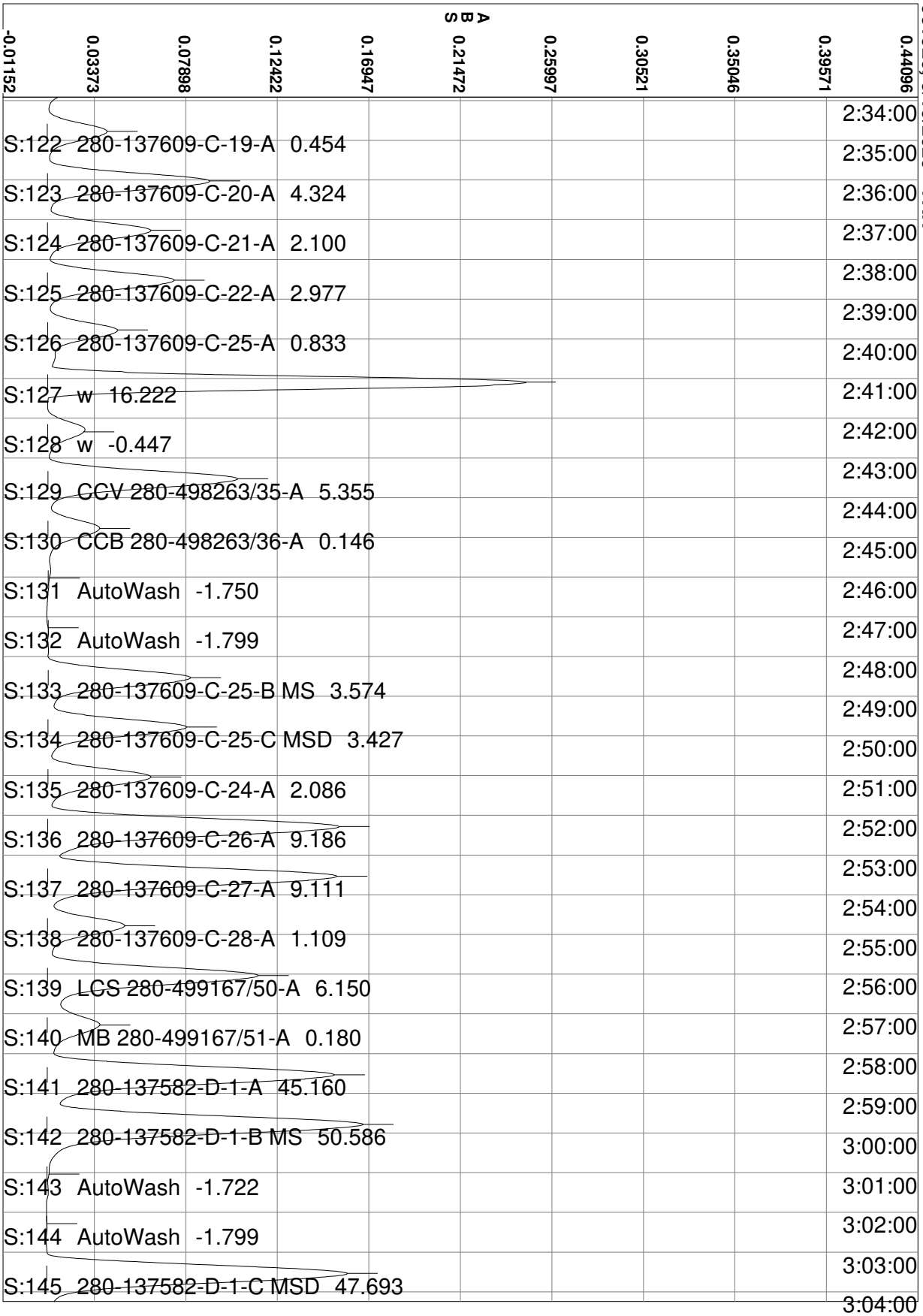
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0.07898
0.12422
0.16947
0.21472
0.25997
0.30521
0.35046
0.39571
0.44096
S:122 280-137609-C-19-A 0.454
S:123 280-137609-C-20-A 4.324
S:124 280-137609-C-21-A 2.100
S:125 280-137609-C-22-A 2.977
S:126 280-137609-C-25-A 0.833
S:127 w 16.222
S:128 w -0.447
S:129 CCV 280-498263/35-A 5.355
S:130 CCB 280-498263/36-A 0.146
S:131 AutoWash -1.750
S:132 AutoWash -1.799
S:133 280-137609-C-25-B MS 3.574
S:134 280-137609-C-25-C MSD 3.427
S:135 280-137609-C-24-A 2.086
S:136 280-137609-C-26-A 9.186
S:137 280-137609-C-27-A 9.111
S:138 280-137609-C-28-A 1.109
S:139 LCS 280-499167/50-A 6.150
S:140 MB 280-499167/51-A 0.180
S:141 280-137582-D-1-A 45.160
S:142 280-137582-D-1-B MS 50.586
S:143 AutoWash -1.722
S:144 AutoWash -1.799
S:145 280-137582-D-1-C MSD 47.693
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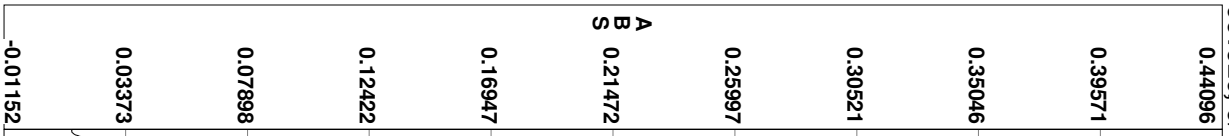

061920, 6/19/2020 - TKN

S:146 w 2.738	3:05:00
S:147 CCV 280-498263/35-A 4.510	3:06:00
S:148 CCB 280-498263/36-A 0.027	3:07:00
S:149 580-95217-M-1-A 33.796	3:08:00
S:150 280-137486-H-2-A 39.327	3:09:00
S:151 w -1.768	3:10:00
S:152 280-137582-D-1-A 47.164	3:11:00
S:153 280-137582-D-1-B MS 52.151	3:12:00
S:154 280-137582-D-1-C MSD 52.892	3:13:00
S:155 AutoWash -1.742	3:14:00
S:156 AutoWash -1.799	3:15:00
S:157 w -1.740	3:16:00
S:158 CCV 280-498263/35-A 4.756	3:17:00
S:159 CCB 280-498263/36-A -0.060	3:18:00
S:160 w 3.488	3:19:00
S:161 w 3.994	3:20:00
S:162 w -1.750	3:21:00
S:163 AutoWash -1.698	3:22:00
S:164 AutoWash -1.799	3:23:00
	3:24:00
	3:25:00
	3:26:00
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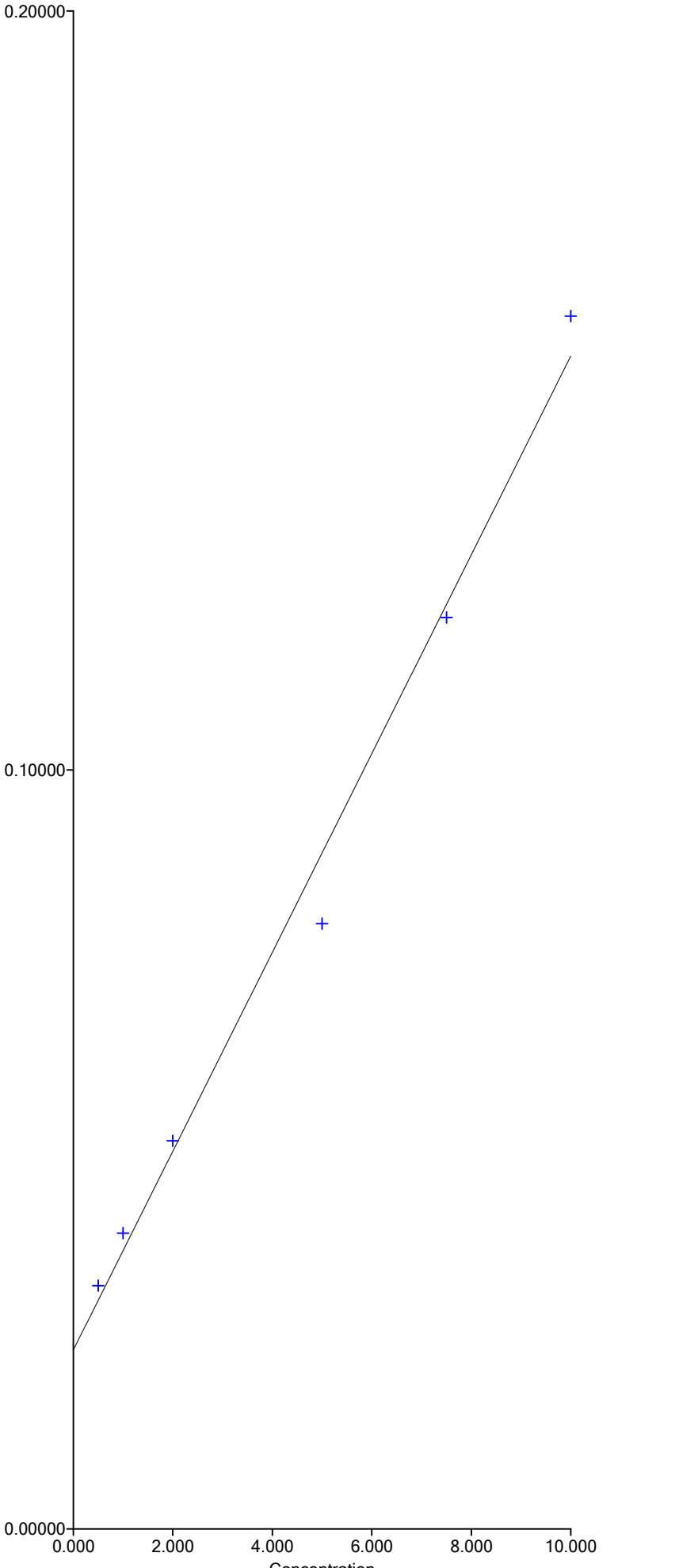
	3:34:00

Calibration for TKN



Segment 1: Equation: y = 0.01309x + 0.02355
Correlation: 0.9950

X Range = 0.000 to 10.000
Y Range = 0.00000 to 7.20000

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\061820.RST
Sample table path	C:\FLOW_4\061820.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	18-Jun-20
Time acquired	21:06

Date	Time	Cup	Name
18-Jun-20	16:03	109	SYNC
18-Jun-20	16:05	0	Carryover
18-Jun-20	16:07	0	Carryover (Statistics)
18-Jun-20	16:09	0	read baseline
18-Jun-20	16:11	101	Cal 0.00 ppb
18-Jun-20	16:13	102	Cal 50.0 ppb
18-Jun-20	16:15	103	Cal 100 ppb
18-Jun-20	16:17	104	Cal 500 ppb
18-Jun-20	16:19	105	Cal 1000 ppb
18-Jun-20	16:21	106	Cal 2500 ppb
18-Jun-20	16:23	107	Cal 5000 ppb
18-Jun-20	16:25	108	Cal 7500 ppb
18-Jun-20	16:27	109	Cal 10000 ppb
18-Jun-20	16:29	0	Blank
18-Jun-20	16:31	0	Read Baseline
18-Jun-20	16:33	110	5000 PPB NO2
18-Jun-20	16:35	111	ICV 5000 PPB
18-Jun-20	16:37	112	ICV 2000 PPB
18-Jun-20	16:39	0	ICB
18-Jun-20	16:41	0	Read Baseline
18-Jun-20	16:43	107	LCS
18-Jun-20	16:45	0	MB
18-Jun-20	16:47	113	280-137609-C-1
18-Jun-20	16:49	114	ms 280-137609-C-1
18-Jun-20	16:51	115	msd 280-137609-C-1
18-Jun-20	16:53	116	280-137609-C-2
18-Jun-20	16:55	117	280-137609-C-3
18-Jun-20	16:57	118	280-137609-C-4
18-Jun-20	16:59	119	280-137609-C-5
18-Jun-20	17:01	120	280-137609-C-6
18-Jun-20	17:03	121	280-137609-C-7
18-Jun-20	17:05	122	280-137609-C-8
18-Jun-20	17:07	0	Rinse
18-Jun-20	17:09	0	Read Baseline
18-Jun-20	17:11	107	CCV 5000 ppb
18-Jun-20	17:13	105	CCVL 1000 ppb
18-Jun-20	17:15	0	CCB
18-Jun-20	17:17	0	Read Baseline
18-Jun-20	17:19	123	280-137609-C-10
18-Jun-20	17:21	124	280-137609-A-11
18-Jun-20	17:23	125	280-137609-L-9
18-Jun-20	17:25	126	ms 280-137609-L-9
18-Jun-20	17:27	127	msd 280-137609-L-9
18-Jun-20	17:29	128	280-137609-A-12

Result path C:\FLOW_4\061820.RST
Sample table path C:\FLOW_4\061820.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 18-Jun-20
Time acquired 21:06

Date	Time	Cup	Name
18-Jun-20	17:31	129	280-137609-C-16
18-Jun-20	17:33	130	280-137609-C-17
18-Jun-20	17:35	131	280-137609-C-18
18-Jun-20	17:37	132	280-137609-C-19
18-Jun-20	17:39	0	Rinse
18-Jun-20	17:41	0	Read Baseline
18-Jun-20	17:43	107	CCV 5000 ppb
18-Jun-20	17:45	105	CCVL 1000 ppb
18-Jun-20	17:47	0	CCB
18-Jun-20	17:49	0	Read Baseline
18-Jun-20	17:51	133	280-137609-C-20
18-Jun-20	17:53	134	280-137609-C-21
18-Jun-20	17:55	135	280-137609-C-22
18-Jun-20	17:57	136	280-137609-C-23
18-Jun-20	17:59	107	LCS
18-Jun-20	18:01	0	MB
18-Jun-20	18:03	137	280-137609-C-25
18-Jun-20	18:05	138	ms 280-137609-C-25
18-Jun-20	18:07	139	msd 280-137609-C-25
18-Jun-20	18:09	140	280-137609-C-24
18-Jun-20	18:11	0	Rinse
18-Jun-20	18:13	0	Read Baseline
18-Jun-20	18:15	107	CCV 5000 ppb
18-Jun-20	18:17	105	CCVL 1000 ppb
18-Jun-20	18:19	0	CCB
18-Jun-20	18:21	0	Read Baseline
18-Jun-20	18:23	141	280-137609-C-26
18-Jun-20	18:25	142	280-137609-C-27
18-Jun-20	18:27	143	280-137609-C-28
18-Jun-20	18:29	144	280-137609-C-29
18-Jun-20	18:31	145	280-137600-B-2
18-Jun-20	18:33	146	280-137600-B-3
18-Jun-20	18:35	147	280-137600-B-4
18-Jun-20	18:37	148	280-137600-B-5
18-Jun-20	18:39	149	280-137600-B-1
18-Jun-20	18:41	150	ms 280-137600-B-1
18-Jun-20	18:43	0	Rinse
18-Jun-20	18:45	0	Read Baseline
18-Jun-20	18:47	107	CCV 5000 ppb
18-Jun-20	18:49	105	CCVL 1000 ppb
18-Jun-20	18:51	0	CCB
18-Jun-20	18:53	0	Read Baseline
18-Jun-20	18:55	151	msd 280-137600-B-1
18-Jun-20	18:57	152	280-137600-B-6
18-Jun-20	18:59	153	280-137600-B-7
18-Jun-20	19:01	154	280-137600-B-8
18-Jun-20	19:03	155	280-137600-B-9
18-Jun-20	19:05	156	280-137600-B-14
18-Jun-20	19:07	157	280-137600-B-18
18-Jun-20	19:09	158	280-137600-B-19
18-Jun-20	19:11	159	280-137600-B-20
18-Jun-20	19:13	0	Rinse
18-Jun-20	19:15	0	Read Baseline
18-Jun-20	19:17	107	CCV 5000 ppb
18-Jun-20	19:19	105	CCVL 1000 ppb
18-Jun-20	19:21	0	CCB
18-Jun-20	19:23	0	Read Baseline

Result path	C:\FLOW_4\061820.RST
Sample table path	C:\FLOW_4\061820.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	18-Jun-20
Time acquired	21:06

Date	Time	Cup	Name
18-Jun-20	19:25	107	LCS
18-Jun-20	19:27	0	MB
18-Jun-20	19:29	201	280-137530-C-1
18-Jun-20	19:31	202	ms 280-137530-C-1
18-Jun-20	19:33	203	msd 280-137530-C-1
18-Jun-20	19:35	204	280-137530-A-1
18-Jun-20	19:37	205	280-137530-C-1
18-Jun-20	19:39	206	280-137530-A-1
18-Jun-20	19:41	207	d
18-Jun-20	19:43	208	d
18-Jun-20	19:45	0	Rinse
18-Jun-20	19:47	0	Read Baseline
18-Jun-20	19:49	107	CCV 5000 ppb
18-Jun-20	19:51	105	CCVL 1000 ppb
18-Jun-20	19:53	0	CCB
18-Jun-20	19:55	0	Read Baseline
18-Jun-20	20:02	145	280-137600-B-2
18-Jun-20	20:04	146	280-137600-B-3
18-Jun-20	20:06	147	280-137600-B-4
18-Jun-20	20:08	148	280-137600-B-5
18-Jun-20	20:10	155	280-137600-B-8
18-Jun-20	20:12	156	280-137600-B-9
18-Jun-20	20:14	158	280-137600-B-19
18-Jun-20	20:16	159	280-137600-B-20
18-Jun-20	20:18	0	Rinse
18-Jun-20	20:20	0	Read Baseline
18-Jun-20	20:22	107	CCV 5000 ppb
18-Jun-20	20:24	105	CCVL 1000 ppb
18-Jun-20	20:26	0	CCB
18-Jun-20	20:28	0	Read Baseline
18-Jun-20	20:35	145	280-137600-B-2
18-Jun-20	20:37	146	280-137600-B-3
18-Jun-20	20:39	147	280-137600-B-4
18-Jun-20	20:41	148	280-137600-B-5
18-Jun-20	20:43	149	w
18-Jun-20	20:45	150	w
18-Jun-20	20:47	151	w
18-Jun-20	20:49	0	Rinse
18-Jun-20	20:51	0	Read Baseline
18-Jun-20	20:53	107	CCV 5000 ppb
18-Jun-20	20:55	105	CCVL 1000 ppb
18-Jun-20	20:57	0	CCB
18-Jun-20	20:59	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\061820.RST
Sample table path	C:\FLOW_4\061820.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	18-Jun-20
Time acquired	21:06

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2285734	9959.137				
Carryover	8238	44.058				
Carryover	1188	13.365				
(Statistics)				4713	28.712	N
read baseline	0	8.194	BL			
Cal 0.00 ppb	2069	17.199				
Cal 50.0 ppb	10756	55.021				
Cal 100 ppb	21527	101.910				
Cal 500 ppb	107258	475.142				
Cal 1000 ppb	220809	969.485				
Cal 2500 ppb	566494	2474.427				
Cal 5000 ppb	1148849	5009.708				
Cal 7500 ppb	1758831	7665.265				
Cal 10000 ppb	2267978	9881.839				
Blank	909	12.152				
Read Baseline	0	8.194	BL			
5000 PPB NO2	1112553	4851.695				
ICV 5000 PPB	1118106	4875.868				
ICV 2000 PPB	450618	1969.958				
ICB	624	10.909				
Read Baseline	0	8.194	BL			
LCS	1116985	4870.988				
MB	89	8.582				
280-137609-C-1	218297	958.549				
ms 280-137609-C-1	1099186	4793.500				
msd 280-137609-C-1	1114360	4859.559				
280-137609-C-2	16700	80.899				
280-137609-C-3	703	11.255				
280-137609-C-4	657038	2868.611				
280-137609-C-5	1251506	10913.250				
280-137609-C-6	9984	51.660				
280-137609-C-7	1445	14.485				
280-137609-C-8	232	9.202				
Rinse	-39	8.024				
Read Baseline	0	8.194	BL			
CCV 5000 ppb	1149151	5011.025				
CCVL 1000 ppb	235749	1034.527				
CCB	445	10.132				
Read Baseline	0	8.194	BL			
280-137609-C-10	436885	1910.172				
280-137609-A-11	3138	21.854				
280-137609-L-9	884144	3857.314				
ms 280-137609-L-9	1614153	7035.410				
msd 280-137609-L-9	1660478	7237.086				
280-137609-A-12	2361	18.474				

Result path C:\FLOW_4\061820.RST
Sample table path C:\FLOW_4\061820.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 18-Jun-20
Time acquired 21:06

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-137609-C-16	-3615	-7.544	LO		
280-137609-C-17	538564	2352.834			
280-137609-C-18	-3211	-5.786	LO		
280-137609-C-19	-3289	-6.126	LO		
Rinse	-386	6.513			
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1164720	5078.804			
CCVL 1000 ppb	240058	1053.286			
CCB	676	11.138			
Read Baseline	0	8.194	BL		
280-137609-C-20	-350	6.670			
280-137609-C-21	27174	126.497			
280-137609-C-22	57955	260.500			
280-137609-C-23	1623625	14153.291			
LCS	1148348	5007.529			
MB	991	12.509			
280-137609-C-25	-1808	0.325			
ms 280-137609-C-25	885777	3864.426			
msd 280-137609-C-25	894880	3904.054			
280-137609-C-24	-391	6.493			
Rinse	1621	15.253			
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1170953	5105.938			
CCVL 1000 ppb	237966	1044.180			
CCB	356	9.745			
Read Baseline	0	8.194	BL		
280-137609-C-26	564	10.648			
280-137609-C-27	-4018	-9.300	LO		
280-137609-C-28	155688	685.980			
280-137609-C-29	93242	414.125			
280-137600-B-2	2991949	651682.312	HI		
280-137600-B-3	3014586	656609.812	HI		
280-137600-B-4	3023728	658599.875	HI		
280-137600-B-5	1276144	278194.438	FL		
280-137600-B-1	1505380	13123.729			
ms 280-137600-B-1	2104829	18343.135			
Rinse	11127	56.635			
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1131702	4935.057			
CCVL 1000 ppb	231056	1014.099			
CCB	-1662	0.959			
Read Baseline	0	8.194	BL		
msd 280-137600-B-1	2096697	18272.334			
280-137600-B-6	1742443	7593.921			
280-137600-B-7	1206778	5261.901			
280-137600-B-8	2739821	11936.007	HI		
280-137600-B-9	1707930	14887.334	FL		
280-137600-B-14	615893	2689.484			
280-137600-B-18	10402	53.477			
280-137600-B-19	2780161	12111.627	HI		
280-137600-B-20	2986414	650477.375	HI		
Rinse	8798	46.495	FL		
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1095043	4775.466			
CCVL 1000 ppb	239292	1049.951			
CCB	-25	8.086			
Read Baseline	0	8.194	BL		

Result path C:\FLOW_4\061820.RST
Sample table path C:\FLOW_4\061820.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 18-Jun-20
Time acquired 21:06

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
LCS	1133180	4941.492			
MB	-1491	1.703			
280-137530-C-1	1465096	12772.979			
ms 280-137530-C-1	2039795	17776.885			
msd 280-137530-C-1	2082062	18144.902			
280-137530-A-1	1410644	12298.864			
280-137530-C-1	1439243	12547.878			
280-137530-A-1	1436905	12527.522			
d	2088	17.283			
d	1622	15.253			
Rinse	530	10.503			
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1136727	4956.937			
CCVL 1000 ppb	236472	1037.675			
CCB	680	11.156			
Read Baseline	0	8.194	BL		
280-137600-B-2	2310085	1006515.062	HI		
280-137600-B-3	3028182	1319138.625	HI		
280-137600-B-4	2987436	1301399.750	HI		
280-137600-B-5	1012196	220739.406	FL		
280-137600-B-8	1723222	15020.487			
280-137600-B-9	1706119	14871.570			
280-137600-B-19	1733889	15113.361			
280-137600-B-20	2266649	987605.062			
Rinse	1864	16.308			
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1110736	4843.782			
CCVL 1000 ppb	230678	1012.451			
CCB	477	10.269			
Read Baseline	0	8.194	BL		
280-137600-B-2	1283938	1119563.375			
280-137600-B-3	1629699	3551544.500			
280-137600-B-4	996275	2172738.750			
280-137600-B-5	1030769	224782.453			
w	486792	2127.444			
w	1547	14.928			
w	1416	14.360			
Rinse	560	10.634			
Read Baseline	0	8.194	BL		
CCV 5000 ppb	1167075	5089.057			
CCVL 1000 ppb	234221	1027.874			
CCB	665	11.087			
Read Baseline	0	8.194	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\061820.RST
Date: 18-Jun-20
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2285734	9959.136719	
2	0	Carryover	1	CO	1	1	8238	44.058357	
3	0	Carryover	2	CO	1	1	1188	13.364791	
B	0	read baseline	1	RB	1	1	0	8.194025	BL
5	101	Cal 0.00 ppb	1	C	1	1	2069	17.199327	
6	102	Cal 50.0 ppb	1	C	1	1	10756	55.021347	
7	103	Cal 100 ppb	1	C	1	1	21527	101.910339	
8	104	Cal 500 ppb	1	C	1	1	107258	475.142487	
9	105	Cal 1000 ppb	1	C	1	1	220809	969.484680	
10	106	Cal 2500 ppb	1	C	1	1	566494	2474.427490	
11	107	Cal 5000 ppb	1	C	1	1	1148849	5009.707520	
12	108	Cal 7500 ppb	1	C	1	1	1758831	7665.265137	
13	109	Cal 10000 ppb	1	C	1	1	2267978	9881.838867	
14	0	Blank	1	BLNK	1	1	909	12.151834	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
16	110	5000 PPB NO2	1	U	1	1	1112553	4851.695312	
17	111	ICV 5000 PPB	1	CCV	1	1	1118106	4875.867676	
18	112	ICV 2000 PPB	1	CCV	1	1	450618	1969.958496	
19	0	ICB	1	U	1	1	624	10.909150	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
21	107	LCS	1	U	1	1	1116985	4870.987793	
22	0	MB	1	U	1	1	89	8.581787	
23	113	280-137609-C-1	1	U	1	1	218297	958.549500	
24	114	ms 280-137609-C-1	1	U	1	1	1099186	4793.500488	
25	115	msd 280-137609-C-1	1	U	1	1	1114360	4859.559082	
26	116	280-137609-C-2	1	U	1	1	16700	80.899132	
27	117	280-137609-C-3	1	U	1	1	703	11.255268	
28	118	280-137609-C-4	1	U	1	1	657038	2868.611328	
29	119	280-137609-C-5	1	U	2	1	1251506	10913.250000	
30	120	280-137609-C-6	1	U	1	1	9984	51.660244	
31	121	280-137609-C-7	1	U	1	1	1445	14.484501	
32	122	280-137609-C-8	1	U	1	1	232	9.202492	
33	0	Rinse	1	U	1	1	-39	8.024482	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1149151	5011.024902	
36	105	CCVL 1000 ppb	1	CCV	1	1	235749	1034.526978	
37	0	CCB	1	U	1	1	445	10.131838	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
39	123	280-137609-C-10	1	U	1	1	436885	1910.172485	
40	124	280-137609-A-11	1	U	1	1	3138	21.854391	
41	125	280-137609-L-9	1	U	1	1	884144	3857.314453	
42	126	ms 280-137609-L-9	1	U	1	1	1614153	7035.410156	
43	127	msd 280-137609-L-9	1	U	1	1	1660478	7237.085938	
44	128	280-137609-A-12	1	U	1	1	2361	18.474016	
45	129	280-137609-C-16	1	U	1	1	-3615	-7.543797	LO
46	130	280-137609-C-17	1	U	1	1	538564	2352.834229	
47	131	280-137609-C-18	1	U	1	1	-3211	-5.785785	LO
48	132	280-137609-C-19	1	U	1	1	-3289	-6.126212	LO
49	0	Rinse	1	U	1	1	-386	6.512556	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1164720	5078.803711	
52	105	CCVL 1000 ppb	1	CCV	1	1	240058	1053.285645	
53	0	CCB	1	U	1	1	676	11.138268	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
55	133	280-137609-C-20	1	U	1	1	-350	6.669760	
56	134	280-137609-C-21	1	U	1	1	27174	126.496552	
57	135	280-137609-C-22	1	U	1	1	57955	260.499725	
58	136	280-137609-C-23	1	U	2	1	1623625	14153.291016	
59	107	LCS	1	U	1	1	1148348	5007.528809	
60	0	MB	1	U	1	1	991	12.508533	
61	137	280-137609-C-25	1	U	1	1	-1808	0.324567	
62	138	ms 280-137609-C-25	1	U	1	1	885777	3864.426270	
63	139	msd 280-137609-C-25	1	U	1	1	894880	3904.053955	
64	140	280-137609-C-24	1	U	1	1	-391	6.492535	
65	0	Rinse	1	U	1	1	1621	15.252530	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
67	107	CCV 5000 ppb	1	CCV	1	1	1170953	5105.938477	
68	105	CCVL 1000 ppb	1	CCV	1	1	237966	1044.180176	
69	0	CCB	1	U	1	1	356	9.745348	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	141	280-137609-C-26	1	U	1	1	564	10.648307	
72	142	280-137609-C-27	1	U	1	1	-4018	-9.299560	LO
73	143	280-137609-C-28	1	U	1	1	155688	685.980225	
74	144	280-137609-C-29	1	U	1	1	93242	414.125092	
75	145	280-137600-B-2	1	U	50	1	2991949	651682.312500	HI
76	146	280-137600-B-3	1	U	50	1	3014586	656609.812500	HI
77	147	280-137600-B-4	1	U	50	1	3023728	658599.875000	HI
78	148	280-137600-B-5	1	U	50	1	1276144	278194.437500	FL
79	149	280-137600-B-1	1	U	2	1	1505380	13123.729492	
80	150	ms 280-137600-B-1	1	U	2	1	2104829	18343.134766	
81	0	Rinse	1	U	1	1	11127	56.634792	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
83	107	CCV 5000 ppb	1	CCV	1	1	1131702	4935.057129	
84	105	CCVL 1000 ppb	1	CCV	1	1	231056	1014.098572	
85	0	CCB	1	U	1	1	-1662	0.959454	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
87	151	msd 280-137600-B-1	1	U	2	1	2096697	18272.333984	
88	152	280-137600-B-6	1	U	1	1	1742443	7593.921387	
89	153	280-137600-B-7	1	U	1	1	1206778	5261.900879	
90	154	280-137600-B-8	1	U	1	1	2739821	11936.006836	HI
91	155	280-137600-B-9	1	U	2	1	1707930	14887.333984	FL
92	156	280-137600-B-14	1	U	1	1	615893	2689.484375	
93	157	280-137600-B-18	1	U	1	1	10402	53.477291	
94	158	280-137600-B-19	1	U	1	1	2780161	12111.626953	HI
95	159	280-137600-B-20	1	U	50	1	2986414	650477.375000	HI
96	0	Rinse	1	U	1	1	8798	46.494877	FL
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
98	107	CCV 5000 ppb	1	CCV	1	1	1095043	4775.466309	
99	105	CCVL 1000 ppb	1	CCV	1	1	239292	1049.951416	
100	0	CCB	1	U	1	1	-25	8.085914	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
102	107	LCS	1	U	1	1	1133180	4941.492188	
103	0	MB	1	U	1	1	-1491	1.702543	
104	201	280-137530-C-1	1	U	2	1	1465096	12772.978516	
105	202	ms 280-137530-C-1	1	U	2	1	2039795	17776.884766	
106	203	msd 280-137530-C-1	1	U	2	1	2082062	18144.902344	
107	204	280-137530-A-1	1	U	2	1	1410644	12298.864258	
108	205	280-137530-C-1	1	U	2	1	1439243	12547.877930	
109	206	280-137530-A-1	1	U	2	1	1436905	12527.522461	
110	207	d	1	U	1	1	2088	17.283026	
111	208	d	1	U	1	1	1622	15.253476	
112	0	Rinse	1	U	1	1	530	10.502832	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
114	107	CCV 5000 ppb	1	CCV	1	1	1136727	4956.936523	
115	105	CCVL 1000 ppb	1	CCV	1	1	236472	1037.675171	
116	0	CCB	1	U	1	1	680	11.155682	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
118	145	280-137600-B-2	1	U	100	1	2310085	1006515.062500	HI
119	146	280-137600-B-3	1	U	100	1	3028182	1319138.625000	HI
120	147	280-137600-B-4	1	U	100	1	2987436	1301399.750000	HI
121	148	280-137600-B-5	1	U	50	1	1012196	220739.406250	FL
122	155	280-137600-B-8	1	U	2	1	1723222	15020.487305	
123	156	280-137600-B-9	1	U	2	1	1706119	14871.570312	
124	158	280-137600-B-19	1	U	2	1	1733889	15113.361328	
125	159	280-137600-B-20	1	U	100	1	2266649	987605.062500	
126	0	Rinse	1	U	1	1	1864	16.307894	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
128	107	CCV 5000 ppb	1	CCV	1	1	1110736	4843.782227	
129	105	CCVL 1000 ppb	1	CCV	1	1	230678	1012.450562	
130	0	CCB	1	U	1	1	477	10.269221	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
132	145	280-137600-B-2	1	U	200	1	1283938	1119563.375000	
133	146	280-137600-B-3	1	U	500	1	1629699	3551544.500000	
134	147	280-137600-B-4	1	U	500	1	996275	2172738.750000	
135	148	280-137600-B-5	1	U	50	1	1030769	224782.453125	
136	149	w	1	U	1	1	486792	2127.443848	
137	150	w	1	U	1	1	1547	14.927781	
138	151	w	1	U	1	1	1416	14.359634	
139	0	Rinse	1	U	1	1	560	10.633589	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL
141	107	CCV 5000 ppb	1	CCV	1	1	1167075	5089.057129	
142	105	CCVL 1000 ppb	1	CCV	1	1	234221	1027.873901	
143	0	CCB	1	U	1	1	665	11.086994	
B	0	Read Baseline	1	RB	1	1	0	8.194025	BL

Nitrate as N:Calibration 1: Peak 5-144

File name: C:\FLOW_4\061820.RST
Date: 18-Jun-20
Operator: svc

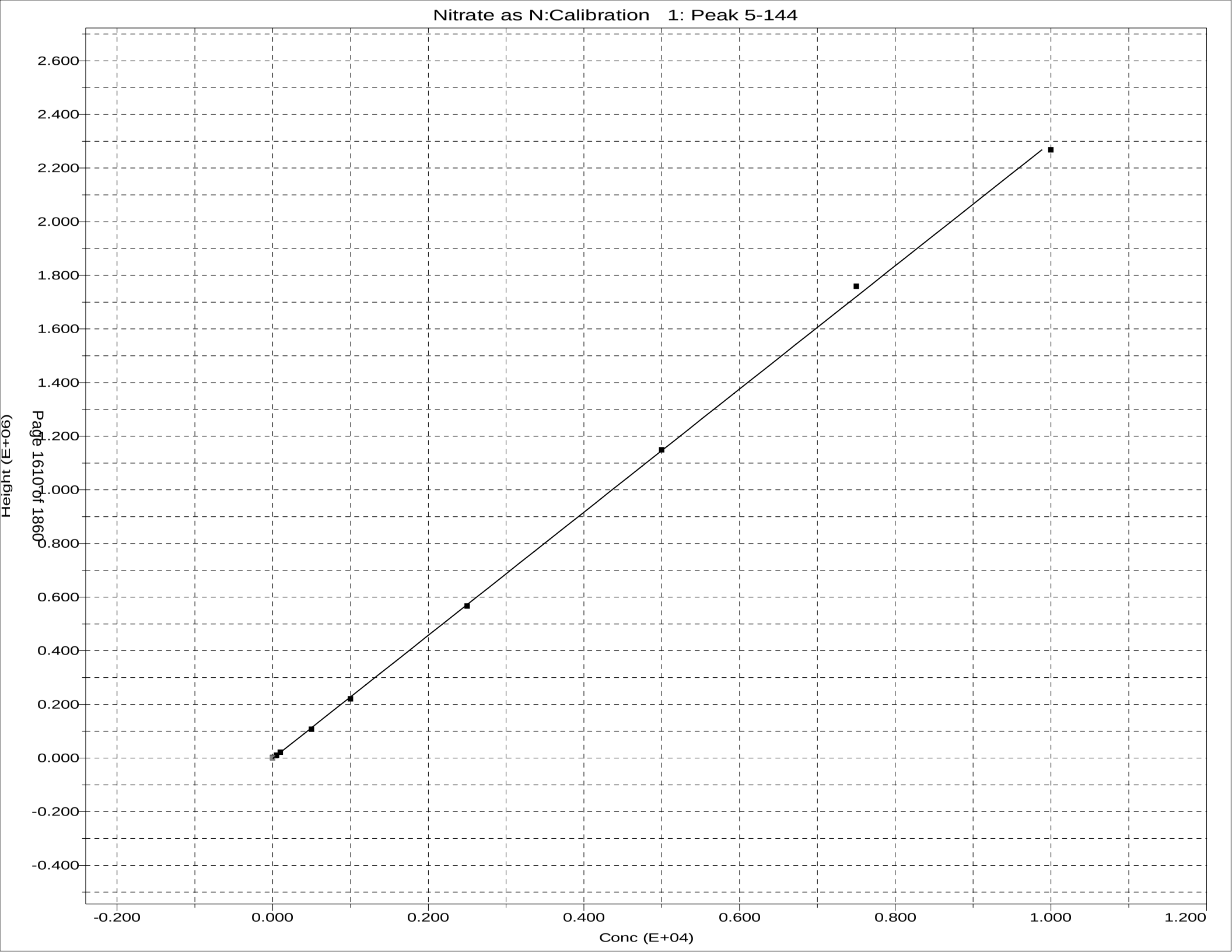
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	2068.520020
*	Cal 50.0 ppb	50.000000	10756.246094
*	Cal 100 ppb	100.000000	21526.656250
*	Cal 500 ppb	500.000000	107258.164062
*	Cal 1000 ppb	1000.000000	220808.671875
*	Cal 2500 ppb	2500.000000	566494.375000
*	Cal 5000 ppb	5000.000000	1148848.750000
*	Cal 7500 ppb	7500.000000	1758830.875000
*	Cal 10000 ppb	10000.000000	2267978.500000

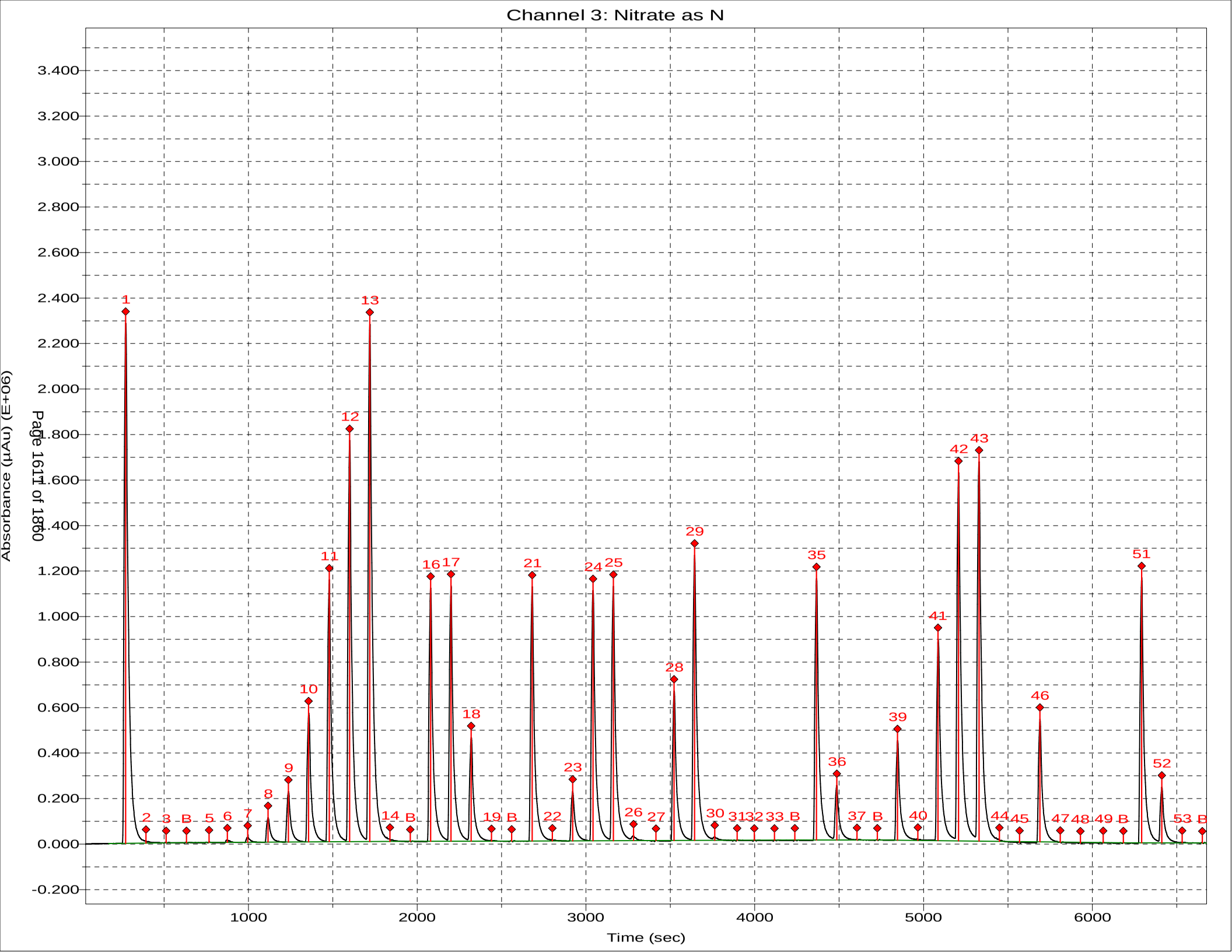
Calib Coef:
y=bx+a
a: (intercept) -1.8822e+03
b: 2.2970e+02

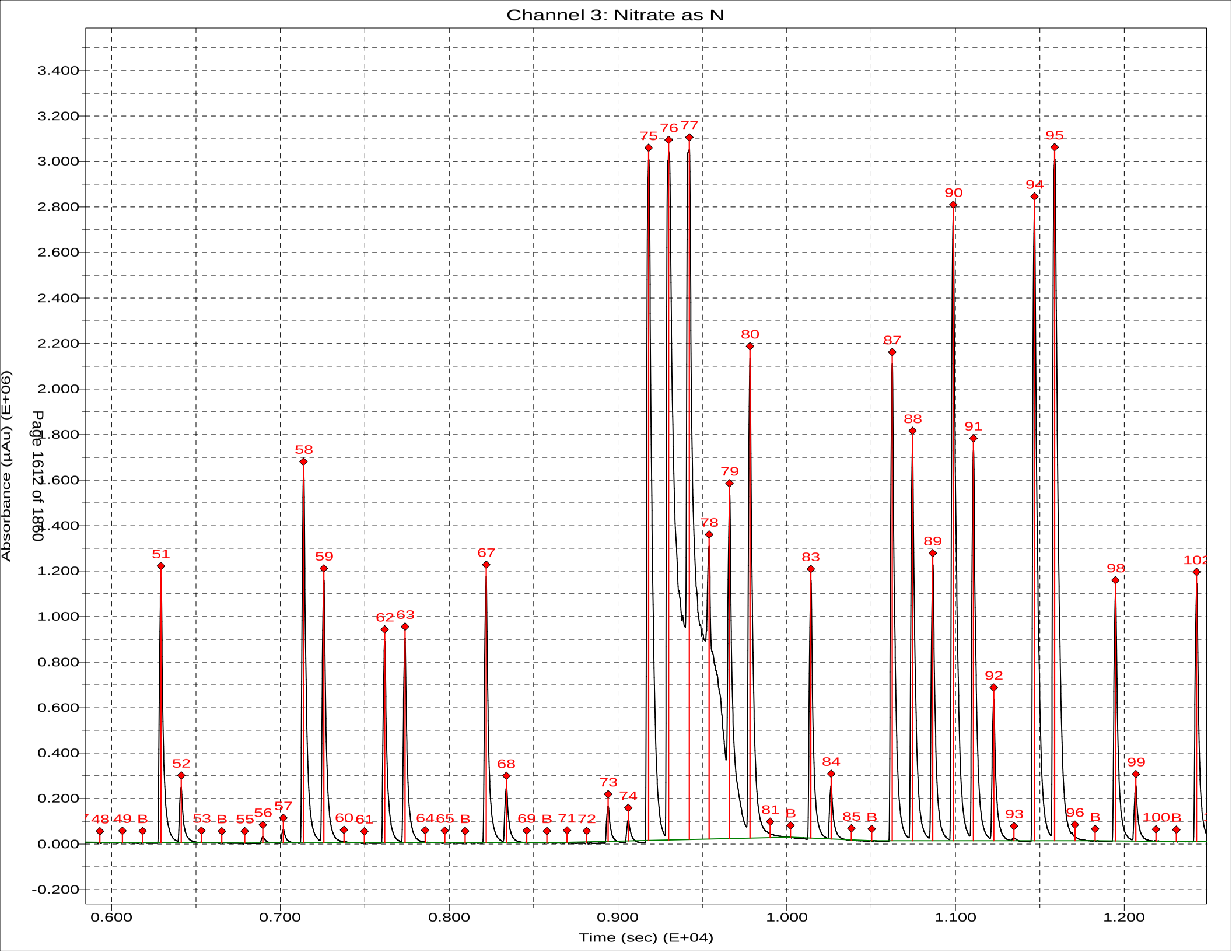
Corr Coef: 0.999800

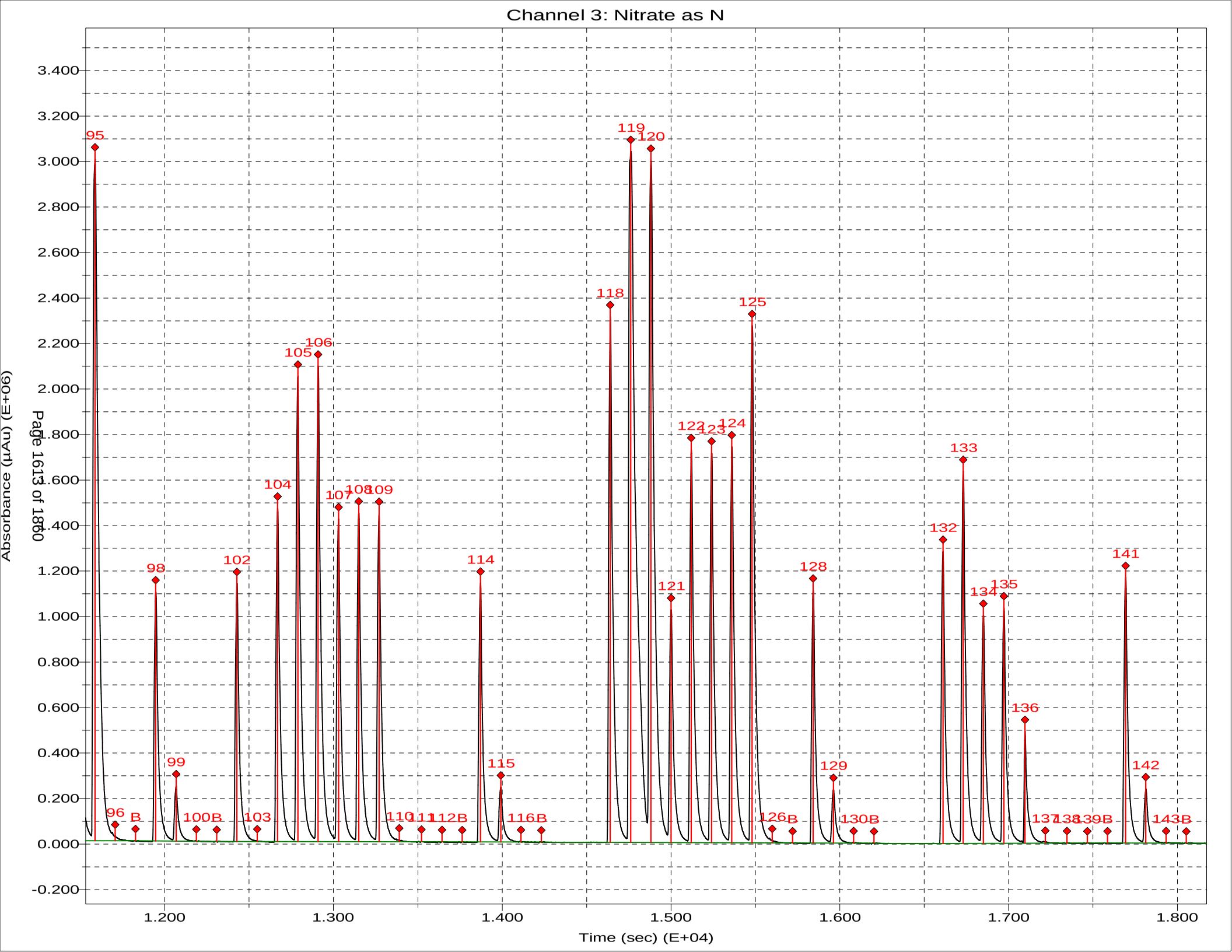
Carryover: 0.36%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-144
Height (E+06)
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.200
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)
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
1000
2000
3000
4000
5000
6000
1 2 3 B 5 6 7 8 9 10 11 12 13 14 B 16 17 18 19 B 21 22 23 24 25 26 27 28 29 30 31 32 33 B 35 36 37 B 39 40 41 42 43 44 45 46 47 48 49 B 51 52 53 B


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (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
0.600
0.700
0.800
0.900
1.000
1.100
1.200
48 49 B 51 52 53 B 55 56 57 58 59 60 61 62 63 64 65 B 67 68 69 B 71 72 73 74 75 76 77 78 79 80 81 B 83 84 85 B 87 88 89 90 91 92 93 94 95 96 B 98 99 100B 102


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1613 of 1860
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
1.200
1.300
1.400
1.500
1.600
1.700
1.800
95
96
B
98
99
100B
102
103
104
105
106
107
108
109
110
111
112B
114
115
116B
118
119
120
121
122
123
124
125
126B
128
129
130B
132
133
134
135
136
137
138
139B
141
142
143B

Sample Table - 061820.tbl

File name: C:\FLOW_4\061820.TBL
Date: 18-Jun-20

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	280-137609-C-1	U	1	1	1		<2
114	ms 280-137609-C-1	U	1	1	1		<2
115	msd 280-137609-C-1	U	1	1	1		<2
116	280-137609-C-2	U	1	1	1		<2
117	280-137609-C-3	U	1	1	1		<2
118	280-137609-C-4	U	1	1	1		<2
119	280-137609-C-5	U	1	2	1		<2
120	280-137609-C-6	U	1	1	1		<2
121	280-137609-C-7	U	1	1	1		<2
122	280-137609-C-8	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	280-137609-C-10	U	1	1	1		<2
124	280-137609-A-11	U	1	1	1		<2
125	280-137609-L-9	U	1	1	1		<2
126	ms 280-137609-L-9	U	1	1	1		<2
127	msd 280-137609-L-9	U	1	1	1		<2
128	280-137609-A-12	U	1	1	1		<2
129	280-137609-C-16	U	1	1	1		<2
130	280-137609-C-17	U	1	1	1		<2
131	280-137609-C-18	U	1	1	1		<2
132	280-137609-C-19	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	280-137609-C-20	U	1	1	1		<2
134	280-137609-C-21	U	1	1	1		<2

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-137609-C-22	U	1	1	1		
136	280-137609-C-23	U	1	2	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-137609-C-25	U	1	1	1		
138	ms 280-137609-C-25	U	1	1	1		
139	msd 280-137609-C-25	U	1	1	1		
140	280-137609-C-24	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-137609-C-26	U	1	1	1		
142	280-137609-C-27	U	1	1	1		
143	280-137609-C-28	U	1	1	1		
144	280-137609-C-29	U	1	1	1		
145	280-137600-B-2	U	1	50	1		
146	280-137600-B-3	U	1	50	1		
147	280-137600-B-4	U	1	50	1		
148	280-137600-B-5	U	1	50	1		
149	280-137600-B-1	U	1	2	1		
150	ms 280-137600-B-1	U	1	2	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 280-137600-B-1	U	1	2	1		
152	280-137600-B-6	U	1	1	1		
153	280-137600-B-7	U	1	1	1		
154	280-137600-B-8	U	1	1	1		
155	280-137600-B-9	U	1	2	1		
156	280-137600-B-14	U	1	1	1		
157	280-137600-B-18	U	1	1	1		
158	280-137600-B-19	U	1	1	1		
159	280-137600-B-20	U	1	50	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		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
201	280-137530-C-1	U	1	2	1	Total	
202	ms 280-137530-C-1	U	1	2	1	Total	
203	msd 280-137530-C-1	U	1	2	1	Total	
204	280-137530-A-1	U	1	2	1	Dissolved	
205	280-137530-C-1	U	1	2	1	Total	
206	280-137530-A-1	U	1	2	1	Dissolved	
207	d	U	1	1	1		
208	d	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
0	Read Baseline	RB	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
0	Read Baseline	RB	1	1	1		
145	280-137600-B-2	U	1	100 ~~1~~	1		
146	280-137600-B-3	U	1	100 ~~1~~	1		
147	280-137600-B-4	U	1	100 ~~1~~	1		
148	280-137600-B-5	U	1	50 ~~1~~	1		
~~155~~	~~280-137600-B-8~~ 9	U	1	~~2 1~~	1		
156	280-137600-B-~~14~~	U	1	2 ~~1~~	1		
158	280-137600-B-19	U	1	2 ~~1~~	1		
159	280-137600-B-20	U	1	100 ~~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		
145	280-137600-B-2	U	1	200	1		
146	280-137600-B-3	U	1	500	1		
147	280-137600-B-4	U	1	500	1		
148	280-137600-B-5	U	1	50 ~~1~~	1		
149	w	U	1	1	1		
150	w	U	1	1	1		
151	w	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		

Sulfide by Titration

Analyst:	SAH	SOP Information:	
Date:	6/12/2020	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01738
TALS ID	Iod_00257	Prep Date:	6/8/2020
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	1108
TALS ID	Na Thio_00166	Expiration Date:	9/8/2020
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00062		

ICV Information	
Source/Ver-Lot#:	INT_01685
Prep Date:	6/8/2020
Made By:	SAH
Concentration:	920
Expiration Date:	9/8/2020

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	6.20	20	6.20	1104.000
CAL	5	6.20	12.30	20	6.10	1112.000

For SM4500 S2 D colorimetric

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.40	20	8.40	928.000
ICV	5	8.40	17.00	20	8.60	912.000

Sample	Start	End
1	0	3.5
2	3.6	4.6
3	4.6	5.5
4	5.5	8.3
5	8.3	12.1
6	12.1	13.1
7	13.1	14.1
8	14.1	15.1
9	15.1	16.1
10	16.1	17.1
11 → 5mL Iodine	17.1	19.1
12	19.1	20.1
13	20.1	21.1
14	21.1	22.1
15	22.1	23.1
16	23.1	24.1
17	0.00	1.00
18	~~1.1~~ 06/18/20 Burn	2.0
	1.1	

TALS Raw Data Report

Job Number: 280-137584-1
LIMS Batch: 499231
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499227/1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	54	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499227/2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-137596-K-3-B** Inj Date: 6/18/2020 9:54:00AM 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				

RS# 4 Lab ID: **280-137596-K-3-C MS** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	76	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137596-K-3-D MSD** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		9.6 mg/L	mg/L	40	44 110	59	20
Sulfide as H2S		10.2 mg/L	mg/L				

RS# 8 Lab ID: **280-137584-Q-1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-137587-1
LIMS Batch: 499231
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499227/1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	54	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499227/2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-137596-K-3-B** Inj Date: 6/18/2020 9:54:00AM 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				

RS# 4 Lab ID: **280-137596-K-3-C MS** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	76	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137596-K-3-D MSD** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		9.6 mg/L	mg/L	40	44 110	59	20
Sulfide as H2S		10.2 mg/L	mg/L				

RS# 9 Lab ID: **280-137587-M-2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 12 Lab ID: **280-137587-M-3-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 14 Lab ID: **280-137587-M-5-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 15 Lab ID: **280-137587-M-6-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 16 Lab ID: **280-137587-M-7-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

RS# 17 Lab ID: **280-137587-M-8-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-137587-2
LIMS Batch: 499231
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499227/1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	54	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499227/2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-137596-K-3-B** Inj Date: 6/18/2020 9:54:00AM 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				

RS# 4 Lab ID: **280-137596-K-3-C MS** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	76	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137596-K-3-D MSD** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		9.6 mg/L	mg/L	40	44 110	59	20
Sulfide as H2S		10.2 mg/L	mg/L				

RS# 13 Lab ID: **280-137587-M-4-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-137596-1
LIMS Batch: 499231
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499227/1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	ug/L	54	44 110		
Sulfide as H2S		12.75 mg/L	ug/L				

RS# 2 Lab ID: **MB 280-499227/2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	ug/L				
Sulfide as H2S		0 mg/L	ug/L				

RS# 3 Lab ID: **280-137596-K-3-B** Inj Date: 6/18/2020 9:54:00AM 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	800 J ug/L				
Sulfide as H2S		0.85 mg/L	850 J ug/L				

RS# 4 Lab ID: **280-137596-K-3-C MS** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	ug/L	76	44 110		
Sulfide as H2S		18.7 mg/L	ug/L				

RS# 5 Lab ID: **280-137596-K-3-D MSD** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		9.6 mg/L	ug/L	40	44 110	59	20
Sulfide as H2S		10.2 mg/L	ug/L				

RS# 6 Lab ID: **280-137596-M-1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	ug/L				
Sulfide as H2S		0 mg/L	ug/L				

RS# 7 Lab ID: **280-137596-N-2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	ug/L				
Sulfide as H2S		0 mg/L	ug/L				

TALS Raw Data Report

Job Number: 280-137609-1
LIMS Batch: 499231
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499227/1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	54	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499227/2-A** Inj Date: 6/18/2020 9:54:00AM 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: **280-137596-K-3-B** Inj Date: 6/18/2020 9:54:00AM 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				

RS# 4 Lab ID: **280-137596-K-3-C MS** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	76	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137596-K-3-D MSD** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		9.6 mg/L	mg/L	40	44 110	59	20
Sulfide as H2S		10.2 mg/L	mg/L				

RS# 10 Lab ID: **280-137609-E-25-A** Inj Date: 6/18/2020 9:54:00AM 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# 11 Lab ID: **280-137609-E-24-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		24 mg/L	mg/L				
Sulfide as H2S		25.5 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-137671-1
LIMS Batch: 499231
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499227/1-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	54	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499227/2-A** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-137596-K-3-B** Inj Date: 6/18/2020 9:54:00AM 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				

RS# 4 Lab ID: **280-137596-K-3-C MS** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	76	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137596-K-3-D MSD** Inj Date: 6/18/2020 9:54:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		9.6 mg/L	mg/L	40	44 110	59	20
Sulfide as H2S		10.2 mg/L	mg/L				

RS# 18 Lab ID: **280-137671-M-1-A** Inj Date: 6/18/2020 9:54:00AM 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: 499231	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer:	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: BWH 06/18/2020	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)** Manual	**Instrument ID (circle one if applicable):** N/A AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	✓		✓	If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	✓		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	✓		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	✓		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	✓		✓	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	✓		✓	□ 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)	06/18/2020 ✓ BWH	✓	✓	□ 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)	✓		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Sulfide by Titration

Analyst:	SAH	SOP Information:	
Date:	6/12/2020	Number:	91

Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01738
TALS ID	Iod_00257	Prep Date:	6/8/2020
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	1108
TALS ID	Na Thio_00166	Expiration Date:	9/8/2020
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00062		

ICV Information	
Source/Ver-Lot#:	INT_01685
Prep Date:	6/8/2020
Made By:	SAH
Concentration:	920
Expiration Date:	9/8/2020

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	6.20	20	6.20	1104.000
CAL	5	6.20	12.30	20	6.10	1112.000

For SM4500 S2 D colorimetric

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.40	20	8.40	928.000
ICV	5	8.40	17.00	20	8.60	912.000

Samples	Start	End
1	0.0	2.6
2	2.6	3.6
3	3.6	4.6
4	4.6	7.4
5	7.4	10.5
6	10.5	11.5
7	11.5	12.5
8	12.5	13.5
9	13.5	14.5
10	14.5	15.4
11	15.4	16.4
12	16.4	17.4
13	17.4	18.4
14	18.4	19.4
15	19.4	20.4
16	20.4	21.4
17	21.4	22.4
18	22.4	23.4

