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ANALYTICAL REPORT

Job Number: 280-137609-1

Job Description: Cornhusker (CHAAP)

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



Approved for release.
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7/24/2020 4:11 PM

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The Lab Certification ID# is 4025.

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.

HPLC/IC

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	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-137609-1

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

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

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

RECEIPT

The samples were received on 6/12/2020 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.2º C, 0.4º C, 0.4º C, 0.4º C, 1.0º C, 1.9º C and 3.9º 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 second Login Sample Receiving Checklist included in this data package is associated with the volume received on 6/13/2020.

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

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11), SHGW05-20A (280-137609-12), SOURCE 2020 (280-137609-13), TB01-061120 (280-137609-14) and TB02-061120 (280-137609-15) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 06/20/2020.

The continuing calibration verification (CCV) associated with batch 280-499519 recovered above the upper control limit for Dichlorodifluoromethane at +22.6%D. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are associated: SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11), SHGW05-20A (280-137609-12), SOURCE 2020 (280-137609-13), TB01-061120 (280-137609-14), TB02-061120 (280-137609-15) and (CCV 280-499519/2)

The following compound was outside control limits in the closing continuing calibration verification (CCVC) associated with batch 280-499519: Bromomethane at -60.7%D . This compound is considered a poor performing compound as listed in the Technical Specifications to DoD QSM and is excluded from the 50%D limit. The following samples are associated: SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11), SHGW05-20A (280-137609-12), SOURCE 2020 (280-137609-13), TB01-061120 (280-137609-14), TB02-061120 (280-137609-15) and (CCVC 280-499519/34)

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

DISSOLVED GASES (GC)

Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8), G0102-20A (280-137609-9), SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11) and SHGW05-20A (280-137609-12) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/16/2020, 06/17/2020 and 06/18/2020.

Samples PZ012-20A (280-137609-2)[3X], G0017-20A (280-137609-8)[3X], SHGW02-20A (280-137609-11)[3X] and SHGW05-20A (280-137609-12)[3X] 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.

DIESEL RANGE ORGANICS (DRO)
Sample SHGW03-20A (280-137609-10) was analyzed for Diesel Range Organics (DRO) in accordance with 8015C DRO. The samples were prepared on 06/18/2020 and analyzed on 06/30/2020.

C10-C28 was detected in method blank MB 280-499277/1-A at a level that was below half the LOQ. The value should be considered an estimate, and has been flagged J.

The two 500ml AG volumes received for sample SHGW03-20A (280-137609-10) were combined together for extraction as requested on the COC.

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8), G0102-20A (280-137609-9) and SOURCE 2020 (280-137609-13) 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.

RDX failed the recovery criteria high for the MSD of sample PZ007-20AMSD (280-137609-1) in batch 280-499532. RDX exceeded the RPD limit. Refer to the QC report for details.

4-Amino-2,6-dinitrotoluene and RDX failed the recovery criteria low for the MS of sample G0102-20AMS (280-137609-9) in batch 280-499863. 4-Amino-2,6-dinitrotoluene and RDX failed the recovery criteria low for the MSD of sample G0102-20AMSD (280-137609-9) in batch 280-499863. Refer to the QC report for details.

Sample G0102-20A (280-137609-9)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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 analytical batch 280-499531: G0080-20A (280-137609-4), PZ005-20A (280-137609-5) and G0017-20A (280-137609-8). The results from both columns has been reported and qualified in accordance with the laboratory's QAS.

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

ALKALINITY
Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8), G0102-20A (280-137609-9), SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11) and SHGW05-20A (280-137609-12) 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 PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8) and G0102-20A (280-137609-9) 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 PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8) and G0102-20A (280-137609-9) 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.

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

NITRATE-NITRITE AS NITROGEN
Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8), G0102-20A (280-137609-9), SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11) and SHGW05-20A (280-137609-12) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/18/2020.

Nitrate Nitrite as N failed the recovery criteria low for the MS of sample G0102-20AMS (280-137609-9) in batch 280-499351. Nitrate Nitrite as N failed the recovery criteria low for the MSD of sample G0102-20AMSD (280-137609-9) in batch 280-499351. Refer to the QC report for details.

Sample PZ005-20A (280-137609-5)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8) and G0102-20A (280-137609-9) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 06/16/2020 and 06/18/2020.

Sulfide was detected in method blank MB 280-498938/2-A at a level that was below half the LOQ. The value should be considered an estimate, and has been flagged J.

Sulfide was detected in method blank MB 280-499239/2-A at a level that was below half the LOQ. The value should be considered an estimate, and has been flagged J.

Sulfide was detected in method blank MB 280-499255/2-A at a level that was below half the LOQ. The value should be considered an estimate, and has been flagged J.

Sulfide exceeded the RPD limit for the MSD of sample PZ007-20AMSD (280-137609-1) in batch 280-499241. Refer to the QC report for details.

Sulfide exceeded the RPD limit for the MSD of sample G0102-20AMSD (280-137609-9) in batch 280-499302. 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.

ANIONS (28 DAYS)

Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8), G0102-20A (280-137609-9), SHGW03-20A (280-137609-10), SHGW02-20A (280-137609-11) and SHGW05-20A (280-137609-12) were analyzed for anions (28 days) in accordance with 9056A. The samples were analyzed on 06/25/2020 and 06/29/2020.

Samples PZ007-20A (280-137609-1)[5X], PZ012-20A (280-137609-2)[5X], G0105-20A (280-137609-3)[10X], G0080-20A (280-137609-4)[5X], PZ005-20A (280-137609-5)[10X], NW052-20A (280-137609-6)[5X], G0045-20A (280-137609-7)[10X], G0017-20A (280-137609-8)[5X], G0102-20A (280-137609-9)[10X], SHGW03-20A (280-137609-10)[5X], SHGW02-20A (280-137609-11)[5X] and SHGW05-20A (280-137609-12)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED ORGANIC CARBON

Samples PZ007-20A (280-137609-1), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8) and G0102-20A (280-137609-9) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 06/27/2020.

The following samples were filtered and preserved at the bench using sulfuric acid to bring their pH to <2, prior to analysis: PZ007-20A (280-137609-1), PZ007-20A (280-137609-1[MS]), PZ007-20A (280-137609-1[MSD]), PZ012-20A (280-137609-2), G0105-20A (280-137609-3), G0080-20A (280-137609-4), PZ005-20A (280-137609-5), NW052-20A (280-137609-6), G0045-20A (280-137609-7), G0017-20A (280-137609-8), G0102-20A (280-137609-9), G0102-20A (280-137609-9[MS]) and G0102-20A (280-137609-9[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: 280-137609-1

Client Sample ID: PZ007-20A — Lab Sample ID: 280-137609-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	0.042	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.71	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.96		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	580	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	410		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.1		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ012-20A — Lab Sample ID: 280-137609-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	12	D M	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
Ammonia	2.6		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.6		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.081	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	360	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	630		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: G0105-20A — Lab Sample ID: 280-137609-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	2.4		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.94		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.7		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	1100	D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	480		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.3		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0080-20A — Lab Sample ID: 280-137609-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0088		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.053	J J1 M	0.11	0.10	0.053	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.11	J1 M	0.11	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.15	J J1 M	0.16	0.13	0.060	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.087	J J1 M	0.16	0.13	0.060	ug/L	1		8330A	Total/NA
Ammonia	0.83		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.97	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.9		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	87	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.8		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: 280-137609-1

Client Sample ID: PZ005-20A — Lab Sample ID: 280-137609-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.076	J J1	0.11	0.10	0.053	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.32	J1	0.11	0.10	0.053	ug/L	1		8330A	Total/NA
Ammonia	0.024	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.81	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	11		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	1400	D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	620		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.9		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW052-20A — Lab Sample ID: 280-137609-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.45		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.031	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.052	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	1.6	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	140	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	320		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.6		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0045-20A — Lab Sample ID: 280-137609-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0028	J	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	3.4		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.3		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	1200	D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	420		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.1		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0017-20A — Lab Sample ID: 280-137609-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	8.5	D M	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
Tetryl	0.26	J1 M	0.12	0.11	0.033	ug/L	1		8330A	Total/NA
Tetryl	0.065	J J1	0.12	0.11	0.033	ug/L	1		8330A	Total/NA
Ammonia	0.12		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.83	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	8.0		4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	340	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	410		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.1		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: 280-137609-1

Client Sample ID: G0102-20A — Lab Sample ID: 280-137609-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0018	J M	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
HMX	2.2	M	0.23	0.22	0.096	ug/L	1		8330A	Total/NA
MNX	1.2	J M	2.2	0.44	0.17	ug/L	1		8330A	Total/NA
RDX - DL	41	D M J1	2.3	2.2	0.57	ug/L	10		8330A	Total/NA
Ammonia	0.072	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	3.9	J1	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
Total Alkalinity as CaCO3	430		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: SHGW03-20A — Lab Sample ID: 280-137609-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	15		1.0	0.80	0.27	ug/L	1		8260B	Total/NA
Methane	0.16		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
C10-C28	320		250	120	32	ug/L	1		8015C DRO	Total/NA
Nitrate Nitrite as N	1.9		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	39	D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	160		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW02-20A — Lab Sample ID: 280-137609-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	0.33	J	1.0	0.80	0.27	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	1.4		1.0	0.40	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	68		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	73		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	38		10	6.4	1.9	ug/L	1		8260B	Total/NA
Carbon disulfide	0.19	J	2.0	0.80	0.17	ug/L	1		8260B	Total/NA
Chloroethane	1.5	J	2.0	1.6	0.41	ug/L	1		8260B	Total/NA
Methane	13	D M	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
Ethylene	0.0010	J M	0.0050	0.0014	0.00040	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	0.022	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	13	J D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	160		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW05-20A — Lab Sample ID: 280-137609-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	0.31	J	1.0	0.80	0.27	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	1.4		1.0	0.40	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	71		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	75		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	40		10	6.4	1.9	ug/L	1		8260B	Total/NA
Carbon disulfide	0.26	J	2.0	0.80	0.17	ug/L	1		8260B	Total/NA
Chloroethane	1.4	J	2.0	1.6	0.41	ug/L	1		8260B	Total/NA
Ethylene	0.0011	J M	0.0050	0.0014	0.00040	mg/L	1		RSK-175	Total/NA
Methane - DL	14	D M	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
Sulfate	12	J D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	160		10	10	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-137609-1

Client Sample ID: SOURCE 2020 — Lab Sample ID: 280-137609-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	1.9		1.0	0.40	0.17	ug/L	1		8260B	Total/NA
Bromoform	1.2		1.0	1.0	0.46	ug/L	1		8260B	Total/NA
Chloroform	0.61	J	1.0	0.40	0.16	ug/L	1		8260B	Total/NA
Dibromochloromethane	2.7		1.0	0.40	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: TB01-061120 — Lab Sample ID: 280-137609-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	1.8		1.0	0.40	0.17	ug/L	1		8260B	Total/NA
Bromoform	1.2		1.0	1.0	0.46	ug/L	1		8260B	Total/NA
Chloroform	0.61	J	1.0	0.40	0.16	ug/L	1		8260B	Total/NA
Dibromochloromethane	2.8		1.0	0.40	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: TB02-061120 — Lab Sample ID: 280-137609-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	1.8		1.0	0.40	0.17	ug/L	1		8260B	Total/NA
Bromoform	1.2		1.0	1.0	0.46	ug/L	1		8260B	Total/NA
Chloroform	0.63	J	1.0	0.40	0.16	ug/L	1		8260B	Total/NA
Dibromochloromethane	2.8		1.0	0.40	0.17	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ007-20A
Lab Sample ID: 280-137609-1

Date Collected: 06/11/20 08:50
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/16/20 21:53	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 03:09	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/23/20 03:09	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		06/23/20 03:09	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		06/23/20 03:09	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		06/23/20 03:09	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		06/23/20 03:09	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		06/23/20 03:09	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		06/23/20 03:09	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/23/20 03:09	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		06/23/20 03:09	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		06/23/20 03:09	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		06/23/20 03:09	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		06/23/20 03:09	1
RDX	0.21	U J1	0.22	0.21	0.055	ug/L		06/23/20 03:09	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/23/20 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 03:09*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.042**	**J**	0.10	0.050	0.022	mg/L		06/16/20 14:28	1
Nitrogen, Total Kjeldahl	**0.71**	**J**	1.0	1.0	0.69	mg/L		06/19/20 16:40	1
Nitrate Nitrite as N	**0.96**		0.10	0.050	0.019	mg/L		06/18/20 16:47	1
Sulfide	1.9	U J1	4.0	1.9	0.79	mg/L		06/18/20 10:56	1
Sulfate	**580**	**D**	25	15	5.2	mg/L		06/25/20 17:18	5
Total Alkalinity as CaCO3	**410**		10	10	3.1	mg/L		06/16/20 13:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.1**		1.0	1.0	0.35	mg/L		06/27/20 02:06	1

Client Sample ID: PZ012-20A
Lab Sample ID: 280-137609-2

Date Collected: 06/10/20 15:45
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**12**	**D M**	0.015	0.0060	0.0019	mg/L		06/18/20 14:52	3

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.090	ug/L		06/22/20 17:11	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/22/20 17:11	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		06/22/20 17:11	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		06/24/20 08:56	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		06/22/20 17:11	1

Client Sample ID: PZ012-20A
Lab Sample ID: 280-137609-2

Date Collected: 06/10/20 15:45
Matrix: Water
Date Received: 06/12/20 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.054	ug/L		06/22/20 17:11	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		06/22/20 17:11	1
3-Nitrotoluene	0.43	U M	0.43	0.43	0.21	ug/L		06/22/20 17:11	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		06/22/20 17:11	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		06/22/20 17:11	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		06/22/20 17:11	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		06/22/20 17:11	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		06/22/20 17:11	1
RDX	0.21	U M	0.22	0.21	0.055	ug/L		06/22/20 17:11	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/22/20 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*114*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 17:11*	*1*
1,2-Dinitrobenzene	*106*	*M*	*83 - 119*	*06/17/20 09:26*	*06/24/20 08:56*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.6**		0.10	0.050	0.022	mg/L		06/16/20 14:00	1
Nitrogen, Total Kjeldahl	**4.6**		1.0	1.0	0.69	mg/L		06/19/20 16:50	1
Nitrate Nitrite as N	**0.081**	**J**	0.10	0.050	0.019	mg/L		06/18/20 16:53	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/16/20 11:50	1
Sulfate	**360**	**D**	25	15	5.2	mg/L		06/25/20 18:24	5
Total Alkalinity as CaCO3	**630**		10	10	3.1	mg/L		06/16/20 13:51	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 04:13	1

Client Sample ID: G0105-20A
Lab Sample ID: 280-137609-3

Date Collected: 06/11/20 13:35
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**2.4**		0.0050	0.0020	0.00063	mg/L		06/16/20 23:14	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		06/22/20 17:34	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		06/22/20 17:34	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		06/22/20 17:34	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		06/24/20 09:31	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		06/22/20 17:34	1
2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.053	ug/L		06/22/20 17:34	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		06/22/20 17:34	1
3-Nitrotoluene	0.42	U M	0.42	0.42	0.21	ug/L		06/22/20 17:34	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/22/20 17:34	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		06/24/20 09:31	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		06/22/20 17:34	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/24/20 09:31	1
Nitrobenzene	0.21	U M	0.22	0.21	0.096	ug/L		06/22/20 17:34	1

Client Sample ID: G0105-20A
Lab Sample ID: 280-137609-3
Date Collected: 06/11/20 13:35
Matrix: Water
Date Received: 06/12/20 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.21	U M	0.22	0.21	0.054	ug/L		06/22/20 17:34	1
Tetryl	0.11	U	0.12	0.11	0.033	ug/L		06/22/20 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*107*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 17:34*	*1*
1,2-Dinitrobenzene	*103*	*M*	*83 - 119*	*06/17/20 09:26*	*06/24/20 09:31*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.94**		0.10	0.050	0.022	mg/L		06/16/20 14:02	1
Nitrogen, Total Kjeldahl	**1.7**		1.0	1.0	0.69	mg/L		06/19/20 16:57	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 16:55	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/18/20 10:56	1
Sulfate	**1100**	**D**	50	30	10	mg/L		06/29/20 21:37	10
Total Alkalinity as CaCO3	**480**		10	10	3.1	mg/L		06/16/20 13:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.3**		1.0	1.0	0.35	mg/L		06/27/20 04:40	1

Client Sample ID: G0080-20A
Lab Sample ID: 280-137609-4
Date Collected: 06/11/20 13:45
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0088**		0.0050	0.0020	0.00063	mg/L		06/16/20 23:31	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 17:56	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.039	ug/L		06/22/20 17:56	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		06/22/20 17:56	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		06/22/20 17:56	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		06/22/20 17:56	1
2-Amino-4,6-dinitrotoluene	**0.053**	**J J1 M**	0.11	0.10	0.053	ug/L		06/22/20 17:56	1
2-Amino-4,6-dinitrotoluene	**0.11**	**J1 M**	0.11	0.10	0.053	ug/L		06/24/20 10:06	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		06/22/20 17:56	1
3-Nitrotoluene	0.42	U M	0.42	0.42	0.20	ug/L		06/24/20 10:06	1
4-Amino-2,6-dinitrotoluene	**0.15**	**J J1 M**	0.16	0.13	0.060	ug/L		06/22/20 17:56	1
4-Amino-2,6-dinitrotoluene	**0.087**	**J J1 M**	0.16	0.13	0.060	ug/L		06/24/20 10:06	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		06/22/20 17:56	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		06/22/20 17:56	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/22/20 17:56	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		06/22/20 17:56	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		06/22/20 17:56	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		06/22/20 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 17:56*	*1*
1,2-Dinitrobenzene	*99*		*83 - 119*	*06/17/20 09:26*	*06/24/20 10:06*	*1*

Client Sample ID: G0080-20A
Lab Sample ID: 280-137609-4

Date Collected: 06/11/20 13:45
Matrix: Water
Date Received: 06/12/20 09:00

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.83**		0.10	0.050	0.022	mg/L		06/16/20 14:16	1
Nitrogen, Total Kjeldahl	**0.97**	**J**	1.0	1.0	0.69	mg/L		06/19/20 16:59	1
Nitrate Nitrite as N	**2.9**		0.10	0.050	0.019	mg/L		06/18/20 16:57	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 10:56	1
Sulfate	**87**	**D**	25	15	5.2	mg/L		06/25/20 18:57	5
Total Alkalinity as CaCO3	**310**		10	10	3.1	mg/L		06/16/20 14:04	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.8**		1.0	1.0	0.35	mg/L		06/27/20 05:48	1

Client Sample ID: PZ005-20A
Lab Sample ID: 280-137609-5

Date Collected: 06/11/20 12:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/16/20 23:47	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	0.087	ug/L		06/22/20 18:19	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		06/22/20 18:19	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		06/22/20 18:19	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		06/22/20 18:19	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		06/22/20 18:19	1
2-Amino-4,6-dinitrotoluene	**0.076**	**J J1**	0.11	0.10	0.053	ug/L		06/22/20 18:19	1
2-Amino-4,6-dinitrotoluene	**0.32**	**J1**	0.11	0.10	0.053	ug/L		06/24/20 10:41	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		06/22/20 18:19	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		06/22/20 18:19	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		06/24/20 10:41	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		06/22/20 18:19	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		06/22/20 18:19	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/22/20 18:19	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		06/24/20 10:41	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		06/24/20 10:41	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		06/22/20 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*103*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 18:19*	*1*
1,2-Dinitrobenzene	*102*		*83 - 119*	*06/17/20 09:26*	*06/24/20 10:41*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.024**	**J**	0.10	0.050	0.022	mg/L		06/16/20 15:42	1
Nitrogen, Total Kjeldahl	**0.81**	**J**	1.0	1.0	0.69	mg/L		06/19/20 17:00	1
Nitrate Nitrite as N	**11**		0.20	0.10	0.038	mg/L		06/18/20 16:59	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/18/20 10:56	1
Sulfate	**1400**	**D**	50	30	10	mg/L		06/29/20 21:54	10
Total Alkalinity as CaCO3	**620**		10	10	3.1	mg/L		06/16/20 14:11	1

Client Sample ID: PZ005-20A
Lab Sample ID: 280-137609-5

Date Collected: 06/11/20 12:00
Matrix: Water
Date Received: 06/12/20 09:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.9**		1.0	1.0	0.35	mg/L		06/27/20 12:11	1

Client Sample ID: NW052-20A
Lab Sample ID: 280-137609-6

Date Collected: 06/10/20 15:50
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.45**		0.0050	0.0020	0.00063	mg/L		06/17/20 00:04	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 18:42	1
1,3-Dinitrobenzene	0.10	U	0.12	0.10	0.039	ug/L		06/22/20 18:42	1
2,4,6-Trinitrotoluene	0.10	U	0.12	0.10	0.047	ug/L		06/22/20 18:42	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		06/22/20 18:42	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		06/22/20 18:42	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.12	0.10	0.053	ug/L		06/22/20 18:42	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		06/22/20 18:42	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		06/22/20 18:42	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.060	ug/L		06/22/20 18:42	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		06/22/20 18:42	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		06/22/20 18:42	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/22/20 18:42	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		06/24/20 11:16	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		06/22/20 18:42	1
Tetryl	0.10	U	0.12	0.10	0.033	ug/L		06/22/20 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*108*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 18:42*	*1*
1,2-Dinitrobenzene	*105*		*83 - 119*	*06/17/20 09:26*	*06/24/20 11:16*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.031**	**J**	0.10	0.050	0.022	mg/L		06/16/20 14:20	1
Nitrogen, Total Kjeldahl	**1.0**		1.0	1.0	0.69	mg/L		06/19/20 17:01	1
Nitrate Nitrite as N	**0.052**	**J**	0.10	0.050	0.019	mg/L		06/18/20 17:01	1
Sulfide	**1.6**	**J**	4.0	1.9	0.79	mg/L		06/16/20 11:50	1
Sulfate	**140**	**D**	25	15	5.2	mg/L		06/25/20 20:02	5
Total Alkalinity as CaCO3	**320**		10	10	3.1	mg/L		06/16/20 14:17	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.6**		1.0	1.0	0.35	mg/L		06/27/20 12:43	1

Client Sample ID: G0045-20A
Lab Sample ID: 280-137609-7

Date Collected: 06/11/20 12:10
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0028**	**J**	0.0050	0.0020	0.00063	mg/L		06/17/20 00:20	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		06/22/20 19:51	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/22/20 19:51	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		06/22/20 19:51	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		06/22/20 19:51	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		06/22/20 19:51	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053	ug/L		06/22/20 19:51	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		06/22/20 19:51	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		06/22/20 19:51	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/22/20 19:51	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		06/22/20 19:51	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		06/22/20 19:51	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/22/20 19:51	1
Nitrobenzene	0.21	U M	0.22	0.21	0.096	ug/L		06/22/20 19:51	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		06/22/20 19:51	1
Tetryl	0.11	U	0.12	0.11	0.033	ug/L		06/22/20 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*	*M*	*83 - 119*	*06/17/20 09:26*	*06/22/20 19:51*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.4**		0.10	0.050	0.022	mg/L		06/16/20 14:22	1
Nitrogen, Total Kjeldahl	**3.3**		1.0	1.0	0.69	mg/L		06/19/20 18:17	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 17:03	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/18/20 10:56	1
Sulfate	**1200**	**D**	50	30	10	mg/L		06/29/20 22:10	10
Total Alkalinity as CaCO3	**420**		10	10	3.1	mg/L		06/16/20 14:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.1**		1.0	1.0	0.35	mg/L		06/27/20 13:10	1

Client Sample ID: G0017-20A
Lab Sample ID: 280-137609-8

Date Collected: 06/11/20 11:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**8.5**	**D M**	0.015	0.0060	0.0019	mg/L		06/18/20 15:09	3

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 20:14	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		06/22/20 20:14	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		06/22/20 20:14	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		06/22/20 20:14	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		06/22/20 20:14	1

Client Sample ID: G0017-20A
Lab Sample ID: 280-137609-8

Date Collected: 06/11/20 11:00
Matrix: Water
Date Received: 06/12/20 09:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053	ug/L		06/24/20 13:01	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.090	ug/L		06/22/20 20:14	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		06/22/20 20:14	1
4-Amino-2,6-dinitrotoluene	0.13	U M	0.16	0.13	0.061	ug/L		06/22/20 20:14	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.11	ug/L		06/22/20 20:14	1
HMX	0.21	U M	0.22	0.21	0.092	ug/L		06/22/20 20:14	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/24/20 13:01	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		06/24/20 13:01	1
RDX	0.21	U M	0.22	0.21	0.054	ug/L		06/22/20 20:14	1
Tetryl	**0.26**	**J1 M**	0.12	0.11	0.033	ug/L		06/22/20 20:14	1
Tetryl	**0.065**	**J J1**	0.12	0.11	0.033	ug/L		06/24/20 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*116*		*83 - 119*	*06/17/20 09:26*	*06/22/20 20:14*	*1*
1,2-Dinitrobenzene	*106*	*M*	*83 - 119*	*06/17/20 09:26*	*06/24/20 13:01*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.12**		0.10	0.050	0.022	mg/L		06/16/20 15:56	1
Nitrogen, Total Kjeldahl	**0.83**	**J**	1.0	1.0	0.69	mg/L		06/19/20 18:19	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/18/20 17:05	1
Sulfide	**8.0**		4.0	1.9	0.79	mg/L		06/18/20 10:56	1
Sulfate	**340**	**D**	25	15	5.2	mg/L		06/25/20 20:35	5
Total Alkalinity as CaCO3	**410**		10	10	3.1	mg/L		06/16/20 14:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.1**		1.0	1.0	0.35	mg/L		06/27/20 13:33	1

Client Sample ID: G0102-20A
Lab Sample ID: 280-137609-9

Date Collected: 06/11/20 15:15
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0018**	**J M**	0.0050	0.0020	0.00063	mg/L		06/18/20 18:08	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	0.093	ug/L		06/23/20 05:50	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041	ug/L		06/23/20 05:50	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050	ug/L		06/23/20 05:50	1
2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030	ug/L		06/23/20 05:50	1
2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044	ug/L		06/23/20 05:50	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056	ug/L		06/23/20 05:50	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.094	ug/L		06/23/20 05:50	1
3-Nitrotoluene	0.44	U M	0.44	0.44	0.21	ug/L		06/23/20 05:50	1
4-Amino-2,6-dinitrotoluene	0.13	U J1	0.17	0.13	0.064	ug/L		06/23/20 05:50	1
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		06/23/20 05:50	1
HMX	**2.2**	**M**	0.23	0.22	0.096	ug/L		06/23/20 05:50	1
MNX	**1.2**	**J M**	2.2	0.44	0.17	ug/L		06/23/20 05:50	1

Client Sample ID: G0102-20A

Date Collected: 06/11/20 15:15
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-9

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.22	U	0.23	0.22	0.10	ug/L		06/23/20 05:50	1
Tetryl	0.11	U	0.12	0.11	0.035	ug/L		06/23/20 05:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*06/17/20 17:11*	*06/23/20 05:50*	*1*
1,2-Dinitrobenzene	*101*		*83 - 119*	*06/17/20 17:11*	*06/25/20 00:51*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	**41**	**D M J1**	2.3	2.2	0.57	ug/L		06/23/20 19:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*106*	*M D*	*83 - 119*	*06/17/20 17:11*	*06/23/20 19:49*	*10*
1,2-Dinitrobenzene	*69*	*Q M D*	*83 - 119*	*06/17/20 17:11*	*06/25/20 04:55*	*10*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.072**	**J**	0.10	0.050	0.022	mg/L		06/16/20 15:04	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 17:06	1
Nitrate Nitrite as N	**3.9**	**J1**	0.10	0.050	0.019	mg/L		06/18/20 17:23	1
Sulfide	1.9	U J1	4.0	1.9	0.79	mg/L		06/18/20 14:05	1
Sulfate	**1100**	**D**	50	30	10	mg/L		06/29/20 22:26	10
Total Alkalinity as CaCO3	**430**		10	10	3.1	mg/L		06/16/20 14:48	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 15:07	1

Client Sample ID: SHGW03-20A

Date Collected: 06/11/20 10:15
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 14:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 14:51	1
1,1,2-Trichloroethane	**15**		1.0	0.80	0.27	ug/L		06/20/20 14:51	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 14:51	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 14:51	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 14:51	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 14:51	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 14:51	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 14:51	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 14:51	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 14:51	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 14:51	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/20 14:51	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/20 14:51	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 14:51	1

Client Sample ID: SHGW03-20A
Lab Sample ID: 280-137609-10

Date Collected: 06/11/20 10:15
Matrix: Water

Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/20 14:51	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 14:51	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 14:51	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/20 14:51	1
Bromomethane	0.80	U Q	2.0	0.80	0.21	ug/L		06/20/20 14:51	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/20 14:51	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 14:51	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 14:51	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/20 14:51	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 14:51	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 14:51	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 14:51	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 14:51	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		06/20/20 14:51	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 14:51	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 14:51	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 14:51	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 14:51	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 14:51	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 14:51	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 14:51	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 14:51	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 14:51	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 14:51	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 14:51	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 14:51	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 14:51	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 14:51	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*06/20/20 14:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*06/20/20 14:51*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/20/20 14:51*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*06/20/20 14:51*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/17/20 00:53	1
Methane	**0.16**		0.0050	0.0020	0.00063	mg/L		06/17/20 00:53	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/17/20 00:53	1

Method: 8015C DRO - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**320**		250	120	32	ug/L		06/30/20 15:59	1

Client Sample ID: SHGW03-20A

Lab Sample ID: 280-137609-10

Date Collected: 06/11/20 10:15

Matrix: Water

Date Received: 06/12/20 09:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*56 - 125*	*06/18/20 15:45*	*06/30/20 15:59*	*1*
n-Octacosane	*97*		*60 - 142*	*06/18/20 15:45*	*06/30/20 15:59*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**1.9**		0.10	0.050	0.019	mg/L		06/18/20 17:19	1
Sulfate	**39**	**D**	25	15	5.2	mg/L		06/25/20 21:57	5
Total Alkalinity as CaCO3	**160**		10	10	3.1	mg/L		06/16/20 14:54	1

Client Sample ID: SHGW02-20A

Lab Sample ID: 280-137609-11

Date Collected: 06/11/20 08:55

Matrix: Water

Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 15:12	1
1,1,2-Trichloroethane	**0.33**	**J**	1.0	0.80	0.27	ug/L		06/20/20 15:12	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 15:12	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 15:12	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:12	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:12	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 15:12	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:12	1
1,2-Dichloroethane	**1.4**		1.0	0.40	0.13	ug/L		06/20/20 15:12	1
1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18	ug/L		06/20/20 15:12	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 15:12	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
2-Butanone (MEK)	**68**		6.0	4.0	2.0	ug/L		06/20/20 15:12	1
2-Hexanone	**73**		5.0	4.0	1.7	ug/L		06/20/20 15:12	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 15:12	1
Acetone	**38**		10	6.4	1.9	ug/L		06/20/20 15:12	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 15:12	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:12	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/20 15:12	1
Bromomethane	0.80	U Q	2.0	0.80	0.21	ug/L		06/20/20 15:12	1
Carbon disulfide	**0.19**	**J**	2.0	0.80	0.17	ug/L		06/20/20 15:12	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 15:12	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:12	1
Chloroethane	**1.5**	**J**	2.0	1.6	0.41	ug/L		06/20/20 15:12	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 15:12	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:12	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 15:12	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:12	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		06/20/20 15:12	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 15:12	1

Client Sample ID: SHGW02-20A
Lab Sample ID: 280-137609-11

Date Collected: 06/11/20 08:55
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 15:12	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 15:12	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 15:12	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 15:12	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 15:12	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 15:12	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 15:12	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:12	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:12	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 15:12	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:12	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 15:12	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 15:12	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/20 15:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*06/20/20 15:12*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*06/20/20 15:12*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*06/20/20 15:12*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/17/20 01:09	1
Methane	**13**	**D M**	0.015	0.0060	0.0019	mg/L		06/18/20 15:25	3
Ethylene	**0.0010**	**J M**	0.0050	0.0014	0.00040	mg/L		06/17/20 01:09	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.022**	**J**	0.10	0.050	0.019	mg/L		06/18/20 17:21	1
Sulfate	**13**	**J D**	25	15	5.2	mg/L		06/25/20 22:14	5
Total Alkalinity as CaCO3	**160**		10	10	3.1	mg/L		06/16/20 15:00	1

Client Sample ID: SHGW05-20A
Lab Sample ID: 280-137609-12

Date Collected: 06/11/20 08:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 15:34	1
1,1,2-Trichloroethane	**0.31**	**J**	1.0	0.80	0.27	ug/L		06/20/20 15:34	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 15:34	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 15:34	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:34	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:34	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 15:34	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:34	1
1,2-Dichloroethane	**1.4**		1.0	0.40	0.13	ug/L		06/20/20 15:34	1
1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18	ug/L		06/20/20 15:34	1

Client Sample ID: SHGW05-20A
Lab Sample ID: 280-137609-12

Date Collected: 06/11/20 08:00
Matrix: Water

Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 15:34	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
2-Butanone (MEK)	**71**		6.0	4.0	2.0	ug/L		06/20/20 15:34	1
2-Hexanone	**75**		5.0	4.0	1.7	ug/L		06/20/20 15:34	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 15:34	1
Acetone	**40**		10	6.4	1.9	ug/L		06/20/20 15:34	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 15:34	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:34	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/20 15:34	1
Bromomethane	0.80	U Q	2.0	0.80	0.21	ug/L		06/20/20 15:34	1
Carbon disulfide	**0.26**	**J**	2.0	0.80	0.17	ug/L		06/20/20 15:34	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 15:34	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:34	1
Chloroethane	**1.4**	**J**	2.0	1.6	0.41	ug/L		06/20/20 15:34	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 15:34	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:34	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 15:34	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:34	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		06/20/20 15:34	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 15:34	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 15:34	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 15:34	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 15:34	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 15:34	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 15:34	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 15:34	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 15:34	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:34	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:34	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 15:34	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:34	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 15:34	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 15:34	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/20 15:34*	*1*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*06/20/20 15:34*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*06/20/20 15:34*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*06/20/20 15:34*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/17/20 01:42	1
Ethylene	**0.0011**	**J M**	0.0050	0.0014	0.00040	mg/L		06/17/20 01:42	1

Client Sample ID: SHGW05-20A
Lab Sample ID: 280-137609-12

Date Collected: 06/11/20 08:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: RSK-175 - Dissolved Gases (GC) - DL

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**14**	**D M**	0.015	0.0060	0.0019	mg/L		06/18/20 15:41	3

General Chemistry

Analyte	Result	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 17:29	1
Sulfate	**12**	**J D**	25	15	5.2	mg/L		06/25/20 22:30	5
Total Alkalinity as CaCO3	**160**		10	10	3.1	mg/L		06/16/20 15:05	1

Client Sample ID: SOURCE 2020
Lab Sample ID: 280-137609-13

Date Collected: 06/11/20 11:30
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 15:55	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/20 15:55	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 15:55	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 15:55	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:55	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 15:55	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 15:55	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:55	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 15:55	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 15:55	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 15:55	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/20 15:55	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/20 15:55	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 15:55	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/20 15:55	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 15:55	1
Bromodichloromethane	**1.9**		1.0	0.40	0.17	ug/L		06/20/20 15:55	1
Bromoform	**1.2**		1.0	1.0	0.46	ug/L		06/20/20 15:55	1
Bromomethane	0.80	U Q	2.0	0.80	0.21	ug/L		06/20/20 15:55	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/20 15:55	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 15:55	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:55	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/20 15:55	1
Chloroform	**0.61**	**J**	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 15:55	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:55	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 15:55	1
Dibromochloromethane	**2.7**		1.0	0.40	0.17	ug/L		06/20/20 15:55	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		06/20/20 15:55	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 15:55	1

Client Sample ID: SOURCE 2020
Lab Sample ID: 280-137609-13
Date Collected: 06/11/20 11:30
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 15:55	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 15:55	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 15:55	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 15:55	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 15:55	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 15:55	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 15:55	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 15:55	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 15:55	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 15:55	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 15:55	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 15:55	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 15:55	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*06/20/20 15:55*	*1*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*06/20/20 15:55*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*06/20/20 15:55*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*06/20/20 15:55*	*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 M	0.22	0.21	0.088	ug/L		06/22/20 20:37	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.039	ug/L		06/22/20 20:37	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		06/22/20 20:37	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		06/22/20 20:37	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		06/22/20 20:37	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		06/22/20 20:37	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		06/22/20 20:37	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		06/22/20 20:37	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.060	ug/L		06/22/20 20:37	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		06/22/20 20:37	1
HMX	0.21	U M	0.22	0.21	0.092	ug/L		06/22/20 20:37	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/22/20 20:37	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		06/22/20 20:37	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		06/22/20 20:37	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		06/22/20 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*106*		*83 - 119*	*06/17/20 09:26*	*06/22/20 20:37*	*1*

Client Sample ID: TB01-061120
Lab Sample ID: 280-137609-14
Date Collected: 06/11/20 07:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 12:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 12:22	1

Client Sample ID: TB01-061120

Date Collected: 06/11/20 07:00
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/20 12:22	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 12:22	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 12:22	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 12:22	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 12:22	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 12:22	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 12:22	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 12:22	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 12:22	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 12:22	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/20 12:22	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/20 12:22	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 12:22	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/20 12:22	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 12:22	1
Bromodichloromethane	**1.8**		1.0	0.40	0.17	ug/L		06/20/20 12:22	1
Bromoform	**1.2**		1.0	1.0	0.46	ug/L		06/20/20 12:22	1
Bromomethane	0.80	U Q	2.0	0.80	0.21	ug/L		06/20/20 12:22	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/20 12:22	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 12:22	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 12:22	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/20 12:22	1
Chloroform	**0.61**	**J**	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 12:22	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 12:22	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 12:22	1
Dibromochloromethane	**2.8**		1.0	0.40	0.17	ug/L		06/20/20 12:22	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		06/20/20 12:22	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 12:22	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 12:22	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 12:22	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 12:22	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 12:22	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 12:22	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 12:22	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 12:22	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 12:22	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 12:22	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 12:22	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:22	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 12:22	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 12:22	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*06/20/20 12:22*	*1*

Client Sample ID: TB01-061120
Lab Sample ID: 280-137609-14

Date Collected: 06/11/20 07:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*06/20/20 12:22*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/20/20 12:22*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*06/20/20 12:22*	*1*

Client Sample ID: TB02-061120
Lab Sample ID: 280-137609-15

Date Collected: 06/11/20 07:00
Matrix: Water
Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 12:44	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/20 12:44	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 12:44	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 12:44	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 12:44	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 12:44	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 12:44	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 12:44	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 12:44	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 12:44	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 12:44	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/20 12:44	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/20 12:44	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 12:44	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/20 12:44	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 12:44	1
Bromodichloromethane	**1.8**		1.0	0.40	0.17	ug/L		06/20/20 12:44	1
Bromoform	**1.2**		1.0	1.0	0.46	ug/L		06/20/20 12:44	1
Bromomethane	0.80	U Q	2.0	0.80	0.21	ug/L		06/20/20 12:44	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/20 12:44	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 12:44	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 12:44	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/20 12:44	1
Chloroform	**0.63**	**J**	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 12:44	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 12:44	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 12:44	1
Dibromochloromethane	**2.8**		1.0	0.40	0.17	ug/L		06/20/20 12:44	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		06/20/20 12:44	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 12:44	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 12:44	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 12:44	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 12:44	1

Client Sample ID: TB02-061120
Lab Sample ID: 280-137609-15

Date Collected: 06/11/20 07:00
Matrix: Water

Date Received: 06/12/20 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 12:44	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 12:44	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 12:44	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 12:44	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 12:44	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 12:44	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 12:44	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 12:44	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 12:44	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 12:44	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*06/20/20 12:44*	*1*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*06/20/20 12:44*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/20/20 12:44*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*06/20/20 12:44*	*1*

Default Detection Limits

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

Job ID: 280-137609-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	LOQ	DL	Units
1,1,1-Trichloroethane	1.0	0.16	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.21	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	3.0	0.18	ug/L
1,1,2-Trichloroethane	1.0	0.27	ug/L
1,1-Dichloroethane	1.0	0.22	ug/L
1,1-Dichloroethene	1.0	0.23	ug/L
1,2,3-Trichlorobenzene	1.0	0.21	ug/L
1,2,4-Trichlorobenzene	1.0	0.21	ug/L
1,2-Dibromo-3-Chloropropane	5.0	0.47	ug/L
1,2-Dichlorobenzene	1.0	0.15	ug/L
1,2-Dichloroethane	1.0	0.13	ug/L
1,2-Dichloropropane	1.0	0.18	ug/L
1,3-Dichlorobenzene	1.0	0.13	ug/L
1,4-Dichlorobenzene	1.0	0.16	ug/L
2-Butanone (MEK)	6.0	2.0	ug/L
2-Hexanone	5.0	1.7	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	0.98	ug/L
Acetone	10	1.9	ug/L
Benzene	1.0	0.16	ug/L
Bromochloromethane	1.0	0.10	ug/L
Bromodichloromethane	1.0	0.17	ug/L
Bromoform	1.0	0.46	ug/L
Bromomethane	2.0	0.21	ug/L
Carbon disulfide	2.0	0.17	ug/L
Carbon tetrachloride	2.0	0.19	ug/L
Chlorobenzene	1.0	0.17	ug/L
Chloroethane	2.0	0.41	ug/L
Chloroform	1.0	0.16	ug/L
Chloromethane	2.0	0.30	ug/L
cis-1,2-Dichloroethene	1.0	0.15	ug/L
cis-1,3-Dichloropropene	1.0	0.16	ug/L
Cyclohexane	2.0	0.28	ug/L
Dibromochloromethane	1.0	0.17	ug/L
Dichlorodifluoromethane	2.0	0.31	ug/L
Ethylbenzene	1.0	0.16	ug/L
Ethylene Dibromide	1.0	0.18	ug/L
Isopropylbenzene	1.0	0.19	ug/L
Methyl acetate	5.0	1.6	ug/L
Methyl tert-butyl ether	5.0	0.25	ug/L
Methylcyclohexane	2.0	0.10	ug/L
Methylene Chloride	5.0	0.94	ug/L
Styrene	1.0	0.36	ug/L
Tetrachloroethene	1.0	0.20	ug/L
Toluene	1.0	0.17	ug/L
trans-1,2-Dichloroethene	1.0	0.15	ug/L
trans-1,3-Dichloropropene	1.0	0.19	ug/L
Trichloroethene	1.0	0.16	ug/L
Trichlorofluoromethane	2.0	0.29	ug/L
Vinyl chloride	1.5	0.10	ug/L
Xylenes, Total	1.0	0.19	ug/L

Method: RSK-175 - Dissolved Gases (GC)

Default Detection Limits

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

Job ID: 280-137609-1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	LOQ	DL	Units
Ethane	0.0050	0.00057	mg/L
Ethylene	0.0050	0.00040	mg/L
Methane	0.0050	0.00063	mg/L

Method: 8015C DRO - Diesel Range Organics (DRO) (GC)

Prep: 3510C

Analyte	LOQ	DL	Units
C10-C28	250	33	ug/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: 280-137609-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(81-118)	(85-114)	(80-119)	(89-112)
280-137609-10	SHGW03-20A	97	98	100	99
280-137609-11	SHGW02-20A	91	99	99	100
280-137609-12	SHGW05-20A	91	98	98	101
280-137609-13	SOURCE 2020	97	100	99	99
280-137609-14	TB01-061120	96	99	100	100
280-137609-15	TB02-061120	96	100	100	99
LCS 280-499519/4	Lab Control Sample	93	99	99	99
LCSD 280-499519/5	Lab Control Sample Dup	95	99	100	98
MB 280-499519/9	Method Blank	96	99	99	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015C DRO - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		OTPH1	OTCN1
Lab Sample ID	Client Sample ID	(56-125)	(60-142)
280-137609-10	SHGW03-20A	82	97
LCS 280-499277/2-A	Lab Control Sample	92	98
LCSD 280-499277/3-A	Lab Control Sample Dup	95	99
MB 280-499277/1-A	Method Blank	84	97

Surrogate Legend

OTPH = o-Terphenyl (Surr)
OTCN = n-Octacosane

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DNB1
Lab Sample ID	Client Sample ID	(83-119)
280-137609-1	PZ007-20A	98 M
280-137609-1 MS	PZ007-20A	98 M
280-137609-1 MS	PZ007-20A	98 M
280-137609-1 MSD	PZ007-20A	98 M
280-137609-1 MSD	PZ007-20A	95 M
280-137609-2	PZ012-20A	114 M
280-137609-3	G0105-20A	107 M
280-137609-4	G0080-20A	99 M
280-137609-5	PZ005-20A	103 M
280-137609-6	NW052-20A	108 M
280-137609-7	G0045-20A	105 M
280-137609-8	G0017-20A	116
280-137609-9	G0102-20A	99 M
280-137609-9 - DL	G0102-20A	106 M D

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	12DNB1 (83-119)
280-137609-9 MS	G0102-20A	100 M
280-137609-9 MS	G0102-20A	95 M
280-137609-9 MS - DL	G0102-20A	109 D
280-137609-9 MSD	G0102-20A	99 M
280-137609-9 MSD	G0102-20A	101 M
280-137609-9 MSD - DL	G0102-20A	111 D
280-137609-13	SOURCE 2020	106
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)
280-137609-2	PZ012-20A	106 M
280-137609-3	G0105-20A	103 M
280-137609-4	G0080-20A	99
280-137609-5	PZ005-20A	102
280-137609-6	NW052-20A	105
280-137609-8	G0017-20A	106 M
280-137609-9	G0102-20A	101
280-137609-9 - DL	G0102-20A	69 Q M D

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-499519/9
Matrix: Water
Analysis Batch: 499519

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 10:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/20 10:57	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/20 10:57	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/20 10:57	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/20 10:57	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 10:57	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/20 10:57	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/20 10:57	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 10:57	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 10:57	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 10:57	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/20 10:57	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/20 10:57	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/20 10:57	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/20 10:57	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/20 10:57	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/20 10:57	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 10:57	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/20 10:57	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/20 10:57	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/20 10:57	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/20 10:57	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 10:57	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/20 10:57	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/20 10:57	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 10:57	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/20 10:57	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 10:57	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/20 10:57	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/20 10:57	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 10:57	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/20 10:57	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/20 10:57	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/20 10:57	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/20 10:57	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/20 10:57	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/20 10:57	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/20 10:57	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/20 10:57	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/20 10:57	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/20 10:57	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/20 10:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-499519/9
Matrix: Water
Analysis Batch: 499519

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/20 10:57	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/20 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*06/20/20 10:57*	*1*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*06/20/20 10:57*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*06/20/20 10:57*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*06/20/20 10:57*	*1*

Lab Sample ID: LCS 280-499519/4
Matrix: Water
Analysis Batch: 499519

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	74 - 131
1,1,2,2-Tetrachloroethane	25.0	26.7		ug/L		107	71 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.7		ug/L		79	70 - 136
1,1,2-Trichloroethane	25.0	27.0		ug/L		108	80 - 119
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 125
1,1-Dichloroethene	25.0	22.4		ug/L		89	71 - 131
1,2,3-Trichlorobenzene	25.0	26.3		ug/L		105	69 - 129
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	69 - 130
1,2-Dibromo-3-Chloropropane	25.0	27.9		ug/L		112	62 - 128
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 119
1,2-Dichloroethane	25.0	25.5		ug/L		102	73 - 128
1,2-Dichloropropane	25.0	27.6		ug/L		110	78 - 122
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 119
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	79 - 118
2-Butanone (MEK)	100	109		ug/L		109	56 - 143
2-Hexanone	100	112		ug/L		112	57 - 139
4-Methyl-2-pentanone (MIBK)	100	114		ug/L		114	67 - 130
Acetone	100	105		ug/L		105	39 - 160
Benzene	25.0	26.1		ug/L		104	79 - 120
Bromochloromethane	25.0	25.6		ug/L		102	78 - 123
Bromodichloromethane	25.0	27.1		ug/L		108	79 - 125
Bromoform	25.0	28.2		ug/L		113	66 - 130
Bromomethane	25.0	21.2		ug/L		85	53 - 141
Carbon disulfide	25.0	20.5		ug/L		82	64 - 133
Carbon tetrachloride	25.0	25.5		ug/L		102	72 - 136
Chlorobenzene	25.0	25.9		ug/L		104	82 - 118
Chloroethane	25.0	25.2		ug/L		101	60 - 138
Chloroform	25.0	25.4		ug/L		101	79 - 124
Chloromethane	25.0	22.1		ug/L		88	50 - 139
cis-1,2-Dichloroethene	25.0	26.4		ug/L		105	78 - 123
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	75 - 124
Cyclohexane	25.0	23.1		ug/L		92	71 - 130
Dibromochloromethane	25.0	27.2		ug/L		109	74 - 126
Dichlorodifluoromethane	25.0	26.4		ug/L		106	32 - 152

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-499519/4
Matrix: Water
Analysis Batch: 499519

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	25.0	26.5		ug/L		106	79 - 121
Ethylene Dibromide	25.0	25.9		ug/L		104	77 - 121
Isopropylbenzene	25.0	27.2		ug/L		109	72 - 131
Methyl acetate	50.0	55.0		ug/L		110	56 - 136
Methyl tert-butyl ether	25.0	26.3		ug/L		105	71 - 124
Methylcyclohexane	25.0	24.2		ug/L		97	72 - 132
Methylene Chloride	25.0	26.5		ug/L		106	74 - 124
Styrene	25.0	27.4		ug/L		109	78 - 123
Tetrachloroethene	25.0	26.4		ug/L		106	74 - 129
Toluene	25.0	26.4		ug/L		106	80 - 121
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	75 - 124
trans-1,3-Dichloropropene	25.0	26.2		ug/L		105	73 - 127
Trichloroethene	25.0	25.2		ug/L		101	79 - 123
Trichlorofluoromethane	25.0	24.5		ug/L		98	65 - 141
Vinyl chloride	25.0	23.4		ug/L		94	58 - 137
Xylenes, Total	50.0	53.9		ug/L		108	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
Toluene-d8 (Surr)	*99*		*89 - 112*

Lab Sample ID: LCSD 280-499519/5
Matrix: Water
Analysis Batch: 499519

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
1,1,1-Trichloroethane	25.0	22.8		ug/L		91	74 - 131	12	20
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	71 - 121	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	17.6		ug/L		70	70 - 136	11	20
1,1,2-Trichloroethane	25.0	25.5		ug/L		102	80 - 119	6	20
1,1-Dichloroethane	25.0	23.3		ug/L		93	77 - 125	9	20
1,1-Dichloroethene	25.0	20.0		ug/L		80	71 - 131	11	20
1,2,3-Trichlorobenzene	25.0	24.2		ug/L		97	69 - 129	8	20
1,2,4-Trichlorobenzene	25.0	23.8		ug/L		95	69 - 130	9	20
1,2-Dibromo-3-Chloropropane	25.0	26.8		ug/L		107	62 - 128	4	20
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 119	8	20
1,2-Dichloroethane	25.0	23.9		ug/L		96	73 - 128	7	20
1,2-Dichloropropane	25.0	25.4		ug/L		102	78 - 122	8	20
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 119	8	20
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	79 - 118	9	20
2-Butanone (MEK)	100	106		ug/L		106	56 - 143	3	20
2-Hexanone	100	112		ug/L		112	57 - 139	1	20
4-Methyl-2-pentanone (MIBK)	100	112		ug/L		112	67 - 130	2	20
Acetone	100	101		ug/L		101	39 - 160	3	20
Benzene	25.0	23.6		ug/L		94	79 - 120	10	20
Bromochloromethane	25.0	23.4		ug/L		94	78 - 123	9	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-499519/5
Matrix: Water
Analysis Batch: 499519

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
Bromodichloromethane	25.0	24.7		ug/L		99	79 - 125	9	20
Bromoform	25.0	26.1		ug/L		105	66 - 130	7	20
Bromomethane	25.0	18.5		ug/L		74	53 - 141	13	20
Carbon disulfide	25.0	18.0		ug/L		72	64 - 133	13	20
Carbon tetrachloride	25.0	23.1		ug/L		92	72 - 136	10	20
Chlorobenzene	25.0	23.7		ug/L		95	82 - 118	9	20
Chloroethane	25.0	24.0		ug/L		96	60 - 138	5	20
Chloroform	25.0	23.5		ug/L		94	79 - 124	7	20
Chloromethane	25.0	20.9		ug/L		84	50 - 139	5	20
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	78 - 123	10	20
cis-1,3-Dichloropropene	25.0	24.8		ug/L		99	75 - 124	11	20
Cyclohexane	25.0	20.6		ug/L		82	71 - 130	12	20
Dibromochloromethane	25.0	25.4		ug/L		102	74 - 126	7	20
Dichlorodifluoromethane	25.0	24.6		ug/L		98	32 - 152	7	20
Ethylbenzene	25.0	24.2		ug/L		97	79 - 121	9	20
Ethylene Dibromide	25.0	23.9		ug/L		95	77 - 121	8	20
Isopropylbenzene	25.0	24.8		ug/L		99	72 - 131	9	20
Methyl acetate	50.0	52.5		ug/L		105	56 - 136	5	20
Methyl tert-butyl ether	25.0	24.4		ug/L		98	71 - 124	7	20
Methylcyclohexane	25.0	21.6		ug/L		86	72 - 132	12	20
Methylene Chloride	25.0	24.3		ug/L		97	74 - 124	8	20
Styrene	25.0	24.8		ug/L		99	78 - 123	10	20
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 129	11	20
Toluene	25.0	24.1		ug/L		97	80 - 121	9	20
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	75 - 124	10	20
trans-1,3-Dichloropropene	25.0	23.8		ug/L		95	73 - 127	10	20
Trichloroethene	25.0	22.8		ug/L		91	79 - 123	10	20
Trichlorofluoromethane	25.0	22.6		ug/L		91	65 - 141	8	20
Vinyl chloride	25.0	22.3		ug/L		89	58 - 137	5	20
Xylenes, Total	50.0	48.8		ug/L		98	79 - 121	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
Toluene-d8 (Surr)	*98*		*89 - 112*

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
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/16/20 21:36	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/16/20 21:36	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/16/20 21:36	1

Method: RSK-175 - Dissolved Gases (GC) (Continued)

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
Ethane	0.137	0.140		mg/L		102	74 - 131
Methane	0.0730	0.0722		mg/L		99	73 - 125
Ethylene	0.128	0.131		mg/L		102	72 - 133

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
Ethane	0.137	0.156		mg/L		114	74 - 131	11	20
Methane	0.0730	0.0797		mg/L		109	73 - 125	10	20
Ethylene	0.128	0.143	M	mg/L		112	72 - 133	9	20

Lab Sample ID: 280-137609-1 MS
Matrix: Water
Analysis Batch: 499014

Client Sample ID: PZ007-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0020	U	0.0730	0.0648		mg/L		89	73 - 125

Lab Sample ID: 280-137609-1 MSD
Matrix: Water
Analysis Batch: 499014

Client Sample ID: PZ007-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0020	U	0.0730	0.0696		mg/L		95	73 - 125	7	20

Lab Sample ID: 280-137609-1 DU
Matrix: Water
Analysis Batch: 499014

Client Sample ID: PZ007-20A
Prep Type: Total/NA

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

Lab Sample ID: 280-137609-12 DU
Matrix: Water
Analysis Batch: 499014

Client Sample ID: SHGW05-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ethane	0.0015	U	0.0015	U	mg/L		NC	20
Ethylene	0.0011	J M	0.00109	J M	mg/L		0.6	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
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/18/20 09:42	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/18/20 09:42	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/18/20 09:42	1

Method: RSK-175 - Dissolved Gases (GC)

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
Ethane	0.137	0.149		mg/L		109	74 - 131
Methane	0.0730	0.0786		mg/L		108	73 - 125
Ethylene	0.128	0.137	M	mg/L		108	72 - 133

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
Ethane	0.137	0.152		mg/L		111	74 - 131	2	20
Methane	0.0730	0.0804		mg/L		110	73 - 125	2	20
Ethylene	0.128	0.139		mg/L		109	72 - 133	2	20

Lab Sample ID: 280-137609-12 DU
Matrix: Water
Analysis Batch: 499210

Client Sample ID: SHGW05-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Methane	14	D M	13.8	D M	mg/L		0	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

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: 280-137609-9 MS
Matrix: Water
Analysis Batch: 499415

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0018	J M	0.0730	0.0644	M	mg/L		86	73 - 125

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: 280-137609-9 MSD — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499415

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0018	J M	0.0730	0.0685	M	mg/L		91	73 - 125	6	20

Lab Sample ID: 280-137609-9 DU — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499415

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Methane	0.0018	J M	0.00191	J M	mg/L		4	20

Method: 8015C DRO - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 280-499277/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500427 — **Prep Batch: 499277**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	69.7	J	250	120	33	ug/L		06/30/20 14:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*56 - 125*	*06/18/20 15:45*	*06/30/20 14:53*	*1*
n-Octacosane	*97*		*60 - 142*	*06/18/20 15:45*	*06/30/20 14:53*	*1*

Lab Sample ID: LCS 280-499277/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500427 — **Prep Batch: 499277**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	1980	1600		ug/L		81	36 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*92*		*56 - 125*
n-Octacosane	*98*		*60 - 142*

Lab Sample ID: LCSD 280-499277/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500427 — **Prep Batch: 499277**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	1980	1800		ug/L		91	36 - 132	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*95*		*56 - 125*
n-Octacosane	*99*		*60 - 142*

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 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **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*

Lab Sample ID: 280-137609-1 MS — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.21	U	2.14	2.50	M	ug/L		117	73 - 125
1,3-Dinitrobenzene	0.11	U	2.14	2.38		ug/L		111	78 - 120

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

Lab Sample ID: 280-137609-1 MS — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,6-Trinitrotoluene	0.11	U	2.14	2.48		ug/L		116	71 - 123
2,4-Dinitrotoluene	0.085	U	2.14	2.16		ug/L		101	78 - 120
2,6-Dinitrotoluene	0.085	U	2.14	2.20		ug/L		103	77 - 127
2-Amino-4,6-dinitrotoluene	0.11	U	2.14	2.15		ug/L		100	79 - 120
2-Nitrotoluene	0.21	U	2.14	1.75		ug/L		82	70 - 127
3-Nitrotoluene	0.43	U	2.14	1.96		ug/L		92	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U	2.14	1.95		ug/L		91	76 - 125
4-Nitrotoluene	0.43	U M	2.14	1.87		ug/L		87	71 - 127
HMX	0.21	U	2.14	2.26	M	ug/L		105	65 - 135
Nitrobenzene	0.21	U	2.14	2.21		ug/L		103	65 - 134
RDX	0.21	U J1	2.14	2.15	M	ug/L		100	68 - 130
Tetryl	0.11	U	2.14	2.00	M	ug/L		93	64 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*

Lab Sample ID: 280-137609-1 MS — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.43	U	2.54	2.24	M	ug/L		88	57 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*

Lab Sample ID: 280-137609-1 MSD — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.21	U	2.13	2.46	M	ug/L		115	73 - 125	1	30
1,3-Dinitrobenzene	0.11	U	2.13	2.38		ug/L		112	78 - 120	0	30
2,4,6-Trinitrotoluene	0.11	U	2.13	2.44		ug/L		114	71 - 123	2	30
2,4-Dinitrotoluene	0.085	U	2.13	2.14		ug/L		100	78 - 120	1	30
2,6-Dinitrotoluene	0.085	U	2.13	2.17	M	ug/L		102	77 - 127	1	30
2-Amino-4,6-dinitrotoluene	0.11	U	2.13	2.10	M	ug/L		98	79 - 120	2	30
2-Nitrotoluene	0.21	U	2.13	1.70		ug/L		80	70 - 127	3	30
3-Nitrotoluene	0.43	U	2.13	1.97		ug/L		92	73 - 125	0	30
4-Amino-2,6-dinitrotoluene	0.13	U	2.13	1.90		ug/L		89	76 - 125	3	30
4-Nitrotoluene	0.43	U M	2.13	1.90		ug/L		89	71 - 127	1	30
HMX	0.21	U	2.13	2.20	M	ug/L		103	65 - 135	3	30
Nitrobenzene	0.21	U	2.13	2.19		ug/L		102	65 - 134	1	30
RDX	0.21	U J1	2.13	3.02	J1	ug/L		142	68 - 130	34	30
Tetryl	0.11	U	2.13	2.33		ug/L		109	64 - 128	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: 280-137609-1 MSD — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.43	U	2.52	2.18	J M	ug/L		87	57 - 132	3	30

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

Lab Sample ID: 280-137609-9 MS — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.22	U	2.19	2.54	M	ug/L		116	73 - 125
1,3-Dinitrobenzene	0.11	U	2.19	2.40	M	ug/L		110	78 - 120
2,4,6-Trinitrotoluene	0.11	U	2.19	2.50		ug/L		114	71 - 123
2,4-Dinitrotoluene	0.088	U	2.19	2.20		ug/L		101	78 - 120
2,6-Dinitrotoluene	0.088	U	2.19	2.29		ug/L		105	77 - 127
2-Amino-4,6-dinitrotoluene	0.11	U	2.19	2.02		ug/L		92	79 - 120
2-Nitrotoluene	0.22	U	2.19	1.80		ug/L		82	70 - 127
3-Nitrotoluene	0.44	U M	2.19	2.01		ug/L		92	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U J1	2.19	1.50	J1	ug/L		69	76 - 125
4-Nitrotoluene	0.44	U	2.19	1.88		ug/L		86	71 - 127
HMX	2.2	M	2.19	4.40	M	ug/L		102	65 - 135
Nitrobenzene	0.22	U	2.19	2.26		ug/L		103	65 - 134
Tetryl	0.11	U	2.19	2.27		ug/L		104	64 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*

Lab Sample ID: 280-137609-9 MS — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	1.2	J M	2.48	3.34	M	ug/L		85	57 - 132

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

Lab Sample ID: 280-137609-9 MSD — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.22	U	2.14	2.47	M	ug/L		115	73 - 125	3	30
1,3-Dinitrobenzene	0.11	U	2.14	2.33	M	ug/L		109	78 - 120	3	30
2,4,6-Trinitrotoluene	0.11	U	2.14	2.44		ug/L		114	71 - 123	2	30
2,4-Dinitrotoluene	0.088	U	2.14	2.11		ug/L		98	78 - 120	4	30
2,6-Dinitrotoluene	0.088	U	2.14	2.26		ug/L		105	77 - 127	1	30
2-Amino-4,6-dinitrotoluene	0.11	U	2.14	1.85		ug/L		86	79 - 120	9	30

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

Lab Sample ID: 280-137609-9 MSD — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitrotoluene	0.22	U	2.14	1.82		ug/L		85	70 - 127	1	30
3-Nitrotoluene	0.44	U M	2.14	1.97		ug/L		92	73 - 125	2	30
4-Amino-2,6-dinitrotoluene	0.13	U J1	2.14	1.19	J1	ug/L		56	76 - 125	23	30
4-Nitrotoluene	0.44	U	2.14	1.83		ug/L		85	71 - 127	3	30
HMX	2.2	M	2.14	4.35	M	ug/L		101	65 - 135	1	30
Nitrobenzene	0.22	U	2.14	2.22		ug/L		104	65 - 134	2	30
Tetryl	0.11	U	2.14	2.22		ug/L		104	64 - 128	2	30

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

Lab Sample ID: 280-137609-9 MSD — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499532 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	1.2	J M	2.53	3.41	M	ug/L		87	57 - 132	2	30

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

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

Lab Sample ID: 280-137609-9 MS — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499863 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
RDX - DL	41	D M J1	2.19	39.7	D M 4	ug/L		-75	68 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene - DL	*109*	*D*	*83 - 119*

Lab Sample ID: 280-137609-9 MSD — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499863 — **Prep Batch: 499107**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
RDX - DL	41	D M J1	2.14	41.4	D 4	ug/L		6	68 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene - DL	*111*	*D*	*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-498989/19
Matrix: Water
Analysis Batch: 498989

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/16/20 13:10	1

Lab Sample ID: MB 280-498989/57
Matrix: Water
Analysis Batch: 498989

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/16/20 14:26	1

Lab Sample ID: LCS 280-498989/18
Matrix: Water
Analysis Batch: 498989

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.46		mg/L		98	90 - 110		

Lab Sample ID: LCS 280-498989/56
Matrix: Water
Analysis Batch: 498989

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.47		mg/L		99	90 - 110		

Lab Sample ID: 280-137609-1 MS
Matrix: Water
Analysis Batch: 498989

Client Sample ID: PZ007-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.042	J	1.00	1.03		mg/L		99	90 - 110		

Lab Sample ID: 280-137609-1 MSD
Matrix: Water
Analysis Batch: 498989

Client Sample ID: PZ007-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.042	J	1.00	1.04		mg/L		100	90 - 110	1	10

Lab Sample ID: 280-137609-9 MS
Matrix: Water
Analysis Batch: 498989

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.072	J	1.00	1.06		mg/L		99	90 - 110		

Lab Sample ID: 280-137609-9 MSD
Matrix: Water
Analysis Batch: 498989

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.072	J	1.00	1.08		mg/L		101	90 - 110	2	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-499167/28-A
Matrix: Water
Analysis Batch: 499501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499167

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 17:05	1

Lab Sample ID: MB 280-499167/2-A
Matrix: Water
Analysis Batch: 499501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499167

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/19/20 16:14	1

Lab Sample ID: LCS 280-499167/1-A
Matrix: Water
Analysis Batch: 499501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	6.10		mg/L		102	90 - 110

Lab Sample ID: LCS 280-499167/27-A
Matrix: Water
Analysis Batch: 499501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	6.50		mg/L		108	90 - 110

Lab Sample ID: 280-137609-1 MS
Matrix: Water
Analysis Batch: 499501

Client Sample ID: PZ007-20A
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	0.71	J	3.00	3.44		mg/L		91	90 - 110

Lab Sample ID: 280-137609-1 MSD
Matrix: Water
Analysis Batch: 499501

Client Sample ID: PZ007-20A
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	0.71	J	3.00	3.47		mg/L		92	90 - 110	1	25

Lab Sample ID: 280-137609-9 MS
Matrix: Water
Analysis Batch: 499501

Client Sample ID: G0102-20A
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	1.0	U	3.00	2.93		mg/L		98	90 - 110

Lab Sample ID: 280-137609-9 MSD
Matrix: Water
Analysis Batch: 499501

Client Sample ID: G0102-20A
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	1.0	U	3.00	3.08		mg/L		103	90 - 110	5	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-499351/22
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 16:45	1

Lab Sample ID: LCS 280-499351/21
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	4.87		mg/L		97	90 - 110

Lab Sample ID: 280-137609-1 MS
Matrix: Water
Analysis Batch: 499351

Client Sample ID: PZ007-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.96		4.00	4.79		mg/L		96	90 - 110

Lab Sample ID: 280-137609-1 MSD
Matrix: Water
Analysis Batch: 499351

Client Sample ID: PZ007-20A
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	0.96		4.00	4.86		mg/L		98	90 - 110	1	10

Lab Sample ID: 280-137609-9 MS
Matrix: Water
Analysis Batch: 499351

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	3.9	J1	4.00	7.04	J1	mg/L		79	90 - 110

Lab Sample ID: 280-137609-9 MSD
Matrix: Water
Analysis Batch: 499351

Client Sample ID: G0102-20A
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	3.9	J1	4.00	7.24	J1	mg/L		84	90 - 110	3	10

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

Lab Sample ID: MB 280-498938/2-A
Matrix: Water
Analysis Batch: 498939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498938

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	0.800	J	4.0	1.9	0.79	mg/L		06/16/20 11:50	1

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

Lab Sample ID: LCS 280-498938/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498939 — **Prep Batch: 498938**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			18.6	19.2		mg/L		103	44 - 110		

Lab Sample ID: MB 280-499239/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241 — **Prep Batch: 499239**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	0.800	J	4.0	1.9	0.79	mg/L		06/18/20 10:56	1

Lab Sample ID: LCS 280-499239/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241 — **Prep Batch: 499239**

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: 280-137609-1 MS — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241 — **Prep Batch: 499239**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.9	U J1	22.2	19.2		mg/L		87	44 - 110		

Lab Sample ID: 280-137609-1 MSD — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241 — **Prep Batch: 499239**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U J1	22.2	11.2	J1	mg/L		51	44 - 110	53	20

Lab Sample ID: MB 280-499255/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499302 — **Prep Batch: 499255**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	0.800	J	4.0	1.9	0.79	mg/L		06/18/20 14:05	1

Lab Sample ID: LCS 280-499255/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499302 — **Prep Batch: 499255**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			22.2	20.0		mg/L		90	44 - 110		

Lab Sample ID: 280-137609-9 MS — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499302 — **Prep Batch: 499255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.9	U J1	22.2	11.2		mg/L		51	44 - 110		

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

Lab Sample ID: 280-137609-9 MSD — **Client Sample ID: G0102-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499302 — **Prep Batch: 499255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U J1	22.2	16.8	J1	mg/L		76	44 - 110	40	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-500081/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500081

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		06/25/20 10:57	1

Lab Sample ID: LCS 280-500081/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	98.0		mg/L		98	87 - 112

Lab Sample ID: LCSD 280-500081/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	98.1		mg/L		98	87 - 112	0	10

Lab Sample ID: MRL 280-500081/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500081

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.94	J	mg/L		99	50 - 150

Lab Sample ID: 280-137609-1 MS — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500081

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	580	D	250	840	D	mg/L		104	87 - 112

Lab Sample ID: 280-137609-1 MSD — **Client Sample ID: PZ007-20A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	580	D	250	831	D	mg/L		101	87 - 112	1	10

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

Lab Sample ID: 280-137609-1 DU
Matrix: Water
Analysis Batch: 500081

Client Sample ID: PZ007-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	580	D		572	D	mg/L				1	10

Lab Sample ID: MB 280-500465/6
Matrix: Water
Analysis Batch: 500465

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		06/29/20 11:15	1

Lab Sample ID: LCS 280-500465/4
Matrix: Water
Analysis Batch: 500465

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	97.4		mg/L		97	87 - 112		

Lab Sample ID: LCSD 280-500465/5
Matrix: Water
Analysis Batch: 500465

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	97.2		mg/L		97	87 - 112	0	10

Lab Sample ID: MRL 280-500465/3
Matrix: Water
Analysis Batch: 500465

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	4.86	J	mg/L		97	50 - 150		

Lab Sample ID: 280-137609-9 MS
Matrix: Water
Analysis Batch: 500465

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	1100	D	500	1540	D	mg/L		97	87 - 112		

Lab Sample ID: 280-137609-9 MSD
Matrix: Water
Analysis Batch: 500465

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1100	D	500	1520	D	mg/L		93	87 - 112	1	10

Lab Sample ID: 280-137609-9 DU
Matrix: Water
Analysis Batch: 500465

Client Sample ID: G0102-20A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	1100	D		1060	D	mg/L				0.2	10

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

Lab Sample ID: MB 280-500262/28-A
Matrix: Water
Analysis Batch: 500423

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		06/27/20 14:23	1

Lab Sample ID: MB 280-500262/2-A
Matrix: Water
Analysis Batch: 500423

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		06/26/20 19:38	1

Lab Sample ID: LCS 280-500262/1-A
Matrix: Water
Analysis Batch: 500423

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad			25.0	25.5		mg/L		102	88 - 112		

Lab Sample ID: LCS 280-500262/27-A
Matrix: Water
Analysis Batch: 500423

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	26.4		mg/L		105	88 - 112		

Lab Sample ID: 280-137609-1 MS
Matrix: Water
Analysis Batch: 500423

Client Sample ID: PZ007-20A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	3.1		25.0	29.8		mg/L		107	88 - 112		

Lab Sample ID: 280-137609-1 MSD
Matrix: Water
Analysis Batch: 500423

Client Sample ID: PZ007-20A
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	3.1		25.0	29.7		mg/L		106	88 - 112	0	15

Lab Sample ID: 280-137609-9 MS
Matrix: Water
Analysis Batch: 500423

Client Sample ID: G0102-20A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	3.9		25.0	30.3		mg/L		105	88 - 112		

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

Lab Sample ID: 280-137609-9 MSD
Matrix: Water
Analysis Batch: 500423

Client Sample ID: G0102-20A
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	3.9		25.0	30.2		mg/L		105	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-499040/31
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 13:15	1

Lab Sample ID: LCS 280-499040/30
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	179		mg/L		90	89 - 109

GC/MS VOA

Analysis Batch: 499519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-10	SHGW03-20A	Total/NA	Water	8260B	
280-137609-11	SHGW02-20A	Total/NA	Water	8260B	
280-137609-12	SHGW05-20A	Total/NA	Water	8260B	
280-137609-13	SOURCE 2020	Total/NA	Water	8260B	
280-137609-14	TB01-061120	Total/NA	Water	8260B	
280-137609-15	TB02-061120	Total/NA	Water	8260B	
MB 280-499519/9	Method Blank	Total/NA	Water	8260B	
LCS 280-499519/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-499519/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 499014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	RSK-175	
280-137609-3	G0105-20A	Total/NA	Water	RSK-175	
280-137609-4	G0080-20A	Total/NA	Water	RSK-175	
280-137609-5	PZ005-20A	Total/NA	Water	RSK-175	
280-137609-6	NW052-20A	Total/NA	Water	RSK-175	
280-137609-7	G0045-20A	Total/NA	Water	RSK-175	
280-137609-10	SHGW03-20A	Total/NA	Water	RSK-175	
280-137609-11	SHGW02-20A	Total/NA	Water	RSK-175	
280-137609-12	SHGW05-20A	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	
280-137609-1 MS	PZ007-20A	Total/NA	Water	RSK-175	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	RSK-175	
280-137609-1 DU	PZ007-20A	Total/NA	Water	RSK-175	
280-137609-12 DU	SHGW05-20A	Total/NA	Water	RSK-175	

Analysis Batch: 499210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-2	PZ012-20A	Total/NA	Water	RSK-175	
280-137609-8	G0017-20A	Total/NA	Water	RSK-175	
280-137609-11	SHGW02-20A	Total/NA	Water	RSK-175	
280-137609-12 - DL	SHGW05-20A	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	
280-137609-12 DU	SHGW05-20A	Total/NA	Water	RSK-175	

Analysis Batch: 499415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-9	G0102-20A	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	
280-137609-9 MS	G0102-20A	Total/NA	Water	RSK-175	
280-137609-9 MSD	G0102-20A	Total/NA	Water	RSK-175	
280-137609-9 DU	G0102-20A	Total/NA	Water	RSK-175	

GC Semi VOA

Prep Batch: 499277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-10	SHGW03-20A	Total/NA	Water	3510C	
MB 280-499277/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-499277/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-499277/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 500427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-10	SHGW03-20A	Total/NA	Water	8015C DRO	499277
MB 280-499277/1-A	Method Blank	Total/NA	Water	8015C DRO	499277
LCS 280-499277/2-A	Lab Control Sample	Total/NA	Water	8015C DRO	499277
LCSD 280-499277/3-A	Lab Control Sample Dup	Total/NA	Water	8015C DRO	499277

HPLC/IC

Prep Batch: 499027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-2	PZ012-20A	Total/NA	Water	3535	
280-137609-3	G0105-20A	Total/NA	Water	3535	
280-137609-4	G0080-20A	Total/NA	Water	3535	
280-137609-5	PZ005-20A	Total/NA	Water	3535	
280-137609-6	NW052-20A	Total/NA	Water	3535	
280-137609-7	G0045-20A	Total/NA	Water	3535	
280-137609-8	G0017-20A	Total/NA	Water	3535	
280-137609-13	SOURCE 2020	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	
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
280-137609-1	PZ007-20A	Total/NA	Water	3535	
280-137609-9 - DL	G0102-20A	Total/NA	Water	3535	
280-137609-9	G0102-20A	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	
280-137609-1 MS	PZ007-20A	Total/NA	Water	3535	
280-137609-1 MS	PZ007-20A	Total/NA	Water	3535	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	3535	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	3535	
280-137609-9 MS	G0102-20A	Total/NA	Water	3535	
280-137609-9 MS - DL	G0102-20A	Total/NA	Water	3535	
280-137609-9 MS	G0102-20A	Total/NA	Water	3535	
280-137609-9 MSD	G0102-20A	Total/NA	Water	3535	
280-137609-9 MSD - DL	G0102-20A	Total/NA	Water	3535	
280-137609-9 MSD	G0102-20A	Total/NA	Water	3535	

HPLC/IC

Analysis Batch: 499531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-2	PZ012-20A	Total/NA	Water	8330A	499027
280-137609-3	G0105-20A	Total/NA	Water	8330A	499027
280-137609-4	G0080-20A	Total/NA	Water	8330A	499027
280-137609-5	PZ005-20A	Total/NA	Water	8330A	499027
280-137609-6	NW052-20A	Total/NA	Water	8330A	499027
280-137609-7	G0045-20A	Total/NA	Water	8330A	499027
280-137609-8	G0017-20A	Total/NA	Water	8330A	499027
280-137609-13	SOURCE 2020	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
280-137609-1	PZ007-20A	Total/NA	Water	8330A	499107
280-137609-9	G0102-20A	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
280-137609-1 MS	PZ007-20A	Total/NA	Water	8330A	499107
280-137609-1 MS	PZ007-20A	Total/NA	Water	8330A	499107
280-137609-1 MSD	PZ007-20A	Total/NA	Water	8330A	499107
280-137609-1 MSD	PZ007-20A	Total/NA	Water	8330A	499107
280-137609-9 MS	G0102-20A	Total/NA	Water	8330A	499107
280-137609-9 MS	G0102-20A	Total/NA	Water	8330A	499107
280-137609-9 MSD	G0102-20A	Total/NA	Water	8330A	499107
280-137609-9 MSD	G0102-20A	Total/NA	Water	8330A	499107

Analysis Batch: 499860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-2	PZ012-20A	Total/NA	Water	8330A	499027
280-137609-3	G0105-20A	Total/NA	Water	8330A	499027
280-137609-4	G0080-20A	Total/NA	Water	8330A	499027
280-137609-5	PZ005-20A	Total/NA	Water	8330A	499027
280-137609-6	NW052-20A	Total/NA	Water	8330A	499027
280-137609-8	G0017-20A	Total/NA	Water	8330A	499027

Analysis Batch: 499863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-9 - DL	G0102-20A	Total/NA	Water	8330A	499107
280-137609-9 MS - DL	G0102-20A	Total/NA	Water	8330A	499107
280-137609-9 MSD - DL	G0102-20A	Total/NA	Water	8330A	499107

Analysis Batch: 500016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-9	G0102-20A	Total/NA	Water	8330A	499107
280-137609-9 - DL	G0102-20A	Total/NA	Water	8330A	499107

General Chemistry

Prep Batch: 498938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-2	PZ012-20A	Total/NA	Water	9030B	
280-137609-6	NW052-20A	Total/NA	Water	9030B	
MB 280-498938/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-498938/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 498939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-2	PZ012-20A	Total/NA	Water	9034	498938
280-137609-6	NW052-20A	Total/NA	Water	9034	498938
MB 280-498938/2-A	Method Blank	Total/NA	Water	9034	498938
LCS 280-498938/1-A	Lab Control Sample	Total/NA	Water	9034	498938

Analysis Batch: 498989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	350.1	
280-137609-2	PZ012-20A	Total/NA	Water	350.1	
280-137609-3	G0105-20A	Total/NA	Water	350.1	
280-137609-4	G0080-20A	Total/NA	Water	350.1	
280-137609-5	PZ005-20A	Total/NA	Water	350.1	
280-137609-6	NW052-20A	Total/NA	Water	350.1	
280-137609-7	G0045-20A	Total/NA	Water	350.1	
280-137609-8	G0017-20A	Total/NA	Water	350.1	
280-137609-9	G0102-20A	Total/NA	Water	350.1	
MB 280-498989/19	Method Blank	Total/NA	Water	350.1	
MB 280-498989/57	Method Blank	Total/NA	Water	350.1	
LCS 280-498989/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-498989/56	Lab Control Sample	Total/NA	Water	350.1	
280-137609-1 MS	PZ007-20A	Total/NA	Water	350.1	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	350.1	
280-137609-9 MS	G0102-20A	Total/NA	Water	350.1	
280-137609-9 MSD	G0102-20A	Total/NA	Water	350.1	

Analysis Batch: 499040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	SM 2320B	
280-137609-2	PZ012-20A	Total/NA	Water	SM 2320B	
280-137609-3	G0105-20A	Total/NA	Water	SM 2320B	
280-137609-4	G0080-20A	Total/NA	Water	SM 2320B	
280-137609-5	PZ005-20A	Total/NA	Water	SM 2320B	
280-137609-6	NW052-20A	Total/NA	Water	SM 2320B	
280-137609-7	G0045-20A	Total/NA	Water	SM 2320B	
280-137609-8	G0017-20A	Total/NA	Water	SM 2320B	
280-137609-9	G0102-20A	Total/NA	Water	SM 2320B	
280-137609-10	SHGW03-20A	Total/NA	Water	SM 2320B	
280-137609-11	SHGW02-20A	Total/NA	Water	SM 2320B	
280-137609-12	SHGW05-20A	Total/NA	Water	SM 2320B	
MB 280-499040/31	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-499040/30	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry

Prep Batch: 499167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	351.2	
280-137609-2	PZ012-20A	Total/NA	Water	351.2	
280-137609-3	G0105-20A	Total/NA	Water	351.2	
280-137609-4	G0080-20A	Total/NA	Water	351.2	
280-137609-5	PZ005-20A	Total/NA	Water	351.2	
280-137609-6	NW052-20A	Total/NA	Water	351.2	
280-137609-7	G0045-20A	Total/NA	Water	351.2	
280-137609-8	G0017-20A	Total/NA	Water	351.2	
280-137609-9	G0102-20A	Total/NA	Water	351.2	
MB 280-499167/28-A	Method Blank	Total/NA	Water	351.2	
MB 280-499167/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-499167/1-A	Lab Control Sample	Total/NA	Water	351.2	
LCS 280-499167/27-A	Lab Control Sample	Total/NA	Water	351.2	
280-137609-1 MS	PZ007-20A	Total/NA	Water	351.2	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	351.2	
280-137609-9 MS	G0102-20A	Total/NA	Water	351.2	
280-137609-9 MSD	G0102-20A	Total/NA	Water	351.2	

Prep Batch: 499239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	9030B	
280-137609-3	G0105-20A	Total/NA	Water	9030B	
280-137609-4	G0080-20A	Total/NA	Water	9030B	
280-137609-5	PZ005-20A	Total/NA	Water	9030B	
280-137609-7	G0045-20A	Total/NA	Water	9030B	
280-137609-8	G0017-20A	Total/NA	Water	9030B	
MB 280-499239/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-499239/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-137609-1 MS	PZ007-20A	Total/NA	Water	9030B	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	9030B	

Analysis Batch: 499241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	9034	499239
280-137609-3	G0105-20A	Total/NA	Water	9034	499239
280-137609-4	G0080-20A	Total/NA	Water	9034	499239
280-137609-5	PZ005-20A	Total/NA	Water	9034	499239
280-137609-7	G0045-20A	Total/NA	Water	9034	499239
280-137609-8	G0017-20A	Total/NA	Water	9034	499239
MB 280-499239/2-A	Method Blank	Total/NA	Water	9034	499239
LCS 280-499239/1-A	Lab Control Sample	Total/NA	Water	9034	499239
280-137609-1 MS	PZ007-20A	Total/NA	Water	9034	499239
280-137609-1 MSD	PZ007-20A	Total/NA	Water	9034	499239

Prep Batch: 499255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-9	G0102-20A	Total/NA	Water	9030B	
MB 280-499255/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-499255/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-137609-9 MS	G0102-20A	Total/NA	Water	9030B	
280-137609-9 MSD	G0102-20A	Total/NA	Water	9030B	

General Chemistry

Analysis Batch: 499302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-9	G0102-20A	Total/NA	Water	9034	499255
MB 280-499255/2-A	Method Blank	Total/NA	Water	9034	499255
LCS 280-499255/1-A	Lab Control Sample	Total/NA	Water	9034	499255
280-137609-9 MS	G0102-20A	Total/NA	Water	9034	499255
280-137609-9 MSD	G0102-20A	Total/NA	Water	9034	499255

Analysis Batch: 499351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	353.2	
280-137609-2	PZ012-20A	Total/NA	Water	353.2	
280-137609-3	G0105-20A	Total/NA	Water	353.2	
280-137609-4	G0080-20A	Total/NA	Water	353.2	
280-137609-5	PZ005-20A	Total/NA	Water	353.2	
280-137609-6	NW052-20A	Total/NA	Water	353.2	
280-137609-7	G0045-20A	Total/NA	Water	353.2	
280-137609-8	G0017-20A	Total/NA	Water	353.2	
280-137609-9	G0102-20A	Total/NA	Water	353.2	
280-137609-10	SHGW03-20A	Total/NA	Water	353.2	
280-137609-11	SHGW02-20A	Total/NA	Water	353.2	
280-137609-12	SHGW05-20A	Total/NA	Water	353.2	
MB 280-499351/22	Method Blank	Total/NA	Water	353.2	
LCS 280-499351/21	Lab Control Sample	Total/NA	Water	353.2	
280-137609-1 MS	PZ007-20A	Total/NA	Water	353.2	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	353.2	
280-137609-9 MS	G0102-20A	Total/NA	Water	353.2	
280-137609-9 MSD	G0102-20A	Total/NA	Water	353.2	

Analysis Batch: 499501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	351.2	499167
280-137609-2	PZ012-20A	Total/NA	Water	351.2	499167
280-137609-3	G0105-20A	Total/NA	Water	351.2	499167
280-137609-4	G0080-20A	Total/NA	Water	351.2	499167
280-137609-5	PZ005-20A	Total/NA	Water	351.2	499167
280-137609-6	NW052-20A	Total/NA	Water	351.2	499167
280-137609-7	G0045-20A	Total/NA	Water	351.2	499167
280-137609-8	G0017-20A	Total/NA	Water	351.2	499167
280-137609-9	G0102-20A	Total/NA	Water	351.2	499167
MB 280-499167/28-A	Method Blank	Total/NA	Water	351.2	499167
MB 280-499167/2-A	Method Blank	Total/NA	Water	351.2	499167
LCS 280-499167/1-A	Lab Control Sample	Total/NA	Water	351.2	499167
LCS 280-499167/27-A	Lab Control Sample	Total/NA	Water	351.2	499167
280-137609-1 MS	PZ007-20A	Total/NA	Water	351.2	499167
280-137609-1 MSD	PZ007-20A	Total/NA	Water	351.2	499167
280-137609-9 MS	G0102-20A	Total/NA	Water	351.2	499167
280-137609-9 MSD	G0102-20A	Total/NA	Water	351.2	499167

Analysis Batch: 500081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Total/NA	Water	9056A	
280-137609-2	PZ012-20A	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 500081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-4	G0080-20A	Total/NA	Water	9056A	
280-137609-6	NW052-20A	Total/NA	Water	9056A	
280-137609-8	G0017-20A	Total/NA	Water	9056A	
280-137609-10	SHGW03-20A	Total/NA	Water	9056A	
280-137609-11	SHGW02-20A	Total/NA	Water	9056A	
280-137609-12	SHGW05-20A	Total/NA	Water	9056A	
MB 280-500081/6	Method Blank	Total/NA	Water	9056A	
LCS 280-500081/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-500081/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-500081/3	Lab Control Sample	Total/NA	Water	9056A	
280-137609-1 MS	PZ007-20A	Total/NA	Water	9056A	
280-137609-1 MSD	PZ007-20A	Total/NA	Water	9056A	
280-137609-1 DU	PZ007-20A	Total/NA	Water	9056A	

Filtration Batch: 500262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Dissolved	Water	FILTRATION	
280-137609-2	PZ012-20A	Dissolved	Water	FILTRATION	
280-137609-3	G0105-20A	Dissolved	Water	FILTRATION	
280-137609-4	G0080-20A	Dissolved	Water	FILTRATION	
280-137609-5	PZ005-20A	Dissolved	Water	FILTRATION	
280-137609-6	NW052-20A	Dissolved	Water	FILTRATION	
280-137609-7	G0045-20A	Dissolved	Water	FILTRATION	
280-137609-8	G0017-20A	Dissolved	Water	FILTRATION	
280-137609-9	G0102-20A	Dissolved	Water	FILTRATION	
MB 280-500262/28-A	Method Blank	Dissolved	Water	FILTRATION	
MB 280-500262/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-500262/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 280-500262/27-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-137609-1 MS	PZ007-20A	Dissolved	Water	FILTRATION	
280-137609-1 MSD	PZ007-20A	Dissolved	Water	FILTRATION	
280-137609-9 MS	G0102-20A	Dissolved	Water	FILTRATION	
280-137609-9 MSD	G0102-20A	Dissolved	Water	FILTRATION	

Analysis Batch: 500423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-1	PZ007-20A	Dissolved	Water	9060A	500262
280-137609-2	PZ012-20A	Dissolved	Water	9060A	500262
280-137609-3	G0105-20A	Dissolved	Water	9060A	500262
280-137609-4	G0080-20A	Dissolved	Water	9060A	500262
280-137609-5	PZ005-20A	Dissolved	Water	9060A	500262
280-137609-6	NW052-20A	Dissolved	Water	9060A	500262
280-137609-7	G0045-20A	Dissolved	Water	9060A	500262
280-137609-8	G0017-20A	Dissolved	Water	9060A	500262
280-137609-9	G0102-20A	Dissolved	Water	9060A	500262
MB 280-500262/28-A	Method Blank	Dissolved	Water	9060A	500262
MB 280-500262/2-A	Method Blank	Dissolved	Water	9060A	500262
LCS 280-500262/1-A	Lab Control Sample	Dissolved	Water	9060A	500262
LCS 280-500262/27-A	Lab Control Sample	Dissolved	Water	9060A	500262
280-137609-1 MS	PZ007-20A	Dissolved	Water	9060A	500262
280-137609-1 MSD	PZ007-20A	Dissolved	Water	9060A	500262

General Chemistry (Continued)

Analysis Batch: 500423 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-9 MS	G0102-20A	Dissolved	Water	9060A	500262
280-137609-9 MSD	G0102-20A	Dissolved	Water	9060A	500262

Analysis Batch: 500465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137609-3	G0105-20A	Total/NA	Water	9056A	
280-137609-5	PZ005-20A	Total/NA	Water	9056A	
280-137609-7	G0045-20A	Total/NA	Water	9056A	
280-137609-9	G0102-20A	Total/NA	Water	9056A	
MB 280-500465/6	Method Blank	Total/NA	Water	9056A	
LCS 280-500465/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-500465/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-500465/3	Lab Control Sample	Total/NA	Water	9056A	
280-137609-9 MS	G0102-20A	Total/NA	Water	9056A	
280-137609-9 MSD	G0102-20A	Total/NA	Water	9056A	
280-137609-9 DU	G0102-20A	Total/NA	Water	9056A	

Client Sample ID: PZ007-20A
Lab Sample ID: 280-137609-1

Date Collected: 06/11/20 08:50
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/16/20 21:53	GPM	TAL DEN
Total/NA	Prep	3535			470.1 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 03:09	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:28	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 16:40	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 16:47	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499239	06/18/20 10:52	BWH	TAL DEN
Total/NA	Analysis	9034		1			499241	06/18/20 10:56	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 17:18	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 02:06	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 13:44	SPG	TAL DEN

Client Sample ID: PZ012-20A
Lab Sample ID: 280-137609-2

Date Collected: 06/10/20 15:45
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		3	18 mL	18 mL	499210	06/18/20 14:52	GPM	TAL DEN
Total/NA	Prep	3535			467.9 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 08:56	JZ	TAL DEN
Total/NA	Prep	3535			467.9 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 17:11	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:00	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 16:50	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 16:53	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	498938	06/16/20 11:47	AAD	TAL DEN
Total/NA	Analysis	9034		1			498939	06/16/20 11:50	AAD	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 18:24	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 04:13	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 13:51	SPG	TAL DEN

Client Sample ID: G0105-20A
Lab Sample ID: 280-137609-3

Date Collected: 06/11/20 13:35
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/16/20 23:14	GPM	TAL DEN
Total/NA	Prep	3535			474.8 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 09:31	JZ	TAL DEN

Client Sample ID: G0105-20A
Lab Sample ID: 280-137609-3

Date Collected: 06/11/20 13:35
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			474.8 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 17:34	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:02	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 16:57	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 16:55	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499239	06/18/20 10:52	BWH	TAL DEN
Total/NA	Analysis	9034		1			499241	06/18/20 10:56	BWH	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	500465	06/29/20 21:37	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 04:40	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 13:57	SPG	TAL DEN

Client Sample ID: G0080-20A
Lab Sample ID: 280-137609-4

Date Collected: 06/11/20 13:45
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/16/20 23:31	GPM	TAL DEN
Total/NA	Prep	3535			479 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 10:06	JZ	TAL DEN
Total/NA	Prep	3535			479 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 17:56	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:16	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 16:59	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 16:57	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499239	06/18/20 10:52	BWH	TAL DEN
Total/NA	Analysis	9034		1			499241	06/18/20 10:56	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 18:57	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 05:48	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:04	SPG	TAL DEN

Client Sample ID: PZ005-20A
Lab Sample ID: 280-137609-5

Date Collected: 06/11/20 12:00
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/16/20 23:47	GPM	TAL DEN
Total/NA	Prep	3535			481.9 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 10:41	JZ	TAL DEN
Total/NA	Prep	3535			481.9 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 18:19	JZ	TAL DEN

Client Sample ID: PZ005-20A
Lab Sample ID: 280-137609-5

Date Collected: 06/11/20 12:00
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:42	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 17:00	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	499351	06/18/20 16:59	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499239	06/18/20 10:52	BWH	TAL DEN
Total/NA	Analysis	9034		1			499241	06/18/20 10:56	BWH	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	500465	06/29/20 21:54	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 12:11	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:11	SPG	TAL DEN

Client Sample ID: NW052-20A
Lab Sample ID: 280-137609-6

Date Collected: 06/10/20 15:50
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 00:04	GPM	TAL DEN
Total/NA	Prep	3535			477.1 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 11:16	JZ	TAL DEN
Total/NA	Prep	3535			477.1 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 18:42	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:20	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 17:01	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:01	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	498938	06/16/20 11:47	AAD	TAL DEN
Total/NA	Analysis	9034		1			498939	06/16/20 11:50	AAD	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 20:02	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 12:43	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:17	SPG	TAL DEN

Client Sample ID: G0045-20A
Lab Sample ID: 280-137609-7

Date Collected: 06/11/20 12:10
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 00:20	GPM	TAL DEN
Total/NA	Prep	3535			474.8 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 19:51	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 14:22	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 18:17	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:03	SVC	TAL DEN

Client Sample ID: G0045-20A
Lab Sample ID: 280-137609-7

Date Collected: 06/11/20 12:10
Matrix: Water
Date Received: 06/12/20 09:00

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	499239	06/18/20 10:52	BWH	TAL DEN
Total/NA	Analysis	9034		1			499241	06/18/20 10:56	BWH	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	500465	06/29/20 22:10	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 13:10	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:23	SPG	TAL DEN

Client Sample ID: G0017-20A
Lab Sample ID: 280-137609-8

Date Collected: 06/11/20 11:00
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		3	18 mL	18 mL	499210	06/18/20 15:09	GPM	TAL DEN
Total/NA	Prep	3535			476.1 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499860	06/24/20 13:01	JZ	TAL DEN
Total/NA	Prep	3535			476.1 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 20:14	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:56	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 18:19	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:05	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499239	06/18/20 10:52	BWH	TAL DEN
Total/NA	Analysis	9034		1			499241	06/18/20 10:56	BWH	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 20:35	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 13:33	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:42	SPG	TAL DEN

Client Sample ID: G0102-20A
Lab Sample ID: 280-137609-9

Date Collected: 06/11/20 15:15
Matrix: Water
Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499415	06/18/20 18:08	GPM	TAL DEN
Total/NA	Prep	3535			453.9 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			500016	06/25/20 00:51	JZ	TAL DEN
Total/NA	Prep	3535	DL		453.9 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A	DL	10			500016	06/25/20 04:55	JZ	TAL DEN
Total/NA	Prep	3535			453.9 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A		1			499532	06/23/20 05:50	JZ	TAL DEN
Total/NA	Prep	3535	DL		453.9 mL	5 mL	499107	06/17/20 17:11	KSA	TAL DEN
Total/NA	Analysis	8330A	DL	10			499863	06/23/20 19:49	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	498989	06/16/20 15:04	BWH	TAL DEN

Client Sample ID: G0102-20A

Lab Sample ID: 280-137609-9

Date Collected: 06/11/20 15:15

Matrix: Water

Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	499167	06/17/20 16:38	SVC	TAL DEN
Total/NA	Analysis	351.2		1			499501	06/19/20 17:06	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:23	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	499255	06/18/20 11:38	SAH	TAL DEN
Total/NA	Analysis	9034		1			499302	06/18/20 14:05	BWH	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	500465	06/29/20 22:26	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 15:07	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:48	SPG	TAL DEN

Client Sample ID: SHGW03-20A

Lab Sample ID: 280-137609-10

Date Collected: 06/11/20 10:15

Matrix: Water

Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499519	06/20/20 14:51	JLS	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 00:53	GPM	TAL DEN
Total/NA	Prep	3510C			1006.9 mL	1 mL	499277	06/18/20 15:45	NMC	TAL DEN
Total/NA	Analysis	8015C DRO		1			500427	06/30/20 15:59	MAM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:19	SVC	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 21:57	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 14:54	SPG	TAL DEN

Client Sample ID: SHGW02-20A

Lab Sample ID: 280-137609-11

Date Collected: 06/11/20 08:55

Matrix: Water

Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499519	06/20/20 15:12	JLS	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 01:09	GPM	TAL DEN
Total/NA	Analysis	RSK-175		3	18 mL	18 mL	499210	06/18/20 15:25	GPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:21	SVC	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 22:14	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:00	SPG	TAL DEN

Client Sample ID: SHGW05-20A

Lab Sample ID: 280-137609-12

Date Collected: 06/11/20 08:00

Matrix: Water

Date Received: 06/12/20 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499519	06/20/20 15:34	JLS	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	499014	06/17/20 01:42	GPM	TAL DEN
Total/NA	Analysis	RSK-175	DL	3	18 mL	18 mL	499210	06/18/20 15:41	GPM	TAL DEN

Lab Chronicle

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

Job ID: 280-137609-1

Client Sample ID: SHGW05-20A
Date Collected: 06/11/20 08:00
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	499351	06/18/20 17:29	SVC	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	500081	06/25/20 22:30	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			499040	06/16/20 15:05	SPG	TAL DEN

Client Sample ID: SOURCE 2020
Date Collected: 06/11/20 11:30
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-13
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	8260B		1	5 mL	5 mL	499519	06/20/20 15:55	JLS	TAL DEN
Total/NA	Prep	3535			478.3 mL	5 mL	499027	06/17/20 09:26	MLA	TAL DEN
Total/NA	Analysis	8330A		1			499531	06/22/20 20:37	JZ	TAL DEN

Client Sample ID: TB01-061120
Date Collected: 06/11/20 07:00
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-14
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	8260B		1	5 mL	5 mL	499519	06/20/20 12:22	JLS	TAL DEN

Client Sample ID: TB02-061120
Date Collected: 06/11/20 07:00
Date Received: 06/12/20 09:00

Lab Sample ID: 280-137609-15
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	8260B		1	5 mL	5 mL	499519	06/20/20 12:44	JLS	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: 280-137609-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

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

Method Summary

Client: Brice Environmental Services, Corp
Job ID: 280-137609-1
Project/Site: Cornhusker (CHAAP)

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
RSK-175	Dissolved Gases (GC)	RSK	TAL DEN
8015C DRO	Diesel Range Organics (DRO) (GC)	SW846	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
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL DEN
FILTRATION	Sample Filtration	None	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

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

None = None

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

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

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

Laboratory References:

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

Sample Summary

Client: Brice Environmental Services, Corp
Job ID: 280-137609-1
Project/Site: Cornhusker (CHAAP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-137609-1	PZ007-20A	Water	06/11/20 08:50	06/12/20 09:00	
280-137609-2	PZ012-20A	Water	06/10/20 15:45	06/12/20 09:00	
280-137609-3	G0105-20A	Water	06/11/20 13:35	06/12/20 09:00	
280-137609-4	G0080-20A	Water	06/11/20 13:45	06/12/20 09:00	
280-137609-5	PZ005-20A	Water	06/11/20 12:00	06/12/20 09:00	
280-137609-6	NW052-20A	Water	06/10/20 15:50	06/12/20 09:00	
280-137609-7	G0045-20A	Water	06/11/20 12:10	06/12/20 09:00	
280-137609-8	G0017-20A	Water	06/11/20 11:00	06/12/20 09:00	
280-137609-9	G0102-20A	Water	06/11/20 15:15	06/12/20 09:00	
280-137609-10	SHGW03-20A	Water	06/11/20 10:15	06/12/20 09:00	
280-137609-11	SHGW02-20A	Water	06/11/20 08:55	06/12/20 09:00	
280-137609-12	SHGW05-20A	Water	06/11/20 08:00	06/12/20 09:00	
280-137609-13	SOURCE 2020	Water	06/11/20 11:30	06/12/20 09:00	
280-137609-14	TB01-061120	Water	06/11/20 07:00	06/12/20 09:00	
280-137609-15	TB02-061120	Water	06/11/20 07:00	06/12/20 09:00	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 496958

Lab Sample ID: STD005 280-496958/12 IC Client Sample ID:

Date Analyzed: 06/01/20 16:26 Lab File ID: P1658.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.67	Assign Peak	seifertj	06/02/20 08:03
Chloromethane	1.84	Assign Peak	seifertj	06/02/20 08:03
Bromomethane	2.24	Assign Peak	seifertj	06/02/20 08:03
Acetone	2.96	Assign Peak	seifertj	06/02/20 08:04
Iodomethane	3.08	Assign Peak	seifertj	06/02/20 08:04
Carbon disulfide	3.13	Assign Peak	seifertj	06/02/20 08:04
Methylene Chloride	3.31	Assign Peak	seifertj	06/02/20 08:04
trans-1,2-Dichloroethene	3.52	Invalid Compound ID	ornelasg	06/01/20 21:43
Bromochloromethane	4.43	Invalid Compound ID	ornelasg	06/01/20 21:43
1,2-Dichloroethane	4.92	Invalid Compound ID	ornelasg	06/01/20 21:53
Trichloroethene	5.39	Invalid Compound ID	ornelasg	06/01/20 21:43
Methylcyclohexane	5.59	Invalid Compound ID	ornelasg	06/01/20 21:43
Dibromomethane	5.67	Invalid Compound ID	ornelasg	06/01/20 21:43
Ethylene Dibromide	7.24	Invalid Compound ID	ornelasg	06/01/20 21:43
1-Chlorohexane	7.63	Invalid Compound ID	ornelasg	06/01/20 21:54
Chlorobenzene	7.68	Invalid Compound ID	ornelasg	06/01/20 21:43
Ethylbenzene	7.75	Invalid Compound ID	ornelasg	06/01/20 21:43
Bromobenzene	8.89	Invalid Compound ID	ornelasg	06/01/20 21:44
4-Chlorotoluene	9.19	Invalid Compound ID	ornelasg	06/01/20 21:44
1,3-Dichlorobenzene	9.80	Invalid Compound ID	ornelasg	06/01/20 21:44
1,4-Dichlorobenzene	9.90	Invalid Compound ID	ornelasg	06/01/20 21:44
1,2,4-Trichlorobenzene	11.87	Invalid Compound ID	ornelasg	06/01/20 21:44
Hexachlorobutadiene	12.00	Invalid Compound ID	ornelasg	06/01/20 21:44
1,2,3-Trichlorobenzene	12.35	Invalid Compound ID	ornelasg	06/01/20 21:44

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 496958

Lab Sample ID: STD010 280-496958/13 IC Client Sample ID:

Date Analyzed: 06/01/20 16:47 Lab File ID: P1659.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.84	Invalid Compound ID	ornelasg	06/01/20 21:04
Acetone	2.96	Invalid Compound ID	ornelasg	06/01/20 21:52

Lab Sample ID: STD020 280-496958/14 IC Client Sample ID:

Date Analyzed: 06/01/20 17:09 Lab File ID: P1660.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Iodomethane	3.07	Peak Tail	seifertj	06/02/20 09:06

Lab Sample ID: STD100 280-496958/19 IC Client Sample ID:

Date Analyzed: 06/01/20 18:55 Lab File ID: P1665.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.22	Invalid Compound ID	ornelasg	06/01/20 21:04

Lab Sample ID: STD200 280-496958/20 IC Client Sample ID:

Date Analyzed: 06/01/20 19:16 Lab File ID: P1666.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.21	Invalid Compound ID	ornelasg	06/01/20 21:04

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 499519

Lab Sample ID: 280-137609-11 Client Sample ID: SHGW02-20A

Date Analyzed: 06/20/20 15:12 Lab File ID: P2522.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloropropane		Invalid Compound ID	seifertj	06/22/20 13:21

Lab Sample ID: 280-137609-12 Client Sample ID: SHGW05-20A

Date Analyzed: 06/20/20 15:34 Lab File ID: P2523.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroethane	2.32	Invalid Compound ID	seifertj	06/22/20 13:21
1,2-Dichloropropane		Invalid Compound ID	seifertj	06/22/20 13:21

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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: LCSD 280-499014/6 Client Sample ID:

Date Analyzed: 06/16/20 21:20 Lab File ID: 038F0201.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 10:09

Lab Sample ID: 280-137609-11 Client Sample ID: SHGW02-20A

Date Analyzed: 06/17/20 01:09 Lab File ID: 002F1601.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	06/18/20 10:17
Ethylene	1.74	Peak not integrated	meierg	06/18/20 10:17

Lab Sample ID: 280-137609-11 Client Sample ID: SHGW02-20A

Date Analyzed: 06/17/20 01:09 Lab File ID: 002F1601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Peak not integrated	meierg	06/18/20 10:17

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499014

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: 280-137609-12 Client Sample ID: SHGW05-20A

Date Analyzed: 06/17/20 01:42 Lab File ID: 004F1801.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	06/18/20 10:20
Ethylene	1.74	Peak not integrated	meierg	06/18/20 10:20

Lab Sample ID: 280-137609-12 Client Sample ID: SHGW05-20A

Date Analyzed: 06/17/20 01:42 Lab File ID: 004F1801.D GC Column: HP-Plot Q ID: 0.53(mm)

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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499014

Lab Sample ID: 280-137609-12 DU Client Sample ID: SHGW05-20A DU

Date Analyzed: 06/17/20 01:58 Lab File ID: 005F1901.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	06/18/20 10:21
Ethylene	1.74	Peak not integrated	meierg	06/18/20 10:21

Lab Sample ID: 280-137609-12 DU Client Sample ID: SHGW05-20A DU

Date Analyzed: 06/17/20 01:58 Lab File ID: 005F1901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.13	Peak not integrated	meierg	06/18/20 10:21
Ethylene	4.03	Peak not integrated	meierg	06/18/20 10:21

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.: 280-137609-1

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: LCS 280-499210/2 Client Sample ID:

Date Analyzed: 06/18/20 09:10 Lab File ID: 002F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.05	Shouldering	meierg	06/19/20 16:01

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

Date Analyzed: 06/18/20 13:47 Lab File ID: 019F1901.D GC Column: 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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499210

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

Lab Sample ID: 280-137609-2 Client Sample ID: PZ012-20A

Date Analyzed: 06/18/20 14:52 Lab File ID: 023F2301.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 12:30

Lab Sample ID: 280-137609-2 Client Sample ID: PZ012-20A

Date Analyzed: 06/18/20 14:52 Lab File ID: 023F2301.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 12:30

Lab Sample ID: 280-137609-8 Client Sample ID: G0017-20A

Date Analyzed: 06/18/20 15:09 Lab File ID: 024F2401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:30

Lab Sample ID: 280-137609-8 Client Sample ID: G0017-20A

Date Analyzed: 06/18/20 15:09 Lab File ID: 024F2401.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 12:30

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499210

Lab Sample ID: 280-137609-11 Client Sample ID: SHGW02-20A

Date Analyzed: 06/18/20 15:25 Lab File ID: 025F2501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak not integrated	meierg	06/19/20 12:30

Lab Sample ID: 280-137609-11 Client Sample ID: SHGW02-20A

Date Analyzed: 06/18/20 15:25 Lab File ID: 025F2501.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 12:30

Lab Sample ID: 280-137609-12 DL Client Sample ID: SHGW05-20A DL

Date Analyzed: 06/18/20 15:41 Lab File ID: 026F2601.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: 280-137609-12 DL Client Sample ID: SHGW05-20A DL

Date Analyzed: 06/18/20 15:41 Lab File ID: 026F2601.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 12:32

Lab Sample ID: 280-137609-12 DU Client Sample ID: SHGW05-20A DU

Date Analyzed: 06/18/20 15:58 Lab File ID: 027F2701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499210

Lab Sample ID: 280-137609-12 DU Client Sample ID: SHGW05-20A DU

Date Analyzed: 06/18/20 15:58 Lab File ID: 027F2701.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 12:32

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.: 280-137609-1

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.: 280-137609-1

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: 280-137609-9 Client Sample ID: G0102-20A

Date Analyzed: 06/18/20 18:08 Lab File ID: 035F3501.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.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499415

Lab Sample ID: 280-137609-9 Client Sample ID: G0102-20A

Date Analyzed: 06/18/20 18:08 Lab File ID: 035F3501.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 12:33

Lab Sample ID: 280-137609-9 DU Client Sample ID: G0102-20A DU

Date Analyzed: 06/18/20 18:25 Lab File ID: 036F3601.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 12:34

Lab Sample ID: 280-137609-9 DU Client Sample ID: G0102-20A DU

Date Analyzed: 06/18/20 18:25 Lab File ID: 036F3601.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 12:33

Lab Sample ID: 280-137609-9 MS Client Sample ID: G0102-20A MS

Date Analyzed: 06/18/20 18:41 Lab File ID: 037F3701.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	06/23/20 12:07

Lab Sample ID: 280-137609-9 MS Client Sample ID: G0102-20A MS

Date Analyzed: 06/18/20 18:41 Lab File ID: 037F3701.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 13:16

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499415

Lab Sample ID: 280-137609-9 MSD Client Sample ID: G0102-20A MSD

Date Analyzed: 06/18/20 18:57 Lab File ID: 038F3801.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 12:08

Lab Sample ID: 280-137609-9 MSD Client Sample ID: G0102-20A MSD

Date Analyzed: 06/18/20 18:57 Lab File ID: 038F3801.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 13:18

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

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: SGC_U2a Analysis Batch Number: 483279

Lab Sample ID: STD6 280-483279/5 IC Client Sample ID:

Date Analyzed: 01/17/20 14:58 Lab File ID: 01170104.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.51	Shouldering	paulr	01/17/20 16:10
o-Terphenyl (Surr)	7.07	Shouldering	paulr	01/17/20 16:10

Lab Sample ID: STD5 280-483279/6 IC Client Sample ID:

Date Analyzed: 01/17/20 15:21 Lab File ID: 01170105.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.51	Shouldering	paulr	01/17/20 16:09
o-Terphenyl (Surr)	7.07	Shouldering	paulr	01/17/20 16:09

Lab Sample ID: STD4 280-483279/7 ICRT Client Sample ID:

Date Analyzed: 01/17/20 15:43 Lab File ID: 01170106.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.51	Shouldering	paulr	01/17/20 16:08
o-Terphenyl (Surr)	7.06	Shouldering	paulr	01/17/20 16:08

Lab Sample ID: STD3 280-483279/8 IC Client Sample ID:

Date Analyzed: 01/17/20 16:05 Lab File ID: 01170107.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.51	Shouldering	paulr	01/17/20 17:20
o-Terphenyl (Surr)	7.06	Shouldering	paulr	01/17/20 17:20

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: SGC_U2a Analysis Batch Number: 483279

Lab Sample ID: STD2 280-483279/9 IC Client Sample ID:

Date Analyzed: 01/17/20 16:28 Lab File ID: 01170108.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.51	Shouldering	paulr	01/17/20 17:20
o-Terphenyl (Surr)	7.06	Shouldering	paulr	01/17/20 17:20

Lab Sample ID: STD1 280-483279/10 IC Client Sample ID:

Date Analyzed: 01/17/20 16:50 Lab File ID: 01170109.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.51	Shouldering	paulr	01/17/20 17:22
o-Terphenyl (Surr)	7.06	Shouldering	paulr	01/17/20 17:22

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: SGC_U2a Analysis Batch Number: 500427

Lab Sample ID: CCV 280-500427/15 Client Sample ID:

Date Analyzed: 06/30/20 16:21 Lab File ID: 063F1801.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
C10-C28	6.48	Split Peak	mcaleesem	06/30/20 16:54
o-Terphenyl (Surr)	7.07	Split Peak	mcaleesem	06/30/20 16:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 499860

Lab Sample ID: CCV 280-499860/22 Client Sample ID:

Date Analyzed: 06/24/20 04:51 Lab File ID: 06230022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	15.78	Baseline	zhangji	06/24/20 18:09
Nitroglycerin	16.00	Baseline	zhangji	06/24/20 16:44
2-Nitrotoluene	16.71	Baseline	zhangji	06/24/20 18:09
4-Nitrotoluene	17.00	Baseline	zhangji	06/24/20 18:09
4-Amino-2,6-dinitrotoluene	17.44	Baseline	zhangji	06/24/20 18:09
3-Nitrotoluene	17.92	Baseline	zhangji	06/24/20 18:09
2-Amino-4,6-dinitrotoluene	18.38	Baseline	zhangji	06/24/20 18:09
1,3,5-Trinitrobenzene	19.12	Baseline	zhangji	06/24/20 18:09
2,6-Dinitrotoluene	20.04	Baseline	zhangji	06/24/20 18:09
2,4-Dinitrotoluene	20.55	Baseline	zhangji	06/24/20 18:09

Lab Sample ID: 280-137609-2 Client Sample ID: PZ012-20A

Date Analyzed: 06/24/20 08:56 Lab File ID: 06230029.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 18:14
2-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:14
3-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:14
MNX		Invalid Compound ID	zhangji	06/24/20 18:14
1,2-Dinitrobenzene	13.23	Baseline	zhangji	06/24/20 18:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 499860

Lab Sample ID: 280-137609-3 Client Sample ID: G0105-20A

Date Analyzed: 06/24/20 09:31 Lab File ID: 06230030.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:14
3-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:14
MNX		Invalid Compound ID	zhangji	06/24/20 18:14
1,2-Dinitrobenzene	13.21	Baseline	zhangji	06/24/20 18:14

Lab Sample ID: 280-137609-4 Client Sample ID: G0080-20A

Date Analyzed: 06/24/20 10:06 Lab File ID: 06230031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.14	Baseline	zhangji	06/24/20 18:15
RDX	9.34	Baseline	zhangji	06/24/20 18:15
3-Nitrotoluene		Baseline	zhangji	06/24/20 18:15
4-Nitrotoluene		Invalid Compound ID	zhangji	06/24/20 18:19
Tetryl		Invalid Compound ID	zhangji	06/24/20 18:15
2-Nitrotoluene	16.66	Baseline	zhangji	06/24/20 18:15
4-Amino-2,6-dinitrotoluene	17.42	Baseline	zhangji	06/24/20 18:15
2-Amino-4,6-dinitrotoluene	18.39	Baseline	zhangji	06/24/20 18:15

Lab Sample ID: 280-137609-5 Client Sample ID: PZ005-20A

Date Analyzed: 06/24/20 10:41 Lab File ID: 06230032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl		Invalid Compound ID	zhangji	06/24/20 18:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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: 280-137609-8 Client Sample ID: G0017-20A

Date Analyzed: 06/24/20 13:01 Lab File ID: 06230036.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 18:20
2-Nitrotoluene		Baseline	zhangji	06/24/20 18:21
HMX		Invalid Compound ID	zhangji	06/24/20 18:20
1,2-Dinitrobenzene	13.26	Baseline	zhangji	06/24/20 18:20
4-Nitrotoluene	16.96	Baseline	zhangji	06/24/20 18:21
4-Amino-2,6-dinitrotoluene	17.52	Baseline	zhangji	06/24/20 18:21

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 500016

Lab Sample ID: CCV 280-500016/7 Client Sample ID:

Date Analyzed: 06/24/20 21:56 Lab File ID: 06240007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	16.75	Baseline	zhangji	06/25/20 16:58
4-Nitrotoluene	17.03	Baseline	zhangji	06/25/20 16:58
4-Amino-2,6-dinitrotoluene	17.47	Baseline	zhangji	06/25/20 16:58
3-Nitrotoluene	17.96	Baseline	zhangji	06/25/20 16:58
2-Amino-4,6-dinitrotoluene	18.40	Baseline	zhangji	06/25/20 16:58
1,3,5-Trinitrobenzene	19.14	Baseline	zhangji	06/25/20 16:58
2,6-Dinitrotoluene	20.07	Baseline	zhangji	06/25/20 16:58
2,4-Dinitrotoluene	20.58	Baseline	zhangji	06/25/20 16:58

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 500016

Lab Sample ID: 280-137609-9 DL Client Sample ID: G0102-20A DL

Date Analyzed: 06/25/20 04:55 Lab File ID: 06240019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:08
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/25/20 17:08
1,2-Dinitrobenzene	13.26	Baseline	zhangji	06/25/20 17:08

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

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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: 280-137609-2 Client Sample ID: PZ012-20A

Date Analyzed: 06/22/20 17:11 Lab File ID: 06220015.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 14:12
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:12
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:12
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:13
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:12
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:12
RDX		Invalid Compound ID	zhangji	06/23/20 14:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: 280-137609-3 Client Sample ID: G0105-20A

Date Analyzed: 06/22/20 17:34 Lab File ID: 06220016.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 14:13
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:13
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:13
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:13
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:13
Nitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:13
RDX		Invalid Compound ID	zhangji	06/23/20 14:13

Lab Sample ID: 280-137609-4 Client Sample ID: G0080-20A

Date Analyzed: 06/22/20 17:56 Lab File ID: 06220017.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 14:13
4-Amino-2,6-dinitrotoluene	11.40	Baseline	zhangji	06/23/20 14:15
2-Amino-4,6-dinitrotoluene	11.69	Baseline	zhangji	06/23/20 14:15
3-Nitrotoluene	13.87	Baseline	zhangji	06/23/20 14:14

Lab Sample ID: 280-137609-5 Client Sample ID: PZ005-20A

Date Analyzed: 06/22/20 18:19 Lab File ID: 06220018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.80	Baseline	zhangji	06/23/20 14:30
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:29
Nitrobenzene	9.97	Baseline	zhangji	06/23/20 14:30
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: 280-137609-6 Client Sample ID: NW052-20A

Date Analyzed: 06/22/20 18:42 Lab File ID: 06220019.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 14:30
Nitrobenzene	9.96	Baseline	zhangji	06/23/20 14:30

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

Lab Sample ID: 280-137609-7 Client Sample ID: G0045-20A

Date Analyzed: 06/22/20 19:51 Lab File ID: 06220022.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 14:38
Nitrobenzene	9.97	Baseline	zhangji	06/23/20 14:38

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

Lab Sample ID: 280-137609-8 Client Sample ID: G0017-20A

Date Analyzed: 06/22/20 20:14 Lab File ID: 06220023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.45	Baseline	zhangji	06/23/20 14:39
Nitrobenzene	9.97	Baseline	zhangji	06/23/20 14:39
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:39
2-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:39
4-Amino-2,6-dinitrotoluene		Baseline	zhangji	06/23/20 14:40
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:39
HMX		Invalid Compound ID	zhangji	06/23/20 14:38
RDX		Invalid Compound ID	zhangji	06/23/20 14:39
Tetryl	10.26	Baseline	zhangji	06/23/20 14:39
2-Amino-4,6-dinitrotoluene	11.70	Baseline	zhangji	06/23/20 14:40

Lab Sample ID: 280-137609-13 Client Sample ID: SOURCE 2020

Date Analyzed: 06/22/20 20:37 Lab File ID: 06220024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/23/20 14:40
HMX		Invalid Compound ID	zhangji	06/23/20 14:40

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499531

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.: 280-137609-1

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.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-1 Client Sample ID: PZ007-20A

Date Analyzed: 06/23/20 03:09 Lab File ID: 06220041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.77	Baseline	zhangji	06/23/20 14:48
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:48

Lab Sample ID: 280-137609-1 MS Client Sample ID: PZ007-20A MS

Date Analyzed: 06/23/20 03:32 Lab File ID: 06220042.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 14:48
RDX	7.80	Baseline	zhangji	06/23/20 14:48
1,2-Dinitrobenzene	8.75	Baseline	zhangji	06/23/20 14:48
1,3,5-Trinitrobenzene	8.94	Baseline	zhangji	06/23/20 14:48
Tetryl	10.27	Baseline	zhangji	06/23/20 14:49

Lab Sample ID: 280-137609-1 MSD Client Sample ID: PZ007-20A MSD

Date Analyzed: 06/23/20 03:55 Lab File ID: 06220043.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 14:49
1,2-Dinitrobenzene	8.77	Baseline	zhangji	06/23/20 14:49
1,3,5-Trinitrobenzene	8.95	Baseline	zhangji	06/23/20 14:49
MNX		Invalid Compound ID	zhangji	06/23/20 14:49
2-Amino-4,6-dinitrotoluene	11.70	Baseline	zhangji	06/23/20 14:50
2,6-Dinitrotoluene	11.83	Baseline	zhangji	06/23/20 14:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-1 MS Client Sample ID: PZ007-20A MS

Date Analyzed: 06/23/20 04:18 Lab File ID: 06220044.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 14:50
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:51
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:51

Lab Sample ID: 280-137609-1 MSD Client Sample ID: PZ007-20A MSD

Date Analyzed: 06/23/20 04:41 Lab File ID: 06220045.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 14:51
1,2-Dinitrobenzene	8.77	Baseline	zhangji	06/23/20 14:51
4-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:51

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

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

Lab Sample ID: 280-137609-9 Client Sample ID: G0102-20A

Date Analyzed: 06/23/20 05:50 Lab File ID: 06220048.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 14:52
MNX	7.40	Baseline	zhangji	06/23/20 14:52
RDX	7.81	Baseline	zhangji	06/23/20 14:53
1,2-Dinitrobenzene	8.78	Baseline	zhangji	06/23/20 14:53
3-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:53

Lab Sample ID: 280-137609-9 MS Client Sample ID: G0102-20A MS

Date Analyzed: 06/23/20 06:13 Lab File ID: 06220049.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 14:53
MNX	7.40	Baseline	zhangji	06/23/20 14:53
RDX	7.81	Baseline	zhangji	06/23/20 14:53
1,2-Dinitrobenzene	8.77	Baseline	zhangji	06/23/20 14:53
1,3,5-Trinitrobenzene	8.95	Baseline	zhangji	06/23/20 14:53
1,3-Dinitrobenzene	9.60	Baseline	zhangji	06/23/20 14:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499532

Lab Sample ID: 280-137609-9 MSD Client Sample ID: G0102-20A MSD

Date Analyzed: 06/23/20 06:36 Lab File ID: 06220050.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 14:54
MNX	7.40	Baseline	zhangji	06/23/20 14:54
RDX	7.81	Baseline	zhangji	06/23/20 14:54
1,2-Dinitrobenzene	8.77	Baseline	zhangji	06/23/20 14:54
1,3,5-Trinitrobenzene	8.95	Baseline	zhangji	06/23/20 14:55
1,3-Dinitrobenzene	9.61	Baseline	zhangji	06/23/20 14:55

Lab Sample ID: 280-137609-9 MS Client Sample ID: G0102-20A MS

Date Analyzed: 06/23/20 06:59 Lab File ID: 06220051.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 14:55
MNX	7.40	Baseline	zhangji	06/23/20 14:56
RDX	7.81	Baseline	zhangji	06/23/20 14:56
1,2-Dinitrobenzene	8.78	Baseline	zhangji	06/23/20 14:56

Lab Sample ID: 280-137609-9 MSD Client Sample ID: G0102-20A MSD

Date Analyzed: 06/23/20 07:22 Lab File ID: 06220052.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 14:56
MNX	7.40	Baseline	zhangji	06/23/20 14:56
RDX	7.80	Baseline	zhangji	06/23/20 14:57
1,2-Dinitrobenzene	8.76	Baseline	zhangji	06/23/20 14:57
2-Nitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:57
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/23/20 14:57

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499863

Lab Sample ID: CCV 280-499863/7 Client Sample ID:

Date Analyzed: 06/23/20 18:40 Lab File ID: 06230007.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 20:01
2,4,6-Trinitrotoluene	11.20	Baseline	zhangji	06/23/20 20:02
4-Amino-2,6-dinitrotoluene	11.36	Baseline	zhangji	06/23/20 20:02
2-Amino-4,6-dinitrotoluene	11.66	Baseline	zhangji	06/23/20 20:02
2,6-Dinitrotoluene	11.79	Baseline	zhangji	06/23/20 20:02
2,4-Dinitrotoluene	11.99	Baseline	zhangji	06/23/20 20:02
2-Nitrotoluene	12.80	Baseline	zhangji	06/23/20 20:02
4-Nitrotoluene	13.22	Baseline	zhangji	06/23/20 20:02
3-Nitrotoluene	13.80	Baseline	zhangji	06/23/20 20:02

Lab Sample ID: CCV 280-499863/9 Client Sample ID:

Date Analyzed: 06/23/20 19:26 Lab File ID: 06230009.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 20:03
DNX	6.95	Baseline	zhangji	06/23/20 20:03

Lab Sample ID: 280-137609-9 DL Client Sample ID: G0102-20A DL

Date Analyzed: 06/23/20 19:49 Lab File ID: 06230010.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 20:47
MNX	7.39	Baseline	zhangji	06/23/20 20:47
RDX	7.79	Baseline	zhangji	06/23/20 20:47
1,2-Dinitrobenzene	8.73	Baseline	zhangji	06/23/20 20:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 499863

Lab Sample ID: 280-137609-9 MS DL Client Sample ID: G0102-20A MS DL

Date Analyzed: 06/23/20 20:12 Lab File ID: 06230011.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 20:47
RDX	7.79	Baseline	zhangji	06/23/20 20:47

Lab Sample ID: 280-137609-9 MSD DL Client Sample ID: G0102-20A MSD DL

Date Analyzed: 06/23/20 20:35 Lab File ID: 06230012.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 21:33
2-Amino-4,6-dinitrotoluene	11.61	Baseline	zhangji	06/23/20 21:33
2,6-Dinitrotoluene	11.75	Baseline	zhangji	06/23/20 21:33

Lab Sample ID: CCV 280-499863/15 Client Sample ID:

Date Analyzed: 06/23/20 20:58 Lab File ID: 06230015.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 21:34

Lab Sample ID: CCV 280-499863/16 Client Sample ID:

Date Analyzed: 06/23/20 21:21 Lab File ID: 06230016.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 22:01
DNX	6.94	Baseline	zhangji	06/23/20 22:01

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 500081

Lab Sample ID: CCV 280-500081/1 Client Sample ID:

Date Analyzed: 06/25/20 09:35 Lab File ID: 01.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.74	Incomplete Integration	pedrickj	06/25/20 11:46
Bromide	4.86	Peak assignment corrected	pedrickj	06/25/20 11:45

Lab Sample ID: CCV 280-500081/17 Client Sample ID:

Date Analyzed: 06/25/20 19:29 Lab File ID: 17.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	5.03	Peak assignment corrected	jindaratc	06/25/20 20:20

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 500465

Lab Sample ID: CCV 280-500465/1 Client Sample ID:

Date Analyzed: 06/29/20 09:54 Lab File ID: 01.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.79	Incomplete Integration	pedrickj	06/29/20 11:07
Bromide	4.73	Incomplete Integration	pedrickj	06/29/20 11:07

Lab Sample ID: CCV 280-500465/29 Client Sample ID:

Date Analyzed: 06/29/20 20:48 Lab File ID: 29.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	4.93	Peak assignment corrected	pedrickj	06/30/20 08:57

Lab Sample ID: CCV 280-500465/41 Client Sample ID:

Date Analyzed: 06/30/20 00:05 Lab File ID: 41.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	5.02	Peak assignment corrected	pedrickj	06/30/20 09:06

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_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
350.1 ICV_00407	06/17/20	06/16/20	na, Lot na	100 mL	NH3 ICV STD_00027	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00027	04/01/21		Inorganic Ventures, Lot N2-NH669544		(Purchased Reagent)		Ammonia	1002 mg/L
8015 LCS_00084	10/14/20	04/14/20	ACETONE, Lot Acetone_00325	200 mL	8015 DROStock_00680	1.25 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00686	1.25 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00687	1.25 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00688	1.25 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00691	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00692	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00693	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
.8015 DROStock_00680	04/14/21		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00686	04/14/21		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00687	04/14/21		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00688	04/14/21		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00691	04/14/21		Accustandard, Lot 216081176		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00692	08/14/21	Accustandard, Lot 216081176			(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00693	04/14/21	Accustandard, Lot 216081176			(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
8015Surrogate_00187	12/04/20	06/04/20	90:10 Acetone:MeCl2, Lot 90Ace10MeCl2_00062	500 mL	DRO_SURR_00132	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00133	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00134	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00135	0.5 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
.DRO_SURR_00132	06/04/21	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00133	06/04/21	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00134	06/04/21	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00135	06/04/21	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.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
.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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_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
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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.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
DRO_L4/CCV_00086	05/06/20	12/23/19	Methylene Chloride, Lot MeCl2_Cycl_00461	25 mL	DRO_Fuel2_00137	2.5 mL	C10-C28	4960 ug/mL
					DRO_SURR_00118	0.125 mL	n-Octacosane	25 ug/mL
							o-Terphenyl (Surr)	25 ug/mL
.DRO_Fuel2_00137	06/23/20		Restek, Lot A0152130		(Purchased Reagent)		C10-C28	49600 ug/mL
.DRO_SURR_00118	11/06/20		Accustandard, Lot 216111071-01		(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L4/CCV_00089	12/10/20	06/10/20	Methylene Chloride, Lot MeCl2_Cycl_00464	25 mL	DRO_SURR_00122	0.125 mL	n-Octacosane	25 ug/mL
							o-Terphenyl (Surr)	25 ug/mL
.DRO_SURR_00122	07/17/20		Accustandard, Lot 219101198		(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L4/CCV_00089	12/10/20	06/10/20	Methylene Chloride, Lot MeCl2_Cycl_00464	25 mL	DRO_Fuel2_00138	1 mL	C10-C28	4960 ug/mL
					DRO_Fuel2_00140	1.5 mL	C10-C28	4960 ug/mL
.DRO_Fuel2_00138	07/13/20		Restek, Lot A0152130		(Purchased Reagent)		C10-C28	49600 ug/mL
.DRO_Fuel2_00140	06/10/21		Restek, Lot A0152130		(Purchased Reagent)		C10-C28	49600 ug/mL
DRO_L6_00048	05/06/20	01/10/20	Methylene Chloride, Lot MeCl2_Cycl_00463	5 mL	DRO_Fuel2_00137	1.5 mL	C10-C28	14880 ug/mL
					DRO_SURR_00118	75 uL	n-Octacosane	75 ug/mL
							o-Terphenyl (Surr)	75 ug/mL
.DRO_Fuel2_00137	06/23/20		Restek, Lot A0152130		(Purchased Reagent)		C10-C28	49600 ug/mL
.DRO_SURR_00118	11/06/20		Accustandard, Lot 216111071-01		(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L7_00067	07/13/20	01/13/20	Methylene Chloride, Lot MeCl2 Cycl 00463	1 mL	DRO_Fuel2_00138	0.6 mL	C10-C28	29760 ug/mL
.DRO_Fuel2_00138	07/13/20		Restek, Lot A0152130		(Purchased Reagent)		C10-C28	49600 ug/mL
DRO_RTMKR_00057	07/13/20	01/13/20	Methylene Chloride, Lot MeCl2_cycl_00463	10 mL	DRO_RTMKR1_00116	1 mL	C10-C28	1000 ug/mL
							n-Octacosane	200 ug/mL
					DRO_RTMKR2_00062	1 mL	n-Octacosane	200 ug/mL
.DRO_RTMKR1_00116	07/13/20		Accustandard, Lot 219101211		(Purchased Reagent)		C10-C28	10000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Octacosane	1000 ug/mL
.DRO_RTMKR2_00062	07/13/20	Ultra Scientific, Lot CT-1500			(Purchased Reagent)		n-Octacosane	1000 ug/mL
DRO_SS_00022	07/17/20	01/17/20	Methylene Chloride, Lot MeCl2_cycl_00463	10 mL	DRO_SURR_00122	40 uL	n-Octacosane	20 ug/mL
							o-Terphenyl (Surr)	20 ug/mL
.DRO_SURR_00122	07/17/20	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_SS_00022	07/17/20	01/17/20	Methylene Chloride, Lot MeCl2 cycl 00463	10 mL	8015 DROStock_00610	0.4 mL	C10-C28	1984 ug/mL
.8015 DROStock_00610	07/17/20	Accustandard, Lot 213071423			(Purchased Reagent)		C10-C28	49.6 mg/mL
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 cl/so4_00317	07/06/20	06/29/20	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
.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
ICMS/MSD WEEK_00655	07/06/20	06/29/20	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00022	5 mL	Sulfate	5000.51 mg/L
.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
mv-Cent BFB_00002							1,2-Dichloroethene, Total	
							1,2-Dichloroethene, Total (URS)	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylenes, Total (URS)	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		BFB	250 ug/mL
MV-Gas A_00058	06/12/20	05/26/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00005	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00010	11/30/21		RESTEK, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00005	10/31/21		RESTEK, Lot A0142584		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00059	06/26/20	06/10/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722_00010	11/30/21		RESTEK, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-Gas B_00060	06/05/20	05/18/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MV-Gas B_00063	06/26/20	06/20/20	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
mv-IS_SS_00001	06/13/20	12/13/19	P&T Methanol, Lot 198123	50 mL	mv-30241_00008	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
					MV-567650_00028	1000 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.MV-567650_00028	11/30/22		Restek, Lot A0132615		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
mv-IS_SS_00006	11/07/20	05/07/20	P&T Methanol, Lot 198123	100 mL	mv-30241_00008	2000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.mv-30241_00008	10/31/22		Restek, Lot A0131578		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
mv-IS_SS_00006	11/07/20	05/07/20	P&T Methanol, Lot 198123	100 mL	MV-567650_00028	2000 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.MV-567650_00028	11/30/22		Restek, Lot A0132615		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-MegaMain B_00031	10/24/20	04/24/20	P&T Methanol, Lot 181124	25 mL	MV-569721.sec_00006	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-571992.sec_00005	1000 uL	1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							Benzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Ethylbenzene	100 ug/mL
							Ethylene Dibromide	100 ug/mL
							Isopropylbenzene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							Styrene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							Trichloroethene	100 ug/mL
							Xylenes, Total	200 ug/mL
.MV-569721.sec_00006	08/31/21		RESTEK, Lot A0140519		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-571992.sec_00005	06/30/21		RESTEK, Lot A0144202		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
MV-MegaMainA_00034	10/31/20	04/28/20	P&T Methanol, Lot 181124	25 mL	MV-568720_00033	1250 uL	Acrolein	987.5 ug/mL
					MV-569721_00008	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724_00025	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00010	4000 uL	Cyclohexanone	4000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MV-571992_00004	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Dibromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Ethylene Dibromide	100 ug/mL
							Hexachlorobutadiene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					MV-CUS17739_00005	2500 uL	1-Chlorohexane	100 ug/mL
							2-Pentanone	400 ug/mL
							sec-Butyl Alcohol	3000 ug/mL
.MV-568720_00033	04/30/21		RESTEK, Lot A0154578		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721_00008	10/31/21		RESTEK, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00025	07/31/21		RESTEK, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00010	03/31/22		RESTEK, Lot A0146650		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00004	06/30/21		RESTEK, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS17739_00005	12/31/21	Agilent, Lot 6503344			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00034	10/31/20	04/28/20	P&T Methanol, Lot 181124	25 mL	MV-571992_00004	1000 uL	Xylenes, Total	200 ug/mL
.MV-571992_00004	06/30/21	RESTEK, Lot A0143774			(Purchased Reagent)		Xylenes, Total	5000 ug/mL
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
NXN ICV INT_00516	06/23/20	06/16/20	Di Water, Lot NA	100 mL	NOXT ICV STD_00023	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00023	03/11/21	ERA, Lot 130319m			(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
SFD ICV INT_01714	09/09/20	06/09/20	Di Water, Lot N/A	500 mL	50% NaOH_00018	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00007	3.47566 g	Sulfide	928.001 mg/L
.50% NaOH_00018	11/30/22	Fisher, Lot 1603D65			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00007	06/28/23	Acros, Lot B0132482A			(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
TKN ICV 25_00094	07/13/20	06/10/20	DI water, Lot 1	100 mL	TKN ICV 100_00084	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00084	07/13/20	06/10/20	Di Water, Lot 1	500 mL	TKN ICV_00011	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00011	11/30/20	ERA, Lot 281018			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
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®

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

Certificate of Analysis

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

Lot Number: 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

8015 DROStock_00610

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: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 213071423
Solvent: Acetone
Hazards: HIGHLY FLAMMABLE - *Refer to SDS for safety info*



Danger 2

Date Certified: Jul 29, 2013
Expiration: Jul 29, 2023
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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6		50.04	50.04

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.

Reagent

8015 DROStock_00680

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USA

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 219091457
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 26, 2019
Expiration: Sep 26, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03*	50.03

* Weight compensated to 100% purity.

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

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8015 DROStock_00686

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USA

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 219091457
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 26, 2019
Expiration: Sep 26, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03*	50.03

* Weight compensated to 100% purity.

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

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8015 DROStock_00687

125 Market Street
New Haven, CT 06513
USA

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

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 219091457
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 26, 2019
Expiration: Sep 26, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03*	50.03

* Weight compensated to 100% purity.

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

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8015 DROStock_00688

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: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 219091457
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 26, 2019
Expiration: Sep 26, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03*	50.03

* Weight compensated to 100% purity.

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8015 DROStock_00691

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

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 15, 2016
Expiration: Aug 15, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

8015 DROStock_00692

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USA

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 15, 2016
Expiration: Aug 15, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8015 DROStock_00693

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USA

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

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 15, 2016
Expiration: Aug 15, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

AccuStandard

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

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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** 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 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99% (Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL 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 +/- 55.1906 +/- 64.3577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99% (Lot BCBB8606V)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99% (Lot GA01)	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 **Purity** 99% (Lot FAU01)	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98% (Lot FBO01)	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)

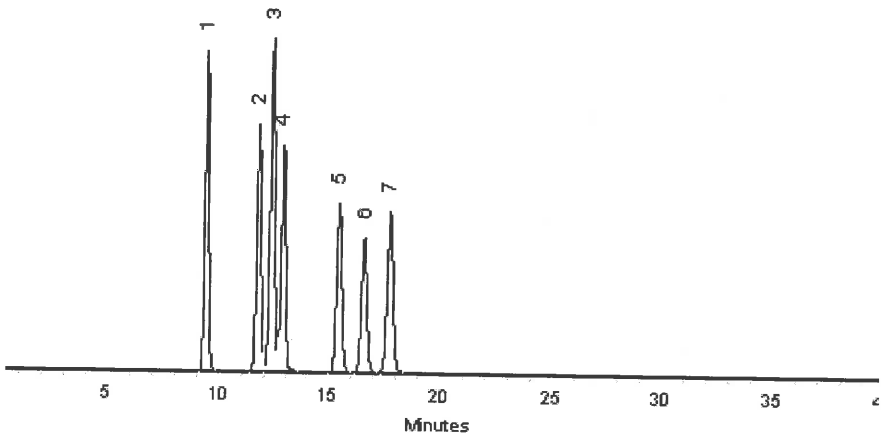
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

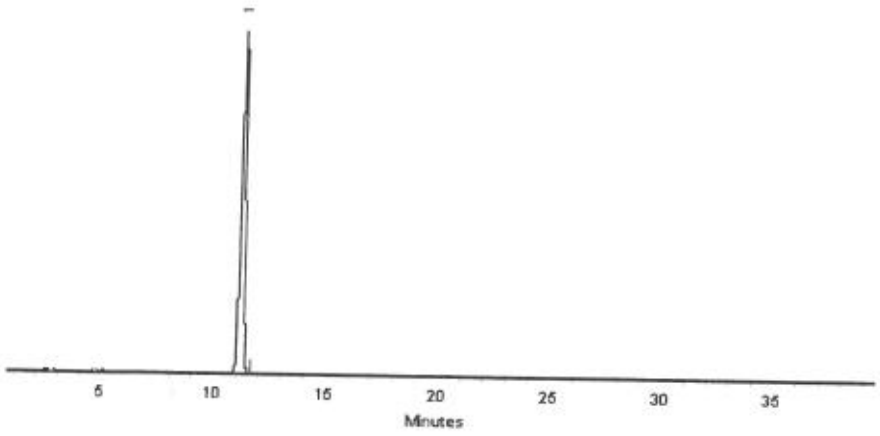
Flow Rate:
1.0 ml/min.

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

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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)

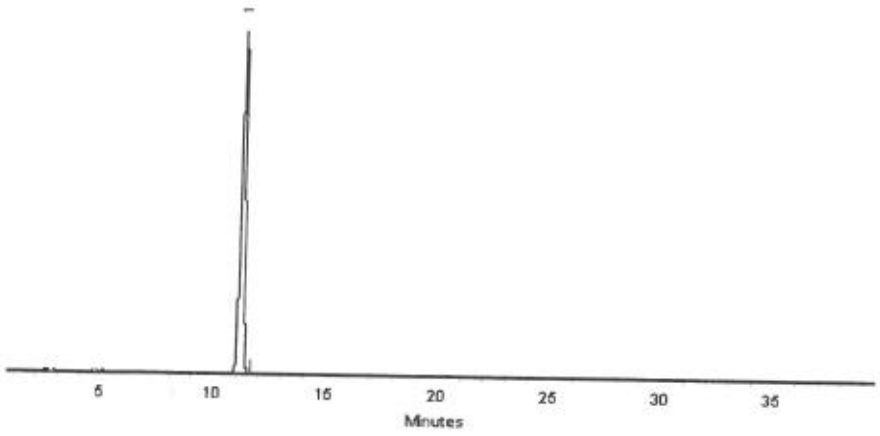
Flow Rate:
1.0 ml/min.

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)

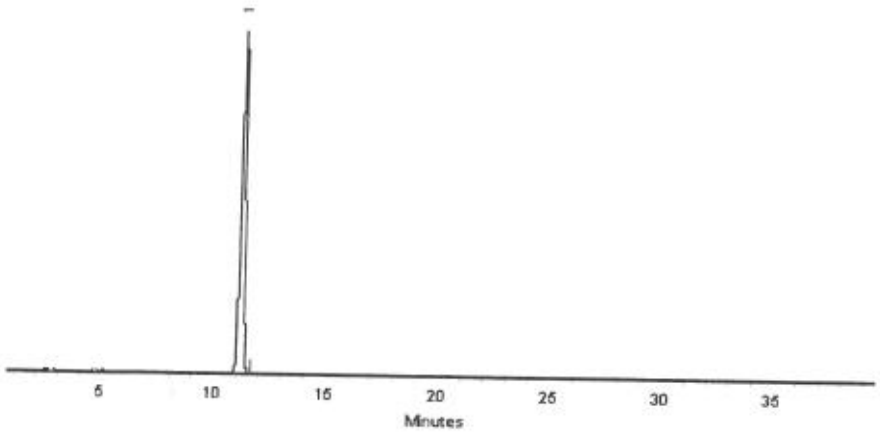
Flow Rate:
1.0 ml/min.

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.

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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. : 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)

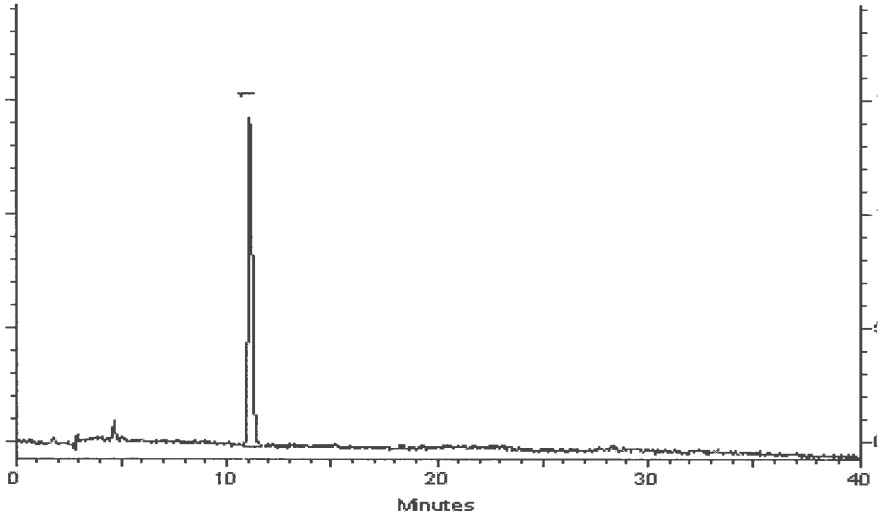
Flow Rate:
1.0 ml/min.

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 A Jaglowski
Joseph Jaglowski - Mix Technician

Date Mixed: 05-Aug-2019 **Balance:** B707717271

Jennifer A Pollino
Jennifer 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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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	5,028.0 µg/mL	+/- 46.7577	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.7886	µg/mL	Unstressed
	Purity 99%		+/- 323.2092	µg/mL	Stressed

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

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

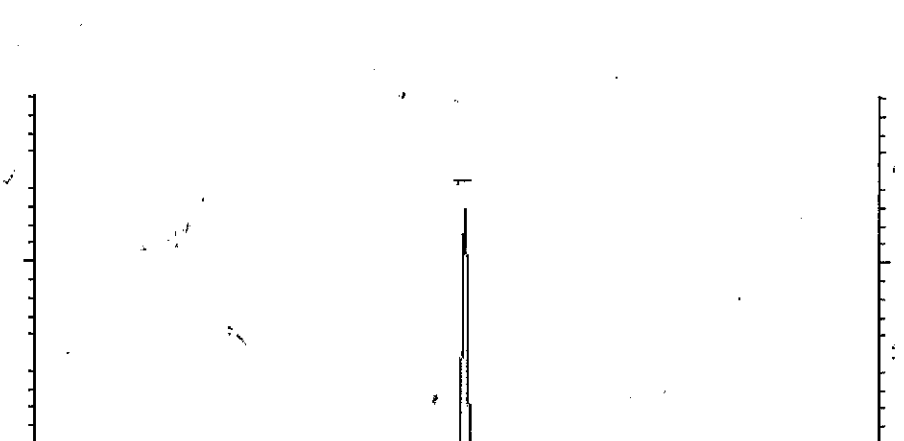
Flow Rate:
1.0 ml/min.

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.

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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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)

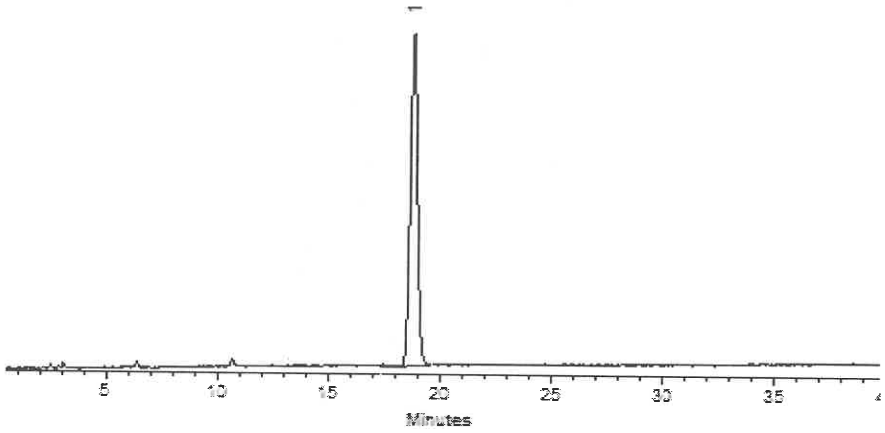
Flow Rate:
1.0 ml/min.

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 **CAS #** 2691-41-0 **Purity** 97%	(Lot 190402JLM)	1,004.9 µg/mL	+/- 5.9689 µg/mL +/- 55.0525 µg/mL +/- 64.1967 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 97%	(Lot DJ5QO)	1,003.0 µg/mL	+/- 5.9574 µg/mL +/- 54.9463 µg/mL +/- 64.0727 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL		Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL		Gravimetric Unstressed Stressed

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

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

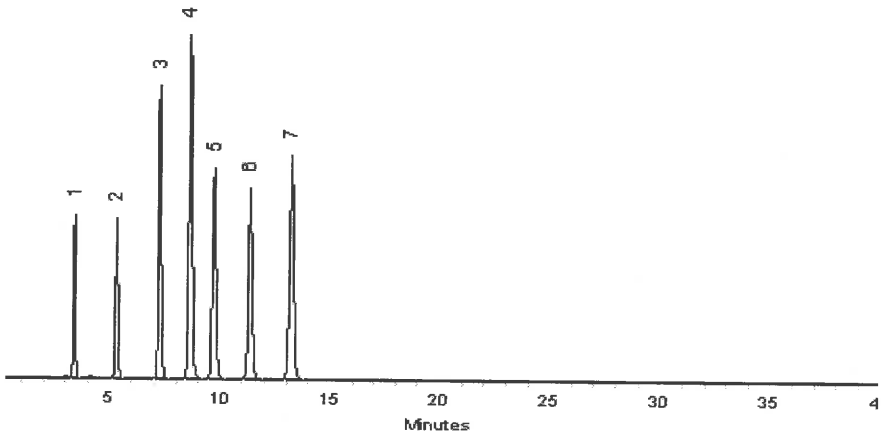
Flow Rate:
1.0 ml/min.

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
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Reagent

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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)

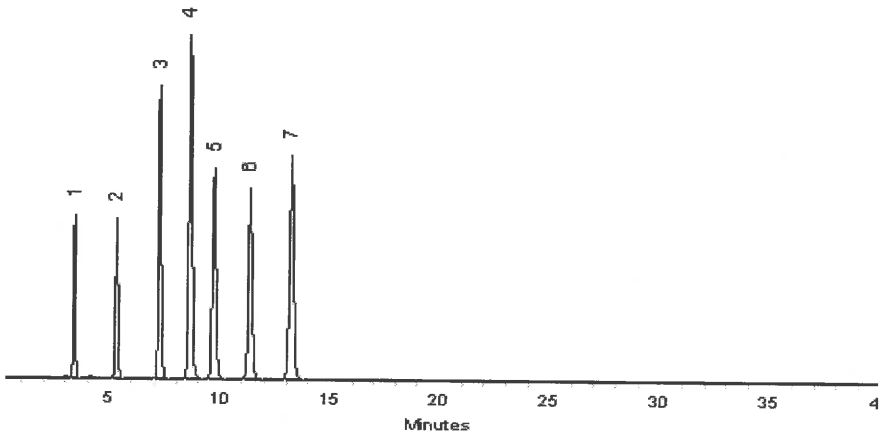
Flow Rate:
1.0 ml/min.

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_00113

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		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)

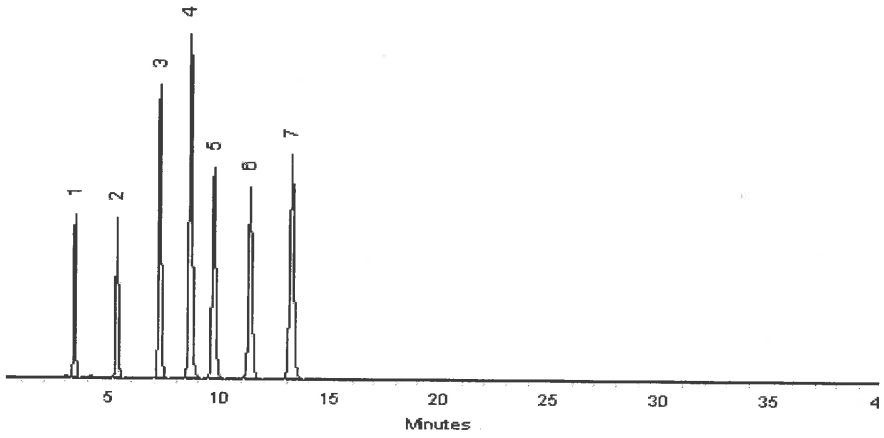
Flow Rate:
1.0 ml/min.

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** 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 (Lot 091120JLM) **Purity** 99%	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 (Lot ER070908-01) **Purity** 99%	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 (Lot 29550-55) **Purity** 98%	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 (Lot 1437483V) **Purity** 99%	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 (Lot GA01) **Purity** 99%	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 (Lot FAU01) **Purity** 99%	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 (Lot 07329LG) **Purity** 98%	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)

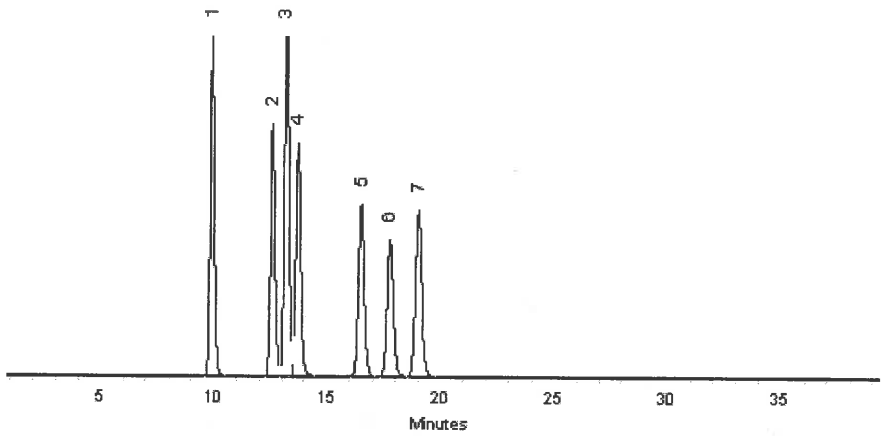
Flow Rate:
1.0 ml/min.

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

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

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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)

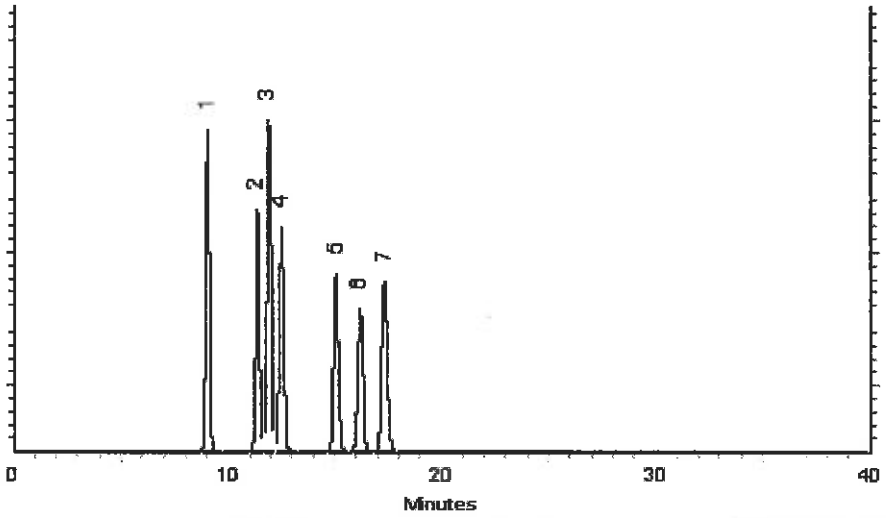
Flow Rate:
1.0 ml/min.

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®

Tel (203)786-5290
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

Page 1 of 1

For use in routine laboratory analysis.

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

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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.:** 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)

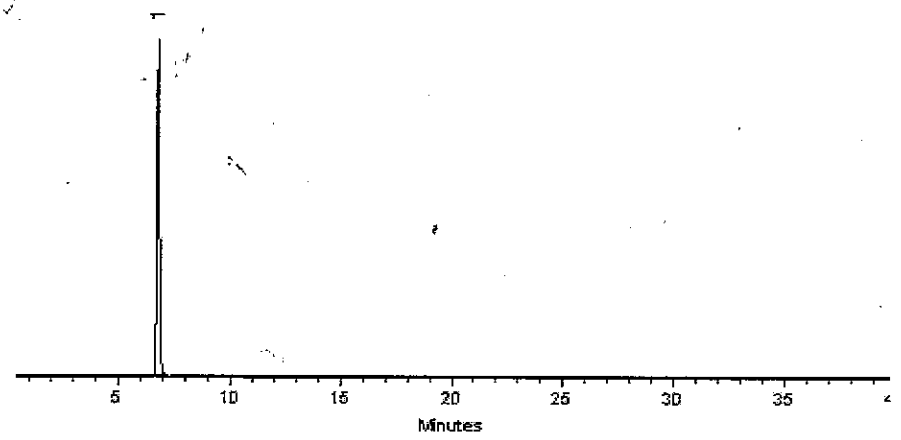
Flow Rate:
1.0 ml/min.

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)

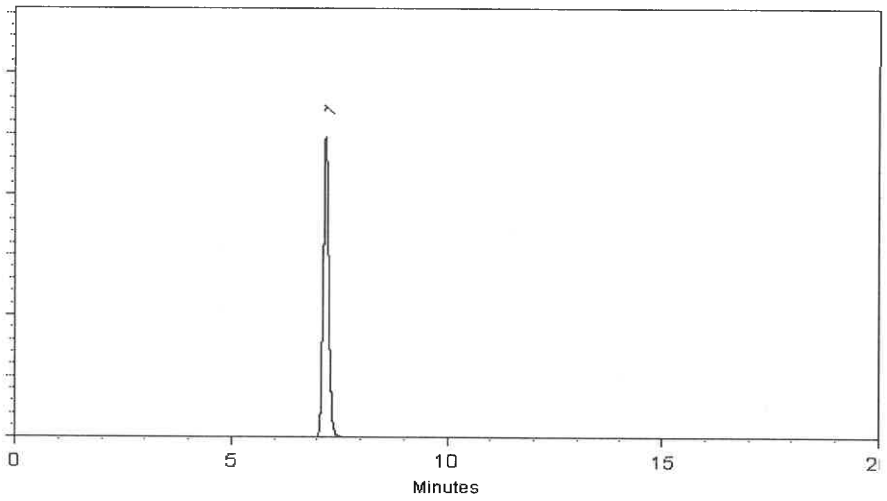
Flow Rate:
1.0 ml/min.

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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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)

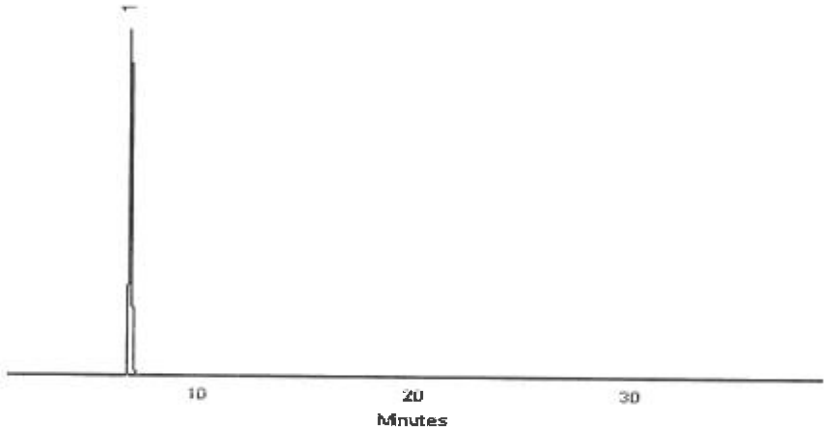
Flow Rate:
1.0 ml/min.

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_00160

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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. : 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)

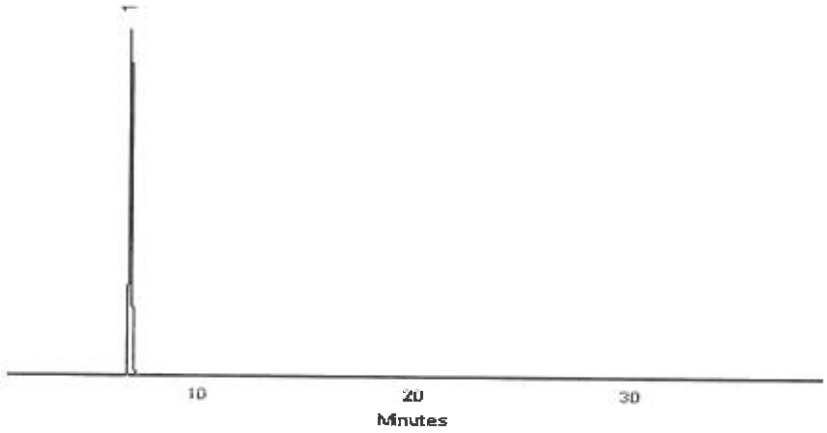
Flow Rate:
1.0 ml/min.

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)

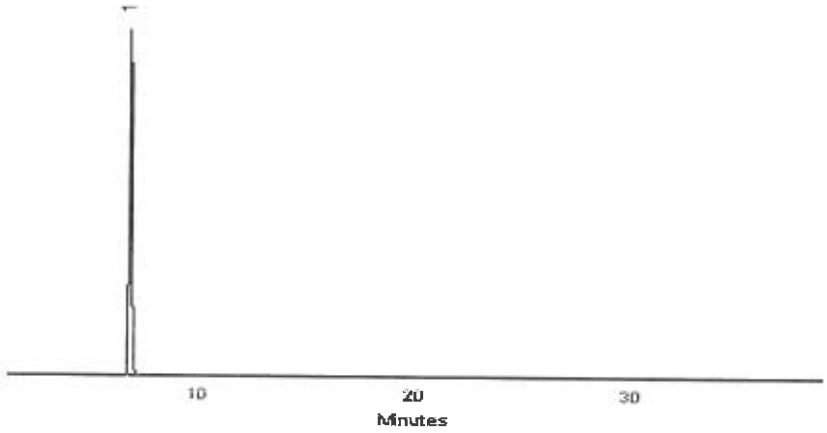
Flow Rate:
1.0 ml/min.

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

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

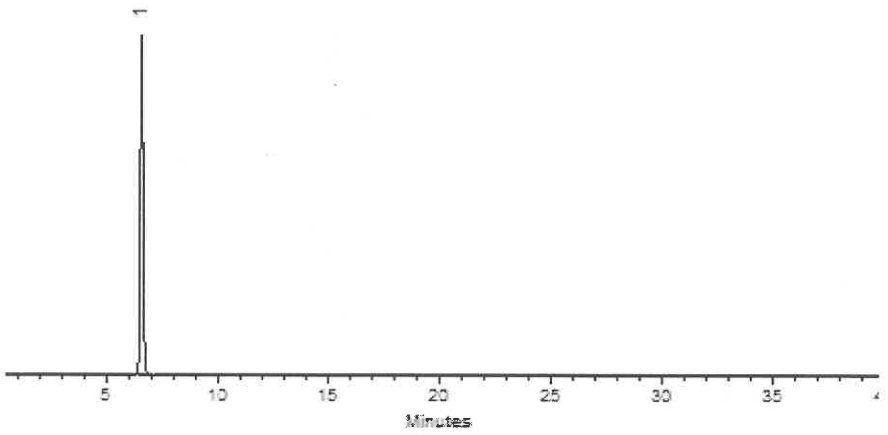
Flow Rate:
1.0 ml/min.

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 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

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

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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

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	Purity 99%			+/- 57.6234	µg/mL	Stressed

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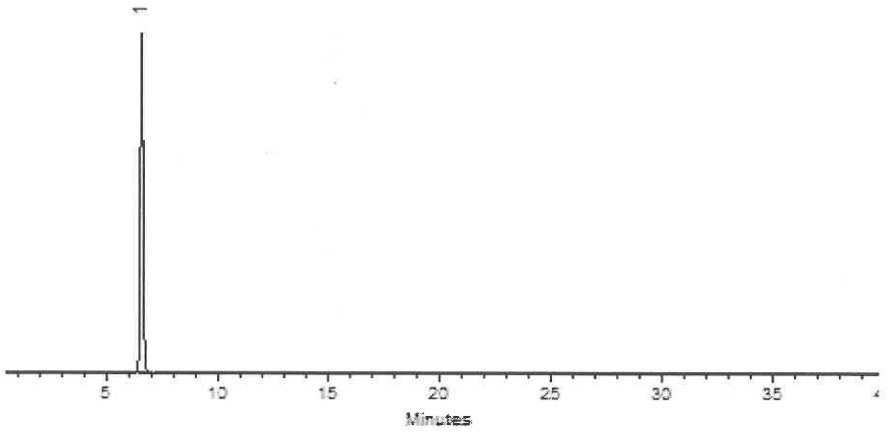
Det. Type:
Wavelength: 210 nm



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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

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Expiration Date : November 30, 2024 **Storage:** 10°C or colder

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Purity 99%

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1.0 ml/min.

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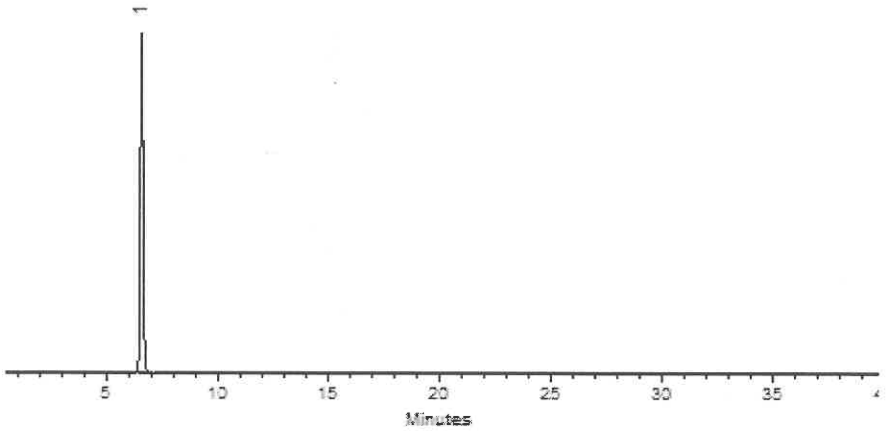
Mobile Phase B:

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_00166

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Certificate #3222.01

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Certificate #3222.02

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Expiration Date : November 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

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1.0 ml/min.

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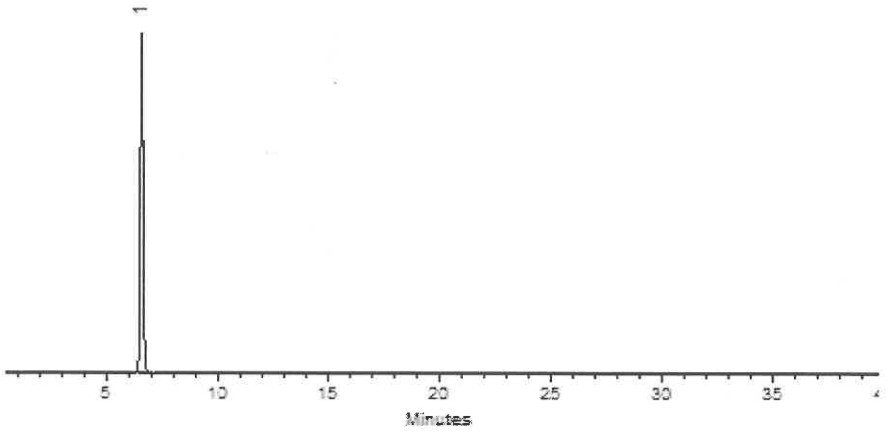
Mobile Phase B:

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

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

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

DRO_Fuel2_00137

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31259 **Lot No.:** A0152130

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2026 **Storage:** 25°C nominal

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diesel Fuel #2 Composite	50,004.0 µg/mL	+/- 290.7124	µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0147904)		+/- 1,488.7763	µg/mL	Unstressed
	Purity ----%		+/- 1,587.8311	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

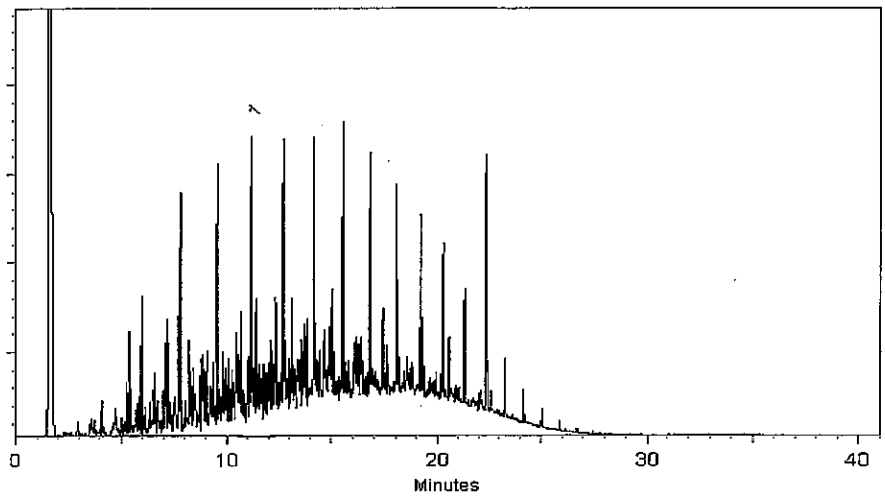
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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.

Brandon Reish - Mix Technician

Date Mixed: 21-Aug-2019 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Aug-2019

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

Reagent

DRO_Fuel2_00138

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

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Reference Material Producer
Certificate #3222.01

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Det. Temp:
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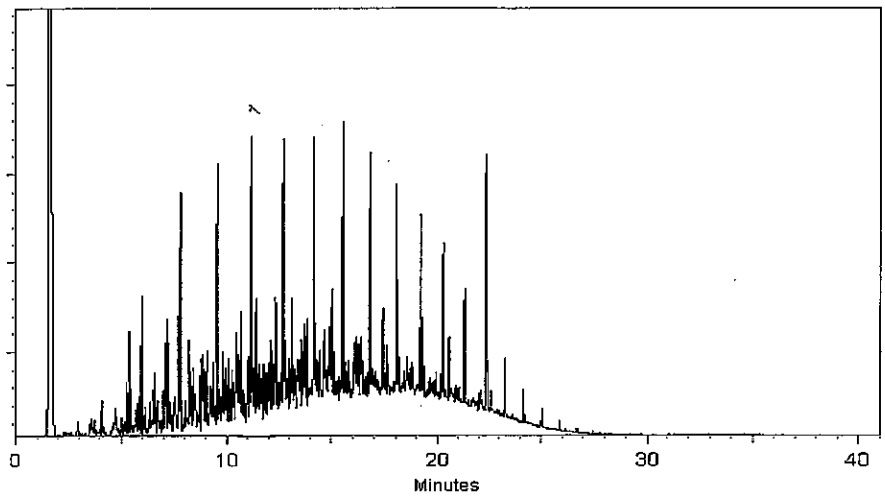
Det. Type:
FID



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Reagent

DRO_Fuel2_00140

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Det. Type:
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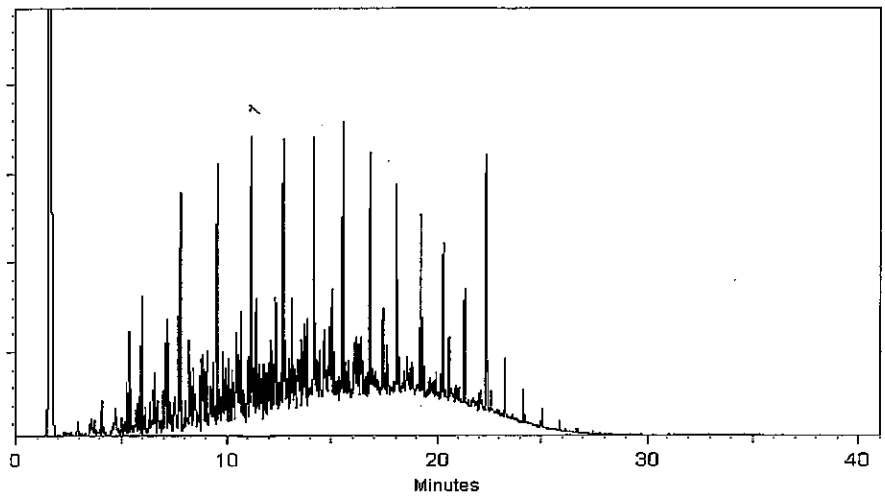

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Date Passed: 26-Aug-2019

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

Reagent

DRO_RTMKR1_00116

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: DRH-004S-R1-5X
Description: Calibration/Window Defining Hydrocarbon Standard
Lot: 219101211
Solvent: Chloroform
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 22, 2019
Expiration: Oct 22, 2029
Sample Size: 1 mL
Components: 17
Storage Condition: Ambient (>5 °C)/Sonicate

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
n-Octane	111-65-9	100.0	1001	1001
Decane	124-18-5	100.0	1000	1000
Dodecane	112-40-3	100.0	1001	1001
n-Tetradecane	629-59-4	100.0	1001	1001
Hexadecane	544-76-3	99.4	1003	997
n-Octadecane	593-45-3	99.1	1001	992
Eicosane	112-95-8	99.8	1002	1000
Docosane	629-97-0	99.1	1003	994
n-Tetracosane	646-31-1	95.7	1047*	1002
Hexacosane	630-01-3	99.5	1003	998
n-Octacosane	630-02-4	99.0	1003	993
n-Triacontane	638-68-6	100.0	1000	1000
Dotriacontane	544-85-4	98.5	1000	985
Tetratriacontane	14167-59-0	99.0	1001	991
Hexatriacontane	630-06-8	93.0	1076*	1001
n-Octatriacontane	7194-85-6	98.5	1003	988
Tetracontane	4181-95-7	99.9	1001	1000

* Weight compensated to 100% purity.

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

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

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

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

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

Certified By: _____
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

DRO_RTMKR2_00062

Agilent

Certificate of Analysis
ISO Guide 34

DRO Standard

Product Number: UST-210 **Page:** 1 of 2

Lot Number: CT-1500 **Lot Issue Date:** 03-Apr-2019 **Expiration Date:** 30-Apr-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
n-decane	000124-18-5	RM00137	1003 ± 5 µg/mL
n-undecane	001120-21-4	RM04270	1001 ± 5 µg/mL
n-dodecane	000112-40-3	RM12672	1003 ± 5 µg/mL
n-tridecane	000629-50-5	RM13949	1002 ± 5 µg/mL
n-tetradecane	000629-59-4	RM09997	1004 ± 5 µg/mL
n-pentadecane	000629-62-9	RM01156	1003 ± 5 µg/mL
n-hexadecane	000544-76-3	RM13973	1002 ± 5 µg/mL
n-heptadecane	000629-78-7	RM04189	1002 ± 5 µg/mL
n-octadecane	000593-45-3	RM09995	1004 ± 5 µg/mL
n-nonadecane	000629-92-5	NT01739	1002 ± 5 µg/mL
n-eicosane	000112-95-8	RM04169	1002 ± 5 µg/mL
n-heneicosane	000629-94-7	RM04170	1004 ± 5 µg/mL
n-docosane	000629-97-0	RM12134	1002 ± 5 µg/mL
n-tricosane	000638-67-5	RM10887	1003 ± 5 µg/mL
n-tetracosane	000646-31-1	RM12272	1002 ± 5 µg/mL
n-pentacosane	000629-99-2	NT00444	1002 ± 5 µg/mL

Matrix: methylene chloride (dichloromethane)

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 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

MF 5/6/19

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

Certificate of Analysis
ISO Guide 34

DRO Standard

Product Number: UST-210 **Page:** 2 of 2

Lot Number: CT-1500 **Lot Issue Date:** 03-Apr-2019 **Expiration Date:** 30-Apr-2022

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

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ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
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ISO17025 Cert No.
AT-1937

Reagent

DRO_SURR_00118

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 216111071-01
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Dec 3, 2018
Expiration: Dec 3, 2021
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	100.0	5001	5001
n-Octacosane	630-02-4	99.0	5001	4951

5x1 mL Vials
Received 5/6/19
MF

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

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

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

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

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

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Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1 - Rev. 1

For use in routine laboratory analysis.

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

Reagent

DRO_SURR_00122

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

CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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Rev. 5/18

Reagent

DRO_SURR_00132

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USA

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

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

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

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

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

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Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

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

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

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

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

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

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

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

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Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

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."

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Reagent

IC CL cal_00060

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ILAC-MRA 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®

1490 Lammers Pike
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

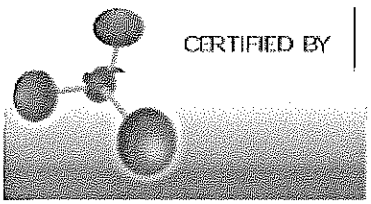
Certificate of Analysis

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



CERTIFIED BY

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

Matrix: H_2O

EXPIRES JUN. 30, 2020

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

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:

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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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Your Science is Our Passion®

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 800-547-7739 732-603-9647

Reagent

IC sulfatecal_00060

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

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

Page 1 of 2
Rev. 0

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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:

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

mv-30241_00008

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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30241 **Lot No.:** A0131578

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene	2,522.1 µg/mL	+/- 14.6637 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBK8171V)		+/- 141.4116 µg/mL	Unstressed
	Purity 99%		+/- 144.7205 µg/mL	Stressed
2	Chlorobenzene-d5	2,518.6 µg/mL	+/- 14.6434 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 141.2154 µg/mL	Unstressed
	Purity 99%		+/- 144.5197 µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,520.5 µg/mL	+/- 14.6544 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 141.3219 µg/mL	Unstressed
	Purity 99%		+/- 144.6287 µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

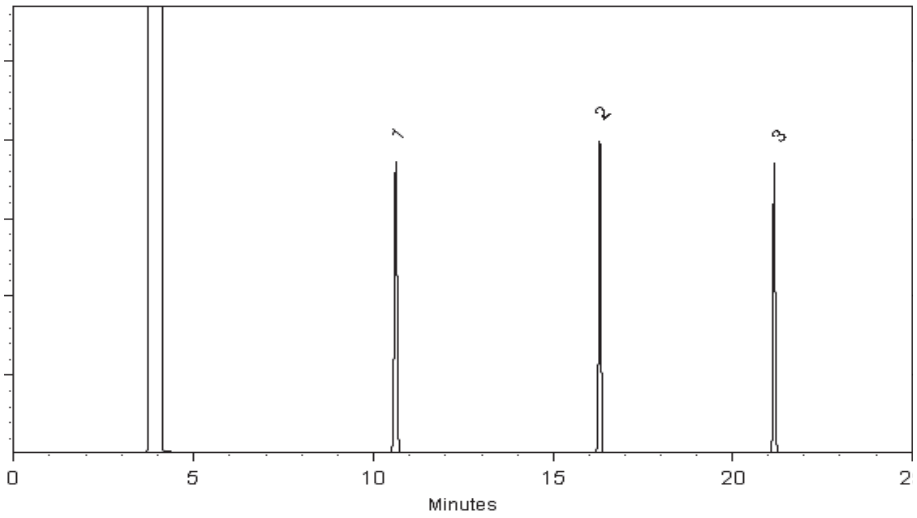
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 11-Oct-2017 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Oct-2017

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:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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. : 567650 **Lot No.:** A0132615

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

Rec'd 11/1/19

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 140.1837 µg/mL		Unstressed
	Purity 99.8%			+/- 143.4639 µg/mL		Stressed
2	1,2-Dichloroethane-d4		2,500.2 µg/mL	+/- 14.5361 µg/mL		Gravimetric
	CAS # 17060-07-0	(Lot PR-26748)		+/- 140.1809 µg/mL		Unstressed
	Purity 99%			+/- 143.4610 µg/mL		Stressed
3	Toluene-d8		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 2037-26-5	(Lot PR-26623)		+/- 140.1837 µg/mL		Unstressed
	Purity 99%			+/- 143.4639 µg/mL		Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,500.3 µg/mL	+/- 14.5370 µg/mL		Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 140.1893 µg/mL		Unstressed
	Purity 99%			+/- 143.4696 µg/mL		Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

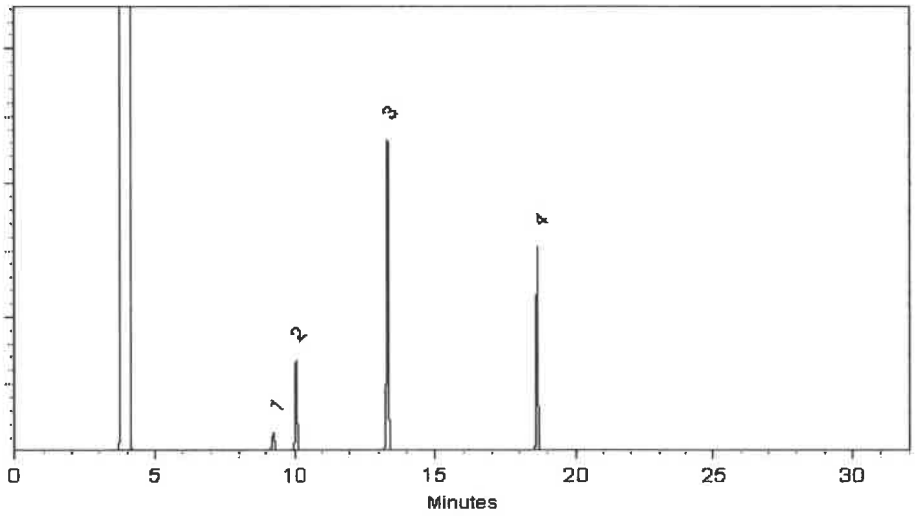
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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: 21-Nov-2017 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 22-Nov-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

MV-568720_00033

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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. : 568720 **Lot No.:** A0154578

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Rec'd 4/28/20

GM

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

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,810.7 µg/mL	+/- 115.9958 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019410)		+/- 395.7642 µg/mL	Unstressed
	Purity 99%		+/- 887.8866 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

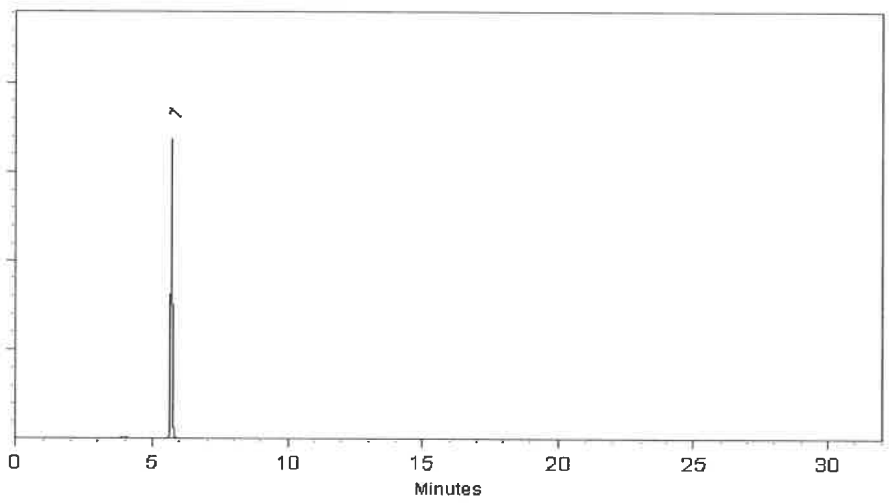
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 31-Oct-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Nov-2019

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

Reagent

MV-569721.sec_00006

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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. : 569721.SEC **Lot No.:** A0140519

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : August 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone		12,509.0 µg/mL	+/- 73.2429 µg/mL	Gravimetric
	CAS # 67-64-1.SEC	(Lot U13B039)		+/- 754.7732 µg/mL	Unstressed
	Purity 99%			+/- 756.5649 µg/mL	Stressed
2	2-Butanone (MEK)		12,558.0 µg/mL	+/- 73.5299 µg/mL	Gravimetric
	CAS # 78-93-3.SEC	(Lot RGZ2A)		+/- 757.7297 µg/mL	Unstressed
	Purity 99%			+/- 759.5285 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,547.0 µg/mL	+/- 73.4654 µg/mL	Gravimetric
	CAS # 108-10-1.SEC	(Lot E29T040)		+/- 757.0660 µg/mL	Unstressed
	Purity 99%			+/- 758.8632 µg/mL	Stressed
4	2-Hexanone		12,561.0 µg/mL	+/- 73.5474 µg/mL	Gravimetric
	CAS # 591-78-6.SEC	(Lot V3NRA)		+/- 757.9108 µg/mL	Unstressed
	Purity 99%			+/- 759.7099 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

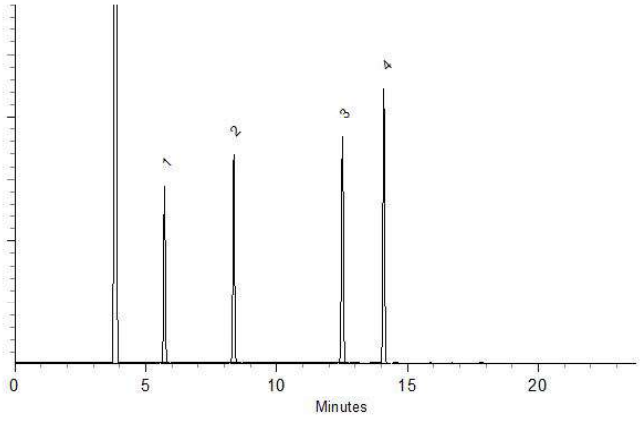
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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: 09-Aug-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Aug-2018

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

MV-569721_00008

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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. : 569721 **Lot No.:** A0143988

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : December 31, 2021 **Storage:** 0°C or colder

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

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone		12,500.5 µg/mL	+/- 72.6790 µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBJ7699)		+/- 754.2106 µg/mL	Unstressed
	Purity 99%			+/- 756.0012 µg/mL	Stressed
2	2-Butanone (MEK)		12,501.0 µg/mL	+/- 72.6819 µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 754.2407 µg/mL	Unstressed
	Purity 99%			+/- 756.0314 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,501.5 µg/mL	+/- 72.6848 µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBH8930)		+/- 754.2709 µg/mL	Unstressed
	Purity 99%			+/- 756.0617 µg/mL	Stressed
4	2-Hexanone		12,501.8 µg/mL	+/- 72.6863 µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKCD9048)		+/- 754.2860 µg/mL	Unstressed
	Purity 99%			+/- 756.0768 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

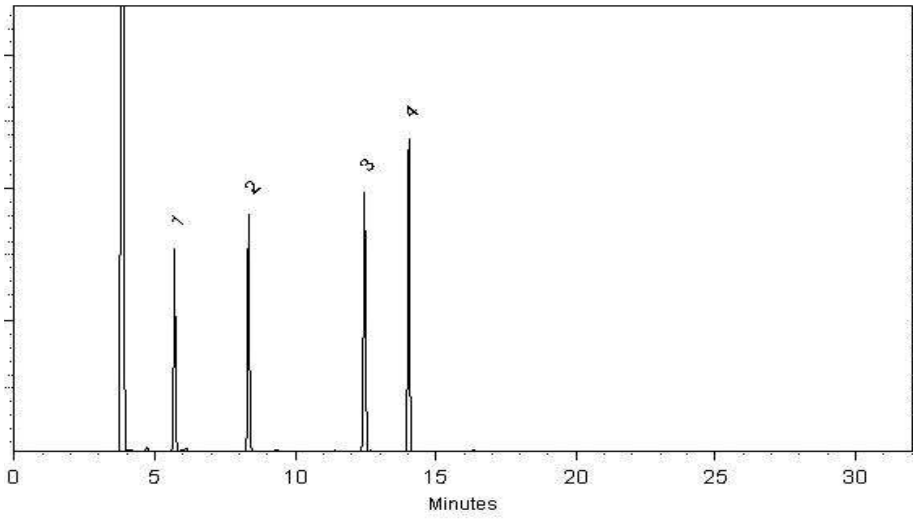
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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.

F. Joseph Tallon - Mix Technician

Date Mixed: 11-Dec-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2018

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

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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. : 569722.SEC **Lot No.:** A0142594

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,499.3 µg/mL	+/- 25.7724 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24847)		+/- 141.7384 µg/mL	Unstressed
	Purity 99%		+/- 144.9810 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,506.0 µg/mL	+/- 21.8612 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.4482 µg/mL	Unstressed
	Purity 99%		+/- 144.7145 µg/mL	Stressed
3	Vinyl chloride	2,505.4 µg/mL	+/- 25.4396 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 142.0168 µg/mL	Unstressed
	Purity 99%		+/- 145.2689 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 22.0034 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 22331)		+/- 141.1491 µg/mL	Unstressed
	Purity 99%		+/- 144.4071 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,511.9 µg/mL	+/- 23.0453 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 141.9646 µg/mL	Unstressed
	Purity 99%		+/- 145.2346 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,498.5 µg/mL	+/- 23.5866 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 141.3133 µg/mL	Unstressed
	Purity 99%		+/- 144.5633 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,450.0 µg/mL	+/- 14.3780 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7766400)		+/- 137.3830 µg/mL	Unstressed
	Purity 97%		+/- 140.5969 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,502.5	µg/mL	+/-	22.2947	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)			+/-	141.3276	µg/mL	Unstressed
	Purity 99%				+/-	144.5877	µg/mL	Stressed

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

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

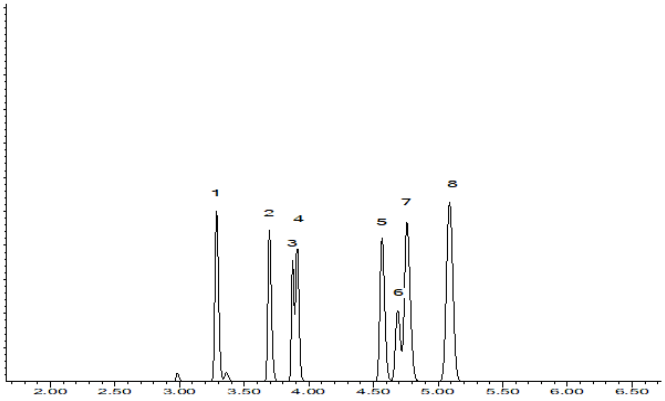
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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.

Brandon Reish - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 05-Nov-2018

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

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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. : 569722 **Lot No.:** A0143158

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12)	2,500.9 µg/mL	+/- 17.2023 µg/mL		Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5234 µg/mL		Unstressed
	Purity 99%		+/- 143.7976 µg/mL		Stressed
2	Chloromethane (methyl chloride)	2,500.4 µg/mL	+/- 17.0791 µg/mL		Gravimetric
	CAS # 74-87-3 (Lot SHBJ6334)		+/- 140.4796 µg/mL		Unstressed
	Purity 99%		+/- 143.7534 µg/mL		Stressed
3	Vinyl chloride	2,500.4 µg/mL	+/- 16.5693 µg/mL		Gravimetric
	CAS # 75-01-4 (Lot 00012557)		+/- 140.4224 µg/mL		Unstressed
	Purity 99%		+/- 143.6977 µg/mL		Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 17.0785 µg/mL		Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.4623 µg/mL		Unstressed
	Purity 99%		+/- 143.7357 µg/mL		Stressed
5	Bromomethane (methyl bromide)	2,500.9 µg/mL	+/- 16.5511 µg/mL		Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4457 µg/mL		Unstressed
	Purity 99%		+/- 143.7217 µg/mL		Stressed
6	Chloroethane (ethyl chloride)	2,502.0 µg/mL	+/- 16.0409 µg/mL		Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.4480 µg/mL		Unstressed
	Purity 99%		+/- 143.7268 µg/mL		Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL		Gravimetric
	CAS # 75-43-4 (Lot 7766400)		+/- 140.1725 µg/mL		Unstressed
	Purity 99%		+/- 143.4524 µg/mL		Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.8	µg/mL	+/-	17.8012	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBH4155V)			+/-	140.5946	µg/mL	Unstressed
	Purity 99%				+/-	143.8670	µg/mL	Stressed

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

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

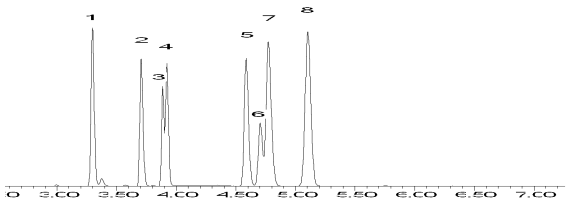
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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: 12-Nov-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Dec-2018

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

MV-569723_00005

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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. : 569723 **Lot No.:** A0142584

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,506.0 µg/mL	+/- 14.7066 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.6910 µg/mL	Unstressed
	Purity 99%		+/- 55.2497 µg/mL	Stressed

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

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

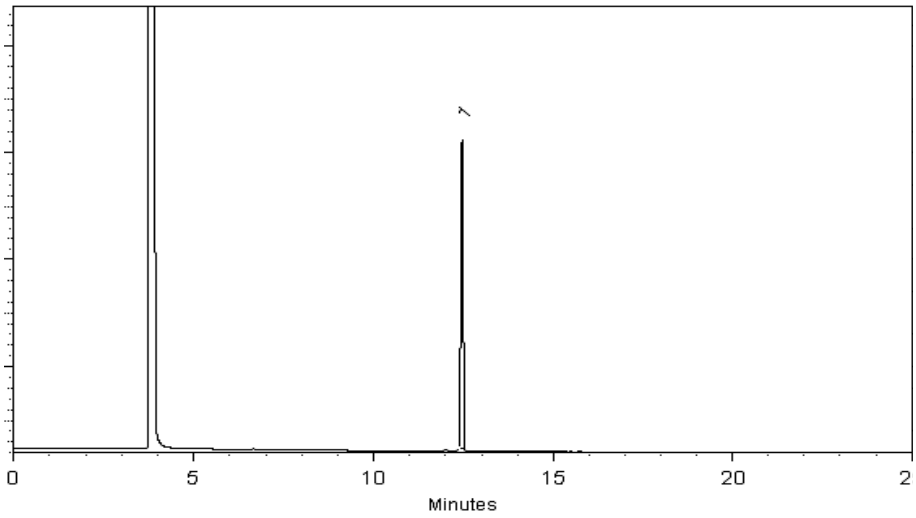
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Oct-2018

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

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Certificate #3222.02

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

Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Rec'd 4/24/20 Gm

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

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate		5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4	(Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%			+/- 304.8275	µg/mL	Stressed

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

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

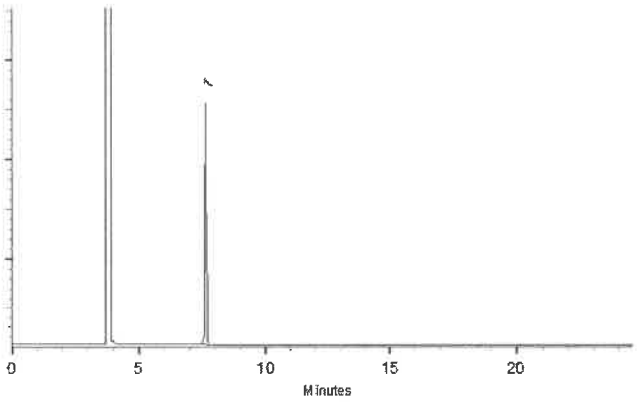
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 10-Jan-2020 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Jan-2020

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

Reagent

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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. : 569727 **Lot No.:** A0146650

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Rec'd 4/28/20

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

Expiration Date : March 31, 2022 **Storage:** 10°C or colder

GM

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Cyclohexanone		25,006.0 µg/mL	+/- 146.4156	µg/mL	Gravimetric
	CAS # 108-94-1	(Lot MKCD4357)		+/- 1,508.8223	µg/mL	Unstressed
	Purity 99%			+/- 1,512.4040	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

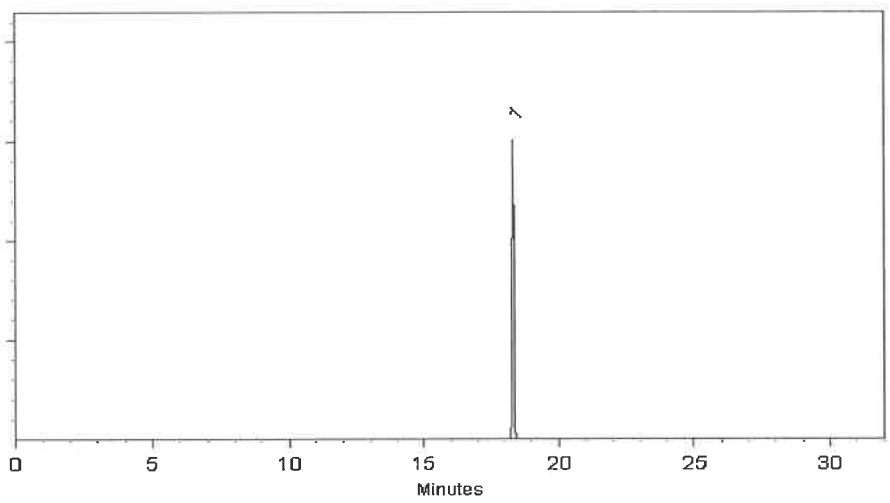
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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.

Jessica McClenahan - Operations Technician I

Date Mixed: 05-Mar-2019 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 07-Mar-2019

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

Reagent

MV-571992.sec_00005

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Rec'd 4/24/20

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

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 µg/mL +/- 151.8598 µg/mL +/- 152.2203 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 µg/mL +/- 151.2383 µg/mL +/- 151.5974 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 µg/mL +/- 151.0372 µg/mL +/- 151.3958 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 µg/mL +/- 1,508.4071 µg/mL +/- 1,511.9883 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 µg/mL +/- 301.8129 µg/mL +/- 302.5295 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 µg/mL +/- 151.5400 µg/mL +/- 151.8998 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane		2,502.4	µg/mL	+/-	14.5494	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	150.9832	µg/mL	Unstressed
	Purity 97%				+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene		2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	151.1277	µg/mL	Unstressed
	Purity 99%				+/-	151.4865	µg/mL	Stressed
43	m-Xylene		1,251.7	µg/mL	+/-	7.2941	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.5202	µg/mL	Unstressed
	Purity 99%				+/-	75.6995	µg/mL	Stressed
44	p-Xylene		1,253.7	µg/mL	+/-	7.3058	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.6409	µg/mL	Unstressed
	Purity 99%				+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	151.0472	µg/mL	Unstressed
	Purity 99%				+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
47	o-Xylene		2,504.2	µg/mL	+/-	14.5594	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	151.0875	µg/mL	Unstressed
	Purity 99%				+/-	151.4462	µg/mL	Stressed
48	Styrene		2,507.2	µg/mL	+/-	14.5769	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	151.2685	µg/mL	Unstressed
	Purity 99%				+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,505.2	µg/mL	+/-	14.5653	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	151.1478	µg/mL	Unstressed
	Purity 99%				+/-	151.5067	µg/mL	Stressed
50	Bromoform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5461400)			+/-	150.8661	µg/mL	Unstressed
	Purity 97%				+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,505.7	µg/mL	+/-	14.5682	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	151.1780	µg/mL	Unstressed
	Purity 99%				+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,514.2	µg/mL	+/-	14.6177	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	151.6922	µg/mL	Unstressed
	Purity 98%				+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	151.0573	µg/mL	Unstressed
	Purity 99%				+/-	151.4159	µg/mL	Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2	µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	151.5740	µg/mL	Unstressed
	Purity 98%				+/-	151.9338	µg/mL	Stressed

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

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

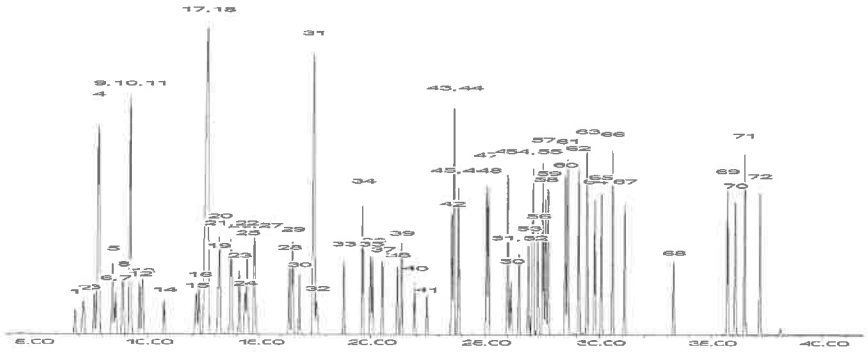
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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.

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

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

Reagent

MV-571992_00004

RESTEK®
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

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. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

Received 8/30/19 GM 4x/mL

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBJ5713)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.6 µg/mL	+/- 14.5447 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/- 150.9341 µg/mL	Unstressed
	Purity 99%		+/- 151.2925 µg/mL	Stressed
3	1,1-dichloroethene	2,501.9 µg/mL	+/- 14.5461 µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/- 150.9492 µg/mL	Unstressed
	Purity 99%		+/- 151.3076 µg/mL	Stressed
4	tert-Butanol (TBA)	25,008.1 µg/mL	+/- 145.3918 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBJ9404)		+/- 1,508.8503 µg/mL	Unstressed
	Purity 99%		+/- 1,512.4325 µg/mL	Stressed
5	Methyl acetate	5,000.8 µg/mL	+/- 29.0748 µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/- 301.7174 µg/mL	Unstressed
	Purity 99%		+/- 302.4337 µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBH4362V)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,502.0 µg/mL	+/- 14.5468 µg/mL	Gravimetric
	CAS # 107-05-1 (Lot WXBB7852V)		+/- 150.9567 µg/mL	Unstressed
	Purity 99%		+/- 151.3151 µg/mL	Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBJ2110)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
25	n-Heptane (C7)		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBJ2424)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
26	1,2-Dichloroethane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot SHBJ0707)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
27	Benzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBJ5344)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
28	Trichloroethene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBH1955V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
29	Methylcyclohexane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBJ0457)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
30	1,2-Dichloropropane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
31	1,4-Dioxane		50,001.1	µg/mL	+/-	290.6957	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBJ7415)			+/-	3,016.7880	µg/mL	Unstressed
	Purity 99%				+/-	3,023.9503	µg/mL	Stressed
32	Dibromomethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10201030)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 25076)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
34	Toluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBJ5659)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
35	Ethyl methacrylate		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot 69796APV)			+/-	151.0020	µg/mL	Unstressed
	Purity 99%				+/-	151.3605	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot C797620)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBG2162V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
39	Tetrachloroethene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBH9691)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,499.9	µg/mL	+/-	14.5348	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBH5027V)			+/-	150.8320	µg/mL	Unstressed
	Purity 97%				+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBV3556V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	151.0095	µg/mL	Unstressed
	Purity 99%				+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
71	Naphthalene		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	151.0020	µg/mL	Unstressed
	Purity 99%				+/-	151.3605	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

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

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

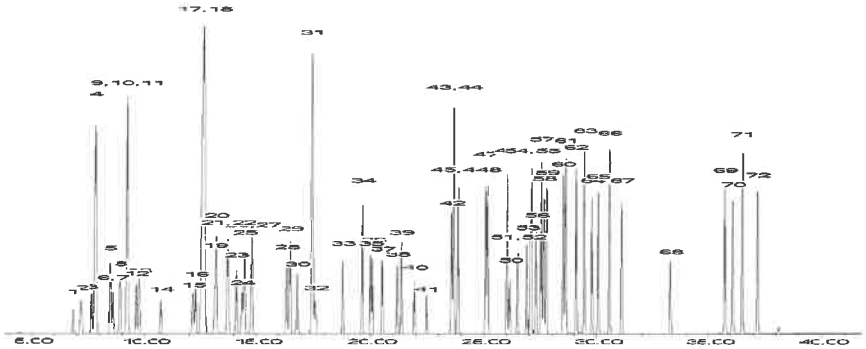
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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.

F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

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

Reagent

MV-CUS17739_00005

Agilent

Certificate of Analysis
ISO 17034

Custom Standard

Product Number: CUS-17739 **Page:** 1 of 1

Lot Number: 0006503344 **Lot Issue Date:** 12-Nov-2019 **Expiration Date:** 31-Dec-2021

This ISO 17034 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-chlorohexane	000544-10-5	RM12893	1001 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30126 ± 151 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°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

12/11/19

RECEIVED

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 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
ISO 17025 Cert No. AT-1937

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

Reagent

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570812 **Lot No.:** A0143593

Description : 8260 IS/Surrogate Mix (2016)

8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,000.1 µg/mL	+/- 29.0694 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0521 µg/mL	Unstressed
	Purity 98%			+/- 110.1643 µg/mL	Stressed
2	Dibromofluoromethane		250.2 µg/mL	+/- 1.4580 µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 5.3577 µg/mL	Unstressed
	Purity 99%			+/- 5.5134 µg/mL	Stressed
3	1,2-Dichloroethane-d4		250.3 µg/mL	+/- 1.4584 µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot PR-29377)		+/- 5.3592 µg/mL	Unstressed
	Purity 99%			+/- 5.5149 µg/mL	Stressed
4	1,4-Dioxane-d8		5,000.5 µg/mL	+/- 29.0716 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.0602 µg/mL	Unstressed
	Purity 99%			+/- 110.1726 µg/mL	Stressed
5	Fluorobenzene		250.1 µg/mL	+/- 1.4573 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3549 µg/mL	Unstressed
	Purity 99%			+/- 5.5105 µg/mL	Stressed
6	Toluene-d8		250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-27311)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%			+/- 5.5112 µg/mL	Stressed
7	Chlorobenzene-d5		250.5 µg/mL	+/- 1.4600 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3649 µg/mL	Unstressed
	Purity 99%			+/- 5.5208 µg/mL	Stressed

8	1-Bromo-4-fluorobenzene (BFB)		250.1	µg/mL	+/-	1.4575	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)			+/-	5.3556	µg/mL	Unstressed
	Purity 99%				+/-	5.5112	µg/mL	Stressed
9	1,4-Dichlorobenzene-d4		250.2	µg/mL	+/-	1.4580	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/-	5.3577	µg/mL	Unstressed
	Purity 99%				+/-	5.5134	µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

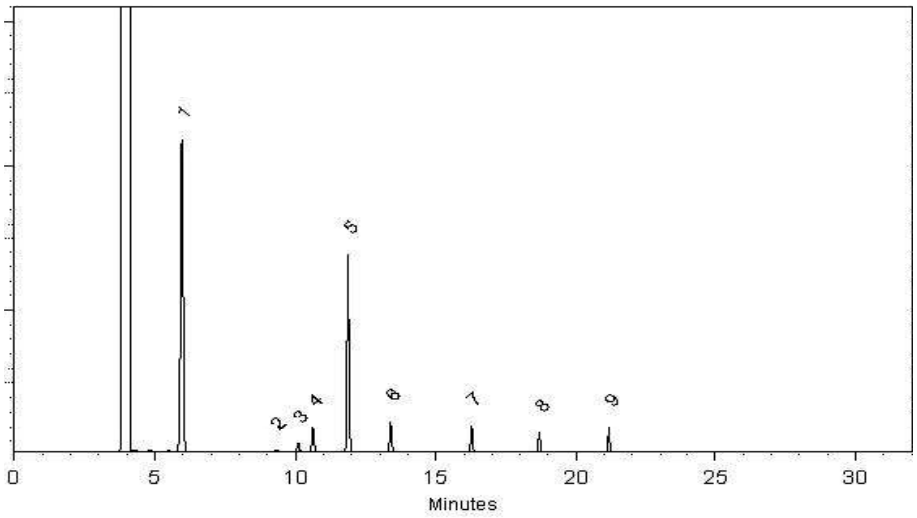
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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.

F. Joseph Tallon - Mix Technician

Date Mixed: 29-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Dec-2018

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

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

NH3 ICV STD_00027

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	N2-NH669544
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.0000%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1005 ± 3 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

Assay Method #2 **997 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

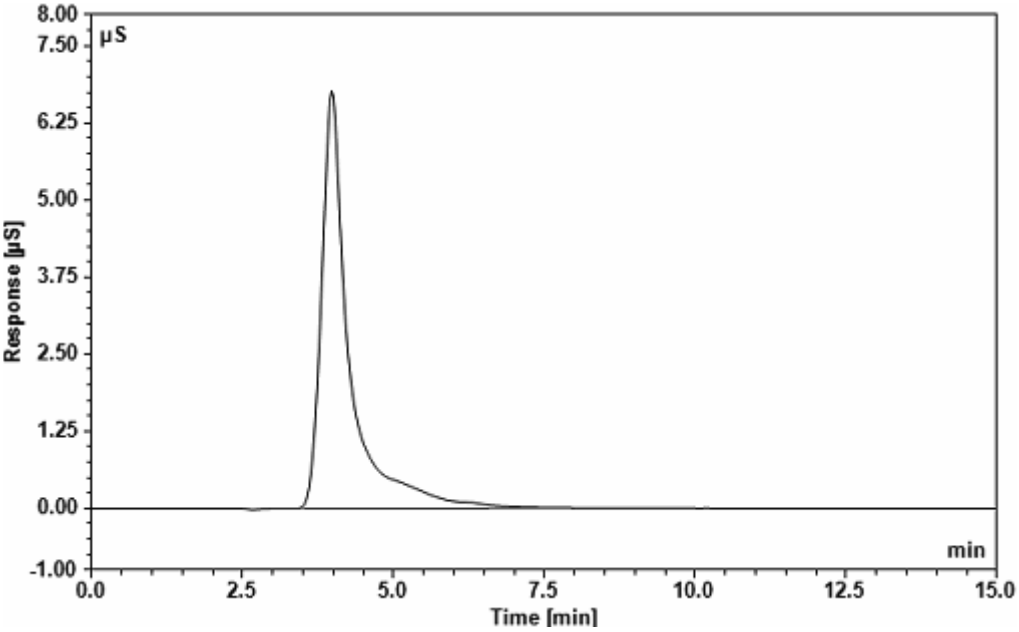
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35 °C
		Cell Temp:	35 °C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 01, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 01, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

James King Jr
Chemist, Technical Manager



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT ICV STD_00023

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	130319m
ISSUE DATE:	April 3, 2019
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0041 ± 0.0004 g/mL at 18.4°C and 754 mm Hg
TRACEABILITY[3]:	101%
NIST/SRM:	3185 Nitrate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 3/11/2021**. 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

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)

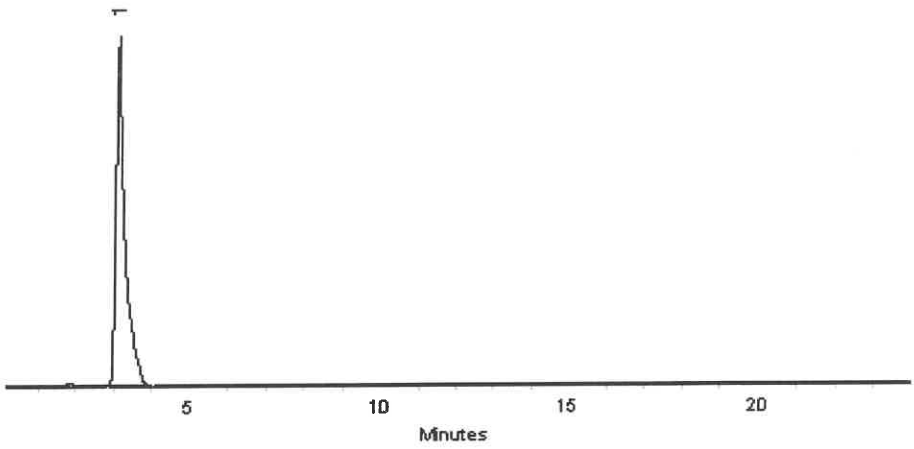
Flow Rate:
1.0 ml/min.

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)	

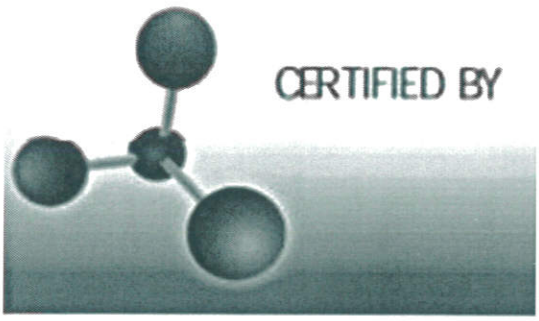
Certificate of Analysis

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



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.

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

TKN ICV_00011

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Total Kjeldahl Nitrogen (TKN)
CATALOG NUMBER:	043 -125 mL; 996 - 500 mL
LOT NUMBER:	281018
ISSUE DATE:	December 7, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	1.0055 ± 0.0010 g/mL at 16.6°C and 754 mm Hg
TRACEABILITY[3]:	100%
NIST/SRM:	194a Ammonium Dihydrogen Phosphate
VERIFICATION METHOD:	Ion Selective Electrode (ISE)
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 10/2020**. 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. 1439.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

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 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

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

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SHGW03-20A	280-137609-10	100	97	99	98
SHGW02-20A	280-137609-11	99	91	100	99
SHGW05-20A	280-137609-12	98	91	101	98
SOURCE 2020	280-137609-13	99	97	99	100
TB01-061120	280-137609-14	100	96	100	99
TB02-061120	280-137609-15	100	96	99	100
	MB 280-499519/9	99	96	99	99
	LCS 280-499519/4	99	93	99	99
	LCSD 280-499519/5	100	95	98	99

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2508.D

Lab ID: LCS 280-499519/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.8	103	74-131	
1,1,2,2-Tetrachloroethane	25.0	26.7	107	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.7	79	70-136	
1,1,2-Trichloroethane	25.0	27.0	108	80-119	
1,1-Dichloroethane	25.0	25.7	103	77-125	
1,1-Dichloroethene	25.0	22.4	89	71-131	
1,2,3-Trichlorobenzene	25.0	26.3	105	69-129	
1,2,4-Trichlorobenzene	25.0	26.0	104	69-130	
1,2-Dibromo-3-Chloropropane	25.0	27.9	112	62-128	
1,2-Dichlorobenzene	25.0	25.2	101	80-119	
1,2-Dichloroethane	25.0	25.5	102	73-128	
1,2-Dichloropropane	25.0	27.6	110	78-122	
1,3-Dichlorobenzene	25.0	26.4	106	80-119	
1,4-Dichlorobenzene	25.0	26.2	105	79-118	
2-Butanone (MEK)	100	109	109	56-143	
2-Hexanone	100	112	112	57-139	
4-Methyl-2-pentanone (MIBK)	100	114	114	67-130	
Acetone	100	105	105	39-160	
Benzene	25.0	26.1	104	79-120	
Bromochloromethane	25.0	25.6	102	78-123	
Bromodichloromethane	25.0	27.1	108	79-125	
Bromoform	25.0	28.2	113	66-130	
Bromomethane	25.0	21.2	85	53-141	
Carbon disulfide	25.0	20.5	82	64-133	
Carbon tetrachloride	25.0	25.5	102	72-136	
Chlorobenzene	25.0	25.9	104	82-118	
Chloroethane	25.0	25.2	101	60-138	
Chloroform	25.0	25.4	101	79-124	
Chloromethane	25.0	22.1	88	50-139	
cis-1,2-Dichloroethene	25.0	26.4	105	78-123	
cis-1,3-Dichloropropene	25.0	27.8	111	75-124	
Cyclohexane	25.0	23.1	92	71-130	
Dibromochloromethane	25.0	27.2	109	74-126	
Dichlorodifluoromethane	25.0	26.4	106	32-152	
Ethylbenzene	25.0	26.5	106	79-121	
Ethylene Dibromide	25.0	25.9	104	77-121	
Isopropylbenzene	25.0	27.2	109	72-131	
Methyl acetate	50.0	55.0	110	56-136	
Methyl tert-butyl ether	25.0	26.3	105	71-124	
Methylcyclohexane	25.0	24.2	97	72-132	
Methylene Chloride	25.0	26.5	106	74-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2508.D

Lab ID: LCS 280-499519/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	27.4	109	78-123	
Tetrachloroethene	25.0	26.4	106	74-129	
Toluene	25.0	26.4	106	80-121	
trans-1,2-Dichloroethene	25.0	24.1	96	75-124	
trans-1,3-Dichloropropene	25.0	26.2	105	73-127	
Trichloroethene	25.0	25.2	101	79-123	
Trichlorofluoromethane	25.0	24.5	98	65-141	
Vinyl chloride	25.0	23.4	94	58-137	
Xylenes, Total	50.0	53.9	108	79-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2511.D

Lab ID: LCSD 280-499519/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	22.8	91	12	20	74-131	
1,1,2,2-Tetrachloroethane	25.0	25.1	100	6	20	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	17.6	70	11	20	70-136	
1,1,2-Trichloroethane	25.0	25.5	102	6	20	80-119	
1,1-Dichloroethane	25.0	23.3	93	9	20	77-125	
1,1-Dichloroethene	25.0	20.0	80	11	20	71-131	
1,2,3-Trichlorobenzene	25.0	24.2	97	8	20	69-129	
1,2,4-Trichlorobenzene	25.0	23.8	95	9	20	69-130	
1,2-Dibromo-3-Chloropropane	25.0	26.8	107	4	20	62-128	
1,2-Dichlorobenzene	25.0	23.2	93	8	20	80-119	
1,2-Dichloroethane	25.0	23.9	96	7	20	73-128	
1,2-Dichloropropane	25.0	25.4	102	8	20	78-122	
1,3-Dichlorobenzene	25.0	24.3	97	8	20	80-119	
1,4-Dichlorobenzene	25.0	23.9	96	9	20	79-118	
2-Butanone (MEK)	100	106	106	3	20	56-143	
2-Hexanone	100	112	112	1	20	57-139	
4-Methyl-2-pentanone (MIBK)	100	112	112	2	20	67-130	
Acetone	100	101	101	3	20	39-160	
Benzene	25.0	23.6	94	10	20	79-120	
Bromochloromethane	25.0	23.4	94	9	20	78-123	
Bromodichloromethane	25.0	24.7	99	9	20	79-125	
Bromoform	25.0	26.1	105	7	20	66-130	
Bromomethane	25.0	18.5	74	13	20	53-141	
Carbon disulfide	25.0	18.0	72	13	20	64-133	
Carbon tetrachloride	25.0	23.1	92	10	20	72-136	
Chlorobenzene	25.0	23.7	95	9	20	82-118	
Chloroethane	25.0	24.0	96	5	20	60-138	
Chloroform	25.0	23.5	94	7	20	79-124	
Chloromethane	25.0	20.9	84	5	20	50-139	
cis-1,2-Dichloroethene	25.0	23.7	95	10	20	78-123	
cis-1,3-Dichloropropene	25.0	24.8	99	11	20	75-124	
Cyclohexane	25.0	20.6	82	12	20	71-130	
Dibromochloromethane	25.0	25.4	102	7	20	74-126	
Dichlorodifluoromethane	25.0	24.6	98	7	20	32-152	
Ethylbenzene	25.0	24.2	97	9	20	79-121	
Ethylene Dibromide	25.0	23.9	95	8	20	77-121	
Isopropylbenzene	25.0	24.8	99	9	20	72-131	
Methyl acetate	50.0	52.5	105	5	20	56-136	
Methyl tert-butyl ether	25.0	24.4	98	7	20	71-124	
Methylcyclohexane	25.0	21.6	86	12	20	72-132	
Methylene Chloride	25.0	24.3	97	8	20	74-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P2511.D

Lab ID: LCSD 280-499519/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	24.8	99	10	20	78-123	
Tetrachloroethene	25.0	23.6	94	11	20	74-129	
Toluene	25.0	24.1	97	9	20	80-121	
trans-1,2-Dichloroethene	25.0	21.8	87	10	20	75-124	
trans-1,3-Dichloropropene	25.0	23.8	95	10	20	73-127	
Trichloroethene	25.0	22.8	91	10	20	79-123	
Trichlorofluoromethane	25.0	22.6	91	8	20	65-141	
Vinyl chloride	25.0	22.3	89	5	20	58-137	
Xylenes, Total	50.0	48.8	98	10	20	79-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab File ID: P2510.D Lab Sample ID: MB 280-499519/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_P Date Analyzed: 06/20/2020 10:57

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-499519/4	P2508.D	06/20/2020 10:14
	LCSD 280-499519/5	P2511.D	06/20/2020 11:18
TB01-061120	280-137609-14	P2514.D	06/20/2020 12:22
TB02-061120	280-137609-15	P2515.D	06/20/2020 12:44
SHGW03-20A	280-137609-10	P2521.D	06/20/2020 14:51
SHGW02-20A	280-137609-11	P2522.D	06/20/2020 15:12
SHGW05-20A	280-137609-12	P2523.D	06/20/2020 15:34
SOURCE 2020	280-137609-13	P2524.D	06/20/2020 15:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab File ID: P1658A.D BFB Injection Date: 06/01/2020

Instrument ID: VMS_P BFB Injection Time: 16:26

Analysis Batch No.: 496958

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	50.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	64.2	
175	5.0 - 9.0 % of mass 174	5.3	(8.3) 1
176	95.0 - 101.0 % of mass 174	61.9	(96.4) 1
177	5.0 - 9.0 % of mass 176	4.1	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD005 280-496958/12	P1658.D	06/01/2020	16:26
	STD010 280-496958/13	P1659.D	06/01/2020	16:47
	STD020 280-496958/14	P1660.D	06/01/2020	17:09
	STD050 280-496958/15	P1661.D	06/01/2020	17:30
	STD10 280-496958/16	P1662.D	06/01/2020	17:51
	STD75 280-496958/18	P1664.D	06/01/2020	18:33
	STD100 280-496958/19	P1665.D	06/01/2020	18:55
	STD200 280-496958/20	P1666.D	06/01/2020	19:16
	ICIS 280-496958/17	P1669.D	06/01/2020	20:33
	ICV 280-496958/21	P1670.D	06/01/2020	20:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab File ID: P2505.D BFB Injection Date: 06/20/2020

Instrument ID: VMS_P BFB Injection Time: 08:58

Analysis Batch No.: 499519

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	71.8	
175	5.0 - 9.0 % of mass 174	5.5	(7.7) 1
176	95.0 - 101.0 % of mass 174	68.8	(95.9) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-499519/2	P2506.D	06/20/2020	9:29
	LCS 280-499519/4	P2508.D	06/20/2020	10:14
	MB 280-499519/9	P2510.D	06/20/2020	10:57
	LCSD 280-499519/5	P2511.D	06/20/2020	11:18
TB01-061120	280-137609-14	P2514.D	06/20/2020	12:22
TB02-061120	280-137609-15	P2515.D	06/20/2020	12:44
SHGW03-20A	280-137609-10	P2521.D	06/20/2020	14:51
SHGW02-20A	280-137609-11	P2522.D	06/20/2020	15:12
SHGW05-20A	280-137609-12	P2523.D	06/20/2020	15:34
SOURCE 2020	280-137609-13	P2524.D	06/20/2020	15:55
	CCVC 280-499519/34	P2533.D	06/20/2020	19:06

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Sample No.: ICIS 280-496958/17 Date Analyzed: 06/01/2020 20:33

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): P1669.D Heated Purge: (Y/N) N

Calibration ID: 44775

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2594633	5.11	589468	7.65	851368	9.87
UPPER LIMIT		5189266	5.61	1178936	8.15	1702736	10.37
LOWER LIMIT		1297317	4.61	294734	7.15	425684	9.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-496958/21		2590465	5.11	590999	7.65	849842	9.87
CCV 280-499519/2		2870776	5.11	651947	7.64	913047	9.87
LCS 280-499519/4		2768018	5.11	628509	7.64	909333	9.87
MB 280-499519/9		2674413	5.11	612281	7.64	879628	9.87
LCSD 280-499519/5		2715469	5.11	623330	7.64	904418	9.87
280-137609-14	TB01-061120	2666454	5.11	609068	7.65	875501	9.87
280-137609-15	TB02-061120	2694009	5.11	622315	7.64	886358	9.87
280-137609-10	SHGW03-20A	2661186	5.10	611196	7.65	884138	9.87
280-137609-11	SHGW02-20A	2452849	5.11	555782	7.64	805824	9.87
280-137609-12	SHGW05-20A	2485148	5.11	558228	7.64	807614	9.87
280-137609-13	SOURCE 2020	2687336	5.11	616734	7.64	885539	9.87
CCVC 280-499519/34		2672250	5.11	620592	7.65	898506	9.87

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW03-20A Lab Sample ID: 280-137609-10

Matrix: Water Lab File ID: P2521.D

Analysis Method: 8260B Date Collected: 06/11/2020 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 14:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	15		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U Q	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW03-20A Lab Sample ID: 280-137609-10

Matrix: Water Lab File ID: P2521.D

Analysis Method: 8260B Date Collected: 06/11/2020 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 14:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		81-118
460-00-4	4-Bromofluorobenzene (Surr)	98		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2521.D
Lims ID: 280-137609-E-10
Client ID: SHGW03-20A
Sample Type: Client
Inject. Date: 20-Jun-2020 14:51:30 ALS Bottle#: 16 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-e-10 pH
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:27:38 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:20:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.103	5.110	-0.007	98	2661186	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.642	0.004	87	611196	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.869	0.004	97	884138	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	641815	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	96	732276	48.6	
$ 6 Toluene-d8 (Surr)	98	6.369	6.367	0.002	93	2667948	49.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.741	0.003	85	959128	49.1	
10 Dichlorodifluoromethane	85		1.671				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64		2.325				ND	
17 Trichlorofluoromethane	101		2.536				ND	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43		2.958				ND	
27 Carbon disulfide	76		3.127				ND	
29 Methyl acetate	43		3.190				ND	
31 Methylene Chloride	84		3.306				ND	
34 Methyl tert-butyl ether	73		3.496				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
39 1,1-Dichloroethane	63		3.834				ND	
44 2-Butanone (MEK)	43		4.214				ND	
47 cis-1,2-Dichloroethene	96		4.246				ND	
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.488				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
56 Cyclohexane	56		4.689				ND	
59 Carbon tetrachloride	117		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62		4.921				ND	
67 Trichloroethene	95		5.385				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.609				ND	
82 1,1,2-Trichloroethane	97	6.781	6.778	0.003	91	134521	14.5	
83 Tetrachloroethene	164		6.873				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.243				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106	7.752	7.749	0.003	97	2351	0.1481	
93 m-Xylene & p-Xylene	106	7.868	7.865	0.003	97	2438	0.1277	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
97 Isopropylbenzene	105		8.572				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.865				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
S 142 Xylenes, Total	106				0		0.1277	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

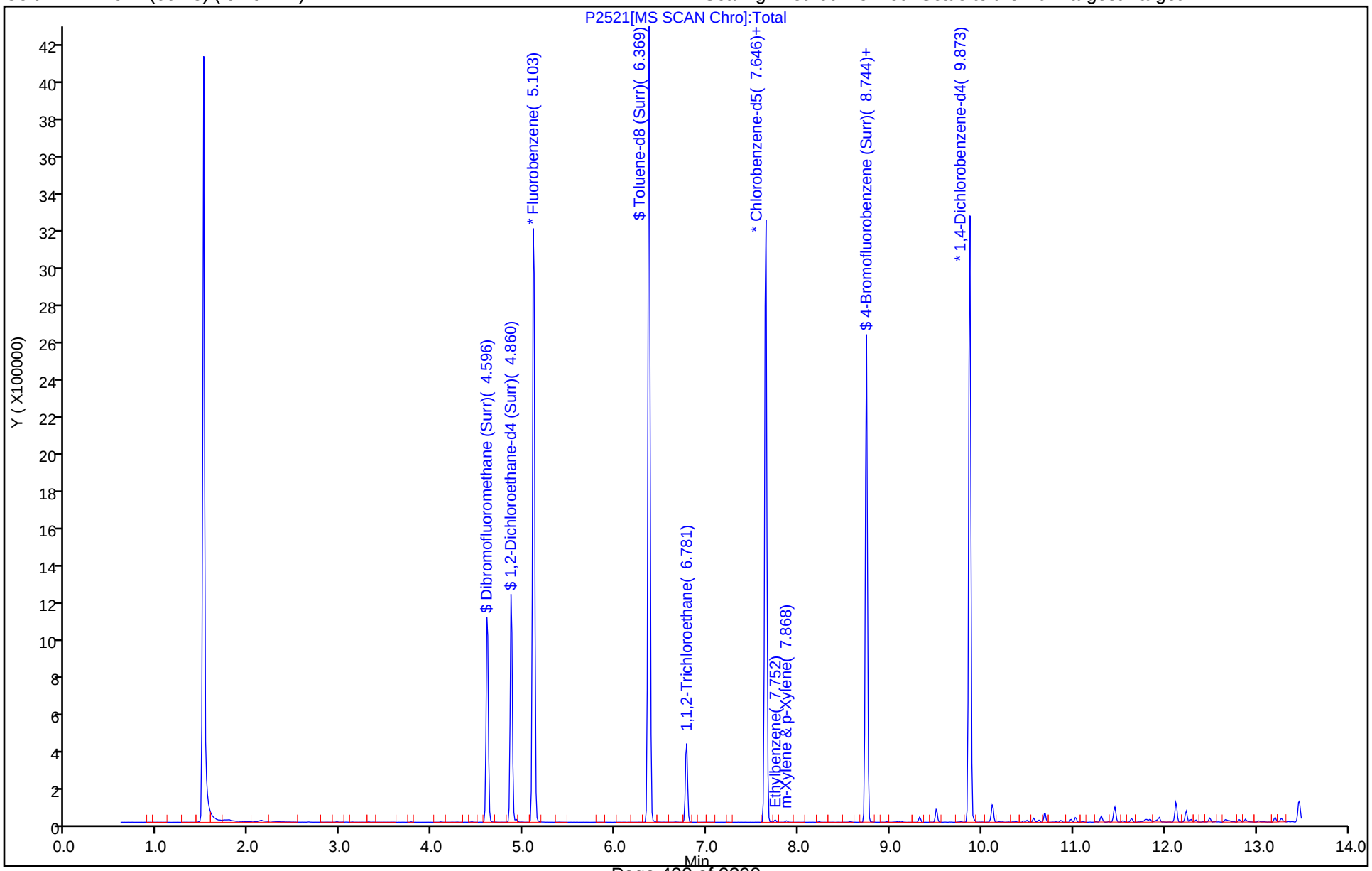
Report Date: 22-Jun-2020 13:29:48 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2521.D

Injection Date:	20-Jun-2020 14:51:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-137609-E-10	Lab Sample ID:	280-137609-10	Worklist Smp#:	22
Client ID:	SHGW03-20A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2521.D				
Lims ID:	280-137609-E-10				
Client ID:	SHGW03-20A				
Sample Type:	Client				
Inject. Date:	20-Jun-2020 14:51:30	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-e-10 pH				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	22-Jun-2020 13:27:38	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: seifertj Date: 22-Jun-2020 13:20:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.16
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.12
$ 6 Toluene-d8 (Surr)	50.0	49.6	99.22
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.1	98.30

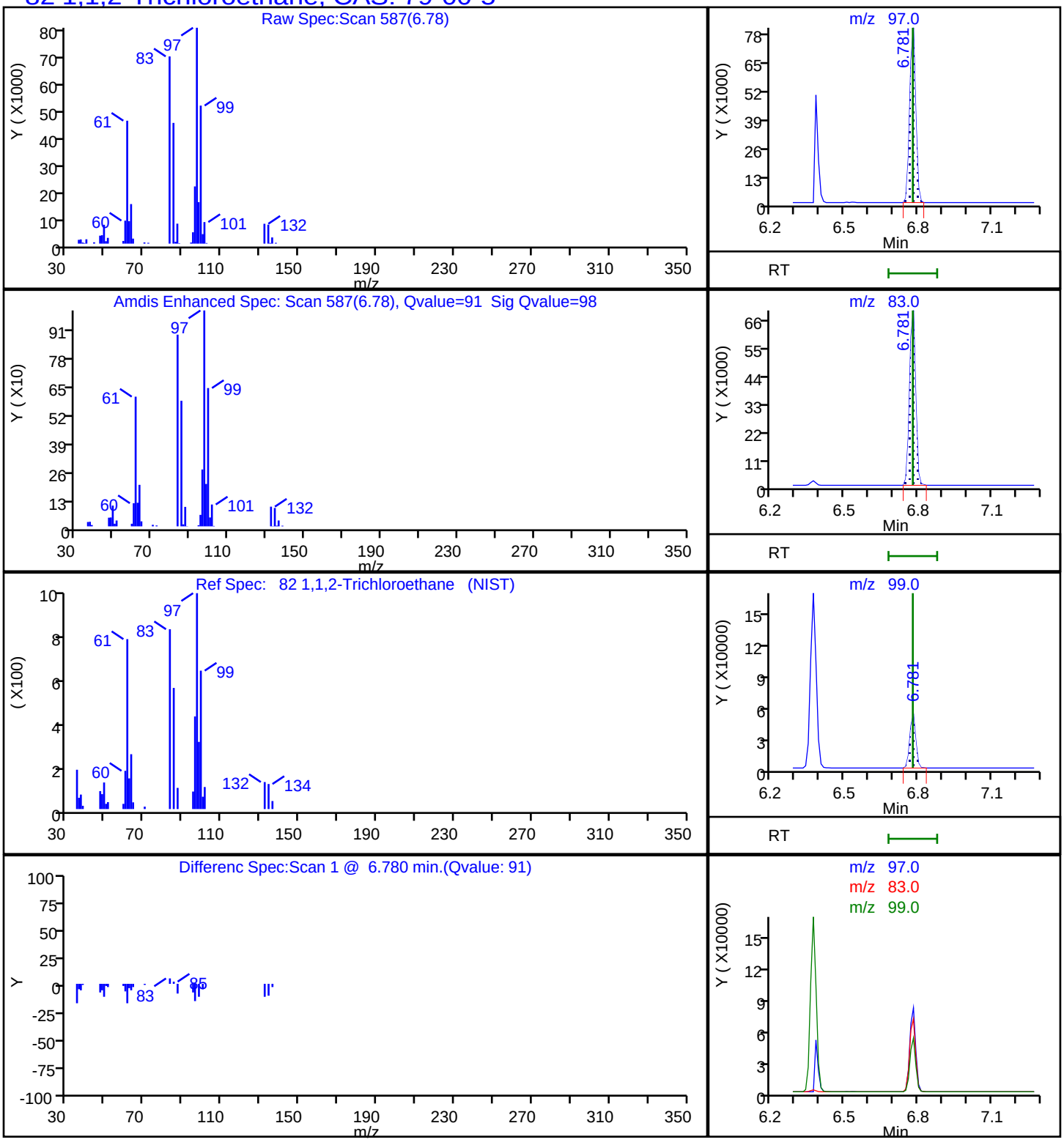
Report Date: 22-Jun-2020 13:29:48 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2521.D

Injection Date:	20-Jun-2020 14:51:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-E-10	Lab Sample ID:	280-137609-10		
Client ID:	SHGW03-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

82 1,1,2-Trichloroethane, CAS: 79-00-5



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW02-20A Lab Sample ID: 280-137609-11

Matrix: Water Lab File ID: P2522.D

Analysis Method: 8260B Date Collected: 06/11/2020 08:55

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 15:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.33	J	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	1.4		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	68		6.0	4.0	2.0
591-78-6	2-Hexanone	73		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	38		10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U Q	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.19	J	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.5	J	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW02-20A Lab Sample ID: 280-137609-11

Matrix: Water Lab File ID: P2522.D

Analysis Method: 8260B Date Collected: 06/11/2020 08:55

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 15:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D
Lims ID: 280-137609-E-11
Client ID: SHGW02-20A
Sample Type: Client
Inject. Date: 20-Jun-2020 15:12:30 ALS Bottle#: 17 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-e-11 pH
Misc. Info.: 280-0092603-023
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:27:38 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:21:32

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.109	5.110	-0.001	99	2452849	50.0	
*	2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	555782	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	805824	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	583296	49.4	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	96	633981	45.6	
$	6 Toluene-d8 (Surr)	98	6.365	6.367	-0.002	93	2437136	49.8	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	82	880461	49.5	
	10 Dichlorodifluoromethane	85		1.671				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64	2.323	2.325	-0.002	99	9976	1.46	
	17 Trichlorofluoromethane	101		2.536				ND	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43	2.957	2.958	-0.001	100	128170	38.4	
	27 Carbon disulfide	76	3.125	3.127	-0.002	98	11015	0.1877	
	29 Methyl acetate	43		3.190				ND	
	31 Methylene Chloride	84		3.306				ND	
	34 Methyl tert-butyl ether	73		3.496				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	44 2-Butanone (MEK)	43	4.212	4.214	-0.002	99	370741	67.8	
	47 cis-1,2-Dichloroethene	96		4.246				ND	
	53 Chlorobromomethane	128		4.425				ND	
	54 Chloroform	83		4.488				ND	
	55 1,1,1-Trichloroethane	97		4.625				ND	
	56 Cyclohexane	56		4.689				ND	
	59 Carbon tetrachloride	117		4.752				ND	
	60 Benzene	78		4.900				ND	
	61 1,2-Dichloroethane	62	4.919	4.921	-0.002	96	21621	1.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
67 Trichloroethene	95		5.385				ND	
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	U
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43	6.238	6.240	-0.002	96	5400	0.5177	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.609				ND	
82 1,1,2-Trichloroethane	97	6.777	6.778	-0.001	86	2849	0.3336	
83 Tetrachloroethene	164		6.873				ND	
85 2-Hexanone	43	6.935	6.947	-0.012	97	546894	73.2	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.243				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
97 Isopropylbenzene	105		8.572				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.865				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
S 142 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

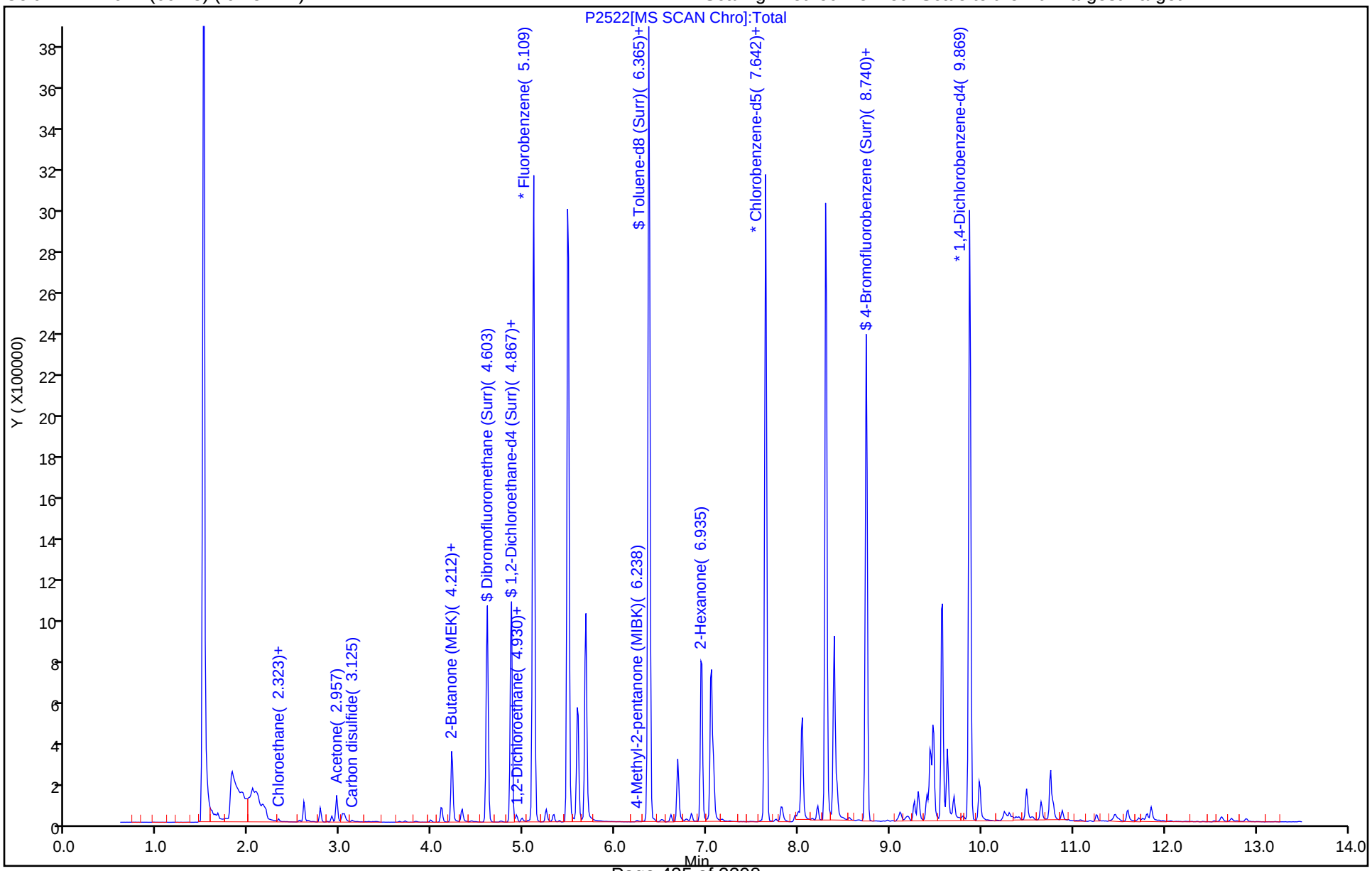
Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D

Injection Date:	20-Jun-2020 15:12:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-137609-E-11	Lab Sample ID:	280-137609-11	Worklist Smp#:	23
Client ID:	SHGW02-20A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D				
Lims ID:	280-137609-E-11				
Client ID:	SHGW02-20A				
Sample Type:	Client				
Inject. Date:	20-Jun-2020 15:12:30	ALS Bottle#:	17	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-e-11 pH				
Misc. Info.:	280-0092603-023				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	22-Jun-2020 13:27:38	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: seifertj Date: 22-Jun-2020 13:21:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.4	98.76
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.22
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.67
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.5	99.00

Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D

Injection Date: 20-Jun-2020 15:12:30 Instrument ID: VMS_P

Lims ID: 280-137609-E-11 Lab Sample ID: 280-137609-11

Client ID: SHGW02-20A

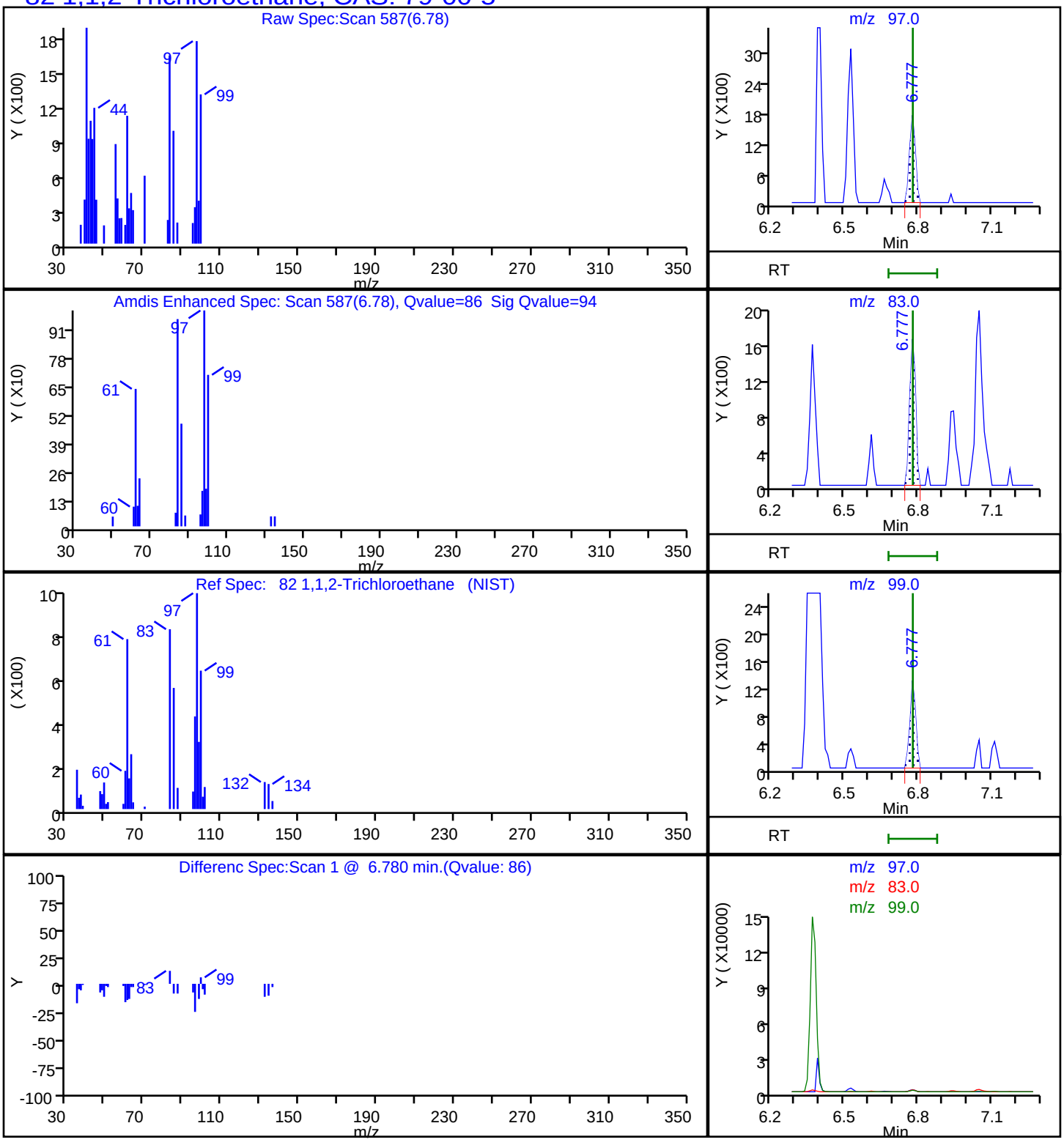
Operator ID: SEIFERTJ ALS Bottle#: 17 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

82 1,1,2-Trichloroethane, CAS: 79-00-5

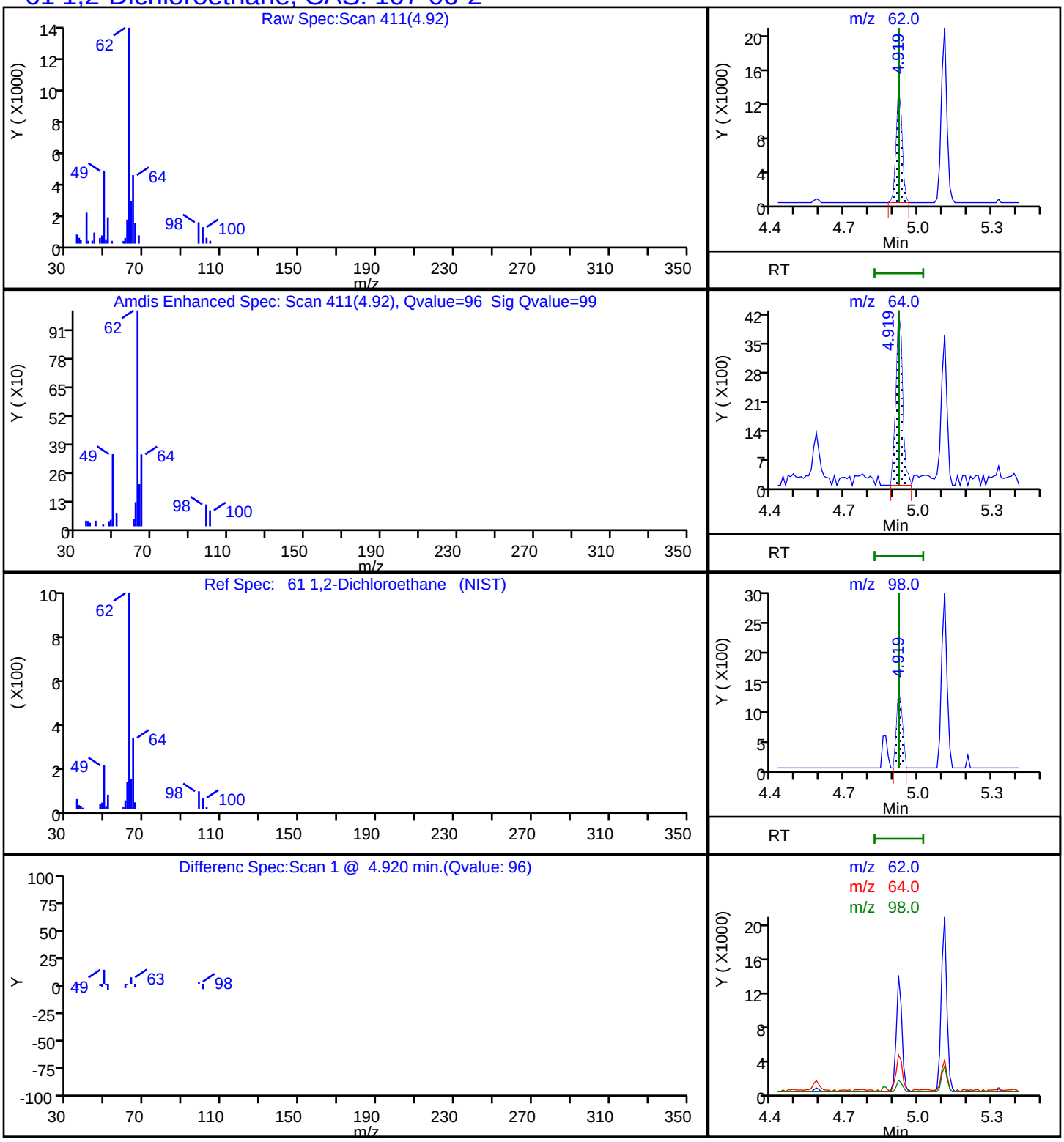


Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D				
Injection Date:	20-Jun-2020 15:12:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-E-11	Lab Sample ID:	280-137609-11		
Client ID:	SHGW02-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	17	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

61 1,2-Dichloroethane, CAS: 107-06-2

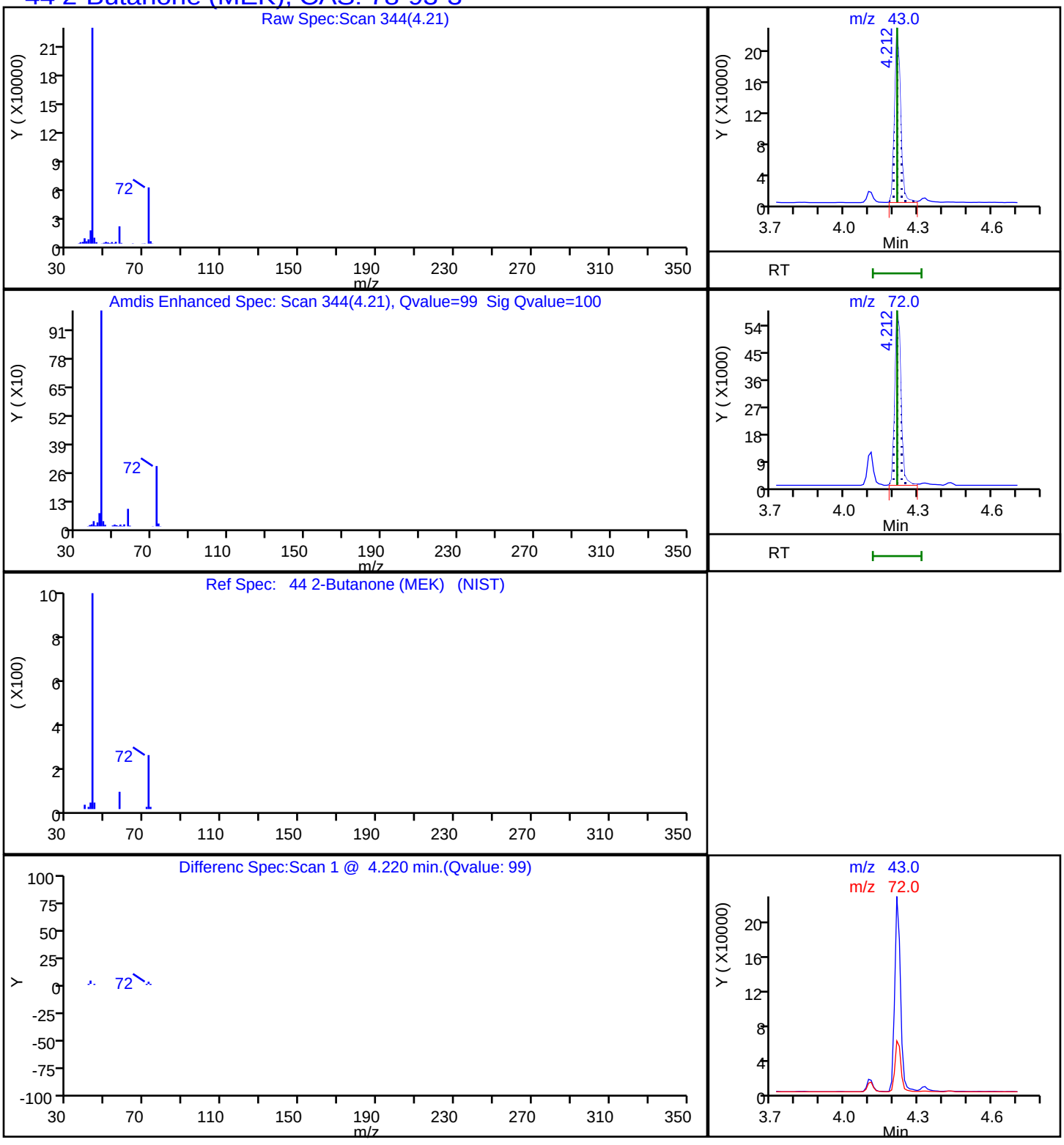


Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D				
Injection Date:	20-Jun-2020 15:12:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-E-11	Lab Sample ID:	280-137609-11		
Client ID:	SHGW02-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	17	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D

Injection Date: 20-Jun-2020 15:12:30 Instrument ID: VMS_P

Lims ID: 280-137609-E-11 Lab Sample ID: 280-137609-11

Client ID: SHGW02-20A

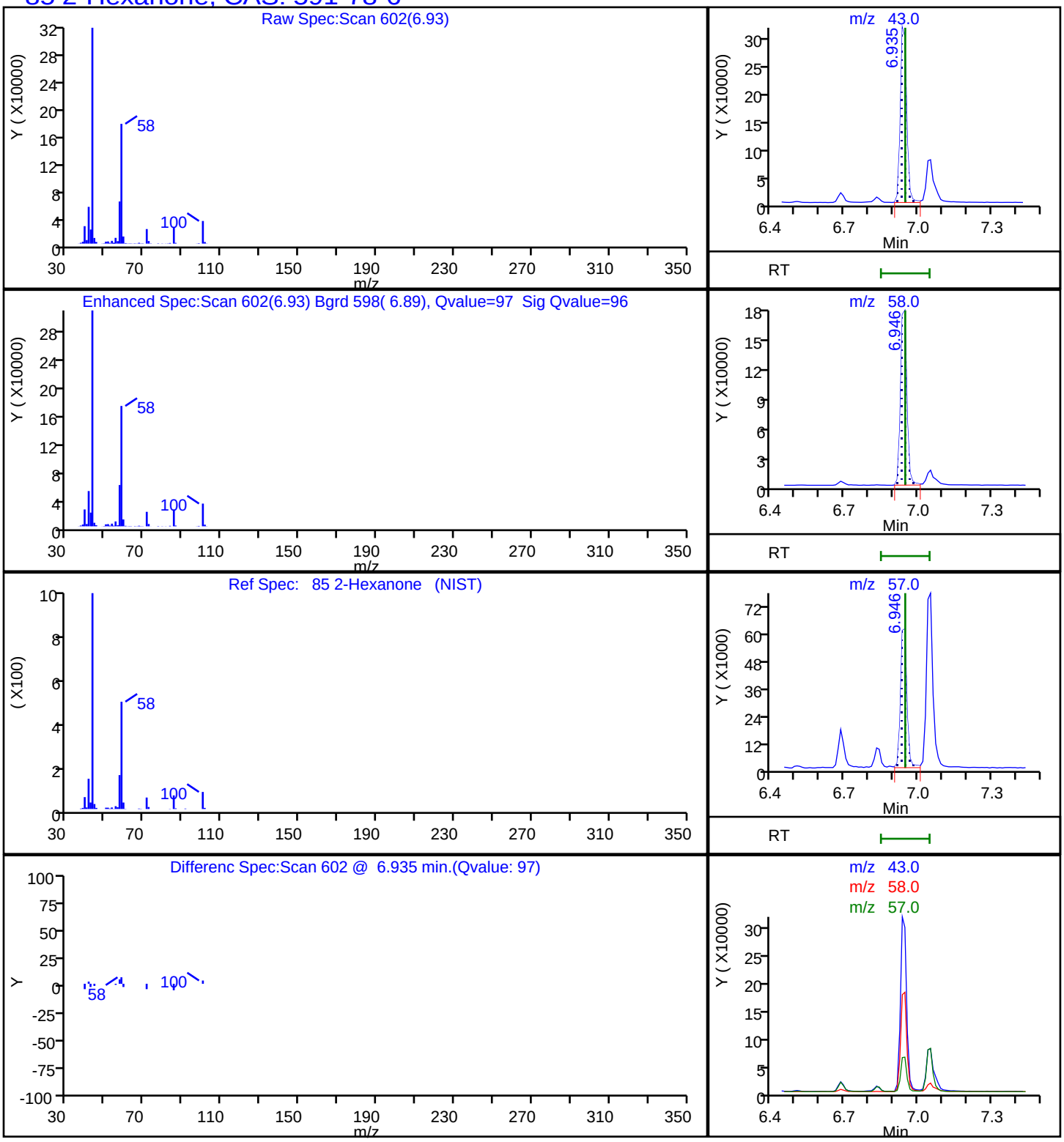
Operator ID: SEIFERTJ ALS Bottle#: 17 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

85 2-Hexanone, CAS: 591-78-6



Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D

Injection Date: 20-Jun-2020 15:12:30 Instrument ID: VMS_P

Lims ID: 280-137609-E-11 Lab Sample ID: 280-137609-11

Client ID: SHGW02-20A

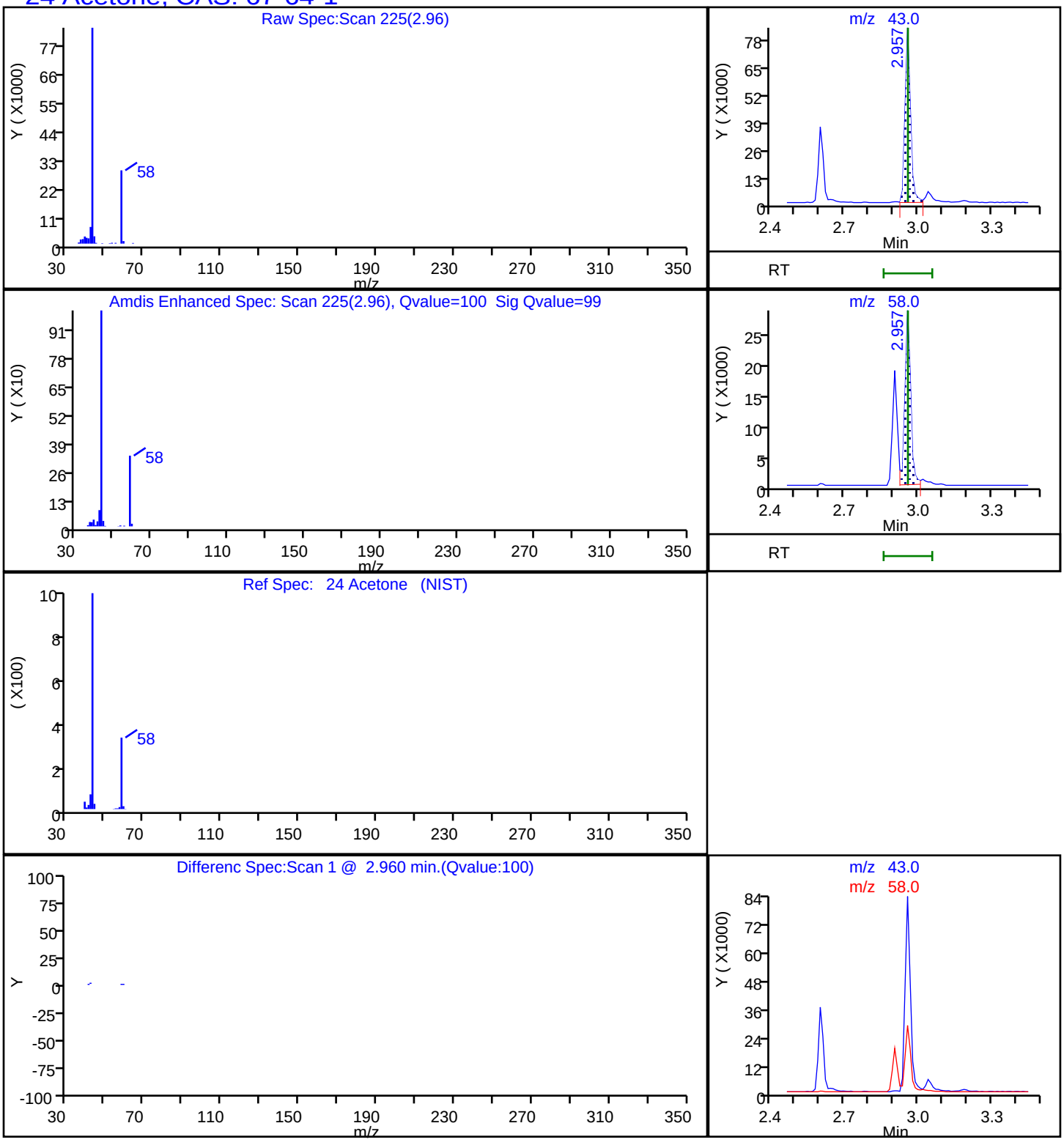
Operator ID: SEIFERTJ ALS Bottle#: 17 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

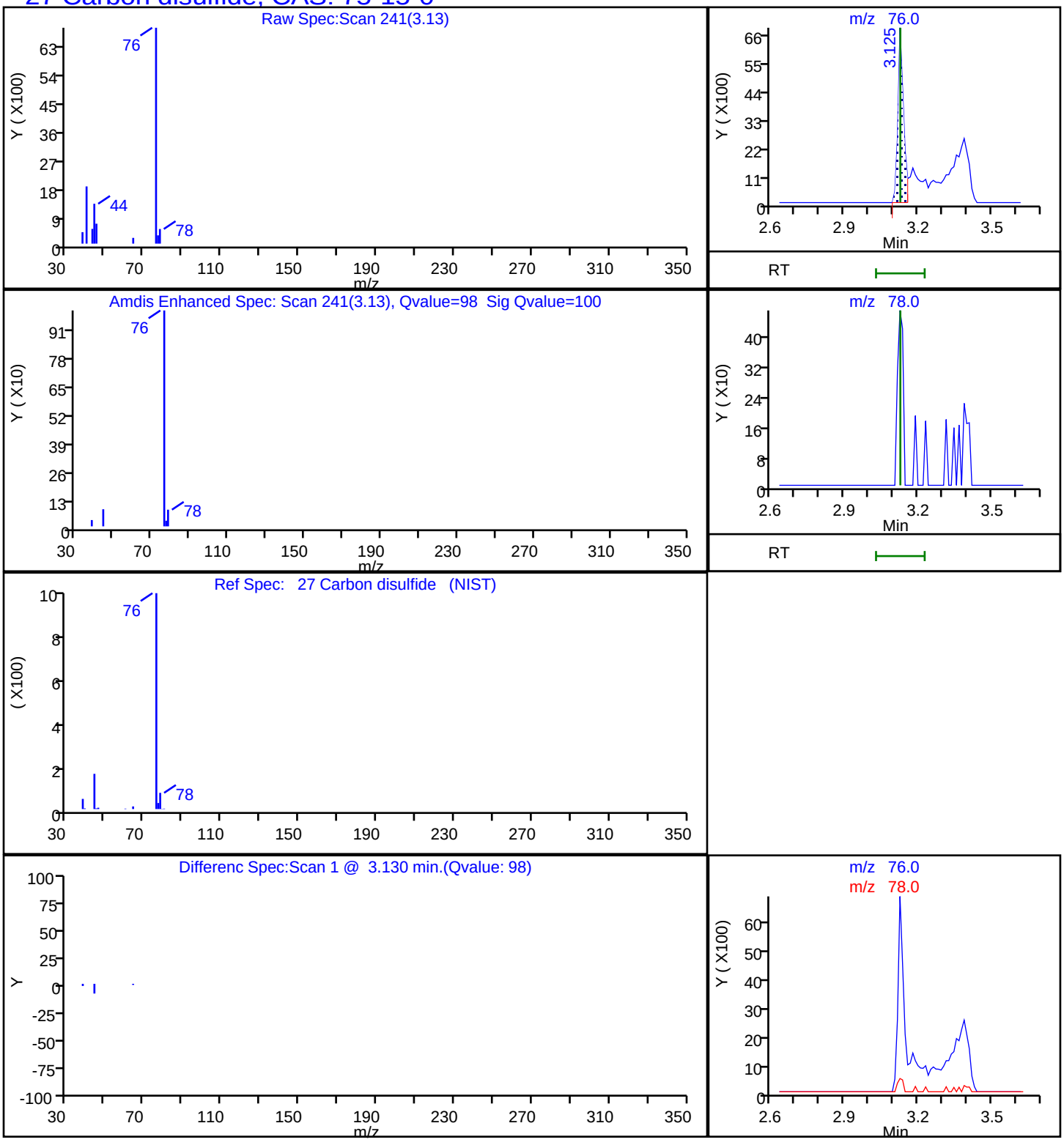


Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D				
Injection Date:	20-Jun-2020 15:12:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-E-11	Lab Sample ID:	280-137609-11		
Client ID:	SHGW02-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	17	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

27 Carbon disulfide, CAS: 75-15-0



Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D

Injection Date: 20-Jun-2020 15:12:30 Instrument ID: VMS_P

Lims ID: 280-137609-E-11 Lab Sample ID: 280-137609-11

Client ID: SHGW02-20A

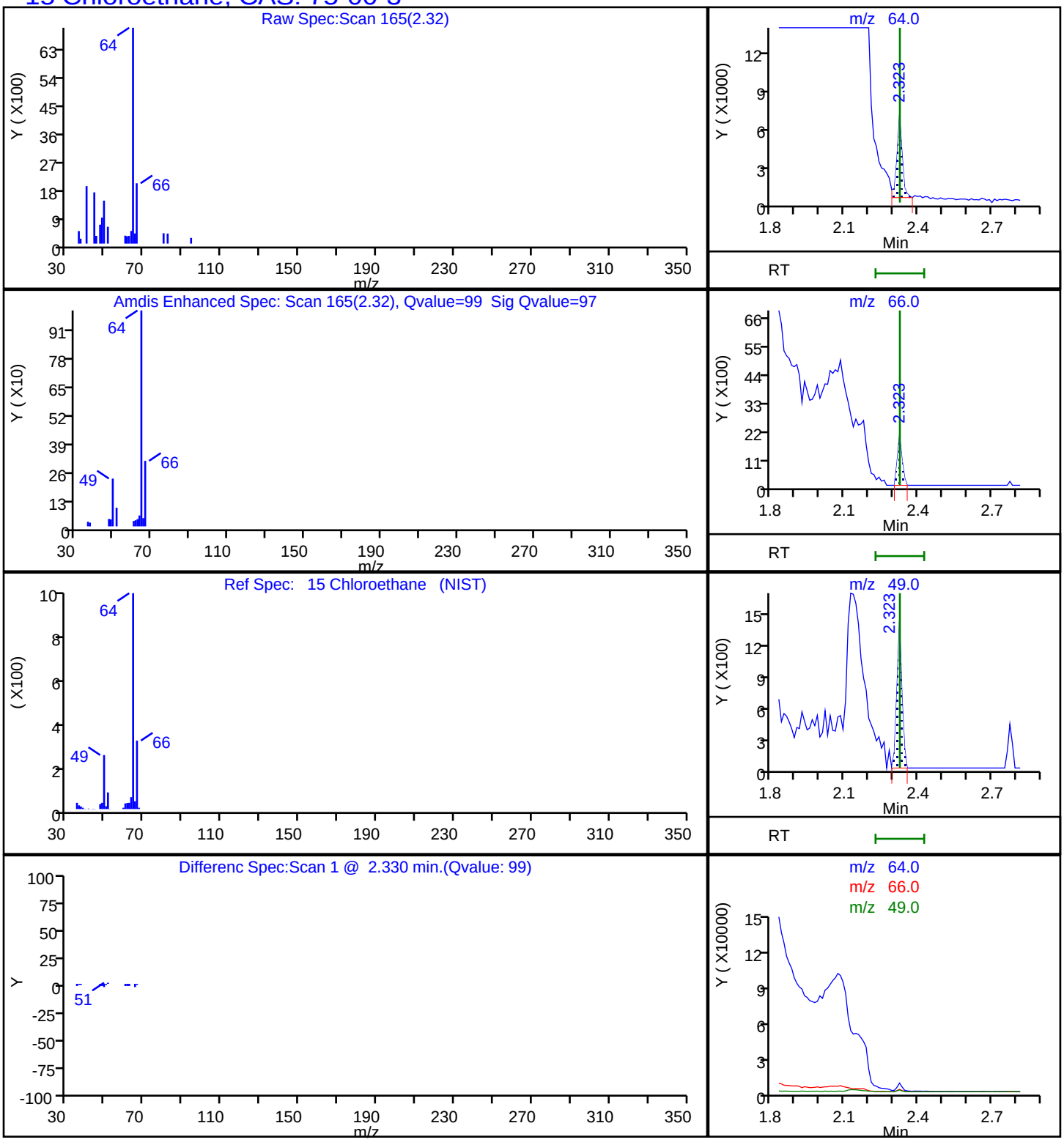
Operator ID: SEIFERTJ ALS Bottle#: 17 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3



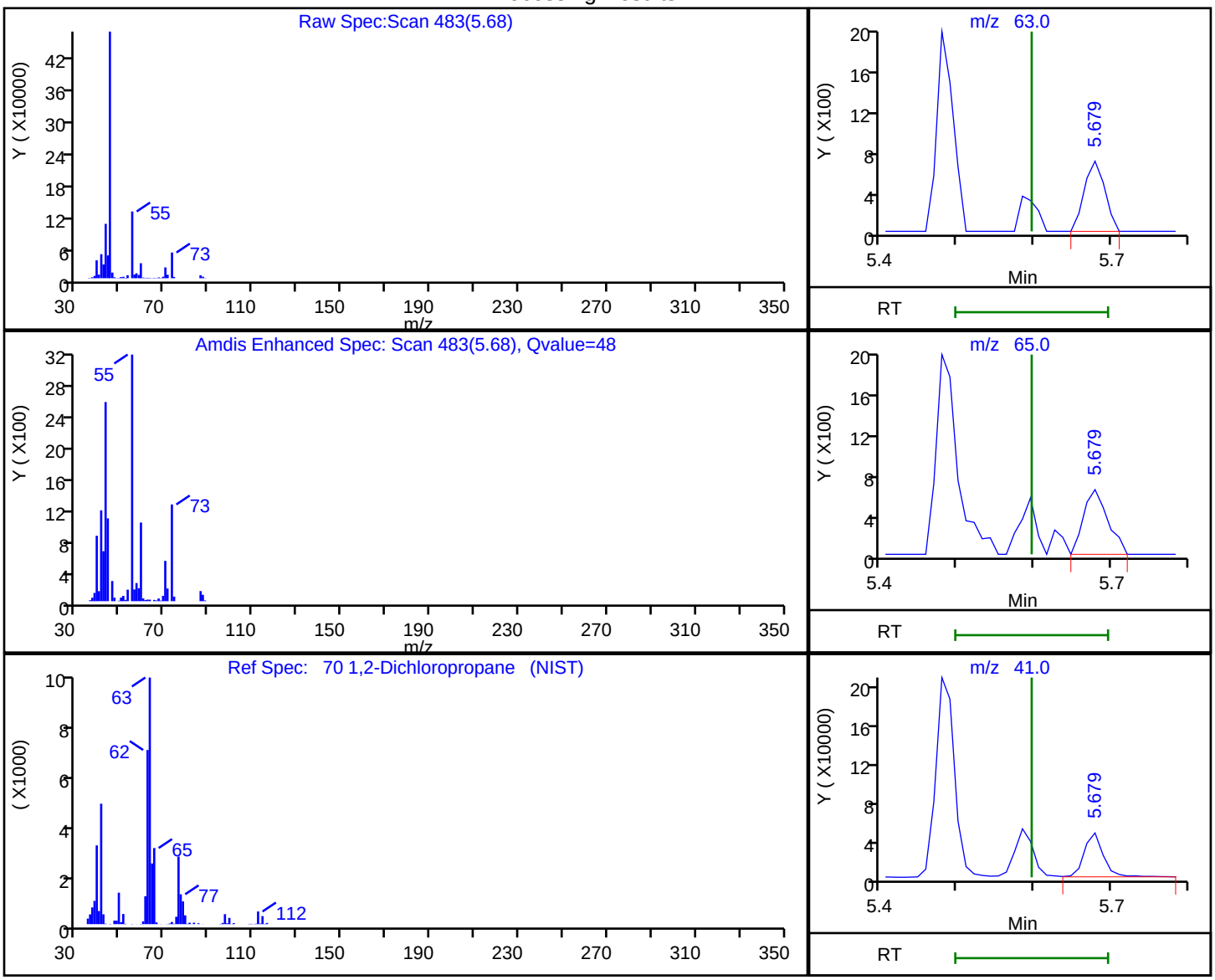
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2522.D				
Injection Date:	20-Jun-2020 15:12:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-E-11	Lab Sample ID:	280-137609-11		
Client ID:	SHGW02-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	17	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

70 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
5.68	63.00	1292	0.123878
5.68	65.00	1396	
5.68	41.00	77733	

Reviewer: seifertj, 22-Jun-2020 13:21:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A Lab Sample ID: 280-137609-12

Matrix: Water Lab File ID: P2523.D

Analysis Method: 8260B Date Collected: 06/11/2020 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 15:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.31	J	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	1.4		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	71		6.0	4.0	2.0
591-78-6	2-Hexanone	75		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	40		10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U Q	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.26	J	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.4	J	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A Lab Sample ID: 280-137609-12

Matrix: Water Lab File ID: P2523.D

Analysis Method: 8260B Date Collected: 06/11/2020 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 15:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	98		85-114
1868-53-7	Dibromofluoromethane (Surr)	98		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D
Lims ID: 280-137609-D-12
Client ID: SHGW05-20A
Sample Type: Client
Inject. Date: 20-Jun-2020 15:34:30 ALS Bottle#: 18 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-d-12 pH
Misc. Info.: 280-0092603-024
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:27:38 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:22:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.109	5.110	-0.001	98	2485148	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	87	558228	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	-0.001	97	807614	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	586898	49.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.866	4.868	-0.002	95	637371	45.3	
$ 6 Toluene-d8 (Surr)	98	6.365	6.367	-0.002	93	2469054	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.739	8.741	-0.002	83	876537	49.2	
10 Dichlorodifluoromethane	85		1.671				ND	
11 Chloromethane	50		1.839				ND	
12 Vinyl chloride	62		1.945				ND	
14 Bromomethane	94		2.230				ND	
15 Chloroethane	64	2.323	2.325	-0.002	97	9613	1.39	
17 Trichlorofluoromethane	101		2.536				ND	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
22 1,1-Dichloroethene	96		2.937				ND	
24 Acetone	43	2.956	2.958	-0.002	100	133910	39.7	
27 Carbon disulfide	76	3.125	3.127	-0.002	97	12890	0.2573	
29 Methyl acetate	43		3.190				ND	
31 Methylene Chloride	84		3.306				ND	
34 Methyl tert-butyl ether	73		3.496				ND	
35 trans-1,2-Dichloroethene	96		3.517				ND	
39 1,1-Dichloroethane	63		3.834				ND	
44 2-Butanone (MEK)	43	4.212	4.214	-0.002	99	390664	70.5	
47 cis-1,2-Dichloroethene	96		4.246				ND	
53 Chlorobromomethane	128		4.425				ND	
54 Chloroform	83		4.488				ND	
55 1,1,1-Trichloroethane	97		4.625				ND	
56 Cyclohexane	56		4.689				ND	
59 Carbon tetrachloride	117		4.752				ND	
60 Benzene	78		4.900				ND	
61 1,2-Dichloroethane	62	4.919	4.921	-0.002	96	22749	1.43	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
67 Trichloroethene	95		5.385				ND	
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	U
74 Dichlorobromomethane	83		5.786				ND	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43	6.238	6.240	-0.002	96	6402	0.6057	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.609				ND	
82 1,1,2-Trichloroethane	97	6.777	6.778	-0.001	89	2699	0.3119	
83 Tetrachloroethene	164		6.873				ND	
85 2-Hexanone	43	6.935	6.947	-0.012	96	566597	75.5	
86 Chlorodibromomethane	129		7.126				ND	
88 Ethylene Dibromide	107		7.243				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173		8.435				ND	
97 Isopropylbenzene	105		8.572				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.865				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
S 142 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

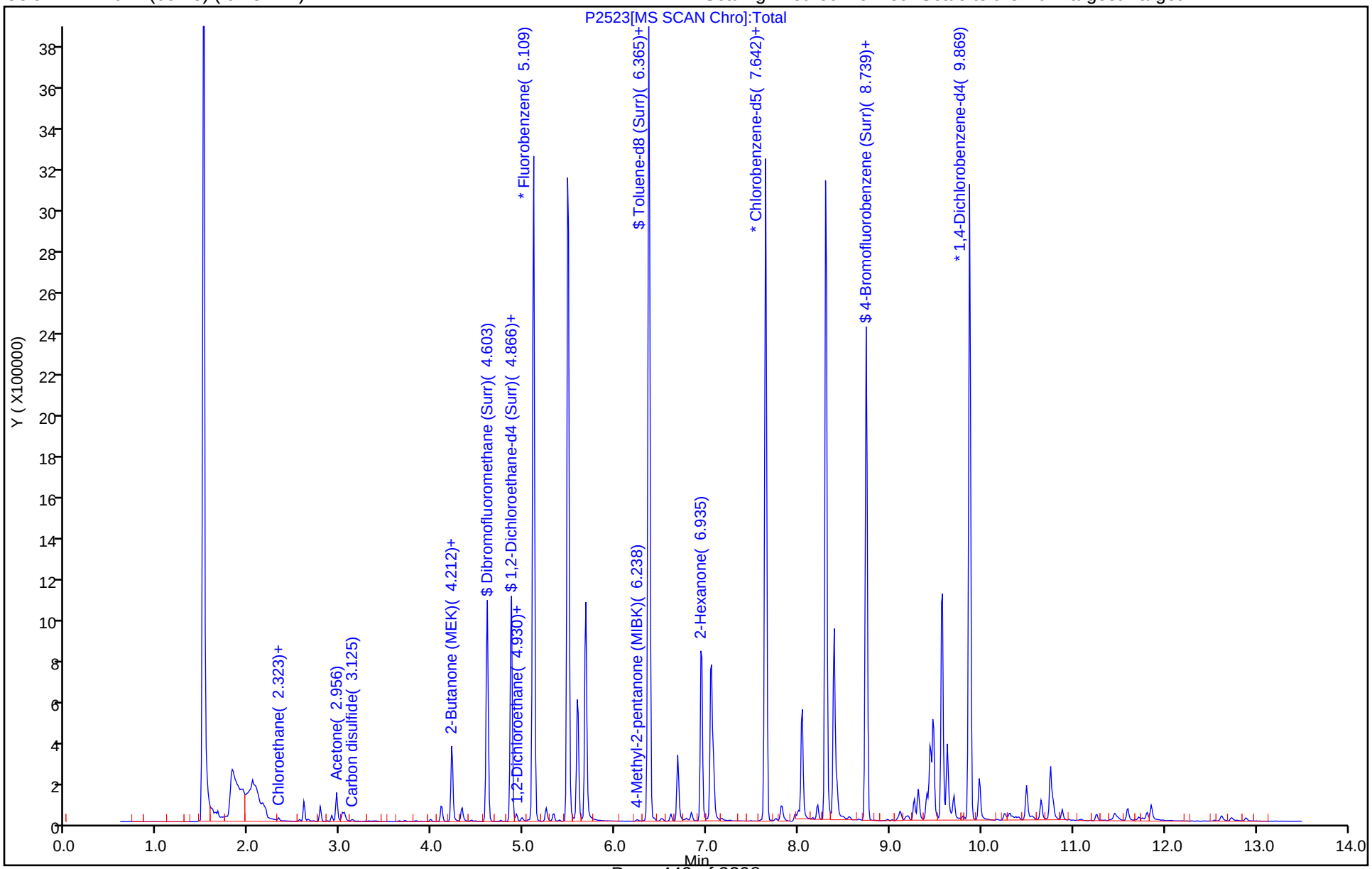
Report Date: 22-Jun-2020 13:29:49 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D

Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12	Worklist Smp#:	24
Client ID:	SHGW05-20A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Lims ID:	280-137609-D-12				
Client ID:	SHGW05-20A				
Sample Type:	Client				
Inject. Date:	20-Jun-2020 15:34:30	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-d-12 pH				
Misc. Info.:	280-0092603-024				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	22-Jun-2020 13:27:38	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1011				
First Level Reviewer: seifertj		Date:	22-Jun-2020 13:22:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.0	98.08
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	45.3	90.52
$ 6 Toluene-d8 (Surr)	50.0	50.3	100.53
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.2	98.35

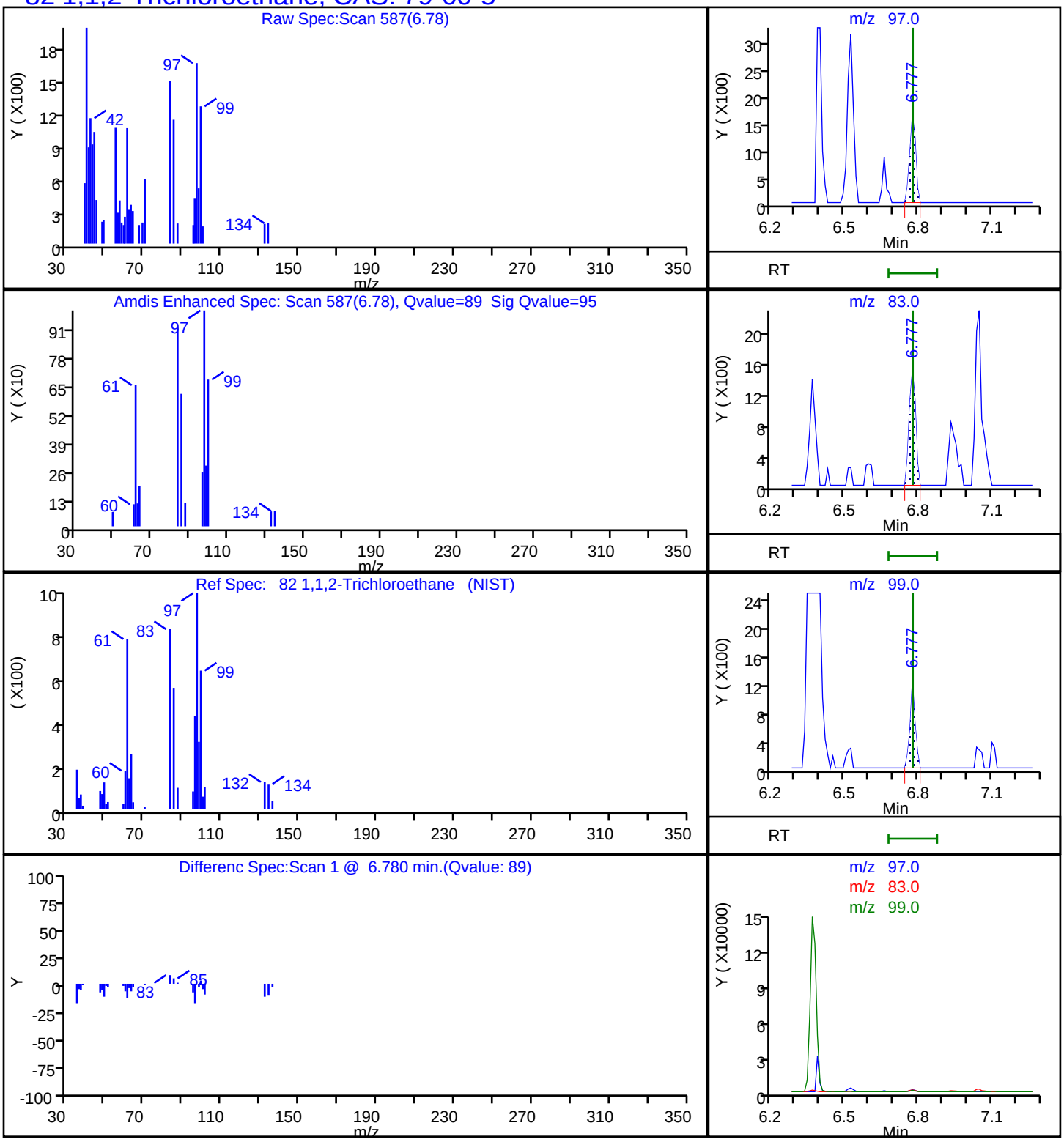
Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D

Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

82 1,1,2-Trichloroethane, CAS: 79-00-5

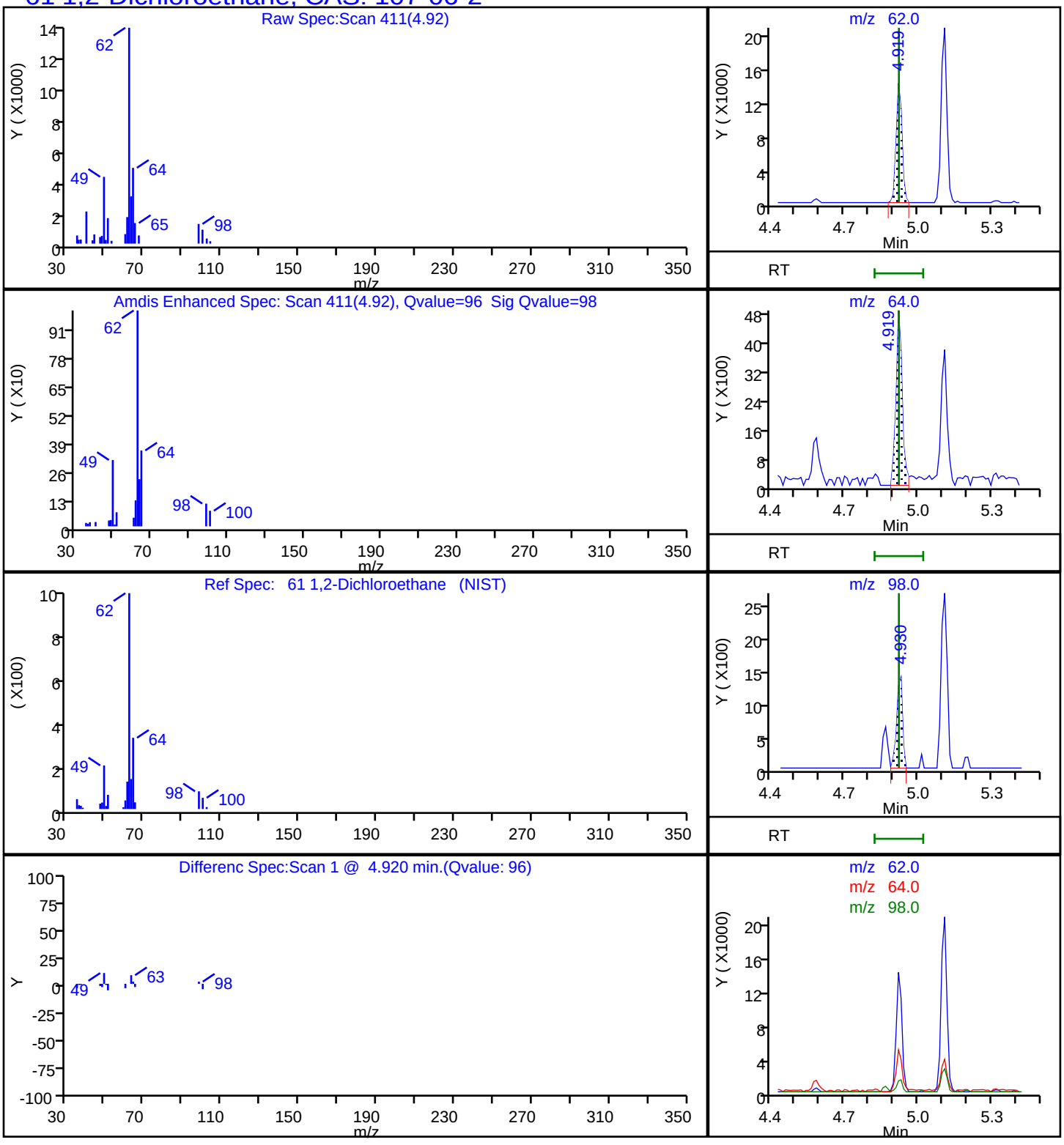


Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

61 1,2-Dichloroethane, CAS: 107-06-2

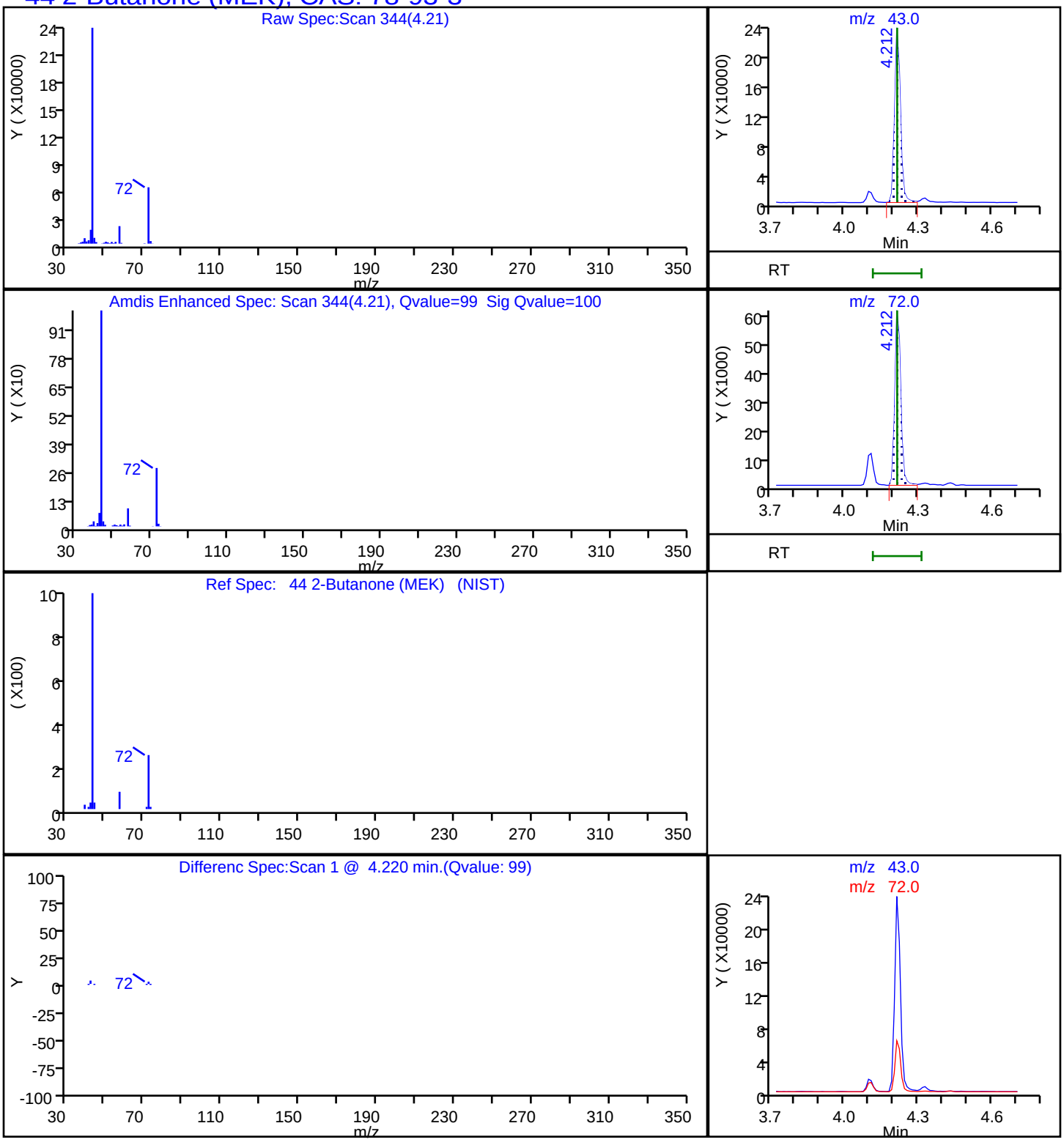


Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



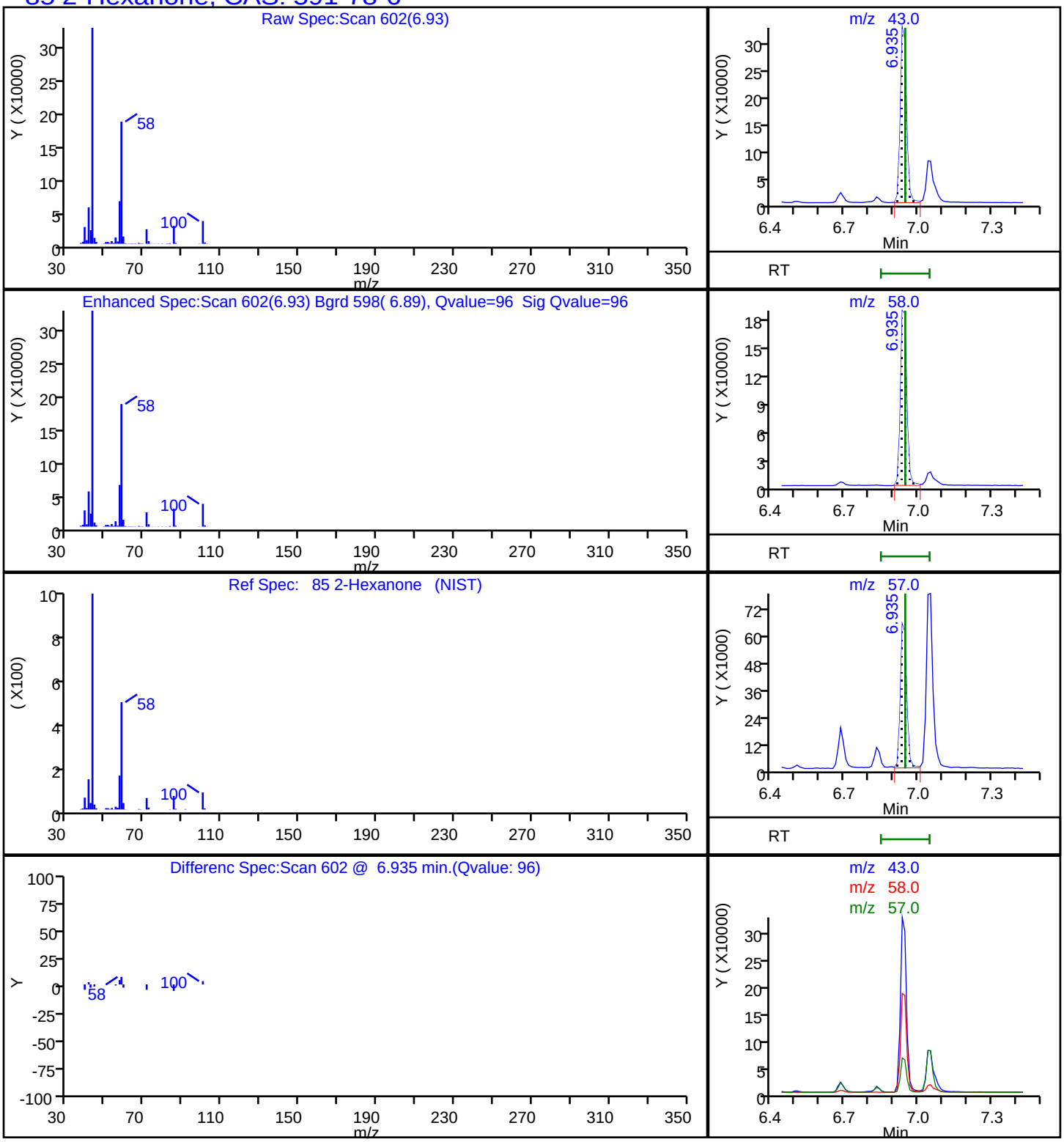
Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D

Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12
Client ID:	SHGW05-20A		
Operator ID:	SEIFERTJ	ALS Bottle#:	18 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

85 2-Hexanone, CAS: 591-78-6

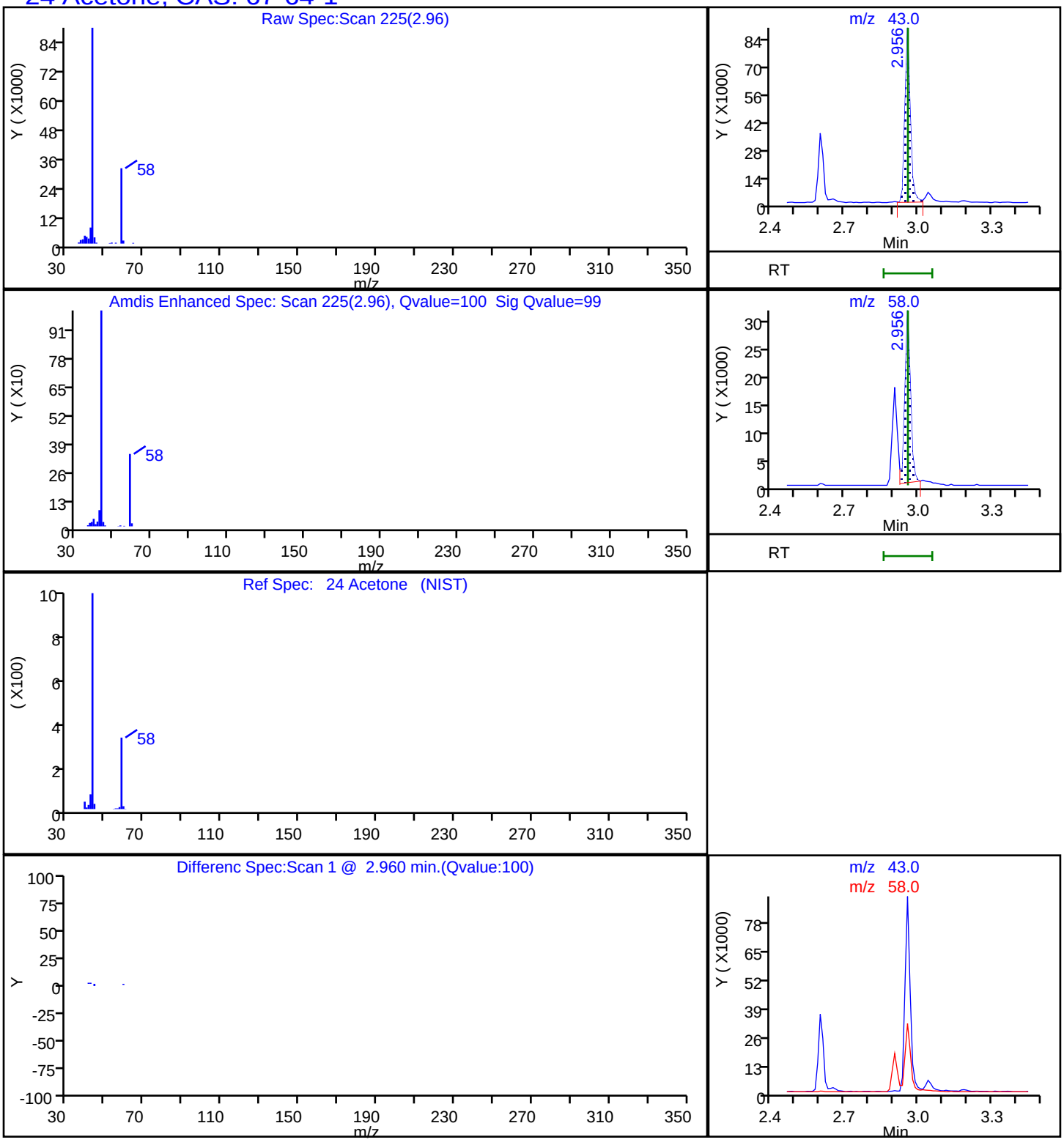


Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1



Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D

Injection Date: 20-Jun-2020 15:34:30 Instrument ID: VMS_P

Lims ID: 280-137609-D-12 Lab Sample ID: 280-137609-12

Client ID: SHGW05-20A

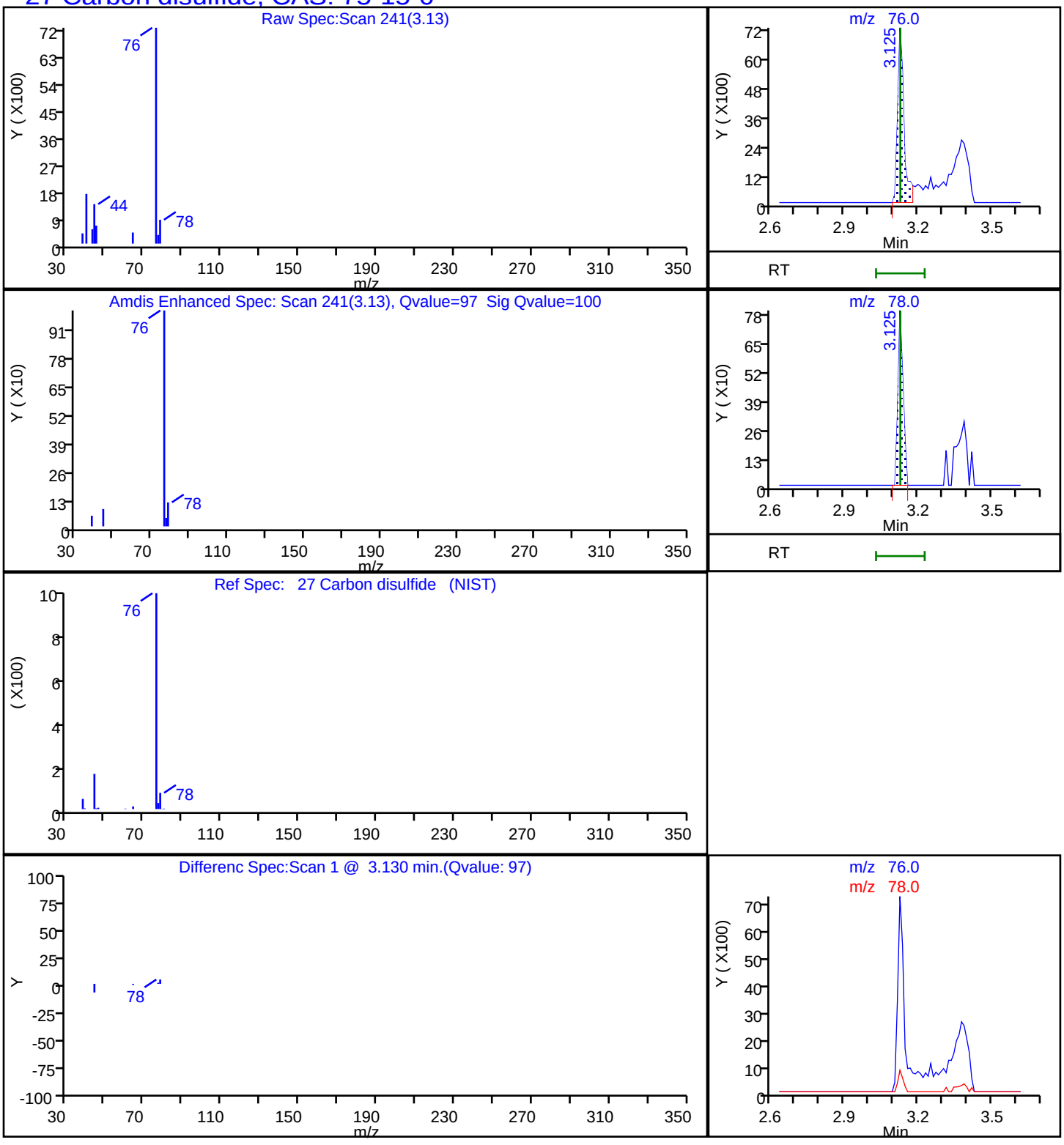
Operator ID: SEIFERTJ ALS Bottle#: 18 Worklist Smp#: 24

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0



Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D

Injection Date: 20-Jun-2020 15:34:30 Instrument ID: VMS_P

Lims ID: 280-137609-D-12 Lab Sample ID: 280-137609-12

Client ID: SHGW05-20A

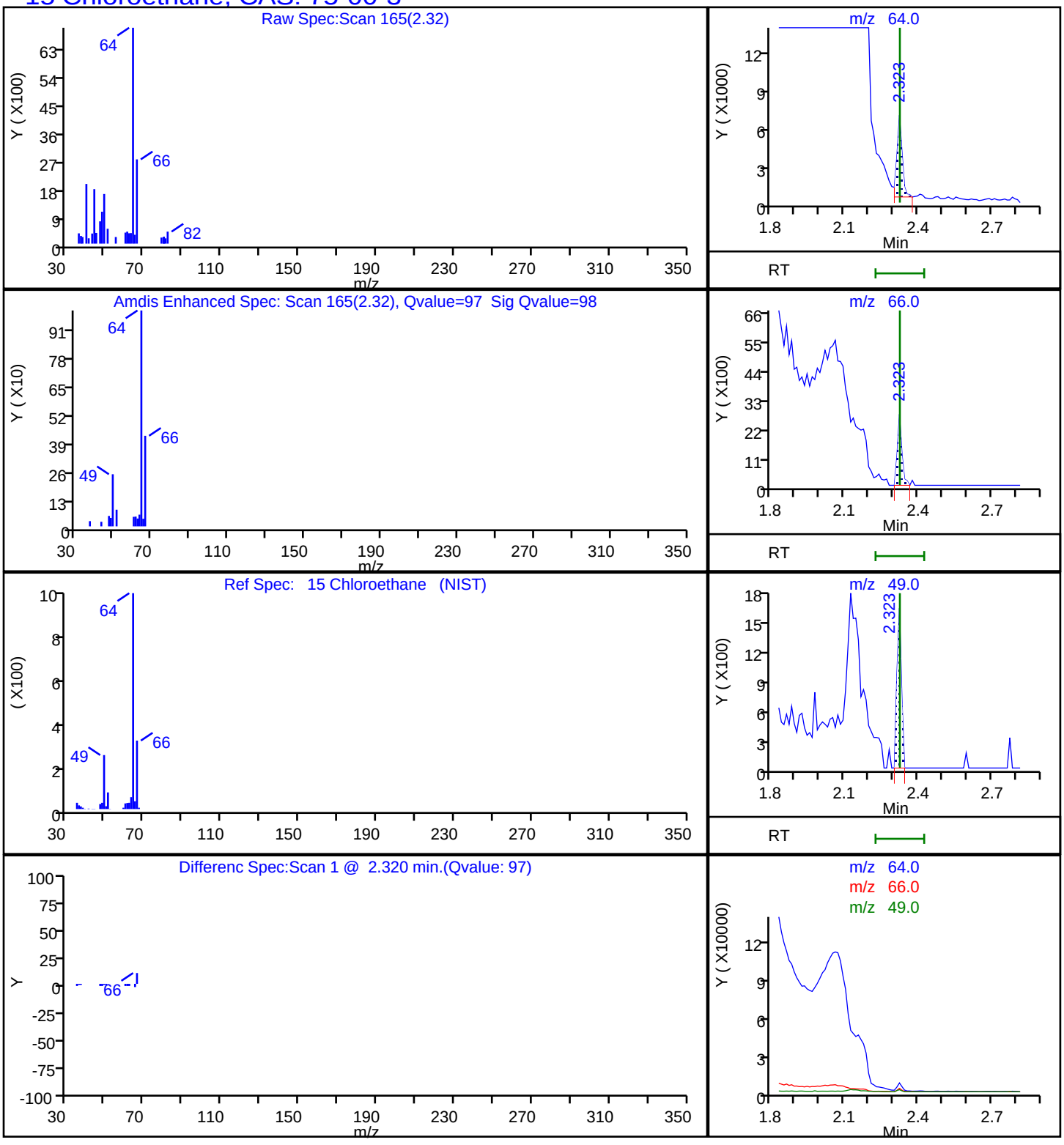
Operator ID: SEIFERTJ ALS Bottle#: 18 Worklist Smp#: 24

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3



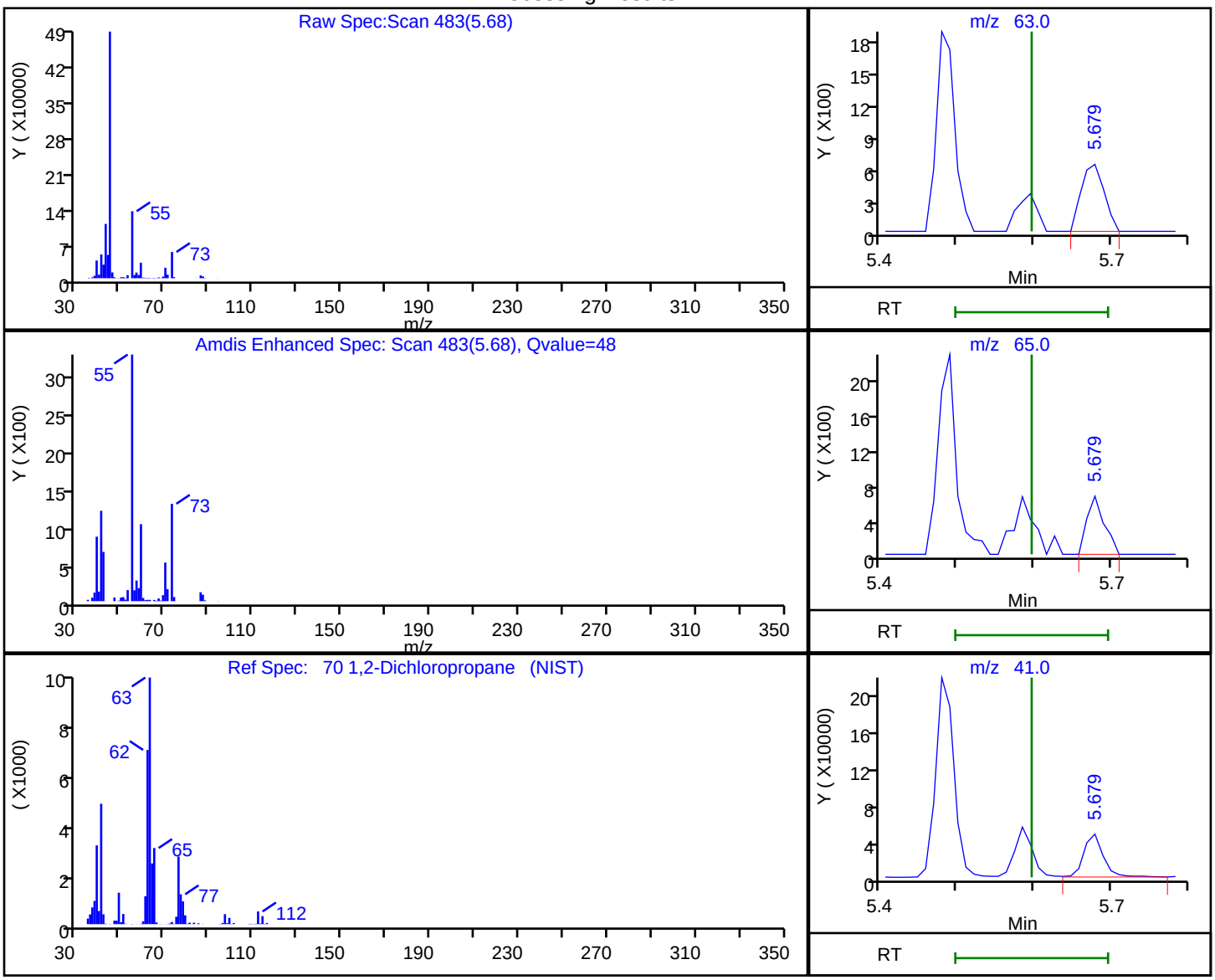
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

70 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
5.68	63.00	1332	0.126053
5.68	65.00	1056	
5.68	41.00	82461	

Reviewer: seifertj, 22-Jun-2020 13:21:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

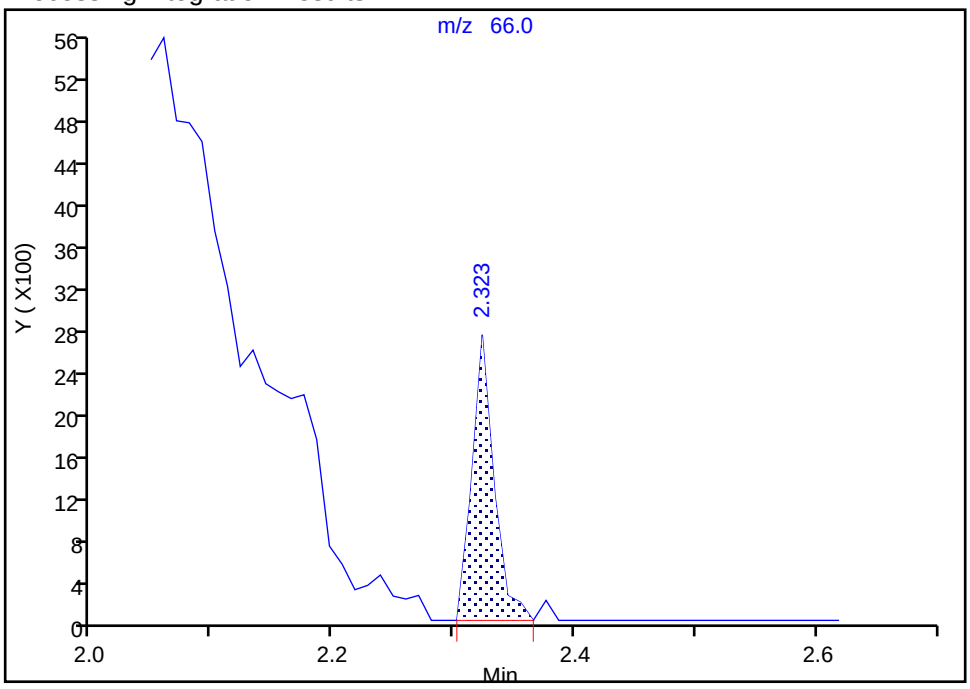
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

15 Chloroethane, CAS: 75-00-3

Signal: 2

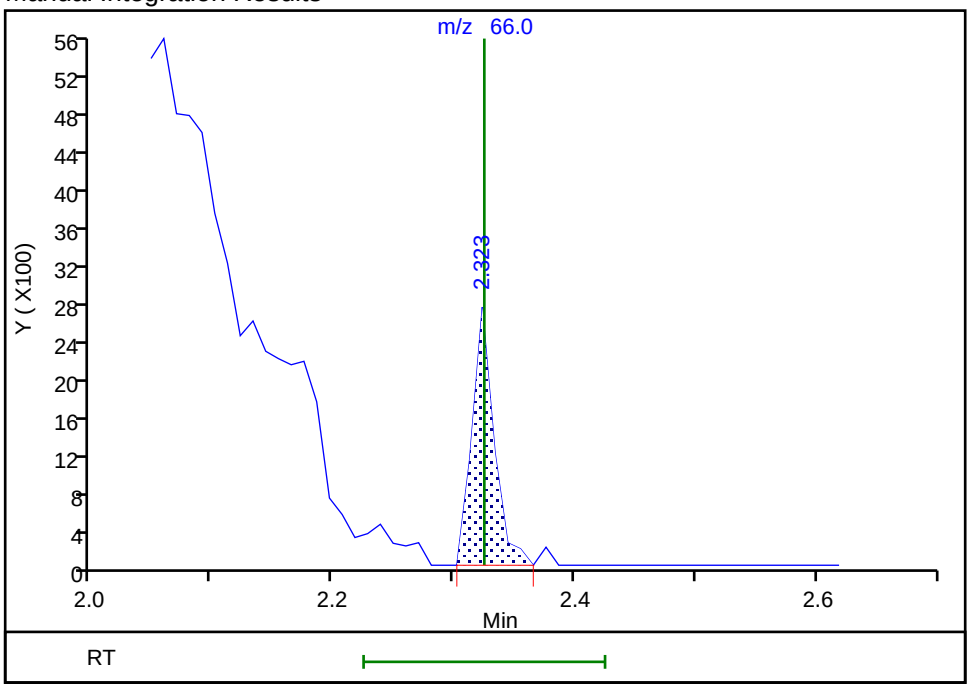
Processing Integration Results

RT: 2.32
Area: 3408
Amount: 1.387494
Amount Units: ug/l



Manual Integration Results

RT: 2.32
Area: 3408
Amount: 1.387494
Amount Units: ug/l



Reviewer: seifertj, 22-Jun-2020 13:21:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

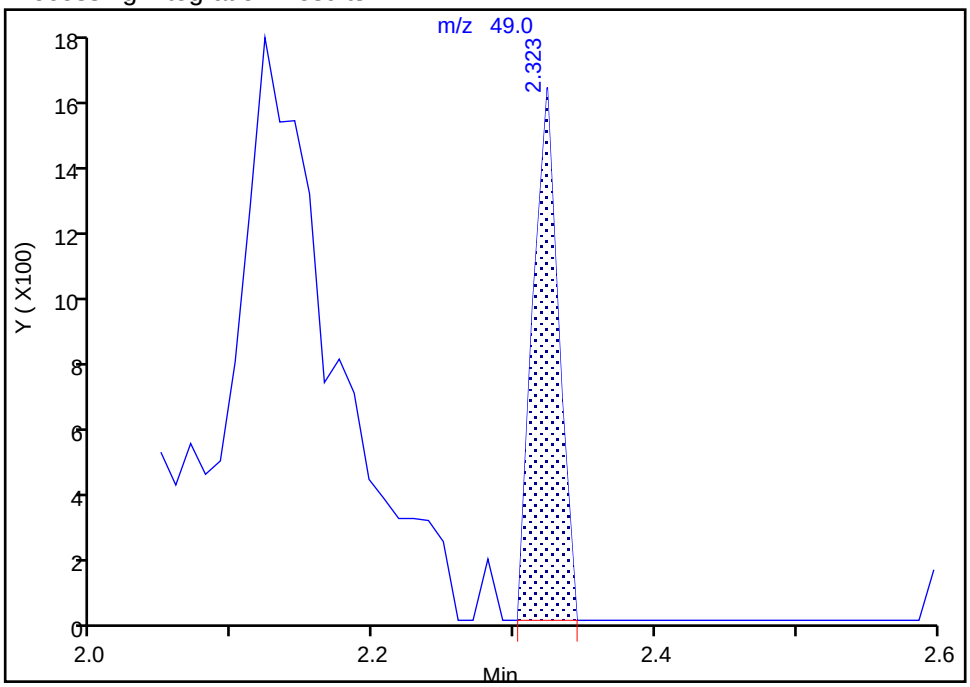
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2523.D				
Injection Date:	20-Jun-2020 15:34:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SEIFERTJ	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

15 Chloroethane, CAS: 75-00-3

Signal: 3

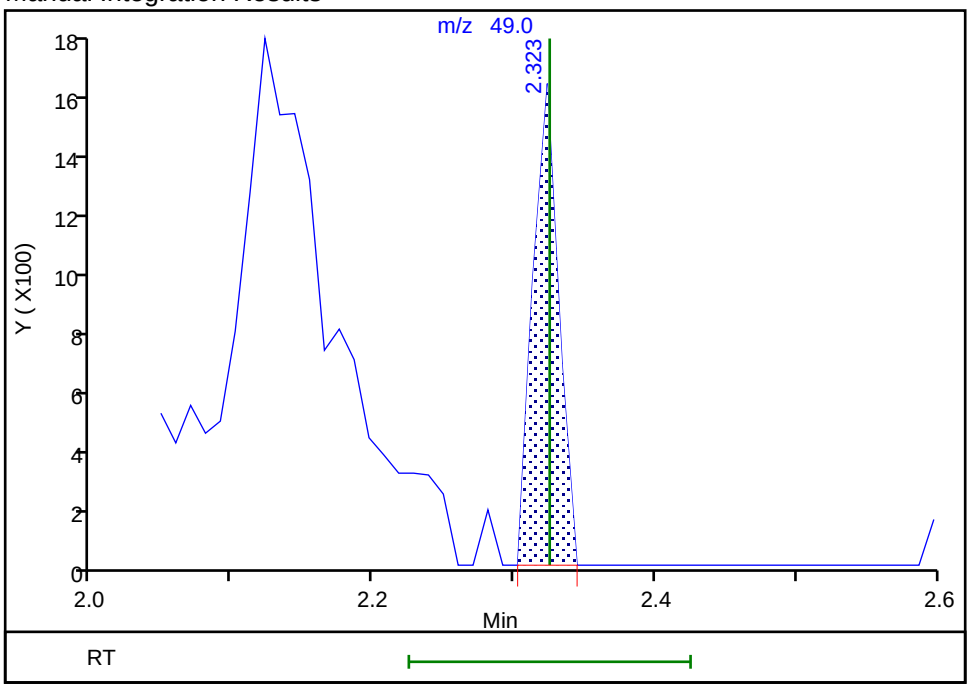
Processing Integration Results

RT: 2.32
Area: 2019
Amount: 1.387494
Amount Units: ug/l



Manual Integration Results

RT: 2.32
Area: 2019
Amount: 1.387494
Amount Units: ug/l



Reviewer: seifertj, 22-Jun-2020 13:21:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SOURCE 2020 Lab Sample ID: 280-137609-13

Matrix: Water Lab File ID: P2524.D

Analysis Method: 8260B Date Collected: 06/11/2020 11:30

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	1.9		1.0	0.40	0.17
75-25-2	Bromoform	1.2		1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U Q	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.61	J	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	2.7		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SOURCE 2020 Lab Sample ID: 280-137609-13

Matrix: Water Lab File ID: P2524.D

Analysis Method: 8260B Date Collected: 06/11/2020 11:30

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 15:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		81-118
460-00-4	4-Bromofluorobenzene (Surr)	100		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D
Lims ID: 280-137609-D-13
Client ID: SOURCE 2020
Sample Type: Client
Inject. Date: 20-Jun-2020 15:55:30 ALS Bottle#: 19 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-d-13 pH
Misc. Info.: 280-0092603-025
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:27:38 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:22:42

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.110	5.110	0.000	99	2687336	50.0	
*	2 Chlorobenzene-d5	119	7.643	7.642	0.001	87	616734	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	97	885539	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	92	641720	49.6	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	735960	48.3	
$	6 Toluene-d8 (Surr)	98	6.366	6.367	-0.001	93	2674410	49.3	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	83	975045	49.9	
	10 Dichlorodifluoromethane	85		1.671				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	27 Carbon disulfide	76		3.127				ND	
	29 Methyl acetate	43		3.190				ND	
	31 Methylene Chloride	84		3.306				ND	
	34 Methyl tert-butyl ether	73		3.496				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.246				ND	
	53 Chlorobromomethane	128		4.425				ND	
	54 Chloroform	83	4.477	4.488	-0.011	91	11093	0.6147	
	55 1,1,1-Trichloroethane	97		4.625				ND	
	56 Cyclohexane	56		4.689				ND	
	59 Carbon tetrachloride	117		4.752				ND	
	60 Benzene	78		4.900				ND	
	61 1,2-Dichloroethane	62		4.921				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
67 Trichloroethene	95		5.385				ND	
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	
74 Dichlorobromomethane	83	5.786	5.786	0.000	99	24929	1.88	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.609				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129	7.115	7.126	-0.011	91	25506	2.75	
88 Ethylene Dibromide	107		7.243				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173	8.424	8.435	-0.011	93	6532	1.19	
97 Isopropylbenzene	105		8.572				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.865				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

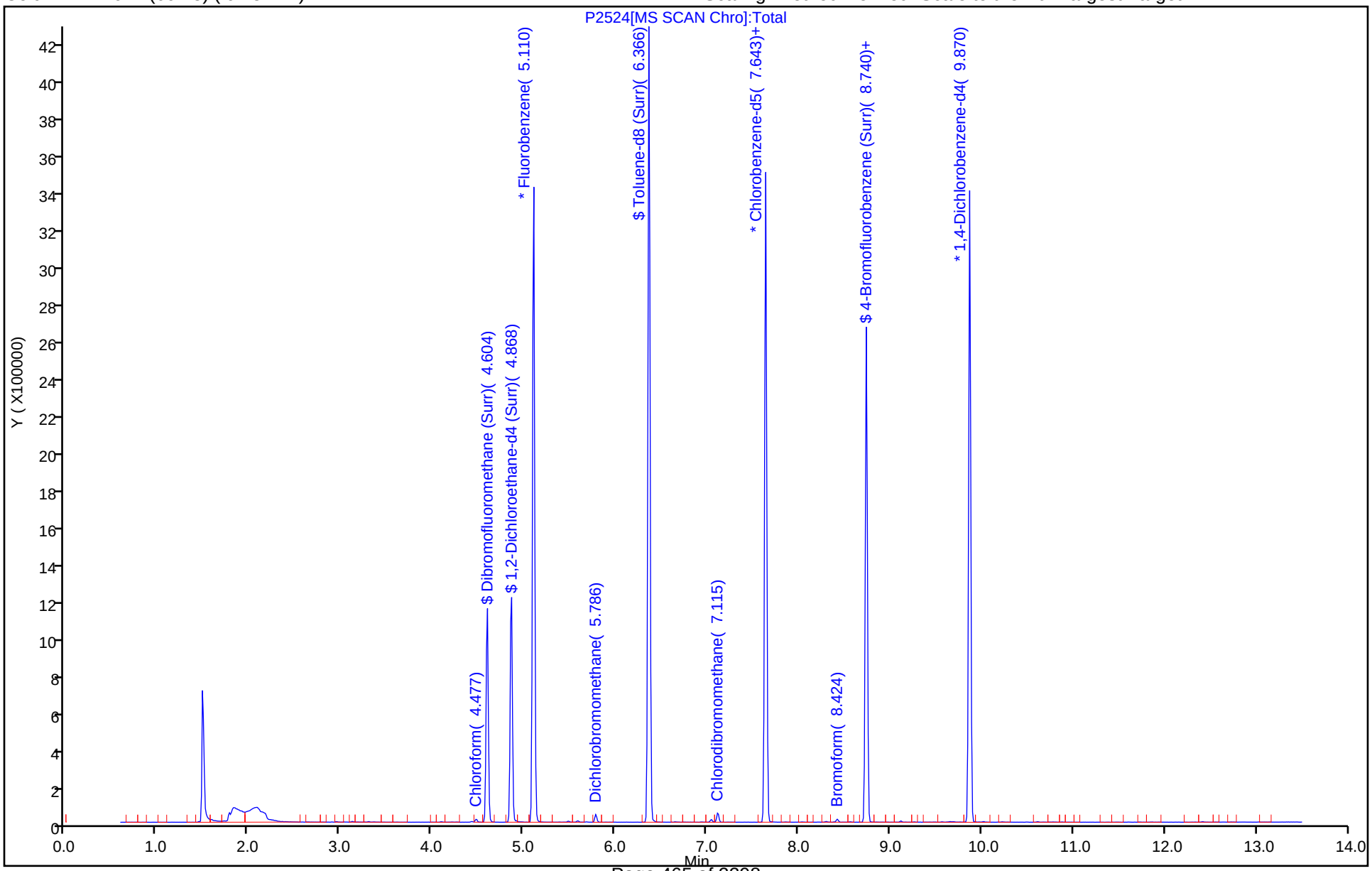
Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D

Injection Date:	20-Jun-2020 15:55:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-137609-D-13	Lab Sample ID:	280-137609-13	Worklist Smp#:	25
Client ID:	SOURCE 2020				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D				
Lims ID:	280-137609-D-13				
Client ID:	SOURCE 2020				
Sample Type:	Client				
Inject. Date:	20-Jun-2020 15:55:30	ALS Bottle#:	19	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-d-13 pH				
Misc. Info.:	280-0092603-025				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	22-Jun-2020 13:27:38	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1011				
First Level Reviewer: seifertj		Date:	22-Jun-2020 13:22:42		

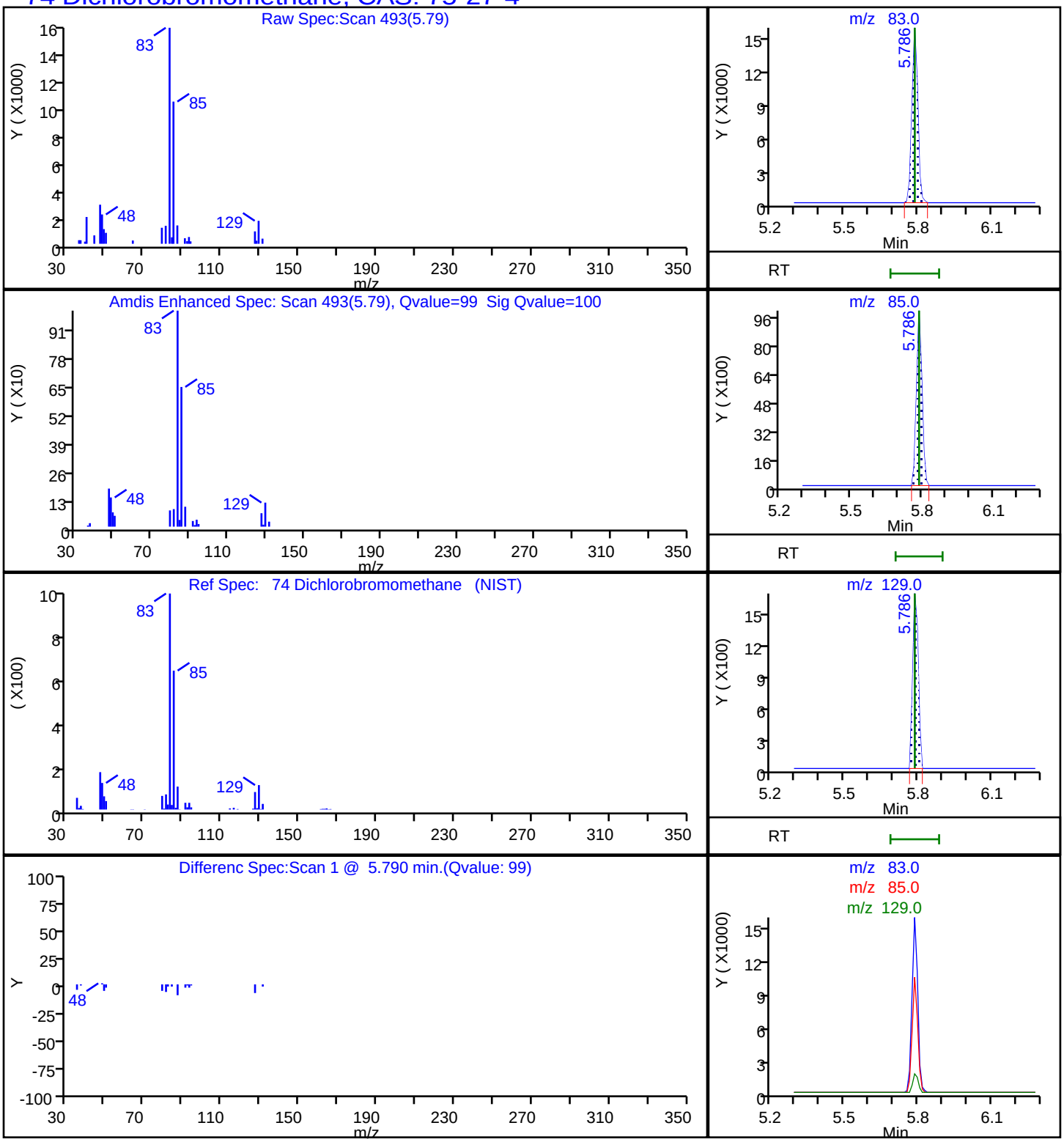
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.6	99.17
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.3	96.65
$ 6 Toluene-d8 (Surr)	50.0	49.3	98.56
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.9	99.77

Report Date: 22-Jun-2020 13:29:51 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D				
Injection Date:	20-Jun-2020 15:55:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-13	Lab Sample ID:	280-137609-13		
Client ID:	SOURCE 2020				
Operator ID:	SEIFERTJ	ALS Bottle#:	19	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

74 Dichlorobromomethane, CAS: 75-27-4



Report Date: 22-Jun-2020 13:29:51 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D

Injection Date: 20-Jun-2020 15:55:30 Instrument ID: VMS_P

Lims ID: 280-137609-D-13 Lab Sample ID: 280-137609-13

Client ID: SOURCE 2020

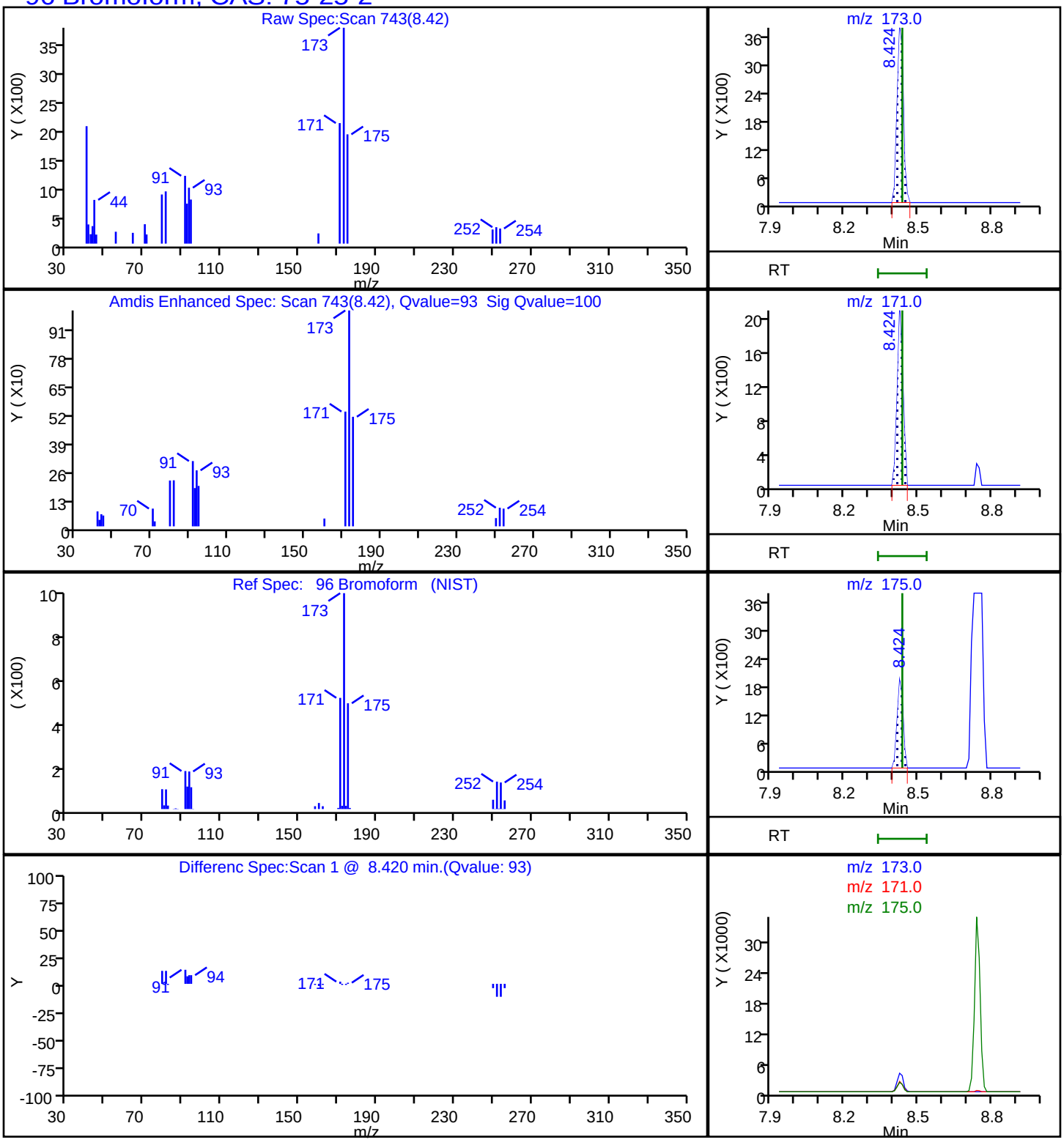
Operator ID: SEIFERTJ ALS Bottle#: 19 Worklist Smp#: 25

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

96 Bromoform, CAS: 75-25-2



Report Date: 22-Jun-2020 13:29:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D

Injection Date: 20-Jun-2020 15:55:30 Instrument ID: VMS_P

Lims ID: 280-137609-D-13 Lab Sample ID: 280-137609-13

Client ID: SOURCE 2020

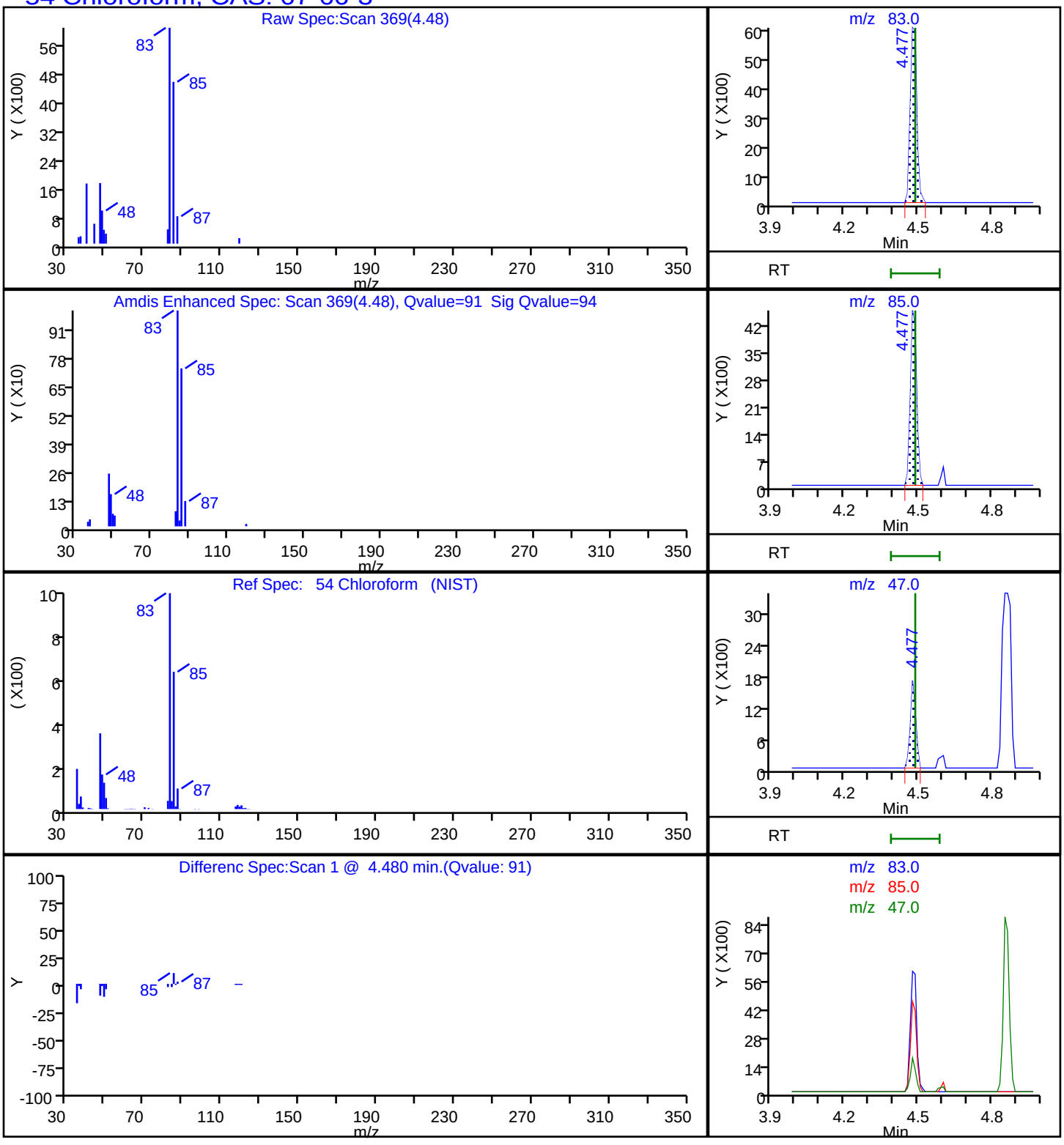
Operator ID: SEIFERTJ ALS Bottle#: 19 Worklist Smp#: 25

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

54 Chloroform, CAS: 67-66-3

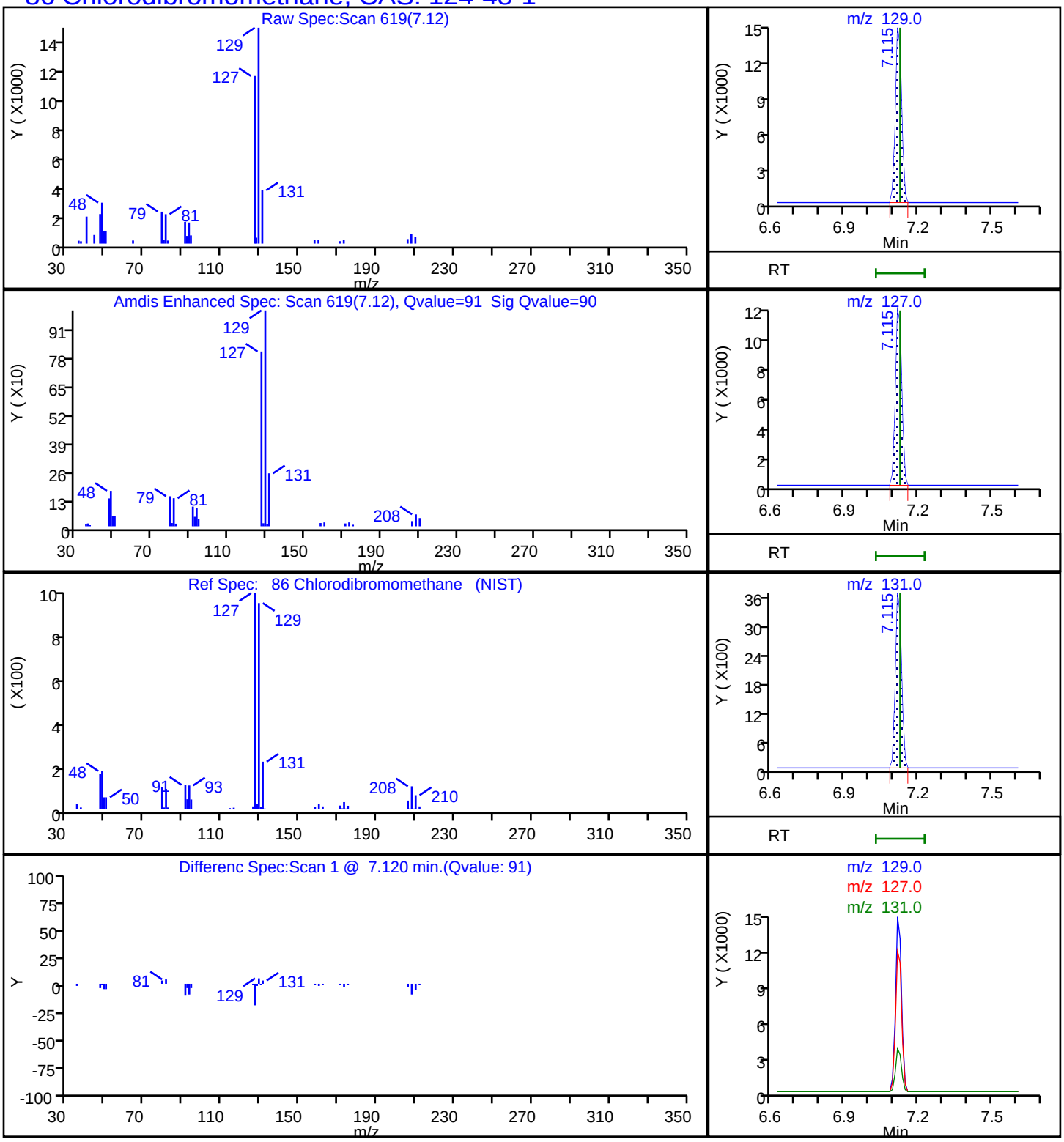


Report Date: 22-Jun-2020 13:29:51 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2524.D				
Injection Date:	20-Jun-2020 15:55:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-D-13	Lab Sample ID:	280-137609-13		
Client ID:	SOURCE 2020				
Operator ID:	SEIFERTJ	ALS Bottle#:	19	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

86 Chlorodibromomethane, CAS: 124-48-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: TB01-061120 Lab Sample ID: 280-137609-14

Matrix: Water Lab File ID: P2514.D

Analysis Method: 8260B Date Collected: 06/11/2020 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 12:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	1.8		1.0	0.40	0.17
75-25-2	Bromoform	1.2		1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U Q	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.61	J	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	2.8		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: TB01-061120 Lab Sample ID: 280-137609-14

Matrix: Water Lab File ID: P2514.D

Analysis Method: 8260B Date Collected: 06/11/2020 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 12:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D
Lims ID: 280-137609-A-14
Client ID: TB01-061120
Sample Type: Client
Inject. Date: 20-Jun-2020 12:22:30 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-a-14 pH
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:27:38 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:19:12

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.113	5.110	0.003	99	2666454	50.0	
*	2 Chlorobenzene-d5	119	7.645	7.642	0.003	86	609068	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	97	875501	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	640159	49.9	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	96	723720	47.9	
$	6 Toluene-d8 (Surr)	98	6.369	6.367	0.002	93	2669428	49.8	
$	7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	84	955639	49.5	
	10 Dichlorodifluoromethane	85		1.671				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	27 Carbon disulfide	76		3.127				ND	
	29 Methyl acetate	43		3.190				ND	
	31 Methylene Chloride	84		3.306				ND	
	34 Methyl tert-butyl ether	73		3.496				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.246				ND	
	53 Chlorobromomethane	128		4.425				ND	
	54 Chloroform	83	4.480	4.488	-0.008	92	10886	0.6079	
	55 1,1,1-Trichloroethane	97		4.625				ND	
	56 Cyclohexane	56		4.689				ND	
	59 Carbon tetrachloride	117		4.752				ND	
	60 Benzene	78		4.900				ND	
	61 1,2-Dichloroethane	62		4.921				ND	
	67 Trichloroethene	95		5.385				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	
74 Dichlorobromomethane	83	5.788	5.786	0.002	99	23048	1.75	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.609				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129	7.118	7.126	-0.008	90	25359	2.77	
88 Ethylene Dibromide	107		7.243				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173	8.426	8.435	-0.009	92	6543	1.21	
97 Isopropylbenzene	105		8.572				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.865				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

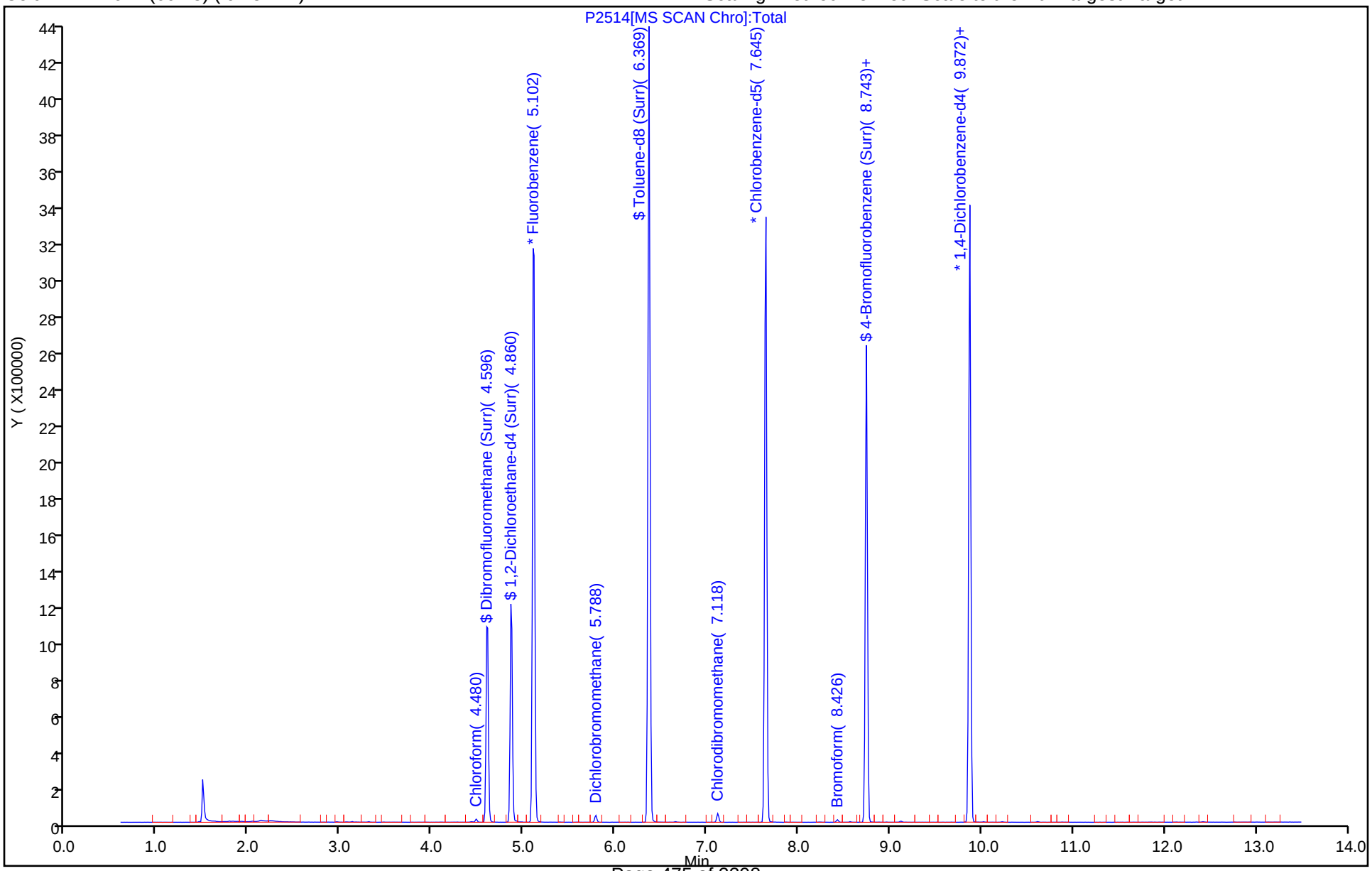
Report Date: 22-Jun-2020 13:29:43 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D

Injection Date:	20-Jun-2020 12:22:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-137609-A-14	Lab Sample ID:	280-137609-14	Worklist Smp#:	15
Client ID:	TB01-061120				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D				
Lims ID:	280-137609-A-14				
Client ID:	TB01-061120				
Sample Type:	Client				
Inject. Date:	20-Jun-2020 12:22:30	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-a-14 pH				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	22-Jun-2020 13:27:38	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: seifertj Date: 22-Jun-2020 13:19:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.70
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.9	95.79
$ 6 Toluene-d8 (Surr)	50.0	49.8	99.62
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.5	98.91

Report Date: 22-Jun-2020 13:29:43 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D

Injection Date: 20-Jun-2020 12:22:30 Instrument ID: VMS_P

Lims ID: 280-137609-A-14 Lab Sample ID: 280-137609-14

Client ID: TB01-061120

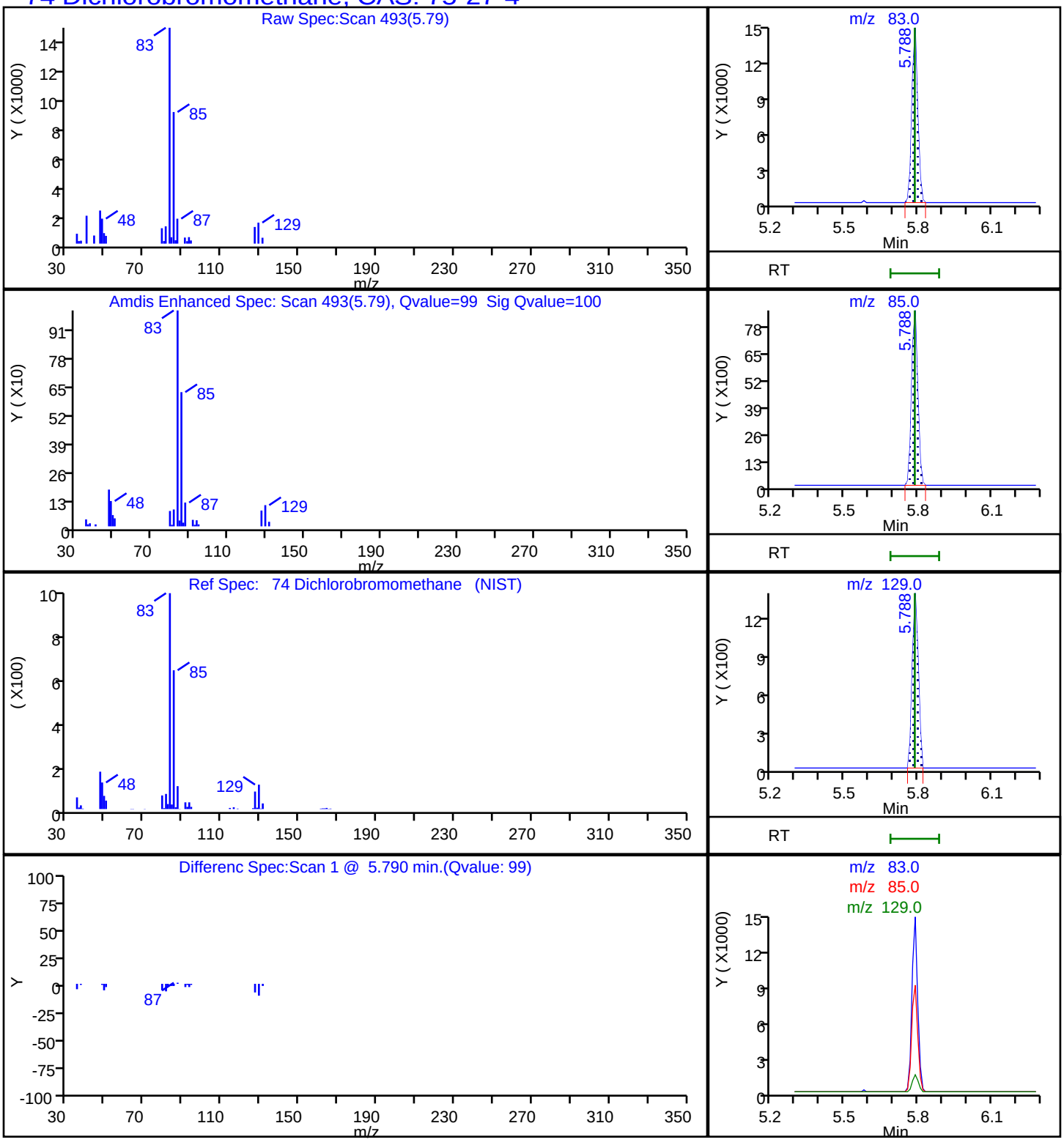
Operator ID: SEIFERTJ ALS Bottle#: 9 Worklist Smp#: 15

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

74 Dichlorobromomethane, CAS: 75-27-4



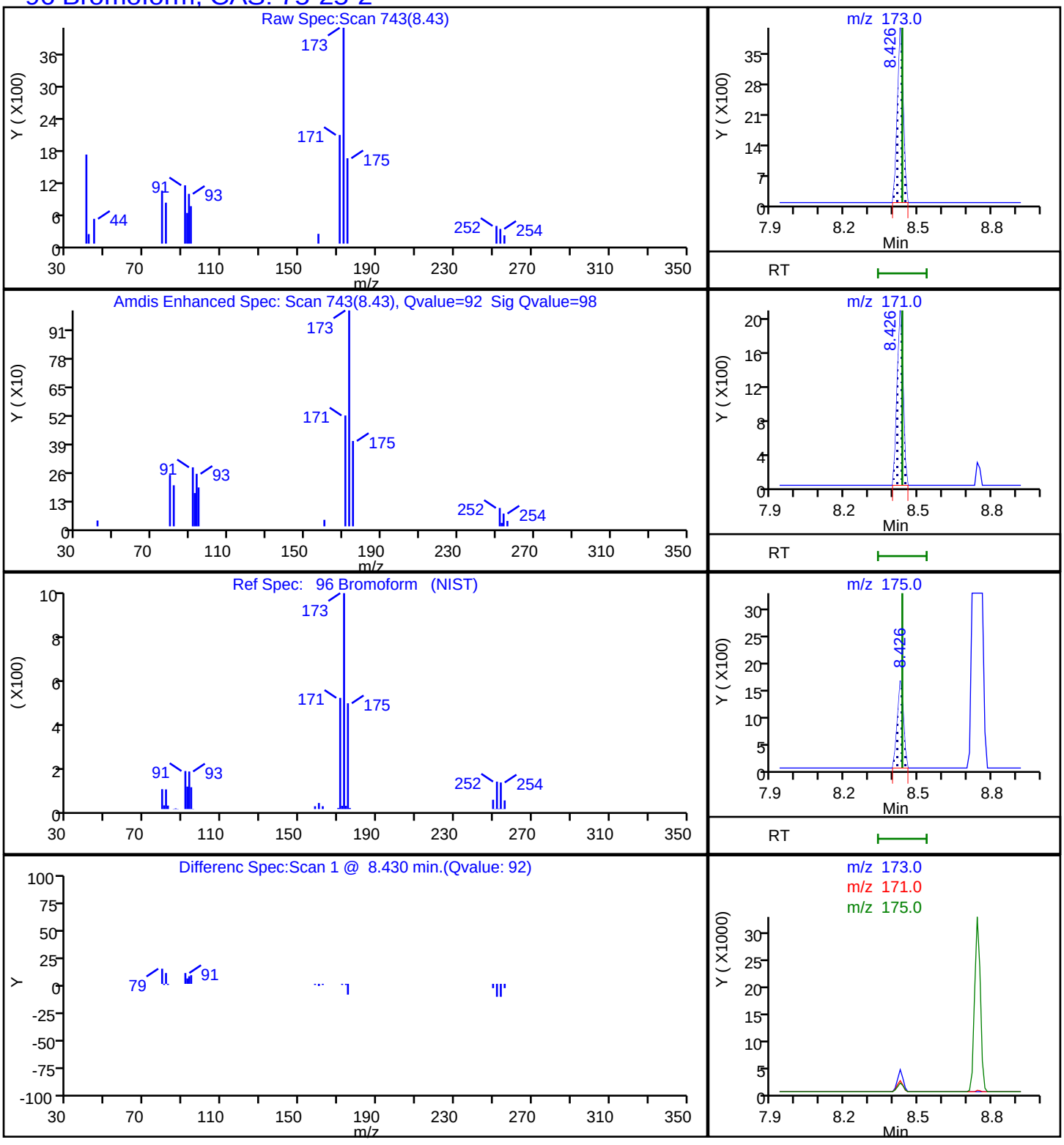
Report Date: 22-Jun-2020 13:29:43 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D

Injection Date:	20-Jun-2020 12:22:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-A-14	Lab Sample ID:	280-137609-14		
Client ID:	TB01-061120				
Operator ID:	SEIFERTJ	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

96 Bromoform, CAS: 75-25-2



Report Date: 22-Jun-2020 13:29:43 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D

Injection Date: 20-Jun-2020 12:22:30 Instrument ID: VMS_P

Lims ID: 280-137609-A-14 Lab Sample ID: 280-137609-14

Client ID: TB01-061120

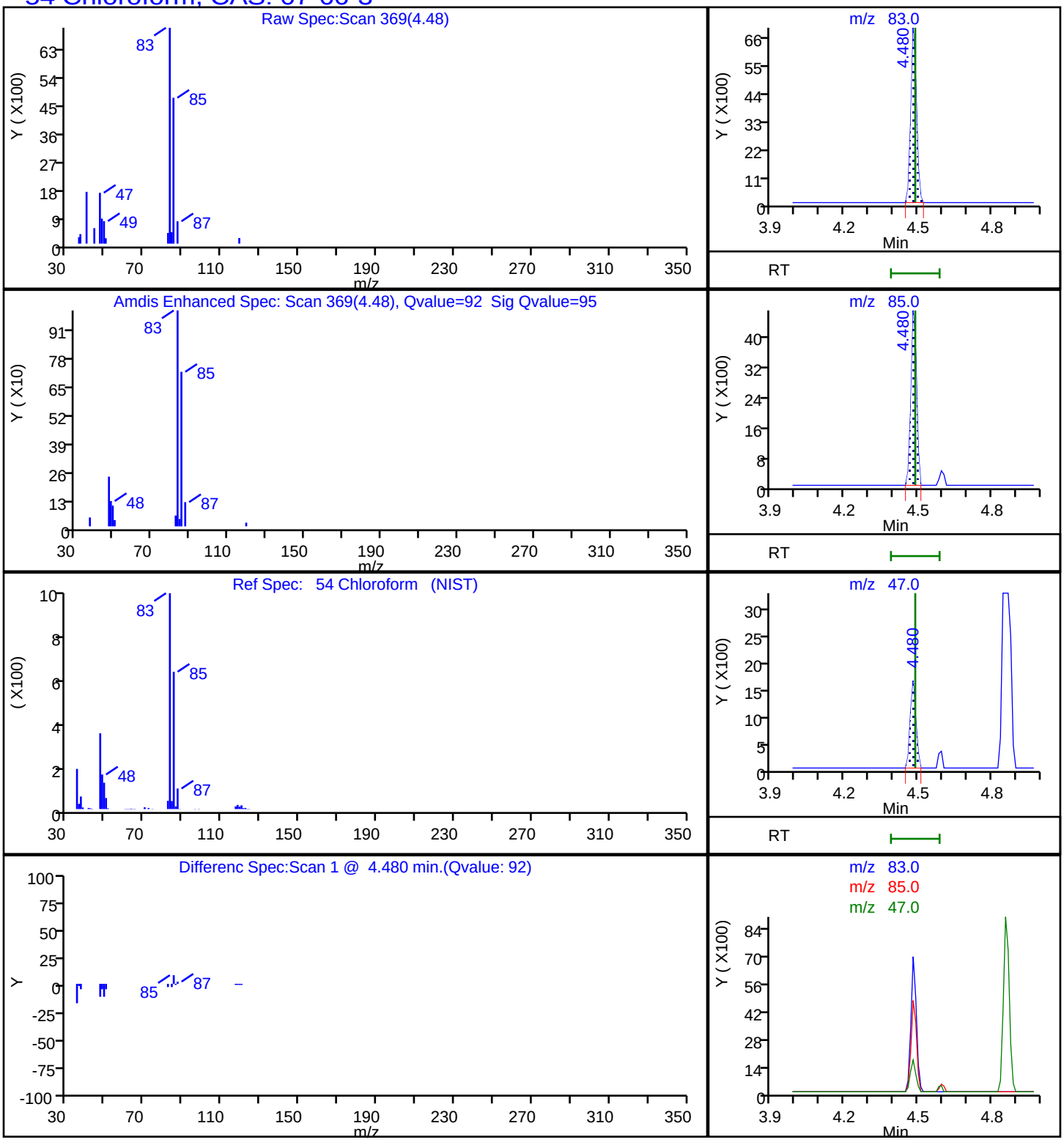
Operator ID: SEIFERTJ ALS Bottle#: 9 Worklist Smp#: 15

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

54 Chloroform, CAS: 67-66-3

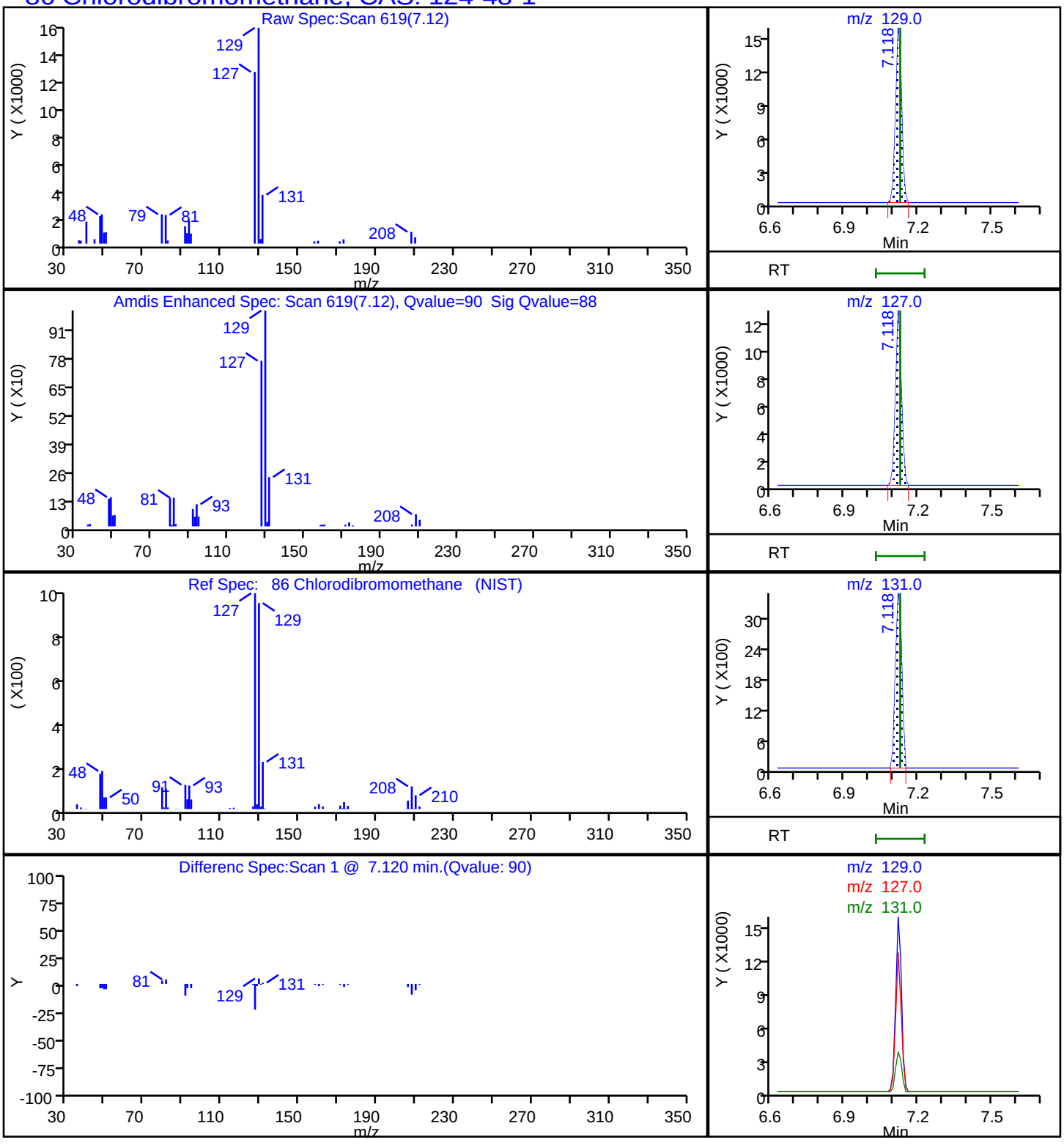


Report Date: 22-Jun-2020 13:29:43 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2514.D				
Injection Date:	20-Jun-2020 12:22:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-A-14	Lab Sample ID:	280-137609-14		
Client ID:	TB01-061120				
Operator ID:	SEIFERTJ	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

86 Chlorodibromomethane, CAS: 124-48-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: TB02-061120 Lab Sample ID: 280-137609-15

Matrix: Water Lab File ID: P2515.D

Analysis Method: 8260B Date Collected: 06/11/2020 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 12:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	1.8		1.0	0.40	0.17
75-25-2	Bromoform	1.2		1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U Q	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.63	J	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	2.8		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: TB02-061120 Lab Sample ID: 280-137609-15

Matrix: Water Lab File ID: P2515.D

Analysis Method: 8260B Date Collected: 06/11/2020 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 12:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	100		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D
Lims ID: 280-137609-A-15
Client ID: TB02-061120
Sample Type: Client
Inject. Date: 20-Jun-2020 12:44:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-a-15 pH
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:27:38 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:19:31

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.110	5.110	0.000	99	2694009	50.0	
*	2 Chlorobenzene-d5	119	7.643	7.642	0.001	87	622315	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	886358	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.603	4.604	-0.001	93	649825	50.1	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.868	-0.001	95	734088	48.1	
$	6 Toluene-d8 (Surr)	98	6.366	6.367	-0.001	93	2714038	49.6	
$	7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	82	974166	49.8	
	10 Dichlorodifluoromethane	85		1.671				ND	
	11 Chloromethane	50		1.839				ND	
	12 Vinyl chloride	62		1.945				ND	
	14 Bromomethane	94		2.230				ND	
	15 Chloroethane	64		2.325				ND	
	17 Trichlorofluoromethane	101		2.536				ND	
	23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937				ND	
	22 1,1-Dichloroethene	96		2.937				ND	
	24 Acetone	43		2.958				ND	
	27 Carbon disulfide	76		3.127				ND	
	29 Methyl acetate	43		3.190				ND	
	31 Methylene Chloride	84		3.306				ND	
	34 Methyl tert-butyl ether	73		3.496				ND	
	35 trans-1,2-Dichloroethene	96		3.517				ND	
	39 1,1-Dichloroethane	63		3.834				ND	
	44 2-Butanone (MEK)	43		4.214				ND	
	47 cis-1,2-Dichloroethene	96		4.246				ND	
	53 Chlorobromomethane	128		4.425				ND	
	54 Chloroform	83	4.477	4.488	-0.011	91	11317	0.6256	
	55 1,1,1-Trichloroethane	97		4.625				ND	
	56 Cyclohexane	56		4.689				ND	
	59 Carbon tetrachloride	117		4.752				ND	
	60 Benzene	78		4.900				ND	
	61 1,2-Dichloroethane	62		4.921				ND	
	67 Trichloroethene	95		5.385				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
69 Methylcyclohexane	55		5.586				ND	
70 1,2-Dichloropropane	63		5.596				ND	
74 Dichlorobromomethane	83	5.785	5.786	-0.001	99	24369	1.83	
77 cis-1,3-Dichloropropene	75		6.134				ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240				ND	
79 Toluene	91		6.430				ND	
80 trans-1,3-Dichloropropene	75		6.609				ND	
82 1,1,2-Trichloroethane	97		6.778				ND	
83 Tetrachloroethene	164		6.873				ND	
85 2-Hexanone	43		6.947				ND	
86 Chlorodibromomethane	129	7.115	7.126	-0.011	90	26054	2.78	
88 Ethylene Dibromide	107		7.243				ND	
90 Chlorobenzene	112		7.675				ND	
92 Ethylbenzene	106		7.749				ND	
93 m-Xylene & p-Xylene	106		7.865				ND	
94 o-Xylene	106		8.224				ND	
95 Styrene	104		8.245				ND	
96 Bromoform	173	8.424	8.435	-0.011	90	6379	1.15	
97 Isopropylbenzene	105		8.572				ND	
100 1,1,2,2-Tetrachloroethane	83		8.857				ND	
111 1,3-Dichlorobenzene	146		9.796				ND	
113 1,4-Dichlorobenzene	146		9.902				ND	
116 1,2-Dichlorobenzene	146		10.250				ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031				ND	
119 1,2,4-Trichlorobenzene	180		11.865				ND	
122 1,2,3-Trichlorobenzene	180		12.350				ND	
S 142 Xylenes, Total	106		0.000				ND	

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

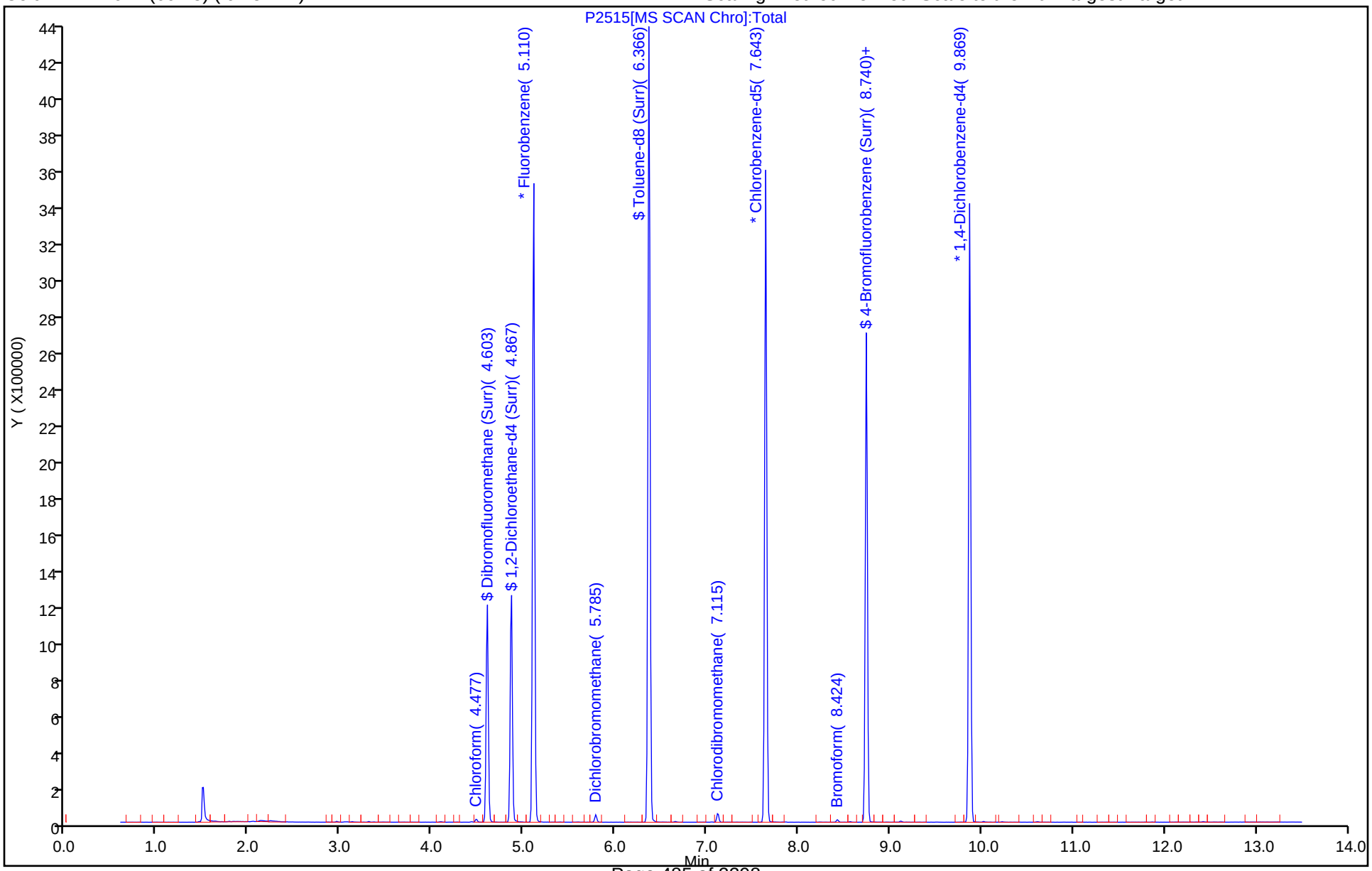
Report Date: 22-Jun-2020 13:29:44 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D

Injection Date:	20-Jun-2020 12:44:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-137609-A-15	Lab Sample ID:	280-137609-15	Worklist Smp#:	16
Client ID:	TB02-061120				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D				
Lims ID:	280-137609-A-15				
Client ID:	TB02-061120				
Sample Type:	Client				
Inject. Date:	20-Jun-2020 12:44:30	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-a-15 pH				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	22-Jun-2020 13:27:38	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: seifertj Date: 22-Jun-2020 13:19:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	50.1	100.17
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.17
$ 6 Toluene-d8 (Surr)	50.0	49.6	99.13
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.8	99.59

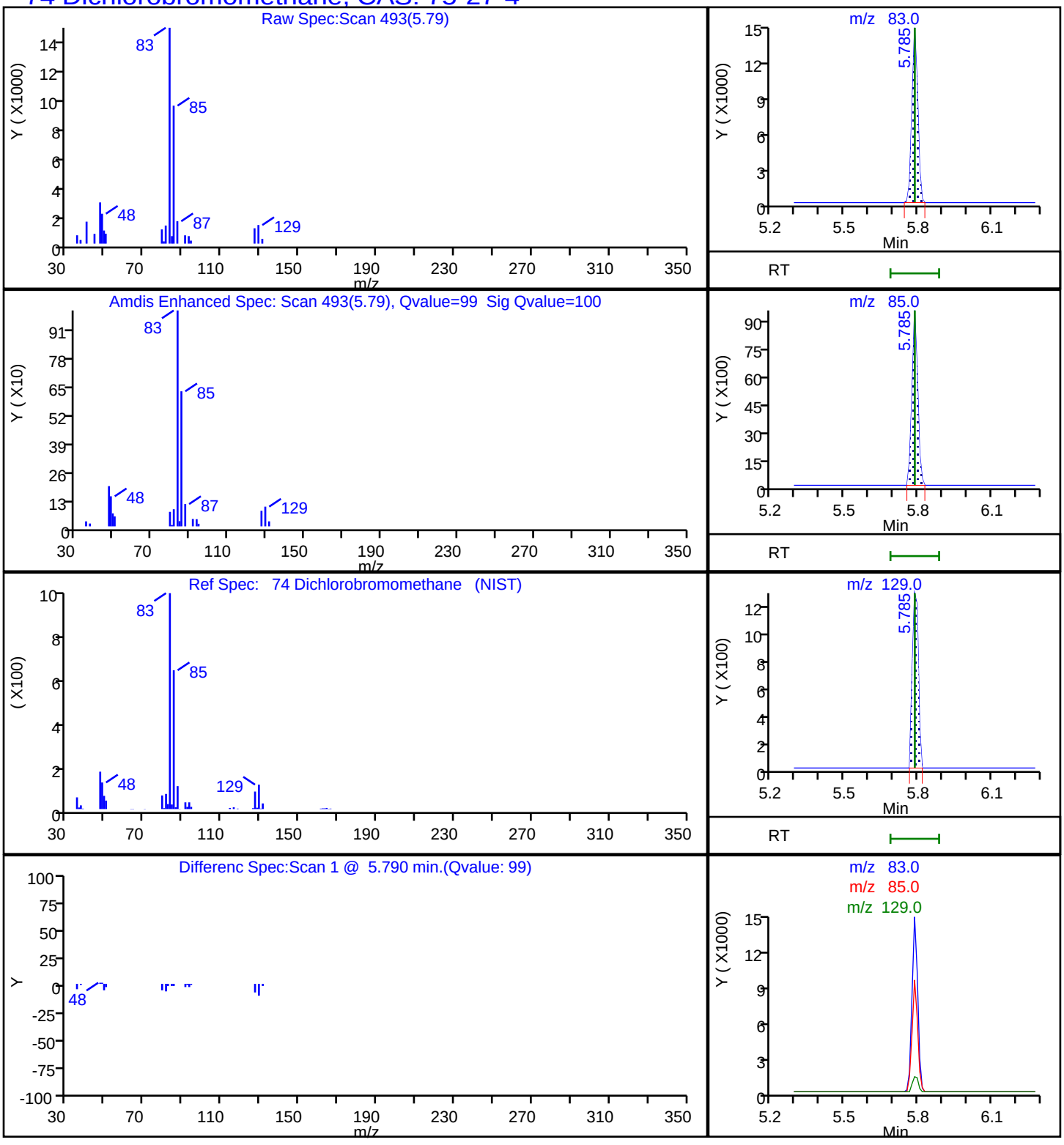
Report Date: 22-Jun-2020 13:29:44 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D

Injection Date:	20-Jun-2020 12:44:30	Instrument ID:	VMS_P		
Lims ID:	280-137609-A-15	Lab Sample ID:	280-137609-15		
Client ID:	TB02-061120				
Operator ID:	SEIFERTJ	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