TALS Raw Data Report

Job Number: 280-137609-1
LIMS Batch: 499306
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499253/1-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	87	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499253/2-A** Inj Date: 6/18/2020 2:09:00PM 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: **280-137609-E-16-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-137609-E-16-B MS** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	79	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137609-E-16-C MSD** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	69	44 110	15	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 6 Lab ID: **280-137609-E-17-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 7 Lab ID: **280-137609-E-18-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-137609-E-19-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-137609-E-20-A** Inj Date: 6/18/2020 2:09:00PM 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: **280-137609-E-21-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

TALS Raw Data Report

RS# 11 Lab ID: **280-137609-E-22-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-7.2 mg/L	1.9 U mg/L				
Sulfide as H2S		-7.65 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-137609-E-23-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-8 mg/L	1.9 U mg/L				
Sulfide as H2S		-8.5 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-137609-E-26-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-8 mg/L	1.9 U mg/L				
Sulfide as H2S		-8.5 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-137609-E-27-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-8 mg/L	1.9 U mg/L				
Sulfide as H2S		-8.5 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-137609-E-28-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-8 mg/L	1.9 U mg/L				
Sulfide as H2S		-8.5 mg/L	2.0 U mg/L				

RS# 16 Lab ID: **280-137609-E-29-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-8 mg/L	1.9 U mg/L				
Sulfide as H2S		-8.5 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-137644-1
LIMS Batch: 499306
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499253/1-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	87	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499253/2-A** Inj Date: 6/18/2020 2:09:00PM 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: **280-137609-E-16-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-137609-E-16-B MS** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	79	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137609-E-16-C MSD** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	69	44 110	15	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 17 Lab ID: **280-137644-Q-1-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-8 mg/L	mg/L				
Sulfide as H2S		-8.5 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-137647-1
LIMS Batch: 499306
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499253/1-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	87	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499253/2-A** Inj Date: 6/18/2020 2:09:00PM 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: **280-137609-E-16-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-137609-E-16-B MS** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	79	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 5 Lab ID: **280-137609-E-16-C MSD** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	69	44 110	15	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 18 Lab ID: **280-137647-F-1-A** Inj Date: 6/18/2020 2:09:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 449306	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: BWH	**2310B** **2320B** **2340C**	(**Standard**) **DoD** **QAPP** **Other**
Date: 06/19/2020	**4500 S2 F** **4500 SO3 B** (**9030B/9034**)	
Matrix (circle): (**Water**) **Solid**	**Automated or (Manual) (circle one)**	**Instrument ID (circle one if applicable):** N/A **AT2** **AT3**

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	✓		✓	If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	✓		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	✓		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	✓		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	✓		✓	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	✓		✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	✓		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1304
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jun-2020 12:47:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091996-002
Misc. Info.: 280-0091996-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:14:46 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1039

First Level Reviewer: pedrickj Date: 01-Jun-2020 13:10:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.308	3.310	-0.002	960724	0.2000	0.2639	
2 Chloride	4.480	4.477	0.003	3008859	1.00	1.19	
3 Nitrite as N	5.168	5.160	0.008	1169039	NC	NC	M
4 Bromide	6.222	6.210	0.012	262781	0.2000	0.2385	
5 Nitrate as N	6.995	6.957	0.038	1364325	NC	NC	
6 Orthophosphate as P	9.443	9.415	0.028	566668	NC	NC	
7 Sulfate	10.787	10.765	0.022	2086301	1.00	1.27	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

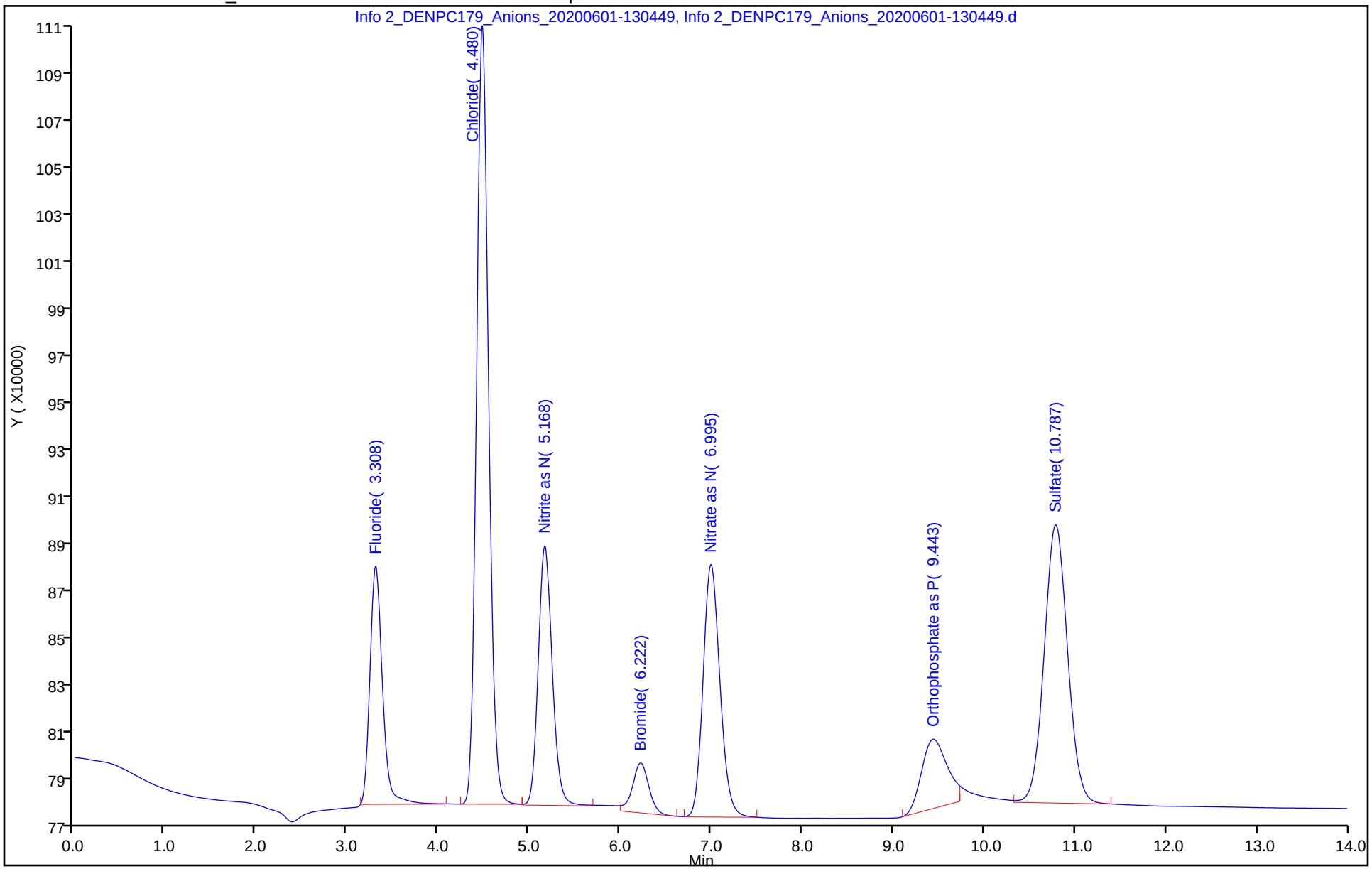
IC Cal low_00527 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00312 Amount Added: 0.04 Units: mL

Report Date: 02-Jun-2020 12:14:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-130449.d

Injection Date:	01-Jun-2020 12:47:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1322
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jun-2020 13:04:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091996-003
Misc. Info.: 280-0091996-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:14:48 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.313	3.310	0.003	2275066	0.5000	0.4122	
2 Chloride	4.487	4.477	0.010	7892240	2.50	2.35	
3 Nitrite as N	5.177	5.160	0.017	2864011	NC	NC	
4 Bromide	6.233	6.210	0.023	594319	0.5000	0.4808	
5 Nitrate as N	7.002	6.957	0.045	3539182	NC	NC	
6 Orthophosphate as P	9.447	9.415	0.032	1240422	NC	NC	
7 Sulfate	10.807	10.765	0.042	5269475	2.50	2.30	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

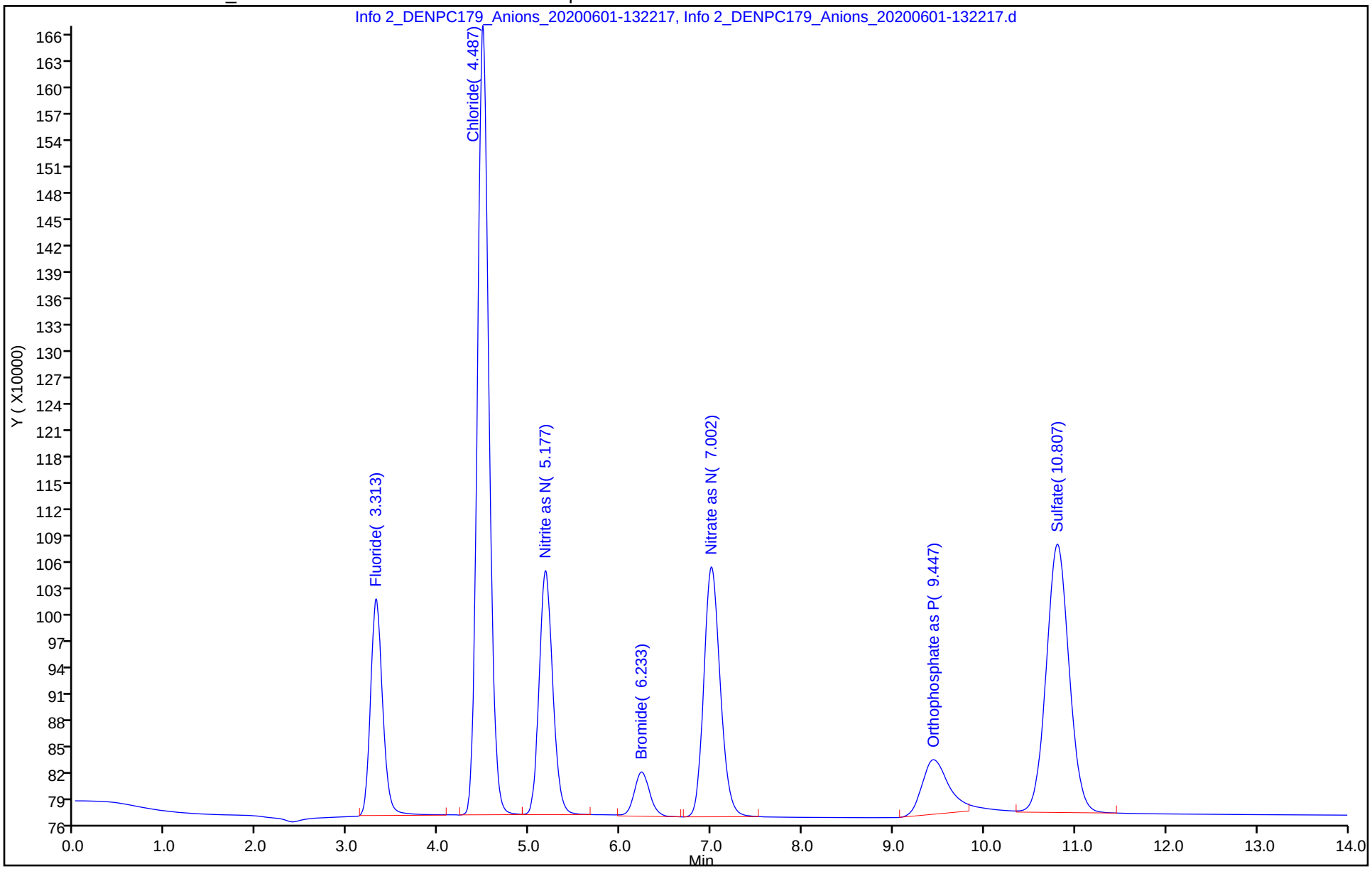
IC Cal low_00527 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00312 Amount Added: 0.10 Units: mL

Report Date: 02-Jun-2020 12:14:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-132217.d

Injection Date:	01-Jun-2020 13:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-133
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jun-2020 13:22:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091996-004
Misc. Info.: 280-0091996-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:14:48 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143

Column 1 : Det: Info 2_091554_1
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.312	3.310	0.002	5662439	1.00	0.7945	
2 Chloride	4.480	4.477	0.003	16828074	5.00	4.47	
3 Nitrite as N	5.168	5.160	0.008	6191792	NC	NC	
4 Bromide	6.223	6.210	0.013	1156053	1.00	0.8914	
5 Nitrate as N	6.983	6.957	0.026	7422076	NC	NC	
6 Orthophosphate as P	9.422	9.415	0.007	4528056	NC	NC	
7 Sulfate	10.787	10.765	0.022	11215027	5.00	4.22	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

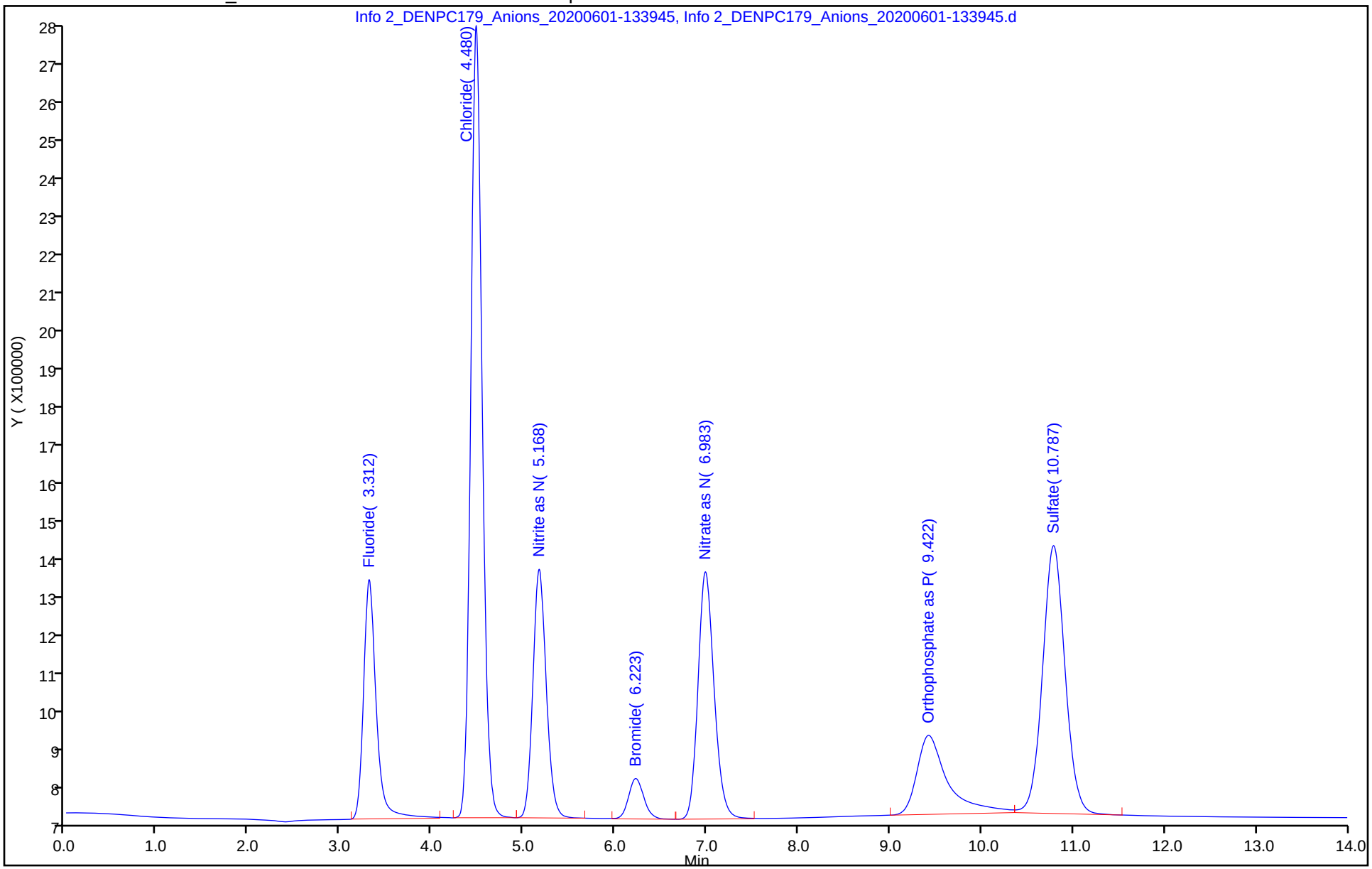
IC Cal low_00527 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00312 Amount Added: 0.20 Units: mL

Report Date: 02-Jun-2020 12:14:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-133945.d

Injection Date:	01-Jun-2020 13:22:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-135
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jun-2020 13:39:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091996-005
Misc. Info.: 280-0091996-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:14:49 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143

Column 1 : Det: Info 2_091554_1
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.315	3.315	0.000	36299181	4.00	4.25	
2 Chloride	4.478	4.478	0.000	245275024	60.0	58.7	
3 Nitrite as N	5.163	5.163	0.000	32433677	NC	NC	
4 Bromide	6.217	6.217	0.000	4939075	4.00	3.66	
5 Nitrate as N	6.963	6.963	0.000	35267803	NC	NC	
6 Orthophosphate as P	9.428	9.428	0.000	22273443	NC	NC	
7 Sulfate	10.777	10.777	0.000	177129224	60.0	57.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated

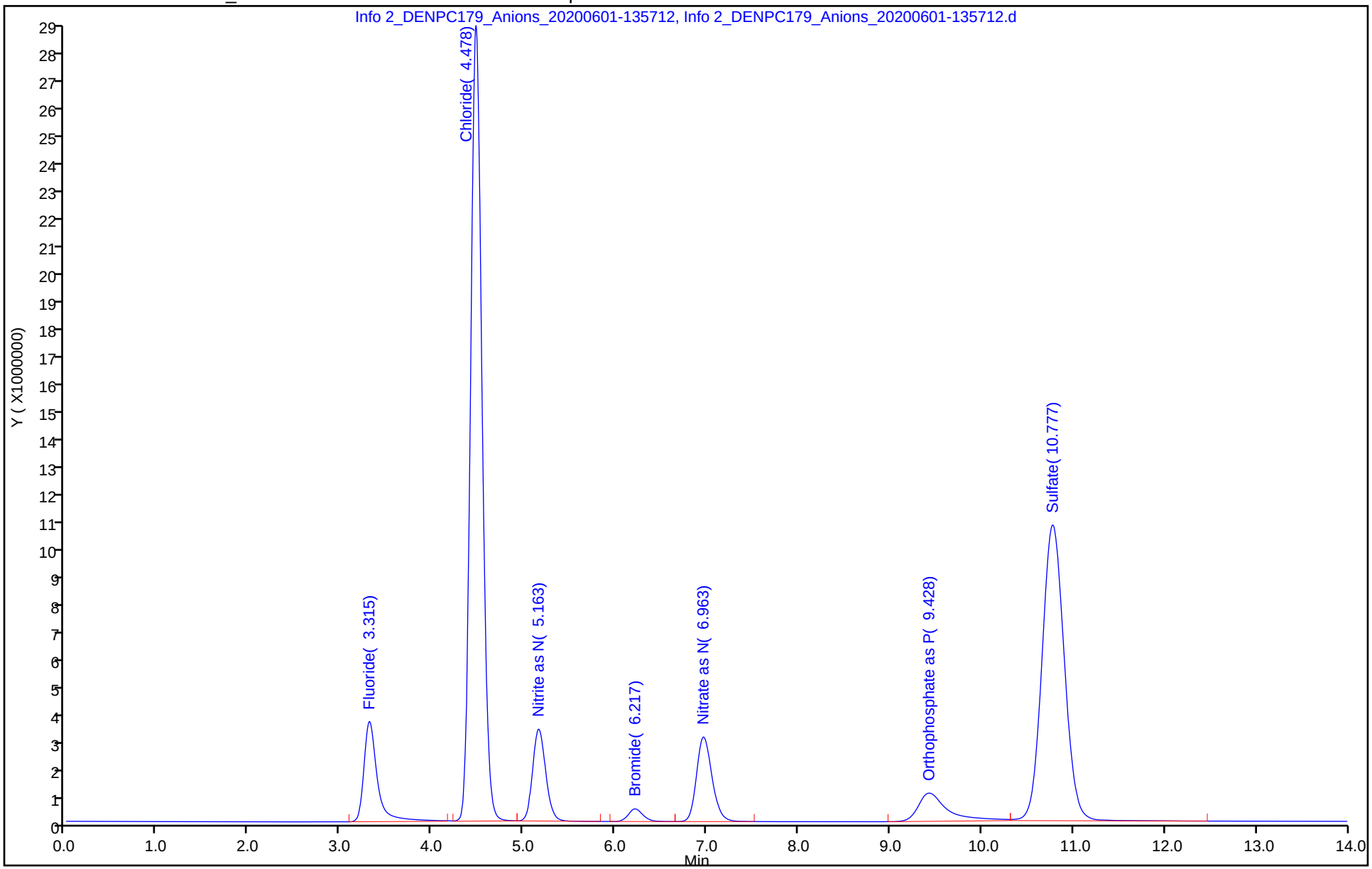
Reagents:

IC Cal low_00527 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00312 Amount Added: 2.40 Units: mL

Report Date: 02-Jun-2020 12:14:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-135712.d				
Injection Date:	01-Jun-2020 13:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1414
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jun-2020 13:57:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091996-006
Misc. Info.: 280-0091996-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:14:49 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.318	3.315	0.003	69819024	8.00	8.04	
2 Chloride	4.485	4.478	0.007	492646370	120.0	117.5	
3 Nitrite as N	5.163	5.163	0.000	69818042	NC	NC	
4 Bromide	6.215	6.217	-0.002	10728140	8.00	7.89	
5 Nitrate as N	6.953	6.963	-0.010	76451046	NC	NC	
6 Orthophosphate as P	9.418	9.428	-0.010	43487286	NC	NC	
7 Sulfate	10.773	10.777	-0.004	360690780	120.0	117.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

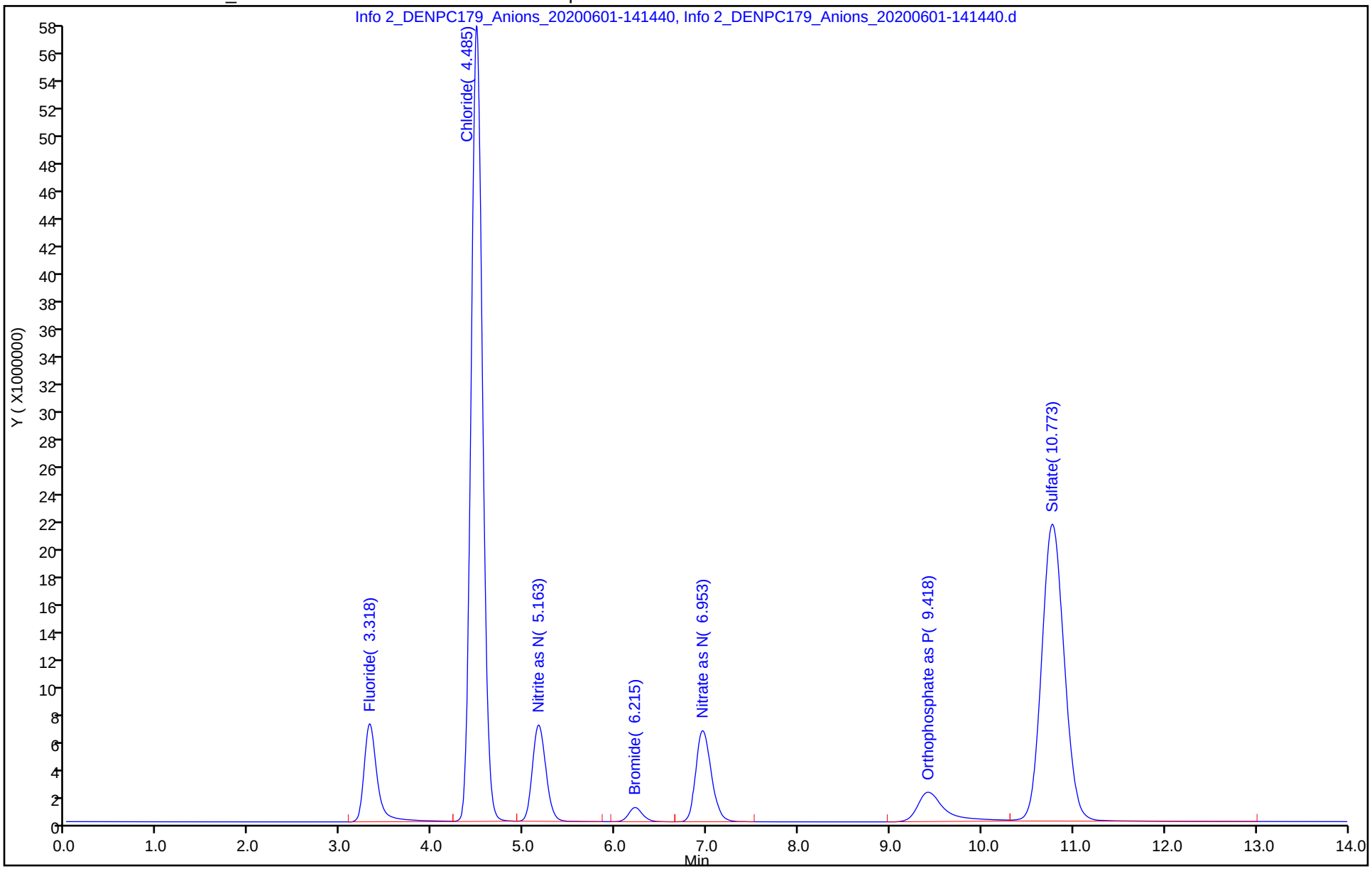
IC Cal low_00527 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00312 Amount Added: 4.80 Units: mL

Report Date: 02-Jun-2020 12:14:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-141440.d

Injection Date:	01-Jun-2020 13:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Jun-2020 14:14:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091996-007
Misc. Info.: 280-0091996-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:14:50 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.317	3.315	0.002	86704208	10.0	9.94	
2 Chloride	4.492	4.478	0.014	858365825	200.0	204.3	
3 Nitrite as N	5.160	5.163	-0.003	90947997	NC	NC	
4 Bromide	6.212	6.217	-0.005	14364128	10.0	10.5	
5 Nitrate as N	6.945	6.963	-0.018	101279649	NC	NC	
6 Orthophosphate as P	9.402	9.428	-0.026	56378441	NC	NC	
7 Sulfate	10.755	10.777	-0.022	632451003	200.0	205.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

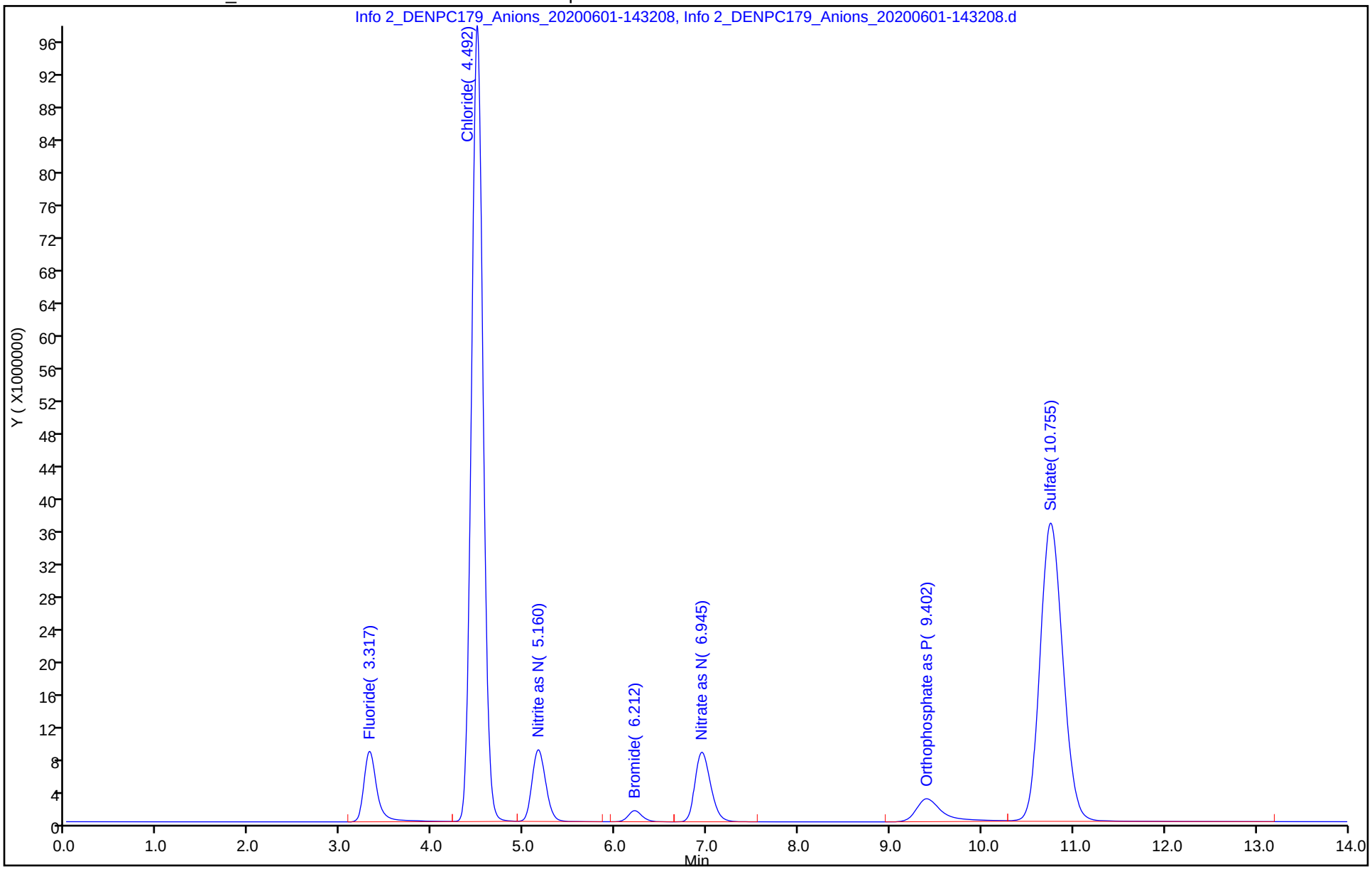
Reagents:

IC Cal low_00527 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00312 Amount Added: 8.00 Units: mL

Report Date: 02-Jun-2020 12:14:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143208.d				
Injection Date:	01-Jun-2020 14:14:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 92060 **Inst ID:** 10 **Analysis Date:** 6/3/2020 **Analyst:** JP

SOILS

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	136560	4	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	136663	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			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
66B		F Cl NO2 Br NO3 PO4 SO4	100X	PURG
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2020 16:18:43
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b
Inj Date : 01-Jun-2020 12:47:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-137718	8860074		0.995				
2 Chloride	-199359	4211012		0.999				
3 Nitrite as N					-112196	8867357		0.996
4 Bromide	-63504	1368165		0.996				
5 Nitrate as N					-103805	9770143		0.996
6 Orthophosphate as P					-868427	5640712		0.997
7 Sulfate	-182343	3088243		0.999				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2020 16:18:43
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.350 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-130449
Inj Date: 01-Jun-2020 12:47:00 Worklist: 91996 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-132217
Inj Date: 01-Jun-2020 13:04:00 Worklist: 91996 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-133945
Inj Date: 01-Jun-2020 13:22:00 Worklist: 91996 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-135712
Inj Date: 01-Jun-2020 13:39:00 Worklist: 91996 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-141440
Inj Date: 01-Jun-2020 13:57:00 Worklist: 91996 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143208
Inj Date: 01-Jun-2020 14:14:00 Worklist: 91996 Sample#: 7

Start Cal Date: 01-Jun-2020 12:47:00 End Cal Date: 01-Jun-2020 14:14:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
4803620	4550132	5662439	9074795	8727378	8670421	**-1377187**			**0.995**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8860074**		
960724	2275066	5662439	36299181	69819024	86704208				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
2 Chloride				Signal: 1					
3008859	3156896	3365615	4087917	4105386	4291829	**-1993599**			**0.999**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**4211012**		
3008859	7892240	16828074	245275024	492646370	858365825				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
4 Bromide				Signal: 1					
1313905	1188638	1156053	1234769	1341018	1436413	**-63504**			**0.996**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**1368165**		
262781	594319	1156053	4939075	10728140	14364128				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
7 Sulfate				Signal: 1					
2086301	2107790	2243005	2952154	3005757	3162255	**-1823433**			**0.999**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**3088243**		
2086301	5269475	11215027	177129224	360690780	632451003				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2020 16:18:43
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.350 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-130449
Inj Date: 01-Jun-2020 12:47:00 Worklist: 91996 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-132217
Inj Date: 01-Jun-2020 13:04:00 Worklist: 91996 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-133945
Inj Date: 01-Jun-2020 13:22:00 Worklist: 91996 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-135712
Inj Date: 01-Jun-2020 13:39:00 Worklist: 91996 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-141440
Inj Date: 01-Jun-2020 13:57:00 Worklist: 91996 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143208
Inj Date: 01-Jun-2020 14:14:00 Worklist: 91996 Sample#: 7

Start Cal Date: 01-Jun-2020 12:47:00 End Cal Date: 01-Jun-2020 14:14:00

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					
5845195	5728022	6191792	8108419	8727255	9094800	**-1121965**			**0.996**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8867357**		
M1169039	2864011	6191792	32433677	69818042	90947997				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
5 Nitrate as N				Signal: 1					
6821625	7078364	7422076	8816951	9556381	10127965	**-1038053**			**0.996**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**9770143**		
1364325	3539182	7422076	35267803	76451046	101279649				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
6 Orthophosphate as P				Signal: 1					
2833340	2480844	4528056	5568361	5435911	5637844	**-868427**			**0.997**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**5640712**		
566668	1240422	4528056	22273443	43487286	56378441				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				

IC Instrument Information

WL: 92106 **Inst ID:** 11 **Analysis Date:** 6/4/20 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	137254	3	F Cl NO2 Br NO3 PO4 SO4	(MS/D) 1	
☐	137249	3	F (Cl) (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	137253	1	(F) (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	137257	4	F Cl NO2 Br NO3 PO4 SO4	(MS/D) 3	
☐	137266	4	F Cl (NO2) Br (NO3) PO4 SO4	MS/D	
☐	137264	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
253		F Cl NO2 Br NO3 PO4 SO4	2, 20x	Hist
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Info 2_DENPC179_Anions_20200603-1010
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Jun-2020 09:53:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092060-001
Misc. Info.: 280-0092060-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:19:19 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 10:18:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.305	3.305	0.000	36231268	4.00	4.24	
2 Chloride	4.468	4.468	0.000	345715357	80.0	82.6	
3 Nitrite as N	5.148	5.148	0.000	35178183	NC	NC	
4 Bromide	6.197	6.197	0.000	5526245	4.00	4.09	
5 Nitrate as N	6.942	6.942	0.000	39641832	NC	NC	
6 Orthophosphate as P	9.377	9.377	0.000	22874323	NC	NC	M
7 Sulfate	10.725	10.725	0.000	250525422	80.0	81.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

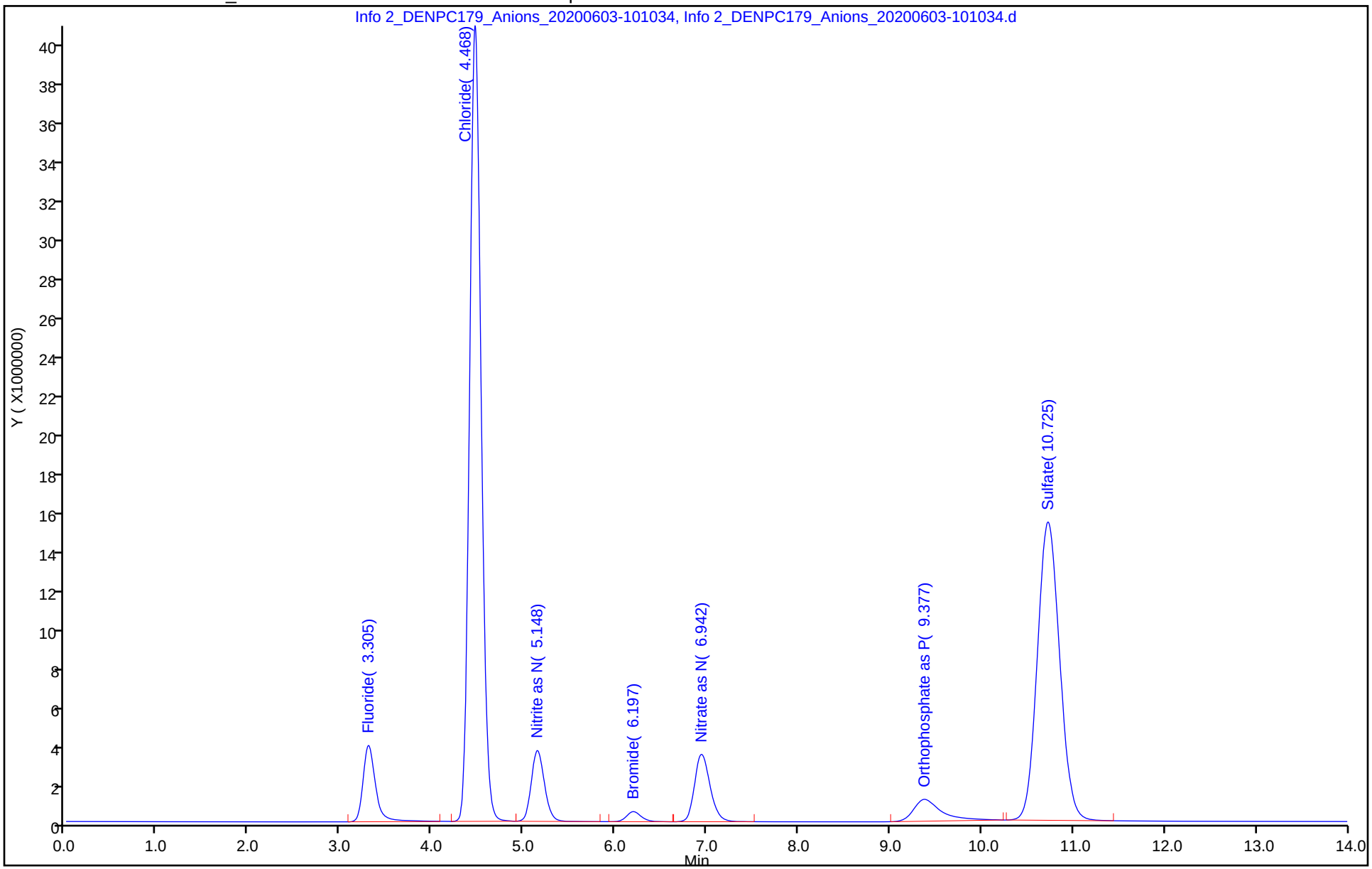
Reagents:

IC SO4 ICV_00021 Amount Added: 0.80 Units: mL
IC ICV 5_00272 Amount Added: 0.80 Units: mL
IC CL ICV_00018 Amount Added: 0.80 Units: mL

Report Date: 04-Jun-2020 08:19:20 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Info 2_DENPC179_Anions_20200603-101034.d				
Injection Date:	03-Jun-2020 09:53:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

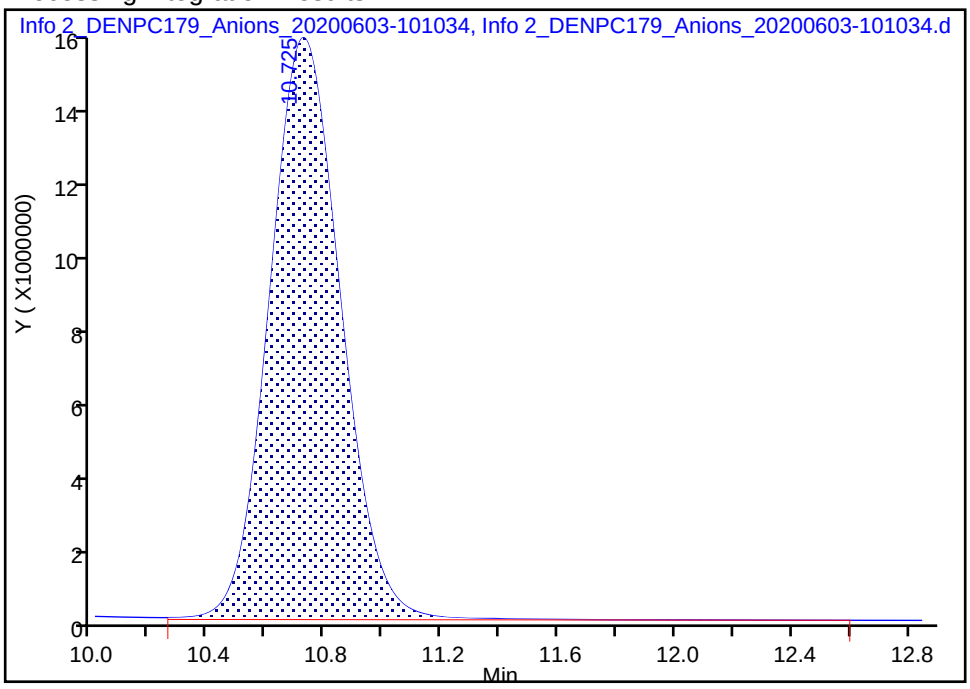
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Info 2_DENPC179_Anions_20200603-1010				
Injection Date:	03-Jun-2020 09:53:00	Instrument ID:	WC_IonChrom10		
Lims ID:	ICV				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		
Column:		Detector	Info 2_091554_1		

7 Sulfate, CAS: 14808-79-8

Signal: 1

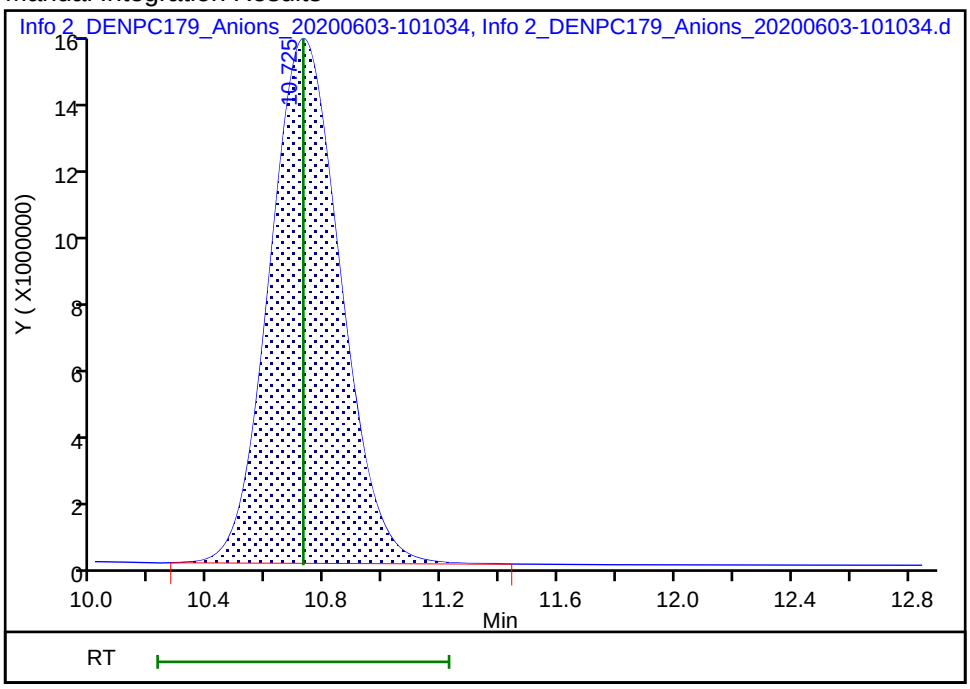
Processing Integration Results

RT: 10.73
Area: 253048113
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.73
Area: 250525422
Amount: 81.712758
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 10:18:56

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Info 2_DENPC179_Anions_20200603-102
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 03-Jun-2020 10:10:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092060-002
Misc. Info.: 280-0092060-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:19:19 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1067

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.305				ND	
2 Chloride	4.485	4.468	0.017	55165		0.4865	
3 Nitrite as N		5.148				ND	
4 Bromide		6.197				ND	
5 Nitrate as N		6.942				ND	
6 Orthophosphate as P	9.450	9.377	0.073	101388		NC	
7 Sulfate		10.725				ND	

QC Flag Legend

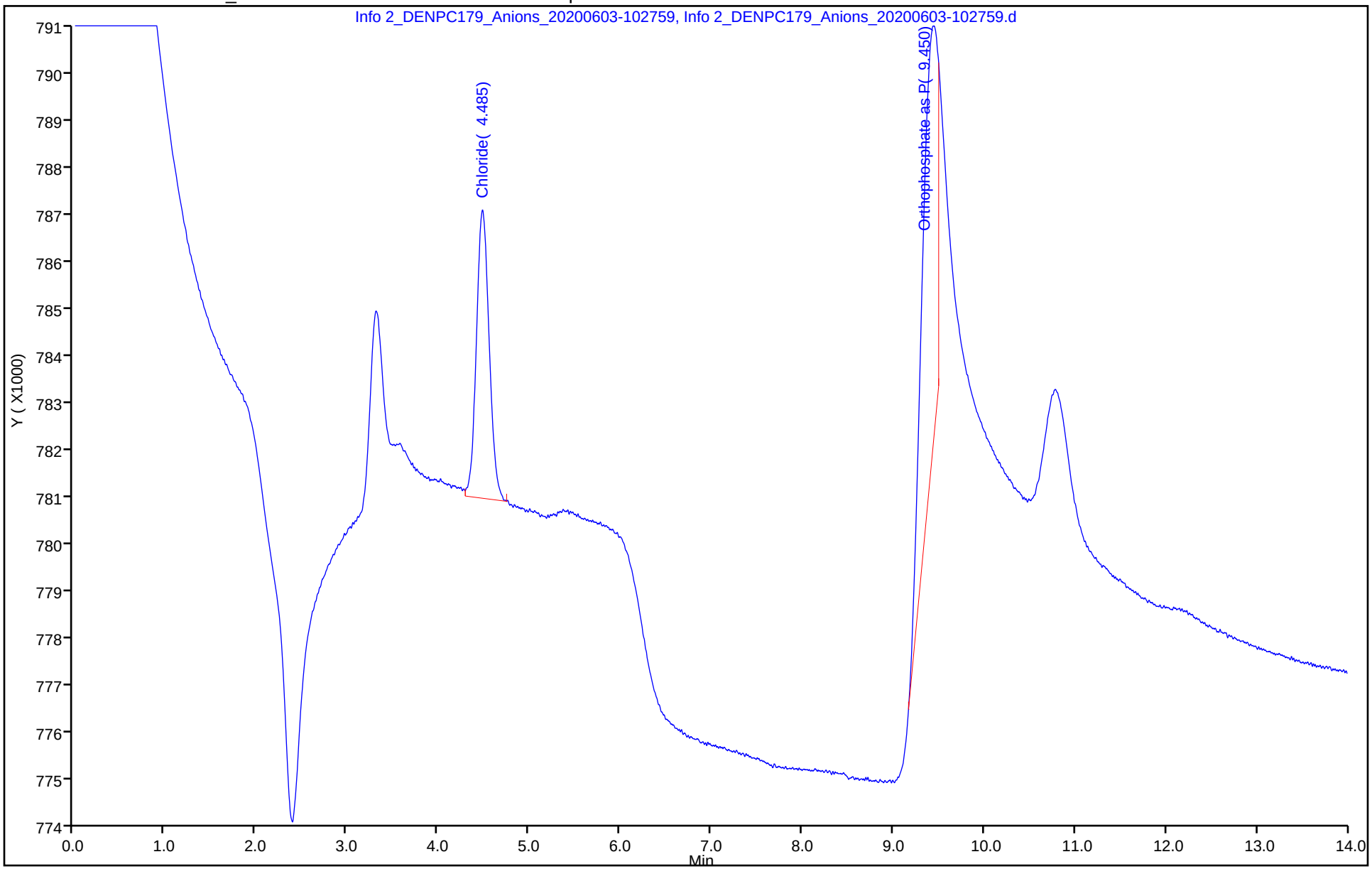
Processing Flags
NC - Not Calibrated

Report Date: 04-Jun-2020 08:19:22 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200603-92060.b\Info 2_DENPC179_Anions_20200603-102759.d

Injection Date:	03-Jun-2020 10:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 92782 **Inst ID:** 10 **Analysis Date:** 6/26/20 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	138062	11	F Cl NO2 Br NO3 PO4 SO4	(MS/D) 12	
☐	138056	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138060	5	F Cl NO2 Br NO3 PO4 SO4	(MS/D) 1	
☐	138055	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138053	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138054	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138057	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138058	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138059	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138009	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	138005	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137609	7	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) 26	
☐			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
609		F Cl NO2 Br NO3 PO4 SO4	5X	Rerun
009		F Cl NO2 Br NO3 PO4 SO4	100X	Rerun to confirm
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2020 16:18:43
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b
Inj Date : 01-Jun-2020 12:47:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-137718	8860074		0.995				
2 Chloride	-199359	4211012		0.999				
3 Nitrite as N					-112196	8867357		0.996
4 Bromide	-63504	1368165		0.996				
5 Nitrate as N					-103805	9770143		0.996
6 Orthophosphate as P					-868427	5640712		0.997
7 Sulfate	-182343	3088243		0.999				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2020 16:18:43
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.350 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-130449
Inj Date: 01-Jun-2020 12:47:00 Worklist: 91996 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-132217
Inj Date: 01-Jun-2020 13:04:00 Worklist: 91996 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-133945
Inj Date: 01-Jun-2020 13:22:00 Worklist: 91996 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-135712
Inj Date: 01-Jun-2020 13:39:00 Worklist: 91996 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-141440
Inj Date: 01-Jun-2020 13:57:00 Worklist: 91996 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143208
Inj Date: 01-Jun-2020 14:14:00 Worklist: 91996 Sample#: 7

Start Cal Date: 01-Jun-2020 12:47:00 End Cal Date: 01-Jun-2020 14:14:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
4803620	4550132	5662439	9074795	8727378	8670421	**-1377187**			**0.995**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8860074**		
960724	2275066	5662439	36299181	69819024	86704208				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
2 Chloride				Signal: 1					
3008859	3156896	3365615	4087917	4105386	4291829	**-1993599**			**0.999**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**4211012**		
3008859	7892240	16828074	245275024	492646370	858365825				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
4 Bromide				Signal: 1					
1313905	1188638	1156053	1234769	1341018	1436413	**-63504**			**0.996**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**1368165**		
262781	594319	1156053	4939075	10728140	14364128				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
7 Sulfate				Signal: 1					
2086301	2107790	2243005	2952154	3005757	3162255	**-1823433**			**0.999**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**3088243**		
2086301	5269475	11215027	177129224	360690780	632451003				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 01-Jun-2020 16:18:43
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.350 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-130449
Inj Date: 01-Jun-2020 12:47:00 Worklist: 91996 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-132217
Inj Date: 01-Jun-2020 13:04:00 Worklist: 91996 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-133945
Inj Date: 01-Jun-2020 13:22:00 Worklist: 91996 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-135712
Inj Date: 01-Jun-2020 13:39:00 Worklist: 91996 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-141440
Inj Date: 01-Jun-2020 13:57:00 Worklist: 91996 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-143208
Inj Date: 01-Jun-2020 14:14:00 Worklist: 91996 Sample#: 7

Start Cal Date: 01-Jun-2020 12:47:00 End Cal Date: 01-Jun-2020 14:14:00

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					
5845195	5728022	6191792	8108419	8727255	9094800	**-1121965**			**0.996**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8867357**		
M1169039	2864011	6191792	32433677	69818042	90947997				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
5 Nitrate as N				Signal: 1					
6821625	7078364	7422076	8816951	9556381	10127965	**-1038053**			**0.996**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**9770143**		
1364325	3539182	7422076	35267803	76451046	101279649				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				
6 Orthophosphate as P				Signal: 1					
2833340	2480844	4528056	5568361	5435911	5637844	**-868427**			**0.997**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**5640712**		
566668	1240422	4528056	22273443	43487286	56378441				
91996(2)	91996(3)	91996(4)	91996(5)	91996(6)	91996(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200626-1200
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 26-Jun-2020 11:42:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-003
Misc. Info.: 280-0092782-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:11 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.325	3.305	0.020	2338216	0.5000	0.4193	
2 Chloride	4.505	4.468	0.037	17143631	5.00	4.54	
3 Nitrite as N	5.202	5.148	0.054	2852447	NC	NC	
4 Bromide	6.263	6.197	0.066	574992	0.5000	0.4667	
5 Nitrate as N	7.040	6.942	0.098	3370810	NC	NC	
6 Orthophosphate as P	9.447	9.377	0.070	2332080	NC	NC	
7 Sulfate	10.850	10.725	0.125	11485572	5.00	4.31	

QC Flag Legend

Processing Flags
NC - Not Calibrated

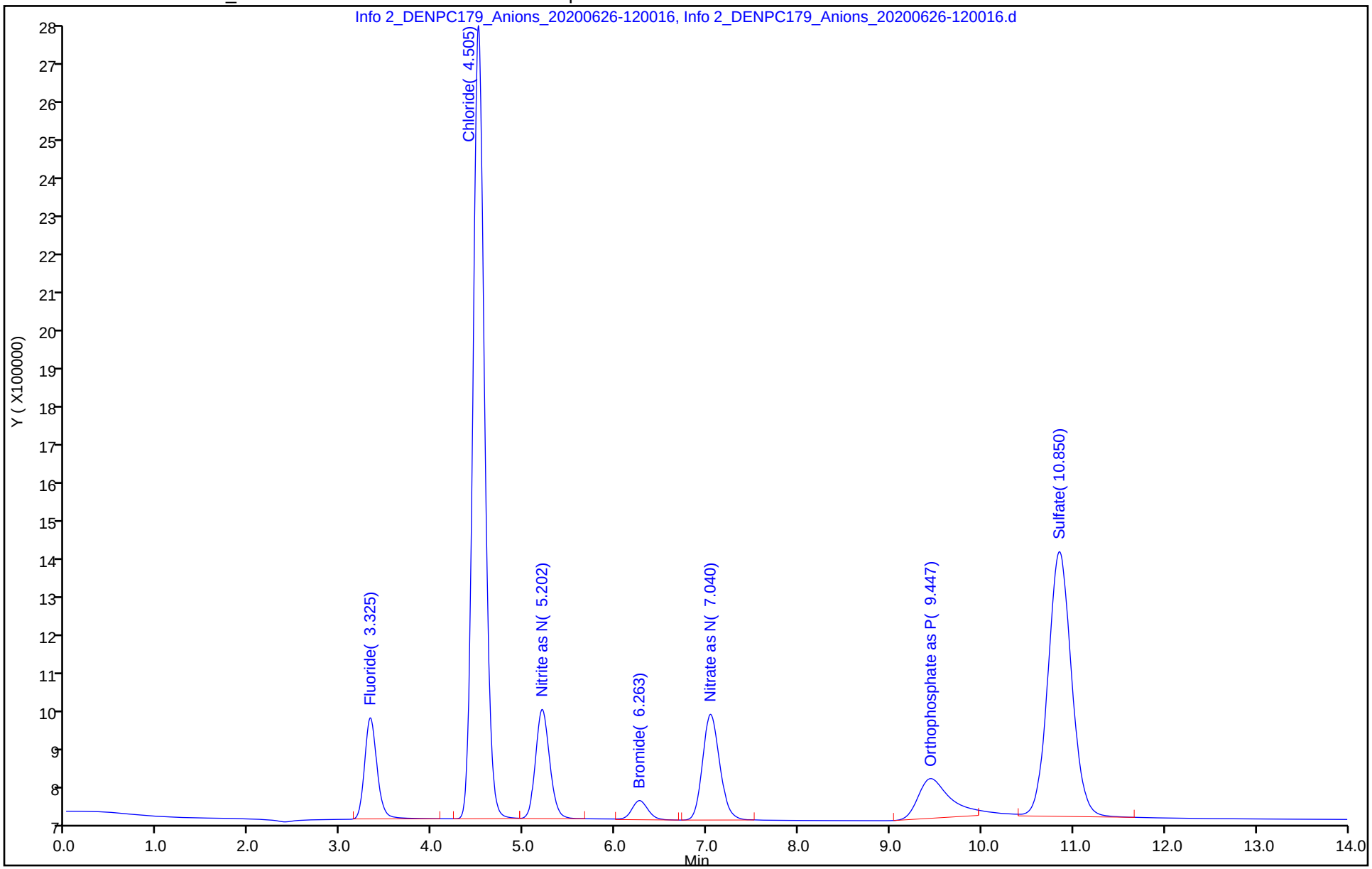
Reagents:

IC Cal low_00531 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00316 Amount Added: 0.20 Units: mL

Report Date: 29-Jun-2020 10:42:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200626-120016.d				
Injection Date:	26-Jun-2020 11:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-042
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 27-Jun-2020 04:10:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-051
Misc. Info.: 280-0092782-051
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:38 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.308	3.305	0.003	36092857	5.00	4.23	
2 Chloride	4.475	4.468	0.007	413637580	100.0	98.7	
3 Nitrite as N	5.155	5.148	0.007	40828090	NC	NC	
4 Bromide	6.205	6.197	0.008	6229820	5.00	4.60	
5 Nitrate as N	6.948	6.942	0.006	45190873	NC	NC	
6 Orthophosphate as P	9.342	9.377	-0.035	38506002	NC	NC	
7 Sulfate	10.685	10.725	-0.040	316680999	100.0	103.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

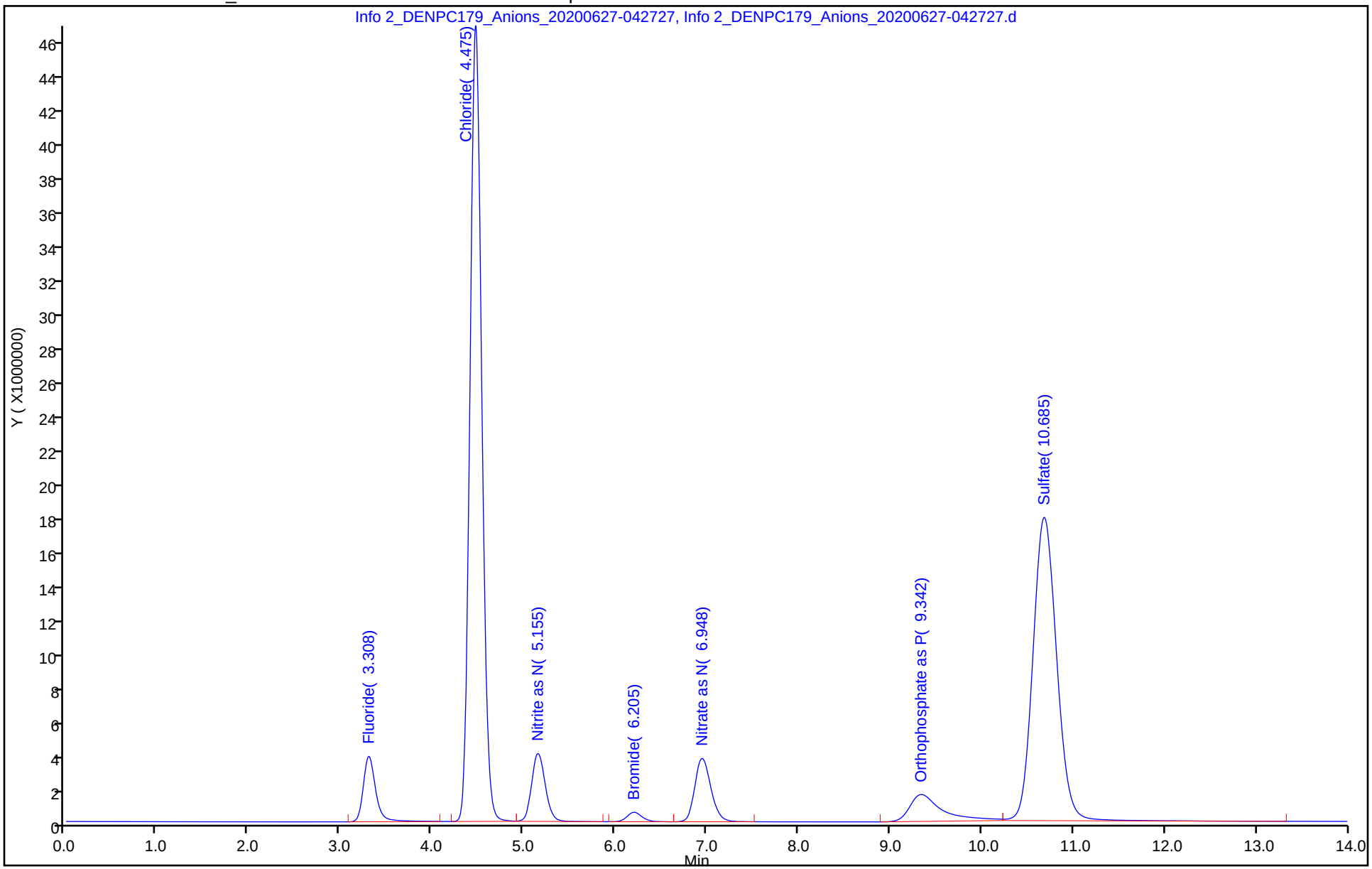
Reagents:

IC LCS_01747 Amount Added: 10.00 Units: mL

Report Date: 29-Jun-2020 10:42:38 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-042727.d				
Injection Date:	27-Jun-2020 04:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	51
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-044
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 27-Jun-2020 04:27:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-052
Misc. Info.: 280-0092782-052
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:38 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.305				ND	
2 Chloride	4.500	4.468	0.032	76824		0.4917	
3 Nitrite as N		5.148				ND	
4 Bromide		6.197				ND	
5 Nitrate as N		6.942				ND	
6 Orthophosphate as P	9.442	9.377	0.065	1430650		NC	
7 Sulfate	10.760	10.725	0.035	221049		0.6620	

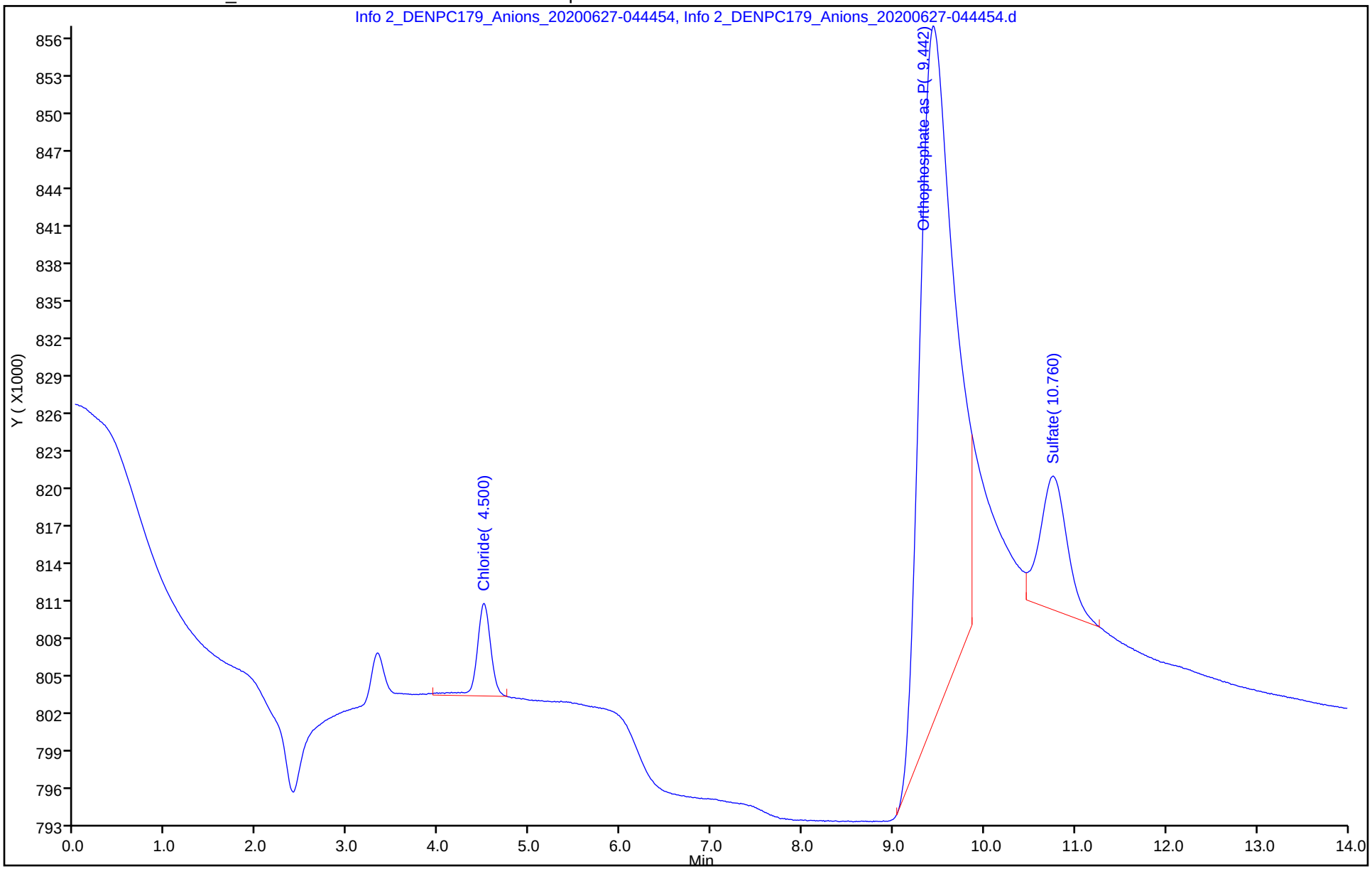
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 29-Jun-2020 10:42:38 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-044454.d				
Injection Date:	27-Jun-2020 04:27:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	52
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-0502
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 27-Jun-2020 04:44:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-053
Misc. Info.: 280-0092782-053
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:38 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.330	3.305	0.025	42396442	5.00	4.94	
2 Chloride	4.500	4.468	0.032	426364280	100.0	101.7	
3 Nitrite as N	5.185	5.148	0.037	41484338	NC	NC	
4 Bromide	6.242	6.197	0.045	6433349	5.00	4.75	
5 Nitrate as N	6.990	6.942	0.048	47169163	NC	NC	
6 Orthophosphate as P	9.400	9.377	0.023	44398903	NC	NC	
7 Sulfate	10.760	10.725	0.035	323162654	100.0	105.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

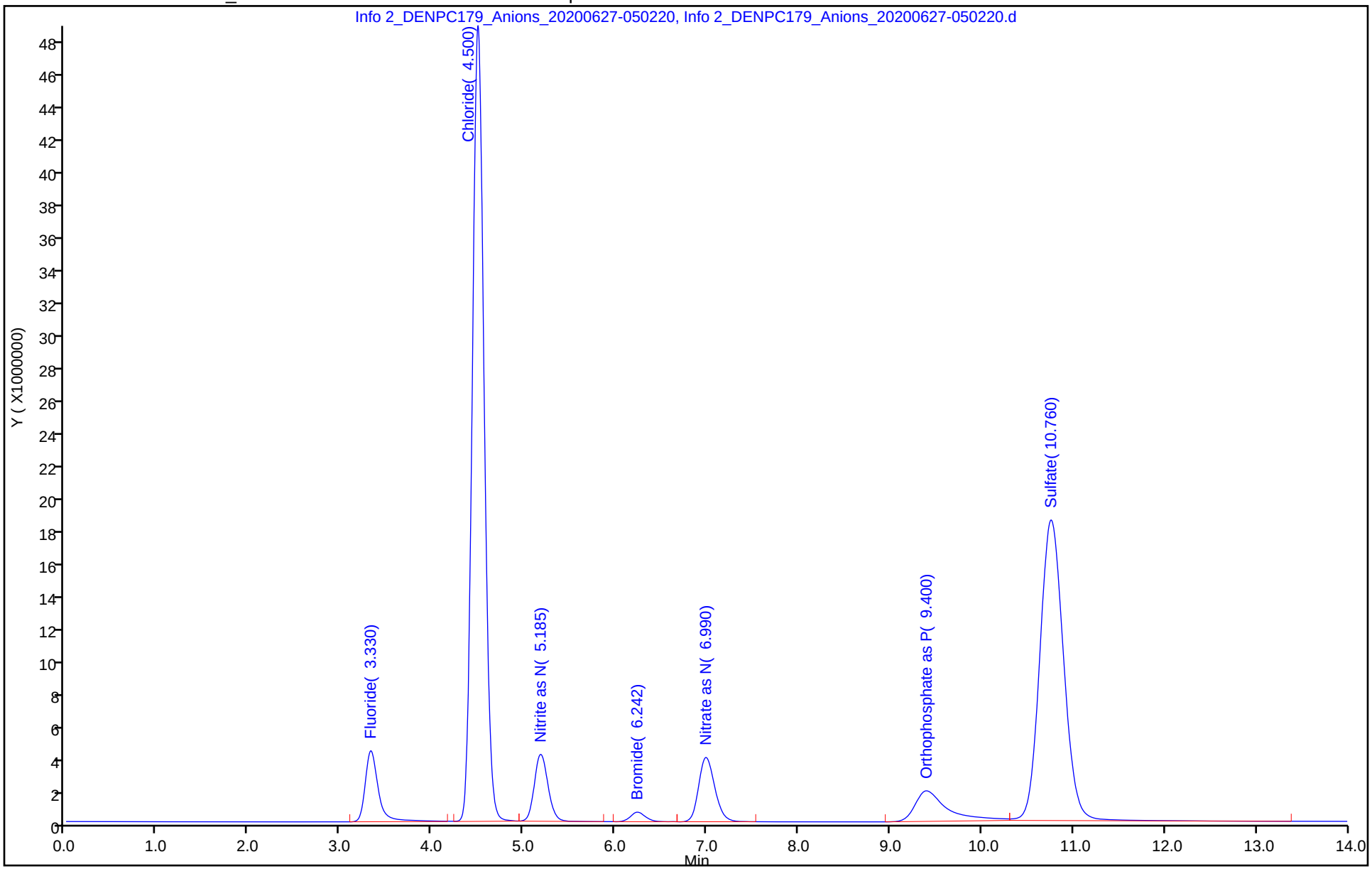
Reagents:

IC LCS_01747 Amount Added: 10.00 Units: mL

Report Date: 29-Jun-2020 10:42:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-050220.d				
Injection Date:	27-Jun-2020 04:44:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	53
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-0519
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 27-Jun-2020 05:02:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-054
Misc. Info.: 280-0092782-054
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:38 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.343	3.305	0.038	39624068	5.00	4.63	
2 Chloride	4.518	4.468	0.050	411099084	100.0	98.1	
3 Nitrite as N	5.207	5.148	0.059	41281523	NC	NC	
4 Bromide	6.268	6.197	0.071	6166367	5.00	4.55	
5 Nitrate as N	7.020	6.942	0.078	45044360	NC	NC	
6 Orthophosphate as P	9.428	9.377	0.051	41221634	NC	NC	
7 Sulfate	10.785	10.725	0.060	307310185	100.0	100.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

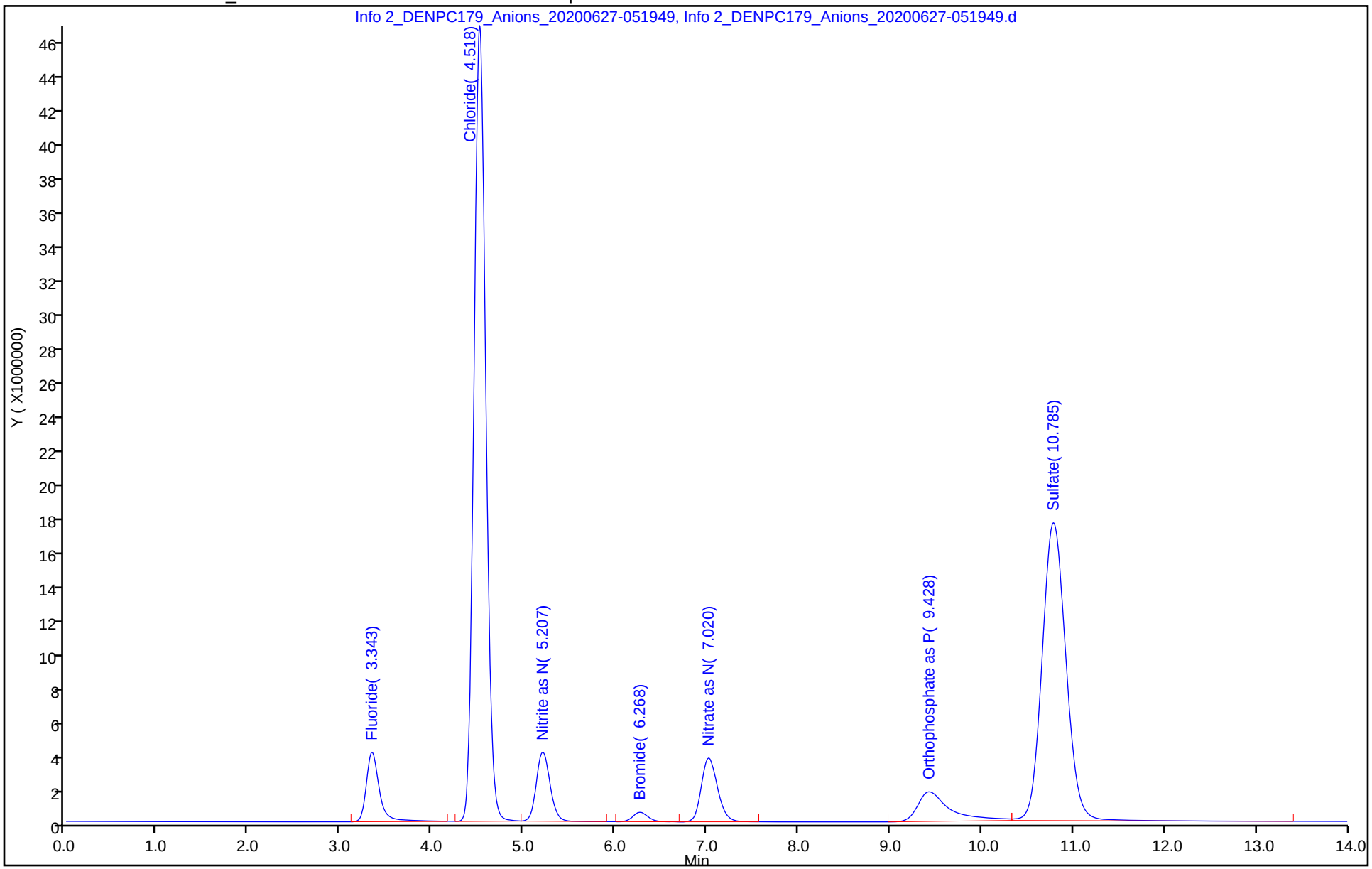
IC LCS_01747 Amount Added: 10.00 Units: mL

Report Date: 29-Jun-2020 10:42:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-051949.d

Injection Date:	27-Jun-2020 05:02:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	54
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-053
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 27-Jun-2020 05:19:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-055
Misc. Info.: 280-0092782-055
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:38 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.305				ND	
2 Chloride	4.523	4.468	0.055	63111		0.4884	
3 Nitrite as N		5.148				ND	
4 Bromide		6.197				ND	
5 Nitrate as N		6.942				ND	
6 Orthophosphate as P	9.485	9.377	0.108	1472060		NC	
7 Sulfate		10.725				ND	

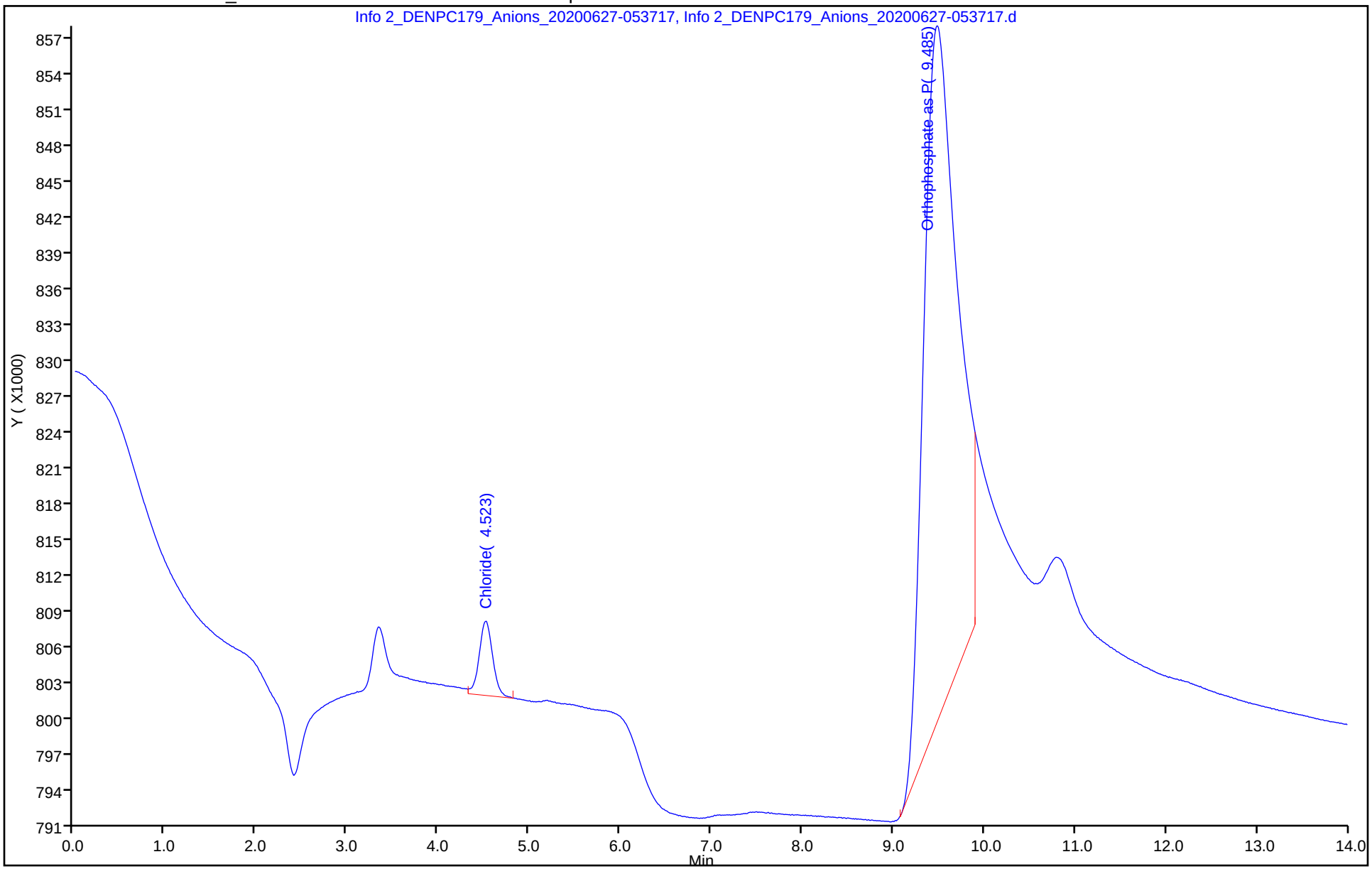
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 29-Jun-2020 10:42:40 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-053717.d				
Injection Date:	27-Jun-2020 05:19:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	55
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-055
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 27-Jun-2020 05:37:00 ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-056
Misc. Info.: 280-0092782-056
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:40 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.343	3.305	0.038	44673096	5.00	5.20	
2 Chloride	4.515	4.468	0.047	412584227	100.0	98.5	
3 Nitrite as N	5.202	5.148	0.054	41045227	NC	NC	
4 Bromide	6.262	6.197	0.065	6196944	5.00	4.58	
5 Nitrate as N	7.012	6.942	0.070	45145193	NC	NC	
6 Orthophosphate as P	9.418	9.377	0.041	40156241	NC	NC	
7 Sulfate	10.773	10.725	0.048	307392967	100.0	100.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

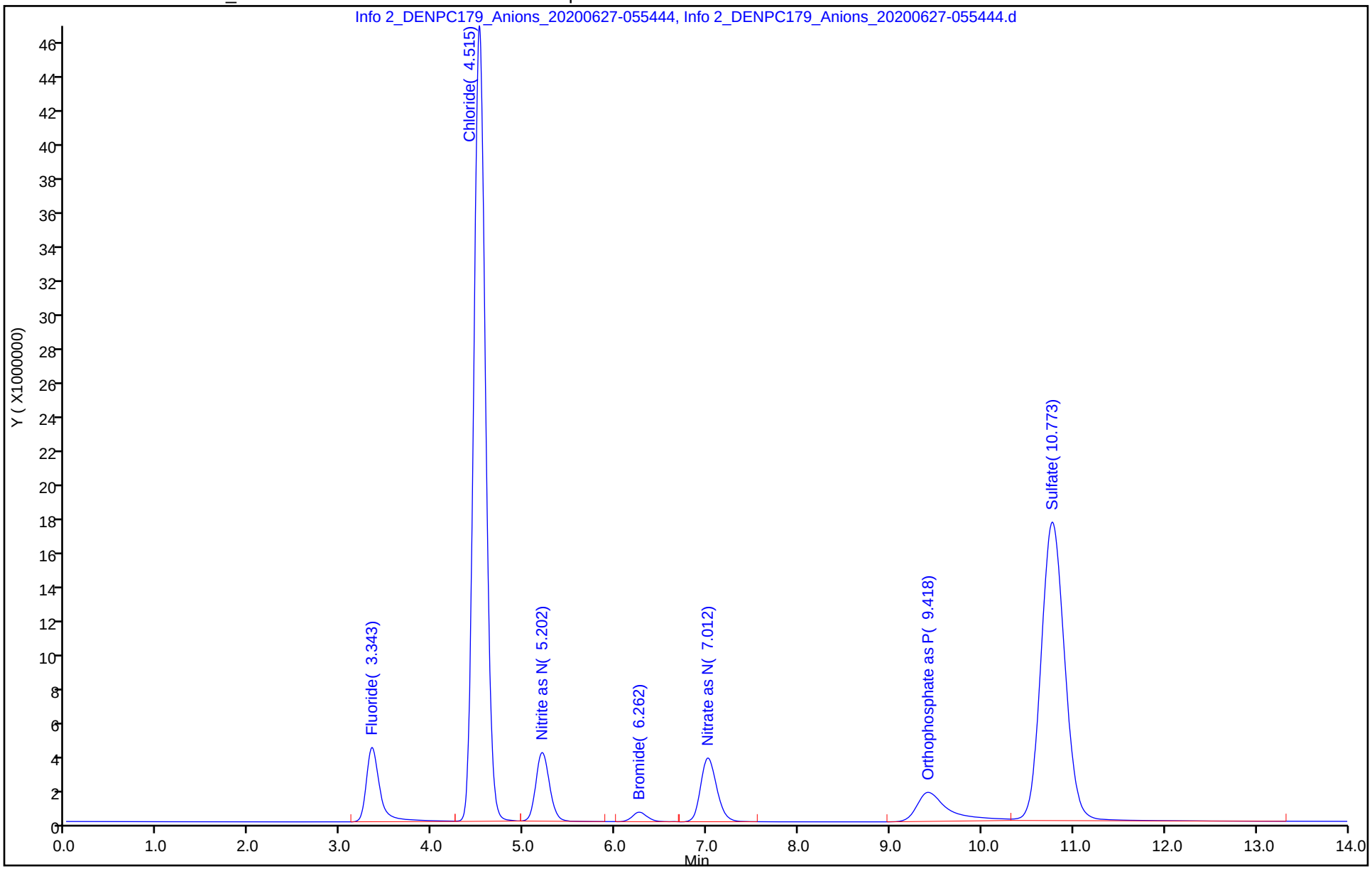
Reagents:

IC LCS_01747 Amount Added: 10.00 Units: mL

Report Date: 29-Jun-2020 10:42:40 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-055444.d				
Injection Date:	27-Jun-2020 05:37:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	56
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-0612
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 27-Jun-2020 05:54:00 ALS Bottle#: 0 Worklist Smp#: 57
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-057
Misc. Info.: 280-0092782-057
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:40 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.305				ND	
2 Chloride	4.503	4.468	0.035	59114		0.4875	
3 Nitrite as N		5.148				ND	
4 Bromide		6.197				ND	
5 Nitrate as N		6.942				ND	
6 Orthophosphate as P	9.442	9.377	0.065	1386441		NC	
7 Sulfate		10.725				ND	

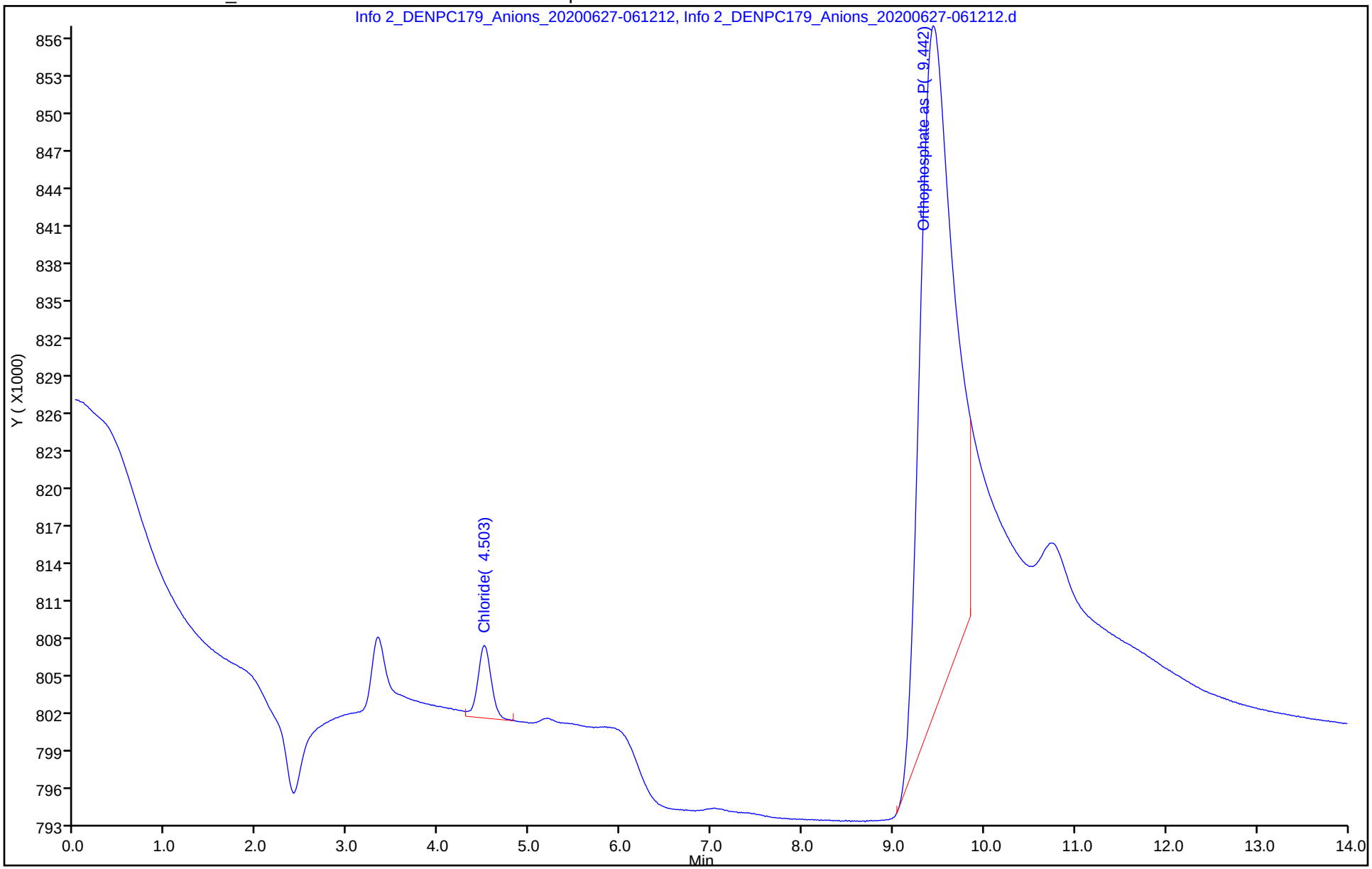
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 29-Jun-2020 10:42:41 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200627-061212.d				
Injection Date:	27-Jun-2020 05:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	57
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-1032
Lims ID: 280-137609-F-26 DU
Client ID:
Sample Type: DU
Inject. Date: 27-Jun-2020 23:22:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092782-065
Misc. Info.: 280-0092782-065
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:46 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.325	3.305	0.020	267561		0.1856	
2 Chloride	4.493	4.468	0.025	67855328		16.6	
3 Nitrite as N		5.148				ND	
4 Bromide	6.255	6.197	0.058	127985		0.1400	
5 Nitrate as N		6.942				ND	
6 Orthophosphate as P	9.437	9.377	0.060	8525606		NC	
7 Sulfate	10.768	10.725	0.043	158008032		51.8	

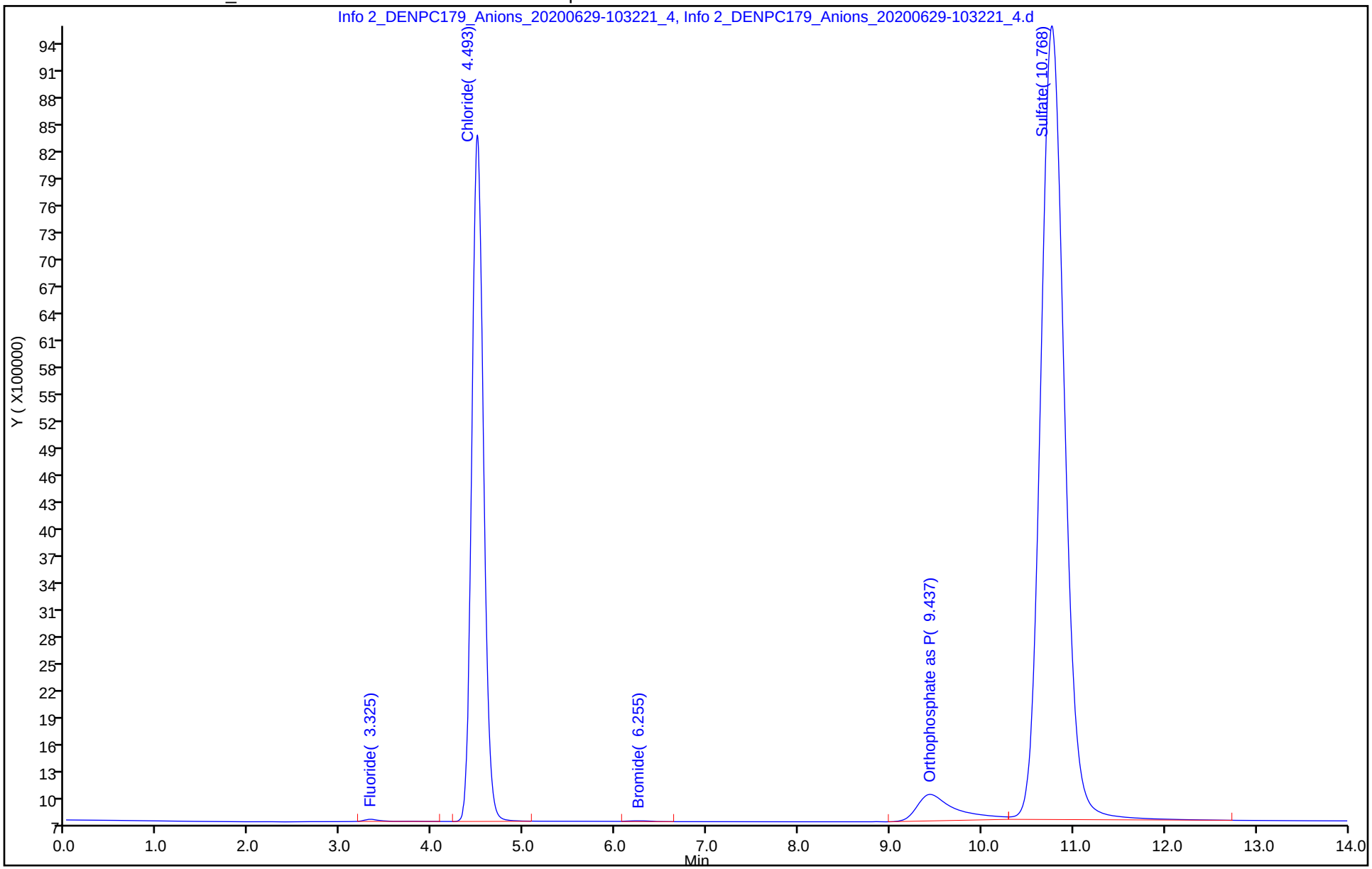
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 29-Jun-2020 13:09:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-103221_4.d				
Injection Date:	27-Jun-2020 23:22:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-137609-F-26 DU			Worklist Smp#:	65
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-1032
Lims ID: 280-137609-F-26 MS
Client ID:
Sample Type: MS
Inject. Date: 27-Jun-2020 23:39:00 ALS Bottle#: 0 Worklist Smp#: 66
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092782-066
Misc. Info.: 280-0092782-066
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:46 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.312	3.305	0.007	34977043	1.00	4.10	
2 Chloride	4.477	4.468	0.009	282449858	10.0	67.5	
3 Nitrite as N	5.165	5.148	0.017	41250157	NC	NC	
4 Bromide	6.220	6.197	0.023	6660015	1.00	4.91	
5 Nitrate as N	6.960	6.942	0.018	45680540	NC	NC	
6 Orthophosphate as P	9.362	9.377	-0.015	40464586	NC	NC	
7 Sulfate	10.717	10.725	-0.008	320308136	10.0	104.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

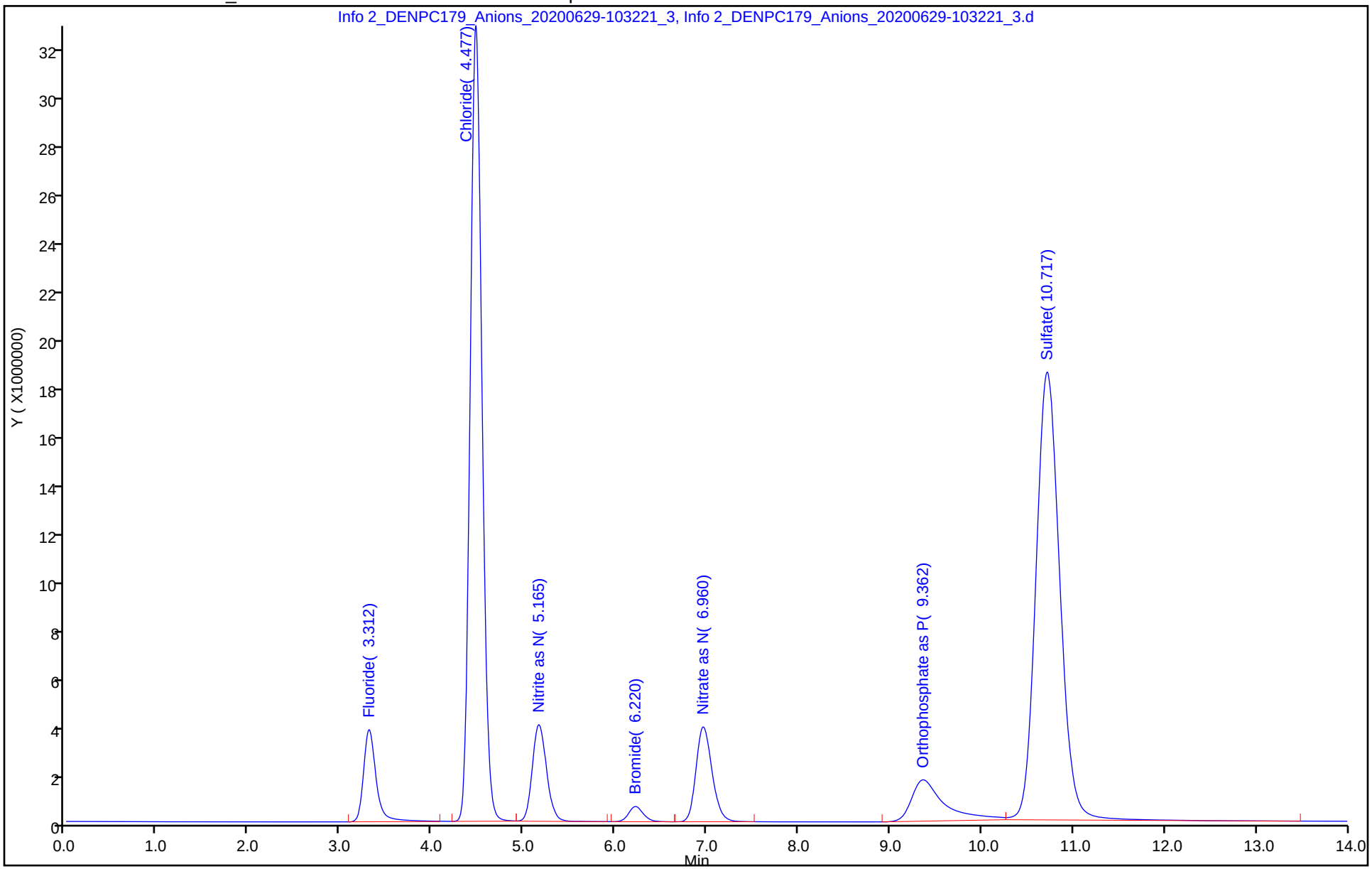
Reagents:

ICMS/MSD WEEK_00654 Amount Added: 0.10 Units: mL

Report Date: 29-Jun-2020 13:09:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-103221_3.d				
Injection Date:	27-Jun-2020 23:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-137609-F-26 MS			Worklist Smp#:	66
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-1032
Lims ID: 280-137609-F-26 MSD
Client ID:
Sample Type: MSD
Inject. Date: 27-Jun-2020 23:57:00 ALS Bottle#: 0 Worklist Smp#: 67
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092782-067
Misc. Info.: 280-0092782-067
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:46 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.323	3.305	0.018	35292682	1.00	4.14	
2 Chloride	4.493	4.468	0.025	285490148	10.0	68.3	
3 Nitrite as N	5.185	5.148	0.037	41969139	NC	NC	
4 Bromide	6.245	6.197	0.048	6727131	1.00	4.96	
5 Nitrate as N	6.988	6.942	0.046	46267311	NC	NC	
6 Orthophosphate as P	9.398	9.377	0.021	43571227	NC	NC	
7 Sulfate	10.758	10.725	0.033	322200716	10.0	104.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated

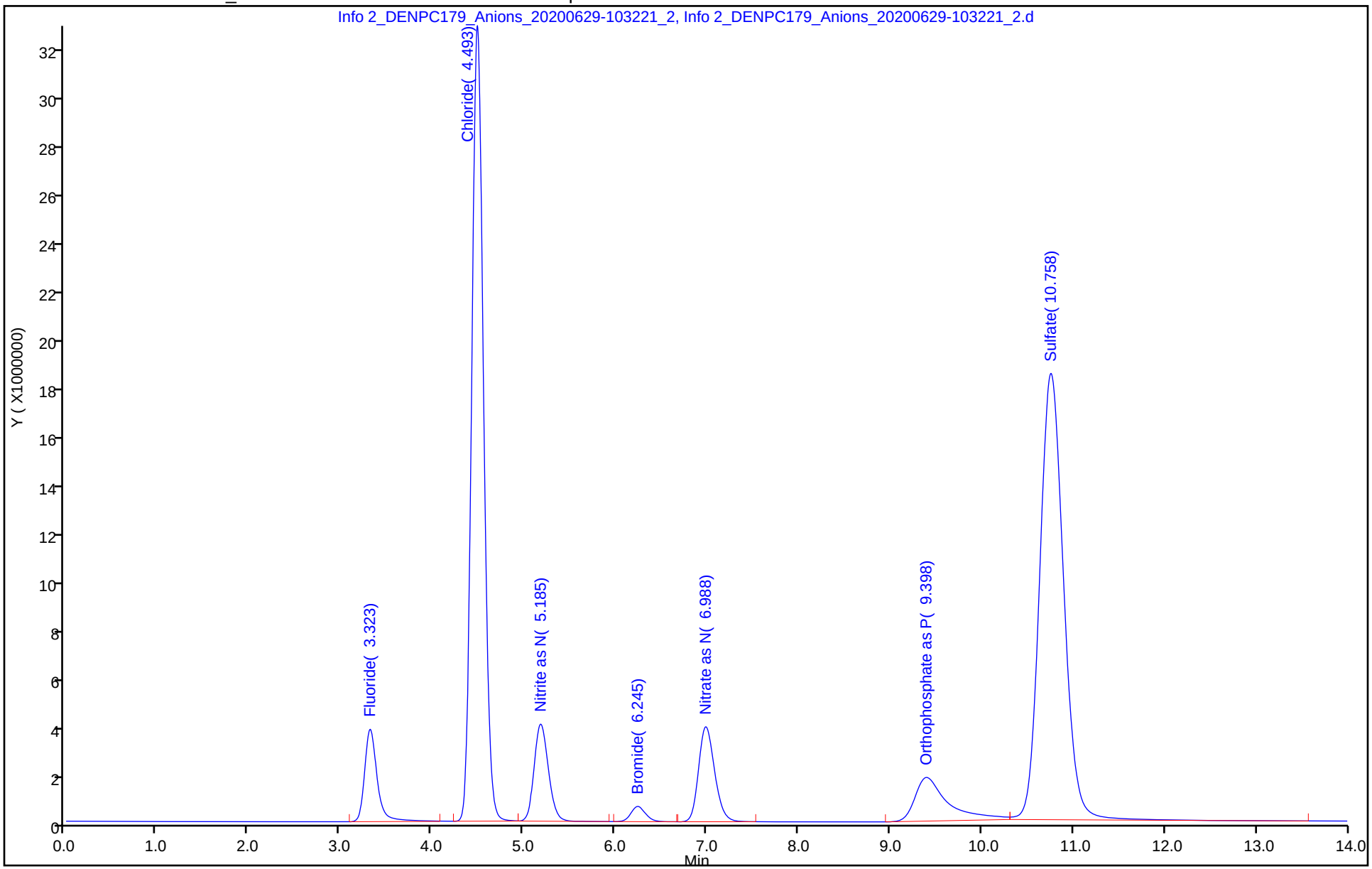
Reagents:

ICMS/MSD WEEK_00654 Amount Added: 0.10 Units: mL

Report Date: 29-Jun-2020 13:09:24 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-103221_2.d				
Injection Date:	27-Jun-2020 23:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-137609-F-26 MSD			Worklist Smp#:	67
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-1032
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 28-Jun-2020 00:14:00 ALS Bottle#: 0 Worklist Smp#: 68
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-068
Misc. Info.: 280-0092782-068
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 13:09:24 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.323	3.305	0.018	33563329	5.00	3.94	
2 Chloride	4.497	4.468	0.029	415956520	100.0	99.3	
3 Nitrite as N	5.180	5.148	0.032	41599531	NC	NC	
4 Bromide	6.230	6.197	0.033	6251393	5.00	4.62	
5 Nitrate as N	6.980	6.942	0.038	45644736	NC	NC	
6 Orthophosphate as P	9.388	9.377	0.011	39391346	NC	NC	
7 Sulfate	10.757	10.725	0.032	317143399	100.0	103.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

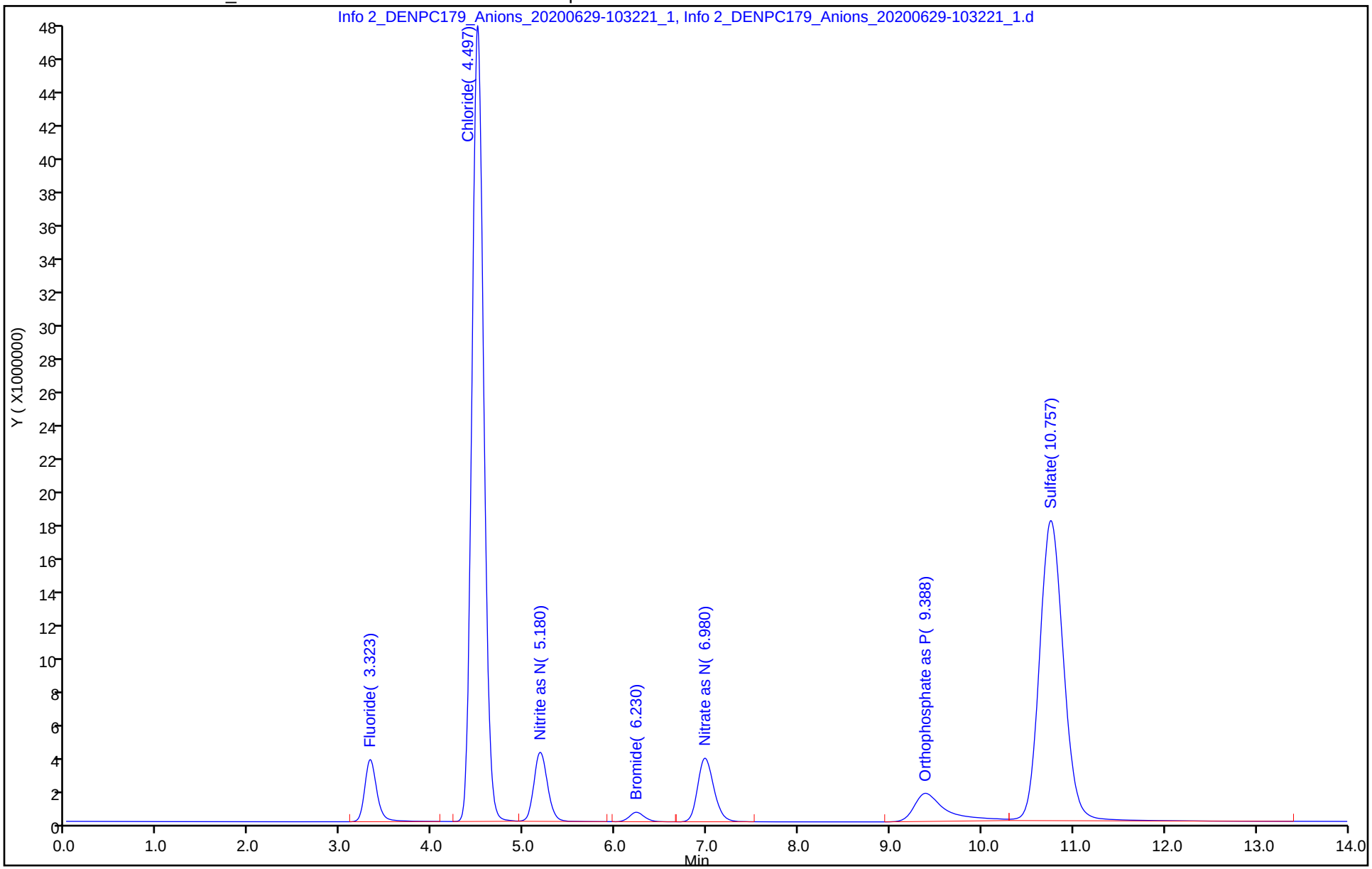
Reagents:

IC LCS_01747 Amount Added: 10.00 Units: mL

Report Date: 29-Jun-2020 13:09:25 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-103221_1.d				
Injection Date:	28-Jun-2020 00:14:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	68
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-1032
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 28-Jun-2020 00:32:00 ALS Bottle#: 0 Worklist Smp#: 69
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092782-069
Misc. Info.: 280-0092782-069
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 29-Jun-2020 10:42:46 Calib Date: 01-Jun-2020 14:14:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20200601-91996.b\Info 2_DENPC179_Anions_20200601-1432

Column 1 : Det: Info 2_091554_1
Process Host: CTX1030

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.305				ND	
2 Chloride	4.500	4.468	0.032	136108		0.5057	
3 Nitrite as N		5.148				ND	
4 Bromide		6.197				ND	
5 Nitrate as N		6.942				ND	
6 Orthophosphate as P	9.448	9.377	0.071	5776210		NC	
7 Sulfate		10.725				ND	

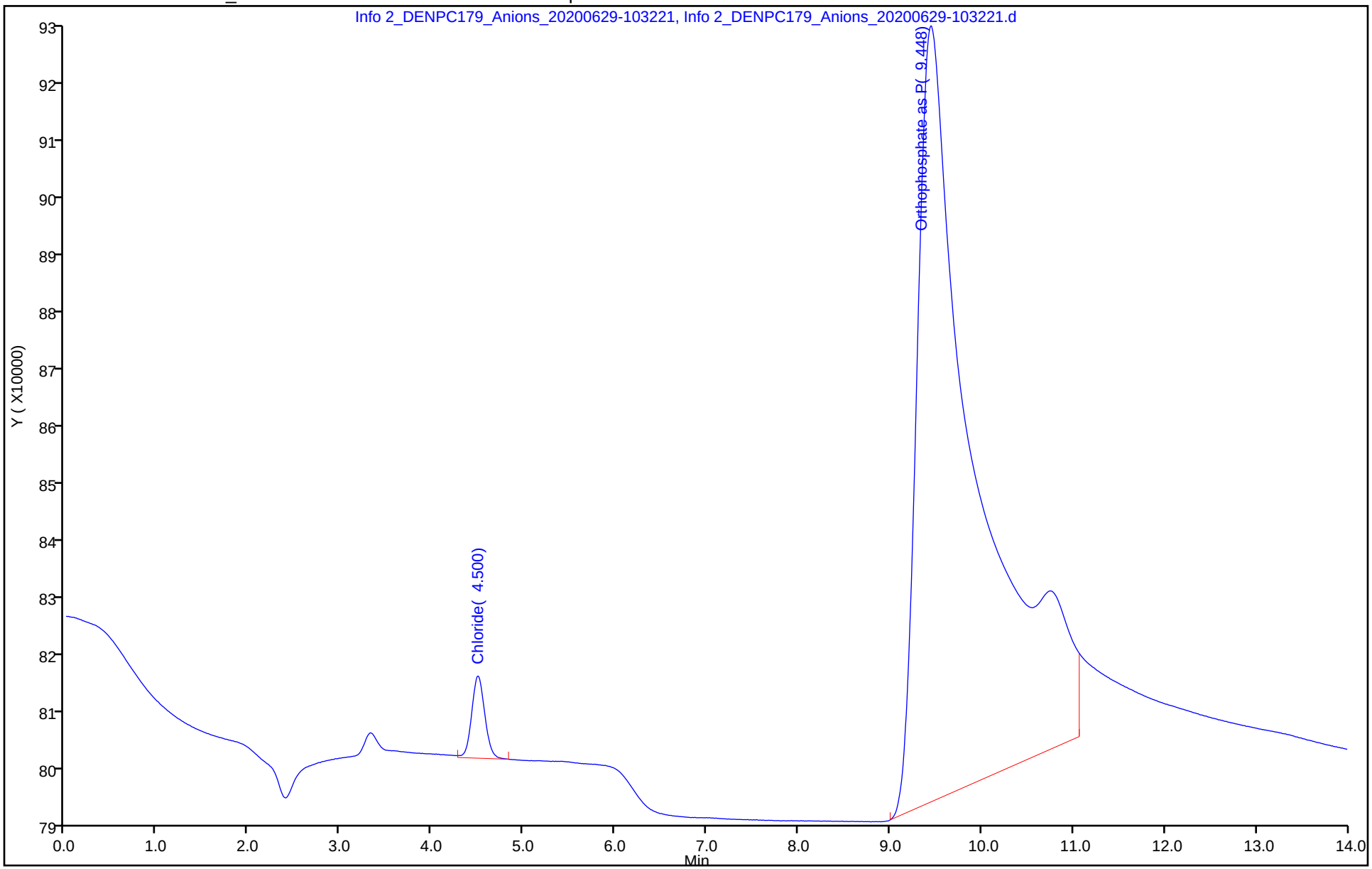
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 29-Jun-2020 10:42:47 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20200626-92782.b\Info 2_DENPC179_Anions_20200629-103221.d				
Injection Date:	28-Jun-2020 00:32:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	69
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 92063 **Inst ID:** 7 **Analysis Date:** 6/3/20 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	137172	16	F Cl (NO2) Br (NO3) PO4 SO4	(MS/D) 15	
☐	137173	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			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
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Inj Date: 03-Jun-2020 10:08:00 Worklist: 92063 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Inj Date: 03-Jun-2020 10:24:00 Worklist: 92063 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Inj Date: 03-Jun-2020 10:41:00 Worklist: 92063 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Inj Date: 03-Jun-2020 10:57:00 Worklist: 92063 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Inj Date: 03-Jun-2020 11:13:00 Worklist: 92063 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Inj Date: 03-Jun-2020 11:30:00 Worklist: 92063 Sample#: 7

Start Cal Date: 03-Jun-2020 10:08:00 End Cal Date: 03-Jun-2020 11:30:00

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					
56683005	46983920	46640922	46687382	44875490	45348060	1958442			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		45103497		
11336601	23491960	M46640922	186749529	359003922	M453480596				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
5 Nitrate as N				Signal: 1					
46210655	48765526	47797352	47873299	47820234	48005904	-144420			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		47949488		
9242131	24382763	47797352	191493196	382561871	480059041				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
7 Orthophosphate as P				Signal: 1				R1, R4, R5	
1504050	332280	319853	3410072	4733627	5545392	-1643645			*0.950
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		4962527		
300810	166140	319853	13640286	37869017	55453916				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b
Inj Date : 03-Jun-2020 10:08:00, Sublist: chrom-Anions_IC7*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					902189	2759876		1.000
2 Chloride					1554283	1822407		1.000
3 Nitrite as N	1958442	4510349		1.000				
4 Bromide					44686	8029379		1.000
5 Nitrate as N	-144420	4794948		1.000				
6 Sulfate					710720	1351477		1.000
7 Orthophosphate as P	-164364	4962527	R1, R4, R5	).950*				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Inj Date: 03-Jun-2020 10:08:00 Worklist: 92063 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Inj Date: 03-Jun-2020 10:24:00 Worklist: 92063 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Inj Date: 03-Jun-2020 10:41:00 Worklist: 92063 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Inj Date: 03-Jun-2020 10:57:00 Worklist: 92063 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Inj Date: 03-Jun-2020 11:13:00 Worklist: 92063 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Inj Date: 03-Jun-2020 11:30:00 Worklist: 92063 Sample#: 7

Start Cal Date: 03-Jun-2020 10:08:00 End Cal Date: 03-Jun-2020 11:30:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
29706160	30317354	29823269	28357977	27595025	27438858	**902189**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**27598765**		
5941232	15158677	29823269	113431906	220760198	274388580				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
2 Chloride				Signal: 1					
19729950	18679714	18619227	18447644	18216011	18185359	**1554283**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**18224071**		
19729950	46699286	M93096135	1106858638	2185921343	M3637071770				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
4 Bromide				Signal: 1					
7896295	8405932	8133508	8087968	8008011	8023270	**44686**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8029379**		
1579259	4202966	8133508	32351872	64064086	80232699				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
6 Sulfate				Signal: 1					
13874566	13779642	13873076	13754129	13516586	13449142	**710720**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**13514778**		
M13874566	M34449105	M69365381	M825247714	M1621990341	2689828489				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Jun-2020 10:08:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092063-002
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:46:56 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 11:51:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	2.009	0.000	5941232	0.2000	0.1826	
2 Chloride	3.075	2.959	0.116	19729950	1.00	1.00	
3 Nitrite as N	3.525	3.400	0.125	11336601	NC	NC	
4 Bromide	5.150	5.217	-0.067	1579259	0.2000	0.1911	
5 Nitrate as N	5.634	5.625	0.009	9242131	NC	NC	
6 Sulfate	9.409	9.184	0.225	13874566	1.00	0.9740	a
7 Orthophosphate as P	12.950	13.325	-0.375	300810	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

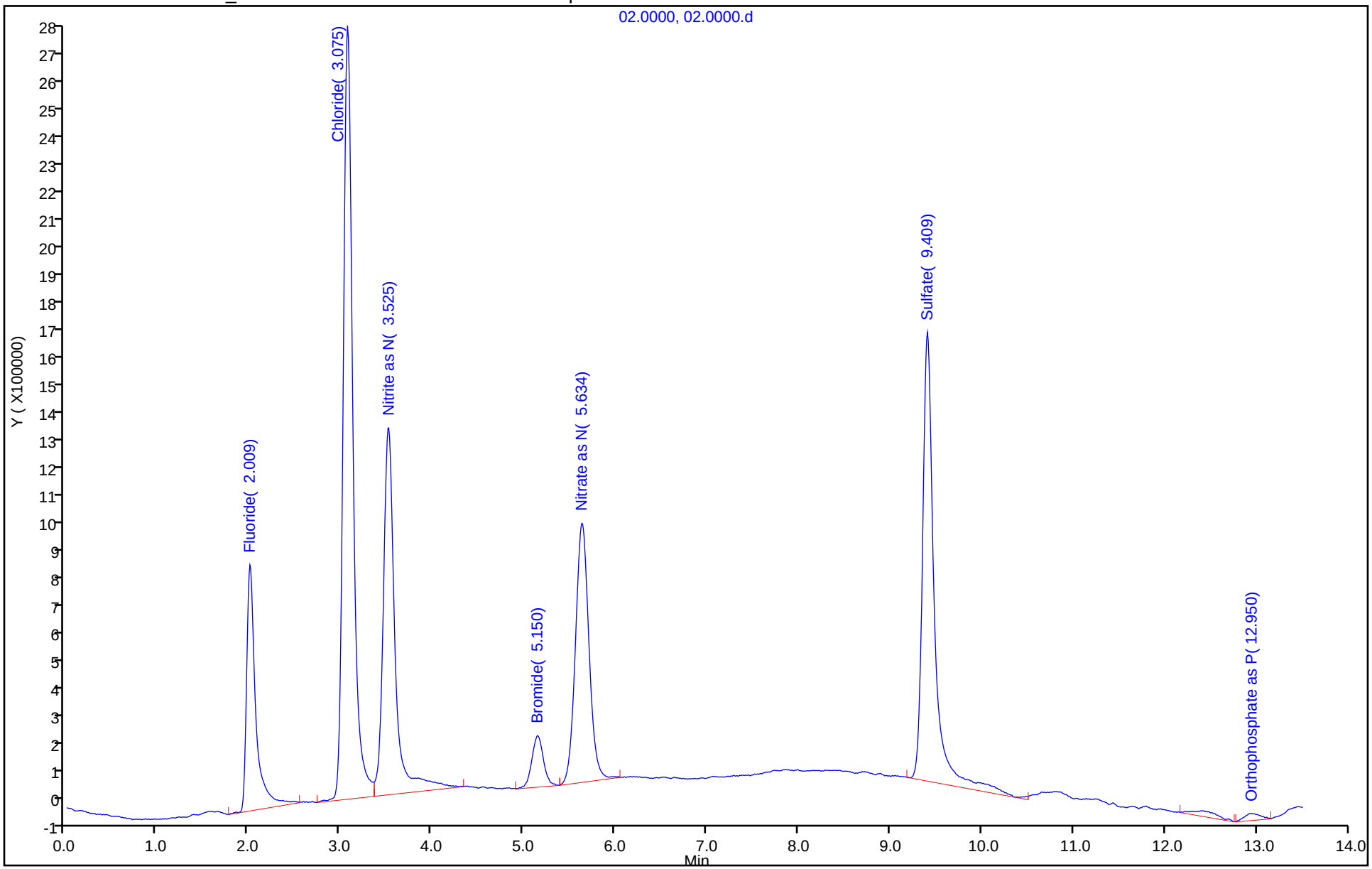
IC Cal low_00527 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00313 Amount Added: 0.02 Units: mL

Report Date: 04-Jun-2020 08:46:56 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d

Injection Date:	03-Jun-2020 10:08:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver

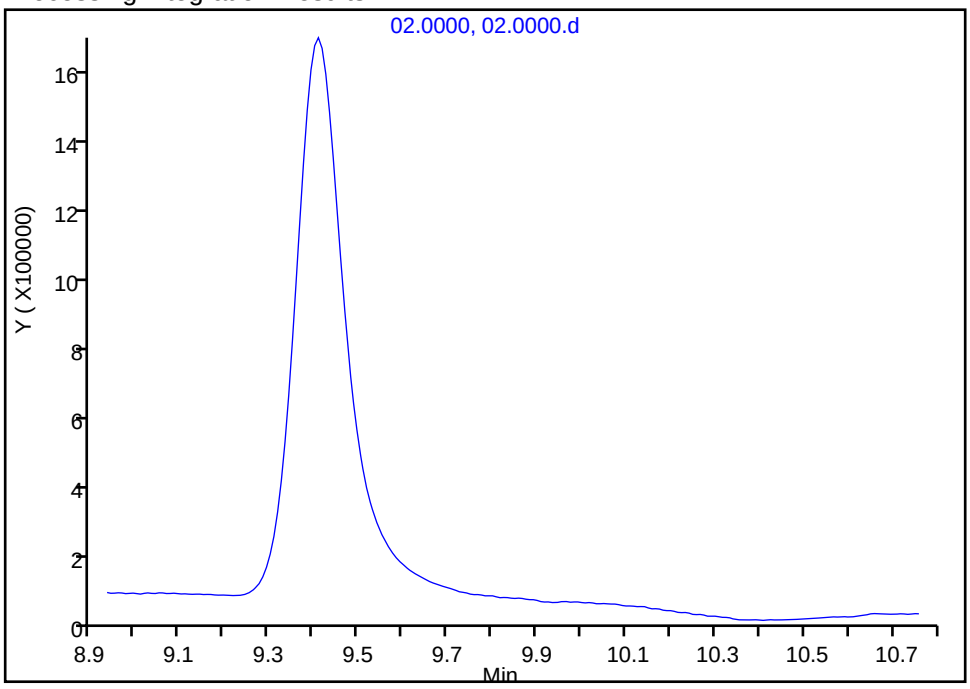
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Injection Date: 03-Jun-2020 10:08:00 Instrument ID: WC_IonChrom7
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

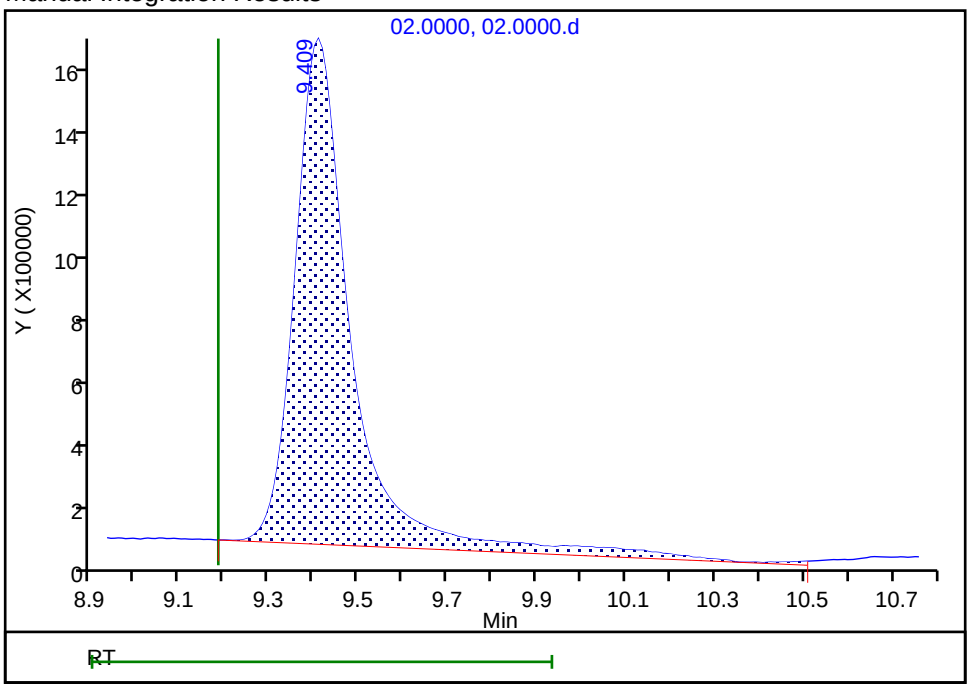
Not Detected
Expected RT: 9.18

Processing Integration Results



Manual Integration Results

RT: 9.41
Area: 13874566
Amount: 0.974033
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:51:07
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Jun-2020 10:24:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092063-003
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:46:57 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 11:51:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	2.009	0.000	15158677	0.5000	0.5166	
2 Chloride	3.000	2.959	0.041	46699286	2.50	2.48	
3 Nitrite as N	3.434	3.400	0.034	23491960	NC	NC	
4 Bromide	5.334	5.217	0.117	4202966	0.5000	0.5179	
5 Nitrate as N	5.834	5.625	0.209	24382763	NC	NC	
6 Sulfate	9.550	9.184	0.366	34449105	2.50	2.50	a
7 Orthophosphate as P	13.259	13.325	-0.066	166140	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

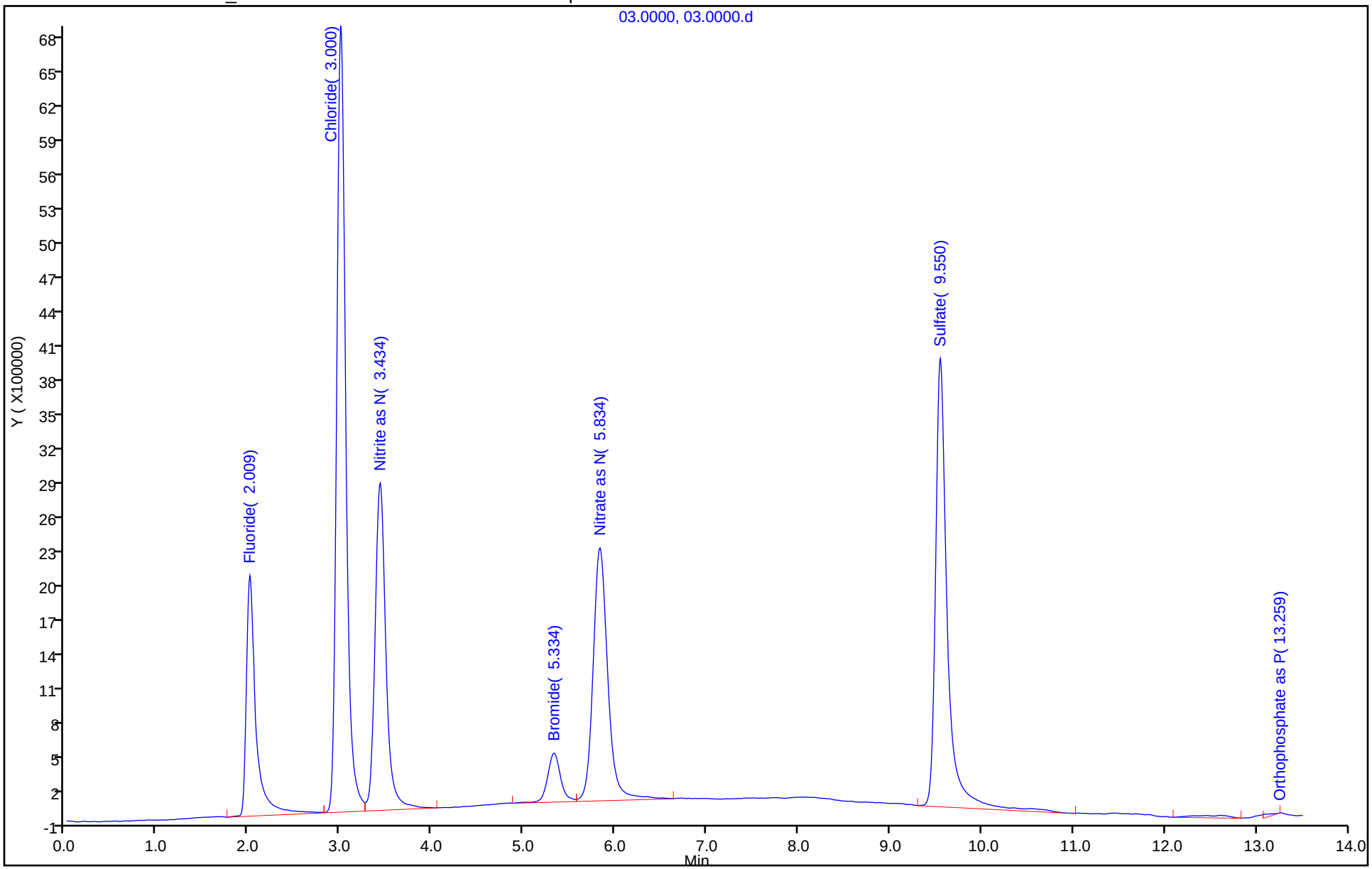
IC CAL cl/so4_00313 Amount Added: 0.05 Units: mL
IC Cal low_00527 Amount Added: 0.05 Units: mL

Report Date: 04-Jun-2020 08:46:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d

Injection Date:	03-Jun-2020 10:24:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

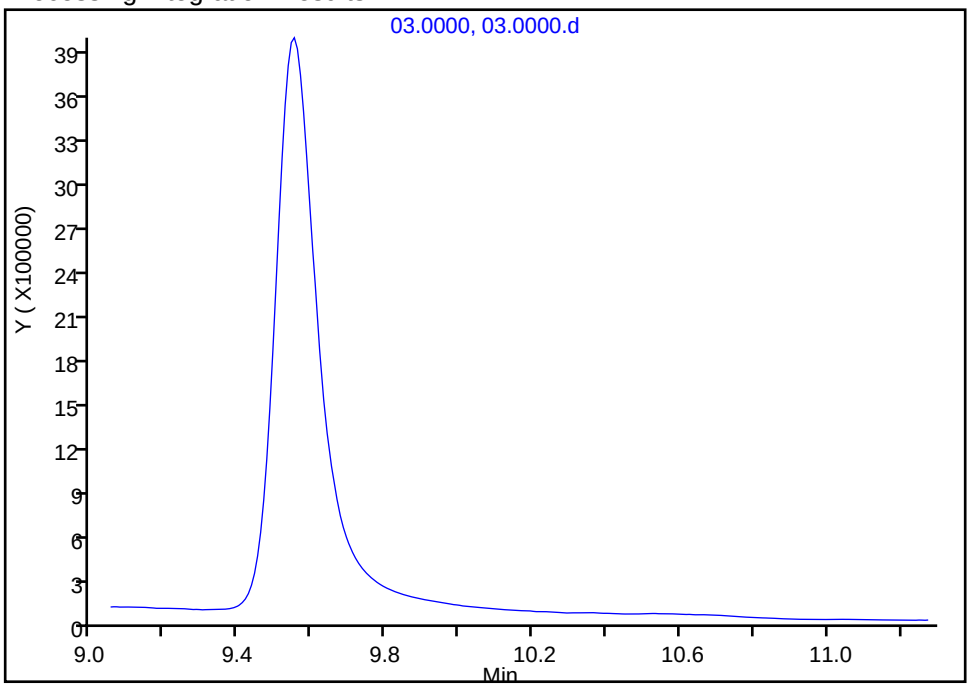
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d		
Injection Date:	03-Jun-2020 10:24:00	Instrument ID:	WC_IonChrom7
Lims ID:	std L2		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

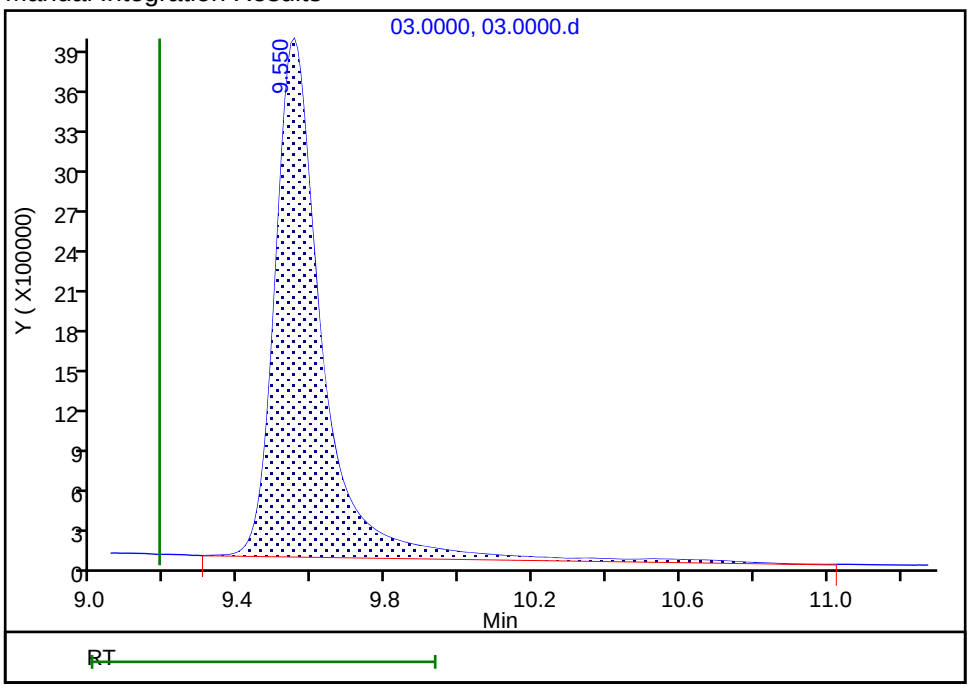
Not Detected
Expected RT: 9.18

Processing Integration Results



Manual Integration Results

RT: 9.55
Area: 34449105
Amount: 2.496407
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:51:11
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Jun-2020 10:41:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092063-004
Misc. Info.: 4 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:46:57 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 11:51:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	2.009	0.008	29823269	1.00	1.05	
2 Chloride	2.900	2.959	-0.059	93096135	5.00	5.02	a
3 Nitrite as N	3.317	3.400	-0.083	46640922	NC	NC	a
4 Bromide	5.175	5.217	-0.042	8133508	1.00	1.01	
5 Nitrate as N	5.659	5.625	0.034	47797352	NC	NC	
6 Sulfate	9.500	9.184	0.316	69365381	5.00	5.08	a
7 Orthophosphate as P	13.134	13.325	-0.191	319853	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

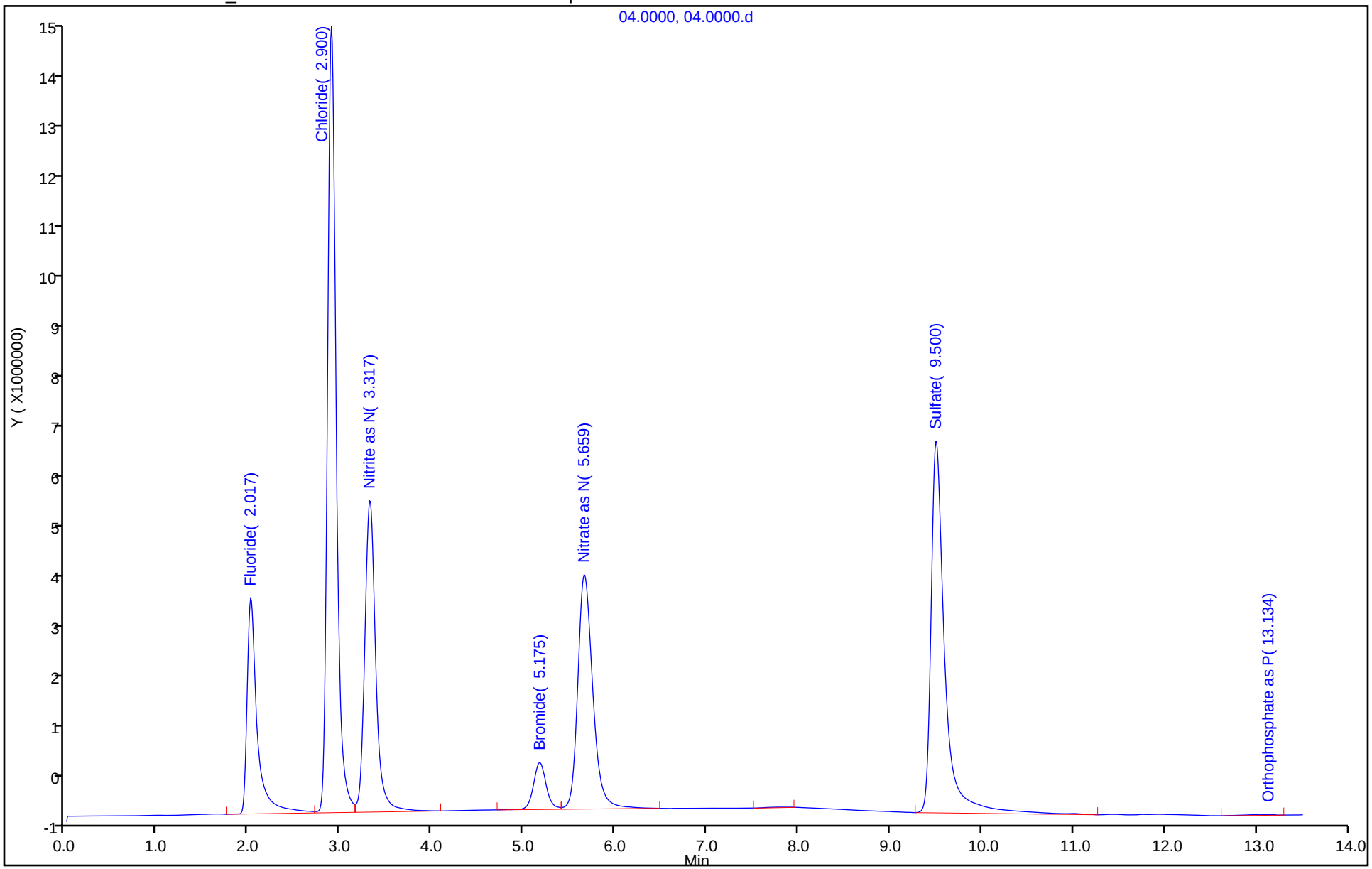
IC CAL cl/so4_00313 Amount Added: 0.10 Units: mL
IC Cal low_00527 Amount Added: 0.10 Units: mL

Report Date: 04-Jun-2020 08:46:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d

Injection Date:	03-Jun-2020 10:41:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

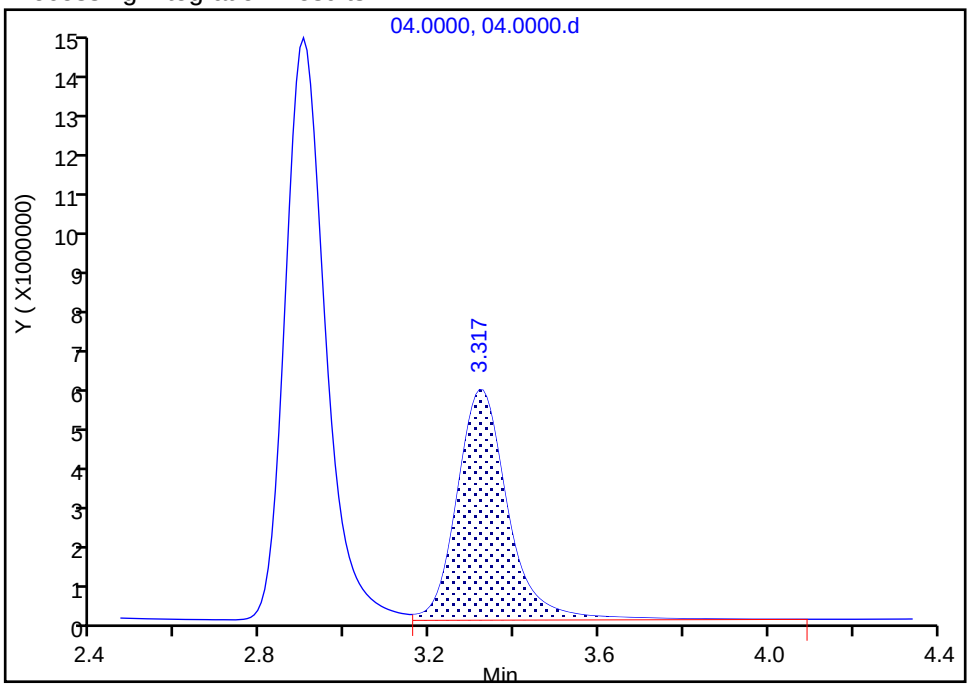
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Injection Date: 03-Jun-2020 10:41:00 Instrument ID: WC_IonChrom7
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

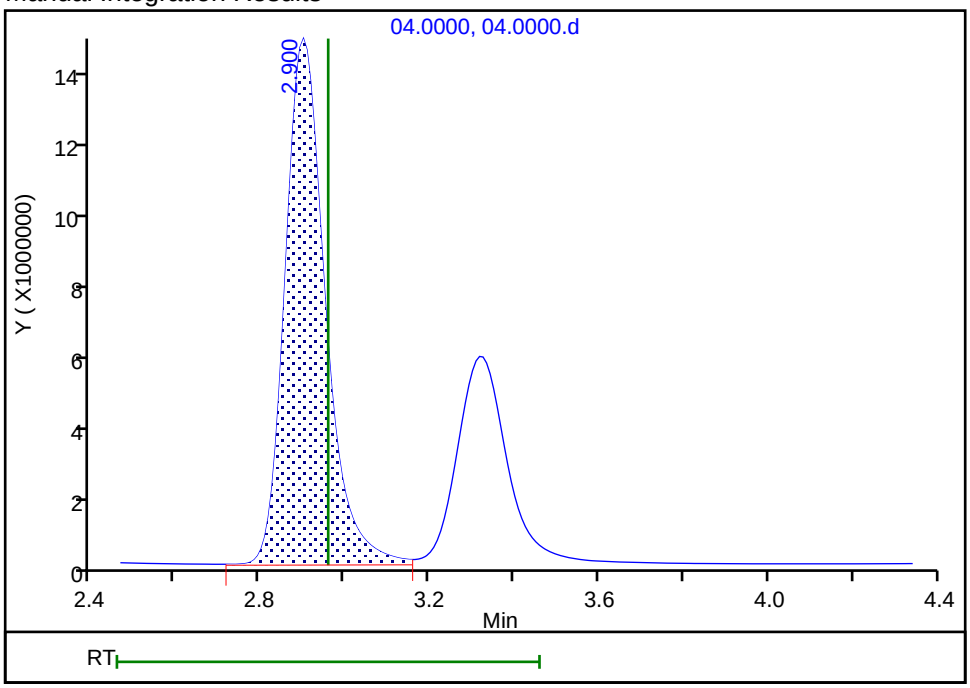
Processing Integration Results

RT: 3.32
Area: 46640922
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.90
Area: 93096135
Amount: 5.023129
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:51:16
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver

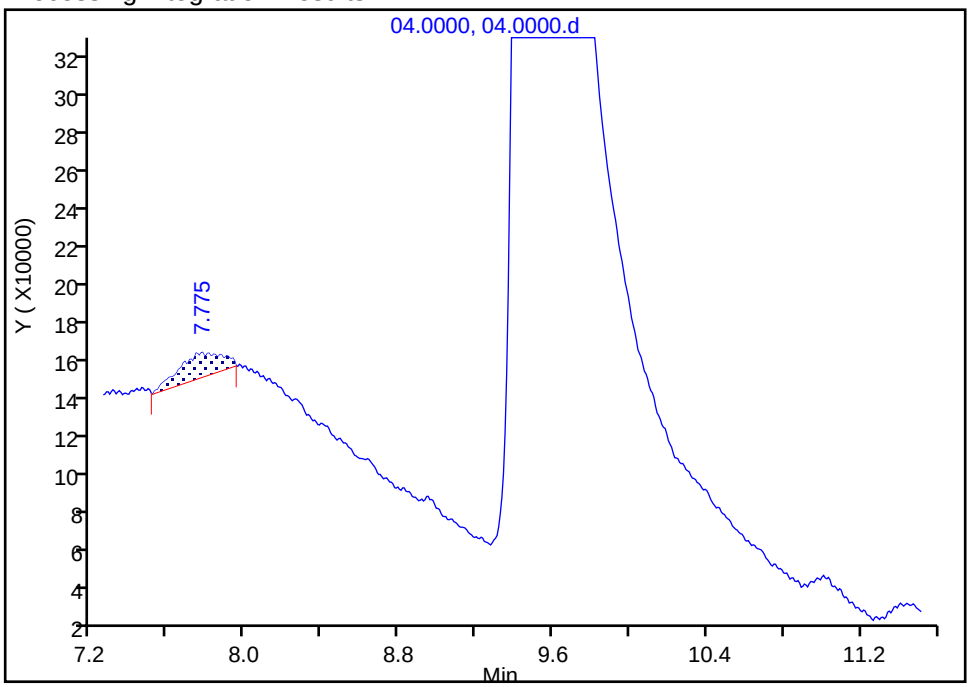
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d				
Injection Date:	03-Jun-2020 10:41:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

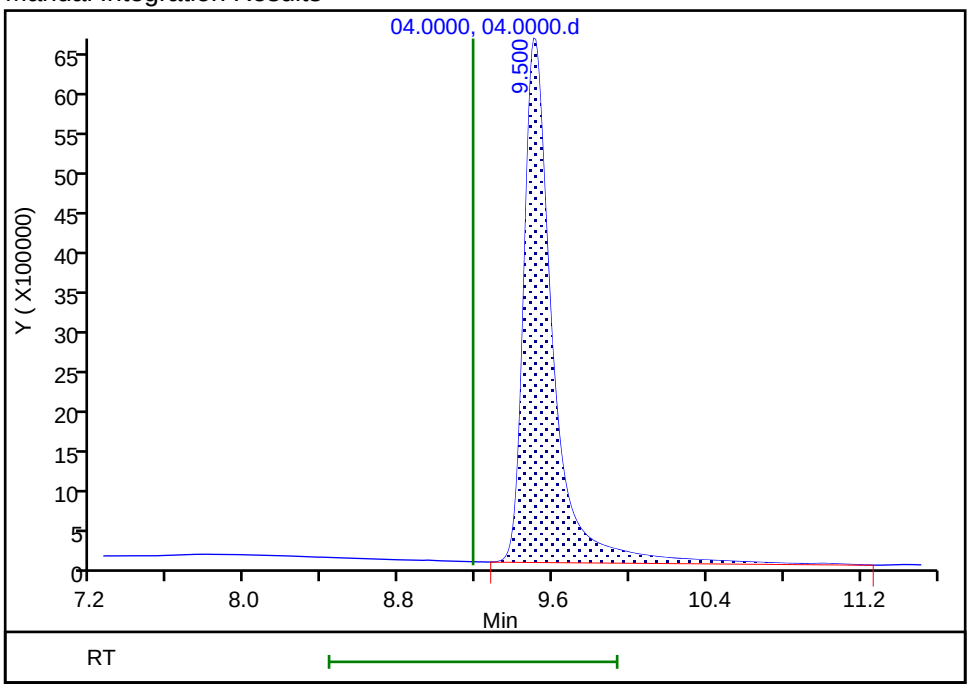
Processing Integration Results

RT: 7.78
Area: 201959
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.50
Area: 69365381
Amount: 5.079970
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:51:20
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Jun-2020 10:57:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092063-005
Misc. Info.: 5 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:46:58 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 11:51:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.026	2.026	0.000	113431906	4.00	4.08	
2 Chloride	3.009	3.009	0.000	1106858638	60.0	60.7	
3 Nitrite as N	3.409	3.409	0.000	186749529	NC	NC	
4 Bromide	5.167	5.167	0.000	32351872	4.00	4.02	
5 Nitrate as N	5.576	5.576	0.000	191493196	NC	NC	
6 Sulfate	9.159	9.159	0.000	825247714	60.0	61.0	a
7 Orthophosphate as P	13.126	13.126	0.000	13640286	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

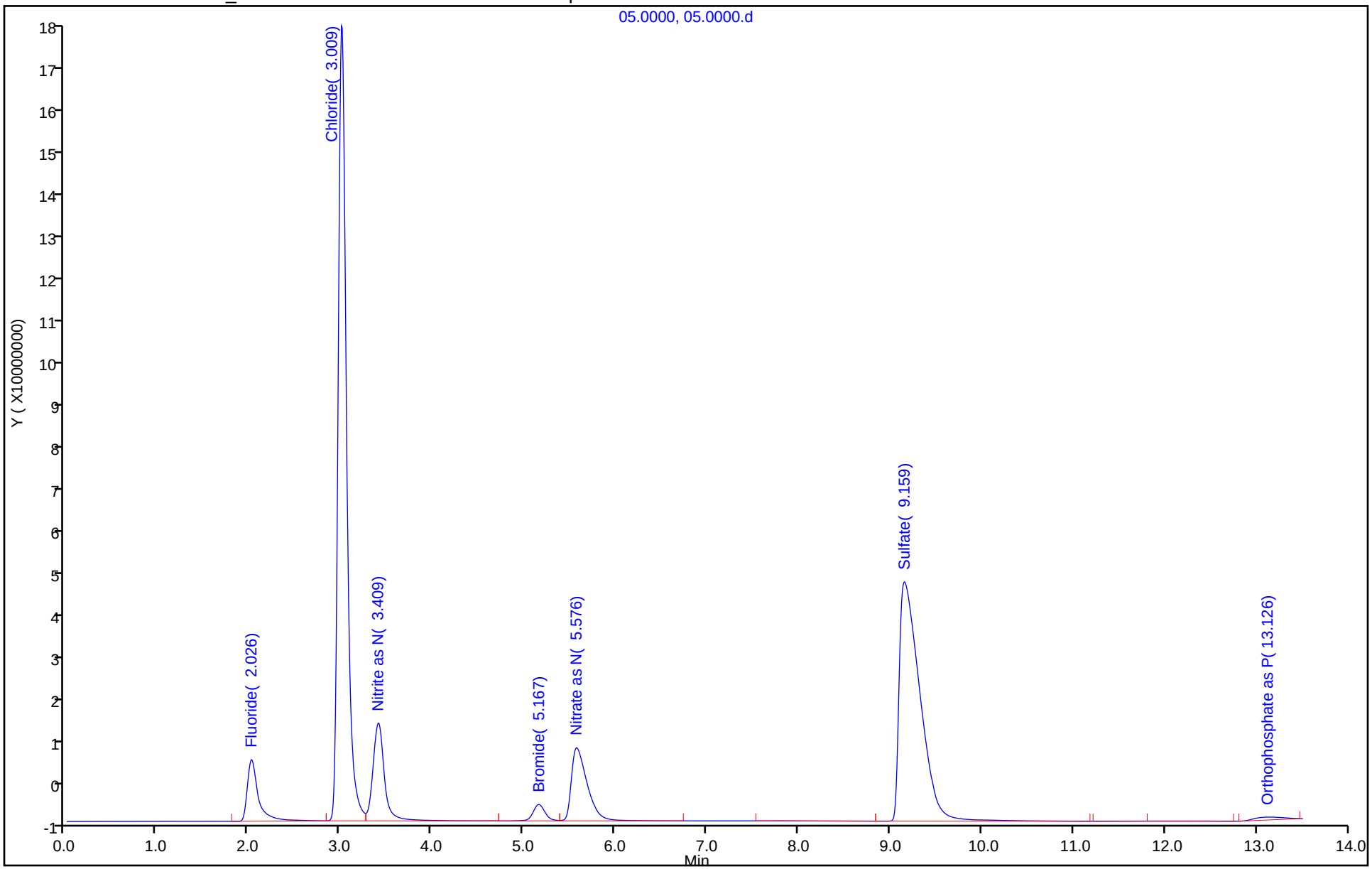
Reagents:

IC CAL cl/so4_00313 Amount Added: 1.20 Units: mL
IC Cal low_00527 Amount Added: 0.40 Units: mL

Report Date: 04-Jun-2020 08:46:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d				
Injection Date:	03-Jun-2020 10:57:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver

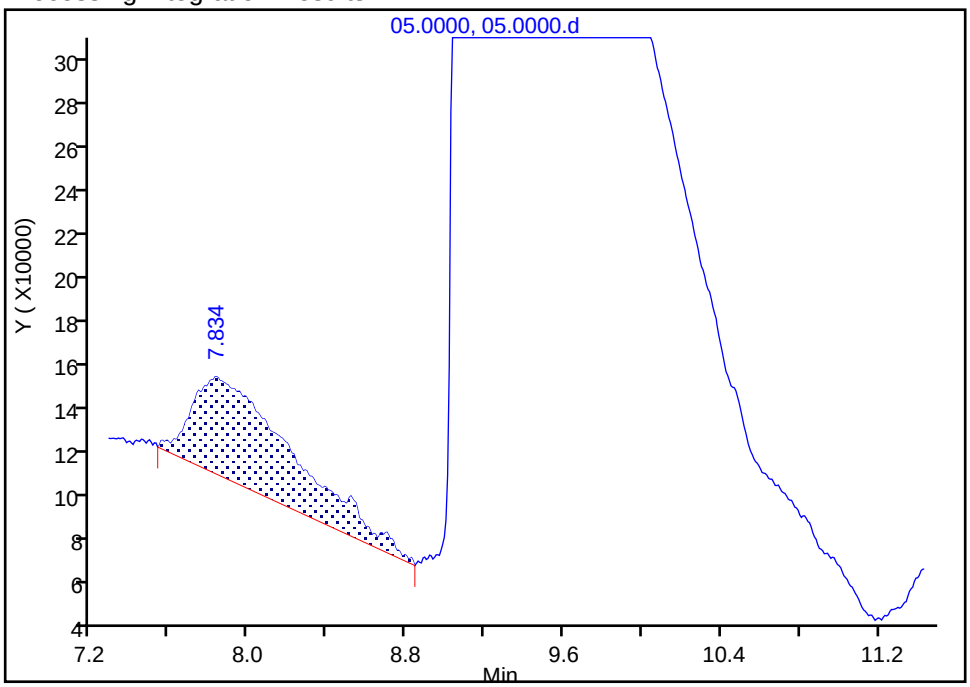
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Injection Date: 03-Jun-2020 10:57:00 Instrument ID: WC_IonChrom7
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

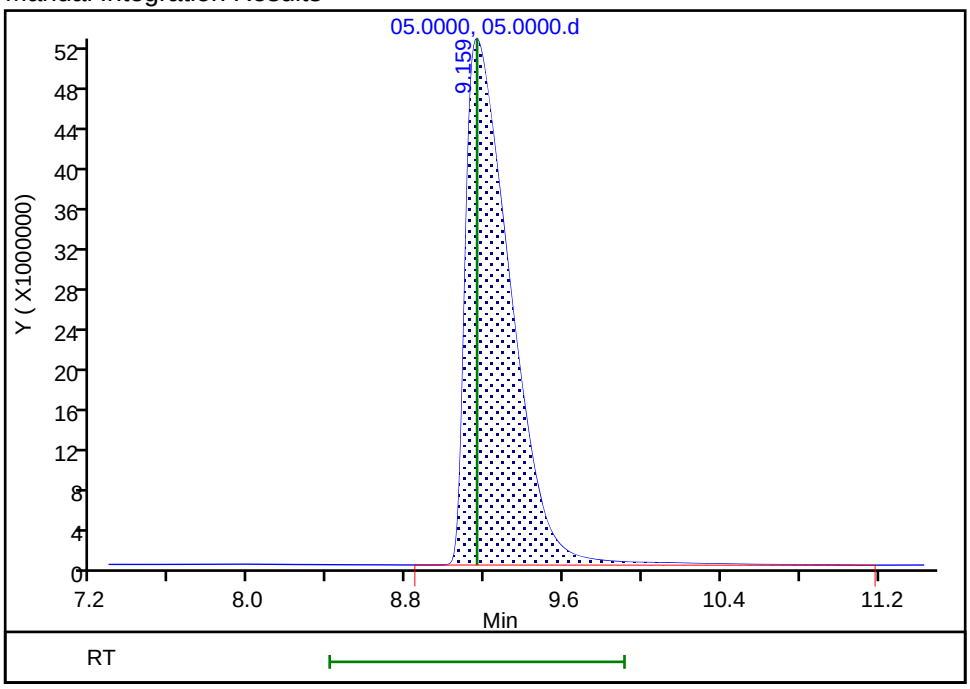
Processing Integration Results

RT: 7.83
Area: 1668987
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.16
Area: 825247714
Amount: 61.010028
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:51:24
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Jun-2020 11:13:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092063-006
Misc. Info.: 6 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:46:58 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 11:51:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.034	2.026	0.008	220760198	8.00	7.97	
2 Chloride	3.059	3.009	0.050	2185921343	120.0	119.9	
3 Nitrite as N	3.492	3.409	0.083	359003922	NC	NC	
4 Bromide	5.217	5.167	0.050	64064086	8.00	7.97	
5 Nitrate as N	5.584	5.576	0.008	382561871	NC	NC	
6 Sulfate	9.059	9.159	-0.100	1621990341	120.0	120.0	a
7 Orthophosphate as P	13.059	13.126	-0.067	37869017	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

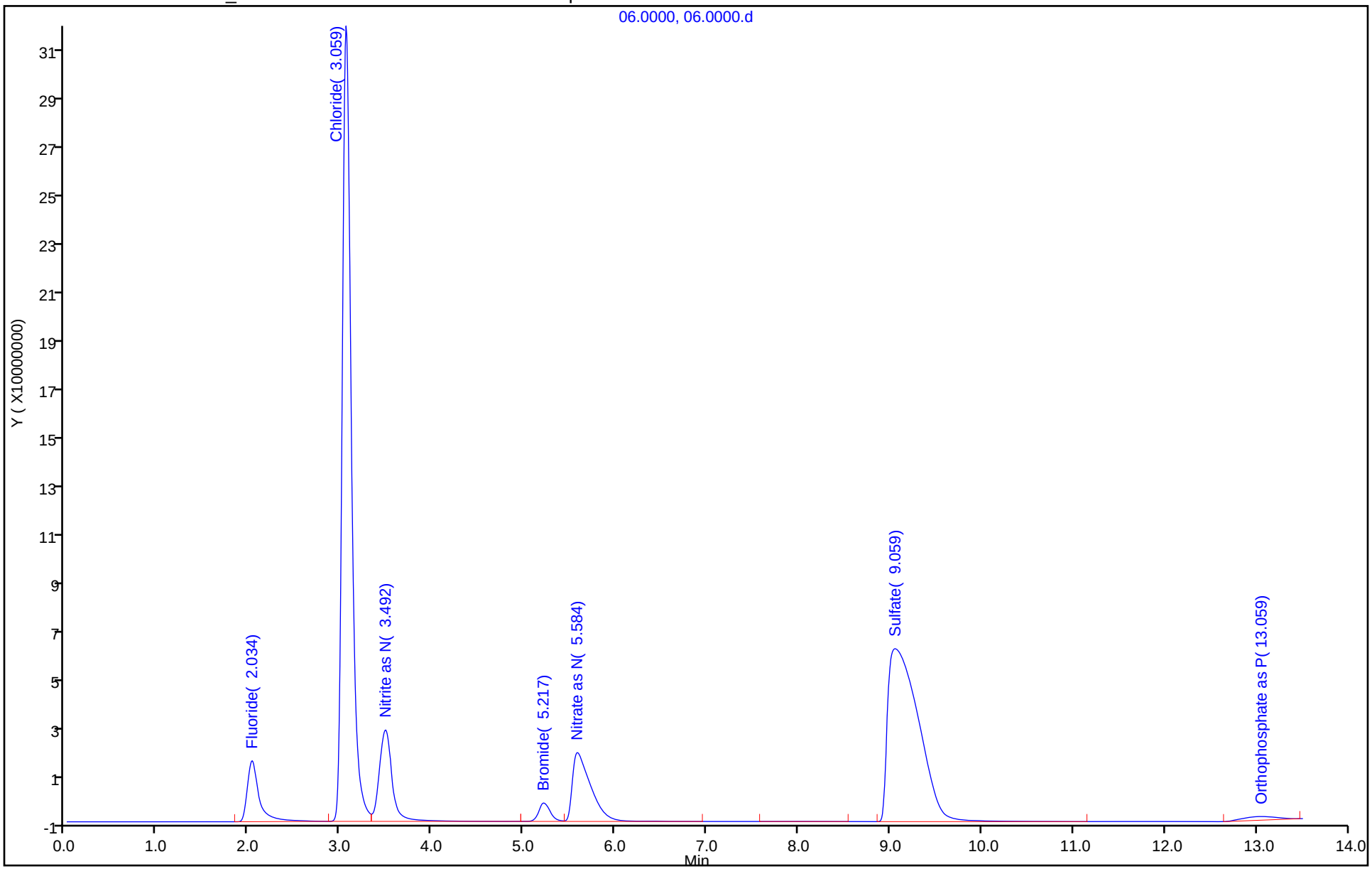
IC CAL cl/so4_00313 Amount Added: 2.40 Units: mL
IC Cal low_00527 Amount Added: 0.80 Units: mL

Report Date: 04-Jun-2020 08:46:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d

Injection Date:	03-Jun-2020 11:13:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

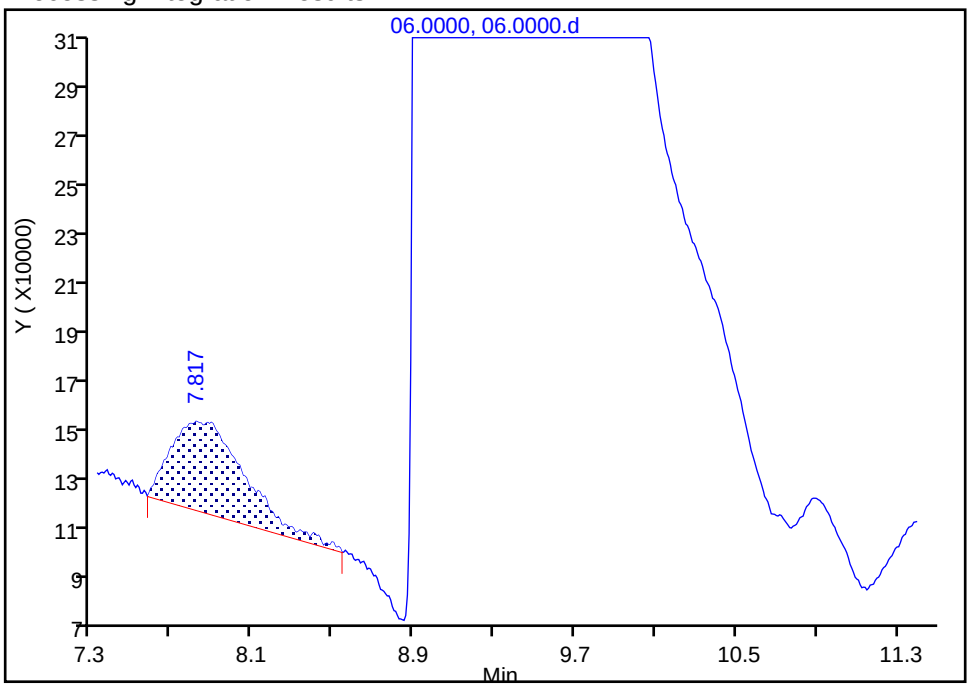
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d				
Injection Date:	03-Jun-2020 11:13:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

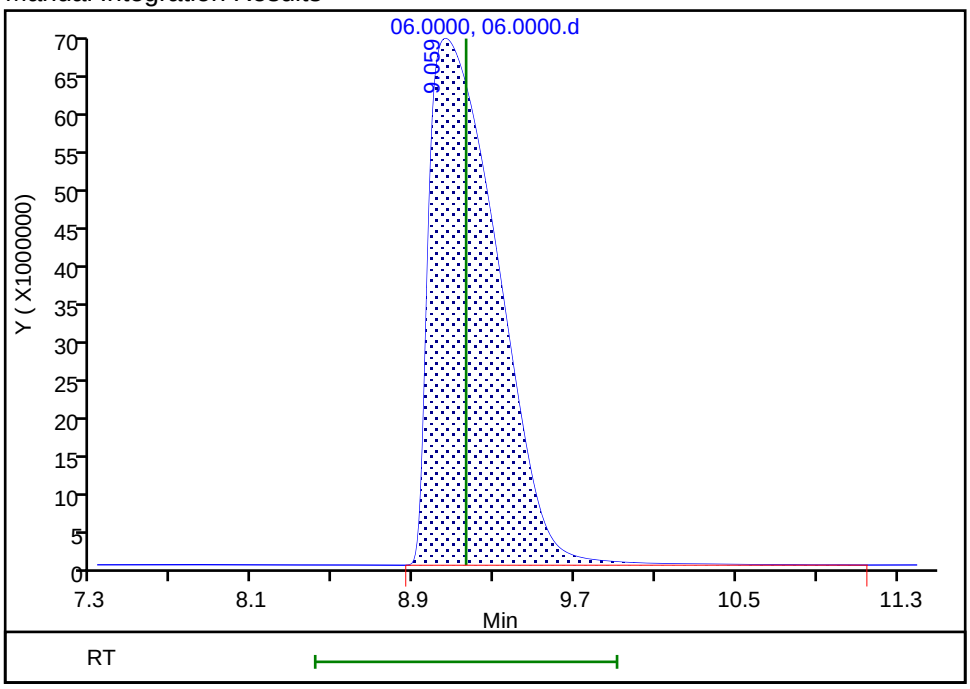
Processing Integration Results

RT: 7.82
Area: 938442
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.06
Area: 1621990341
Amount: 119.9635
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:51:28
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Jun-2020 11:30:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092063-007
Misc. Info.: 7 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 04-Jun-2020 08:46:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1067

First Level Reviewer: pedrickj Date: 03-Jun-2020 11:50:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.034	2.026	0.008	274388580	10.0	9.91	
2 Chloride	3.092	3.009	0.083	3637071770	200.0	199.5	a
3 Nitrite as N	3.534	3.409	0.125	453480596	NC	NC	a
4 Bromide	5.267	5.167	0.100	80232699	10.0	9.99	
5 Nitrate as N	5.617	5.576	0.041	480059041	NC	NC	
6 Sulfate	9.076	9.159	-0.083	2689828489	200.0	199.0	
7 Orthophosphate as P	13.017	13.126	-0.109	55453916	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

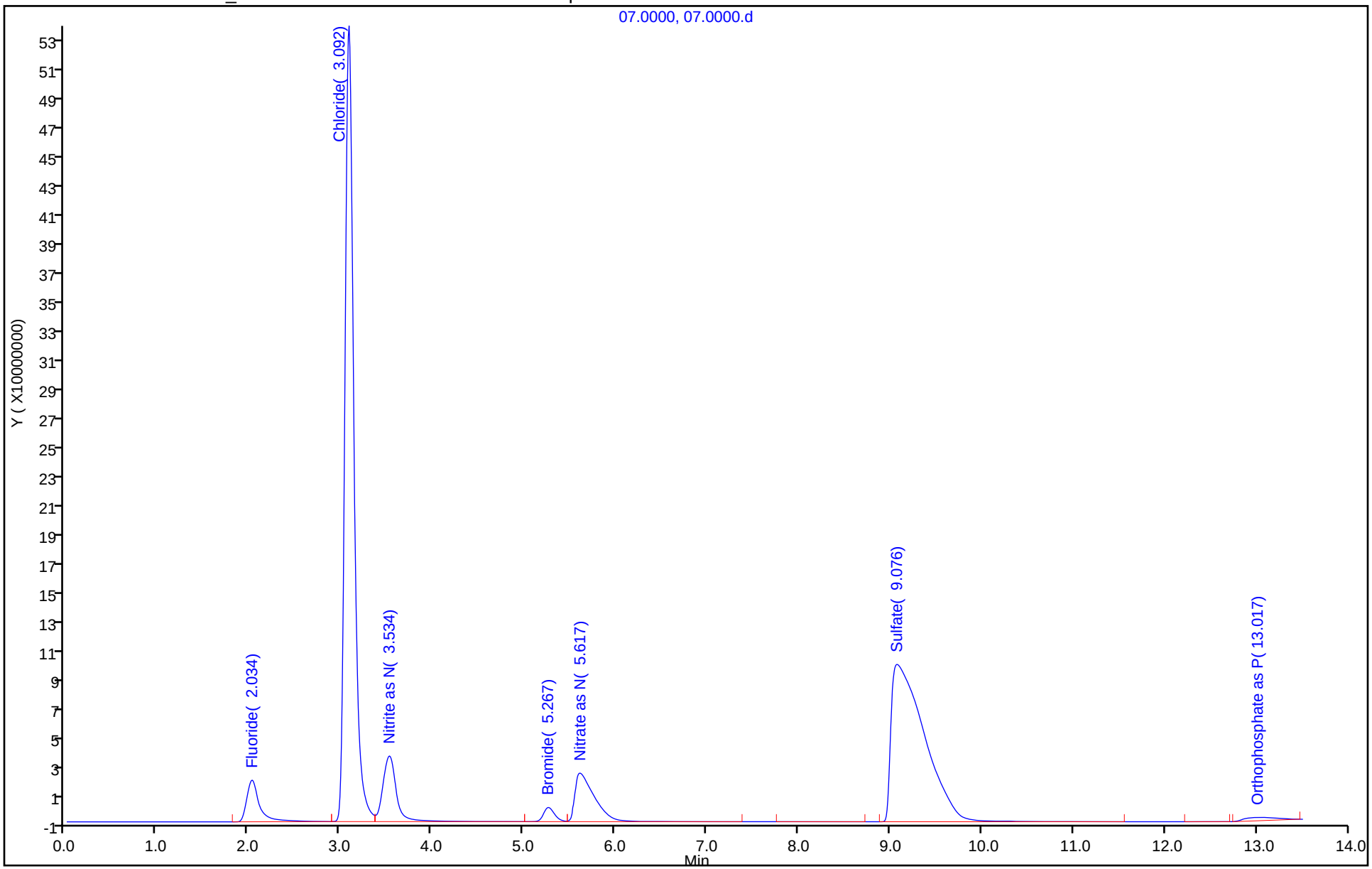
Reagents:

IC CAL cl/so4_00313 Amount Added: 4.00 Units: mL
IC Cal low_00527 Amount Added: 1.00 Units: mL

Report Date: 04-Jun-2020 08:46:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d				
Injection Date:	03-Jun-2020 11:30:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

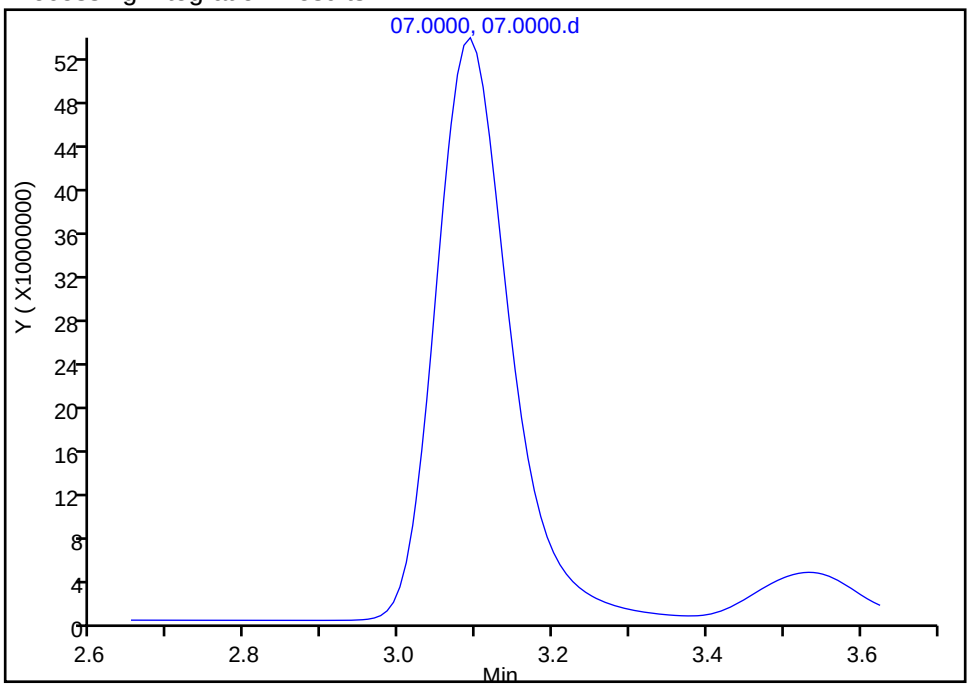
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Injection Date: 03-Jun-2020 11:30:00 Instrument ID: WC_IonChrom7
Lims ID: std L6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

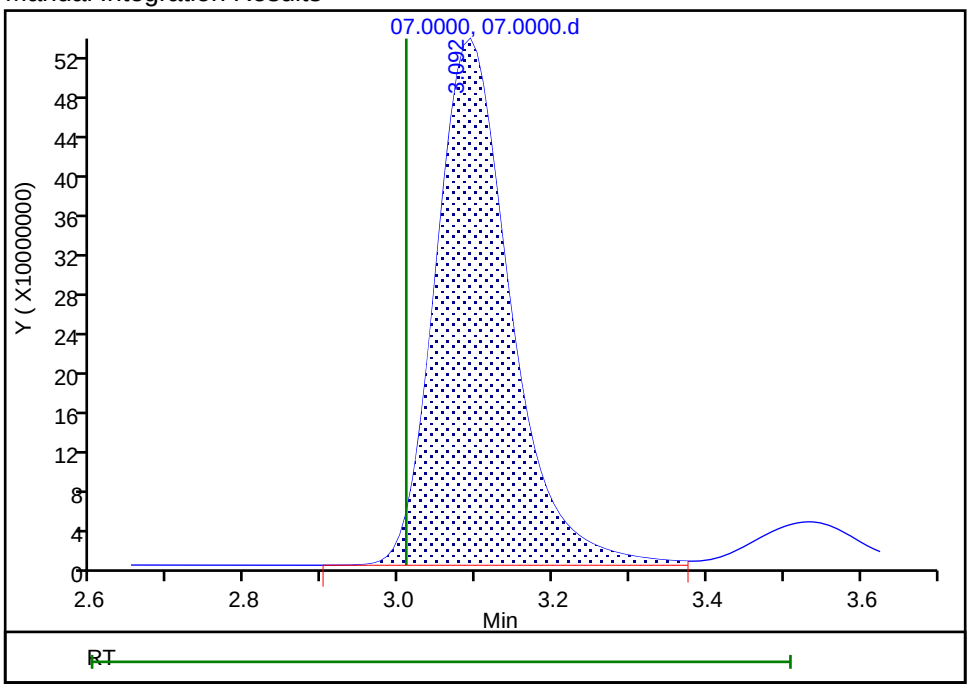
Not Detected
Expected RT: 3.01

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 3637071770
Amount: 199.4899
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jun-2020 11:50:25
Audit Action: Assigned Compound ID Audit Reason:

IC Instrument Information

WL: 92742 **Inst ID:** 7 **Analysis Date:** 6/25/20 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	137474	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137476	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137609	26	F Cl NO2 Br NO3 PO4 SO4	MS/D 1,9	
☐			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	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
474		F Cl NO2 Br NO3 PO4 SO4	20X	Hist
476		F Cl NO2 Br NO3 PO4 SO4	50X	Hist.
137609		F Cl NO2 Br NO3 PO4 SO4	5X	TEST.
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Inj Date: 03-Jun-2020 10:08:00 Worklist: 92063 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Inj Date: 03-Jun-2020 10:24:00 Worklist: 92063 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Inj Date: 03-Jun-2020 10:41:00 Worklist: 92063 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Inj Date: 03-Jun-2020 10:57:00 Worklist: 92063 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Inj Date: 03-Jun-2020 11:13:00 Worklist: 92063 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Inj Date: 03-Jun-2020 11:30:00 Worklist: 92063 Sample#: 7

Start Cal Date: 03-Jun-2020 10:08:00 End Cal Date: 03-Jun-2020 11:30:00

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					
56683005	46983920	46640922	46687382	44875490	45348060	1958442			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		45103497		
11336601	23491960	M46640922	186749529	359003922	M453480596				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
5 Nitrate as N				Signal: 1					
46210655	48765526	47797352	47873299	47820234	48005904	-144420			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		47949488		
9242131	24382763	47797352	191493196	382561871	480059041				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
7 Orthophosphate as P				Signal: 1				R1, R4, R5	
1504050	332280	319853	3410072	4733627	5545392	-1643645			*0.950
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		4962527		
300810	166140	319853	13640286	37869017	55453916				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b
Inj Date : 03-Jun-2020 10:08:00, Sublist: chrom-Anions_IC7*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					902189	2759876		1.000
2 Chloride					1554283	1822407		1.000
3 Nitrite as N	1958442	4510349		1.000				
4 Bromide					44686	8029379		1.000
5 Nitrate as N	-144420	4794948		1.000				
6 Sulfate					710720	1351477		1.000
7 Orthophosphate as P	-164364	4962527	R1, R4, R5	).950*				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Inj Date: 03-Jun-2020 10:08:00 Worklist: 92063 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Inj Date: 03-Jun-2020 10:24:00 Worklist: 92063 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Inj Date: 03-Jun-2020 10:41:00 Worklist: 92063 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Inj Date: 03-Jun-2020 10:57:00 Worklist: 92063 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Inj Date: 03-Jun-2020 11:13:00 Worklist: 92063 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Inj Date: 03-Jun-2020 11:30:00 Worklist: 92063 Sample#: 7

Start Cal Date: 03-Jun-2020 10:08:00 End Cal Date: 03-Jun-2020 11:30:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
29706160	30317354	29823269	28357977	27595025	27438858	**902189**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**27598765**		
5941232	15158677	29823269	113431906	220760198	274388580				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
2 Chloride				Signal: 1					
19729950	18679714	18619227	18447644	18216011	18185359	**1554283**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**18224071**		
19729950	46699286	M93096135	1106858638	2185921343	M3637071770				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
4 Bromide				Signal: 1					
7896295	8405932	8133508	8087968	8008011	8023270	**44686**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8029379**		
1579259	4202966	8133508	32351872	64064086	80232699				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
6 Sulfate				Signal: 1					
13874566	13779642	13873076	13754129	13516586	13449142	**710720**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**13514778**		
M13874566	M34449105	M69365381	M825247714	M1621990341	2689828489				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\31.0000.d
Lims ID: 280-137609-F-16
Client ID: G0117-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 23:19:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-031
Misc. Info.: 27502 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.975	1.992	-0.017	1425782	0.0190	
2 Chloride	2.859	2.934	-0.075	297774331	16.3	
3 Nitrite as N		3.384			ND	
4 Bromide	4.917	5.275	-0.358	1059230	0.1264	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.909	9.317	-0.408	1073501880	79.4	
7 Orthophosphate as P	13.350	13.175	0.175	273894	NC	

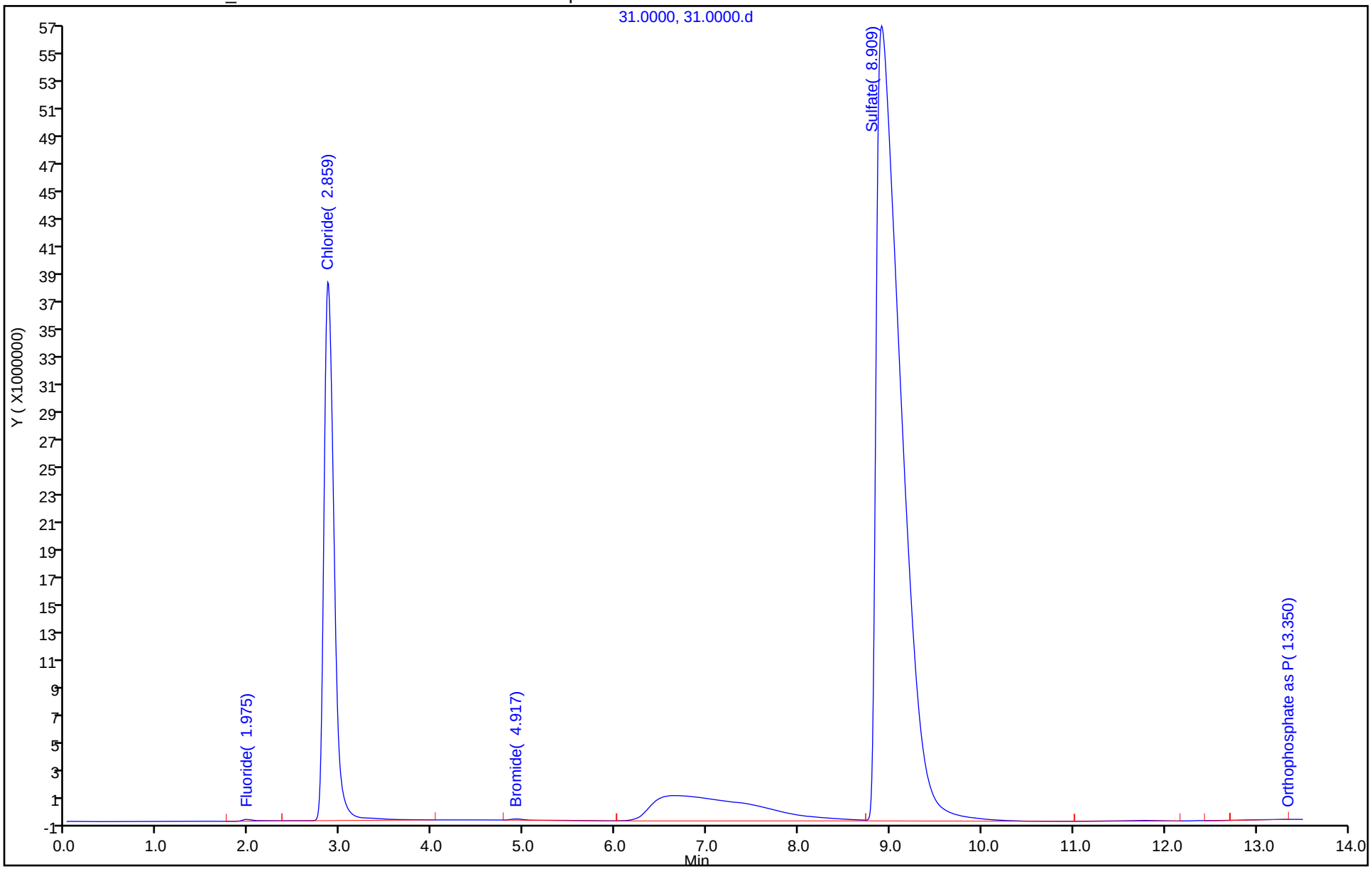
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\31.0000.d				
Injection Date:	25-Jun-2020 23:19:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-16	Lab Sample ID:	280-137609-16	Worklist Smp#:	31
Client ID:	G0117-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\32.0000.d
Lims ID: 280-137609-F-17
Client ID: PZ013-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 23:36:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-032
Misc. Info.: 14333 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