74 Dichlorobromomethane, CAS: 75-27-4



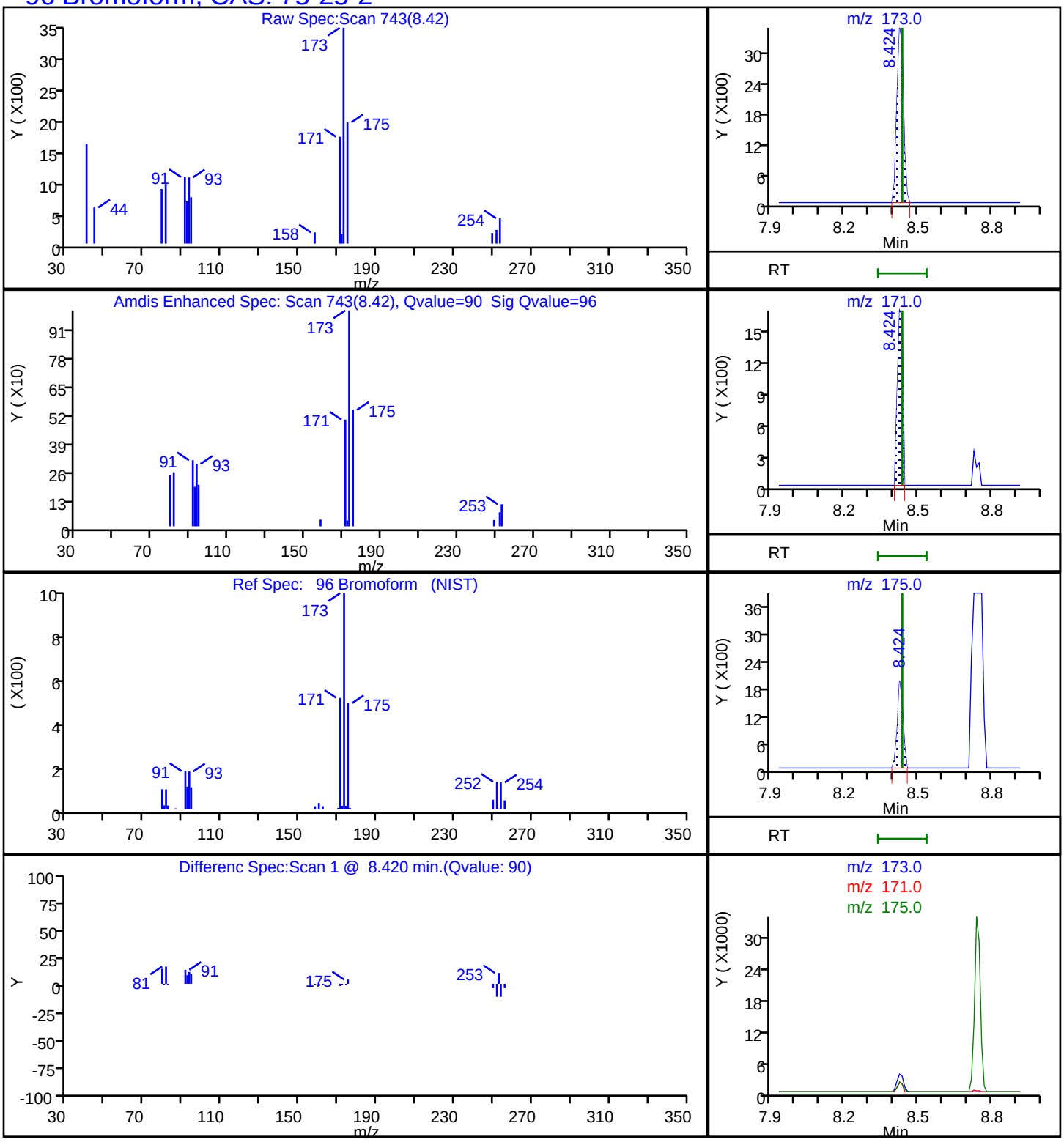
Report Date: 22-Jun-2020 13:29:44 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D

Injection Date:	20-Jun-2020 12:44:30	Instrument ID:	VMS_P
Lims ID:	280-137609-A-15	Lab Sample ID:	280-137609-15
Client ID:	TB02-061120		
Operator ID:	SEIFERTJ	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

96 Bromoform, CAS: 75-25-2



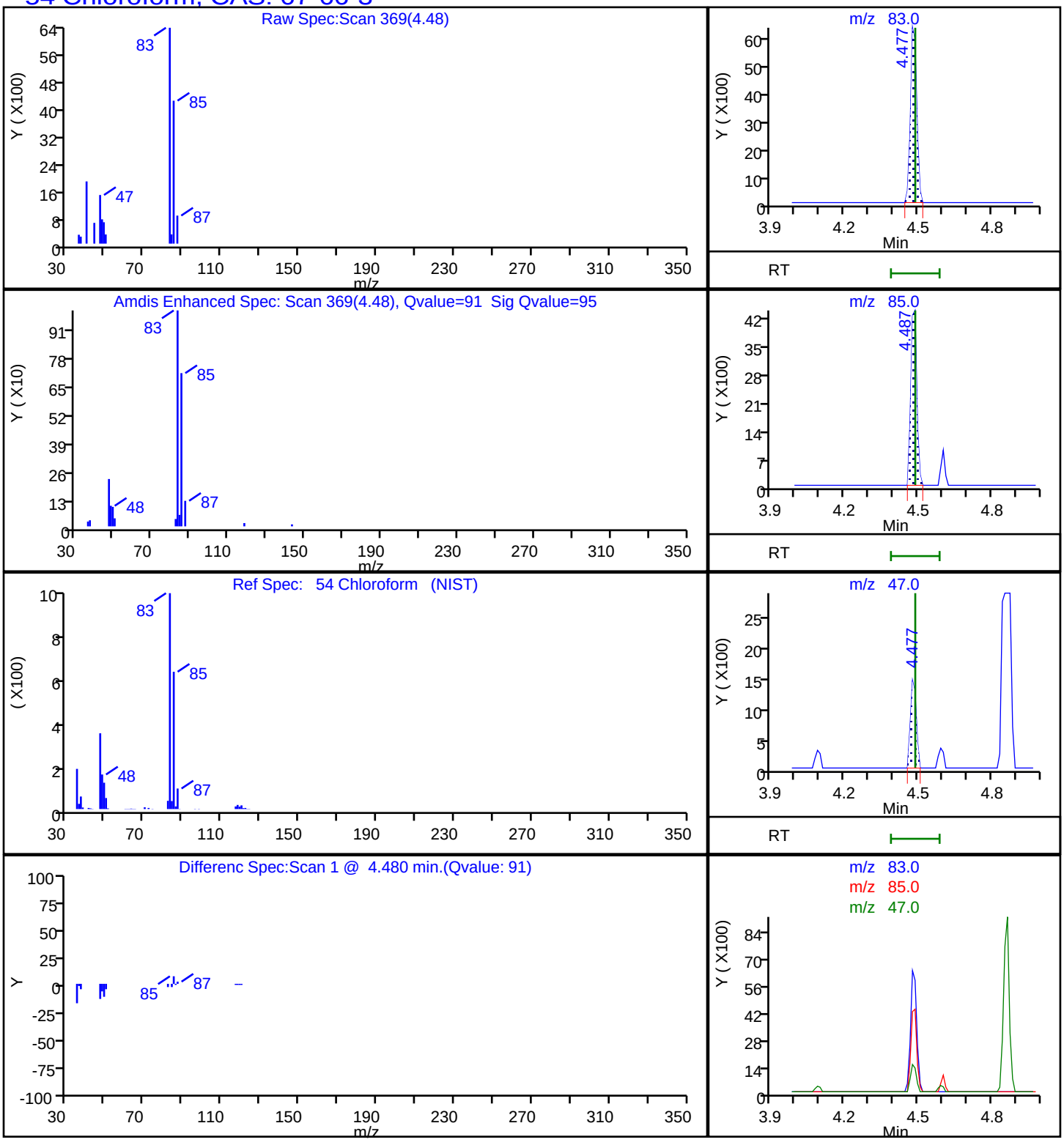
Report Date: 22-Jun-2020 13:29:44 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D

Injection Date:	20-Jun-2020 12:44:30	Instrument ID:	VMS_P
Lims ID:	280-137609-A-15	Lab Sample ID:	280-137609-15
Client ID:	TB02-061120		
Operator ID:	SEIFERTJ	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

54 Chloroform, CAS: 67-66-3



Report Date: 22-Jun-2020 13:29:44 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2515.D

Injection Date: 20-Jun-2020 12:44:30 Instrument ID: VMS_P

Lims ID: 280-137609-A-15 Lab Sample ID: 280-137609-15

Client ID: TB02-061120

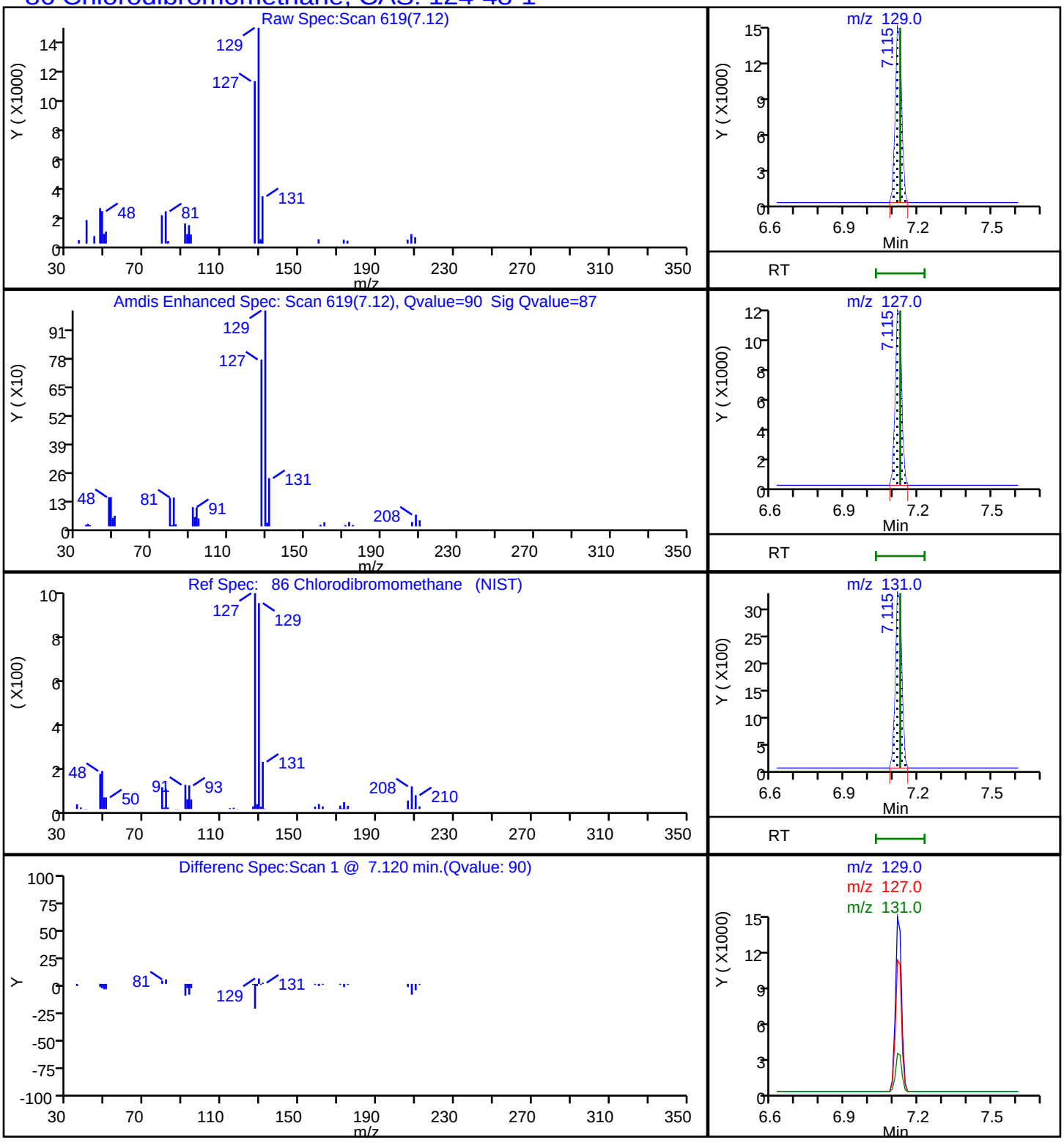
Operator ID: SEIFERTJ ALS Bottle#: 10 Worklist Smp#: 16

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

86 Chlorodibromomethane, CAS: 124-48-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-496958/12	P1658.D
Level 2	STD010 280-496958/13	P1659.D
Level 3	STD020 280-496958/14	P1660.D
Level 4	STD050 280-496958/15	P1661.D
Level 5	STD10 280-496958/16	P1662.D
Level 6	ICIS 280-496958/17	P1669.D
Level 7	STD75 280-496958/18	P1664.D
Level 8	STD100 280-496958/19	P1665.D
Level 9	STD200 280-496958/20	P1666.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1280 0.1501	0.1149 0.1496	0.1184 0.1413	0.1587 0.1427	0.1584	Ave		0.1402				11.6		15.0			
Chloromethane	0.3232 0.1998	0.2299 0.1994	0.1964 0.1852	0.2155 0.1824	0.2026	Lin2	0.0602	0.1892			0.1000				0.9930		0.9900
Vinyl chloride	0.2314 0.2184	0.2062 0.2201	0.2196 0.2055	0.2372 0.2023	0.2292	Ave		0.2189				5.6		30.0			
Bromomethane	+++++ 0.1030	0.2168 0.0763	0.1525 0.0850	0.0951 0.0778	0.0993	Lin1	0.1403	0.0808							0.9900		0.9900
Chloroethane	0.1523 0.1415	0.1337 0.1375	0.1415 0.1307	0.1471 0.1256	0.1447	Ave		0.1394				6.0		15.0			
Dichlorofluoromethane	0.3296 0.3281	0.3209 0.3327	0.3261 0.3139	0.3386 0.3130	0.3265	Ave		0.3255				2.6		15.0			
Trichlorofluoromethane	0.2742 0.2655	0.2673 0.2726	0.2651 0.2571	0.2943 0.2576	0.2782	Ave		0.2702				4.2		15.0			
Ethyl ether	0.1803 0.1669	0.1772 0.1686	0.1768 0.1674	0.1630 0.1640	0.1681	Ave		0.1703				3.7		15.0			
Acrolein	0.0464 0.0387	0.0442 0.0411	0.0442 0.0400	0.0422 0.0401	0.0417	Ave		0.0421				5.8		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1331 0.1247	0.1318 0.1206	0.1304 0.1126	0.1084 0.1136	0.1213	Ave		0.1218				7.4		15.0			
1,1-Dichloroethene	0.1645 0.1668	0.1700 0.1626	0.1758 0.1551	0.1451 0.1545	0.1629	Ave		0.1619				5.7		30.0			
Acetone	0.1008 0.0577	0.0916 0.0653	0.0854 0.0641	0.0735 0.0639	0.0682	Lin2	0.0807	0.0659							0.9910		0.9900
Iodomethane	+++++ 0.1499	0.1131 0.1719	0.0708 0.1647	0.0661 0.1537	0.0868	Lin	-0.110	0.1579							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon disulfide	0.8046 0.5572	0.5575 0.5272	0.5575 0.5112	0.4694 0.5023	0.5159	Lin2	0.1307	0.5000							0.9910		0.9900
Methyl acetate	0.1762 0.1493	0.1830 0.1684	0.1808 0.1658	0.1691 0.1676	0.1690	Ave		0.1699				5.8		15.0			
3-Chloro-1-propene	0.2966 0.2956	0.2886 0.2775	0.2992 0.2698	0.2475 0.2436	0.2799	Ave		0.2776				7.4		15.0			
Methylene Chloride	0.3943 0.1958	0.2548 0.1923	0.2351 0.1896	0.1969 0.1844	0.1984	Lin2	0.0975	0.1851							0.9950		0.9900
t-Butyl alcohol	0.0197 0.0184	0.0219 0.0224	0.0231 0.0224	0.0243 0.0232	0.0220	Ave		0.0219				8.4		15.0			
Acrylonitrile	0.0998 0.0828	0.0983 0.0906	0.0994 0.0885	0.0917 0.0865	0.0907	Ave		0.0920				6.5		15.0			
Methyl tert-butyl ether	0.5313 0.5438	0.5599 0.5554	0.5707 0.5501	0.5156 0.5436	0.5496	Ave		0.5467				2.9		15.0			
trans-1,2-Dichloroethene	0.2346 0.1914	0.1978 0.1852	0.1995 0.1799	0.1702 0.1777	0.1837	Ave		0.1911				9.9		15.0			
Hexane	1.2201 1.2204	1.2431 1.1594	1.2484 1.0737	1.0435 1.0817	1.2042	Ave		1.1661				6.8		15.0			
Vinyl acetate	0.4272 0.4424	0.4172 0.4249	0.4244 0.3910	0.3953 0.3763	0.4080	Ave		0.4119				5.1		15.0			
1,1-Dichloroethane	0.3531 0.3521	0.3670 0.3507	0.3738 0.3391	0.3257 0.3306	0.3553	Ave		0.3497			0.1000	4.5		15.0			
2-Butanone (MEK)	0.1132 0.0956	0.1174 0.1097	0.1212 0.1069	0.1179 0.1067	0.1144	Ave		0.1115				7.0		15.0			
cis-1,2-Dichloroethene	0.2455 0.2107	0.2225 0.2080	0.2256 0.2042	0.1901 0.2008	0.2057	Ave		0.2126				7.7		15.0			
2,2-Dichloropropane	0.2346 0.2600	0.2323 0.2427	0.2428 0.2372	0.2097 0.2386	0.2324	Ave		0.2367				5.6		15.0			
sec-Butyl Alcohol	+++++ 0.0156	0.0160 0.0191	0.0167 0.0191	0.0192 0.0194	0.0183	Ave		0.0179				8.8		15.0			
Bromochloromethane	0.1103 0.0951	0.0986 0.0924	0.1046 0.0900	0.0866 0.0859	0.0935	Ave		0.0952				8.5		15.0			
Tetrahydrofuran	+++++ 0.0637	0.0813 0.0734	0.0776 0.0720	0.0751 0.0733	0.0747	Ave		0.0739				6.8		15.0			
Chloroform	0.3713 0.3304	0.3491 0.3268	0.3704 0.3197	0.3106 0.3113	0.3322	Ave		0.3358				6.9		30.0			
1,1,1-Trichloroethane	0.2799 0.2695	0.2716 0.2667	0.2885 0.2571	0.2408 0.2562	0.2622	Ave		0.2658				5.3		15.0			
Cyclohexane	0.3614 0.3471	0.3496 0.3429	0.3564 0.3206	0.3006 0.3220	0.3469	Ave		0.3386				5.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3014 0.2783	0.2937 0.2786	0.2930 0.2674	0.2522 0.2646	0.2773	Ave		0.2785				5.6		15.0			
Carbon tetrachloride	0.2212 0.2289	0.2101 0.2239	0.2296 0.2168	0.1898 0.2187	0.2191	Ave		0.2176				5.5		15.0			
Isobutyl alcohol	0.0068 0.0067	0.0075 0.0081	0.0078 0.0080	0.0086 0.0081	0.0080	Ave		0.0077				8.2		15.0			
Benzene	0.8807 0.8178	0.8781 0.8113	0.8863 0.7917	0.7662 0.7598	0.8136	Ave		0.8229				5.9		15.0			
1,2-Dichloroethane	0.4331 0.2570	0.3464 0.2591	0.3180 0.2537	0.2691 0.2459	0.2705	Lin2	0.0904	0.2561							0.9990		0.9900
Trichloroethene	0.2440 0.2033	0.2019 0.1960	0.2175 0.1916	0.1770 0.1915	0.1954	Ave		0.2020				9.5		15.0			
2-Pentanone	0.1509 0.1490	0.1666 0.1703	0.1741 0.1669	0.1754 0.1662	0.1709	Ave		0.1656				5.7		15.0			
Methylcyclohexane	0.2890 0.2592	0.2645 0.2551	0.2720 0.2394	0.2292 0.2426	0.2580	Ave		0.2566				7.0		15.0			
1,2-Dichloropropane	0.2162 0.2134	0.2200 0.2148	0.2192 0.2098	0.1974 0.2099	0.2128	Ave		0.2126				3.2		30.0			
1,4-Dioxane	0.0030 0.0026	0.0031 0.0030	0.0029 0.0029	0.0032 0.0030	0.0030	Ave		0.0030				5.6		15.0			
Dibromomethane	+++++ 0.1195	0.1306 0.1219	0.1256 0.1200	0.1175 0.1187	0.1217	Ave		0.1219				3.5		15.0			
Bromodichloromethane	0.2692 0.2494	0.2373 0.2498	0.2577 0.2450	0.2275 0.2439	0.2403	Ave		0.2467				4.9		15.0			
2-Chloroethyl vinyl ether	0.1569 0.1449	0.1343 0.1583	0.1369 0.1500	0.1445 0.1530	0.1449	Ave		0.1471				5.6		15.0			
cis-1,3-Dichloropropene	1.3517 1.4097	1.2827 1.4222	1.3118 1.3849	1.1948 1.3836	1.3273	Ave		1.3410				5.3		15.0			
4-Methyl-2-pentanone (MIBK)	0.1902 0.1945	0.2117 0.2207	0.2257 0.2146	0.2242 0.2085	0.2238	Ave		0.2126				6.1		15.0			
Toluene	0.9569 0.8515	0.9193 0.8435	0.9477 0.8155	0.7939 0.7860	0.8538	Ave		0.8631				7.4		30.0			
trans-1,3-Dichloropropene	0.3010 0.2849	0.2412 0.2870	0.2559 0.2884	0.2309 0.2899	0.2520	Ave		0.2701				9.3		15.0			
Ethyl methacrylate	1.1290 1.2396	1.1658 1.3132	1.2049 1.2925	1.1698 1.2821	1.2639	Ave		1.2290				5.3		15.0			
1,1,2-Trichloroethane	0.1726 0.1720	0.1814 0.1758	0.1781 0.1721	0.1706 0.1713	0.1728	Ave		0.1741				2.1		15.0			
Tetrachloroethene	0.6677 0.6145	0.6612 0.6056	0.6400 0.5746	0.5482 0.5751	0.5991	Ave		0.6096				6.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,3-Dichloropropane	1.5992 1.4048	1.5251 1.4367	1.5542 1.3983	1.4090 1.3710	1.4762	Ave		1.4638				5.4		15.0			
2-Hexanone	0.5975 0.6030	0.6705 0.7005	0.7016 0.6807	0.7322 0.6547	0.7095	Ave		0.6723				6.9		15.0			
Dibromochloromethane	0.7724 0.7764	0.6982 0.7967	0.7313 0.7836	0.6931 0.7792	0.7432	Ave		0.7527				5.1		15.0			
Ethylene Dibromide	0.9651 0.7802	0.8162 0.8052	0.8192 0.7939	0.7446 0.7842	0.8129	Ave		0.8135				7.6		15.0			
1-Chlorohexane	1.8983 1.1687	1.4843 1.1328	1.3488 1.0878	1.0391 1.0718	1.1516	Lin2	0.4010	1.0933							0.9960		0.9900
Chlorobenzene	2.8431 2.2931	2.4882 2.2828	2.5613 2.2170	2.1276 2.1592	2.3153	Ave		2.3653			0.3000	9.7		15.0			
1,1,1,2-Tetrachloroethane	0.7470 0.7531	0.7135 0.7599	0.7208 0.7428	0.6719 0.7404	0.7068	Ave		0.7285				3.8		15.0			
Ethylbenzene	1.4916 1.2986	1.2985 1.3009	1.3772 1.2389	1.1724 1.2245	1.2833	Ave		1.2984				7.1		30.0			
m-Xylene & p-Xylene	1.7050 1.5716	1.6188 1.5634	1.6599 1.5211	1.3964 1.4782	1.5437	Ave		1.5620				6.0		15.0			
o-Xylene	1.6131 1.5082	1.4768 1.5167	1.6055 1.4652	1.3796 1.4336	1.5065	Ave		1.5006				5.0		15.0			
Styrene	2.6597 2.6050	2.4800 2.6021	2.6301 2.5303	2.2837 2.4262	2.5330	Ave		2.5278				4.7		15.0			
Bromoform	0.3772 0.4628	0.4078 0.4907	0.4224 0.4905	0.4134 0.4976	0.4420	Ave		0.4449			0.1000	9.6		15.0			
Isopropylbenzene	2.9207 2.6388	2.5972 2.6100	2.7993 2.4965	2.4207 2.4416	2.6282	Ave		2.6170				6.2		15.0			
Cyclohexanone	0.0425 0.0446	0.0481 0.0532	0.0526 0.0527	0.0587 0.0523	0.0561	Ave		0.0512				10.2		15.0			
1,1,2,2-Tetrachloroethane	0.8348 0.7118	0.8025 0.7375	0.7913 0.7239	0.8059 0.7211	0.7746	Ave		0.7670			0.3000	5.8		15.0			
Bromobenzene	0.7371 0.6049	0.6137 0.5992	0.6435 0.5917	0.5840 0.5870	0.5954	Ave		0.6174				7.8		15.0			
trans-1,4-Dichloro-2-butene	0.2012 0.1997	0.1801 0.2105	0.2016 0.2108	0.2070 0.2135	0.2092	Ave		0.2037				5.0		15.0			
1,2,3-Trichloropropane	0.2640 0.2073	0.2509 0.2189	0.2606 0.2148	0.2352 0.2141	0.2286	Ave		0.2327				9.1		15.0			
N-Propylbenzene	0.8025 0.7397	0.7405 0.7190	0.7765 0.7021	0.6300 0.6985	0.7180	Ave		0.7252				6.8		15.0			
2-Chlorotoluene	0.6633 0.6172	0.6146 0.6083	0.6690 0.5897	0.5711 0.5913	0.6015	Ave		0.6140				5.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	2.3551 2.1752	2.1731 2.1703	2.2493 2.0577	1.9914 2.0094	2.1530	Ave		2.1483				5.4		15.0			
4-Chlorotoluene	0.7545 0.6430	0.6464 0.6311	0.6551 0.6215	0.5833 0.6135	0.6400	Ave		0.6432				7.3		15.0			
tert-Butylbenzene	2.0608 1.8063	1.8002 1.7795	1.8966 1.7171	1.6183 1.6943	1.8020	Ave		1.7972				7.1		15.0			
1,2,4-Trimethylbenzene	2.4448 2.2016	2.1610 2.1649	2.2655 2.0984	2.0025 2.0249	2.1787	Ave		2.1714				6.1		15.0			
sec-Butylbenzene	0.5745 0.5380	0.5150 0.5254	0.5725 0.5014	0.4806 0.5092	0.5140	Ave		0.5256				6.0		15.0			
1,3-Dichlorobenzene	+++++ 1.1241	1.1551 1.1220	1.1918 1.0918	1.0646 1.0774	1.1141	Ave		1.1176				3.7		15.0			
4-Isopropyltoluene	2.4070 2.2834	2.1853 2.2155	2.2701 2.1420	1.9940 2.0784	2.2002	Ave		2.1973				5.5		15.0			
1,4-Dichlorobenzene	+++++ 1.1395	1.2920 1.1360	1.2862 1.0997	1.0905 1.0898	1.1263	Ave		1.1575				7.2		15.0			
n-Butylbenzene	2.3154 2.1037	2.1183 2.0423	2.1364 1.9557	1.8360 1.9070	2.0269	Ave		2.0491				6.9		15.0			
1,2-Dichlorobenzene	1.2828 1.0736	1.1374 1.0901	1.1690 1.0550	1.0580 1.0431	1.0822	Ave		1.1101				6.9		15.0			
1,2-Dibromo-3-Chloropropane	0.1158 0.1202	0.1217 0.1385	0.1267 0.1382	0.1354 0.1477	0.1274	Ave		0.1302				8.0		15.0			
1,2,4-Trichlorobenzene	+++++ 0.6191	0.6124 0.6199	0.6022 0.6100	0.5585 0.6283	0.5803	Ave		0.6038				3.9		15.0			
Hexachlorobutadiene	+++++ 0.2332	0.2237 0.2212	0.2383 0.2125	0.1939 0.2252	0.2098	Ave		0.2197				6.4		15.0			
Naphthalene	2.1471 1.8713	1.8463 2.0171	1.8364 1.9970	1.9310 2.0064	1.9153	Ave		1.9520				5.1		15.0			
1,2,3-Trichlorobenzene	+++++ 0.5563	0.5614 0.5723	0.5535 0.5616	0.5351 0.5738	0.5284	Ave		0.5553				2.9		15.0			
Dibromofluoromethane (Surr)	0.2407 0.2398	0.2411 0.2413	0.2405 0.2421	0.2404 0.2413	0.2400	Ave		0.2408				0.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2860 0.2733	0.2901 0.2807	0.2886 0.2795	0.2868 0.2766	0.2884	Ave		0.2833				2.1		15.0			
Toluene-d8 (Surr)	4.4266 4.3600	4.4563 4.3900	4.4525 4.3492	4.4175 4.3184	4.4261	Ave		4.3996				1.1		15.0			
4-Bromofluorobenzene (Surr)	1.1116 1.1011	1.1177 1.0955	1.1073 1.0784	1.1155 1.0882	1.1173	Ave		1.1036				1.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-496958/12	P1658.D
Level 2	STD010 280-496958/13	P1659.D
Level 3	STD020 280-496958/14	P1660.D
Level 4	STD050 280-496958/15	P1661.D
Level 5	STD10 280-496958/16	P1662.D
Level 6	ICIS 280-496958/17	P1669.D
Level 7	STD75 280-496958/18	P1664.D
Level 8	STD100 280-496958/19	P1665.D
Level 9	STD200 280-496958/20	P1666.D

ANALYTE	IS REF	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
Dichlorodifluoromethane	FB	Ave	3150 389403	5476 565032	11244 732362	38285 1521181	76509	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Lin2	7957 518425	10961 753095	18647 960082	51981 1944451	97832	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	5697 566674	9829 831473	20856 1065051	57213 2156770	110707	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Lin1	+++++ 267351	10332 288045	14480 440495	22950 829108	47958	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloroethane	FB	Ave	3750 367238	6373 519320	13433 677138	35486 1338855	69871	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	8114 851263	15298 1256526	30965 1626866	81685 3337067	157676	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	6751 688909	12743 1029796	25172 1332462	70991 2746174	134330	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	4438 433032	8448 636933	16790 867417	39315 1748580	81198	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	11284 992240	20816 1531495	41406 2049494	100409 4216625	198934	4.94 494	9.88 741	19.8 988	49.4 1975	98.8
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	3277 323522	6283 455666	12382 583334	26144 1210821	58580	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloroethene	FB	Ave	4050 432834	8105 614318	16694 803768	35001 1646977	78660	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Lin2	9926 599119	17462 986514	32447 1328269	70934 2724330	131651	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Iodomethane	FB	Lin	+++++ 388838	5391 649402	6724 853782	15949 1638641	41908	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon disulfide	FB	Lin2	19807 1445817	26575 1991209	52942 2649300	113233 5354499	249116	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	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
Methyl acetate	FB	Ave	8673 774814	17449 1272496	34344 1718245	81580 3572489	163271	1.00 100	2.00 150	4.00 200	10.0 400	20.0
3-Chloro-1-propene	FB	Ave	7301 767084	13759 1048018	28409 1398353	59709 2597002	135183	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Lin2	9706 508123	12146 726350	22322 982723	47489 1965595	95819	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
t-Butyl alcohol	FB	Ave	4840 476237	10427 844878	21901 1163015	58678 2468347	106253	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	24558 2147902	46835 3422488	94418 4584473	221256 9225550	437925	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	13079 1410931	26688 2097701	54197 2851275	124365 5795702	265416	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	5776 496599	9430 699589	18947 932241	41058 1894659	88732	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Ave	6679 719384	13212 991684	26560 1270824	56864 2650185	130470	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	21034 2295944	39777 3210150	80611 4053327	190703 8022993	394091	1.00 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	8693 913640	17492 1324489	35499 1757478	78561 3524595	171592	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	11145 992035	22389 1657714	46020 2217162	113733 4551845	221028	2.00 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	6043 546752	10604 785590	21423 1058127	45860 2140264	99347	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Ave	5776 674576	11073 916619	23061 1229414	50592 2543532	112216	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	+++++ 1213494	22900 2164234	47471 2977506	138755 6200156	265274	+++++ 1500	30.0 2250	60.0 3000	150 6000	300
Bromochloromethane	FB	Ave	2716 246645	4702 349155	9931 466481	20887 916158	45134	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	+++++ 330688	7747 554326	14739 746007	36254 1562767	72173	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
Chloroform	FB	Ave	9141 857391	16640 1234280	35178 1656789	74923 3319211	160425	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	6890 699182	12946 1007366	27396 1332750	58098 2730851	126621	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	8897 900566	16664 1295262	33843 1661826	72517 3432828	167527	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	7420 722099	14002 1052218	27826 1385678	60834 2820470	133932	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	5446 593951	10013 845679	21806 1123442	45792 2331188	105812	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	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
Isobutyl alcohol	FB	Ave	4174 435234	8906 768829	18462 1036679	51802 2158330	96963	12.5 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	21681 2121944	41858 3064336	84162 4103192	184836 8100543	392915	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Lin2	10662 666788	16511 978504	30197 1314638	64913 2621872	130615	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	FB	Ave	6006 527518	9625 740389	20658 992812	42697 2041486	94360	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	14862 1546919	31765 2572976	66130 3459479	169279 7086221	330037	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Methylcyclohexane	FB	Ave	7113 672553	12607 963441	25828 1240952	55290 2586376	124604	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	5321 553580	10485 811193	20818 1087577	47629 2237217	102772	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	1456 134765	2933 224792	5492 304422	15477 629142	29303	10.0 1000	20.0 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	+++++ 310055	6224 460404	11931 622019	28351 1265341	58752	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromodichloromethane	FB	Ave	6627 647111	11312 943348	24474 1269877	54885 2599633	116062	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	3862 375914	6403 598010	12997 777645	34848 1631027	69995	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	7399 830989	13633 1216450	27908 1639115	65109 3390099	143800	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	18727 2019078	40359 3333758	85733 4449408	216321 8889699	432244	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	23555 2209256	43821 3185871	89995 4226712	191514 8379887	412287	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Ave	7409 739208	11495 1084089	24304 1494637	55704 3090342	121709	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Ave	6180 730677	12391 1123161	25633 1529747	63746 3141319	136938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	4248 446203	8647 664027	16908 892221	41158 1826181	83459	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Ave	3655 362210	7028 517985	13615 680115	29875 1409071	64911	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Ave	8754 828087	16209 1228848	33064 1654933	76780 3359188	159930	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Ave	13083 1421906	28505 2396568	59708 3222482	159597 6416464	307466	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Dibromochloromethane	CBNZ d5	Ave	4228 457646	7421 681438	15559 927388	37770 1909184	80520	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	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
Ethylene Dibromide	CBNZ d5	Ave	5283 459893	8675 688729	17428 939615	40577 1921283	88076	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Lin2	10391 688923	15776 968916	28696 1287435	56622 2625923	124764	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chlorobenzene	CBNZ d5	Ave	15563 1351697	26446 1952494	54491 2623954	115938 5290337	250839	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4089 443921	7583 649959	15334 879154	36611 1814145	76578	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylbenzene	CBNZ d5	Ave	8165 765475	13801 1112684	29300 1466328	63884 3000265	139031	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	9333 926436	17205 1337167	35314 1800340	76090 3621670	167252	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZ d5	Ave	8830 889019	15696 1297286	34157 1734182	75177 3512399	163211	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZ d5	Ave	14559 1535593	26358 2225643	55954 2994821	124441 5944526	274427	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZ d5	Ave	2065 272832	4334 419665	8987 580498	22527 1219200	47885	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isopropylbenzene	DCBd 4	Ave	22793 2246623	39516 3269113	85484 4297903	188253 8473631	412530	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZ d5	Ave	9304 1051966	20432 1820858	44758 2497231	127996 5123084	242913	20.0 2000	40.0 3000	80.0 4000	200 8000	400
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	6515 606034	12209 923777	24163 1246192	62677 2502476	121592	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd 4	Ave	5752 514975	9337 750457	19650 1018637	45419 2037374	93464	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1570 169990	2740 263640	6156 362926	16098 740899	32840	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	2060 176525	3818 274122	7957 369781	18290 742902	35882	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd 4	Ave	6263 629799	11266 900621	23713 1208674	48994 2424282	112695	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chlorotoluene	DCBd 4	Ave	5176 525501	9351 761914	20430 1015287	44412 2052197	94413	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	18379 1851899	33063 2718338	68689 3542571	154872 6973832	337938	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Chlorotoluene	DCBd 4	Ave	5888 547434	9835 790475	20005 1069992	45363 2129083	100456	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
tert-Butylbenzene	DCBd 4	Ave	16082 1537848	27390 2228828	57918 2956162	125850 5880094	282847	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	19079 1874413	32879 2711650	69183 3612602	155733 7027541	341971	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 496958

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 16:26 Calibration End Date: 06/01/2020 20:33 Calibration ID: 44775

ANALYTE	IS REF	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
sec-Butylbenzene	DCBd 4	Ave	4483 458007	7836 658067	17482 863268	37379 1767152	80672	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 957029	17575 1405320	36396 1879660	82789 3739315	174866	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Isopropyltoluene	DCBd 4	Ave	18784 1944009	33248 2775007	69322 3687575	155069 7213150	345360	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 970134	19657 1422924	39277 1893150	84803 3782164	176794	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Butylbenzene	DCBd 4	Ave	18069 1790989	32229 2558085	65241 3366903	142782 6618361	318151	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	10011 914029	17305 1365427	35697 1816228	82278 3619991	169871	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	904 102294	1852 173521	3868 237845	10531 512443	19998	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 527062	9317 776485	18390 1050224	43433 2180721	91087	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 198550	3403 277038	7277 365804	15077 781505	32937	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd 4	Ave	16756 1593185	28091 2526472	56079 3438073	150170 6963268	300637	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 473636	8541 716876	16904 966833	41611 1991580	82932	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	592424 622098	574659 607631	571033 627480	579846 643049	579503	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	704070 709192	691353 706747	685163 724426	691950 737268	696272	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	2423114 2570054	2368182 2503188	2368091 2573814	2407178 2645158	2397674	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	867490 937409	850285 914750	845318 928259	867537 944124	876843	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jun-2020 16:26:30 ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:31 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 09:01:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.113	-0.001	98	2461662	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.646	-0.002	87	547396	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.873	-0.002	98	780394	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.605	4.607	-0.002	92	592424	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.869	4.871	-0.002	97	704070	50.0	50.5	
$ 6 Toluene-d8 (Surr)	98	6.367	6.369	-0.002	93	2423114	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.743	-0.001	85	867490	50.0	50.4	
10 Dichlorodifluoromethane	85	1.671	1.662	0.009	97	3150	0.5000	0.4563	a
11 Chloromethane	50	1.840	1.842	-0.002	99	7957	0.5000	0.5358	a
12 Vinyl chloride	62	1.946	1.937	0.009	97	5697	0.5000	0.5286	
14 Bromomethane	94	2.241	2.232	0.009	88	6640	0.5000	-0.0676	a
15 Chloroethane	64	2.326	2.327	-0.001	98	3750	0.5000	0.5464	
16 Dichlorofluoromethane	67	2.505	2.496	0.009	97	8114	0.5000	0.5063	
17 Trichlorofluoromethane	101	2.537	2.538	-0.001	97	6751	0.5000	0.5075	
19 Ethyl ether	59	2.748	2.749	-0.001	92	4438	0.5000	0.5294	
21 Acrolein	56	2.853	2.855	-0.002	99	11284	4.94	5.45	
22 1,1-Dichloroethene	96	2.948	2.939	0.009	95	4050	0.5000	0.5080	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.948	2.939	0.009	81	3277	0.5000	0.5463	
24 Acetone	43	2.959	2.960	-0.001	100	9926	2.00	1.84	a
26 Iodomethane	142	3.075	3.066	0.009	98	5837	0.5000	1.45	a
27 Carbon disulfide	76	3.128	3.129	-0.001	99	19807	0.5000	0.5433	a
29 Methyl acetate	43	3.191	3.193	-0.002	98	8673	1.00	1.04	
30 3-Chloro-1-propene	41	3.212	3.214	-0.002	90	7301	0.5000	0.5342	
31 Methylene Chloride	84	3.307	3.309	-0.002	92	9706	0.5000	0.5381	a
32 2-Methyl-2-propanol	59	3.349	3.351	-0.002	97	4840	5.00	4.49	
33 Acrylonitrile	53	3.476	3.467	0.009	97	24558	5.00	5.42	
34 Methyl tert-butyl ether	73	3.497	3.499	-0.002	96	13079	0.5000	0.4859	
35 trans-1,2-Dichloroethene	96	3.518	3.509	0.009	96	5776	0.5000	0.6138	
36 Hexane	57	3.708	3.710	-0.002	92	6679	0.5000	0.5232	
38 Vinyl acetate	43	3.814	3.805	0.009	95	21034	1.00	1.04	
39 1,1-Dichloroethane	63	3.835	3.836	-0.001	95	8693	0.5000	0.5049	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.225	4.216	0.009	99	11145	2.00	2.03	
47 cis-1,2-Dichloroethene	96	4.246	4.248	-0.002	83	6043	0.5000	0.5775	
48 2,2-Dichloropropane	77	4.257	4.258	-0.001	90	5776	0.5000	0.4956	
50 sec-Butyl Alcohol	45	4.331	4.322	0.009	96	9480	15.0	10.7	
52 Tetrahydrofuran	42	4.436	4.427	0.009	96	4387	1.00	1.21	
53 Chlorobromomethane	128	4.426	4.427	-0.001	96	2716	0.5000	0.5793	
54 Chloroform	83	4.489	4.480	0.009	92	9141	0.5000	0.5530	
55 1,1,1-Trichloroethane	97	4.626	4.628	-0.002	97	6890	0.5000	0.5264	
56 Cyclohexane	56	4.689	4.691	-0.002	91	8897	0.5000	0.5337	
57 1,1-Dichloropropene	75	4.742	4.744	-0.002	95	7420	0.5000	0.5411	
59 Carbon tetrachloride	117	4.753	4.754	-0.001	93	5446	0.5000	0.5084	
58 Isobutyl alcohol	41	4.753	4.754	-0.001	87	4174	12.5	11.0	
60 Benzene	78	4.901	4.902	-0.001	95	21681	0.5000	0.5352	
61 1,2-Dichloroethane	62	4.922	4.923	-0.001	95	10662	0.5000	0.4925	
66 n-Heptane	43	5.080	5.082	-0.002	73	7057	0.5000	0.5835	
67 Trichloroethene	95	5.386	5.388	-0.002	96	6006	0.5000	0.6038	
68 2-Pentanone	43	5.491	5.483	0.008	98	14862	2.00	1.82	
69 Methylcyclohexane	55	5.586	5.578	0.008	91	7113	0.5000	0.5631	
70 1,2-Dichloropropane	63	5.597	5.599	-0.002	96	5321	0.5000	0.5084	
72 1,4-Dioxane	88	5.639	5.630	0.009	77	1456	10.0	10.0	
73 Dibromomethane	93	5.671	5.662	0.009	91	4066	0.5000	0.6773	
74 Dichlorobromomethane	83	5.787	5.789	-0.002	98	6627	0.5000	0.5457	
76 2-Chloroethyl vinyl ether	63	5.998	5.989	0.009	89	3862	0.5000	0.5333	
77 cis-1,3-Dichloropropene	75	6.146	6.137	0.009	94	7399	0.5000	0.5040	
78 4-Methyl-2-pentanone (MIBK)	43	6.241	6.242	-0.001	96	18727	2.00	1.79	
79 Toluene	91	6.431	6.432	-0.001	98	23555	0.5000	0.5543	
80 trans-1,3-Dichloropropene	75	6.610	6.601	0.009	97	7409	0.5000	0.5571	
81 Ethyl methacrylate	69	6.631	6.622	0.009	88	6180	0.5000	0.4593	
82 1,1,2-Trichloroethane	97	6.779	6.781	-0.002	90	4248	0.5000	0.4957	
83 Tetrachloroethene	164	6.874	6.876	-0.002	87	3655	0.5000	0.5477	
84 1,3-Dichloropropane	76	6.927	6.928	-0.001	89	8754	0.5000	0.5462	
85 2-Hexanone	43	6.948	6.939	0.009	94	13083	2.00	1.78	
86 Chlorodibromomethane	129	7.127	7.118	0.009	89	4228	0.5000	0.5131	
88 Ethylene Dibromide	107	7.243	7.245	-0.002	98	5283	0.5000	0.5932	
89 1-Chlorohexane	91	7.634	7.635	-0.001	67	10391	0.5000	0.5014	
90 Chlorobenzene	112	7.676	7.678	-0.002	92	15563	0.5000	0.6010	
92 Ethylbenzene	106	7.750	7.751	-0.001	99	8165	0.5000	0.5744	
91 1,1,1,2-Tetrachloroethane	131	7.750	7.751	-0.001	91	4089	0.5000	0.5127	
93 m-Xylene & p-Xylene	106	7.866	7.868	-0.002	99	9333	0.5000	0.5458	
94 o-Xylene	106	8.235	8.226	0.009	95	8830	0.5000	0.5375	
95 Styrene	104	8.246	8.247	-0.001	94	14559	0.5000	0.5261	
96 Bromoform	173	8.436	8.427	0.009	91	2065	0.5000	0.4239	
97 Isopropylbenzene	105	8.573	8.575	-0.002	95	22793	0.5000	0.5580	
99 Cyclohexanone	55	8.668	8.670	-0.002	93	9304	20.0	16.6	
100 1,1,2,2-Tetrachloroethane	83	8.858	8.859	-0.001	93	6515	0.5000	0.5442	
101 Bromobenzene	156	8.889	8.891	-0.002	96	5752	0.5000	0.5969	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.891	-0.002	44	1570	0.5000	0.4938	
103 1,2,3-Trichloropropane	110	8.921	8.923	-0.002	83	2060	0.5000	0.5672	
104 N-Propylbenzene	120	8.974	8.965	0.009	99	6263	0.5000	0.5533	
105 2-Chlorotoluene	126	9.069	9.071	-0.002	95	5176	0.5000	0.5401	
106 1,3,5-Trimethylbenzene	105	9.143	9.144	-0.001	94	18379	0.5000	0.5481	
107 4-Chlorotoluene	126	9.185	9.187	-0.002	97	5888	0.5000	0.5866	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.449	9.450	-0.001	92	16082	0.5000	0.5733	
109 1,2,4-Trimethylbenzene	105	9.512	9.514	-0.002	97	19079	0.5000	0.5630	
110 sec-Butylbenzene	134	9.670	9.672	-0.002	94	4483	0.5000	0.5465	
111 1,3-Dichlorobenzene	146	9.797	9.799	-0.002	97	11444	0.5000	0.6561	
112 4-Isopropyltoluene	119	9.818	9.820	-0.002	96	18784	0.5000	0.5477	
113 1,4-Dichlorobenzene	146	9.903	9.904	-0.001	88	12135	0.5000	0.6717	
115 n-Butylbenzene	91	10.219	10.221	-0.002	98	18069	0.5000	0.5650	
116 1,2-Dichlorobenzene	146	10.261	10.252	0.009	96	10011	0.5000	0.5778	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.033	-0.001	74	904	0.5000	0.4449	
119 1,2,4-Trichlorobenzene	180	11.865	11.856	0.009	93	6414	0.5000	0.6805	
120 Hexachlorobutadiene	225	12.003	12.004	-0.001	94	2919	0.5000	0.8512	
121 Naphthalene	128	12.129	12.131	-0.002	97	16756	0.5000	0.5500	
122 1,2,3-Trichlorobenzene	180	12.351	12.352	-0.001	93	5564	0.5000	0.6420	
S 139 1,2-Dichloroethene, Total (URS)	96				0		1.00	1.19	
S 142 Xylenes, Total	106				0		1.00	1.08	
S 140 Trihalomethanes, Total	1				0		2.00	2.04	
S 143 Xylenes, Total (URS)	1				0		1.00	1.08	
S 146 Total BTEX	1				0			2.75	
S 145 1,3-Dichloropropene, Total	1				0		1.00	1.06	
S 144 1,2-Dichloroethene, Total	1				0		1.00	1.19	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MV-Gas A_00058	Amount Added:	0.10	Units: uL	
MV-MegaMainA_00034	Amount Added:	0.25	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

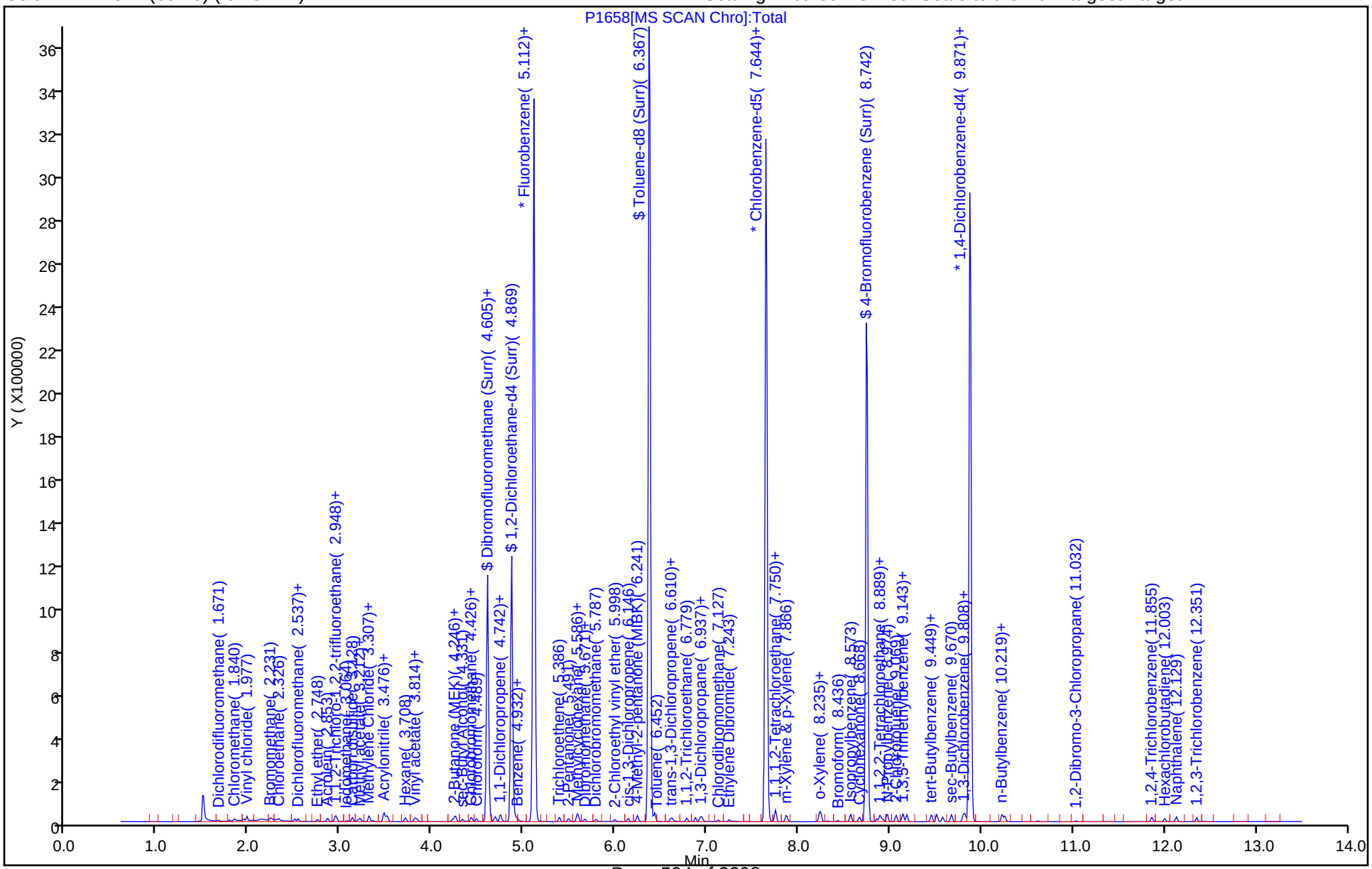
Report Date: 02-Jun-2020 11:15:32 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D

Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

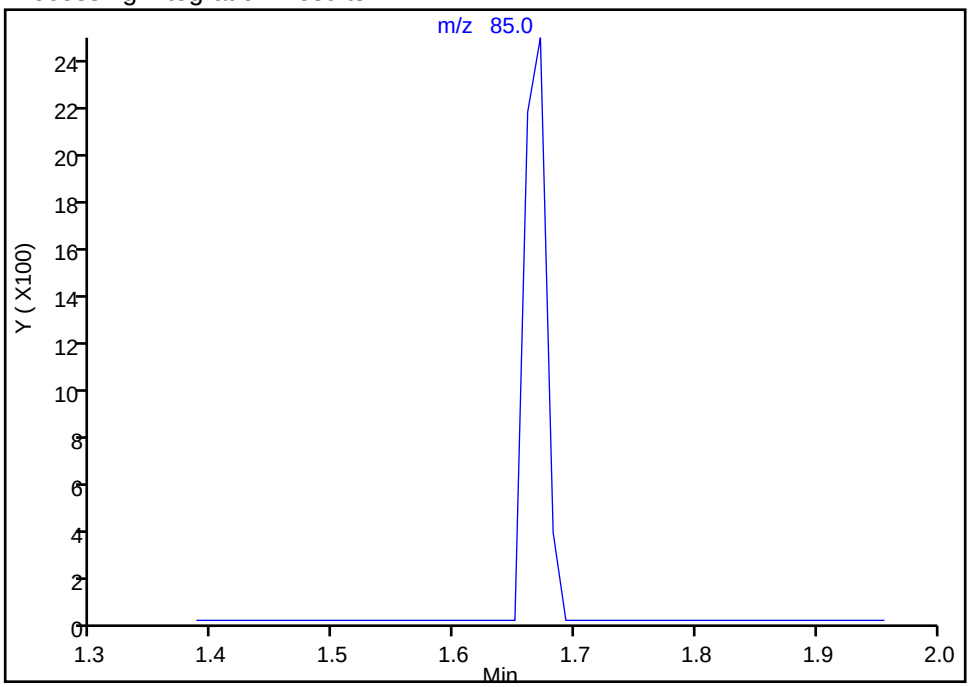
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

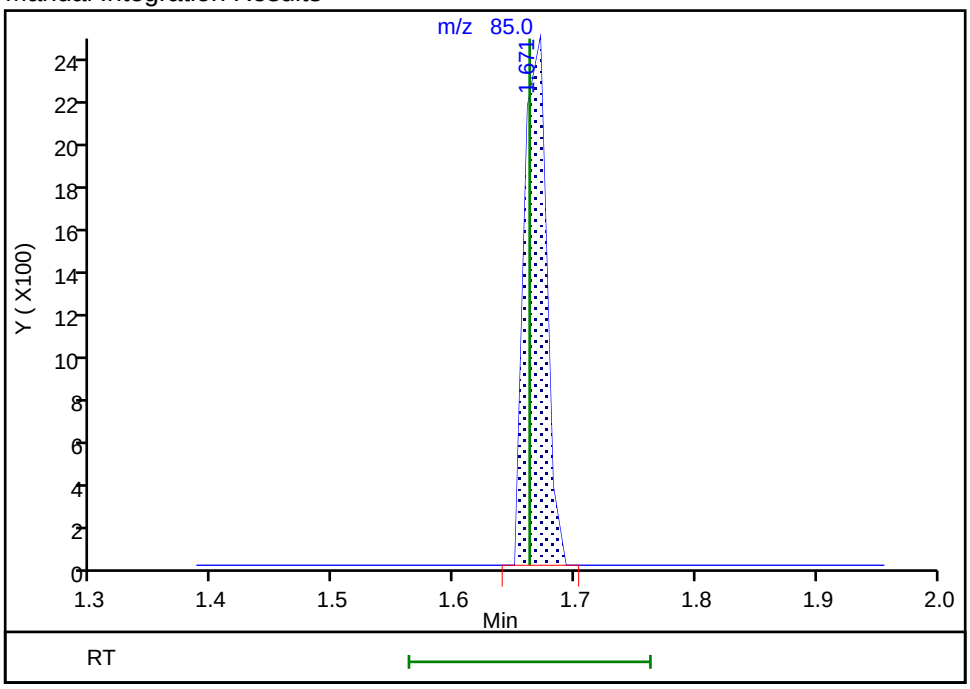
Not Detected
Expected RT: 1.66

Processing Integration Results



Manual Integration Results

RT: 1.67
Area: 3150
Amount: 0.456263
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:32
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

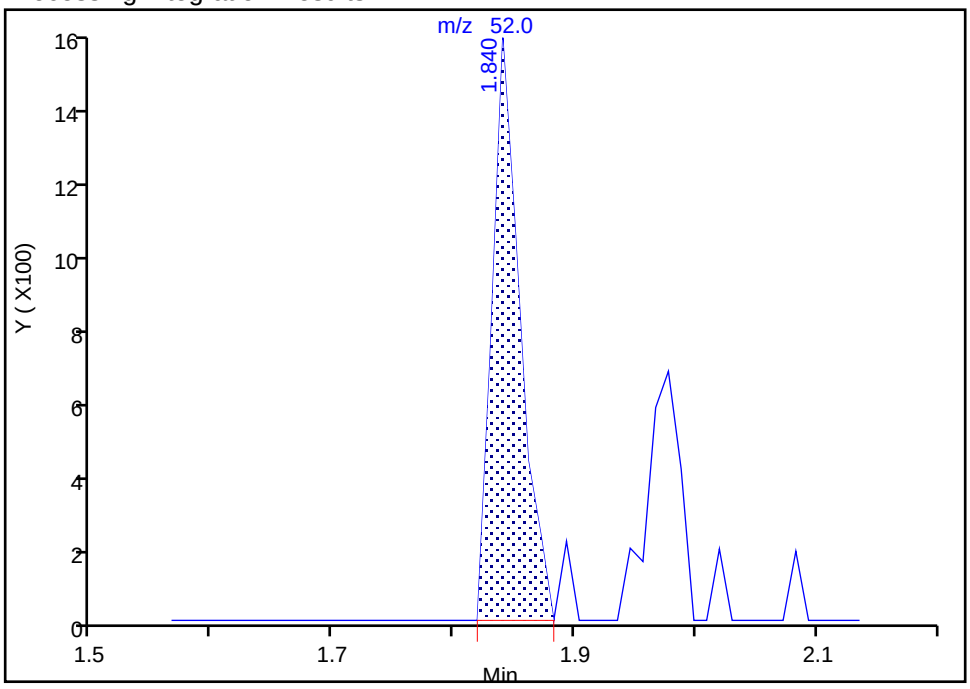
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 2

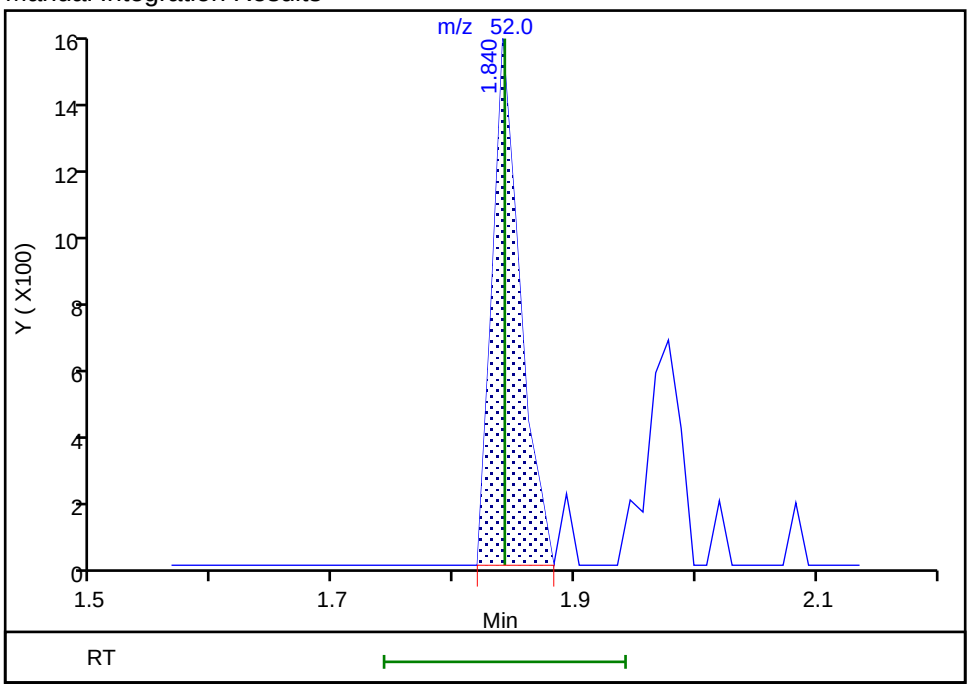
Processing Integration Results

RT: 1.84
Area: 2445
Amount: 0.535842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 2445
Amount: 0.535842
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

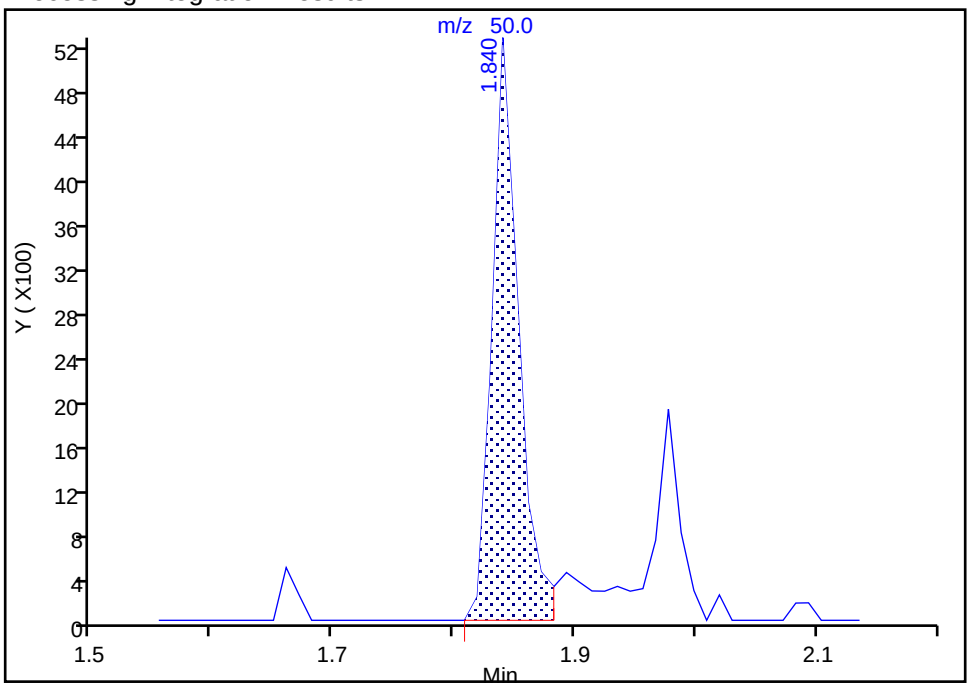
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 1

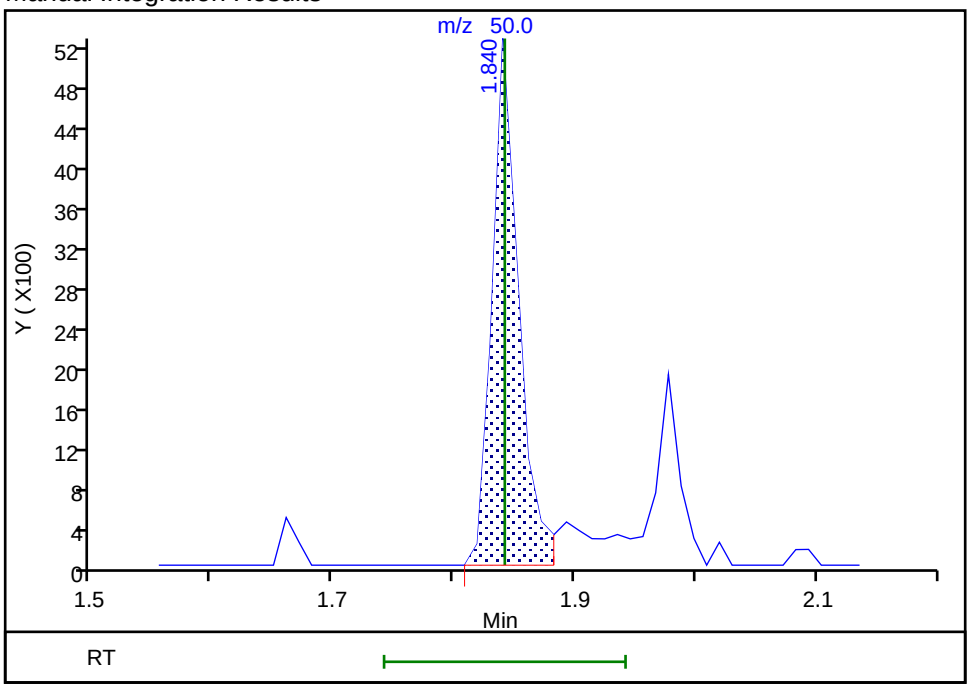
Processing Integration Results

RT: 1.84
Area: 7957
Amount: 0.535842
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 7957
Amount: 0.535842
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:41
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

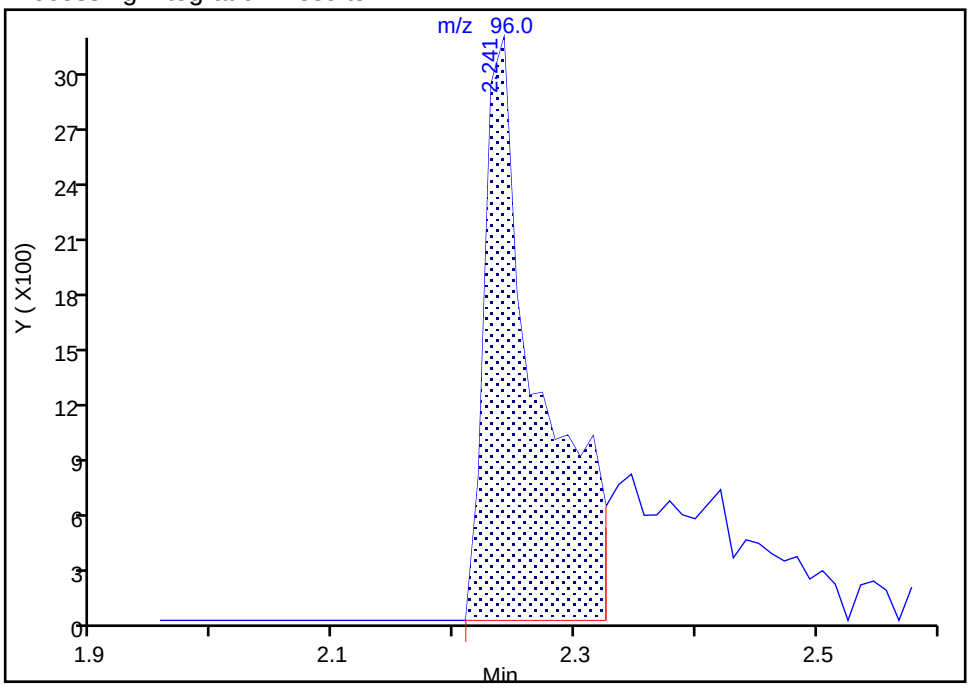
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

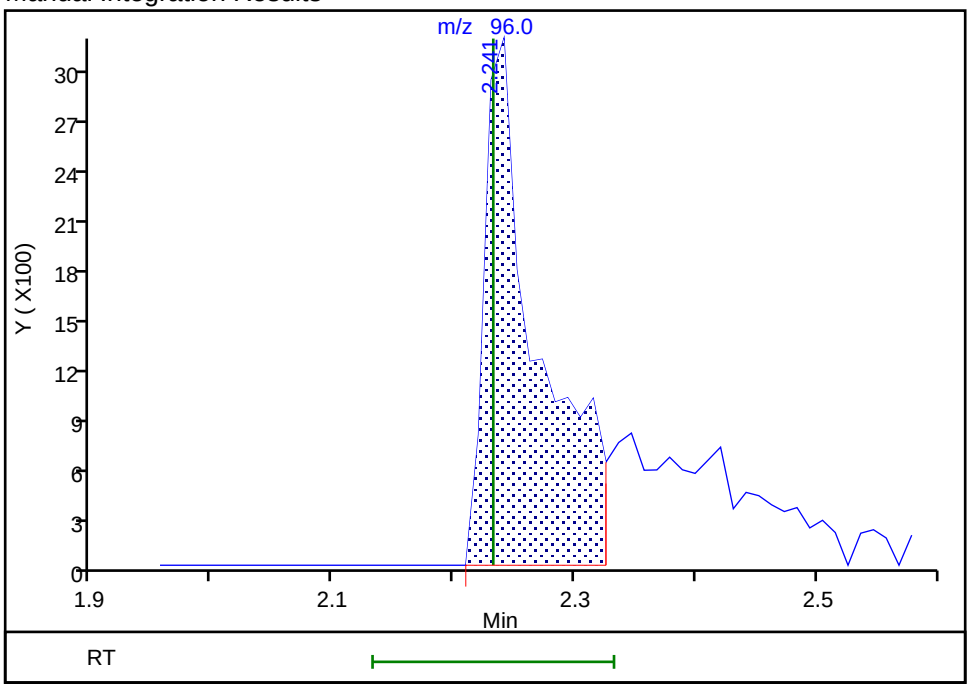
Processing Integration Results

RT: 2.24
Area: 9950
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.24
Area: 9950
Amount: -0.067594
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

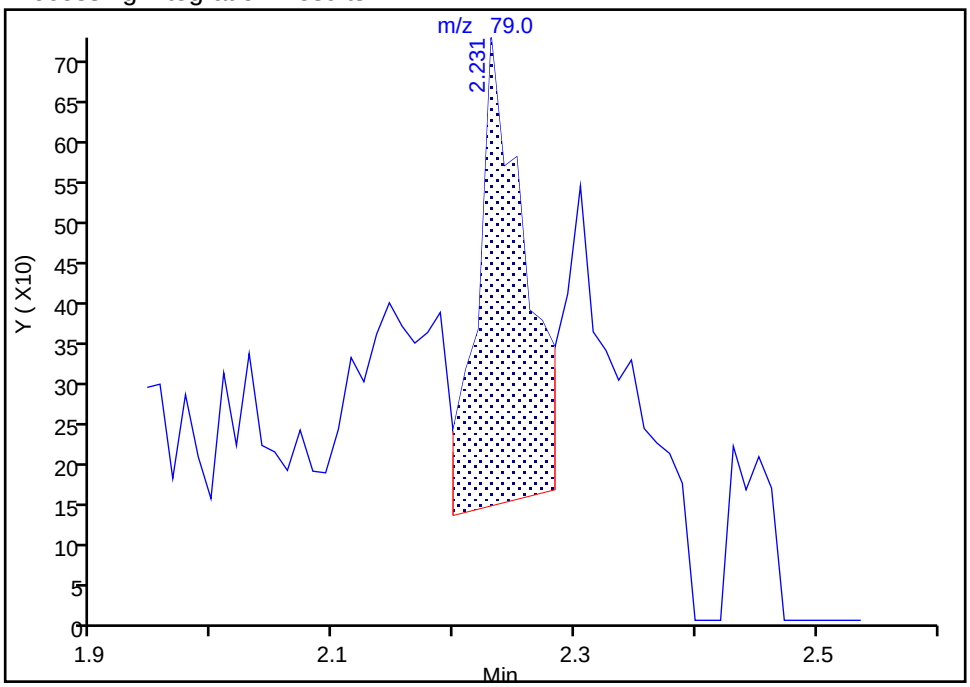
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

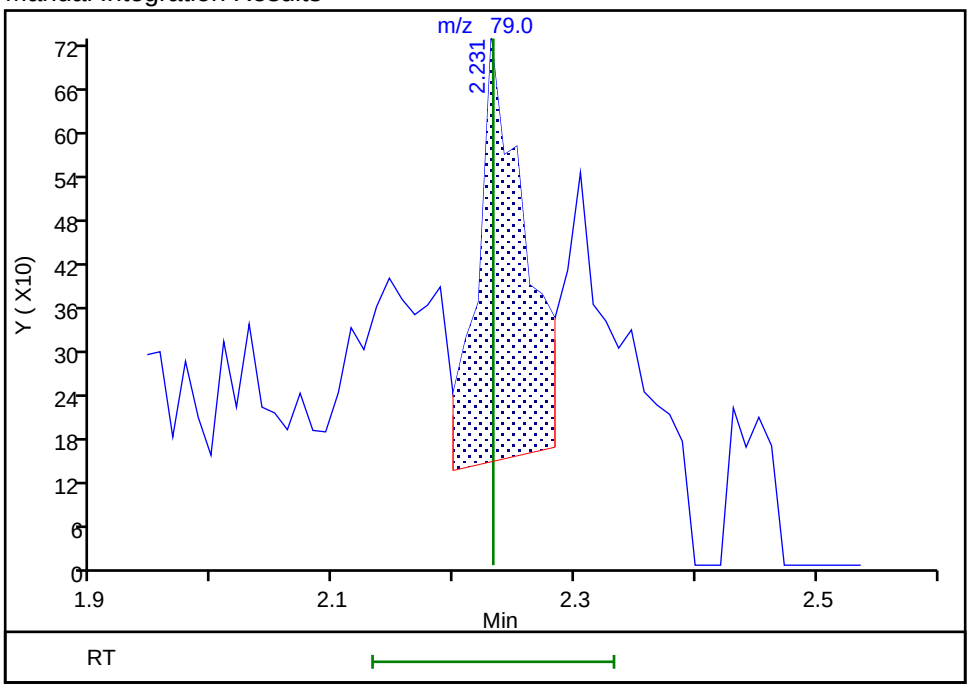
Processing Integration Results

RT: 2.23
Area: 1614
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.23
Area: 1614
Amount: -0.067594
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 20:55:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

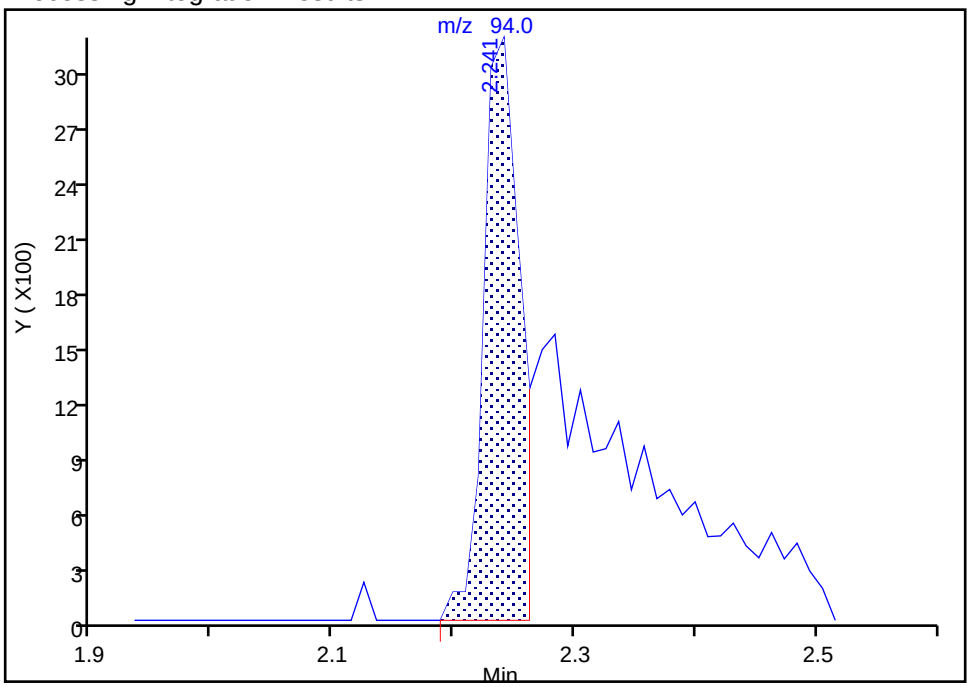
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

14 Bromomethane, CAS: 74-83-9

Signal: 1

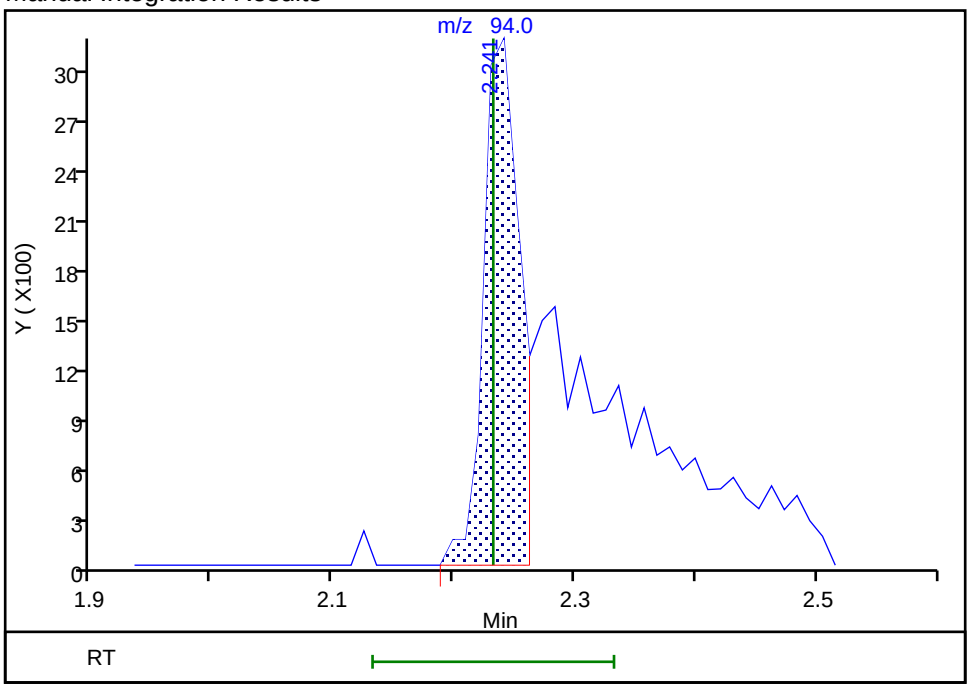
Processing Integration Results

RT: 2.24
Area: 6640
Amount: 0.237768
Amount Units: ug/l



Manual Integration Results

RT: 2.24
Area: 6640
Amount: -0.067594
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:03:49
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

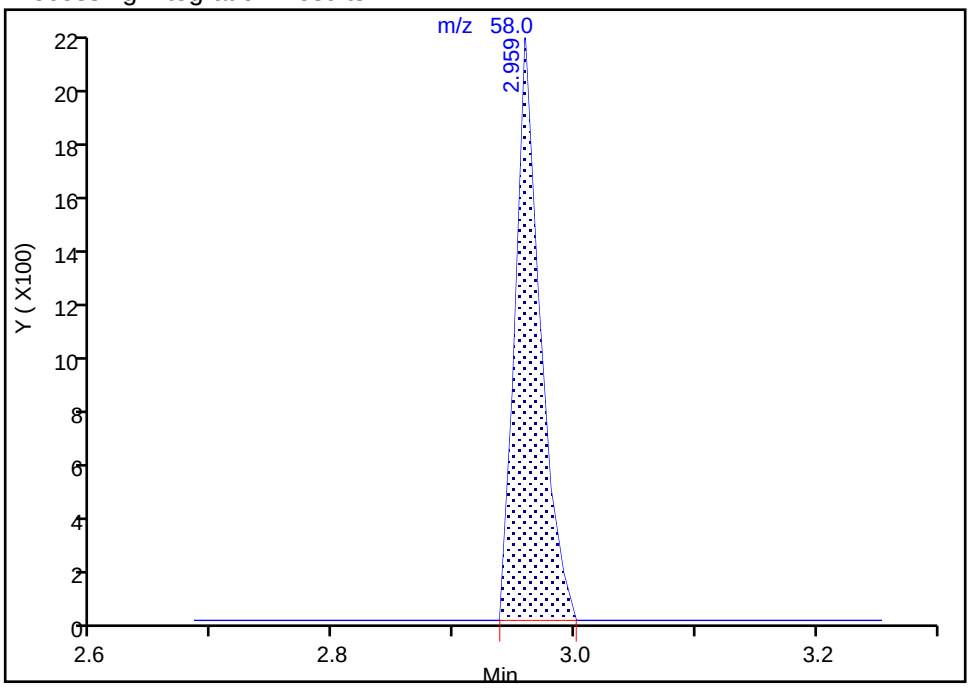
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

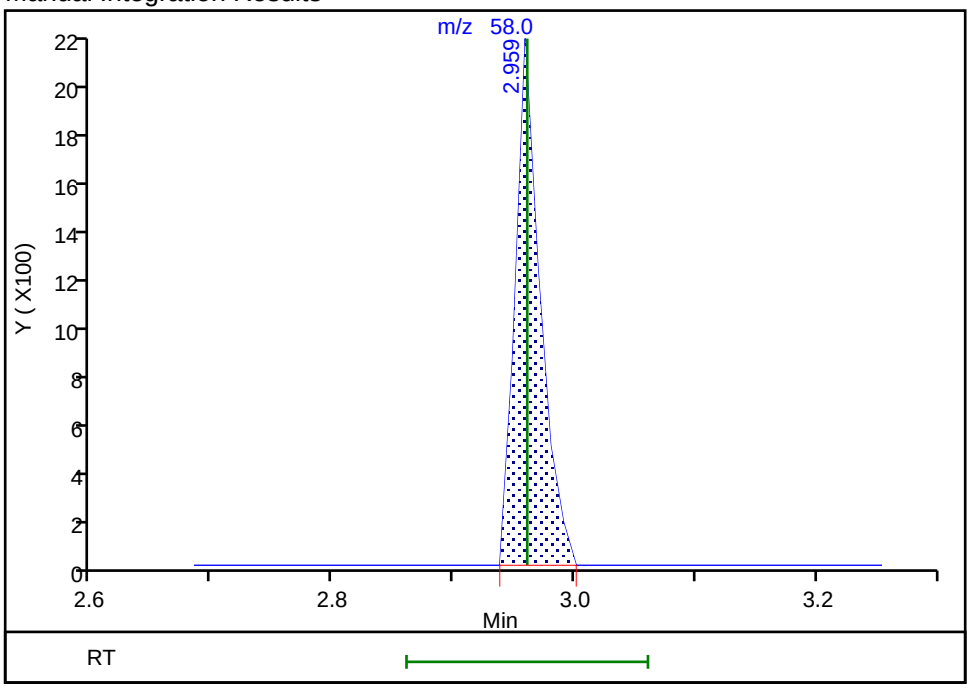
Processing Integration Results

RT: 2.96
Area: 3044
Amount: 1.910701
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 3044
Amount: 1.835879
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

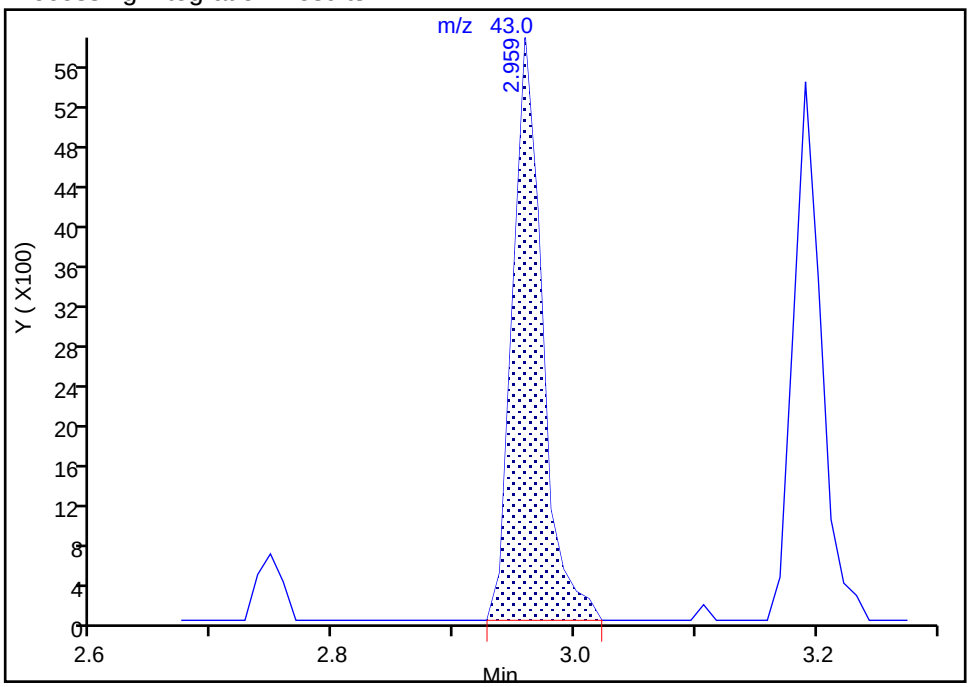
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 1

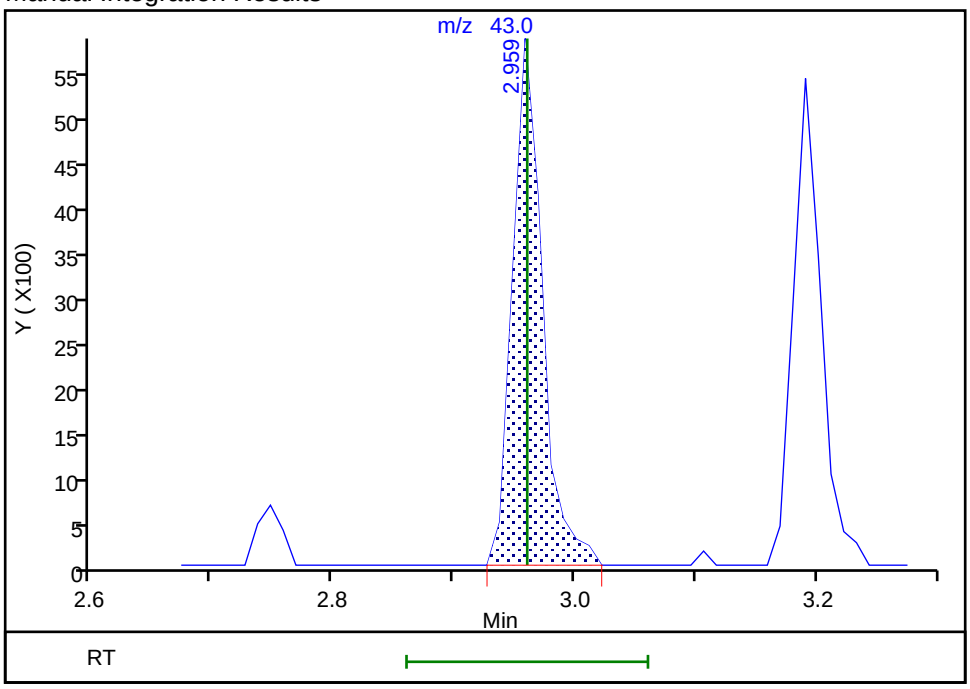
Processing Integration Results

RT: 2.96
Area: 9926
Amount: 1.910701
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 9926
Amount: 1.835879
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:00
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

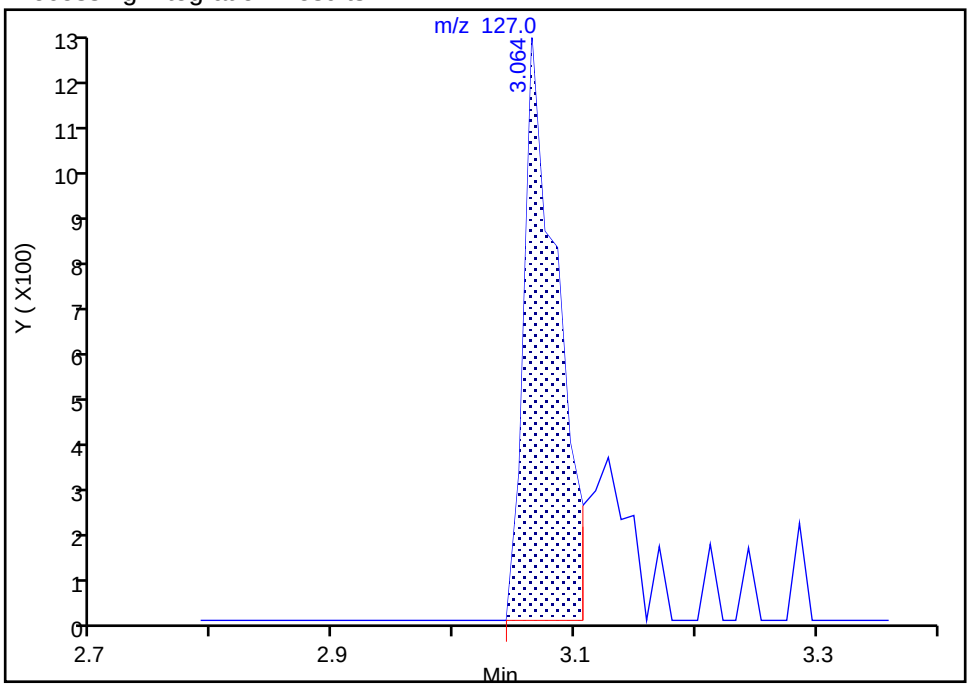
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 2

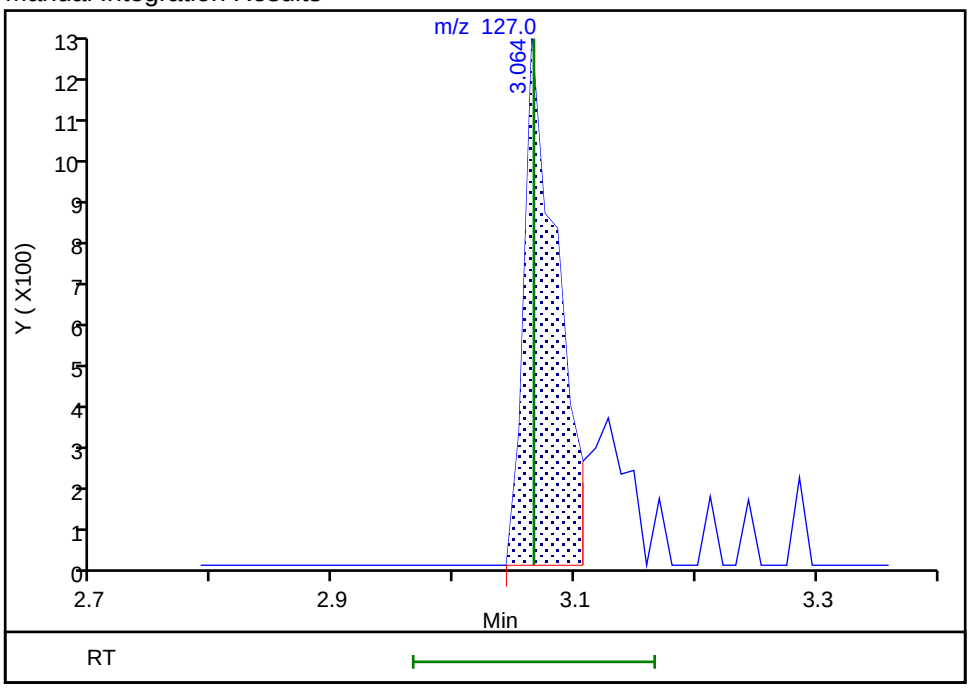
Processing Integration Results

RT: 3.06
Area: 2479
Amount: 0.870495
Amount Units: ug/l



Manual Integration Results

RT: 3.06
Area: 2479
Amount: 1.450023
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

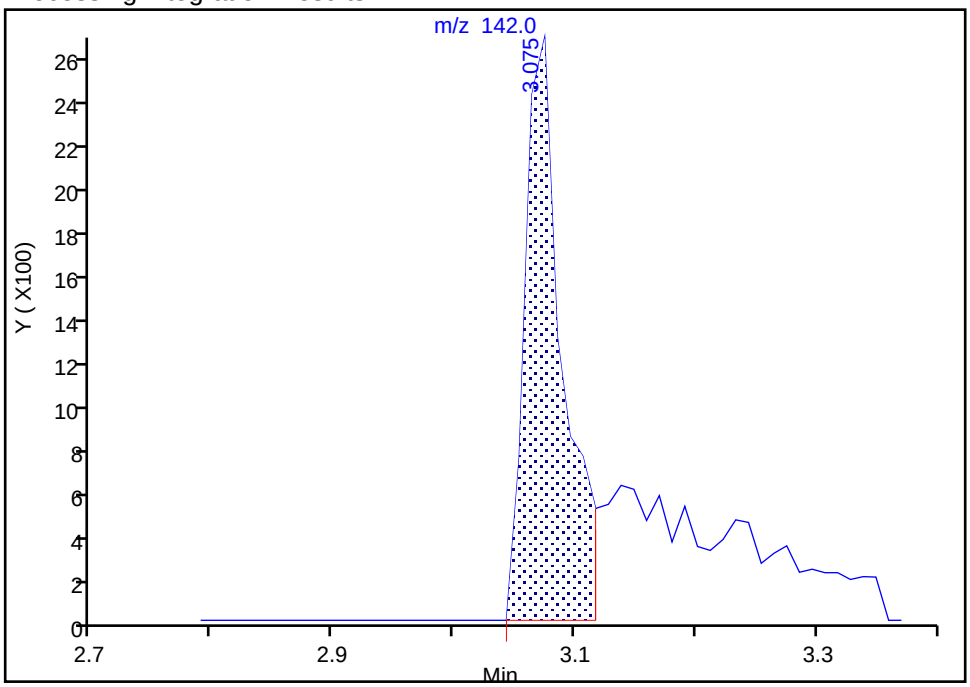
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

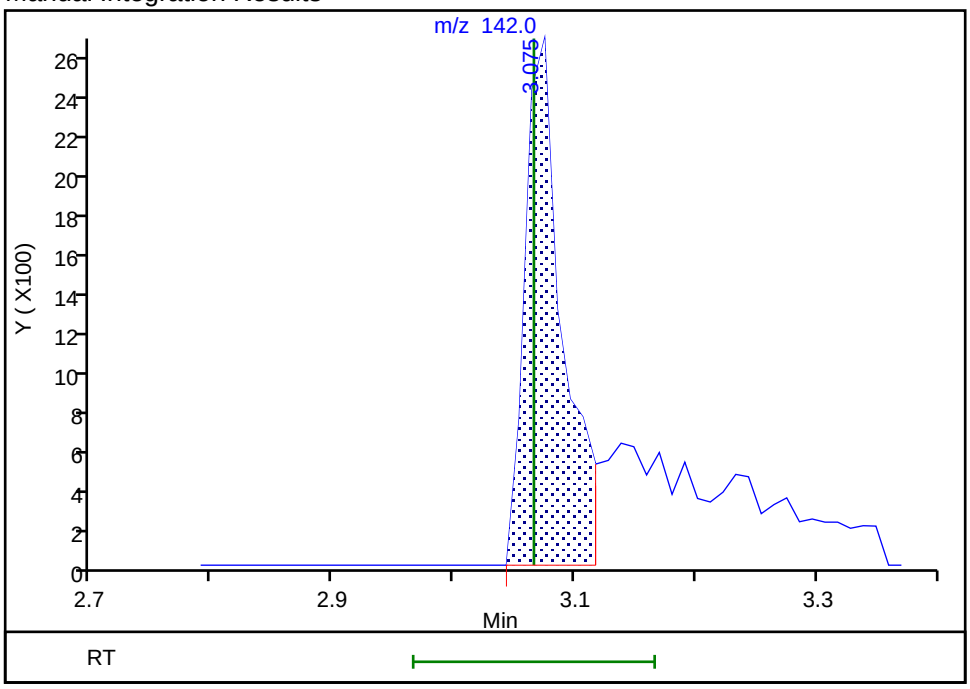
Processing Integration Results

RT: 3.07
Area: 5837
Amount: 0.870495
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 5837
Amount: 1.450023
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:06
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

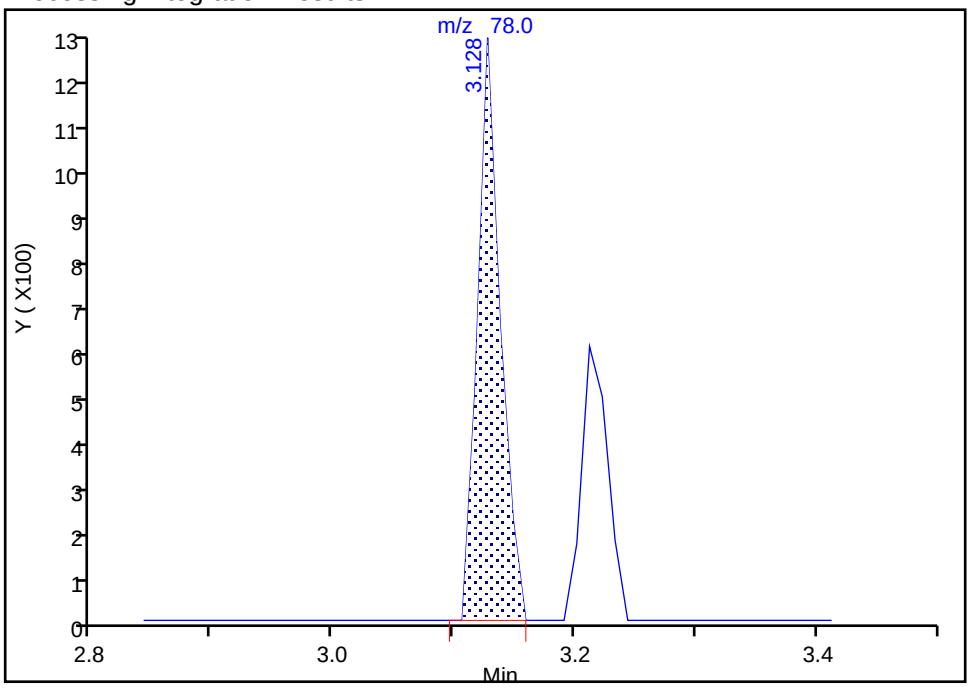
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 2

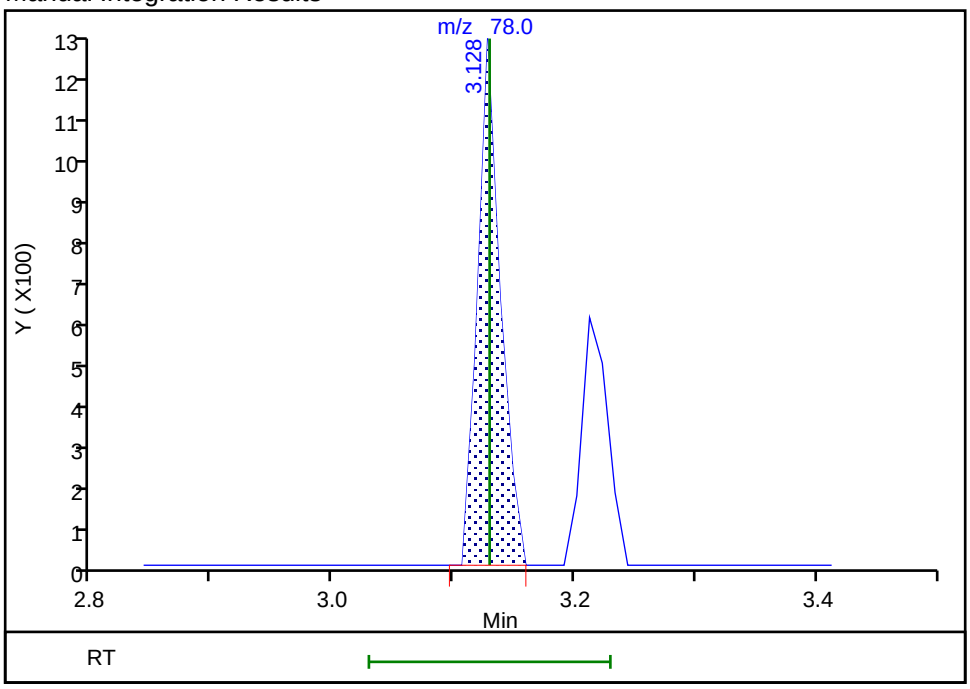
Processing Integration Results

RT: 3.13
Area: 1670
Amount: 0.543289
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 1670
Amount: 0.543289
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

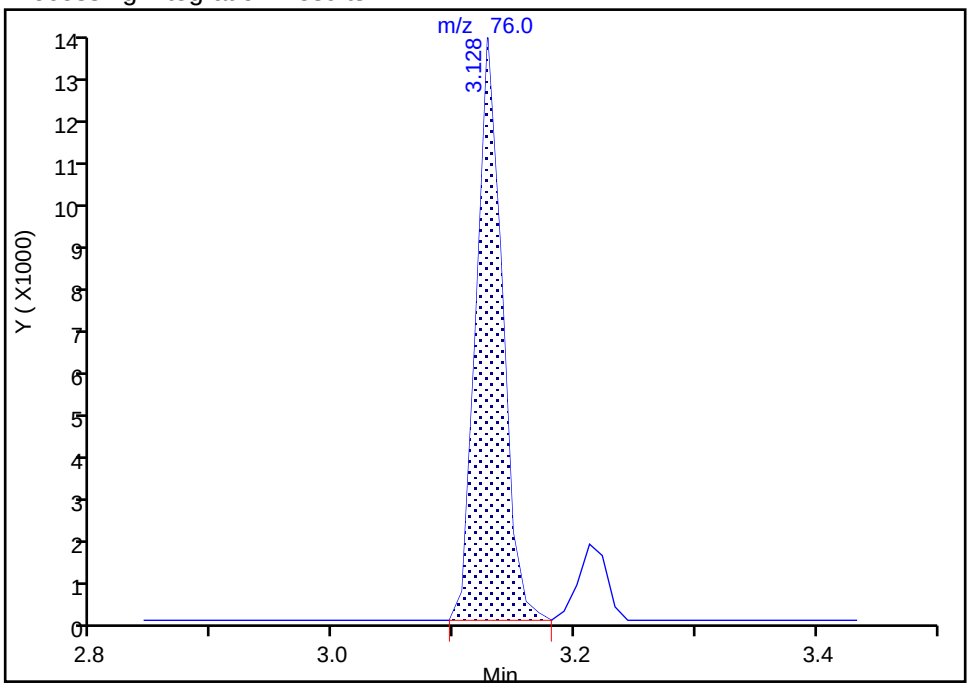
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 1

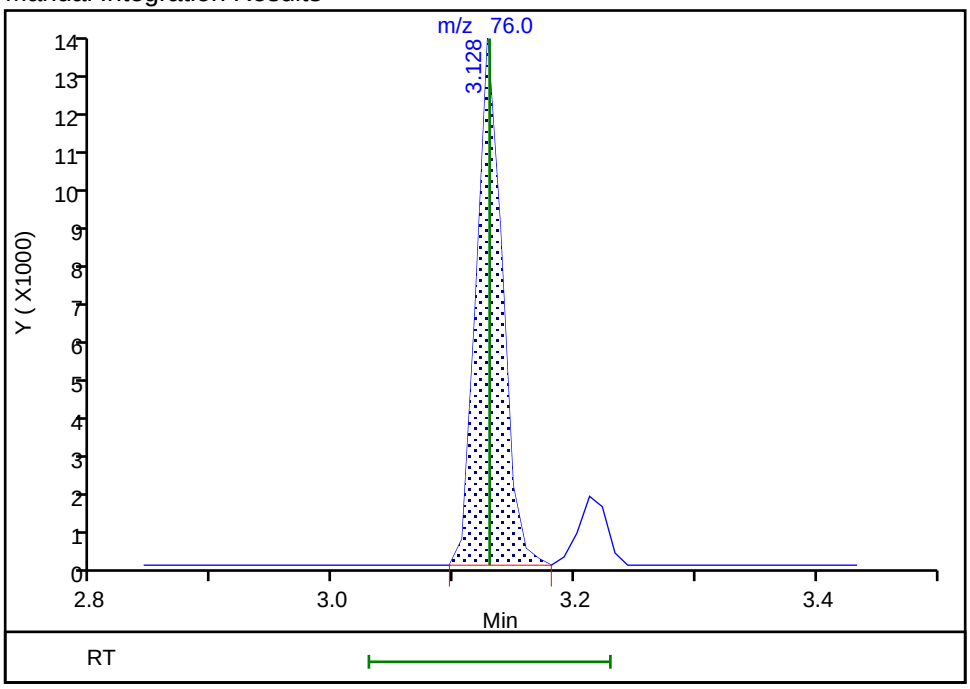
Processing Integration Results

RT: 3.13
Area: 19807
Amount: 0.543289
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 19807
Amount: 0.543289
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:14
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

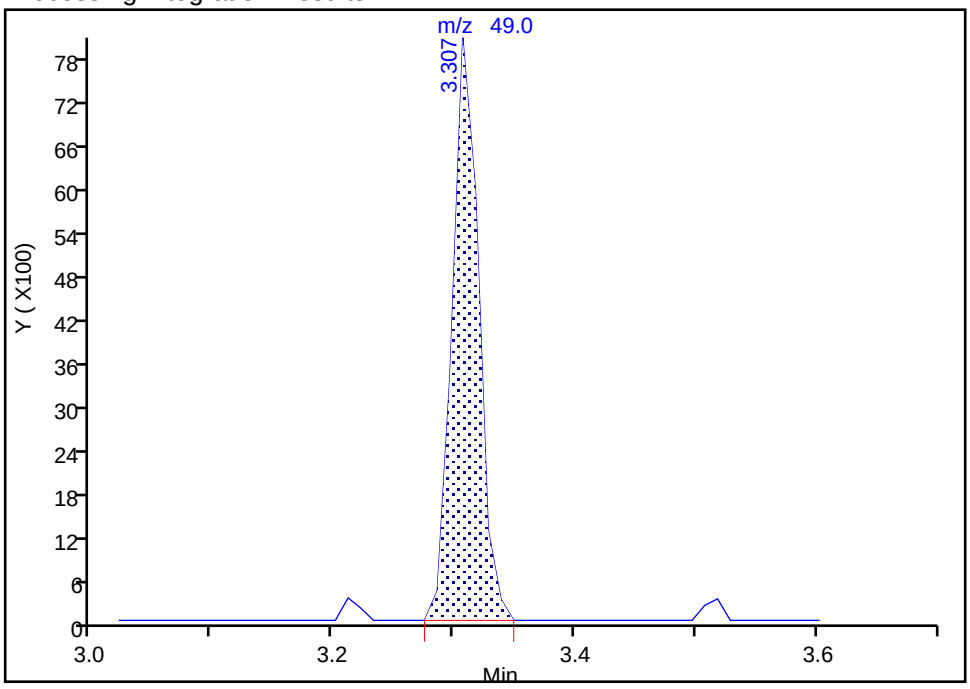
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 2

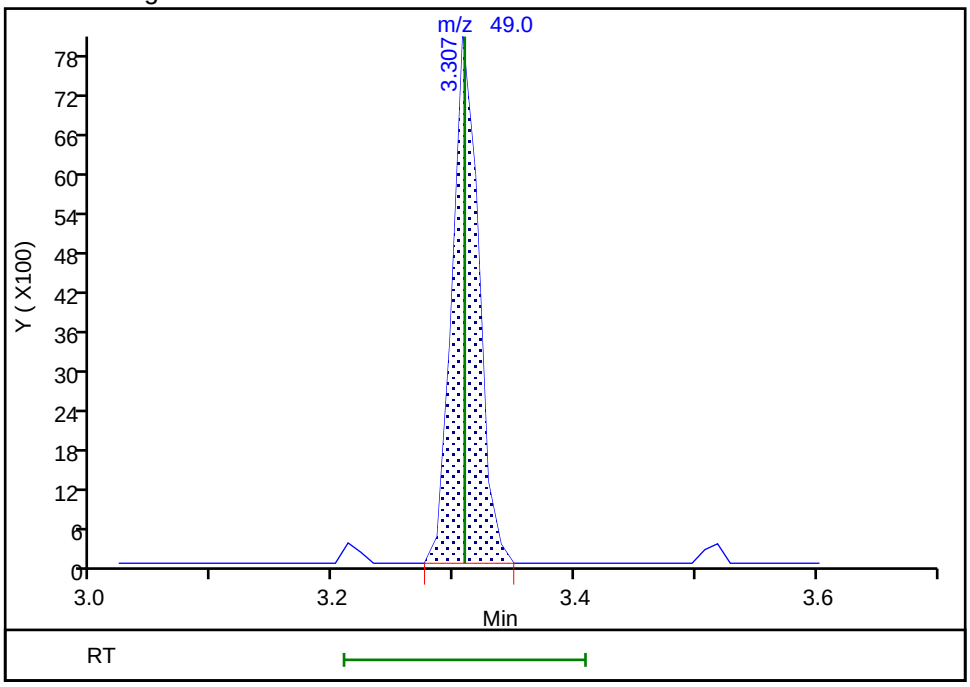
Processing Integration Results

RT: 3.31
Area: 12214
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 12214
Amount: 0.538075
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

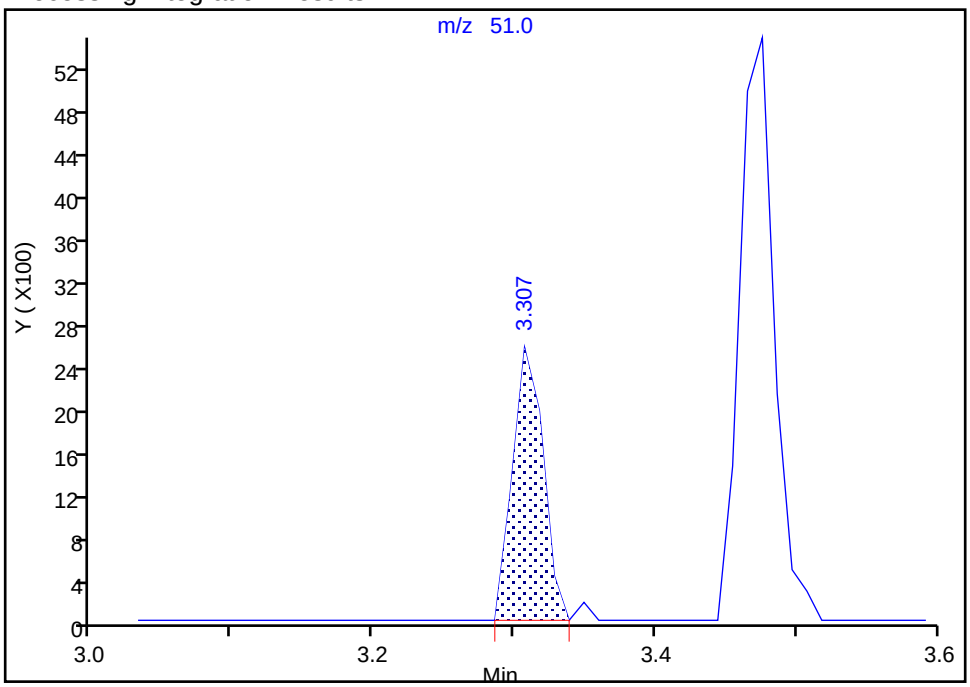
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 3

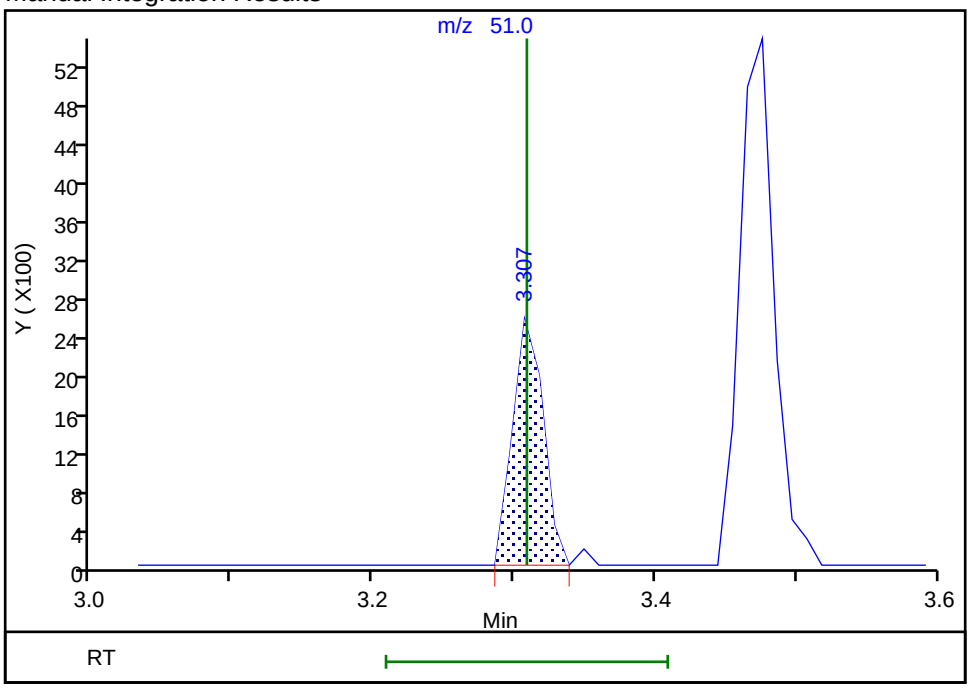
Processing Integration Results

RT: 3.31
Area: 3864
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 3864
Amount: 0.538075
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

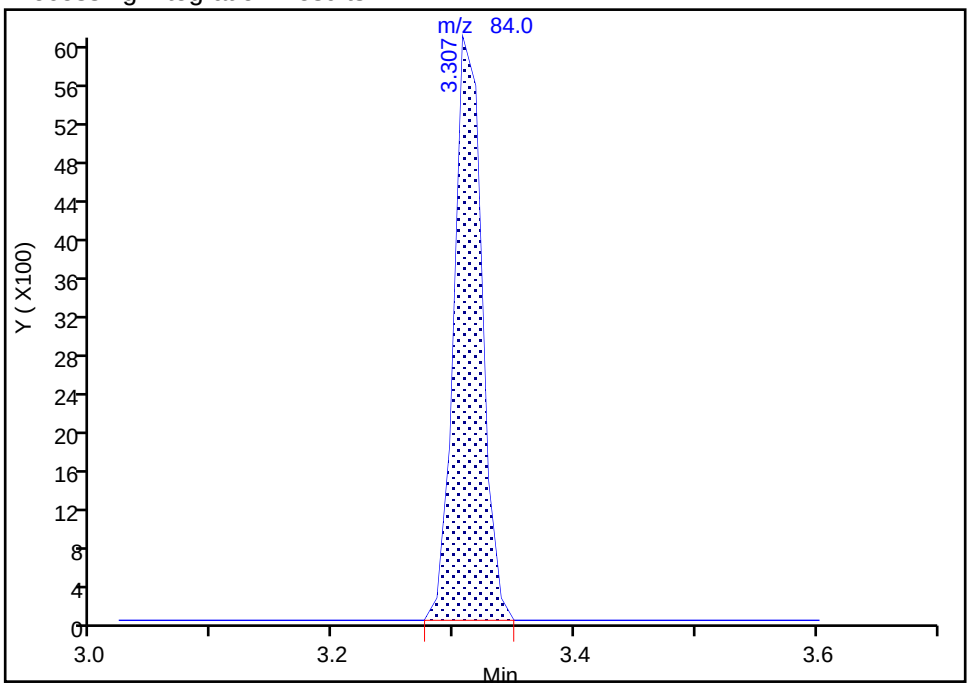
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Signal: 1

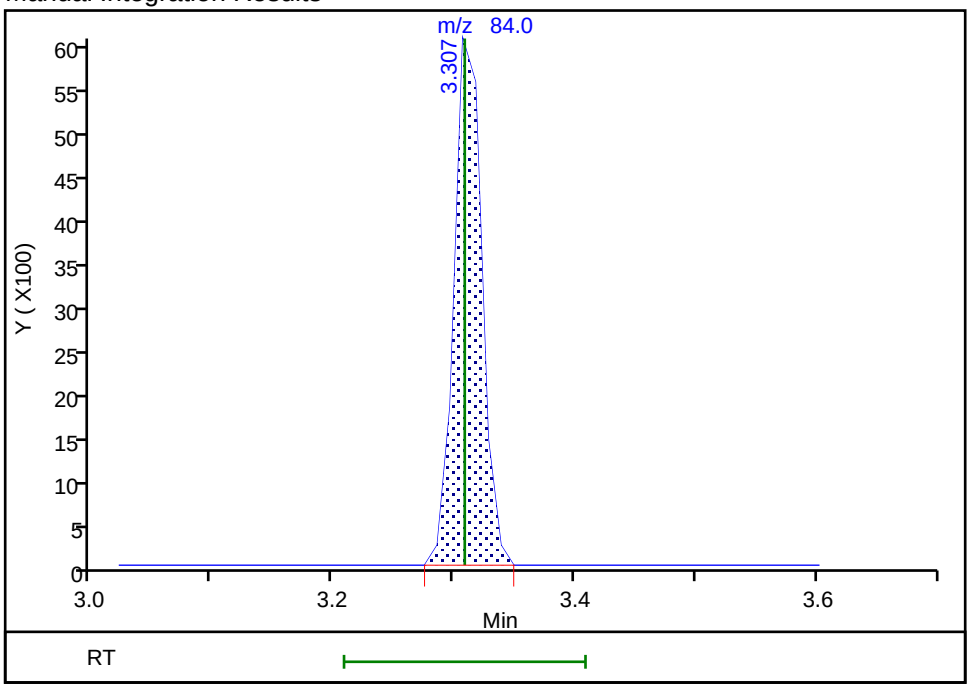
Processing Integration Results

RT: 3.31
Area: 9706
Amount: 0.538075
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 9706
Amount: 0.538075
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 08:04:20
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

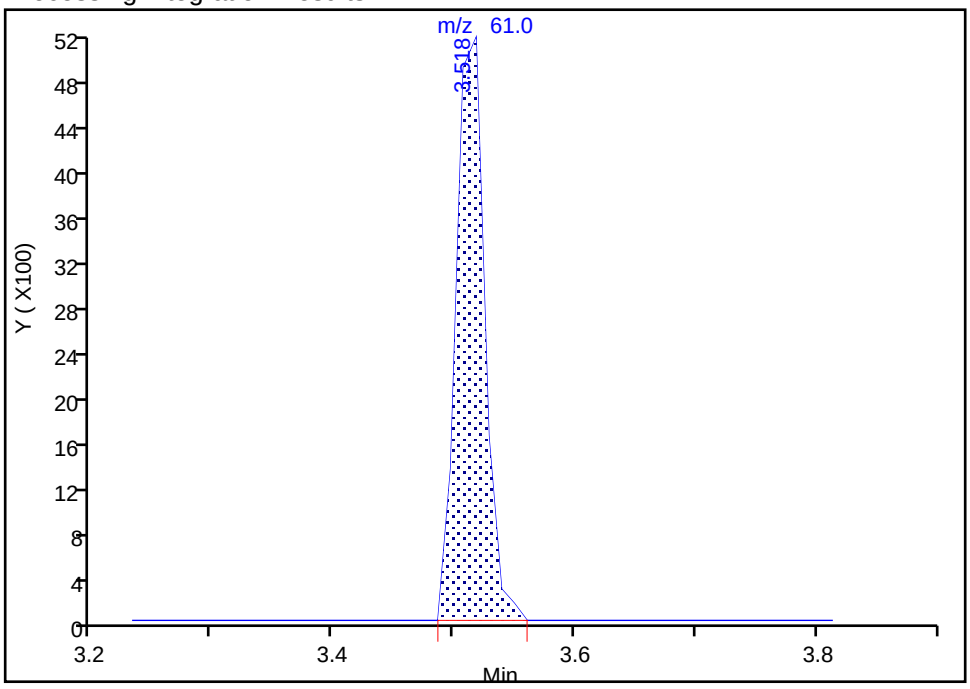
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 2

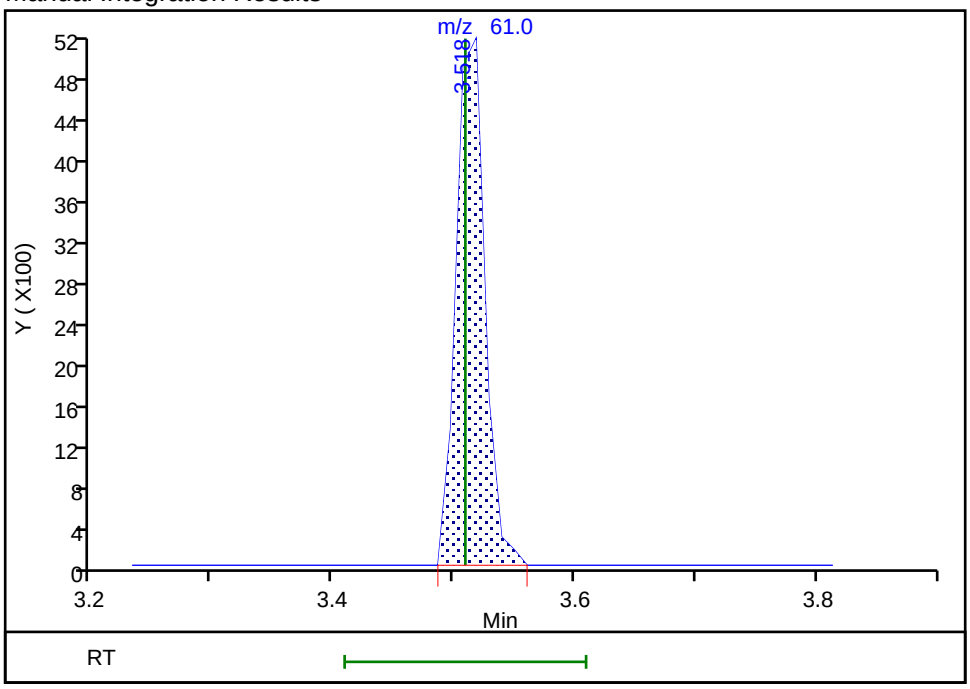
Processing Integration Results

RT: 3.52
Area: 8533
Amount: 0.613827
Amount Units: ug/l



Manual Integration Results

RT: 3.52
Area: 8533
Amount: 0.613827
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

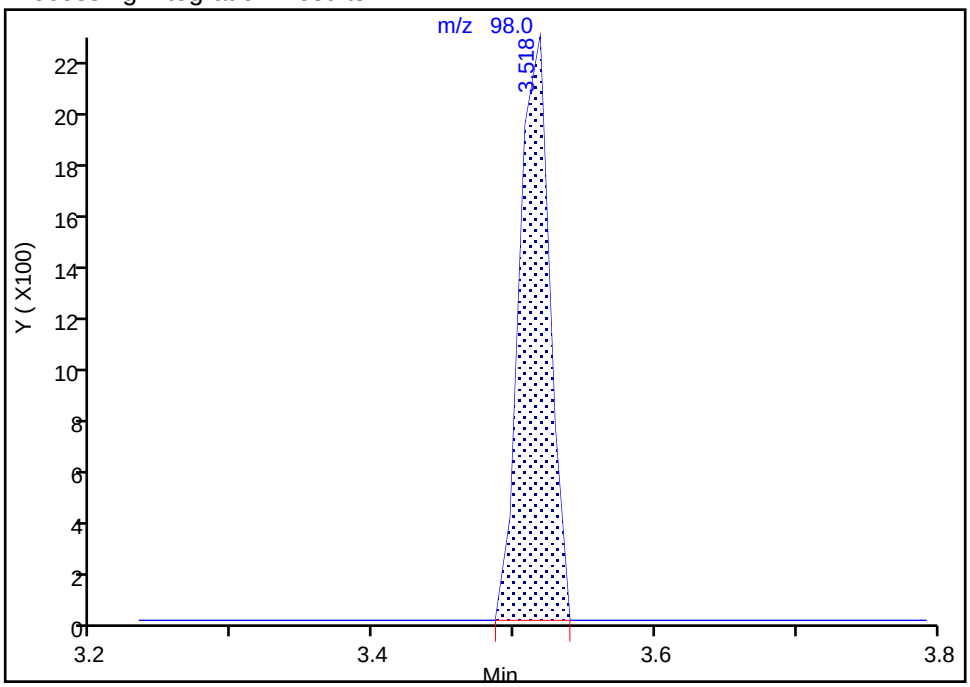
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

35 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 3

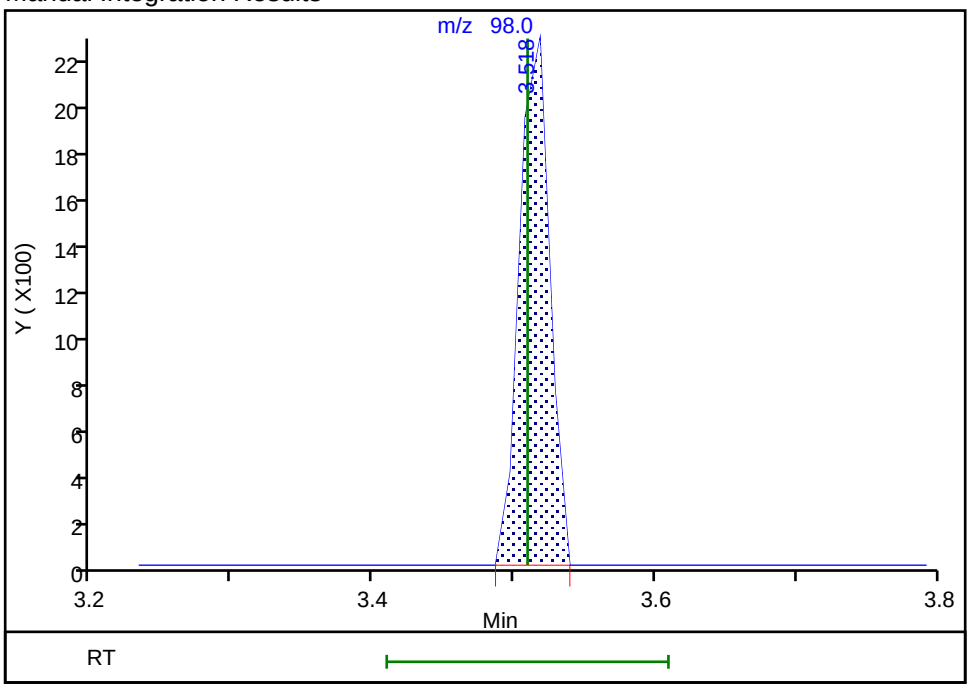
Processing Integration Results

RT: 3.52
Area: 3414
Amount: 0.613827
Amount Units: ug/l



Manual Integration Results

RT: 3.52
Area: 3414
Amount: 0.613827
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

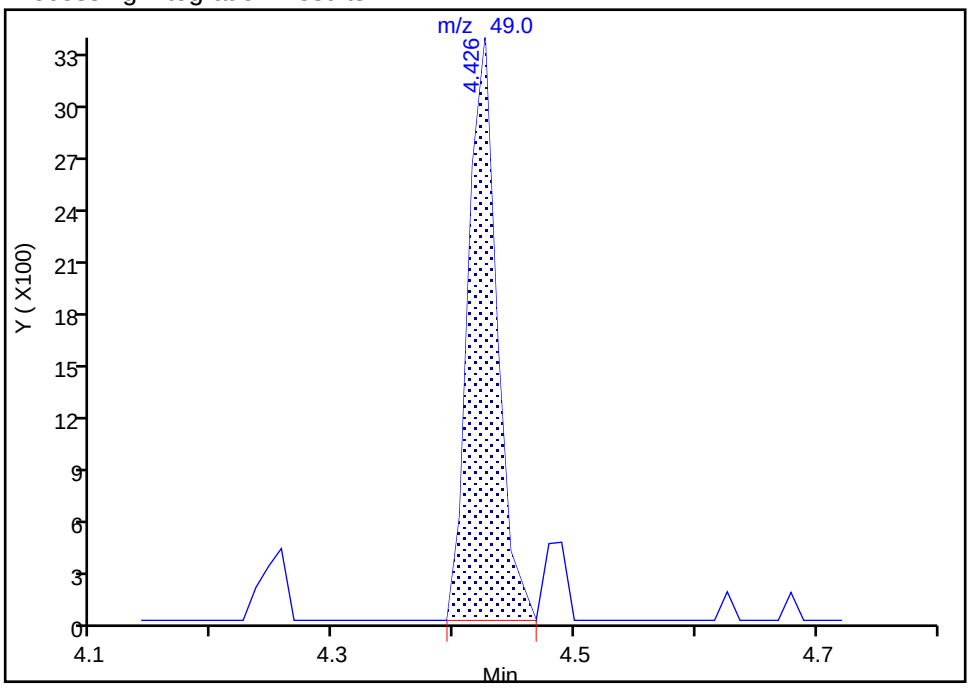
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

53 Chlorobromomethane, CAS: 74-97-5

Signal: 2

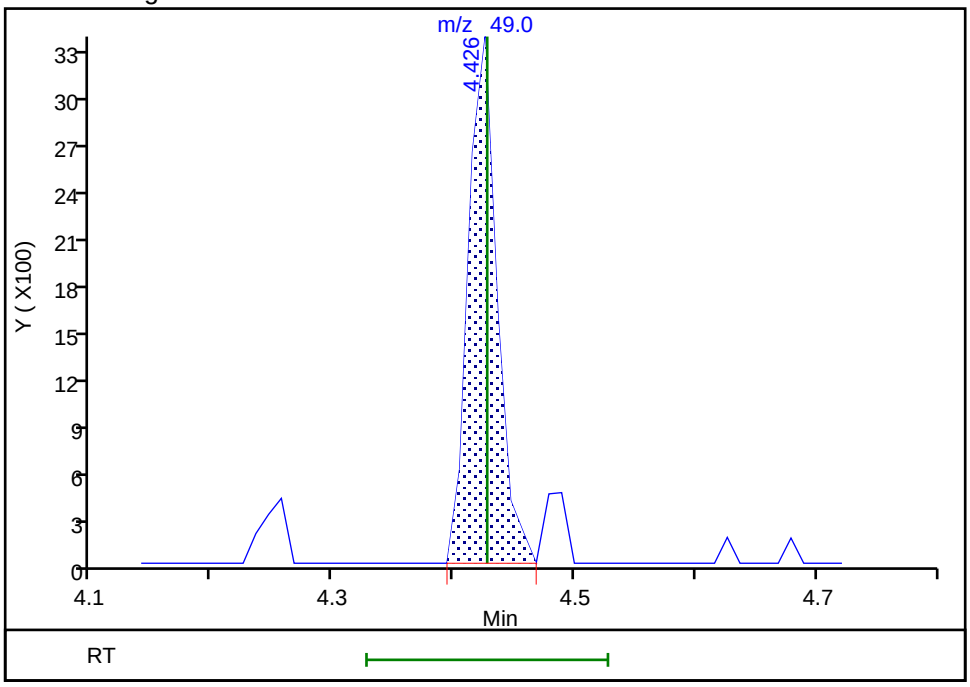
Processing Integration Results

RT: 4.43
Area: 5484
Amount: 0.579310
Amount Units: ug/l



Manual Integration Results

RT: 4.43
Area: 5484
Amount: 0.579310
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

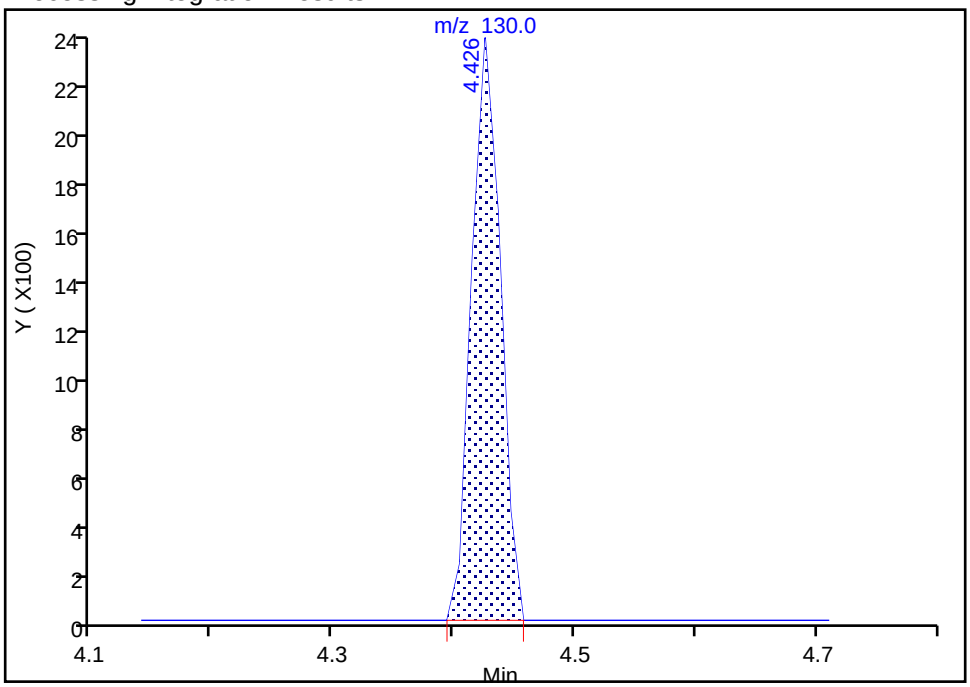
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

53 Chlorobromomethane, CAS: 74-97-5

Signal: 3

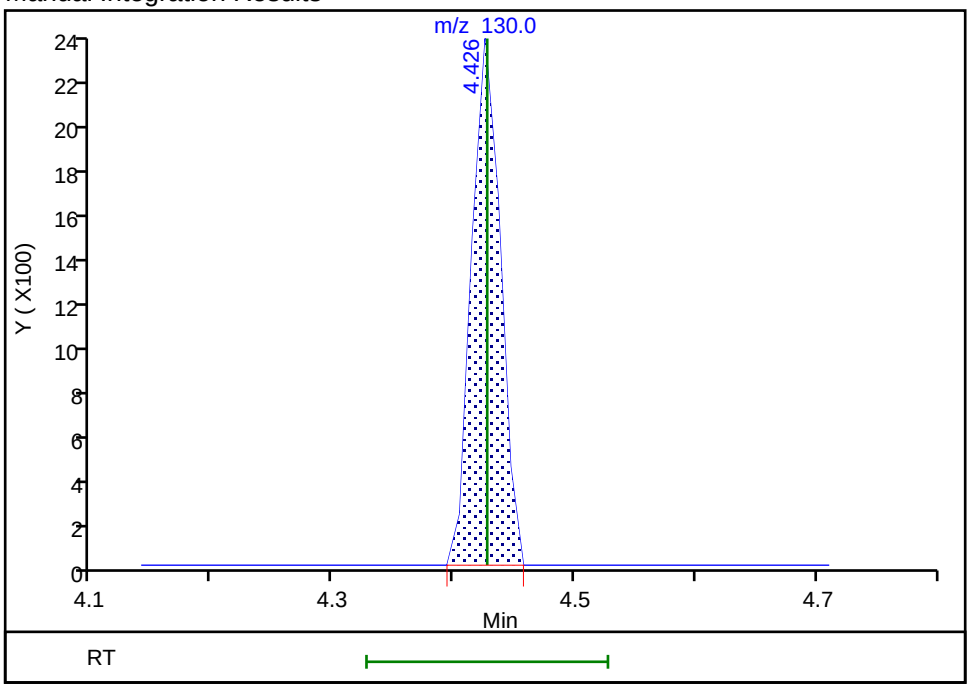
Processing Integration Results

RT: 4.43
Area: 3865
Amount: 0.579310
Amount Units: ug/l



Manual Integration Results

RT: 4.43
Area: 3865
Amount: 0.579310
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

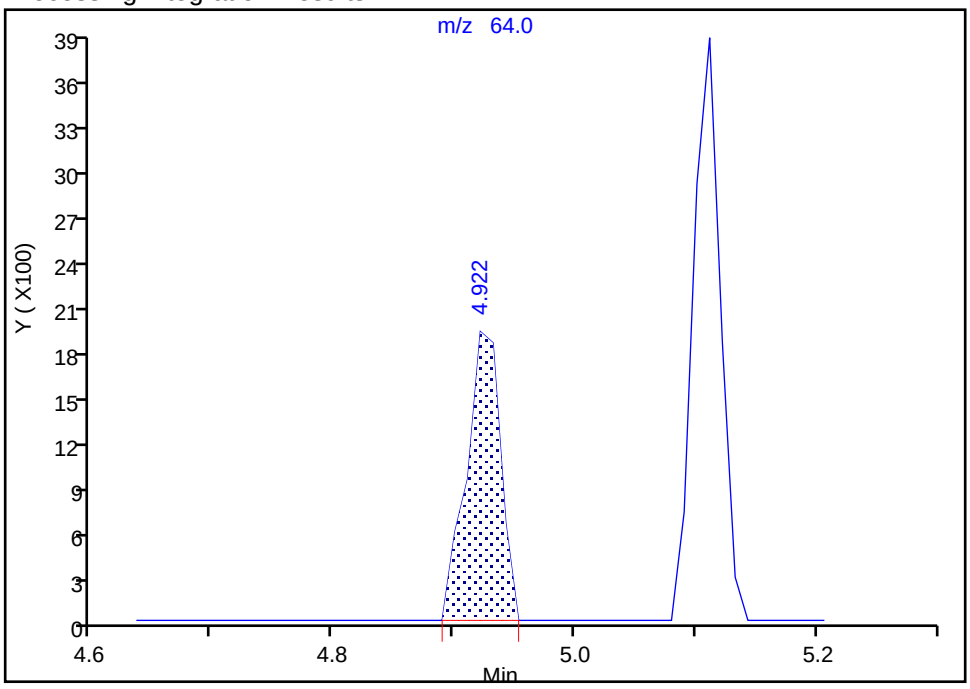
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 2

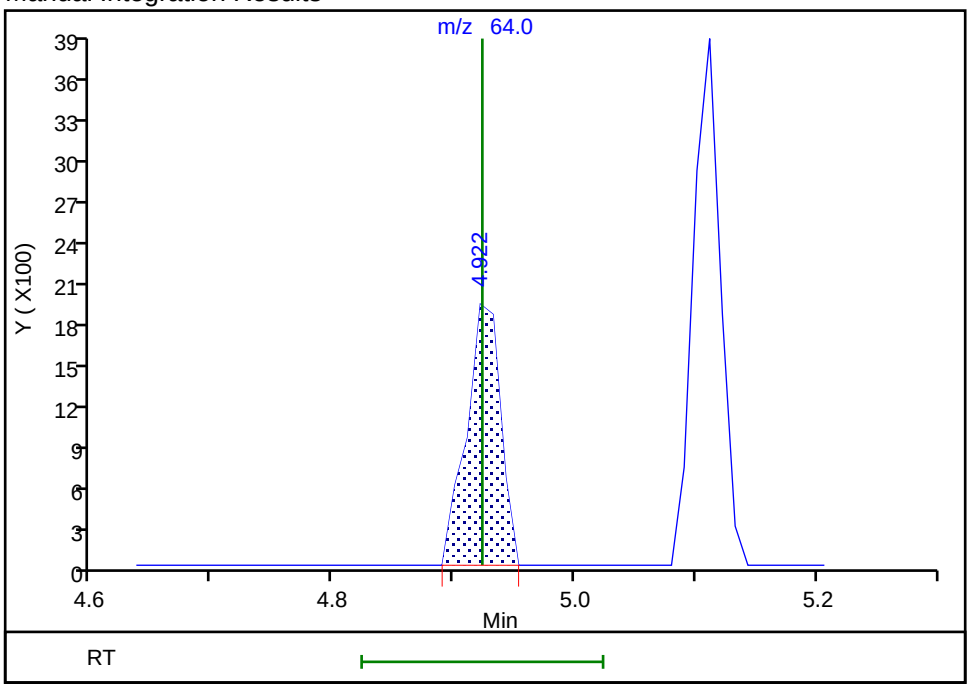
Processing Integration Results

RT: 4.92
Area: 3752
Amount: 0.492521
Amount Units: ug/l



Manual Integration Results

RT: 4.92
Area: 3752
Amount: 0.492521
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:53:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

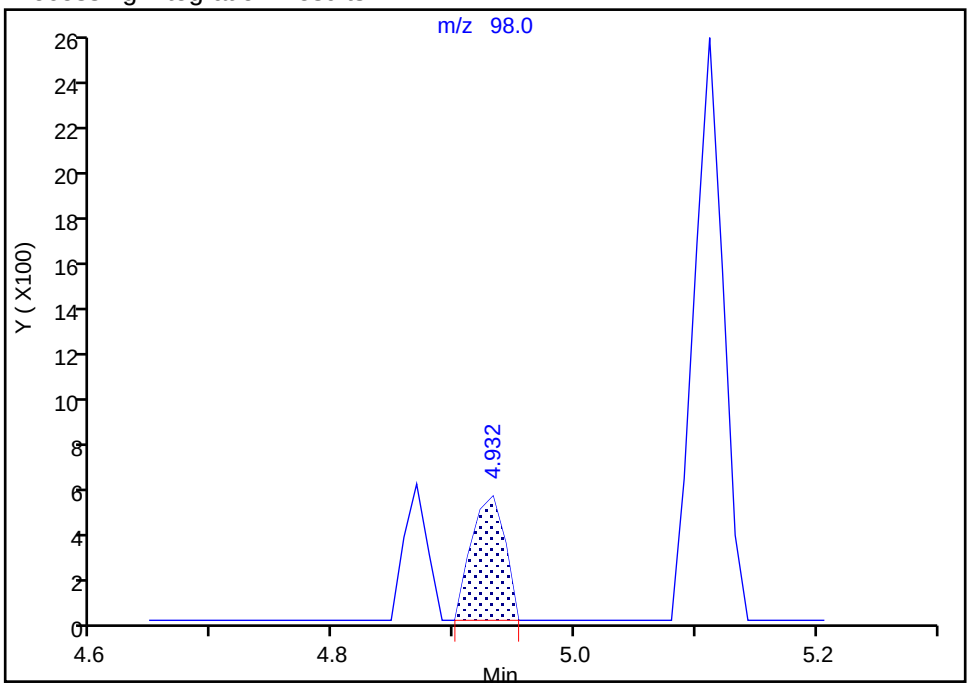
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

61 1,2-Dichloroethane, CAS: 107-06-2

Signal: 3

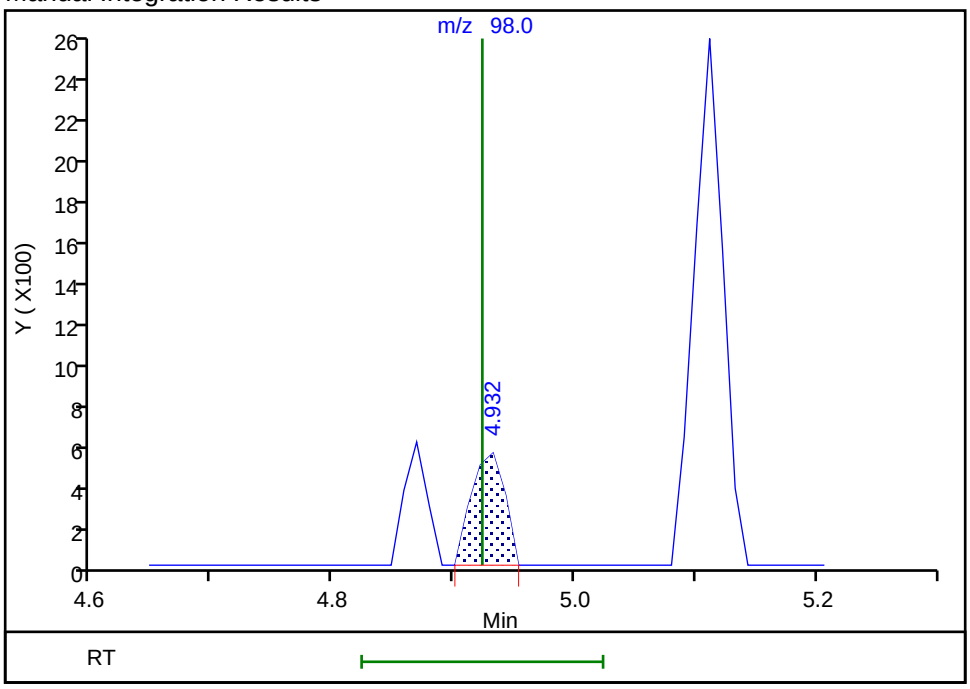
Processing Integration Results

RT: 4.93
Area: 1057
Amount: 0.492521
Amount Units: ug/l



Manual Integration Results

RT: 4.93
Area: 1057
Amount: 0.492521
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:53:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

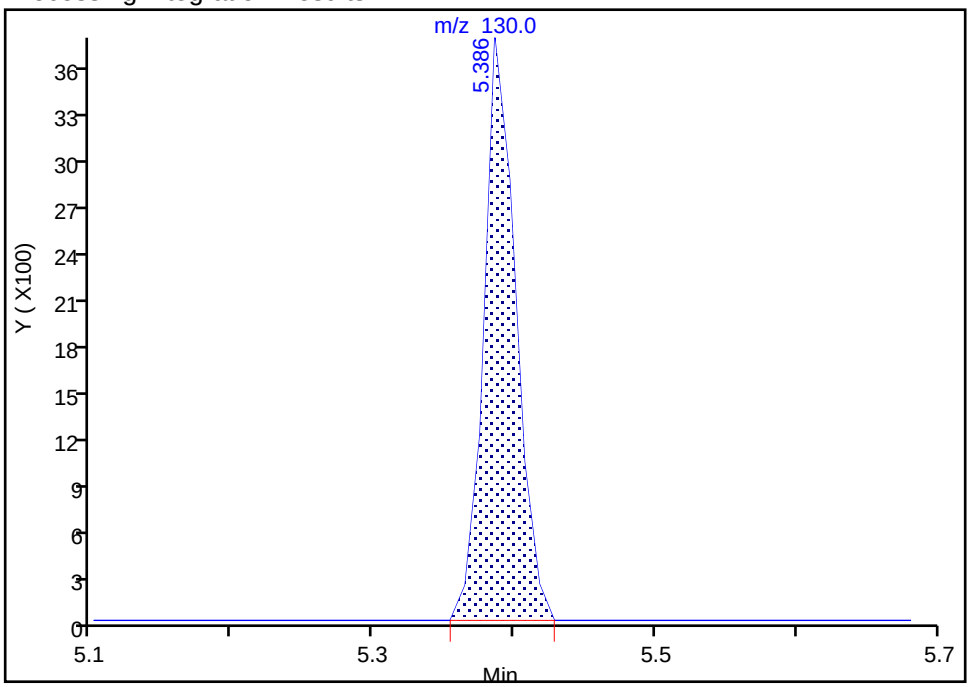
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6

Signal: 2

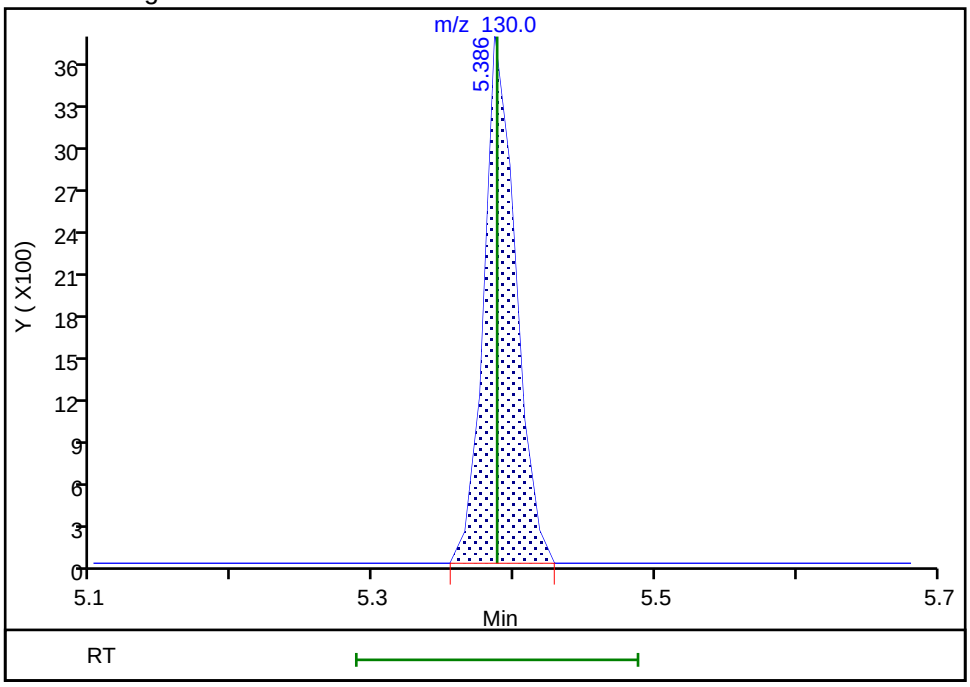
Processing Integration Results

RT: 5.39
Area: 5848
Amount: 0.603840
Amount Units: ug/l



Manual Integration Results

RT: 5.39
Area: 5848
Amount: 0.603840
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

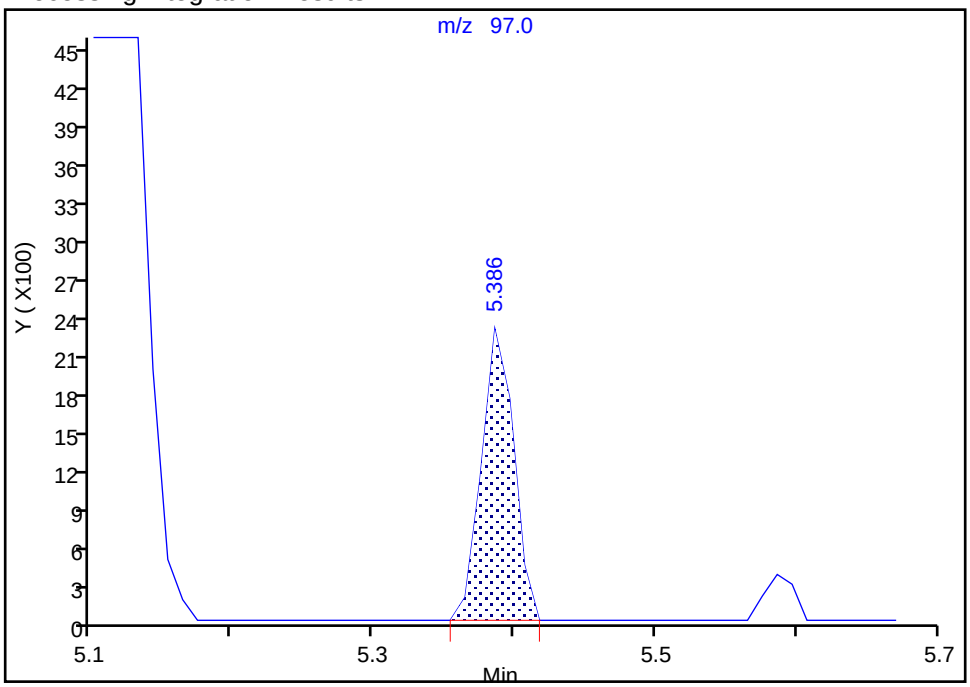
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 Trichloroethene, CAS: 79-01-6

Signal: 3

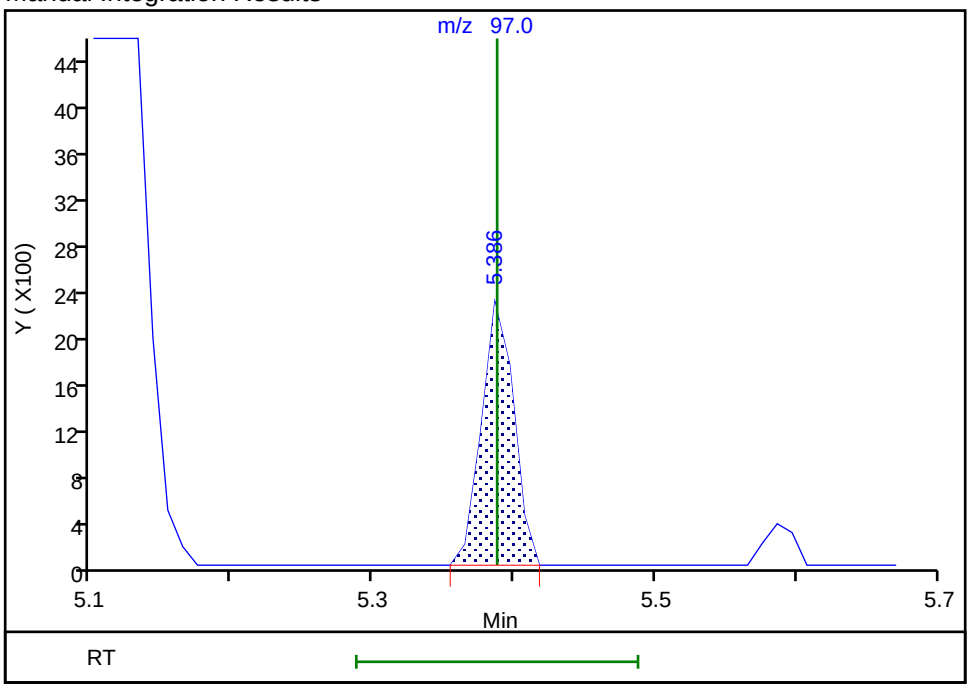
Processing Integration Results

RT: 5.39
Area: 3641
Amount: 0.603840
Amount Units: ug/l



Manual Integration Results

RT: 5.39
Area: 3641
Amount: 0.603840
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

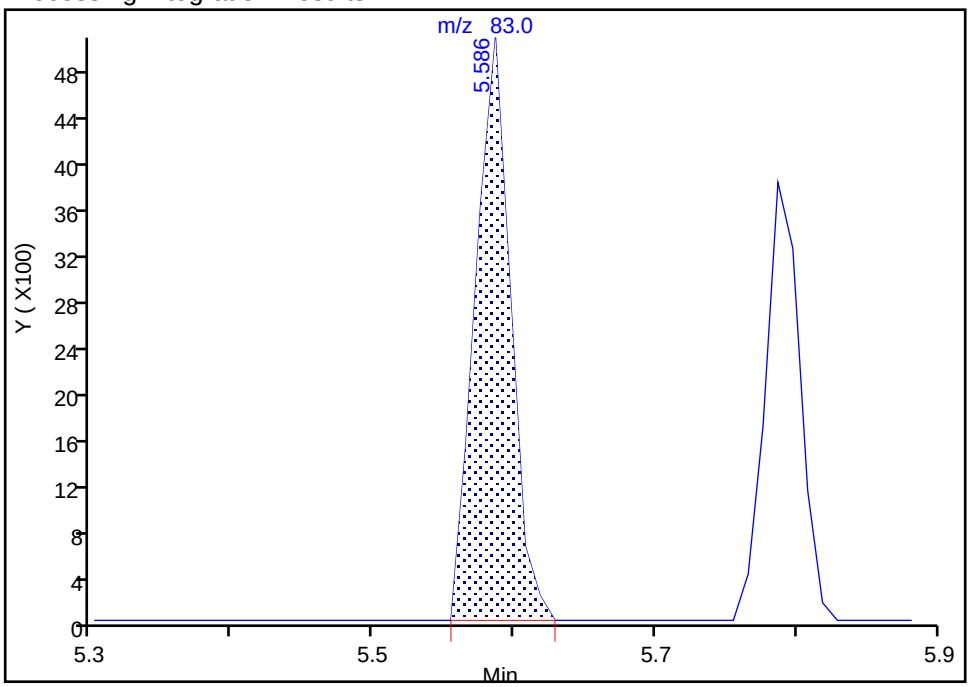
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

69 Methylcyclohexane, CAS: 108-87-2

Signal: 2

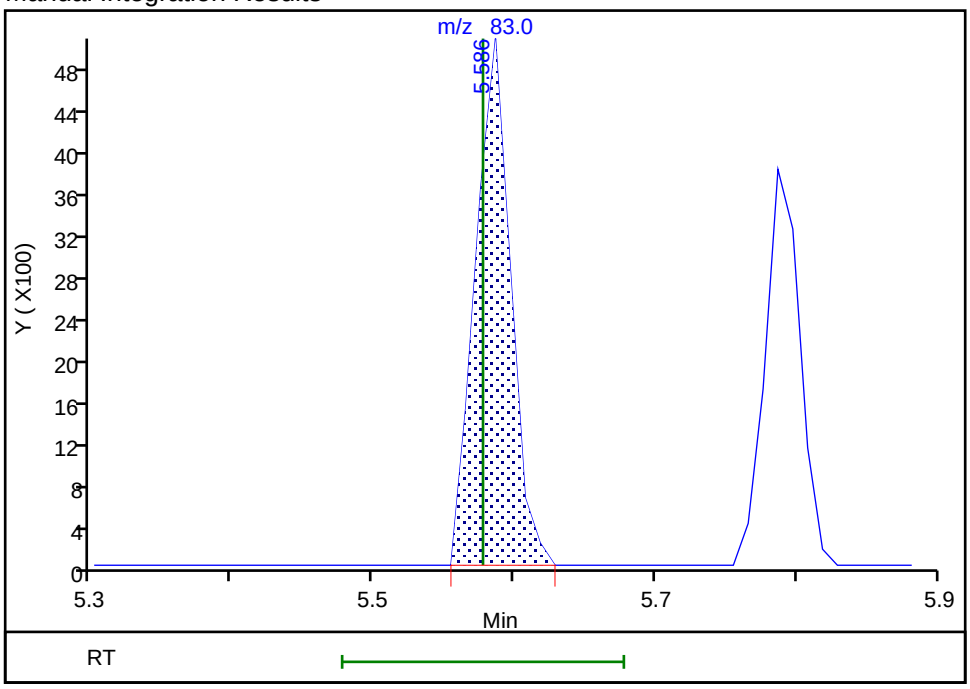
Processing Integration Results

RT: 5.59
Area: 8849
Amount: 0.563143
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 8849
Amount: 0.563143
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

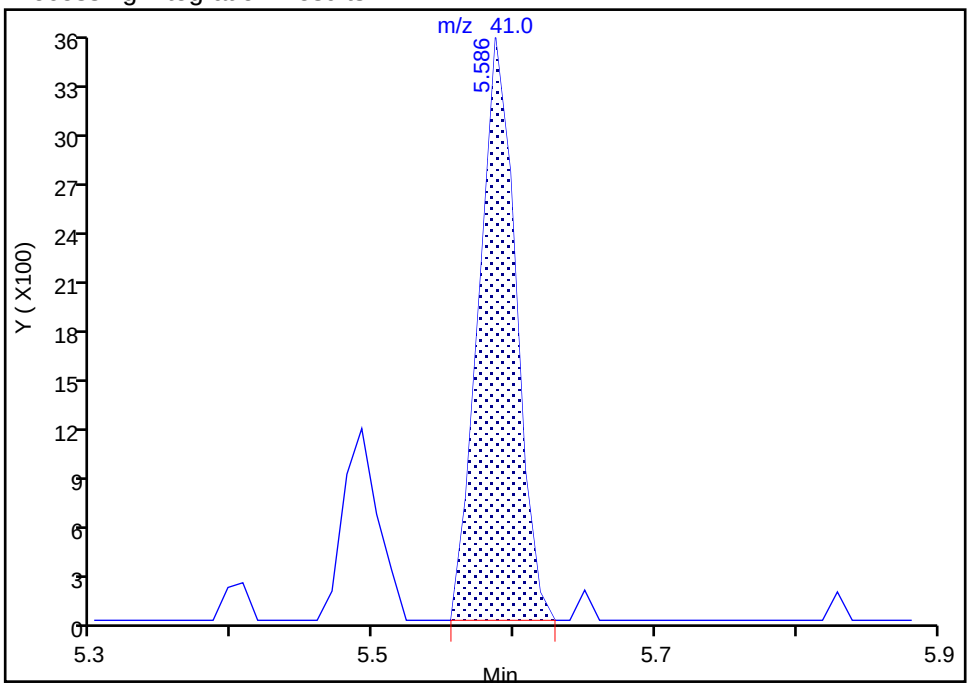
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

69 Methylcyclohexane, CAS: 108-87-2

Signal: 3

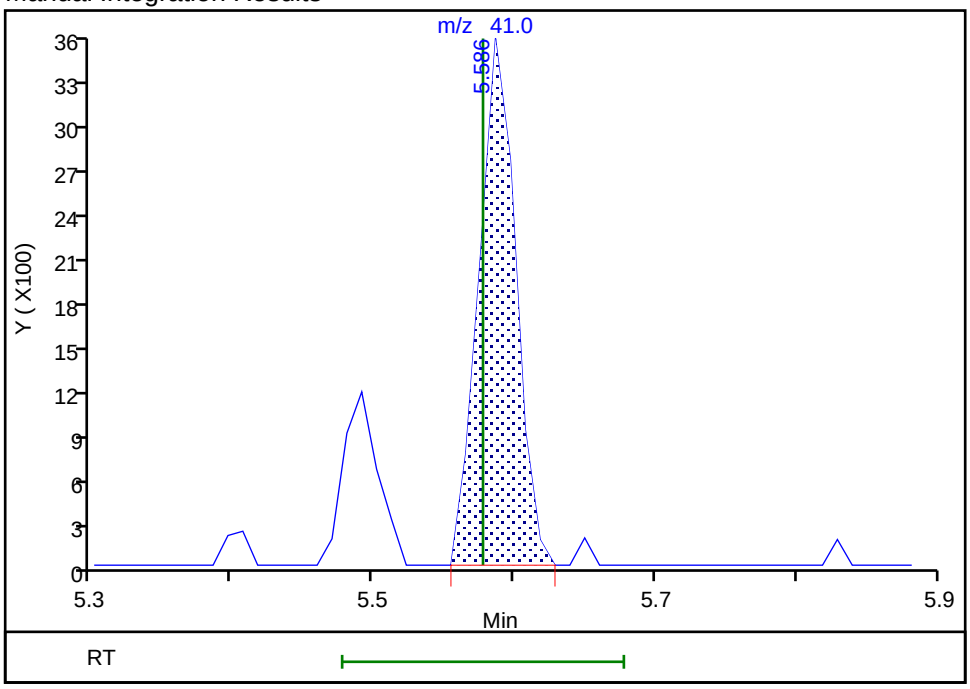
Processing Integration Results

RT: 5.59
Area: 6507
Amount: 0.563143
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 6507
Amount: 0.563143
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

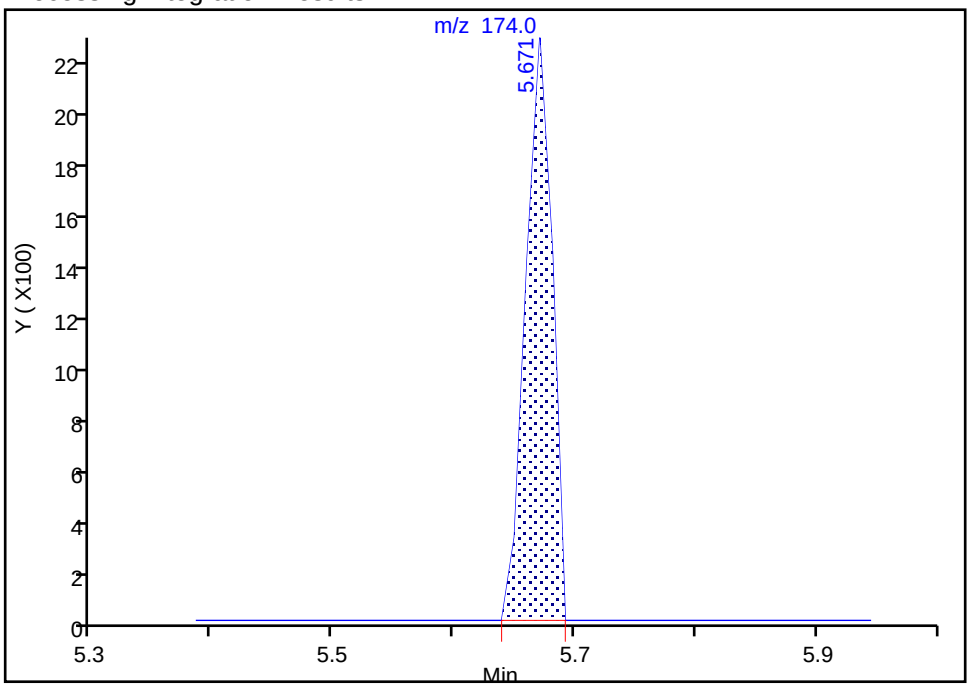
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

73 Dibromomethane, CAS: 74-95-3

Signal: 2

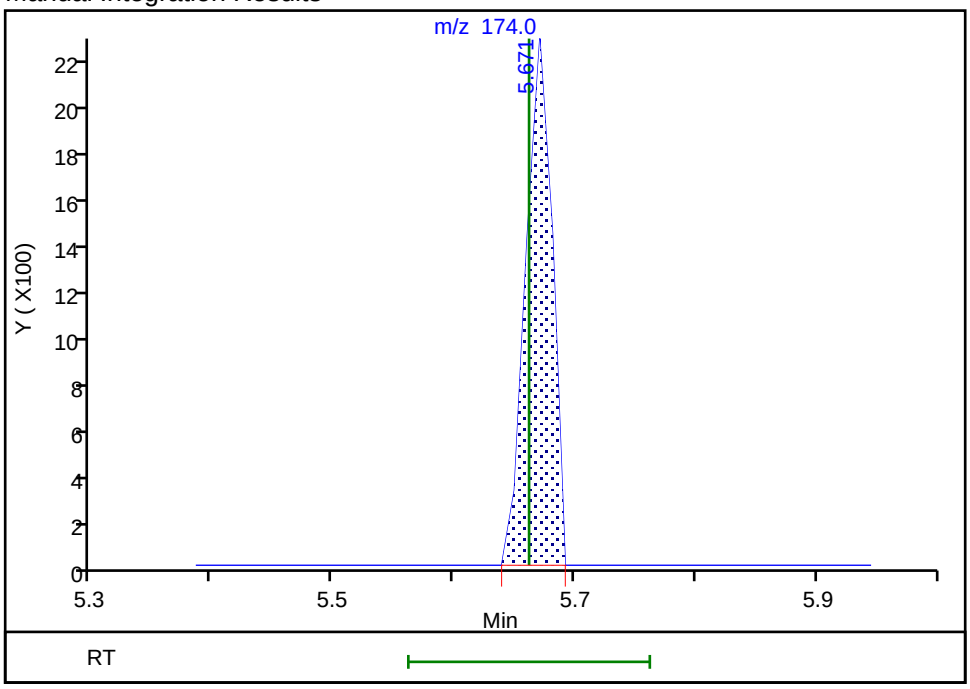
Processing Integration Results

RT: 5.67
Area: 3416
Amount: 0.651614
Amount Units: ug/l



Manual Integration Results

RT: 5.67
Area: 3416
Amount: 0.677285
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

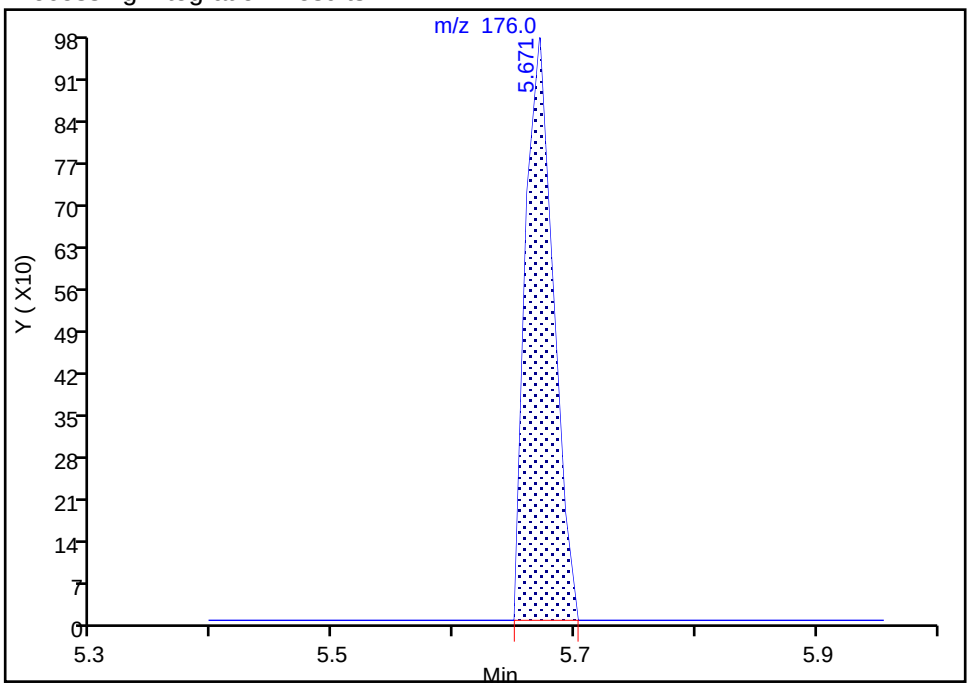
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

73 Dibromomethane, CAS: 74-95-3

Signal: 3

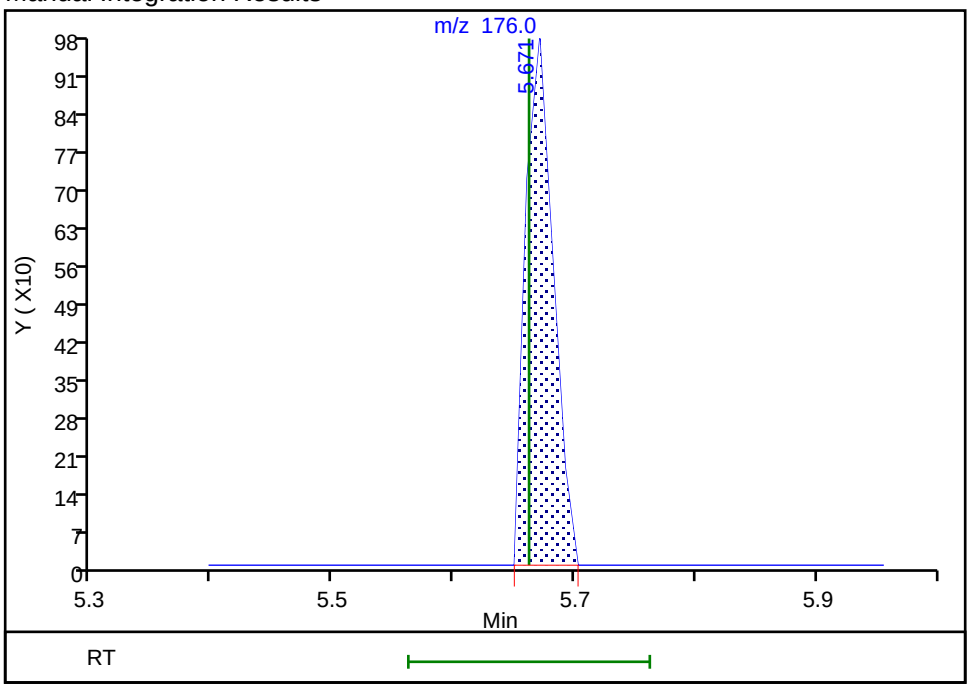
Processing Integration Results

RT: 5.67
Area: 1549
Amount: 0.651614
Amount Units: ug/l



Manual Integration Results

RT: 5.67
Area: 1549
Amount: 0.677285
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

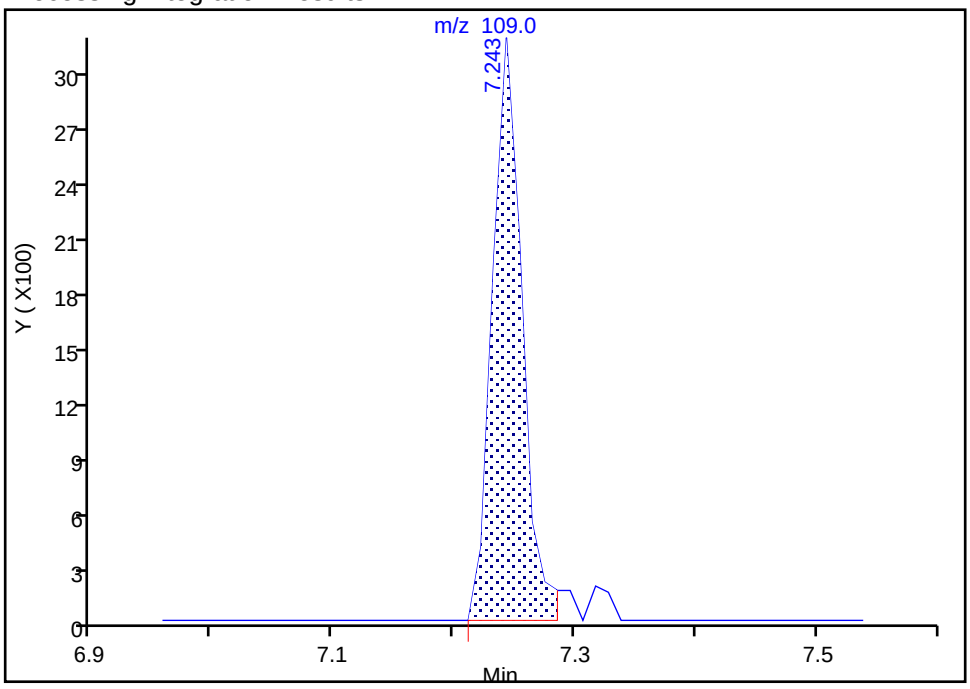
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

88 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

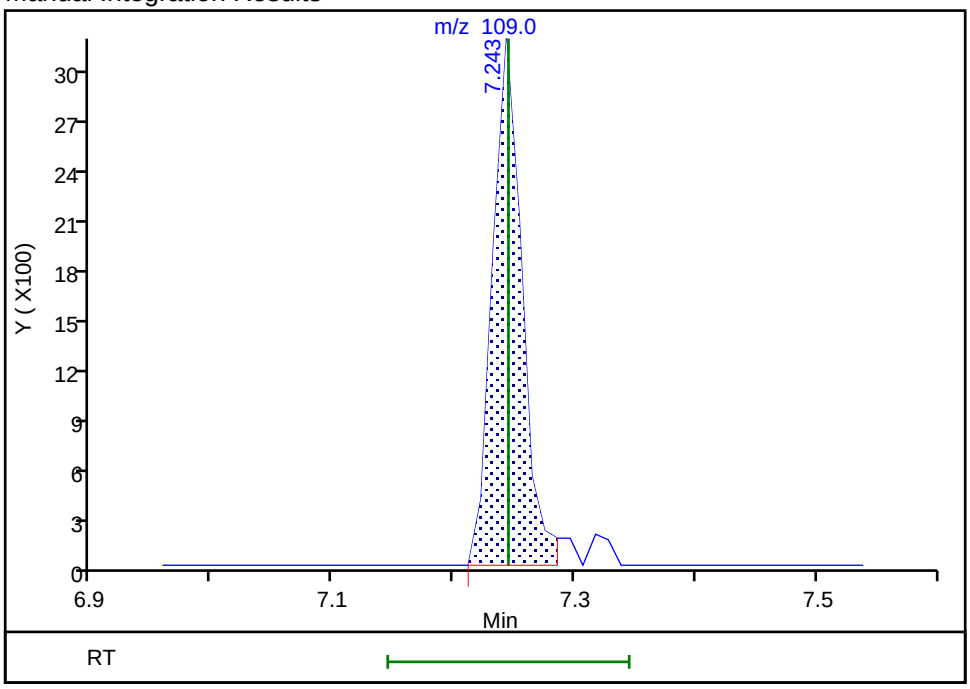
Processing Integration Results

RT: 7.24
Area: 5416
Amount: 0.593181
Amount Units: ug/l



Manual Integration Results

RT: 7.24
Area: 5416
Amount: 0.593181
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

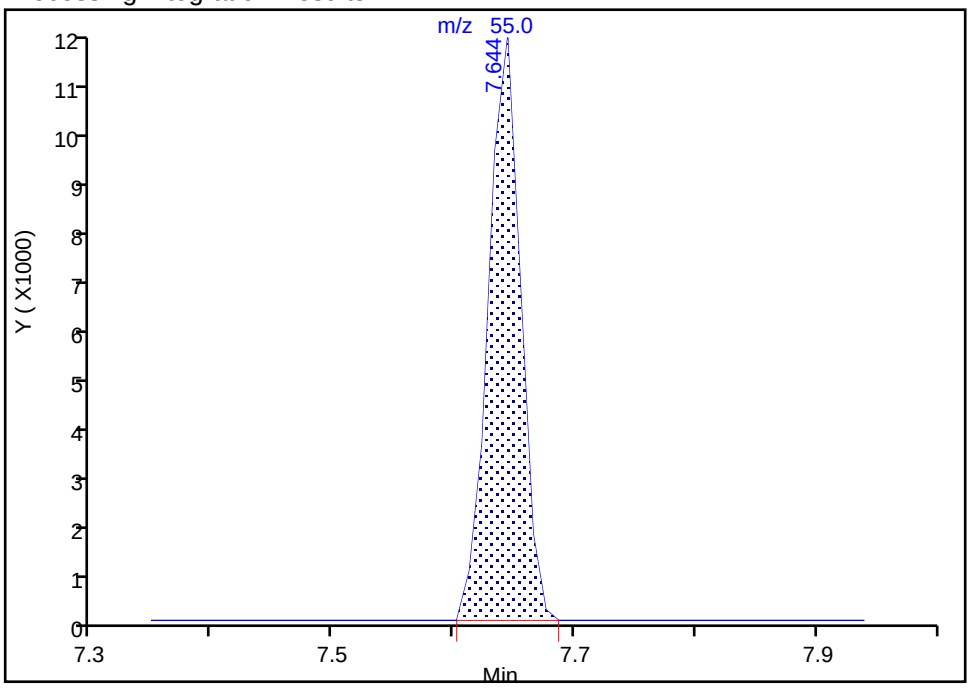
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

89 1-Chlorohexane, CAS: 544-10-5

Signal: 2

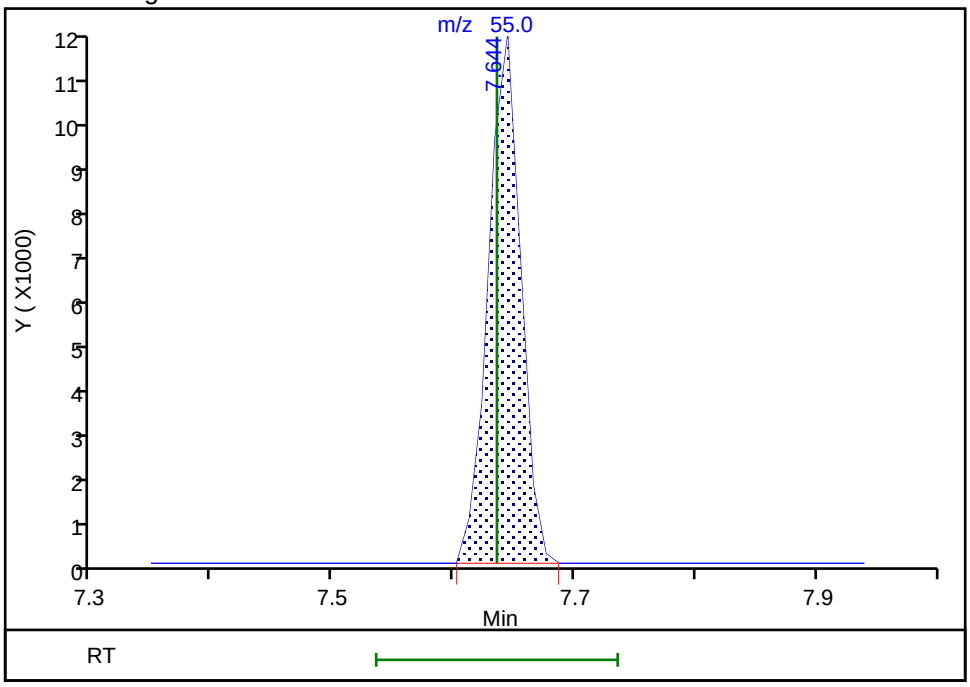
Processing Integration Results

RT: 7.64
Area: 22259
Amount: 0.501364
Amount Units: ug/l



Manual Integration Results

RT: 7.64
Area: 22259
Amount: 0.501364
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:54:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

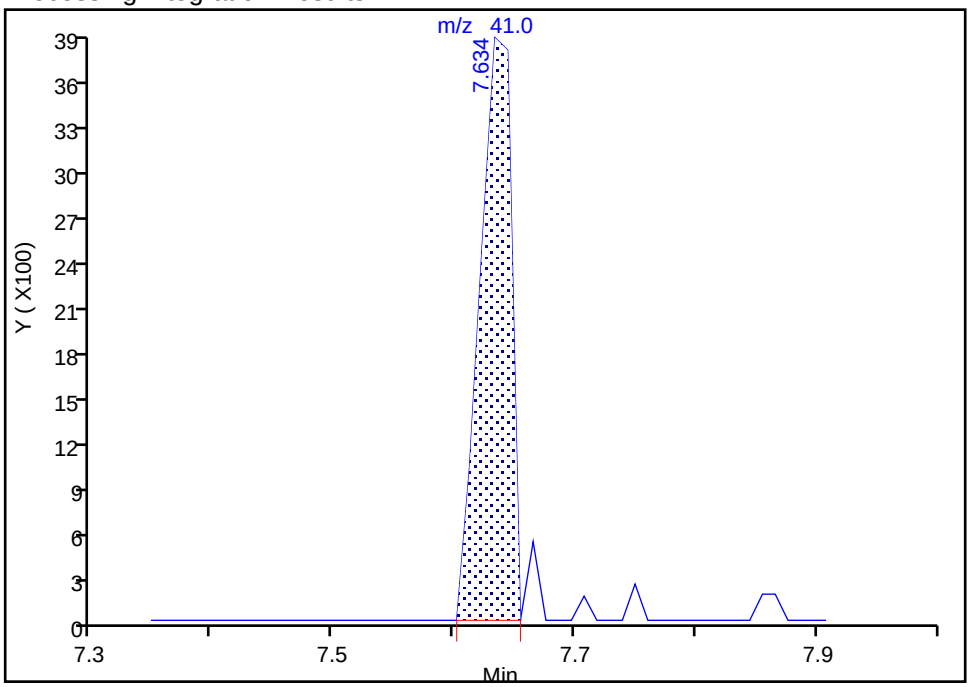
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

89 1-Chlorohexane, CAS: 544-10-5

Signal: 3

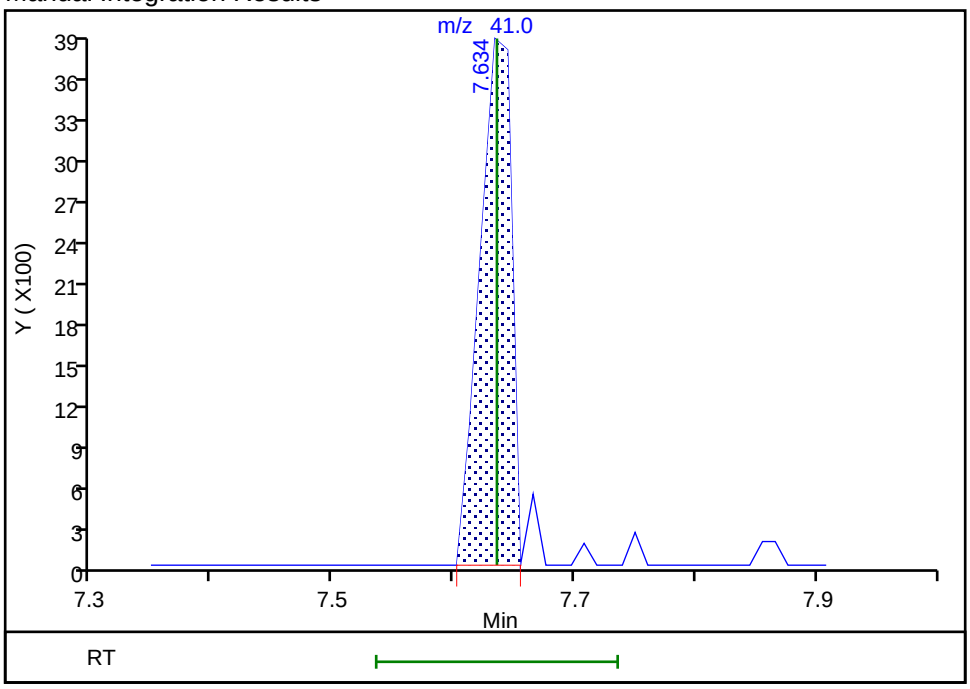
Processing Integration Results

RT: 7.63
Area: 6954
Amount: 0.501364
Amount Units: ug/l



Manual Integration Results

RT: 7.63
Area: 6954
Amount: 0.501364
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:54:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

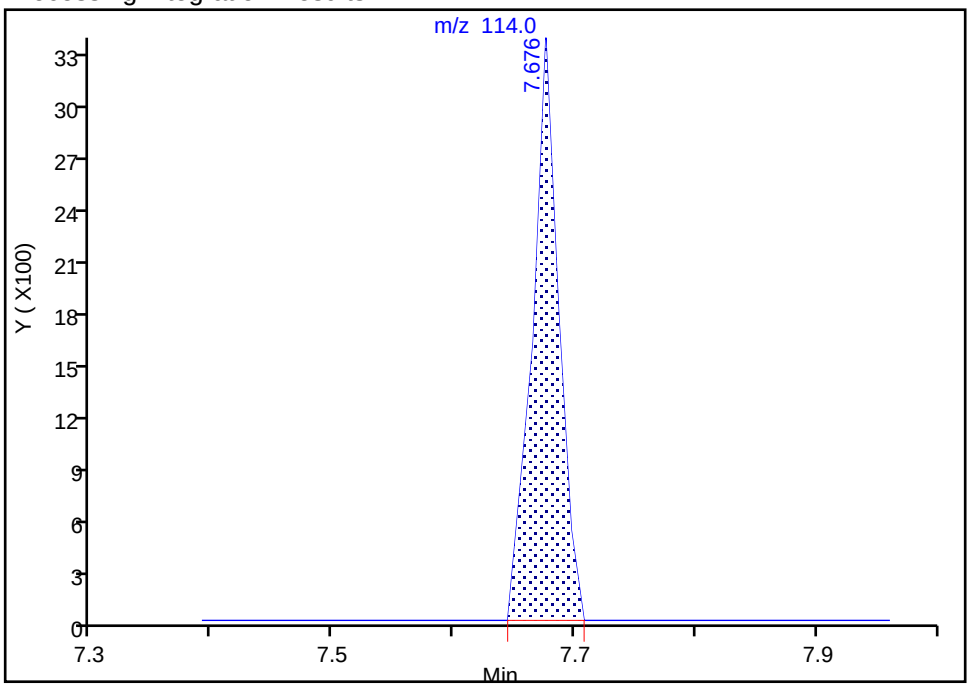
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

90 Chlorobenzene, CAS: 108-90-7

Signal: 2

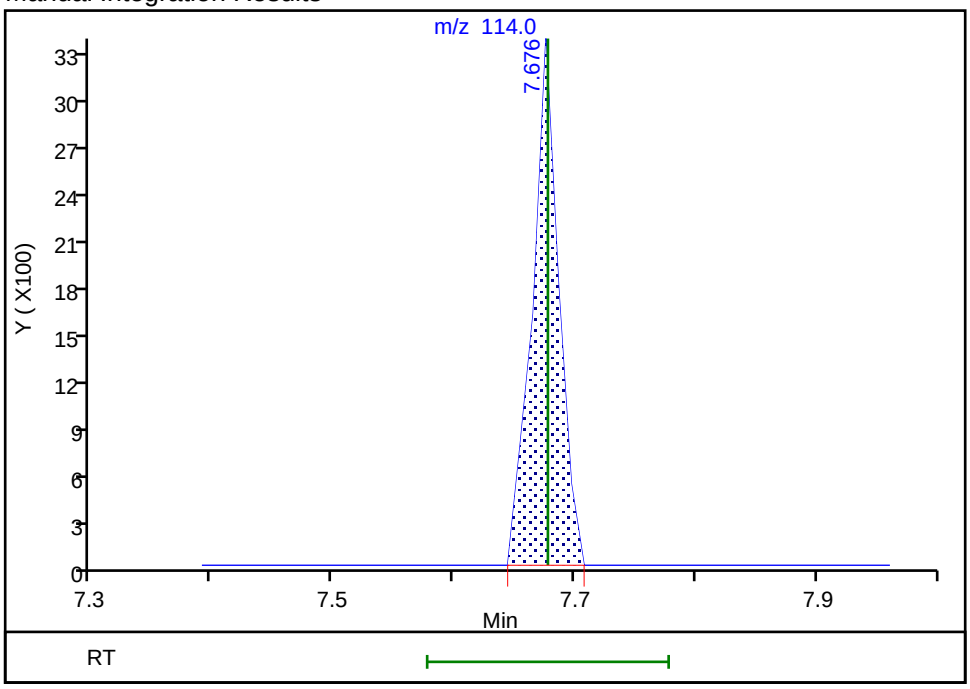
Processing Integration Results

RT: 7.68
Area: 5153
Amount: 0.601004
Amount Units: ug/l



Manual Integration Results

RT: 7.68
Area: 5153
Amount: 0.601004
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

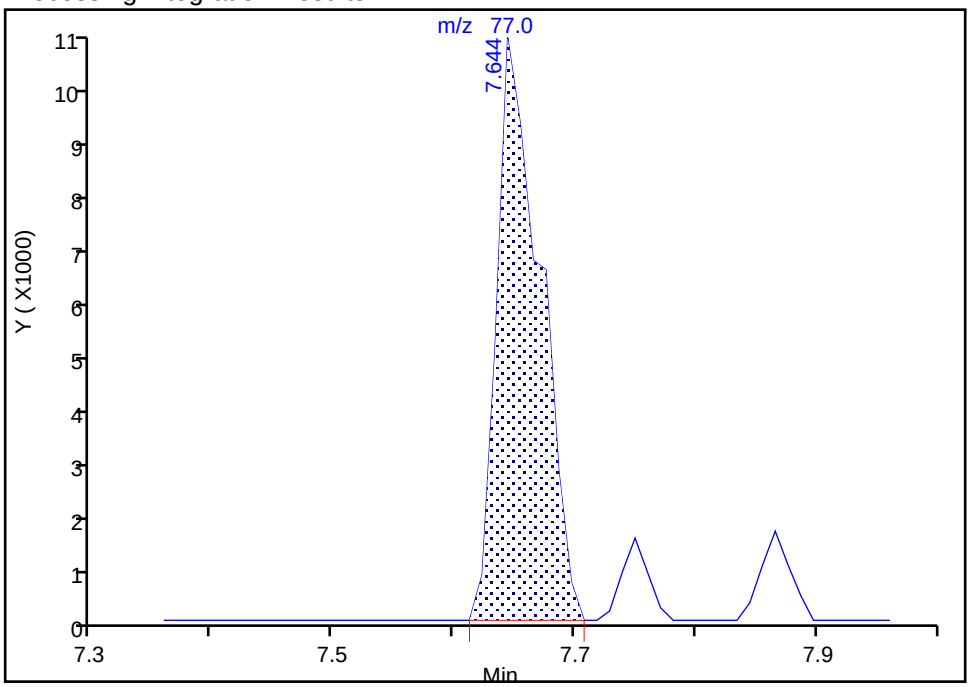
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

90 Chlorobenzene, CAS: 108-90-7

Signal: 3

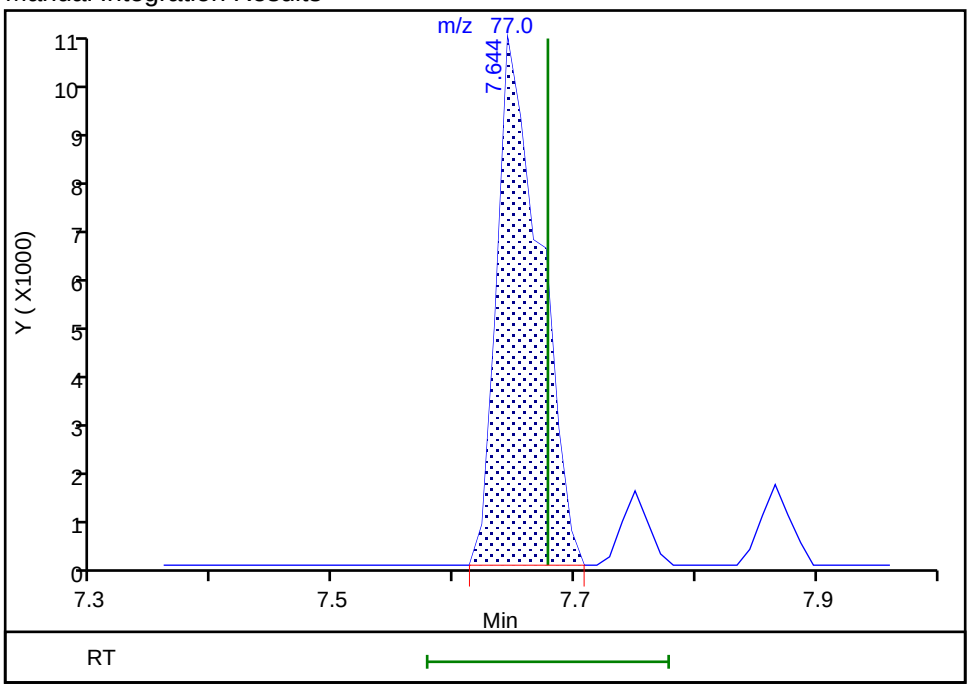
Processing Integration Results

RT: 7.64
Area: 25302
Amount: 0.601004
Amount Units: ug/l



Manual Integration Results

RT: 7.64
Area: 25302
Amount: 0.601004
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

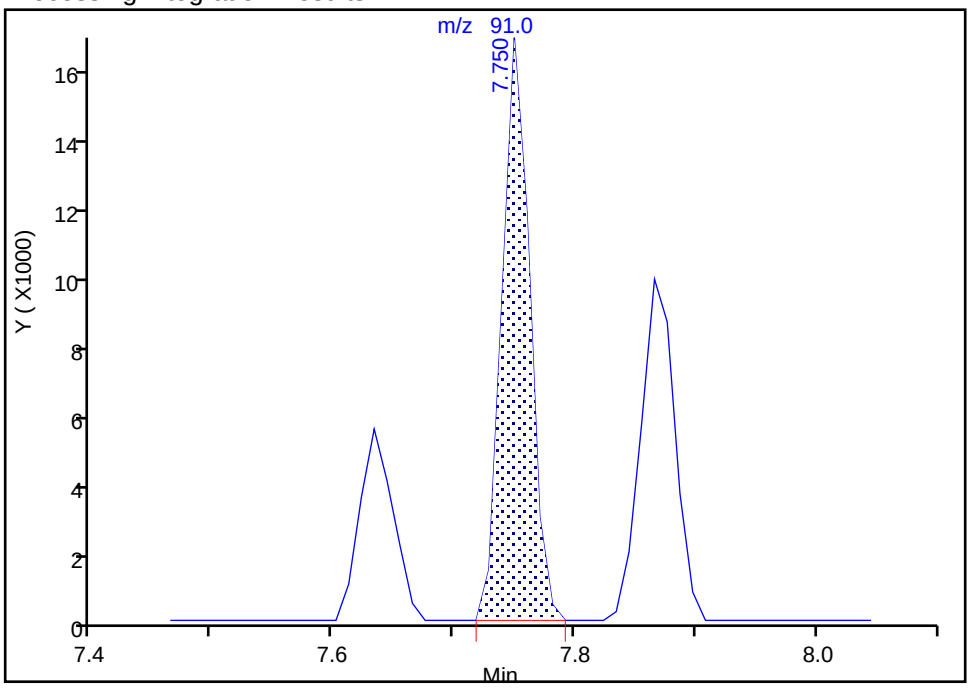
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

92 Ethylbenzene, CAS: 100-41-4

Signal: 2

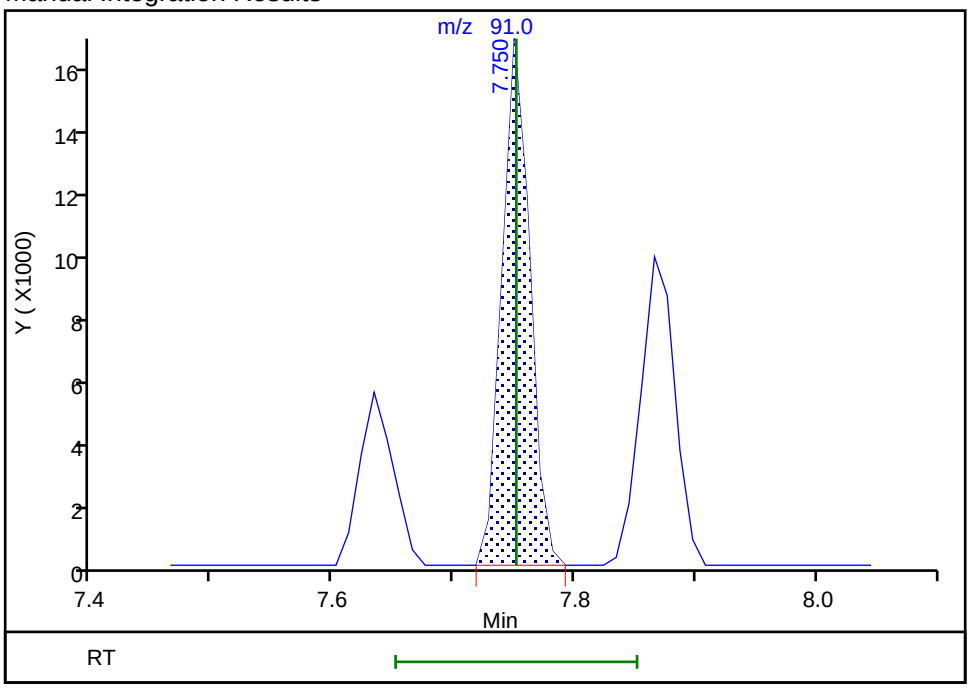
Processing Integration Results

RT: 7.75
Area: 26158
Amount: 0.574387
Amount Units: ug/l



Manual Integration Results

RT: 7.75
Area: 26158
Amount: 0.574387
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:43:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

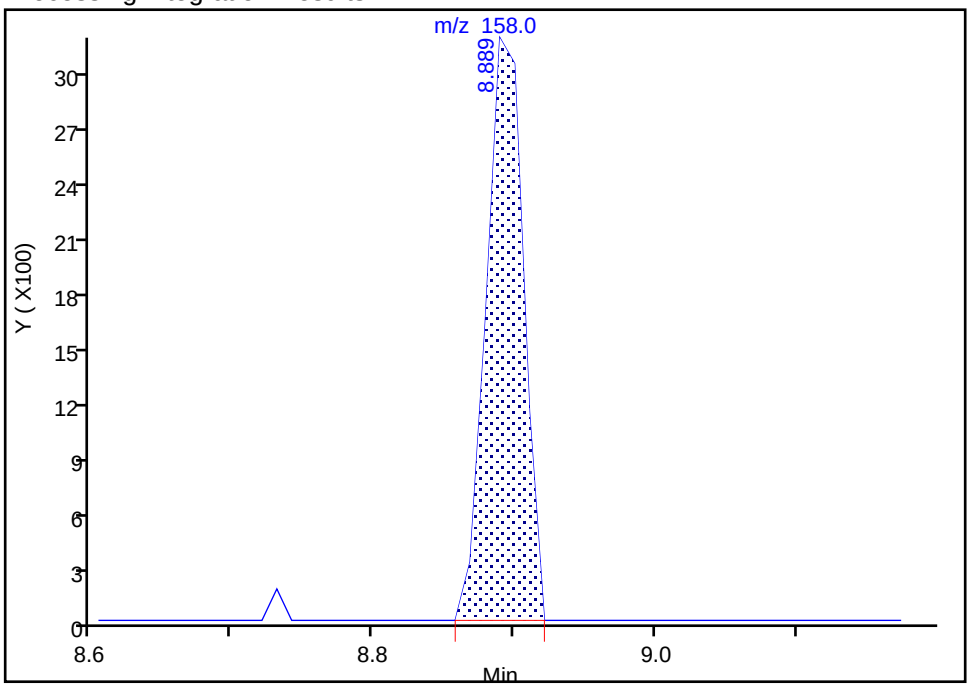
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

101 Bromobenzene, CAS: 108-86-1

Signal: 2

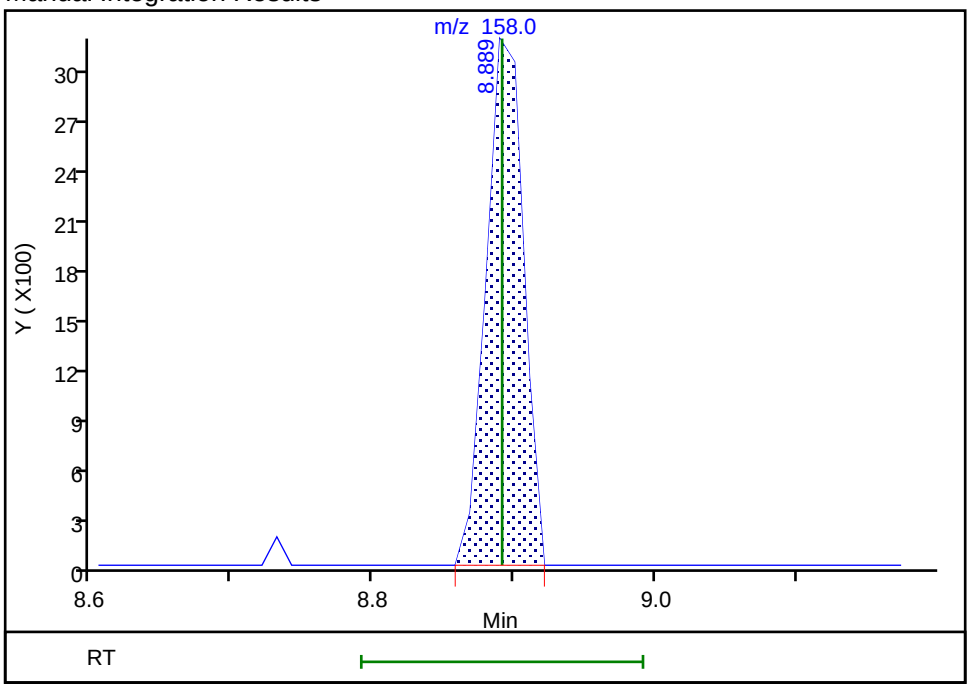
Processing Integration Results

RT: 8.89
Area: 5772
Amount: 0.596925
Amount Units: ug/l



Manual Integration Results

RT: 8.89
Area: 5772
Amount: 0.596925
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

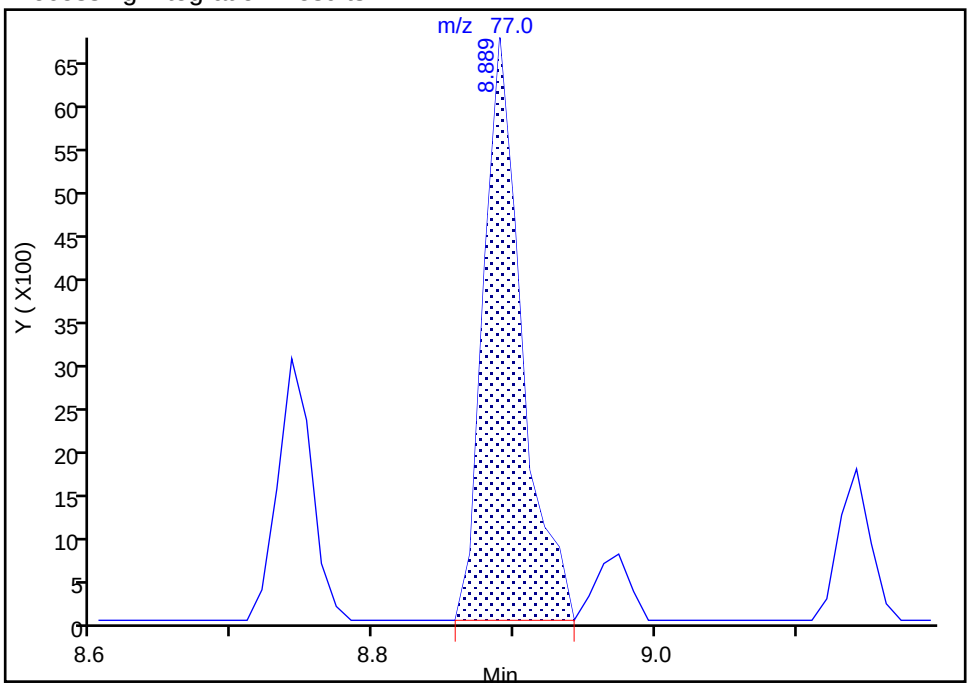
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

101 Bromobenzene, CAS: 108-86-1

Signal: 3

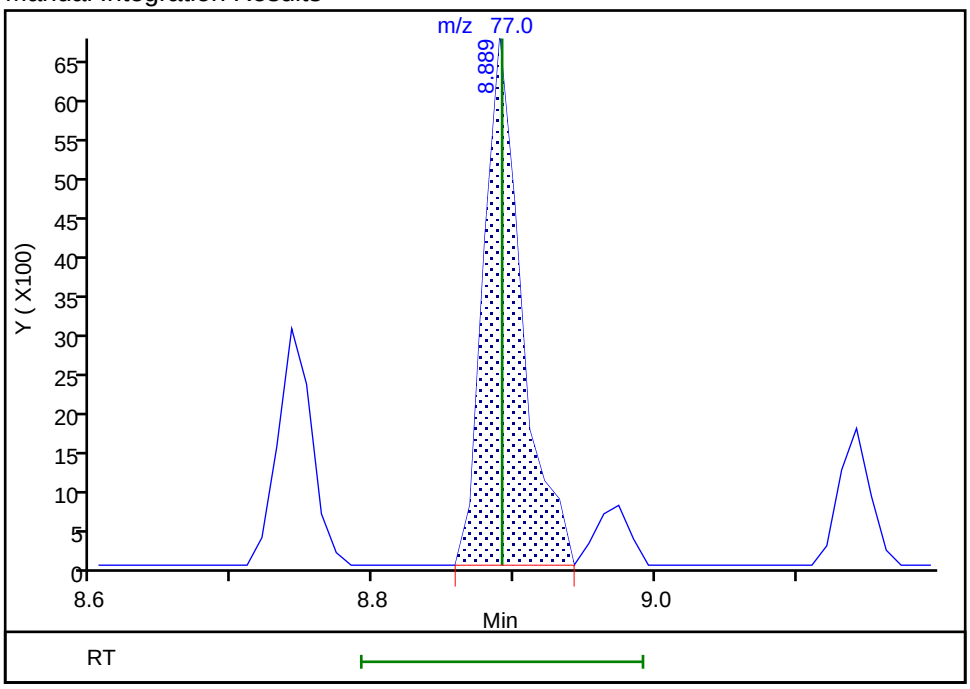
Processing Integration Results

RT: 8.89
Area: 12681
Amount: 0.596925
Amount Units: ug/l



Manual Integration Results

RT: 8.89
Area: 12681
Amount: 0.596925
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

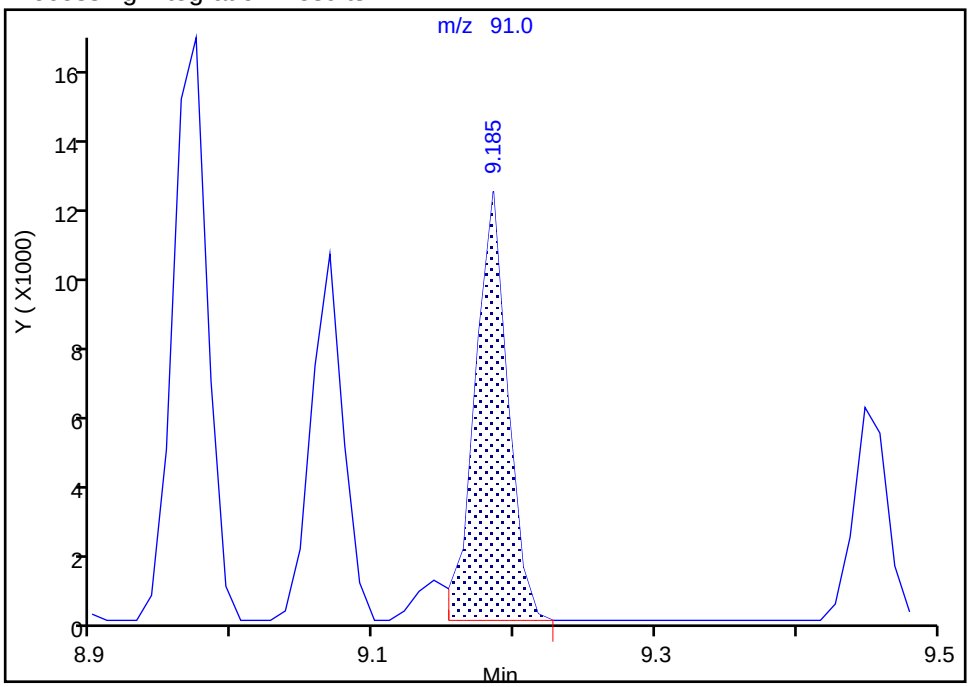
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 2

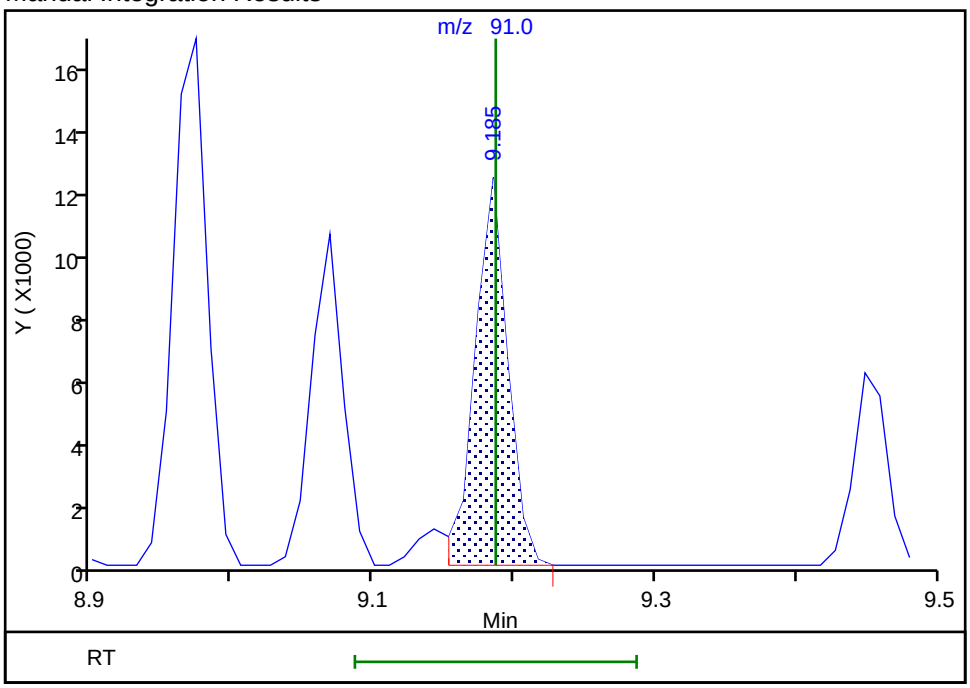
Processing Integration Results

RT: 9.18
Area: 20157
Amount: 0.586554
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 20157
Amount: 0.586554
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

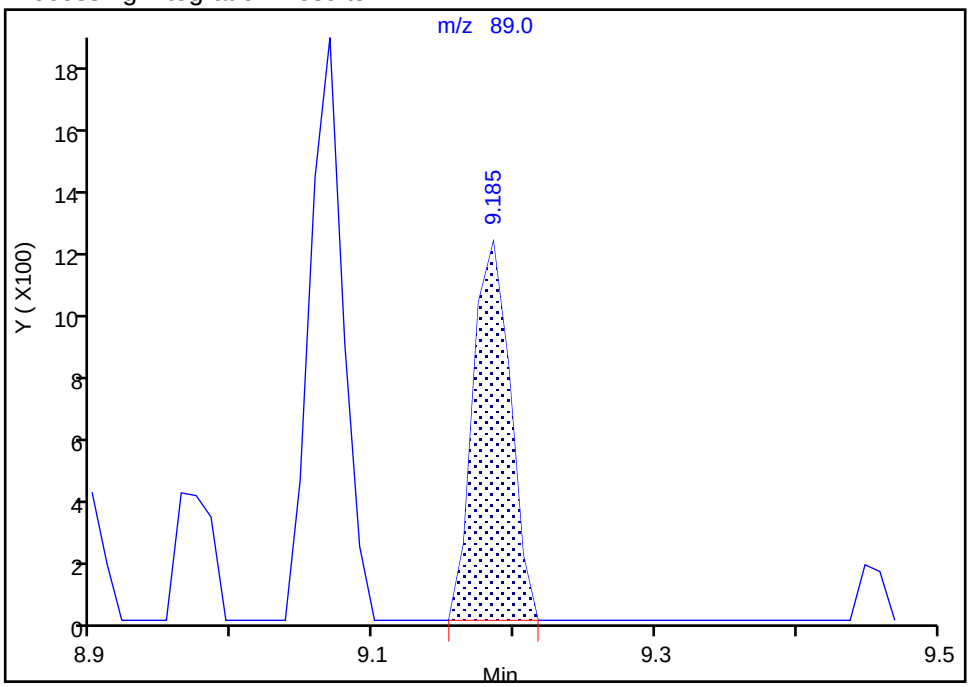
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 3

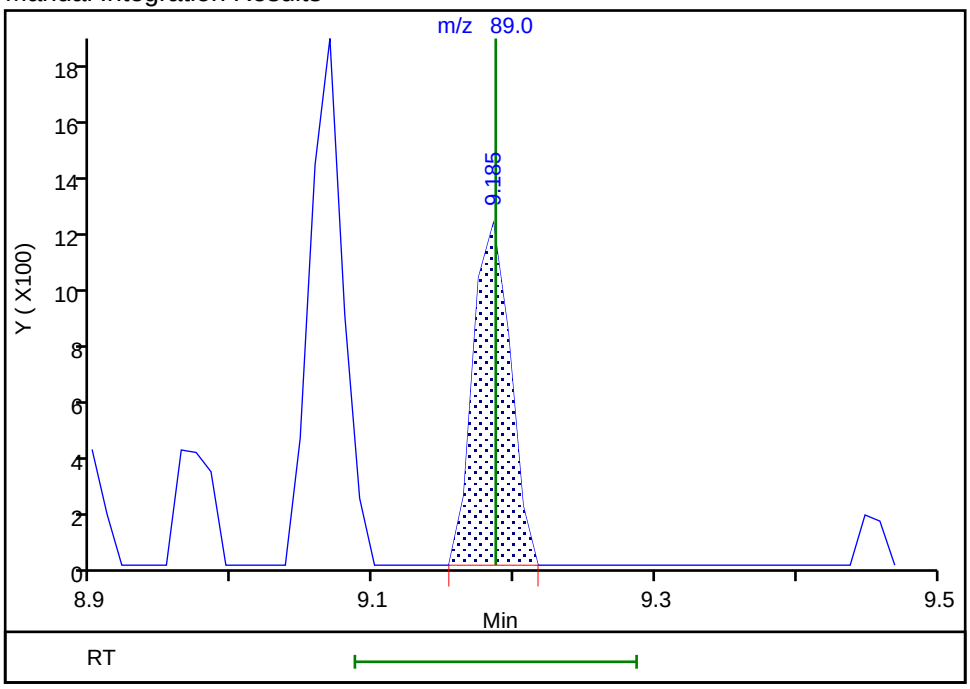
Processing Integration Results

RT: 9.18
Area: 2250
Amount: 0.586554
Amount Units: ug/l



Manual Integration Results

RT: 9.18
Area: 2250
Amount: 0.586554
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

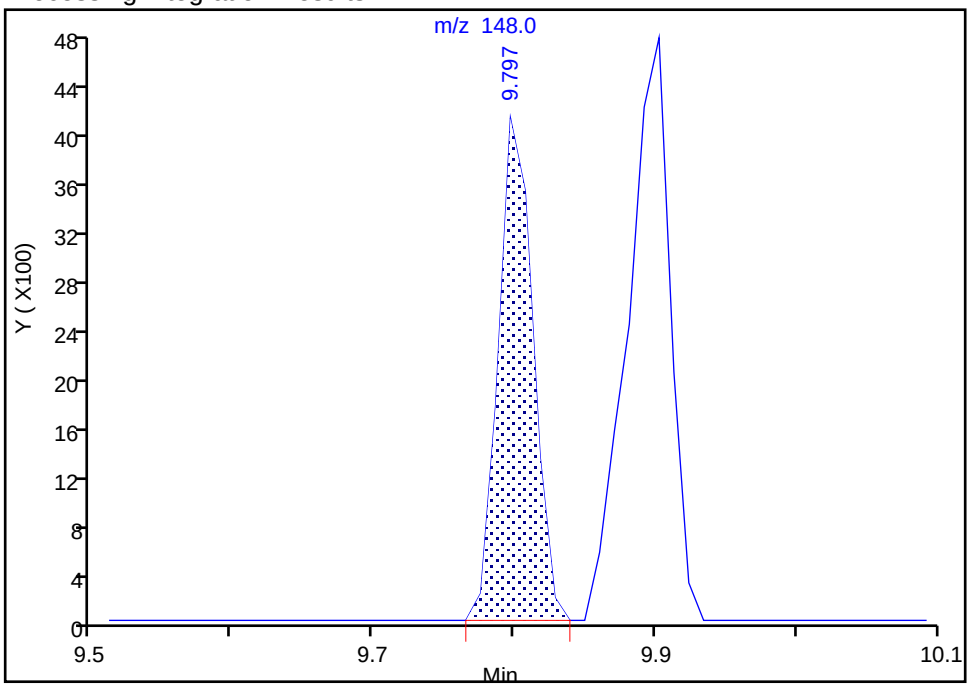
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

111 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 2

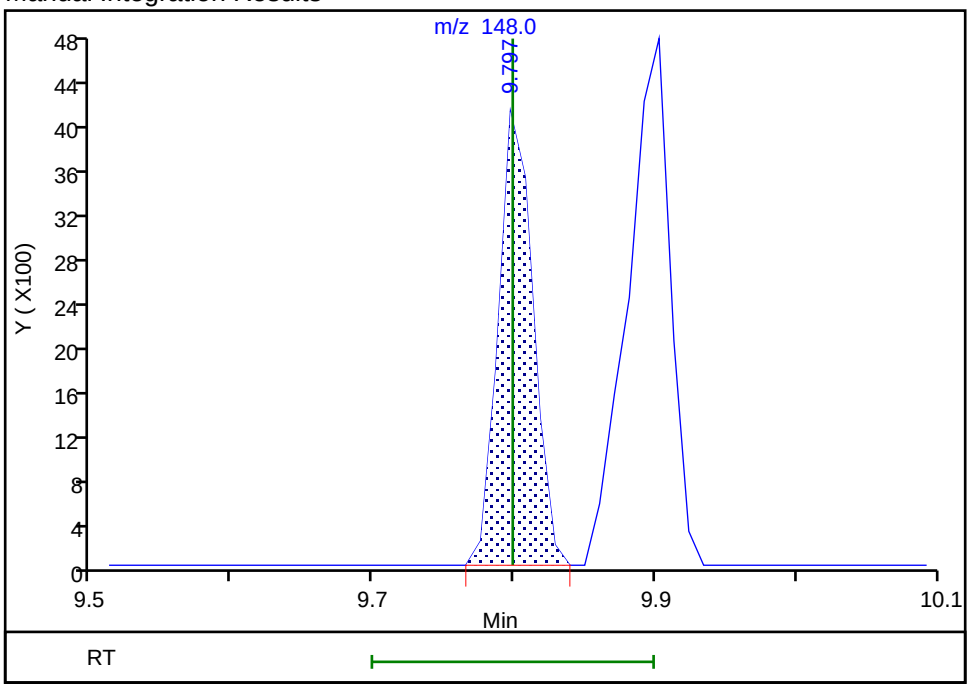
Processing Integration Results

RT: 9.80
Area: 7073
Amount: 0.634067
Amount Units: ug/l



Manual Integration Results

RT: 9.80
Area: 7073
Amount: 0.656056
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

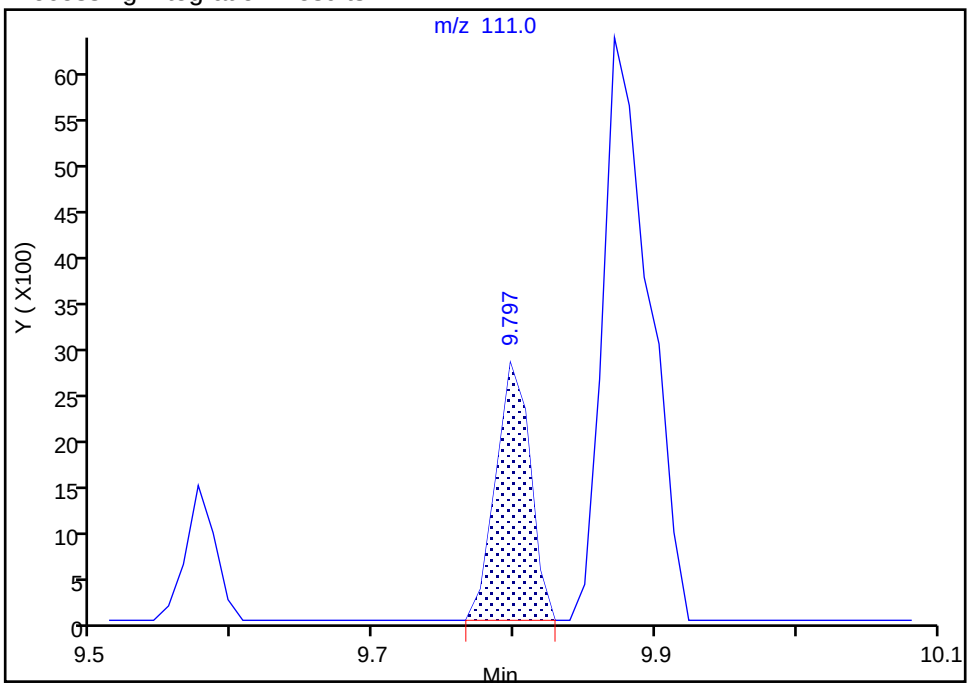
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

111 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 3

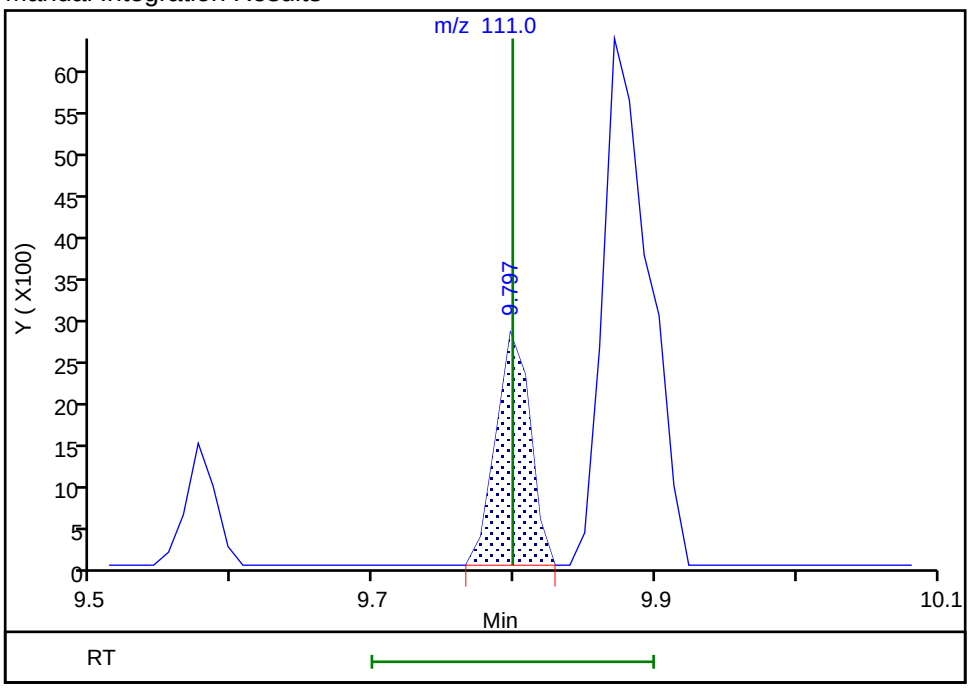
Processing Integration Results

RT: 9.80
Area: 4742
Amount: 0.634067
Amount Units: ug/l



Manual Integration Results

RT: 9.80
Area: 4742
Amount: 0.656056
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

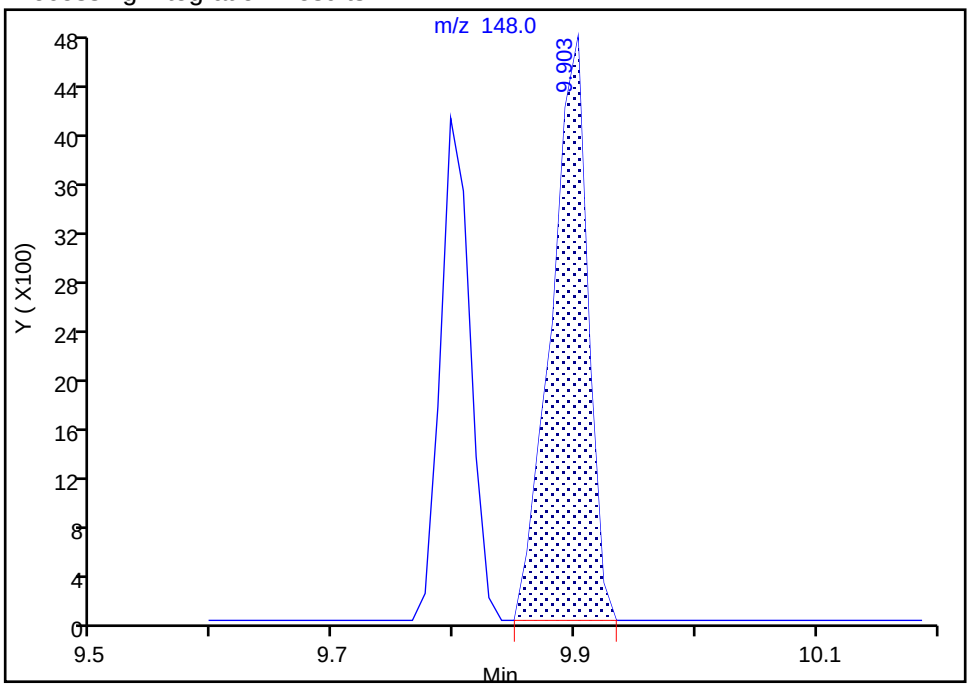
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 2

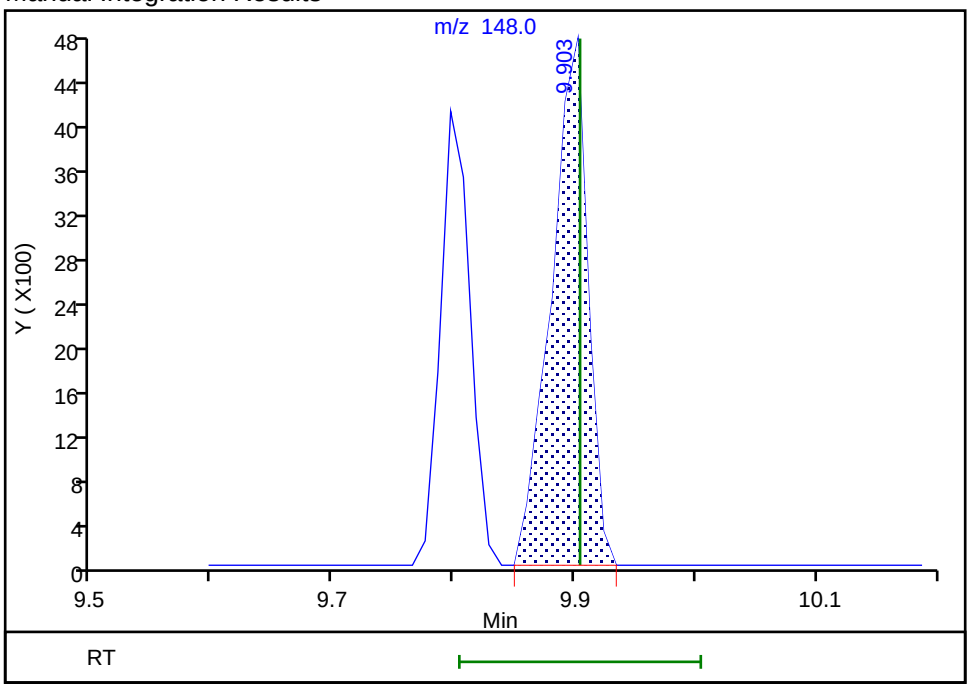
Processing Integration Results

RT: 9.90
Area: 10077
Amount: 0.647016
Amount Units: ug/l



Manual Integration Results

RT: 9.90
Area: 10077
Amount: 0.671704
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

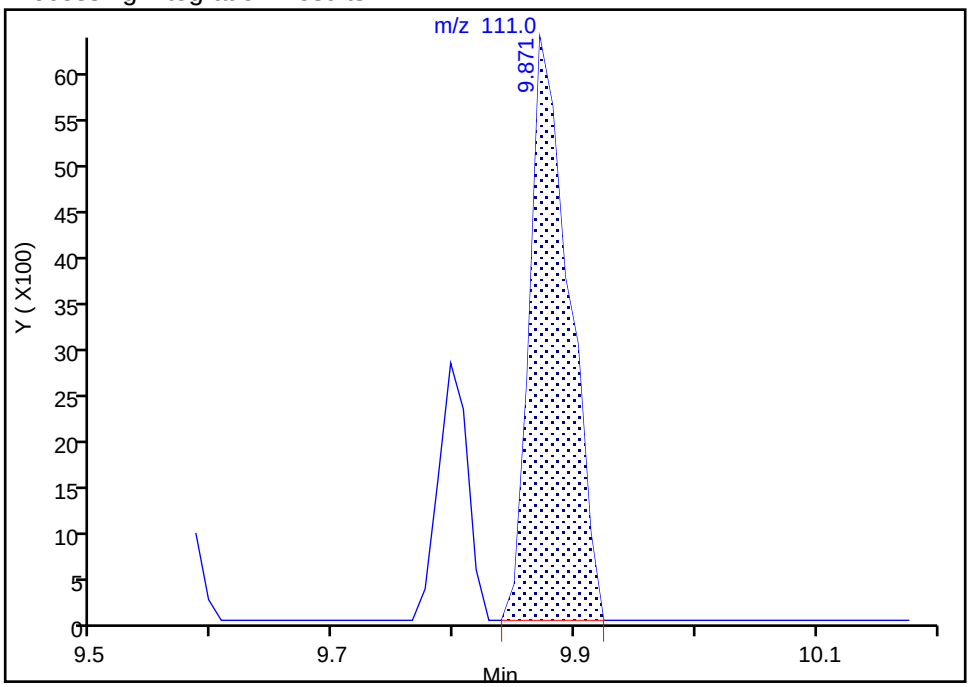
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 3

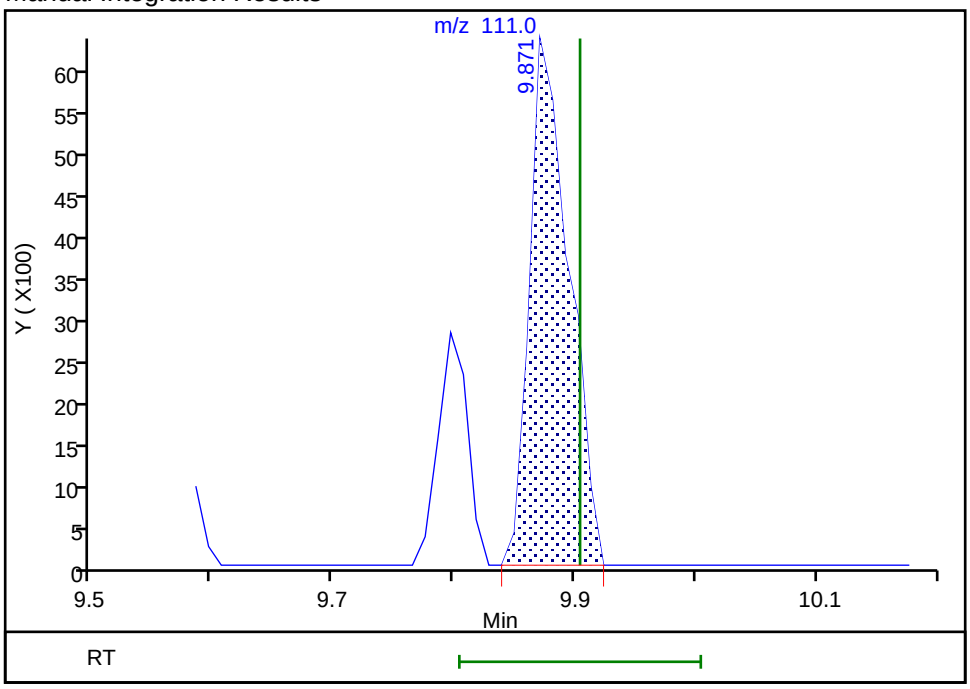
Processing Integration Results

RT: 9.87
Area: 14296
Amount: 0.647016
Amount Units: ug/l



Manual Integration Results

RT: 9.87
Area: 14296
Amount: 0.671704
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

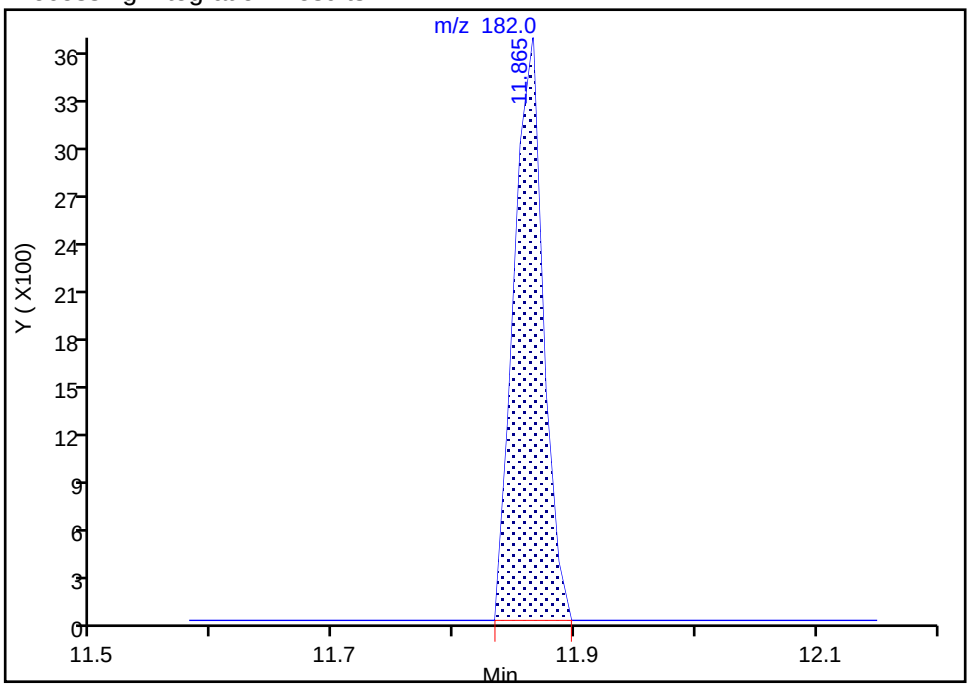
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

119 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 2

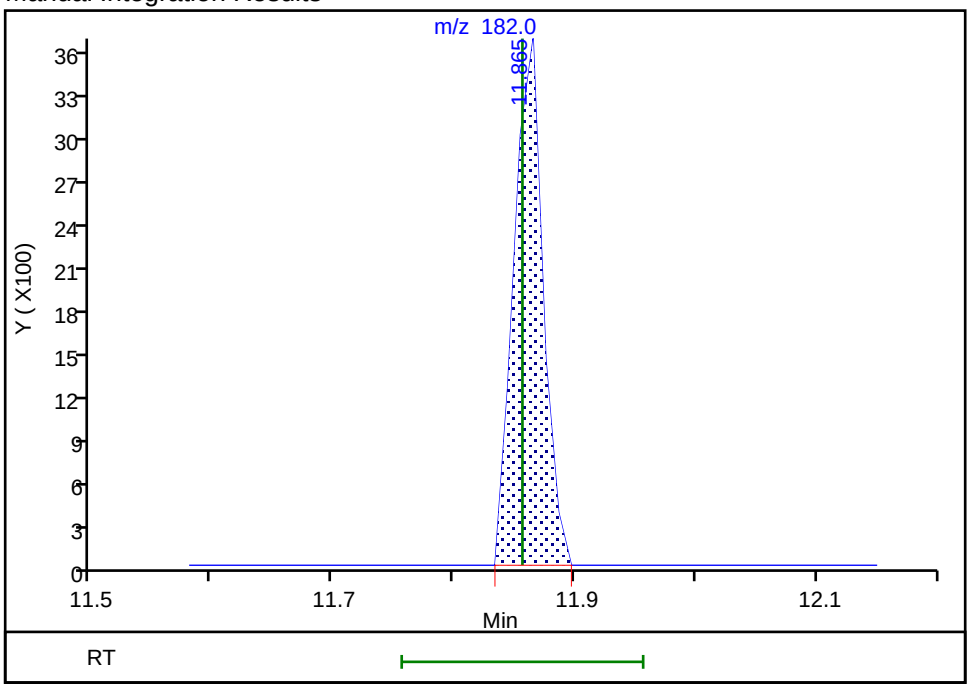
Processing Integration Results

RT: 11.87
Area: 6077
Amount: 0.654297
Amount Units: ug/l



Manual Integration Results

RT: 11.87
Area: 6077
Amount: 0.680549
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

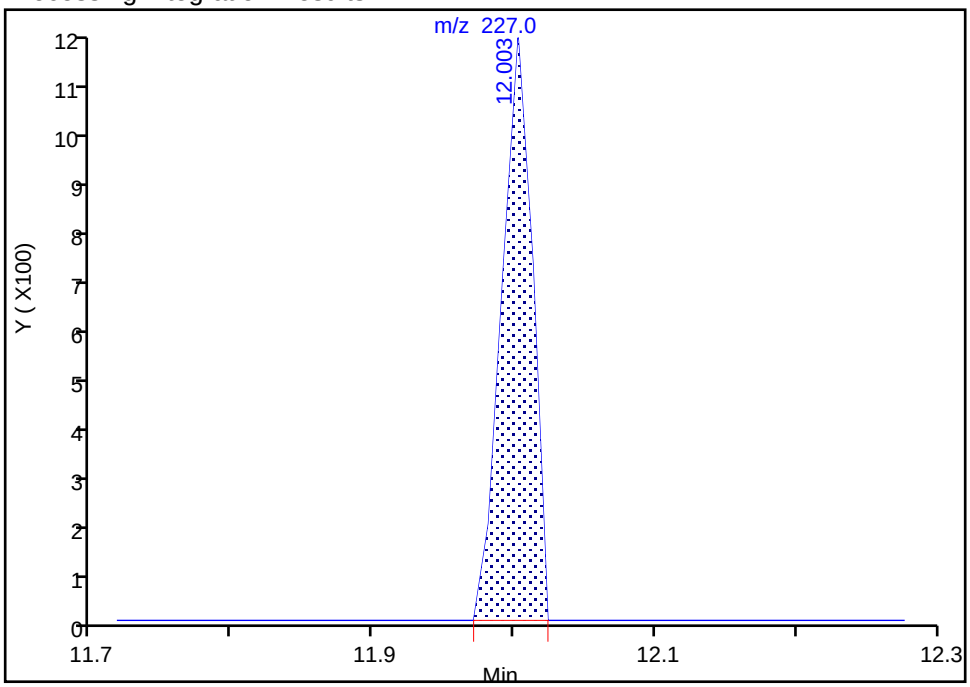
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 2

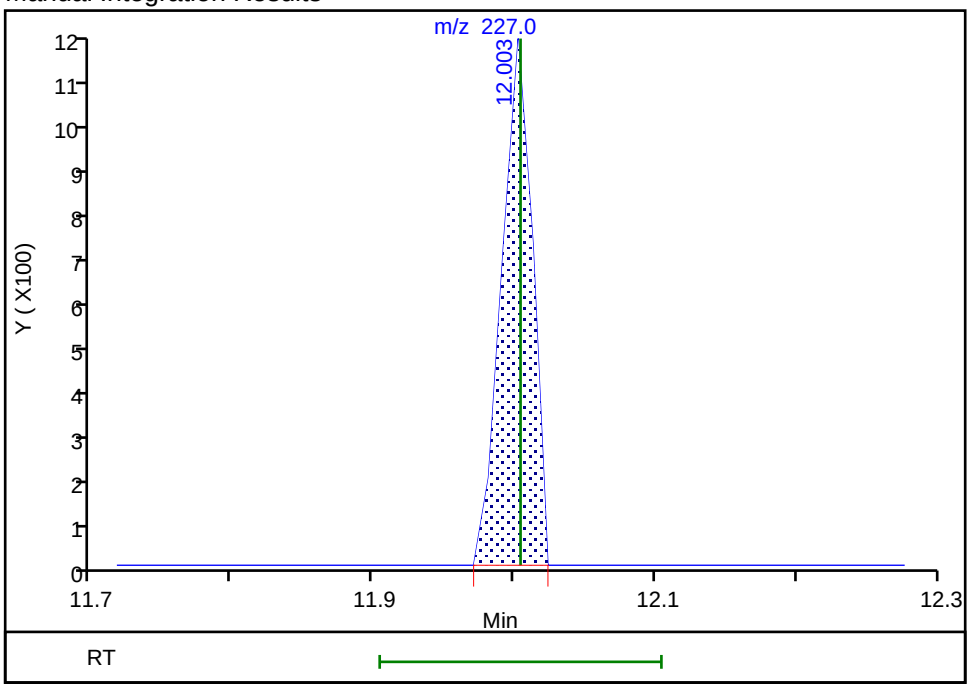
Processing Integration Results

RT: 12.00
Area: 1731
Amount: 0.680887
Amount Units: ug/l



Manual Integration Results

RT: 12.00
Area: 1731
Amount: 0.851194
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

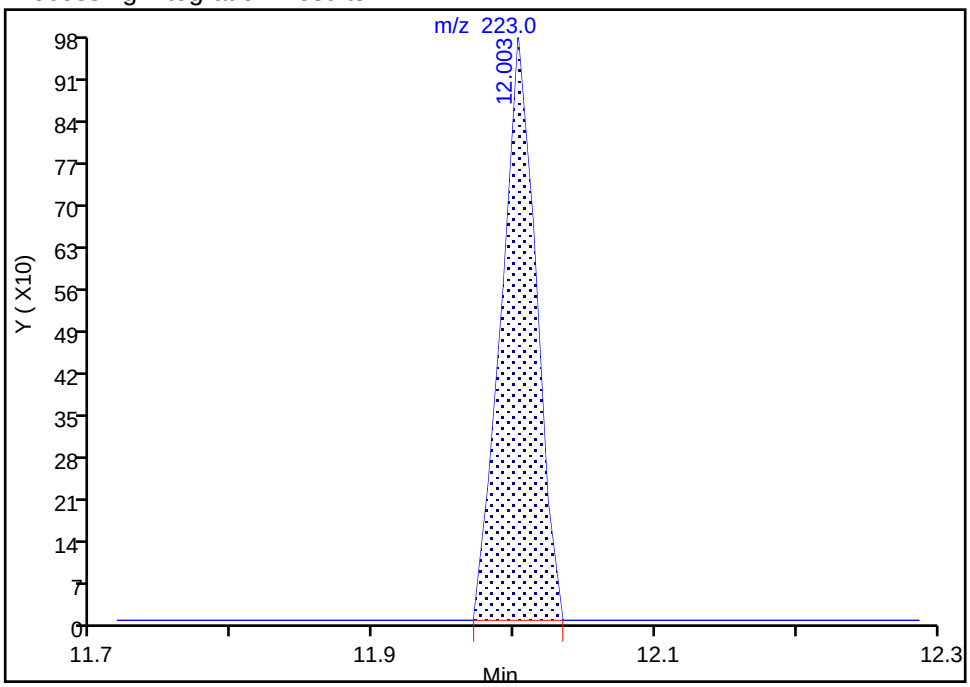
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D				
Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 3

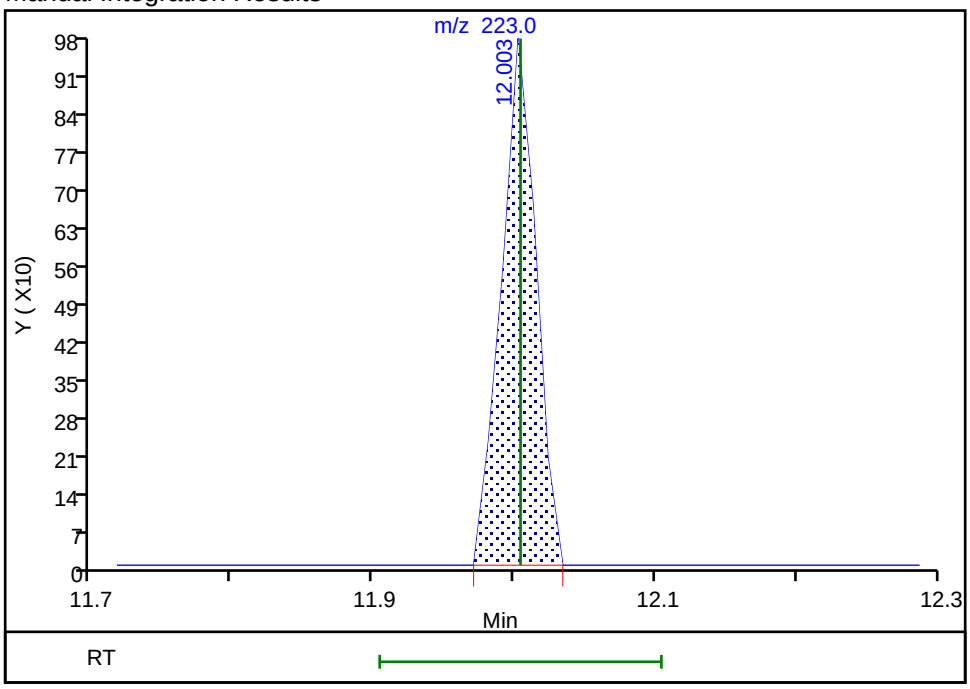
Processing Integration Results

RT: 12.00
Area: 1658
Amount: 0.680887
Amount Units: ug/l



Manual Integration Results

RT: 12.00
Area: 1658
Amount: 0.851194
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

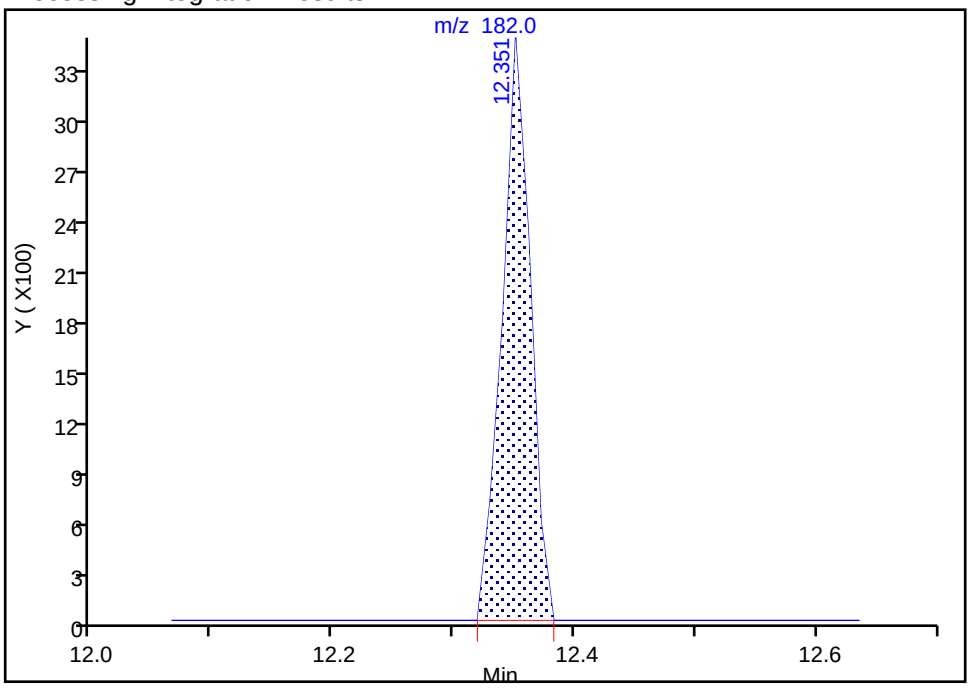
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

122 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 2

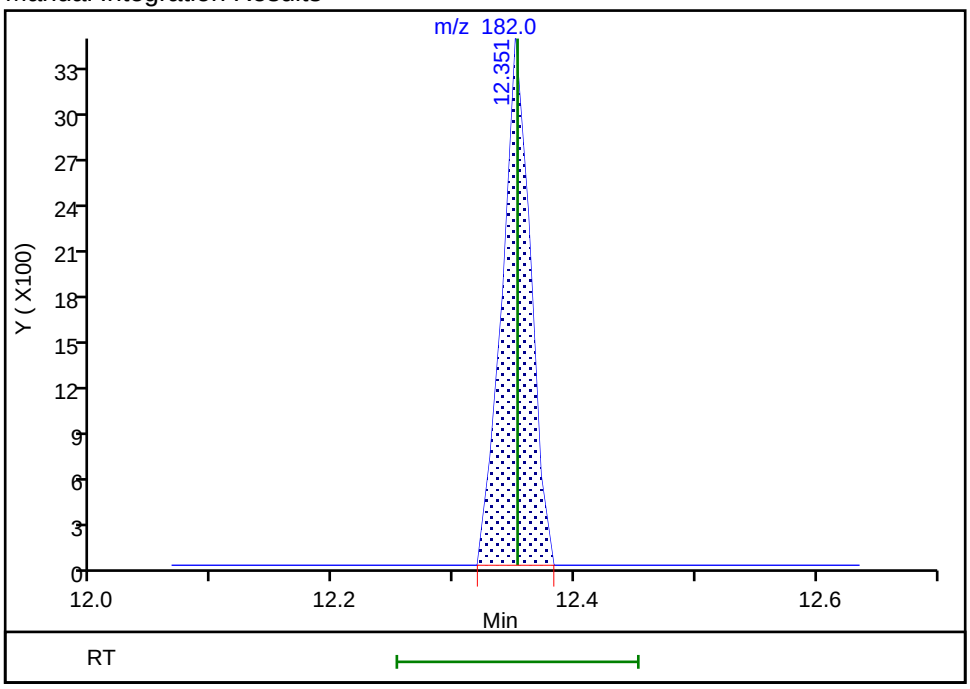
Processing Integration Results

RT: 12.35
Area: 5631
Amount: 0.622333
Amount Units: ug/l



Manual Integration Results

RT: 12.35
Area: 5631
Amount: 0.641966
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:44:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jun-2020 16:47:30 ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:43 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.114	5.113	0.001	99	2383354	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	87	531421	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	97	760731	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	574659	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.871	-0.011	97	691353	50.0	51.2	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2368182	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.743	0.001	83	850285	50.0	50.6	
10 Dichlorodifluoromethane	85	1.663	1.662	0.001	97	5476	1.00	0.8192	
11 Chloromethane	50	1.842	1.842	0.000	100	10961	1.00	0.8970	
12 Vinyl chloride	62	1.937	1.937	0.000	98	9829	1.00	0.9420	
14 Bromomethane	94	2.233	2.232	0.001	88	10332	1.00	0.9459	
15 Chloroethane	64	2.328	2.327	0.001	97	6373	1.00	0.9591	
16 Dichlorofluoromethane	67	2.497	2.496	0.001	96	15298	1.00	0.9860	
17 Trichlorofluoromethane	101	2.528	2.538	-0.010	98	12743	1.00	0.9893	
19 Ethyl ether	59	2.750	2.749	0.001	92	8448	1.00	1.04	
21 Acrolein	56	2.855	2.855	0.000	99	20816	9.88	10.4	
22 1,1-Dichloroethene	96	2.940	2.939	0.001	98	8105	1.00	1.05	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.940	2.939	0.001	75	6283	1.00	1.08	
24 Acetone	43	2.961	2.960	0.001	99	17462	4.00	4.34	
26 Iodomethane	142	3.066	3.066	0.000	98	5391	1.00	1.42	
27 Carbon disulfide	76	3.130	3.129	0.001	99	26575	1.00	0.8537	
29 Methyl acetate	43	3.193	3.193	0.000	98	17449	2.00	2.15	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	92	13759	1.00	1.04	
31 Methylene Chloride	84	3.309	3.309	0.000	93	12146	1.00	0.8495	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	97	10427	10.0	9.98	
33 Acrylonitrile	53	3.467	3.467	0.000	100	46835	10.0	10.7	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	94	26688	1.00	1.02	
35 trans-1,2-Dichloroethene	96	3.510	3.509	0.001	97	9430	1.00	1.04	
36 Hexane	57	3.710	3.710	0.000	92	13212	1.00	1.07	
38 Vinyl acetate	43	3.805	3.805	0.000	97	39777	2.00	2.03	
39 1,1-Dichloroethane	63	3.837	3.836	0.001	96	17492	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.217	4.216	0.001	98	22389	4.00	4.21	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	82	10604	1.00	1.05	
48 2,2-Dichloropropane	77	4.259	4.258	0.001	91	11073	1.00	0.9814	
50 sec-Butyl Alcohol	45	4.333	4.322	0.011	98	22900	30.0	26.8	
52 Tetrahydrofuran	42	4.428	4.427	0.001	87	7747	2.00	2.20	
53 Chlorobromomethane	128	4.428	4.427	0.001	97	4702	1.00	1.04	
54 Chloroform	83	4.480	4.480	0.000	93	16640	1.00	1.04	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	96	12946	1.00	1.02	
56 Cyclohexane	56	4.692	4.691	0.001	87	16664	1.00	1.03	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	95	14002	1.00	1.05	
59 Carbon tetrachloride	117	4.744	4.754	-0.010	92	10013	1.00	0.9655	
58 Isobutyl alcohol	41	4.755	4.754	0.001	90	8906	25.0	24.2	
60 Benzene	78	4.892	4.902	-0.010	96	41858	1.00	1.07	
61 1,2-Dichloroethane	62	4.924	4.923	0.001	97	16511	1.00	1.00	
66 n-Heptane	43	5.082	5.082	0.000	91	12658	1.00	1.08	
67 Trichloroethene	95	5.388	5.388	0.000	96	9625	1.00	1.00	
68 2-Pentanone	43	5.483	5.483	0.000	98	31765	4.00	4.02	
69 Methylcyclohexane	55	5.578	5.578	0.000	92	12607	1.00	1.03	
70 1,2-Dichloropropane	63	5.588	5.599	-0.011	96	10485	1.00	1.03	
72 1,4-Dioxane	88	5.631	5.630	0.001	87	2933	20.0	20.8	
73 Dibromomethane	93	5.662	5.662	0.000	93	6224	1.00	1.07	
74 Dichlorobromomethane	83	5.789	5.789	0.000	98	11312	1.00	0.9620	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	6403	1.00	0.9133	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	94	13633	1.00	0.9565	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.242	-0.010	96	40359	4.00	3.98	
79 Toluene	91	6.422	6.432	-0.010	98	43821	1.00	1.07	
80 trans-1,3-Dichloropropene	75	6.602	6.601	0.001	92	11495	1.00	0.8927	
81 Ethyl methacrylate	69	6.623	6.622	0.001	89	12391	1.00	0.9486	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	90	8647	1.00	1.04	
83 Tetrachloroethene	164	6.876	6.876	0.000	92	7028	1.00	1.08	
84 1,3-Dichloropropane	76	6.929	6.928	0.001	89	16209	1.00	1.04	
85 2-Hexanone	43	6.939	6.939	0.000	97	28505	4.00	3.99	
86 Chlorodibromomethane	129	7.119	7.118	0.001	87	7421	1.00	0.9276	
88 Ethylene Dibromide	107	7.235	7.245	-0.010	100	8675	1.00	1.00	
89 1-Chlorohexane	91	7.636	7.635	0.001	79	15776	1.00	0.99	
90 Chlorobenzene	112	7.667	7.678	-0.011	94	26446	1.00	1.05	
92 Ethylbenzene	106	7.752	7.751	0.001	99	13801	1.00	1.00	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.751	-0.010	79	7583	1.00	0.9794	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	17205	1.00	1.04	
94 o-Xylene	106	8.227	8.226	0.001	97	15696	1.00	0.9842	
95 Styrene	104	8.248	8.247	0.001	94	26358	1.00	0.9811	
96 Bromoform	173	8.427	8.427	0.000	91	4334	1.00	0.9165	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	39516	1.00	0.99	
99 Cyclohexanone	55	8.659	8.670	-0.011	93	20432	40.0	37.5	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.859	-0.010	94	12209	1.00	1.05	
101 Bromobenzene	156	8.892	8.891	0.001	95	9337	1.00	0.99	
102 trans-1,4-Dichloro-2-butene	53	8.892	8.891	0.001	51	2740	1.00	0.8840	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	86	3818	1.00	1.08	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	11266	1.00	1.02	
105 2-Chlorotoluene	126	9.060	9.071	-0.011	95	9351	1.00	1.00	
106 1,3,5-Trimethylbenzene	105	9.134	9.144	-0.010	94	33063	1.00	1.01	
107 4-Chlorotoluene	126	9.187	9.187	0.000	98	9835	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.451	9.450	0.001	93	27390	1.00	1.00	
109 1,2,4-Trimethylbenzene	105	9.504	9.514	-0.010	96	32879	1.00	1.00	
110 sec-Butylbenzene	134	9.672	9.672	0.000	95	7836	1.00	0.9799	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	96	17575	1.00	1.03	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	33248	1.00	0.99	
113 1,4-Dichlorobenzene	146	9.894	9.904	-0.010	89	19657	1.00	1.12	
115 n-Butylbenzene	91	10.221	10.221	0.000	97	32229	1.00	1.03	
116 1,2-Dichlorobenzene	146	10.253	10.252	0.001	97	17305	1.00	1.02	
117 1,2-Dibromo-3-Chloropropane	157	11.034	11.033	0.001	80	1852	1.00	0.9351	
119 1,2,4-Trichlorobenzene	180	11.857	11.856	0.001	94	9317	1.00	1.01	
120 Hexachlorobutadiene	225	11.994	12.004	-0.010	93	3403	1.00	1.02	
121 Naphthalene	128	12.121	12.131	-0.010	98	28091	1.00	0.9459	
122 1,2,3-Trichlorobenzene	180	12.353	12.352	0.001	94	8541	1.00	1.01	
S 139 1,2-Dichloroethene, Total (URS)	96				0		2.00	2.08	
S 142 Xylenes, Total	106				0		2.00	2.02	
S 140 Trihalomethanes, Total	1				0		4.00	3.85	
S 143 Xylenes, Total (URS)	1				0		2.00	2.02	
S 146 Total BTEX	1				0			5.15	
S 145 1,3-Dichloropropene, Total	1				0		2.00	1.85	
S 144 1,2-Dichloroethene, Total	1				0		2.00	2.08	

Reagents:

MV-Gas A_00058	Amount Added:	0.20	Units: uL	
MV-MegaMainA_00034	Amount Added:	0.50	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:15:44 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D

Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

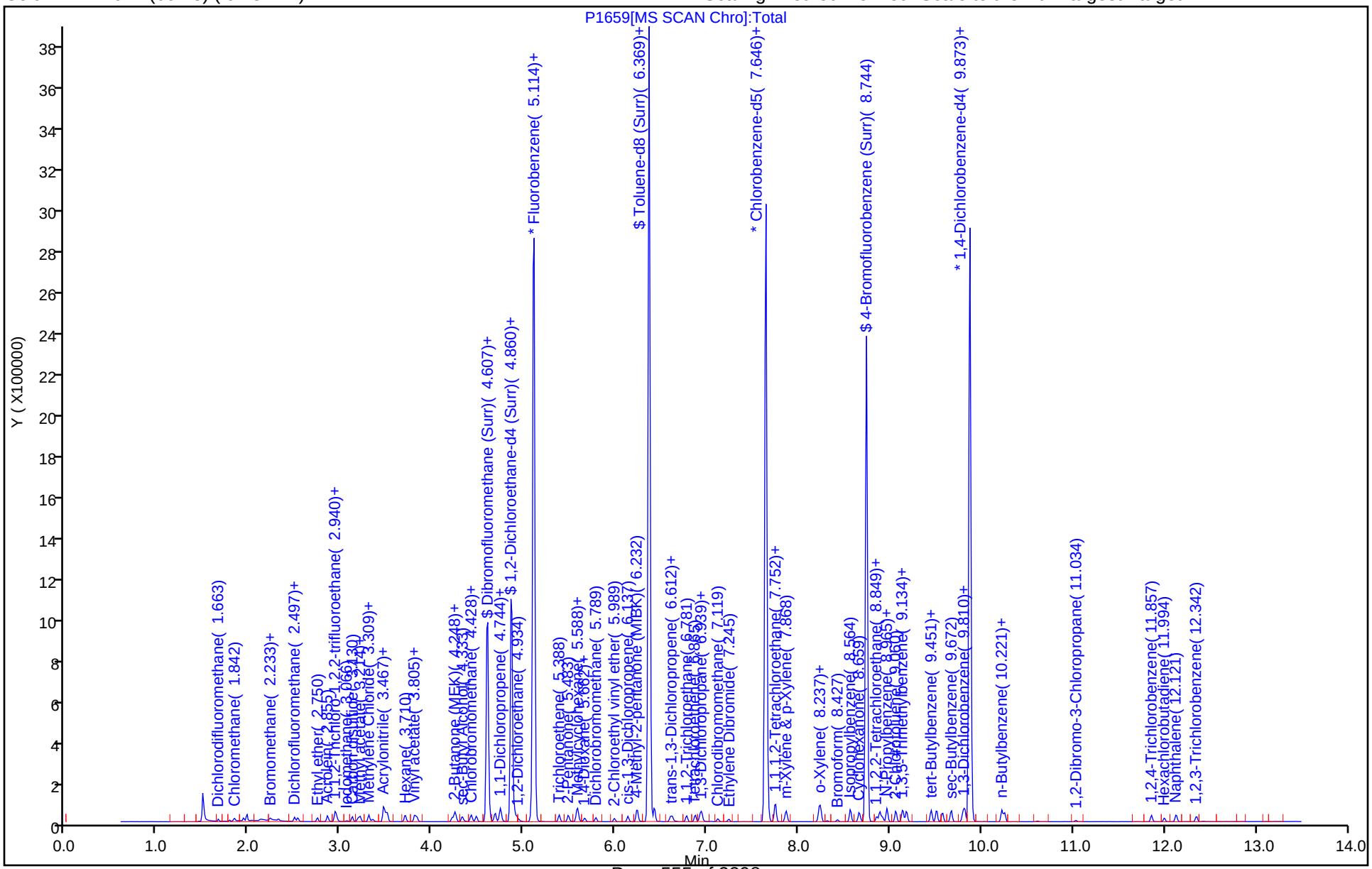
Lims ID: STD010 Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

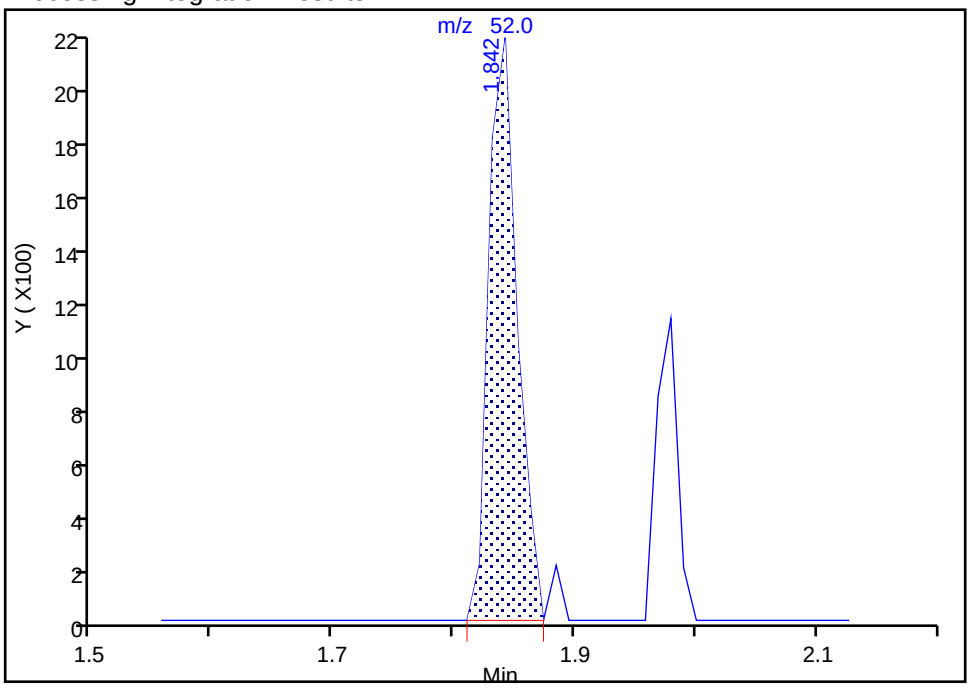
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Chloromethane, CAS: 74-87-3

Signal: 2

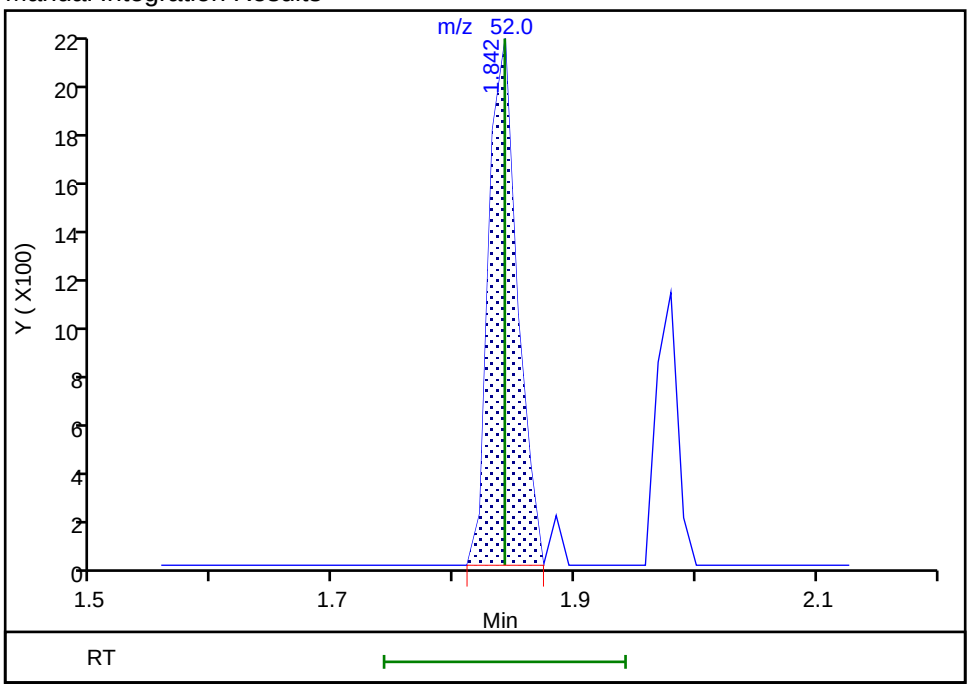
Processing Integration Results

RT: 1.84
Area: 3460
Amount: 1.141745
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 3460
Amount: 0.897043
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

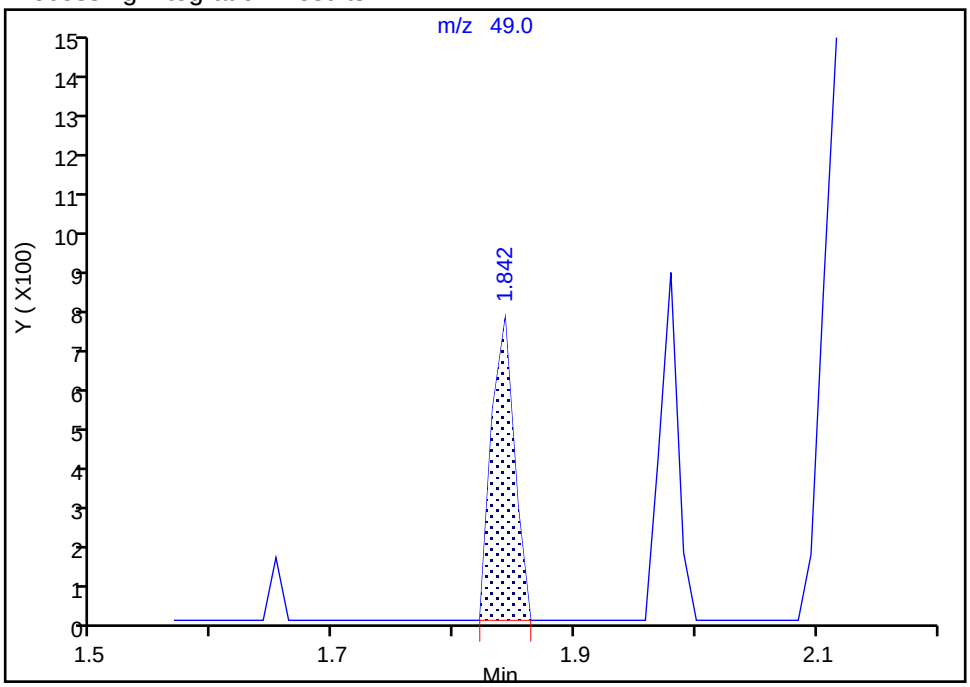
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D				
Injection Date:	01-Jun-2020 16:47:30	Instrument ID:	VMS_P		
Lims ID:	STD010				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	2	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

11 Chloromethane, CAS: 74-87-3

Signal: 3

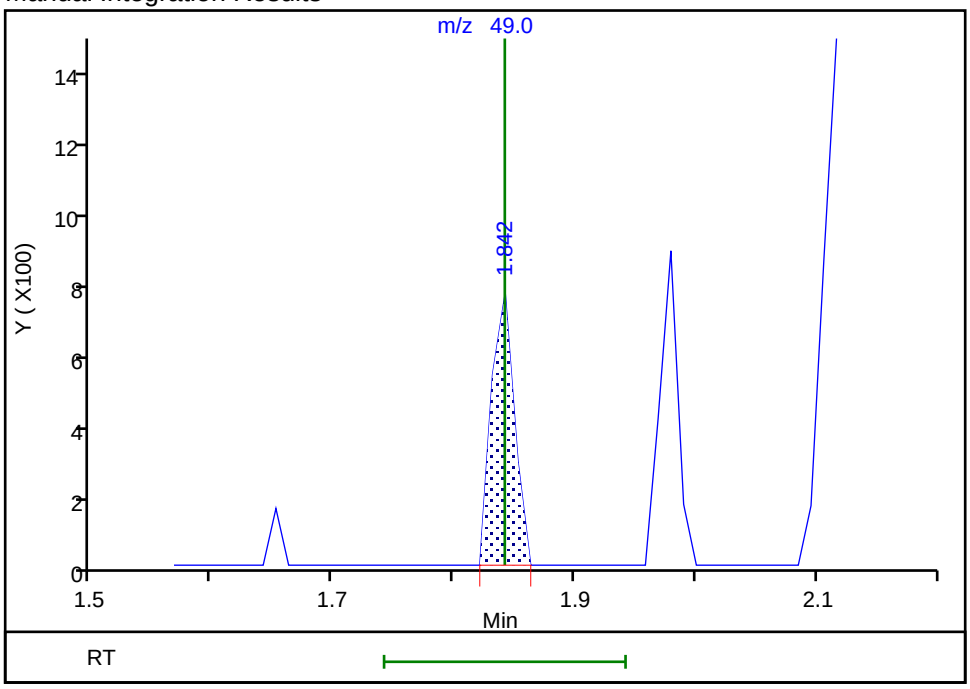
Processing Integration Results

RT: 1.84
Area: 1020
Amount: 1.141745
Amount Units: ug/l



Manual Integration Results

RT: 1.84
Area: 1020
Amount: 0.897043
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

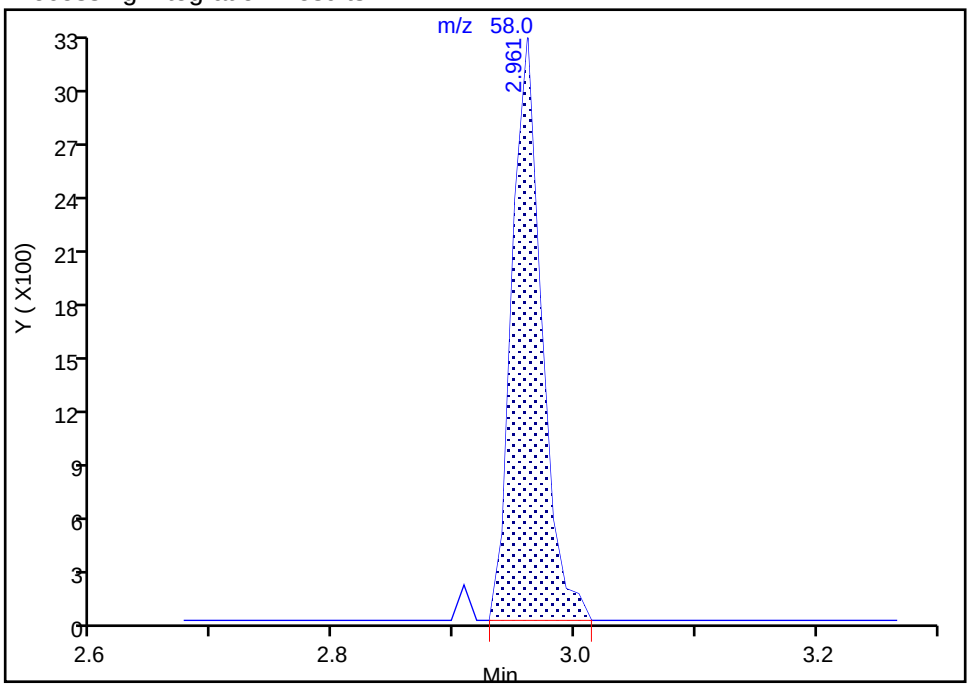
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1659.D
Injection Date: 01-Jun-2020 16:47:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

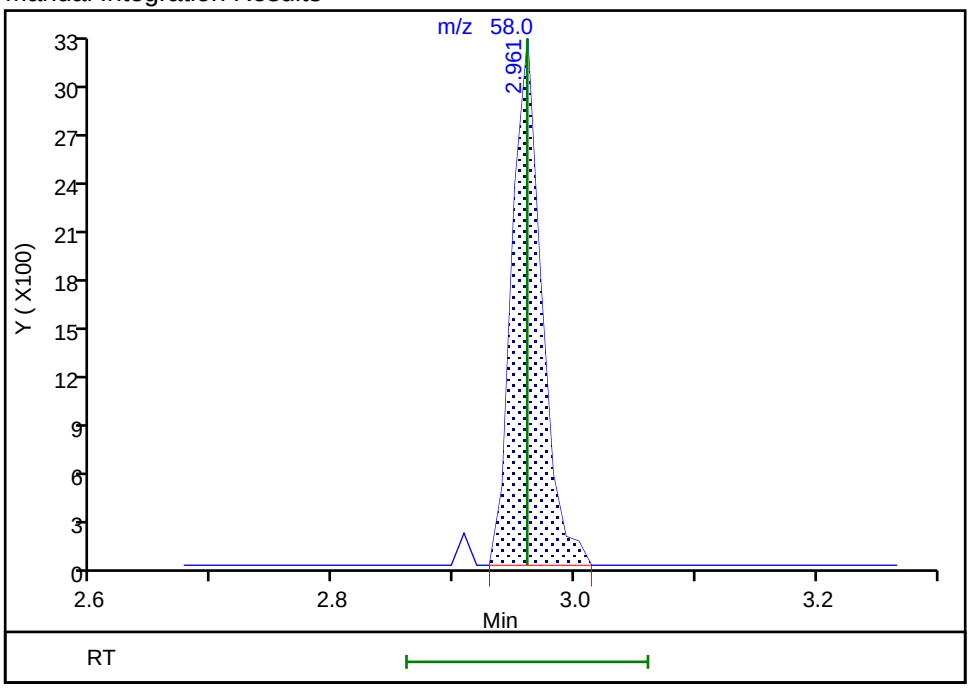
Processing Integration Results

RT: 2.96
Area: 5597
Amount: 4.336547
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 5597
Amount: 4.336547
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:52:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jun-2020 17:09:30 ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:15:54 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 08:07:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.113	0.000	99	2374045	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.646	-0.001	87	531862	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.873	-0.001	97	763439	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.607	-0.001	93	571033	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.870	4.871	-0.001	98	685163	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2368091	50.0	50.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.743	0.000	83	845318	50.0	50.2	
10 Dichlorodifluoromethane	85	1.662	1.662	0.000	98	11244	2.00	1.69	
11 Chloromethane	50	1.841	1.842	-0.001	99	18647	2.00	1.76	
12 Vinyl chloride	62	1.936	1.937	-0.001	97	20856	2.00	2.01	
14 Bromomethane	94	2.232	2.232	0.000	88	14480	2.00	2.04	
15 Chloroethane	64	2.327	2.327	0.000	98	13433	2.00	2.03	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	30965	2.00	2.00	
17 Trichlorofluoromethane	101	2.538	2.538	0.000	97	25172	2.00	1.96	
19 Ethyl ether	59	2.749	2.749	0.000	91	16790	2.00	2.08	
21 Acrolein	56	2.854	2.855	-0.001	99	41406	19.8	20.7	
22 1,1-Dichloroethene	96	2.939	2.939	0.000	97	16694	2.00	2.17	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.939	0.000	72	12382	2.00	2.14	
24 Acetone	43	2.960	2.960	0.000	99	32447	8.00	9.15	
26 Iodomethane	142	3.066	3.066	0.000	96	6724	2.00	1.60	M
27 Carbon disulfide	76	3.129	3.129	0.000	99	52942	2.00	1.97	
29 Methyl acetate	43	3.192	3.193	-0.001	98	34344	4.00	4.26	
30 3-Chloro-1-propene	41	3.213	3.214	-0.001	92	28409	2.00	2.16	
31 Methylene Chloride	84	3.308	3.309	-0.001	92	22322	2.00	2.01	
32 2-Methyl-2-propanol	59	3.350	3.351	-0.001	96	21901	20.0	21.0	
33 Acrylonitrile	53	3.467	3.467	0.000	99	94418	20.0	21.6	
34 Methyl tert-butyl ether	73	3.498	3.499	-0.001	96	54197	2.00	2.09	
35 trans-1,2-Dichloroethene	96	3.509	3.509	0.000	97	18947	2.00	2.09	
36 Hexane	57	3.709	3.710	-0.001	91	26560	2.00	2.14	
38 Vinyl acetate	43	3.804	3.805	-0.001	97	80611	4.00	4.12	
39 1,1-Dichloroethane	63	3.836	3.836	0.000	96	35499	2.00	2.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.216	4.216	0.000	99	46020	8.00	8.70	
47 cis-1,2-Dichloroethene	96	4.247	4.248	-0.001	84	21423	2.00	2.12	
48 2,2-Dichloropropane	77	4.258	4.258	0.000	92	23061	2.00	2.05	
50 sec-Butyl Alcohol	45	4.321	4.322	-0.001	97	47471	60.0	55.8	
52 Tetrahydrofuran	42	4.427	4.427	0.000	88	14739	4.00	4.20	
53 Chlorobromomethane	128	4.427	4.427	0.000	98	9931	2.00	2.20	
54 Chloroform	83	4.480	4.480	0.000	93	35178	2.00	2.21	
55 1,1,1-Trichloroethane	97	4.627	4.628	-0.001	98	27396	2.00	2.17	
56 Cyclohexane	56	4.691	4.691	0.000	89	33843	2.00	2.10	
57 1,1-Dichloropropene	75	4.743	4.744	-0.001	96	27826	2.00	2.10	
59 Carbon tetrachloride	117	4.743	4.754	-0.011	91	21806	2.00	2.11	
58 Isobutyl alcohol	41	4.743	4.754	-0.011	95	18462	50.0	50.3	
60 Benzene	78	4.891	4.902	-0.011	96	84162	2.00	2.15	
61 1,2-Dichloroethane	62	4.923	4.923	0.000	98	30197	2.00	2.13	
66 n-Heptane	43	5.081	5.082	-0.001	91	25333	2.00	2.17	
67 Trichloroethene	95	5.387	5.388	-0.001	97	20658	2.00	2.15	
68 2-Pentanone	43	5.482	5.483	-0.001	99	66130	8.00	8.41	
69 Methylcyclohexane	55	5.577	5.578	-0.001	93	25828	2.00	2.12	
70 1,2-Dichloropropane	63	5.598	5.599	-0.001	97	20818	2.00	2.06	
72 1,4-Dioxane	88	5.630	5.630	0.000	94	5492	40.0	39.1	
73 Dibromomethane	93	5.662	5.662	0.000	95	11931	2.00	2.06	
74 Dichlorobromomethane	83	5.788	5.789	-0.001	100	24474	2.00	2.09	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	12997	2.00	1.86	
77 cis-1,3-Dichloropropene	75	6.136	6.137	-0.001	96	27908	2.00	1.96	
78 4-Methyl-2-pentanone (MIBK)	43	6.242	6.242	0.000	95	85733	8.00	8.49	
79 Toluene	91	6.432	6.432	0.000	98	89995	2.00	2.20	
80 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	93	24304	2.00	1.89	
81 Ethyl methacrylate	69	6.622	6.622	0.000	90	25633	2.00	1.96	
82 1,1,2-Trichloroethane	97	6.780	6.781	-0.001	91	16908	2.00	2.05	
83 Tetrachloroethene	164	6.875	6.876	-0.001	96	13615	2.00	2.10	
84 1,3-Dichloropropane	76	6.928	6.928	0.000	90	33064	2.00	2.12	
85 2-Hexanone	43	6.938	6.939	-0.001	96	59708	8.00	8.35	
86 Chlorodibromomethane	129	7.118	7.118	0.000	91	15559	2.00	1.94	
88 Ethylene Dibromide	107	7.234	7.245	-0.011	99	17428	2.00	2.01	
89 1-Chlorohexane	91	7.624	7.635	-0.011	94	28696	2.00	2.10	
90 Chlorobenzene	112	7.677	7.678	-0.001	96	54491	2.00	2.17	
92 Ethylbenzene	106	7.751	7.751	0.000	99	29300	2.00	2.12	
91 1,1,1,2-Tetrachloroethane	131	7.740	7.751	-0.011	92	15334	2.00	1.98	
93 m-Xylene & p-Xylene	106	7.867	7.868	-0.001	99	35314	2.00	2.13	
94 o-Xylene	106	8.226	8.226	0.000	96	34157	2.00	2.14	
95 Styrene	104	8.247	8.247	0.000	95	55954	2.00	2.08	
96 Bromoform	173	8.426	8.427	-0.001	92	8987	2.00	1.90	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	85484	2.00	2.14	
99 Cyclohexanone	55	8.659	8.670	-0.011	92	44758	80.0	82.2	
100 1,1,2,2-Tetrachloroethane	83	8.848	8.859	-0.011	94	24163	2.00	2.06	
101 Bromobenzene	156	8.891	8.891	0.000	97	19650	2.00	2.08	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	51	6156	2.00	1.98	
103 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	83	7957	2.00	2.24	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	23713	2.00	2.14	
105 2-Chlorotoluene	126	9.070	9.071	-0.001	96	20430	2.00	2.18	
106 1,3,5-Trimethylbenzene	105	9.144	9.144	0.000	93	68689	2.00	2.09	
107 4-Chlorotoluene	126	9.186	9.187	-0.001	98	20005	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.450	9.450	0.000	93	57918	2.00	2.11	
109 1,2,4-Trimethylbenzene	105	9.503	9.514	-0.011	97	69183	2.00	2.09	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	17482	2.00	2.18	
111 1,3-Dichlorobenzene	146	9.798	9.799	-0.001	96	36396	2.00	2.13	
112 4-Isopropyltoluene	119	9.819	9.820	-0.001	96	69322	2.00	2.07	
113 1,4-Dichlorobenzene	146	9.893	9.904	-0.011	93	39277	2.00	2.22	
115 n-Butylbenzene	91	10.220	10.221	-0.001	98	65241	2.00	2.09	
116 1,2-Dichlorobenzene	146	10.252	10.252	0.000	95	35697	2.00	2.11	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.033	0.000	78	3868	2.00	1.95	
119 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	94	18390	2.00	1.99	
120 Hexachlorobutadiene	225	12.004	12.004	0.000	94	7277	2.00	2.17	
121 Naphthalene	128	12.130	12.131	-0.001	97	56079	2.00	1.88	
122 1,2,3-Trichlorobenzene	180	12.352	12.352	0.000	94	16904	2.00	1.99	
S 139 1,2-Dichloroethene, Total (URS)	96				0		4.00	4.21	
S 142 Xylenes, Total	106				0		4.00	4.27	
S 140 Trihalomethanes, Total	1				0		8.00	8.14	
S 143 Xylenes, Total (URS)	1				0		4.00	4.27	
S 146 Total BTEX	1				0			10.7	
S 145 1,3-Dichloropropene, Total	1				0		4.00	3.85	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.21	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Gas A_00058	Amount Added:	0.40	Units: uL	
MV-MegaMainA_00034	Amount Added:	1.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:15:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D

Injection Date: 01-Jun-2020 17:09:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

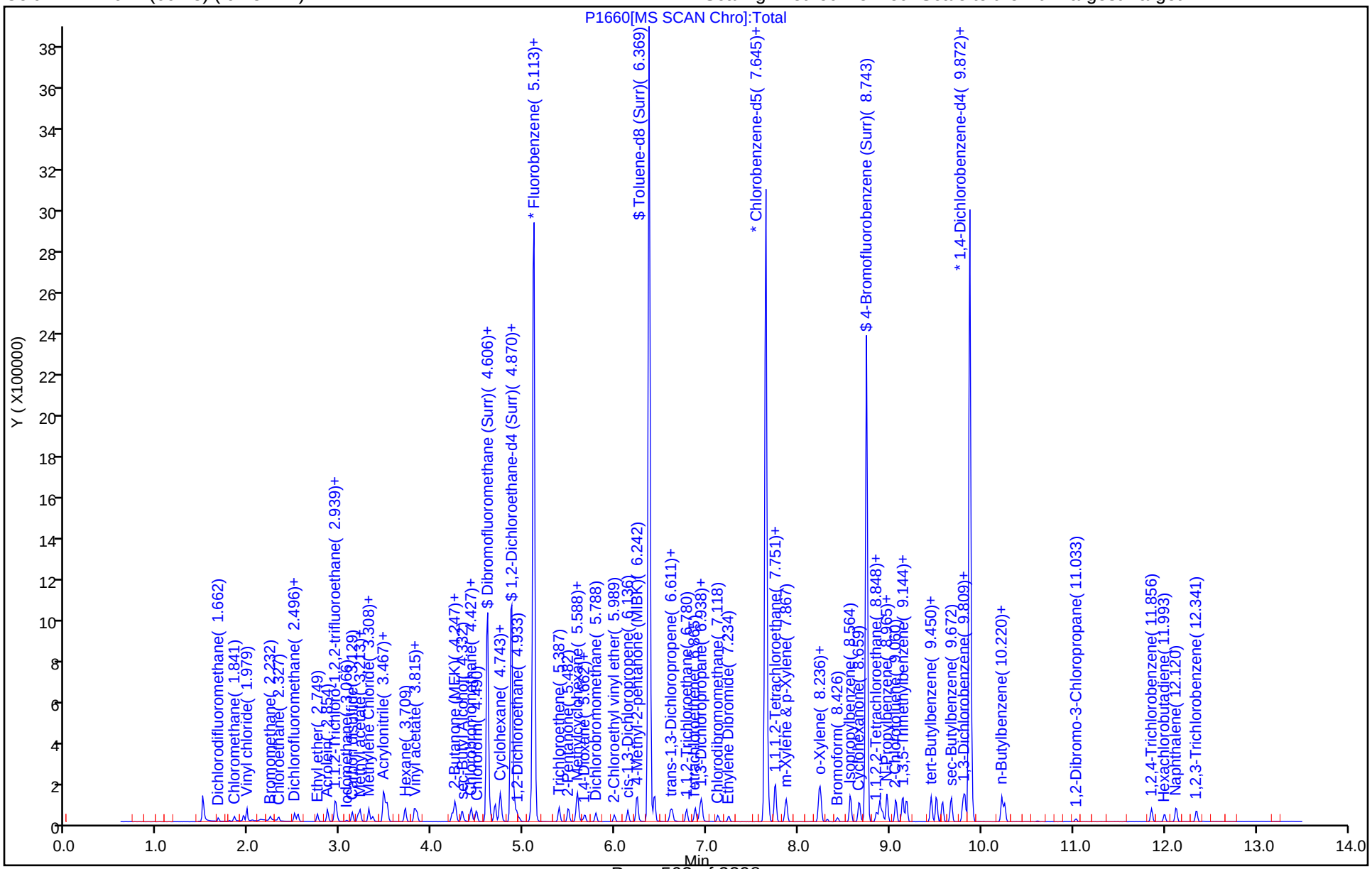
Lims ID: STD020 Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

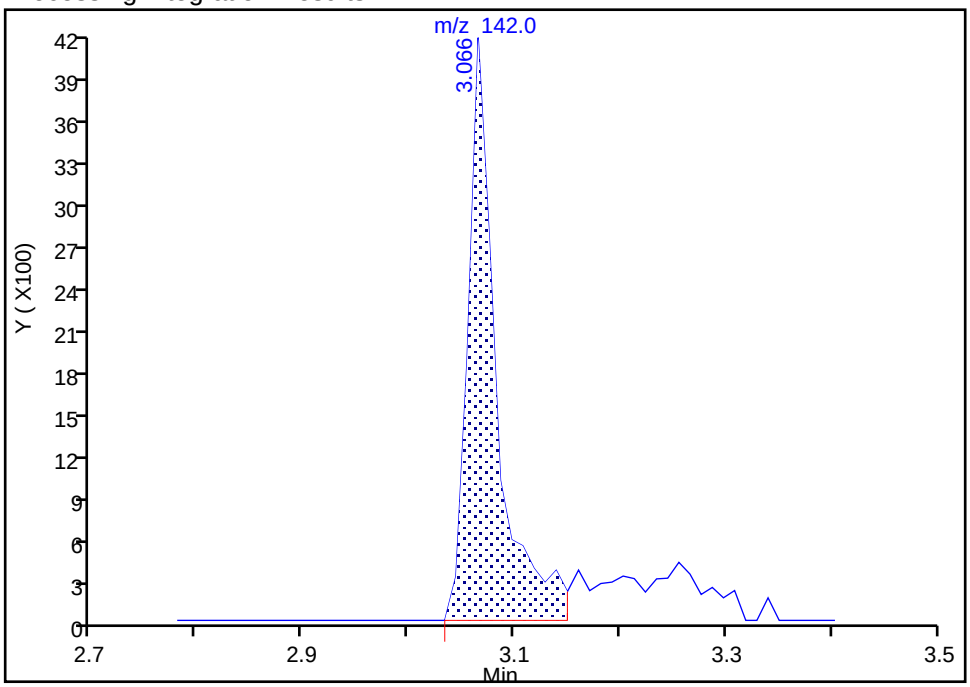
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1660.D
Injection Date: 01-Jun-2020 17:09:30 Instrument ID: VMS_P
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 3 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

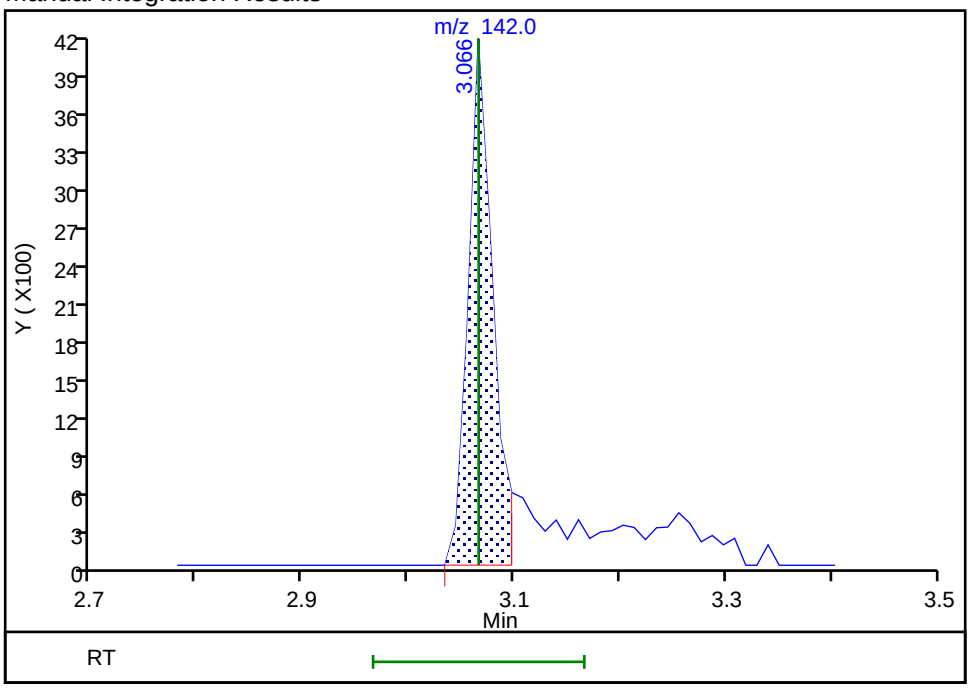
Processing Integration Results

RT: 3.07
Area: 7827
Amount: 3.551540
Amount Units: ug/l



Manual Integration Results

RT: 3.07
Area: 6724
Amount: 1.596067
Amount Units: ug/l



Reviewer: seifertj, 02-Jun-2020 09:06:25
Audit Action: Manually Integrated Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1661.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jun-2020 17:30:30 ALS Bottle#: 4 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:06 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:00:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.113	-0.003	98	2412254	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	87	544917	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.873	-0.003	97	777688	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.607	-0.003	92	579846	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.871	-0.003	98	691950	50.0	50.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2407178	50.0	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.743	-0.003	82	867537	50.0	50.5	
10 Dichlorodifluoromethane	85	1.670	1.662	0.008	99	38285	5.00	5.66	
11 Chloromethane	50	1.839	1.842	-0.003	99	51981	5.00	5.38	
12 Vinyl chloride	62	1.944	1.937	0.007	98	57213	5.00	5.42	
14 Bromomethane	94	2.229	2.232	-0.003	89	22950	5.00	4.15	
15 Chloroethane	64	2.324	2.327	-0.003	100	35486	5.00	5.28	
16 Dichlorofluoromethane	67	2.493	2.496	-0.003	97	81685	5.00	5.20	
17 Trichlorofluoromethane	101	2.535	2.538	-0.003	98	70991	5.00	5.45	
19 Ethyl ether	59	2.747	2.749	-0.003	90	39315	5.00	4.79	
21 Acrolein	56	2.852	2.855	-0.003	99	100409	49.4	49.5	
22 1,1-Dichloroethene	96	2.947	2.939	0.008	98	35001	5.00	4.48	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.947	2.939	0.008	71	26144	5.00	4.45	
24 Acetone	43	2.958	2.960	-0.002	100	70934	20.0	21.1	
26 Iodomethane	142	3.063	3.066	-0.003	99	15949	5.00	2.79	
27 Carbon disulfide	76	3.126	3.129	-0.003	99	113233	5.00	4.43	
29 Methyl acetate	43	3.190	3.193	-0.003	98	81580	10.0	9.95	
30 3-Chloro-1-propene	41	3.211	3.214	-0.003	92	59709	5.00	4.46	
31 Methylene Chloride	84	3.306	3.309	-0.003	90	47489	5.00	4.79	
32 2-Methyl-2-propanol	59	3.348	3.351	-0.003	97	58678	50.0	55.5	
33 Acrylonitrile	53	3.475	3.467	0.008	98	221256	50.0	49.8	
34 Methyl tert-butyl ether	73	3.496	3.499	-0.003	96	124365	5.00	4.72	
35 trans-1,2-Dichloroethene	96	3.517	3.509	0.008	98	41058	5.00	4.45	
36 Hexane	57	3.707	3.710	-0.003	90	56864	5.00	4.47	
38 Vinyl acetate	43	3.812	3.805	0.007	97	190703	10.0	9.60	
39 1,1-Dichloroethane	63	3.833	3.836	-0.003	96	78561	5.00	4.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.216	-0.003	99	113733	20.0	21.2	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	83	45860	5.00	4.47	
48 2,2-Dichloropropane	77	4.256	4.258	-0.002	93	50592	5.00	4.43	
50 sec-Butyl Alcohol	45	4.329	4.322	0.007	98	138755	150.0	160.5	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	36254	10.0	10.2	
53 Chlorobromomethane	128	4.424	4.427	-0.003	98	20887	5.00	4.55	
54 Chloroform	83	4.488	4.480	0.008	93	74923	5.00	4.63	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	99	58098	5.00	4.53	
56 Cyclohexane	56	4.688	4.691	-0.003	89	72517	5.00	4.44	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	96	60834	5.00	4.53	
59 Carbon tetrachloride	117	4.752	4.754	-0.002	77	45792	5.00	4.36	
58 Isobutyl alcohol	41	4.752	4.754	-0.002	94	51802	125.0	138.8	
60 Benzene	78	4.899	4.902	-0.003	94	184836	5.00	4.66	
61 1,2-Dichloroethane	62	4.920	4.923	-0.003	97	64913	5.00	4.90	
66 n-Heptane	43	5.079	5.082	-0.003	88	51836	5.00	4.37	
67 Trichloroethene	95	5.385	5.388	-0.003	97	42697	5.00	4.38	
68 2-Pentanone	43	5.490	5.483	0.007	99	169279	20.0	21.2	
69 Methylcyclohexane	55	5.585	5.578	0.007	92	55290	5.00	4.47	
70 1,2-Dichloropropane	63	5.596	5.599	-0.003	97	47629	5.00	4.64	
72 1,4-Dioxane	88	5.627	5.630	-0.003	92	15477	100.0	108.4	
73 Dibromomethane	93	5.670	5.662	0.008	93	28351	5.00	4.82	
74 Dichlorobromomethane	83	5.786	5.789	-0.003	99	54885	5.00	4.61	
76 2-Chloroethyl vinyl ether	63	5.986	5.989	-0.003	92	34848	5.00	4.91	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	96	65109	5.00	4.46	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.242	-0.003	96	216321	20.0	21.1	
79 Toluene	91	6.429	6.432	-0.003	98	191514	5.00	4.60	
80 trans-1,3-Dichloropropene	75	6.598	6.601	-0.003	95	55704	5.00	4.27	
81 Ethyl methacrylate	69	6.619	6.622	-0.003	89	63746	5.00	4.76	
82 1,1,2-Trichloroethane	97	6.778	6.781	-0.003	90	41158	5.00	4.90	
83 Tetrachloroethene	164	6.873	6.876	-0.003	94	29875	5.00	4.50	
84 1,3-Dichloropropane	76	6.925	6.928	-0.003	97	76780	5.00	4.81	
85 2-Hexanone	43	6.936	6.939	-0.003	95	159597	20.0	21.8	
86 Chlorodibromomethane	129	7.126	7.118	0.008	89	37770	5.00	4.60	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	40577	5.00	4.58	
89 1-Chlorohexane	91	7.632	7.635	-0.003	95	56622	5.00	4.39	
90 Chlorobenzene	112	7.675	7.678	-0.003	93	115938	5.00	4.50	
92 Ethylbenzene	106	7.749	7.751	-0.002	99	63884	5.00	4.51	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.751	-0.002	43	36611	5.00	4.61	
93 m-Xylene & p-Xylene	106	7.865	7.868	-0.003	100	76090	5.00	4.47	
94 o-Xylene	106	8.223	8.226	-0.003	98	75177	5.00	4.60	
95 Styrene	104	8.245	8.247	-0.003	94	124441	5.00	4.52	
96 Bromoform	173	8.424	8.427	-0.003	93	22527	5.00	4.65	
97 Isopropylbenzene	105	8.572	8.575	-0.003	96	188253	5.00	4.62	
99 Cyclohexanone	55	8.667	8.670	-0.003	92	127996	200.0	229.4	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.859	-0.002	94	62677	5.00	5.25	
101 Bromobenzene	156	8.888	8.891	-0.003	96	45419	5.00	4.73	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.891	-0.003	76	16098	5.00	5.08	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	18290	5.00	5.05	
104 N-Propylbenzene	120	8.973	8.965	0.008	99	48994	5.00	4.34	
105 2-Chlorotoluene	126	9.068	9.071	-0.003	96	44412	5.00	4.65	
106 1,3,5-Trimethylbenzene	105	9.142	9.144	-0.002	93	154872	5.00	4.63	
107 4-Chlorotoluene	126	9.184	9.187	-0.003	98	45363	5.00	4.53	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.450	-0.002	93	125850	5.00	4.50	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	155733	5.00	4.61	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	94	37379	5.00	4.57	
111 1,3-Dichlorobenzene	146	9.796	9.799	-0.003	96	82789	5.00	4.76	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	97	155069	5.00	4.54	
113 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	84803	5.00	4.71	
115 n-Butylbenzene	91	10.218	10.221	-0.003	98	142782	5.00	4.48	
116 1,2-Dichlorobenzene	146	10.250	10.252	-0.002	97	82278	5.00	4.77	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.033	-0.003	88	10531	5.00	5.20	
119 1,2,4-Trichlorobenzene	180	11.854	11.856	-0.002	92	43433	5.00	4.62	
120 Hexachlorobutadiene	225	12.001	12.004	-0.003	96	15077	5.00	4.41	
121 Naphthalene	128	12.128	12.131	-0.003	97	150170	5.00	4.95	
122 1,2,3-Trichlorobenzene	180	12.350	12.352	-0.002	94	41611	5.00	4.82	
S 139 1,2-Dichloroethene, Total (URS)	96				0		10.0	8.92	
S 142 Xylenes, Total	106				0		10.0	9.07	
S 140 Trihalomethanes, Total	1				0		20.0	18.5	
S 143 Xylenes, Total (URS)	1				0		10.0	9.07	
S 146 Total BTEX	1				0			22.8	
S 145 1,3-Dichloropropene, Total	1				0		10.0	8.73	
S 144 1,2-Dichloroethene, Total	1				0		10.0	8.92	

Reagents:

MV-Gas A_00058	Amount Added:	1.00	Units: uL		
MV-MegaMainA_00034	Amount Added:	2.50	Units: uL		
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent	

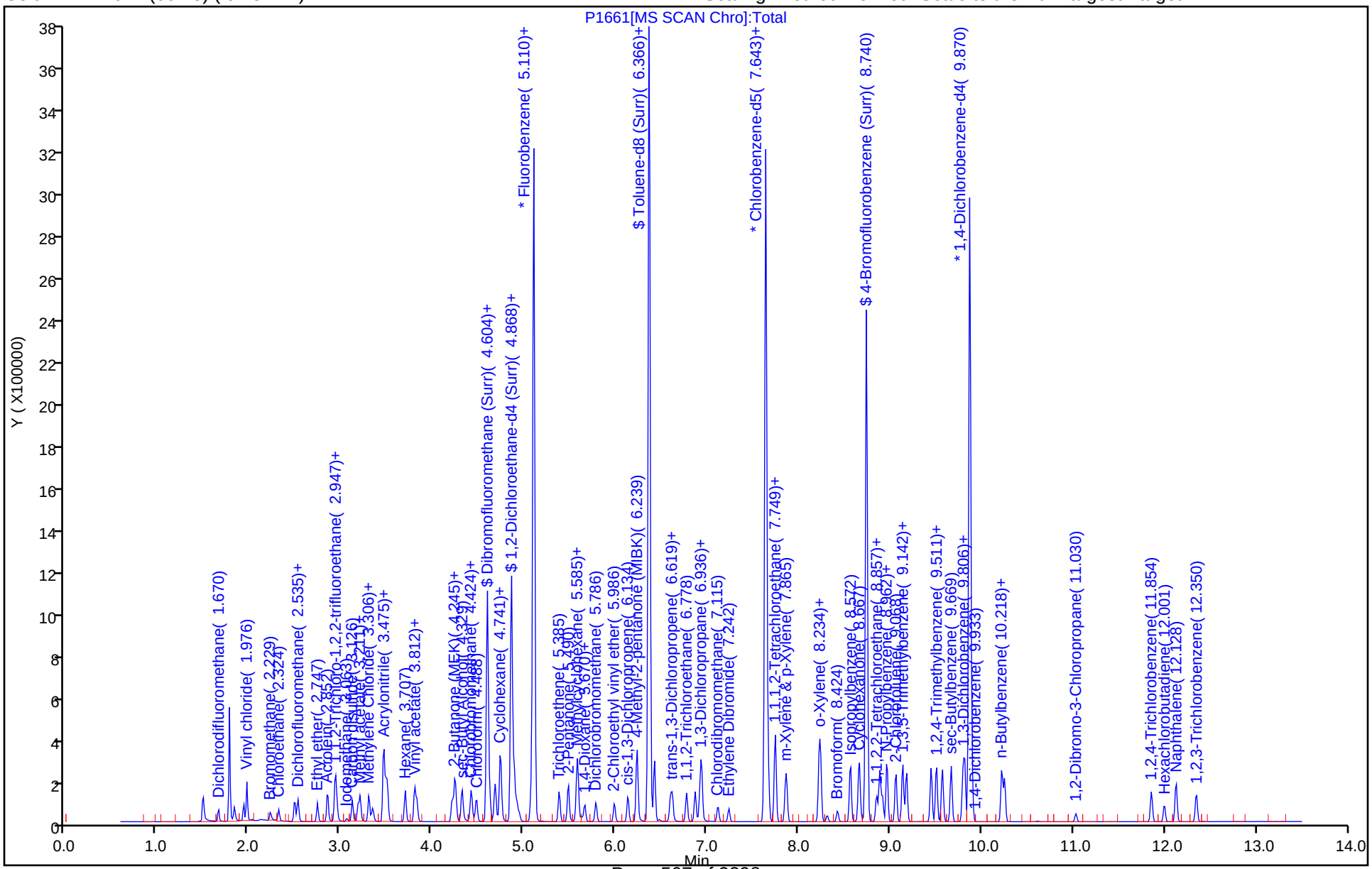
Report Date: 02-Jun-2020 11:16:07 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1661.D

Injection Date:	01-Jun-2020 17:30:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD050			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1662.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jun-2020 17:51:30 ALS Bottle#: 5 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:17 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:54:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.110	0.000	98	2414558	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.642	7.642	0.000	88	541707	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.869	0.000	97	784820	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.603	0.000	92	579503	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.867	0.000	98	696272	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	6.366	6.366	0.000	93	2397674	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.740	0.000	83	876843	50.0	50.6	
10 Dichlorodifluoromethane	85	1.670	1.670	0.000	99	76509	10.0	11.3	
11 Chloromethane	50	1.838	1.838	0.000	99	97832	10.0	10.4	
12 Vinyl chloride	62	1.944	1.944	0.000	98	110707	10.0	10.5	
14 Bromomethane	94	2.229	2.229	0.000	90	47958	10.0	10.6	
15 Chloroethane	64	2.324	2.324	0.000	100	69871	10.0	10.4	
16 Dichlorofluoromethane	67	2.493	2.493	0.000	97	157676	10.0	10.0	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	97	134330	10.0	10.3	
19 Ethyl ether	59	2.746	2.746	0.000	92	81198	10.0	9.88	
21 Acrolein	56	2.851	2.851	0.000	100	198934	98.8	97.9	
22 1,1-Dichloroethene	96	2.946	2.946	0.000	97	78660	10.0	10.1	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.946	2.946	0.000	71	58580	10.0	9.96	
24 Acetone	43	2.957	2.957	0.000	100	131651	40.0	40.2	
26 Iodomethane	142	3.062	3.062	0.000	99	41908	10.0	6.20	
27 Carbon disulfide	76	3.126	3.126	0.000	99	249116	10.0	10.1	
29 Methyl acetate	43	3.189	3.189	0.000	98	163271	20.0	19.9	
30 3-Chloro-1-propene	41	3.210	3.210	0.000	92	135183	10.0	10.1	
31 Methylene Chloride	84	3.305	3.305	0.000	92	95819	10.0	10.2	
32 2-Methyl-2-propanol	59	3.347	3.347	0.000	97	106253	100.0	100.4	
33 Acrylonitrile	53	3.474	3.474	0.000	98	437925	100.0	98.5	
34 Methyl tert-butyl ether	73	3.495	3.495	0.000	95	265416	10.0	10.1	
35 trans-1,2-Dichloroethene	96	3.516	3.516	0.000	98	88732	10.0	9.61	
36 Hexane	57	3.706	3.706	0.000	91	130470	10.0	10.3	
38 Vinyl acetate	43	3.812	3.812	0.000	97	394091	20.0	19.8	
39 1,1-Dichloroethane	63	3.833	3.833	0.000	96	171592	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.213	0.000	100	221028	40.0	41.1	
47 cis-1,2-Dichloroethene	96	4.244	4.244	0.000	83	99347	10.0	9.68	
48 2,2-Dichloropropane	77	4.255	4.255	0.000	91	112216	10.0	9.82	
50 sec-Butyl Alcohol	45	4.329	4.329	0.000	98	265274	300.0	306.5	
52 Tetrahydrofuran	42	4.434	4.434	0.000	88	72173	20.0	20.2	
53 Chlorobromomethane	128	4.424	4.424	0.000	98	45134	10.0	9.81	
54 Chloroform	83	4.487	4.487	0.000	93	160425	10.0	9.89	
55 1,1,1-Trichloroethane	97	4.624	4.624	0.000	98	126621	10.0	9.86	
56 Cyclohexane	56	4.688	4.688	0.000	89	167527	10.0	10.2	
57 1,1-Dichloropropene	75	4.740	4.740	0.000	96	133932	10.0	9.96	
59 Carbon tetrachloride	117	4.751	4.751	0.000	84	105812	10.0	10.1	
58 Isobutyl alcohol	41	4.751	4.751	0.000	94	96963	250.0	259.6	
60 Benzene	78	4.899	4.899	0.000	93	392915	10.0	9.89	
61 1,2-Dichloroethane	62	4.920	4.920	0.000	97	130615	10.0	10.2	
66 n-Heptane	43	5.078	5.078	0.000	92	115523	10.0	9.74	
67 Trichloroethene	95	5.384	5.384	0.000	97	94360	10.0	9.67	
68 2-Pentanone	43	5.490	5.490	0.000	99	330037	40.0	41.3	
69 Methylcyclohexane	55	5.585	5.585	0.000	92	124604	10.0	10.1	
70 1,2-Dichloropropane	63	5.595	5.595	0.000	96	102772	10.0	10.0	
72 1,4-Dioxane	88	5.637	5.637	0.000	93	29303	200.0	205.1	
73 Dibromomethane	93	5.669	5.669	0.000	94	58752	10.0	9.98	
74 Dichlorobromomethane	83	5.785	5.785	0.000	100	116062	10.0	9.74	
76 2-Chloroethyl vinyl ether	63	5.986	5.986	0.000	92	69995	10.0	9.85	
77 cis-1,3-Dichloropropene	75	6.133	6.133	0.000	96	143800	10.0	9.90	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.239	0.000	96	432244	40.0	42.1	
79 Toluene	91	6.429	6.429	0.000	97	412287	10.0	9.89	
80 trans-1,3-Dichloropropene	75	6.598	6.598	0.000	96	121709	10.0	9.33	
81 Ethyl methacrylate	69	6.619	6.619	0.000	89	136938	10.0	10.3	
82 1,1,2-Trichloroethane	97	6.777	6.777	0.000	91	83459	10.0	9.93	
83 Tetrachloroethene	164	6.872	6.872	0.000	94	64911	10.0	9.83	
84 1,3-Dichloropropane	76	6.925	6.925	0.000	97	159930	10.0	10.1	
85 2-Hexanone	43	6.946	6.946	0.000	95	307466	40.0	42.2	
86 Chlorodibromomethane	129	7.125	7.125	0.000	91	80520	10.0	9.87	
88 Ethylene Dibromide	107	7.241	7.241	0.000	97	88076	10.0	10.0	
89 1-Chlorohexane	91	7.632	7.632	0.000	98	124764	10.0	10.2	
90 Chlorobenzene	112	7.674	7.674	0.000	95	250839	10.0	9.79	
92 Ethylbenzene	106	7.748	7.748	0.000	99	139031	10.0	9.88	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.748	0.000	94	76578	10.0	9.70	
93 m-Xylene & p-Xylene	106	7.864	7.864	0.000	100	167252	10.0	9.88	
94 o-Xylene	106	8.223	8.223	0.000	97	163211	10.0	10.0	
95 Styrene	104	8.244	8.244	0.000	94	274427	10.0	10.0	
96 Bromoform	173	8.423	8.423	0.000	94	47885	10.0	9.93	
97 Isopropylbenzene	105	8.571	8.571	0.000	96	412530	10.0	10.0	
99 Cyclohexanone	55	8.666	8.666	0.000	91	242913	400.0	437.9	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.856	0.000	94	121592	10.0	10.1	
101 Bromobenzene	156	8.888	8.888	0.000	96	93464	10.0	9.64	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.888	0.000	83	32840	10.0	10.3	
103 1,2,3-Trichloropropane	110	8.919	8.919	0.000	83	35882	10.0	9.82	
104 N-Propylbenzene	120	8.972	8.972	0.000	99	112695	10.0	9.90	
105 2-Chlorotoluene	126	9.067	9.067	0.000	96	94413	10.0	9.80	
106 1,3,5-Trimethylbenzene	105	9.141	9.141	0.000	94	337938	10.0	10.0	
107 4-Chlorotoluene	126	9.183	9.183	0.000	97	100456	10.0	9.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.447	9.447	0.000	93	282847	10.0	10.0	
109 1,2,4-Trimethylbenzene	105	9.510	9.510	0.000	97	341971	10.0	10.0	
110 sec-Butylbenzene	134	9.669	9.669	0.000	95	80672	10.0	9.78	
111 1,3-Dichlorobenzene	146	9.795	9.795	0.000	97	174866	10.0	9.97	
112 4-Isopropyltoluene	119	9.816	9.816	0.000	97	345360	10.0	10.0	
113 1,4-Dichlorobenzene	146	9.901	9.901	0.000	93	176794	10.0	9.73	
115 n-Butylbenzene	91	10.217	10.217	0.000	98	318151	10.0	9.89	
116 1,2-Dichlorobenzene	146	10.249	10.249	0.000	95	169871	10.0	9.75	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.030	0.000	81	19998	10.0	9.79	
119 1,2,4-Trichlorobenzene	180	11.853	11.853	0.000	94	91087	10.0	9.61	
120 Hexachlorobutadiene	225	12.001	12.001	0.000	97	32937	10.0	9.55	
121 Naphthalene	128	12.127	12.127	0.000	97	300637	10.0	9.81	
122 1,2,3-Trichlorobenzene	180	12.349	12.349	0.000	96	82932	10.0	9.51	
S 139 1,2-Dichloroethene, Total (URS)	96				0		20.0	19.3	
S 142 Xylenes, Total	106				0		20.0	19.9	
S 140 Trihalomethanes, Total	1				0		40.0	39.4	
S 143 Xylenes, Total (URS)	1				0		20.0	19.9	
S 146 Total BTEX	1				0			49.6	
S 145 1,3-Dichloropropene, Total	1				0		20.0	19.2	
S 144 1,2-Dichloroethene, Total	1				0		20.0	19.3	

Reagents:

MV-Gas A_00058	Amount Added:	2.00	Units: uL		
MV-MegaMainA_00034	Amount Added:	5.00	Units: uL		
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent	

Report Date: 02-Jun-2020 11:16:18 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1662.D

Injection Date: 01-Jun-2020 17:51:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

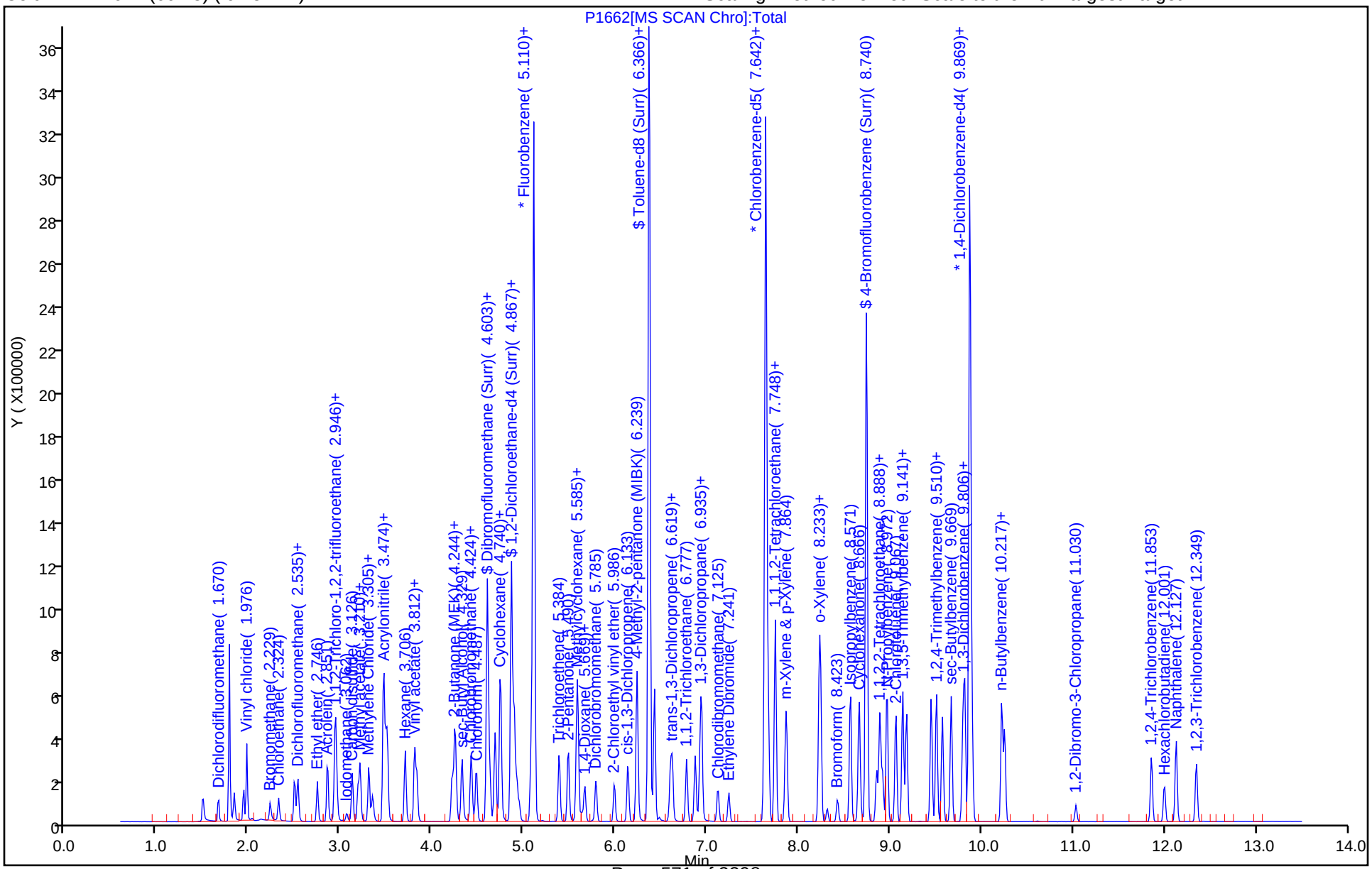
Lims ID: STD10 Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 01-Jun-2020 20:33:30 ALS Bottle#: 12 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:29 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: seifertj Date: 02-Jun-2020 09:23:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.113	0.000	99	2594633	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	87	589468	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	96	851368	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	622098	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.871	4.871	0.000	97	709192	50.0	48.2	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2570054	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.743	0.000	84	937409	50.0	49.9	
10 Dichlorodifluoromethane	85	1.662	1.662	0.000	99	389403	50.0	53.5	
11 Chloromethane	50	1.842	1.842	0.000	99	518425	50.0	52.5	
12 Vinyl chloride	62	1.937	1.937	0.000	98	566674	50.0	49.9	
14 Bromomethane	94	2.232	2.232	0.000	90	267351	50.0	62.0	
15 Chloroethane	64	2.327	2.327	0.000	99	367238	50.0	50.8	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	851263	50.0	50.4	
17 Trichlorofluoromethane	101	2.538	2.538	0.000	98	688909	50.0	49.1	
19 Ethyl ether	59	2.749	2.749	0.000	90	433032	50.0	49.0	
21 Acrolein	56	2.855	2.855	0.000	100	992240	493.8	454.6	
22 1,1-Dichloroethene	96	2.939	2.939	0.000	98	432834	50.0	51.5	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.939	0.000	72	323522	50.0	51.2	
24 Acetone	43	2.960	2.960	0.000	100	599119	200.0	174.0	
26 Iodomethane	142	3.066	3.066	0.000	99	388838	50.0	48.2	
27 Carbon disulfide	76	3.129	3.129	0.000	99	1445817	50.0	55.5	
29 Methyl acetate	43	3.193	3.193	0.000	98	774814	100.0	87.9	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	94	767084	50.0	53.3	
31 Methylene Chloride	84	3.309	3.309	0.000	92	508123	50.0	52.4	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	98	476237	500.0	418.8	
33 Acrylonitrile	53	3.467	3.467	0.000	99	2147902	500.0	449.8	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	95	1410931	50.0	49.7	
35 trans-1,2-Dichloroethene	96	3.509	3.509	0.000	99	496599	50.0	50.1	
36 Hexane	57	3.710	3.710	0.000	91	719384	50.0	52.3	
38 Vinyl acetate	43	3.805	3.805	0.000	97	2295944	100.0	107.4	
39 1,1-Dichloroethane	63	3.836	3.836	0.000	96	913640	50.0	50.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.216	4.216	0.000	99	992035	200.0	171.5	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	83	546752	50.0	49.6	
48 2,2-Dichloropropane	77	4.258	4.258	0.000	88	674576	50.0	54.9	
50 sec-Butyl Alcohol	45	4.322	4.322	0.000	99	1213494	1500.0	1304.7	
53 Chlorobromomethane	128	4.427	4.427	0.000	98	246645	50.0	49.9	
52 Tetrahydrofuran	42	4.427	4.427	0.000	88	330688	100.0	86.2	
54 Chloroform	83	4.480	4.480	0.000	92	857391	50.0	49.2	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	99	699182	50.0	50.7	
56 Cyclohexane	56	4.691	4.691	0.000	89	900566	50.0	51.3	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	97	722099	50.0	50.0	
59 Carbon tetrachloride	117	4.754	4.754	0.000	93	593951	50.0	52.6	
58 Isobutyl alcohol	41	4.754	4.754	0.000	93	435234	1250.0	1084.5	
60 Benzene	78	4.902	4.902	0.000	95	2121944	50.0	49.7	
61 1,2-Dichloroethane	62	4.923	4.923	0.000	98	666788	50.0	49.8	
66 n-Heptane	43	5.082	5.082	0.000	91	652907	50.0	51.2	
67 Trichloroethene	95	5.388	5.388	0.000	98	527518	50.0	50.3	
68 2-Pentanone	43	5.483	5.483	0.000	99	1546919	200.0	180.0	
69 Methylcyclohexane	55	5.578	5.578	0.000	93	672553	50.0	50.5	
70 1,2-Dichloropropane	63	5.599	5.599	0.000	97	553580	50.0	50.2	
72 1,4-Dioxane	88	5.630	5.630	0.000	91	134765	1000.0	877.8	
73 Dibromomethane	93	5.662	5.662	0.000	93	310055	50.0	49.0	
74 Dichlorobromomethane	83	5.789	5.789	0.000	99	647111	50.0	50.6	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	375914	50.0	49.3	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	96	830989	50.0	52.6	
78 4-Methyl-2-pentanone (MIBK)	43	6.242	6.242	0.000	95	2019078	200.0	183.0	
79 Toluene	91	6.432	6.432	0.000	98	2209256	50.0	49.3	
80 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	97	739208	50.0	52.7	
81 Ethyl methacrylate	69	6.622	6.622	0.000	88	730677	50.0	50.4	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	91	446203	50.0	49.4	
83 Tetrachloroethene	164	6.876	6.876	0.000	94	362210	50.0	50.4	
84 1,3-Dichloropropane	76	6.928	6.928	0.000	97	828087	50.0	48.0	
85 2-Hexanone	43	6.939	6.939	0.000	95	1421906	200.0	179.4	
86 Chlorodibromomethane	129	7.118	7.118	0.000	90	457646	50.0	51.6	
88 Ethylene Dibromide	107	7.245	7.245	0.000	98	459893	50.0	48.0	
89 1-Chlorohexane	91	7.635	7.635	0.000	97	688923	50.0	53.1	
90 Chlorobenzene	112	7.678	7.678	0.000	93	1351697	50.0	48.5	
92 Ethylbenzene	106	7.751	7.751	0.000	99	765475	50.0	50.0	
91 1,1,1,2-Tetrachloroethane	131	7.751	7.751	0.000	94	443921	50.0	51.7	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	926436	50.0	50.3	
94 o-Xylene	106	8.226	8.226	0.000	96	889019	50.0	50.3	
95 Styrene	104	8.247	8.247	0.000	94	1535593	50.0	51.5	
96 Bromoform	173	8.427	8.427	0.000	95	272832	50.0	52.0	
97 Isopropylbenzene	105	8.575	8.575	0.000	96	2246623	50.0	50.4	
99 Cyclohexanone	55	8.670	8.670	0.000	91	1051966	2000.0	1742.8	
100 1,1,2,2-Tetrachloroethane	83	8.859	8.859	0.000	93	606034	50.0	46.4	
101 Bromobenzene	156	8.891	8.891	0.000	96	514975	50.0	49.0	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	88	169990	50.0	49.0	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	82	176525	50.0	44.6	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	629799	50.0	51.0	
105 2-Chlorotoluene	126	9.071	9.071	0.000	96	525501	50.0	50.3	
106 1,3,5-Trimethylbenzene	105	9.144	9.144	0.000	94	1851899	50.0	50.6	
107 4-Chlorotoluene	126	9.187	9.187	0.000	97	547434	50.0	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.450	9.450	0.000	93	1537848	50.0	50.3	
109 1,2,4-Trimethylbenzene	105	9.514	9.514	0.000	97	1874413	50.0	50.7	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	458007	50.0	51.2	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	98	957029	50.0	50.3	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	1944009	50.0	52.0	
113 1,4-Dichlorobenzene	146	9.904	9.904	0.000	95	970134	50.0	49.2	
115 n-Butylbenzene	91	10.221	10.221	0.000	98	1790989	50.0	51.3	
116 1,2-Dichlorobenzene	146	10.252	10.252	0.000	96	914029	50.0	48.4	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.033	0.000	83	102294	50.0	46.2	
119 1,2,4-Trichlorobenzene	180	11.856	11.856	0.000	94	527062	50.0	51.3	
120 Hexachlorobutadiene	225	12.004	12.004	0.000	98	198550	50.0	53.1	
121 Naphthalene	128	12.131	12.131	0.000	97	1593185	50.0	47.9	
122 1,2,3-Trichlorobenzene	180	12.352	12.352	0.000	95	473636	50.0	50.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	99.6	
S 142 Xylenes, Total	106				0		100.0	100.6	
S 140 Trihalomethanes, Total	1				0		200.0	203.3	
S 143 Xylenes, Total (URS)	1				0		100.0	100.6	
S 145 1,3-Dichloropropene, Total	1				0		100.0	105.3	
S 144 1,2-Dichloroethene, Total	1				0		100.0	99.6	

Reagents:

MV-Gas A_00058	Amount Added: 10.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 25.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

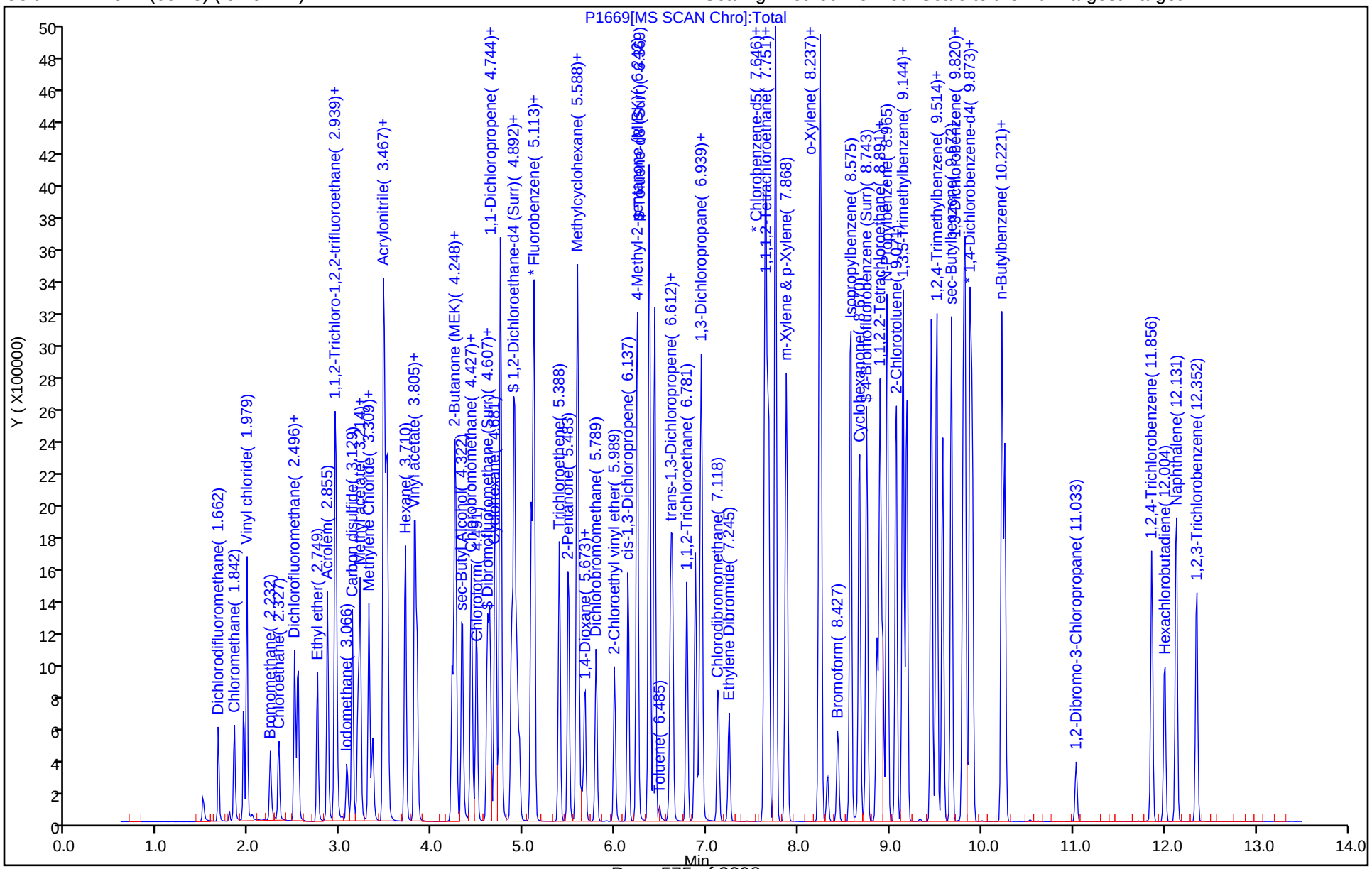
Report Date: 02-Jun-2020 11:16:30 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Injection Date:	01-Jun-2020 20:33:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICIS			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1664.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jun-2020 18:33:30 ALS Bottle#: 7 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:41 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:41:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.113	-0.002	98	2518102	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	86	570208	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.873	-0.003	96	835018	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.607	-0.003	95	607631	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.871	-0.003	97	706747	50.0	49.5	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2503188	50.0	49.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.743	-0.002	83	914750	50.0	49.6	
10 Dichlorodifluoromethane	85	1.660	1.662	-0.002	99	565032	75.0	80.0	
11 Chloromethane	50	1.839	1.842	-0.003	99	753095	75.0	78.7	
12 Vinyl chloride	62	1.945	1.937	0.008	98	831473	75.0	75.4	
14 Bromomethane	94	2.219	2.232	-0.013	90	288045	75.0	69.1	
15 Chloroethane	64	2.314	2.327	-0.013	99	519320	75.0	74.0	
16 Dichlorofluoromethane	67	2.494	2.496	-0.002	97	1256526	75.0	76.7	
17 Trichlorofluoromethane	101	2.525	2.538	-0.013	98	1029796	75.0	75.7	
19 Ethyl ether	59	2.747	2.749	-0.002	91	636933	75.0	74.3	
21 Acrolein	56	2.852	2.855	-0.003	100	1531495	740.6	723.0	
22 1,1-Dichloroethene	96	2.937	2.939	-0.002	97	614318	75.0	75.3	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.939	-0.002	72	455666	75.0	74.3	
24 Acetone	43	2.958	2.960	-0.002	99	986514	300.0	296.2	
26 Iodomethane	142	3.063	3.066	-0.003	99	649402	75.0	82.4	
27 Carbon disulfide	76	3.127	3.129	-0.002	99	1991209	75.0	78.8	
29 Methyl acetate	43	3.190	3.193	-0.003	98	1272496	150.0	148.7	
30 3-Chloro-1-propene	41	3.211	3.214	-0.003	93	1048018	75.0	75.0	
31 Methylene Chloride	84	3.306	3.309	-0.003	91	726350	75.0	77.4	
32 2-Methyl-2-propanol	59	3.348	3.351	-0.003	98	844878	750.0	765.5	
33 Acrylonitrile	53	3.464	3.467	-0.003	98	3422488	750.0	738.5	
34 Methyl tert-butyl ether	73	3.496	3.499	-0.003	95	2097701	75.0	76.2	
35 trans-1,2-Dichloroethene	96	3.507	3.509	-0.002	98	699589	75.0	72.7	
36 Hexane	57	3.707	3.710	-0.003	90	991684	75.0	74.6	
38 Vinyl acetate	43	3.802	3.805	-0.003	97	3210150	150.0	154.8	
39 1,1-Dichloroethane	63	3.834	3.836	-0.002	96	1324489	75.0	75.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.214	4.216	-0.002	99	1657714	300.0	295.3	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	83	785590	75.0	73.4	
48 2,2-Dichloropropane	77	4.256	4.258	-0.002	90	916619	75.0	76.9	
50 sec-Butyl Alcohol	45	4.330	4.322	0.008	99	2164234	2250.0	2397.6	
53 Chlorobromomethane	128	4.425	4.427	-0.002	98	349155	75.0	72.8	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	554326	150.0	149.0	
54 Chloroform	83	4.477	4.480	-0.003	92	1234280	75.0	73.0	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	98	1007366	75.0	75.2	
56 Cyclohexane	56	4.689	4.691	-0.002	89	1295262	75.0	76.0	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	98	1052218	75.0	75.0	
59 Carbon tetrachloride	117	4.752	4.754	-0.002	95	845679	75.0	77.2	
58 Isobutyl alcohol	41	4.752	4.754	-0.002	95	768829	1875.0	1973.9	
60 Benzene	78	4.900	4.902	-0.002	95	3064336	75.0	73.9	
61 1,2-Dichloroethane	62	4.921	4.923	-0.002	98	978504	75.0	75.5	
66 n-Heptane	43	5.079	5.082	-0.003	92	896848	75.0	72.5	
67 Trichloroethene	95	5.385	5.388	-0.003	98	740389	75.0	72.8	
68 2-Pentanone	43	5.480	5.483	-0.003	99	2572976	300.0	308.5	
69 Methylcyclohexane	55	5.586	5.578	0.008	92	963441	75.0	74.6	
70 1,2-Dichloropropane	63	5.596	5.599	-0.003	97	811193	75.0	75.8	
72 1,4-Dioxane	88	5.638	5.630	0.008	92	224792	1500.0	1508.6	
73 Dibromomethane	93	5.670	5.662	0.008	93	460404	75.0	75.0	
74 Dichlorobromomethane	83	5.786	5.789	-0.003	100	943348	75.0	75.9	
76 2-Chloroethyl vinyl ether	63	5.987	5.989	-0.002	91	598010	75.0	80.7	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	96	1216450	75.0	79.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.242	-0.002	95	3333758	300.0	311.3	
79 Toluene	91	6.430	6.432	-0.002	98	3185871	75.0	73.3	
80 trans-1,3-Dichloropropene	75	6.599	6.601	-0.002	97	1084089	75.0	79.7	
81 Ethyl methacrylate	69	6.620	6.622	-0.002	86	1123161	75.0	80.1	
82 1,1,2-Trichloroethane	97	6.778	6.781	-0.003	91	664027	75.0	75.7	
83 Tetrachloroethene	164	6.873	6.876	-0.003	94	517985	75.0	74.5	
84 1,3-Dichloropropane	76	6.926	6.928	-0.002	98	1228848	75.0	73.6	
85 2-Hexanone	43	6.936	6.939	-0.003	95	2396568	300.0	312.6	
86 Chlorodibromomethane	129	7.126	7.118	0.008	90	681438	75.0	79.4	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	688729	75.0	74.2	
89 1-Chlorohexane	91	7.633	7.635	-0.002	97	968916	75.0	77.3	
90 Chlorobenzene	112	7.675	7.678	-0.003	94	1952494	75.0	72.4	
92 Ethylbenzene	106	7.749	7.751	-0.002	98	1112684	75.0	75.1	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.751	-0.002	95	649959	75.0	78.2	
93 m-Xylene & p-Xylene	106	7.865	7.868	-0.003	99	1337167	75.0	75.1	
94 o-Xylene	106	8.224	8.226	-0.002	97	1297286	75.0	75.8	
95 Styrene	104	8.245	8.247	-0.002	94	2225643	75.0	77.2	
96 Bromoform	173	8.424	8.427	-0.003	95	419665	75.0	82.7	
97 Isopropylbenzene	105	8.572	8.575	-0.003	96	3269113	75.0	74.8	
99 Cyclohexanone	55	8.667	8.670	-0.003	91	1820858	3000.0	3118.6	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.859	-0.002	93	923777	75.0	72.1	
101 Bromobenzene	156	8.889	8.891	-0.002	95	750457	75.0	72.8	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.891	-0.002	87	263640	75.0	77.5	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	274122	75.0	70.5	
104 N-Propylbenzene	120	8.973	8.965	0.008	99	900621	75.0	74.4	
105 2-Chlorotoluene	126	9.068	9.071	-0.003	96	761914	75.0	74.3	
106 1,3,5-Trimethylbenzene	105	9.142	9.144	-0.002	94	2718338	75.0	75.8	
107 4-Chlorotoluene	126	9.184	9.187	-0.003	97	790475	75.0	73.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.450	-0.002	93	2228828	75.0	74.3	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	2711650	75.0	74.8	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	94	658067	75.0	75.0	
111 1,3-Dichlorobenzene	146	9.796	9.799	-0.003	97	1405320	75.0	75.3	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	97	2775007	75.0	75.6	
113 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	95	1422924	75.0	73.6	
115 n-Butylbenzene	91	10.218	10.221	-0.003	98	2558085	75.0	74.8	
116 1,2-Dichlorobenzene	146	10.250	10.252	-0.002	98	1365427	75.0	73.6	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.033	-0.002	83	173521	75.0	79.8	
119 1,2,4-Trichlorobenzene	180	11.854	11.856	-0.002	94	776485	75.0	77.0	
120 Hexachlorobutadiene	225	12.002	12.004	-0.002	97	277038	75.0	75.5	
121 Naphthalene	128	12.128	12.131	-0.003	98	2526472	75.0	77.5	
122 1,2,3-Trichlorobenzene	180	12.350	12.352	-0.002	95	716876	75.0	77.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		150.0	146.1	
S 142 Xylenes, Total	106				0		150.0	150.9	
S 140 Trihalomethanes, Total	1				0		300.0	311.0	
S 143 Xylenes, Total (URS)	1				0		150.0	150.9	
S 146 Total BTEX	1				0			373.3	
S 145 1,3-Dichloropropene, Total	1				0		150.0	159.2	
S 144 1,2-Dichloroethene, Total	1				0		150.0	146.1	

Reagents:

MV-Gas A_00058	Amount Added: 15.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 37.50	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

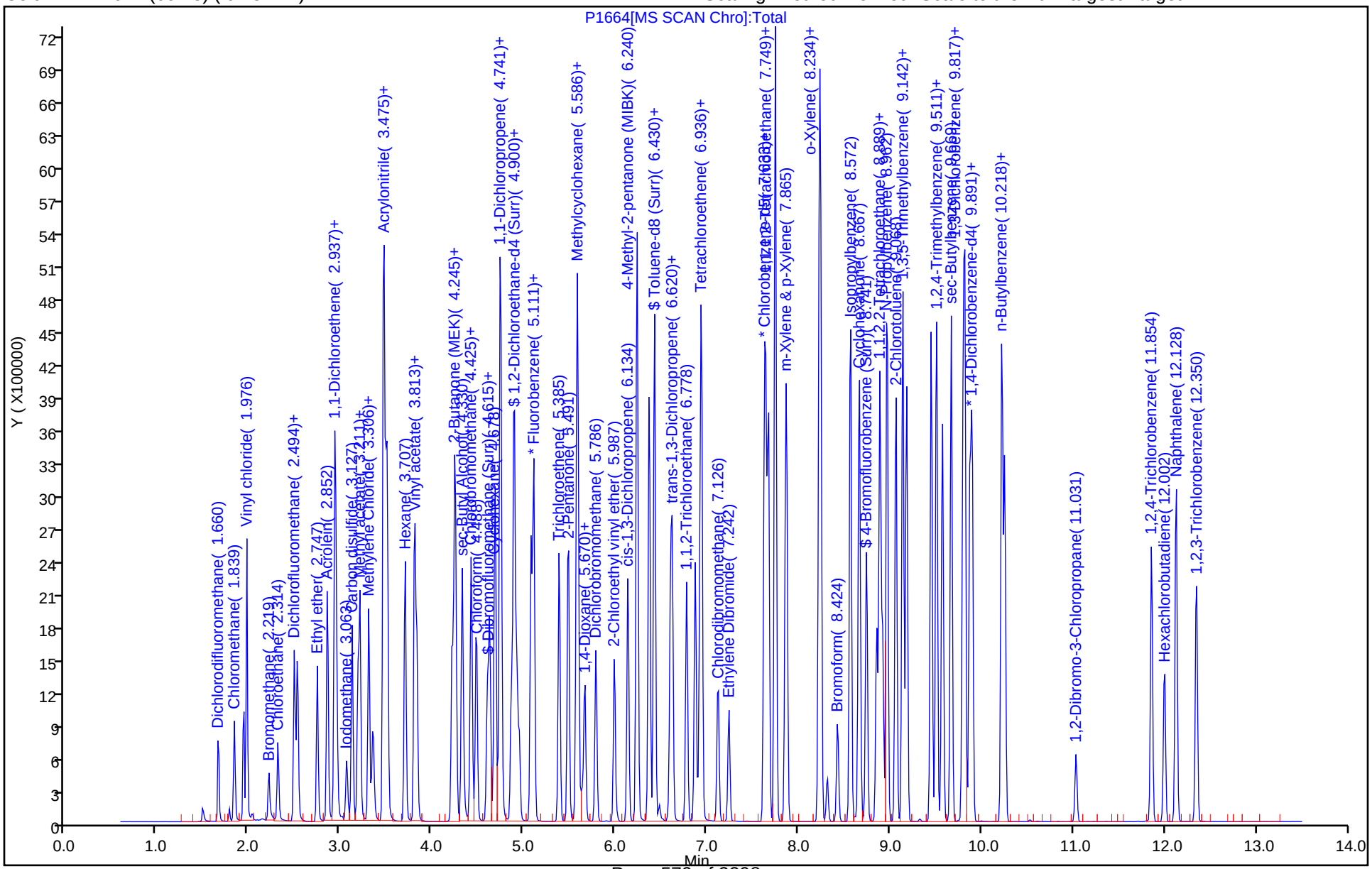
Report Date: 02-Jun-2020 11:16:42 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1664.D

Injection Date:	01-Jun-2020 18:33:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Jun-2020 18:55:30 ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:16:54 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 21:04:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.112	5.113	-0.001	98	2591417	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.645	7.646	-0.001	86	591785	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.871	9.873	-0.002	96	860796	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.606	4.607	-0.001	93	627480	50.0	50.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.869	4.871	-0.002	97	724426	50.0	49.3	
$ 6 Toluene-d8 (Surr)	98	6.368	6.369	-0.001	93	2573814	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.742	8.743	-0.001	84	928259	50.0	48.9	
10 Dichlorodifluoromethane	85	1.661	1.662	-0.001	99	732362	100.0	100.8	
11 Chloromethane	50	1.841	1.842	-0.001	99	960082	100.0	97.6	
12 Vinyl chloride	62	1.946	1.937	0.009	98	1065051	100.0	93.9	
14 Bromomethane	94	2.221	2.232	-0.011	90	440495	100.0	103.5	
15 Chloroethane	64	2.316	2.327	-0.011	99	677138	100.0	93.7	
16 Dichlorofluoromethane	67	2.495	2.496	-0.001	97	1626866	100.0	96.4	
17 Trichlorofluoromethane	101	2.527	2.538	-0.011	98	1332462	100.0	95.1	
19 Ethyl ether	59	2.748	2.749	-0.001	92	867417	100.0	98.3	
21 Acrolein	56	2.854	2.855	-0.001	100	2049494	987.5	940.2	
22 1,1-Dichloroethene	96	2.938	2.939	-0.001	97	803768	100.0	95.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.938	2.939	-0.001	71	583334	100.0	92.4	
24 Acetone	43	2.959	2.960	-0.001	100	1328269	400.0	387.8	
26 Iodomethane	142	3.065	3.066	-0.001	98	853782	100.0	105.0	
27 Carbon disulfide	76	3.128	3.129	-0.001	99	2649300	100.0	102.0	
29 Methyl acetate	43	3.192	3.193	-0.001	98	1718245	200.0	195.1	
30 3-Chloro-1-propene	41	3.213	3.214	-0.001	94	1398353	100.0	97.2	
31 Methylene Chloride	84	3.308	3.309	-0.001	92	982723	100.0	101.9	
32 2-Methyl-2-propanol	59	3.350	3.351	-0.001	98	1163015	1000.0	1023.9	
33 Acrylonitrile	53	3.466	3.467	-0.001	98	4584473	1000.0	961.2	
34 Methyl tert-butyl ether	73	3.498	3.499	-0.001	95	2851275	100.0	100.6	
35 trans-1,2-Dichloroethene	96	3.508	3.509	-0.001	98	932241	100.0	94.1	
36 Hexane	57	3.709	3.710	-0.001	90	1270824	100.0	92.1	
38 Vinyl acetate	43	3.804	3.805	-0.001	97	4053327	200.0	189.9	
39 1,1-Dichloroethane	63	3.835	3.836	-0.001	96	1757478	100.0	97.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.215	4.216	-0.001	99	2217162	400.0	383.8	
47 cis-1,2-Dichloroethene	96	4.247	4.248	-0.001	82	1058127	100.0	96.0	
48 2,2-Dichloropropane	77	4.257	4.258	-0.001	88	1229414	100.0	100.2	
50 sec-Butyl Alcohol	45	4.331	4.322	0.009	99	2977506	3000.0	3205.3	
53 Chlorobromomethane	128	4.426	4.427	-0.001	98	466481	100.0	94.5	
52 Tetrahydrofuran	42	4.426	4.427	-0.001	87	746007	200.0	194.8	
54 Chloroform	83	4.479	4.480	-0.001	92	1656789	100.0	95.2	
55 1,1,1-Trichloroethane	97	4.627	4.628	-0.001	98	1332750	100.0	96.7	
56 Cyclohexane	56	4.690	4.691	-0.001	89	1661826	100.0	94.7	
57 1,1-Dichloropropene	75	4.743	4.744	-0.001	98	1385678	100.0	96.0	
59 Carbon tetrachloride	117	4.753	4.754	-0.001	95	1123442	100.0	99.6	
58 Isobutyl alcohol	41	4.753	4.754	-0.001	95	1036679	2500.0	2586.3	
60 Benzene	78	4.891	4.902	-0.011	97	4103192	100.0	96.2	
61 1,2-Dichloroethane	62	4.922	4.923	-0.001	97	1314638	100.0	98.7	
66 n-Heptane	43	5.080	5.082	-0.002	92	1144406	100.0	89.9	
67 Trichloroethene	95	5.387	5.388	-0.001	98	992812	100.0	94.8	
68 2-Pentanone	43	5.482	5.483	-0.001	99	3459479	400.0	403.1	
69 Methylcyclohexane	55	5.576	5.578	-0.002	93	1240952	100.0	93.3	
70 1,2-Dichloropropane	63	5.598	5.599	-0.001	97	1087577	100.0	98.7	
72 1,4-Dioxane	88	5.629	5.630	-0.001	93	304422	2000.0	1985.3	
73 Dibromomethane	93	5.661	5.662	-0.001	94	622019	100.0	98.4	
74 Dichlorobromomethane	83	5.788	5.789	-0.001	100	1269877	100.0	99.3	
76 2-Chloroethyl vinyl ether	63	5.988	5.989	-0.001	91	777645	100.0	102.0	
77 cis-1,3-Dichloropropene	75	6.136	6.137	-0.001	98	1639115	100.0	103.3	
78 4-Methyl-2-pentanone (MIBK)	43	6.241	6.242	-0.001	95	4449408	400.0	403.7	
79 Toluene	91	6.431	6.432	-0.001	98	4226712	100.0	94.5	
80 trans-1,3-Dichloropropene	75	6.600	6.601	-0.001	97	1494637	100.0	106.8	
81 Ethyl methacrylate	69	6.621	6.622	-0.001	88	1529747	100.0	105.2	
82 1,1,2-Trichloroethane	97	6.780	6.781	-0.001	91	892221	100.0	98.9	
83 Tetrachloroethene	164	6.874	6.876	-0.002	94	680115	100.0	94.3	
84 1,3-Dichloropropane	76	6.927	6.928	-0.001	98	1654933	100.0	95.5	
85 2-Hexanone	43	6.938	6.939	-0.001	95	3222482	400.0	405.0	
86 Chlorodibromomethane	129	7.117	7.118	-0.001	90	927388	100.0	104.1	
88 Ethylene Dibromide	107	7.244	7.245	-0.001	98	939615	100.0	97.6	
89 1-Chlorohexane	91	7.634	7.635	-0.001	96	1287435	100.0	99.1	
90 Chlorobenzene	112	7.676	7.678	-0.002	94	2623954	100.0	93.7	
92 Ethylbenzene	106	7.750	7.751	-0.001	98	1466328	100.0	95.4	
91 1,1,1,2-Tetrachloroethane	131	7.750	7.751	-0.001	95	879154	100.0	102.0	
93 m-Xylene & p-Xylene	106	7.866	7.868	-0.002	99	1800340	100.0	97.4	
94 o-Xylene	106	8.225	8.226	-0.001	97	1734182	100.0	97.6	
95 Styrene	104	8.246	8.247	-0.001	95	2994821	100.0	100.1	
96 Bromoform	173	8.426	8.427	-0.001	95	580498	100.0	110.2	
97 Isopropylbenzene	105	8.573	8.575	-0.002	96	4297903	100.0	95.4	
99 Cyclohexanone	55	8.668	8.670	-0.002	91	2497231	4000.0	4121.1	
100 1,1,2,2-Tetrachloroethane	83	8.858	8.859	-0.001	94	1246192	100.0	94.4	
101 Bromobenzene	156	8.890	8.891	-0.001	96	1018637	100.0	95.8	
102 trans-1,4-Dichloro-2-butene	53	8.890	8.891	-0.001	88	362926	100.0	103.5	
103 1,2,3-Trichloropropane	110	8.922	8.923	-0.001	84	369781	100.0	92.3	
104 N-Propylbenzene	120	8.974	8.965	0.009	99	1208674	100.0	96.8	
105 2-Chlorotoluene	126	9.069	9.071	-0.002	96	1015287	100.0	96.0	
106 1,3,5-Trimethylbenzene	105	9.143	9.144	-0.001	94	3542571	100.0	95.8	
107 4-Chlorotoluene	126	9.186	9.187	-0.001	97	1069992	100.0	96.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.449	9.450	-0.001	93	2956162	100.0	95.5	
109 1,2,4-Trimethylbenzene	105	9.513	9.514	-0.001	97	3612602	100.0	96.6	
110 sec-Butylbenzene	134	9.671	9.672	-0.001	94	863268	100.0	95.4	
111 1,3-Dichlorobenzene	146	9.798	9.799	-0.001	97	1879660	100.0	97.7	
112 4-Isopropyltoluene	119	9.819	9.820	-0.001	97	3687575	100.0	97.5	
113 1,4-Dichlorobenzene	146	9.903	9.904	-0.001	94	1893150	100.0	95.0	
115 n-Butylbenzene	91	10.220	10.221	-0.001	98	3366903	100.0	95.4	
116 1,2-Dichlorobenzene	146	10.251	10.252	-0.001	98	1816228	100.0	95.0	
117 1,2-Dibromo-3-Chloropropane	157	11.032	11.033	-0.001	83	237845	100.0	106.1	
119 1,2,4-Trichlorobenzene	180	11.855	11.856	-0.001	94	1050224	100.0	101.0	
120 Hexachlorobutadiene	225	12.003	12.004	-0.001	98	365804	100.0	96.7	
121 Naphthalene	128	12.130	12.131	-0.001	97	3438073	100.0	102.3	
122 1,2,3-Trichlorobenzene	180	12.351	12.352	-0.001	95	966833	100.0	101.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		200.0	190.2	
S 142 Xylenes, Total	106				0		200.0	195.0	
S 140 Trihalomethanes, Total	1				0		400.0	408.9	
S 143 Xylenes, Total (URS)	1				0		200.0	195.0	
S 146 Total BTEX	1				0			481.1	
S 145 1,3-Dichloropropene, Total	1				0		200.0	210.0	
S 144 1,2-Dichloroethene, Total	1				0		200.0	190.2	

Reagents:

MV-Gas A_00058	Amount Added:	20.00	Units: uL	
MV-MegaMainA_00034	Amount Added:	50.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:16:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D

Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

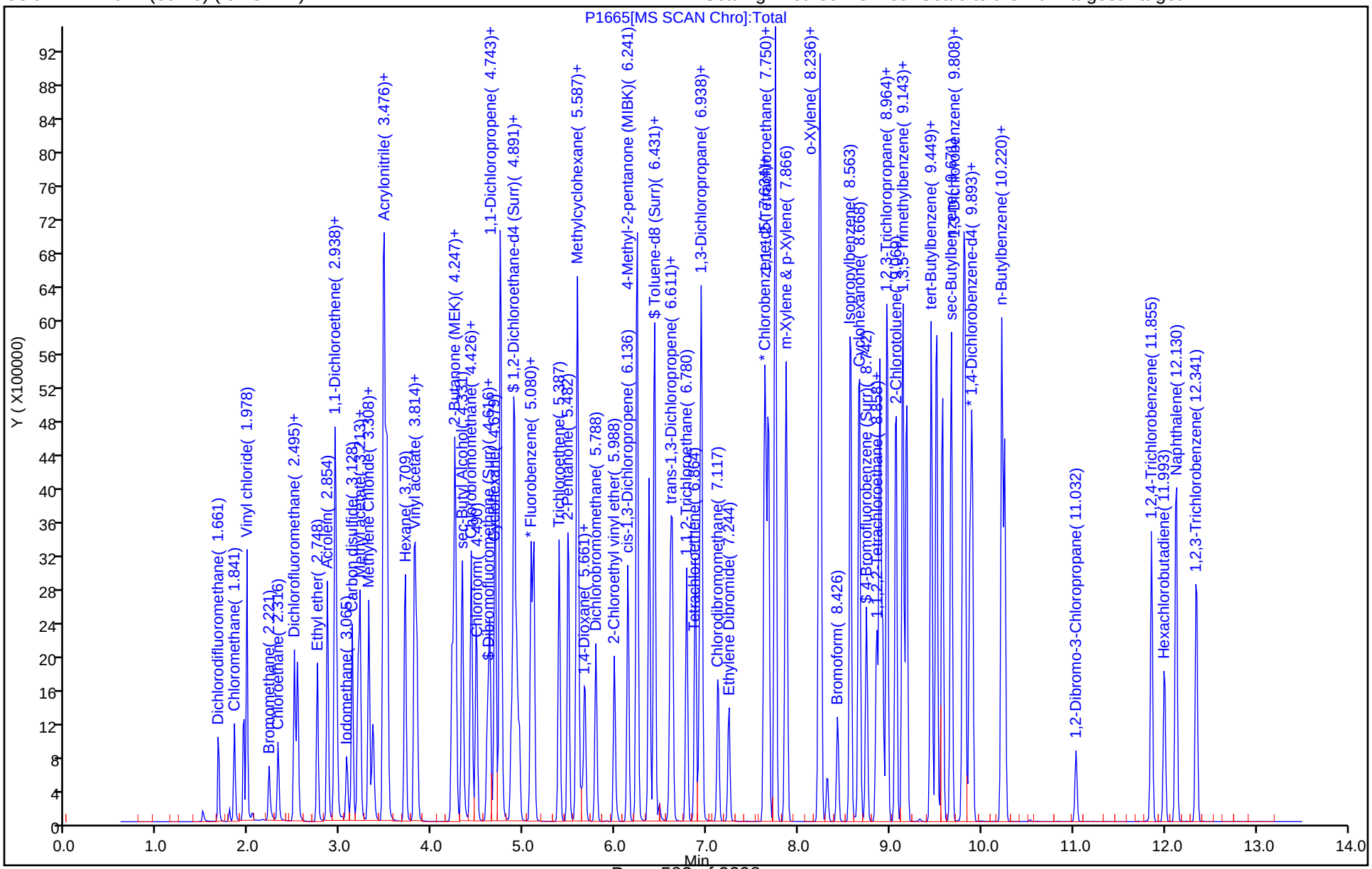
Lims ID: STD100 Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

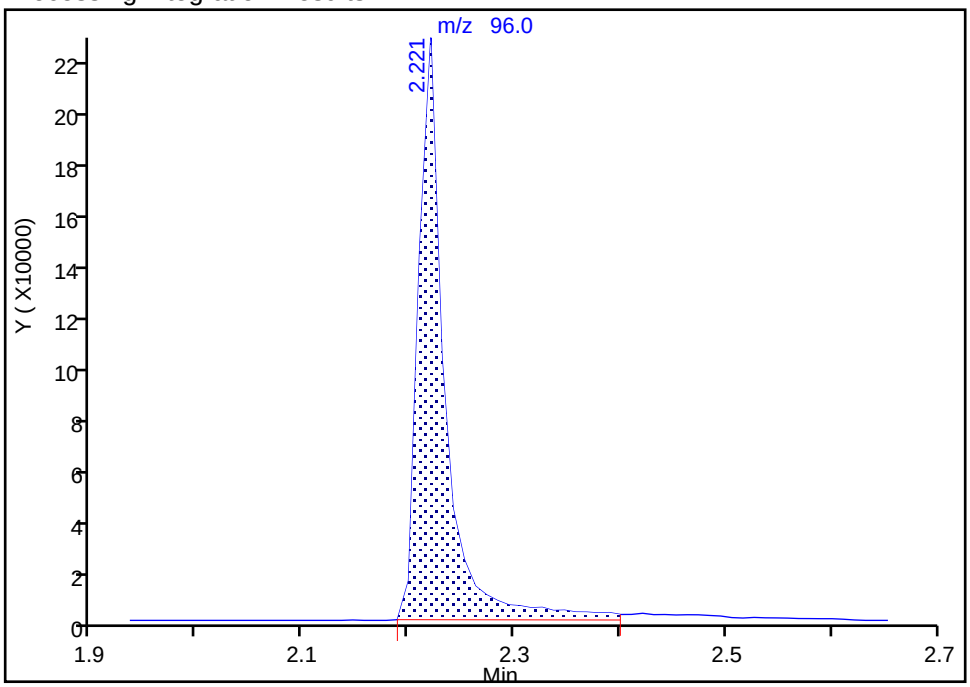
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P
Lims ID: STD100
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

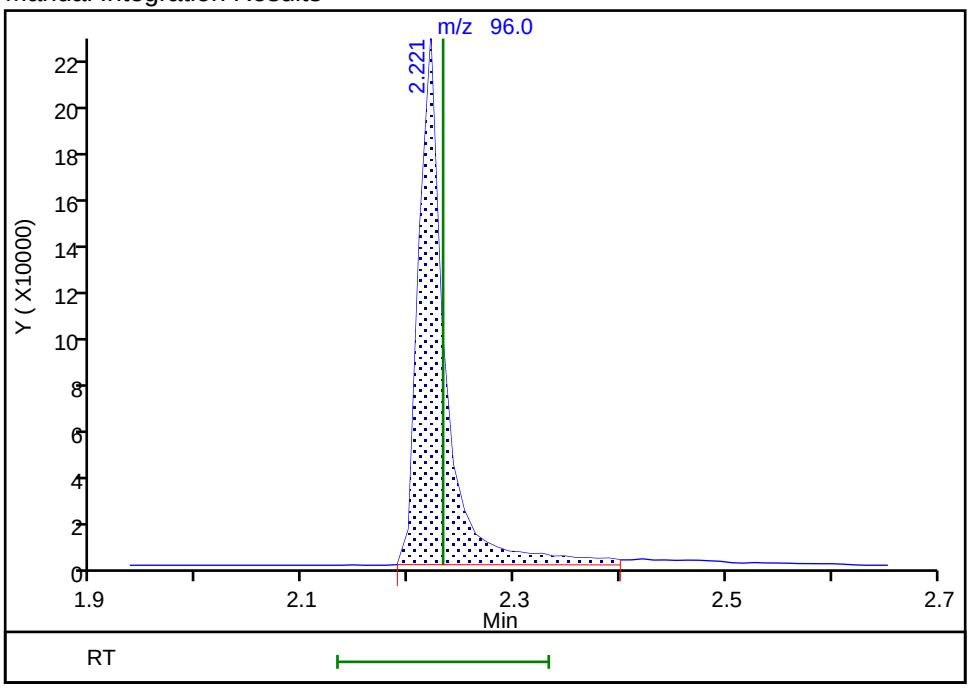
Processing Integration Results

RT: 2.22
Area: 398358
Amount: 71.854497
Amount Units: ug/l



Manual Integration Results

RT: 2.22
Area: 398358
Amount: 103.4548
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

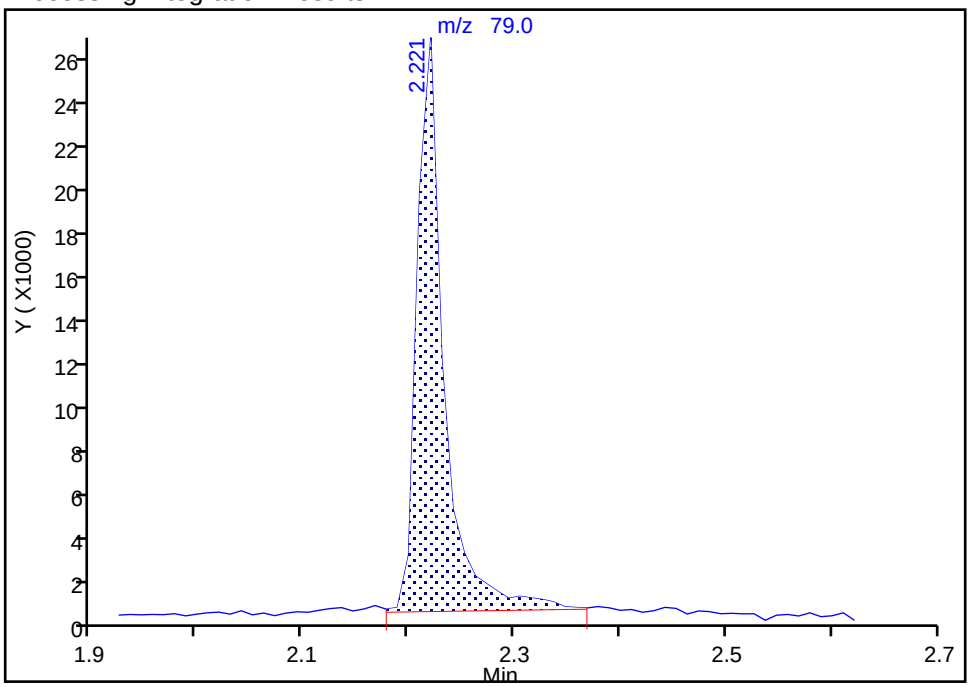
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1665.D
Injection Date: 01-Jun-2020 18:55:30 Instrument ID: VMS_P
Lims ID: STD100
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 8 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 3

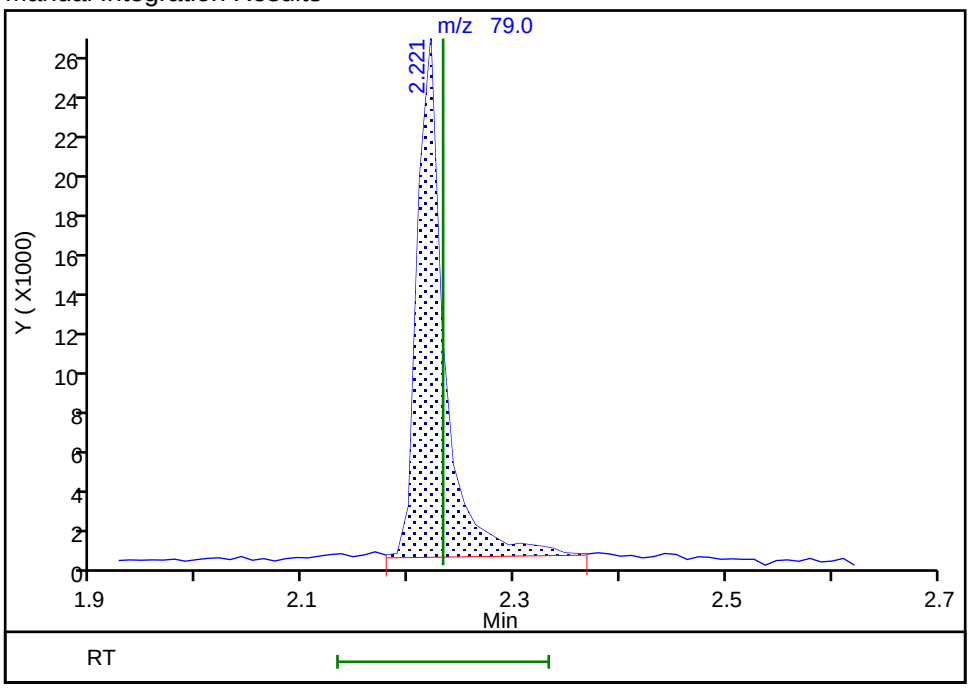
Processing Integration Results

RT: 2.22
Area: 45689
Amount: 71.854497
Amount Units: ug/l



Manual Integration Results

RT: 2.22
Area: 45689
Amount: 103.4548
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-Jun-2020 19:16:30 ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:17:08 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1054

First Level Reviewer: ornelasg Date: 01-Jun-2020 20:22:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.113	-0.003	98	2665192	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.646	-0.003	88	612530	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.869	9.873	-0.004	97	867641	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.603	4.607	-0.004	92	643049	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.867	4.871	-0.004	95	737268	50.0	48.8	
$ 6 Toluene-d8 (Surr)	98	6.366	6.369	-0.003	93	2645158	50.0	49.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.743	-0.003	85	944124	50.0	49.3	
10 Dichlorodifluoromethane	85	1.670	1.662	0.008	99	1521181	200.0	203.5	
11 Chloromethane	50	1.839	1.842	-0.003	99	1944451	200.0	192.5	
12 Vinyl chloride	62	1.944	1.937	0.007	98	2156770	200.0	184.8	
14 Bromomethane	94	2.208	2.232	-0.024	90	829108	200.0	190.8	
15 Chloroethane	64	2.314	2.327	-0.013	99	1338855	200.0	180.2	
16 Dichlorofluoromethane	67	2.493	2.496	-0.003	97	3337067	200.0	192.3	
17 Trichlorofluoromethane	101	2.525	2.538	-0.013	98	2746174	200.0	190.7	
19 Ethyl ether	59	2.746	2.749	-0.003	91	1748580	200.0	192.7	
21 Acrolein	56	2.852	2.855	-0.003	100	4216625	1975.0	1880.7	
22 1,1-Dichloroethene	96	2.936	2.939	-0.003	98	1646977	200.0	190.8	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.936	2.939	-0.003	72	1210821	200.0	186.5	
24 Acetone	43	2.957	2.960	-0.003	100	2724330	800.0	774.7	
26 Iodomethane	142	3.063	3.066	-0.003	99	1638641	200.0	195.4	
27 Carbon disulfide	76	3.126	3.129	-0.003	99	5354499	200.0	200.6	
29 Methyl acetate	43	3.189	3.193	-0.004	97	3572489	400.0	394.4	
30 3-Chloro-1-propene	41	3.210	3.214	-0.004	94	2597002	200.0	175.5	
31 Methylene Chloride	84	3.305	3.309	-0.004	91	1965595	200.0	198.6	
32 2-Methyl-2-propanol	59	3.358	3.351	0.007	98	2468347	2000.0	2112.9	
33 Acrylonitrile	53	3.474	3.467	0.007	98	9225550	2000.0	1880.7	
34 Methyl tert-butyl ether	73	3.495	3.499	-0.004	95	5795702	200.0	198.9	
35 trans-1,2-Dichloroethene	96	3.506	3.509	-0.003	98	1894659	200.0	186.0	
36 Hexane	57	3.706	3.710	-0.004	90	2650185	200.0	185.5	
38 Vinyl acetate	43	3.812	3.805	0.007	97	8022993	400.0	365.4	
39 1,1-Dichloroethane	63	3.833	3.836	-0.003	96	3524595	200.0	189.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.213	4.216	-0.003	99	4551845	800.0	766.2	
47 cis-1,2-Dichloroethene	96	4.245	4.248	-0.003	82	2140264	200.0	188.9	
48 2,2-Dichloropropane	77	4.255	4.258	-0.003	89	2543532	200.0	201.6	
50 sec-Butyl Alcohol	45	4.329	4.322	0.007	99	6200156	6000.0	6489.7	
53 Chlorobromomethane	128	4.424	4.427	-0.003	98	916158	200.0	180.5	
52 Tetrahydrofuran	42	4.435	4.427	0.008	87	1562767	400.0	396.8	
54 Chloroform	83	4.487	4.480	0.007	93	3319211	200.0	185.5	
55 1,1,1-Trichloroethane	97	4.625	4.628	-0.003	99	2730851	200.0	192.7	
56 Cyclohexane	56	4.688	4.691	-0.003	89	3432828	200.0	190.2	
57 1,1-Dichloropropene	75	4.741	4.744	-0.003	97	2820470	200.0	190.0	
59 Carbon tetrachloride	117	4.751	4.754	-0.003	95	2331188	200.0	201.0	
58 Isobutyl alcohol	41	4.751	4.754	-0.003	95	2158330	5000.0	5235.6	
60 Benzene	78	4.899	4.902	-0.003	96	8100543	200.0	184.7	
61 1,2-Dichloroethane	62	4.920	4.923	-0.003	97	2621872	200.0	191.7	
66 n-Heptane	43	5.078	5.082	-0.004	92	2427879	200.0	185.4	
67 Trichloroethene	95	5.384	5.388	-0.004	98	2041486	200.0	189.6	
68 2-Pentanone	43	5.490	5.483	0.007	98	7086221	800.0	802.8	
69 Methylcyclohexane	55	5.585	5.578	0.007	92	2586376	200.0	189.1	
70 1,2-Dichloropropane	63	5.595	5.599	-0.004	97	2237217	200.0	197.4	
72 1,4-Dioxane	88	5.638	5.630	0.008	93	629142	4000.0	3989.3	
73 Dibromomethane	93	5.669	5.662	0.007	94	1265341	200.0	194.7	
74 Dichlorobromomethane	83	5.785	5.789	-0.004	100	2599633	200.0	197.7	
76 2-Chloroethyl vinyl ether	63	5.986	5.989	-0.003	91	1631027	200.0	208.0	
77 cis-1,3-Dichloropropene	75	6.134	6.137	-0.003	97	3390099	200.0	206.4	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.242	-0.003	94	8889699	800.0	784.3	
79 Toluene	91	6.429	6.432	-0.003	99	8379887	200.0	182.1	
80 trans-1,3-Dichloropropene	75	6.609	6.601	0.007	97	3090342	200.0	214.6	
81 Ethyl methacrylate	69	6.619	6.622	-0.003	88	3141319	200.0	208.6	
82 1,1,2-Trichloroethane	97	6.777	6.781	-0.004	90	1826181	200.0	196.8	
83 Tetrachloroethene	164	6.872	6.876	-0.004	93	1409071	200.0	188.7	
84 1,3-Dichloropropane	76	6.925	6.928	-0.003	98	3359188	200.0	187.3	
85 2-Hexanone	43	6.946	6.939	0.007	94	6416464	800.0	779.1	
86 Chlorodibromomethane	129	7.126	7.118	0.008	90	1909184	200.0	207.1	
88 Ethylene Dibromide	107	7.242	7.245	-0.003	98	1921283	200.0	192.8	
89 1-Chlorohexane	91	7.632	7.635	-0.003	98	2625923	200.0	195.7	
90 Chlorobenzene	112	7.674	7.678	-0.004	93	5290337	200.0	182.6	
92 Ethylbenzene	106	7.748	7.751	-0.003	98	3000265	200.0	188.6	
91 1,1,1,2-Tetrachloroethane	131	7.748	7.751	-0.003	96	1814145	200.0	203.3	
93 m-Xylene & p-Xylene	106	7.864	7.868	-0.004	99	3621670	200.0	189.3	
94 o-Xylene	106	8.234	8.226	0.008	96	3512399	200.0	191.1	
95 Styrene	104	8.244	8.247	-0.003	94	5944526	200.0	192.0	
96 Bromoform	173	8.434	8.427	0.007	95	1219200	200.0	223.7	
97 Isopropylbenzene	105	8.571	8.575	-0.004	96	8473631	200.0	186.6	
99 Cyclohexanone	55	8.666	8.670	-0.004	90	5123084	8000.0	8168.1	
100 1,1,2,2-Tetrachloroethane	83	8.856	8.859	-0.003	94	2502476	200.0	188.0	
101 Bromobenzene	156	8.888	8.891	-0.003	96	2037374	200.0	190.2	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.891	-0.003	79	740899	200.0	209.6	
103 1,2,3-Trichloropropane	110	8.920	8.923	-0.003	82	742902	200.0	184.0	
104 N-Propylbenzene	120	8.972	8.965	0.007	98	2424282	200.0	192.6	
105 2-Chlorotoluene	126	9.067	9.071	-0.004	98	2052197	200.0	192.6	
106 1,3,5-Trimethylbenzene	105	9.141	9.144	-0.003	95	6973832	200.0	187.1	
107 4-Chlorotoluene	126	9.183	9.187	-0.004	97	2129083	200.0	190.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.447	9.450	-0.003	93	5880094	200.0	188.5	
109 1,2,4-Trimethylbenzene	105	9.511	9.514	-0.003	97	7027541	200.0	186.5	
110 sec-Butylbenzene	134	9.669	9.672	-0.003	95	1767152	200.0	193.7	
111 1,3-Dichlorobenzene	146	9.795	9.799	-0.004	98	3739315	200.0	192.8	
112 4-Isopropyltoluene	119	9.817	9.820	-0.003	96	7213150	200.0	189.2	
113 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	94	3782164	200.0	188.3	
115 n-Butylbenzene	91	10.218	10.221	-0.003	97	6618361	200.0	186.1	
116 1,2-Dichlorobenzene	146	10.249	10.252	-0.003	95	3619991	200.0	187.9	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.033	-0.003	84	512443	200.0	226.9	
119 1,2,4-Trichlorobenzene	180	11.853	11.856	-0.003	94	2180721	200.0	208.1	
120 Hexachlorobutadiene	225	12.001	12.004	-0.003	98	781505	200.0	205.0	
121 Naphthalene	128	12.128	12.131	-0.003	98	6963268	200.0	205.6	
122 1,2,3-Trichlorobenzene	180	12.349	12.352	-0.003	95	1991580	200.0	206.7	
S 139 1,2-Dichloroethene, Total (URS)	96				0		400.0	374.9	
S 142 Xylenes, Total	106				0		400.0	380.3	
S 140 Trihalomethanes, Total	1				0		800.0	813.9	
S 143 Xylenes, Total (URS)	1				0		400.0	380.3	
S 146 Total BTEX	1				0			935.8	
S 145 1,3-Dichloropropene, Total	1				0		400.0	421.0	
S 144 1,2-Dichloroethene, Total	1				0		400.0	374.9	

Reagents:

MV-Gas A_00058	Amount Added: 40.00	Units: uL	
MV-MegaMainA_00034	Amount Added: 100.00	Units: uL	
mv-IS_SS_00001	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 02-Jun-2020 11:17:09 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D

Injection Date: 01-Jun-2020 19:16:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

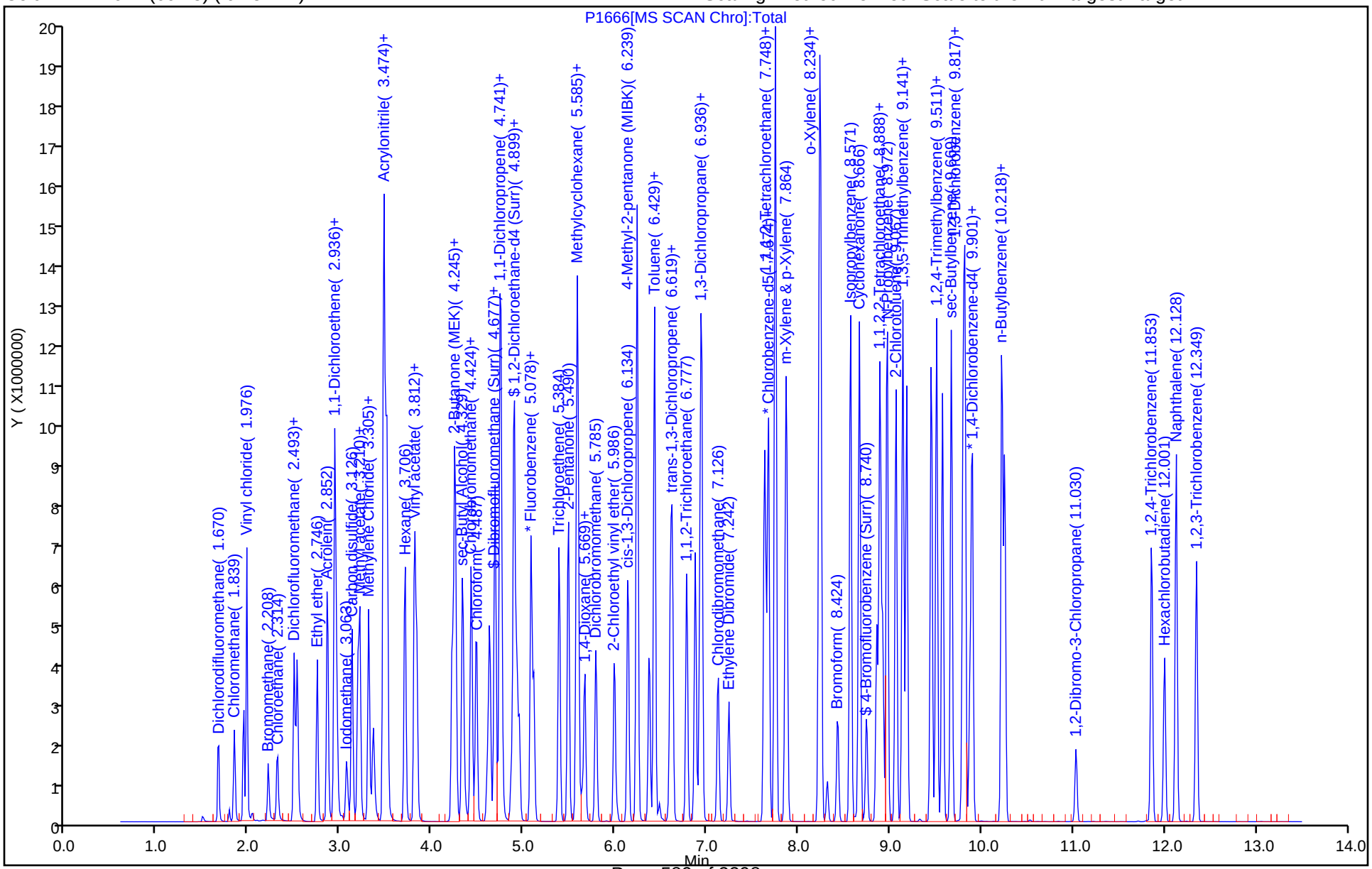
Lims ID: STD200 Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

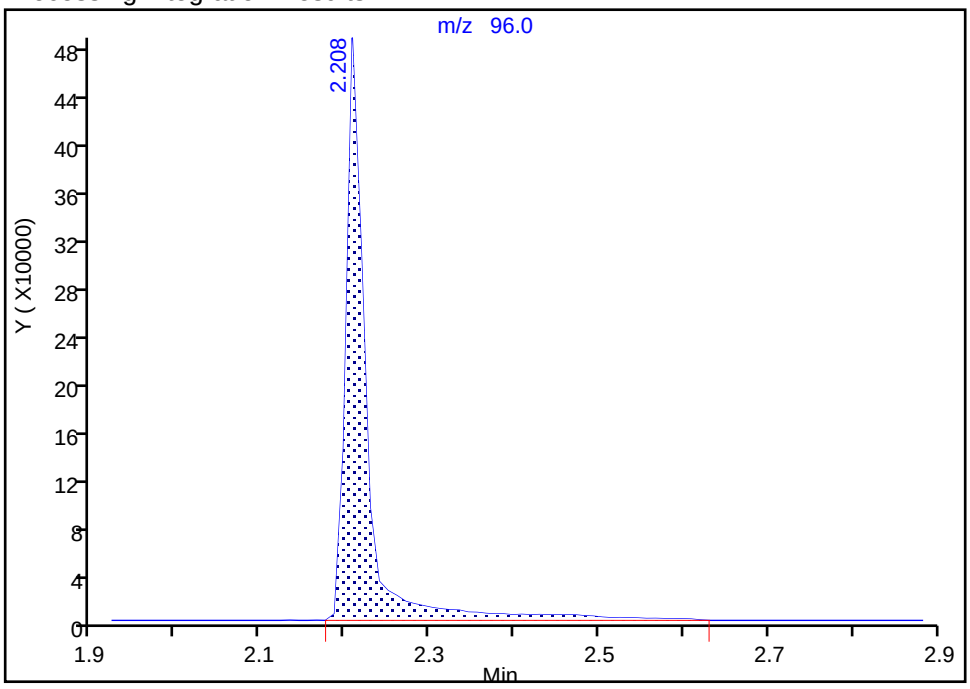
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D
Injection Date: 01-Jun-2020 19:16:30 Instrument ID: VMS_P
Lims ID: STD200
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 9 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

14 Bromomethane, CAS: 74-83-9

Signal: 2

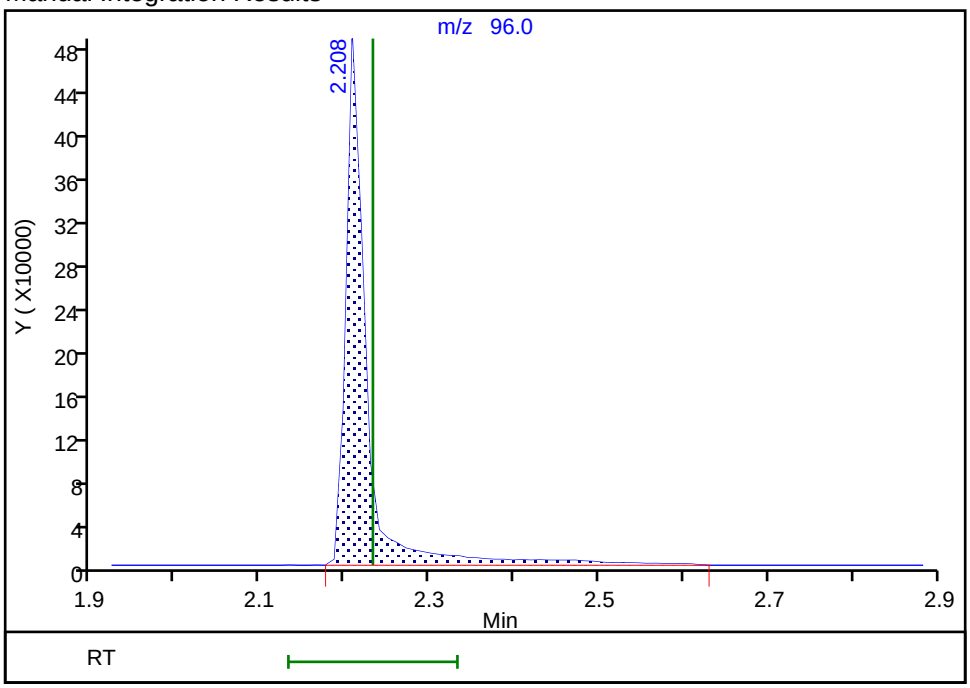
Processing Integration Results

RT: 2.21
Area: 807928
Amount: 190.7761
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 807928
Amount: 190.7761
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

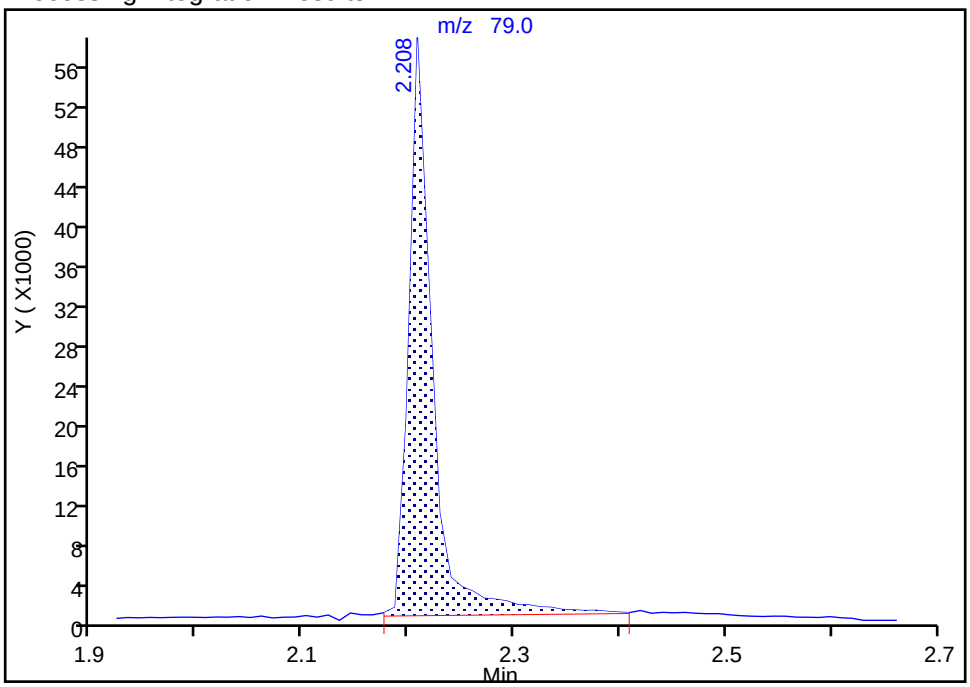
Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1666.D				
Injection Date:	01-Jun-2020 19:16:30	Instrument ID:	VMS_P		
Lims ID:	STD200				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	9	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

14 Bromomethane, CAS: 74-83-9

Signal: 3

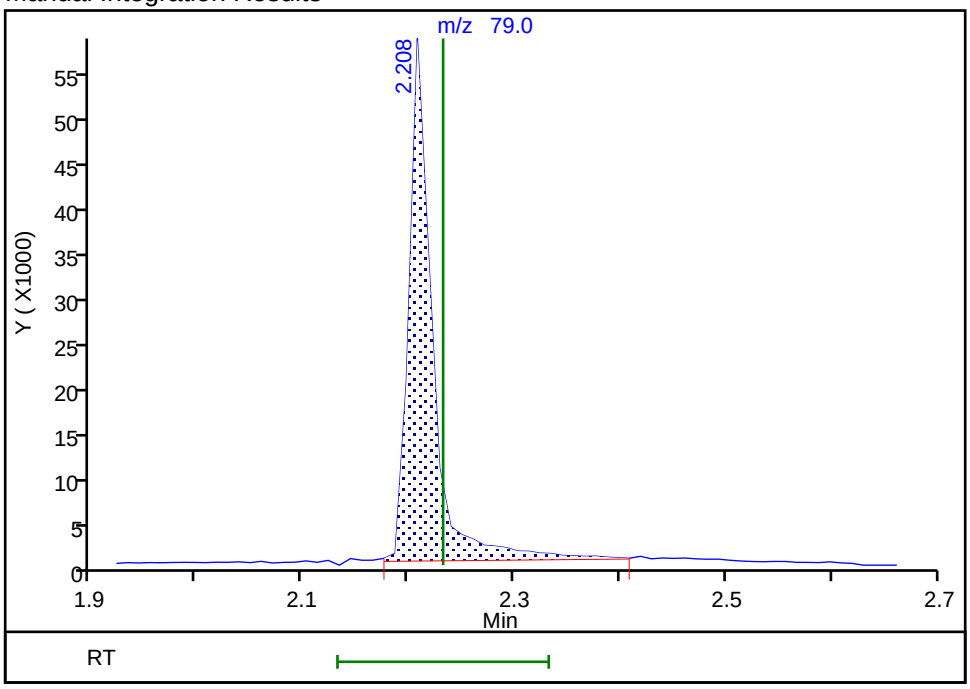
Processing Integration Results

RT: 2.21
Area: 90258
Amount: 190.7761
Amount Units: ug/l



Manual Integration Results

RT: 2.21
Area: 90258
Amount: 190.7761
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 21:04:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1453		51.8	50.0	3.6	20.0
Chloromethane	Lin2		0.1887	0.1000	49.6	50.0	-0.9	20.0
Vinyl chloride	Ave	0.2189	0.2085		47.6	50.0	-4.8	20.0
Bromomethane	Lin1		0.0986		59.3	50.0	18.6	20.0
Chloroethane	Ave	0.1394	0.1352		48.5	50.0	-3.0	20.0
Dichlorofluoromethane	Ave	0.3255	0.3170		48.7	50.0	-2.6	20.0
Trichlorofluoromethane	Ave	0.2702	0.2606		48.2	50.0	-3.5	20.0
Ethyl ether	Ave	0.1703	0.1694		49.7	50.0	-0.5	20.0
Acrolein	Ave	0.0421	0.0417		489	494	-0.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1218	0.1268		52.1	50.0	4.1	20.0
1,1-Dichloroethene	Ave	0.1619	0.1671		51.6	50.0	3.2	20.0
Acetone	Lin2		0.0650		196	200	-1.9	20.0
Iodomethane	Lin		0.1623		52.1	50.0	4.2	20.0
Carbon disulfide	Lin2		0.5468		54.4	50.0	8.8	20.0
Methyl acetate	Ave	0.1699	0.1636		96.3	100	-3.7	20.0
3-Chloro-1-propene	Ave	0.2776	0.2915		52.5	50.0	5.0	20.0
Methylene Chloride	Lin2		0.1954		52.2	50.0	4.5	20.0
t-Butyl alcohol	Ave	0.0219	0.0225		513	500	2.5	20.0
Acrylonitrile	Ave	0.0920	0.0897		487	500	-2.5	20.0
Methyl tert-butyl ether	Ave	0.5467	0.5582		51.1	50.0	2.1	20.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1874		49.0	50.0	-1.9	20.0
Hexane	Ave	1.166	1.244		53.3	50.0	6.7	20.0
Vinyl acetate	Ave	0.4119	0.4582		111	100	11.2	20.0
1,1-Dichloroethane	Ave	0.3497	0.3524	0.1000	50.4	50.0	0.8	20.0
2-Butanone (MEK)	Ave	0.1115	0.1083		194	200	-2.8	20.0
cis-1,2-Dichloroethene	Ave	0.2126	0.2101		49.4	50.0	-1.2	20.0
2,2-Dichloropropane	Ave	0.2367	0.2614		55.2	50.0	10.4	20.0
sec-Butyl Alcohol	Ave	0.0179	0.0189		1580	1500	5.5	20.0
Bromochloromethane	Ave	0.0952	0.0954		50.1	50.0	0.2	20.0
Tetrahydrofuran	Ave	0.0739	0.0713		96.4	100	-3.6	20.0
Chloroform	Ave	0.3358	0.3273		48.7	50.0	-2.5	20.0
1,1,1-Trichloroethane	Ave	0.2658	0.2723		51.2	50.0	2.4	20.0
Cyclohexane	Ave	0.3386	0.3585		52.9	50.0	5.9	20.0
1,1-Dichloropropene	Ave	0.2785	0.2843		51.0	50.0	2.1	20.0
Carbon tetrachloride	Ave	0.2176	0.2292		52.7	50.0	5.3	20.0
Isobutyl alcohol	Ave	0.0077	0.0079		1270	1250	1.9	20.0
Benzene	Ave	0.8229	0.8202		49.8	50.0	-0.3	20.0
1,2-Dichloroethane	Lin2		0.2558		49.6	50.0	-0.8	20.0
Trichloroethene	Ave	0.2020	0.2010		49.8	50.0	-0.5	20.0
2-Pentanone	Ave	0.1656	0.1691		204	200	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.2566	0.2686		52.4	50.0	4.7	20.0
1,2-Dichloropropane	Ave	0.2126	0.2140		50.3	50.0	0.6	20.0
1,4-Dioxane	Ave	0.0030	0.0030		1010	1000	0.6	20.0
Dibromomethane	Ave	0.1219	0.1204		49.4	50.0	-1.3	20.0
Bromodichloromethane	Ave	0.2467	0.2486		50.4	50.0	0.8	20.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1503		51.1	50.0	2.2	20.0
cis-1,3-Dichloropropene	Ave	1.341	1.414		52.7	50.0	5.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.2193		206	200	3.1	20.0
Toluene	Ave	0.8631	0.8530		49.4	50.0	-1.2	20.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2886		53.4	50.0	6.8	20.0
Ethyl methacrylate	Ave	1.229	1.295		52.7	50.0	5.4	20.0
1,1,2-Trichloroethane	Ave	0.1741	0.1763		50.6	50.0	1.3	20.0
Tetrachloroethene	Ave	0.6096	0.6135		50.3	50.0	0.7	20.0
1,3-Dichloropropane	Ave	1.464	1.424		48.6	50.0	-2.7	20.0
2-Hexanone	Ave	0.6723	0.6895		205	200	2.6	20.0
Dibromochloromethane	Ave	0.7527	0.7872		52.3	50.0	4.6	20.0
Ethylene Dibromide	Ave	0.8135	0.8100		49.8	50.0	-0.4	20.0
1-Chlorohexane	Lin2		1.161		52.7	50.0	5.4	20.0
Chlorobenzene	Ave	2.365	2.298	0.3000	48.6	50.0	-2.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7514		51.6	50.0	3.1	20.0
Ethylbenzene	Ave	1.298	1.290		49.7	50.0	-0.7	20.0
m-Xylene & p-Xylene	Ave	1.562	1.584		50.7	50.0	1.4	20.0
o-Xylene	Ave	1.501	1.513		50.4	50.0	0.8	20.0
Styrene	Ave	2.528	2.615		51.7	50.0	3.4	20.0
Bromoform	Ave	0.4449	0.4897	0.1000	55.0	50.0	10.1	20.0
Isopropylbenzene	Ave	2.617	2.692		51.4	50.0	2.9	20.0
Cyclohexanone	Ave	0.0512	0.0546		2130	2000	6.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.7505	0.3000	48.9	50.0	-2.2	20.0
Bromobenzene	Ave	0.6174	0.6124		49.6	50.0	-0.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.2119		52.0	50.0	4.0	20.0
1,2,3-Trichloropropane	Ave	0.2327	0.2186		47.0	50.0	-6.0	20.0
N-Propylbenzene	Ave	0.7252	0.7431		51.2	50.0	2.5	20.0
2-Chlorotoluene	Ave	0.6140	0.6168		50.2	50.0	0.5	20.0
1,3,5-Trimethylbenzene	Ave	2.148	2.205		51.3	50.0	2.7	20.0
4-Chlorotoluene	Ave	0.6432	0.6402		49.8	50.0	-0.5	20.0
tert-Butylbenzene	Ave	1.797	1.838		51.1	50.0	2.3	20.0
1,2,4-Trimethylbenzene	Ave	2.171	2.206		50.8	50.0	1.6	20.0
sec-Butylbenzene	Ave	0.5256	0.5368		51.1	50.0	2.1	20.0
1,3-Dichlorobenzene	Ave	1.118	1.136		50.8	50.0	1.7	20.0
4-Isopropyltoluene	Ave	2.197	2.296		52.2	50.0	4.5	20.0
1,4-Dichlorobenzene	Ave	1.157	1.154		49.8	50.0	-0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: ICV 280-496958/21 Calibration Date: 06/01/2020 20:54

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P1670.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	2.049	2.105		51.4	50.0	2.7	20.0
1,2-Dichlorobenzene	Ave	1.110	1.097		49.4	50.0	-1.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1356		52.1	50.0	4.1	20.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.6273		51.9	50.0	3.9	20.0
Hexachlorobutadiene	Ave	0.2197	0.2319		52.8	50.0	5.5	20.0
Naphthalene	Ave	1.952	2.027		51.9	50.0	3.8	20.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5696		51.3	50.0	2.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2402		49.9	50.0	-0.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2725		48.1	50.0	-3.8	20.0
Toluene-d8 (Surr)	Ave	4.400	4.350		49.4	50.0	-1.1	20.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.092		49.5	50.0	-1.0	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1670.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 01-Jun-2020 20:54:30 ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 02-Jun-2020 11:17:08 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: seifertj Date: 02-Jun-2020 08:01:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.114	5.113	0.001	99	2590465	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.646	0.000	86	590999	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.873	9.873	0.000	96	849842	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.607	4.607	0.000	93	622271	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.871	-0.011	97	705775	50.0	48.1	
$ 6 Toluene-d8 (Surr)	98	6.369	6.369	0.000	93	2570994	50.0	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.744	8.743	0.001	84	928285	50.0	49.5	
10 Dichlorodifluoromethane	85	1.663	1.662	0.001	99	376358	50.0	51.8	
11 Chloromethane	50	1.842	1.842	0.000	99	488912	50.0	49.6	
12 Vinyl chloride	62	1.937	1.937	0.000	98	539997	50.0	47.6	
14 Bromomethane	94	2.233	2.232	0.001	90	255462	50.0	59.3	
15 Chloroethane	64	2.328	2.327	0.001	100	350208	50.0	48.5	
16 Dichlorofluoromethane	67	2.496	2.496	0.000	97	821160	50.0	48.7	
17 Trichlorofluoromethane	101	2.539	2.538	0.001	98	675149	50.0	48.2	
19 Ethyl ether	59	2.750	2.749	0.001	91	438827	50.0	49.7	
21 Acrolein	56	2.855	2.855	0.000	100	1065819	493.8	489.1	
22 1,1-Dichloroethene	96	2.940	2.939	0.001	98	432725	50.0	51.6	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.940	2.939	0.001	73	328549	50.0	52.1	
24 Acetone	43	2.961	2.960	0.001	100	673920	200.0	196.2	
26 Iodomethane	142	3.066	3.066	0.000	98	420437	50.0	52.1	
27 Carbon disulfide	76	3.130	3.129	0.001	99	1416370	50.0	54.4	
29 Methyl acetate	43	3.193	3.193	0.000	97	847714	100.0	96.3	
30 3-Chloro-1-propene	41	3.214	3.214	0.000	93	755062	50.0	52.5	
31 Methylene Chloride	84	3.309	3.309	0.000	92	506201	50.0	52.2	
32 2-Methyl-2-propanol	59	3.351	3.351	0.000	98	582058	500.0	512.6	
33 Acrylonitrile	53	3.467	3.467	0.000	98	2323499	500.0	487.3	
34 Methyl tert-butyl ether	73	3.499	3.499	0.000	95	1445927	50.0	51.1	
35 trans-1,2-Dichloroethene	96	3.510	3.509	0.001	98	485470	50.0	49.0	
36 Hexane	57	3.710	3.710	0.000	90	735288	50.0	53.3	
38 Vinyl acetate	43	3.805	3.805	0.000	97	2373910	100.0	111.2	
39 1,1-Dichloroethane	63	3.837	3.836	0.001	96	912856	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.217	4.216	0.001	99	1122134	200.0	194.3	
47 cis-1,2-Dichloroethene	96	4.248	4.248	0.000	82	544236	50.0	49.4	
48 2,2-Dichloropropane	77	4.259	4.258	0.001	88	677059	50.0	55.2	
50 sec-Butyl Alcohol	45	4.322	4.322	0.000	99	1469949	1500.0	1583.0	
53 Chlorobromomethane	128	4.428	4.427	0.001	98	247207	50.0	50.1	
52 Tetrahydrofuran	42	4.428	4.427	0.001	87	369171	100.0	96.4	
54 Chloroform	83	4.480	4.480	0.000	92	847798	50.0	48.7	
55 1,1,1-Trichloroethane	97	4.628	4.628	0.000	98	705497	50.0	51.2	
56 Cyclohexane	56	4.691	4.691	0.000	89	928773	50.0	52.9	
57 1,1-Dichloropropene	75	4.744	4.744	0.000	97	736563	50.0	51.0	
59 Carbon tetrachloride	117	4.744	4.754	-0.010	83	593714	50.0	52.7	
58 Isobutyl alcohol	41	4.744	4.754	-0.010	94	510443	1250.0	1273.9	
60 Benzene	78	4.892	4.902	-0.010	96	2124641	50.0	49.8	
61 1,2-Dichloroethane	62	4.924	4.923	0.001	97	662615	50.0	49.6	
66 n-Heptane	43	5.082	5.082	0.000	92	669267	50.0	52.6	
67 Trichloroethene	95	5.388	5.388	0.000	99	520749	50.0	49.8	
68 2-Pentanone	43	5.483	5.483	0.000	99	1751955	200.0	204.2	
69 Methylcyclohexane	55	5.578	5.578	0.000	93	695871	50.0	52.4	
70 1,2-Dichloropropane	63	5.588	5.599	-0.011	97	554297	50.0	50.3	
72 1,4-Dioxane	88	5.631	5.630	0.001	93	154164	1000.0	1005.7	
73 Dibromomethane	93	5.662	5.662	0.000	95	311781	50.0	49.4	
74 Dichlorobromomethane	83	5.789	5.789	0.000	99	643971	50.0	50.4	
76 2-Chloroethyl vinyl ether	63	5.989	5.989	0.000	91	389335	50.0	51.1	
77 cis-1,3-Dichloropropene	75	6.137	6.137	0.000	96	835385	50.0	52.7	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.242	-0.010	96	2271889	200.0	206.2	
79 Toluene	91	6.433	6.432	0.001	98	2209611	50.0	49.4	
80 trans-1,3-Dichloropropene	75	6.602	6.601	0.001	97	747539	50.0	53.4	
81 Ethyl methacrylate	69	6.623	6.622	0.001	88	765502	50.0	52.7	
82 1,1,2-Trichloroethane	97	6.781	6.781	0.000	90	456702	50.0	50.6	
83 Tetrachloroethene	164	6.876	6.876	0.000	94	362600	50.0	50.3	
84 1,3-Dichloropropane	76	6.929	6.928	0.001	96	841677	50.0	48.6	
85 2-Hexanone	43	6.939	6.939	0.000	95	1630059	200.0	205.1	
86 Chlorodibromomethane	129	7.119	7.118	0.001	90	465207	50.0	52.3	
88 Ethylene Dibromide	107	7.245	7.245	0.000	98	478705	50.0	49.8	
89 1-Chlorohexane	91	7.625	7.635	-0.010	98	685928	50.0	52.7	
90 Chlorobenzene	112	7.678	7.678	0.000	94	1358393	50.0	48.6	
92 Ethylbenzene	106	7.752	7.751	0.001	98	762280	50.0	49.7	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.751	-0.010	95	444052	50.0	51.6	
93 m-Xylene & p-Xylene	106	7.868	7.868	0.000	99	936078	50.0	50.7	
94 o-Xylene	106	8.227	8.226	0.001	97	893993	50.0	50.4	
95 Styrene	104	8.248	8.247	0.001	94	1545341	50.0	51.7	
96 Bromoform	173	8.427	8.427	0.000	95	289434	50.0	55.0	
97 Isopropylbenzene	105	8.564	8.575	-0.011	96	2287684	50.0	51.4	
99 Cyclohexanone	55	8.659	8.670	-0.011	91	1291007	2000.0	2133.3	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.859	-0.010	93	637840	50.0	48.9	
101 Bromobenzene	156	8.891	8.891	0.000	96	520421	50.0	49.6	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.891	0.000	65	180098	50.0	52.0	
103 1,2,3-Trichloropropane	110	8.923	8.923	0.000	85	185801	50.0	47.0	
104 N-Propylbenzene	120	8.965	8.965	0.000	99	631481	50.0	51.2	
105 2-Chlorotoluene	126	9.071	9.071	0.000	96	524183	50.0	50.2	
106 1,3,5-Trimethylbenzene	105	9.145	9.144	0.001	94	1874231	50.0	51.3	
107 4-Chlorotoluene	126	9.187	9.187	0.000	97	544107	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.451	9.450	0.001	93	1561925	50.0	51.1	
109 1,2,4-Trimethylbenzene	105	9.504	9.514	-0.010	97	1874354	50.0	50.8	
110 sec-Butylbenzene	134	9.672	9.672	0.000	94	456208	50.0	51.1	
111 1,3-Dichlorobenzene	146	9.799	9.799	0.000	98	965515	50.0	50.8	
112 4-Isopropyltoluene	119	9.820	9.820	0.000	97	1950964	50.0	52.2	
113 1,4-Dichlorobenzene	146	9.894	9.904	-0.010	94	980422	50.0	49.8	
115 n-Butylbenzene	91	10.221	10.221	0.000	98	1788798	50.0	51.4	
116 1,2-Dichlorobenzene	146	10.253	10.252	0.001	98	932406	50.0	49.4	
117 1,2-Dibromo-3-Chloropropane	157	11.034	11.033	0.001	84	115195	50.0	52.1	
119 1,2,4-Trichlorobenzene	180	11.857	11.856	0.001	94	533137	50.0	51.9	
120 Hexachlorobutadiene	225	12.005	12.004	0.001	96	197049	50.0	52.8	
121 Naphthalene	128	12.121	12.131	-0.010	98	1722522	50.0	51.9	
122 1,2,3-Trichlorobenzene	180	12.353	12.352	0.001	95	484072	50.0	51.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	98.4	
S 142 Xylenes, Total	106				0		100.0	101.1	
S 140 Trihalomethanes, Total	1				0		200.0	206.4	
S 143 Xylenes, Total (URS)	1				0		100.0	101.1	
S 145 1,3-Dichloropropene, Total	1				0		100.0	106.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	98.4	

Reagents:

MV-MegaMain B_00031	Amount Added:	25.00	Units: uL	
MV-Gas B_00060	Amount Added:	10.00	Units: uL	
mv-IS_SS_00001	Amount Added:	5.00	Units: uL	Run Reagent

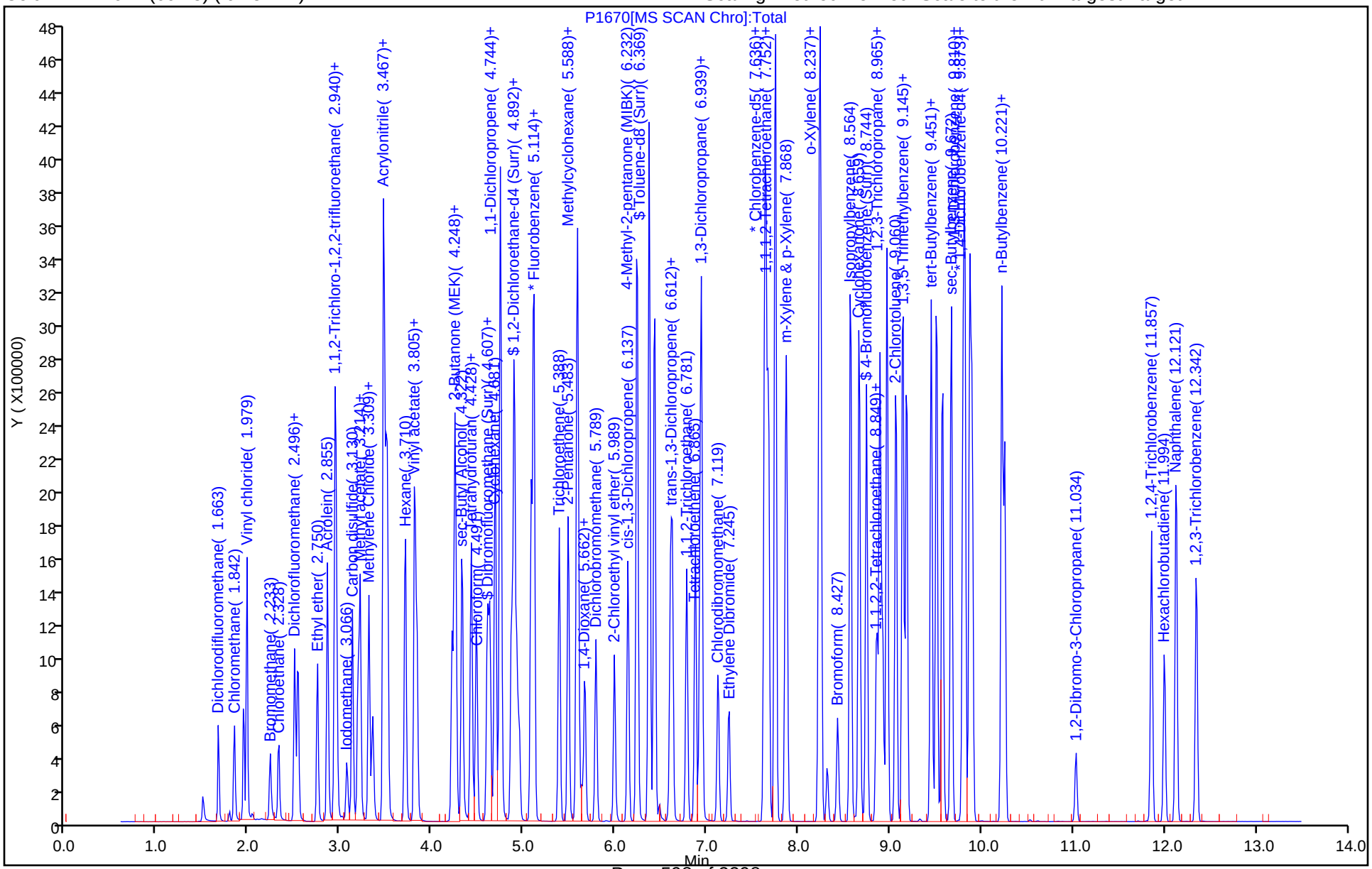
Report Date: 02-Jun-2020 12:20:29 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1670.D

Injection Date:	01-Jun-2020 20:54:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499519/2 Calibration Date: 06/20/2020 09:29

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2506.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1720		61.3	50.0	22.6*	20.0
Chloromethane	Lin2		0.1910	0.1000	50.2	50.0	0.3	20.0
Vinyl chloride	Ave	0.2189	0.2291		52.3	50.0	4.6	20.0
Bromomethane	Lin1		0.0756		45.0	50.0	-9.9	20.0
Chloroethane	Ave	0.1394	0.1553		55.7	50.0	11.4	20.0
Dichlorofluoromethane	Ave	0.3255	0.3608		55.4	50.0	10.8	20.0
Trichlorofluoromethane	Ave	0.2702	0.2972		55.0	50.0	10.0	20.0
Ethyl ether	Ave	0.1703	0.1724		50.6	50.0	1.2	20.0
Acrolein	Ave	0.0421	0.0391		459	494	-7.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1218	0.1107		45.4	50.0	-9.1	20.0
1,1-Dichloroethene	Ave	0.1619	0.1534		47.4	50.0	-5.3	20.0
Acetone	Lin2		0.0605		183	200	-8.7	20.0
Iodomethane	Lin		0.1202		38.8	50.0	-22.5*	20.0
Carbon disulfide	Lin2		0.4885		48.6	50.0	-2.8	20.0
Methyl acetate	Ave	0.1699	0.1649		97.0	100	-3.0	20.0
3-Chloro-1-propene	Ave	0.2776	0.2984		53.8	50.0	7.5	20.0
Methylene Chloride	Lin2		0.1991		53.3	50.0	6.5	20.0
t-Butyl alcohol	Ave	0.0219	0.0196		447	500	-10.7	20.0
Acrylonitrile	Ave	0.0920	0.0903		491	500	-1.9	20.0
Methyl tert-butyl ether	Ave	0.5467	0.5448		49.8	50.0	-0.3	20.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1861		48.7	50.0	-2.6	20.0
Hexane	Ave	1.166	0.9849		42.2	50.0	-15.5	20.0
Vinyl acetate	Ave	0.4119	0.4594		112	100	11.5	20.0
1,1-Dichloroethane	Ave	0.3497	0.3545	0.1000	50.7	50.0	1.4	20.0
2-Butanone (MEK)	Ave	0.1115	0.1038		186	200	-6.9	20.0
cis-1,2-Dichloroethene	Ave	0.2126	0.2144		50.4	50.0	0.9	20.0
2,2-Dichloropropane	Ave	0.2367	0.2510		53.0	50.0	6.0	20.0
sec-Butyl Alcohol	Ave	0.0179	0.0170		1420	1500	-5.3	20.0
Bromochloromethane	Ave	0.0952	0.0960		50.4	50.0	0.8	20.0
Tetrahydrofuran	Ave	0.0739	0.0706		95.6	100	-4.4	20.0
Chloroform	Ave	0.3358	0.3320		49.4	50.0	-1.1	20.0
1,1,1-Trichloroethane	Ave	0.2658	0.2670		50.2	50.0	0.4	20.0
Cyclohexane	Ave	0.3386	0.3316		49.0	50.0	-2.1	20.0
1,1-Dichloropropene	Ave	0.2785	0.2773		49.8	50.0	-0.4	20.0
Carbon tetrachloride	Ave	0.2176	0.2242		51.5	50.0	3.0	20.0
Isobutyl alcohol	Ave	0.0077	0.0073		1190	1250	-5.2	20.0
Benzene	Ave	0.8229	0.8328		50.6	50.0	1.2	20.0
1,2-Dichloroethane	Lin2		0.2527		49.0	50.0	-2.0	20.0
Trichloroethene	Ave	0.2020	0.1987		49.2	50.0	-1.6	20.0
2-Pentanone	Ave	0.1656	0.1598		193	200	-3.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499519/2 Calibration Date: 06/20/2020 09:29

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2506.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.2566	0.2550		49.7	50.0	-0.6	20.0
1,2-Dichloropropane	Ave	0.2126	0.2205		51.8	50.0	3.7	20.0
1,4-Dioxane	Ave	0.0030	0.0027		916	1000	-8.4	20.0
Dibromomethane	Ave	0.1219	0.1218		49.9	50.0	-0.1	20.0
Bromodichloromethane	Ave	0.2467	0.2539		51.5	50.0	2.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1622		55.1	50.0	10.3	20.0
cis-1,3-Dichloropropene	Ave	1.341	1.436		53.5	50.0	7.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.2122		200	200	-0.2	20.0
Toluene	Ave	0.8631	0.8596		49.8	50.0	-0.4	20.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2872		53.2	50.0	6.3	20.0
Ethyl methacrylate	Ave	1.229	1.281		52.1	50.0	4.2	20.0
1,1,2-Trichloroethane	Ave	0.1741	0.1772		50.9	50.0	1.8	20.0
Tetrachloroethene	Ave	0.6096	0.6080		49.9	50.0	-0.3	20.0
1,3-Dichloropropane	Ave	1.464	1.433		48.9	50.0	-2.1	20.0
2-Hexanone	Ave	0.6723	0.6539		195	200	-2.7	20.0
Dibromochloromethane	Ave	0.7527	0.7936		52.7	50.0	5.4	20.0
Ethylene Dibromide	Ave	0.8135	0.7905		48.6	50.0	-2.8	20.0
1-Chlorohexane	Lin2		1.149		52.2	50.0	4.3	20.0
Chlorobenzene	Ave	2.365	2.299	0.3000	48.6	50.0	-2.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7536		51.7	50.0	3.5	20.0
Ethylbenzene	Ave	1.298	1.296		49.9	50.0	-0.2	20.0
m-Xylene & p-Xylene	Ave	1.562	1.569		50.2	50.0	0.4	20.0
o-Xylene	Ave	1.501	1.495		49.8	50.0	-0.4	20.0
Styrene	Ave	2.528	2.594		51.3	50.0	2.6	20.0
Bromoform	Ave	0.4449	0.4883	0.1000	54.9	50.0	9.7	20.0
Isopropylbenzene	Ave	2.617	2.703		51.6	50.0	3.3	20.0
Cyclohexanone	Ave	0.0512	0.0389		1520	2000	-24.1*	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.7559	0.3000	49.3	50.0	-1.5	20.0
Bromobenzene	Ave	0.6174	0.6191		50.1	50.0	0.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.2030		49.8	50.0	-0.4	20.0
1,2,3-Trichloropropane	Ave	0.2327	0.2153		46.3	50.0	-7.5	20.0
N-Propylbenzene	Ave	0.7252	0.7425		51.2	50.0	2.4	20.0
2-Chlorotoluene	Ave	0.6140	0.6251		50.9	50.0	1.8	20.0
1,3,5-Trimethylbenzene	Ave	2.148	2.208		51.4	50.0	2.8	20.0
4-Chlorotoluene	Ave	0.6432	0.6488		50.4	50.0	0.9	20.0
tert-Butylbenzene	Ave	1.797	1.841		51.2	50.0	2.5	20.0
1,2,4-Trimethylbenzene	Ave	2.171	2.211		50.9	50.0	1.8	20.0
sec-Butylbenzene	Ave	0.5256	0.5352		50.9	50.0	1.8	20.0
1,3-Dichlorobenzene	Ave	1.118	1.136		50.8	50.0	1.7	20.0
4-Isopropyltoluene	Ave	2.197	2.253		51.3	50.0	2.5	20.0
1,4-Dichlorobenzene	Ave	1.157	1.148		49.6	50.0	-0.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499519/2 Calibration Date: 06/20/2020 09:29

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2506.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	2.049	2.082		50.8	50.0	1.6	20.0
1,2-Dichlorobenzene	Ave	1.110	1.088		49.0	50.0	-2.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1264		48.5	50.0	-2.9	20.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.6102		50.5	50.0	1.1	20.0
Hexachlorobutadiene	Ave	0.2197	0.2132		48.5	50.0	-3.0	20.0
Naphthalene	Ave	1.952	1.911		49.0	50.0	-2.1	20.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5539		49.9	50.0	-0.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2406		50.0	50.0	-0.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2632		46.5	50.0	-7.1	20.0
Toluene-d8 (Surr)	Ave	4.400	4.334		49.3	50.0	-1.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.119		50.7	50.0	1.4	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2506.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2020 09:29:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:06 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:52:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.111	0.000	99	2870776	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.644	7.644	0.000	87	651947	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.870	0.000	96	913047	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	96	690596	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	755706	50.0	46.5	
$ 6 Toluene-d8 (Surr)	98	6.367	6.367	0.000	93	2825517	50.0	49.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	86	1021733	50.0	50.7	
10 Dichlorodifluoromethane	85	1.671	1.671	0.000	99	493715	50.0	61.3	
11 Chloromethane	50	1.839	1.839	0.000	99	548219	50.0	50.2	
12 Vinyl chloride	62	1.945	1.945	0.000	97	657607	50.0	52.3	
14 Bromomethane	94	2.230	2.230	0.000	91	216958	50.0	45.0	
15 Chloroethane	64	2.325	2.325	0.000	100	445887	50.0	55.7	
16 Dichlorofluoromethane	67	2.494	2.494	0.000	97	1035647	50.0	55.4	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	98	853299	50.0	55.0	
19 Ethyl ether	59	2.747	2.747	0.000	91	494842	50.0	50.6	
21 Acrolein	56	2.853	2.853	0.000	100	1108948	493.8	459.2	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	69	317884	50.0	45.4	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	440446	50.0	47.4	
24 Acetone	43	2.958	2.958	0.000	99	695098	200.0	182.6	
26 Iodomethane	142	3.064	3.064	0.000	98	345085	50.0	38.8	
27 Carbon disulfide	76	3.127	3.127	0.000	99	1402244	50.0	48.6	
29 Methyl acetate	43	3.190	3.190	0.000	98	946565	100.0	97.0	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	856710	50.0	53.8	
31 Methylene Chloride	84	3.306	3.306	0.000	92	571647	50.0	53.3	
32 2-Methyl-2-propanol	59	3.349	3.349	0.000	98	561979	500.0	446.6	
33 Acrylonitrile	53	3.465	3.465	0.000	99	2592075	500.0	490.6	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	1564061	50.0	49.8	
35 trans-1,2-Dichloroethene	96	3.517	3.517	0.000	98	534273	50.0	48.7	
36 Hexane	57	3.707	3.707	0.000	91	642069	50.0	42.2	
38 Vinyl acetate	43	3.802	3.802	0.000	97	2637600	100.0	111.5	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	1017659	50.0	50.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2-Butanone (MEK)	43	4.214	4.214	0.000	99	1192013	200.0	186.3	
47 cis-1,2-Dichloroethene	96	4.246	4.246	0.000	82	615494	50.0	50.4	
48 2,2-Dichloropropane	77	4.256	4.256	0.000	91	720471	50.0	53.0	
50 sec-Butyl Alcohol	45	4.330	4.330	0.000	99	1461989	1500.0	1420.7	
53 Chlorobromomethane	128	4.425	4.425	0.000	98	275570	50.0	50.4	
52 Tetrahydrofuran	42	4.435	4.435	0.000	89	405430	100.0	95.6	
54 Chloroform	83	4.488	4.488	0.000	93	953083	50.0	49.4	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	99	766398	50.0	50.2	
56 Cyclohexane	56	4.689	4.689	0.000	89	951943	50.0	49.0	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	796133	50.0	49.8	
59 Carbon tetrachloride	117	4.752	4.752	0.000	86	643546	50.0	51.5	
58 Isobutyl alcohol	41	4.752	4.752	0.000	93	526337	1250.0	1185.3	
60 Benzene	78	4.900	4.900	0.000	95	2390640	50.0	50.6	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	725494	50.0	49.0	
66 n-Heptane	43	5.079	5.079	0.000	92	662238	50.0	47.0	
67 Trichloroethene	95	5.385	5.385	0.000	98	570452	50.0	49.2	
68 2-Pentanone	43	5.480	5.480	0.000	99	1834981	200.0	193.0	
69 Methylcyclohexane	55	5.586	5.586	0.000	93	731921	50.0	49.7	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	97	632905	50.0	51.8	
72 1,4-Dioxane	88	5.638	5.638	0.000	92	155611	1000.0	916.0	
73 Dibromomethane	93	5.670	5.670	0.000	93	349569	50.0	49.9	
74 Dichlorobromomethane	83	5.786	5.786	0.000	100	729015	50.0	51.5	
76 2-Chloroethyl vinyl ether	63	5.987	5.987	0.000	91	465615	50.0	55.1	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	935987	50.0	53.5	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	95	2436479	200.0	199.6	
79 Toluene	91	6.430	6.430	0.000	98	2467608	50.0	49.8	
80 trans-1,3-Dichloropropene	75	6.609	6.609	0.000	97	824408	50.0	53.2	
81 Ethyl methacrylate	69	6.620	6.620	0.000	88	834924	50.0	52.1	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	508695	50.0	50.9	
83 Tetrachloroethene	164	6.873	6.873	0.000	94	396391	50.0	49.9	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	97	934110	50.0	48.9	
85 2-Hexanone	43	6.947	6.947	0.000	95	1705320	200.0	194.6	
86 Chlorodibromomethane	129	7.126	7.126	0.000	90	517371	50.0	52.7	
88 Ethylene Dibromide	107	7.243	7.243	0.000	98	515388	50.0	48.6	
89 1-Chlorohexane	91	7.633	7.633	0.000	98	748954	50.0	52.2	
90 Chlorobenzene	112	7.675	7.675	0.000	93	1498741	50.0	48.6	
92 Ethylbenzene	106	7.749	7.749	0.000	98	844700	50.0	49.9	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	43	491309	50.0	51.7	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	100	1022806	50.0	50.2	
94 o-Xylene	106	8.224	8.224	0.000	97	974810	50.0	49.8	
95 Styrene	104	8.245	8.245	0.000	94	1691397	50.0	51.3	
96 Bromoform	173	8.435	8.435	0.000	95	318340	50.0	54.9	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	2467684	50.0	51.6	
99 Cyclohexanone	55	8.667	8.667	0.000	91	1013632	2000.0	1518.4	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	690144	50.0	49.3	
101 Bromobenzene	156	8.889	8.889	0.000	95	565285	50.0	50.1	
102 trans-1,4-Dichloro-2-butene	53	8.889	8.889	0.000	84	185349	50.0	49.8	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	82	196612	50.0	46.3	
104 N-Propylbenzene	120	8.973	8.973	0.000	99	677971	50.0	51.2	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	570714	50.0	50.9	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	94	2015674	50.0	51.4	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	592415	50.0	50.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	1681266	50.0	51.2	
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	2019051	50.0	50.9	
110 sec-Butylbenzene	134	9.670	9.670	0.000	94	488654	50.0	50.9	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	1037420	50.0	50.8	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	2056791	50.0	51.3	
113 1,4-Dichlorobenzene	146	9.902	9.902	0.000	94	1048166	50.0	49.6	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	1900718	50.0	50.8	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	993545	50.0	49.0	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	82	115373	50.0	48.5	
119 1,2,4-Trichlorobenzene	180	11.865	11.865	0.000	94	557141	50.0	50.5	
120 Hexachlorobutadiene	225	12.002	12.002	0.000	98	194643	50.0	48.5	
121 Naphthalene	128	12.128	12.128	0.000	97	1744844	50.0	49.0	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	95	505733	50.0	49.9	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	99.1	
S 142 Xylenes, Total	106				0		100.0	100.0	
S 140 Trihalomethanes, Total	1				0		200.0	208.5	
S 143 Xylenes, Total (URS)	1				0		100.0	100.0	
S 145 1,3-Dichloropropene, Total	1				0		100.0	106.7	
S 144 1,2-Dichloroethene, Total	1				0		100.0	99.1	

Reagents:

MV-MegaMainA_00034	Amount Added: 25.00	Units: uL	
MV-Gas A_00059	Amount Added: 10.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

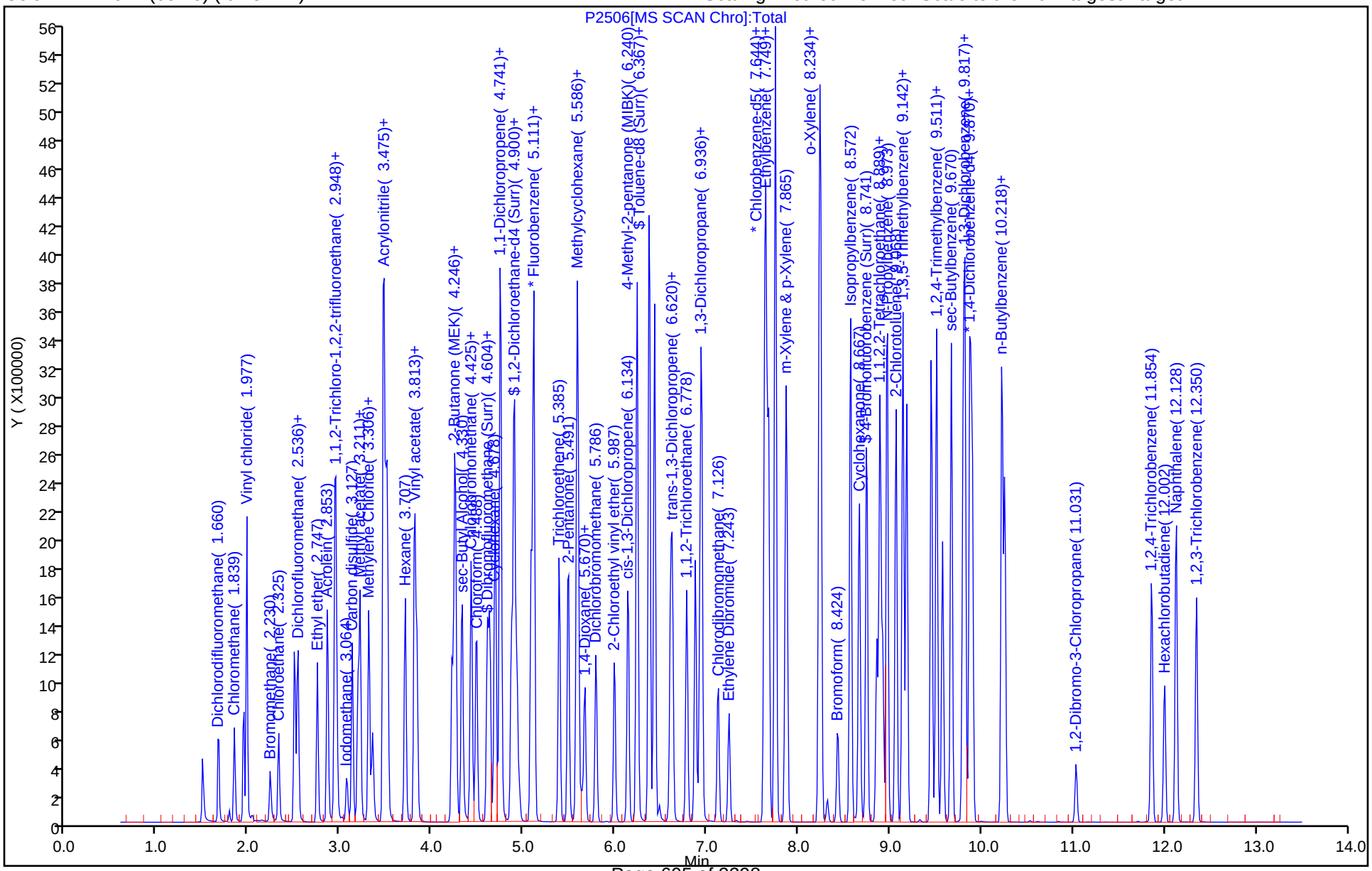
Report Date: 22-Jun-2020 13:30:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2506.D

Injection Date:	20-Jun-2020 09:29:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCVC 280-499519/34 Calibration Date: 06/20/2020 19:06

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2533.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1402	0.1517		54.1	50.0	8.2	50.0
Chloromethane	Lin2		0.1655	0.1000	43.4	50.0	-13.2	50.0
Vinyl chloride	Ave	0.2189	0.2084		47.6	50.0	-4.8	50.0
Bromomethane	Lin1		0.0345		19.6	50.0	-60.7*	50.0
Chloroethane	Ave	0.1394	0.1450		52.0	50.0	4.0	50.0
Dichlorofluoromethane	Ave	0.3255	0.3381		51.9	50.0	3.9	50.0
Trichlorofluoromethane	Ave	0.2702	0.2661		49.2	50.0	-1.5	50.0
Ethyl ether	Ave	0.1703	0.1709		50.2	50.0	0.4	50.0
Acrolein	Ave	0.0421	0.0399		469	494	-5.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1218	0.1045		42.9	50.0	-14.2	50.0
1,1-Dichloroethene	Ave	0.1619	0.1460		45.1	50.0	-9.9	50.0
Acetone	Lin2		0.0683		206	200	3.0	50.0
Iodomethane	Lin		0.0614		20.2	50.0	-59.7*	50.0
Carbon disulfide	Lin2		0.4528		45.0	50.0	-10.0	50.0
Methyl acetate	Ave	0.1699	0.1778		105	100	4.6	50.0
3-Chloro-1-propene	Ave	0.2776	0.2742		49.4	50.0	-1.2	50.0
Methylene Chloride	Lin2		0.1930		51.6	50.0	3.2	50.0
t-Butyl alcohol	Ave	0.0219	0.0234		533	500	6.6	50.0
Acrylonitrile	Ave	0.0920	0.0973		528	500	5.7	50.0
Methyl tert-butyl ether	Ave	0.5467	0.5460		49.9	50.0	-0.1	50.0
trans-1,2-Dichloroethene	Ave	0.1911	0.1775		46.4	50.0	-7.1	50.0
Hexane	Ave	1.166	0.8985		38.5	50.0	-22.9	50.0
Vinyl acetate	Ave	0.4119	0.4107		99.7	100	-0.3	50.0
1,1-Dichloroethane	Ave	0.3497	0.3511	0.1000	50.2	50.0	0.4	50.0
2-Butanone (MEK)	Ave	0.1115	0.1181		212	200	5.9	50.0
cis-1,2-Dichloroethene	Ave	0.2126	0.2068		48.6	50.0	-2.7	50.0
2,2-Dichloropropane	Ave	0.2367	0.2178		46.0	50.0	-8.0	50.0
sec-Butyl Alcohol	Ave	0.0179	0.0206		1730	1500	15.1	50.0
Bromochloromethane	Ave	0.0952	0.0939		49.3	50.0	-1.4	50.0
Tetrahydrofuran	Ave	0.0739	0.0812		110	100	9.9	50.0
Chloroform	Ave	0.3358	0.3246		48.3	50.0	-3.3	50.0
1,1,1-Trichloroethane	Ave	0.2658	0.2525		47.5	50.0	-5.0	50.0
Cyclohexane	Ave	0.3386	0.3264		48.2	50.0	-3.6	50.0
1,1-Dichloropropene	Ave	0.2785	0.2729		49.0	50.0	-2.0	50.0
Carbon tetrachloride	Ave	0.2176	0.2130		48.9	50.0	-2.1	50.0
Isobutyl alcohol	Ave	0.0077	0.0089		1450	1250	15.6	50.0
Benzene	Ave	0.8229	0.8140		49.5	50.0	-1.1	50.0
1,2-Dichloroethane	Lin2		0.2497		48.4	50.0	-3.2	50.0
Trichloroethene	Ave	0.2020	0.1963		48.6	50.0	-2.9	50.0
2-Pentanone	Ave	0.1656	0.1833		221	200	10.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCVC 280-499519/34 Calibration Date: 06/20/2020 19:06

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2533.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.2566	0.2477		48.3	50.0	-3.4	50.0
1,2-Dichloropropane	Ave	0.2126	0.2196		51.6	50.0	3.3	50.0
1,4-Dioxane	Ave	0.0030	0.0032		1090	1000	9.1	50.0
Dibromomethane	Ave	0.1219	0.1219		50.0	50.0	-0.0	50.0
Bromodichloromethane	Ave	0.2467	0.2450		49.6	50.0	-0.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1471	0.1646		56.0	50.0	11.9	50.0
cis-1,3-Dichloropropene	Ave	1.341	1.352		50.4	50.0	0.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2126	0.2360		222	200	11.0	50.0
Toluene	Ave	0.8631	0.8544		49.5	50.0	-1.0	50.0
trans-1,3-Dichloropropene	Ave	0.2701	0.2790		51.6	50.0	3.3	50.0
Ethyl methacrylate	Ave	1.229	1.305		53.1	50.0	6.2	50.0
1,1,2-Trichloroethane	Ave	0.1741	0.1791		51.4	50.0	2.9	50.0
Tetrachloroethene	Ave	0.6096	0.5870		48.1	50.0	-3.7	50.0
1,3-Dichloropropane	Ave	1.464	1.432		48.9	50.0	-2.2	50.0
2-Hexanone	Ave	0.6723	0.7338		218	200	9.1	50.0
Dibromochloromethane	Ave	0.7527	0.7591		50.4	50.0	0.8	50.0
Ethylene Dibromide	Ave	0.8135	0.7890		48.5	50.0	-3.0	50.0
1-Chlorohexane	Lin2		1.107		50.2	50.0	0.5	50.0
Chlorobenzene	Ave	2.365	2.264	0.3000	47.9	50.0	-4.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.7285	0.7255		49.8	50.0	-0.4	50.0
Ethylbenzene	Ave	1.298	1.260		48.5	50.0	-3.0	50.0
m-Xylene & p-Xylene	Ave	1.562	1.539		49.3	50.0	-1.5	50.0
o-Xylene	Ave	1.501	1.482		49.4	50.0	-1.2	50.0
Styrene	Ave	2.528	2.542		50.3	50.0	0.6	50.0
Bromoform	Ave	0.4449	0.4725	0.1000	53.1	50.0	6.2	50.0
Isopropylbenzene	Ave	2.617	2.579		49.3	50.0	-1.5	50.0
Cyclohexanone	Ave	0.0512	0.0406		1590	2000	-20.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7670	0.7503	0.3000	48.9	50.0	-2.2	50.0
Bromobenzene	Ave	0.6174	0.5861		47.5	50.0	-5.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2037	0.1856		45.6	50.0	-8.9	50.0
1,2,3-Trichloropropane	Ave	0.2327	0.2163		46.5	50.0	-7.1	50.0
N-Propylbenzene	Ave	0.7252	0.7105		49.0	50.0	-2.0	50.0
2-Chlorotoluene	Ave	0.6140	0.5962		48.6	50.0	-2.9	50.0
1,3,5-Trimethylbenzene	Ave	2.148	2.126		49.5	50.0	-1.0	50.0
4-Chlorotoluene	Ave	0.6432	0.6228		48.4	50.0	-3.2	50.0
tert-Butylbenzene	Ave	1.797	1.755		48.8	50.0	-2.4	50.0
1,2,4-Trimethylbenzene	Ave	2.171	2.137		49.2	50.0	-1.6	50.0
sec-Butylbenzene	Ave	0.5256	0.5077		48.3	50.0	-3.4	50.0
1,3-Dichlorobenzene	Ave	1.118	1.098		49.1	50.0	-1.7	50.0
4-Isopropyltoluene	Ave	2.197	2.159		49.1	50.0	-1.7	50.0
1,4-Dichlorobenzene	Ave	1.157	1.105		47.8	50.0	-4.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCVC 280-499519/34 Calibration Date: 06/20/2020 19:06

Instrument ID: VMS_P Calib Start Date: 06/01/2020 16:26

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/01/2020 20:33

Lab File ID: P2533.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	2.049	1.972		48.1	50.0	-3.8	50.0
1,2-Dichlorobenzene	Ave	1.110	1.060		47.8	50.0	-4.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1302	0.1364		52.4	50.0	4.7	50.0
1,2,4-Trichlorobenzene	Ave	0.6038	0.5785		47.9	50.0	-4.2	50.0
Hexachlorobutadiene	Ave	0.2197	0.1921		43.7	50.0	-12.6	50.0
Naphthalene	Ave	1.952	1.989		50.9	50.0	1.9	50.0
1,2,3-Trichlorobenzene	Ave	0.5553	0.5342		48.1	50.0	-3.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2408	0.2407		50.0	50.0	-0.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2833	0.2685		47.4	50.0	-5.2	50.0
Toluene-d8 (Surr)	Ave	4.400	4.301		48.9	50.0	-2.2	50.0
4-Bromofluorobenzene (Surr)	Ave	1.104	1.089		49.3	50.0	-1.3	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2533.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 20-Jun-2020 19:06:30 ALS Bottle#: 28 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Misc. Info.: 280-0092603-034
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-AQ_VMSP_8260*sub175

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:29:58 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 13:27:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.113	5.110	0.003	99	2672250	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.646	7.642	0.004	86	620592	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.872	9.869	0.003	96	898506	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.596	4.604	-0.008	93	643273	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.860	4.868	-0.008	95	717528	50.0	47.4	
$ 6 Toluene-d8 (Surr)	98	6.369	6.367	0.002	93	2669276	50.0	48.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.743	8.741	0.002	85	978412	50.0	49.3	
10 Dichlorodifluoromethane	85	1.662	1.671	-0.009	99	405468	50.0	54.1	
11 Chloromethane	50	1.842	1.839	0.003	99	442221	50.0	43.4	
12 Vinyl chloride	62	1.937	1.945	-0.008	98	556799	50.0	47.6	
14 Bromomethane	94	2.221	2.230	-0.009	90	92255	50.0	19.6	
15 Chloroethane	64	2.316	2.325	-0.009	100	387412	50.0	52.0	
16 Dichlorofluoromethane	67	2.496	2.494	0.002	97	903605	50.0	51.9	
17 Trichlorofluoromethane	101	2.528	2.536	-0.008	98	711044	50.0	49.2	
19 Ethyl ether	59	2.749	2.747	0.002	91	456602	50.0	50.2	
21 Acrolein	56	2.855	2.853	0.002	100	1053615	493.8	468.7	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.939	2.937	0.002	70	279316	50.0	42.9	
22 1,1-Dichloroethene	96	2.939	2.937	0.002	98	390081	50.0	45.1	
24 Acetone	43	2.960	2.958	0.002	100	729480	200.0	206.0	
26 Iodomethane	142	3.066	3.064	0.002	98	164134	50.0	20.2	
27 Carbon disulfide	76	3.129	3.127	0.002	99	1210044	50.0	45.0	
29 Methyl acetate	43	3.192	3.190	0.002	98	950274	100.0	104.6	
30 3-Chloro-1-propene	41	3.213	3.211	0.002	95	732723	50.0	49.4	
31 Methylene Chloride	84	3.308	3.306	0.002	93	515822	50.0	51.6	
32 2-Methyl-2-propanol	59	3.351	3.349	0.002	97	624336	500.0	533.0	
33 Acrylonitrile	53	3.467	3.465	0.002	99	2598931	500.0	528.4	
34 Methyl tert-butyl ether	73	3.498	3.496	0.002	95	1459021	50.0	49.9	
35 trans-1,2-Dichloroethene	96	3.509	3.517	-0.008	98	474436	50.0	46.4	
36 Hexane	57	3.699	3.707	-0.008	90	557590	50.0	38.5	
38 Vinyl acetate	43	3.804	3.802	0.002	97	2195006	100.0	99.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 1,1-Dichloroethane	63	3.826	3.834	-0.008	96	938226	50.0	50.2	
44 2-Butanone (MEK)	43	4.216	4.214	0.002	99	1261921	200.0	211.9	
47 cis-1,2-Dichloroethene	96	4.248	4.246	0.002	87	552532	50.0	48.6	
48 2,2-Dichloropropane	77	4.258	4.256	0.002	91	582092	50.0	46.0	
50 sec-Butyl Alcohol	45	4.321	4.330	-0.009	99	1654010	1500.0	1726.7	
53 Chlorobromomethane	128	4.427	4.425	0.002	98	250884	50.0	49.3	
52 Tetrahydrofuran	42	4.427	4.435	-0.008	90	434040	100.0	109.9	
54 Chloroform	83	4.480	4.488	-0.008	93	867474	50.0	48.3	
55 1,1,1-Trichloroethane	97	4.628	4.625	0.003	99	674625	50.0	47.5	
56 Cyclohexane	56	4.691	4.689	0.002	88	872130	50.0	48.2	
57 1,1-Dichloropropene	75	4.744	4.741	0.003	99	729170	50.0	49.0	
59 Carbon tetrachloride	117	4.744	4.752	-0.008	74	569121	50.0	48.9	
58 Isobutyl alcohol	41	4.744	4.752	-0.008	96	597385	1250.0	1445.3	
60 Benzene	78	4.891	4.900	-0.009	96	2175076	50.0	49.5	
61 1,2-Dichloroethane	62	4.923	4.921	0.002	97	667268	50.0	48.4	
66 n-Heptane	43	5.081	5.079	0.002	91	573505	50.0	43.7	
67 Trichloroethene	95	5.387	5.385	0.002	99	524463	50.0	48.6	
68 2-Pentanone	43	5.482	5.480	0.002	99	1959056	200.0	221.4	
69 Methylcyclohexane	55	5.577	5.586	-0.009	93	661997	50.0	48.3	
70 1,2-Dichloropropane	63	5.588	5.596	-0.008	97	586785	50.0	51.6	
72 1,4-Dioxane	88	5.630	5.638	-0.008	93	172499	1000.0	1090.9	
73 Dibromomethane	93	5.662	5.670	-0.008	93	325610	50.0	50.0	
74 Dichlorobromomethane	83	5.788	5.786	0.002	100	654560	50.0	49.6	
76 2-Chloroethyl vinyl ether	63	5.989	5.987	0.002	90	439910	50.0	56.0	
77 cis-1,3-Dichloropropene	75	6.137	6.134	0.003	97	839024	50.0	50.4	
78 4-Methyl-2-pentanone (MIBK)	43	6.232	6.240	-0.008	96	2522537	200.0	222.0	
79 Toluene	91	6.421	6.430	-0.009	98	2283149	50.0	49.5	
80 trans-1,3-Dichloropropene	75	6.601	6.609	-0.008	97	745541	50.0	51.6	
81 Ethyl methacrylate	69	6.622	6.620	0.002	89	809883	50.0	53.1	
82 1,1,2-Trichloroethane	97	6.780	6.778	0.002	90	478589	50.0	51.4	
83 Tetrachloroethene	164	6.875	6.873	0.002	95	364276	50.0	48.1	
84 1,3-Dichloropropane	76	6.928	6.926	0.002	98	888637	50.0	48.9	
85 2-Hexanone	43	6.939	6.947	-0.008	94	1821426	200.0	218.3	
86 Chlorodibromomethane	129	7.118	7.126	-0.008	91	471067	50.0	50.4	
88 Ethylene Dibromide	107	7.234	7.243	-0.008	98	489671	50.0	48.5	
89 1-Chlorohexane	91	7.625	7.633	-0.009	98	686824	50.0	50.2	
90 Chlorobenzene	112	7.667	7.675	-0.008	94	1405012	50.0	47.9	
92 Ethylbenzene	106	7.751	7.749	0.002	98	781857	50.0	48.5	
91 1,1,1,2-Tetrachloroethane	131	7.741	7.749	-0.008	95	450267	50.0	49.8	
93 m-Xylene & p-Xylene	106	7.867	7.865	0.002	99	954834	50.0	49.3	
94 o-Xylene	106	8.226	8.224	0.002	95	919960	50.0	49.4	
95 Styrene	104	8.237	8.245	-0.008	94	1577393	50.0	50.3	
96 Bromoform	173	8.427	8.435	-0.008	95	293213	50.0	53.1	
97 Isopropylbenzene	105	8.564	8.572	-0.008	96	2317034	50.0	49.3	
99 Cyclohexanone	55	8.659	8.667	-0.008	90	1008780	2000.0	1587.5	
100 1,1,2,2-Tetrachloroethane	83	8.849	8.857	-0.008	93	674177	50.0	48.9	
101 Bromobenzene	156	8.891	8.889	0.002	95	526611	50.0	47.5	
102 trans-1,4-Dichloro-2-butene	53	8.891	8.889	0.002	75	166764	50.0	45.6	
103 1,2,3-Trichloropropane	110	8.923	8.920	0.002	83	194311	50.0	46.5	
104 N-Propylbenzene	120	8.965	8.973	-0.008	99	638363	50.0	49.0	
105 2-Chlorotoluene	126	9.060	9.068	-0.008	96	535689	50.0	48.6	
106 1,3,5-Trimethylbenzene	105	9.134	9.142	-0.008	94	1909983	50.0	49.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Chlorotoluene	126	9.176	9.184	-0.008	98	559586	50.0	48.4	
108 tert-Butylbenzene	119	9.450	9.448	0.002	93	1576492	50.0	48.8	
109 1,2,4-Trimethylbenzene	105	9.503	9.511	-0.008	97	1920120	50.0	49.2	
110 sec-Butylbenzene	134	9.672	9.670	0.002	94	456178	50.0	48.3	
111 1,3-Dichlorobenzene	146	9.798	9.796	0.002	97	986641	50.0	49.1	
112 4-Isopropyltoluene	119	9.820	9.817	0.003	97	1939780	50.0	49.1	
113 1,4-Dichlorobenzene	146	9.893	9.902	-0.009	93	993240	50.0	47.8	
115 n-Butylbenzene	91	10.221	10.218	0.002	98	1771542	50.0	48.1	
116 1,2-Dichlorobenzene	146	10.252	10.250	0.002	98	952651	50.0	47.8	
117 1,2-Dibromo-3-Chloropropane	157	11.033	11.031	0.002	83	122514	50.0	52.4	
119 1,2,4-Trichlorobenzene	180	11.856	11.865	-0.009	94	519800	50.0	47.9	
120 Hexachlorobutadiene	225	11.993	12.002	-0.009	96	172606	50.0	43.7	
121 Naphthalene	128	12.120	12.128	-0.008	98	1786955	50.0	50.9	
122 1,2,3-Trichlorobenzene	180	12.342	12.350	-0.008	95	479999	50.0	48.1	
S 139 1,2-Dichloroethene, Total (URS)	96				0		100.0	95.1	
S 142 Xylenes, Total	106				0		100.0	98.6	
S 140 Trihalomethanes, Total	1				0		200.0	201.5	
S 143 Xylenes, Total (URS)	1				0		100.0	98.6	
S 146 Total BTEX	1				0			246.1	
S 145 1,3-Dichloropropene, Total	1				0		100.0	102.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	95.1	

Reagents:

MV-MegaMainA_00034	Amount Added: 25.00	Units: uL	
MV-Gas A_00059	Amount Added: 10.00	Units: uL	
mv-IS_SS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 22-Jun-2020 13:29:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2533.D

Injection Date: 20-Jun-2020 19:06:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

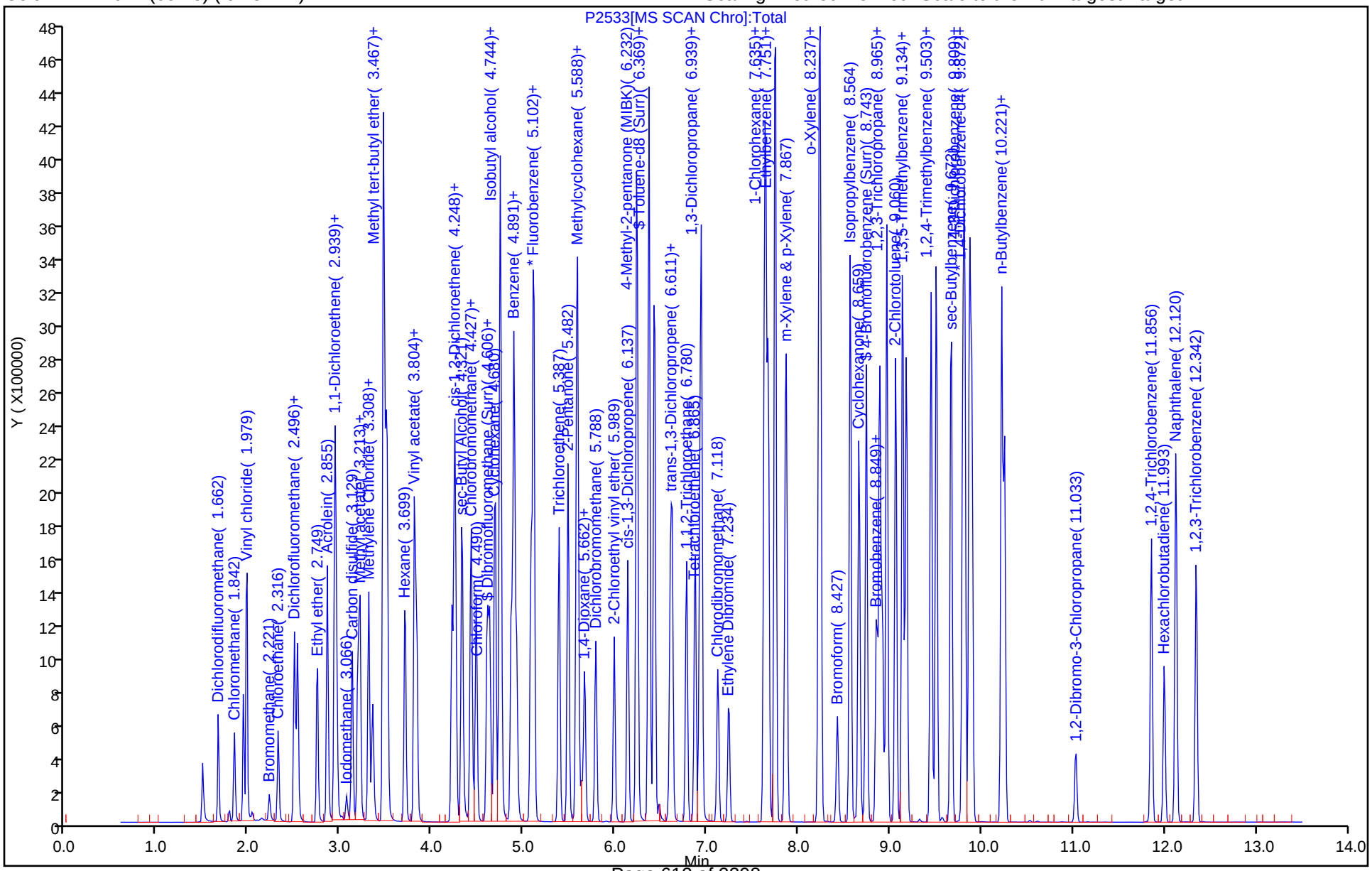
Lims ID: CCVC Worklist Smp#: 34

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 28

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Jun-2020 16:26:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	2.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\AQ_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	01-Jun-2020 22:08:33	Calib Date:	01-Jun-2020 20:33:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1050				
First Level Reviewer: ornelasg		Date:	01-Jun-2020 22:05:05		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	8.742	8.742	0.000	0	867490	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

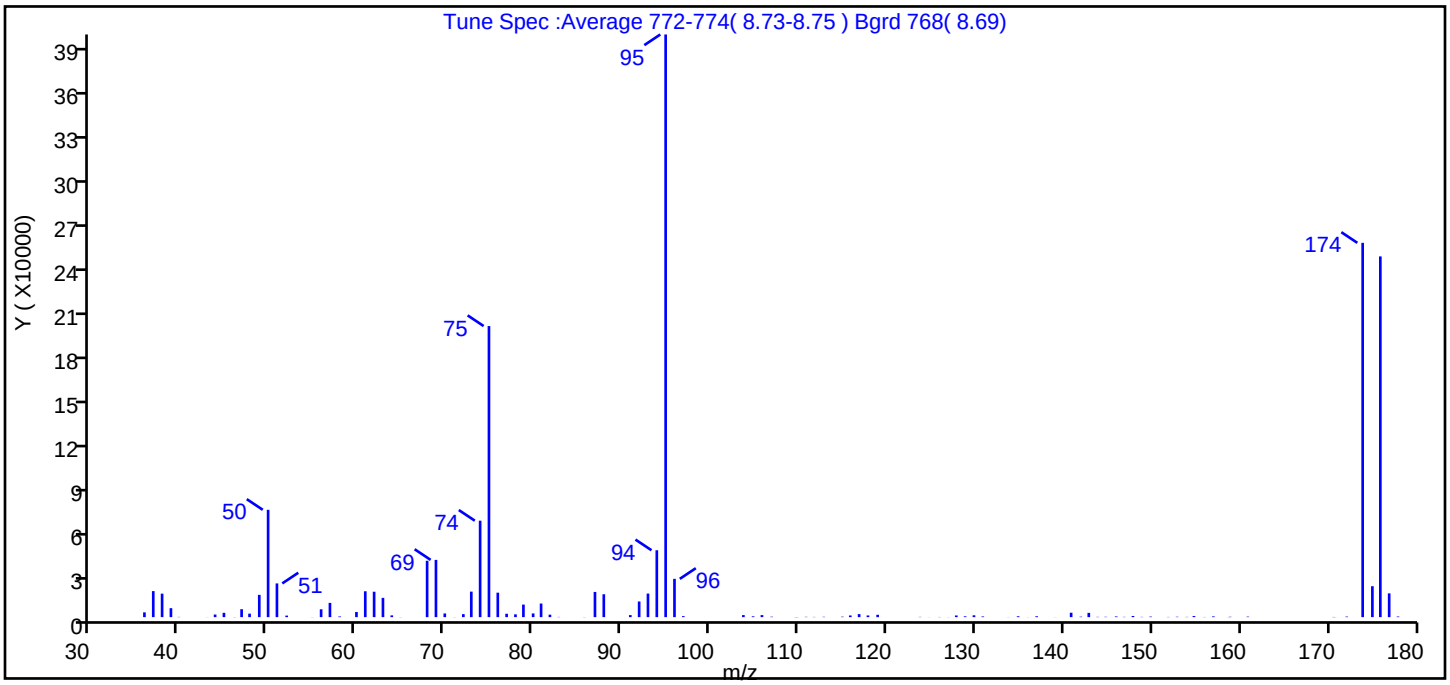
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.4
75	30 to 60% of m/z 95	50.0
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	64.2
175	5 to 9% of m/z 174	5.3 (8.3)
176	Greater than 95% but less than 101% of m/z 174	61.9 (96.4)
177	5 to 9% of m/z 176	4.1 (6.6)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 01-Jun-2020 16:26:30
Spectrum: Tune Spec :Average 772-774(8.73-8.75) Bgrd 768(8.69)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3230	70.00	2479	107.00	303	144.00	188
37.00	17584	71.00	77	110.00	86	145.00	230
38.00	15864	72.00	2025	110.00	99	146.00	470
39.00	6066	73.00	17240	111.00	215	147.00	187
40.00	154	74.00	65144	112.00	152	148.00	779
43.00	59	75.00	196608	113.00	226	149.00	174
44.00	1759	76.00	16528	115.00	319	150.00	371
45.00	2924	77.00	2291	116.00	1125	152.00	141
46.00	93	78.00	1894	117.00	2068	153.00	270
47.00	5367	79.00	8494	118.00	1141	154.00	164
48.00	2358	80.00	2509	119.00	1593	155.00	739
49.00	15041	81.00	9191	124.00	174	156.00	113
50.00	72488	82.00	1672	125.00	54	157.00	502
51.00	22776	83.00	142	126.00	121	159.00	56
52.00	1047	86.00	82	127.00	57	159.00	255
55.00	65	87.00	17016	128.00	1132	161.00	345
56.00	5313	88.00	15465	129.00	551	171.00	131
57.00	9635	91.00	1375	130.00	1251	171.00	70
58.00	459	92.00	10577	131.00	460	172.00	383
60.00	3483	93.00	15925	134.00	62	174.00	252800
61.00	17480	94.00	45184	135.00	583	175.00	20896
62.00	17168	95.00	393536	136.00	54	176.00	243648
63.00	13012	96.00	25856	137.00	591	177.00	16056
64.00	1189	97.00	668	139.00	58	178.00	431
65.00	79	104.00	1393	141.00	2986		
68.00	38072	105.00	552	142.00	313		
69.00	38664	106.00	1381	143.00	2887		

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

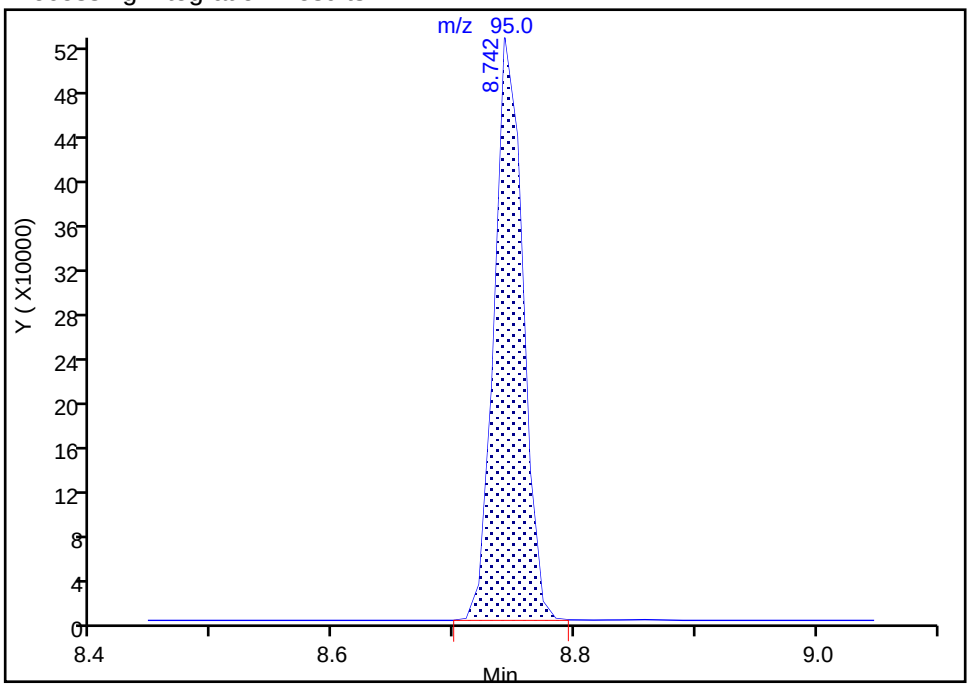
Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D
Injection Date: 01-Jun-2020 16:26:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

$ 9 BFB, CAS: 460-00-4

Signal: 1

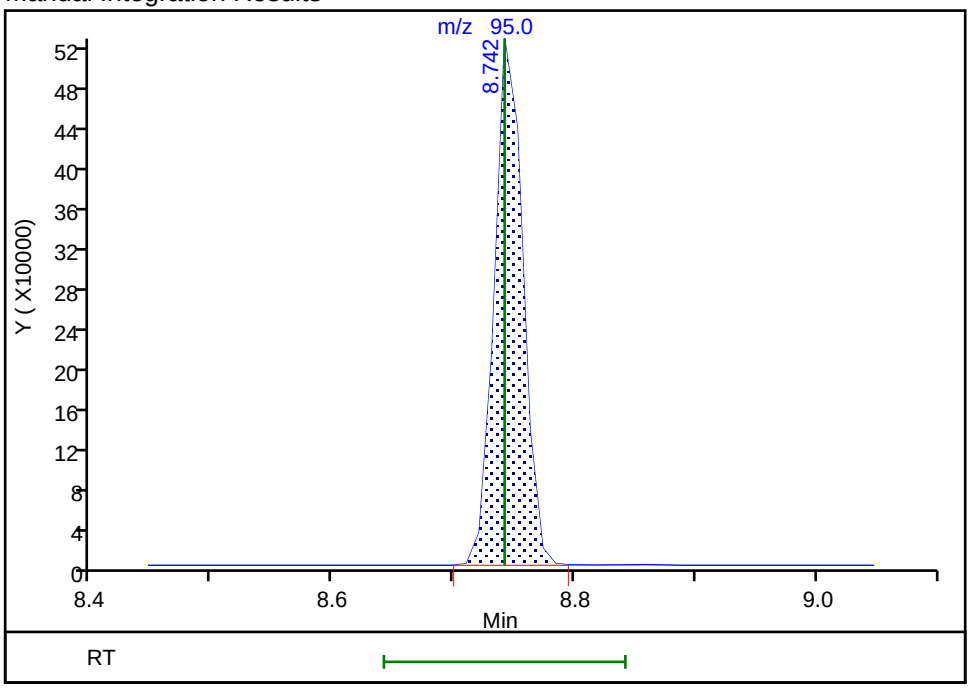
Processing Integration Results

RT: 8.74
Area: 867490
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 8.74
Area: 867490
Amount: 0
Amount Units: ug/l



Reviewer: ornelasg, 01-Jun-2020 22:05:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

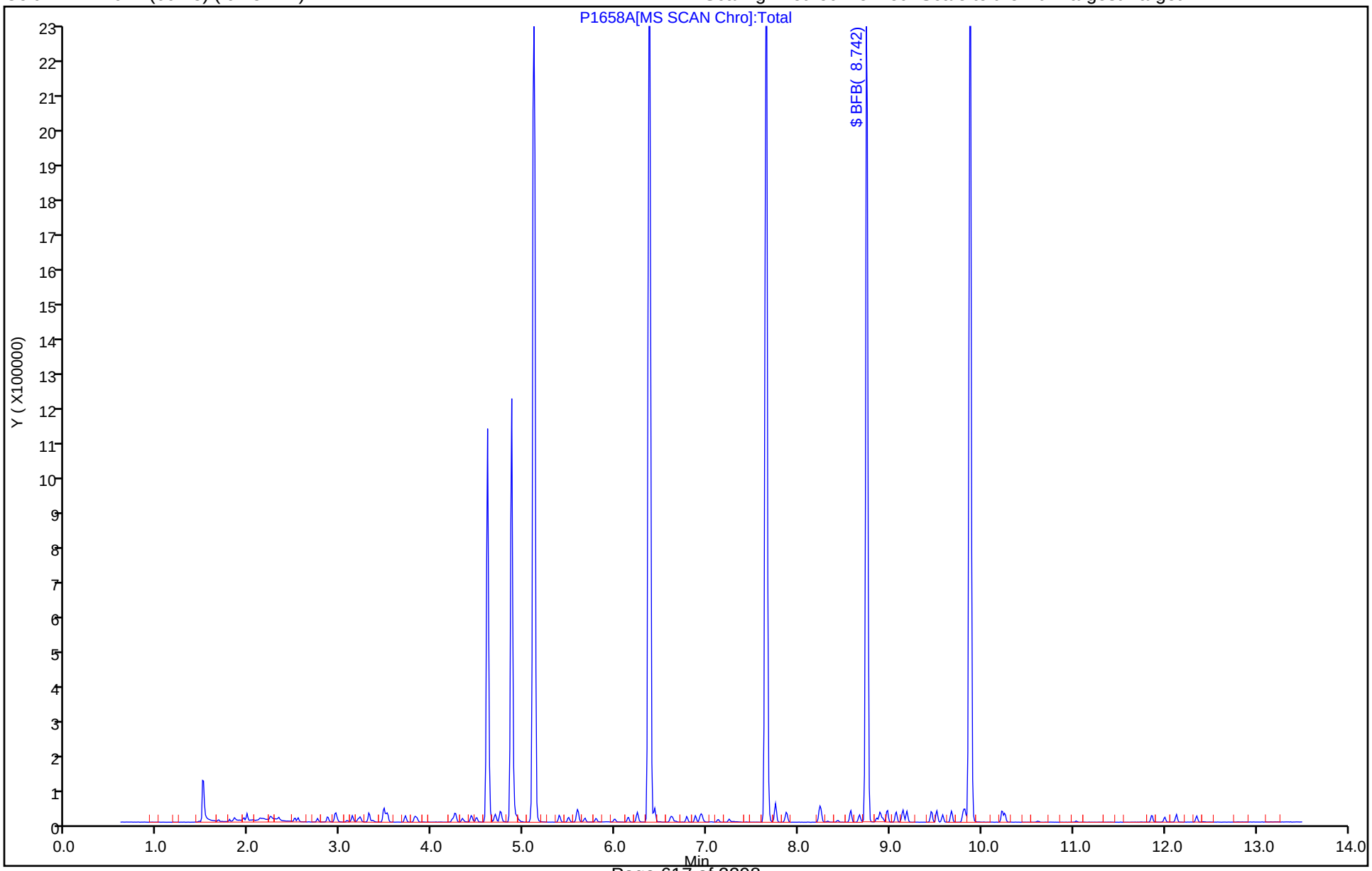
Report Date: 01-Jun-2020 22:08:34 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1658A.D

Injection Date:	01-Jun-2020 16:26:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2505.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Jun-2020 08:58:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:05 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 9 BFB	95	3.577	3.577	0.000	88	943925	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

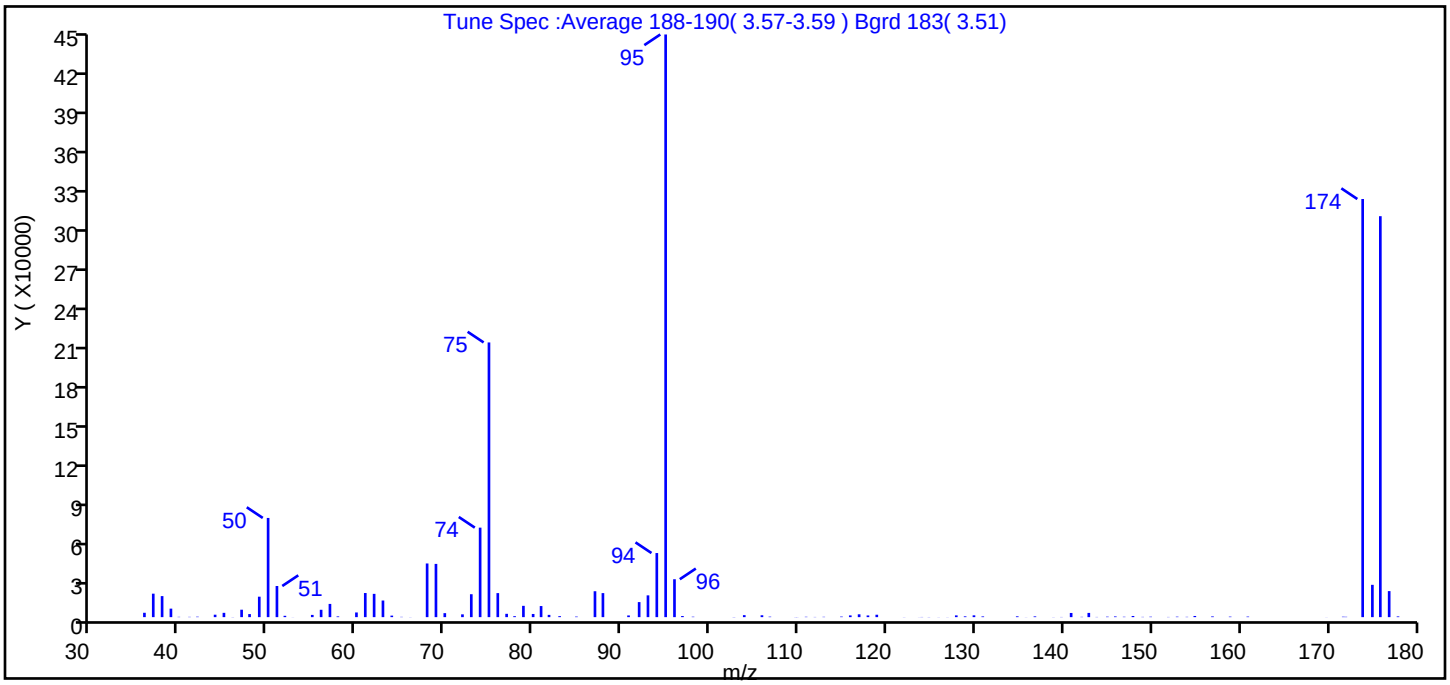
mv-Cent BFB_00002 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2505.D
Injection Date: 20-Jun-2020 08:58:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.0
75	30 to 60% of m/z 95	47.1
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	71.8
175	5 to 9% of m/z 174	5.5 (7.7)
176	Greater than 95% but less than 101% of m/z 174	68.8 (95.9)
177	5 to 9% of m/z 176	4.5 (6.5)

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2505.D\AQ_VMSP_8260.rslt\spectra.d
Injection Date: 20-Jun-2020 08:58:30
Spectrum: Tune Spec :Average 188-190(3.57-3.59) Bgrd 183(3.51)
Base Peak: 94.95
Minimum % Base Peak: 0
Number of Points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3335	68.00	41000	104.00	1523	141.00	3184
37.00	17936	69.00	40672	106.00	1438	142.00	221
38.00	16073	70.00	3050	107.00	364	143.00	3238
39.00	6503	72.00	2139	110.00	88	144.00	154
40.00	226	73.00	17512	110.00	81	145.00	361
41.00	214	74.00	68376	111.00	280	146.00	536
42.00	340	75.00	209856	112.00	149	147.00	290
44.00	1867	76.00	18360	113.00	247	148.00	879
45.00	3291	77.00	2544	115.00	429	149.00	197
46.00	102	78.00	734	116.00	1324	150.00	336
47.00	5676	79.00	8637	117.00	2166	152.00	151
48.00	2345	80.00	2420	118.00	1290	153.00	365
49.00	15626	81.00	8478	119.00	1844	154.00	232
50.00	75784	82.00	1729	122.00	82	155.00	887
51.00	23792	83.00	750	124.00	59	157.00	545
52.00	1021	85.00	422	124.00	140	159.00	392
53.00	60	87.00	19792	125.00	115	161.00	425
55.00	1710	88.00	18360	126.00	74	170.00	56
56.00	5629	91.00	1291	127.00	71	172.00	328
57.00	10104	92.00	11491	128.00	1339	172.00	263
58.00	561	93.00	16640	129.00	597	174.00	319424
60.00	3578	94.00	48968	130.00	1377	175.00	24688
61.00	18424	95.00	445120	131.00	548	176.00	306304
62.00	17792	96.00	28960	135.00	621	177.00	19888
63.00	12706	97.00	840	136.00	66	178.00	546
64.00	1171	98.00	328	137.00	576		
65.00	212	103.00	89	139.00	86		
66.00	87	103.00	56	140.00	139		

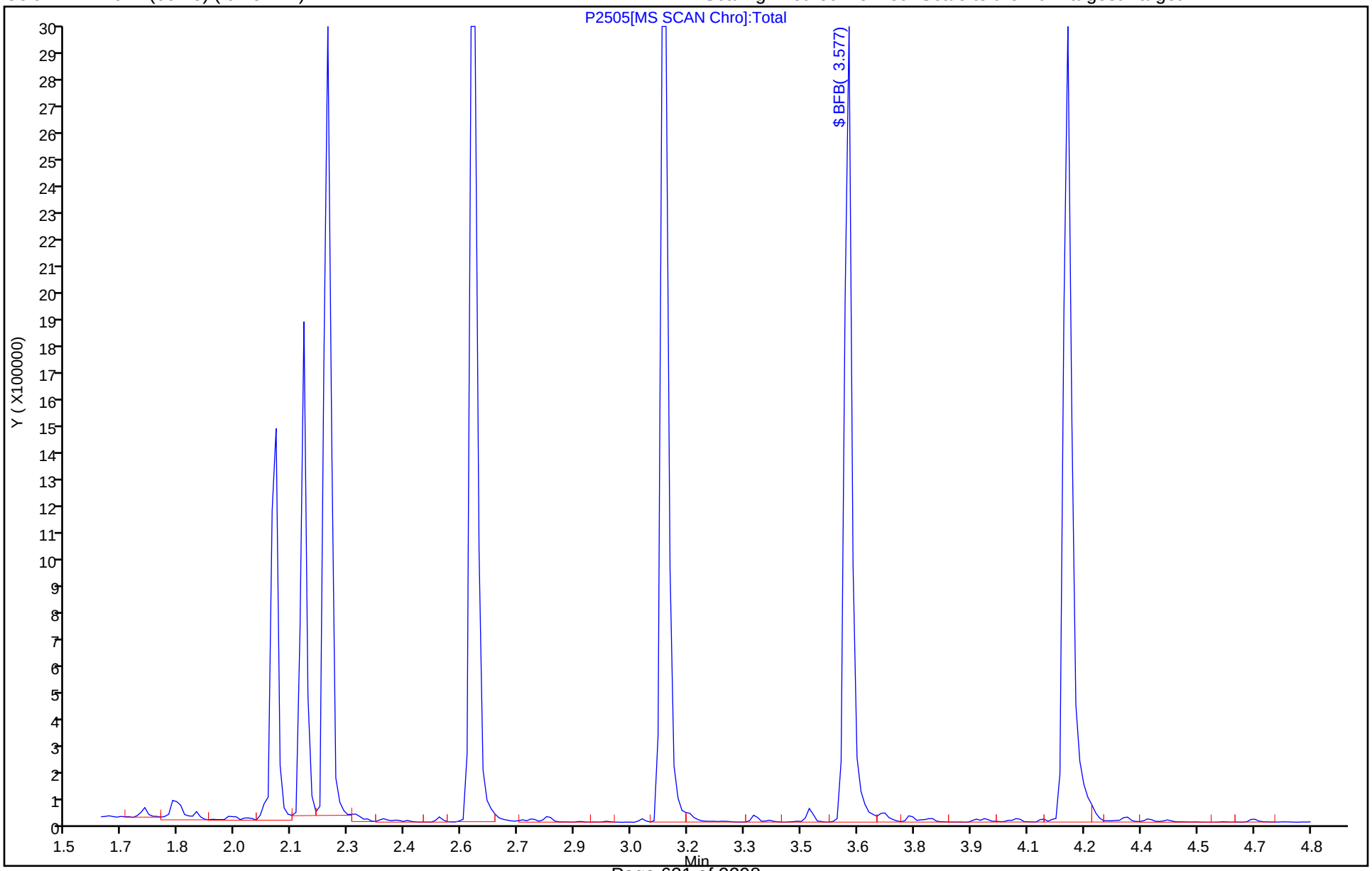
Report Date: 22-Jun-2020 13:30:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2505.D

Injection Date:	20-Jun-2020 08:58:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499519/9

Matrix: Water Lab File ID: P2510.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 10:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499519/9

Matrix: Water Lab File ID: P2510.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 10:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2510.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2020 10:57:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:09 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:54:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.110	0.000	99	2674413	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	87	612281	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	97	879628	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	637155	50.0	49.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	728924	50.0	48.1	
$ 6 Toluene-d8 (Surr)	98	6.366	6.367	-0.001	93	2673100	50.0	49.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	84	961465	50.0	49.5	
$ 8 Trifluorotoluene (Surr)	1		0.000					ND	
$ 9 BFB	95		3.577					ND	
10 Dichlorodifluoromethane	85		1.671					ND	
11 Chloromethane	50		1.839					ND	
12 Vinyl chloride	62		1.945					ND	
13 Ethylene oxide	43	2.124	2.197	-0.073	28	2063		NC	
14 Bromomethane	94		2.230					ND	
15 Chloroethane	64		2.325					ND	
16 Dichlorofluoromethane	67		2.494					ND	
17 Trichlorofluoromethane	101		2.536					ND	
18 Ethanol	45		2.651					ND	
19 Ethyl ether	59		2.747					ND	
20 Propene oxide	58		2.788					ND	U
21 Acrolein	56		2.853					ND	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.937					ND	
22 1,1-Dichloroethene	96		2.937					ND	
24 Acetone	43	2.958	2.958	0.000	98	5048		0.2079	
25 Isopropyl alcohol	45		3.041					ND	
26 Iodomethane	142	3.074	3.064	0.010	98	3587		1.12	
27 Carbon disulfide	76		3.127					ND	
28 Acetonitrile	41	3.179	3.168	0.011	84	2225		1.14	
29 Methyl acetate	43		3.190					ND	
30 3-Chloro-1-propene	41		3.211					ND	
31 Methylene Chloride	84		3.306					ND	
32 2-Methyl-2-propanol	59		3.349					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53		3.465					ND	
34 Methyl tert-butyl ether	73		3.496					ND	
35 trans-1,2-Dichloroethene	96		3.517					ND	
36 Hexane	57		3.707					ND	
38 Vinyl acetate	43		3.802					ND	
37 Chlorotrifluoroethene	116		3.818					ND	
40 Isopropyl ether	87		3.833					ND	
39 1,1-Dichloroethane	63		3.834					ND	
41 2-Chloro-1,3-butadiene	53		3.886					ND	
42 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.027					ND	
43 Tert-butyl ethyl ether	59		4.097					ND	
44 2-Butanone (MEK)	43		4.214					ND	
46 Ethyl acetate	43		4.234					ND	
47 cis-1,2-Dichloroethene	96		4.246					ND	
48 2,2-Dichloropropane	77		4.256					ND	
49 Propionitrile	54		4.266					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.307					ND	
50 sec-Butyl Alcohol	45		4.330					ND	
51 Methacrylonitrile	41		4.382					ND	
53 Chlorobromomethane	128		4.425					ND	
52 Tetrahydrofuran	42		4.435					ND	
54 Chloroform	83		4.488					ND	
55 1,1,1-Trichloroethane	97		4.625					ND	
56 Cyclohexane	56		4.689					ND	
57 1,1-Dichloropropene	75		4.741					ND	
59 Carbon tetrachloride	117		4.752					ND	
58 Isobutyl alcohol	41		4.752					ND	
60 Benzene	78		4.900					ND	
61 1,2-Dichloroethane	62		4.921					ND	
62 Tert-amyl methyl ether	73		4.962					ND	
63 n-Butanol	56		4.962					ND	
66 n-Heptane	43		5.079					ND	
64 1,2-Dichloro-1,1,2-trifluoroetha	117		5.089					ND	
65 1,1,1-Trifluoro-2,2-dichloroetha	83		5.131					ND	
67 Trichloroethene	95		5.385					ND	
68 2-Pentanone	43		5.480					ND	
69 Methylcyclohexane	55		5.586					ND	
71 Methyl methacrylate	100		5.595					ND	
70 1,2-Dichloropropane	63		5.596					ND	
72 1,4-Dioxane	88		5.638					ND	
73 Dibromomethane	93		5.670					ND	
74 Dichlorobromomethane	83		5.786					ND	
75 2-Nitropropane	41		5.954					ND	
76 2-Chloroethyl vinyl ether	63		5.987					ND	
77 cis-1,3-Dichloropropene	75		6.134					ND	
78 4-Methyl-2-pentanone (MIBK)	43		6.240					ND	
79 Toluene	91		6.430					ND	
80 trans-1,3-Dichloropropene	75		6.609					ND	
81 Ethyl methacrylate	69		6.620					ND	
82 1,1,2-Trichloroethane	97		6.778					ND	
83 Tetrachloroethene	164		6.873					ND	
84 1,3-Dichloropropane	76		6.926					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 2-Hexanone	43		6.947					ND	
87 Tetrahydrothiophene	60		7.115					ND	
86 Chlorodibromomethane	129		7.126					ND	
88 Ethylene Dibromide	107		7.243					ND	
89 1-Chlorohexane	91		7.633					ND	
90 Chlorobenzene	112		7.675					ND	
92 Ethylbenzene	106		7.749					ND	
91 1,1,1,2-Tetrachloroethane	131		7.749					ND	
93 m-Xylene & p-Xylene	106		7.865					ND	
94 o-Xylene	106		8.224					ND	
95 Styrene	104		8.245					ND	
96 Bromoform	173		8.435					ND	
97 Isopropylbenzene	105		8.572					ND	
98 cis-1,4-Dichloro-2-butene	53		8.613					ND	
99 Cyclohexanone	55		8.667					ND	U
100 1,1,2,2-Tetrachloroethane	83		8.857					ND	
101 Bromobenzene	156		8.889					ND	
102 trans-1,4-Dichloro-2-butene	53		8.889					ND	
103 1,2,3-Trichloropropane	110		8.920					ND	
104 N-Propylbenzene	120		8.973					ND	
105 2-Chlorotoluene	126		9.068					ND	
106 1,3,5-Trimethylbenzene	105		9.142					ND	
107 4-Chlorotoluene	126		9.184					ND	
108 tert-Butylbenzene	119		9.448					ND	
109 1,2,4-Trimethylbenzene	105		9.511					ND	
110 sec-Butylbenzene	134		9.670					ND	
111 1,3-Dichlorobenzene	146		9.796					ND	
112 4-Isopropyltoluene	119		9.817					ND	
113 1,4-Dichlorobenzene	146		9.902					ND	
114 1,2,3-Trimethylbenzene	105		9.911					ND	
115 n-Butylbenzene	91		10.218					ND	
116 1,2-Dichlorobenzene	146		10.250					ND	
117 1,2-Dibromo-3-Chloropropane	157		11.031					ND	
118 1,3,5-Trichlorobenzene	180		11.220					ND	
119 1,2,4-Trichlorobenzene	180		11.865					ND	
120 Hexachlorobutadiene	225		12.002					ND	
121 Naphthalene	128		12.128					ND	
122 1,2,3-Trichlorobenzene	180		12.350					ND	
124 2,3-Dimethylpentane	1		0.000					ND	
131 Propene oxide TIC	58		0.000					ND	
126 3-Ethylpentane	1		0.000					ND	
130 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
128 2,4-Dimethylpentane	1		0.000					ND	
125 2,2,3-Trimethylbutane	1		0.000					ND	
135 3-Methylhexane	1		0.000					ND	
127 Pentachloroethane	167		0.000					ND	
132 2-Methylhexane	1		0.000					ND	
129 n-Nonyl Aldehyde	1		0.000					ND	
134 2,2-Dimethylpentane	1		0.000					ND	
137 Cyclohexane TIC	1		0.000					ND	
138 Dimethyl disulfide	1		0.000					ND	
133 Methyl cyclohexane TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 3,3-Dimethylpentane	1		0.000				ND		
136 1-Chlorohexane TIC	1		0.000				ND		
S 139 1,2-Dichloroethene, Total (URS)	96		2.000				ND		
S 142 Xylenes, Total	106		0.000				ND		
S 141 TAH	1				0			0	7
S 140 Trihalomethanes, Total	1		0.000				ND		
S 143 Xylenes, Total (URS)	1		0.000				ND		
S 146 Total BTEX	1		0.000				ND		
S 145 1,3-Dichloropropene, Total	1		0.000				ND		
S 144 1,2-Dichloroethene, Total	1		0.000				ND		

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00006 Amount Added: 5.00 Units: uL Run Reagent

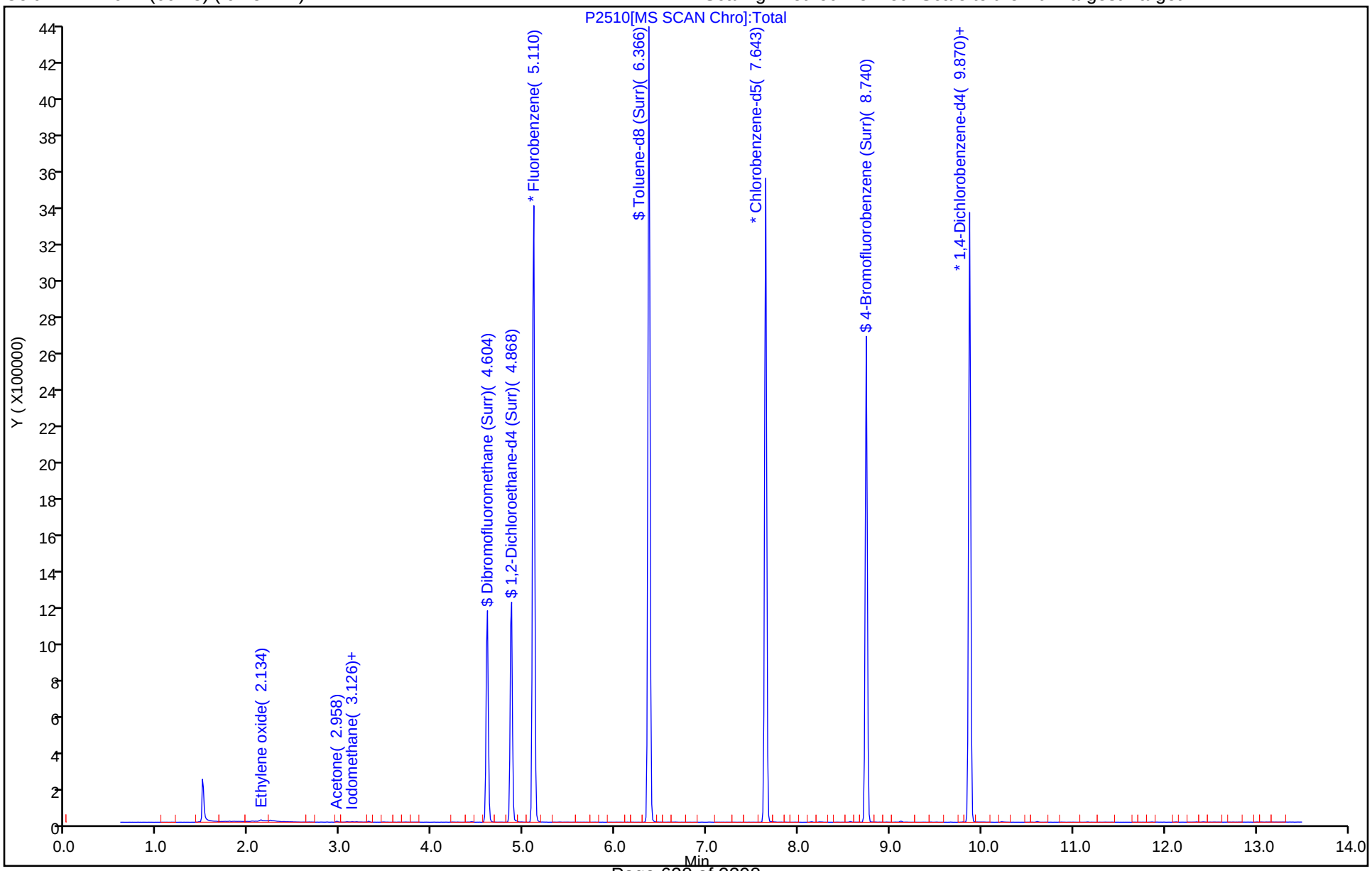
Report Date: 22-Jun-2020 13:30:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2510.D

Injection Date:	20-Jun-2020 10:57:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2510.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2020 10:57:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:09 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:54:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.5	98.94
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.19
$ 6 Toluene-d8 (Surr)	50.0	49.6	99.23
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.5	99.04

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499519/4

Matrix: Water Lab File ID: P2508.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	25.8		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	26.7		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	19.7		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	27.0		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	25.7		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	22.4		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	26.3		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	26.0		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	27.9		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	25.2		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	25.5		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	27.6		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	26.4		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	26.2		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	109		6.0	4.0	2.0
591-78-6	2-Hexanone	112		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	114		5.0	3.2	0.98
67-64-1	Acetone	105		10	6.4	1.9
71-43-2	Benzene	26.1		1.0	0.40	0.16
74-97-5	Bromochloromethane	25.6		1.0	0.20	0.10
75-27-4	Bromodichloromethane	27.1		1.0	0.40	0.17
75-25-2	Bromoform	28.2		1.0	1.0	0.46
74-83-9	Bromomethane	21.2		2.0	0.80	0.21
75-15-0	Carbon disulfide	20.5		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	25.5		2.0	0.40	0.19
108-90-7	Chlorobenzene	25.9		1.0	0.40	0.17
75-00-3	Chloroethane	25.2		2.0	1.6	0.41
67-66-3	Chloroform	25.4		1.0	0.40	0.16
74-87-3	Chloromethane	22.1		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	26.4		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	27.8		1.0	0.40	0.16
110-82-7	Cyclohexane	23.1		2.0	0.80	0.28
124-48-1	Dibromochloromethane	27.2		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	26.4		2.0	0.80	0.31
100-41-4	Ethylbenzene	26.5		1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499519/4

Matrix: Water Lab File ID: P2508.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	25.9		1.0	0.40	0.18
98-82-8	Isopropylbenzene	27.2		1.0	0.40	0.19
79-20-9	Methyl acetate	55.0		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	26.3		5.0	0.80	0.25
108-87-2	Methylcyclohexane	24.2		2.0	0.40	0.10
75-09-2	Methylene Chloride	26.5		5.0	2.0	0.94
100-42-5	Styrene	27.4		1.0	0.80	0.36
127-18-4	Tetrachloroethene	26.4		1.0	0.40	0.20
108-88-3	Toluene	26.4		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	24.1		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	26.2		1.0	0.40	0.19
79-01-6	Trichloroethene	25.2		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	24.5		2.0	0.80	0.29
75-01-4	Vinyl chloride	23.4		1.5	0.20	0.10
1330-20-7	Xylenes, Total	53.9		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2508.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2020 10:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:09 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:53:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.111	5.110	0.001	99	2768018	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	87	628509	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	909333	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	663012	50.0	49.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	95	733283	50.0	46.7	
$ 6 Toluene-d8 (Surr)	98	6.366	6.367	-0.001	93	2748543	50.0	49.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.741	8.741	0.000	85	989106	50.0	49.3	
10 Dichlorodifluoromethane	85	1.670	1.671	-0.001	99	205328	25.0	26.4	
11 Chloromethane	50	1.839	1.839	0.000	99	234606	25.0	22.1	
12 Vinyl chloride	62	1.945	1.945	0.000	98	283925	25.0	23.4	
14 Bromomethane	94	2.219	2.230	-0.011	90	102692	25.0	21.2	
15 Chloroethane	64	2.325	2.325	0.000	100	194644	25.0	25.2	
16 Dichlorofluoromethane	67	2.493	2.494	-0.001	97	451411	25.0	25.1	
17 Trichlorofluoromethane	101	2.536	2.536	0.000	97	366043	25.0	24.5	
19 Ethyl ether	59	2.747	2.747	0.000	91	257203	25.0	27.3	
21 Acrolein	56	2.852	2.853	-0.001	100	386246	246.9	165.9	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.937	2.937	0.000	68	132946	25.0	19.7	
22 1,1-Dichloroethene	96	2.937	2.937	0.000	98	200563	25.0	22.4	
24 Acetone	43	2.958	2.958	0.000	99	385698	100.0	104.5	
26 Iodomethane	142	3.063	3.064	-0.001	97	125742	25.0	15.1	
27 Carbon disulfide	76	3.127	3.127	0.000	98	573546	25.0	20.5	
29 Methyl acetate	43	3.190	3.190	0.000	98	517499	50.0	55.0	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	95	400893	25.0	26.1	
31 Methylene Chloride	84	3.306	3.306	0.000	93	277004	25.0	26.5	
32 2-Methyl-2-propanol	59	3.348	3.349	-0.001	98	333316	250.0	274.7	
33 Acrylonitrile	53	3.464	3.465	-0.001	99	1408230	250.0	276.4	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	795865	25.0	26.3	
35 trans-1,2-Dichloroethene	96	3.507	3.517	-0.010	98	254761	25.0	24.1	
36 Hexane	57	3.707	3.707	0.000	90	259984	25.0	17.7	
38 Vinyl acetate	43	3.802	3.802	0.000	98	1328291	50.0	58.3	
39 1,1-Dichloroethane	63	3.834	3.834	0.000	96	496824	25.0	25.7	
44 2-Butanone (MEK)	43	4.214	4.214	0.000	100	675546	100.0	109.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.245	4.246	-0.001	82	310147	25.0	26.4	
48 2,2-Dichloropropane	77	4.256	4.256	0.000	90	357864	25.0	27.3	
50 sec-Butyl Alcohol	45	4.330	4.330	0.000	99	880764	750.0	887.7	
53 Chlorobromomethane	128	4.425	4.425	0.000	98	134725	25.0	25.6	
52 Tetrahydrofuran	42	4.435	4.435	0.000	88	230025	50.0	56.2	
54 Chloroform	83	4.477	4.488	-0.011	92	471562	25.0	25.4	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	98	379208	25.0	25.8	
56 Cyclohexane	56	4.688	4.689	-0.001	89	433335	25.0	23.1	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	387537	25.0	25.1	
59 Carbon tetrachloride	117	4.752	4.752	0.000	81	307668	25.0	25.5	
58 Isobutyl alcohol	41	4.752	4.752	0.000	94	293284	625.0	685.0	
60 Benzene	78	4.899	4.900	-0.001	95	1189449	25.0	26.1	
61 1,2-Dichloroethane	62	4.921	4.921	0.000	97	366863	25.0	25.5	
66 n-Heptane	43	5.079	5.079	0.000	92	305129	25.0	22.4	
67 Trichloroethene	95	5.385	5.385	0.000	98	282141	25.0	25.2	
68 2-Pentanone	43	5.480	5.480	0.000	99	1085430	100.0	118.4	
69 Methylcyclohexane	55	5.575	5.586	-0.011	94	343959	25.0	24.2	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	98	324907	25.0	27.6	
72 1,4-Dioxane	88	5.628	5.638	-0.010	93	88765	500.0	541.9	
73 Dibromomethane	93	5.659	5.670	-0.011	93	179981	25.0	26.7	
74 Dichlorobromomethane	83	5.786	5.786	0.000	99	369637	25.0	27.1	
76 2-Chloroethyl vinyl ether	63	5.986	5.987	-0.001	91	212314	25.0	26.1	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	468795	25.0	27.8	
78 4-Methyl-2-pentanone (MIBK)	43	6.240	6.240	0.000	96	1341932	100.0	114.0	
79 Toluene	91	6.430	6.430	0.000	98	1262636	25.0	26.4	
80 trans-1,3-Dichloropropene	75	6.598	6.609	-0.011	97	391077	25.0	26.2	
81 Ethyl methacrylate	69	6.620	6.620	0.000	87	435164	25.0	28.2	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	91	259733	25.0	27.0	
83 Tetrachloroethene	164	6.873	6.873	0.000	95	202367	25.0	26.4	
84 1,3-Dichloropropane	76	6.926	6.926	0.000	98	480165	25.0	26.1	
85 2-Hexanone	43	6.936	6.947	-0.011	95	943107	100.0	111.6	
86 Chlorodibromomethane	129	7.126	7.126	0.000	91	257522	25.0	27.2	
88 Ethylene Dibromide	107	7.242	7.243	0.000	98	265059	25.0	25.9	
89 1-Chlorohexane	91	7.633	7.633	0.000	98	401561	25.0	28.9	
90 Chlorobenzene	112	7.675	7.675	0.000	94	769506	25.0	25.9	
92 Ethylbenzene	106	7.749	7.749	0.000	98	432959	25.0	26.5	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	0.000	95	245257	25.0	26.8	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	527677	25.0	26.9	
94 o-Xylene	106	8.224	8.224	0.000	97	509816	25.0	27.0	
95 Styrene	104	8.245	8.245	0.000	95	869451	25.0	27.4	
96 Bromoform	173	8.424	8.435	-0.011	95	157494	25.0	28.2	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	1295457	25.0	27.2	
99 Cyclohexanone	55	8.667	8.667	0.000	90	717421	1000.0	1114.8	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	372838	25.0	26.7	
101 Bromobenzene	156	8.888	8.889	-0.001	96	289531	25.0	25.8	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.889	-0.001	87	101318	25.0	27.3	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	82	107722	25.0	25.5	
104 N-Propylbenzene	120	8.973	8.973	0.000	99	351490	25.0	26.6	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	295464	25.0	26.5	
106 1,3,5-Trimethylbenzene	105	9.142	9.142	0.000	94	1052101	25.0	26.9	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	312942	25.0	26.8	
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	858221	25.0	26.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	1065633	25.0	27.0	
110 sec-Butylbenzene	134	9.669	9.670	-0.001	94	252736	25.0	26.4	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	536365	25.0	26.4	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	1086531	25.0	27.2	
113 1,4-Dichlorobenzene	146	9.902	9.902	0.000	95	552403	25.0	26.2	
115 n-Butylbenzene	91	10.218	10.218	0.000	99	986119	25.0	26.5	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	509258	25.0	25.2	
117 1,2-Dibromo-3-Chloropropane	157	11.031	11.031	0.000	83	66066	25.0	27.9	
119 1,2,4-Trichlorobenzene	180	11.854	11.865	-0.011	94	285219	25.0	26.0	
120 Hexachlorobutadiene	225	12.002	12.002	0.000	98	102334	25.0	25.6	
121 Naphthalene	128	12.128	12.128	0.000	97	948455	25.0	26.7	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	95	265565	25.0	26.3	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	50.4	
S 142 Xylenes, Total	106				0		50.0	53.9	
S 140 Trihalomethanes, Total	1				0		100.0	107.8	
S 143 Xylenes, Total (URS)	1				0		50.0	53.9	
S 145 1,3-Dichloropropene, Total	1				0		50.0	54.0	
S 144 1,2-Dichloroethene, Total	1				0		50.0	50.4	

Reagents:

MV-Gas B_00063	Amount Added:	5.00	Units: uL	
MV-MegaMain B_00031	Amount Added:	12.50	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

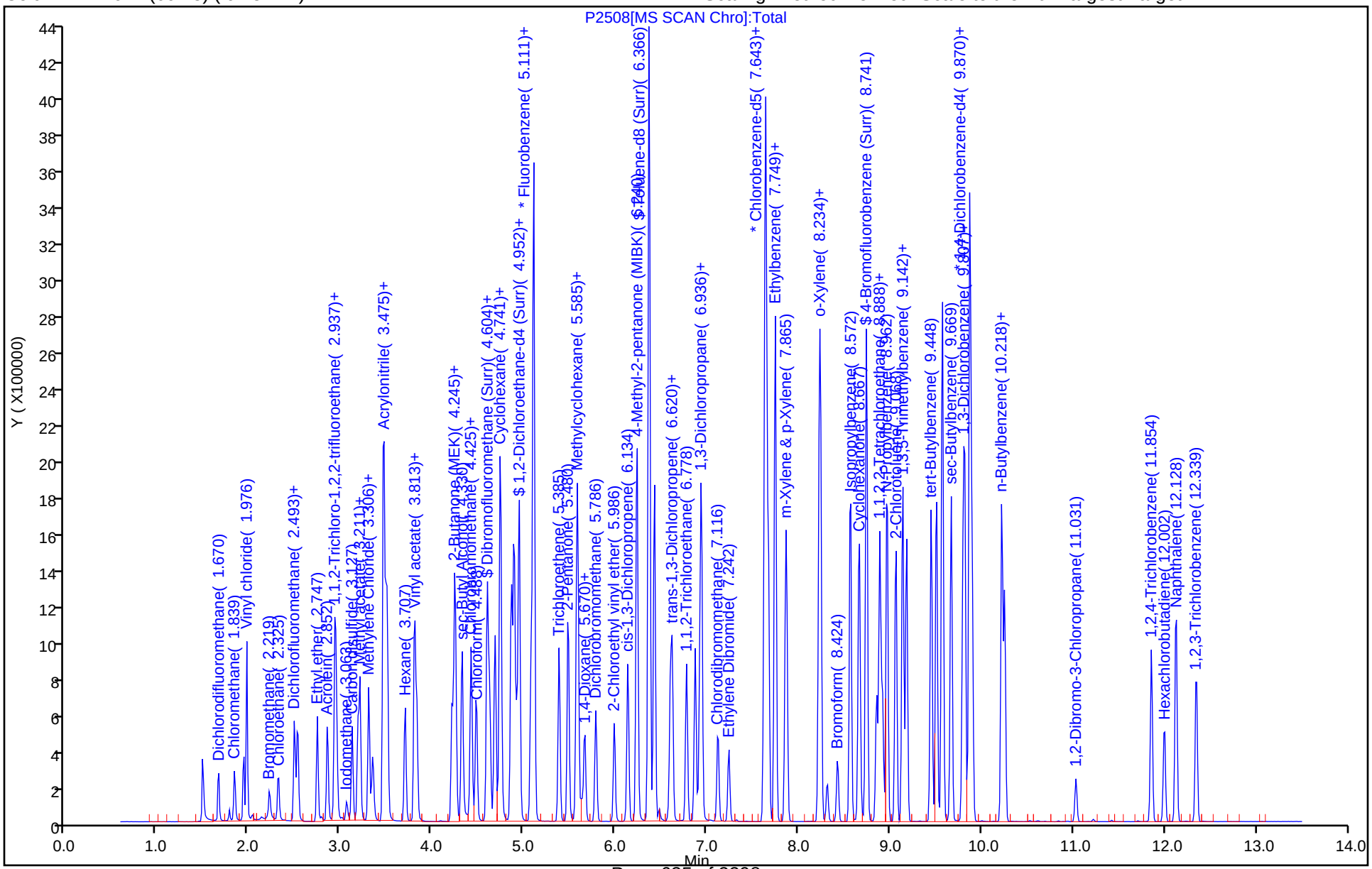
Report Date: 22-Jun-2020 13:30:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2508.D

Injection Date:	20-Jun-2020 10:14:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2508.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2020 10:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:09 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:53:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.7	99.47
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	46.7	93.50
$ 6 Toluene-d8 (Surr)	50.0	49.7	99.40
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.3	98.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499519/5

Matrix: Water Lab File ID: P2511.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 11:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	22.8		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	25.1		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	17.6		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	25.5		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	23.3		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	20.0		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	24.2		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	23.8		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	26.8		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	23.2		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	23.9		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	25.4		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	24.3		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	23.9		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	106		6.0	4.0	2.0
591-78-6	2-Hexanone	112		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	112		5.0	3.2	0.98
67-64-1	Acetone	101		10	6.4	1.9
71-43-2	Benzene	23.6		1.0	0.40	0.16
74-97-5	Bromochloromethane	23.4		1.0	0.20	0.10
75-27-4	Bromodichloromethane	24.7		1.0	0.40	0.17
75-25-2	Bromoform	26.1		1.0	1.0	0.46
74-83-9	Bromomethane	18.5		2.0	0.80	0.21
75-15-0	Carbon disulfide	18.0		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	23.1		2.0	0.40	0.19
108-90-7	Chlorobenzene	23.7		1.0	0.40	0.17
75-00-3	Chloroethane	24.0		2.0	1.6	0.41
67-66-3	Chloroform	23.5		1.0	0.40	0.16
74-87-3	Chloromethane	20.9		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	23.7		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	24.8		1.0	0.40	0.16
110-82-7	Cyclohexane	20.6		2.0	0.80	0.28
124-48-1	Dibromochloromethane	25.4		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	24.6		2.0	0.80	0.31
100-41-4	Ethylbenzene	24.2		1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499519/5

Matrix: Water Lab File ID: P2511.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2020 11:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499519 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	23.9		1.0	0.40	0.18
98-82-8	Isopropylbenzene	24.8		1.0	0.40	0.19
79-20-9	Methyl acetate	52.5		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	24.4		5.0	0.80	0.25
108-87-2	Methylcyclohexane	21.6		2.0	0.40	0.10
75-09-2	Methylene Chloride	24.3		5.0	2.0	0.94
100-42-5	Styrene	24.8		1.0	0.80	0.36
127-18-4	Tetrachloroethene	23.6		1.0	0.40	0.20
108-88-3	Toluene	24.1		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	21.8		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	23.8		1.0	0.40	0.19
79-01-6	Trichloroethene	22.8		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	22.6		2.0	0.80	0.29
75-01-4	Vinyl chloride	22.3		1.5	0.20	0.10
1330-20-7	Xylenes, Total	48.8		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	98		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2511.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Jun-2020 11:18:30 ALS Bottle#: 6 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:09 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:53:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.110	5.110	0.000	99	2715469	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.643	7.642	0.001	87	623330	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.870	9.869	0.001	96	904418	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.604	4.604	0.000	93	652538	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.868	4.868	0.000	96	732437	50.0	47.6	
$ 6 Toluene-d8 (Surr)	98	6.366	6.367	-0.001	93	2695265	50.0	49.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.740	8.741	-0.001	83	985419	50.0	49.4	
10 Dichlorodifluoromethane	85	1.670	1.671	-0.001	99	187125	25.0	24.6	
11 Chloromethane	50	1.839	1.839	0.000	99	218133	25.0	20.9	
12 Vinyl chloride	62	1.944	1.945	-0.001	97	265223	25.0	22.3	
14 Bromomethane	94	2.229	2.230	-0.001	91	88994	25.0	18.5	
15 Chloroethane	64	2.324	2.325	-0.001	99	181359	25.0	24.0	
16 Dichlorofluoromethane	67	2.493	2.494	-0.001	97	422217	25.0	23.9	
17 Trichlorofluoromethane	101	2.535	2.536	-0.001	98	332129	25.0	22.6	
19 Ethyl ether	59	2.746	2.747	-0.001	91	228134	25.0	24.7	
21 Acrolein	56	2.852	2.853	-0.001	100	354790	246.9	155.3	
23 1,1,2-Trichloro-1,2,2-trifluoroe	151	2.936	2.937	-0.001	68	116251	25.0	17.6	
22 1,1-Dichloroethene	96	2.936	2.937	-0.001	97	175603	25.0	20.0	
24 Acetone	43	2.958	2.958	0.000	99	365525	100.0	101.0	
26 Iodomethane	142	3.063	3.064	-0.001	98	100603	25.0	12.4	
27 Carbon disulfide	76	3.126	3.127	-0.001	99	494533	25.0	18.0	
29 Methyl acetate	43	3.190	3.190	0.000	98	484647	50.0	52.5	
30 3-Chloro-1-propene	41	3.211	3.211	0.000	94	345376	25.0	22.9	
31 Methylene Chloride	84	3.306	3.306	0.000	92	250025	25.0	24.3	
32 2-Methyl-2-propanol	59	3.348	3.349	-0.001	97	326974	250.0	274.7	
33 Acrylonitrile	53	3.464	3.465	-0.001	99	1321098	250.0	264.3	
34 Methyl tert-butyl ether	73	3.496	3.496	0.000	95	725414	25.0	24.4	
35 trans-1,2-Dichloroethene	96	3.506	3.517	-0.011	98	226494	25.0	21.8	
36 Hexane	57	3.707	3.707	0.000	91	218826	25.0	15.1	
38 Vinyl acetate	43	3.802	3.802	0.000	97	1165693	50.0	52.1	
39 1,1-Dichloroethane	63	3.833	3.834	-0.001	96	443444	25.0	23.3	
44 2-Butanone (MEK)	43	4.213	4.214	-0.001	100	644291	100.0	106.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 cis-1,2-Dichloroethene	96	4.245	4.246	-0.001	83	274052	25.0	23.7	
48 2,2-Dichloropropane	77	4.256	4.256	0.000	90	300831	25.0	23.4	
50 sec-Butyl Alcohol	45	4.329	4.330	-0.001	99	861300	750.0	884.8	
53 Chlorobromomethane	128	4.424	4.425	-0.001	98	121086	25.0	23.4	
52 Tetrahydrofuran	42	4.424	4.435	-0.011	89	217013	50.0	54.1	
54 Chloroform	83	4.477	4.488	-0.011	93	429424	25.0	23.5	
55 1,1,1-Trichloroethane	97	4.625	4.625	0.000	99	328733	25.0	22.8	
56 Cyclohexane	56	4.688	4.689	-0.001	89	378771	25.0	20.6	
57 1,1-Dichloropropene	75	4.741	4.741	0.000	97	339625	25.0	22.5	
59 Carbon tetrachloride	117	4.752	4.752	0.000	74	272593	25.0	23.1	
58 Isobutyl alcohol	41	4.752	4.752	0.000	91	287223	625.0	683.8	
60 Benzene	78	4.889	4.900	-0.011	96	1053340	25.0	23.6	
61 1,2-Dichloroethane	62	4.920	4.921	-0.001	97	337496	25.0	23.9	
66 n-Heptane	43	5.079	5.079	0.000	92	262781	25.0	19.7	
67 Trichloroethene	95	5.385	5.385	0.000	99	250378	25.0	22.8	
68 2-Pentanone	43	5.480	5.480	0.000	99	1051565	100.0	116.9	
69 Methylcyclohexane	55	5.575	5.586	-0.011	93	300664	25.0	21.6	
70 1,2-Dichloropropane	63	5.596	5.596	0.000	97	293241	25.0	25.4	
72 1,4-Dioxane	88	5.627	5.638	-0.011	92	88171	500.0	548.7	
73 Dibromomethane	93	5.659	5.670	-0.011	94	161546	25.0	24.4	
74 Dichlorobromomethane	83	5.786	5.786	0.000	100	330945	25.0	24.7	
76 2-Chloroethyl vinyl ether	63	5.986	5.987	-0.001	90	208928	25.0	26.2	
77 cis-1,3-Dichloropropene	75	6.134	6.134	0.000	97	414968	25.0	24.8	
78 4-Methyl-2-pentanone (MIBK)	43	6.239	6.240	-0.001	96	1292968	100.0	112.0	
79 Toluene	91	6.429	6.430	-0.001	98	1130909	25.0	24.1	
80 trans-1,3-Dichloropropene	75	6.598	6.609	-0.011	96	348458	25.0	23.8	
81 Ethyl methacrylate	69	6.619	6.620	-0.001	88	399922	25.0	26.1	
82 1,1,2-Trichloroethane	97	6.778	6.778	0.000	90	240693	25.0	25.5	
83 Tetrachloroethene	164	6.873	6.873	0.000	94	179362	25.0	23.6	
84 1,3-Dichloropropane	76	6.925	6.926	-0.001	98	441114	25.0	24.2	
85 2-Hexanone	43	6.936	6.947	-0.011	96	941369	100.0	112.3	
86 Chlorodibromomethane	129	7.115	7.126	-0.011	90	238718	25.0	25.4	
88 Ethylene Dibromide	107	7.242	7.243	0.000	99	242064	25.0	23.9	
89 1-Chlorohexane	91	7.622	7.633	-0.011	98	351193	25.0	25.4	
90 Chlorobenzene	112	7.675	7.675	0.000	96	697962	25.0	23.7	
92 Ethylbenzene	106	7.749	7.749	-0.001	98	392043	25.0	24.2	
91 1,1,1,2-Tetrachloroethane	131	7.749	7.749	-0.001	96	220029	25.0	24.2	
93 m-Xylene & p-Xylene	106	7.865	7.865	0.000	99	468697	25.0	24.1	
94 o-Xylene	106	8.223	8.224	-0.001	97	462500	25.0	24.7	
95 Styrene	104	8.244	8.245	-0.001	95	780700	25.0	24.8	
96 Bromoform	173	8.424	8.435	-0.011	95	144924	25.0	26.1	
97 Isopropylbenzene	105	8.572	8.572	0.000	96	1172574	25.0	24.8	
99 Cyclohexanone	55	8.656	8.667	-0.011	92	697911	1000.0	1093.5	
100 1,1,2,2-Tetrachloroethane	83	8.857	8.857	0.000	93	347678	25.0	25.1	
101 Bromobenzene	156	8.888	8.889	-0.001	95	262967	25.0	23.5	
102 trans-1,4-Dichloro-2-butene	53	8.888	8.889	-0.001	84	92637	25.0	25.1	
103 1,2,3-Trichloropropane	110	8.920	8.920	0.000	83	100532	25.0	23.9	
104 N-Propylbenzene	120	8.962	8.973	-0.011	99	315471	25.0	24.0	
105 2-Chlorotoluene	126	9.068	9.068	0.000	96	267029	25.0	24.0	
106 1,3,5-Trimethylbenzene	105	9.141	9.142	-0.001	94	946031	25.0	24.3	
107 4-Chlorotoluene	126	9.184	9.184	0.000	97	279457	25.0	24.0	
108 tert-Butylbenzene	119	9.448	9.448	0.000	93	775671	25.0	23.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 1,2,4-Trimethylbenzene	105	9.511	9.511	0.000	97	968610	25.0	24.7	
110 sec-Butylbenzene	134	9.669	9.670	-0.001	94	224690	25.0	23.6	
111 1,3-Dichlorobenzene	146	9.796	9.796	0.000	97	491165	25.0	24.3	
112 4-Isopropyltoluene	119	9.817	9.817	0.000	97	972518	25.0	24.5	
113 1,4-Dichlorobenzene	146	9.901	9.902	-0.001	94	499911	25.0	23.9	
115 n-Butylbenzene	91	10.218	10.218	0.000	98	871252	25.0	23.5	
116 1,2-Dichlorobenzene	146	10.250	10.250	0.000	96	465303	25.0	23.2	
117 1,2-Dibromo-3-Chloropropane	157	11.030	11.031	-0.001	84	63163	25.0	26.8	
119 1,2,4-Trichlorobenzene	180	11.854	11.865	-0.011	94	260262	25.0	23.8	
120 Hexachlorobutadiene	225	12.001	12.002	-0.001	97	87395	25.0	22.0	
121 Naphthalene	128	12.128	12.128	0.000	97	905046	25.0	25.6	
122 1,2,3-Trichlorobenzene	180	12.350	12.350	0.000	95	243309	25.0	24.2	
S 139 1,2-Dichloroethene, Total (URS)	96				0		50.0	45.6	
S 142 Xylenes, Total	106				0		50.0	48.8	
S 140 Trihalomethanes, Total	1				0		100.0	99.8	
S 143 Xylenes, Total (URS)	1				0		50.0	48.8	
S 145 1,3-Dichloropropene, Total	1				0		50.0	48.6	
S 144 1,2-Dichloroethene, Total	1				0		50.0	45.6	

Reagents:

MV-Gas B_00063	Amount Added:	5.00	Units: uL	
MV-MegaMain B_00031	Amount Added:	12.50	Units: uL	
mv-IS_SS_00006	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 22-Jun-2020 13:30:14 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2511.D

Injection Date: 20-Jun-2020 11:18:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

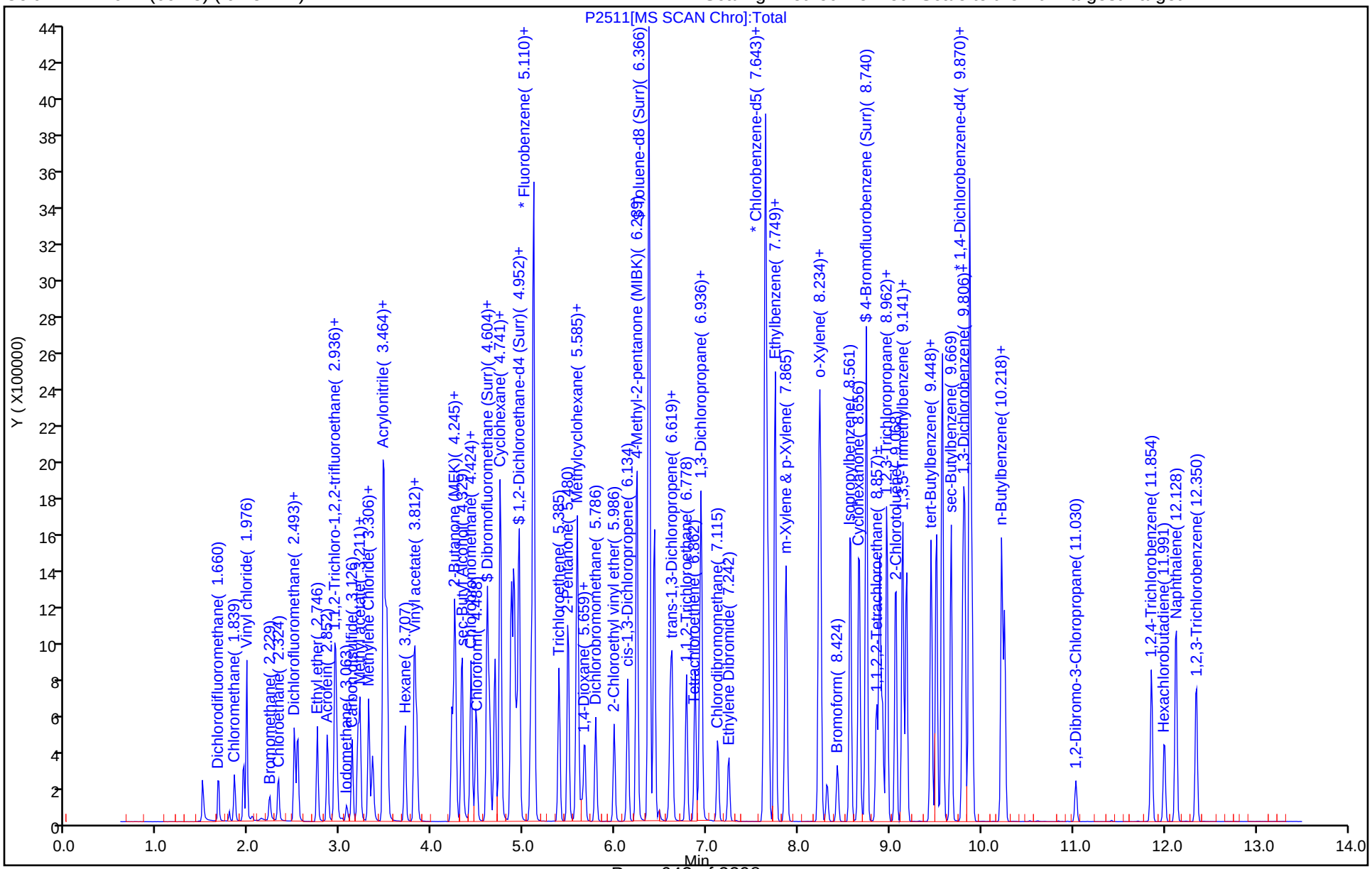
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: AQ_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\P2511.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Jun-2020 11:18:30 ALS Bottle#: 6 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b\AQ_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2020 13:30:09 Calib Date: 01-Jun-2020 20:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b\P1669.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: seifertj Date: 22-Jun-2020 09:53:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.9	99.80
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	47.6	95.19
$ 6 Toluene-d8 (Surr)	50.0	49.1	98.28
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.4	98.73

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/01/2020 16:26

Analysis Batch Number: 496958 End Date: 06/02/2020 03:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-496958/1		06/01/2020 16:26	1	P1658A.D	DB-624 (60.25) 0.25(mm)
STD005 280-496958/12 IC		06/01/2020 16:26	1	P1658.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 16:26	1		DB-624 (60.25) 0.25(mm)
STD010 280-496958/13 IC		06/01/2020 16:47	1	P1659.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 16:47	1		DB-624 (60.25) 0.25(mm)
STD020 280-496958/14 IC		06/01/2020 17:09	1	P1660.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:09	1		DB-624 (60.25) 0.25(mm)
STD050 280-496958/15 IC		06/01/2020 17:30	1	P1661.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:30	1		DB-624 (60.25) 0.25(mm)
STD10 280-496958/16 IC		06/01/2020 17:51	1	P1662.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 17:51	1		DB-624 (60.25) 0.25(mm)
STD75 280-496958/18 IC		06/01/2020 18:33	1	P1664.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 18:33	1		DB-624 (60.25) 0.25(mm)
STD100 280-496958/19 IC		06/01/2020 18:55	1	P1665.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 18:55	1		DB-624 (60.25) 0.25(mm)
STD200 280-496958/20 IC		06/01/2020 19:16	1	P1666.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 19:16	1		DB-624 (60.25) 0.25(mm)
ICIS 280-496958/17		06/01/2020 20:33	1	P1669.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 20:33	1		DB-624 (60.25) 0.25(mm)
ICV 280-496958/21		06/01/2020 20:54	1	P1670.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 20:54	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 21:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 22:56	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/01/2020 23:18	200		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:00	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:21	4		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 00:43	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 01:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:29	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/02/2020 02:50	1		DB-624 (60.25) 0.25(mm)
CCVC 280-496958/38		06/02/2020 03:11	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/20/2020 08:58

Analysis Batch Number: 499519 End Date: 06/20/2020 21:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-499519/1		06/20/2020 08:58	1	P2505.D	DB-624 (60.25) 0.25(mm)
CCV 280-499519/2		06/20/2020 09:29	1	P2506.D	DB-624 (60.25) 0.25(mm)
CCV 280-499519/3		06/20/2020 09:50	1		DB-624 (60.25) 0.25(mm)
LCS 280-499519/4		06/20/2020 10:14	1	P2508.D	DB-624 (60.25) 0.25(mm)
MB 280-499519/9		06/20/2020 10:57	1	P2510.D	DB-624 (60.25) 0.25(mm)
LCSD 280-499519/5		06/20/2020 11:18	1	P2511.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 11:39	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 12:01	1		DB-624 (60.25) 0.25(mm)
280-137609-14		06/20/2020 12:22	1	P2514.D	DB-624 (60.25) 0.25(mm)
280-137609-15		06/20/2020 12:44	1	P2515.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 13:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 13:26	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 13:47	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 14:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 14:30	1		DB-624 (60.25) 0.25(mm)
280-137609-10		06/20/2020 14:51	1	P2521.D	DB-624 (60.25) 0.25(mm)
280-137609-11		06/20/2020 15:12	1	P2522.D	DB-624 (60.25) 0.25(mm)
280-137609-12		06/20/2020 15:34	1	P2523.D	DB-624 (60.25) 0.25(mm)
280-137609-13		06/20/2020 15:55	1	P2524.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 16:16	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 16:38	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 16:59	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 17:20	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 17:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 18:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 18:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 18:45	1		DB-624 (60.25) 0.25(mm)
CCVC 280-499519/34		06/20/2020 19:06	1	P2533.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 19:28	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 19:49	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 20:10	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 20:32	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 20:53	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 21:14	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2020 21:35	1		DB-624 (60.25) 0.25(mm)

Sequence Name: C:\HPCHEM\1\SEQUENCE\062020.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\062020\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 26
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 0858 - 20:53 ↓ 21:35
TALs Batch: 449519

Fridge Blks OK out of tune
JK 6/22/20

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P2505	BFB	BFB 0858
2	Sample	1	P2506	8260	CCV
3	Sample	2	P2507	8260	CCV
4	Sample	3	P2508	8260	LCS
5	Sample	4	P2509	8260	RINSE
6	Sample	5	P2510	8260	MB
7	Sample	6	P2511	8260	LCSD
8	Sample	7	P2512	8260	280-137592-i-11 pH<2
9	Sample	8	P2513	8260	280-137592-c-12 pH<2
10	Sample	9	P2514	8260	280-137609-a-14 pH<2
11	Sample	10	P2515	8260	280-137609-a-15 pH<2
12	Sample	11	P2516	8260	280-137604-a-1 pH<2
13	Sample	12	P2517	8260	280-137592-b-8 pH<2
14	Sample	13	P2518	8260	280-137592-c-10 pH<2
15	Sample	14	P2519	8260	280-137592-h-11 pH<2
16	Sample	15	P2520	8260	280-137592-b-12 pH<2
17	Sample	16	P2521	8260	280-137609-e-10 pH<2
18	Sample	17	P2522	8260	280-137609-e-11 pH<2
19	Sample	18	P2523	8260	280-137609-d-12 pH<2
20	Sample	19	P2524	8260	280-137609-d-13 pH<2
21	Sample	20	P2525	8260	280-137630-c-2 pH<2
22	Sample	21	P2526	8260	280-137630-d-3 pH<2
23	Sample	22	P2527	8260	280-137630-a-4 pH<2
24	Sample	23	P2528	8260	280-137695-f-3 pH<2
25	Sample	24	P2529	8260	280-137695-g-6 pH<2
26	Sample	25	P2530	8260	280-137695-h-10 pH<2
27	Sample	26	P2531	8260	280-137695-g-11 pH<2
28	Sample	27	P2532	8260	280-137695-e-12 pH<2
29	Sample	28	P2533	8260	CCVC
30	Sample	29	P2534	8260	280-137522-a-2 pH<2
31	Sample	30	P2535	8260	280-137522-a-3 pH<2
32	Sample	31	P2536	8260	280-137522-a-4 pH<2
33	Sample	32	P2537	8260	280-137522-b-6 pH<2
34	Sample	33	P2538	8260	280-137522-a-7 pH<2
35	Sample	34	P2539	8260	280-137522-b-8 pH<2
36	Sample	35	P2540	8260	280-137522-a-9 pH<2

RR No Variances

2053 21:35 OK Fridge Blanks

Preliminary Report

Eurofins Environment Testing America
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b

Worklist Name:	062020	Worklist Num:	92603
Instrument:	VMS_P	Method:	AQ_VMSP_8260
Analysis Type:	VOA	Creator:	Seifert, Judy L
Inj Volume:	5	Inj Vol Units:	mL

QC Batching: Disabled Limit Group Batching: Enabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 499519
# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV
# 3 CCV	# 3 CCV
# 4 LCS	# 4 LCS
# 5 LCSD	# 5 LCSD
# 6 LCS	# 6 LCS
# 7 LCSD	# 7 LCSD
# 8 RINSE	# 8 RINSE
# 9 MB	# 9 MB
# 10 280-121232-A-1	# 10 280-121232-A-1
# 11 280-121232-A-2	# 11 280-121232-A-2
# 12 280-121232-A-3	# 12 280-121232-A-3
# 13 280-137592-I-11	# 13 280-137592-I-11
# 14 280-137592-C-12	# 14 280-137592-C-12
# 15 280-137609-A-14	# 15 280-137609-A-14
# 16 280-137609-A-15	# 16 280-137609-A-15
# 17 280-137604-A-1	# 17 280-137604-A-1
# 18 280-137592-B-8	# 18 280-137592-B-8
# 19 280-137592-C-10	# 19 280-137592-C-10
# 20 280-137592-H-11	# 20 280-137592-H-11
# 21 280-137592-B-12	# 21 280-137592-B-12
# 22 280-137609-E-10	# 22 280-137609-E-10
# 23 280-137609-E-11	# 23 280-137609-E-11
# 24 280-137609-D-12	# 24 280-137609-D-12
# 25 280-137609-D-13	# 25 280-137609-D-13
# 26 280-137630-C-2	# 26 280-137630-C-2
# 27 280-137630-D-3	# 27 280-137630-D-3
# 28 280-137630-A-4	# 28 280-137630-A-4
# 29 280-137695-F-3	# 29 280-137695-F-3
# 30 280-137695-G-6	# 30 280-137695-G-6
# 31 280-137695-H-10	# 31 280-137695-H-10
# 32 280-137695-G-11	# 32 280-137695-G-11
# 33 280-137695-E-12	# 33 280-137695-E-12
# 34 CCVC	# 34 CCVC
# 35 280-137522-A-2	# 35 280-137522-A-2
# 36 280-137522-A-3	# 36 280-137522-A-3
# 37 280-137522-A-4	# 37 280-137522-A-4
# 38 280-137522-B-6	# 38 280-137522-B-6
# 39 280-137522-A-7	# 39 280-137522-A-7
# 40 280-137522-B-8	# 40 280-137522-B-8
# 41 280-137522-A-9	# 41 280-137522-A-9

137592, 1604, 1609
695

DieFlome +22.6%

Bromo CCVC

-60.7

630

Eurofins Environment Testing America
Worklist Report

Worklist Name: 062020 Worklist Number: 92603
Instrument Name: VMS_P Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200620-92603.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00006 Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	#1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	#2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00059		
3	#3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	#4 LCS	LCS	1.000	voaWater	5.000	mL	MV-Gas B_00063 MV-MegaMain B_00031		
5	#5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Gas B_00063 MV-MegaMain B_00031		
6	#6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	#7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	#8 RINSE	Client	1.000	voaWater	5.000	mL			
9	#9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-121232-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-121232-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-121232-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-137592-I-11	Client	1.000	voaWater	5.000	mL			
14	#14 280-137592-C-12	Client	1.000	voaWater	5.000	mL			
15	#15 280-137609-A-14	Client	1.000	voaWater	5.000	mL			
16	#16 280-137609-A-15	Client	1.000	voaWater	5.000	mL			
17	#17 280-137604-A-1	Client	1.000	voaWater	5.000	mL			
18	#18 280-137592-B-8	Client	1.000	voaWater	5.000	mL			
19	#19 280-137592-C-10	Client	1.000	voaWater	5.000	mL			
20	#20 280-137592-H-11	Client	1.000	voaWater	5.000	mL			
21	#21 280-137592-B-12	Client	1.000	voaWater	5.000	mL			
22	#22 280-137609-E-10	Client	1.000	voaWater	5.000	mL			
23	#23 280-137609-E-11	Client	1.000	voaWater	5.000	mL			
24	#24 280-137609-D-12	Client	1.000	voaWater	5.000	mL			
25	#25 280-137609-D-13	Client	1.000	voaWater	5.000	mL			
26	#26 280-137630-C-2	Client	1.000	voaWater	5.000	mL			
27	#27 280-137630-D-3	Client	1.000	voaWater	5.000	mL			
28	#28 280-137630-A-4	Client	1.000	voaWater	5.000	mL			
29	#29 280-137695-F-3	Client	1.000	voaWater	5.000	mL			
30	#30 280-137695-G-6	Client	1.000	voaWater	5.000	mL			
31	#31 280-137695-H-10	Client	1.000	voaWater	5.000	mL			
32	#32 280-137695-G-11	Client	1.000	voaWater	5.000	mL			
33	#33 280-137695-E-12	Client	1.000	voaWater	5.000	mL			
34	#34 CCVC	CCVC	1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00059		
35	#35 280-137522-A-2	Client	1.000	voaWater	5.000	mL			
36	#36 280-137522-A-3	Client	1.000	voaWater	5.000	mL			
37	#37 280-137522-A-4	Client	1.000	voaWater	5.000	mL			
38	#38 280-137522-B-6	Client	1.000	voaWater	5.000	mL			
39	#39 280-137522-A-7	Client	1.000	voaWater	5.000	mL			
40	#40 280-137522-B-8	Client	1.000	voaWater	5.000	mL			
41	#41 280-137522-A-9	Client	1.000	voaWater	5.000	mL			
42	#42 Samp 42	Client	1.000	voaWater	5.000	mL			

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 499519
# 42 Samp 42	# 42 Samp 42

Sample Request Form: 62634

den_msvoa_totalbacklog Gabe 6/20/2020 2:29:36 PM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-137630-2	FWGmw-020-200401-GW	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	DRR	OH	AA-2 & Mtls-Strge	Unconfirmed
M Q5.0_DIL1										
280-137630-3	FWGmw-018-200401-GW	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	DRR	OH	AA-2 & Mtls-Strge	Unconfirmed
M Q5.0_DIL1										
280-137630-4	FWGTB-200405-TB	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	DRR	OH	AA-2	Unconfirmed
M Q5.0_DIL1										
280-137695-3	6-MW5	1x	8260B_DOD5	8260B_DOD5	06/27 23:59	07/02/20	PJM	MT	VS-5	Unconfirmed
M Q5.3_NoVariancesAccepted,_DIL3										
280-137695-6	6-MW6	1x	8260B_DOD5	8260B_DOD5	06/27 23:59	07/02/20	PJM	MT	VS-5	Unconfirmed
M Q5.3_NoVariancesAccepted,_DIL3										
280-137695-10	FB-4	1x	8260B_DOD5	8260B_DOD5	06/27 23:59	07/02/20	PJM	MT	VS-5	Unconfirmed
M Q5.3_NoVariancesAccepted,_DIL3										
280-137695-11	EB-4	1x	8260B_DOD5	8260B_DOD5	06/27 23:59	07/02/20	PJM	MT	VS-5	Unconfirmed
M Q5.3_NoVariancesAccepted,_DIL3										
280-137695-12	TRIP BLANK	1x	8260B_DOD5	8260B_DOD5	06/26 23:59	07/02/20	PJM	MT	VS-5 & Shared Samples In-Transi	Unconfirmed
M Q5.3_NoVariancesAccepted,_DIL3										

Sample Request Form: 62626

den_msvoa_totalbacklog Gabe 6/20/2020 11:15:01 AM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-137604-1	TB-06112020	1 X	8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	IL	AA-2	Unconfirmed
M Q5.1_Std Tech Spec App_DIL3										

Sample Request Form: 62623

den_msvoa_totalbacklog Gabe 6/20/2020 10:43:32 AM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-137592-8	SB2835x31-2005	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	PJM	CA	VS-8 & AA-2	Unconfirmed
M Q5/DIL1_Std variances Nov12 2013 ok_DF										
280-137592-10	SB2857x31-2005	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	PJM	CA	AA-2 & Marked as Disposed & VS-8	Unconfirmed
M Q5/DIL1_Std variances Nov12 2013 ok_DF										
280-137592-11	EB2005-06x31_2005-DP	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	PJM	CA	VS-8 & 145 & AA-2 & Mtls-Strge & Marked as Disposed	Unconfirmed
M Q5/DIL1_Std variances Nov12 2013 ok_DF										
280-137592-12	TB061120-2005	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/30/20	PJM	CA	VS-8 & AA-2	Unconfirmed
M Q5/DIL1_Std variances Nov12 2013 ok_DF										
280-137609-10	SHGW03-20A	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	NE	VS-8 & OP Dpt & AA-2 & 149	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-137609-11	SHGW02-20A	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	NE	149 & VS-8 & AA-2	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-137609-12	SHGW05-20A	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	NE	AA-2 & VS-8 & 149	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-137609-13	SOURCE 2020		8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	NE	AA-2 & Marked as Disposed & 149	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-137609-14	TB01-061120	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	NE	AA-2	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-137609-15	TB02-061120	1x	8260B_DOD5	8260B_DOD5	06/25 23:59	06/28/20	PJM	NE	AA-2	Unconfirmed

Sequence Name: C:\HPCHEM\1\SEQUENCE\060120I.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\060120I\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Eurofins TestAmerica Denver
Instrument ID: P
SOP: DV-MS-0010 Rev. 26
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time:
TALs Batch: 496958 8260
496959 624
496960 524

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	P1657	BFB	BFB
2 Sample	1	P1658	8260	STD005
3 Sample	2	P1659	8260	STD010
4 Sample	3	P1660	8260	STD020
5 Sample	4	P1661	8260	STD050
6 Sample	5	P1662	8260	STD10
7 Sample	6	P1663	8260	ICIS
8 Sample	7	P1664	8260	STD75
9 Sample	8	P1665	8260	STD100
10 Sample	9	P1666	8260	STD200
11 Sample	10	P1667	8260	BLK
12 Sample	11	P1668	8260	ICV
13 Sample	12	P1669	8260	ICIS RR
14 Sample	13	P1670	8260	ICV

Calib
44775
44776
44777

ICIS. 17
ICV: 21

All < 20% For DoD

1st JC 6/2/20

2nd: Tam 6-2-20

Preliminary Report

TestAmerica Laboratories
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b

Worklist Name:	060120I	Worklist Num:	92011
Instrument:	VMS_P	Method:	AQ_VMSP_8260
Analysis Type:	VOA	Creator:	Seifert, Judy L
Inj Volume:	5	Inj Vol Units:	mL

QC Batching: Disabled Limit Group Batching: Disabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 496958	MSV - 624 Raw Batch: 496959	MSV - 524 Raw Batch: 496960
# 1 BFB	# 1 BFB	# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV	# 2 CCV	
# 3 CCV	# 3 CCV	# 3 CCV	
# 4 LCS	# 4 LCS	# 4 LCS	
# 5 LCSD	# 5 LCSD	# 5 LCSD	
# 6 LCS	# 6 LCS	# 6 LCS	
# 7 LCSD	# 7 LCSD	# 7 LCSD	
# 8 MB	# 8 MB	# 8 MB	
# 9 280-121232-A-1	# 9 280-121232-A-1		
# 10 280-121232-A-2	# 10 280-121232-A-2		
# 11 280-121232-A-3	# 11 280-121232-A-3		
# 12 STD005	# 12 STD005	# 12 STD005	# 12 STD005
# 13 STD010	# 13 STD010	# 13 STD010	# 13 STD010
# 14 STD020	# 14 STD020	# 14 STD020	# 14 STD020
# 15 STD050	# 15 STD050	# 15 STD050	# 15 STD050
# 16 STD10	# 16 STD10	# 16 STD10	# 16 STD10
# 17 ICIS	# 17 ICIS	# 17 ICIS	# 17 ICIS
# 18 STD75	# 18 STD75	# 18 STD75	# 18 STD75
# 19 STD100	# 19 STD100	# 19 STD100	# 19 STD100
# 20 STD200	# 20 STD200	# 20 STD200	# 20 STD200
# 21 ICV	# 21 ICV	# 21 ICV	# 21 ICV
# 22 LCS	# 22 LCS	# 22 LCS	# 22 LCS
# 23 LCSD	# 23 LCSD	# 23 LCSD	# 23 LCSD
# 24 MB	# 24 MB	# 24 MB	# 24 MB
# 25 280-136811-R-3	# 25 280-136811-R-3		
# 26 280-136811-M-7	# 26 280-136811-M-7		
# 27 280-136816-C-5	# 27 280-136816-C-5		
# 28 280-136816-A-6	# 28 280-136816-A-6		
# 29 280-136816-C-7	# 29 280-136816-C-7		
# 30 280-136827-B-10	# 30 280-136827-B-10		
# 31 280-136734-J-1	# 31 280-136734-J-1		
# 32 280-136734-A-8	# 32 280-136734-A-8		
# 33 280-136758-F-3	# 33 280-136758-F-3		
# 34 280-136758-F-4	# 34 280-136758-F-4		
# 35 280-136758-A-5	# 35 280-136758-A-5		
# 36 280-136853-L-7	# 36 280-136853-L-7		
# 37 280-136853-G-8	# 37 280-136853-G-8		
# 38 CCVC	# 38 CCVC		

TestAmerica Laboratories
Worklist Report

Worklist Name: 060120I
Worklist Number: 92011
Instrument Name: VMS_P
Chrom Method: AQ_VMSP_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_P\20200601-92011.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P

Run Reagent: mv-IS_SS_00001
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00002		
2	# 2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00058		
3	# 3 CCV	CCV		1.000	voaWater	5.000	mL	MV-Supp A_00044 mv-Cent IS_00006		
4	# 4 LCS	LCS		1.000	voaWater	5.000	mL	MV-Gas B_00060 MV-MegaMain B_00031		
5	# 5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00060 MV-MegaMain B_00031		
6	# 6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00027		
7	# 7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00027		
8	# 8 MB	MB		1.000	voaWater	5.000	mL			
9	# 9 280-121232-A-1	Client		1.000	voaWater	5.000	mL			
10	#10 280-121232-A-2	Client		1.000	voaWater	5.000	mL			
11	#11 280-121232-A-3	Client		1.000	voaWater	5.000	mL			
12	#12 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
13	#13 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
14	#14 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
15	#15 STD050	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
16	#16 STD10	IC	5	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
17	#17 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
18	#18 STD75	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
19	#19 STD100	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
20	#20 STD200	IC	9	1.000	voaWater	5.000	mL	MV-Gas A_00058 MV-MegaMainA_00034		
21	#21 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
22	#22 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
23	#23 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMain B_00031 MV-Gas B_00060		
24	#24 MB	MB		1.000	voaWater	5.000	mL			
25	#25 280-136811-R-3	Client		1.000	voaWater	5.000	mL			
26	#26 280-136811-M-7	Client		1.000	voaWater	5.000	mL			
27	#27 280-136816-C-5	Client		200.0	voaWater	5.000	mL			
28	#28 280-136816-A-6	Client		100.0	voaWater	5.000	mL			
29	#29 280-136816-C-7	Client		5.000	voaWater	5.000	mL			
30	#30 280-136827-B-10	Client		4.000	voaWater	5.000	mL			
31	#31 280-136734-J-1	Client		1.000	voaWater	5.000	mL			
32	#32 280-136734-A-8	Client		1.000	voaWater	5.000	mL			
33	#33 280-136758-F-3	Client		1.000	voaWater	5.000	mL			
34	#34 280-136758-F-4	Client		1.000	voaWater	5.000	mL			
35	#35 280-136758-A-5	Client		1.000	voaWater	5.000	mL			
36	#36 280-136853-L-7	Client		1.000	voaWater	5.000	mL			
37	#37 280-136853-G-8	Client		1.000	voaWater	5.000	mL			
38	#38 CCVC	CCVC		1.000	voaWater	5.000	mL	MV-MegaMainA_00034 MV-Gas A_00058		

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 496958 Batch Start Date: 06/01/20 16:26 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	MV-Gas A 00058	MV-Gas B 00060	mv-IS_SS 00001
BFB 280-496958/1		8260B		2 uL	2 uL	2 uL			
STD005 280-496958/12 IC		8260B		5 mL	5 mL		0.1 uL		5 uL
STD010 280-496958/13 IC		8260B		5 mL	5 mL		0.2 uL		5 uL
STD020 280-496958/14 IC		8260B		5 mL	5 mL		0.4 uL		5 uL
STD050 280-496958/15 IC		8260B		5 mL	5 mL		1 uL		5 uL
STD10 280-496958/16 IC		8260B		5 mL	5 mL		2 uL		5 uL
ICIS 280-496958/17		8260B		5 mL	5 mL		10 uL		5 uL
STD75 280-496958/18 IC		8260B		5 mL	5 mL		15 uL		5 uL
STD100 280-496958/19 IC		8260B		5 mL	5 mL		20 uL		5 uL
STD200 280-496958/20 IC		8260B		5 mL	5 mL		40 uL		5 uL
ICV 280-496958/21		8260B		5 mL	5 mL			10 uL	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
BFB 280-496958/1		8260B							
STD005 280-496958/12 IC		8260B			0.25 uL				
STD010 280-496958/13 IC		8260B			0.5 uL				

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/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 496958 Batch Start Date: 06/01/20 16:26 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
STD020 280-496958/14 IC		8260B			1 uL				
STD050 280-496958/15 IC		8260B			2.5 uL				
STD10 280-496958/16 IC		8260B			5 uL				
ICIS 280-496958/17		8260B			25 uL				
STD75 280-496958/18 IC		8260B			37.5 uL				
STD100 280-496958/19 IC		8260B			50 uL				
STD200 280-496958/20 IC		8260B			100 uL				
ICV 280-496958/21		8260B		25 uL					

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 499519 Batch Start Date: 06/20/20 08:58 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	mv-Cent BFB 00002	MV-Gas A 00059	MV-Gas B 00063	mv-IS_SS 00006
BFB 280-499519/1		8260B		2 uL	2 uL	2 uL			
CCV 280-499519/2		8260B		5 mL	5 mL		10 uL		5 uL
LCS 280-499519/4		8260B		5 mL	5 mL			5 uL	5 uL
LCSD 280-499519/5		8260B		5 mL	5 mL			5 uL	5 uL
MB 280-499519/9		8260B		5 mL	5 mL				5 uL
280-137609-A-14	TB01-061120	8260B	T	5 mL	5 mL				5 uL
280-137609-A-15	TB02-061120	8260B	T	5 mL	5 mL				5 uL
280-137609-E-10	SHGW03-20A	8260B	T	5 mL	5 mL				5 uL
280-137609-E-11	SHGW02-20A	8260B	T	5 mL	5 mL				5 uL
280-137609-D-12	SHGW05-20A	8260B	T	5 mL	5 mL				5 uL
280-137609-D-13	SOURCE 2020	8260B	T	5 mL	5 mL				5 uL
CCVC 280-499519/34		8260B		5 mL	5 mL		10 uL		5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
BFB 280-499519/1		8260B							
CCV 280-499519/2		8260B			25 uL				
LCS 280-499519/4		8260B		12.5 uL					
LCSD 280-499519/5		8260B		12.5 uL					
MB 280-499519/9		8260B							
280-137609-A-14	TB01-061120	8260B	T						
280-137609-A-15	TB02-061120	8260B	T						
280-137609-E-10	SHGW03-20A	8260B	T						
280-137609-E-11	SHGW02-20A	8260B	T						
280-137609-D-12	SHGW05-20A	8260B	T						
280-137609-D-13	SOURCE 2020	8260B	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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 499519 Batch Start Date: 06/20/20 08:58 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00031	MV-MegaMainA 00034				
CCVC 280-499519/34		8260B			25 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.

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	#
Ethane	0.137	0.140	102	74-131	
Methane	0.0730	0.0722	99	73-125	
Ethylene	0.128	0.131	102	72-133	

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.: 280-137609-1

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	#
Ethane	0.137	0.149	109	74-131	
Methane	0.0730	0.0786	108	73-125	
Ethylene	0.128	0.137	108	72-133	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.: 280-137609-1

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 DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	#
Ethane	0.137	0.156	114	11	20	74-131	
Methane	0.0730	0.0797	109	10	20	73-125	
Ethylene	0.128	0.143	112	9	20	72-133	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.: 280-137609-1

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	#
Ethane	0.137	0.152	111	2	20	74-131	
Methane	0.0730	0.0804	110	2	20	73-125	
Ethylene	0.128	0.139	109	2	20	72-133	

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.: 280-137609-1

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 MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 042F0601.D

Lab ID: 280-137609-1 MS Client ID: PZ007-20A MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0730	0.0020 U	0.0648	89	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.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 037F3701.D

Lab ID: 280-137609-9 MS Client ID: G0102-20A MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0730	0.0018 J	0.0644	86	73-125	M

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.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 043F0701.D

Lab ID: 280-137609-1 MSD Client ID: PZ007-20A MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0696	95	7	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 038F3801.D

Lab ID: 280-137609-9 MSD Client ID: G0102-20A MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0685	91	6	20	73-125	M

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.: 280-137609-1

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
PZ007-20A	280-137609-1	06/16/2020 21:53	06/16/2020 21:53
PZ007-20A DU	280-137609-1 DU	06/16/2020 22:09	06/16/2020 22:09
PZ007-20A MS	280-137609-1 MS	06/16/2020 22:25	06/16/2020 22:25
PZ007-20A MSD	280-137609-1 MSD	06/16/2020 22:42	06/16/2020 22:42
G0105-20A	280-137609-3	06/16/2020 23:14	06/16/2020 23:14
G0080-20A	280-137609-4	06/16/2020 23:31	06/16/2020 23:31
PZ005-20A	280-137609-5	06/16/2020 23:47	06/16/2020 23:47
NW052-20A	280-137609-6	06/17/2020 00:04	06/17/2020 00:04
G0045-20A	280-137609-7	06/17/2020 00:20	06/17/2020 00:20
SHGW03-20A	280-137609-10	06/17/2020 00:53	06/17/2020 00:53
SHGW02-20A	280-137609-11	06/17/2020 01:09	06/17/2020 01:09
SHGW05-20A	280-137609-12	06/17/2020 01:42	06/17/2020 01:42
SHGW05-20A DU	280-137609-12 DU	06/17/2020 01:58	06/17/2020 01:58

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
PZ012-20A	280-137609-2	06/18/2020 14:52	06/18/2020 14:52
G0017-20A	280-137609-8	06/18/2020 15:09	06/18/2020 15:09
SHGW02-20A	280-137609-11	06/18/2020 15:25	06/18/2020 15:25
SHGW05-20A DL	280-137609-12 DL	06/18/2020 15:41	06/18/2020 15:41
SHGW05-20A DU	280-137609-12 DU	06/18/2020 15:58	06/18/2020 15:58

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
G0102-20A	280-137609-9	06/18/2020 18:08	06/18/2020 18:08
G0102-20A DU	280-137609-9 DU	06/18/2020 18:25	06/18/2020 18:25
G0102-20A MS	280-137609-9 MS	06/18/2020 18:41	06/18/2020 18:41
G0102-20A MSD	280-137609-9 MSD	06/18/2020 18:57	06/18/2020 18:57

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MS Lab Sample ID: 280-137609-1 MS

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

Date Analyzed (1): 06/16/2020 22:25 Date Analyzed (2): 06/16/2020 22:25

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		3.16	3.12	3.20	0.0648		5.3
	2		1.25	1.21	1.29	0.0683		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MSD Lab Sample ID: 280-137609-1 MSD

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

Date Analyzed (1): 06/16/2020 22:42 Date Analyzed (2): 06/16/2020 22:42

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.12	3.20	0.0696		5.0
	2		1.24	1.21	1.29	0.0732		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ012-20A Lab Sample ID: 280-137609-2

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

Date Analyzed (1): 06/18/2020 14:52 Date Analyzed (2): 06/18/2020 14:52

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	12		1.6
	2		1.25	1.23	1.31	12		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0105-20A Lab Sample ID: 280-137609-3

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

Date Analyzed (1): 06/16/2020 23:14 Date Analyzed (2): 06/16/2020 23:14

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	3.12	3.20	2.4		6.3
	2		1.24	1.21	1.29	2.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0080-20A Lab Sample ID: 280-137609-4

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

Date Analyzed (1): 06/16/2020 23:31 Date Analyzed (2): 06/16/2020 23:31

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		3.16	3.12	3.20	0.0088		5.4
	2		1.25	1.21	1.29	0.0093		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: NW052-20A Lab Sample ID: 280-137609-6

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

Date Analyzed (1): 06/17/2020 00:04 Date Analyzed (2): 06/17/2020 00:04

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		3.16	3.12	3.20	0.45		5.8
	2		1.25	1.21	1.29	0.48		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0045-20A Lab Sample ID: 280-137609-7

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

Date Analyzed (1): 06/17/2020 00:20 Date Analyzed (2): 06/17/2020 00:20

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		3.16	3.12	3.20	0.0028		5.2
	2		1.24	1.21	1.29	0.0030		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0017-20A Lab Sample ID: 280-137609-8

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

Date Analyzed (1): 06/18/2020 15:09 Date Analyzed (2): 06/18/2020 15:09

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	8.5		1.2
	2		1.25	1.23	1.31	8.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A Lab Sample ID: 280-137609-9

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

Date Analyzed (1): 06/18/2020 18:08 Date Analyzed (2): 06/18/2020 18:08

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		3.16	3.17	3.25	0.0018		5.4
	2		1.25	1.23	1.31	0.0019		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MS Lab Sample ID: 280-137609-9 MS

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

Date Analyzed (1): 06/18/2020 18:41 Date Analyzed (2): 06/18/2020 18:41

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	0.0644		2.0
	2		1.24	1.23	1.31	0.0657		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MSD Lab Sample ID: 280-137609-9 MSD

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

Date Analyzed (1): 06/18/2020 18:57 Date Analyzed (2): 06/18/2020 18:57

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	0.0685		3.6
	2		1.25	1.23	1.31	0.0710		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A DU Lab Sample ID: 280-137609-9 DU

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

Date Analyzed (1): 06/18/2020 18:25 Date Analyzed (2): 06/18/2020 18:25

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		3.16	3.17	3.25	0.00191		5.7
	2		1.24	1.23	1.31	0.00203		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW03-20A Lab Sample ID: 280-137609-10

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

Date Analyzed (1): 06/17/2020 00:53 Date Analyzed (2): 06/17/2020 00:53

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	0.16		5.1
	2		1.24	1.21	1.29	0.17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW02-20A Lab Sample ID: 280-137609-11

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

Date Analyzed (1): 06/17/2020 01:09 Date Analyzed (2): 06/17/2020 01:09

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.14	3.12	3.20	14		1.6
	2		1.24	1.21	1.29	15		
Ethylene	1		4.03	3.97	4.07	0.0010		20.1
	2		1.74	1.73	1.83	0.00083		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW02-20A Lab Sample ID: 280-137609-11

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

Date Analyzed (1): 06/18/2020 15:25 Date Analyzed (2): 06/18/2020 15:25

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	13		0.7
	2		1.25	1.23	1.31	13		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A Lab Sample ID: 280-137609-12

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

Date Analyzed (1): 06/17/2020 01:42 Date Analyzed (2): 06/17/2020 01:42

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.13	3.12	3.20	16		2.1
	2		1.24	1.21	1.29	16		
Ethylene	1		4.03	3.97	4.07	0.0011		20.6
	2		1.74	1.73	1.83	0.00088		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A DL Lab Sample ID: 280-137609-12 DL

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

Date Analyzed (1): 06/18/2020 15:41 Date Analyzed (2): 06/18/2020 15:41

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	14		0.4
	2		1.25	1.23	1.31	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A DU Lab Sample ID: 280-137609-12 DU

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

Date Analyzed (1): 06/17/2020 01:58 Date Analyzed (2): 06/17/2020 01:58

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.13	3.12	3.20	16.0		4.3
	2		1.24	1.21	1.29	16.7		
Ethylene	1		4.03	3.97	4.07	0.00109		26.1
	2		1.74	1.73	1.83	0.000838		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A DU Lab Sample ID: 280-137609-12 DU

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

Date Analyzed (1): 06/18/2020 15:58 Date Analyzed (2): 06/18/2020 15:58

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.17	3.25	13.8		0.5
	2		1.25	1.23	1.31	13.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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		
Ethylene	1		4.04	3.97	4.07	0.131		1.2
	2		1.78	1.73	1.83	0.132		
Ethane	1		4.31	4.24	4.34	0.140		2.1
	2		1.51	1.45	1.55	0.143		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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		
Ethylene	1		4.03	3.97	4.07	0.143		0.3
	2		1.78	1.73	1.83	0.143		
Ethane	1		4.30	4.24	4.34	0.156		1.0
	2		1.51	1.45	1.55	0.157		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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		
Ethylene	1		4.05	4.01	4.11	0.137		1.0
	2		1.80	1.76	1.86	0.136		
Ethane	1		4.32	4.28	4.38	0.149		0.1
	2		1.52	1.48	1.58	0.149		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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		
Ethylene	1		4.04	4.01	4.11	0.139		1.3
	2		1.80	1.76	1.86	0.138		
Ethane	1		4.31	4.28	4.38	0.152		0.3
	2		1.52	1.48	1.58	0.151		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A Lab Sample ID: 280-137609-1

Matrix: Water Lab File ID: 040F0401.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:50

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 21:53

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\040F0401.D				
Lims ID:	280-137609-I-1				
Client ID:	PZ007-20A				
Sample Type:	Client				
Inject. Date:	16-Jun-2020 21:53:08	ALS Bottle#:	40	Worklist Smp#:	37
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-137609-I-1				
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: 17-Jun-2020 14:10:14

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		1.246			ND	
2		3.159				
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				

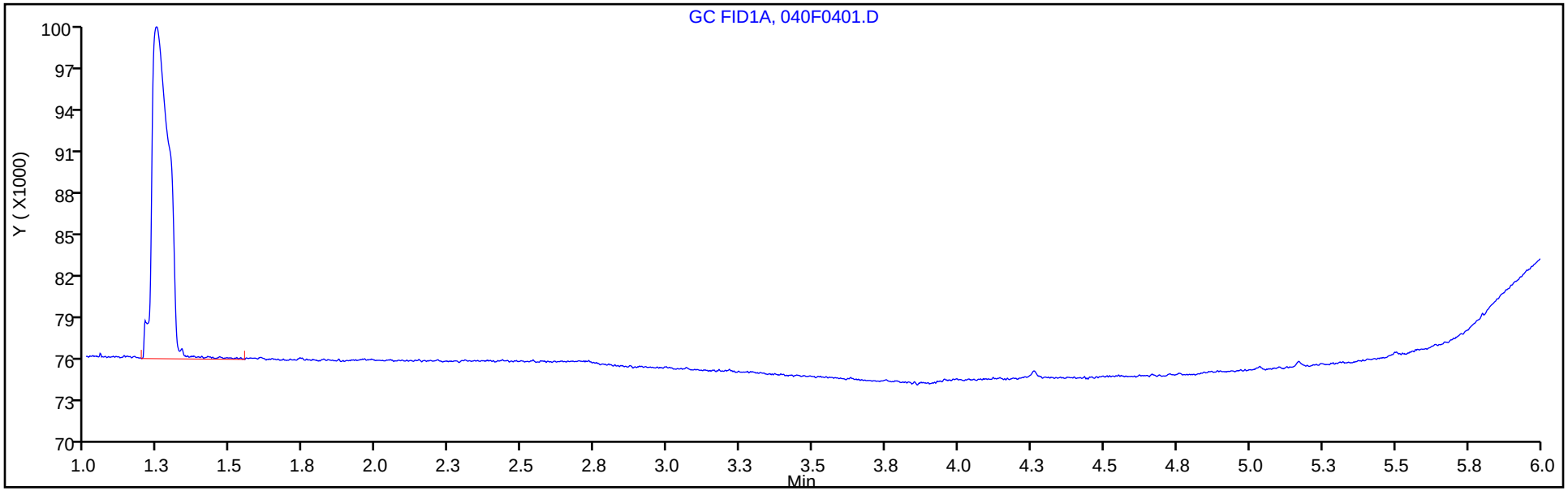
Report Date: 18-Jun-2020 10:24:54 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

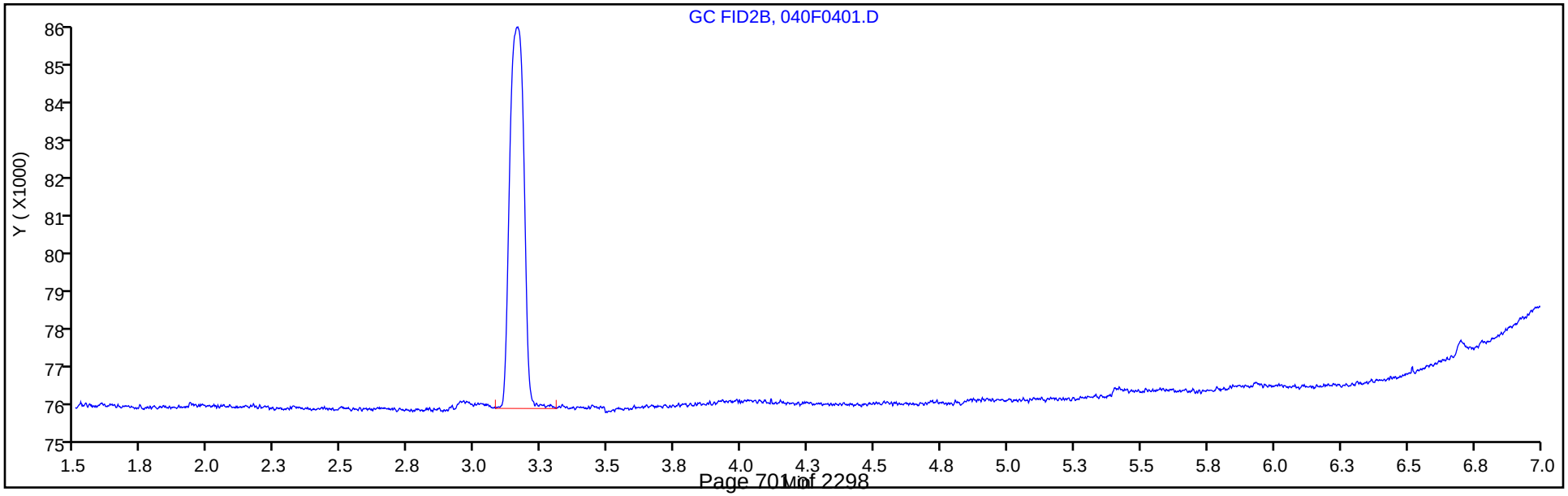
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\040F0401.D

Injection Date:	16-Jun-2020 21:53:08	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-I-1	Lab Sample ID:	280-137609-1	Worklist Smp#:	37
Client ID:	PZ007-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ012-20A Lab Sample ID: 280-137609-2

Matrix: Water Lab File ID: 023F2301.D

Analysis Method: RSK-175 Date Collected: 06/10/2020 15:45

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 14:52

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	12	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\023F2301.D
Lims ID: 280-137609-H-2
Client ID: PZ012-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 14:52:46 ALS Bottle#: 23 Worklist Smp#: 22
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-137609-H-2
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 12:30:39

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	576196793	4008.5	a
2	3.155	3.212	-0.057	269990381	3944.2	a
					RPD = 1.62	
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

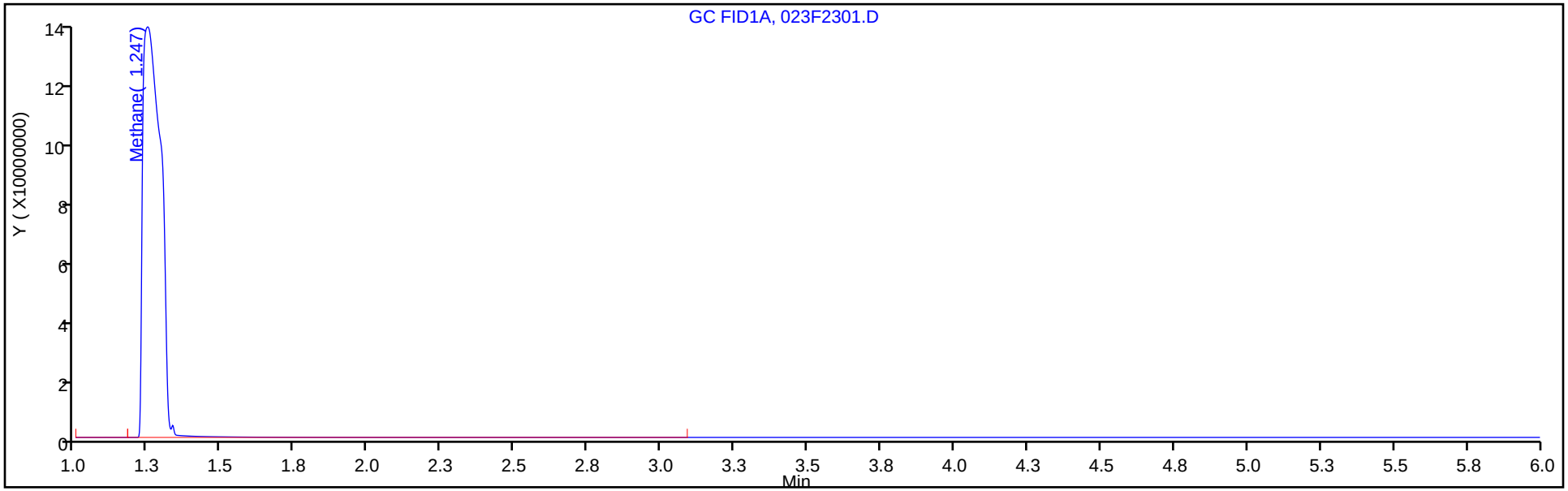
Report Date: 19-Jun-2020 12:43:17 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

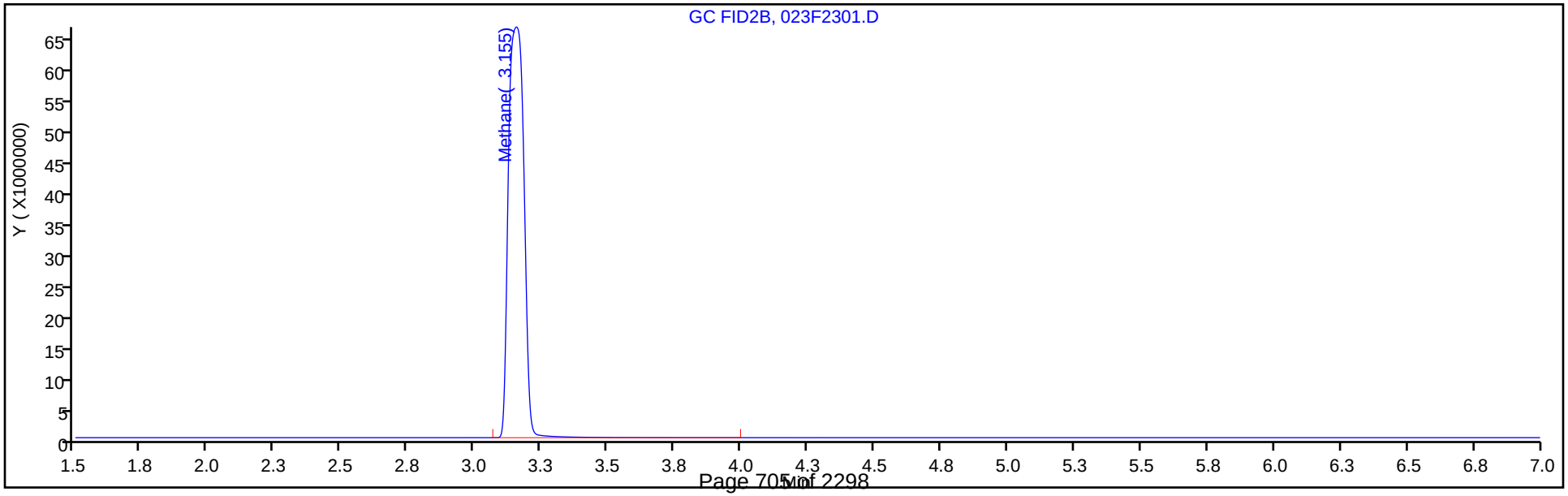
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\023F2301.D

Injection Date:	18-Jun-2020 14:52:46	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-2	Lab Sample ID:	280-137609-2	Worklist Smp#:	22
Client ID:	PZ012-20A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

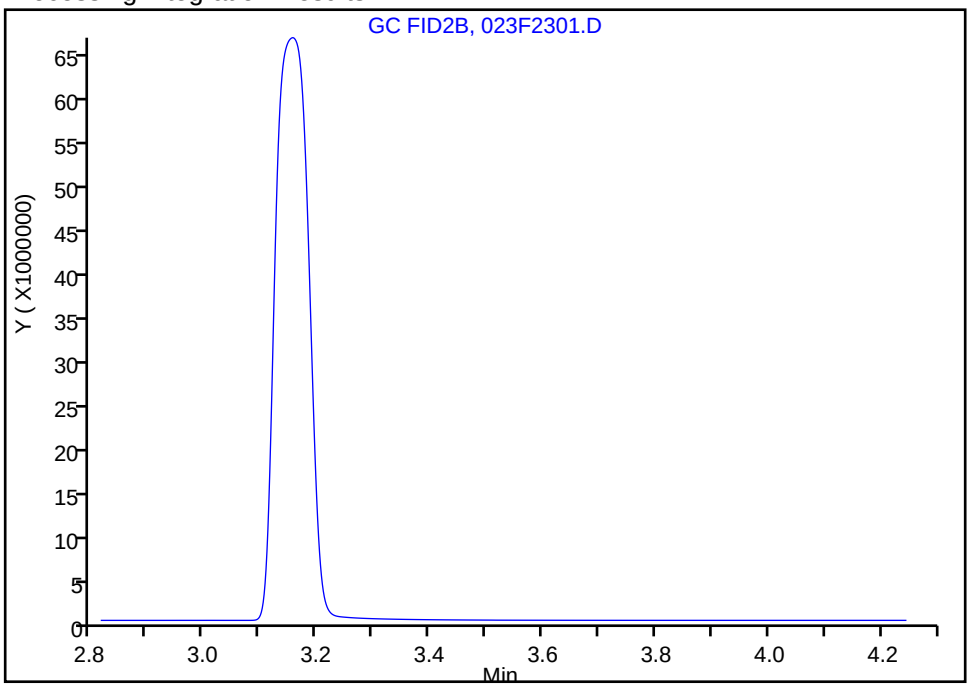
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\023F2301.D				
Injection Date:	18-Jun-2020 14:52:46	Instrument ID:	VGC_J		
Lims ID:	280-137609-H-2	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	gm	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	18.000 mL	Dil. Factor:	3.0000		
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

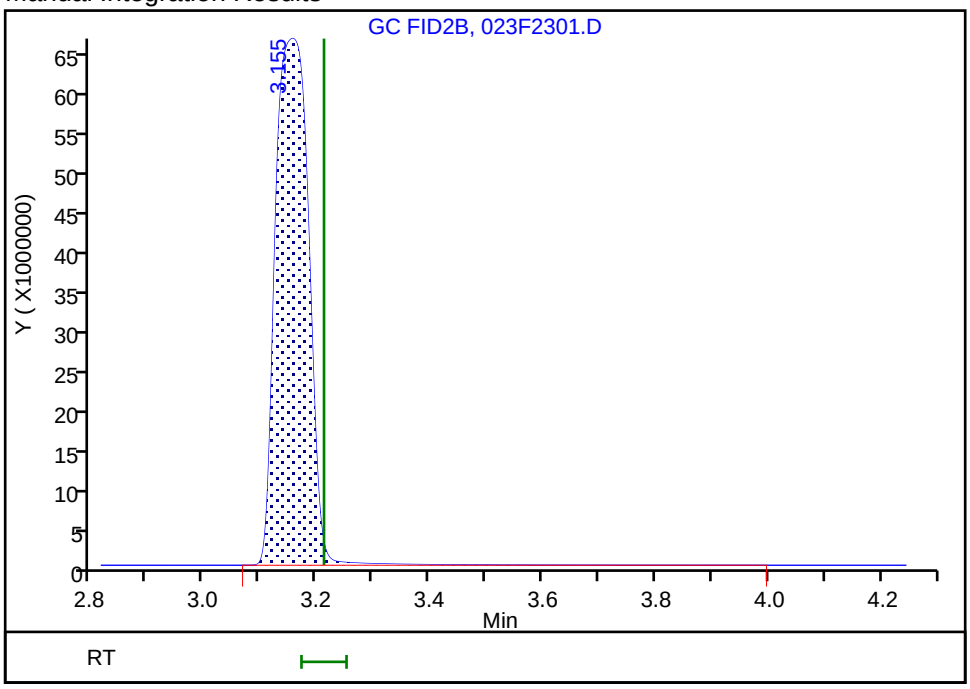
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 269990381
Amount: 3944.1999
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:30:34
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.: 280-137609-1

SDG No.:

Client Sample ID: G0105-20A Lab Sample ID: 280-137609-3

Matrix: Water Lab File ID: 045F0901.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 13:35

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 23:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	2.4		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\045F0901.D
Lims ID: 280-137609-I-3
Client ID: G0105-20A
Sample Type: Client
Inject. Date: 16-Jun-2020 23:14:58 ALS Bottle#: 45 Worklist Smp#: 42
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-I-3
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 10:13:38

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	1.242	1.246	-0.004	365572549	2543.1	
2	3.154	3.159	-0.005	163522953	2388.8	
					RPD = 6.26	
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				

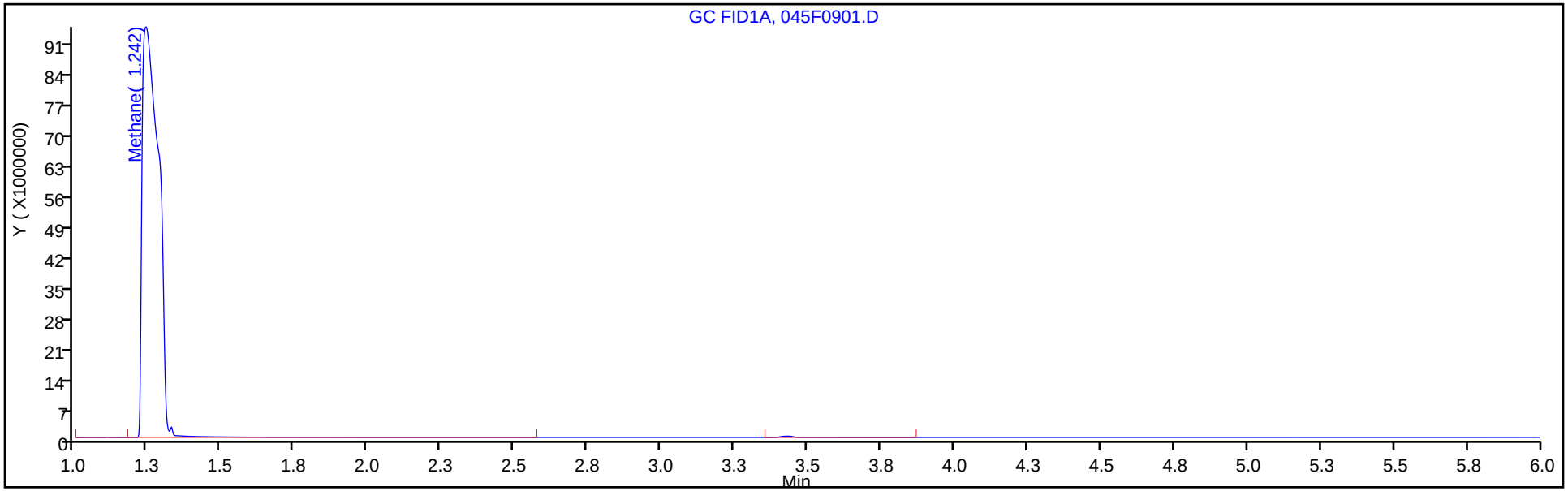
Report Date: 18-Jun-2020 10:24:56 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

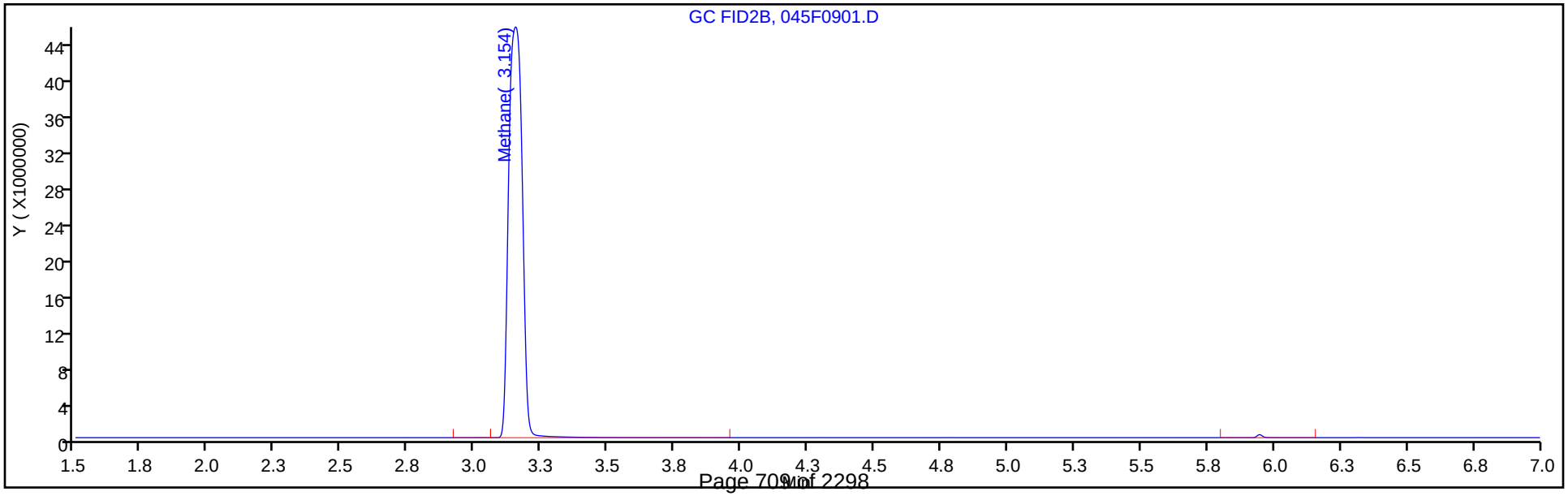
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\045F0901.D

Injection Date:	16-Jun-2020 23:14:58	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-I-3	Lab Sample ID:	280-137609-3	Worklist Smp#:	42
Client ID:	G0105-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-137609-1

SDG No.:

Client Sample ID: G0080-20A Lab Sample ID: 280-137609-4

Matrix: Water Lab File ID: 046F1001.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 13:45

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 23:31

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	0.0088		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\046F1001.D
Lims ID: 280-137609-G-4
Client ID: G0080-20A
Sample Type: Client
Inject. Date: 16-Jun-2020 23:31:19 ALS Bottle#: 46 Worklist Smp#: 43
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-4
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 10:13:46

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	1384228	9.29	
2	3.162	3.159	0.003	619881	8.80	
					RPD = 5.39	
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				

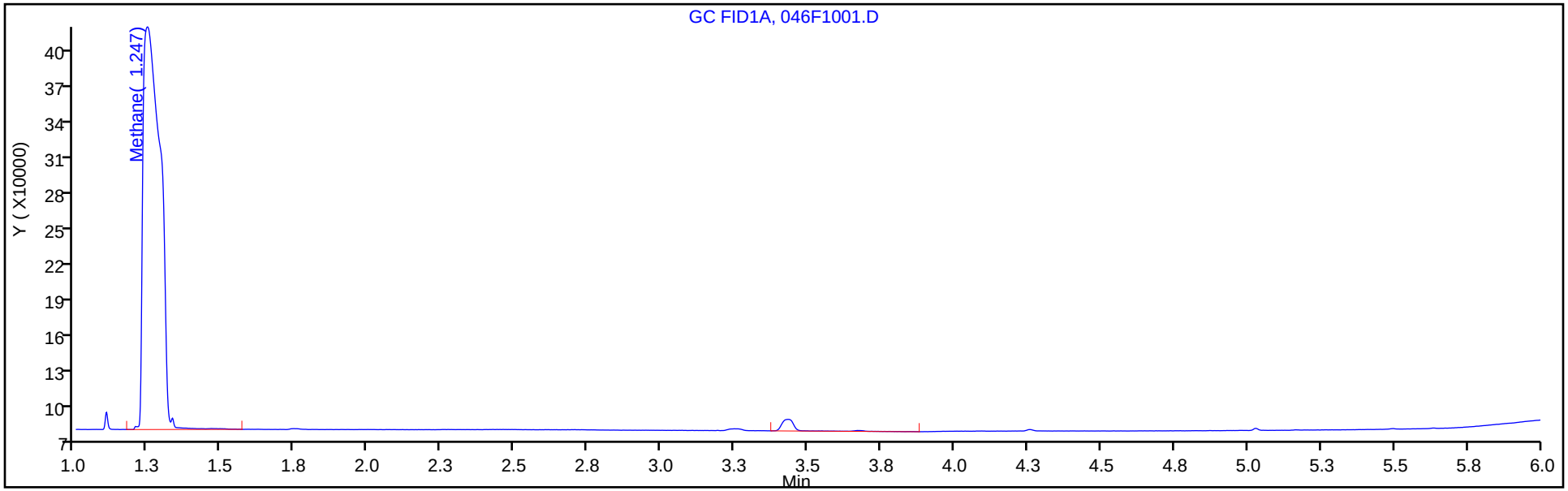
Report Date: 18-Jun-2020 10:24:57 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

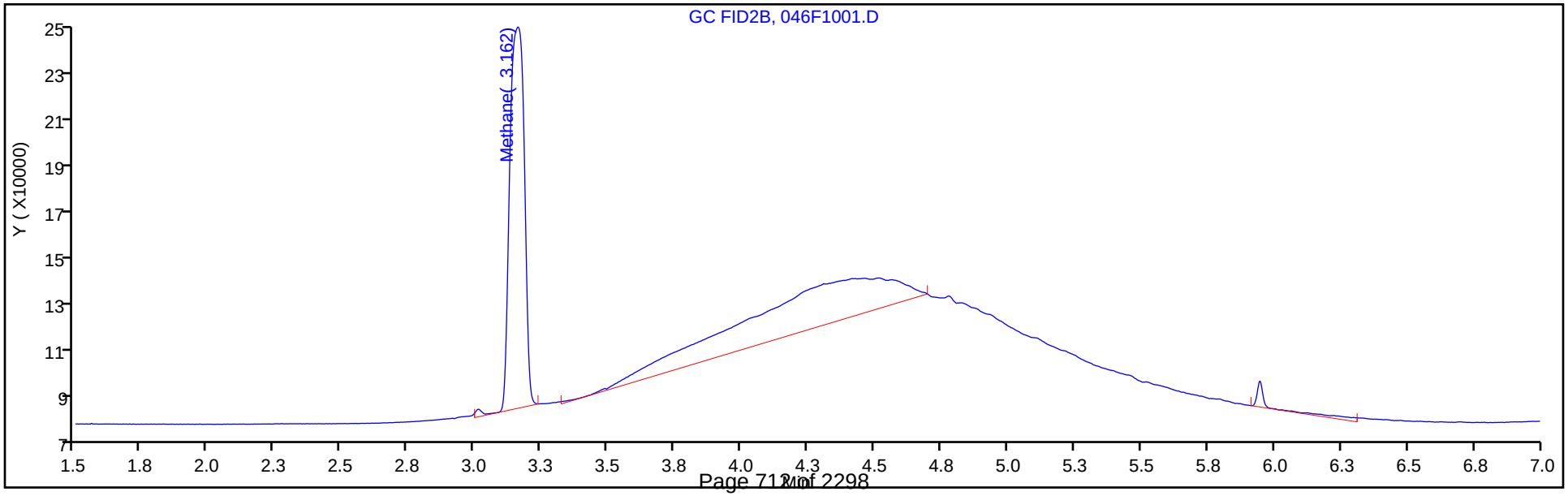
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\046F1001.D

Injection Date:	16-Jun-2020 23:31:19	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-4	Lab Sample ID:	280-137609-4	Worklist Smp#:	43
Client ID:	G0080-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-137609-1

SDG No.:

Client Sample ID: PZ005-20A Lab Sample ID: 280-137609-5

Matrix: Water Lab File ID: 047F1101.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 12:00

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 23:47

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	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\047F1101.D
Lims ID: 280-137609-H-5
Client ID: PZ005-20A
Sample Type: Client
Inject. Date: 16-Jun-2020 23:47:40 ALS Bottle#: 47 Worklist Smp#: 44
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-H-5
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 10:14:03

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		1.246			ND	
2		3.159				
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				

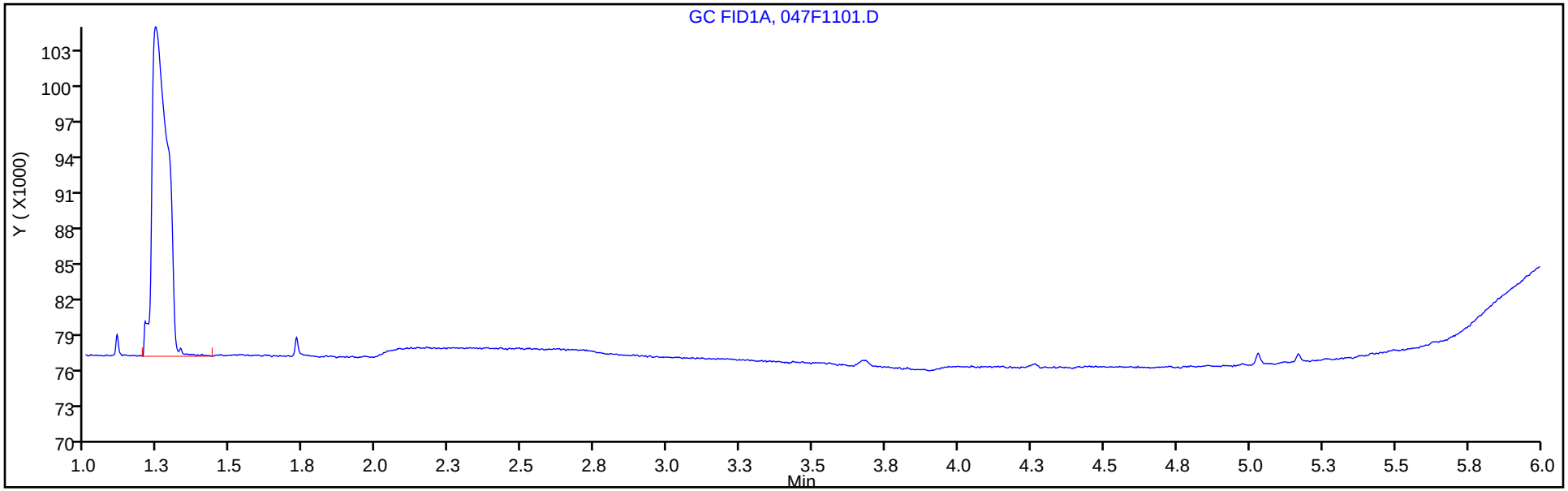
Report Date: 18-Jun-2020 10:24:57 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

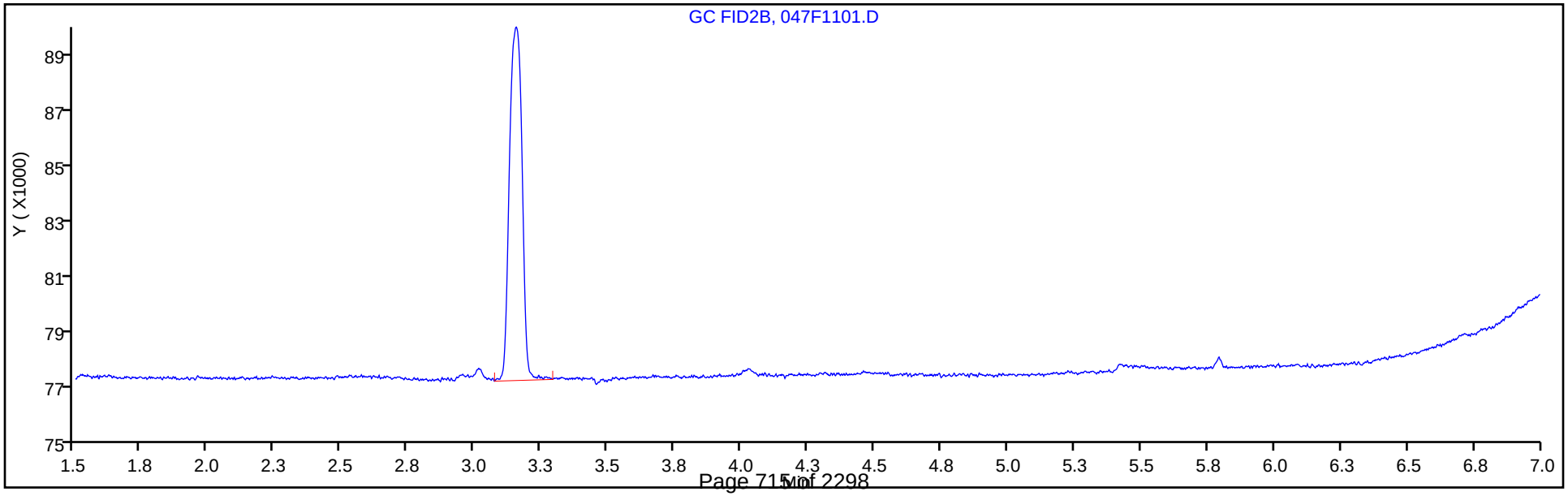
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\047F1101.D

Injection Date:	16-Jun-2020 23:47:40	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-H-5	Lab Sample ID:	280-137609-5	Worklist Smp#:	44
Client ID:	PZ005-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-137609-1

SDG No.:

Client Sample ID: NW052-20A Lab Sample ID: 280-137609-6

Matrix: Water Lab File ID: 048F1201.D

Analysis Method: RSK-175 Date Collected: 06/10/2020 15:50

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 00:04

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	0.45		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\048F1201.D
Lims ID: 280-137609-G-6
Client ID: NW052-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 00:04:02 ALS Bottle#: 48 Worklist Smp#: 45
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-6
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 10:14:08

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	1.246	1.246	0.000	68568883	476.7	
2	3.161	3.159	0.002	30799172	449.7	
					RPD = 5.83	
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				

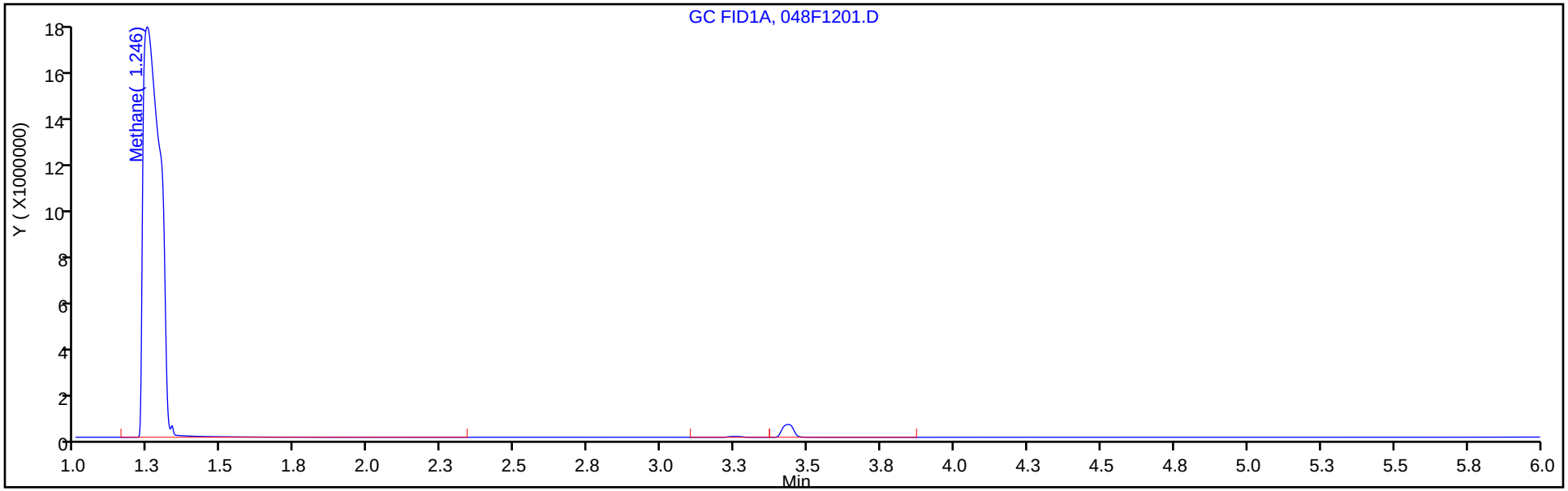
Report Date: 18-Jun-2020 10:24:57 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

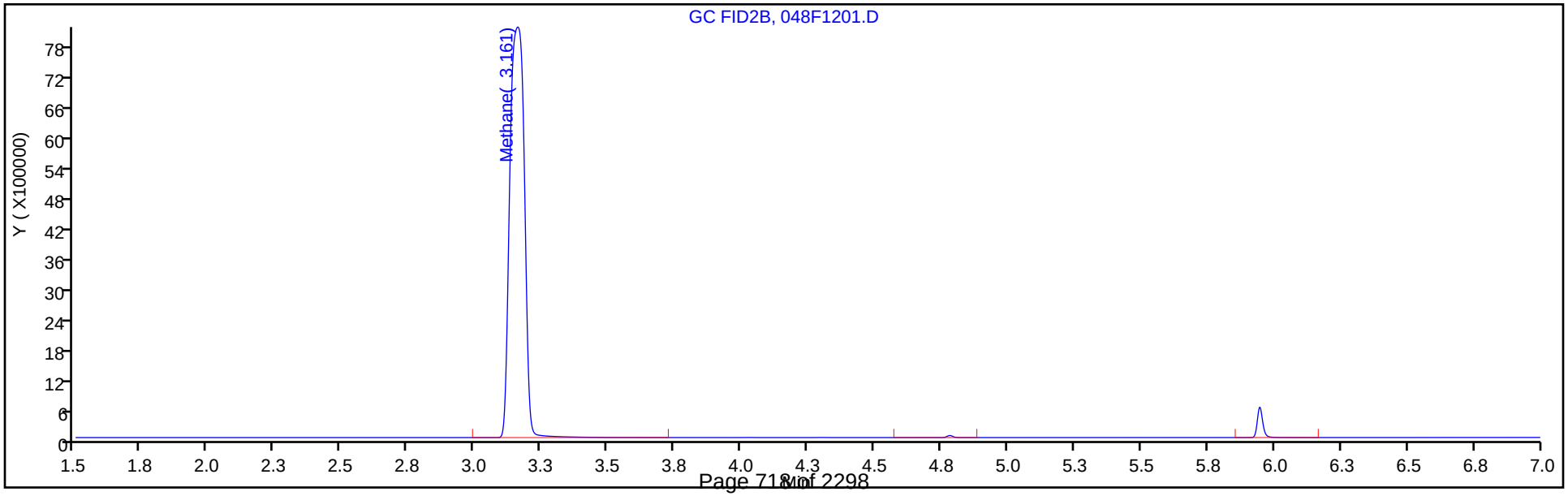
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\048F1201.D

Injection Date:	17-Jun-2020 00:04:02	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-6	Lab Sample ID:	280-137609-6	Worklist Smp#:	45
Client ID:	NW052-20A				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0045-20A Lab Sample ID: 280-137609-7

Matrix: Water Lab File ID: 049F1301.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 12:10

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 00:20

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	0.0028	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\049F1301.D
Lims ID: 280-137609-H-7
Client ID: G0045-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 00:20:26 ALS Bottle#: 49 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-H-7
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 10:14:13

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	1.244	1.246	-0.002	477923	2.99	
2	3.159	3.159	0.000	211351	2.83	
					RPD = 5.18	
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				

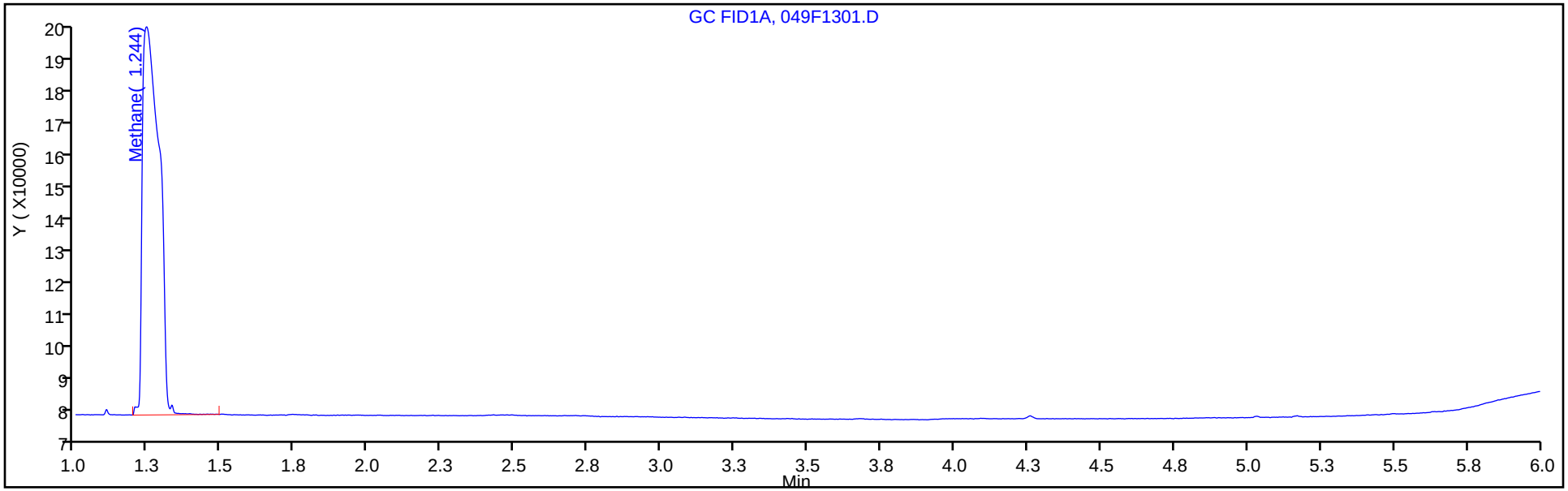
Report Date: 18-Jun-2020 10:24:58 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

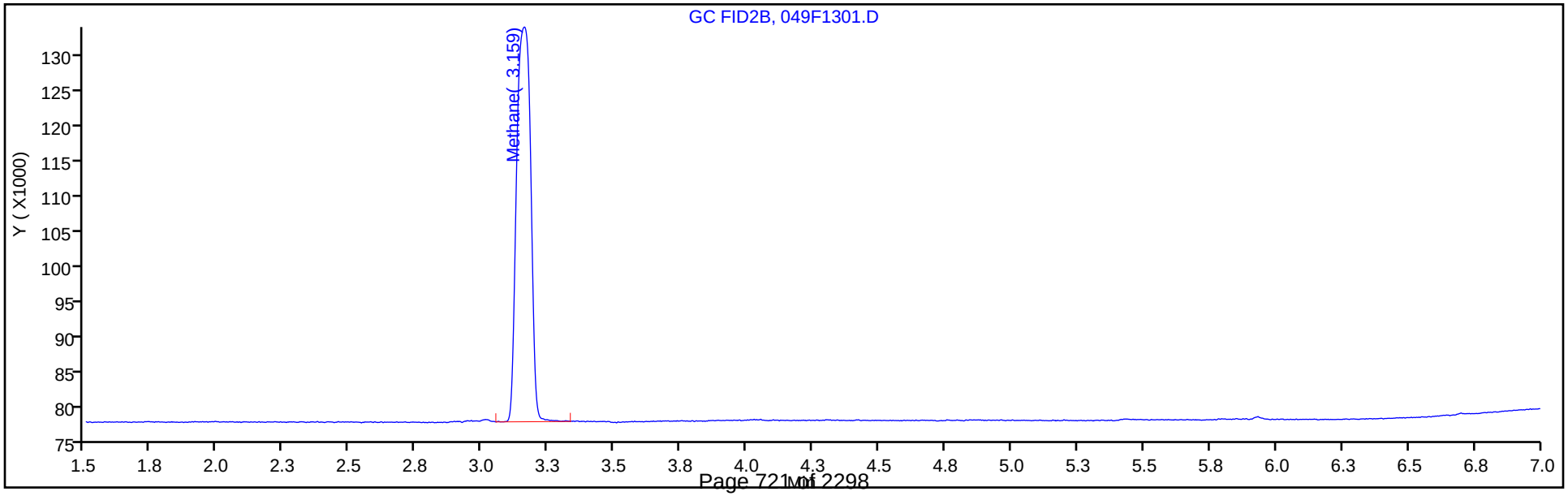
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\049F1301.D

Injection Date:	17-Jun-2020 00:20:26	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-H-7	Lab Sample ID:	280-137609-7	Worklist Smp#:	46
Client ID:	G0045-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-137609-1

SDG No.:

Client Sample ID: G0017-20A Lab Sample ID: 280-137609-8

Matrix: Water Lab File ID: 024F2401.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 11:00

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 15:09

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	8.5	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\024F2401.D
Lims ID: 280-137609-G-8
Client ID: G0017-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 15:09:07 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-137609-G-8
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 12:30:51

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	411246533	2860.8	a
2	3.156	3.212	-0.056	193592635	2828.1	a
					RPD = 1.15	
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

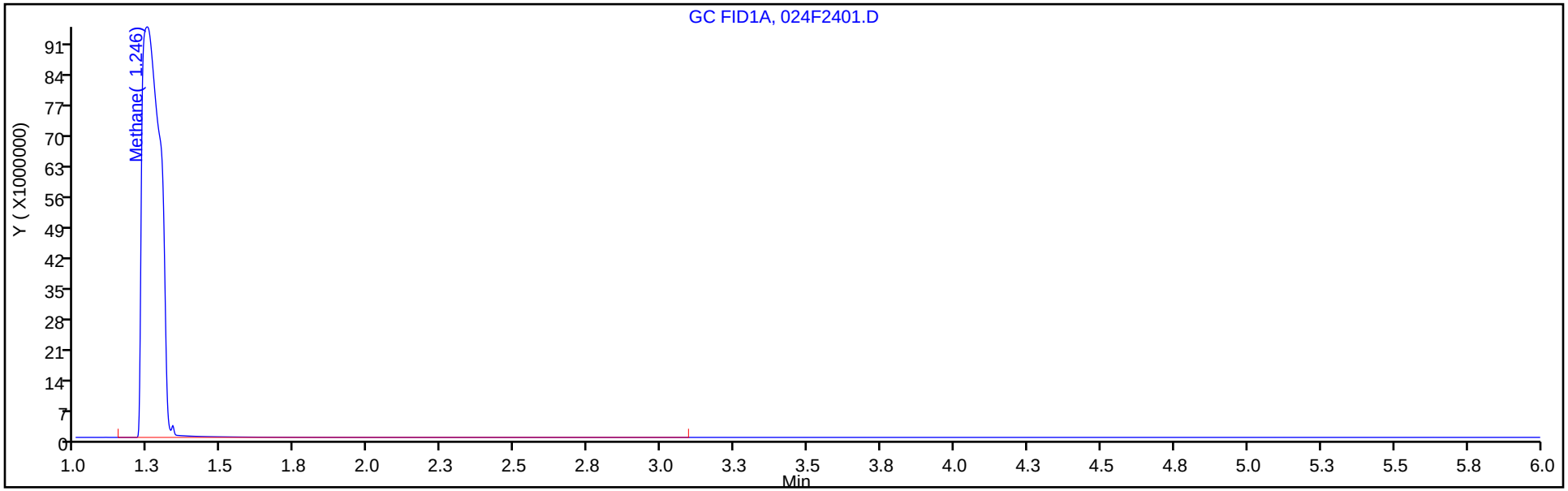
Report Date: 19-Jun-2020 12:43:18 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

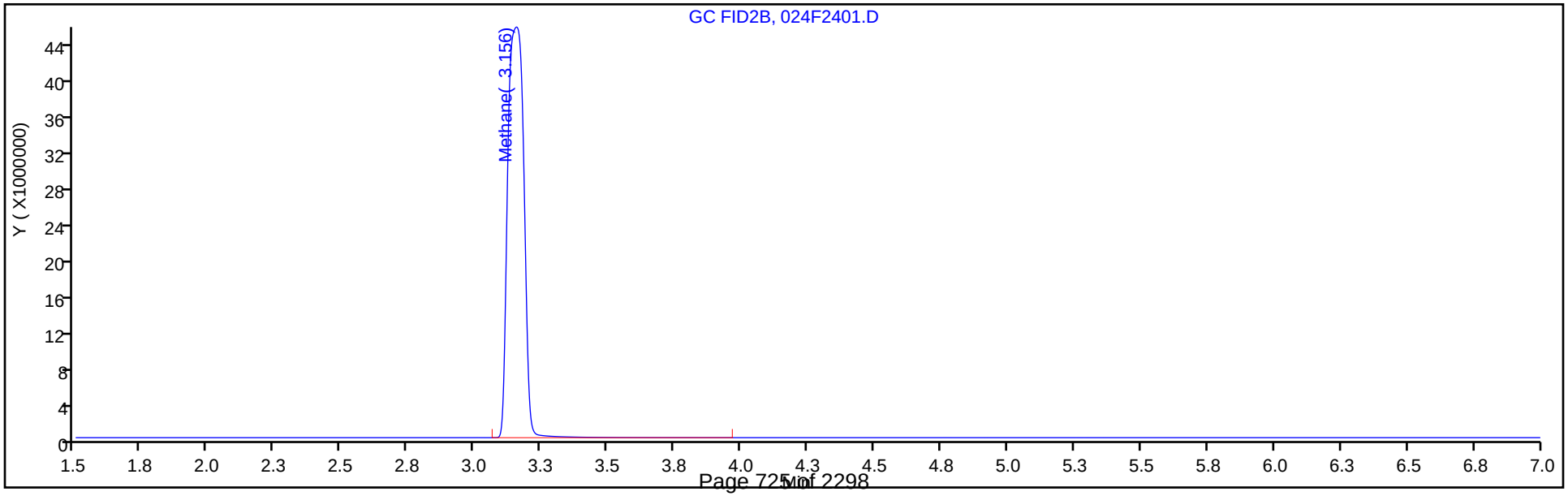
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\024F2401.D

Injection Date:	18-Jun-2020 15:09:07	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-G-8	Lab Sample ID:	280-137609-8	Worklist Smp#:	23
Client ID:	G0017-20A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	24
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

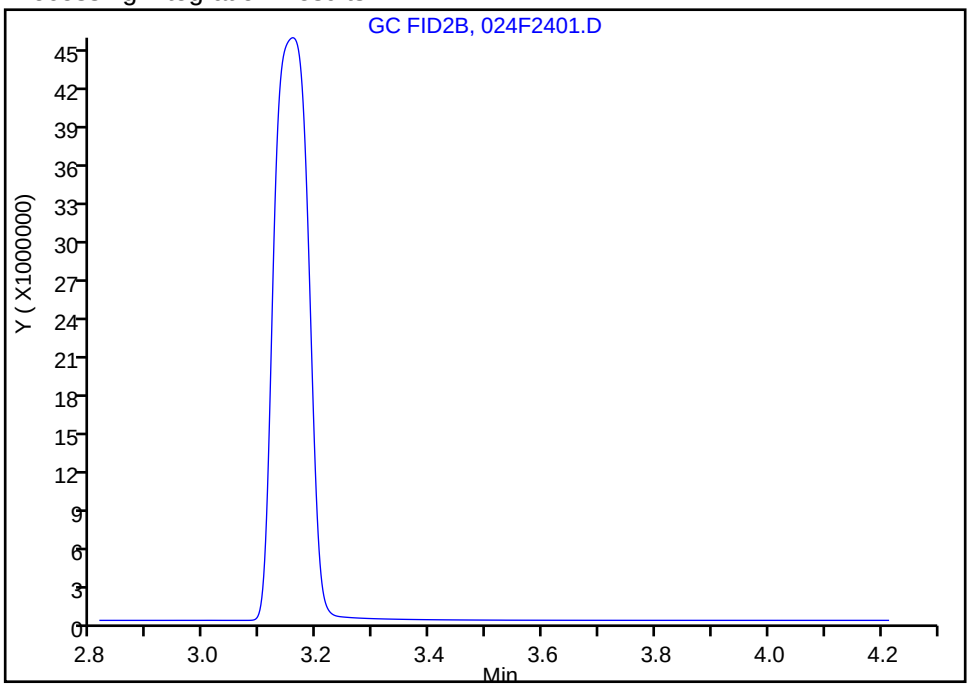
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\024F2401.D				
Injection Date:	18-Jun-2020 15:09:07	Instrument ID:	VGC_J		
Lims ID:	280-137609-G-8	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	gm	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	18.000 mL	Dil. Factor:	3.0000		
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

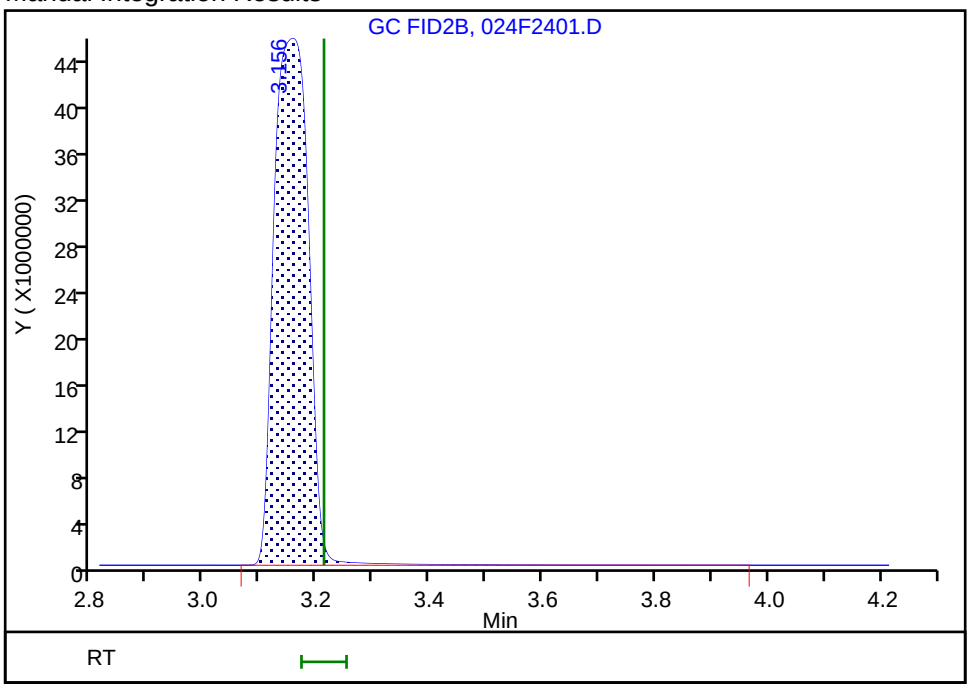
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 193592635
Amount: 2828.0590
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:30:45
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.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A Lab Sample ID: 280-137609-9

Matrix: Water Lab File ID: 035F3501.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 15:15

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 18:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0018	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\035F3501.D
Lims ID: 280-137609-R-9
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 18:08:45 ALS Bottle#: 35 Worklist Smp#: 34
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-R-9
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 12:33:53

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	326620	1.93	a
2	3.161	3.212	-0.051	142628	1.83	a
					RPD = 5.42	
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

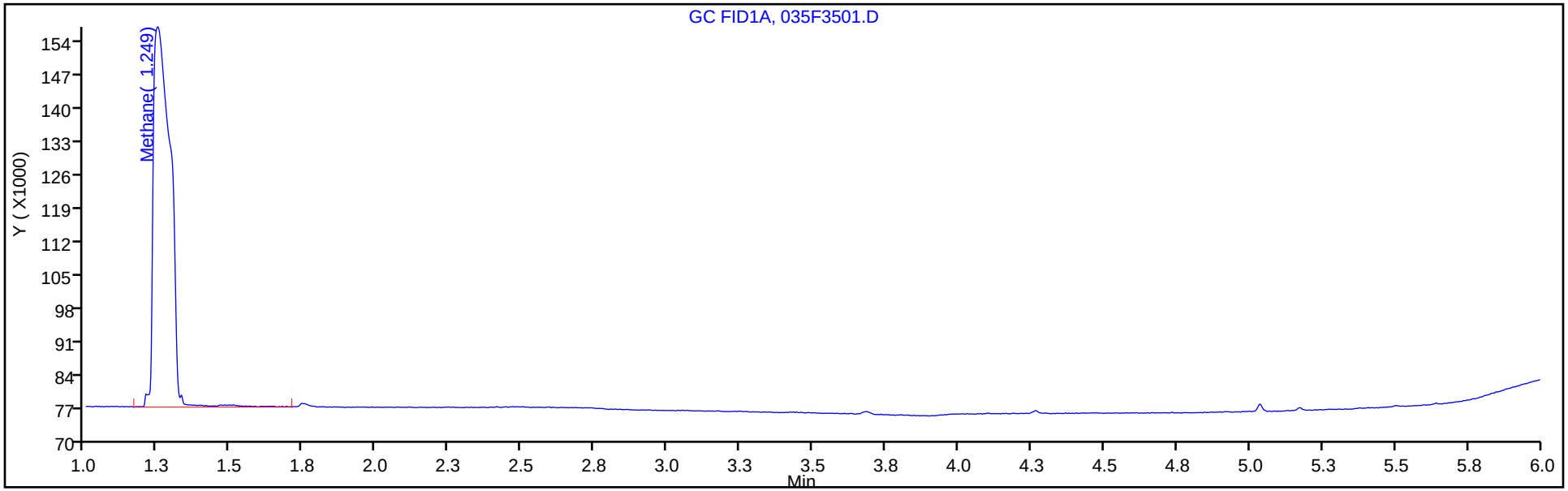
Report Date: 19-Jun-2020 12:43:23 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

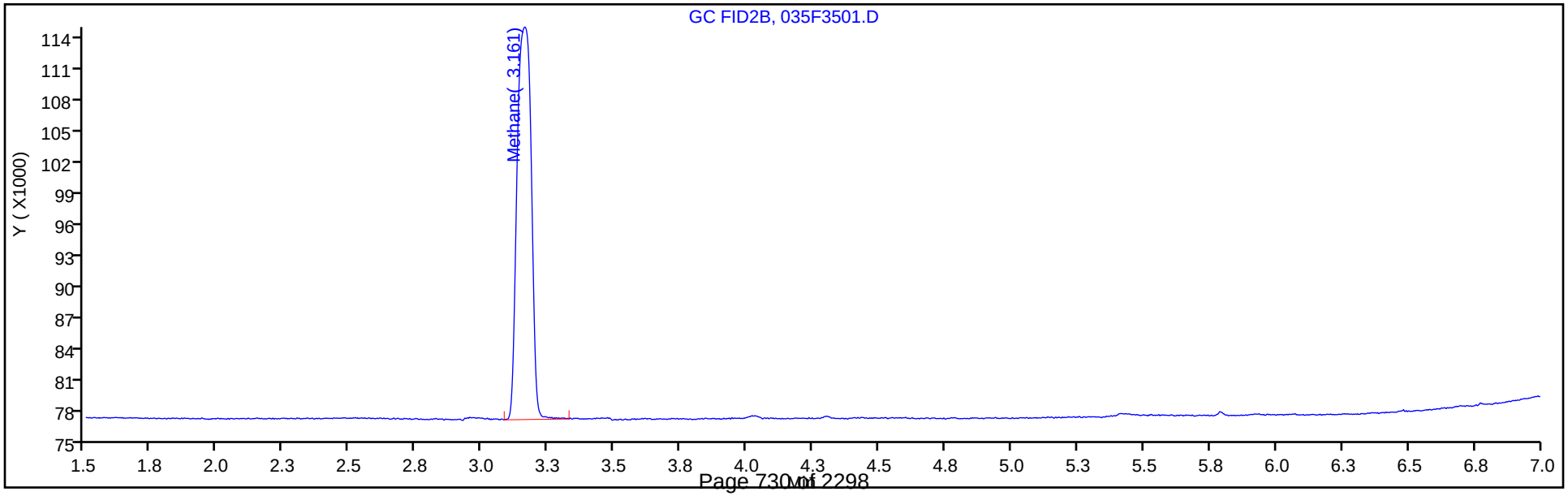
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\035F3501.D

Injection Date:	18-Jun-2020 18:08:45	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-R-9	Lab Sample ID:	280-137609-9	Worklist Smp#:	34
Client ID:	G0102-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

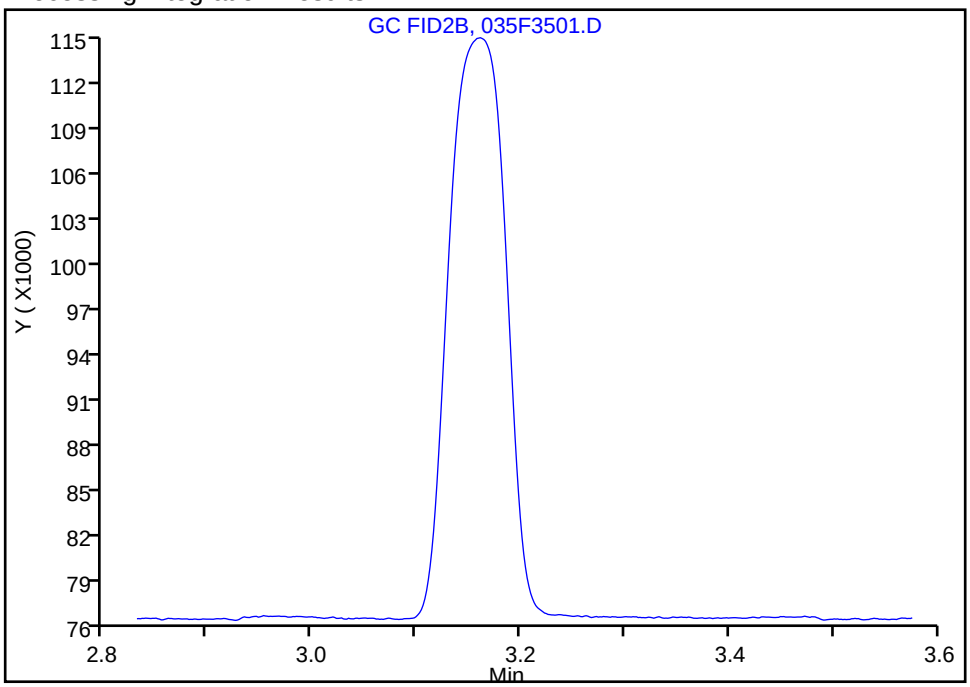
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\035F3501.D				
Injection Date:	18-Jun-2020 18:08:45	Instrument ID:	VGC_J		
Lims ID:	280-137609-R-9	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	gm	ALS Bottle#:	35	Worklist Smp#:	34
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
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

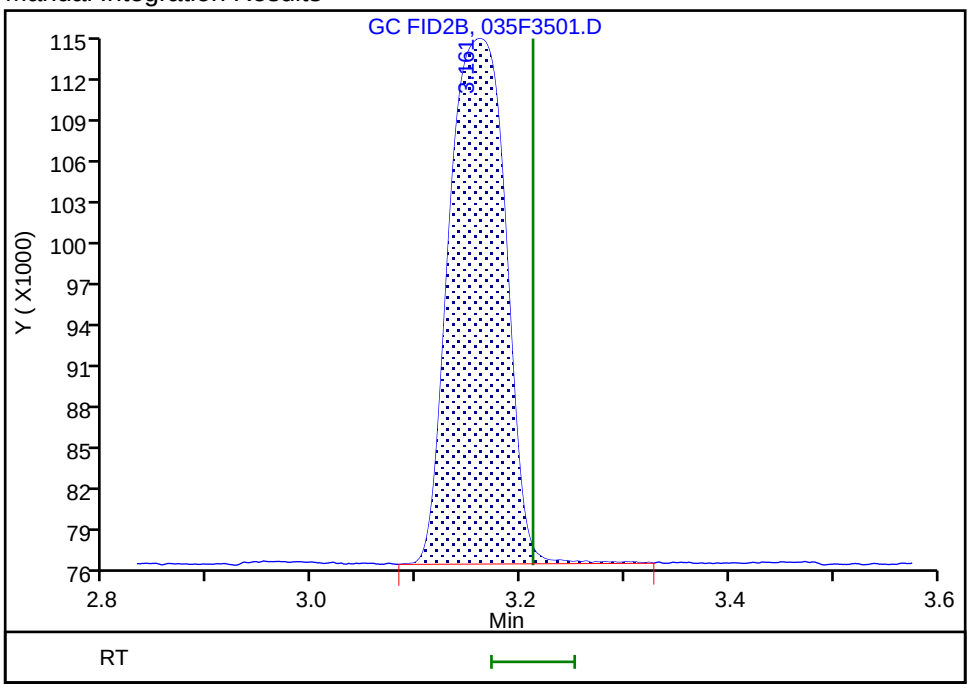
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 142628
Amount: 1.830913
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:33:47
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.: 280-137609-1

SDG No.:

Client Sample ID: SHGW03-20A Lab Sample ID: 280-137609-10

Matrix: Water Lab File ID: 001F1501.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 10:15

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 00:53

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
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.16		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\001F1501.D
Lims ID: 280-137609-H-10
Client ID: SHGW03-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 00:53:14 ALS Bottle#: 1 Worklist Smp#: 48
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-H-10
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 10:14:27

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	1.244	1.246	-0.002	23859466	165.7	
2	3.157	3.159	-0.002	10789033	157.4	
					RPD = 5.13	
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				

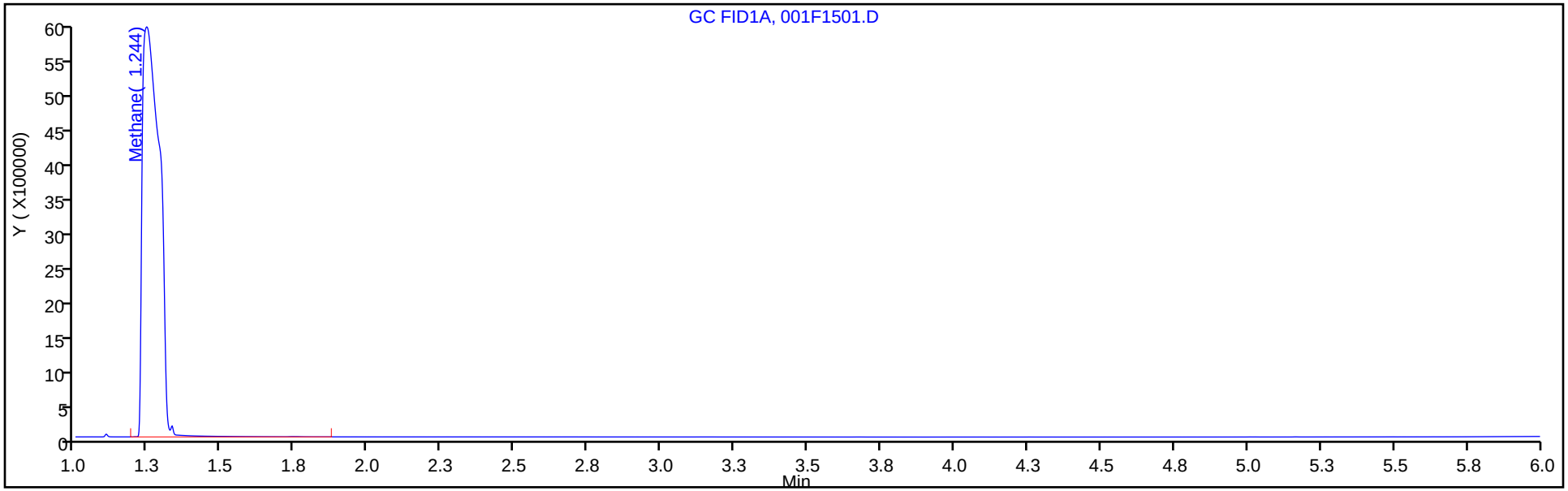
Report Date: 18-Jun-2020 10:24:59 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

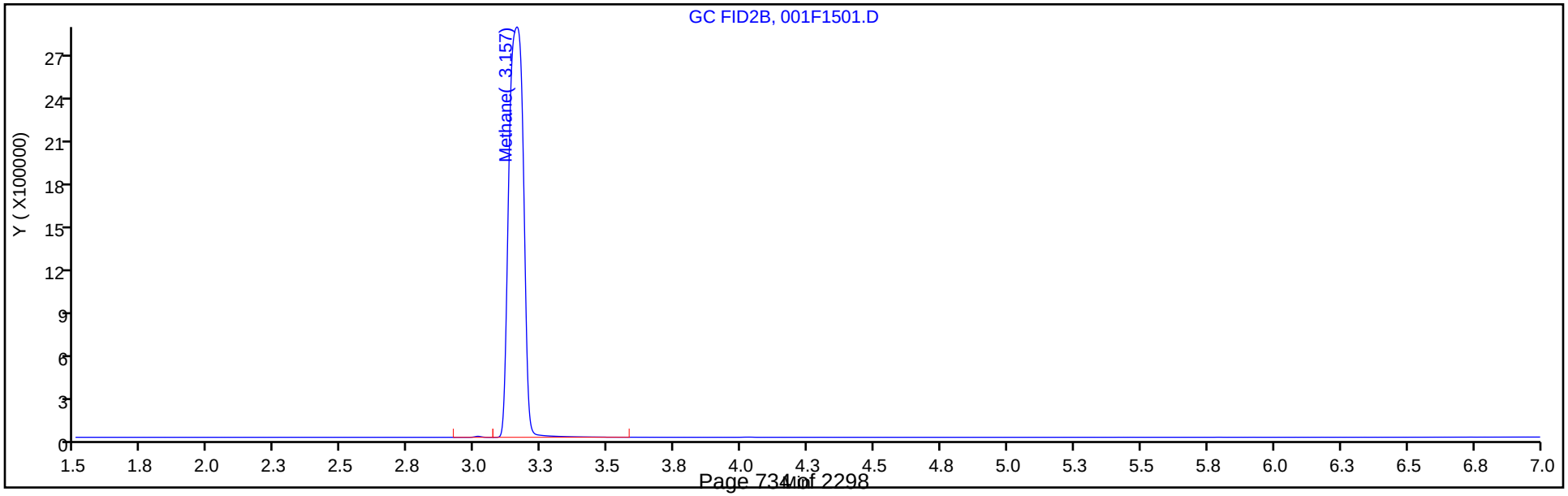
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\001F1501.D

Injection Date:	17-Jun-2020 00:53:14	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-H-10	Lab Sample ID:	280-137609-10	Worklist Smp#:	48
Client ID:	SHGW03-20A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW02-20A Lab Sample ID: 280-137609-11

Matrix: Water Lab File ID: 002F1601.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:55

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 01:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-85-1	Ethylene	0.0010	J M	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\002F1601.D
Lims ID: 280-137609-F-11
Client ID: SHGW02-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 01:09:37 ALS Bottle#: 2 Worklist Smp#: 49
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-F-11
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 10:17:38

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						Ma
1	1.239	1.246	-0.007	2091545967	14551	EM
2	3.136	3.159	-0.023	979942569	14316	E
					RPD = 1.63	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						Ma
1	1.738	1.779	-0.041	91099	0.8266	M
2	4.025	4.021	0.004	48495	1.01	M
					RPD = 20.14	
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				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

a - User Assigned ID

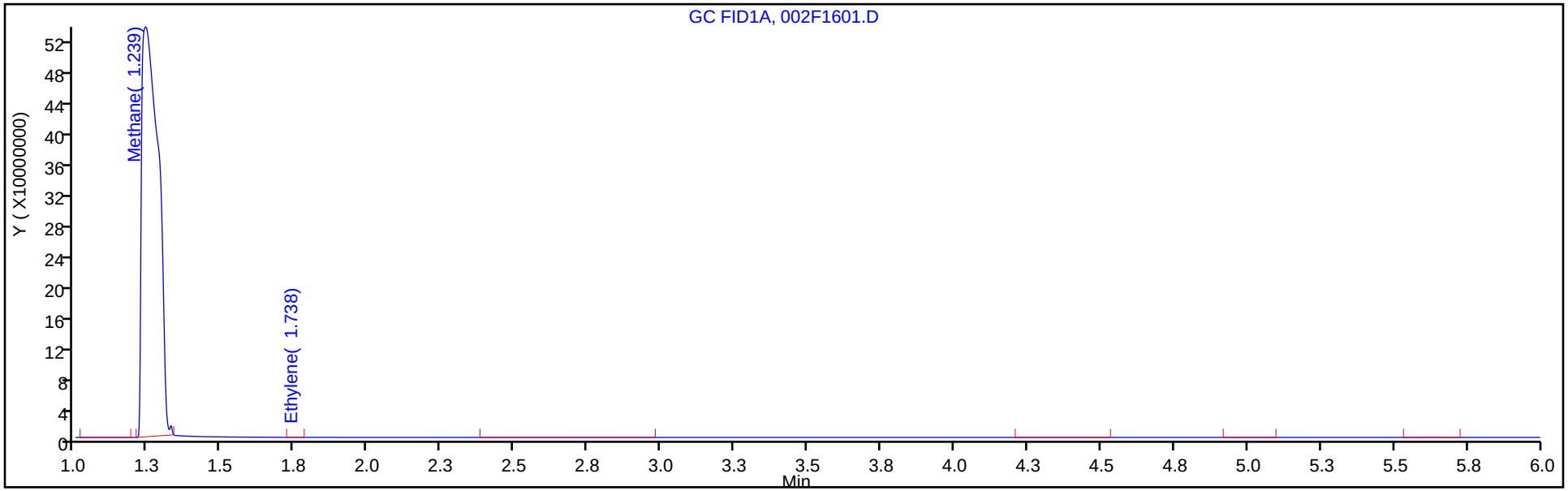
Report Date: 18-Jun-2020 10:24:59 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

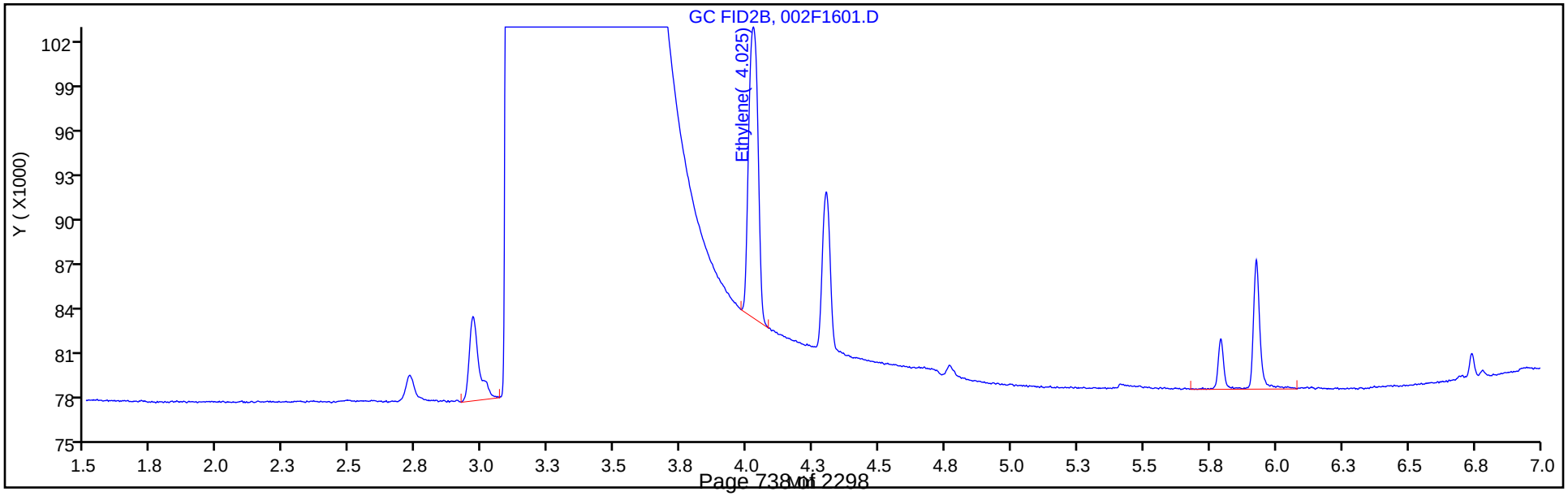
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\002F1601.D

Injection Date:	17-Jun-2020 01:09:37	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-F-11	Lab Sample ID:	280-137609-11	Worklist Smp#:	49
Client ID:	SHGW02-20A				
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

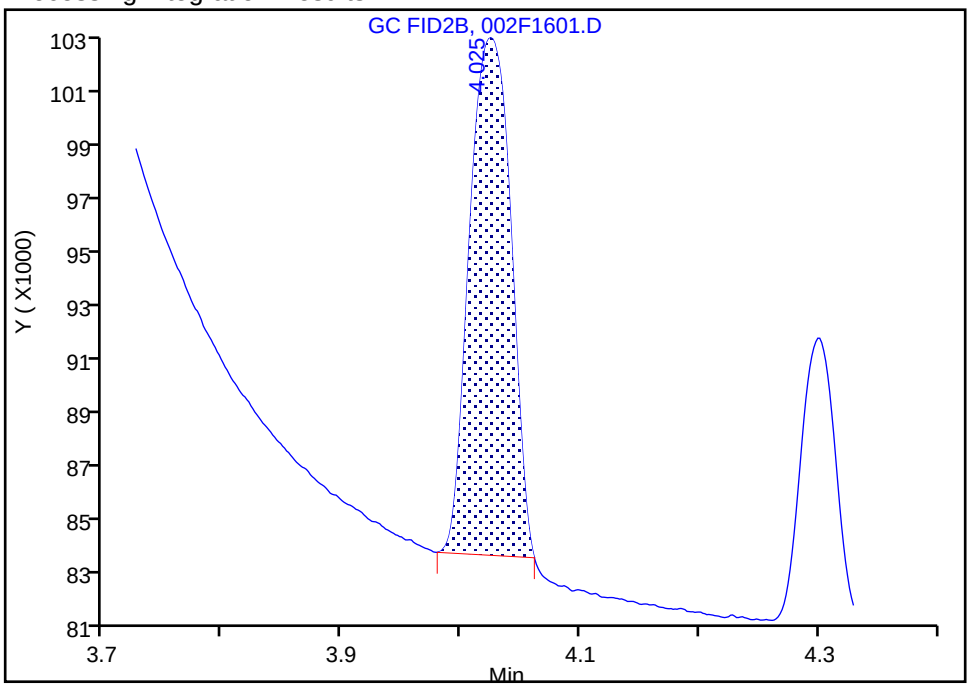
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\002F1601.D				
Injection Date:	17-Jun-2020 01:09:37	Instrument ID:	VGC_J		
Lims ID:	280-137609-F-11	Lab Sample ID:	280-137609-11		
Client ID:	SHGW02-20A				
Operator ID:	SCIANNAC	ALS Bottle#:	2	Worklist Smp#:	49
Purge Vol:	18.000 mL	Dil. Factor:	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

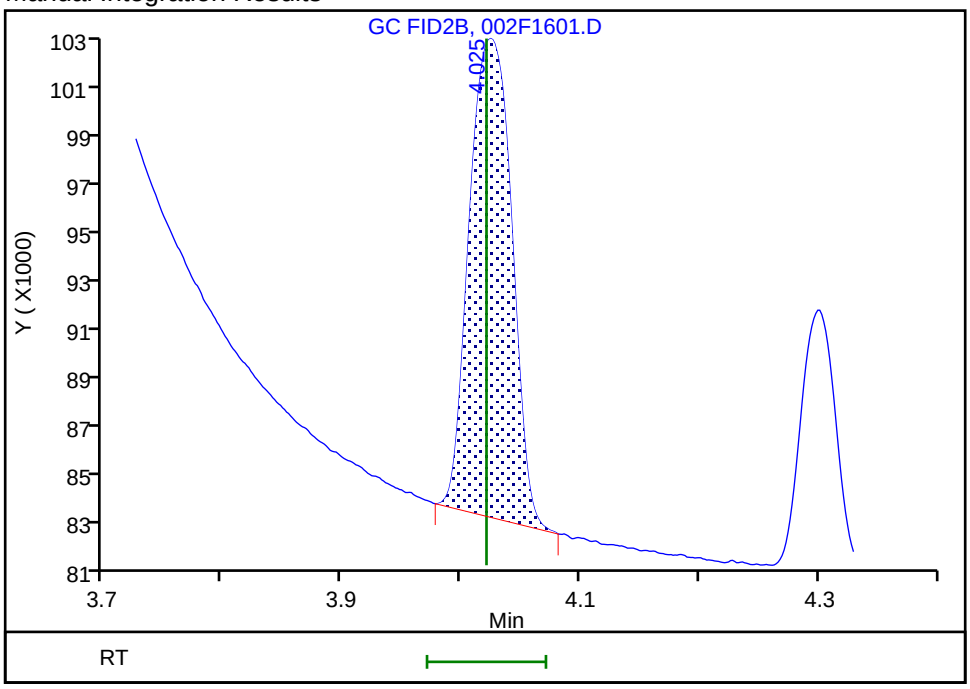
Processing Integration Results

RT: 4.02
Area: 46238
Amount: 0.964624
Amount Units: ug/l



Manual Integration Results

RT: 4.02
Area: 48495
Amount: 1.011710
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:17:09

Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW02-20A Lab Sample ID: 280-137609-11

Matrix: Water Lab File ID: 025F2501.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:55

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 15:25

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	13	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\025F2501.D
Lims ID: 280-137609-H-11
Client ID: SHGW02-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 15:25:28 ALS Bottle#: 25 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-137609-H-11
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 12:31:11

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	1.248	1.266	-0.018	644006234	4480.2	a
2	3.158	3.212	-0.054	304530819	4448.8	a
					RPD = 0.70	
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

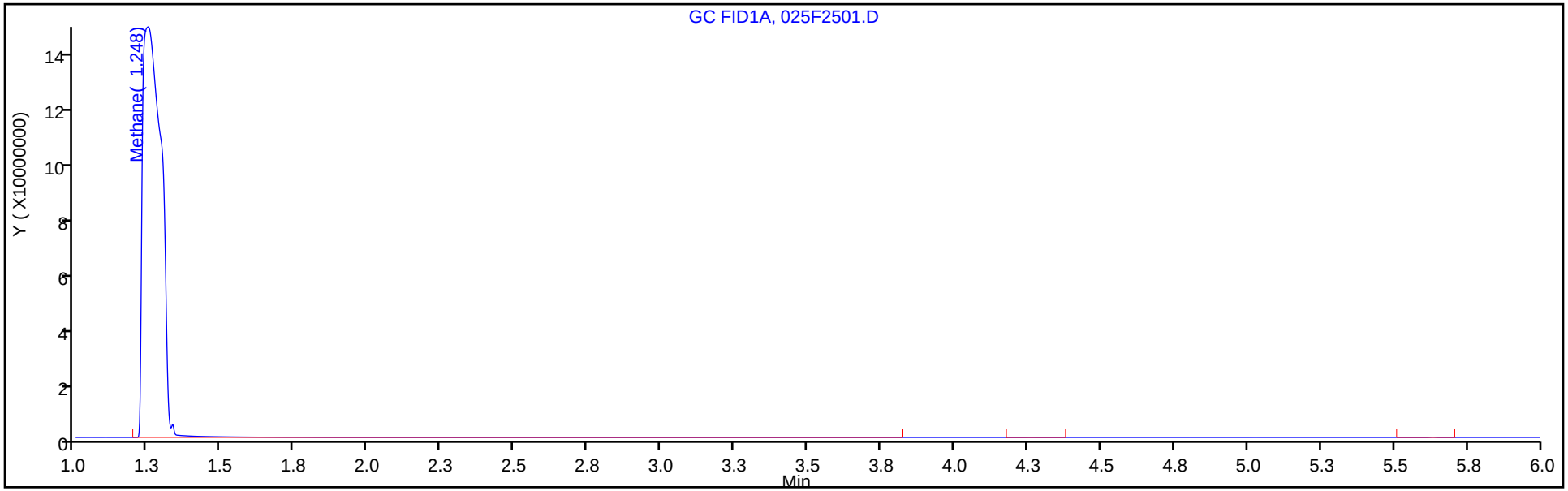
Report Date: 19-Jun-2020 12:43:18 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

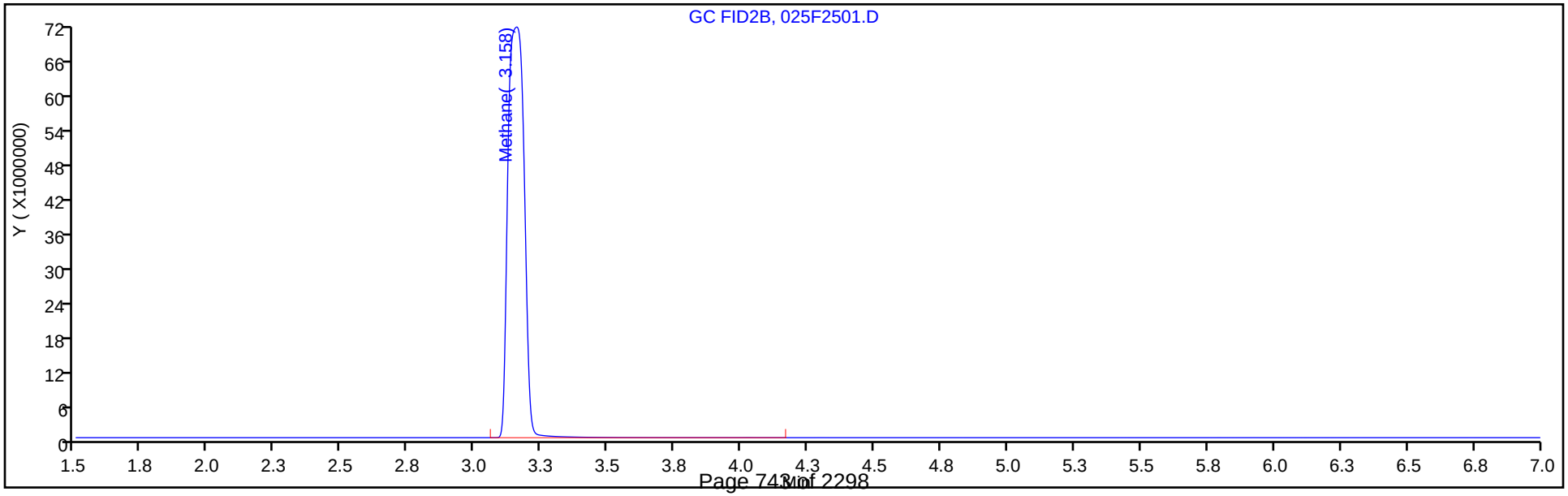
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\025F2501.D

Injection Date:	18-Jun-2020 15:25:28	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-H-11	Lab Sample ID:	280-137609-11	Worklist Smp#:	24
Client ID:	SHGW02-20A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

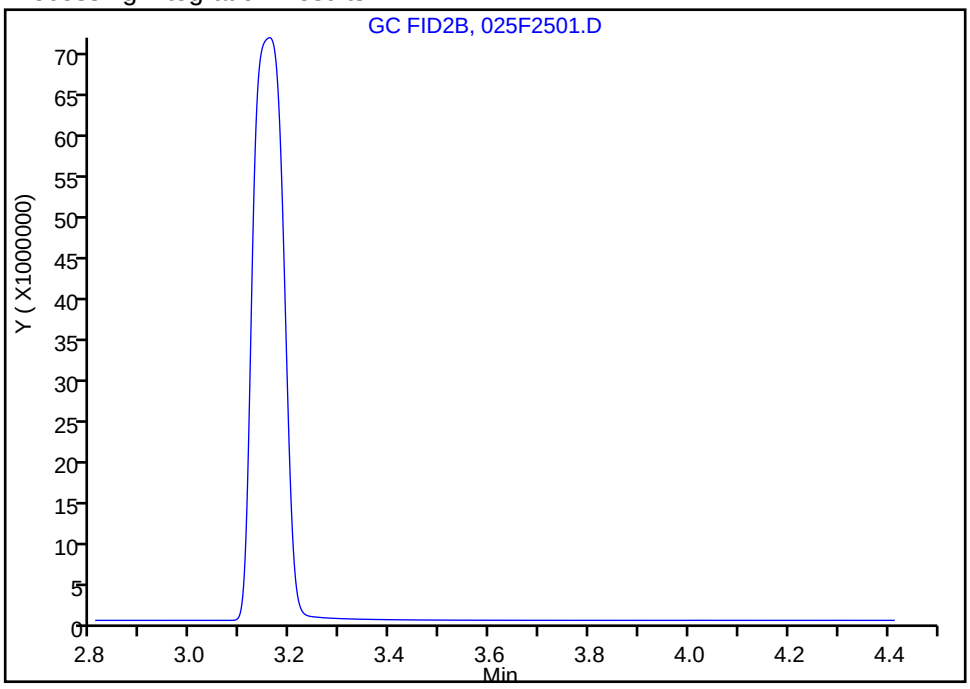
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\025F2501.D				
Injection Date:	18-Jun-2020 15:25:28	Instrument ID:	VGC_J		
Lims ID:	280-137609-H-11	Lab Sample ID:	280-137609-11		
Client ID:	SHGW02-20A				
Operator ID:	gm	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	18.000 mL	Dil. Factor:	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

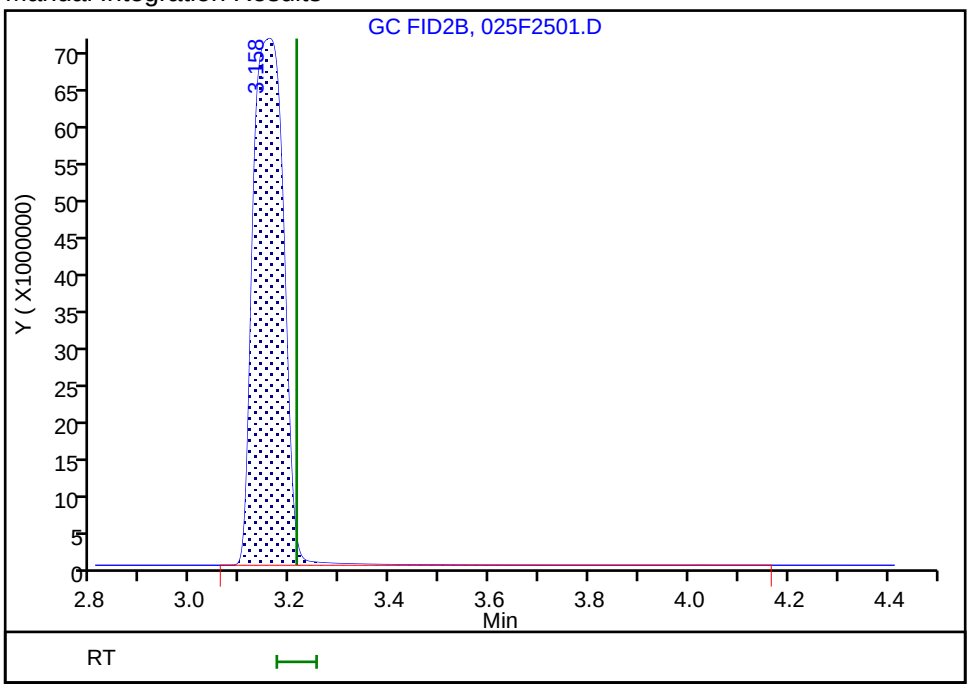
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 304530819
Amount: 4448.8220
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:30:58
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.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A Lab Sample ID: 280-137609-12

Matrix: Water Lab File ID: 004F1801.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 01:42

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.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-85-1	Ethylene	0.0011	J M	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\004F1801.D
Lims ID: 280-137609-G-12
Client ID: SHGW05-20A
Sample Type: Client
Inject. Date: 17-Jun-2020 01:42:18 ALS Bottle#: 4 Worklist Smp#: 51
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-13U609-G-12
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 10:20:45

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						Ma
1	1.237	1.246	-0.009	2317063721	16120	EM
2	3.134	3.159	-0.025	1081025879	15793	E
					RPD = 2.05	
3 Ethane						
1		1.501			ND	
2		4.294				
4 Ethylene						Ma
1	1.735	1.779	-0.044	97060	0.8807	M
2	4.026	4.021	0.005	51910	1.08	M
					RPD = 20.60	
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				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

a - User Assigned ID

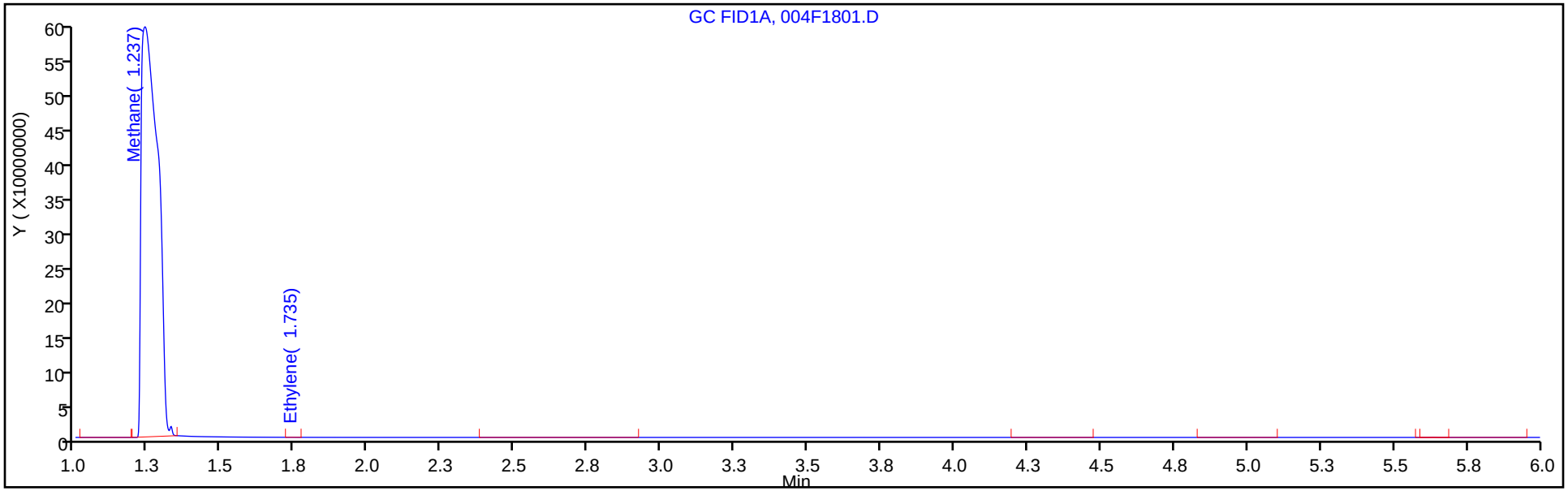
Report Date: 18-Jun-2020 10:25:00 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

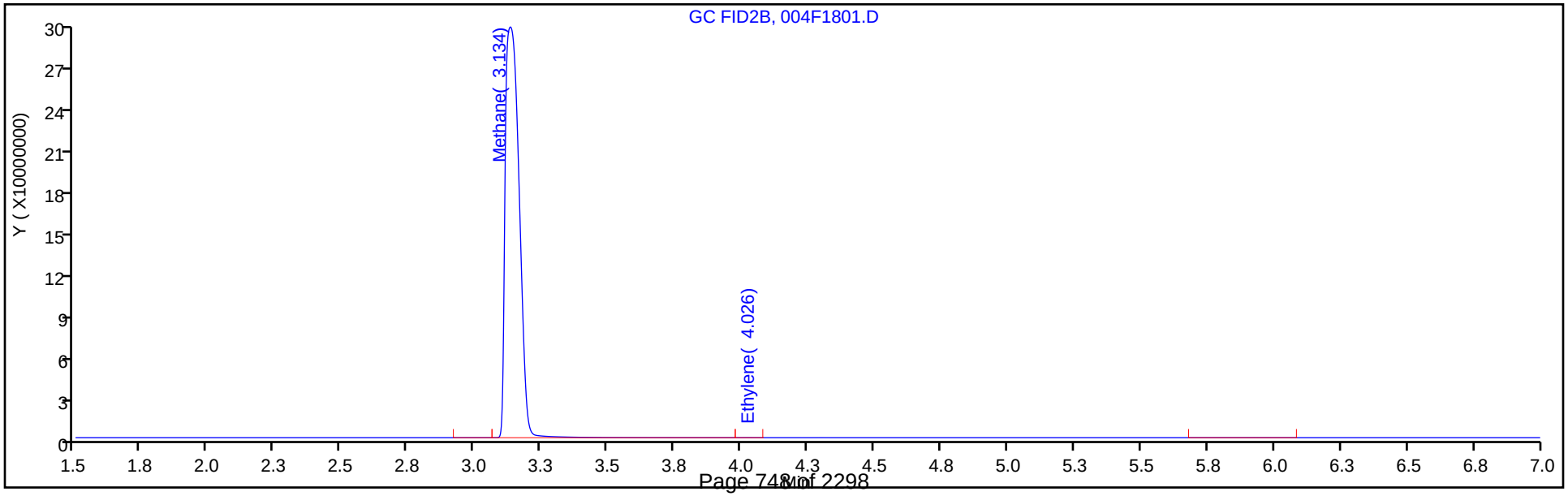
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\004F1801.D

Injection Date:	17-Jun-2020 01:42:18	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-12	Lab Sample ID:	280-137609-12	Worklist Smp#:	51
Client ID:	SHGW05-20A				
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

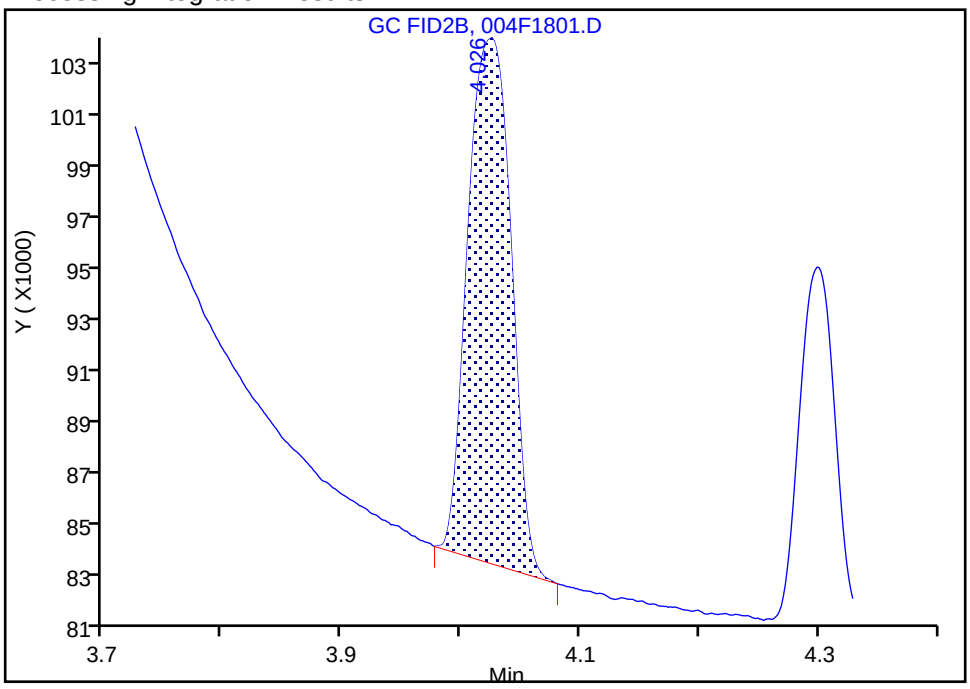
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\004F1801.D				
Injection Date:	17-Jun-2020 01:42:18	Instrument ID:	VGC_J		
Lims ID:	280-137609-G-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	51
Purge Vol:	18.000 mL	Dil. Factor:	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

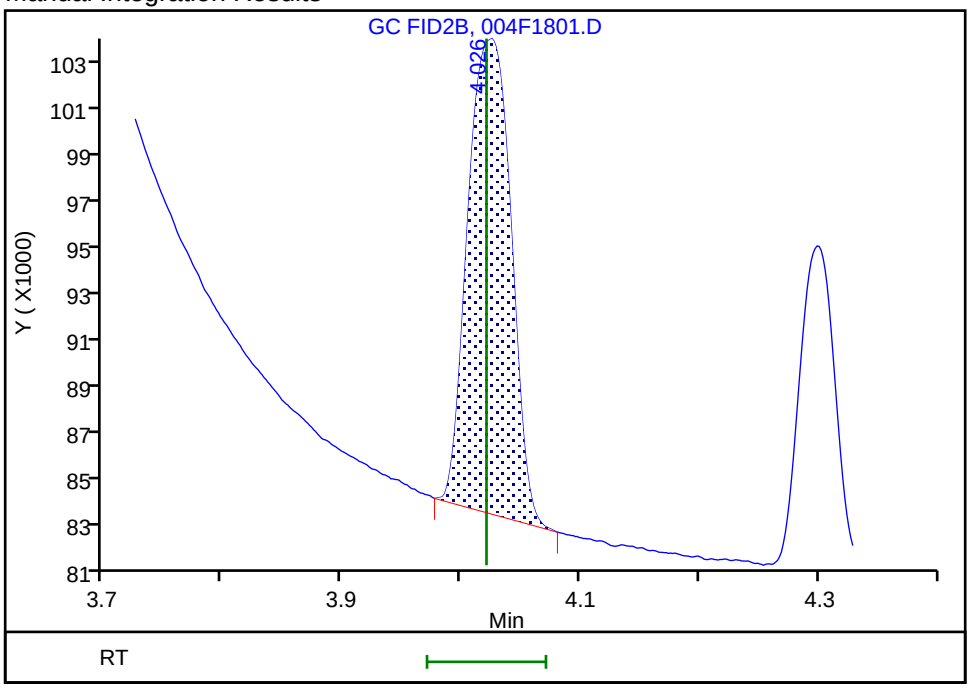
Processing Integration Results

RT: 4.03
Area: 51910
Amount: 1.082954
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 51910
Amount: 1.082954
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:20:16

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A DL Lab Sample ID: 280-137609-12 DL

Matrix: Water Lab File ID: 026F2601.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 15:41

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	14	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\026F2601.D
Lims ID: 280-137609-F-12
Client ID: SHGW05-20A
Sample Type: Client
Inject. Date: 18-Jun-2020 15:41:50 ALS Bottle#: 26 Worklist Smp#: 25
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-137609-F-12
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 12:32:25

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	662246965	4607.1	a
2	3.155	3.212	-0.057	314013331	4587.4	a
					RPD = 0.43	
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

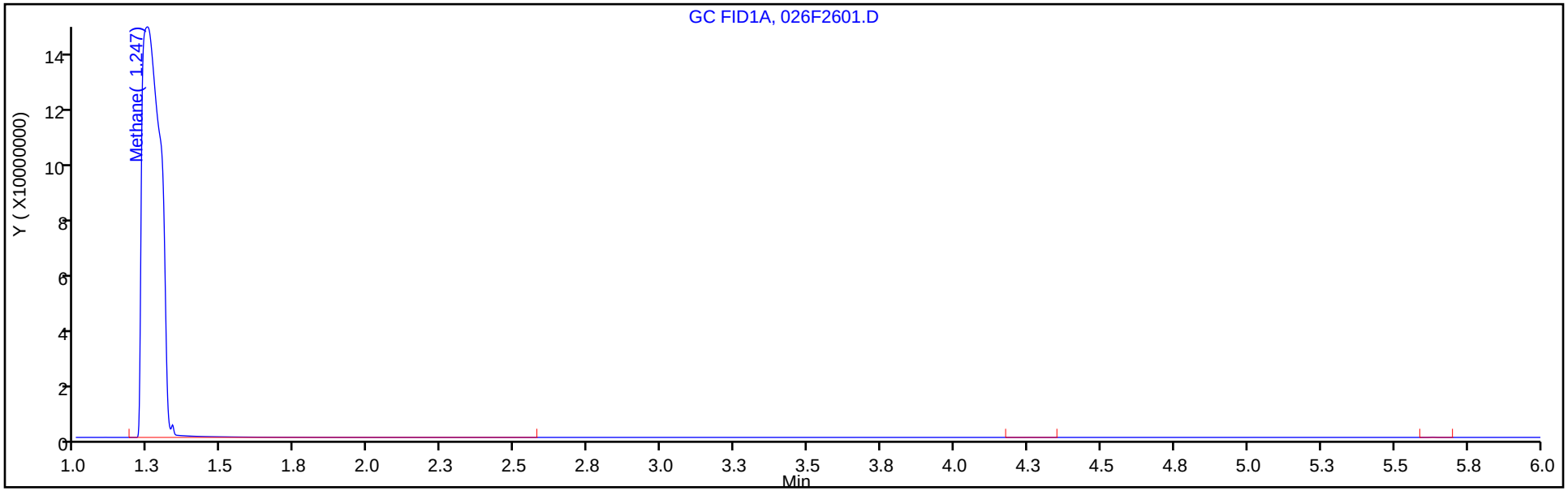
Report Date: 19-Jun-2020 12:43:19 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

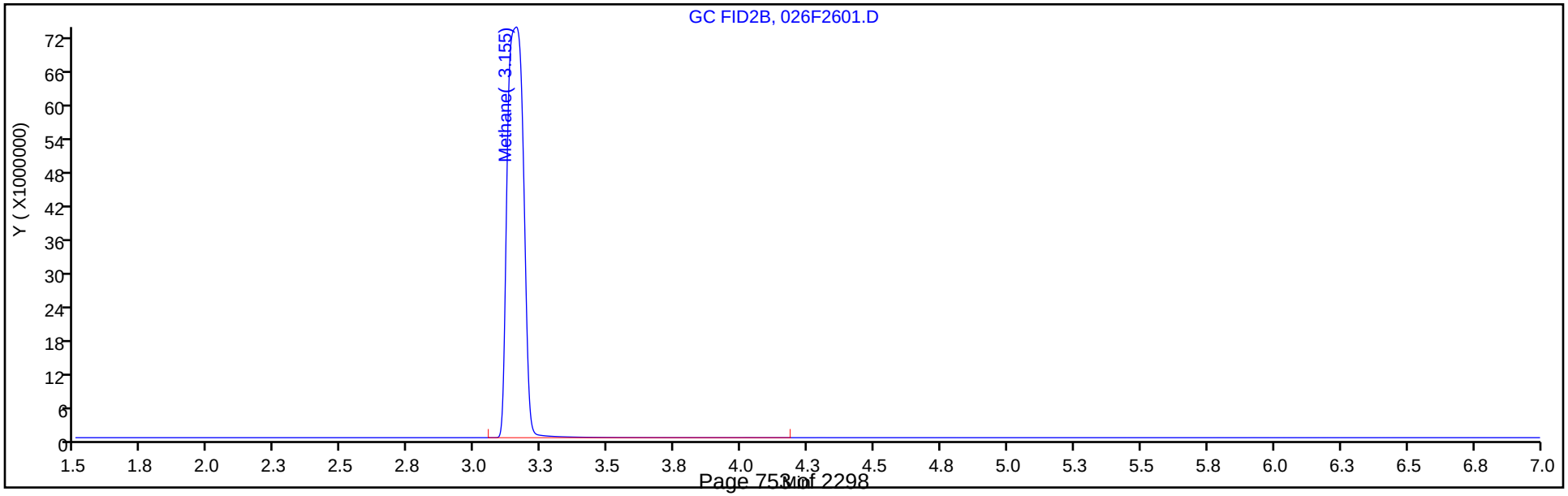
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\026F2601.D

Injection Date:	18-Jun-2020 15:41:50	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-F-12	Lab Sample ID:	280-137609-12	Worklist Smp#:	25
Client ID:	SHGW05-20A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	26
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

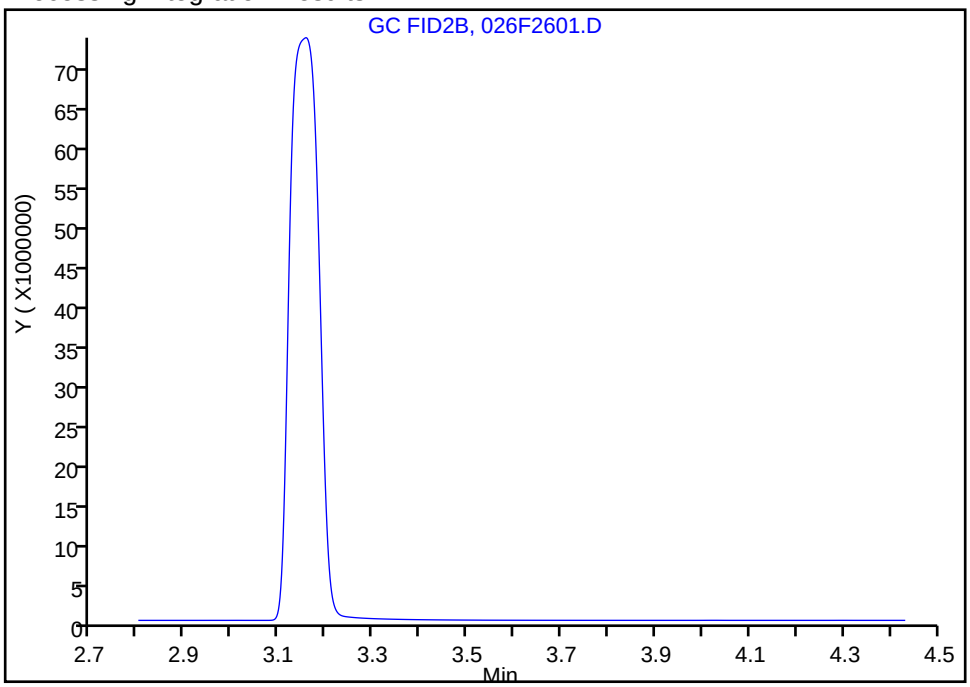
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\026F2601.D				
Injection Date:	18-Jun-2020 15:41:50	Instrument ID:	VGC_J		
Lims ID:	280-137609-F-12	Lab Sample ID:	280-137609-12		
Client ID:	SHGW05-20A				
Operator ID:	gm	ALS Bottle#:	26	Worklist Smp#:	25
Purge Vol:	18.000 mL	Dil. Factor:	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

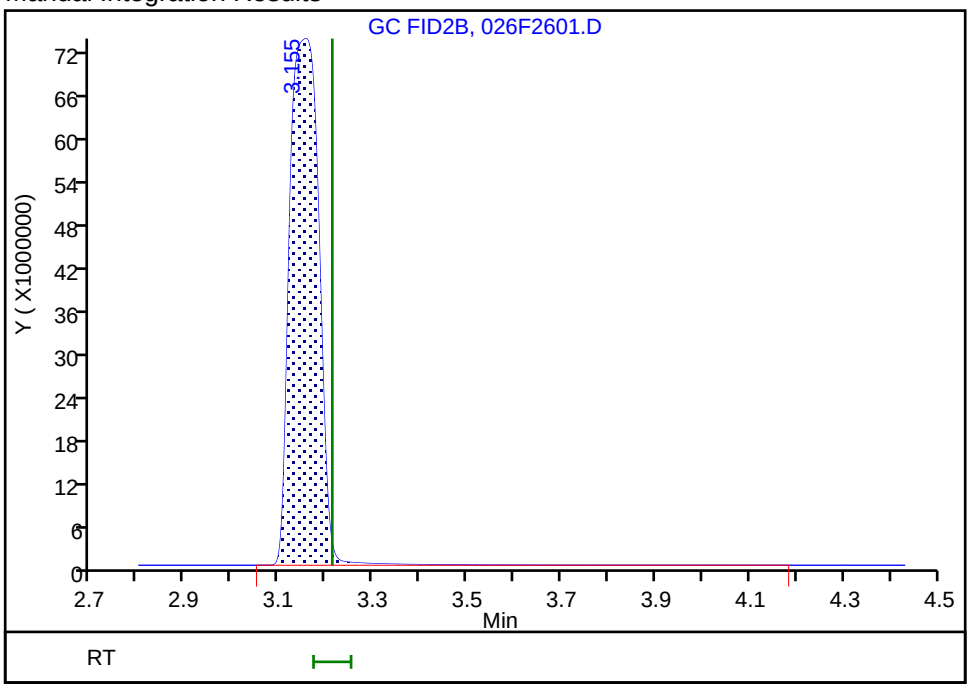
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 314013331
Amount: 4587.3578
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:32:18
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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

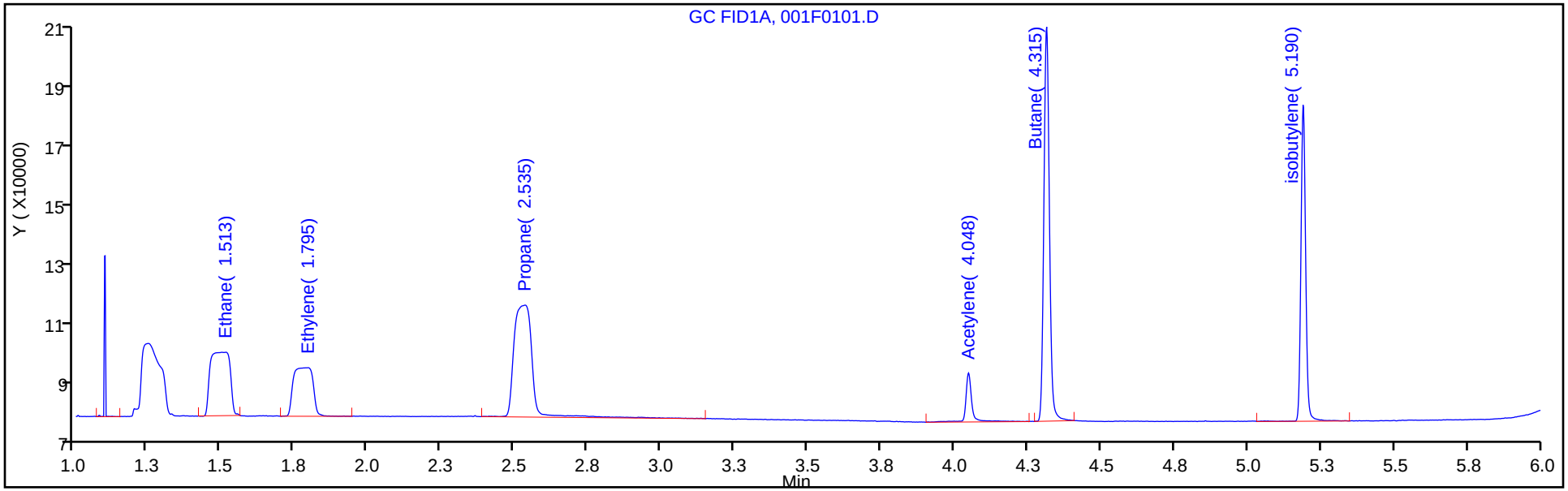
Report Date: 17-May-2020 08:59:46 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

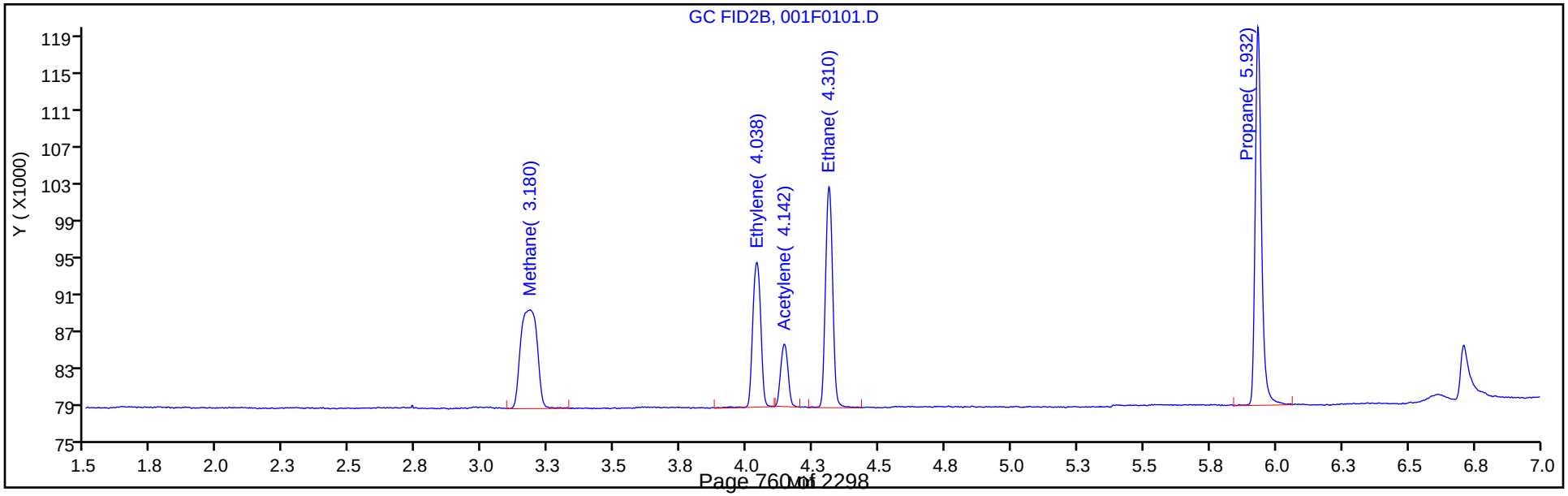
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D

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

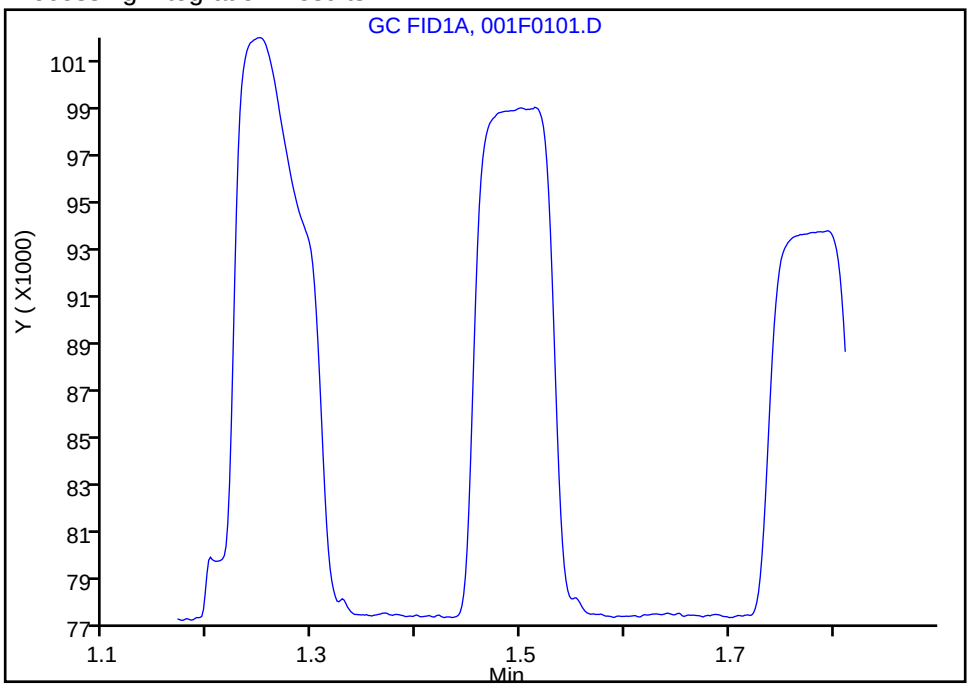
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

3 Ethane, CAS: 74-84-0

Signal: 1

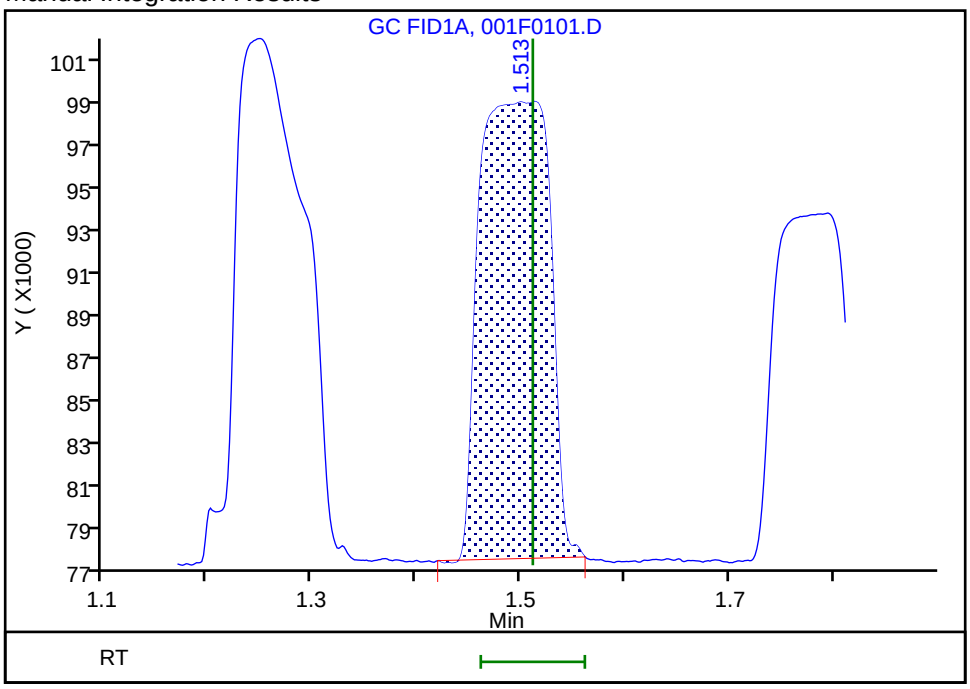
Not Detected
Expected RT: 1.51

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

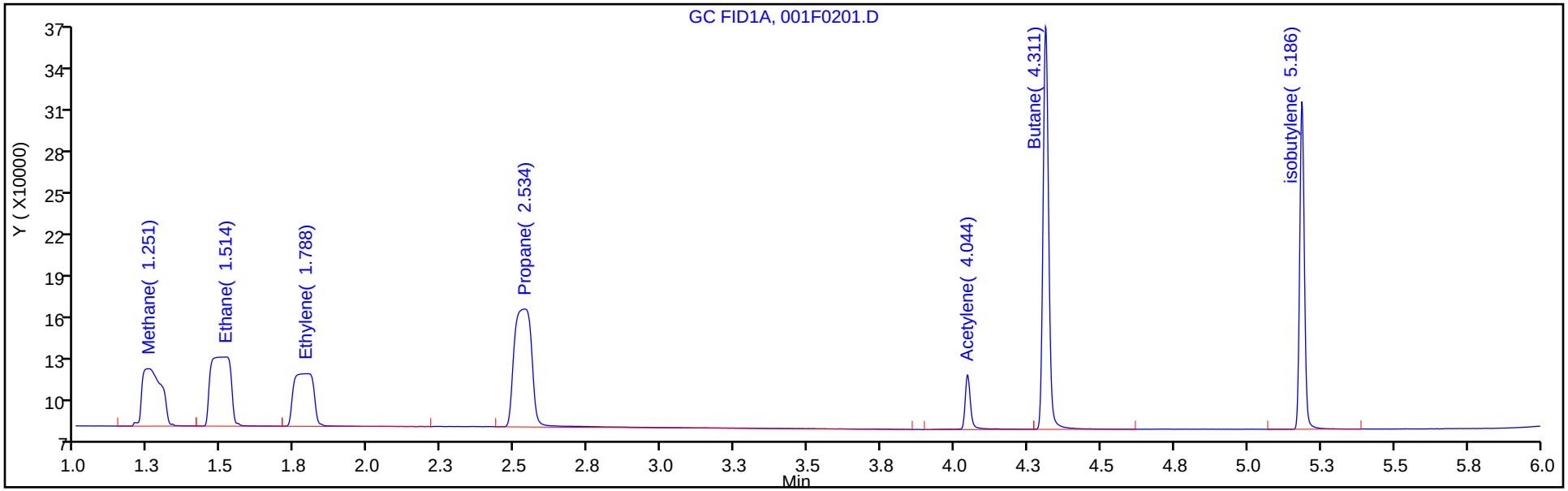
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

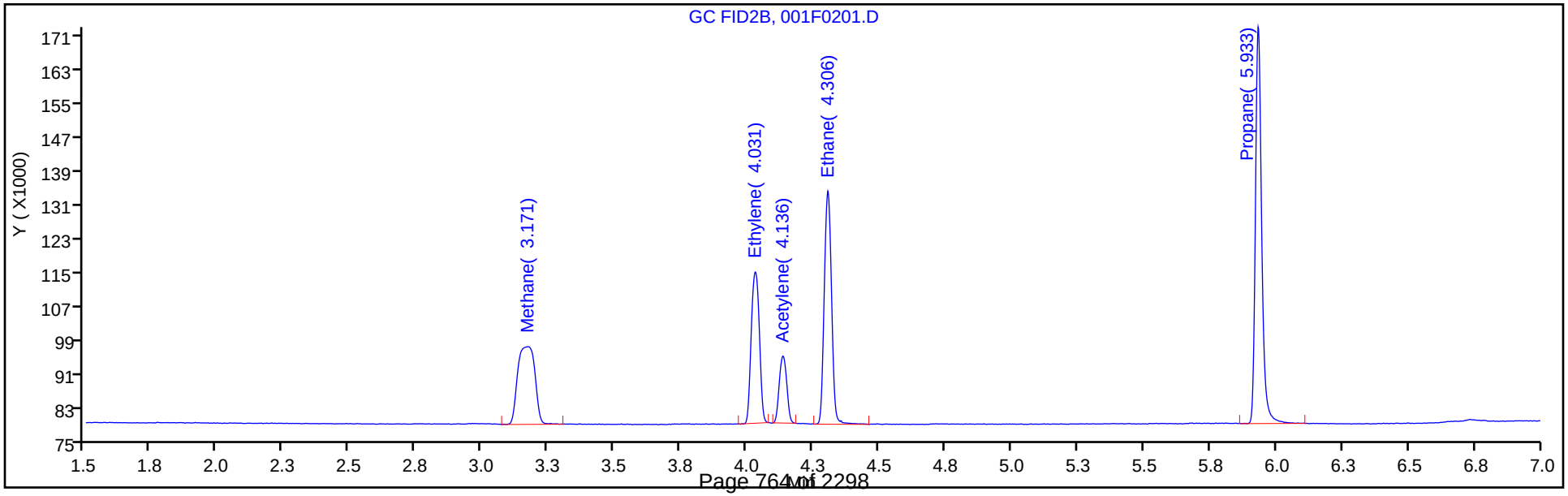
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D

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

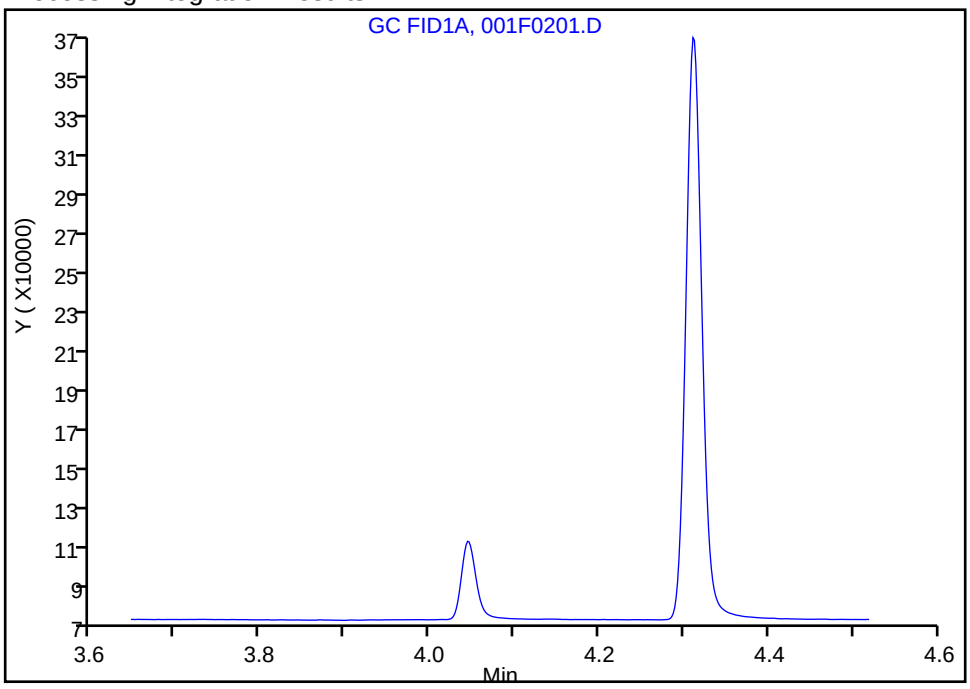
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Injection Date: 16-May-2020 11:13:34 Instrument ID: VGC_J
Lims ID: IC L2
Client ID:
Operator ID: MEIERG ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

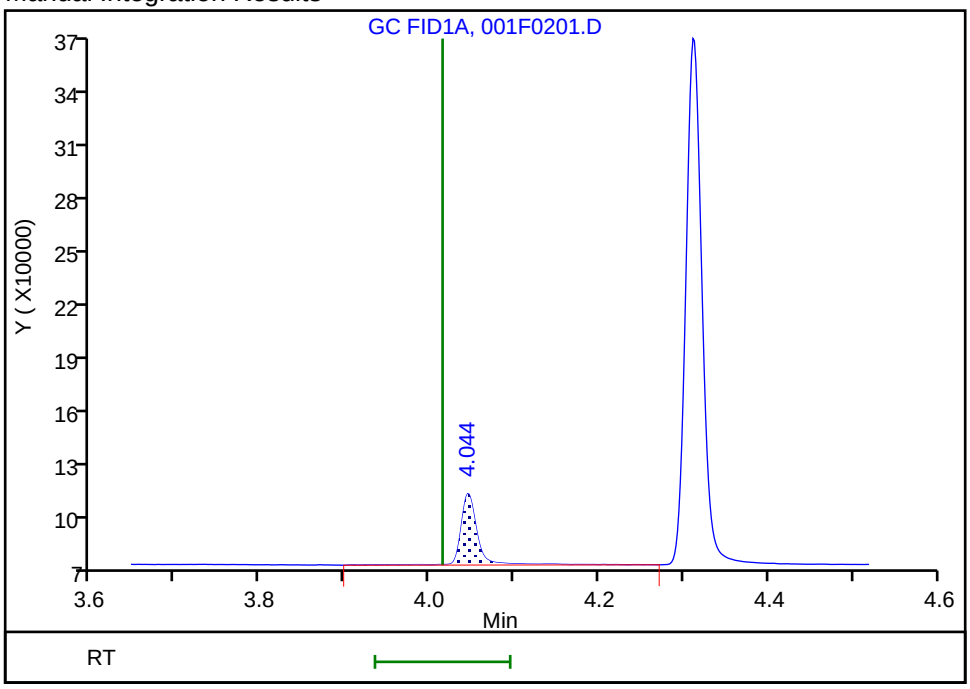
Processing Integration Results

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

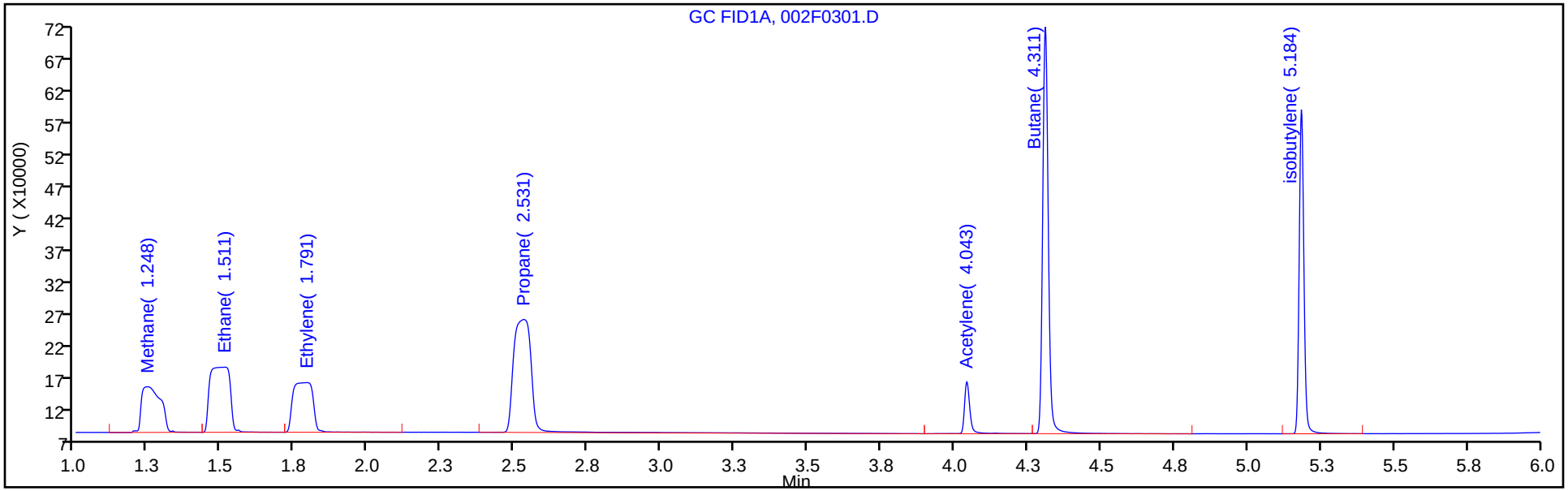
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

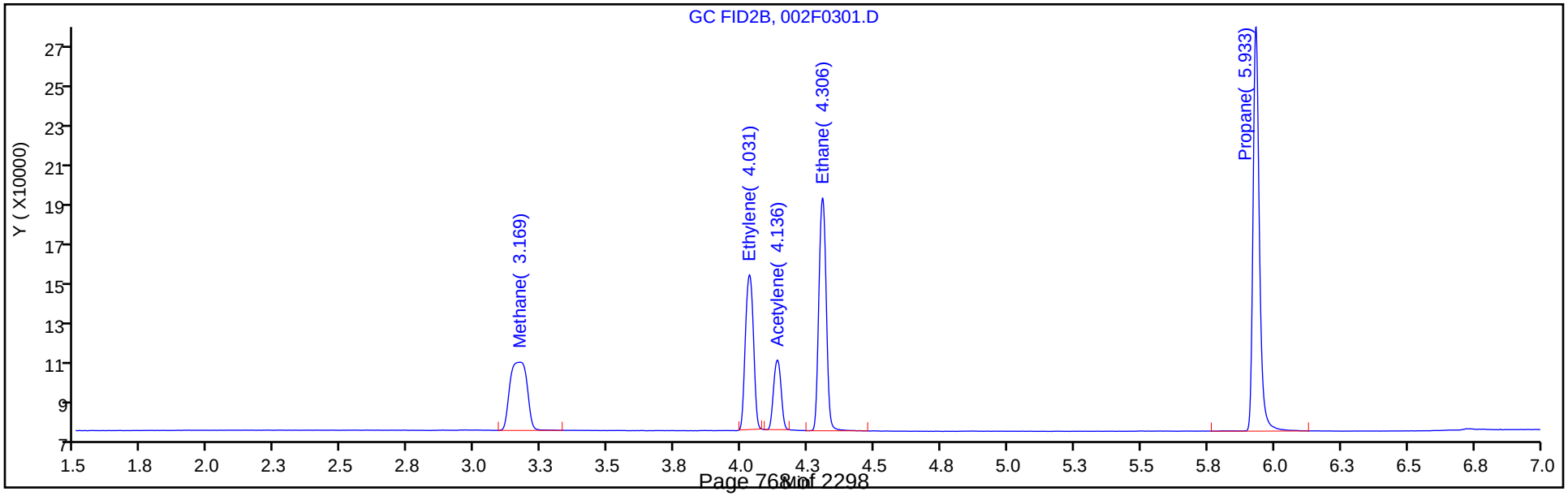
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D

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

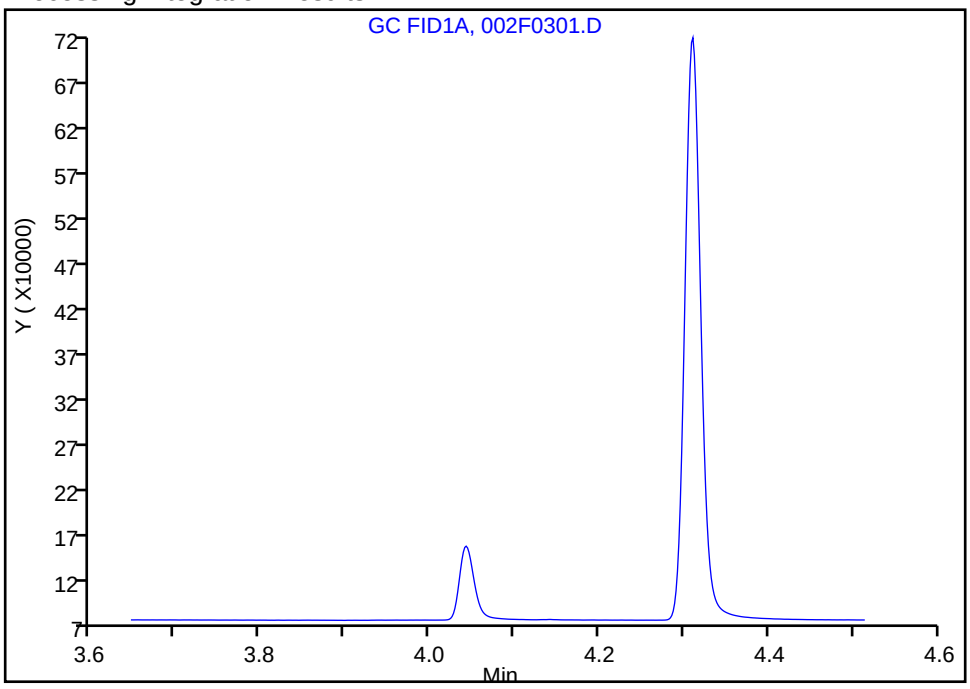
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

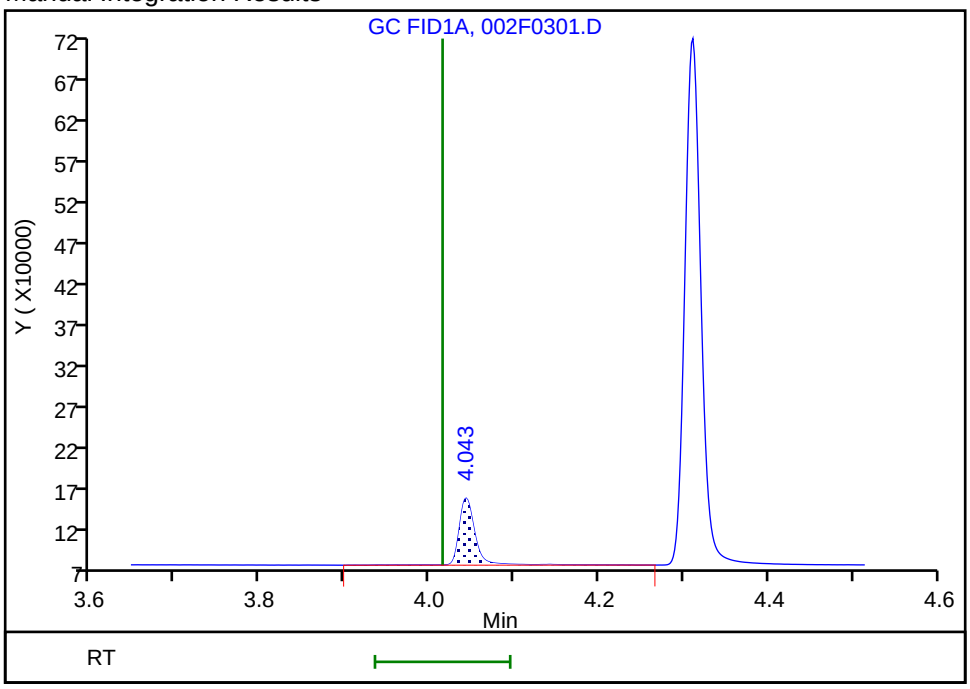
Processing Integration Results

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

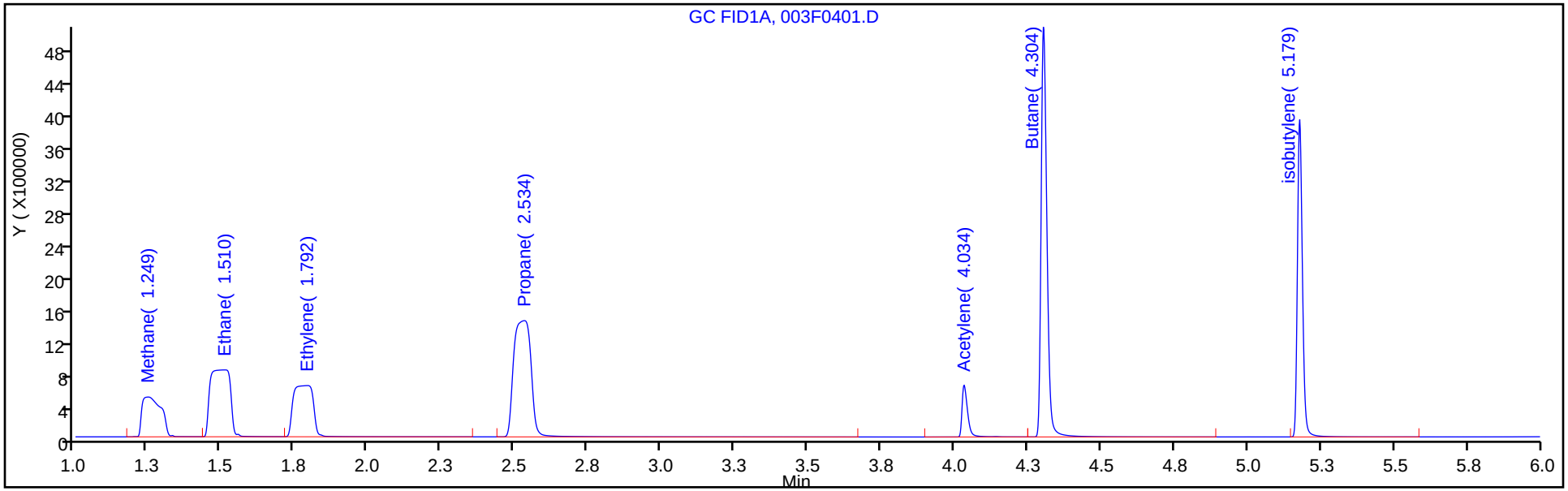
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

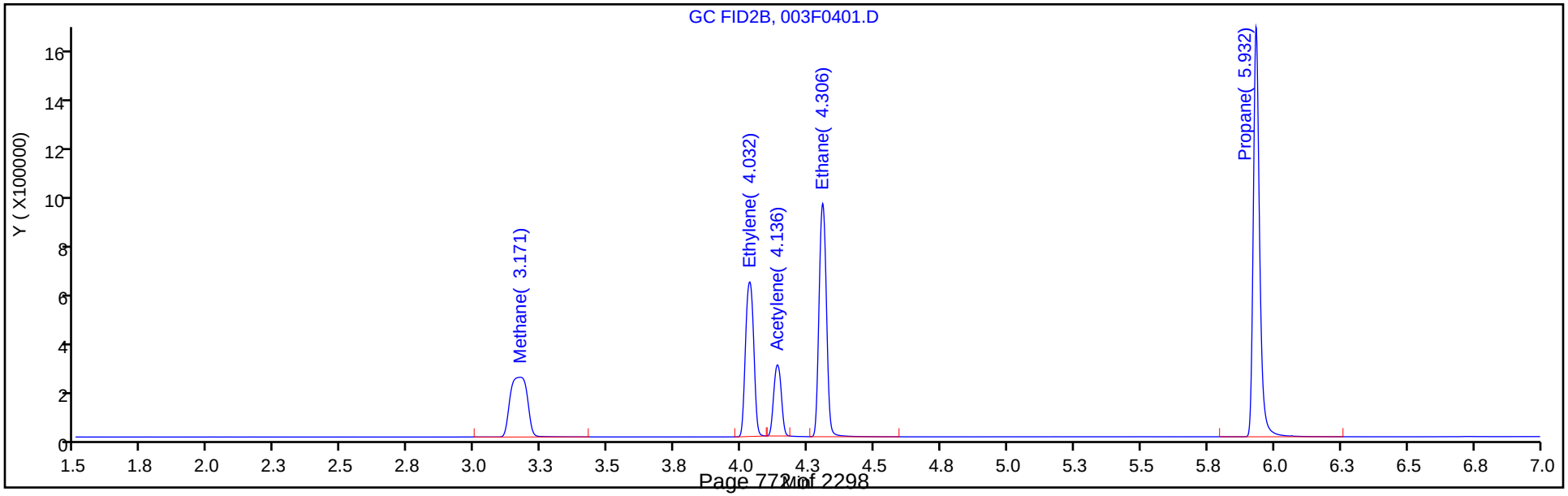
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D

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

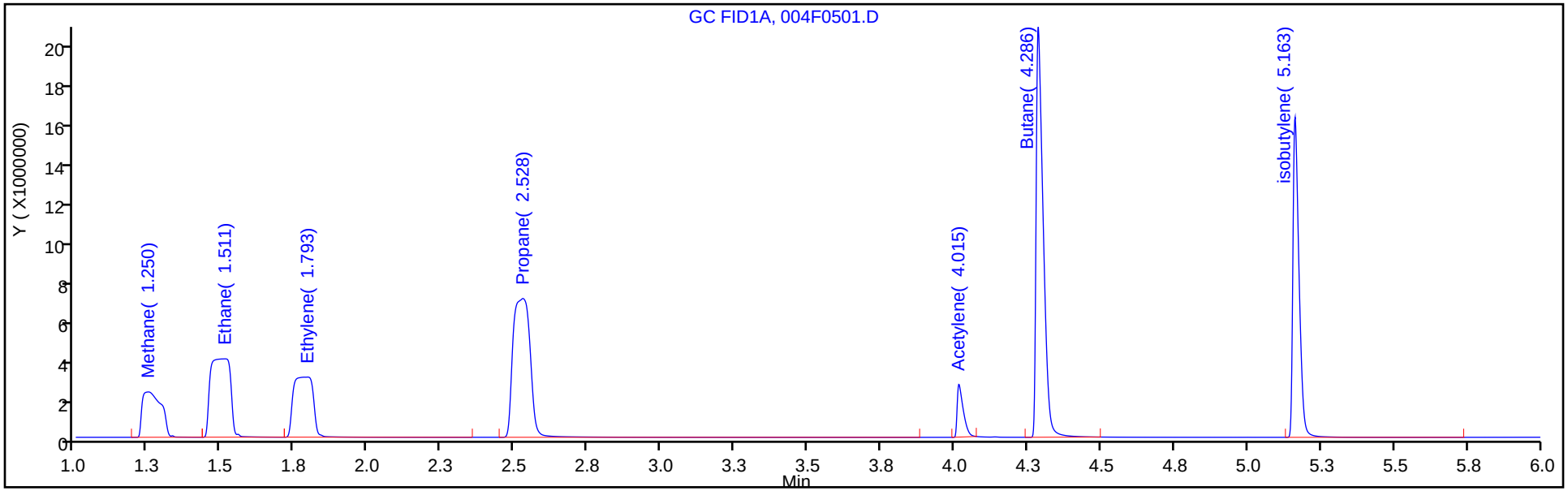
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

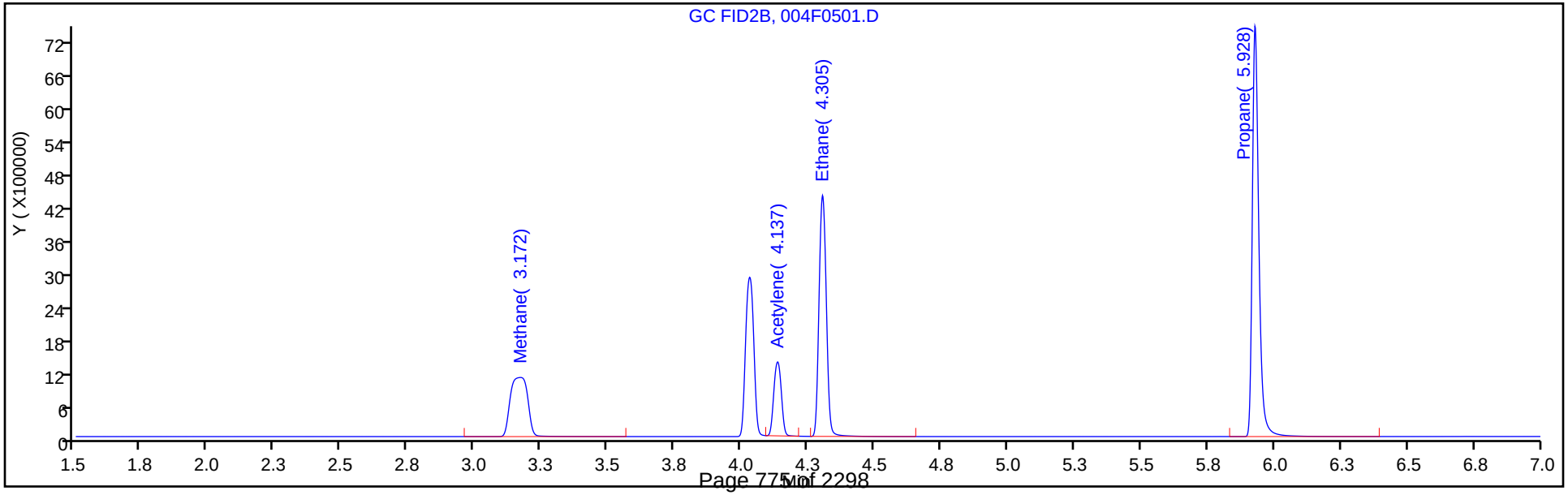
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D

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

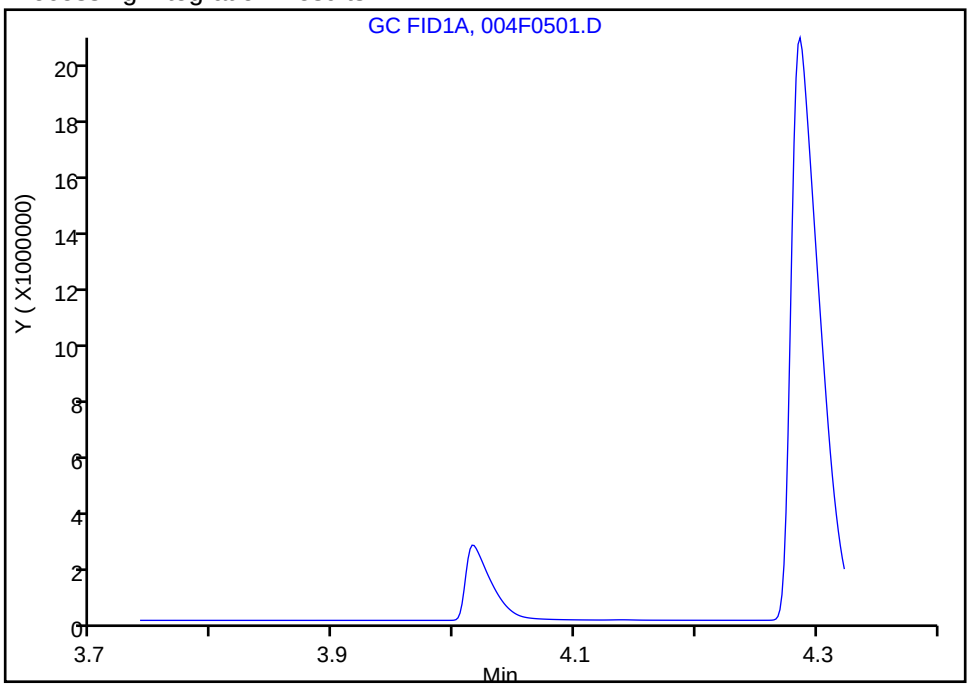
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

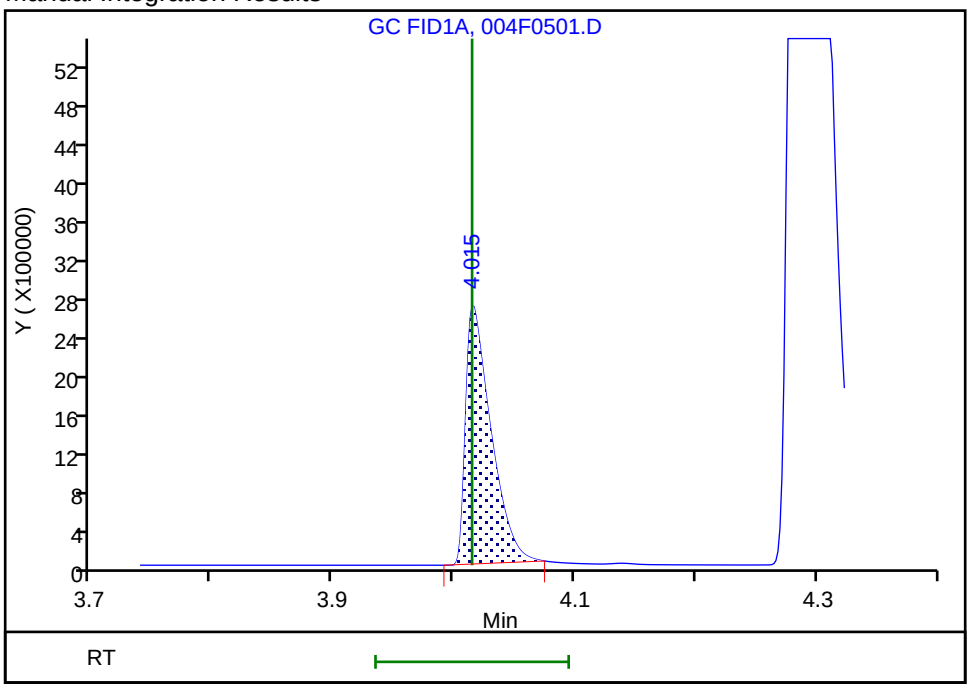
Processing Integration Results

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

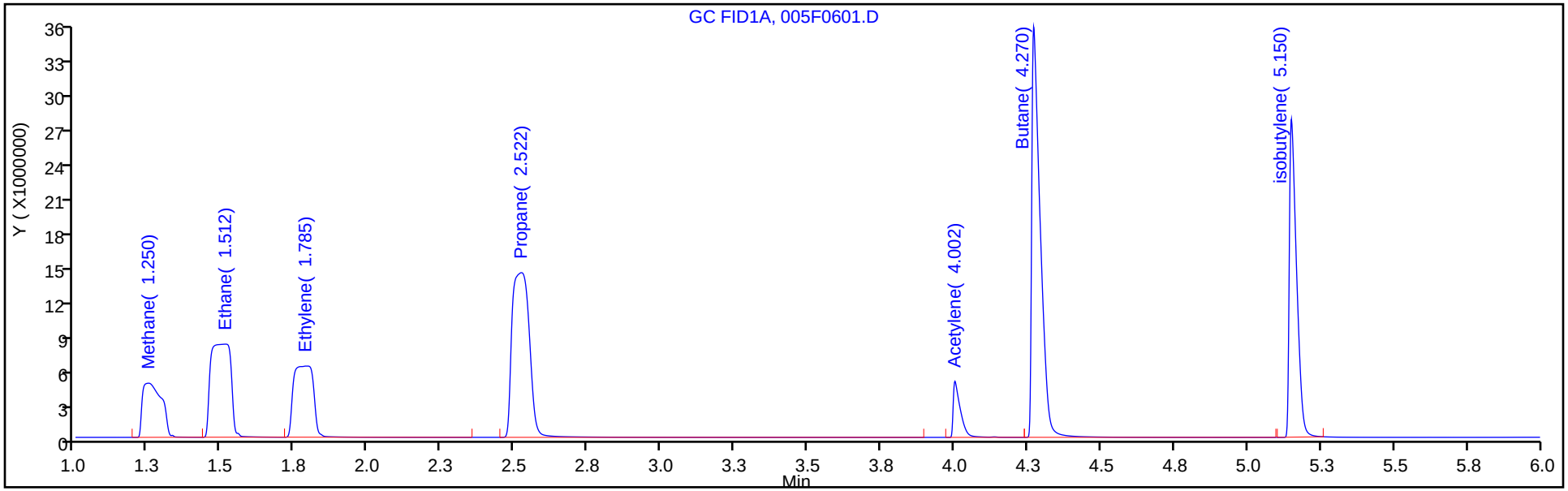
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

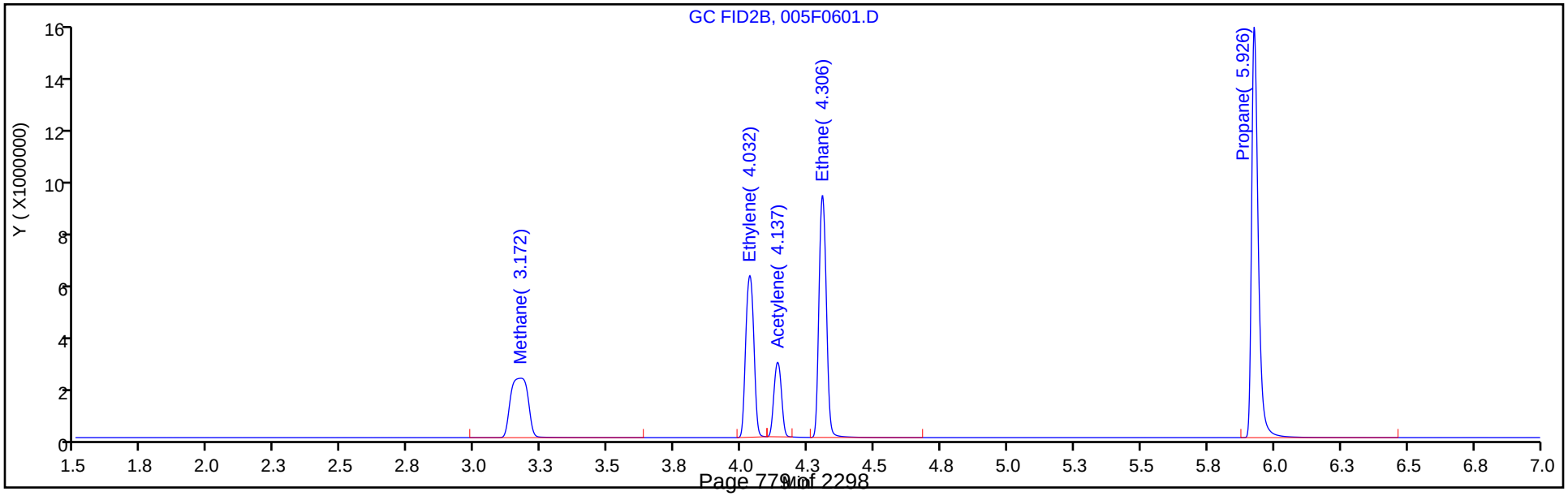
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D

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

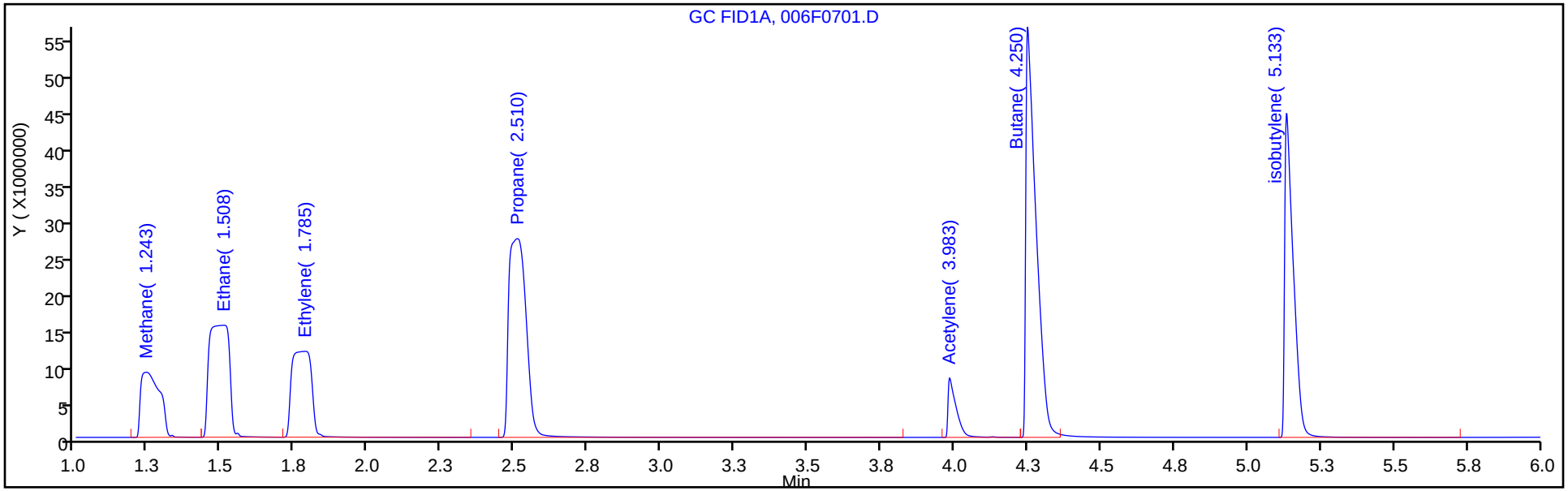
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

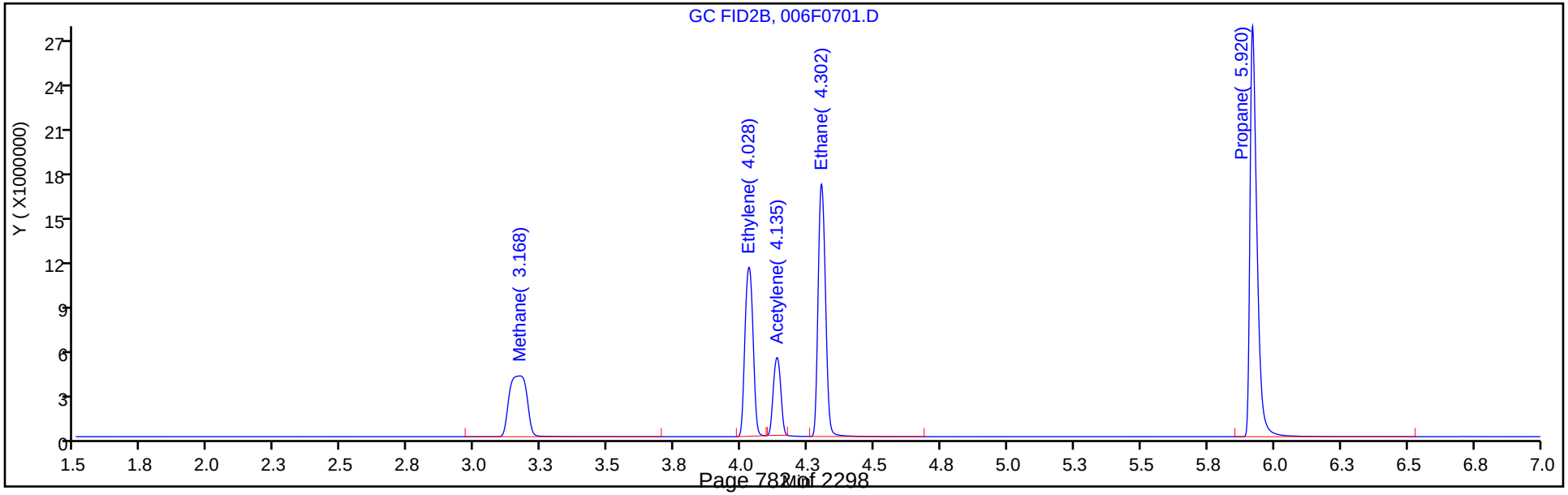
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D

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

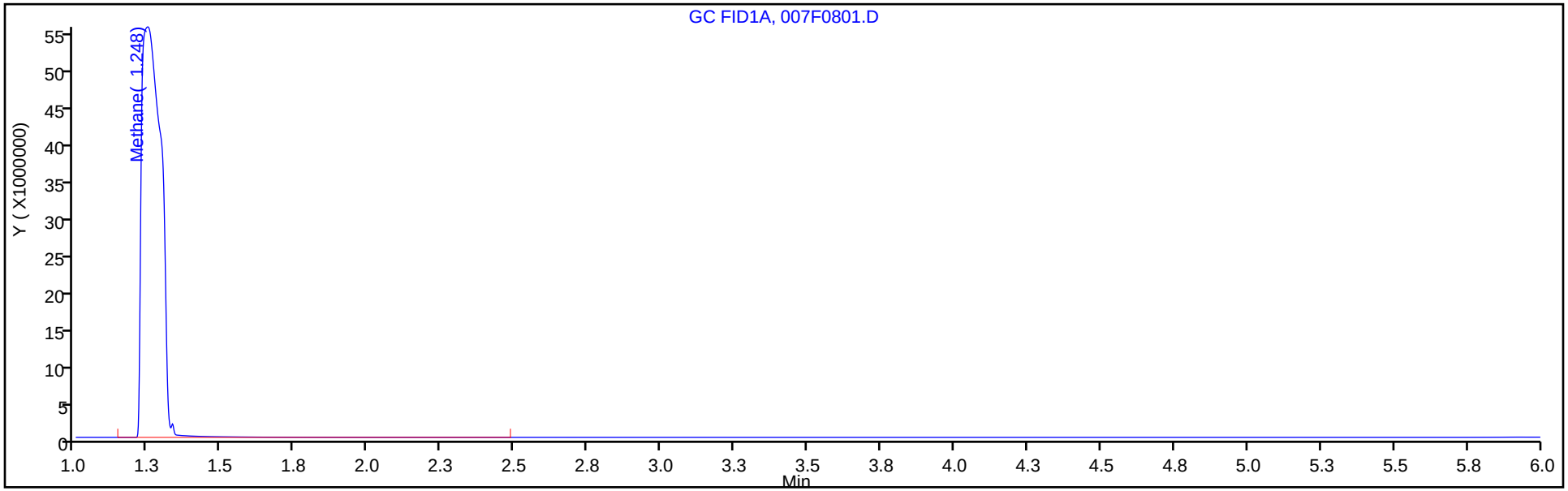
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

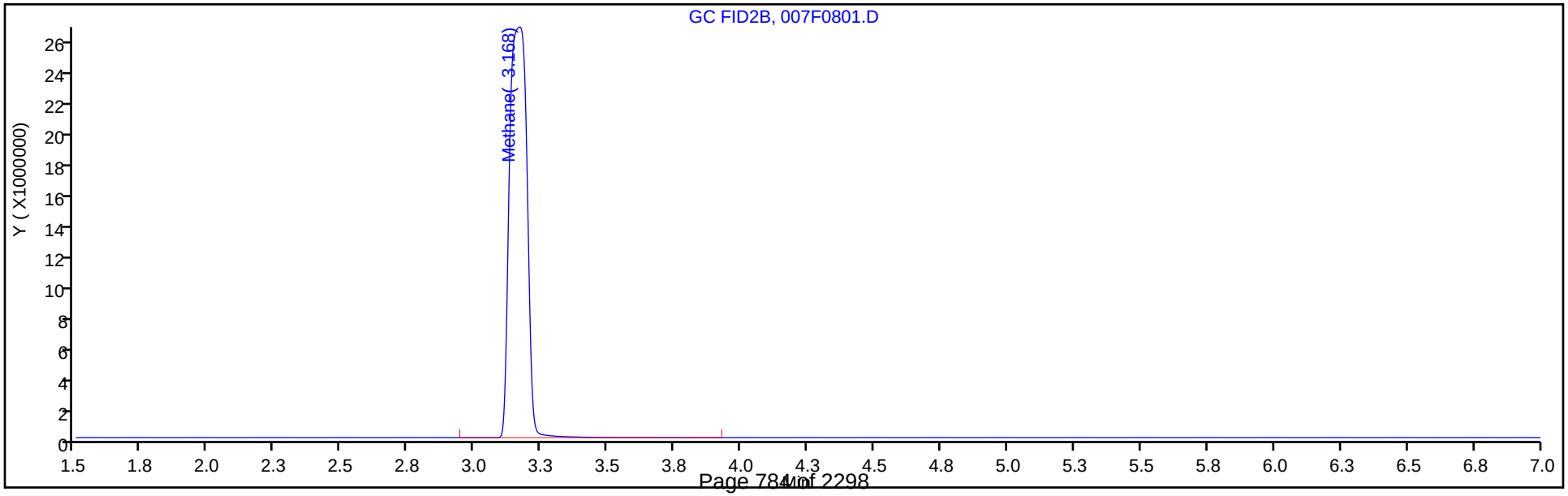
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D

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

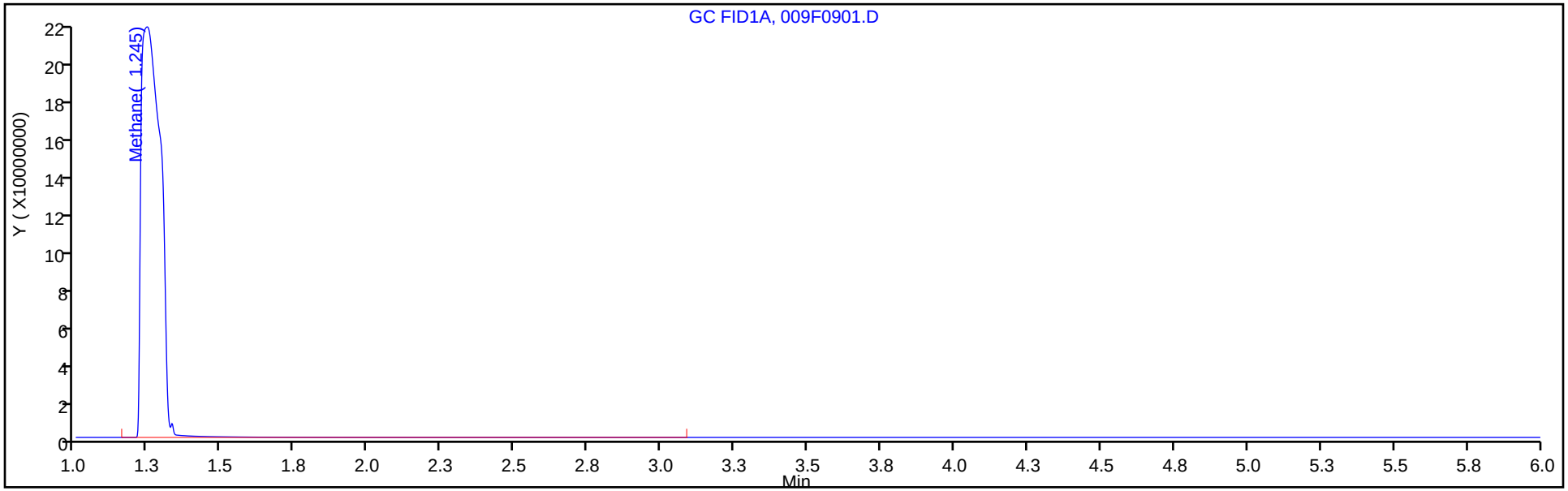
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

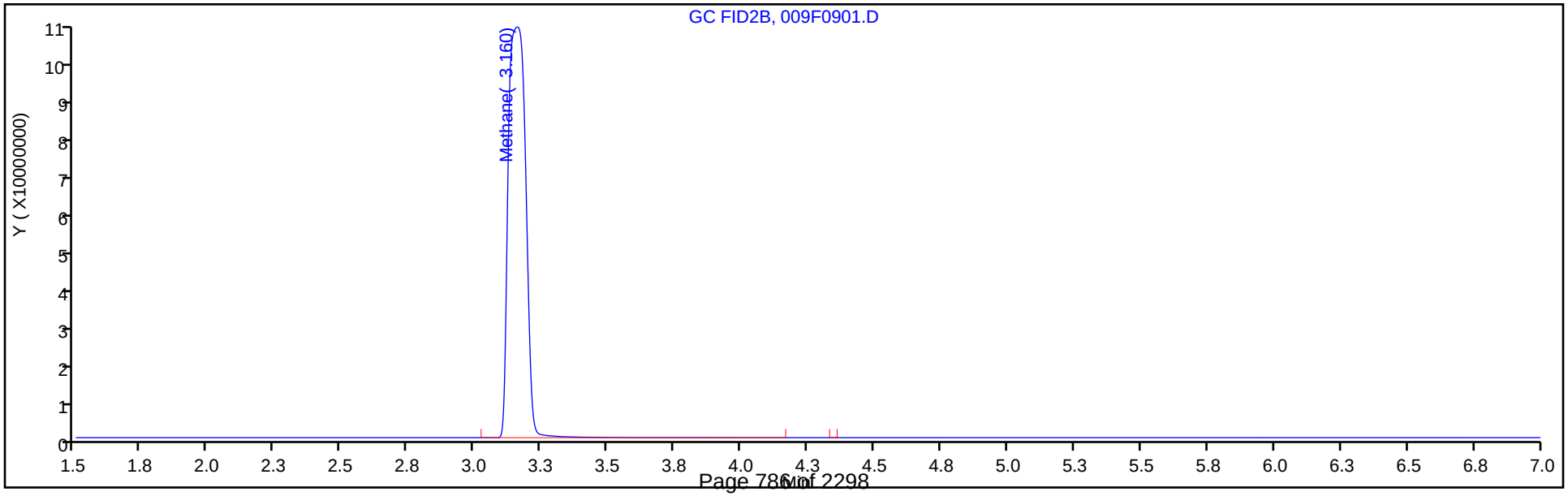
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

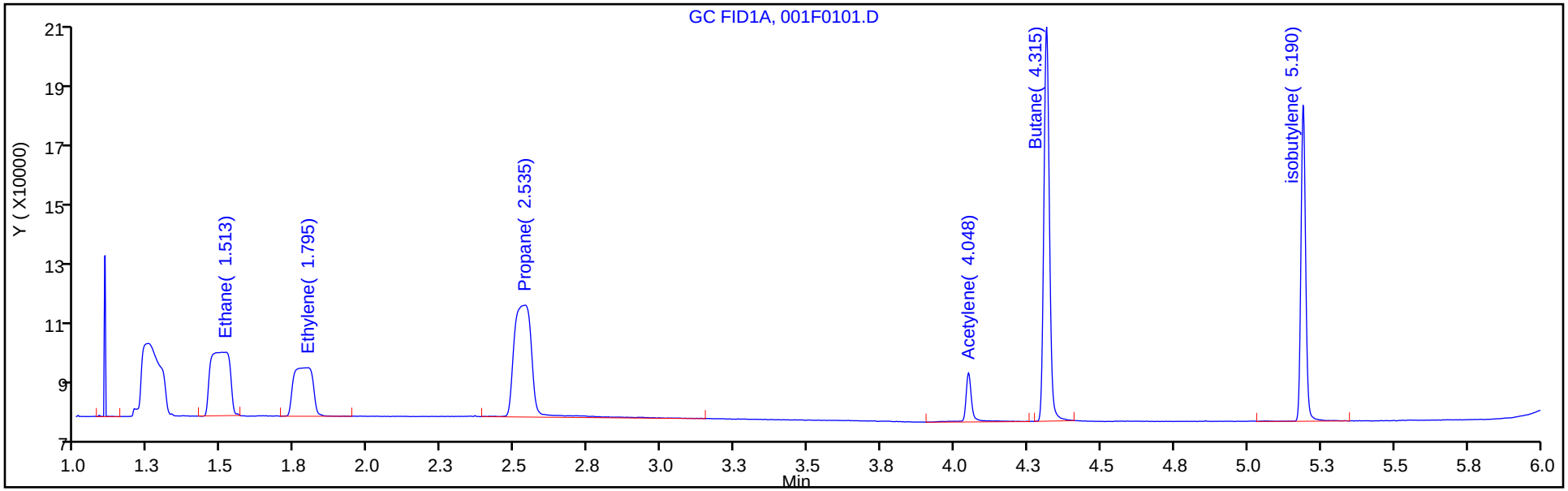
Report Date: 17-May-2020 08:59:46 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

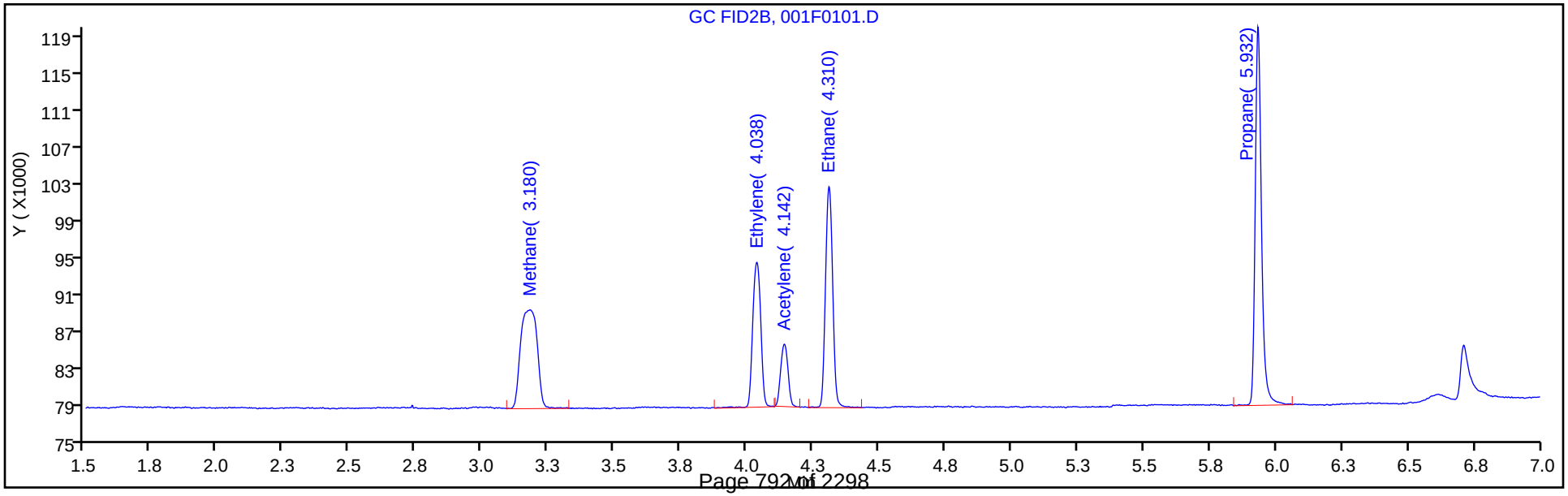
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D

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

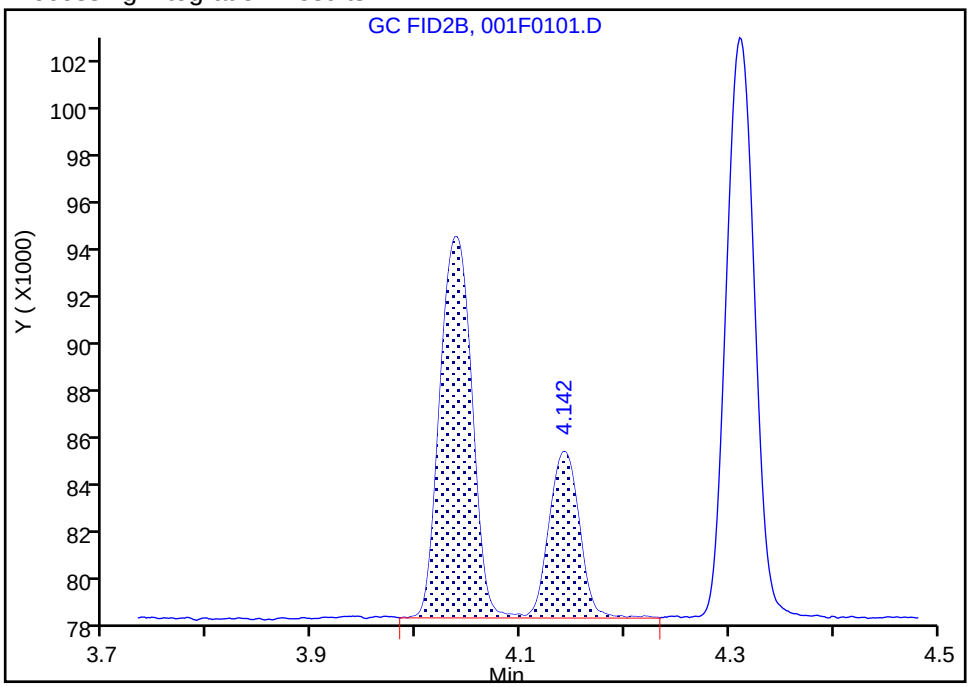
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Injection Date: 16-May-2020 10:57:08 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: MEIERG ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

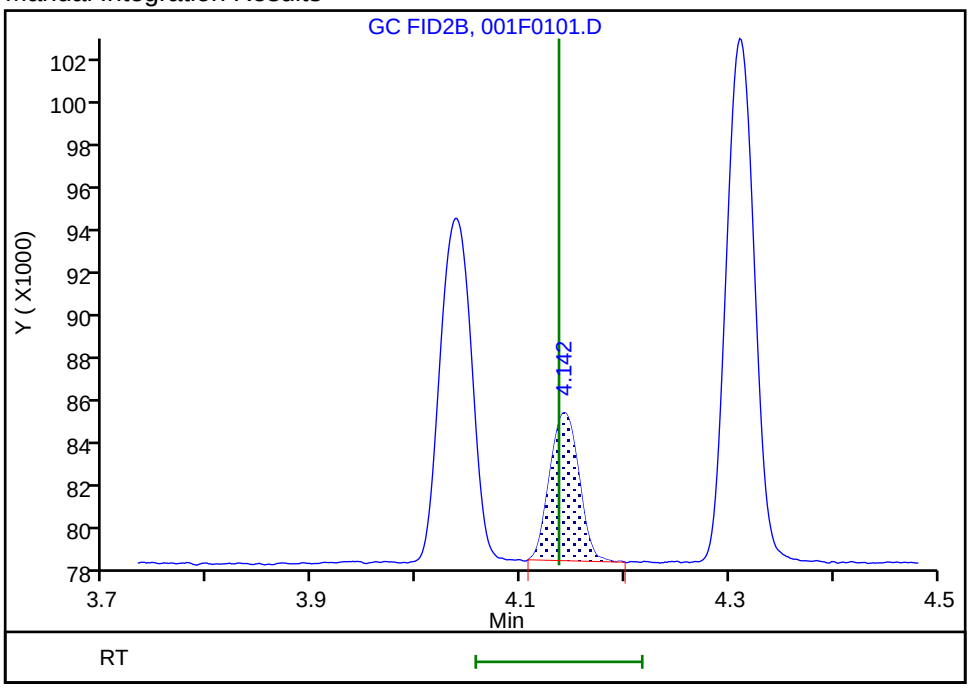
Processing Integration Results

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

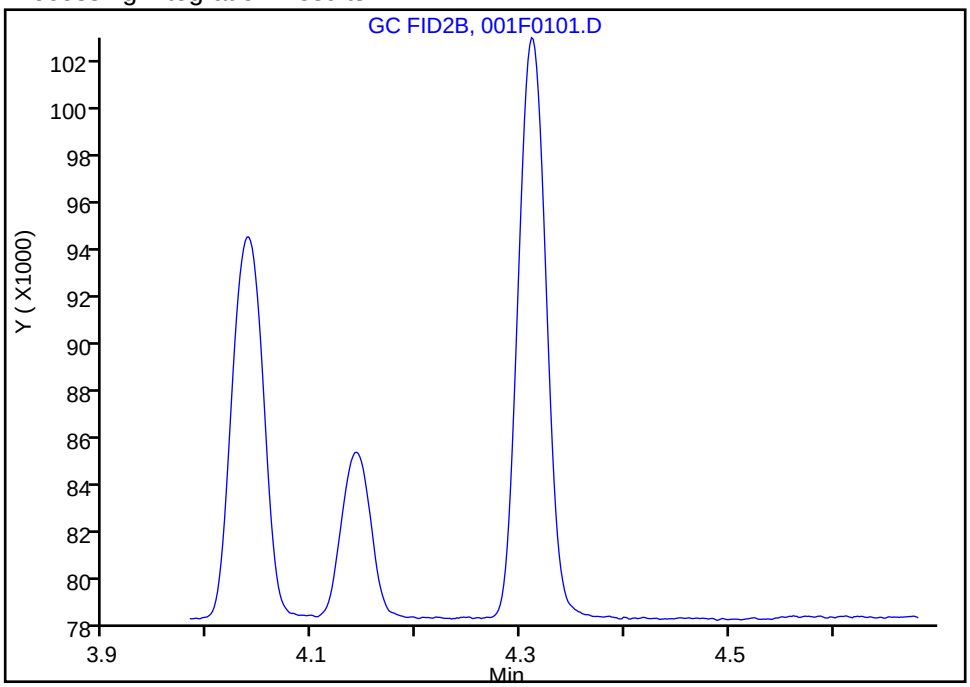
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Injection Date: 16-May-2020 10:57:08 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: MEIERG ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

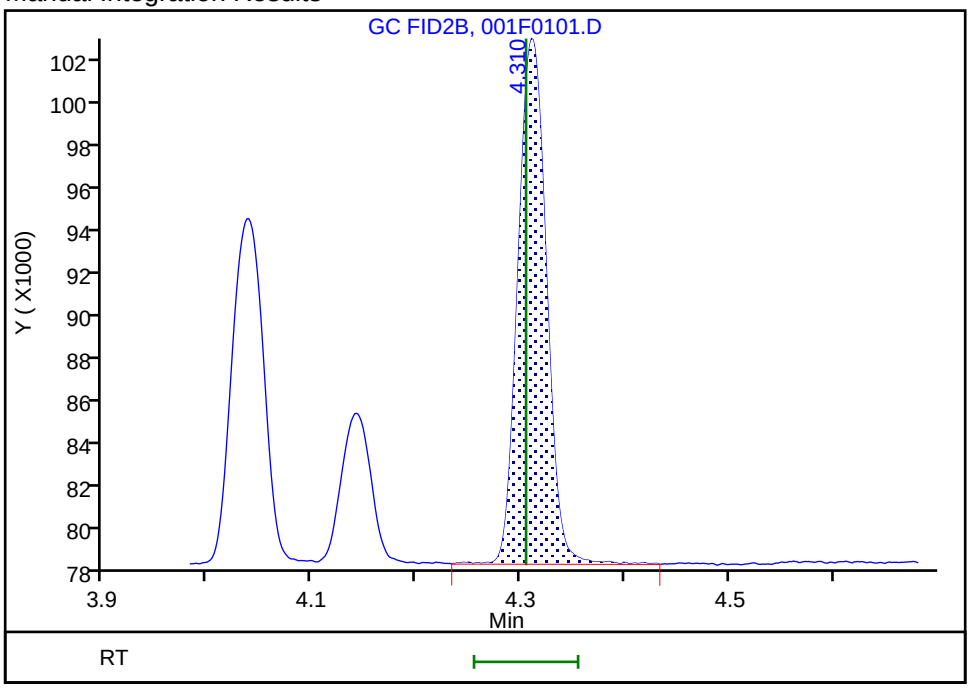
Not Detected
Expected RT: 4.30

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

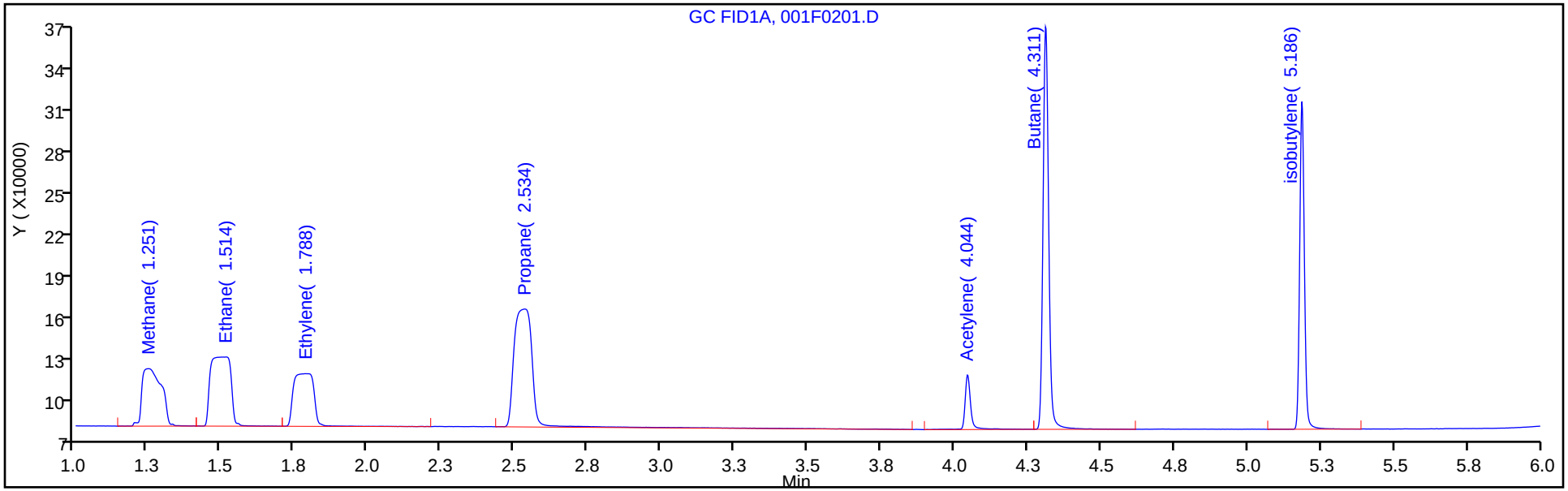
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

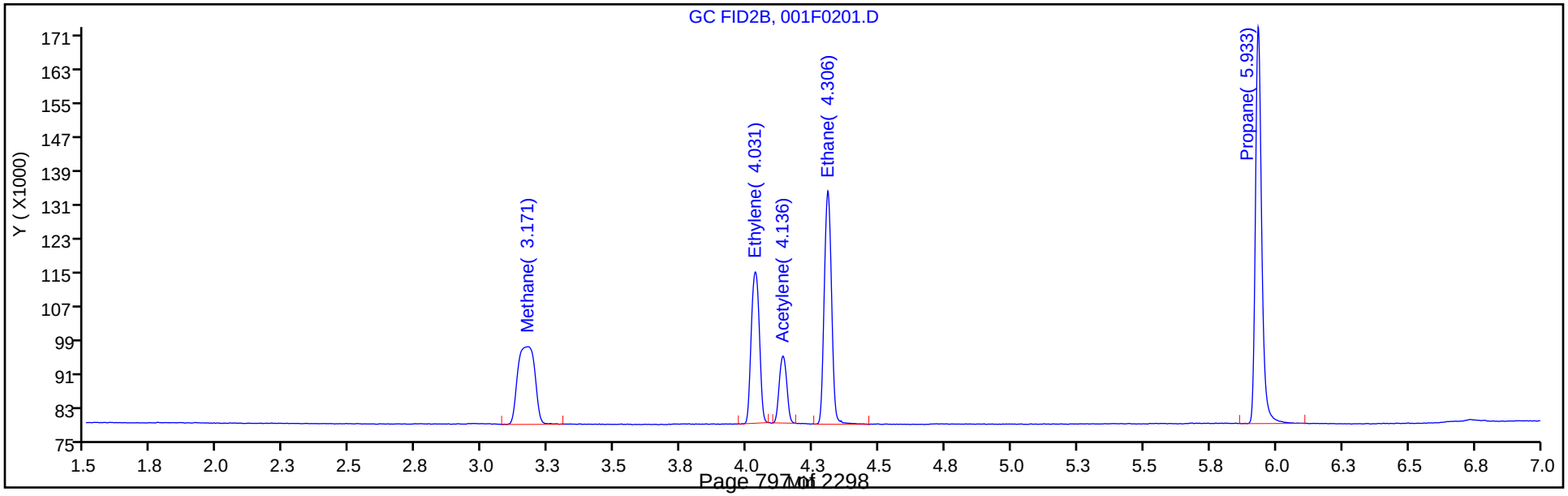
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D

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

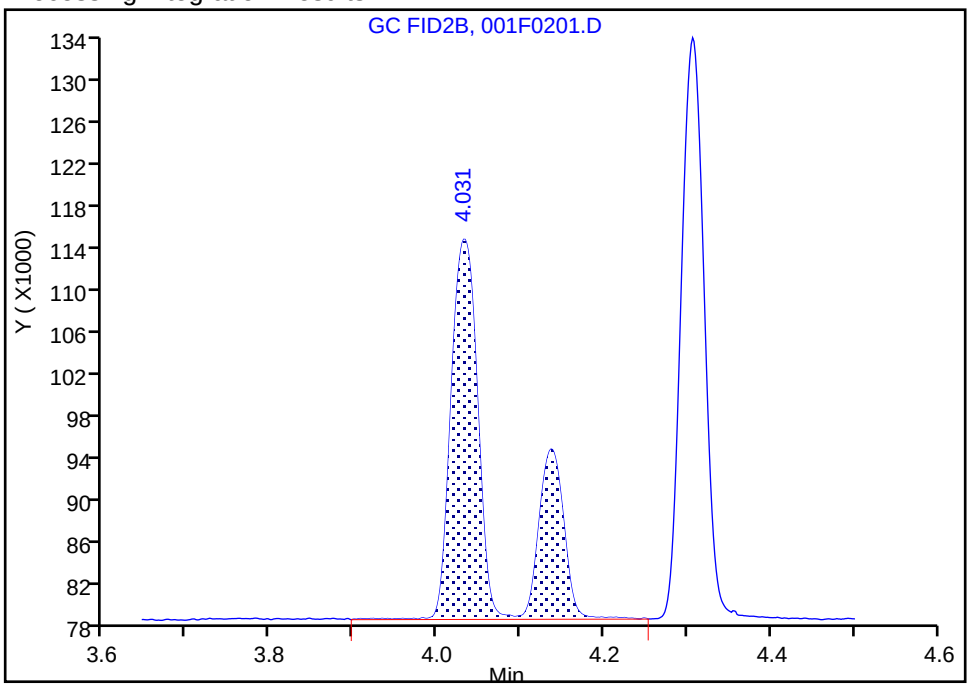
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J		
Lims ID:	IC L2				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

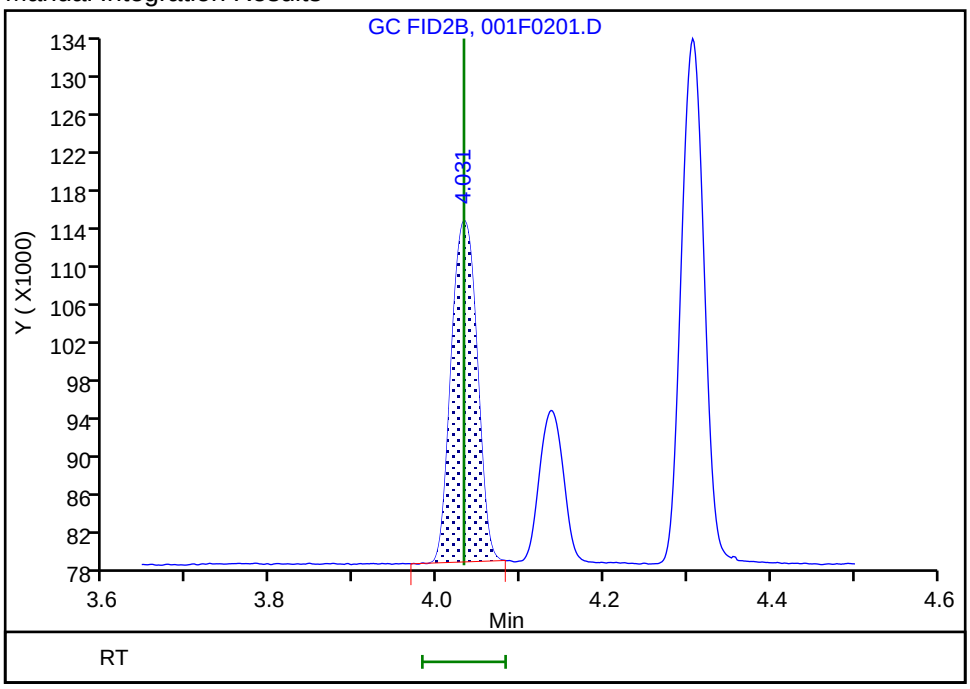
Processing Integration Results

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

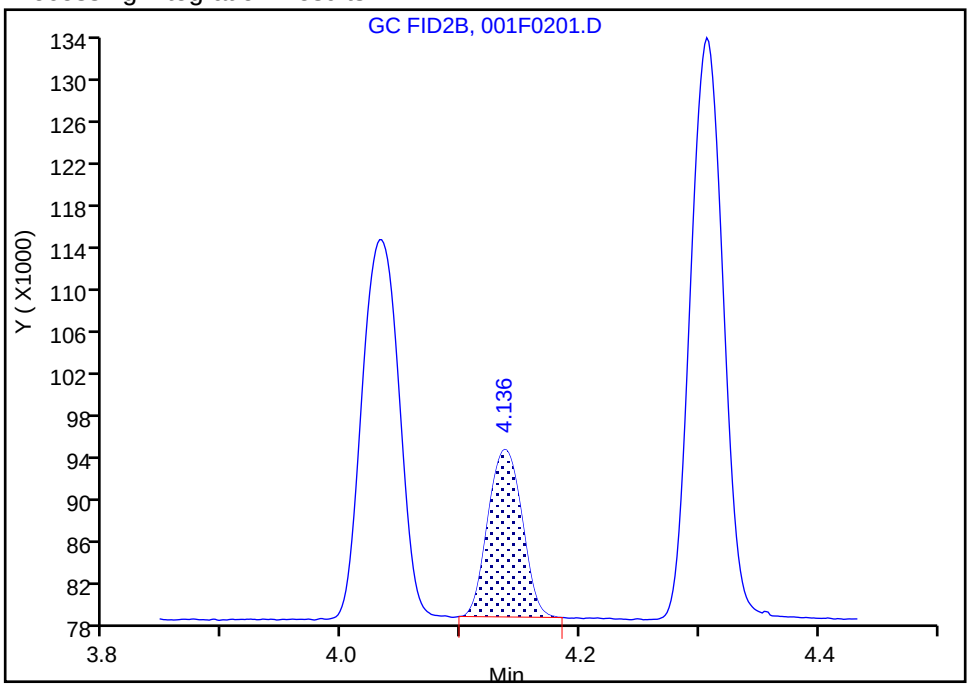
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Injection Date: 16-May-2020 11:13:34 Instrument ID: VGC_J
Lims ID: IC L2
Client ID:
Operator ID: MEIERG ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

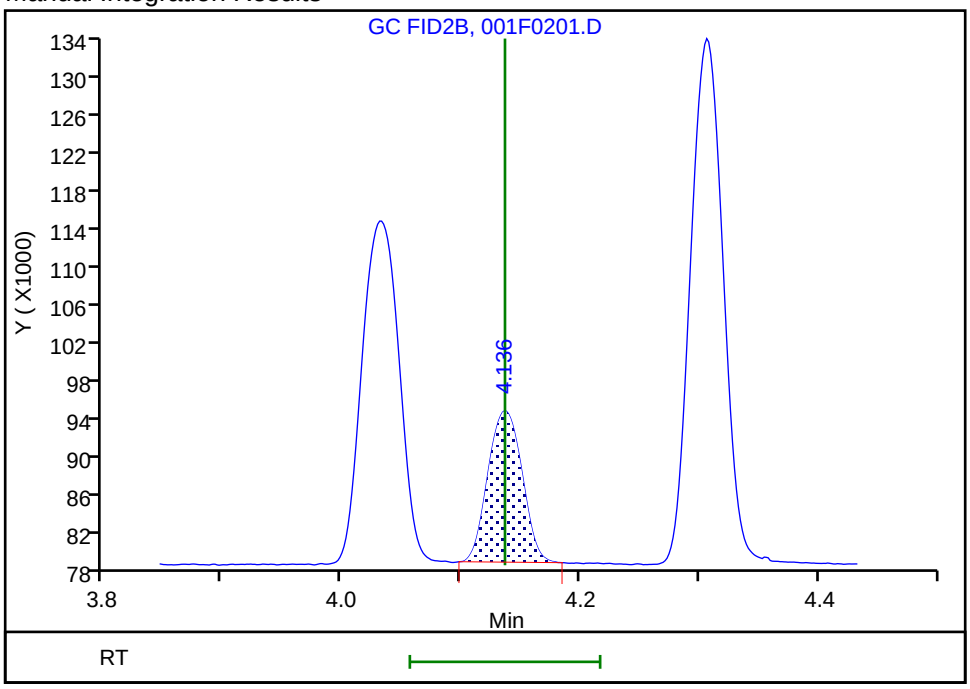
Processing Integration Results

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

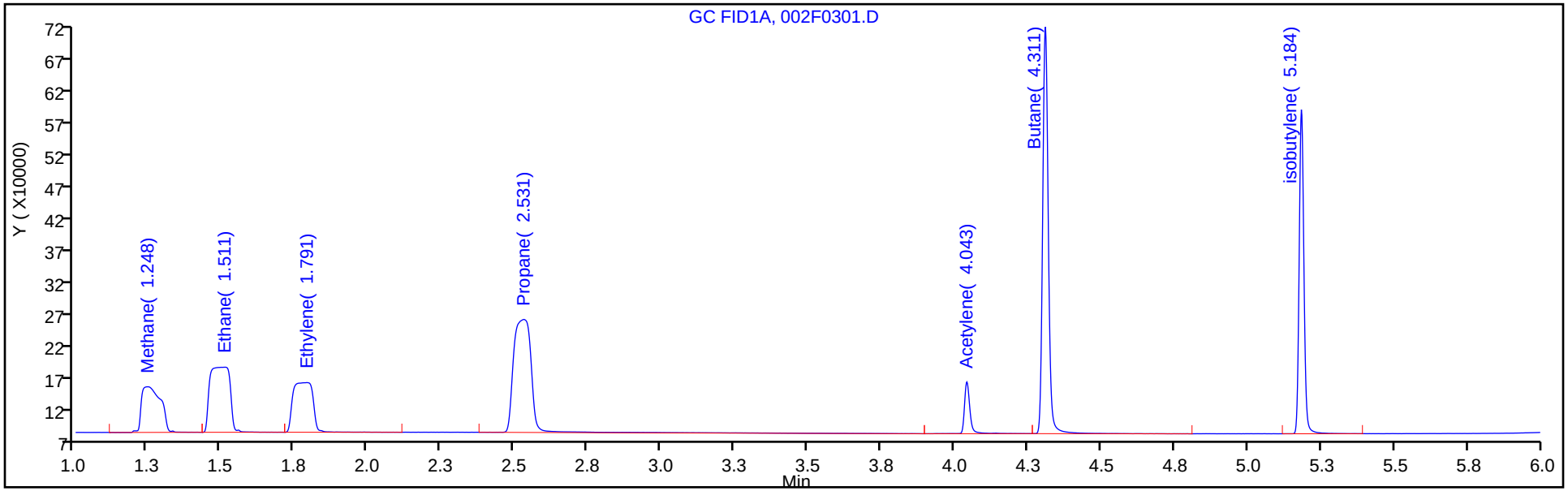
Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

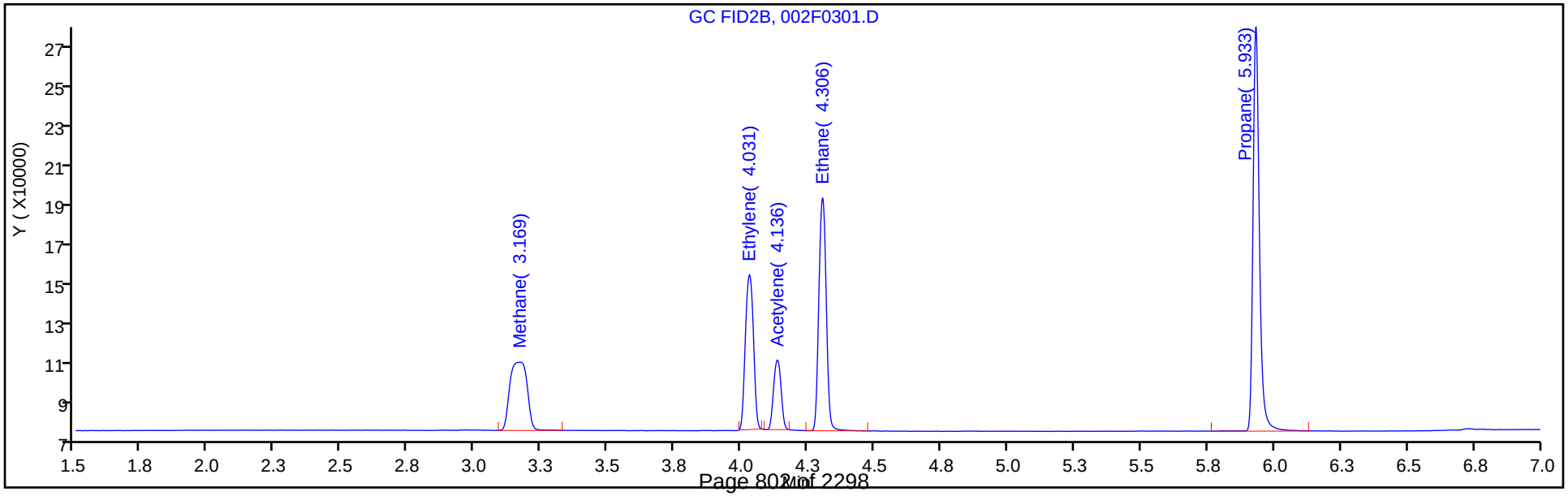
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D

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

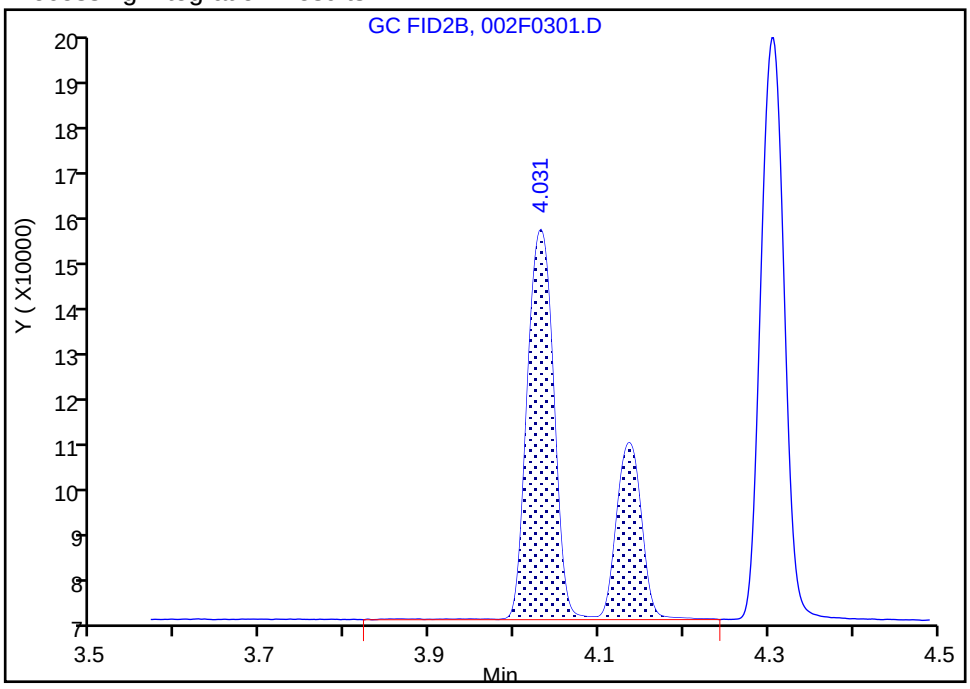
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