First Level Reviewer: pedrickj Date: 26-Jun-2020 08:33:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.942	1.992	-0.050	1446894	0.0197	
2 Chloride	2.817	2.934	-0.117	238311347	13.0	
3 Nitrite as N		3.384			ND	
4 Bromide	4.850	5.275	-0.425	648389	0.0752	a
5 Nitrate as N	5.284	5.692	-0.408	25763772	NC	a
6 Sulfate	9.009	9.317	-0.308	763942794	56.5	
7 Orthophosphate as P	13.217	13.175	0.042	1164895	NC	

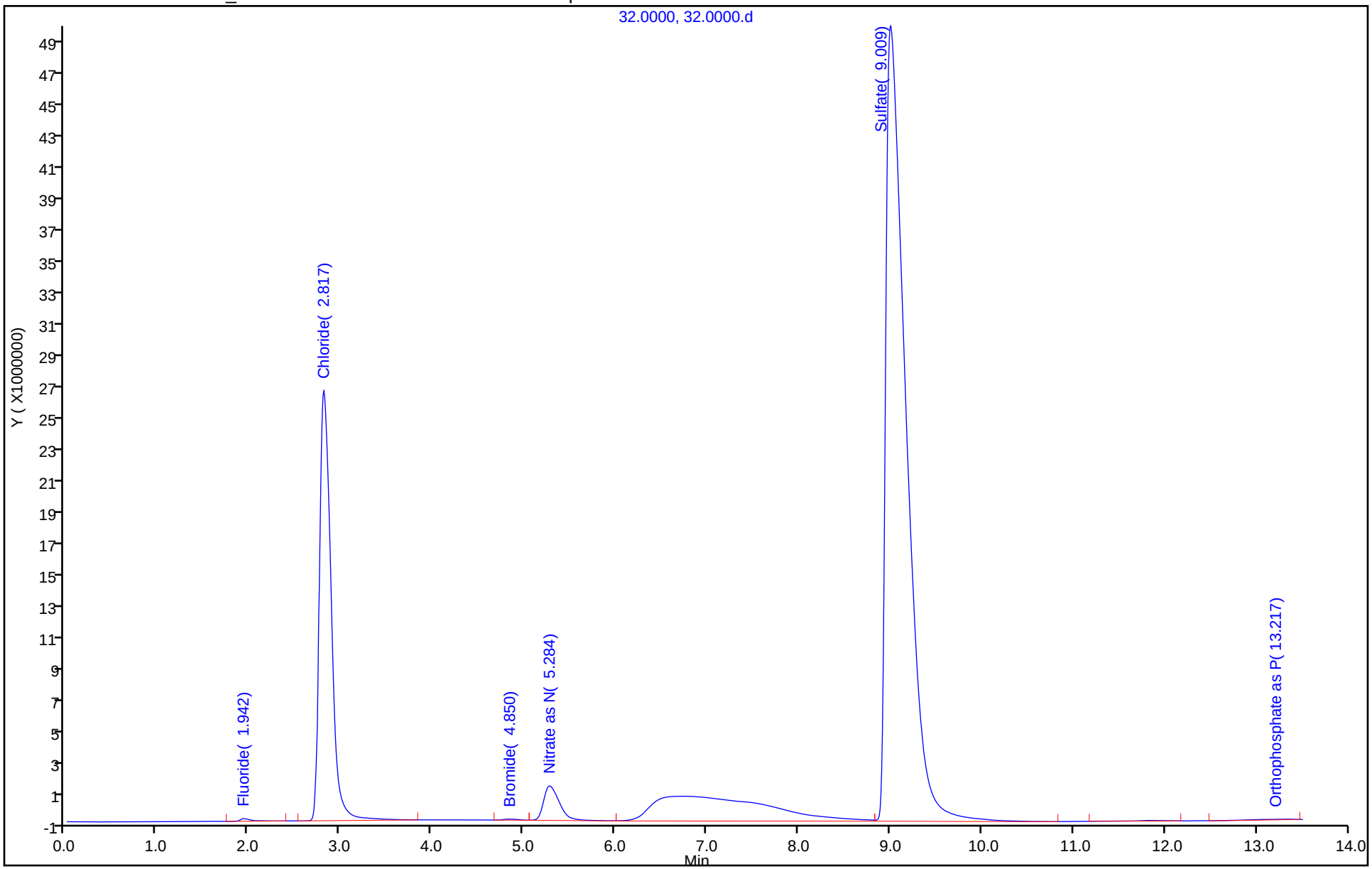
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 26-Jun-2020 08:35:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\32.0000.d				
Injection Date:	25-Jun-2020 23:36:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-17	Lab Sample ID:	280-137609-17	Worklist Smp#:	32
Client ID:	PZ013-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\33.0000.d
Lims ID: 280-137609-F-18
Client ID: G0104-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 23:52:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-033
Misc. Info.: 27565 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.976	1.992	-0.016	2341431	0.0521	
2 Chloride	2.992	2.934	0.058	375601722	20.5	
3 Nitrite as N		3.384			ND	
4 Bromide	5.151	5.275	-0.124	1598708	0.1935	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.876	9.317	-0.441	2230335910	165.0	
7 Orthophosphate as P	13.251	13.175	0.076	750490	NC	

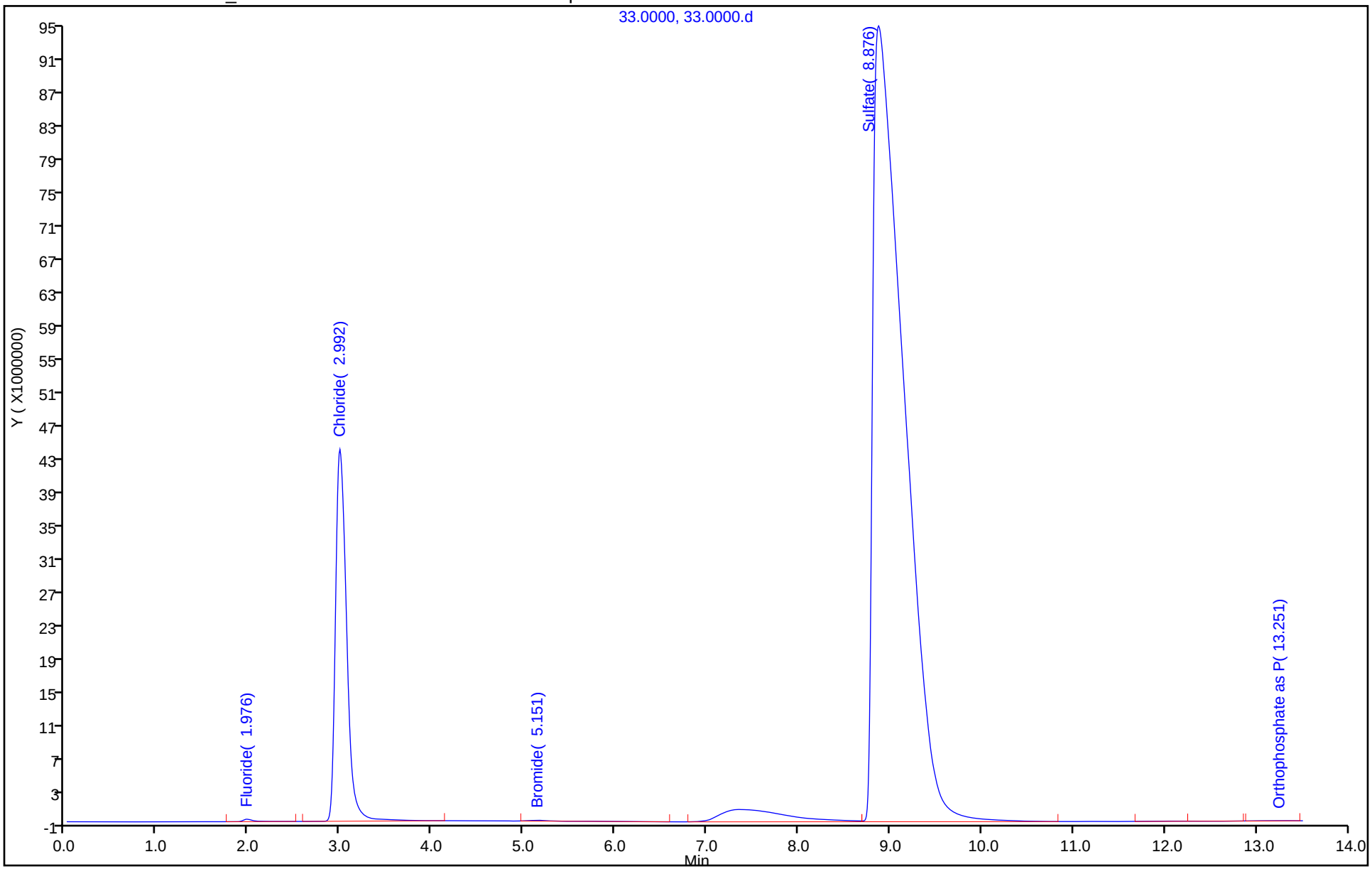
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\33.0000.d				
Injection Date:	25-Jun-2020 23:52:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-18	Lab Sample ID:	280-137609-18	Worklist Smp#:	33
Client ID:	G0104-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\34.0000.d
Lims ID: 280-137609-F-19
Client ID: PZ014-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 00:09:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-034
Misc. Info.: 8438 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.984	1.992	-0.008	1200054	0.0108	
2 Chloride	2.992	2.934	0.058	265839275	14.5	
3 Nitrite as N		3.384			ND	
4 Bromide	5.092	5.275	-0.183	750371	0.0879	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.884	9.317	-0.433	1300604849	96.2	
7 Orthophosphate as P	13.242	13.175	0.067	908360	NC	

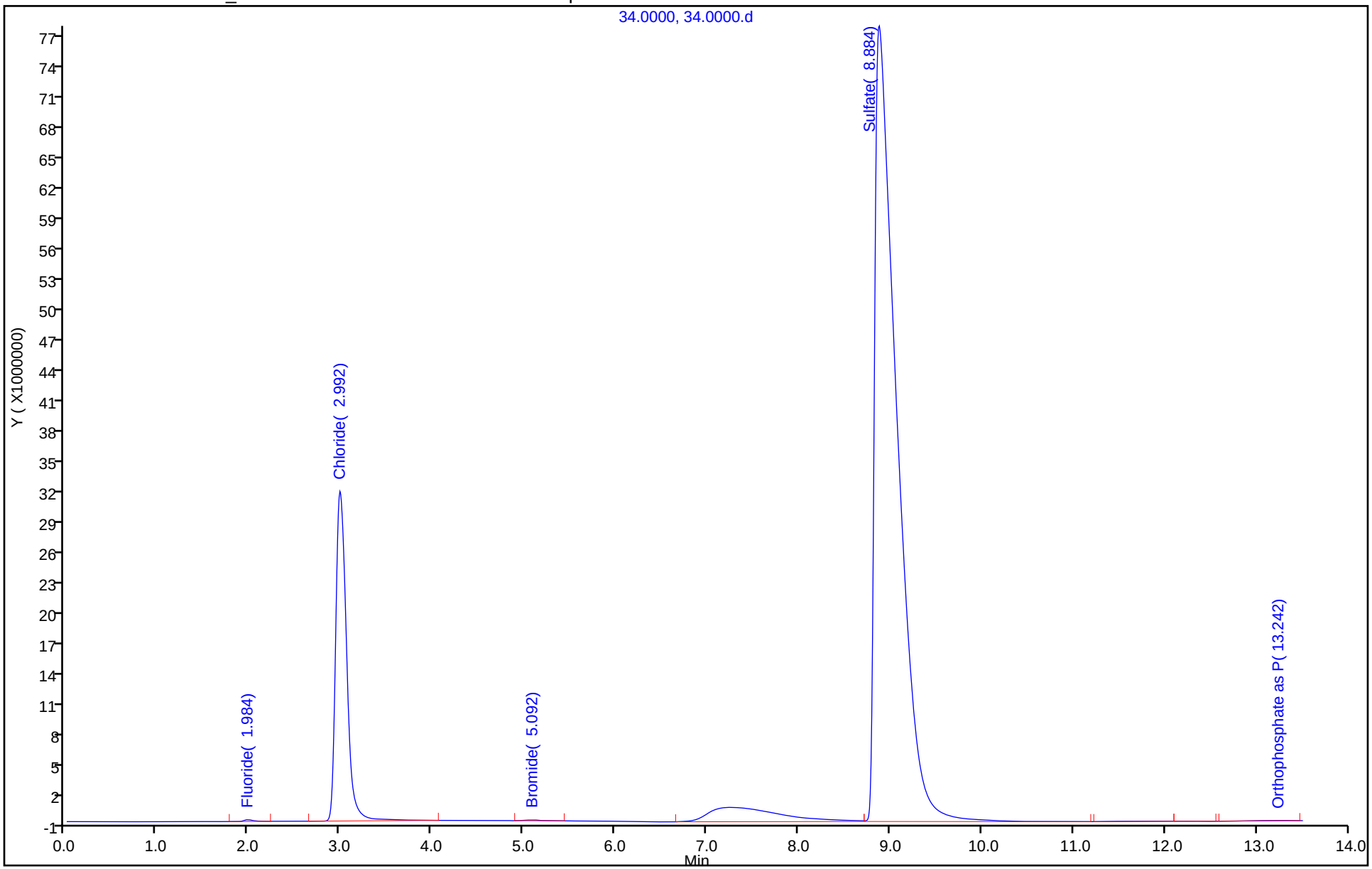
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\34.0000.d				
Injection Date:	26-Jun-2020 00:09:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-19	Lab Sample ID:	280-137609-19	Worklist Smp#:	34
Client ID:	PZ014-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\35.0000.d
Lims ID: 280-137609-F-20
Client ID: G0115-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 00:25:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-035
Misc. Info.: 31418 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.975	1.992	-0.017	2152298	0.0453	
2 Chloride	2.959	2.934	0.025	307103270	16.8	
3 Nitrite as N		3.384			ND	
4 Bromide	5.217	5.275	-0.058	1355460	0.1632	
5 Nitrate as N		5.692			ND	
6 Sulfate	9.125	9.317	-0.192	804046257	59.4	
7 Orthophosphate as P	13.092	13.175	-0.083	795085	NC	

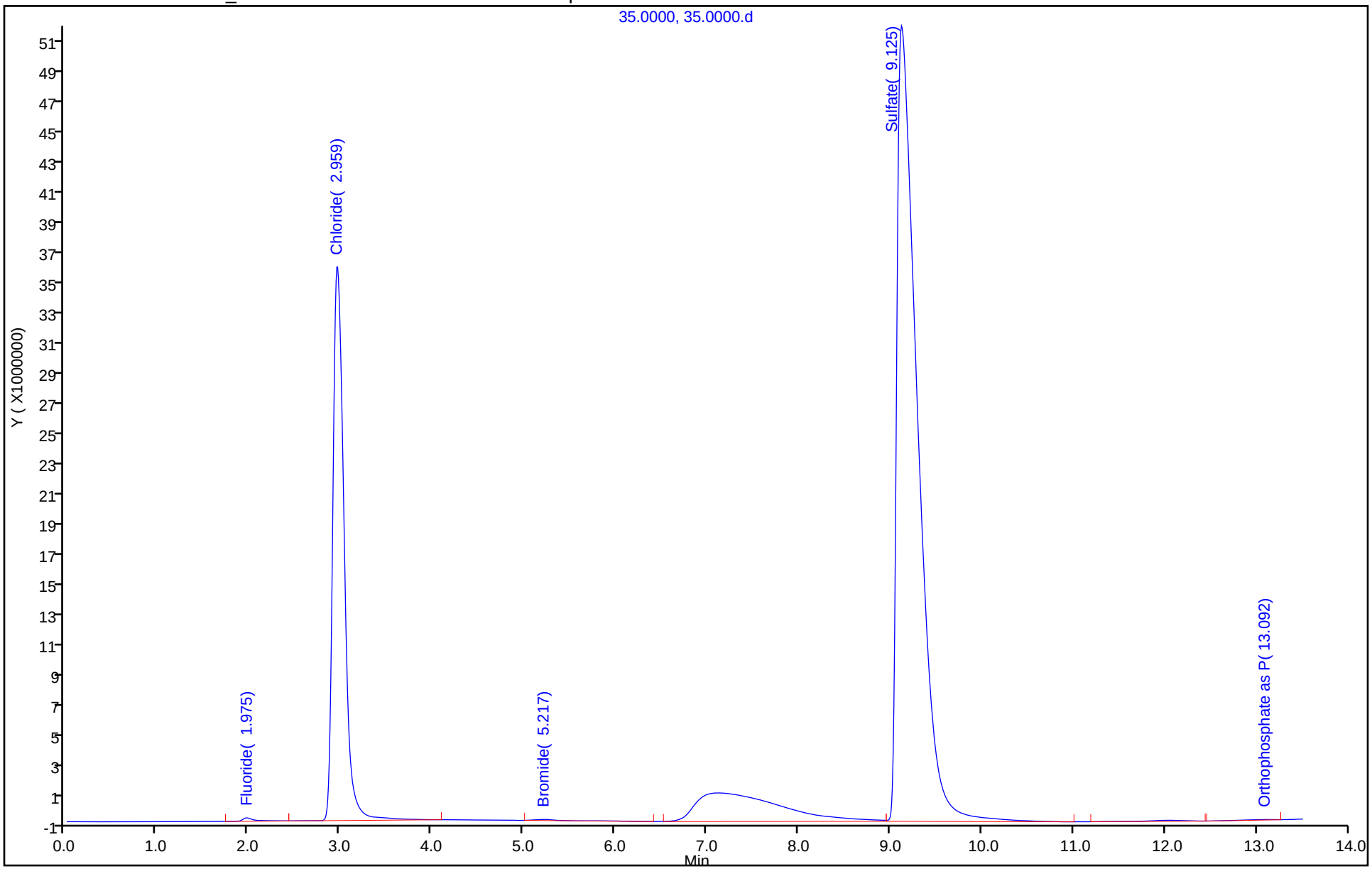
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\35.0000.d				
Injection Date:	26-Jun-2020 00:25:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-20	Lab Sample ID:	280-137609-20	Worklist Smp#:	35
Client ID:	G0115-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\36.0000.d
Lims ID: 280-137609-F-21
Client ID: G0101-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 00:41:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-036
Misc. Info.: 128 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

First Level Reviewer: pedrickj Date: 26-Jun-2020 08:33:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.942	1.992	-0.050	2305220	0.0508	
2 Chloride	2.842	2.934	-0.092	277354588	15.1	
3 Nitrite as N		3.384			ND	
4 Bromide	4.934	5.275	-0.341	721870	0.0843	a
5 Nitrate as N	5.384	5.692	-0.308	1905479	NC	a
6 Sulfate	8.859	9.317	-0.458	1502715375	111.1	
7 Orthophosphate as P	13.100	13.175	-0.075	713950	NC	

QC Flag Legend

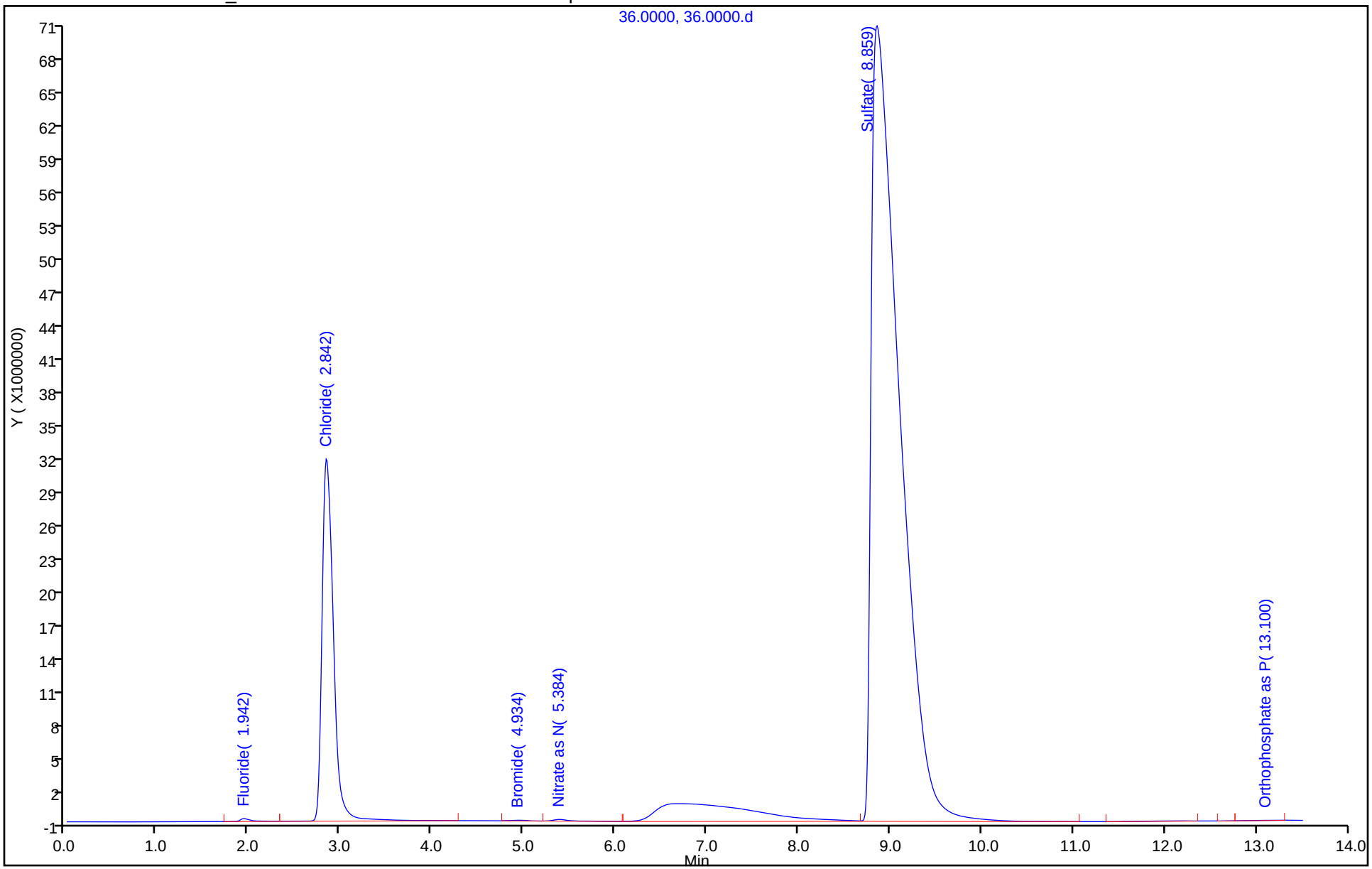
Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 26-Jun-2020 08:35:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\36.0000.d

Injection Date:	26-Jun-2020 00:41:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-21	Lab Sample ID:	280-137609-21	Worklist Smp#:	36
Client ID:	G0101-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\37.0000.d
Lims ID: 280-137609-F-22
Client ID: G0100-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 00:58:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-037
Misc. Info.: 30248 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

First Level Reviewer: pedrickj Date: 26-Jun-2020 08:33:38

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.976	1.992	-0.016	1856862	0.0346	
2 Chloride	2.867	2.934	-0.067	257819497	14.1	
3 Nitrite as N		3.384			ND	
4 Bromide	4.867	5.275	-0.408	763912	0.0896	a
5 Nitrate as N	5.309	5.692	-0.383	4344341	NC	a
6 Sulfate	8.942	9.317	-0.375	775615823	57.3	
7 Orthophosphate as P	13.026	13.175	-0.149	1547491	NC	

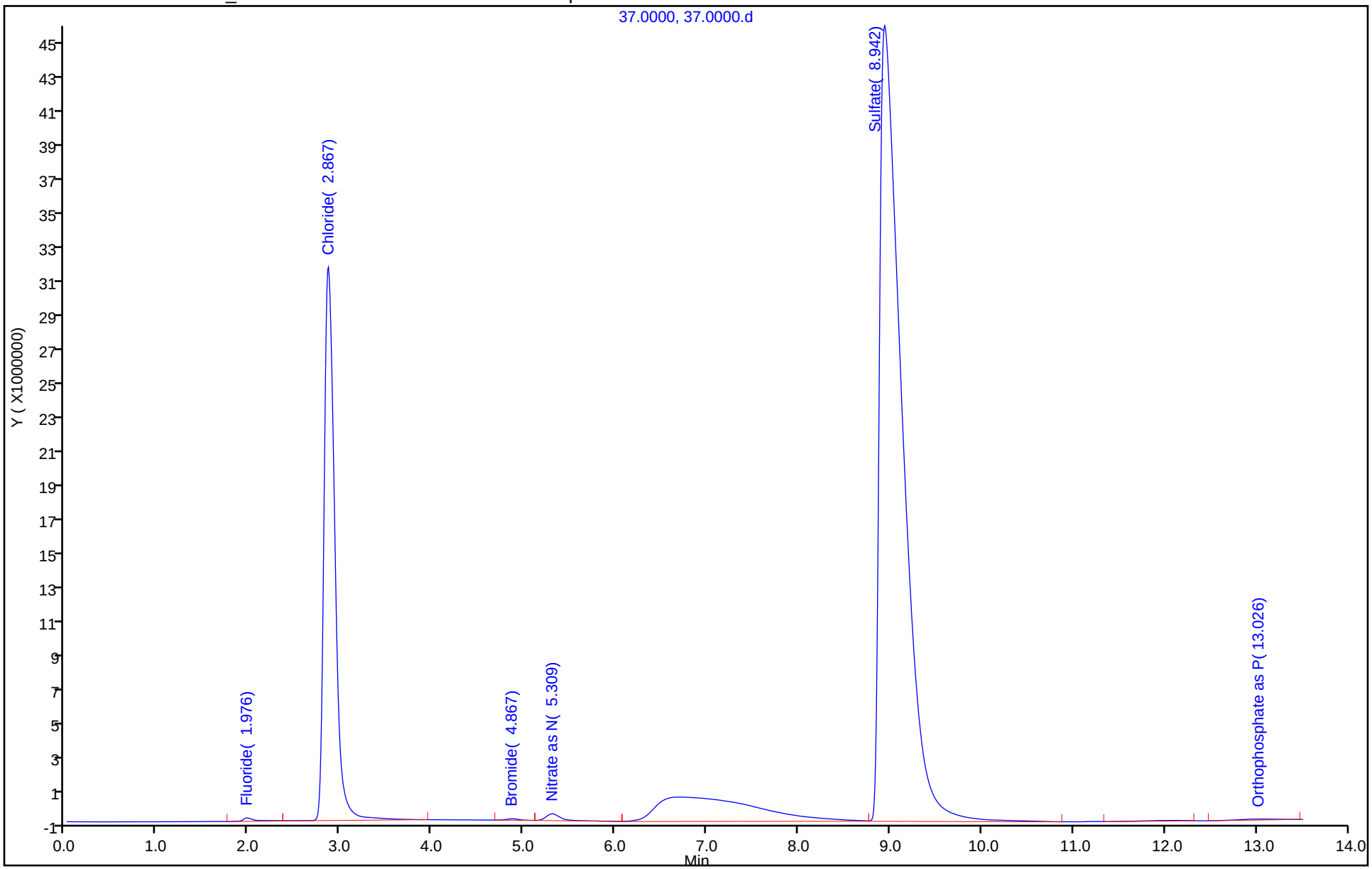
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 26-Jun-2020 08:35:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\37.0000.d				
Injection Date:	26-Jun-2020 00:58:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-22	Lab Sample ID:	280-137609-22	Worklist Smp#:	37
Client ID:	G0100-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\38.0000.d
Lims ID: 280-137609-F-23
Client ID: G0111-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 01:14:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-038
Misc. Info.: 32694 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

First Level Reviewer: pedrickj Date: 26-Jun-2020 08:33:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.967	1.992	-0.025	1855246	0.0345	
2 Chloride	2.851	2.934	-0.083	289676381	15.8	
3 Nitrite as N		3.384			ND	
4 Bromide	4.859	5.275	-0.416	531208	0.0606	a
5 Nitrate as N	5.201	5.692	-0.491	150153150	NC	a
6 Sulfate	8.917	9.317	-0.400	996623979	73.7	
7 Orthophosphate as P	13.226	13.175	0.051	1121341	NC	

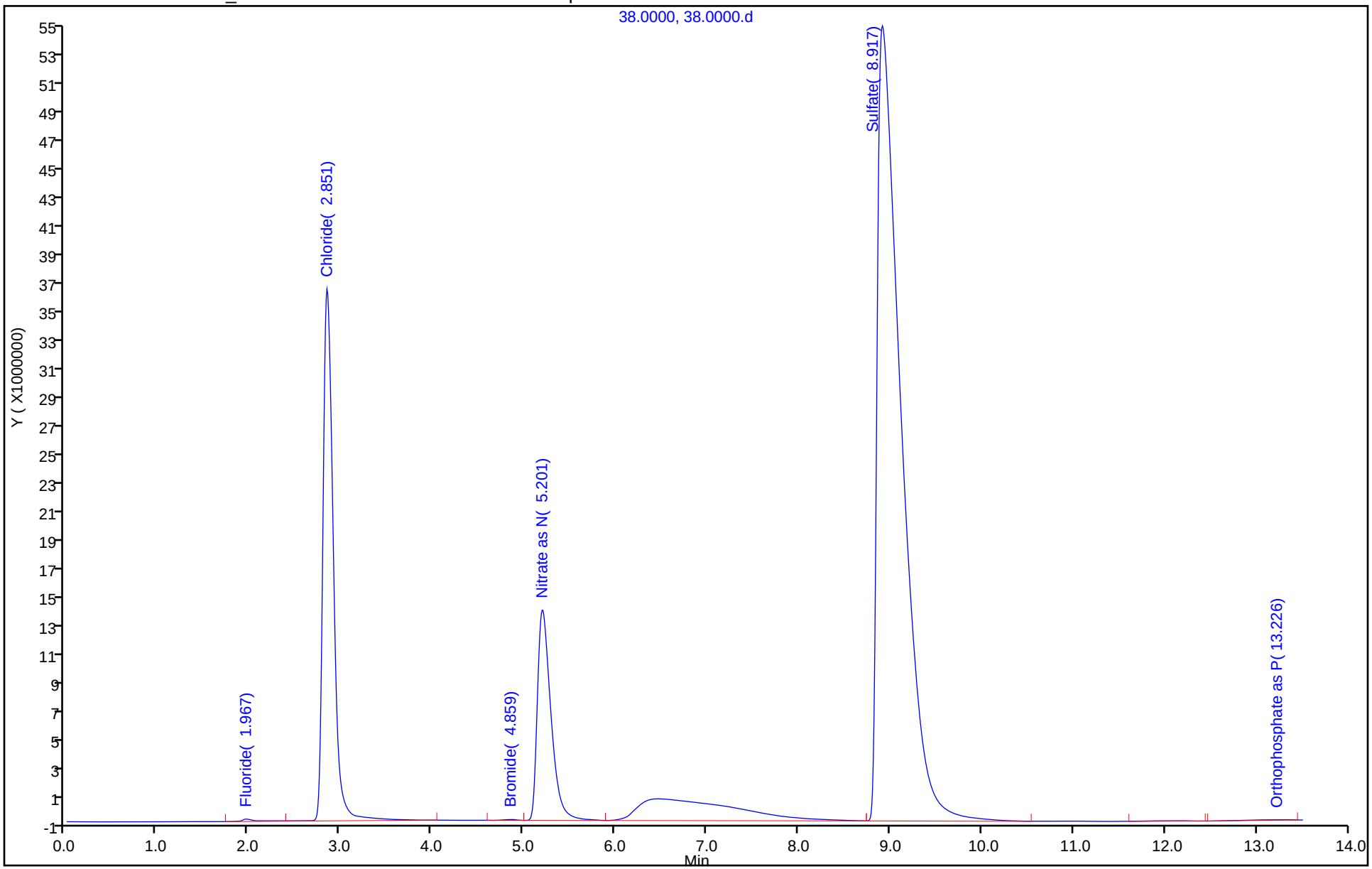
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 26-Jun-2020 08:35:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\38.0000.d				
Injection Date:	26-Jun-2020 01:14:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-23	Lab Sample ID:	280-137609-23	Worklist Smp#:	38
Client ID:	G0111-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\39.0000.d
Lims ID: 280-137609-F-24
Client ID: G0103-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 01:31:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-039
Misc. Info.: 25902 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:34:59 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.134	1.992	0.142	155809995	5.61	
2 Chloride	2.900	2.934	-0.034	211716438	11.5	
3 Nitrite as N		3.384			ND	
4 Bromide	4.959	5.275	-0.316	1680075	0.2037	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.825	9.317	-0.492	2210030310	163.5	
7 Orthophosphate as P	13.284	13.175	0.109	277997	NC	

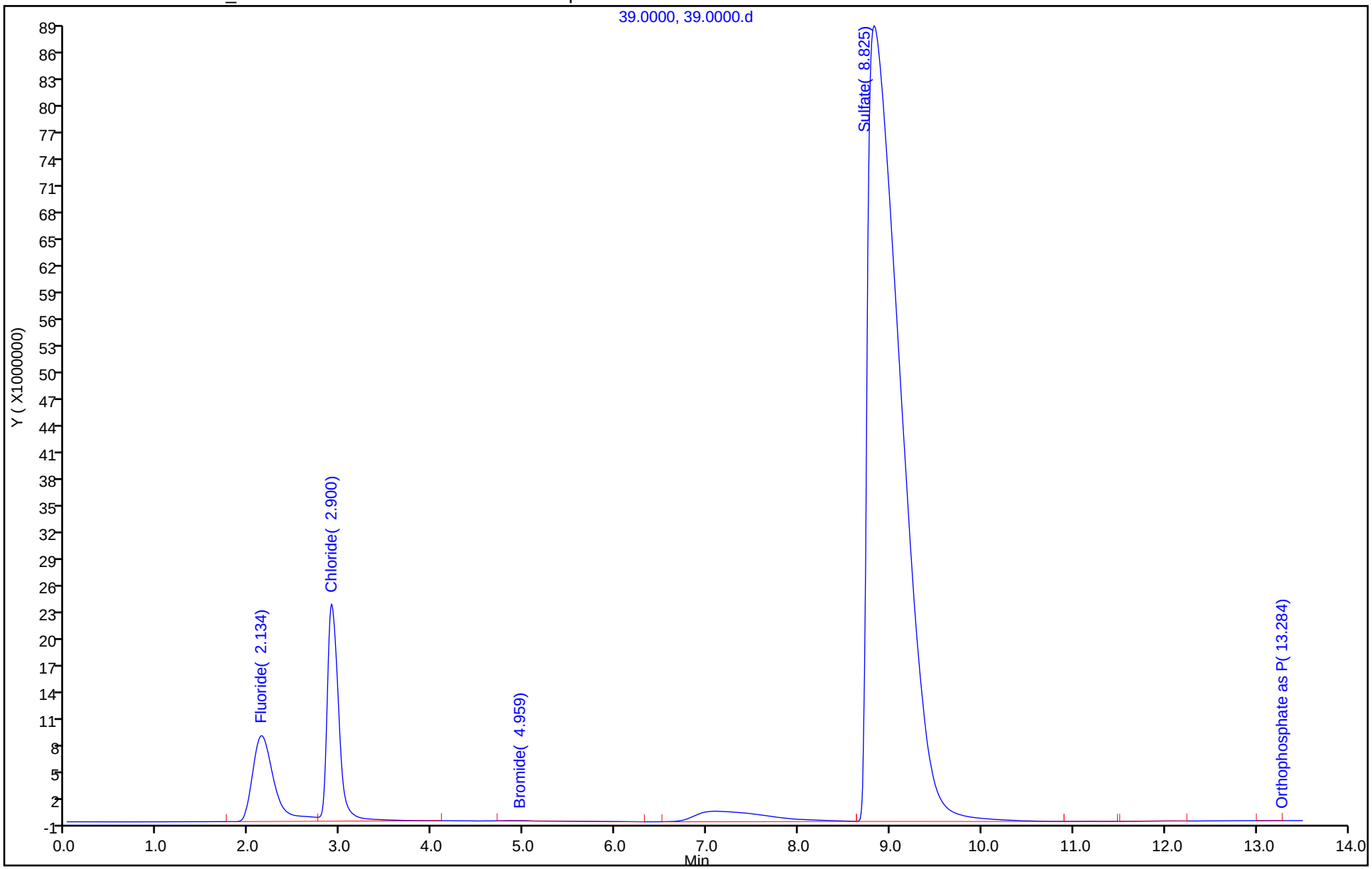
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\39.0000.d				
Injection Date:	26-Jun-2020 01:31:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-24	Lab Sample ID:	280-137609-24	Worklist Smp#:	39
Client ID:	G0103-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\41.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2020 02:04:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-041
Misc. Info.: 20096 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:35:04 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

First Level Reviewer: pedrickj Date: 26-Jun-2020 08:33:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	1.992	0.025	139719514	5.00	5.03	
2 Chloride	2.850	2.934	-0.084	1785222012	100.0	97.9	
3 Nitrite as N	3.225	3.384	-0.159	252542508	NC	NC	
4 Bromide	4.892	5.275	-0.383	41038328	5.00	5.11	a
5 Nitrate as N	5.309	5.692	-0.383	236562392	NC	NC	a
6 Sulfate	8.867	9.317	-0.450	1325945804	100.0	98.1	
7 Orthophosphate as P		13.175			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
a - User Assigned ID

Reagents:

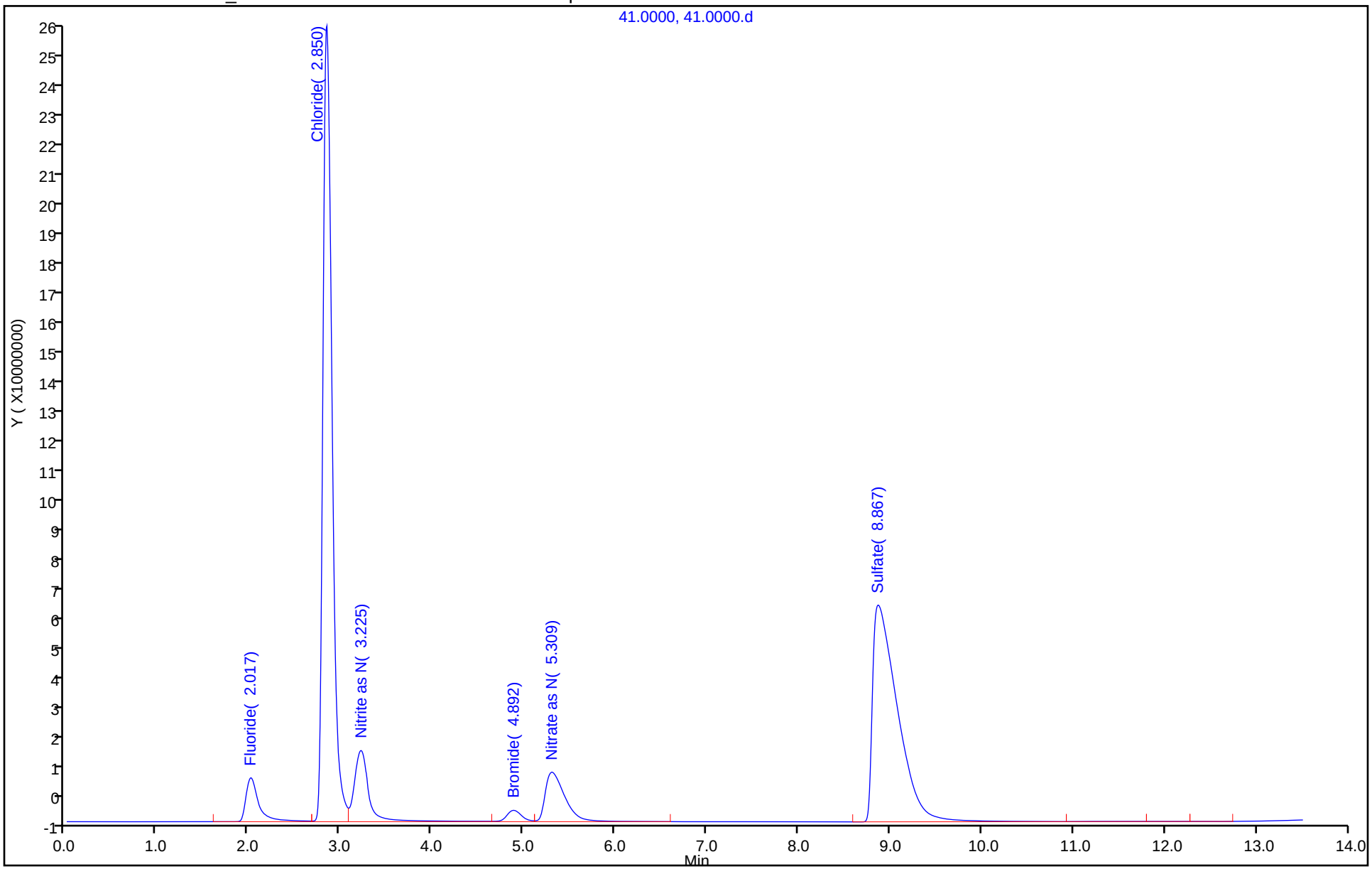
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:35:04 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\41.0000.d

Injection Date:	26-Jun-2020 02:04:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\42.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	26-Jun-2020 02:20:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092742-042				
Misc. Info.:	23718 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	26-Jun-2020 08:35:04	Calib Date:	03-Jun-2020 11:30:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1062				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.992				ND	
2 Chloride	2.917	2.934	-0.017	222989		-0.0731	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate	9.559	9.317	0.242	239808		-0.0348	
7 Orthophosphate as P	13.109	13.175	-0.066	703571		NC	

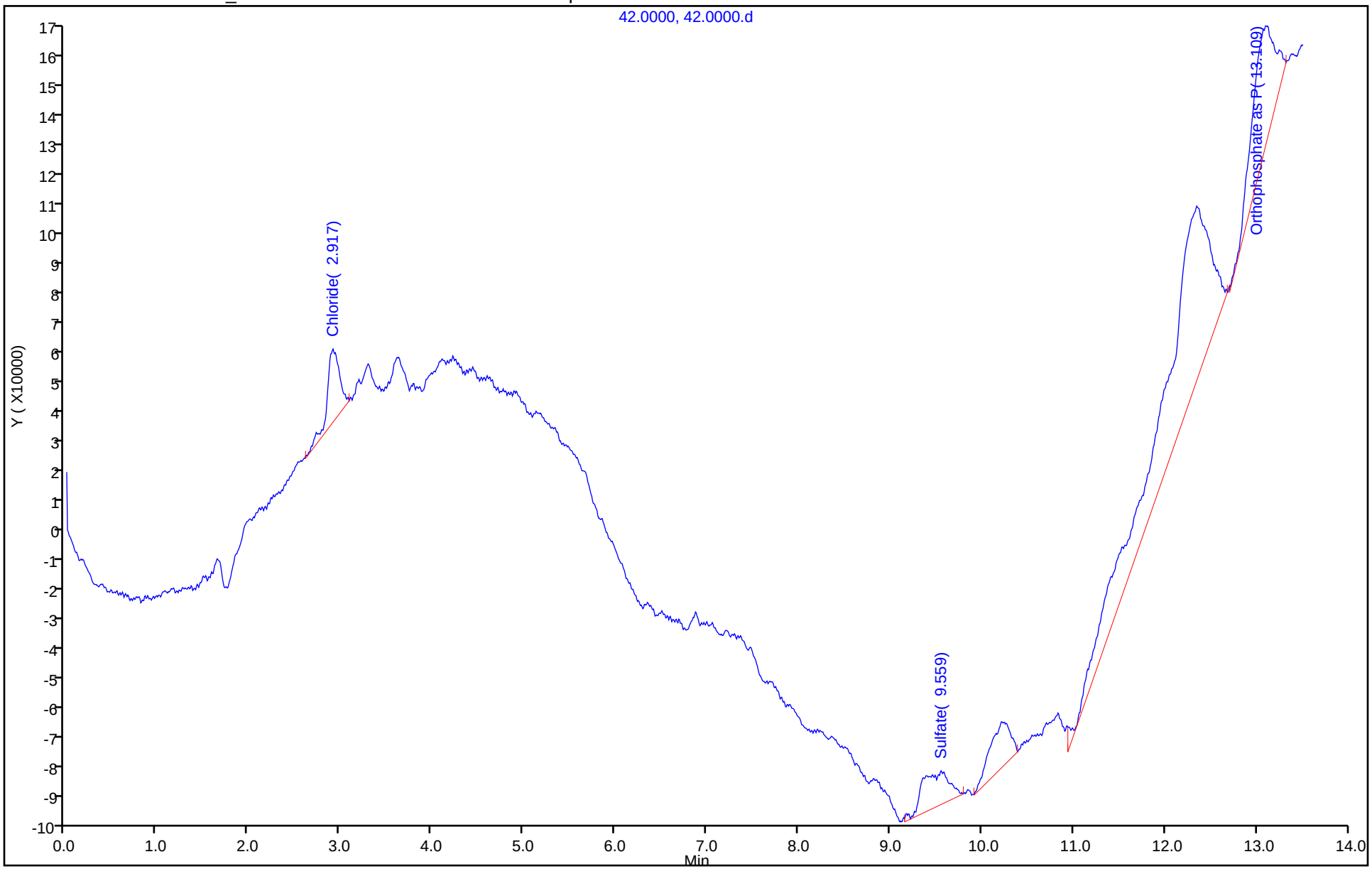
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\42.0000.d				
Injection Date:	26-Jun-2020 02:20:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\43.0000.d
Lims ID: 280-137609-F-26
Client ID: G0116-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 02:36:00 ALS Bottle#: 0 Worklist Smp#: 43
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-043
Misc. Info.: 436 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:35:04 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	3084932	0.0791	
2 Chloride	2.867	2.934	-0.067	331004728	18.1	
3 Nitrite as N		3.384			ND	
4 Bromide	4.917	5.275	-0.358	820968	0.0967	
5 Nitrate as N		5.692			ND	
6 Sulfate	9.042	9.317	-0.275	684767652	50.6	
7 Orthophosphate as P	13.209	13.175	0.034	2002902	NC	

QC Flag Legend

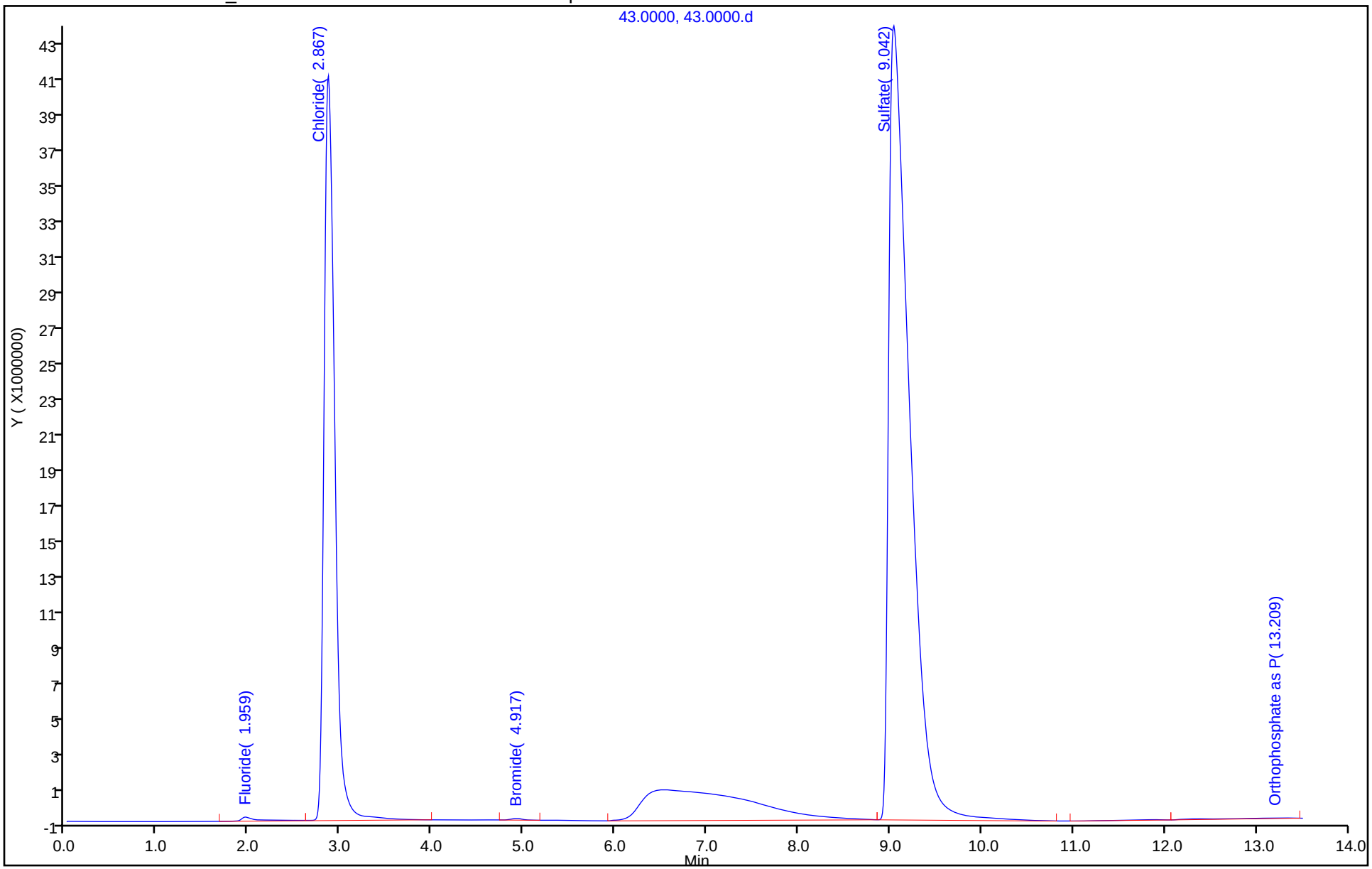
Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\43.0000.d

Injection Date:	26-Jun-2020 02:36:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-26	Lab Sample ID:	280-137609-26	Worklist Smp#:	43
Client ID:	G0116-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\44.0000.d
Lims ID: 280-137609-F-27
Client ID: G0120-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 02:53:00 ALS Bottle#: 0 Worklist Smp#: 44
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-044
Misc. Info.: 2551 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:35:04 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.967	1.992	-0.025	2810506	0.0691	
2 Chloride	2.909	2.934	-0.025	324601158	17.7	
3 Nitrite as N		3.384			ND	
4 Bromide	5.009	5.275	-0.266	826297	0.0973	
5 Nitrate as N		5.692			ND	
6 Sulfate	9.034	9.317	-0.283	711412997	52.6	
7 Orthophosphate as P	13.342	13.175	0.167	450426	NC	

QC Flag Legend

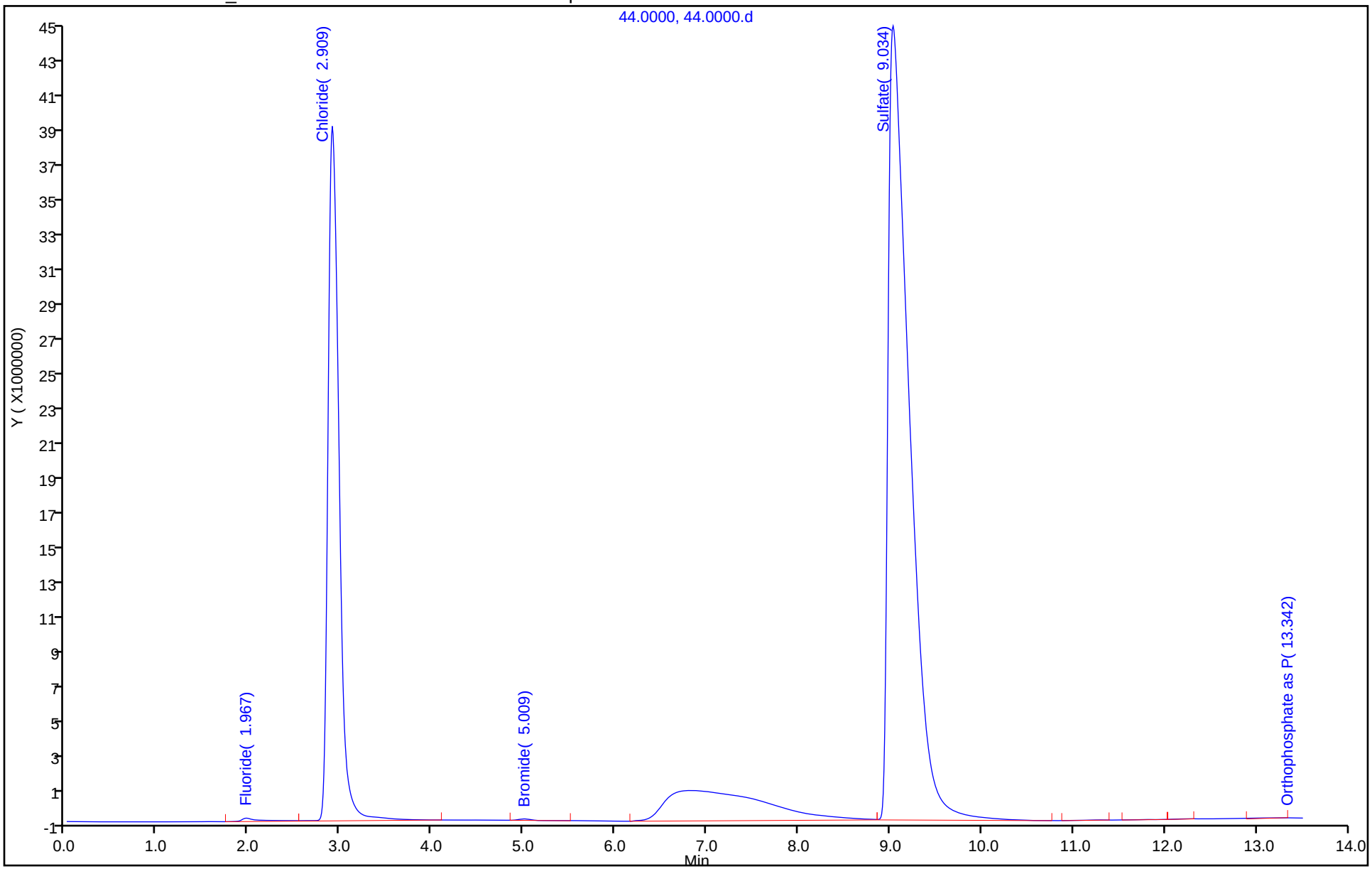
Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\44.0000.d

Injection Date:	26-Jun-2020 02:53:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-27	Lab Sample ID:	280-137609-27	Worklist Smp#:	44
Client ID:	G0120-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\46.0000.d
Lims ID: 280-137609-F-29
Client ID: G0095-20A
Sample Type: Client
Inject. Date: 26-Jun-2020 03:26:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-046
Misc. Info.: 2419 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:35:04 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	2826602	0.0697	
2 Chloride	2.900	2.934	-0.034	327580670	17.9	
3 Nitrite as N		3.384			ND	
4 Bromide	5.025	5.275	-0.250	667081	0.0775	
5 Nitrate as N	5.500	5.692	-0.192	8910943	NC	
6 Sulfate	9.059	9.317	-0.258	907830320	67.1	
7 Orthophosphate as P	13.175	13.175	0.000	1732721	NC	

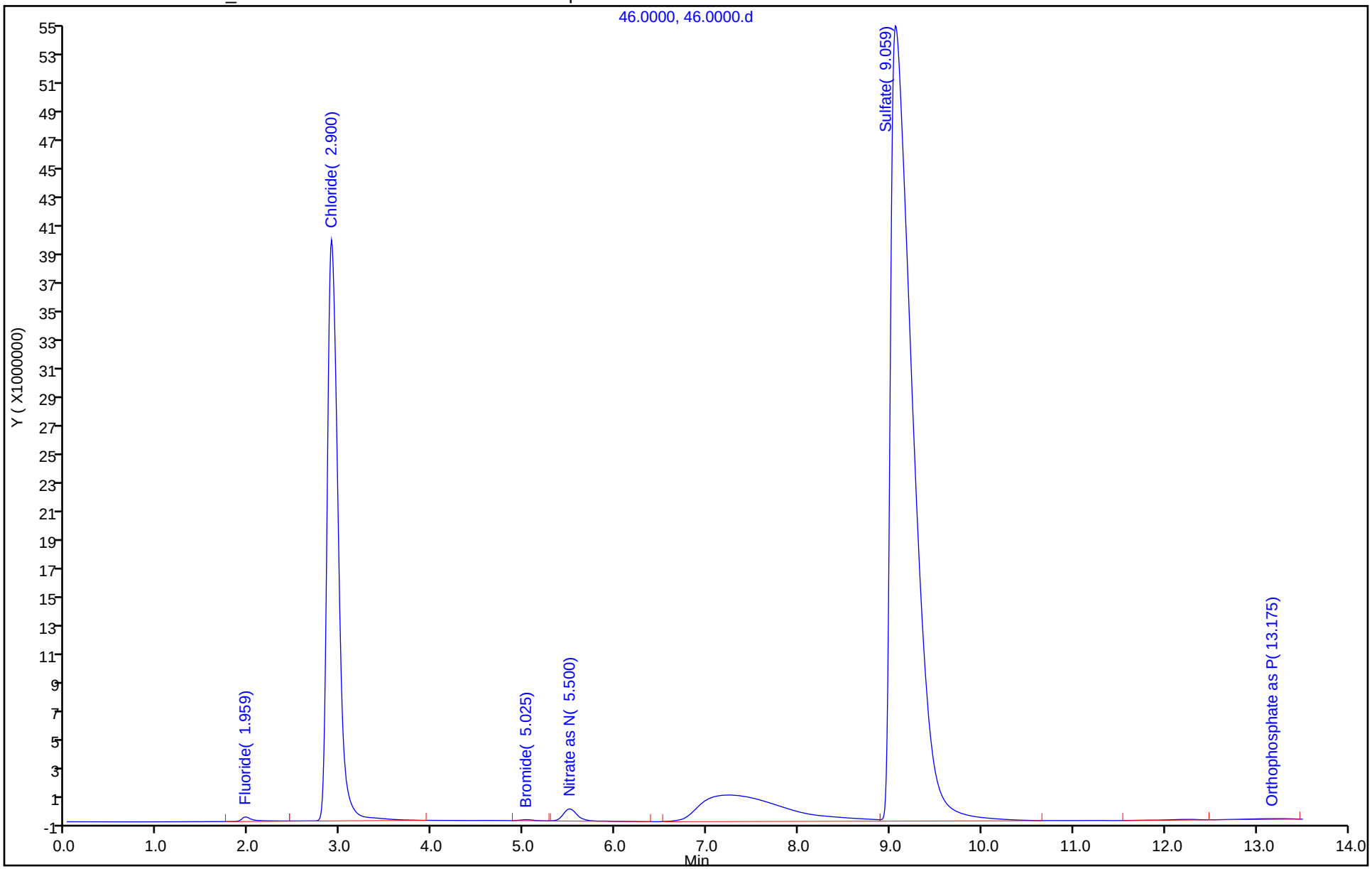
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\46.0000.d				
Injection Date:	26-Jun-2020 03:26:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-29	Lab Sample ID:	280-137609-29	Worklist Smp#:	46
Client ID:	G0095-20A				
Injection Vol:	25.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\47.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2020 03:42:00 ALS Bottle#: 0 Worklist Smp#: 47
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-047
Misc. Info.: 24282 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 26-Jun-2020 08:35:06 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1062