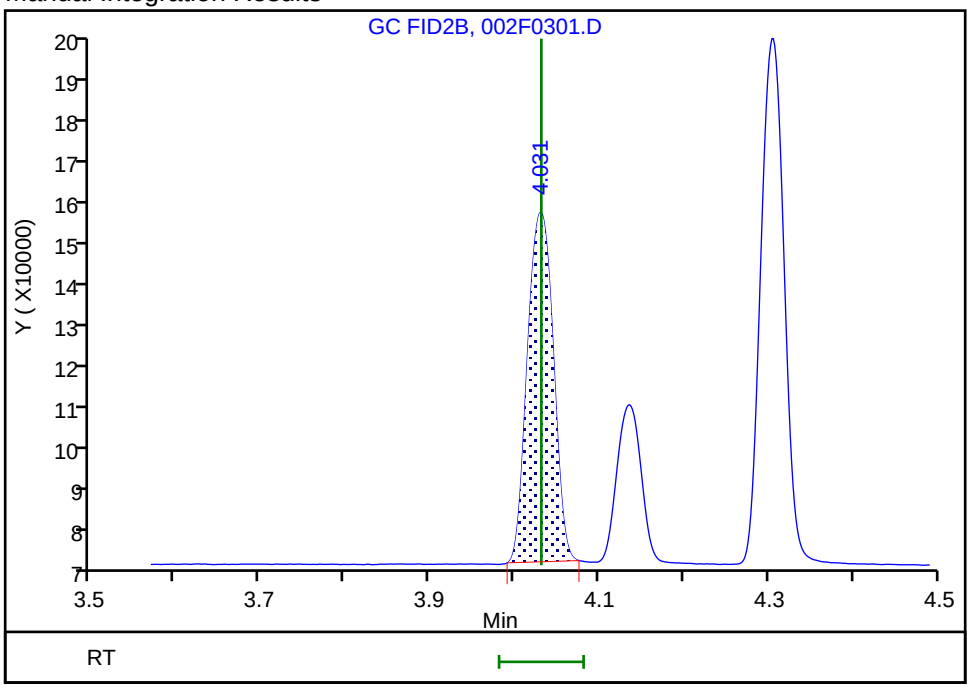
Processing Integration Results

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

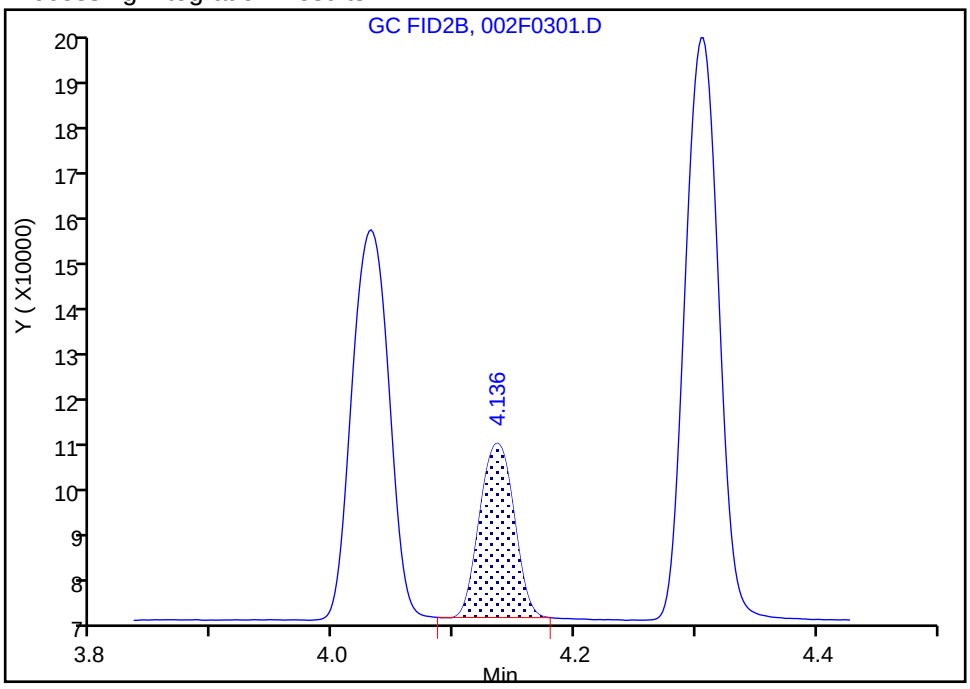
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

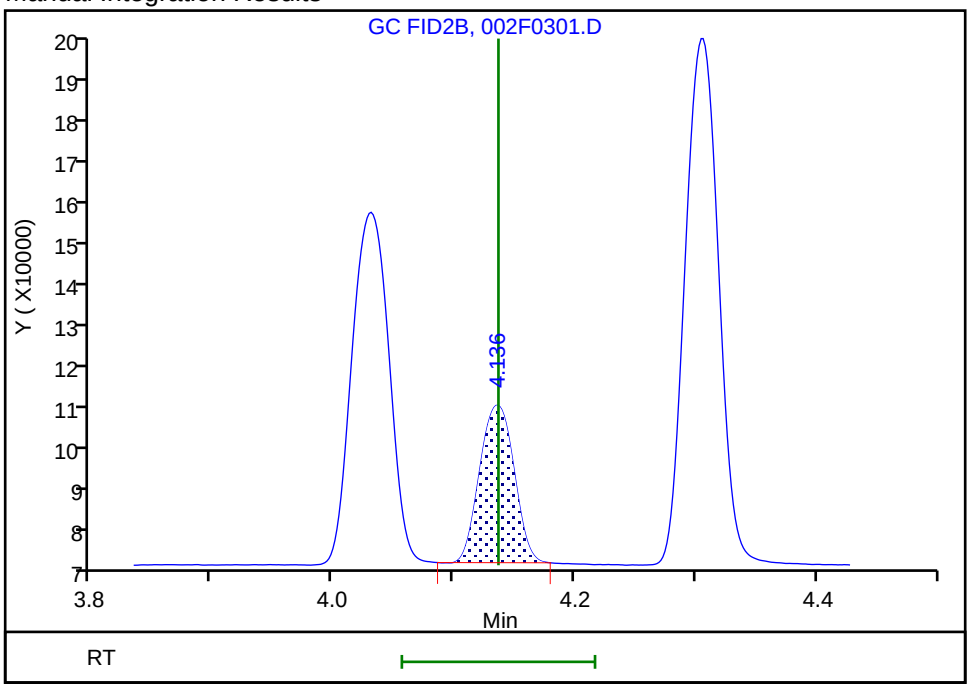
Processing Integration Results

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

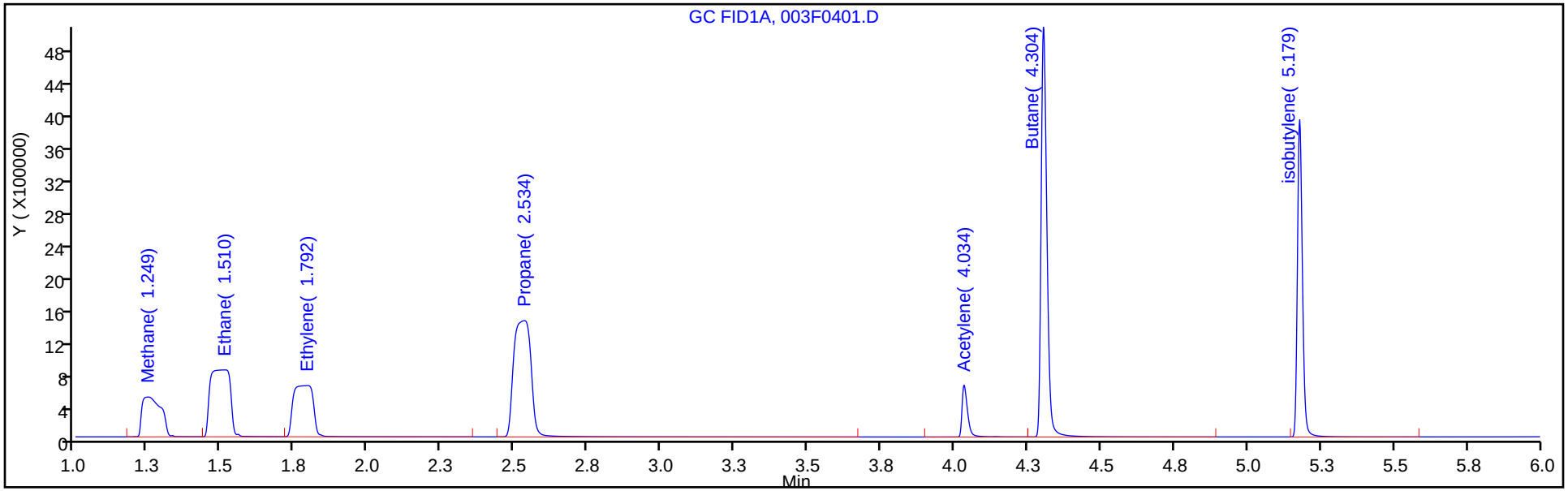
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

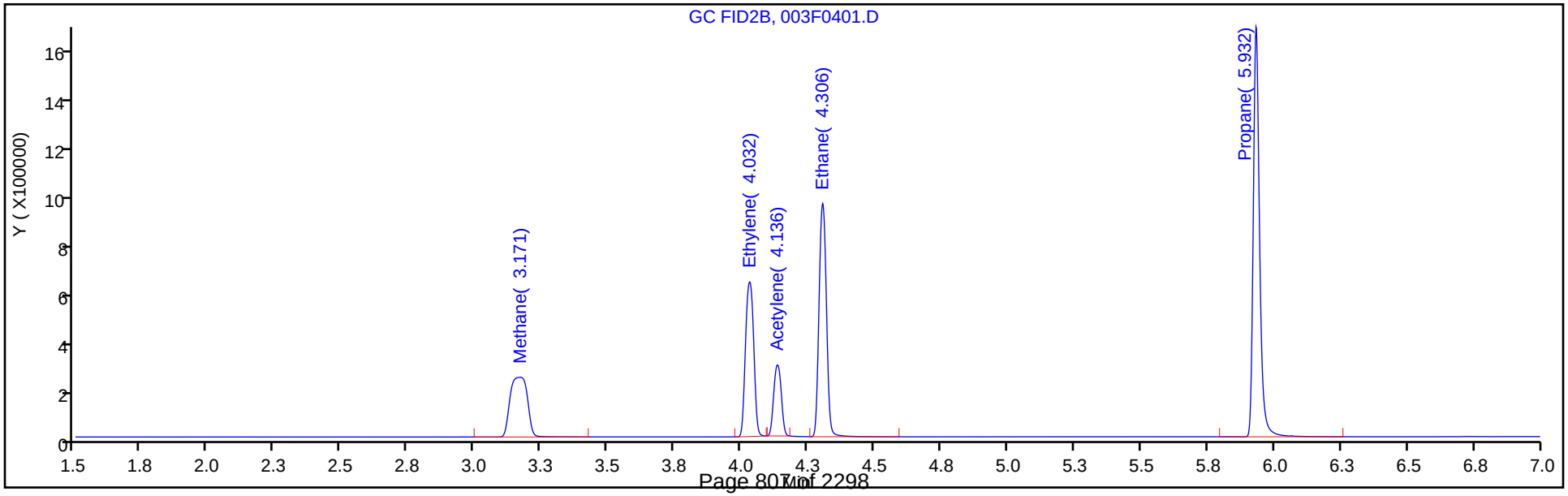
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D

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

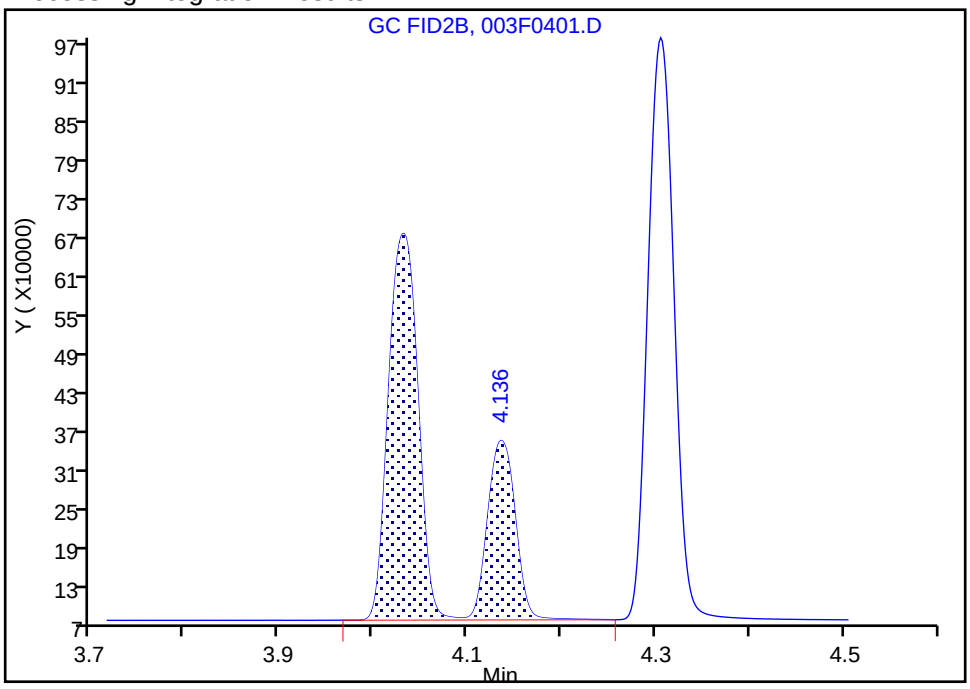
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D				
Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J		
Lims ID:	IC L4				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

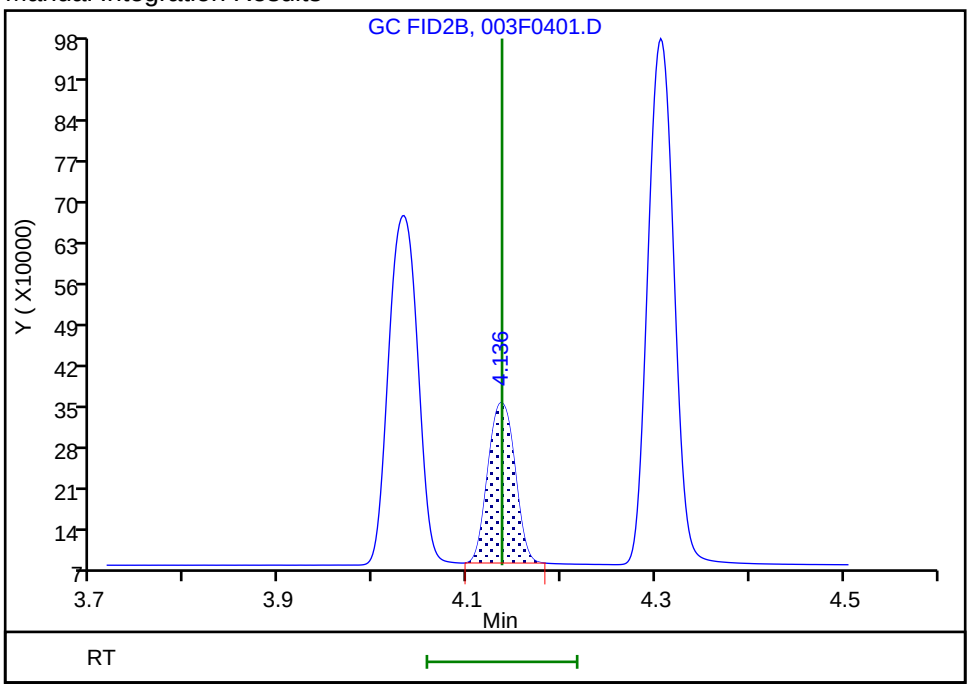
Processing Integration Results

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

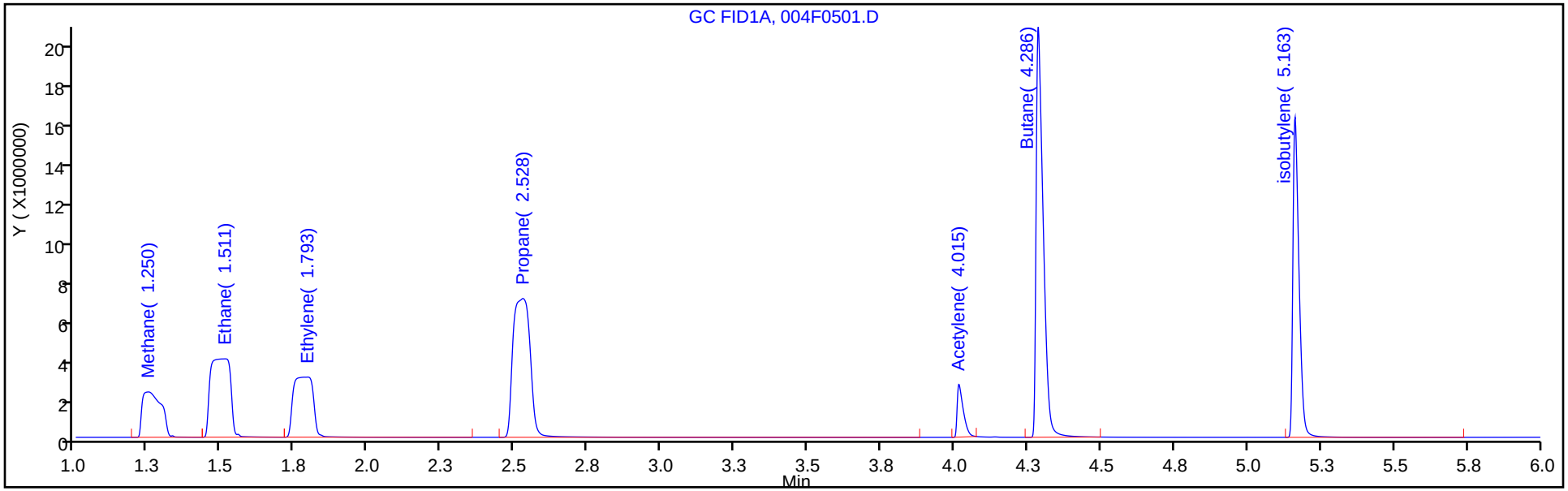
Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

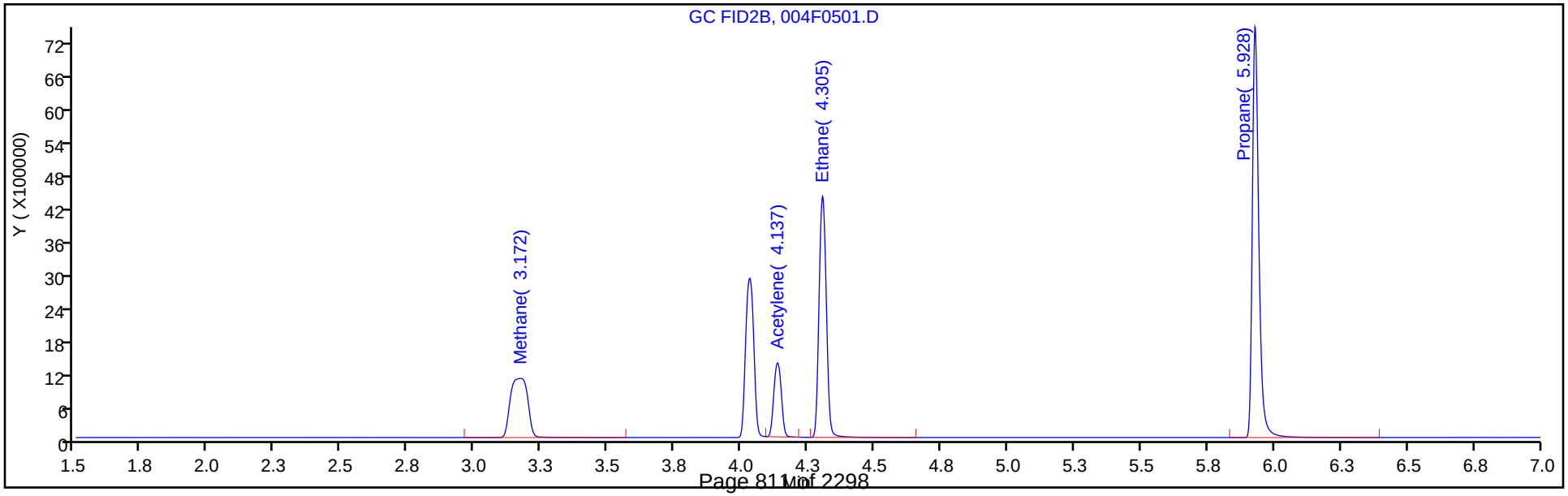
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D

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

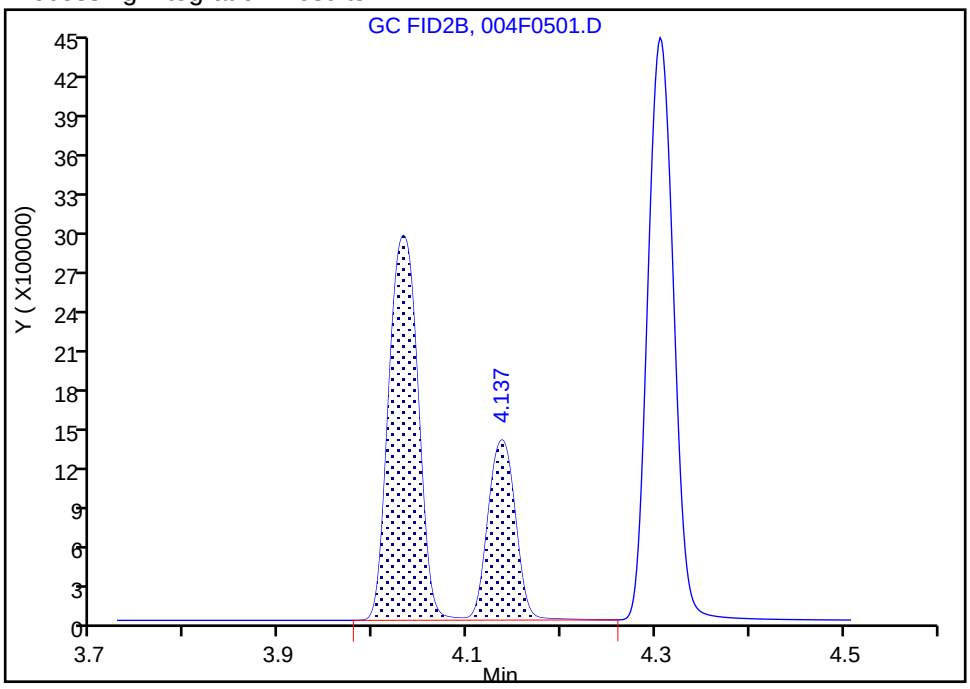
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

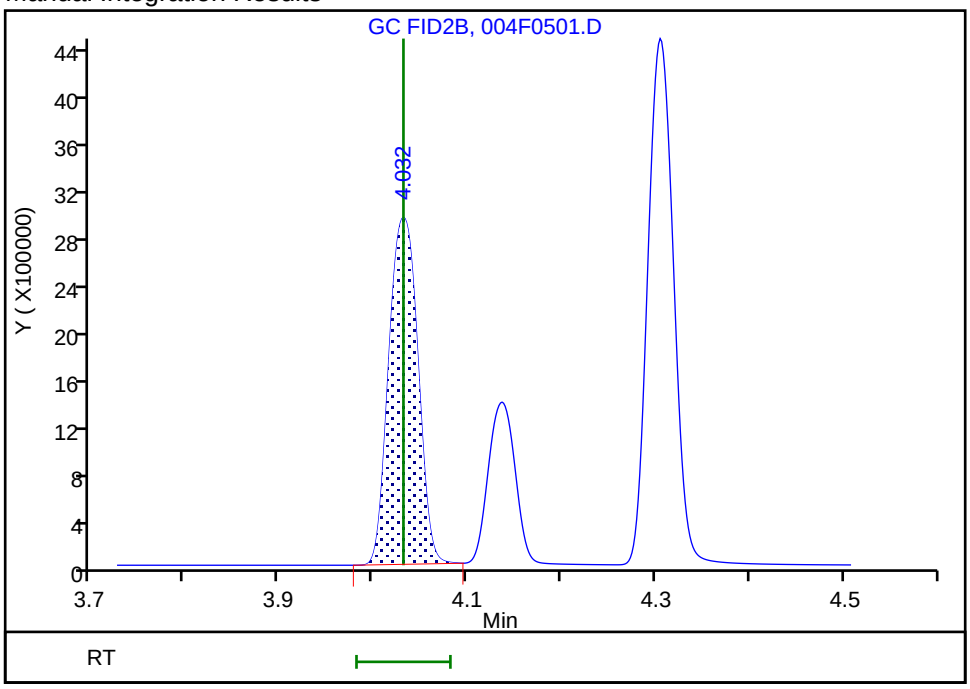
Processing Integration Results

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

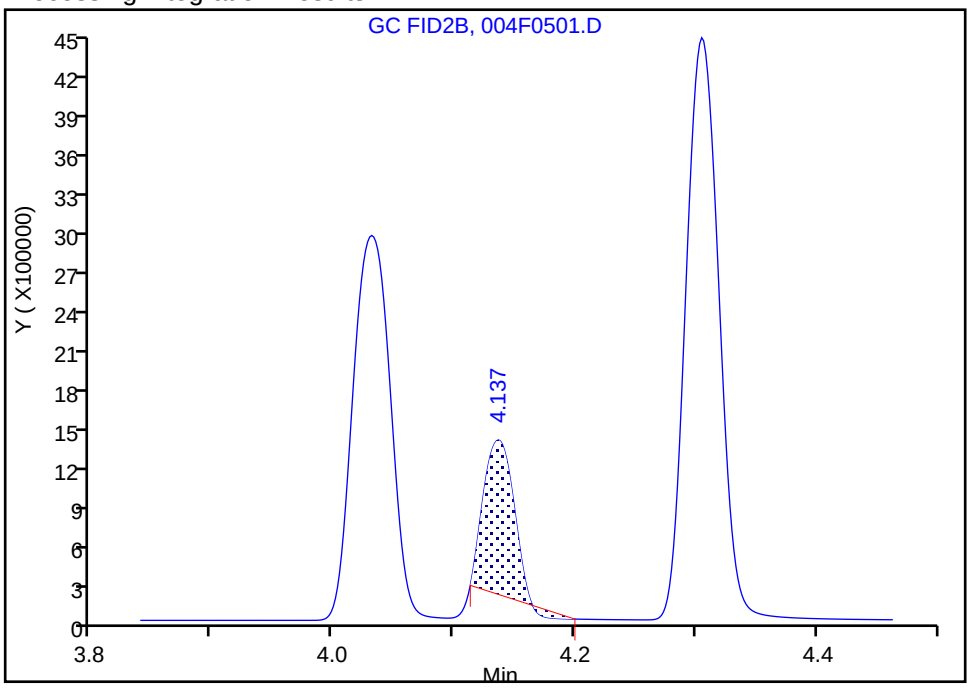
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

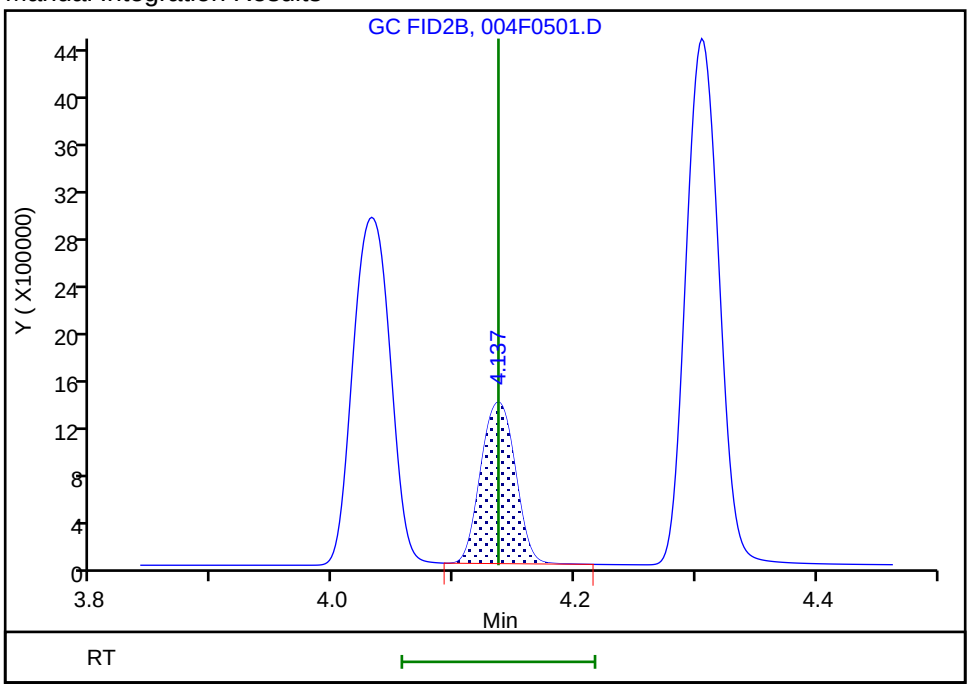
Processing Integration Results

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

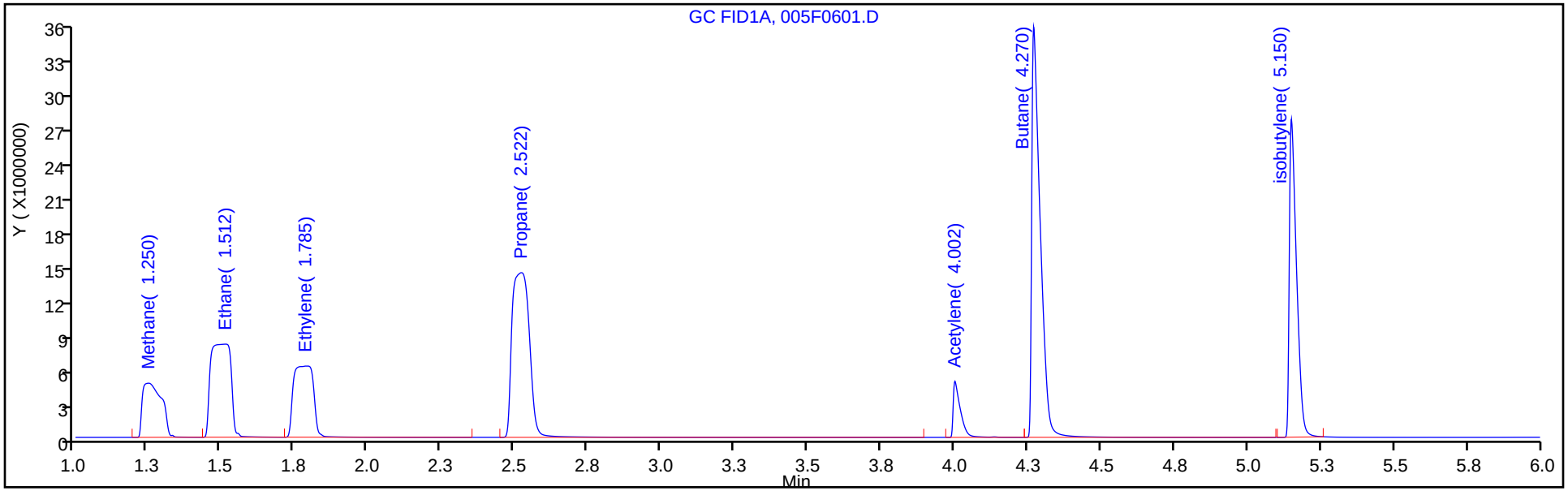
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

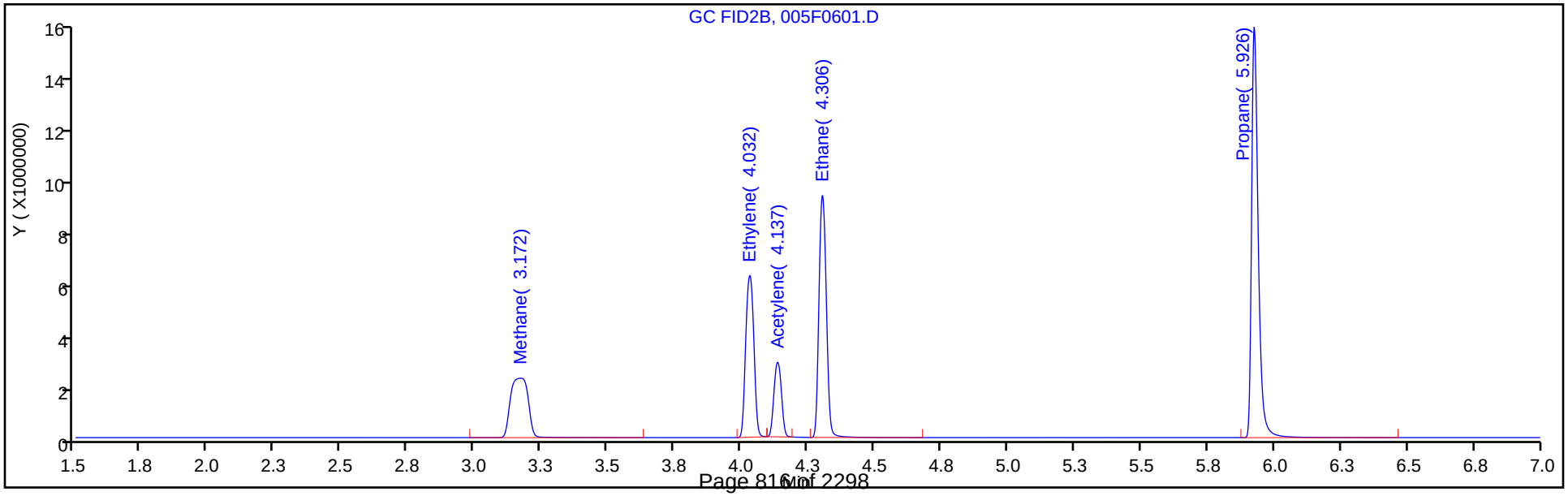
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D

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



Eurofins TestAmerica, Denver

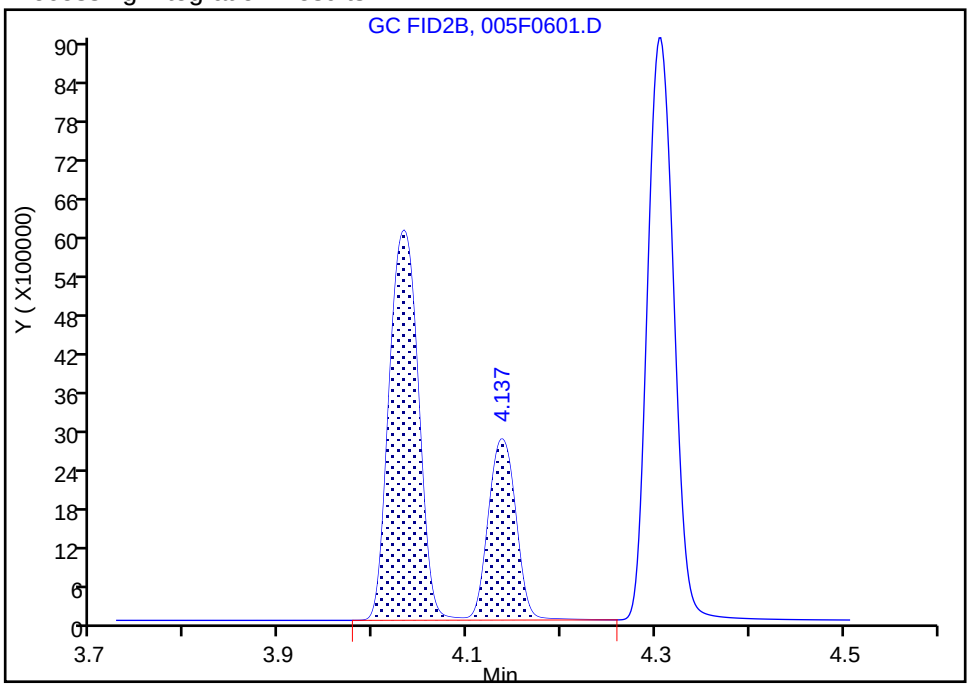
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D
Injection Date: 16-May-2020 12:19:27 Instrument ID: VGC_J
Lims ID: IC L6
Client ID:
Operator ID: MEIERG ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

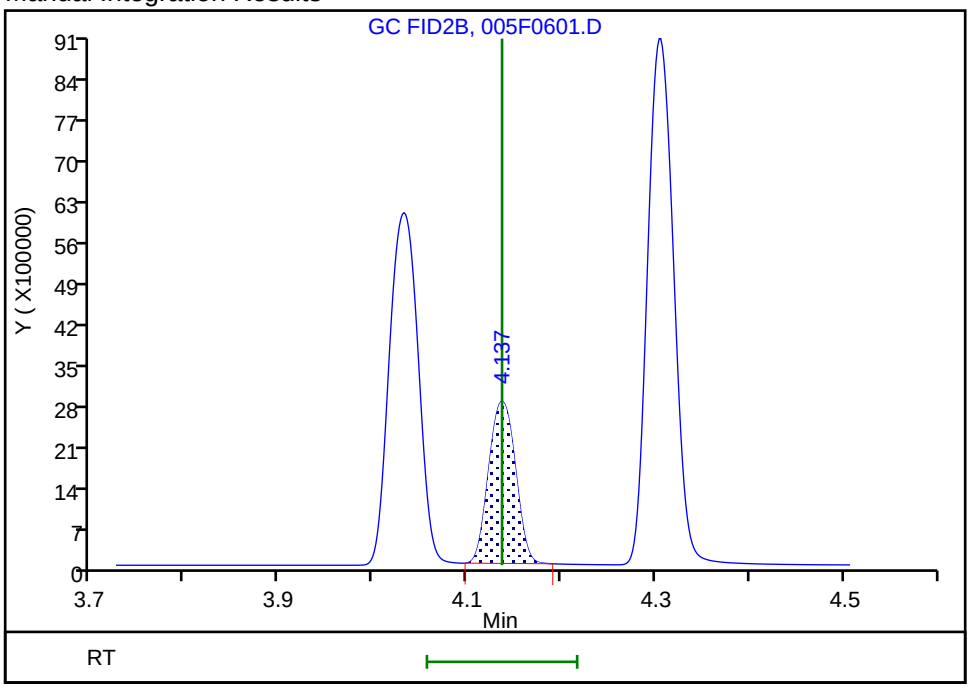
Processing Integration Results

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

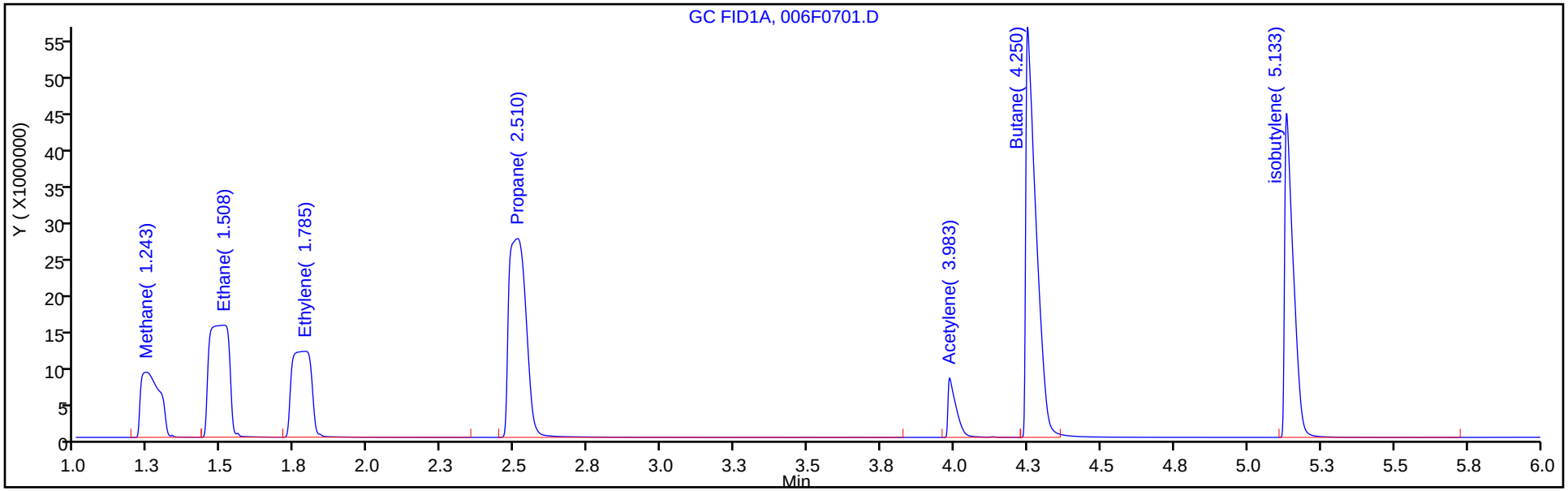
Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

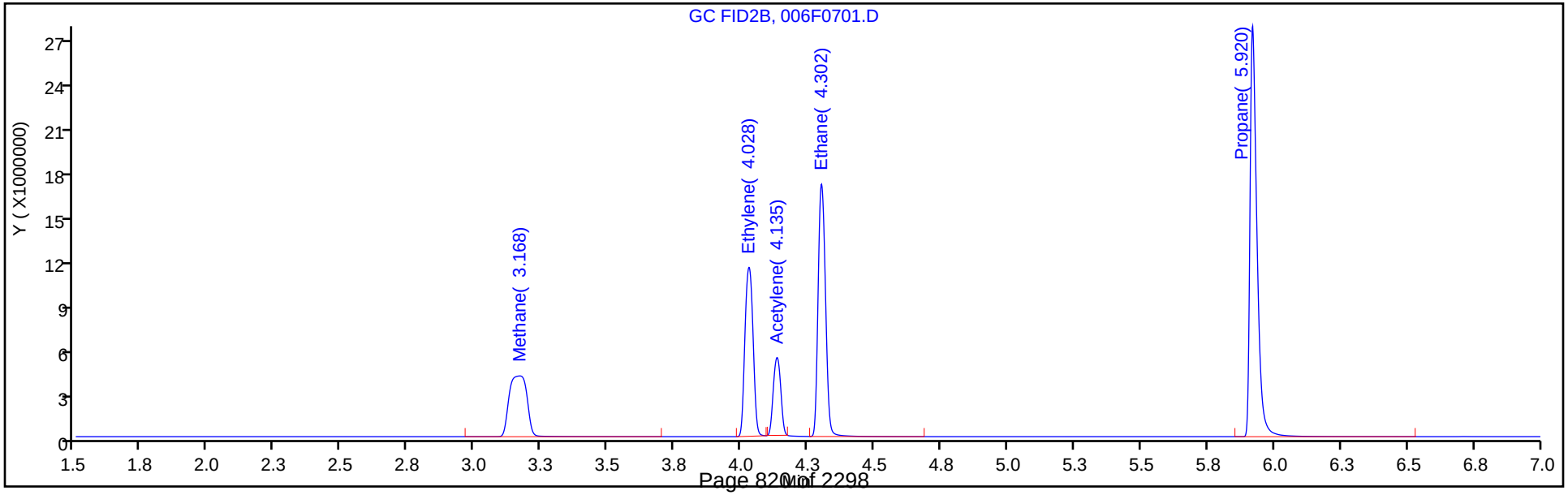
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

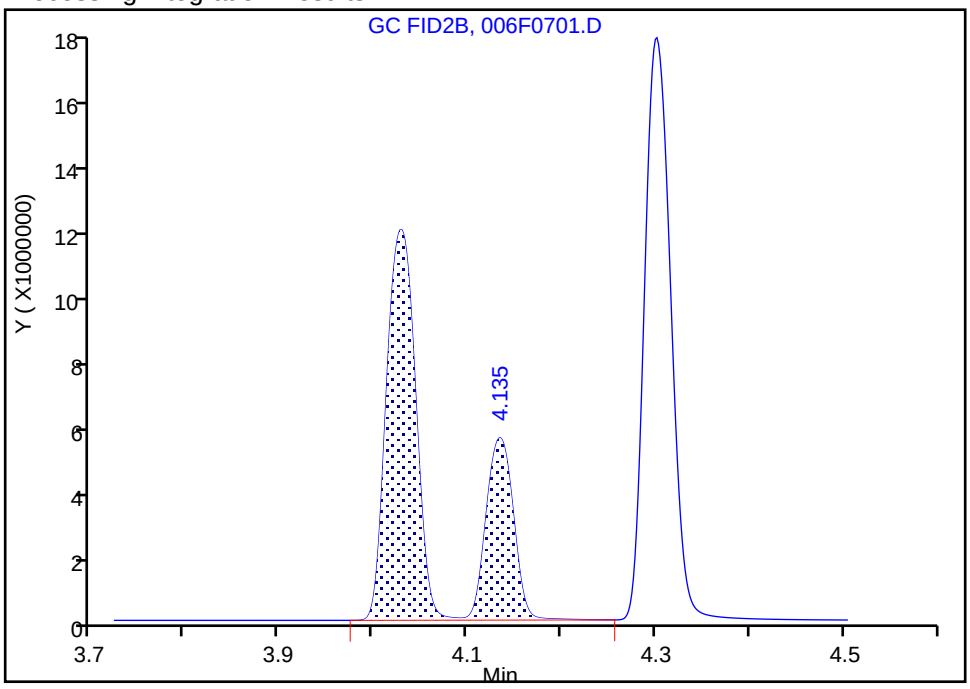
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D
Injection Date: 16-May-2020 12:35:56 Instrument ID: VGC_J
Lims ID: IC L7
Client ID:
Operator ID: MEIERG ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

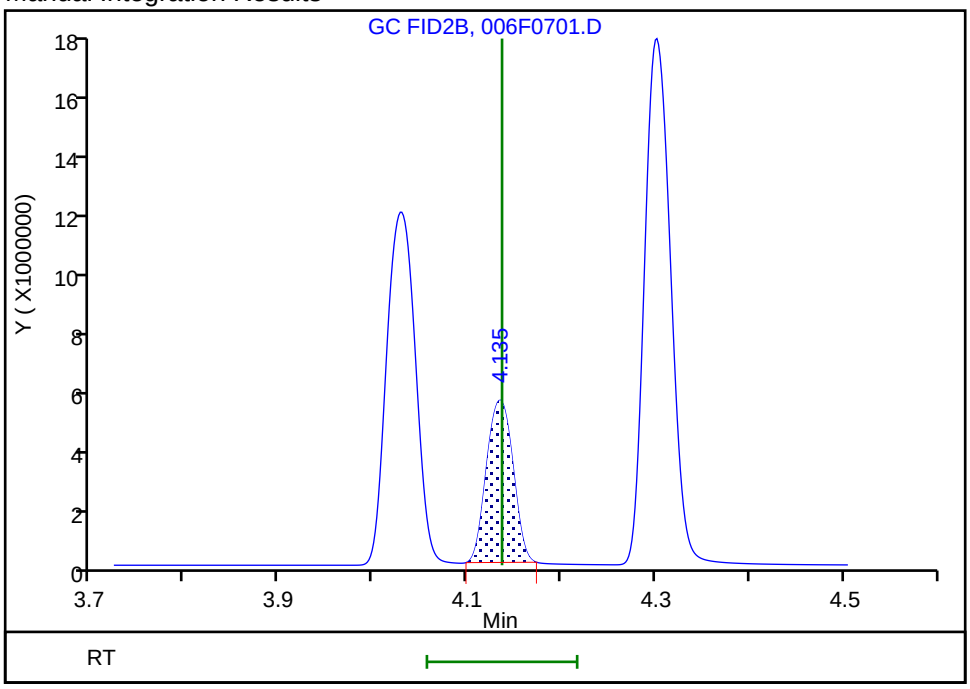
Processing Integration Results

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

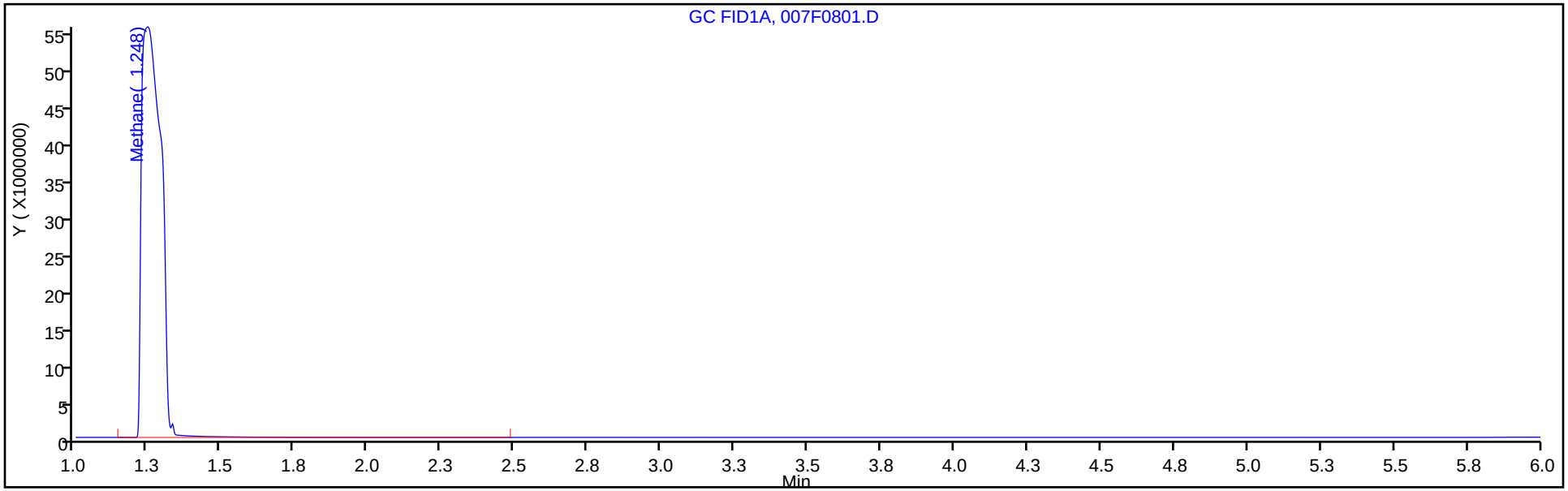
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

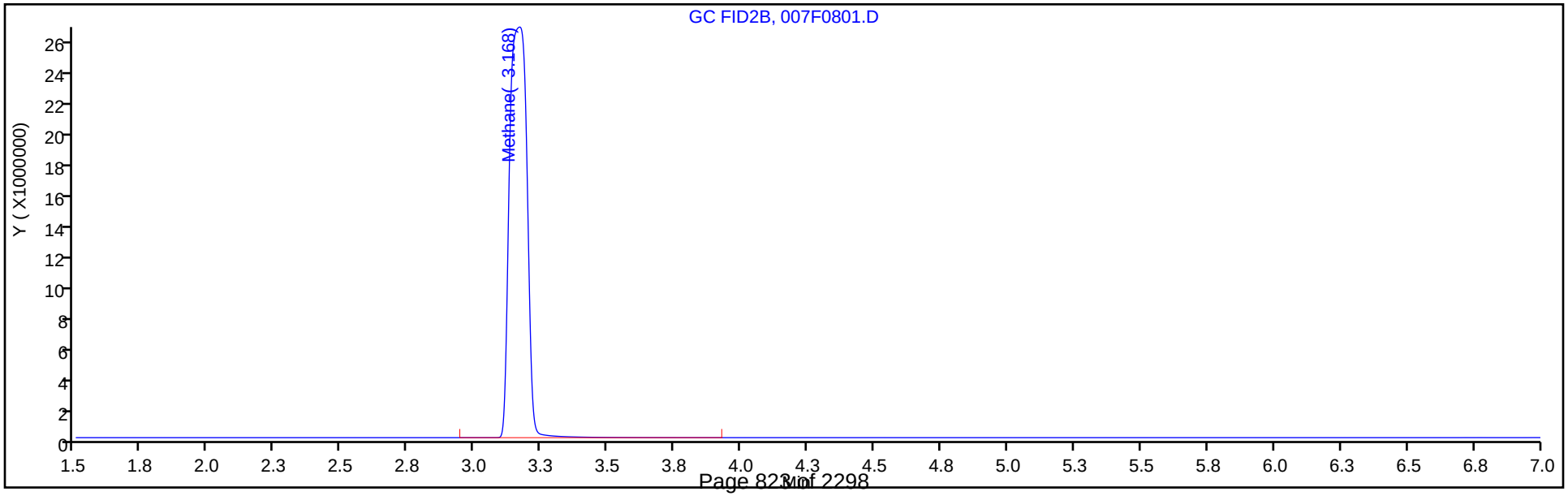
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D

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

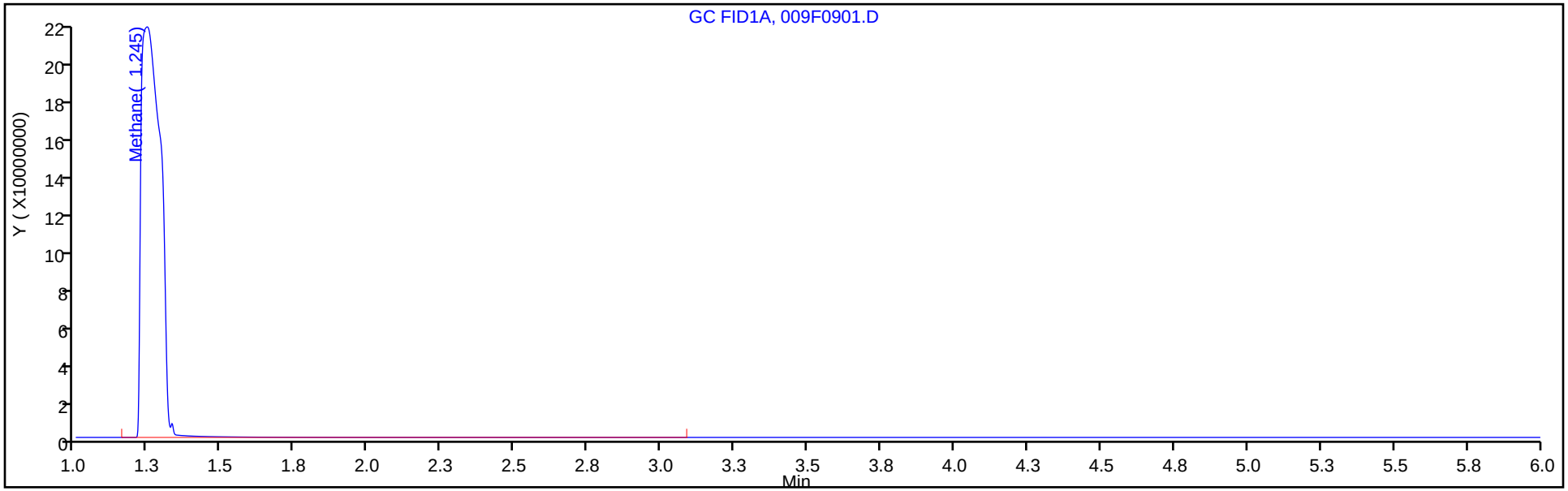
Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

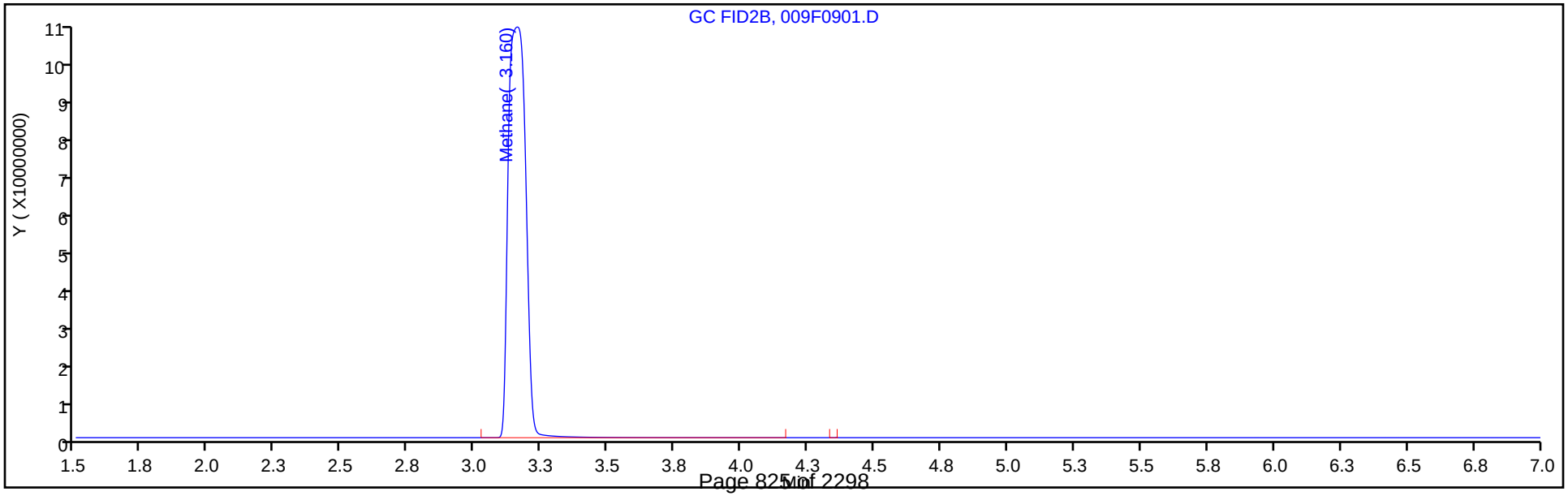
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

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.: 280-137609-1

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.: 280-137609-1

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

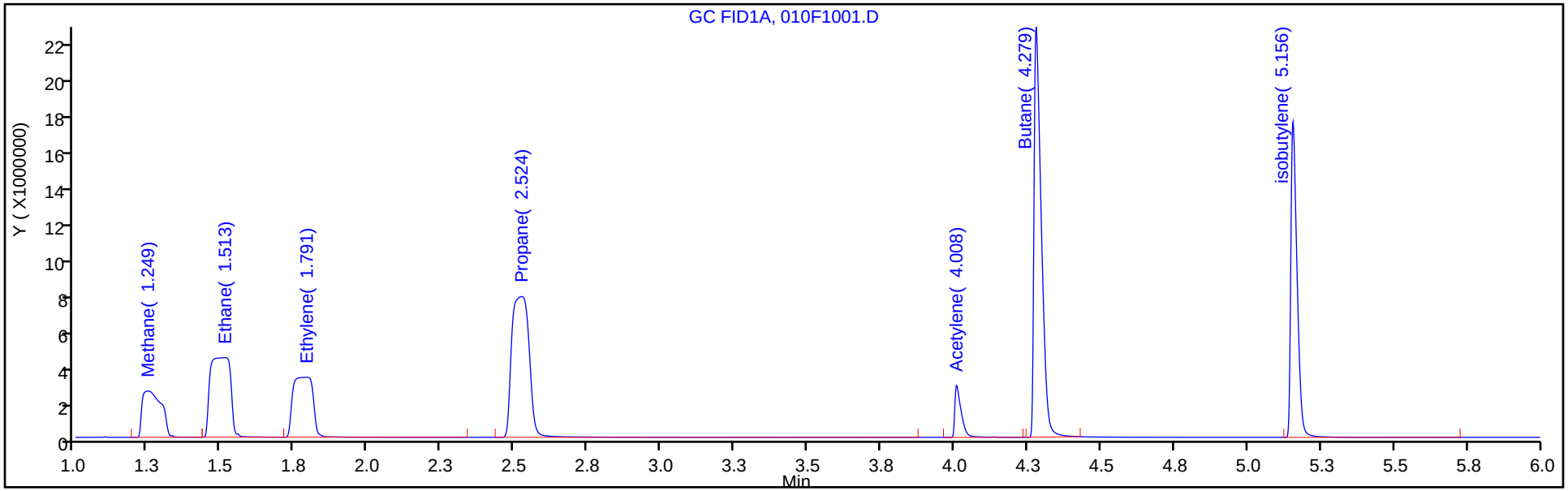
Report Date: 17-May-2020 09:03:52 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

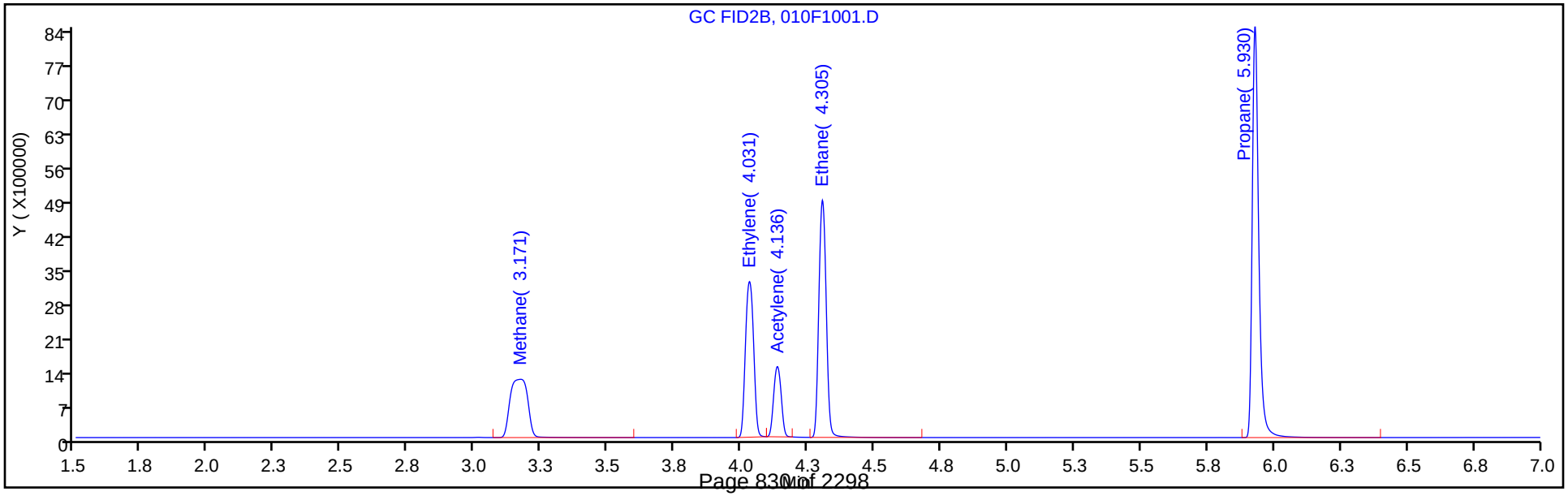
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D

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.: 280-137609-1

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.: 280-137609-1

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

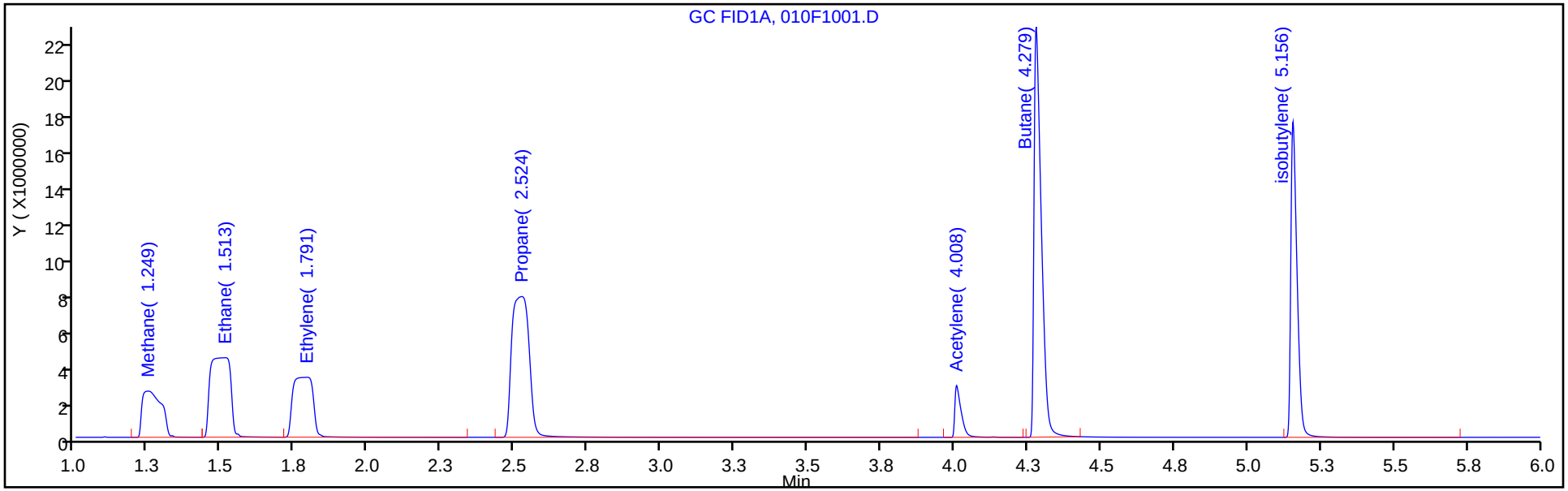
Report Date: 17-May-2020 09:03:52 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

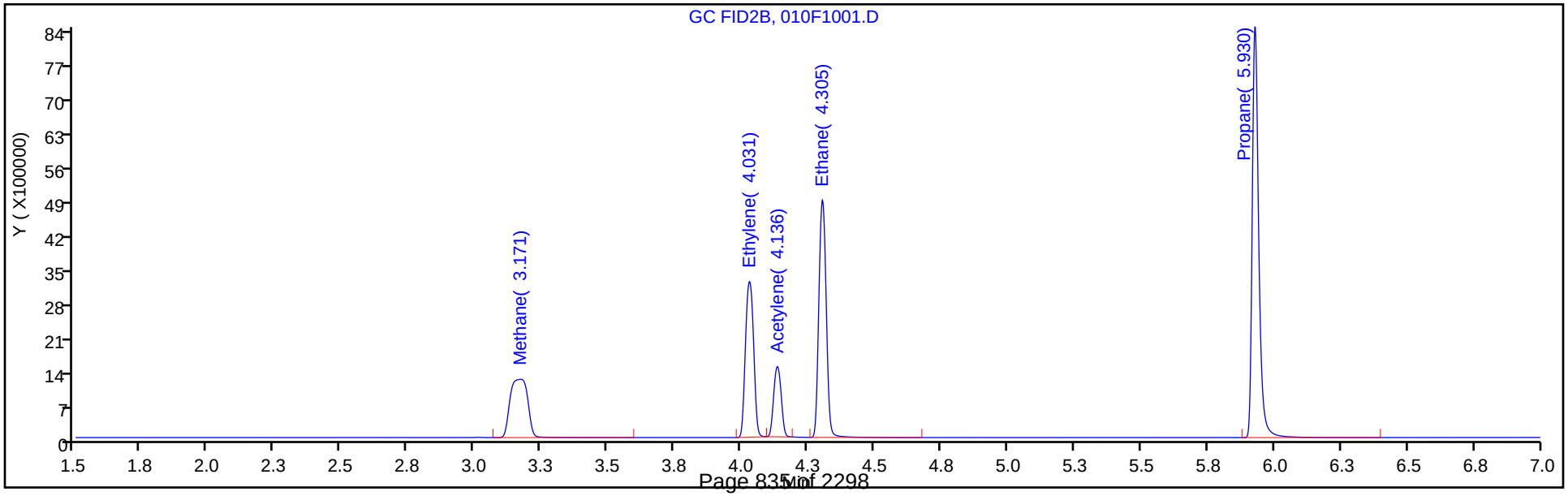
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D

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



Eurofins TestAmerica, Denver

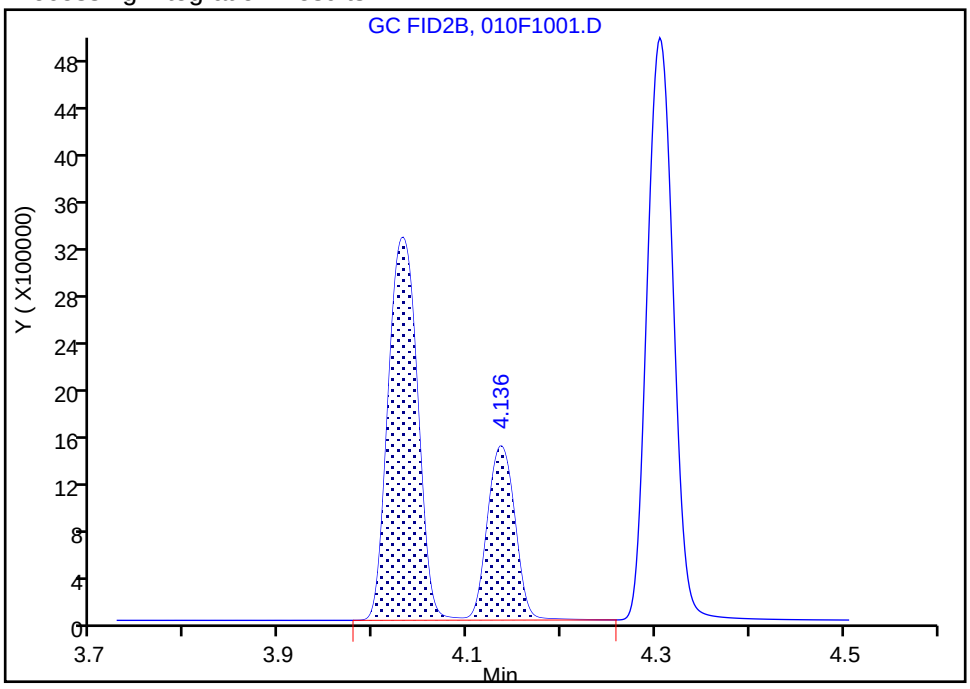
Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D
Injection Date: 16-May-2020 13:25:26 Instrument ID: VGC_J
Lims ID: ICV
Client ID:
Operator ID: MEIERG ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

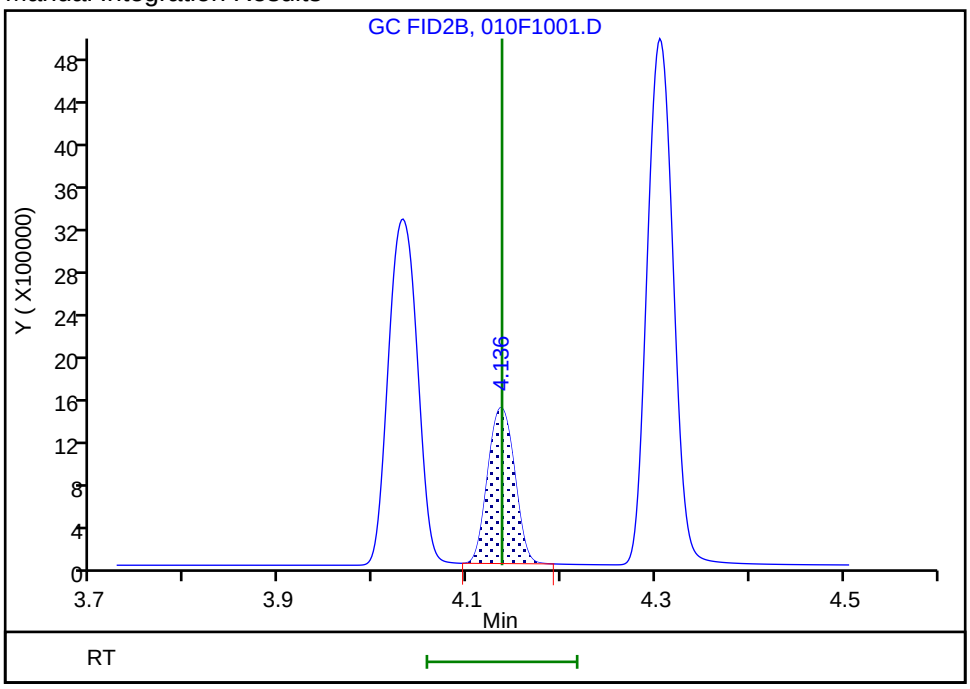
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

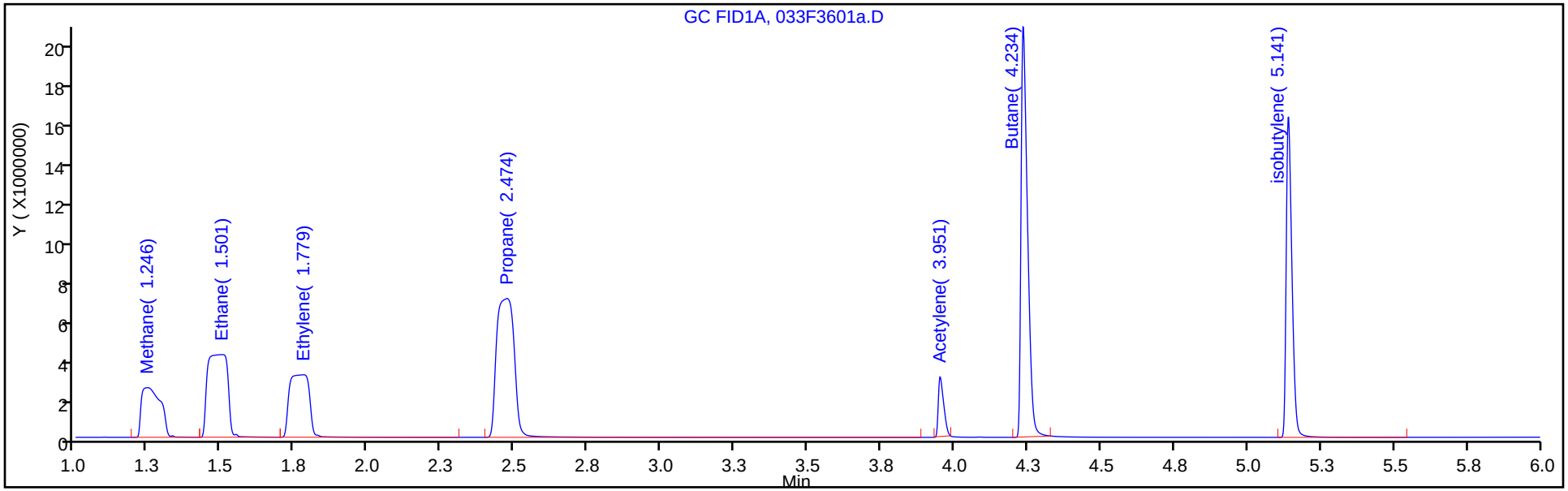
Report Date: 18-Jun-2020 10:24:52 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

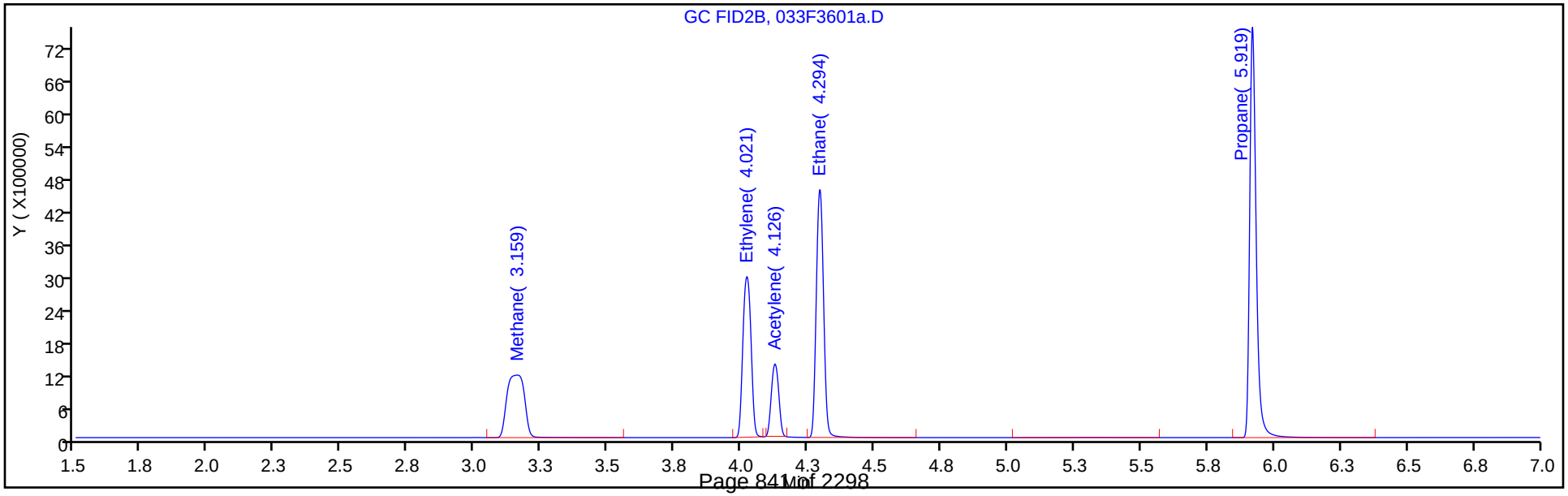
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D

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

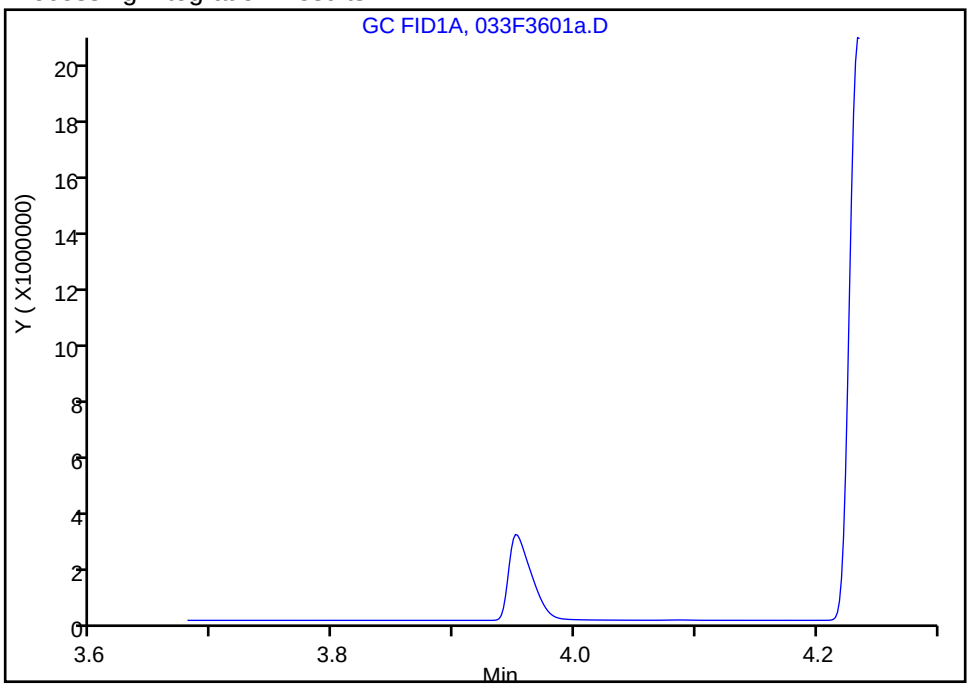
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D				
Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	33	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

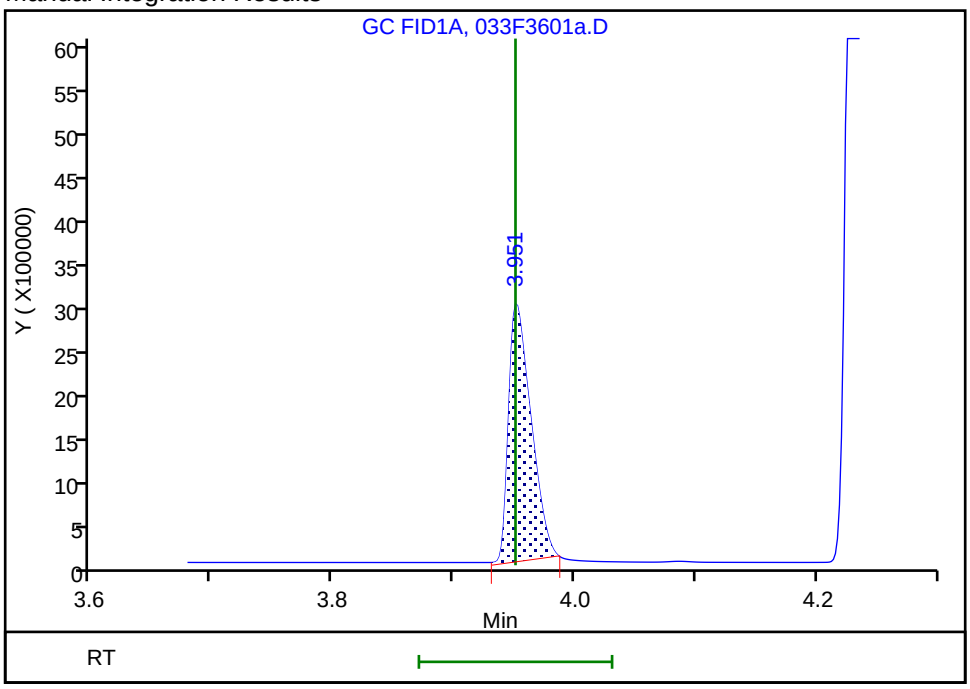
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

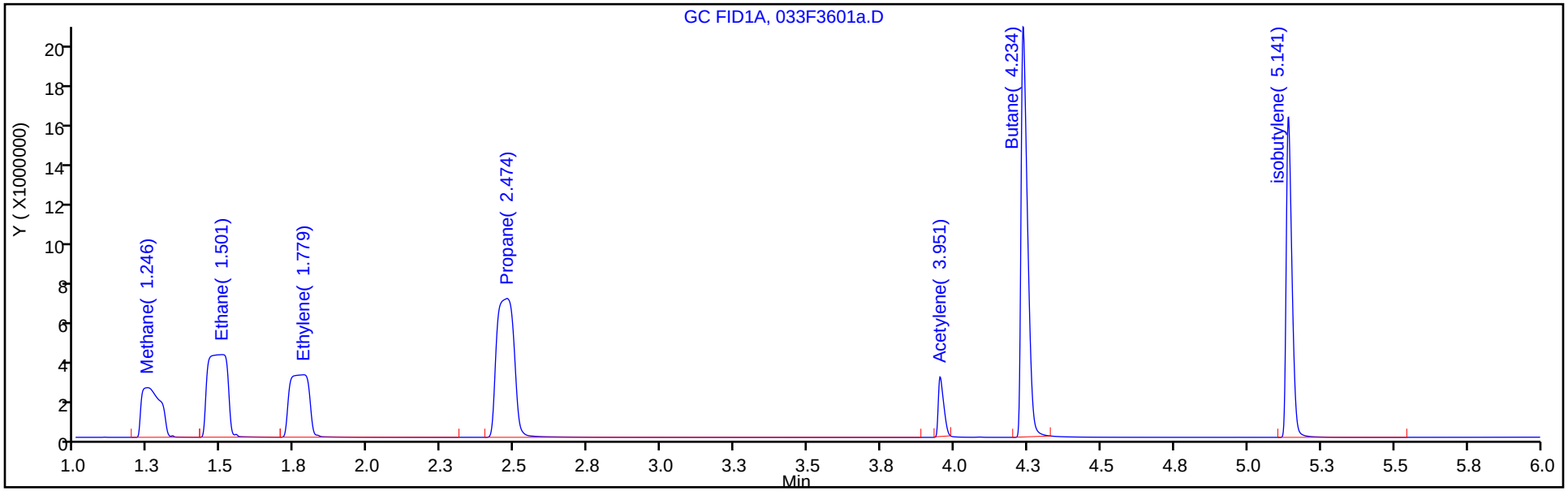
Report Date: 18-Jun-2020 10:24:52 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

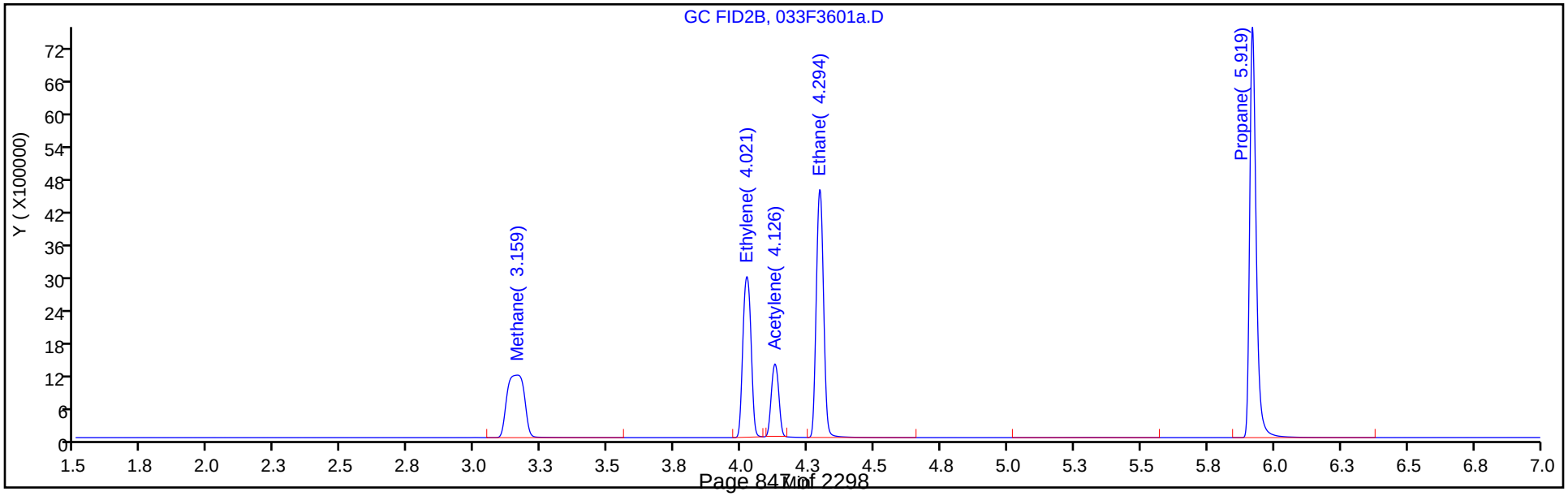
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D

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

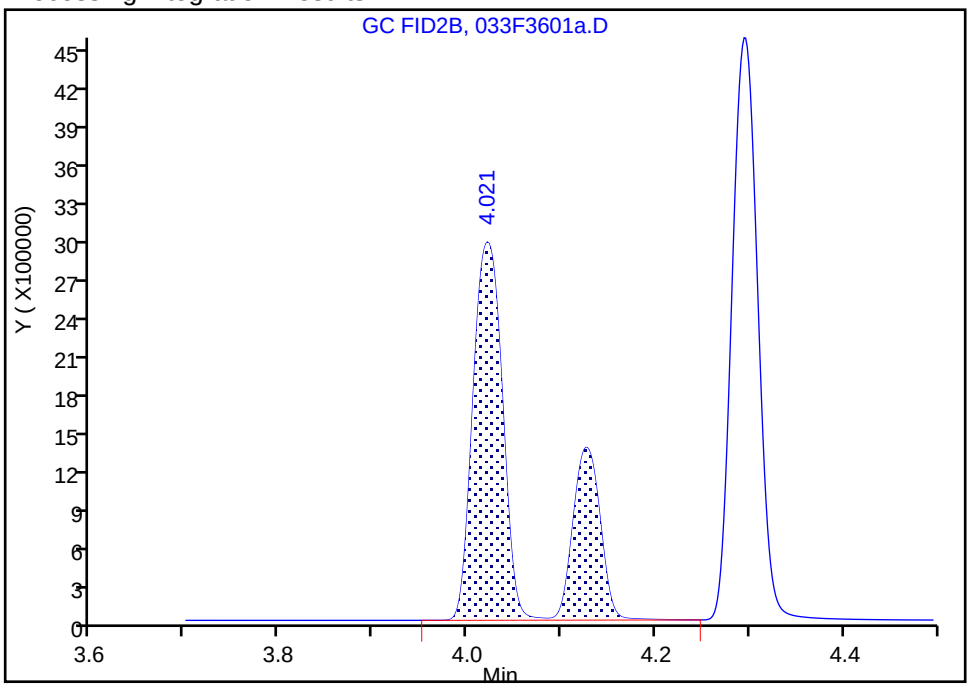
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D				
Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	33	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

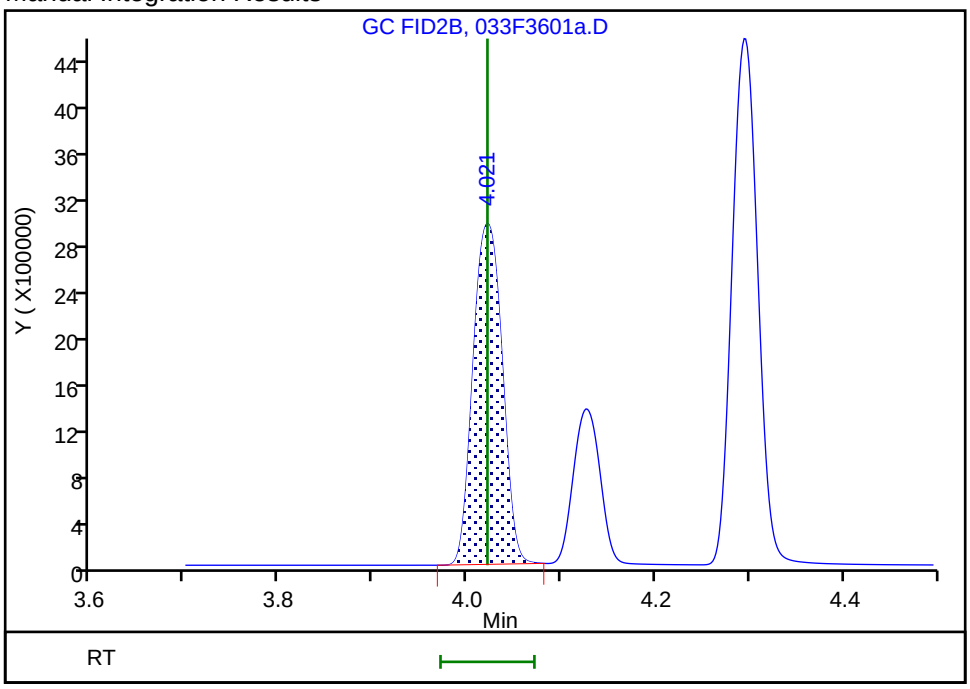
Processing Integration Results

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

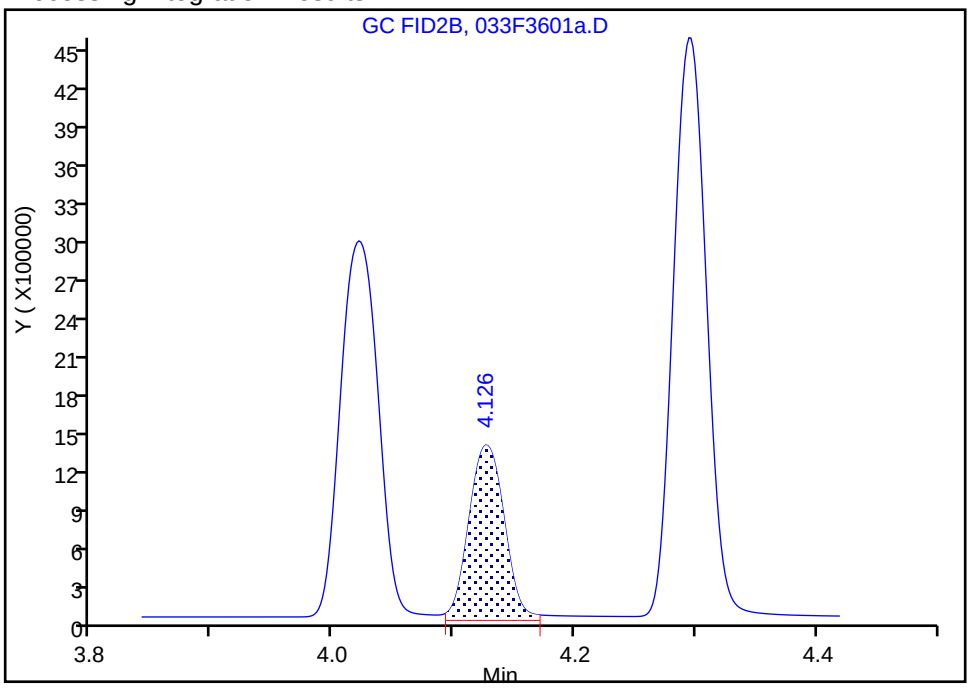
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\033F3601a.D				
Injection Date:	16-Jun-2020 20:22:22	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	33	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

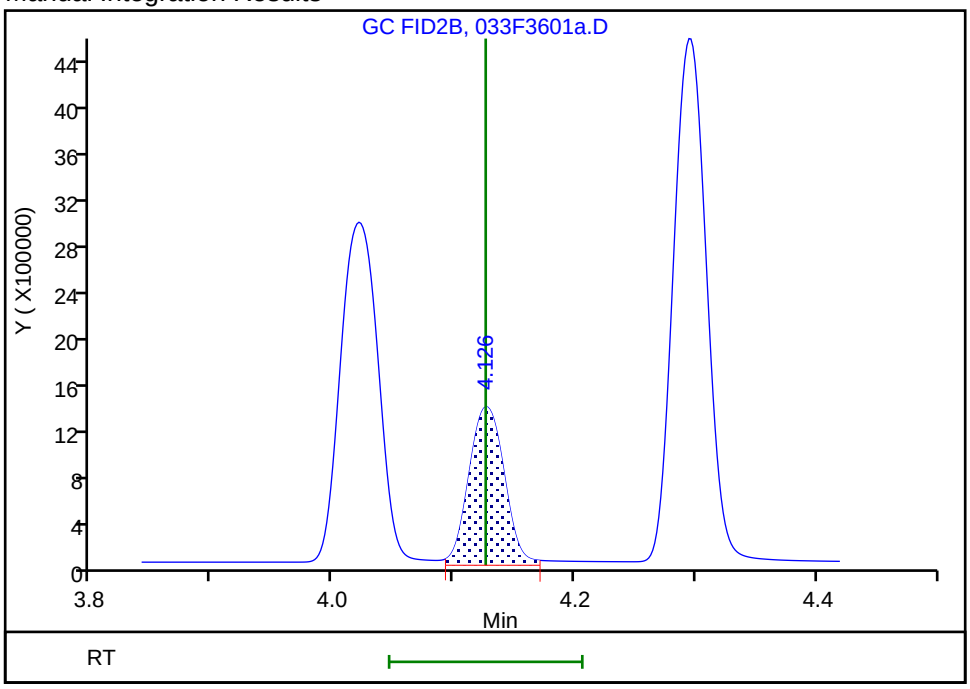
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

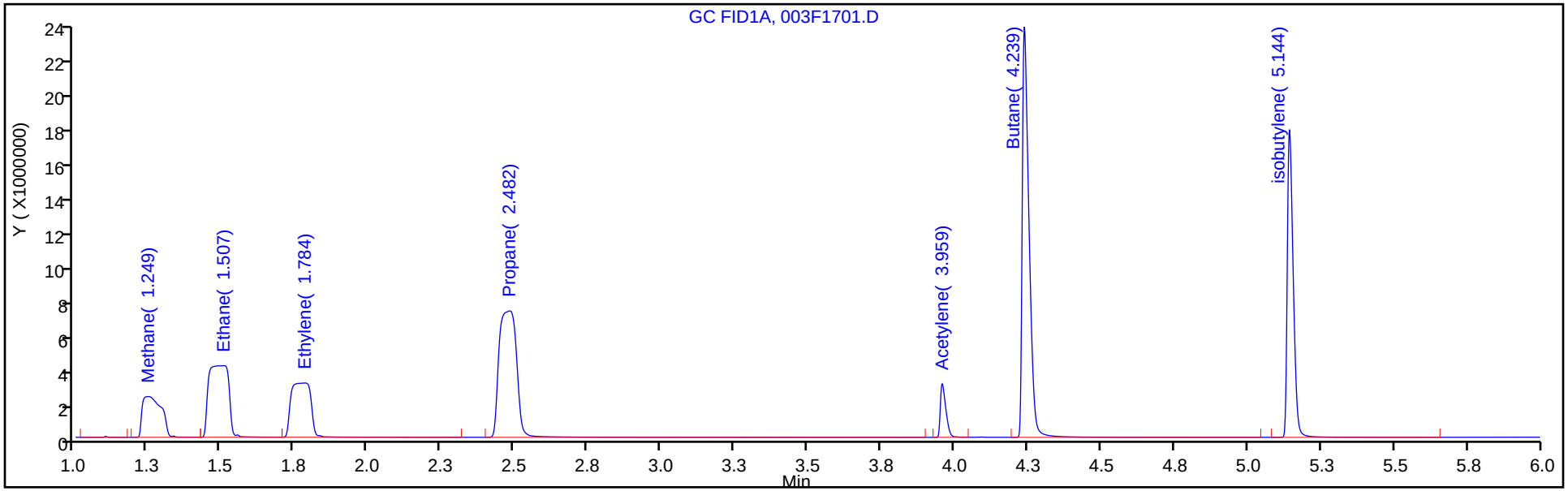
Report Date: 18-Jun-2020 10:25:00 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

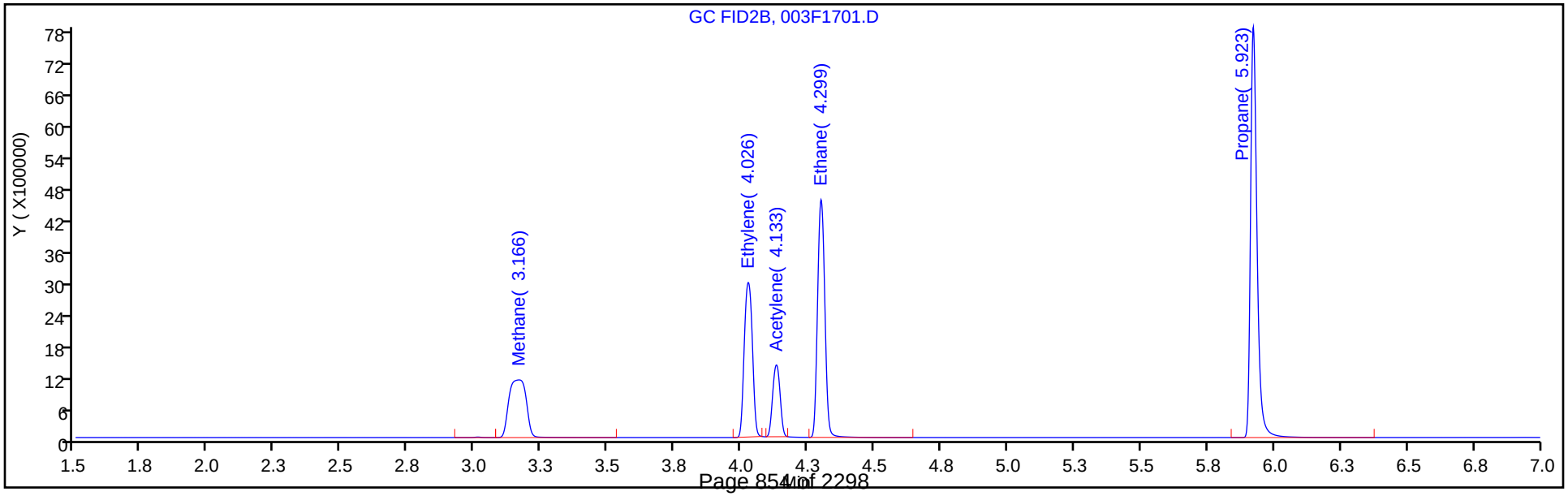
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D

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

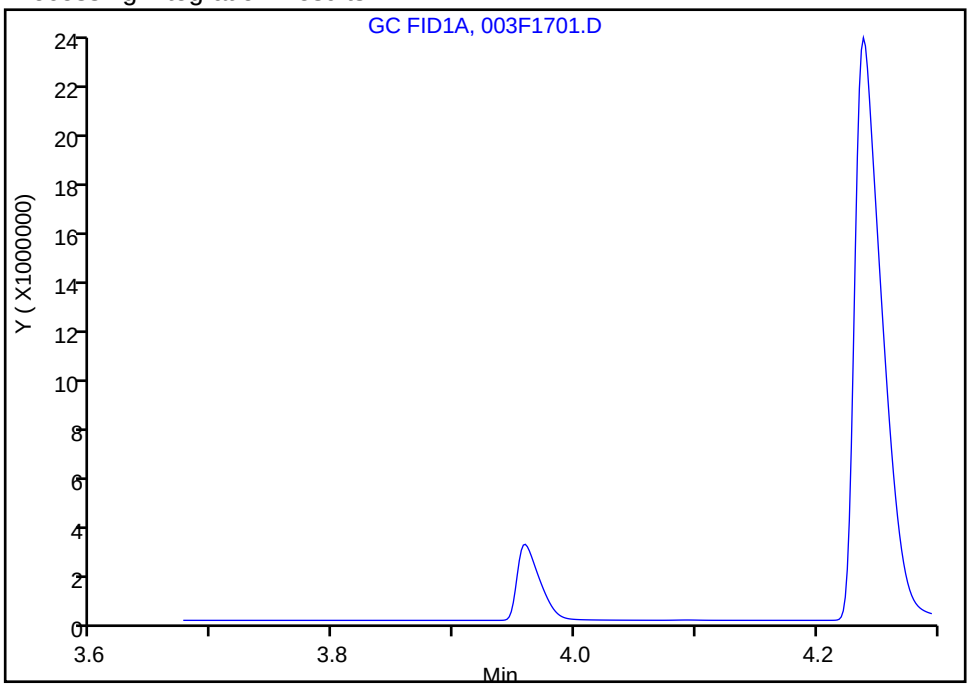
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D				
Injection Date:	17-Jun-2020 01:25:58	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	3	Worklist Smp#:	50
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

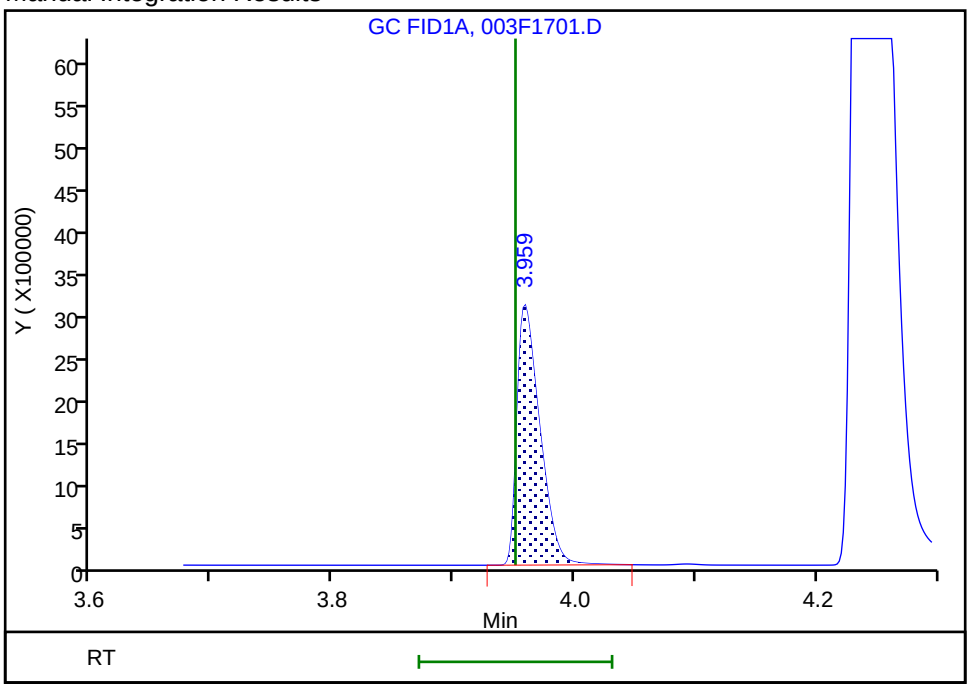
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

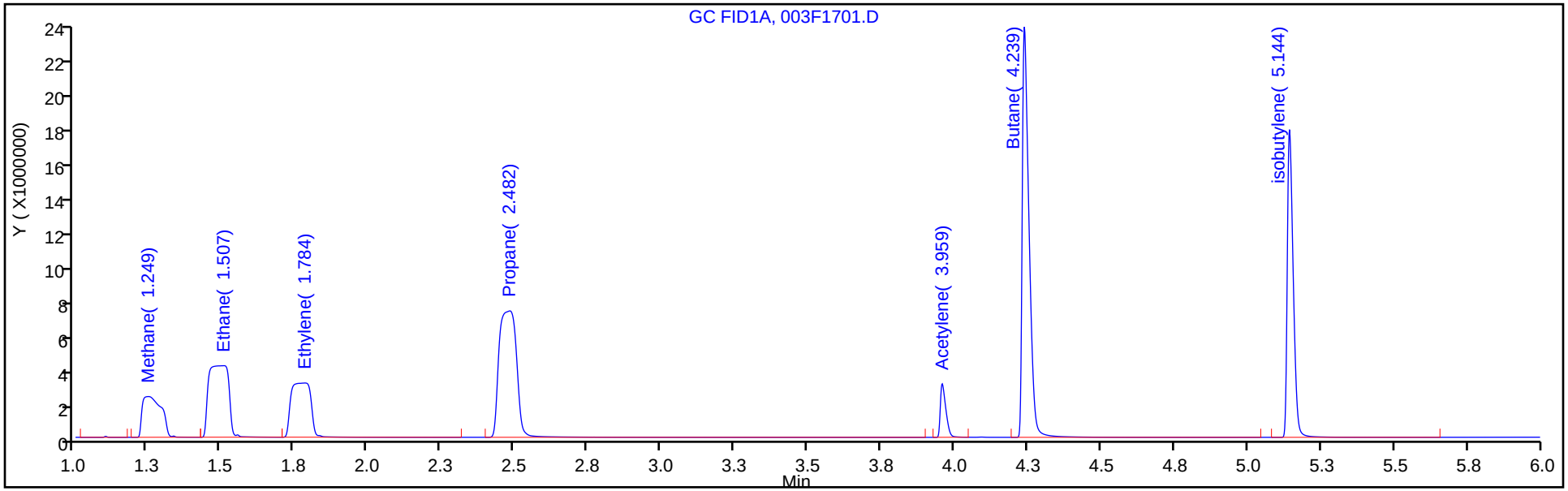
Report Date: 18-Jun-2020 10:25:00 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

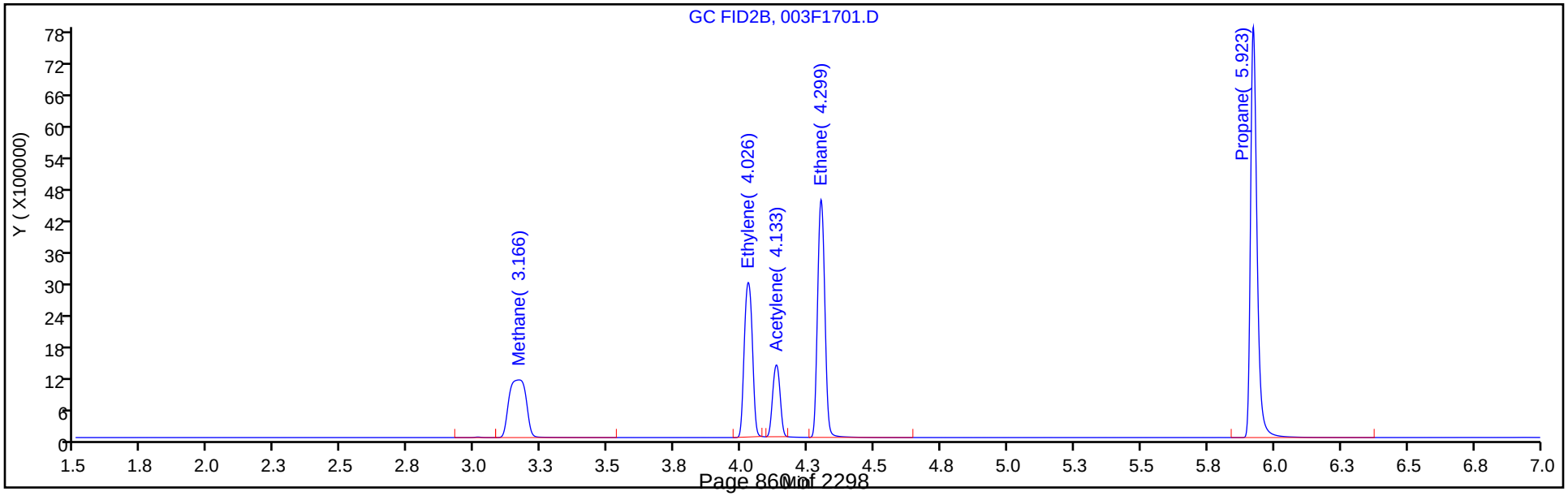
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D

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

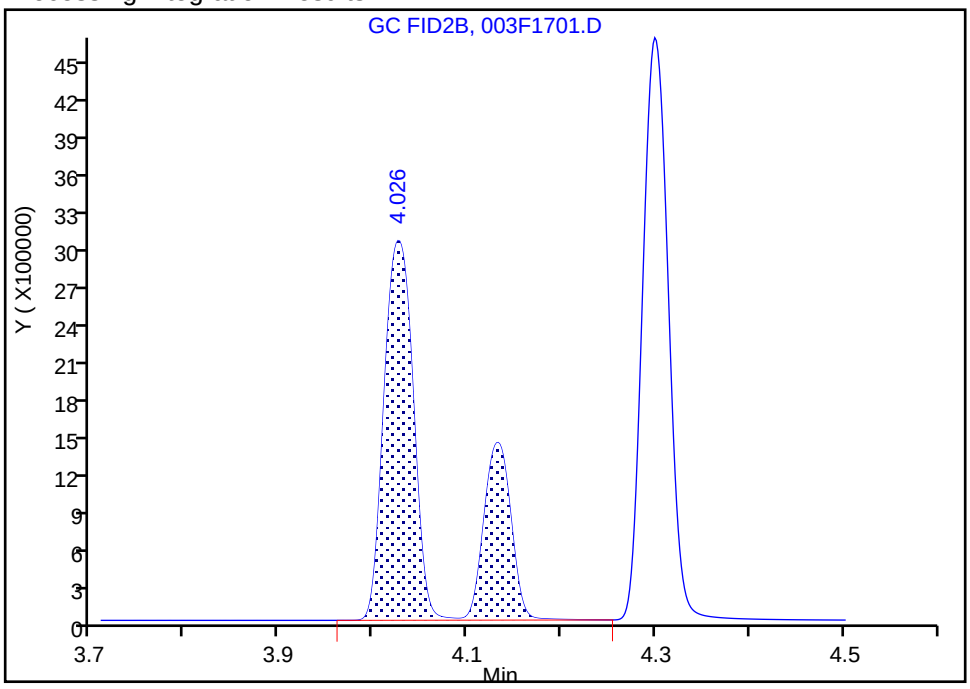
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D				
Injection Date:	17-Jun-2020 01:25:58	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	3	Worklist Smp#:	50
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

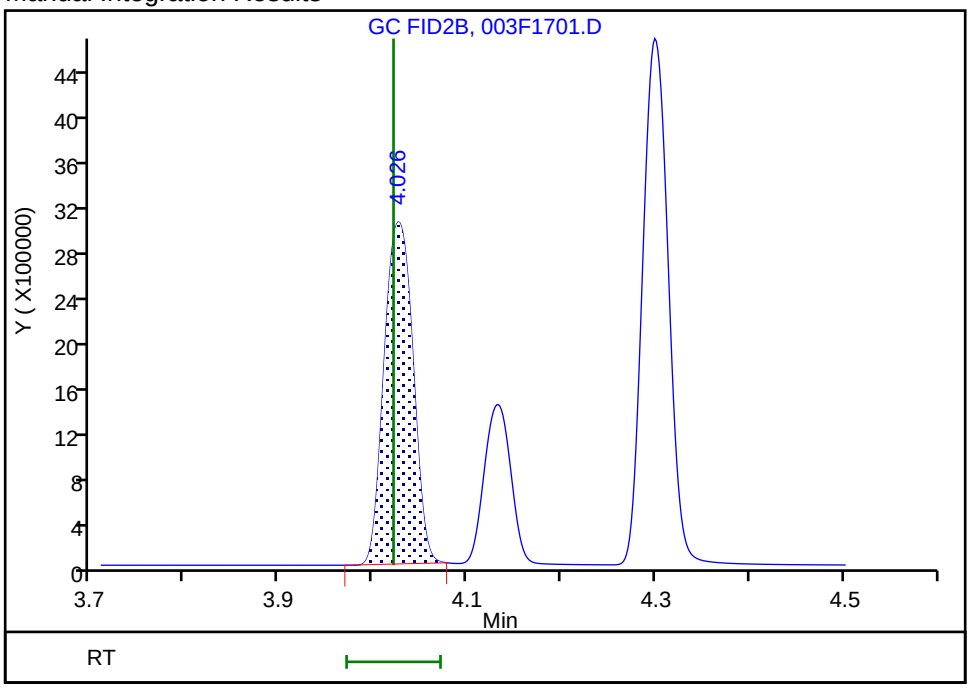
Processing Integration Results

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

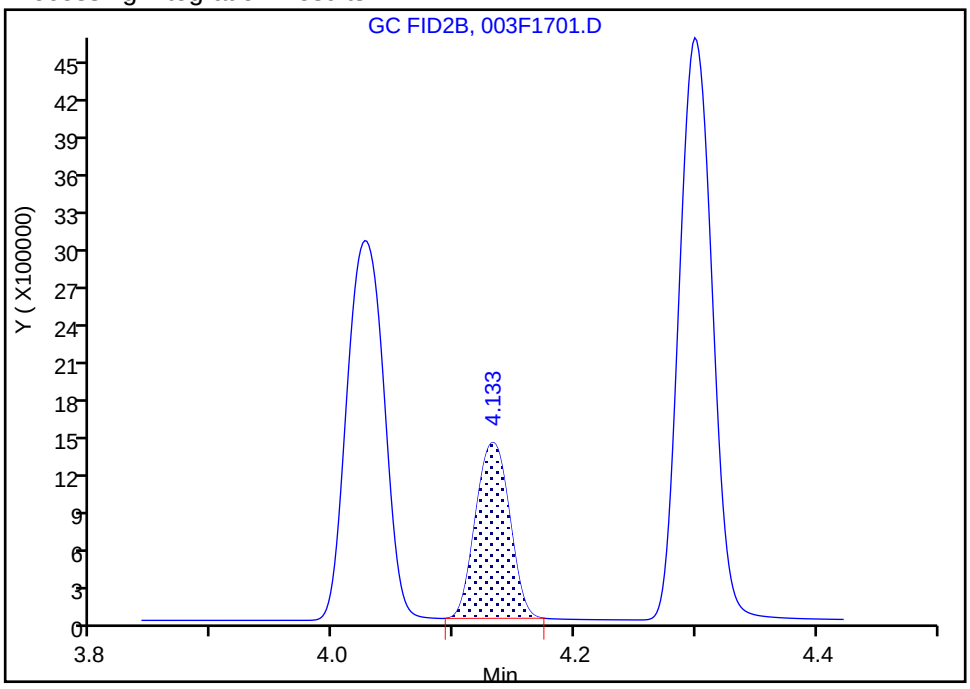
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\003F1701.D
Injection Date: 17-Jun-2020 01:25:58 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: SCIANNAC ALS Bottle#: 3 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

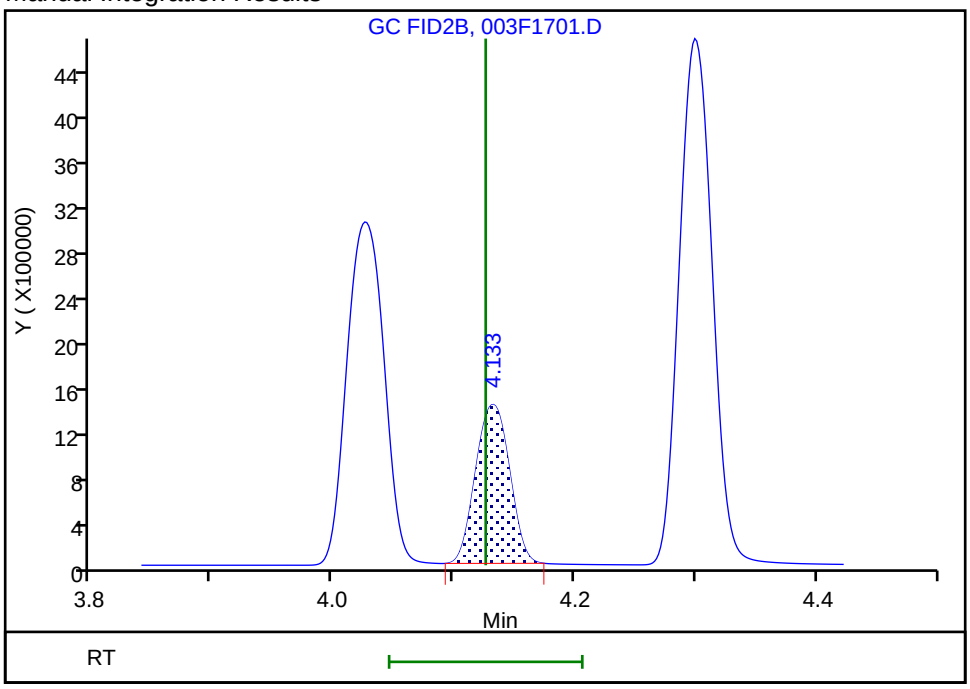
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

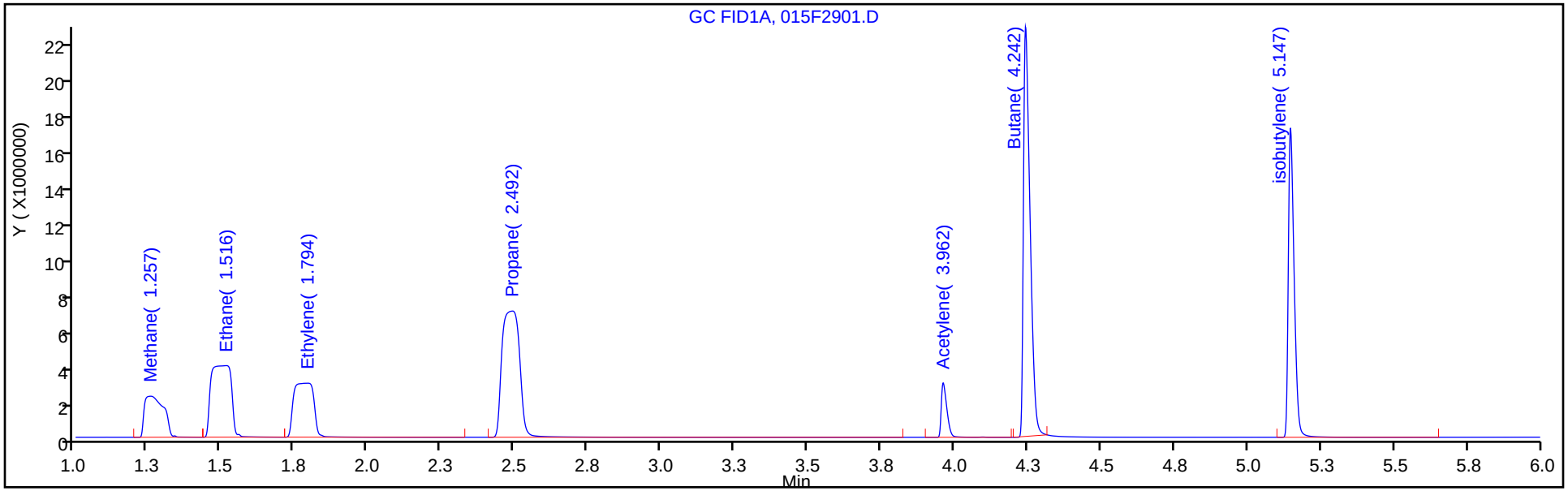
Report Date: 18-Jun-2020 10:25:06 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

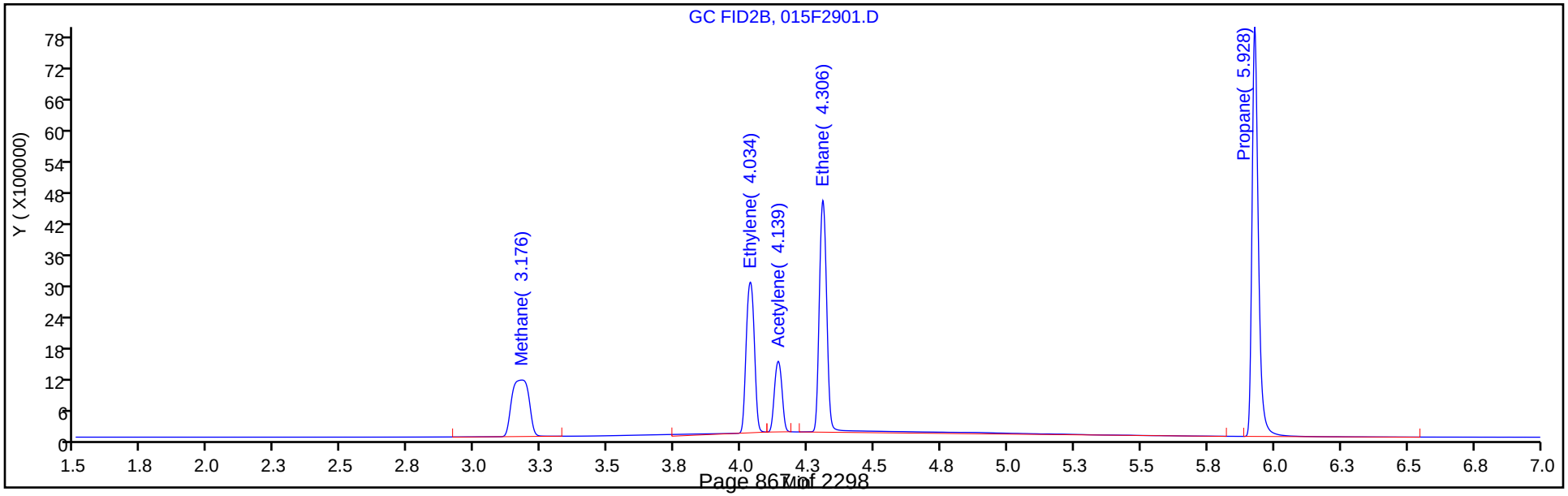
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D

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.: 280-137609-1

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.: 280-137609-1

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

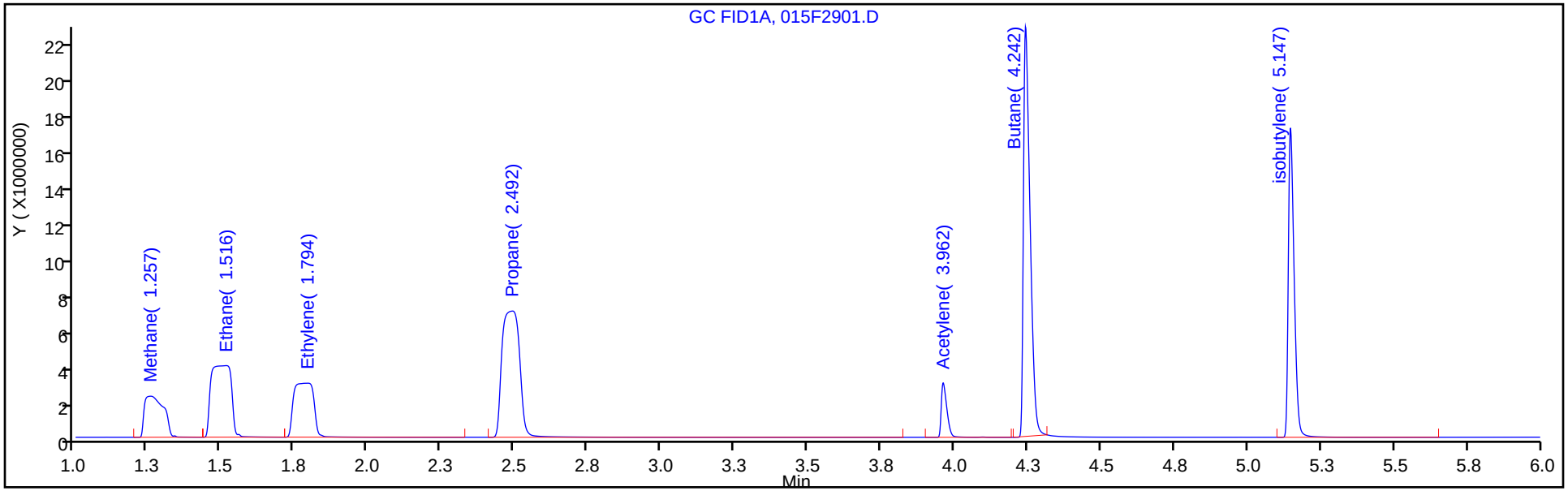
Report Date: 18-Jun-2020 10:25:06 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

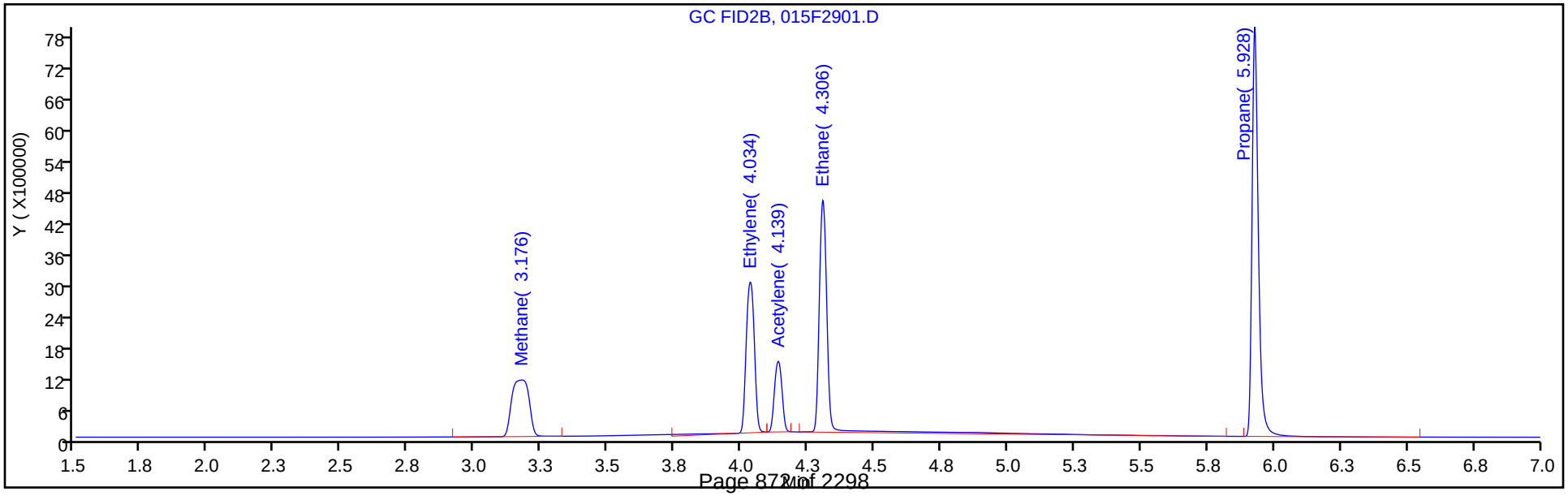
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D

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

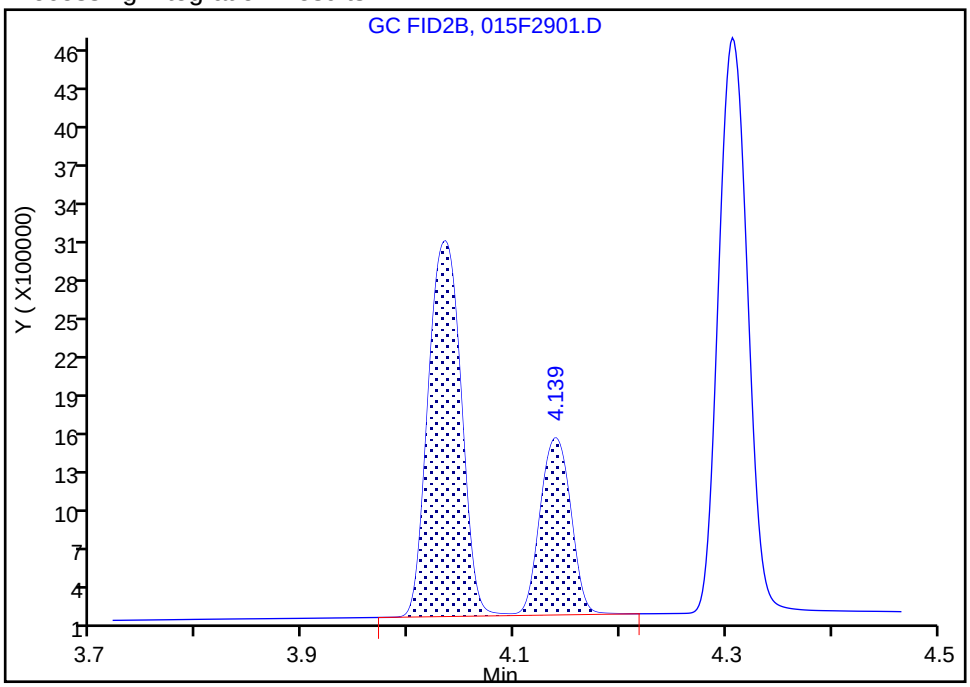
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\015F2901.D
Injection Date: 17-Jun-2020 04:41:24 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: SCIANNAC ALS Bottle#: 15 Worklist Smp#: 62
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

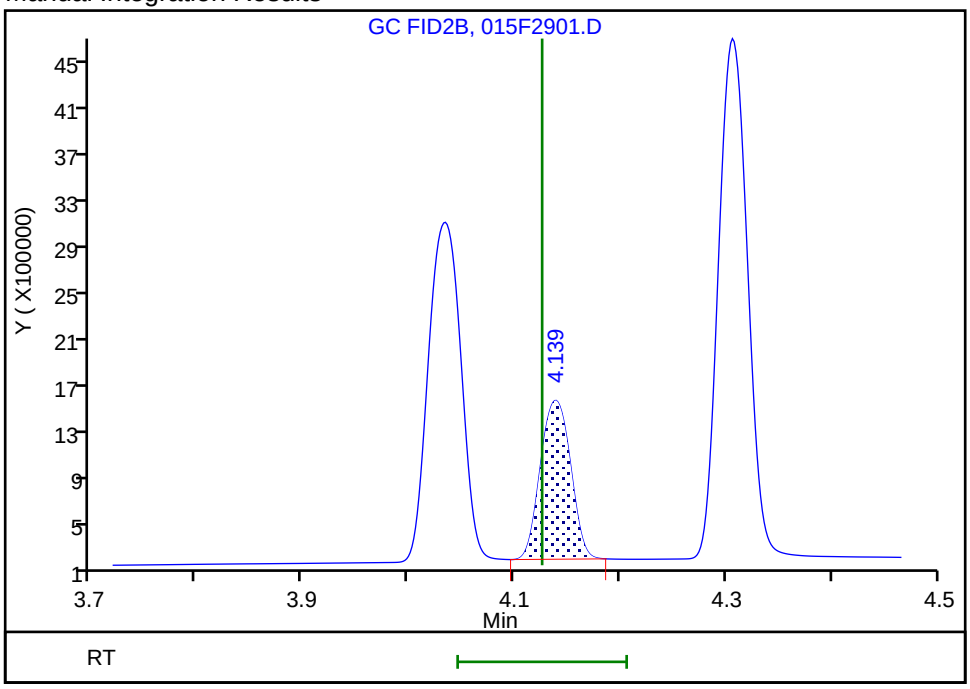
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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

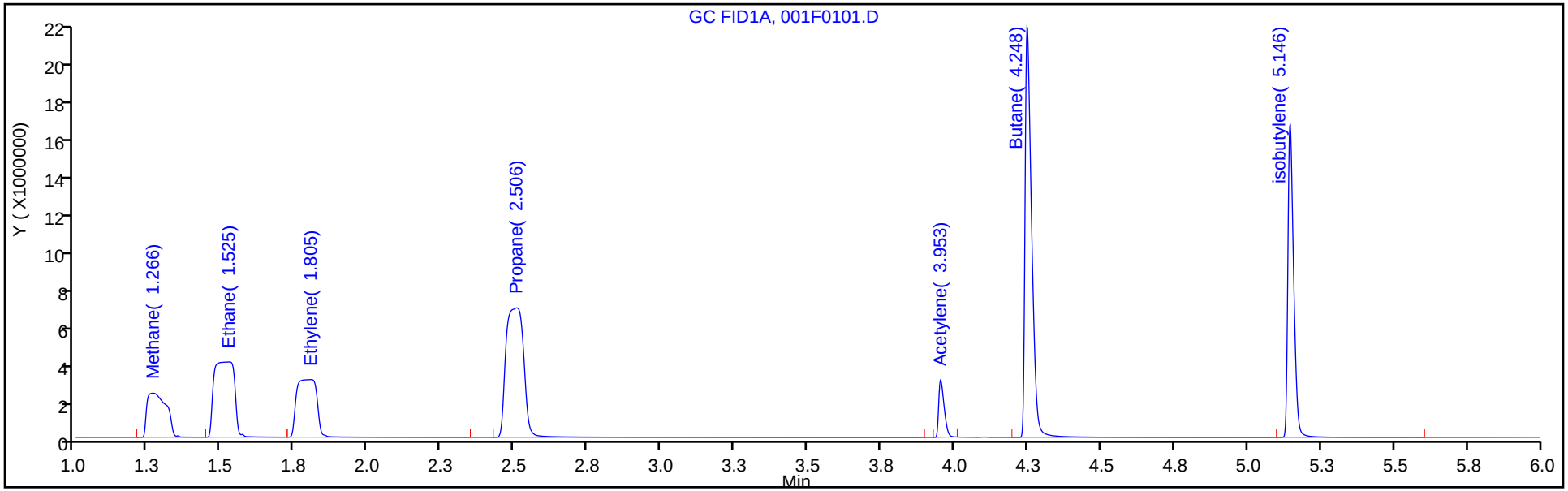
Report Date: 19-Jun-2020 12:43:09 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

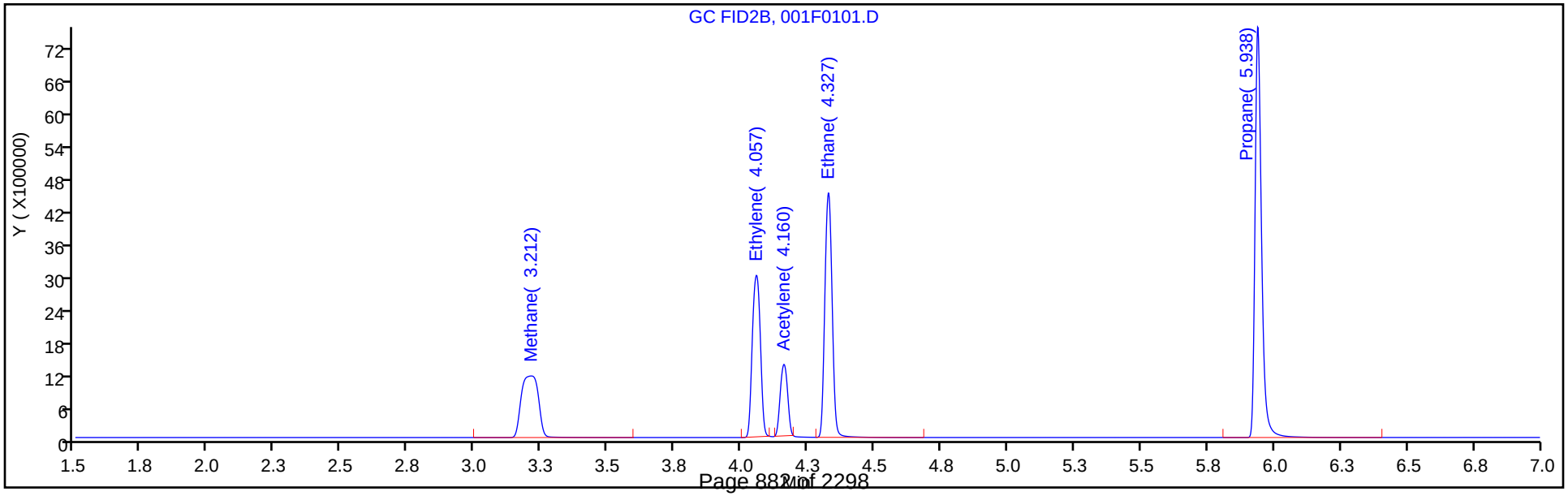
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

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



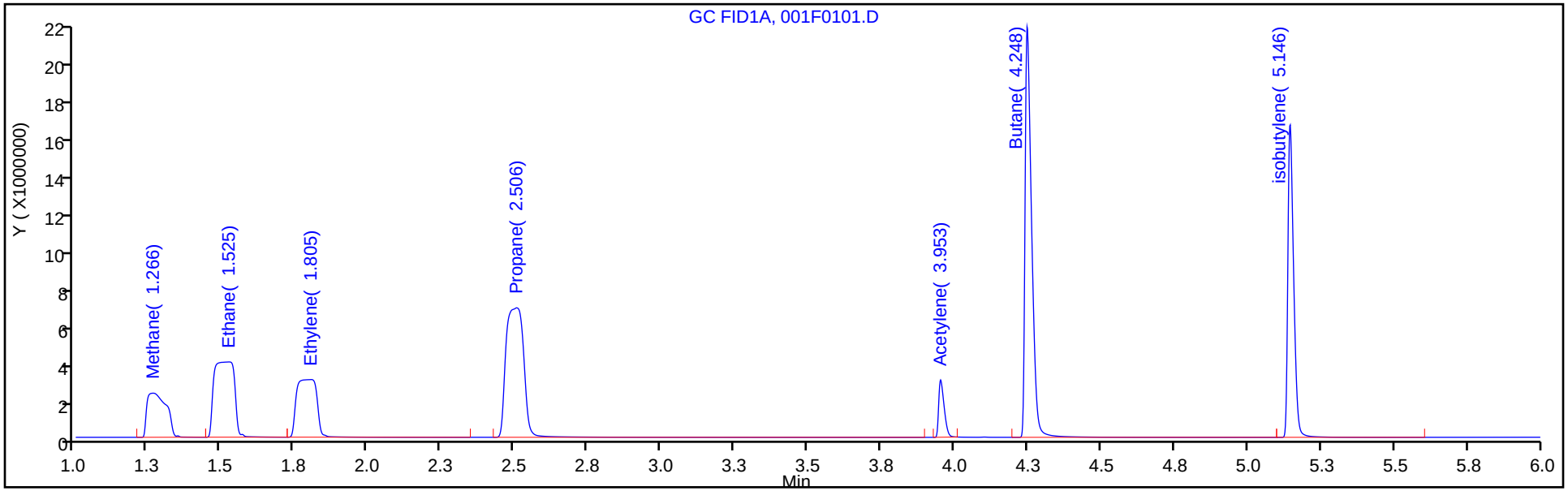
Report Date: 19-Jun-2020 12:43:08 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

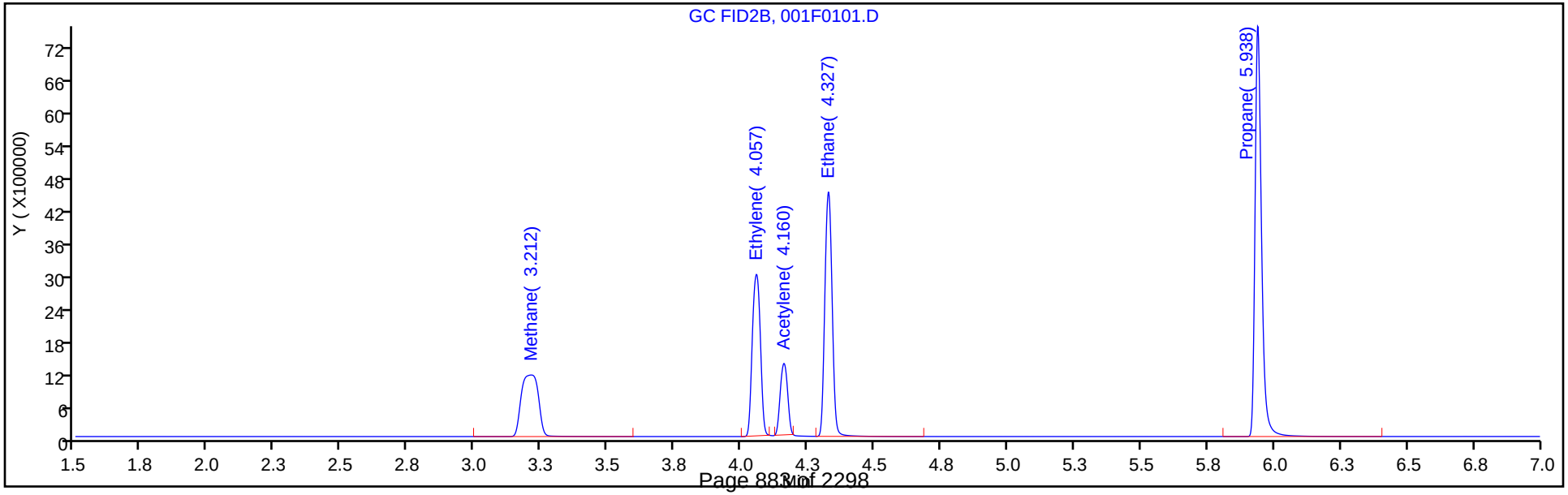
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

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

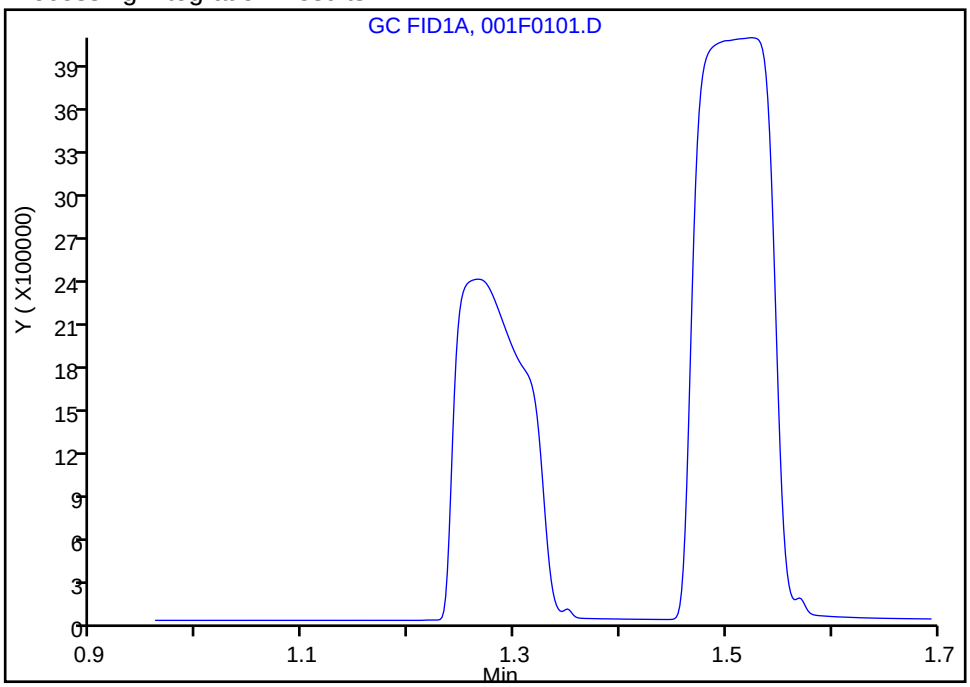
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

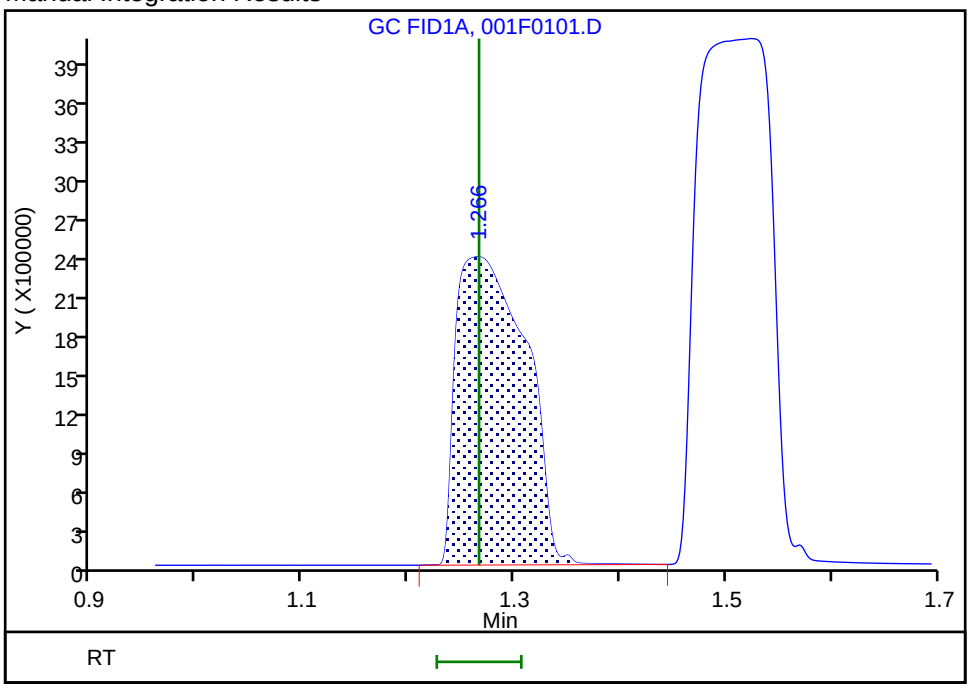
Not Detected
Expected RT: 1.27

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

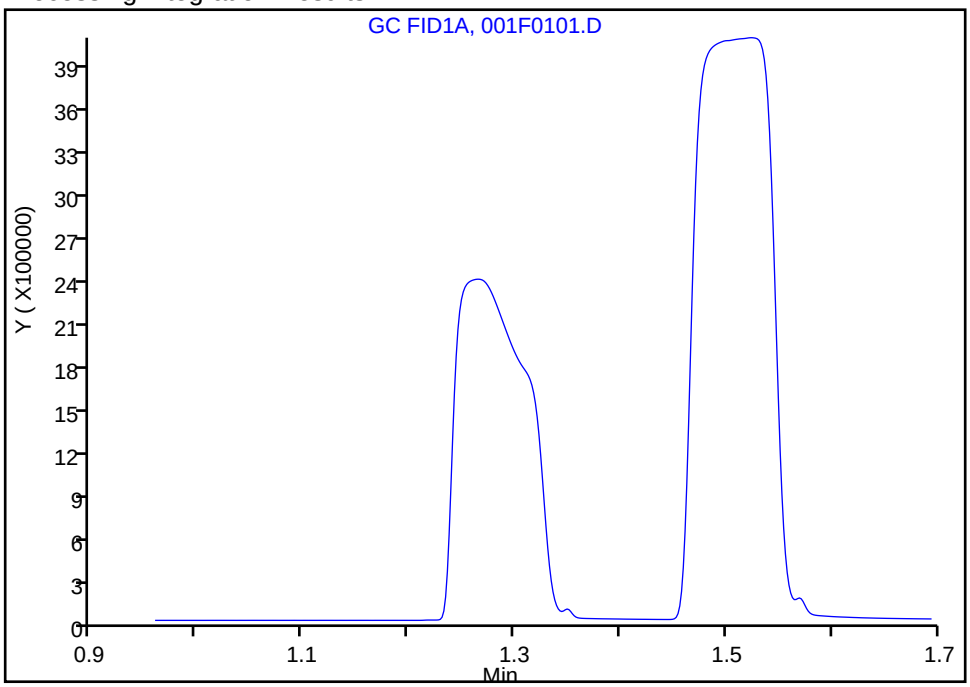
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

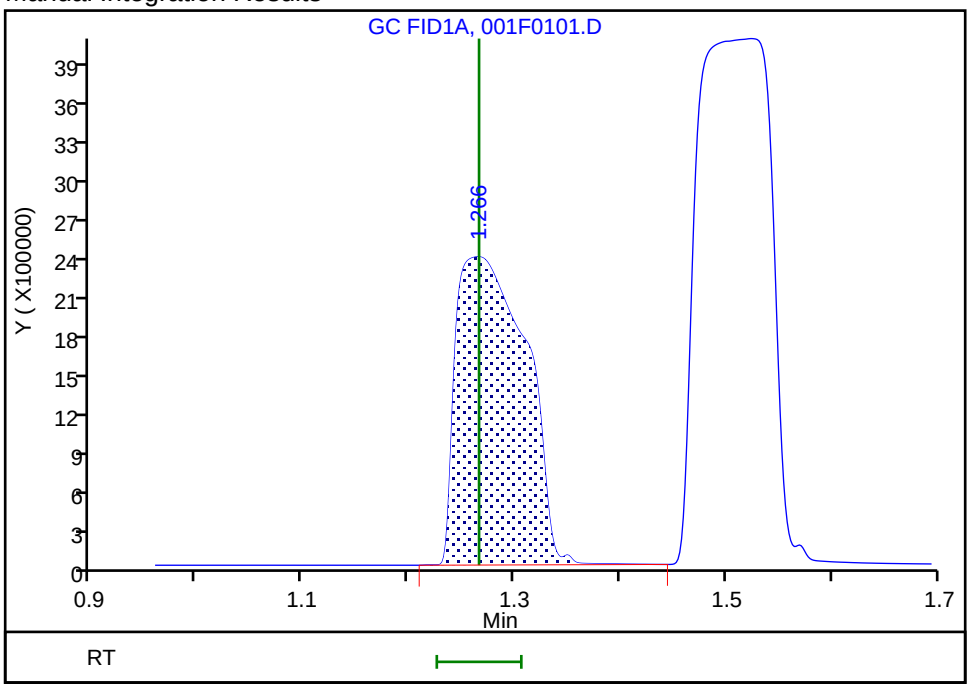
Not Detected
Expected RT: 1.27

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

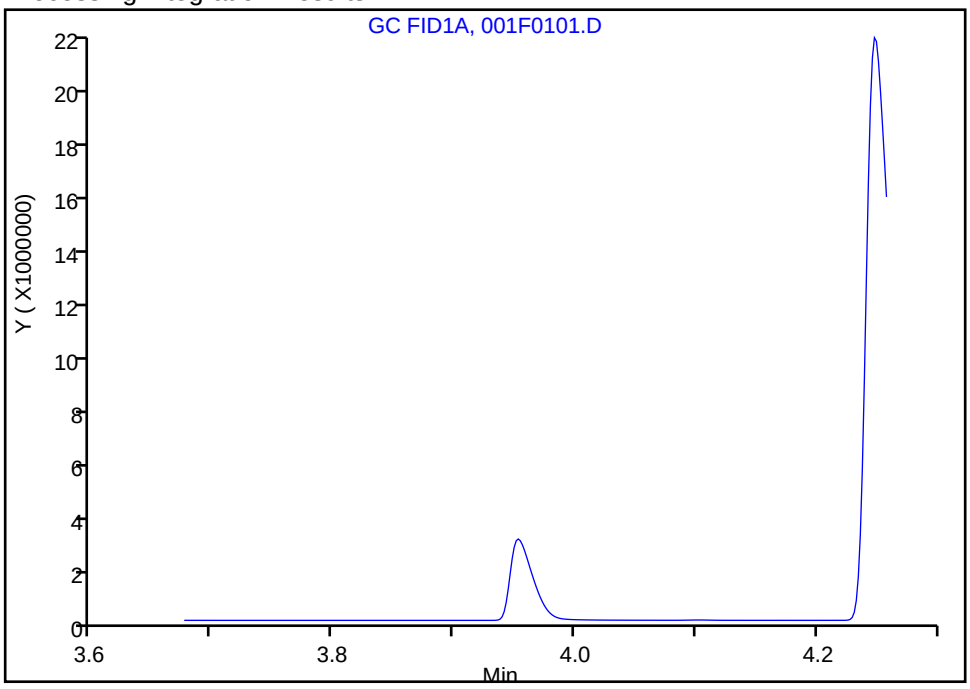
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

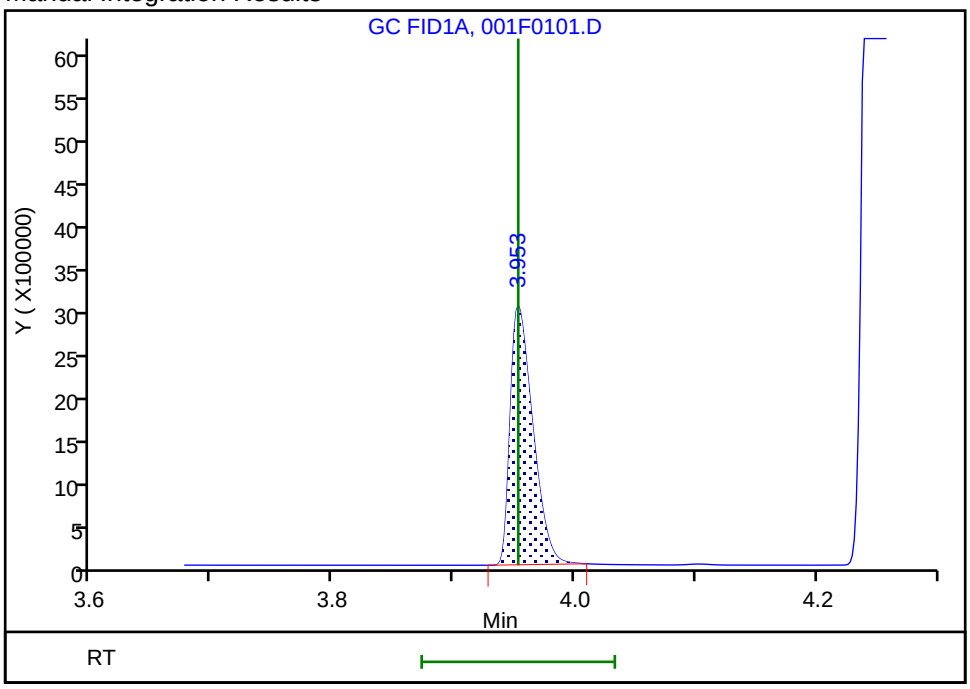
Processing Integration Results

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

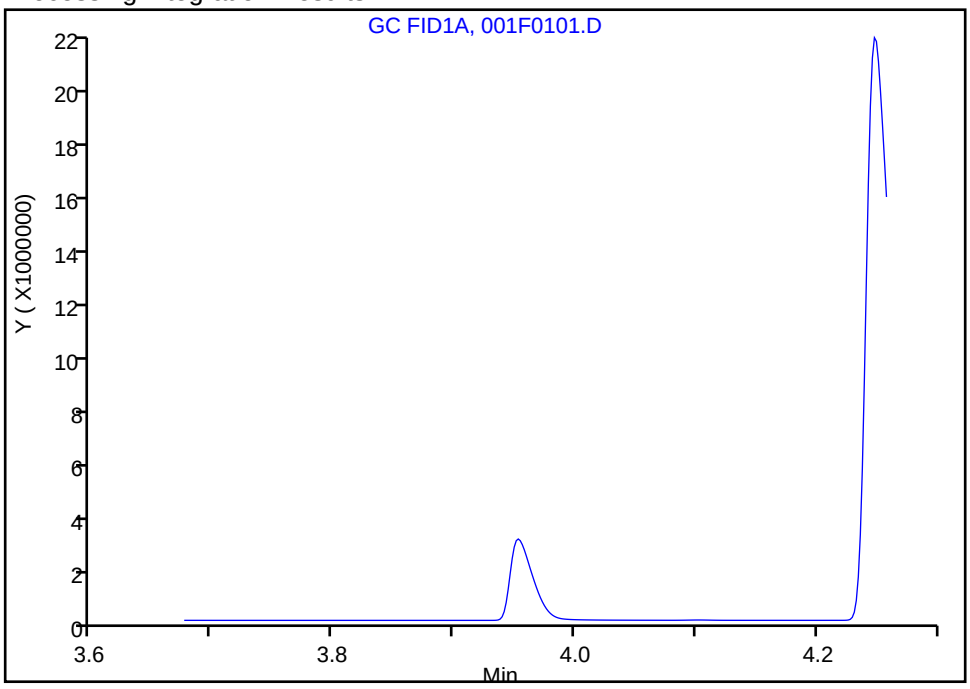
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

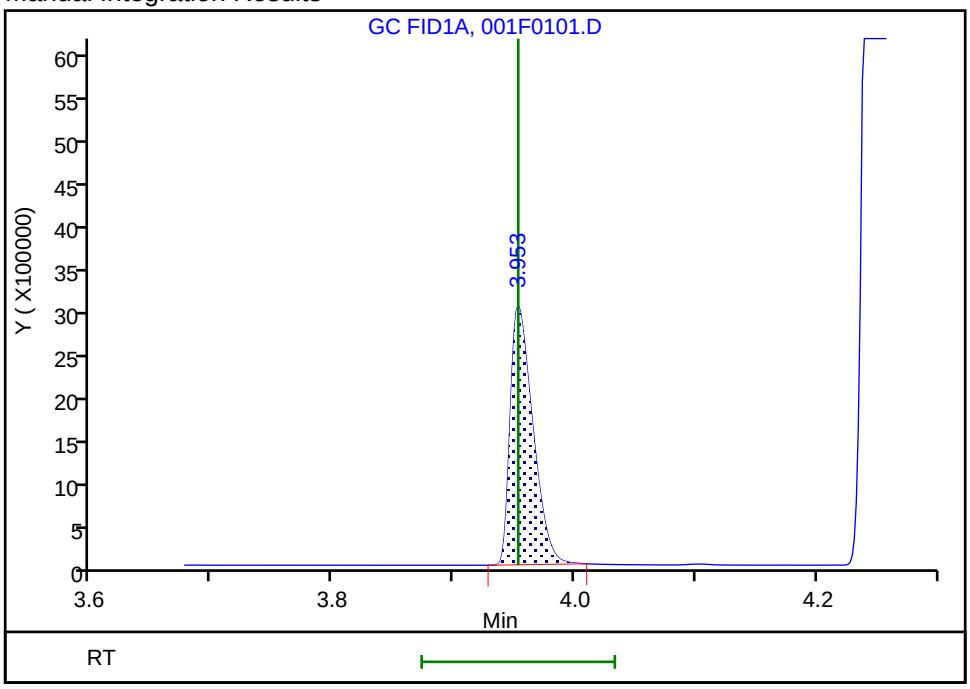
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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
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1	1.525	1.525	0.000	19033298	136.9	139.9	
2	4.327	4.327	0.000	8488760	136.9	139.0	
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2	4.057	4.057	0.000	6216689	127.7	129.7	M
						RPD = 0.32	
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2	5.938	5.938	0.000	12700696	200.7	202.8	
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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
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2	3.212	3.212	0.000	5027738	73.0	73.2	a
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6 Acetylene							Ma
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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

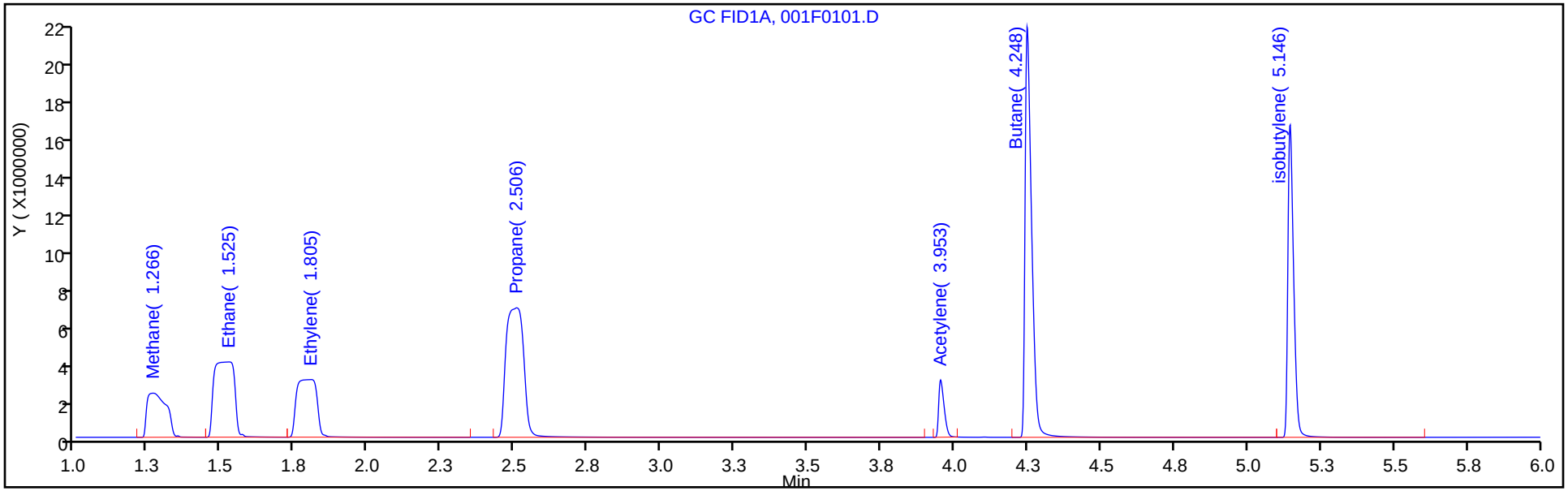
Report Date: 19-Jun-2020 12:43:09 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

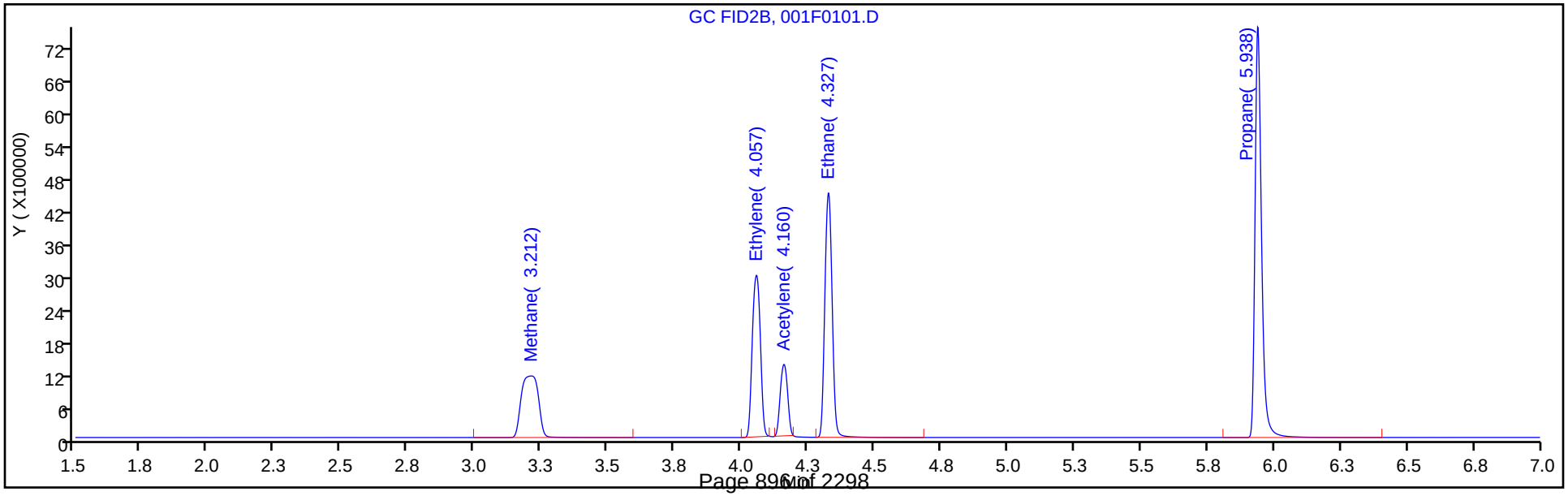
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

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



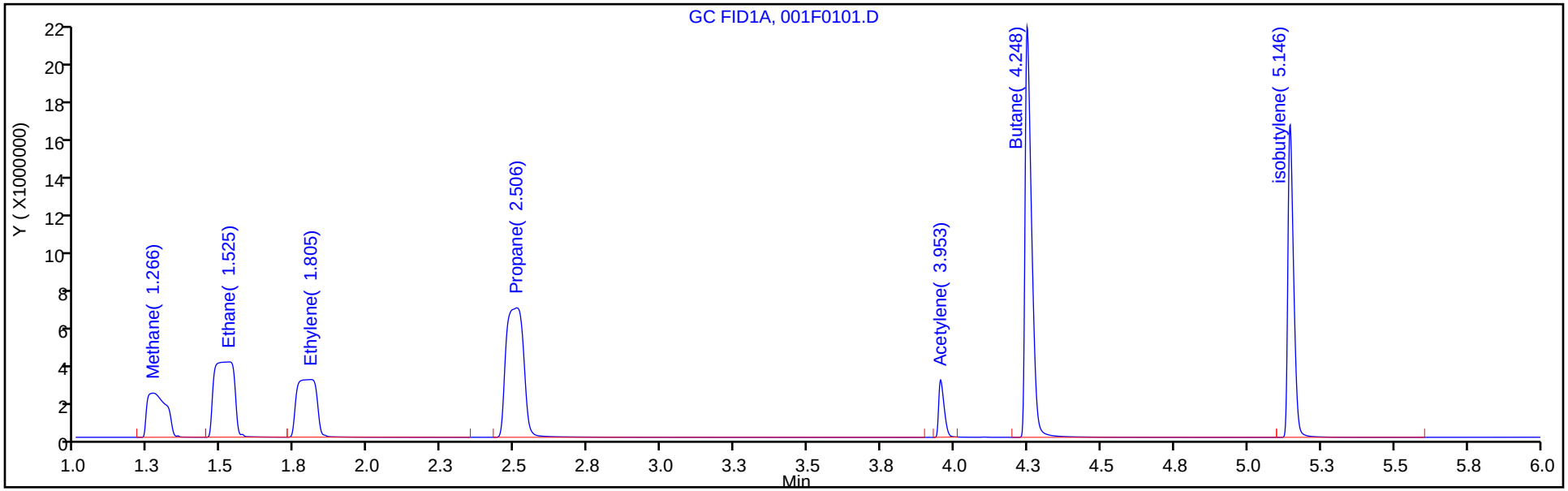
Report Date: 19-Jun-2020 12:43:08 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

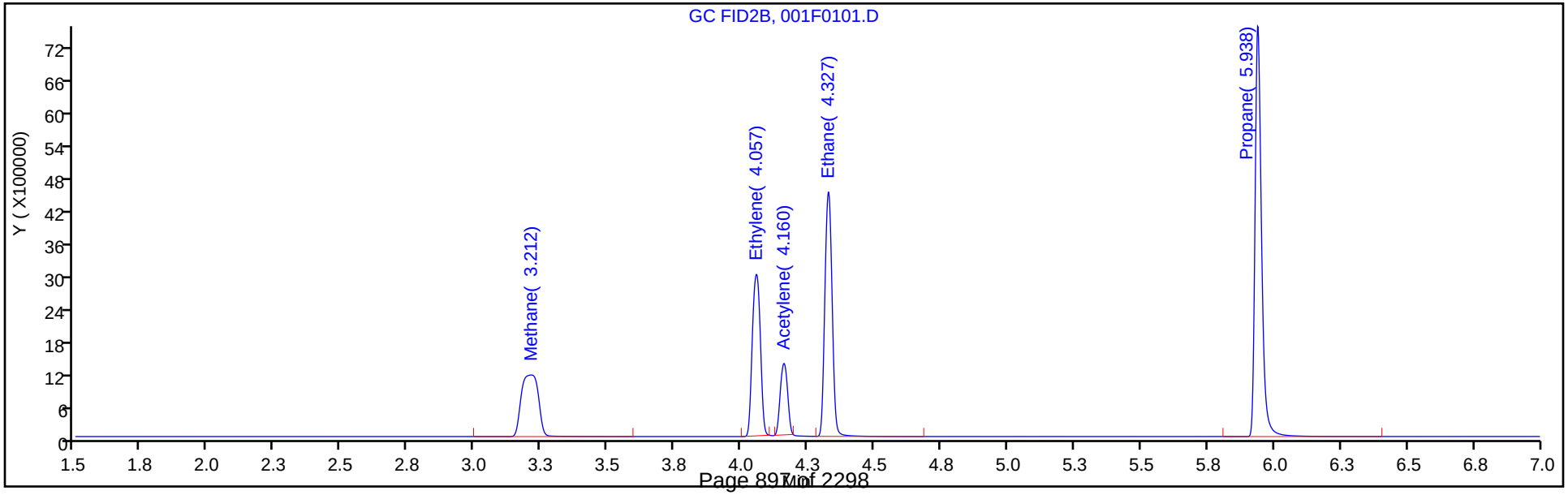
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D

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

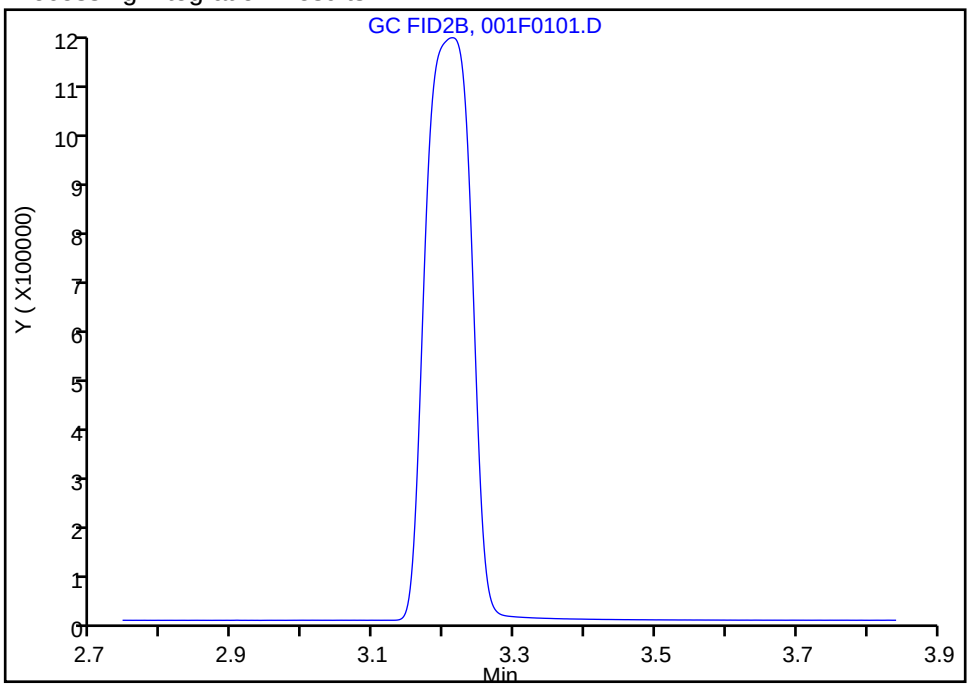
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

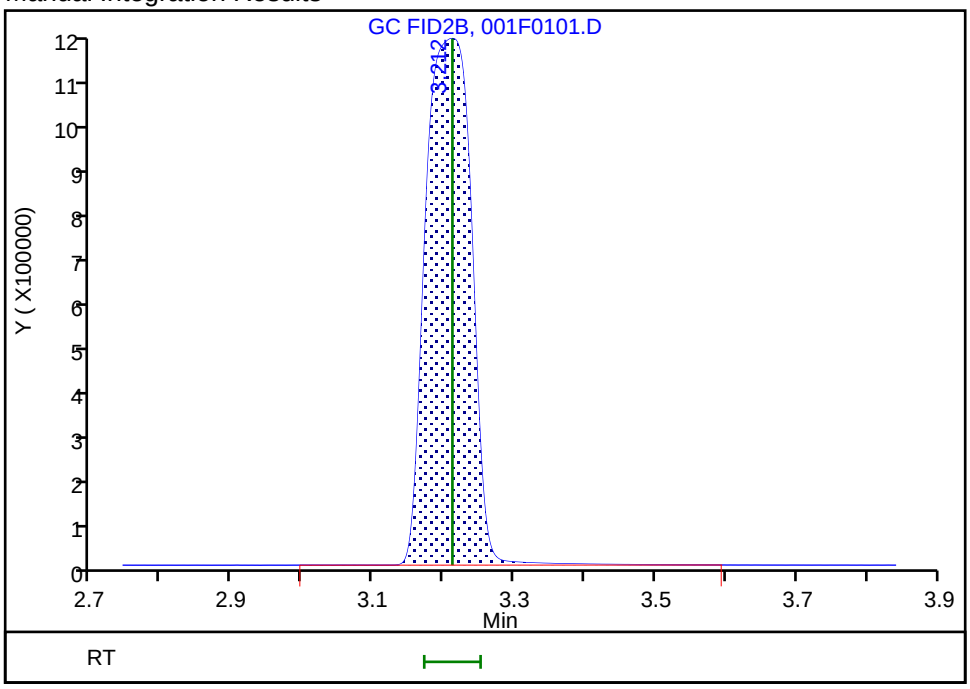
Not Detected
Expected RT: 3.21

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

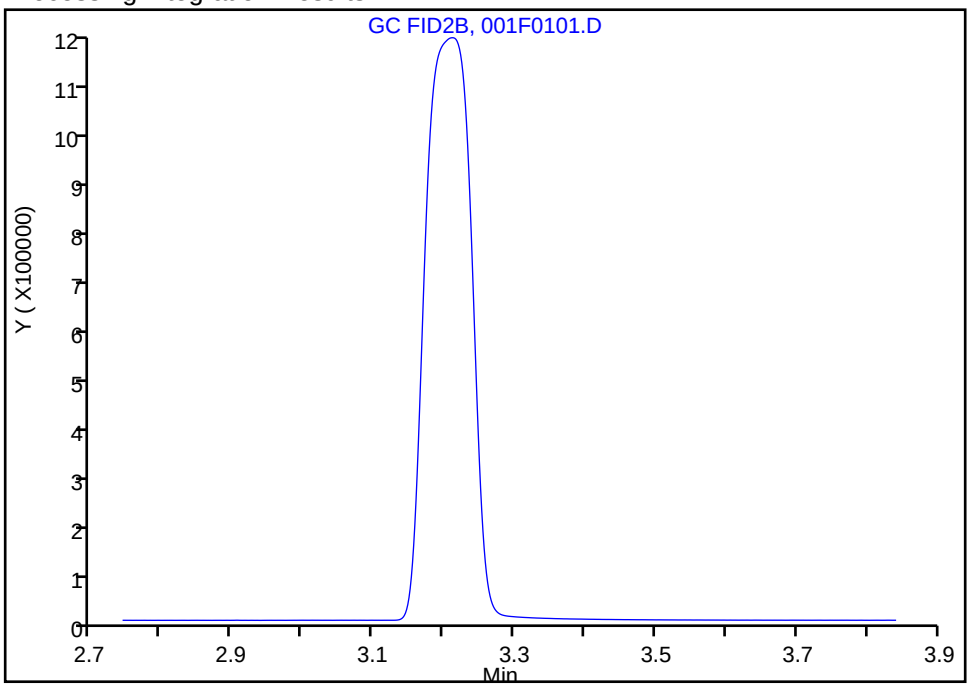
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

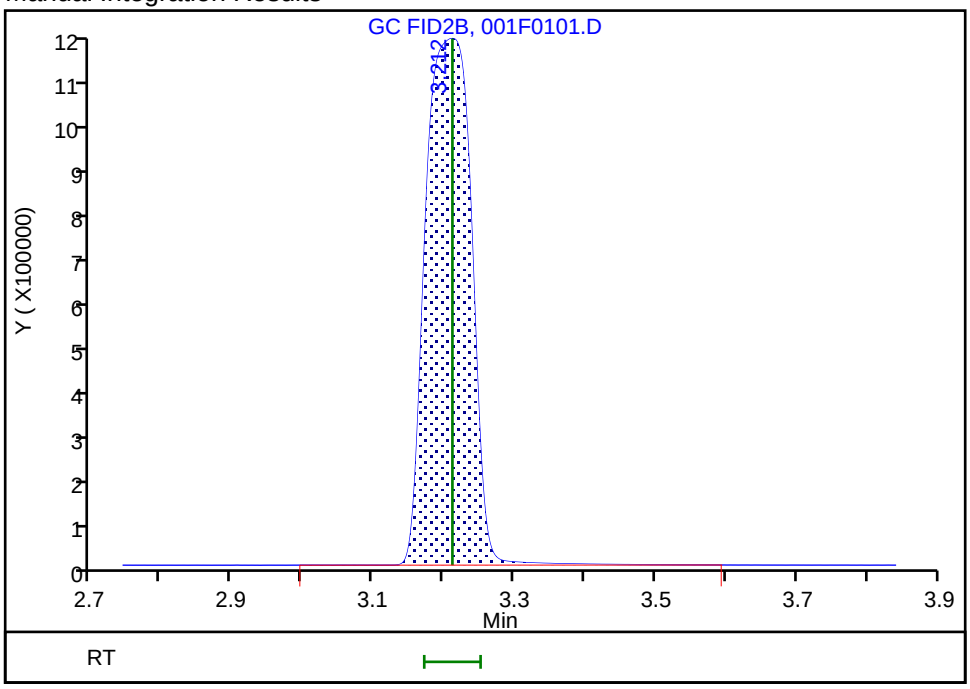
Not Detected
Expected RT: 3.21

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

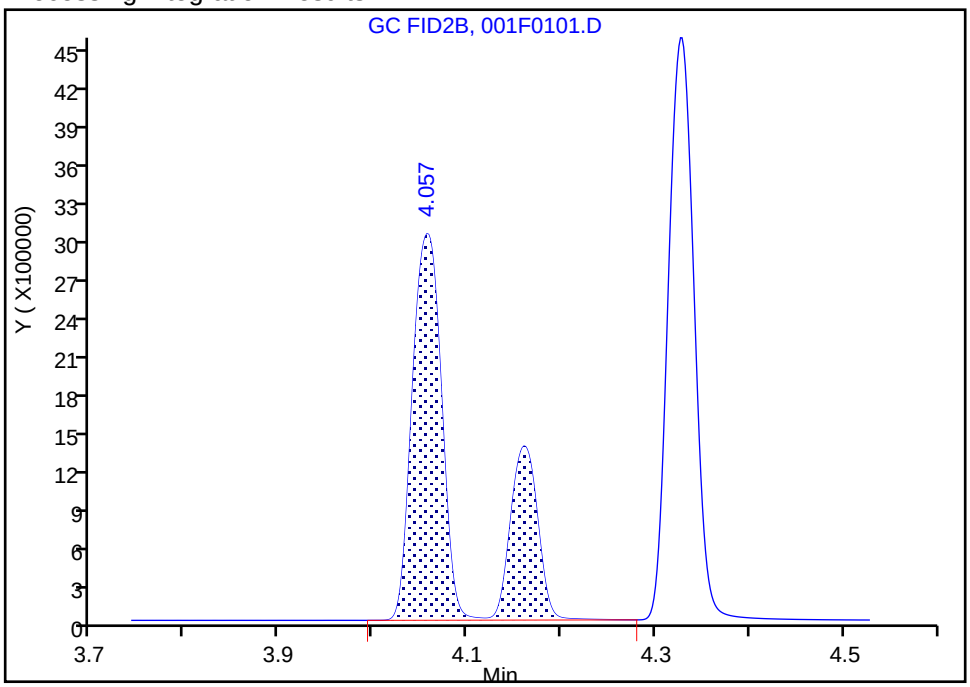
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

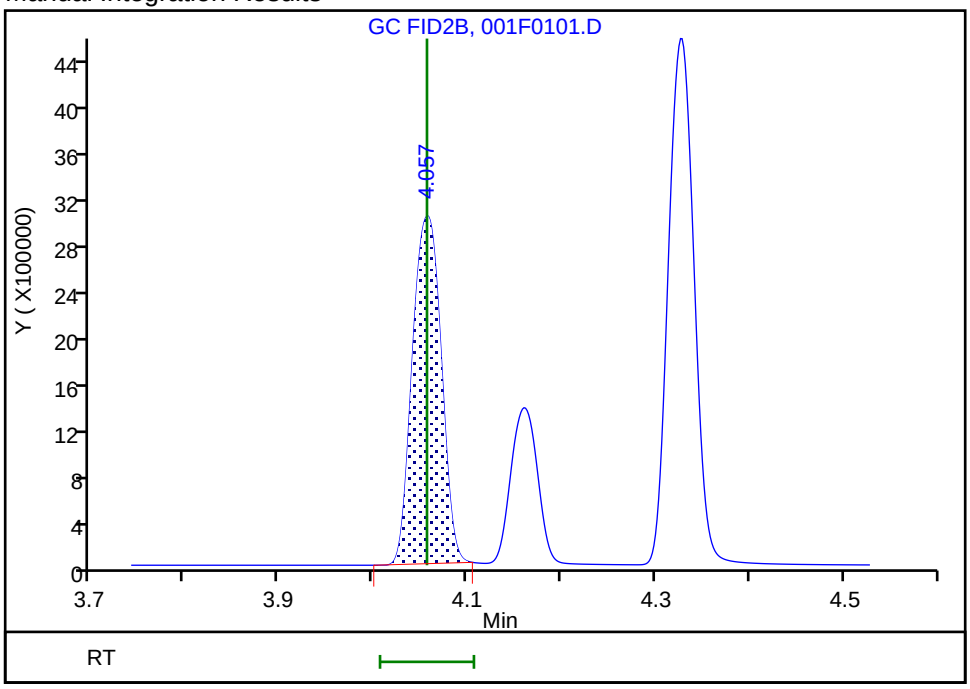
Processing Integration Results

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

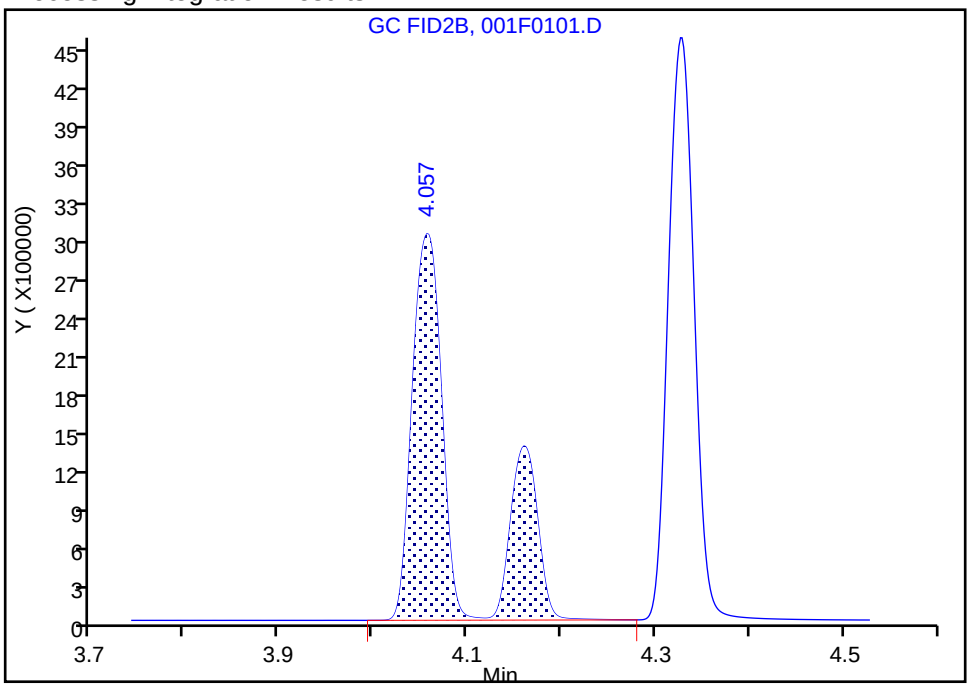
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

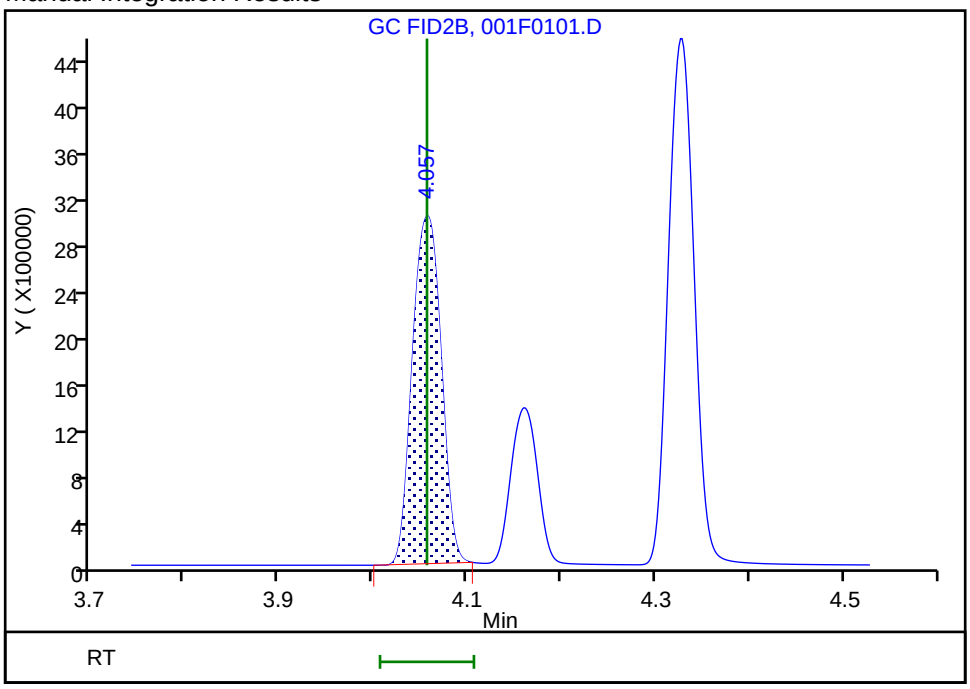
Processing Integration Results

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

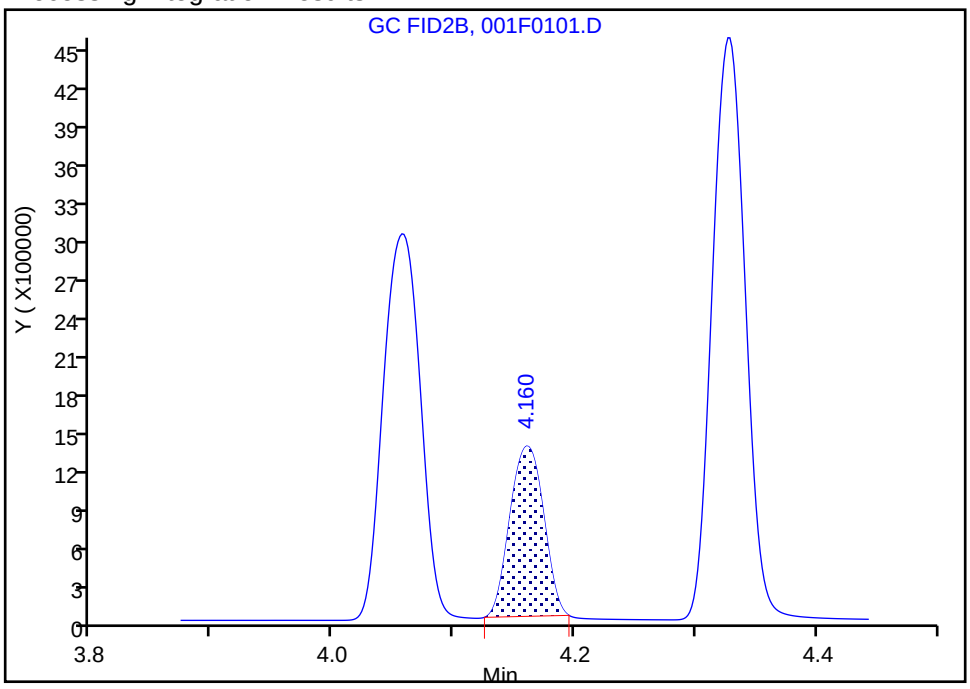
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D				
Injection Date:	18-Jun-2020 08:54:00	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	gm	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

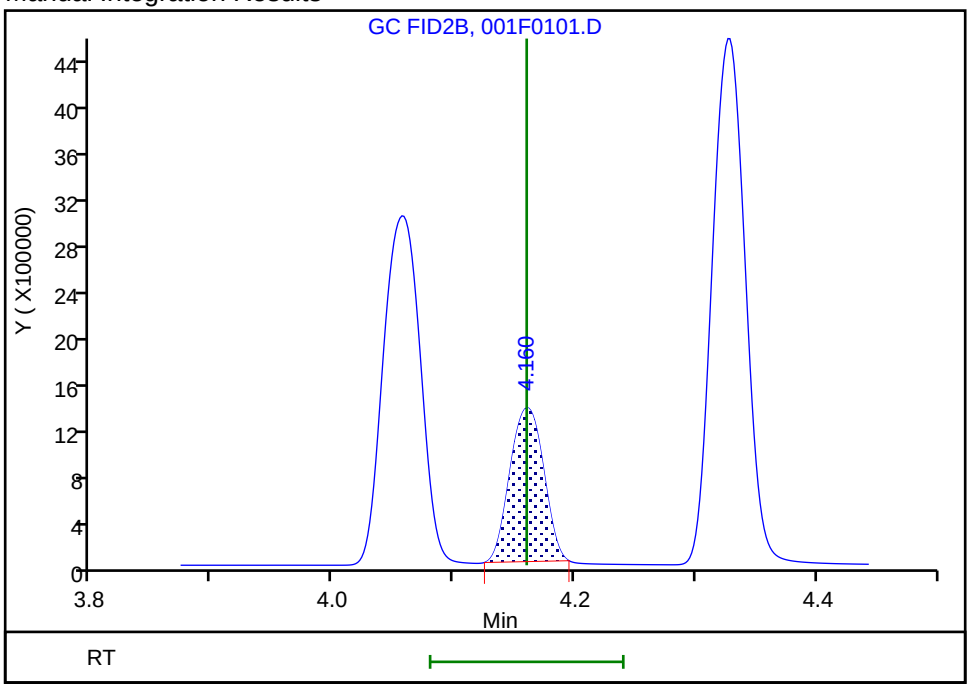
Processing Integration Results

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

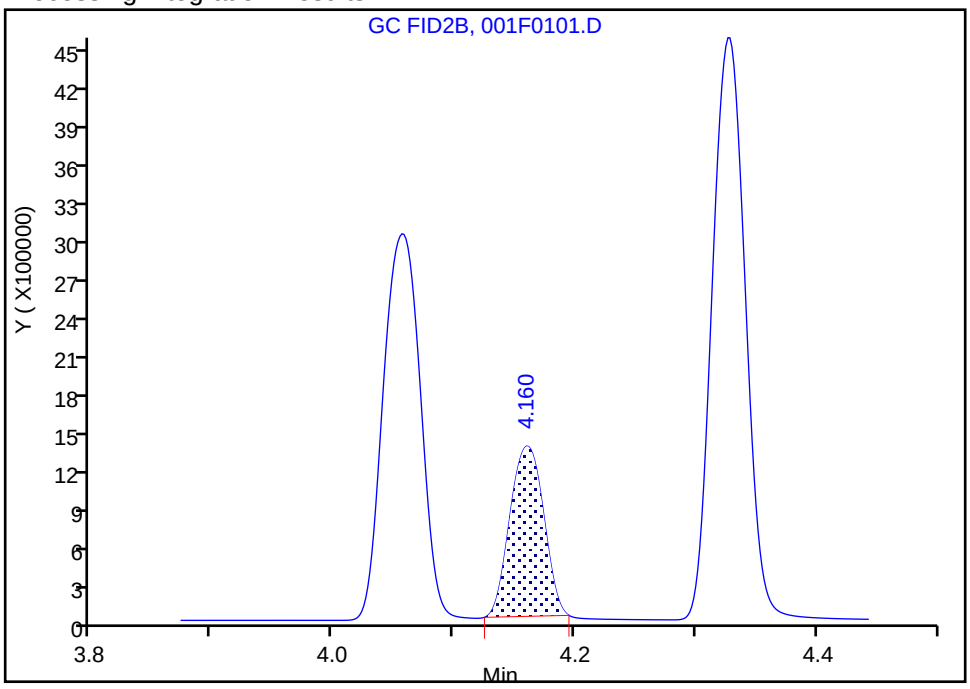
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\001F0101.D
Injection Date: 18-Jun-2020 08:54:00 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

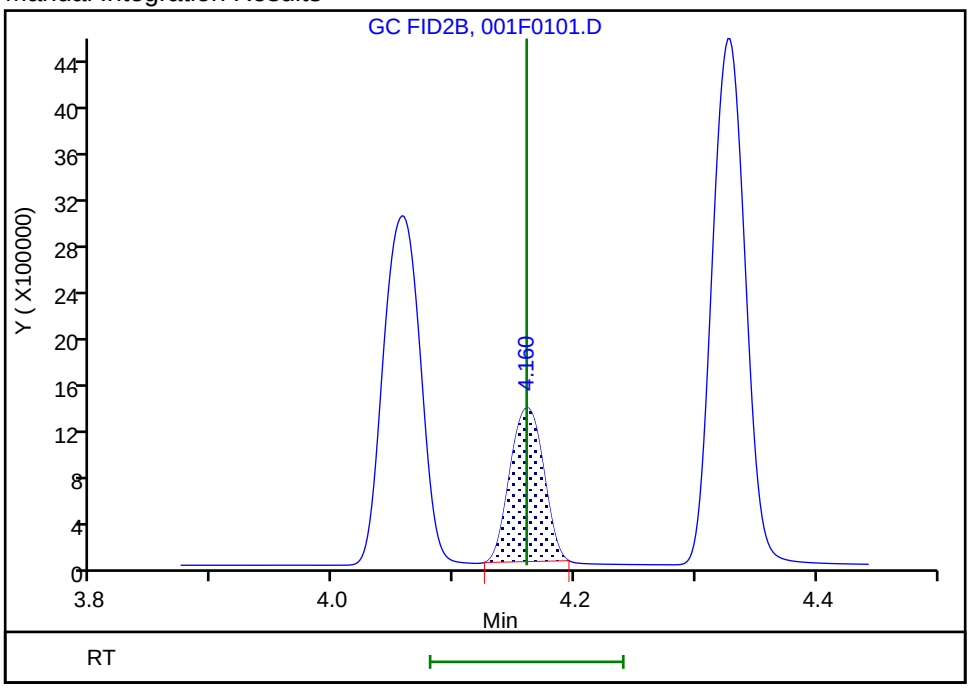
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

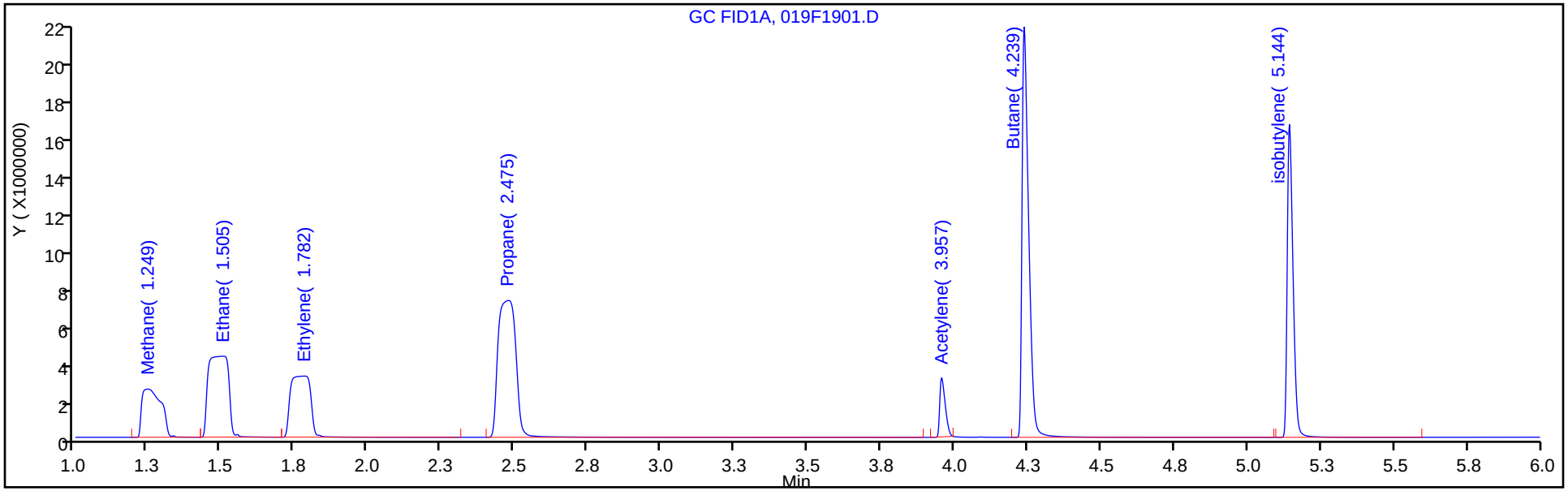
Report Date: 19-Jun-2020 12:43:15 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

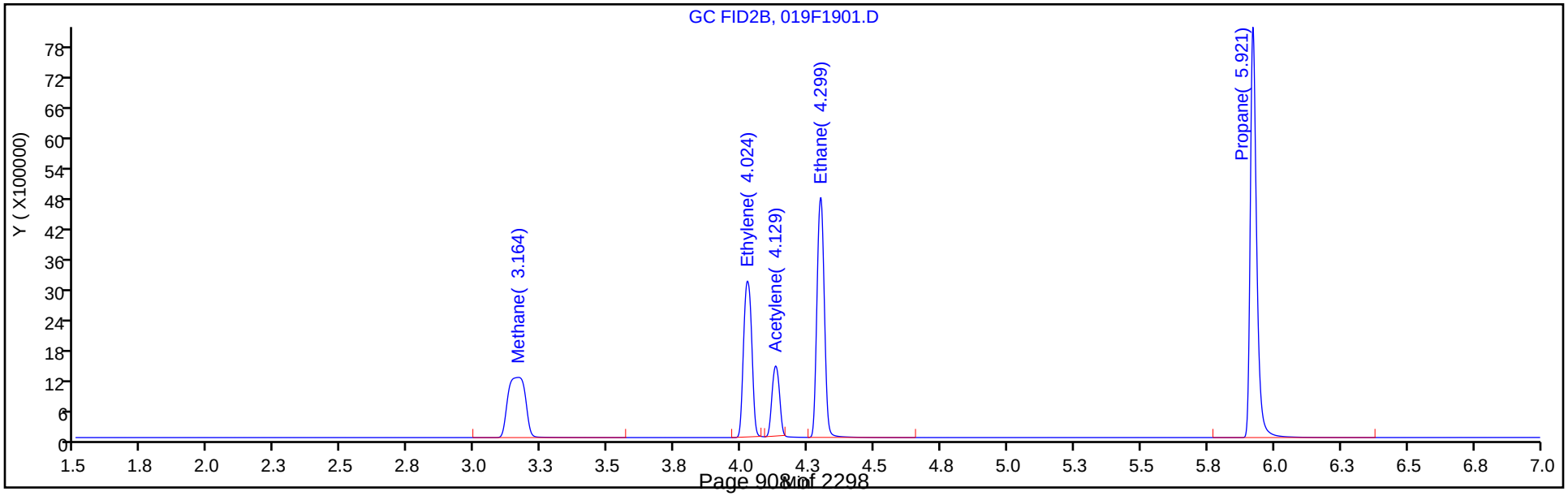
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D

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

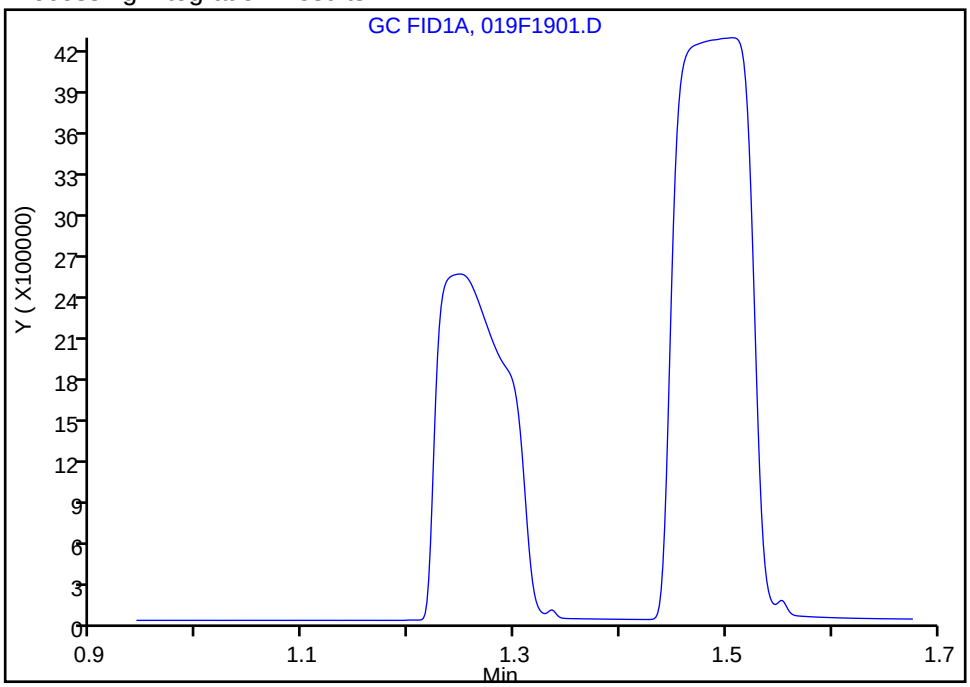
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

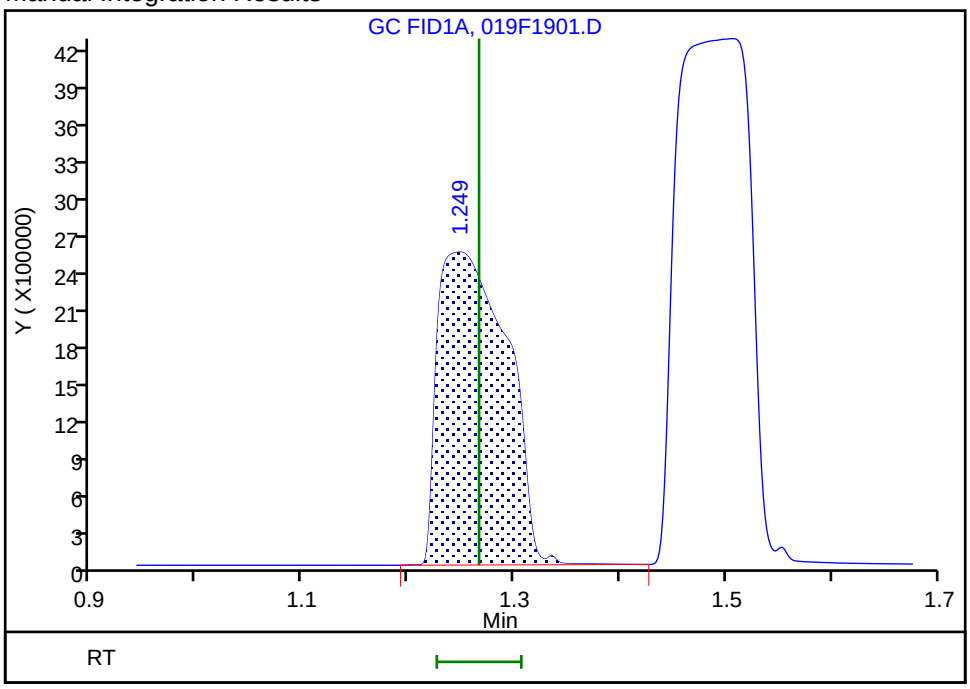
Not Detected
Expected RT: 1.27

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

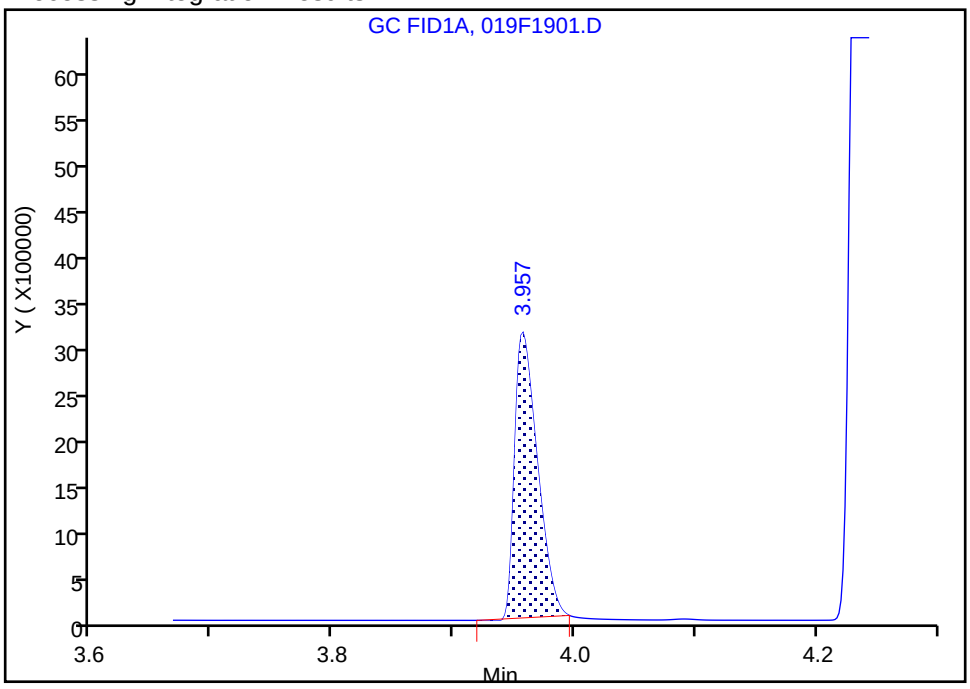
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D				
Injection Date:	18-Jun-2020 13:47:33	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

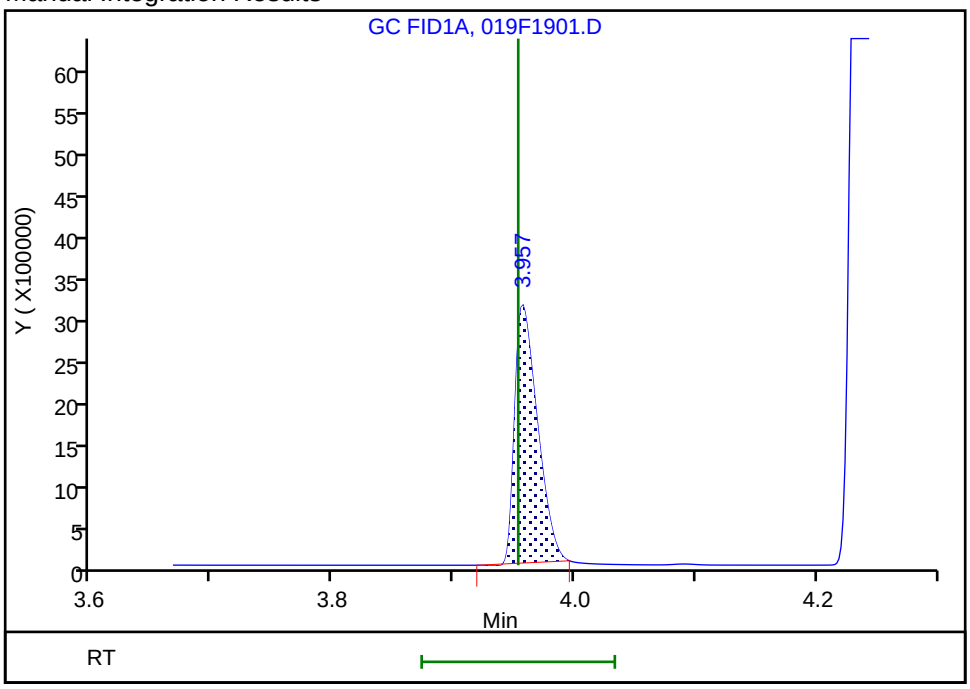
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

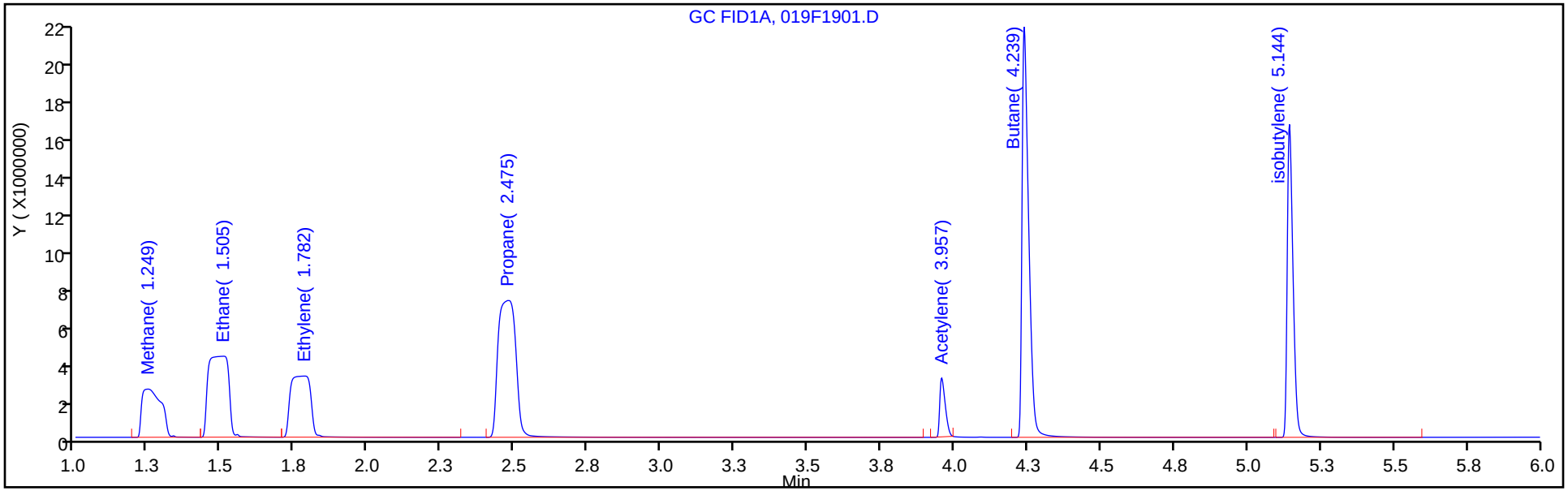
Report Date: 19-Jun-2020 12:43:16 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

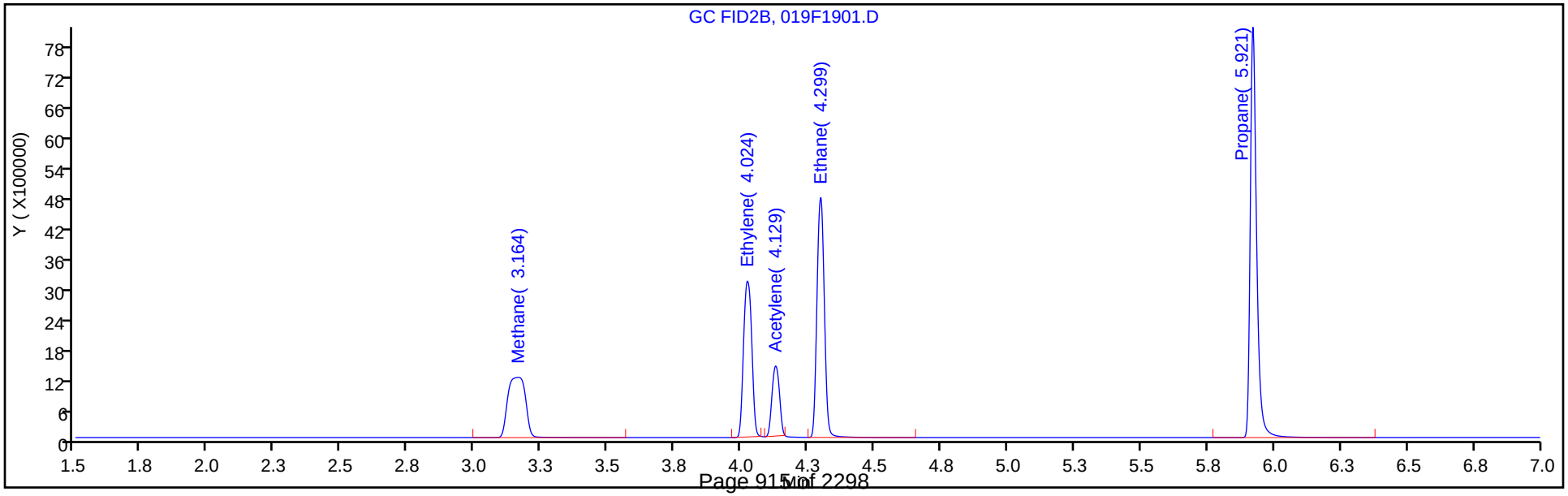
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D

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

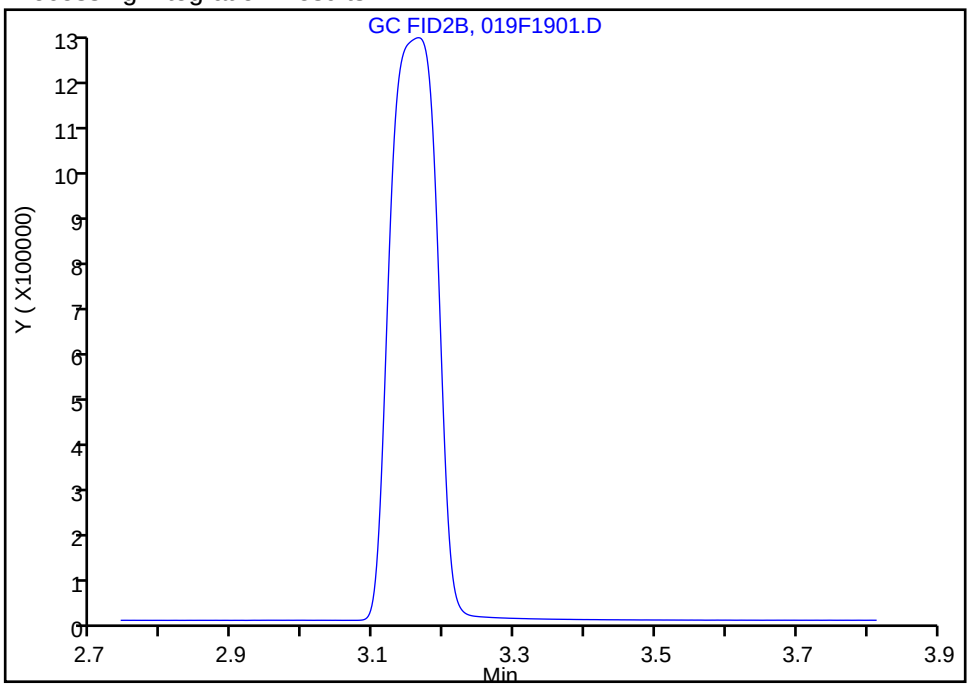
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

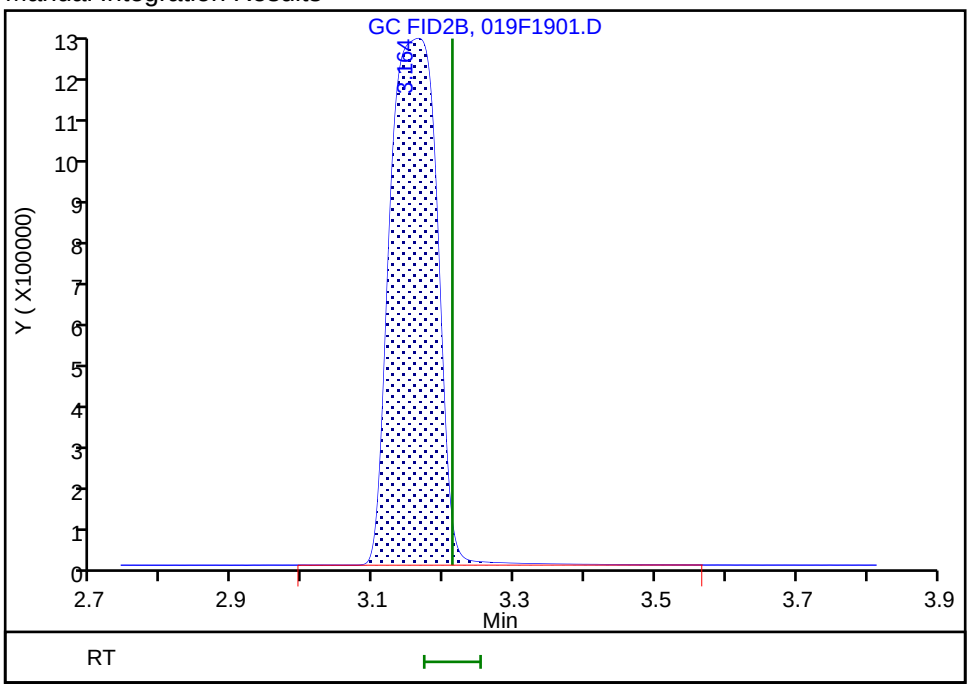
Not Detected
Expected RT: 3.21

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

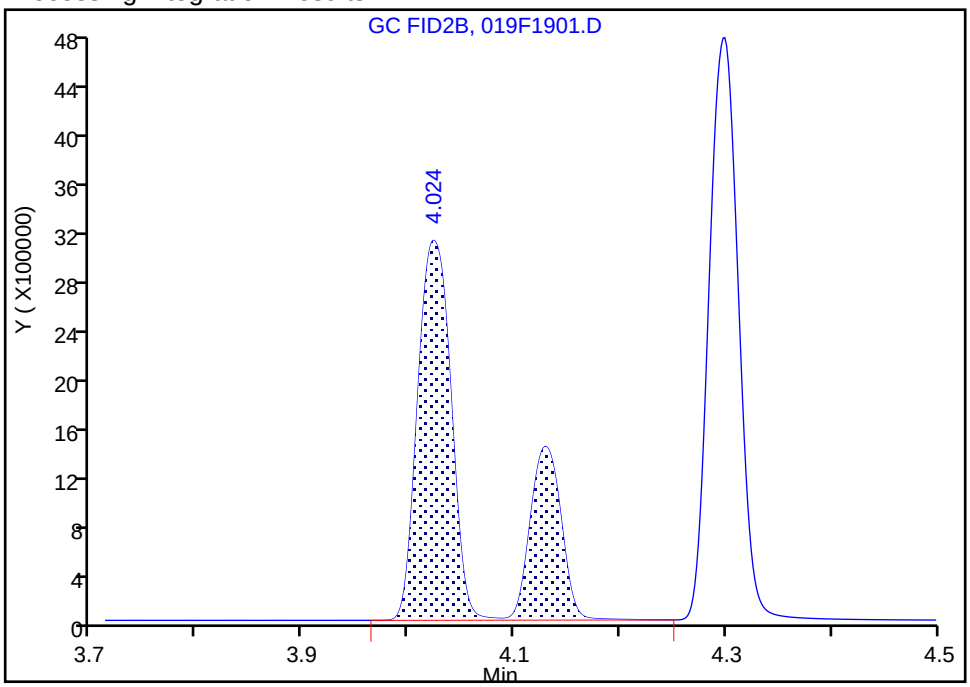
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D				
Injection Date:	18-Jun-2020 13:47:33	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

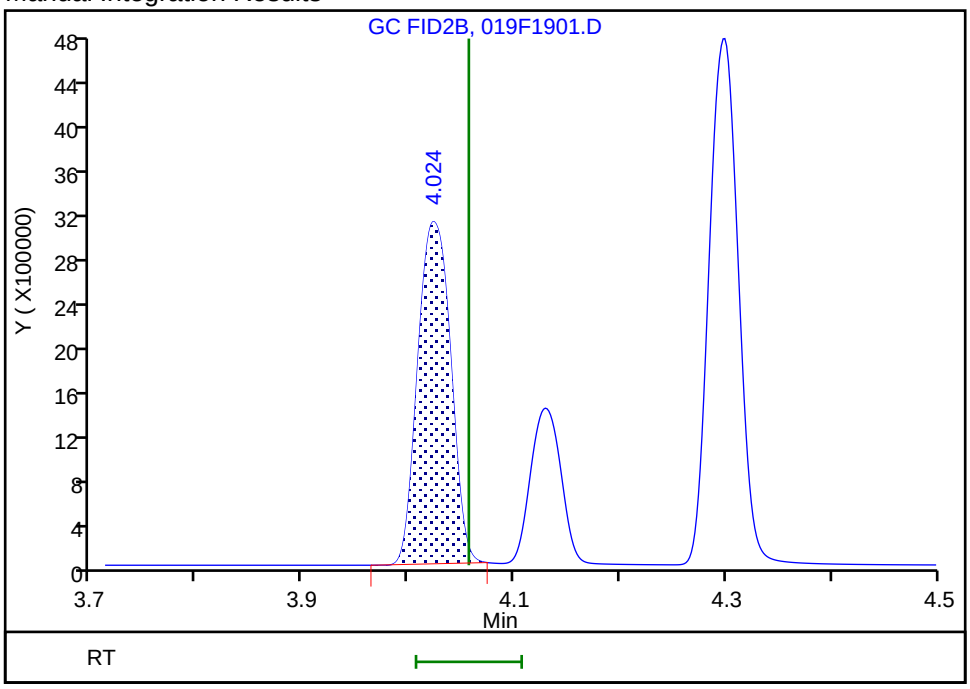
Processing Integration Results

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

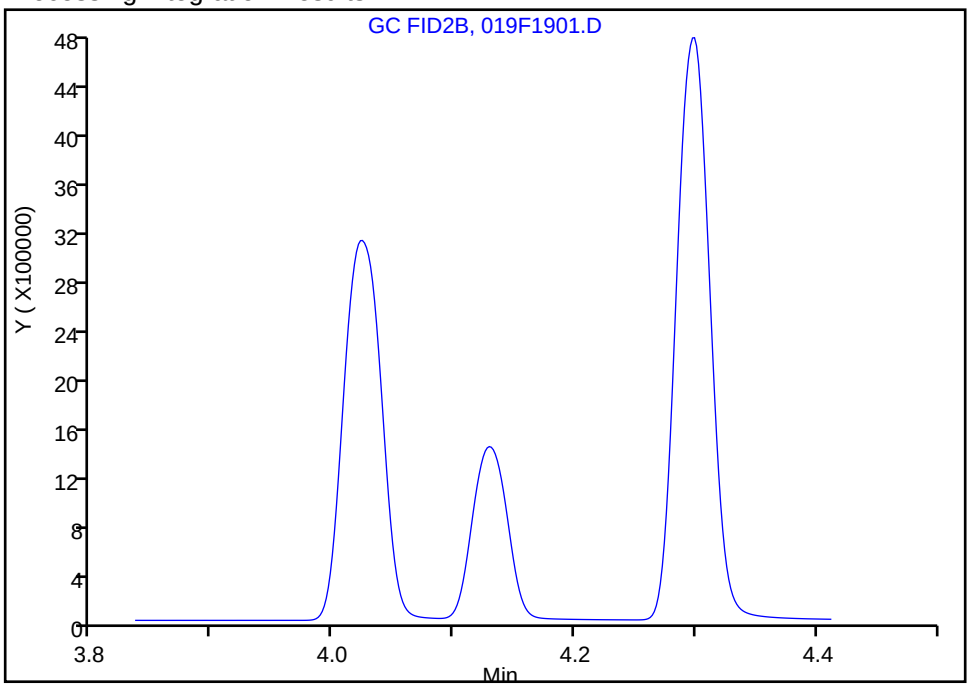
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\019F1901.D
Injection Date: 18-Jun-2020 13:47:33 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

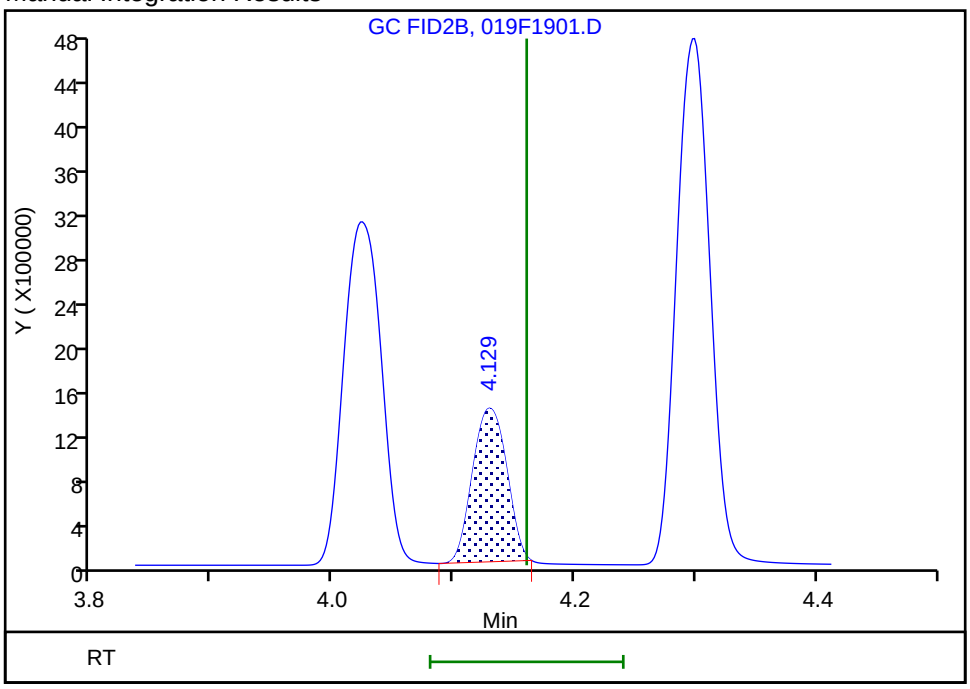
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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

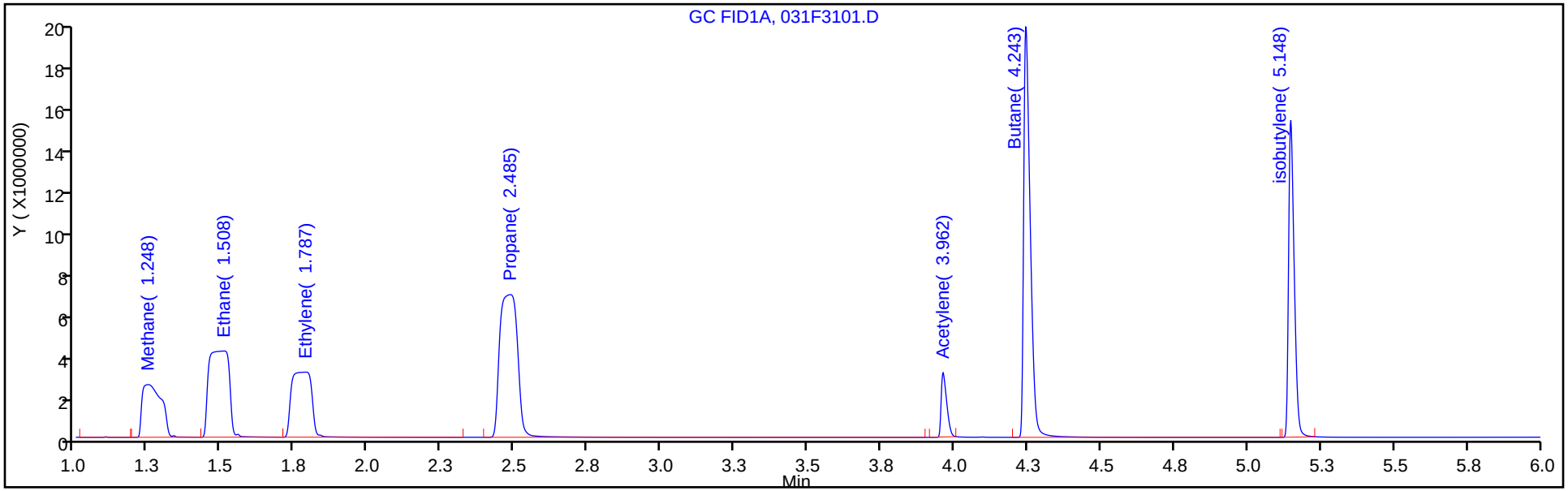
Report Date: 19-Jun-2020 16:09:11 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

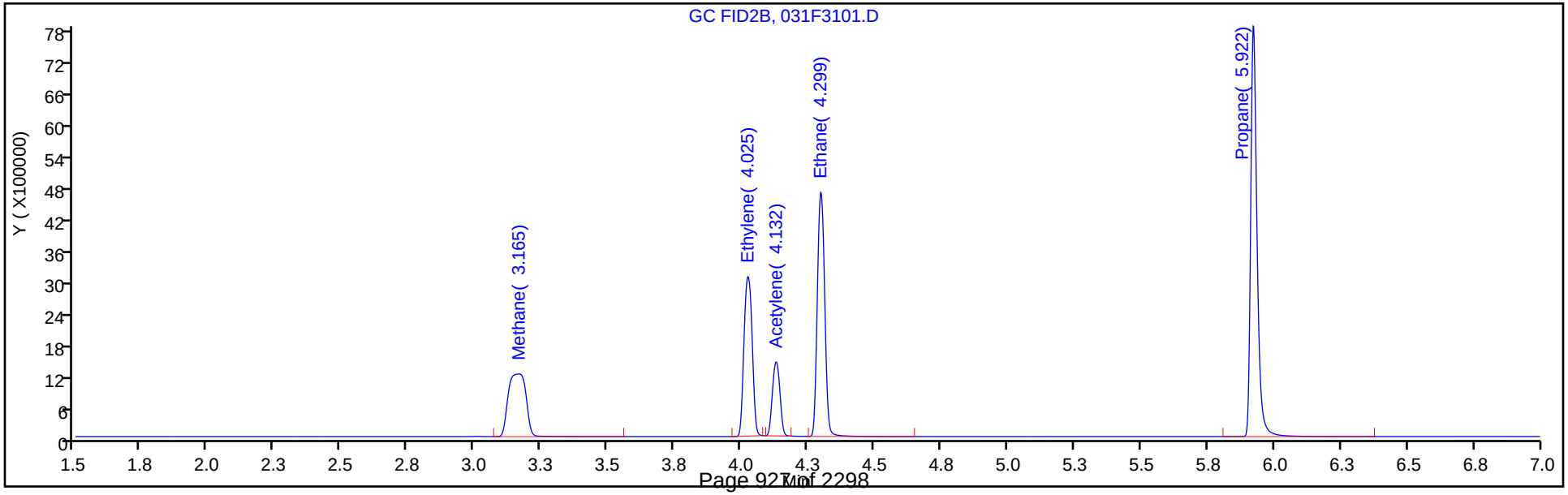
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

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



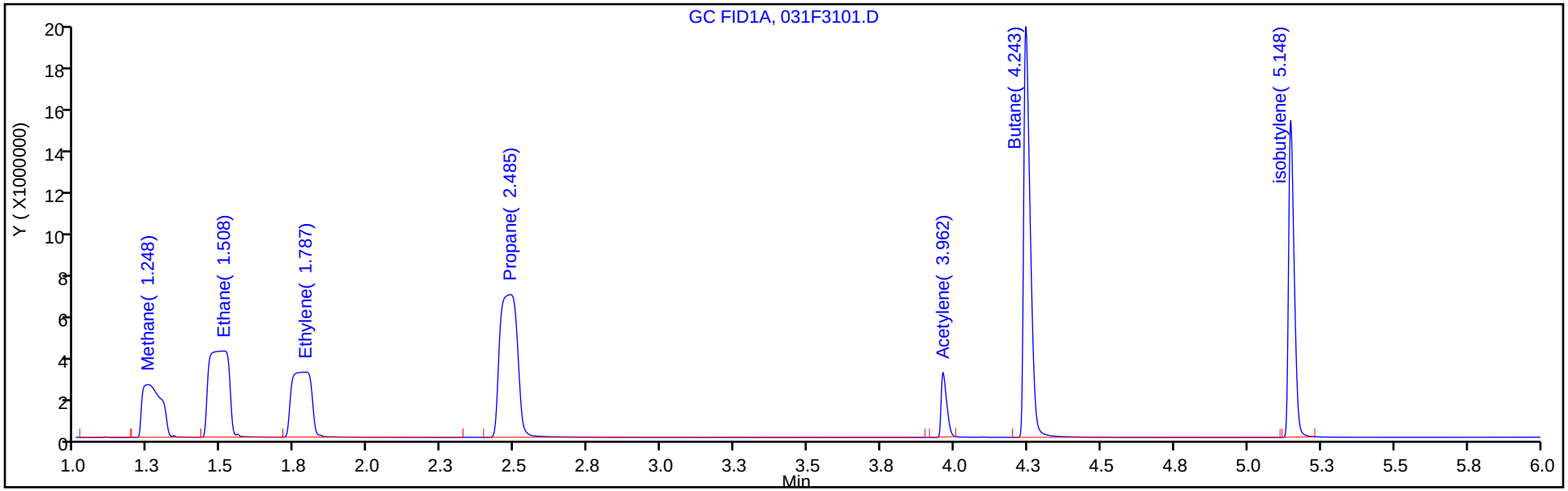
Report Date: 19-Jun-2020 16:09:10 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

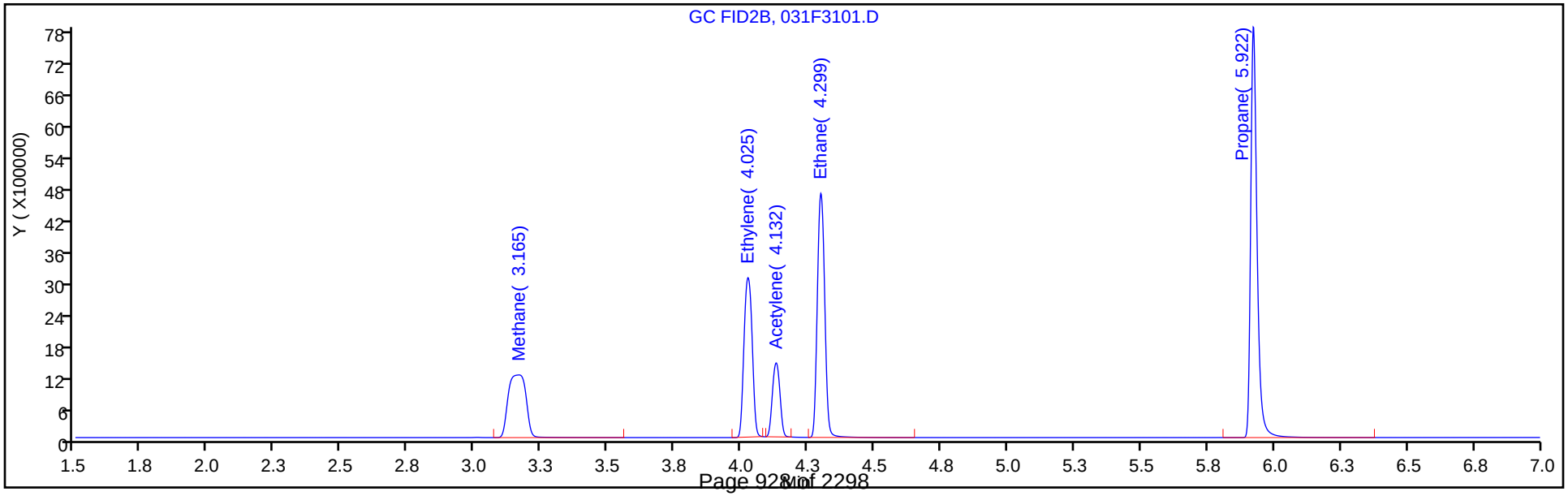
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

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

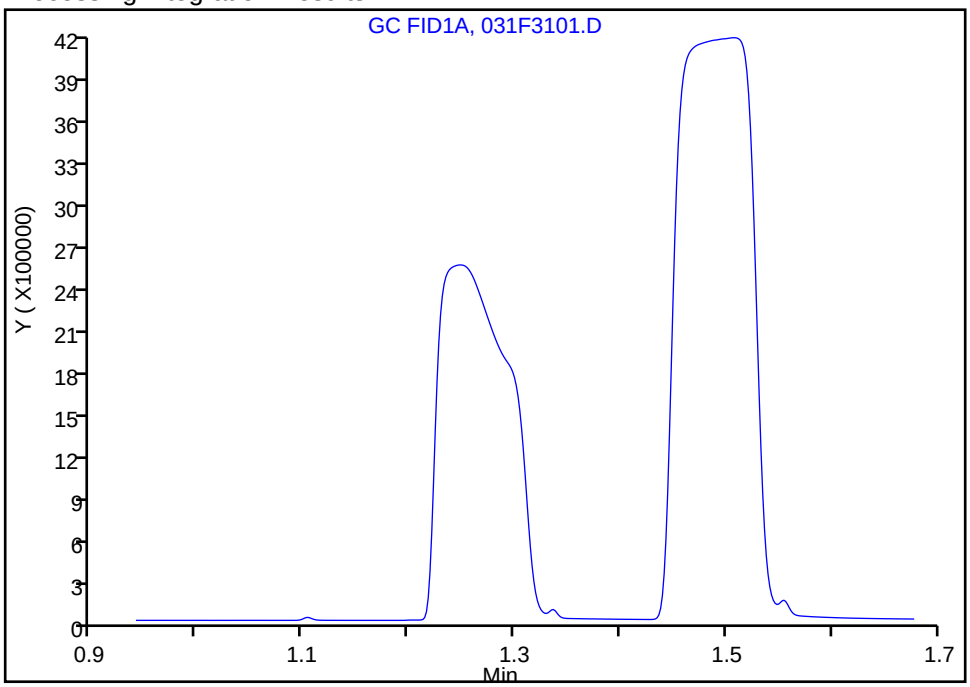
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

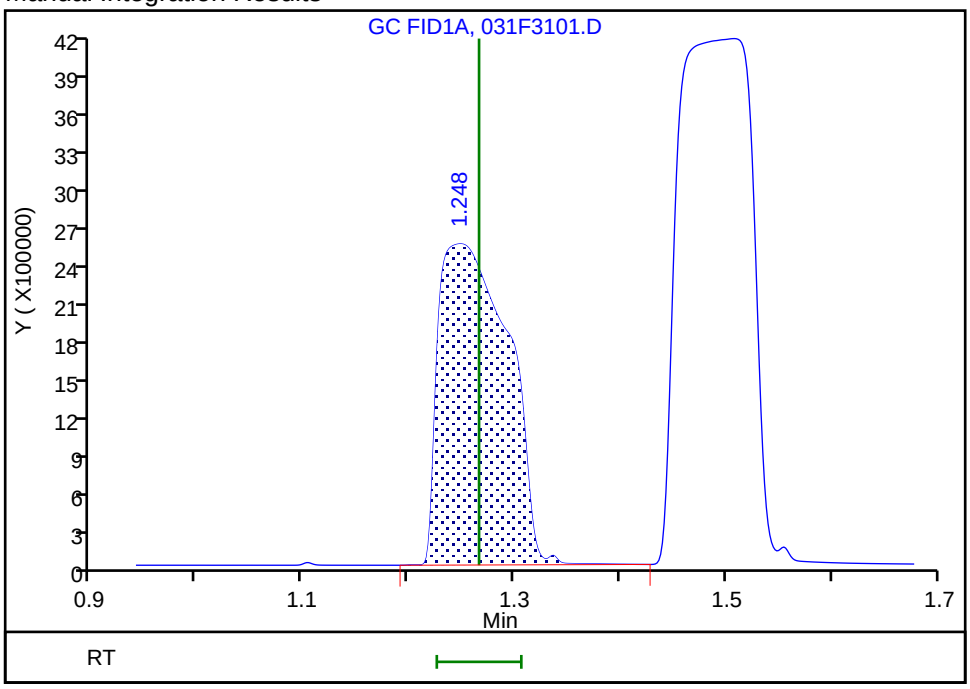
Not Detected
Expected RT: 1.27

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

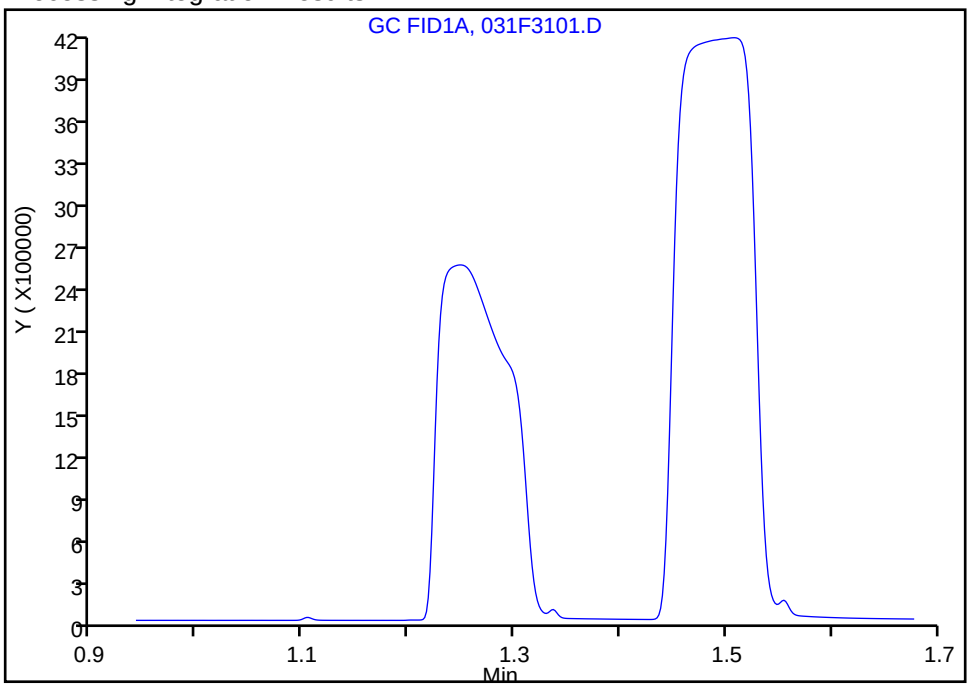
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Injection Date: 18-Jun-2020 17:03:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

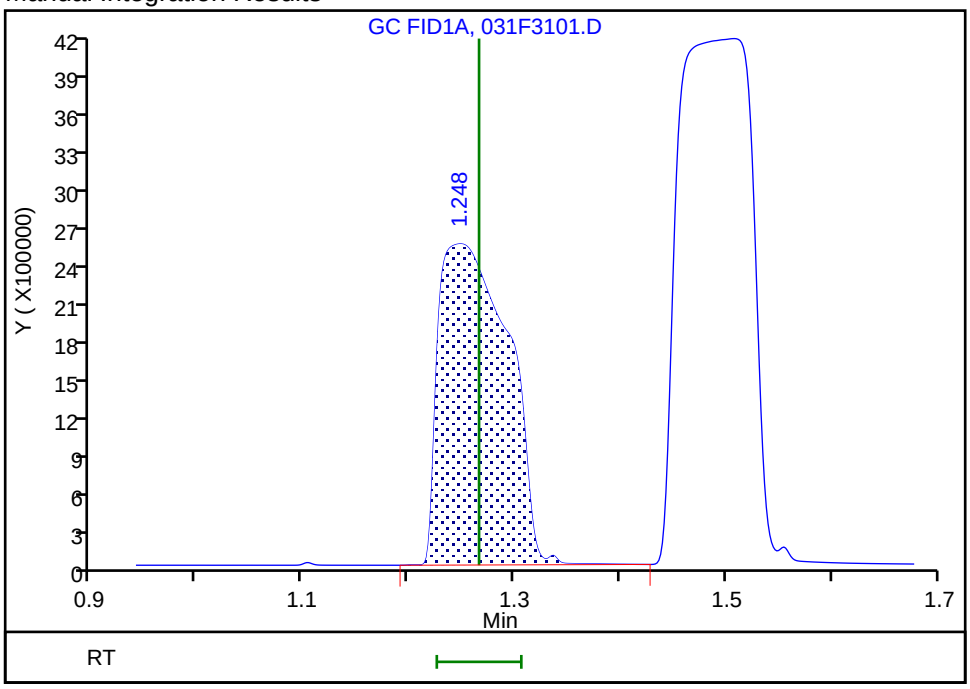
Not Detected
Expected RT: 1.27

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

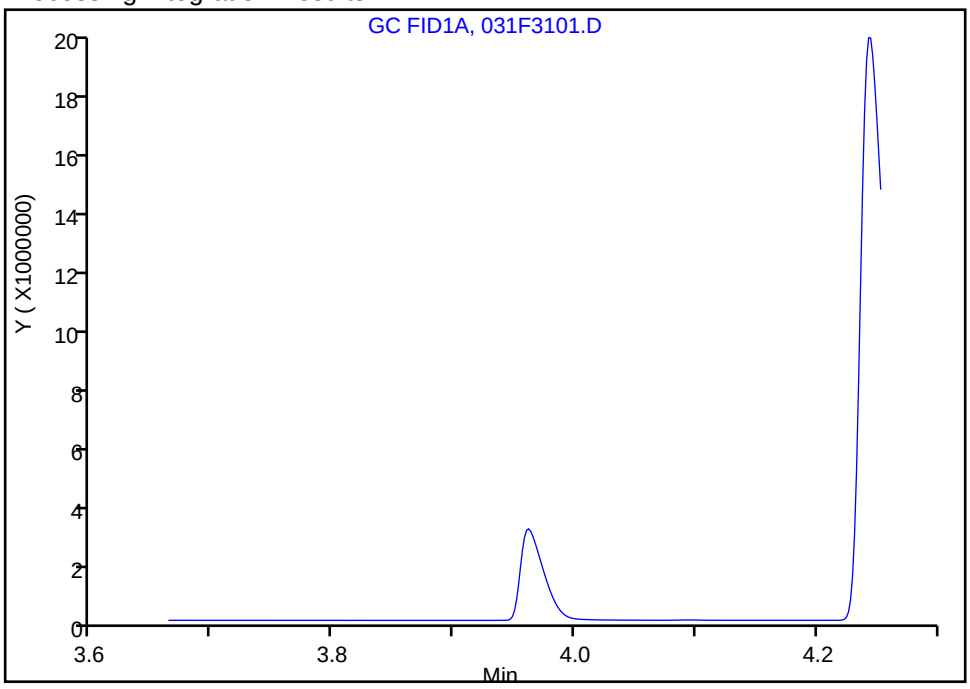
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

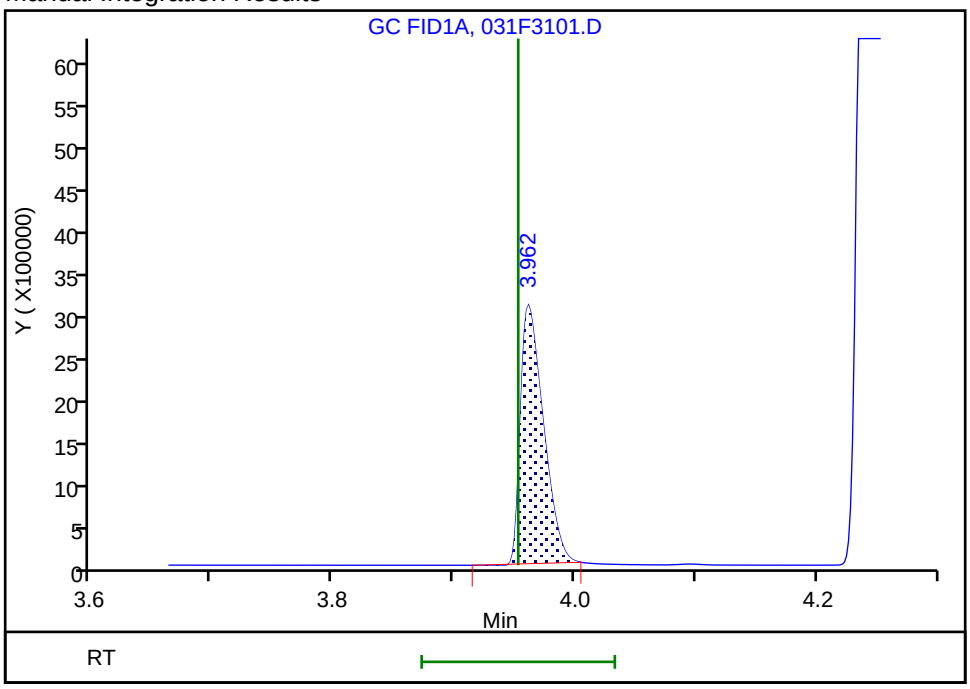
Processing Integration Results

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

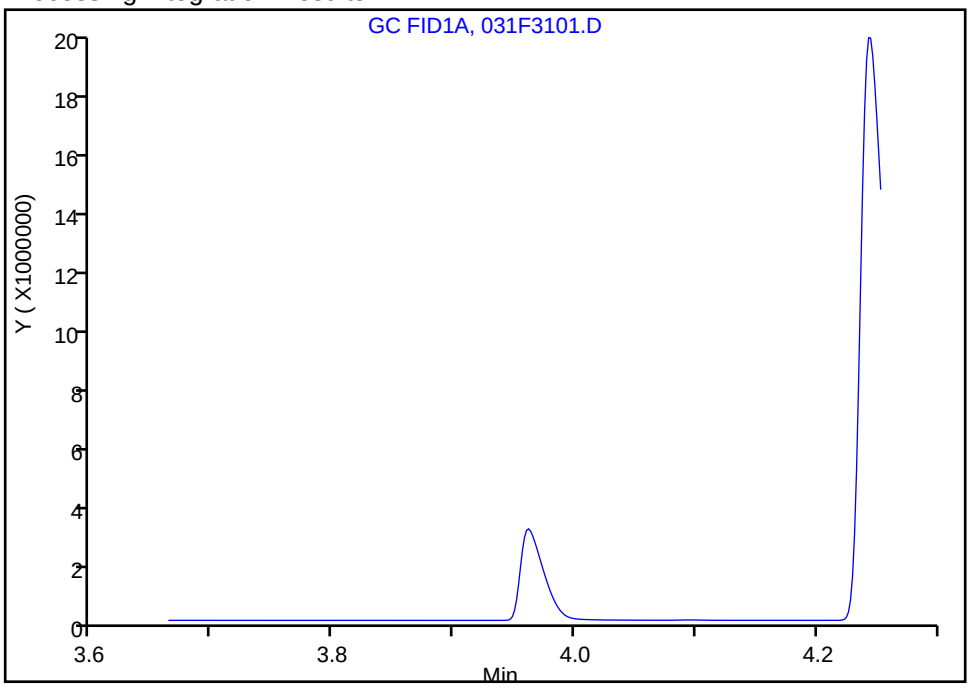
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

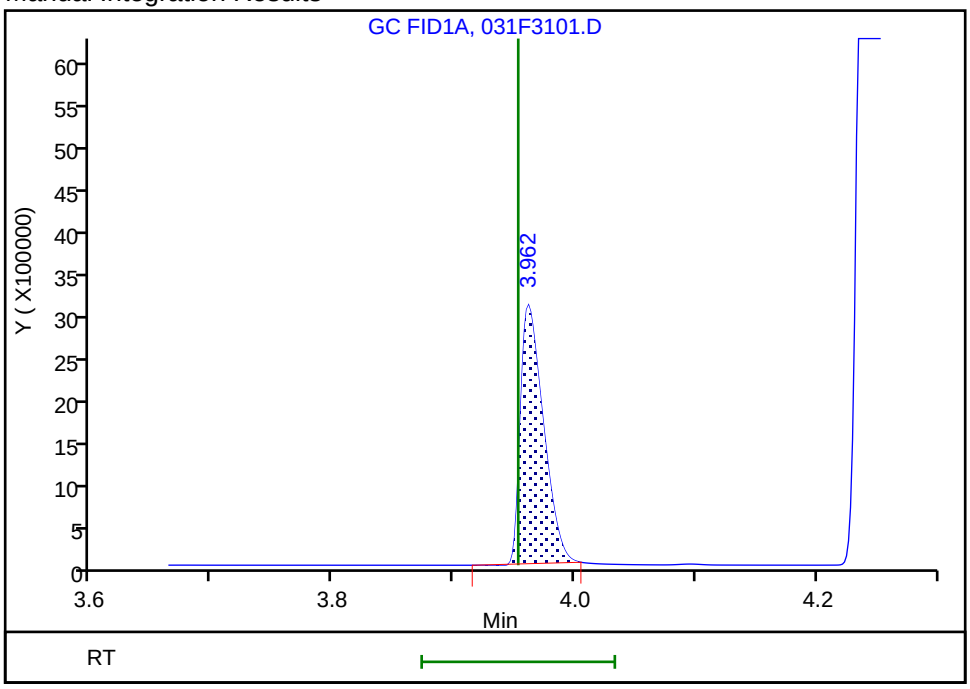
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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

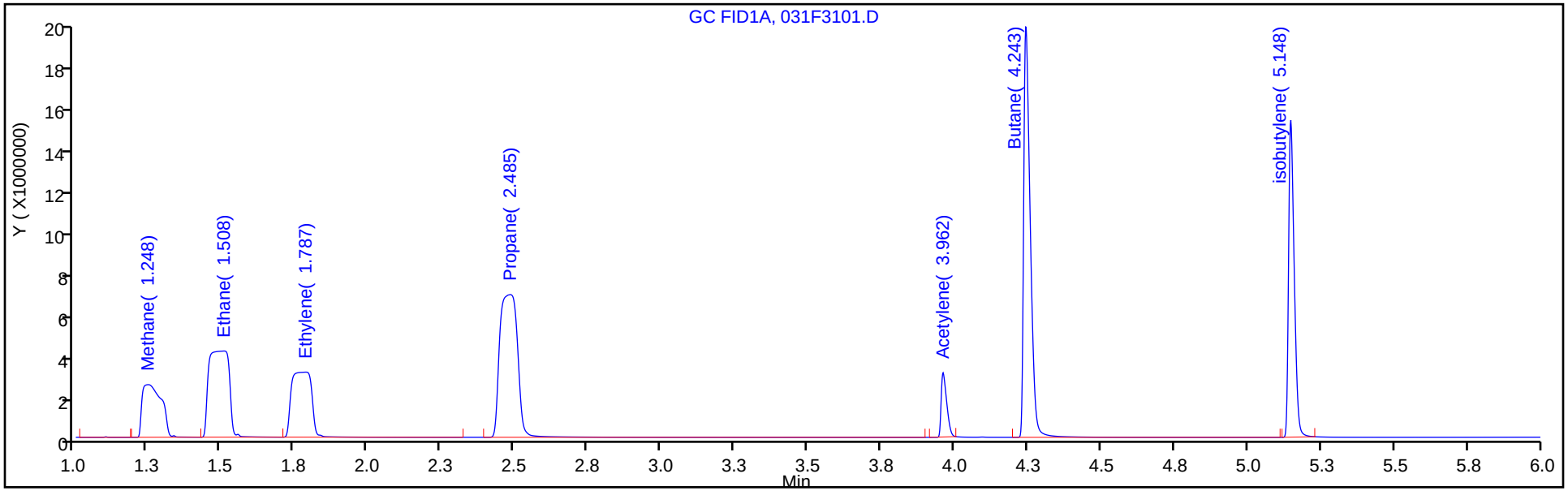
Report Date: 19-Jun-2020 16:09:11 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

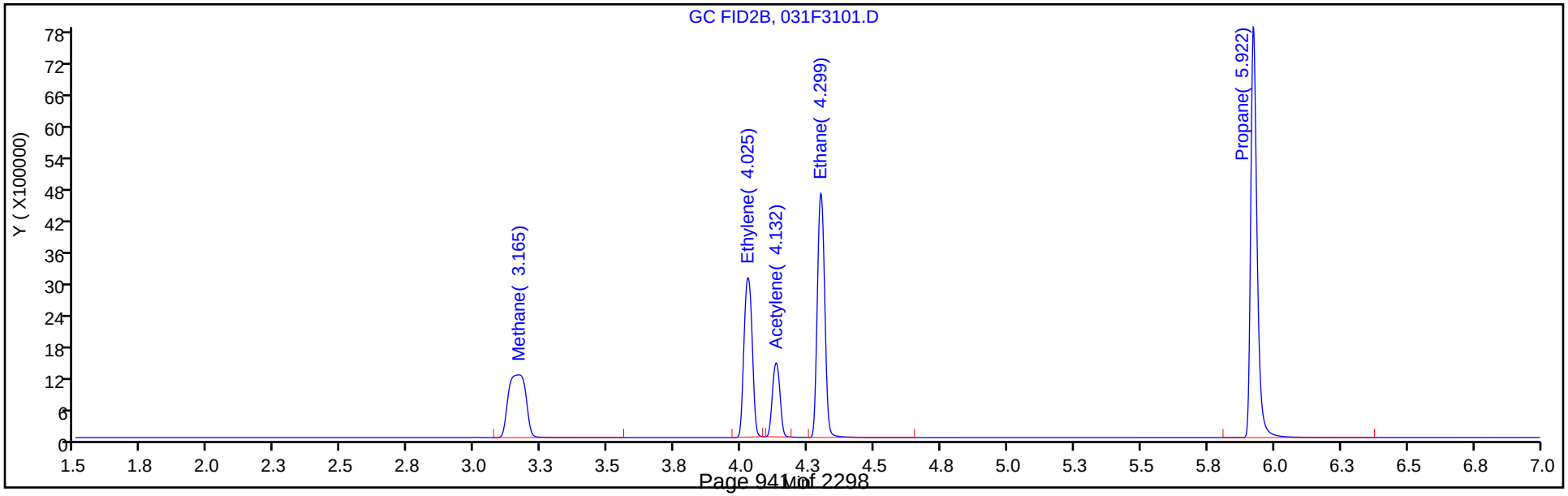
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

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



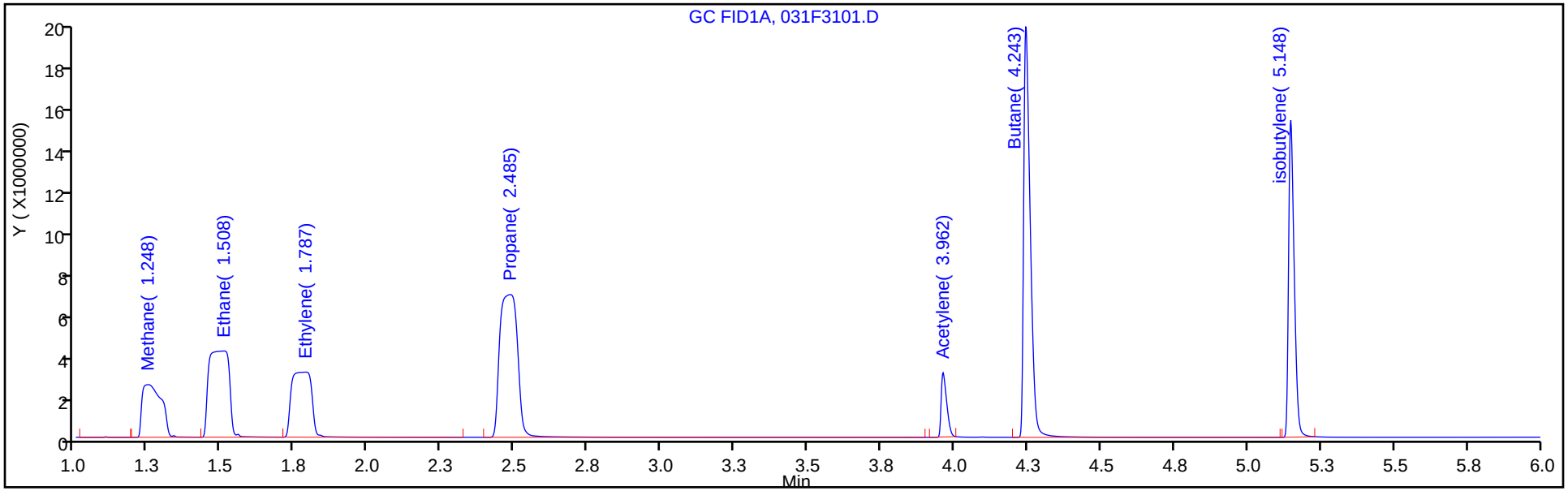
Report Date: 19-Jun-2020 16:09:10 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

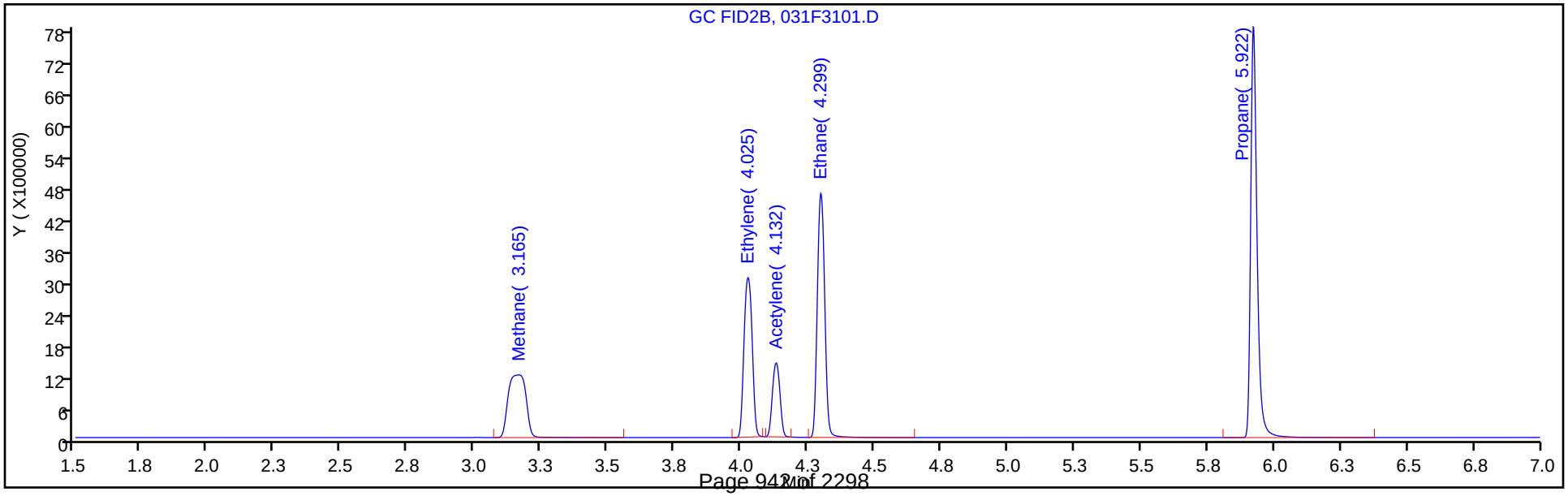
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D

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

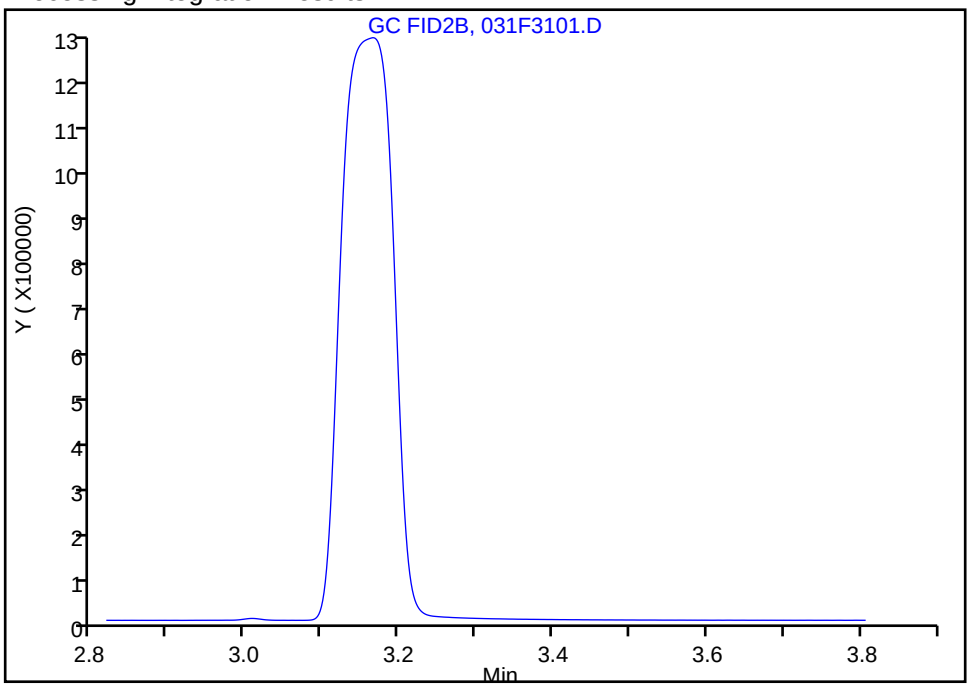
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Injection Date: 18-Jun-2020 17:03:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

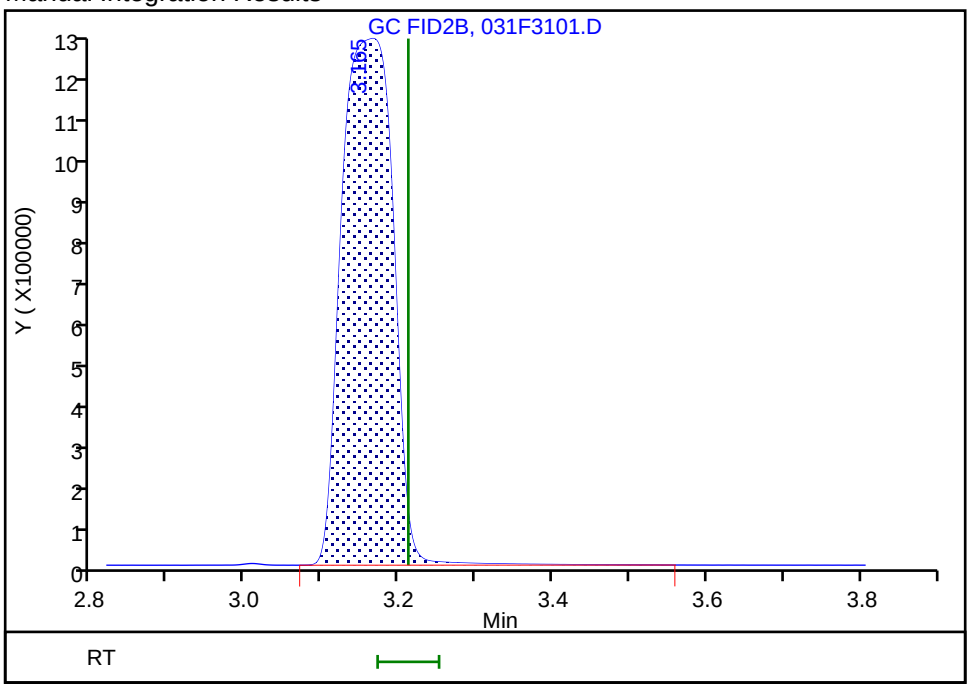
Not Detected
Expected RT: 3.21

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

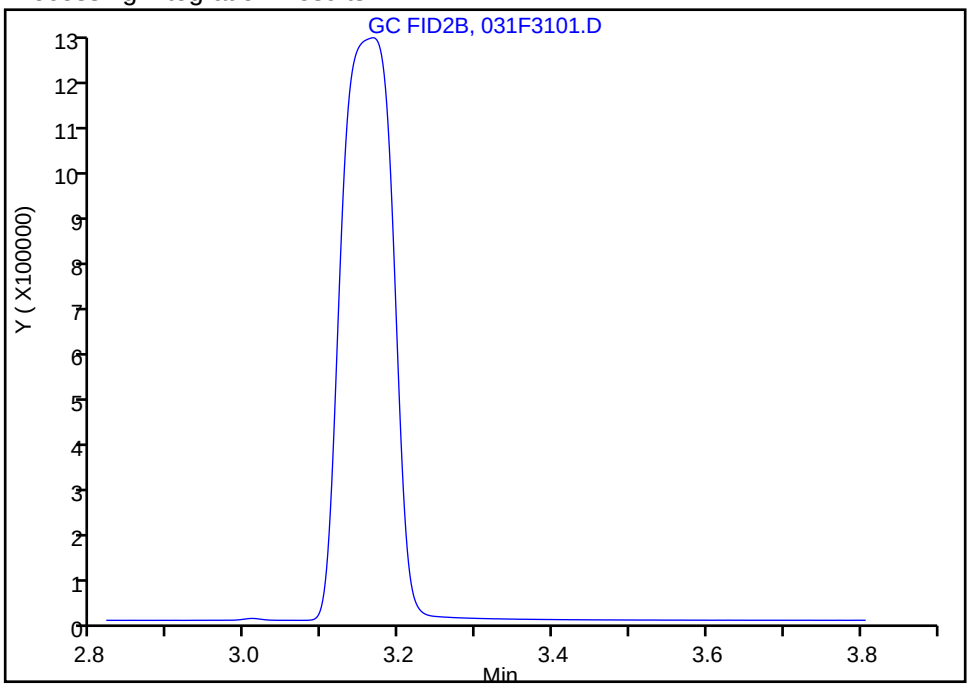
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Injection Date: 18-Jun-2020 17:03:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

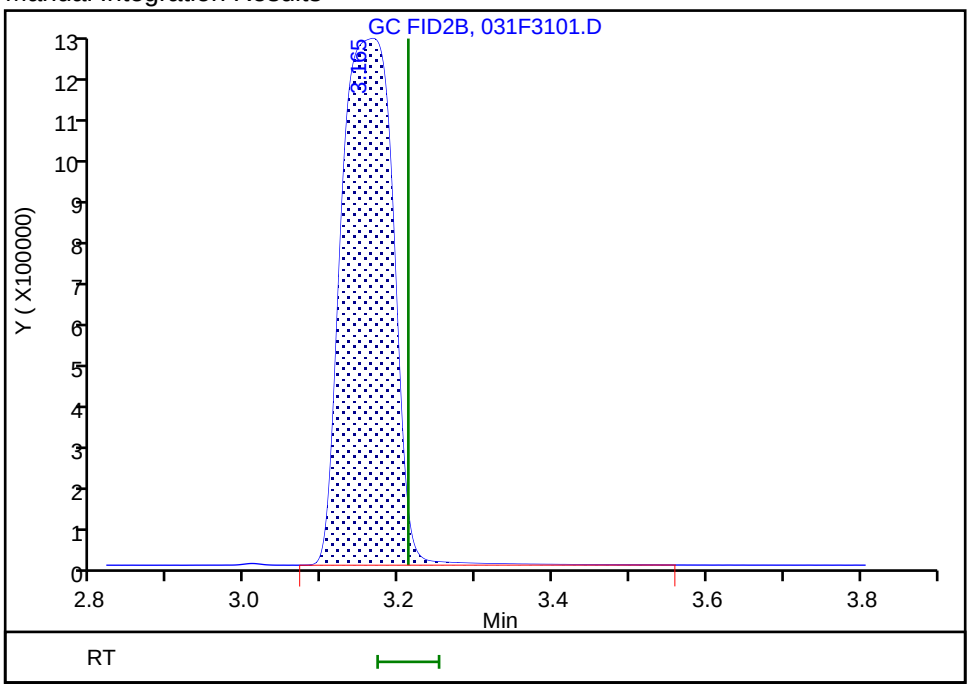
Not Detected
Expected RT: 3.21

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

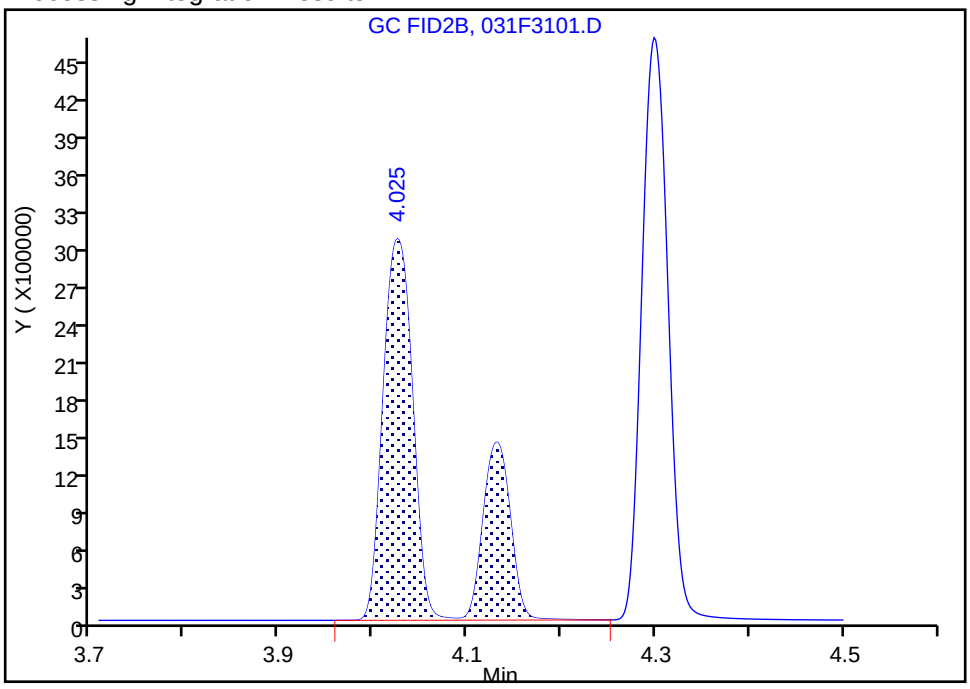
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

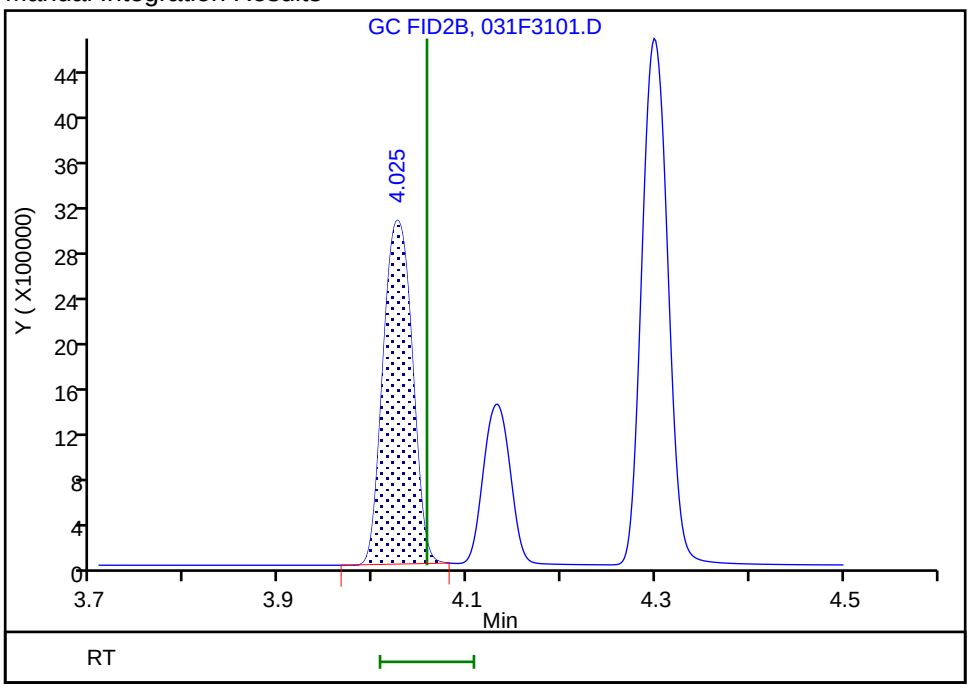
Processing Integration Results

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

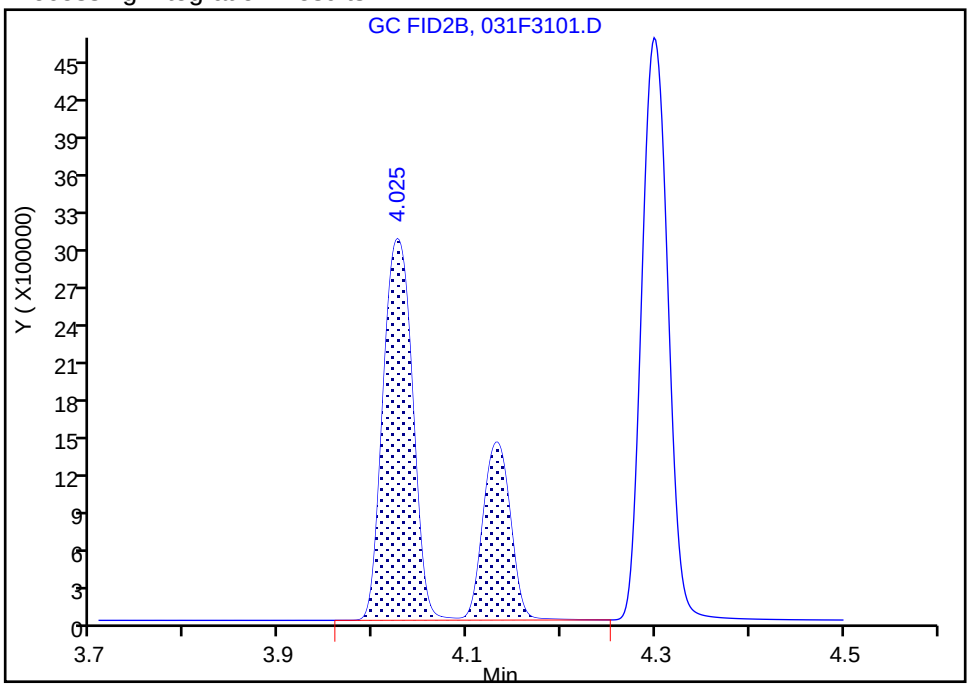
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D				
Injection Date:	18-Jun-2020 17:03:30	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	31	Worklist Smp#:	30
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

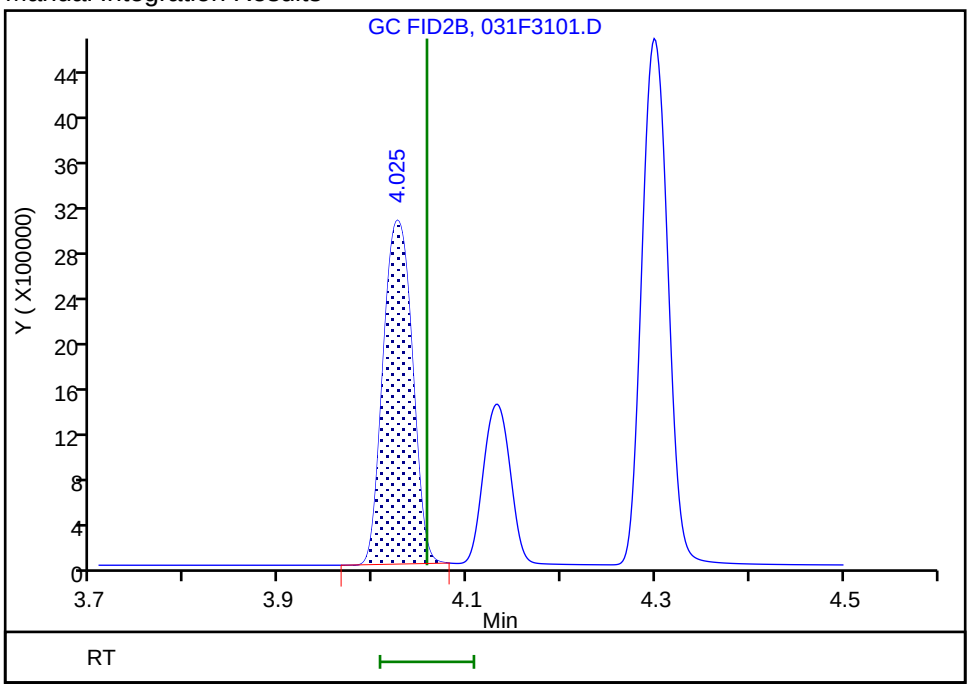
Processing Integration Results

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

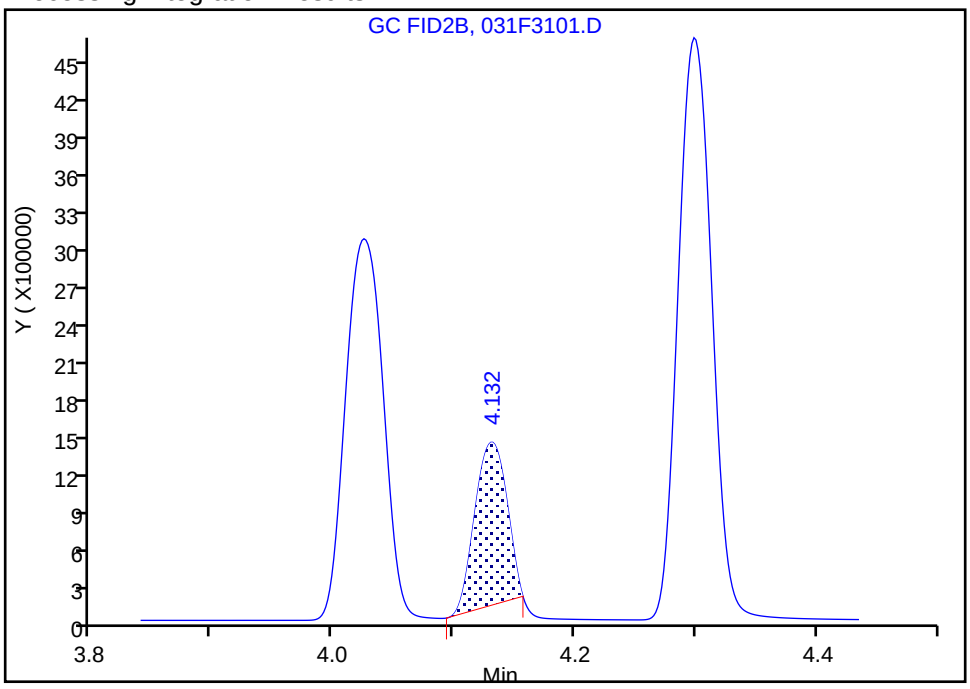
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Injection Date: 18-Jun-2020 17:03:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

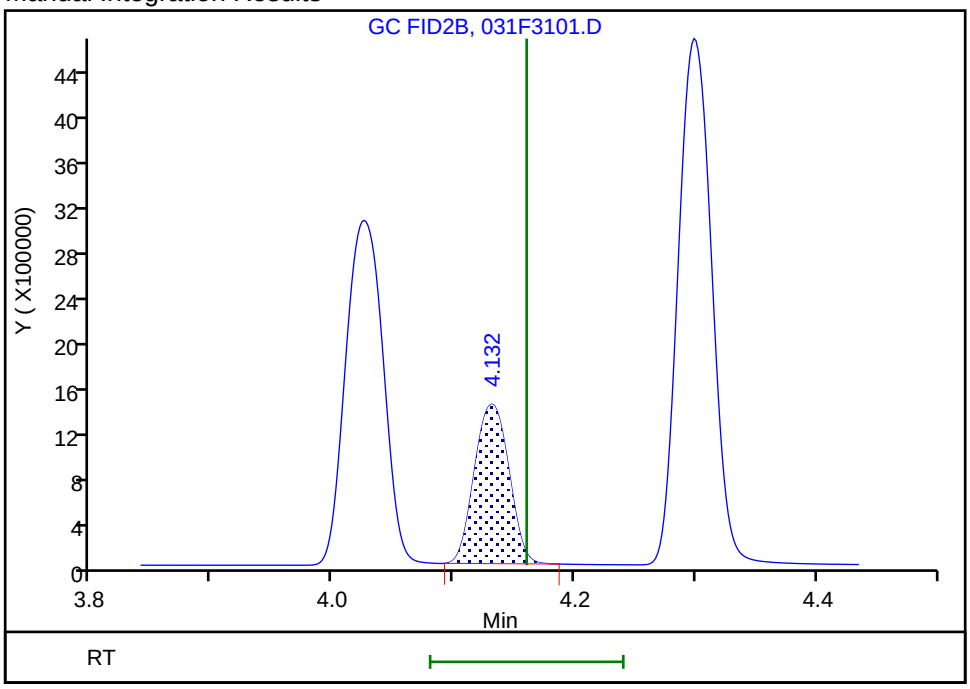
Processing Integration Results

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

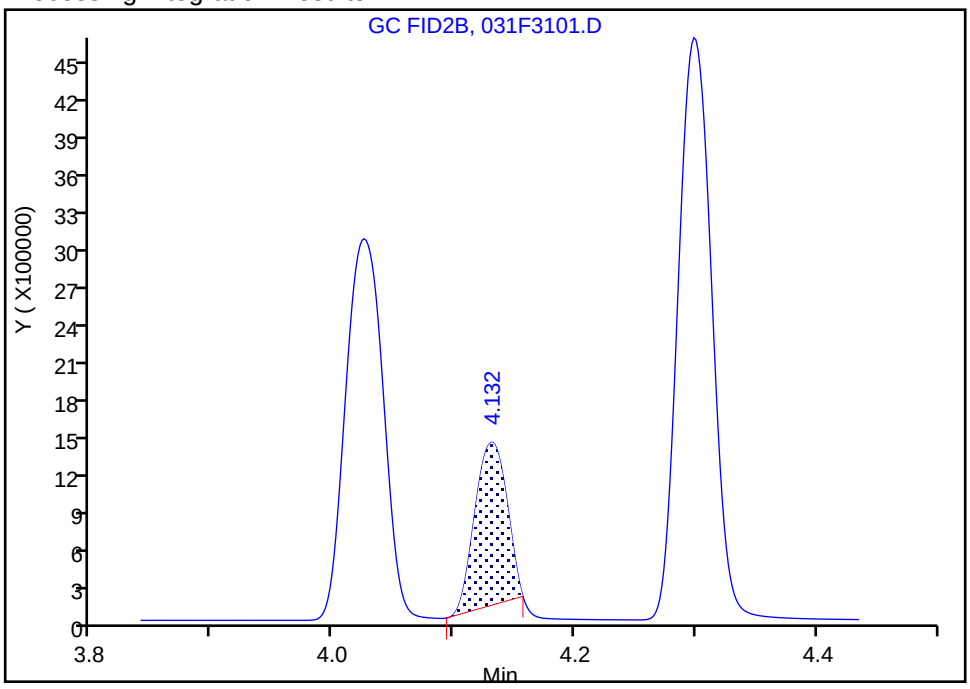
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\031F3101.D
Injection Date: 18-Jun-2020 17:03:30 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 31 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

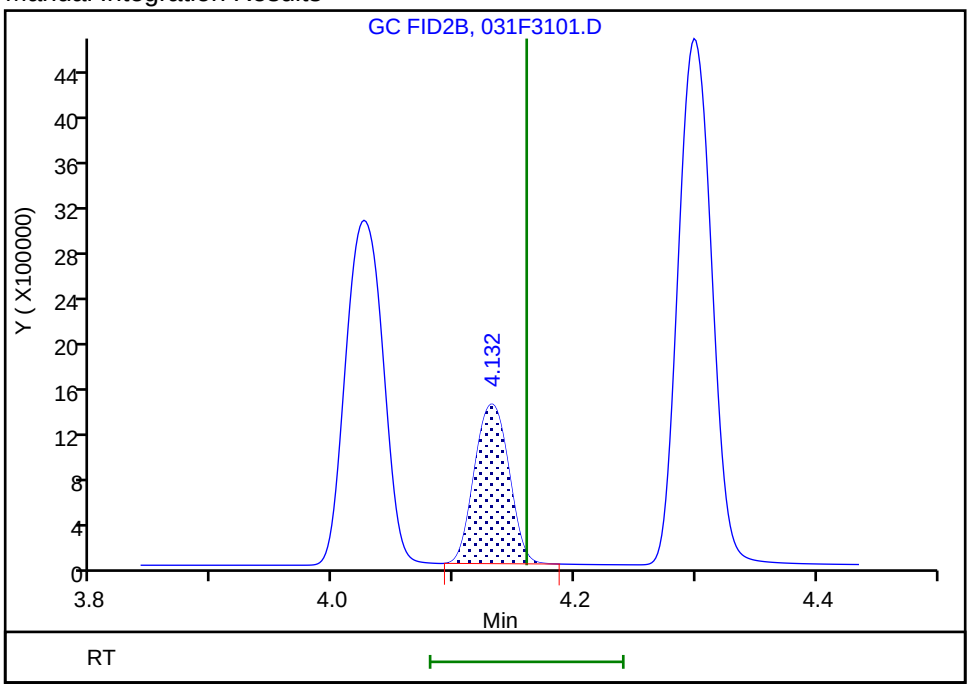
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

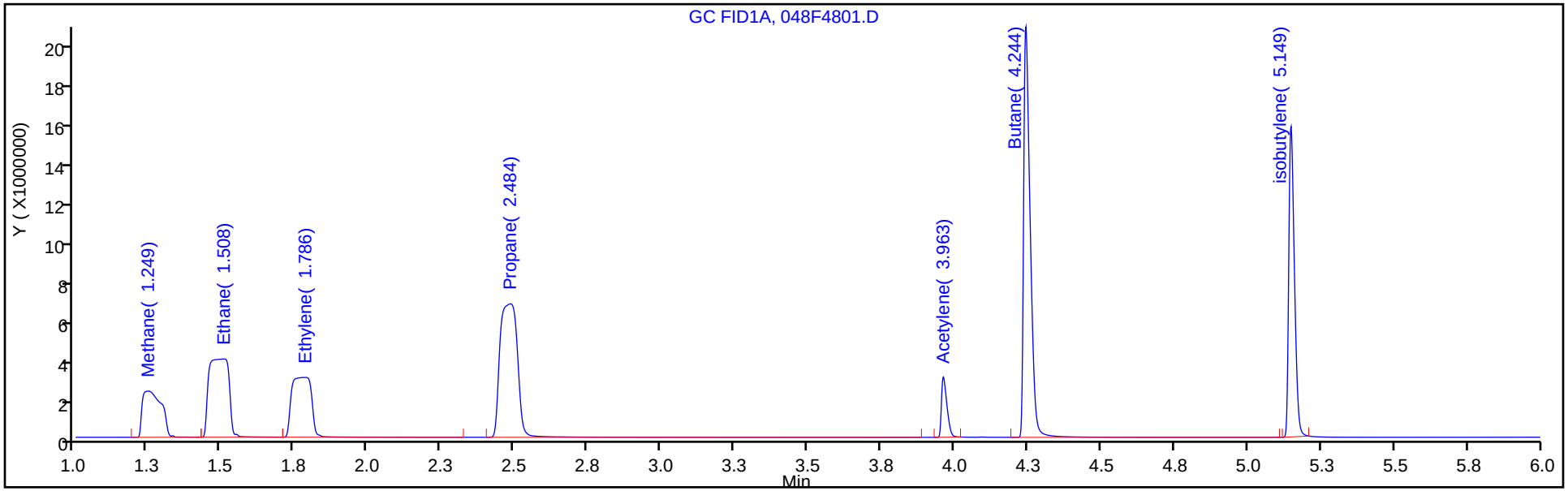
Report Date: 22-Jun-2020 13:22:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

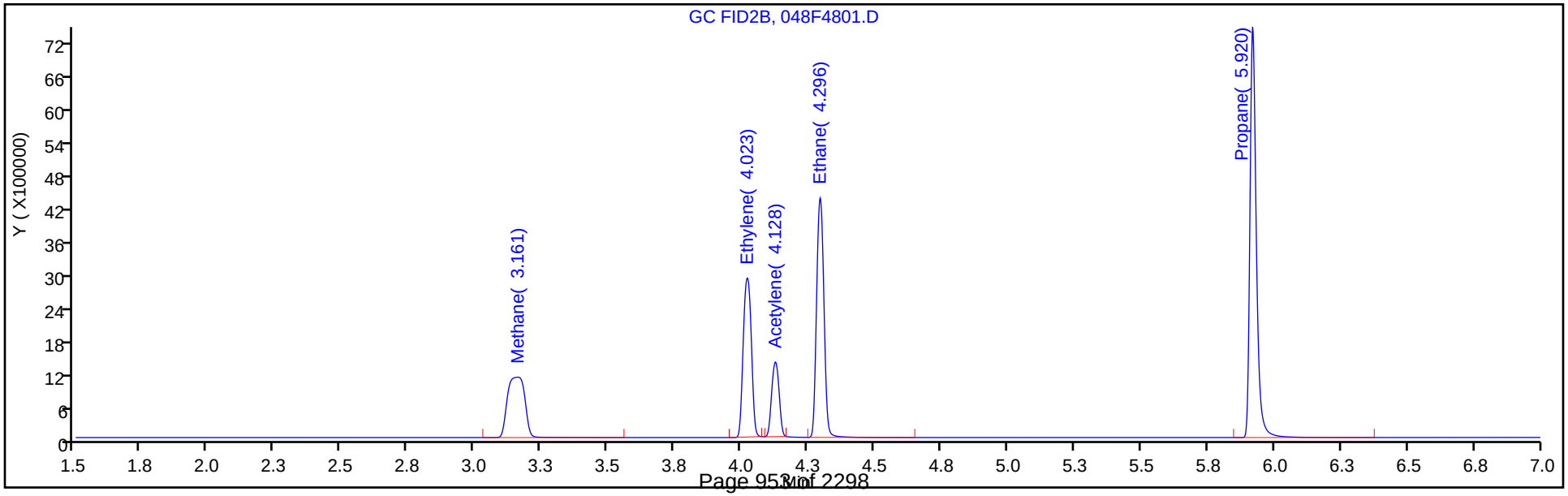
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D

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

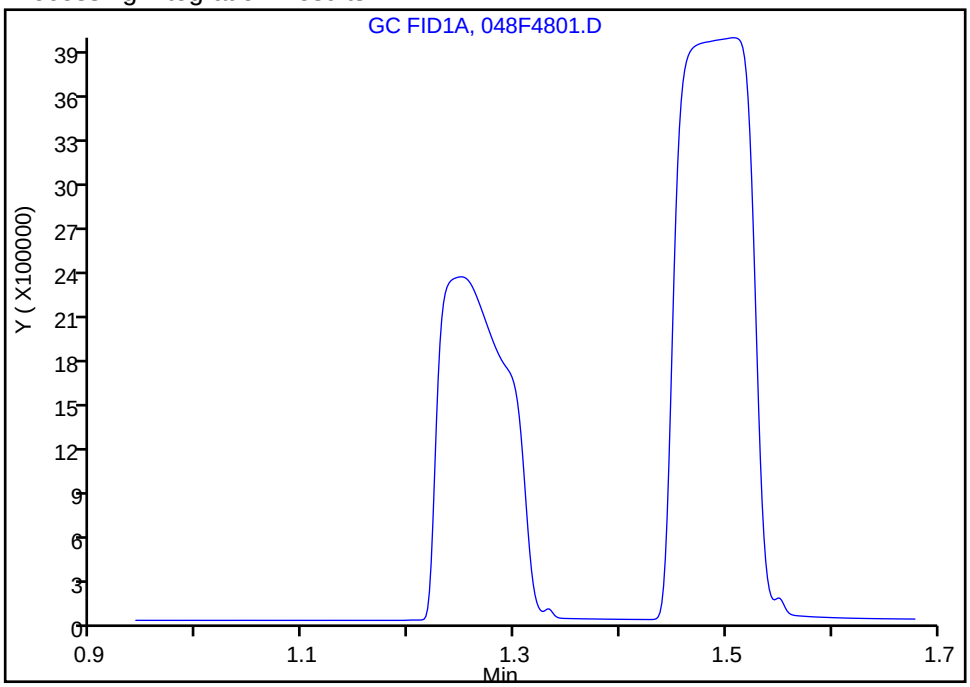
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D				
Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	48	Worklist Smp#:	47
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

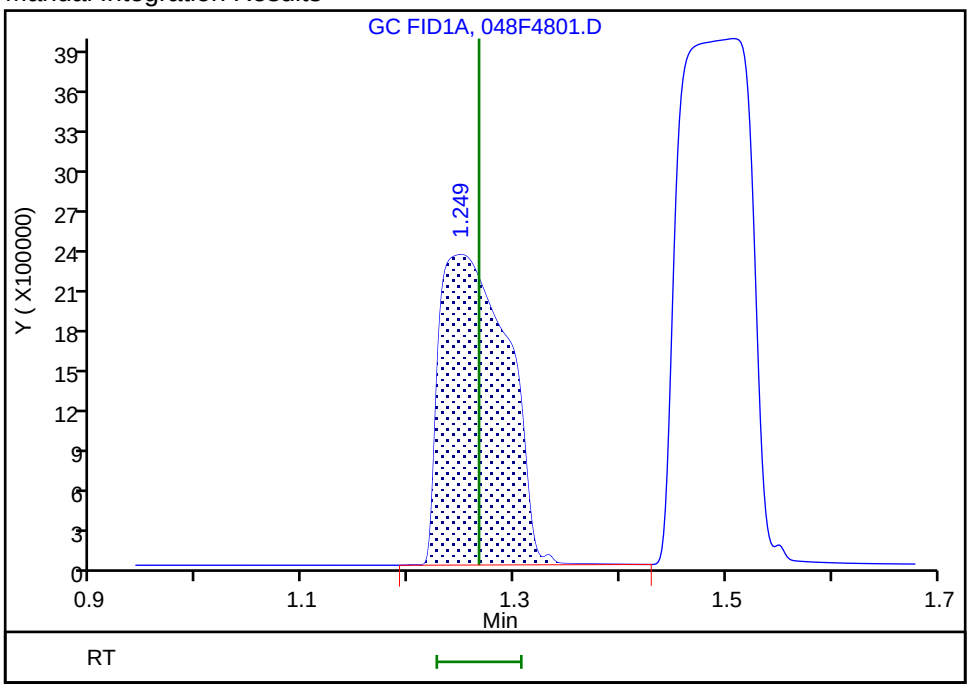
Not Detected
Expected RT: 1.27

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

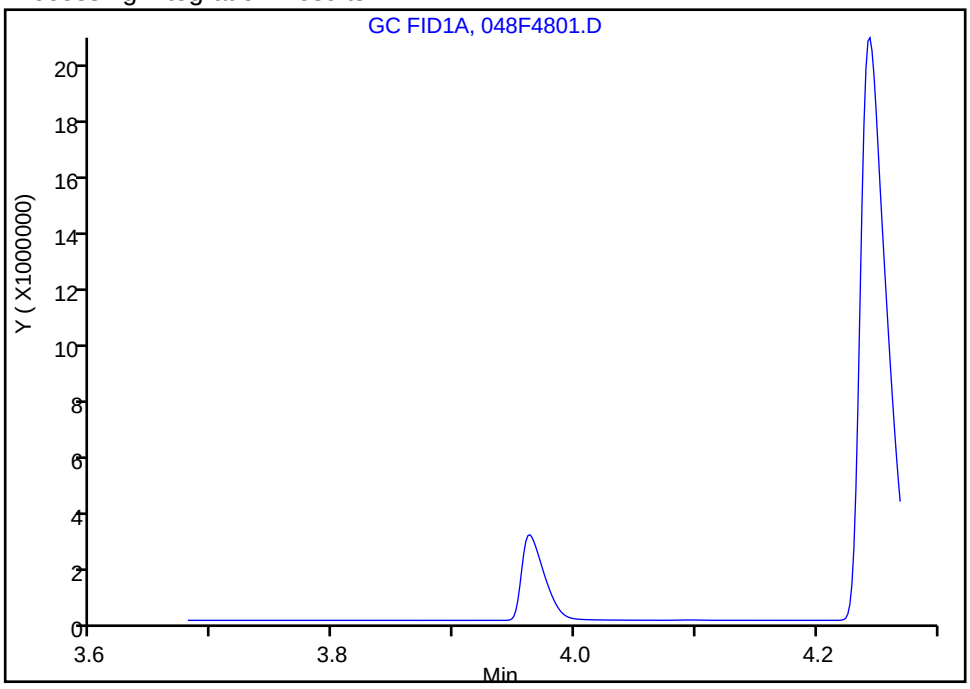
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D				
Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	48	Worklist Smp#:	47
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

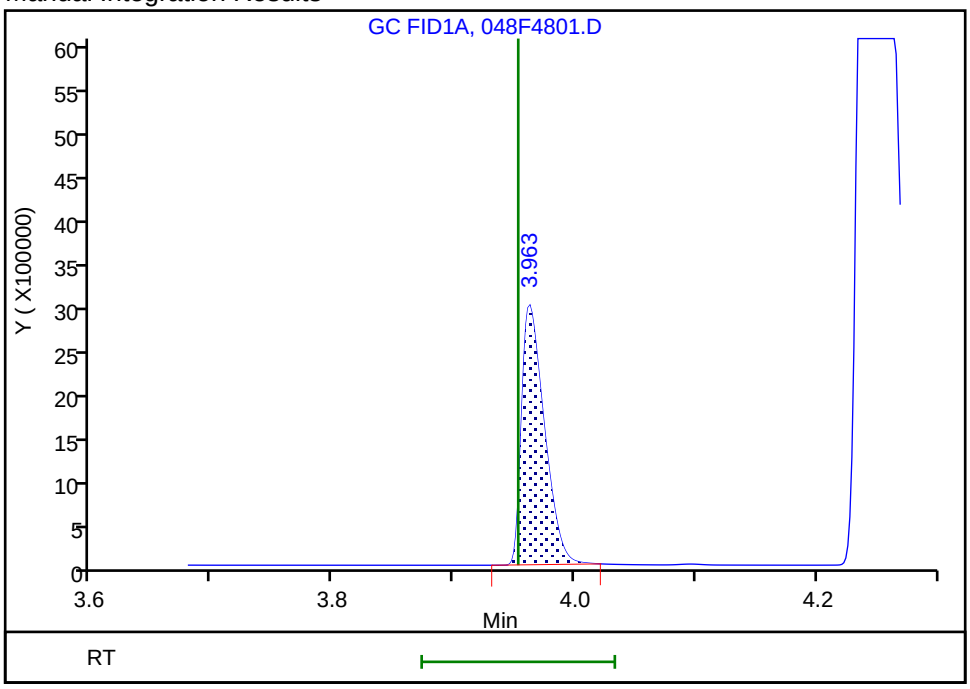
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

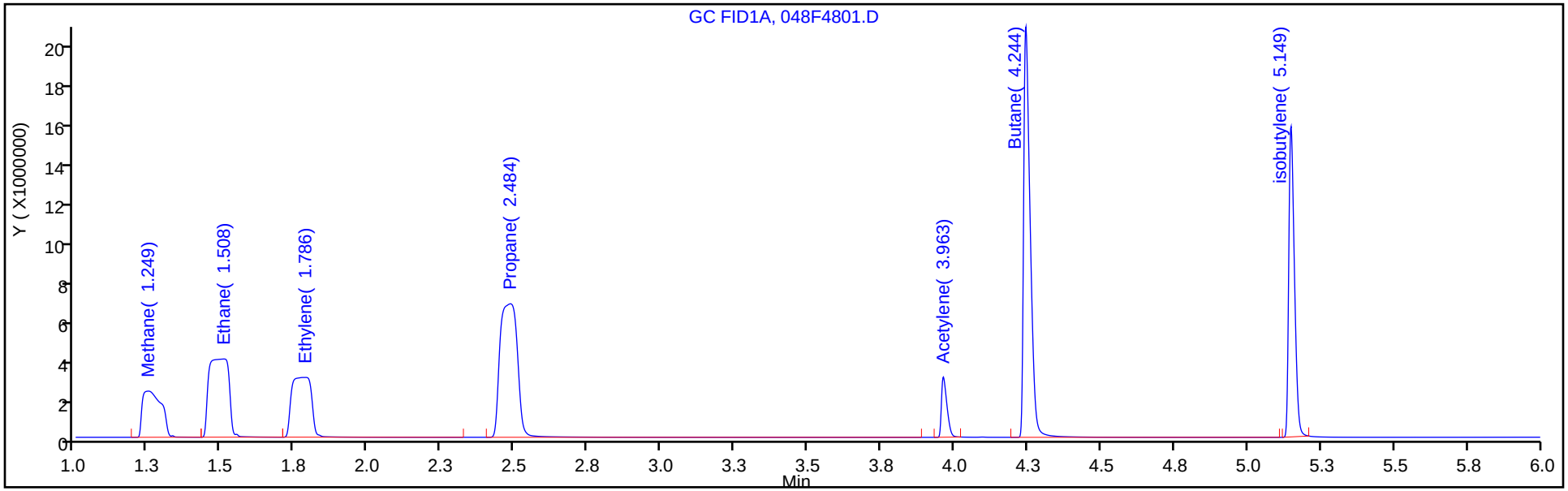
Report Date: 22-Jun-2020 13:22:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

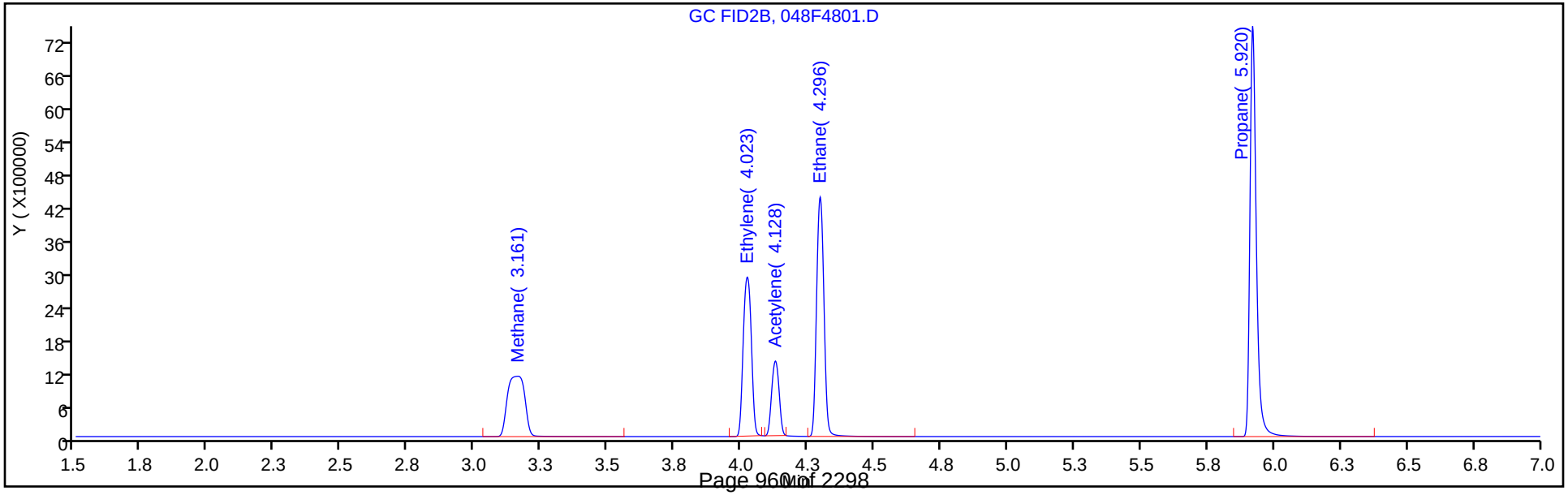
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D

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

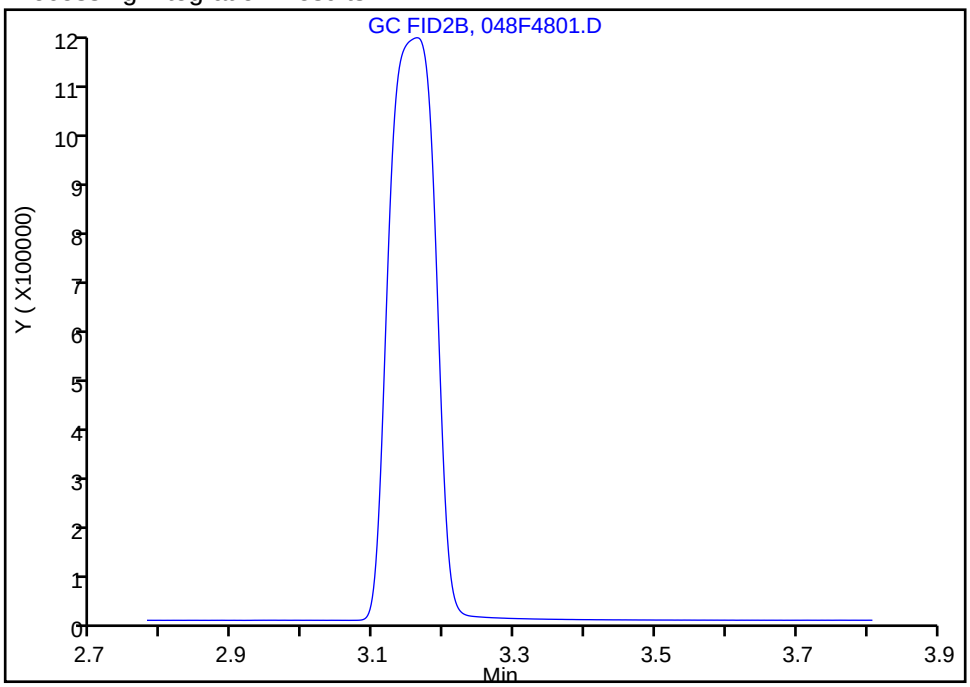
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Injection Date: 18-Jun-2020 21:41:06 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

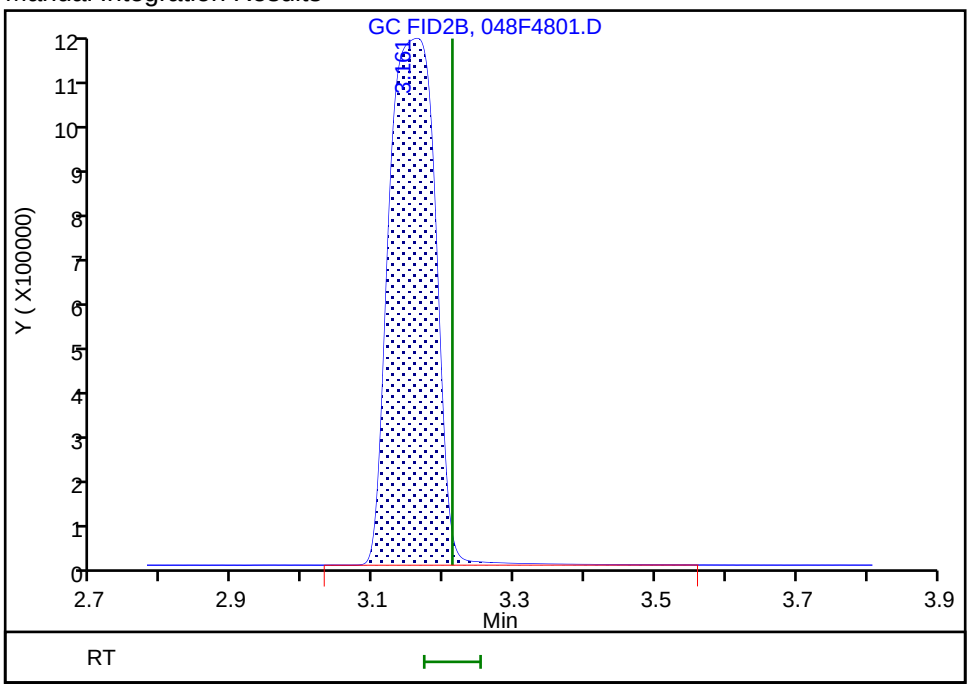
Not Detected
Expected RT: 3.21

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

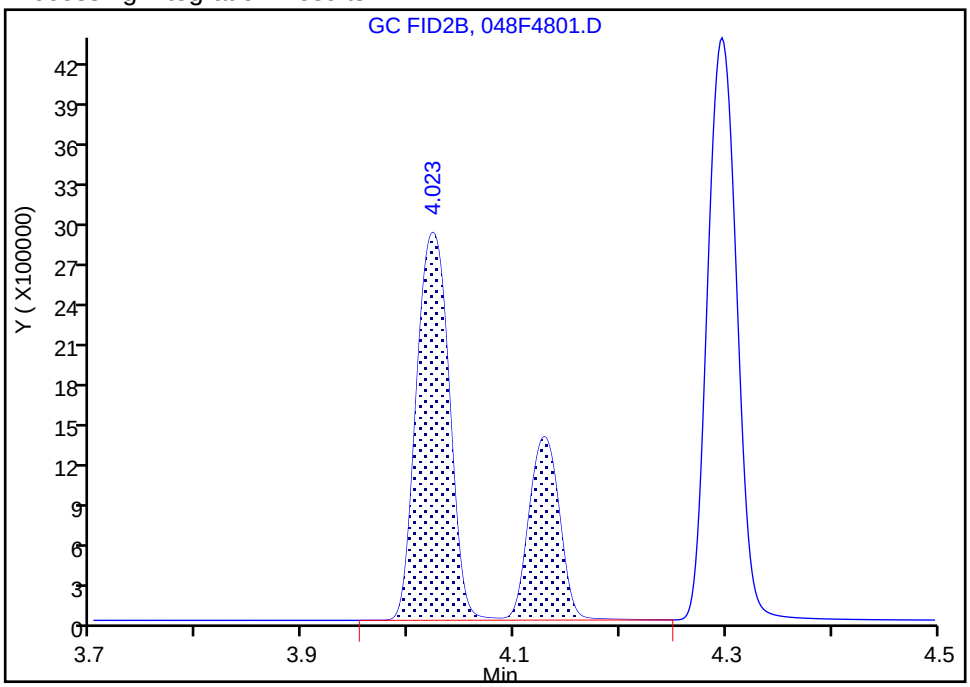
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D
Injection Date: 18-Jun-2020 21:41:06 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: gm ALS Bottle#: 48 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

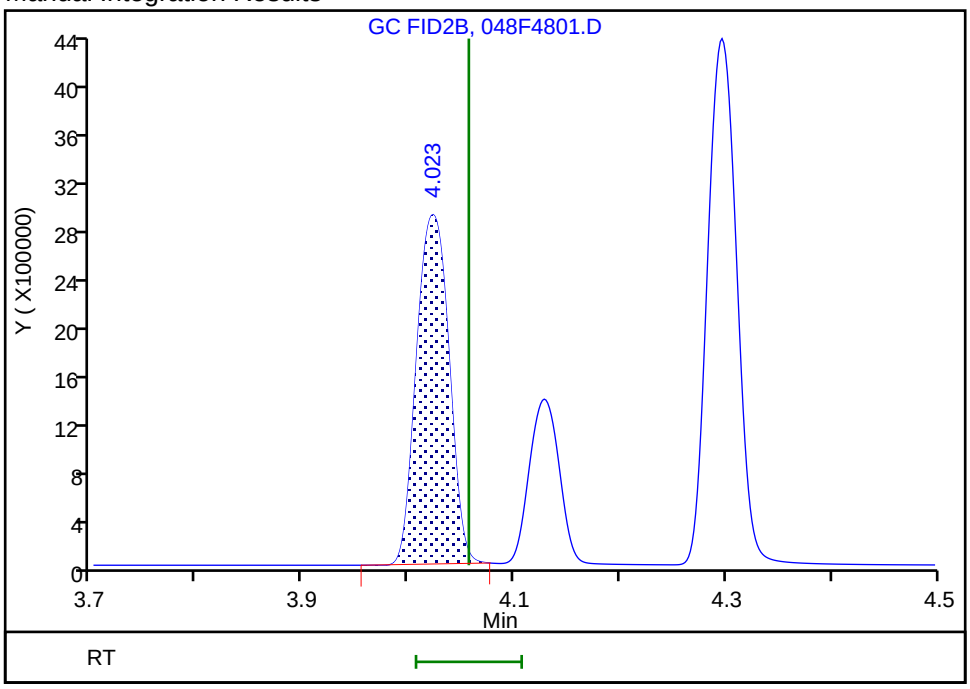
Processing Integration Results

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

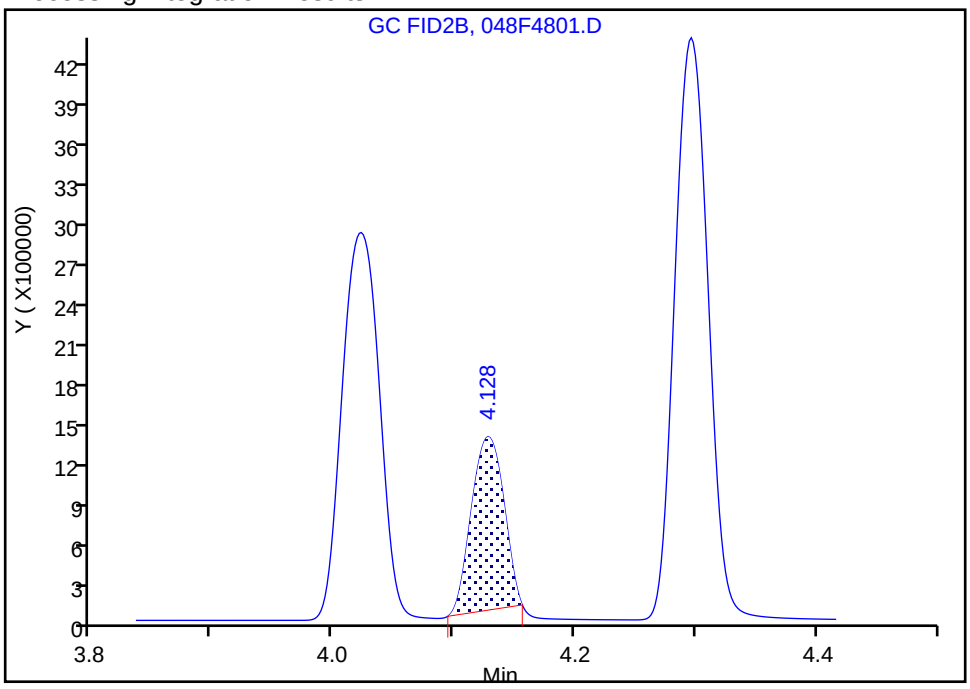
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\048F4801.D				
Injection Date:	18-Jun-2020 21:41:06	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	gm	ALS Bottle#:	48	Worklist Smp#:	47
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

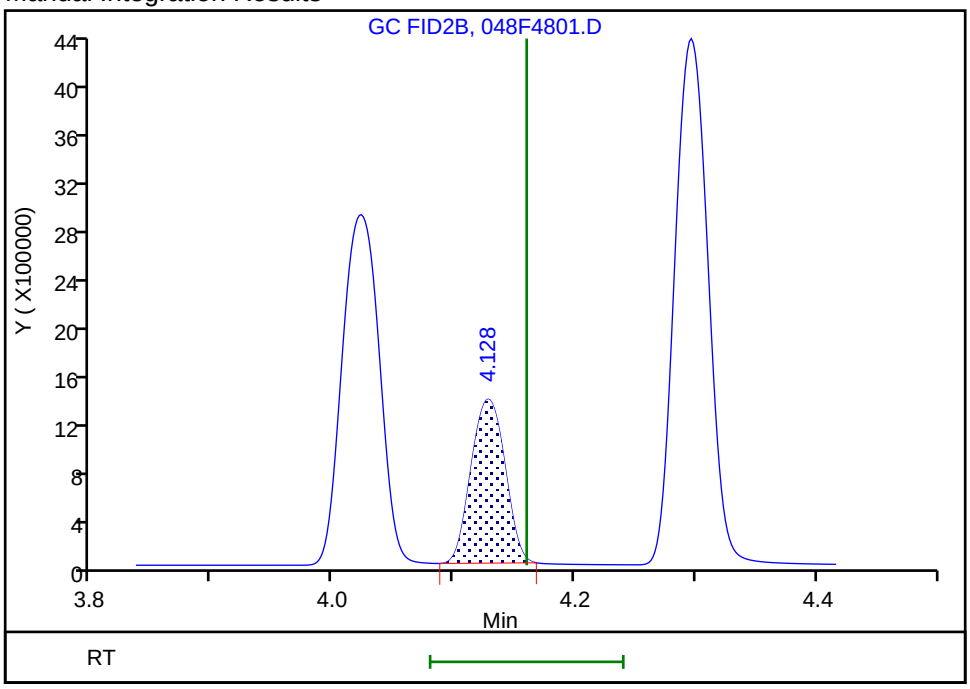
Processing Integration Results

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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

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

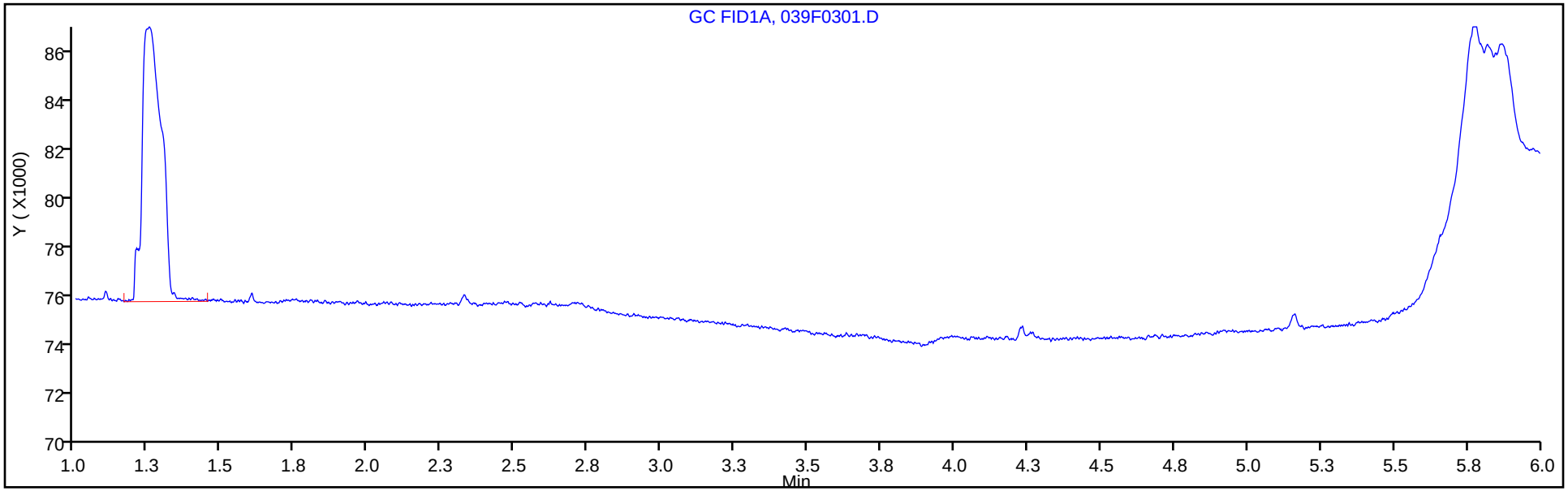
Report Date: 18-Jun-2020 10:24:54 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

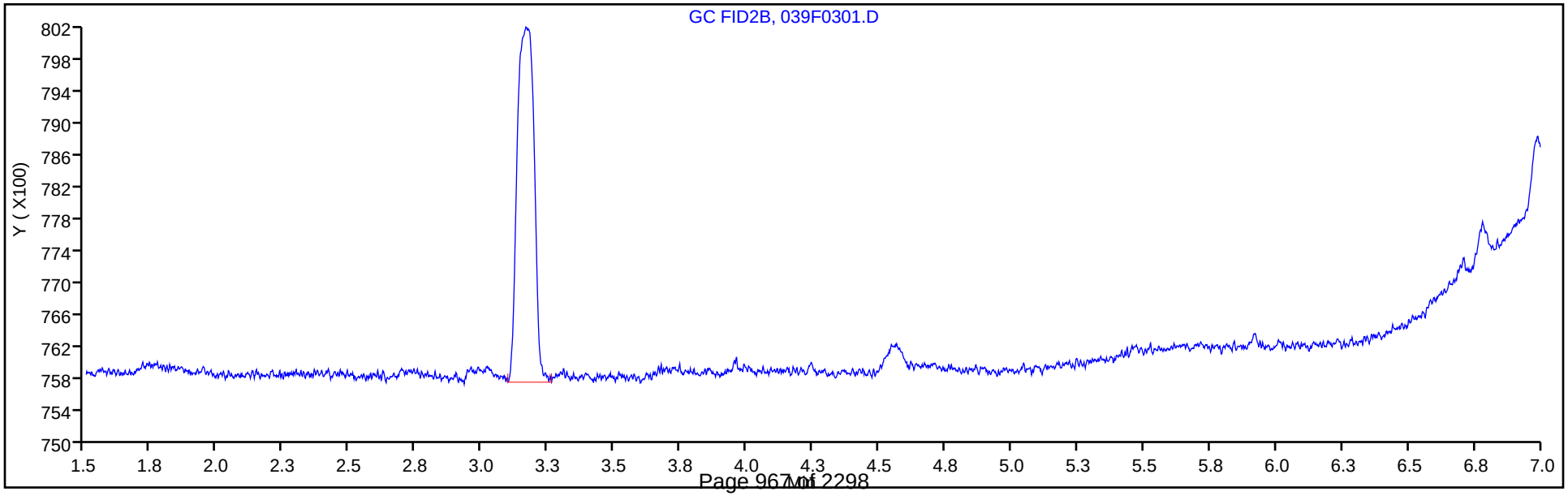
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\039F0301.D

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.: 280-137609-1

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
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

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

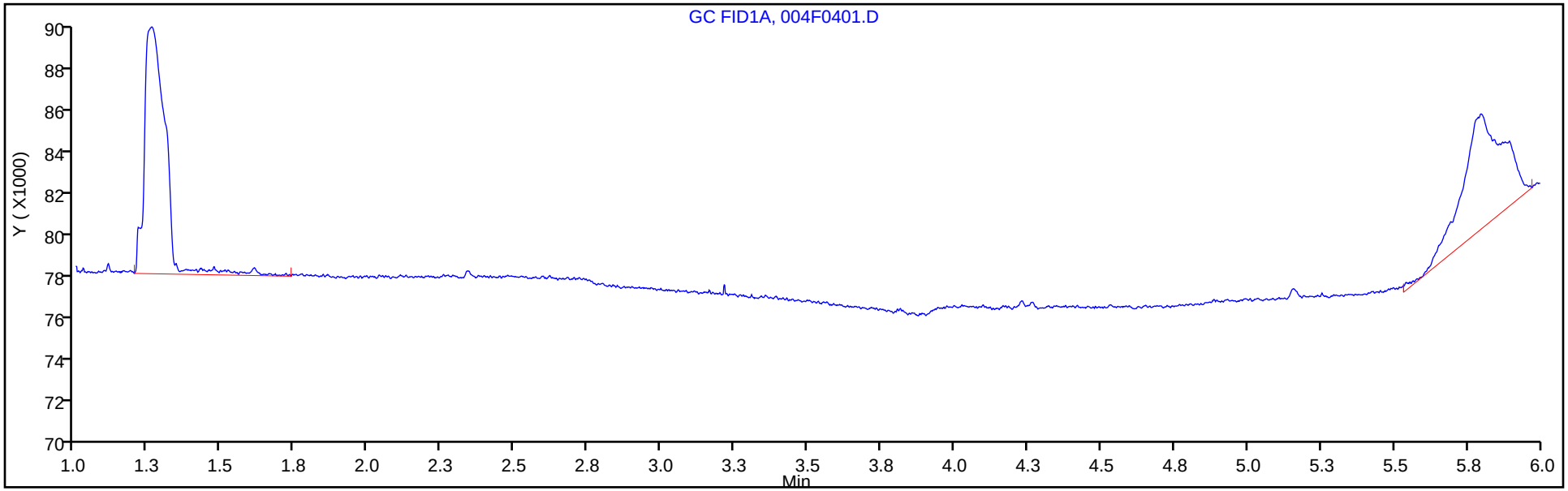
Report Date: 19-Jun-2020 12:43:10 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

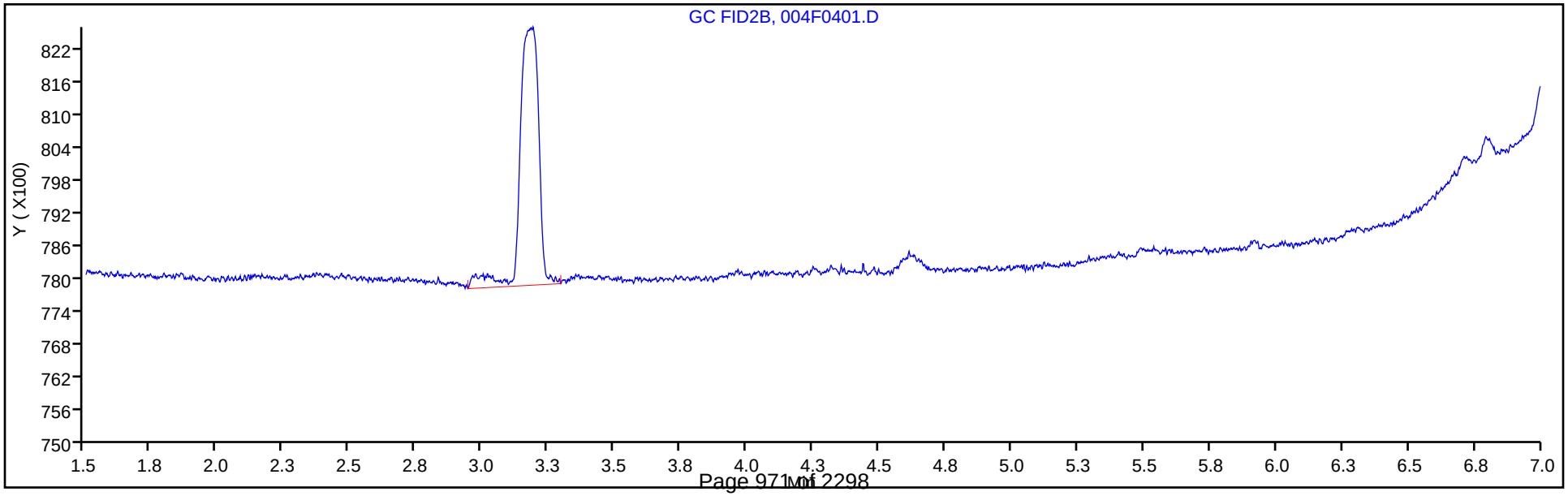
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\004F0401.D

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.: 280-137609-1

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					

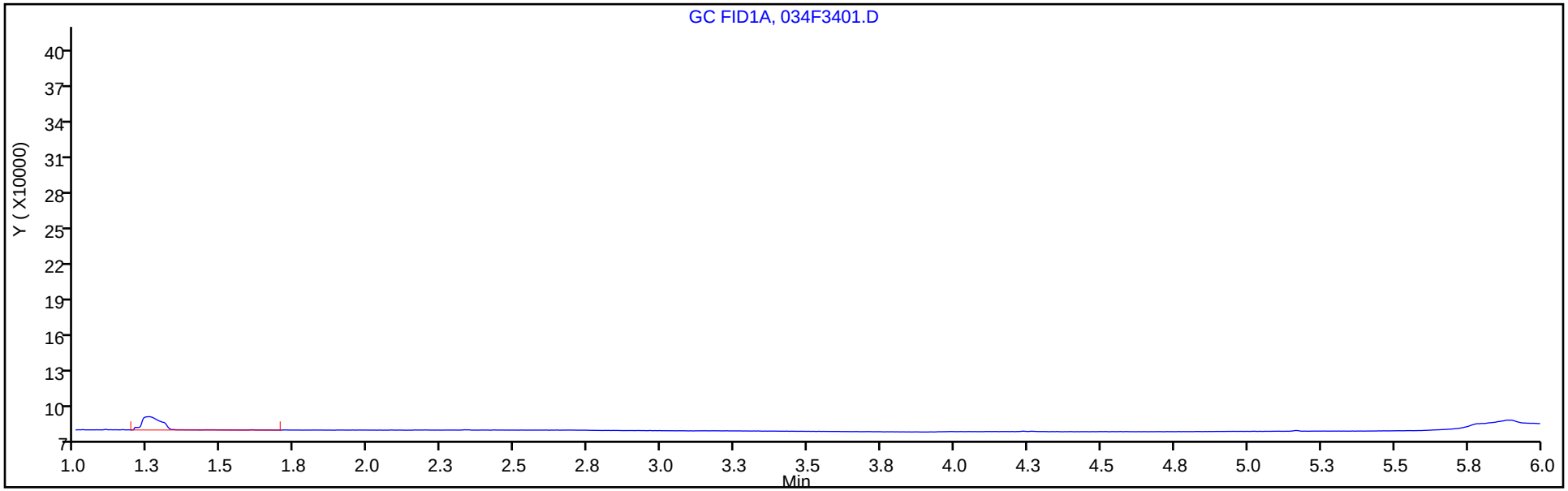
Report Date: 19-Jun-2020 12:43:22 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

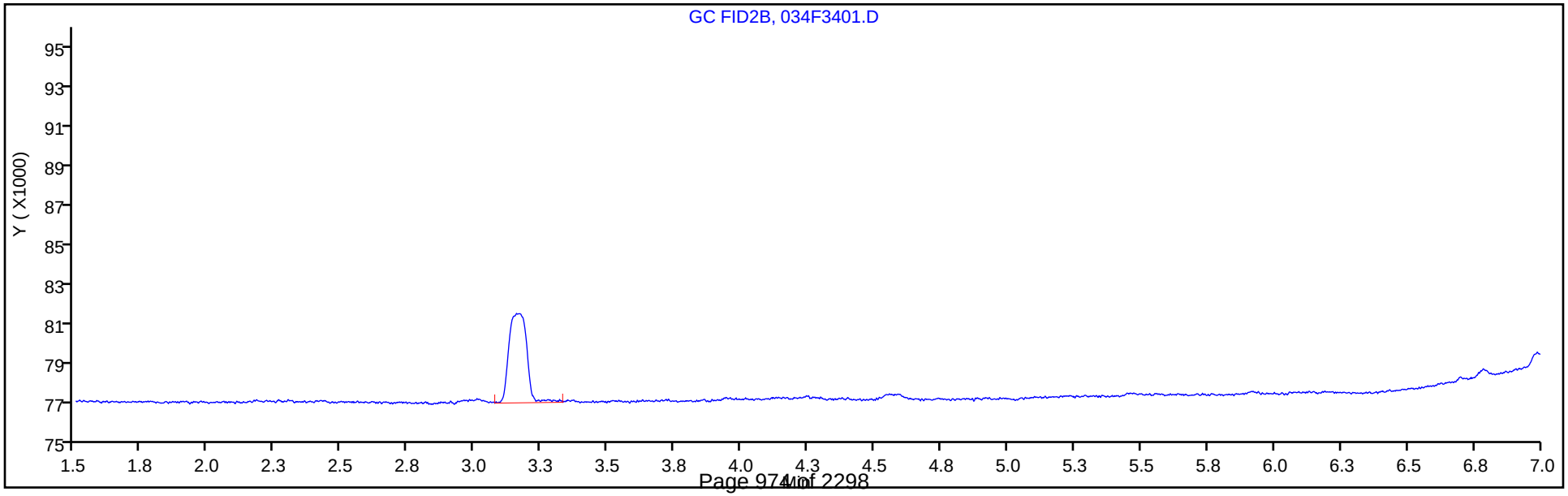
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\034F3401.D

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.: 280-137609-1

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
74-84-0	Ethane	0.140		0.0050	0.0015	0.00057
74-82-8	Methane	0.0722		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.131		0.0050	0.0014	0.00040

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

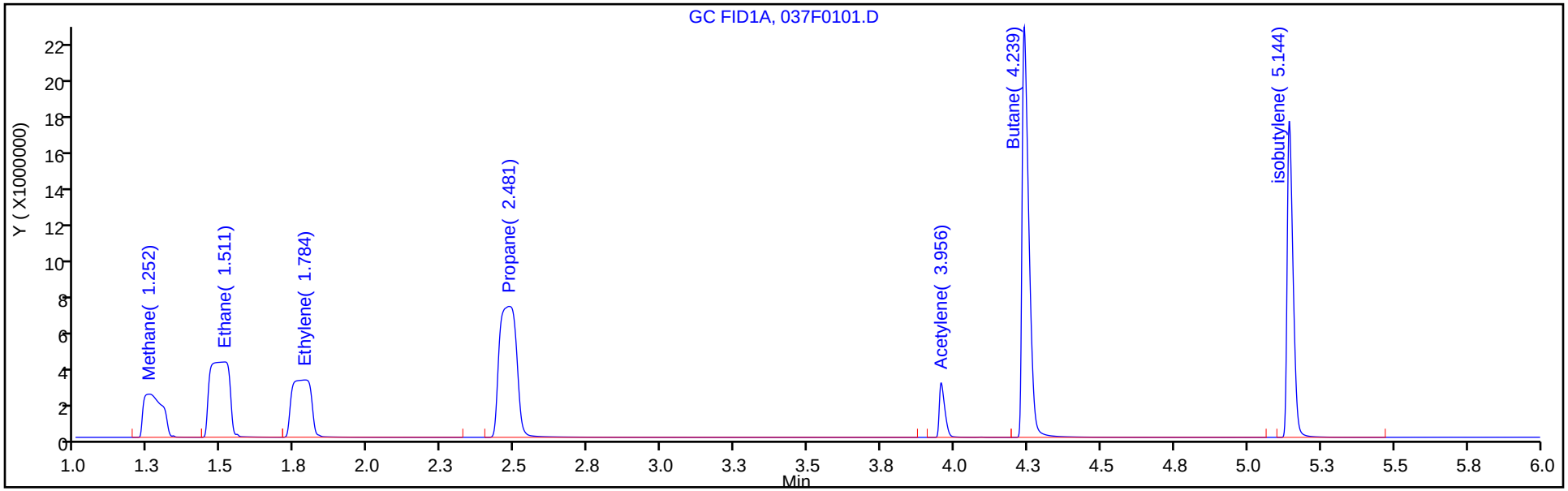
Report Date: 18-Jun-2020 10:24:53 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

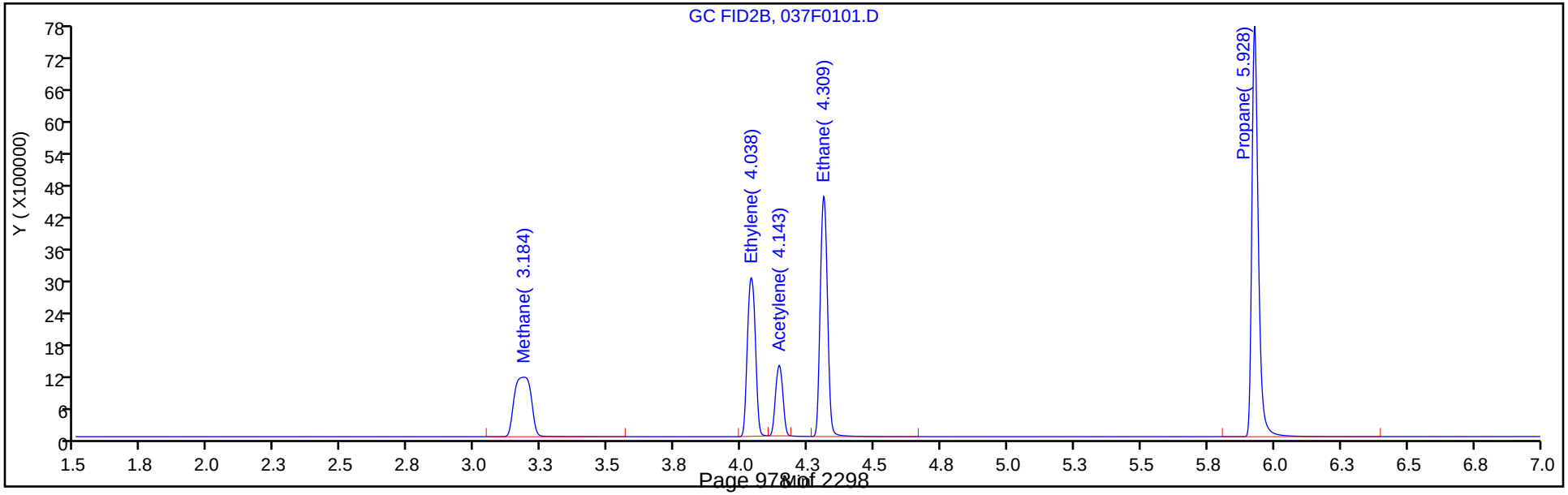
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\037F0101.D

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.: 280-137609-1

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
74-84-0	Ethane	0.149		0.0050	0.0015	0.00057
74-82-8	Methane	0.0786		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.137	M	0.0050	0.0014	0.00040

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

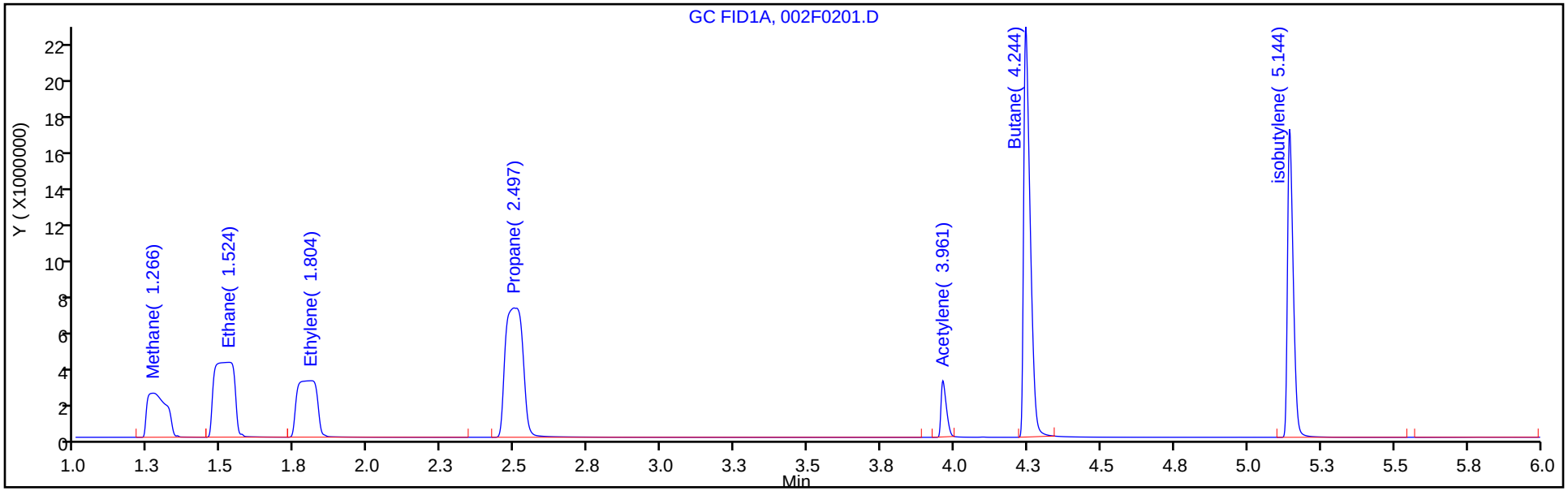
Lims ID: lcs Worklist Smp#: 2

Client ID:

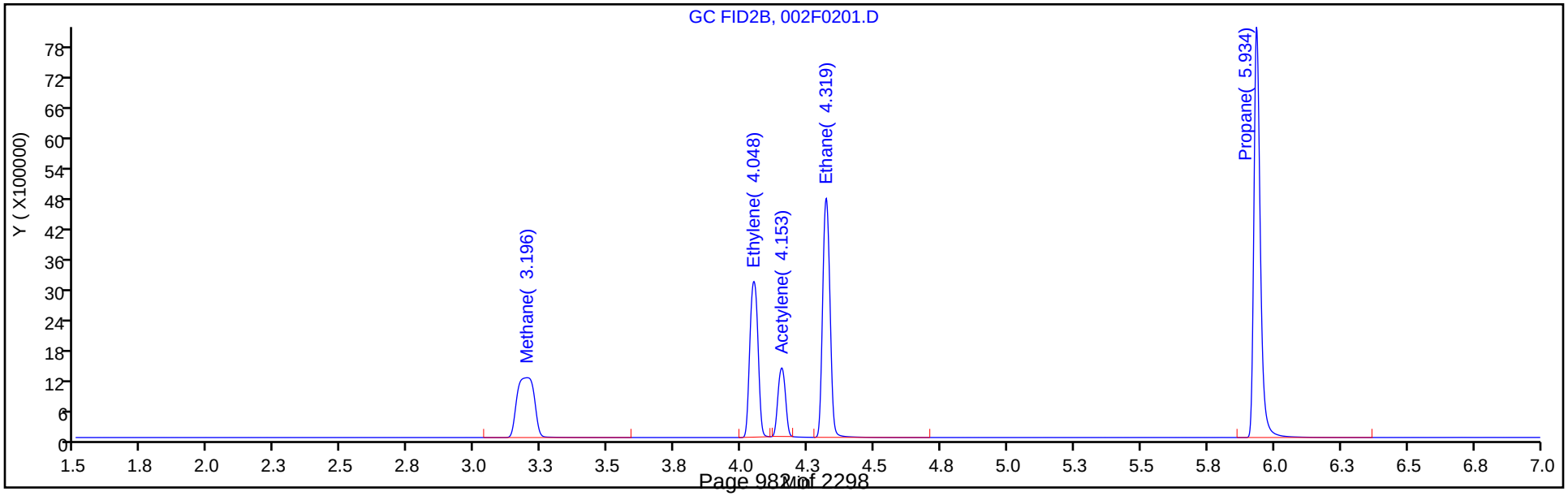
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

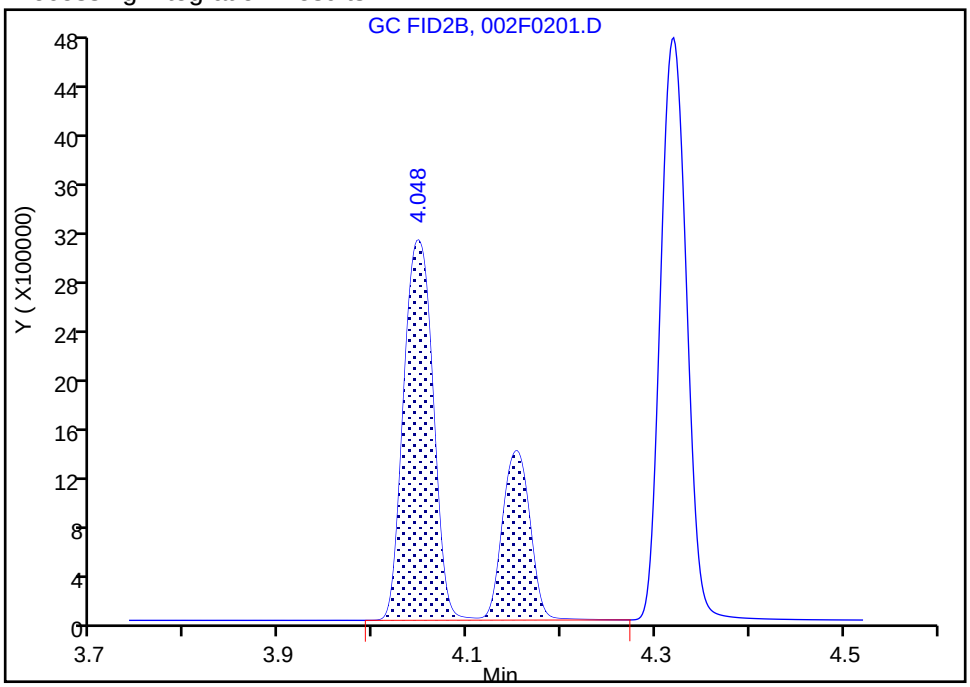
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\002F0201.D
Injection Date: 18-Jun-2020 09:10:07 Instrument ID: VGC_J
Lims ID: lcs
Client ID:
Operator ID: gm ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

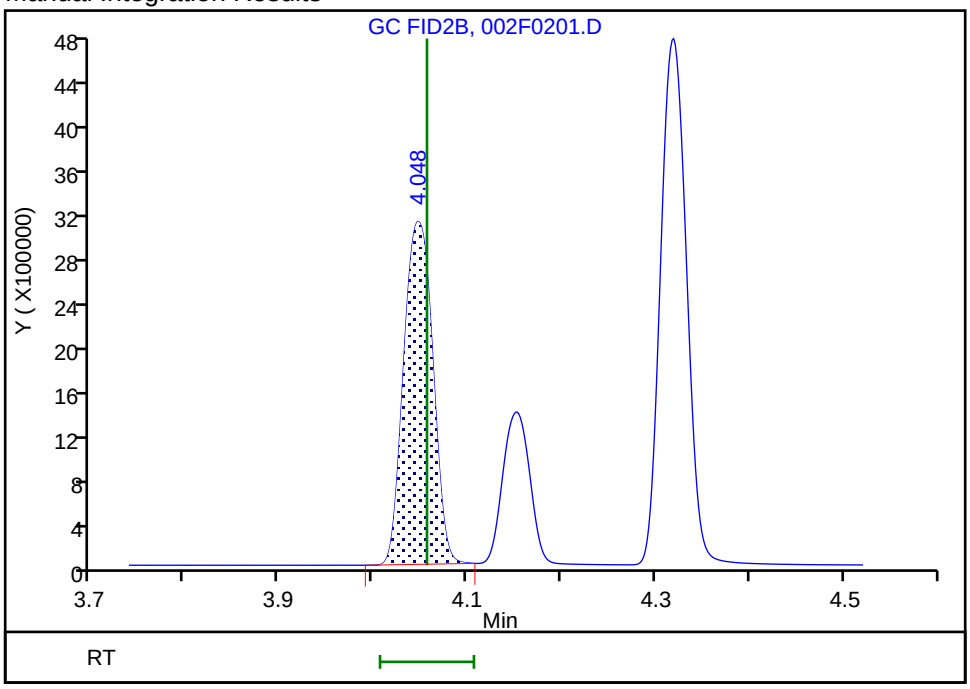
Processing Integration Results

RT: 4.05
Area: 9403996
Amount: 196.1876
Amount Units: ug/l



Manual Integration Results

RT: 4.05
Area: 6580795
Amount: 137.2895
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 16:01:21
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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

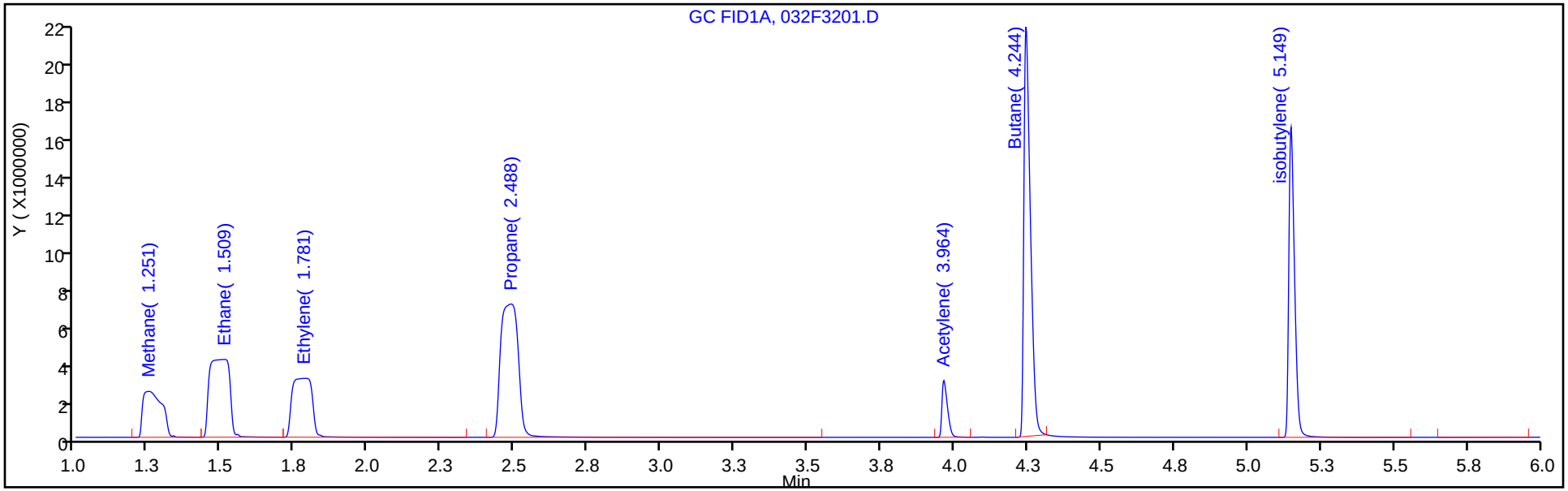
Report Date: 22-Jun-2020 13:14:32 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

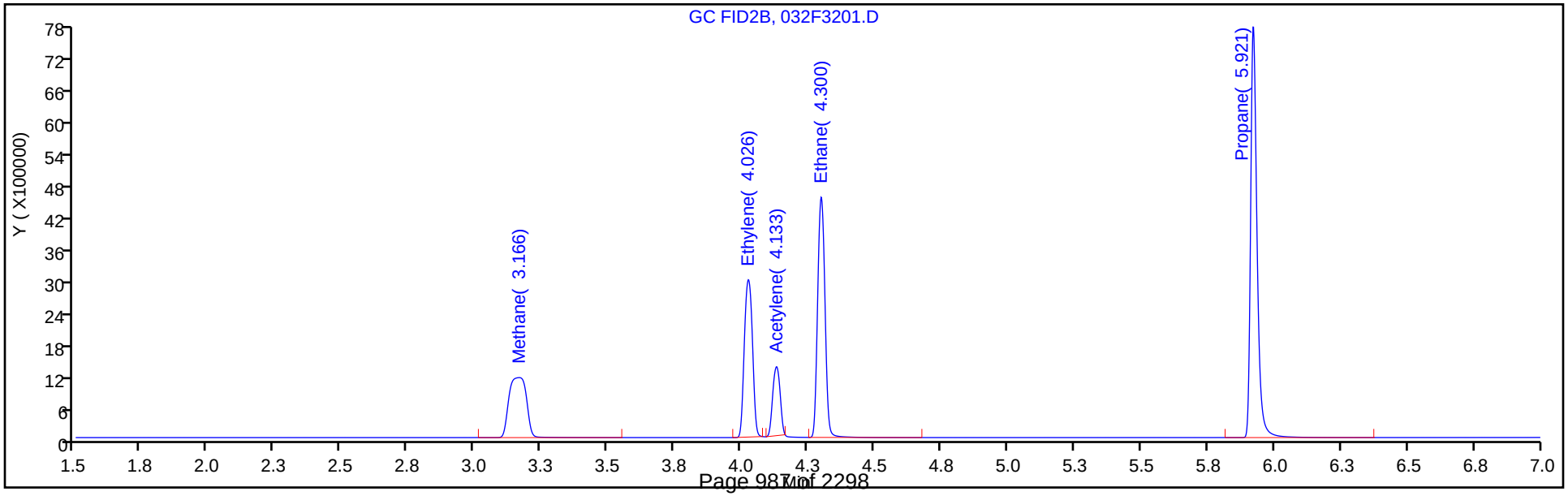
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\032F3201.D

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

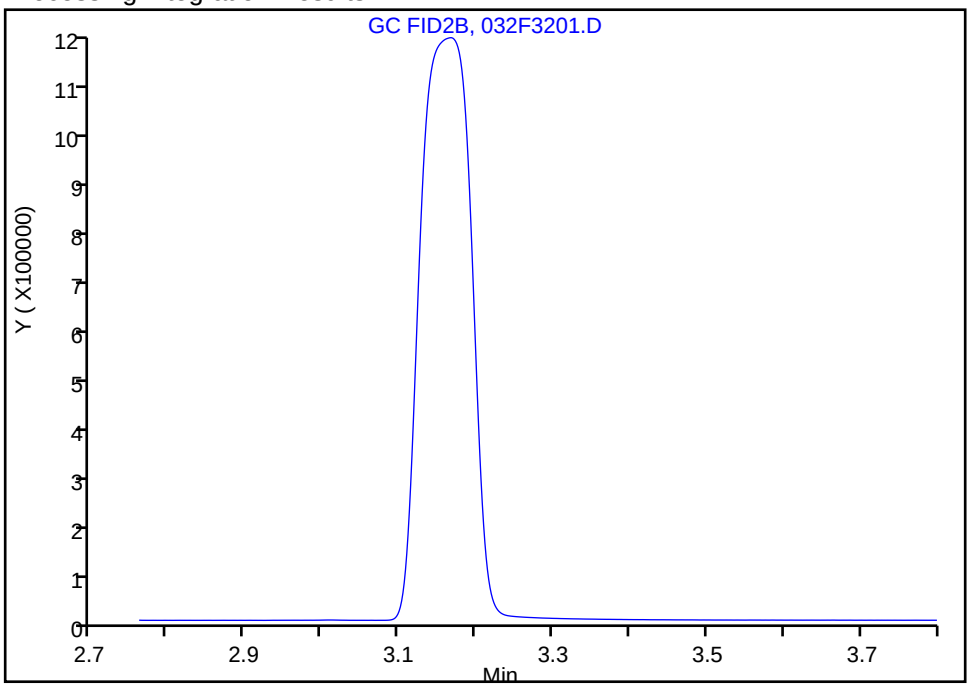
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\032F3201.D
Injection Date: 18-Jun-2020 17:19:50 Instrument ID: VGC_J
Lims ID: lcs
Client ID:
Operator ID: gm ALS Bottle#: 32 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

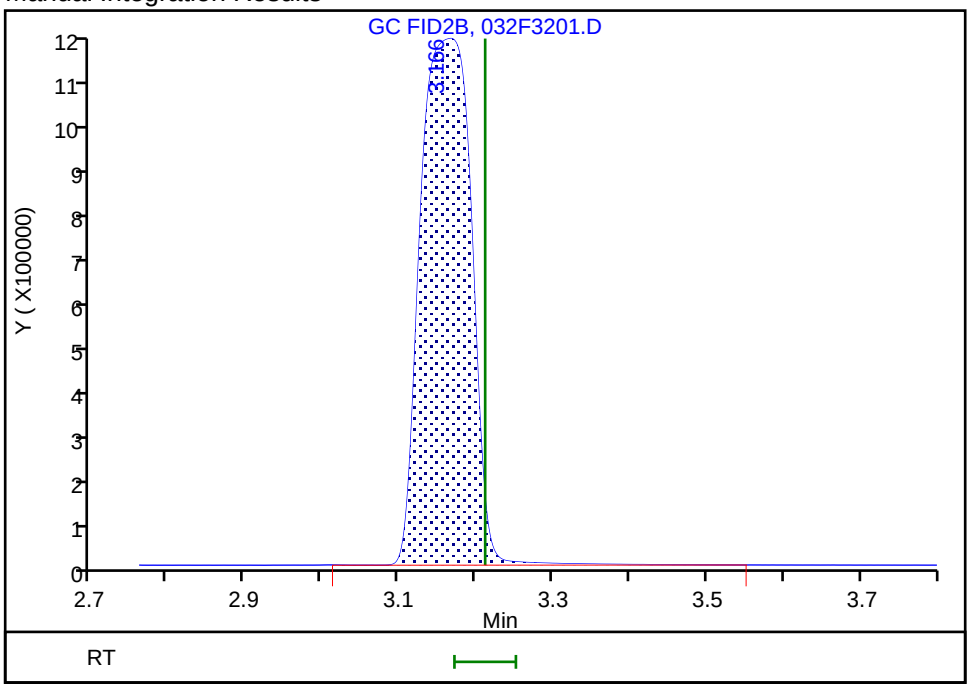
Processing Integration Results

Not Detected
Expected RT: 3.21



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.: 280-137609-1

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
74-84-0	Ethane	0.156		0.0050	0.0015	0.00057
74-82-8	Methane	0.0797		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.143	M	0.0050	0.0014	0.00040

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

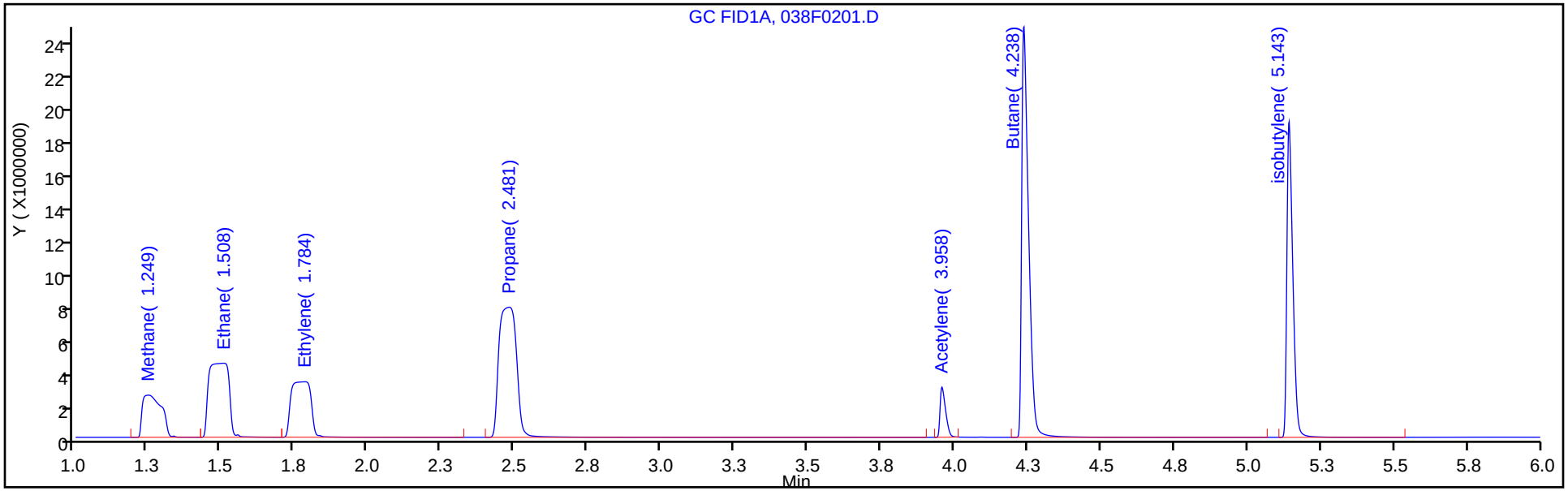
Report Date: 18-Jun-2020 10:24:53 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

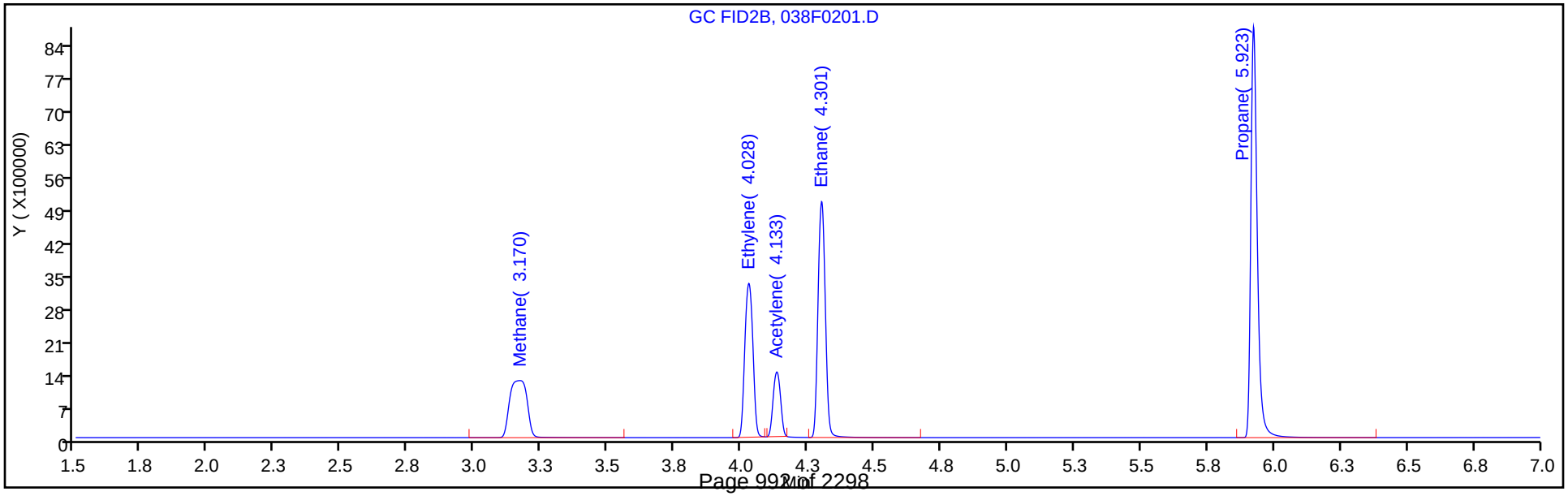
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\038F0201.D

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

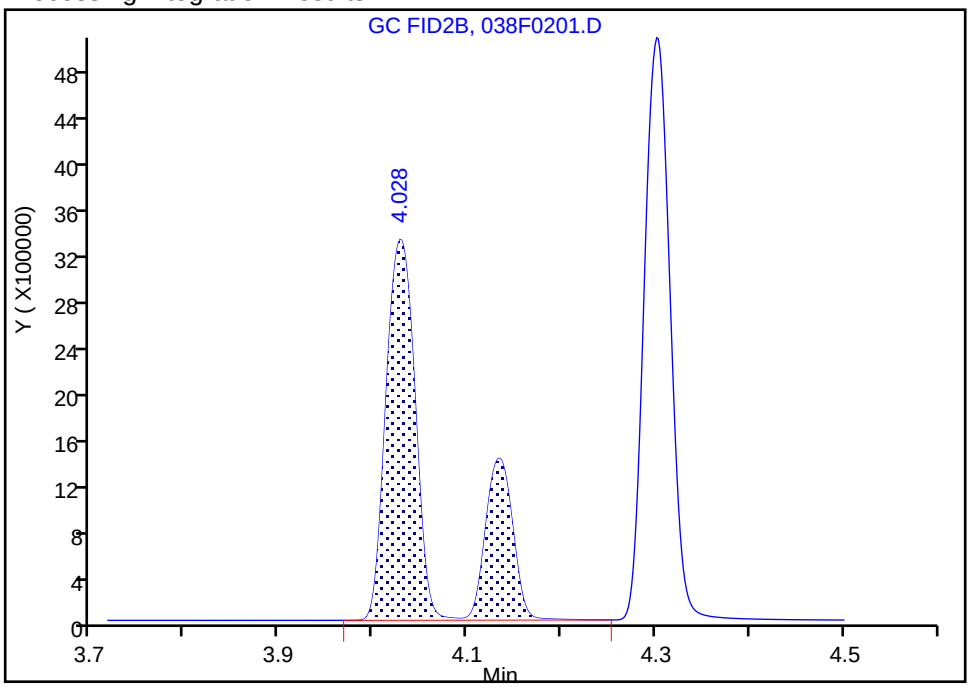
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\038F0201.D				
Injection Date:	16-Jun-2020 21:20:26	Instrument ID:	VGC_J		
Lims ID:	lcsd				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	38	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

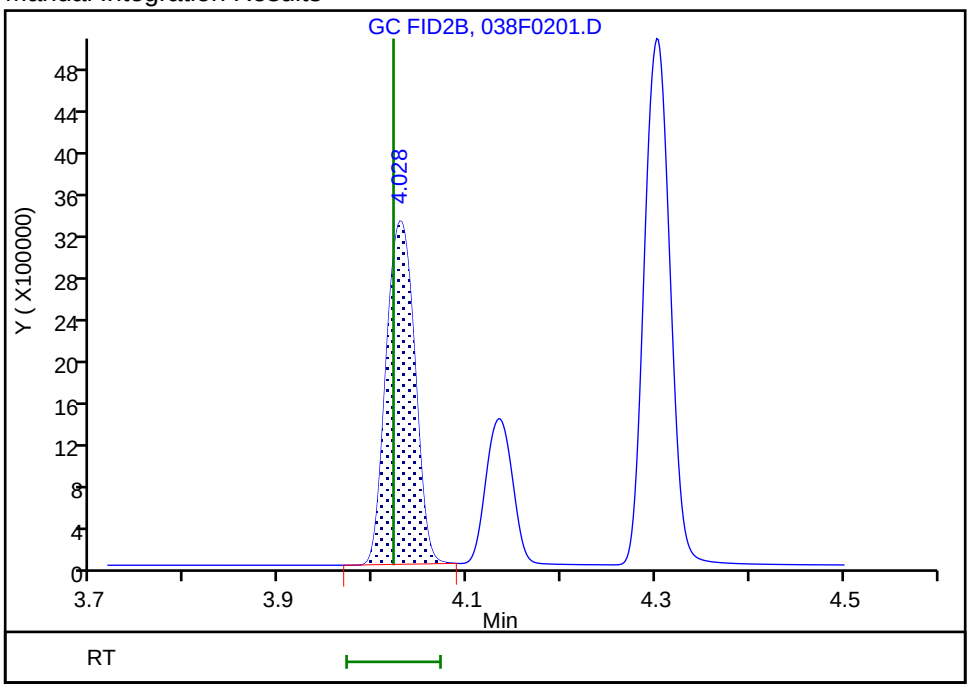
Processing Integration Results

RT: 4.03
Area: 9670333
Amount: 201.7439
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6843476
Amount: 142.7696
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:09:22

Audit Action: Manually Integrated Audit Reason: Shouldering

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
74-84-0	Ethane	0.152		0.0050	0.0015	0.00057
74-82-8	Methane	0.0804		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.139		0.0050	0.0014	0.00040

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

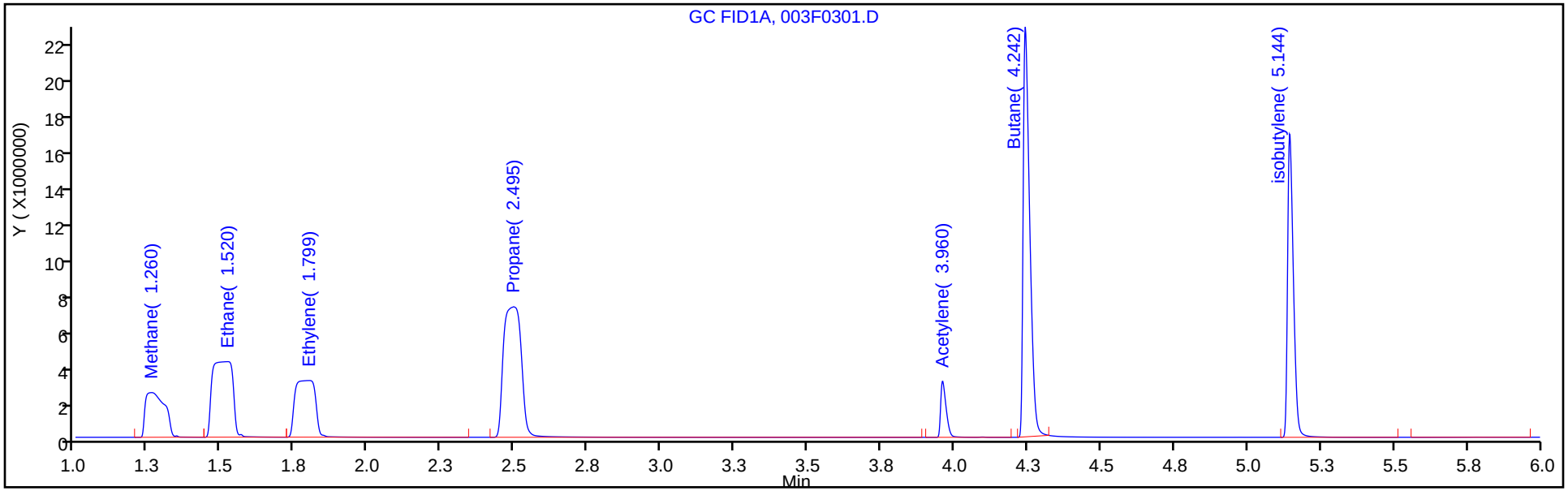
Report Date: 19-Jun-2020 16:02:56 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

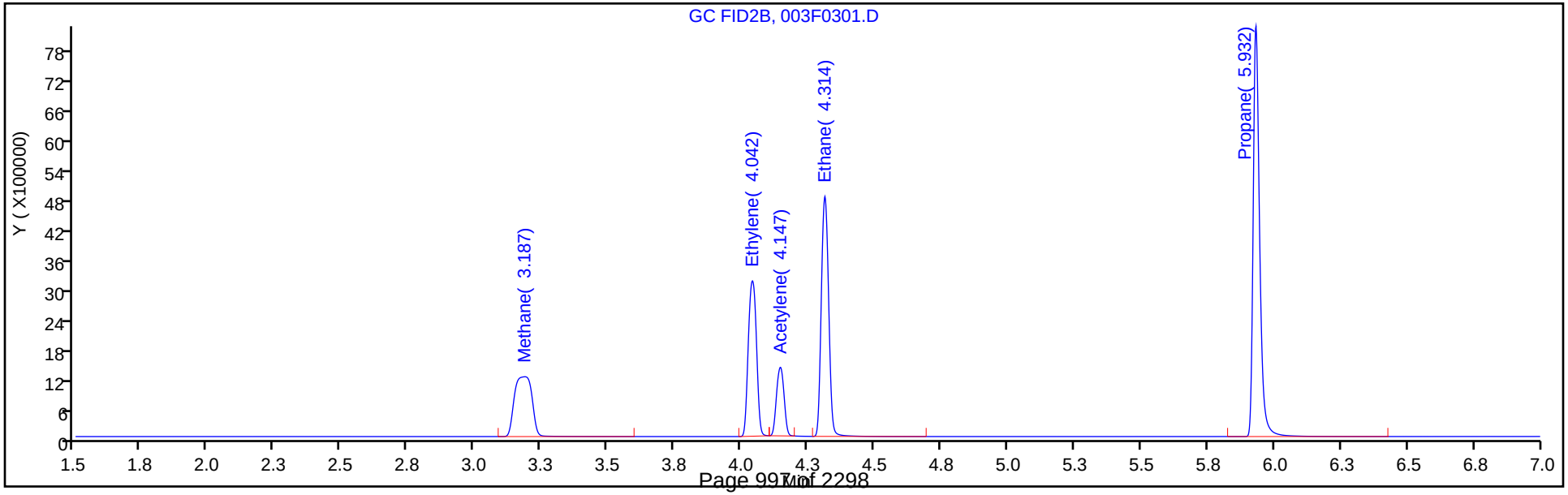
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\003F0301.D

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.: 280-137609-1

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

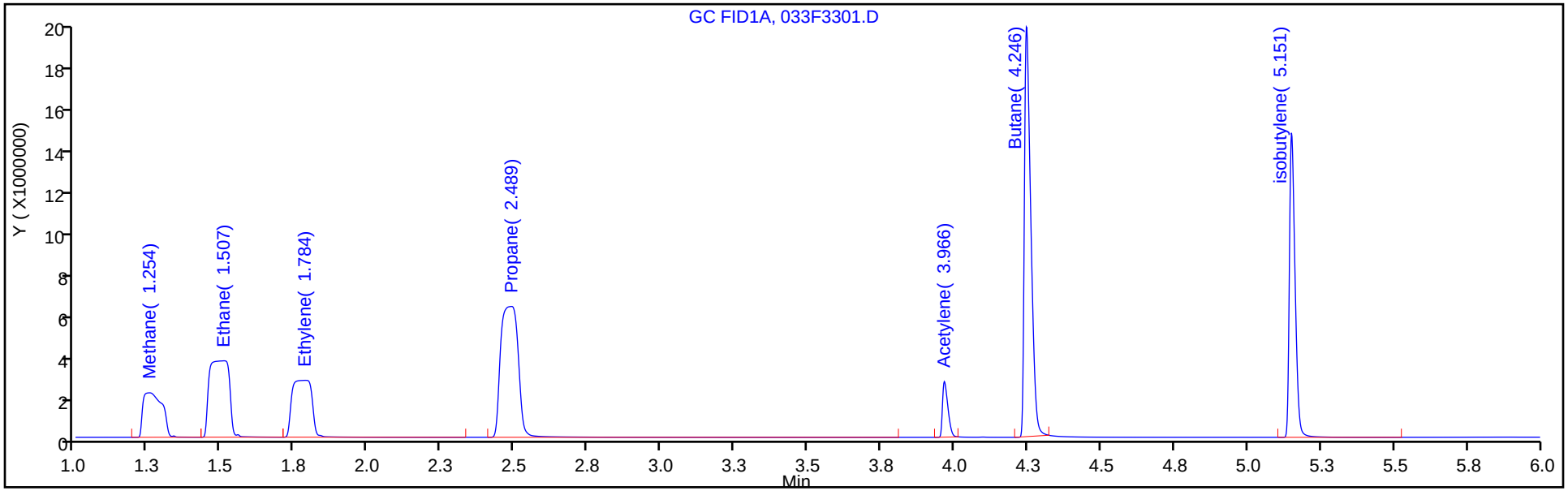
Report Date: 22-Jun-2020 13:15:50 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

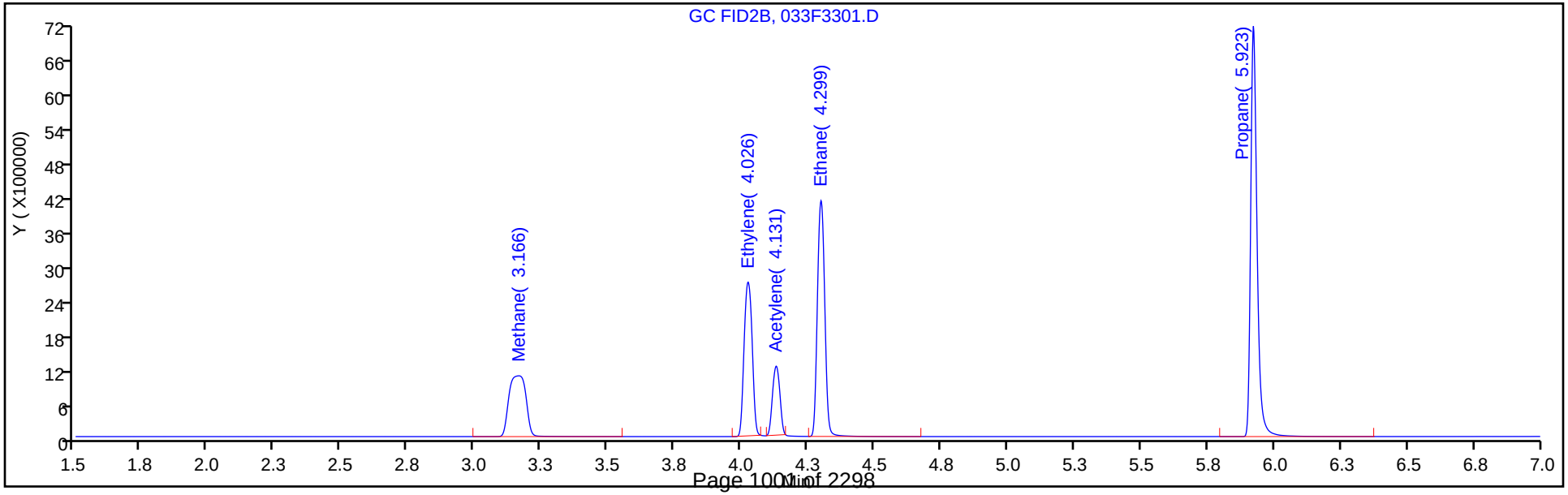
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\033F3301.D

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

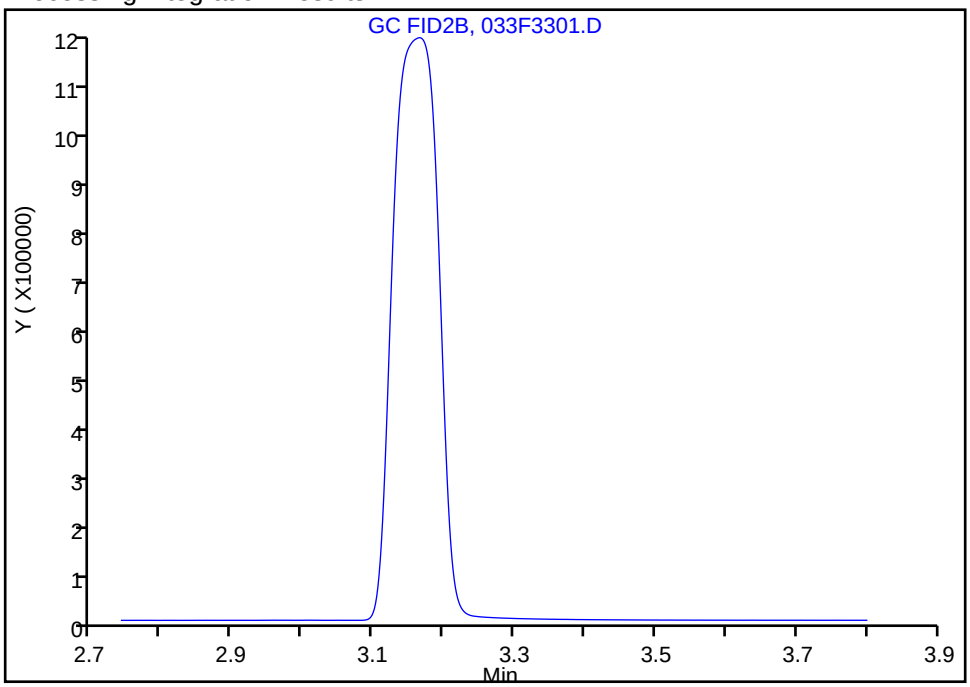
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\033F3301.D
Injection Date: 18-Jun-2020 17:36:09 Instrument ID: VGC_J
Lims ID: lcsd
Client ID:
Operator ID: gm ALS Bottle#: 33 Worklist Smp#: 32
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