First Level Reviewer: pedrickj Date: 26-Jun-2020 08:34:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.984	1.992	-0.008	139790084	5.00	5.03	
2 Chloride	2.884	2.934	-0.050	1788650032	100.0	98.1	
3 Nitrite as N	3.300	3.384	-0.084	250847823	NC	NC	
4 Bromide	5.009	5.275	-0.266	40352507	5.00	5.02	a
5 Nitrate as N	5.367	5.692	-0.325	235595337	NC	NC	a
6 Sulfate	8.809	9.317	-0.508	1330201935	100.0	98.4	
7 Orthophosphate as P		13.175			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
a - User Assigned ID

Reagents:

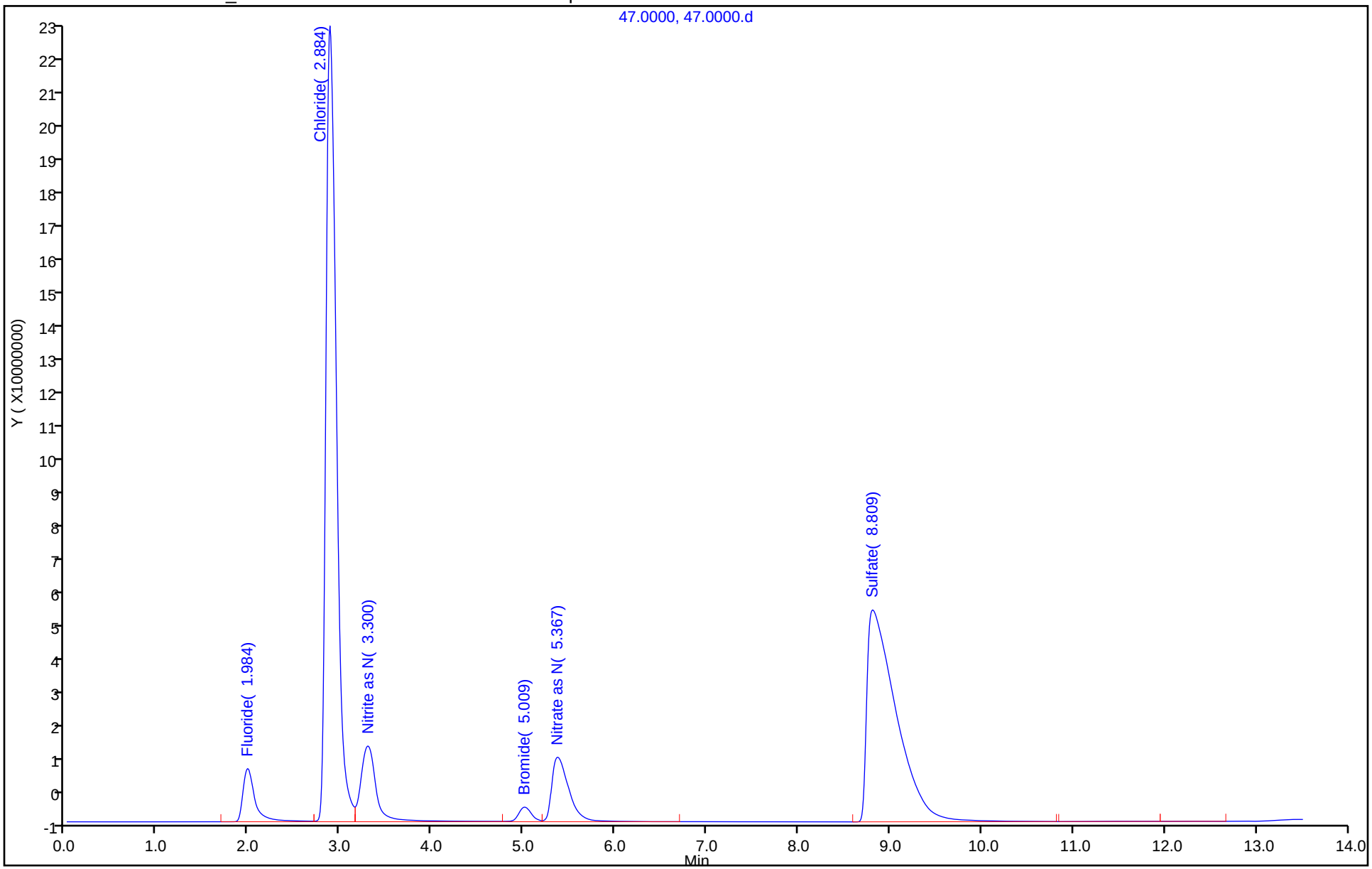
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:35:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\47.0000.d

Injection Date:	26-Jun-2020 03:42:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	47
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\48.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	26-Jun-2020 03:59:00	ALS Bottle#:	0	Worklist Smp#:	48
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092742-048				
Misc. Info.:	11298 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	26-Jun-2020 08:35:06	Calib Date:	03-Jun-2020 11:30:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1062				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.992				ND	
2 Chloride	2.917	2.934	-0.017	244282		-0.0719	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate		9.317				ND	
7 Orthophosphate as P	13.142	13.175	-0.033	1422124		NC	

QC Flag Legend

Processing Flags

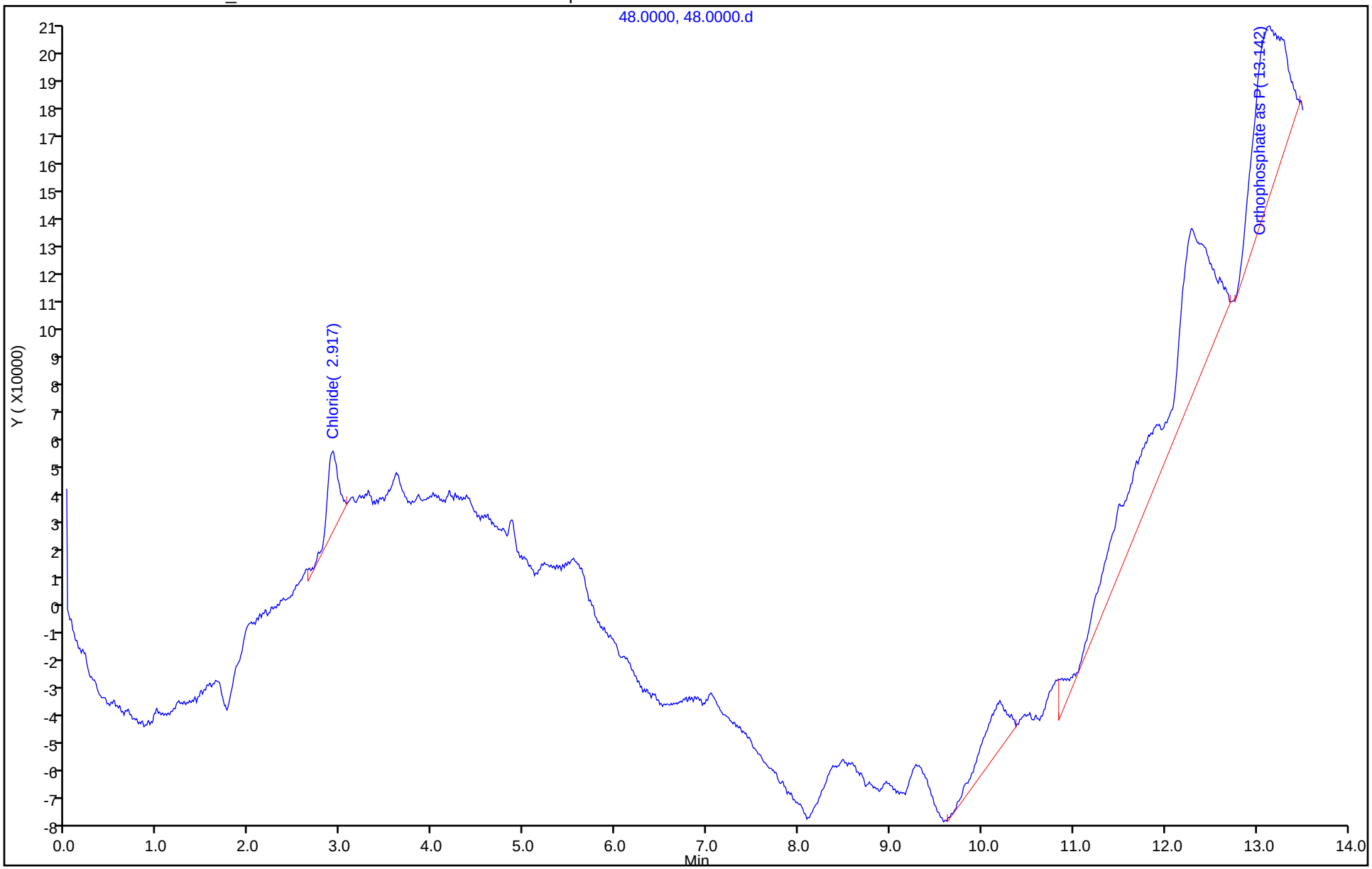
NC - Not Calibrated

Report Date: 26-Jun-2020 08:35:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\48.0000.d

Injection Date:	26-Jun-2020 03:59:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	48
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 92862 **Inst ID:** 7 **Analysis Date:** 6/29/20 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	137425	6	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	137489	1	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) 1	
☐	137492	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	137529	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	137549	2	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	137596	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	137598	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	137609	6	F Cl NO2 Br NO3 PO4 SO4	(MS/D) 9	
☐	~~137644~~ CJ 6/29/20		F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137649	1	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137733	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	137762	4	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
762		F Cl NO2 Br NO3 PO4 SO4	10, 20X	Rerun.
733		F Cl NO2 Br NO3 PO4 SO4	5X	Rerun
609		F Cl NO2 Br NO3 PO4 SO4	10X	
598		F Cl NO2 Br NO3 PO4 SO4	5X	
596		F Cl NO2 Br NO3 PO4 SO4	5X	
549		F Cl NO2 Br NO3 PO4 SO4	10X	
529		F Cl NO2 Br NO3 PO4 SO4	10X	
492		F Cl NO2 Br NO3 PO4 SO4	20X	
425		F Cl NO2 Br NO3 PO4 SO4	20, 50X	

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Inj Date: 03-Jun-2020 10:08:00 Worklist: 92063 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Inj Date: 03-Jun-2020 10:24:00 Worklist: 92063 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Inj Date: 03-Jun-2020 10:41:00 Worklist: 92063 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Inj Date: 03-Jun-2020 10:57:00 Worklist: 92063 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Inj Date: 03-Jun-2020 11:13:00 Worklist: 92063 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Inj Date: 03-Jun-2020 11:30:00 Worklist: 92063 Sample#: 7

Start Cal Date: 03-Jun-2020 10:08:00 End Cal Date: 03-Jun-2020 11:30:00

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					
56683005	46983920	46640922	46687382	44875490	45348060	1958442			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		45103497		
11336601	23491960	M46640922	186749529	359003922	M453480596				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
5 Nitrate as N				Signal: 1					
46210655	48765526	47797352	47873299	47820234	48005904	-144420			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		47949488		
9242131	24382763	47797352	191493196	382561871	480059041				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
7 Orthophosphate as P				Signal: 1				R1, R4, R5	
1504050	332280	319853	3410072	4733627	5545392	-1643645			*0.950
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		4962527		
300810	166140	319853	13640286	37869017	55453916				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b
Inj Date : 03-Jun-2020 10:08:00, Sublist: chrom-Anions_IC7*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					902189	2759876		1.000
2 Chloride					1554283	1822407		1.000
3 Nitrite as N	1958442	4510349		1.000				
4 Bromide					44686	8029379		1.000
5 Nitrate as N	-144420	4794948		1.000				
6 Sulfate					710720	1351477		1.000
7 Orthophosphate as P	-164364	4962527	R1, R4, R5	).950*				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\Anions_IC7.m
Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Jun-2020 08:15:11
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Inj Date: 03-Jun-2020 10:08:00 Worklist: 92063 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d
Inj Date: 03-Jun-2020 10:24:00 Worklist: 92063 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d
Inj Date: 03-Jun-2020 10:41:00 Worklist: 92063 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Inj Date: 03-Jun-2020 10:57:00 Worklist: 92063 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d
Inj Date: 03-Jun-2020 11:13:00 Worklist: 92063 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Inj Date: 03-Jun-2020 11:30:00 Worklist: 92063 Sample#: 7

Start Cal Date: 03-Jun-2020 10:08:00 End Cal Date: 03-Jun-2020 11:30:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
29706160	30317354	29823269	28357977	27595025	27438858	**902189**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**27598765**		
5941232	15158677	29823269	113431906	220760198	274388580				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
2 Chloride				Signal: 1					
19729950	18679714	18619227	18447644	18216011	18185359	**1554283**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**18224071**		
19729950	46699286	M93096135	1106858638	2185921343	M3637071770				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
4 Bromide				Signal: 1					
7896295	8405932	8133508	8087968	8008011	8023270	**44686**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8029379**		
1579259	4202966	8133508	32351872	64064086	80232699				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				
6 Sulfate				Signal: 1					
13874566	13779642	13873076	13754129	13516586	13449142	**710720**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**13514778**		
M13874566	M34449105	M69365381	M825247714	M1621990341	2689828489				
92063(2)	92063(3)	92063(4)	92063(5)	92063(6)	92063(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\39.0000.d
Lims ID: 280-137609-F-25
Client ID: G0107-20A
Sample Type: Client
Inject. Date: 29-Jun-2020 23:32:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-039
Misc. Info.: 13534 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 30-Jun-2020 09:07:20 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1016

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.967	1.992	-0.025	1580333	0.0246	
2 Chloride	2.934	2.934	0.000	136261797	7.39	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.759	9.317	-0.558	1554483951	115.0	
7 Orthophosphate as P	13.034	13.175	-0.141	3509817	NC	

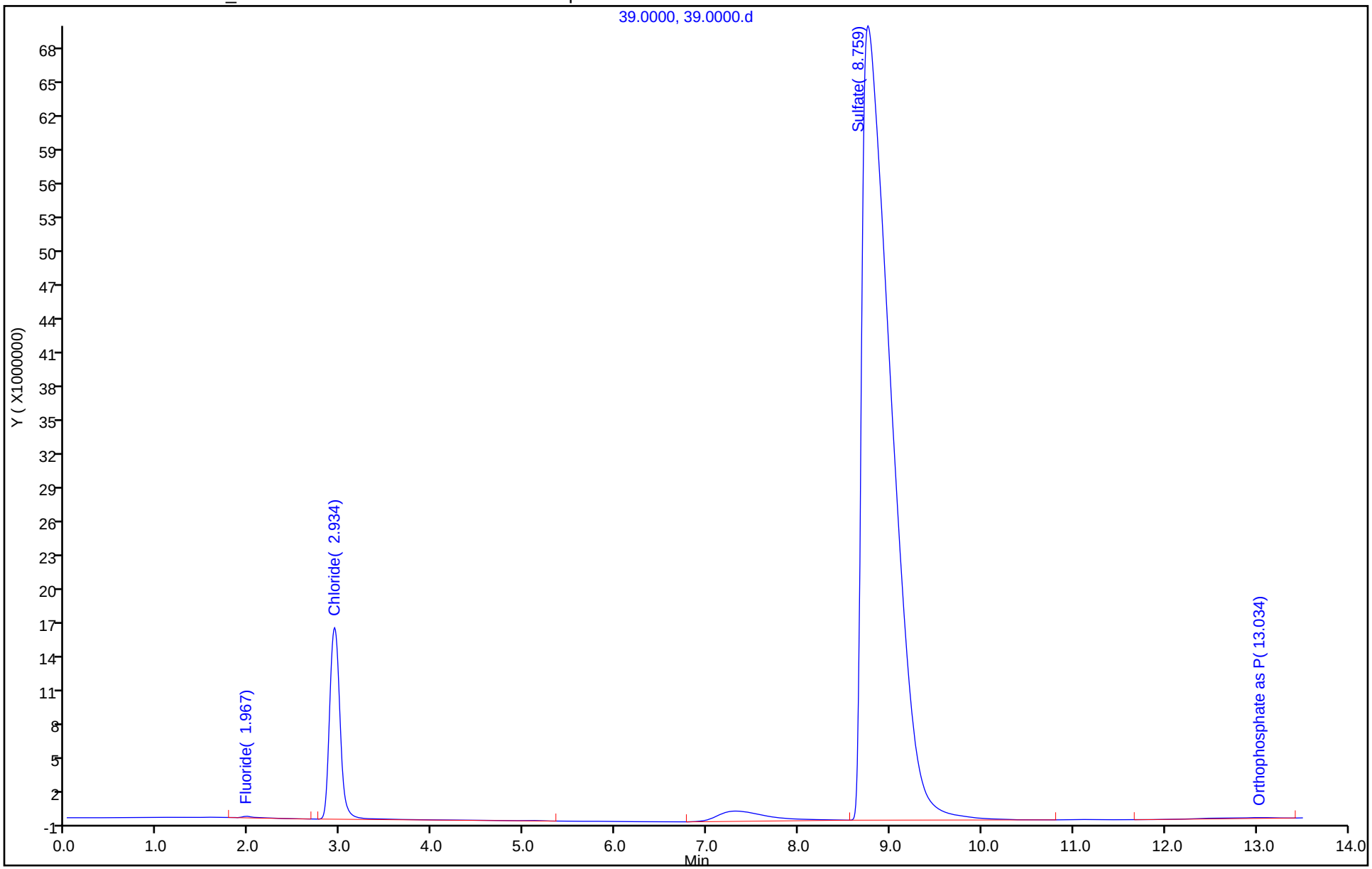
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\39.0000.d				
Injection Date:	29-Jun-2020 23:32:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-25	Lab Sample ID:	280-137609-25	Worklist Smp#:	39
Client ID:	G0107-20A				
Injection Vol:	25.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\40.0000.d
Lims ID: 280-137609-F-28
Client ID: G0106-20A
Sample Type: Client
Inject. Date: 29-Jun-2020 23:48:00 ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-040
Misc. Info.: 9368 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 30-Jun-2020 09:07:20 Calib Date: 03-Jun-2020 11:30:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1016

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.934	1.992	-0.058	1178257	0.0100	
2 Chloride	2.767	2.934	-0.167	121511762	6.58	
3 Nitrite as N		3.384			ND	
4 Bromide	5.100	5.275	-0.175	3364422	0.4134	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.800	9.317	-0.517	1490788157	110.3	
7 Orthophosphate as P	13.292	13.175	0.117	12703	NC	

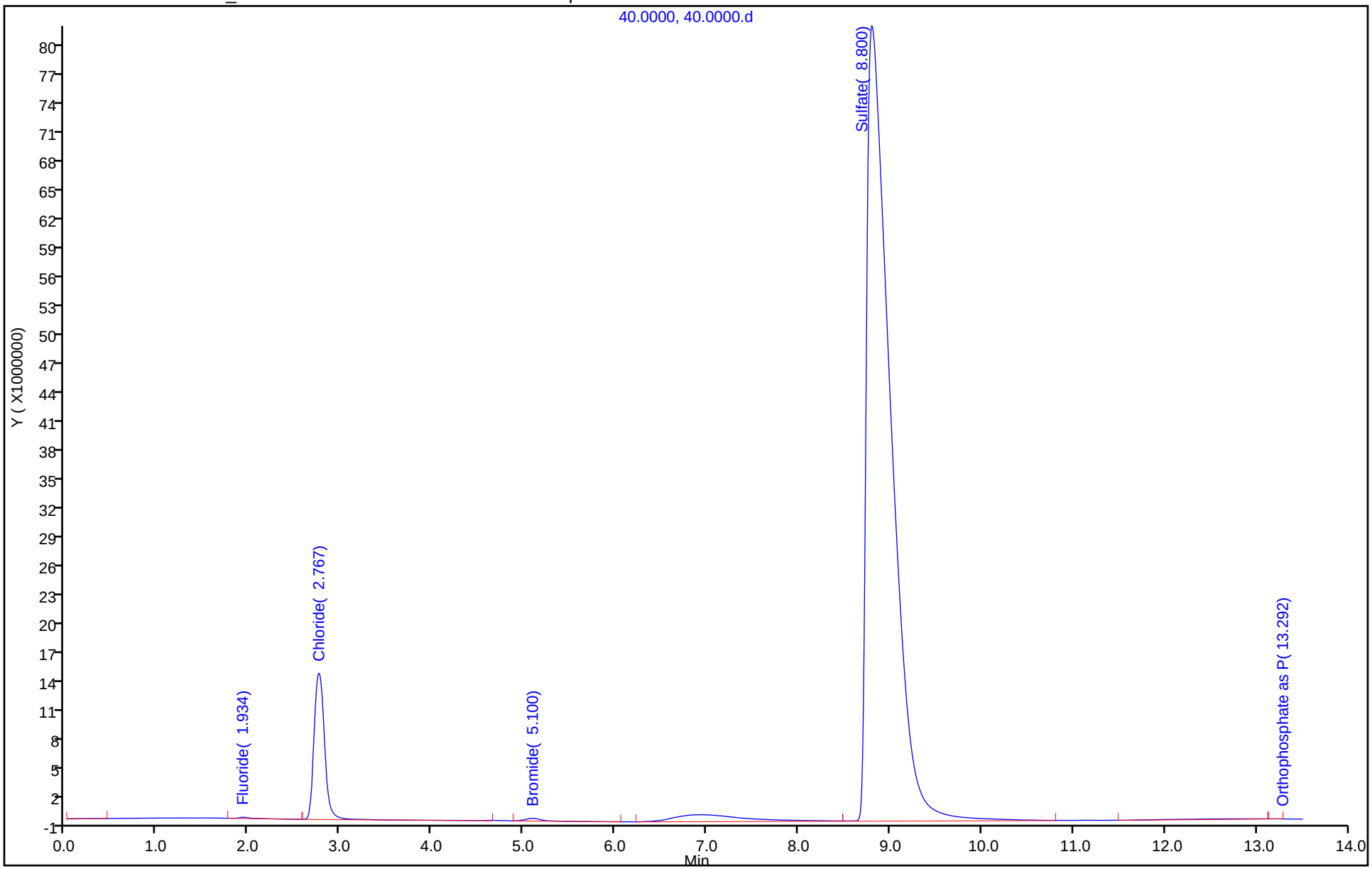
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:24 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\40.0000.d				
Injection Date:	29-Jun-2020 23:48:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-28	Lab Sample ID:	280-137609-28	Worklist Smp#:	40
Client ID:	G0106-20A				
Injection Vol:	25.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



~~SH13~~ ~~SH14~~

	Analysis	Sample Name	Origin	Result	Notes	Status	Date	Vial
1*	NPOC	icv	NPOC.	✓		Defined		1
2*	NPOC	icb	NPOC.	✓		Defined		2
3*	NPOC	LCS 280-500262/1-A	NPOC.	✓		Defined		3
4*	NPOC	MB 280-500262/2-A	NPOC.	✓		Defined		4
5*	NPOC	tic	NPOC.	✓		Defined		5
6*	NPOC	280-137549-D-9-A	NPOC.	7		Defined		6
7*	NPOC	280-137549-D-9-B MS	NPOC.	7		Defined		7
8*	NPOC	280-137549-D-9-C MSD	NPOC.	7		Defined		8
9*	NPOC	280-137549-D-1-A	NPOC.	6		Defined		9
10*	NPOC	280-137549-D-2-A	NPOC.	6		Defined		10
11*	NPOC	280-137549-D-3-A	NPOC.	6	✓	Defined		11
12*	NPOC	280-137549-D-4-A	NPOC.	7		Defined		12
13*	NPOC	280-137549-D-5-A	NPOC.	7		Defined		13
14*	NPOC	280-137549-D-6-A	NPOC.	7		Defined		14
15*	NPOC	ccv	NPOC.	✓		Defined		15
16*	NPOC	ccb	NPOC.	✓		Defined		16
17*	NPOC	280-137549-D-7-A	NPOC.	7		Defined		17
18*	NPOC	280-137549-D-8-A	NPOC.	6		Defined		18
19*	NPOC	280-137549-D-10-A	NPOC.	6		Defined		19
20*	NPOC	280-137609-D-1-A	NPOC.	6		Defined		20
21*	NPOC	280-137609-D-1-B MS	NPOC.	6		Defined		21
22*	NPOC	280-137609-D-1-C MSD	NPOC.	6		Defined		22
23*	NPOC	280-137549-D-11-A	NPOC.	7		Defined		23
24*	NPOC	280-137549-D-12-A	NPOC.	7		Defined		24
25*	NPOC	280-137609-D-2-A	NPOC.	7		Defined		25
26*	NPOC	280-137609-D-3-A	NPOC.	7		Defined		26
27*	NPOC	ccv	NPOC.	✓		Defined		27
28*	NPOC	ccb	NPOC.	✓		Defined		28
29*	NPOC	280-137609-D-4-A	NPOC.	7		Defined		29
30*	NPOC	280-137609-D-5-A	NPOC.	7		Defined		30
31*	NPOC	280-137609-D-6-A	NPOC.	6		Defined		31
32*	NPOC	280-137609-D-7-A	NPOC.	6		Defined		32
33*	NPOC	280-137609-D-8-A	NPOC.	6		Defined		33
34*	NPOC	LCS 280-500262/27-A	NPOC.	✓		Defined		34
35*	NPOC	MB 280-500262/28-A	NPOC.	✓		Defined		35
36*	NPOC	tic	NPOC.	✓		Defined		36
37*	NPOC	280-137609-M-9-A	NPOC.	7		Defined		37
38*	NPOC	280-137609-M-9-B MS	NPOC.	7		Defined		38
39*	NPOC	ccv	NPOC.	✓		Defined		39
40*	NPOC	ccb	NPOC.	✓		Defined		40
41*	NPOC	280-137609-M-9-C MSD	NPOC.	7		Defined		41
42*	NPOC	280-137609-D-16-A	NPOC.	7	✓	Defined		42
43*	NPOC	280-137609-D-17-A	NPOC.	7		Defined		43
44*	NPOC	280-137609-D-18-A	NPOC.	7		Defined		44
45*	NPOC	280-137609-D-19-A	NPOC.	7		Defined		45
46*	NPOC	280-137609-D-20-A	NPOC.	6	Sample a bit dark, but filtered clear	Defined		46
47*	NPOC	280-137609-D-21-A	NPOC.	7		Defined		47
48*	NPOC	280-137609-D-22-A	NPOC.	6		Defined		48
49*	NPOC	280-137609-D-23-A	NPOC.	7		Defined		49
50*	NPOC	280-137609-D-24-A	NPOC.	7		Defined		50
51*	NPOC	ccv	NPOC.	✓		Defined		51

	Analysis	Sample Name	Origin	Result	Notes	Status	Date	Vial
52*	NPOC	ccb	NPOC.	✓		Defined		52
53*	NPOC	280-137609-A-25-A	NPOC.	7		Defined		53
54*	NPOC	ms 280-137609-A-25-A	NPOC.	7		Defined		54
55*	NPOC	msd 280-137609-A-25-A	NPOC.	7		Defined		55
56*	NPOC	280-137609-D-26-A	NPOC.	1	1x Dil - color	Defined		56
57*	NPOC	280-137609-D-27-A	NPOC.	7	2x Dil - color	Defined		57
58*	NPOC	280-137609-D-28-A	NPOC.	7		Defined		58
59*	NPOC	280-137609-D-29-A	NPOC.	7		Defined		59
60*	NPOC	ccv	NPOC.	✓		Defined		60
61*	NPOC	ccb	NPOC.	✓		Defined		61

	Analysis	Sample Name	Origin	Result	Notes	Status	Date / Time	Vial
1	NPOC	icv	NPOC.met	NPOC:19.80m		Completed	6/26/2020 6:3	1
2	NPOC	icb	NPOC.met	NPOC:-0.4678		Completed	6/26/2020 7:0	2
3	NPOC	LCS 280-500262/1-A	NPOC.met	NPOC:25.52m		Completed	6/26/2020 7:3	3
4	NPOC	MB 280-500262/2-A	NPOC.met	NPOC:-0.2855		Completed	6/26/2020 7:5	4
5	NPOC	tic	NPOC.met	NPOC:-0.4000		Completed	6/26/2020 8:1	5
6	NPOC	280-137549-D-9-A	NPOC.met	NPOC:5.610m		Completed	6/26/2020 8:3	6
7	NPOC	280-137549-D-9-B MS	NPOC.met	NPOC:32.44m		Completed	6/26/2020 9:0	7
8	NPOC	280-137549-D-9-C MSD	NPOC.met	NPOC:32.41m		Completed	6/26/2020 9:2	8
9	NPOC	280-137549-D-1-A	NPOC.met	NPOC:6.485m		Completed	6/26/2020 9:4	9
10	NPOC	280-137549-D-2-A	NPOC.met	NPOC:5.681m		Completed	6/26/2020 10:	10
11	NPOC	280-137549-D-3-A	NPOC.met	NPOC:5.411m		Completed	6/26/2020 10:	11
12	NPOC	280-137549-D-4-A	NPOC.met	NPOC:4.051m		Completed	6/26/2020 10:	12
13	NPOC	280-137549-D-5-A	NPOC.met	NPOC:9.243m		Completed	6/26/2020 11:	13
14	NPOC	280-137549-D-6-A	NPOC.met	NPOC:10.74m		Completed	6/26/2020 11:	14
15	NPOC	ccv	NPOC.met	NPOC:25.90m		Completed	6/27/2020 12:	15
16	NPOC	ccb	NPOC.met	NPOC:-0.4292		Completed	6/27/2020 12:	16
17	NPOC	280-137549-D-7-A	NPOC.met	NPOC:2.532m		Completed	6/27/2020 1:0	17
18	NPOC	280-137549-D-8-A	NPOC.met	NPOC:0.9639		Completed	6/27/2020 1:3	18
19	NPOC	280-137549-D-10-A	NPOC.met	NPOC:1.712m		Completed	6/27/2020 1:5	19
20	NPOC	280-137609-D-1-A	NPOC.met	NPOC:3.148m		Completed	6/27/2020 2:2	20
21	NPOC	280-137609-D-1-B MS	NPOC.met	NPOC:29.84m		Completed	6/27/2020 2:4	21
22	NPOC	280-137609-D-1-C MSD	NPOC.met	NPOC:29.74m		Completed	6/27/2020 3:1	22
23	NPOC	280-137549-D-11-A	NPOC.met	NPOC:5.791m		Completed	6/27/2020 3:3	23
24	NPOC	280-137549-D-12-A	NPOC.met	NPOC:2.272m		Completed	6/27/2020 4:0	24
25	NPOC	280-137609-D-2-A	NPOC.met	NPOC:9.966m		Completed	6/27/2020 4:2	25
26	NPOC	280-137609-D-3-A	NPOC.met	NPOC:4.288m		Completed	6/27/2020 4:5	26
27	NPOC	ccv	NPOC.met	NPOC:26.30m		Completed	6/27/2020 5:1	27
28	NPOC	ccb	NPOC.met	NPOC:-0.4325		Completed	6/27/2020 5:3	28
29	NPOC	280-137609-D-4-A	NPOC.met	NPOC:2.761m		Completed	6/27/2020 6:0	29
30	NPOC	280-137609-D-5-A	NPOC.met	NPOC:8.860m		Completed	6/27/2020 12:	30
31	NPOC	280-137609-D-6-A	NPOC.met	NPOC:6.563m		Completed	6/27/2020 12:	31
32	NPOC	280-137609-D-7-A	NPOC.met	NPOC:5.126m		Completed	6/27/2020 1:2	32
33	NPOC	280-137609-D-8-A	NPOC.met	NPOC:7.140m		Completed	6/27/2020 1:5	33
34	NPOC	LCS 280-500262/27-A	NPOC.met	NPOC:26.39m		Completed	6/27/2020 2:1	34
35	NPOC	MB 280-500262/28-A	NPOC.met	NPOC:-0.2912		Completed	6/27/2020 2:3	35
36	NPOC	tic	NPOC.met	NPOC:-0.4030		Completed	6/27/2020 2:5	36
37	NPOC	280-137609-M-9-A	NPOC.met	NPOC:3.949m		Completed	6/27/2020 3:2	37
38	NPOC	280-137609-M-9-B MS	NPOC.met	NPOC:30.27m		Completed	6/27/2020 3:4	38
39	NPOC	ccv	NPOC.met	NPOC:26.34m		Completed	6/27/2020 4:0	39
40	NPOC	ccb	NPOC.met	NPOC:-0.3259		Completed	6/27/2020 4:2	40
41	NPOC	280-137609-M-9-C MSD	NPOC.met	NPOC:30.19m		Completed	6/27/2020 4:5	41
42	NPOC	280-137609-D-16-A	NPOC.met	NPOC:13.49m		Completed	6/27/2020 5:1	42
43	NPOC	280-137609-D-17-A	NPOC.met	NPOC:9.777m		Completed	6/27/2020 5:3	43
44	NPOC	280-137609-D-18-A	NPOC.met	NPOC:4.962m		Completed	6/27/2020 5:5	44
45	NPOC	280-137609-D-19-A	NPOC.met	NPOC:5.269m		Completed	6/27/2020 6:2	45
46	NPOC	280-137609-D-20-A	NPOC.met	NPOC:15.67m		Completed	6/27/2020 6:4	46
47	NPOC	280-137609-D-21-A	NPOC.met	NPOC:10.34m		Completed	6/27/2020 7:0	47
48	NPOC	280-137609-D-22-A	NPOC.met	NPOC:8.004m		Completed	6/27/2020 7:2	48
49	NPOC	280-137609-D-23-A	NPOC.met	NPOC:7.898m		Completed	6/27/2020 7:5	49
50	NPOC	280-137609-D-24-A	NPOC.met	NPOC:88.17m		Completed	6/27/2020 8:2	50
51	NPOC	ccv	NPOC.met	NPOC:26.37m		Completed	6/27/2020 9:0	51
52	NPOC	ccb	NPOC.met	NPOC:-0.3845		Completed	6/27/2020 9:2	52
53	NPOC	280-137609-A-25-A	NPOC.met	NPOC:4.099m		Completed	6/27/2020 9:4	53

	Analysis	Sample Name	Origin	Result	Notes	Status	Date / Time	Vial
54	NPOC	ms 280-137609-A-25-A	NPOC.met	NPOC:31.24m		Completed	6/27/2020 10:	54
55	NPOC	msd 280-137609-A-25-A	NPOC.met	NPOC:31.35m		Completed	6/27/2020 10:	55
56	NPOC	280-137609-D-26-A	NPOC.met	NPOC:22.83m		Completed	6/27/2020 10:	56
57	NPOC	280-137609-D-27-A	NPOC.met	NPOC:24.58m		Completed	6/27/2020 11:	57
58	NPOC	280-137609-D-28-A	NPOC.met	NPOC:3.864m		Completed	6/27/2020 11:	58
59	NPOC	280-137609-D-29-A	NPOC.met	NPOC:11.93m		Completed	6/28/2020 12:	59
60	NPOC	ccv	NPOC.met	NPOC:26.66m		Completed	6/28/2020 12:	60
61	NPOC	ccb	NPOC.met	NPOC:-0.3695		Completed	6/28/2020 12:	61

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥NPOC.2020_06_15_14_56_20.cal

Date of Creation 4:11:58 PM 6/15/2020
User sgb
System TOC-V CPN

Cal. Curve

Sample Name: cal
Sample ID:
Object ID 0A-100612-04635090-1343CA723828-0000
Cal. Curve: NPOC.2020_06_15_14_56_20.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6345	50uL	1	*******	E	6/15/2020 3:05:05 PM
2	2.558	50uL	1	*******		6/15/2020 3:07:11 PM
3	2.840	50uL	1	*******	E	6/15/2020 3:09:22 PM
4	2.342	50uL	1	*******		6/15/2020 3:11:28 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 2.450
SD Area 0.1527
CV Area 6.23%
Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.629	50uL	1	*******	E	6/15/2020 3:19:57 PM
2	6.139	50uL	1	*******		6/15/2020 3:22:03 PM
3	4.772	50uL	1	*******	E	6/15/2020 3:24:09 PM
4	6.011	50uL	1	*******		6/15/2020 3:26:14 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 6.075
SD Area 0.09051
CV Area 1.49%
Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.91	50uL	1	*******	E	6/15/2020 3:34:55 PM
2	16.89	50uL	1	*******		6/15/2020 3:37:01 PM
3	16.43	50uL	1	*******		6/15/2020 3:39:07 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 16.66
SD Area 0.3253
CV Area 1.95%
Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	33.12	50uL	1	*******		6/15/2020 3:47:50 PM
2	32.65	50uL	1	*******		6/15/2020 3:49:56 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 32.89
SD Area 0.3323
CV Area 1.01%
Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	79.57	50uL	1	*******		6/15/2020 3:58:49 PM
2	78.98	50uL	1	*******		6/15/2020 4:00:59 PM

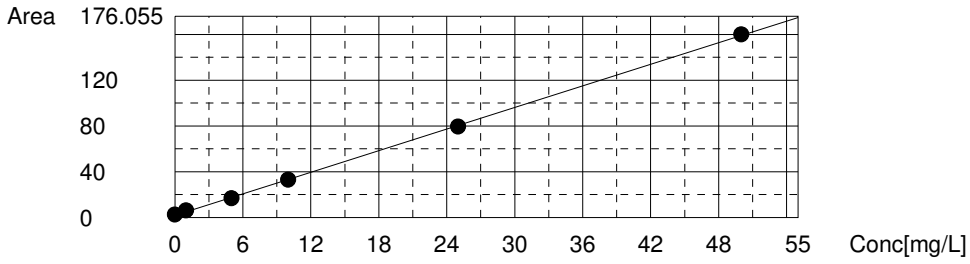
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 79.28
SD Area 0.4172
CV Area 0.53%
Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	159.6	50uL	1	*******		6/15/2020 4:09:45 PM
2	160.5	50uL	1	*******		6/15/2020 4:11:58 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 160.1
SD Area 0.6364
CV Area 0.40%
Vial 6

Slope: 3.149
Intercept 1.799
r^2 0.9997
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	

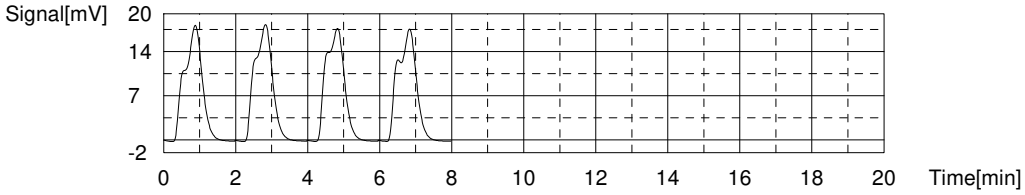
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.59	19.62mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:25:50 PM
2	64.32	19.85mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:30:33 PM
3	64.42	19.88mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:35:14 PM
4	64.32	19.85mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:39:58 PM

Mean Area 64.16
Mean Conc. 19.80mg/L



Sample

Sample Name:	icb
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

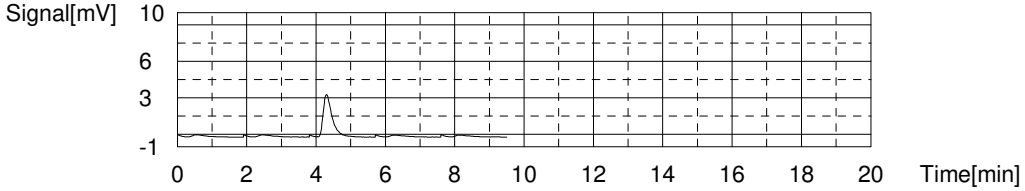
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4678mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3384	-0.4638mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:48:32 PM
2	0.3351	-0.4648mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:53:09 PM
3	6.237	1.409mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/26/2020 6:57:46 PM
4	0.3274	-0.4673mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:02:23 PM
5	0.3023	-0.4752mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:07:00 PM

Mean Area 0.3258
Mean Conc. -0.4678mg/L



Sample

Sample Name: LCS 280-500262/1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

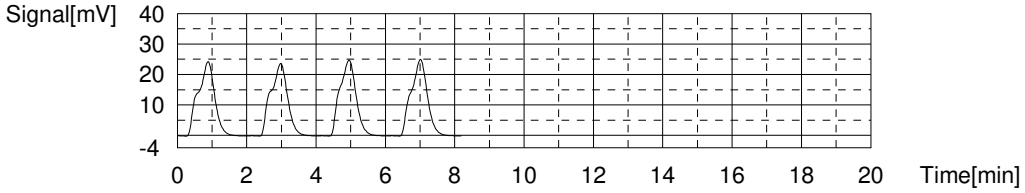
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.39	25.59mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:15:47 PM
2	81.37	25.26mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:20:31 PM
3	82.08	25.49mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:25:15 PM
4	82.87	25.74mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:30:00 PM

Mean Area 82.18
Mean Conc. 25.52mg/L



Sample

Sample Name: MB 280-500262/2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

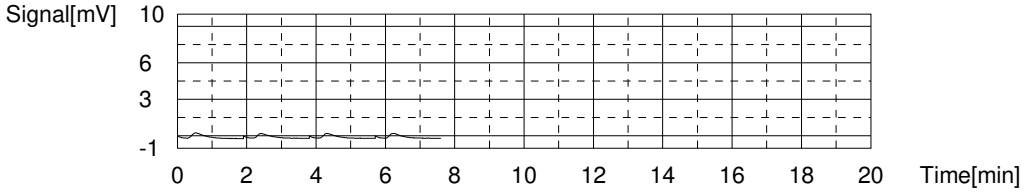
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.2855mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.019	-0.2477mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:38:34 PM
2	0.8789	-0.2922mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:43:11 PM
3	0.8695	-0.2952mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:47:48 PM
4	0.8327	-0.3068mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 7:52:25 PM

Mean Area 0.9000
Mean Conc. -0.2855mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

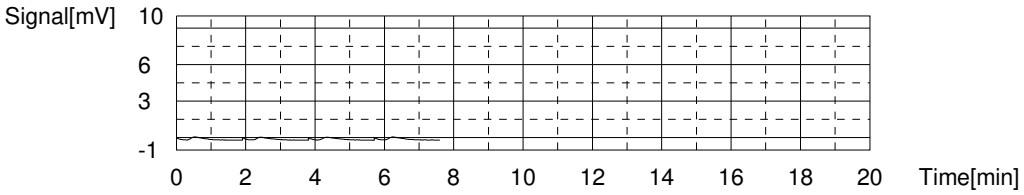
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5212	-0.4057mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:00:59 PM
2	0.5185	-0.4066mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:05:36 PM
3	0.5725	-0.3895mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:10:13 PM
4	0.5447	-0.3983mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:14:50 PM

Mean Area 0.5392
Mean Conc. -0.4000mg/L



Sample

Sample Name: 280-137549-D-9-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

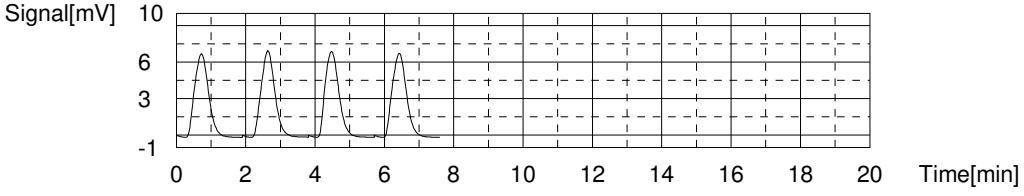
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.610mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.34	5.570mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:23:24 PM
2	19.53	5.630mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:28:01 PM
3	19.46	5.608mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:32:38 PM
4	19.54	5.633mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:37:15 PM

Mean Area 19.47
Mean Conc. 5.610mg/L



Sample

Sample Name: 280-137549-D-9-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

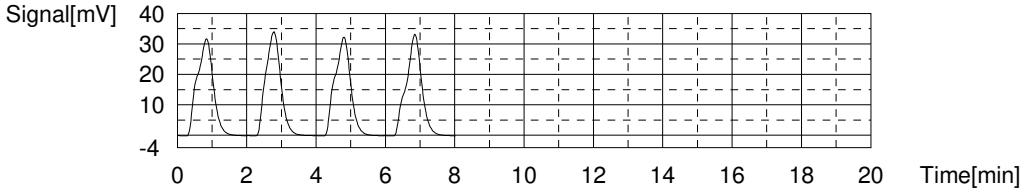
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.44mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.0	32.45mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:45:55 PM
2	104.2	32.51mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:50:36 PM
3	103.5	32.29mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 8:55:19 PM
4	104.2	32.51mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:00:05 PM

Mean Area 104.0
Mean Conc. 32.44mg/L



Sample

Sample Name: 280-137549-D-9-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

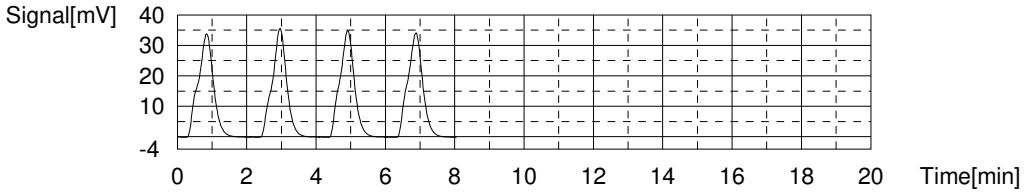
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	105.2	32.83mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:08:52 PM
2	103.9	32.42mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:13:34 PM
3	102.9	32.10mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:18:14 PM
4	103.5	32.29mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:22:57 PM

Mean Area 103.9
Mean Conc. 32.41mg/L



Sample

Sample Name: 280-137549-D-1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

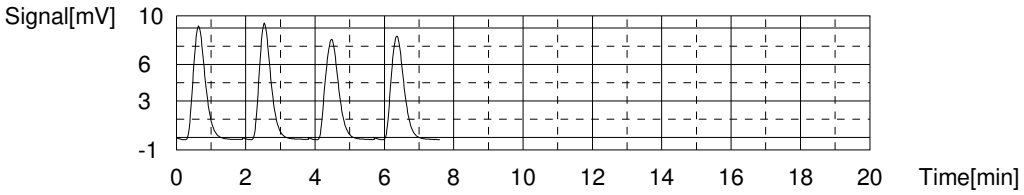
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.485mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.67	6.627mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:31:31 PM
2	22.37	6.532mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:36:08 PM
3	21.92	6.389mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:40:45 PM
4	21.93	6.392mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:45:22 PM

Mean Area 22.22
Mean Conc. 6.485mg/L



Sample

Sample Name: 280-137549-D-2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

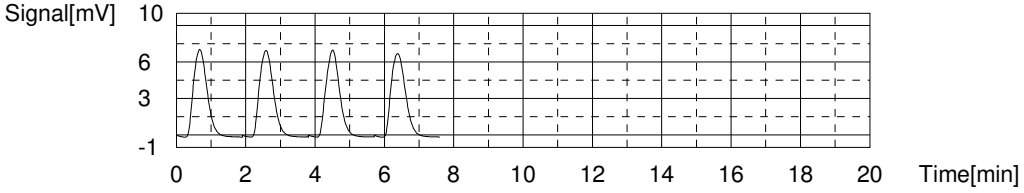
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.681mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.63	5.662mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:53:56 PM
2	19.88	5.741mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 9:58:33 PM
3	19.54	5.633mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:03:10 PM
4	19.72	5.690mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:07:47 PM

Mean Area 19.69
Mean Conc. 5.681mg/L



Sample

Sample Name: 280-137549-D-3-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

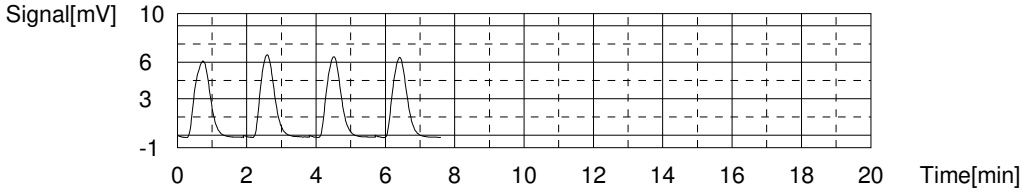
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.411mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.13	5.503mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:16:21 PM
2	18.81	5.401mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:20:58 PM
3	18.88	5.423mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:25:35 PM
4	18.54	5.315mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:30:12 PM

Mean Area 18.84
Mean Conc. 5.411mg/L



Sample

Sample Name: 280-137549-D-4-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

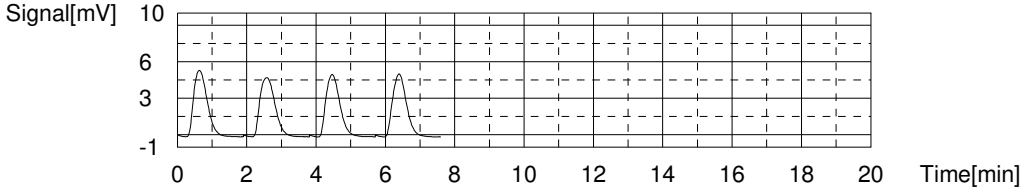
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.051mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.86	4.147mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:38:46 PM
2	14.68	4.090mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:43:23 PM
3	14.30	3.969mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:48:00 PM
4	14.39	3.998mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 10:52:37 PM

Mean Area 14.56
Mean Conc. 4.051mg/L



Sample

Sample Name: 280-137549-D-5-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

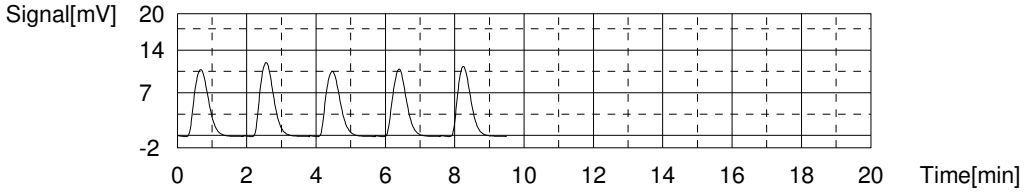
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.243mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.55	9.446mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:01:11 PM
2	33.36	10.02mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:05:48 PM
3	30.86	9.227mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:10:25 PM
4	30.74	9.189mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:15:02 PM
5	30.49	9.110mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:19:39 PM

Mean Area 30.91
Mean Conc. 9.243mg/L



Sample

Sample Name: 280-137549-D-6-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

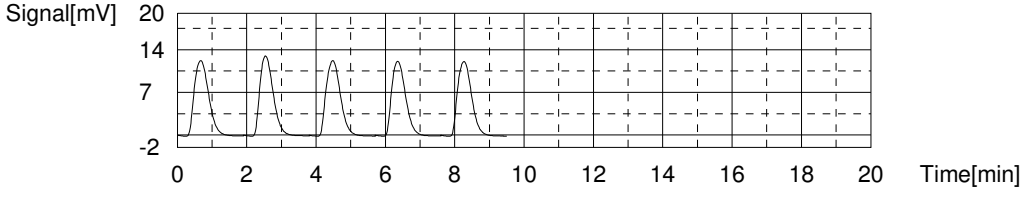
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.23	10.93mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:28:13 PM
2	35.54	10.71mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:32:50 PM
3	35.94	10.84mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:37:27 PM
4	34.42	10.36mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:42:04 PM
5	34.75	10.46mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:46:41 PM

Mean Area 35.62
Mean Conc. 10.74mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

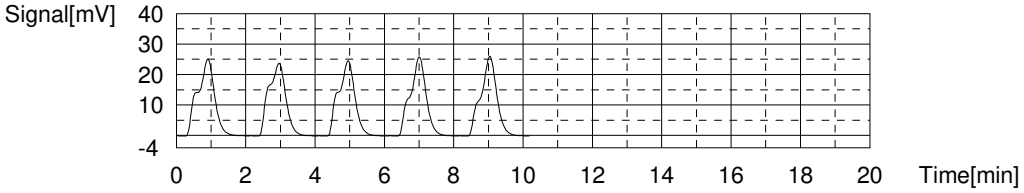
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.74	26.97mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/26/2020 11:55:27 PM
2	83.08	25.81mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:00:09 AM
3	82.46	25.61mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:04:54 AM
4	83.41	25.91mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:09:38 AM
5	84.59	26.29mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:14:24 AM

Mean Area 83.39
Mean Conc. 25.90mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

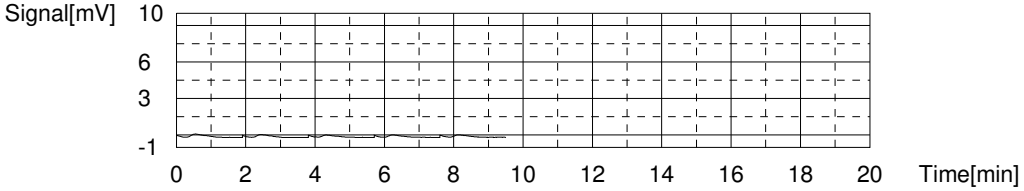
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4292mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7104	-0.3457mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:22:58 AM
2	0.5506	-0.3964mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:27:35 AM
3	0.3916	-0.4469mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:32:12 AM
4	0.4286	-0.4351mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:36:49 AM
5	0.4190	-0.4382mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:41:26 AM

Mean Area 0.4475
Mean Conc. -0.4292mg/L



Sample

Sample Name: 280-137549-D-7-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

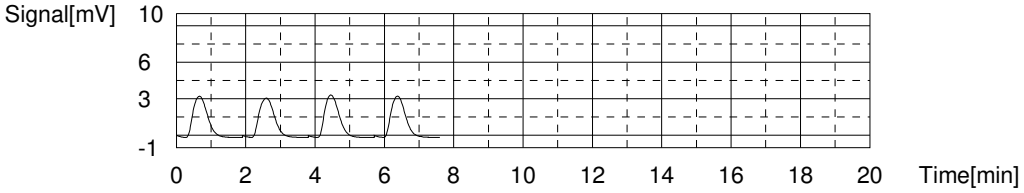
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.532mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.700	2.509mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:50:00 AM
2	9.741	2.522mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:54:37 AM
3	9.956	2.590mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:59:14 AM
4	9.701	2.509mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:03:51 AM

Mean Area 9.775
Mean Conc. 2.532mg/L



Sample

Sample Name: 280-137549-D-8-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

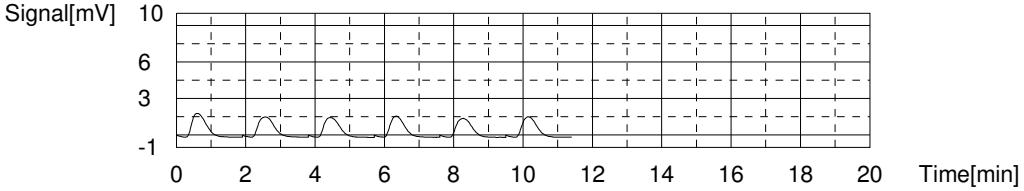
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9639mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.491	1.172mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:12:25 AM
2	5.172	1.071mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:17:02 AM
3	4.936	0.9960mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:21:39 AM
4	4.782	0.9471mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:26:16 AM
5	4.744	0.9351mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:30:53 AM
6	4.877	0.9773mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:35:30 AM

Mean Area 4.835
Mean Conc. 0.9639mg/L



Sample

Sample Name: 280-137549-D-10-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

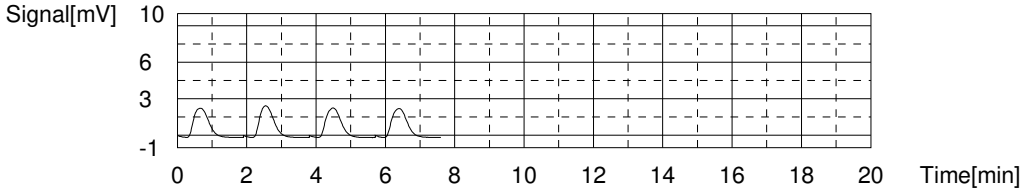
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.712mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.151	1.699mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:44:04 AM
2	7.206	1.717mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:48:41 AM
3	7.237	1.727mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:53:18 AM
4	7.169	1.705mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:57:55 AM

Mean Area 7.191
Mean Conc. 1.712mg/L



Sample

Sample Name: 280-137609-D-1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

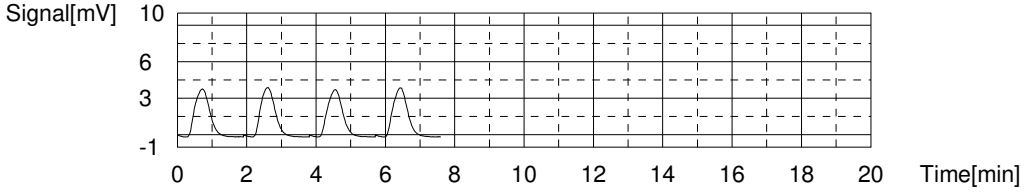
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.148mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.75	3.160mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:06:29 AM
2	11.64	3.125mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:11:06 AM
3	11.69	3.141mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:15:43 AM
4	11.77	3.166mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:20:20 AM

Mean Area 11.71
Mean Conc. 3.148mg/L



Sample

Sample Name: 280-137609-D-1-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

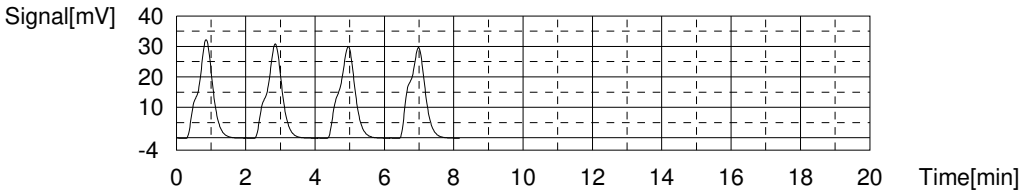
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.34	30.02mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:28:58 AM
2	95.35	29.70mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:33:47 AM
3	96.45	30.05mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:38:35 AM
4	94.92	29.57mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:43:19 AM

Mean Area 95.77
Mean Conc. 29.84mg/L



Sample

Sample Name: 280-137609-D-1-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

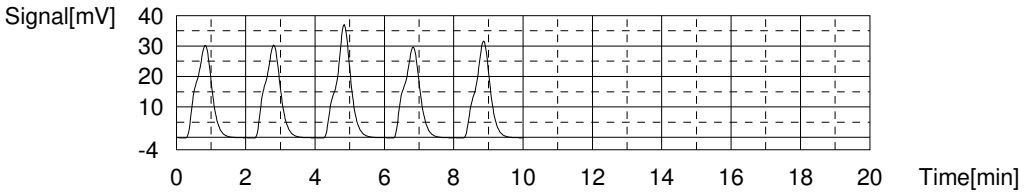
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.46	30.06mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:52:09 AM
2	95.16	29.64mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:56:51 AM
3	108.7	33.94mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:01:35 AM
4	95.39	29.72mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:06:19 AM
5	94.86	29.55mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:11:03 AM

Mean Area 95.47
Mean Conc. 29.74mg/L



Sample

Sample Name: 280-137549-D-11-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

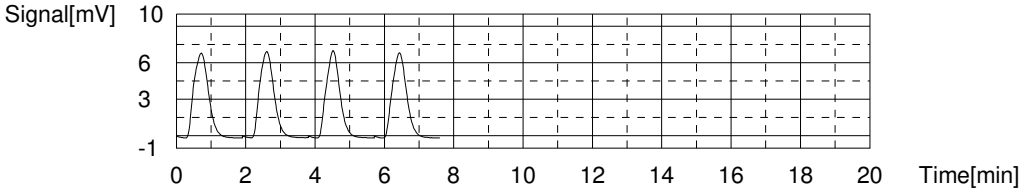
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.791mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.51	5.941mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:19:37 AM
2	20.12	5.817mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:24:14 AM
3	19.57	5.643mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:28:51 AM
4	19.95	5.763mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:33:28 AM

Mean Area 20.04
Mean Conc. 5.791mg/L



Sample

Sample Name: 280-137549-D-12-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

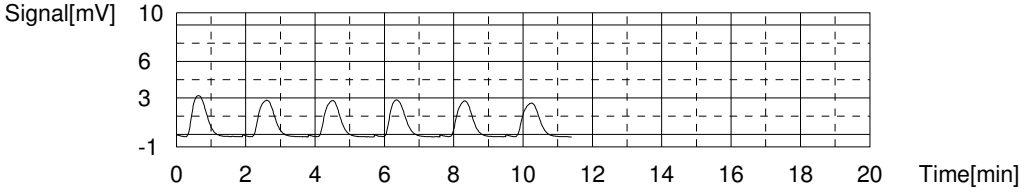
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.272mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.547	2.460mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:42:02 AM
2	9.345	2.396mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:46:39 AM
3	8.966	2.276mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:51:16 AM
4	8.932	2.265mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:55:53 AM
5	8.913	2.259mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:00:30 AM
6	9.010	2.290mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:05:07 AM

Mean Area 8.955
Mean Conc. 2.272mg/L



Sample

Sample Name: 280-137609-D-2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

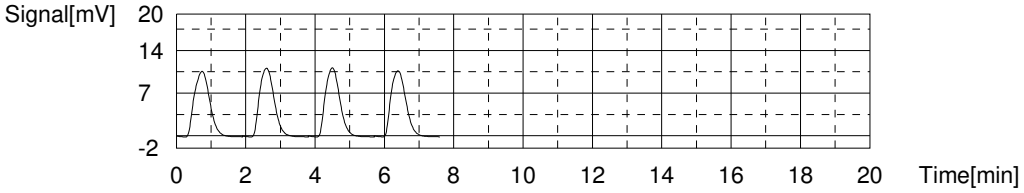
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.966mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.66	10.12mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:13:41 AM
2	33.36	10.02mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:18:18 AM
3	33.05	9.923mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:22:55 AM
4	32.67	9.802mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:27:32 AM

Mean Area 33.19
Mean Conc. 9.966mg/L



Sample

Sample Name: 280-137609-D-3-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

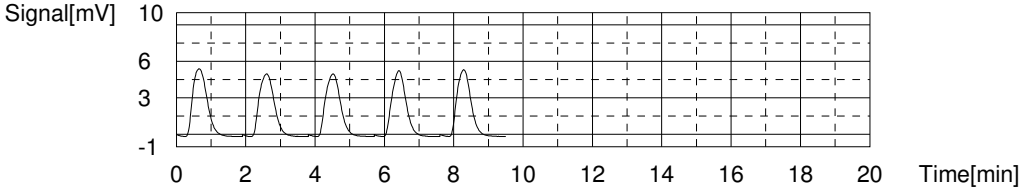
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.288mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.14	4.553mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:36:06 AM
2	15.42	4.325mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:40:43 AM
3	15.29	4.284mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:45:20 AM
4	15.22	4.261mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:49:57 AM
5	15.28	4.280mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:54:34 AM

Mean Area 15.30
Mean Conc. 4.288mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

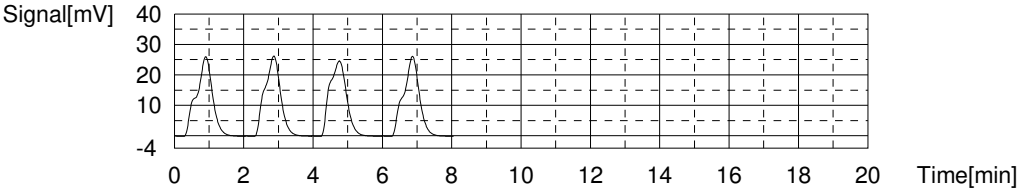
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.27	26.50mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:03:16 AM
2	84.36	26.21mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:07:54 AM
3	84.82	26.36mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:12:39 AM
4	84.07	26.12mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:17:26 AM

Mean Area 84.63
Mean Conc. 26.30mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

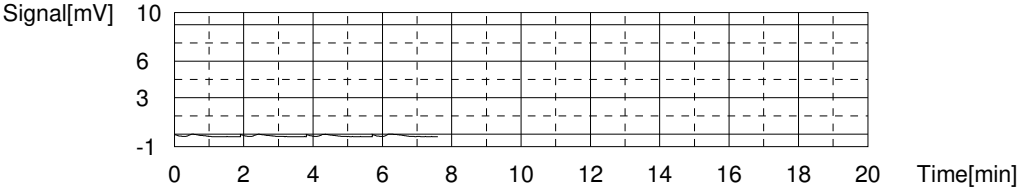
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4325mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4229	-0.4370mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:26:00 AM
2	0.4140	-0.4398mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:30:37 AM
3	0.3848	-0.4491mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:35:14 AM
4	0.5263	-0.4041mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:39:51 AM

Mean Area 0.4370
Mean Conc. -0.4325mg/L



Sample

Sample Name: 280-137609-D-4-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

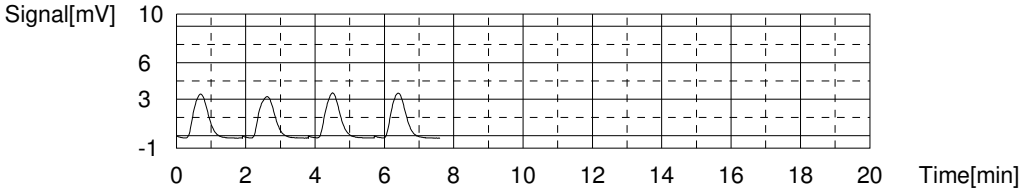
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.761mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.41	2.734mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:48:25 AM
2	10.49	2.760mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:53:02 AM
3	10.51	2.766mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:57:39 AM
4	10.57	2.785mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:02:16 AM

Mean Area 10.49
Mean Conc. 2.761mg/L



Sample

Sample Name: 280-137609-D-5-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

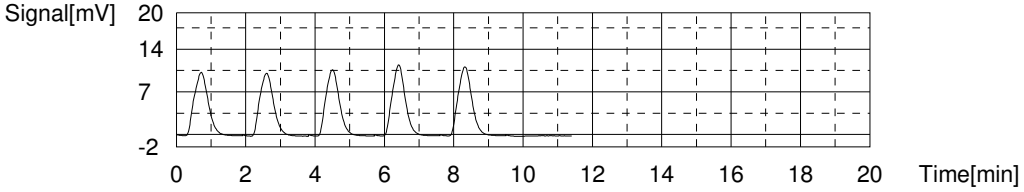
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.860mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.60	8.827mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:11:53 PM
2	28.86	8.592mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:16:30 PM
3	29.57	8.818mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:21:07 PM
4	30.78	9.202mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:25:44 PM
5	31.37	9.389mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:30:21 PM
6	0.000	-0.5712mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:34:58 PM

Mean Area 29.70
Mean Conc. 8.860mg/L



Sample

Sample Name: 280-137609-D-6-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

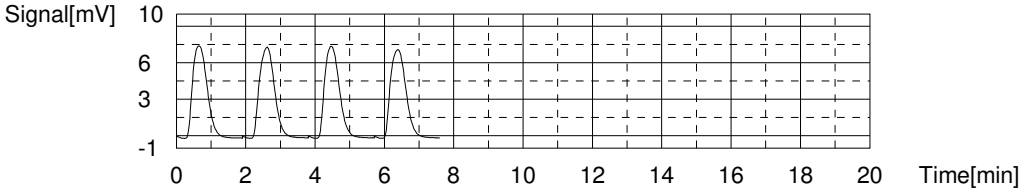
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.563mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.26	6.497mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:43:32 PM
2	22.68	6.630mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:48:09 PM
3	22.31	6.513mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:52:46 PM
4	22.62	6.611mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 12:57:23 PM

Mean Area 22.47
Mean Conc. 6.563mg/L



Sample

Sample Name: 280-137609-D-7-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

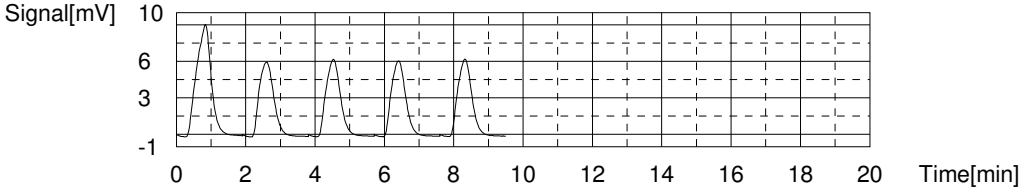
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.126mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.29	8.094mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:05:58 PM
2	17.83	5.090mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:10:35 PM
3	18.20	5.208mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:15:12 PM
4	17.81	5.084mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:19:49 PM
5	17.93	5.122mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:24:26 PM

Mean Area 17.94
Mean Conc. 5.126mg/L



Sample

Sample Name: 280-137609-D-8-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

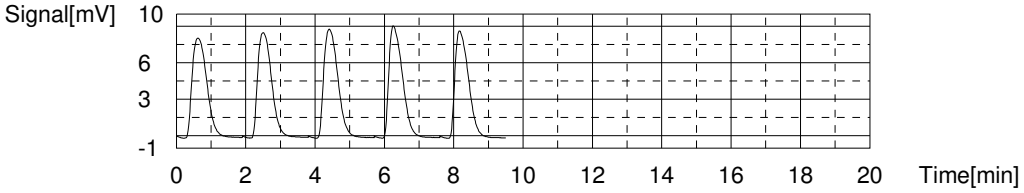
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.140mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.31	7.148mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:33:01 PM
2	24.01	7.052mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:37:38 PM
3	25.22	7.436mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:42:15 PM
4	24.93	7.344mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:46:52 PM
5	23.90	7.017mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 1:51:29 PM

Mean Area 24.29
Mean Conc. 7.140mg/L



Sample

Sample Name: LCS 280-500262/27-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

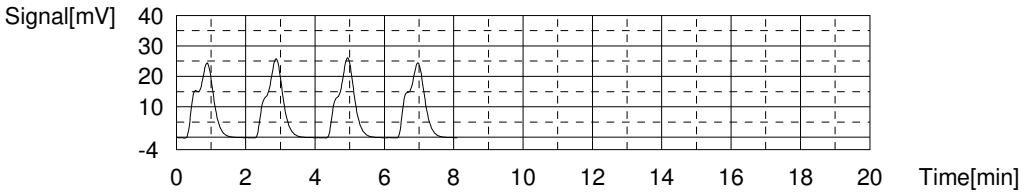
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.39mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.36	26.53mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:00:10 PM
2	85.28	26.51mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:04:57 PM
3	84.79	26.35mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:09:42 PM
4	84.22	26.17mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:14:25 PM

Mean Area 84.91
Mean Conc. 26.39mg/L



Sample

Sample Name: MB 280-500262/28-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

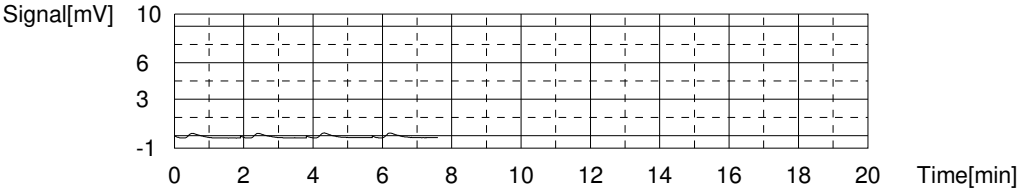
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.2912mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8859	-0.2899mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:23:00 PM
2	0.8740	-0.2937mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:27:37 PM
3	0.8740	-0.2937mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:32:14 PM
4	0.8934	-0.2876mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:36:51 PM

Mean Area 0.8818
Mean Conc. -0.2912mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

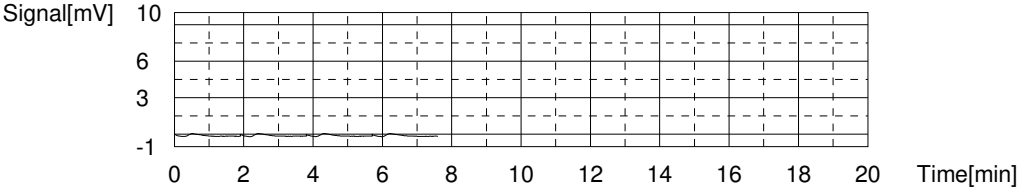
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4030mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5167	-0.4072mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:45:26 PM
2	0.5636	-0.3923mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:50:03 PM
3	0.4835	-0.4177mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:54:40 PM
4	0.5554	-0.3949mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 2:59:17 PM

Mean Area 0.5298
Mean Conc. -0.4030mg/L



Sample

Sample Name: 280-137609-M-9-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

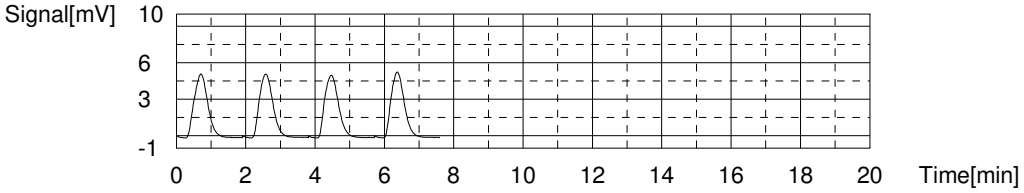
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.949mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.34	3.982mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:07:52 PM
2	14.12	3.912mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:12:29 PM
3	14.21	3.941mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:17:06 PM
4	14.27	3.960mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:21:43 PM

Mean Area 14.24
Mean Conc. 3.949mg/L



Sample

Sample Name: 280-137609-M-9-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

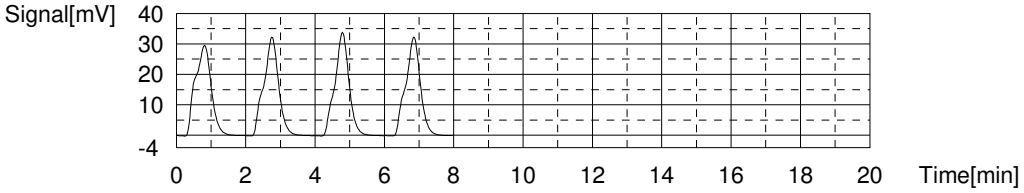
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.73	30.14mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:30:19 PM
2	97.75	30.47mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:35:04 PM
3	97.42	30.36mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:39:50 PM
4	96.59	30.10mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:44:31 PM

Mean Area 97.12
Mean Conc. 30.27mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

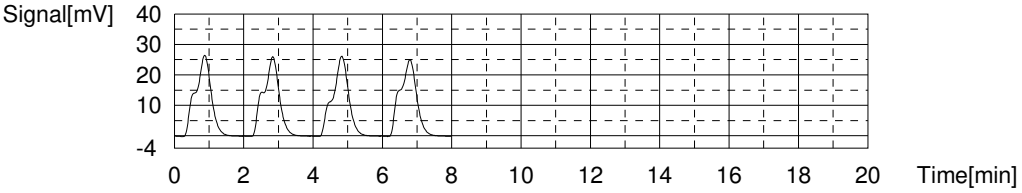
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.48	26.57mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:53:10 PM
2	84.09	26.13mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 3:57:50 PM
3	84.51	26.26mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:02:34 PM
4	84.99	26.41mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:07:20 PM

Mean Area 84.77
Mean Conc. 26.34mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

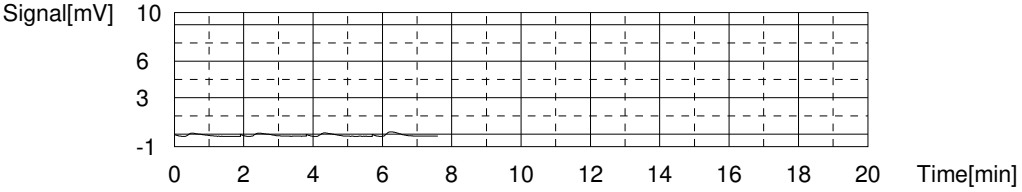
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3259mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7532	-0.3321mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:15:55 PM
2	0.7114	-0.3454mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:20:32 PM
3	0.7136	-0.3447mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:25:09 PM
4	0.9128	-0.2814mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:29:46 PM

Mean Area 0.7728
Mean Conc. -0.3259mg/L



Sample

Sample Name: 280-137609-M-9-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

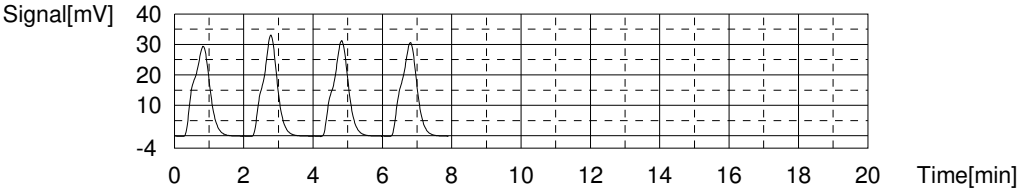
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.79	30.16mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:38:25 PM
2	96.85	30.18mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:43:09 PM
3	97.20	30.29mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:47:51 PM
4	96.66	30.12mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 4:52:30 PM

Mean Area 96.88
Mean Conc. 30.19mg/L



Sample

Sample Name: 280-137609-D-16-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

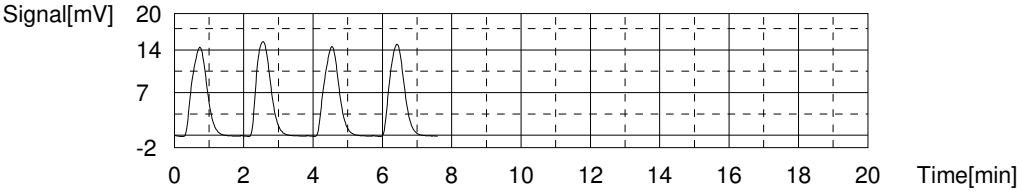
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.49mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.22	13.47mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:01:05 PM
2	44.53	13.57mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:05:42 PM
3	43.91	13.37mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:10:19 PM
4	44.49	13.56mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:14:56 PM

Mean Area 44.29
Mean Conc. 13.49mg/L



Sample

Sample Name: 280-137609-D-17-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

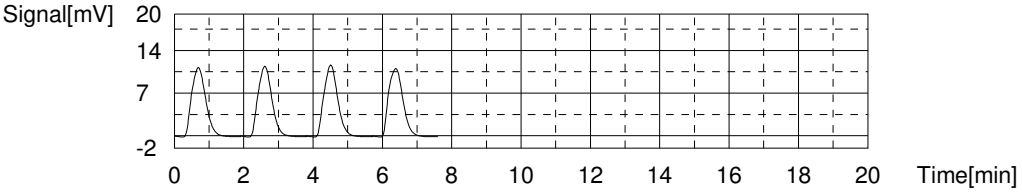
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.777mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.54	9.761mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:23:31 PM
2	32.42	9.723mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:28:08 PM
3	32.79	9.840mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:32:45 PM
4	32.62	9.786mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:37:22 PM

Mean Area 32.59
Mean Conc. 9.777mg/L



Sample

Sample Name: 280-137609-D-18-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

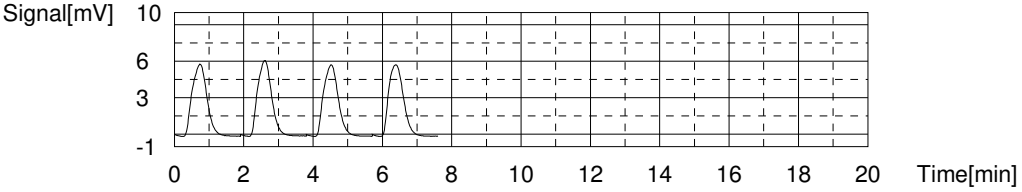
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.962mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.57	5.008mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:45:57 PM
2	17.53	4.995mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:50:34 PM
3	17.17	4.881mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:55:11 PM
4	17.44	4.966mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 5:59:48 PM

Mean Area 17.43
Mean Conc. 4.962mg/L



Sample

Sample Name: 280-137609-D-19-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

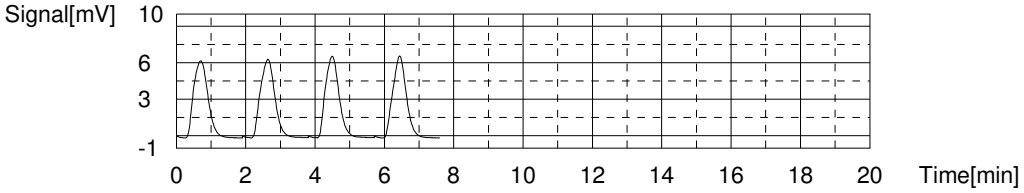
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.269mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.34	5.252mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:08:23 PM
2	18.61	5.338mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:13:00 PM
3	18.30	5.239mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:17:37 PM
4	18.33	5.249mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:22:14 PM

Mean Area 18.40
Mean Conc. 5.269mg/L



Sample

Sample Name: 280-137609-D-20-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

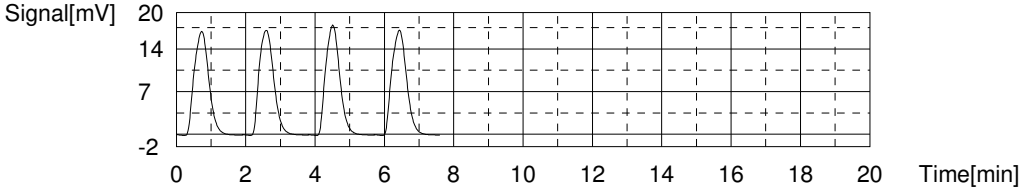
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.62	15.50mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:30:49 PM
2	50.81	15.56mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:35:26 PM
3	51.62	15.82mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:40:03 PM
4	51.50	15.78mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:44:40 PM

Mean Area 51.14
Mean Conc. 15.67mg/L



Sample

Sample Name: 280-137609-D-21-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

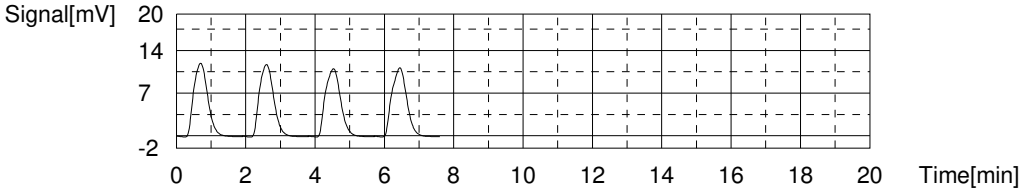
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.43	10.36mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:53:15 PM
2	34.37	10.34mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 6:57:52 PM
3	34.39	10.35mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:02:29 PM
4	34.25	10.30mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:07:06 PM

Mean Area 34.36
Mean Conc. 10.34mg/L



Sample

Sample Name: 280-137609-D-22-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

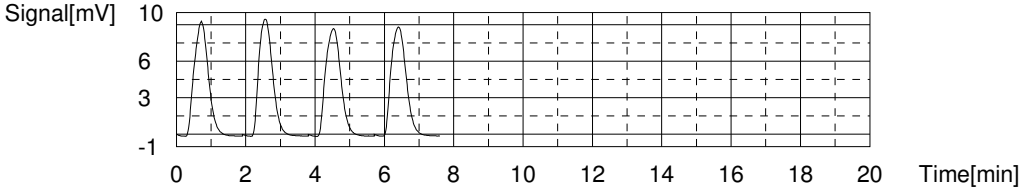
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.004mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.05	8.018mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:15:41 PM
2	26.74	7.919mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:20:18 PM
3	27.07	8.024mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:24:55 PM
4	27.17	8.056mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:29:32 PM

Mean Area 27.01
Mean Conc. 8.004mg/L



Sample

Sample Name: 280-137609-D-23-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

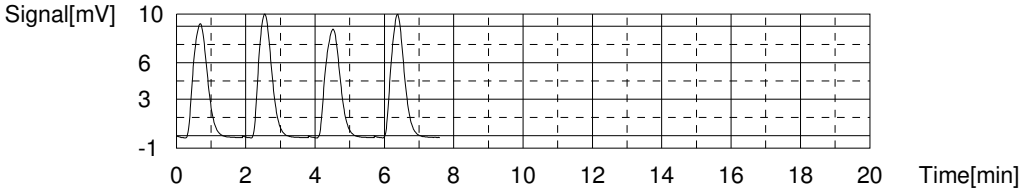
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.898mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.64	7.887mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:38:07 PM
2	26.77	7.929mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:42:44 PM
3	26.45	7.827mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:47:21 PM
4	26.83	7.948mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 7:51:58 PM

Mean Area 26.67
Mean Conc. 7.898mg/L



Sample

Sample Name: 280-137609-D-24-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

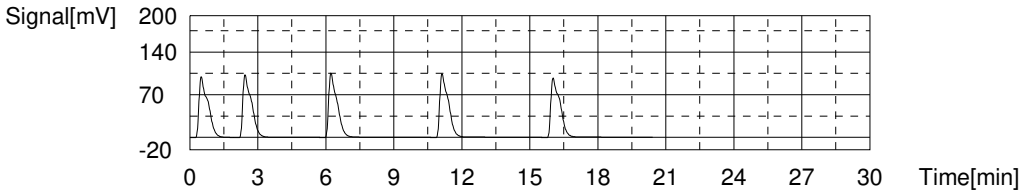
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:88.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	274.5	86.59mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:00:35 PM
2	276.6	87.25mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:07:05 PM
3	282.6	89.16mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:14:42 PM
4	288.9	91.16mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:22:17 PM
5	284.3	89.70mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:29:51 PM

Mean Area 279.5
Mean Conc. 88.17mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

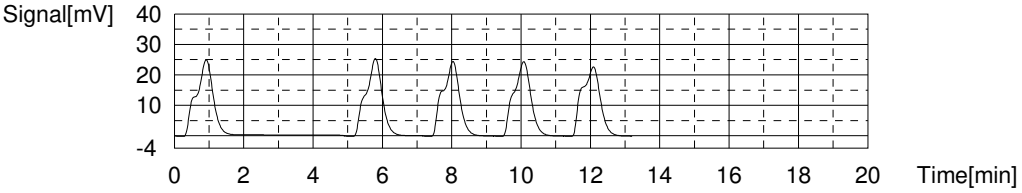
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.37mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.39	29.08mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:41:23 PM
2	85.18	26.47mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:46:19 PM
3	84.53	26.27mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:51:05 PM
4	85.11	26.45mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 8:55:48 PM
5	84.55	26.27mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:00:31 PM

Mean Area 84.84
Mean Conc. 26.37mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

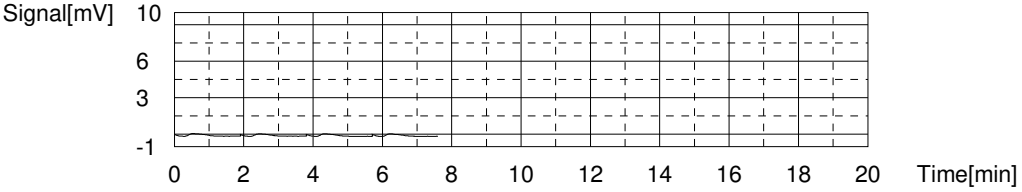
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3845mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6564	-0.3628mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:09:06 PM
2	0.5498	-0.3967mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:13:43 PM
3	0.5596	-0.3935mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:18:20 PM
4	0.5860	-0.3852mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:22:57 PM

Mean Area 0.5879
Mean Conc. -0.3845mg/L



Sample

Sample Name: 280-137609-A-25-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

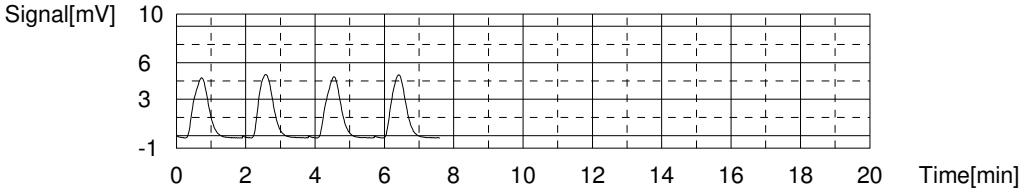
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.099mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.52	4.039mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:31:39 PM
2	14.80	4.128mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:36:16 PM
3	14.72	4.103mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:40:53 PM
4	14.79	4.125mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:45:30 PM

Mean Area 14.71
Mean Conc. 4.099mg/L



Sample

Sample Name: ms 280-137609-A-25-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

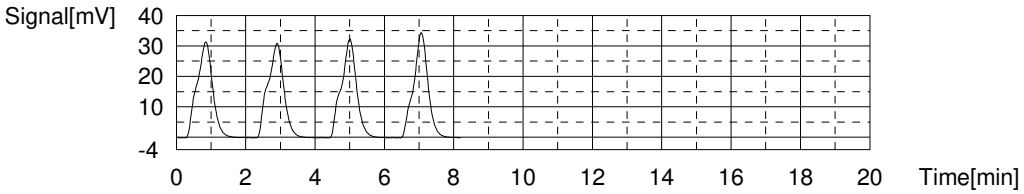
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	99.70	31.09mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:54:28 PM
2	100.4	31.31mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 9:59:17 PM
3	99.90	31.15mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:04:03 PM
4	100.7	31.40mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:08:46 PM

Mean Area 100.2
Mean Conc. 31.24mg/L



Sample

Sample Name: msd 280-137609-A-25-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

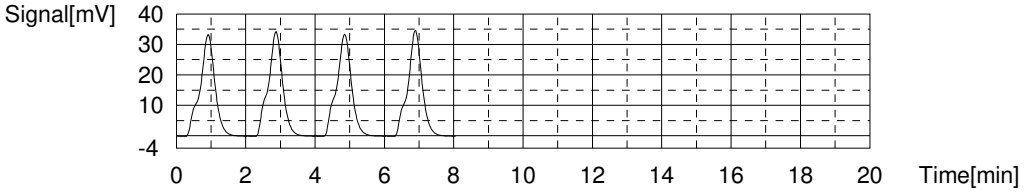
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.35mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	100.8	31.43mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:17:53 PM
2	100.2	31.24mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:22:34 PM
3	100.9	31.47mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:27:19 PM
4	100.3	31.28mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:32:04 PM

Mean Area 100.6
Mean Conc. 31.35mg/L



Sample

Sample Name: 280-137609-D-26-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

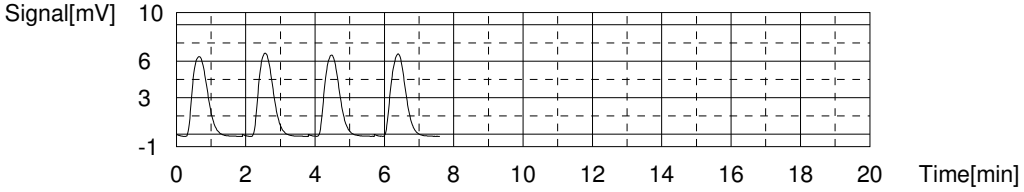
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	4.000	NPOC:22.83mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.79	22.85mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:41:06 PM
2	19.85	22.93mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:45:43 PM
3	19.68	22.71mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:50:20 PM
4	19.78	22.84mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 10:54:57 PM

Mean Area 19.77
Mean Conc. 22.83mg/L



Sample

Sample Name: 280-137609-D-27-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

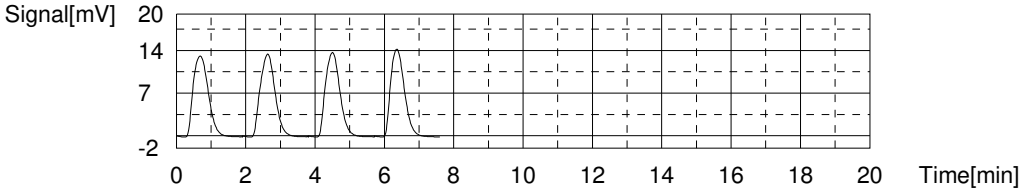
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:24.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.65	24.67mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:03:56 PM
2	40.68	24.69mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:08:33 PM
3	40.53	24.60mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:13:10 PM
4	40.18	24.37mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:17:47 PM

Mean Area 40.51
Mean Conc. 24.58mg/L



Sample

Sample Name: 280-137609-D-28-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

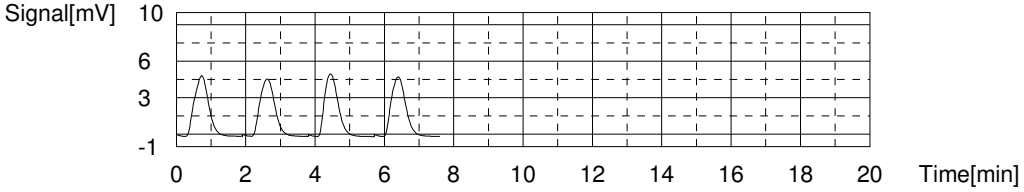
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.864mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.22	3.944mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:26:45 PM
2	13.86	3.830mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:31:22 PM
3	13.83	3.820mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:35:59 PM
4	13.96	3.861mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:40:36 PM

Mean Area 13.97
Mean Conc. 3.864mg/L



Sample

Sample Name: 280-137609-D-29-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

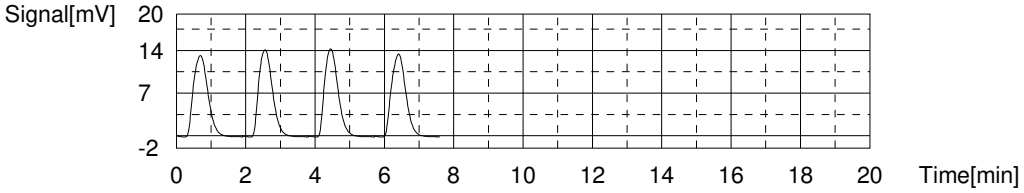
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.11	11.85mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:49:18 PM
2	39.63	12.01mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:53:55 PM
3	39.33	11.92mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/27/2020 11:58:32 PM
4	39.37	11.93mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:03:09 AM

Mean Area 39.36
Mean Conc. 11.93mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

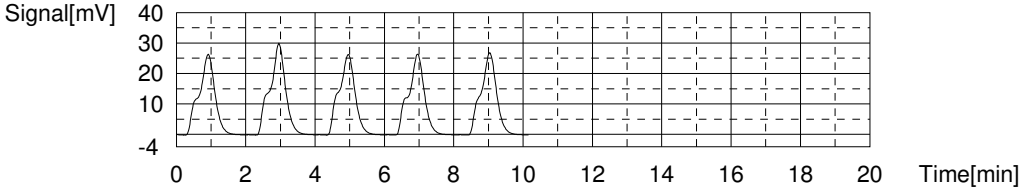
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.91	26.71mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:12:00 AM
2	95.35	29.70mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:16:45 AM
3	85.99	26.73mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:21:27 AM
4	85.22	26.49mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:26:15 AM
5	85.88	26.70mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:30:58 AM

Mean Area 85.75
Mean Conc. 26.66mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

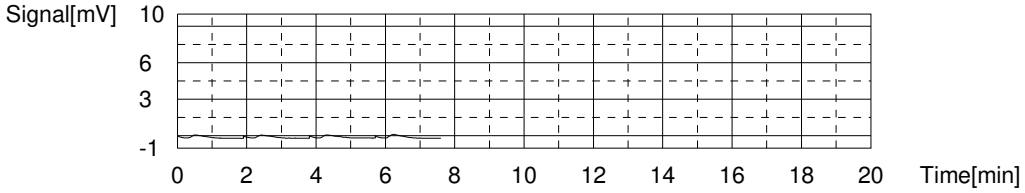
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3695mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6042	-0.3794mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:39:34 AM
2	0.6117	-0.3770mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:44:11 AM
3	0.6485	-0.3653mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:48:48 AM
4	0.6771	-0.3562mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/28/2020 12:53:25 AM

Mean Area	0.6354
Mean Conc.	-0.3695mg/L



	Analysi	Sample Name	Orig	Result	Notes	Status	Da	Vial
1*	NPOC	icv	NP	✓		Defined		1
2*	NPOC	icb	NP	✓		Defined		2
3*	NPOC	LCS 280-500528/1-A	NP	✓		Defined		3
4*	NPOC	MB 280-500528/2-A	NP	✓		Defined		4
5*	NPOC	tic	NP	✓		Defined		5
6*	NPOC	280-137702-D-1-A	NP	7		Defined		6
7*	NPOC	280-137702-D-1-B MS	NP	7		Defined		7
8*	NPOC	280-137702-D-1-C MSD	NP	7		Defined		8
9*	NPOC	280-137702-D-2-A	NP	7		Defined		9
10*	NPOC	280-137702-D-3-A	NP	7		Defined		10
11*	NPOC	280-137702-D-4-A	NP	7		Defined		11
12*	NPOC	280-137702-D-5-A	NP	7		Defined		12
13*	NPOC	280-137702-D-6-A	NP	7		Defined		13
14*	NPOC	280-137702-D-7-A	NP	7		Defined		14
15*	NPOC	ccv	NP	✓		Defined		15
16*	NPOC	ccb	NP	✓		Defined		16
17*	NPOC	280-137702-D-8-A	NP	7		Defined		17
18*	NPOC	280-137702-D-9-A	NP	7		Defined		18
19*	NPOC	280-137702-D-10-A	NP	7		Defined		19
20*	NPOC	280-137702-D-11-A	NP	7		Defined		20
21*	NPOC	280-137702-D-11-B MS	NP	7		Defined		21
22*	NPOC	280-137702-D-11-C MS	NP	7		Defined		22
23*	NPOC	280-137702-D-12-A	NP	7		Defined		23
24*	NPOC	280-137702-D-13-A	NP	7		Defined		24
25*	NPOC	280-137702-D-14-A	NP	7		Defined		25
26*	NPOC	280-137702-D-15-A	NP	7		Defined		26
27*	NPOC	ccv	NP	✓		Defined		27
28*	NPOC	ccb	NP	✓		Defined		28
29*	NPOC	280-137702-D-16-A	NP	7		Defined		29
30*	NPOC	280-137702-D-17-A	NP	7		Defined		30
31*	NPOC	280-137702-D-18-A	NP	7		Defined		31
32*	NPOC	280-137702-D-19-A	NP	7		Defined		32
33*	NPOC	280-137702-D-20-A	NP	7		Defined		33
34*	NPOC	LCS 280-500528/27-A	NP	✓		Defined		34
35*	NPOC	MB 280-500528/28-A	NP	✓		Defined		35
36*	NPOC	tic	NP	✓		Defined		36
37*	NPOC	280-137702-D-21-A	NP	7		Defined		37
38*	NPOC	280-137702-D-21-B MS	NP	7		Defined		38
39*	NPOC	ccv	NP	✓		Defined		39
40*	NPOC	ccb	NP	✓		Defined		40
41*	NPOC	280-137702-D-21-C MS	NP	7		Defined		41
42*	NPOC	280-137702-D-22-A	NP	6		Defined		42
43*	NPOC	280-137702-D-23-A	NP	7		Defined		43
44*	NPOC	280-137702-D-24-A	NP	7		Defined		44
45*	NPOC	280-137702-D-25-A	NP	7		Defined		45
46*	NPOC	280-137702-D-26-A	NP	7		Defined		46
47*	NPOC	280-137702-D-27-A	NP	7	10x DL - color	Defined		47
48*	NPOC	280-137702-D-28-A	NP	7		Defined		48
49*	NPOC	280-137702-D-29-A	NP	7		Defined		49
50*	NPOC	280-137702-D-30-A	NP	7	5x DL - color	Defined		50
51*	NPOC	ccv	NP	✓		Defined		51

	Analysi	Sample Name	Orig	Result	Notes	Status	Da	Vial
52*	NPOC	ccb	NP	✓	✓	Defined		52
53*	NPOC	280-137702-D-30-B MS	NP	✓	5x	Defined		53
54*	NPOC	280-137702-D-30-C MS	NP	✓	5x	Defined		54
55*	NPOC	280-137609-D-24-B	NP	✓	2x Dil - reanalyzed	Defined		55
56*	NPOC	ccv	NP	✓		Defined		56
57*	NPOC	ccb	NP	✓		Defined		57

+ 686-D-2

SGB
6/30/20

	Analysi	Sample Name	Orig	Result	Notes	Status	Date / Time	Vial
1	NPOC	icv	NP	NPOC:20.58		Complete	6/29/2020 4:38:	1
2	NPOC	icb	NP	NPOC:-0.447		Complete	6/29/2020 5:09:	2
3	NPOC	LCS 280-500528/1-A	NP	NPOC:25.03		Complete	6/29/2020 5:32:	3
4	NPOC	MB 280-500528/2-A	NP	NPOC:-0.307		Complete	6/29/2020 5:55:	4
5	NPOC	tic	NP	NPOC:-0.349		Complete	6/29/2020 6:22:	5
6	NPOC	280-137702-D-1-A	NP	NPOC:5.159		Complete	6/29/2020 6:44:	6
7	NPOC	280-137702-D-1-B MS	NP	NPOC:31.24		Complete	6/29/2020 7:07:	7
8	NPOC	280-137702-D-1-C MSD	NP	NPOC:31.17		Complete	6/29/2020 7:30:	8
9	NPOC	280-137702-D-2-A	NP	NPOC:5.894		Complete	6/29/2020 7:53:	9
10	NPOC	280-137702-D-3-A	NP	NPOC:4.865		Complete	6/29/2020 8:15:	10
11	NPOC	280-137702-D-4-A	NP	NPOC:5.380		Complete	6/29/2020 8:37:	11
12	NPOC	280-137702-D-5-A	NP	NPOC:4.015		Complete	6/29/2020 9:04:	12
13	NPOC	280-137702-D-6-A	NP	NPOC:4.053		Complete	6/29/2020 9:27:	13
14	NPOC	280-137702-D-7-A	NP	NPOC:4.078		Complete	6/29/2020 9:49:	14
15	NPOC	ccv	NP	NPOC:25.67		Complete	6/29/2020 10:1	15
16	NPOC	ccb	NP	NPOC:-0.441		Complete	6/29/2020 10:3	16
17	NPOC	280-137702-D-8-A	NP	NPOC:2.503		Complete	6/29/2020 10:5	17
18	NPOC	280-137702-D-9-A	NP	NPOC:4.586		Complete	6/29/2020 11:2	18
19	NPOC	280-137702-D-10-A	NP	NPOC:5.398		Complete	6/29/2020 11:4	19
20	NPOC	280-137702-D-11-A	NP	NPOC:6.769		Complete	6/30/2020 12:0	20
21	NPOC	280-137702-D-11-B MS	NP	NPOC:32.68		Complete	6/30/2020 12:2	21
22	NPOC	280-137702-D-11-C MS	NP	NPOC:32.81		Complete	6/30/2020 12:5	22
23	NPOC	280-137702-D-12-A	NP	NPOC:3.082		Complete	6/30/2020 1:13:	23
24	NPOC	280-137702-D-13-A	NP	NPOC:2.604		Complete	6/30/2020 1:36:	24
25	NPOC	280-137702-D-14-A	NP	NPOC:1.836		Complete	6/30/2020 2:03:	25
26	NPOC	280-137702-D-15-A	NP	NPOC:5.391		Complete	6/30/2020 2:26:	26
27	NPOC	ccv	NP	NPOC:25.96		Complete	6/30/2020 2:49:	27
28	NPOC	ccb	NP	NPOC:-0.434		Complete	6/30/2020 3:12:	28
29	NPOC	280-137702-D-16-A	NP	NPOC:2.490		Complete	6/30/2020 3:35:	29
30	NPOC	280-137702-D-17-A	NP	NPOC:7.952		Complete	6/30/2020 3:57:	30
31	NPOC	280-137702-D-18-A	NP	NPOC:2.852		Complete	6/30/2020 4:20:	31
32	NPOC	280-137702-D-19-A	NP	NPOC:13.46		Complete	6/30/2020 4:43:	32
33	NPOC	280-137702-D-20-A	NP	NPOC:3.283		Complete	6/30/2020 5:11:	33
34	NPOC	LCS 280-500528/27-A	NP	NPOC:26.08		Complete	6/30/2020 5:34:	34
35	NPOC	MB 280-500528/28-A	NP	NPOC:-0.360		Complete	6/30/2020 6:02:	35
36	NPOC	tic	NP	NPOC:-0.348		Complete	6/30/2020 6:25:	36
37	NPOC	280-137702-D-21-A	NP	NPOC:5.849		Complete	6/30/2020 6:52:	37
38	NPOC	280-137702-D-21-B MS	NP	NPOC:32.88		Complete	6/30/2020 7:15:	38
39	NPOC	ccv	NP	NPOC:26.38		Complete	6/30/2020 7:44:	39
40	NPOC	ccb	NP	NPOC:-0.403		Complete	6/30/2020 8:07:	40
41	NPOC	280-137702-D-21-C MS	NP	NPOC:32.74		Complete	6/30/2020 8:30:	41
42	NPOC	280-137702-D-22-A	NP	NPOC:4.227		Complete	6/30/2020 8:53:	42
43	NPOC	280-137702-D-23-A	NP	NPOC:2.762		Complete	6/30/2020 9:16:	43
44	NPOC	280-137702-D-24-A	NP	NPOC:2.715		Complete	6/30/2020 9:38:	44
45	NPOC	280-137702-D-25-A	NP	NPOC:2.984		Complete	6/30/2020 10:0	45
46	NPOC	280-137702-D-26-A	NP	NPOC:5.464		Complete	6/30/2020 10:2	46
47	NPOC	280-137702-D-27-A	NP	NPOC:78.13		Complete	6/30/2020 10:4	47
48	NPOC	280-137702-D-28-A	NP	NPOC:3.890		Complete	6/30/2020 11:1	48
49	NPOC	280-137702-D-29-A	NP	NPOC:7.575		Complete	6/30/2020 11:3	49
50	NPOC	280-137702-D-30-A	NP	NPOC:43.76		Complete	6/30/2020 11:5	50
51	NPOC	ccv	NP	NPOC:26.36		Complete	6/30/2020 12:1	51
52	NPOC	ccb	NP	NPOC:-0.410		Complete	6/30/2020 12:4	52
53	NPOC	280-137702-D-30-B MS	NP	NPOC:179.5		Complete	6/30/2020 1:05:	53

	Analysi	Sample Name	Orig	Result	Notes	Status	Date / Time	Vial
54	NPOC	280-137702-D-30-C MS	NP	NPOC:178.8		Complete	6/30/2020 1:28:	54
55	NPOC	280-137609-D-24-B	NP	NPOC:87.83		Complete	6/30/2020 2:09:	55
56	NPOC	ccv	NP	NPOC:26.27		Complete	6/30/2020 2:32:	56
57	NPOC	ccb	NP	NPOC:-0.397		Complete	6/30/2020 2:55:	57

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥NPOC.2020_06_15_14_56_20.cal

Date of Creation 4:11:58 PM 6/15/2020
User sgb
System TOC-V CPN

Cal. Curve

Sample Name: cal
Sample ID:
Object ID 0A-100612-04635090-1343CA723828-0000
Cal. Curve: NPOC.2020_06_15_14_56_20.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6345	50uL	1	*******	E	6/15/2020 3:05:05 PM
2	2.558	50uL	1	*******		6/15/2020 3:07:11 PM
3	2.840	50uL	1	*******	E	6/15/2020 3:09:22 PM
4	2.342	50uL	1	*******		6/15/2020 3:11:28 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 2.450
SD Area 0.1527
CV Area 6.23%
Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.629	50uL	1	*******	E	6/15/2020 3:19:57 PM
2	6.139	50uL	1	*******		6/15/2020 3:22:03 PM
3	4.772	50uL	1	*******	E	6/15/2020 3:24:09 PM
4	6.011	50uL	1	*******		6/15/2020 3:26:14 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 6.075
SD Area 0.09051
CV Area 1.49%
Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.91	50uL	1	*******	E	6/15/2020 3:34:55 PM
2	16.89	50uL	1	*******		6/15/2020 3:37:01 PM
3	16.43	50uL	1	*******		6/15/2020 3:39:07 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 16.66
SD Area 0.3253
CV Area 1.95%
Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	33.12	50uL	1	*******		6/15/2020 3:47:50 PM
2	32.65	50uL	1	*******		6/15/2020 3:49:56 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 32.89
SD Area 0.3323
CV Area 1.01%
Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	79.57	50uL	1	*******		6/15/2020 3:58:49 PM
2	78.98	50uL	1	*******		6/15/2020 4:00:59 PM

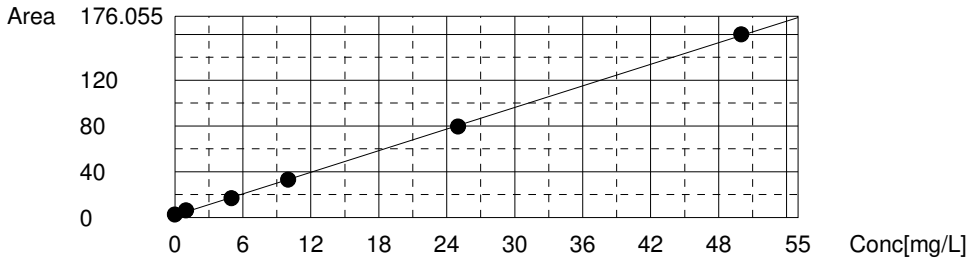
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 79.28
SD Area 0.4172
CV Area 0.53%
Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	159.6	50uL	1	*******		6/15/2020 4:09:45 PM
2	160.5	50uL	1	*******		6/15/2020 4:11:58 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 160.1
SD Area 0.6364
CV Area 0.40%
Vial 6

Slope: 3.149
Intercept 1.799
r^2 0.9997
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	

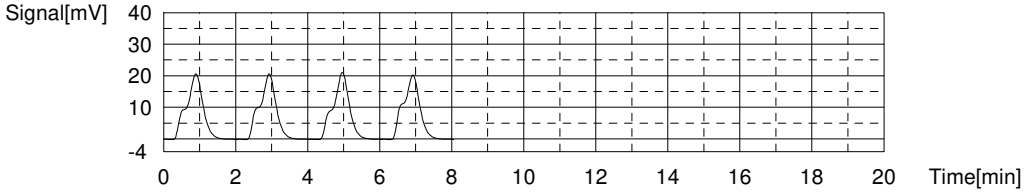
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.36	20.82mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:24:06 PM
2	66.43	20.52mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:28:50 PM
3	66.65	20.59mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:33:33 PM
4	65.98	20.38mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:38:15 PM

Mean Area 66.61
Mean Conc. 20.58mg/L



Sample

Sample Name:	icb
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

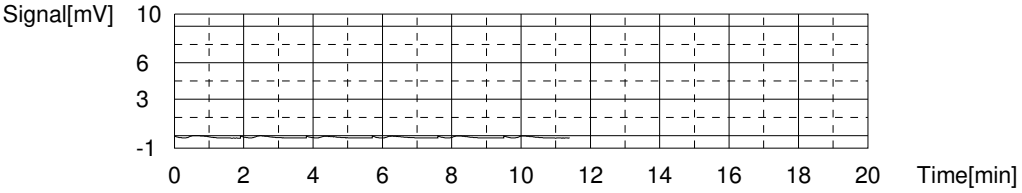
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4471mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6387	-0.3684mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:46:50 PM
2	0.4291	-0.4350mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:51:27 PM
3	0.2027	-0.5069mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/29/2020 4:56:03 PM
4	0.3015	-0.4755mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:00:40 PM
5	0.4246	-0.4364mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:05:17 PM
6	0.4085	-0.4415mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:09:54 PM

Mean Area 0.3909
Mean Conc. -0.4471mg/L



Sample

Sample Name: LCS 280-500528/1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

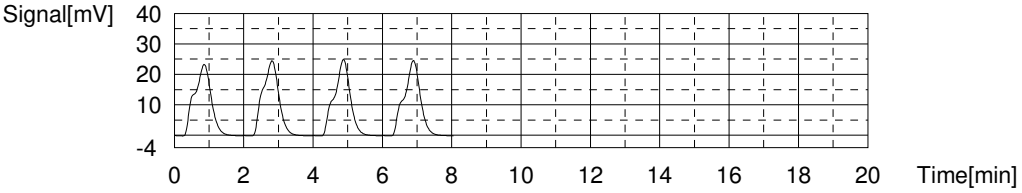
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.13	24.87mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:18:34 PM
2	80.44	24.97mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:23:17 PM
3	80.94	25.13mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:28:00 PM
4	80.95	25.13mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:32:46 PM

Mean Area 80.61
Mean Conc. 25.03mg/L



Sample

Sample Name: MB 280-500528/2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

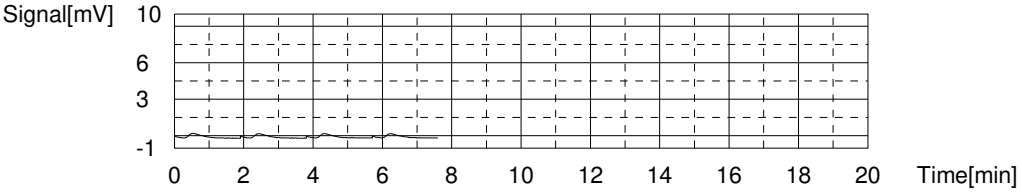
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3075mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9165	-0.2802mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:41:21 PM
2	0.8397	-0.3046mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:45:58 PM
3	0.7700	-0.3267mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:50:35 PM
4	0.7960	-0.3185mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 5:55:12 PM

Mean Area 0.8306
Mean Conc. -0.3075mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

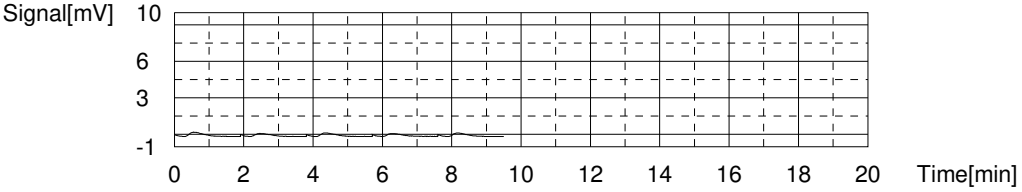
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3492mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9081	-0.2829mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:03:46 PM
2	0.6671	-0.3594mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:08:23 PM
3	0.7767	-0.3246mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:13:00 PM
4	0.6330	-0.3702mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:17:37 PM
5	0.7200	-0.3426mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:22:14 PM

Mean Area 0.6992
Mean Conc. -0.3492mg/L



Sample

Sample Name: 280-137702-D-1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

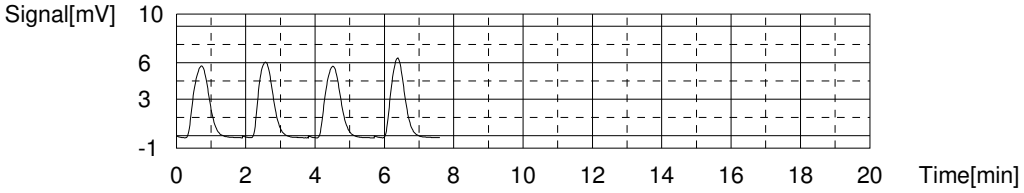
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.159mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.21	5.211mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:30:48 PM
2	17.99	5.141mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:35:24 PM
3	18.03	5.154mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:40:02 PM
4	17.96	5.131mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:44:39 PM

Mean Area 18.05
Mean Conc. 5.159mg/L



Sample

Sample Name: 280-137702-D-1-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

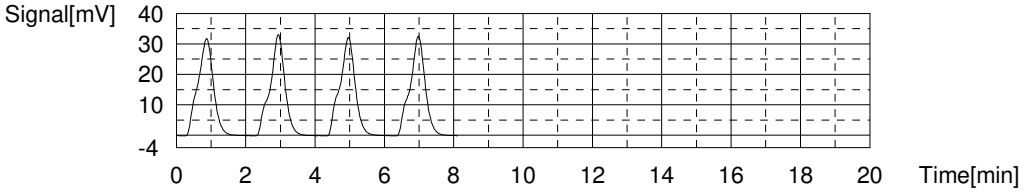
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	100.9	31.47mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:53:21 PM
2	99.95	31.16mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 6:58:07 PM
3	100.0	31.18mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:02:50 PM
4	99.89	31.15mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:07:35 PM

Mean Area 100.2
Mean Conc. 31.24mg/L



Sample

Sample Name: 280-137702-D-1-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

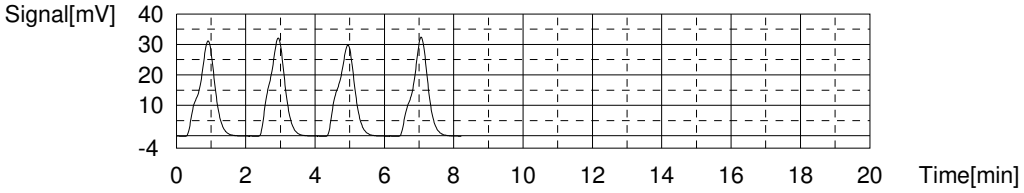
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	100.2	31.24mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:16:21 PM
2	99.48	31.02mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:21:01 PM
3	99.93	31.16mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:25:50 PM
4	100.2	31.24mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:30:37 PM

Mean Area 99.95
Mean Conc. 31.17mg/L



Sample

Sample Name: 280-137702-D-2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

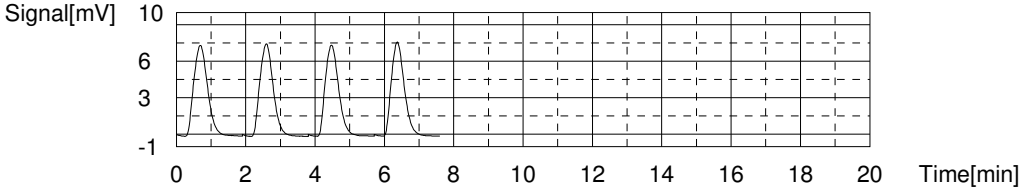
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.894mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.71	6.005mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:39:11 PM
2	20.42	5.912mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:43:48 PM
3	20.11	5.814mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:48:25 PM
4	20.21	5.846mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 7:53:02 PM

Mean Area 20.36
Mean Conc. 5.894mg/L



Sample

Sample Name: 280-137702-D-3-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

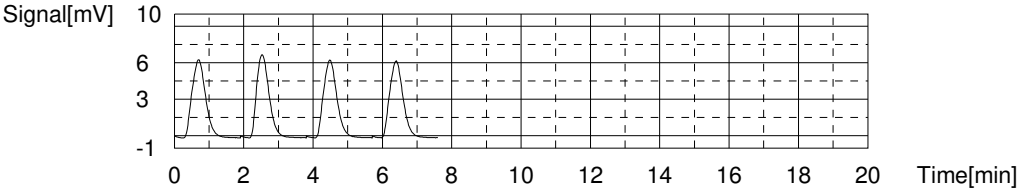
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.865mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.49	4.982mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:01:36 PM
2	17.07	4.849mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:06:13 PM
3	16.98	4.820mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:10:50 PM
4	16.95	4.811mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:15:27 PM

Mean Area 17.12
Mean Conc. 4.865mg/L



Sample

Sample Name: 280-137702-D-4-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

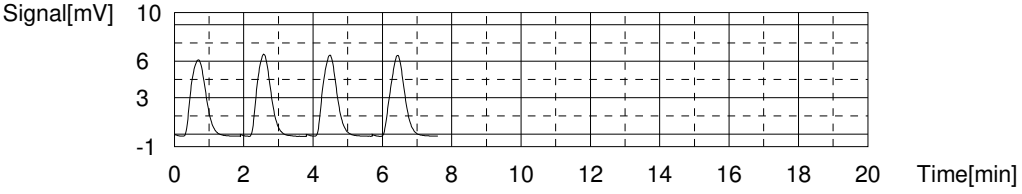
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.380mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.78	5.392mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:24:01 PM
2	18.63	5.344mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:28:38 PM
3	18.64	5.347mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:33:14 PM
4	18.92	5.436mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:37:51 PM

Mean Area 18.74
Mean Conc. 5.380mg/L



Sample

Sample Name: 280-137702-D-5-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

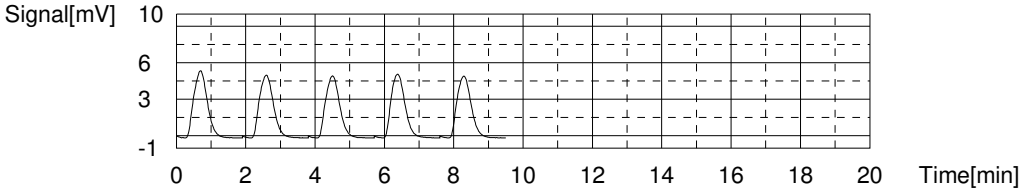
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.015mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.04	4.204mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:46:25 PM
2	14.56	4.052mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:51:02 PM
3	14.37	3.991mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 8:55:39 PM
4	14.46	4.020mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:00:16 PM
5	14.39	3.998mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:04:53 PM