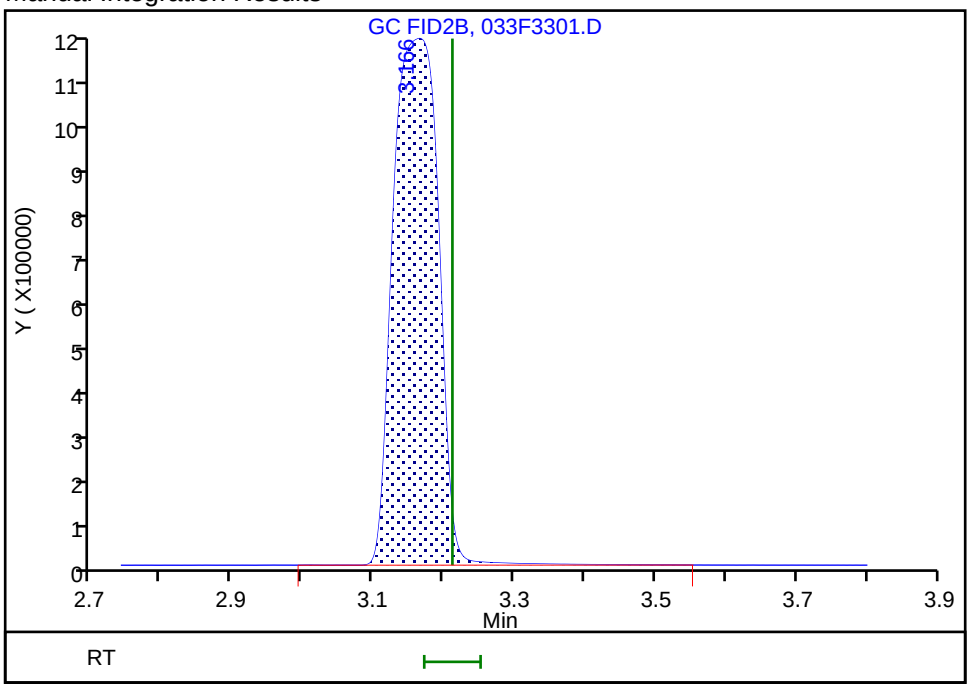
Not Detected
Expected RT: 3.21

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.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MS Lab Sample ID: 280-137609-1 MS

Matrix: Water Lab File ID: 042F0601.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:50

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 22:25

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	0.0648		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\042F0601.D
Lims ID: 280-137609-G-1 MS
Client ID: PZ007-20A
Sample Type: MS
Inject. Date: 16-Jun-2020 22:25:52 ALS Bottle#: 42 Worklist Smp#: 39
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-1MS
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 10:12:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1	1.245	1.246	-0.001	9867765	73.0	68.3	
2	3.160	3.159	0.001	4452808	73.0	64.8	
						RPD = 5.28	
3 Ethane							
1	1.487	1.501	-0.014	18078272	136.9	132.9	
2	4.300	4.294	0.006	7700391	136.9	126.1	
						RPD = 5.23	
4 Ethylene							M
1	1.742	1.779	-0.037	13740684	127.7	124.7	
2	4.027	4.021	0.006	5703930	127.7	119.0	M
						RPD = 4.66	
5 Propane							
1	2.433	2.474	-0.041	27939690	200.7	195.0	
2	5.924	5.919	0.005	11834237	200.7	189.0	
						RPD = 3.17	
6 Acetylene							Ma
1	3.955	3.951	0.004	3984206	118.5	116.2	M
2	4.132	4.126	0.006	2462744	118.5	114.0	M
						RPD = 1.90	
7 Butane							
1	4.240	4.234	0.006	34852980	264.5	264.2	
2	7.367	7.366	0.001	15978783	264.5	250.6	
						RPD = 5.30	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.148	5.141	0.007	23102260	255.4	258.8	M
2	7.220	7.218	0.002	9748693	255.4	234.6	M
						RPD = 9.82	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

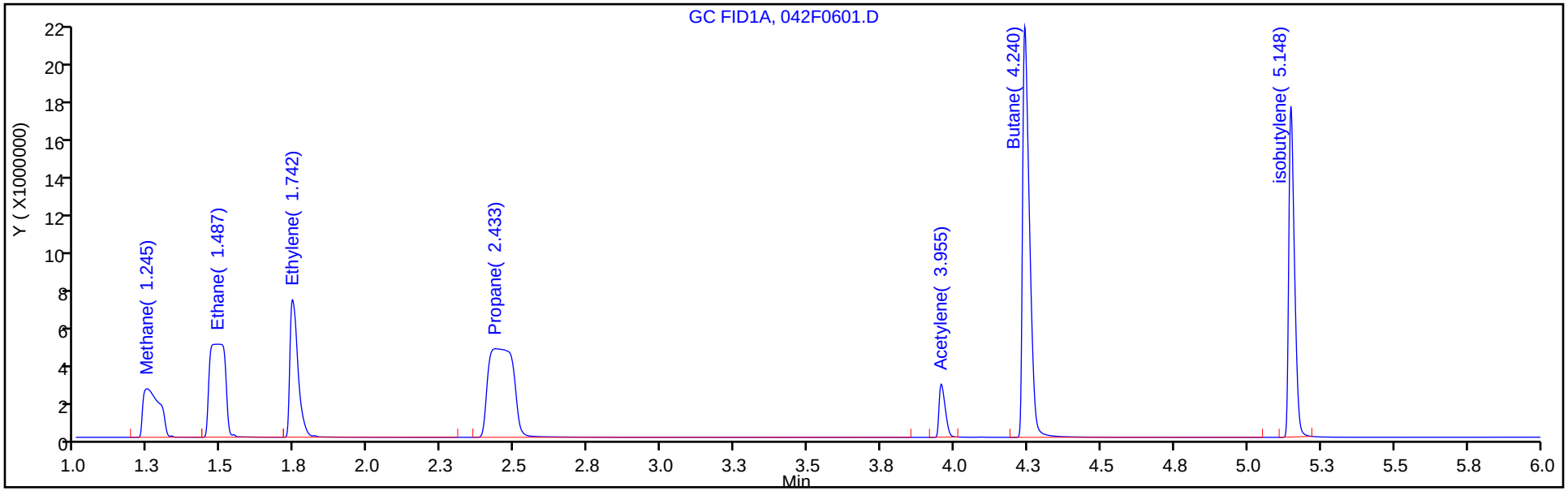
Report Date: 18-Jun-2020 10:24:55 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

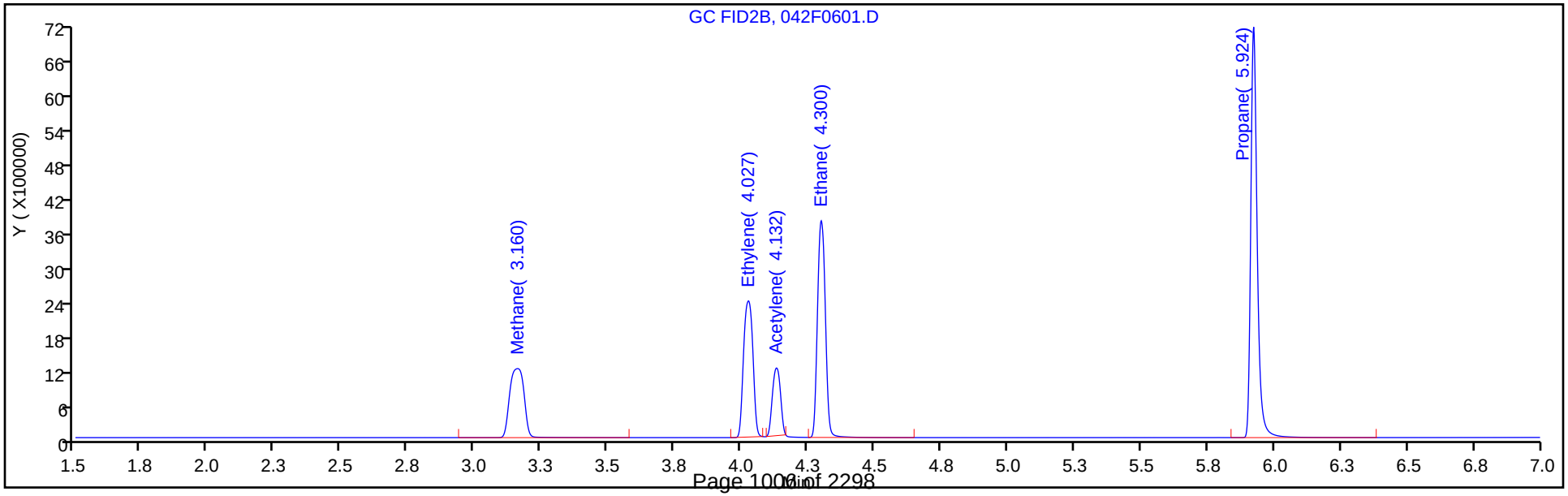
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\042F0601.D

Injection Date:	16-Jun-2020 22:25:52	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-1 MS			Worklist Smp#:	39
Client ID:	PZ007-20A				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MS Lab Sample ID: 280-137609-9 MS

Matrix: Water Lab File ID: 037F3701.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 15:15

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 18:41

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	0.0644	M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\037F3701.D
Lims ID: 280-137609-I-9 MS
Client ID: G0102-20A
Sample Type: MS
Inject. Date: 18-Jun-2020 18:41:19 ALS Bottle#: 37 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-I-9MS
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: 23-Jun-2020 12:08:26 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 12:08:26

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	1.242	1.266	-0.024	9489294	73.0	65.7	M
2	3.156	3.212	-0.056	4425345	73.0	64.4	a
						RPD = 1.97	
3 Ethane							Ma
1	1.492	1.525	-0.033	16397687	136.9	120.5	M
2	4.299	4.327	-0.028	7357680	136.9	120.5	
						RPD = 0.02	
4 Ethylene							Ma
1	1.741	1.805	-0.064	12594402	127.7	114.3	M
2	4.024	4.057	-0.033	5410663	127.7	112.9	M
						RPD = 1.23	
5 Propane							Ma
1	2.442	2.506	-0.064	24650761	200.7	172.1	M
2	5.923	5.938	-0.015	10253956	200.7	163.7	M
						RPD = 4.98	
6 Acetylene							Ma
1	3.962	3.953	0.009	3821934	118.5	111.4	M
2	4.129	4.160	-0.031	2354495	118.5	109.0	M
						RPD = 2.24	
7 Butane							M
1	4.247	4.248	-0.001	28580997	264.5	216.8	M
2	7.368	7.380	-0.012	13580658	264.5	213.0	
						RPD = 1.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.156	5.146	0.010	19306364	255.4	216.3	M
2	7.219	7.233	-0.014	8640795	255.4	207.9	M
						RPD = 3.94	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

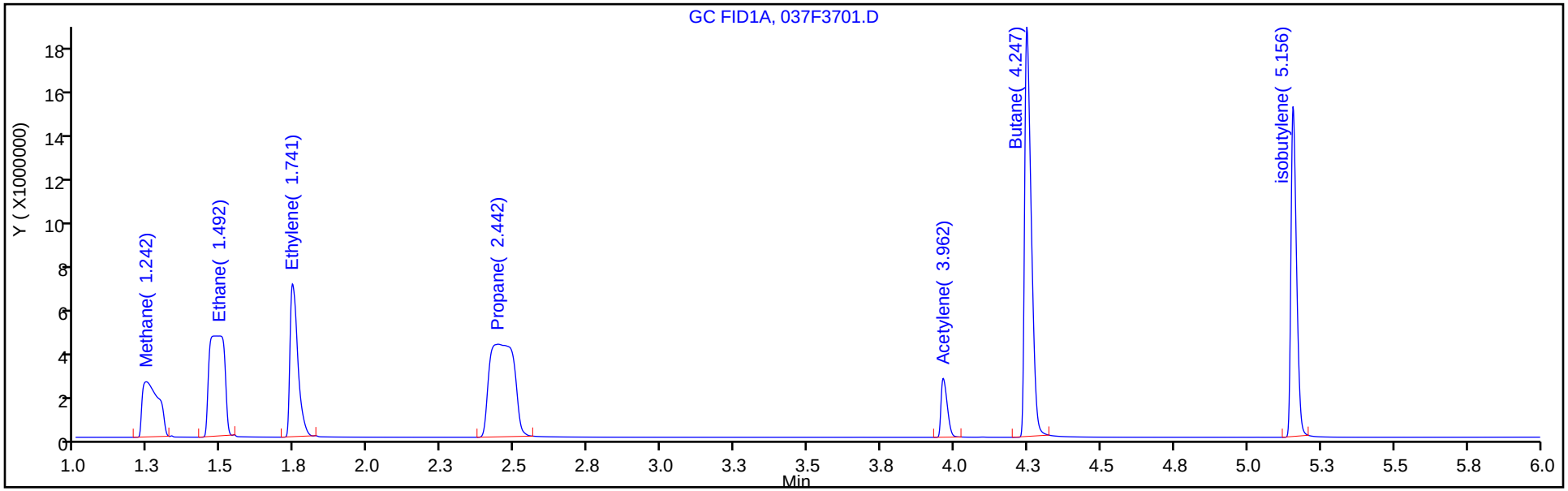
Report Date: 23-Jun-2020 12:08:27 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

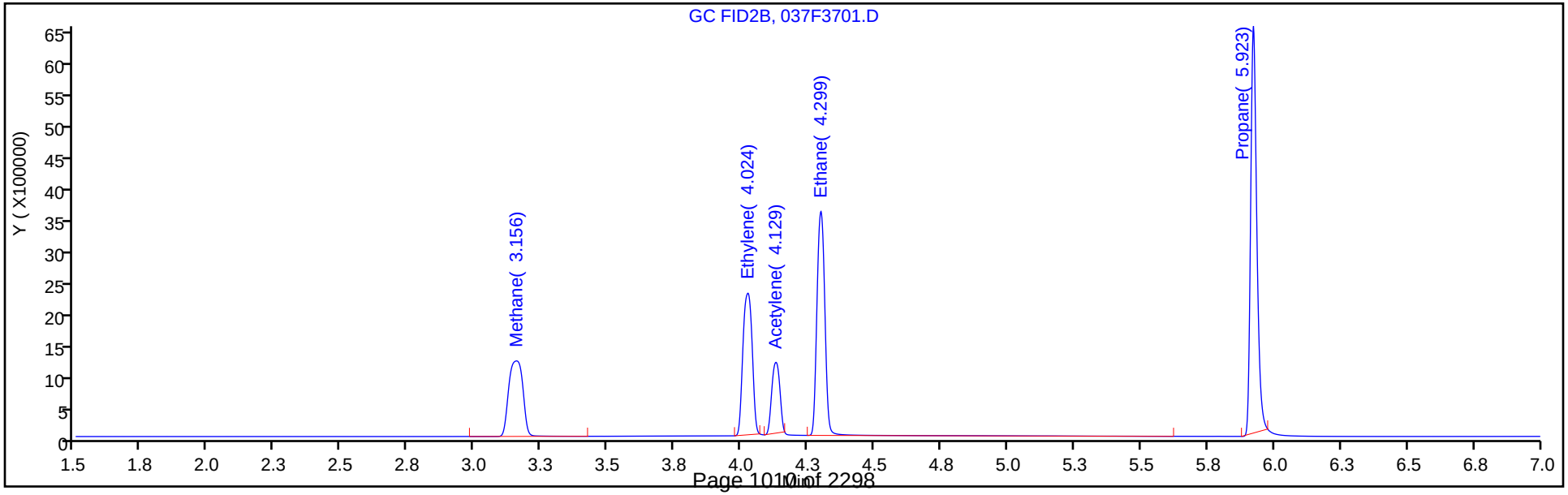
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\037F3701.D

Injection Date:	18-Jun-2020 18:41:19	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-I-9 MS			Worklist Smp#:	36
Client ID:	G0102-20A				
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

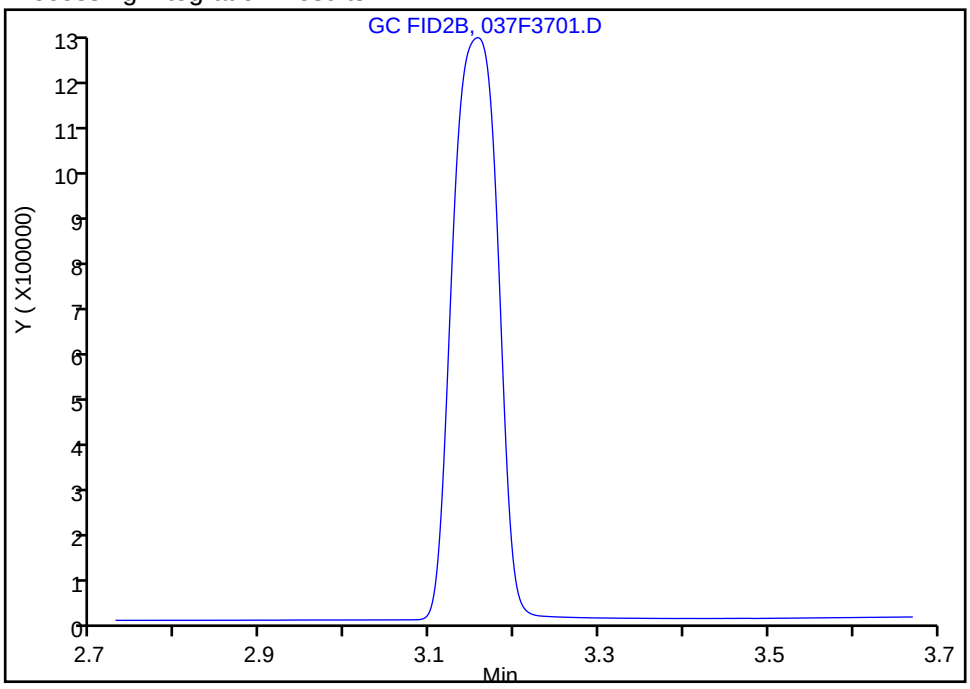
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\037F3701.D				
Injection Date:	18-Jun-2020 18:41:19	Instrument ID:	VGC_J		
Lims ID:	280-137609-I-9 MS				
Client ID:	G0102-20A				
Operator ID:	gm	ALS Bottle#:	37	Worklist Smp#:	36
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

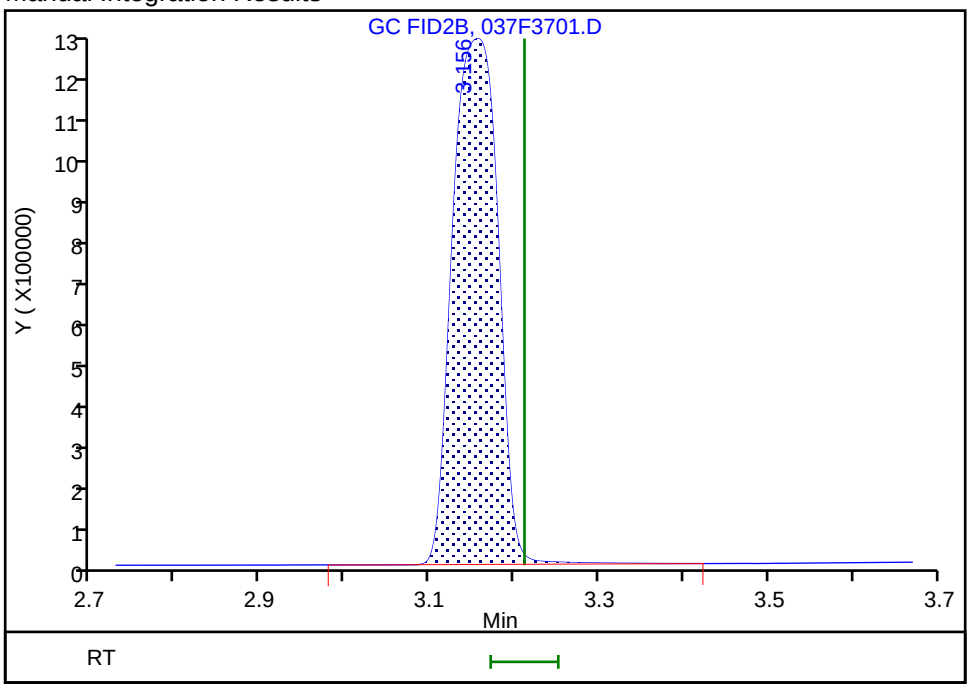
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 4425345
Amount: 64.399715
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:16:14
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.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MSD Lab Sample ID: 280-137609-1 MSD

Matrix: Water Lab File ID: 043F0701.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:50

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 22:42

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.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0696		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\043F0701.D
Lims ID: 280-137609-G-1 MSD
Client ID: PZ007-20A
Sample Type: MSD
Inject. Date: 16-Jun-2020 22:42:14 ALS Bottle#: 43 Worklist Smp#: 40
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-1MS
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 10:13:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1	1.241	1.246	-0.005	10569609	73.0	73.2	
2	3.158	3.159	-0.001	4784122	73.0	69.6	
						RPD = 4.98	
3 Ethane							
1	1.483	1.501	-0.018	19264901	136.9	141.6	
2	4.300	4.294	0.006	8235528	136.9	134.9	
						RPD = 4.86	
4 Ethylene							M
1	1.738	1.779	-0.041	14320190	127.7	129.9	
2	4.025	4.021	0.004	5989673	127.7	125.0	M
						RPD = 3.90	
5 Propane							
1	2.433	2.474	-0.041	29848804	200.7	208.4	
2	5.923	5.919	0.004	12685003	200.7	202.5	
						RPD = 2.84	
6 Acetylene							Ma
1	3.955	3.951	0.004	3830548	118.5	111.7	M
2	4.130	4.126	0.004	2452384	118.5	113.5	M
						RPD = 1.61	
7 Butane							
1	4.238	4.234	0.004	37250257	264.5	282.4	
2	7.367	7.366	0.001	17134437	264.5	268.7	
						RPD = 4.97	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							
1	5.148	5.141	0.007	24186894	255.4	270.9	
2	7.220	7.218	0.002	10769562	255.4	259.1	
						RPD = 4.45	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

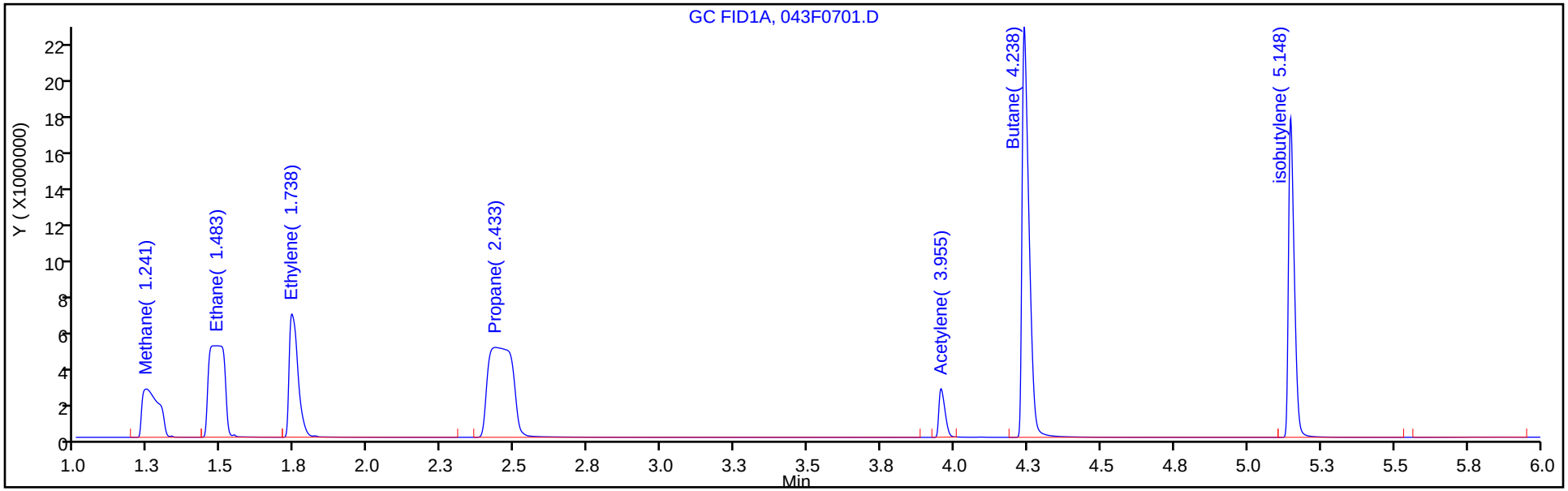
Report Date: 18-Jun-2020 10:24:55 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

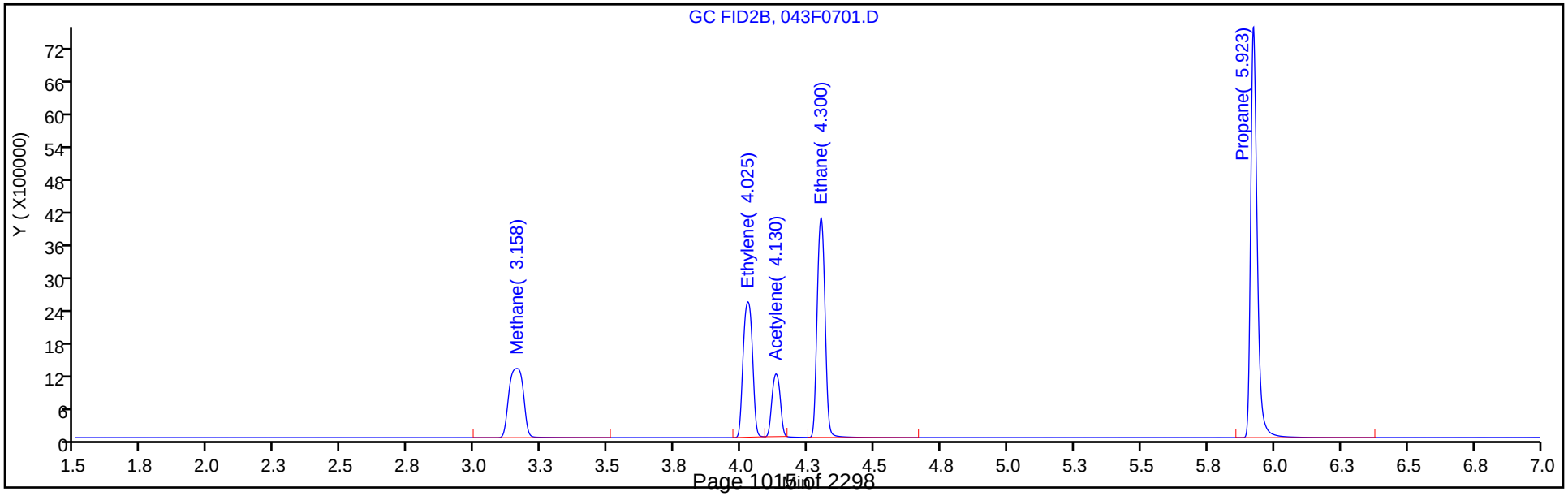
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\043F0701.D

Injection Date:	16-Jun-2020 22:42:14	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-1 MSD			Worklist Smp#:	40
Client ID:	PZ007-20A				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MSD Lab Sample ID: 280-137609-9 MSD

Matrix: Water Lab File ID: 038F3801.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 15:15

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 18:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0685	M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\038F3801.D
Lims ID: 280-137609-I-9 MSD
Client ID: G0102-20A
Sample Type: MSD
Inject. Date: 18-Jun-2020 18:57:37 ALS Bottle#: 38 Worklist Smp#: 37
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-I-9MS
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: 23-Jun-2020 12:09:26 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 13:19:38

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	1.246	1.266	-0.020	10252951	73.0	71.0	M
2	3.159	3.212	-0.053	4702686	73.0	68.5	a
						RPD = 3.65	
3 Ethane							Ma
1	1.489	1.525	-0.036	17691748	136.9	130.0	M
2	4.301	4.327	-0.026	7818854	136.9	128.1	
						RPD = 1.54	
4 Ethylene							Ma
1	1.746	1.805	-0.059	13182134	127.7	119.6	M
2	4.026	4.057	-0.031	5639248	127.7	117.6	M
						RPD = 1.65	
5 Propane							Ma
1	2.442	2.506	-0.064	26187860	200.7	182.8	M
2	5.923	5.938	-0.015	11057996	200.7	176.6	M
						RPD = 3.48	
6 Acetylene							Ma
1	3.962	3.953	0.009	3788345	118.5	110.5	M
2	4.131	4.160	-0.029	2394433	118.5	110.8	M
						RPD = 0.32	
7 Butane							Ma
1	4.247	4.248	-0.001	29250950	264.5	221.8	M
2	7.368	7.380	-0.012	14579401	264.5	228.7	
						RPD = 3.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.155	5.146	0.009	20133506	255.4	225.5	M
2	7.219	7.233	-0.014	8626534	255.4	207.6	M
						RPD = 8.30	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

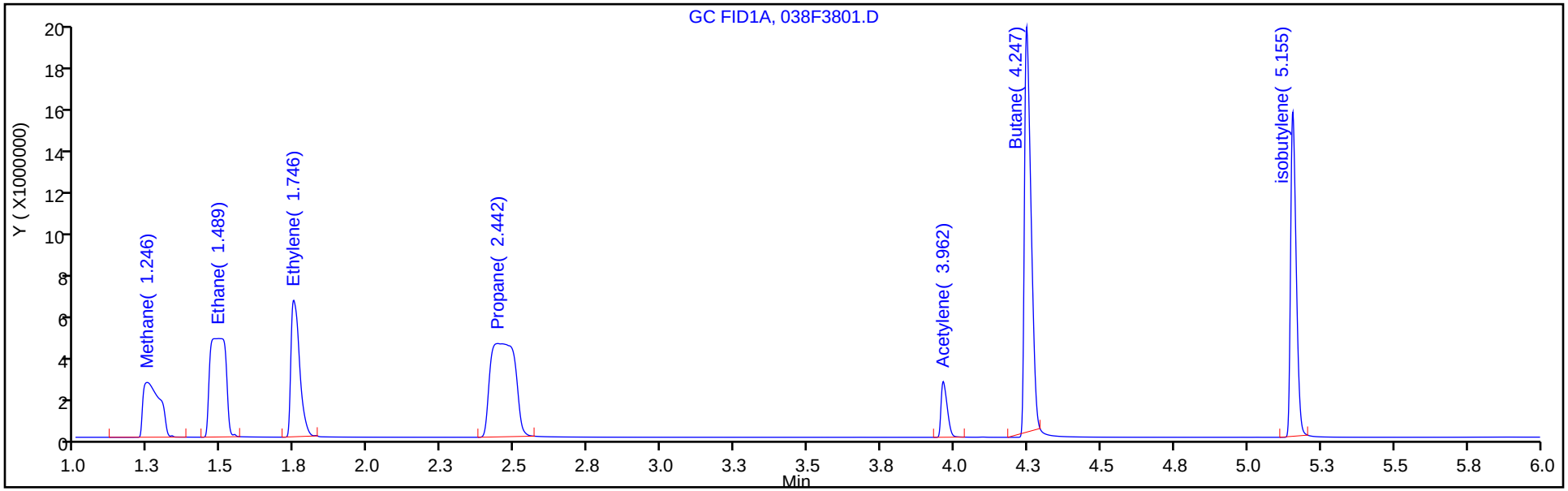
Report Date: 23-Jun-2020 12:09:27 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

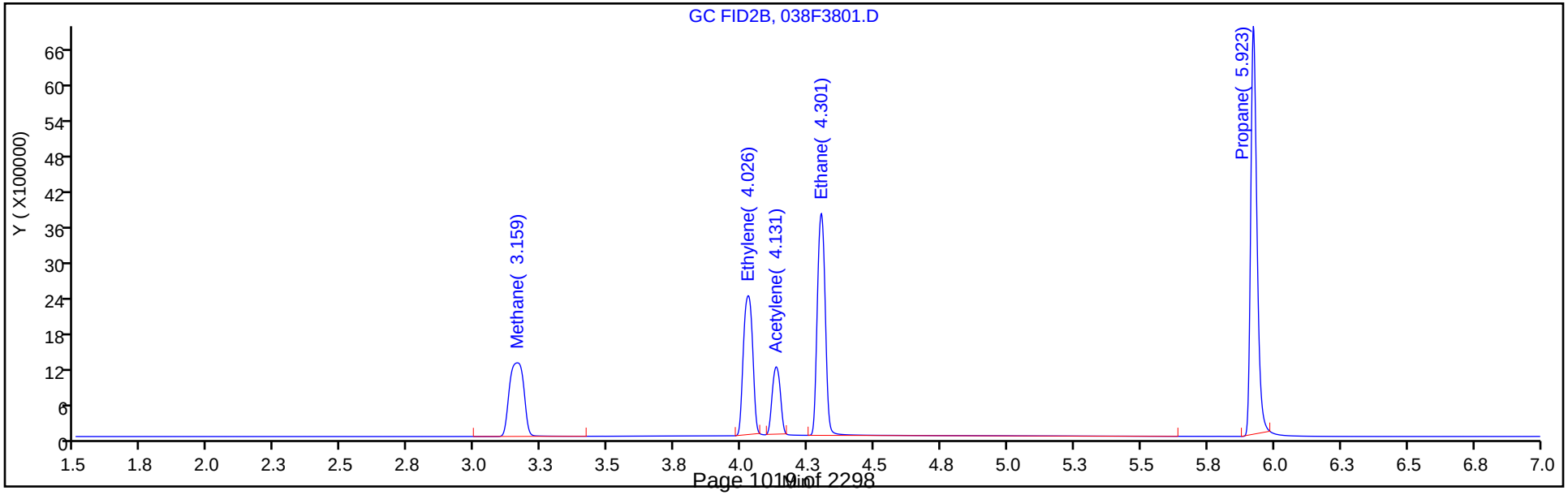
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\038F3801.D

Injection Date:	18-Jun-2020 18:57:37	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-I-9 MSD			Worklist Smp#:	37
Client ID:	G0102-20A				
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

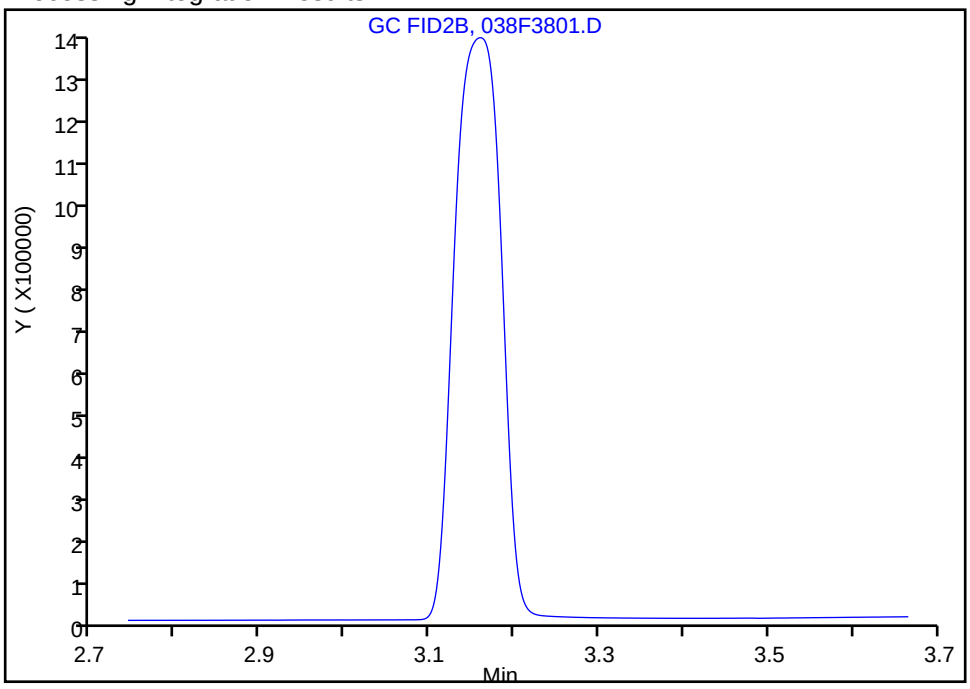
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\038F3801.D				
Injection Date:	18-Jun-2020 18:57:37	Instrument ID:	VGC_J		
Lims ID:	280-137609-I-9 MSD				
Client ID:	G0102-20A				
Operator ID:	gm	ALS Bottle#:	38	Worklist Smp#:	37
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

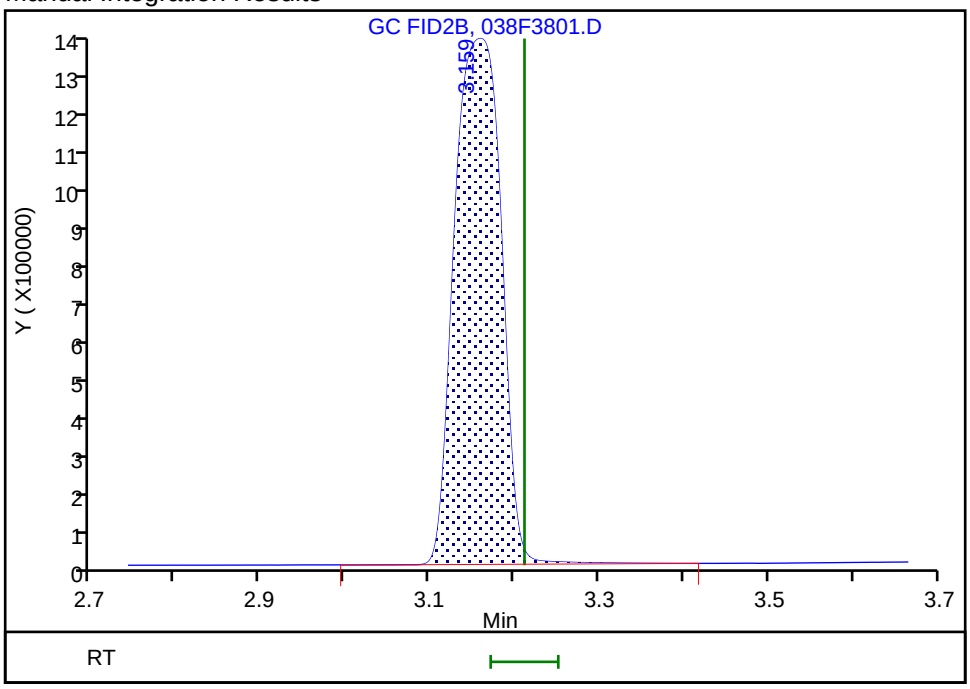
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 4702686
Amount: 68.451557
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2020 13:18:11
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.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A DU Lab Sample ID: 280-137609-1 DU

Matrix: Water Lab File ID: 041F0501.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:50

Sample wt/vol: 18(mL) Date Analyzed: 06/16/2020 22:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 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\041F0501.D
Lims ID: 280-137609-I-1 DU
Client ID:
Sample Type: DU
Inject. Date: 16-Jun-2020 22:09:30 ALS Bottle#: 41 Worklist Smp#: 38
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-I-1DU
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 10:10:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1		1.246				ND	
2		3.159					
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					

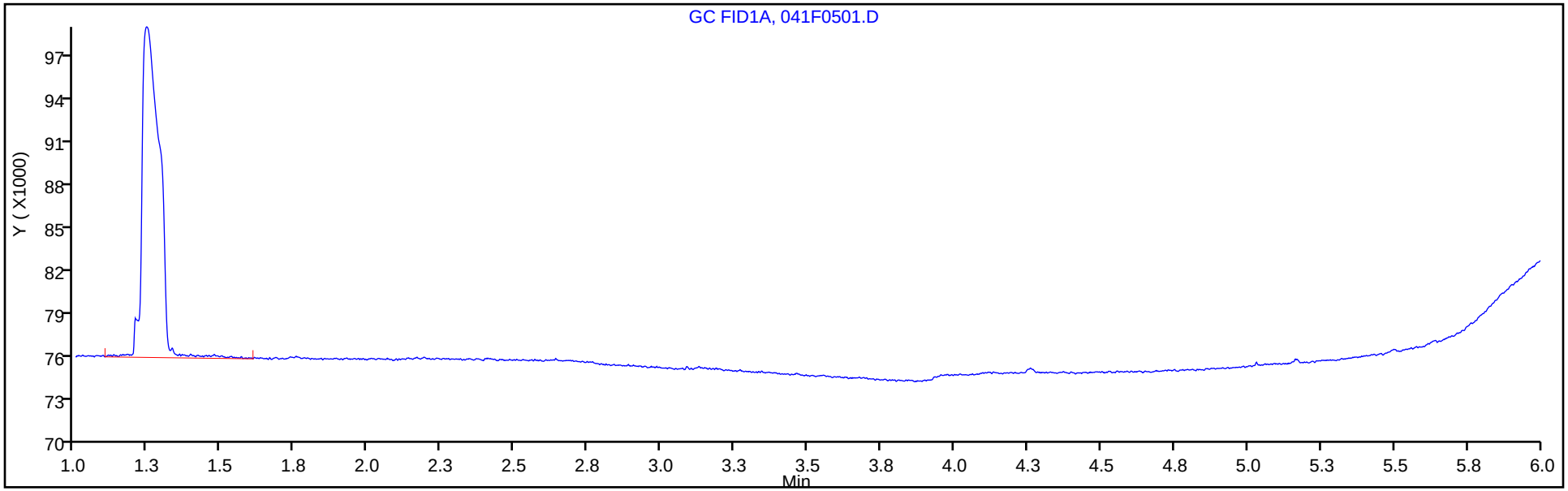
Report Date: 18-Jun-2020 10:24:54 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

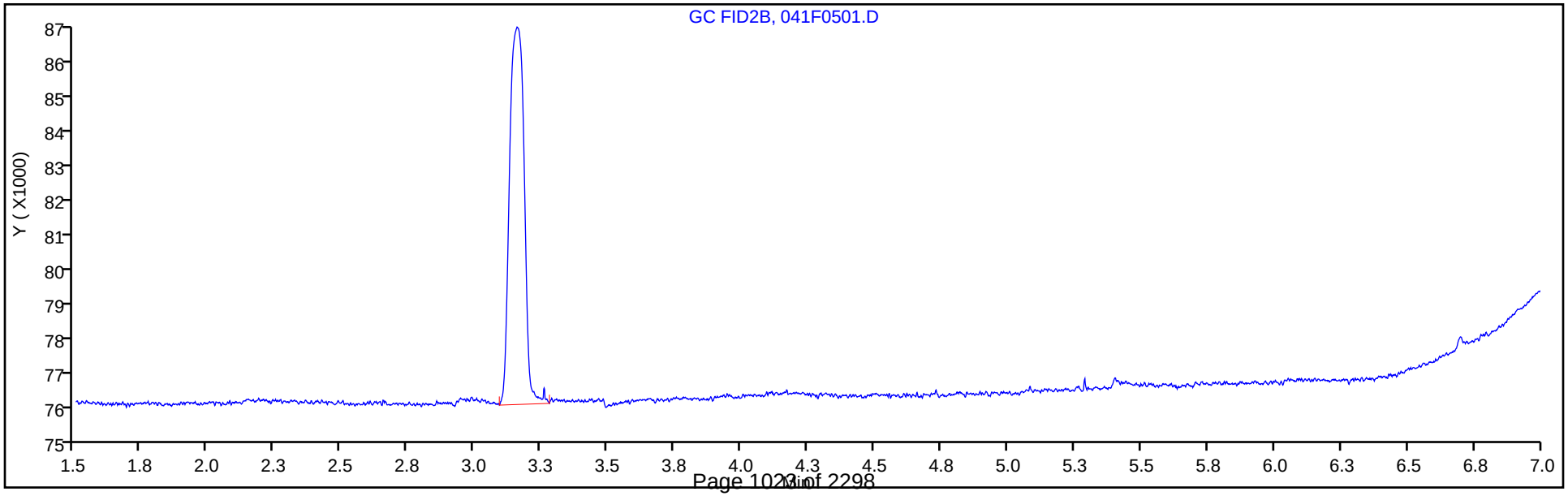
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\041F0501.D

Injection Date:	16-Jun-2020 22:09:30	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-I-1 DU			Worklist Smp#:	38
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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A DU Lab Sample ID: 280-137609-9 DU

Matrix: Water Lab File ID: 036F3601.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 15:15

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 18:25

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.: 499415 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00191	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\036F3601.D
Lims ID: 280-137609-R-9 DU
Client ID:
Sample Type: DU
Inject. Date: 18-Jun-2020 18:25:01 ALS Bottle#: 36 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-R-9DU
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 12:34:04

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	1.242	1.266	-0.024	339916		2.03	a
2	3.156	3.212	-0.056	148256		1.91	a
						RPD = 5.70	
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

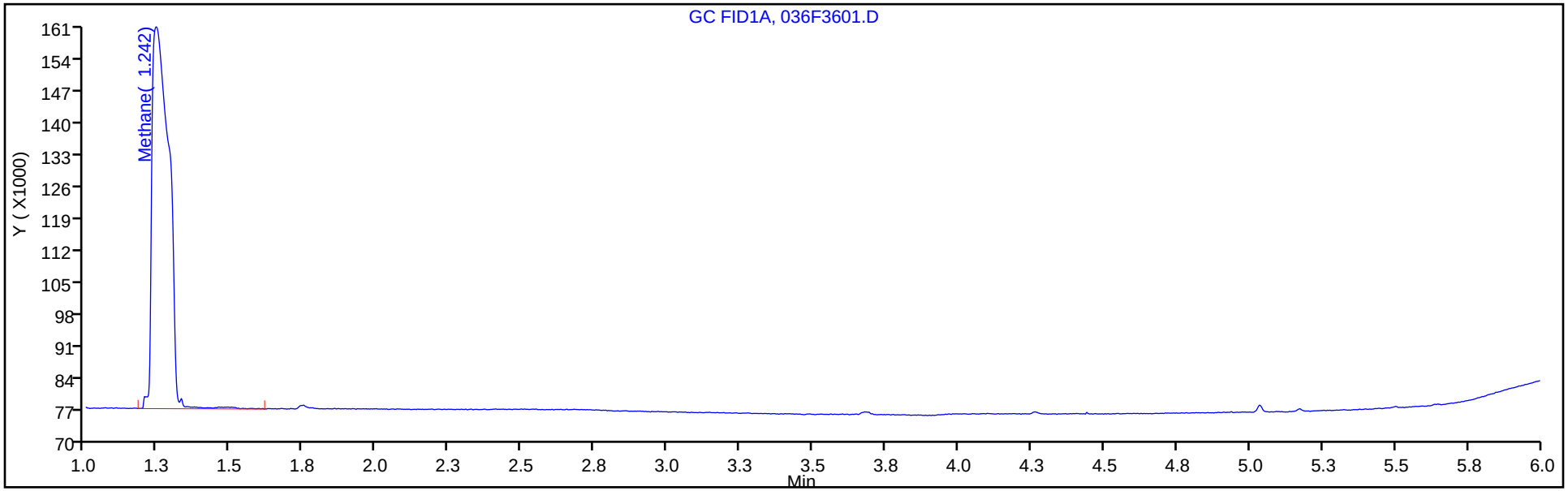
Report Date: 19-Jun-2020 12:43:23 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

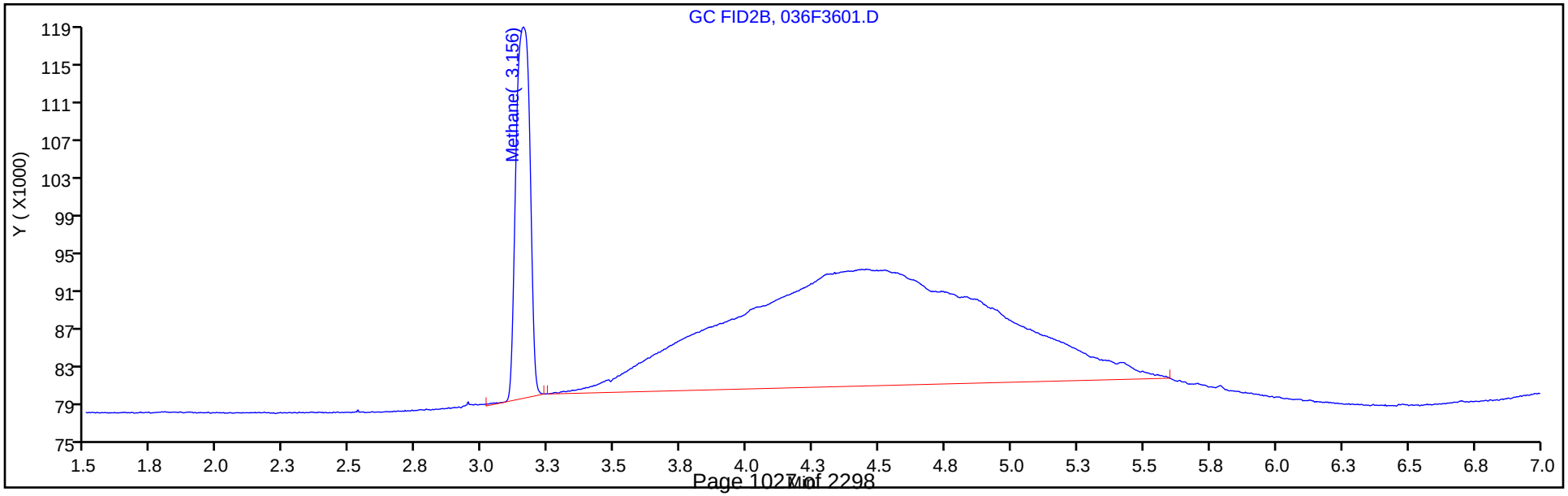
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\036F3601.D

Injection Date:	18-Jun-2020 18:25:01	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-R-9 DU			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

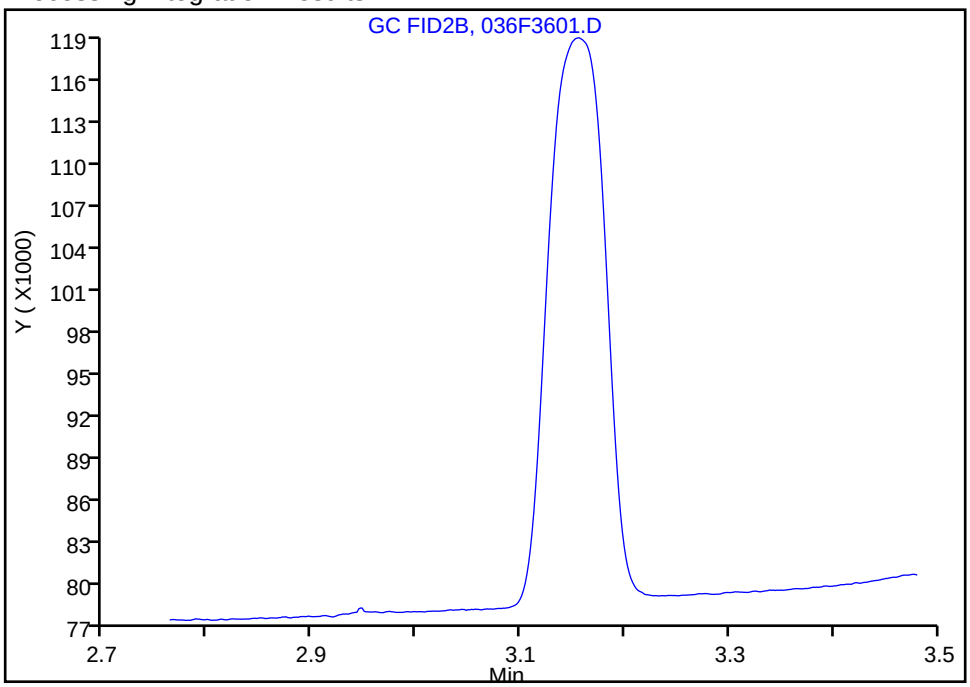
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\036F3601.D
Injection Date: 18-Jun-2020 18:25:01 Instrument ID: VGC_J
Lims ID: 280-137609-R-9 DU
Client ID:
Operator ID: gm ALS Bottle#: 36 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

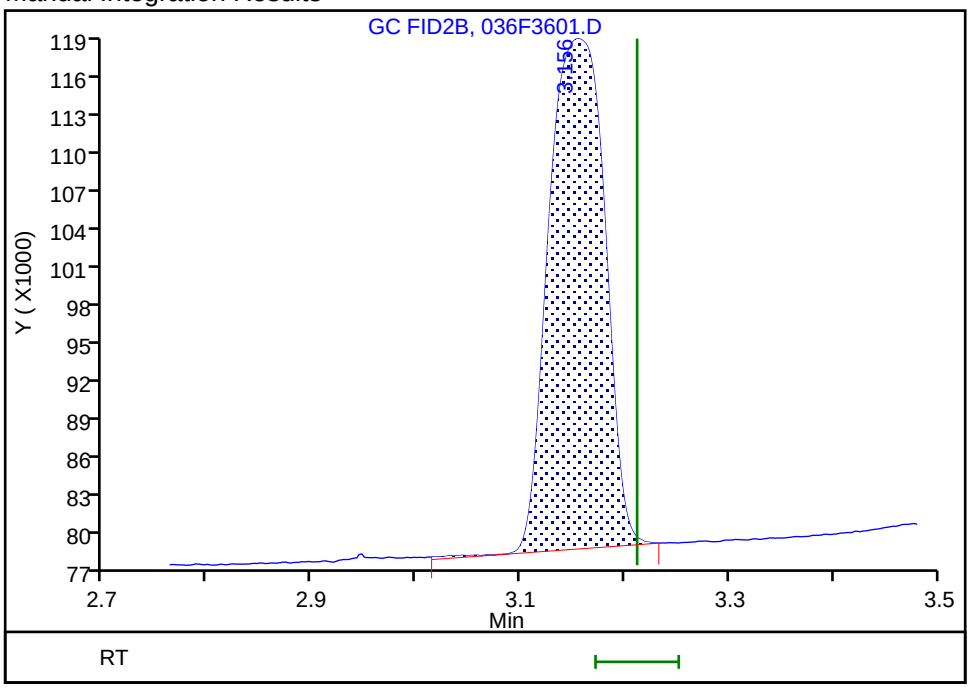
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 148256
Amount: 1.913136
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:33:59
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.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A DU Lab Sample ID: 280-137609-12 DU

Matrix: Water Lab File ID: 005F1901.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/17/2020 01:58

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 499014 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-85-1	Ethylene	0.00109	J M	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\005F1901.D
Lims ID: 280-137609-G-12 DU
Client ID:
Sample Type: DU
Inject. Date: 17-Jun-2020 01:58:36 ALS Bottle#: 5 Worklist Smp#: 52
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137609-G-12D
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 10:21:41

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	1.239	1.246	-0.007	2393240622		16650	EM
2	3.134	3.159	-0.025	1092002748		15953	EM
						RPD = 4.27	
3 Ethane							
1		1.501				ND	
2		4.294					
4 Ethylene							Ma
1	1.737	1.779	-0.042	92361		0.8380	M
2	4.026	4.021	0.005	52224		1.09	M
						RPD = 26.09	
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					

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

a - User Assigned ID

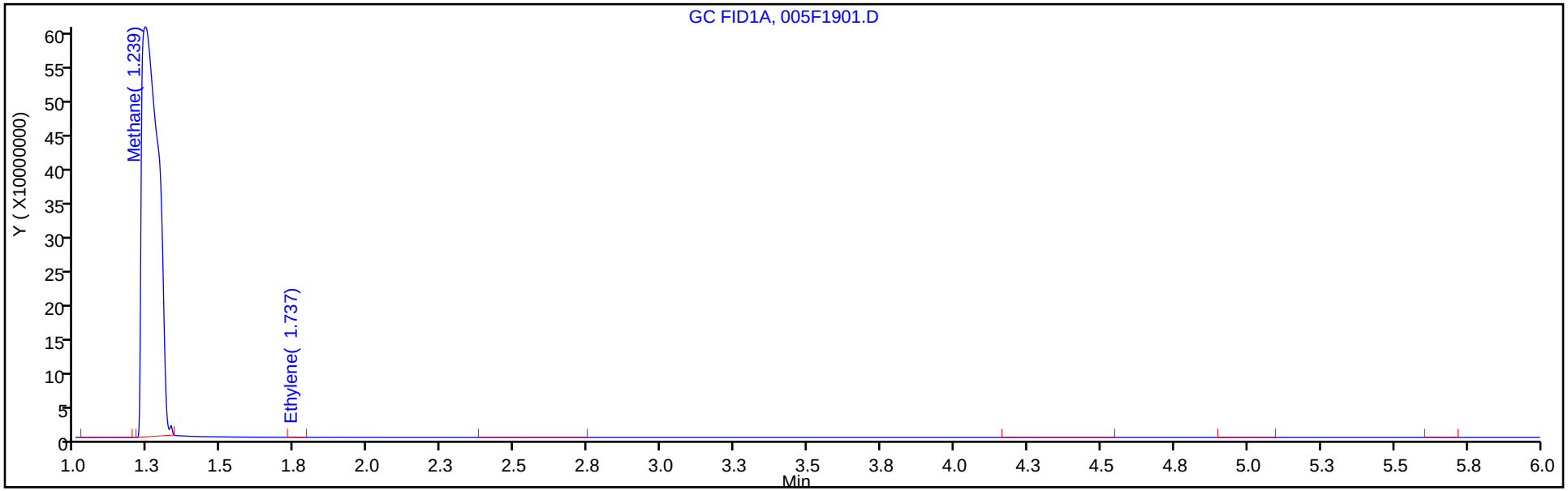
Report Date: 18-Jun-2020 10:25:01 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

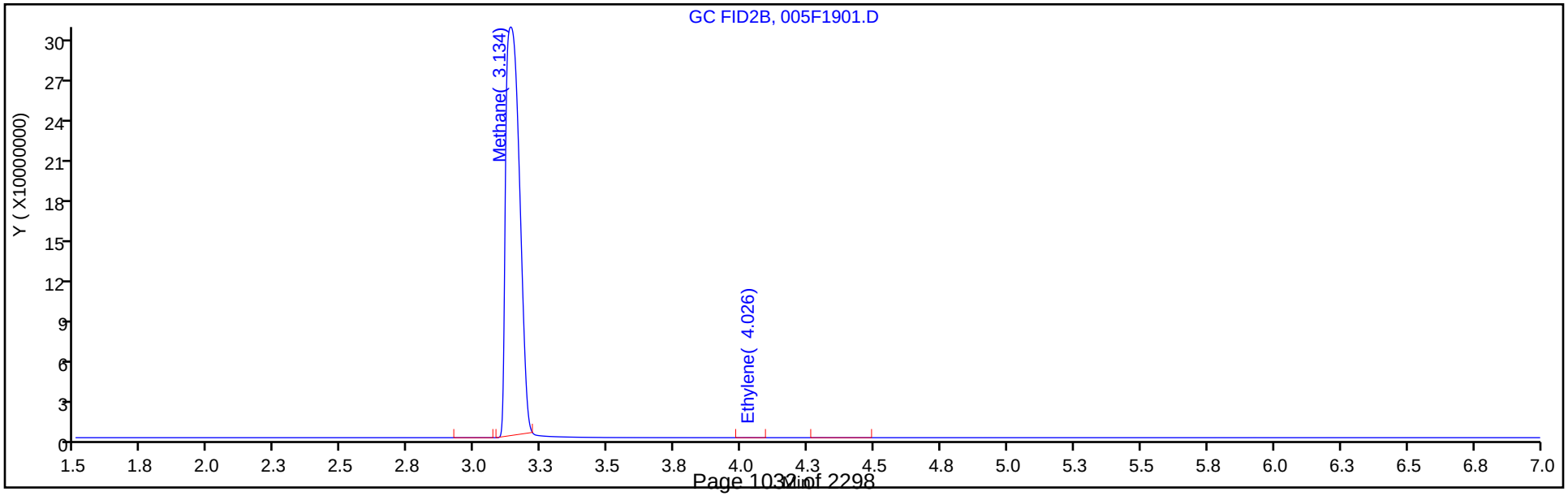
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\005F1901.D

Injection Date:	17-Jun-2020 01:58:36	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137609-G-12 DU			Worklist Smp#:	52
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

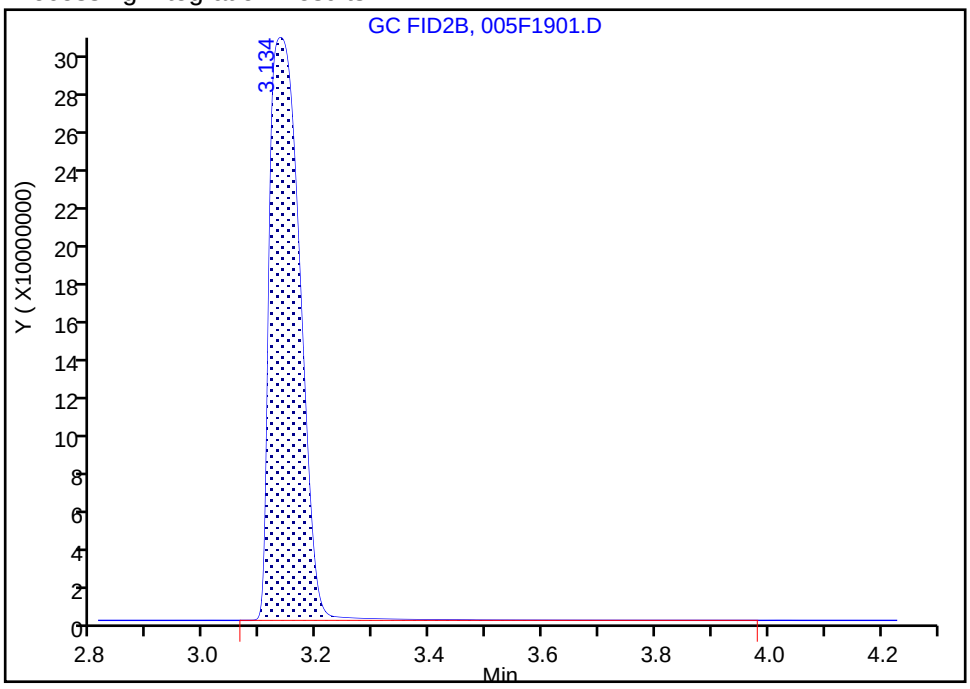
Data File: \\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\005F1901.D
Injection Date: 17-Jun-2020 01:58:36 Instrument ID: VGC_J
Lims ID: 280-137609-G-12 DU
Client ID:
Operator ID: SCIANNAC ALS Bottle#: 5 Worklist Smp#: 52
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

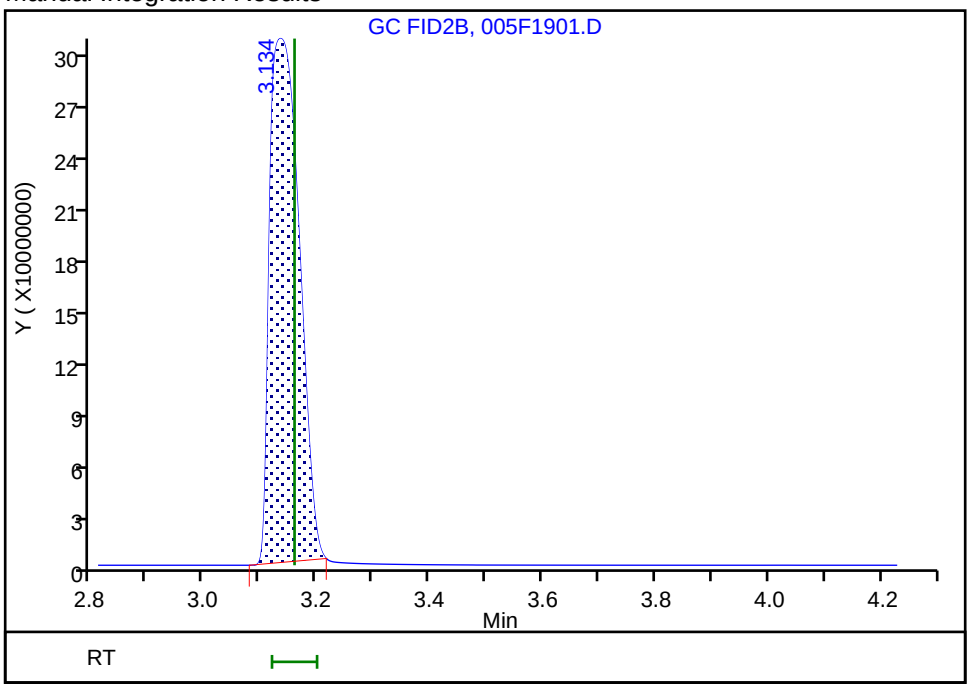
Processing Integration Results

RT: 3.13
Area: 1119815640
Amount: 16360
Amount Units: ug/l



Manual Integration Results

RT: 3.13
Area: 1092002748
Amount: 15953
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:21:33
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

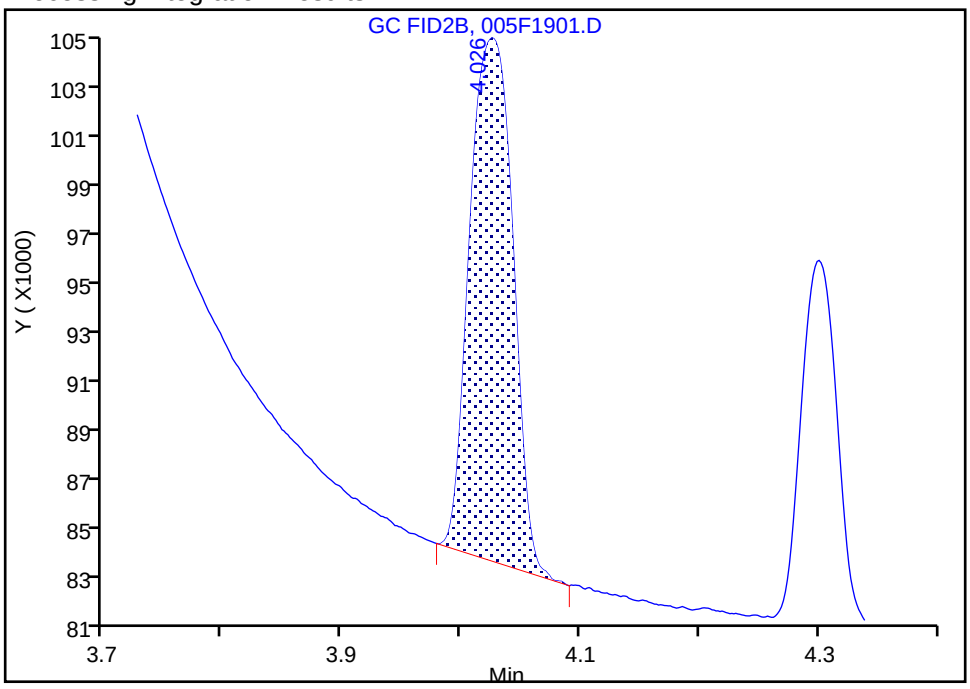
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200616-92492.b\005F1901.D				
Injection Date:	17-Jun-2020 01:58:36	Instrument ID:	VGC_J		
Lims ID:	280-137609-G-12 DU				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	5	Worklist Smp#:	52
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

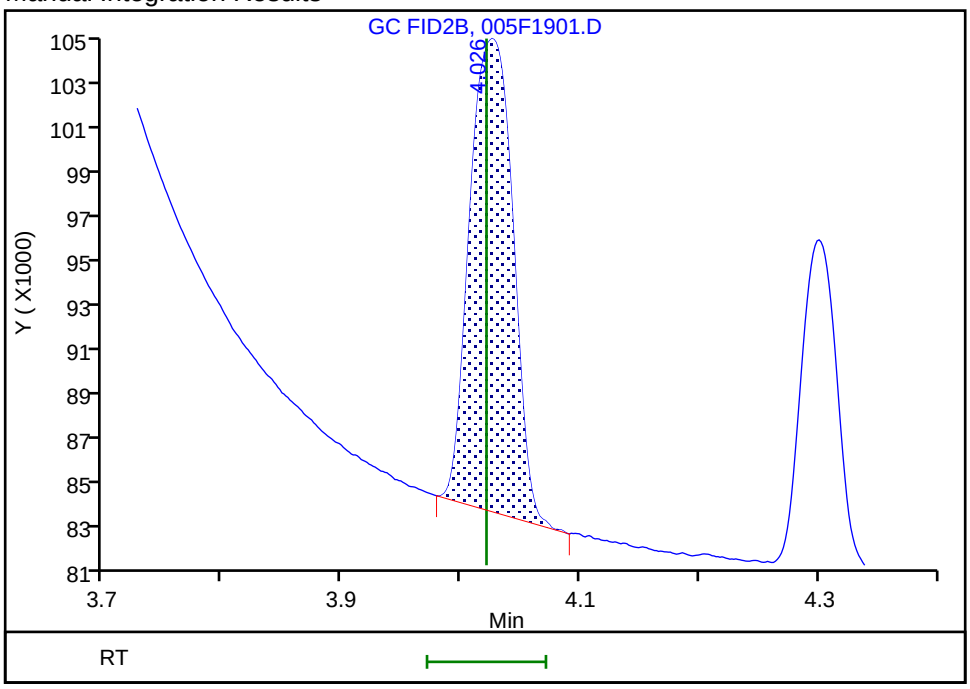
Processing Integration Results

RT: 4.03
Area: 52224
Amount: 1.089505
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 52224
Amount: 1.089505
Amount Units: ug/l



Reviewer: meierg, 18-Jun-2020 10:21:05

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW05-20A DU Lab Sample ID: 280-137609-12 DU

Matrix: Water Lab File ID: 027F2701.D

Analysis Method: RSK-175 Date Collected: 06/11/2020 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/18/2020 15:58

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	13.8	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\027F2701.D
Lims ID: 280-137609-F-12 DU
Client ID:
Sample Type: DU
Inject. Date: 18-Jun-2020 15:58:11 ALS Bottle#: 27 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-137609-F-12D
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 12:32:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							a
1	1.249	1.266	-0.017	662777899		4610.8	a
2	3.156	3.212	-0.056	314044640		4587.8	a
						RPD = 0.50	
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

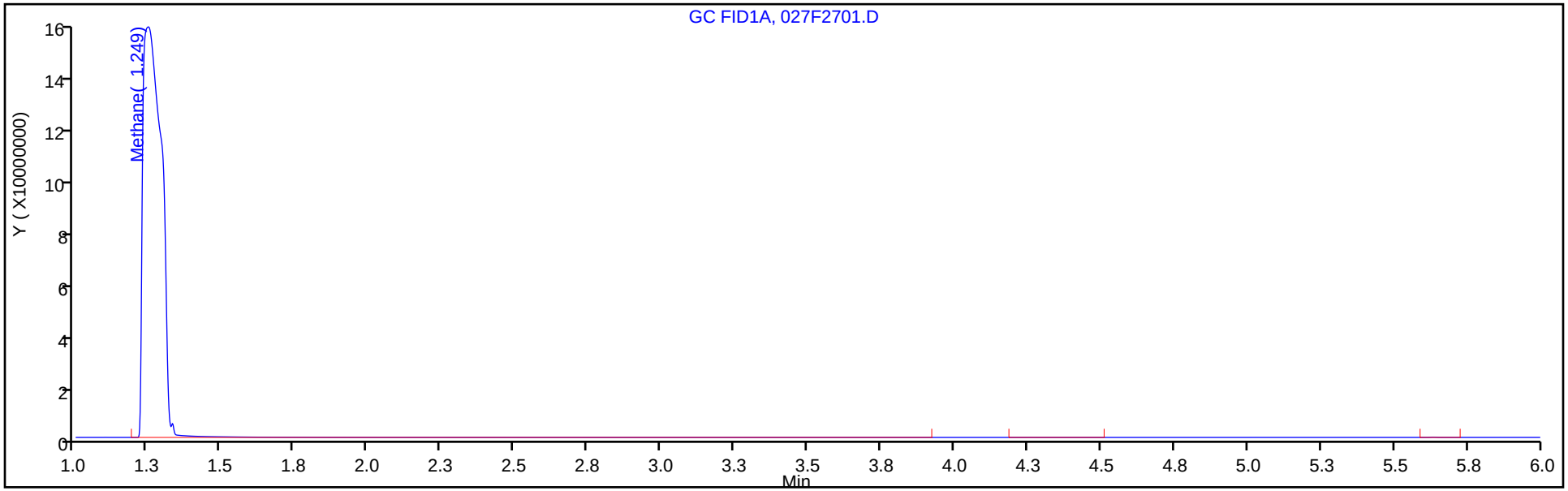
Report Date: 19-Jun-2020 12:43:19 Chrom Revision: 2.3 17-Jun-2020 19:07:08

Eurofins TestAmerica, Denver

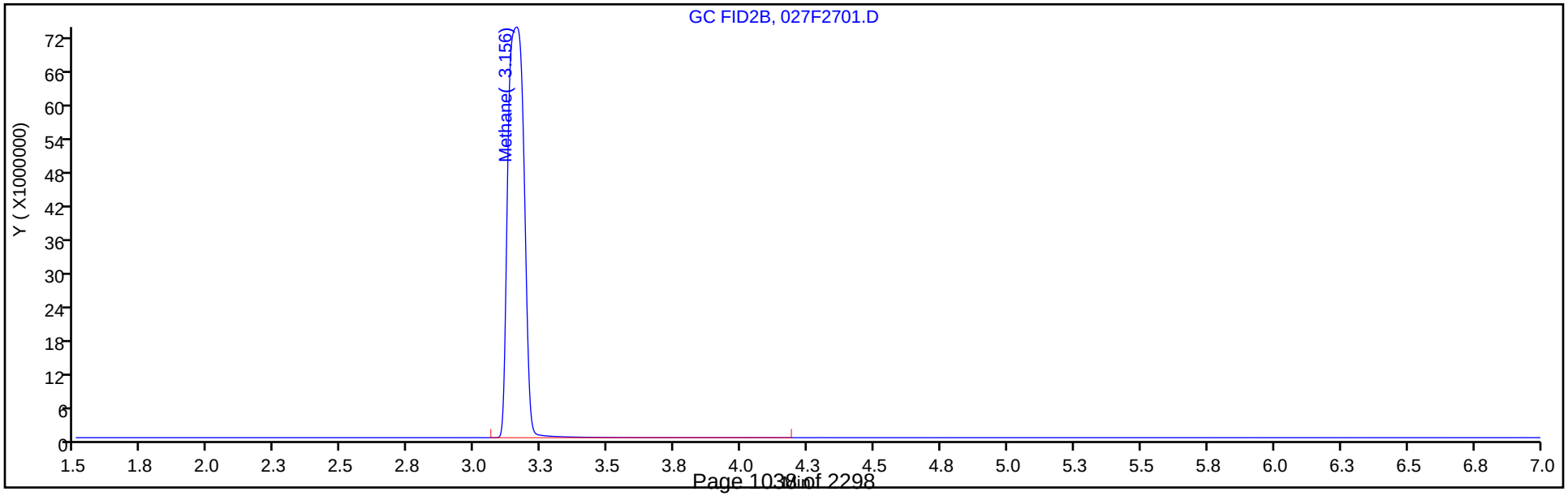
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\027F2701.D

Injection Date:	18-Jun-2020 15:58:11	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	280-137609-F-12 DU			Worklist Smp#:	26
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	27
Method:	RSK_J	Limit Group:	GCV - RSK 175		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

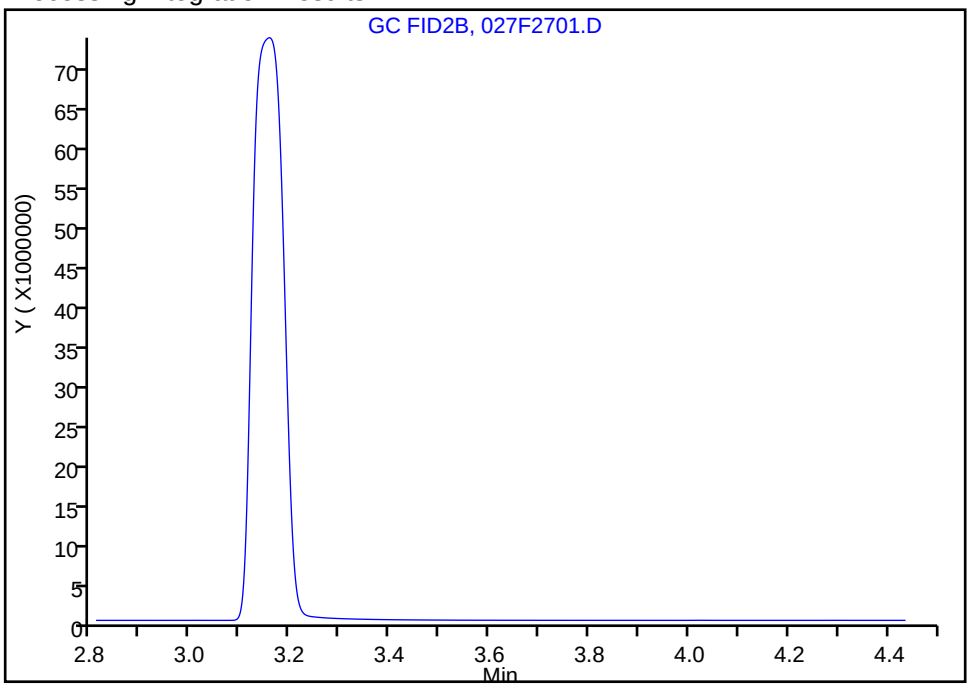
Data File: \\chromfs\Denver\ChromData\VGC_J\20200618-92541.b\027F2701.D
Injection Date: 18-Jun-2020 15:58:11 Instrument ID: VGC_J
Lims ID: 280-137609-F-12 DU
Client ID:
Operator ID: gm ALS Bottle#: 27 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

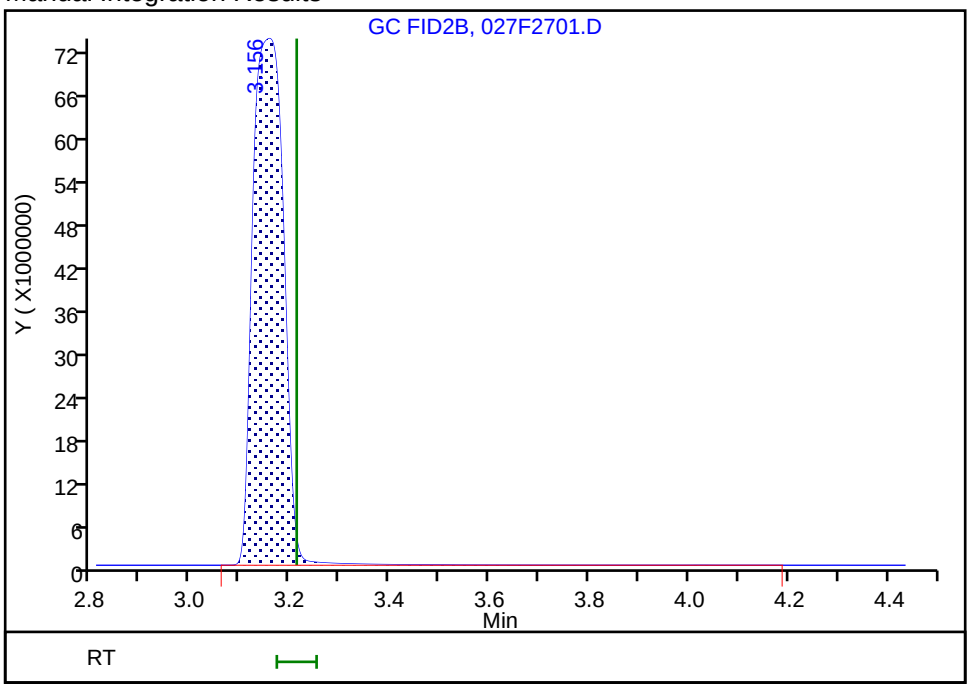
Not Detected
Expected RT: 3.21

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 314044640
Amount: 4587.8152
Amount Units: ug/l



Reviewer: meierg, 19-Jun-2020 12:32:31
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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)
280-137609-1		06/16/2020 21:53	1	040F0401.D	Rt-Alumina KCl 0.53(mm)
280-137609-1		06/16/2020 21:53	1	040F0401.D	HP-Plot Q 0.53(mm)
280-137609-1 DU		06/16/2020 22:09	1	041F0501.D	Rt-Alumina KCl 0.53(mm)
280-137609-1 DU		06/16/2020 22:09	1	041F0501.D	HP-Plot Q 0.53(mm)
280-137609-1 MS		06/16/2020 22:25	1	042F0601.D	Rt-Alumina KCl 0.53(mm)
280-137609-1 MS		06/16/2020 22:25	1	042F0601.D	HP-Plot Q 0.53(mm)
280-137609-1 MSD		06/16/2020 22:42	1	043F0701.D	Rt-Alumina KCl 0.53(mm)
280-137609-1 MSD		06/16/2020 22:42	1	043F0701.D	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)
280-137609-3		06/16/2020 23:14	1	045F0901.D	Rt-Alumina KCl 0.53(mm)
280-137609-3		06/16/2020 23:14	1	045F0901.D	HP-Plot Q 0.53(mm)
280-137609-4		06/16/2020 23:31	1	046F1001.D	Rt-Alumina KCl 0.53(mm)
280-137609-4		06/16/2020 23:31	1	046F1001.D	HP-Plot Q 0.53(mm)
280-137609-5		06/16/2020 23:47	1	047F1101.D	Rt-Alumina KCl 0.53(mm)
280-137609-5		06/16/2020 23:47	1	047F1101.D	HP-Plot Q 0.53(mm)
280-137609-6		06/17/2020 00:04	1	048F1201.D	Rt-Alumina KCl 0.53(mm)
280-137609-6		06/17/2020 00:04	1	048F1201.D	HP-Plot Q 0.53(mm)
280-137609-7		06/17/2020 00:20	1	049F1301.D	Rt-Alumina KCl 0.53(mm)
280-137609-7		06/17/2020 00:20	1	049F1301.D	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)
280-137609-10		06/17/2020 00:53	1	001F1501.D	Rt-Alumina KCl 0.53(mm)
280-137609-10		06/17/2020 00:53	1	001F1501.D	HP-Plot Q 0.53(mm)
280-137609-11		06/17/2020 01:09	1	002F1601.D	Rt-Alumina KCl 0.53(mm)
280-137609-11		06/17/2020 01:09	1	002F1601.D	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)
280-137609-12		06/17/2020 01:42	1	004F1801.D	Rt-Alumina KCl 0.53(mm)
280-137609-12		06/17/2020 01:42	1	004F1801.D	HP-Plot Q 0.53(mm)
280-137609-12 DU		06/17/2020 01:58	1	005F1901.D	Rt-Alumina KCl 0.53(mm)
280-137609-12 DU		06/17/2020 01:58	1	005F1901.D	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)
ZZZZZ		06/17/2020 02:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 02:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 02:47	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
ZZZZZ		06/17/2020 02:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 03:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 03:03	1		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)
ZZZZZ		06/17/2020 03:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 03:36	1		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)
ZZZZZ		06/17/2020 04:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 04:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/17/2020 04:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/17/2020 04:25	1		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.: 280-137609-1

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)
280-137609-2		06/18/2020 14:52	3	023F2301.D	Rt-Alumina KCl 0.53(mm)
280-137609-2		06/18/2020 14:52	3	023F2301.D	HP-Plot Q 0.53(mm)
280-137609-8		06/18/2020 15:09	3	024F2401.D	Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
280-137609-8		06/18/2020 15:09	3	024F2401.D	HP-Plot Q 0.53(mm)
280-137609-11		06/18/2020 15:25	3	025F2501.D	Rt-Alumina KCl 0.53(mm)
280-137609-11		06/18/2020 15:25	3	025F2501.D	HP-Plot Q 0.53(mm)
280-137609-12 DL		06/18/2020 15:41	3	026F2601.D	Rt-Alumina KCl 0.53(mm)
280-137609-12 DL		06/18/2020 15:41	3	026F2601.D	HP-Plot Q 0.53(mm)
280-137609-12 DU		06/18/2020 15:58	3	027F2701.D	Rt-Alumina KCl 0.53(mm)
280-137609-12 DU		06/18/2020 15:58	3	027F2701.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 16:14	6		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 16:14	6		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 16:30	6		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 16:30	6		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 16:47	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 16:47	3		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.: 280-137609-1

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)
280-137609-9		06/18/2020 18:08	1	035F3501.D	Rt-Alumina KCl 0.53(mm)
280-137609-9		06/18/2020 18:08	1	035F3501.D	HP-Plot Q 0.53(mm)
280-137609-9 DU		06/18/2020 18:25	1	036F3601.D	Rt-Alumina KCl 0.53(mm)
280-137609-9 DU		06/18/2020 18:25	1	036F3601.D	HP-Plot Q 0.53(mm)
280-137609-9 MS		06/18/2020 18:41	1	037F3701.D	Rt-Alumina KCl 0.53(mm)
280-137609-9 MS		06/18/2020 18:41	1	037F3701.D	HP-Plot Q 0.53(mm)
280-137609-9 MSD		06/18/2020 18:57	1	038F3801.D	Rt-Alumina KCl 0.53(mm)
280-137609-9 MSD		06/18/2020 18:57	1	038F3801.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 19:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 19:13	1		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)
ZZZZZ		06/18/2020 20:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 20:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/18/2020 20:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/18/2020 20:19	1		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)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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 BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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			
280-137609-I-1	PZ007-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-I-1 DU	PZ007-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-1 MS	PZ007-20A	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-137609-G-1 MSD	PZ007-20A	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-137609-I-3	G0105-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-4	G0080-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-5	PZ005-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-6	NW052-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-7	G0045-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-10	SHGW03-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-F-11	SHGW02-20A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-499014/50		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-137609-G-12	SHGW05-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-12 DU	SHGW05-20A	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.: 280-137609-1

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-H-2	PZ012-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-G-8	G0017-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-H-11	SHGW02-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-F-12	SHGW05-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-F-12 DU	SHGW05-20A	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.: 280-137609-1

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-R-9	G0102-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-R-9 DU	G0102-20A	RSK-175	T	18 mL	18 mL	<2 SU			
280-137609-I-9 MS	G0102-20A	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-137609-I-9 MSD	G0102-20A	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
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.

8015C_DRO_DOD5

Diesel Range Organics (DRO) (GC)

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-1 (30.3 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	OTPH1 #	OTCN1 #
SHGW03-20A	280-137609-10	82	97
	MB 280-499277/1-A	84	97
	LCS 280-499277/2-A	92	98
	LCSD 280-499277/3-A	95	99

	QC LIMITS
OTPH = o-Terphenyl (Surr)	56-125
OTCN = n-Octacosane	60-142

Column to be used to flag recovery values

FORM II 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 058F1501.D

Lab ID: LCS 280-499277/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
C10-C28	1980	1600	81	36-132	

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 059F1601.D

Lab ID: LCSD 280-499277/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
C10-C28	1980	1800	91	12	30	36-132	

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: MB 280-499277/1-A

Matrix: Water Date Extracted: 06/18/2020 15:45

Lab File ID:(1) 057F1401.D Lab File ID:(2)

Date Analyzed:(1) 06/30/2020 14:53 Date Analyzed:(2)

Instrument ID:(1) SGC_U2a Instrument ID:(2)

GC Column:(1) RTX-1 (30.32 ID: 0.25(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-499277/2-A	06/30/2020 15:15	
	LCSD 280-499277/3-A	06/30/2020 15:37	
SHGW03-20A	280-137609-10	06/30/2020 15:59	

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Sample No.: STD4 280-483279/7 Date Analyzed: 01/17/2020 15:43

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 01170106.D Heated Purge: (Y/N) N

Calibration ID: 41561

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				7.06	9.66	
UPPER LIMIT				7.11	9.71	
LOWER LIMIT				7.01	9.61	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD4 280-483279/7 ICRT		01/17/2020 15:43	01170106.D	7.06	9.66	
ICV 280-483279/11		01/17/2020 17:13	01170110.D	7.06	9.66	

OTPH = o-Terphenyl
OTCN = n-Octacosane

OTPH RT Limit = ± 0.05 minutes of surrogate RT
OTCN RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C DRO

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Sample No.: CCVRT 280-500427/4 Date Analyzed: 06/30/2020 10:51

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 044F0301.D Heated Purge: (Y/N) N

Calibration ID: 41561

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				7.07	9.69	
UPPER LIMIT				7.12	9.74	
LOWER LIMIT				7.02	9.64	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 280-500427/4		06/30/2020 10:51	044F0301.D	7.07	9.69	
MB 280-499277/1-A		06/30/2020 14:53	057F1401.D	7.07	9.69	
LCS 280-499277/2-A		06/30/2020 15:15	058F1501.D	7.07	9.69	
LCSD 280-499277/3-A		06/30/2020 15:37	059F1601.D	7.07	9.69	
280-137609-10	SHGW03-20A	06/30/2020 15:59	062F1701.D	7.07	9.69	
CCV 280-500427/15		06/30/2020 16:21	063F1801.D	7.07	9.69	

OTPH = o-Terphenyl
OTCN = n-Octacosane

OTPH RT Limit = ± 0.05 minutes of surrogate RT
OTCN RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C DRO

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SHGW03-20A Lab Sample ID: 280-137609-10

Matrix: Water Lab File ID: 062F1701.D

Analysis Method: 8015C DRO Date Collected: 06/11/2020 10:15

Extraction Method: 3510C Date Extracted: 06/18/2020 15:45

Sample wt/vol: 1006.9(mL) Date Analyzed: 06/30/2020 15:59

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500427 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	320		250	120	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	82		56-125
630-02-4	n-Octacosane	97		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\062F1701.D
Lims ID: 280-137609-A-10-A
Client ID: SHGW03-20A
Sample Type: Client
Inject. Date: 30-Jun-2020 15:59:09 ALS Bottle#: 62 Worklist Smp#: 54
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-10-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	4 C8-C12					
	2.876	(1.242-4.511)		2616586	13.7	
A	6 C10-C25					
	6.018	(3.156-8.879)		41450918	263.6	
	23 Hexadecane					
	6.193	6.181	0.012	150288	NC	
A	8 C10-C28					
	6.476	(3.156-9.796)		49755887	318.9	
A	22 C10-C32					
	6.900	(3.156-10.644)		56774636	364.3	
$	9 o-Terphenyl					
	7.068	7.073	-0.005	5757270	28.8	
A	10 C10-C36					
	7.452	(3.156-11.748)		70549566	449.5	
$	14 n-Octacosane					
	9.688	9.688	0.000	4945283	34.0	
A	13 C20-C38					
	10.054	(7.502-12.607)		59555694	382.9	
A	15 C25-C36					
	10.314	(8.879-11.748)		29986056	179.0	
	18 Dotriacontane					
	10.582	10.589	-0.007	774490	NC	
$	21 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

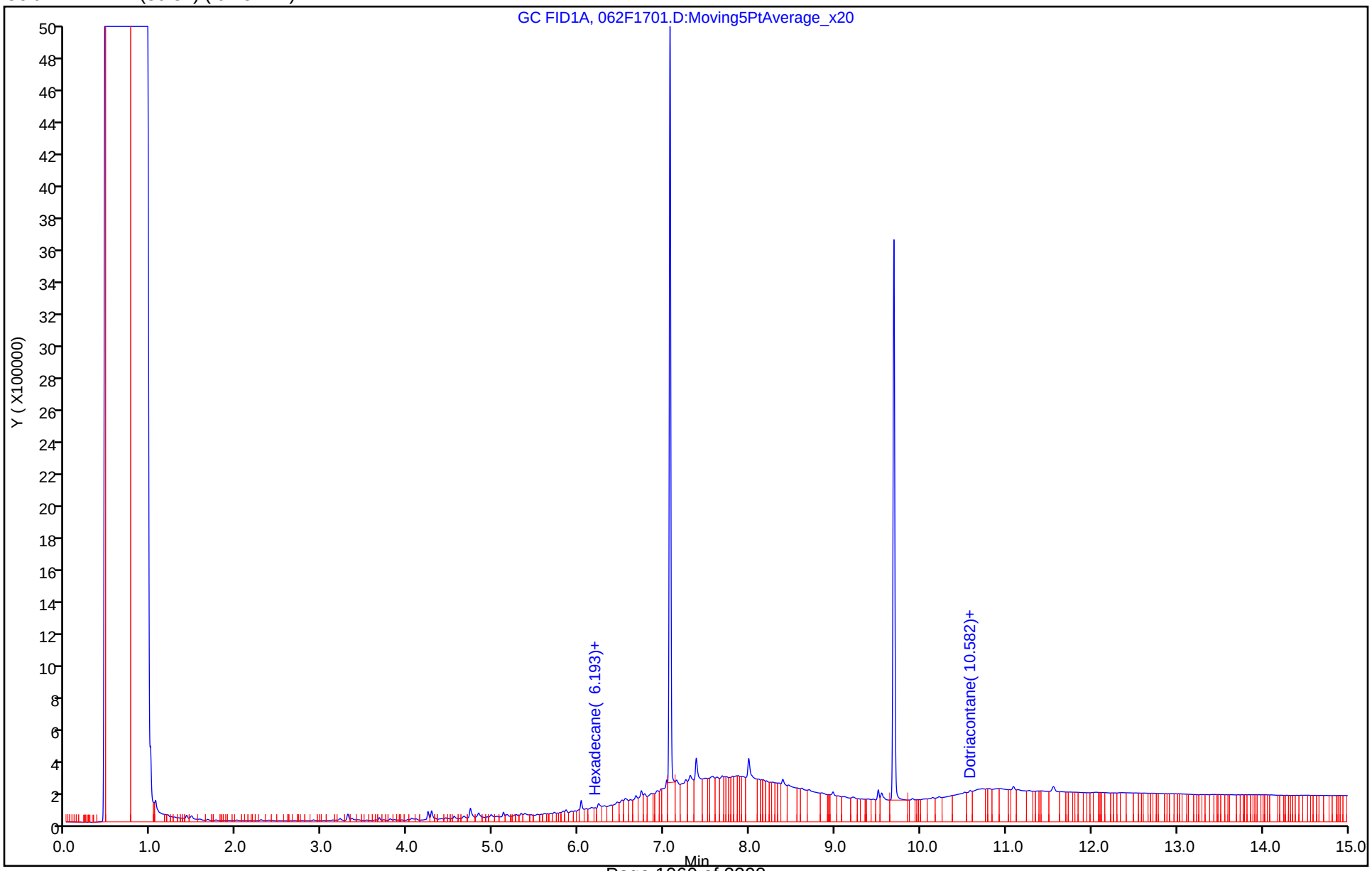
NC - Not Calibrated

Report Date: 30-Jun-2020 17:23:37 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\062F1701.D				
Injection Date:	30-Jun-2020 15:59:09	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	280-137609-A-10-A	Lab Sample ID:	280-137609-10	Worklist Smp#:	54
Client ID:	SHGW03-20A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\062F1701.D
Lims ID: 280-137609-A-10-A
Client ID: SHGW03-20A
Sample Type: Client
Inject. Date: 30-Jun-2020 15:59:09 ALS Bottle#: 62 Worklist Smp#: 54
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-10-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

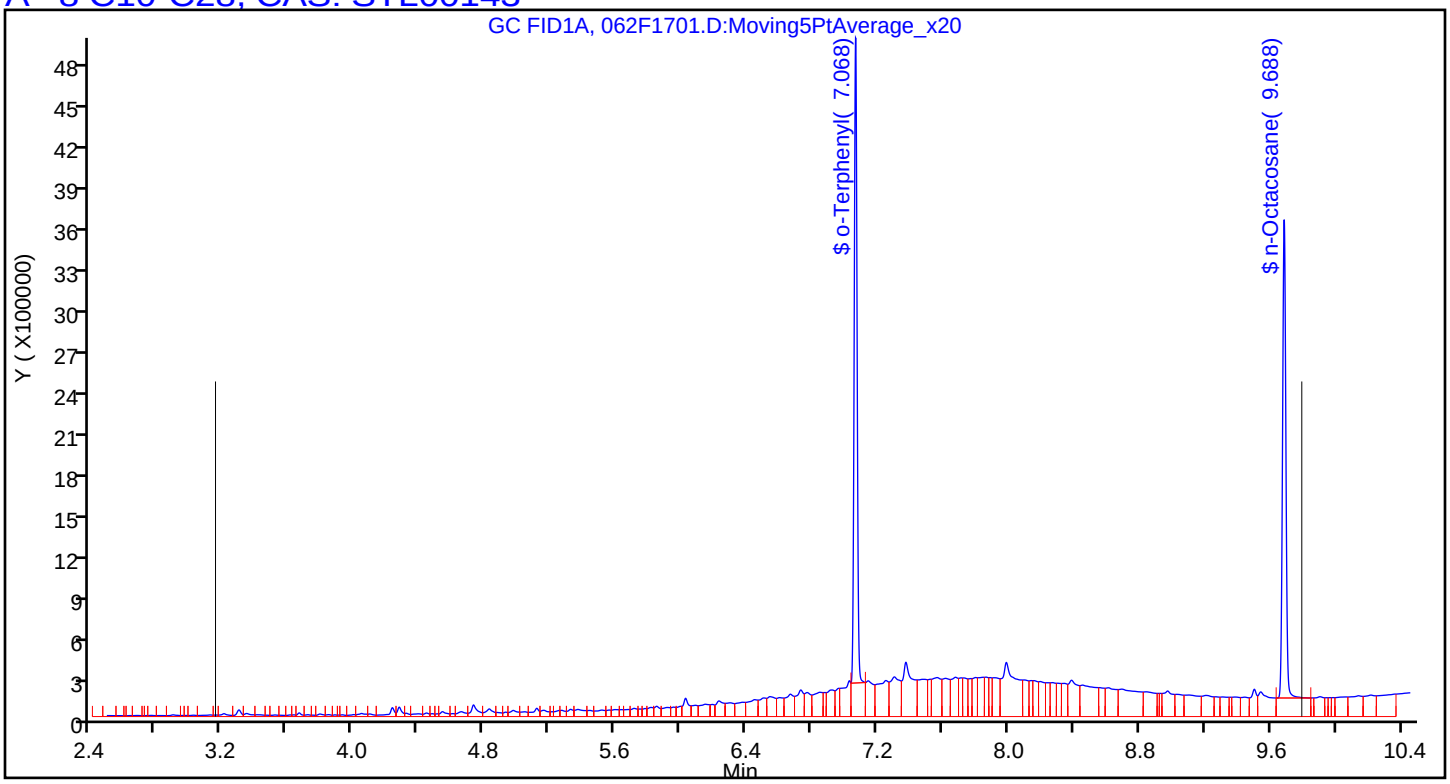
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	28.8	82.15
$ 14 n-Octacosane	35.0	34.0	97.10

Report Date: 30-Jun-2020 17:23:37 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\062F1701.D				
Injection Date:	30-Jun-2020 15:59:09	Instrument ID:	SGC_U2a		
Lims ID:	280-137609-A-10-A	Lab Sample ID:	280-137609-10		
Client ID:	SHGW03-20A				
Operator ID:	MM	ALS Bottle#:	62	Worklist Smp#:	54
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 483279

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2020 14:36 Calibration End Date: 01/17/2020 16:50 Calibration ID: 41561

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-483279/10	01170109.D
Level 2	STD2 280-483279/9	01170108.D
Level 3	STD3 280-483279/8	01170107.D
Level 4	STD4 280-483279/7	01170106.D
Level 5	STD5 280-483279/6	01170105.D
Level 6	STD6 280-483279/5	01170104.D
Level 7	STD7 280-483279/4	01170103.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
C10-C28	6.513	6.513	6.513	6.513	6.513	6.513	6.510				3.167 - 9.854	6.513
o-Terphenyl (Surr)	7.061	7.058	7.059	7.063	7.066	7.073					7.013 - 7.113	7.063
n-Octacosane	9.673	9.669	9.663	9.664	9.664	9.667					9.622 - 9.722	9.667

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 483279

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2020 14:36 Calibration End Date: 01/17/2020 16:50 Calibration ID: 41561

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-483279/10	01170109.D
Level 2	STD2 280-483279/9	01170108.D
Level 3	STD3 280-483279/8	01170107.D
Level 4	STD4 280-483279/7	01170106.D
Level 5	STD5 280-483279/6	01170105.D
Level 6	STD6 280-483279/5	01170104.D
Level 7	STD7 280-483279/4	01170103.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		B	M1	M2								
C10-C28	178128 149942	154912 145242	151325 147405	146663	Lin1	2905421.31	146916.357							1.0000		0.9900
o-Terphenyl (Surr)	190594 210433	188203 202241	204476	205529	Ave		200246.240				4.4		15.0			
n-Octacosane	148054 148409	138910 144090	148772	144875	Ave		145518.556				2.6		15.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1 Analy Batch No.: 483279

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2020 14:36 Calibration End Date: 01/17/2020 16:50 Calibration ID: 41561

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-483279/10	01170109.D
Level 2	STD2 280-483279/9	01170108.D
Level 3	STD3 280-483279/8	01170107.D
Level 4	STD4 280-483279/7	01170106.D
Level 5	STD5 280-483279/6	01170105.D
Level 6	STD6 280-483279/5	01170104.D
Level 7	STD7 280-483279/4	01170103.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
C10-C28	Lin1	17670312 2161207447	38418075 4386771980	150113936	727447828	1115567747	99.2 14880	248 29760	992	4960	7440
o-Terphenyl (Surr)	Ave	95297 15168088	235254	1022381	5138235	7891255	0.500 75.0	1.25	5.00	25.0	37.5
n-Octacosane	Ave	74027 10806753	173638	743861	3621882	5565353	0.500 75.0	1.25	5.00	25.0	37.5

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170103.D
Lims ID: STD7 DRO
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Jan-2020 14:36:24 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD7 DRO
Misc. Info.: 280-0088679-004
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:32:52 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 15:06:01

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A 6 C10-C25						
6.029	(3.167-8.892)		4350462681	29430	29508	
A 8 C10-C28						
6.510	(3.167-9.854)		4386771980	29760	29839	
A 22 C10-C32						
6.925	(3.167-10.683)		4393445965	29880	29958	
A 10 C10-C36						
7.427	(3.167-11.687)		4396900657	30000	30079	

Reagents:

DRO_L7_00067 Amount Added: 200.00 Units: uL

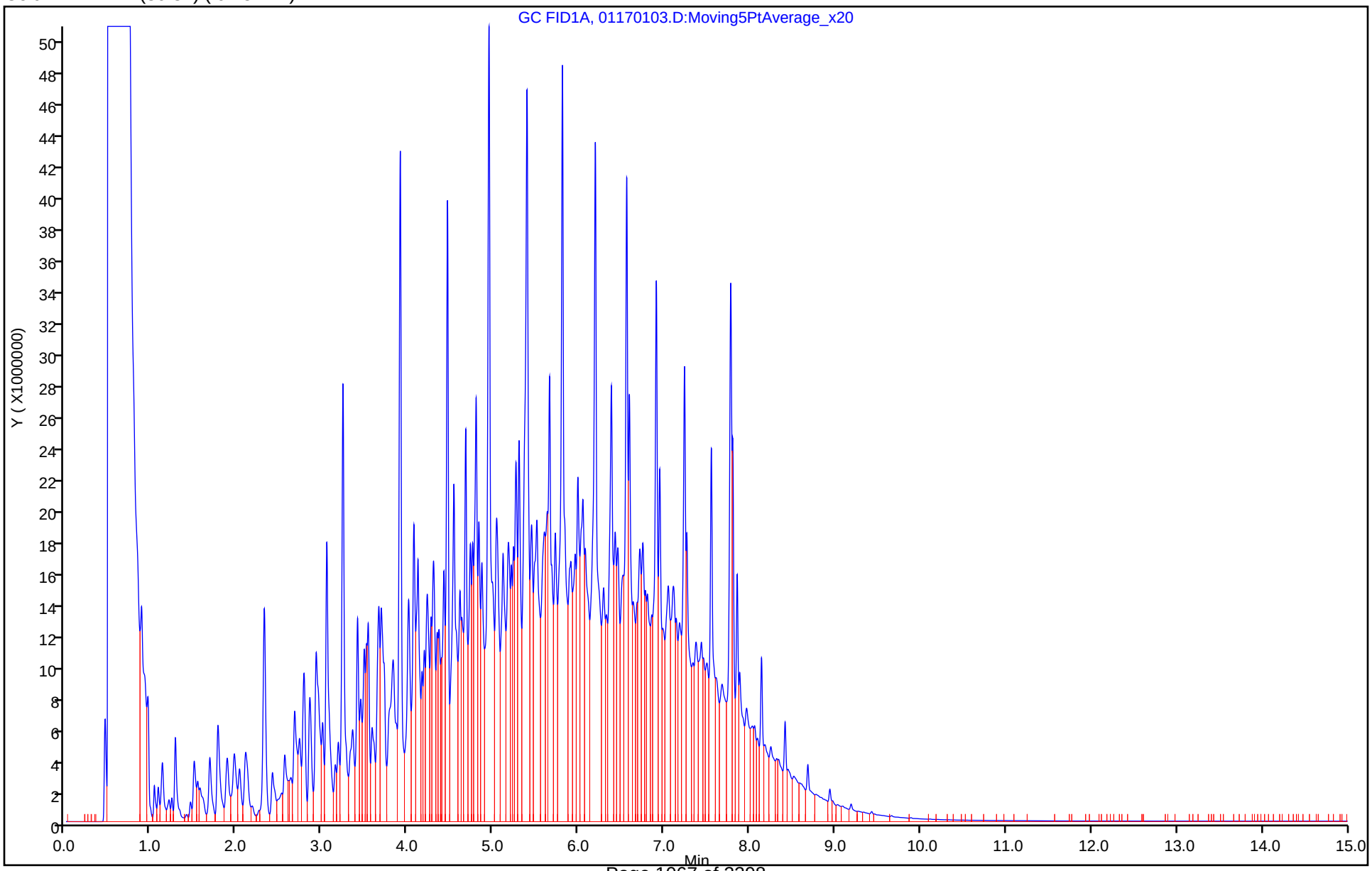
Report Date: 20-Jan-2020 09:32:54 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170103.D

Injection Date:	17-Jan-2020 14:36:24	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD7 DRO			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

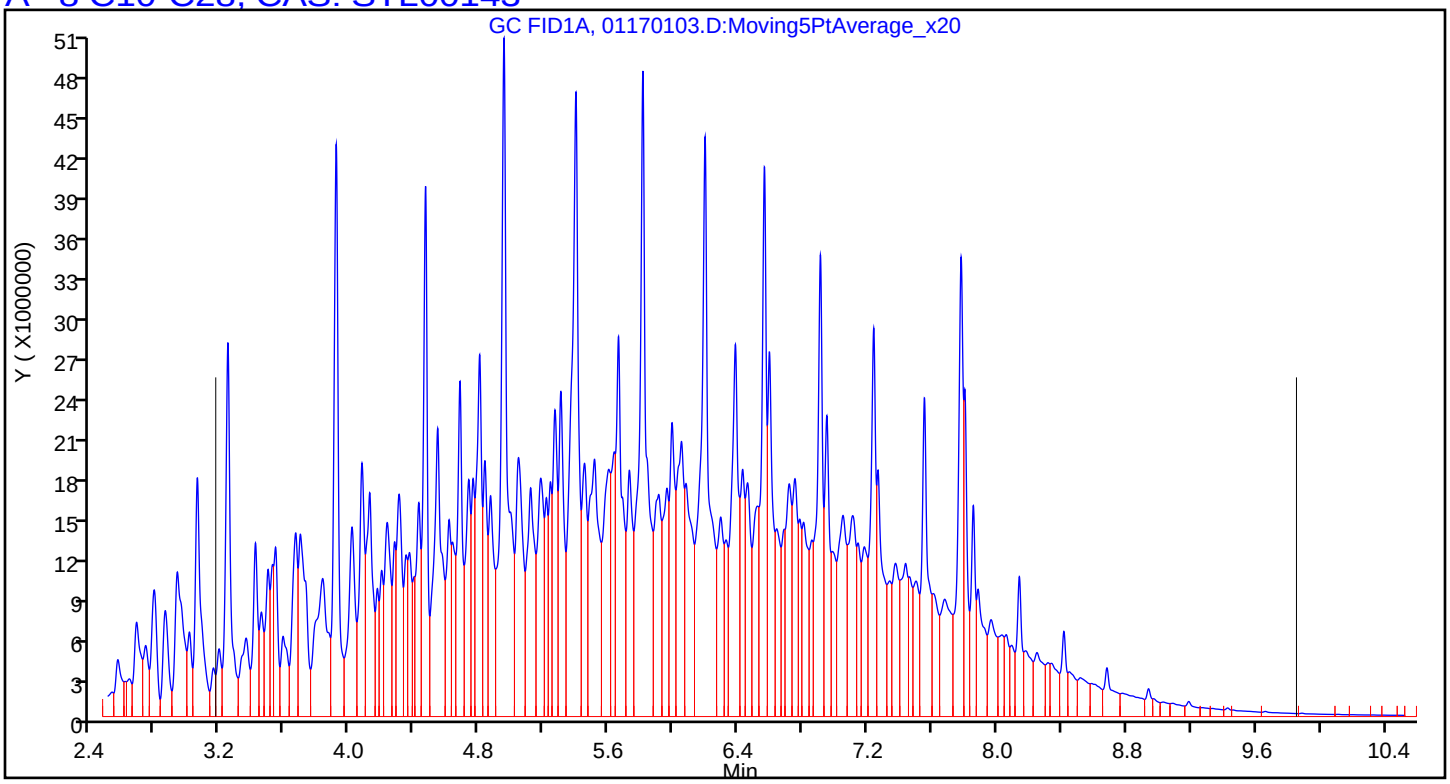


Report Date: 20-Jan-2020 09:32:54 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170103.D				
Injection Date:	17-Jan-2020 14:36:24	Instrument ID:	SGC_U2a		
Lims ID:	STD7 DRO				
Client ID:					
Operator ID:	RP	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170104.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Jan-2020 14:58:49 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6
Misc. Info.: 280-0088679-005
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:01 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 16:10:19

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.029	(3.167-8.892)		2143397571	14715	14529	M
A	8 C10-C28						M
	6.513	(3.167-9.854)		2161207447	14880	14691	M
A	22 C10-C32						M
	6.925	(3.167-10.683)		2164926881	14940	14751	M
$	9 o-Terphenyl						M
	7.073	7.063	0.010	15168088	75.0	75.7	M
A	10 C10-C36						M
	7.427	(3.167-11.687)		2167241063	15000	14809	M
$	14 n-Octacosane						
	9.667	9.672	-0.005	10806753	75.0	74.3	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L6_00048 Amount Added: 200.00 Units: uL

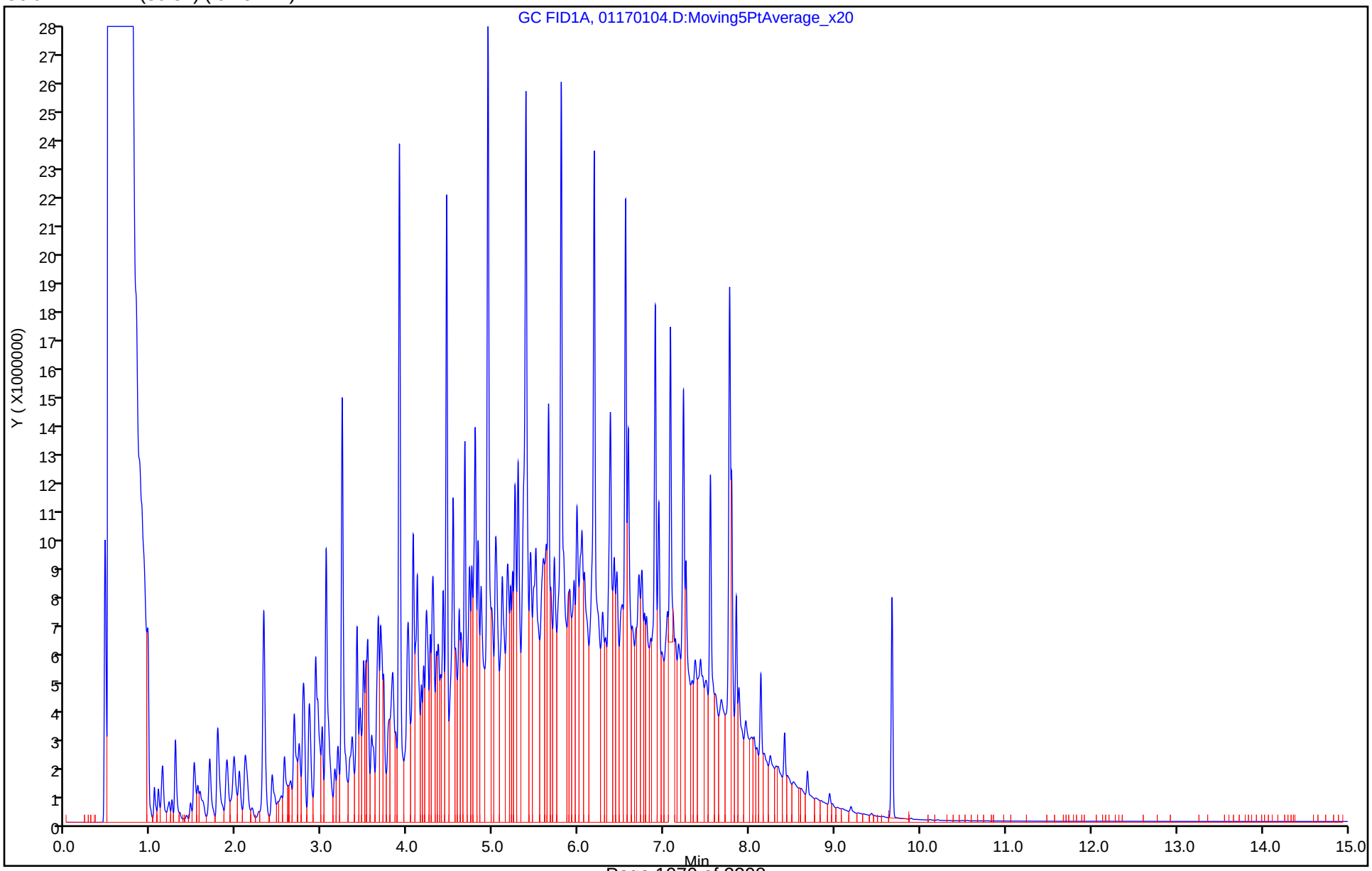
Report Date: 20-Jan-2020 09:33:02 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170104.D

Injection Date:	17-Jan-2020 14:58:49	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD6			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

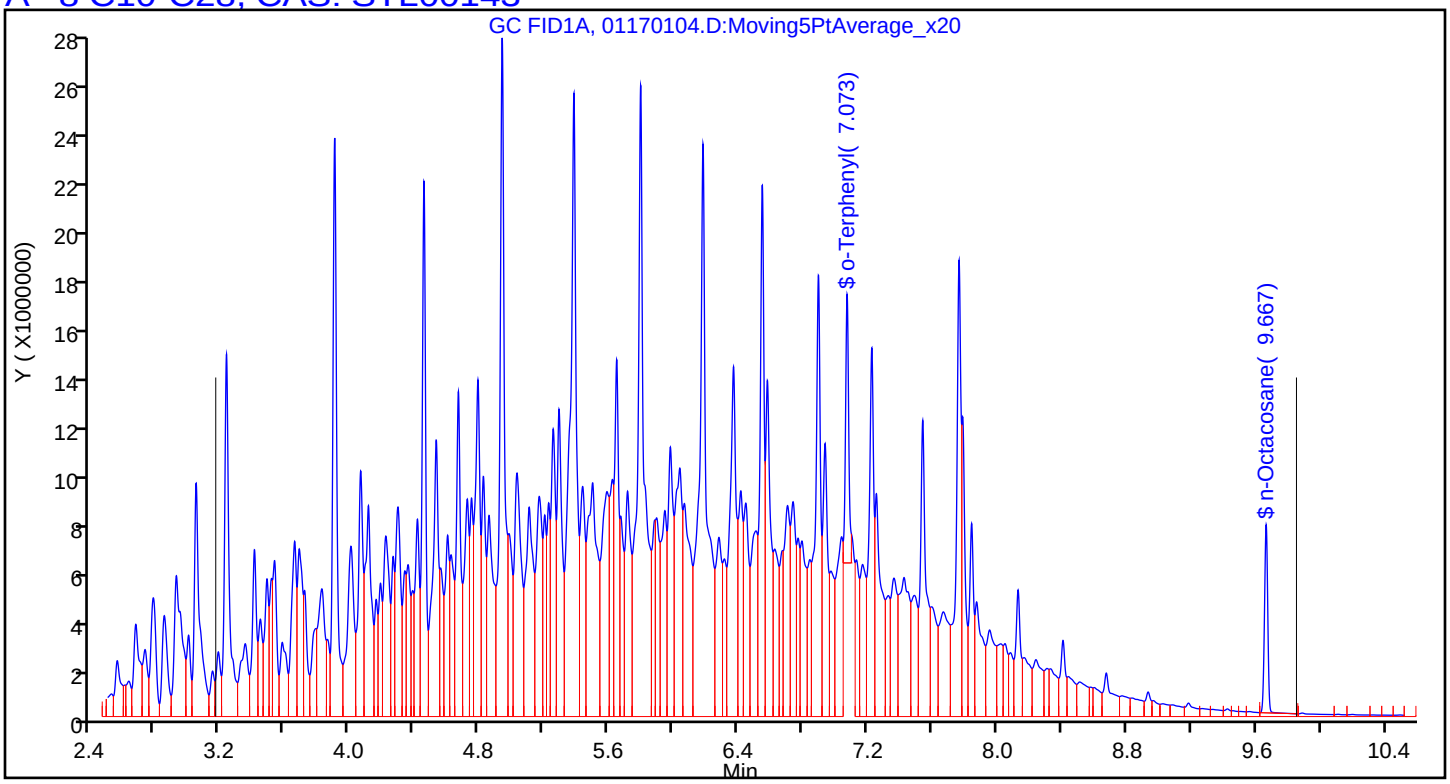


Report Date: 20-Jan-2020 09:33:02 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170104.D				
Injection Date:	17-Jan-2020 14:58:49	Instrument ID:	SGC_U2a		
Lims ID:	STD6				
Client ID:					
Operator ID:	RP	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

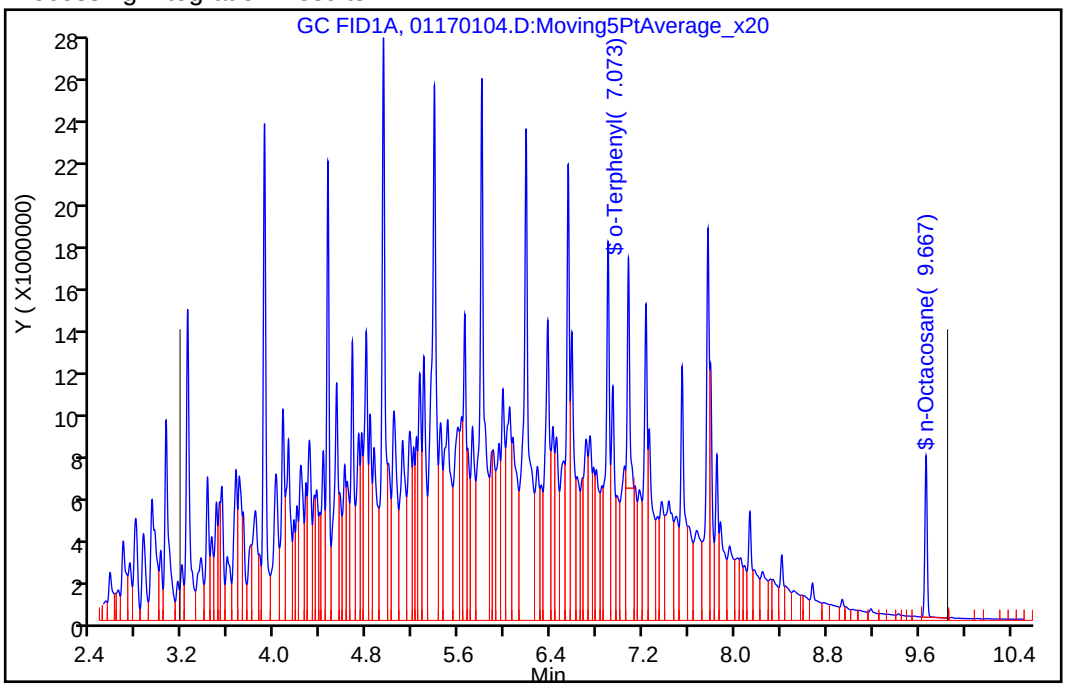
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170104.D				
Injection Date:	17-Jan-2020 14:58:49	Instrument ID:	SGC_U2a		
Lims ID:	STD6				
Client ID:					
Operator ID:	RP	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.510, CAS: STL00143

Signal: 1

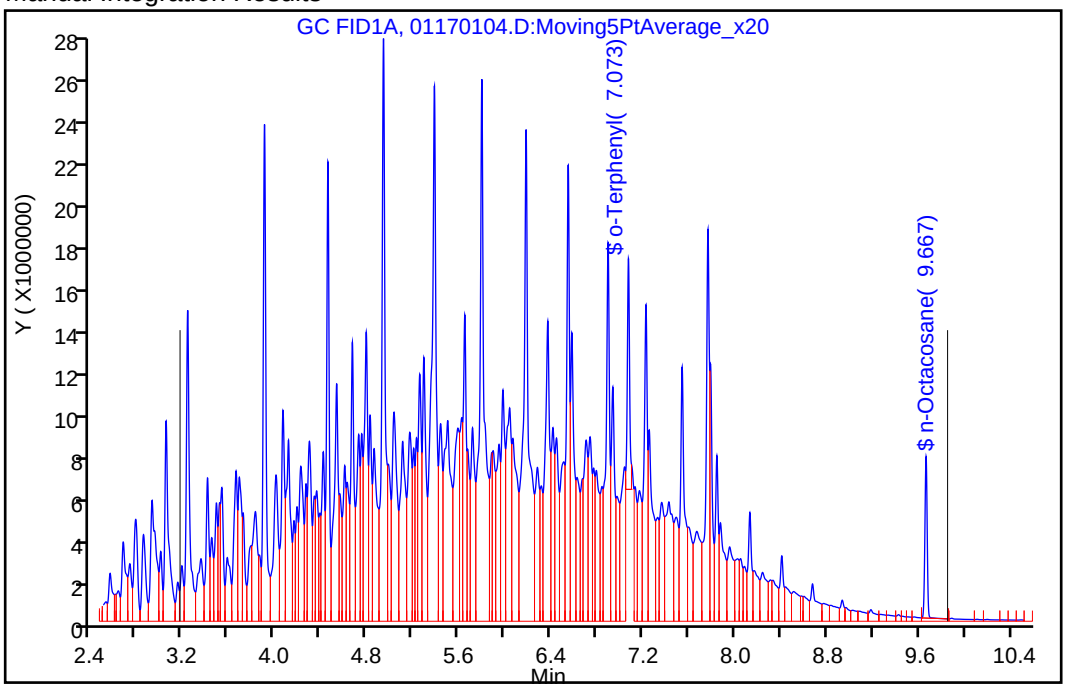
Processing Integration Results

RT: 6.51
Response: 2174110189
Amount: 14749



Manual Integration Results

RT: 6.51
Response: 2161207447
Amount: 14691



Reviewer: paulr, 17-Jan-2020 16:10:08

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver

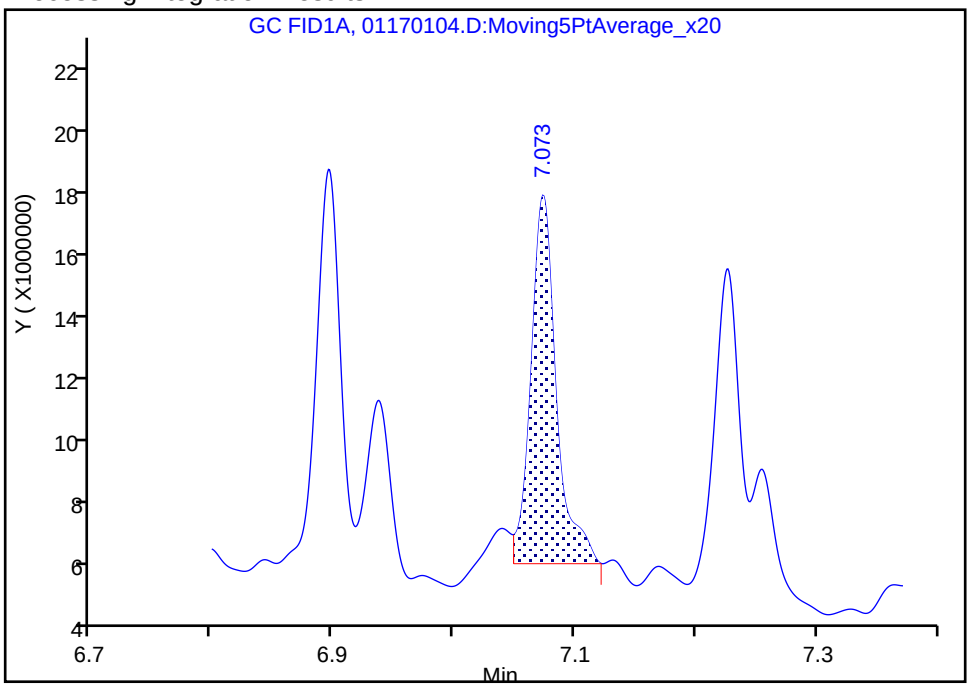
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170104.D				
Injection Date:	17-Jan-2020 14:58:49	Instrument ID:	SGC_U2a		
Lims ID:	STD6				
Client ID:					
Operator ID:	RP	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

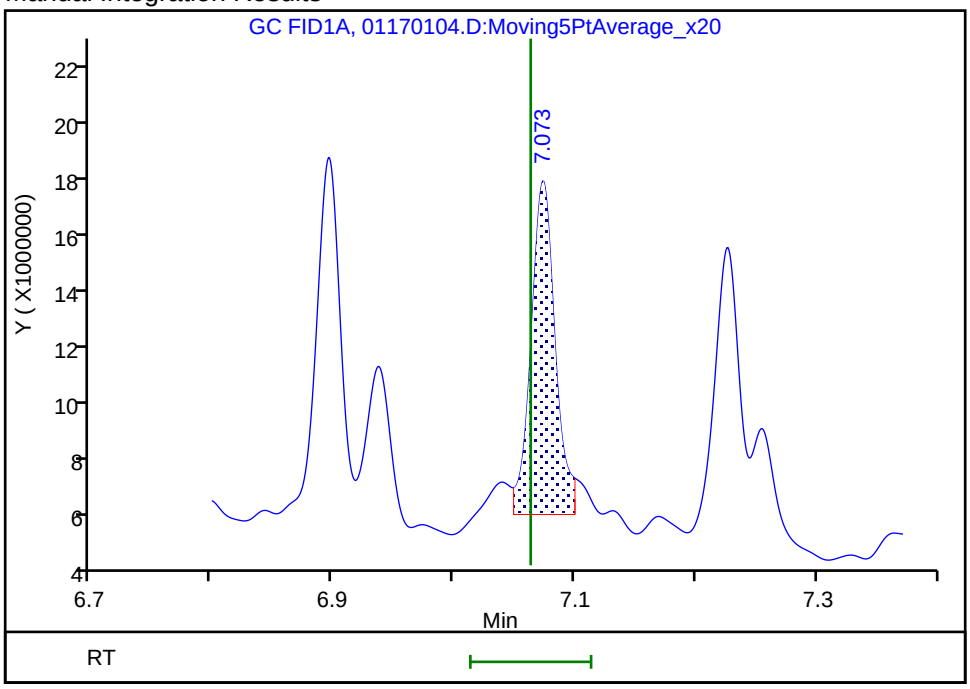
Processing Integration Results

RT: 7.07
Area: 15940238
Amount: 74.838283
Amount Units: ug/ml



Manual Integration Results

RT: 7.07
Area: 15168088
Amount: 75.747180
Amount Units: ug/ml



Reviewer: paulr, 17-Jan-2020 16:10:08
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170105.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Jan-2020 15:21:16 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 280-0088679-006
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:08 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 16:09:41

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.029	(3.167-8.892)		1106164663	7357.5	7489.5	M
A	8 C10-C28						M
	6.513	(3.167-9.854)		1115567747	7440.0	7573.4	M
A	22 C10-C32						M
	6.925	(3.167-10.683)		1117655575	7470.0	7603.9	M
$	9 o-Terphenyl						M
	7.066	7.063	0.003	7891255	37.5	39.4	M
A	10 C10-C36						M
	7.427	(3.167-11.687)		1119597840	7500.0	7634.0	M
$	14 n-Octacosane						
	9.664	9.672	-0.008	5565353	37.5	38.2	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L6_00048 Amount Added: 100.00 Units: uL

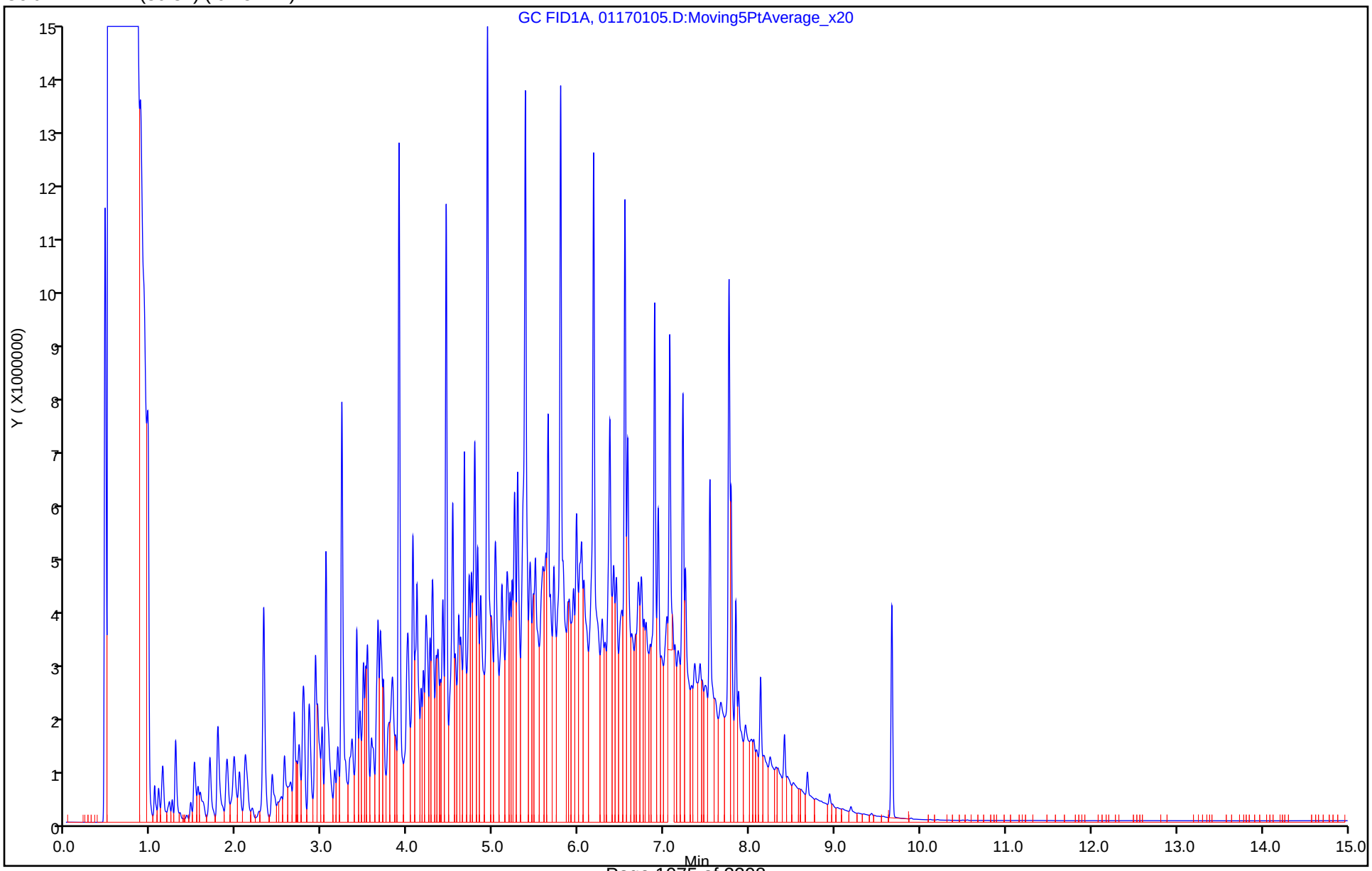
Report Date: 20-Jan-2020 09:33:09 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170105.D

Injection Date:	17-Jan-2020 15:21:16	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

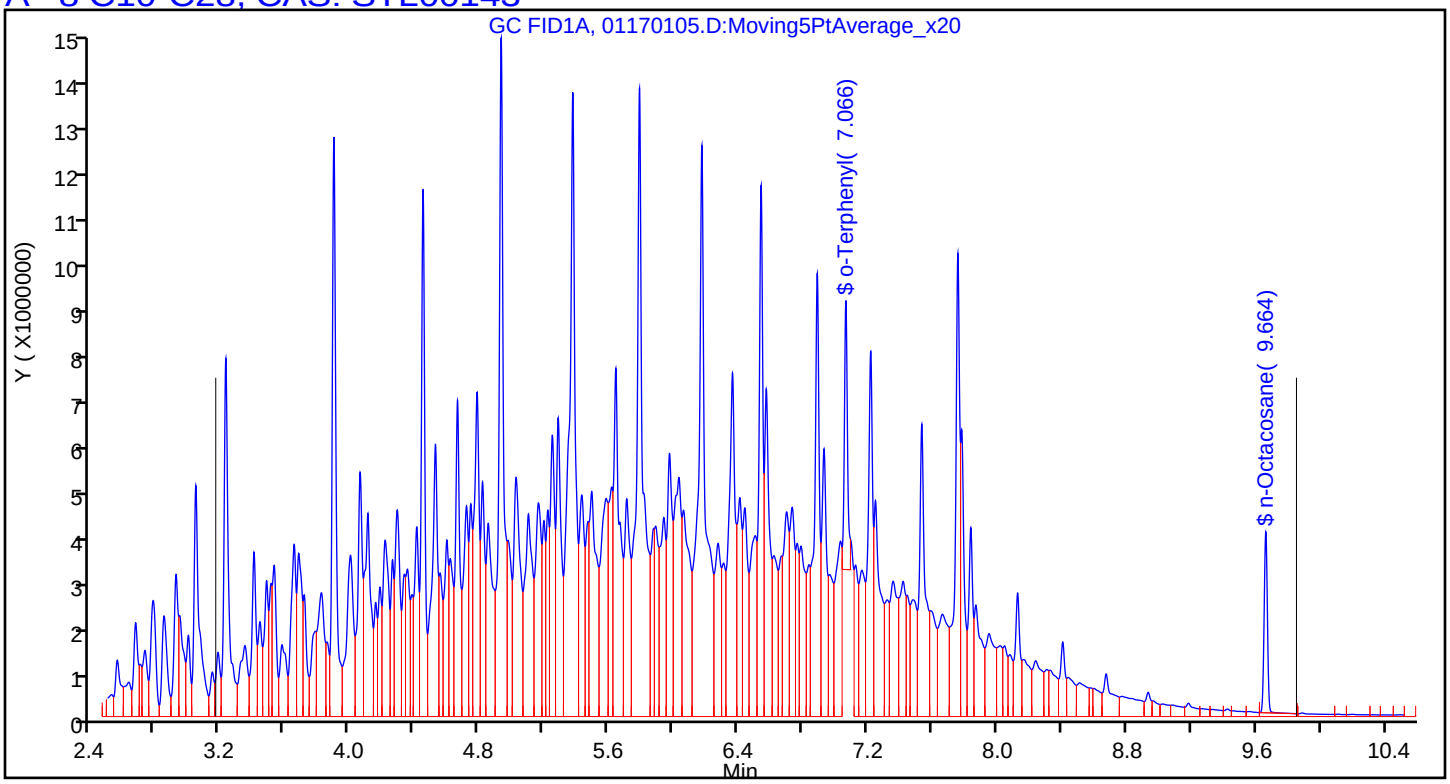


Report Date: 20-Jan-2020 09:33:10 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170105.D				
Injection Date:	17-Jan-2020 15:21:16	Instrument ID:	SGC_U2a		
Lims ID:	STD5				
Client ID:					
Operator ID:	RP	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

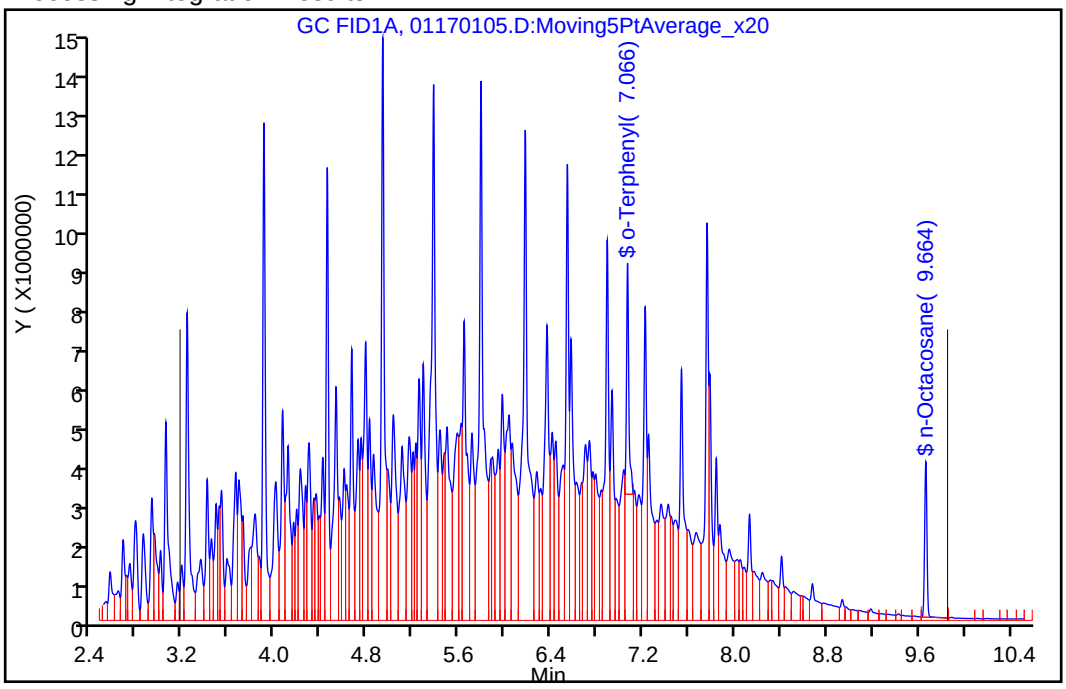
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170105.D				
Injection Date:	17-Jan-2020 15:21:16	Instrument ID:	SGC_U2a		
Lims ID:	STD5				
Client ID:					
Operator ID:	RP	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.510, CAS: STL00143

Signal: 1

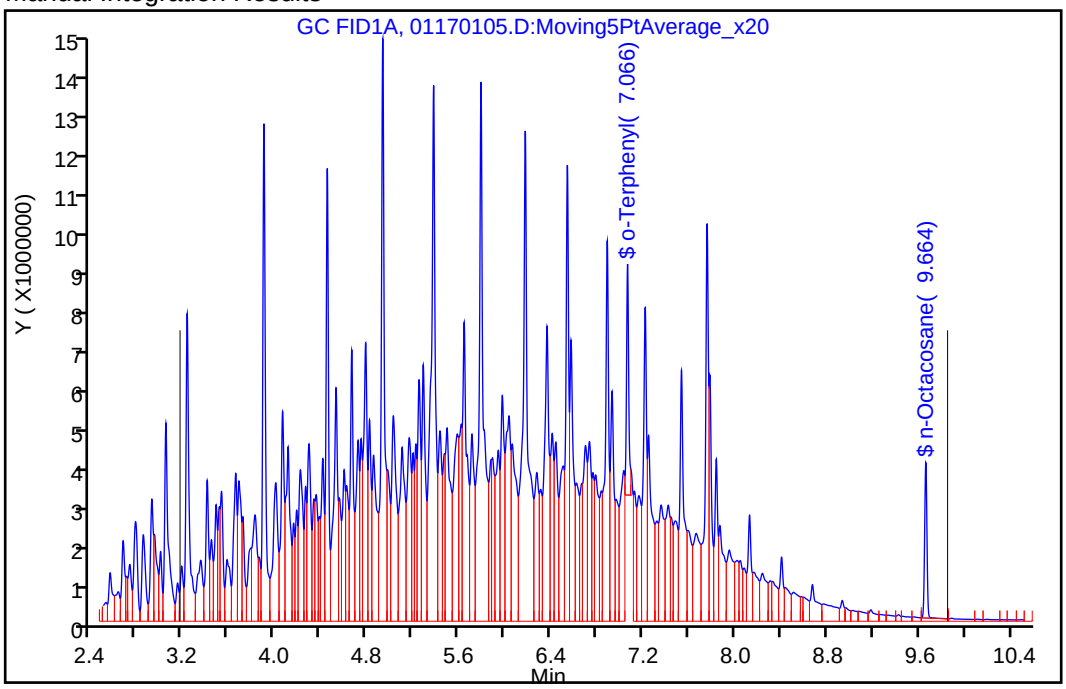
Processing Integration Results

RT: 6.51
Response: 1121940635
Amount: 7588.8507



Manual Integration Results

RT: 6.51
Response: 1115567747
Amount: 7573.4408



Reviewer: paulr, 17-Jan-2020 16:09:37

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

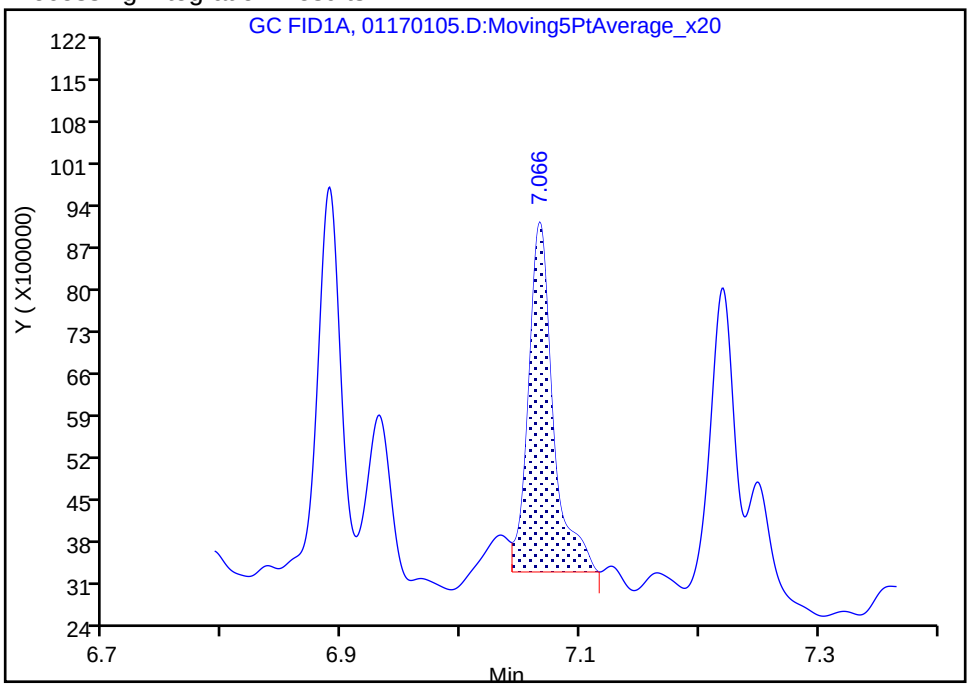
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170105.D				
Injection Date:	17-Jan-2020 15:21:16	Instrument ID:	SGC_U2a		
Lims ID:	STD5				
Client ID:					
Operator ID:	RP	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

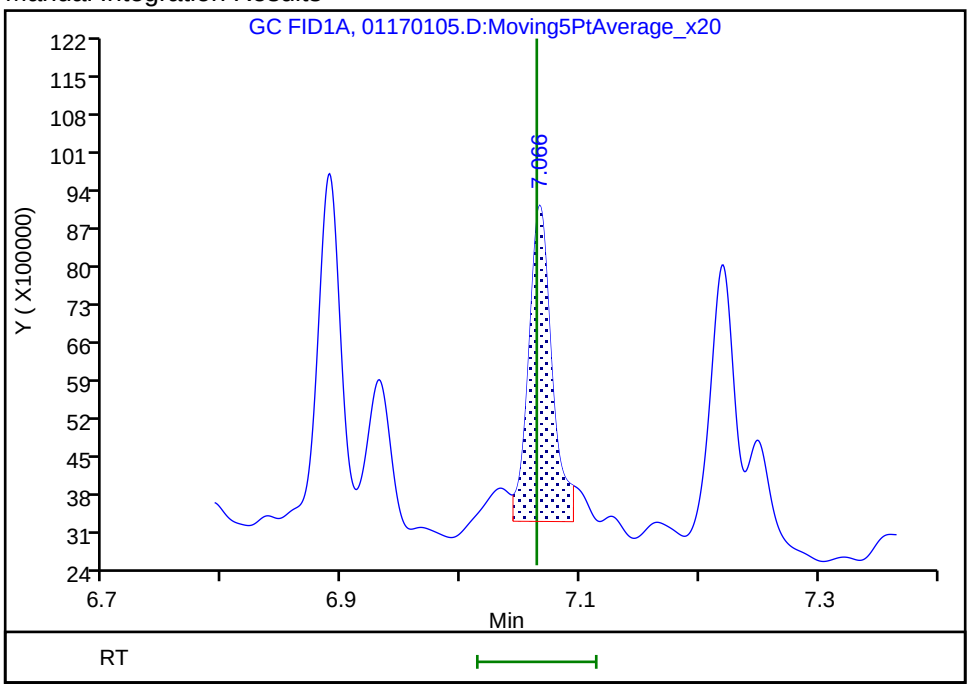
Processing Integration Results

RT: 7.07
Area: 8378117
Amount: 39.128312
Amount Units: ug/ml



Manual Integration Results

RT: 7.07
Area: 7891255
Amount: 39.407756
Amount Units: ug/ml



Reviewer: paulr, 17-Jan-2020 16:09:37

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170106.D
Lims ID: STD4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 17-Jan-2020 15:43:37 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4
Misc. Info.: 280-0088679-007
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:18 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 16:06:11

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.029	(3.167-8.892)		721213005	4905.0	4877.0	M
A	8 C10-C28						M
	6.513	(3.167-9.860)		727447828	4960.0	4931.7	M
A	22 C10-C32						M
	6.925	(3.167-10.683)		729057562	4980.0	4952.1	M
$	9 o-Terphenyl						M
	7.063	7.063	0.000	5138235	25.0	25.7	M
A	10 C10-C36						M
	7.427	(3.167-11.687)		730857410	5000.0	4971.7	M
$	14 n-Octacosane						
	9.664	9.664	0.000	3621882	25.0	24.9	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L4/CCV_00086 Amount Added: 200.00 Units: uL

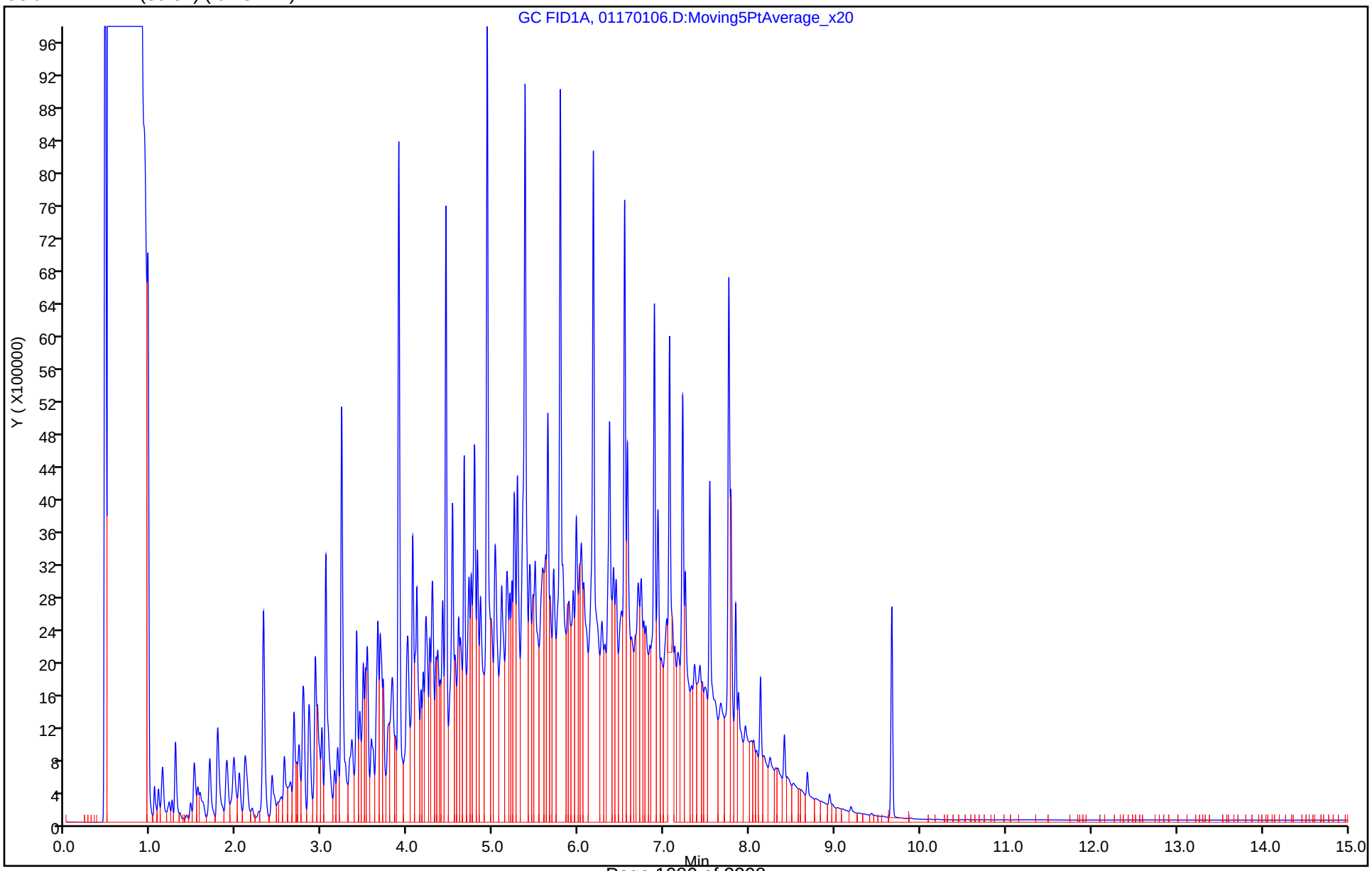
Report Date: 20-Jan-2020 09:33:18 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170106.D

Injection Date:	17-Jan-2020 15:43:37	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD4			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

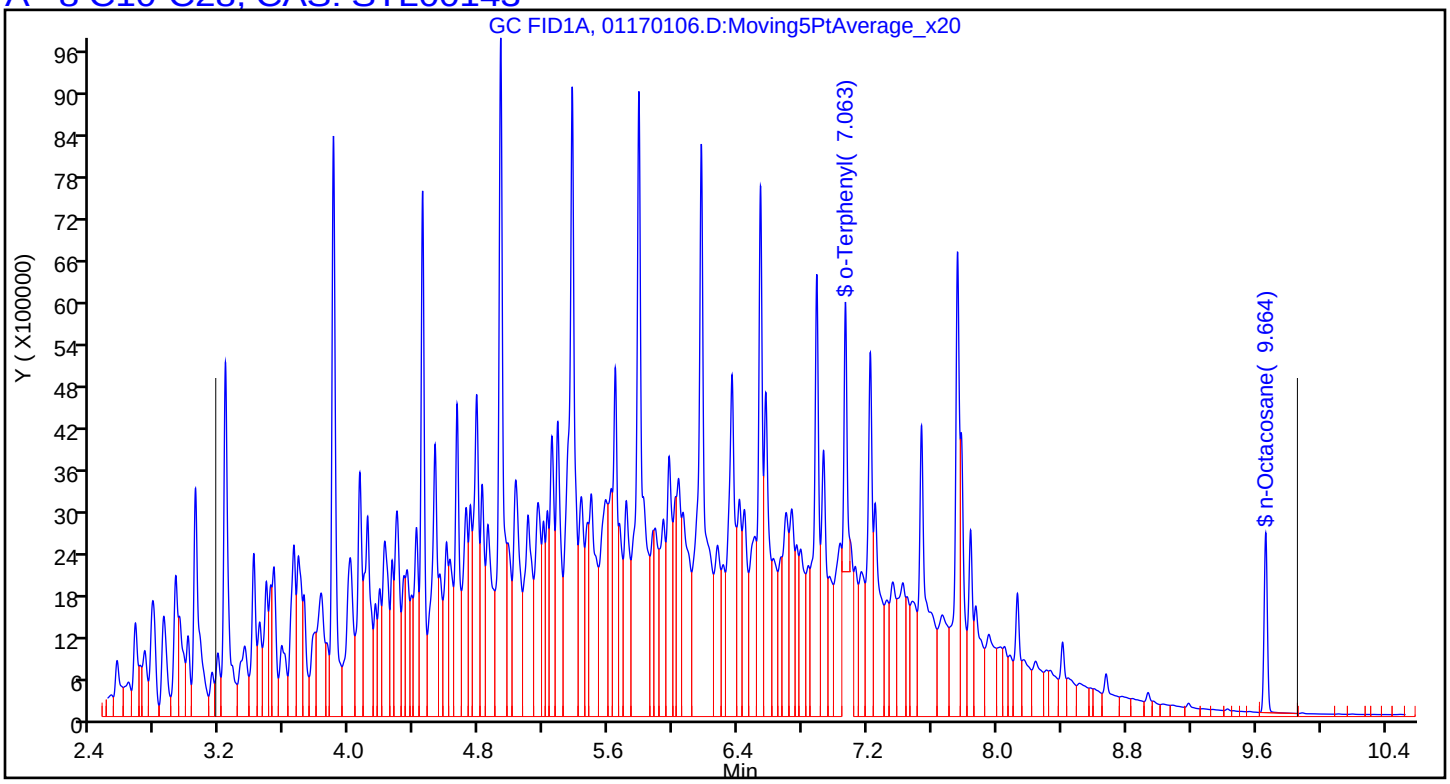


Report Date: 20-Jan-2020 09:33:20 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170106.D				
Injection Date:	17-Jan-2020 15:43:37	Instrument ID:	SGC_U2a		
Lims ID:	STD4				
Client ID:					
Operator ID:	RP	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

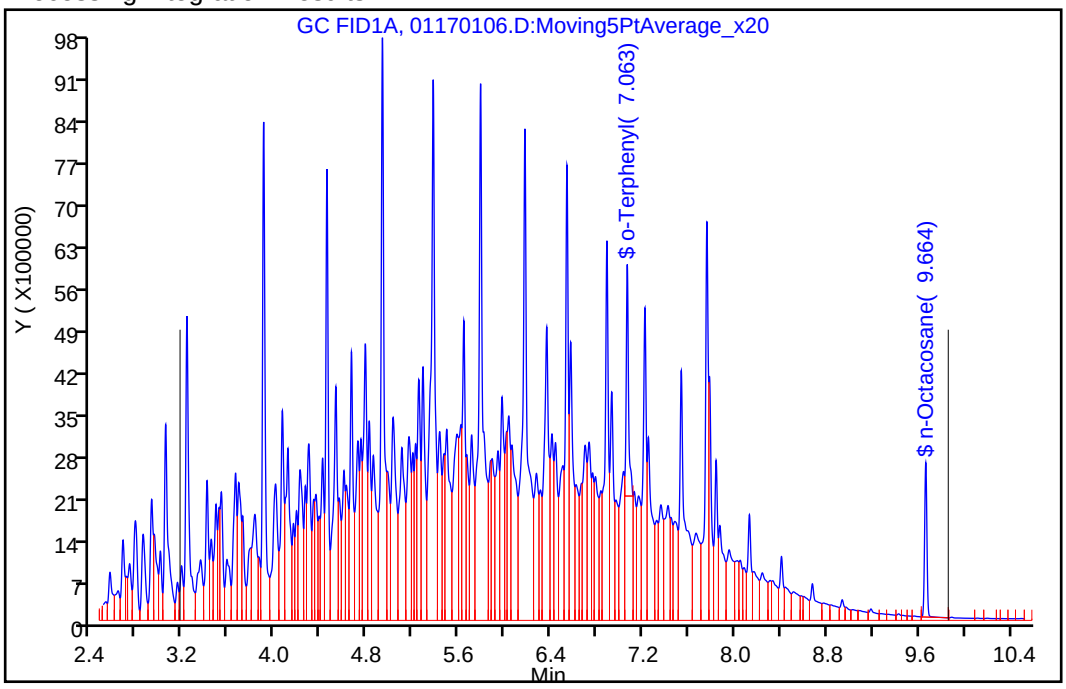
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170106.D				
Injection Date:	17-Jan-2020 15:43:37	Instrument ID:	SGC_U2a		
Lims ID:	STD4				
Client ID:					
Operator ID:	RP	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.513, CAS: STL00143

Signal: 1

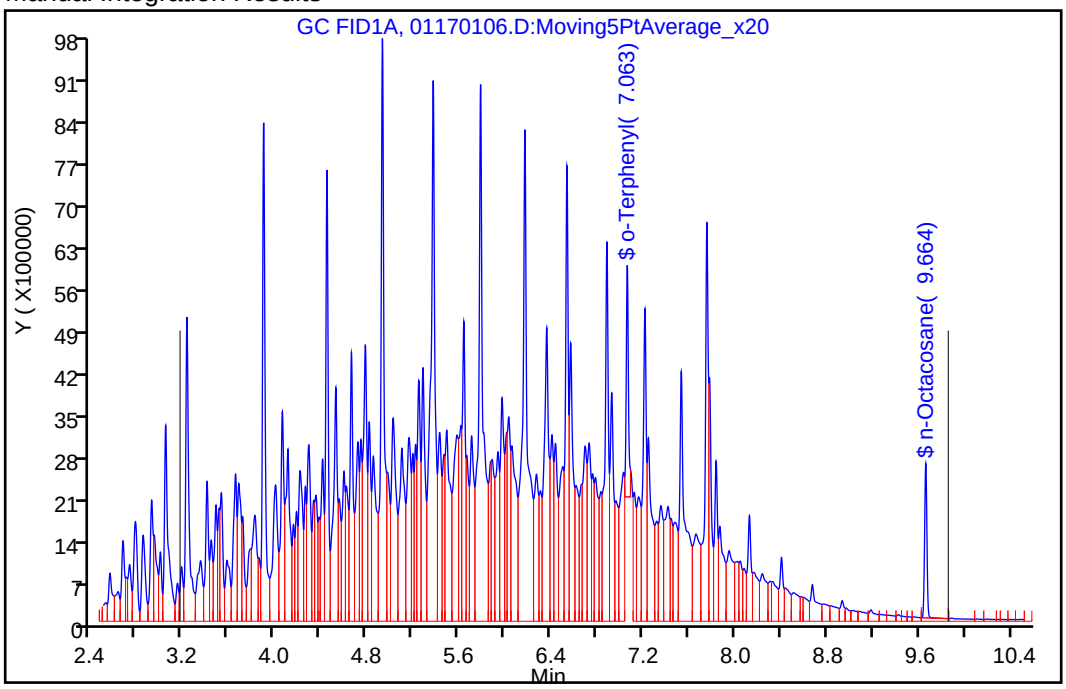
Processing Integration Results

RT: 6.51
Response: 731442568
Amount: 4916.6081



Manual Integration Results

RT: 6.51
Response: 727447828
Amount: 4931.6660



Reviewer: paulr, 17-Jan-2020 16:08:58

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

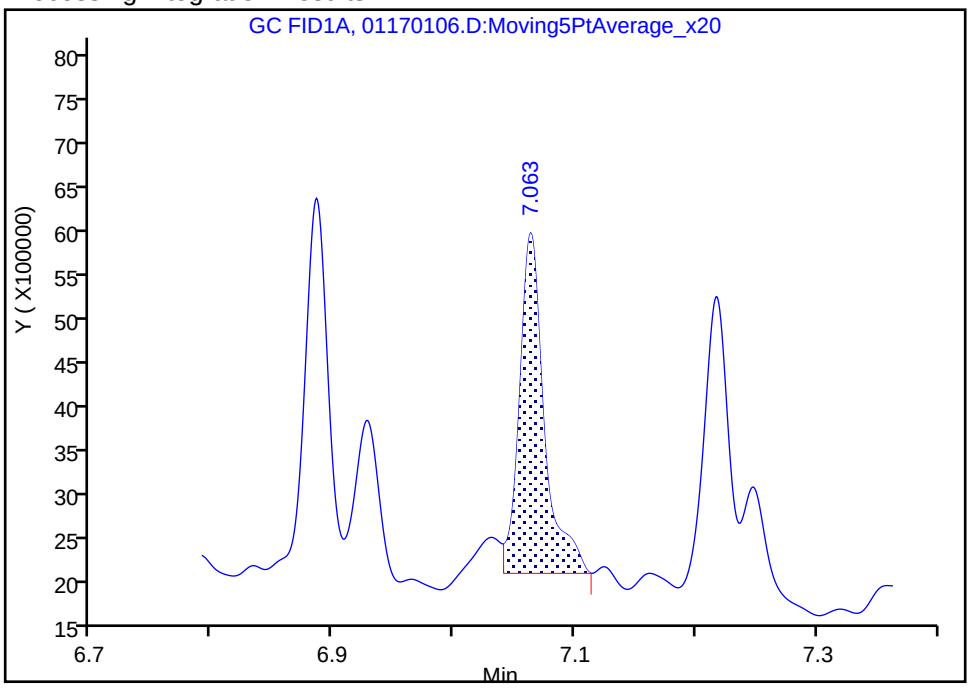
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170106.D				
Injection Date:	17-Jan-2020 15:43:37	Instrument ID:	SGC_U2a		
Lims ID:	STD4				
Client ID:					
Operator ID:	RP	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

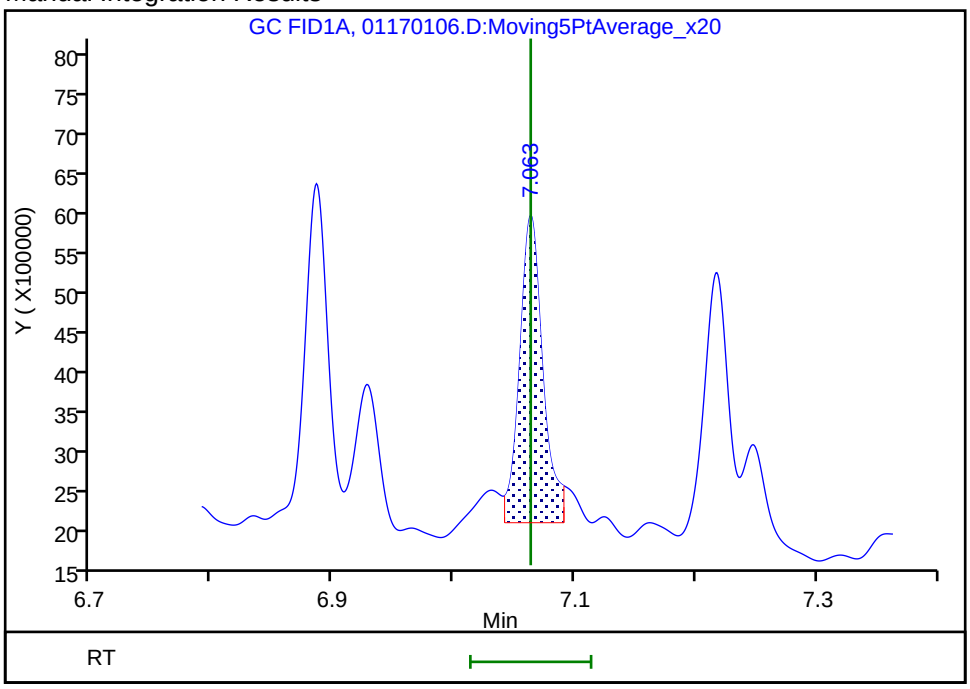
Processing Integration Results

RT: 7.06
Area: 5495413
Amount: 24.714482
Amount Units: ug/ml



Manual Integration Results

RT: 7.06
Area: 5138235
Amount: 25.659583
Amount Units: ug/ml



Reviewer: paulr, 17-Jan-2020 16:08:58
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170107.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Jan-2020 16:05:56 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3
Misc. Info.: 280-0088679-008
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:33 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 17:20:15

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.029	(3.167-8.892)		148529385	981.0	990.3	M
A	8 C10-C28						M
	6.513	(3.167-9.860)		150113936	992.0	1002.0	M
A	22 C10-C32						M
	6.925	(3.167-10.683)		150833963	996.0	1006.2	M
$	9 o-Terphenyl						M
	7.059	7.063	-0.004	1022381	5.00	5.11	M
A	10 C10-C36						M
	7.427	(3.167-11.687)		152470194	1000.0	1010.5	M
$	14 n-Octacosane						
	9.663	9.664	-0.001	743861	5.00	5.11	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L4/CCV_00086 Amount Added: 40.00 Units: uL

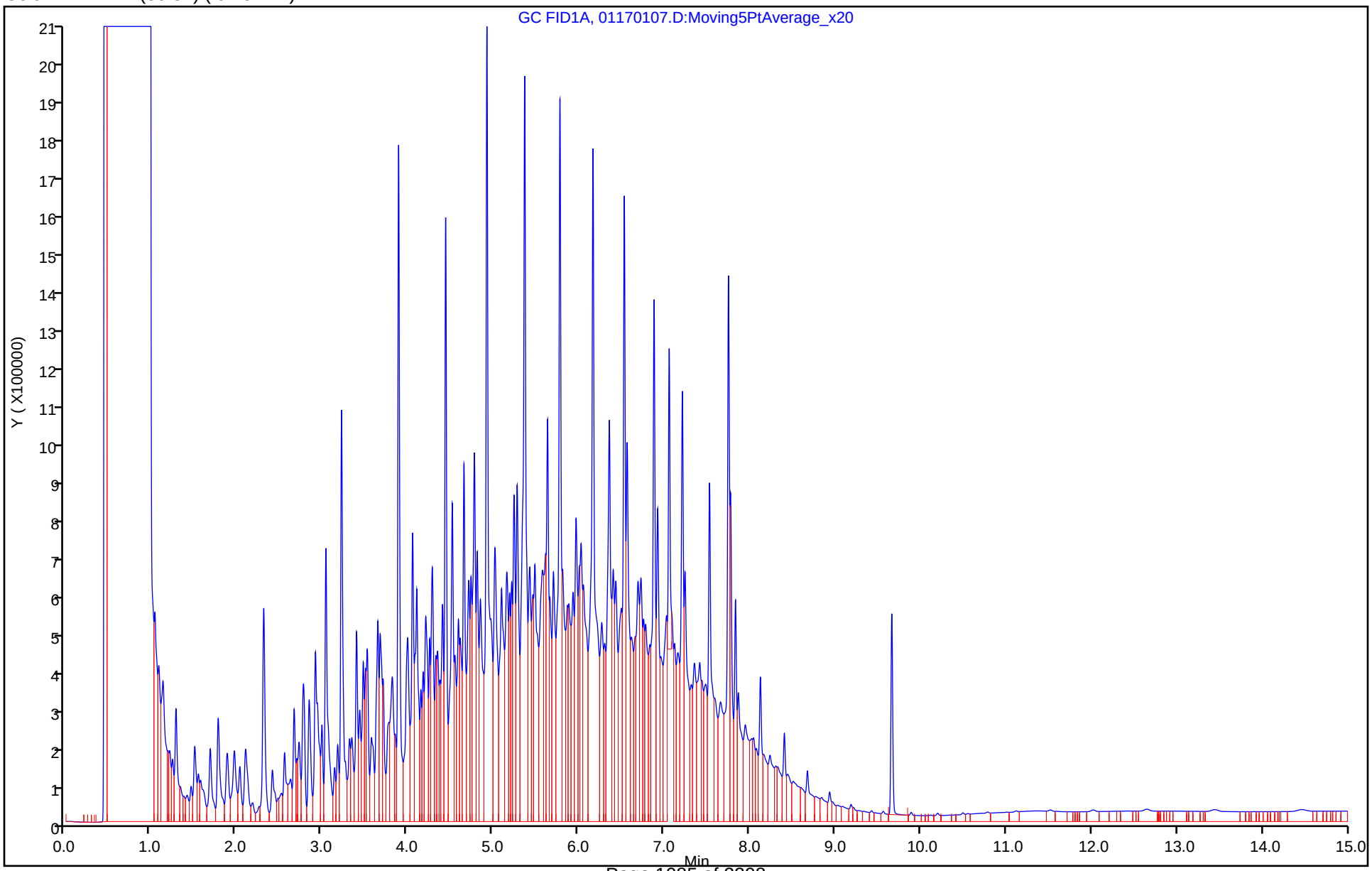
Report Date: 20-Jan-2020 09:33:36 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170107.D

Injection Date:	17-Jan-2020 16:05:56	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

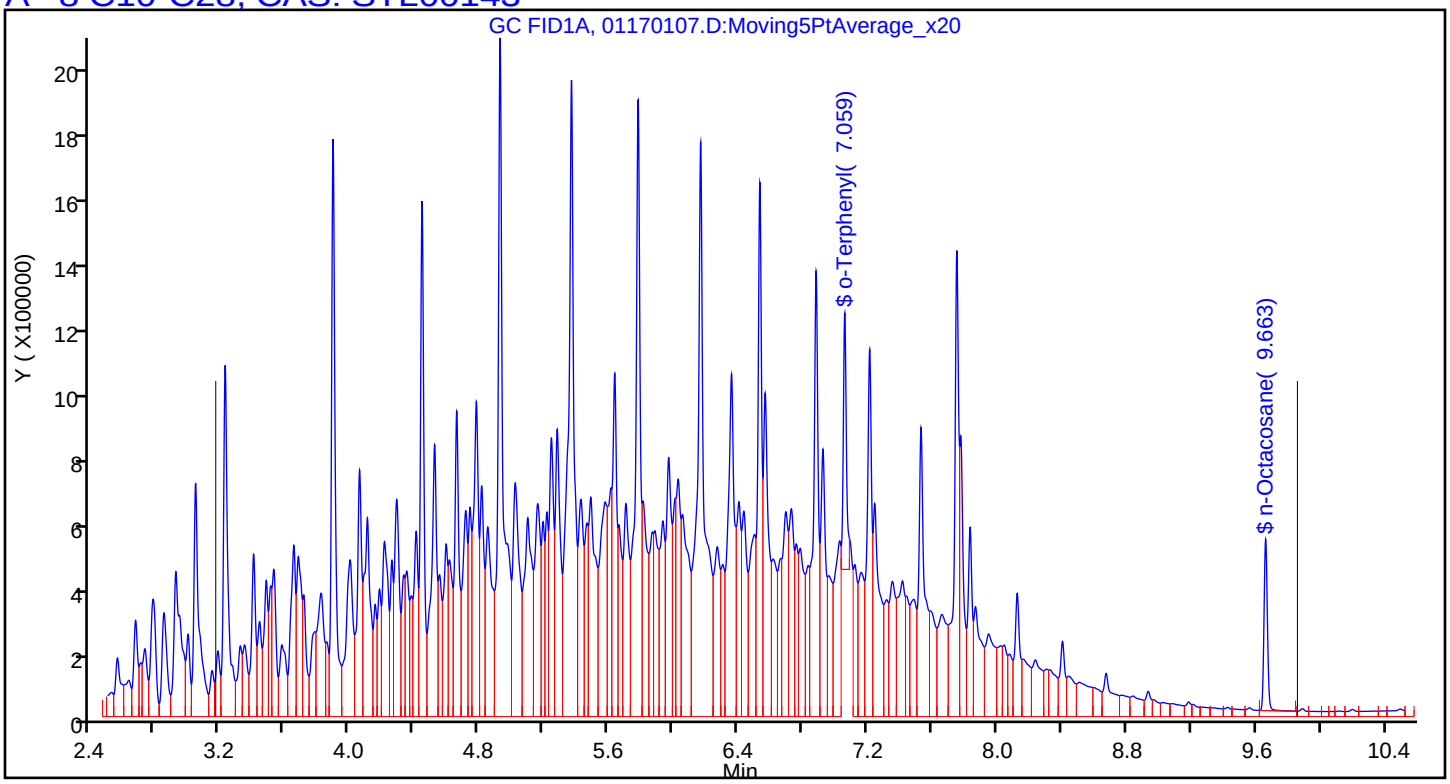


Report Date: 20-Jan-2020 09:33:41 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170107.D				
Injection Date:	17-Jan-2020 16:05:56	Instrument ID:	SGC_U2a		
Lims ID:	STD3				
Client ID:					
Operator ID:	RP	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

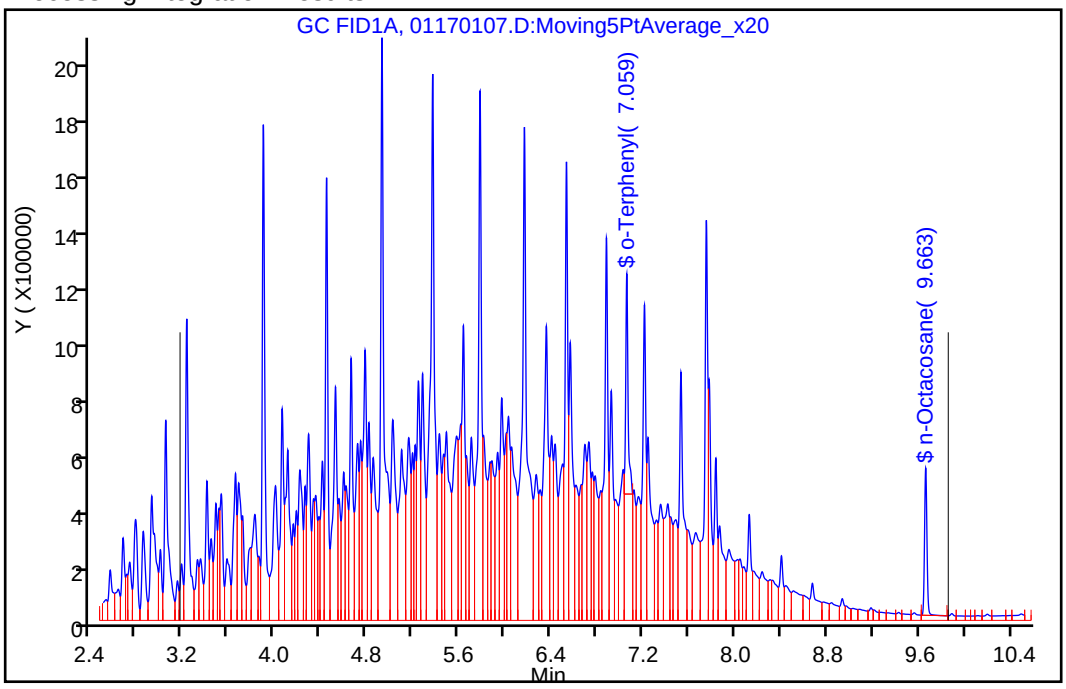
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170107.D				
Injection Date:	17-Jan-2020 16:05:56	Instrument ID:	SGC_U2a		
Lims ID:	STD3				
Client ID:					
Operator ID:	RP	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.513, CAS: STL00143

Signal: 1

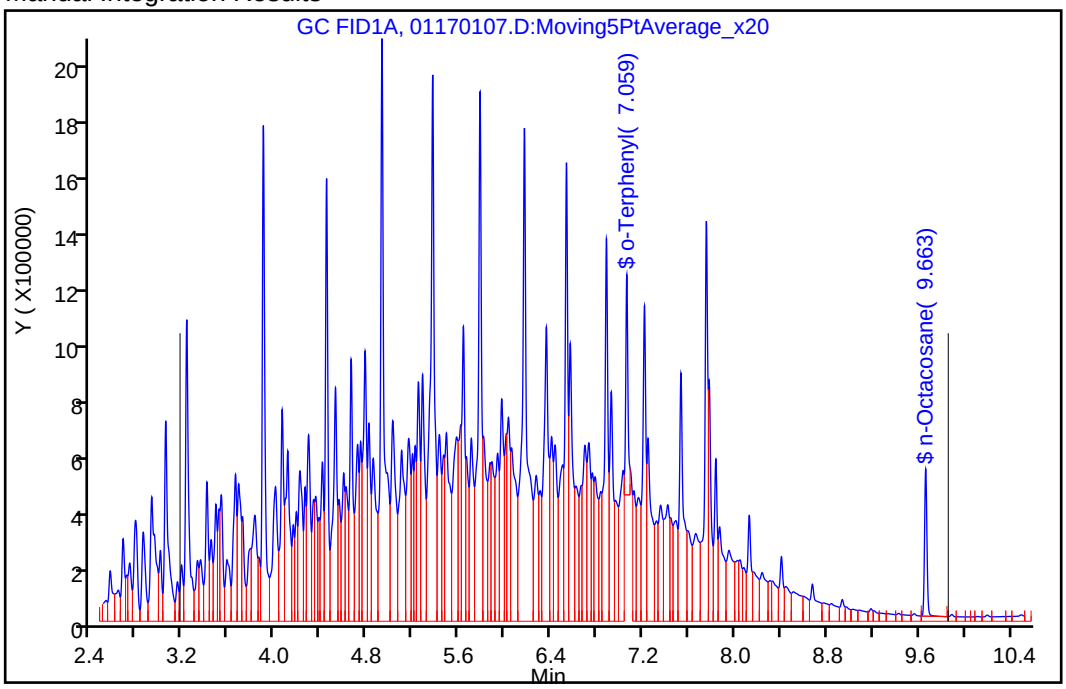
Processing Integration Results

RT: 6.51
Response: 151022660
Amount: 1006.6131



Manual Integration Results

RT: 6.51
Response: 150113936
Amount: 1001.9886



Reviewer: paulr, 17-Jan-2020 17:20:08
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

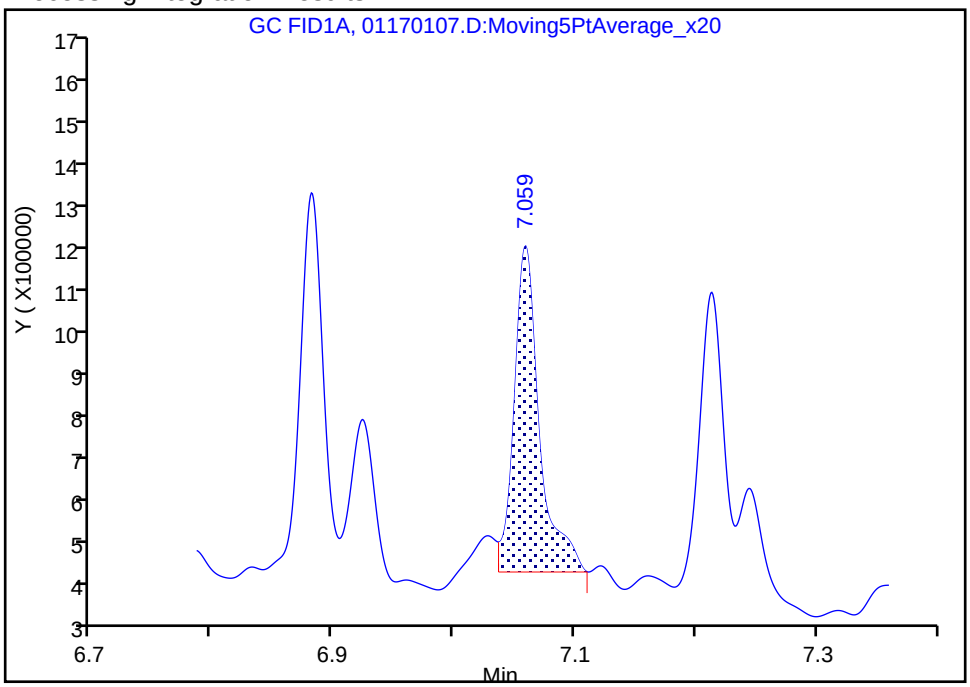
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170107.D				
Injection Date:	17-Jan-2020 16:05:56	Instrument ID:	SGC_U2a		
Lims ID:	STD3				
Client ID:					
Operator ID:	RP	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

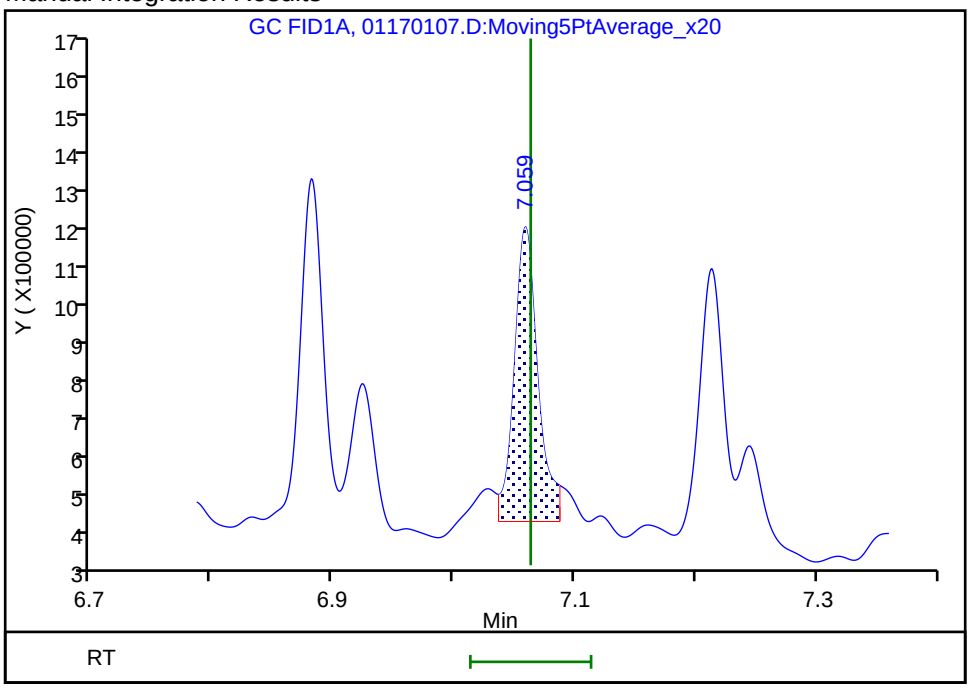
Processing Integration Results

RT: 7.06
Area: 1091364
Amount: 5.263934
Amount Units: ug/ml



Manual Integration Results

RT: 7.06
Area: 1022381
Amount: 5.105619
Amount Units: ug/ml



Reviewer: paulr, 17-Jan-2020 17:20:08

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170108.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Jan-2020 16:28:19 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2
Misc. Info.: 280-0088679-009
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:48 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 17:20:46

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.029	(3.167-8.892)		37819995	245.3	239.0	M
A	8 C10-C28						M
	6.513	(3.167-9.860)		38418075	248.0	241.7	M
A	22 C10-C32						M
	6.925	(3.167-10.683)		38949702	249.0	242.7	M
$	9 o-Terphenyl						M
	7.058	7.063	-0.005	235254	1.25	1.17	M
A	10 C10-C36						M
	7.427	(3.167-11.687)		40648272	250.0	244.7	M
$	14 n-Octacosane						
	9.669	9.664	0.005	173638	1.25	1.19	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L4/CCV_00086 Amount Added: 10.00 Units: uL

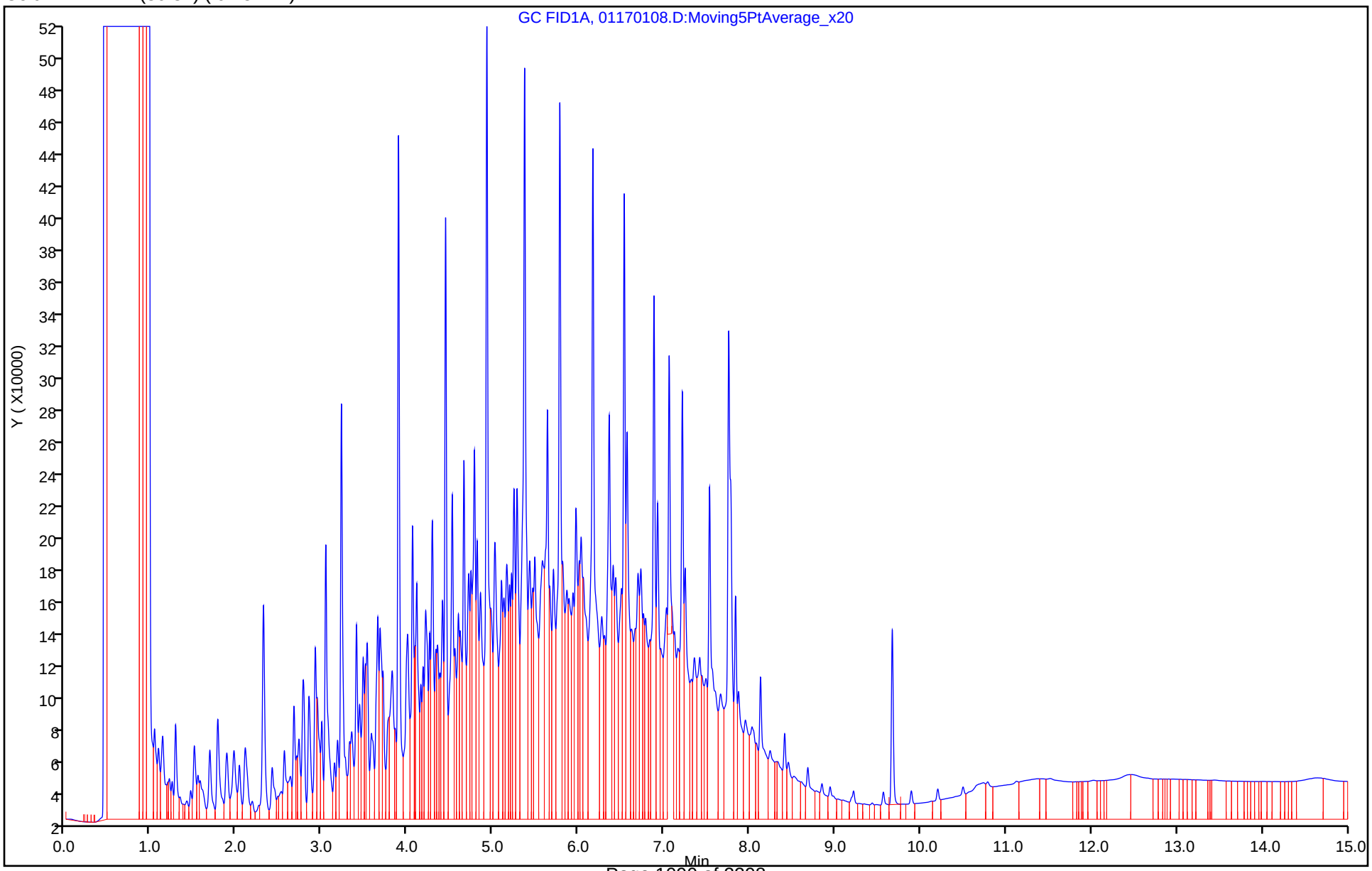
Report Date: 20-Jan-2020 09:33:49 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170108.D

Injection Date:	17-Jan-2020 16:28:19	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD2			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

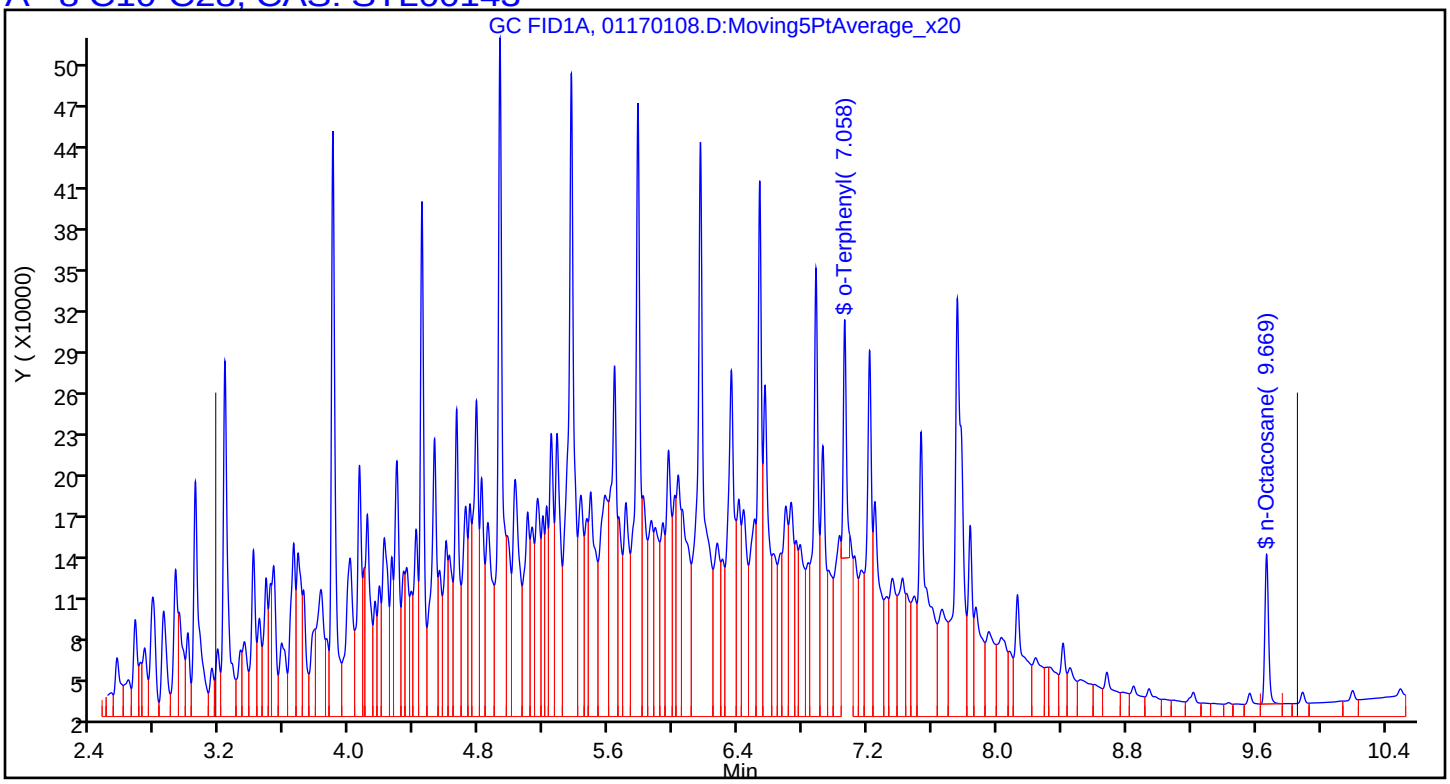


Report Date: 20-Jan-2020 09:33:49 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170108.D				
Injection Date:	17-Jan-2020 16:28:19	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	RP	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

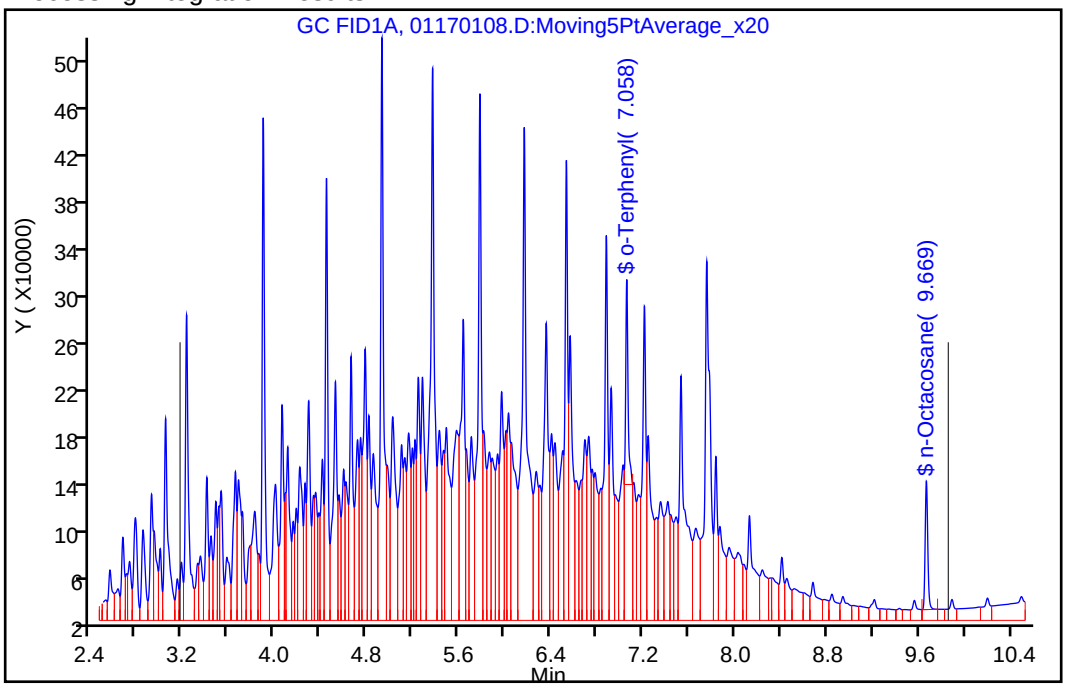
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170108.D				
Injection Date:	17-Jan-2020 16:28:19	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	RP	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.513, CAS: STL00143

Signal: 1

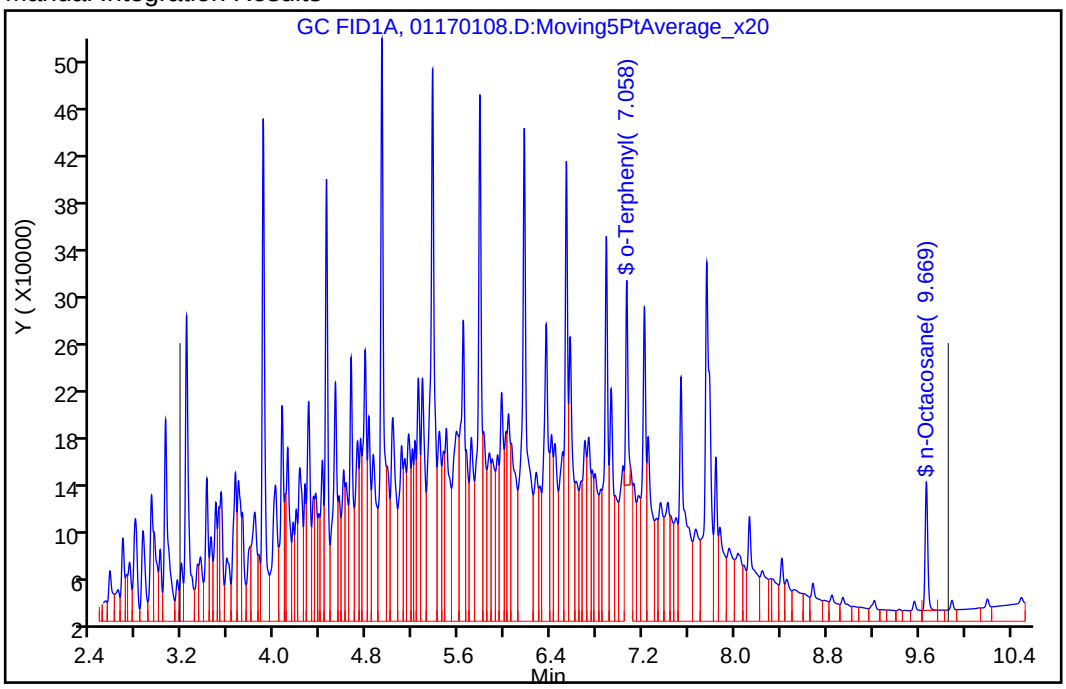
Processing Integration Results

RT: 6.51
Response: 38695281
Amount: 242.3551



Manual Integration Results

RT: 6.51
Response: 38418075
Amount: 241.7202



Reviewer: paulr, 17-Jan-2020 17:20:43
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

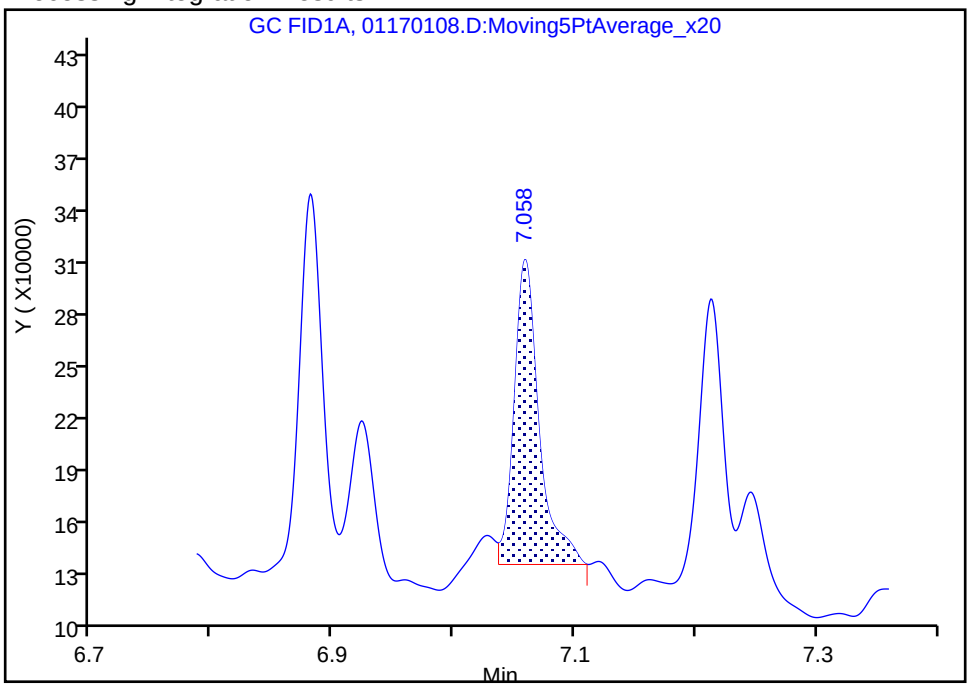
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170108.D				
Injection Date:	17-Jan-2020 16:28:19	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	RP	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

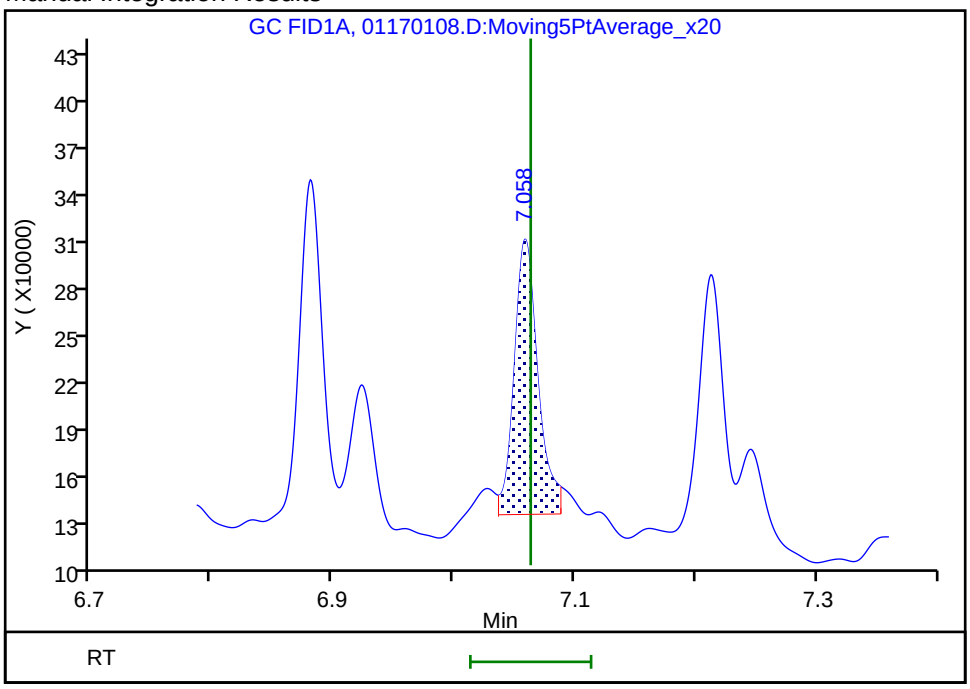
Processing Integration Results

RT: 7.06
Area: 247789
Amount: 1.228033
Amount Units: ug/ml



Manual Integration Results

RT: 7.06
Area: 235254
Amount: 1.174824
Amount Units: ug/ml



Reviewer: paulr, 17-Jan-2020 17:20:43

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Jan-2020 16:50:44 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 280-0088679-010
Operator ID: RP Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:56 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 17:22:14

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.029	(3.167-8.892)		17260228	98.1	99.5	M
A	8 C10-C28						M
	6.513	(3.167-9.860)		17670312	99.2	100.5	M
A	22 C10-C32						M
	6.925	(3.167-10.683)		18168644	99.6	100.9	M
$	9 o-Terphenyl						M
	7.061	7.063	-0.002	95297	0.5000	0.4759	M
A	10 C10-C36						M
	7.427	(3.167-11.687)		19648781	100.0	100.9	M
$	14 n-Octacosane						
	9.673	9.664	0.009	74027	0.5000	0.5087	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L4/CCV_00086 Amount Added: 4.00 Units: uL

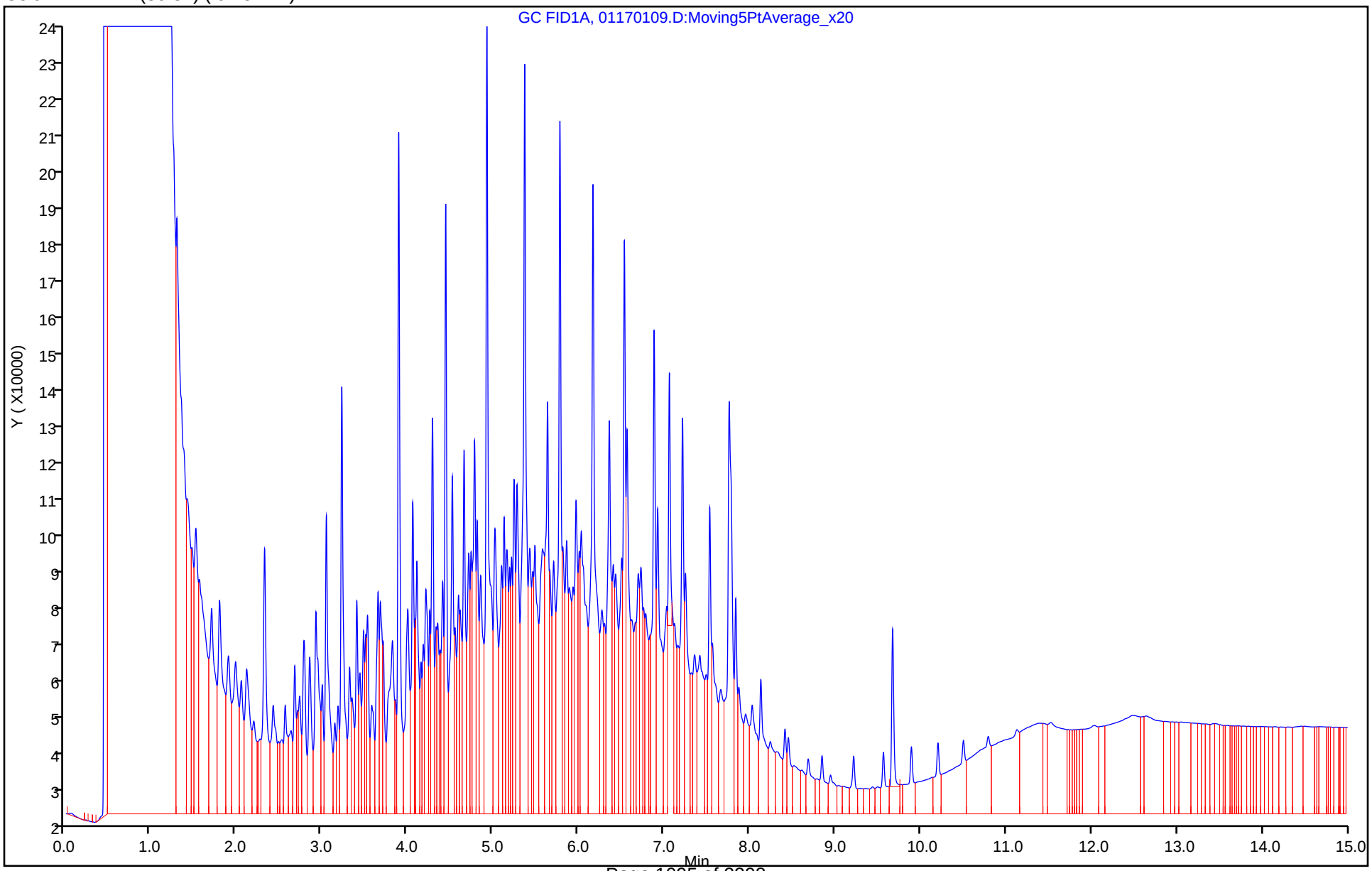
Report Date: 20-Jan-2020 09:33:56 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Injection Date:	17-Jan-2020 16:50:44	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	STD1			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

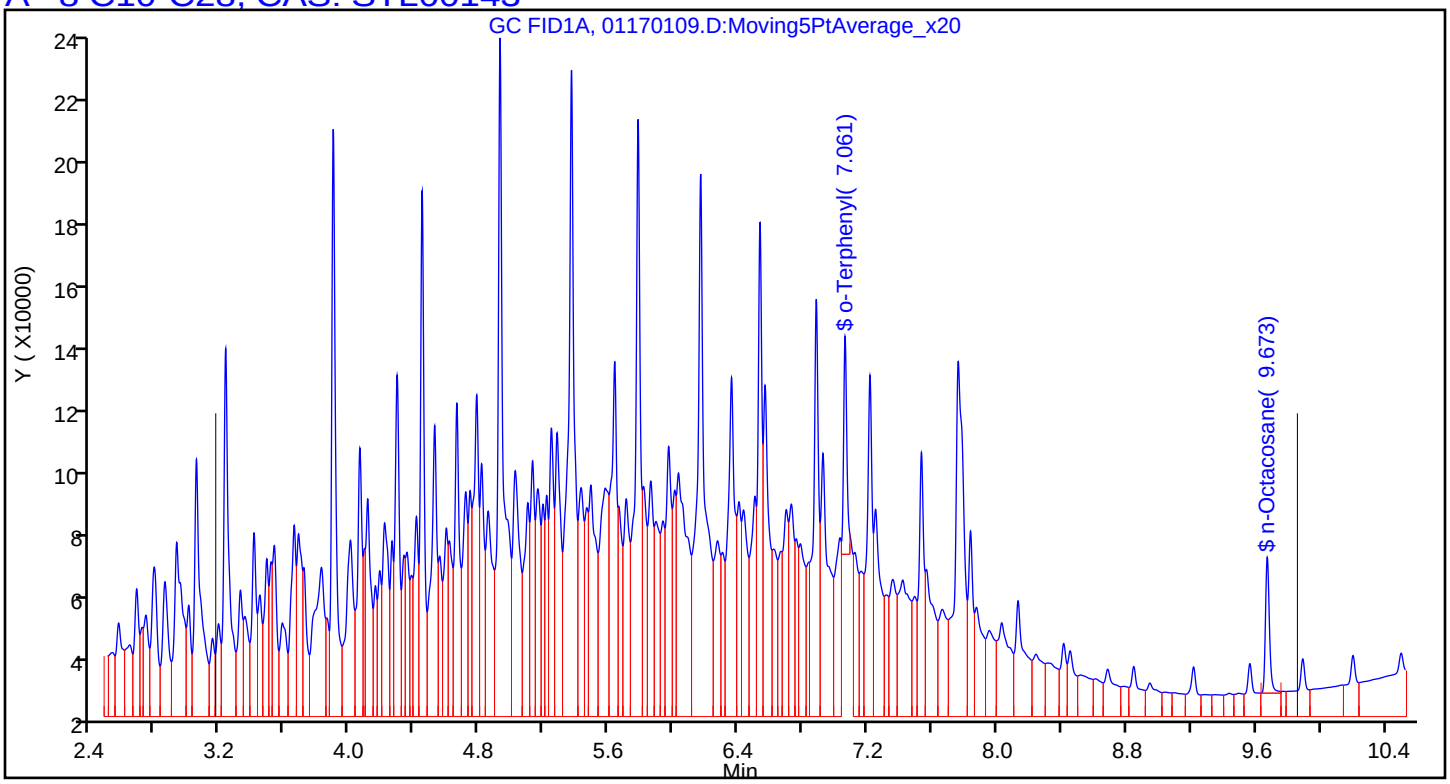


Report Date: 20-Jan-2020 09:33:57 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D				
Injection Date:	17-Jan-2020 16:50:44	Instrument ID:	SGC_U2a		
Lims ID:	STD1				
Client ID:					
Operator ID:	RP	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

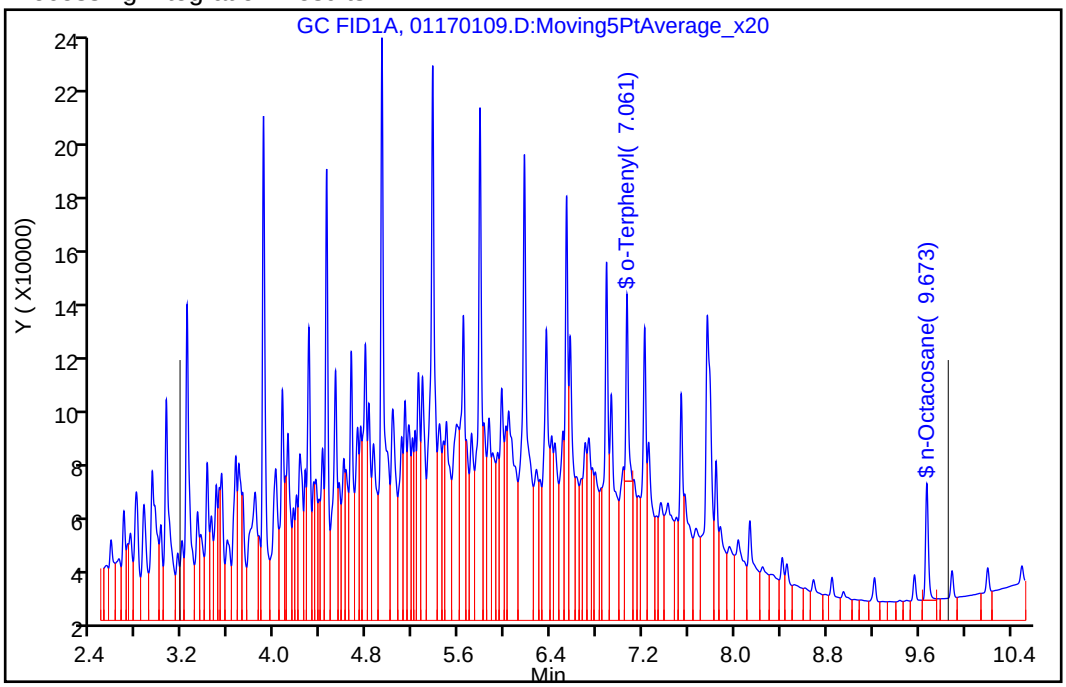
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D				
Injection Date:	17-Jan-2020 16:50:44	Instrument ID:	SGC_U2a		
Lims ID:	STD1				
Client ID:					
Operator ID:	RP	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.513, CAS: STL00143

Signal: 1

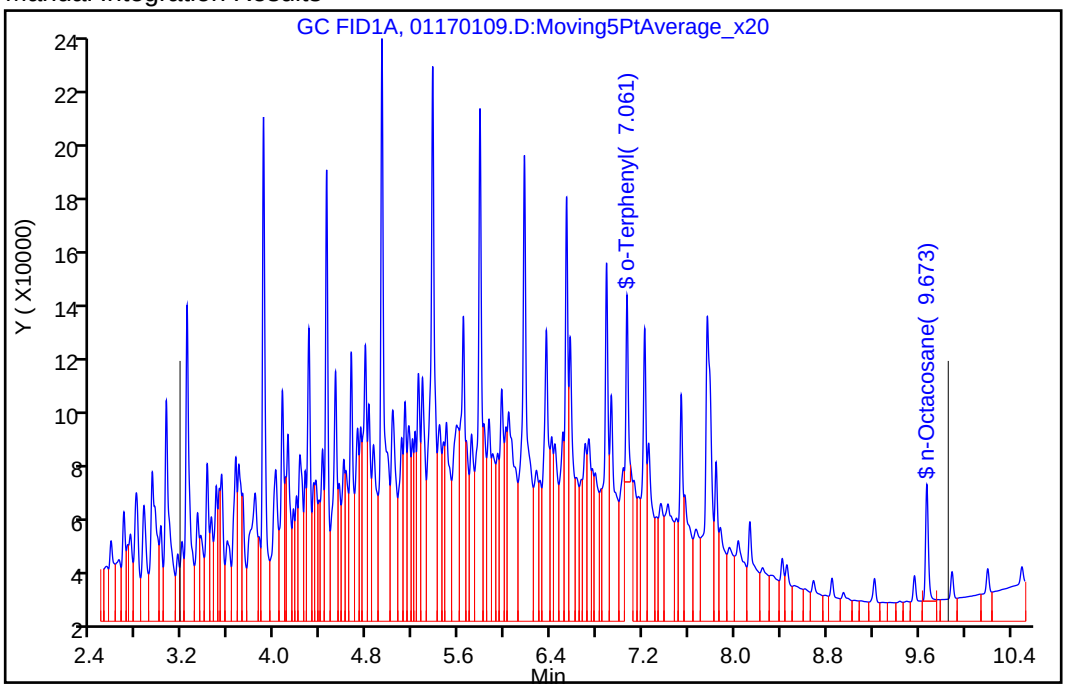
Processing Integration Results

RT: 6.51
Response: 17800253
Amount: 100.2370



Manual Integration Results

RT: 6.51
Response: 17670312
Amount: 100.4986



Reviewer: paulr, 17-Jan-2020 17:22:10
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

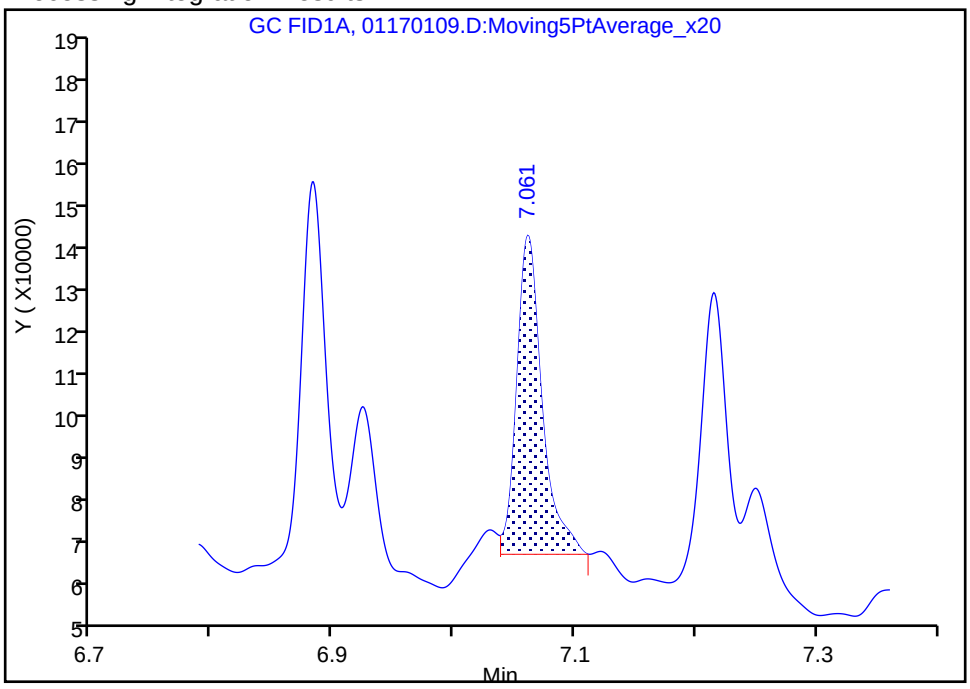
Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D				
Injection Date:	17-Jan-2020 16:50:44	Instrument ID:	SGC_U2a		
Lims ID:	STD1				
Client ID:					
Operator ID:	RP	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

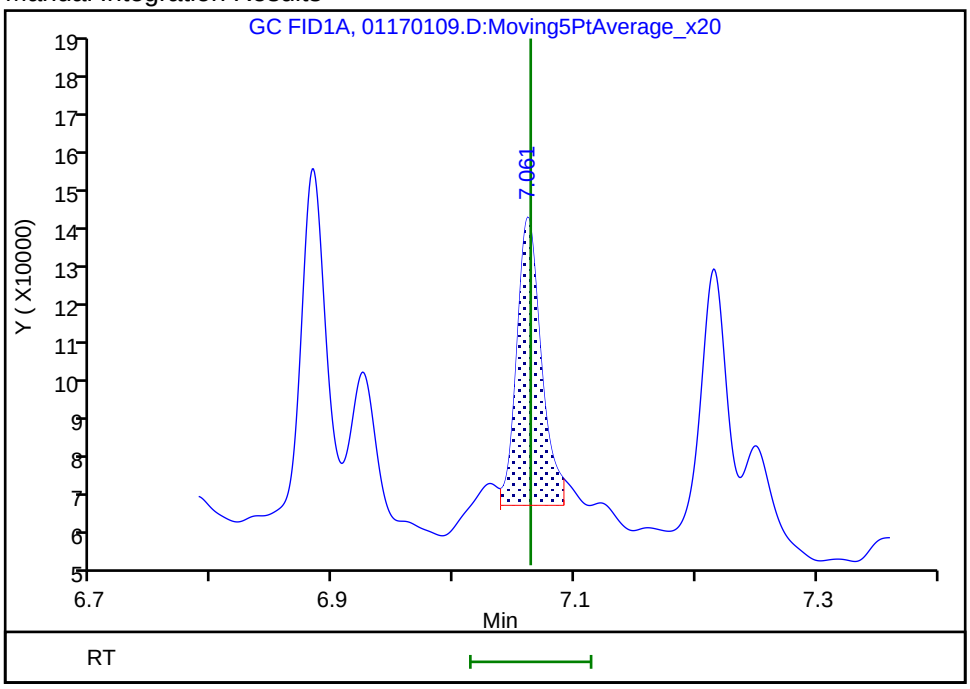
Processing Integration Results

RT: 7.06
Area: 98927
Amount: 0.510885
Amount Units: ug/ml



Manual Integration Results

RT: 7.06
Area: 95297
Amount: 0.475899
Amount Units: ug/ml



Reviewer: paulr, 17-Jan-2020 17:22:10

Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: ICV 280-483279/11 Calibration Date: 01/17/2020 17:13

Instrument ID: SGC_U2a Calib Start Date: 01/17/2020 14:36

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 01/17/2020 16:50

Lab File ID: 01170110.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		156506		2090	1980	5.5	20.0
o-Terphenyl (Surr)	Ave	200246	172801		17.3	20.0	-13.7	20.0
n-Octacosane	Ave	145519	134478		18.5	20.0	-7.6	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: ICV 280-483279/11 Calibration Date: 01/17/2020 17:13

Instrument ID: SGC_U2a Calib Start Date: 01/17/2020 14:36

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 01/17/2020 16:50

Lab File ID: 01170110.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.51	3.17	9.86
o-Terphenyl (Surr)	7.06	7.01	7.11
n-Octacosane	9.66	9.61	9.71

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170110.D
Lims ID: ICV DRO
Client ID:
Sample Type: ICV
Inject. Date: 17-Jan-2020 17:13:13 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV DRO
Misc. Info.: 280-0088679-011
Operator ID: RP Instrument ID: SGC_U2a
Sublist:
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 20-Jan-2020 09:33:56 Calib Date: 17-Jan-2020 16:50:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170109.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0316

First Level Reviewer: paulr Date: 17-Jan-2020 17:33:14

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.029	(3.167-8.892)		309376128	1962.0	2082.0	
A	8 C10-C28						
	6.513	(3.167-9.860)		310507271	1984.0	2093.7	
A	22 C10-C32						
	6.925	(3.167-10.683)		311098892	1992.0	2099.9	
$	9 o-Terphenyl						
	7.060	7.063	-0.003	3456020	20.0	17.3	
A	10 C10-C36						
	7.427	(3.167-11.687)		312565390	2000.0	2107.0	
$	14 n-Octacosane						
	9.663	9.664	-0.001	2689560	20.0	18.5	

Reagents:

DRO_SS_00022 Amount Added: 200.00 Units: uL

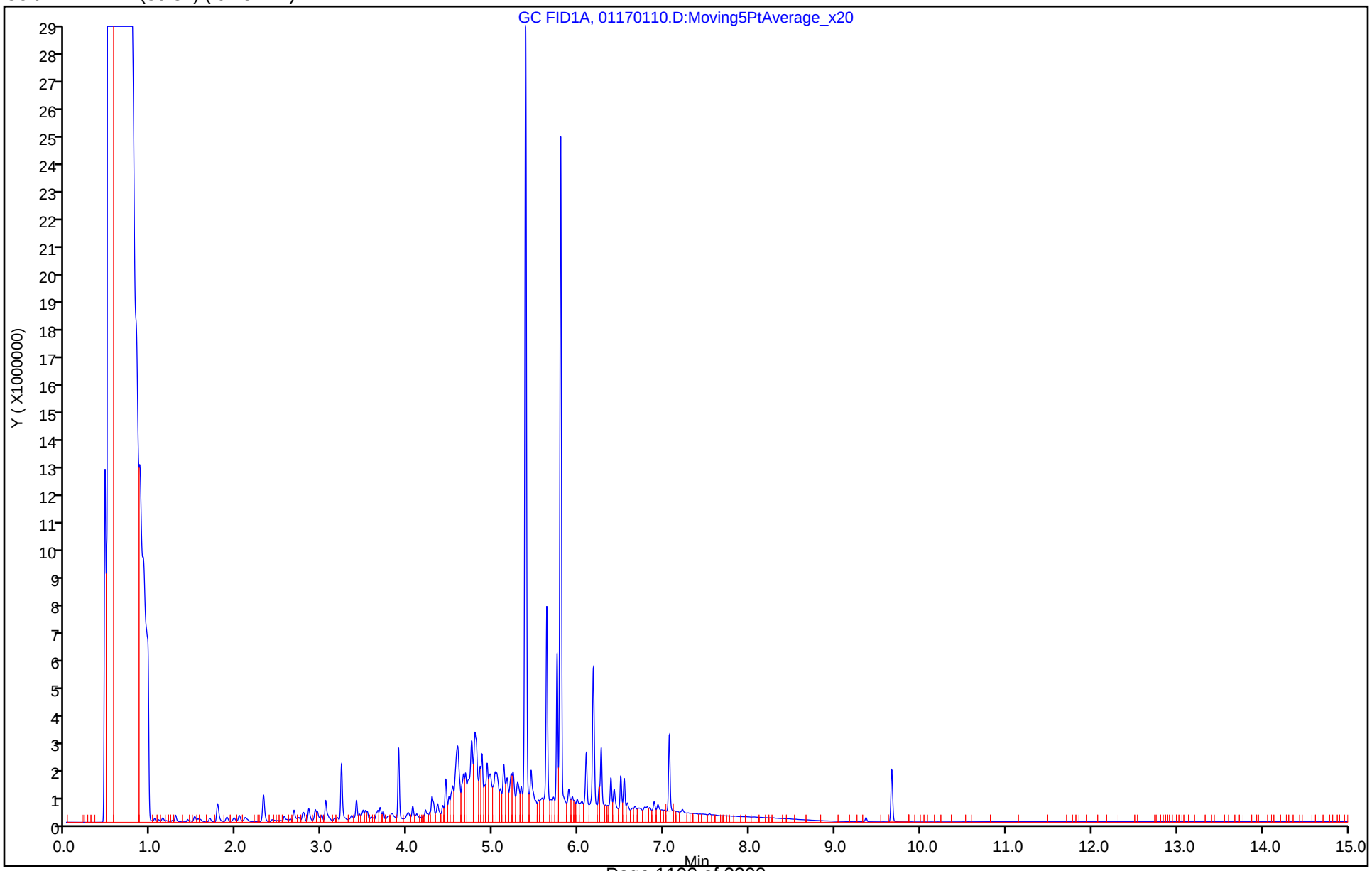
Report Date: 20-Jan-2020 09:34:05 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170110.D

Injection Date:	17-Jan-2020 17:13:13	Instrument ID:	SGC_U2a	Operator ID:	RP
Lims ID:	ICV DRO			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

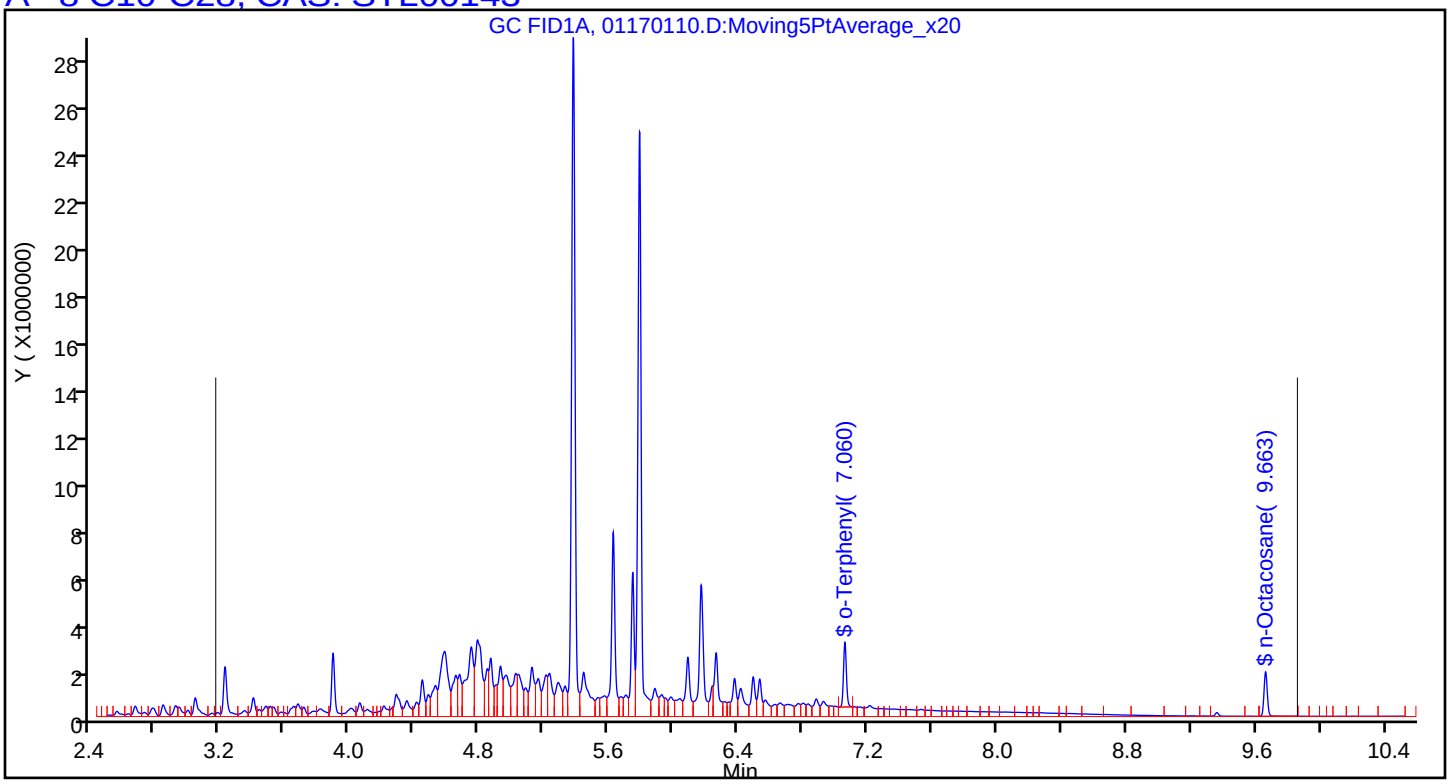


Report Date: 20-Jan-2020 09:34:05 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20200117-88679.b\01170110.D				
Injection Date:	17-Jan-2020 17:13:13	Instrument ID:	SGC_U2a		
Lims ID:	ICV DRO				
Client ID:					
Operator ID:	RP	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCVRT 280-500427/4 Calibration Date: 06/30/2020 10:51

Instrument ID: SGC_U2a Calib Start Date: 01/17/2020 14:36

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 01/17/2020 16:50

Lab File ID: 044F0301.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		151801		5110	4960	2.9	20.0
o-Terphenyl (Surr)	Ave	200246	208056		26.0	25.0	3.9	20.0
n-Octacosane	Ave	145519	150740		25.9	25.0	3.6	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCVRT 280-500427/4 Calibration Date: 06/30/2020 10:51

Instrument ID: SGC_U2a Calib Start Date: 01/17/2020 14:36

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 01/17/2020 16:50

Lab File ID: 044F0301.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.48	3.16	9.80
o-Terphenyl (Surr)	7.07	7.02	7.12
n-Octacosane	9.69	9.64	9.74

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\044F0301.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 30-Jun-2020 10:51:08 ALS Bottle#: 44 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: dro
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:23 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

First Level Reviewer: mcaleesem Date: 30-Jun-2020 13:04:00

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.018	(3.156-8.879)		744570480	4905.0	5035.5	
A	8 C10-C28						
	6.476	(3.156-9.796)		752931163	4960.0	5105.1	
A	22 C10-C32						
	6.900	(3.156-10.644)		761086361	4980.0	5170.6	
$	9 o-Terphenyl						
	7.073	7.073	0.000	5201403	25.0	26.0	
A	10 C10-C36						
	7.452	(3.156-11.748)		778072838	5000.0	5295.1	
$	14 n-Octacosane						
	9.688	9.688	0.000	3768498	25.0	25.9	

Reagents:

DRO_L4/CCV_00089 Amount Added: 100.00 Units: uL

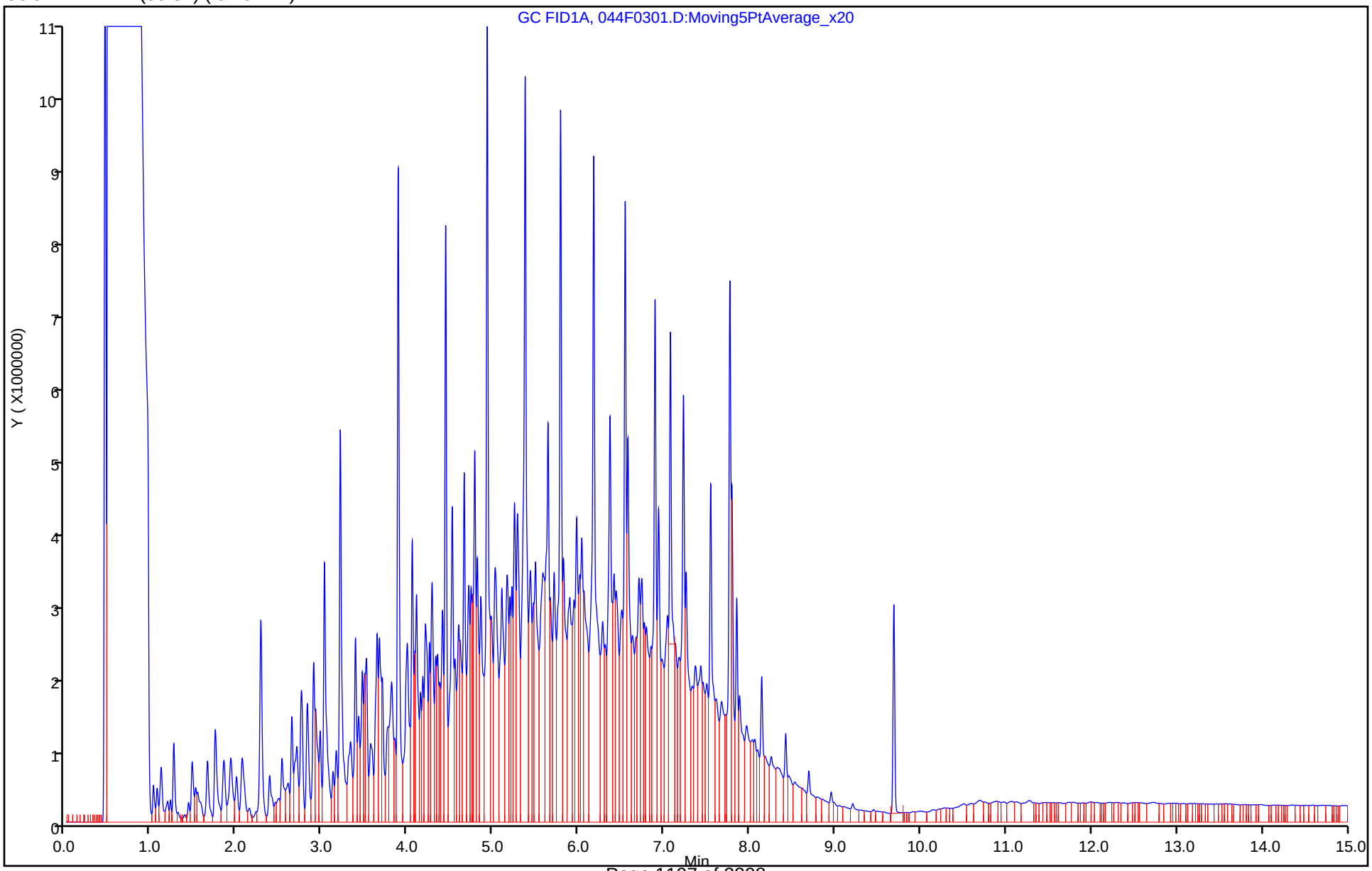
Report Date: 30-Jun-2020 17:23:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\044F0301.D

Injection Date:	30-Jun-2020 10:51:08	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Report Date: 30-Jun-2020 17:23:23 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\044F0301.D

Injection Date: 30-Jun-2020 10:51:08 Instrument ID: SGC_U2a

Lims ID: CCVRT

Client ID:

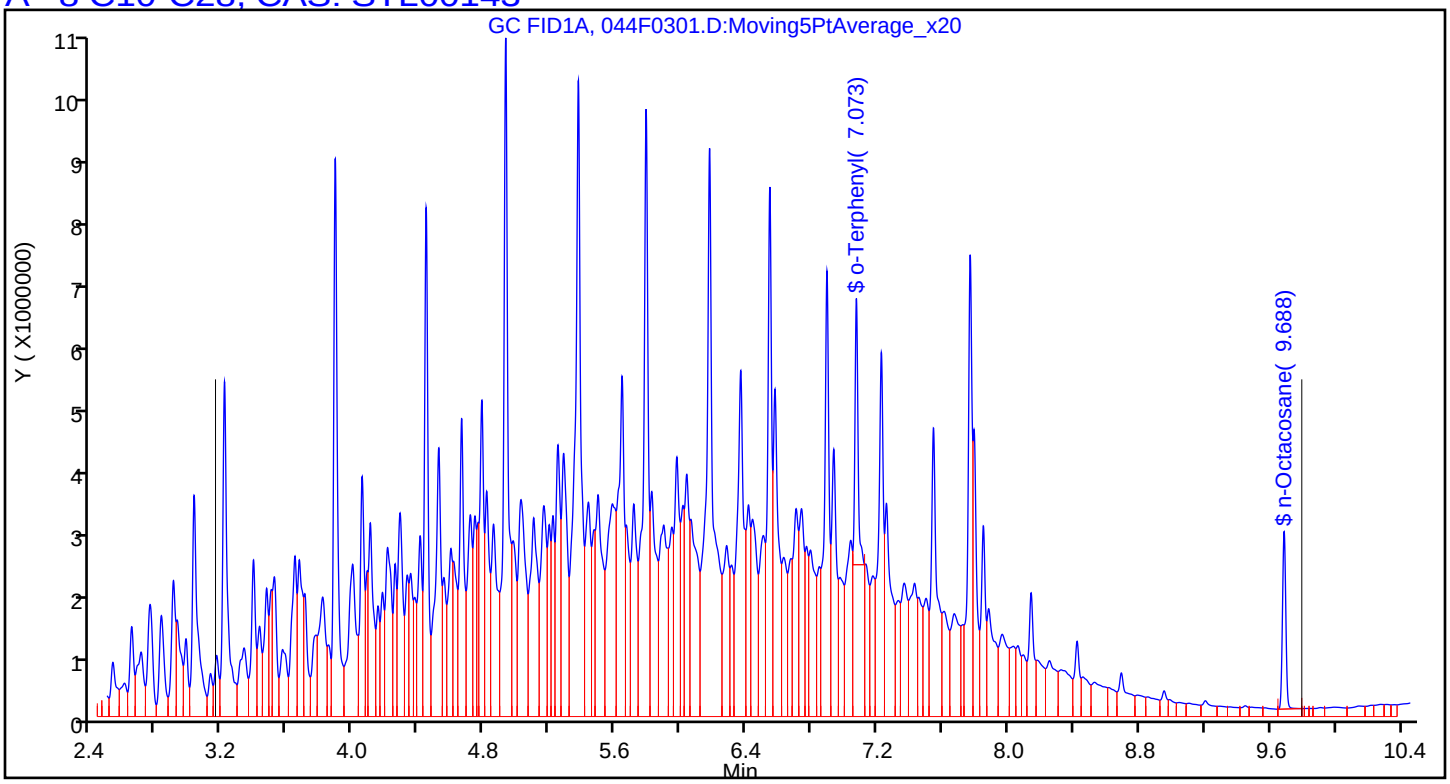
Operator ID: MM ALS Bottle#: 44 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: DRO_U2a Limit Group: GCSV - DRO

Column: RTX-1 (30.32) (0.25 mm) Detector GC FID1A

A 8 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-500427/15 Calibration Date: 06/30/2020 16:21

Instrument ID: SGC_U2a Calib Start Date: 01/17/2020 14:36

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 01/17/2020 16:50

Lab File ID: 063F1801.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		155836		5240	4960	5.7	20.0
o-Terphenyl (Surr)	Ave	200246	238518		29.8	25.0	19.1	20.0
n-Octacosane	Ave	145519	157087		27.0	25.0	8.0	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-500427/15 Calibration Date: 06/30/2020 16:21

Instrument ID: SGC_U2a Calib Start Date: 01/17/2020 14:36

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 01/17/2020 16:50

Lab File ID: 063F1801.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.48	3.16	9.80
o-Terphenyl (Surr)	7.07	7.02	7.12
n-Octacosane	9.69	9.64	9.74

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\063F1801.D
Lims ID: CCV DRO
Client ID:
Sample Type: CCV
Inject. Date: 30-Jun-2020 16:21:10 ALS Bottle#: 63 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: dro
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:38 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

First Level Reviewer: mcaleesem Date: 30-Jun-2020 16:54:20

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						M
	6.018	(3.156-8.879)		764748962	4905.0	5172.4	M
A	8 C10-C28						M
	6.476	(3.156-9.796)		772946290	4960.0	5241.4	M
A	22 C10-C32						M
	6.900	(3.156-10.644)		778187128	4980.0	5287.3	M
$	9 o-Terphenyl						M
	7.072	7.073	-0.001	5962959	25.0	29.8	M
A	10 C10-C36						M
	7.452	(3.156-11.748)		789023083	5000.0	5370.1	M
$	14 n-Octacosane						
	9.687	9.688	-0.001	3927183	25.0	27.0	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

DRO_L4/CCV_00089 Amount Added: 100.00 Units: uL

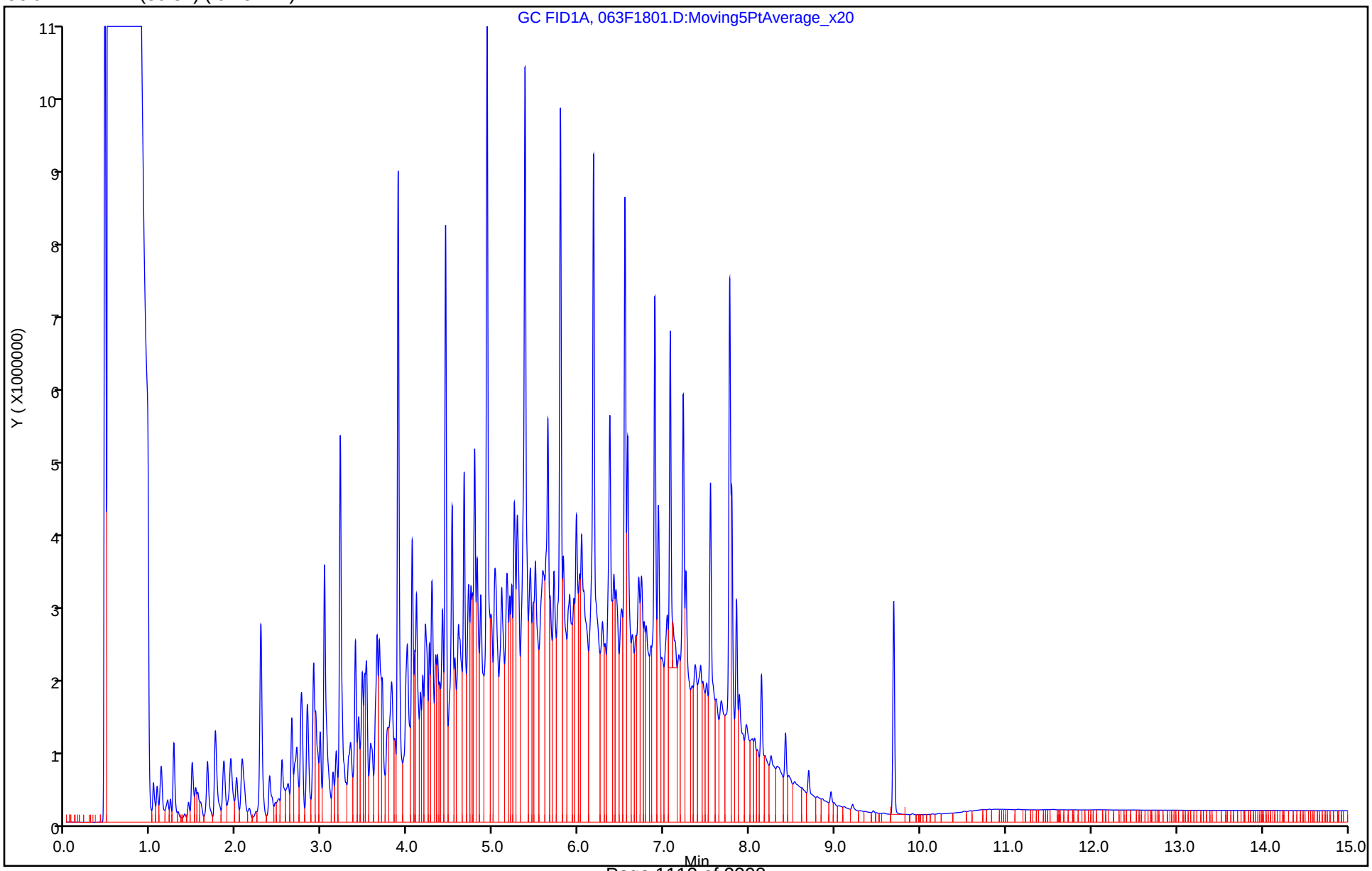
Report Date: 30-Jun-2020 17:23:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\063F1801.D

Injection Date:	30-Jun-2020 16:21:10	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	CCV DRO			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Report Date: 30-Jun-2020 17:23:39 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\063F1801.D

Injection Date: 30-Jun-2020 16:21:10 Instrument ID: SGC_U2a

Lims ID: CCV DRO

Client ID:

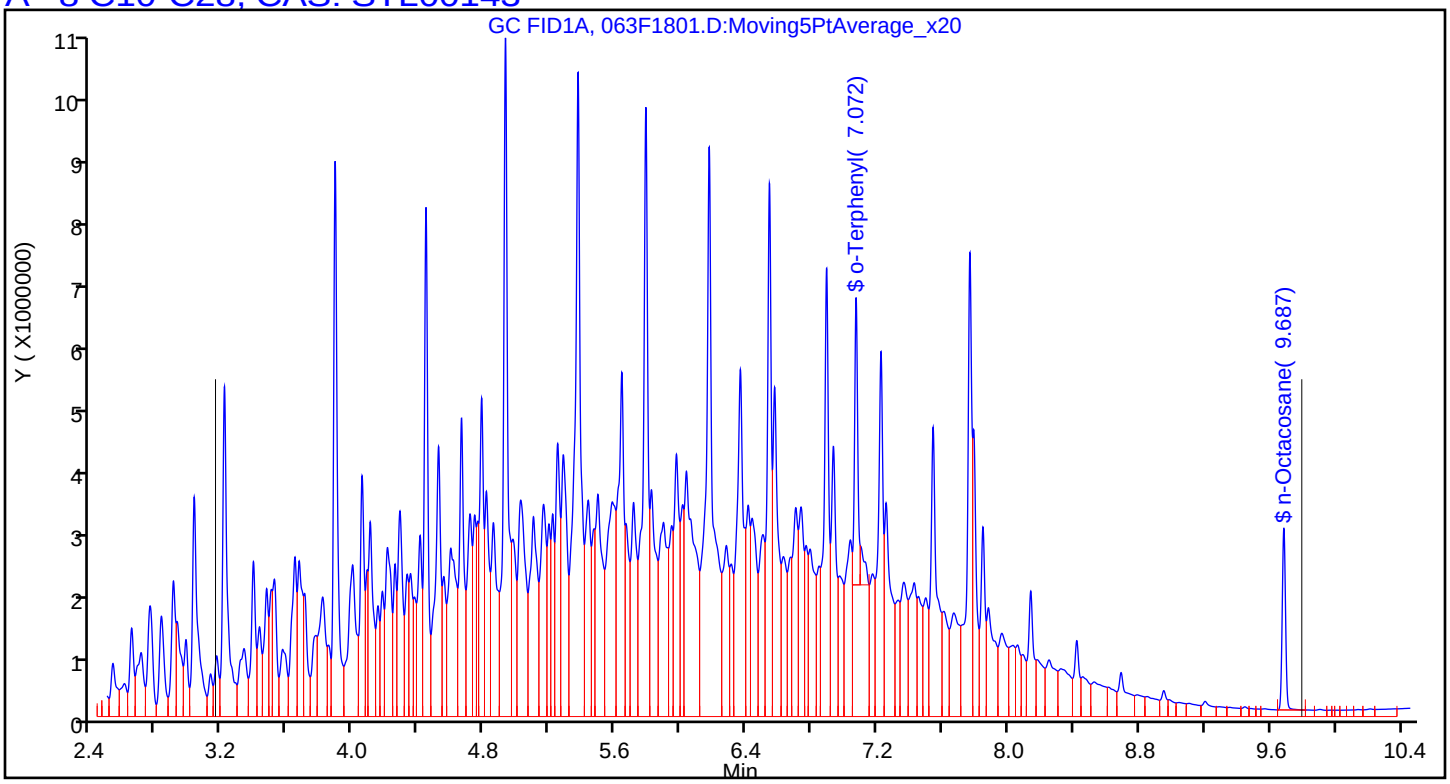
Operator ID: MM ALS Bottle#: 63 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: DRO_U2a Limit Group: GCSV - DRO

Column: RTX-1 (30.32) (0.25 mm) Detector GC FID1A

A 8 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

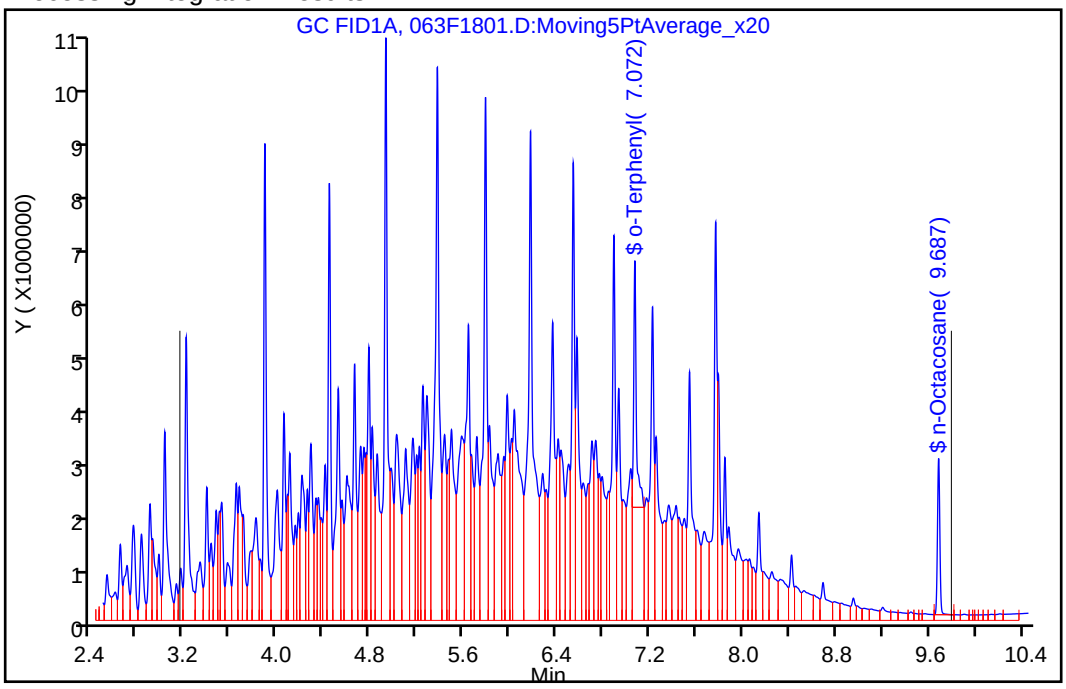
Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\063F1801.D				
Injection Date:	30-Jun-2020 16:21:10	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	63	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, RT: 6.476, CAS: STL00143

Signal: 1

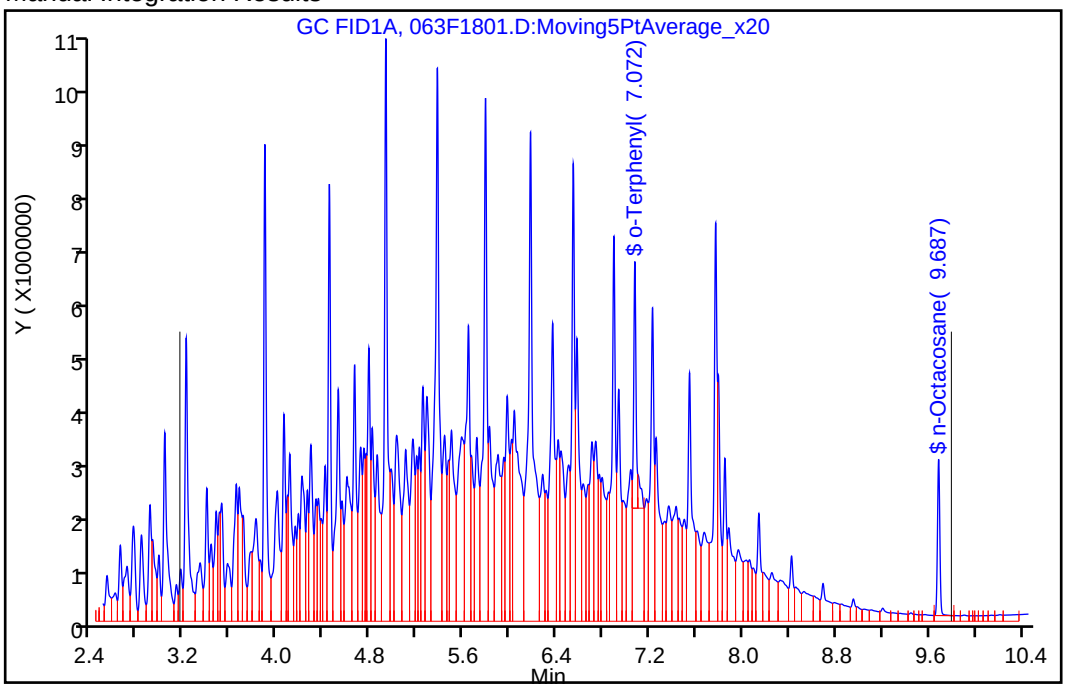
Processing Integration Results

RT: 6.48
Response: 771853782
Amount: 5233.9193



Manual Integration Results

RT: 6.48
Response: 772946290
Amount: 5241.3556



Reviewer: mcaleesem, 30-Jun-2020 16:54:14

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

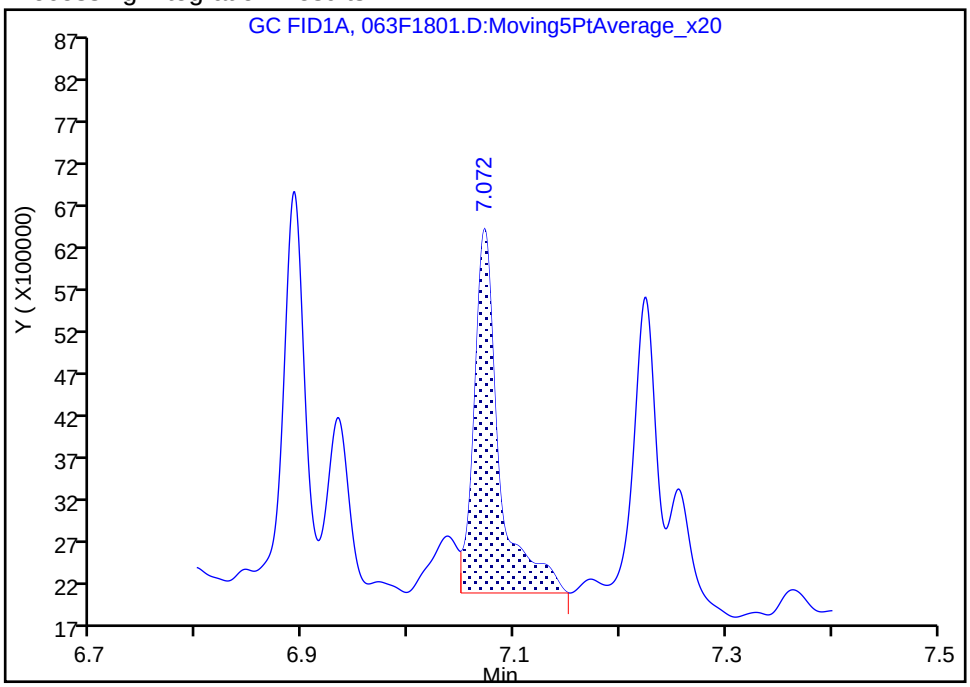
Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\063F1801.D				
Injection Date:	30-Jun-2020 16:21:10	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	63	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

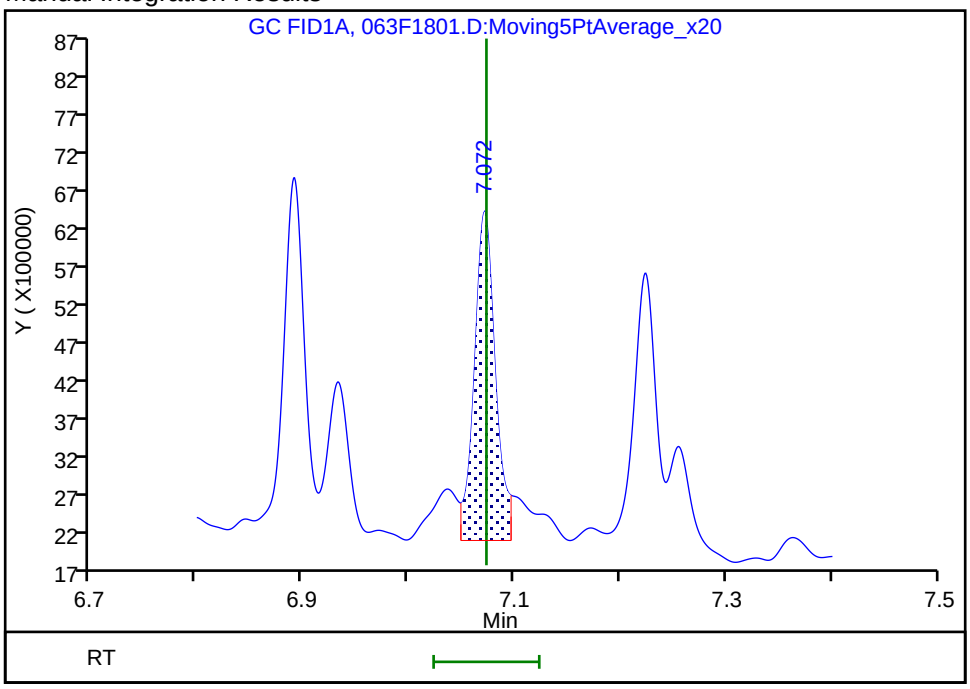
Processing Integration Results

RT: 7.07
Area: 7055468
Amount: 35.233960
Amount Units: ug/ml



Manual Integration Results

RT: 7.07
Area: 5962959
Amount: 29.778132
Amount Units: ug/ml



Reviewer: mcaleesem, 30-Jun-2020 16:54:14

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: RTC 280-500427/3 Date Analyzed: 06/30/2020 10:29

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID: 043F0201.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.46	3.16	9.77

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\043F0201.D
Lims ID: RTC
Client ID:
Sample Type: RTC
Inject. Date: 30-Jun-2020 10:29:15 ALS Bottle#: 43 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: rtc
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:22 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

First Level Reviewer: mcaleesem Date: 30-Jun-2020 11:13:09

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	2 n-Octane						
	1.275	1.275	0.000	16295523	NC	NC	
	3 n-Decane						
	3.221	3.221	0.000	33580351	NC	NC	
	5 Dodecane						
	4.449	4.449	0.000	34005024	NC	NC	
	23 Hexadecane						
	6.181	6.181	0.000	33843578	NC	NC	
A	8 C10-C28						
	6.460	(3.156-9.765)		428926607	1000.0	2899.8	
	11 icosane						
	7.553	7.553	0.000	33307673	NC	NC	
	12 C25						
	8.962	8.962	0.000	17034680	NC	NC	
$	14 n-Octacosane						
	9.694	9.694	0.000	15184511	200.0	104.3	
	18 Dotriacontane						
	10.589	10.589	0.000	18487848	NC	NC	
	16 n-Hexatriacontane						
	11.675	11.675	0.000	21013451	NC	NC	
	17 C38						
	12.521	12.521	0.000	20421848	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

DRO_RTMKR_00057 Amount Added: 200.00 Units: uL

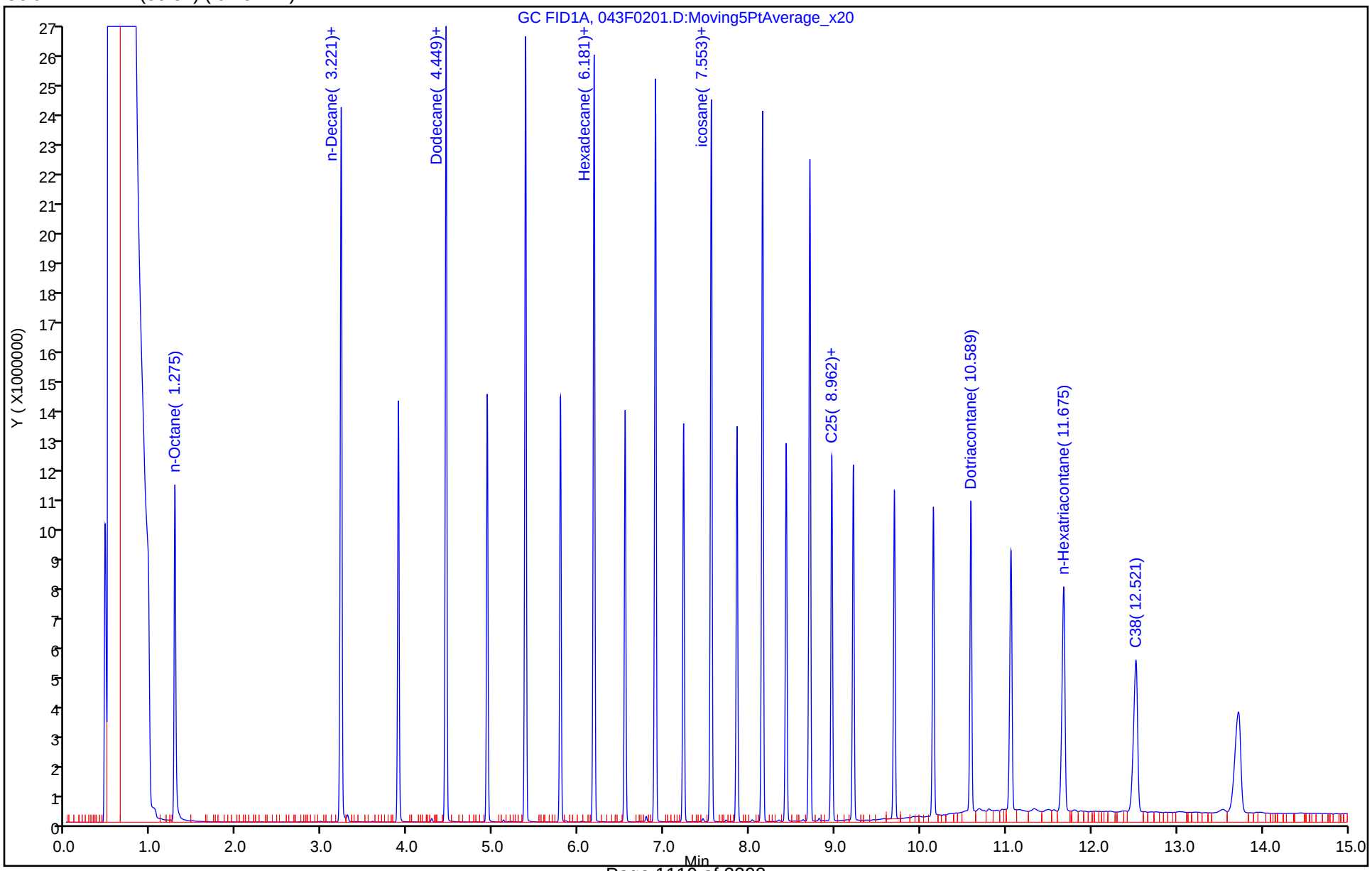
Report Date: 30-Jun-2020 17:23:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\043F0201.D

Injection Date:	30-Jun-2020 10:29:15	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	RTC			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

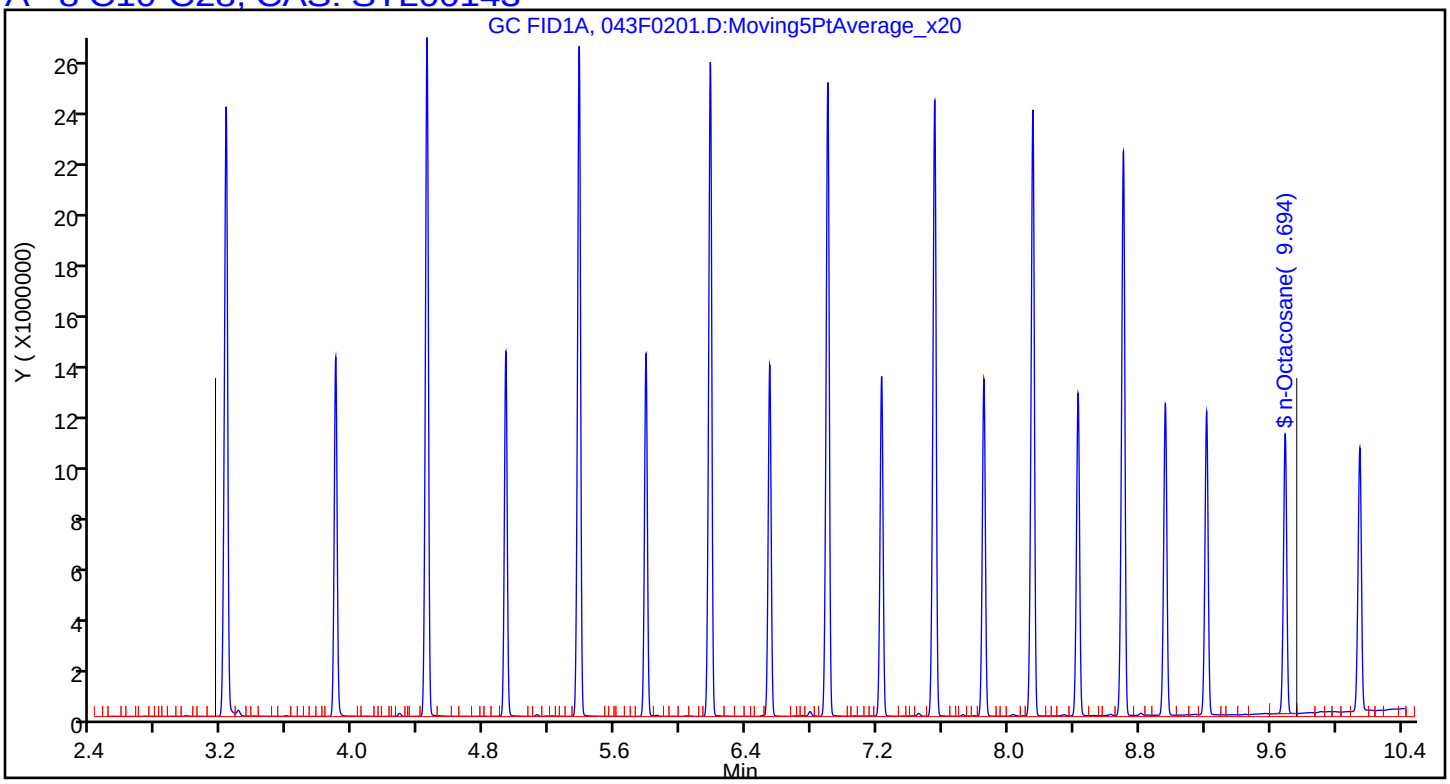


Report Date: 30-Jun-2020 17:23:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\043F0201.D				
Injection Date:	30-Jun-2020 10:29:15	Instrument ID:	SGC_U2a		
Lims ID:	RTC				
Client ID:					
Operator ID:	MM	ALS Bottle#:	43	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-499277/1-A

Matrix: Water Lab File ID: 057F1401.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 06/18/2020 15:45

Sample wt/vol: 1000(mL) Date Analyzed: 06/30/2020 14:53

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500427 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	69.7	J	250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	84		56-125
630-02-4	n-Octacosane	97		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\057F1401.D
Lims ID: MB 280-499277/1-A
Client ID:
Sample Type: MB
Inject. Date: 30-Jun-2020 14:53:12 ALS Bottle#: 57 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB280-499277_1-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	4 C8-C12						
	2.876	(1.242-4.511)		3715038		22.5	
A	6 C10-C25						
	6.008	(3.156-8.879)		7042018		30.1	
	23 Hexadecane						
	6.169	6.181	-0.012	45768		NC	
A	8 C10-C28						
	6.476	(3.156-9.796)		13141450		69.7	
A	22 C10-C32						
	6.900	(3.156-10.644)		25041783		147.8	
$	9 o-Terphenyl						
	7.069	7.073	-0.004	5879705	35.0	29.4	
A	10 C10-C36						
	7.452	(3.156-11.748)		48469891		298.3	
$	14 n-Octacosane						
	9.689	9.688	0.001	4943485	35.0	34.0	
A	13 C20-C38						
	10.054	(7.502-12.607)		61214980		394.2	
A	15 C25-C36						
	10.314	(8.879-11.748)		41427873		252.6	
	18 Dotriacontane						
	10.589	10.589	0.000	1830633		NC	
$	21 n-Decanoic Acid (Surr)						
	0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

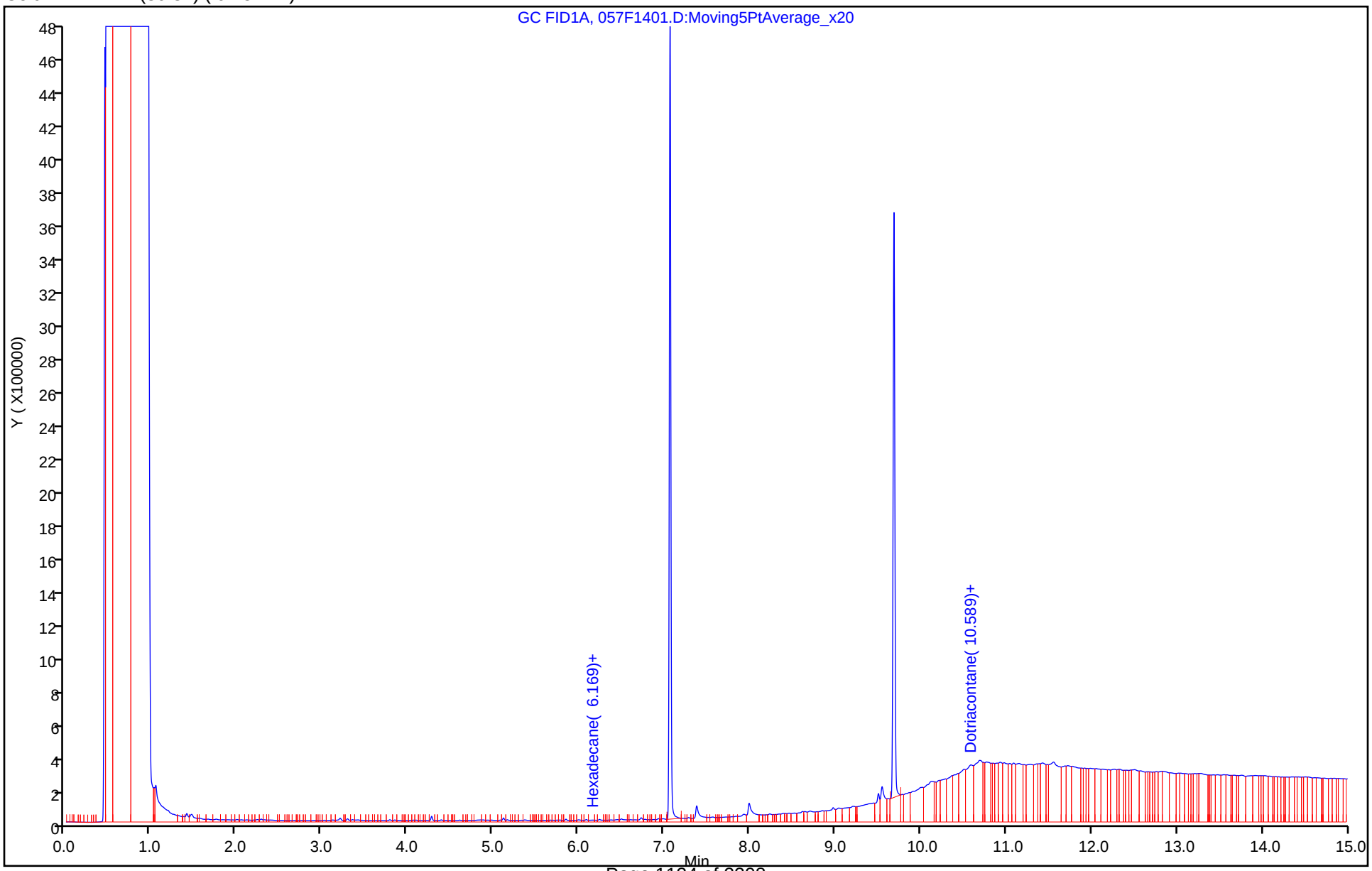
Report Date: 30-Jun-2020 17:23:34 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\057F1401.D

Injection Date:	30-Jun-2020 14:53:12	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	MB 280-499277/1-A			Worklist Smp#:	49
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\057F1401.D
Lims ID: MB 280-499277/1-A
Client ID:
Sample Type: MB
Inject. Date: 30-Jun-2020 14:53:12 ALS Bottle#: 57 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB280-499277_1-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

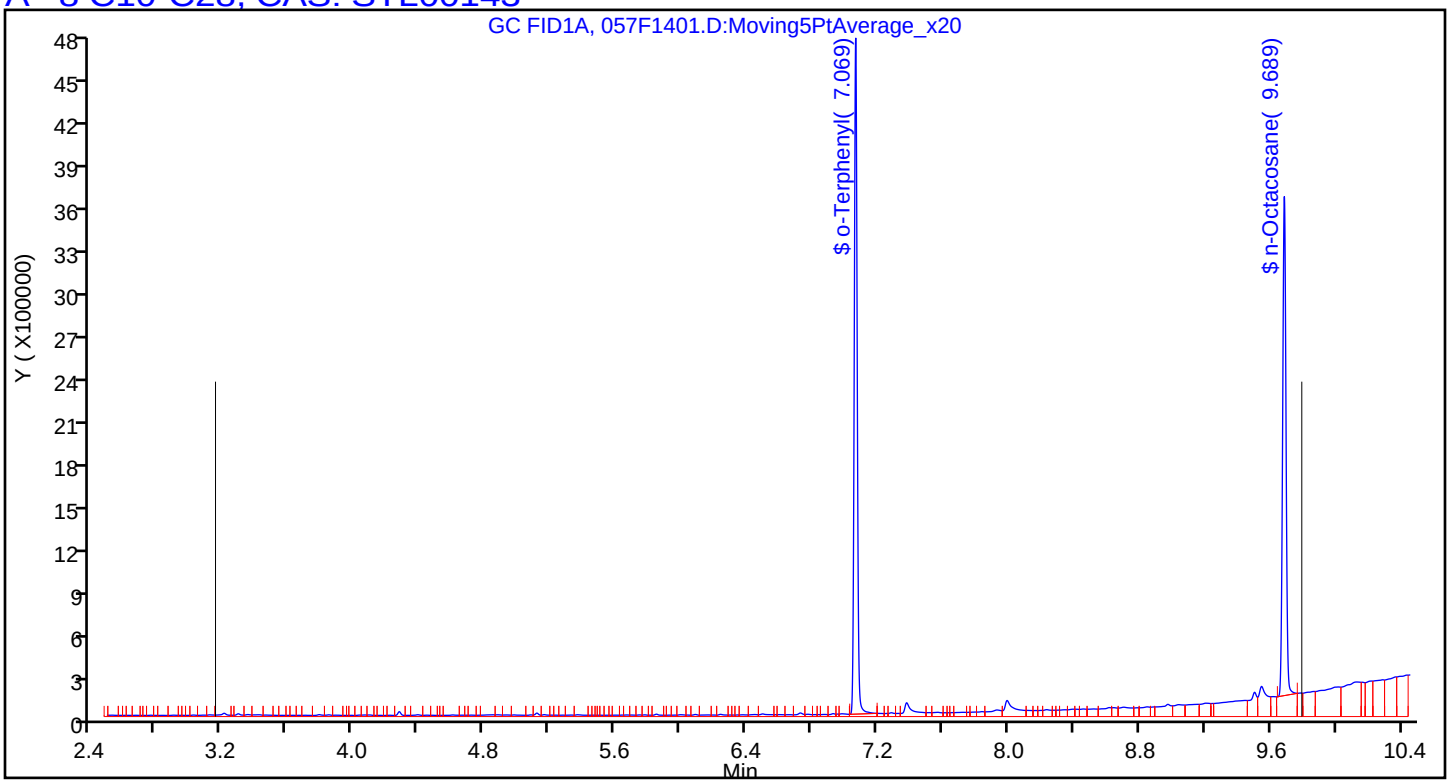
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	29.4	83.89
$ 14 n-Octacosane	35.0	34.0	97.06

Report Date: 30-Jun-2020 17:23:34 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\057F1401.D				
Injection Date:	30-Jun-2020 14:53:12	Instrument ID:	SGC_U2a		
Lims ID:	MB 280-499277/1-A				
Client ID:					
Operator ID:	MM	ALS Bottle#:	57	Worklist Smp#:	49
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-499277/2-A

Matrix: Water Lab File ID: 058F1501.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 06/18/2020 15:45

Sample wt/vol: 1000(mL) Date Analyzed: 06/30/2020 15:15

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500427 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1600		250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	92		56-125
630-02-4	n-Octacosane	98		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\058F1501.D
Lims ID: LCS 280-499277/2-A
Client ID:
Sample Type: LCS
Inject. Date: 30-Jun-2020 15:15:10 ALS Bottle#: 58 Worklist Smp#: 50
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS280-499277_2-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

First Level Reviewer: mcaleesem Date: 30-Jun-2020 17:22:50

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A 6 C10-C25	6.018	(3.156-8.879)		233359713	1962.0	1566.1	
A 8 C10-C28	6.476	(3.156-9.796)		237718639	1984.0	1598.3	
A 22 C10-C32	6.900	(3.156-10.644)		244571798	1992.0	1645.9	
$ 9 o-Terphenyl	7.069	7.073	-0.004	6479014	35.0	32.4	
A 10 C10-C36	7.452	(3.156-11.748)		261253993	2000.0	1755.5	
$ 14 n-Octacosane	9.687	9.688	-0.001	4975164	35.0	34.2	

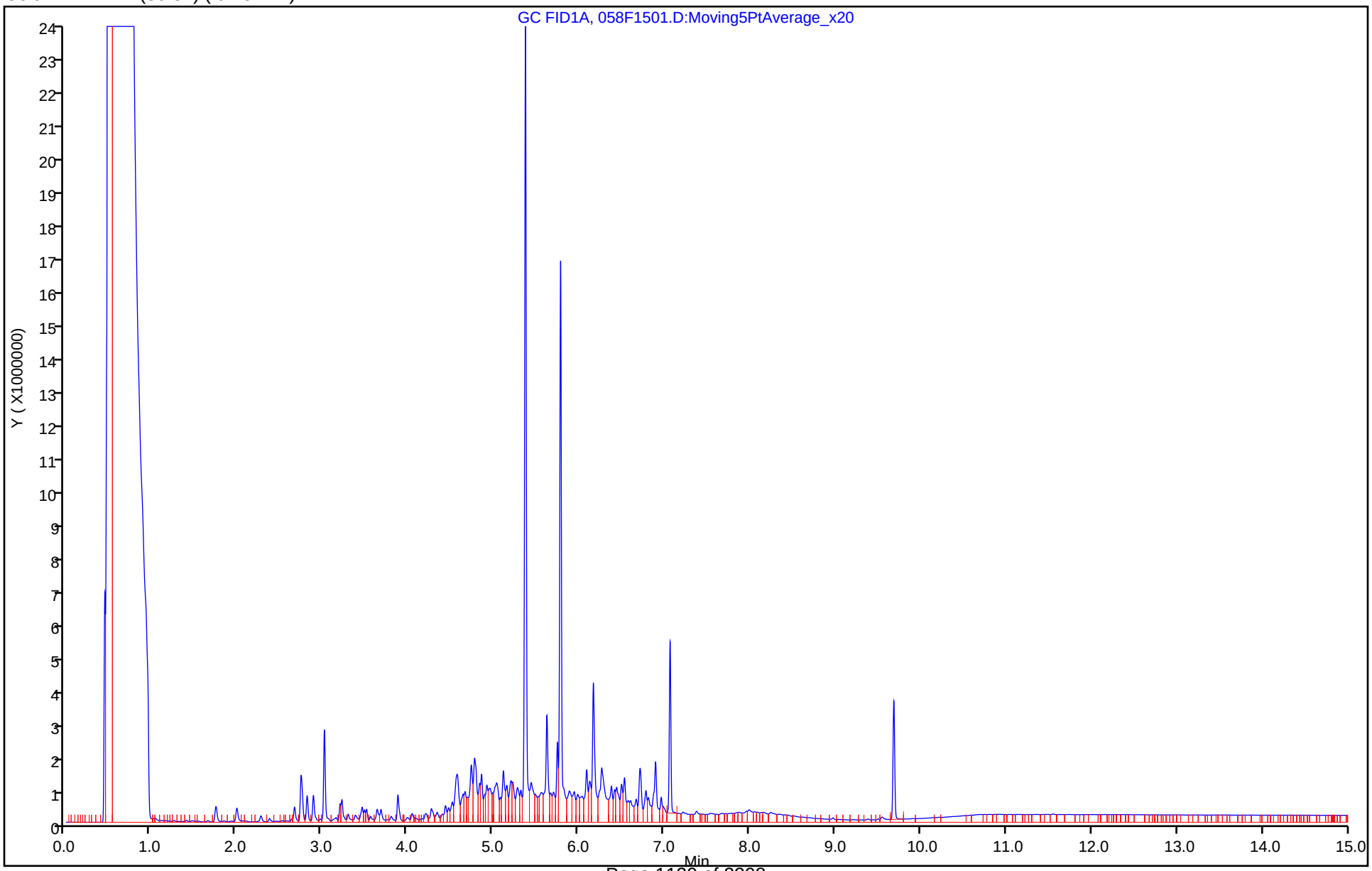
Report Date: 30-Jun-2020 17:23:35 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\058F1501.D

Injection Date:	30-Jun-2020 15:15:10	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	LCS 280-499277/2-A			Worklist Smp#:	50
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\058F1501.D
Lims ID: LCS 280-499277/2-A
Client ID:
Sample Type: LCS
Inject. Date: 30-Jun-2020 15:15:10 ALS Bottle#: 58 Worklist Smp#: 50
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS280-499277_2-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

First Level Reviewer: mcaleesem Date: 30-Jun-2020 17:22:50

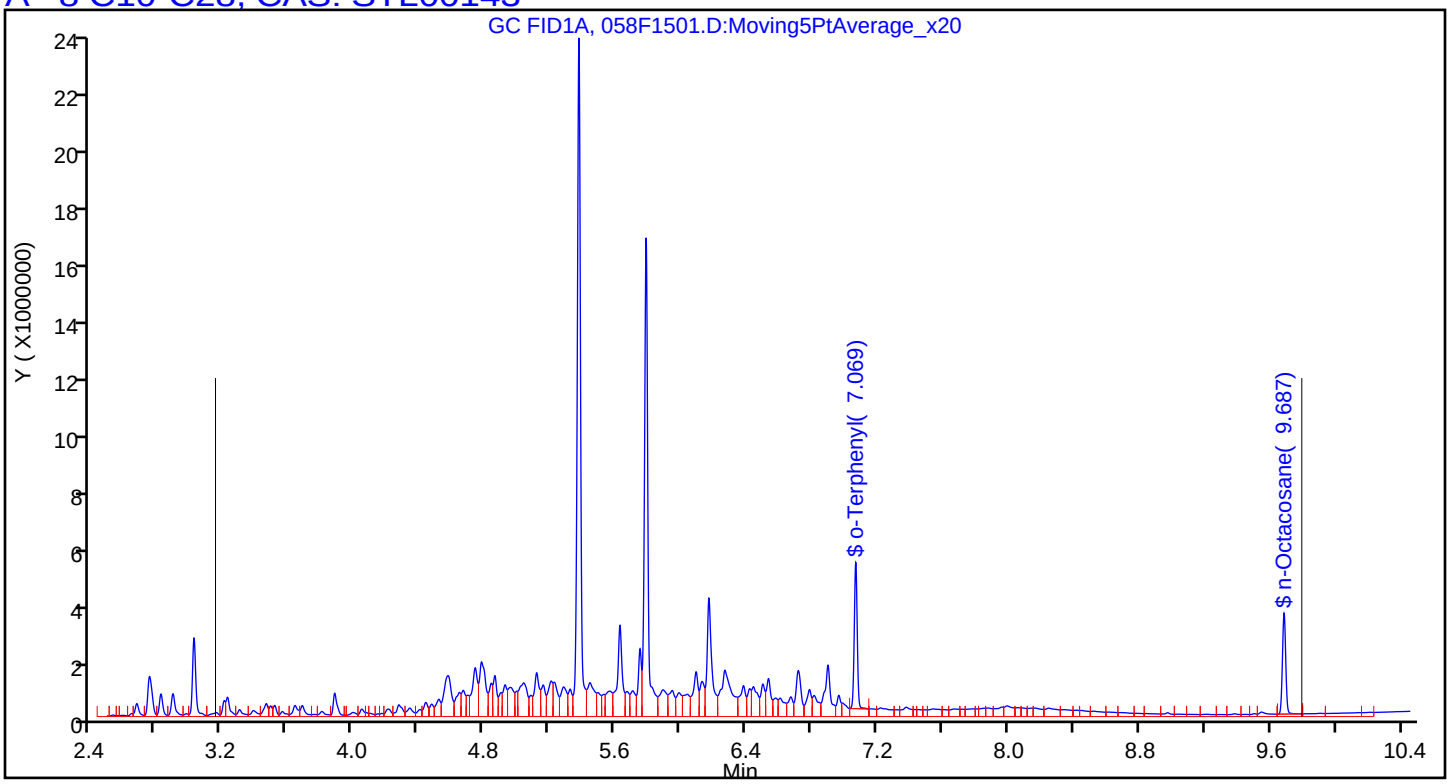
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	32.4	92.44
$ 14 n-Octacosane	35.0	34.2	97.68

Report Date: 30-Jun-2020 17:23:35 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\058F1501.D				
Injection Date:	30-Jun-2020 15:15:10	Instrument ID:	SGC_U2a		
Lims ID:	LCS 280-499277/2-A				
Client ID:					
Operator ID:	MM	ALS Bottle#:	58	Worklist Smp#:	50
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-499277/3-A

Matrix: Water Lab File ID: 059F1601.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 06/18/2020 15:45

Sample wt/vol: 1000(mL) Date Analyzed: 06/30/2020 15:37

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 500427 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1800		250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	95		56-125
630-02-4	n-Octacosane	99		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\059F1601.D
Lims ID: LCSD 280-499277/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 30-Jun-2020 15:37:06 ALS Bottle#: 59 Worklist Smp#: 51
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD280-499277_3-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.018	(3.156-8.879)		264406973	1962.0	1776.8	
A	8 C10-C28						
	6.476	(3.156-9.796)		268060071	1984.0	1804.8	
A	22 C10-C32						
	6.900	(3.156-10.644)		273410009	1992.0	1842.7	
$	9 o-Terphenyl						
	7.069	7.073	-0.004	6678468	35.0	33.4	
A	10 C10-C36						
	7.452	(3.156-11.748)		286812656	2000.0	1930.6	
$	14 n-Octacosane						
	9.687	9.688	-0.001	5028326	35.0	34.6	

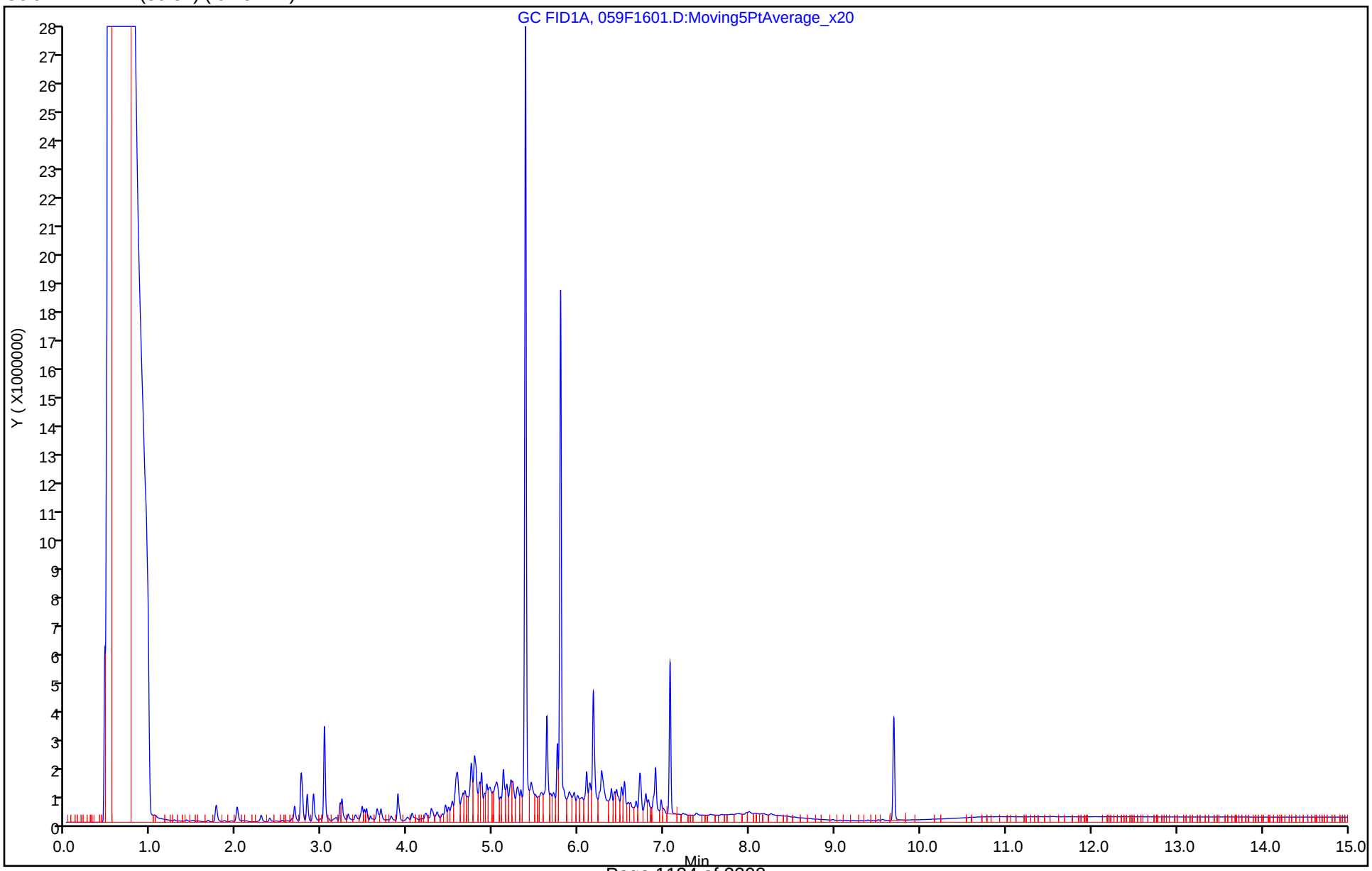
Report Date: 30-Jun-2020 17:23:36 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\059F1601.D

Injection Date:	30-Jun-2020 15:37:06	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	LCSD 280-499277/3-A			Worklist Smp#:	51
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\059F1601.D
Lims ID: LCSD 280-499277/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 30-Jun-2020 15:37:06 ALS Bottle#: 59 Worklist Smp#: 51
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD280-499277_3-A
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 30-Jun-2020 17:23:24 Calib Date: 06-Mar-2020 21:14:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20200306-89854.b\03060009.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1047

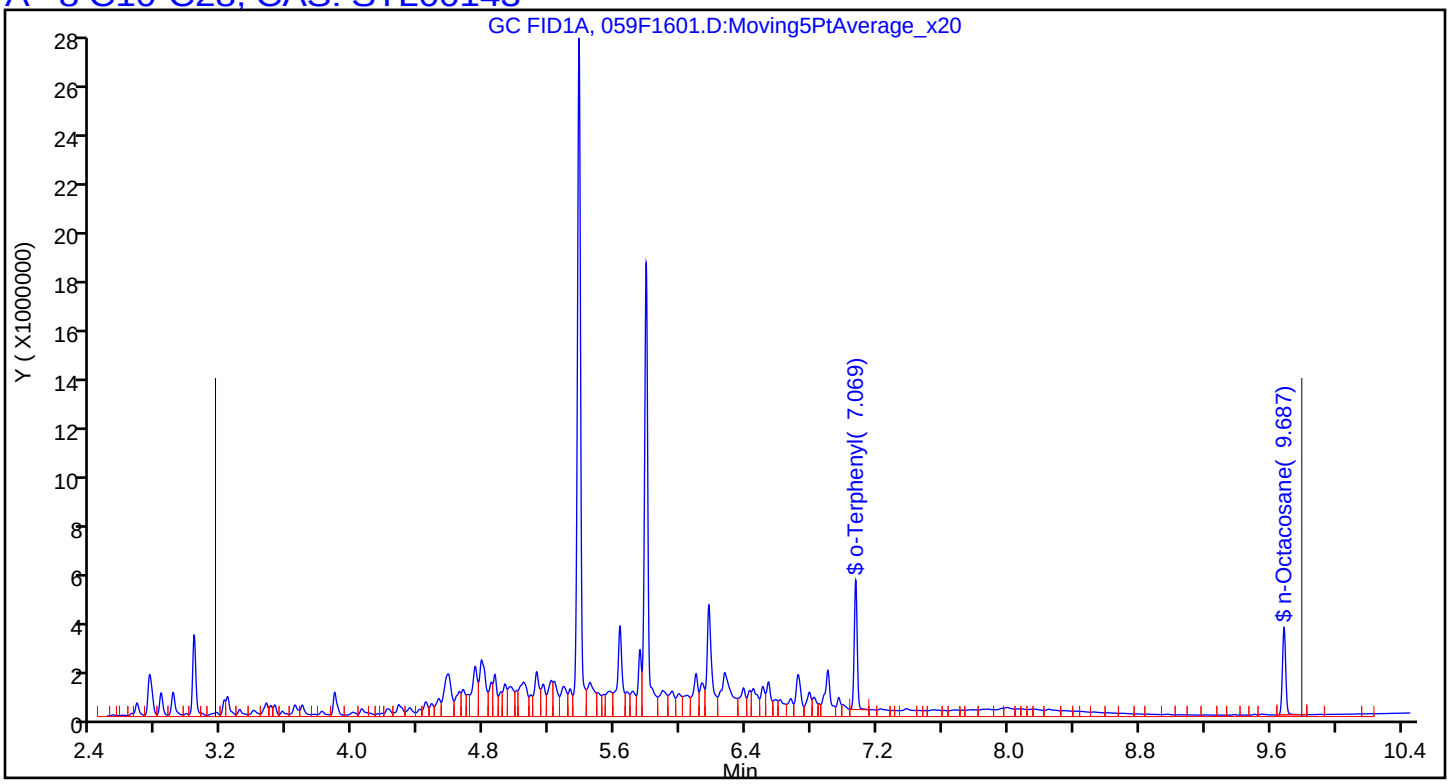
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	33.4	95.29
$ 14 n-Octacosane	35.0	34.6	98.73

Report Date: 30-Jun-2020 17:23:36 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20200628-92842.b\059F1601.D				
Injection Date:	30-Jun-2020 15:37:06	Instrument ID:	SGC_U2a		
Lims ID:	LCSD 280-499277/3-A				
Client ID:					
Operator ID:	MM	ALS Bottle#:	59	Worklist Smp#:	51
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 01/17/2020 14:14

Analysis Batch Number: 483279 End Date: 01/18/2020 09:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-483279/3		01/17/2020 14:14	1		RTX-1 (30.32) 0.25(mm)
STD7 280-483279/4 IC		01/17/2020 14:36	1	01170103.D	RTX-1 (30.32) 0.25(mm)
STD6 280-483279/5 IC		01/17/2020 14:58	1	01170104.D	RTX-1 (30.32) 0.25(mm)
STD5 280-483279/6 IC		01/17/2020 15:21	1	01170105.D	RTX-1 (30.32) 0.25(mm)
STD4 280-483279/7 ICRT		01/17/2020 15:43	1	01170106.D	RTX-1 (30.32) 0.25(mm)
STD3 280-483279/8 IC		01/17/2020 16:05	1	01170107.D	RTX-1 (30.32) 0.25(mm)
STD2 280-483279/9 IC		01/17/2020 16:28	1	01170108.D	RTX-1 (30.32) 0.25(mm)
STD1 280-483279/10 IC		01/17/2020 16:50	1	01170109.D	RTX-1 (30.32) 0.25(mm)
ICV 280-483279/11		01/17/2020 17:13	1	01170110.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 18:02	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 18:24	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 18:46	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 19:08	1		RTX-1 (30.32) 0.25(mm)
CCV 280-483279/16		01/17/2020 19:53	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 20:15	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 20:37	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 21:00	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 21:22	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 21:44	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 22:06	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 22:50	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 23:13	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 23:35	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/17/2020 23:57	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 00:19	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 00:41	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 01:03	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 01:26	1		RTX-1 (30.32) 0.25(mm)
CCV 280-483279/43		01/18/2020 01:48	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 02:10	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 02:54	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 03:16	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 03:38	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 04:00	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 04:44	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 05:28	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 06:12	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 06:56	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 07:40	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		01/18/2020 08:24	1		RTX-1 (30.32) 0.25(mm)
CCV 280-483279/62		01/18/2020 09:08	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 06/30/2020 10:29

Analysis Batch Number: 500427 End Date: 06/30/2020 21:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-500427/3		06/30/2020 10:29	1	043F0201.D	RTX-1 (30.32) 0.25(mm)
CCVRT 280-500427/4		06/30/2020 10:51	1	044F0301.D	RTX-1 (30.32) 0.25(mm)
CCV 280-500427/5		06/30/2020 11:13	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 11:35	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 11:57	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 12:19	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 12:41	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 13:03	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 13:25	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 13:47	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 14:09	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 14:31	1		RTX-1 (30.32) 0.25(mm)
MB 280-499277/1-A		06/30/2020 14:53	1	057F1401.D	RTX-1 (30.32) 0.25(mm)
LCS 280-499277/2-A		06/30/2020 15:15	1	058F1501.D	RTX-1 (30.32) 0.25(mm)
LCSD 280-499277/3-A		06/30/2020 15:37	1	059F1601.D	RTX-1 (30.32) 0.25(mm)
280-137609-10		06/30/2020 15:59	1	062F1701.D	RTX-1 (30.32) 0.25(mm)
CCV 280-500427/15		06/30/2020 16:21	1	063F1801.D	RTX-1 (30.32) 0.25(mm)
CCV 280-500427/16		06/30/2020 16:43	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 17:05	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 17:27	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 17:49	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 18:11	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 19:38	2		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 20:00	2		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 20:22	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 20:44	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/30/2020 21:06	5		RTX-1 (30.32) 0.25(mm)
CCV 280-500427/66		06/30/2020 21:28	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 499277 Batch Start Date: 06/18/20 15:45 Batch Analyst: Cross, Nicole M

Batch Method: 3510C Batch End Date: 06/29/20 08:36

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	8015 LCS 00084	8015Surrogate 00187	AnalysisComment
MB 280-499277/1		3510C, 8015C DRO		1000 mL	1 mL	7 SU		1 mL	
LCS 280-499277/2		3510C, 8015C DRO		1000 mL	1 mL	7 SU	1 mL	1 mL	DRO
LCSD 280-499277/3		3510C, 8015C DRO		1000 mL	1 mL	7 SU	1 mL	1 mL	DRO
280-137609-A-10	SHGW03-20A	3510C, 8015C DRO	T	1006.9 mL	1 mL	7 SU		1 mL	Samples 9 (A-10) and 10 (B-10) combined together for extraction individual initial weight 502.5

Batch Notes	
Balance ID	24750399
Batch Comment	DV-OP-0006/0007
Analyst ID - Concentration	MA
Concentration 1 Corrected Temperature	84 Degrees C
Equipment ID - Concentration 1	AR
Analyst ID - Extraction	NC (Trainee)/AC (Trainer)
Method/Fraction	3510C/8015B_DRO_DOD5
Na2SO4 ID	NaSO4_00006
NaCl ID	195918
Pipette/Syringe/Dispenser ID	NEXCIA
Prep Solvent ID	MecL2_CyCL_00482
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	AC
Analyst ID - Spike Witness Analyst	Reviewer: EB
Sufficient Volume for Batch QC	NO
Concentration 1 Uncorrected Temperature	84 Degrees C
Reagent Water ID	S. ELGA

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.

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 499277 Batch Start Date: 06/18/20 15:45 Batch Analyst: Cross, Nicole M

Batch Method: 3510C Batch End Date: 06/29/20 08:36

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.: 280-137609-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): Luna-phenyl 4.6 (mm)

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
PZ007-20A	280-137609-1	98 M	
PZ012-20A	280-137609-2		106 M
PZ012-20A	280-137609-2	114 M	
G0105-20A	280-137609-3		103 M
G0105-20A	280-137609-3	107 M	
G0080-20A	280-137609-4		99
G0080-20A	280-137609-4	99 M	
PZ005-20A	280-137609-5		102
PZ005-20A	280-137609-5	103 M	
NW052-20A	280-137609-6		105
NW052-20A	280-137609-6	108 M	
G0045-20A	280-137609-7	105 M	
G0017-20A	280-137609-8		106 M
G0017-20A	280-137609-8	116	
G0102-20A	280-137609-9		101
G0102-20A	280-137609-9	99 M	
G0102-20A DL	280-137609-9 DL		69 Q M D
G0102-20A DL	280-137609-9 DL	106 M D	
SOURCE 2020	280-137609-13	106	
	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	
	LCSD 280-499027/5-A	106 M	
PZ007-20A MS	280-137609-1 MS	98 M	
PZ007-20A MS	280-137609-1 MS	98 M	
G0102-20A MS	280-137609-9 MS	100 M	
G0102-20A MS	280-137609-9 MS	95 M	

	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.: 280-137609-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): Luna-phenyl 4.6 (mm)

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
G0102-20A MS DL	280-137609-9 MS DL	109 D	
PZ007-20A MSD	280-137609-1 MSD	98 M	
PZ007-20A MSD	280-137609-1 MSD	95 M	
G0102-20A MSD	280-137609-9 MSD	99 M	
G0102-20A MSD	280-137609-9 MSD	101 M	
G0102-20A MSD DL	280-137609-9 MSD DL	111 D	

	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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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.: 280-137609-1

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 III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220042.D

Lab ID: 280-137609-1 MS Client ID: PZ007-20A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.14	0.21 U	2.50	117	73-125	M
1,3-Dinitrobenzene	2.14	0.11 U	2.38	111	78-120	
2,4,6-Trinitrotoluene	2.14	0.11 U	2.48	116	71-123	
2,4-Dinitrotoluene	2.14	0.085 U	2.16	101	78-120	
2,6-Dinitrotoluene	2.14	0.085 U	2.20	103	77-127	
2-Amino-4,6-dinitrotoluene	2.14	0.11 U	2.15	100	79-120	
2-Nitrotoluene	2.14	0.21 U	1.75	82	70-127	
3-Nitrotoluene	2.14	0.43 U	1.96	92	73-125	
4-Amino-2,6-dinitrotoluene	2.14	0.13 U	1.95	91	76-125	
4-Nitrotoluene	2.14	0.43 U	1.87	87	71-127	
HMX	2.14	0.21 U	2.26	105	65-135	M
Nitrobenzene	2.14	0.21 U	2.21	103	65-134	
RDX	2.14	0.21 U	2.15	100	68-130	M
Tetryl	2.14	0.11 U	2.00	93	64-128	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220044.D

Lab ID: 280-137609-1 MS Client ID: PZ007-20A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.54	0.43 U	2.24	88	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220049.D

Lab ID: 280-137609-9 MS Client ID: G0102-20A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.19	0.22 U	2.54	116	73-125	M
1,3-Dinitrobenzene	2.19	0.11 U	2.40	110	78-120	M
2,4,6-Trinitrotoluene	2.19	0.11 U	2.50	114	71-123	
2,4-Dinitrotoluene	2.19	0.088 U	2.20	101	78-120	
2,6-Dinitrotoluene	2.19	0.088 U	2.29	105	77-127	
2-Amino-4,6-dinitrotoluene	2.19	0.11 U	2.02	92	79-120	
2-Nitrotoluene	2.19	0.22 U	1.80	82	70-127	
3-Nitrotoluene	2.19	0.44 U	2.01	92	73-125	
4-Amino-2,6-dinitrotoluene	2.19	0.13 U	1.50	69	76-125	J1
4-Nitrotoluene	2.19	0.44 U	1.88	86	71-127	
HMX	2.19	2.2	4.40	102	65-135	M
Nitrobenzene	2.19	0.22 U	2.26	103	65-134	
Tetryl	2.19	0.11 U	2.27	104	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220051.D

Lab ID: 280-137609-9 MS Client ID: G0102-20A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.48	1.2 J	3.34	85	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06230011.D

Lab ID: 280-137609-9 MS DL Client ID: G0102-20A MS DL

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
RDX	2.19	41	39.7	-75	68-130	D M 4

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220043.D

Lab ID: 280-137609-1 MSD Client ID: PZ007-20A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.13	2.46	115	1	30	73-125	M
1,3-Dinitrobenzene	2.13	2.38	112	0	30	78-120	
2,4,6-Trinitrotoluene	2.13	2.44	114	2	30	71-123	
2,4-Dinitrotoluene	2.13	2.14	100	1	30	78-120	
2,6-Dinitrotoluene	2.13	2.17	102	1	30	77-127	M
2-Amino-4,6-dinitrotoluene	2.13	2.10	98	2	30	79-120	M
2-Nitrotoluene	2.13	1.70	80	3	30	70-127	
3-Nitrotoluene	2.13	1.97	92	0	30	73-125	
4-Amino-2,6-dinitrotoluene	2.13	1.90	89	3	30	76-125	
4-Nitrotoluene	2.13	1.90	89	1	30	71-127	
HMX	2.13	2.20	103	3	30	65-135	M
Nitrobenzene	2.13	2.19	102	1	30	65-134	
RDX	2.13	3.02	142	34	30	68-130	J1
Tetryl	2.13	2.33	109	16	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220045.D

Lab ID: 280-137609-1 MSD Client ID: PZ007-20A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.52	2.18 J	87	3	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220050.D

Lab ID: 280-137609-9 MSD Client ID: G0102-20A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.14	2.47	115	3	30	73-125	M
1,3-Dinitrobenzene	2.14	2.33	109	3	30	78-120	M
2,4,6-Trinitrotoluene	2.14	2.44	114	2	30	71-123	
2,4-Dinitrotoluene	2.14	2.11	98	4	30	78-120	
2,6-Dinitrotoluene	2.14	2.26	105	1	30	77-127	
2-Amino-4,6-dinitrotoluene	2.14	1.85	86	9	30	79-120	
2-Nitrotoluene	2.14	1.82	85	1	30	70-127	
3-Nitrotoluene	2.14	1.97	92	2	30	73-125	
4-Amino-2,6-dinitrotoluene	2.14	1.19	56	23	30	76-125	J1
4-Nitrotoluene	2.14	1.83	85	3	30	71-127	
HMX	2.14	4.35	101	1	30	65-135	M
Nitrobenzene	2.14	2.22	104	2	30	65-134	
Tetryl	2.14	2.22	104	2	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06220052.D

Lab ID: 280-137609-9 MSD Client ID: G0102-20A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.53	3.41	87	2	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06230012.D

Lab ID: 280-137609-9 MSD DL Client ID: G0102-20A MSD DL

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
RDX	2.14	41.4	6	4	30	68-130	D 4

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.: 280-137609-1

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	
PZ012-20A	280-137609-2	06/22/2020 17:11	06/24/2020 08:56
G0105-20A	280-137609-3	06/22/2020 17:34	06/24/2020 09:31
G0080-20A	280-137609-4	06/22/2020 17:56	06/24/2020 10:06
PZ005-20A	280-137609-5	06/22/2020 18:19	06/24/2020 10:41
NW052-20A	280-137609-6	06/22/2020 18:42	06/24/2020 11:16
G0045-20A	280-137609-7	06/22/2020 19:51	
G0017-20A	280-137609-8	06/22/2020 20:14	06/24/2020 13:01
SOURCE 2020	280-137609-13	06/22/2020 20:37	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	
PZ007-20A	280-137609-1	06/23/2020 03:09	
PZ007-20A MS	280-137609-1 MS	06/23/2020 03:32	
PZ007-20A MSD	280-137609-1 MSD	06/23/2020 03:55	
PZ007-20A MS	280-137609-1 MS	06/23/2020 04:18	
PZ007-20A MSD	280-137609-1 MSD	06/23/2020 04:41	
G0102-20A	280-137609-9	06/23/2020 05:50	06/25/2020 00:51
G0102-20A MS	280-137609-9 MS	06/23/2020 06:13	
G0102-20A MSD	280-137609-9 MSD	06/23/2020 06:36	
G0102-20A MS	280-137609-9 MS	06/23/2020 06:59	
G0102-20A MSD	280-137609-9 MSD	06/23/2020 07:22	
G0102-20A DL	280-137609-9 DL	06/23/2020 19:49	06/25/2020 04:55
G0102-20A MS DL	280-137609-9 MS DL	06/23/2020 20:12	
G0102-20A MSD DL	280-137609-9 MSD DL	06/23/2020 20:35	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0080-20A Lab Sample ID: 280-137609-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/22/2020 17:56 Date Analyzed (2): 06/24/2020 10:06

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4-Amino-2,6-dinitrotoluene	1		11.40	11.26	11.46	0.15		52.8
	2		17.42	17.30	17.60	0.087		
2-Amino-4,6-dinitrotoluene	1		11.69	11.55	11.75	0.053		70.1
	2		18.39	18.24	18.54	0.11		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ005-20A Lab Sample ID: 280-137609-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/22/2020 18:19 Date Analyzed (2): 06/24/2020 10:41

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2-Amino-4,6-dinitrotoluene	1		11.68	11.55	11.75	0.076		124.1
	2		18.36	18.24	18.54	0.32		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0017-20A Lab Sample ID: 280-137609-8

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/22/2020 20:14 Date Analyzed (2): 06/24/2020 13:01

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	
Tetryl	1		10.26	10.08	10.38	0.26		119.0
	2		23.85	23.72	24.02	0.065		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A Lab Sample ID: 280-137609-9

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/23/2020 05:50 Date Analyzed (2): 06/25/2020 00:51

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		6.73	6.58	6.88	2.2		14.1
	2		7.14	7.00	7.30	1.9		
MNX	1		7.40	7.25	7.55	1.2		1.0
	2		7.90	7.78	8.08	1.2		
RDX	1		7.81	7.65	7.95	40		5.4
	2		9.35	9.21	9.51	38		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A DL Lab Sample ID: 280-137609-9 DL

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/23/2020 19:49 Date Analyzed (2): 06/25/2020 04:55

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.79	7.64	7.94	41		2.5
	2		9.36	9.21	9.51	42		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A Lab Sample ID: 280-137609-1

Matrix: Water Lab File ID: 06220041.D

Analysis Method: 8330A Date Collected: 06/11/2020 08:50

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 470.1(mL) Date Analyzed: 06/23/2020 03:09

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.: 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	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	0.16	0.13	0.061
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	0.093
5755-27-1	MNX	0.43	U	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	0.21	U J1	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	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220041.D
Lims ID: 280-137609-A-1-A
Client ID: PZ007-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 03:09:05 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-1-A
Misc. Info.: 280-0092608-041
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 14:48:20

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	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	
7	RDX	1		7.801			ND	
8	2,4,6-Trinitrophenol	1	8.121	8.094	0.027	2268	0.0266	M
$ 9	1,2-Dinitrobenzene	1	8.767	8.741	0.026	27133	0.1963	M
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	U
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

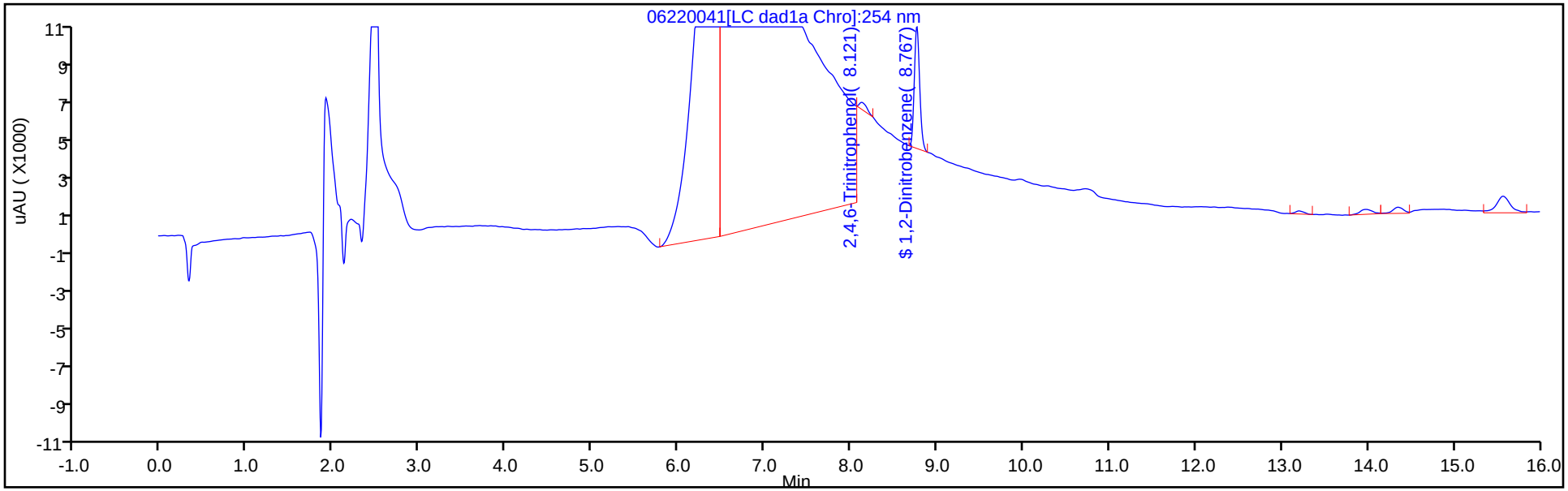
Report Date: 23-Jun-2020 15:18:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

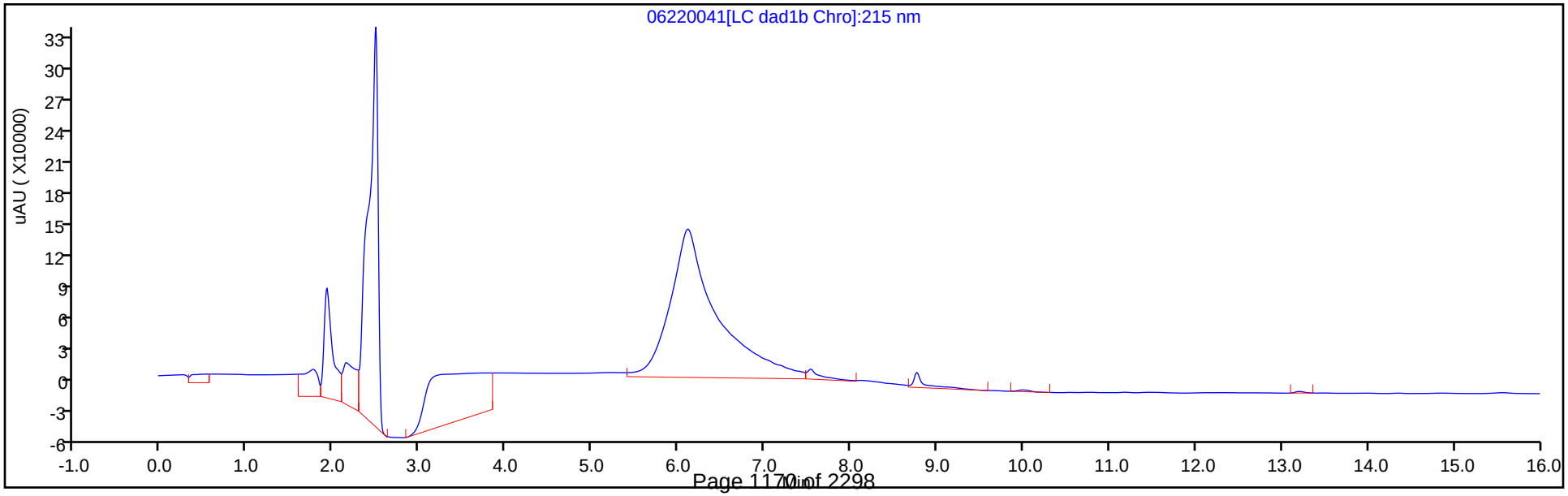
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220041.d

Injection Date:	23-Jun-2020 03:09:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-1-A	Lab Sample ID:	280-137609-1	Worklist Smp#:	41
Client ID:	PZ007-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220041.D				
Lims ID:	280-137609-A-1-A				
Client ID:	PZ007-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 03:09:05	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-1-A				
Misc. Info.:	280-0092608-041				
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 14:48:20		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1963	98.16

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

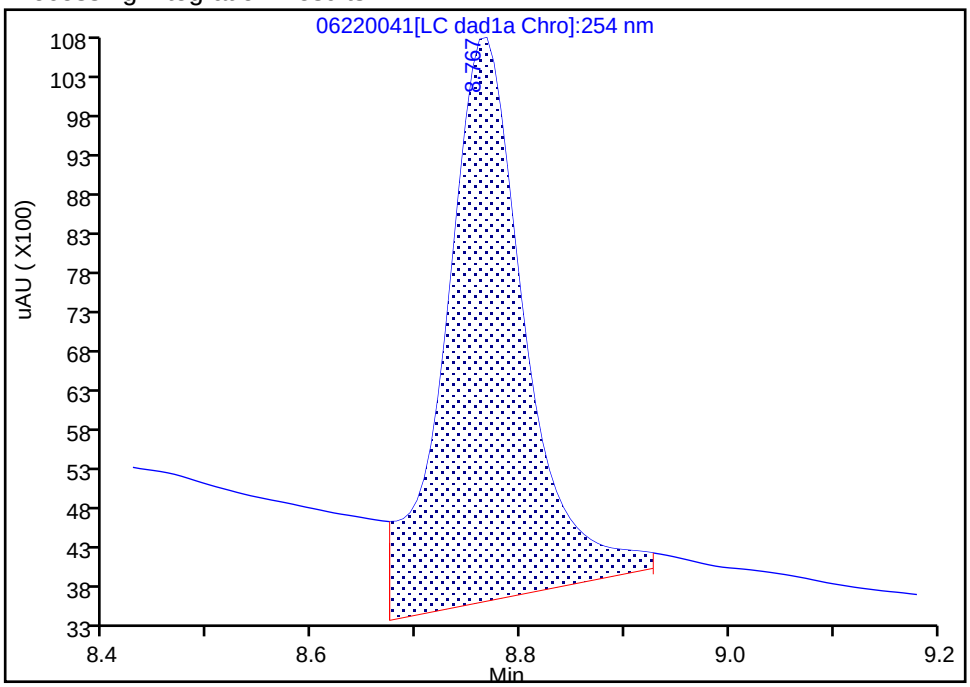
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220041.d				
Injection Date:	23-Jun-2020 03:09:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-A	Lab Sample ID:	280-137609-1		
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

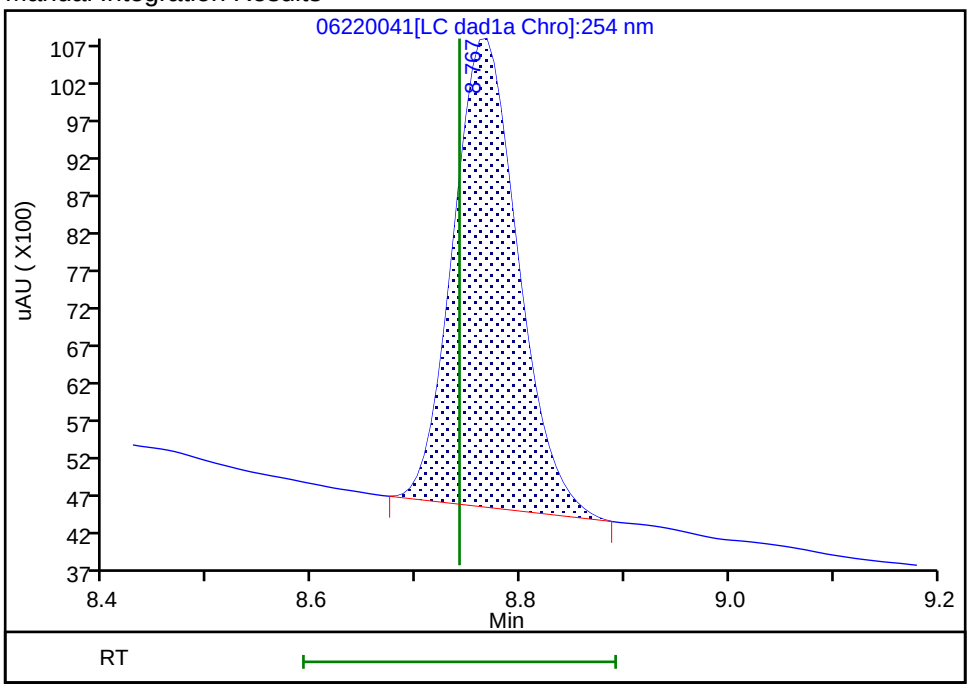
Processing Integration Results

RT: 8.77
Area: 38015
Amount: 0.275048
Amount Units: ug/mL



Manual Integration Results

RT: 8.77
Area: 27133
Amount: 0.196314
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:48:15

Audit Action: Manually Integrated Audit Reason: Baseline

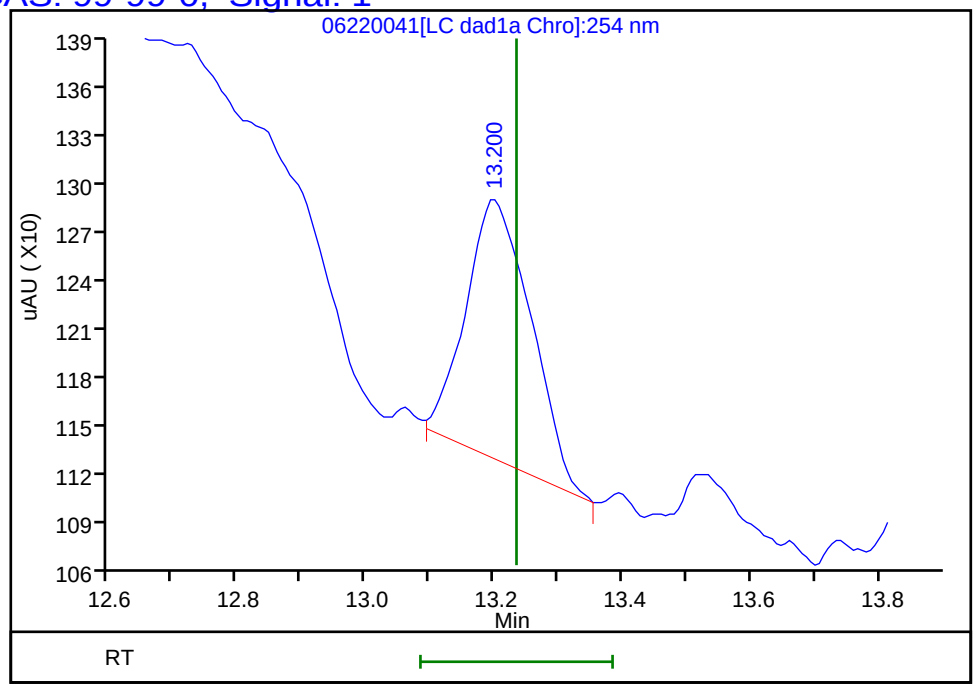
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220041.d				
Injection Date:	23-Jun-2020 03:09:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-A	Lab Sample ID:	280-137609-1		
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.20
Response: 1118
Amount: 0.009893



Reviewer: zhangji, 23-Jun-2020 14:48:20
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.: 280-137609-1

SDG No.:

Client Sample ID: PZ012-20A Lab Sample ID: 280-137609-2

Matrix: Water Lab File ID: 06220015.D

Analysis Method: 8330A Date Collected: 06/10/2020 15:45

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 467.9(mL) Date Analyzed: 06/22/2020 17:11

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U 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	0.12	0.11	0.048
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 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
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	114	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220015.D
Lims ID: 280-137609-A-2-A
Client ID: PZ012-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 17:11:00 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-2-A
Misc. Info.: 280-0092608-015
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 14:13:03

	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	MU
$	9 1,2-Dinitrobenzene	1	8.751	8.741	0.010	31586	0.2285	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	MU
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1		9.941			ND	U
	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	11.997	11.988	0.009	2975	0.009800	
	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

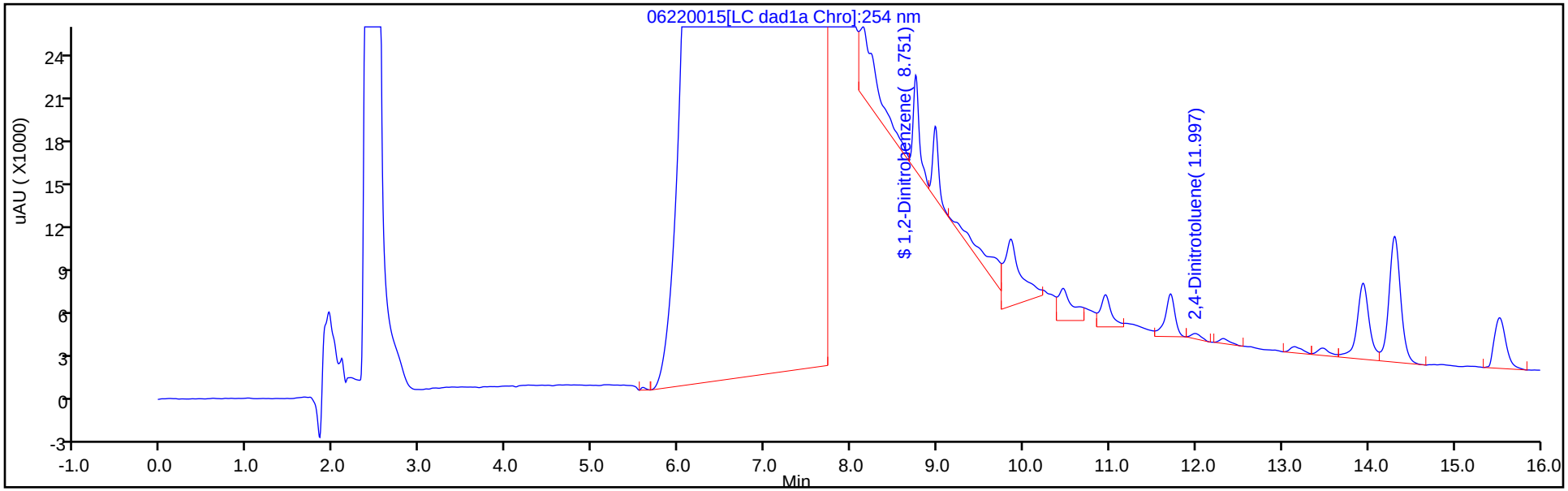
Report Date: 23-Jun-2020 15:17:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

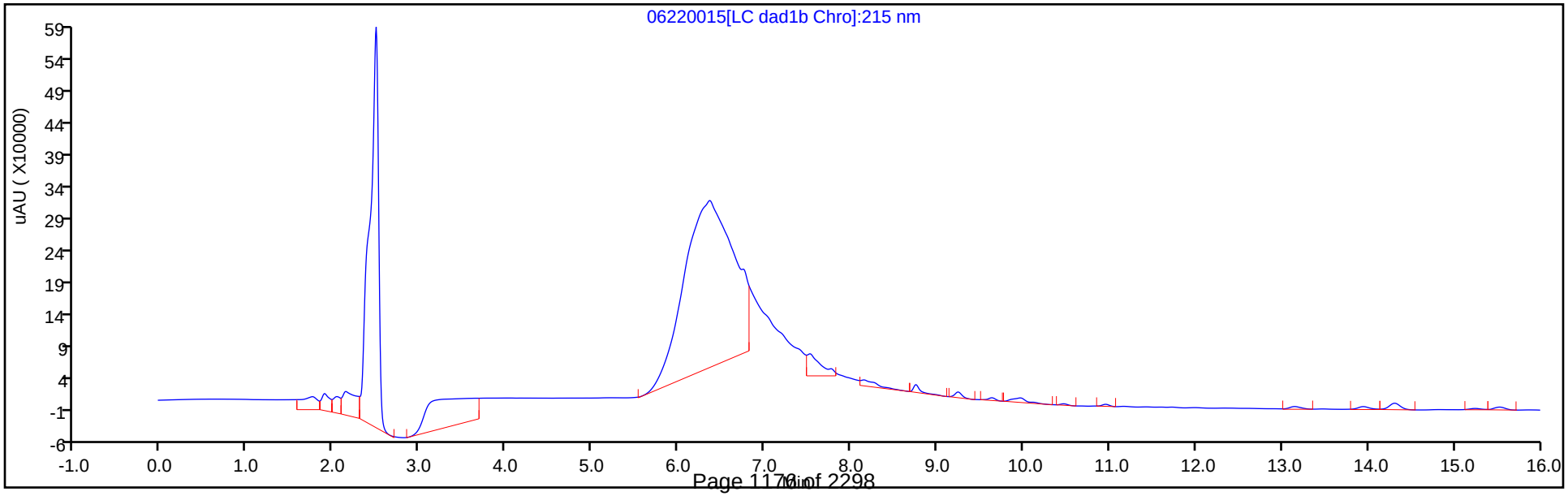
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d

Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2	Worklist Smp#:	15
Client ID:	PZ012-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220015.D				
Lims ID:	280-137609-A-2-A				
Client ID:	PZ012-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 17:11:00	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-2-A				
Misc. Info.:	280-0092608-015				
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 14:13:03		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2285	114.27

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

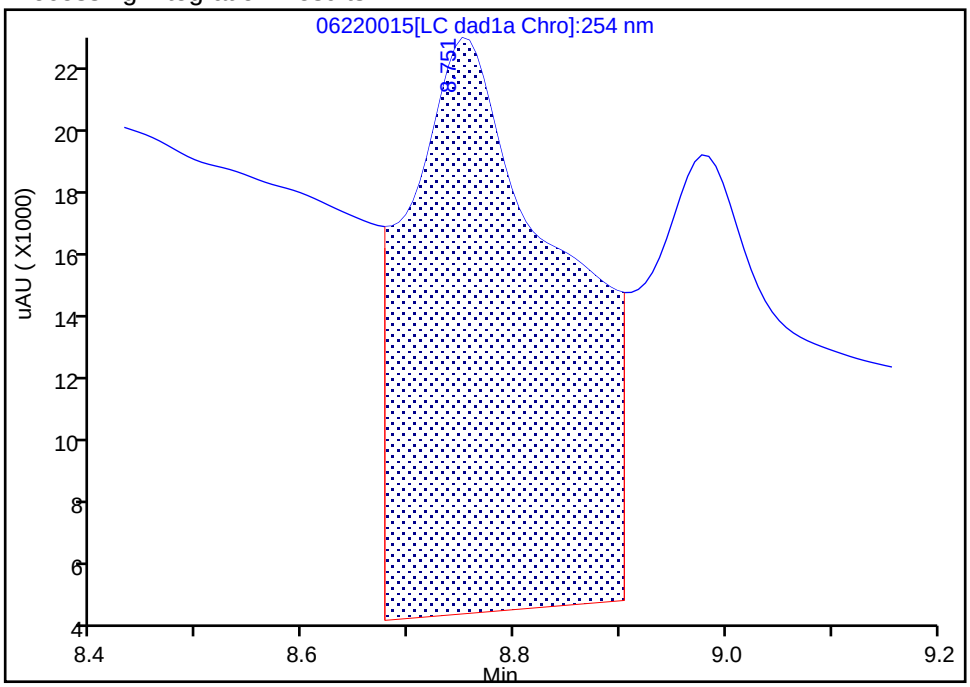
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

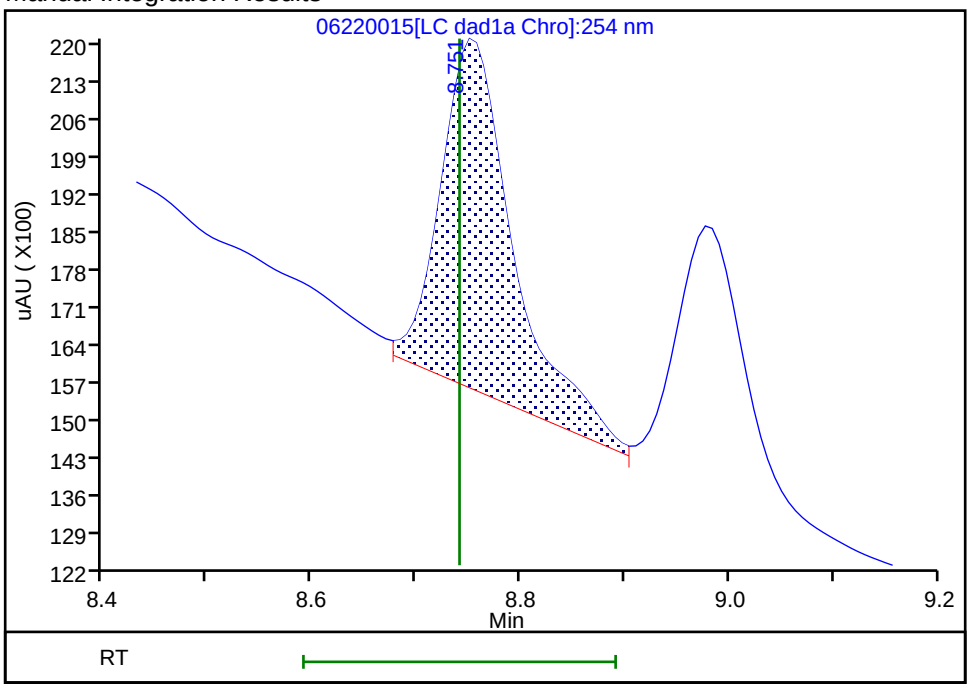
Processing Integration Results

RT: 8.75
Area: 170333
Amount: 1.232402
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 31586
Amount: 0.228533
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:12:36
Audit Action: Assigned New Baseline Audit Reason: Baseline

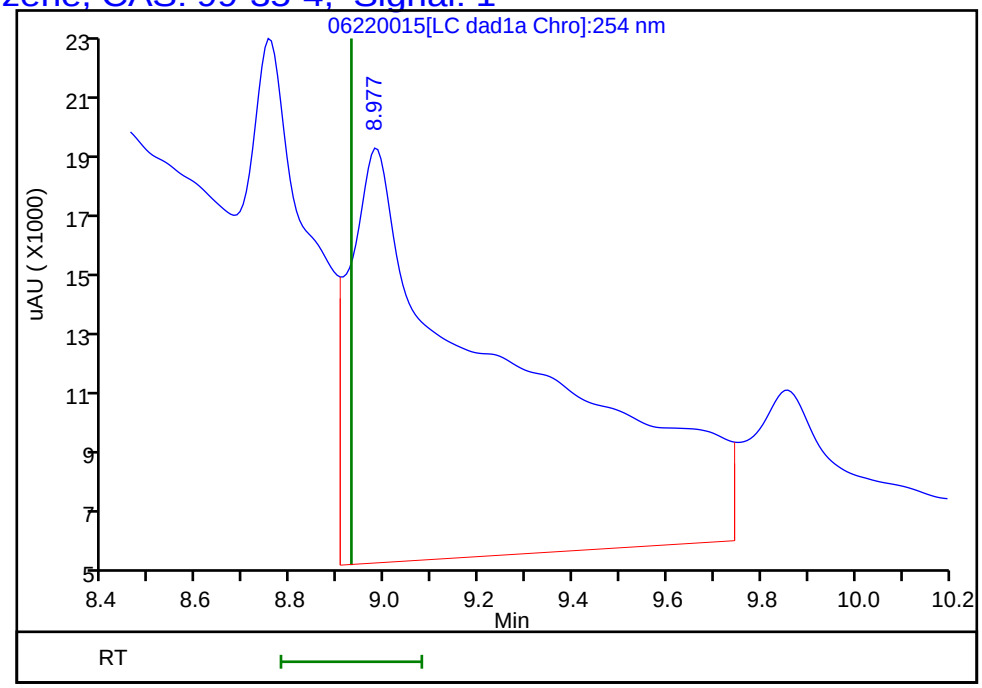
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.98
Response: 310028
Amount: 1.346140



Reviewer: zhangji, 23-Jun-2020 14:13:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

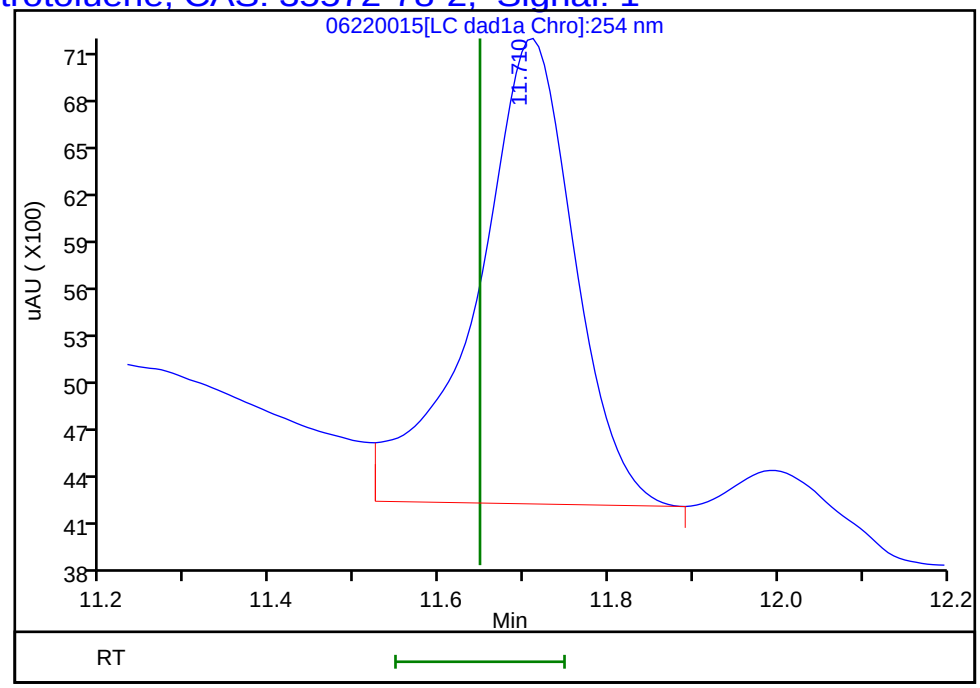
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.71
Response: 23457
Amount: 0.115656



Reviewer: zhangji, 23-Jun-2020 14:13:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

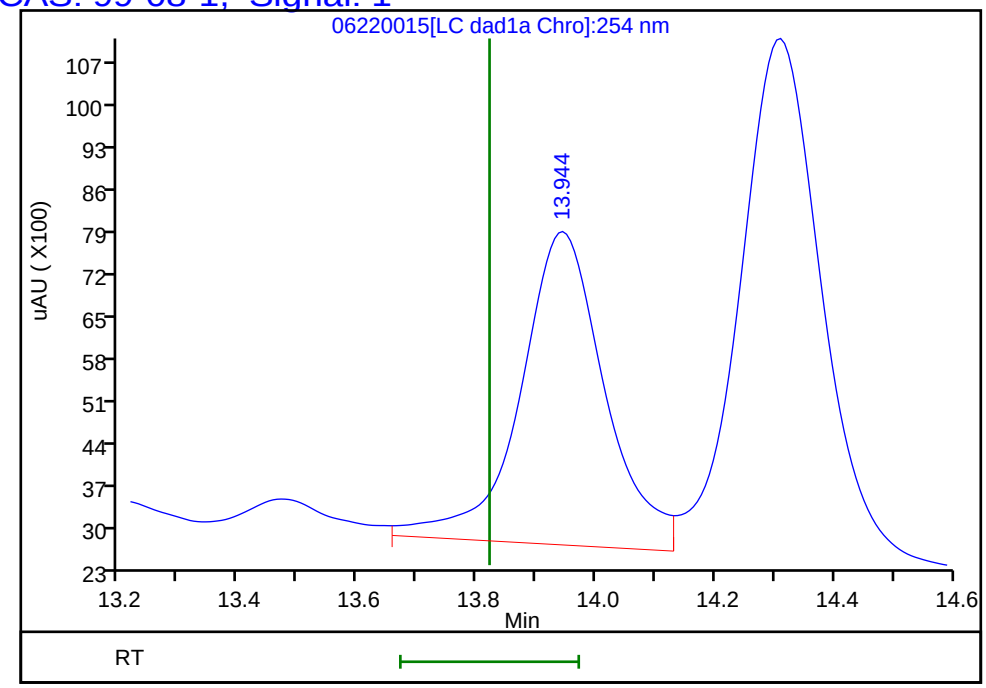
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.94
Response: 51326
Amount: 0.358851



Reviewer: zhangji, 23-Jun-2020 14:13:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

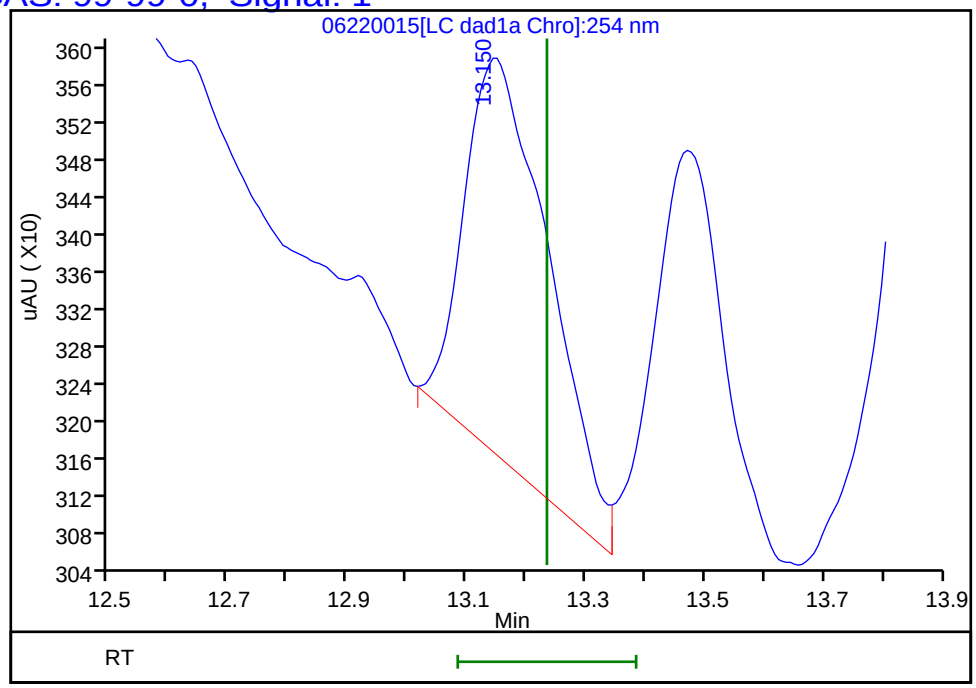
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.15
Response: 4229
Amount: 0.037423



Reviewer: zhangji, 23-Jun-2020 14:13:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

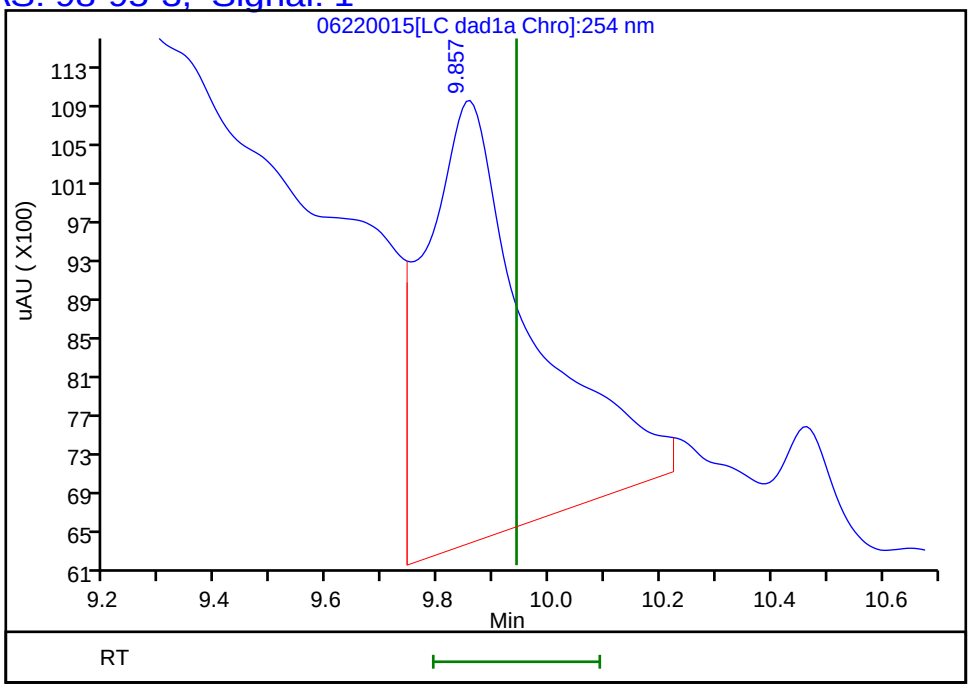
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.86
Response: 61342
Amount: 0.306094



Reviewer: zhangji, 23-Jun-2020 14:13:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

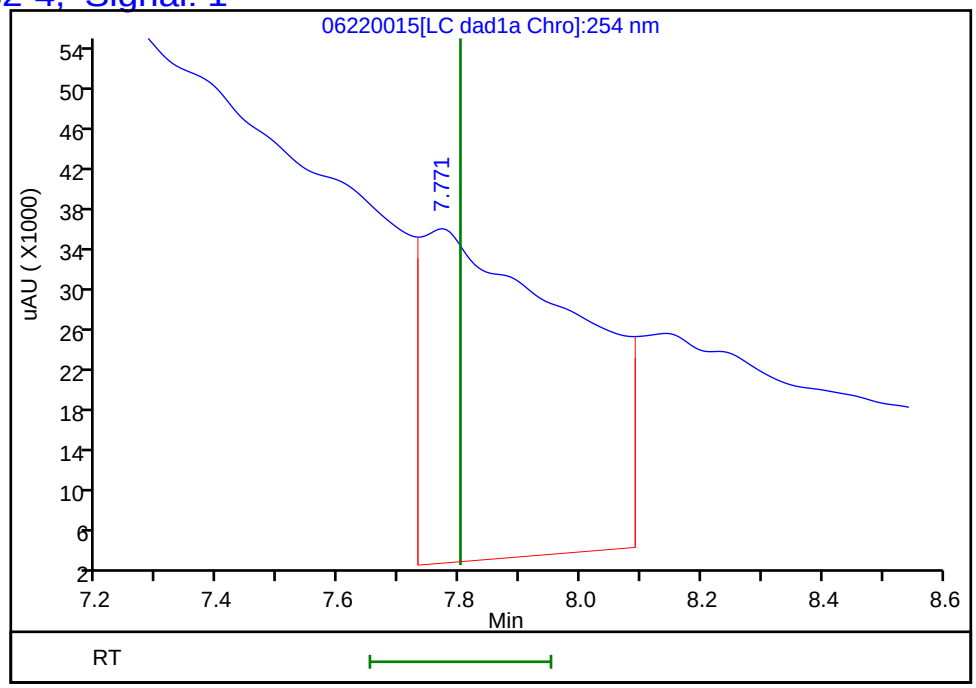
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220015.d				
Injection Date:	22-Jun-2020 17:11:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.77
Response: 579727
Amount: 4.971372



Reviewer: zhangji, 23-Jun-2020 14:13:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ012-20A Lab Sample ID: 280-137609-2

Matrix: Water Lab File ID: 06230029.D

Analysis Method: 8330A Date Collected: 06/10/2020 15:45

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 467.9(mL) Date Analyzed: 06/24/2020 08:56

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
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029

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\G2_LUNA\20200623-92679.b\06230029.D
Lims ID: 280-137609-A-2-A
Client ID: PZ012-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 08:56:09 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-2-A
Misc. Info.: 280-0092679-029
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 18:51:58 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: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:14:38

	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	13.231	13.263	-0.032	60557	0.2118	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	U
	18 2-Amino-4,6-dinitrotoluene	1	18.311	18.390	-0.079	32122	0.0690	
	19 1,3,5-Trinitrobenzene	1		19.123			ND	
	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		24.890			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

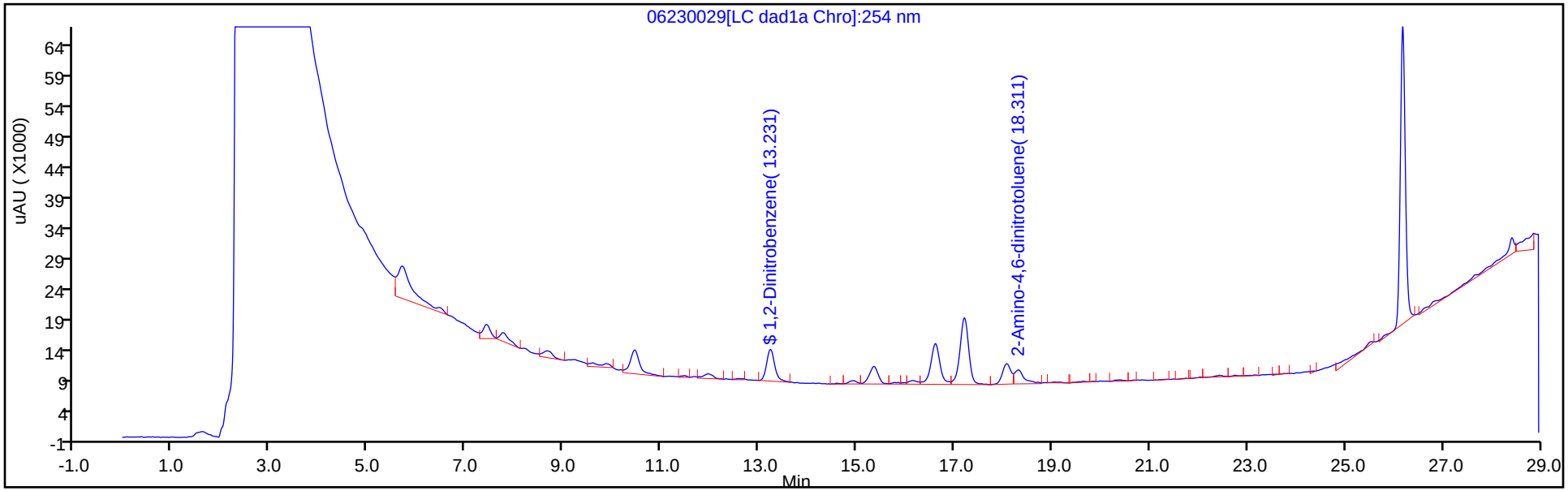
Report Date: 24-Jun-2020 18:52:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

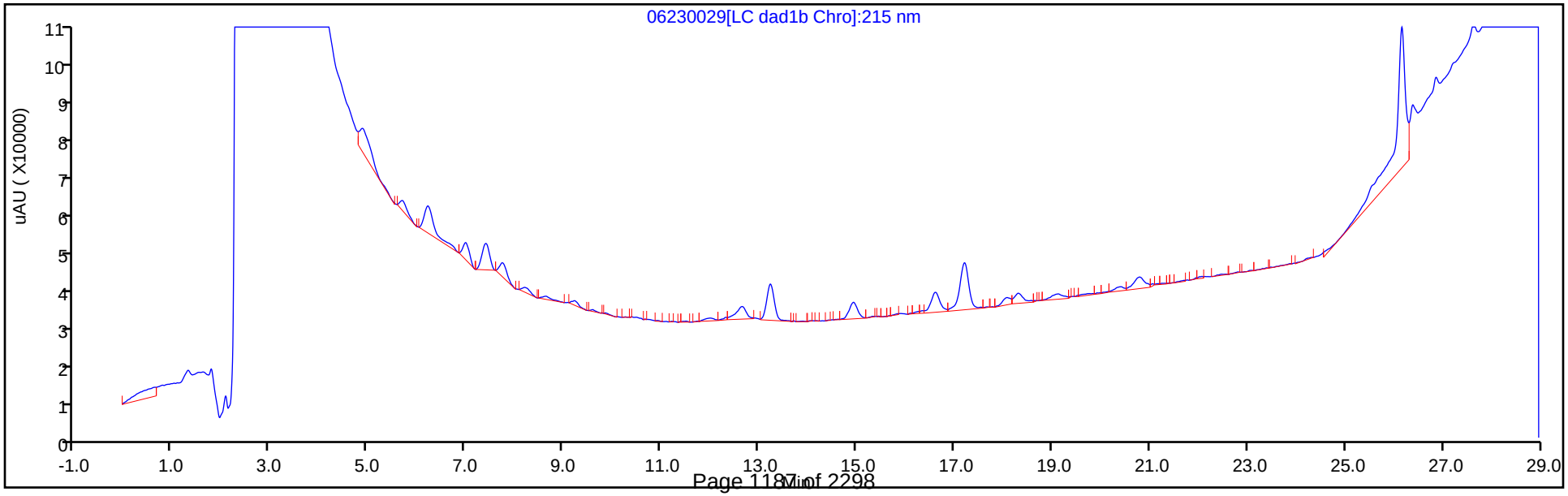
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230029.d

Injection Date:	24-Jun-2020 08:56:09	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2	Worklist Smp#:	29
Client ID:	PZ012-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
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\06230029.D				
Lims ID:	280-137609-A-2-A				
Client ID:	PZ012-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 08:56:09	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-2-A				
Misc. Info.:	280-0092679-029				
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 18:51:58	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:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:14:38		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2118	105.90

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

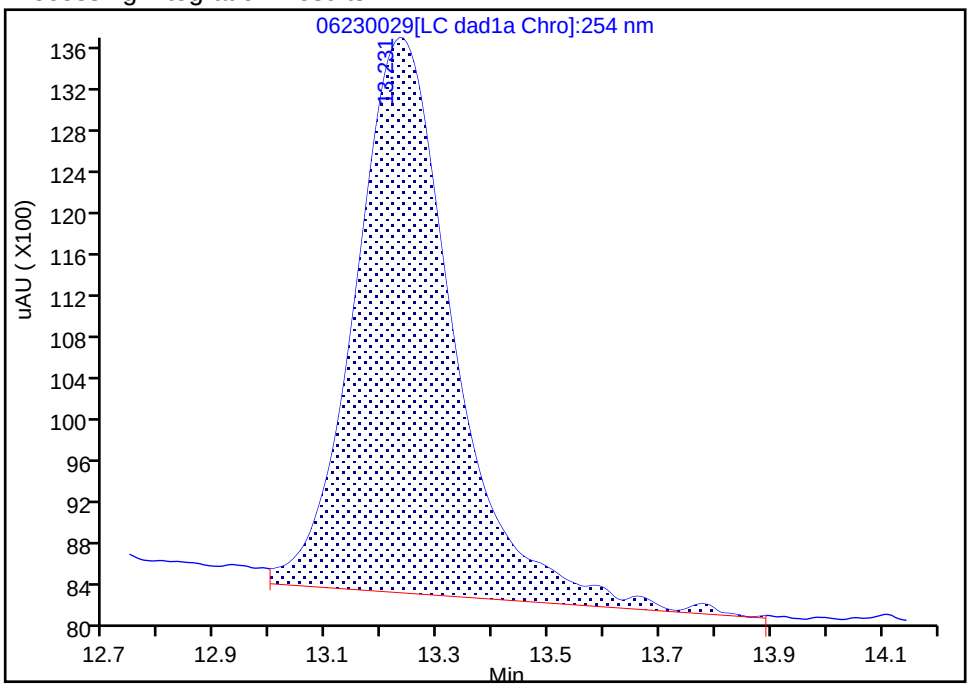
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230029.d				
Injection Date:	24-Jun-2020 08:56:09	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

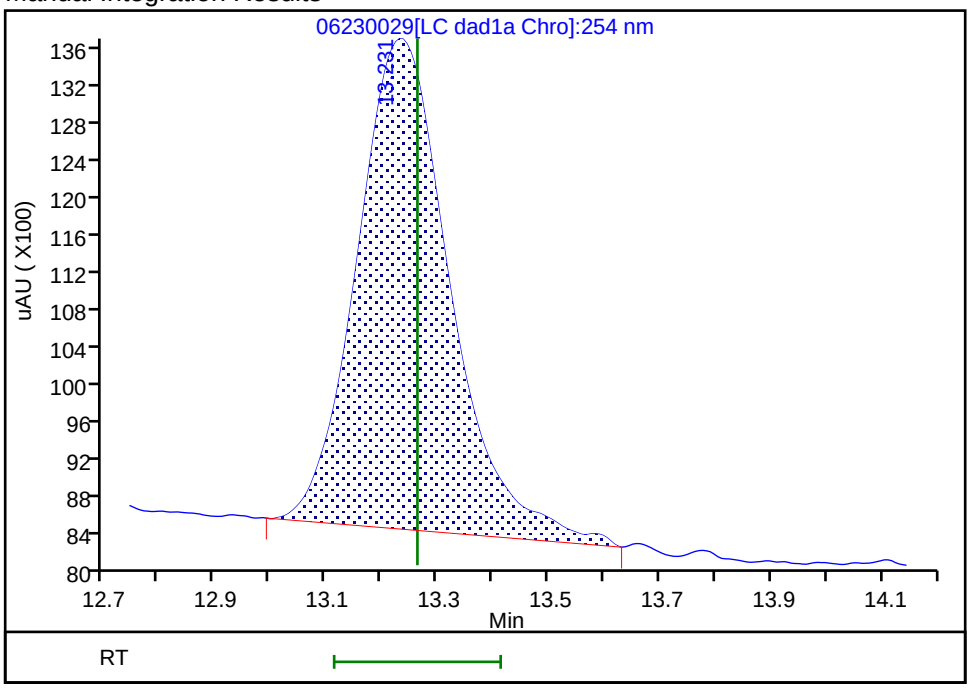
Processing Integration Results

RT: 13.23
Area: 65504
Amount: 0.229648
Amount Units: ug/ml



Manual Integration Results

RT: 13.23
Area: 60557
Amount: 0.211804
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:14:29

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

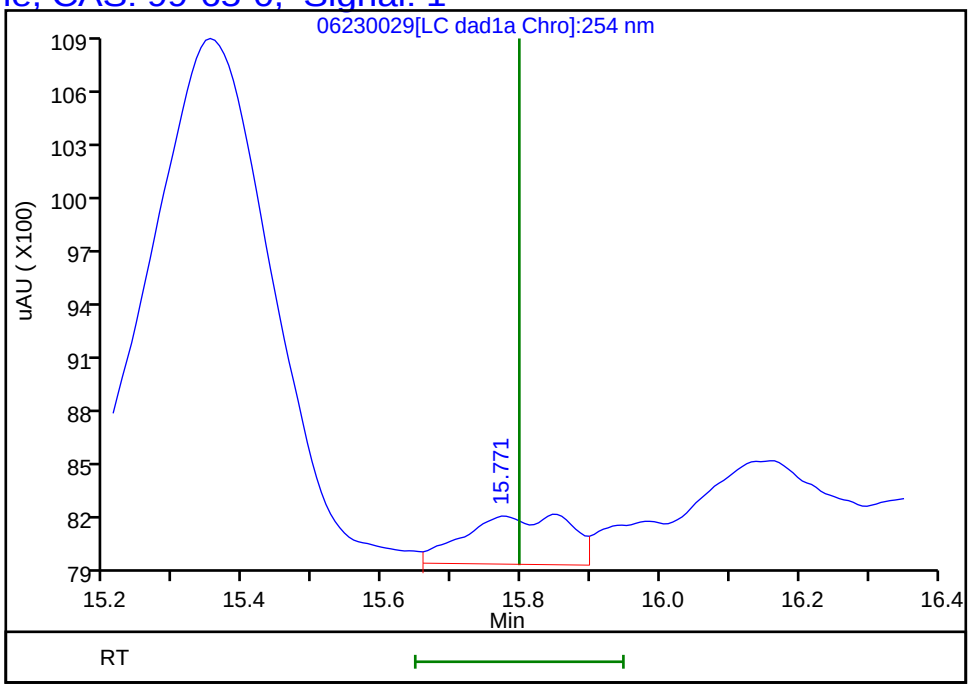
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230029.d

Injection Date:	24-Jun-2020 08:56:09	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	29	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		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.77
Response: 2845
Amount: 0.004220



Reviewer: zhangji, 24-Jun-2020 18:14:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

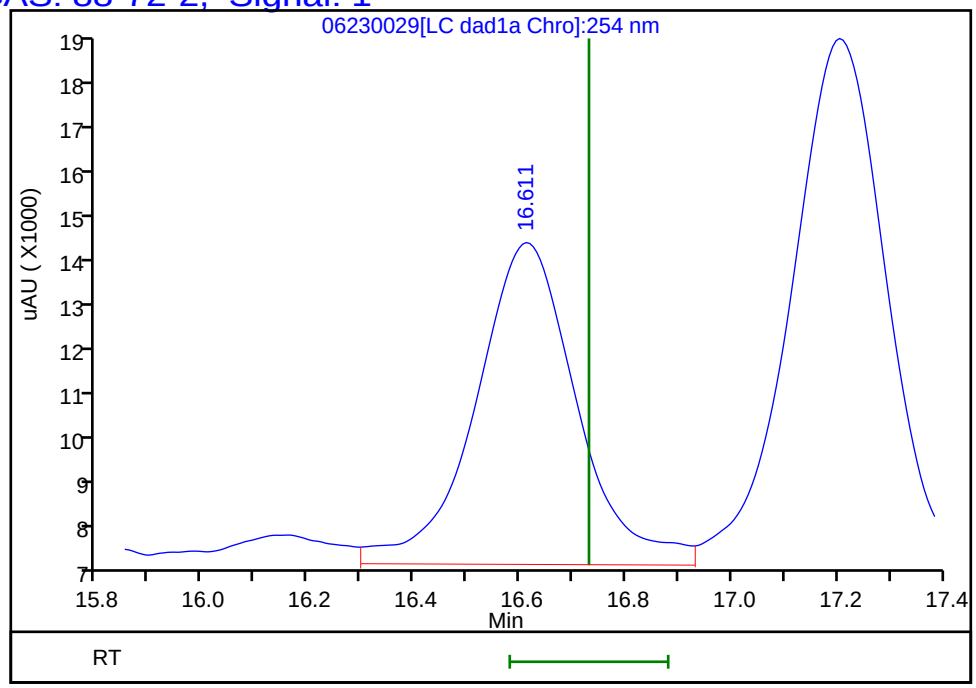
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230029.d				
Injection Date:	24-Jun-2020 08:56:09	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	29	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		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.61
Response: 88827
Amount: 0.325416



Reviewer: zhangji, 24-Jun-2020 18:14:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

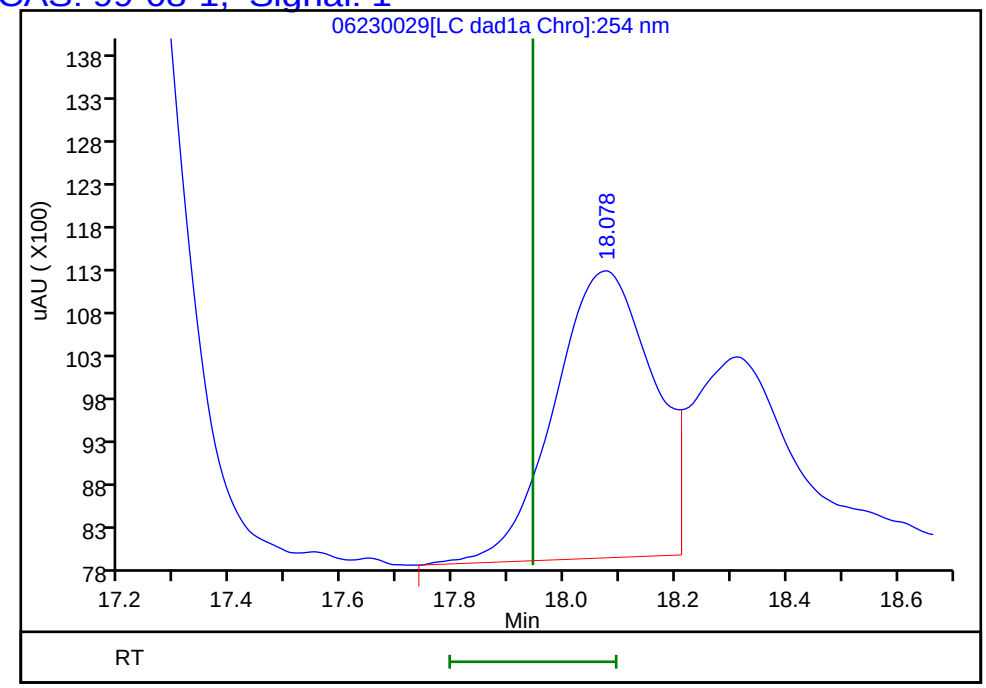
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230029.d				
Injection Date:	24-Jun-2020 08:56:09	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	29	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		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.08
Response: 41274
Amount: 0.138352



Reviewer: zhangji, 24-Jun-2020 18:14:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

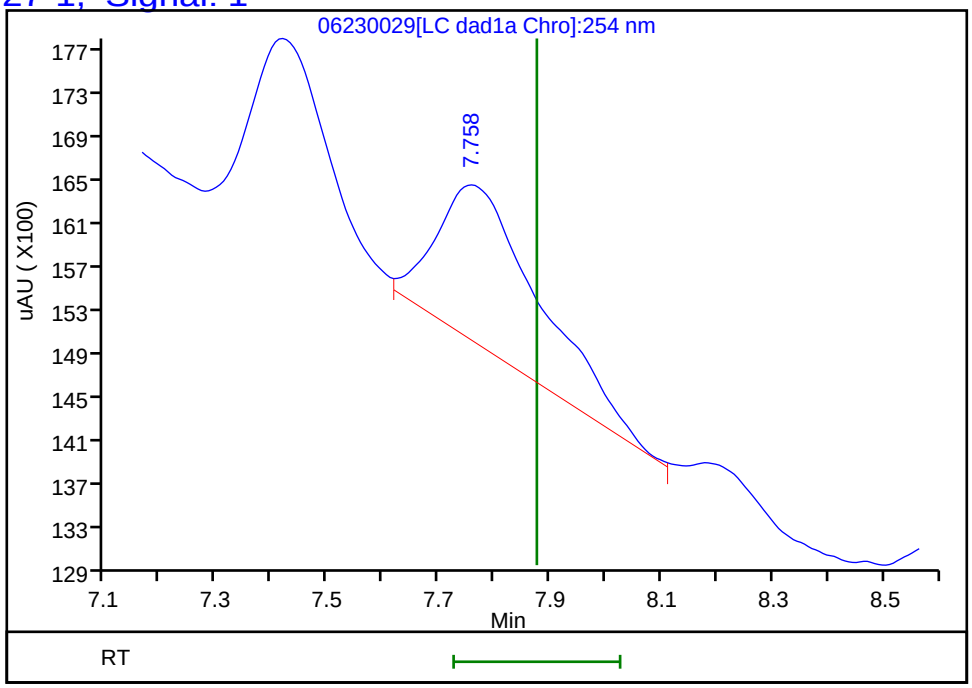
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230029.d				
Injection Date:	24-Jun-2020 08:56:09	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-2-A	Lab Sample ID:	280-137609-2		
Client ID:	PZ012-20A				
Operator ID:	JZ	ALS Bottle#:	29	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

RT: 7.76
Response: 19090
Amount: 0.051261



Reviewer: zhangji, 24-Jun-2020 18:14:38
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.: 280-137609-1

SDG No.:

Client Sample ID: G0105-20A Lab Sample ID: 280-137609-3

Matrix: Water Lab File ID: 06220016.D

Analysis Method: 8330A Date Collected: 06/11/2020 13:35

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 474.8(mL) Date Analyzed: 06/22/2020 17:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M	0.12	0.11	0.053
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
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
2691-41-0	HMX	0.21	U	0.22	0.21	0.092
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	0.12	0.11	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	107	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220016.D
Lims ID: 280-137609-A-3-A
Client ID: G0105-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 17:34:00 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-3-A
Misc. Info.: 280-0092608-016
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 14:13:46

	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	7.389	7.396	-0.007	16274	0.1026	M
	7 RDX	1		7.801			ND	U
$	9 1,2-Dinitrobenzene	1	8.762	8.741	0.021	29444	0.2130	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	
	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	12.002	11.988	0.014	2484	0.008182	
	21 o-Nitrotoluene	1		12.801			ND	
	22 p-Nitrotoluene	1	13.248	13.234	0.014	1752	0.0155	
	23 m-Nitrotoluene	1		13.821			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

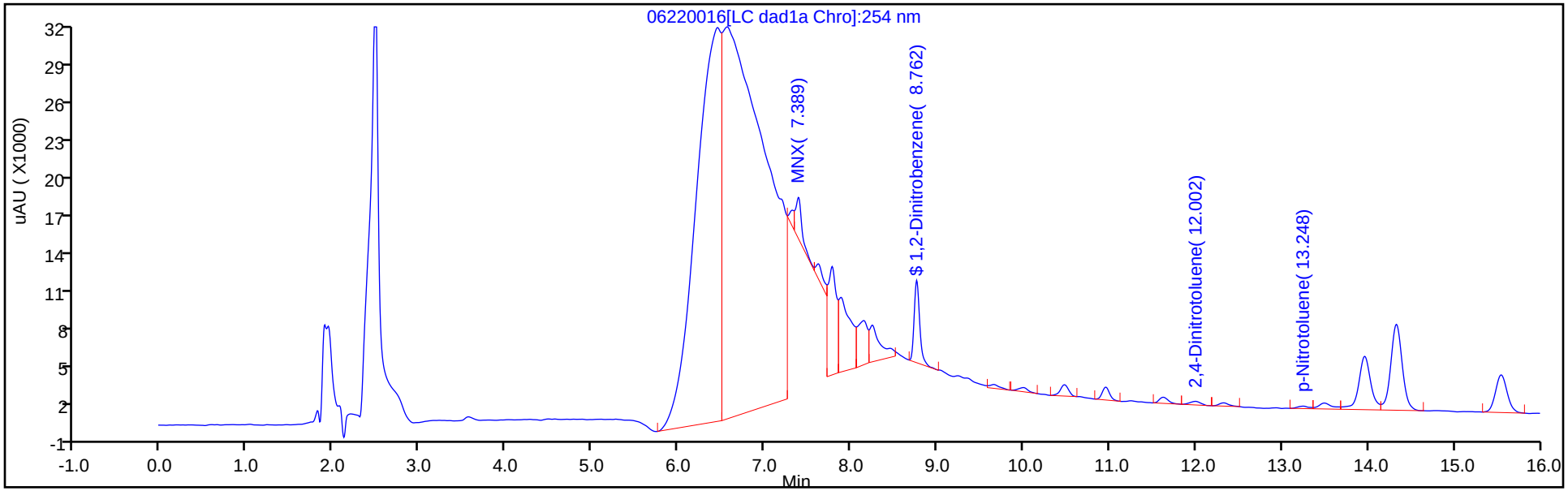
Report Date: 23-Jun-2020 15:17:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

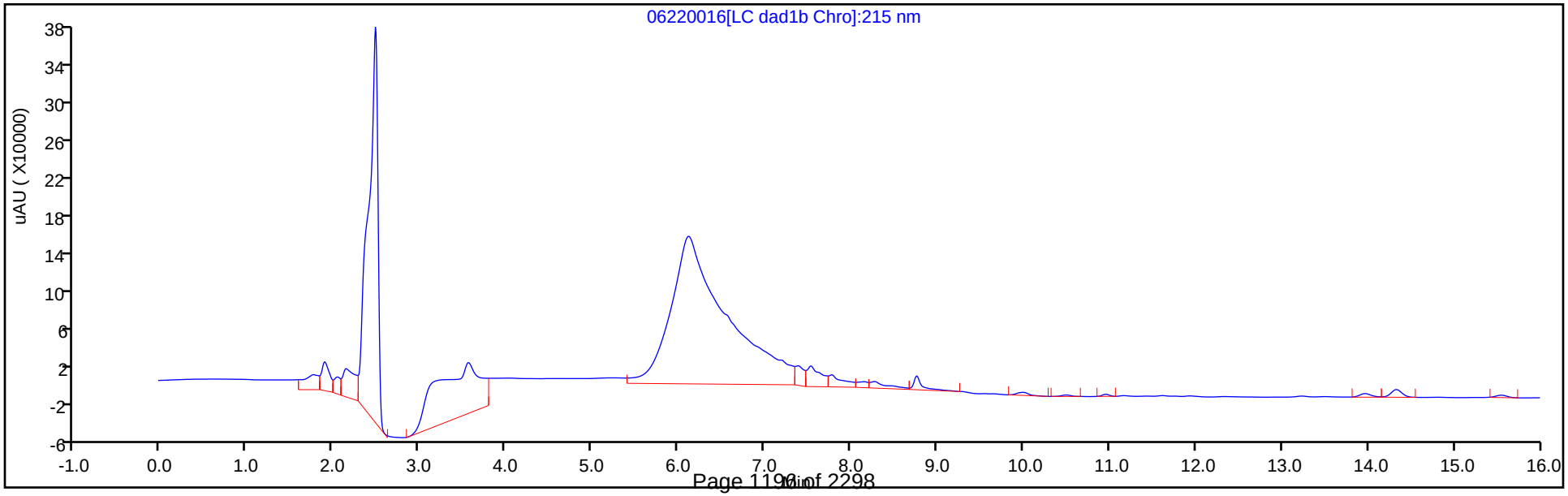
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d

Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3	Worklist Smp#:	16
Client ID:	G0105-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220016.D				
Lims ID:	280-137609-A-3-A				
Client ID:	G0105-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 17:34:00	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-3-A				
Misc. Info.:	280-0092608-016				
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 14:13:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2130	106.52

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

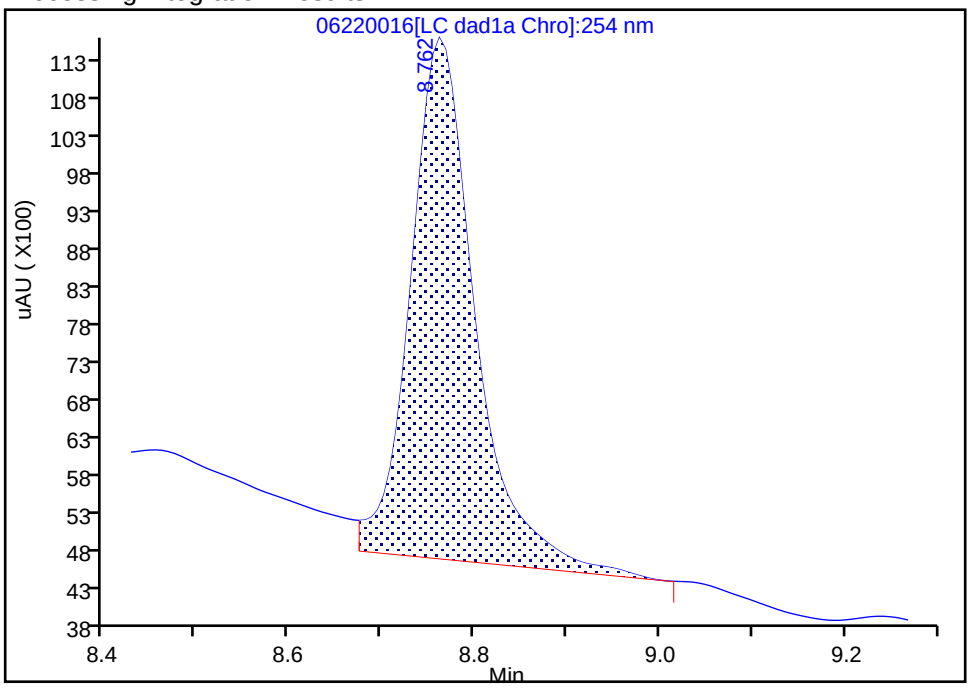
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d		
Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3
Client ID:	G0105-20A		
Operator ID:	JZ	ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

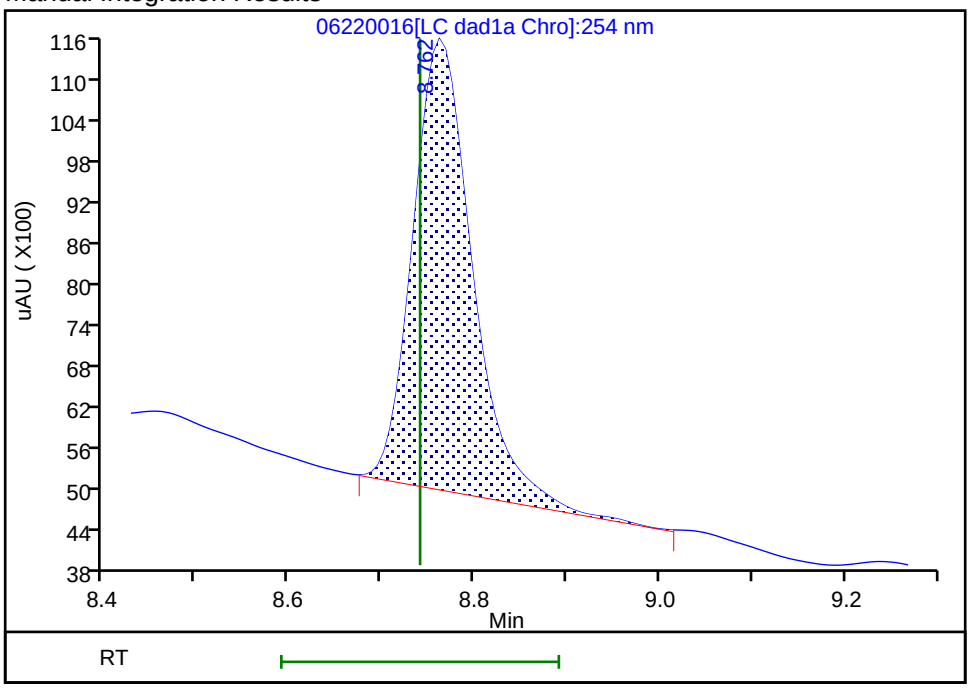
Processing Integration Results

RT: 8.76
Area: 33228
Amount: 0.240413
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 29444
Amount: 0.213035
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:13:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

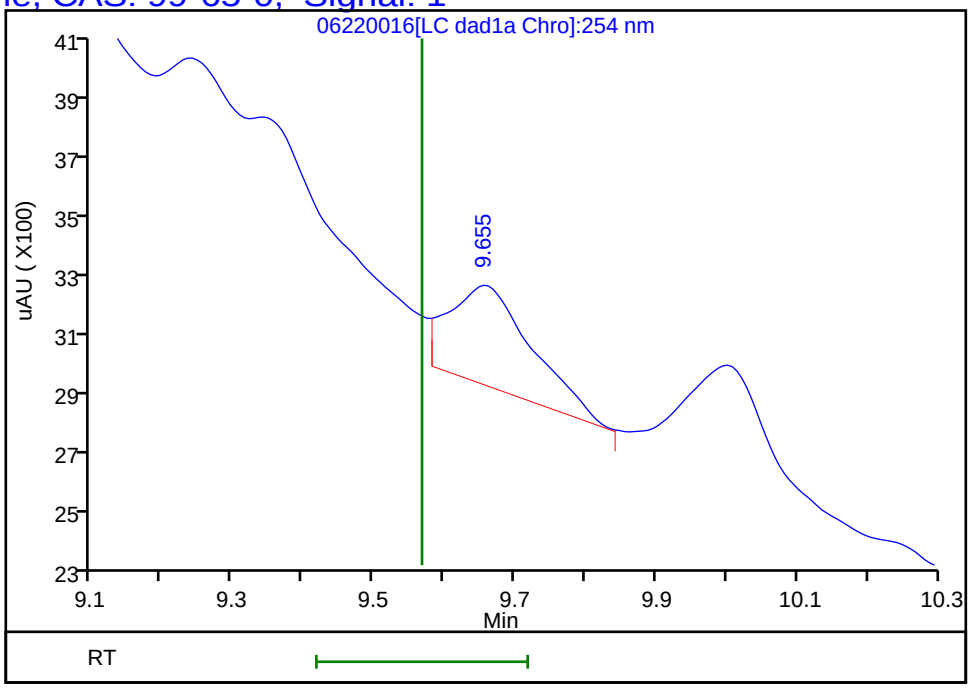
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d

Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.66
Response: 2486
Amount: 0.008106



Reviewer: zhangji, 23-Jun-2020 14:13:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

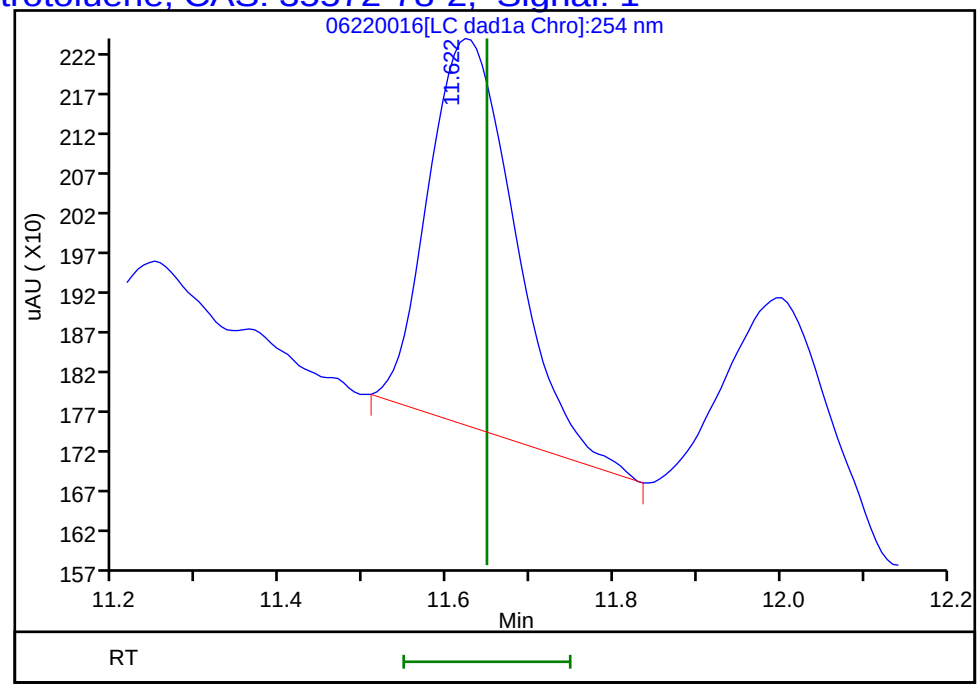
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d				
Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.62
Response: 3527
Amount: 0.017390



Reviewer: zhangji, 23-Jun-2020 14:13:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

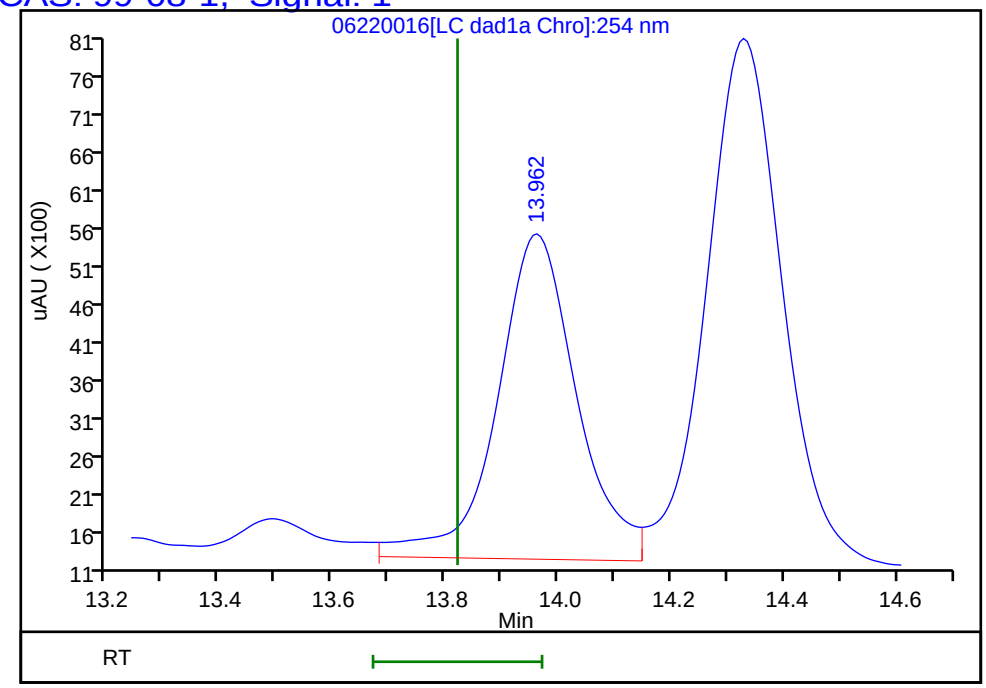
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d				
Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.96
Response: 41600
Amount: 0.290851



Reviewer: zhangji, 23-Jun-2020 14:13:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

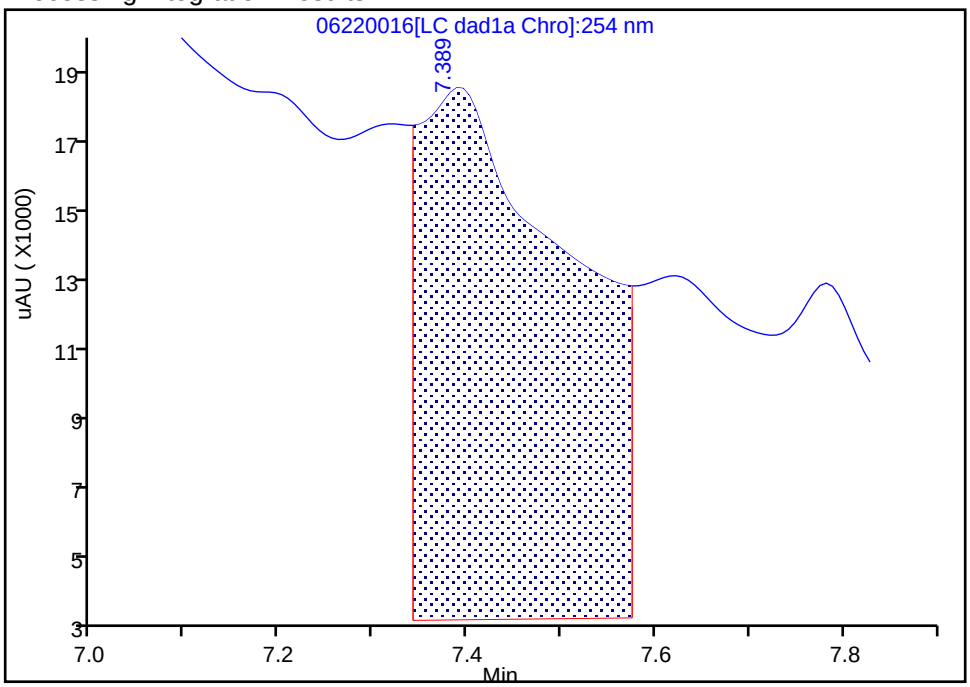
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d		
Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3
Client ID:	G0105-20A		
Operator ID:	JZ	ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

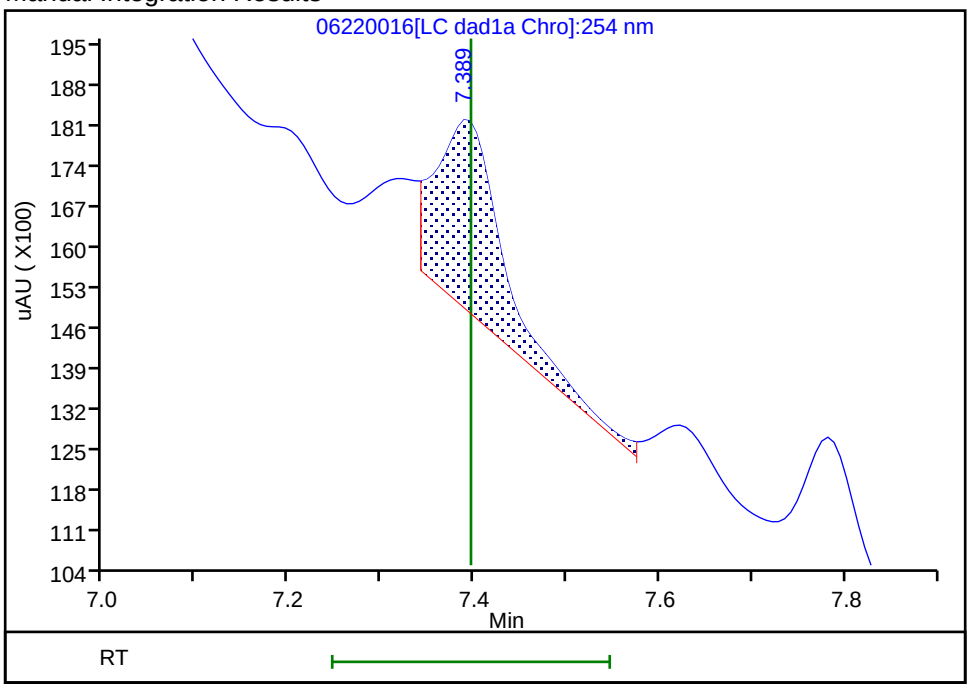
Processing Integration Results

RT: 7.39
Area: 166256
Amount: 1.048641
Amount Units: ug/mL



Manual Integration Results

RT: 7.39
Area: 16274
Amount: 0.102646
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:13:28
Audit Action: Assigned New Baseline Audit Reason: Baseline

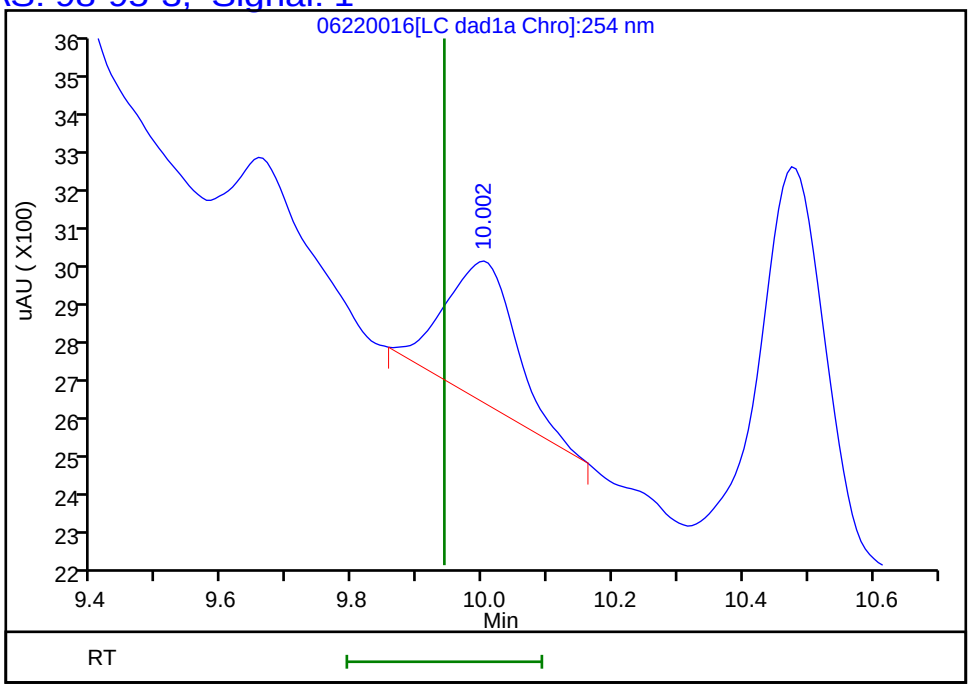
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d				
Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 10.00
Response: 2496
Amount: 0.012455



Reviewer: zhangji, 23-Jun-2020 14:13:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

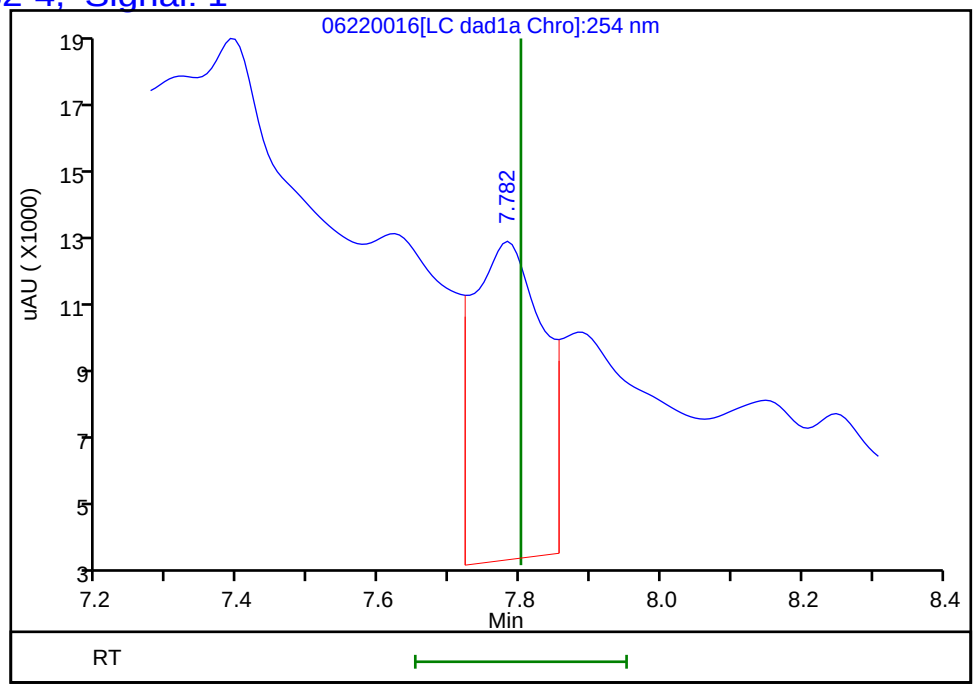
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220016.d

Injection Date:	22-Jun-2020 17:34:00	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3
Client ID:	G0105-20A		
Operator ID:	JZ	ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.78
Response: 59012
Amount: 0.506050



Reviewer: zhangji, 23-Jun-2020 14:13:46
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.: 280-137609-1

SDG No.:

Client Sample ID: G0105-20A Lab Sample ID: 280-137609-3

Matrix: Water Lab File ID: 06230030.D

Analysis Method: 8330A Date Collected: 06/11/2020 13:35

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 474.8(mL) Date Analyzed: 06/24/2020 09:31

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
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16

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\G2_LUNA\20200623-92679.b\06230030.D
Lims ID: 280-137609-A-3-A
Client ID: G0105-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 09:31:10 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-3-A
Misc. Info.: 280-0092679-030
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 18:51:58 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: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:15:00

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	13.206	13.263	-0.057	59186	0.2069	M
12 1,3-Dinitrobenzene	1		15.797			ND	
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	U
18 2-Amino-4,6-dinitrotoluene	1	18.279	18.390	-0.111	24216	0.0521	
19 1,3,5-Trinitrobenzene	1		19.123			ND	
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		24.890			ND	

QC Flag Legend

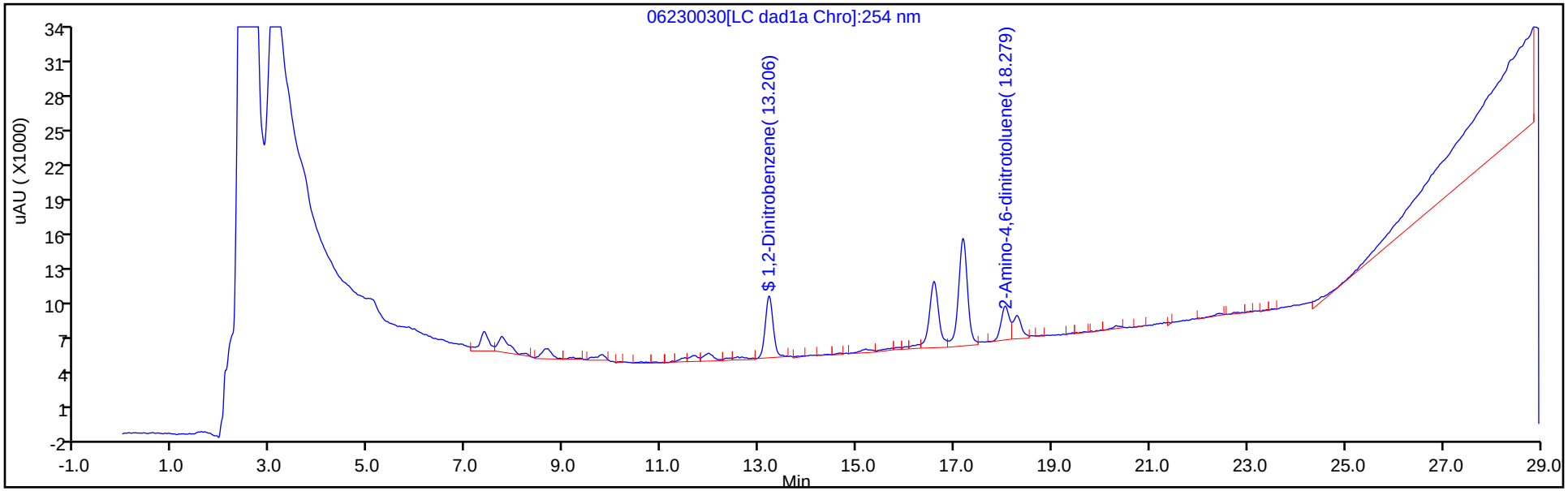
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Jun-2020 18:52:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

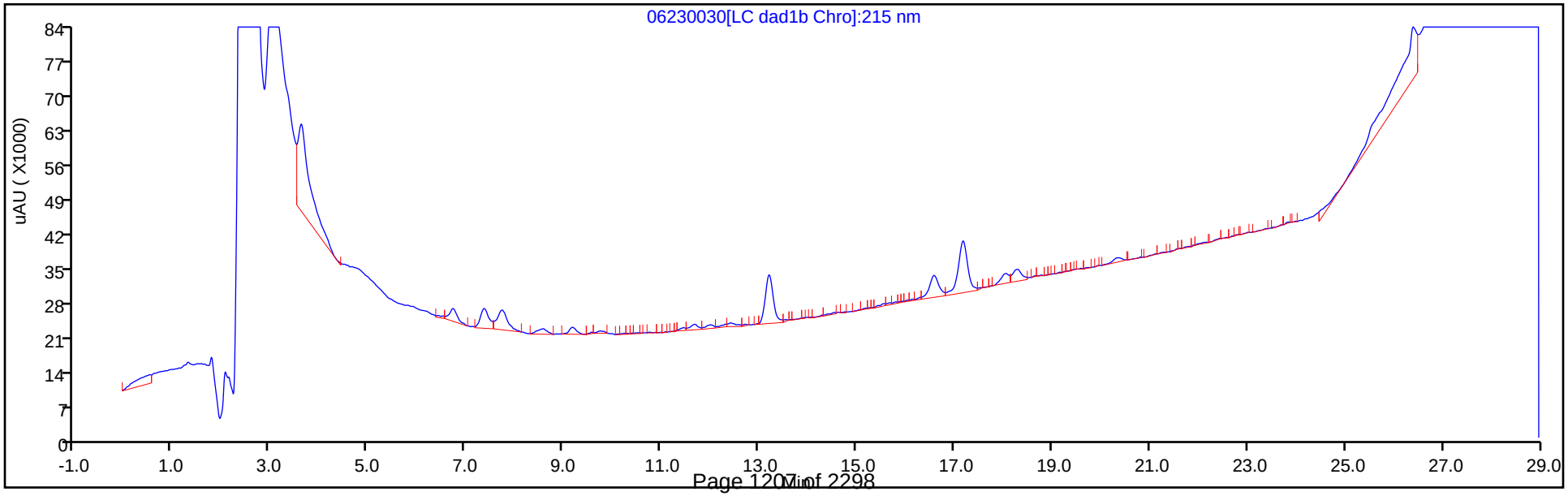
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230030.d				
Injection Date:	24-Jun-2020 09:31:10	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3	Worklist Smp#:	30
Client ID:	G0105-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
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\06230030.D				
Lims ID:	280-137609-A-3-A				
Client ID:	G0105-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 09:31:10	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-3-A				
Misc. Info.:	280-0092679-030				
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 18:51:58	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:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:15:00		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2069	103.43

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

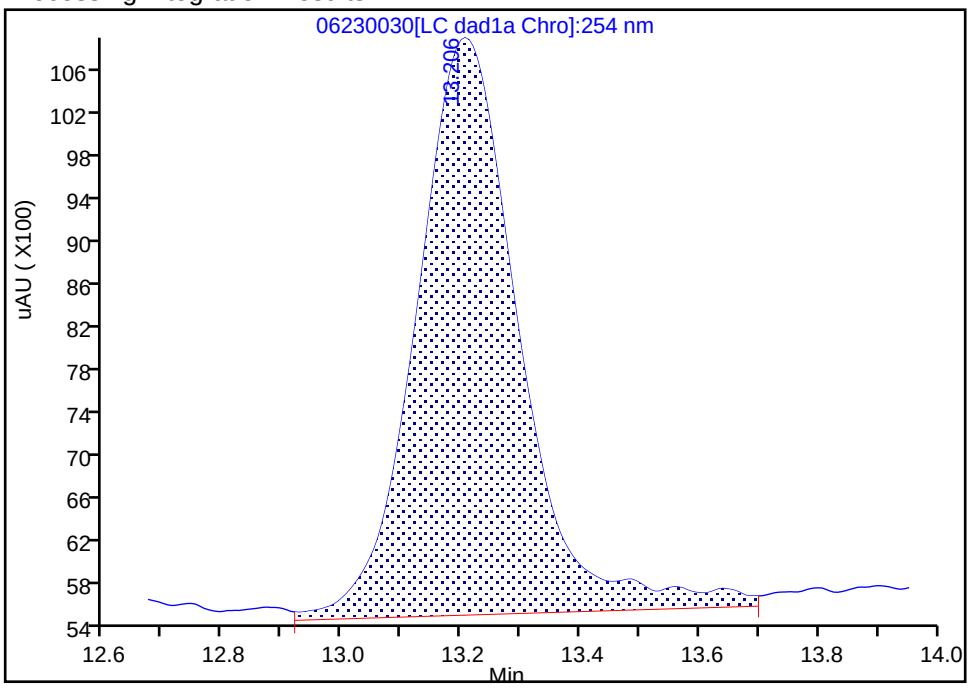
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230030.d				
Injection Date:	24-Jun-2020 09:31:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	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

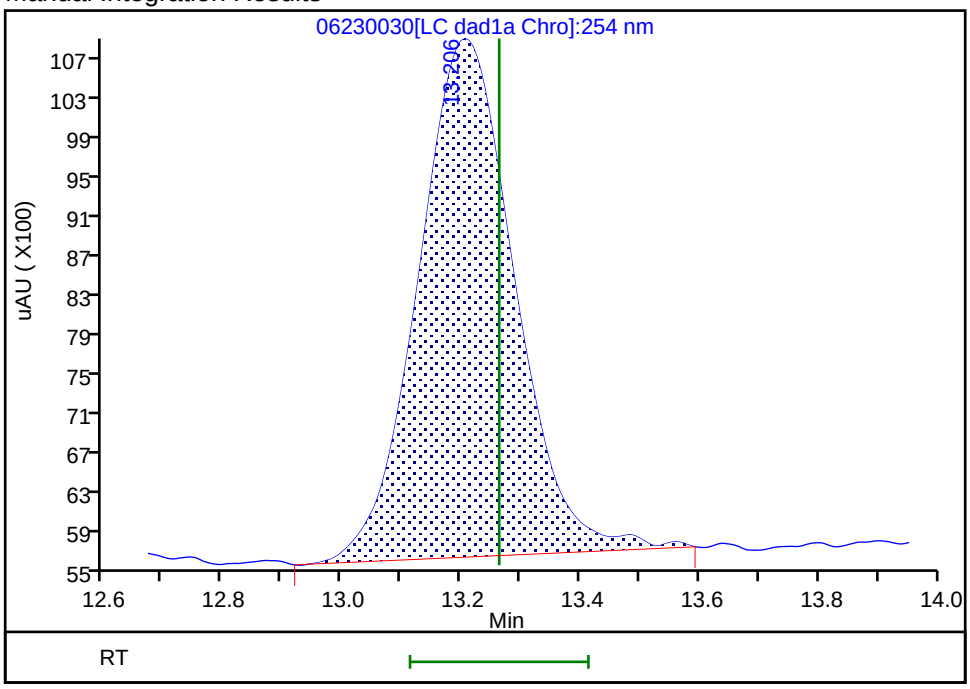
Processing Integration Results

RT: 13.21
Area: 64622
Amount: 0.226467
Amount Units: ug/ml



Manual Integration Results

RT: 13.21
Area: 59186
Amount: 0.206859
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:14:45

Audit Action: Manually Integrated Audit Reason: Baseline

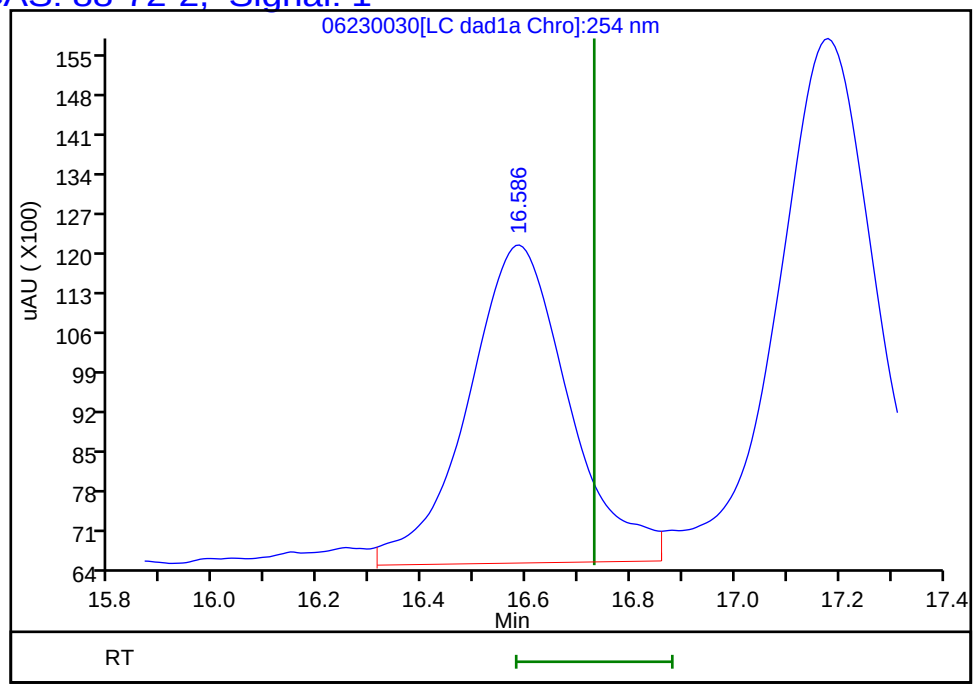
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230030.d				
Injection Date:	24-Jun-2020 09:31:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
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: 16.59
Response: 75884
Amount: 0.277999



Reviewer: zhangji, 24-Jun-2020 18:15:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

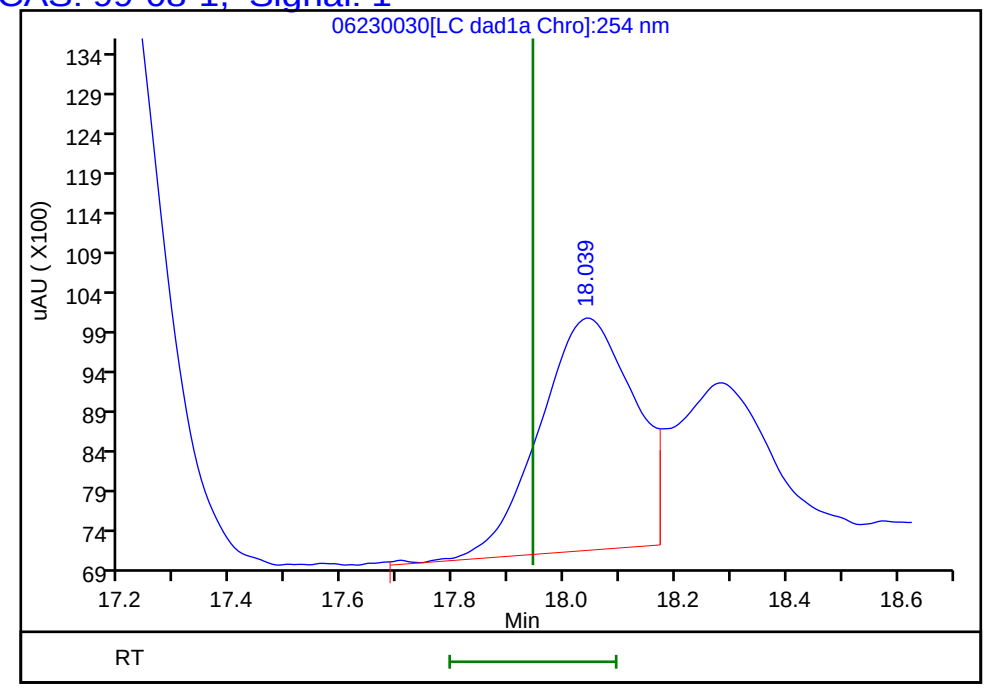
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230030.d				
Injection Date:	24-Jun-2020 09:31:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
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: 18.04
Response: 34205
Amount: 0.114656



Reviewer: zhangji, 24-Jun-2020 18:15:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

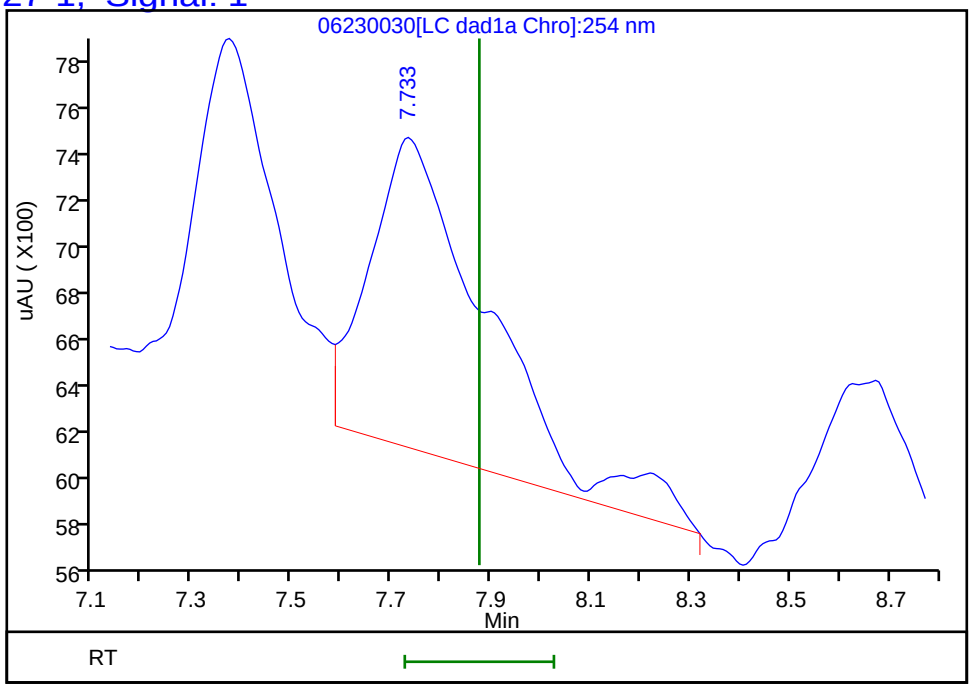
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230030.d				
Injection Date:	24-Jun-2020 09:31:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-3-A	Lab Sample ID:	280-137609-3		
Client ID:	G0105-20A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
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: 7.73
Response: 22296
Amount: 0.063273



Reviewer: zhangji, 24-Jun-2020 18:15:00
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.: 280-137609-1

SDG No.:

Client Sample ID: G0080-20A Lab Sample ID: 280-137609-4

Matrix: Water Lab File ID: 06220017.D

Analysis Method: 8330A Date Collected: 06/11/2020 13:45

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 479(mL) Date Analyzed: 06/22/2020 17:56

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	0.053	J J1 M	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
19406-51-0	4-Amino-2,6-dinitrotoluene	0.15	J J1 M	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	99	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220017.D
Lims ID: 280-137609-A-4-A
Client ID: G0080-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 17:56:59 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-4-A
Misc. Info.: 280-0092608-017
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 14:15:24

	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	8.763	8.741	0.022	27304	0.1976	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	11.403	11.361	0.042	1401	0.0144	M
	18 2-Amino-4,6-dinitrotoluene	1	11.689	11.648	0.041	1026	0.005059	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	
	23 m-Nitrotoluene	1	13.869	13.821	0.048	2789	0.0195	M

QC Flag Legend

Review Flags
M - Manually Integrated

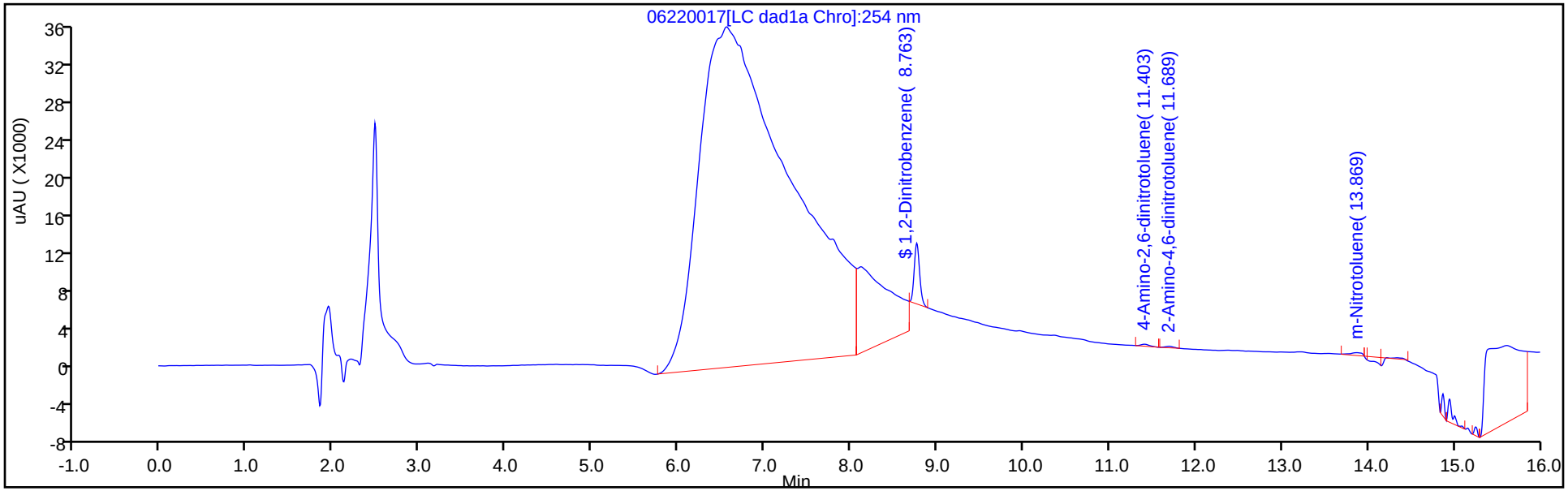
Report Date: 23-Jun-2020 15:17:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

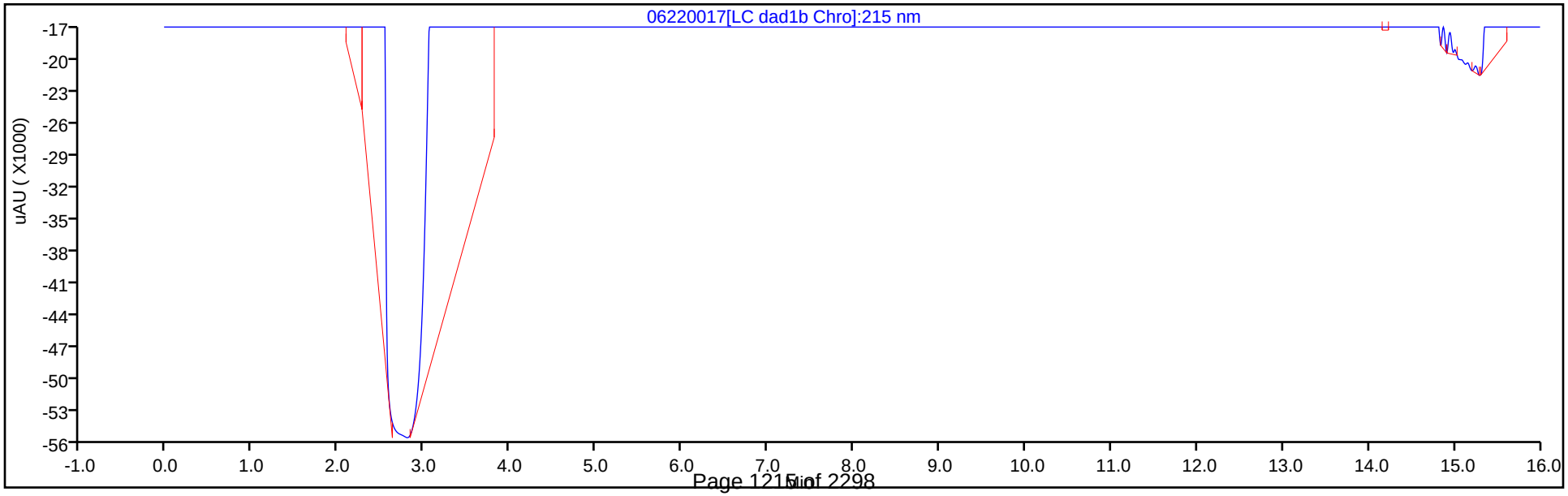
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220017.d

Injection Date:	22-Jun-2020 17:56:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4	Worklist Smp#:	17
Client ID:	G0080-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220017.D				
Lims ID:	280-137609-A-4-A				
Client ID:	G0080-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 17:56:59	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-4-A				
Misc. Info.:	280-0092608-017				
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 14:15:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1976	98.78

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

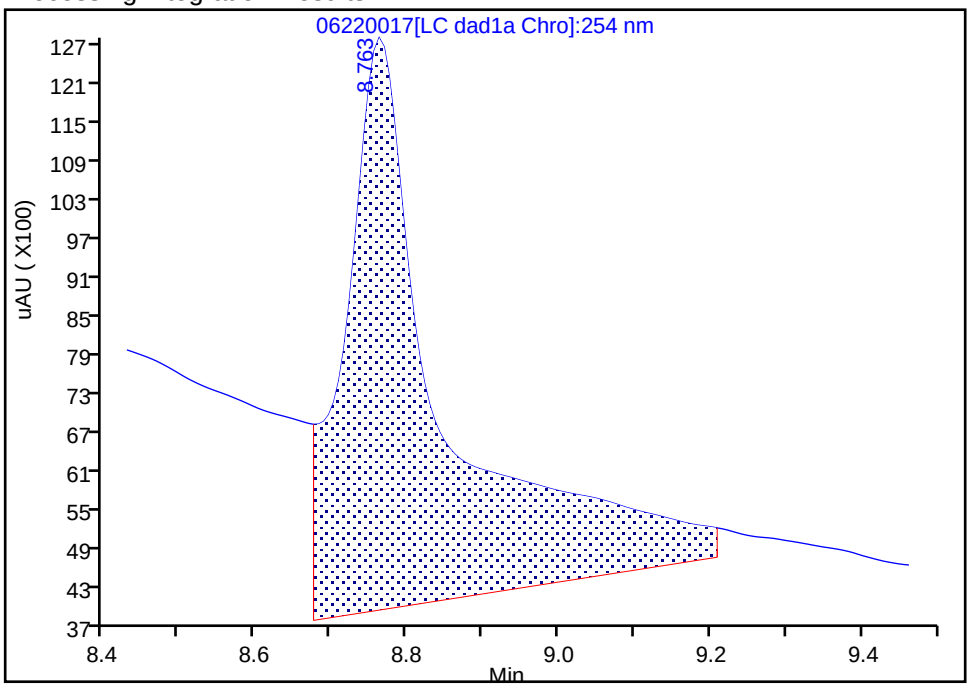
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220017.d				
Injection Date:	22-Jun-2020 17:56:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

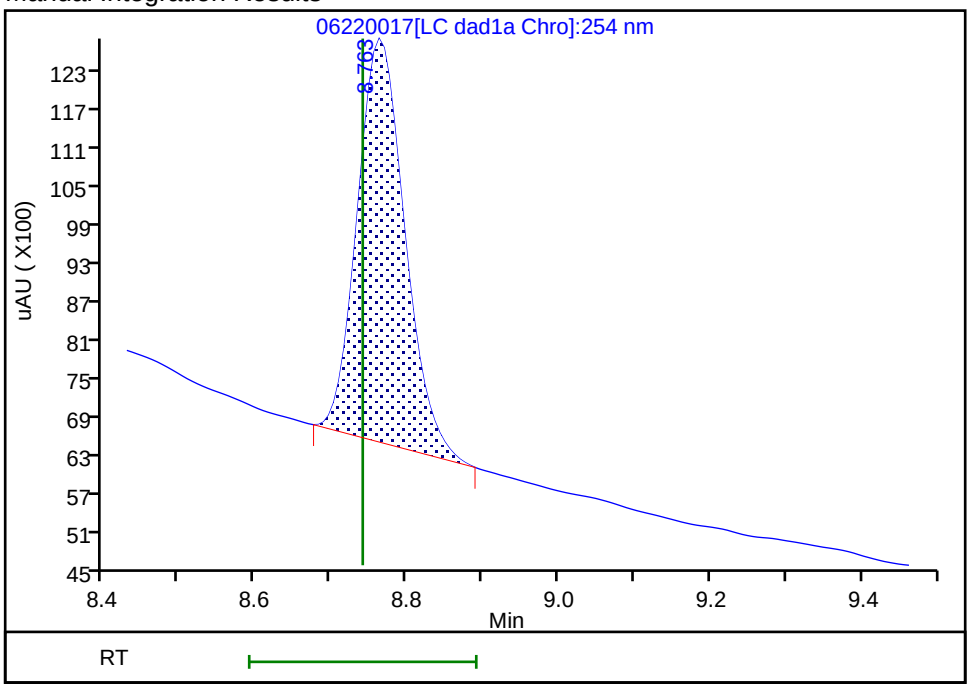
Processing Integration Results

RT: 8.76
Area: 82350
Amount: 0.595823
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 27304
Amount: 0.197551
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:13:57

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

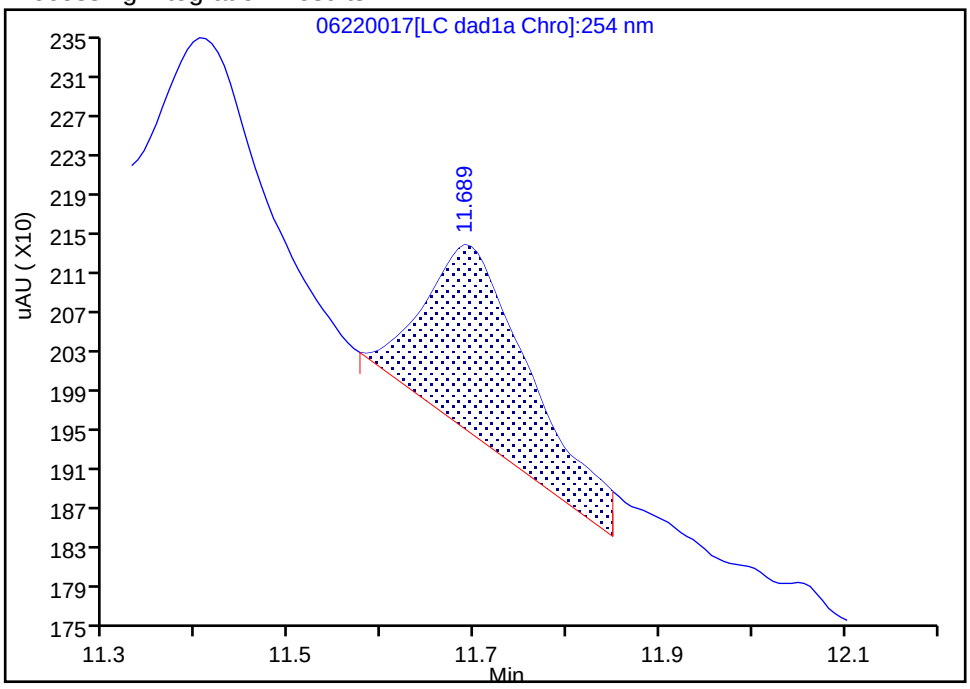
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220017.d				
Injection Date:	22-Jun-2020 17:56:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

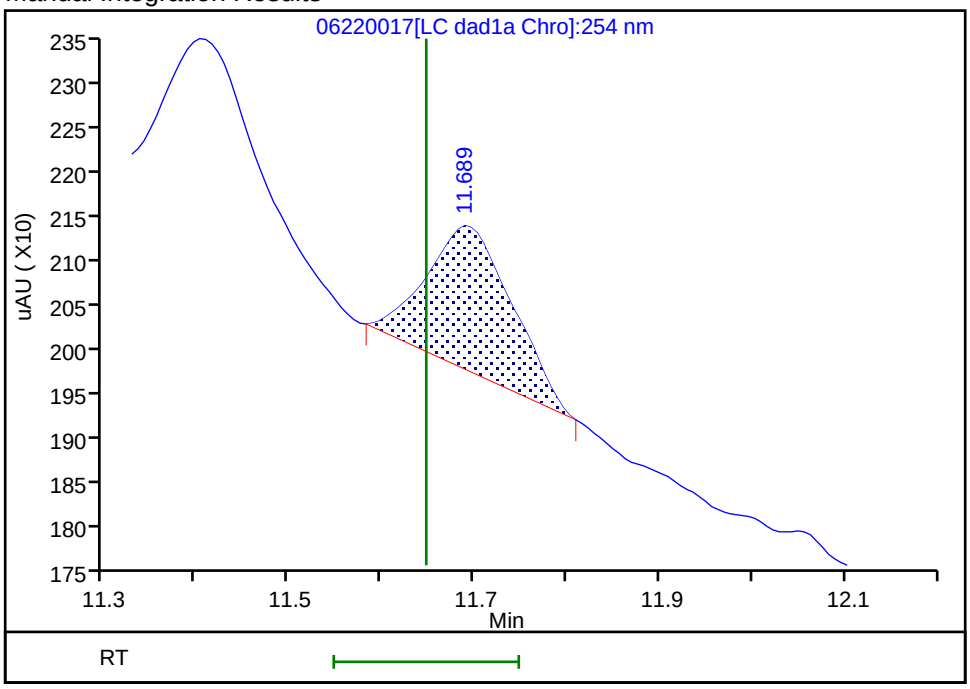
Processing Integration Results

RT: 11.69
Area: 1508
Amount: 0.007435
Amount Units: ug/mL



Manual Integration Results

RT: 11.69
Area: 1026
Amount: 0.005059
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:15:19

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

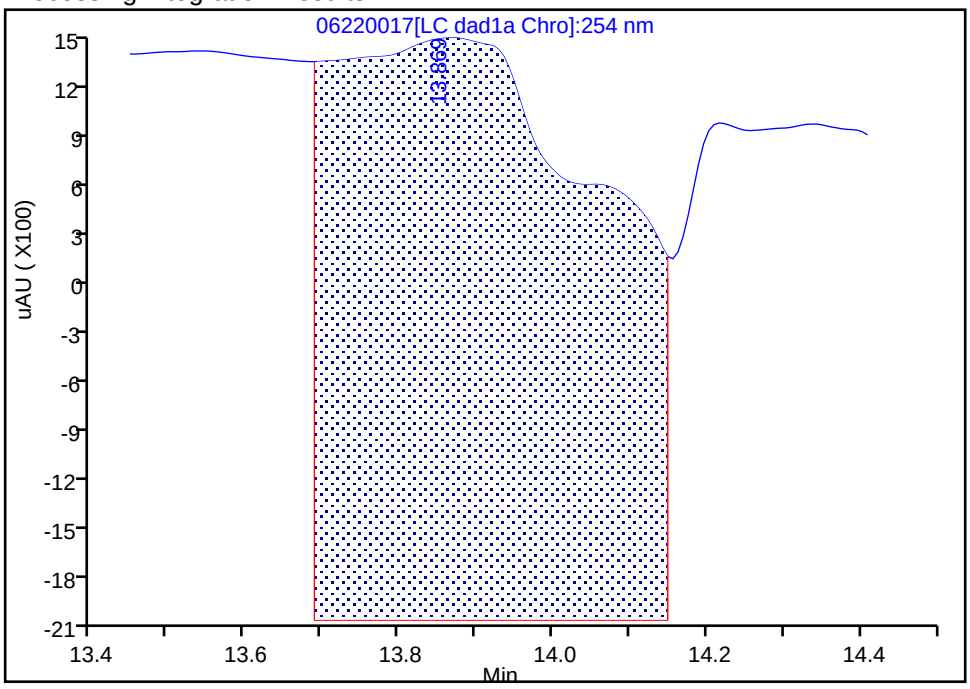
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220017.d		
Injection Date:	22-Jun-2020 17:56:59	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4
Client ID:	G0080-20A		
Operator ID:	JZ	ALS Bottle#:	17 Worklist Smp#: 17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

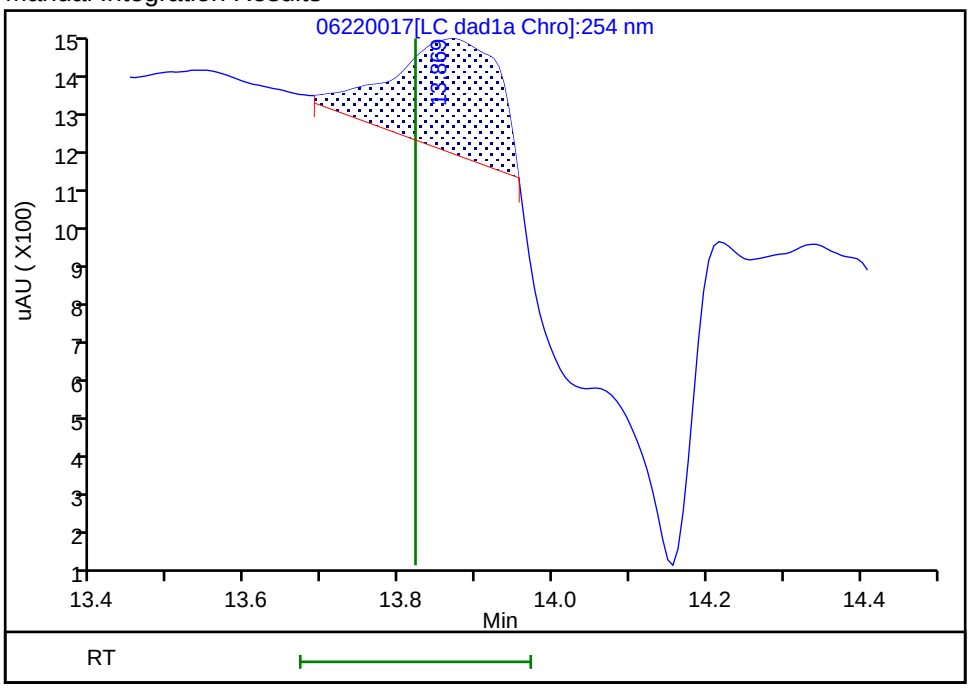
Processing Integration Results

RT: 13.87
Area: 86305
Amount: 0.603411
Amount Units: ug/mL



Manual Integration Results

RT: 13.87
Area: 2789
Amount: 0.019500
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:14:26

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

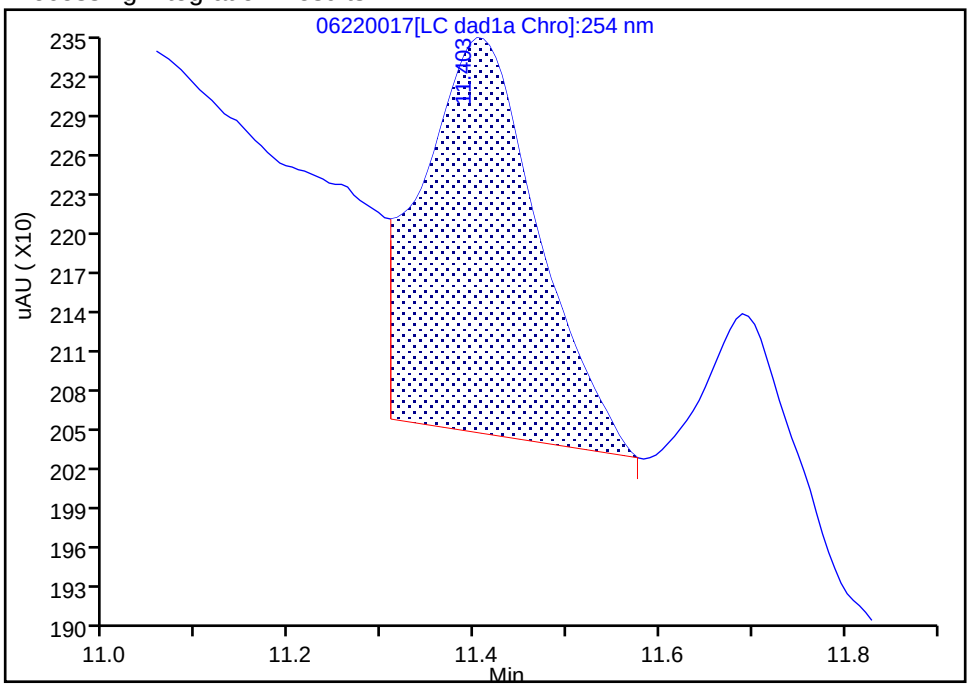
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220017.d				
Injection Date:	22-Jun-2020 17:56:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

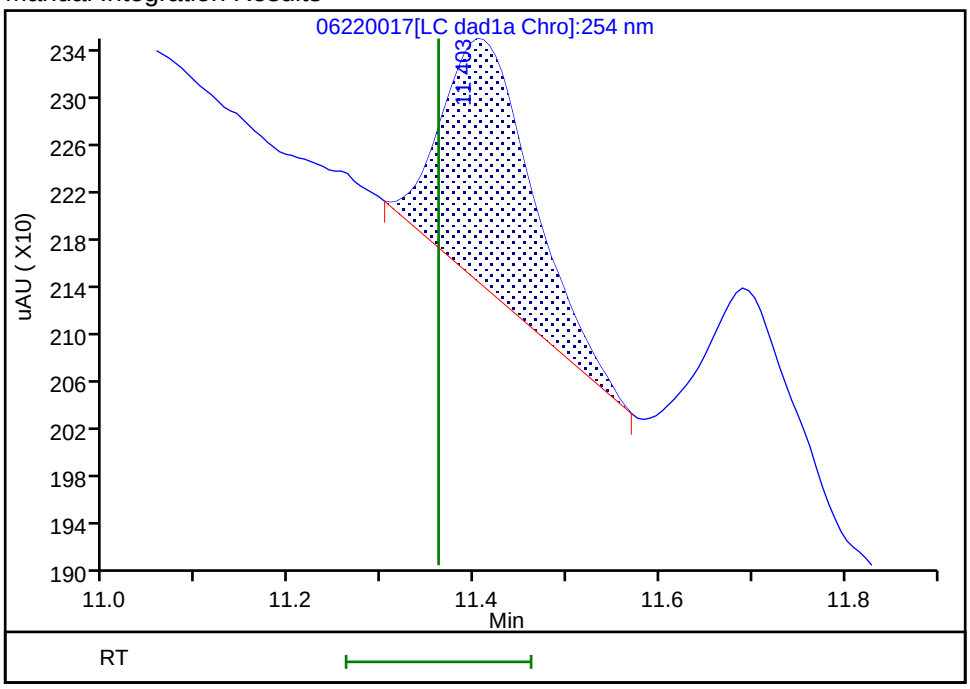
Processing Integration Results

RT: 11.40
Area: 2570
Amount: 0.020932
Amount Units: ug/mL



Manual Integration Results

RT: 11.40
Area: 1401
Amount: 0.014378
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:15:13

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0080-20A Lab Sample ID: 280-137609-4

Matrix: Water Lab File ID: 06230031.D

Analysis Method: 8330A Date Collected: 06/11/2020 13:45

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 479(mL) Date Analyzed: 06/24/2020 10:06

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499860 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.11*	*J1 M*	*0.11*	0.10	*0.053*
99-08-1	3-Nitrotoluene	0.42	U M	0.42	0.42	0.20
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.087*	*J J1 M*	*0.16*	0.13	*0.060*

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\20200623-92679.b\06230031.D
Lims ID: 280-137609-A-4-A
Client ID: G0080-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 10:06:12 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-4-A
Misc. Info.: 280-0092679-031
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 18:51:58 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: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:16:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.144	7.150	-0.006	3704	-0.009152	7M
	7 MNX	1		7.876			ND	
	8 RDX	1	9.344	9.363	-0.019	3452	0.0141	M
	9 Nitrobenzene	1		12.263			ND	
$	10 1,2-Dinitrobenzene	1	13.251	13.263	-0.012	56800	0.1983	
	12 1,3-Dinitrobenzene	1		15.797			ND	
	14 o-Nitrotoluene	1	16.664	16.730	-0.066	2308	0.008455	M
	15 p-Nitrotoluene	1		17.017			ND	MU
	16 4-Amino-2,6-dinitrotoluene	1	17.417	17.450	-0.033	2890	0.008371	M
	17 m-Nitrotoluene	1		17.943			ND	MU
	18 2-Amino-4,6-dinitrotoluene	1	18.391	18.390	0.001	4891	0.0105	M
	19 1,3,5-Trinitrobenzene	1		19.123			ND	
	20 2,6-Dinitrotoluene	1		20.050			ND	
	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

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

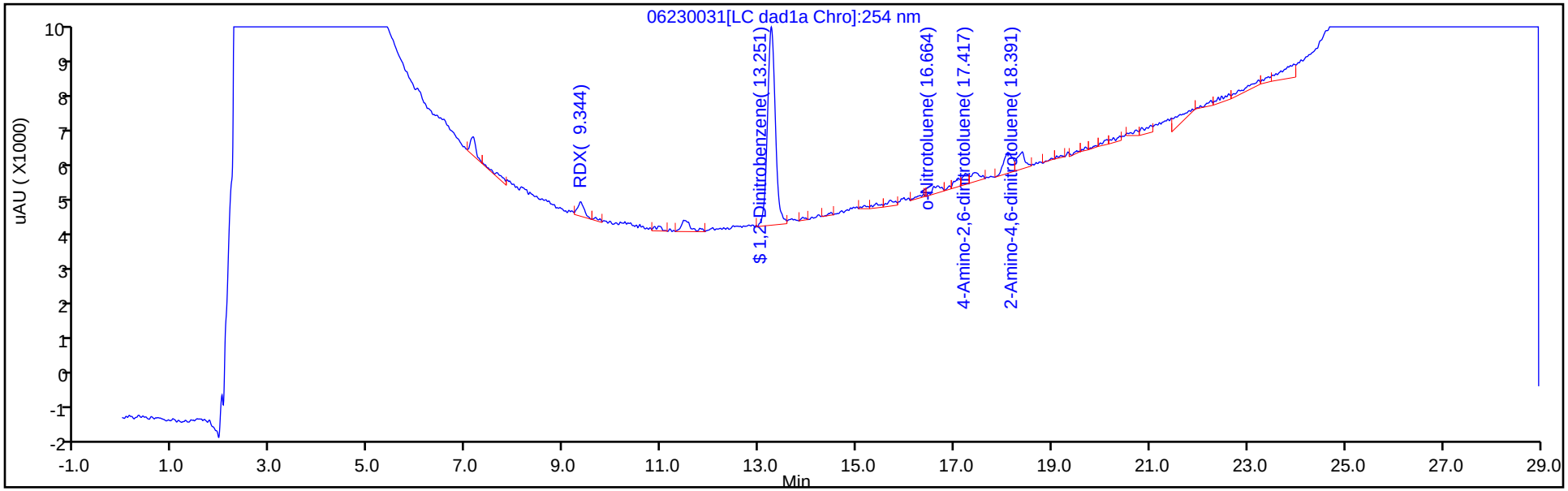
Report Date: 24-Jun-2020 18:52:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

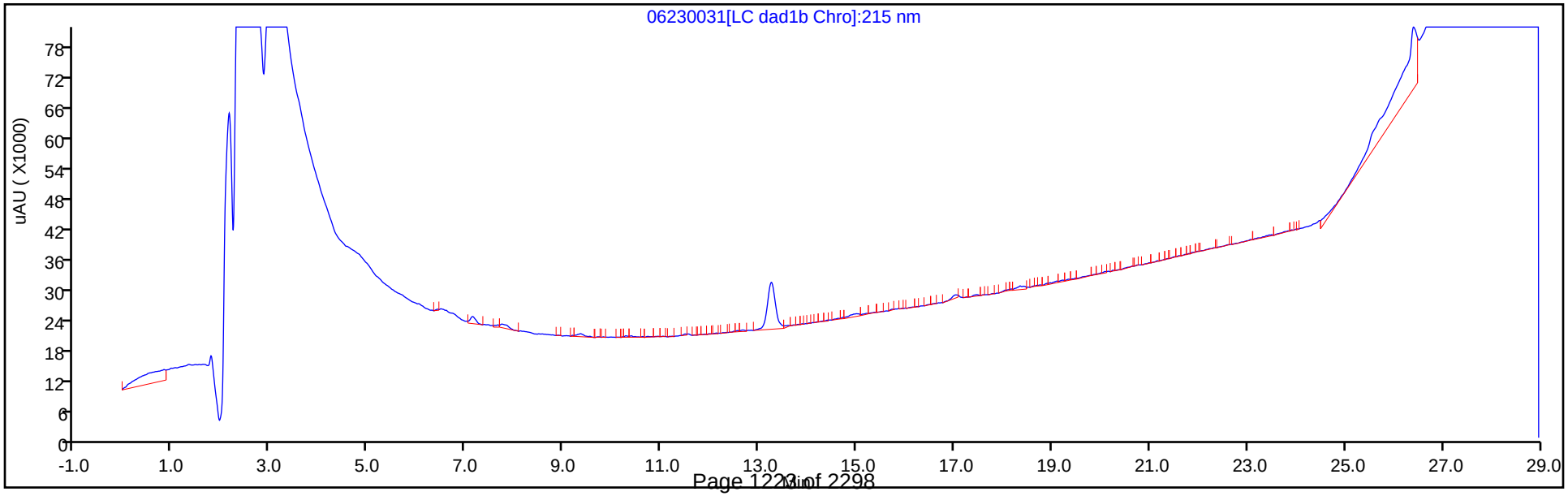
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d

Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4	Worklist Smp#:	31
Client ID:	G0080-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
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\06230031.D				
Lims ID:	280-137609-A-4-A				
Client ID:	G0080-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 10:06:12	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-4-A				
Misc. Info.:	280-0092679-031				
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 18:51:58	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:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:16:01		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1983	99.13

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

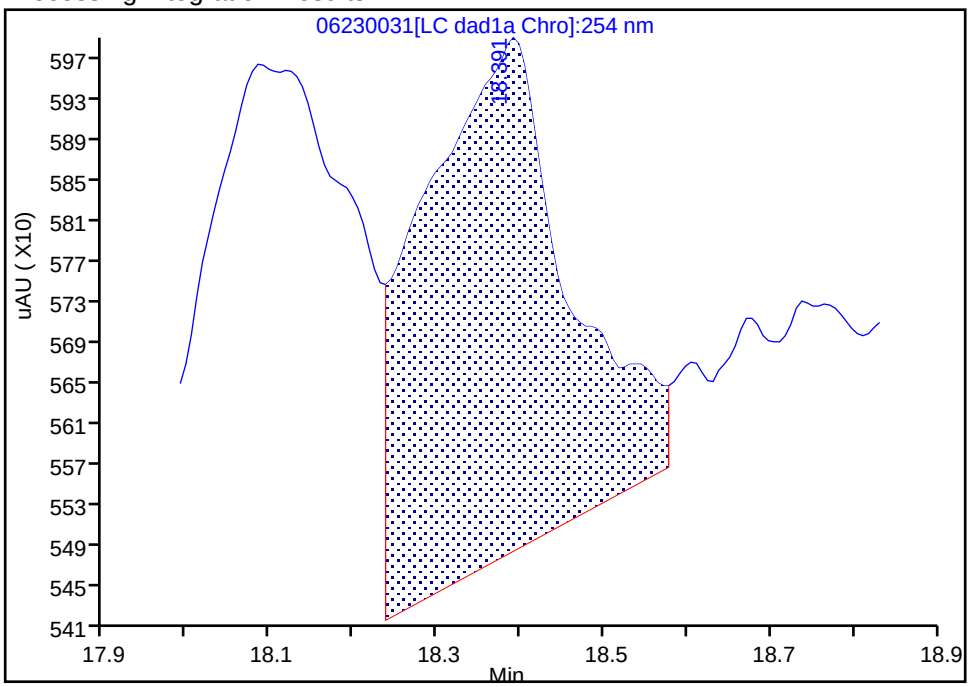
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	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

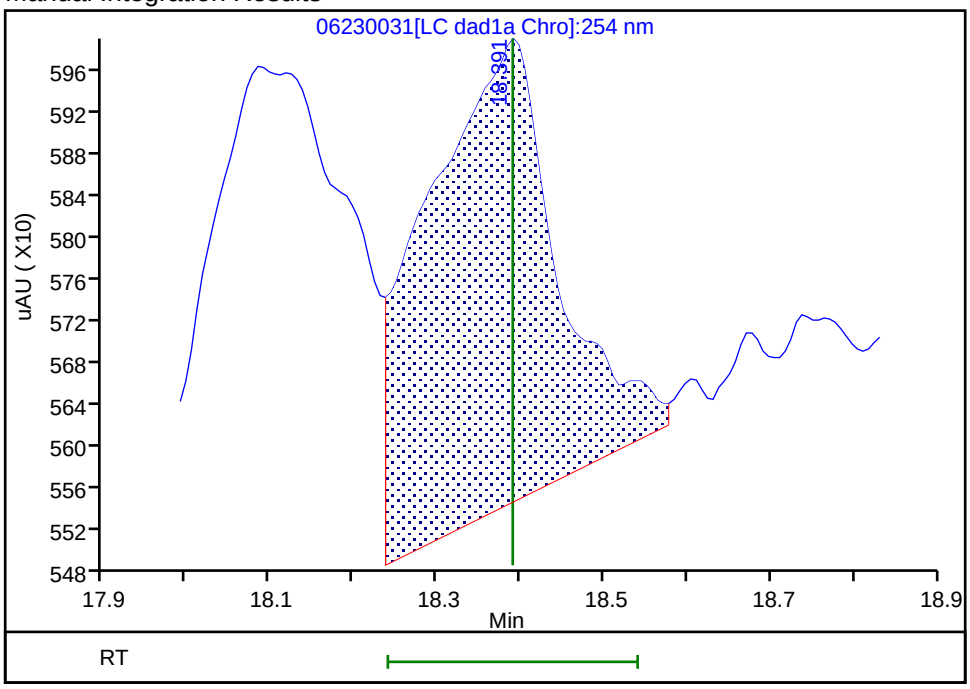
Processing Integration Results

RT: 18.39
Area: 6309
Amount: 0.013562
Amount Units: ug/ml



Manual Integration Results

RT: 18.39
Area: 4891
Amount: 0.010514
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:15:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

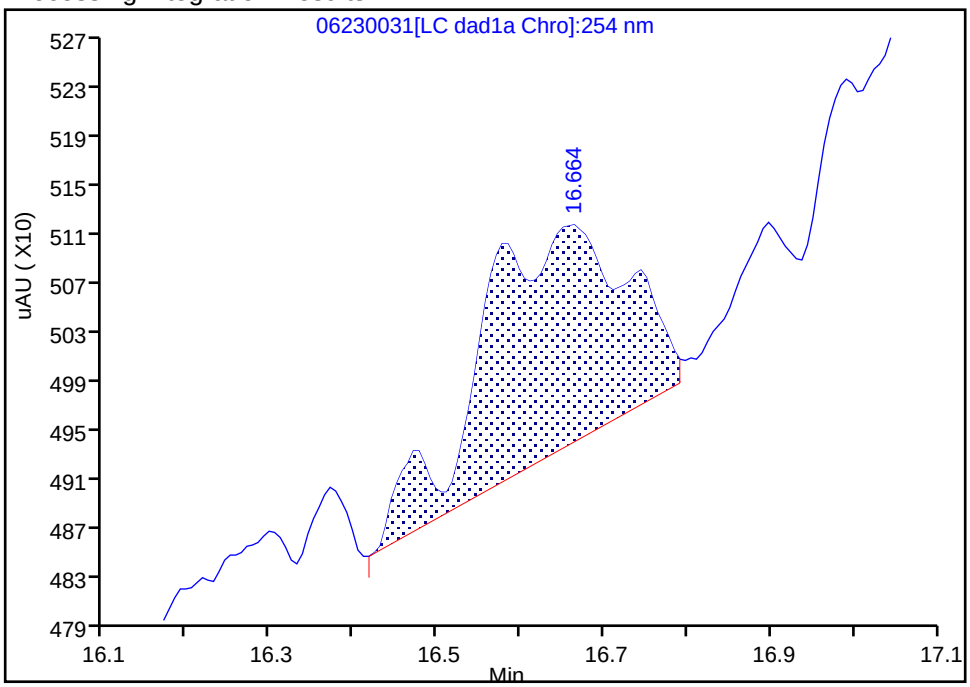
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	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

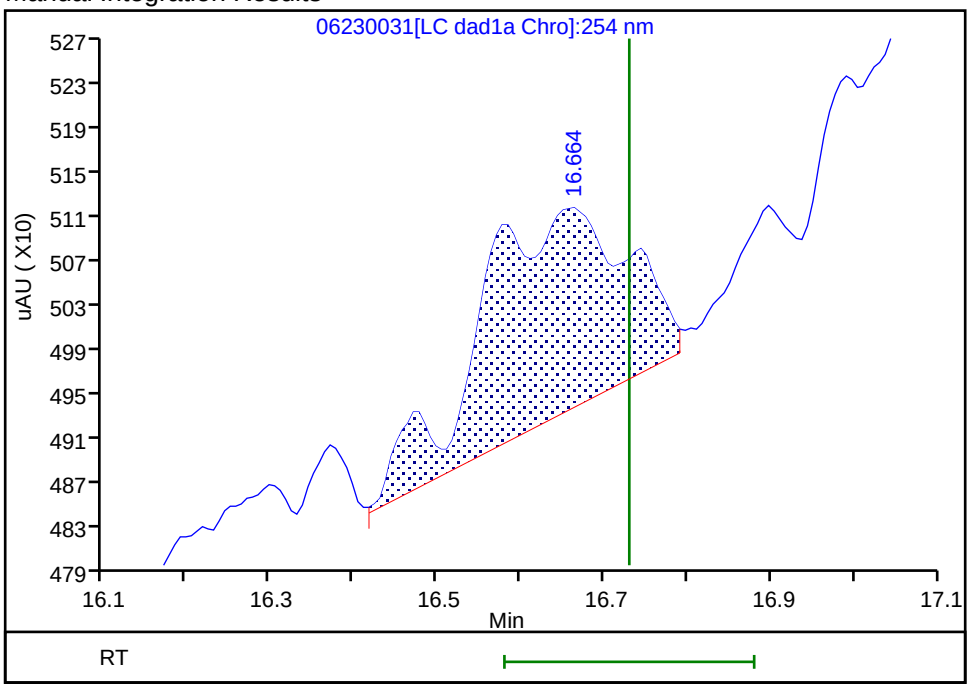
Processing Integration Results

RT: 16.66
Area: 2229
Amount: 0.008166
Amount Units: ug/ml



Manual Integration Results

RT: 16.66
Area: 2308
Amount: 0.008455
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:15:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

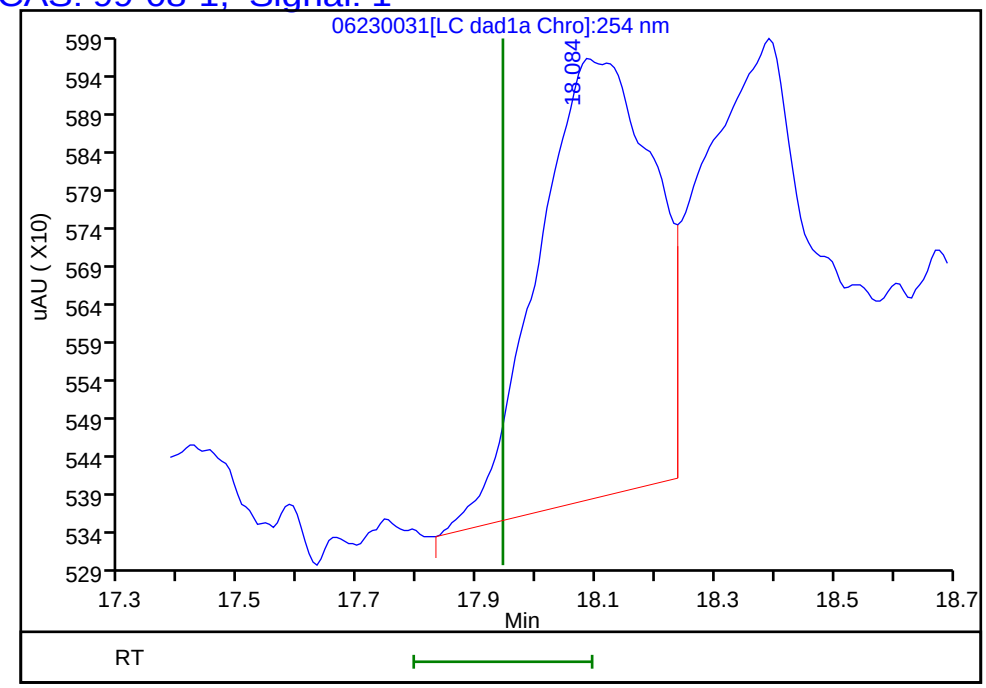
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
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: 18.08
Response: 7727
Amount: 0.025901



Reviewer: zhangji, 24-Jun-2020 18:16:01
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

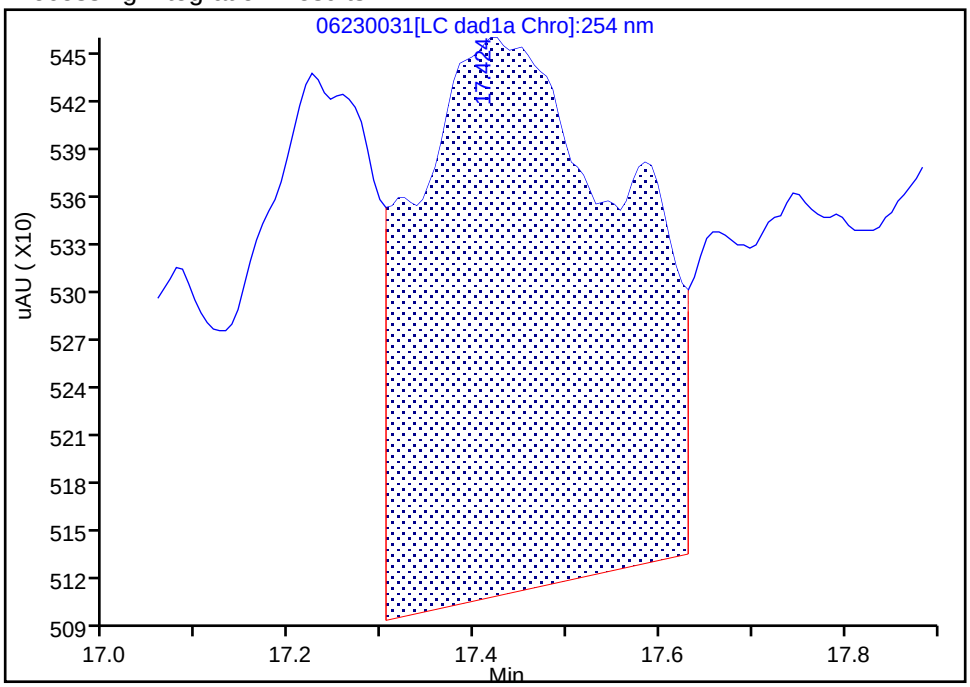
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	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

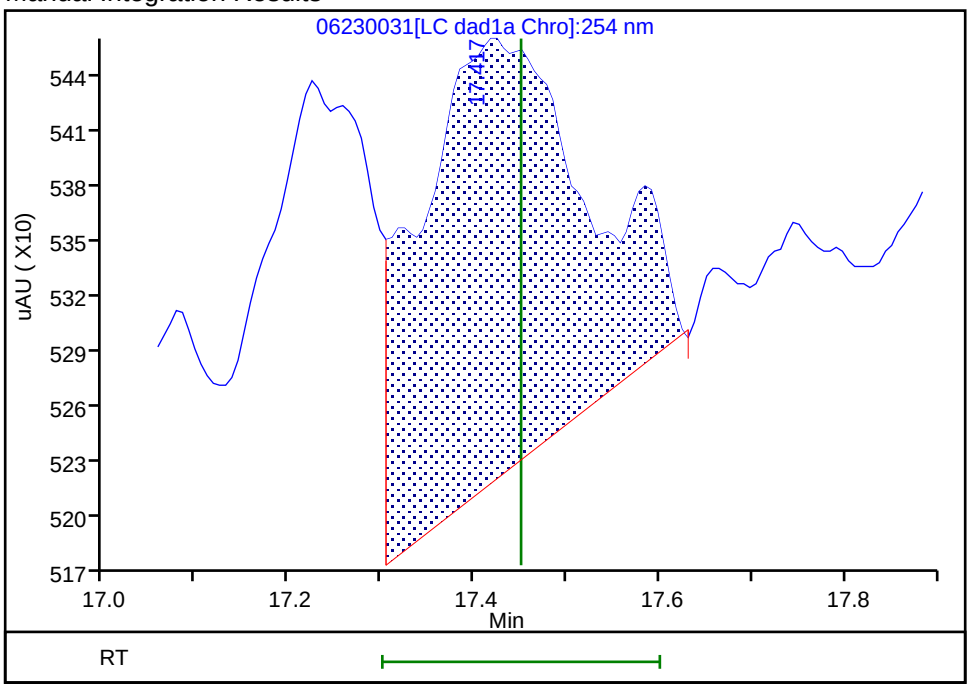
Processing Integration Results

RT: 17.42
Area: 5359
Amount: 0.015523
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 2890
Amount: 0.008371
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:15:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

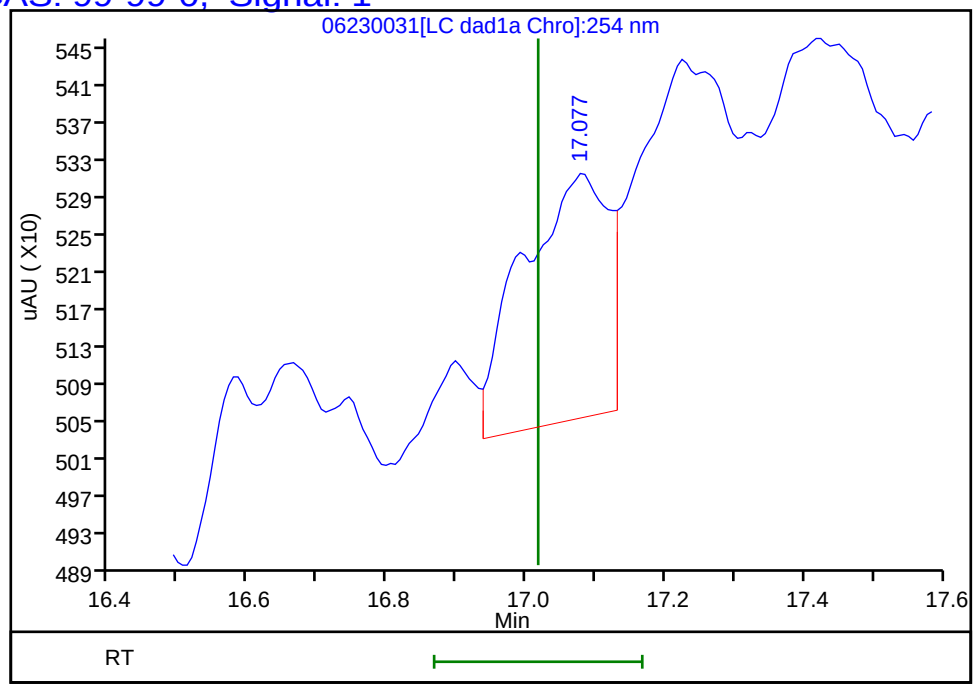
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
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

RT: 17.08
Response: 2232
Amount: 0.009266



Reviewer: zhangji, 24-Jun-2020 18:19:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

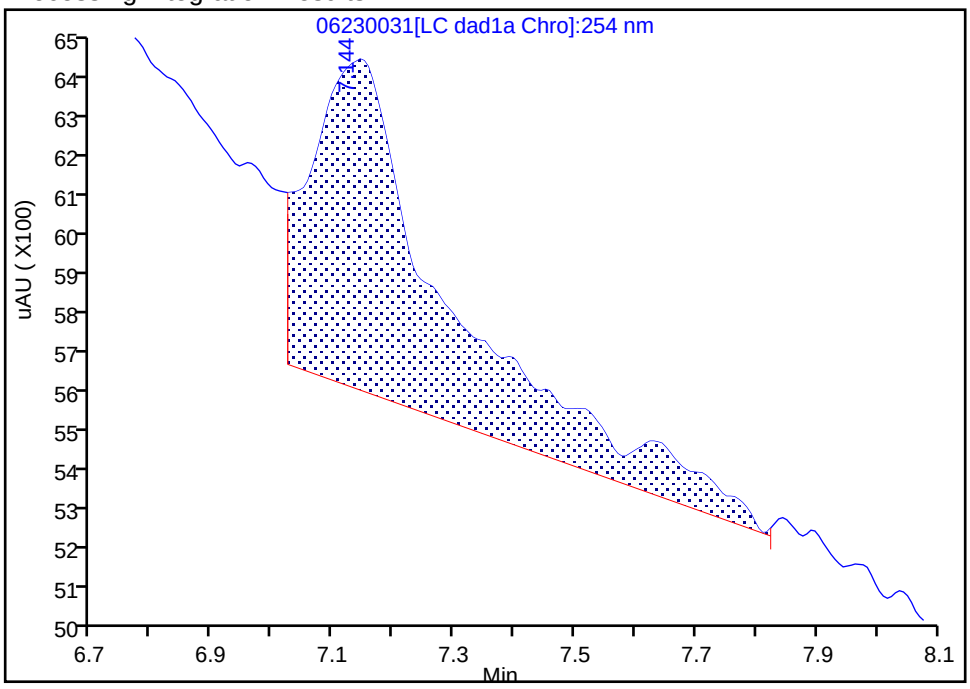
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	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

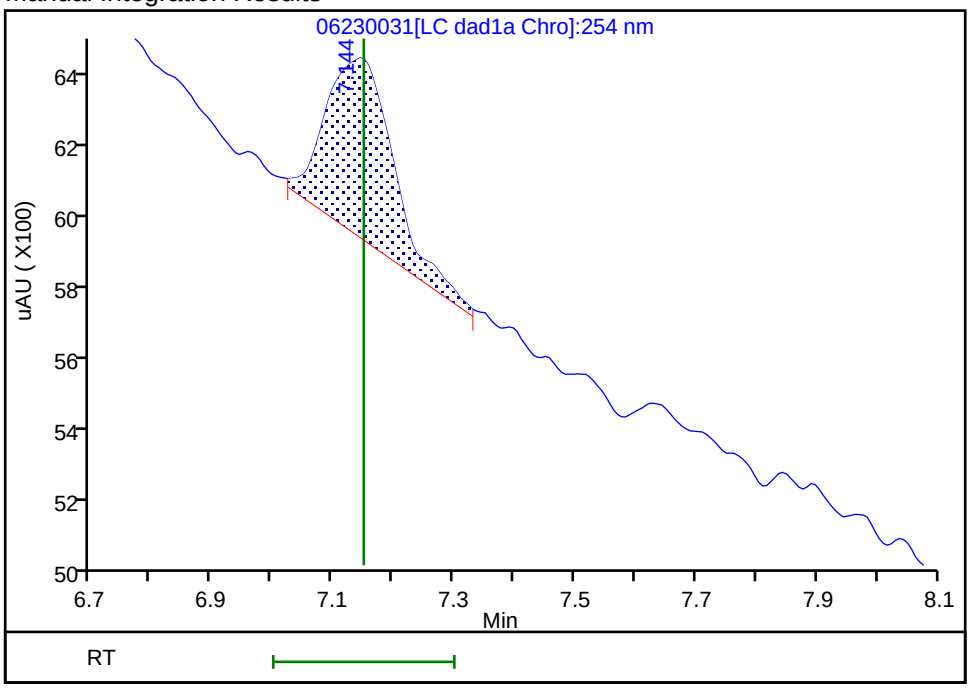
Processing Integration Results

RT: 7.14
Area: 12644
Amount: 0.041353
Amount Units: ug/ml



Manual Integration Results

RT: 7.14
Area: 3704
Amount: -0.009152
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:15:26

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

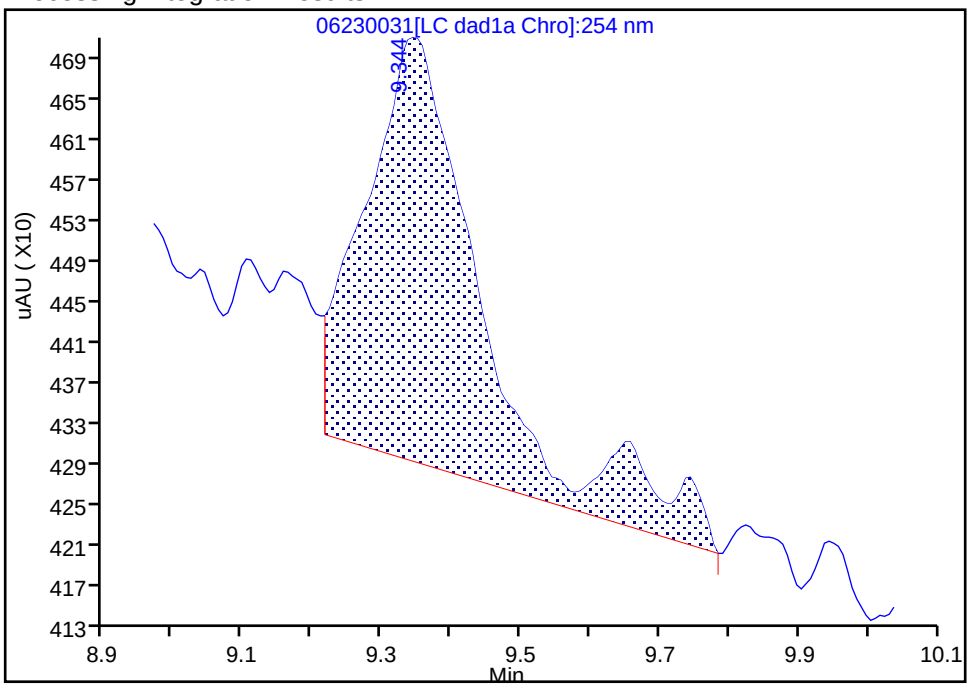
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d				
Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	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

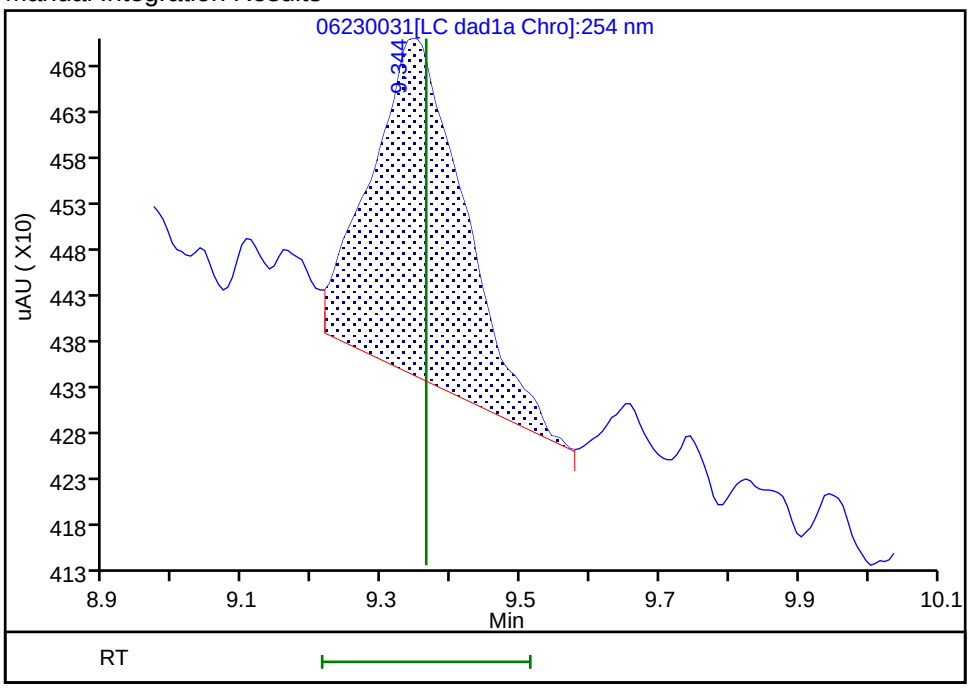
Processing Integration Results

RT: 9.34
Area: 4959
Amount: 0.020294
Amount Units: ug/ml



Manual Integration Results

RT: 9.34
Area: 3452
Amount: 0.014127
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:15:35

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

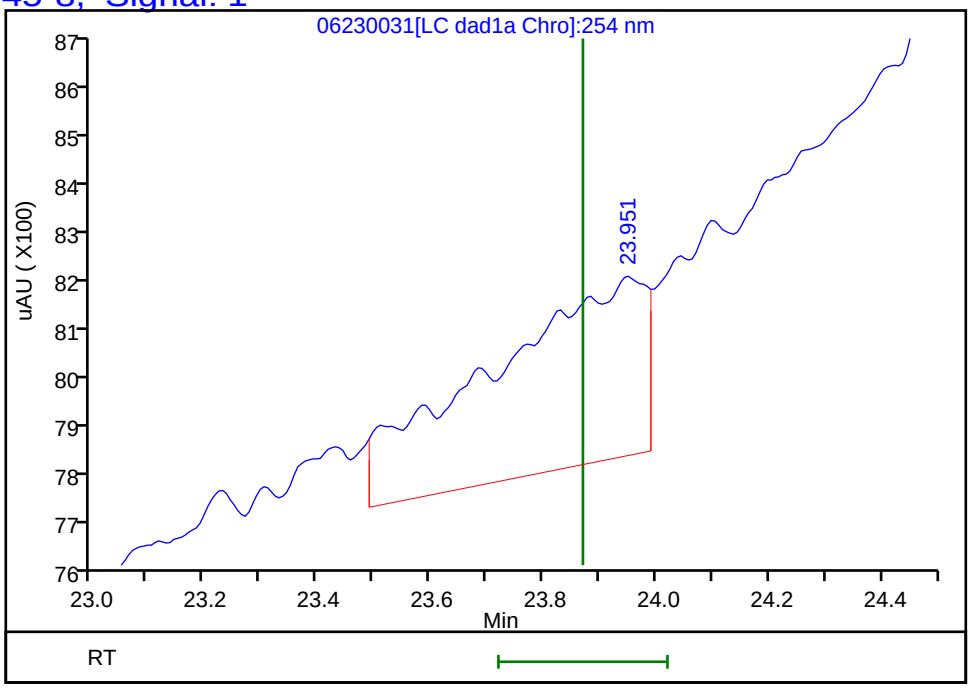
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230031.d

Injection Date:	24-Jun-2020 10:06:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-4-A	Lab Sample ID:	280-137609-4		
Client ID:	G0080-20A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
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: 6960
Amount: 0.018878



Reviewer: zhangji, 24-Jun-2020 18:16:01

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.: 280-137609-1

SDG No.:

Client Sample ID: PZ005-20A Lab Sample ID: 280-137609-5

Matrix: Water Lab File ID: 06220018.D

Analysis Method: 8330A Date Collected: 06/11/2020 12:00

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 481.9(mL) Date Analyzed: 06/22/2020 18:19

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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 M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047
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	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.076	J J1	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
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
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	103	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220018.D
Lims ID: 280-137609-A-5-A
Client ID: PZ005-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 18:19:57 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-5-A
Misc. Info.: 280-0092608-018
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 14:30:25

	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	7.797	7.801	-0.004	5022	0.0431	M
$	9 1,2-Dinitrobenzene	1	8.764	8.741	0.023	28361	0.2052	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	U
	12 Nitrobenzene	1	9.970	9.941	0.029	3058	0.0153	M
	14 Tetryl	1		10.234			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1	11.397	11.361	0.036	1062	0.0125	
	18 2-Amino-4,6-dinitrotoluene	1	11.684	11.648	0.036	1478	0.007287	
	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

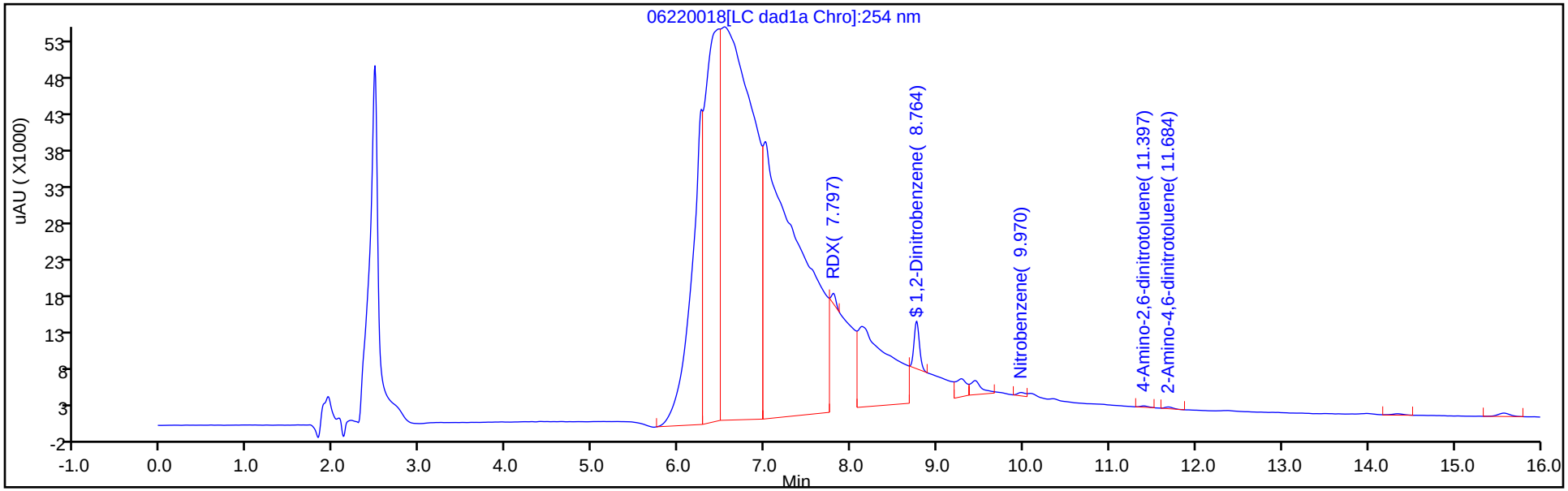
Report Date: 23-Jun-2020 15:17:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

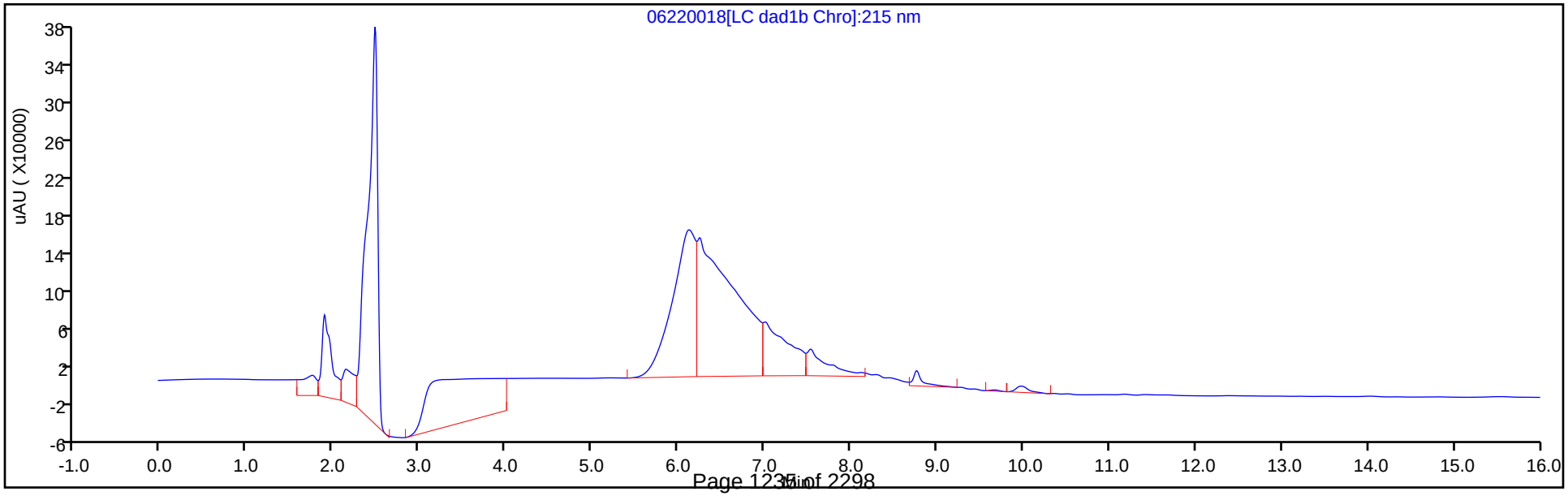
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220018.d

Injection Date:	22-Jun-2020 18:19:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5	Worklist Smp#:	18
Client ID:	PZ005-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220018.D				
Lims ID:	280-137609-A-5-A				
Client ID:	PZ005-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 18:19:57	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-5-A				
Misc. Info.:	280-0092608-018				
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 14:30:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2052	102.60

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

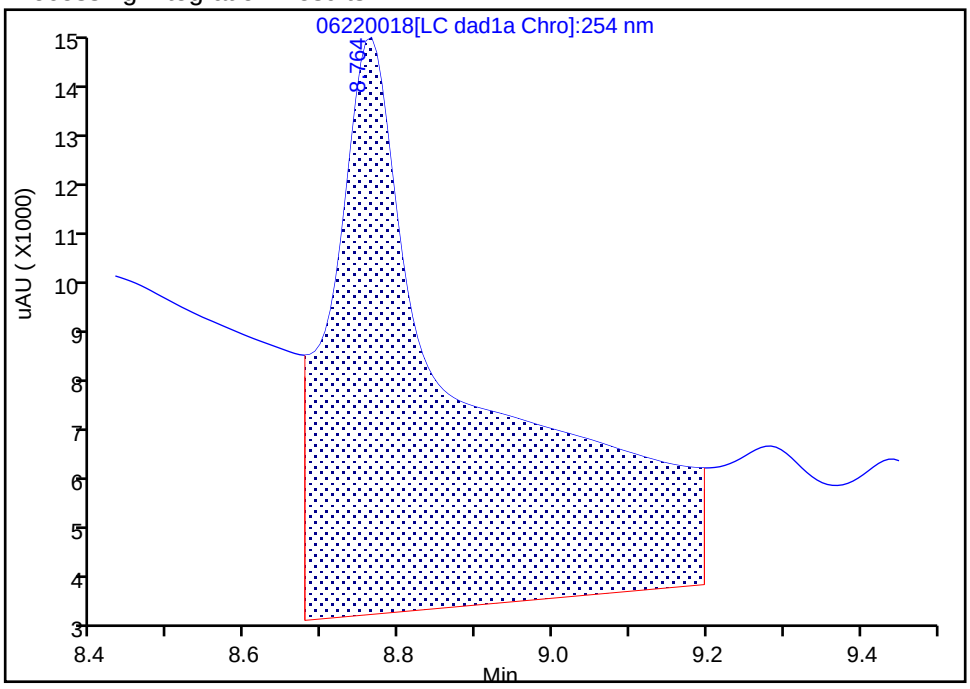
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220018.d				
Injection Date:	22-Jun-2020 18:19:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5		
Client ID:	PZ005-20A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

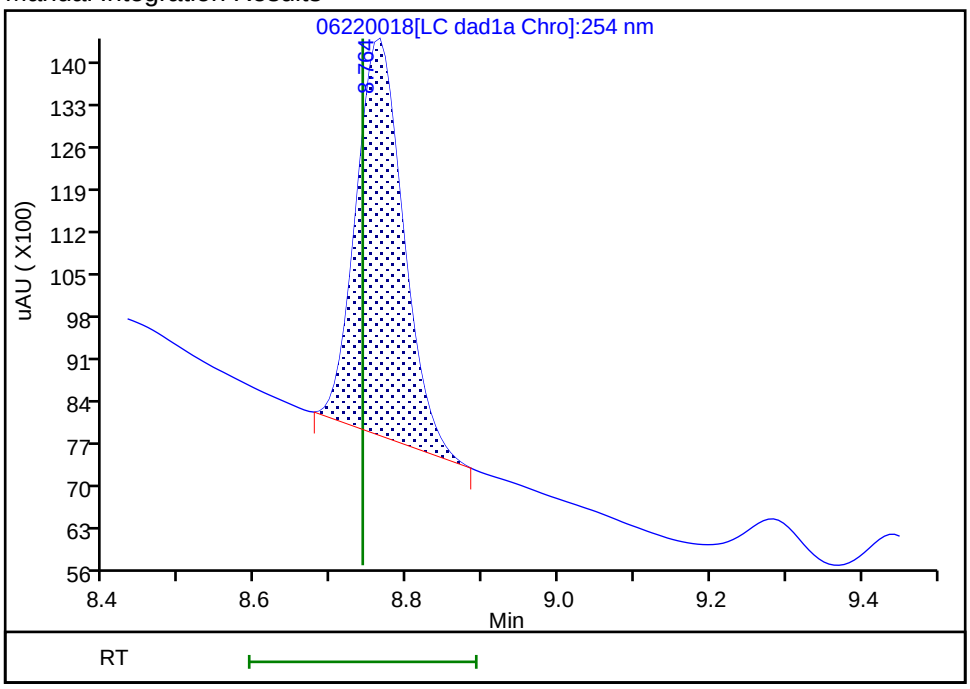
Processing Integration Results

RT: 8.76
Area: 141673
Amount: 1.025040
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 28361
Amount: 0.205199
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:29:55

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

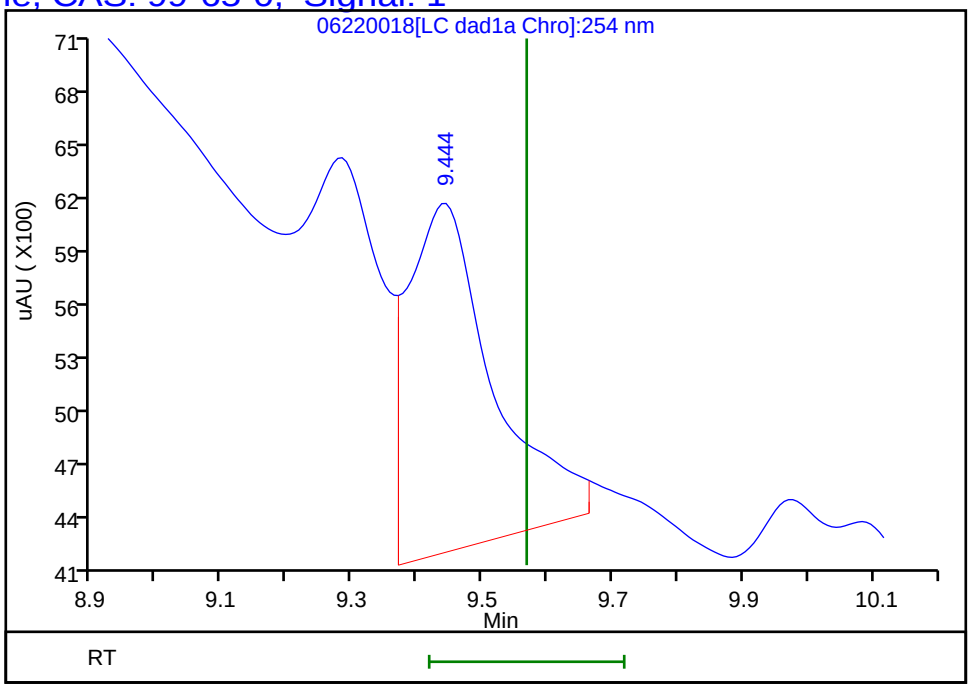
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220018.d

Injection Date:	22-Jun-2020 18:19:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5		
Client ID:	PZ005-20A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.44
Response: 17380
Amount: 0.056670



Reviewer: zhangji, 23-Jun-2020 14:30:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

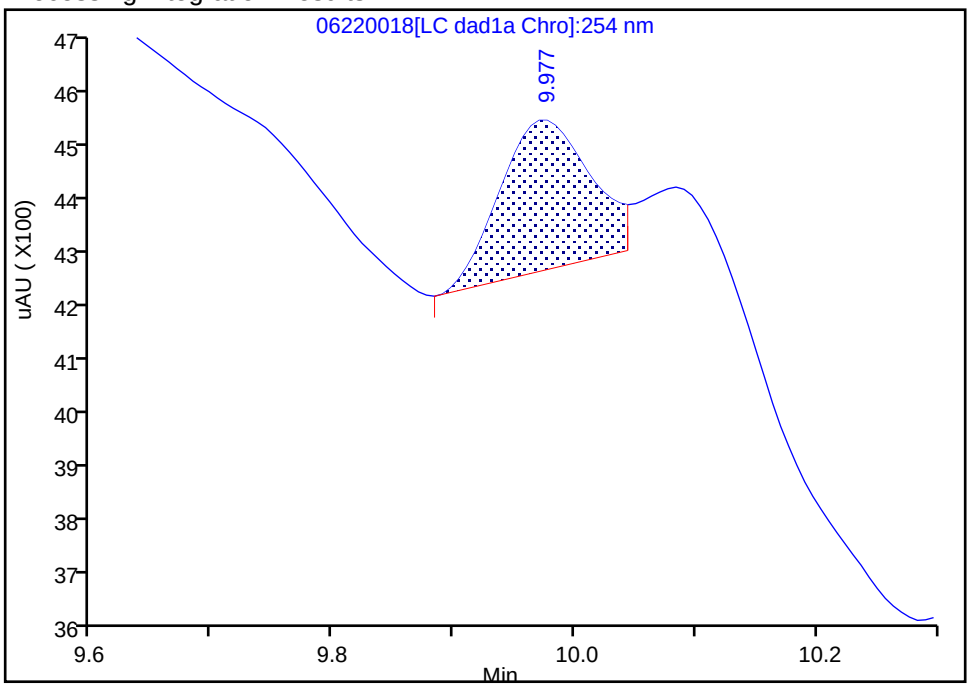
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220018.d		
Injection Date:	22-Jun-2020 18:19:57	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5
Client ID:	PZ005-20A		
Operator ID:	JZ	ALS Bottle#:	18 Worklist Smp#: 18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

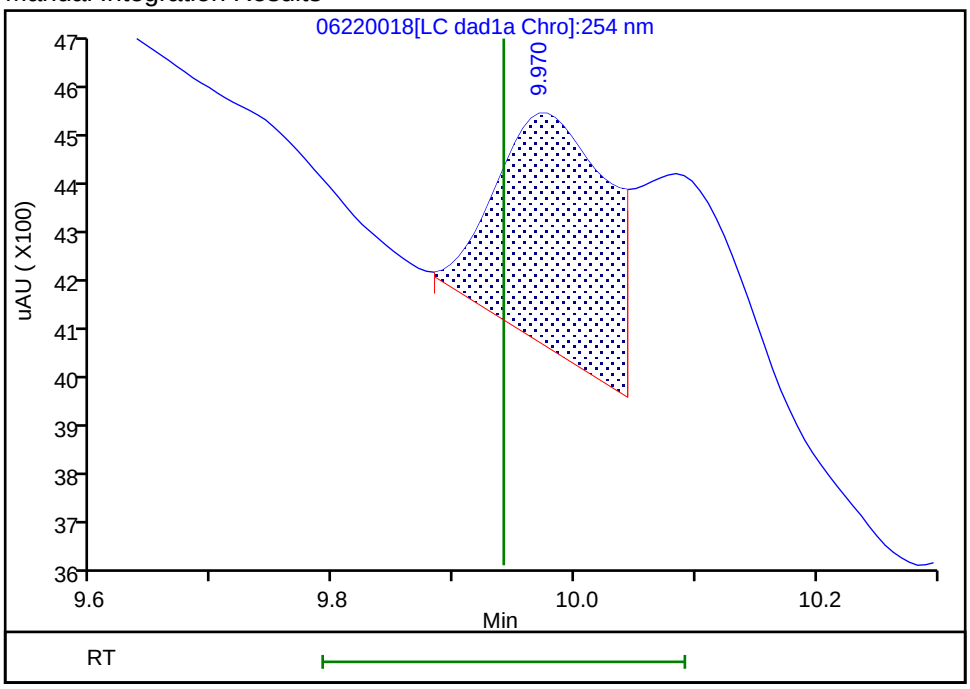
Processing Integration Results

RT: 9.98
Area: 1411
Amount: 0.007041
Amount Units: ug/mL



Manual Integration Results

RT: 9.97
Area: 3058
Amount: 0.015259
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:30:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

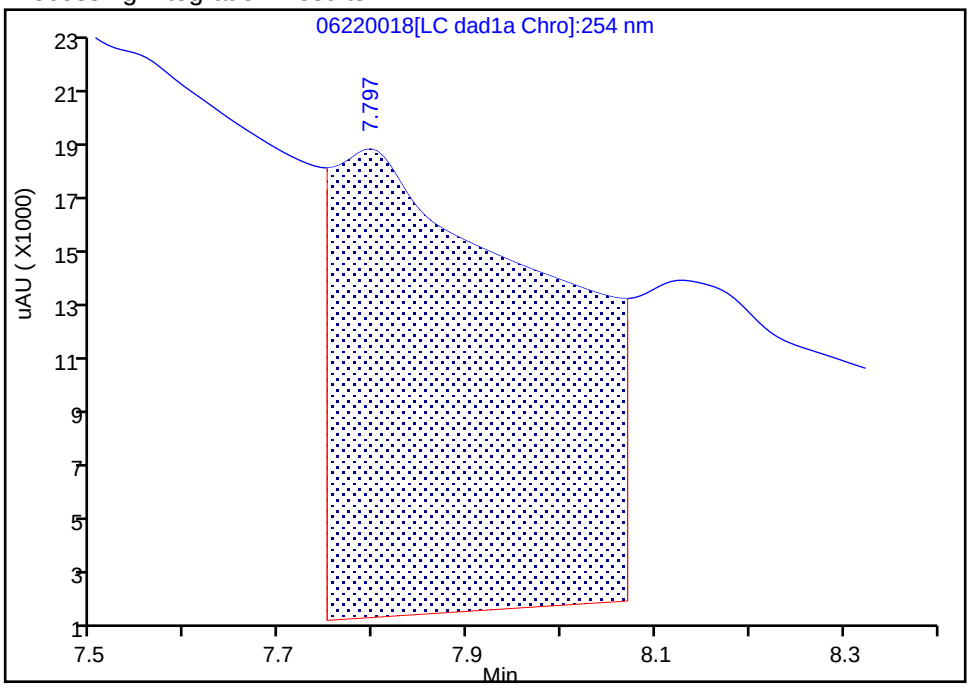
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220018.d				
Injection Date:	22-Jun-2020 18:19:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5		
Client ID:	PZ005-20A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

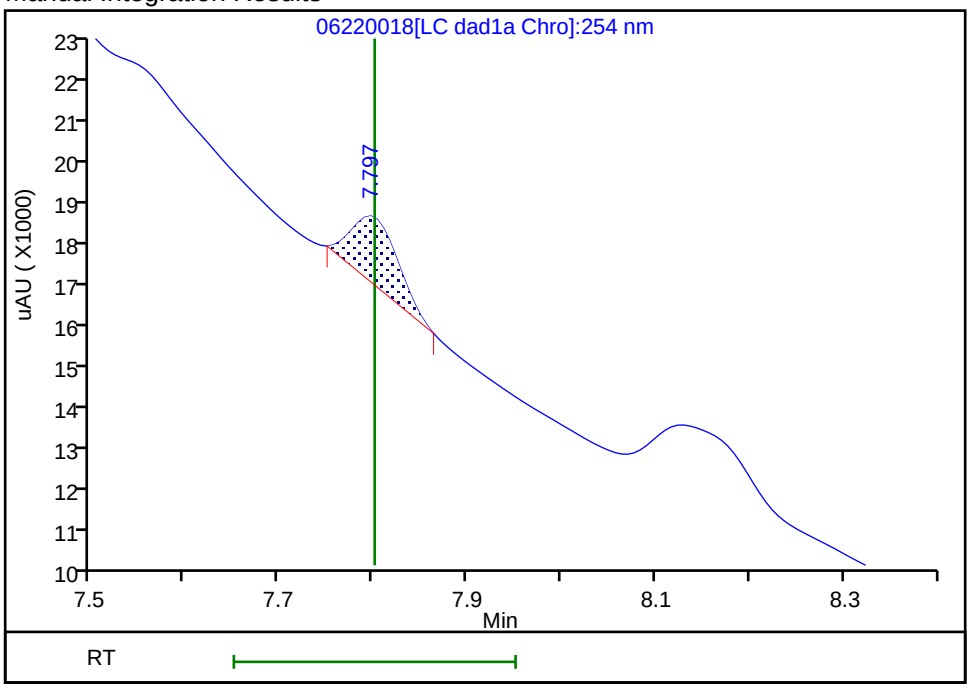
Processing Integration Results

RT: 7.80
Area: 250978
Amount: 2.152229
Amount Units: ug/mL



Manual Integration Results

RT: 7.80
Area: 5022
Amount: 0.043065
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:30:01

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ005-20A Lab Sample ID: 280-137609-5

Matrix: Water Lab File ID: 06230032.D

Analysis Method: 8330A Date Collected: 06/11/2020 12:00

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 481.9(mL) Date Analyzed: 06/24/2020 10:41

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499860 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.32*	*J1*	*0.11*	0.10	*0.053*
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
121-82-4	RDX	0.21	U	0.22	0.21	0.053

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\G2_LUNA\20200623-92679.b\06230032.D
Lims ID: 280-137609-A-5-A
Client ID: PZ005-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 10:41:11 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-5-A
Misc. Info.: 280-0092679-032
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 18:51:58 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: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:19:55

	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	13.242	13.263	-0.021	58255	0.2035	
	12 1,3-Dinitrobenzene	1		15.797			ND	
	14 o-Nitrotoluene	1		16.730			ND	
	15 p-Nitrotoluene	1	16.982	17.017	-0.035	8447	0.0351	
	16 4-Amino-2,6-dinitrotoluene	1		17.450			ND	
	17 m-Nitrotoluene	1		17.943			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.356	18.390	-0.034	14481	0.0311	
	19 1,3,5-Trinitrobenzene	1		19.123			ND	
	20 2,6-Dinitrotoluene	1		20.050			ND	
	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

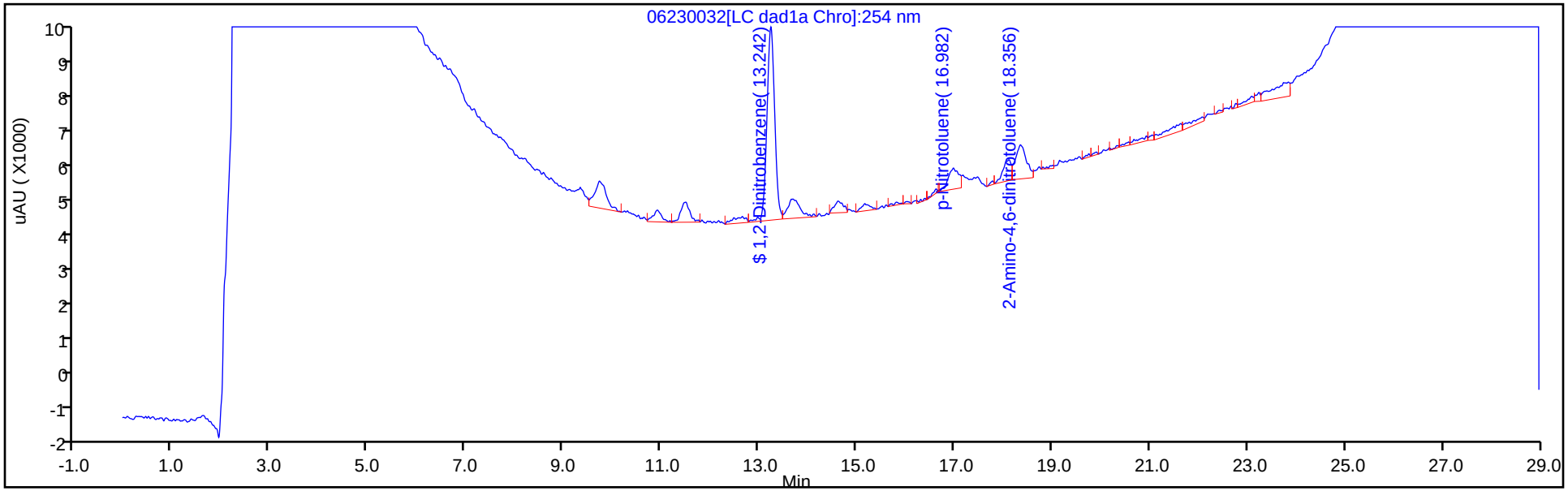
Review Flags
U - Marked Undetected

Report Date: 24-Jun-2020 18:52:04 Chrom Revision: 2.3 21-Jun-2020 18:30:46

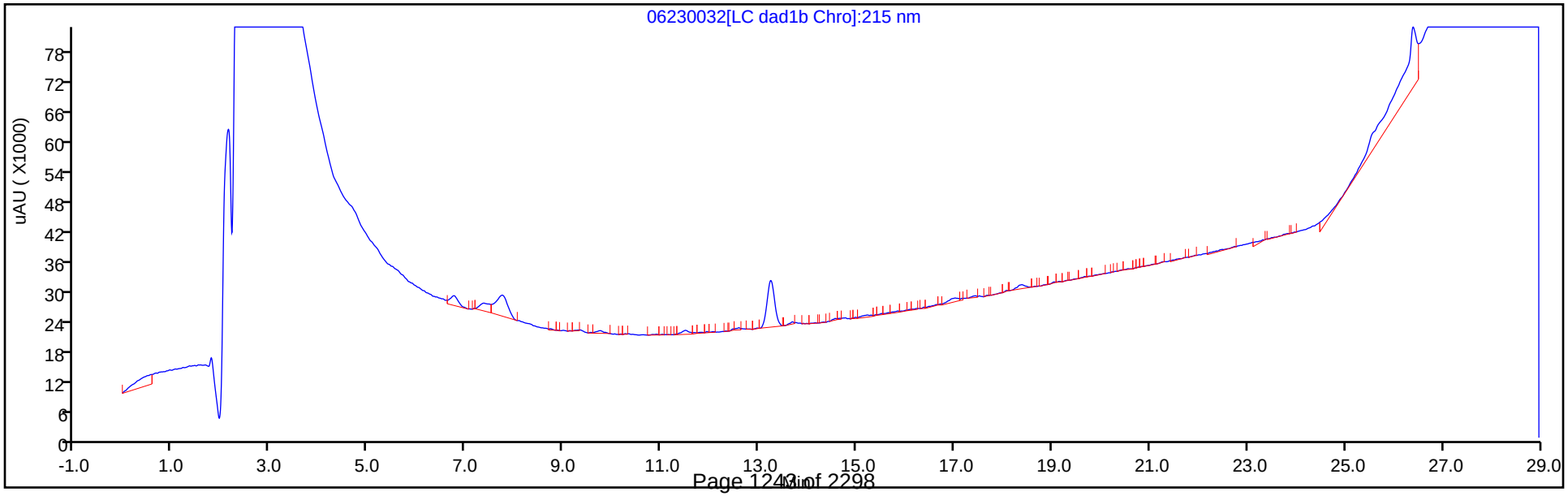
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230032.d				
Injection Date:	24-Jun-2020 10:41:11	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5	Worklist Smp#:	32
Client ID:	PZ005-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
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\06230032.D				
Lims ID:	280-137609-A-5-A				
Client ID:	PZ005-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 10:41:11	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-5-A				
Misc. Info.:	280-0092679-032				
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 18:51:58	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:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:19:55		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2035	101.75

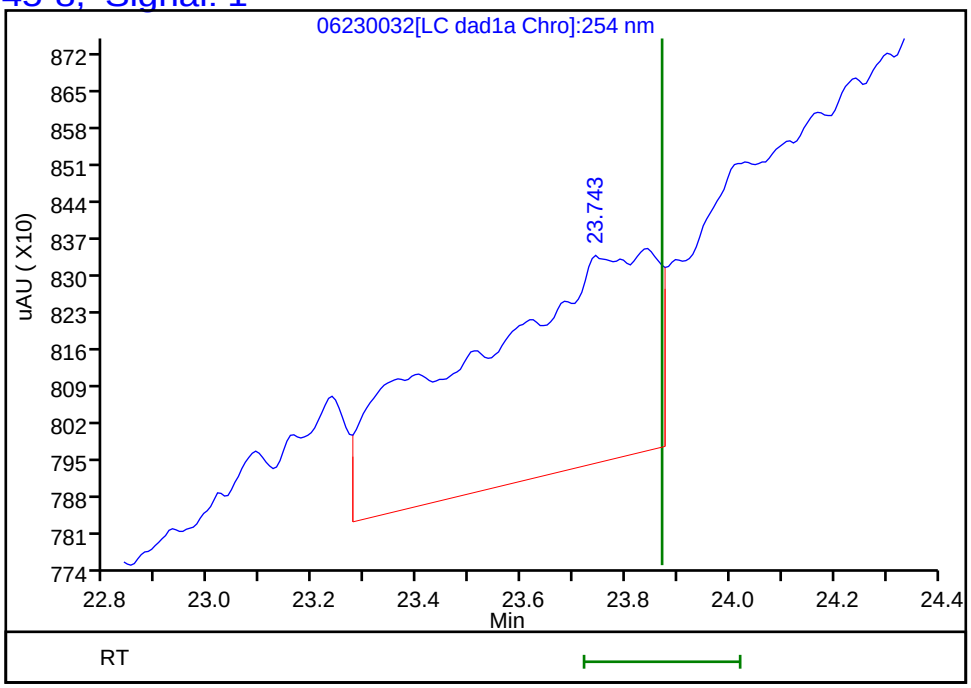
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230032.d				
Injection Date:	24-Jun-2020 10:41:11	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-5-A	Lab Sample ID:	280-137609-5		
Client ID:	PZ005-20A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
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: 23.74
Response: 10416
Amount: 0.028252



Reviewer: zhangji, 24-Jun-2020 18:19:55
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.: 280-137609-1

SDG No.:

Client Sample ID: NW052-20A Lab Sample ID: 280-137609-6

Matrix: Water Lab File ID: 06220019.D

Analysis Method: 8330A Date Collected: 06/10/2020 15:50

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 477.1(mL) Date Analyzed: 06/22/2020 18:42

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.12	0.10	0.039
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.12	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.12	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	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	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
121-82-4	RDX	0.21	U	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U	0.12	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	108	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220019.D
Lims ID: 280-137609-A-6-A
Client ID: NW052-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 18:42:56 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-6-A
Misc. Info.: 280-0092608-019
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 14:30:45

	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	8.762	8.741	0.021	29904	0.2164	M
	10 1,3,5-Trinitrobenzene	1		8.928			ND	
	11 1,3-Dinitrobenzene	1		9.568			ND	
	12 Nitrobenzene	1	9.962	9.941	0.021	6413	0.0320	M
	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

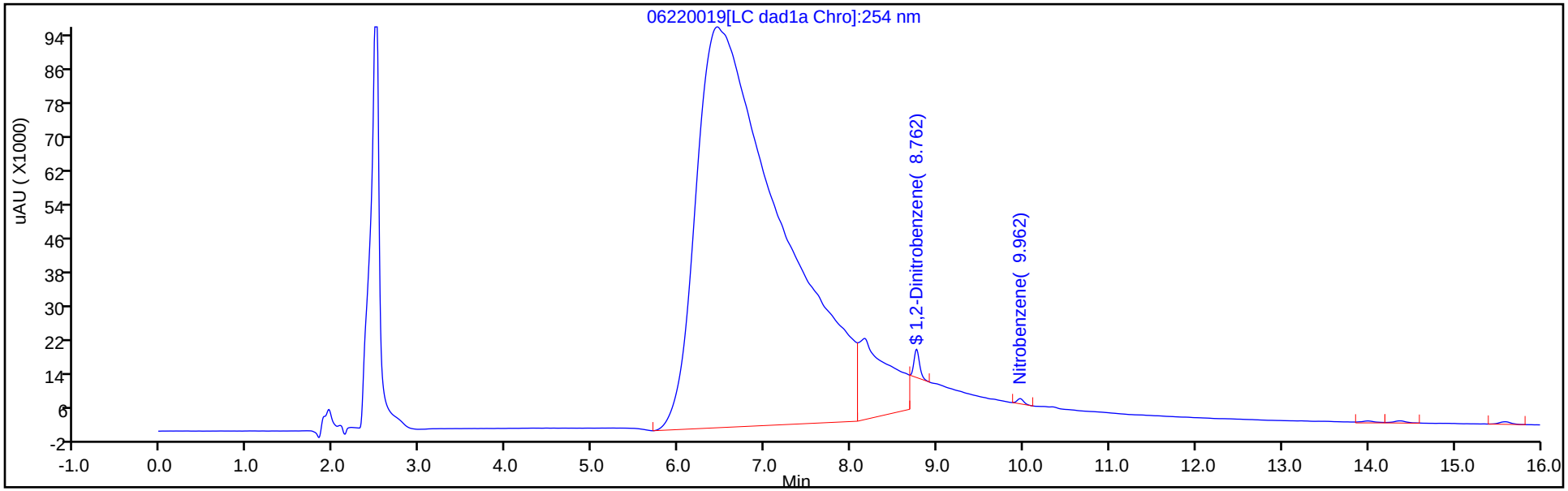
Report Date: 23-Jun-2020 15:17:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

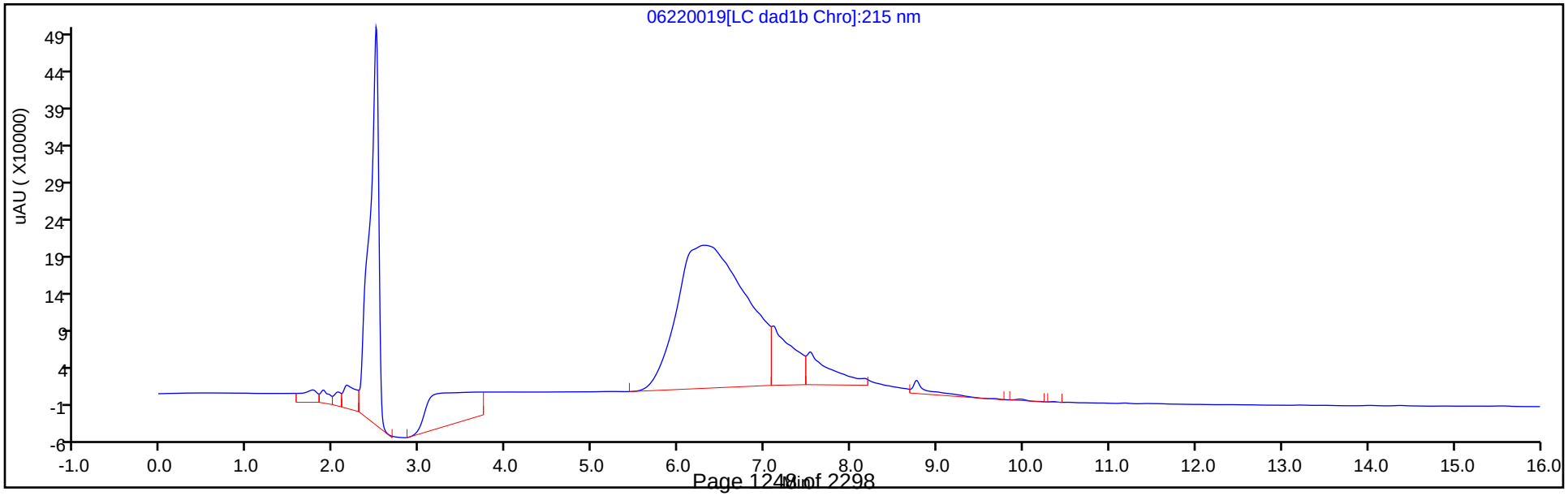
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220019.d

Injection Date:	22-Jun-2020 18:42:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-6-A	Lab Sample ID:	280-137609-6	Worklist Smp#:	19
Client ID:	NW052-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220019.D				
Lims ID:	280-137609-A-6-A				
Client ID:	NW052-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 18:42:56	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-6-A				
Misc. Info.:	280-0092608-019				
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 14:30:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2164	108.18

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

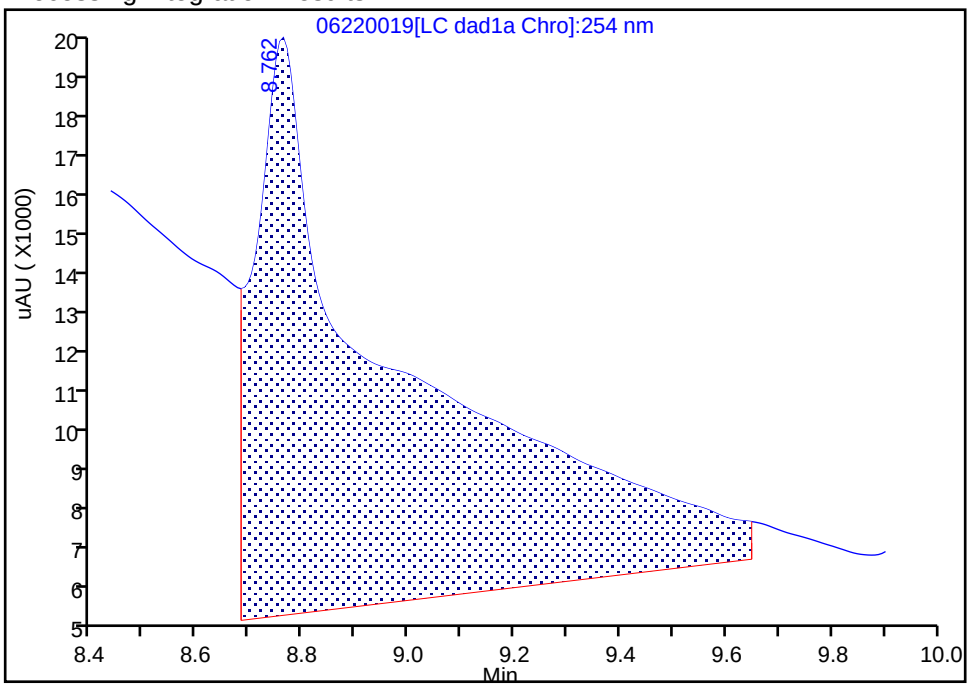
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220019.d				
Injection Date:	22-Jun-2020 18:42:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-6-A	Lab Sample ID:	280-137609-6		
Client ID:	NW052-20A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

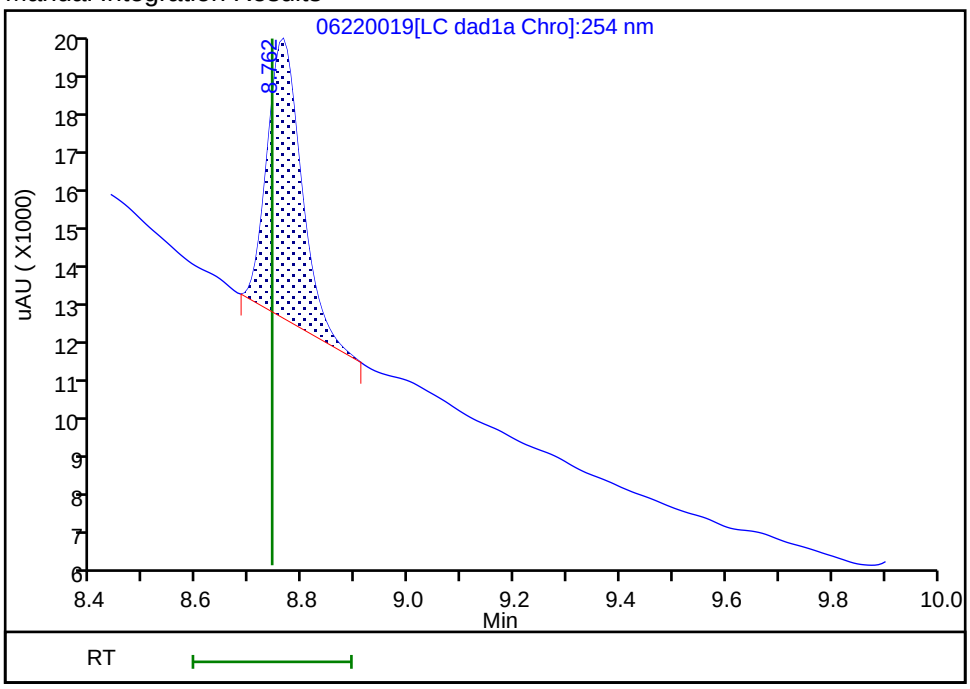
Processing Integration Results

RT: 8.76
Area: 273193
Amount: 1.976620
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 29904
Amount: 0.216363
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:30:34

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

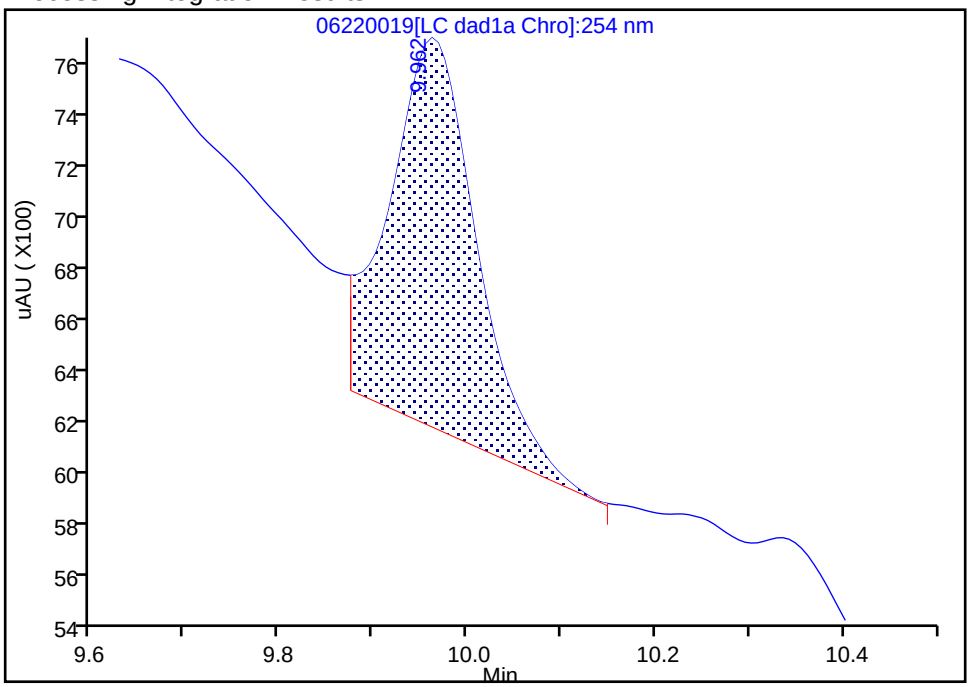
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220019.d				
Injection Date:	22-Jun-2020 18:42:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-6-A	Lab Sample ID:	280-137609-6		
Client ID:	NW052-20A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

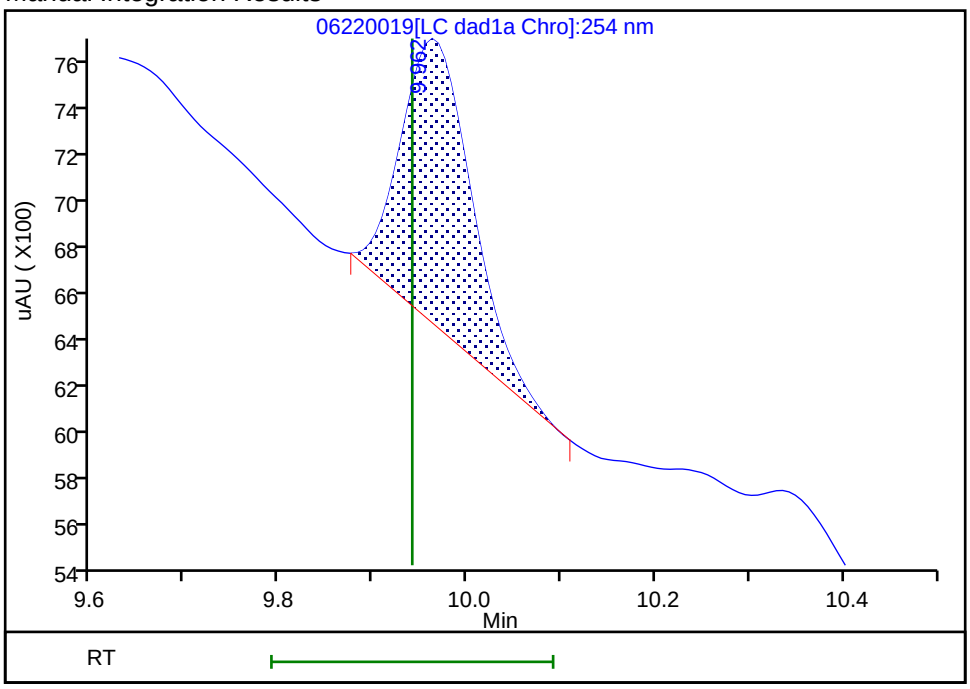
Processing Integration Results

RT: 9.96
Area: 9751
Amount: 0.048657
Amount Units: ug/mL



Manual Integration Results

RT: 9.96
Area: 6413
Amount: 0.032001
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:30:43

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: NW052-20A Lab Sample ID: 280-137609-6

Matrix: Water Lab File ID: 06230033.D

Analysis Method: 8330A Date Collected: 06/10/2020 15:50

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 477.1(mL) Date Analyzed: 06/24/2020 11:16

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
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230033.D
Lims ID: 280-137609-A-6-A
Client ID: NW052-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 11:16:08 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-6-A
Misc. Info.: 280-0092679-033
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 18:51:58 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: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 18:20:04

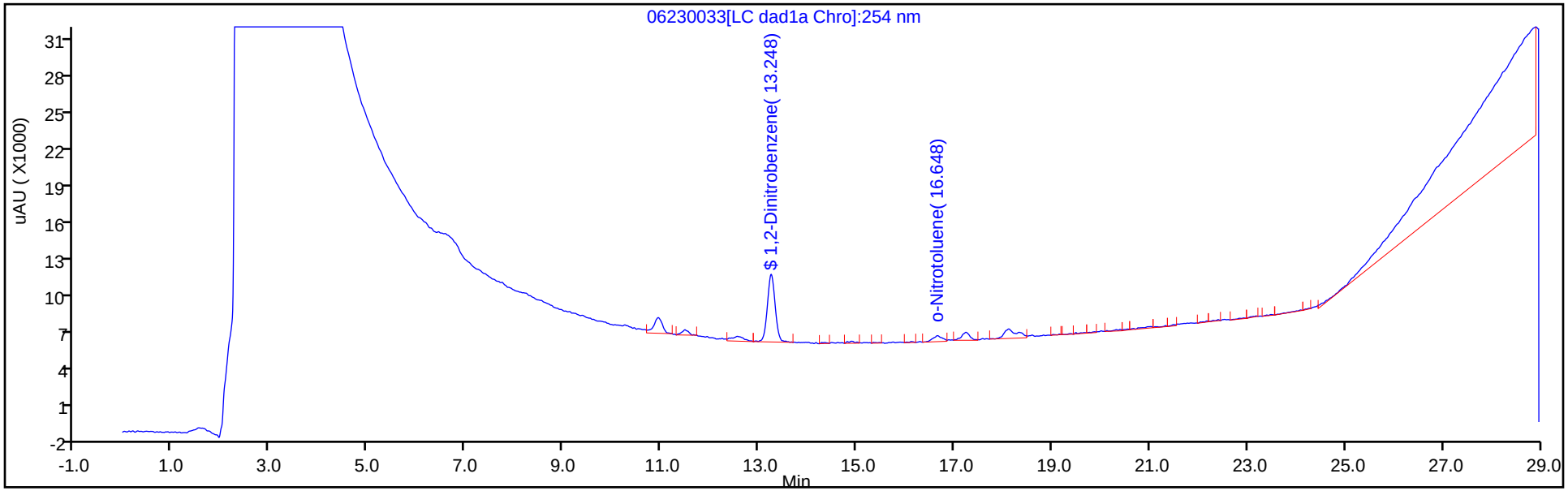
Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.150			ND	
7 MNX	1		7.876			ND	
8 RDX	1		9.363			ND	
9 Nitrobenzene	1		12.263			ND	
$ 10 1,2-Dinitrobenzene	1	13.248	13.263	-0.015	59959	0.2096	
12 1,3-Dinitrobenzene	1		15.797			ND	
14 o-Nitrotoluene	1	16.648	16.730	-0.082	6356	0.0233	
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		18.390			ND	
19 1,3,5-Trinitrobenzene	1		19.123			ND	
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		24.890			ND	

Report Date: 24-Jun-2020 18:52:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

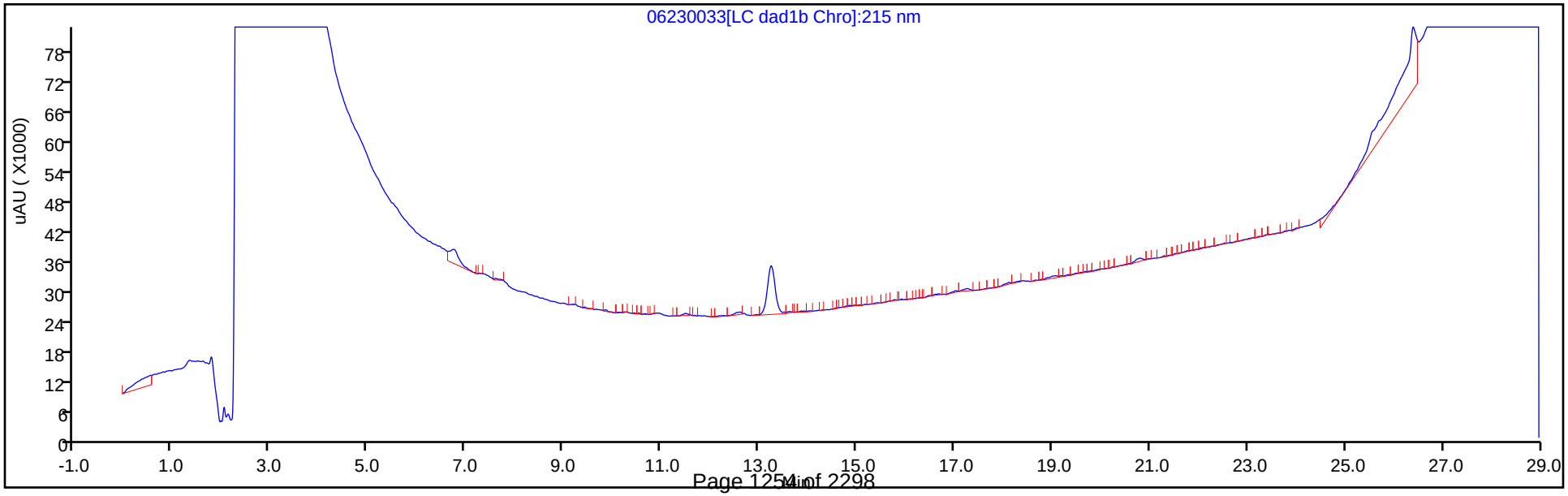
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230033.d				
Injection Date:	24-Jun-2020 11:16:08	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-6-A	Lab Sample ID:	280-137609-6	Worklist Smp#:	33
Client ID:	NW052-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
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\06230033.D				
Lims ID:	280-137609-A-6-A				
Client ID:	NW052-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 11:16:08	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-6-A				
Misc. Info.:	280-0092679-033				
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 18:51:58	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:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:20:04		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2096	104.82

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0045-20A Lab Sample ID: 280-137609-7

Matrix: Water Lab File ID: 06220022.D

Analysis Method: 8330A Date Collected: 06/11/2020 12:10

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 474.8(mL) Date Analyzed: 06/22/2020 19:51

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	0.089
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	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.21
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	0.43	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.096
121-82-4	RDX	0.21	U	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U	0.12	0.11	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220022.D
Lims ID: 280-137609-A-7-A
Client ID: G0045-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 19:51:58 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-7-A
Misc. Info.: 280-0092608-022
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 14:35:57

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	8.759	8.741	0.018	29045	0.2101	M
10 1,3,5-Trinitrobenzene	1		8.928			ND	
11 1,3-Dinitrobenzene	1		9.568			ND	
12 Nitrobenzene	1	9.972	9.941	0.031	1644	0.008203	M
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

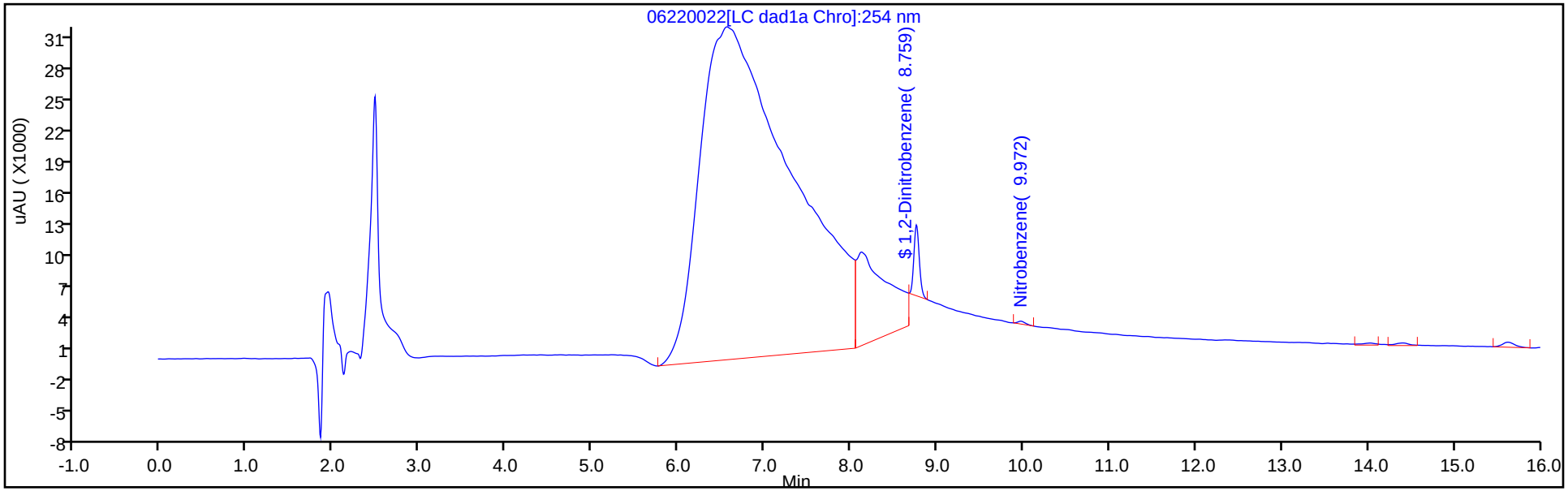
Report Date: 23-Jun-2020 15:18:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

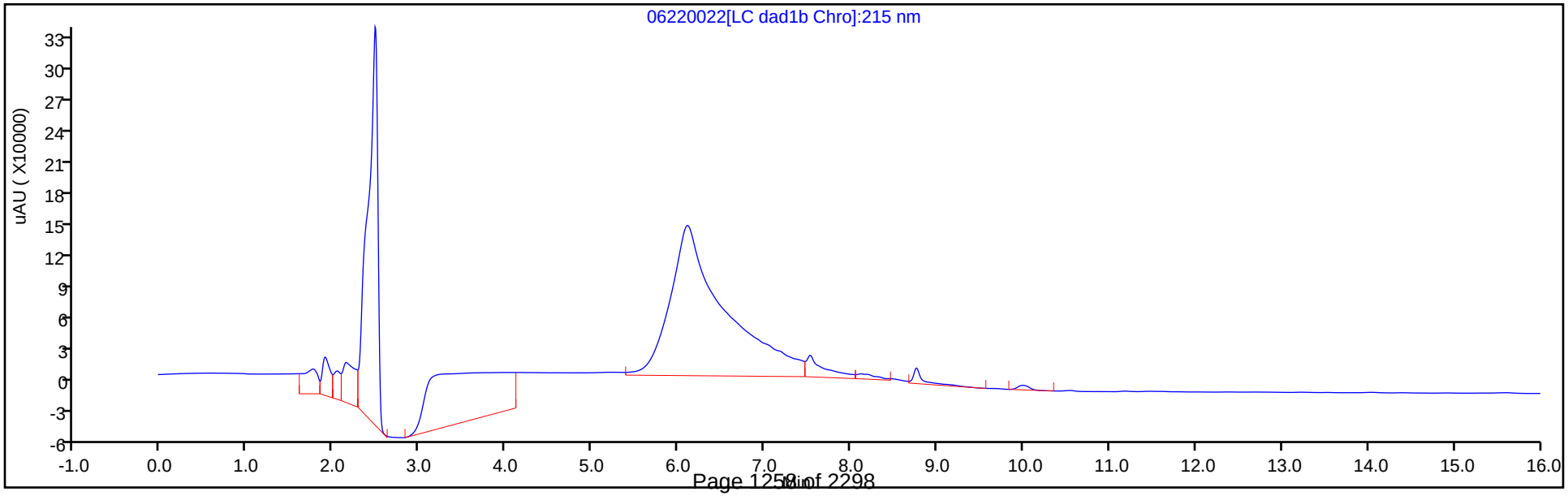
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220022.d

Injection Date:	22-Jun-2020 19:51:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-7-A	Lab Sample ID:	280-137609-7	Worklist Smp#:	22
Client ID:	G0045-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
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\06220022.D				
Lims ID:	280-137609-A-7-A				
Client ID:	G0045-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 19:51:58	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-7-A				
Misc. Info.:	280-0092608-022				
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 14:35:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2101	105.07

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

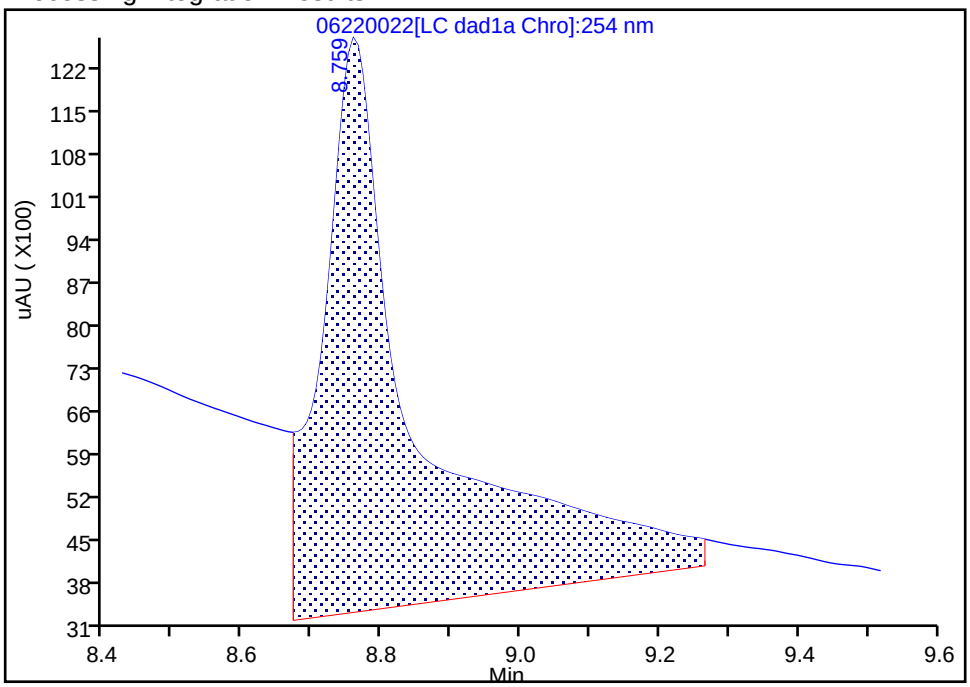
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220022.d				
Injection Date:	22-Jun-2020 19:51:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-7-A	Lab Sample ID:	280-137609-7		
Client ID:	G0045-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

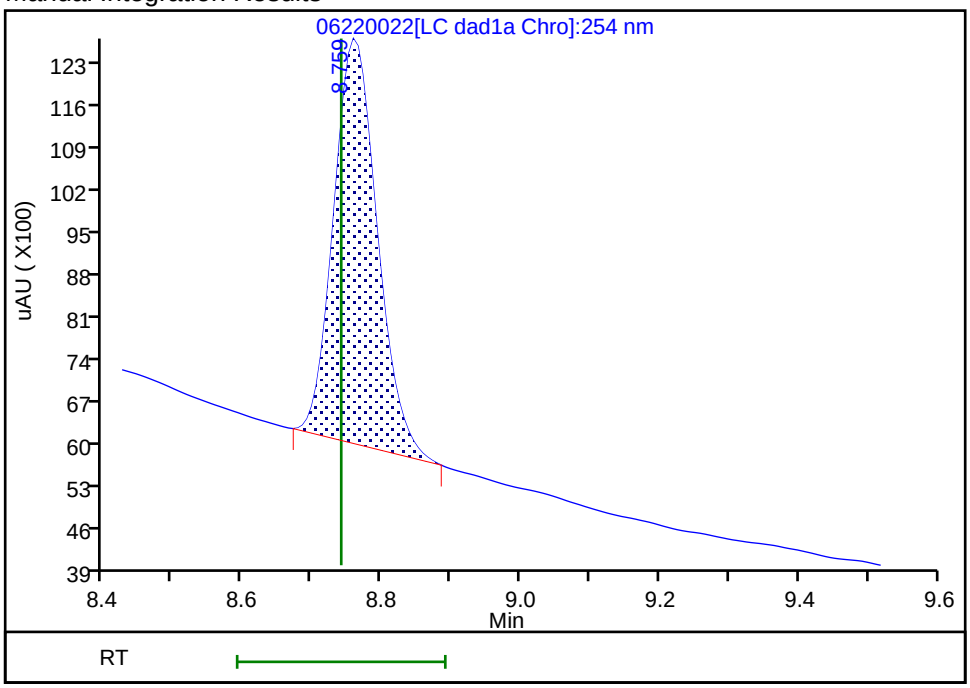
Processing Integration Results

RT: 8.76
Area: 90539
Amount: 0.655072
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 29045
Amount: 0.210148
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:38:09

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

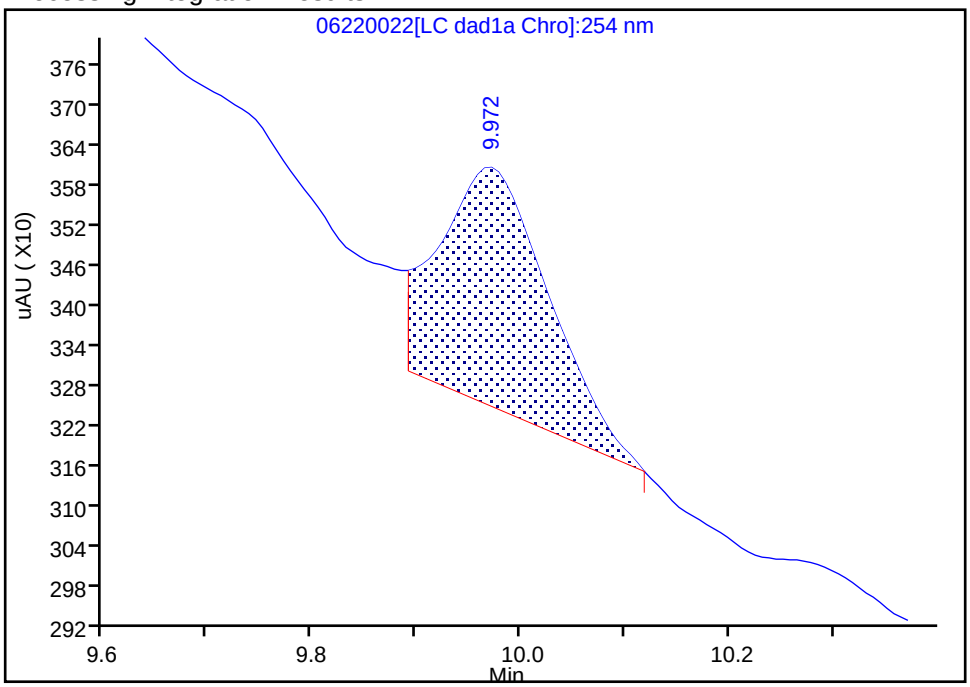
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220022.d				
Injection Date:	22-Jun-2020 19:51:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-7-A	Lab Sample ID:	280-137609-7		
Client ID:	G0045-20A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

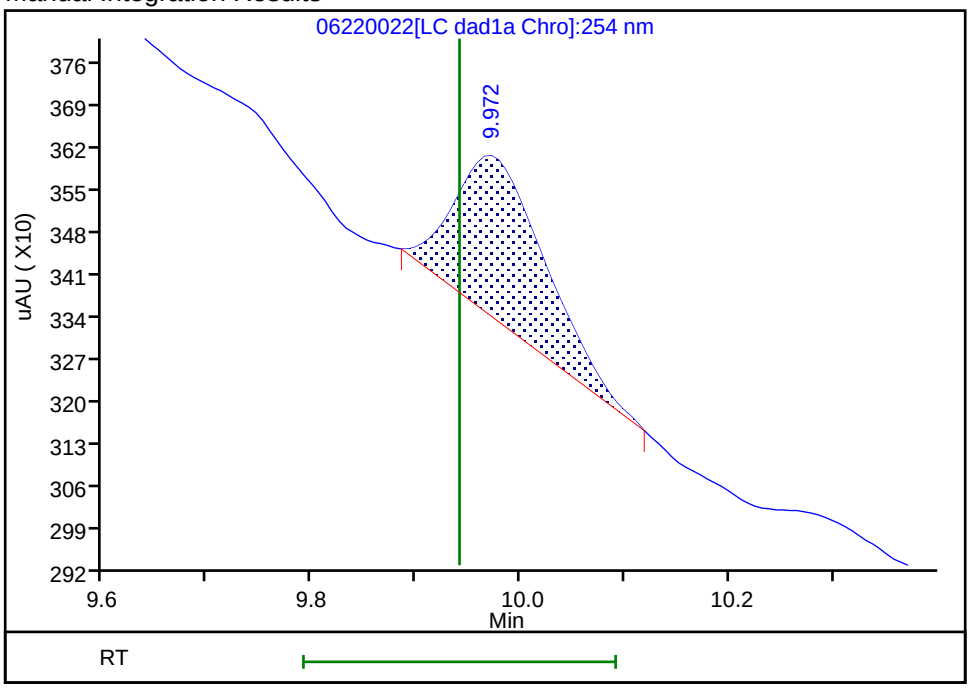
Processing Integration Results

RT: 9.97
Area: 2610
Amount: 0.013024
Amount Units: ug/mL



Manual Integration Results

RT: 9.97
Area: 1644
Amount: 0.008203
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:38:14

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0017-20A Lab Sample ID: 280-137609-8

Matrix: Water Lab File ID: 06220023.D

Analysis Method: 8330A Date Collected: 06/11/2020 11:00

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 476.1(mL) Date Analyzed: 06/22/2020 20:14

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.11	U M	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U M	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 M	0.22	0.21	0.092
121-82-4	RDX	0.21	U M	0.22	0.21	0.054
479-45-8	Tetryl	0.26	J1 M	0.12	0.11	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	116		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220023.D
Lims ID: 280-137609-A-8-A
Client ID: G0017-20A
Sample Type: Client
Inject. Date: 22-Jun-2020 20:14:58 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-8-A
Misc. Info.: 280-0092608-023
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 14:40:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.734			ND	U
6 MNX	1	7.449	7.396	0.053	8245	0.0520	M
7 RDX	1		7.801			ND	U
$ 9 1,2-Dinitrobenzene	1	8.769	8.741	0.028	32126	0.2324	
10 1,3,5-Trinitrobenzene	1		8.928			ND	
11 1,3-Dinitrobenzene	1		9.568			ND	U
12 Nitrobenzene	1	9.969	9.941	0.028	6203	0.0310	M
14 Tetryl	1	10.262	10.234	0.028	4316	0.0244	M
16 2,4,6-Trinitrotoluene	1		11.201			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.361			ND	MU
18 2-Amino-4,6-dinitrotoluene	1	11.702	11.648	0.054	10174	0.0502	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

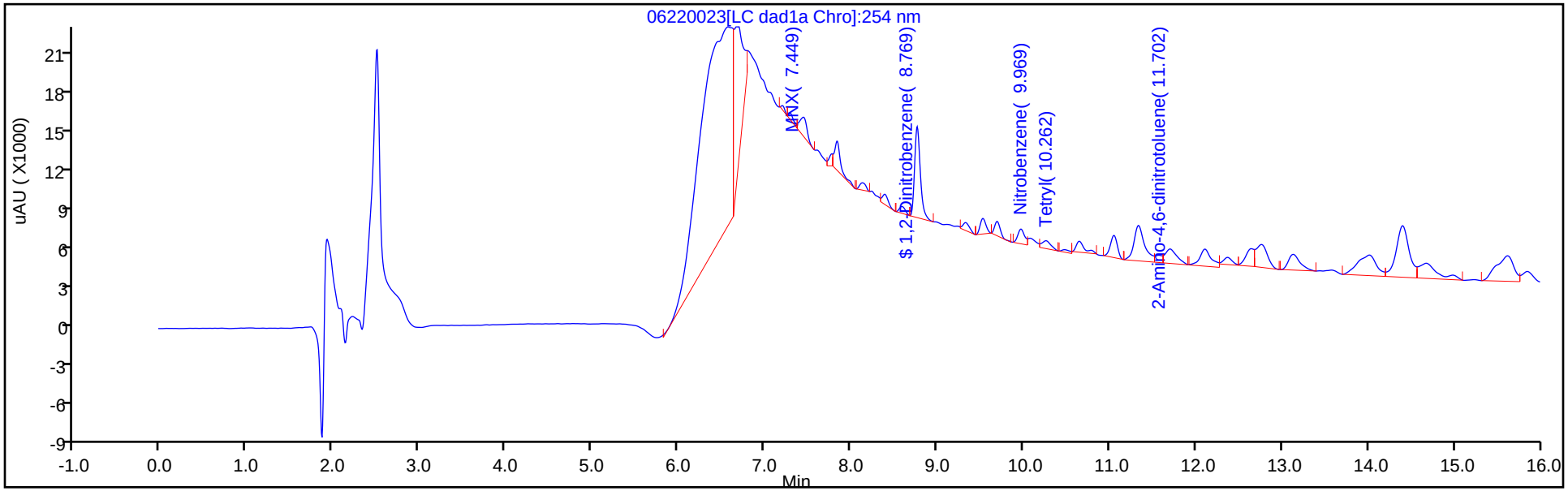
Report Date: 23-Jun-2020 15:18:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

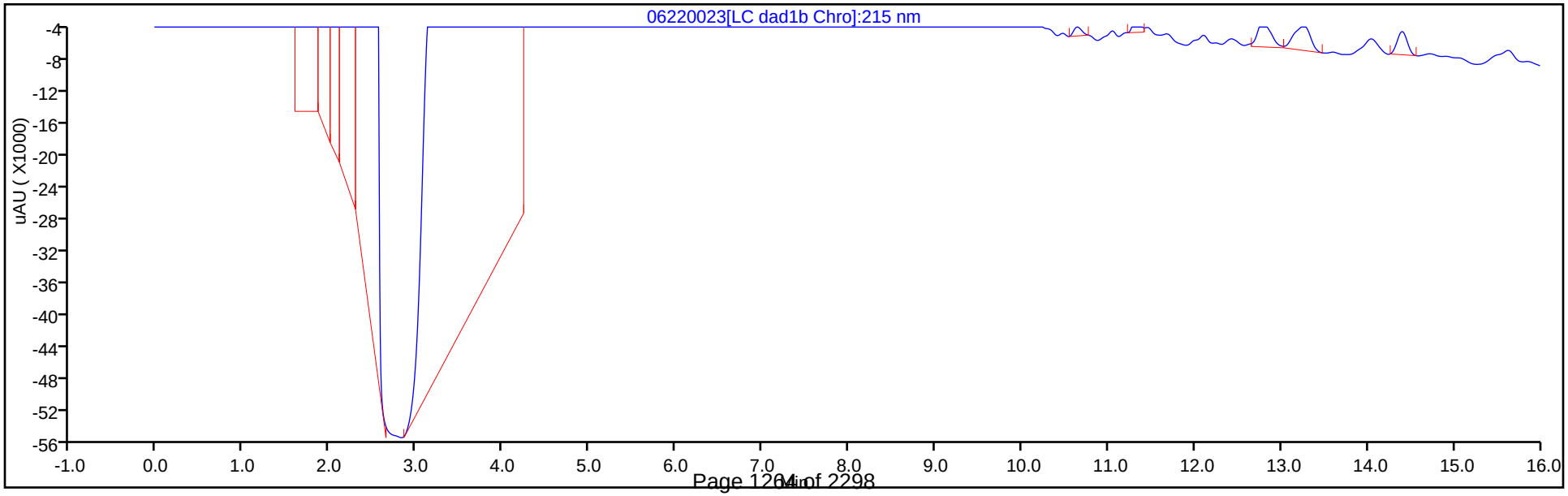
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d

Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8	Worklist Smp#:	23
Client ID:	G0017-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220023.D				
Lims ID:	280-137609-A-8-A				
Client ID:	G0017-20A				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 20:14:58	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-8-A				
Misc. Info.:	280-0092608-023				
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 14:40:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2324	116.22

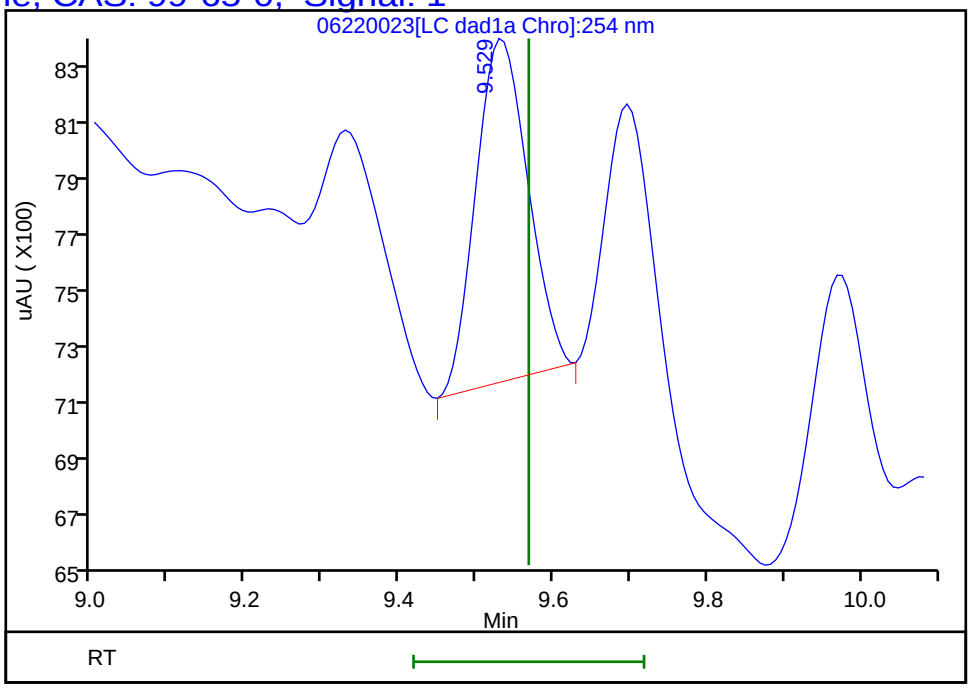
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.53
Response: 5538
Amount: 0.018058



Reviewer: zhangji, 23-Jun-2020 14:40:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

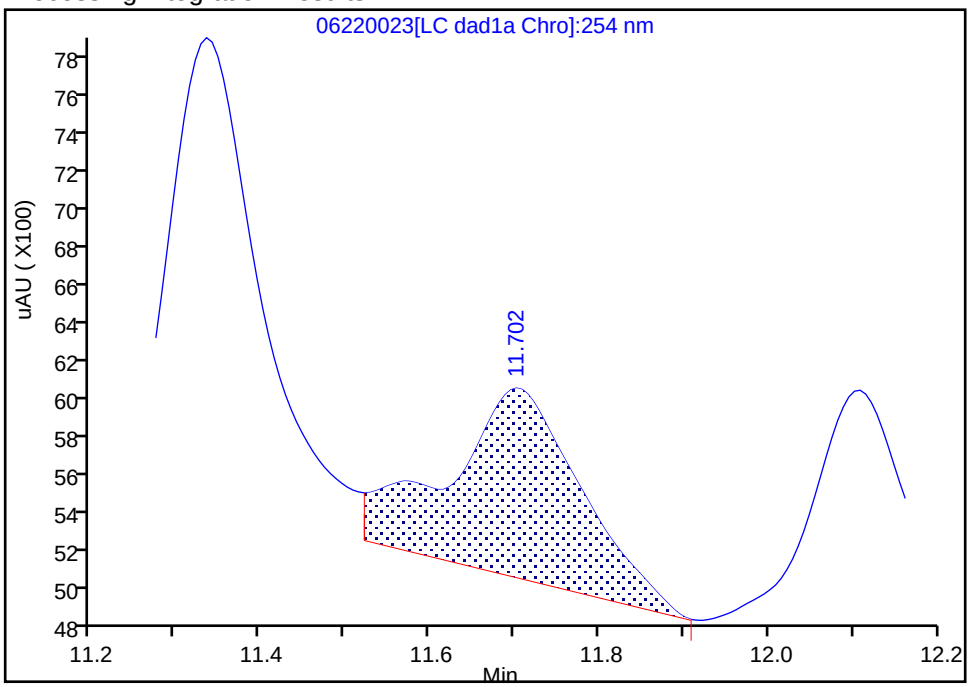
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

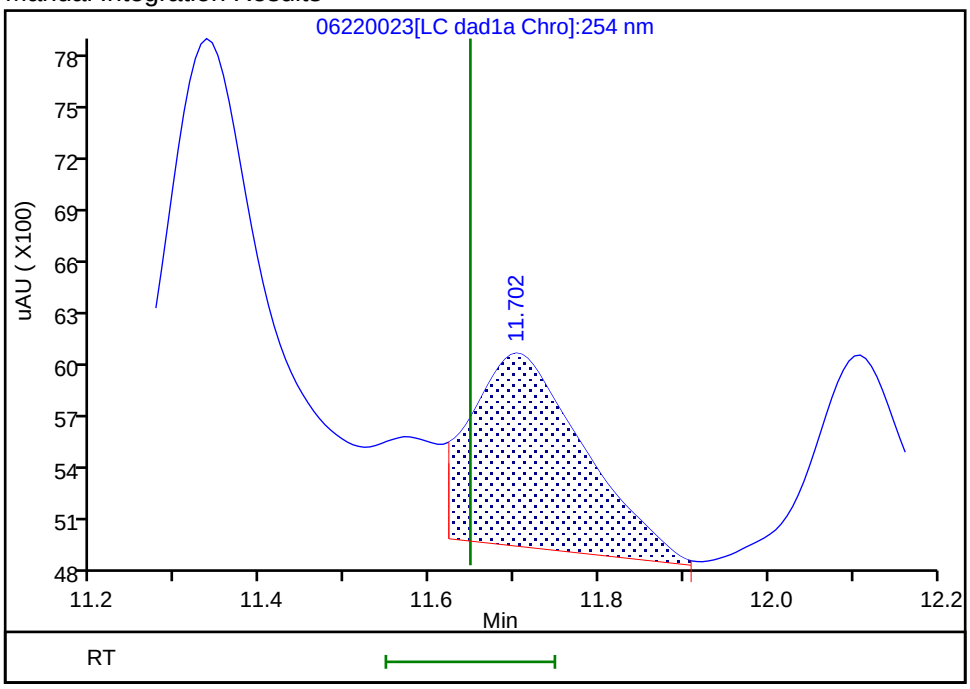
Processing Integration Results

RT: 11.70
Area: 10494
Amount: 0.051741
Amount Units: ug/mL



Manual Integration Results

RT: 11.70
Area: 10174
Amount: 0.050164
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:40:05
Audit Action: Assigned New Baseline Audit Reason: Baseline

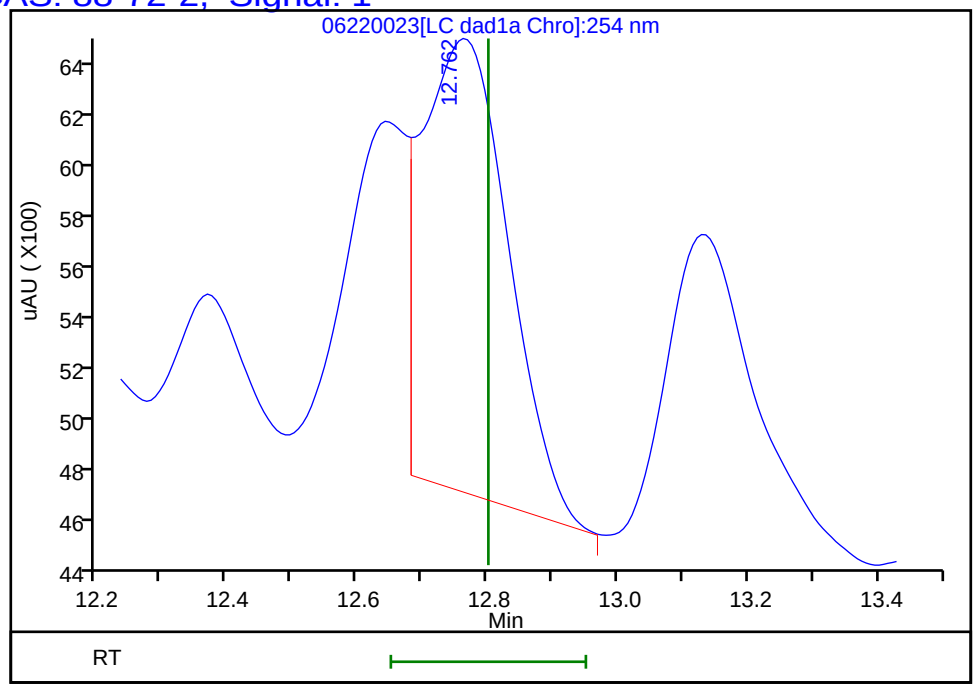
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.76
Response: 15775
Amount: 0.116808



Reviewer: zhangji, 23-Jun-2020 14:40:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

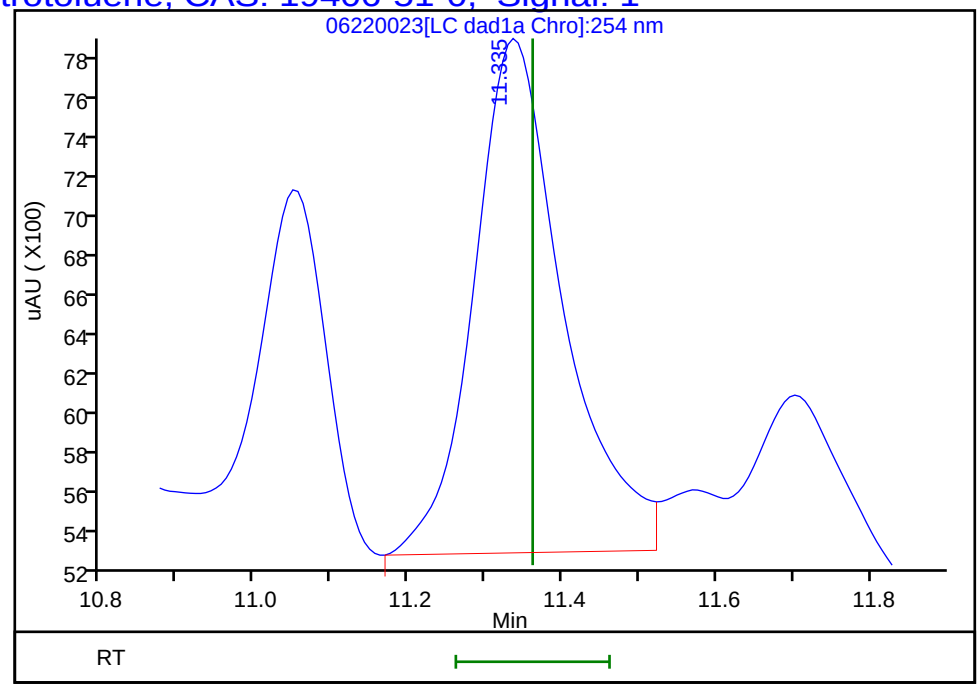
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.34
Response: 20735
Amount: 0.122769



Reviewer: zhangji, 23-Jun-2020 14:40:10

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

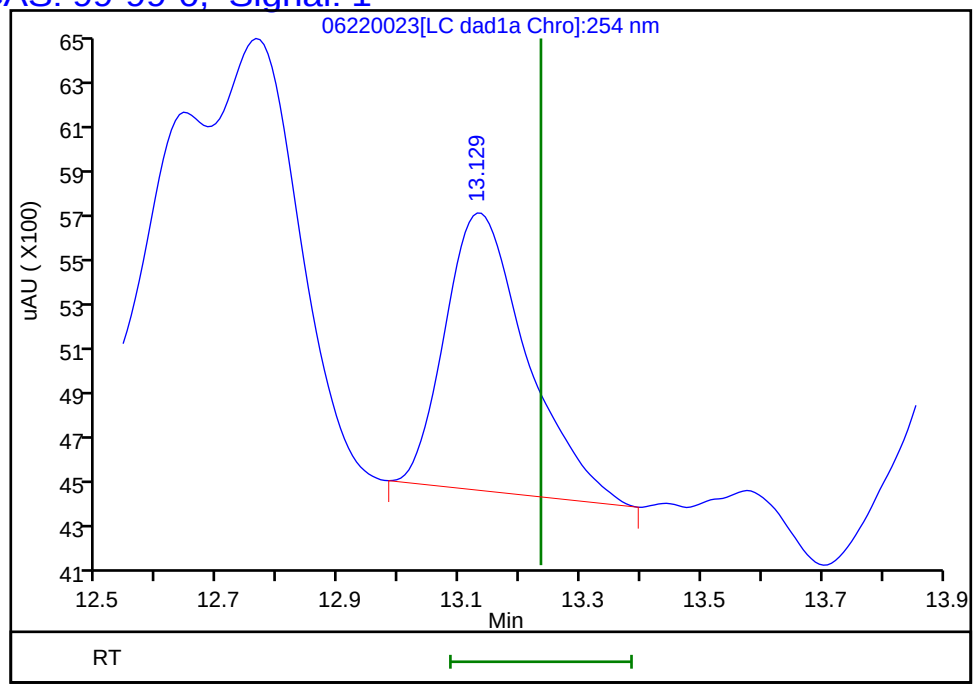
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d

Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.13
Response: 11258
Amount: 0.099624



Reviewer: zhangji, 23-Jun-2020 14:40:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

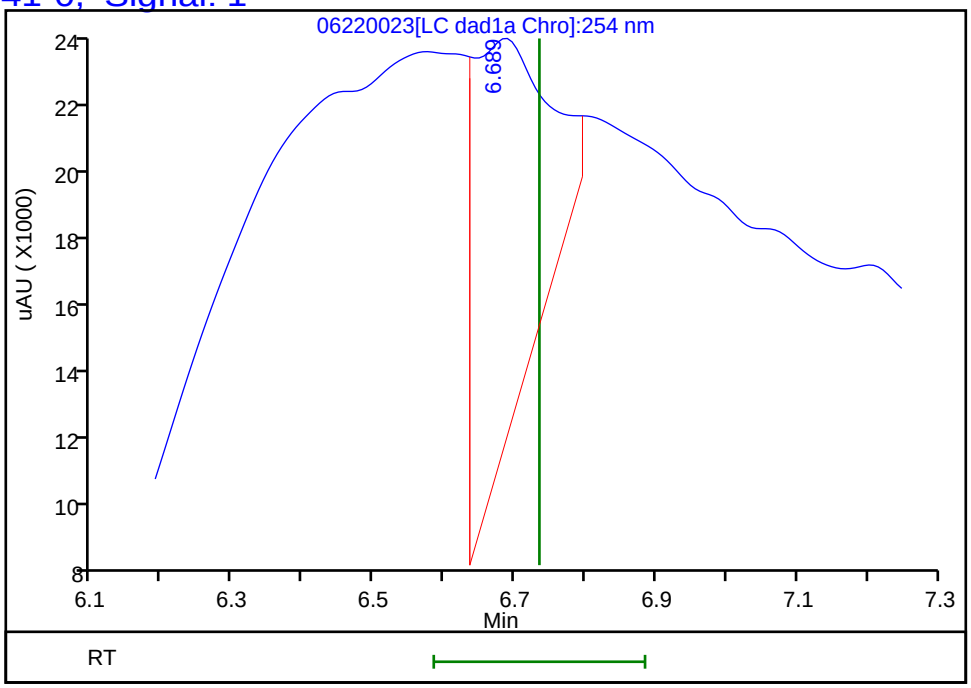
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d

Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8
Client ID:	G0017-20A		
Operator ID:	JZ	ALS Bottle#:	23 Worklist Smp#: 23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.69
Response: 78863
Amount: 0.917415



Reviewer: zhangji, 23-Jun-2020 14:40:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

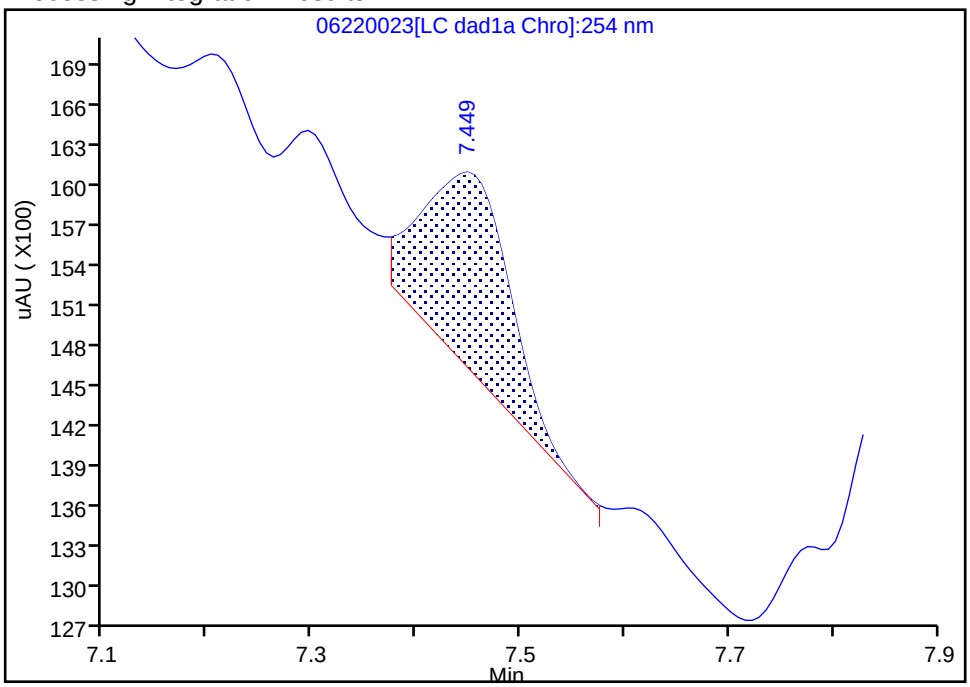
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

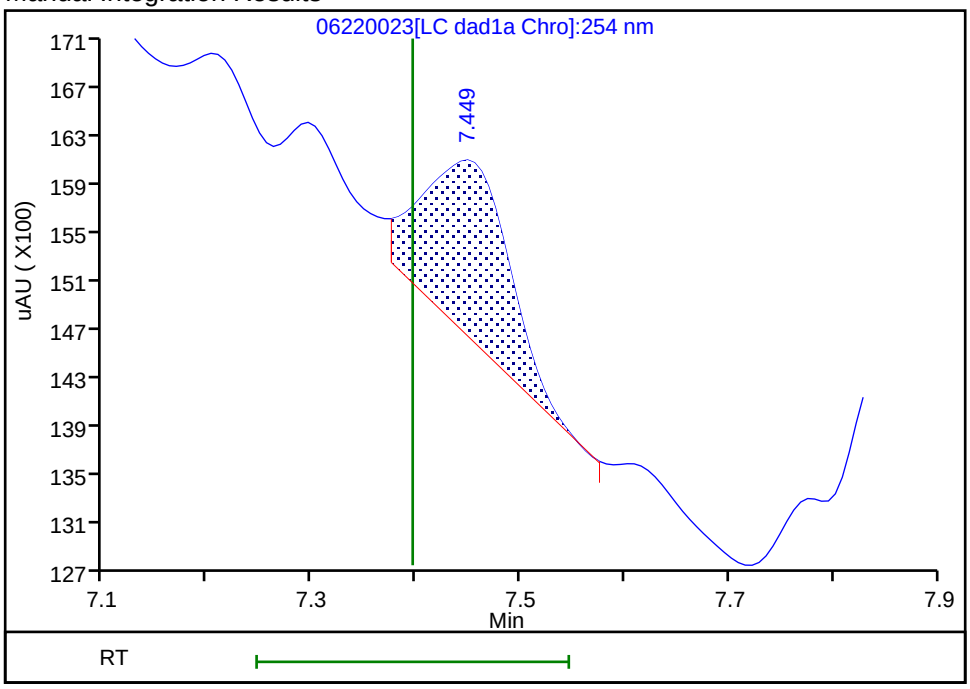
Processing Integration Results

RT: 7.45
Area: 8335
Amount: 0.052572
Amount Units: ug/mL



Manual Integration Results

RT: 7.45
Area: 8245
Amount: 0.052004
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:39:44

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

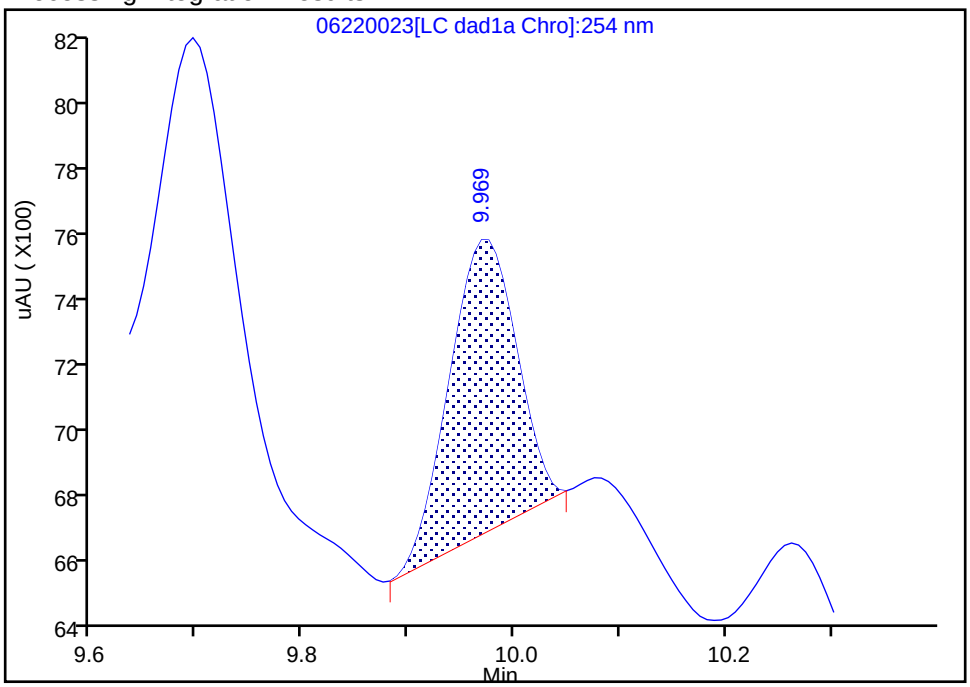
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

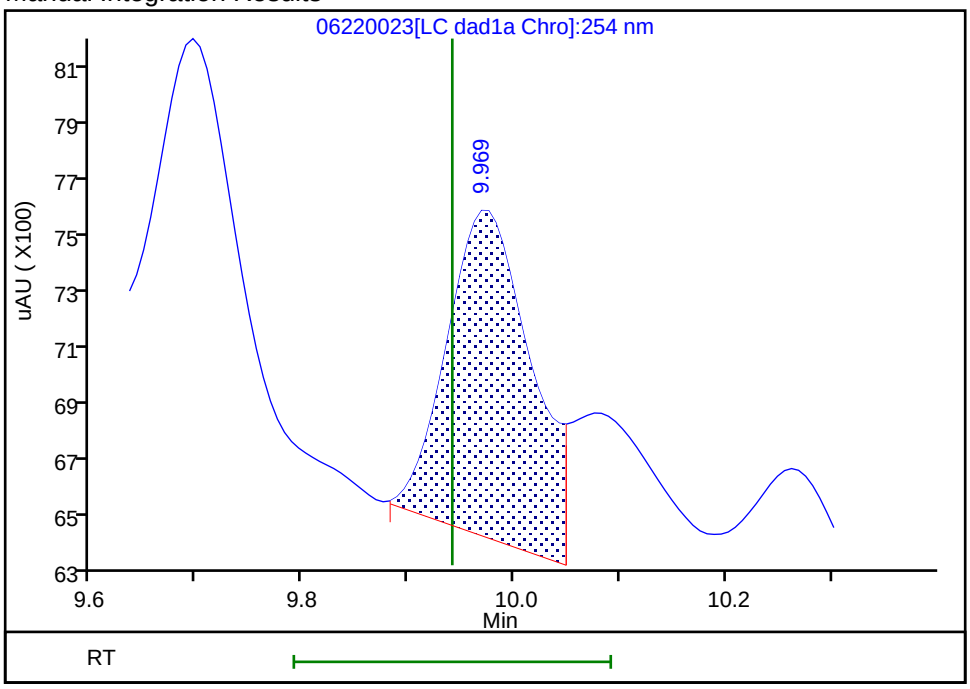
Processing Integration Results

RT: 9.97
Area: 3768
Amount: 0.018802
Amount Units: ug/mL



Manual Integration Results

RT: 9.97
Area: 6203
Amount: 0.030953
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:39:51

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

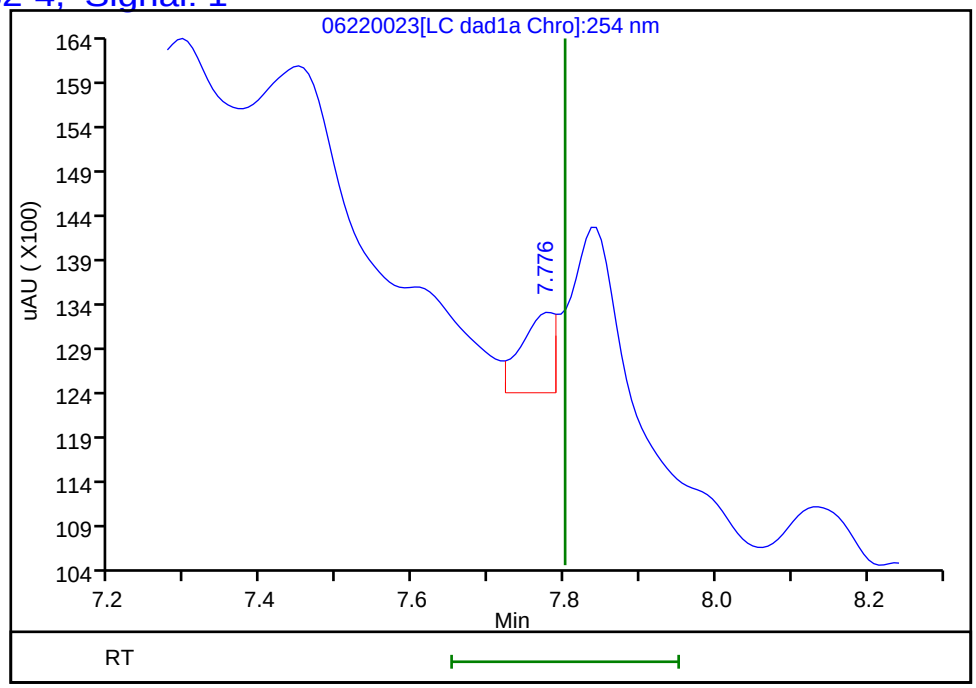
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d

Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.78
Response: 2715
Amount: 0.023282



Reviewer: zhangji, 23-Jun-2020 14:40:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

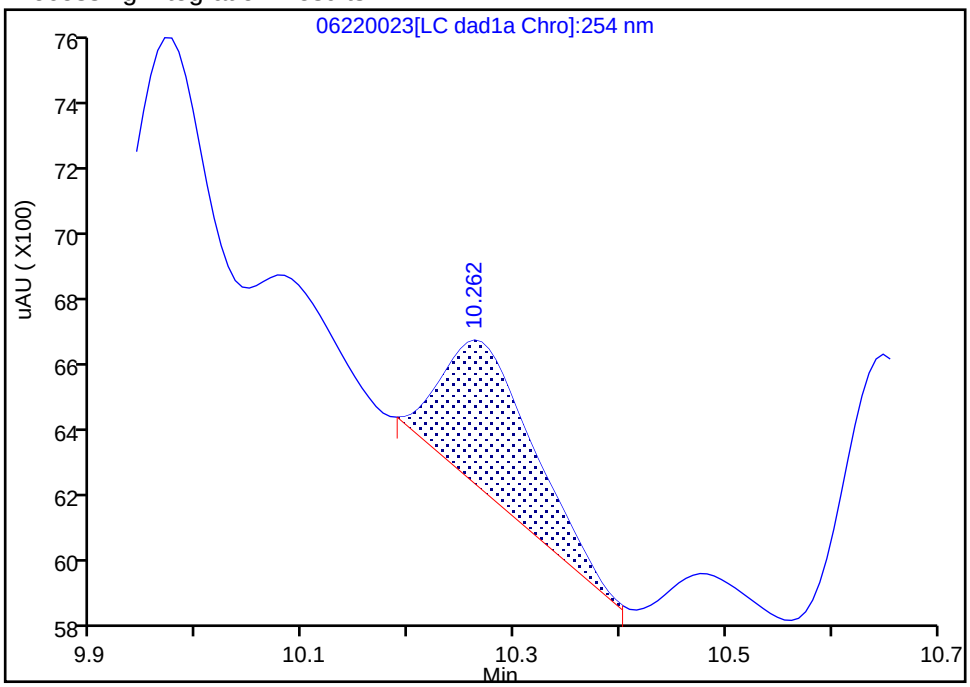
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220023.d				
Injection Date:	22-Jun-2020 20:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

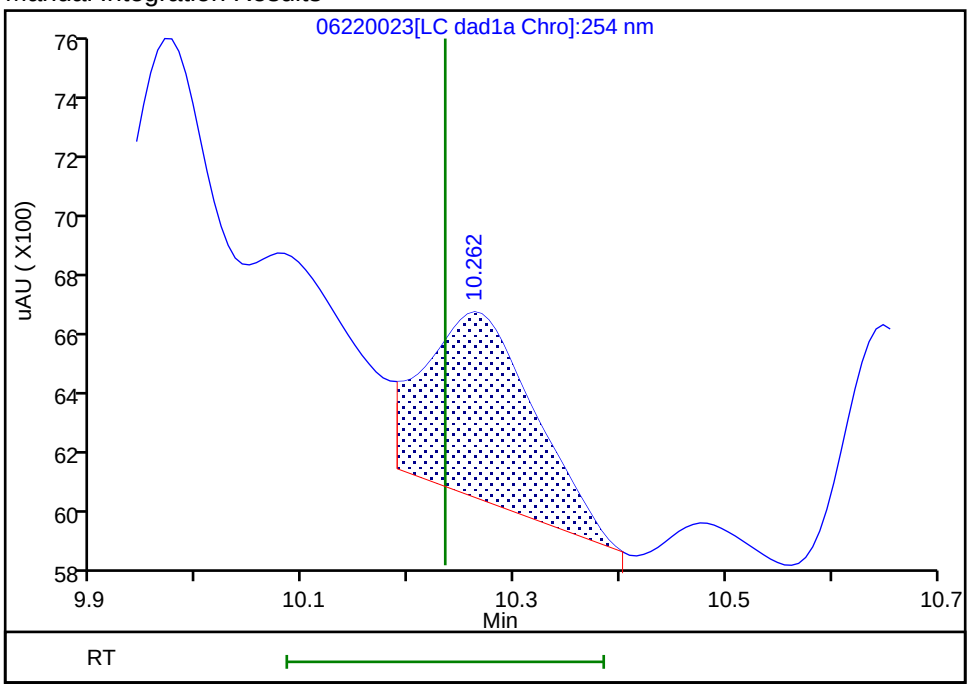
Processing Integration Results

RT: 10.26
Area: 2607
Amount: 0.014726
Amount Units: ug/mL



Manual Integration Results

RT: 10.26
Area: 4316
Amount: 0.024380
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:39:51

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0017-20A Lab Sample ID: 280-137609-8

Matrix: Water Lab File ID: 06230036.D

Analysis Method: 8330A Date Collected: 06/11/2020 11:00

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 476.1(mL) Date Analyzed: 06/24/2020 13:01

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	0.11	U	0.12	0.11	0.053
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
479-45-8	*Tetryl*	*0.065*	*J J1*	*0.12*	0.11	*0.033*

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\G2_LUNA\20200623-92679.b\06230036.D
Lims ID: 280-137609-A-8-A
Client ID: G0017-20A
Sample Type: Client
Inject. Date: 24-Jun-2020 13:01:01 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-8-A
Misc. Info.: 280-0092679-036
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 18:21:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.150			ND	U
7 MNX	1		7.876			ND	
8 RDX	1		9.363			ND	
9 Nitrobenzene	1		12.263			ND	
$ 10 1,2-Dinitrobenzene	1	13.259	13.263	-0.004	60837	0.2128	M
12 1,3-Dinitrobenzene	1		15.797			ND	
14 o-Nitrotoluene	1		16.730			ND	MU
15 p-Nitrotoluene	1	16.959	17.017	-0.058	19852	0.0824	M
16 4-Amino-2,6-dinitrotoluene	1	17.519	17.450	0.069	10518	0.0305	M
17 m-Nitrotoluene	1		17.943			ND	
18 2-Amino-4,6-dinitrotoluene	1		18.390			ND	
19 1,3,5-Trinitrobenzene	1		19.123			ND	U
20 2,6-Dinitrotoluene	1	20.073	20.050	0.023	11920	0.0259	
21 2,4-Dinitrotoluene	1	20.620	20.564	0.056	4384	0.006849	
22 Tetryl	1	23.853	23.870	-0.017	2282	0.006190	
23 2,4,6-Trinitrotoluene	1		24.890			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

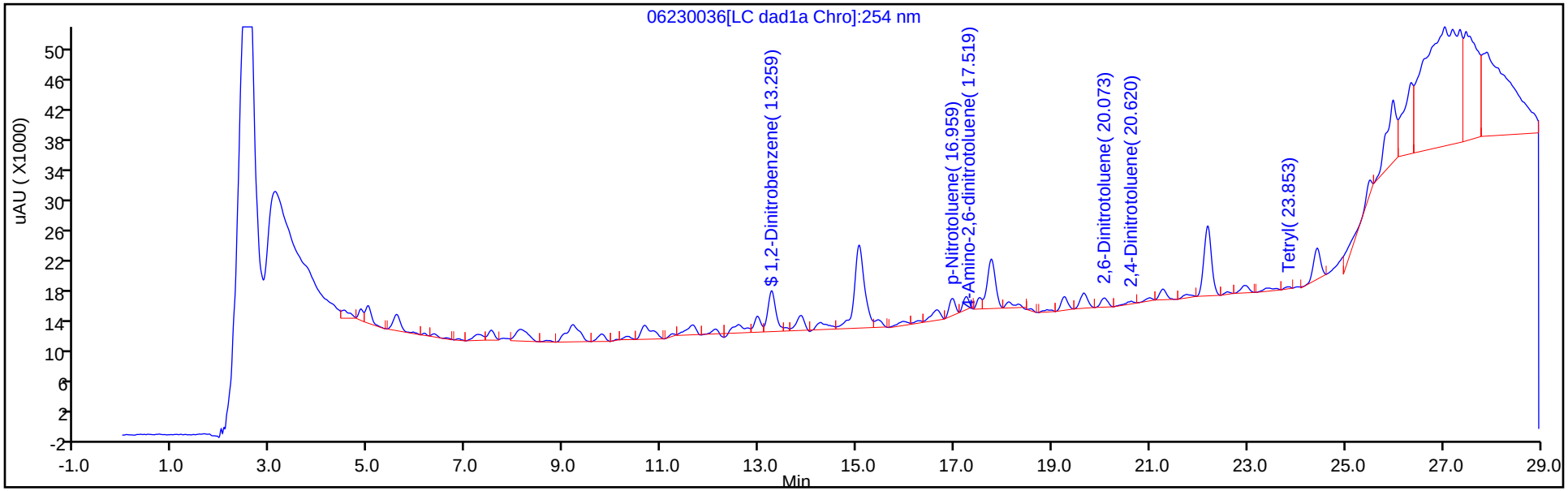
Report Date: 24-Jun-2020 18:52:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

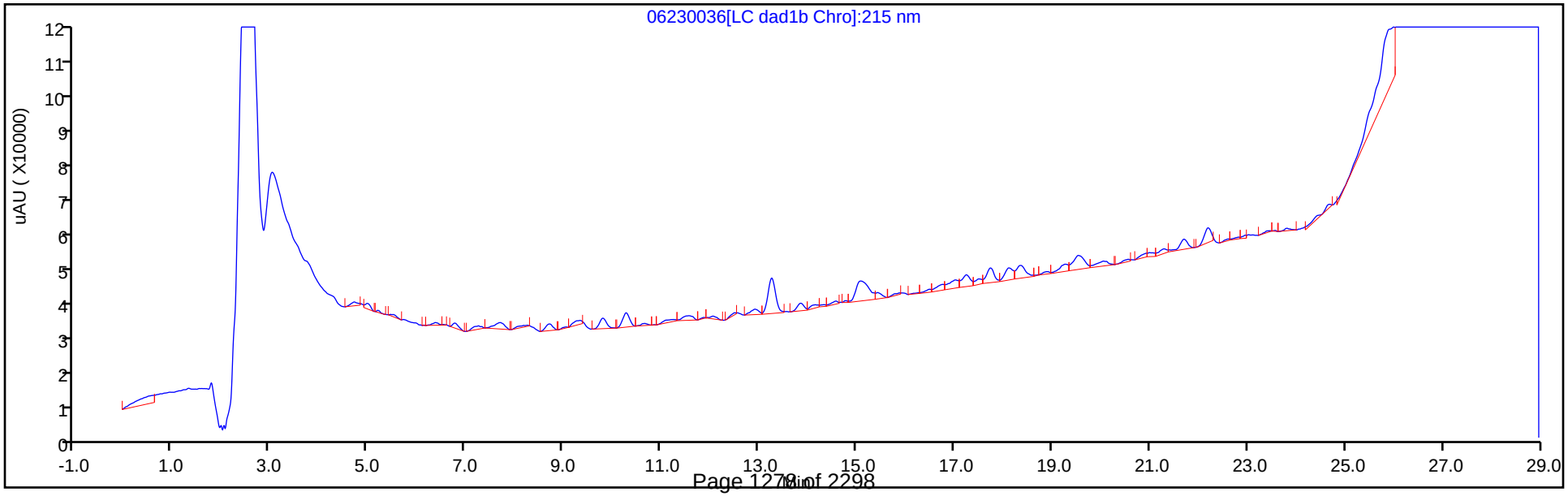
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d

Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8	Worklist Smp#:	36
Client ID:	G0017-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
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\06230036.D				
Lims ID:	280-137609-A-8-A				
Client ID:	G0017-20A				
Sample Type:	Client				
Inject. Date:	24-Jun-2020 13:01:01	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-8-A				
Misc. Info.:	280-0092679-036				
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 18:21:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2128	106.41

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

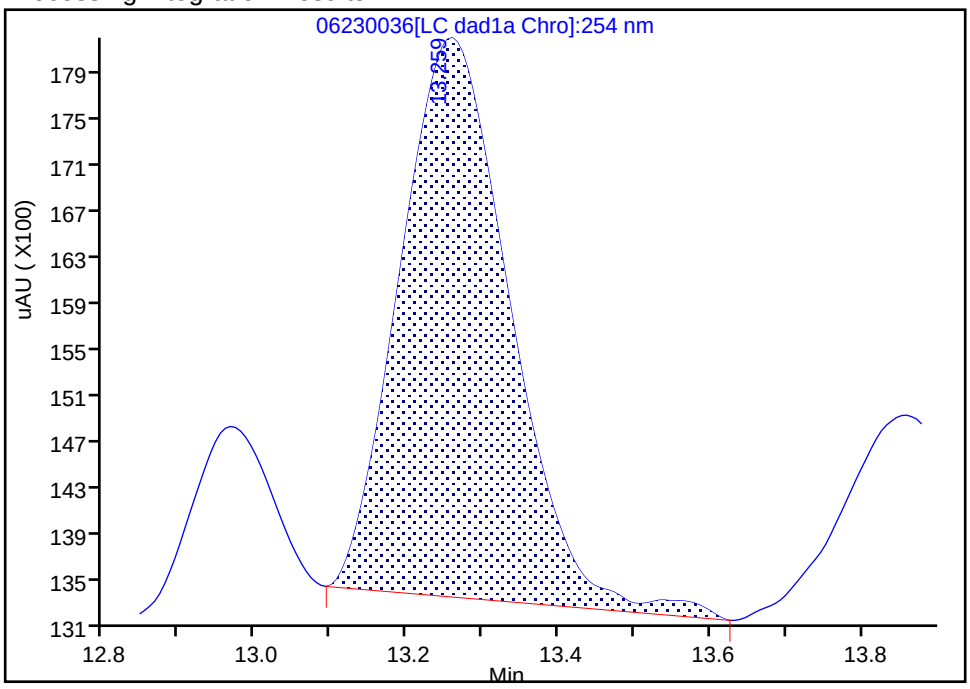
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d				
Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	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

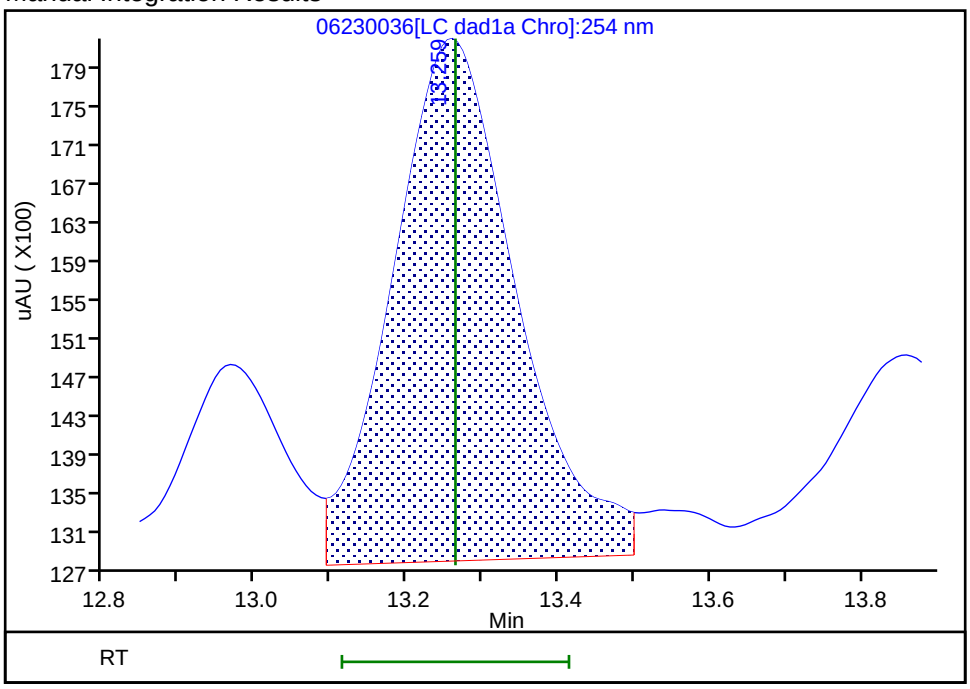
Processing Integration Results

RT: 13.26
Area: 48831
Amount: 0.169507
Amount Units: ug/ml



Manual Integration Results

RT: 13.26
Area: 60837
Amount: 0.212814
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:20:56

Audit Action: Split an Integrated Peak Audit Reason: Baseline

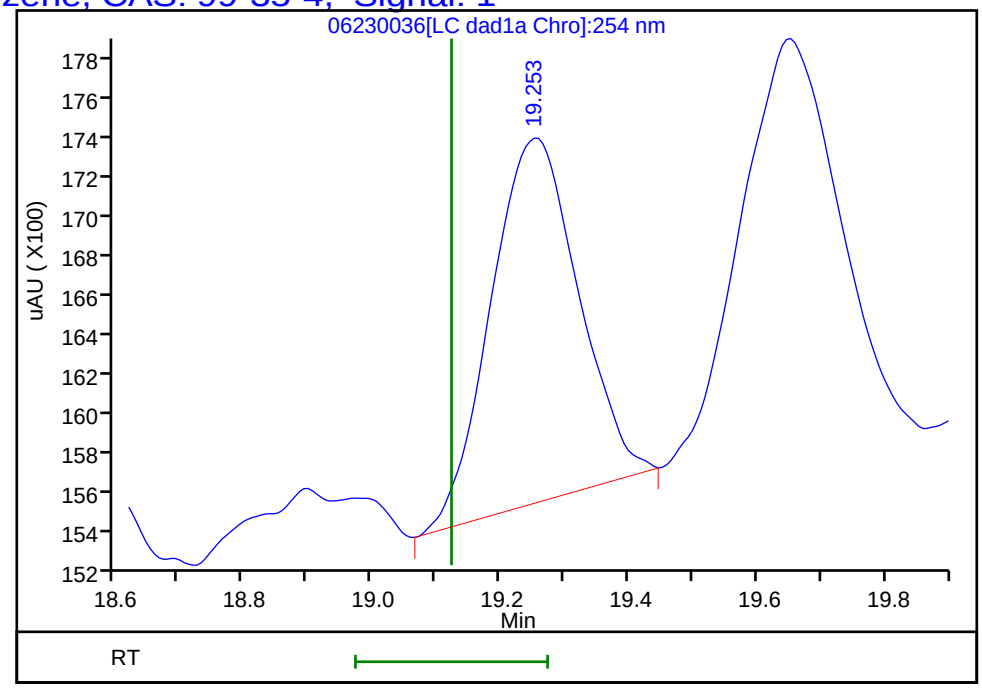
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d				
Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
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: 16894
Amount: 0.035758



Reviewer: zhangji, 24-Jun-2020 18:21:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

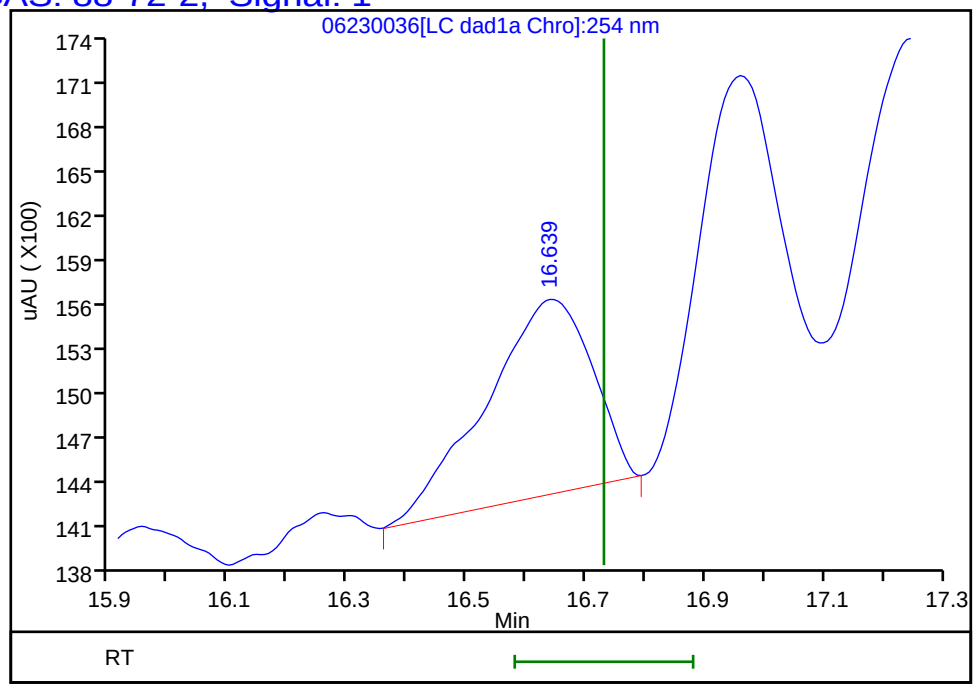
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d				
Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
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: 16.64
Response: 16211
Amount: 0.059389



Reviewer: zhangji, 24-Jun-2020 18:21:25
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

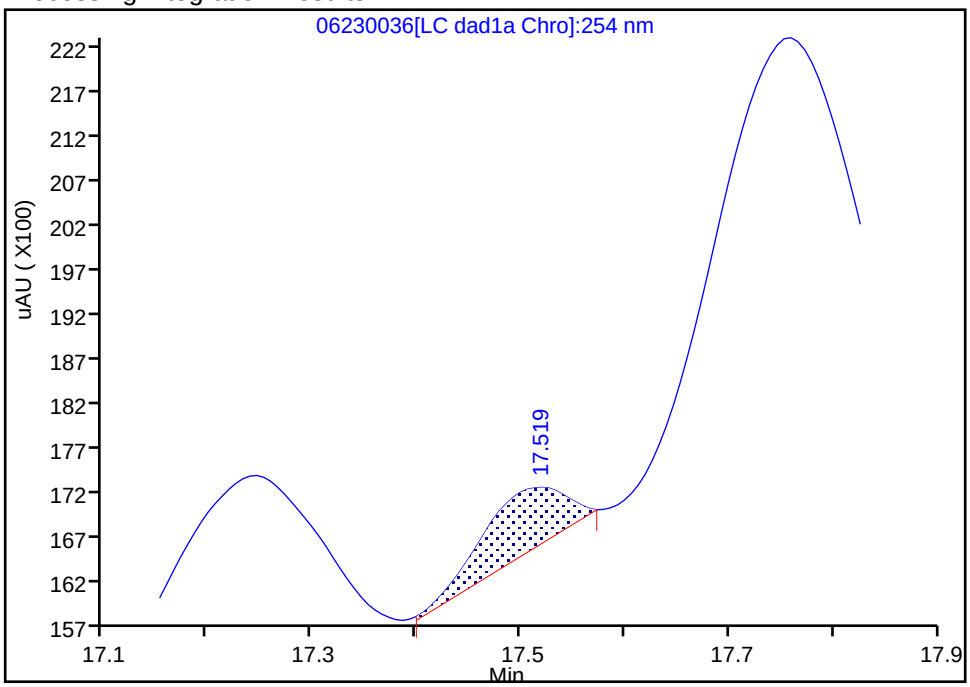
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d				
Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	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

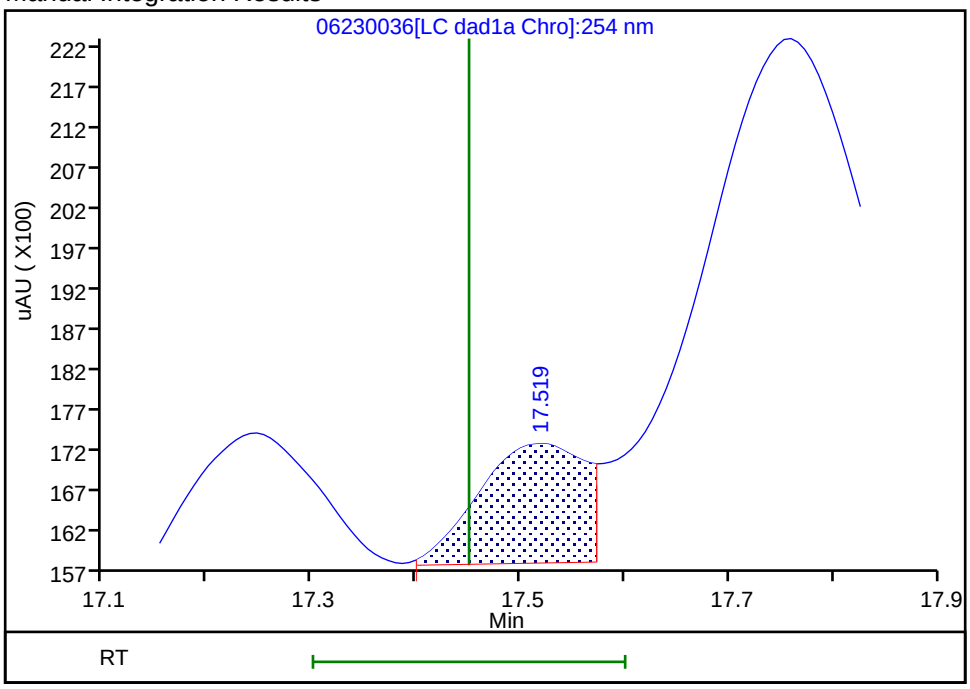
Processing Integration Results

RT: 17.52
Area: 4028
Amount: 0.011667
Amount Units: ug/ml



Manual Integration Results

RT: 17.52
Area: 10518
Amount: 0.030466
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:21:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

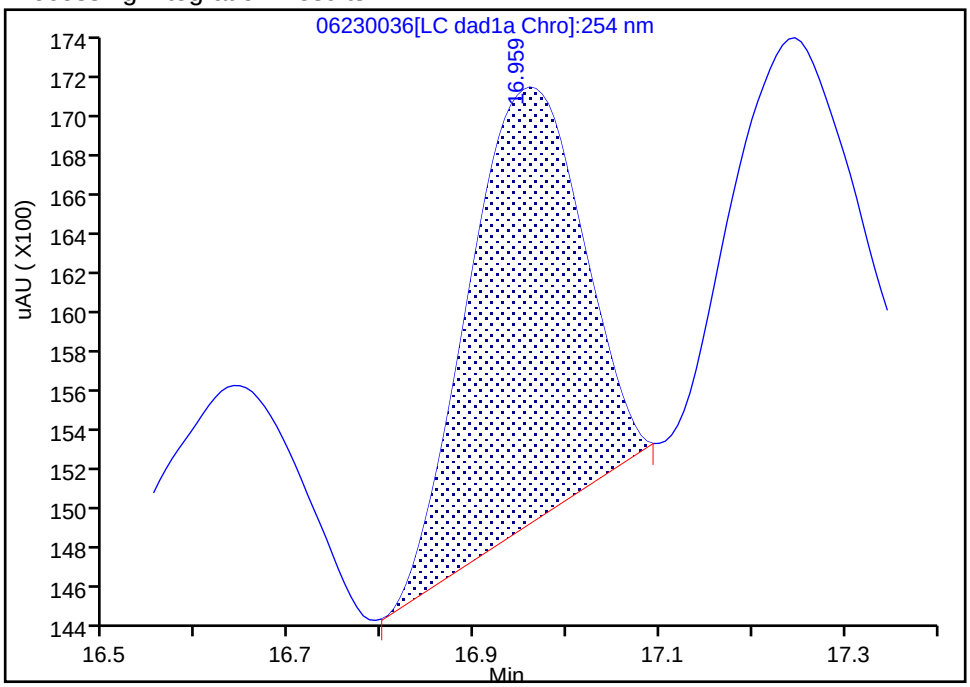
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d				
Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	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

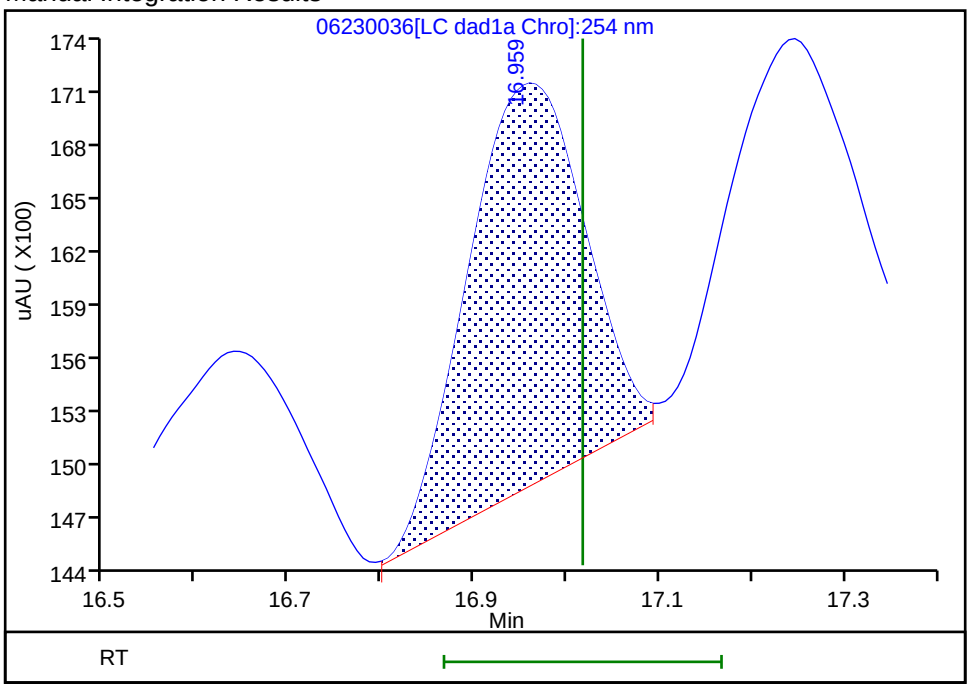
Processing Integration Results

RT: 16.96
Area: 18884
Amount: 0.078395
Amount Units: ug/ml



Manual Integration Results

RT: 16.96
Area: 19852
Amount: 0.082414
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:21:14

Audit Action: Assigned New Baseline Audit Reason: Baseline

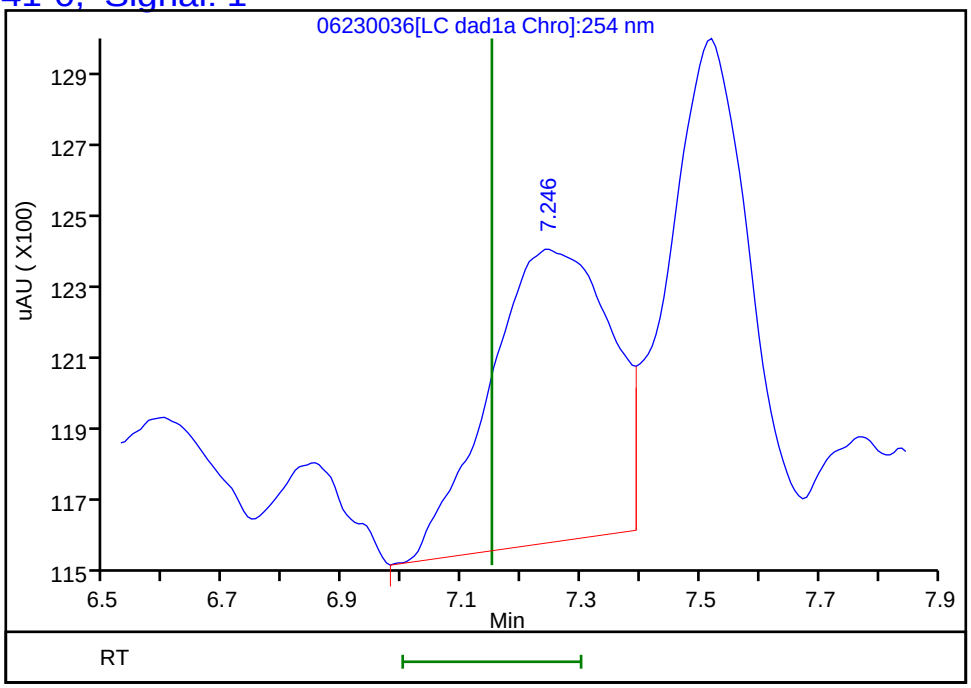
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230036.d				
Injection Date:	24-Jun-2020 13:01:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-A-8-A	Lab Sample ID:	280-137609-8		
Client ID:	G0017-20A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
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: 7.25
Response: 11114
Amount: 0.032710



Reviewer: zhangji, 24-Jun-2020 18:21:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A Lab Sample ID: 280-137609-9

Matrix: Water Lab File ID: 06220048.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 453.9(mL) Date Analyzed: 06/23/2020 05:50

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.093
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	0.050
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 J1	0.17	0.13	0.064
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11
2691-41-0	HMX	2.2	M	0.23	0.22	0.096
5755-27-1	MNX	1.2	J M	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.10
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	99	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220048.D
Lims ID: 280-137609-J-9-A
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 05:50:10 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-J-9-A
Misc. Info.: 280-0092608-048
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 15:18:12 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 14:53:12

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	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	6.725	6.734	-0.009	16974	0.1975	M
4	2,4-diamino-6-nitrotoluene	1		6.764			ND	
5	DNX	1		6.949			ND	
6	MNX	1	7.398	7.396	0.002	17628	0.1112	M
7	RDX	1	7.812	7.801	0.011	421305	3.61	EM
8	2,4,6-Trinitrophenol	1		8.094			ND	
$ 9	1,2-Dinitrobenzene	1	8.778	8.741	0.037	27367	0.1980	M
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

Processing Flags
E - Exceeded Maximum Amount

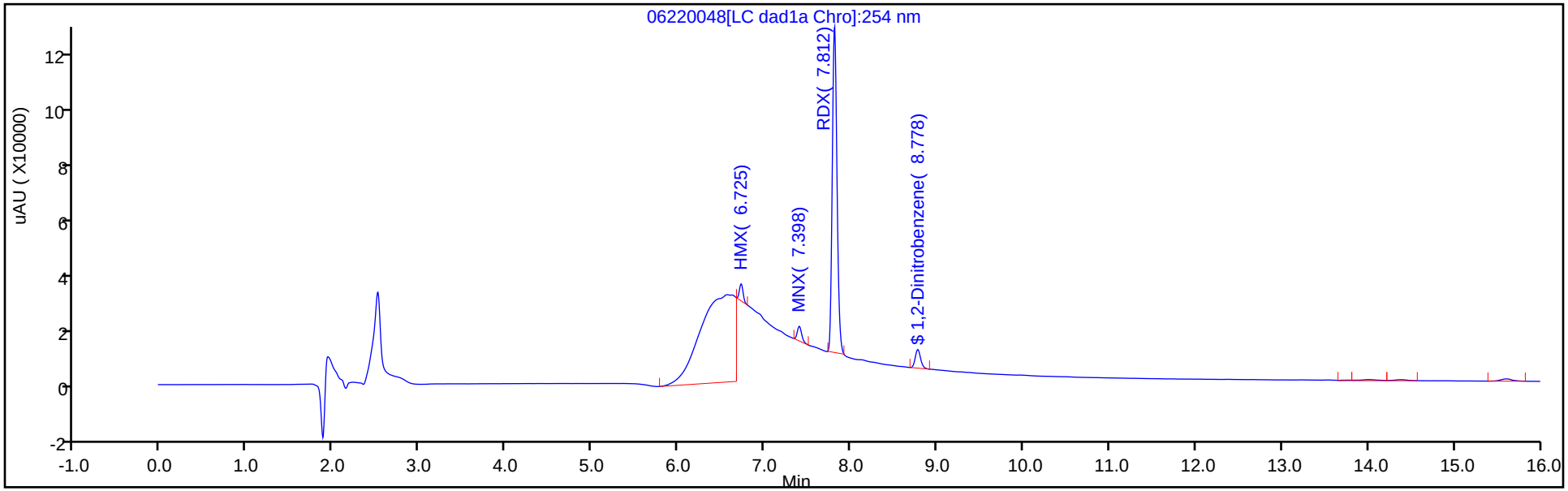
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Jun-2020 15:18:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

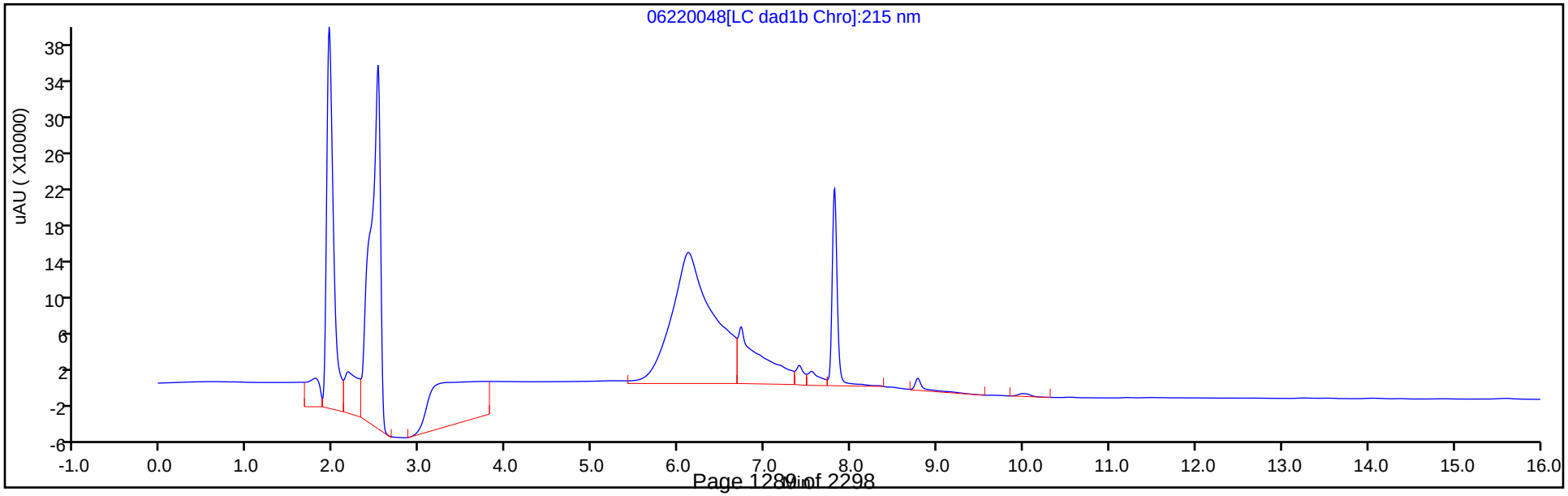
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220048.d				
Injection Date:	23-Jun-2020 05:50:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9	Worklist Smp#:	48
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
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\06220048.D
Lims ID: 280-137609-J-9-A
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 05:50:10 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-J-9-A
Misc. Info.: 280-0092608-048
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 15:18:12 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 14:53:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1980	99.00

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

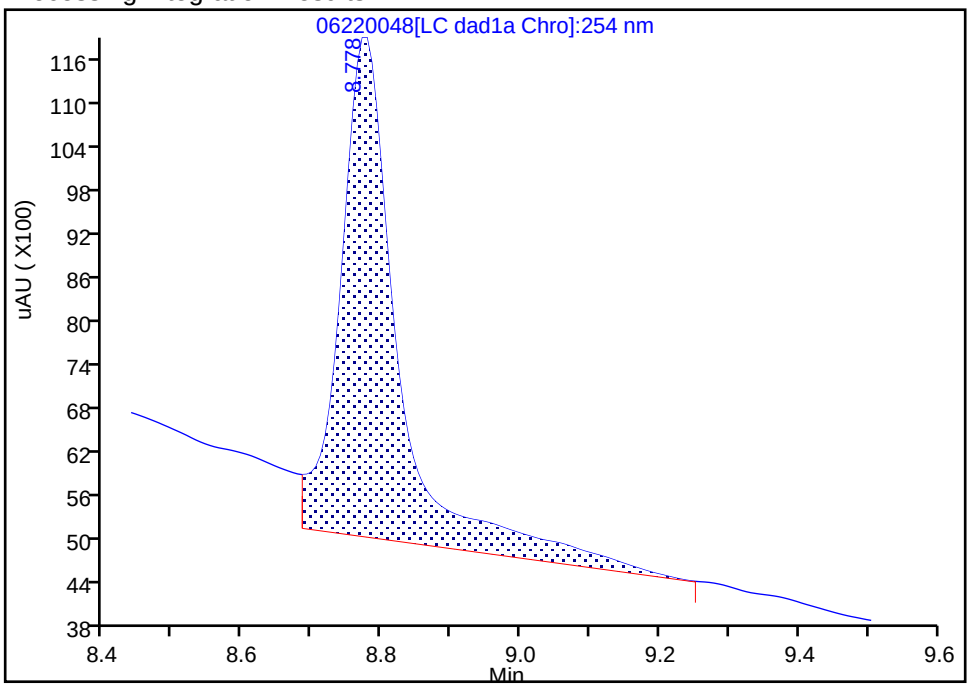
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220048.d				
Injection Date:	23-Jun-2020 05:50:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

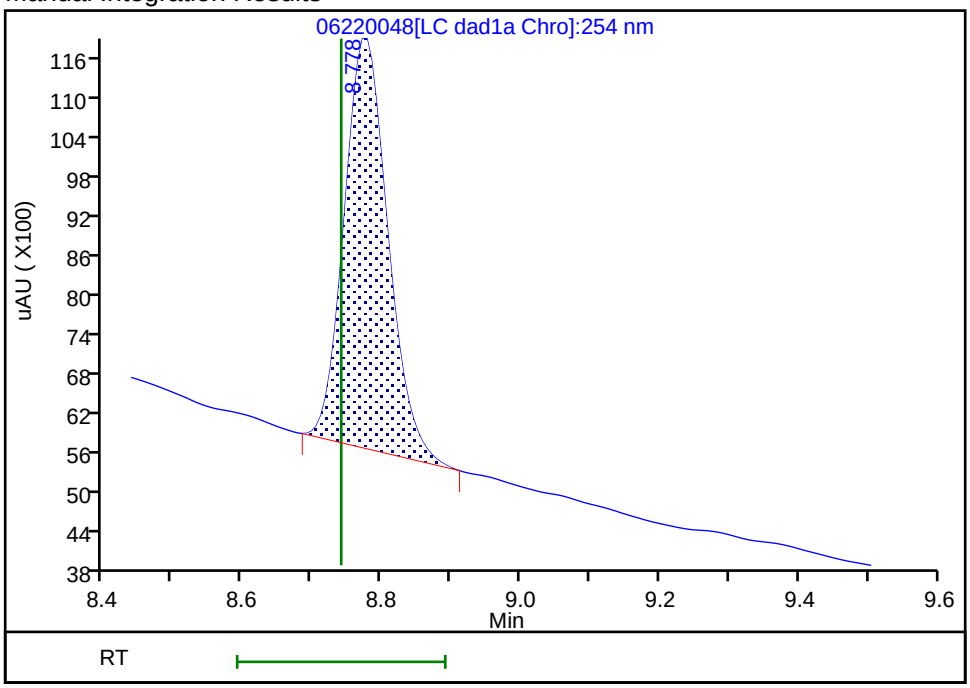
Processing Integration Results

RT: 8.78
Area: 40244
Amount: 0.291175
Amount Units: ug/mL



Manual Integration Results

RT: 8.78
Area: 27367
Amount: 0.198007
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:05

Audit Action: Manually Integrated Audit Reason: Baseline

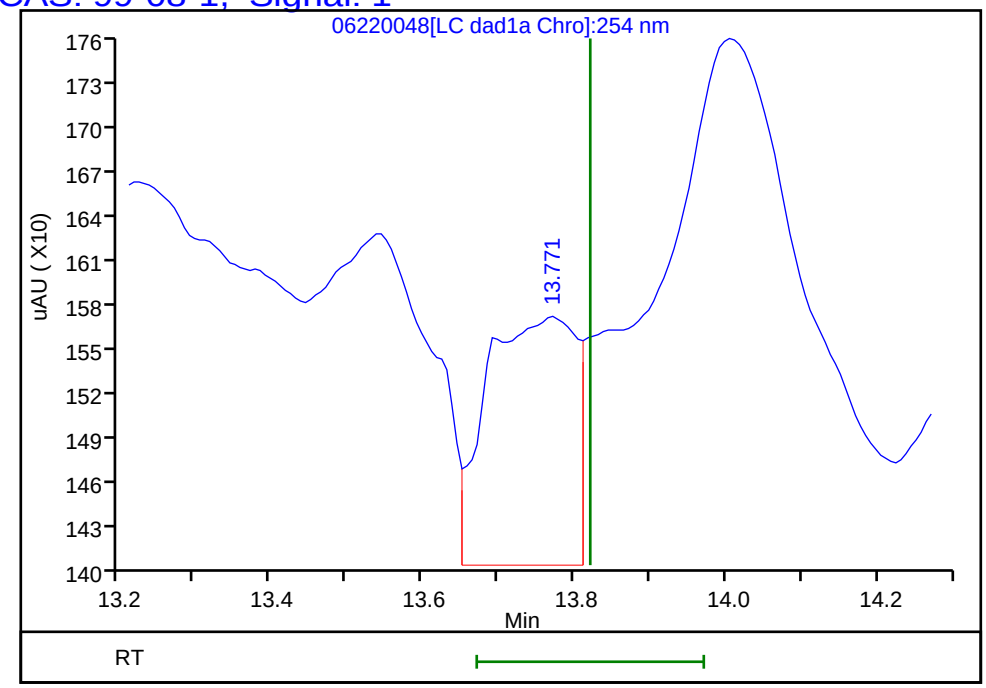
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220048.d				
Injection Date:	23-Jun-2020 05:50:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.77
Response: 1328
Amount: 0.009285



Reviewer: zhangji, 23-Jun-2020 14:53:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

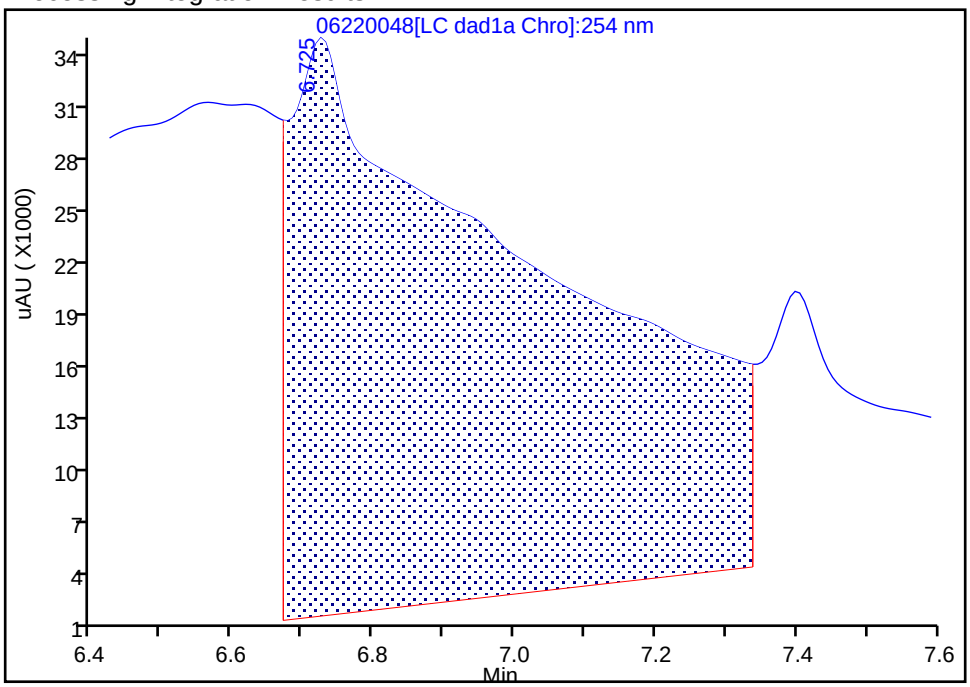
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220048.d				
Injection Date:	23-Jun-2020 05:50:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

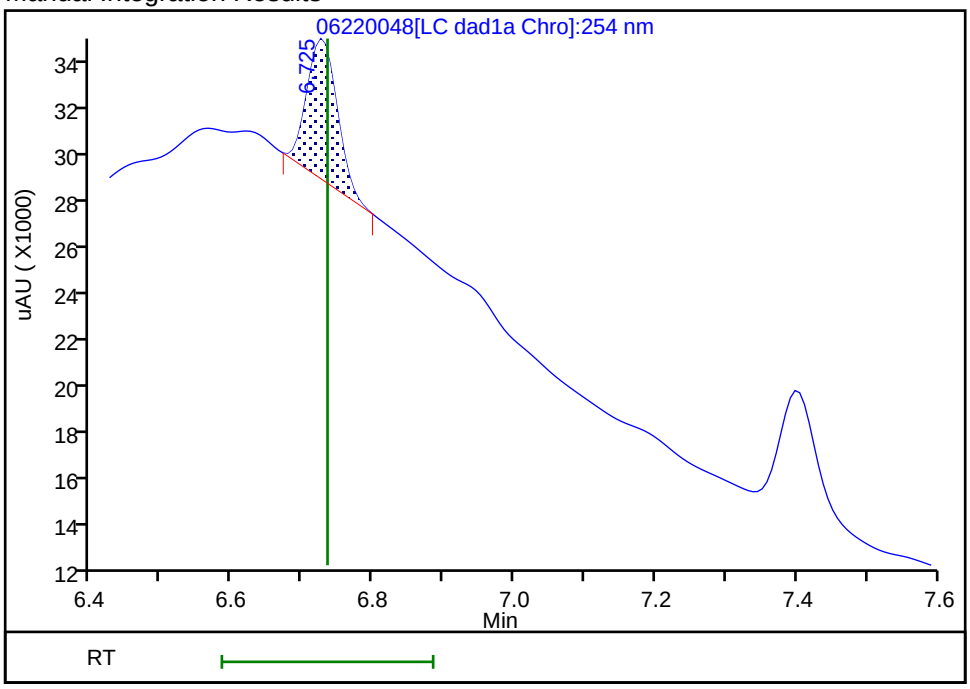
Processing Integration Results

RT: 6.72
Area: 794778
Amount: 9.245672
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 16974
Amount: 0.197459
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:52:49

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

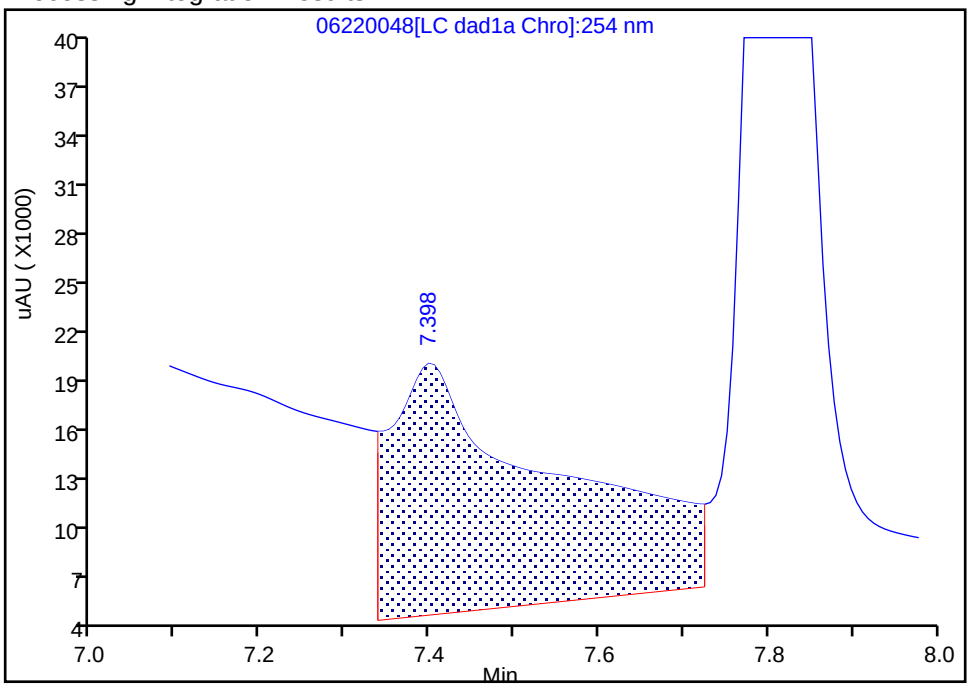
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220048.d				
Injection Date:	23-Jun-2020 05:50:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

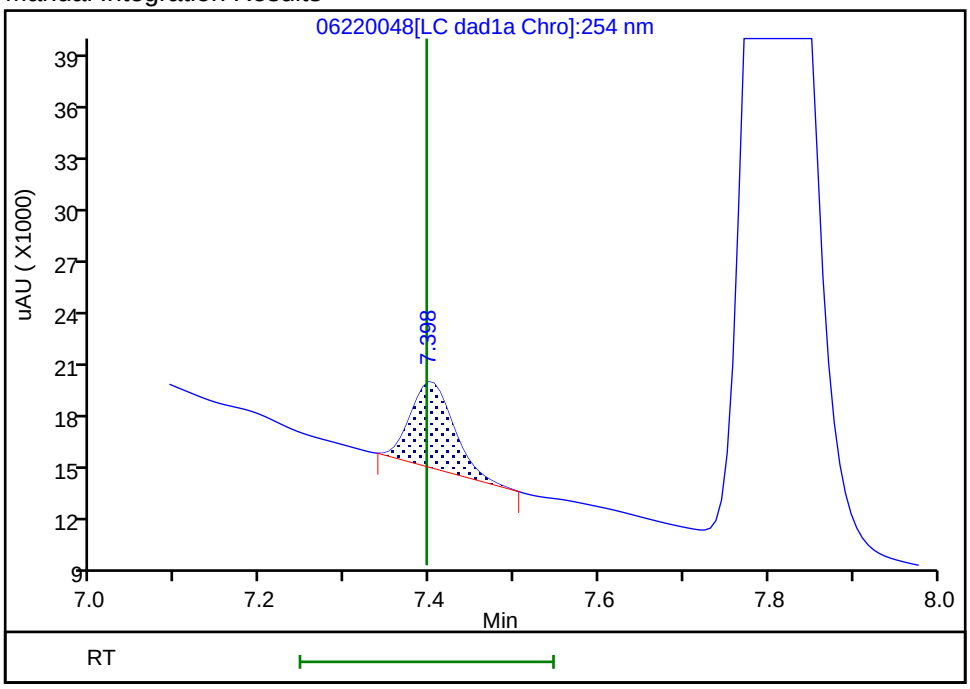
Processing Integration Results

RT: 7.40
Area: 205081
Amount: 1.293526
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 17628
Amount: 0.111187
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:52:55

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

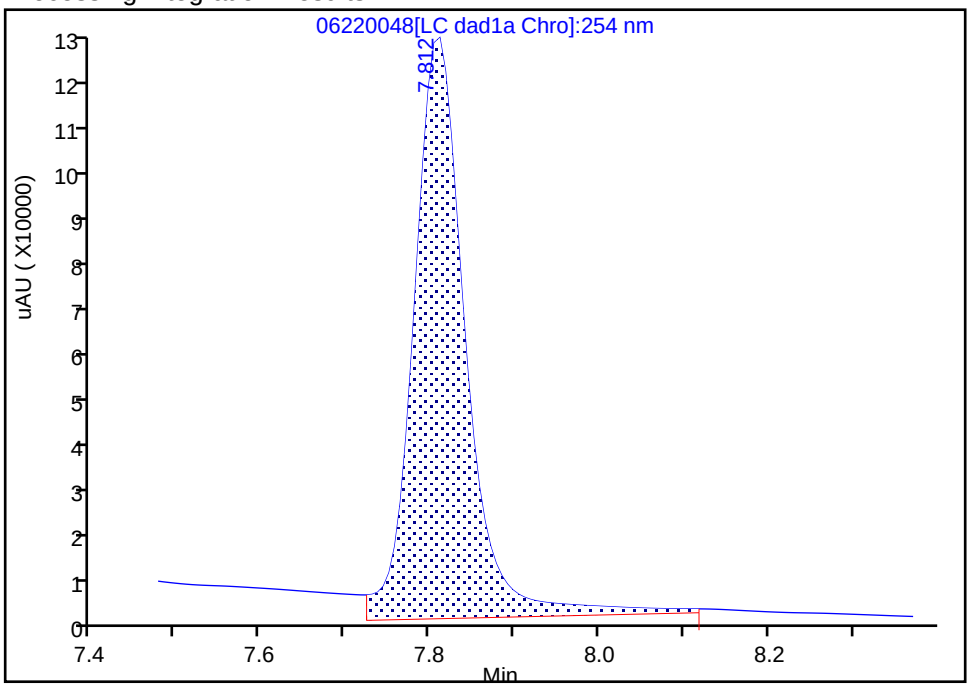
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220048.d				
Injection Date:	23-Jun-2020 05:50:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

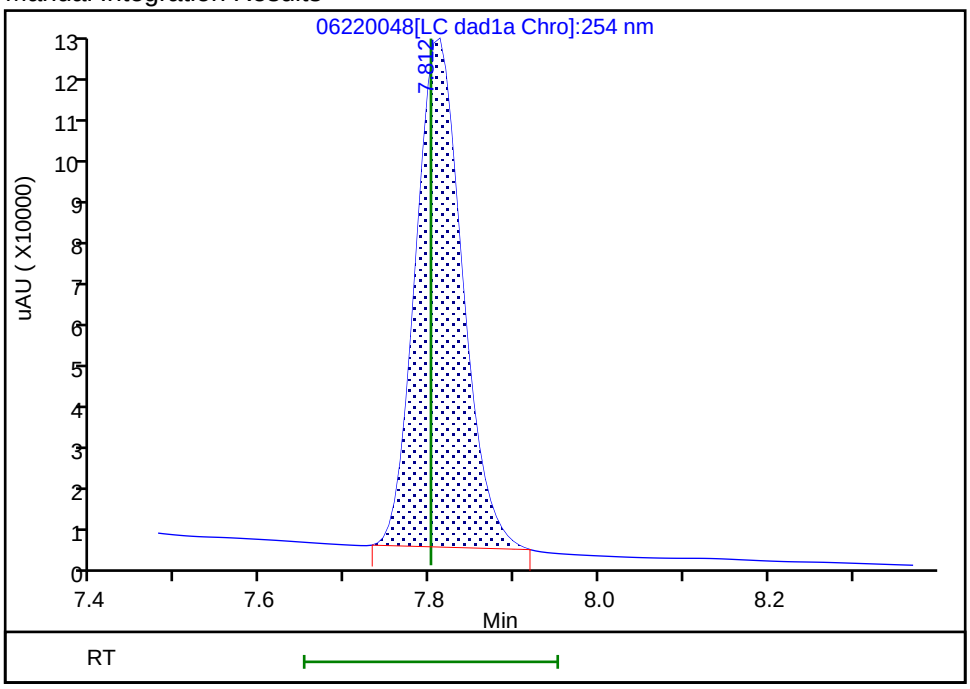
Processing Integration Results

RT: 7.81
Area: 490687
Amount: 4.207822
Amount Units: ug/mL



Manual Integration Results

RT: 7.81
Area: 421305
Amount: 3.612845
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A Lab Sample ID: 280-137609-9

Matrix: Water Lab File ID: 06240012.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 453.9(mL) Date Analyzed: 06/25/2020 00:51

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.	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\G2_LUNA\20200624-92719.b\06240012.D
Lims ID: 280-137609-J-9-A
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 00:51:15 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-J-9-A
Misc. Info.: 280-0092719-012
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 16:18:59 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: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 17:03:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.425			ND	
2 2,4-diamino-6-nitrotoluene	1		4.938			ND	
3 TNX	1		5.532			ND	
4 DNX	1	6.340	6.372	-0.032	6716	0.0209	
6 HMX	1	7.140	7.145	-0.005	35669	0.1714	
7 MNX	1	7.900	7.926	-0.026	34790	0.1101	
5 2,4,6-Trinitrophenol	1		8.465			ND	
8 RDX	1	9.347	9.358	-0.011	836648	3.42	E
9 Nitrobenzene	1		12.265			ND	
$ 10 1,2-Dinitrobenzene	1	13.260	13.271	-0.011	57821	0.2019	
11 3,5-Dinitroaniline	1		15.205			ND	
12 1,3-Dinitrobenzene	1		15.805			ND	
13 Nitroglycerin	2		16.045			ND	
14 o-Nitrotoluene	1	16.673	16.745	-0.072	6269	0.0230	
15 p-Nitrotoluene	1		17.031			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.465			ND	
17 m-Nitrotoluene	1		17.958			ND	
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	
22 Tetryl	1		23.885			ND	
23 2,4,6-Trinitrotoluene	1		24.905			ND	
24 PETN	2		25.438			ND	
25 Ammonium Picrate	1		0.000			ND	
26 Triamine Trinitrobenzene	1		0.000			ND	

QC Flag Legend

Processing Flags

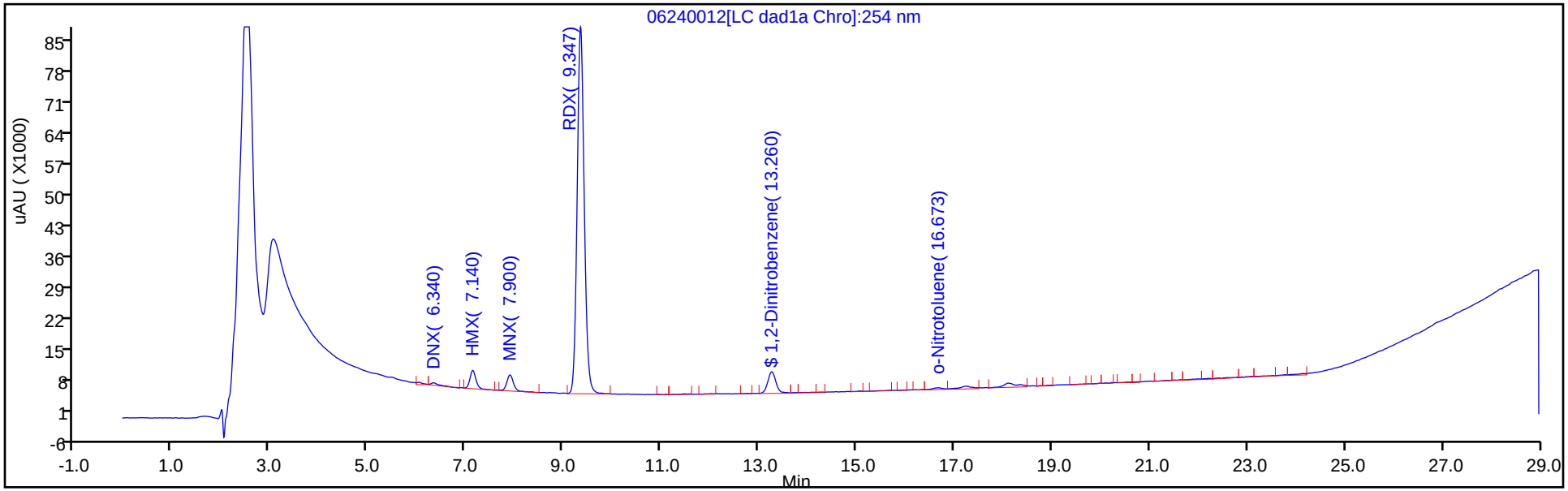
E - Exceeded Maximum Amount

Report Date: 26-Jun-2020 16:19:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

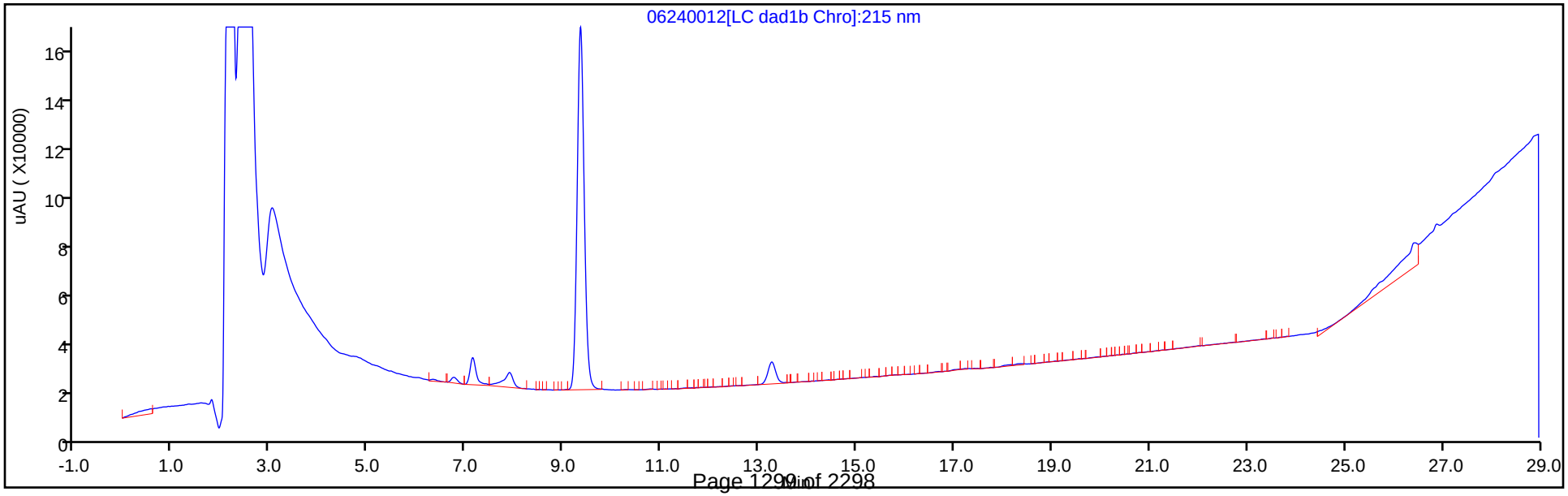
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240012.d				
Injection Date:	25-Jun-2020 00:51:15	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9	Worklist Smp#:	12
Client ID:	G0102-20A				
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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240012.D				
Lims ID:	280-137609-J-9-A				
Client ID:	G0102-20A				
Sample Type:	Client				
Inject. Date:	25-Jun-2020 00:51:15	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-J-9-A				
Misc. Info.:	280-0092719-012				
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 16:18:59	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:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:03:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2019	100.97

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A DL Lab Sample ID: 280-137609-9 DL

Matrix: Water Lab File ID: 06230010.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 453.9(mL) Date Analyzed: 06/23/2020 19:49

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499863 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	41	D M J1	2.3	2.2	0.57

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106	M D	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230010.D
Lims ID: 280-137609-J-9-A
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 23-Jun-2020 19:49:36 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 10.0000
Sample Info: 280-137609-J-9-A
Misc. Info.: 280-0092681-010
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:11 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 20:47:25

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1	2,6-diamino-4-nitrotoluene	1		6.576			ND	U
2	TNX	1		6.627			ND	
3	HMX	1	6.725	6.723	0.002	1620	0.0188	M
4	2,4-diamino-6-nitrotoluene	1		6.763			ND	
5	DNX	1		6.947			ND	
6	MNX	1	7.385	7.394	-0.009	1996	0.0126	M
7	RDX	1	7.785	7.790	-0.005	43728	0.3750	M
8	2,4,6-Trinitrophenol	1		8.090			ND	
$ 9	1,2-Dinitrobenzene	1	8.732	8.736	-0.004	2943	0.0213	M
10	1,3,5-Trinitrobenzene	1		8.923			ND	
11	1,3-Dinitrobenzene	1		9.570			ND	
12	Nitrobenzene	1		9.943			ND	
13	3,5-Dinitroaniline	1		10.170			ND	
14	Tetryl	1		10.236			ND	
15	Nitroglycerin	2		10.750			ND	
16	2,4,6-Trinitrotoluene	1		11.203			ND	
17	4-Amino-2,6-dinitrotoluene	1		11.363			ND	
18	2-Amino-4,6-dinitrotoluene	1		11.656			ND	
19	2,6-Dinitrotoluene	1		11.790			ND	
20	2,4-Dinitrotoluene	1		11.990			ND	
21	o-Nitrotoluene	1		12.796			ND	
22	p-Nitrotoluene	1		13.223			ND	
23	m-Nitrotoluene	1		13.803			ND	
24	PETN	2		14.843			ND	
25	Ammonium Picrate	1		0.000			ND	
26	Triamine Trinitrobenzene	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

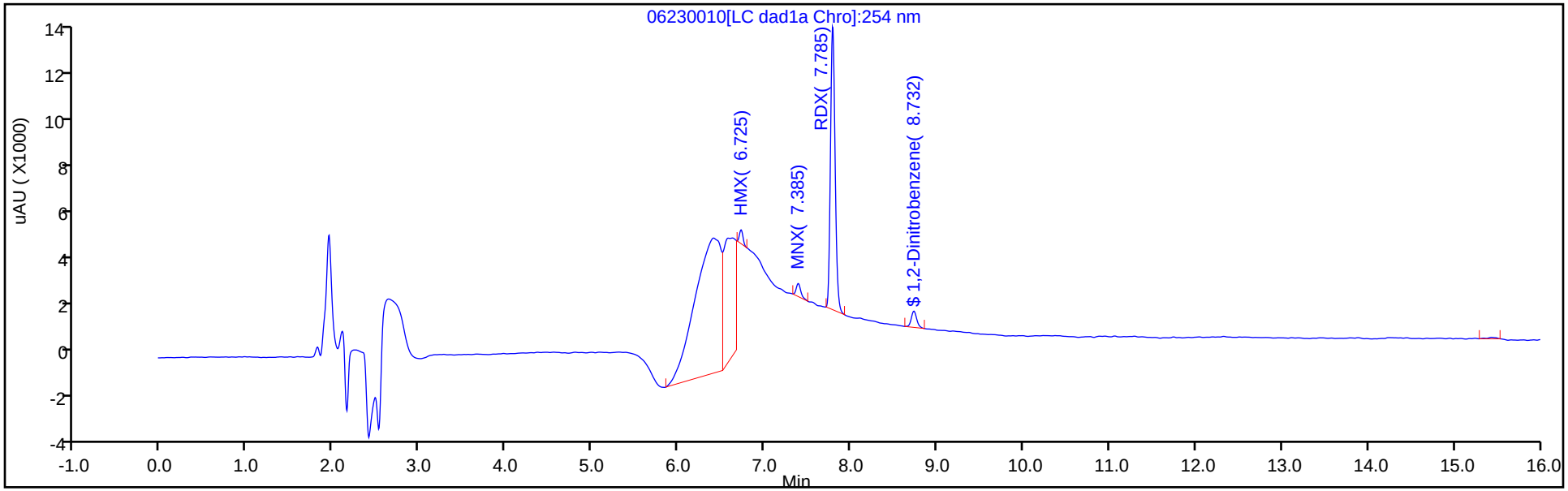
Report Date: 24-Jun-2020 16:26:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

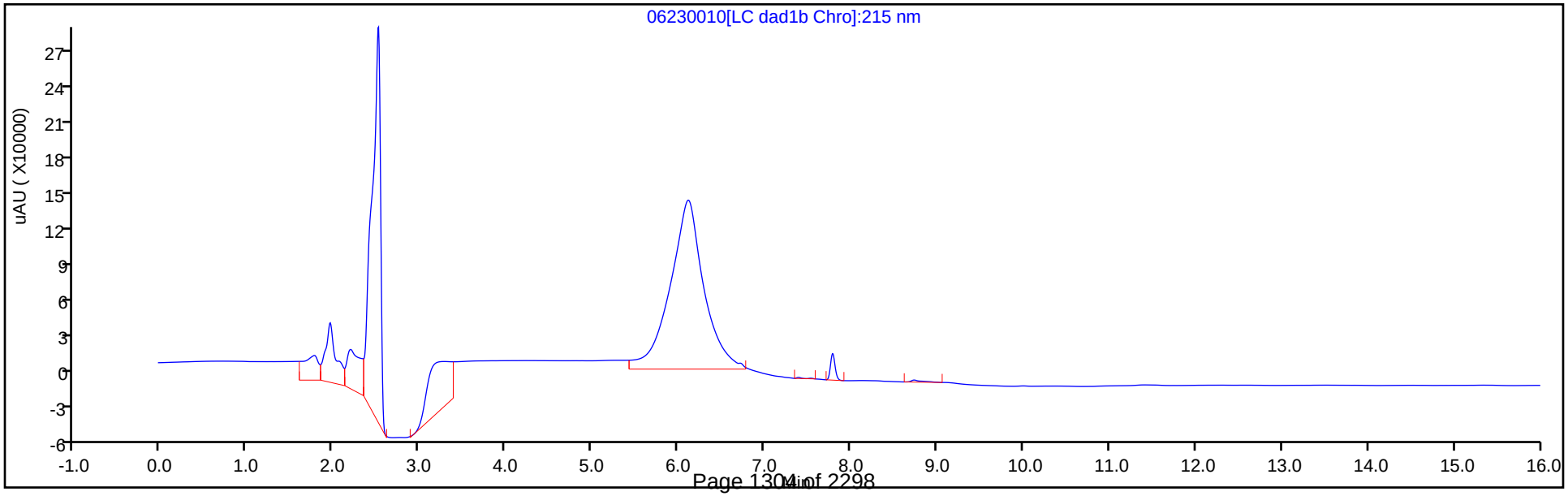
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230010.d

Injection Date:	23-Jun-2020 19:49:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9	Worklist Smp#:	10
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	10.0000	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\20200623-92681.b\06230010.D				
Lims ID:	280-137609-J-9-A				
Client ID:	G0102-20A				
Sample Type:	Client				
Inject. Date:	23-Jun-2020 19:49:36	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-137609-J-9-A				
Misc. Info.:	280-0092681-010				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 16:26:11	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:	CTX1068				
First Level Reviewer: zhangji		Date:	23-Jun-2020 20:47:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0213	10.65

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

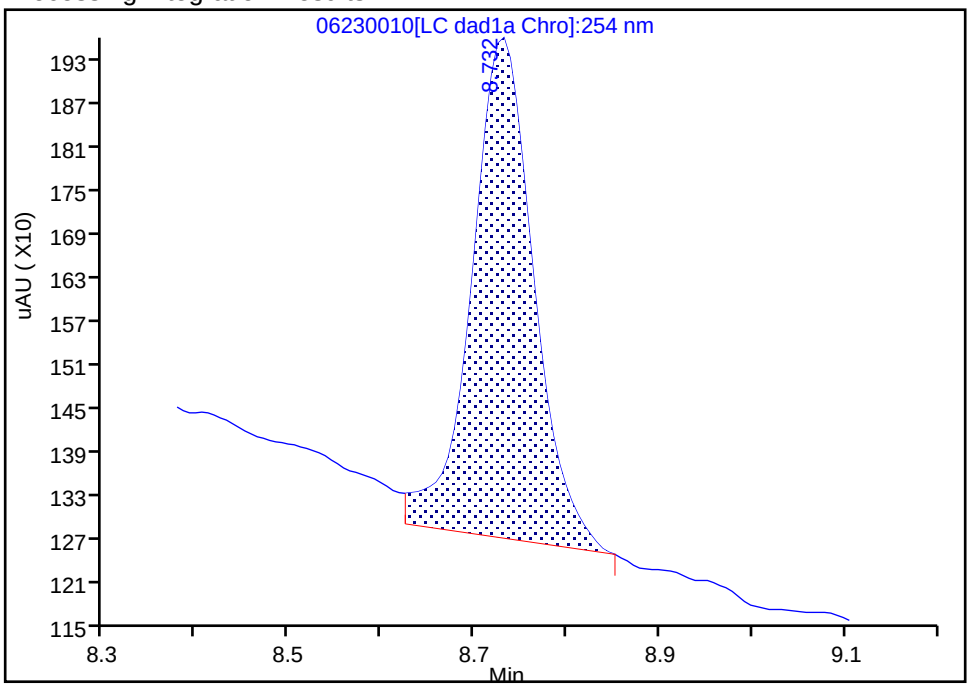
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230010.d				
Injection Date:	23-Jun-2020 19:49:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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

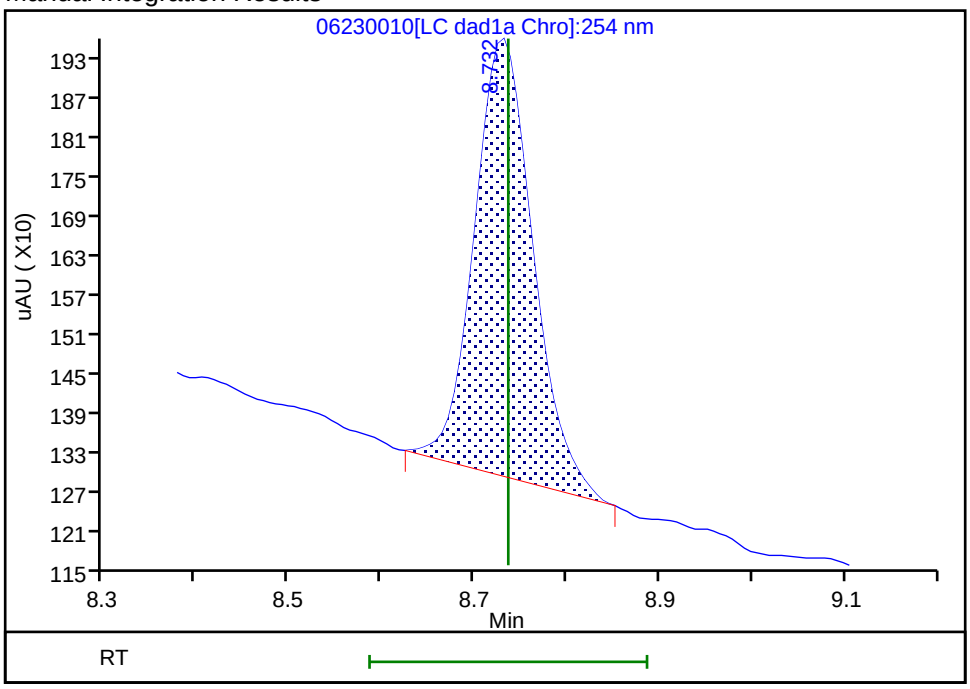
Processing Integration Results

RT: 8.73
Area: 3228
Amount: 0.023355
Amount Units: ug/mL



Manual Integration Results

RT: 8.73
Area: 2943
Amount: 0.021293
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:47:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

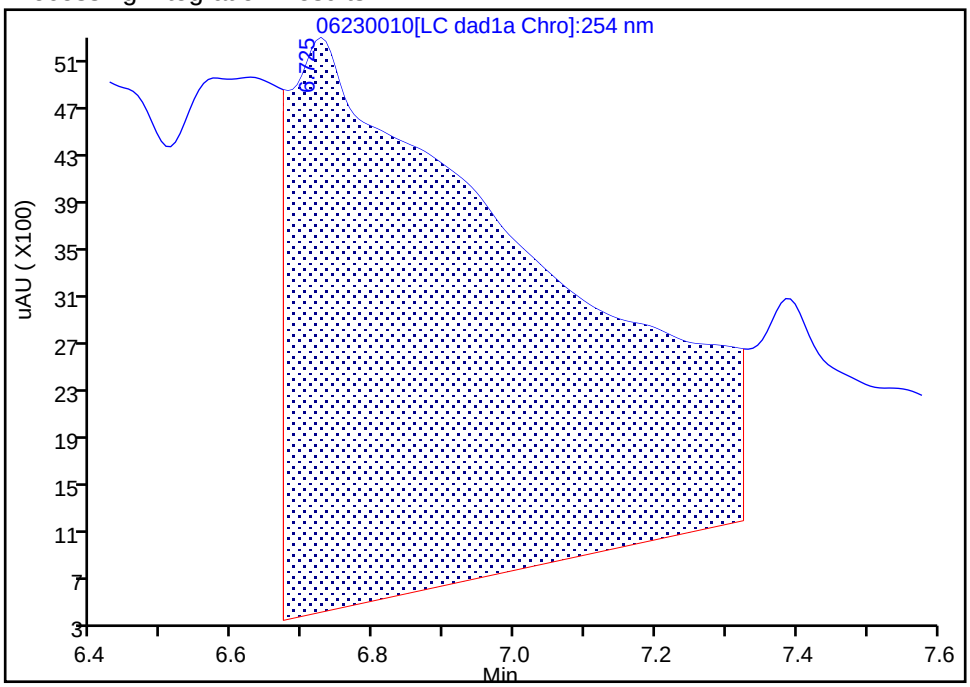
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230010.d				
Injection Date:	23-Jun-2020 19:49:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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

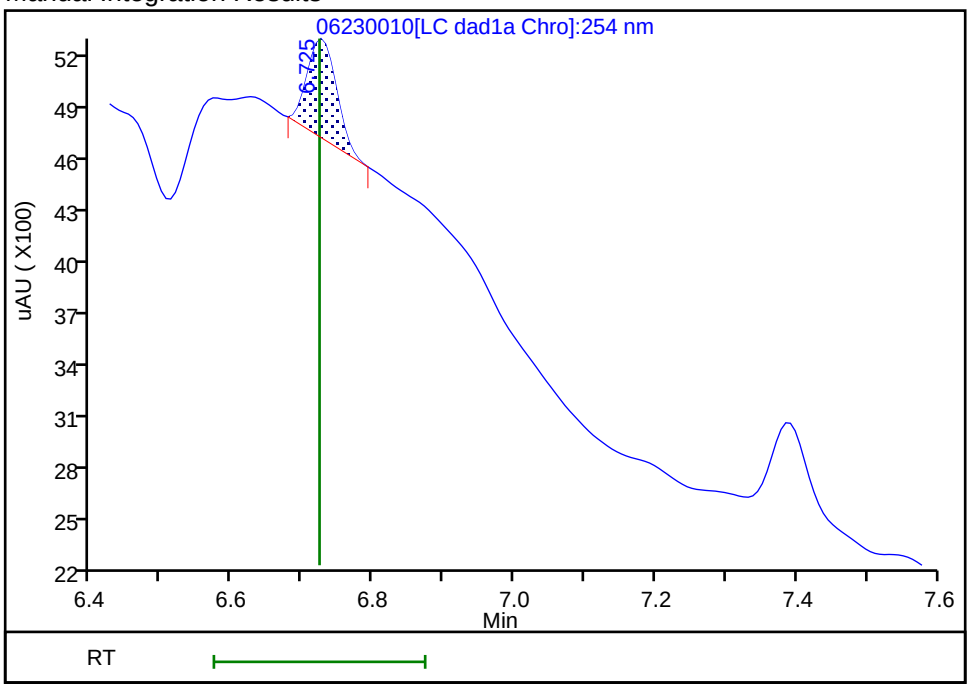
Processing Integration Results

RT: 6.73
Area: 114427
Amount: 1.331132
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 1620
Amount: 0.018845
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:47:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

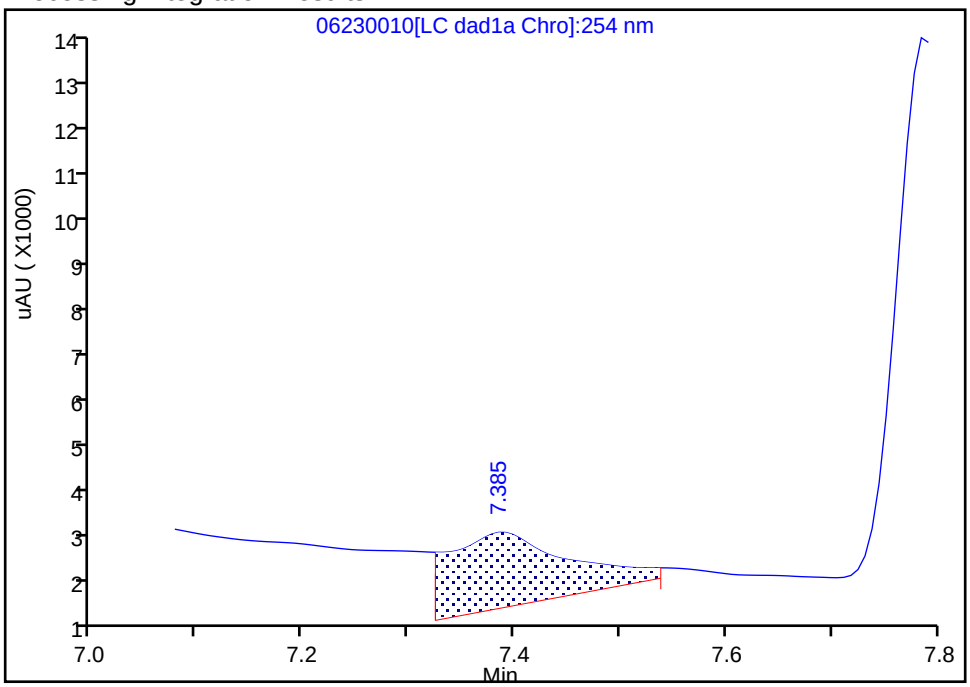
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230010.d				
Injection Date:	23-Jun-2020 19:49:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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

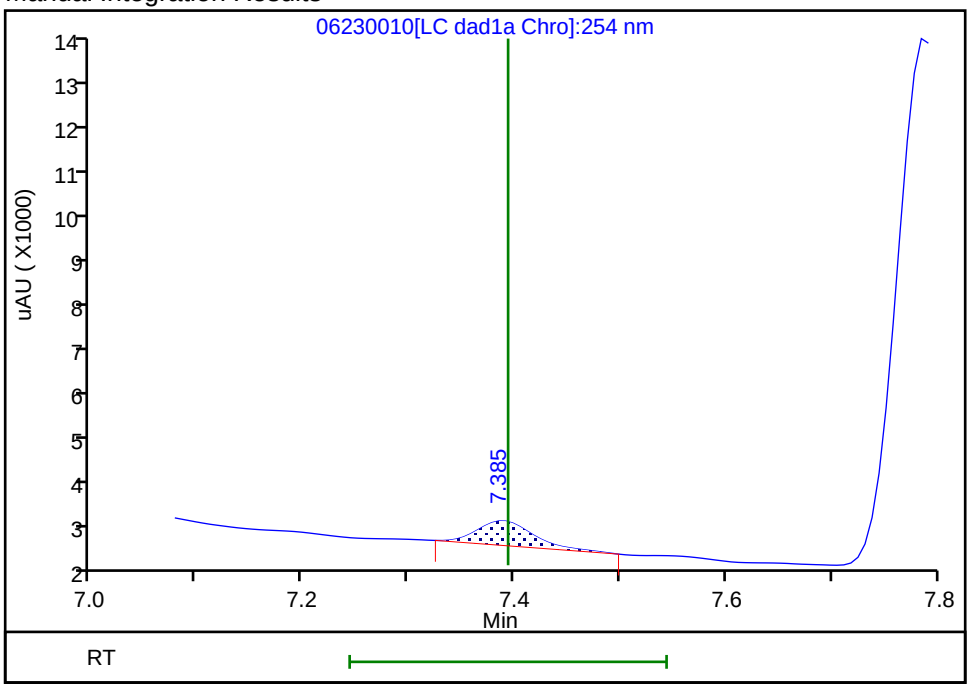
Processing Integration Results

RT: 7.39
Area: 12477
Amount: 0.078697
Amount Units: ug/mL



Manual Integration Results

RT: 7.39
Area: 1996
Amount: 0.012590
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:47:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

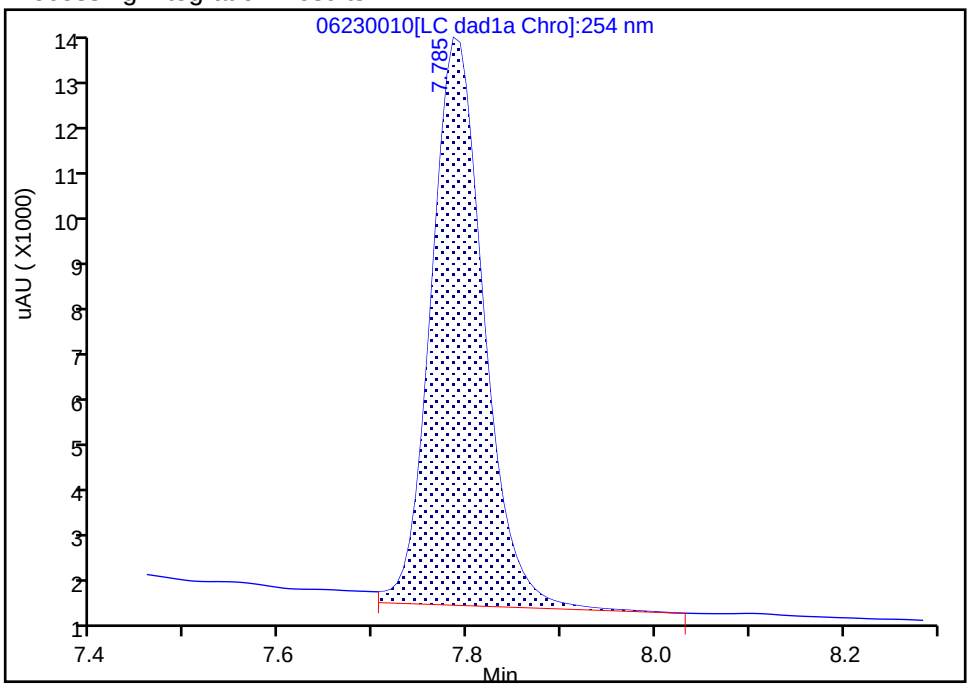
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230010.d				
Injection Date:	23-Jun-2020 19:49:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-J-9-A	Lab Sample ID:	280-137609-9		
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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

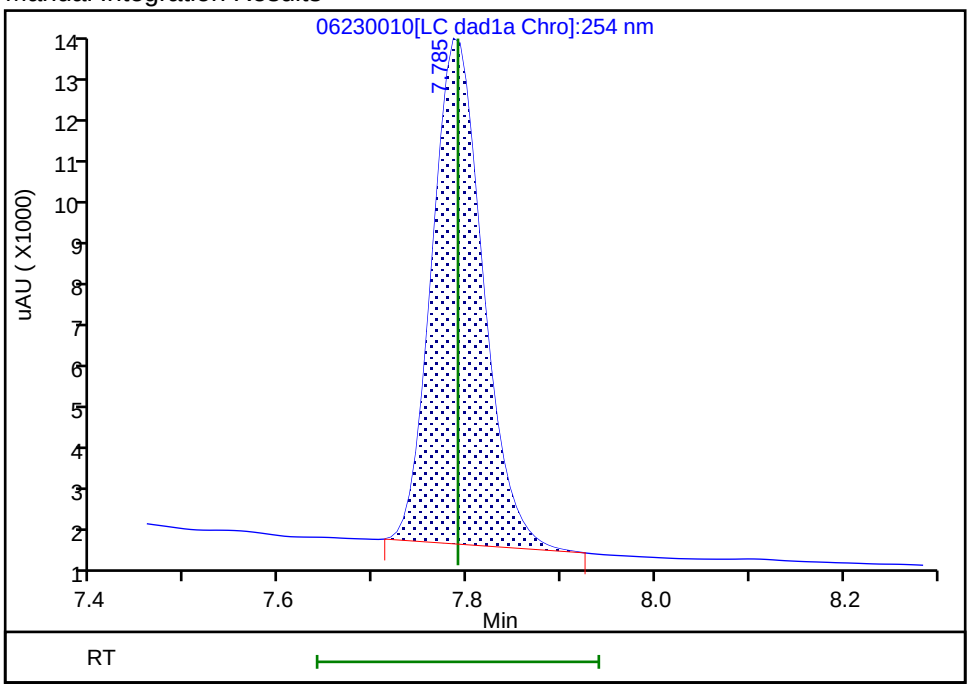
Processing Integration Results

RT: 7.79
Area: 45888
Amount: 0.393506
Amount Units: ug/mL



Manual Integration Results

RT: 7.79
Area: 43728
Amount: 0.374984
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:47:16

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A DL Lab Sample ID: 280-137609-9 DL

Matrix: Water Lab File ID: 06240019.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 453.9(mL) Date Analyzed: 06/25/2020 04:55

Con. Extract Vol.: 5(mL) Dilution Factor: 10

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.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	69	*Q M D*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240019.D
Lims ID: 280-137609-J-9-A
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 04:55:59 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 10.0000
Sample Info: 280-137609-J-9-A
Misc. Info.: 280-0092719-019
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 17:08:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1		4.425			ND	
2	2,4-diamino-6-nitrotoluene	1		4.938			ND	
3	TNX	1	5.515	5.532	-0.017	1118	0.002565	
4	DNX	1		6.372			ND	
6	HMX	1		7.145			ND	
7	MNX	1		7.926			ND	
5	2,4,6-Trinitrophenol	1		8.465			ND	U
8	RDX	1	9.355	9.358	-0.003	93982	0.3846	
9	Nitrobenzene	1		12.265			ND	
$ 10	1,2-Dinitrobenzene	1	13.255	13.271	-0.016	5691	0.0139	M
11	3,5-Dinitroaniline	1		15.205			ND	
12	1,3-Dinitrobenzene	1		15.805			ND	
13	Nitroglycerin	2		16.045			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	U
17	m-Nitrotoluene	1		17.958			ND	
18	2-Amino-4,6-dinitrotoluene	1		18.398			ND	U
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	
22	Tetryl	1		23.885			ND	
23	2,4,6-Trinitrotoluene	1		24.905			ND	
24	PETN	2		25.438			ND	
25	Ammonium Picrate	1		0.000			ND	
26	Triamine Trinitrobenzene	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

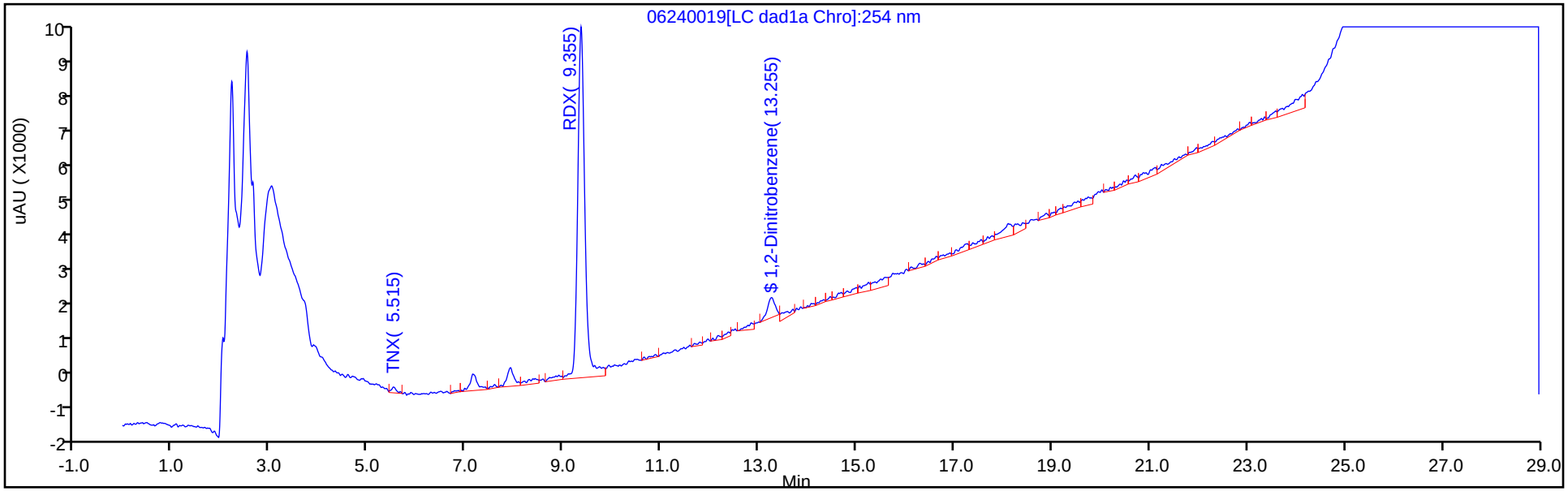
U - Marked Undetected

Report Date: 26-Jun-2020 16:19:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

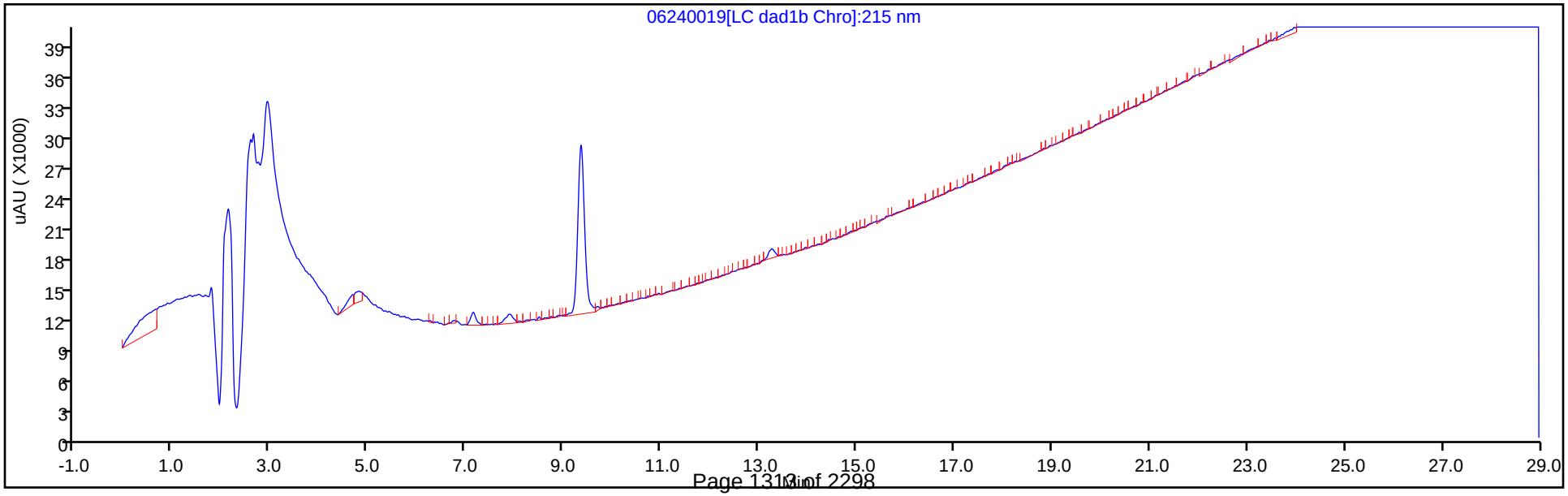
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240019.d				
Injection Date:	25-Jun-2020 04:55:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137609-J-9-A	Lab Sample ID:		Worklist Smp#:	19
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	10.0000	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



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240019.D
Lims ID: 280-137609-J-9-A
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 04:55:59 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 10.0000
Sample Info: 280-137609-J-9-A
Misc. Info.: 280-0092719-019
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 17:08:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0139	6.95

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

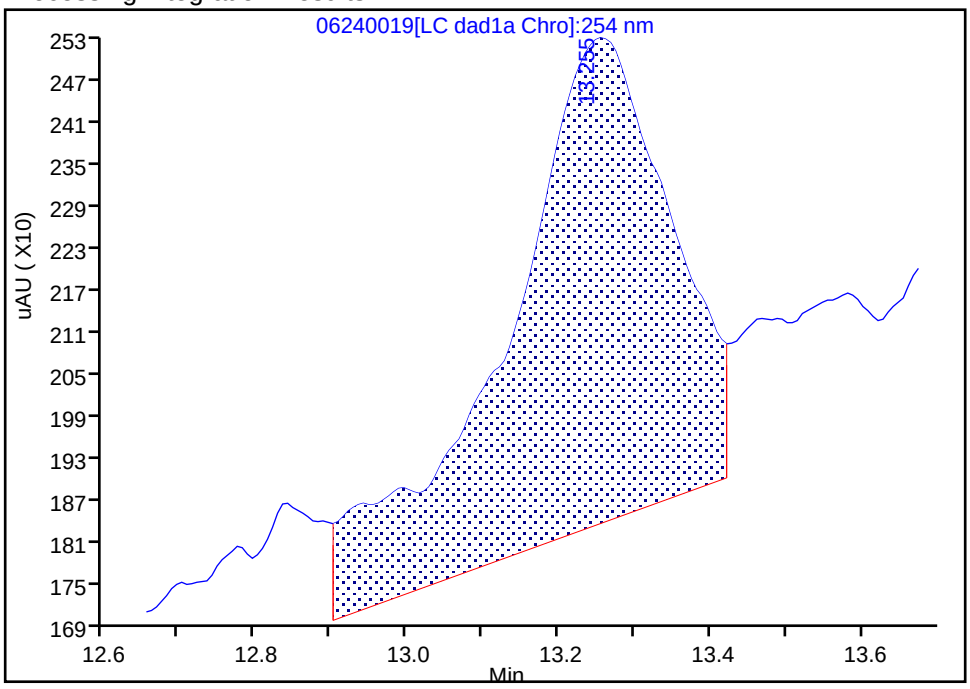
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240019.d				
Injection Date:	25-Jun-2020 04:55:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-J-9-A	Lab Sample ID:			
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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

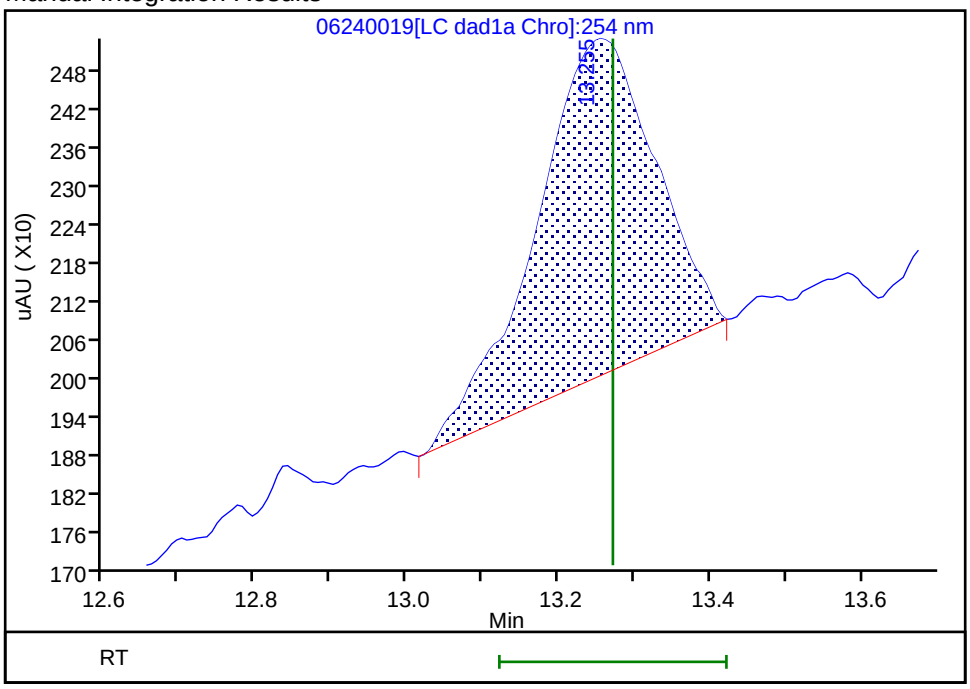
Processing Integration Results

RT: 13.26
Area: 10660
Amount: 0.031818
Amount Units: ug/ml



Manual Integration Results

RT: 13.26
Area: 5691
Amount: 0.013895
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 17:08:20

Audit Action: Manually Integrated Audit Reason: Baseline

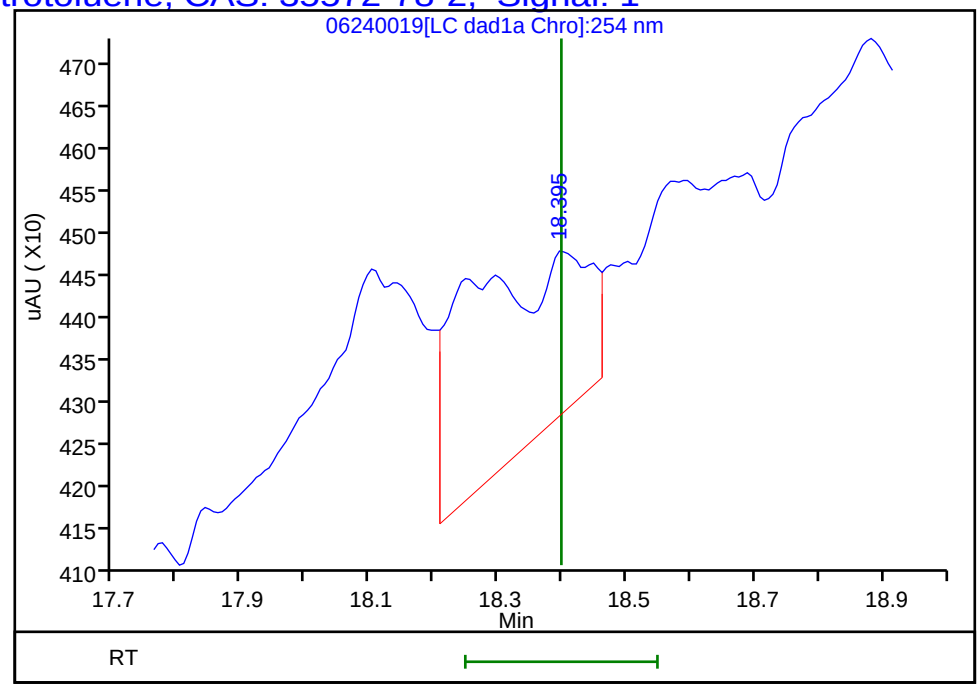
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240019.d				
Injection Date:	25-Jun-2020 04:55:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-J-9-A	Lab Sample ID:			
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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: 18.40
Response: 2939
Amount: 0.006318



Reviewer: zhangji, 25-Jun-2020 17:08:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

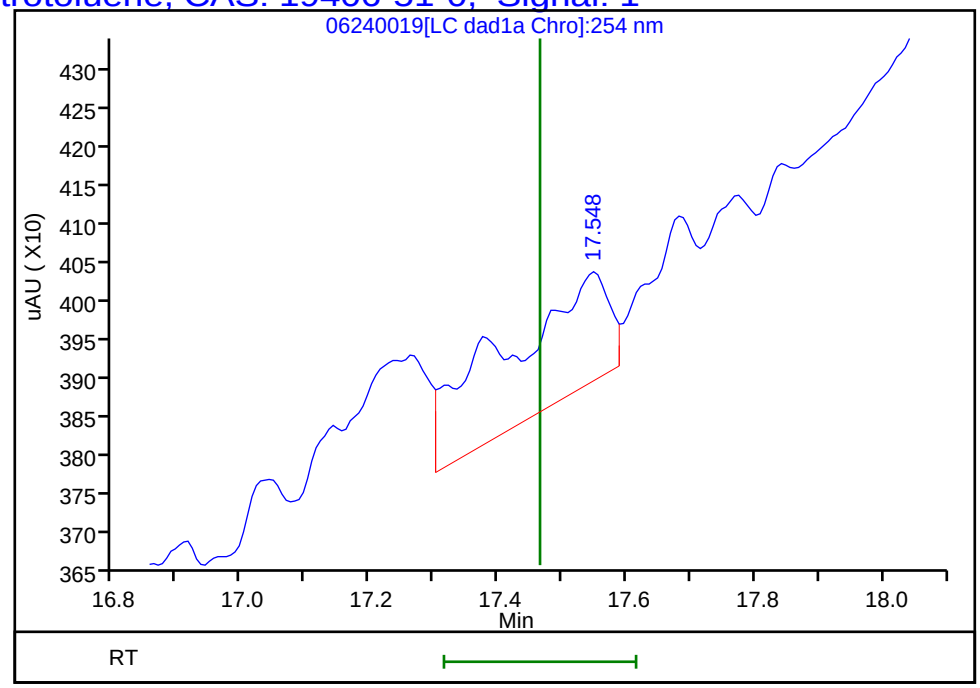
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240019.d				
Injection Date:	25-Jun-2020 04:55:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137609-J-9-A	Lab Sample ID:			
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
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: 17.55
Response: 1837
Amount: 0.005321



Reviewer: zhangji, 25-Jun-2020 17:08:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: SOURCE 2020 Lab Sample ID: 280-137609-13

Matrix: Water Lab File ID: 06220024.D

Analysis Method: 8330A Date Collected: 06/11/2020 11:30

Extraction Method: 3535 Date Extracted: 06/17/2020 09:26

Sample wt/vol: 478.3(mL) Date Analyzed: 06/22/2020 20:37

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499531 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	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	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 M	0.22	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	0.21	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	106		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220024.D				
Lims ID:	280-137609-A-13-A				
Client ID:	SOURCE 2020				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 20:37:57	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-13-				
Misc. Info.:	280-0092608-024				
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 14:40:18		

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.734			ND	U
	6 MNX	1		7.396			ND	
	7 RDX	1		7.801			ND	
$	9 1,2-Dinitrobenzene	1	8.760	8.741	0.019	29435	0.2130	
	10 1,3,5-Trinitrobenzene	1		8.928			ND	U
	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

U - Marked Undetected

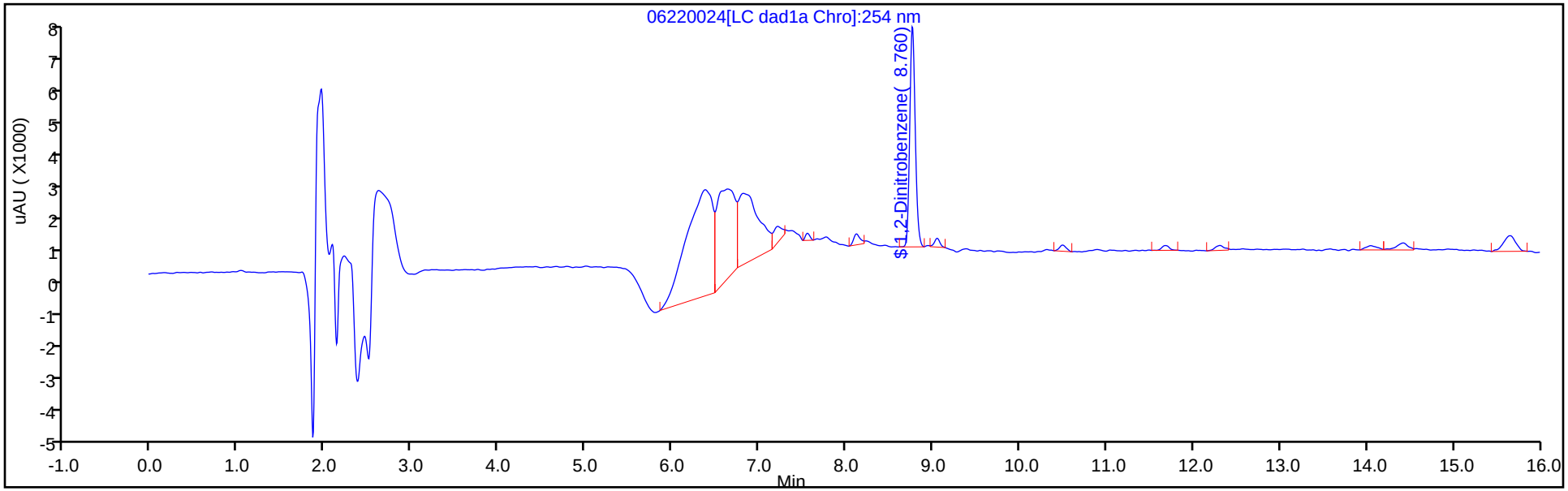
Report Date: 23-Jun-2020 15:18:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

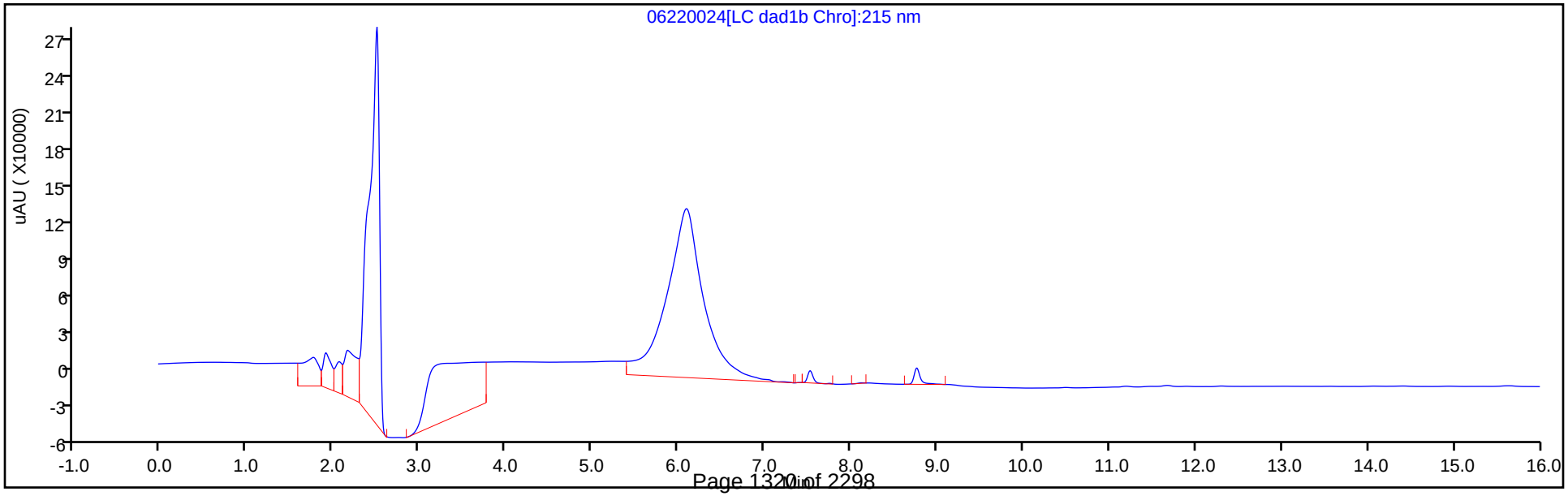
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220024.d

Injection Date:	22-Jun-2020 20:37:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-13-A	Lab Sample ID:	280-137609-13	Worklist Smp#:	24
Client ID:	SOURCE 2020				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220024.D				
Lims ID:	280-137609-A-13-A				
Client ID:	SOURCE 2020				
Sample Type:	Client				
Inject. Date:	22-Jun-2020 20:37:57	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-13-				
Misc. Info.:	280-0092608-024				
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 14:40:18		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2130	106.48

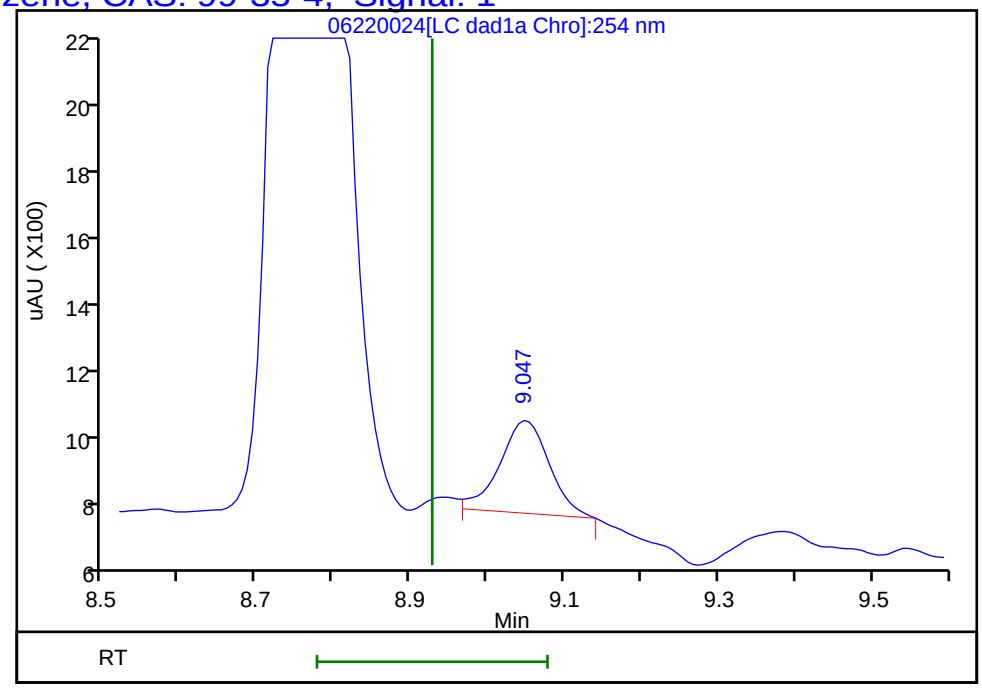
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220024.d				
Injection Date:	22-Jun-2020 20:37:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-13-A	Lab Sample ID:	280-137609-13		
Client ID:	SOURCE 2020				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 9.05
Response: 1182
Amount: 0.005132



Reviewer: zhangji, 23-Jun-2020 14:40:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

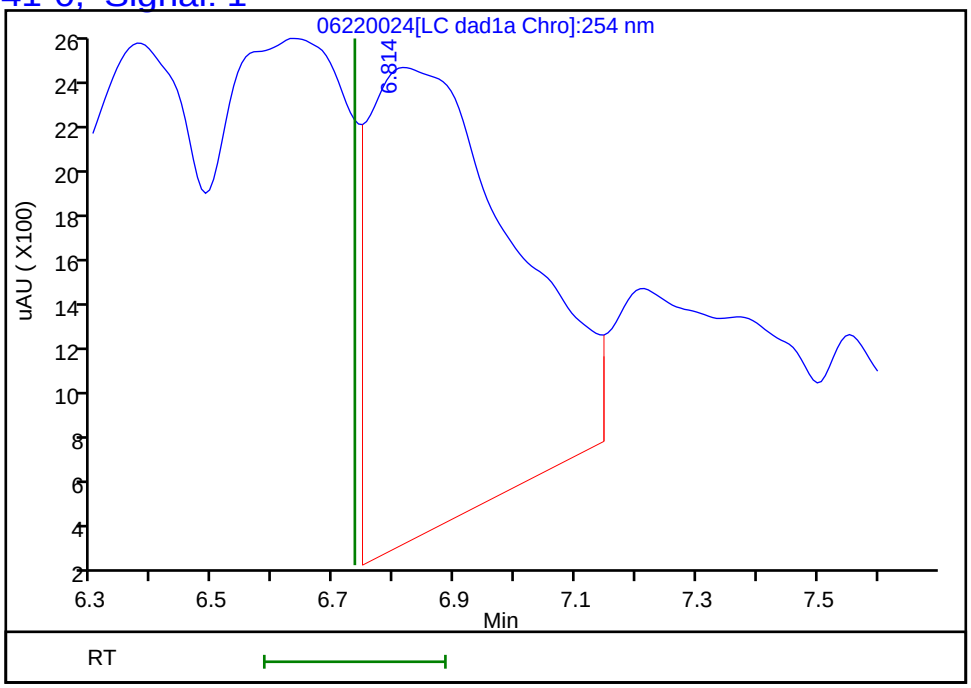
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220024.d

Injection Date:	22-Jun-2020 20:37:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-13-A	Lab Sample ID:	280-137609-13		
Client ID:	SOURCE 2020				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.81
Response: 34317
Amount: 0.399211



Reviewer: zhangji, 23-Jun-2020 14:40:18

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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

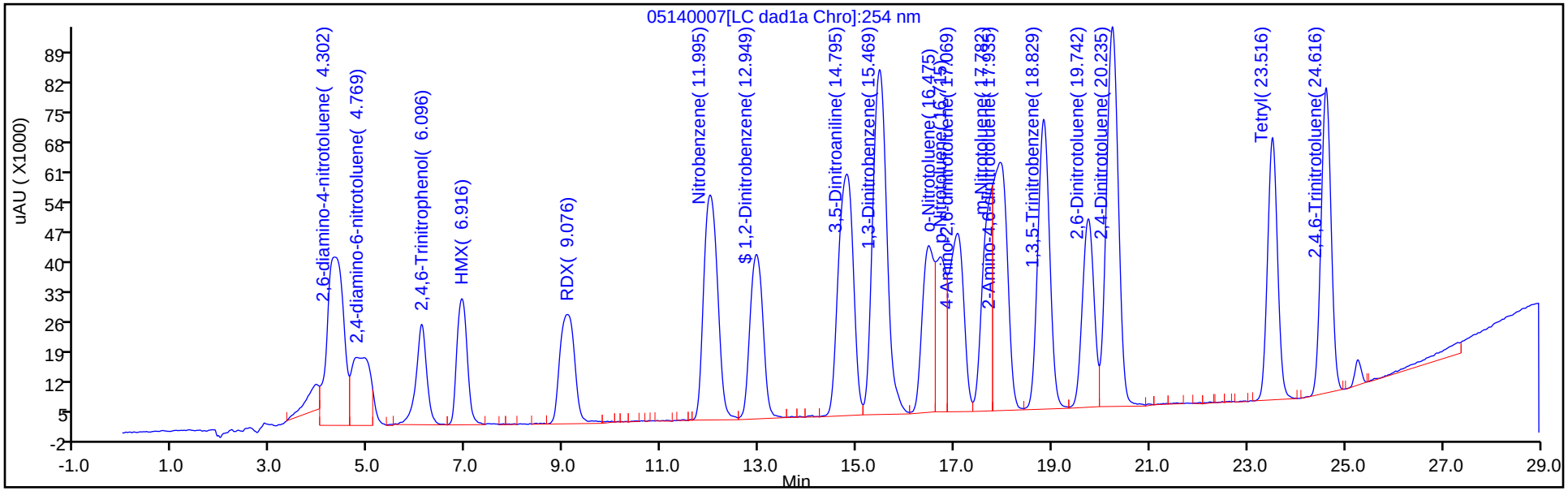
Report Date: 15-May-2020 12:00:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

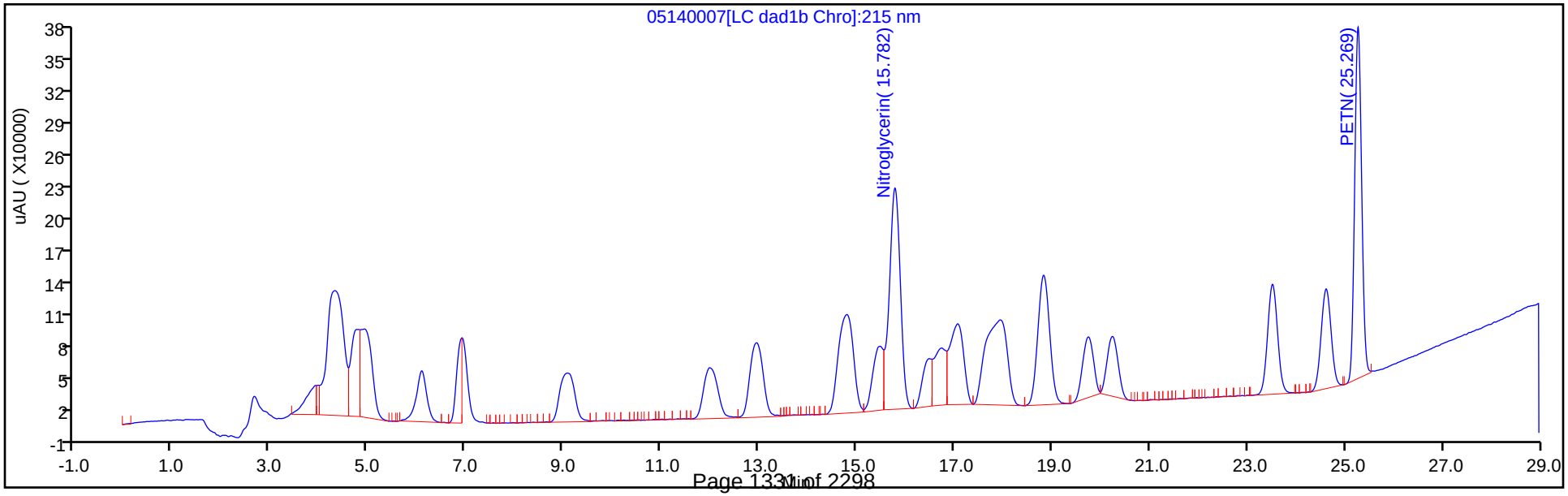
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d

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

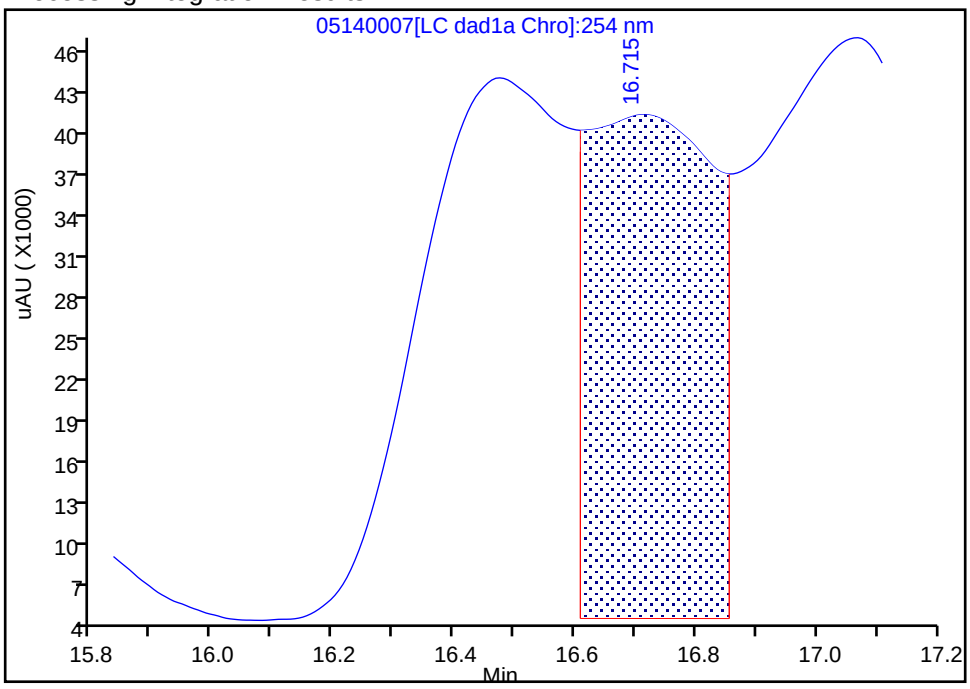
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

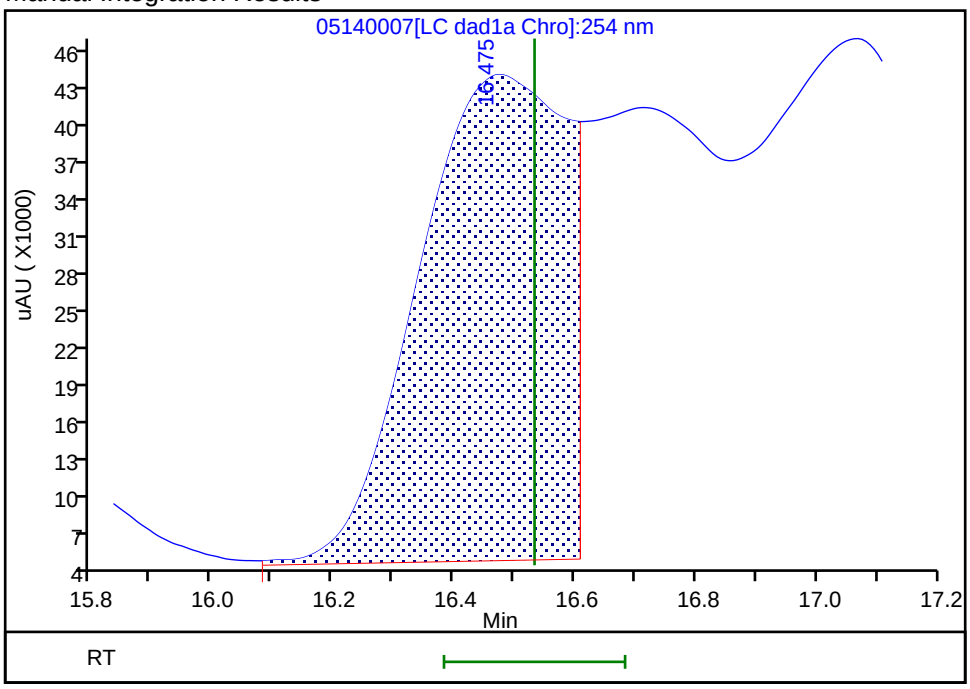
Processing Integration Results

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

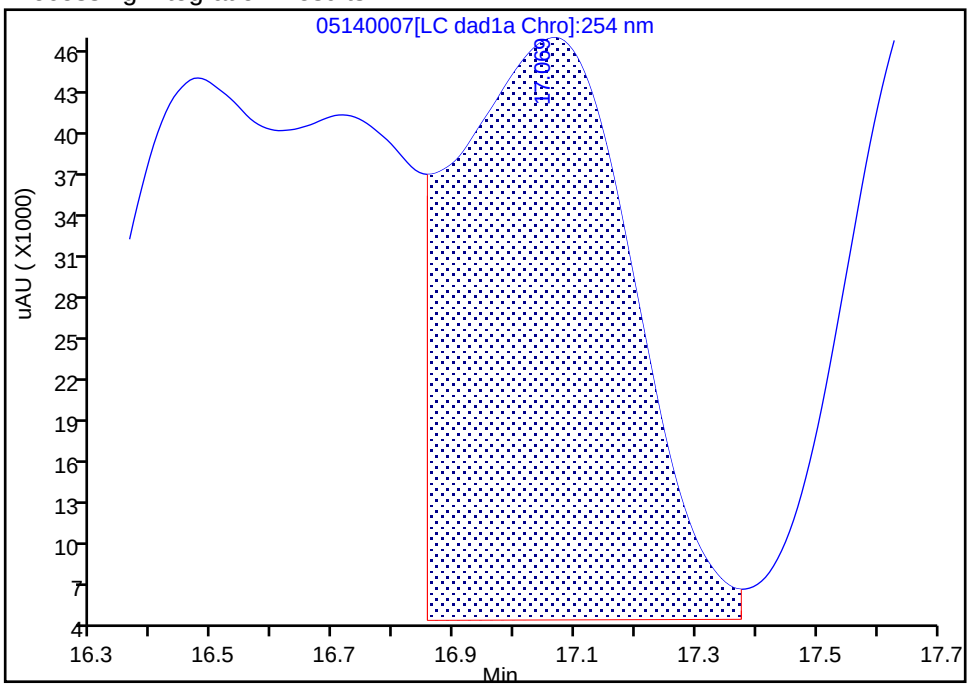
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

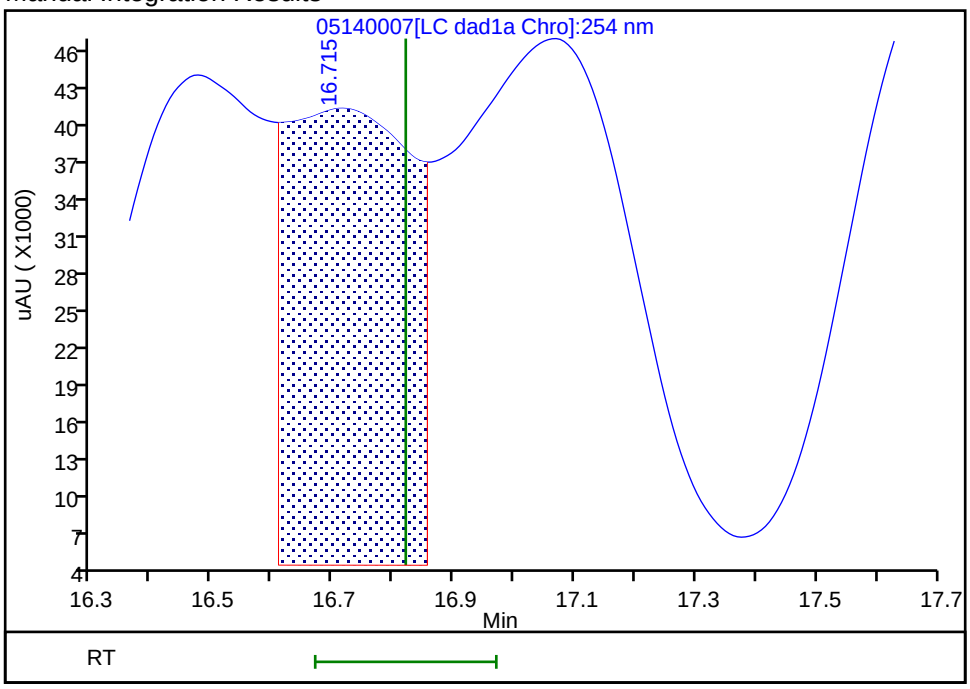
Processing Integration Results

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

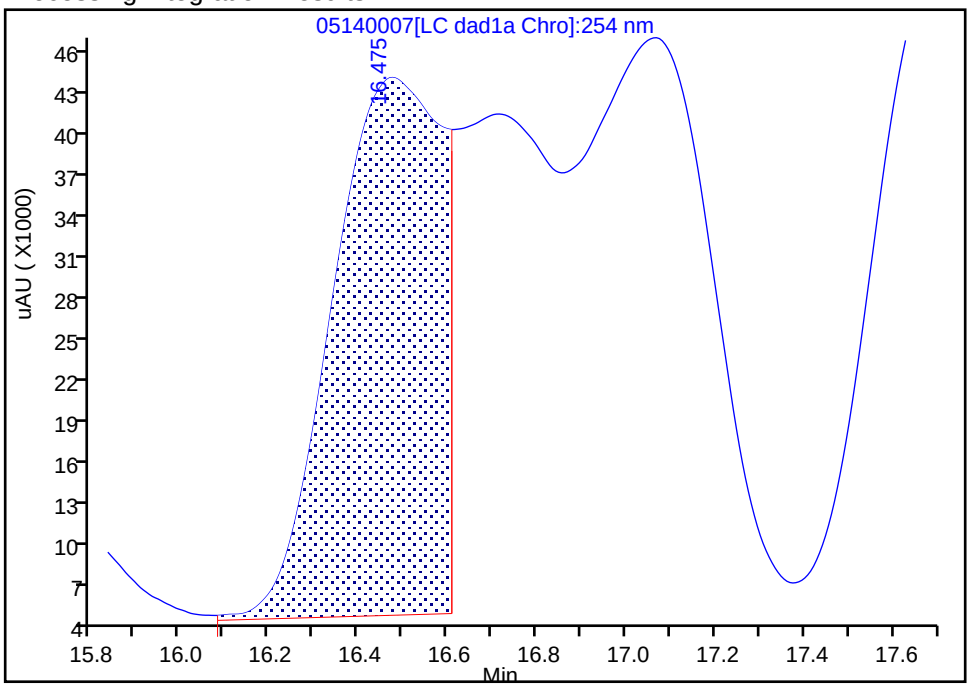
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 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

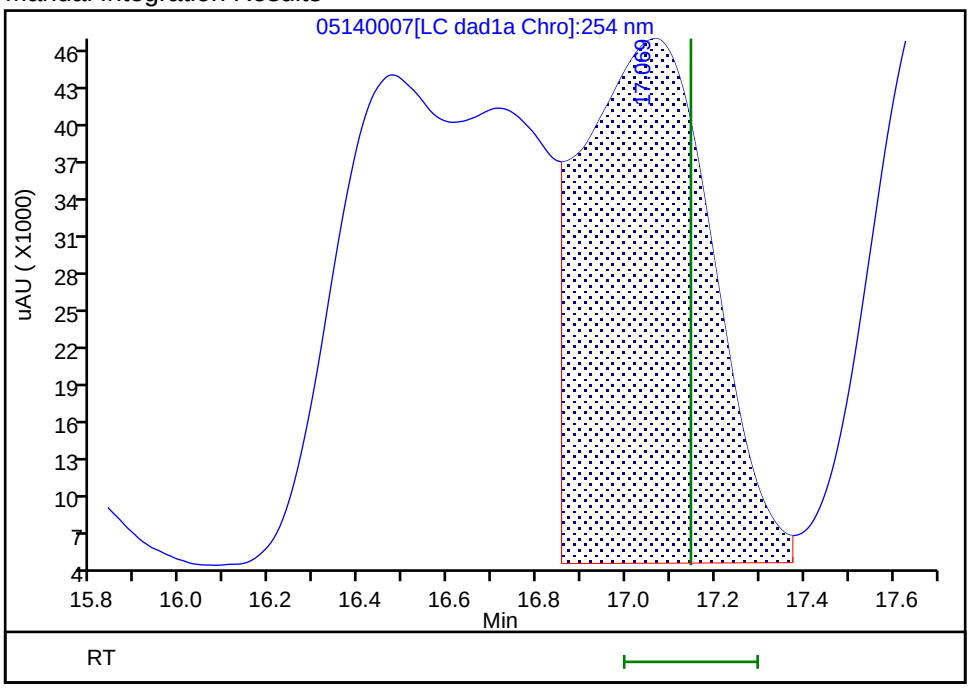
Processing Integration Results

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

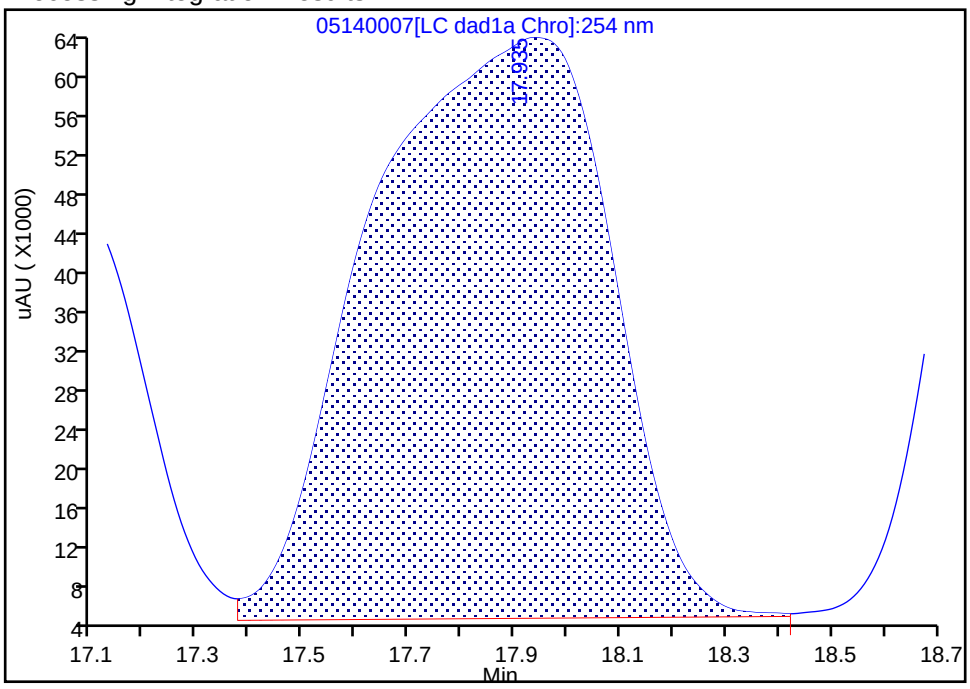
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

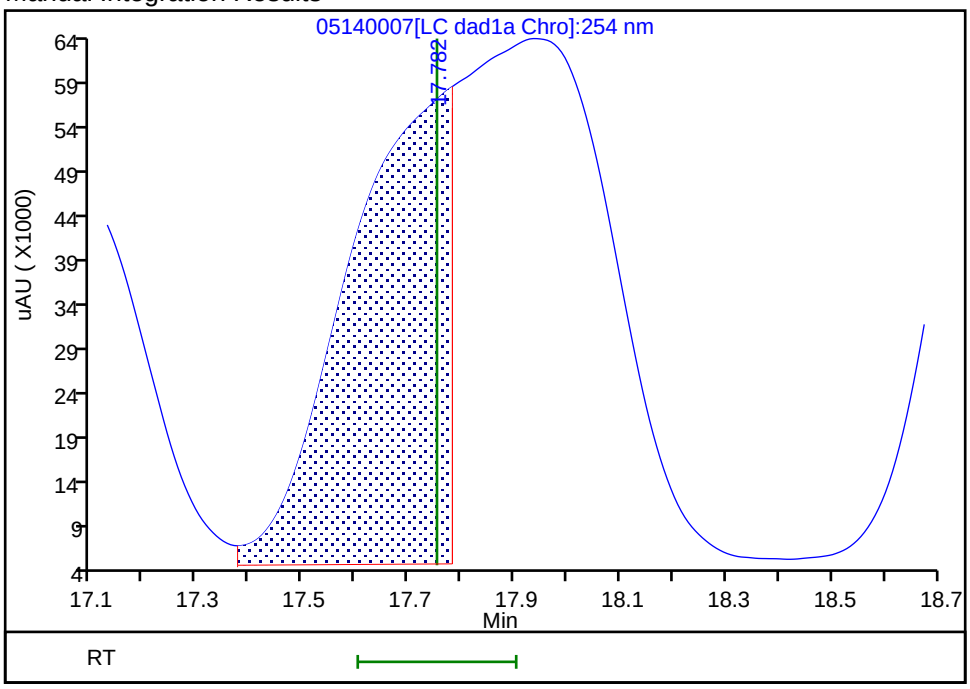
Processing Integration Results

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

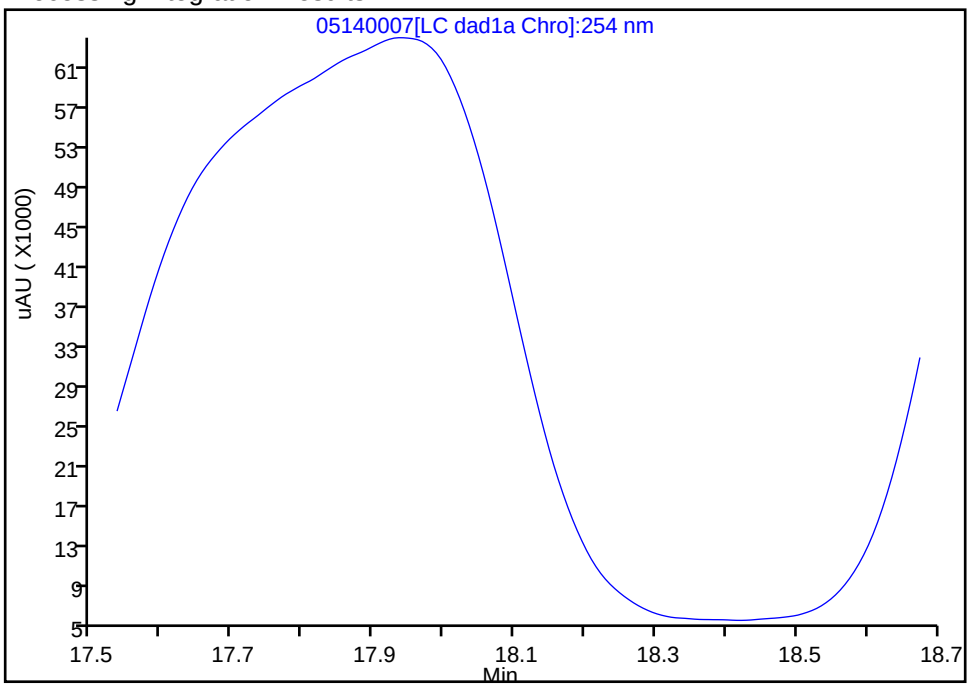
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

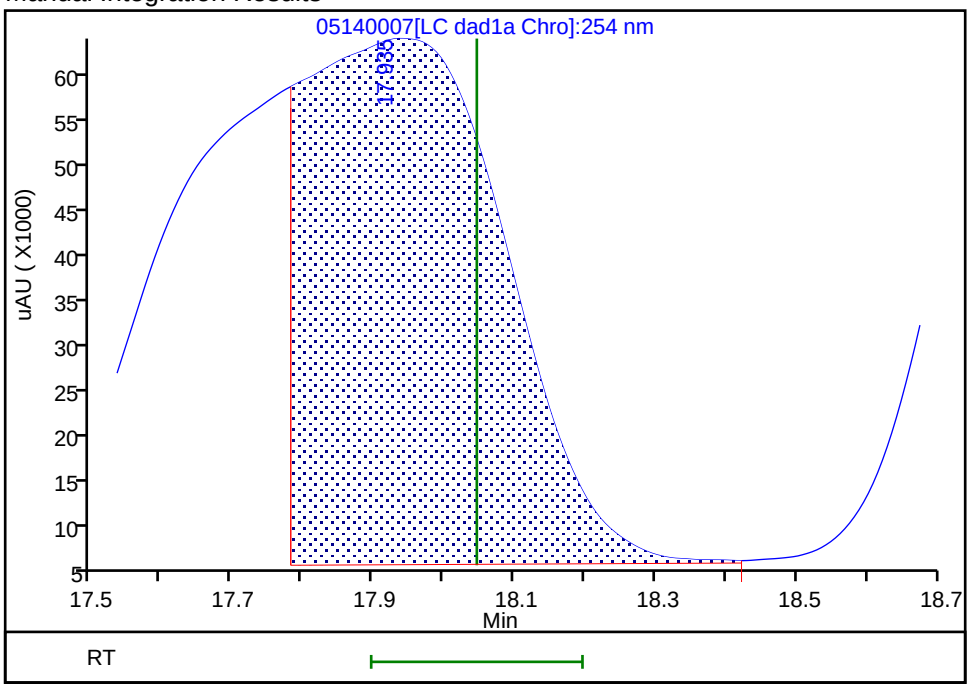
Not Detected
Expected RT: 18.05

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

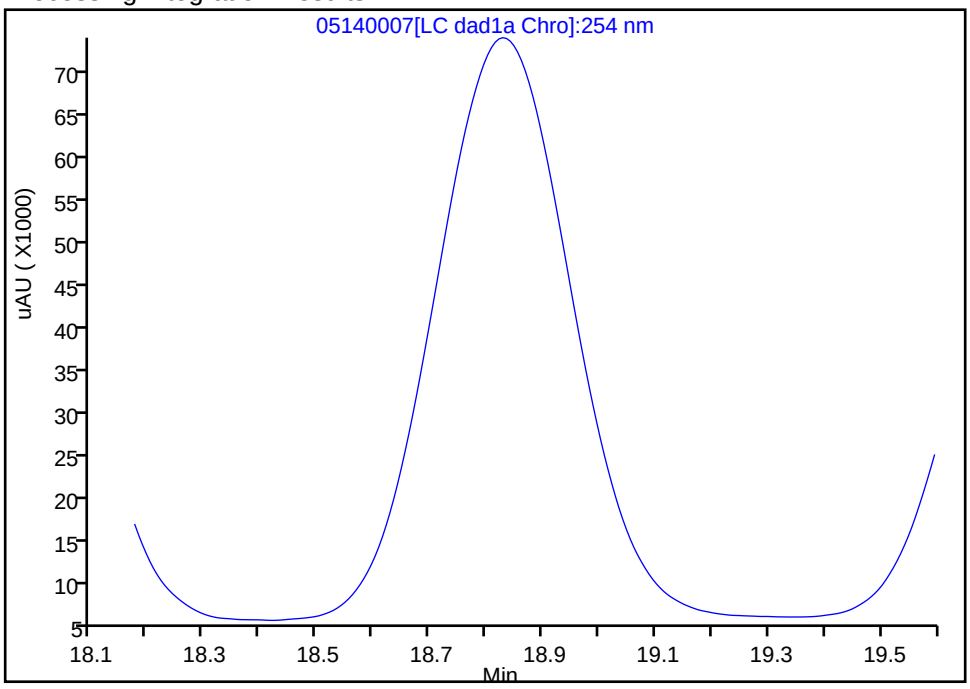
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

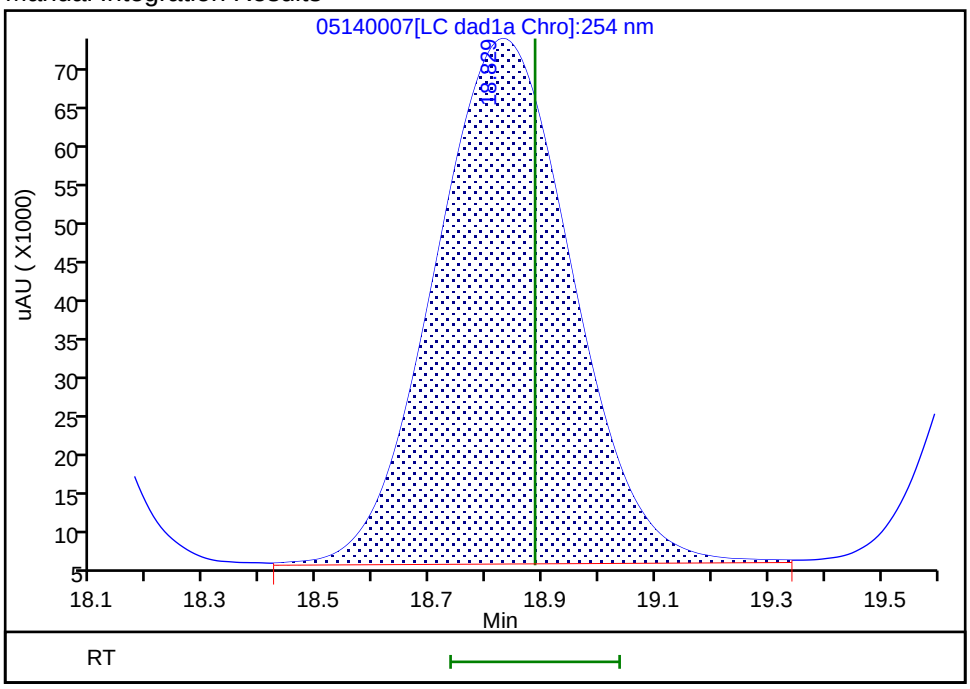
Not Detected
Expected RT: 18.89

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

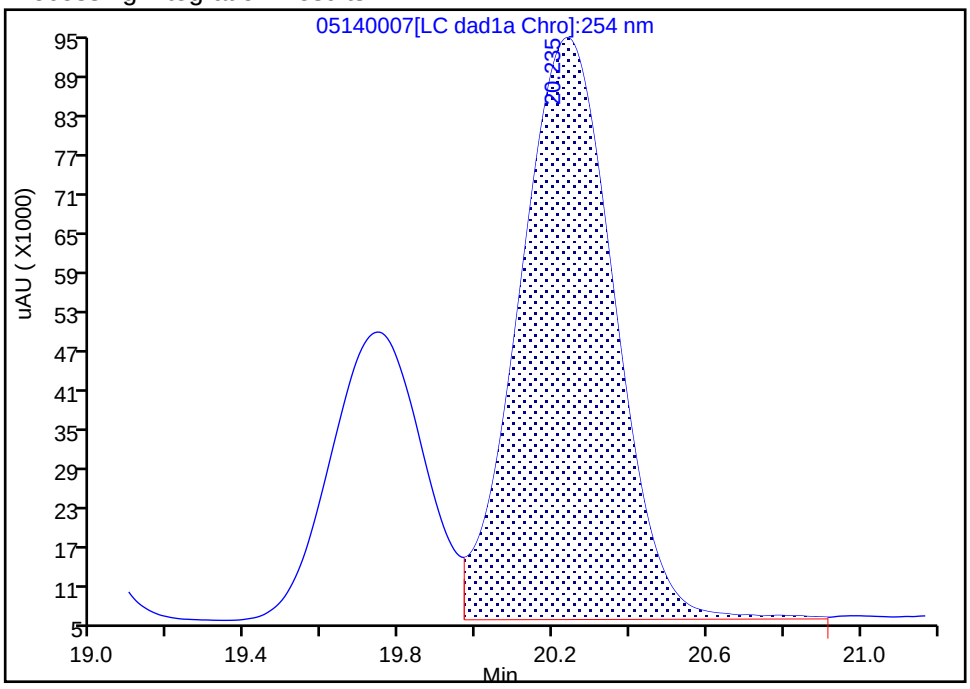
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

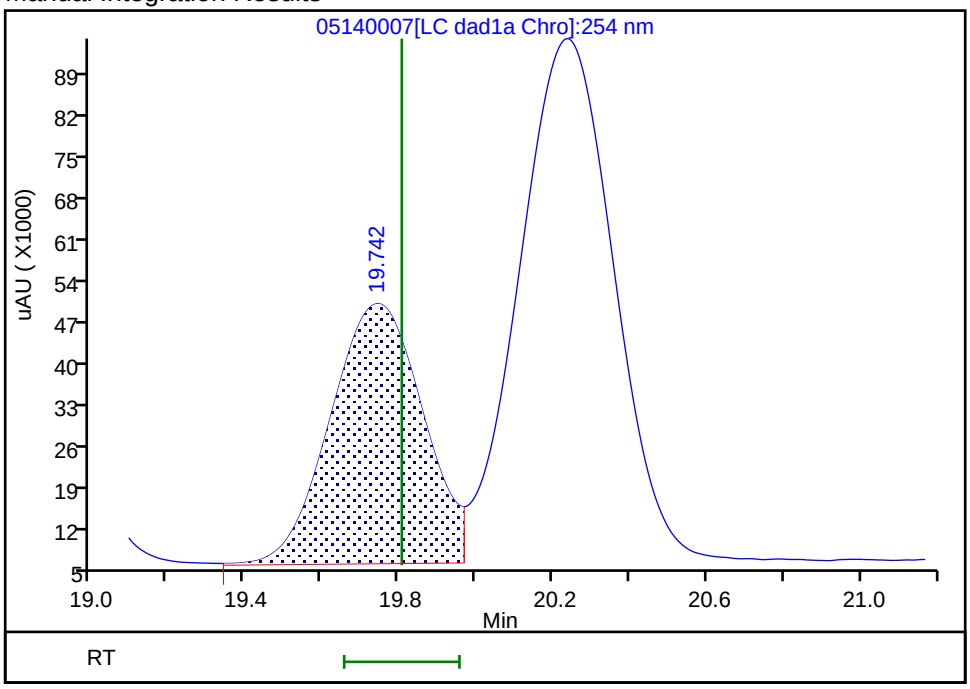
Processing Integration Results

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

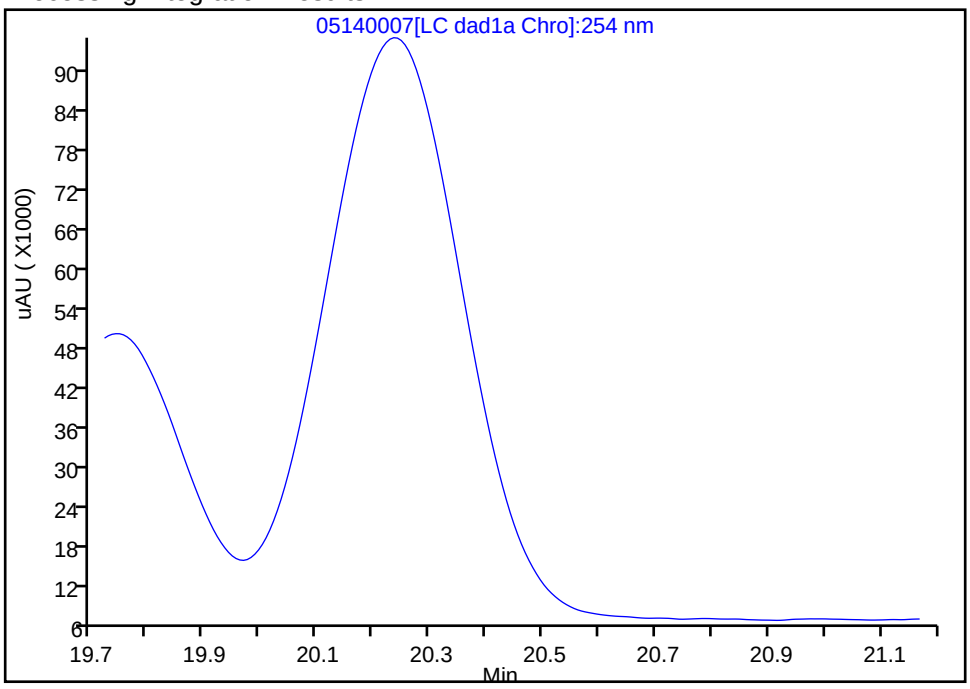
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

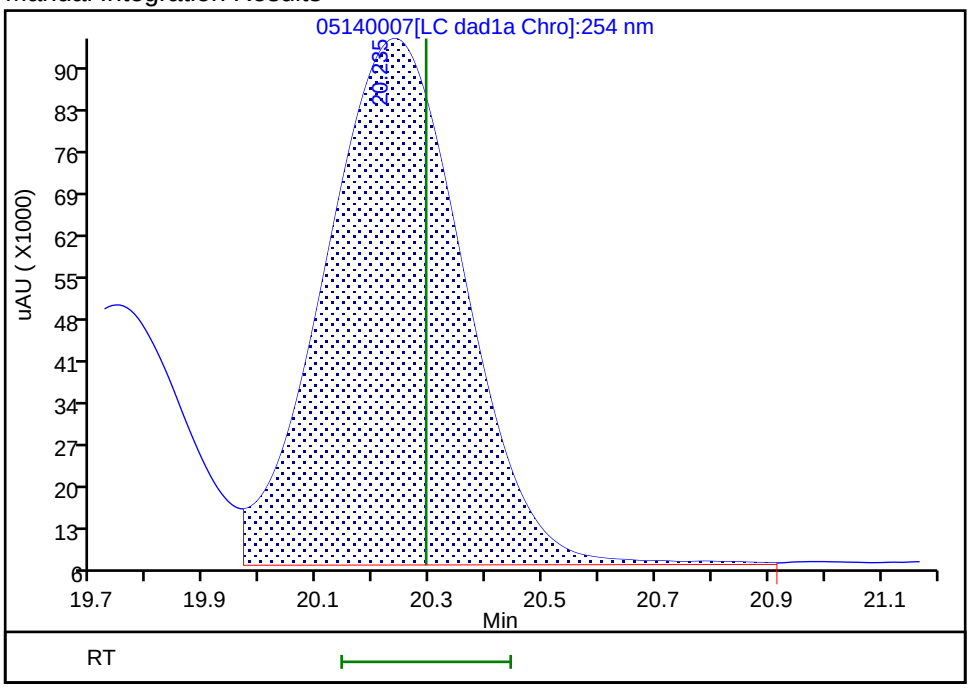
Not Detected
Expected RT: 20.29

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

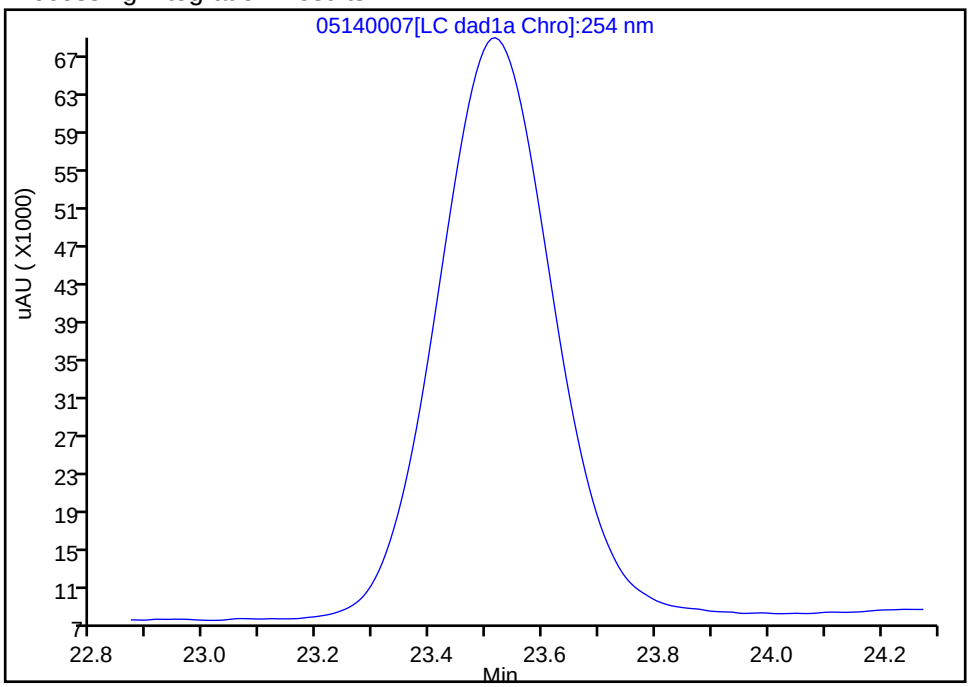
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

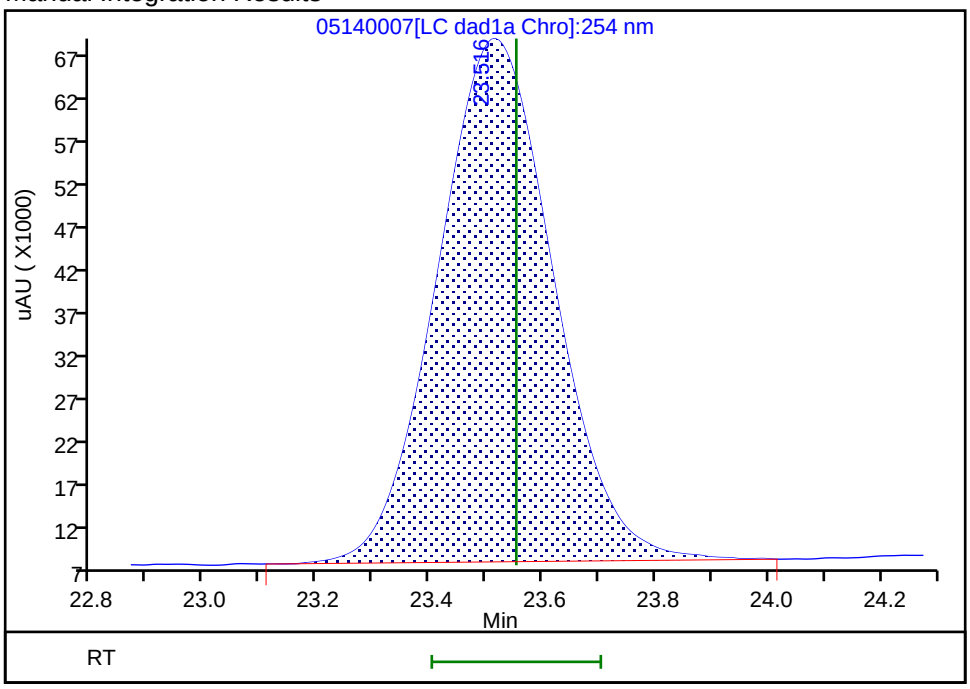
Not Detected
Expected RT: 23.55

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

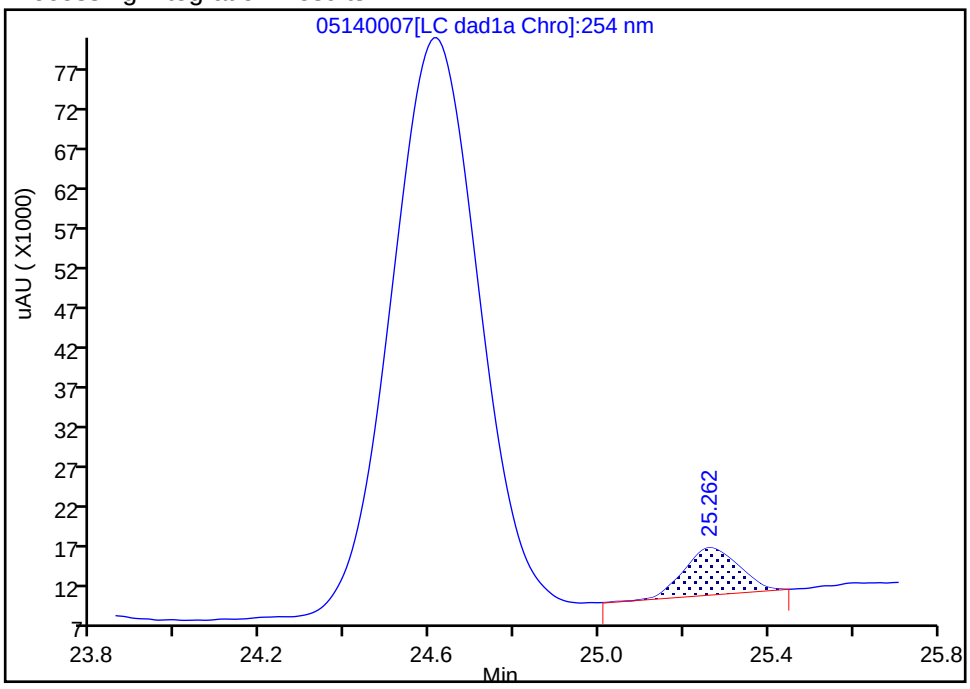
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

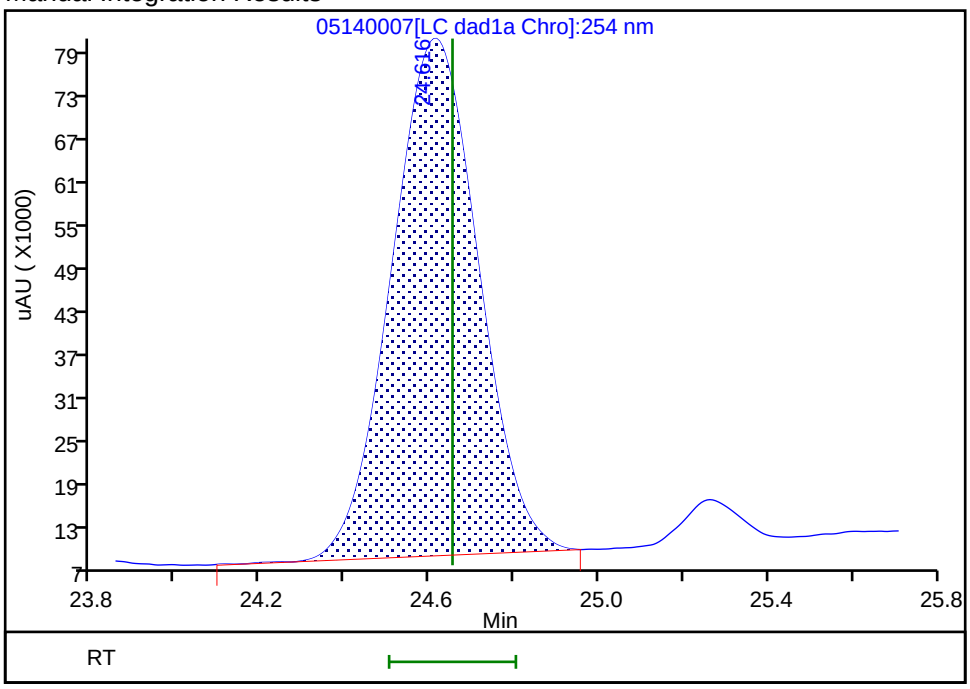
Processing Integration Results

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

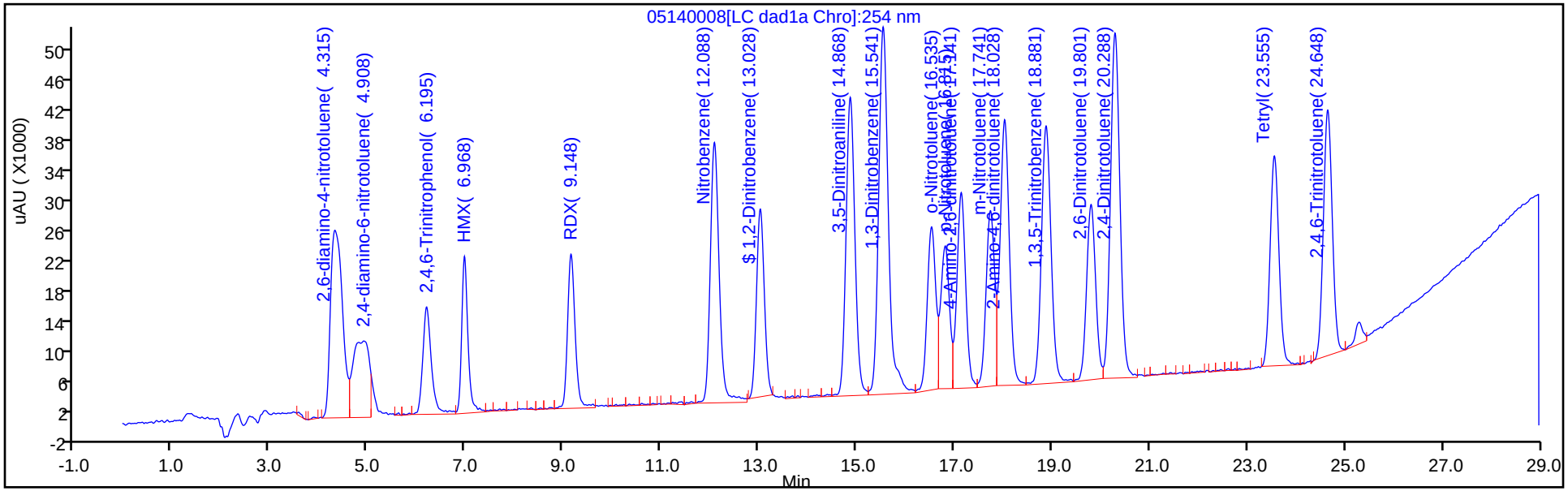
Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

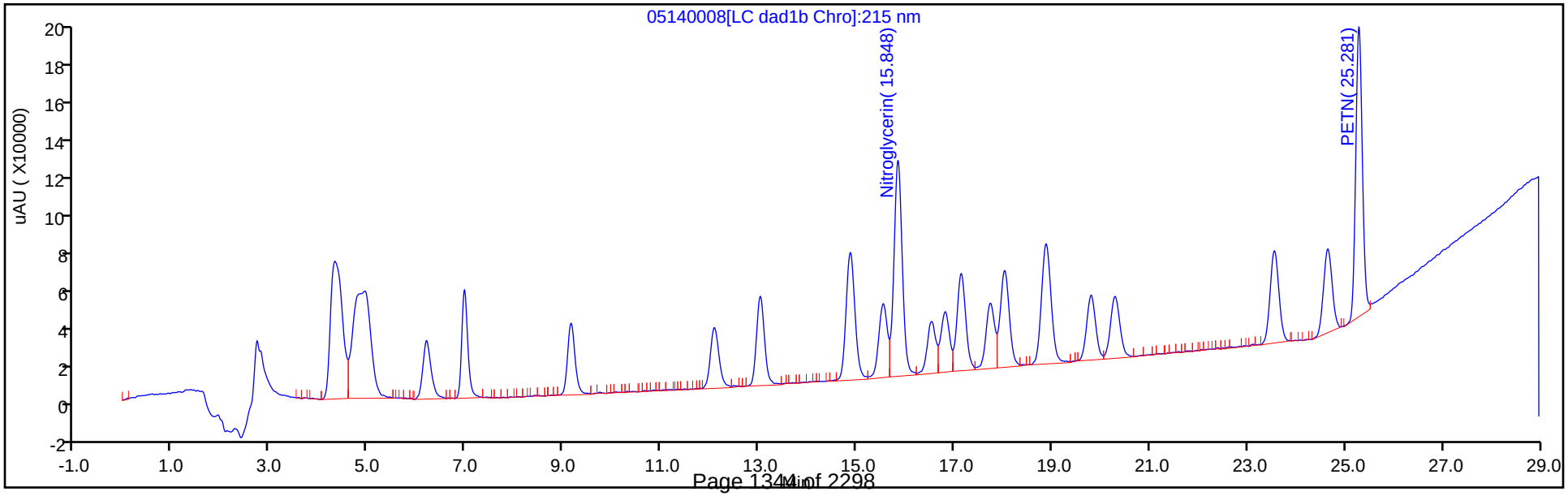
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140008.d

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

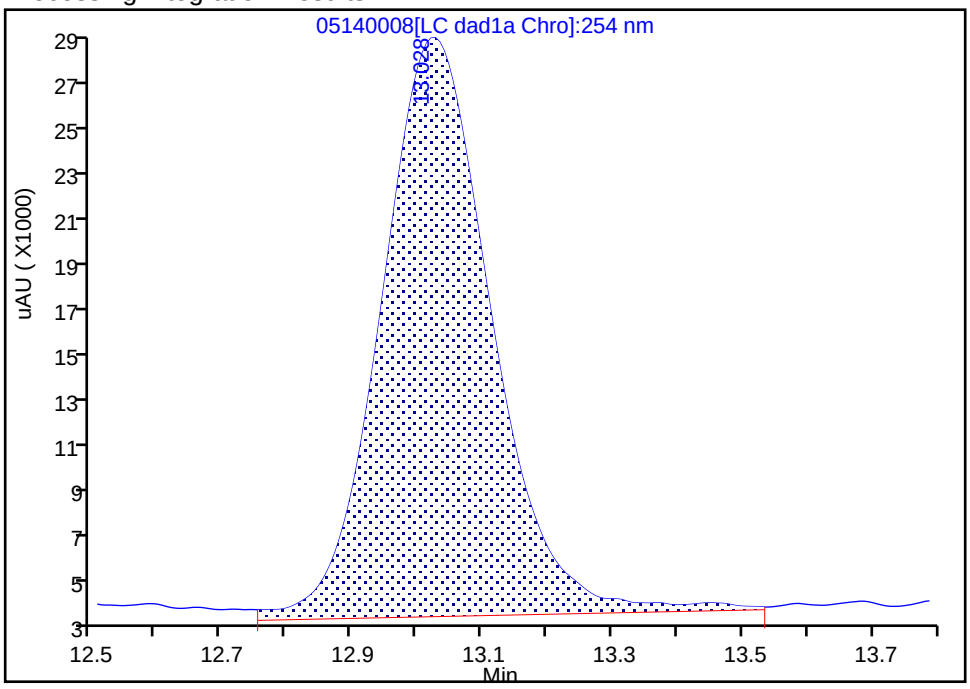
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140008.d				
Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

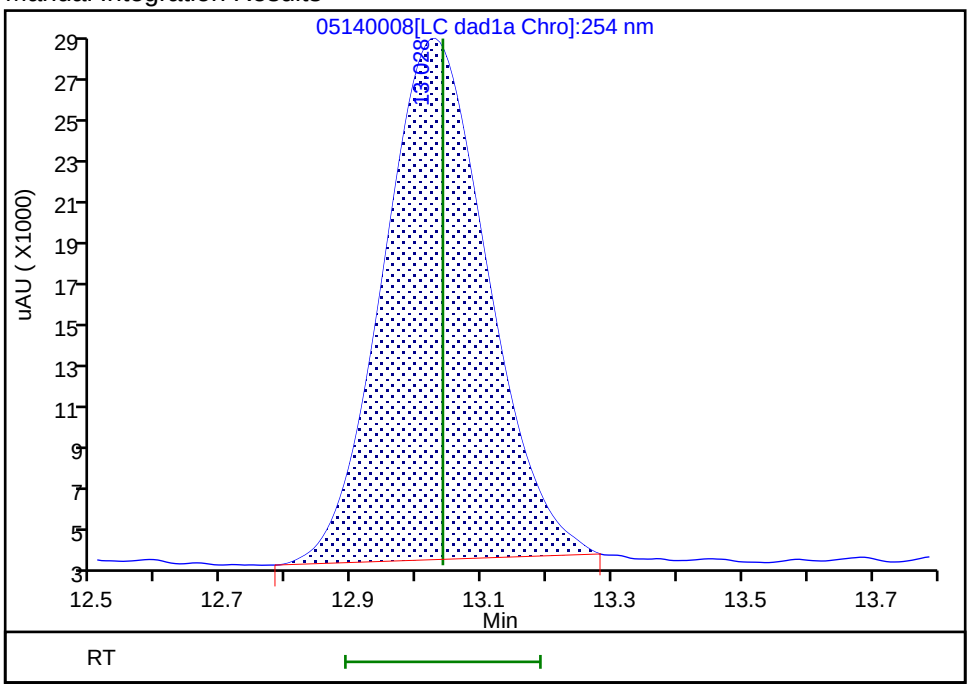
Processing Integration Results

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

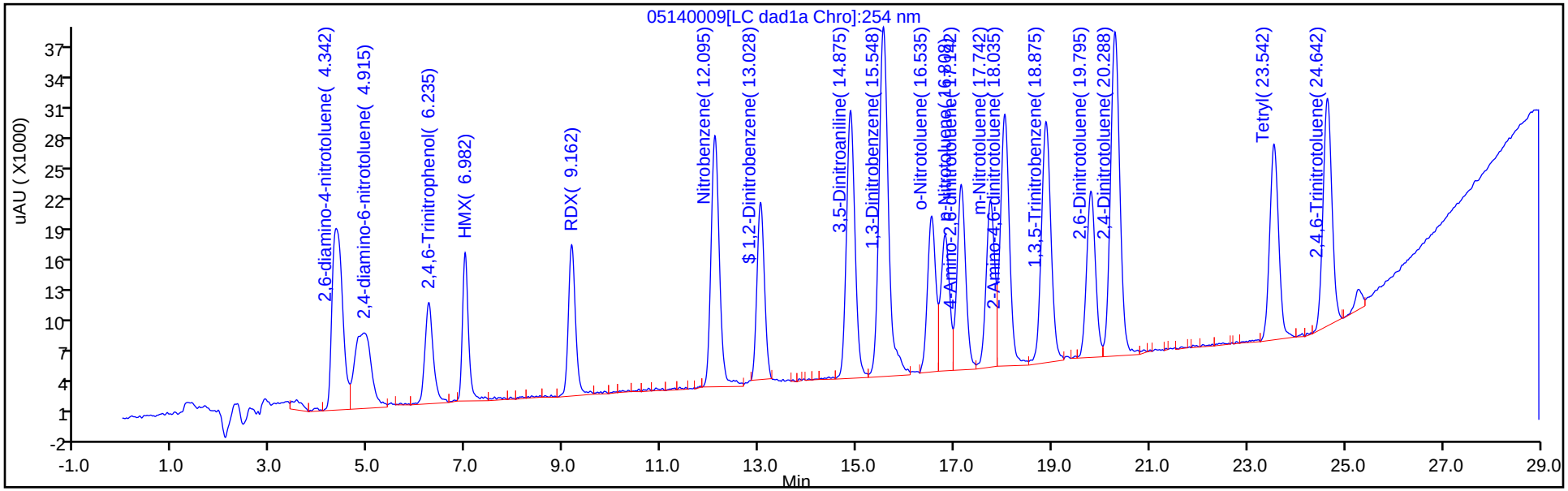
Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

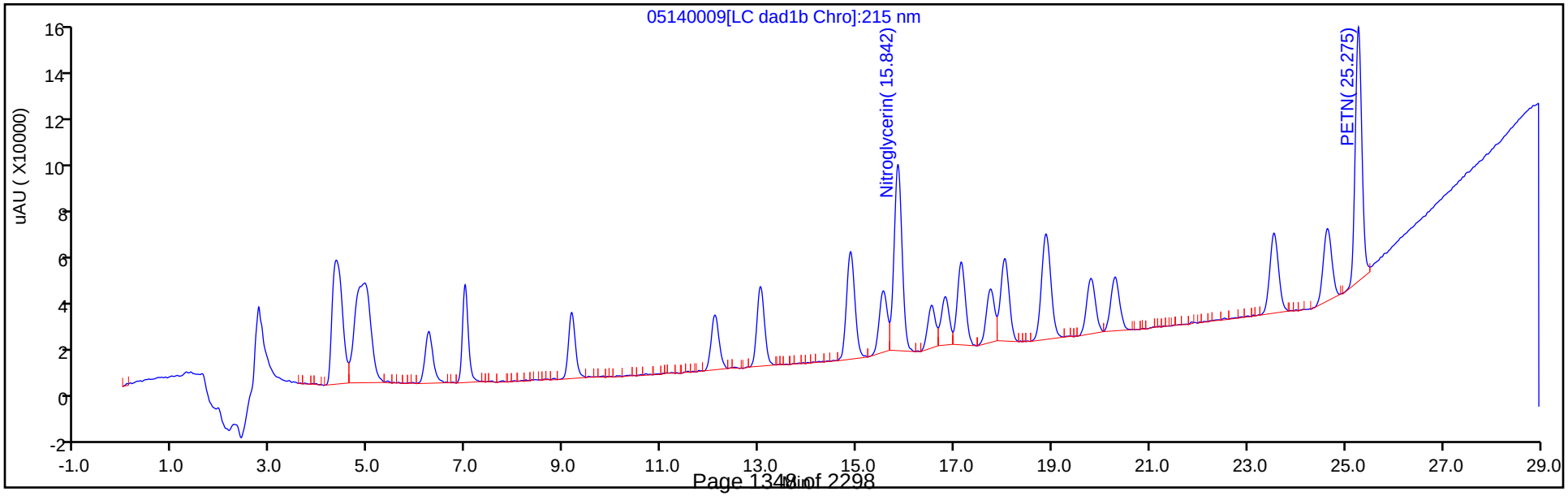
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140009.d

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

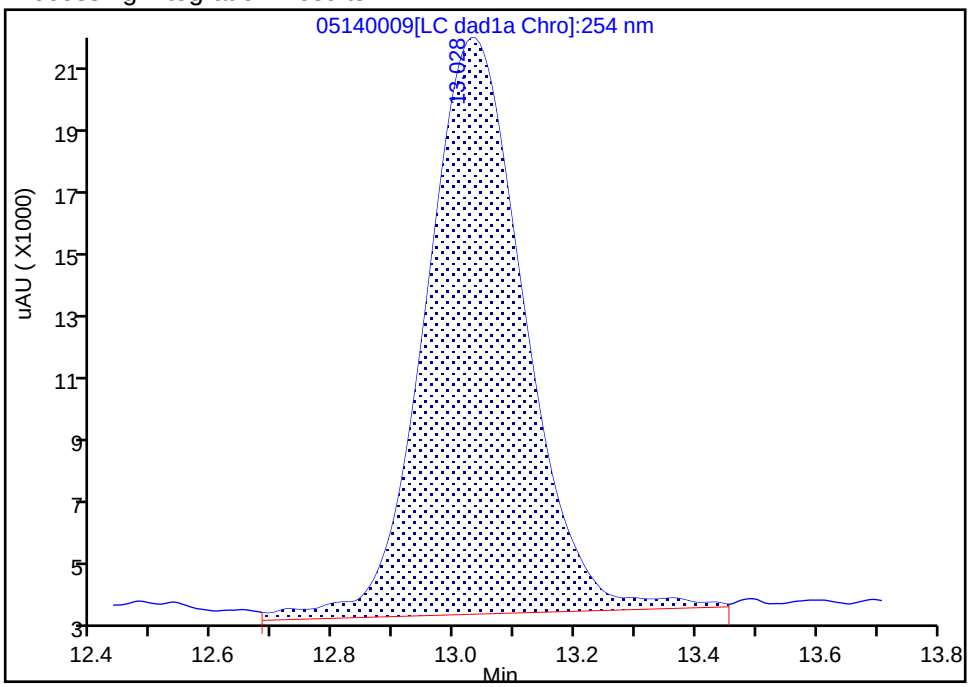
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140009.d				
Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

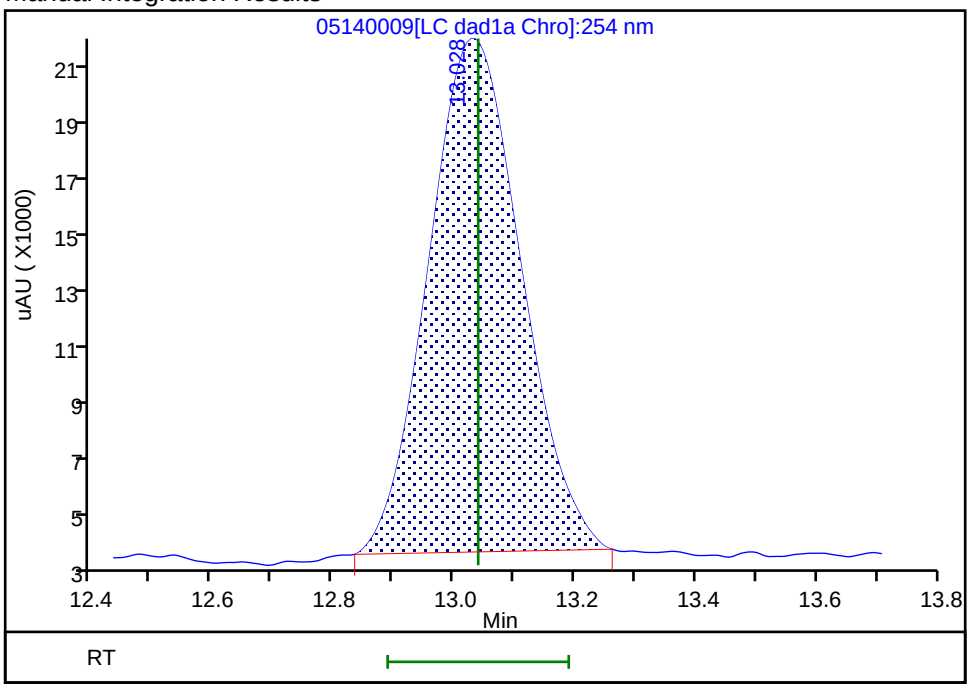
Processing Integration Results

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

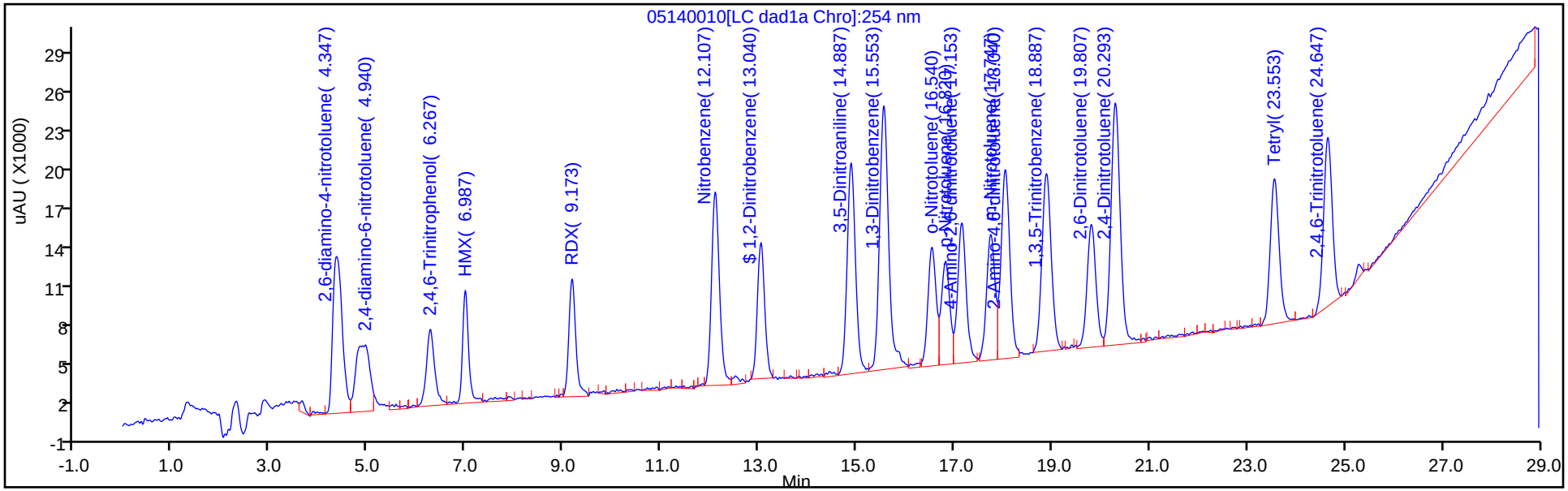
Report Date: 15-May-2020 12:00:56 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

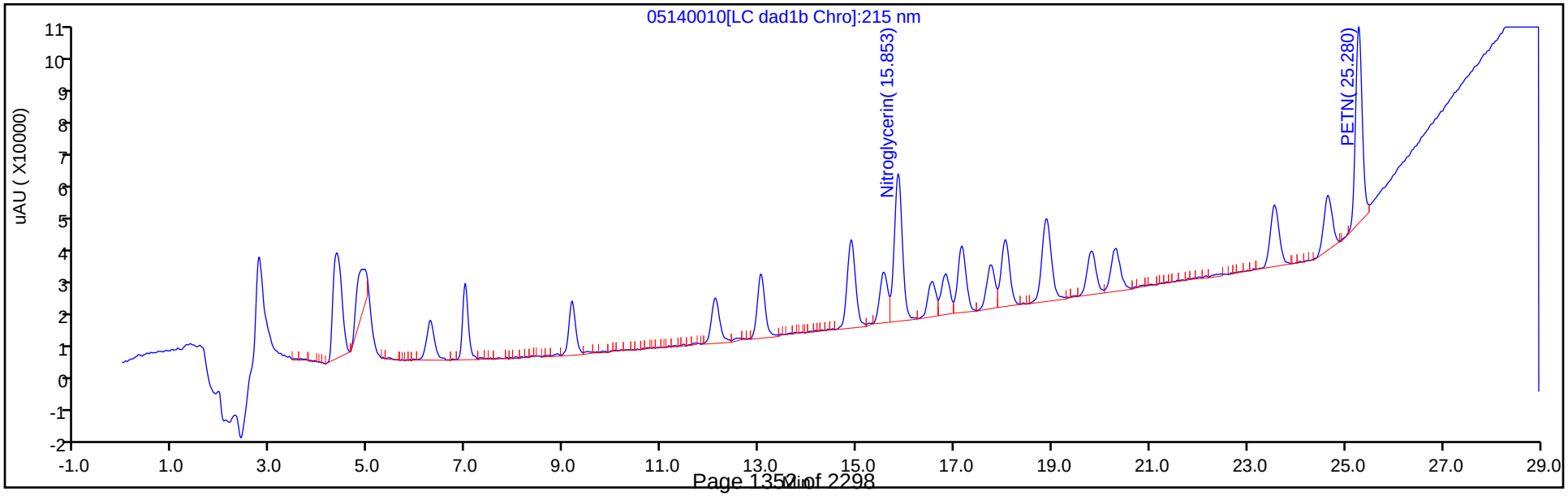
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d

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

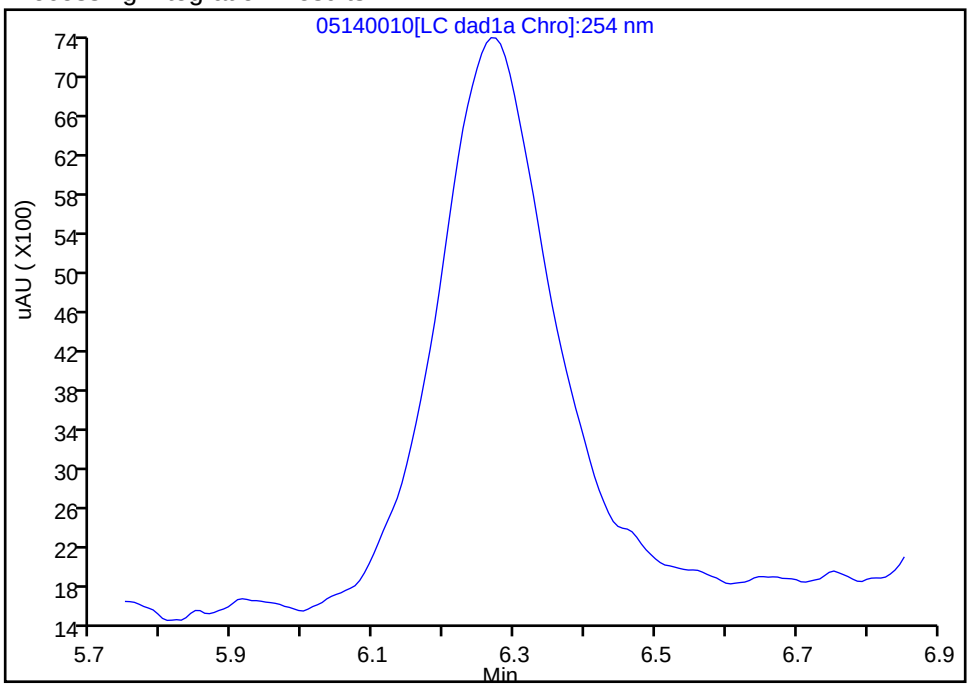
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