Mean Area 14.45
Mean Conc. 4.015mg/L



Sample

Sample Name: 280-137702-D-6-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

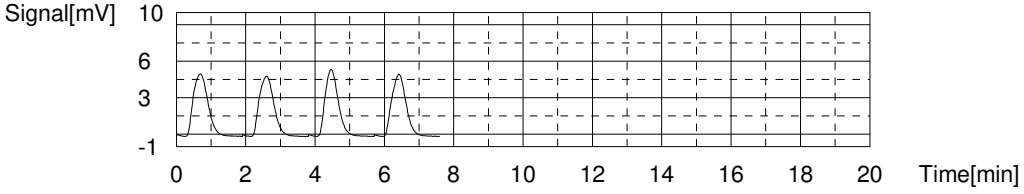
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.053mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.99	4.188mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:13:27 PM
2	14.37	3.991mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:18:04 PM
3	14.43	4.011mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:22:41 PM
4	14.46	4.020mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:27:18 PM

Mean Area 14.56
Mean Conc. 4.053mg/L



Sample

Sample Name: 280-137702-D-7-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

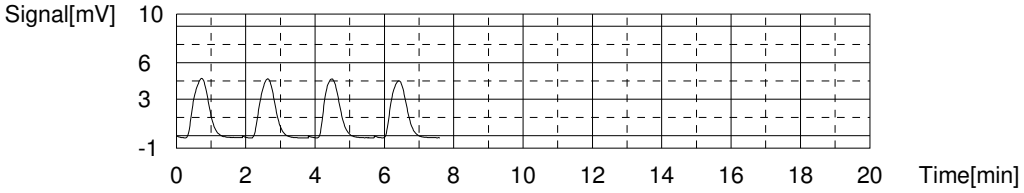
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.078mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.80	4.128mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:35:52 PM
2	14.74	4.109mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:40:29 PM
3	14.55	4.049mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:45:06 PM
4	14.48	4.026mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:49:43 PM

Mean Area 14.64
Mean Conc. 4.078mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

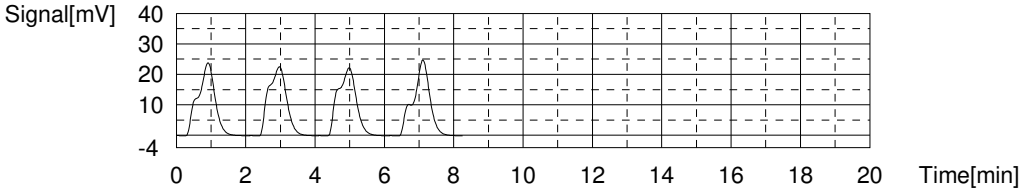
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.28	25.55mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 9:58:30 PM
2	82.63	25.67mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:03:12 PM
3	82.73	25.70mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:07:58 PM
4	82.88	25.74mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:12:47 PM

Mean Area 82.63
Mean Conc. 25.67mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

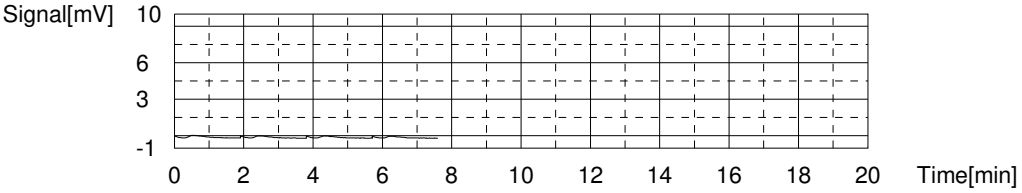
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5027	-0.4116mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:21:21 PM
2	0.3755	-0.4520mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:25:58 PM
3	0.4032	-0.4432mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:30:35 PM
4	0.3564	-0.4581mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:35:12 PM

Mean Area 0.4095
Mean Conc. -0.4412mg/L



Sample

Sample Name: 280-137702-D-8-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

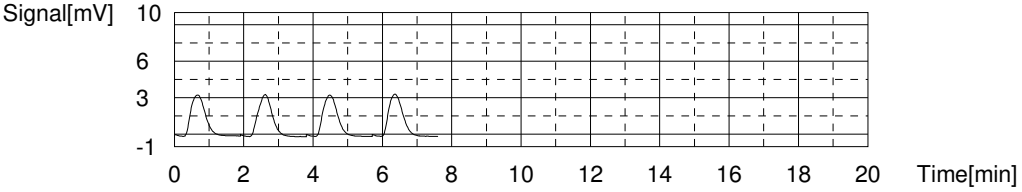
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.503mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.736	2.520mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:43:46 PM
2	9.631	2.487mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:48:23 PM
3	9.671	2.499mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:53:00 PM
4	9.693	2.506mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 10:57:37 PM

Mean Area 9.683
Mean Conc. 2.503mg/L



Sample

Sample Name: 280-137702-D-9-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

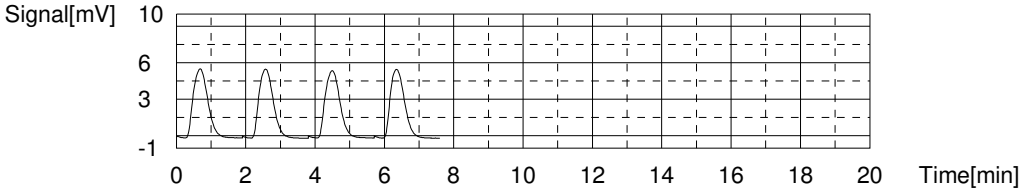
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.586mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.61	4.703mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:06:11 PM
2	16.23	4.582mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:10:48 PM
3	16.18	4.566mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:15:25 PM
4	15.95	4.493mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:20:02 PM

Mean Area 16.24
Mean Conc. 4.586mg/L



Sample

Sample Name: 280-137702-D-10-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

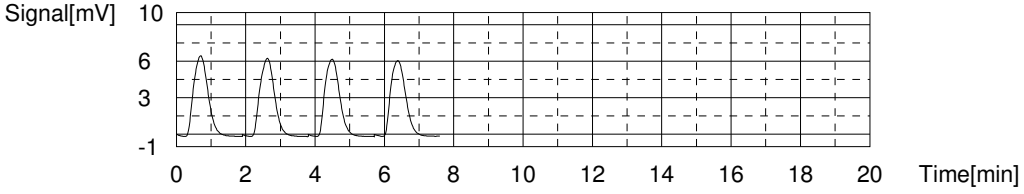
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.398mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.32	5.563mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:28:36 PM
2	18.75	5.382mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:33:13 PM
3	18.53	5.312mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:37:50 PM
4	18.60	5.335mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:42:27 PM

Mean Area 18.80
Mean Conc. 5.398mg/L



Sample

Sample Name: 280-137702-D-11-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

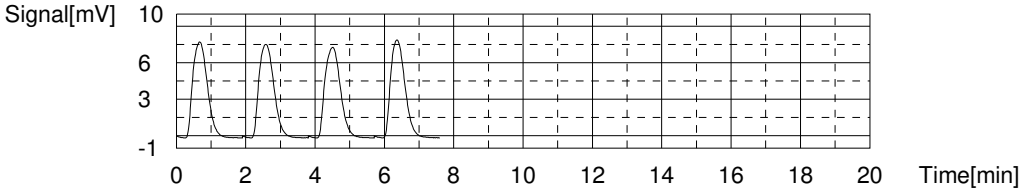
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.769mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.12	6.770mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:51:01 PM
2	23.10	6.763mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/29/2020 11:55:38 PM
3	23.16	6.782mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:00:15 AM
4	23.09	6.760mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:04:52 AM

Mean Area 23.12
Mean Conc. 6.769mg/L



Sample

Sample Name: 280-137702-D-11-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

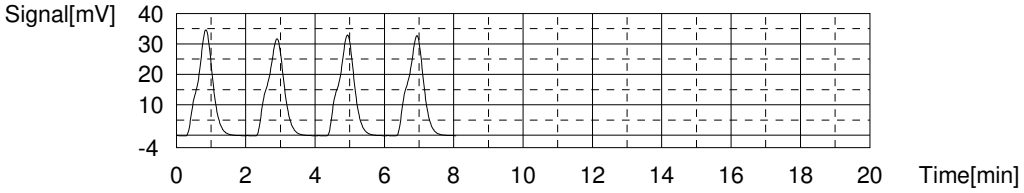
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.9	32.74mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:13:45 AM
2	105.2	32.83mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:18:31 AM
3	104.4	32.58mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:23:14 AM
4	104.4	32.58mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:27:57 AM

Mean Area 104.7
Mean Conc. 32.68mg/L



Sample

Sample Name: 280-137702-D-11-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

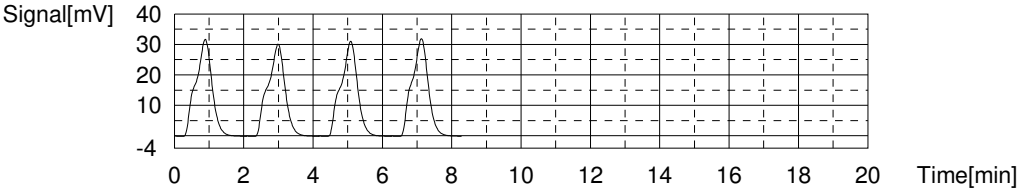
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	105.6	32.96mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:36:41 AM
2	104.8	32.70mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:41:30 AM
3	104.9	32.74mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:46:18 AM
4	105.2	32.83mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:51:03 AM

Mean Area 105.1
Mean Conc. 32.81mg/L



Sample

Sample Name: 280-137702-D-12-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

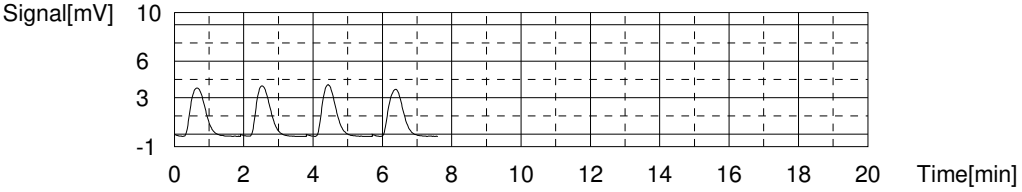
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.082mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.77	3.166mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:59:43 AM
2	11.55	3.096mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:04:20 AM
3	11.45	3.064mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:08:57 AM
4	11.25	3.001mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:13:34 AM

Mean Area 11.51
Mean Conc. 3.082mg/L



Sample

Sample Name: 280-137702-D-13-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

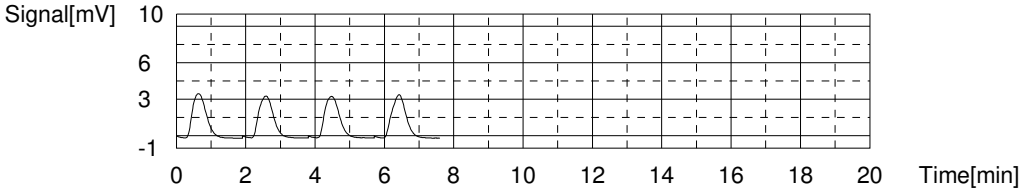
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.604mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.13	2.645mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:22:20 AM
2	9.843	2.554mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:26:57 AM
3	9.955	2.590mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:31:34 AM
4	10.07	2.626mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:36:11 AM

Mean Area 9.999
Mean Conc. 2.604mg/L



Sample

Sample Name: 280-137702-D-14-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

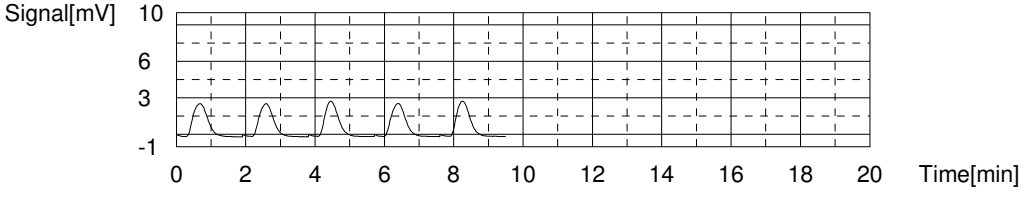
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.836mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.901	1.937mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:44:57 AM
2	7.463	1.798mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:49:34 AM
3	7.670	1.864mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:54:11 AM
4	7.528	1.819mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:58:48 AM
5	7.668	1.863mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:03:25 AM

Mean Area 7.582
Mean Conc. 1.836mg/L



Sample

Sample Name: 280-137702-D-15-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

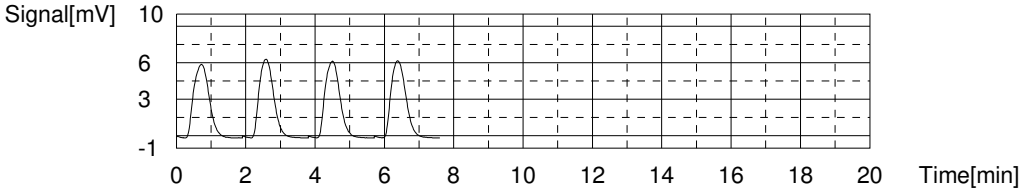
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.391mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.89	5.427mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:12:18 AM
2	18.71	5.369mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:16:56 AM
3	18.67	5.357mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:21:32 AM
4	18.84	5.411mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:26:09 AM

Mean Area 18.78
Mean Conc. 5.391mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

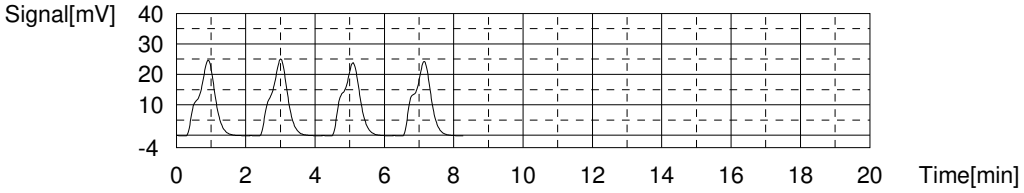
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.75	26.02mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:35:17 AM
2	83.61	25.98mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:40:05 AM
3	83.34	25.89mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:44:51 AM
4	83.54	25.95mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:49:35 AM

Mean Area 83.56
Mean Conc. 25.96mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

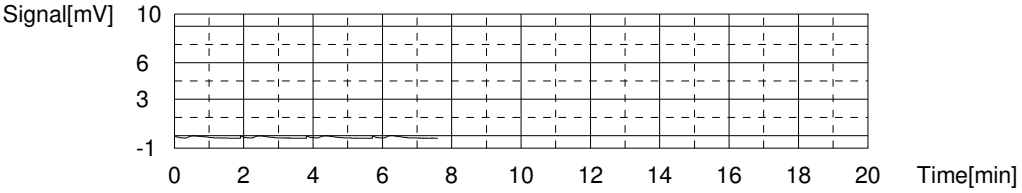
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4348mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4645	-0.4237mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:58:31 AM
2	0.3779	-0.4512mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:03:08 AM
3	0.3904	-0.4473mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:07:45 AM
4	0.4862	-0.4169mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:12:22 AM

Mean Area 0.4298
Mean Conc. -0.4348mg/L



Sample

Sample Name: 280-137702-D-16-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

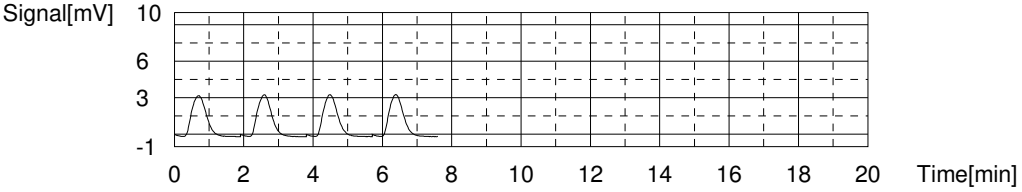
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.490mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.737	2.520mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:21:20 AM
2	9.624	2.485mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:25:57 AM
3	9.580	2.471mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:30:34 AM
4	9.618	2.483mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:35:10 AM

Mean Area 9.640
Mean Conc. 2.490mg/L



Sample

Sample Name: 280-137702-D-17-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

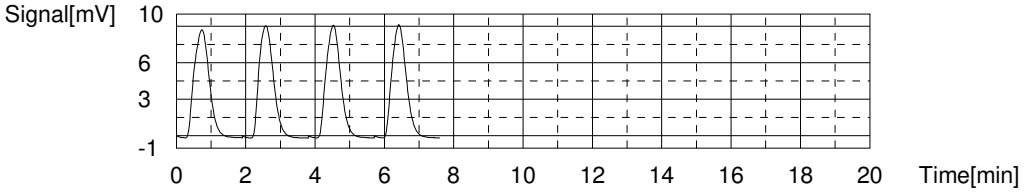
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.952mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.91	7.973mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:44:07 AM
2	26.67	7.897mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:48:44 AM
3	27.04	8.014mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:53:21 AM
4	26.76	7.925mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 3:57:58 AM

Mean Area 26.85
Mean Conc. 7.952mg/L



Sample

Sample Name: 280-137702-D-18-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

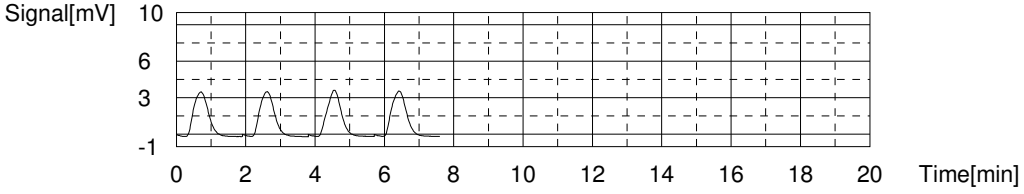
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.852mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.82	2.864mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:06:56 AM
2	10.64	2.807mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:11:33 AM
3	10.78	2.852mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:16:10 AM
4	10.89	2.887mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:20:48 AM

Mean Area 10.78
Mean Conc. 2.852mg/L



Sample

Sample Name: 280-137702-D-19-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

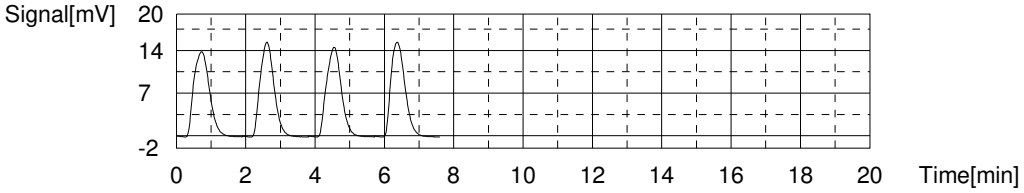
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.58	13.58mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:30:07 AM
2	44.02	13.41mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:34:44 AM
3	43.85	13.35mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:39:21 AM
4	44.34	13.51mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:43:57 AM

Mean Area 44.20
Mean Conc. 13.46mg/L



Sample

Sample Name: 280-137702-D-20-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

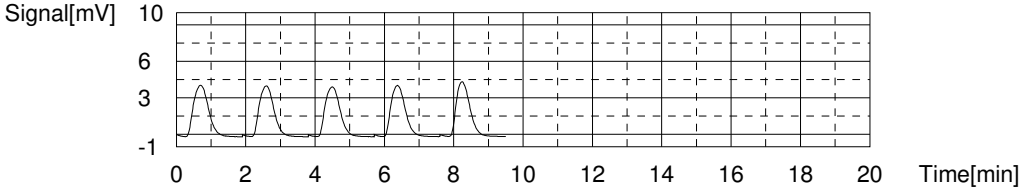
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.283mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.69	3.458mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:52:57 AM
2	12.13	3.280mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 4:57:34 AM
3	12.15	3.287mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:02:10 AM
4	12.04	3.252mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:06:47 AM
5	12.23	3.312mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:11:24 AM

Mean Area 12.14
Mean Conc. 3.283mg/L



Sample

Sample Name: LCS 280-500528/27-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

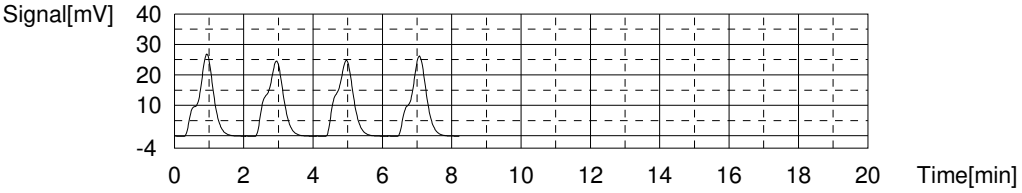
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.93	26.08mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:20:33 AM
2	83.86	26.06mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:25:18 AM
3	84.10	26.13mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:30:05 AM
4	83.81	26.04mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:34:52 AM

Mean Area 83.93
Mean Conc. 26.08mg/L



Sample

Sample Name: MB 280-500528/28-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

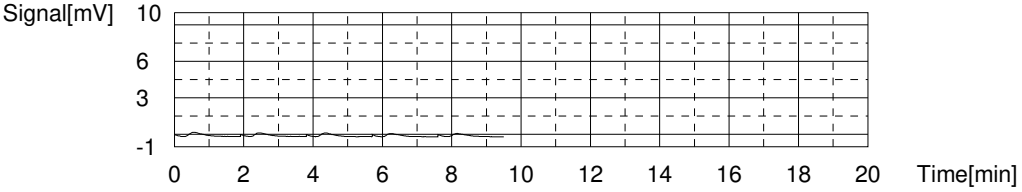
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3603mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8960	-0.2867mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:43:51 AM
2	0.6981	-0.3496mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:48:28 AM
3	0.7087	-0.3462mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:53:05 AM
4	0.6189	-0.3747mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 5:57:42 AM
5	0.6313	-0.3708mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:02:19 AM

Mean Area 0.6643
Mean Conc. -0.3603mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

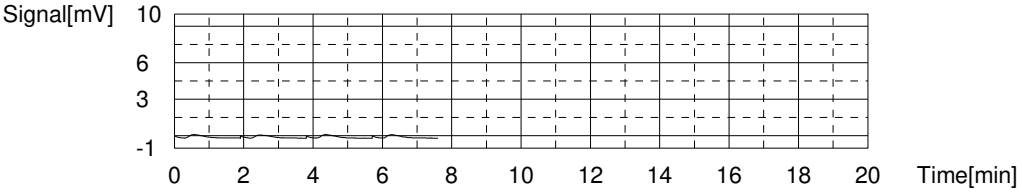
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3484mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6986	-0.3494mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:11:18 AM
2	0.7075	-0.3466mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:15:55 AM
3	0.7531	-0.3321mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:20:32 AM
4	0.6474	-0.3657mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:25:09 AM

Mean Area 0.7017
Mean Conc. -0.3484mg/L



Sample

Sample Name: 280-137702-D-21-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

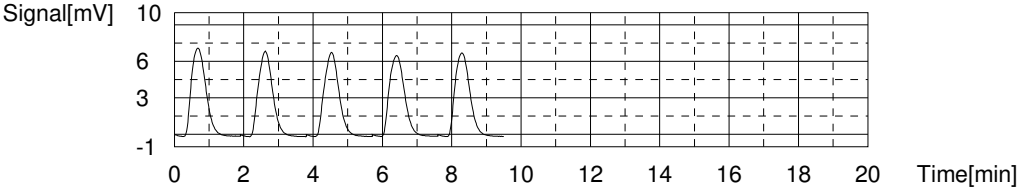
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.849mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.13	6.138mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:34:09 AM
2	20.18	5.836mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:38:46 AM
3	20.38	5.900mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:43:23 AM
4	20.05	5.795mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:48:00 AM
5	20.27	5.865mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 6:52:37 AM

Mean Area 20.22
Mean Conc. 5.849mg/L



Sample

Sample Name: 280-137702-D-21-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

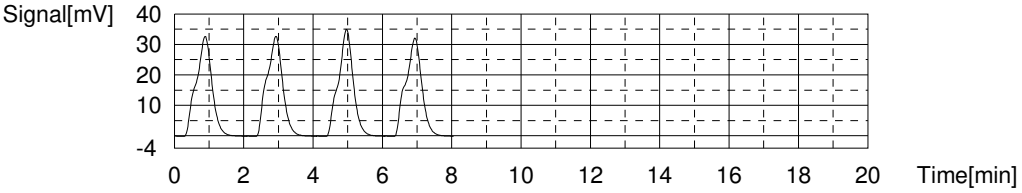
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	105.2	32.83mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:01:48 AM
2	105.5	32.93mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:06:32 AM
3	105.8	33.02mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:11:13 AM
4	104.9	32.74mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:15:55 AM

Mean Area 105.3
Mean Conc. 32.88mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

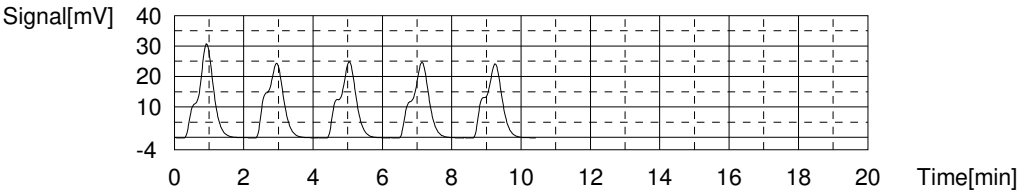
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.38mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.06	29.93mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:25:04 AM
2	84.88	26.38mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:29:50 AM
3	85.21	26.48mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:34:38 AM
4	85.00	26.42mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:39:29 AM
5	84.38	26.22mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:44:17 AM

Mean Area 84.87
Mean Conc. 26.38mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

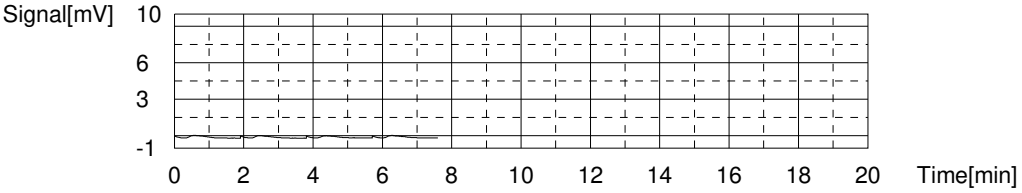
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4037mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5955	-0.3822mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:53:16 AM
2	0.4895	-0.4158mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 7:57:53 AM
3	0.4988	-0.4129mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:02:30 AM
4	0.5262	-0.4042mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:07:07 AM

Mean Area 0.5275
Mean Conc. -0.4037mg/L



Sample

Sample Name: 280-137702-D-21-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

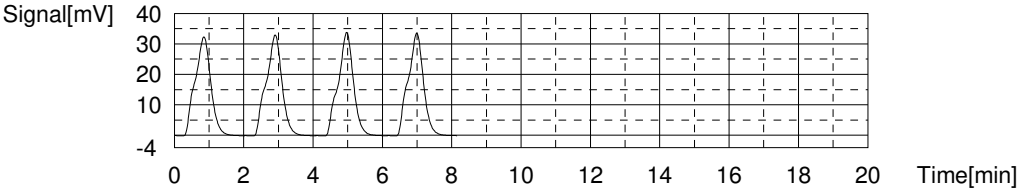
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.0	32.45mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:16:13 AM
2	106.0	33.09mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:21:00 AM
3	105.0	32.77mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:25:46 AM
4	104.7	32.67mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:30:30 AM

Mean Area 104.9
Mean Conc. 32.74mg/L



Sample

Sample Name: 280-137702-D-22-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

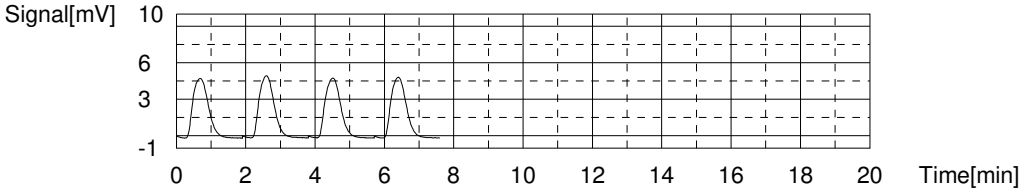
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.227mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.16	4.242mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:39:29 AM
2	15.14	4.236mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:44:06 AM
3	15.06	4.211mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:48:43 AM
4	15.09	4.220mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 8:53:20 AM

Mean Area 15.11
Mean Conc. 4.227mg/L



Sample

Sample Name: 280-137702-D-23-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

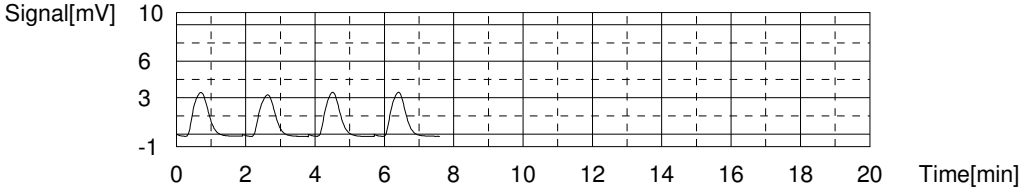
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.762mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.76	2.845mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:02:18 AM
2	10.43	2.740mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:06:55 AM
3	10.47	2.753mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:11:32 AM
4	10.33	2.709mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:16:09 AM

Mean Area 10.50
Mean Conc. 2.762mg/L



Sample

Sample Name: 280-137702-D-24-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

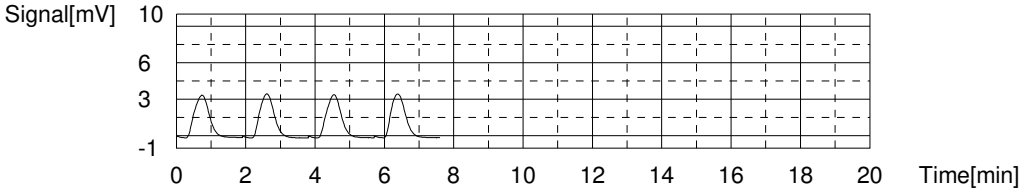
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.715mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.42	2.737mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:25:07 AM
2	10.36	2.718mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:29:44 AM
3	10.36	2.718mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:34:21 AM
4	10.26	2.686mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:38:58 AM

Mean Area 10.35
Mean Conc. 2.715mg/L



Sample

Sample Name: 280-137702-D-25-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

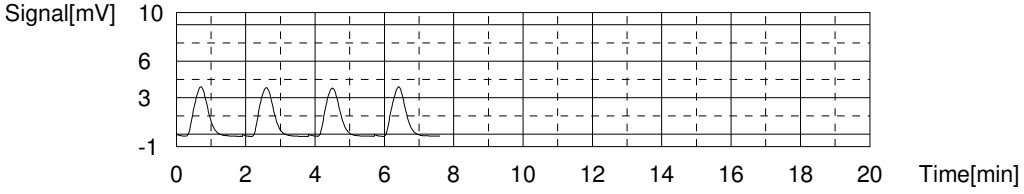
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.984mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.29	3.014mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:47:55 AM
2	11.19	2.982mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:52:32 AM
3	11.21	2.988mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 9:57:09 AM
4	11.10	2.953mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:01:46 AM

Mean Area 11.20
Mean Conc. 2.984mg/L



Sample

Sample Name: 280-137702-D-26-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

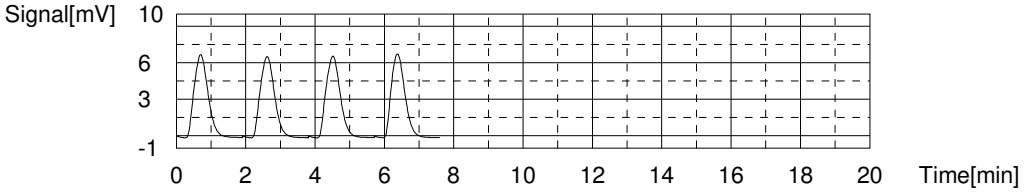
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.464mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.16	5.512mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:10:42 AM
2	19.02	5.468mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:15:19 AM
3	19.07	5.484mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:19:56 AM
4	18.78	5.392mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:24:33 AM

Mean Area 19.01
Mean Conc. 5.464mg/L



Sample

Sample Name: 280-137702-D-27-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

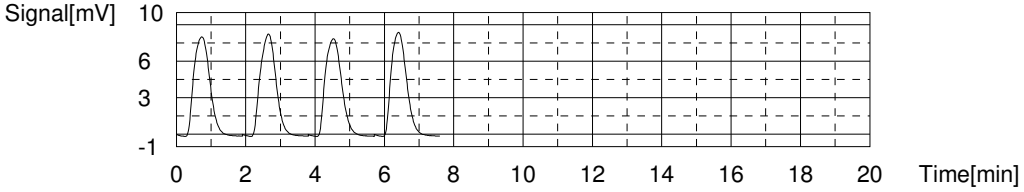
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:78.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.39	78.08mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:33:29 AM
2	26.54	78.56mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:38:06 AM
3	26.37	78.02mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:42:43 AM
4	26.32	77.86mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:47:20 AM

Mean Area 26.41
Mean Conc. 78.13mg/L



Sample

Sample Name: 280-137702-D-28-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

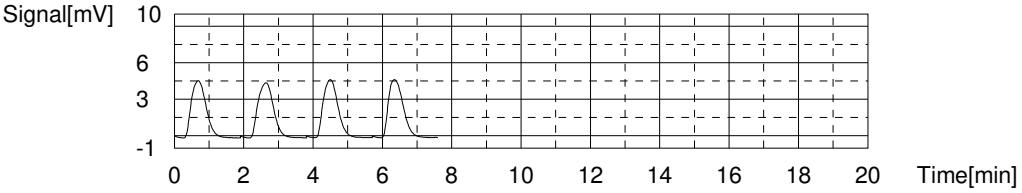
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.890mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.96	3.861mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 10:56:15 AM
2	14.10	3.906mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:00:52 AM
3	14.05	3.890mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:05:29 AM
4	14.09	3.903mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:10:06 AM

Mean Area 14.05
Mean Conc. 3.890mg/L



Sample

Sample Name: 280-137702-D-29-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

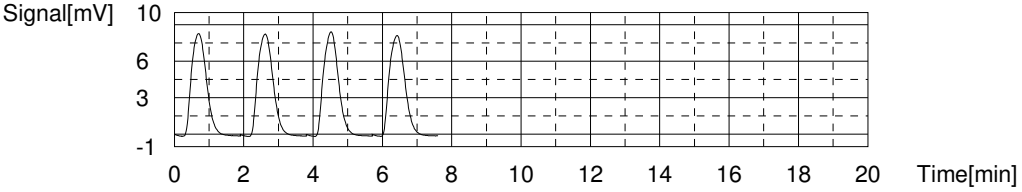
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.575mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.44	7.506mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:19:01 AM
2	25.86	7.640mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:23:38 AM
3	25.61	7.560mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:28:15 AM
4	25.71	7.592mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:32:52 AM

Mean Area 25.66
Mean Conc. 7.575mg/L



Sample

Sample Name: 280-137702-D-30-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

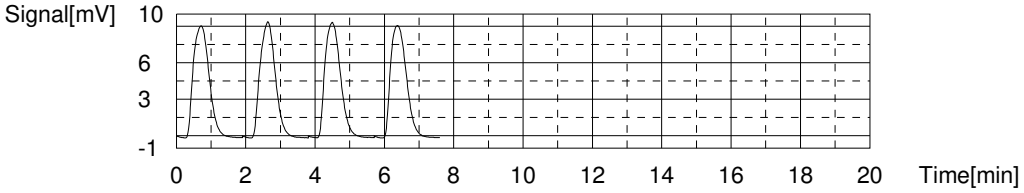
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:43.76mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.47	43.93mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:41:48 AM
2	29.23	43.55mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:46:25 AM
3	29.59	44.12mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:51:02 AM
4	29.17	43.45mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 11:55:39 AM

Mean Area 29.37
Mean Conc. 43.76mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

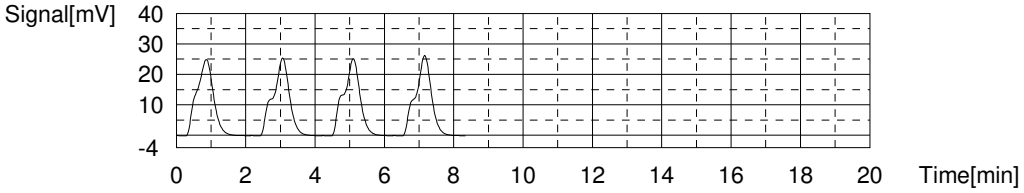
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.81	26.36mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:04:48 PM
2	84.88	26.38mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:09:35 PM
3	84.57	26.28mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:14:21 PM
4	85.02	26.42mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:19:09 PM

Mean Area 84.82
Mean Conc. 26.36mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

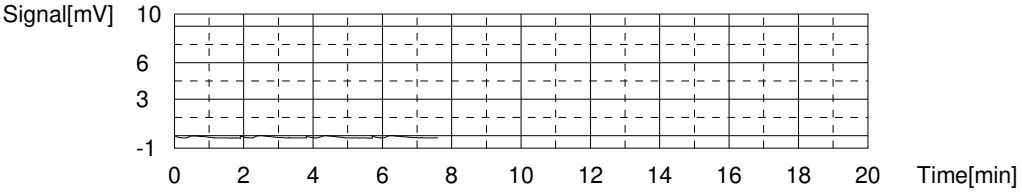
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4105mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4954	-0.4139mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:28:04 PM
2	0.5305	-0.4028mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:32:41 PM
3	0.5180	-0.4068mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:37:18 PM
4	0.4804	-0.4187mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:41:55 PM

Mean Area 0.5061
Mean Conc. -0.4105mg/L



Sample

Sample Name: 280-137702-D-30-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

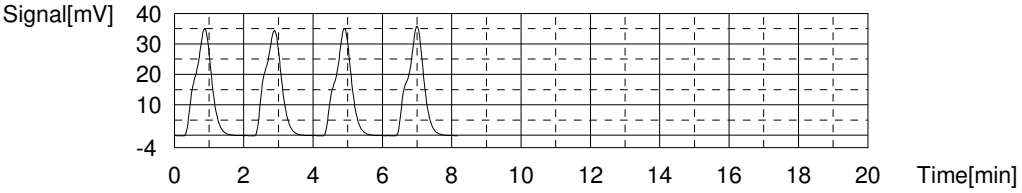
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:179.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	114.8	179.4mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:50:57 PM
2	115.5	180.5mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 12:55:39 PM
3	113.7	177.7mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:00:28 PM
4	115.4	180.4mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:05:14 PM

Mean Area 114.8
Mean Conc. 179.5mg/L



Sample

Sample Name: 280-137702-D-30-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

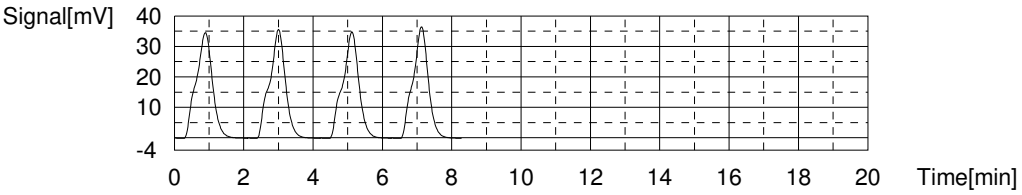
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:178.8mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	114.8	179.4mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:14:19 PM
2	114.6	179.1mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:19:08 PM
3	114.5	178.9mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:23:54 PM
4	113.8	177.8mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:28:39 PM

Mean Area 114.4
Mean Conc. 178.8mg/L



Sample

Sample Name: 280-137609-D-24-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

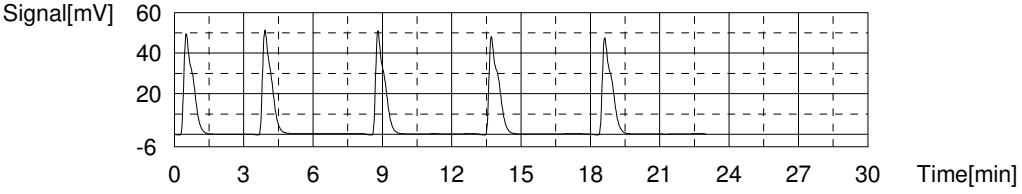
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:87.83mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	134.9	84.52mg/L	50uL	1	E	NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:38:57 PM
2	140.9	88.33mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:46:34 PM
3	140.6	88.14mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 1:54:08 PM
4	140.5	88.08mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:01:42 PM
5	138.4	86.75mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:09:17 PM

Mean Area 140.1
Mean Conc. 87.83mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

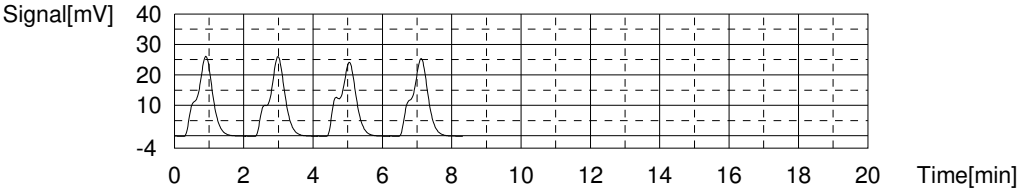
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.75	26.34mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:18:12 PM
2	84.89	26.38mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:22:59 PM
3	84.28	26.19mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:27:47 PM
4	84.21	26.17mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:32:37 PM

Mean Area 84.53
Mean Conc. 26.27mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

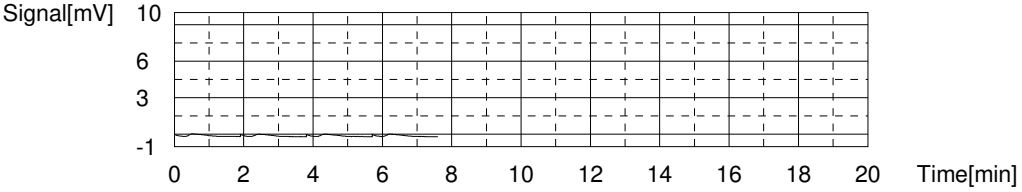
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3970mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6017	-0.3802mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:41:19 PM
2	0.5132	-0.4083mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:45:56 PM
3	0.5603	-0.3933mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:50:33 PM
4	0.5198	-0.4062mg/L	50uL	1		NPOC.2020_06_15_14_56_20.cal	6/30/2020 2:55:10 PM

Mean Area 0.5488
Mean Conc. -0.3970mg/L



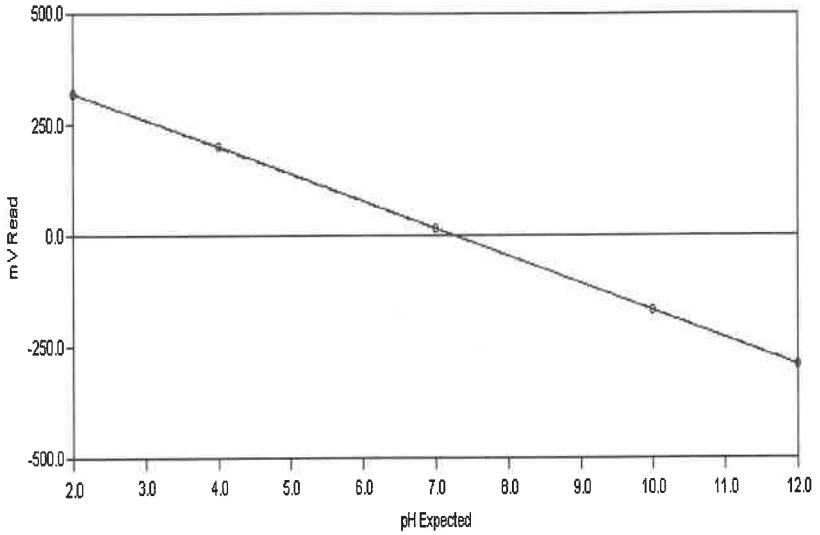
MANTECH

MANTECH INC.

Report Date: 6/16/2020 : 9:29 AM

Calibration Report

Calibration Record # 136



Calibration Settings

Calibration ID	PH	Date	6/16/2020	
Channel	1	Time	9:06 AM	
Probe Type	pH	Temperature	295.43 K	22.28 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-61.134	CorrCoeff	1.0000
Intercept	15.258	Equation:	Y = (-61.134) X + (15.258)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-61.134	-65.00	-53.00
Intercept	15.258	-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	320.55
	4.00	198.97
	7.00	15.50
	10.00	-168.09
	12.00	-290.64

Test America

Water Analysis Report

AT4 Analyst:_____

Run Number 430 **Order Number** 20200616-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	6/16/2020	10:16 AM	21.99	-1.00	5.21	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	6/16/2020	10:22 AM	21.83	-1.00	10.65	96.32	181.73	.00	170.82	10.92	.96	1.82	-1.00	.02
BUFFER 7	6/16/2020	10:25 AM	21.86	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	6/16/2020	10:31 AM	21.92	-1.00	10.65	94.72	181.41	.00	173.38	8.03	.95	1.81	-1.00	.02
MB	6/16/2020	10:37 AM	22.10	-1.00	6.79	.00	.54	.54	.00	.00	.00	.02	.03	.02
280-137598-a-2	6/16/2020	10:43 AM	21.74	-1.00	6.97	.00	400.74	400.74	.00	.00	.00	4.01	-1.00	.02
DU 280-137598-a-2	6/16/2020	10:49 AM	21.69	-1.00	7.02	.00	396.27	396.27	.00	.00	.00	3.96	-1.00	.02
280-137598-a-1	6/16/2020	10:56 AM	21.70	-1.00	7.13	.00	460.60	460.60	.00	.00	.00	4.61	-1.00	.02
280-137589-a-1	6/16/2020	11:02 AM	21.89	-1.00	7.75	.00	189.33	189.33	.00	.00	.00	1.89	-1.00	.02
280-137589-a-2	6/16/2020	11:08 AM	22.11	-1.00	8.04	.00	106.18	106.18	.00	.00	.00	1.06	-1.00	.02
280-137589-a-3	6/16/2020	11:13 AM	22.49	-1.00	8.15	.00	114.23	114.23	.00	.00	.00	1.14	-1.00	.02
280-137589-a-4	6/16/2020	11:19 AM	22.25	-1.00	7.75	.00	150.42	150.42	.00	.00	.00	1.50	-1.00	.02
280-137589-a-5	6/16/2020	11:25 AM	21.99	-1.00	7.96	.00	139.29	139.29	.00	.00	.00	1.39	-1.00	.02
280-137596-i-1	6/16/2020	11:31 AM	21.96	-1.00	7.89	.00	272.35	272.35	.00	.00	.00	2.72	-1.00	.02
280-137596-i-2	6/16/2020	11:38 AM	22.05	-1.00	7.55	.00	664.14	664.14	.00	.00	.00	6.64	-1.00	.02
CCV	6/16/2020	11:45 AM	21.96	-1.00	10.62	97.50	186.97	.00	178.95	8.02	.97	1.87	-1.00	.02
CCB	6/16/2020	11:50 AM	22.29	-1.00	6.71	.00	.50	.50	.00	.00	.00	.02	.03	.02
280-137596-f-3	6/16/2020	11:57 AM	22.25	-1.00	7.76	.00	342.80	342.80	.00	.00	.00	3.43	-1.00	.02
280-137595-a-2	6/16/2020	12:04 PM	22.35	-1.00	7.94	.00	609.50	609.50	.00	.00	.00	6.10	-1.00	.02
280-137647-a-1	6/16/2020	12:10 PM	22.42	-1.00	8.18	.00	113.51	113.51	.00	.00	.00	1.14	-1.00	.02
280-137647-a-2	6/16/2020	12:16 PM	22.61	-1.00	8.08	.00	123.90	123.90	.00	.00	.00	1.24	-1.00	.02
280-137647-a-3	6/16/2020	12:21 PM	22.78	-1.00	8.10	.00	118.45	118.45	.00	.00	.00	1.18	-1.00	.02
280-137647-a-4	6/16/2020	12:27 PM	22.92	-1.00	8.12	.00	123.01	123.01	.00	.00	.00	1.23	-1.00	.02
280-137648-g-1	6/16/2020	12:33 PM	22.63	-1.00	6.10	.00	.47	.47	.00	.00	.00	.02	.03	.02
280-137669-b-2	6/16/2020	12:38 PM	22.32	-1.00	8.31	.80	191.81	190.21	1.60	.00	.01	1.92	-1.00	.02
280-137650-a-1	6/16/2020	12:45 PM	22.28	-1.00	8.42	5.33	205.99	195.33	10.67	.00	.05	2.06	-1.00	.02
280-137650-i-3	6/16/2020	12:52 PM	22.32	-1.00	7.72	.00	610.74	610.74	.00	.00	.00	6.11	-1.00	.02

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Run Number 430 **Order Number** 20200616-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCV	6/16/2020	12:58 PM	22.23	-1.00	10.59	96.43	186.46	.00	180.06	6.40	.96	1.86	-1.00	.02
CCB	6/16/2020	1:04 PM	22.43	-1.00	6.65	.00	.50	.50	.00	.00	.00	.02	.04	.02
LCS	6/16/2020	1:10 PM	22.34	-1.00	10.59	92.09	179.28	.00	174.39	4.89	.92	1.79	-1.00	.02
MB	6/16/2020	1:15 PM	22.52	-1.00	6.61	.00	.50	.50	.00	.00	.00	.02	.03	.02
280-137650-i-4	6/16/2020	1:23 PM	22.51	-1.00	6.62	.00	769.08	769.08	.00	.00	.00	7.69	-1.00	.02
DU 280-137650-i-4	6/16/2020	1:30 PM	22.75	-1.00	6.68	.00	774.53	774.53	.00	.00	.00	7.75	-1.00	.02
280-137650-i-6	6/16/2020	1:37 PM	23.09	-1.00	8.00	.00	272.79	272.79	.00	.00	.00	2.73	-1.00	.02
280-137609-f-1	6/16/2020	1:44 PM	23.04	-1.00	7.72	.00	405.67	405.67	.00	.00	.00	4.06	-1.00	.02
280-137609-f-2	6/16/2020	1:51 PM	22.86	-1.00	7.20	.00	629.85	629.85	.00	.00	.00	6.30	-1.00	.02
280-137609-f-3	6/16/2020	1:57 PM	22.75	-1.00	7.54	.00	475.94	475.94	.00	.00	.00	4.76	-1.00	.02
280-137609-f-4	6/16/2020	2:04 PM	22.75	-1.00	7.36	.00	306.66	306.66	.00	.00	.00	3.07	-1.00	.02
280-137609-f-5	6/16/2020	2:11 PM	22.74	-1.00	7.54	.00	618.75	618.75	.00	.00	.00	6.19	-1.00	.02
280-137609-f-6	6/16/2020	2:17 PM	22.78	-1.00	7.42	.00	323.68	323.68	.00	.00	.00	3.24	-1.00	.02
280-137609-f-7	6/16/2020	2:23 PM	22.74	-1.00	7.64	.00	417.25	417.25	.00	.00	.00	4.17	-1.00	.02
CCV	6/16/2020	2:30 PM	22.66	-1.00	10.55	93.73	183.32	.00	179.19	4.13	.94	1.83	-1.00	.02
CCB	6/16/2020	2:35 PM	22.86	-1.00	6.50	.00	.55	.55	.00	.00	.00	.02	.03	.02
280-137609-f-8	6/16/2020	2:42 PM	22.95	-1.00	7.50	.00	406.94	406.94	.00	.00	.00	4.07	-1.00	.02
280-137609-o-9	6/16/2020	2:48 PM	23.09	-1.00	7.67	.00	426.89	426.89	.00	.00	.00	4.27	-1.00	.02
280-137609-d-10	6/16/2020	2:54 PM	23.35	-1.00	6.85	.00	164.31	164.31	.00	.00	.00	1.64	-1.00	.02
280-137609-b-11	6/16/2020	3:00 PM	23.19	-1.00	5.91	.00	160.05	160.05	.00	.00	.00	1.60	-1.00	.02
280-137609-b-12	6/16/2020	3:05 PM	23.01	-1.00	5.91	.00	162.94	162.94	.00	.00	.00	1.63	-1.00	.02
280-137609-f-16	6/16/2020	3:13 PM	22.92	-1.00	7.17	.00	947.63	947.63	.00	.00	.00	9.48	-1.00	.02
280-137609-f-17	6/16/2020	3:21 PM	22.98	-1.00	7.19	.00	782.90	782.90	.00	.00	.00	7.83	-1.00	.02
280-137609-f-18	6/16/2020	3:28 PM	23.03	-1.00	7.61	.00	466.44	466.44	.00	.00	.00	4.66	-1.00	.02
280-137609-f-19	6/16/2020	3:34 PM	23.06	-1.00	7.48	.00	465.54	465.54	.00	.00	.00	4.66	-1.00	.02
280-137609-f-20	6/16/2020	3:42 PM	23.06	-1.00	7.18	.00	780.83	780.83	.00	.00	.00	7.81	-1.00	.02
280-137609-f-21	6/16/2020	3:50 PM	23.11	-1.00	7.49	.00	761.04	761.04	.00	.00	.00	7.61	-1.00	.02
CCV	6/16/2020	3:56 PM	23.04	-1.00	10.50	89.70	181.79	2.39	179.41	.00	.90	1.82	-1.00	.02
CCB	6/16/2020	4:02 PM	23.22	-1.00	6.44	.00	.46	.46	.00	.00	.00	.02	.04	.02
LCS	6/16/2020	4:08 PM	23.27	-1.00	10.50	89.68	184.18	4.82	179.37	.00	.90	1.84	-1.00	.02

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Run Number 430 **Order Number** 20200616-2

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	6/16/2020	4:13 PM	23.52	-1.00	6.46	.00	.37	.37	.00	.00	.00	.02	.04	.02
280-137609-f-22	6/16/2020	4:20 PM	23.43	-1.00	7.33	.00	604.18	604.18	.00	.00	.00	6.04	-1.00	.02
DU 280-137609-f-22	6/16/2020	4:27 PM	23.44	-1.00	7.36	.00	631.42	631.42	.00	.00	.00	6.31	-1.00	.02
280-137609-f-23	6/16/2020	4:35 PM	23.56	-1.00	7.47	.00	724.86	724.86	.00	.00	.00	7.25	-1.00	.02
280-137609-f-24	6/16/2020	4:42 PM	23.62	-1.00	7.56	.00	464.30	464.30	.00	.00	.00	4.64	-1.00	.02
280-137609-f-25	6/16/2020	4:48 PM	23.64	-1.00	7.67	.00	393.80	393.80	.00	.00	.00	3.94	-1.00	.02
280-137609-f-26	6/16/2020	4:56 PM	23.64	-1.00	7.32	.00	901.05	901.05	.00	.00	.00	9.01	-1.00	.02
280-137609-f-27	6/16/2020	5:04 PM	23.72	-1.00	7.35	.00	834.75	834.75	.00	.00	.00	8.35	-1.00	.02
280-137609-f-28	6/16/2020	5:11 PM	23.72	-1.00	7.66	.00	380.47	380.47	.00	.00	.00	3.80	-1.00	.02
280-137609-f-29	6/16/2020	5:18 PM	23.73	-1.00	7.32	.00	728.83	728.83	.00	.00	.00	7.29	-1.00	.02
CCV	6/16/2020	5:25 PM	23.76	-1.00	10.45	89.90	187.53	7.73	179.79	.00	.90	1.88	-1.00	.02
CCB	6/16/2020	5:30 PM	24.07	-1.00	6.47	.00	.47	.47	.00	.00	.00	.02	.04	.02

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GENERAL RESULTS REPORT.SRW

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Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

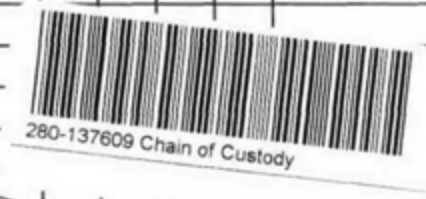
Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY GC JO CH	

Analytical Parameters: Explosives+MNX (8330A); TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2); SO_4 (9056A), Alkalinity (2320B); Sulfide (9034); DOC (9060A)*; Methane (RSK 175)

Bill to: Brice Engineering

Remarks: standard TAT

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
6-12-20	1110			GO117-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
6-12-20	1130		X	PZ013-20A	AQ	9	ABCDEF	X	X	X	X	X	X		



Page 1843 of 1860

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6-12-20	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	6-13-20	0935	Airbill Number: 8156 5922 7678	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

1.6, 0.2, 1.3, 0.4, 0.9, 0.6, 0.6, 0.9 °C IR Gun 6-13-20

2020087

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): CH JO TY GC	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
								Analytical Parameters							Bill to: Brice Engineering
6-12-20	0825		X	GO104-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
6-12-20	0820		X	PZ014-20A	AQ	9	ABCDEF	X	X	X	X	X	X		standard TAT

Signatures	Date	Time
Relinquished by:		
Received by:	6-13-20	0935
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 8156 5922 7656

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

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2020083

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY GC JO CH	

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)	
6-12-20	1355		X	GO115-20A	AQ	9	ABCDEF	X	X	X	X	X	X	
6-12-20	1425		X	GO101-20A	AQ	9	ABCDEF	X	X	X	X	X	X	

Analytical Parameters

Bill to: Brice Engineering

Remarks

standard TAT

6°C

Signatures	Date	Time
Relinquished by:	6-12-20	1700
Received by:	6-13-20	0937
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 815659227494

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020089

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TYGC SO CH	

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
6-12-20	1305		X	GO100-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
6-12-20	1240		X	GO111-20A	AQ	9	ABCDEF	X	X	X	X	X	X		

Bill to: Brice Engineering

standard TAT

Signatures	Date	Time
Relinquished by:	6-12-20	1700
Received by:	6-13-20	0935
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 8156 5922 7453

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020088

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): JO CH TY GC	

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
6-11-20	1645		X	GO103-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
6-11-20	1450		X	GO107-20A	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time
Relinquished by:	6-12-20	1700
Received by:	6-13-20	0935
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 8156 5922 7645

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

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2020082

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY GC JO CH	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Bill to: Brice Engineering Remarks standard TAT
6-12-20	0950		X	GO116-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
6-12-20	1100		X	GO120-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6-12-20	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	6-13-20	0935	Airbill Number: 8156 5922 7667	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020086

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY GC CH JO	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
								Analytical Parameters							Bill to: Brice Engineering
6-11-20	1515			GO102-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
6-11-20	1605			GO106-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
															standard TAT

Signatures	Date	Time
Relinquished by:	6-12-20	1700
Received by:	6-13-20	0935
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 8156 5922 7634

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

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2020085

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY GC	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
								Analytical Parameters							Bill to: Brice Engineering
6-12-20	1510		X	GW095-20A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
															standard TAT

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6-12-20	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	6-13-20	0935	Airbill Number: 8156 5922 7509	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020090



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TestAmerica

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: 22MAY20
ACTWGT: 10.00 LB MAN
CAD: 0562057/CAFE3313

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-99203

RMA:

FedEx Express

FedEx
TRK# 0221 1103 6129 1826

FRI - 12 JUN 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

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650 1 10:30 1048 06.12

ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
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7502 WEST 13TH STREET

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4955 YARROW STREET

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REF: S280-99203

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ORIGIN ID:PHDA (308) 379-7542
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4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-99203

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TRK# 0221 1103 6129 1081

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ORIGIN ID:PHDA (308) 379-7542
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BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
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4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-99203

RMA:

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#3676756 06/11 56BJ1/C7DD/FE4A



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REF: S280-99203

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FedEx
TRK# 0221 1103 6129 1826

FRI - 12 JUN 10:30A
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PRIORITY OVERNIGHT

XH LAAA

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ARVADA CO 800024517
(303) 736-0100
REF: S280-99203

RMA:

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TRK# 0221 **1103 6129 1081**

FRI - 12 JUN 10:30A
PRIORITY OVERNIGHT

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#3676756 06/11 5GBJ1/C7DD/FE4A

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GARY CARSON
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GRAND ISLAND, NE 68803
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TO

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4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-99203

RMA:

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FedEx
TRK# 0221 1103 6129 1070

FRI - 12 JUN 10:3

PRIORITY OVERNIGH

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CO-US DEN

#3676756 06/11 5GBJ1/C7DD/FE4A

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-137609-2

Login Number: 137609
List Number: 1
Creator: Lubin, Julius C

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?	False	Refer to Job Narrative for details.
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	False	Refer to Job Narrative for details.
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-137609-2

Login Number: 137609
List Number: 2
Creator: Lubin, Julius C

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	
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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	