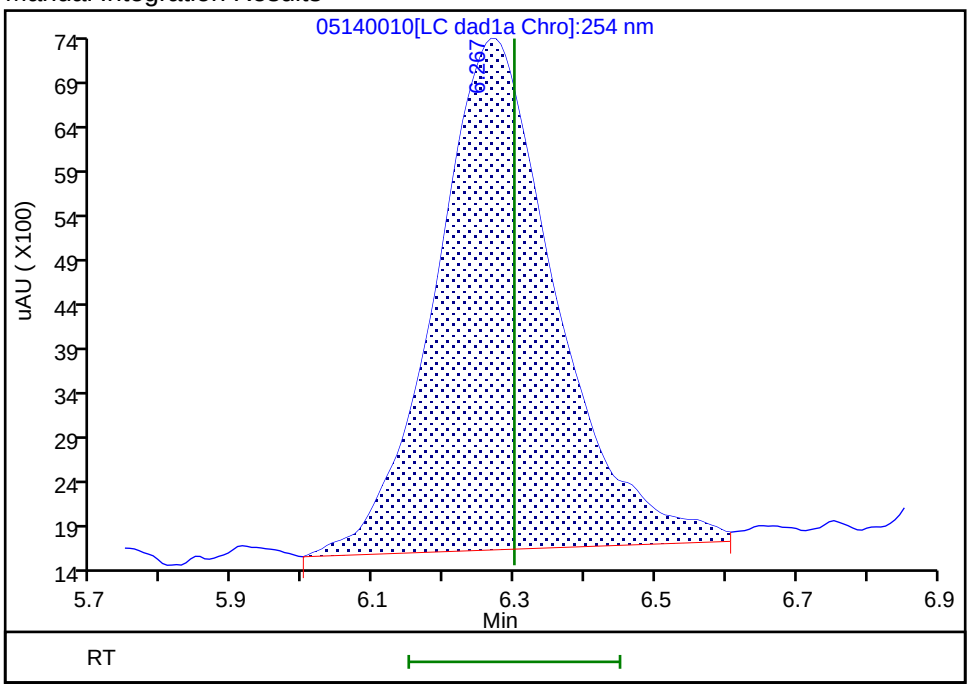
Not Detected
Expected RT: 6.30

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

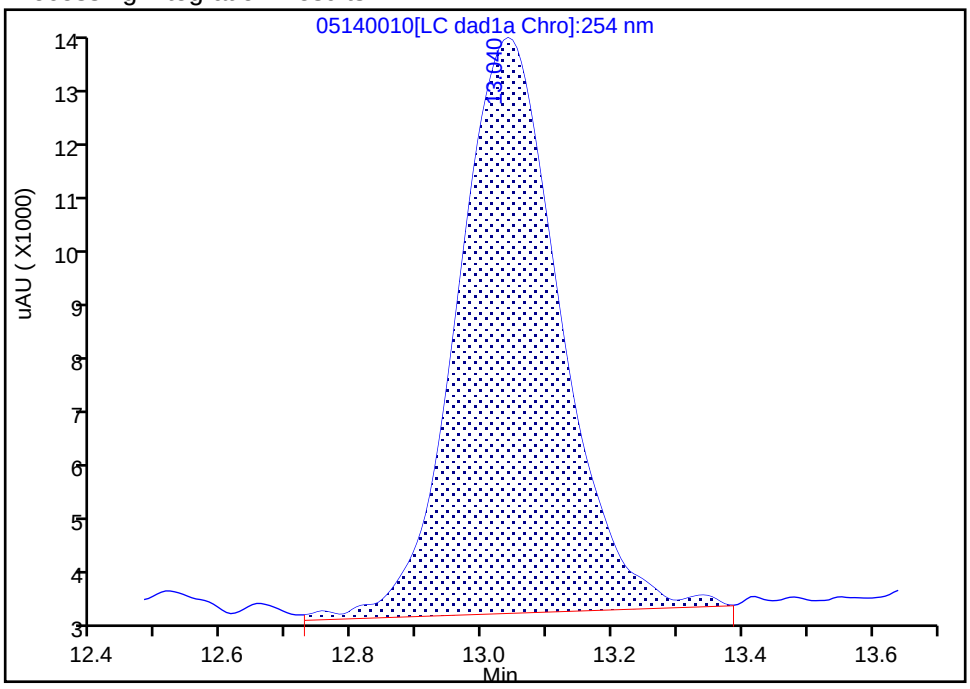
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

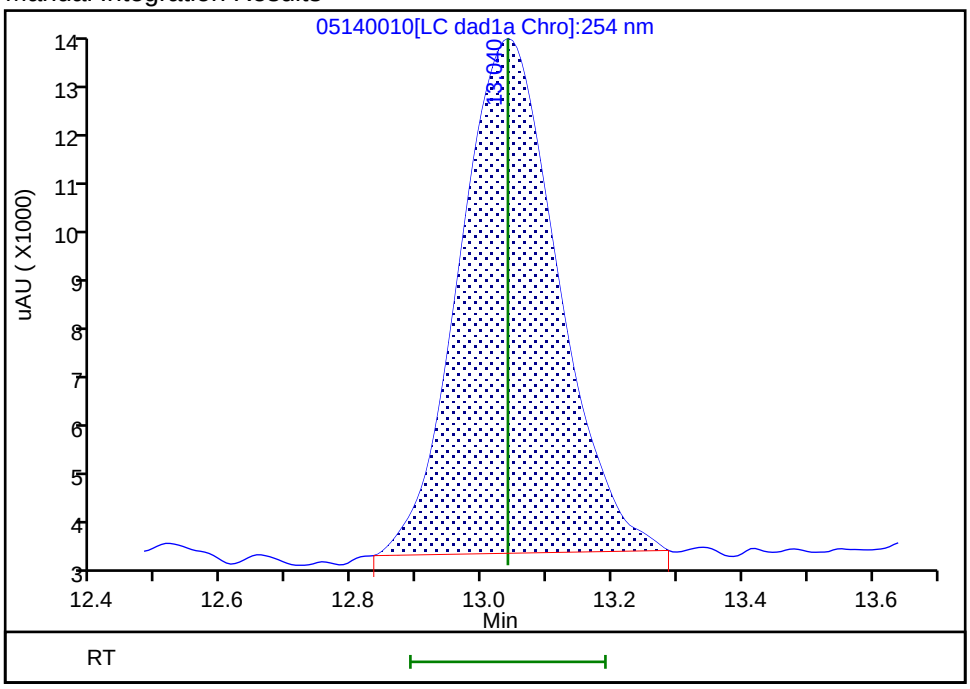
Processing Integration Results

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

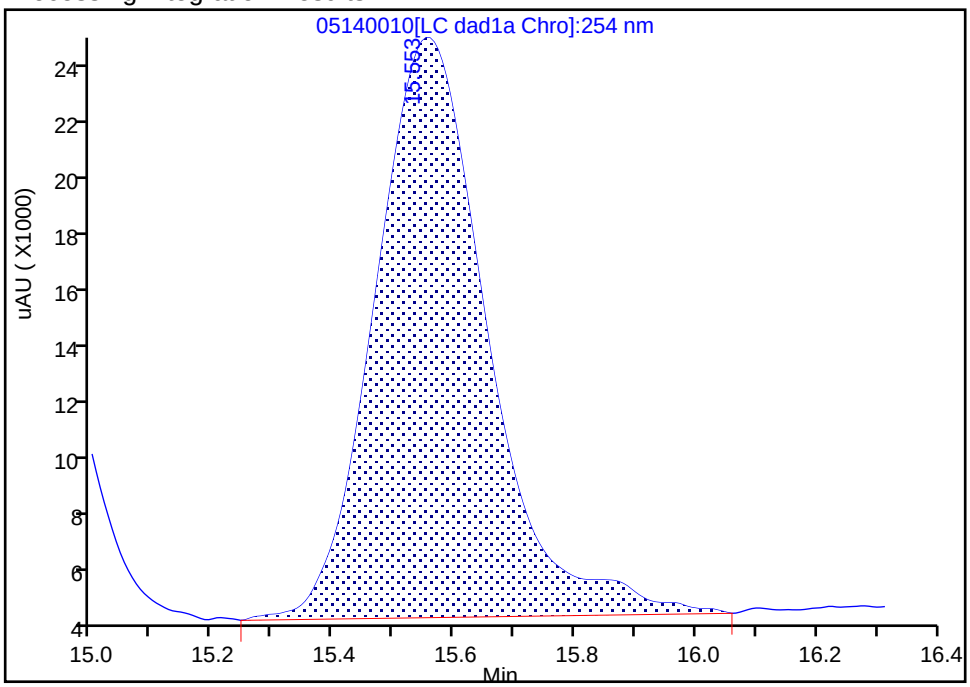
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

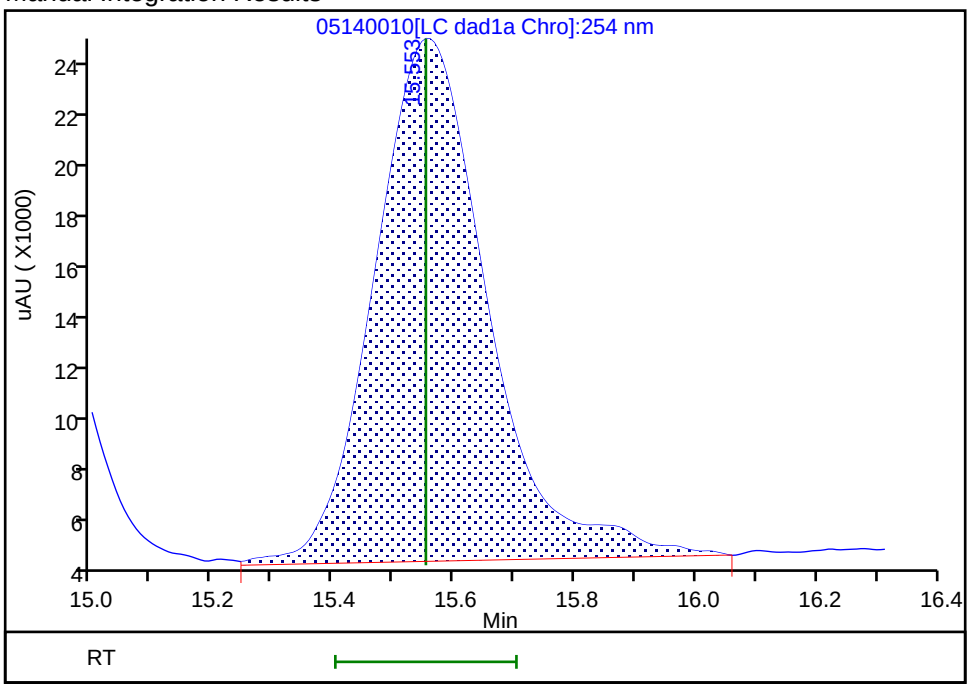
Processing Integration Results

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

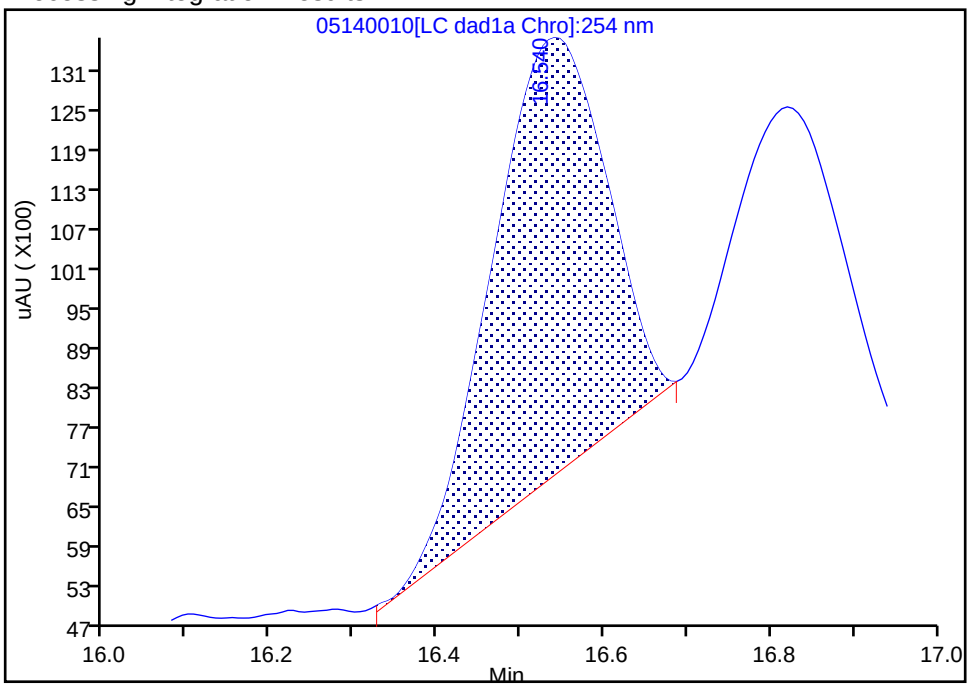
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

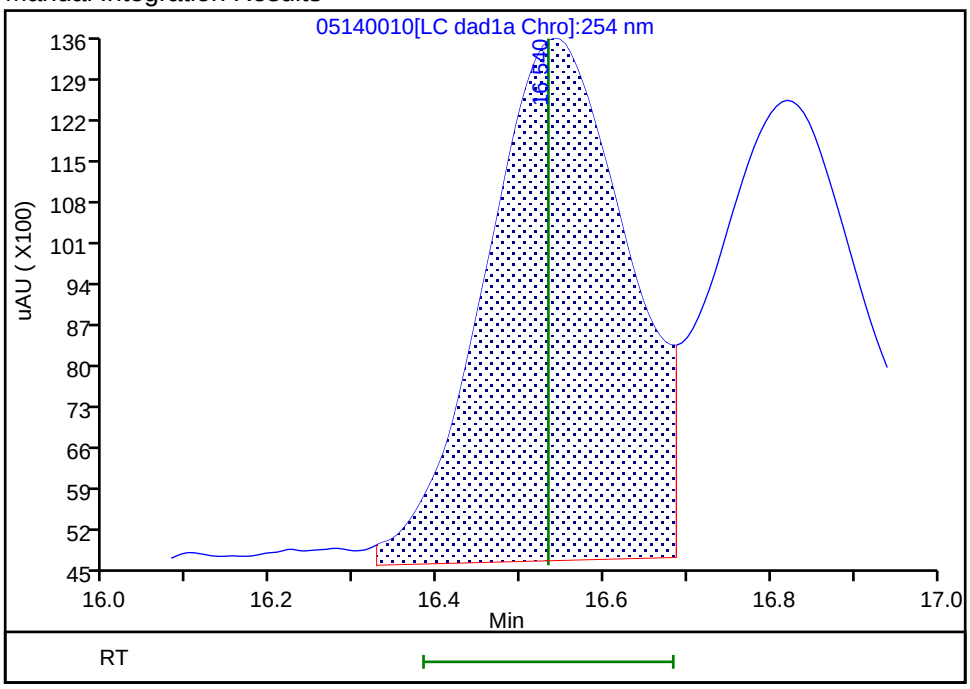
Processing Integration Results

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

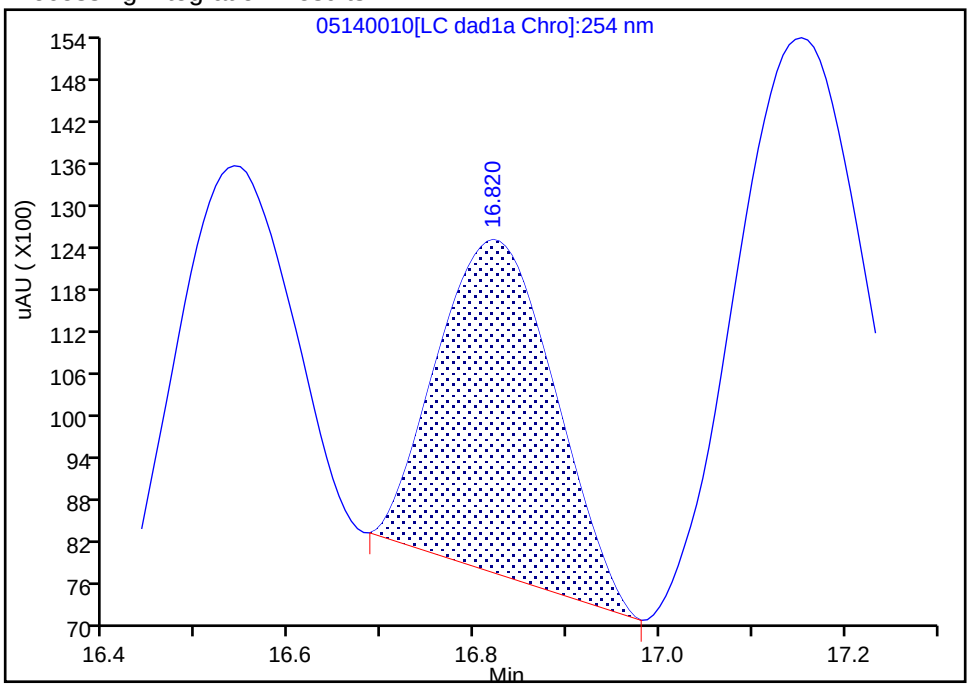
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

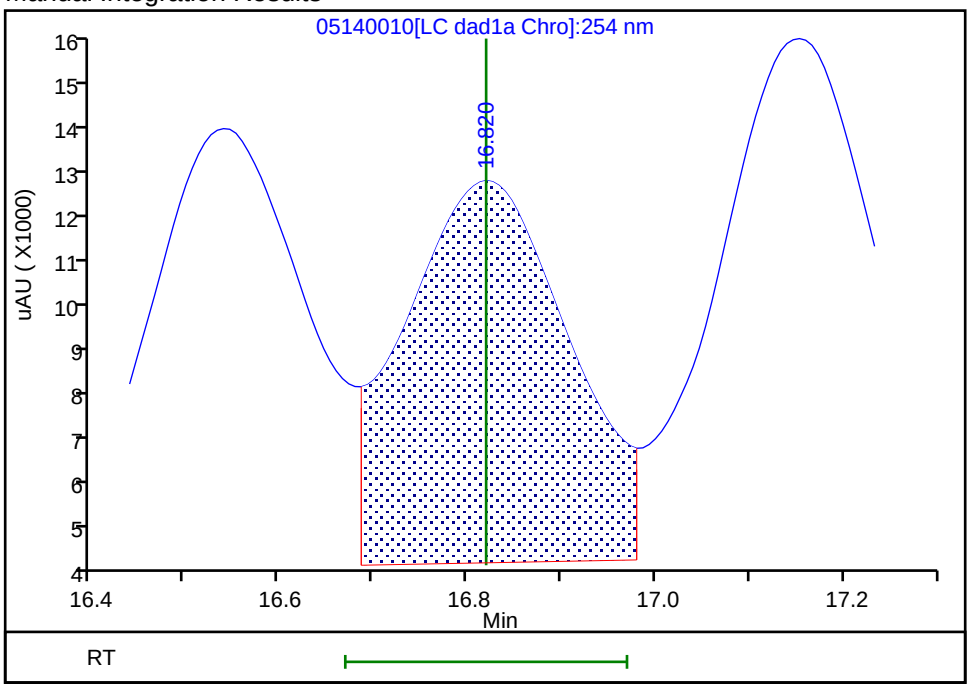
Processing Integration Results

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

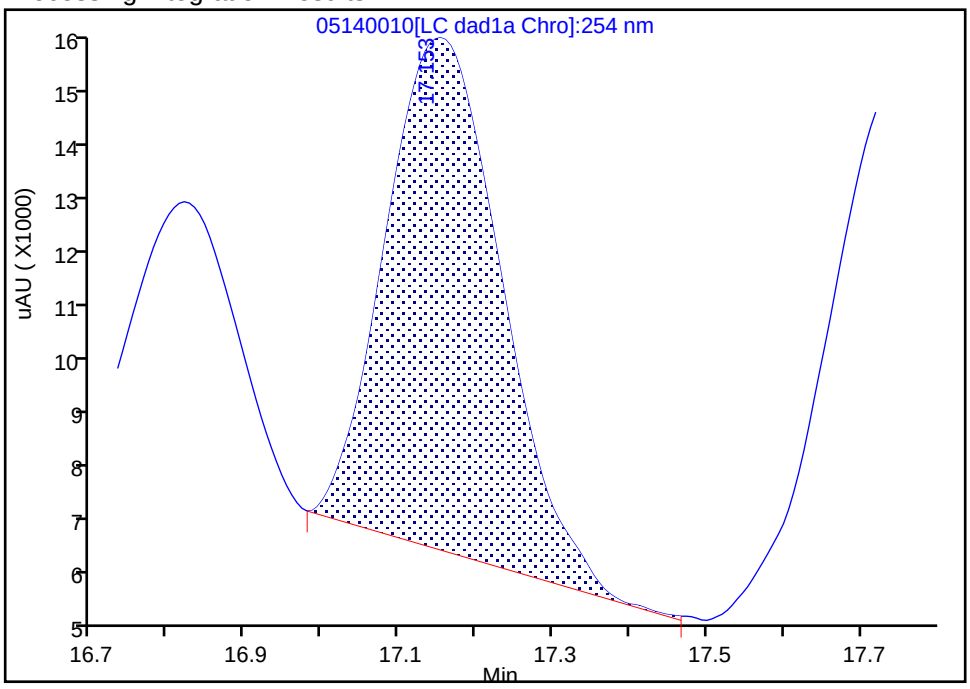
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

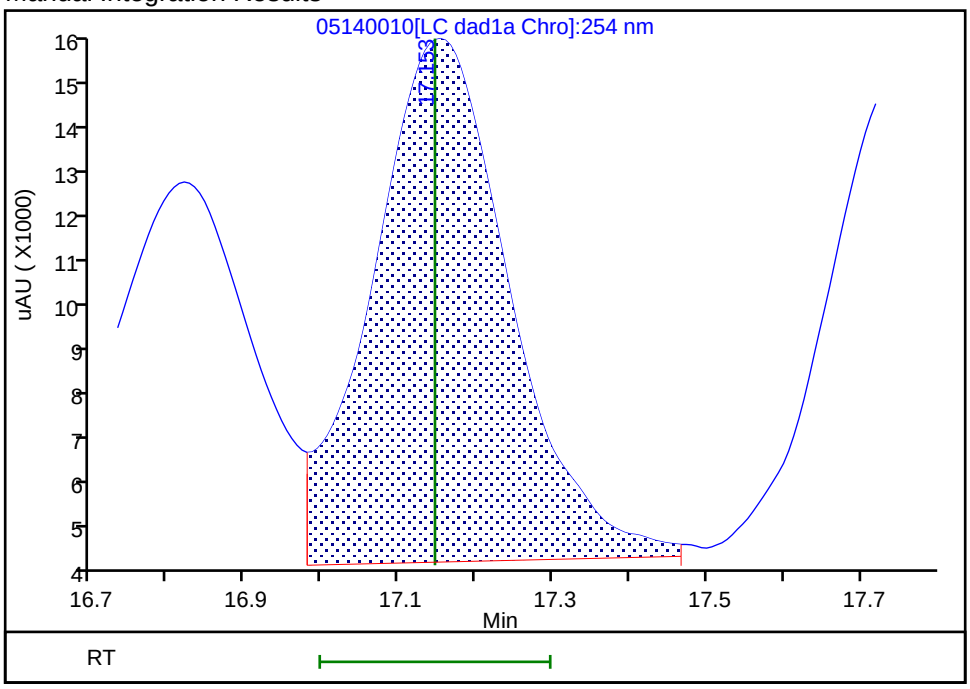
Processing Integration Results

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

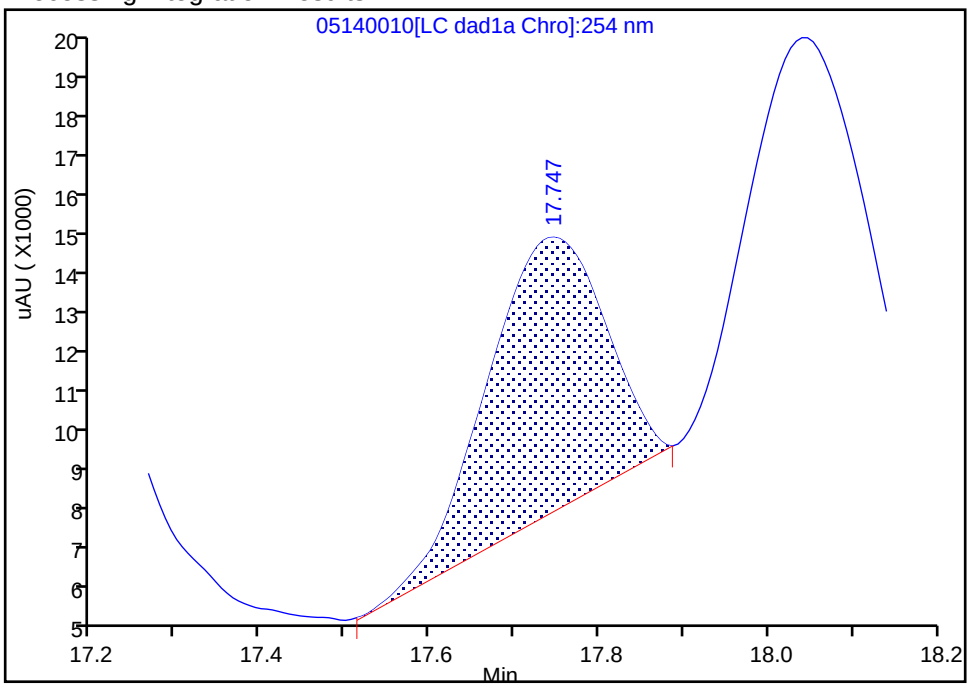
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

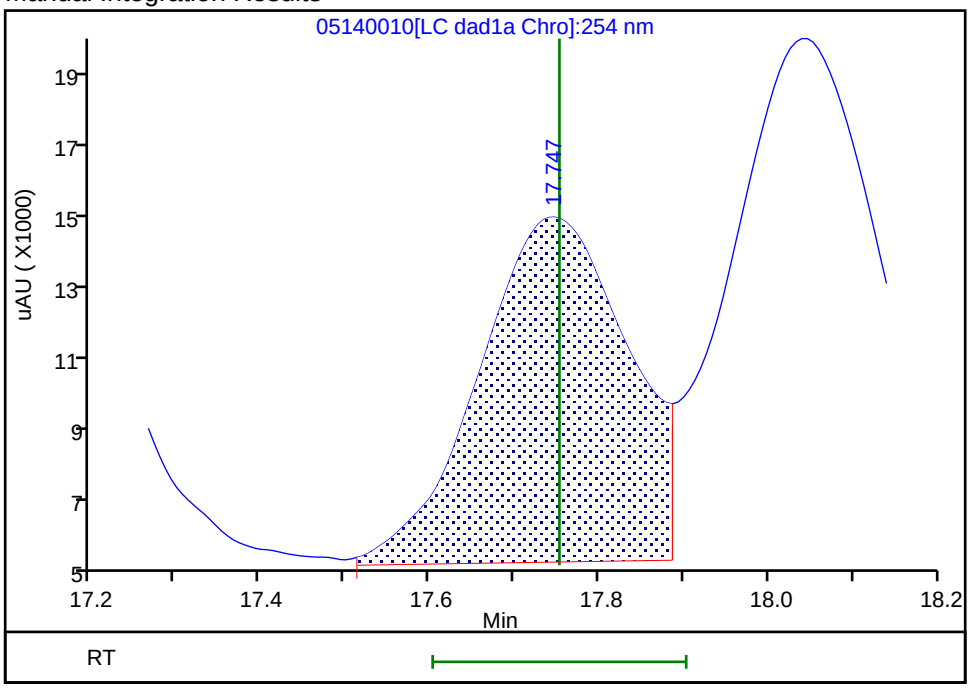
Processing Integration Results

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

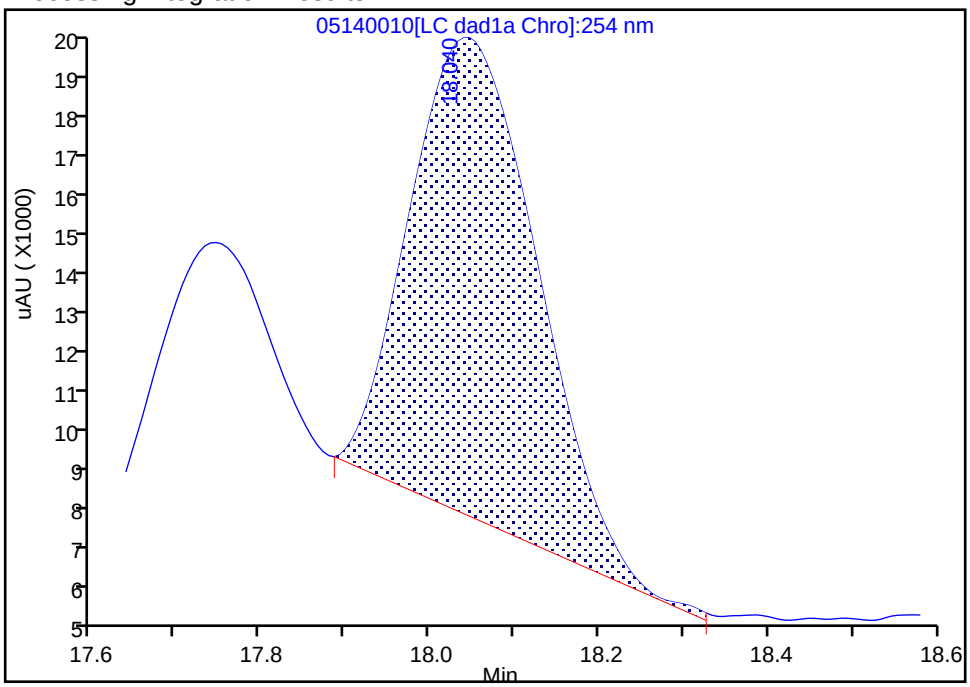
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

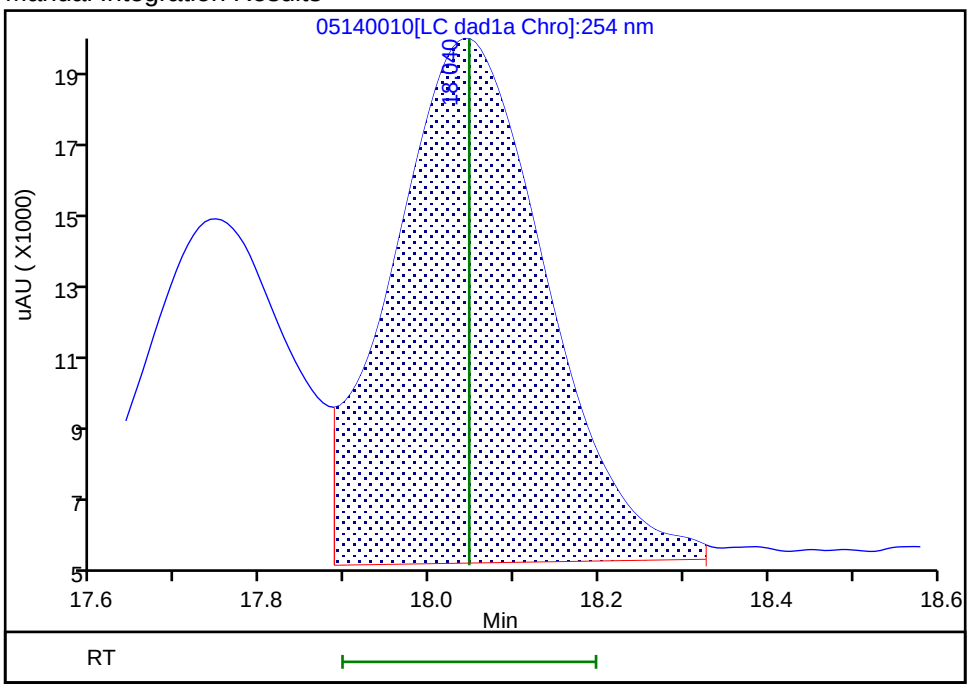
Processing Integration Results

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

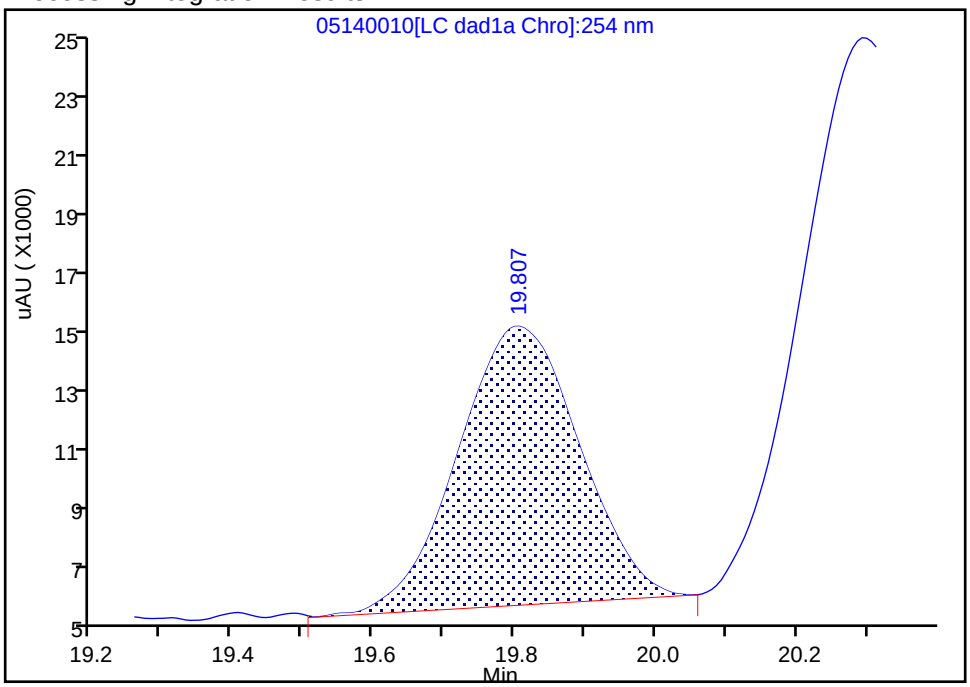
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

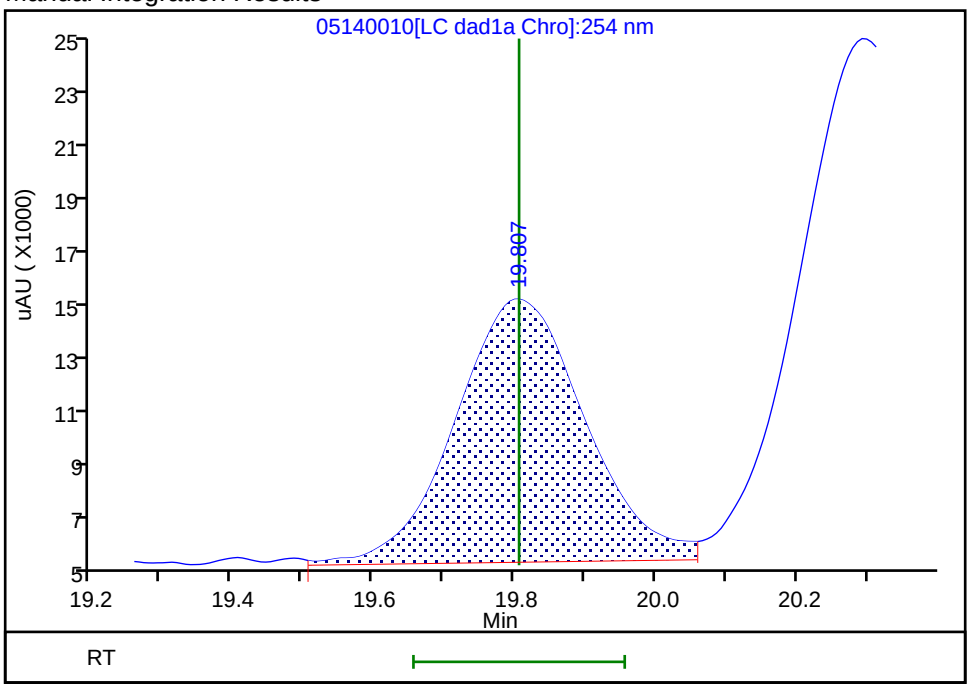
Processing Integration Results

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

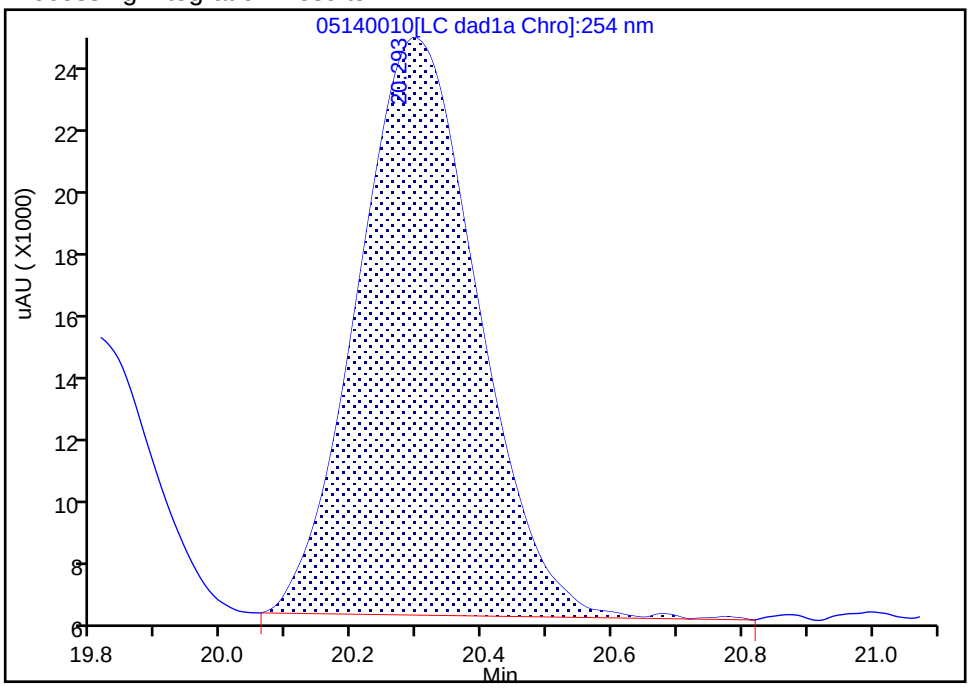
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

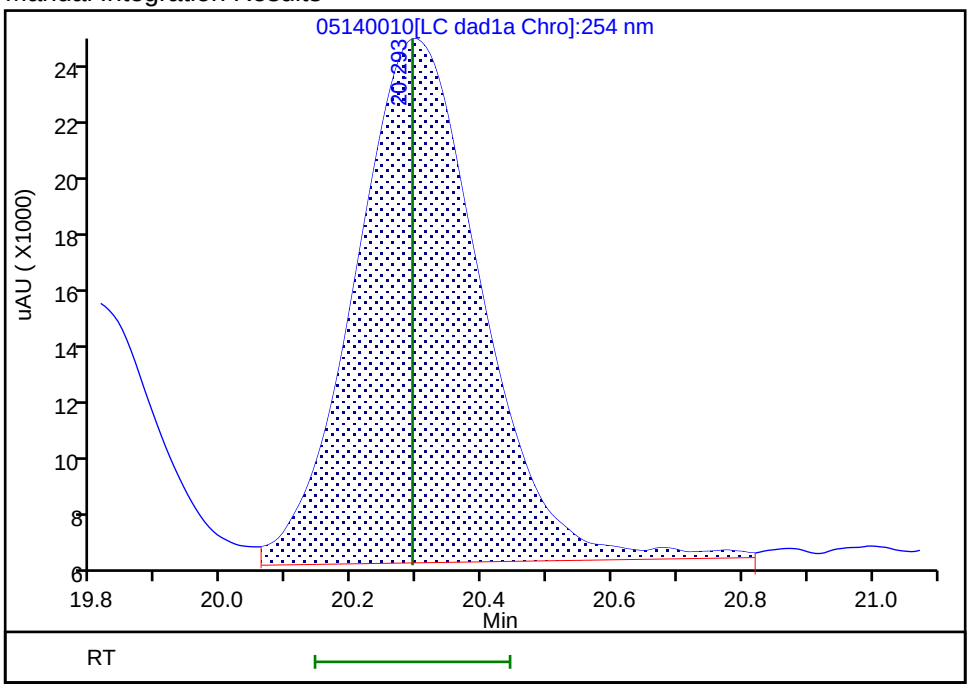
Processing Integration Results

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

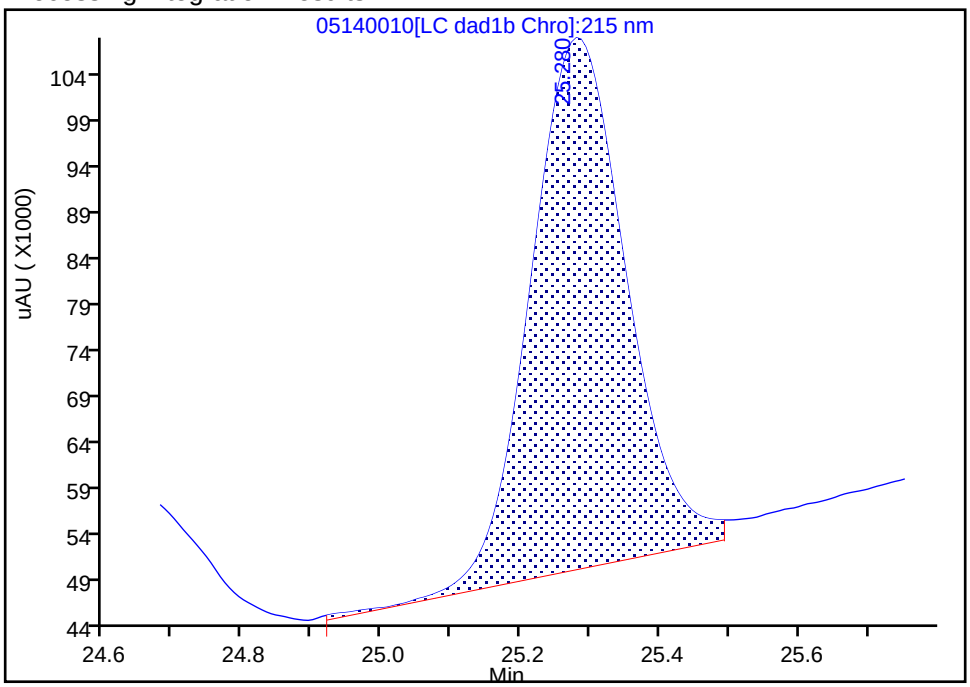
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

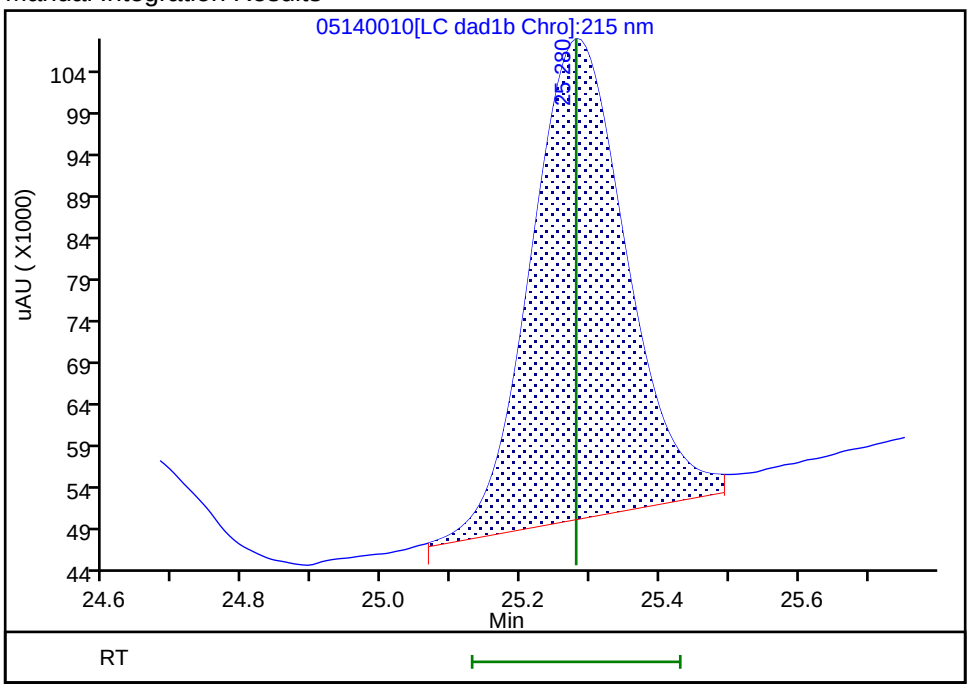
Processing Integration Results

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

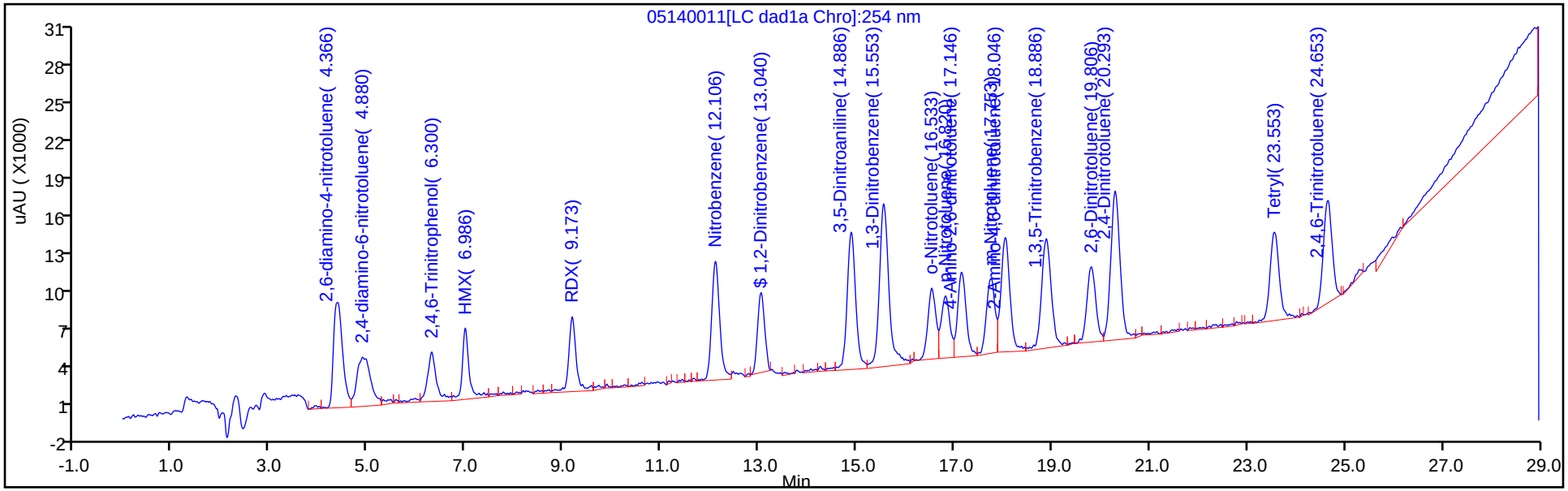
Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

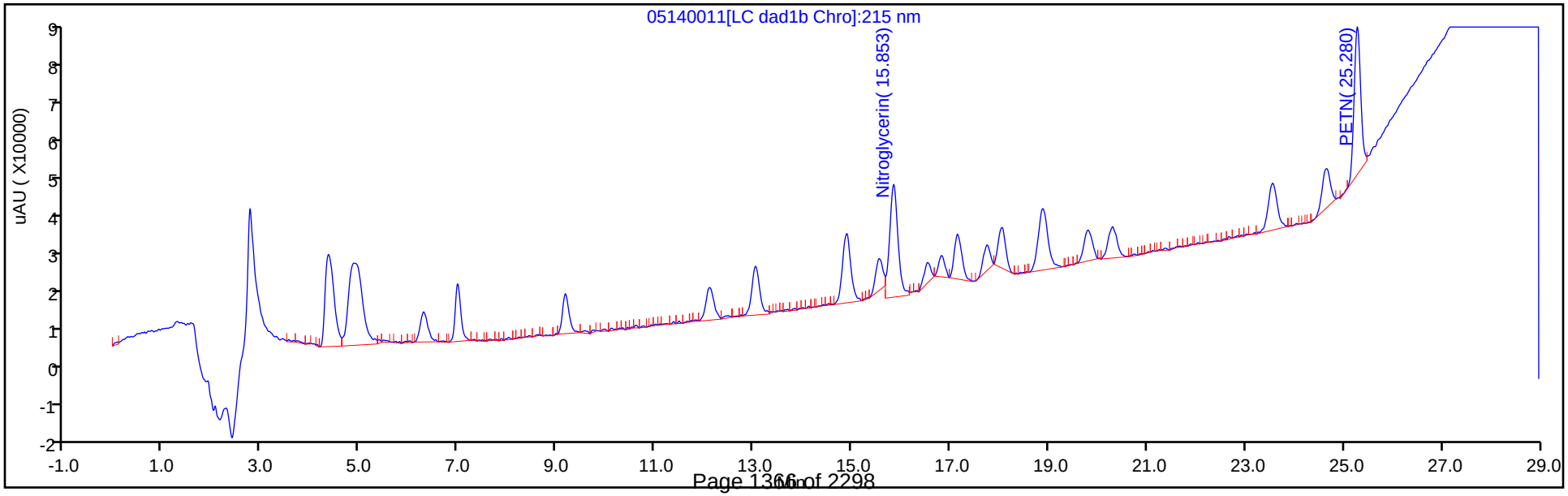
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d

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

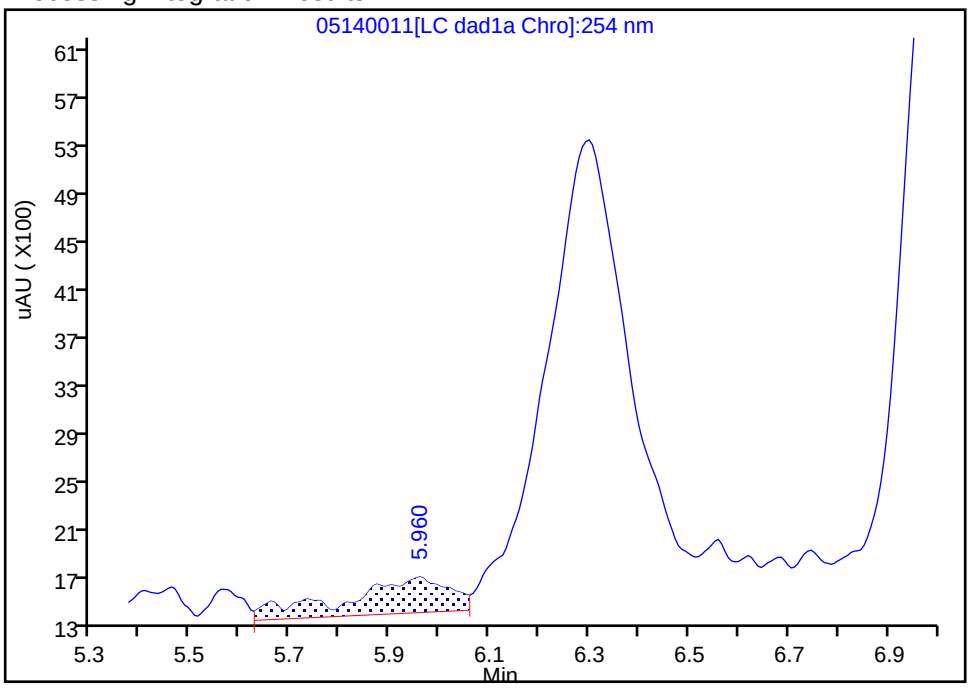
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

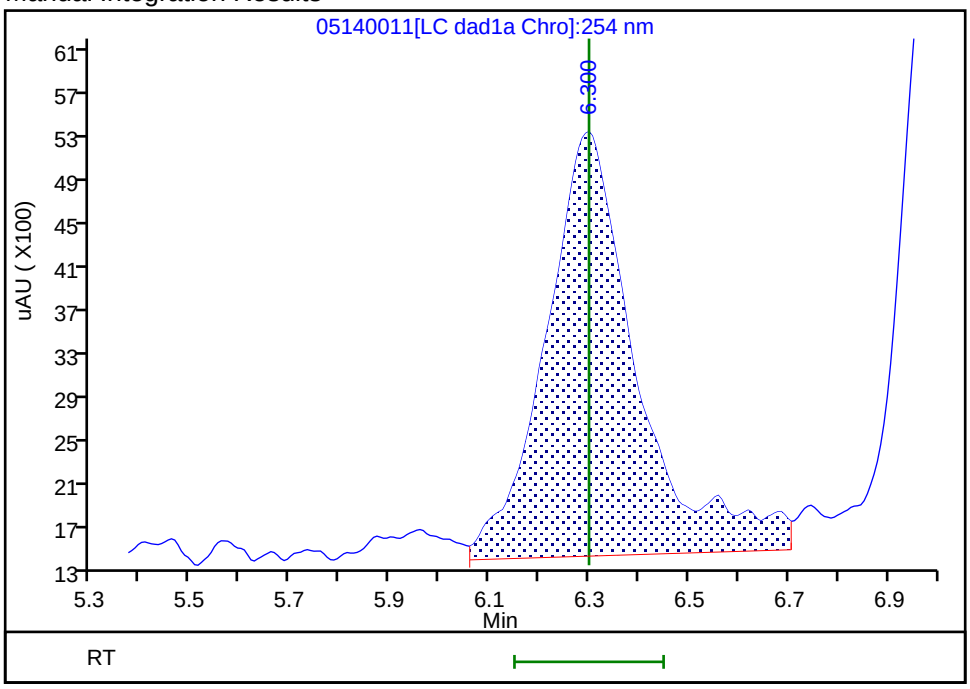
Processing Integration Results

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

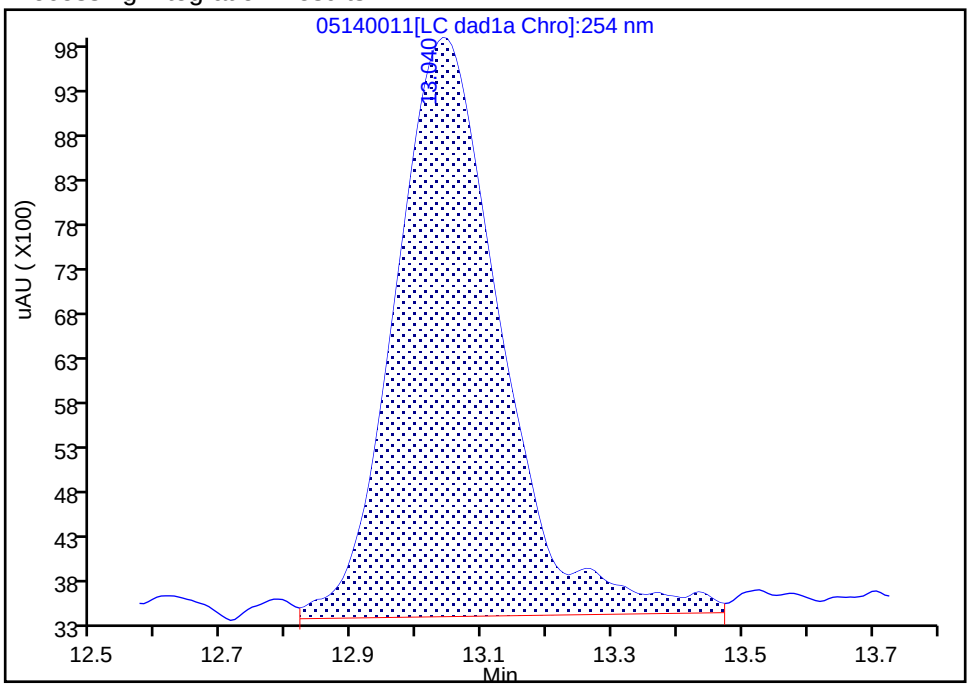
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

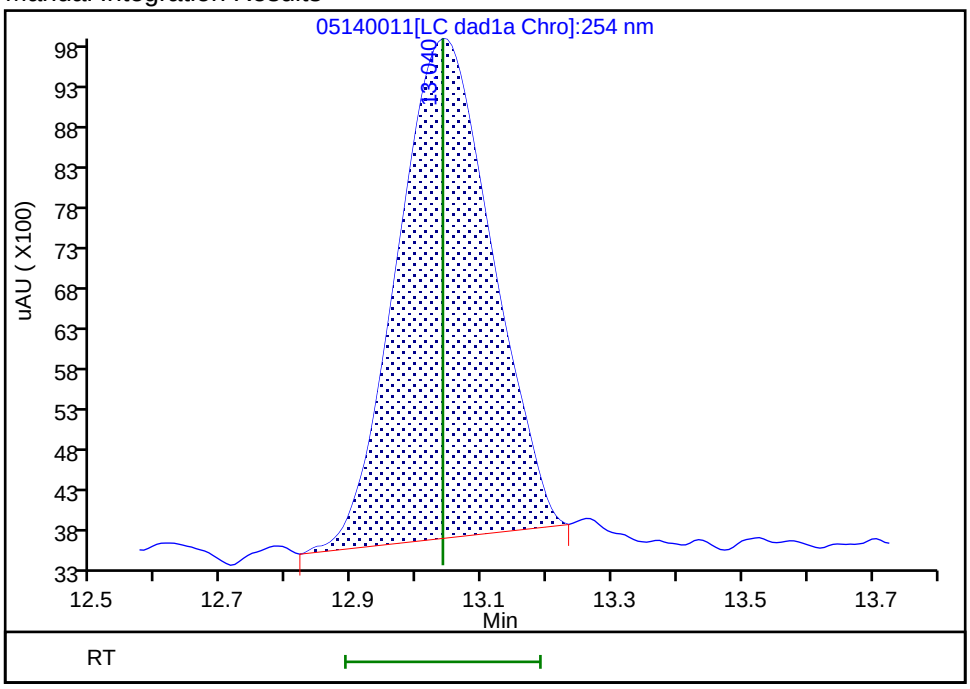
Processing Integration Results

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

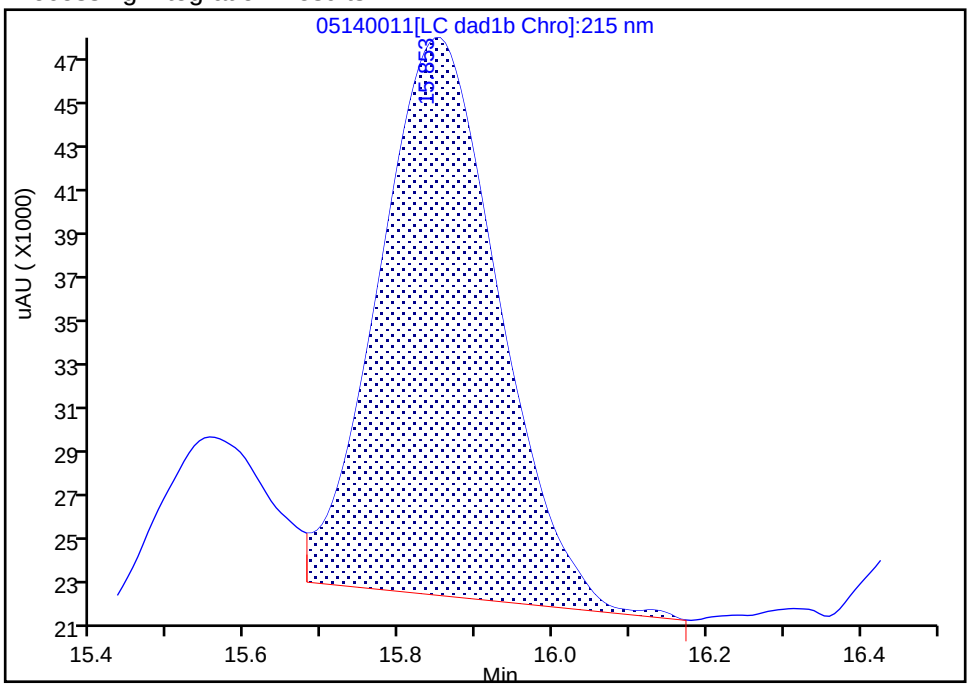
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

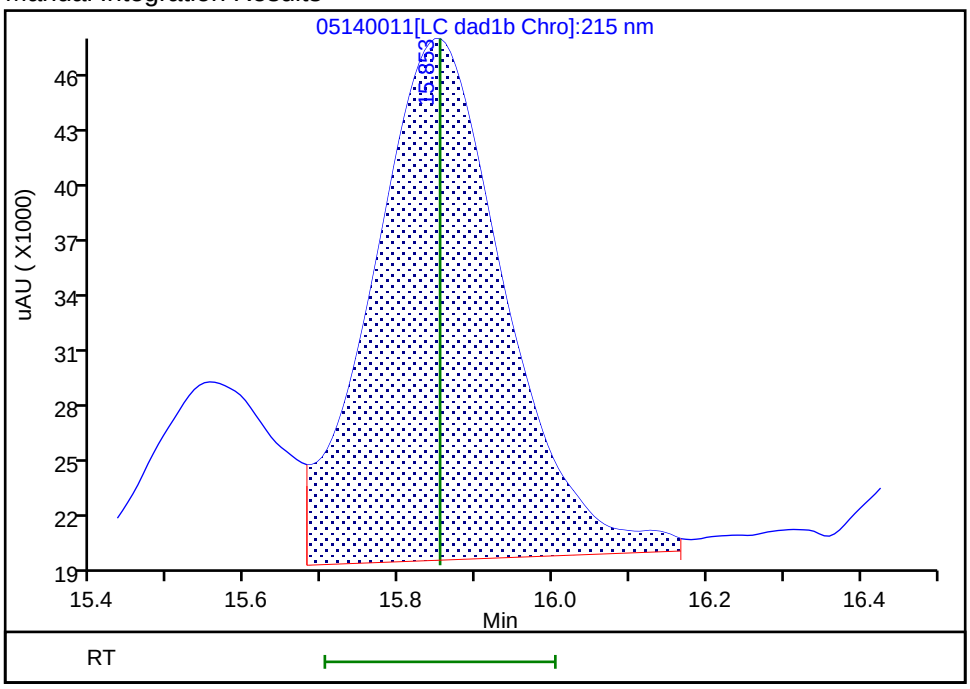
Processing Integration Results

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

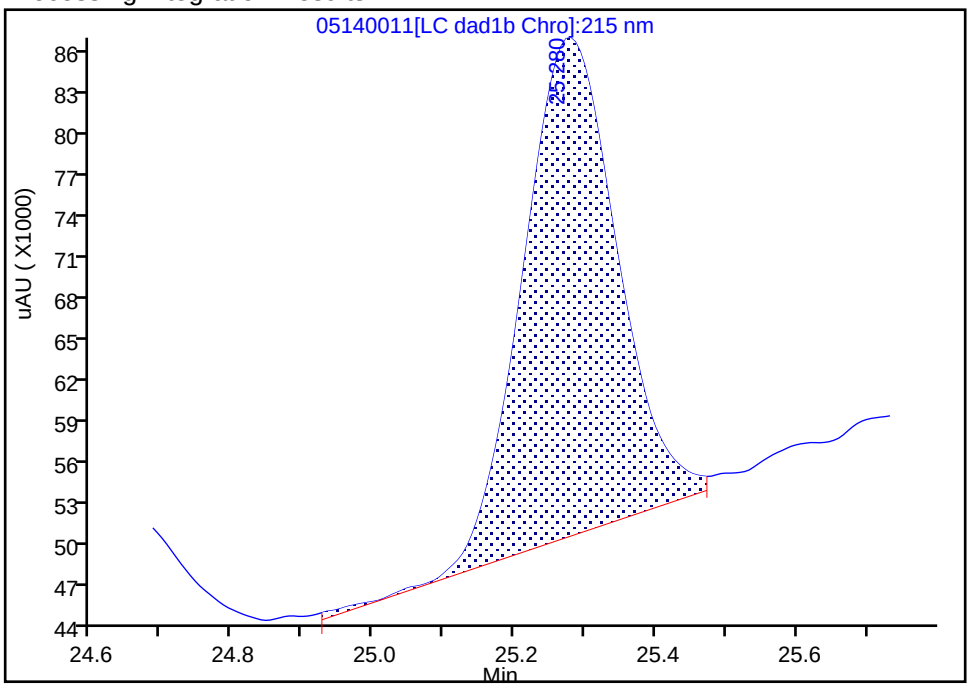
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d
Injection Date: 14-May-2020 18:36:40 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 5
Client ID:
Operator ID: CB ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

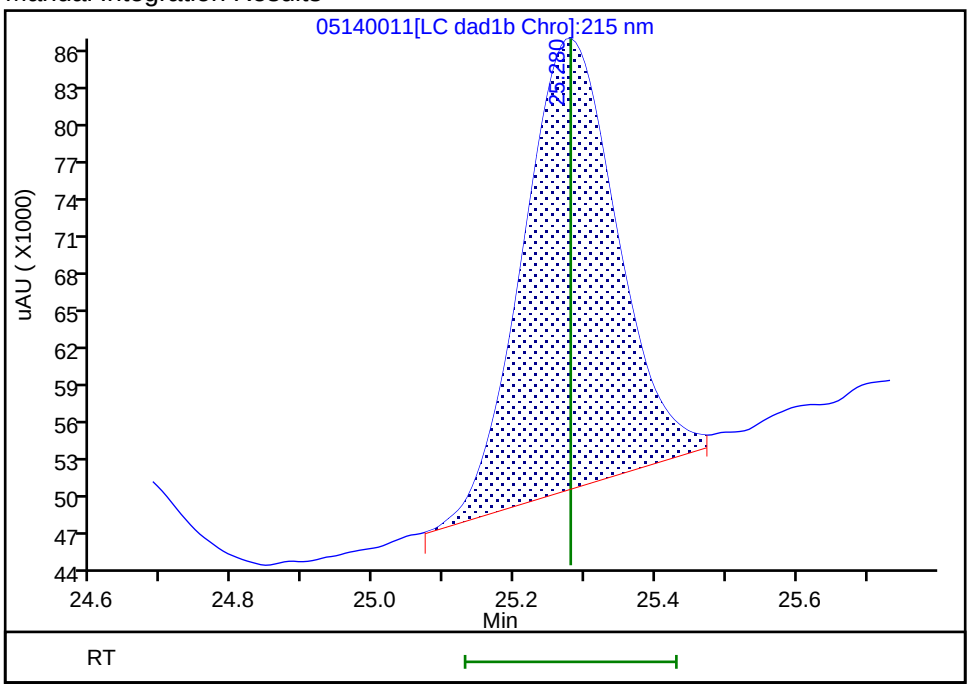
Processing Integration Results

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

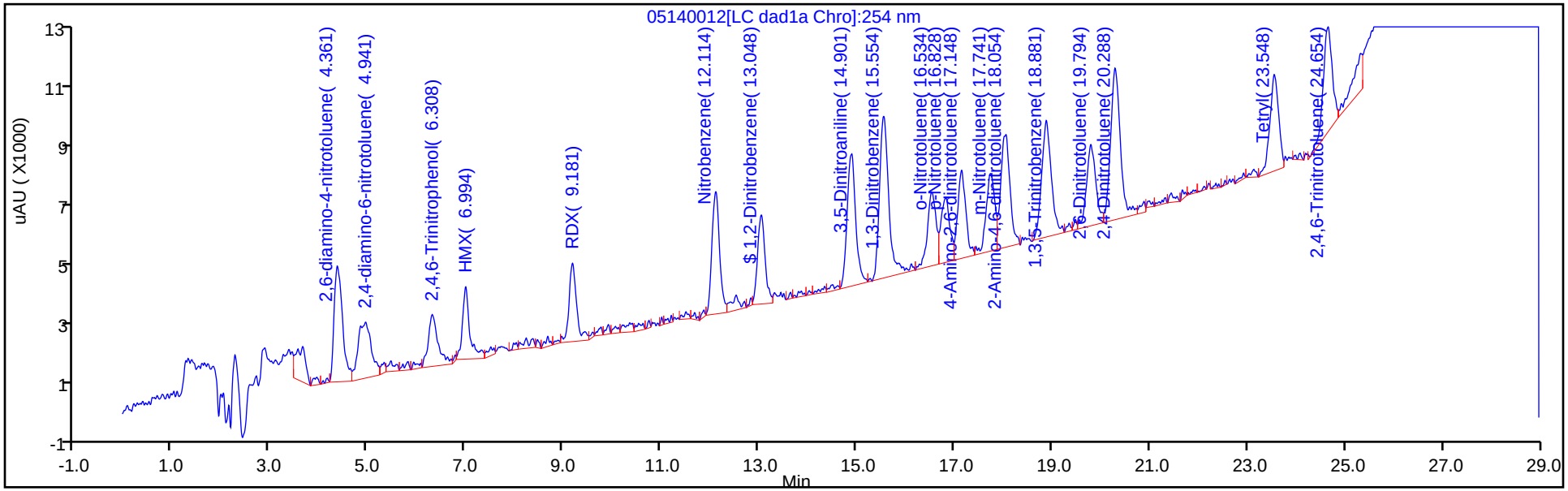
Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

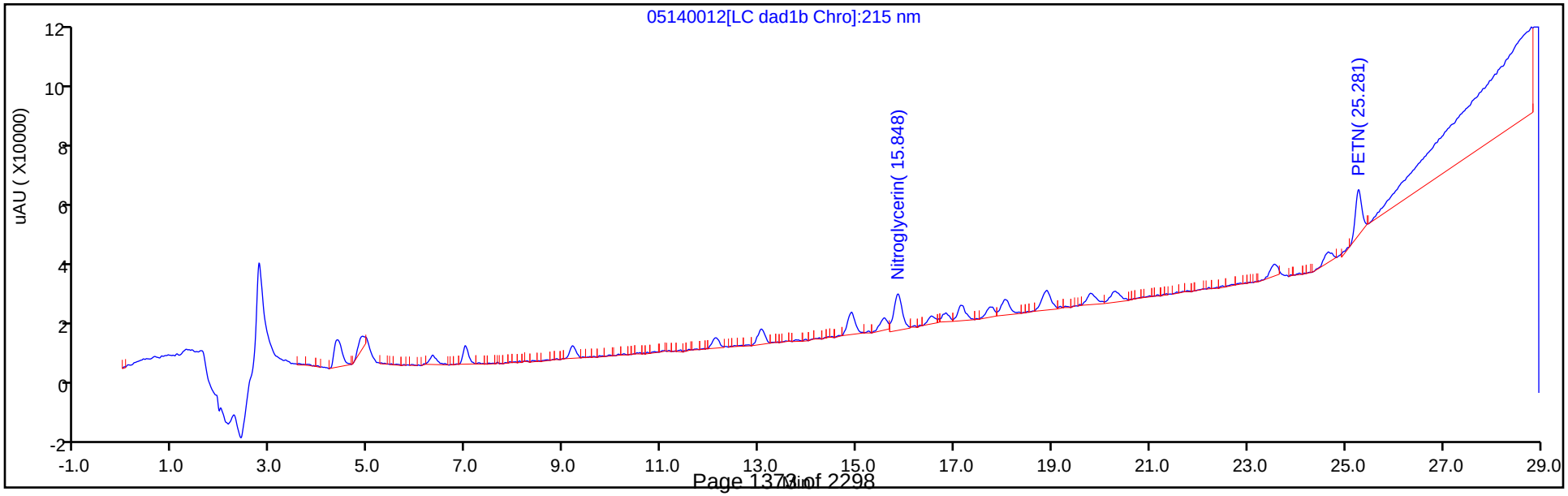
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d

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

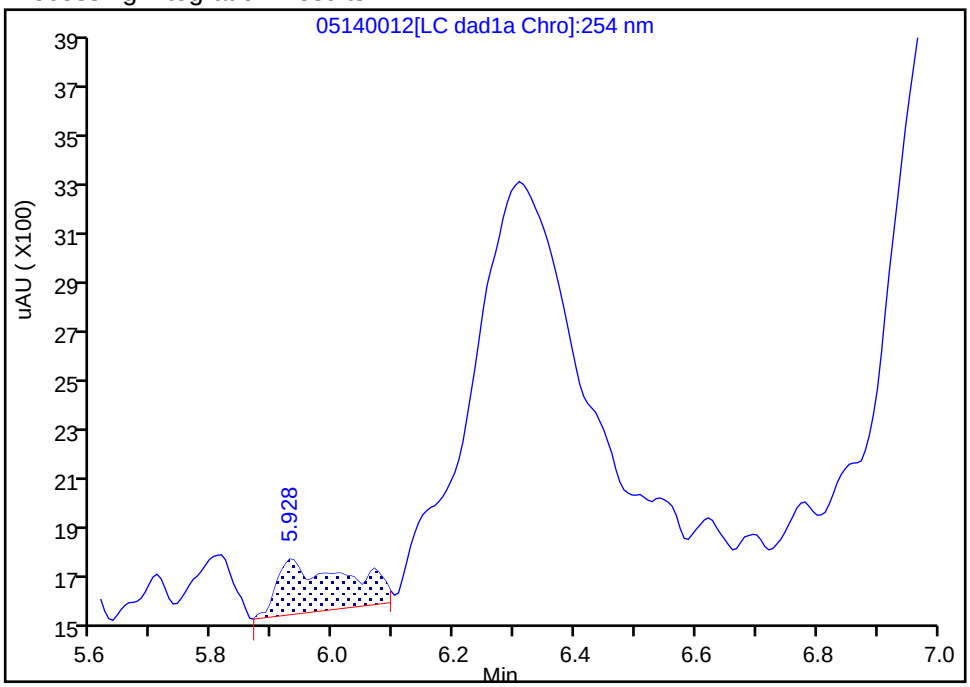
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

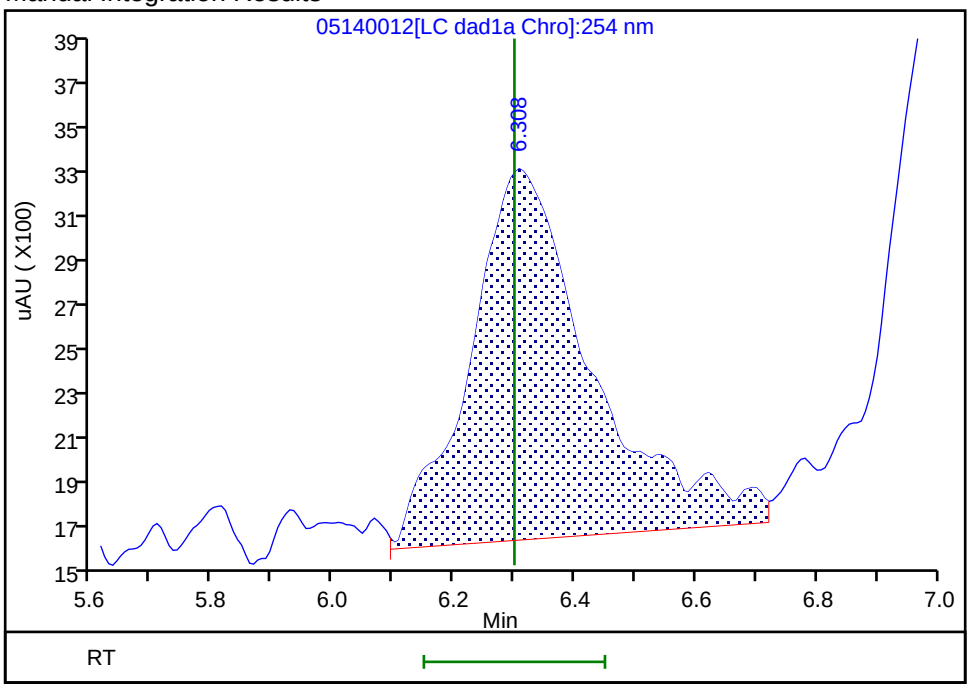
Processing Integration Results

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

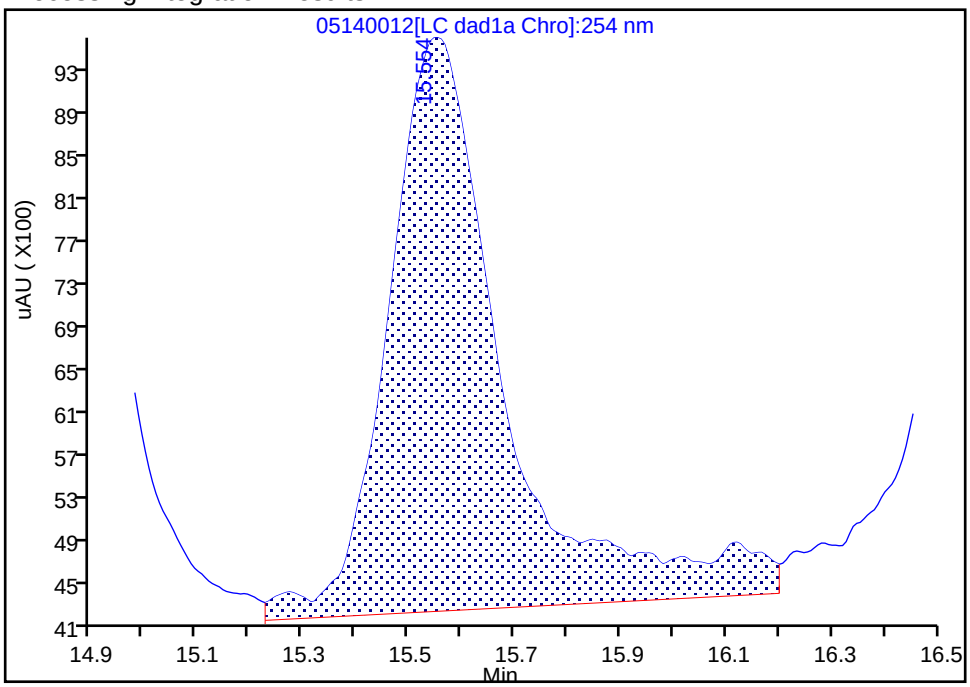
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

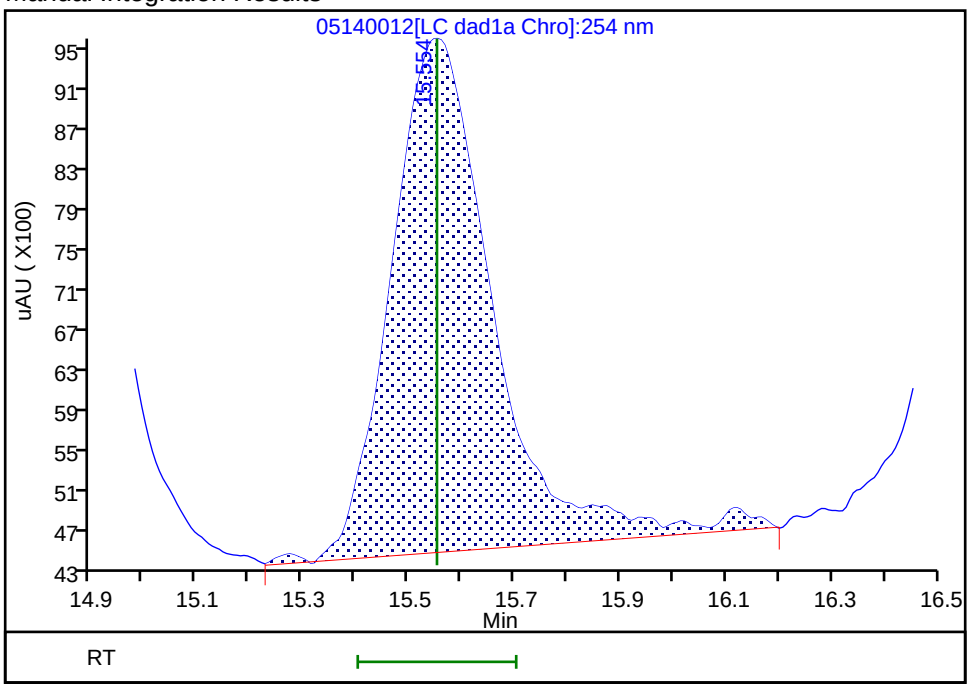
Processing Integration Results

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

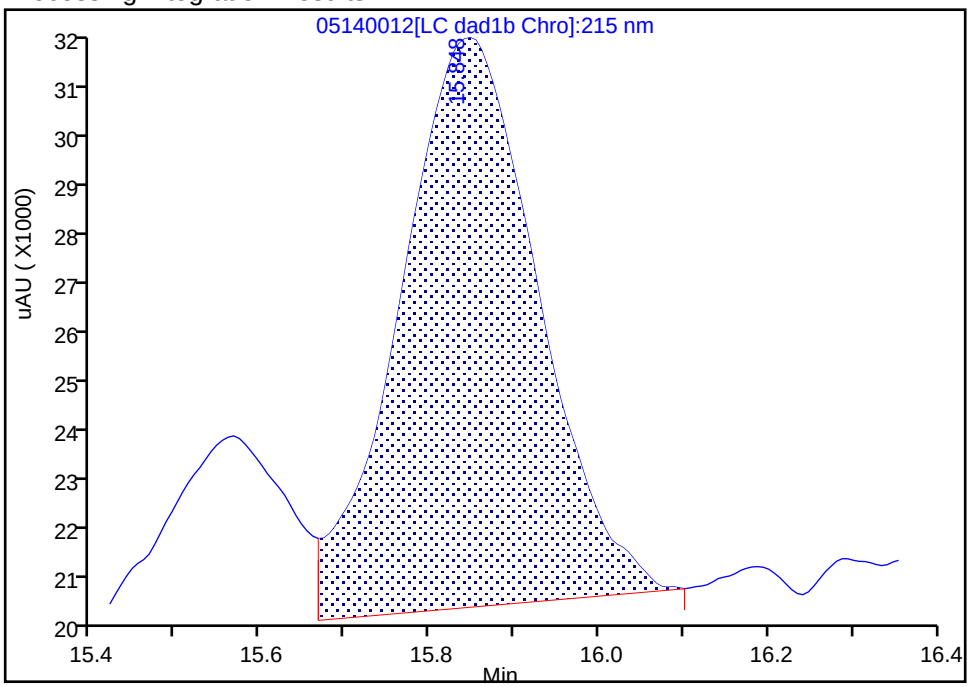
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d
Injection Date: 14-May-2020 19:11:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 4
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

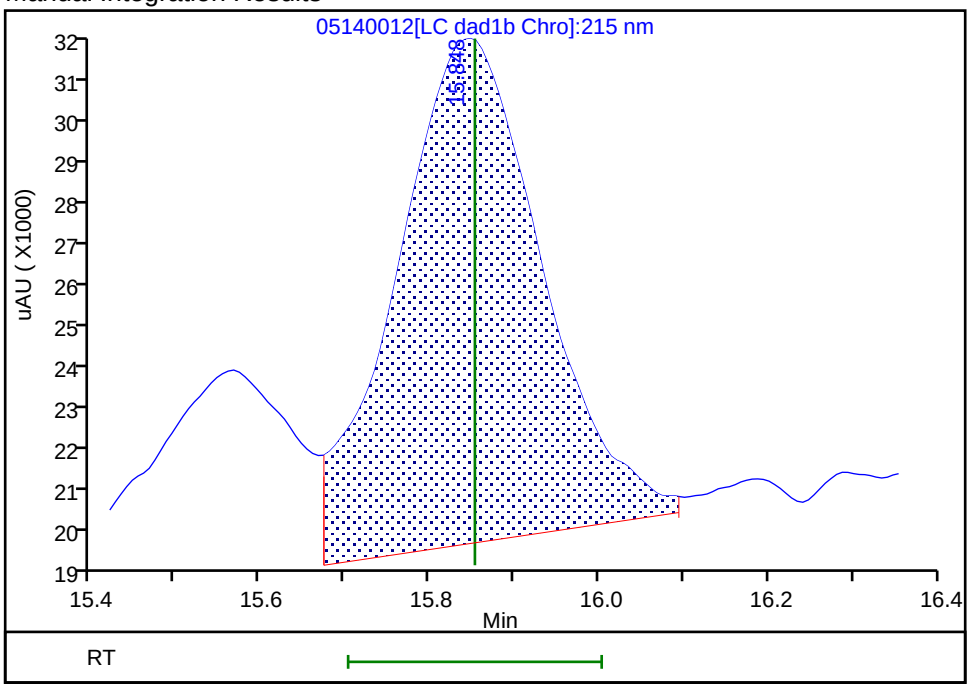
Processing Integration Results

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

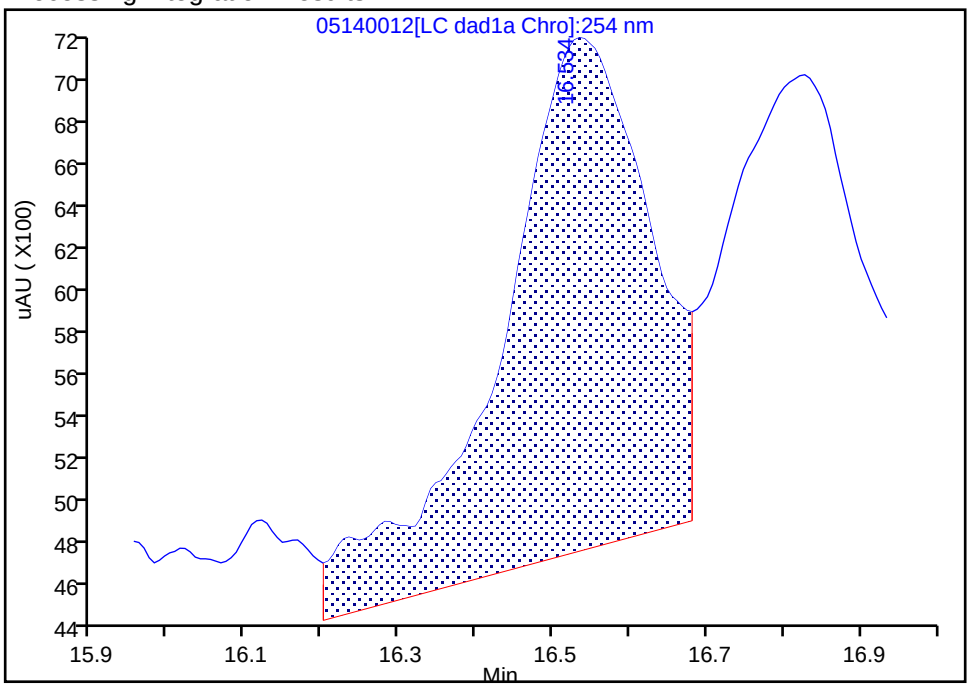
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

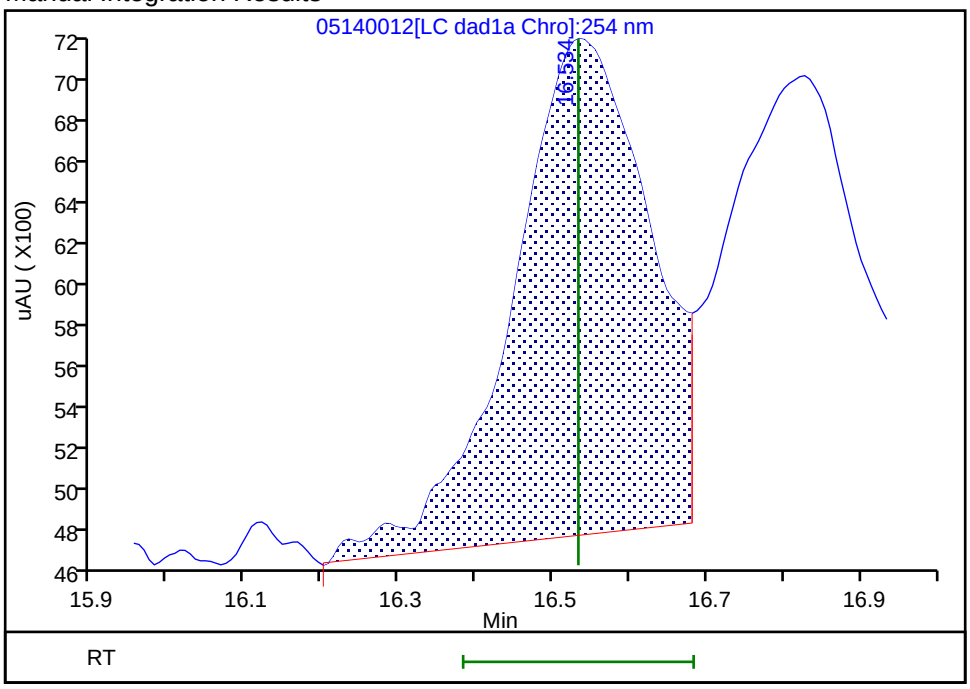
Processing Integration Results

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

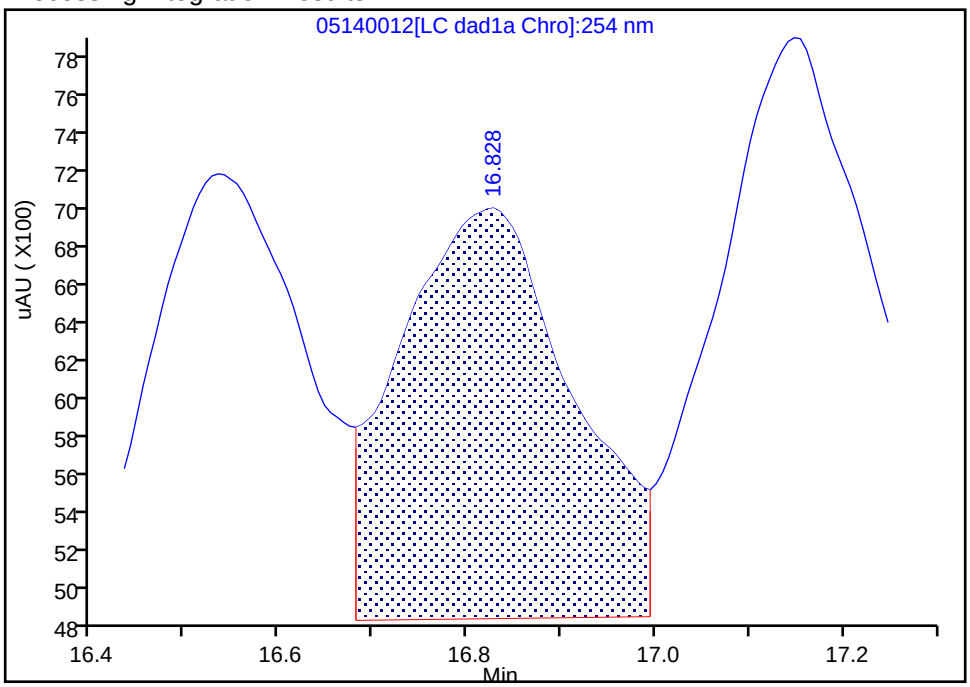
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

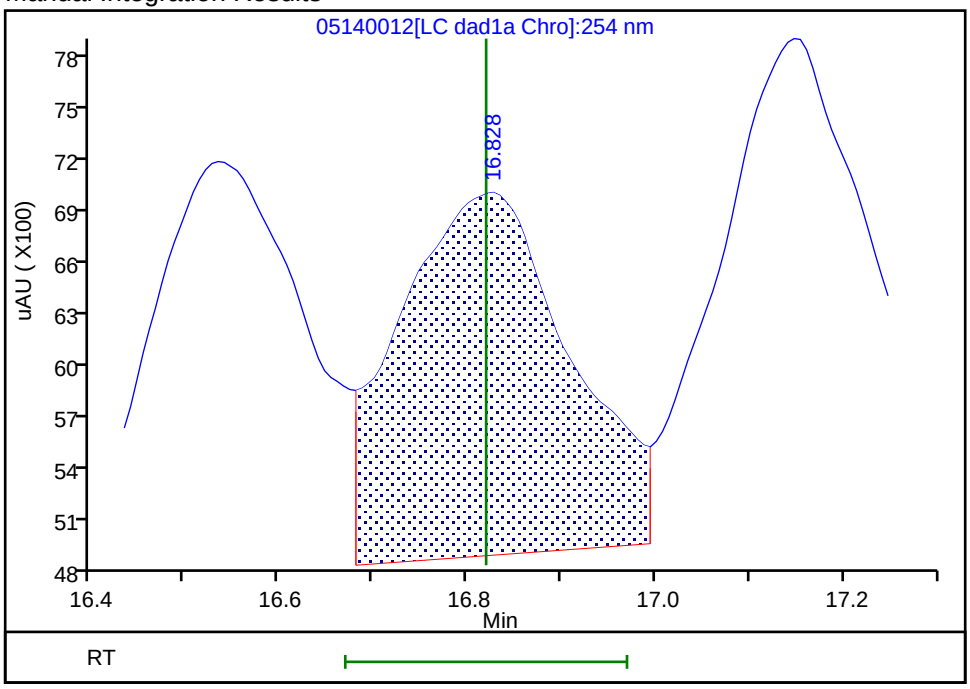
Processing Integration Results

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

Eurofins TestAmerica, Denver

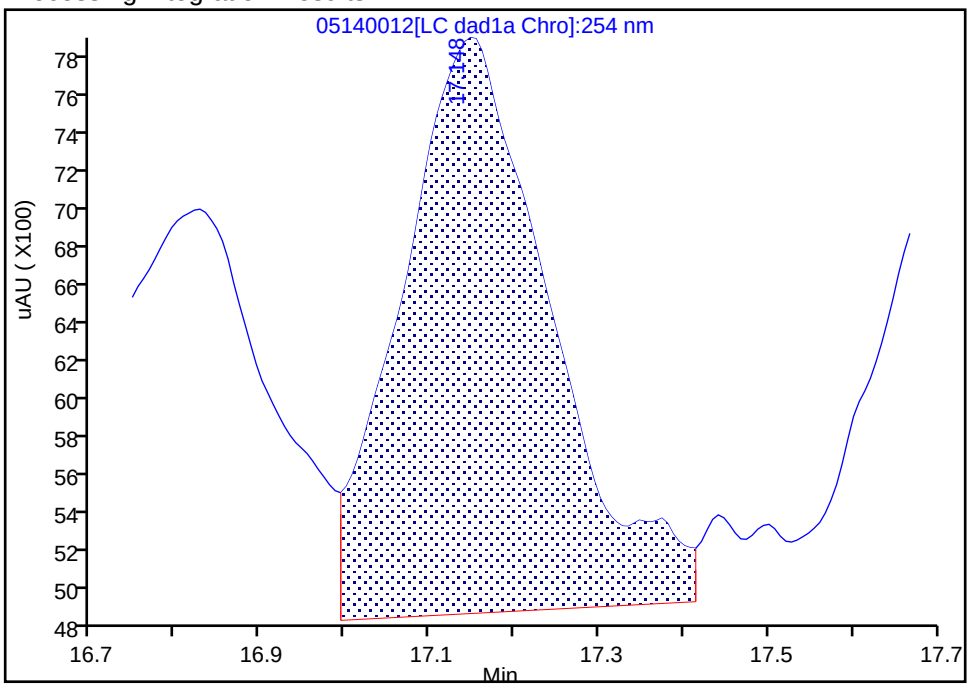
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

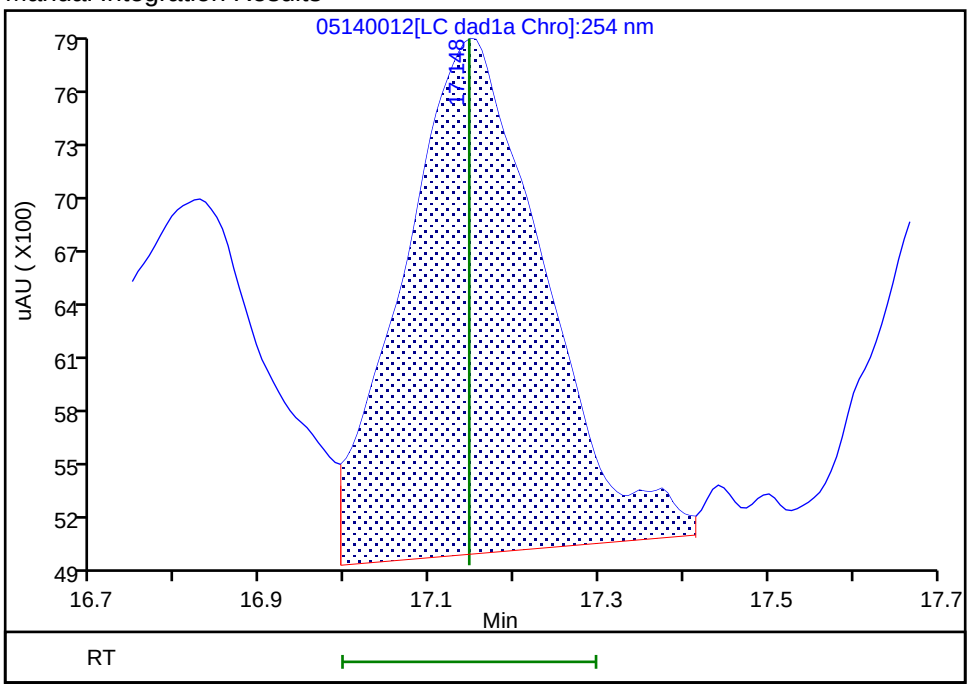
Processing Integration Results

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

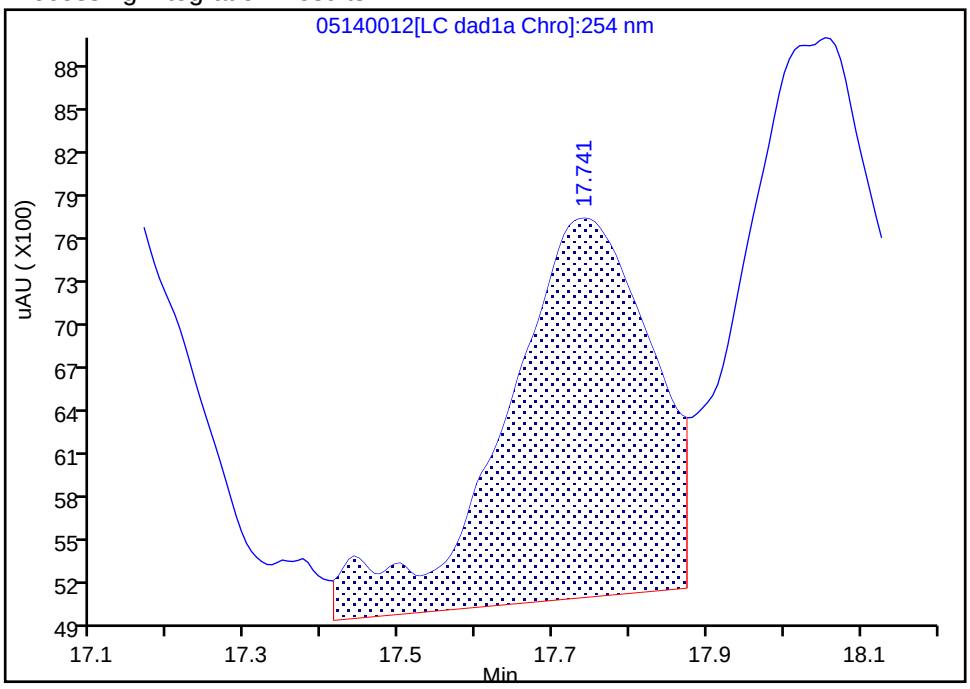
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

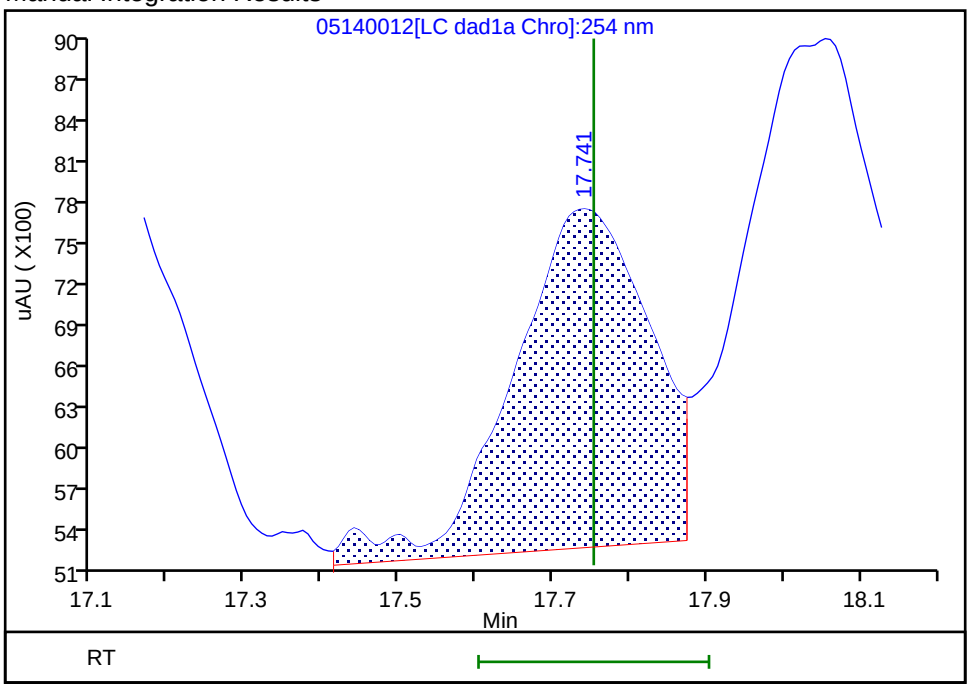
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

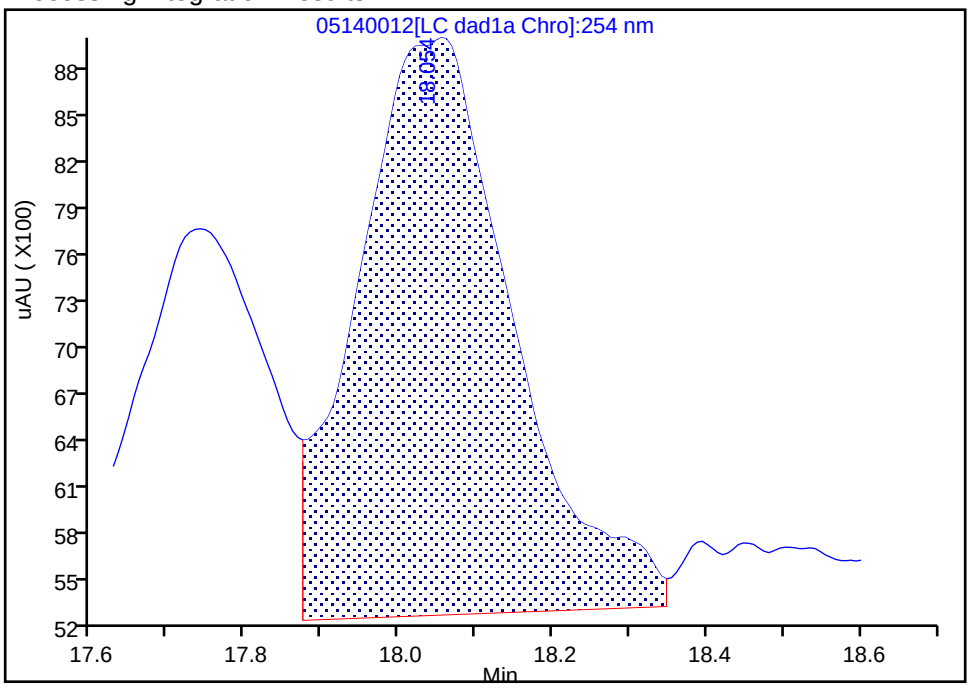
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

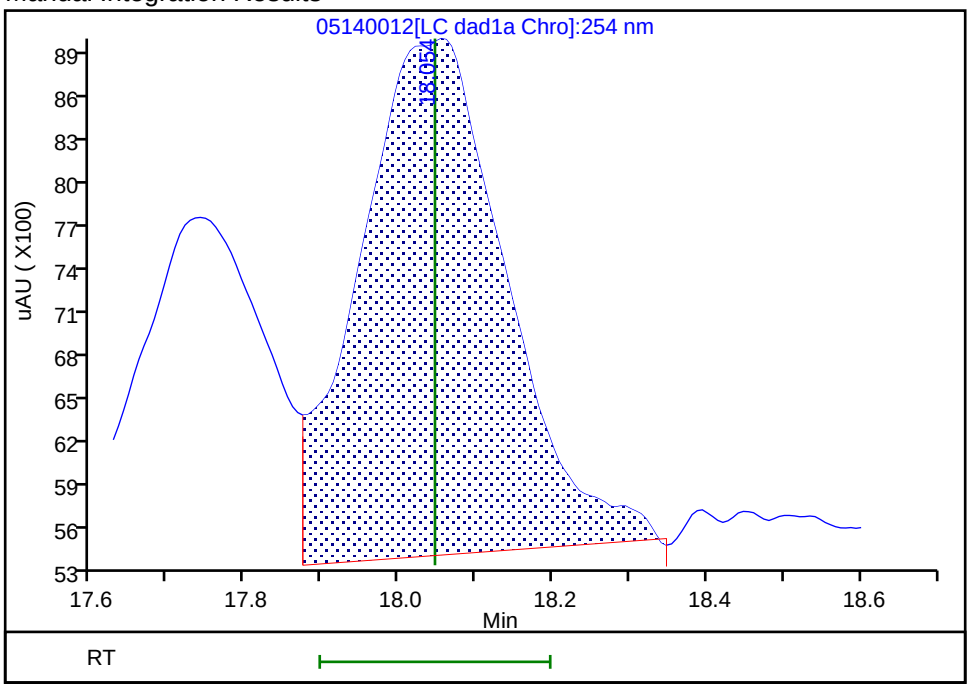
Processing Integration Results

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

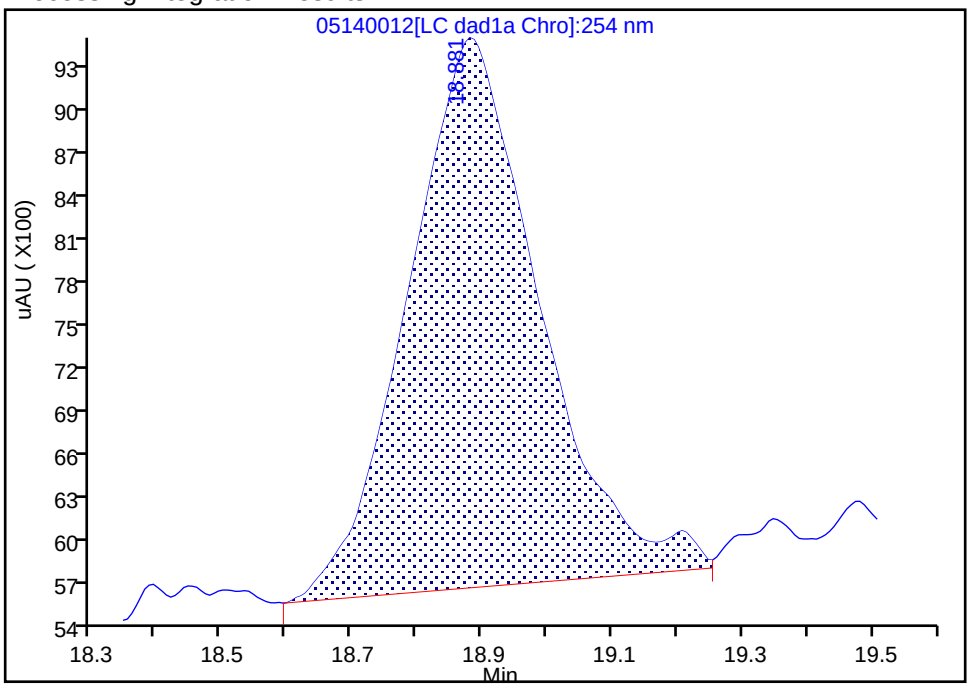
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

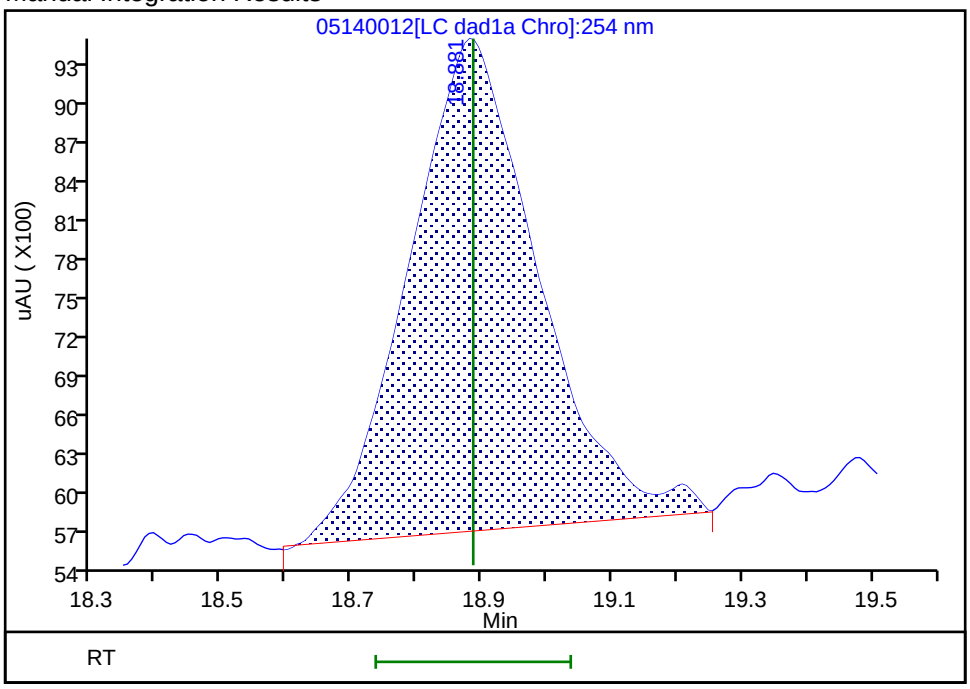
Processing Integration Results

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

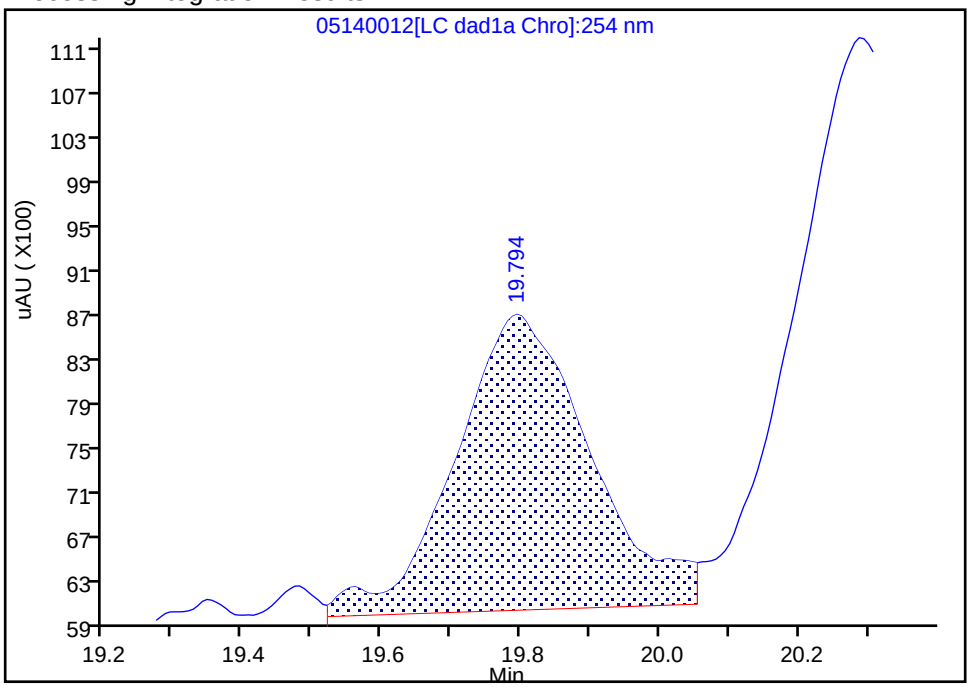
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

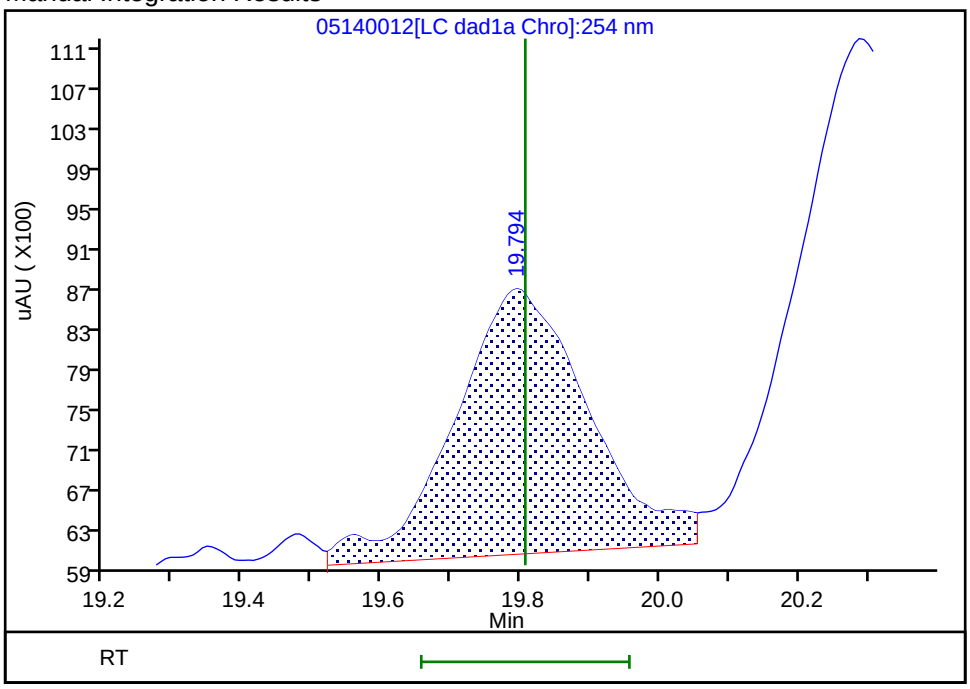
Processing Integration Results

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

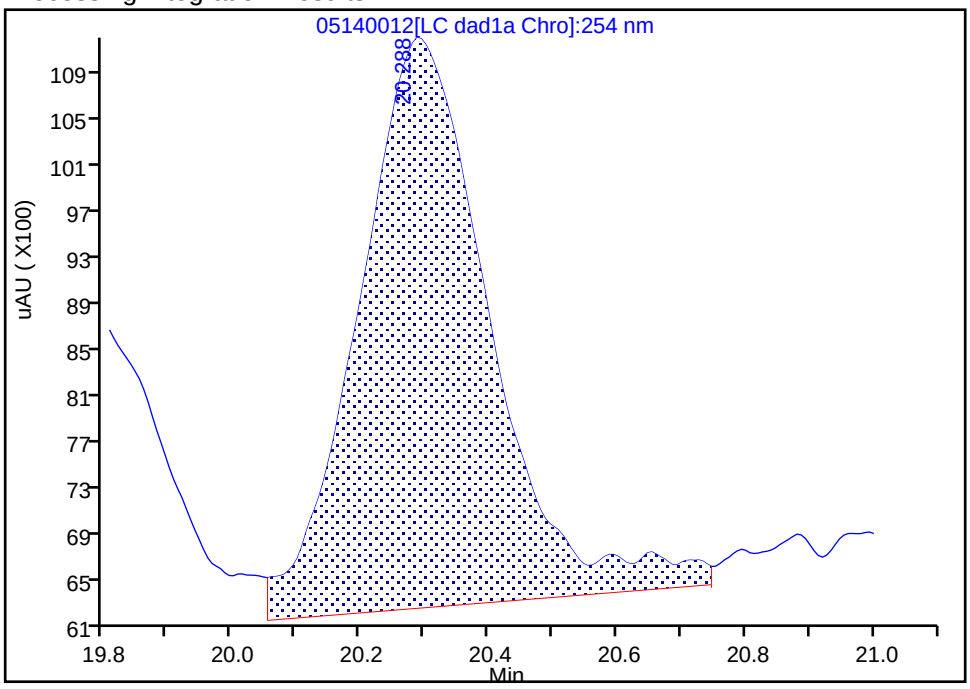
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

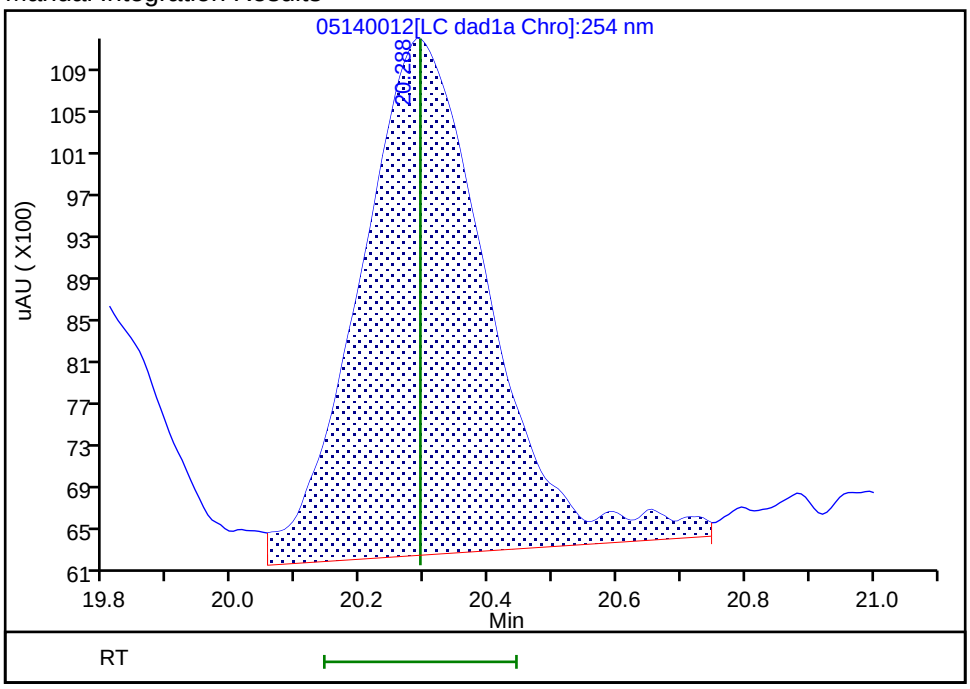
Processing Integration Results

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

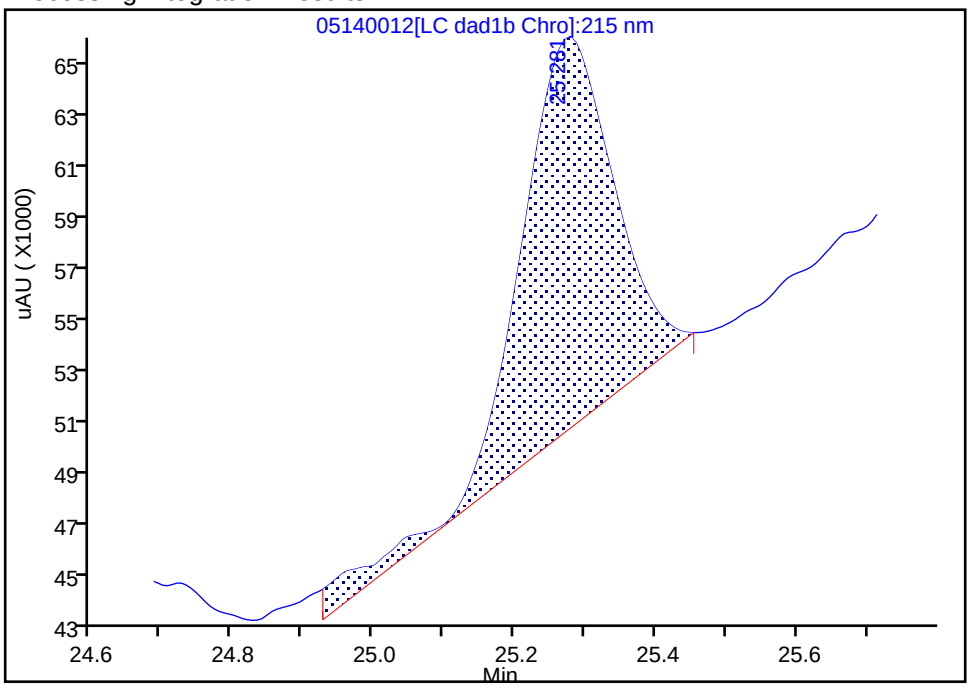
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d
Injection Date: 14-May-2020 19:11:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 4
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

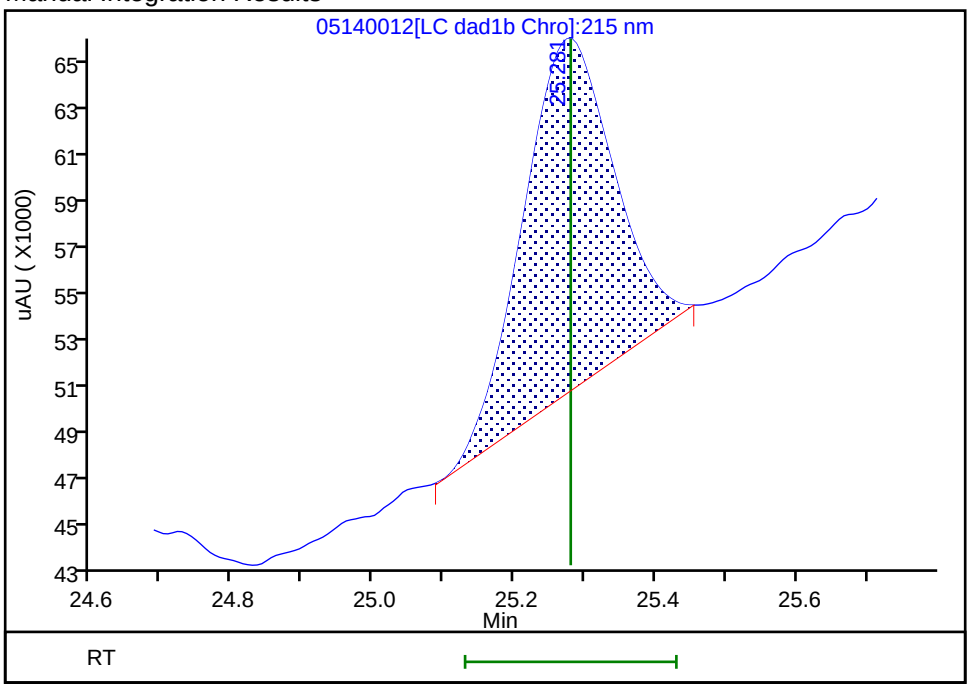
Processing Integration Results

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

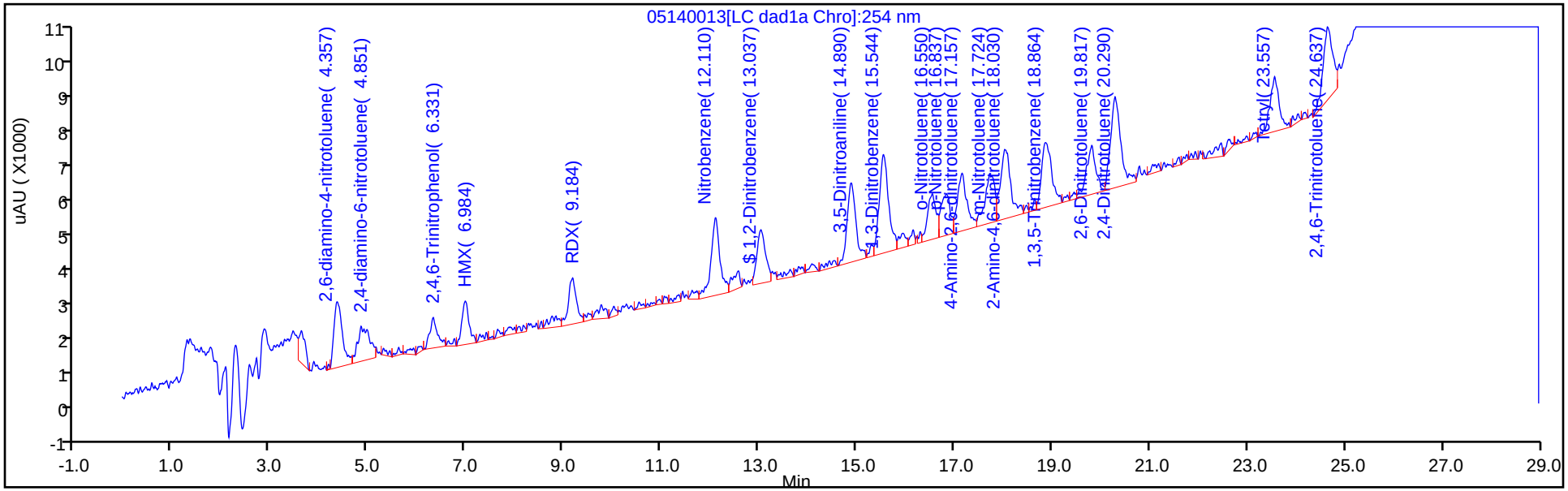
Report Date: 15-May-2020 12:00:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

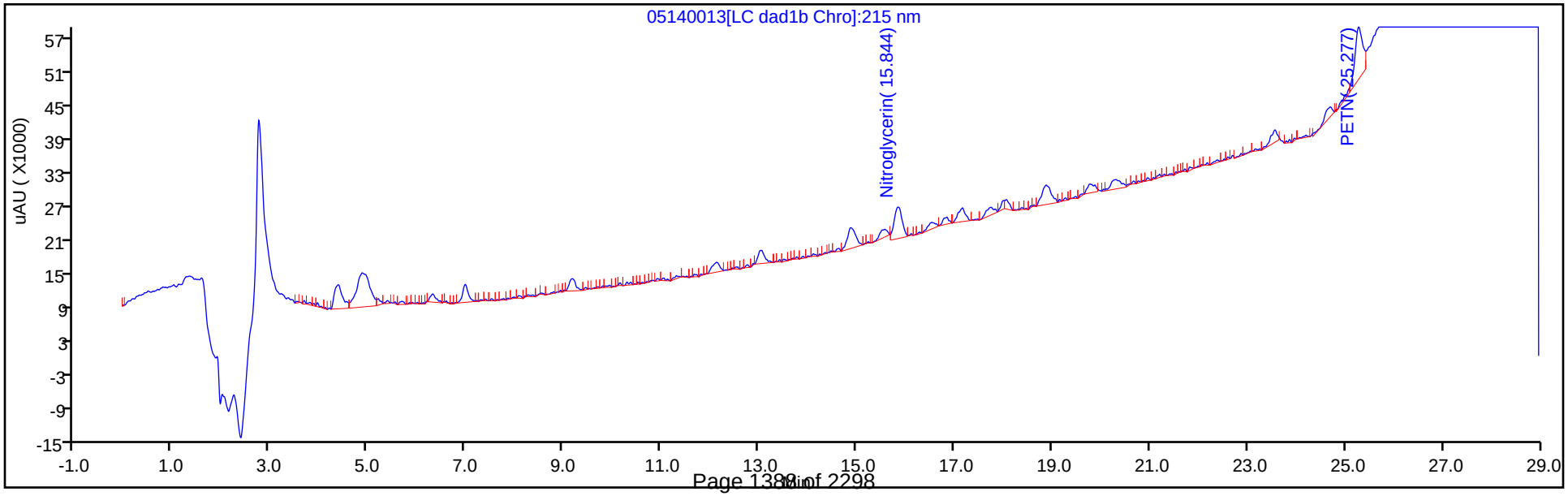
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d

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



Eurofins TestAmerica, Denver

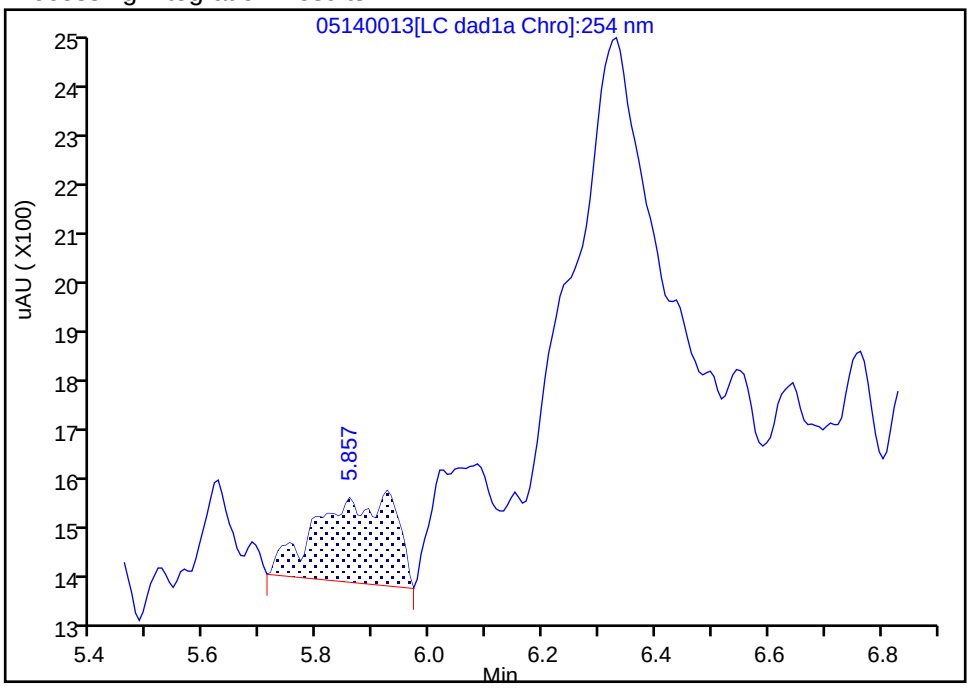
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d
Injection Date: 14-May-2020 19:46:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

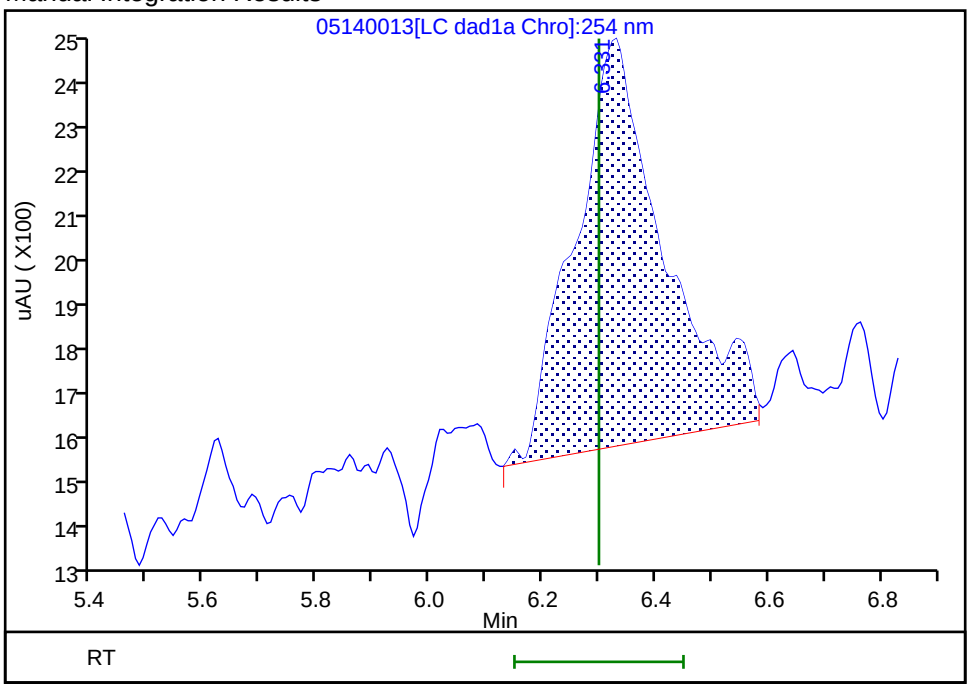
Processing Integration Results

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

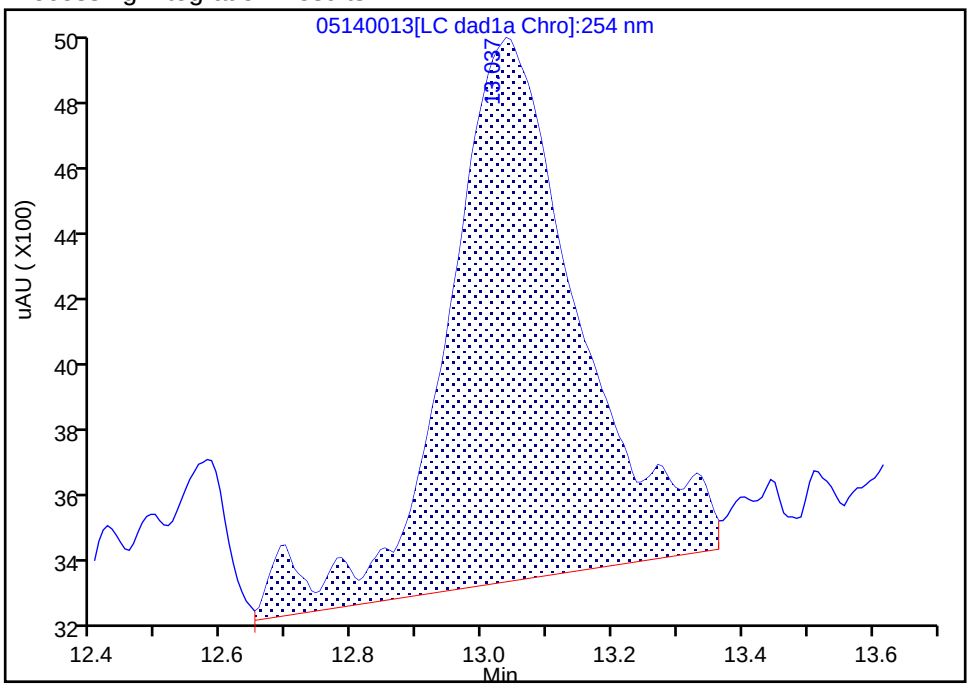
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

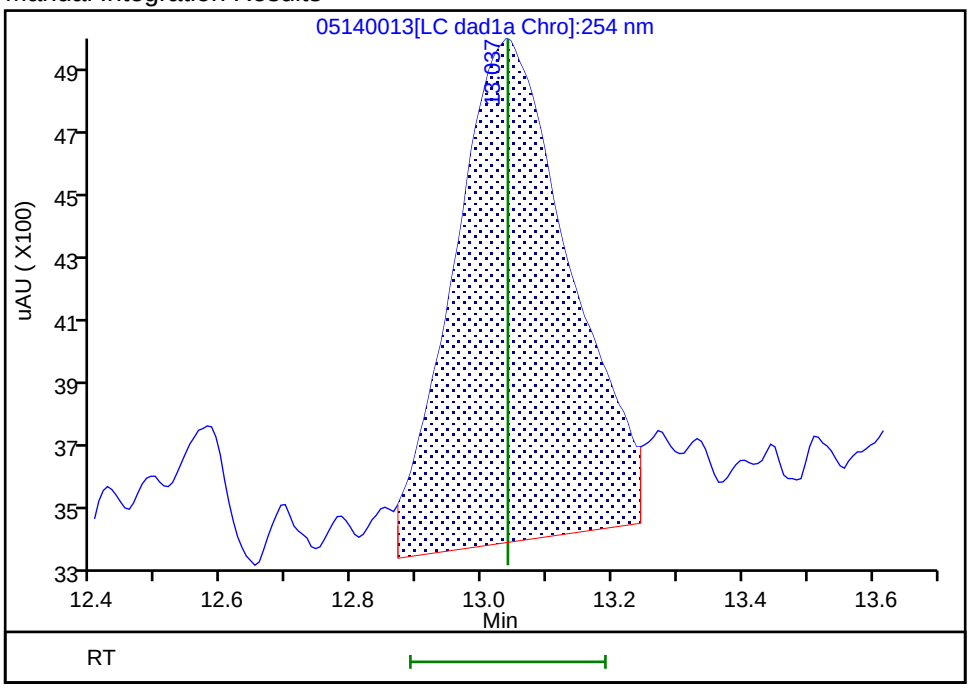
Processing Integration Results

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

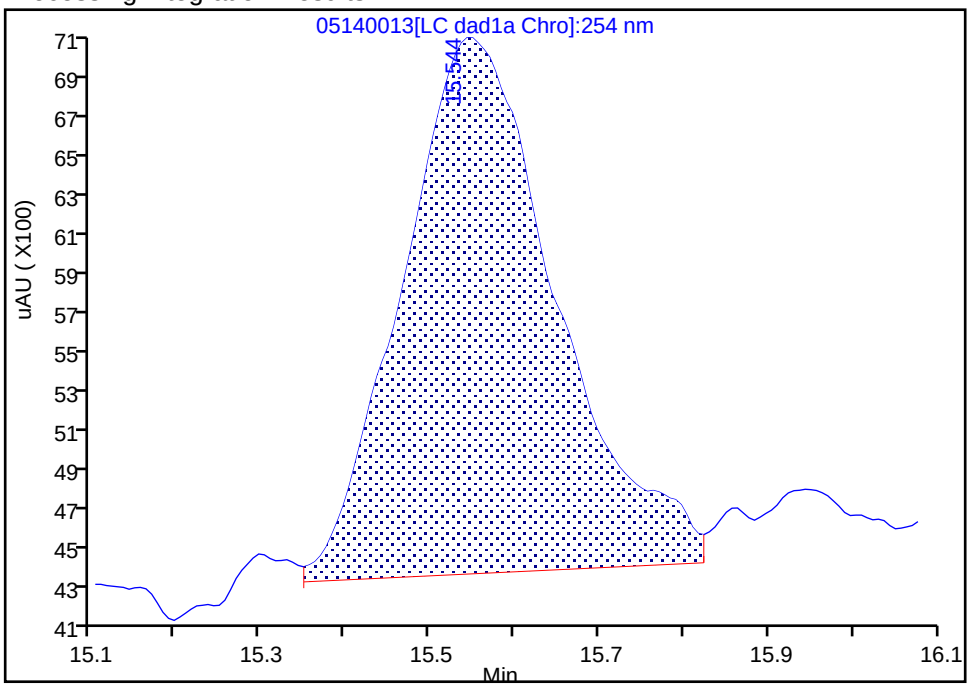
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

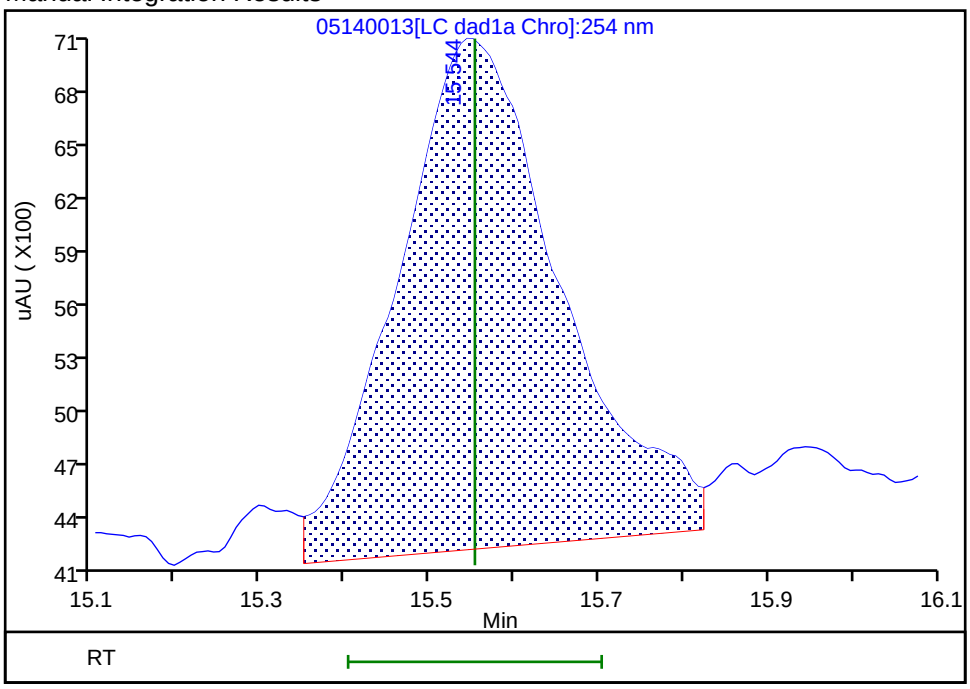
Processing Integration Results

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

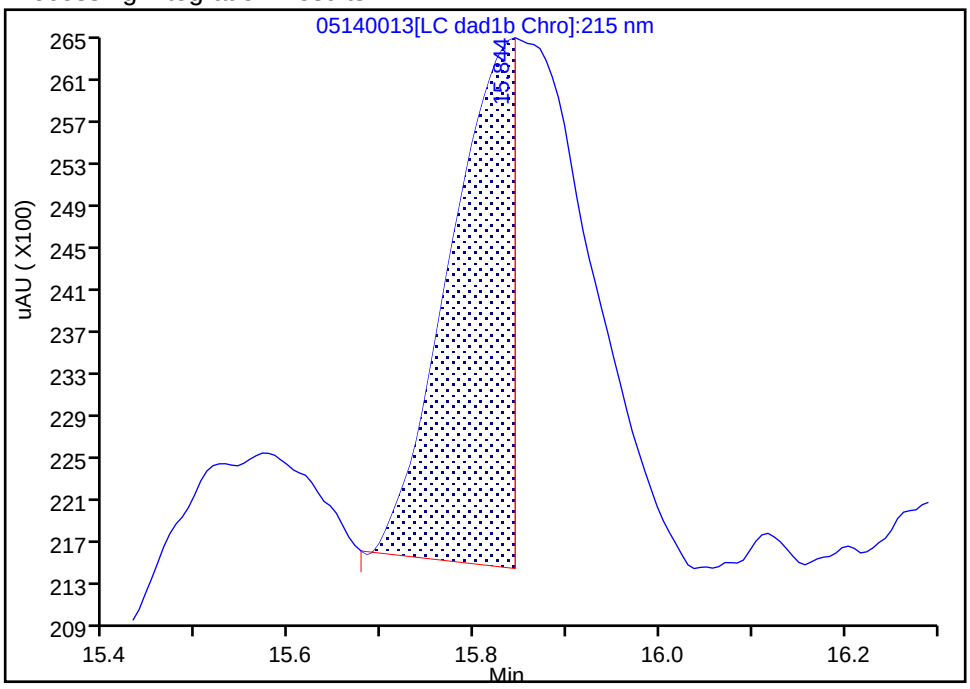
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

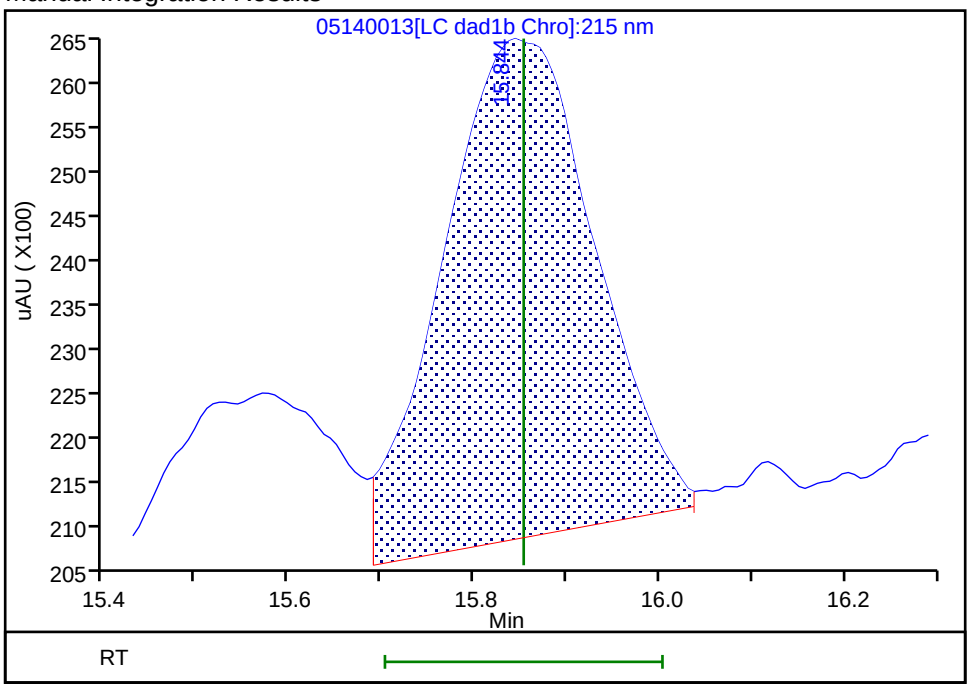
Processing Integration Results

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

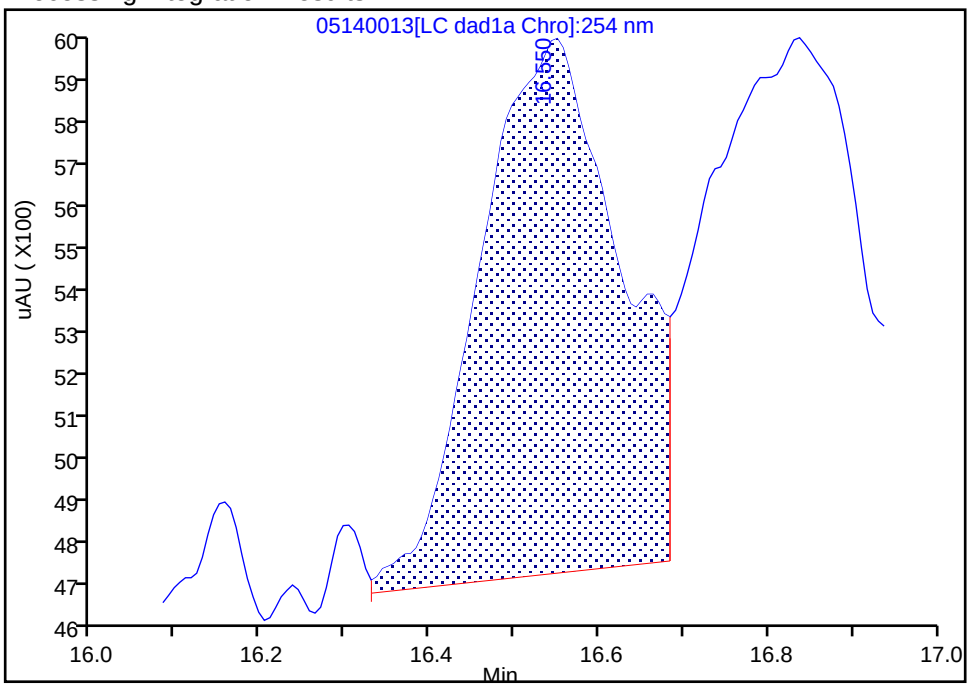
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d
Injection Date: 14-May-2020 19:46:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

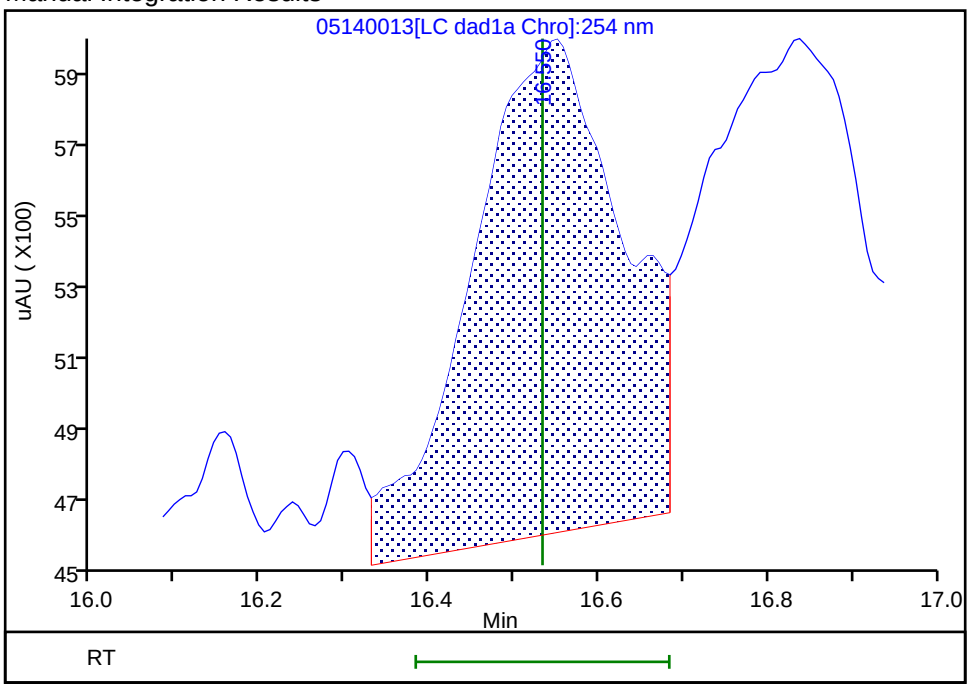
Processing Integration Results

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

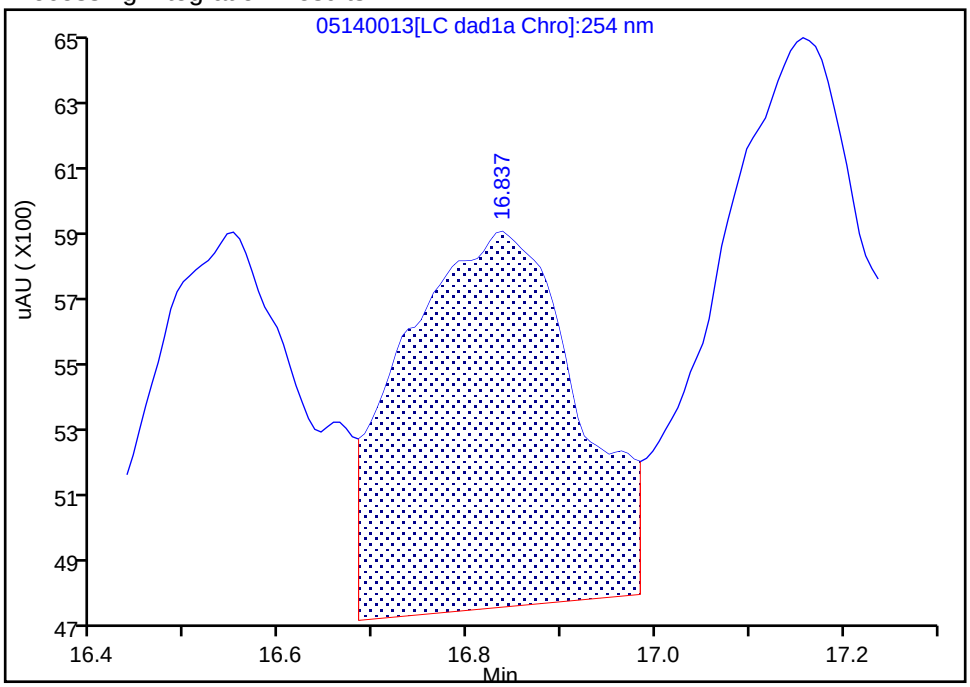
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

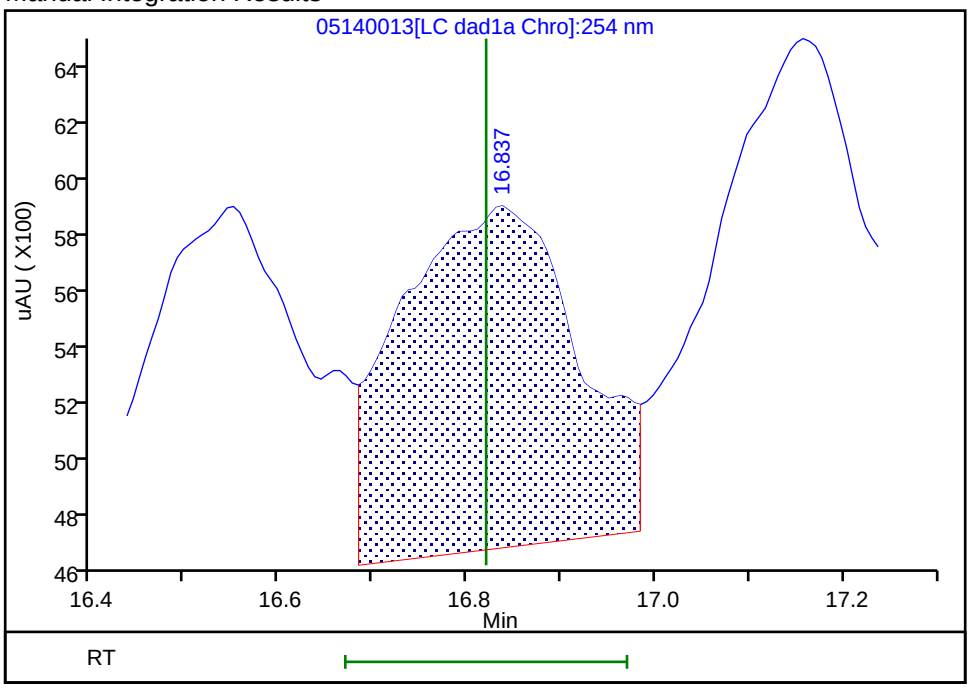
Processing Integration Results

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

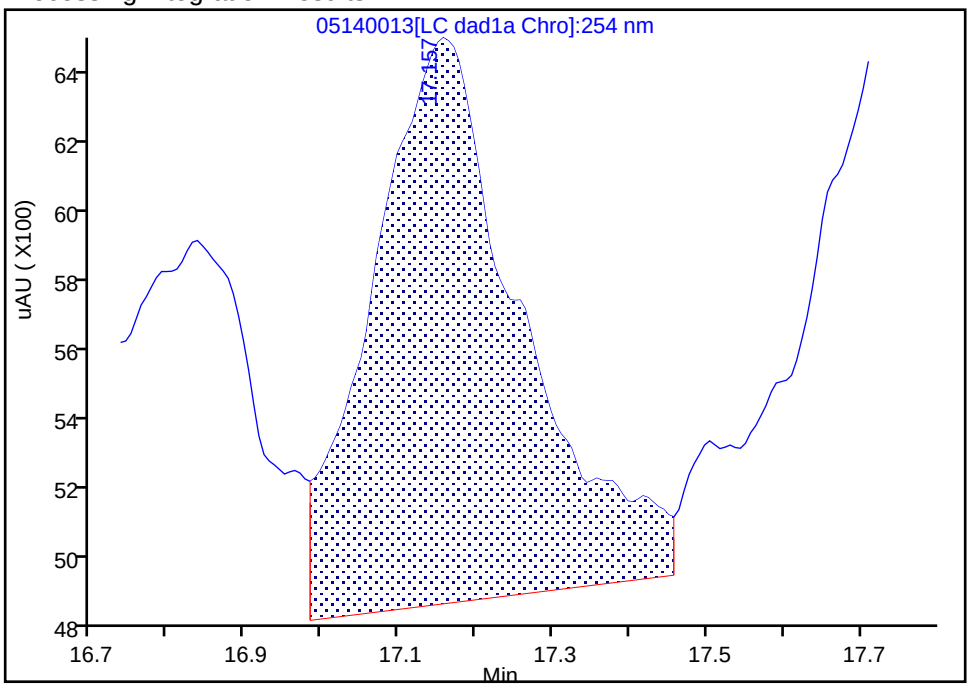
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

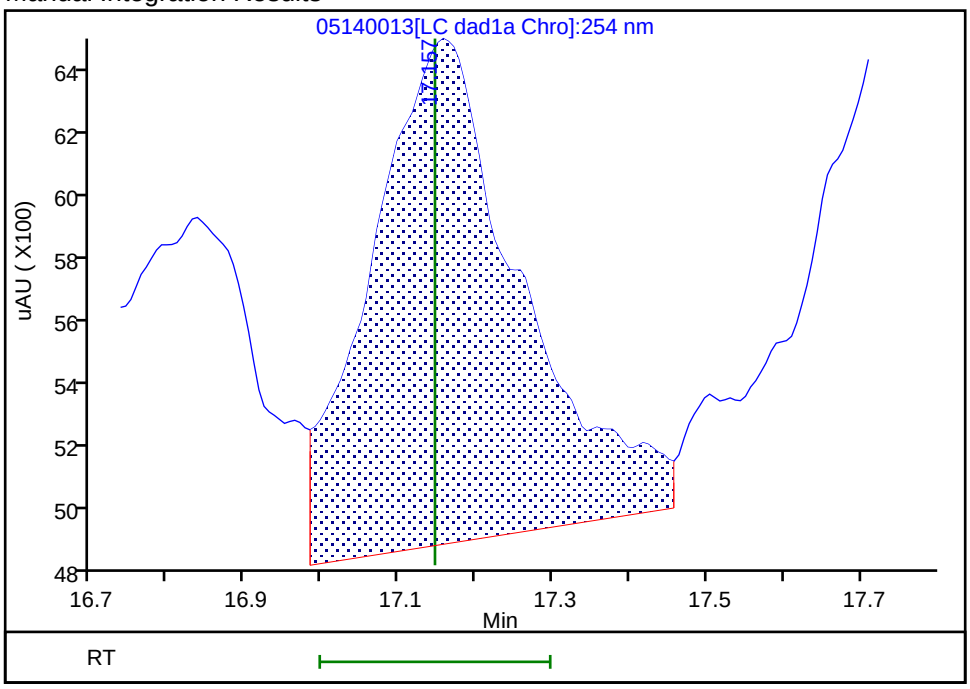
Processing Integration Results

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

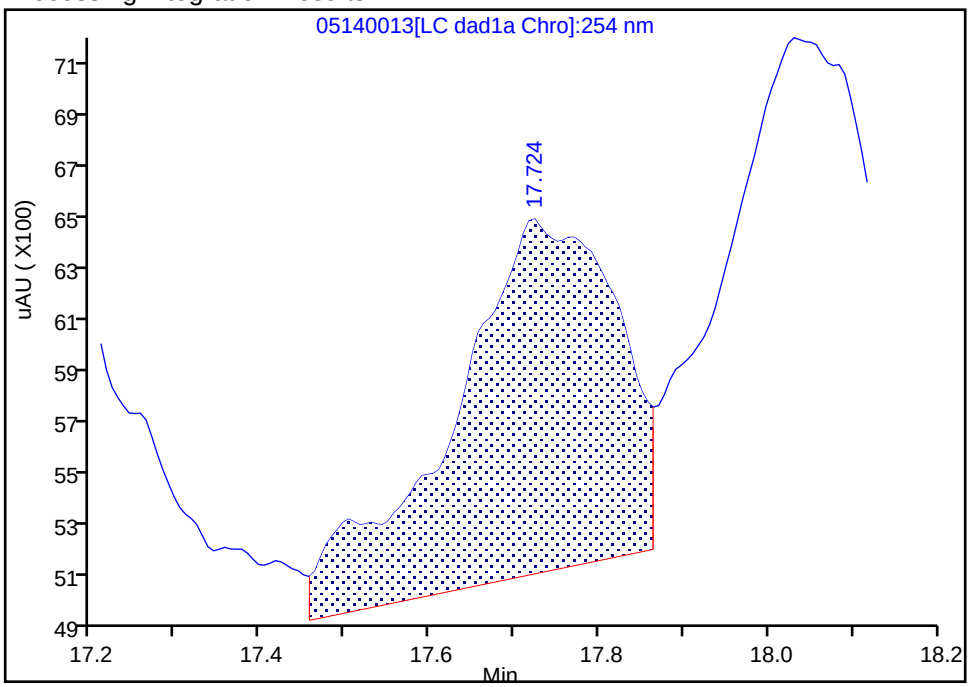
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

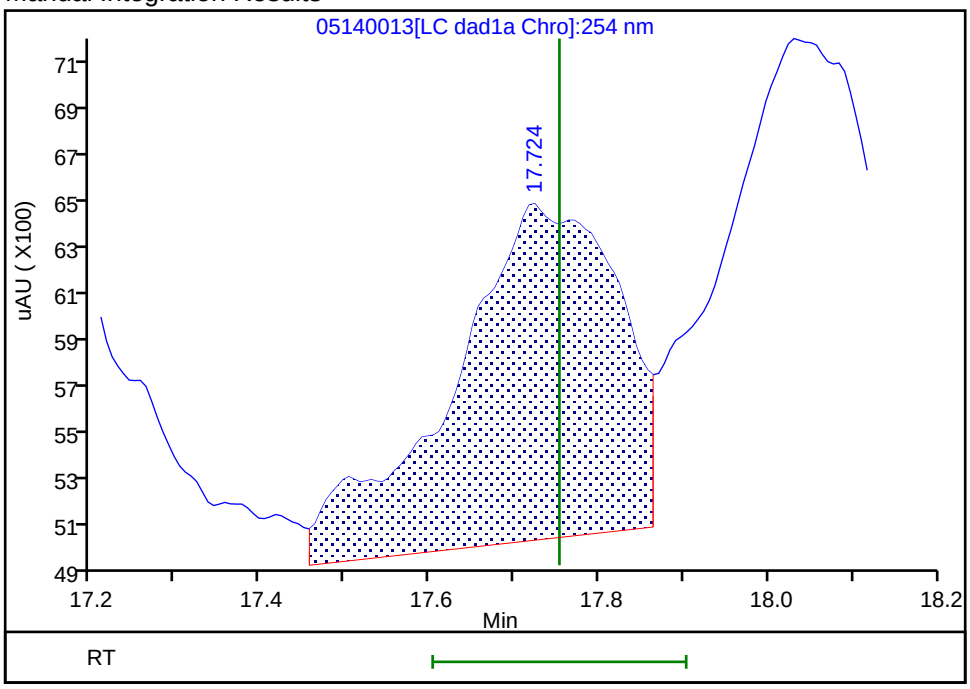
Processing Integration Results

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

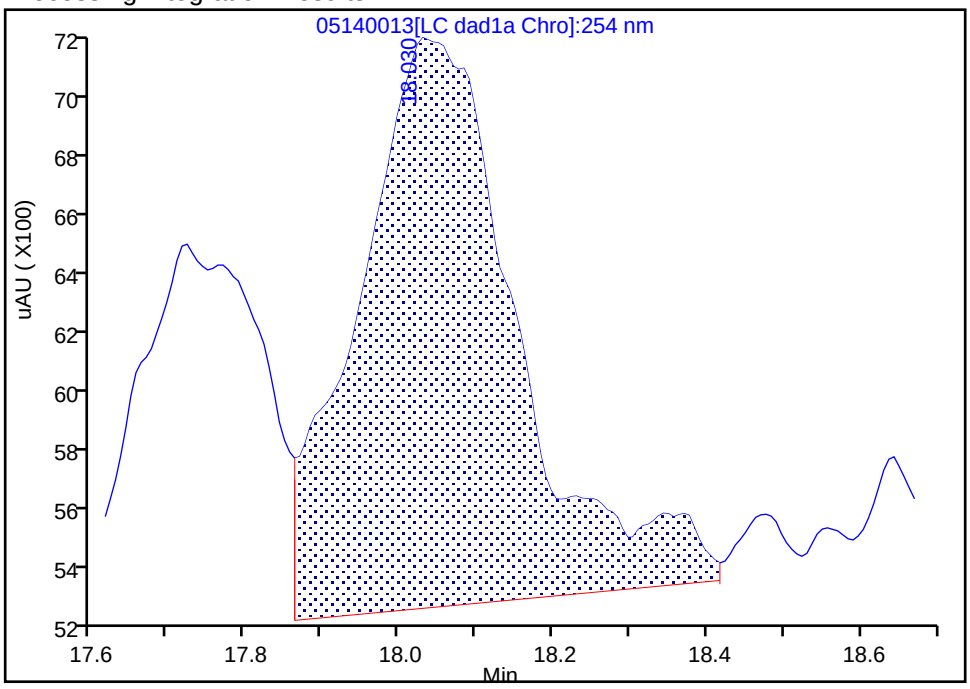
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

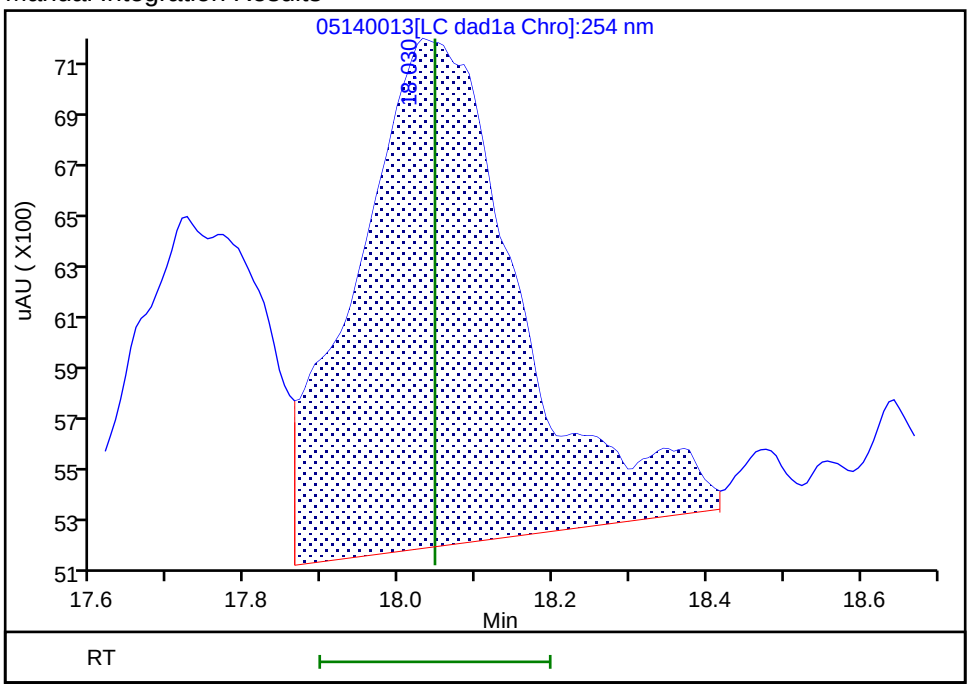
Processing Integration Results

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

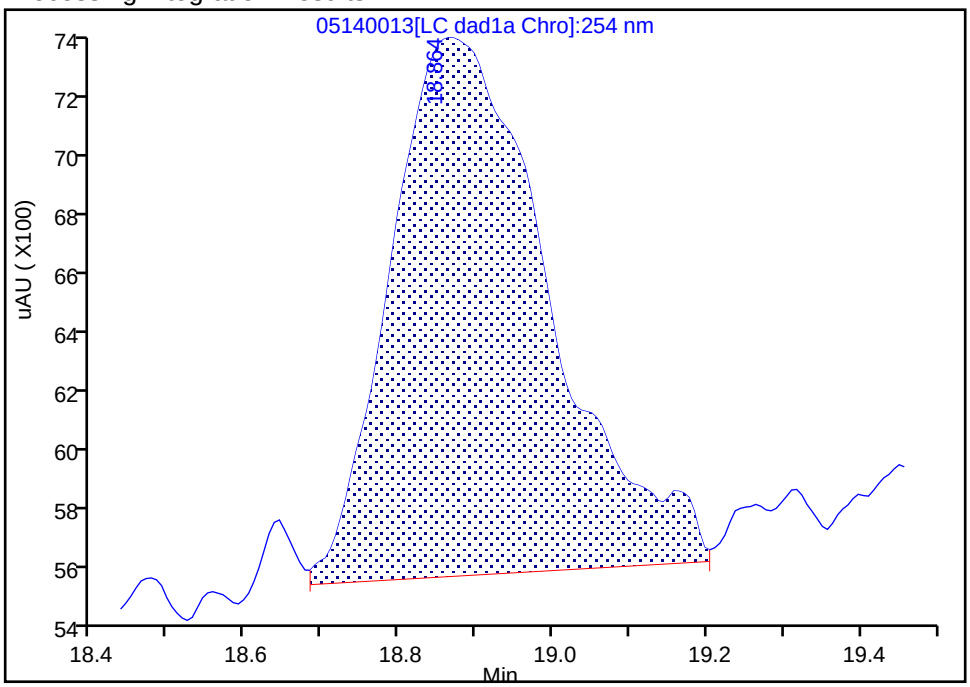
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

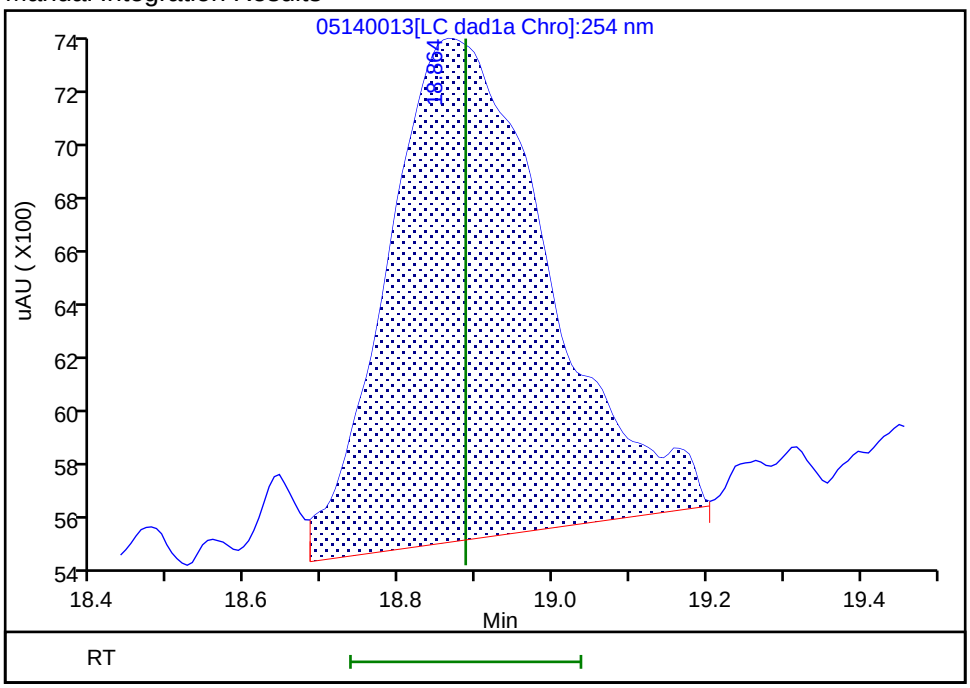
Processing Integration Results

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

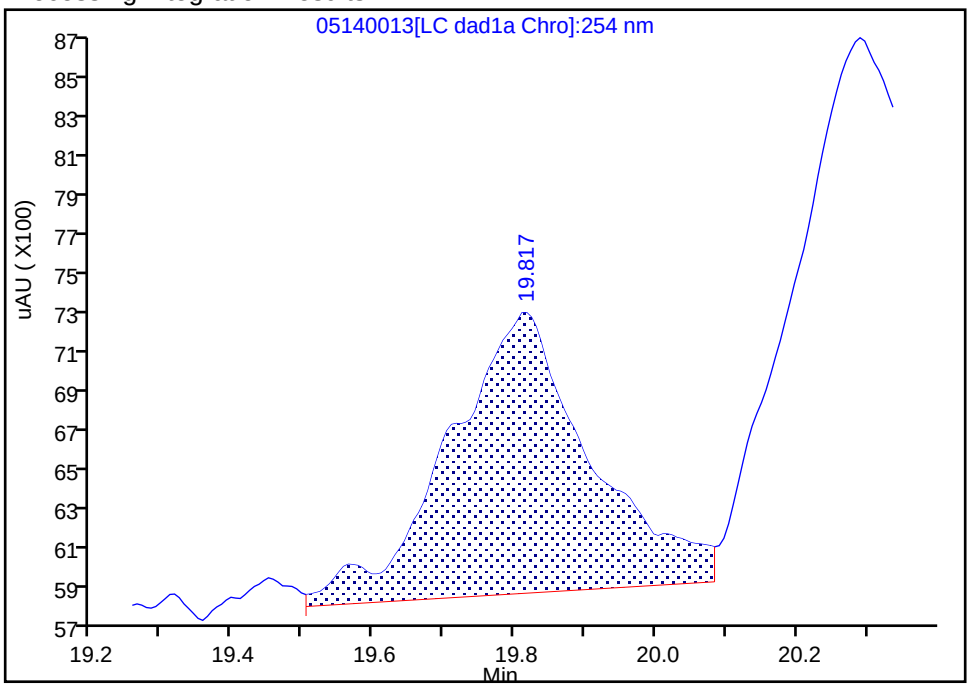
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

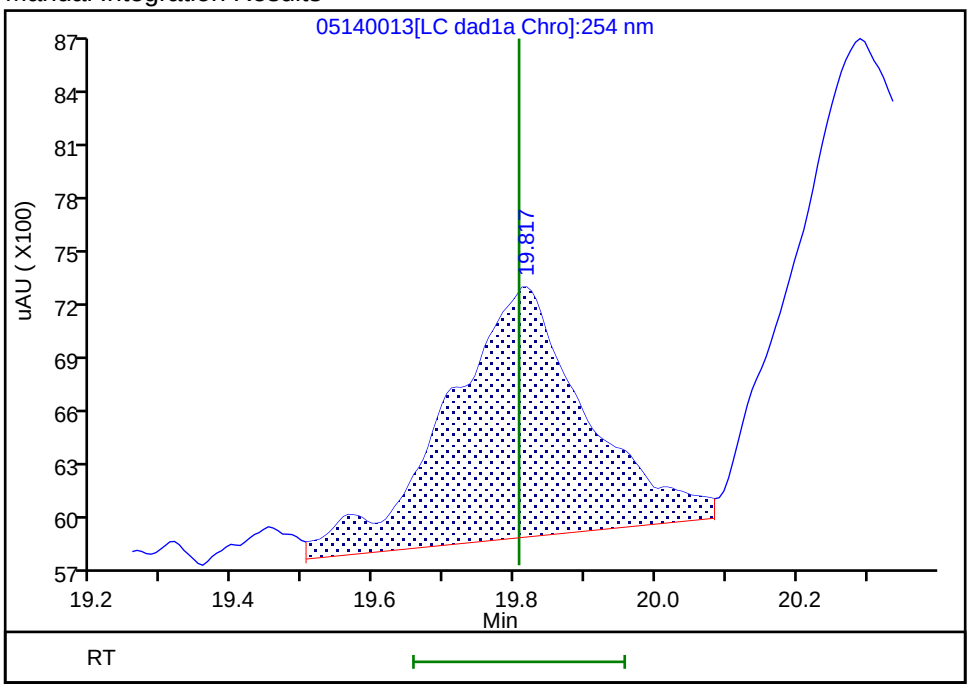
Processing Integration Results

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

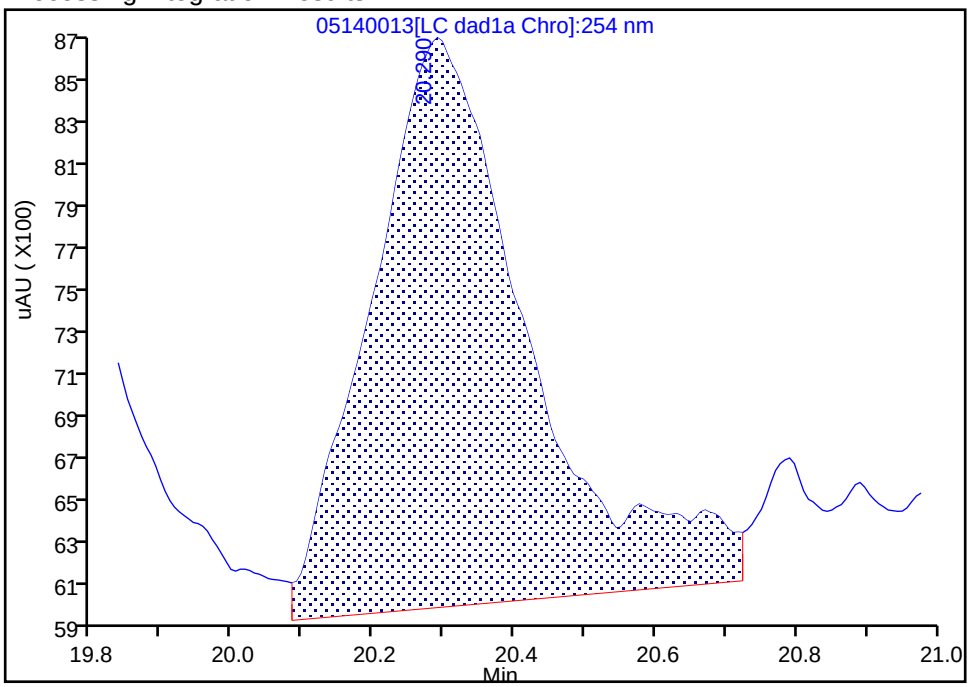
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

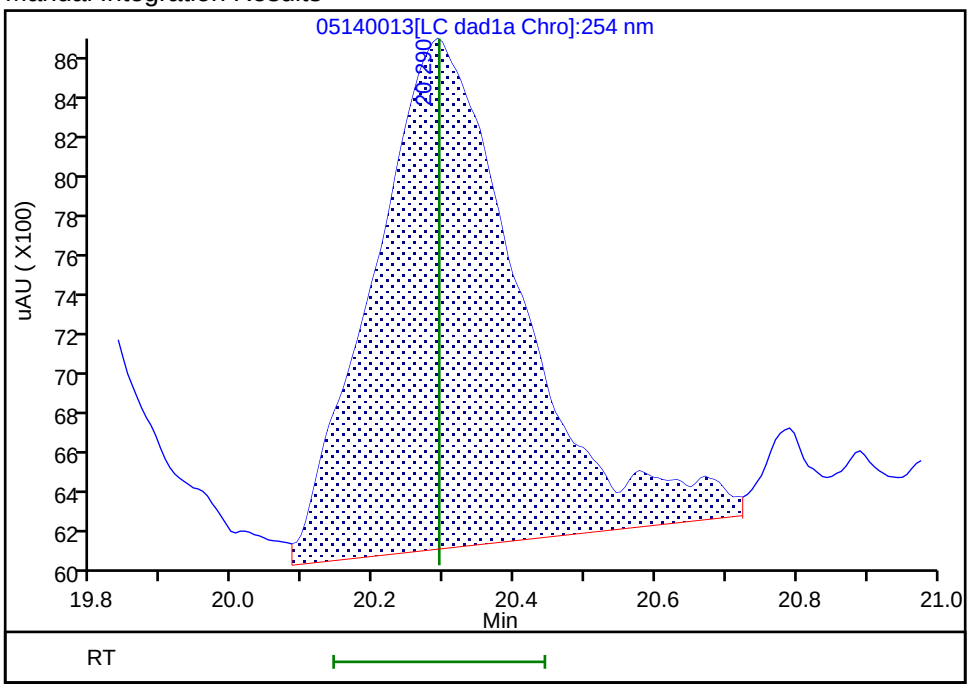
Processing Integration Results

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

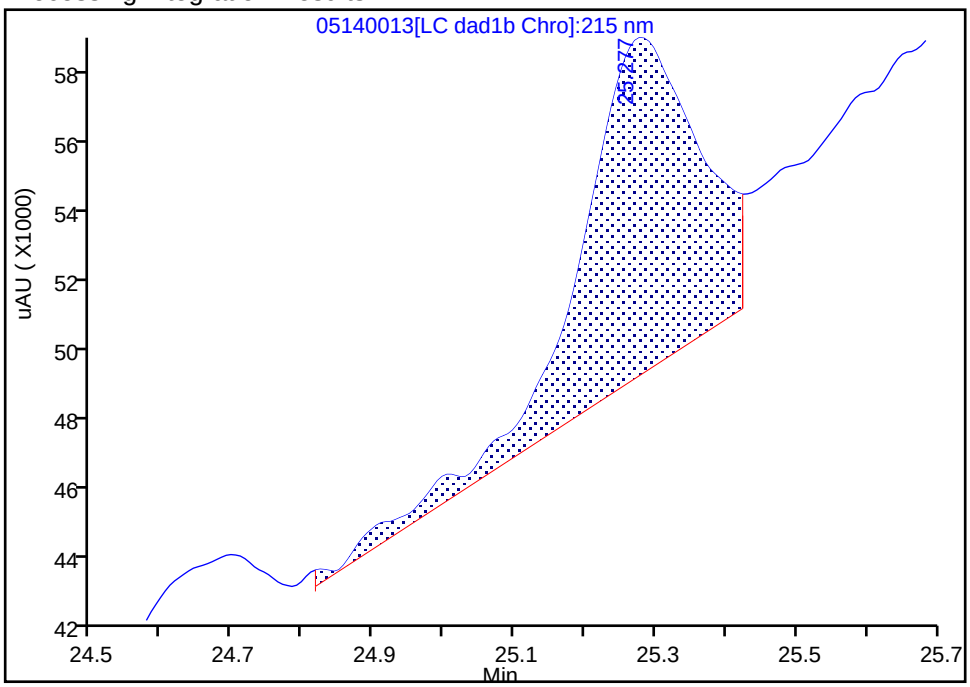
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d		
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA
Lims ID:	IC FULL 3		
Client ID:			
Operator ID:	CB	ALS Bottle#:	13 Worklist Smp#: 13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330
Column:		Detector	LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

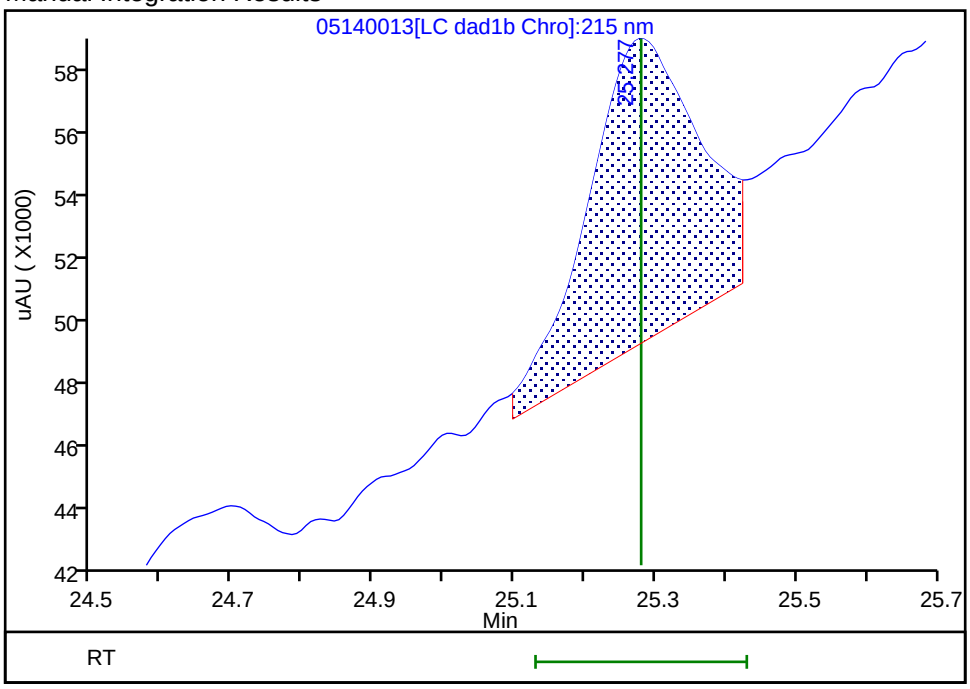
Processing Integration Results

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

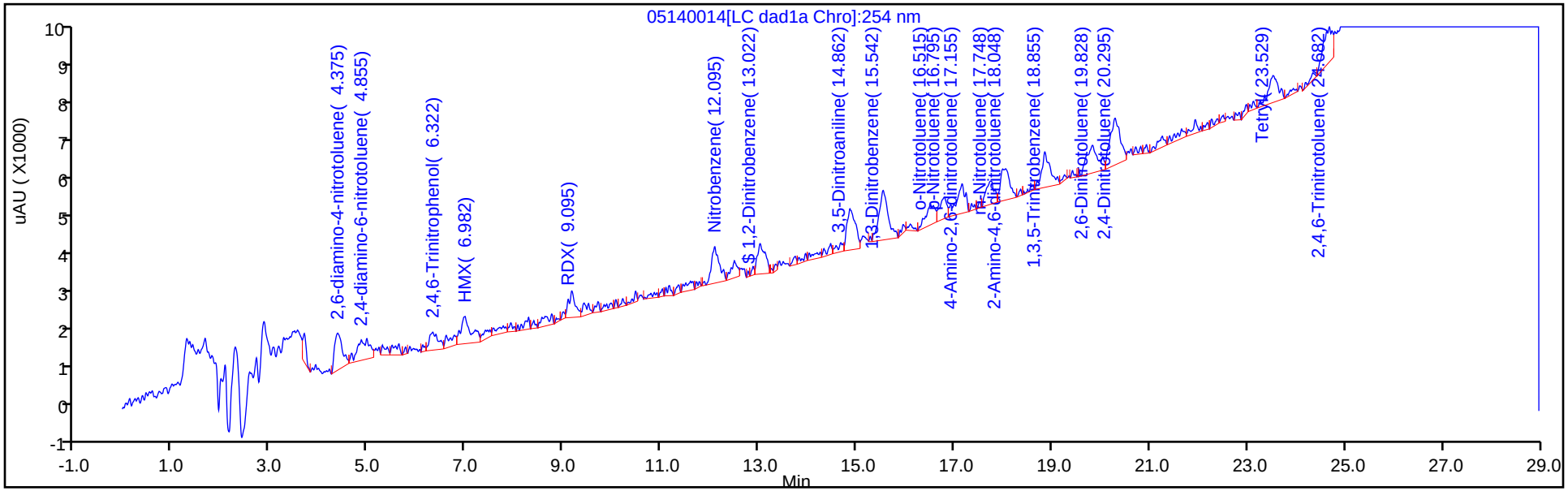
Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

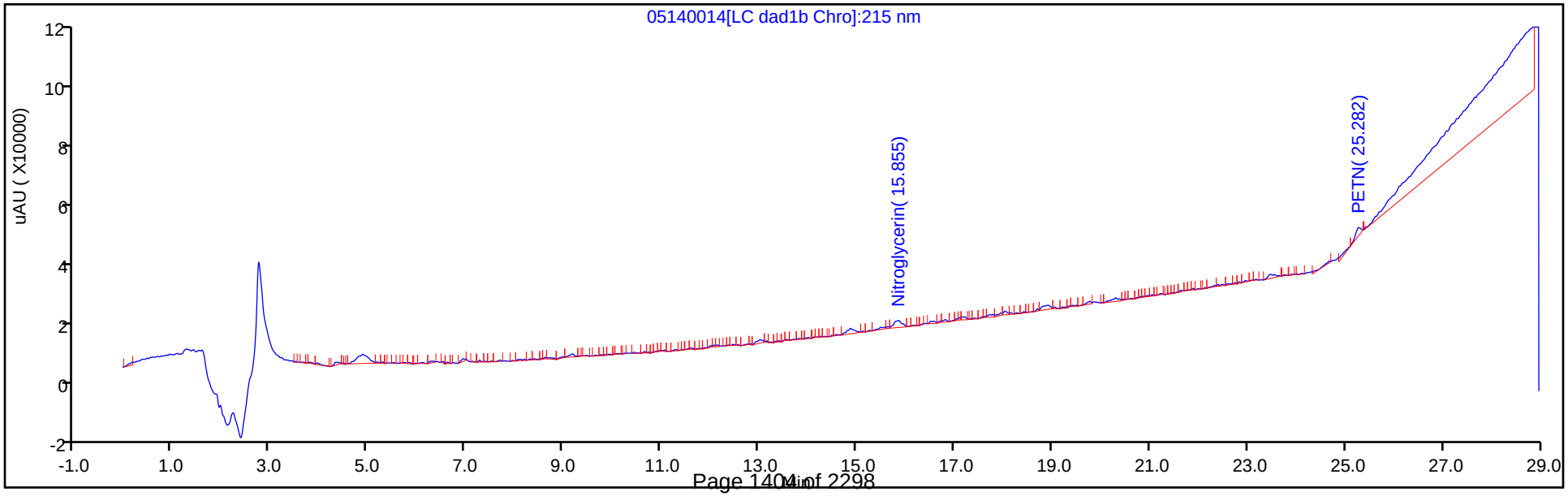
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d

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

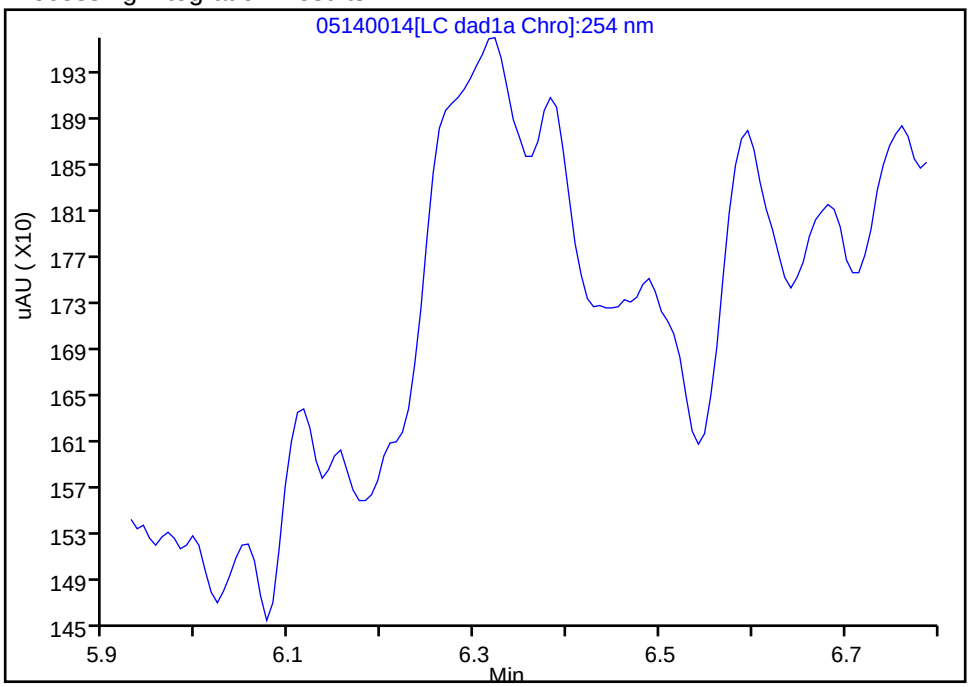
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

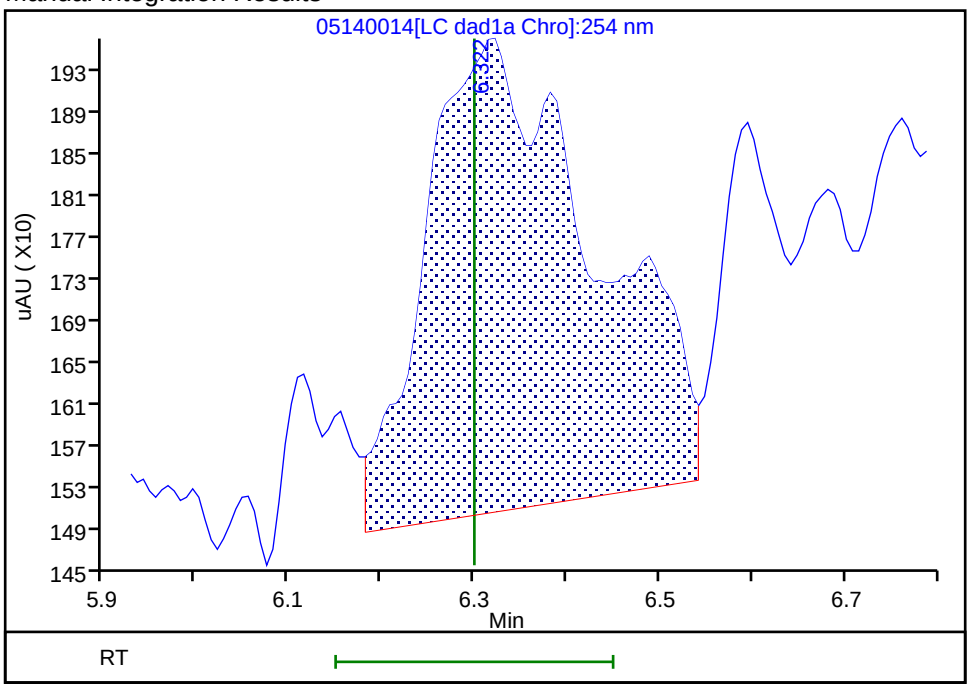
Not Detected
Expected RT: 6.30

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

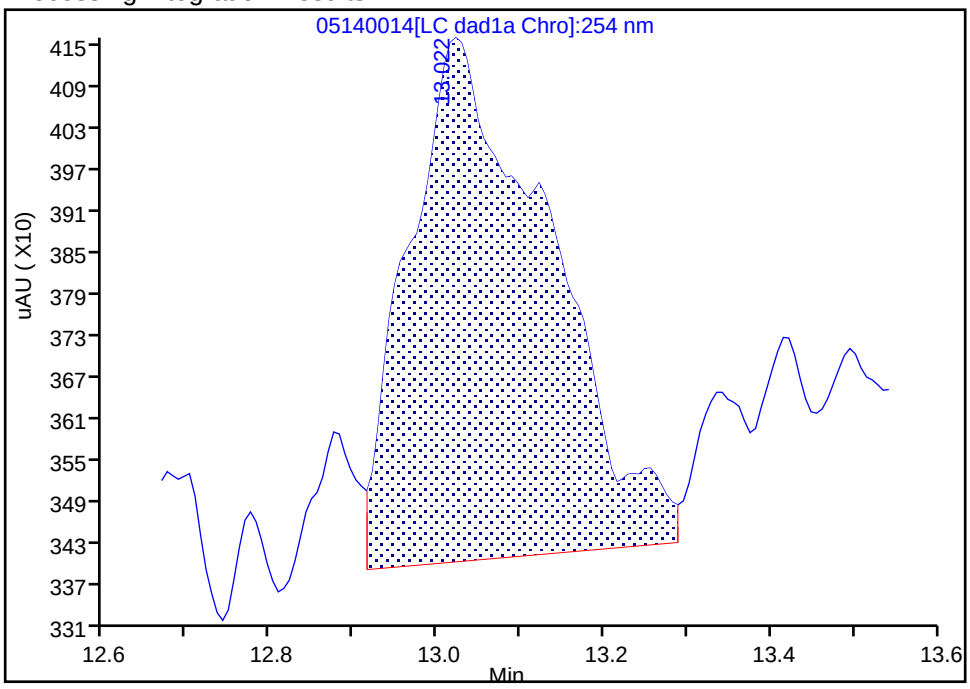
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

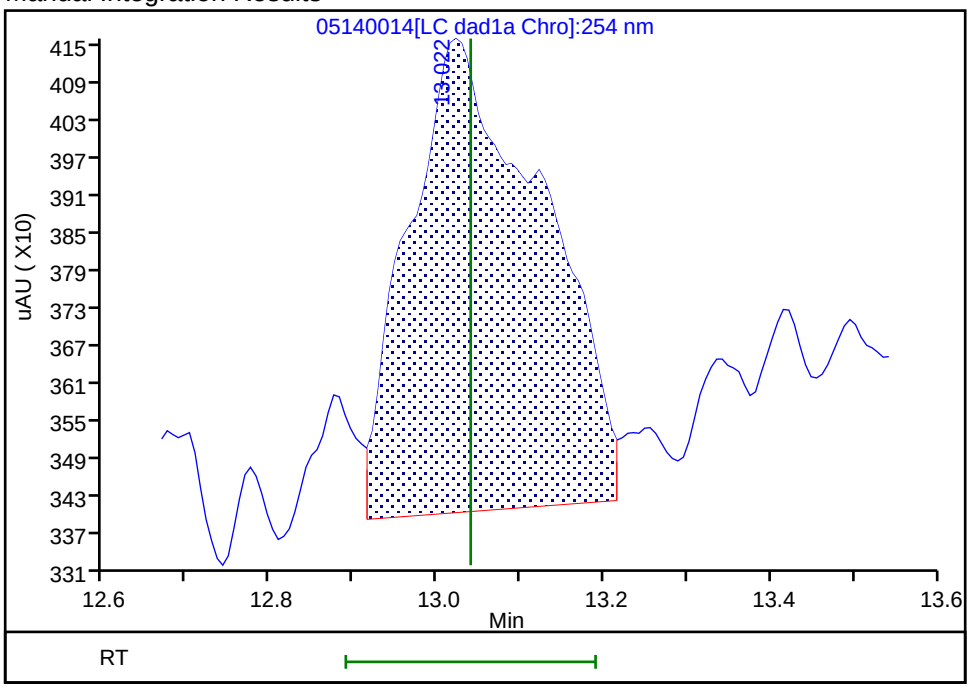
Processing Integration Results

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

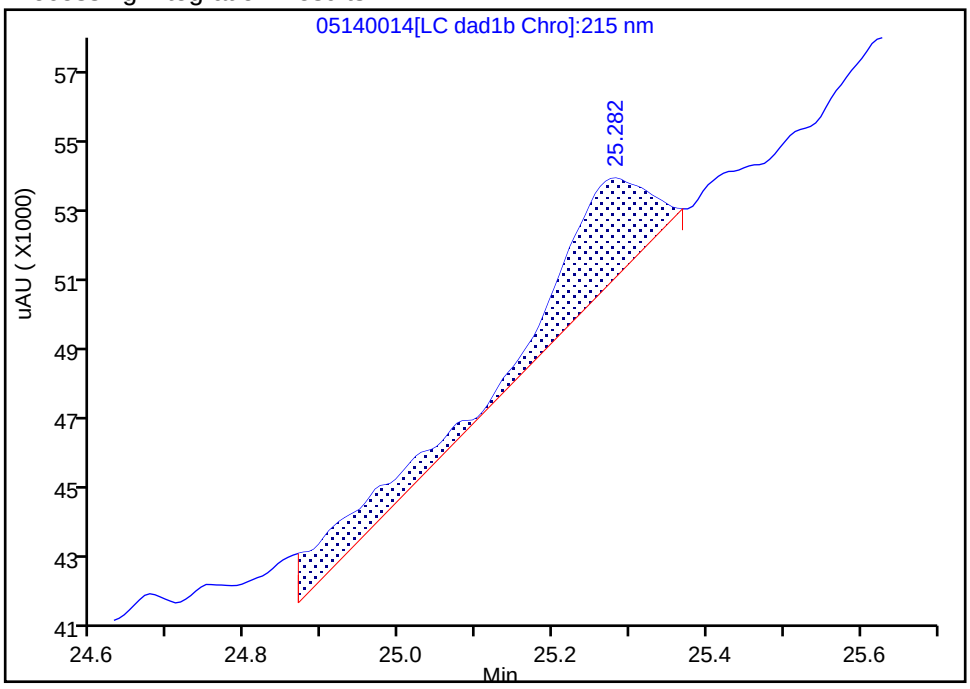
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d
Injection Date: 14-May-2020 20:21:33 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 2
Client ID:
Operator ID: CB ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

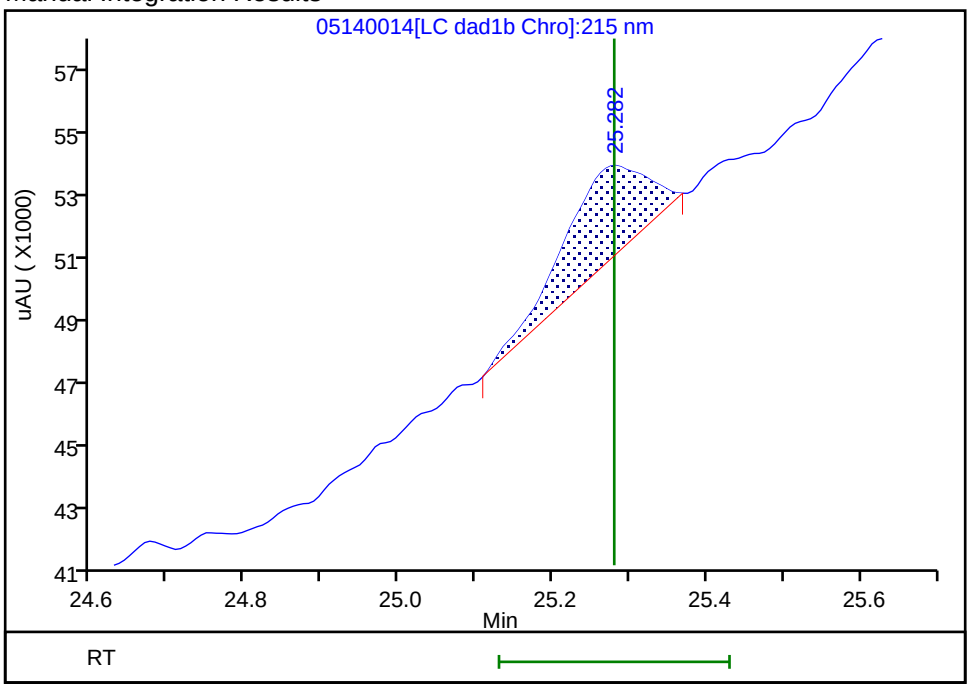
Processing Integration Results

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

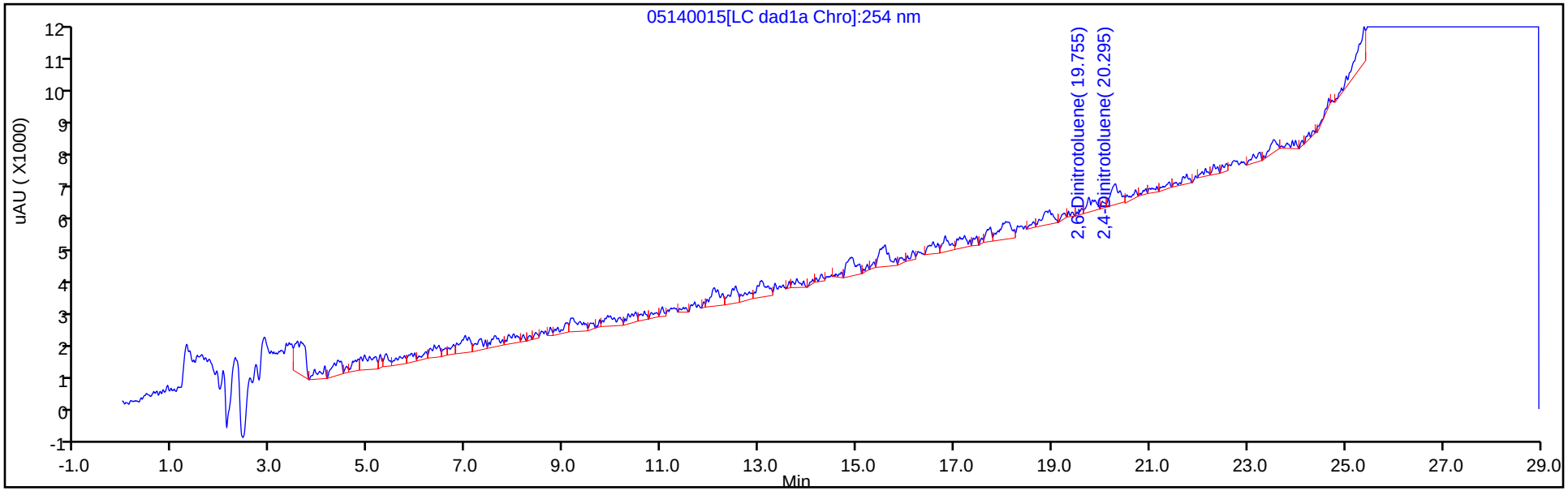
Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

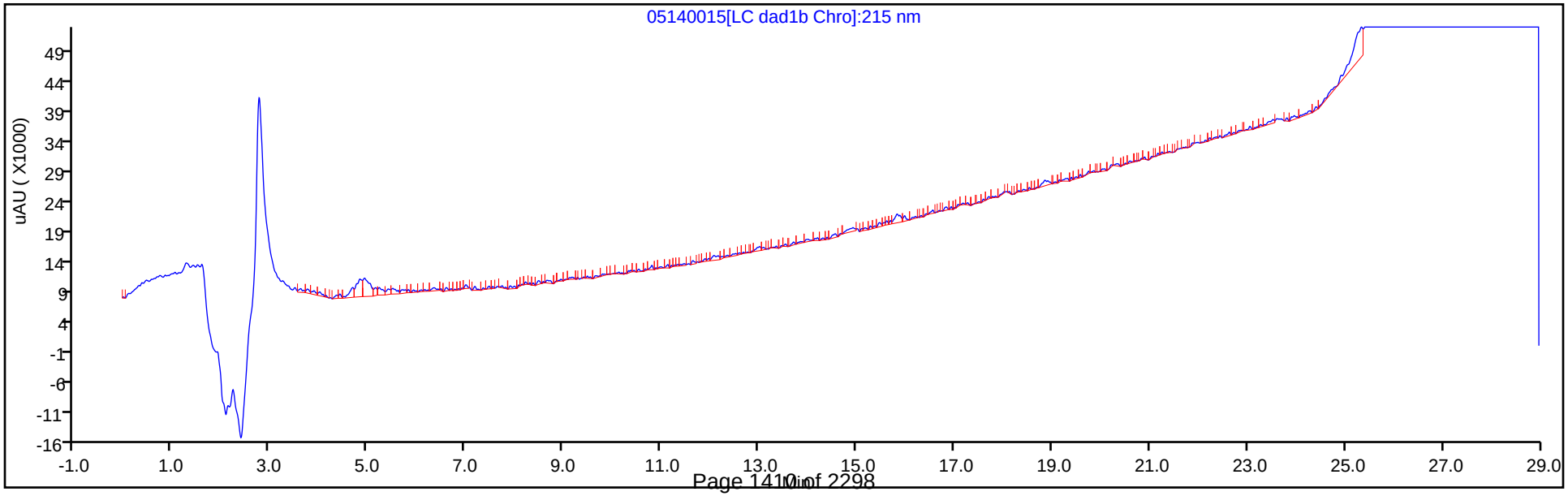
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d

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

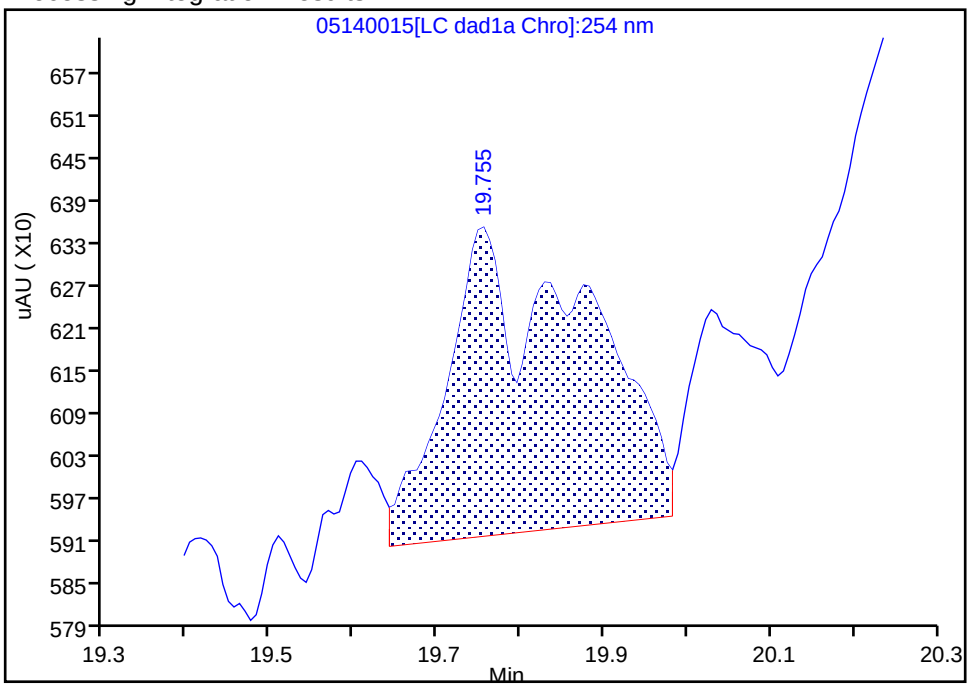
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

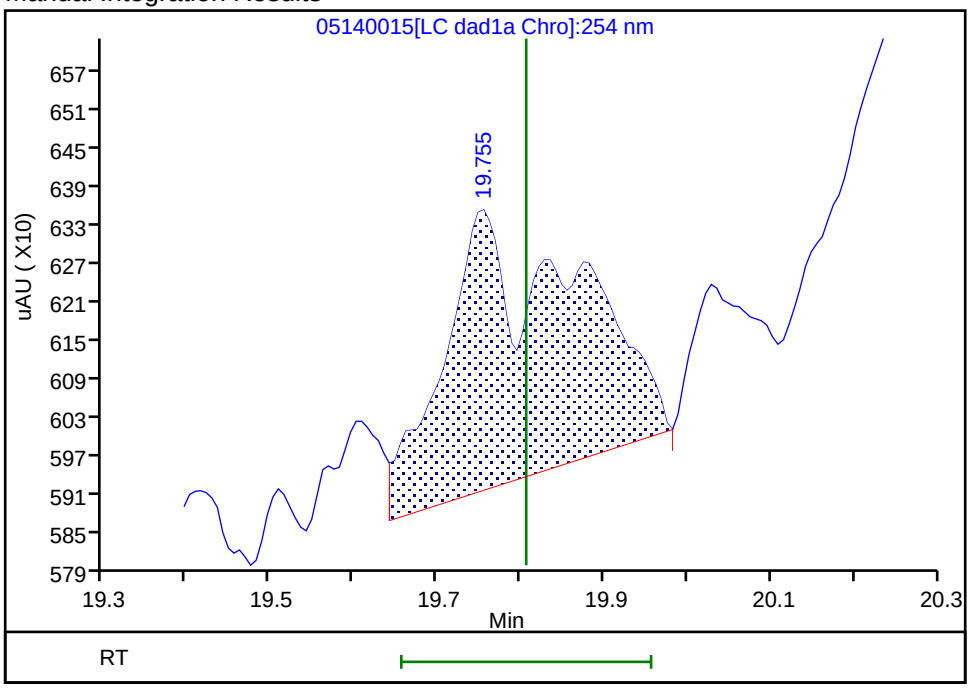
Processing Integration Results

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

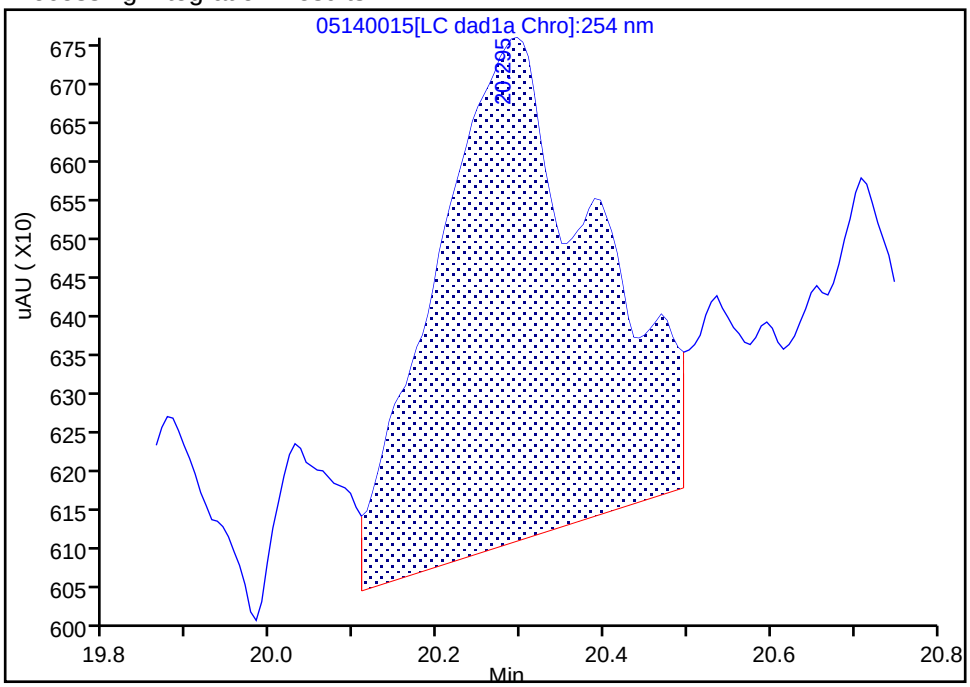
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

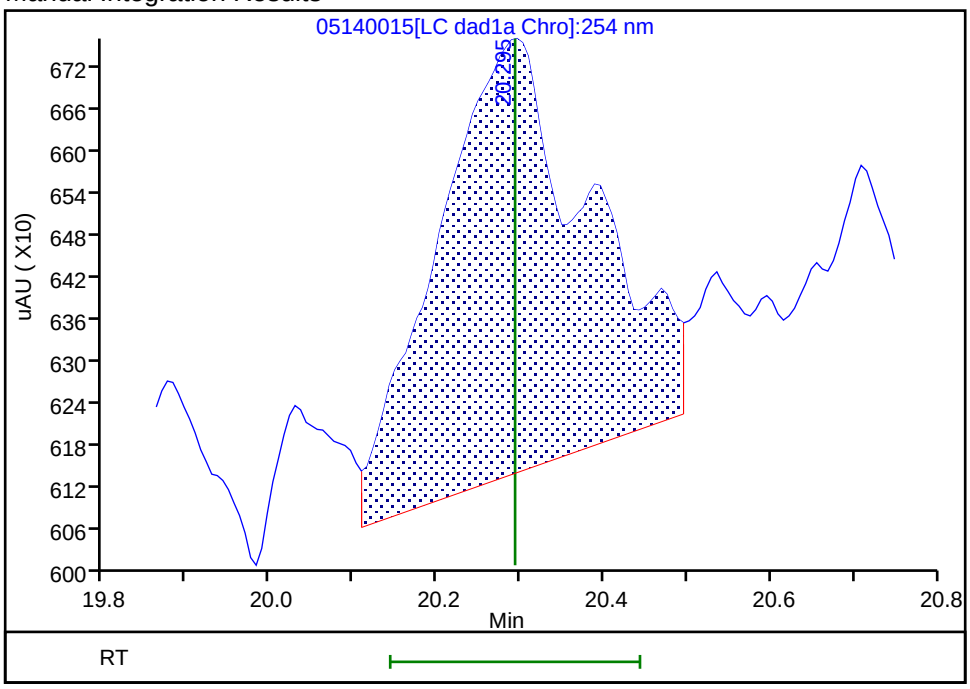
Processing Integration Results

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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

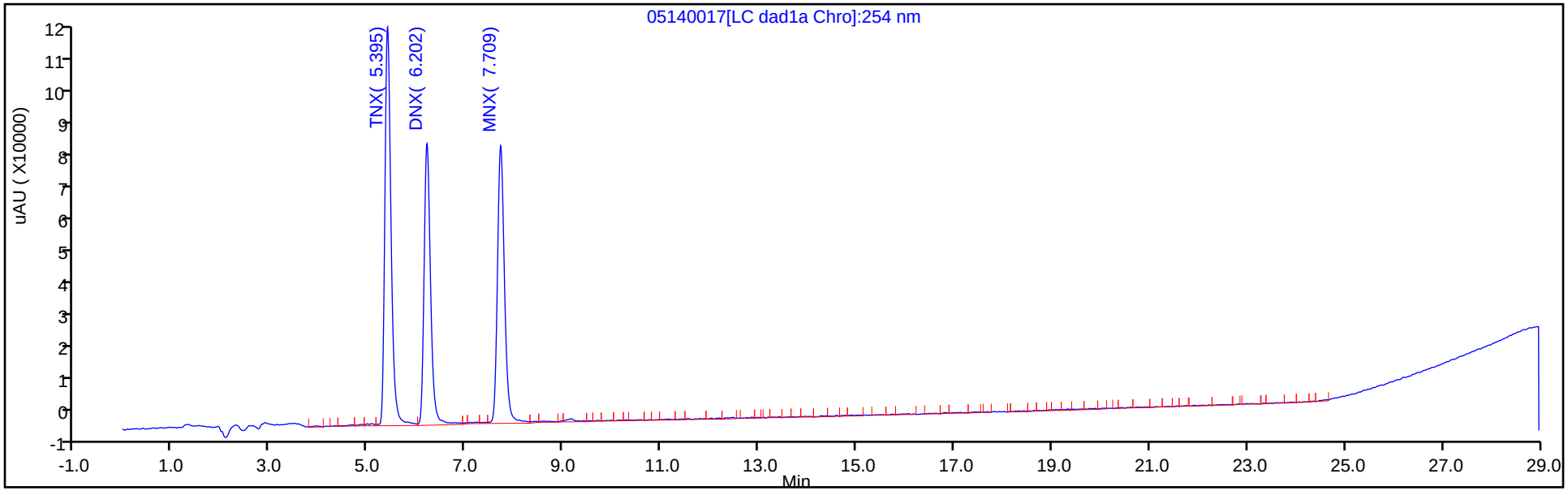
Report Date: 15-May-2020 12:01:02 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

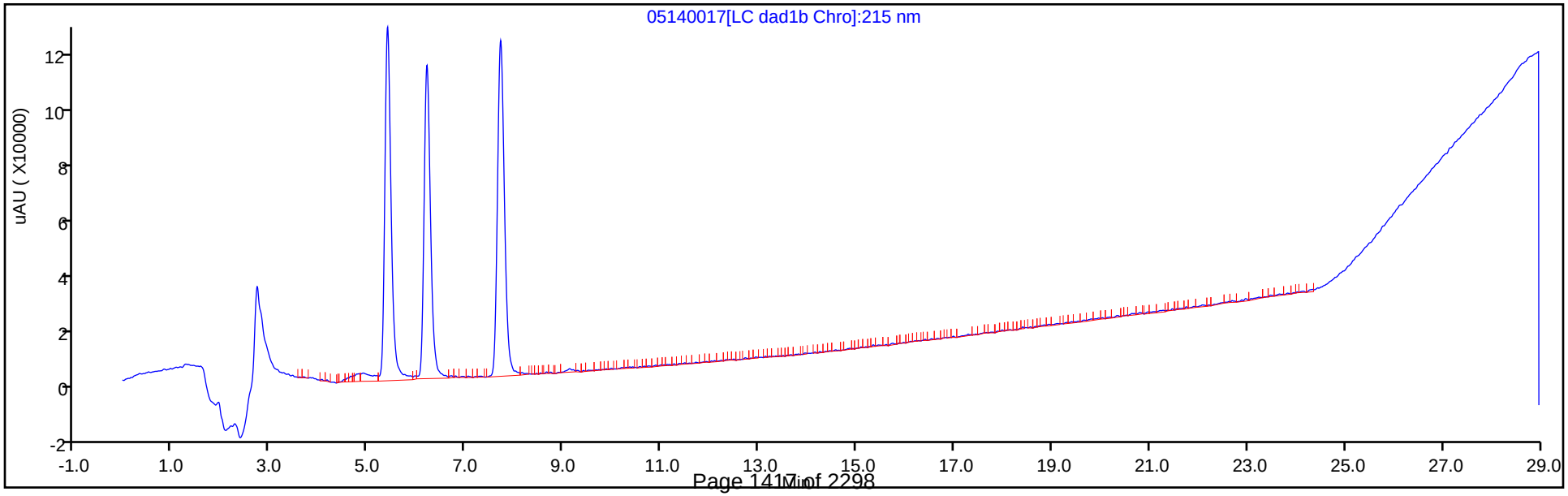
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140017.d

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

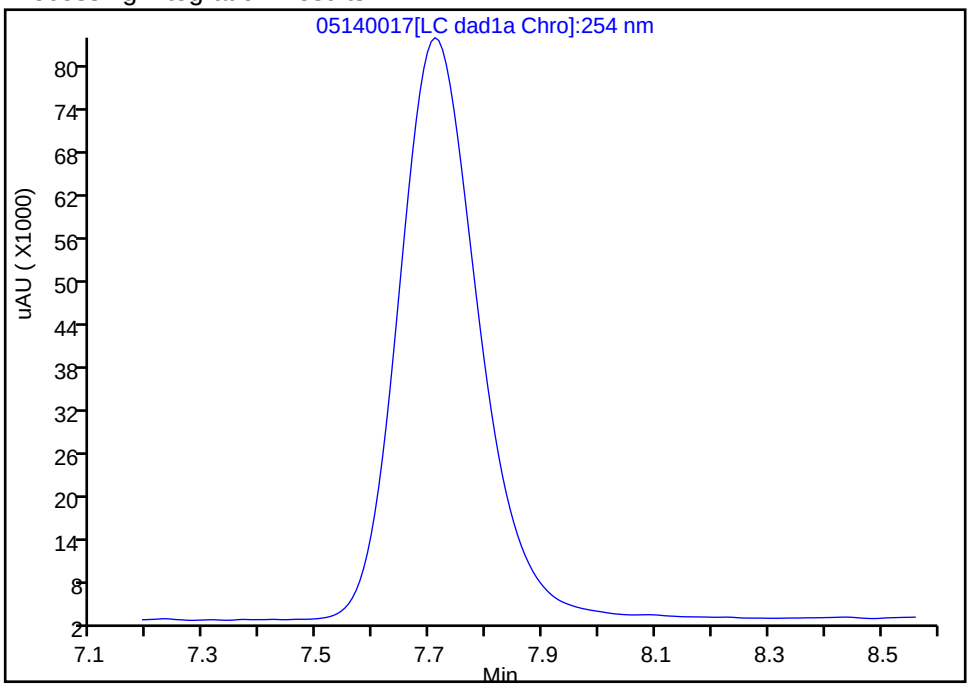
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140017.d				
Injection Date:	14-May-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

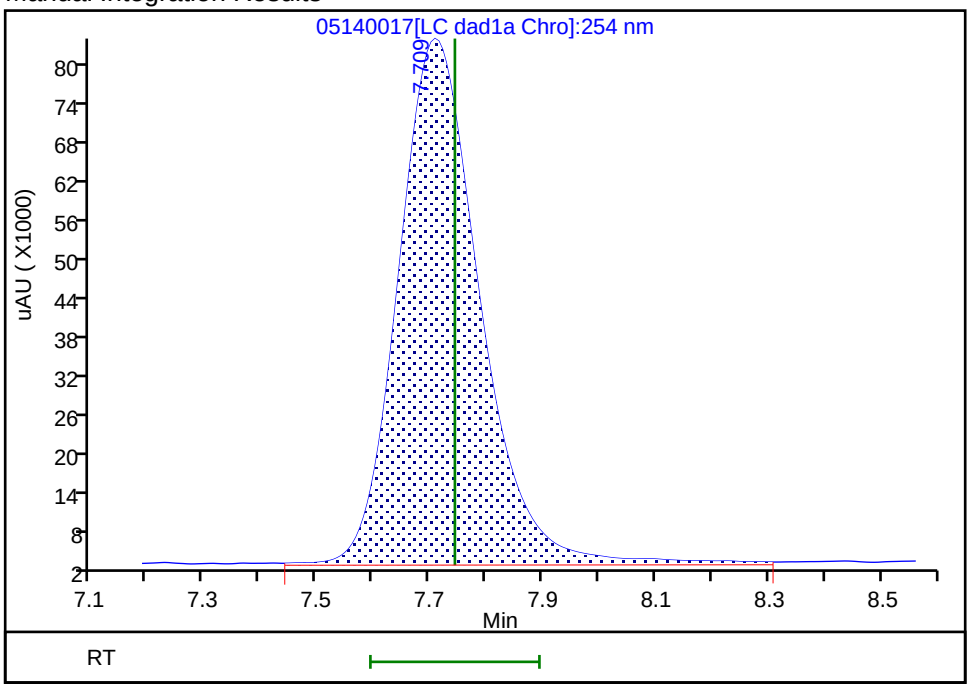
Not Detected
Expected RT: 7.74

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

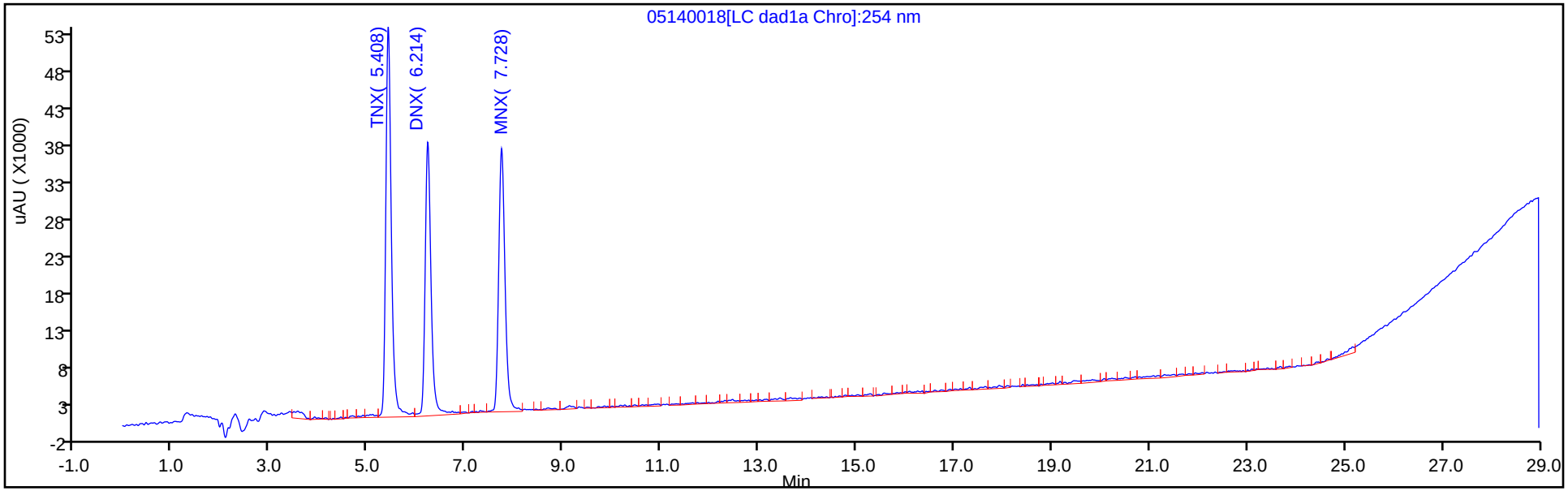
Report Date: 15-May-2020 12:01:03 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

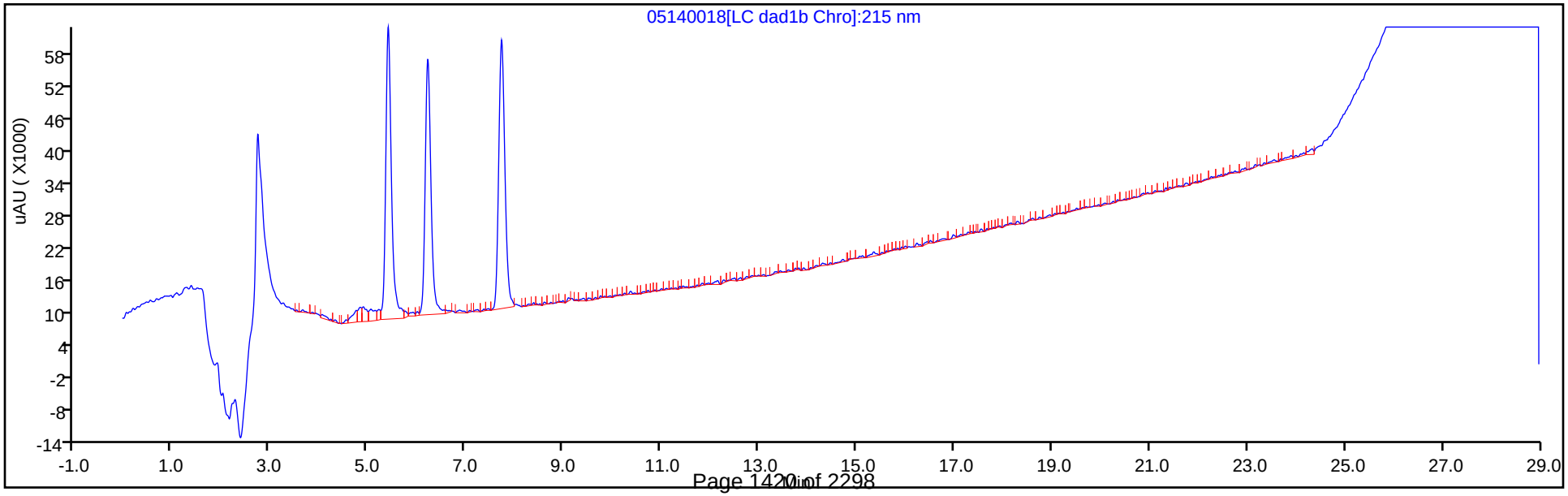
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140018.d

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

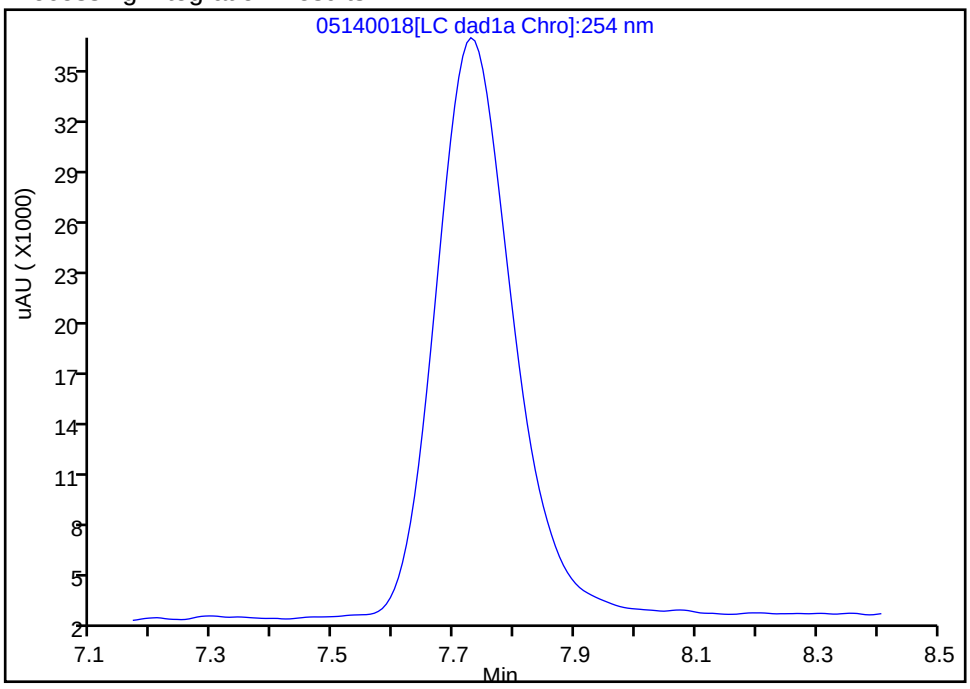
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140018.d				
Injection Date:	14-May-2020 22:41:23	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

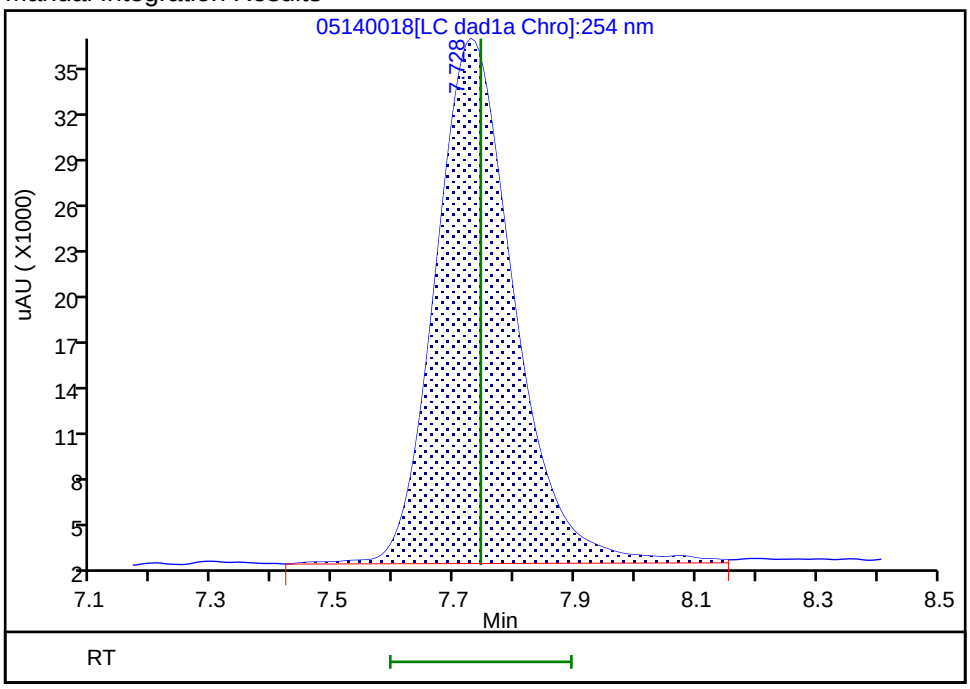
Not Detected
Expected RT: 7.74

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

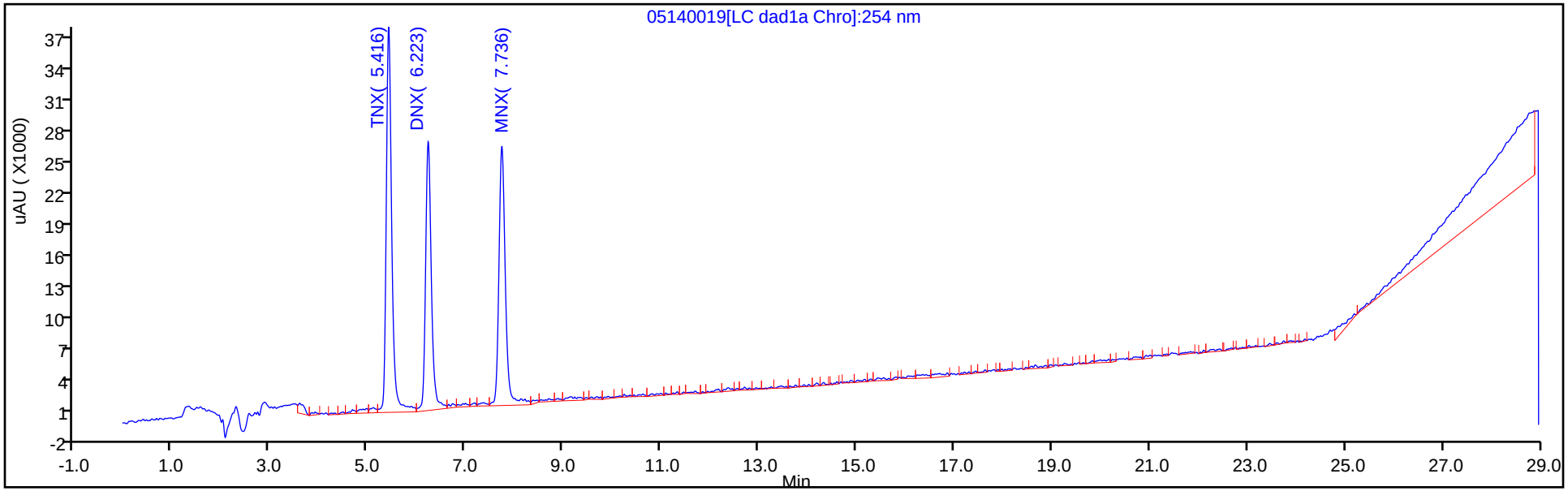
Report Date: 15-May-2020 12:01:03 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

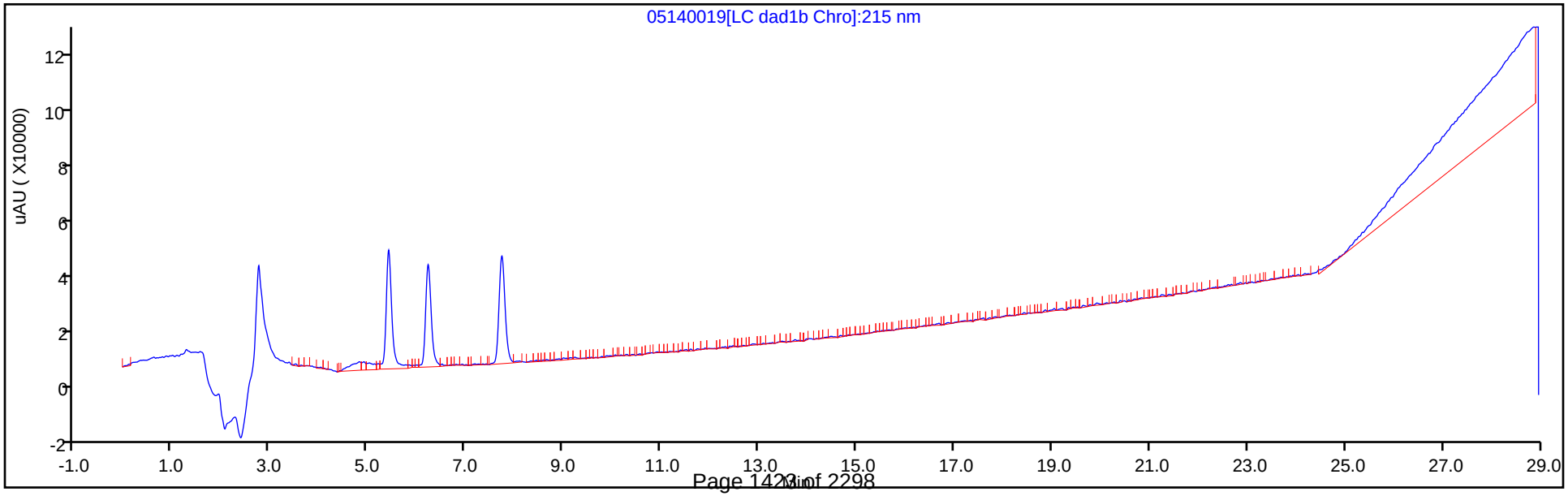
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140019.d

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

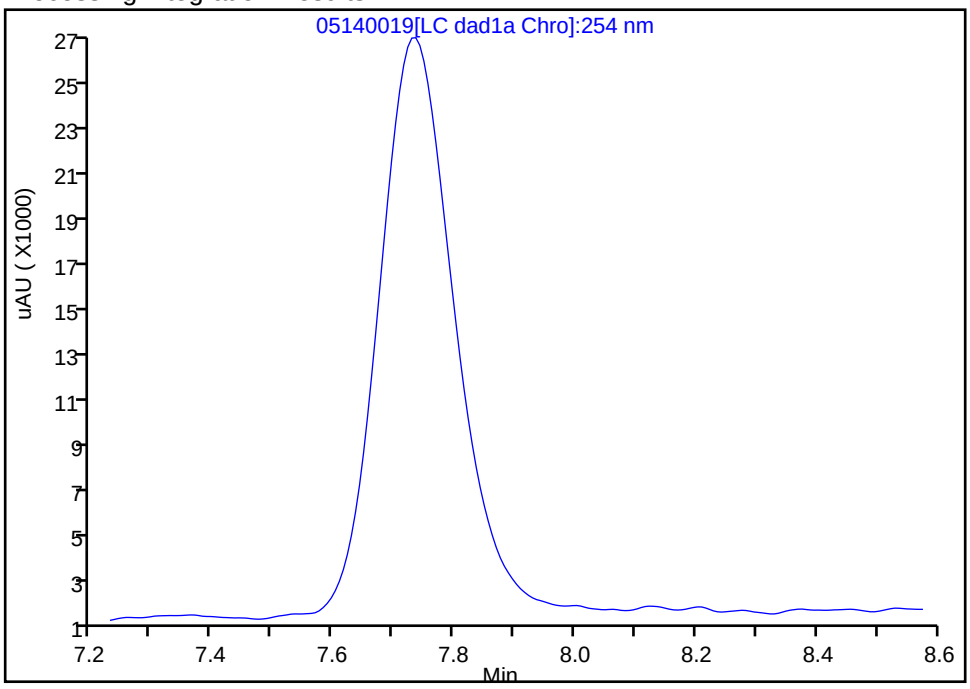
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140019.d				
Injection Date:	14-May-2020 23:16:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

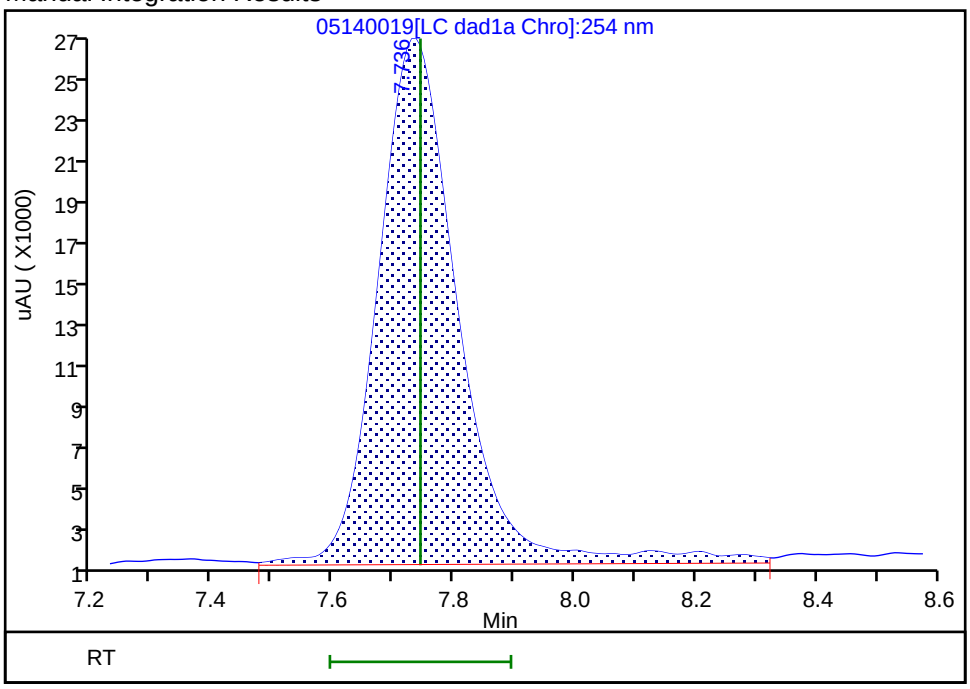
Not Detected
Expected RT: 7.74

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

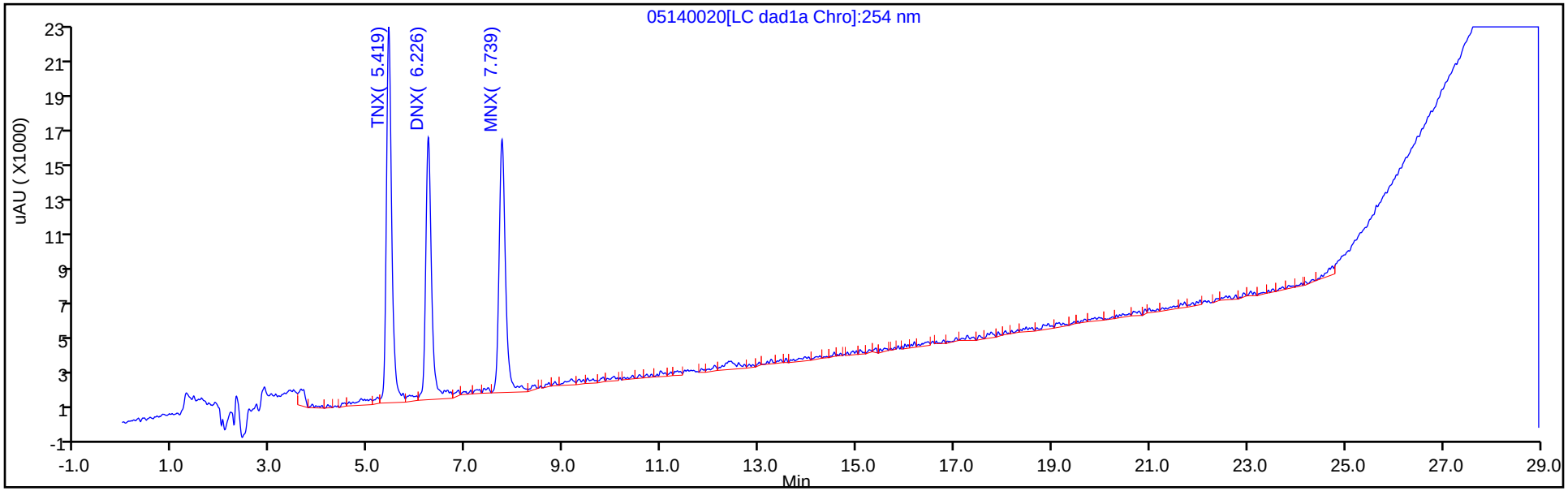
Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

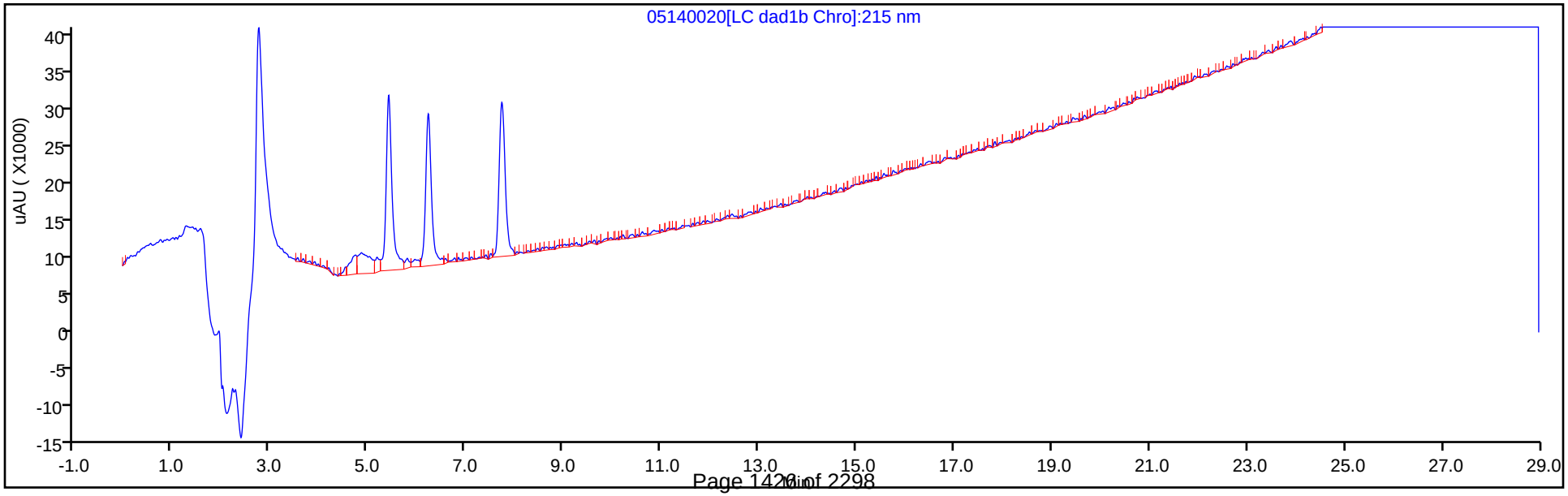
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140020.d

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

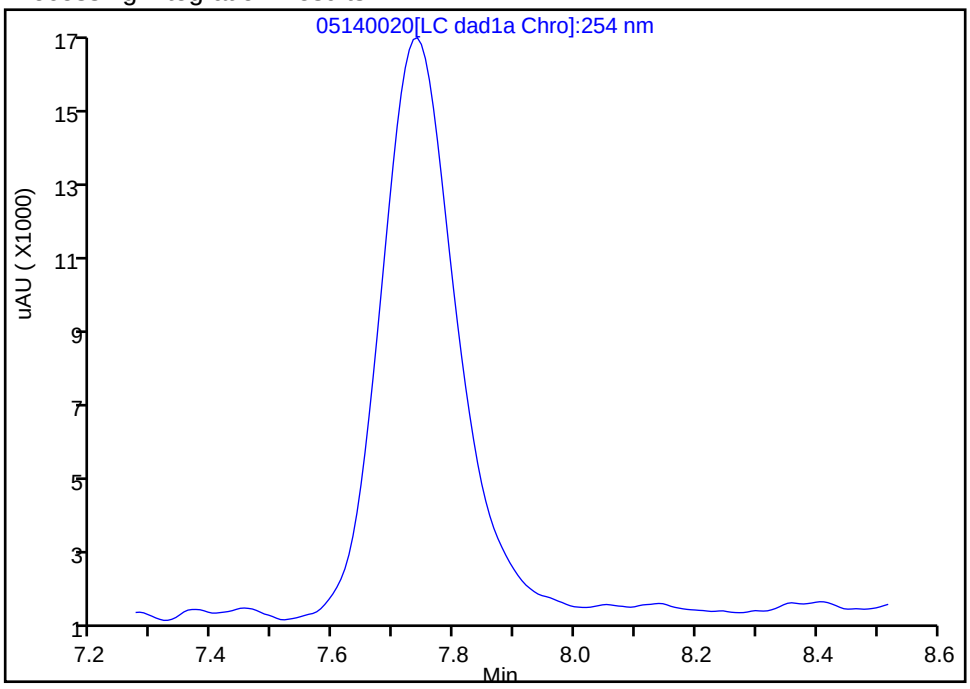
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140020.d				
Injection Date:	14-May-2020 23:51:28	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

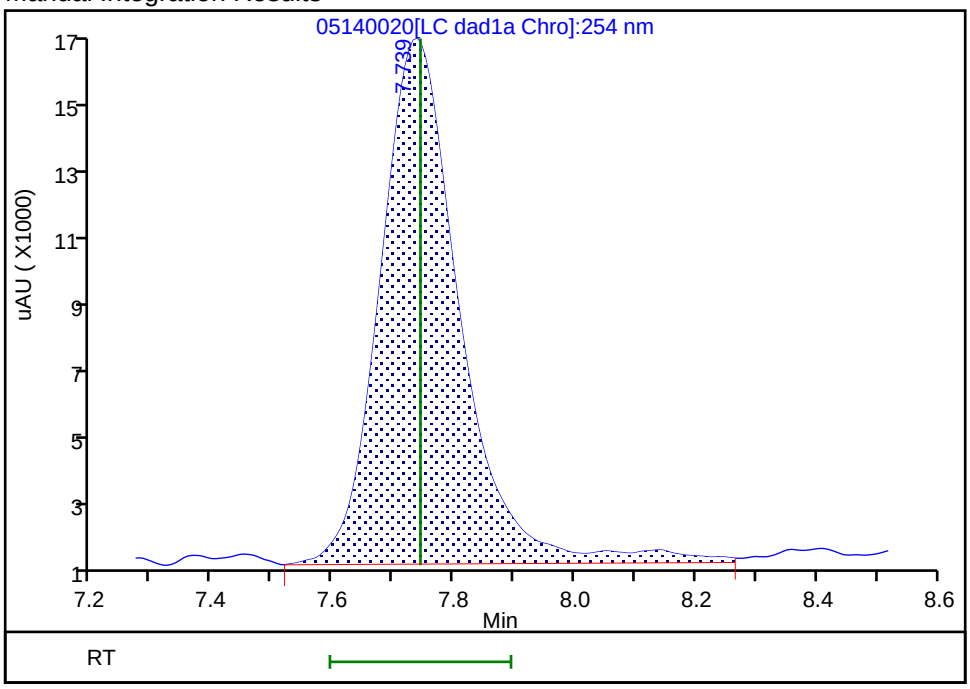
Not Detected
Expected RT: 7.74

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

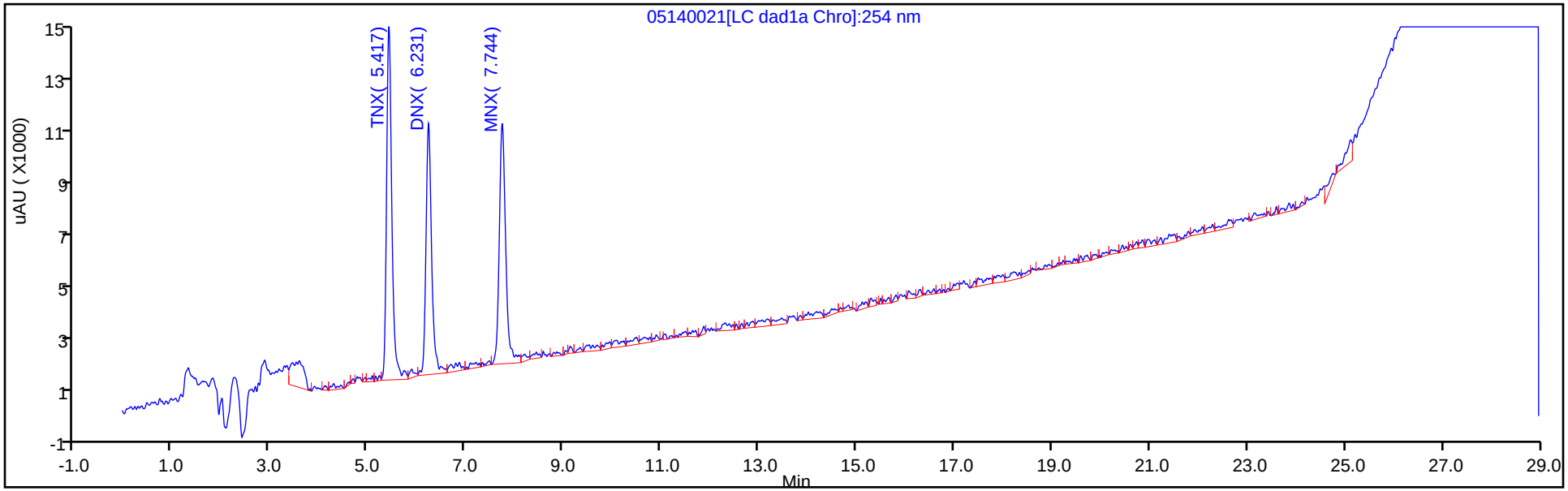
Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

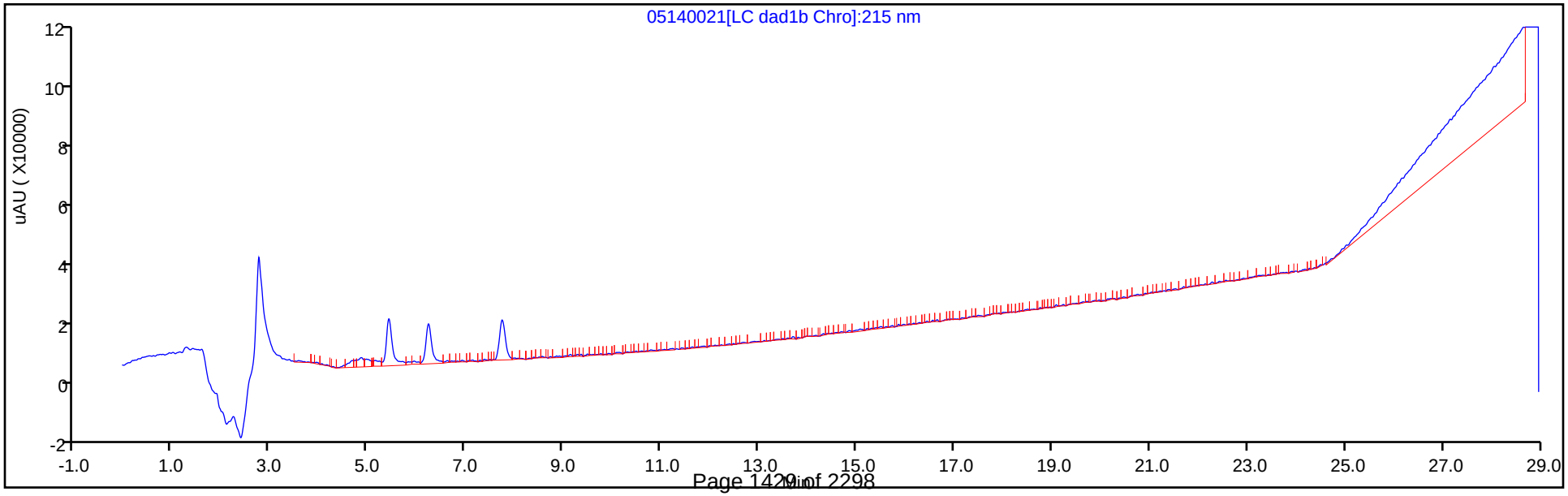
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140021.d

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

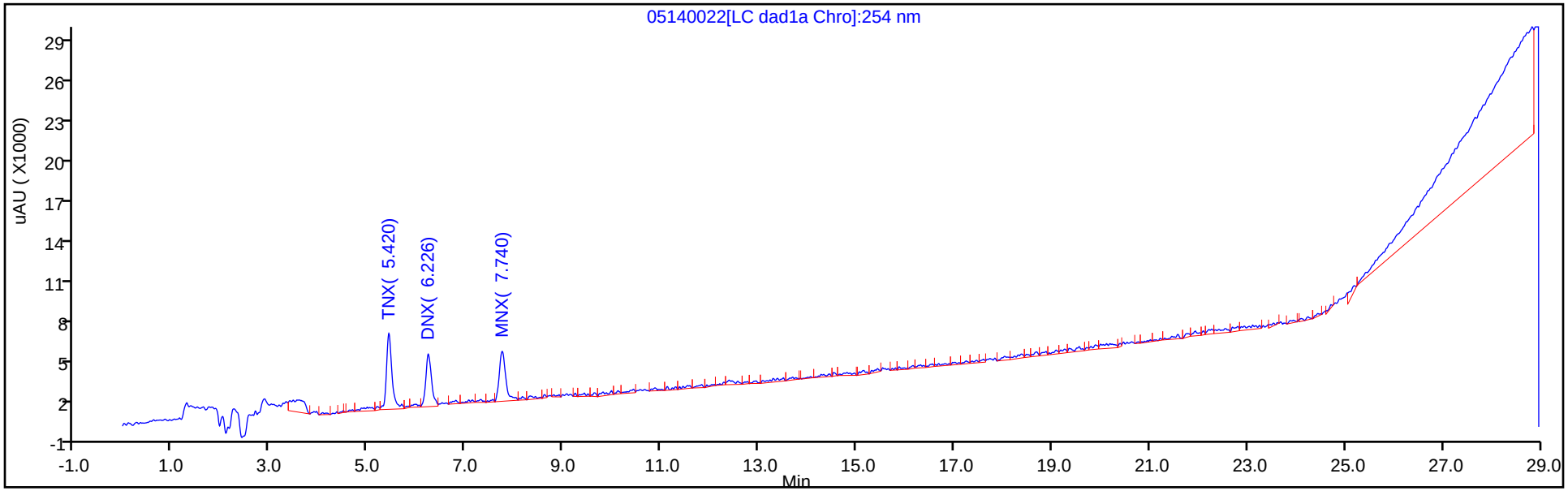
Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

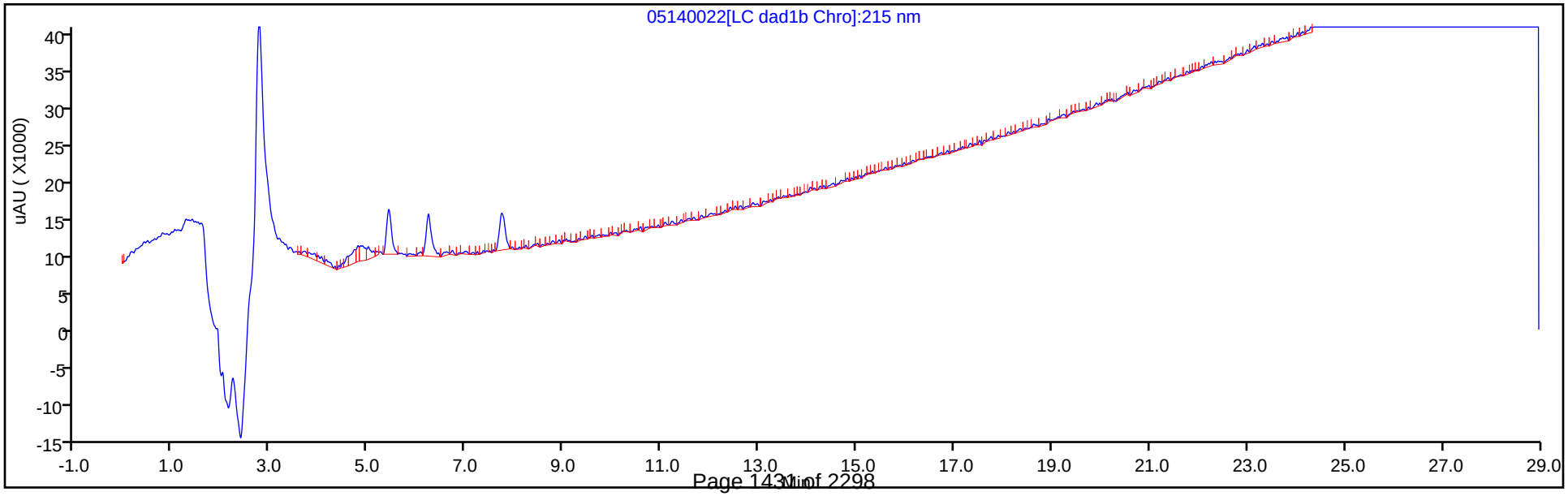
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140022.d

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

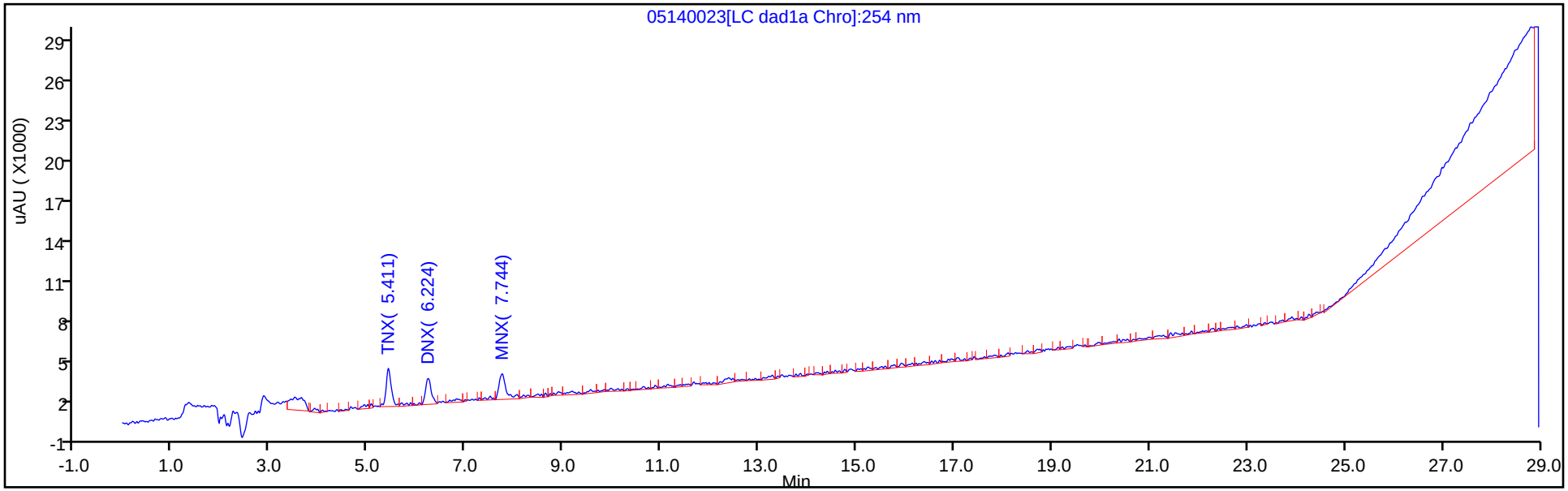
Report Date: 15-May-2020 12:01:05 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

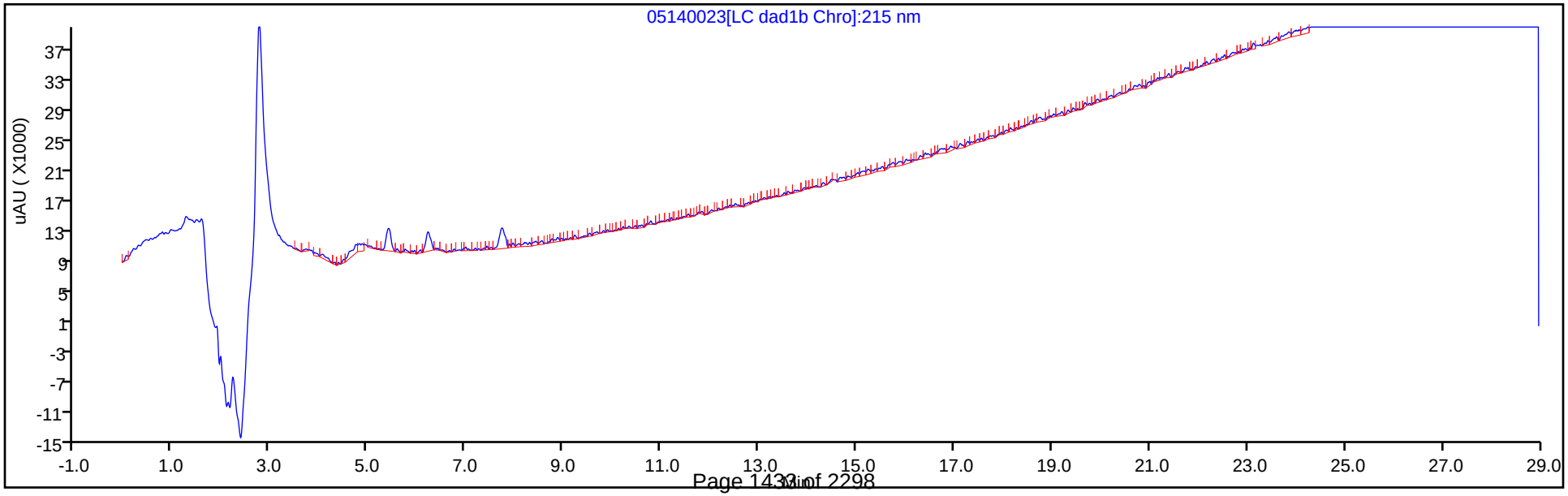
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140023.d

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

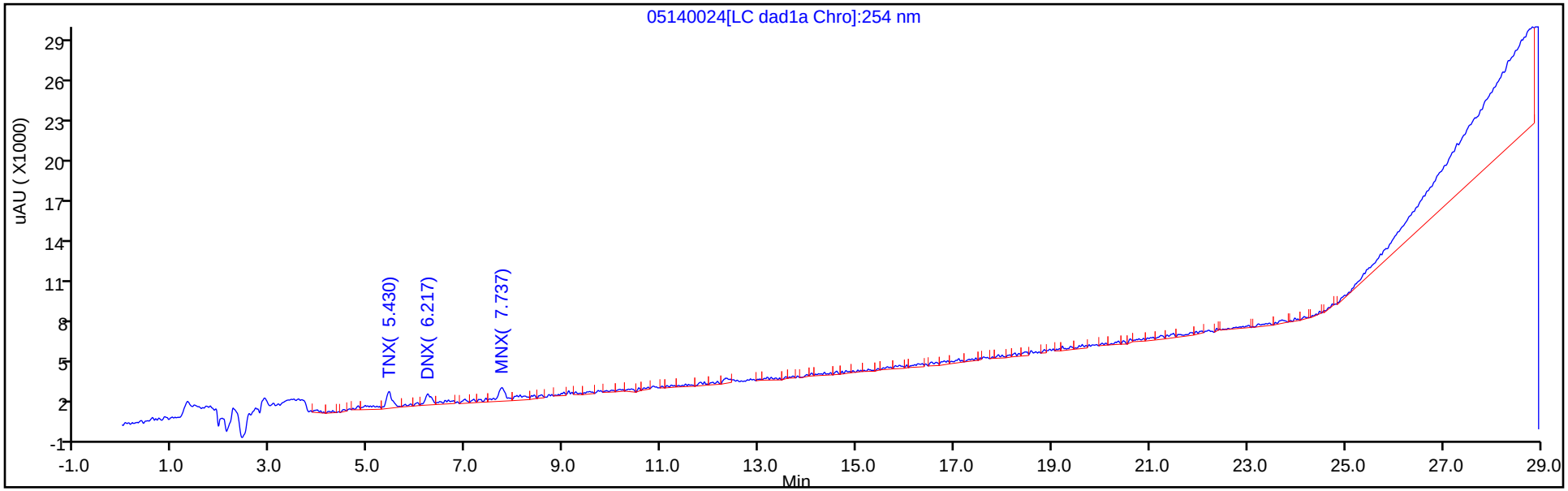
Report Date: 15-May-2020 12:01:05 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

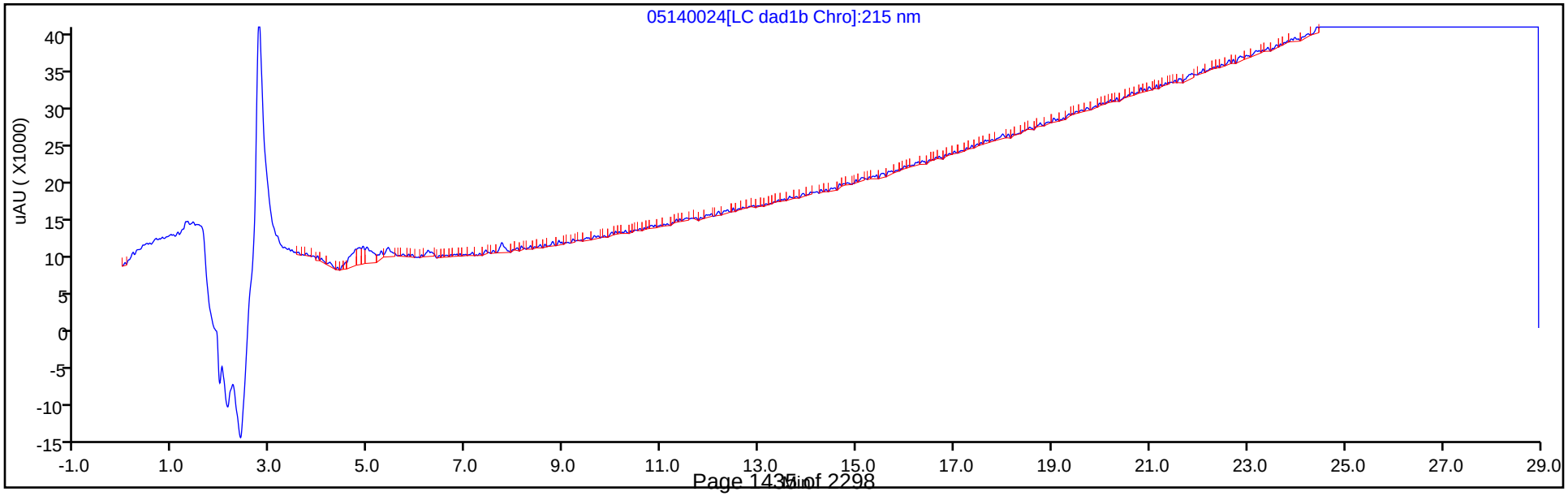
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140024.d

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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

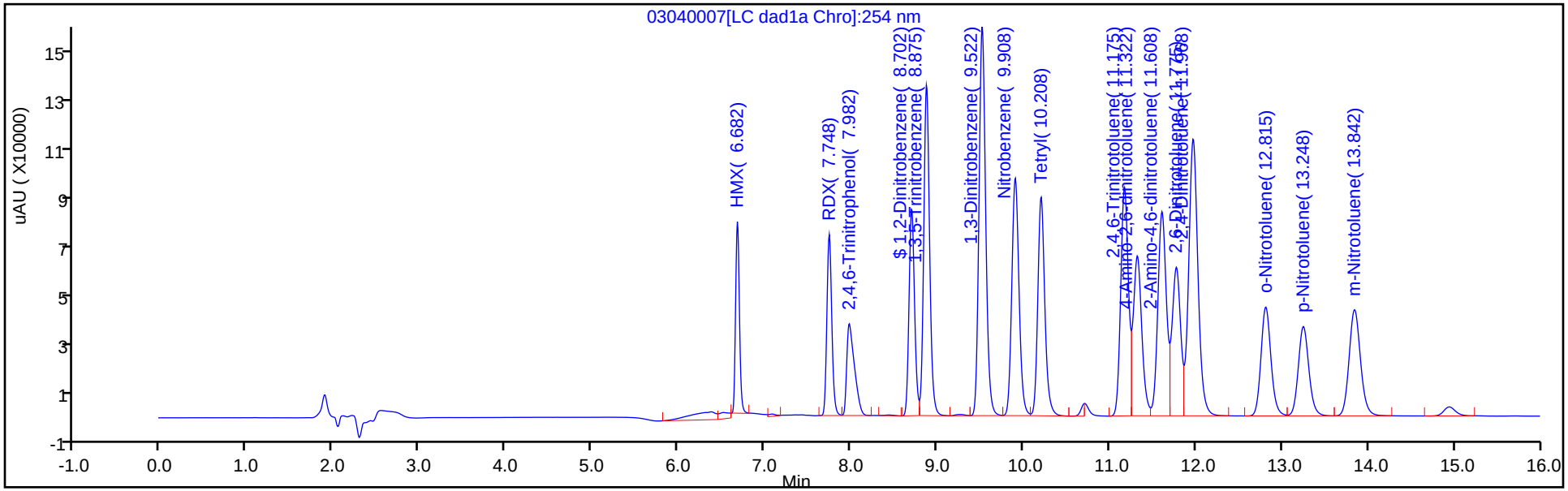
Report Date: 06-Mar-2020 10:24:59 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

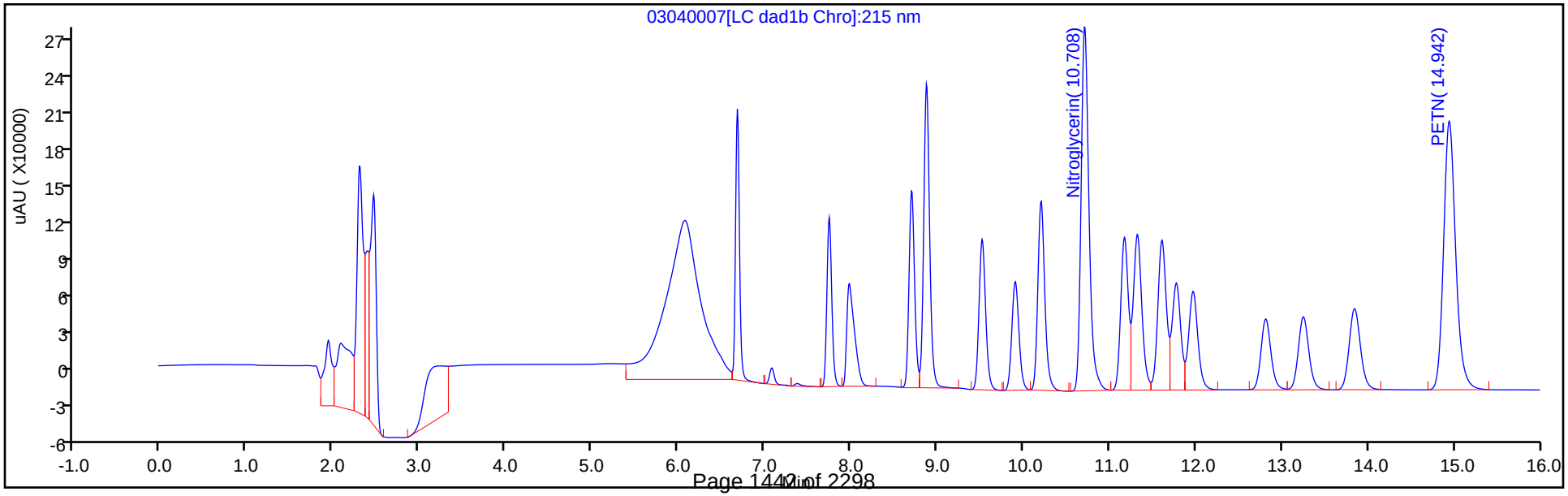
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040007.d

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

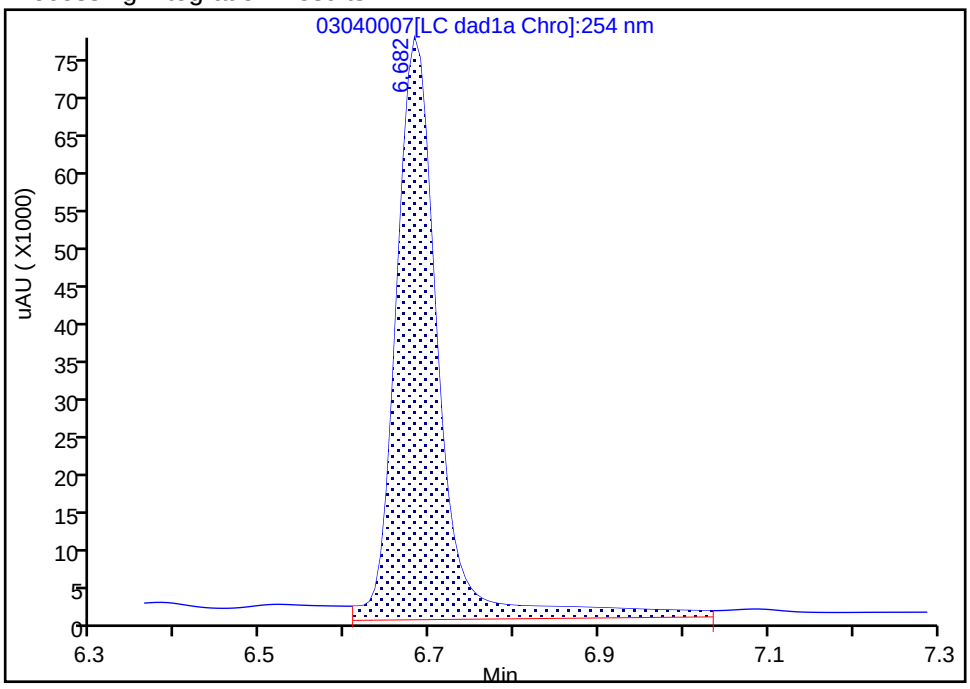
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040007.d				
Injection Date:	04-Mar-2020 14:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

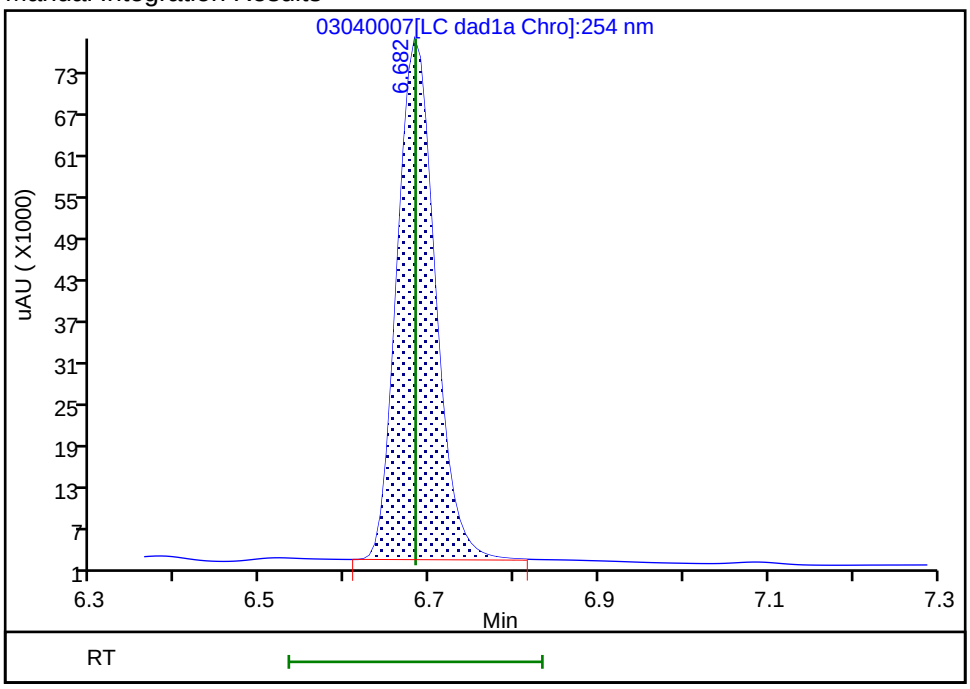
Processing Integration Results

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

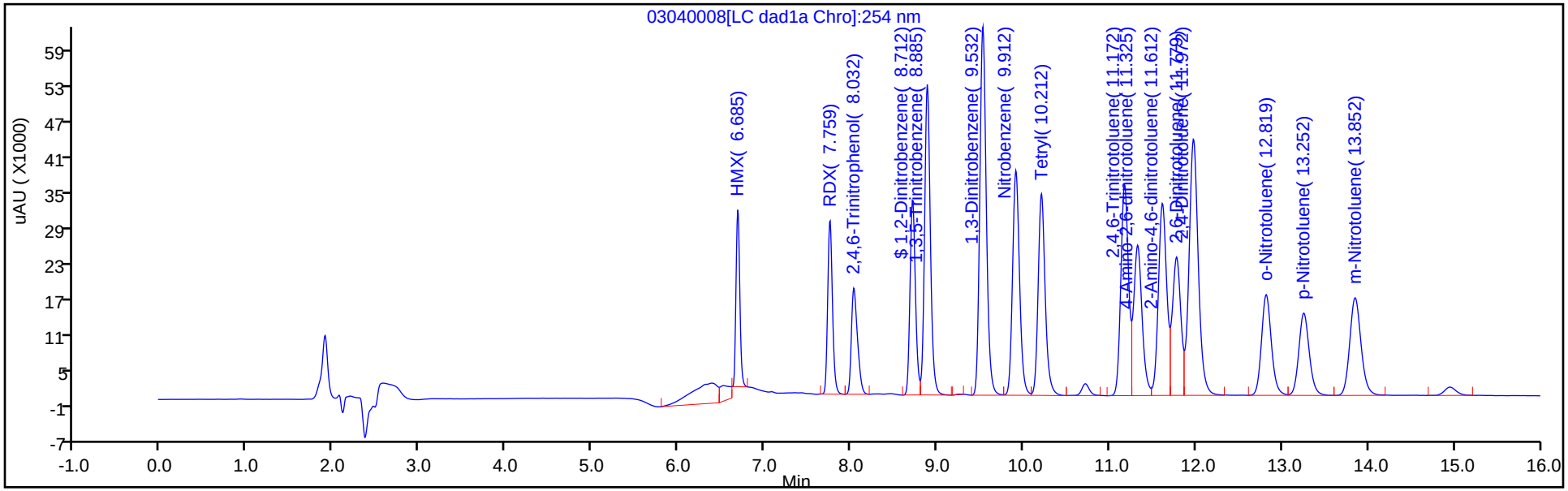
Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

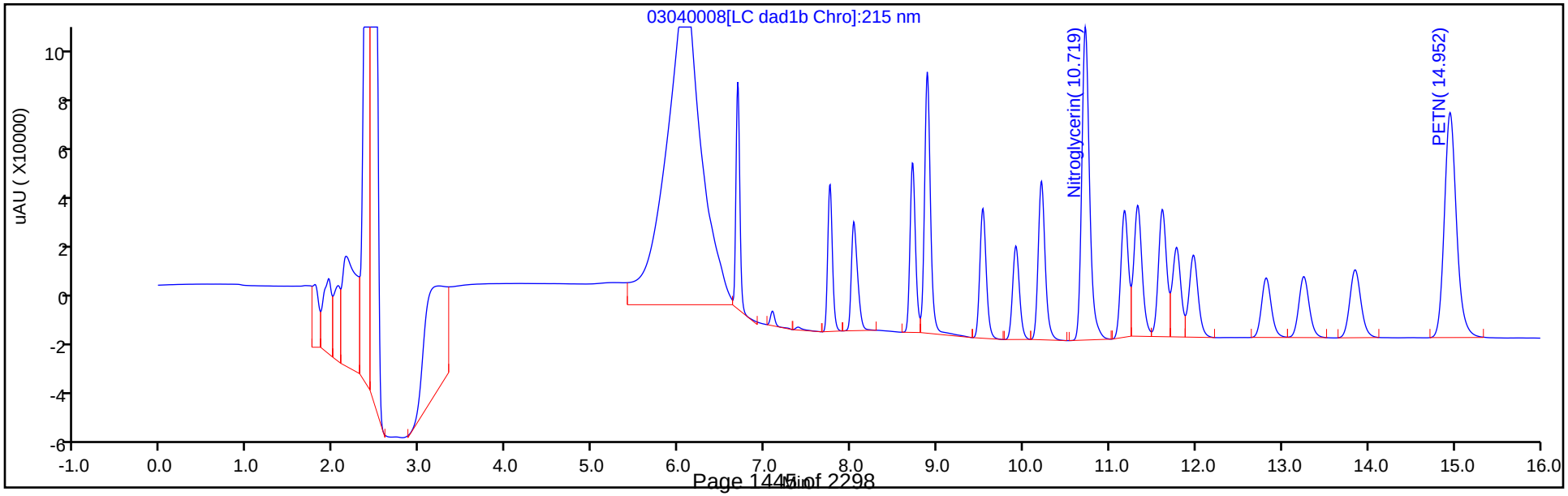
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040008.d

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

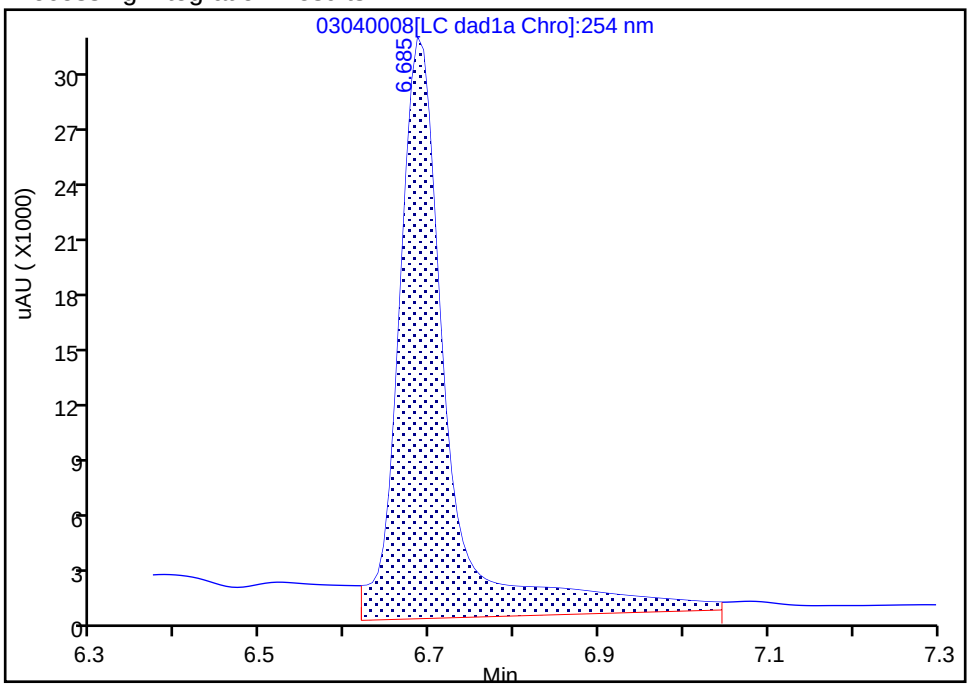
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040008.d				
Injection Date:	04-Mar-2020 14:30:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

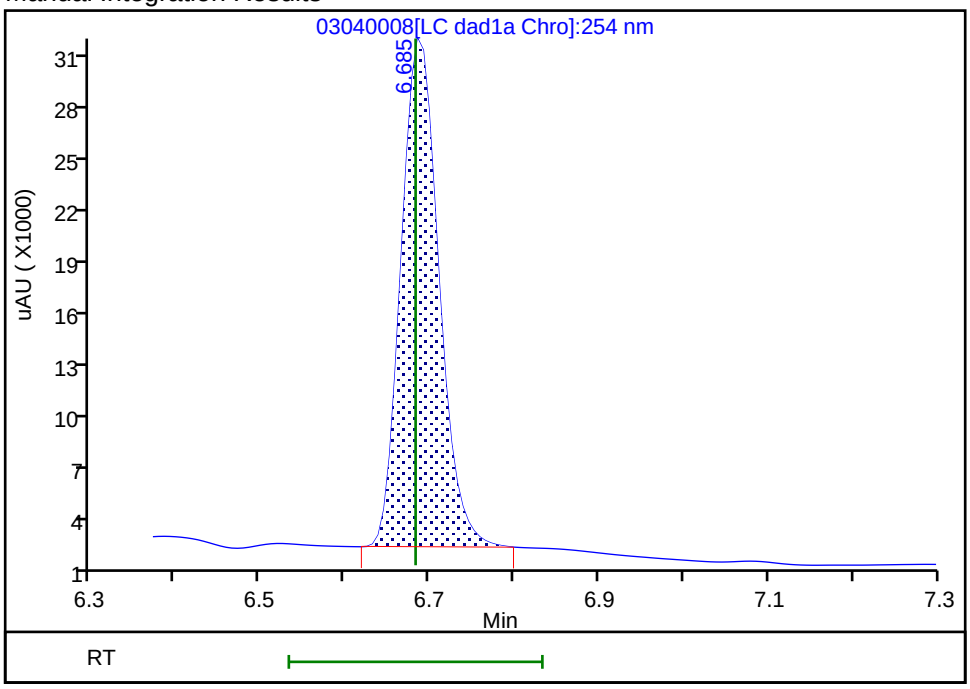
Processing Integration Results

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

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

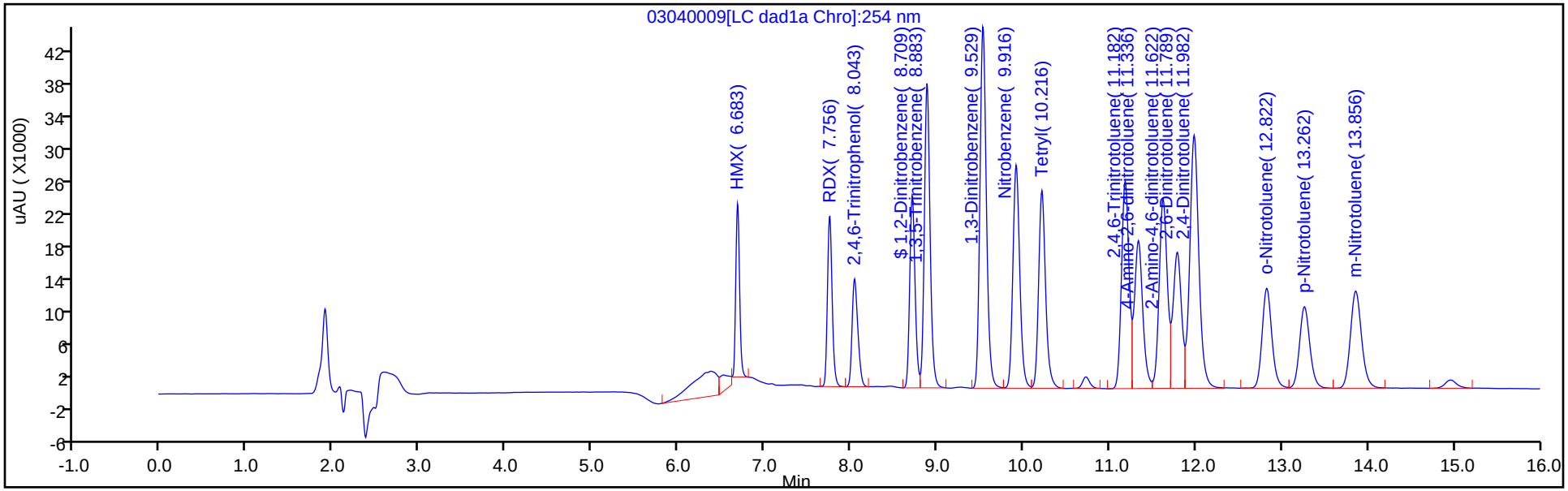
Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

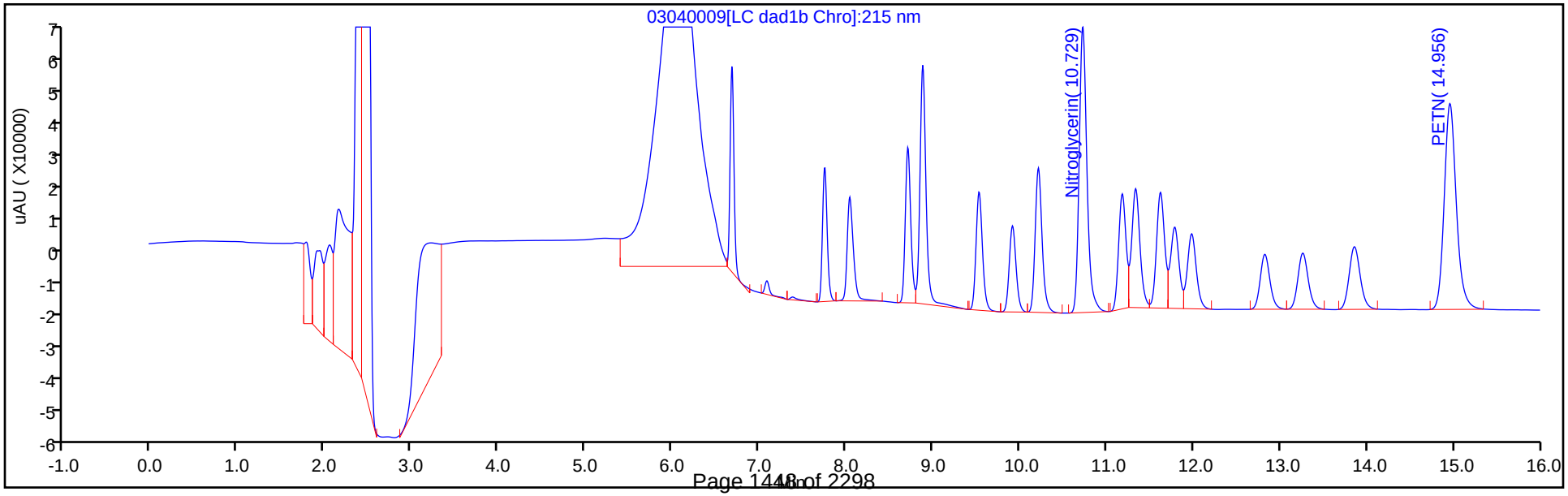
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040009.d

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

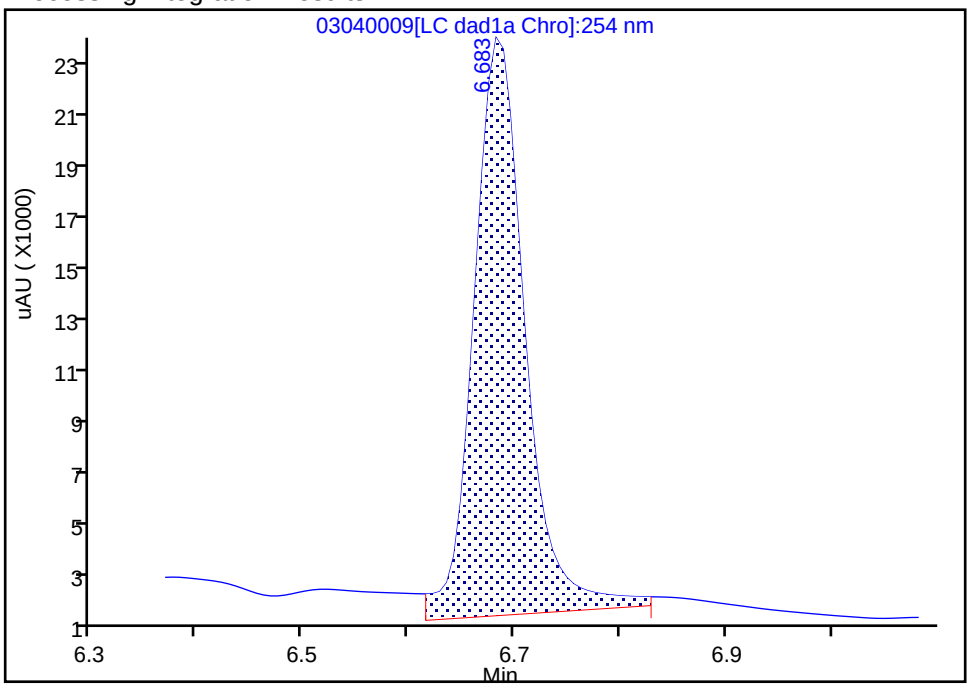
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040009.d				
Injection Date:	04-Mar-2020 14:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

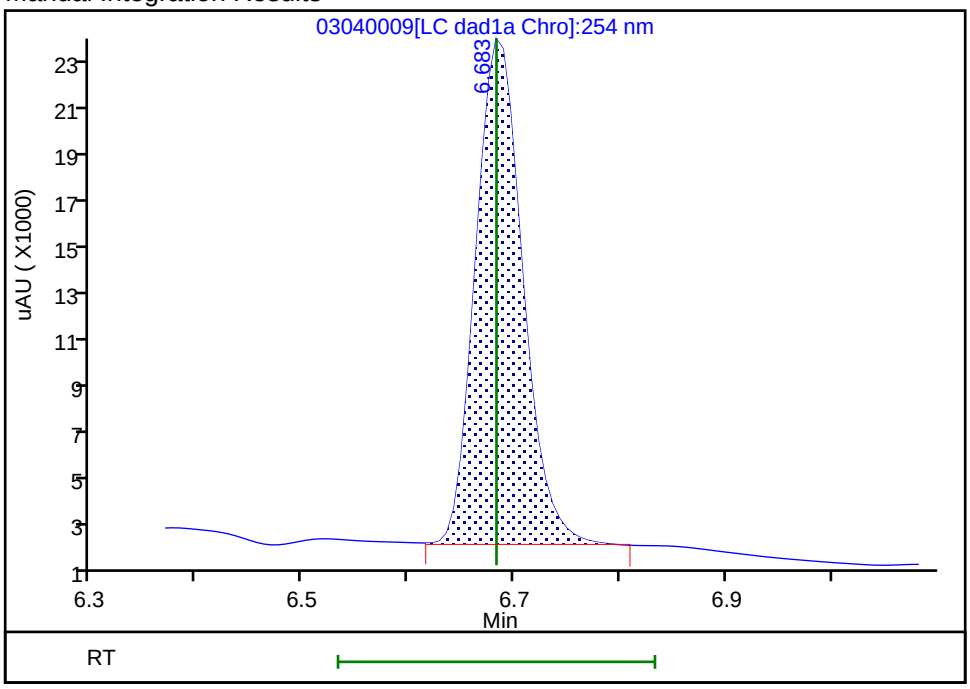
Processing Integration Results

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

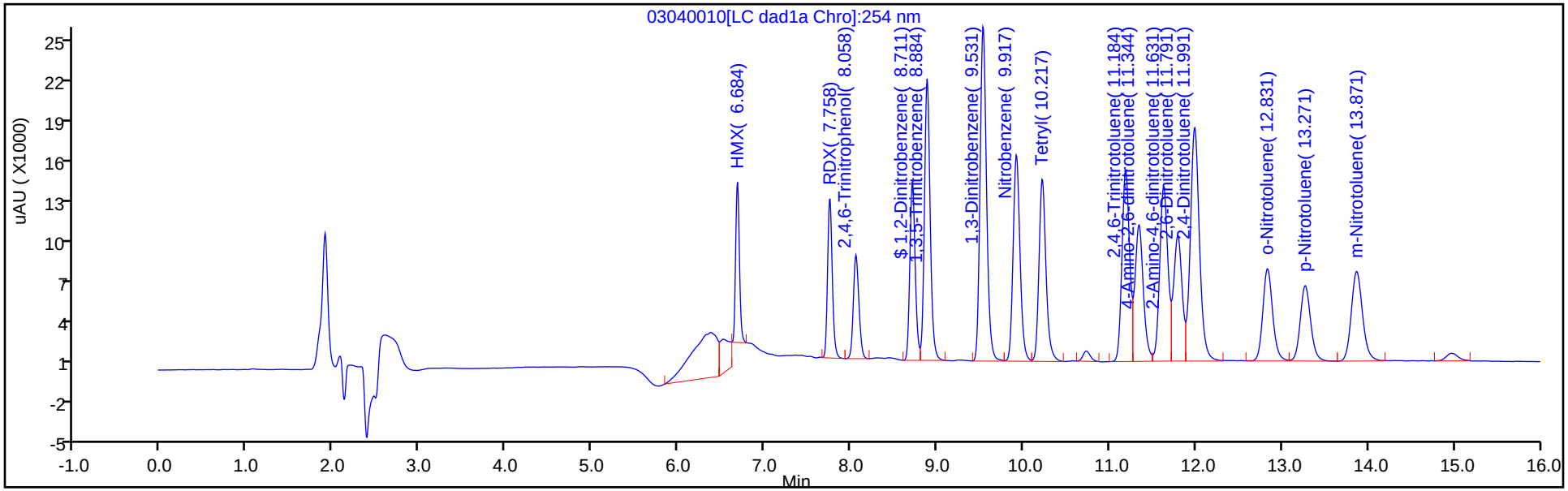
Report Date: 06-Mar-2020 10:25:04 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

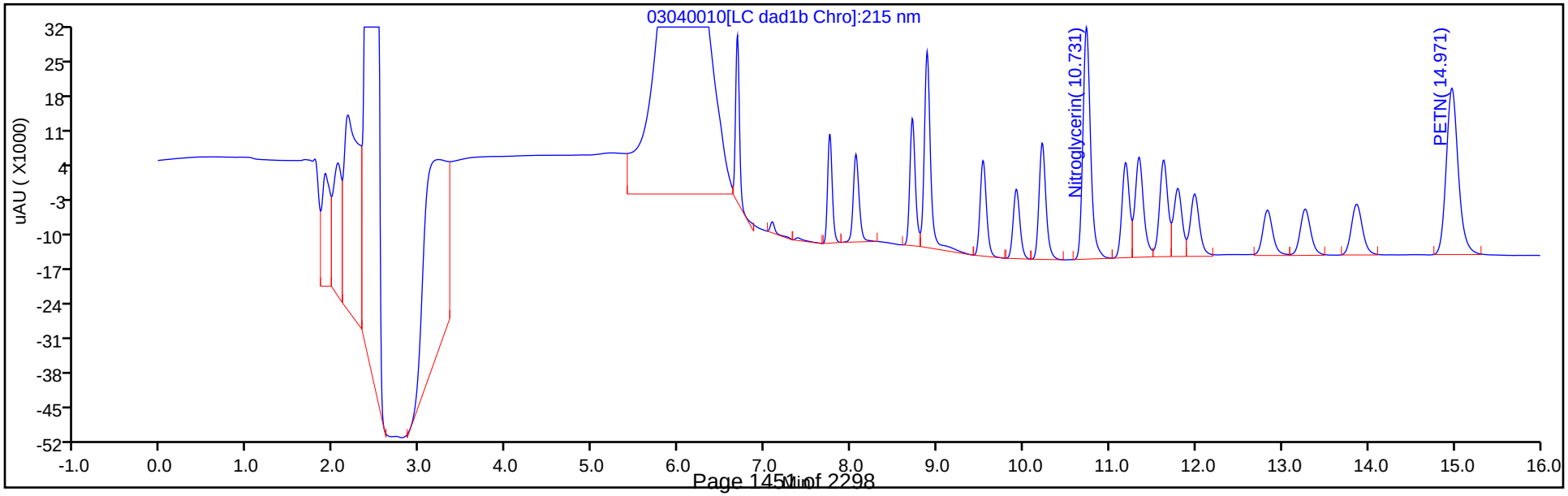
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040010.d

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

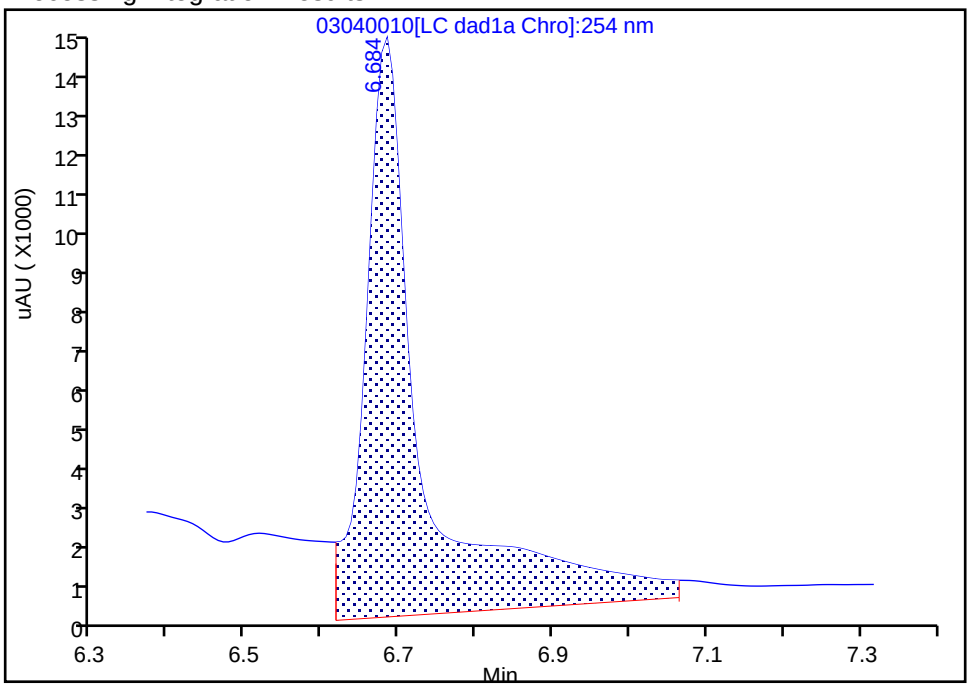
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040010.d				
Injection Date:	04-Mar-2020 15:16:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

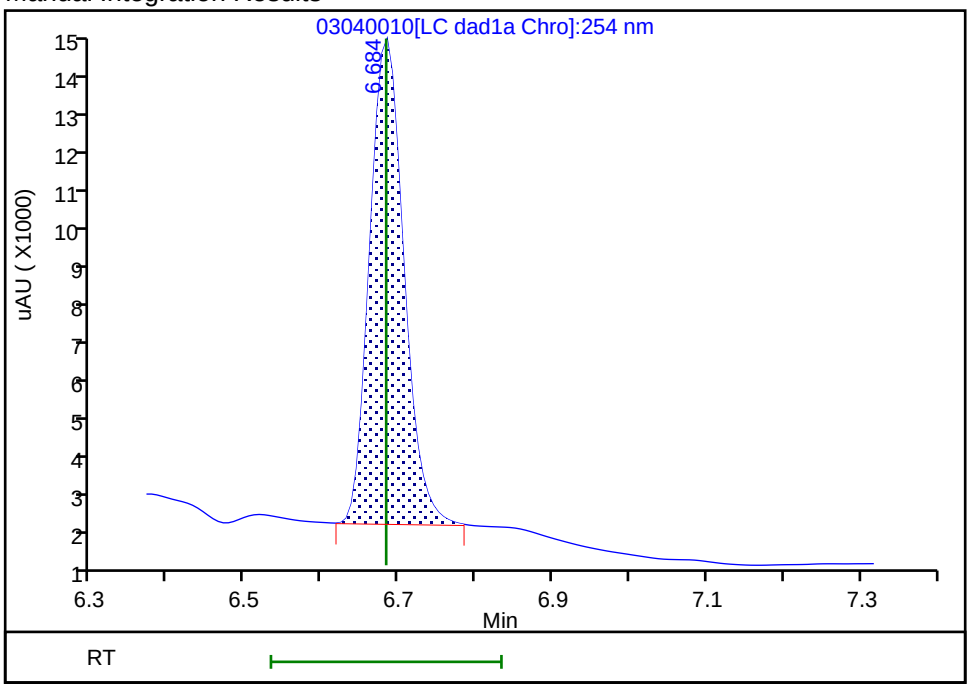
Processing Integration Results

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

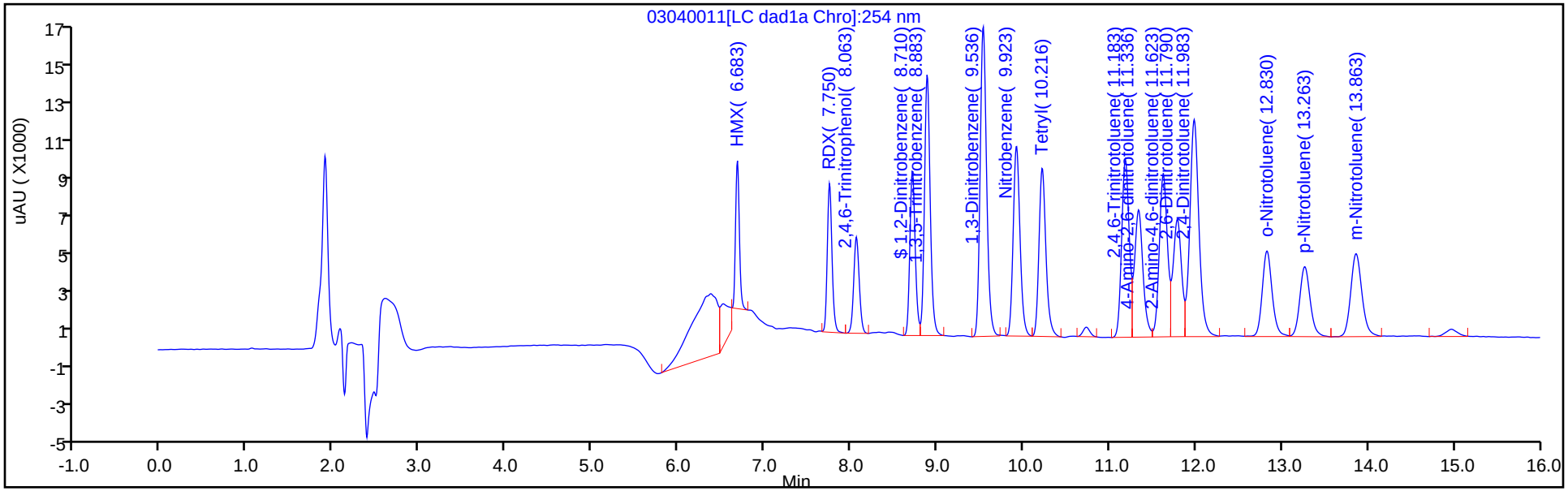
Report Date: 06-Mar-2020 10:25:05 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

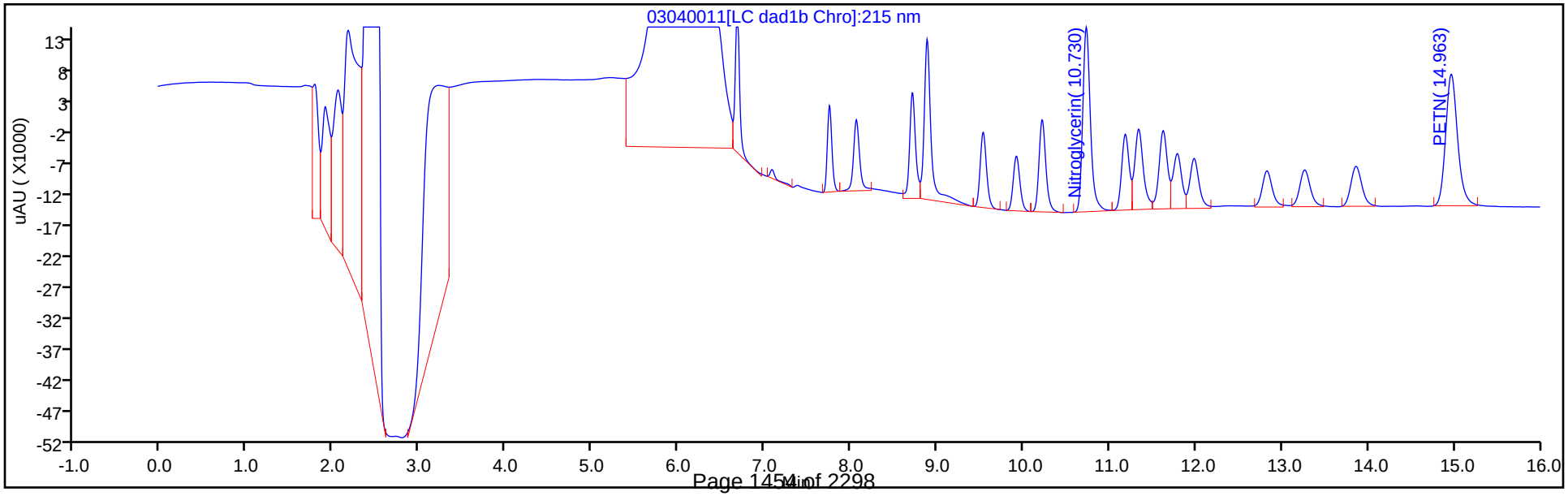
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040011.d

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

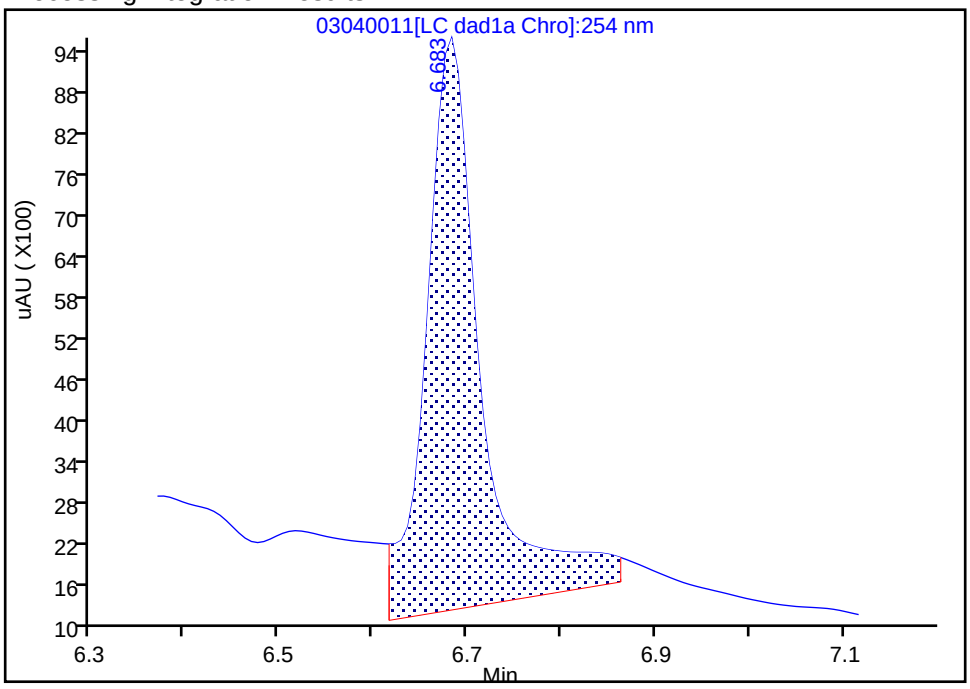
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040011.d				
Injection Date:	04-Mar-2020 15:39:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

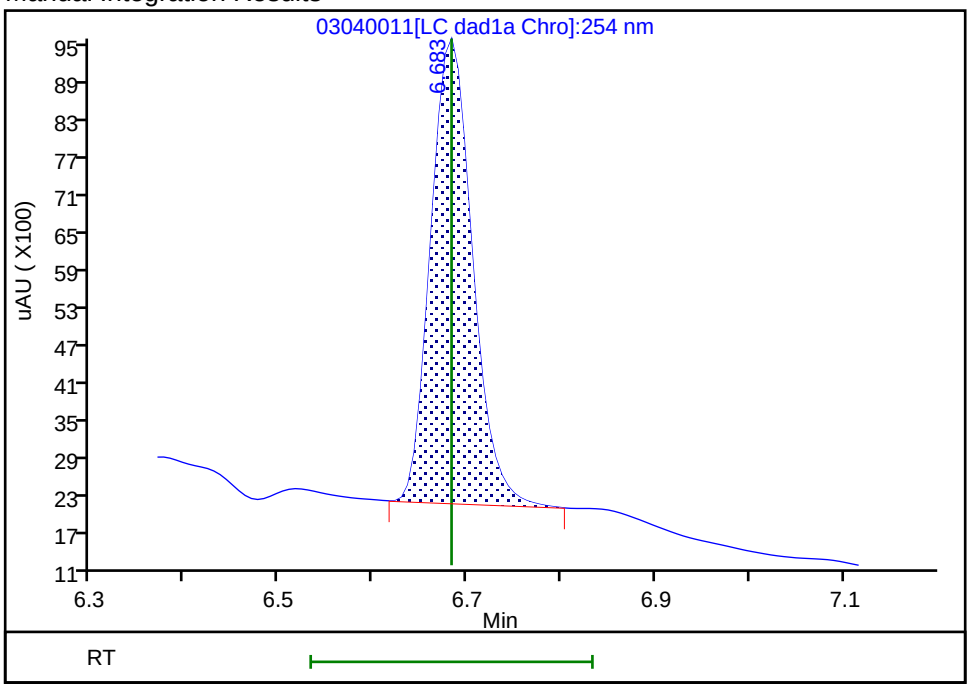
Processing Integration Results

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

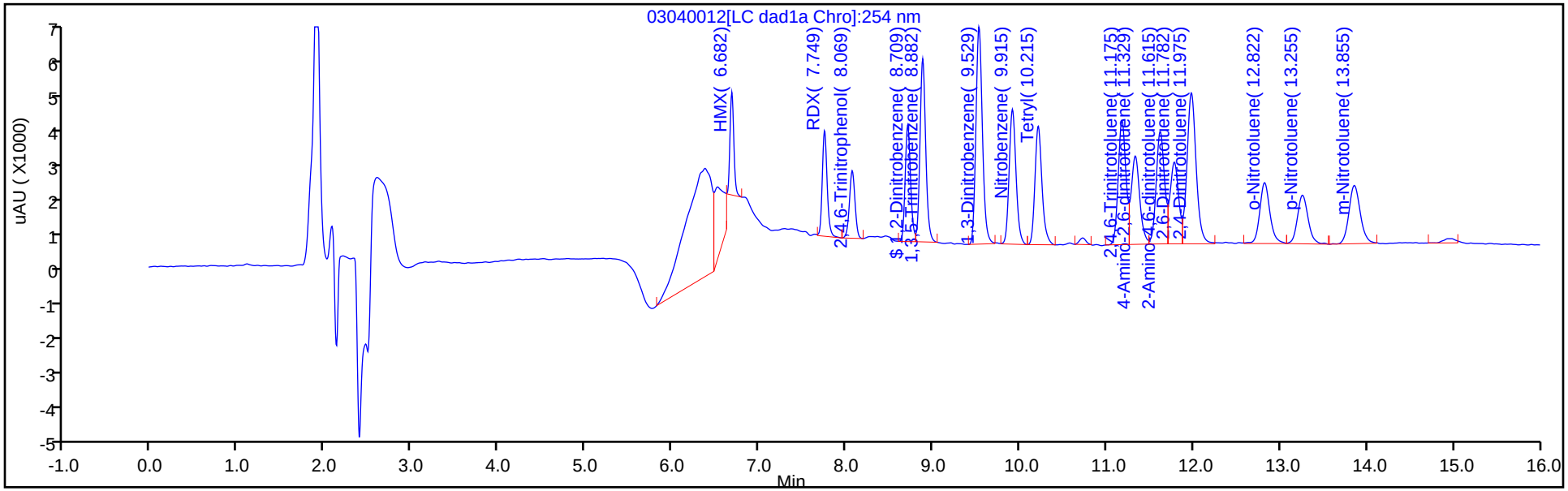
Report Date: 06-Mar-2020 10:25:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

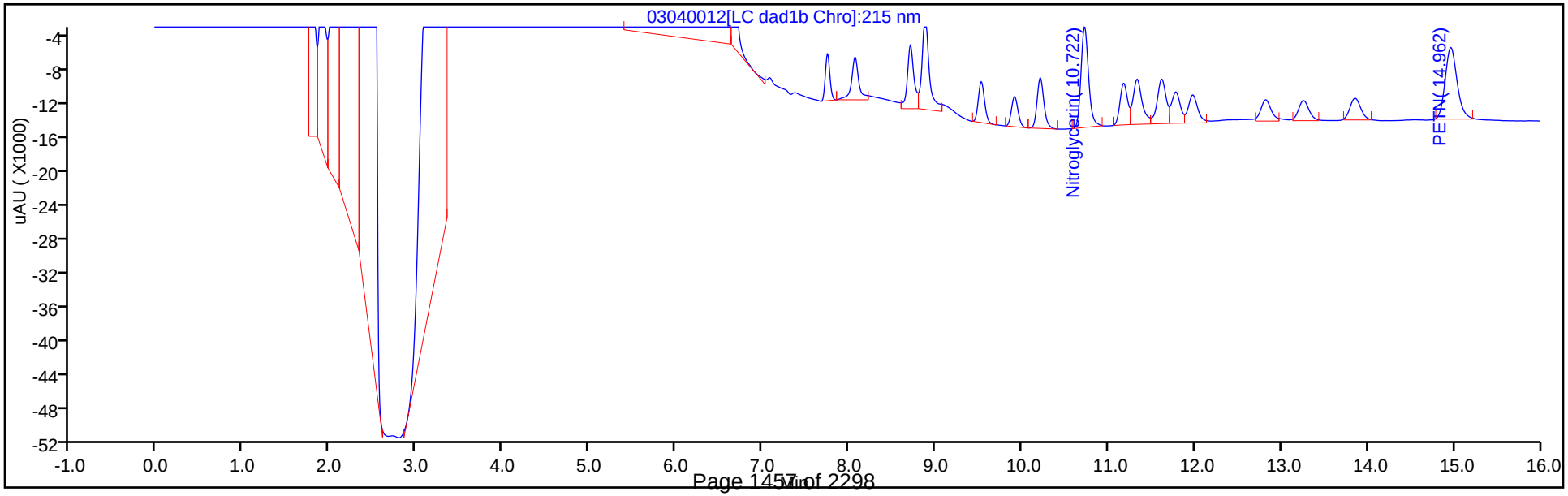
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040012.d

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

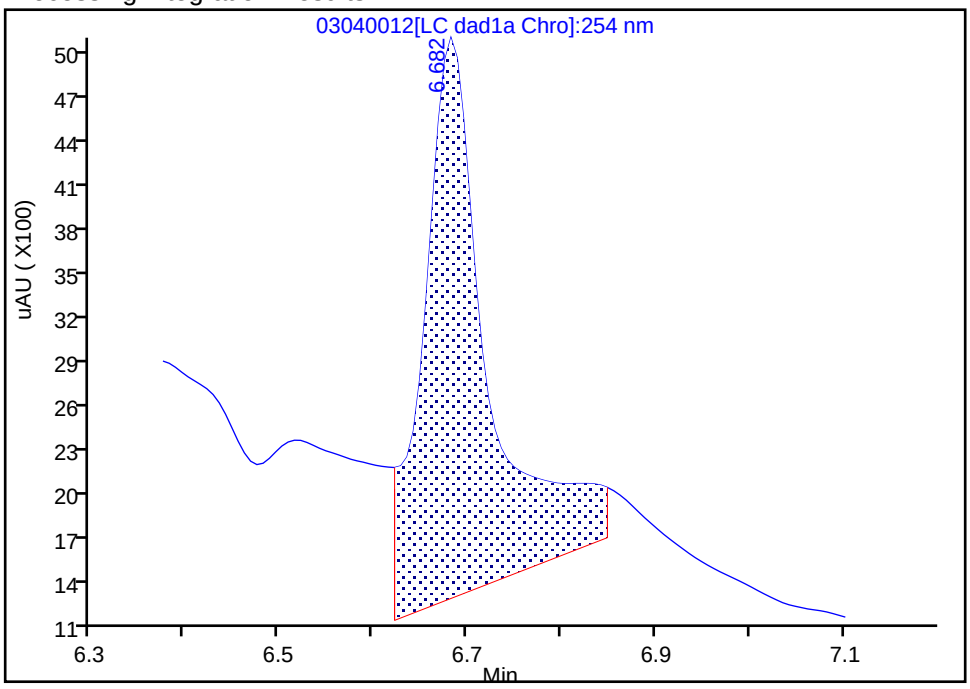
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040012.d
Injection Date: 04-Mar-2020 16:01:56 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L3
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

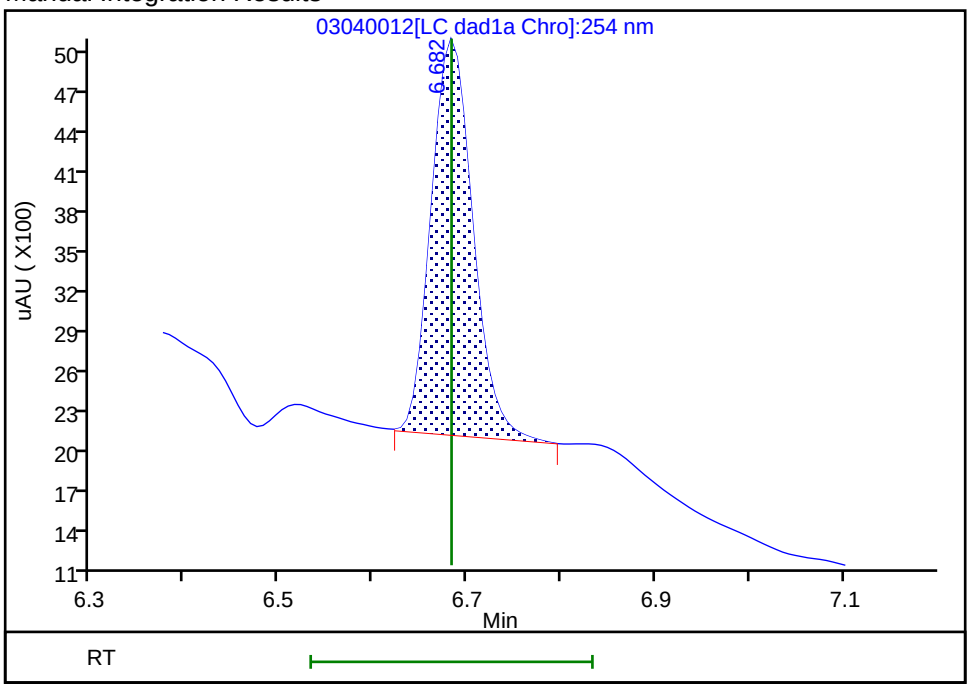
Processing Integration Results

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

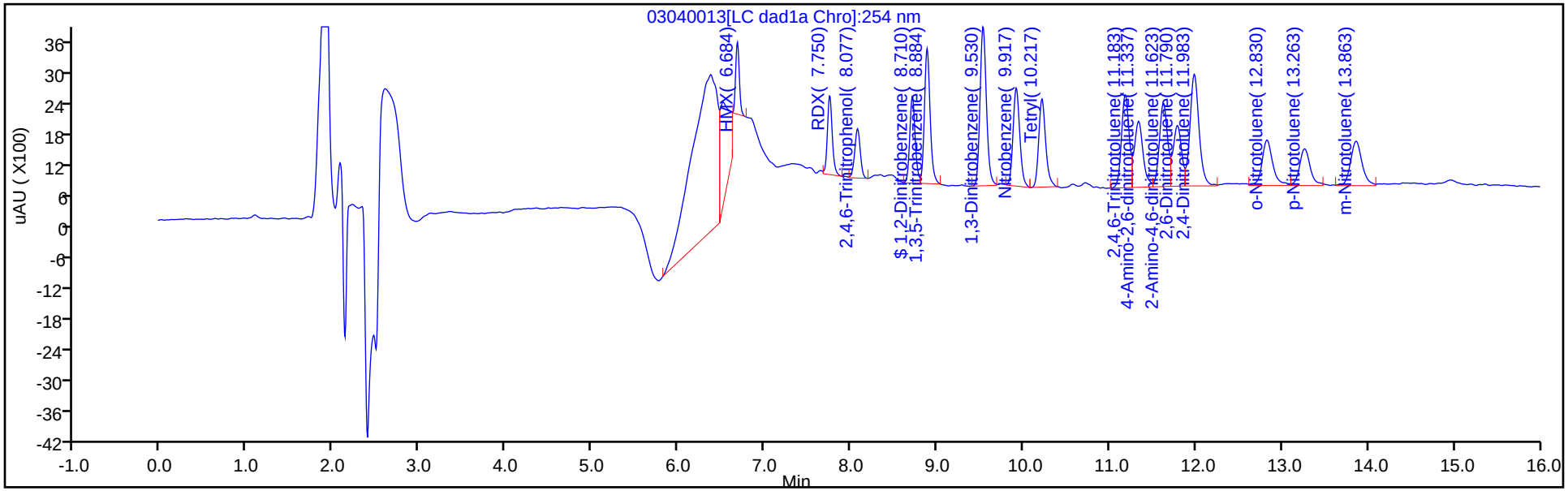
Report Date: 06-Mar-2020 10:25:07 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

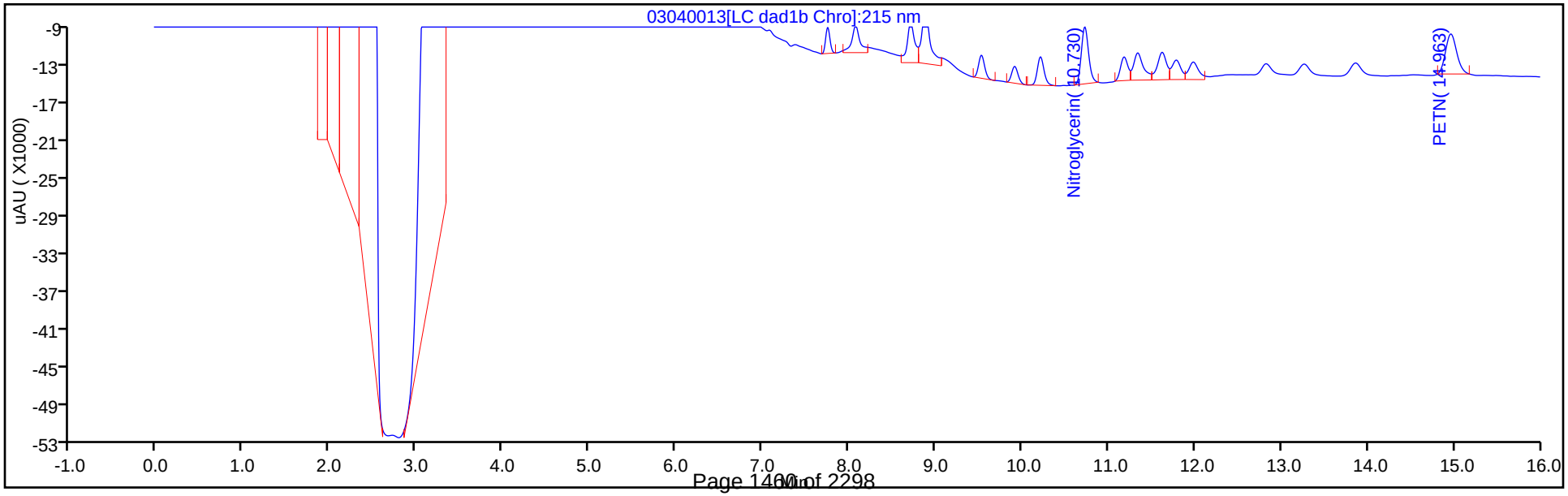
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040013.d

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

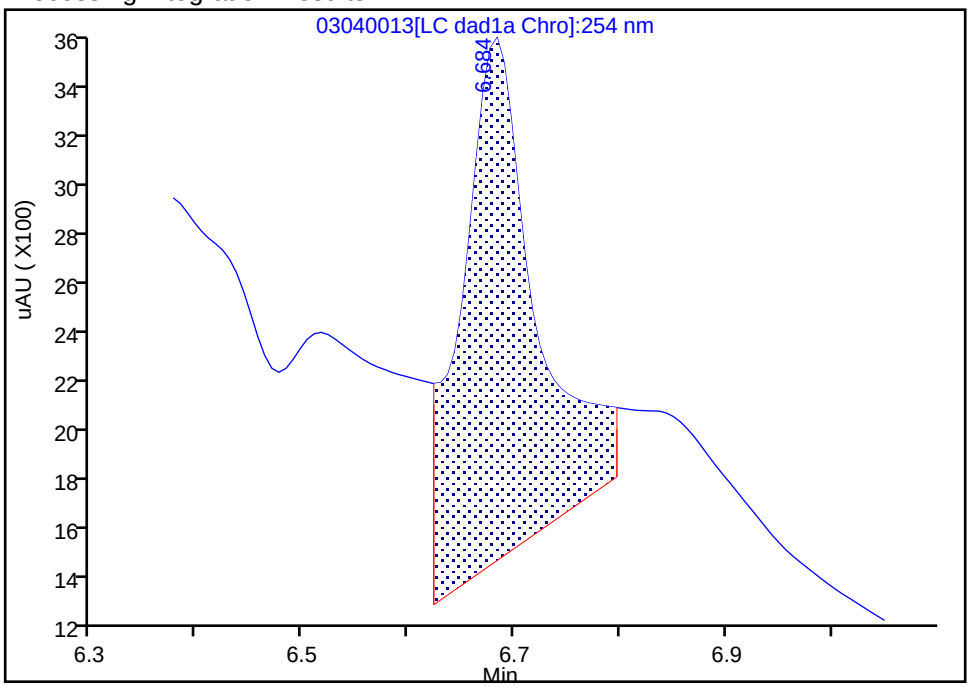
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040013.d
Injection Date: 04-Mar-2020 16:24:51 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L2
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

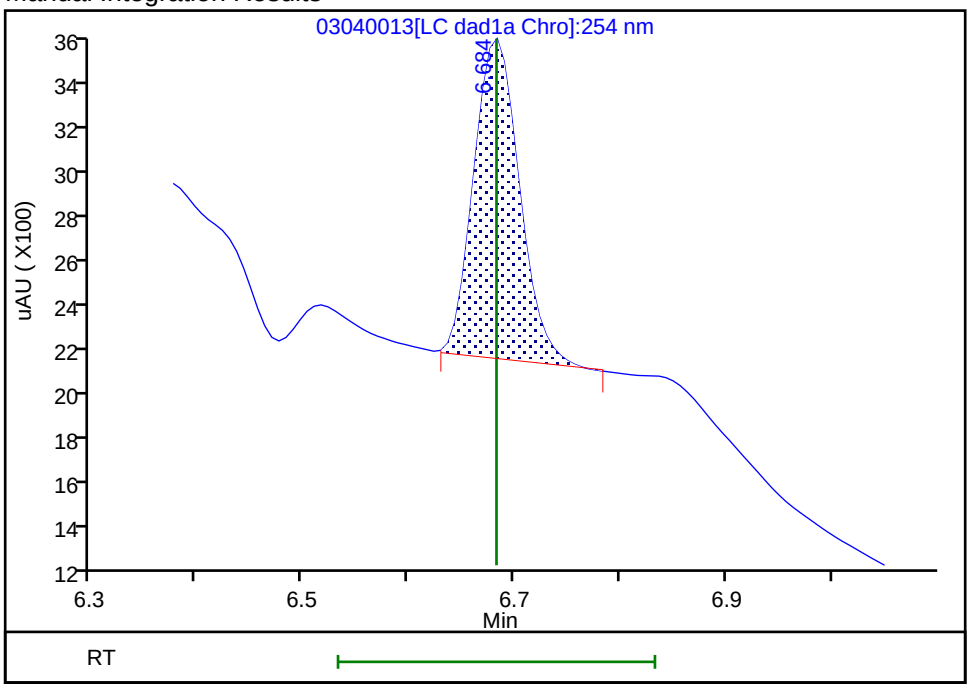
Processing Integration Results

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

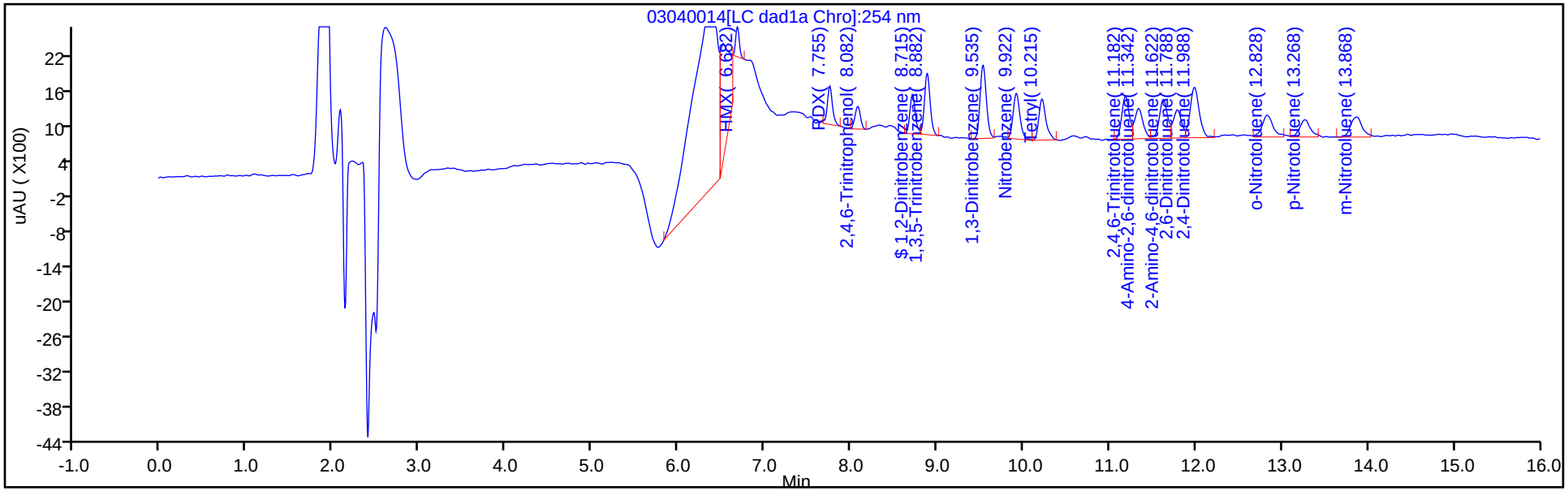
Report Date: 06-Mar-2020 10:25:09 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

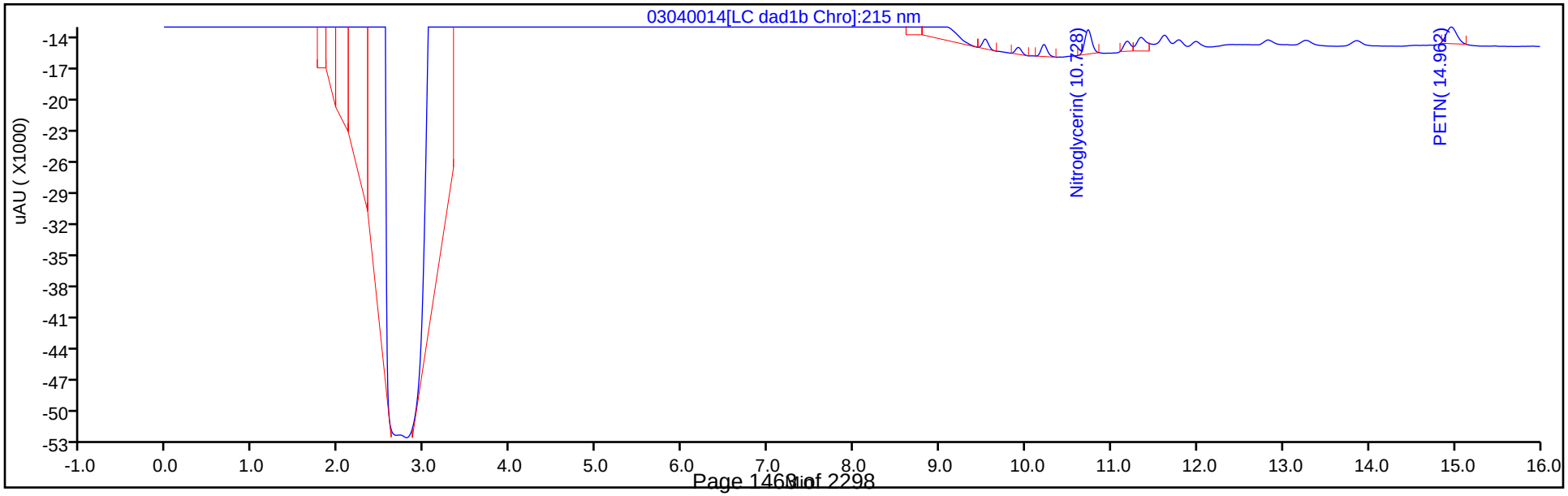
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d

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

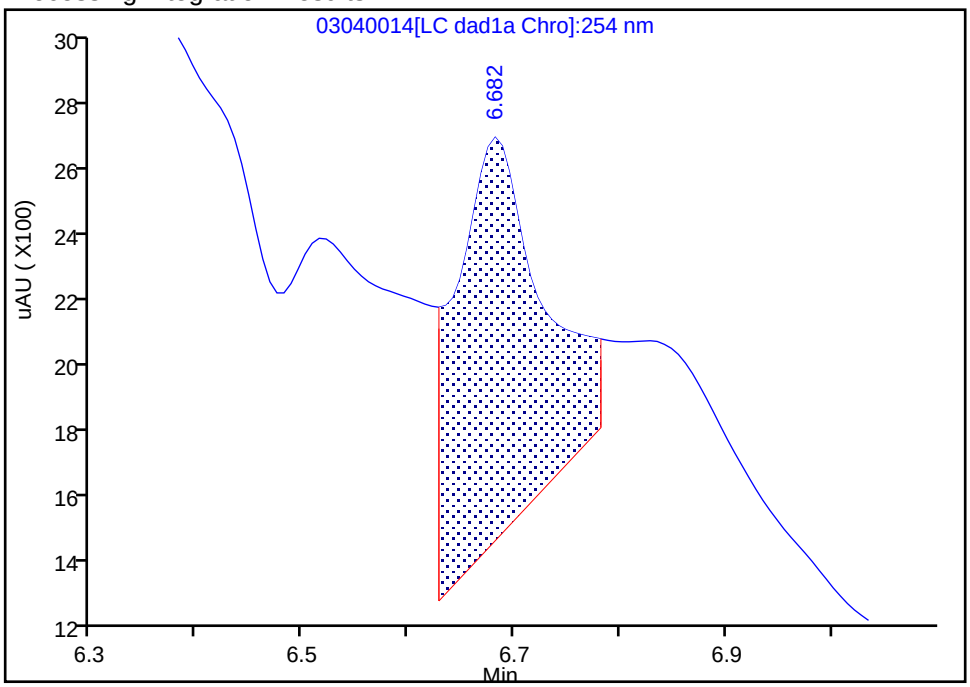
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

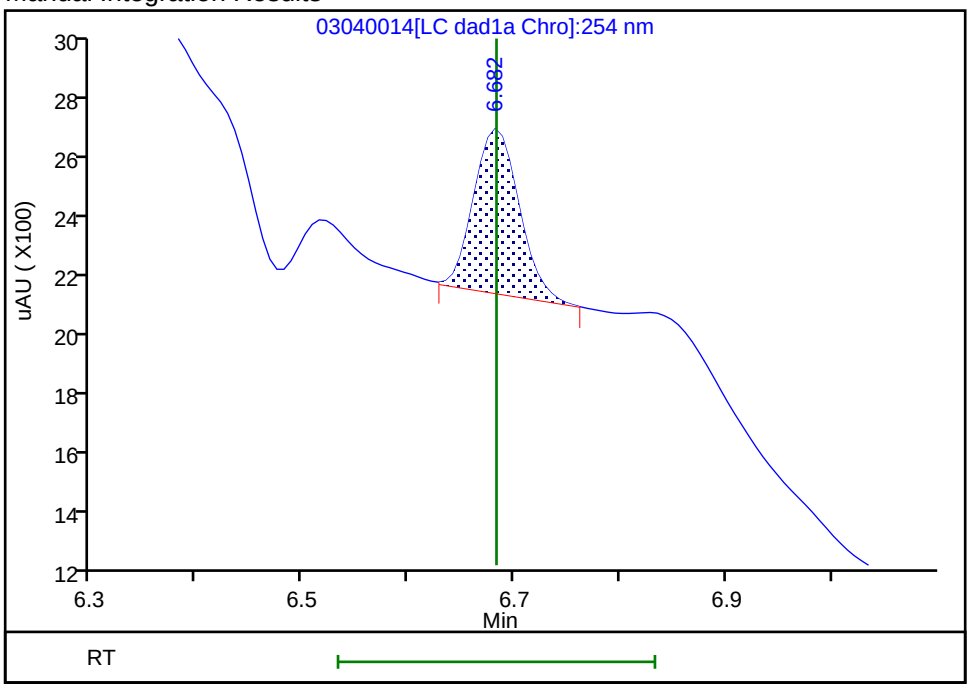
Processing Integration Results

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

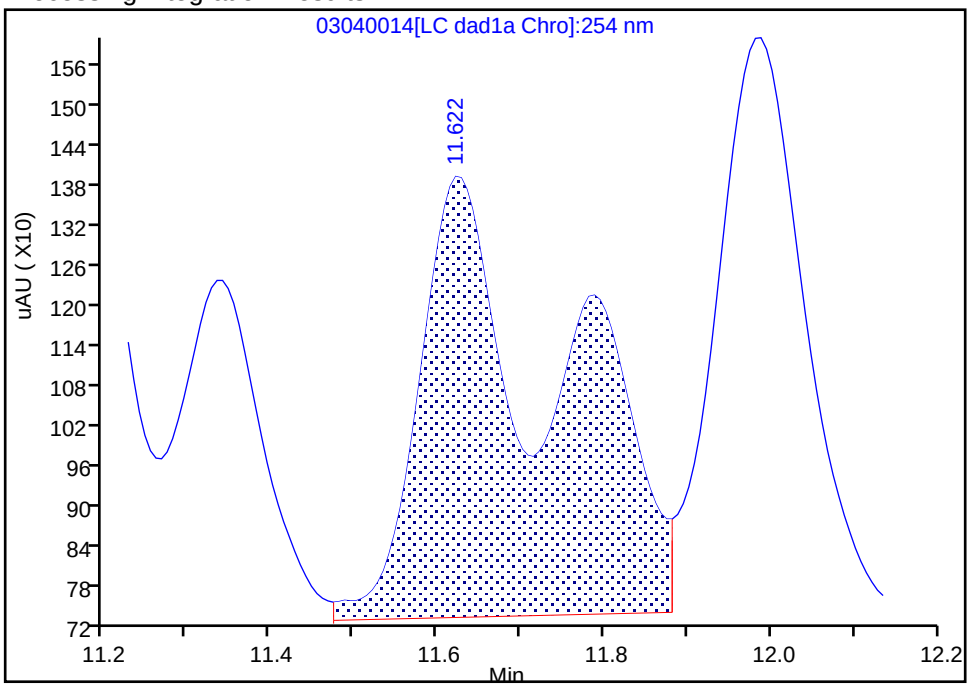
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

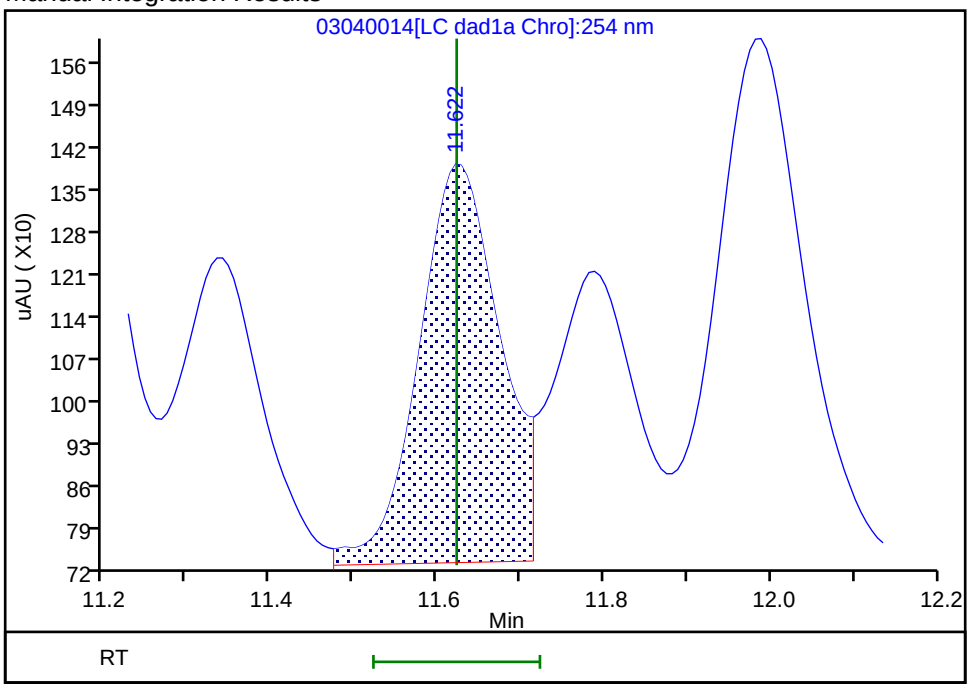
Processing Integration Results

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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

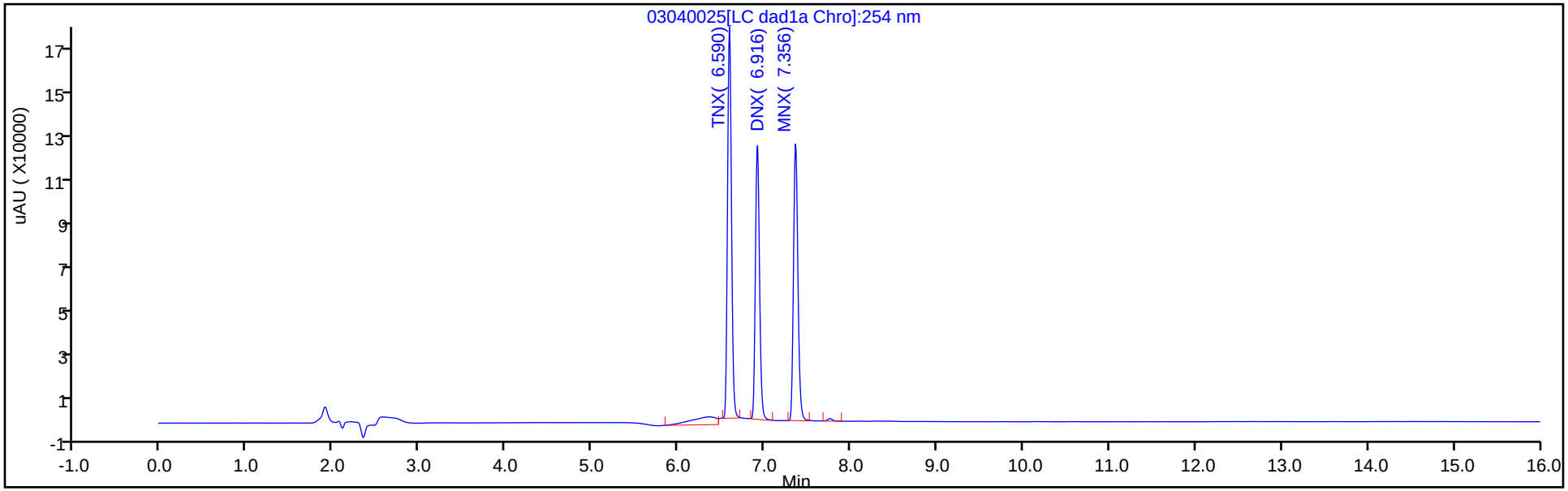
Report Date: 06-Mar-2020 10:25:21 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

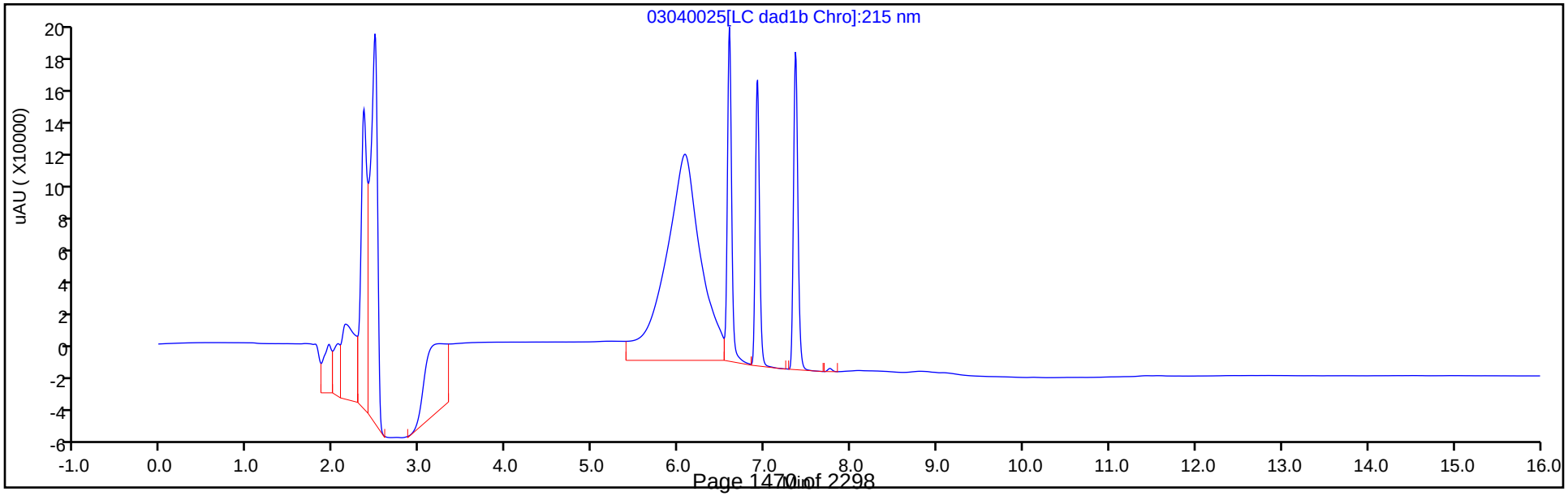
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d

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

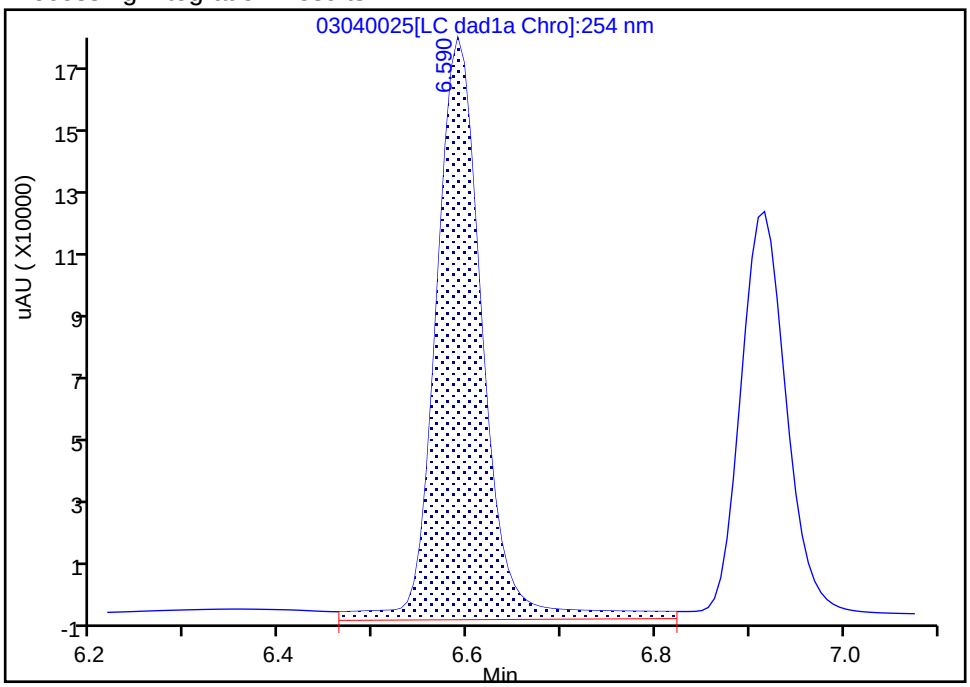
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

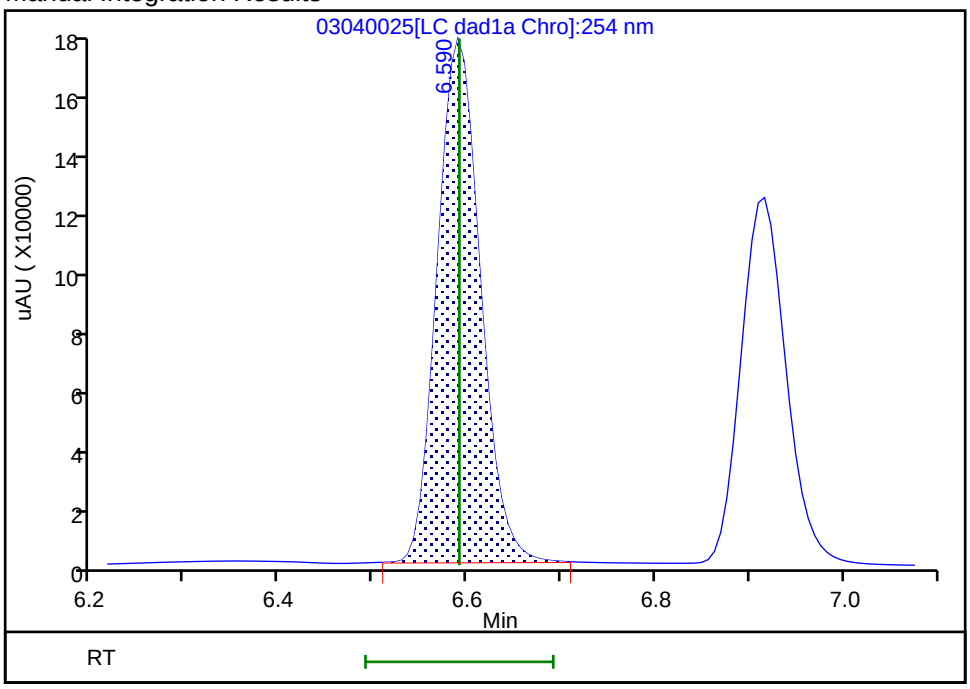
Processing Integration Results

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

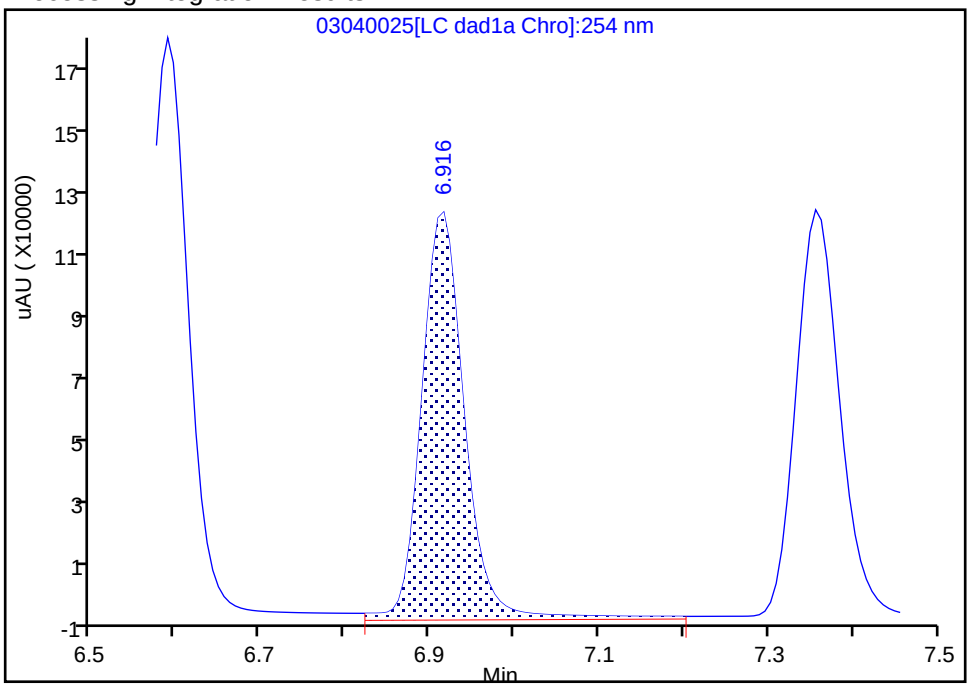
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

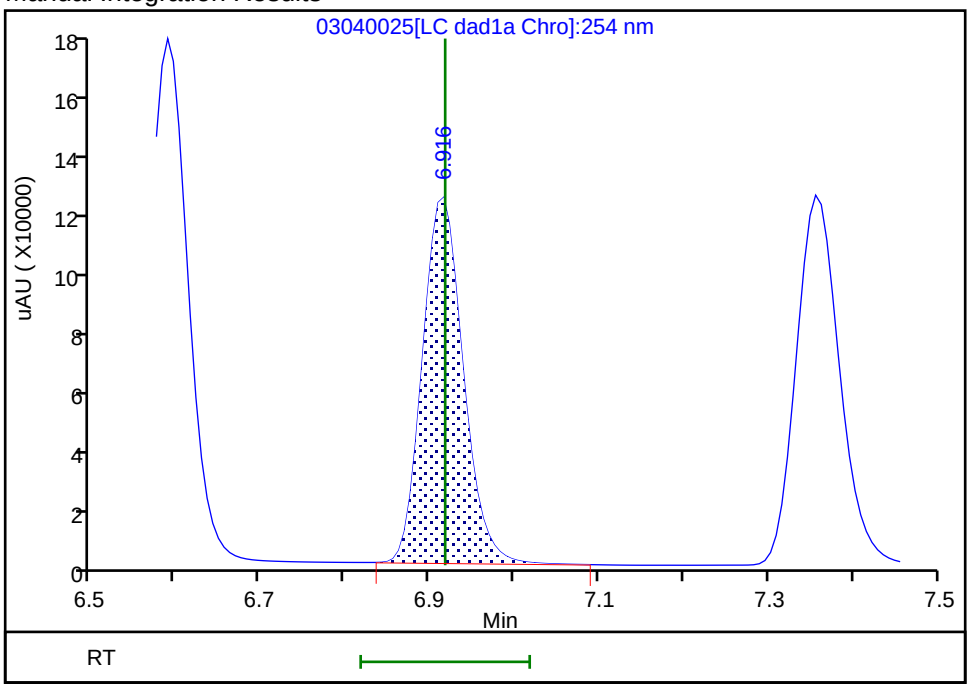
Processing Integration Results

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

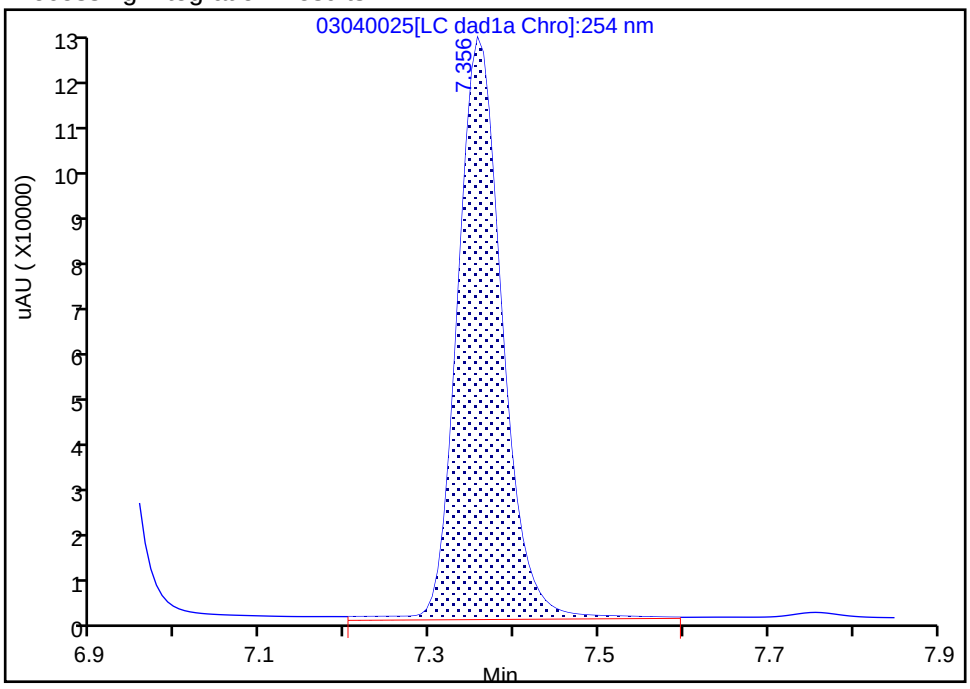
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

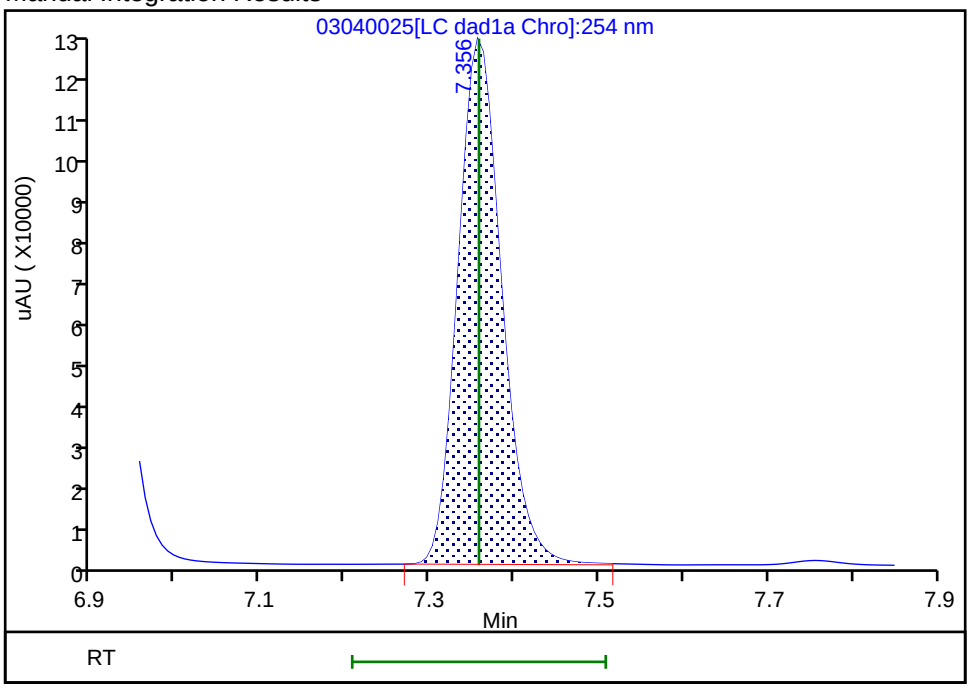
Processing Integration Results

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

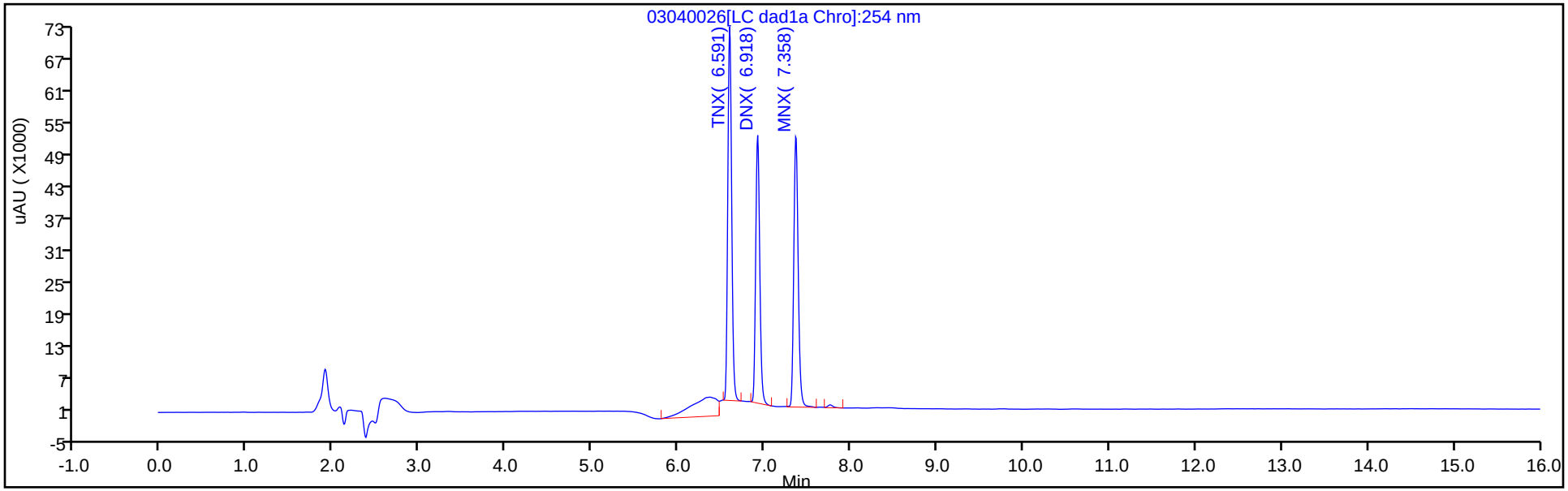
Report Date: 06-Mar-2020 10:25:22 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

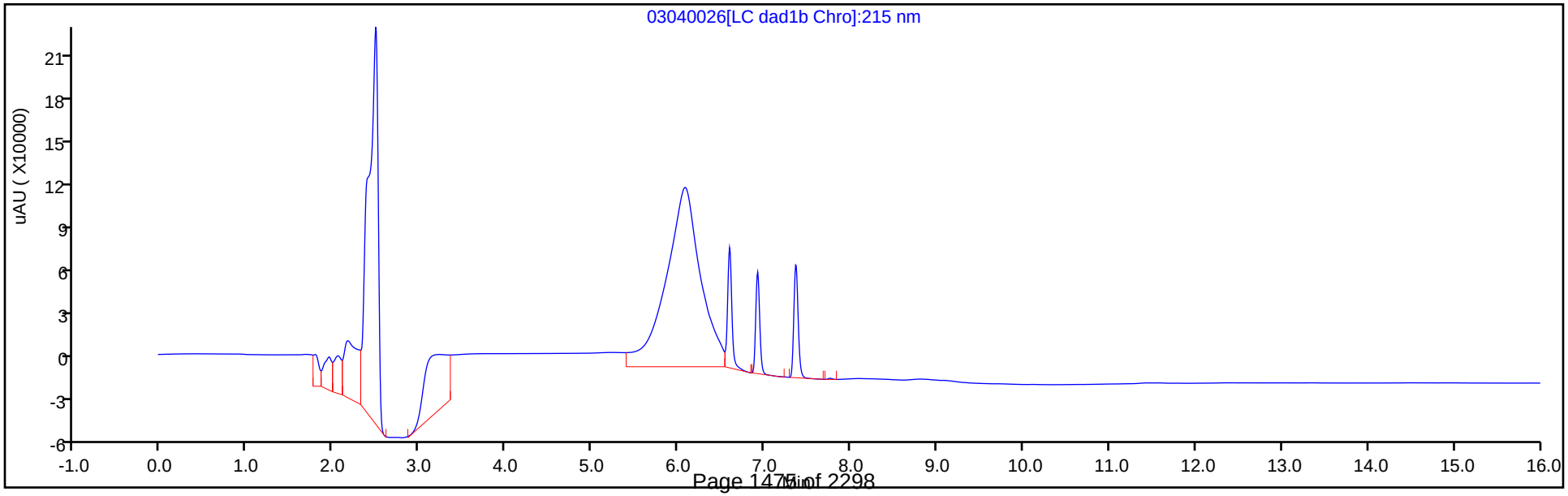
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d

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

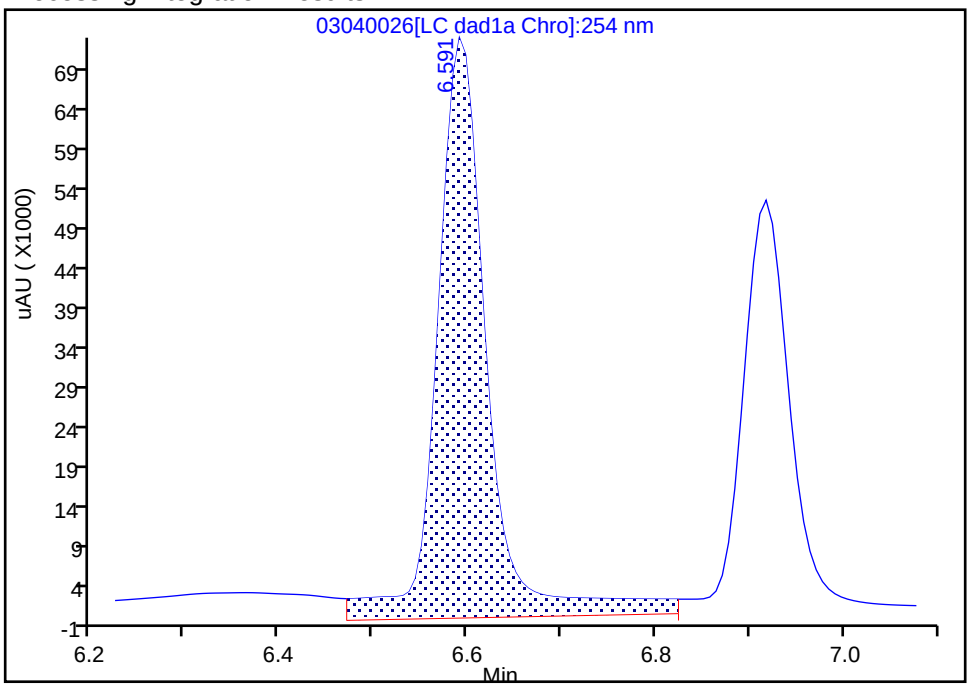
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d
Injection Date: 04-Mar-2020 21:23:03 Instrument ID: CHHPLC_X3
Lims ID: IC DMT L7
Client ID:
Operator ID: CB ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

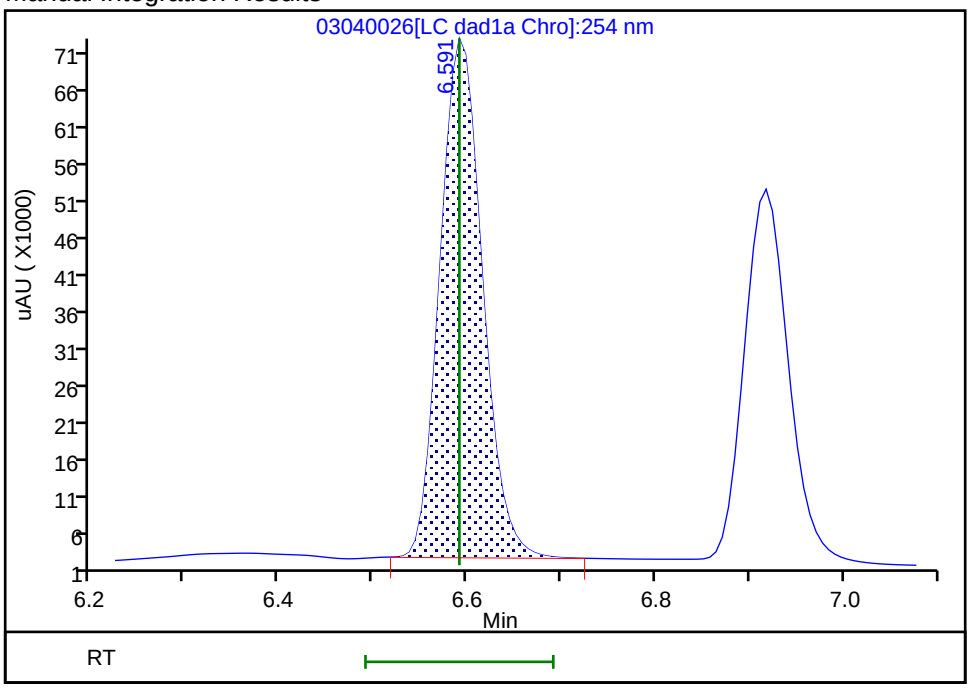
Processing Integration Results

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

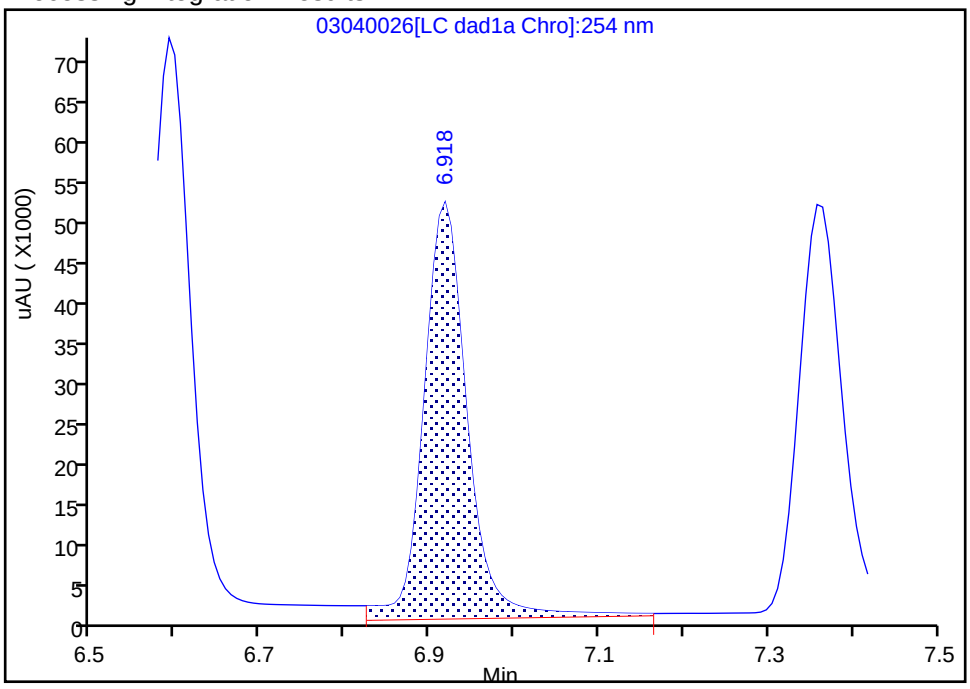
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

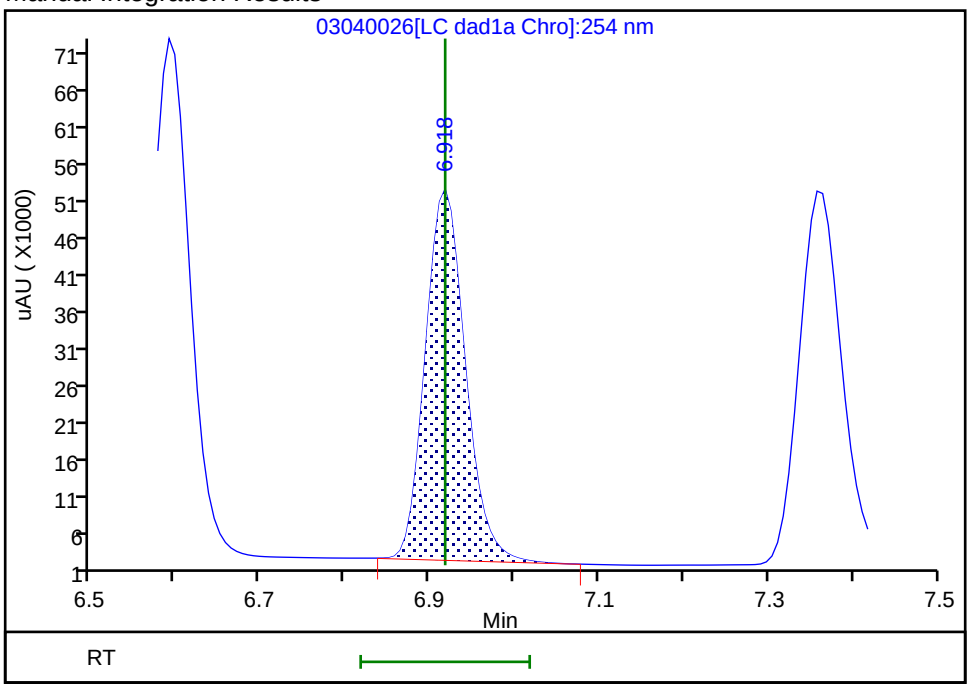
Processing Integration Results

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

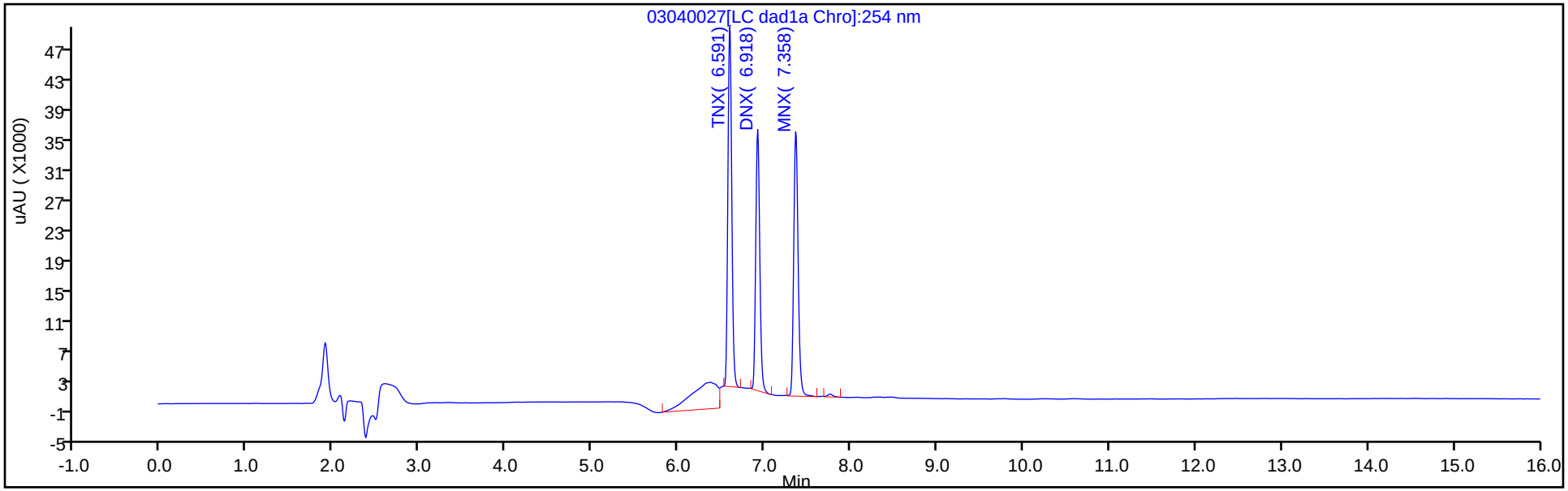
Report Date: 06-Mar-2020 10:25:23 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

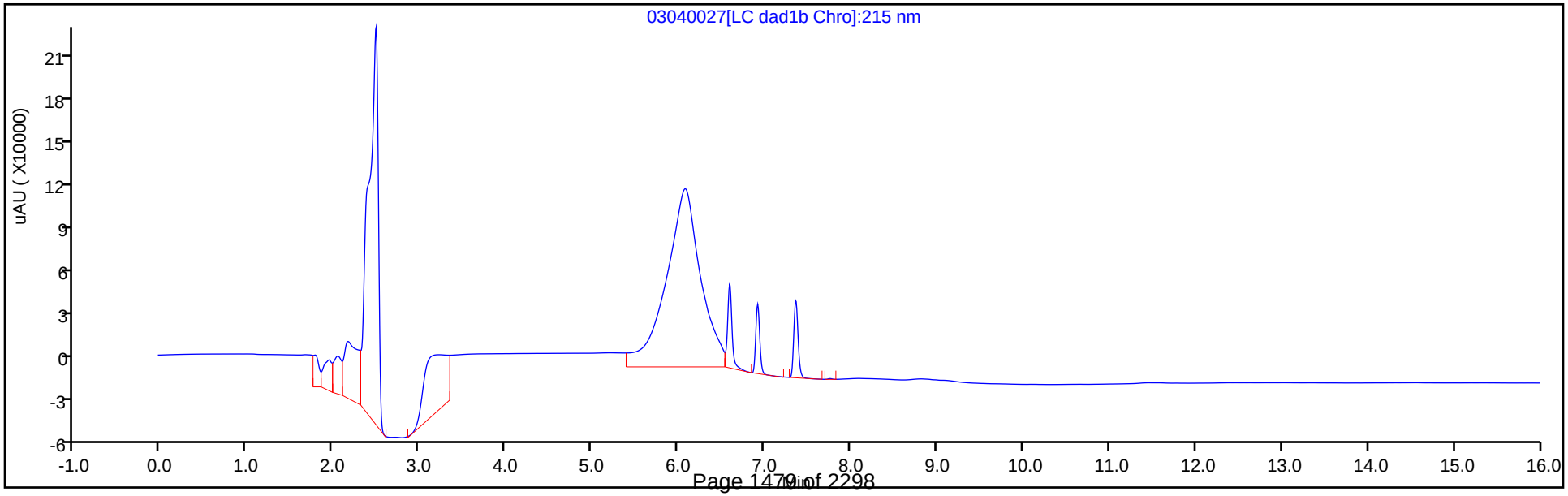
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d

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

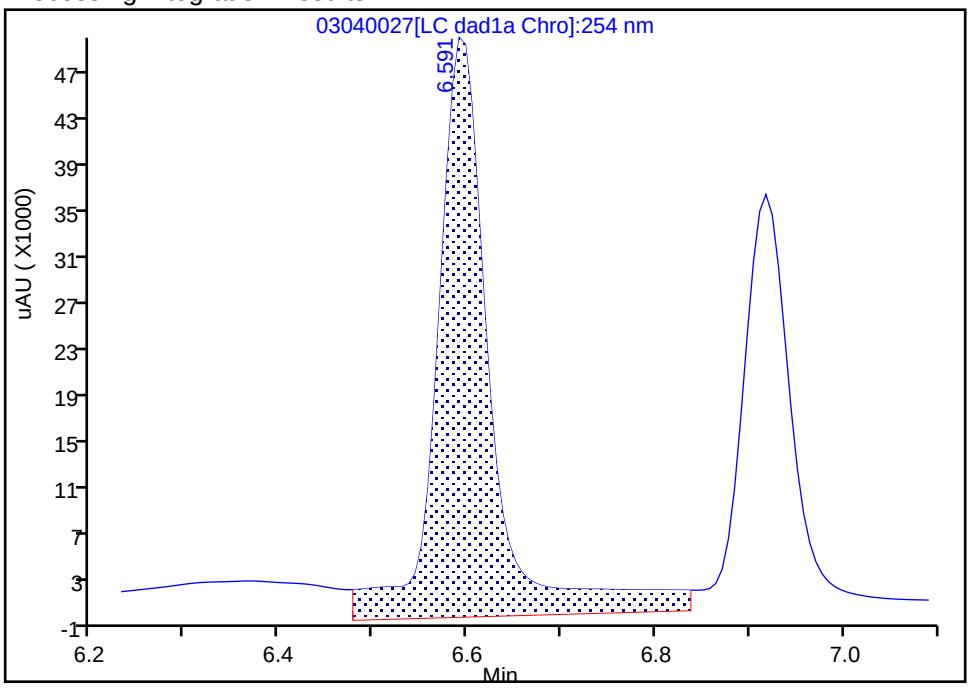
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

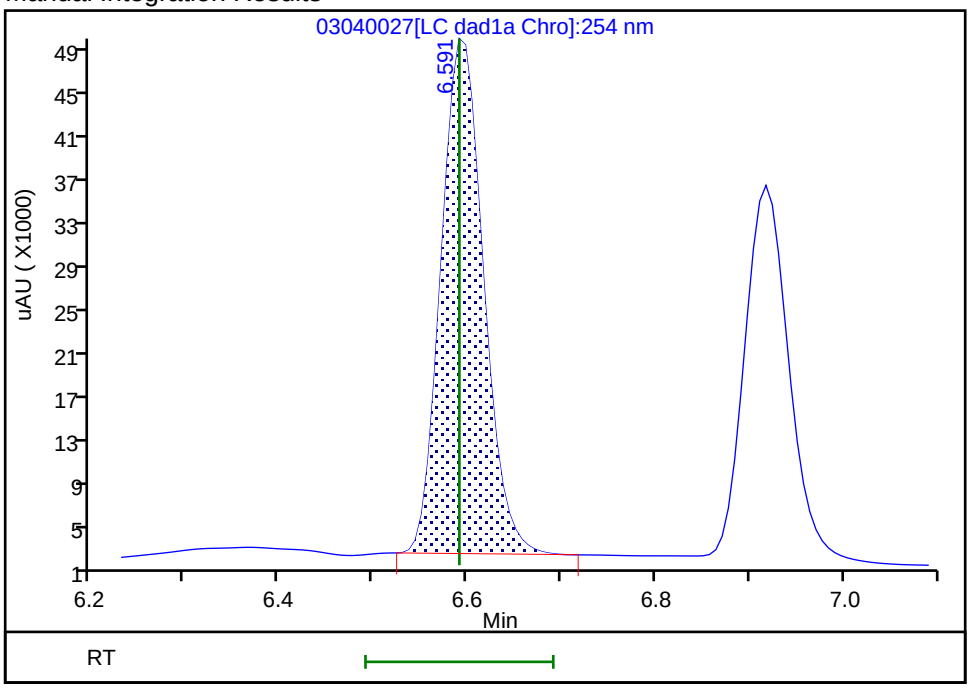
Processing Integration Results

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

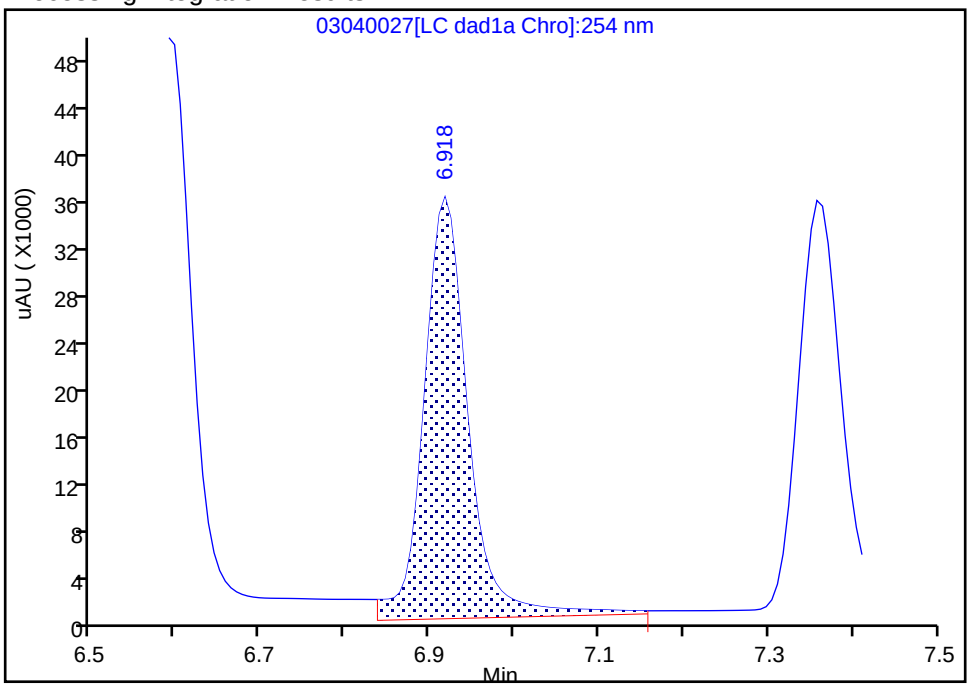
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

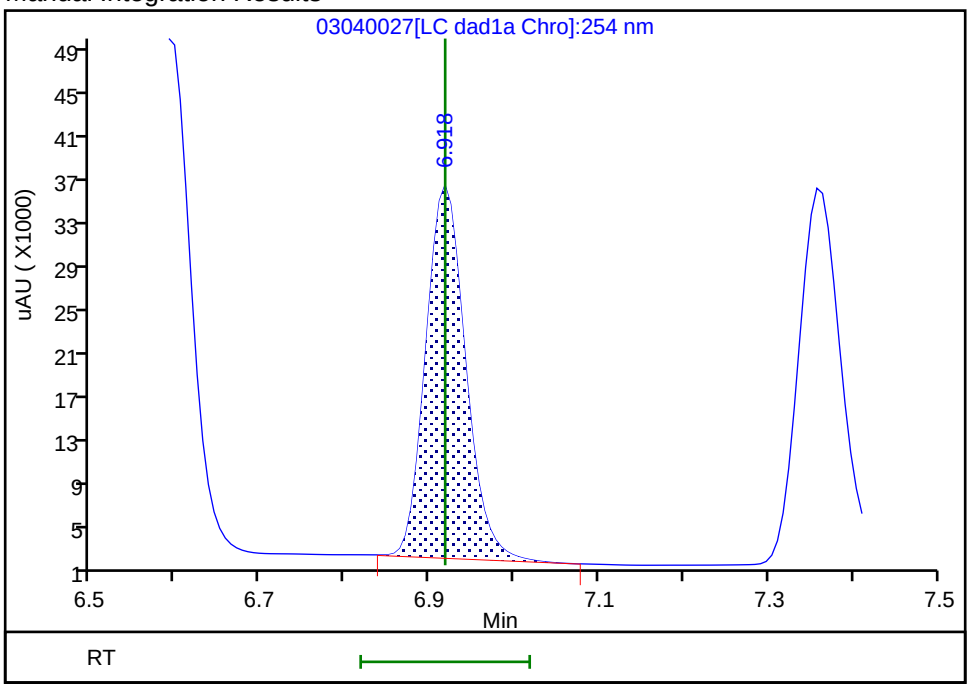
Processing Integration Results

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

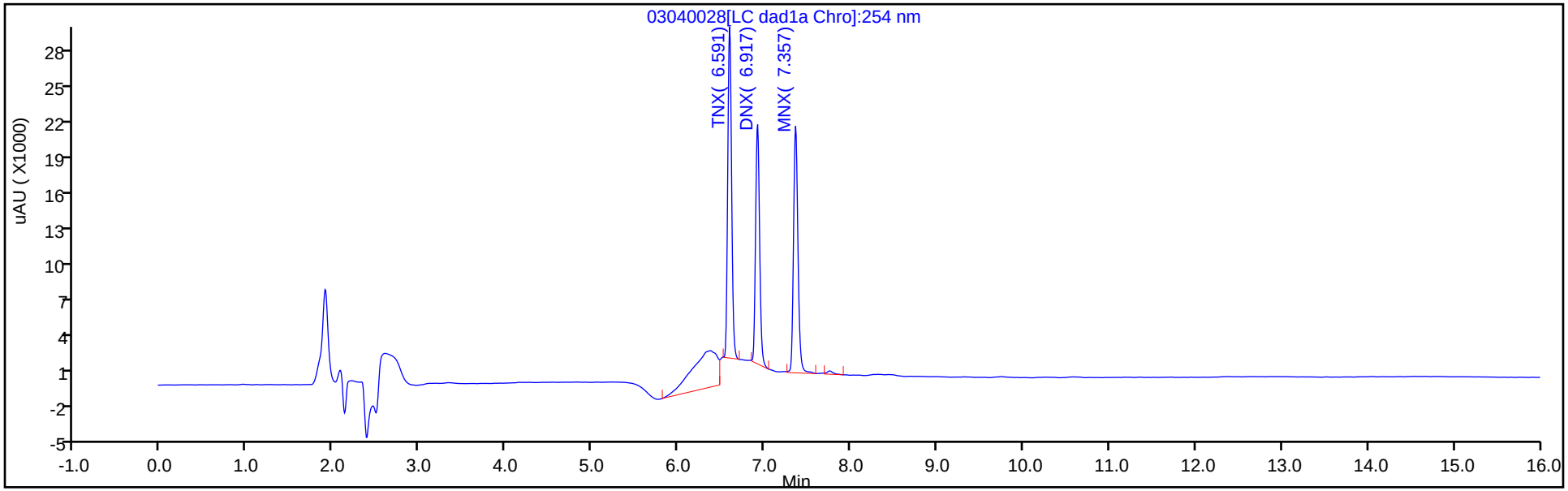
Report Date: 06-Mar-2020 10:25:24 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

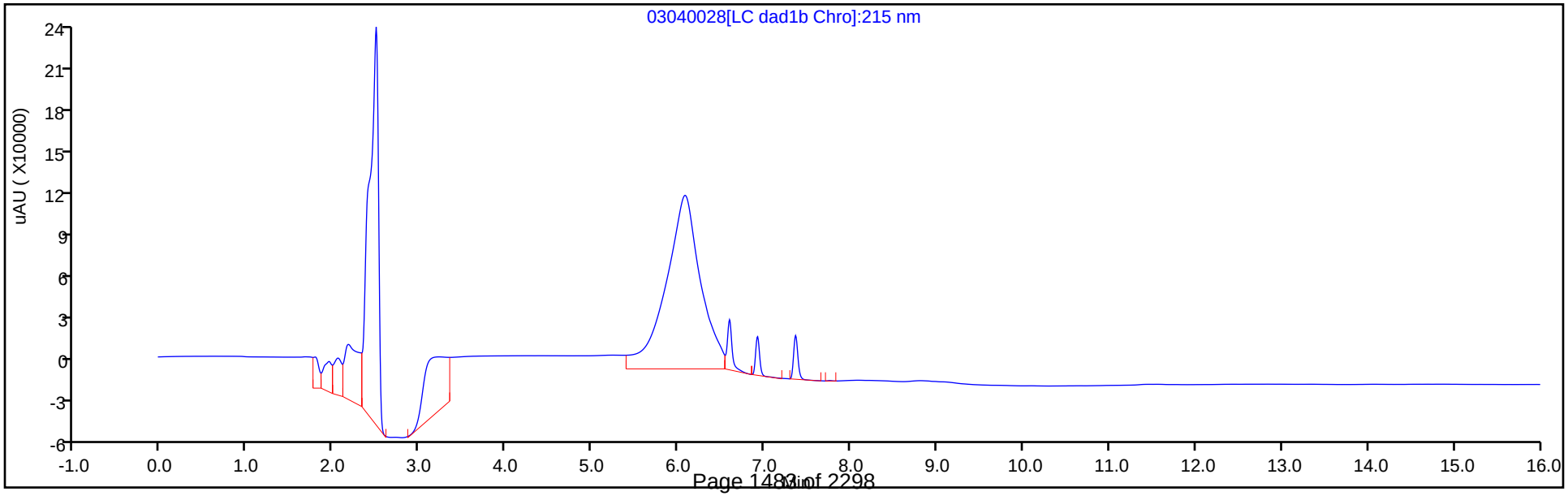
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d

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

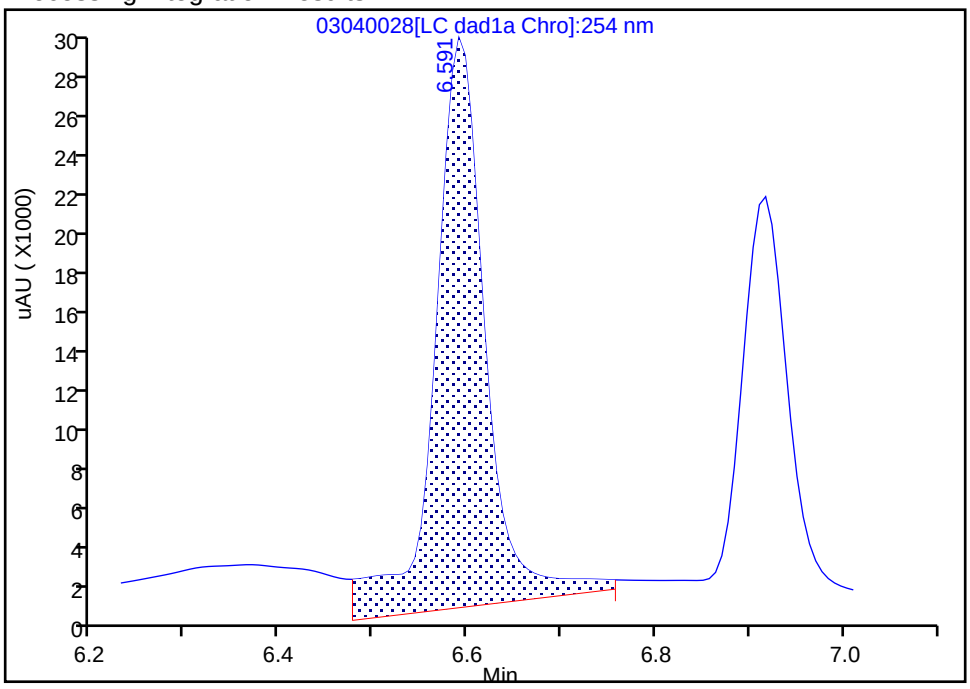
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d
Injection Date: 04-Mar-2020 22:09:00 Instrument ID: CHHPLC_X3
Lims ID: IC DMT L5
Client ID:
Operator ID: CB ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

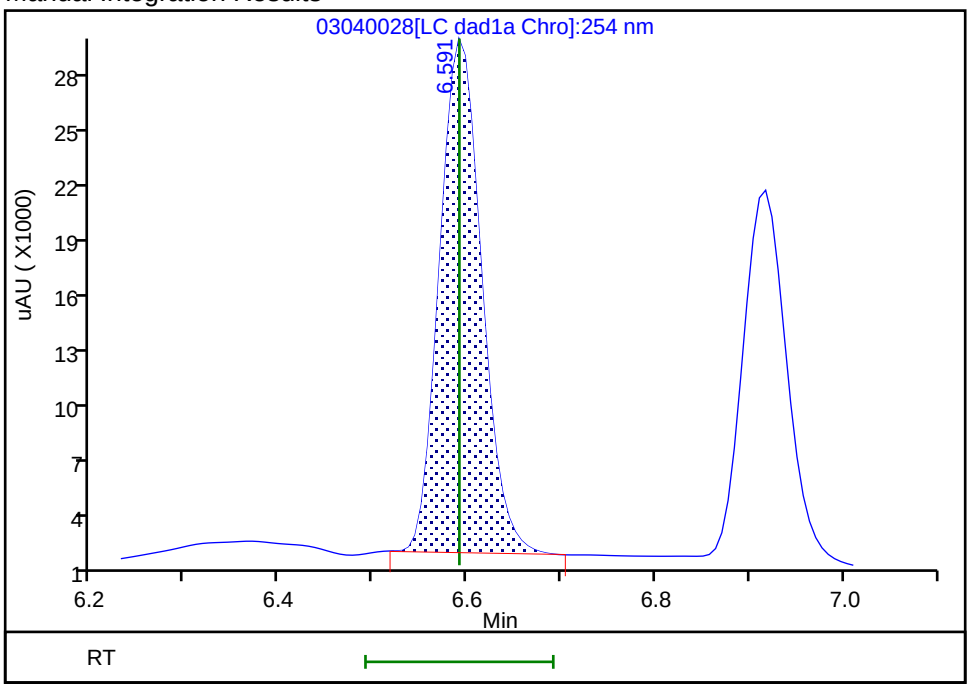
Processing Integration Results

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

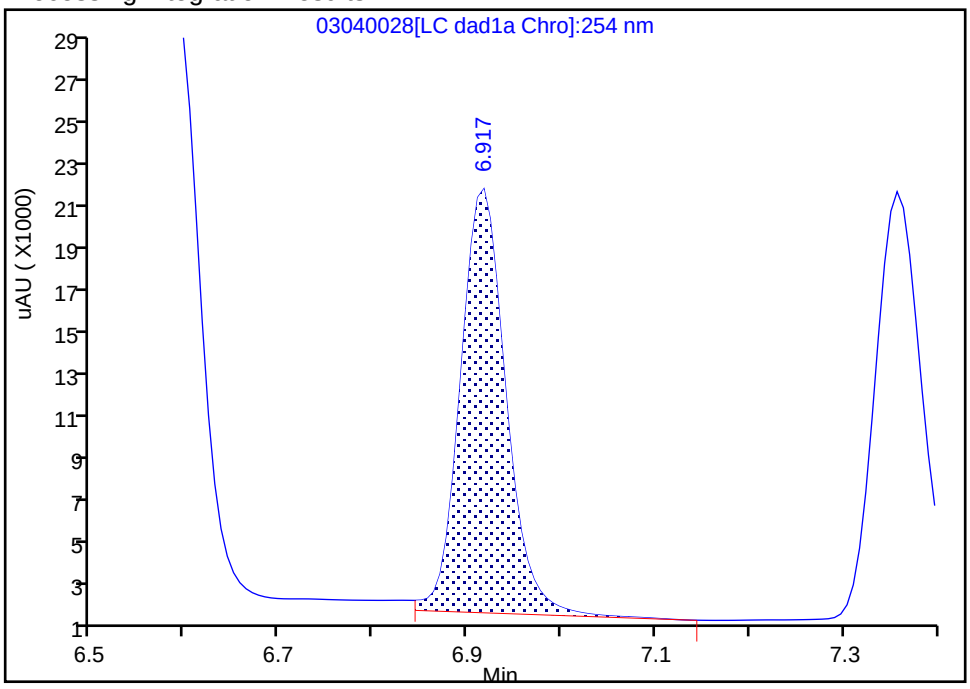
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

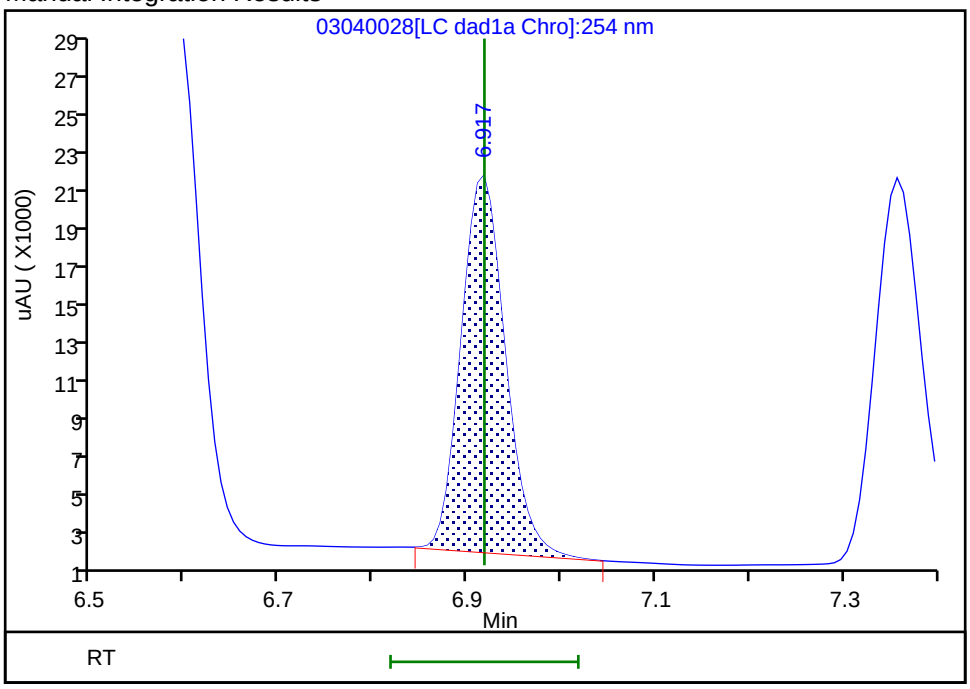
Processing Integration Results

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

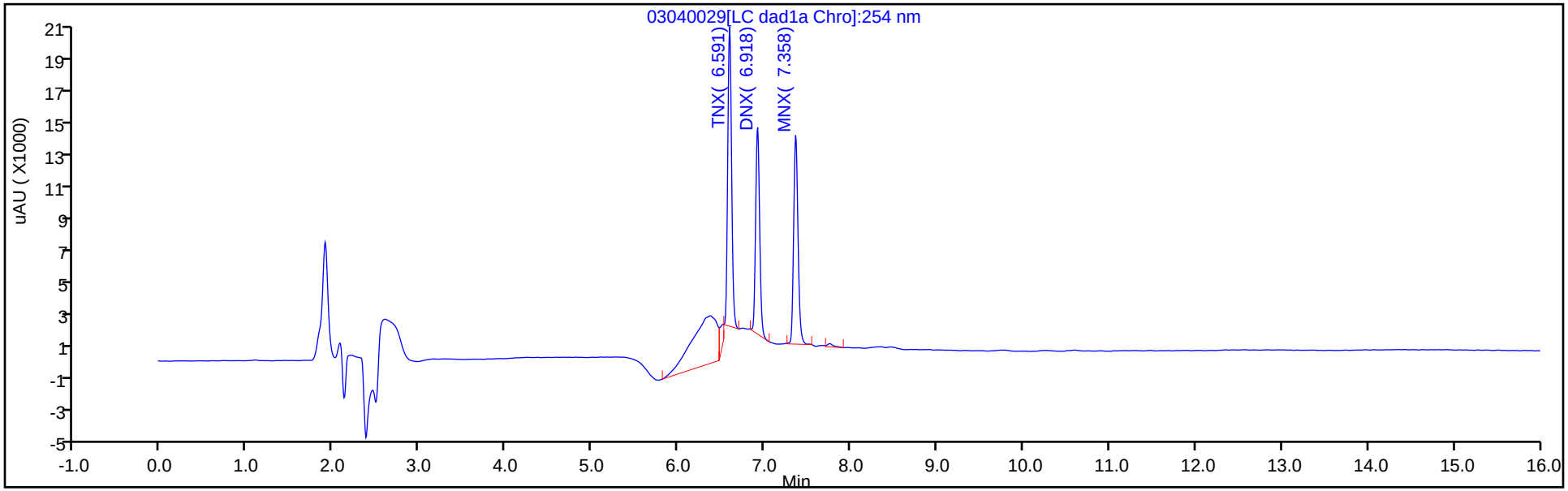
Report Date: 06-Mar-2020 10:25:25 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

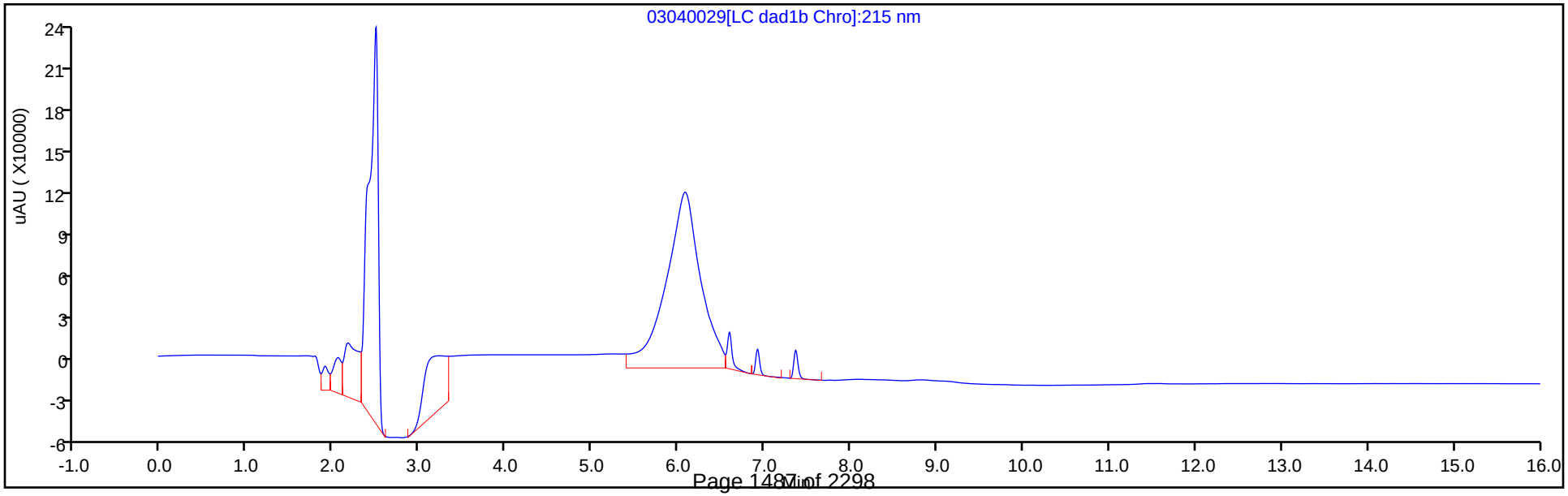
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d

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

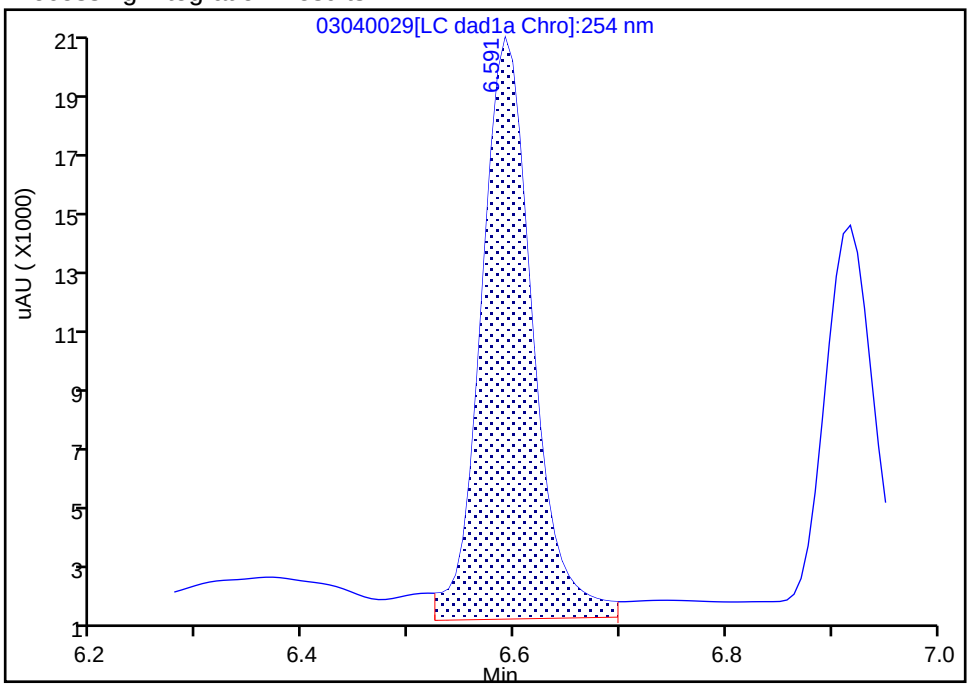
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d
Injection Date: 04-Mar-2020 22:31:57 Instrument ID: CHHPLC_X3
Lims ID: IC DMT L4
Client ID:
Operator ID: CB ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

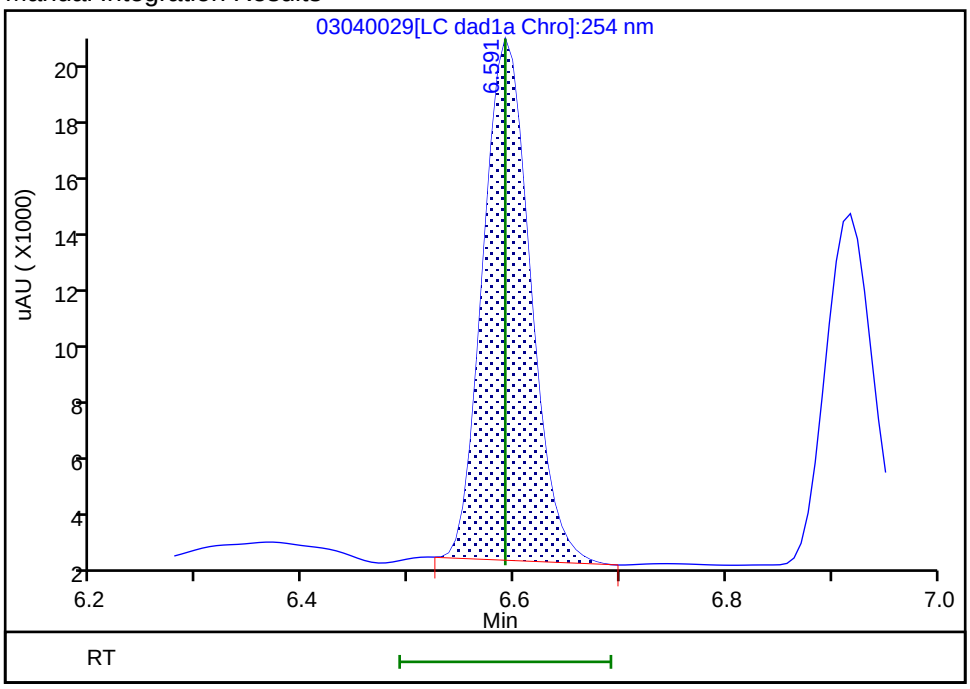
Processing Integration Results

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

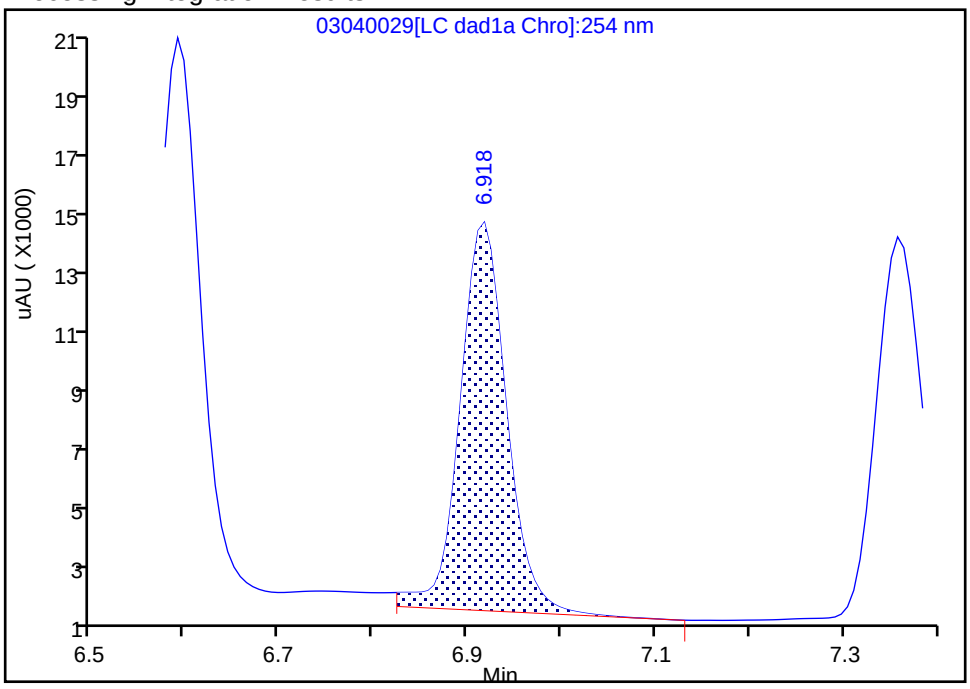
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

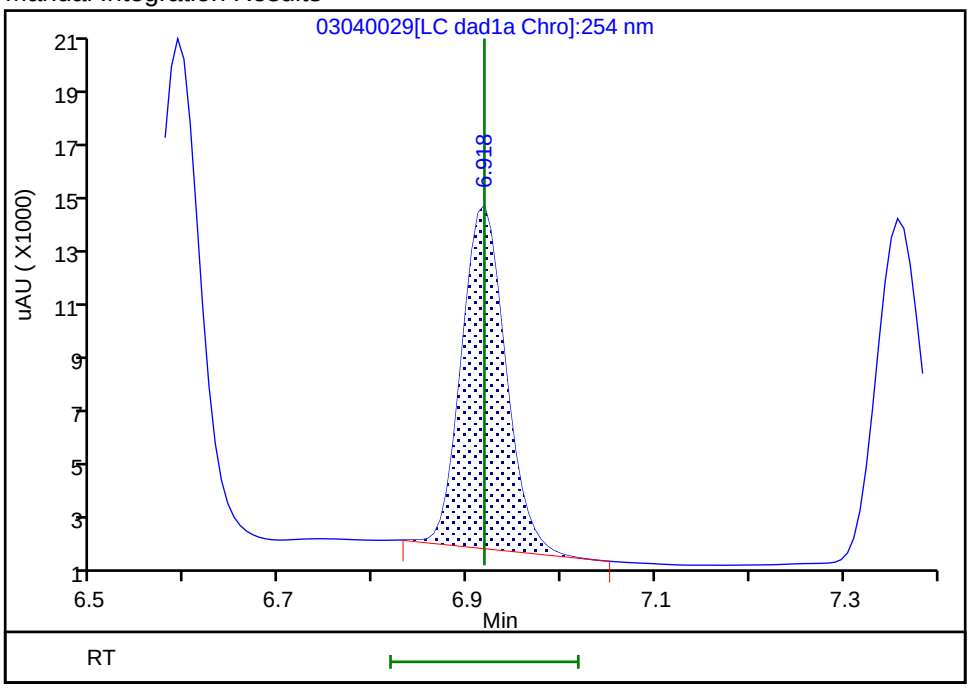
Processing Integration Results

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

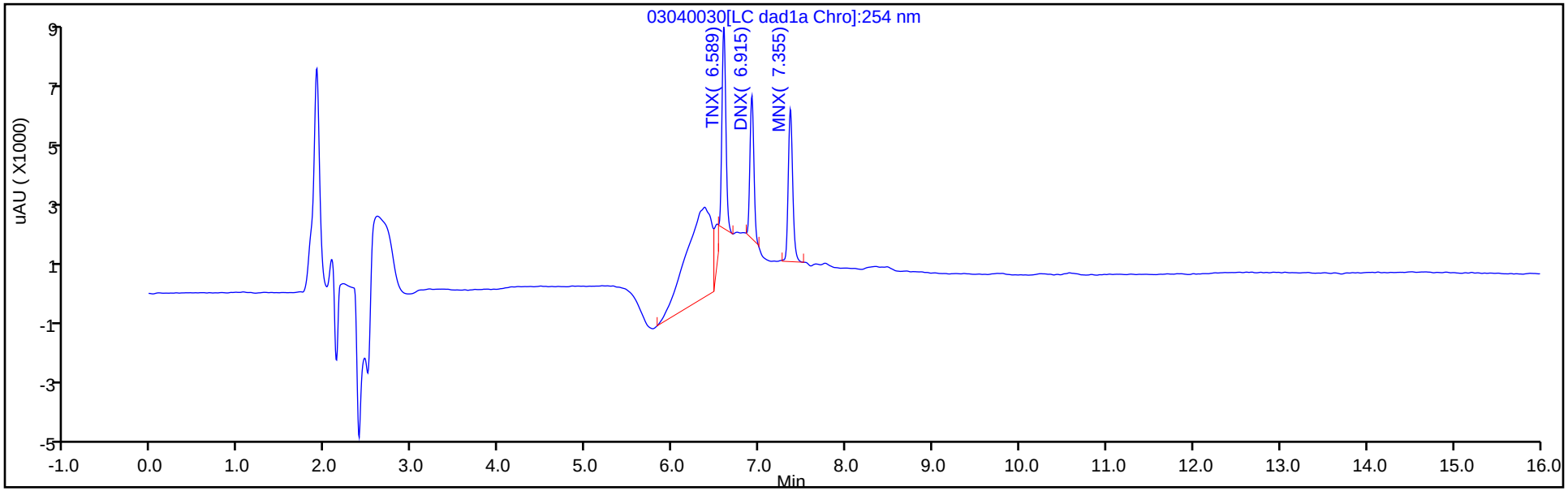
Report Date: 06-Mar-2020 10:25:26 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

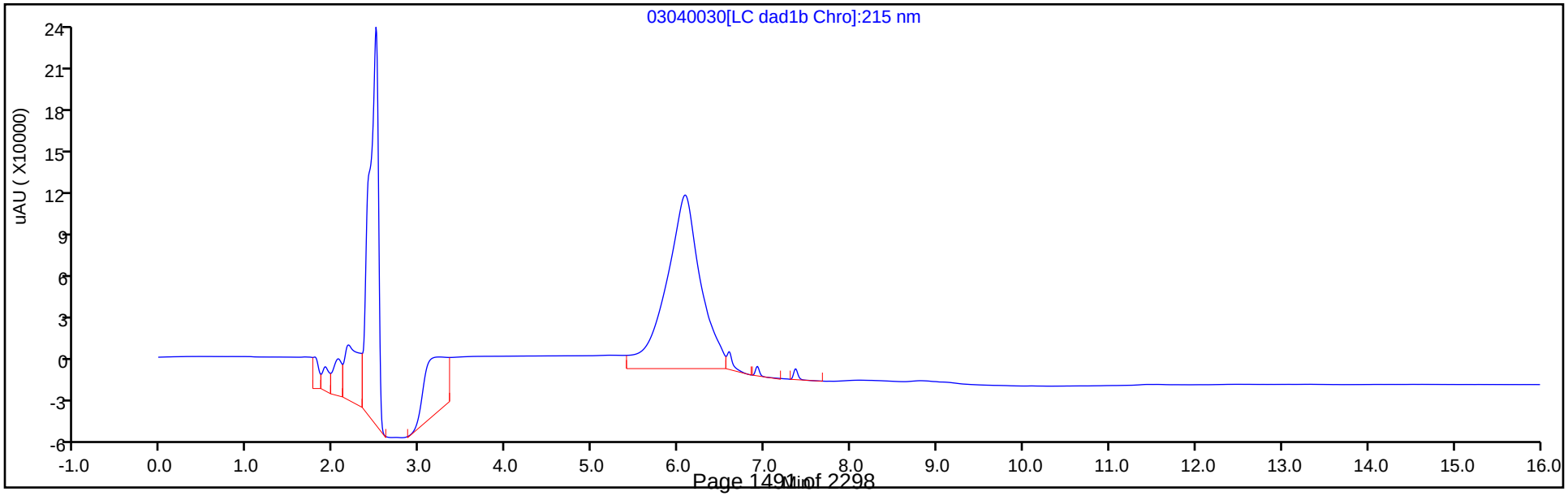
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d

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

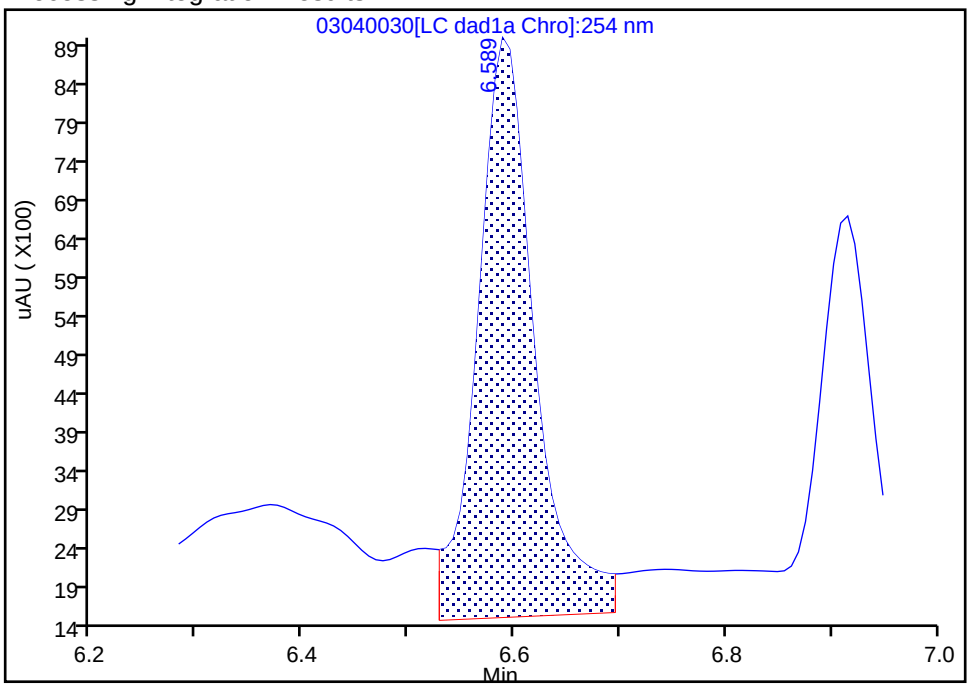
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

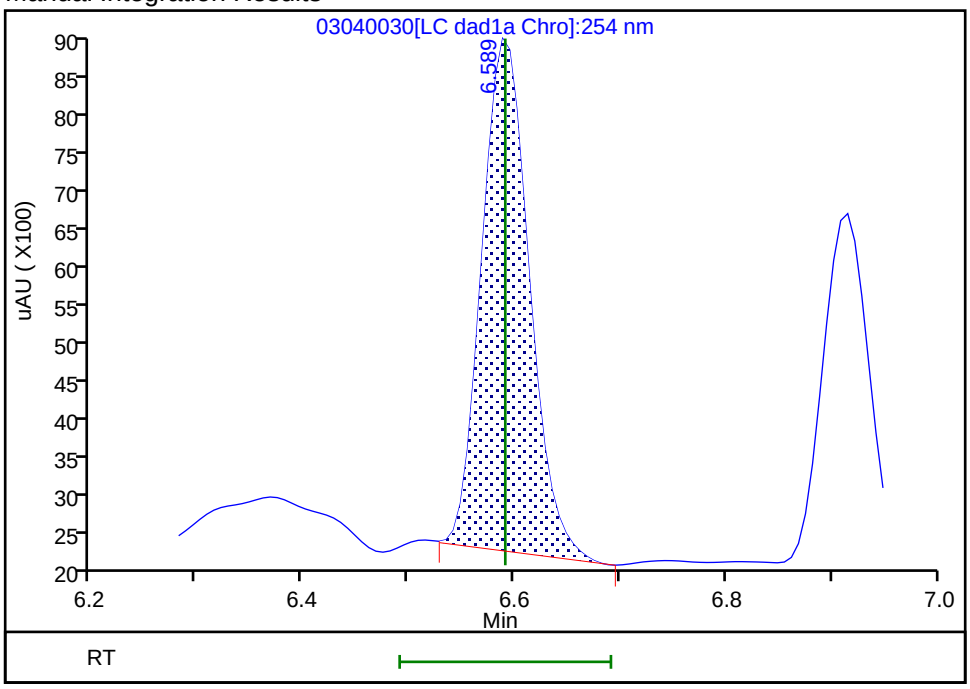
Processing Integration Results

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

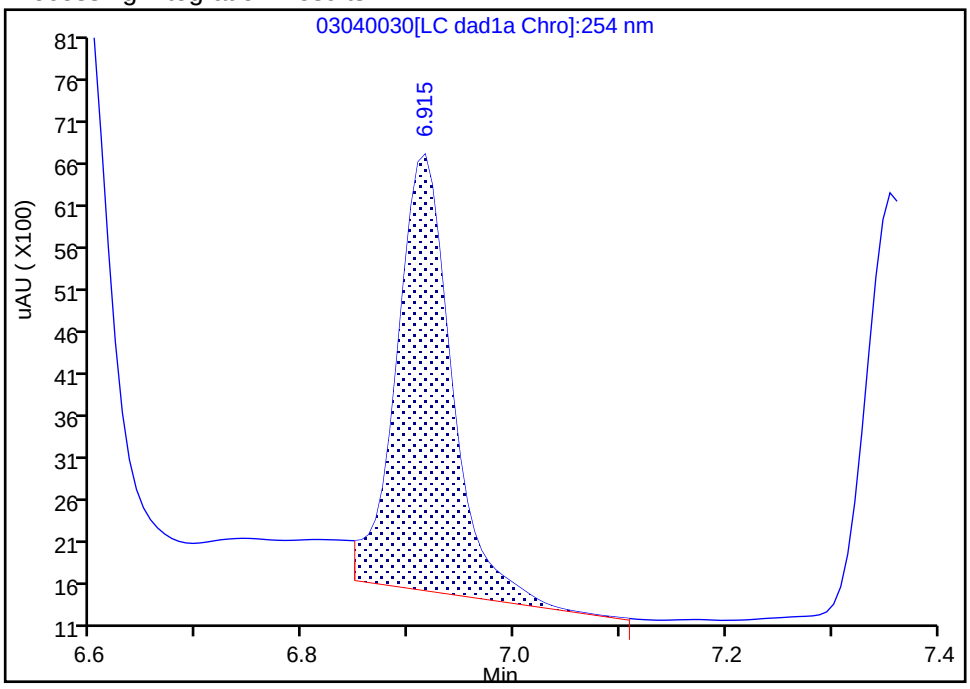
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

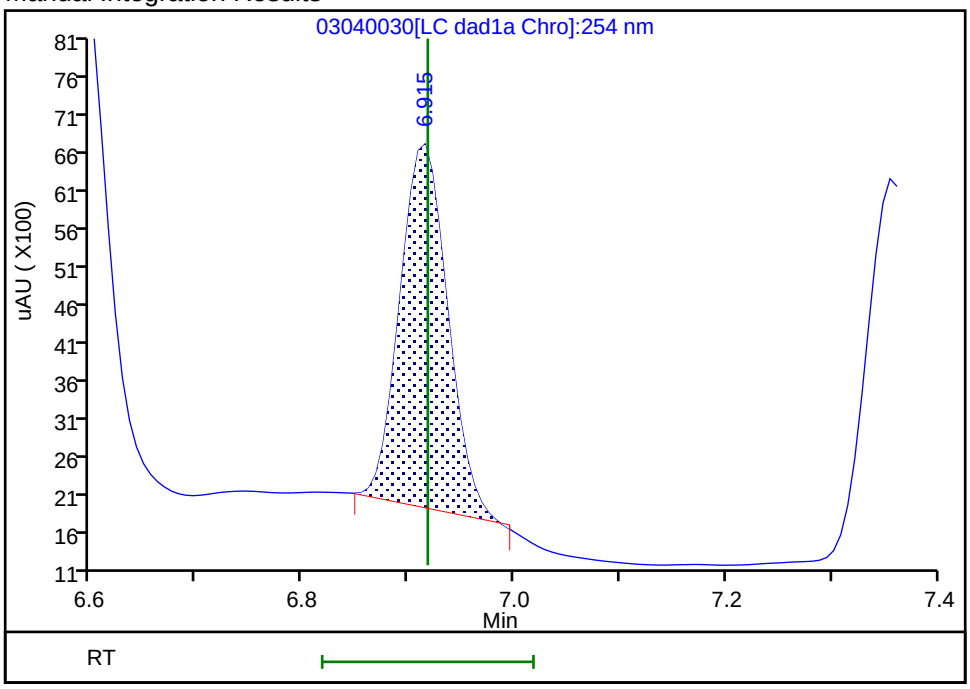
Processing Integration Results

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

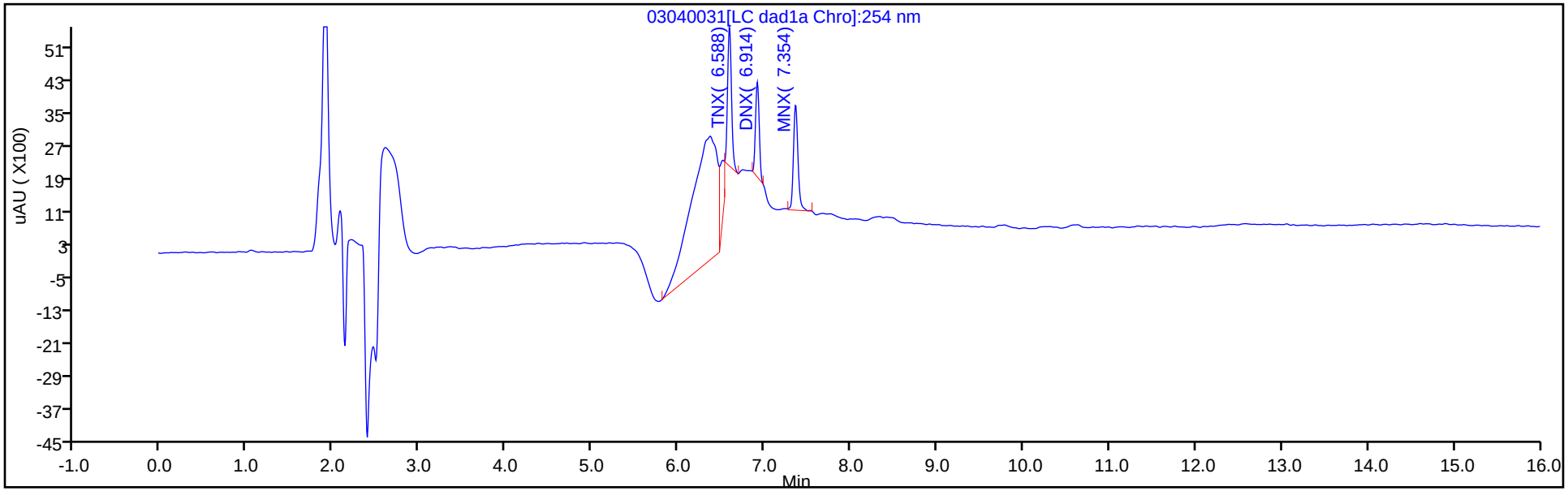
Report Date: 06-Mar-2020 10:25:27 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

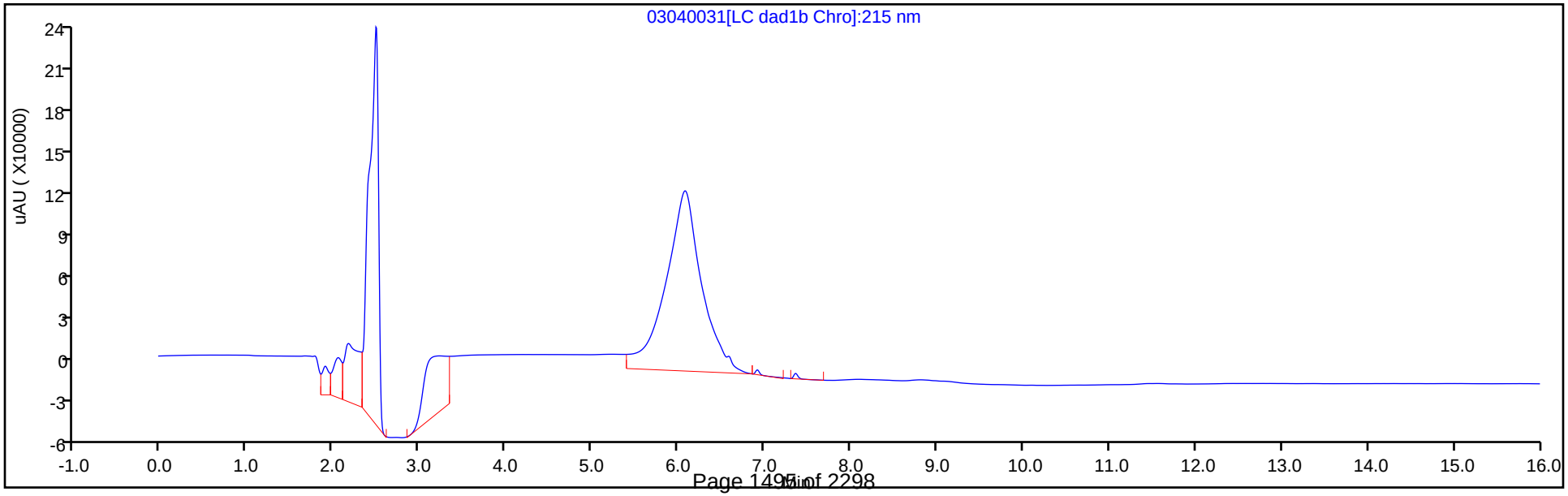
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d

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

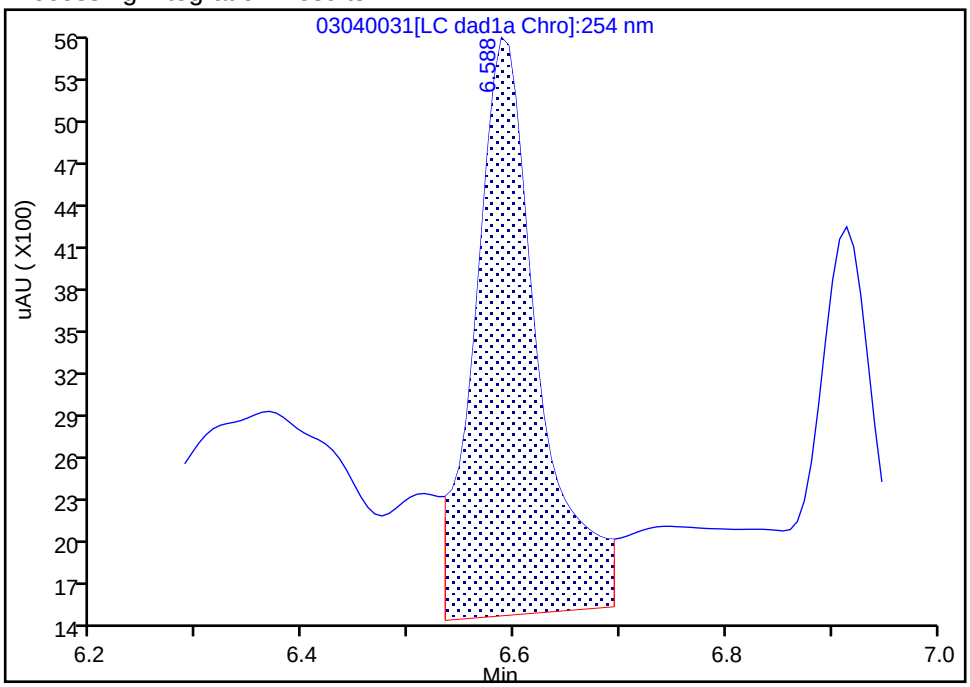
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

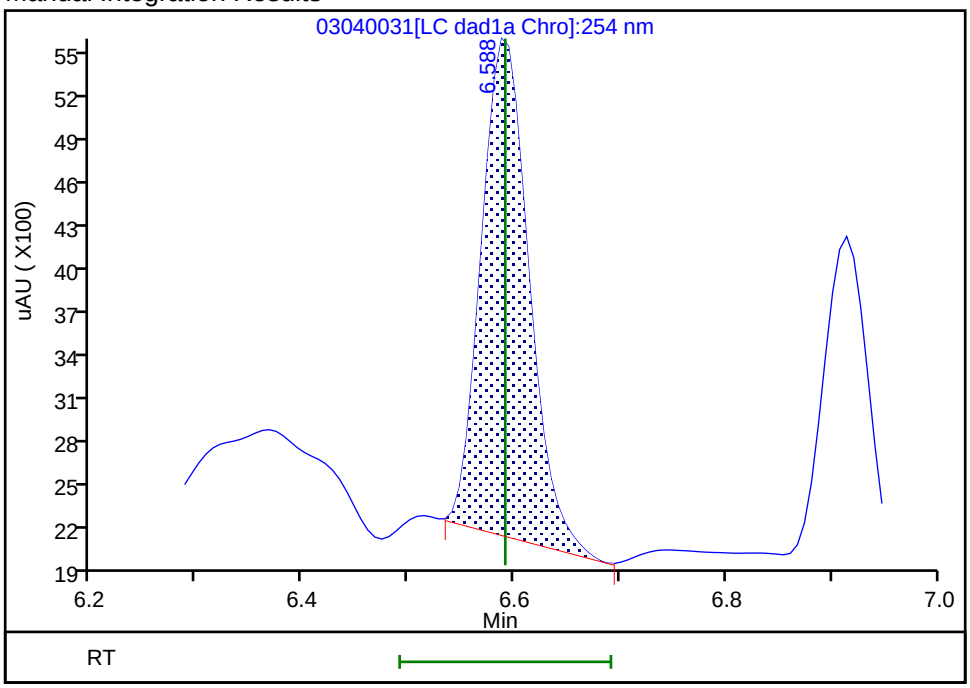
Processing Integration Results

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

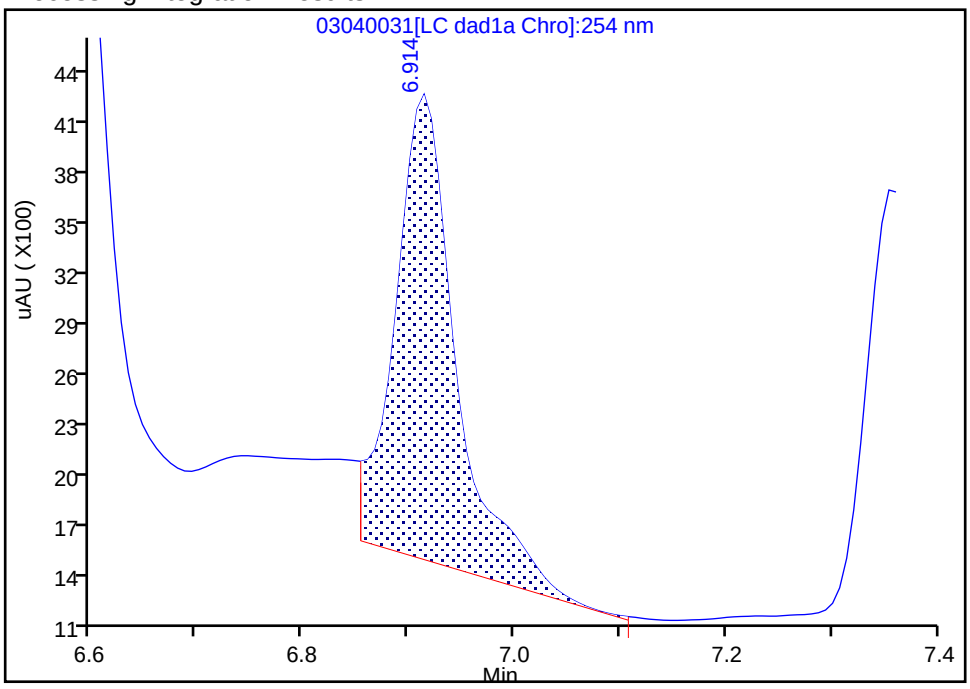
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

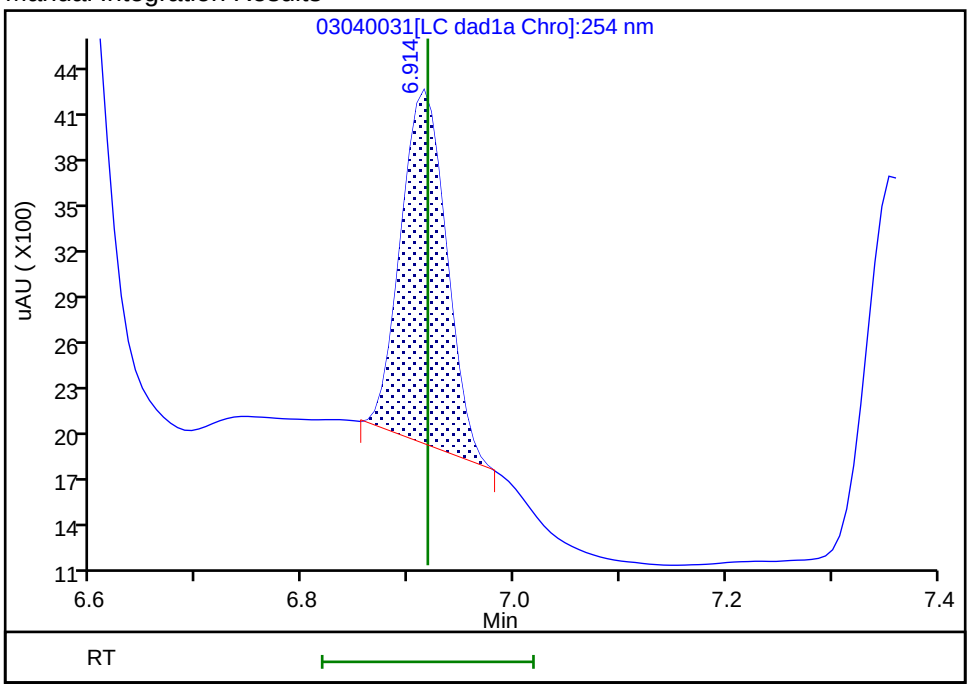
Processing Integration Results

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

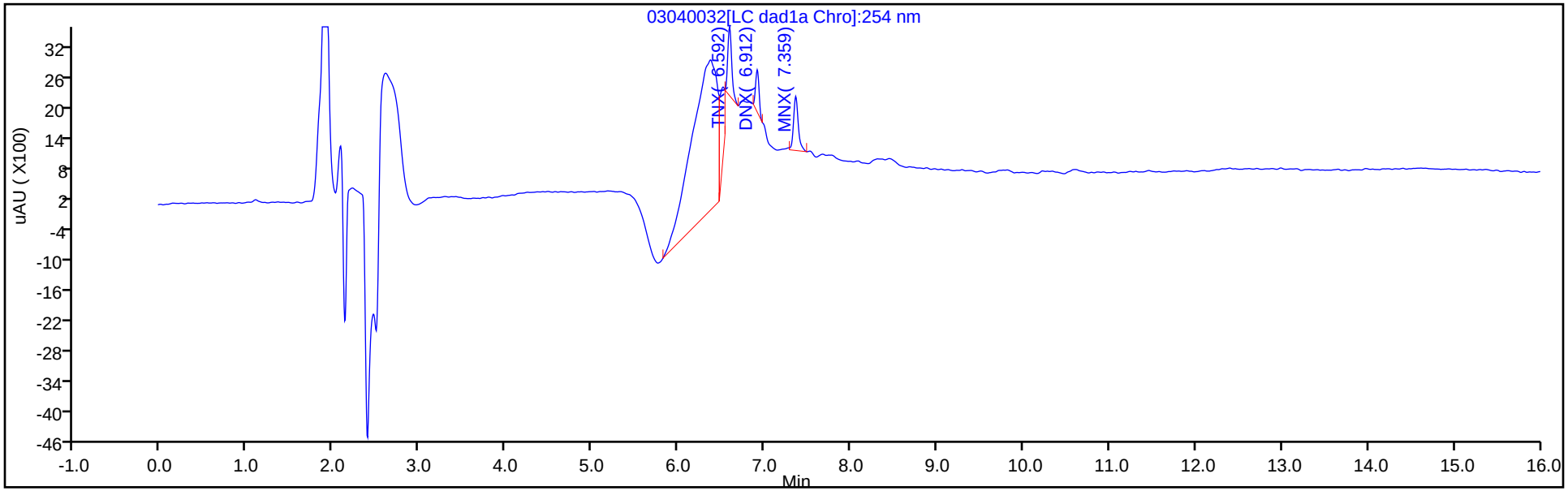
Report Date: 06-Mar-2020 10:25:28 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

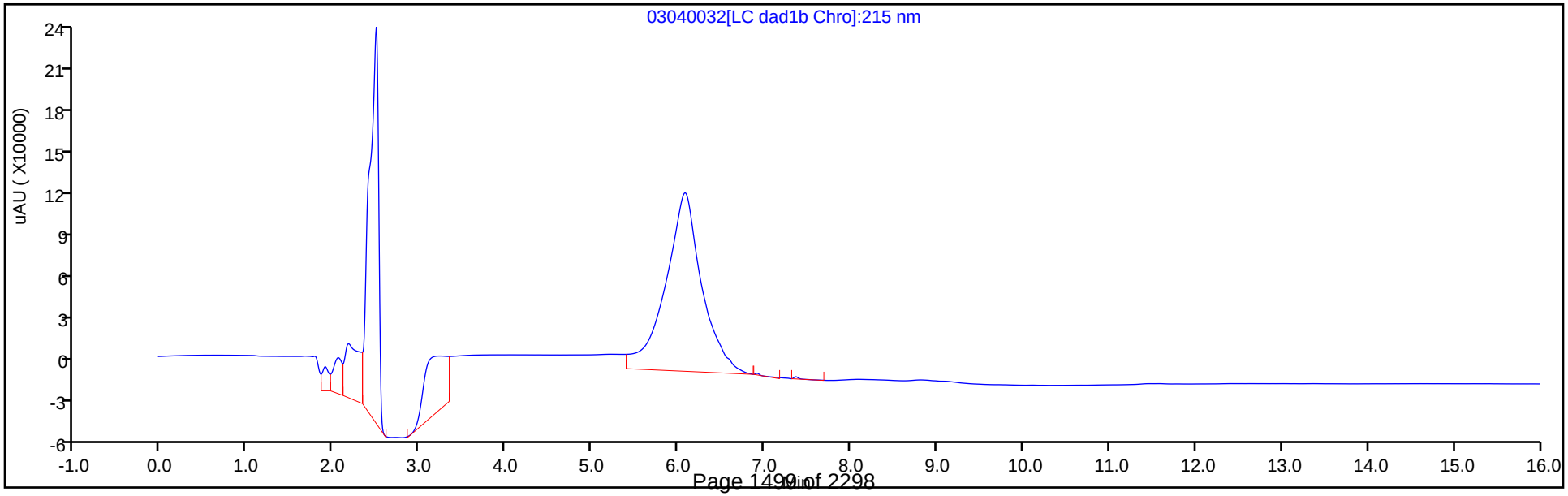
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d

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

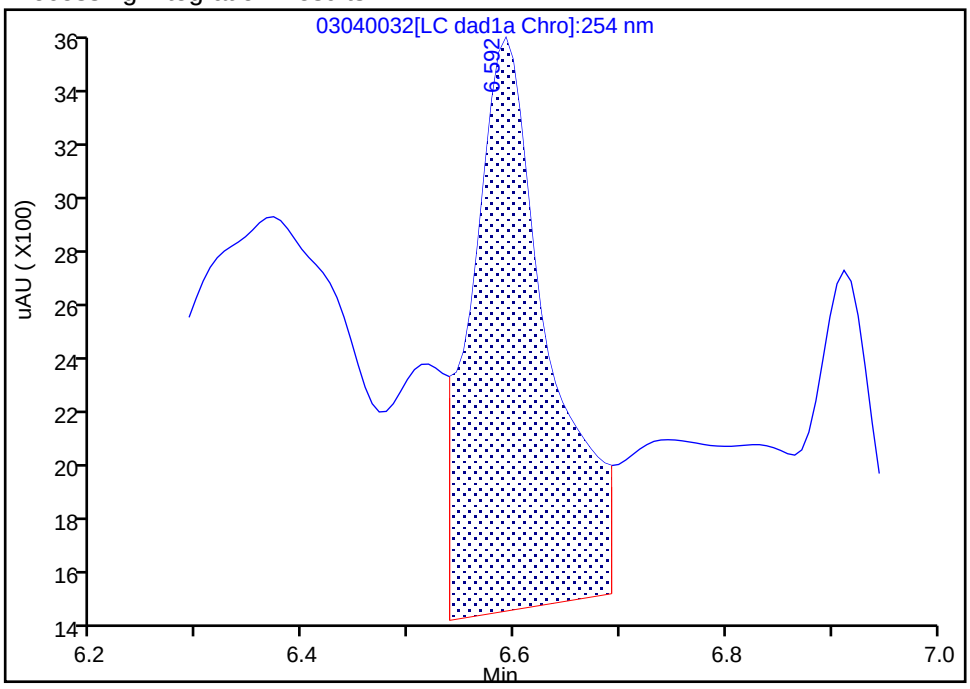
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

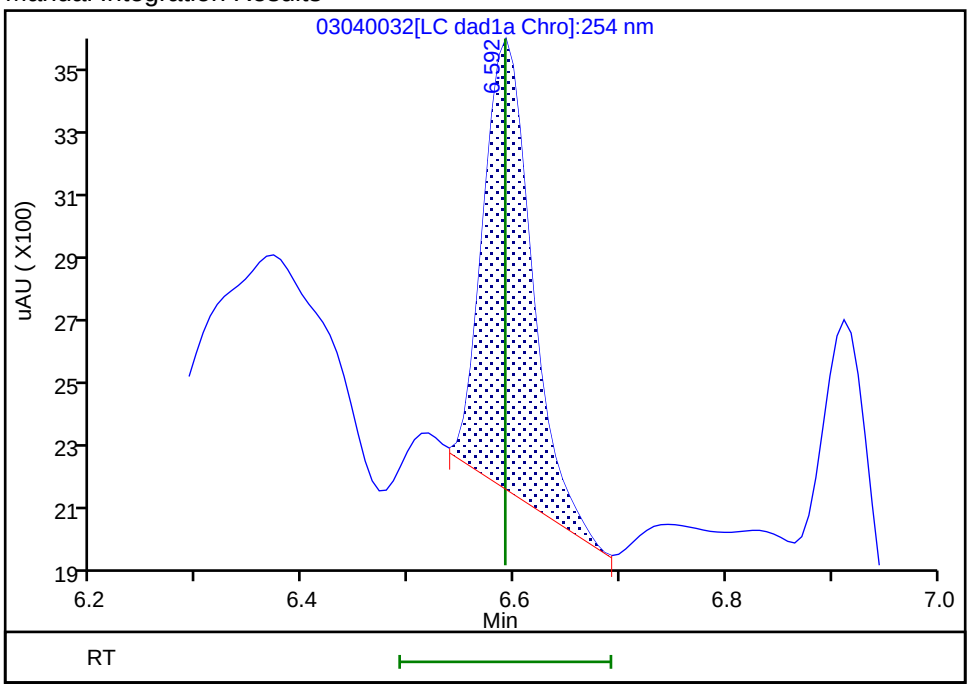
Processing Integration Results

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

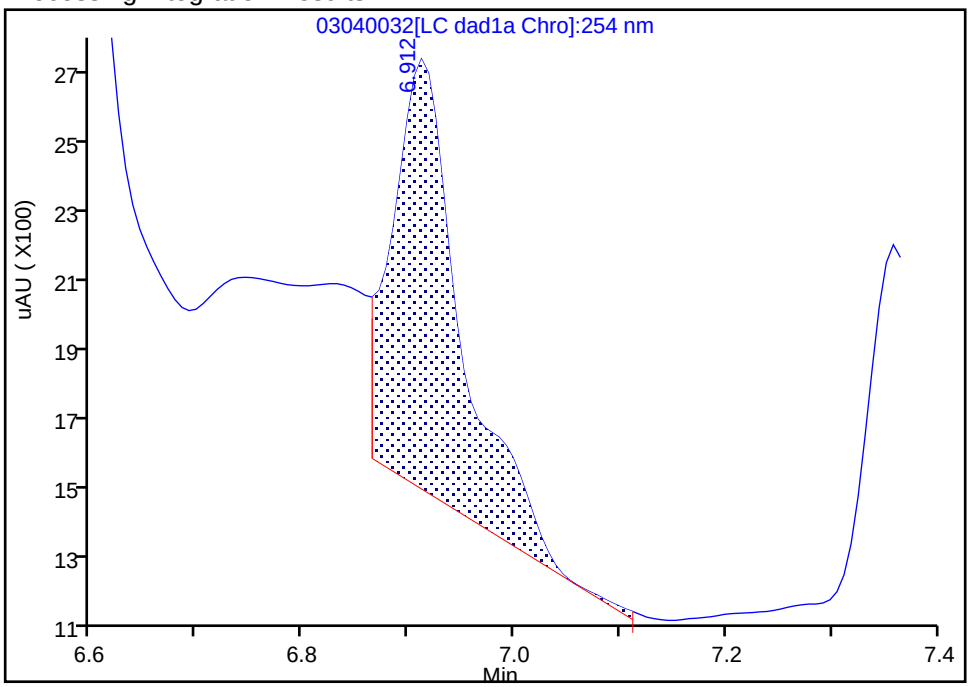
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

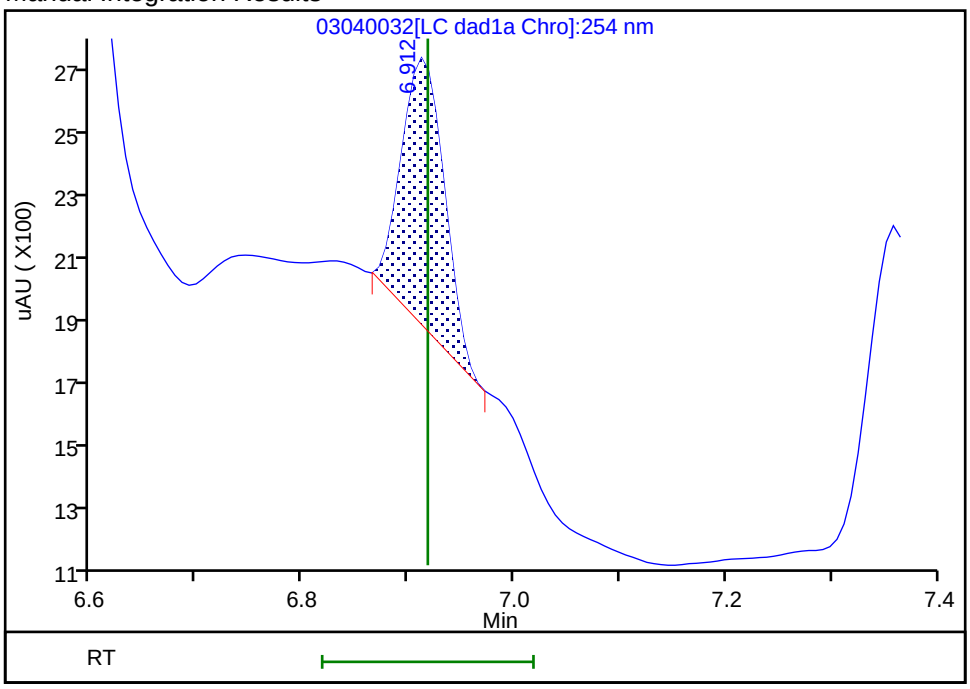
Processing Integration Results

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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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.: 280-137609-1 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

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

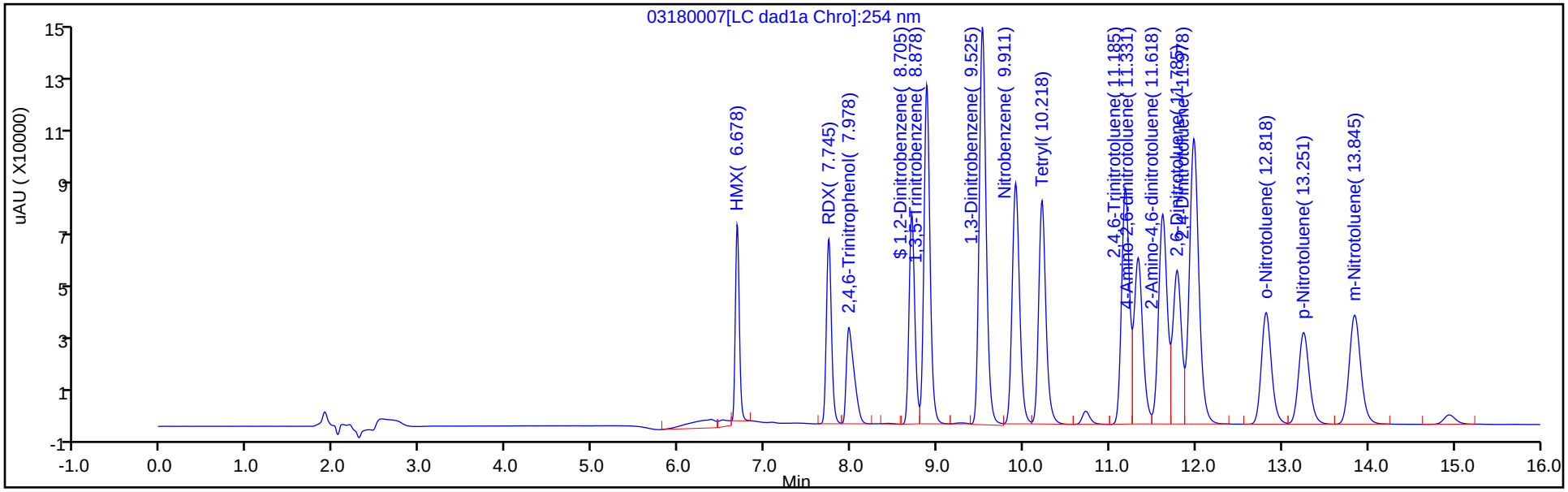
Report Date: 26-Mar-2020 15:45:39 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

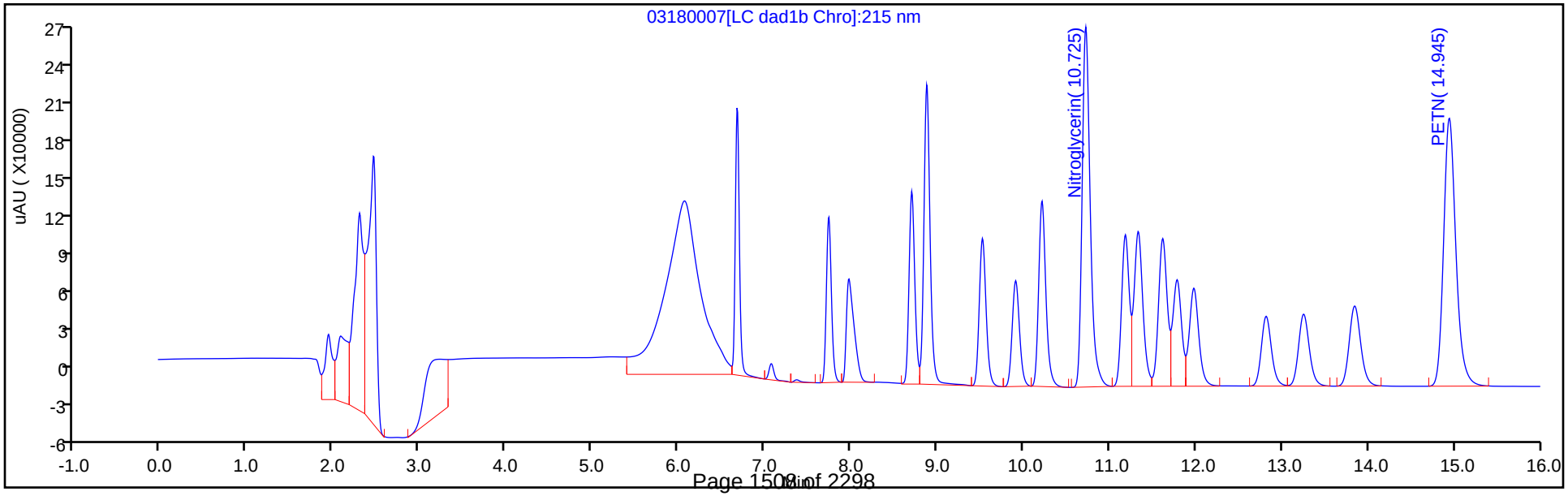
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d

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

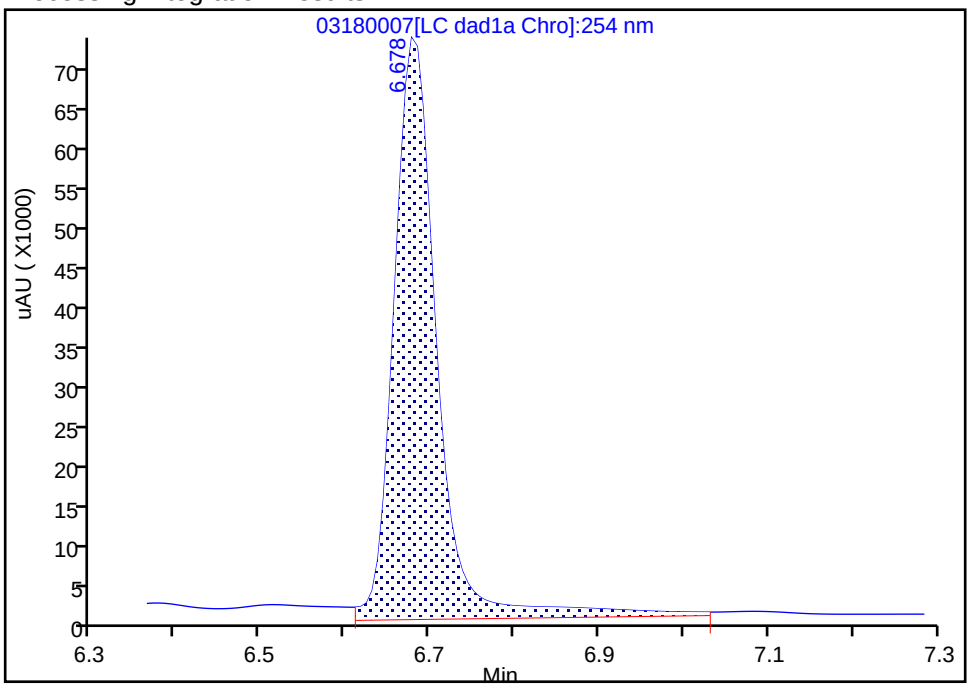
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d				
Injection Date:	18-Mar-2020 11:35:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

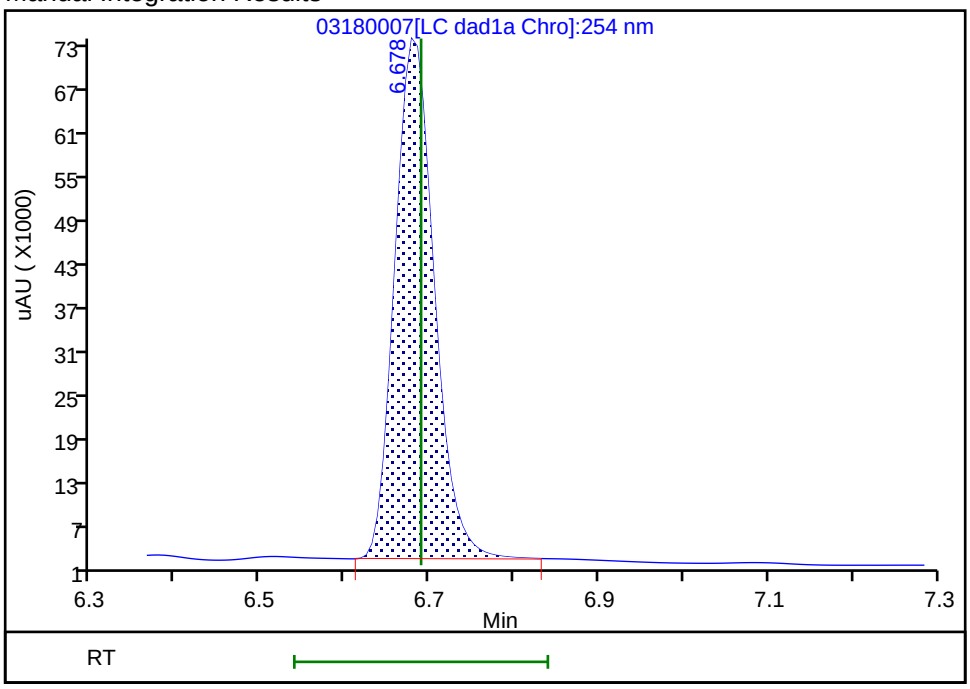
Processing Integration Results

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

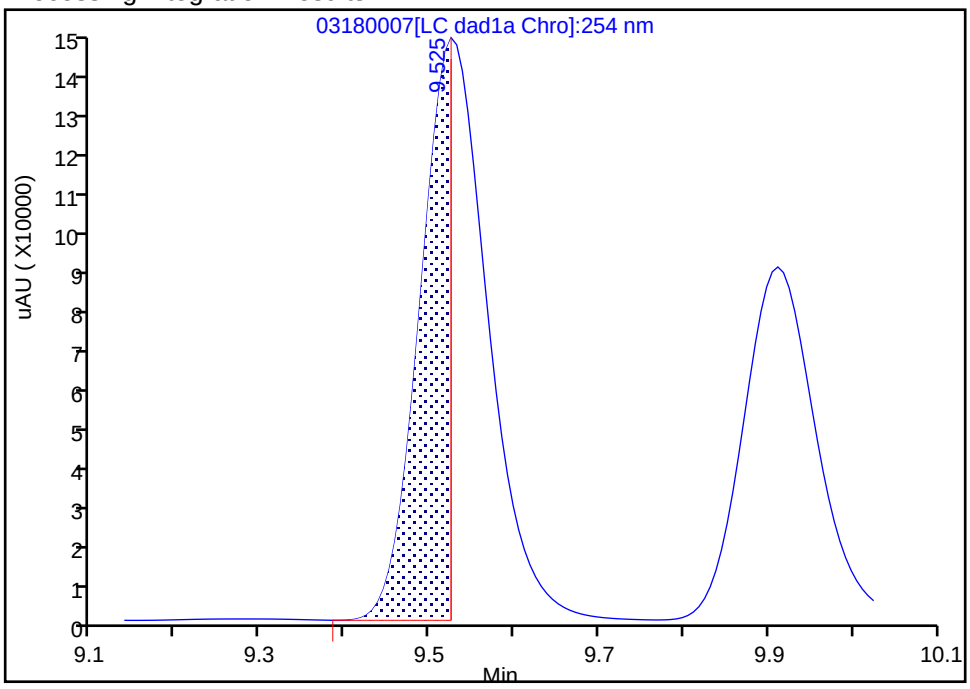
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d
Injection Date: 18-Mar-2020 11:35:53 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

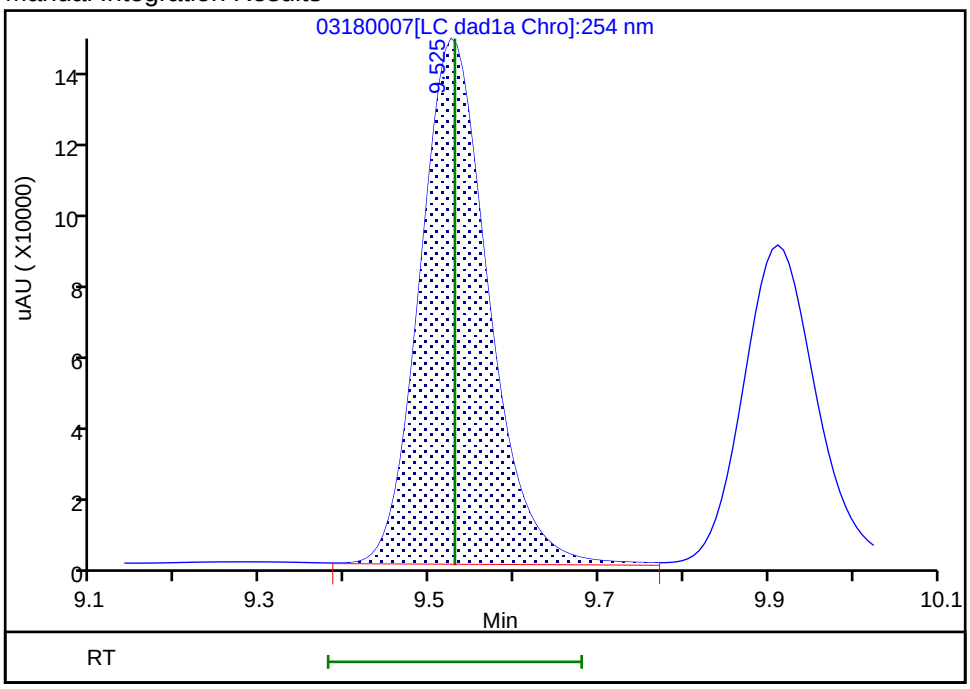
Processing Integration Results

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

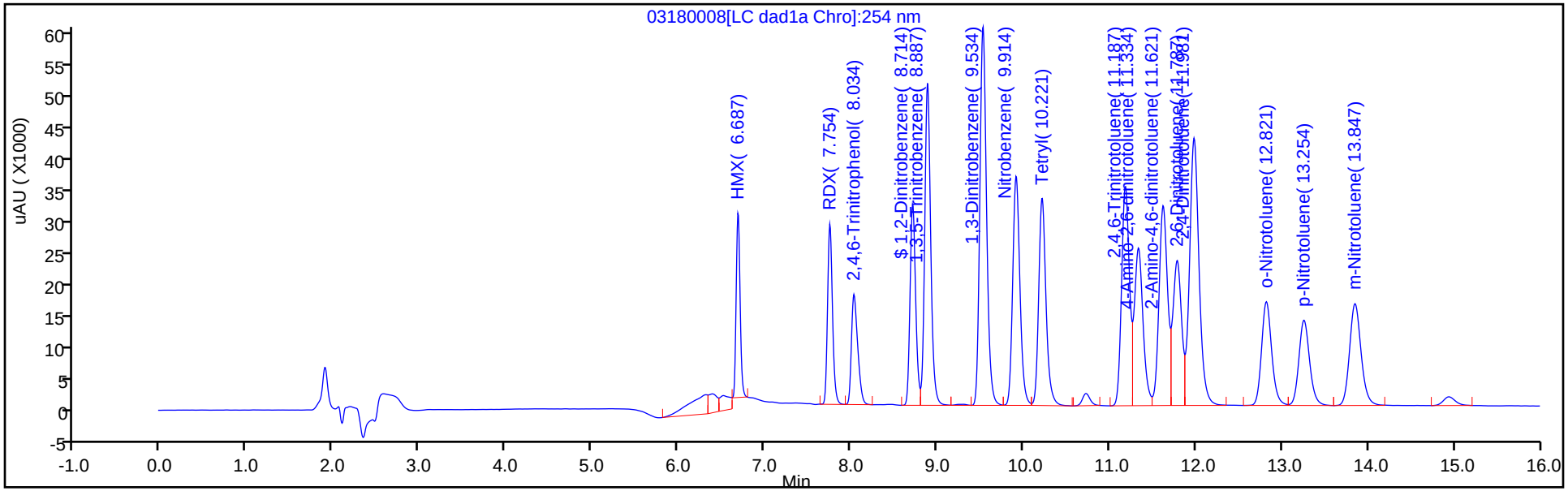
Report Date: 26-Mar-2020 15:45:40 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

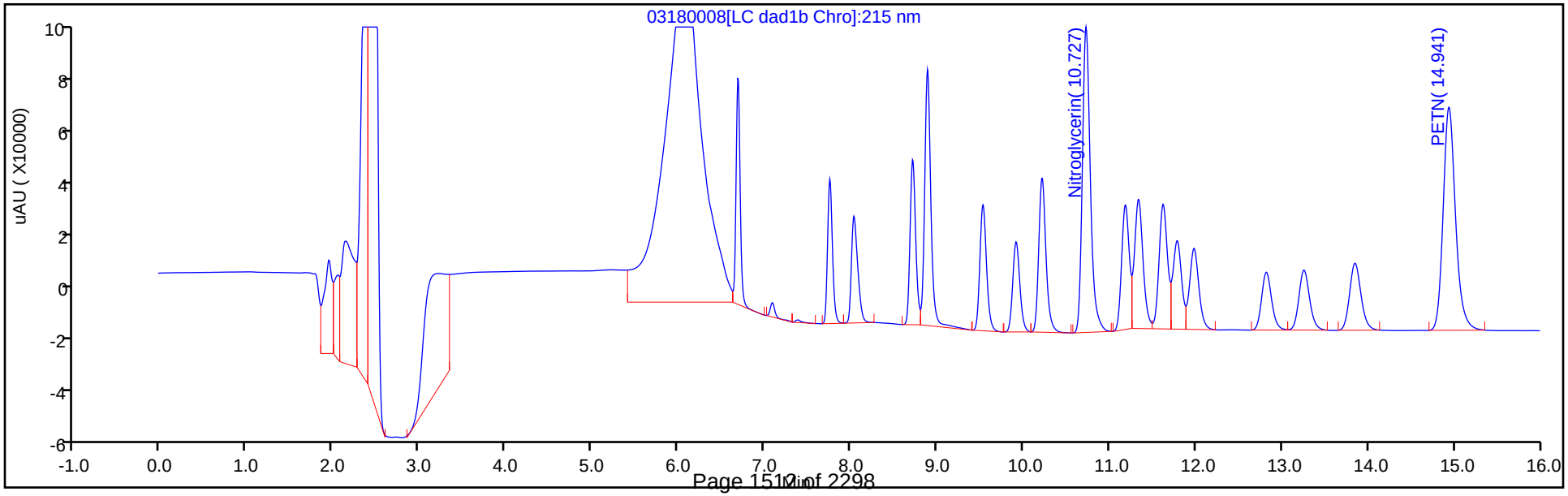
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180008.d

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

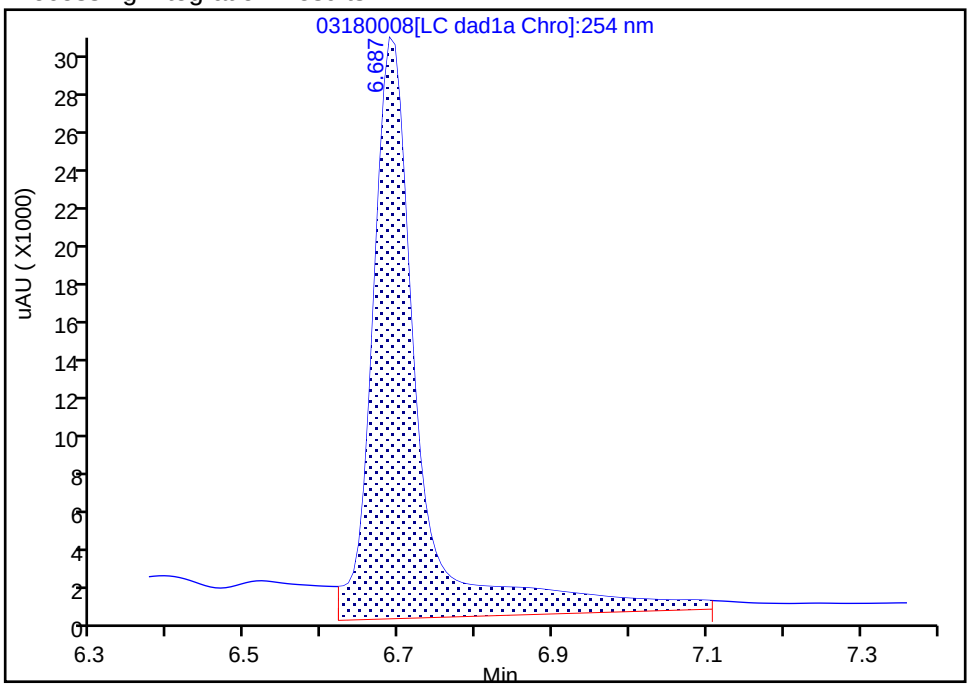
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180008.d				
Injection Date:	18-Mar-2020 11:58:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

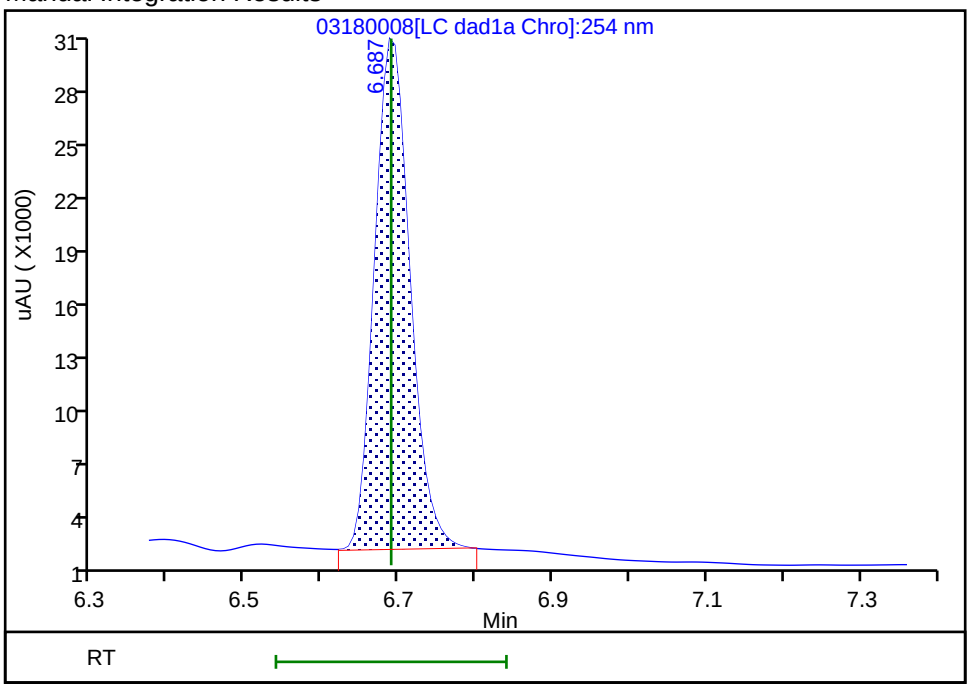
Processing Integration Results

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

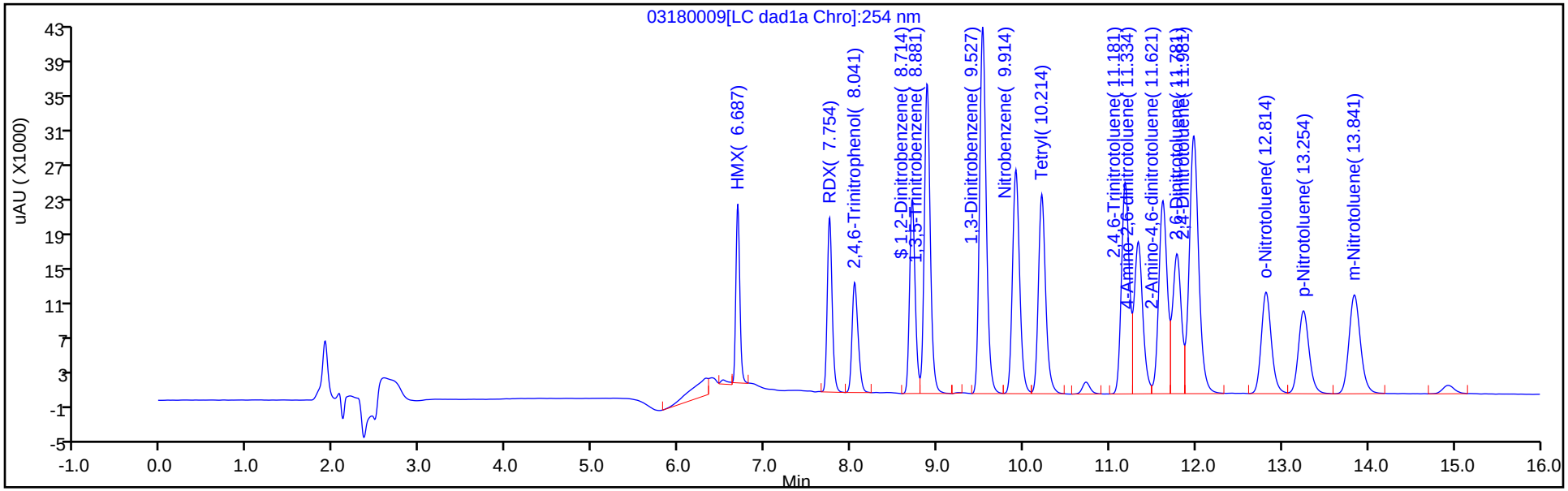
Report Date: 26-Mar-2020 15:45:41 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

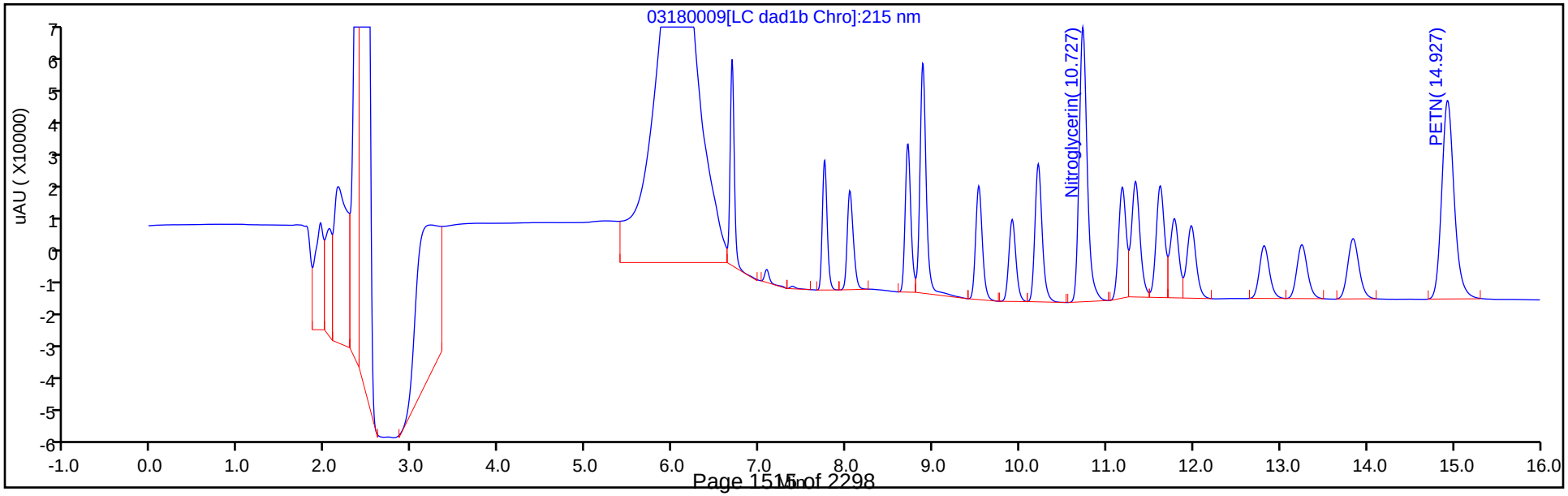
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180009.d

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

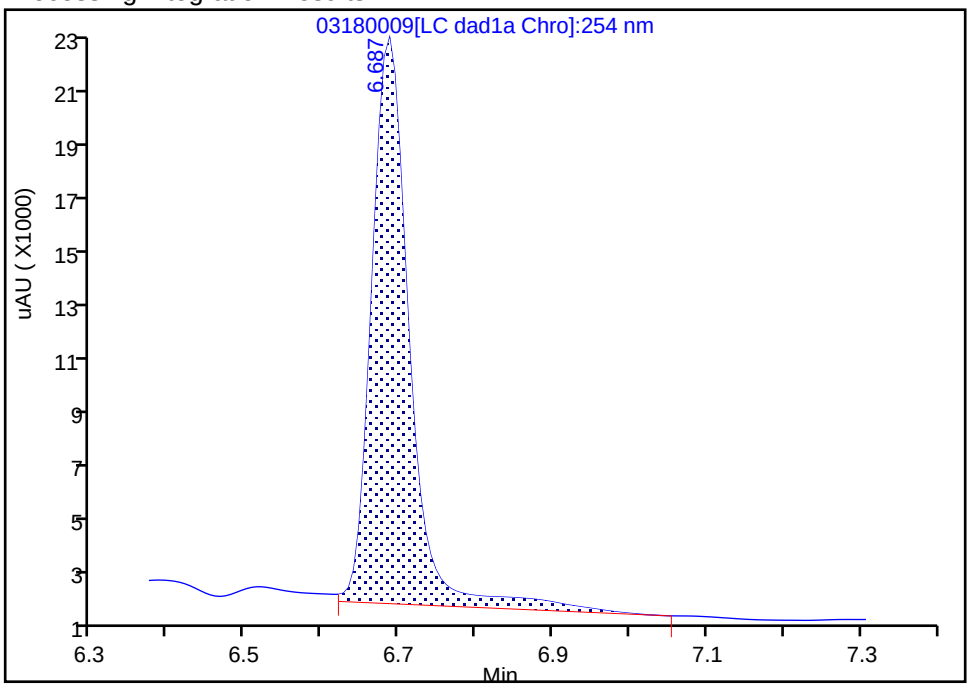
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180009.d
Injection Date: 18-Mar-2020 12:21:47 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L7
Client ID:
Operator ID: CB ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

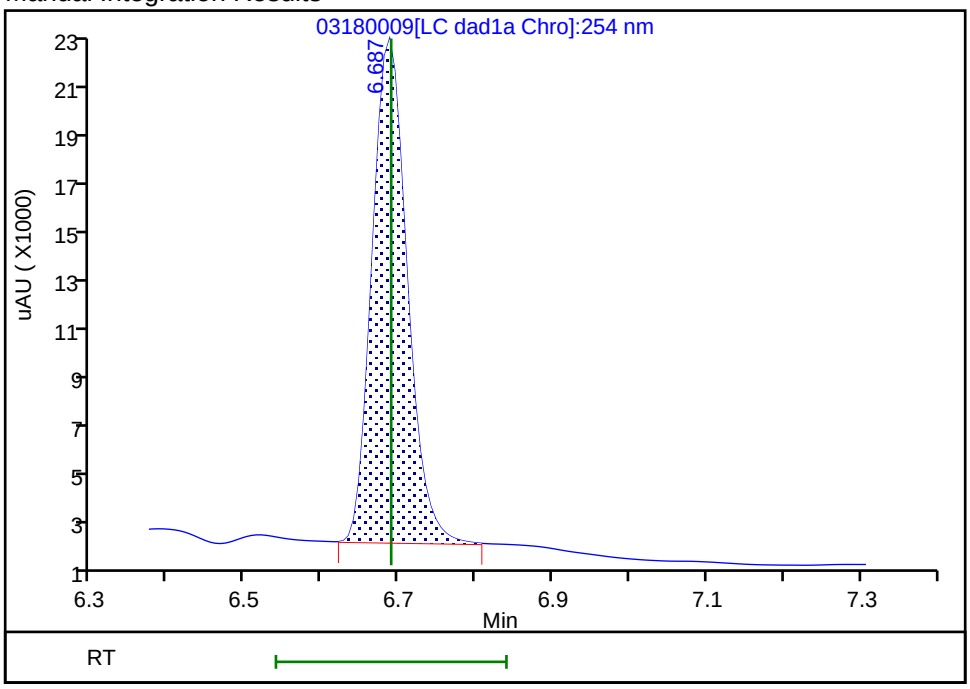
Processing Integration Results

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

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

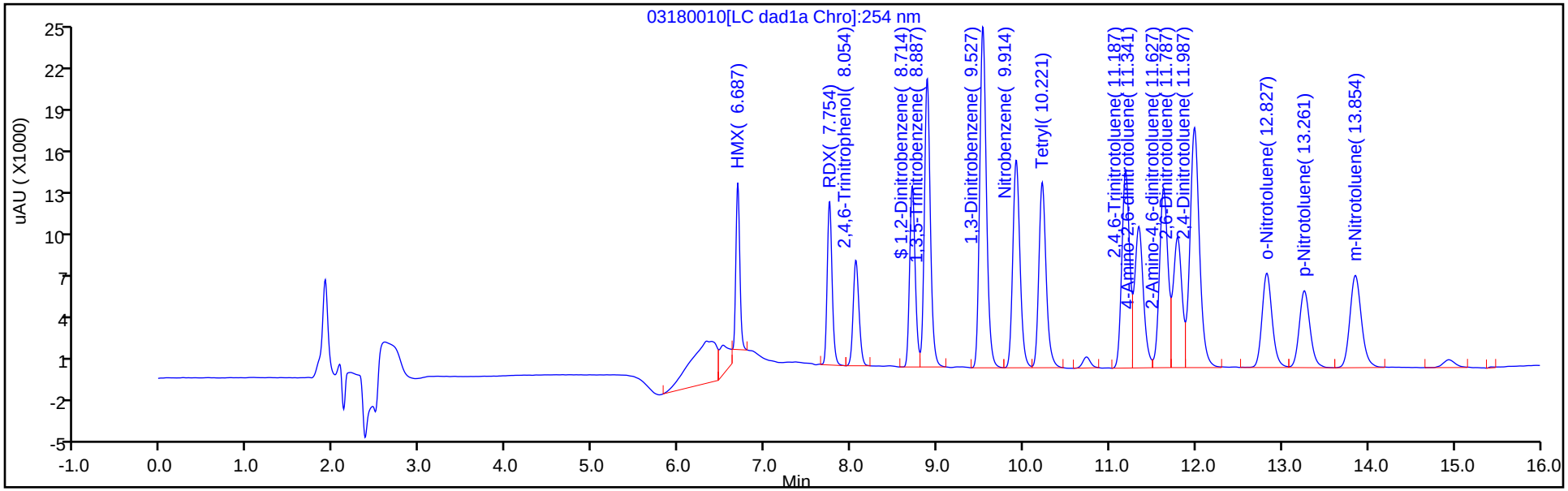
Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

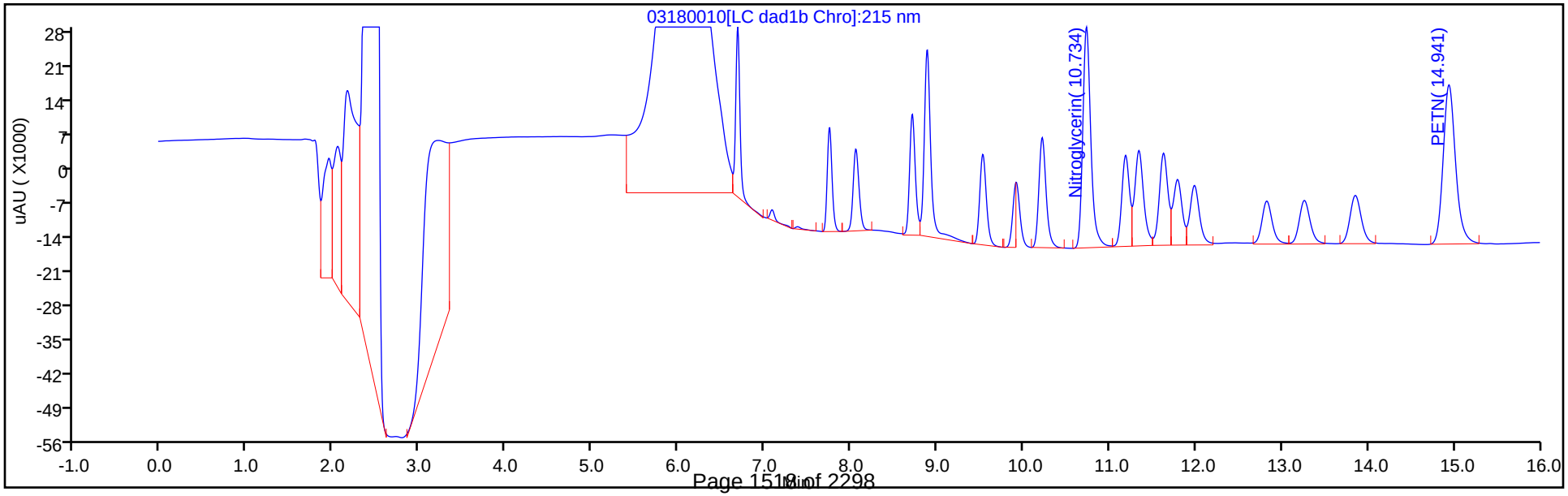
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180010.d

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

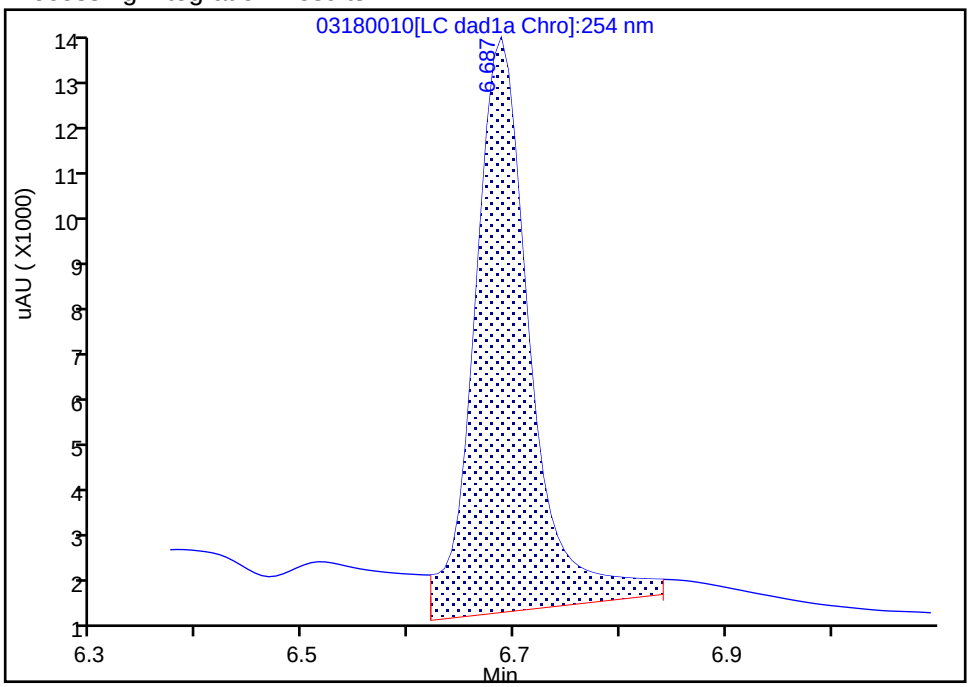
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180010.d
Injection Date: 18-Mar-2020 12:44:45 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

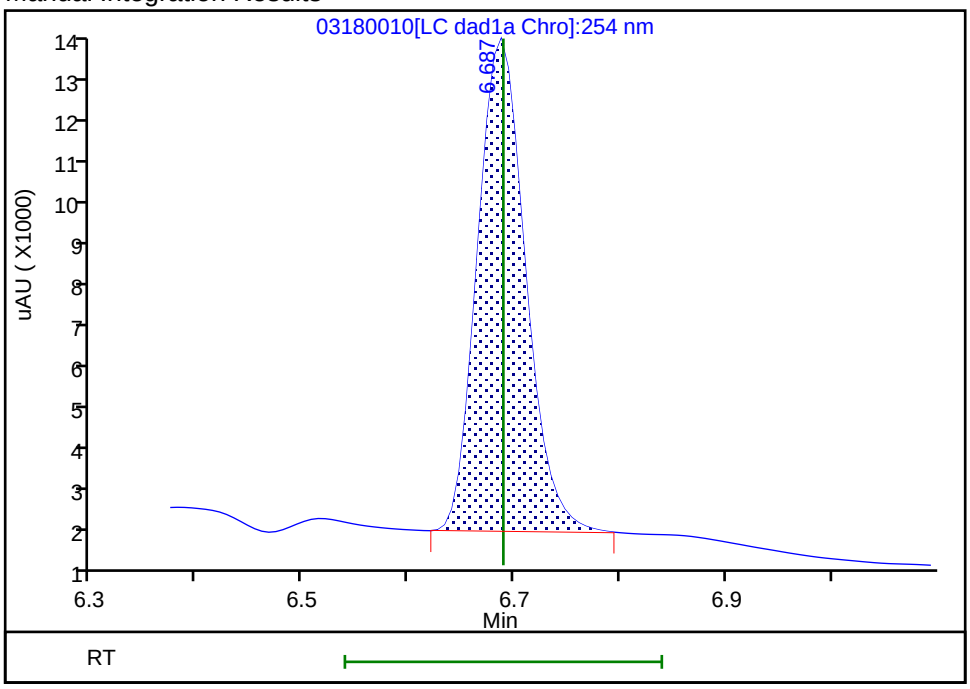
Processing Integration Results

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

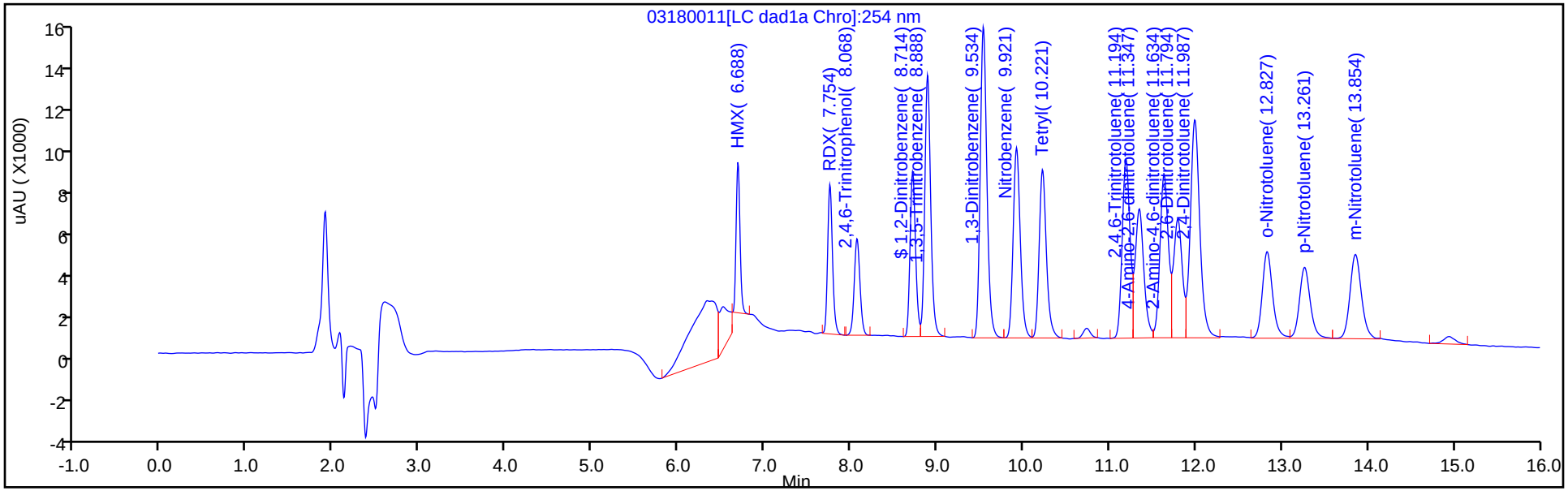
Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

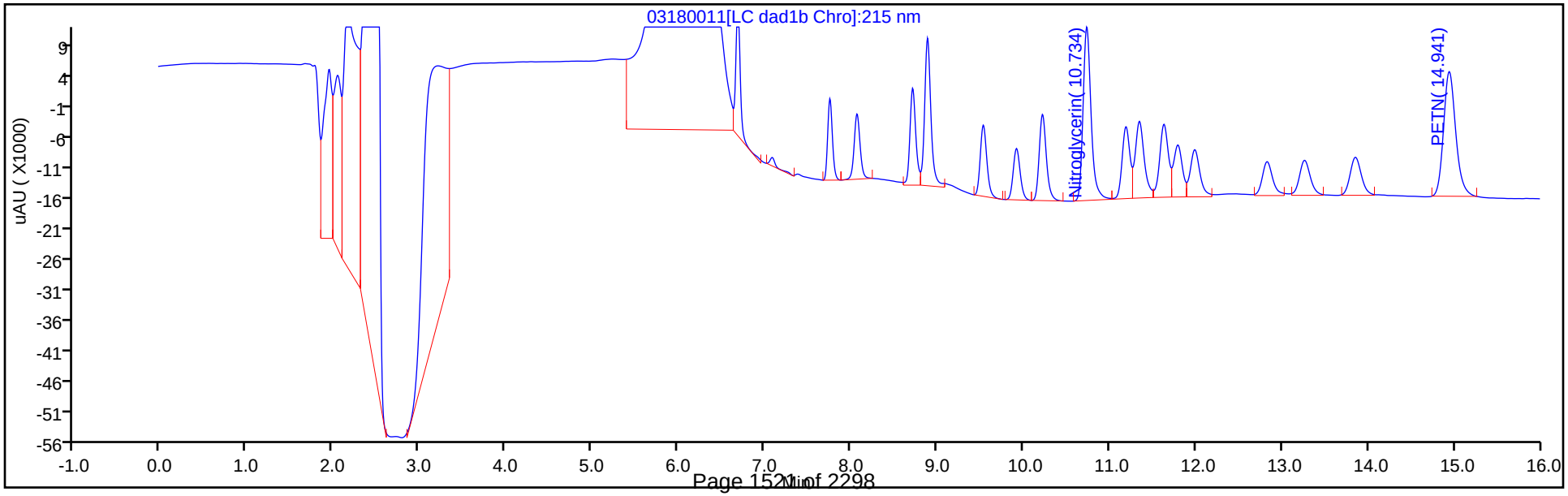
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180011.d

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

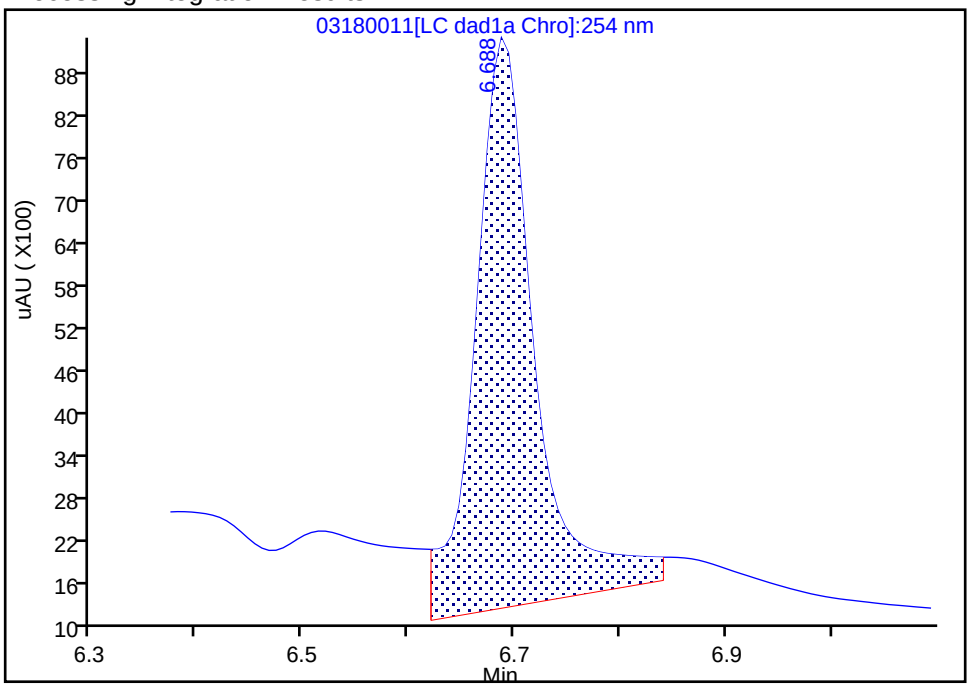
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180011.d				
Injection Date:	18-Mar-2020 13:07:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

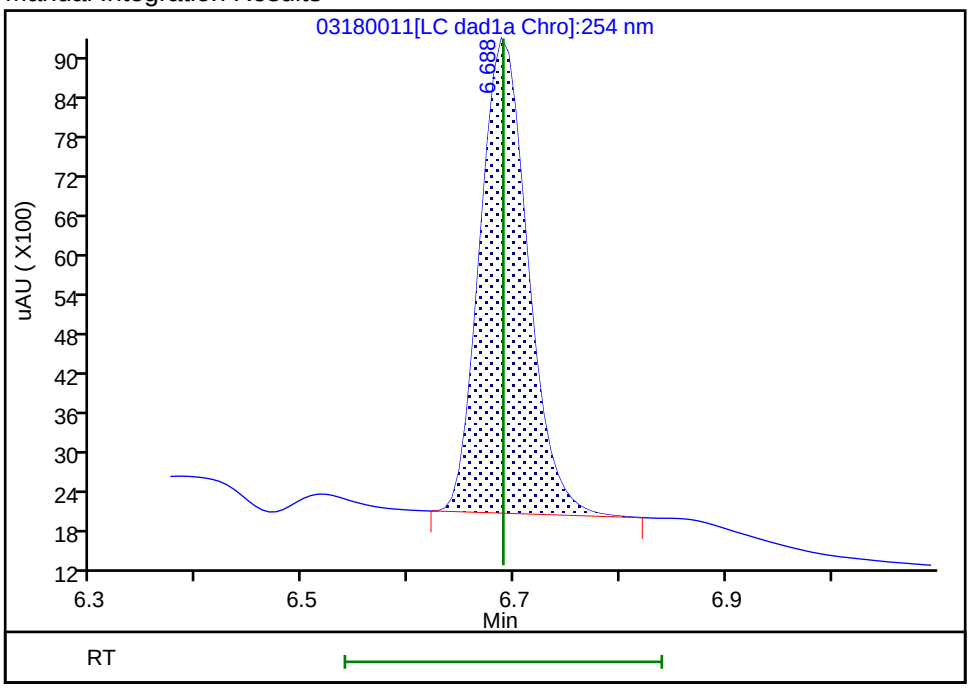
Processing Integration Results

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

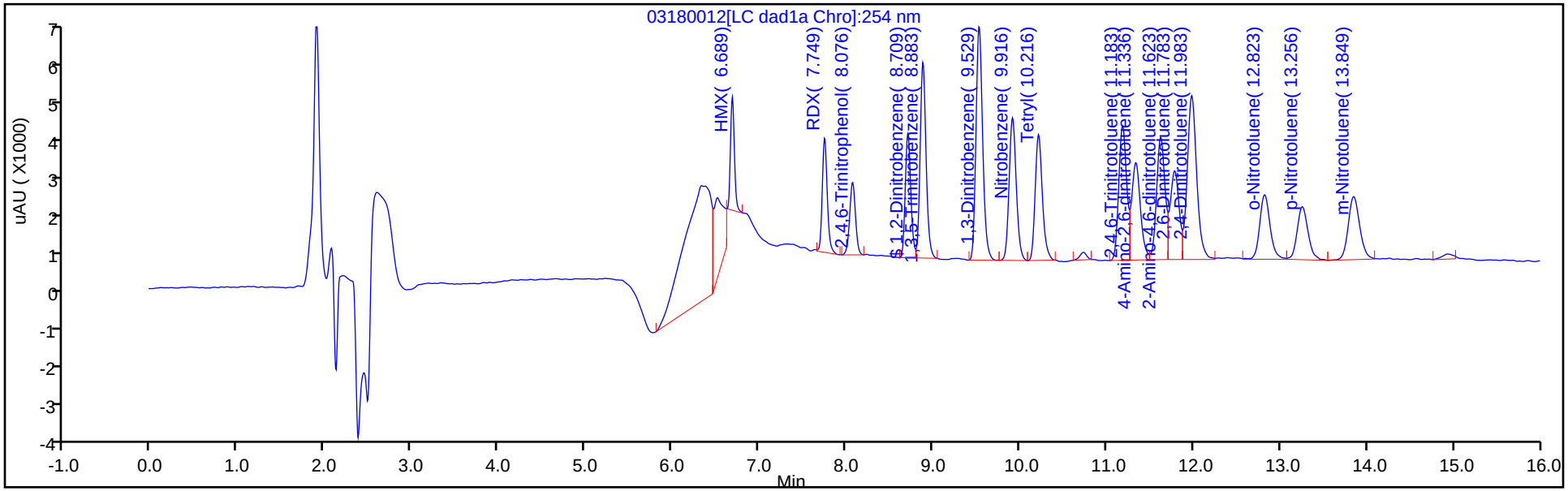
Report Date: 26-Mar-2020 15:45:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

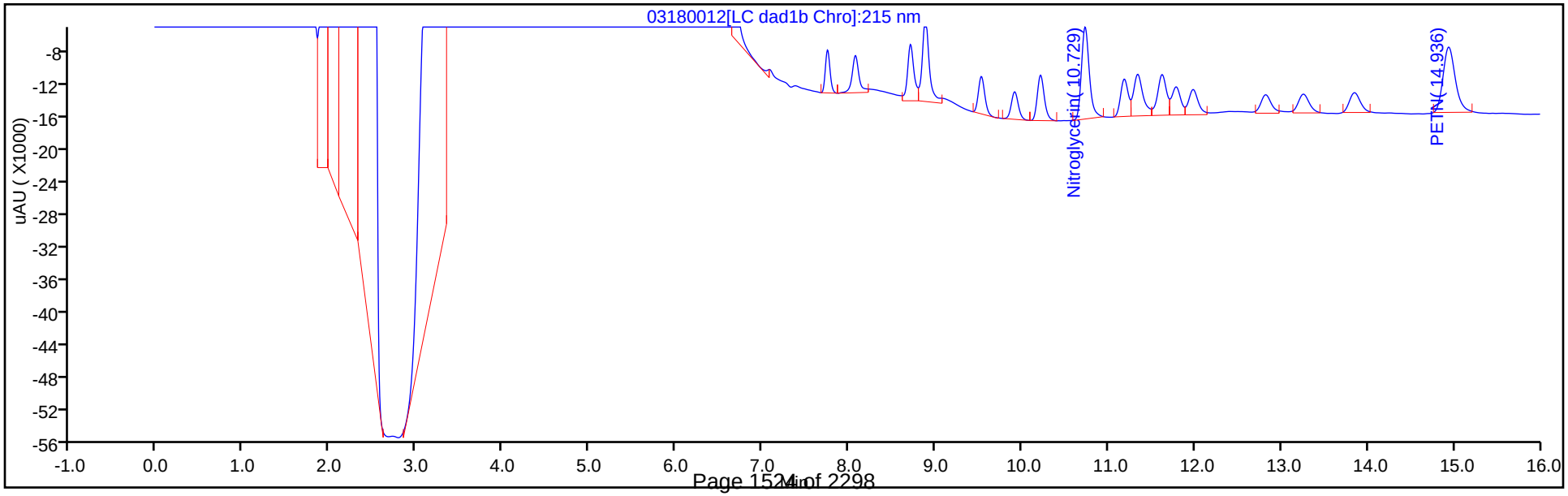
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180012.d

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

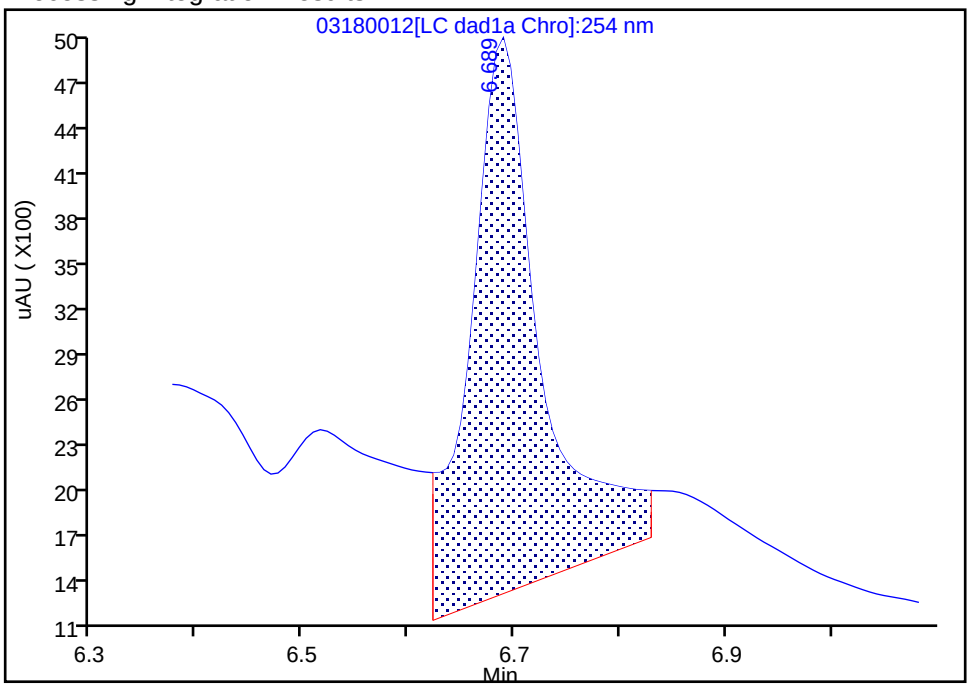
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180012.d
Injection Date: 18-Mar-2020 13:30:35 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L4
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

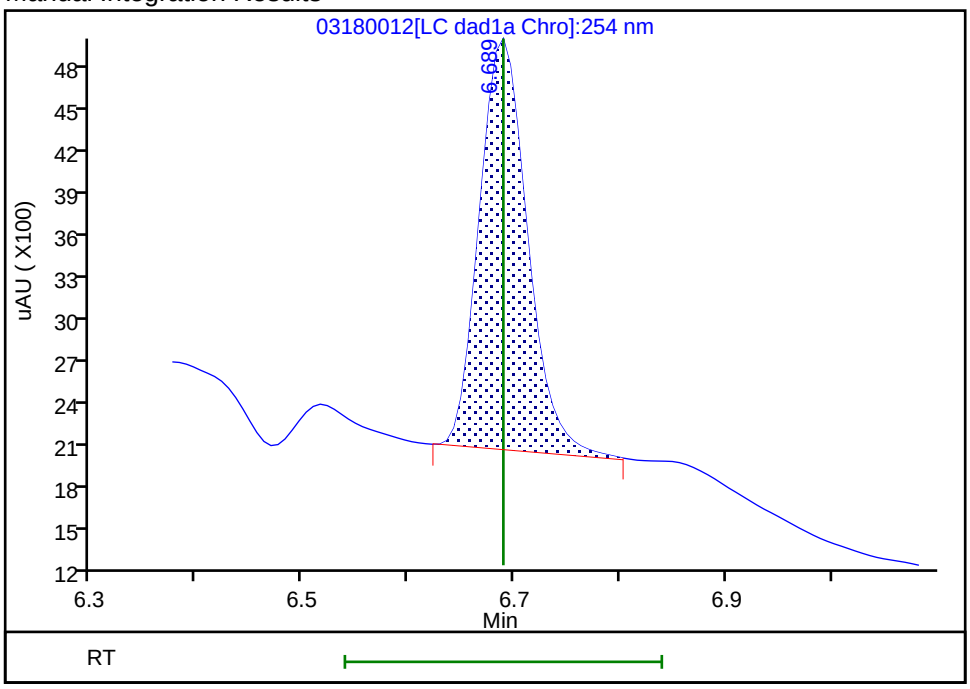
Processing Integration Results

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

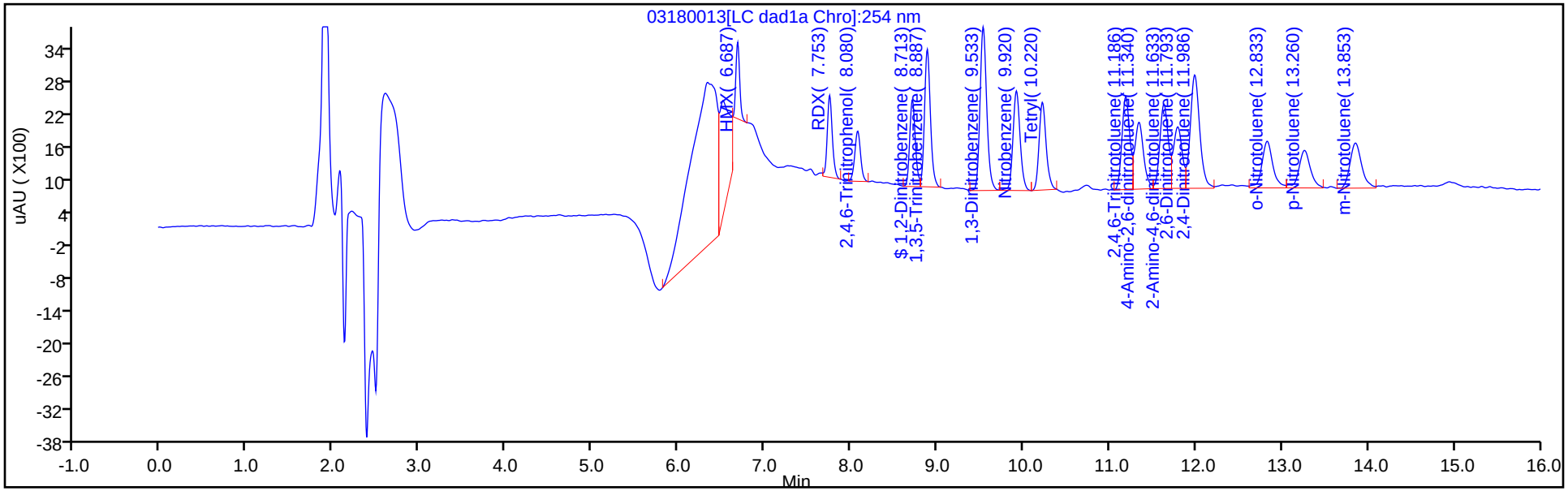
Report Date: 26-Mar-2020 15:45:44 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

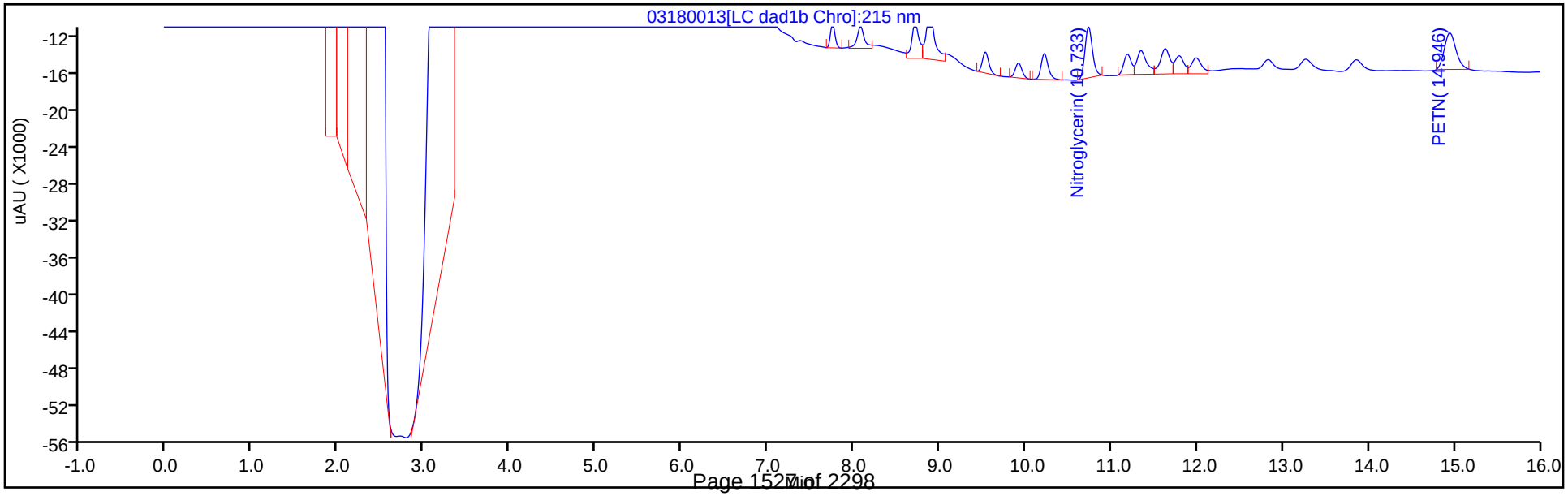
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180013.d

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

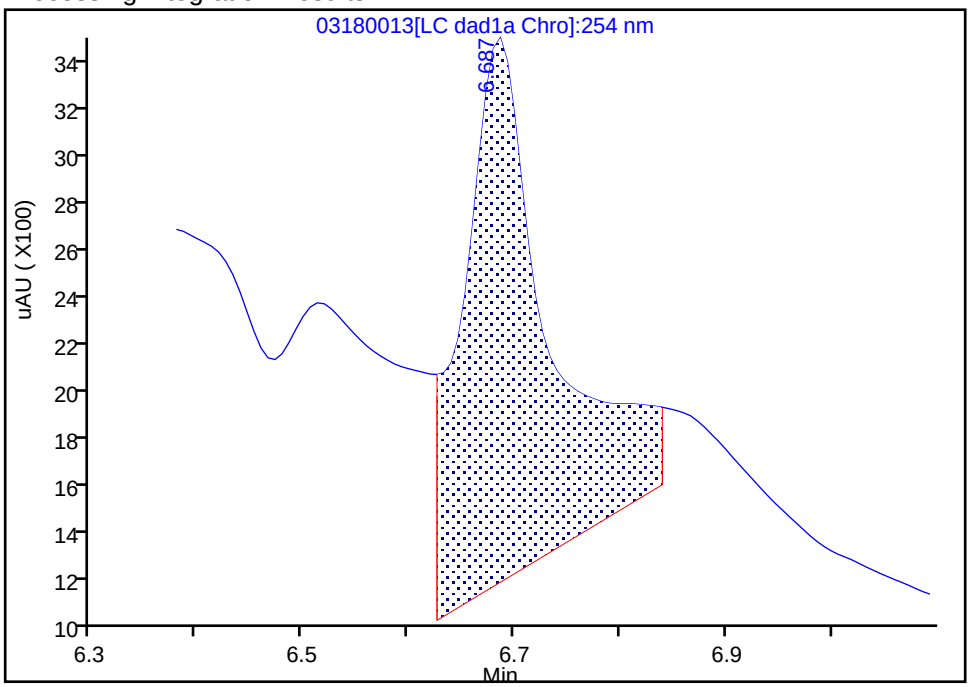
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180013.d
Injection Date: 18-Mar-2020 13:53:37 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

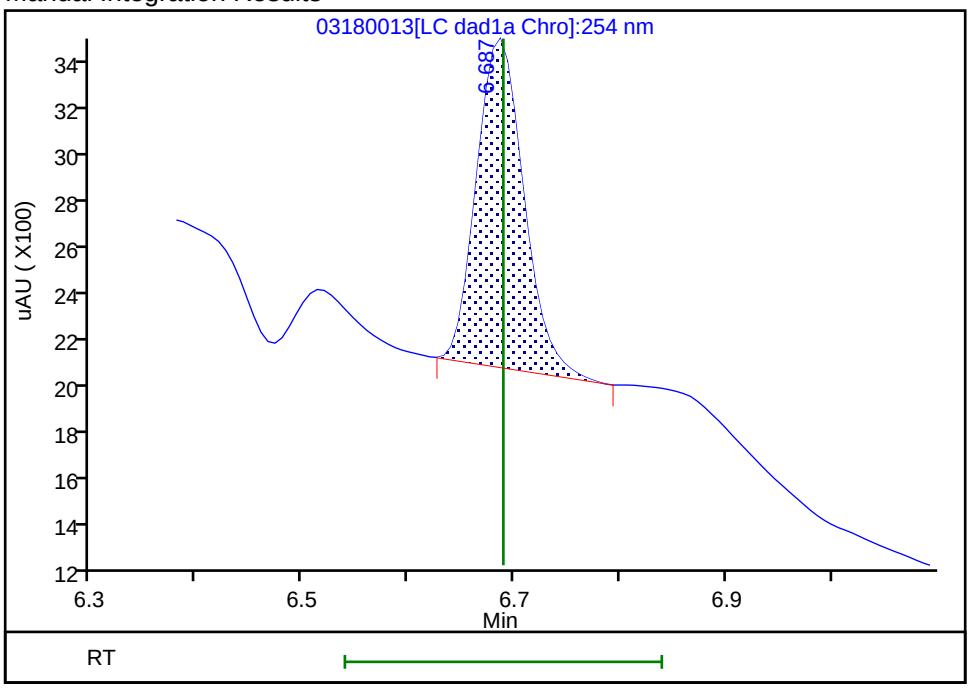
Processing Integration Results

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

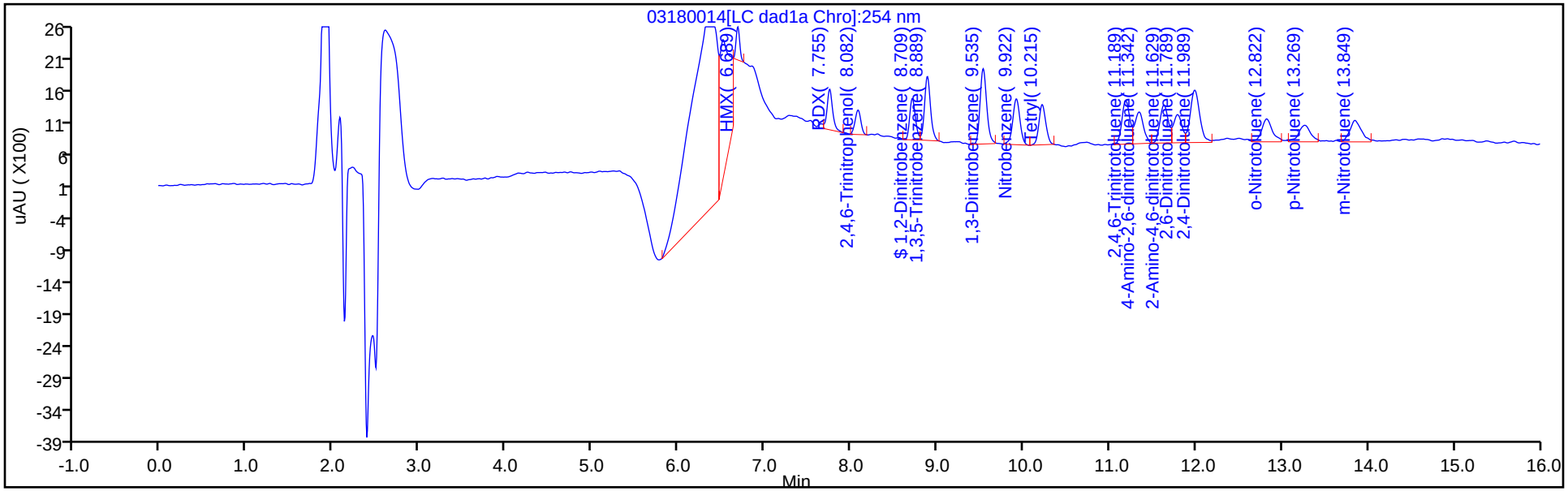
Report Date: 26-Mar-2020 15:45:45 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

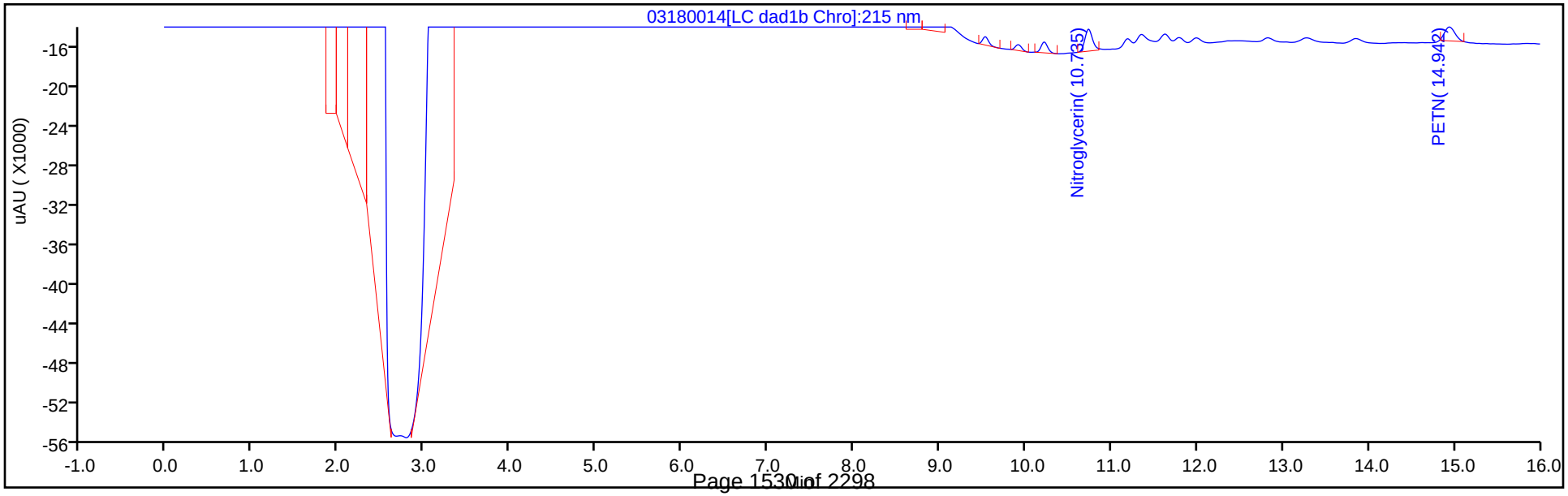
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d

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

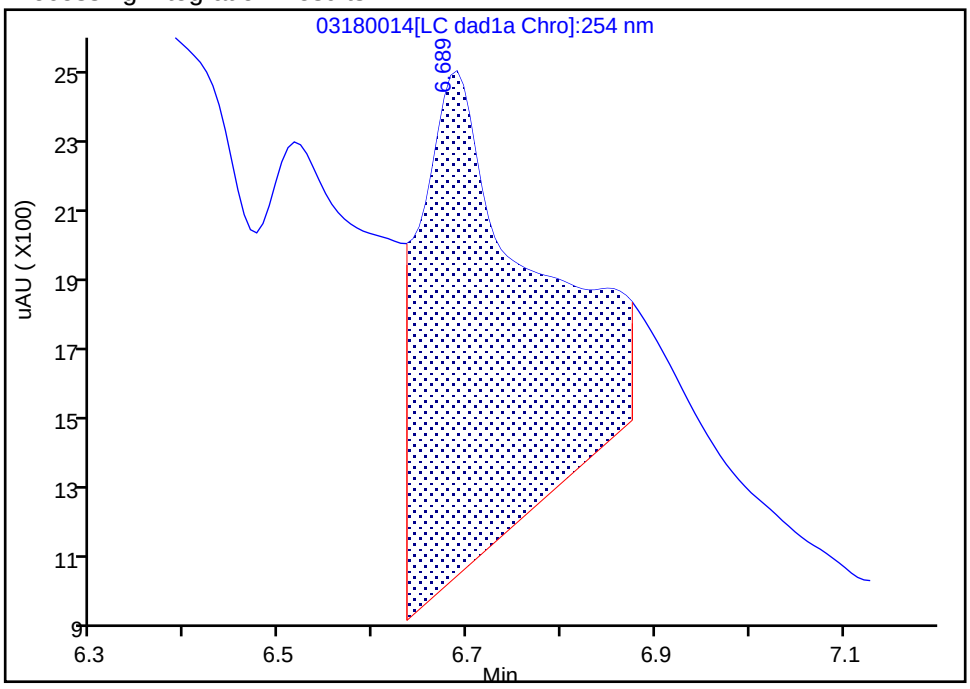
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d				
Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

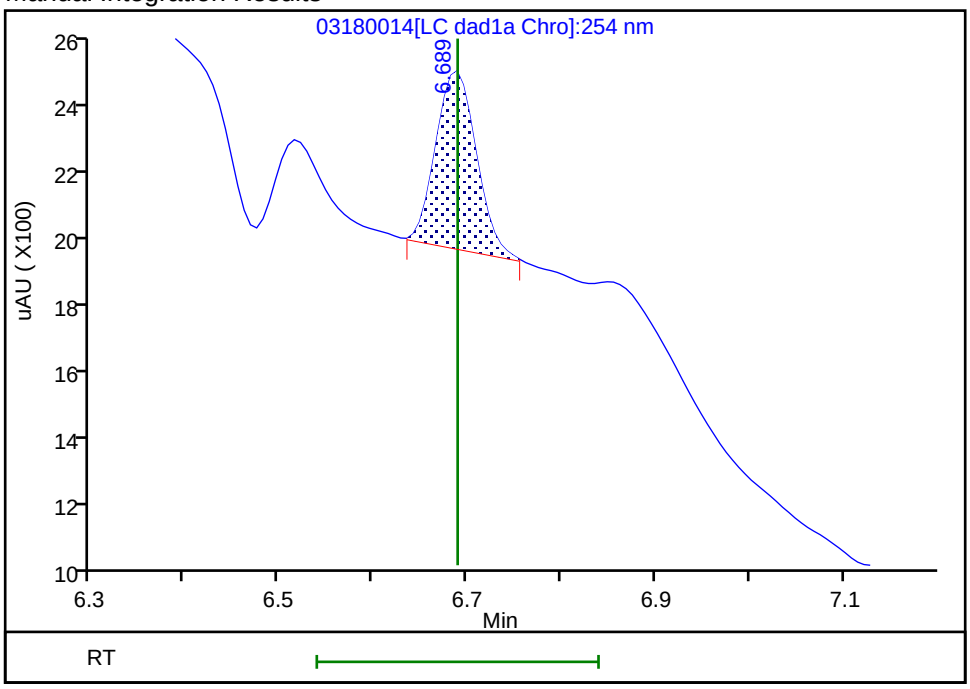
Processing Integration Results

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

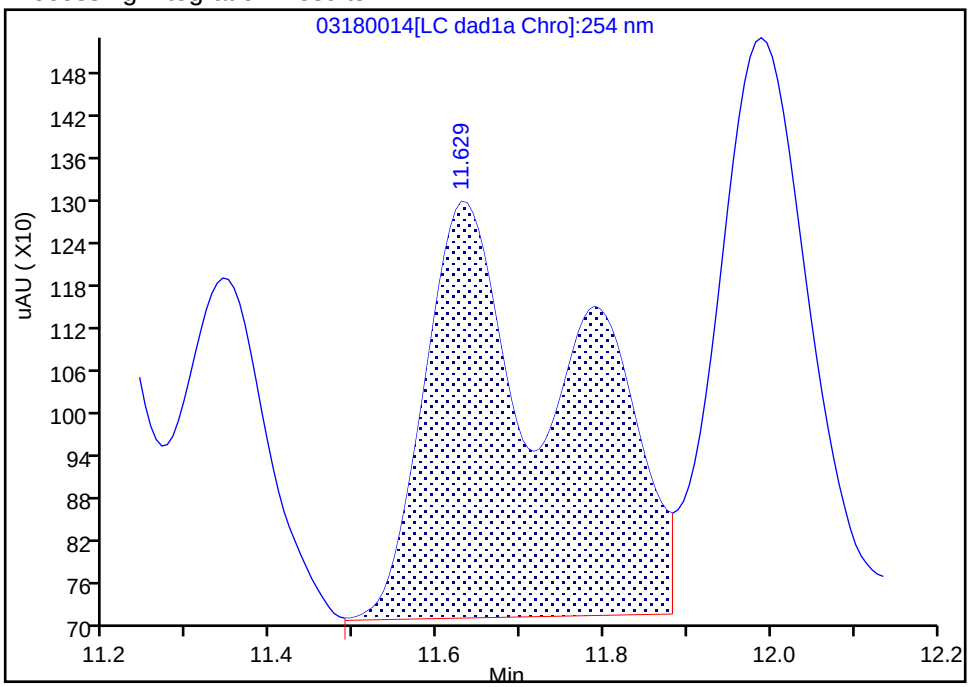
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d				
Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

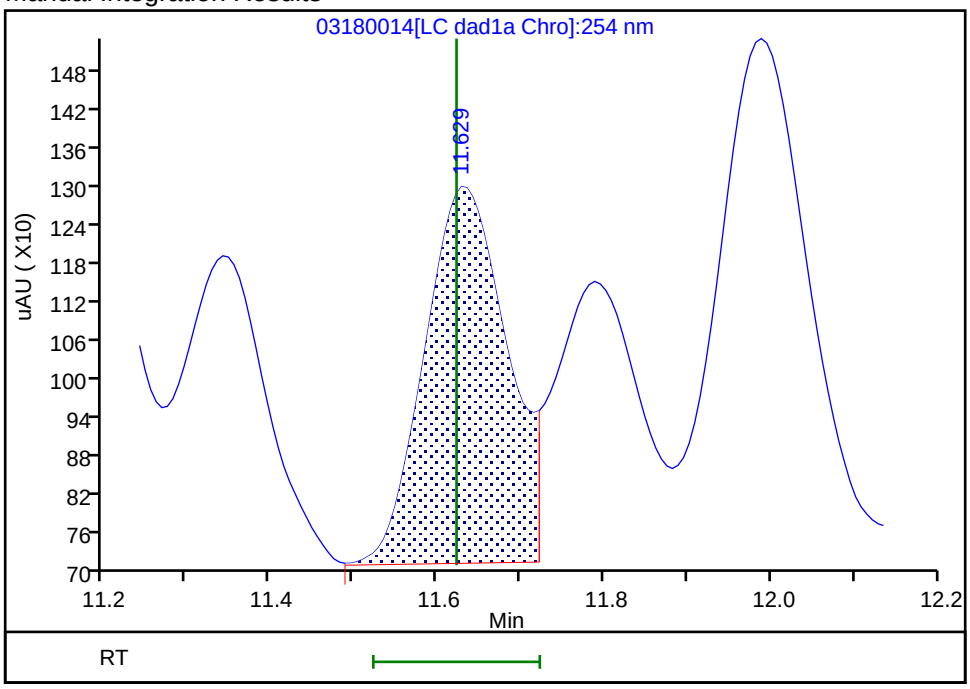
Processing Integration Results

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

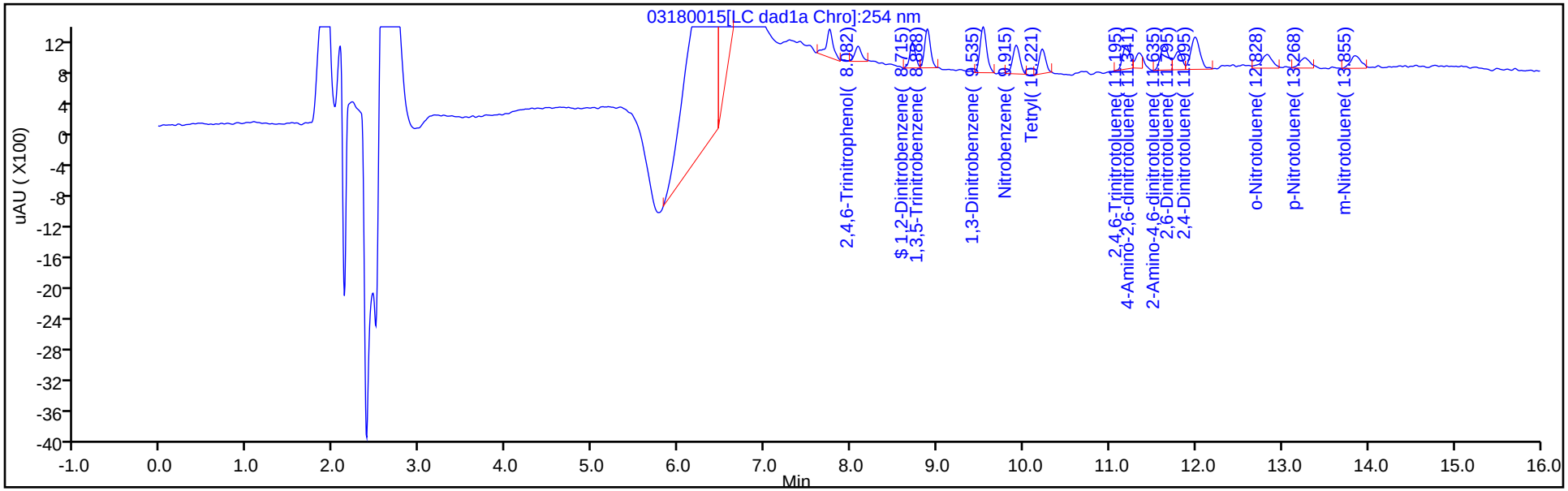
Report Date: 26-Mar-2020 15:45:46 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

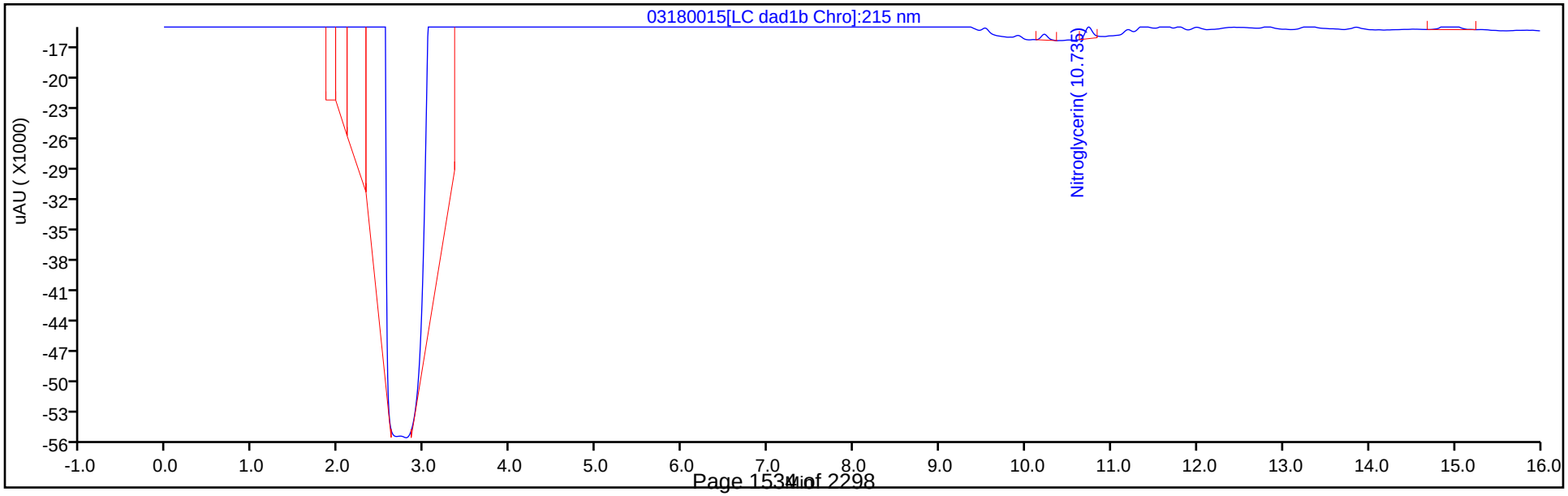
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180015.d

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

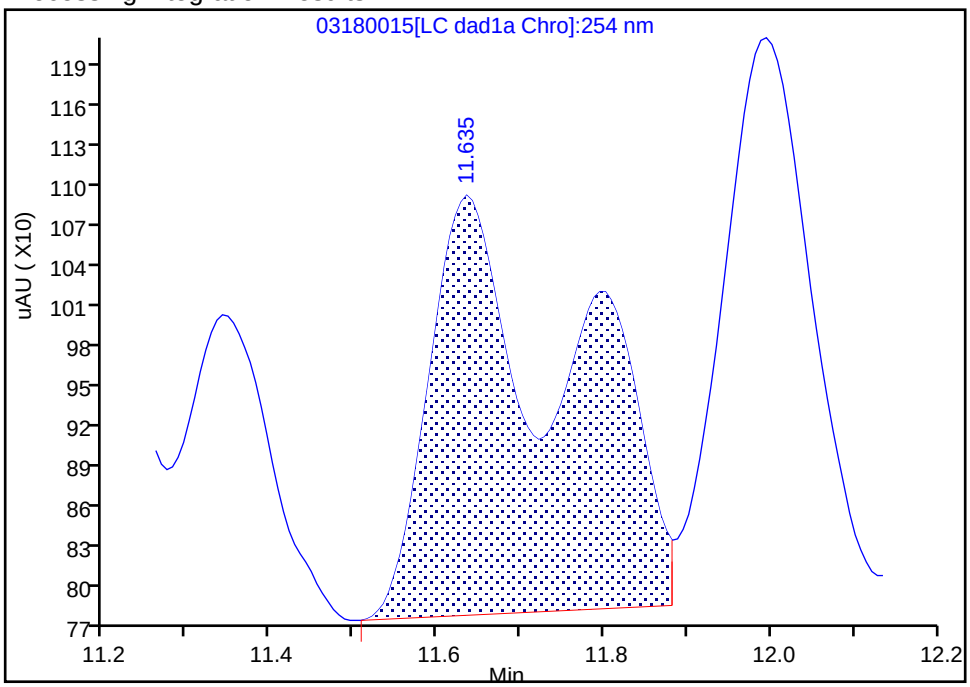
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180015.d
Injection Date: 18-Mar-2020 14:39:27 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L1
Client ID:
Operator ID: CB ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

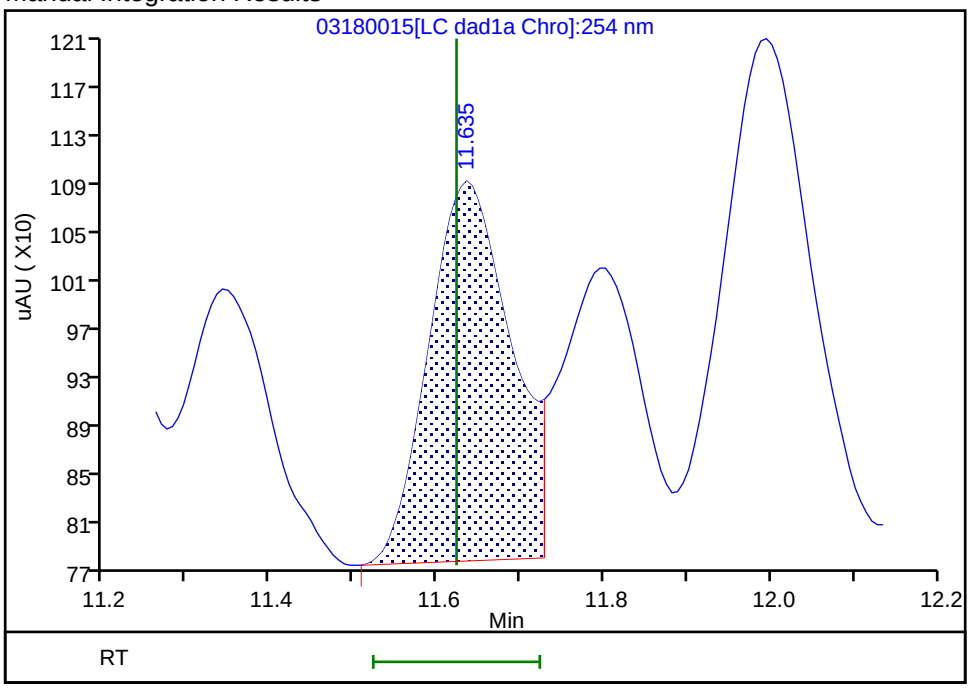
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

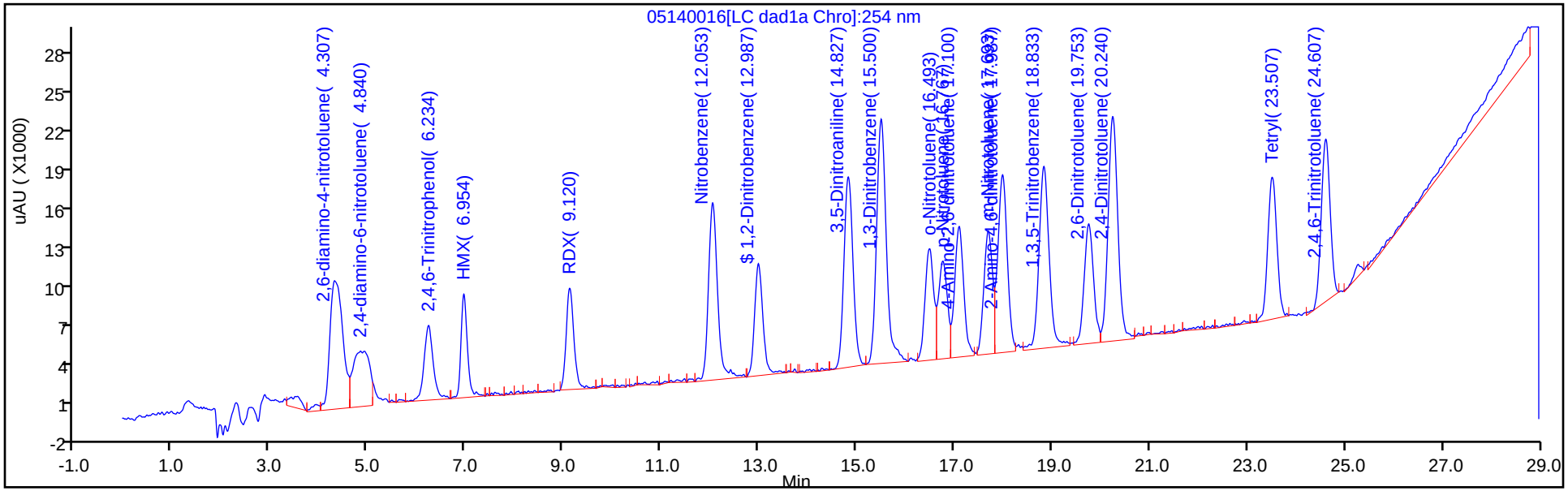
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d

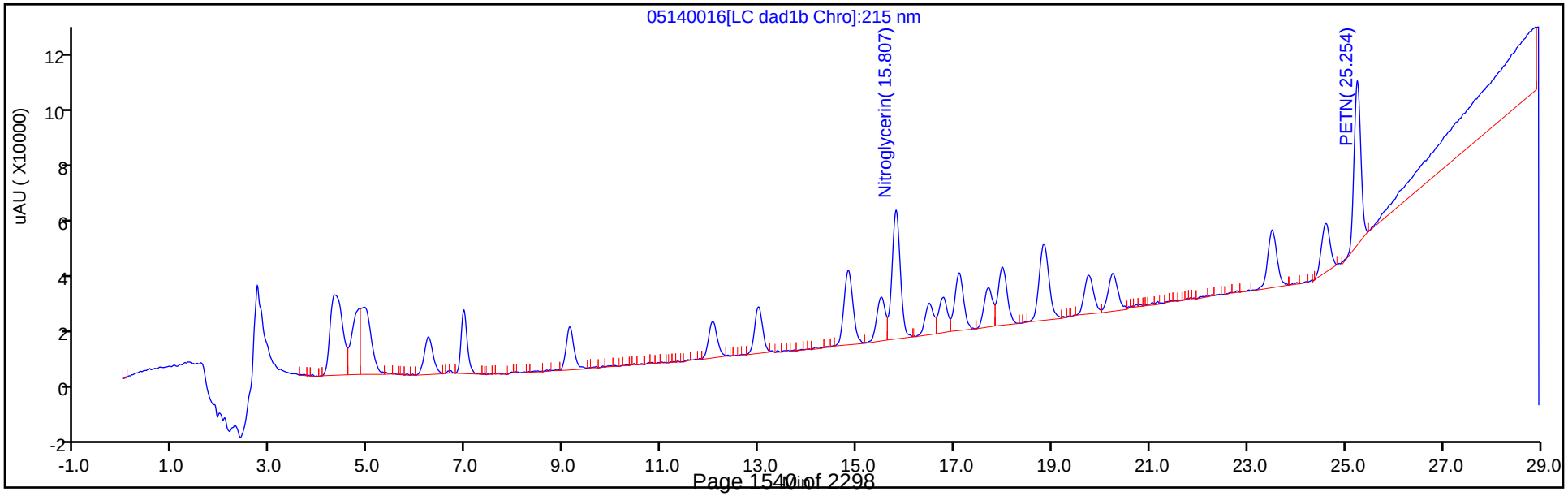
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV FULL			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

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

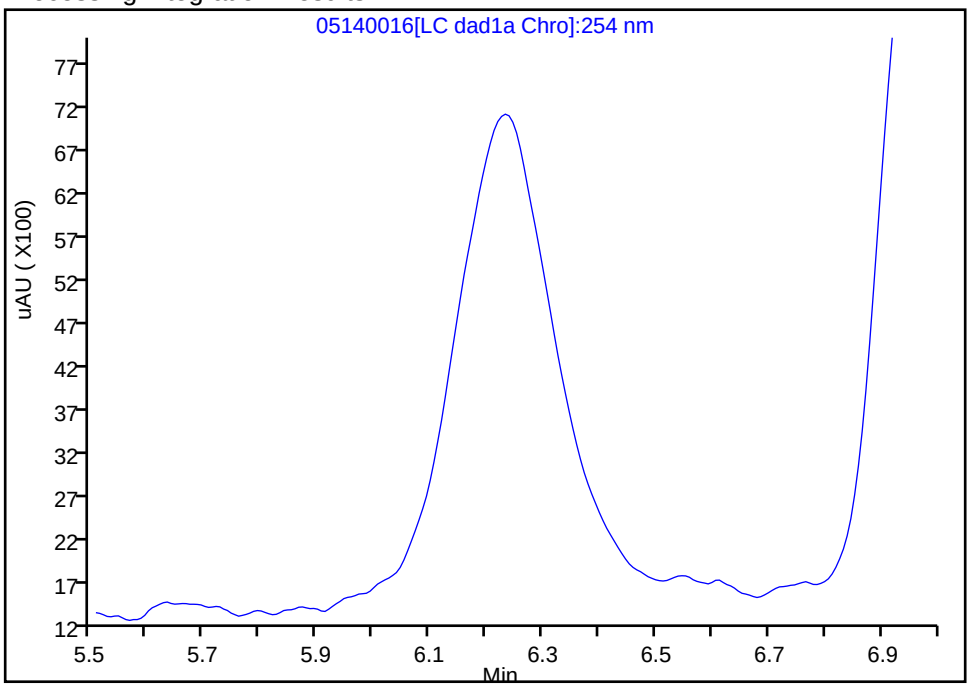
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

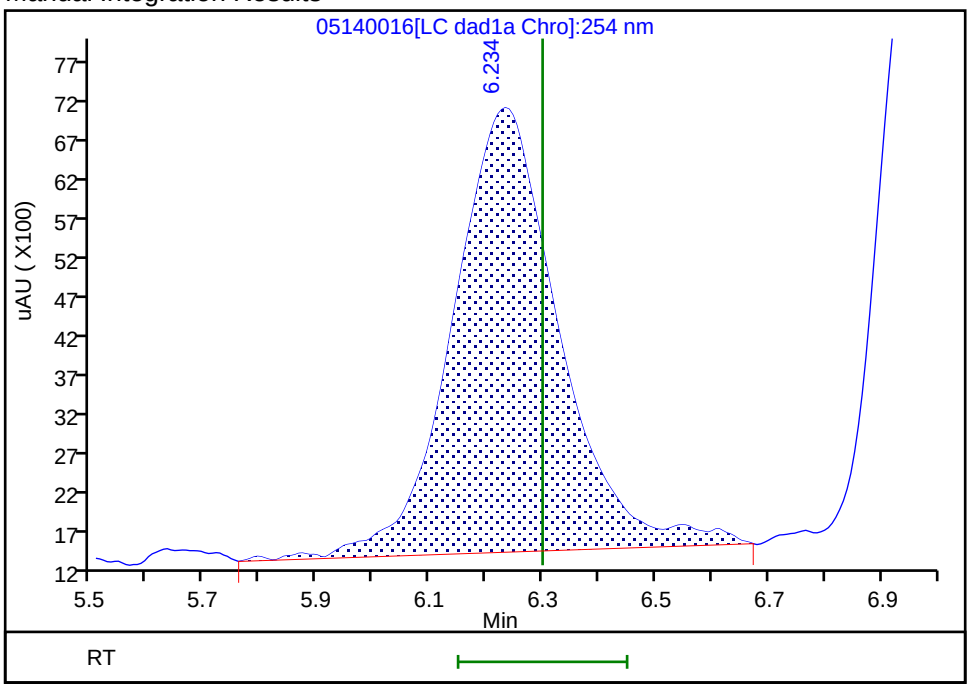
Not Detected
Expected RT: 6.30

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

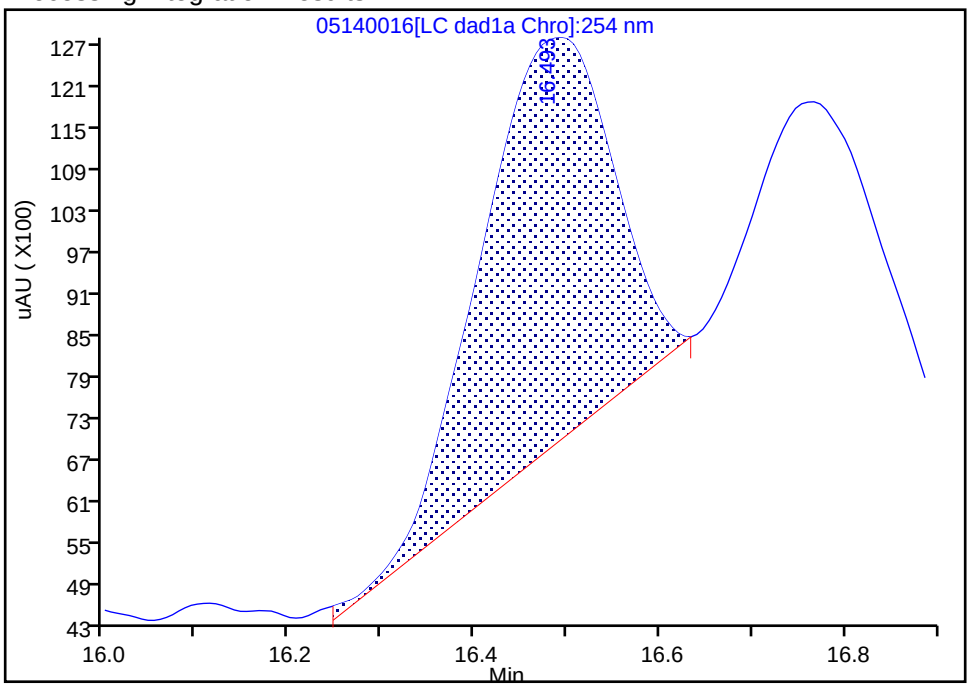
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d
Injection Date: 14-May-2020 21:31:26 Instrument ID: CHHPLC_G2_LUNA
Lims ID: ICV FULL
Client ID:
Operator ID: CB ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

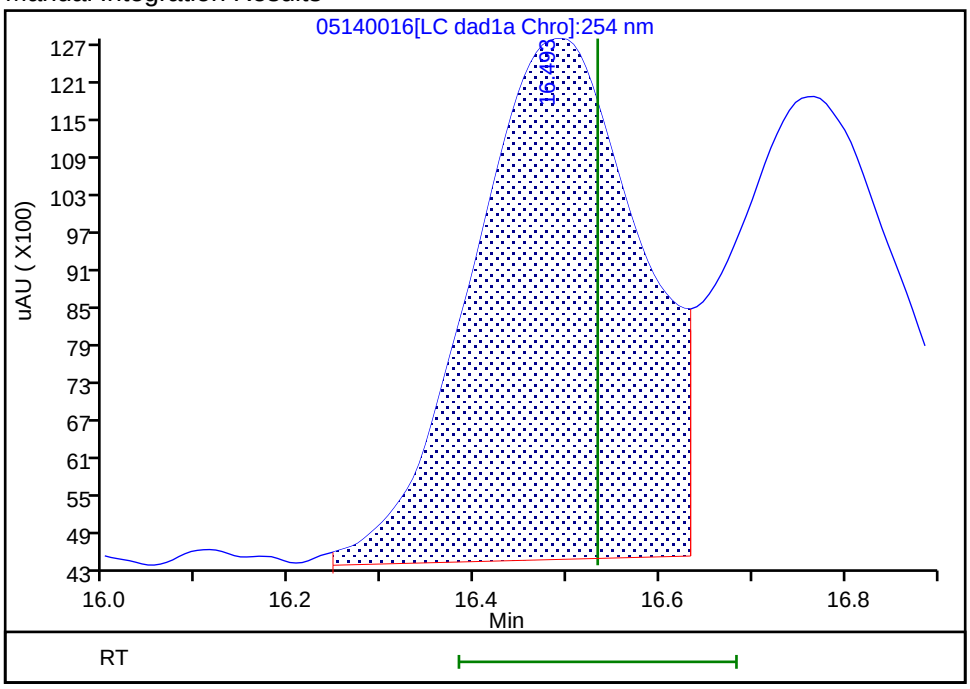
Processing Integration Results

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

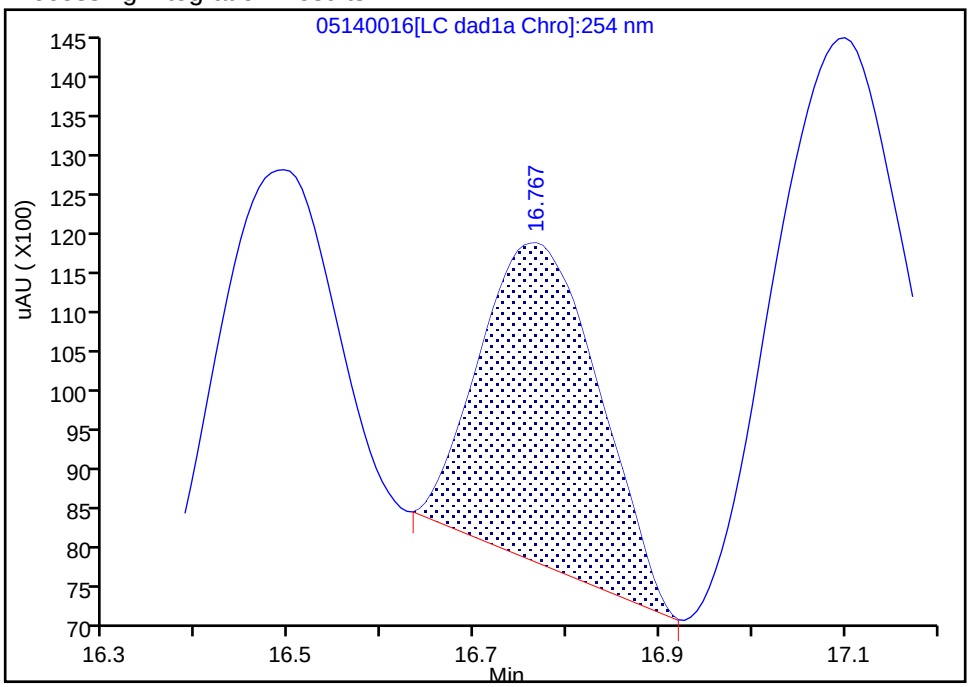
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

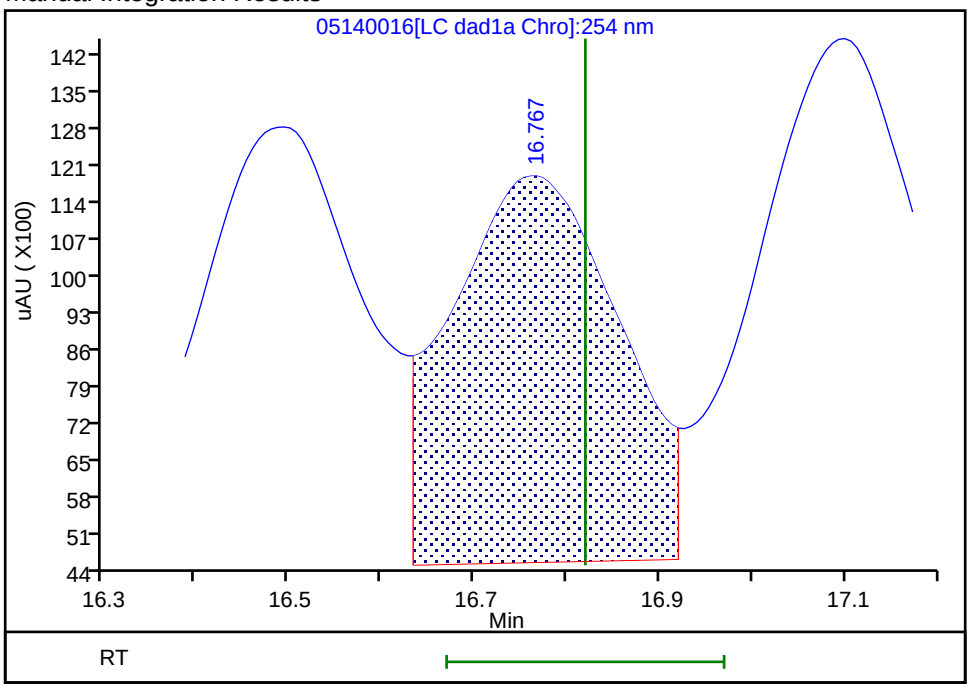
Processing Integration Results

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

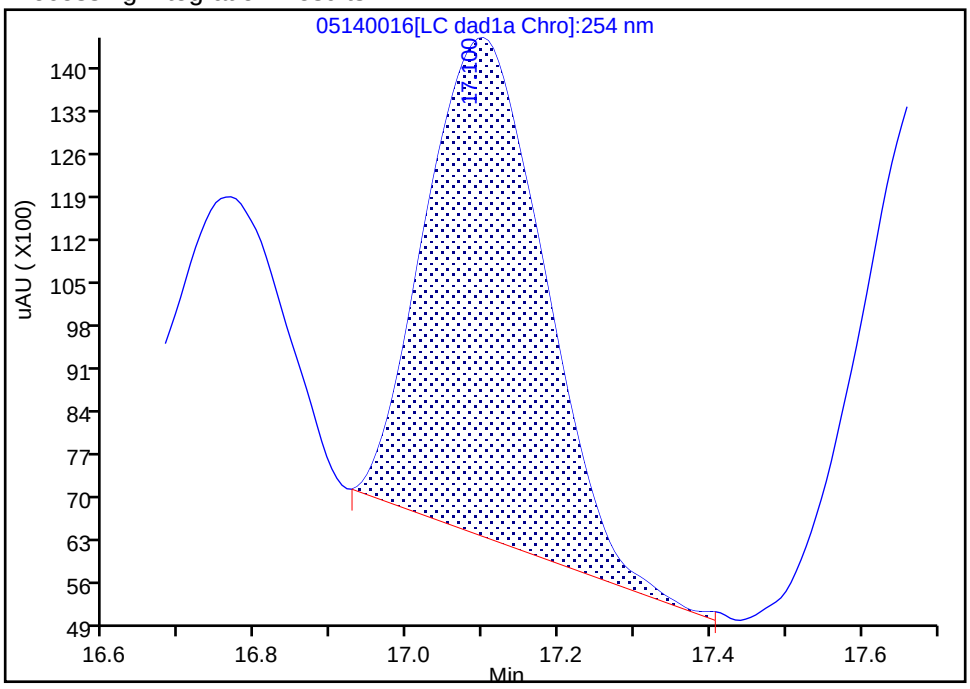
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

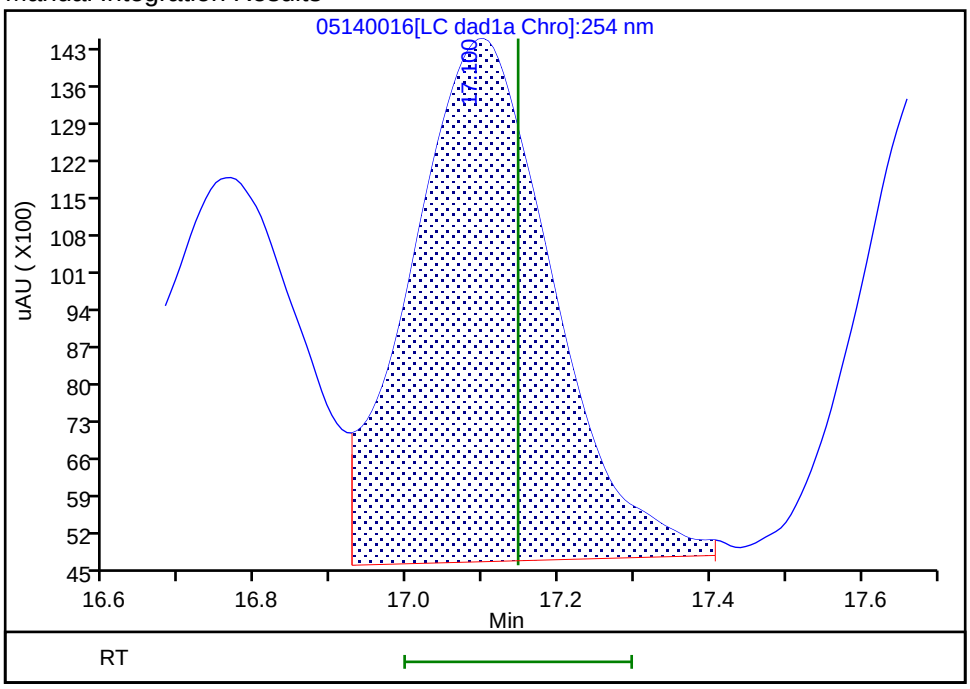
Processing Integration Results

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

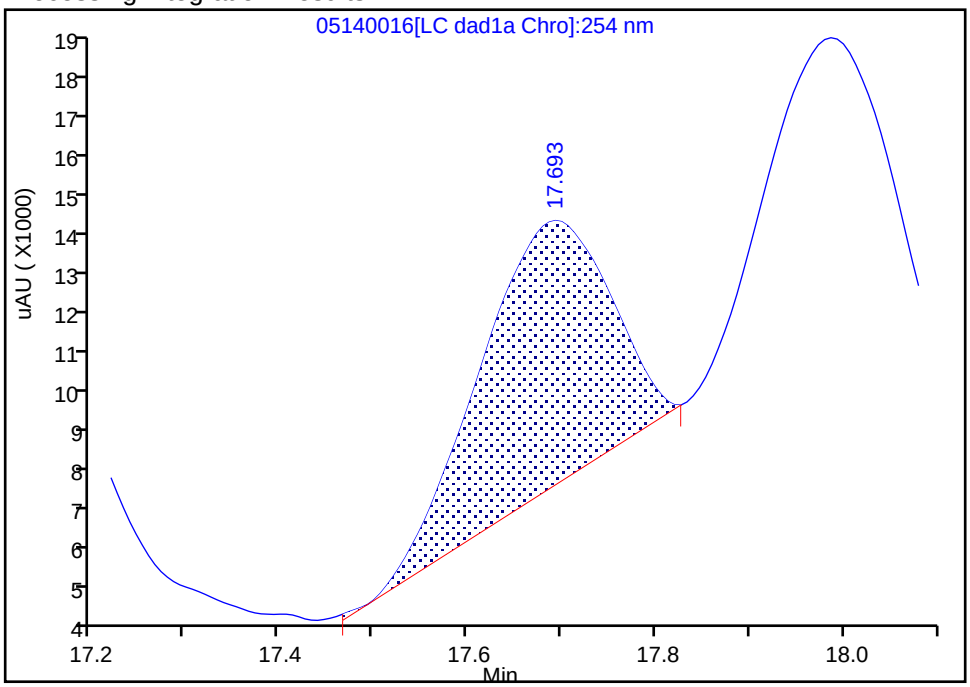
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

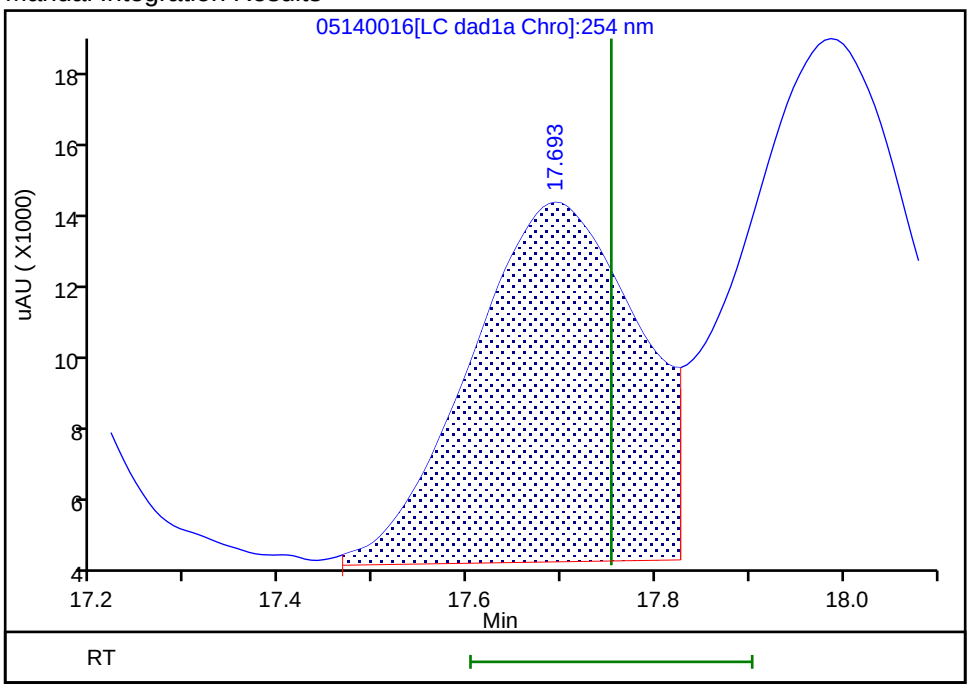
Processing Integration Results

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

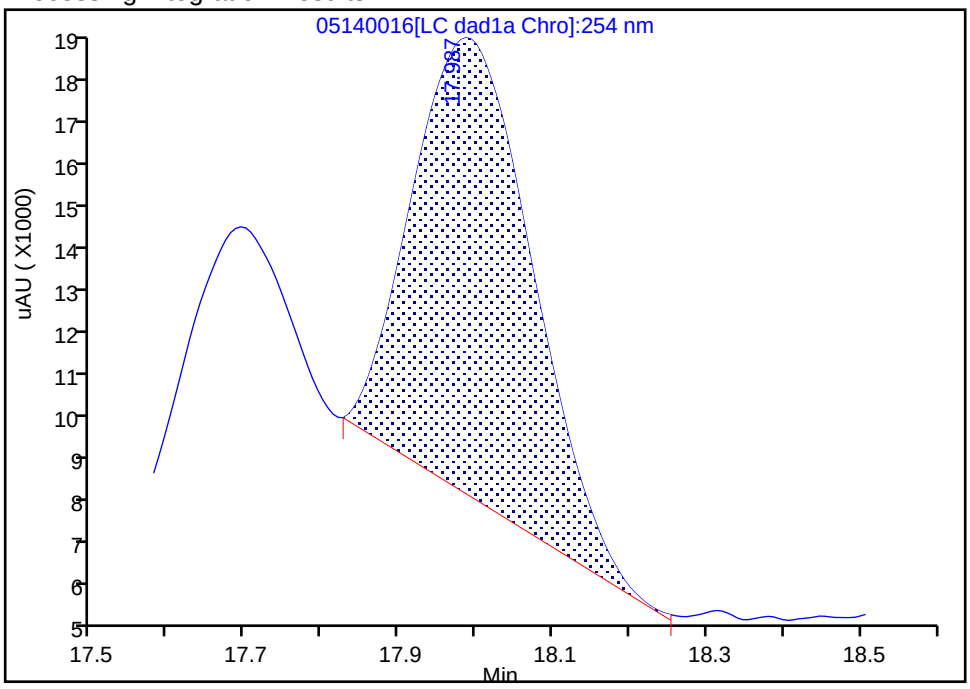
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

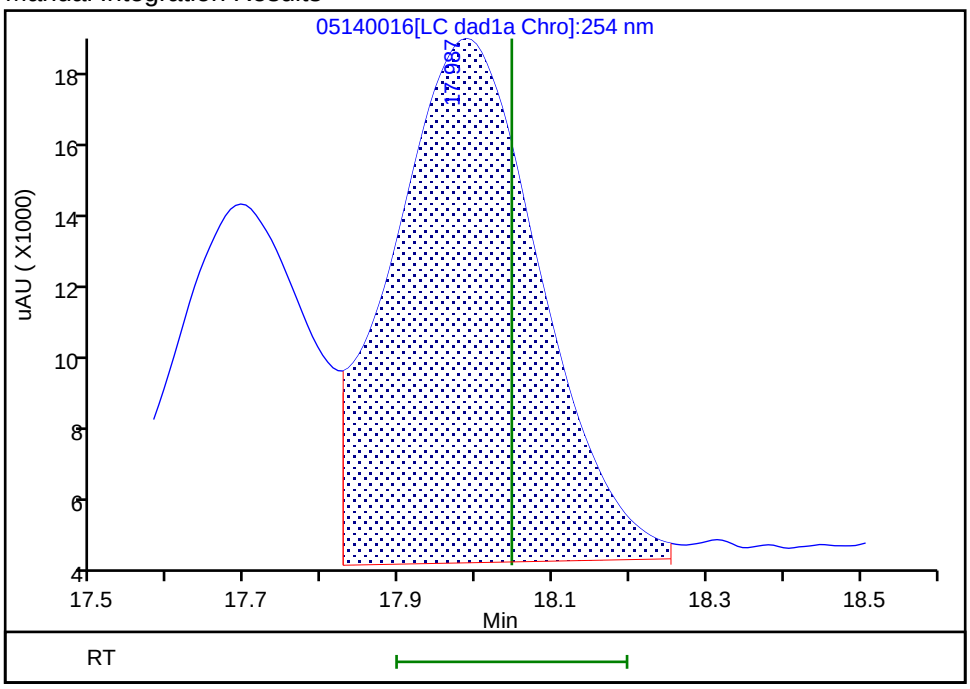
Processing Integration Results

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

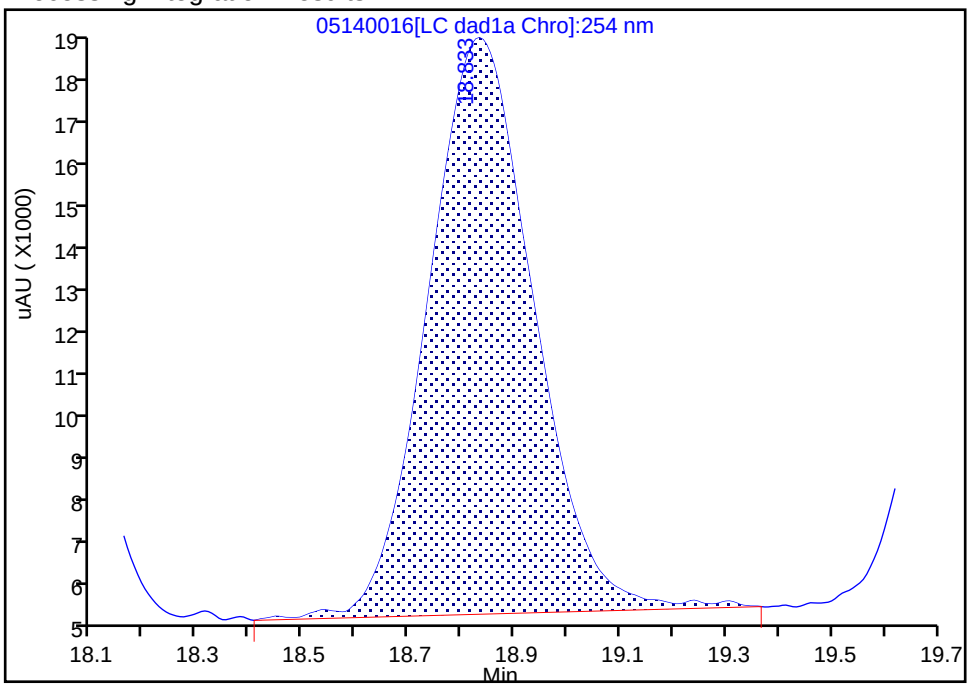
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

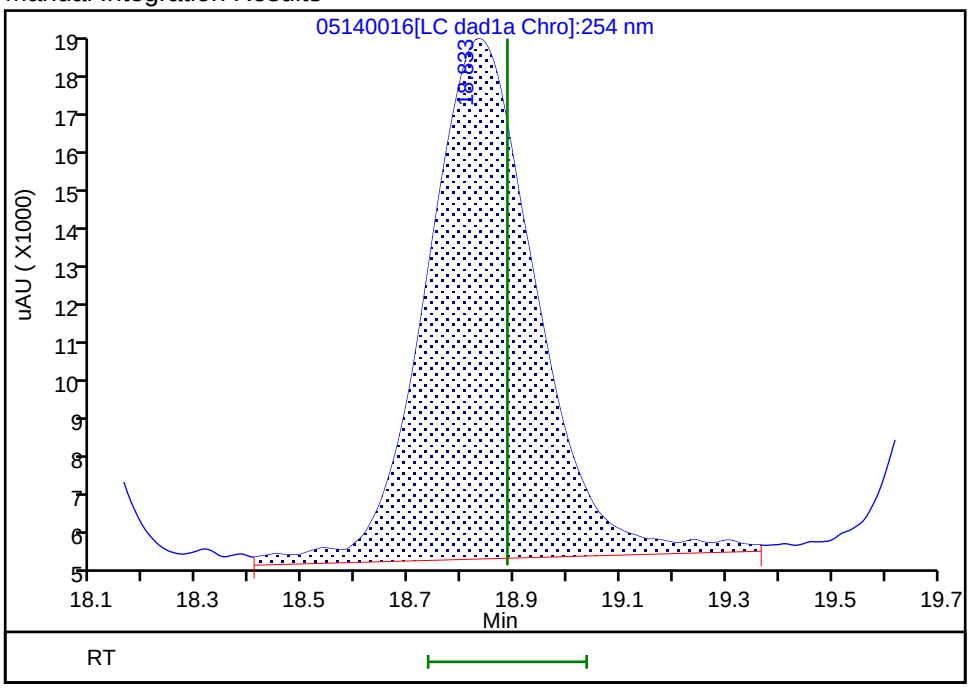
Processing Integration Results

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

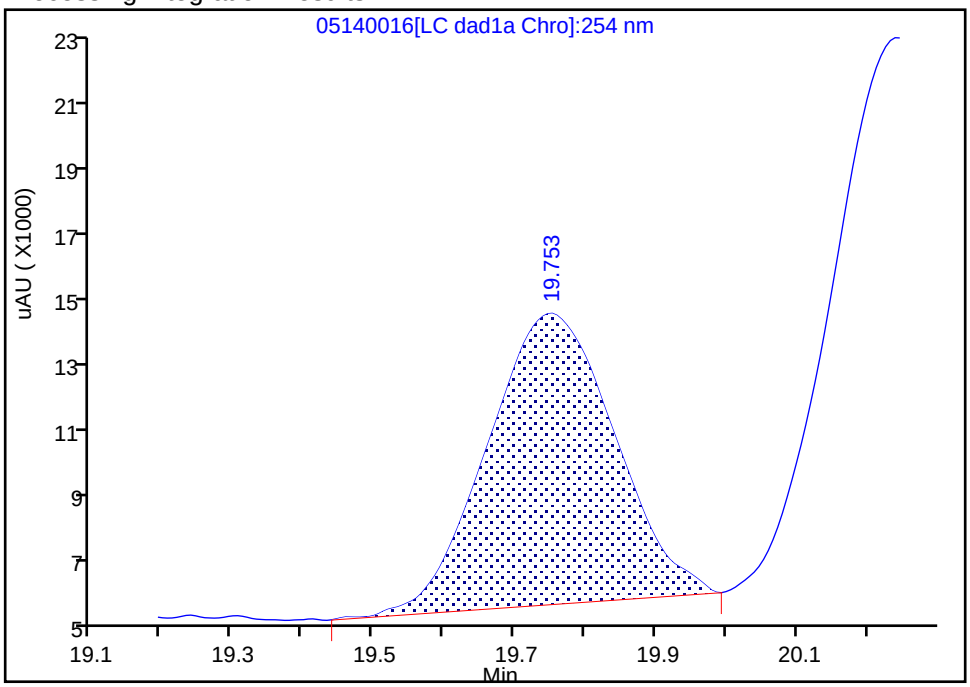
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d
Injection Date: 14-May-2020 21:31:26 Instrument ID: CHHPLC_G2_LUNA
Lims ID: ICV FULL
Client ID:
Operator ID: CB ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

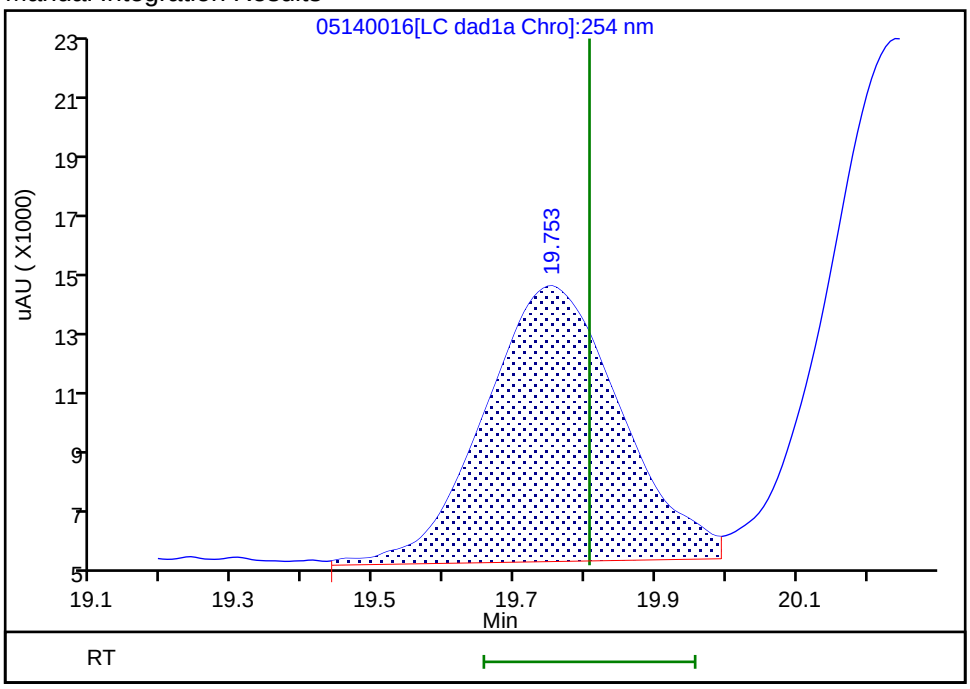
Processing Integration Results

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

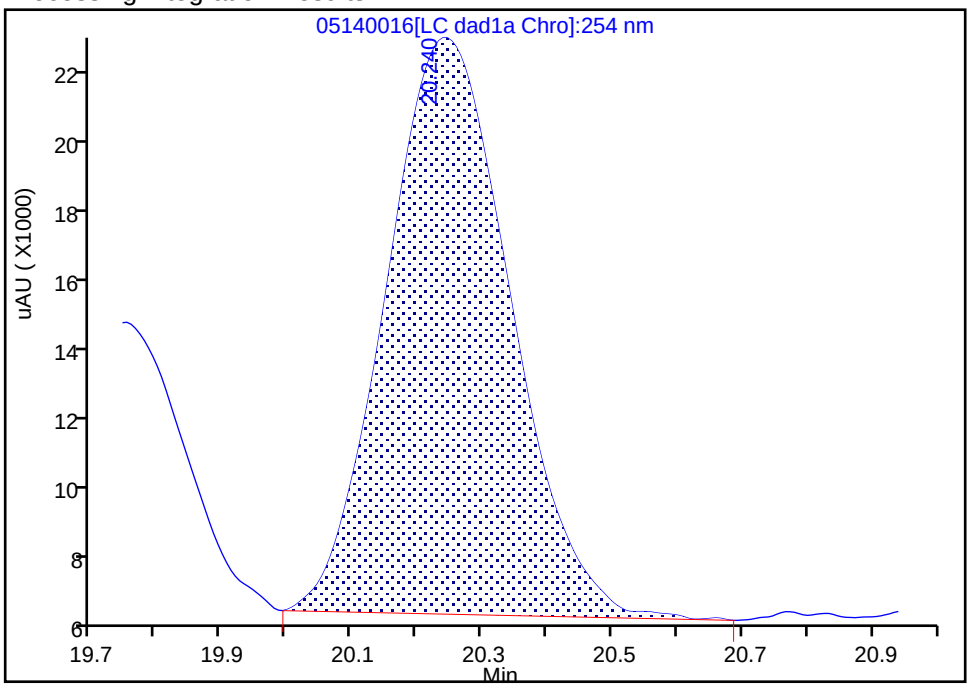
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

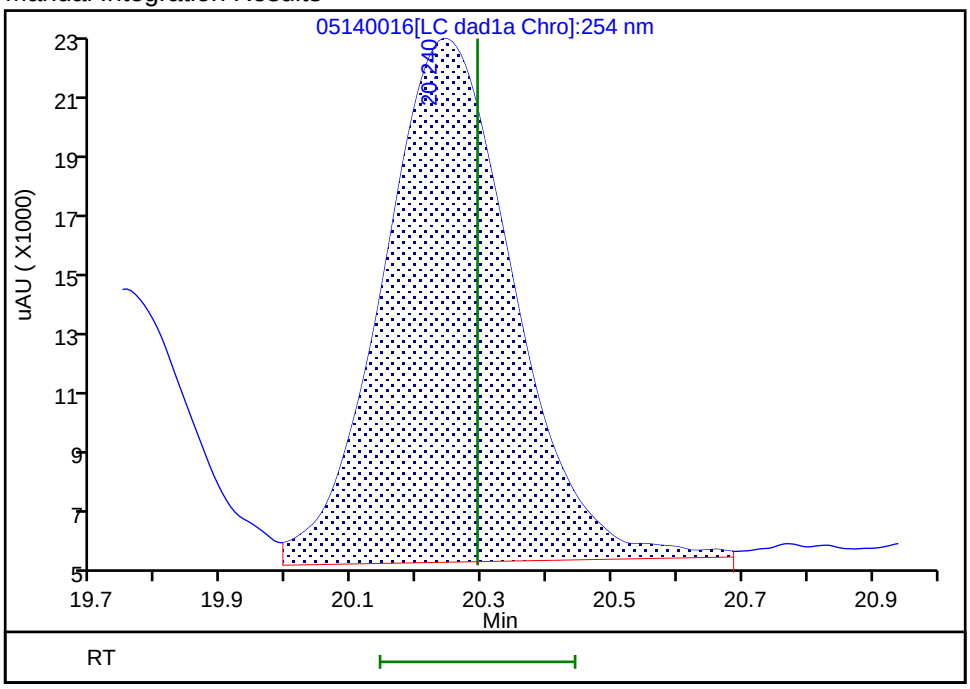
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

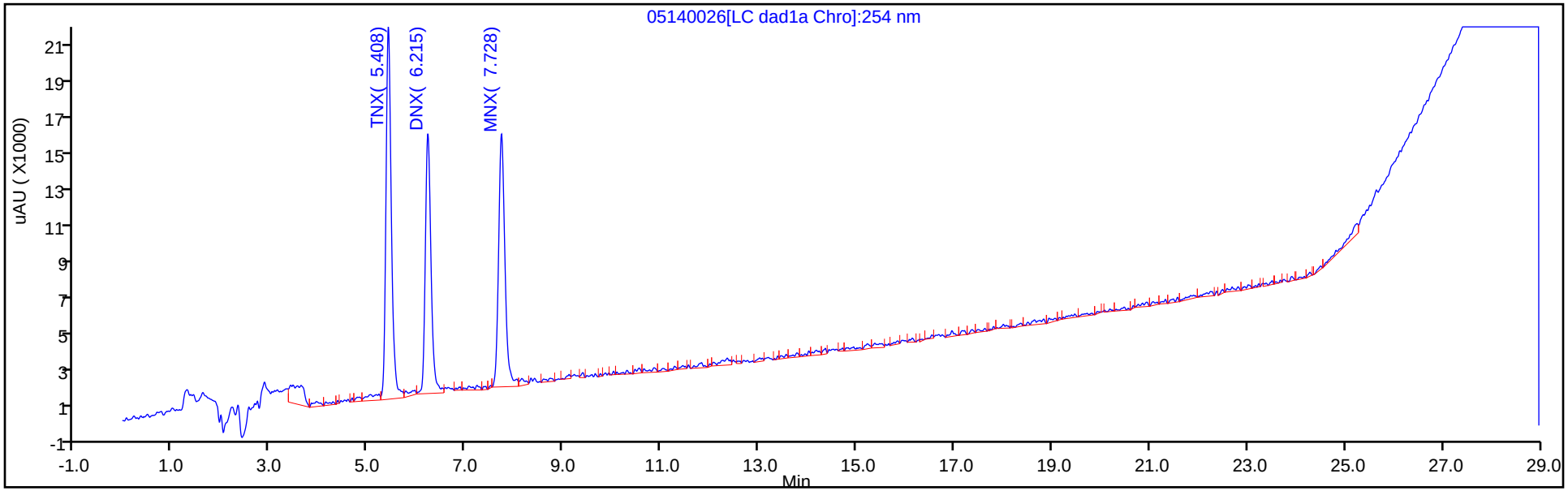
Report Date: 15-May-2020 12:01:06 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

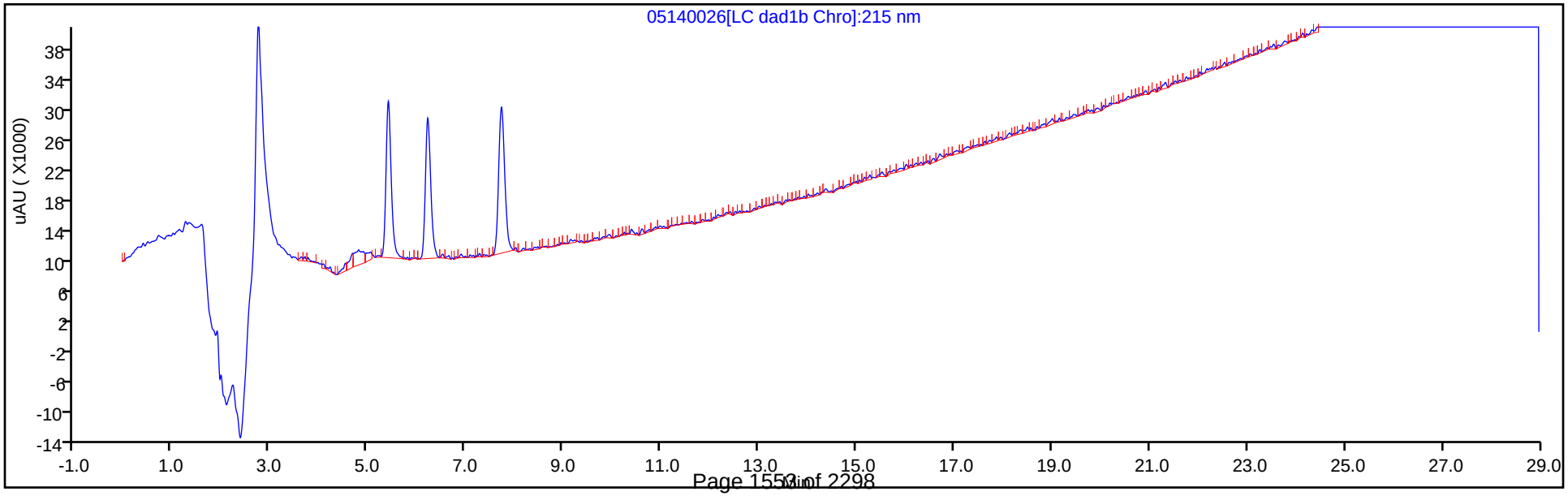
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140026.d

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.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499860/22 Calibration Date: 06/24/2020 04:51

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: 06230022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		186932		234	250	-6.4	15.0
Picric acid	Ave	193810	193608		250	250	-0.1	15.0
RDX	Ave	244360	242512		248	250	-0.8	15.0
Nitrobenzene	Ave	439227	438797		251	251	-0.1	15.0
1,3-Dinitrobenzene	Ave	674189	662032		246	251	-1.8	15.0
Nitroglycerin	Ave	126803	141438		2790	2500	11.5	15.0
2-Nitrotoluene	Ave	272965	258984		237	250	-5.1	15.0
4-Nitrotoluene	Ave	240881	231325		241	251	-4.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	316176		229	250	-8.4	15.0
3-Nitrotoluene	Ave	298327	293495		246	250	-1.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	451741		244	251	-2.9	15.0
1,3,5-Trinitrobenzene	Ave	472451	476327		253	251	0.8	15.0
2,6-Dinitrotoluene	Lin2		309060		253	251	0.7	15.0
2,4-Dinitrotoluene	Ave	640113	627956		246	251	-1.9	15.0
Tetryl	Ave	368678	347126		236	251	-5.8	15.0
2,4,6-Trinitrotoluene	Lin1		399928		242	251	-3.6	15.0
PETN	Lin1		138030		2460	2500	-1.7	15.0
1,2-Dinitrobenzene	Lin1		309532		272	250	9.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499860/22 Calibration Date: 06/24/2020 04:51

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: 06230022.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.14	7.00	7.30
Picric acid	8.45	8.32	8.62
RDX	9.35	9.21	9.51
Nitrobenzene	12.24	12.11	12.41
1,3-Dinitrobenzene	15.78	15.65	15.95
Nitroglycerin	16.00	15.88	16.18
2-Nitrotoluene	16.71	16.58	16.88
4-Nitrotoluene	17.00	16.87	17.17
4-Amino-2,6-dinitrotoluene	17.44	17.30	17.60
3-Nitrotoluene	17.92	17.79	18.09
2-Amino-4,6-dinitrotoluene	18.38	18.24	18.54
1,3,5-Trinitrobenzene	19.12	18.97	19.27
2,6-Dinitrotoluene	20.04	19.90	20.20
2,4-Dinitrotoluene	20.55	20.41	20.71
Tetryl	23.85	23.72	24.02
2,4,6-Trinitrotoluene	24.86	24.74	25.04
PETN	25.40	25.28	25.58
1,2-Dinitrobenzene	13.25	13.11	13.41

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200623-92679.b\06230022.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 24-Jun-2020 04:51:19 ALS Bottle#: 7 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092679-022
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 18:51:57 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: CTX1068

First Level Reviewer: zhangji Date: 24-Jun-2020 16:44:55

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.404	4.417	-0.013	108372	0.2500	0.2524	
	2 2,4-diamino-6-nitrotoluene	1	4.944	4.930	0.014	68849	0.2500	0.2663	
	6 HMX	1	7.144	7.150	-0.006	46733	0.2500	0.2339	
	5 2,4,6-Trinitrophenol	1	8.451	8.470	-0.019	48402	0.2500	0.2497	
	8 RDX	1	9.351	9.363	-0.012	60628	0.2500	0.2481	
	9 Nitrobenzene	1	12.244	12.263	-0.019	110138	0.2510	0.2508	
$	10 1,2-Dinitrobenzene	1	13.251	13.263	-0.012	77383	0.2500	0.2725	
	11 3,5-Dinitroaniline	1	15.197	15.203	-0.006	121869	0.2500	0.2456	M
	12 1,3-Dinitrobenzene	1	15.784	15.797	-0.013	165839	0.2505	0.2460	M
	13 Nitroglycerin	2	16.004	16.030	-0.026	353594	2.50	2.79	M
	14 o-Nitrotoluene	1	16.711	16.730	-0.019	64746	0.2500	0.2372	M
	15 p-Nitrotoluene	1	16.997	17.017	-0.020	57947	0.2505	0.2406	M
	16 4-Amino-2,6-dinitrotoluene	1	17.444	17.450	-0.006	79123	0.2503	0.2292	M
	17 m-Nitrotoluene	1	17.924	17.943	-0.019	73447	0.2503	0.2462	M
	18 2-Amino-4,6-dinitrotoluene	1	18.384	18.390	-0.006	113387	0.2510	0.2437	M
	19 1,3,5-Trinitrobenzene	1	19.117	19.123	-0.006	119320	0.2505	0.2526	M
	20 2,6-Dinitrotoluene	1	20.037	20.050	-0.013	77574	0.2510	0.2529	M
	21 2,4-Dinitrotoluene	1	20.551	20.564	-0.012	157617	0.2510	0.2462	M
	22 Tetryl	1	23.851	23.870	-0.019	86955	0.2505	0.2359	
	23 2,4,6-Trinitrotoluene	1	24.864	24.890	-0.026	100382	0.2510	0.2421	
	24 PETN	2	25.397	25.430	-0.033	345074	2.50	2.46	

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

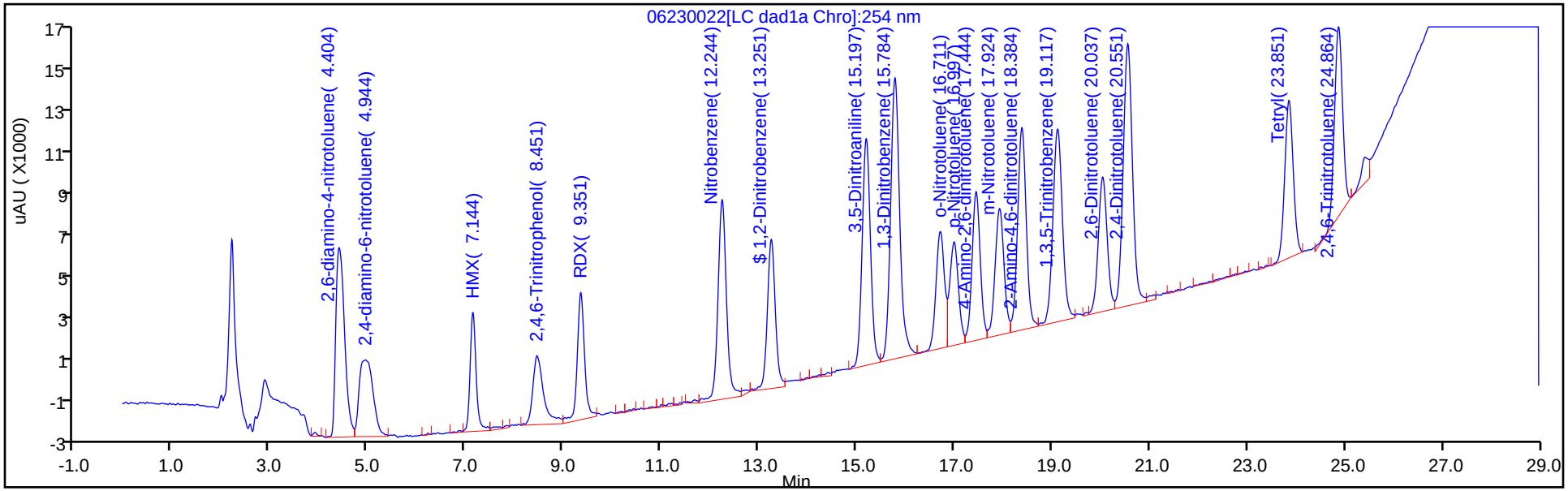
Report Date: 24-Jun-2020 18:51:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

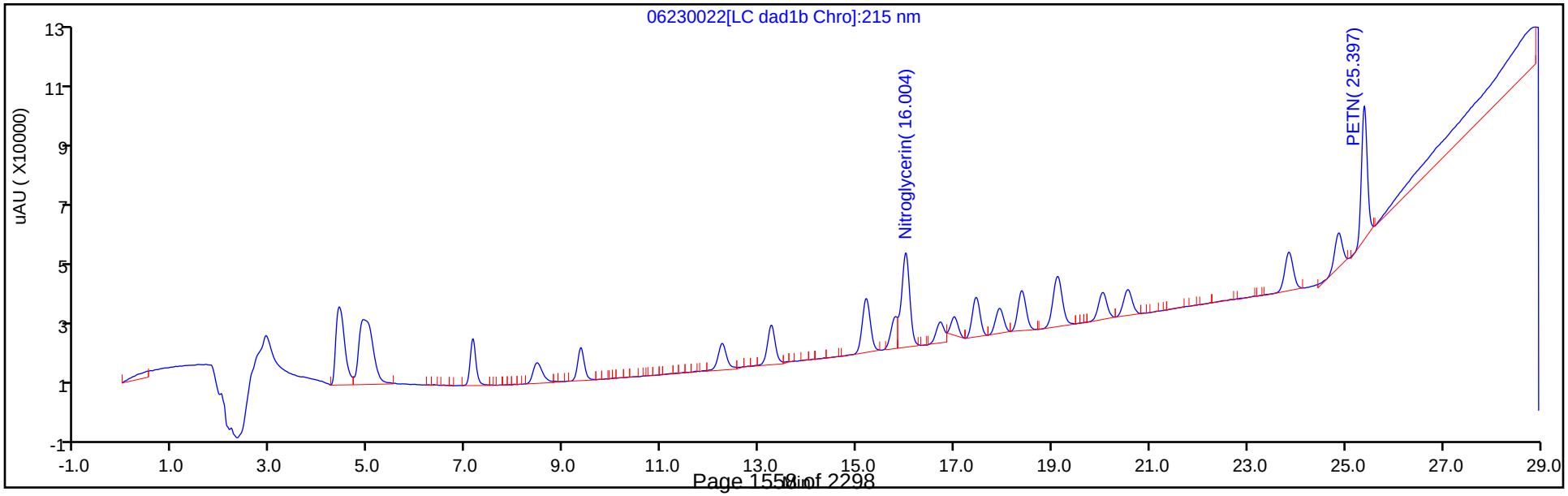
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d

Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	22
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

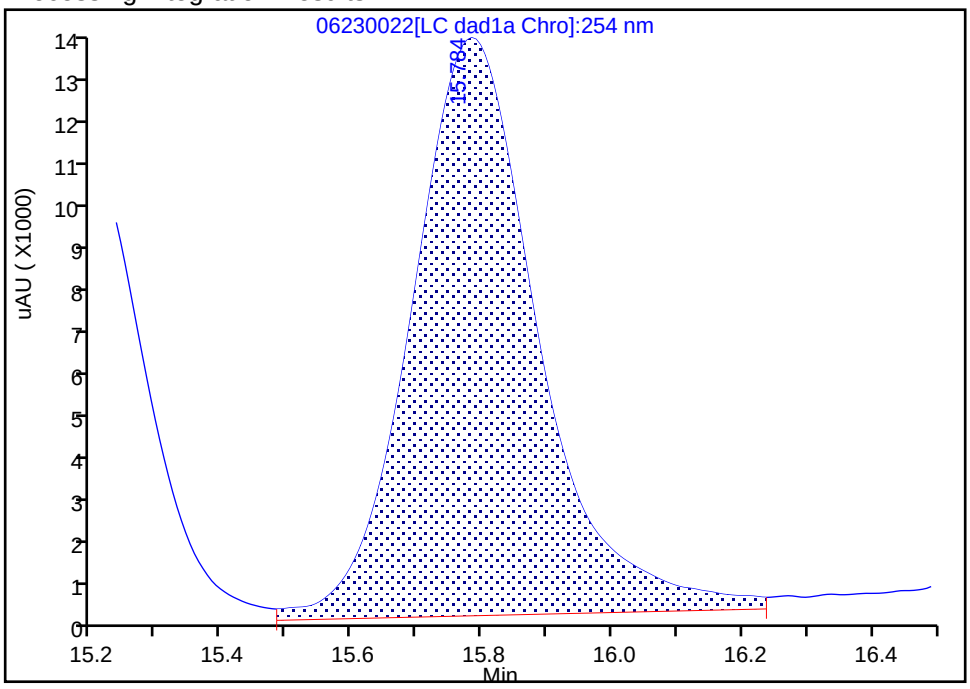
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

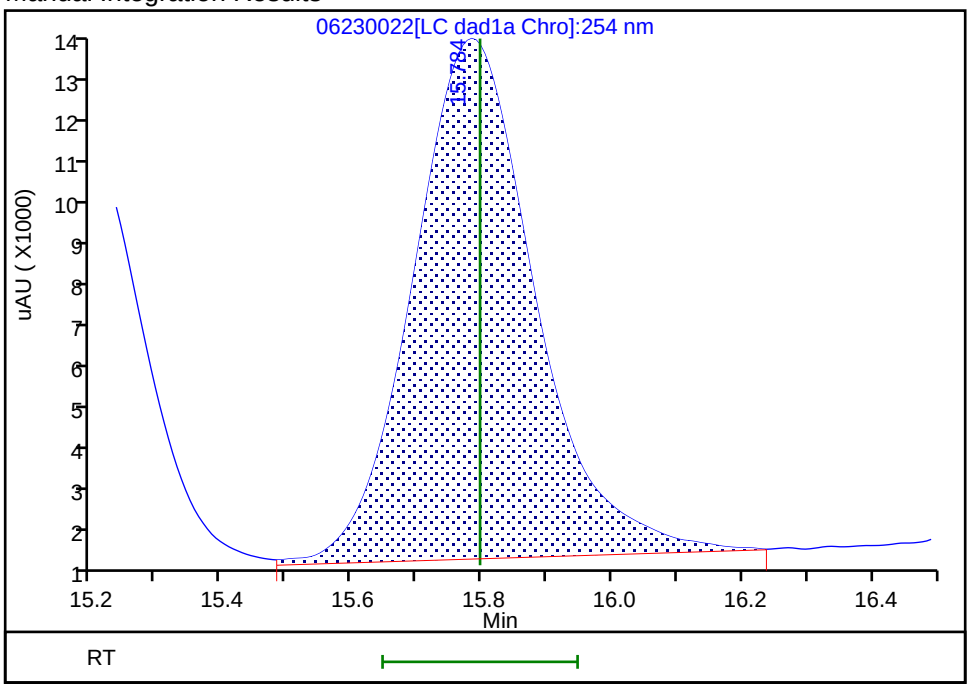
Processing Integration Results

RT: 15.78
Area: 174088
Amount: 0.258219
Amount Units: ug/ml



Manual Integration Results

RT: 15.78
Area: 165839
Amount: 0.245983
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

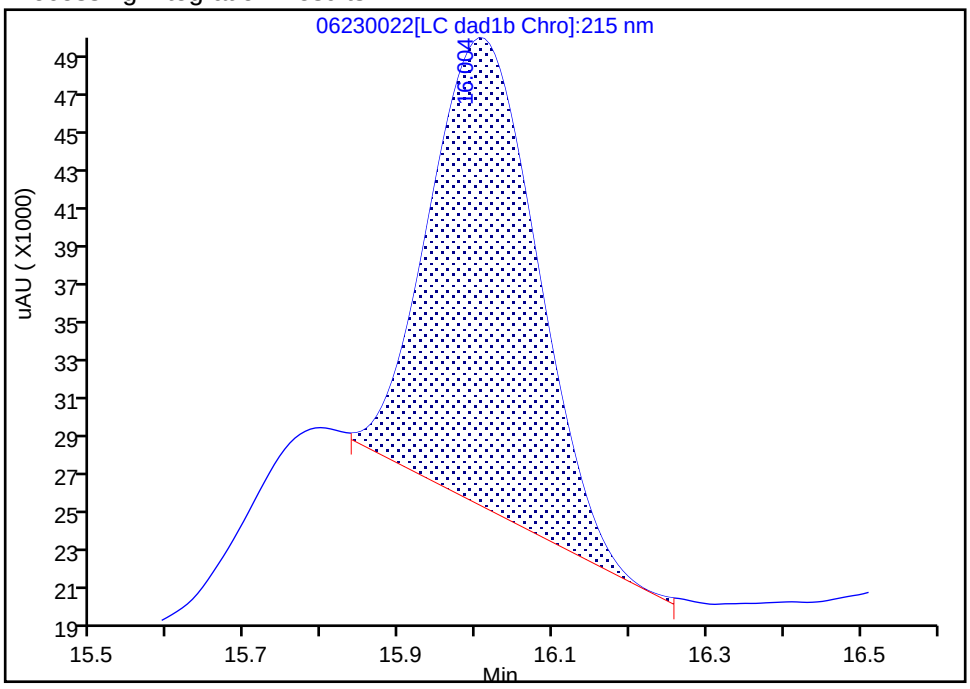
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

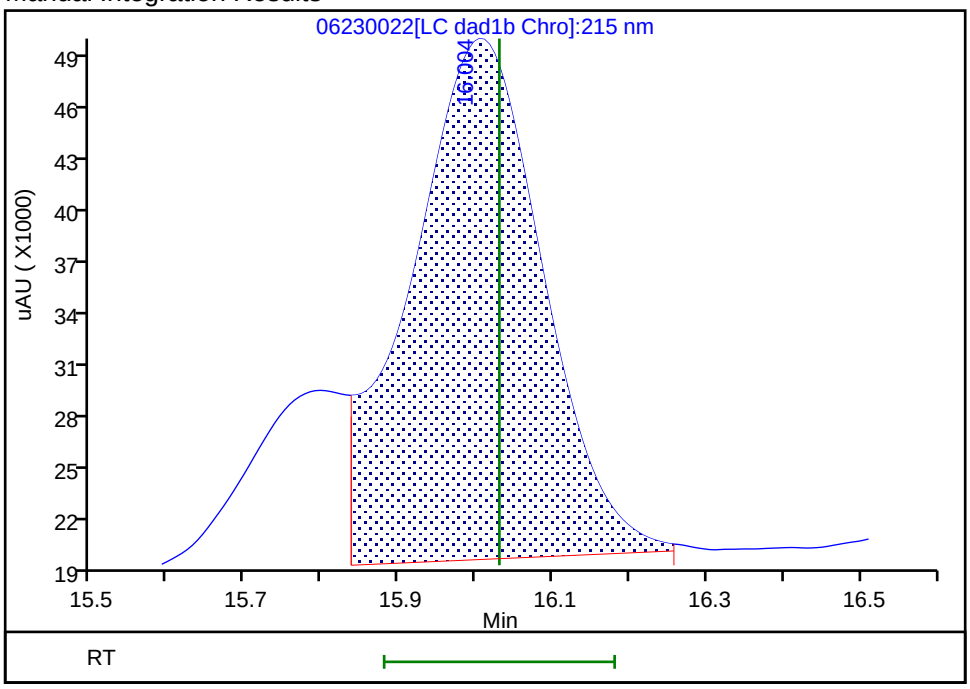
Processing Integration Results

RT: 16.00
Area: 235557
Amount: 1.857656
Amount Units: ug/ml



Manual Integration Results

RT: 16.00
Area: 353594
Amount: 2.788523
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 16:44:50
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

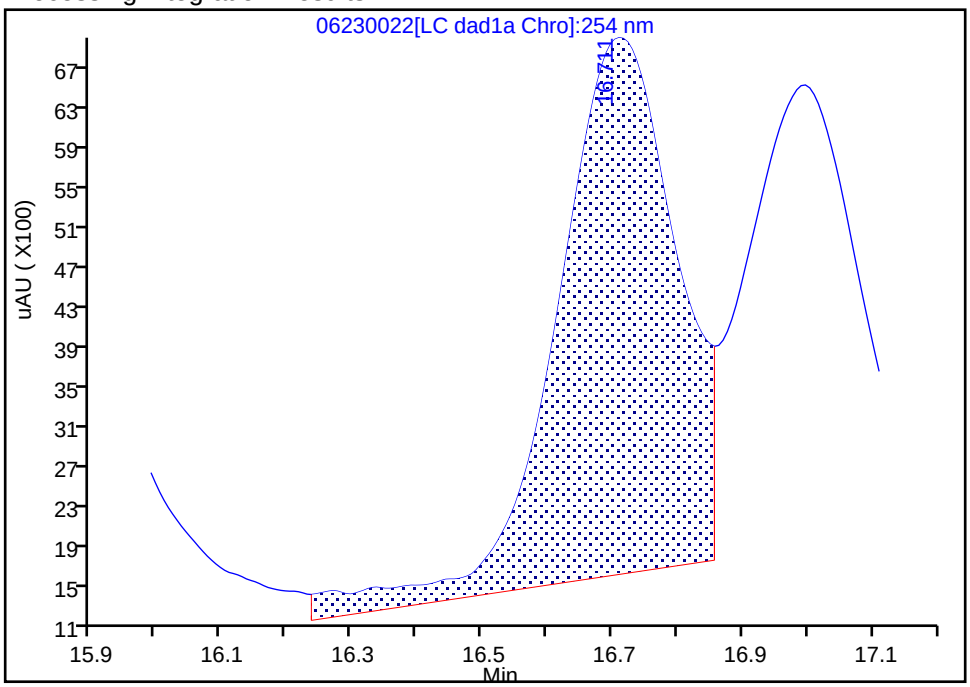
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

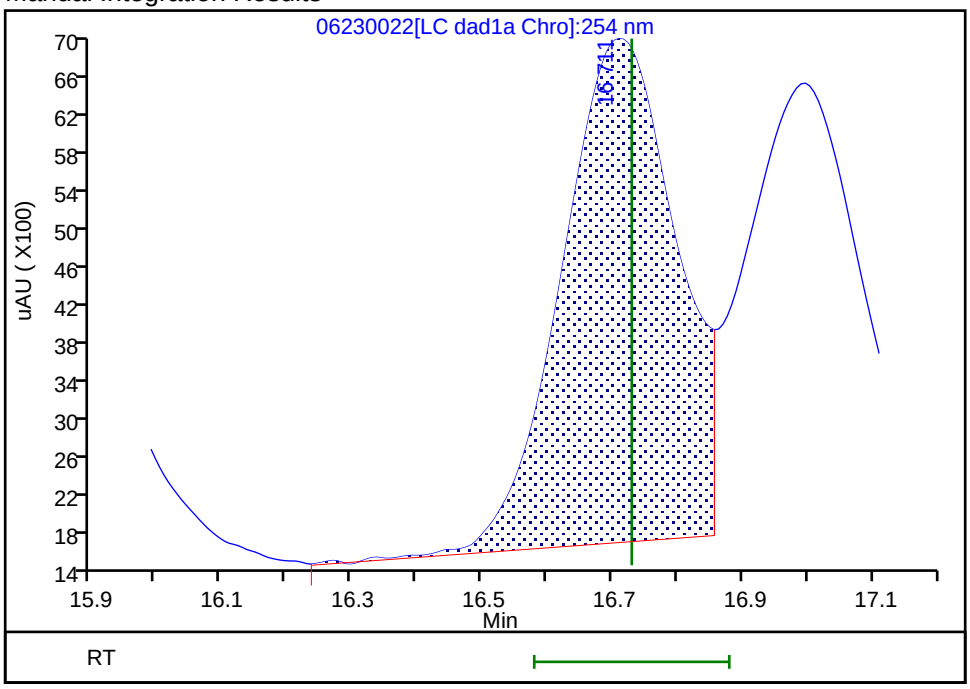
Processing Integration Results

RT: 16.71
Area: 68541
Amount: 0.251099
Amount Units: ug/ml



Manual Integration Results

RT: 16.71
Area: 64746
Amount: 0.237196
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

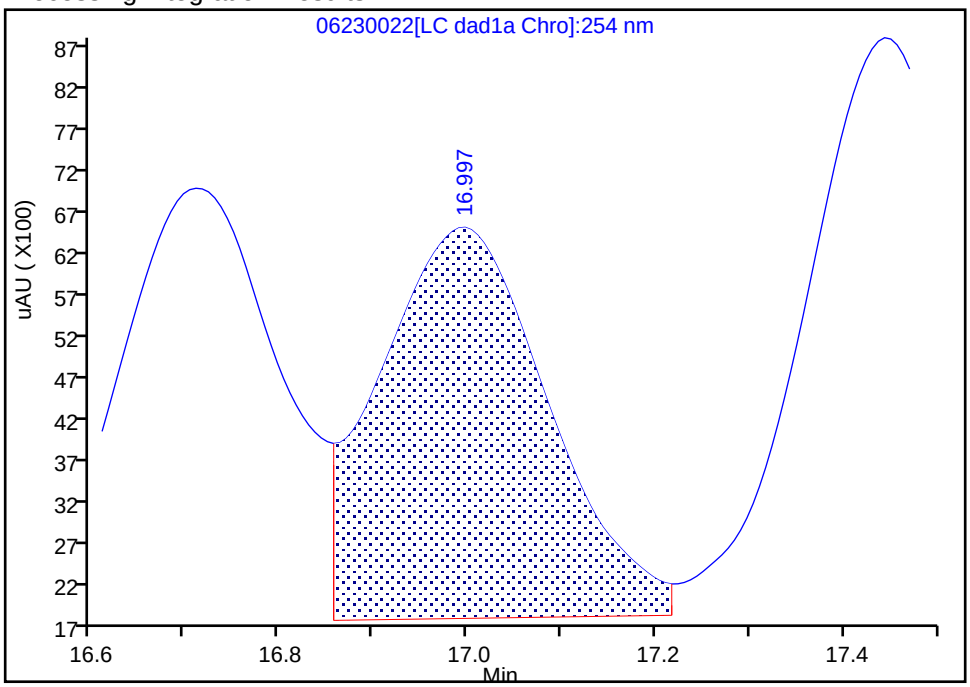
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

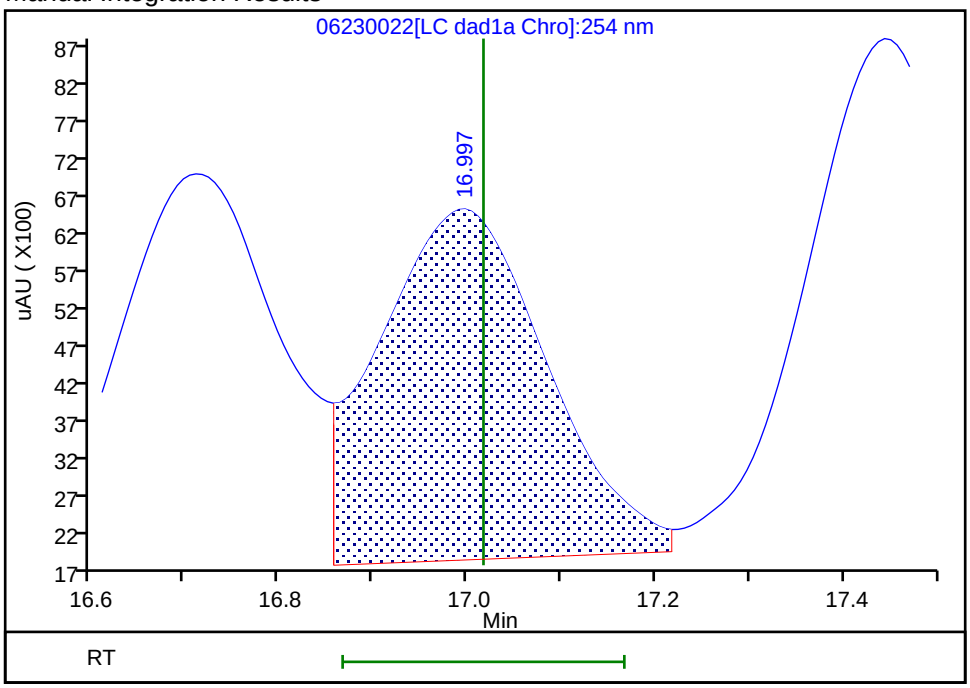
Processing Integration Results

RT: 17.00
Area: 58379
Amount: 0.242356
Amount Units: ug/ml



Manual Integration Results

RT: 17.00
Area: 57947
Amount: 0.240562
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

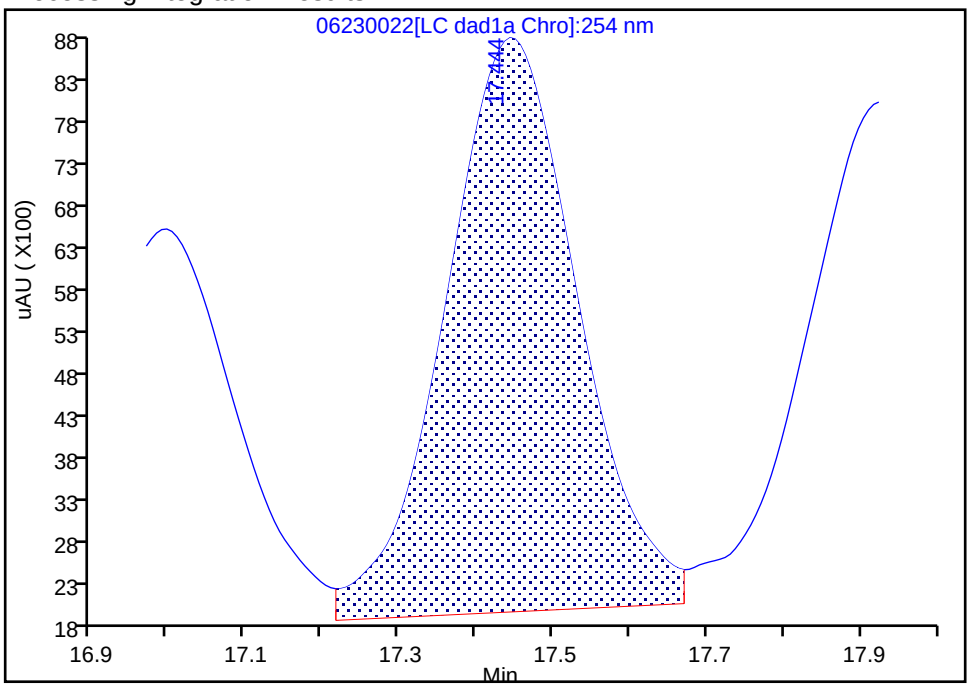
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

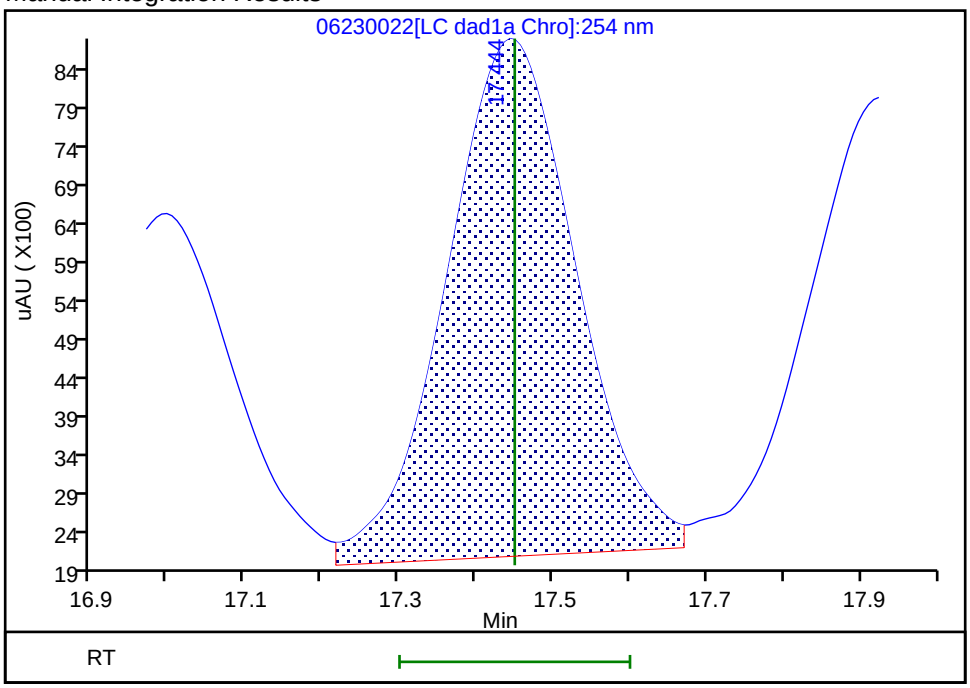
Processing Integration Results

RT: 17.44
Area: 81694
Amount: 0.236633
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 79123
Amount: 0.229186
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

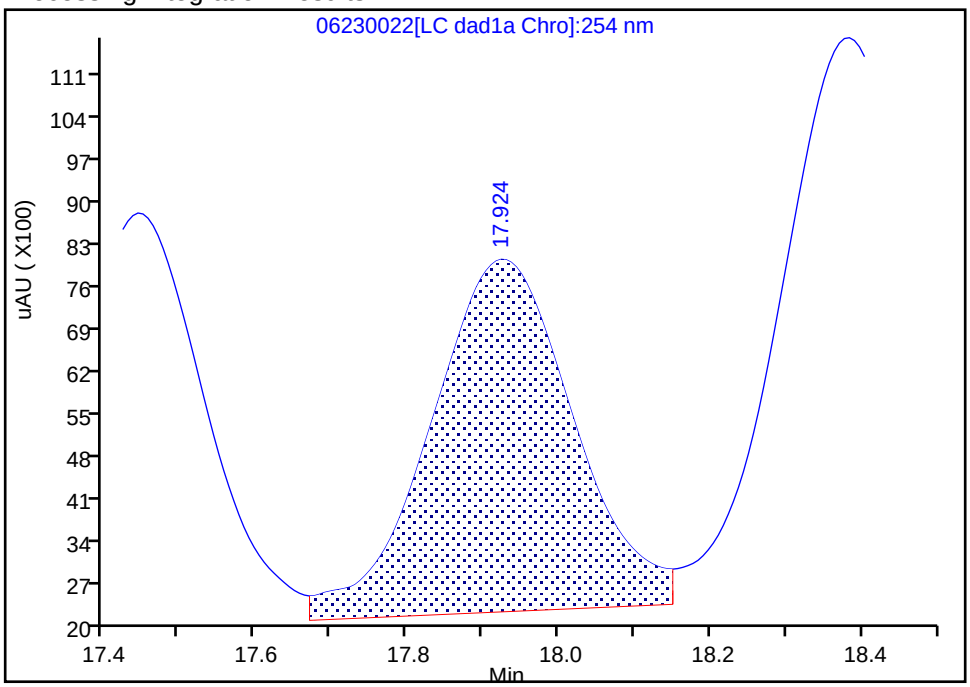
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

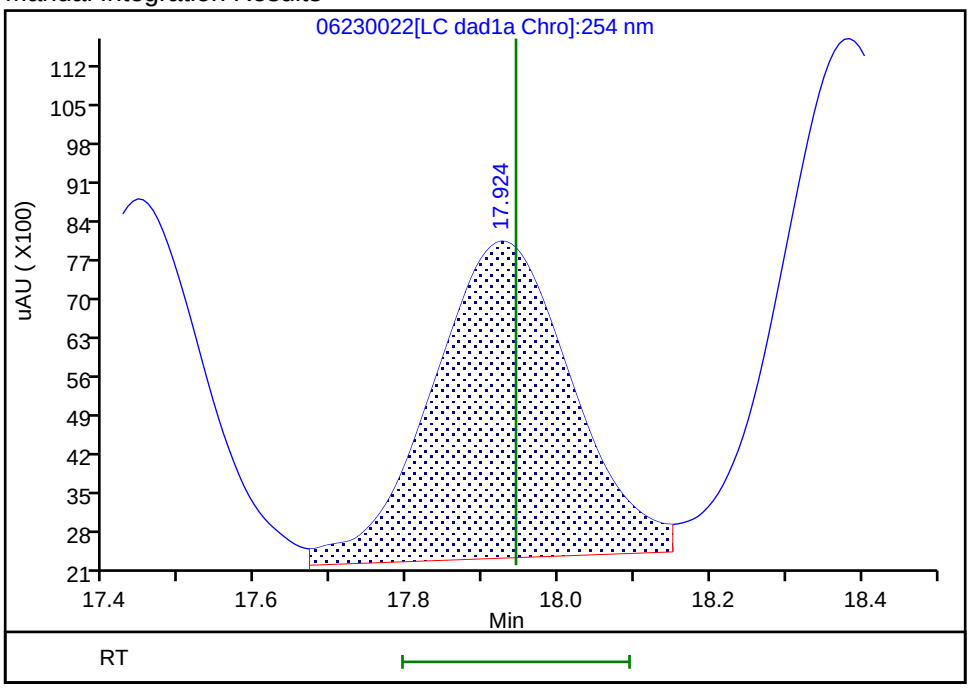
Processing Integration Results

RT: 17.92
Area: 76240
Amount: 0.255559
Amount Units: ug/ml



Manual Integration Results

RT: 17.92
Area: 73447
Amount: 0.246196
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

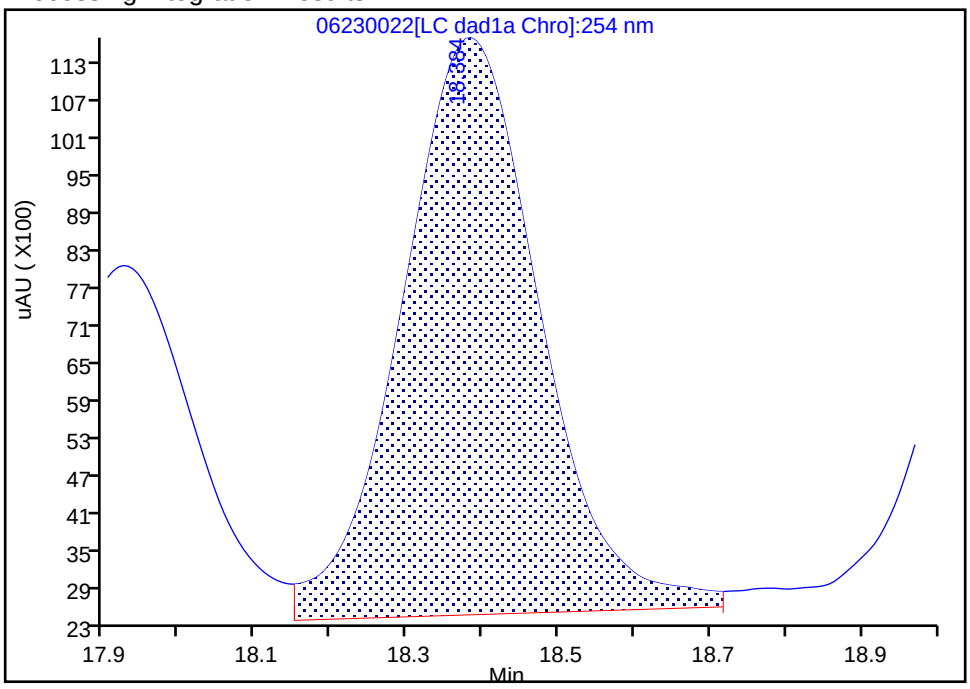
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

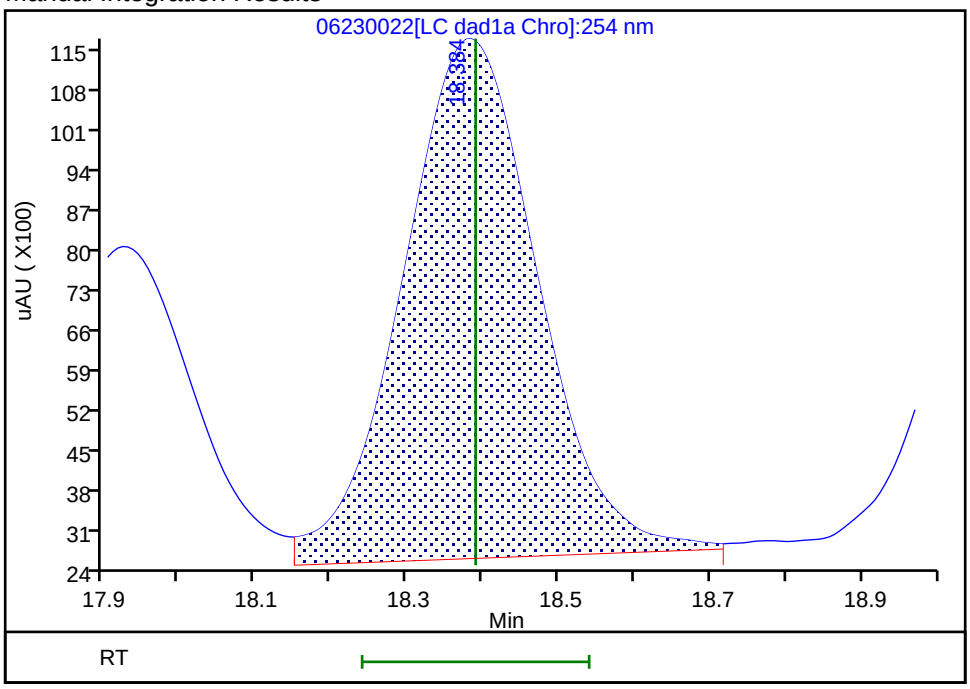
Processing Integration Results

RT: 18.38
Area: 117433
Amount: 0.252430
Amount Units: ug/ml



Manual Integration Results

RT: 18.38
Area: 113387
Amount: 0.243732
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

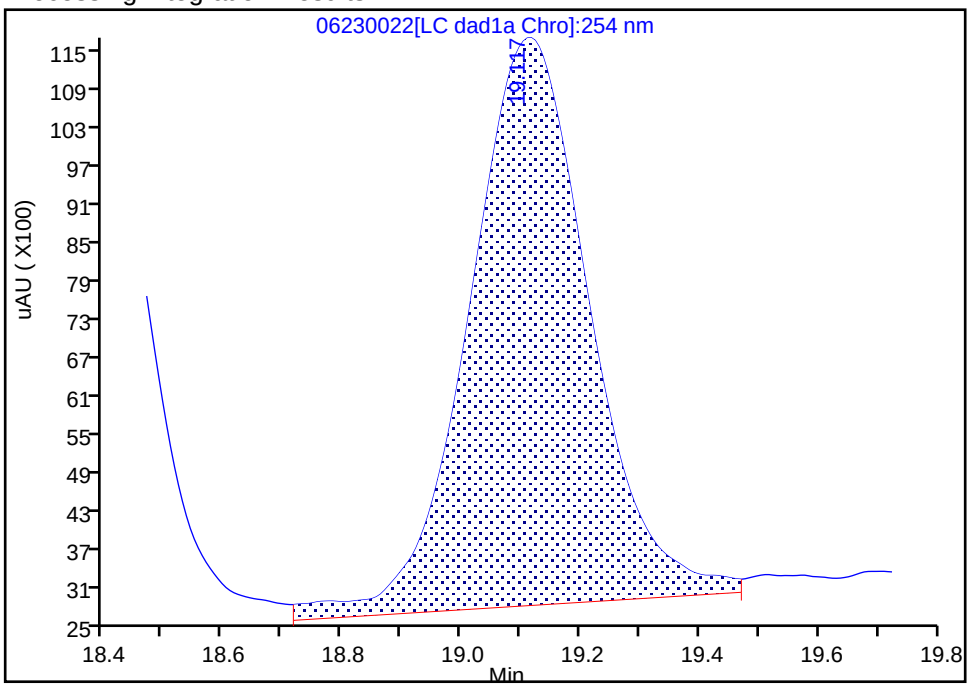
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

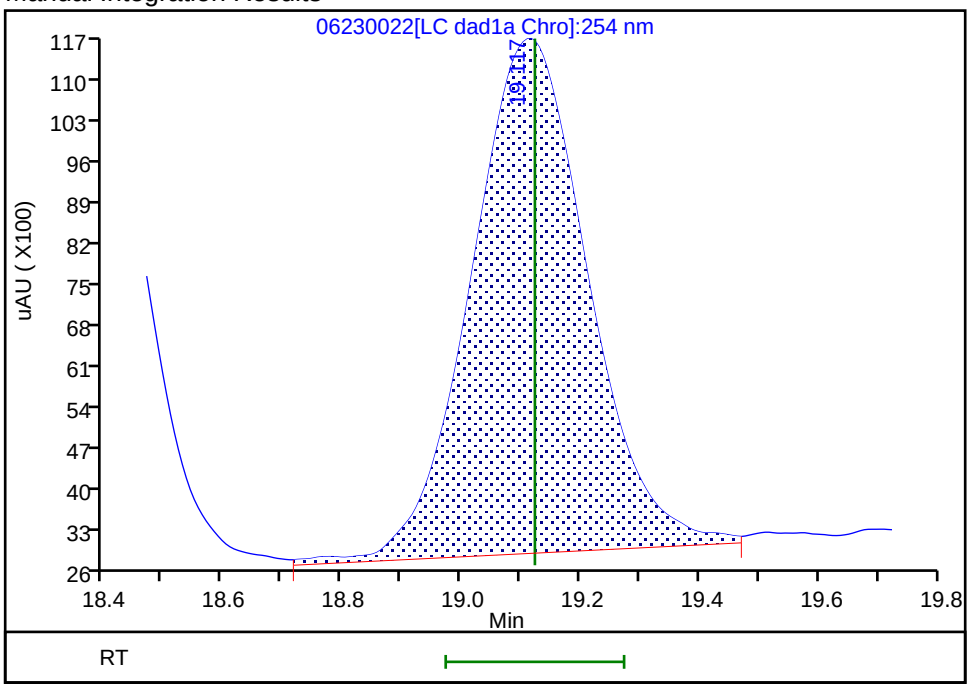
Processing Integration Results

RT: 19.12
Area: 124924
Amount: 0.264417
Amount Units: ug/ml



Manual Integration Results

RT: 19.12
Area: 119320
Amount: 0.252555
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

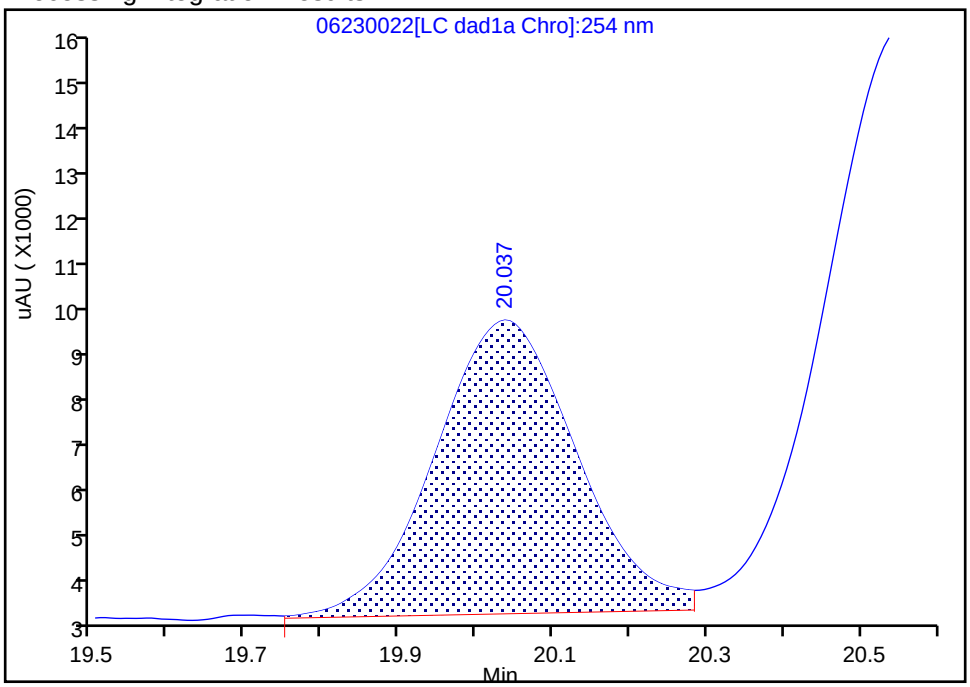
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

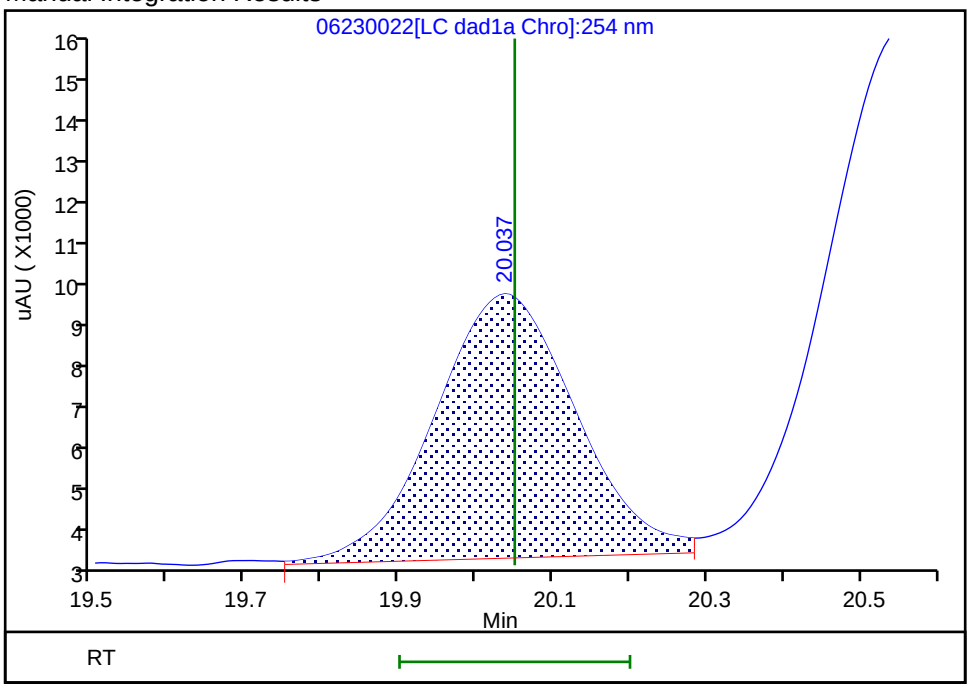
Processing Integration Results

RT: 20.04
Area: 78294
Amount: 0.255371
Amount Units: ug/ml



Manual Integration Results

RT: 20.04
Area: 77574
Amount: 0.252882
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

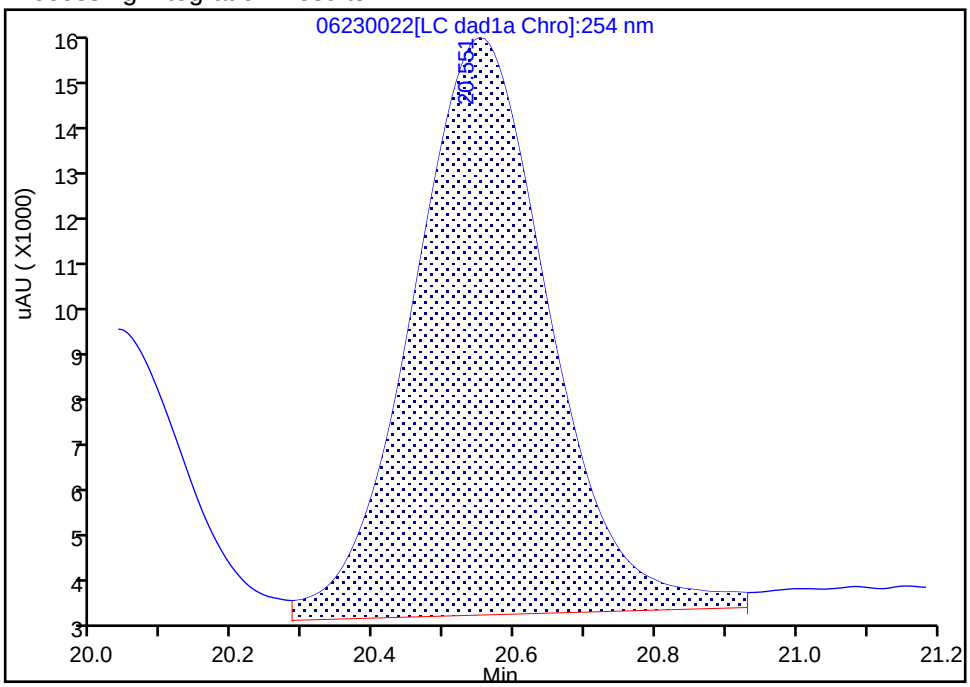
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230022.d				
Injection Date:	24-Jun-2020 04:51:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

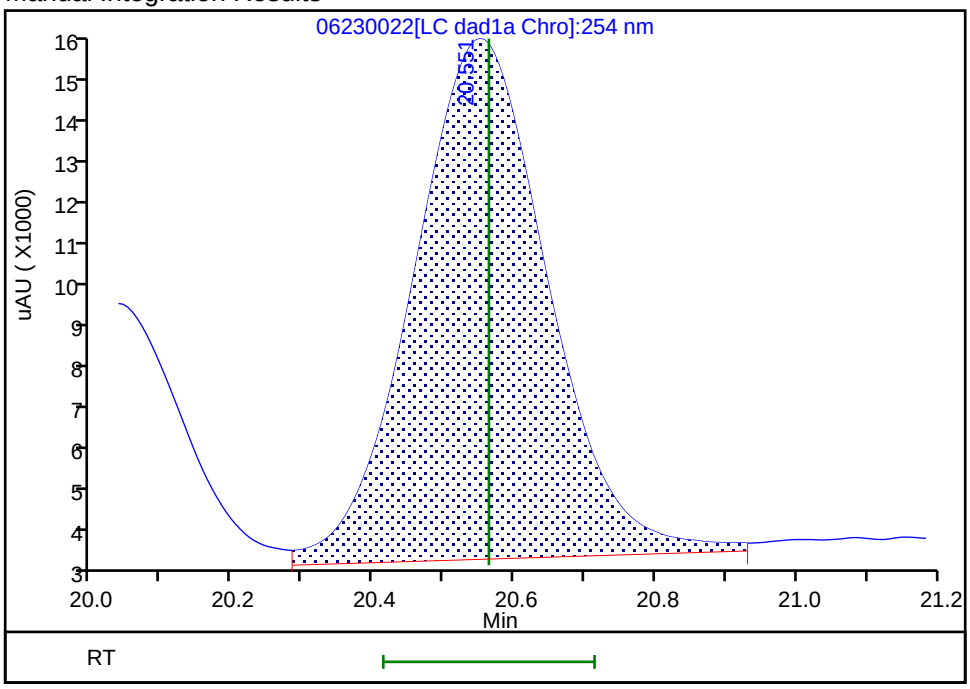
Processing Integration Results

RT: 20.55
Area: 161516
Amount: 0.252324
Amount Units: ug/ml



Manual Integration Results

RT: 20.55
Area: 157617
Amount: 0.246233
Amount Units: ug/ml



Reviewer: zhangji, 24-Jun-2020 18:09:16
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499860/23 Calibration Date: 06/24/2020 05:26

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: 06230023.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	405123		233	250	-7.0	15.0
DNX	Ave	321206	307960		240	250	-4.1	15.0
MNX	Lin2		283633		290	292	-0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499860/23 Calibration Date: 06/24/2020 05:26

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: 06230023.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\06230023.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	24-Jun-2020 05:26:21	ALS Bottle#:	8	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092679-023				
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 18:51:58	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:	CTX1068				
First Level Reviewer: zhangji		Date:	24-Jun-2020 18:09:24		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.517	5.509	0.008	101382	0.2503	0.2326	
4 DNX	1	6.357	6.336	0.021	77067	0.2503	0.2399	
7 MNX	1	7.917	7.876	0.041	82750	0.2918	0.2898	

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

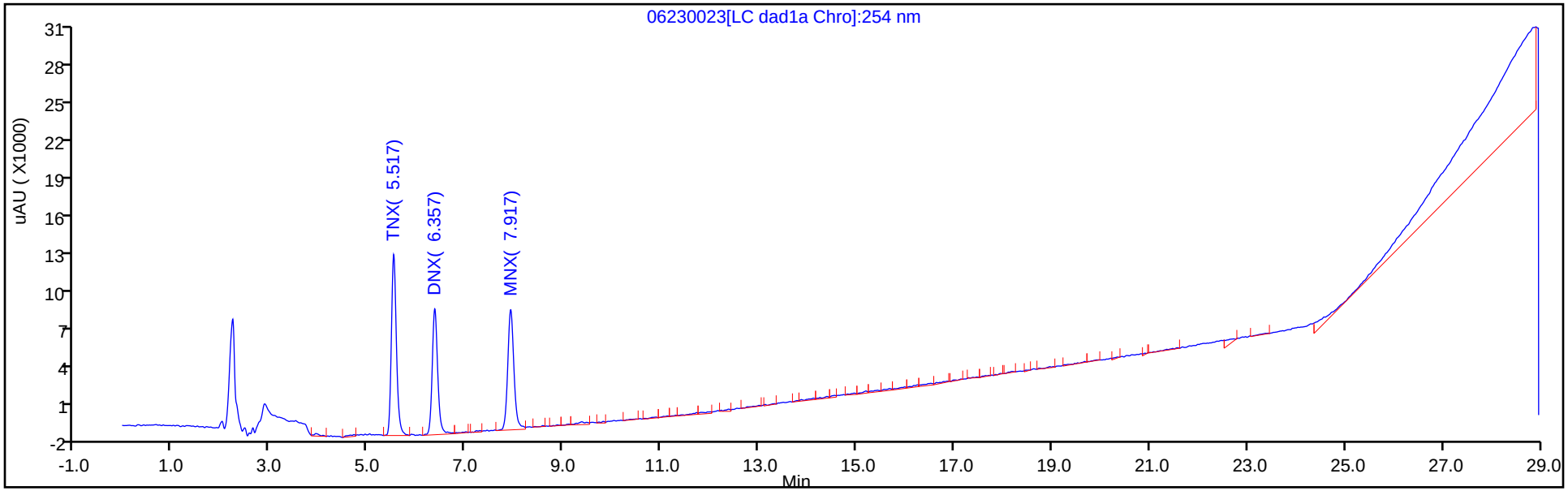
Report Date: 24-Jun-2020 18:51:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

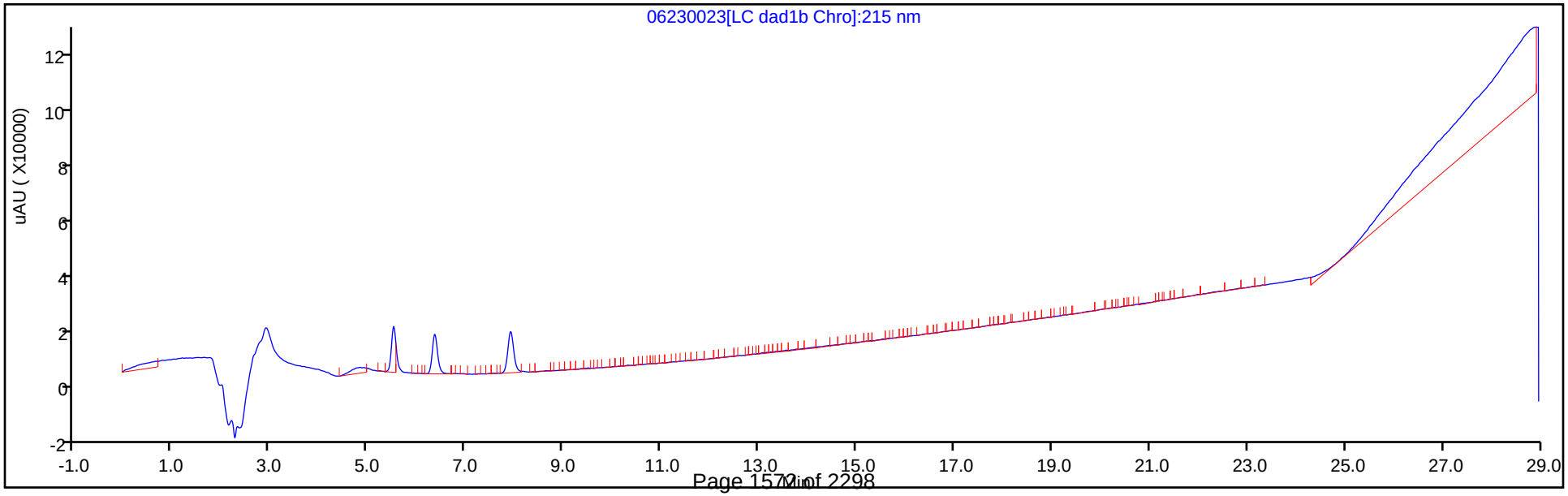
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230023.d

Injection Date:	24-Jun-2020 05:26:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	23
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.: 280-137609-1

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.: 280-137609-1

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

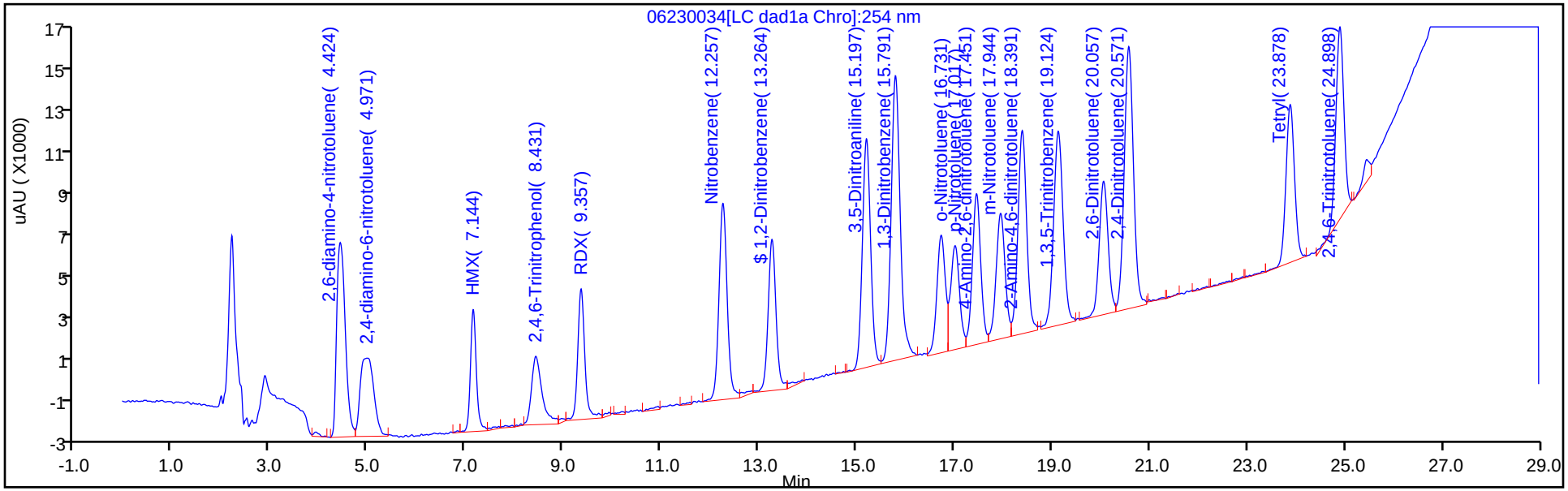
Report Date: 24-Jun-2020 18:52:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

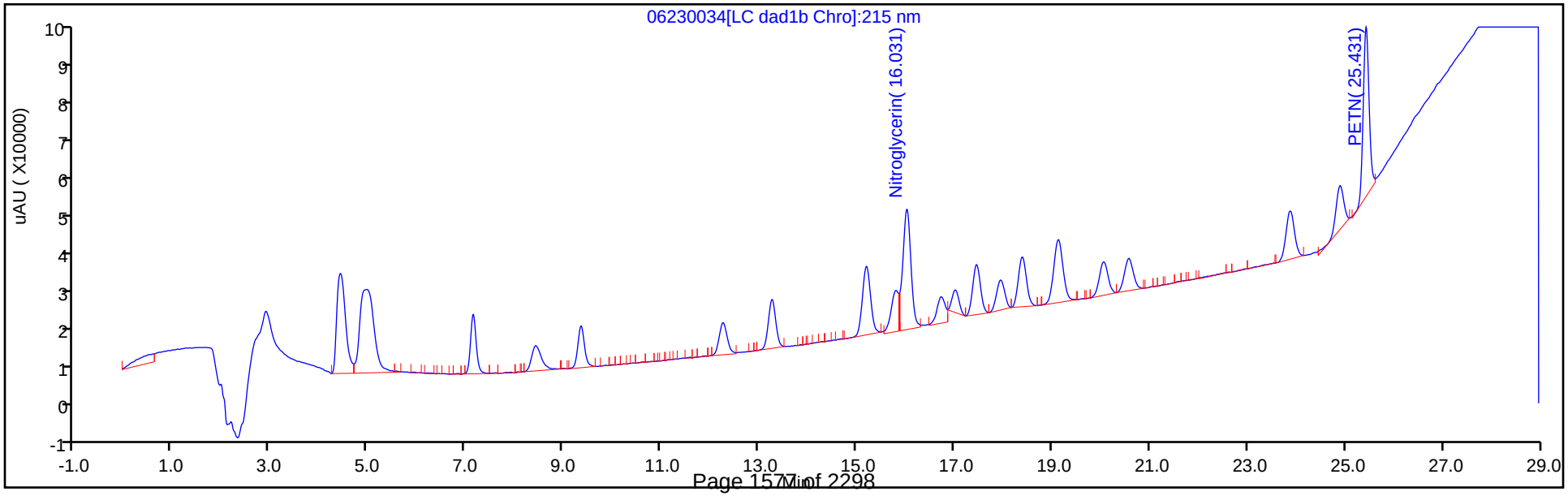
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d

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

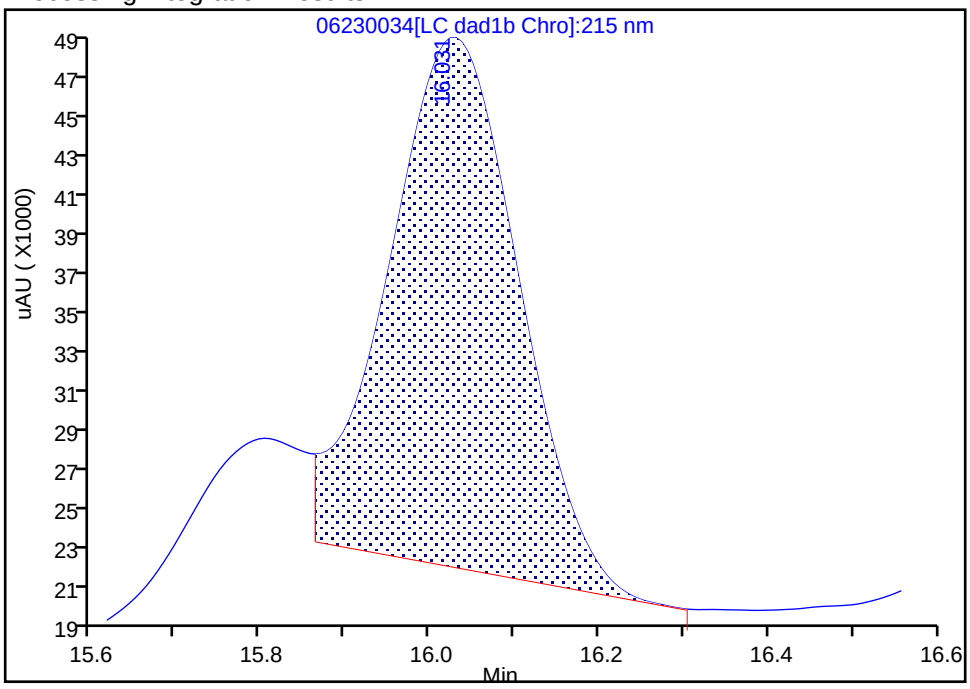
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

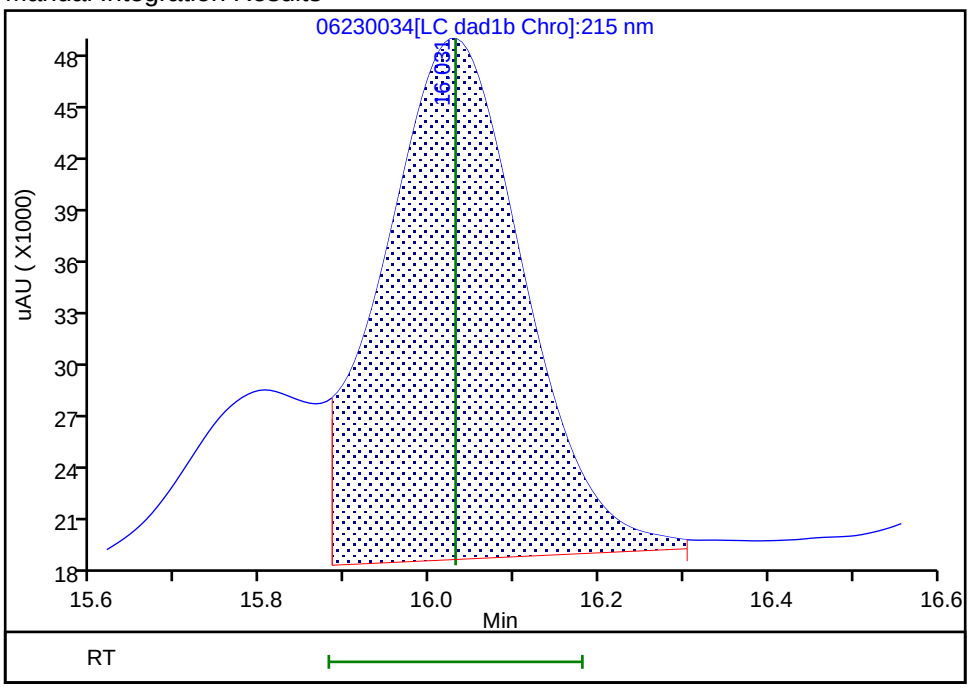
Processing Integration Results

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

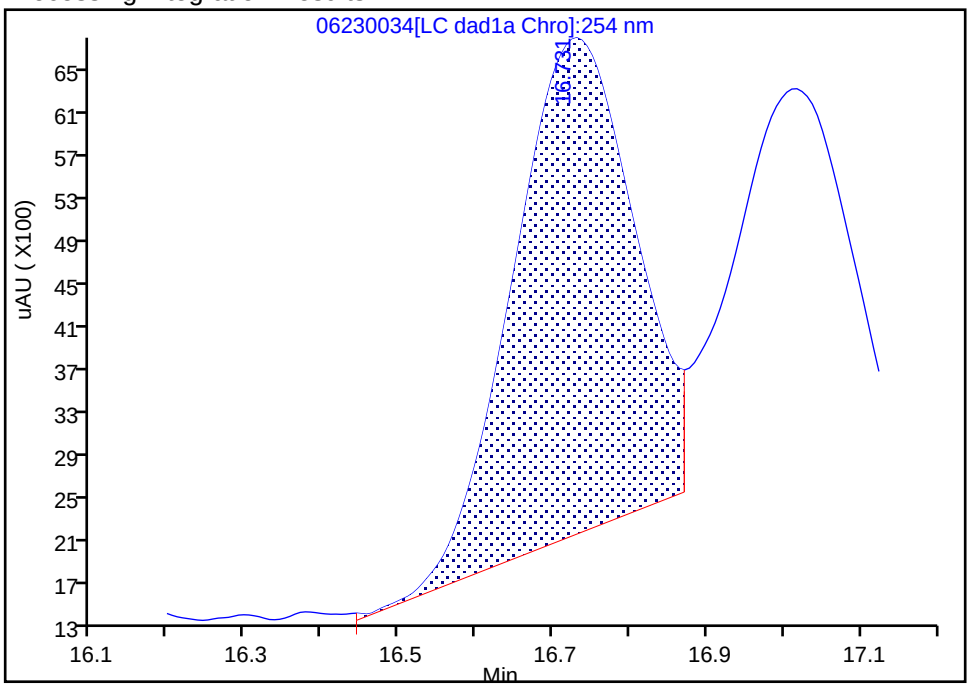
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

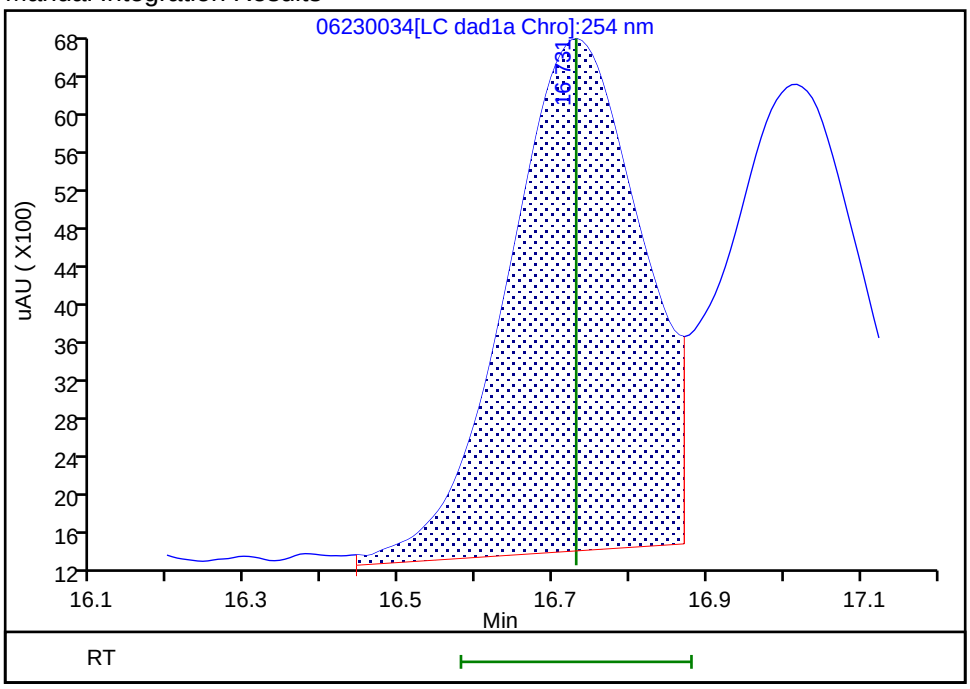
Processing Integration Results

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

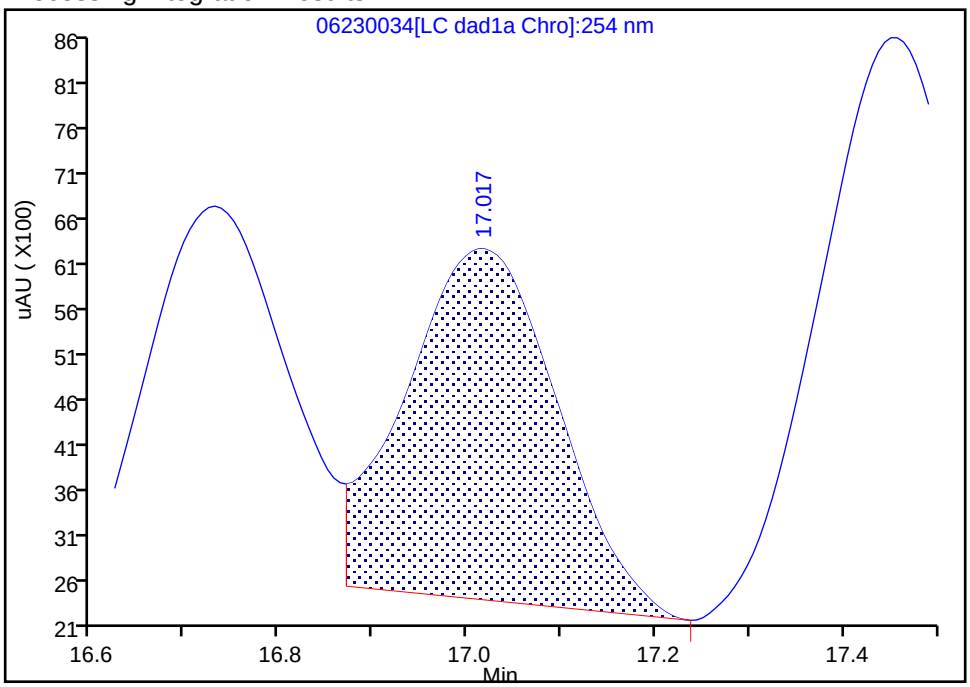
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

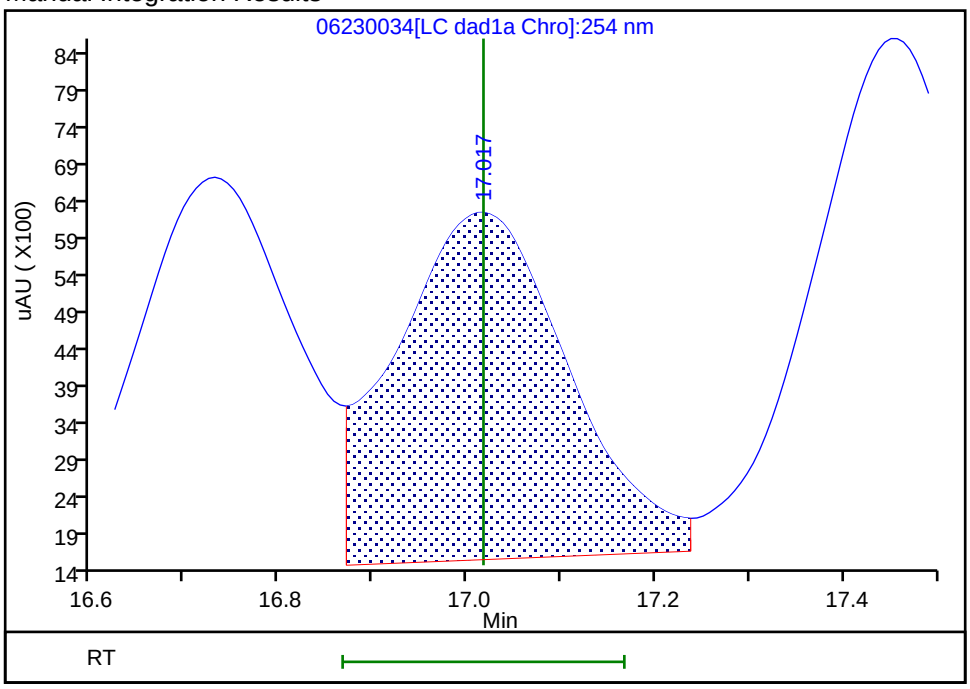
Processing Integration Results

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

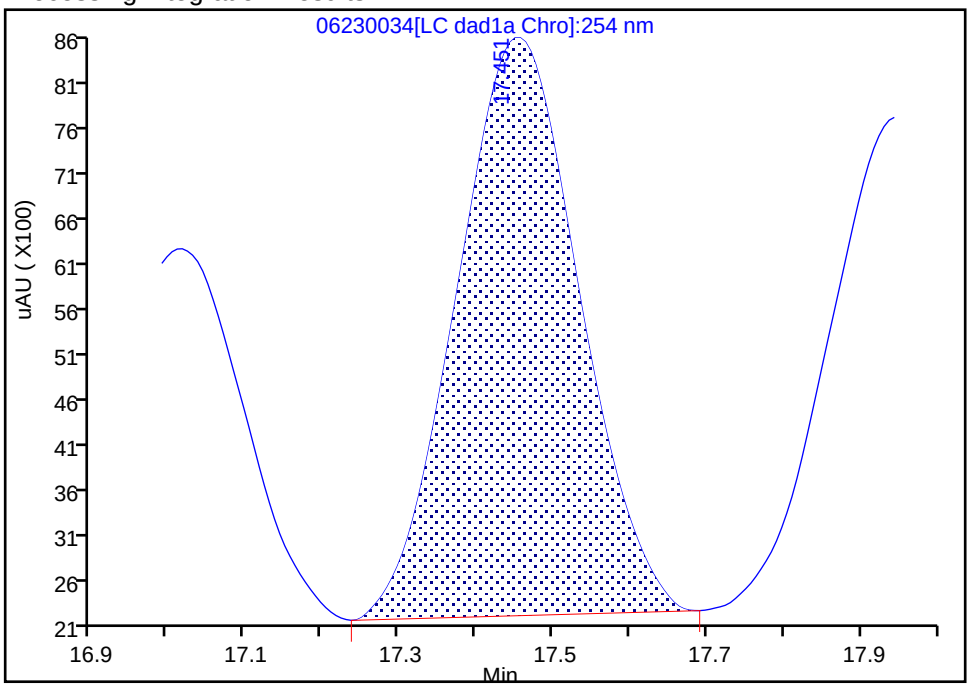
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

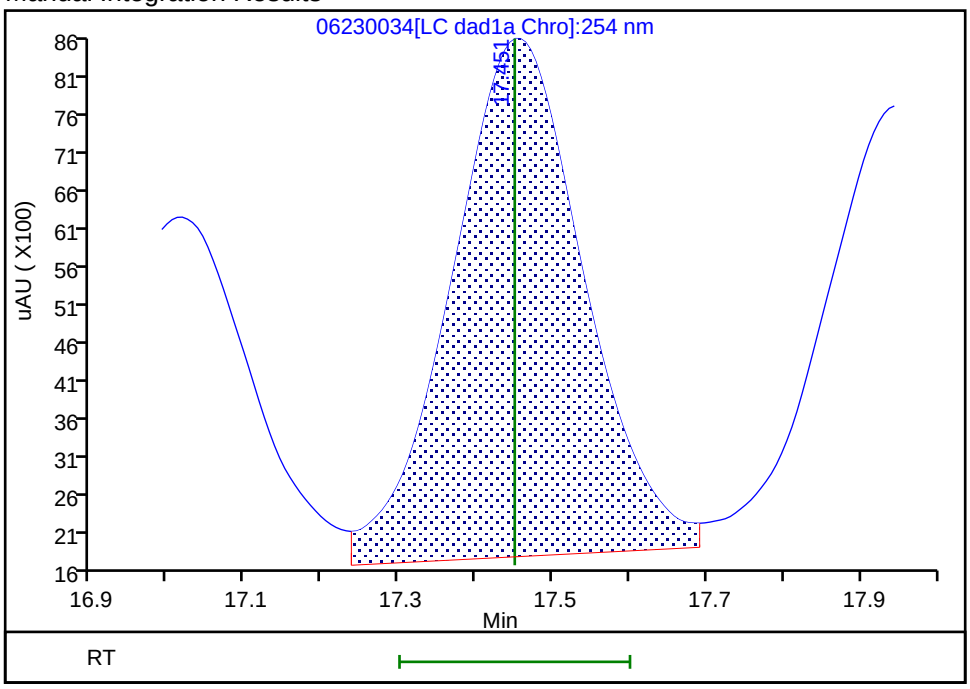
Processing Integration Results

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

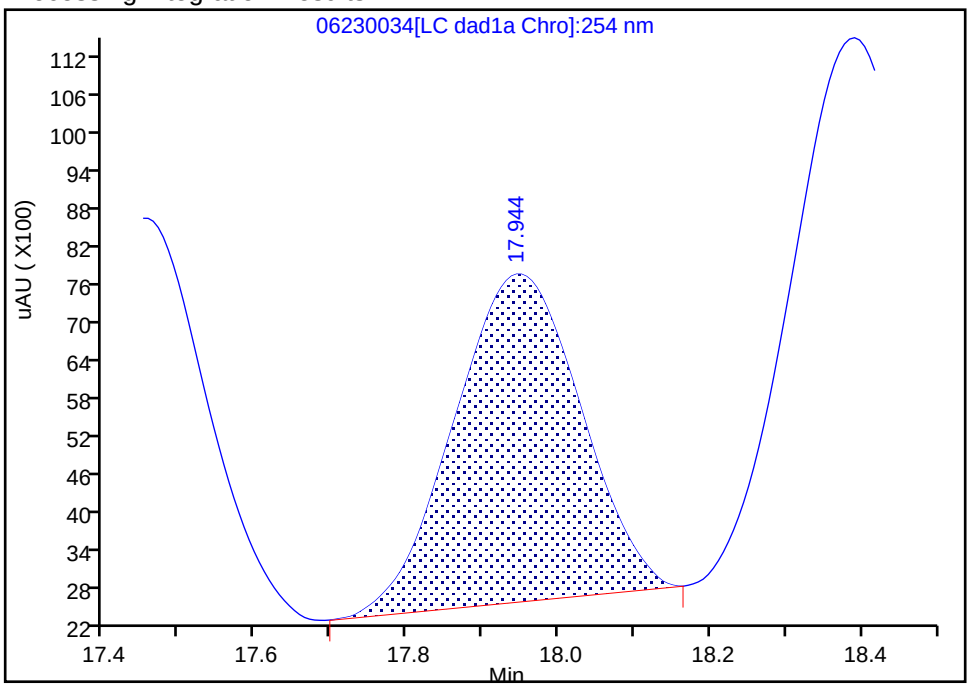
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

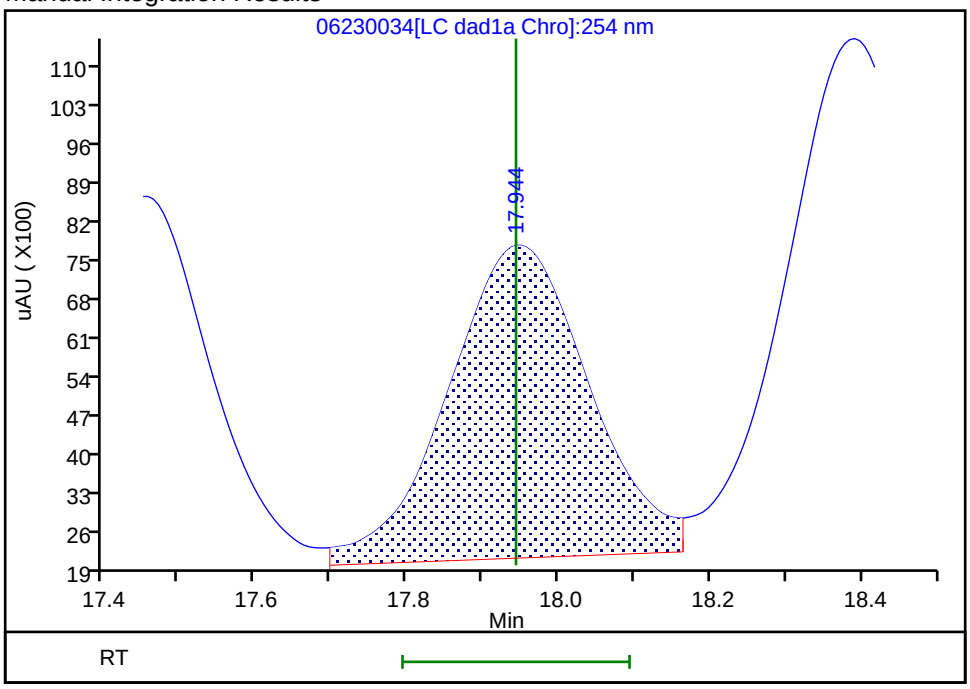
Processing Integration Results

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

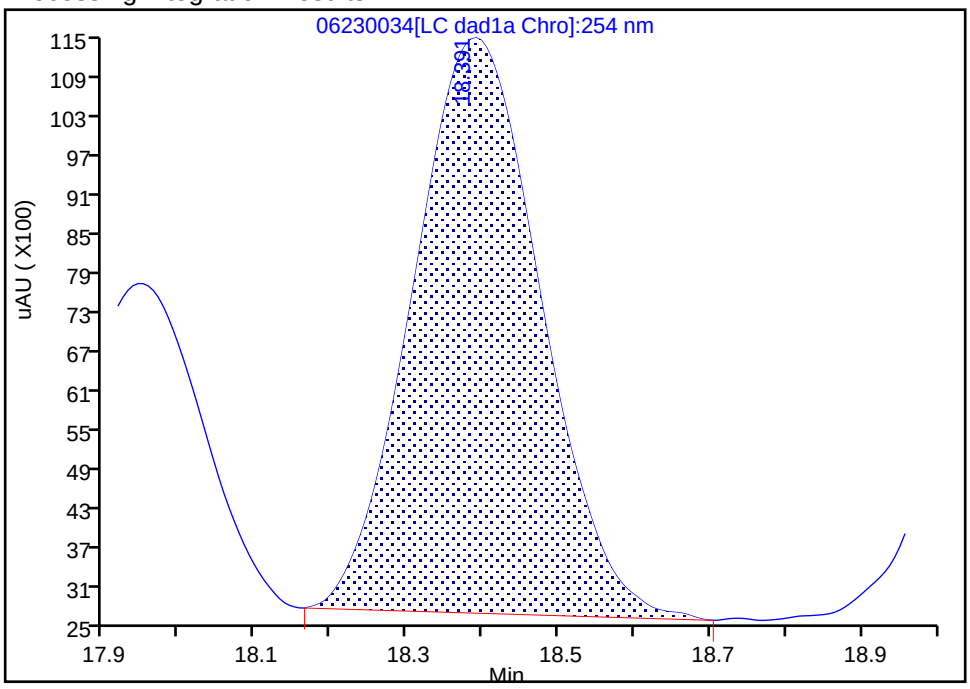
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

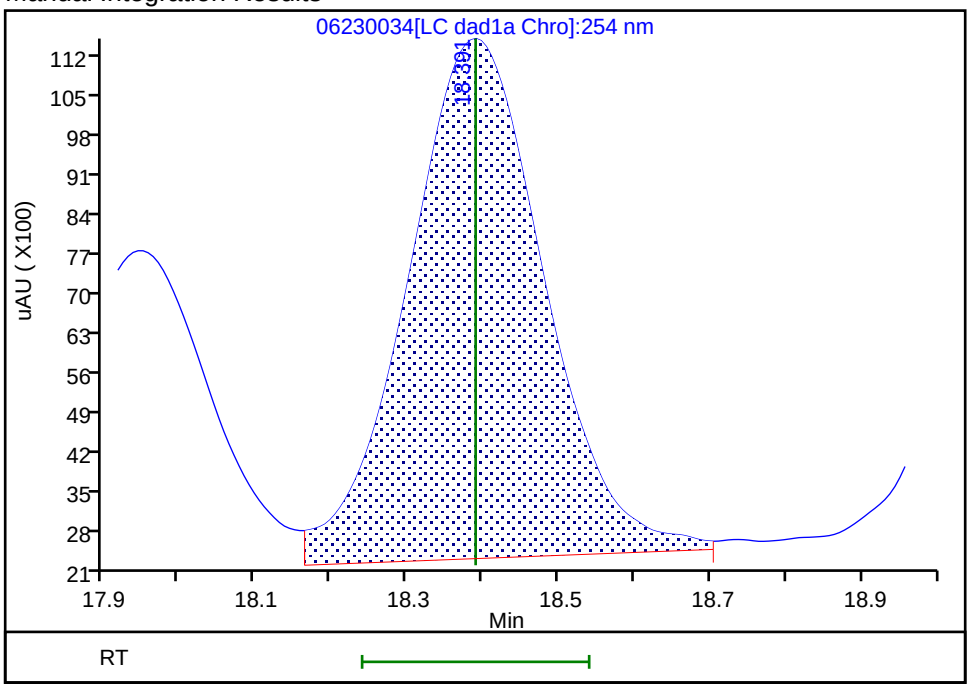
Processing Integration Results

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

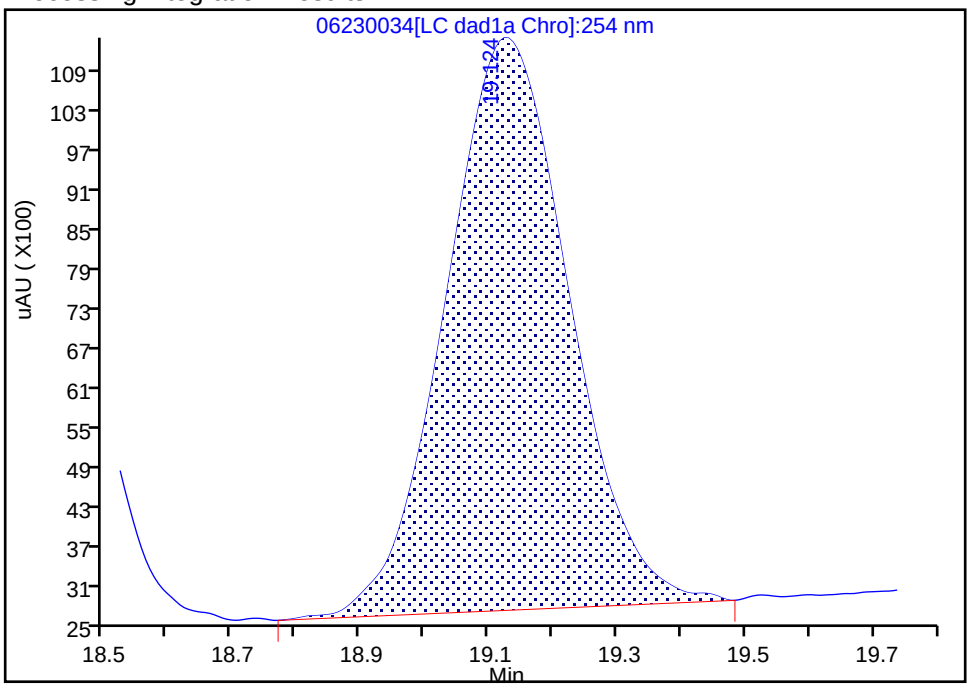
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

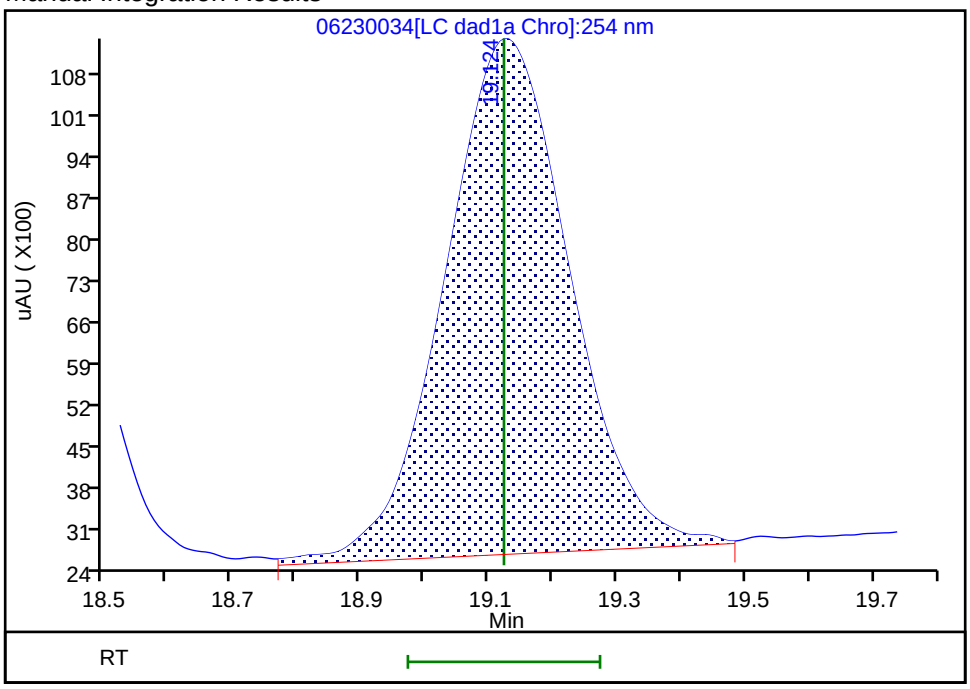
Processing Integration Results

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

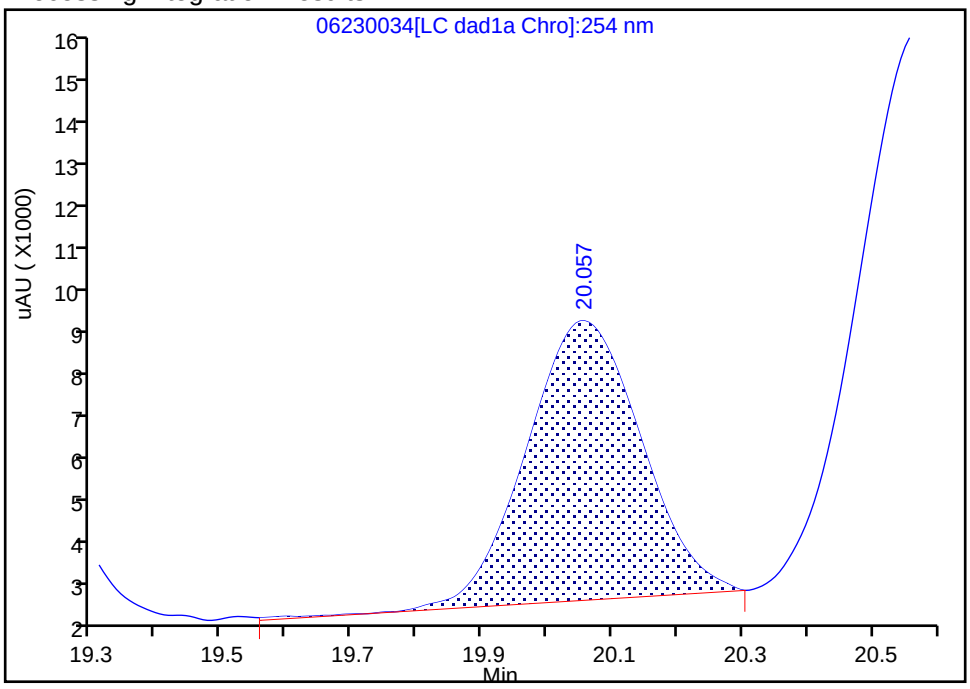
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

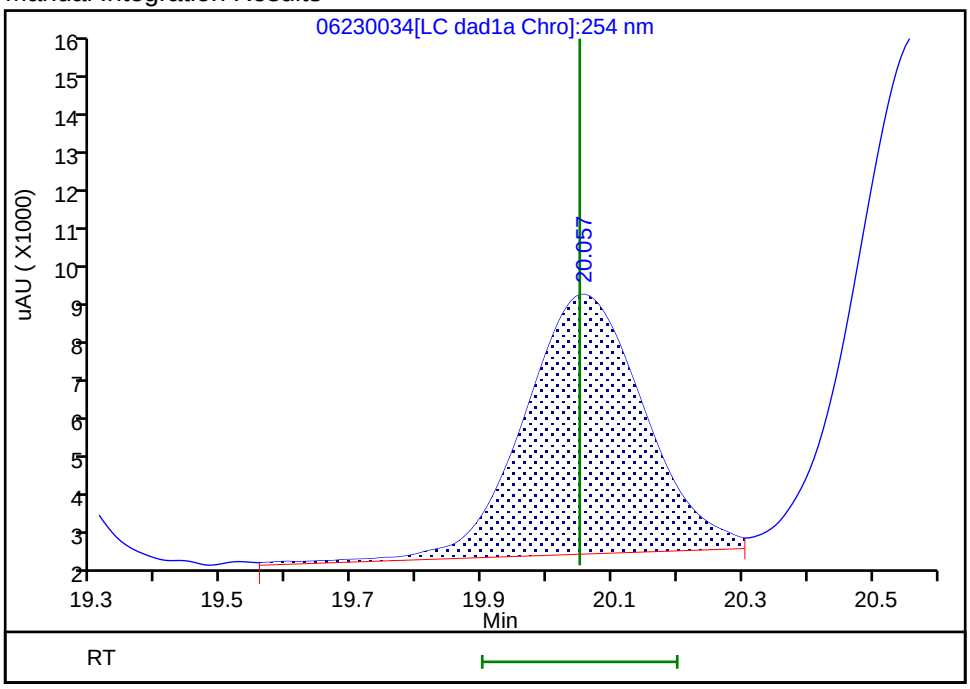
Processing Integration Results

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

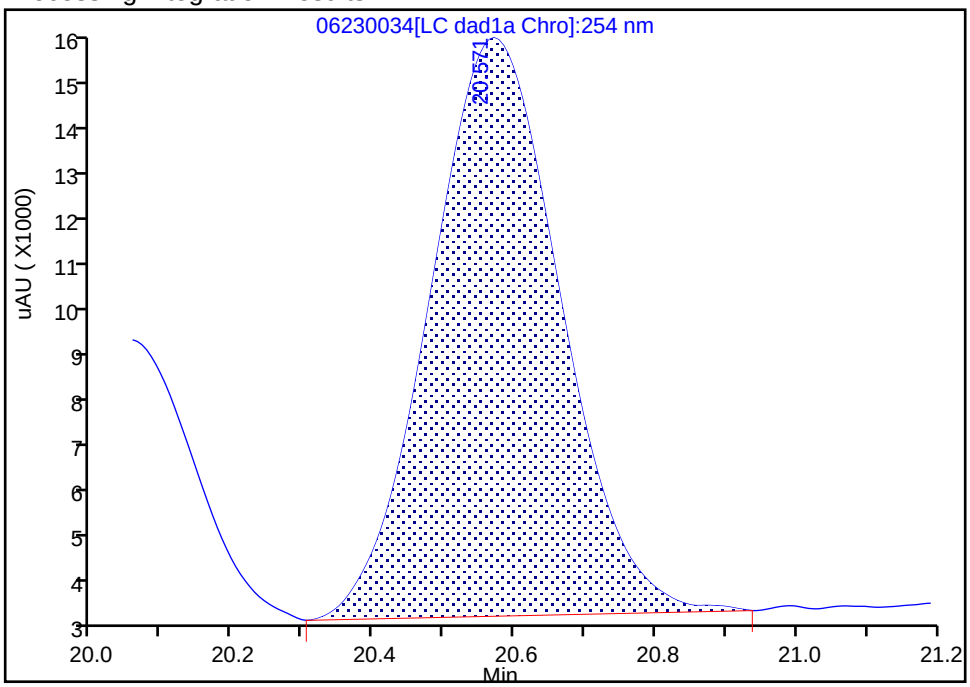
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230034.d				
Injection Date:	24-Jun-2020 11:51:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

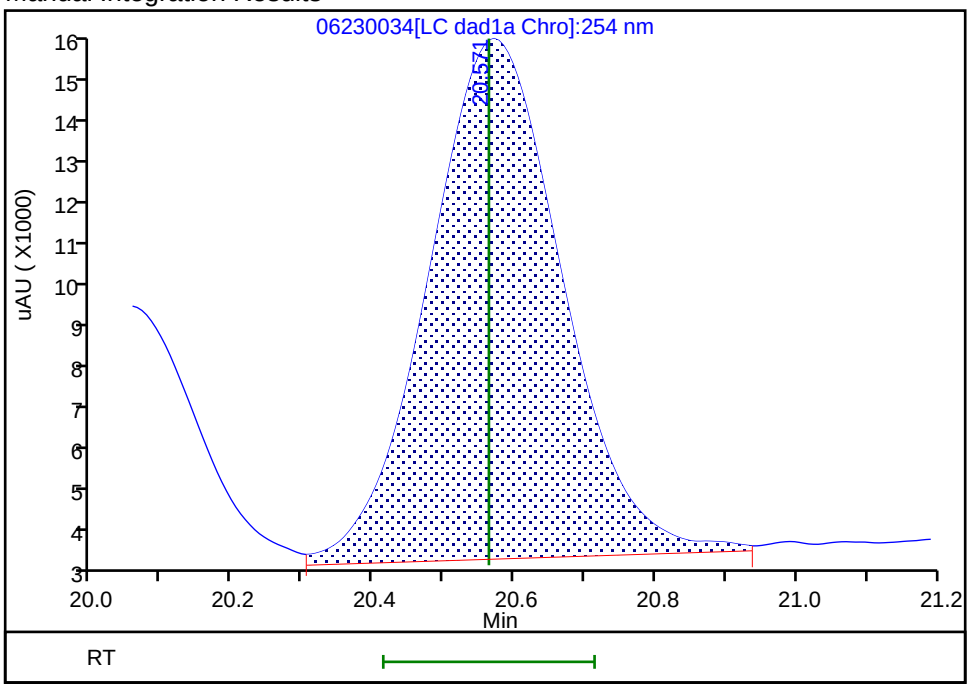
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

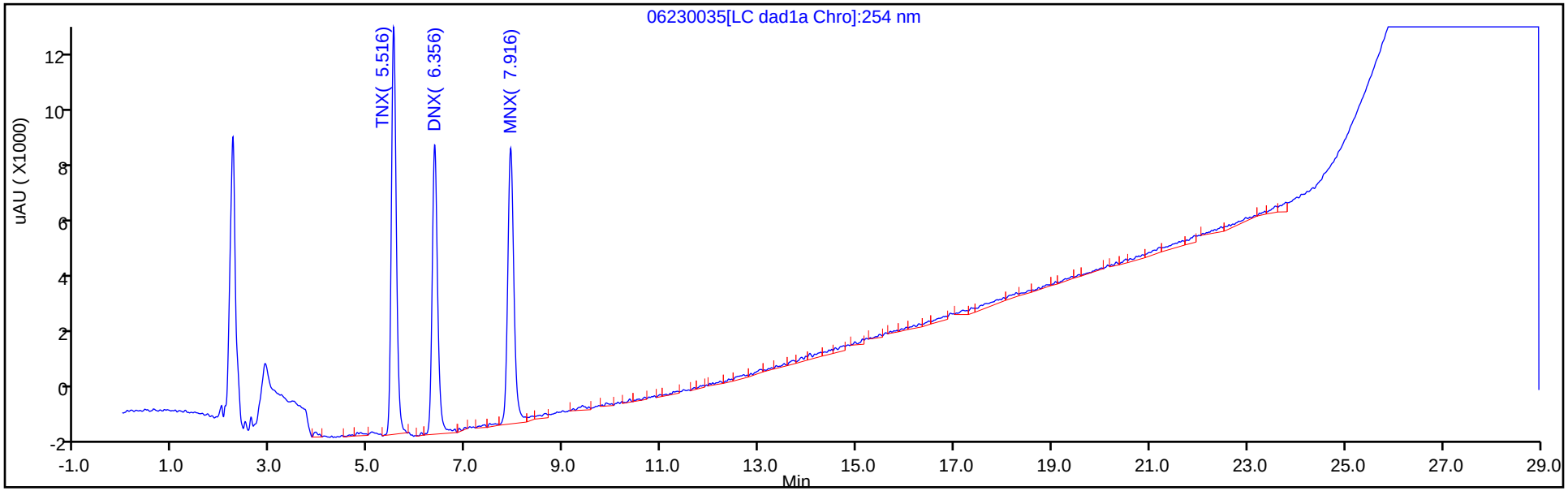
Report Date: 24-Jun-2020 18:52:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

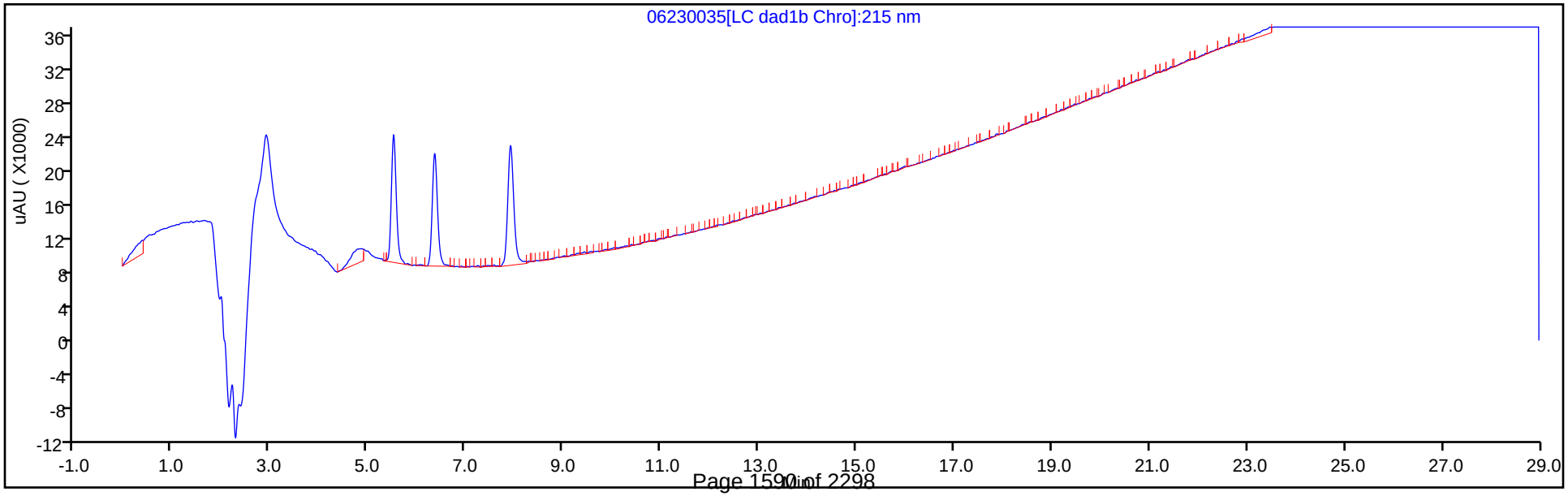
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230035.d

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

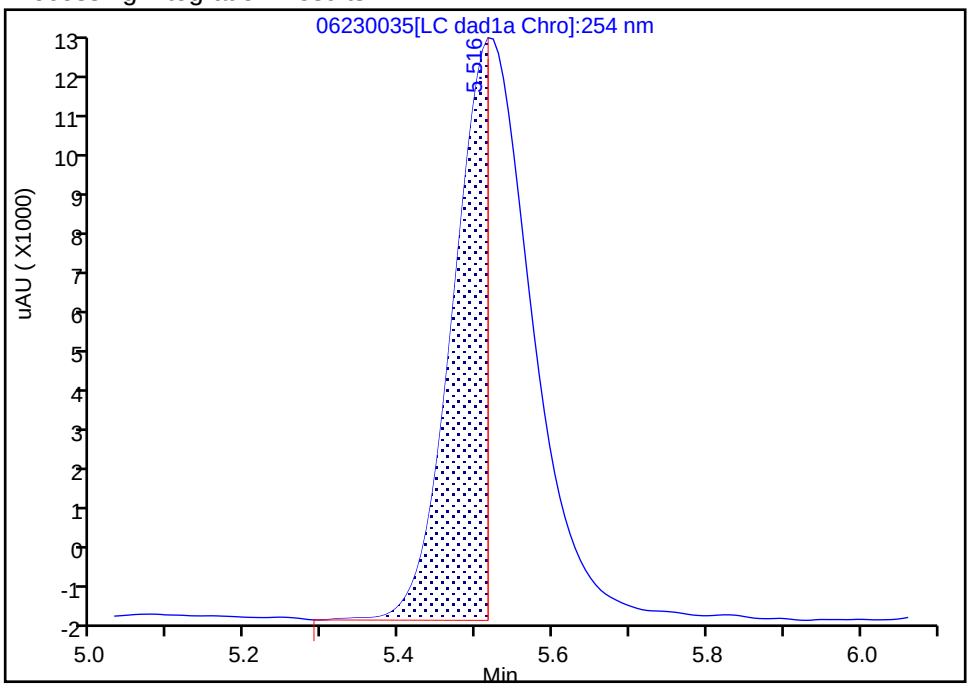
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230035.d				
Injection Date:	24-Jun-2020 12:26:04	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

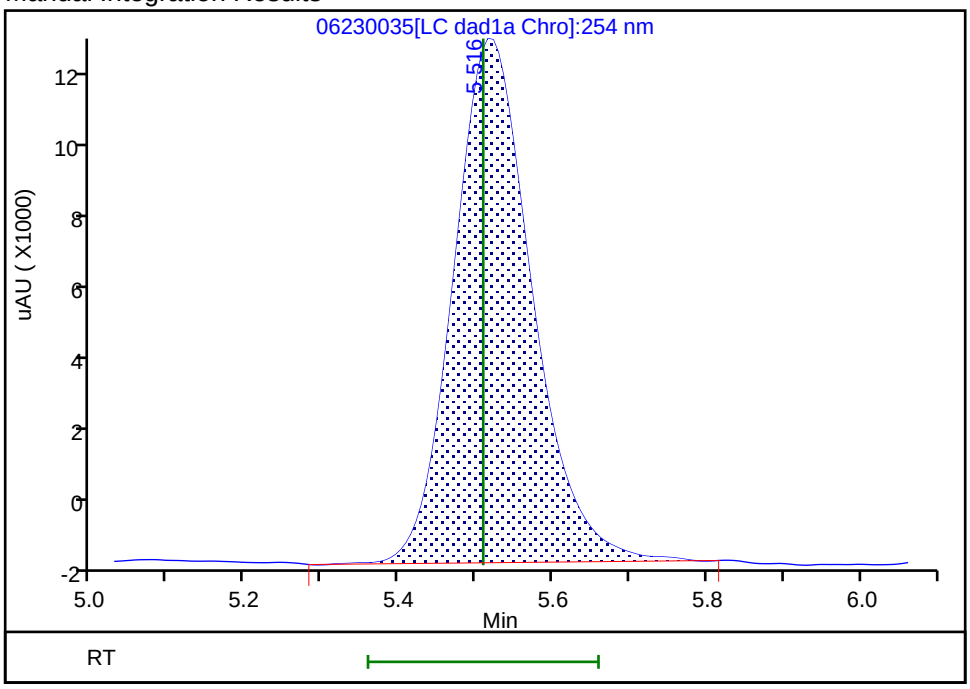
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

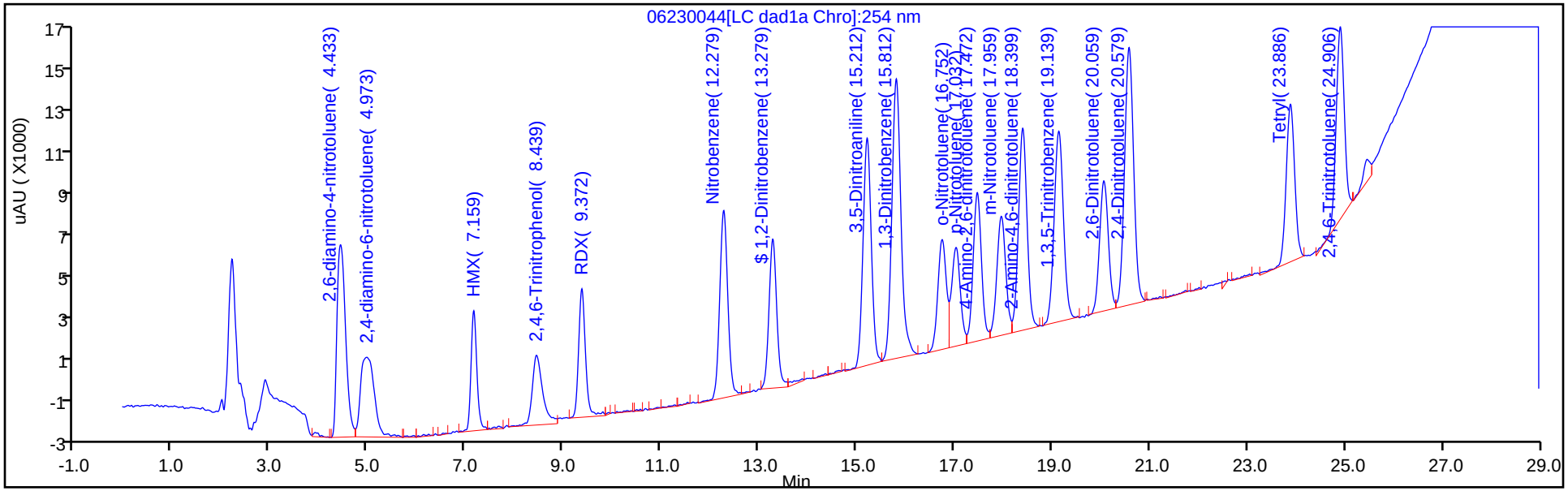
Report Date: 24-Jun-2020 18:52:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

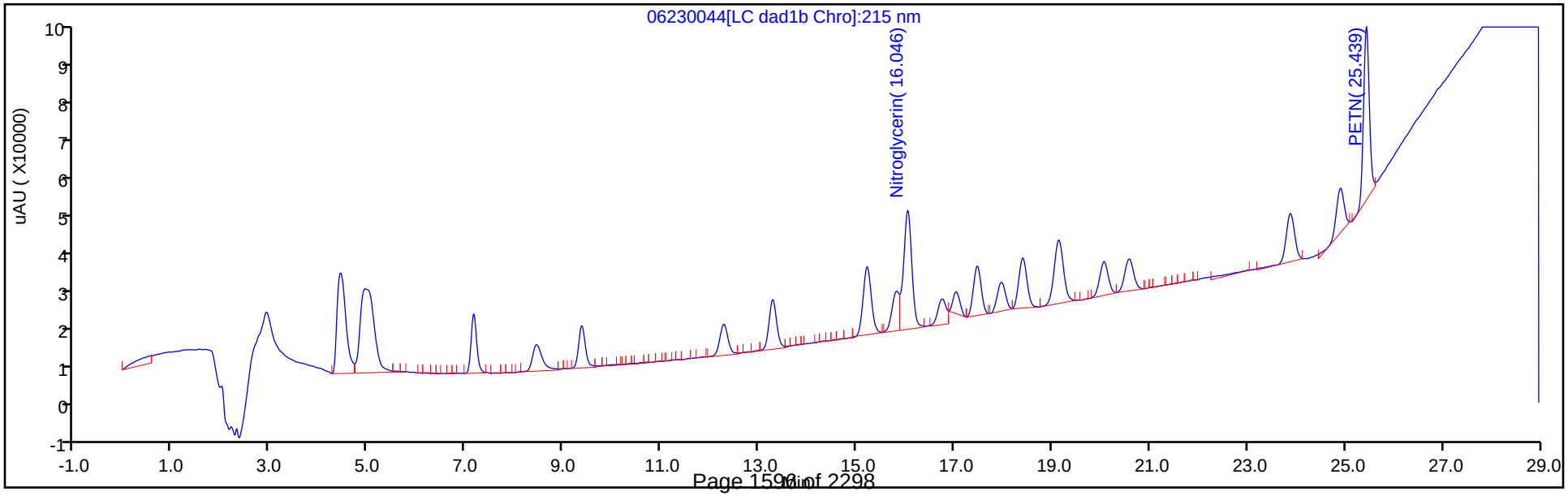
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d

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

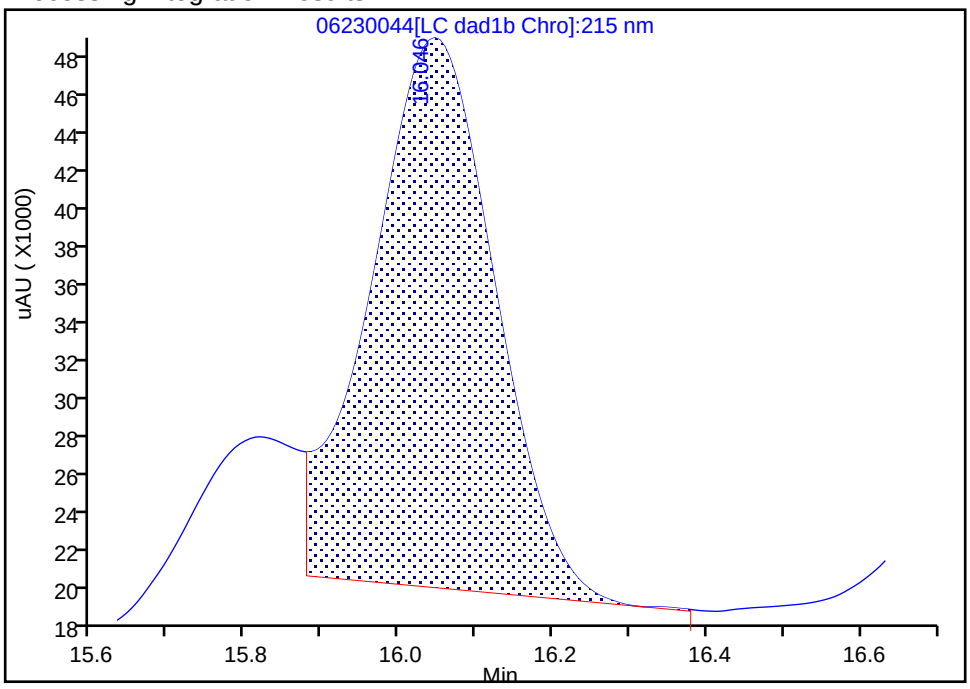
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d
Injection Date: 24-Jun-2020 17:40:51 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

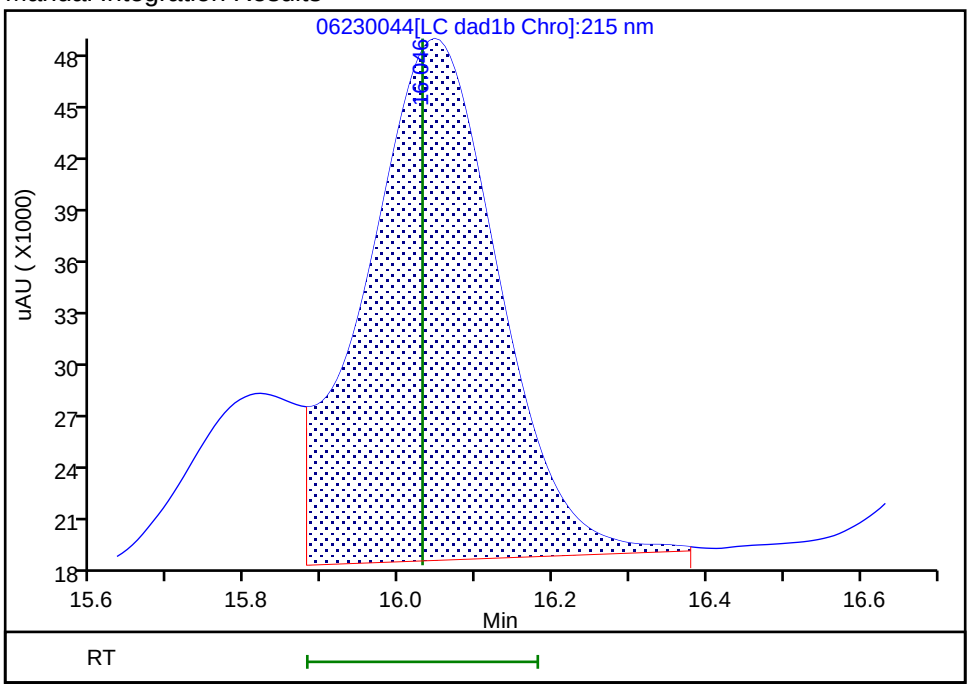
Processing Integration Results

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

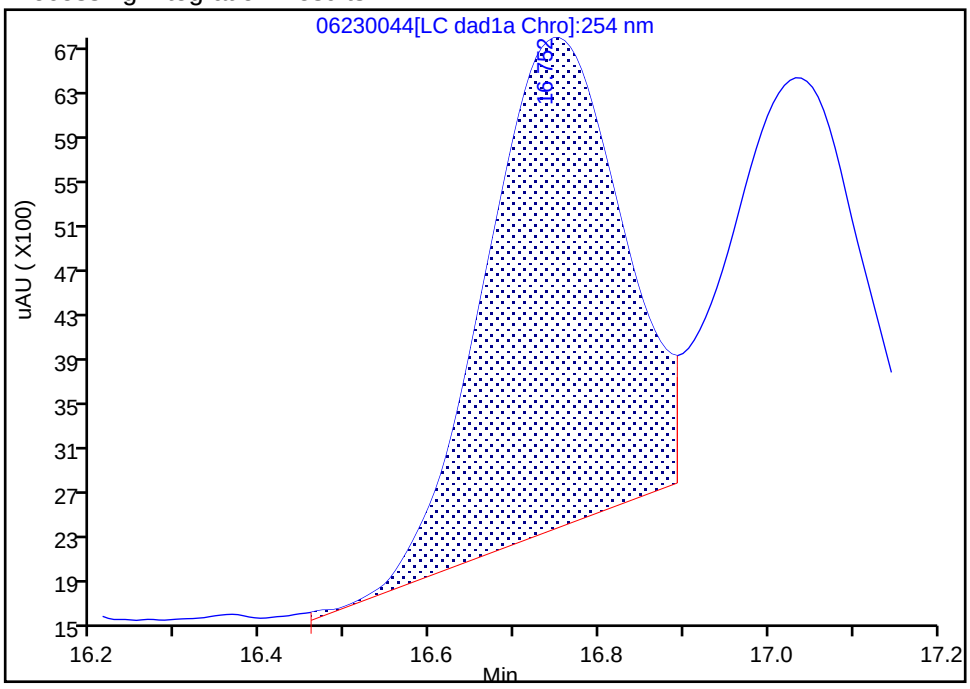
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

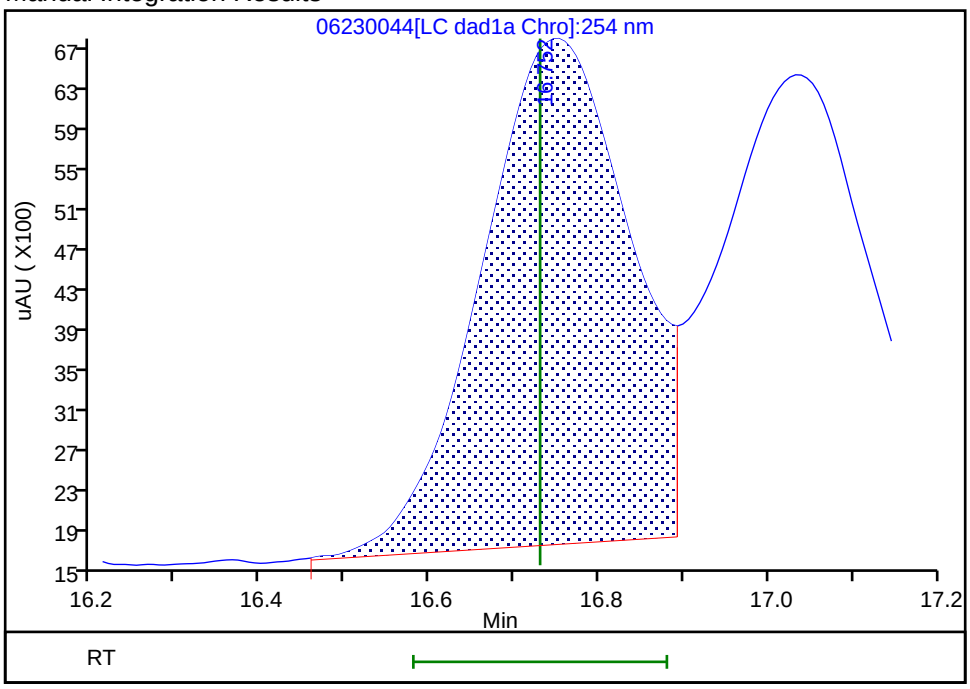
Processing Integration Results

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

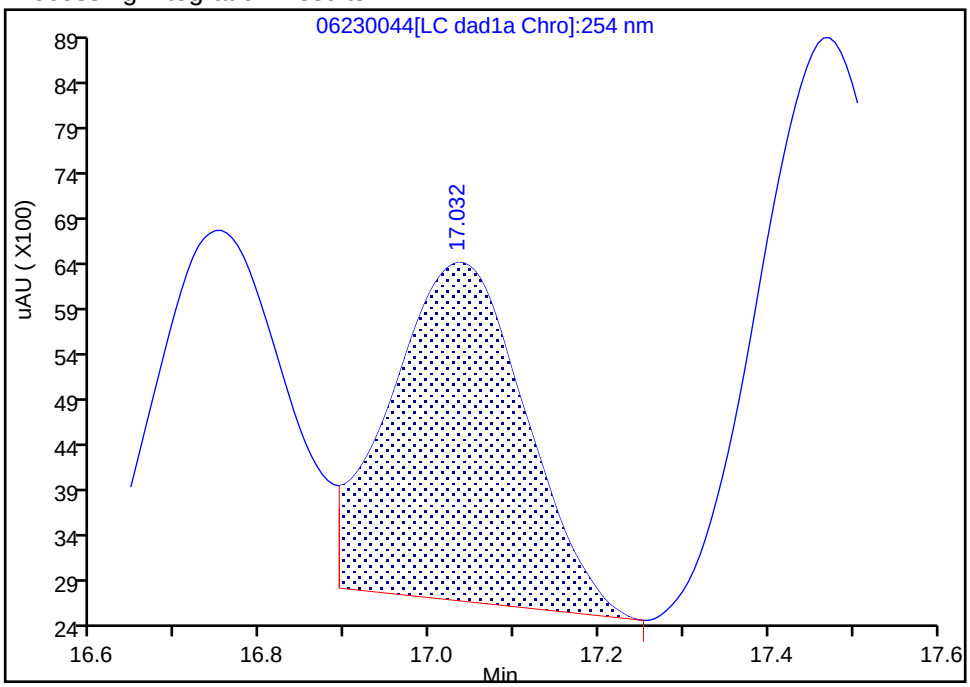
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

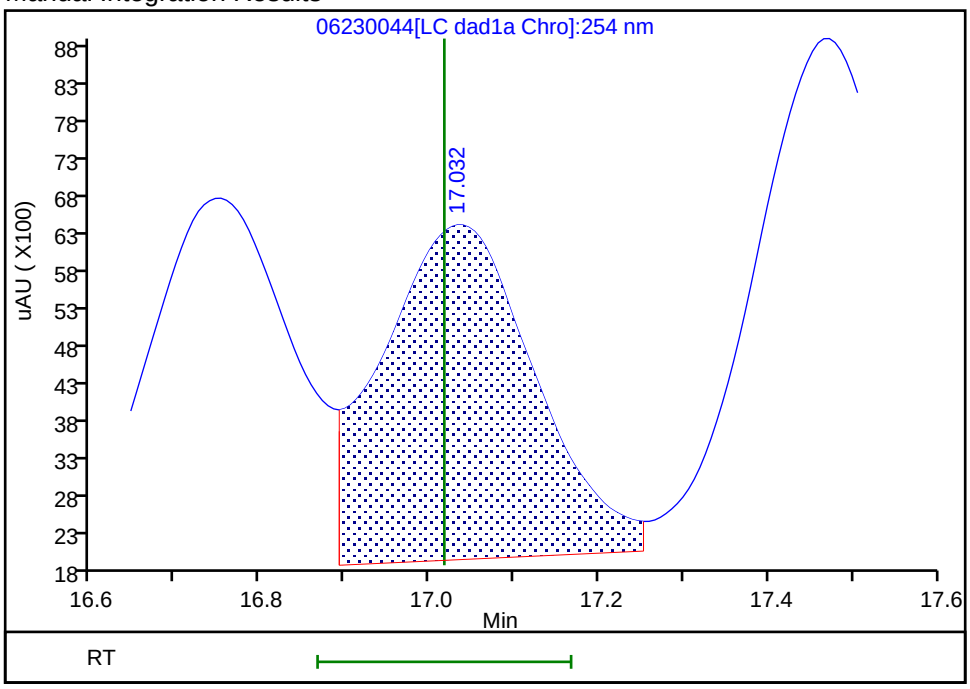
Processing Integration Results

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

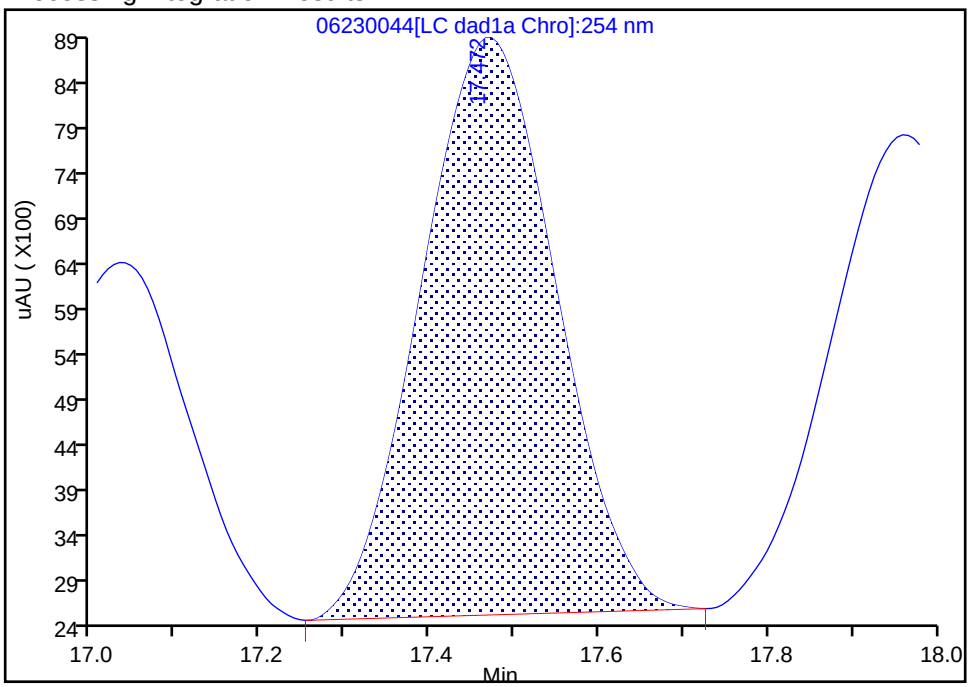
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

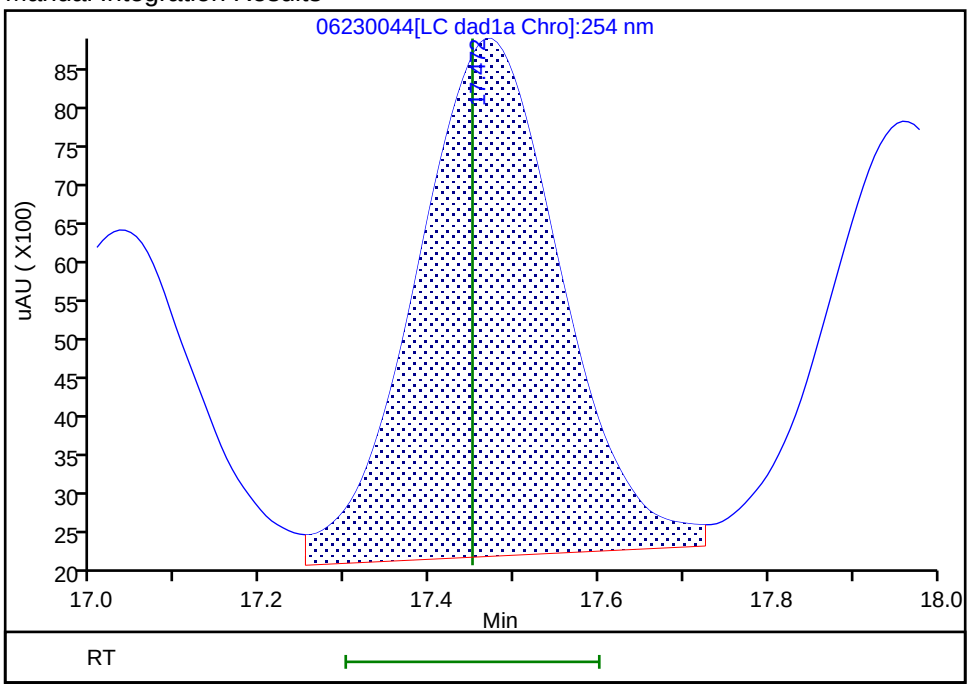
Processing Integration Results

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

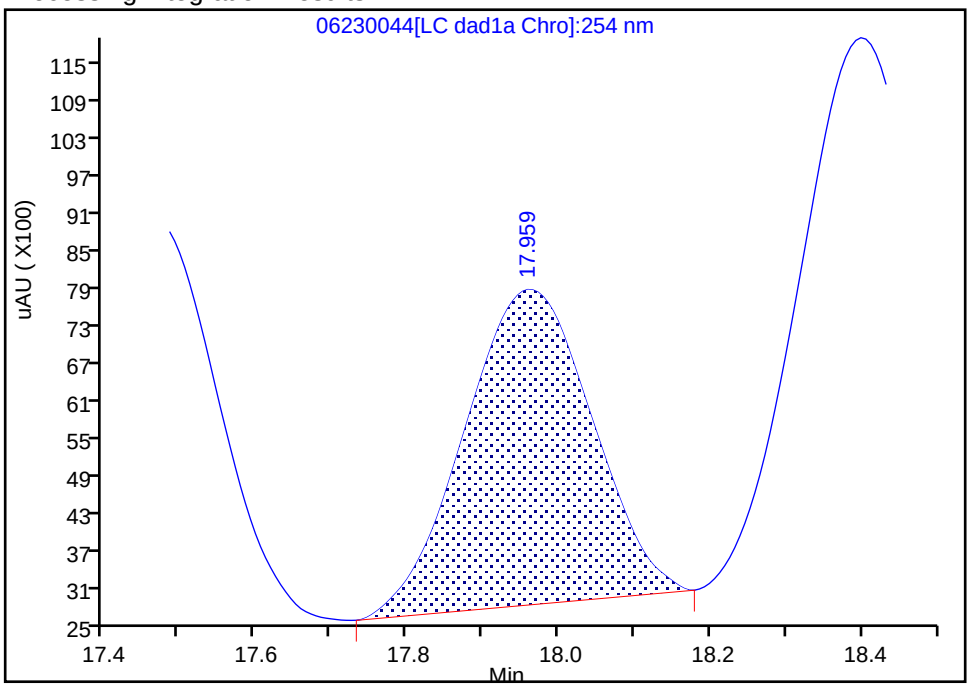
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

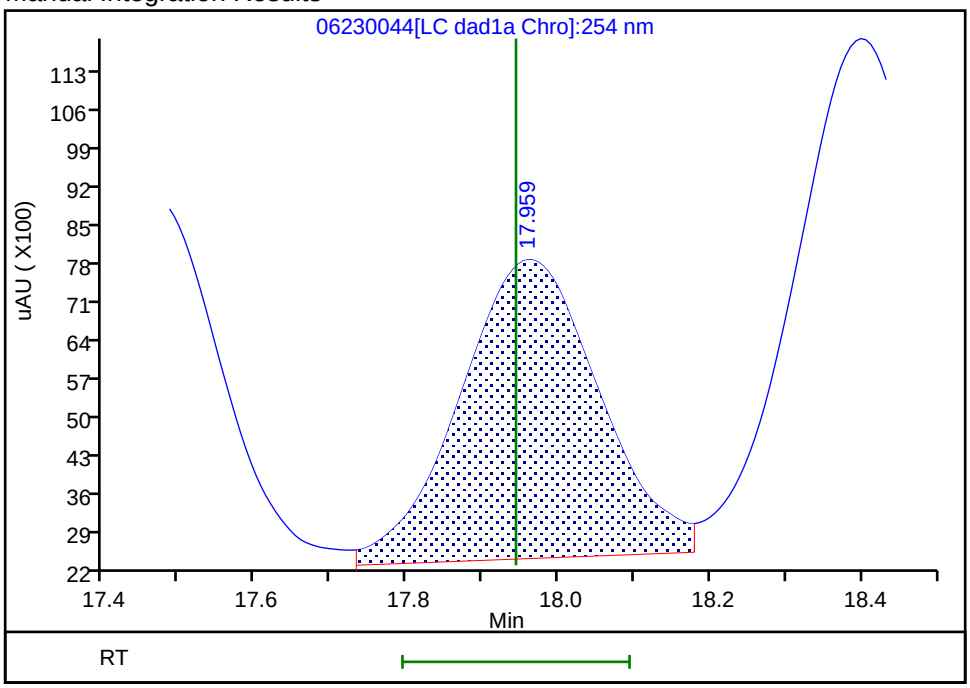
Processing Integration Results

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

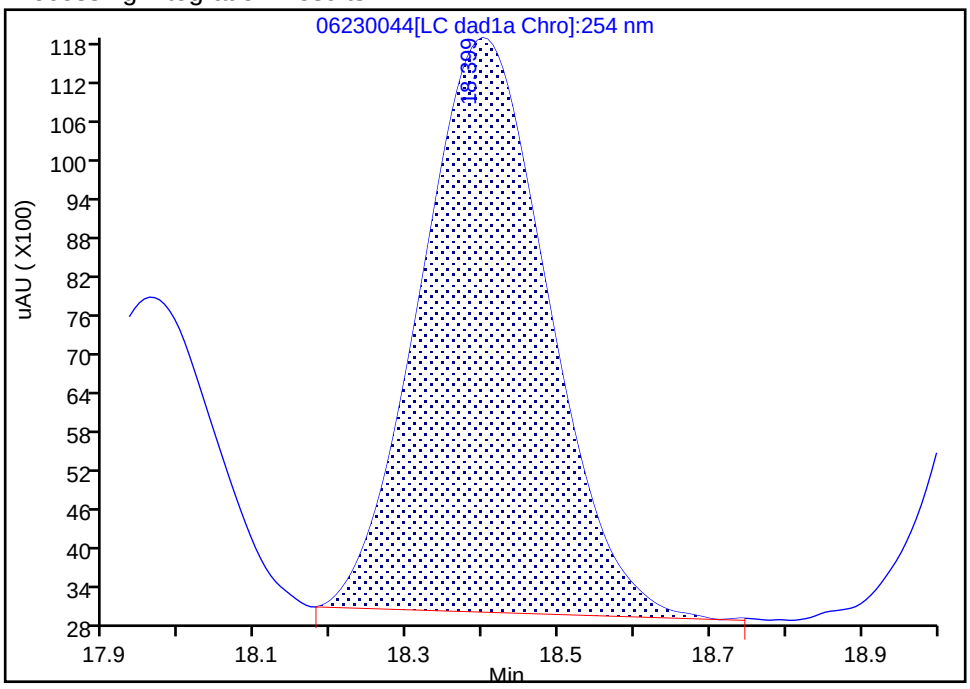
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

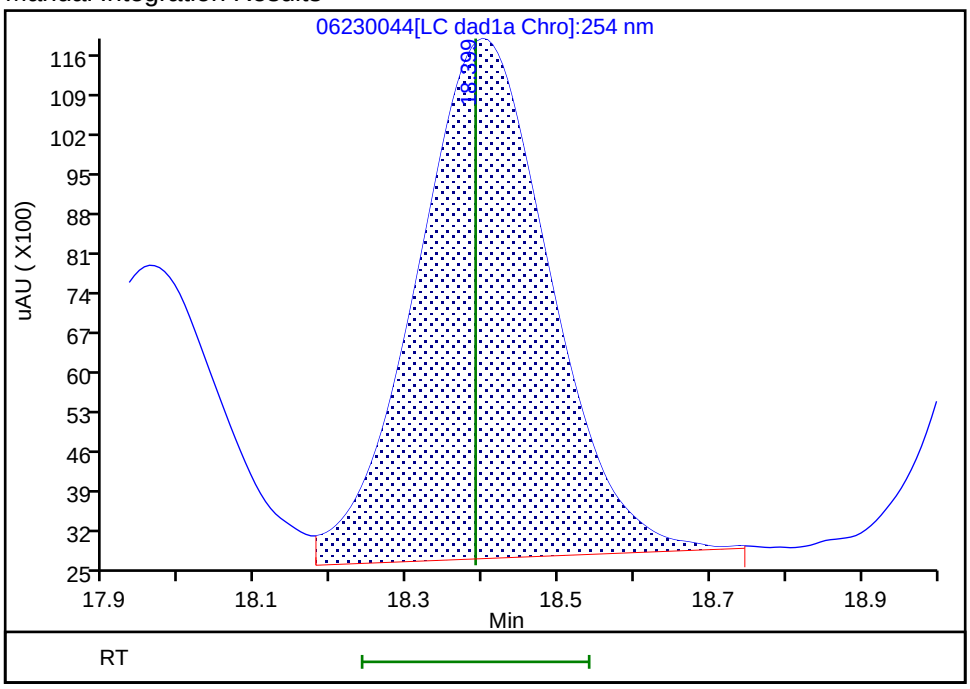
Processing Integration Results

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

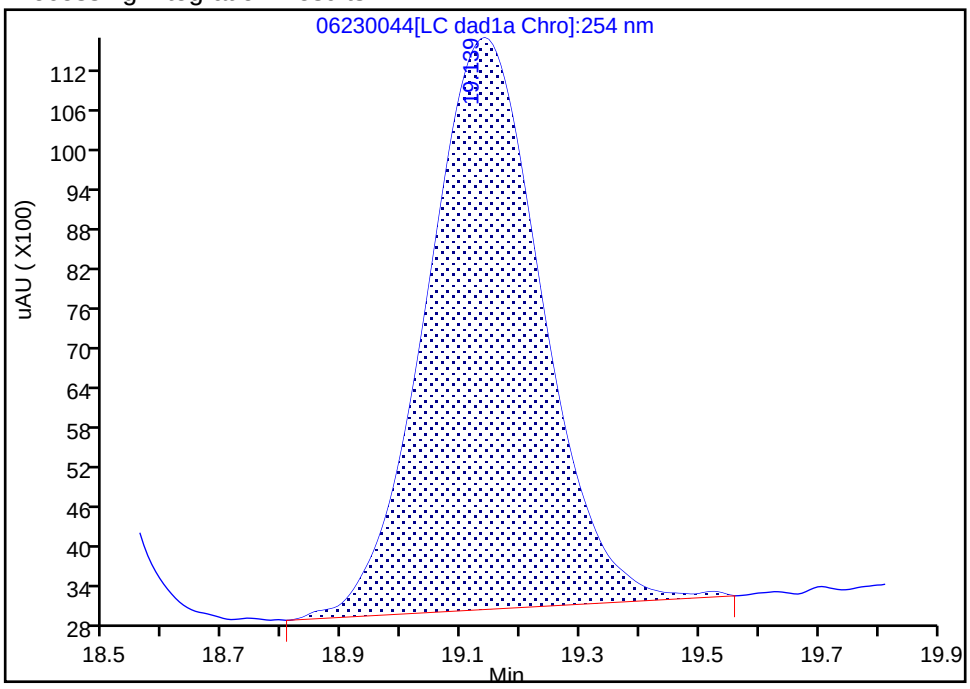
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

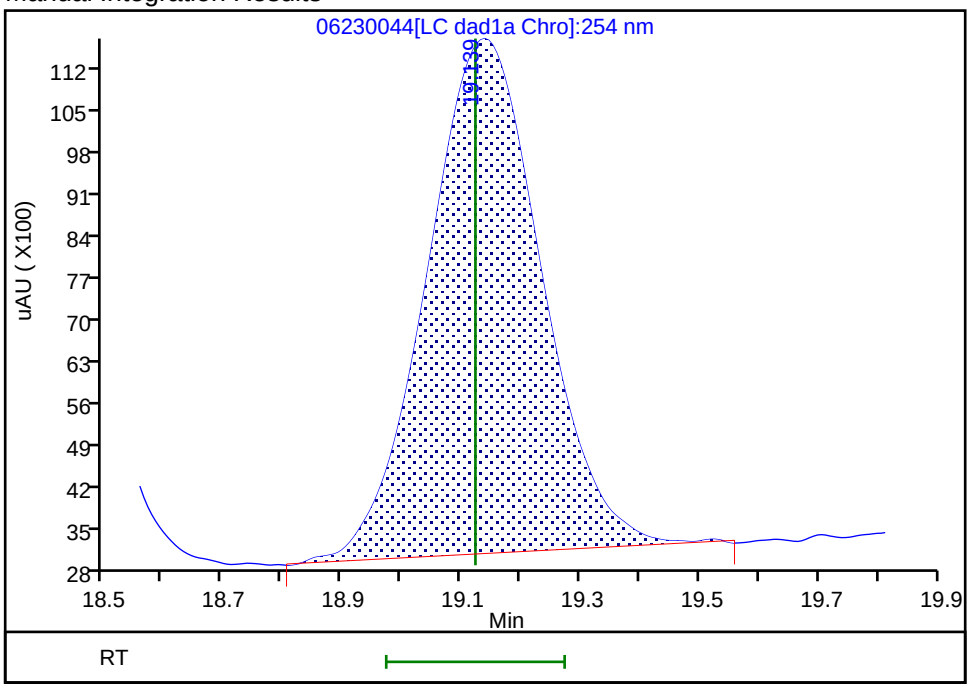
Processing Integration Results

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

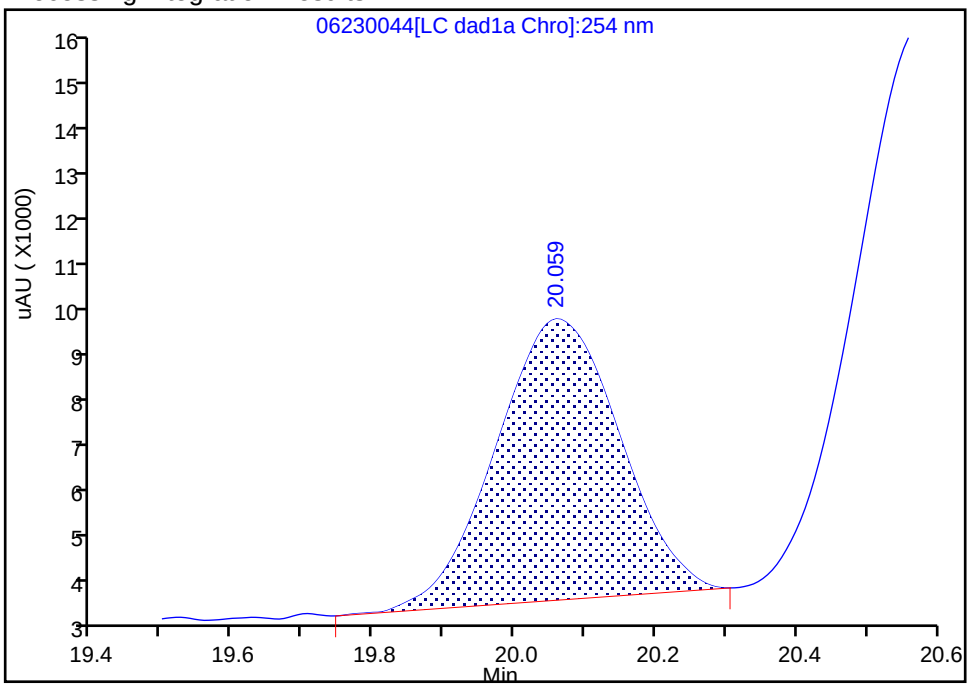
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

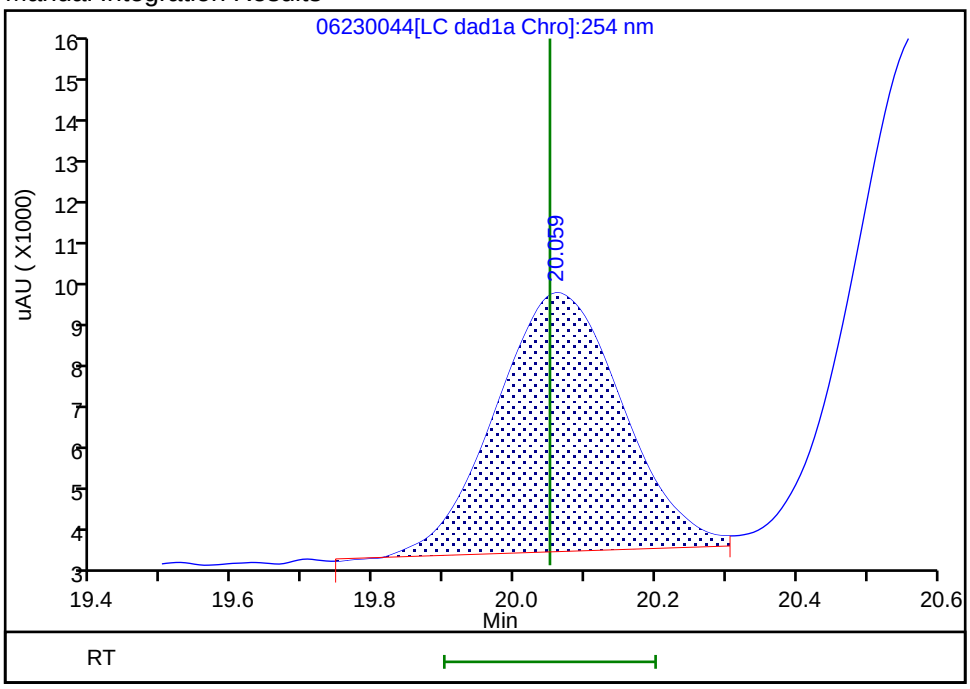
Processing Integration Results

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

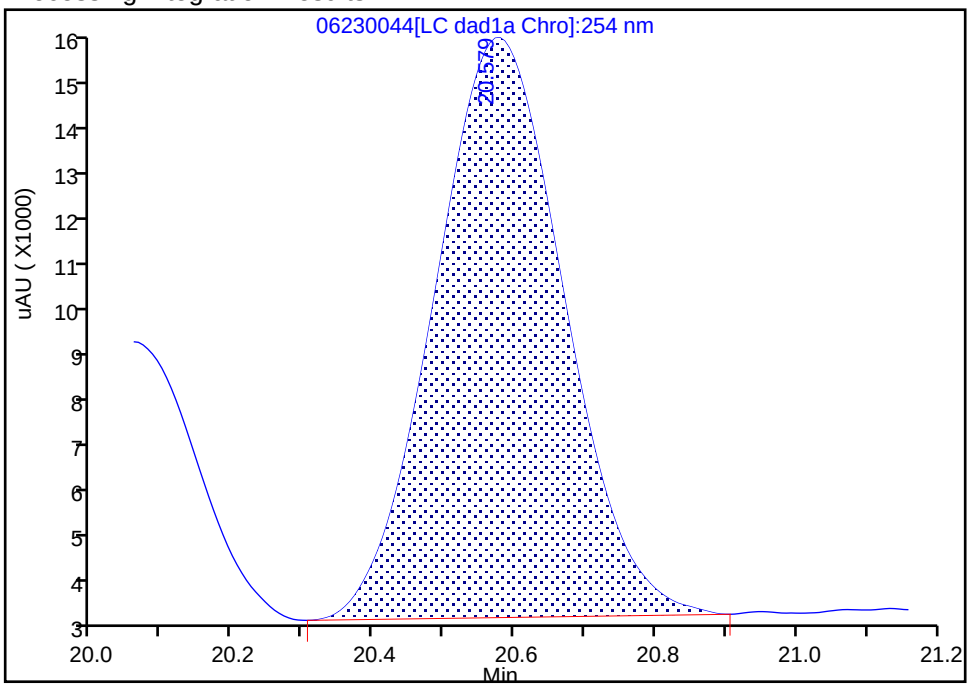
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230044.d				
Injection Date:	24-Jun-2020 17:40:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

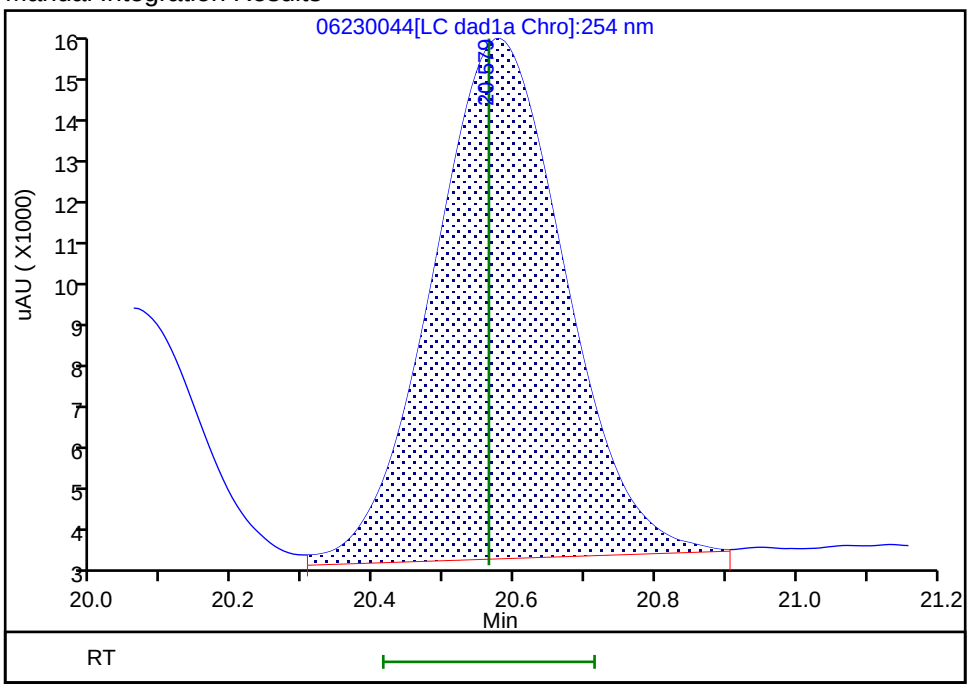
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

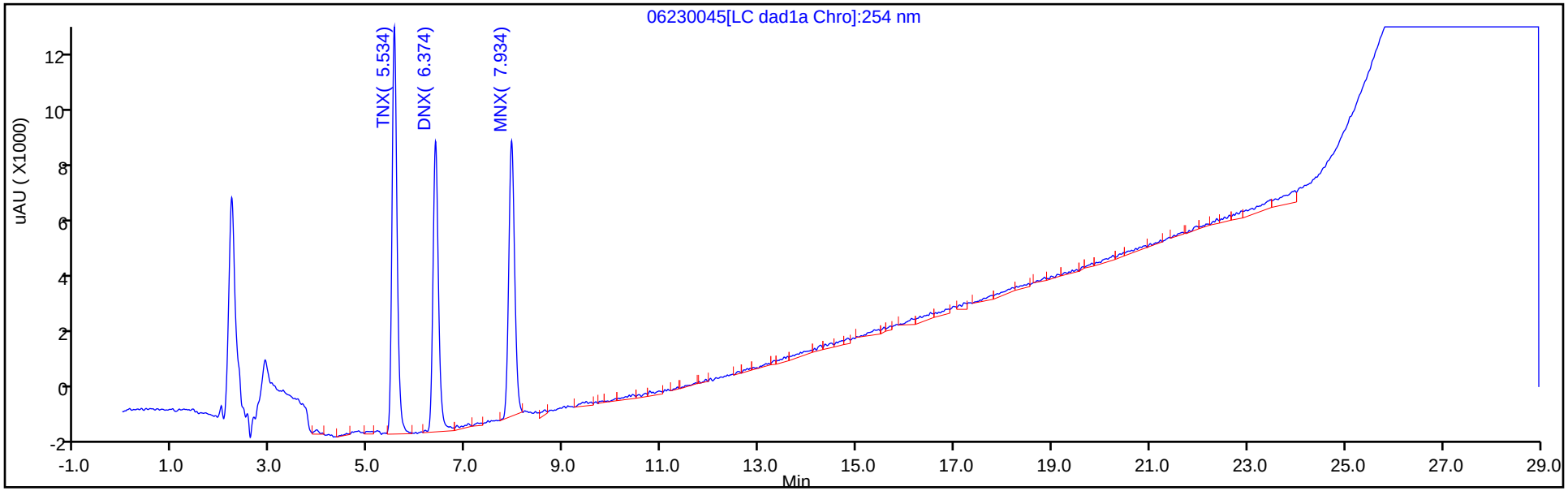
Report Date: 24-Jun-2020 18:52:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

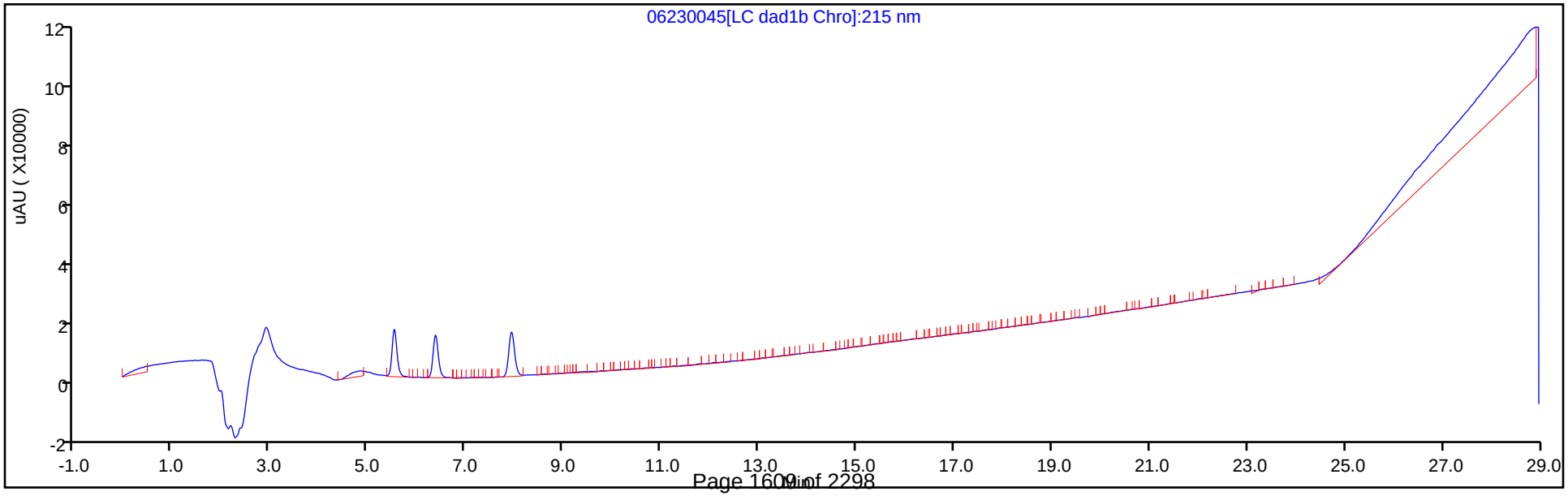
Data File: \\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230045.d

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

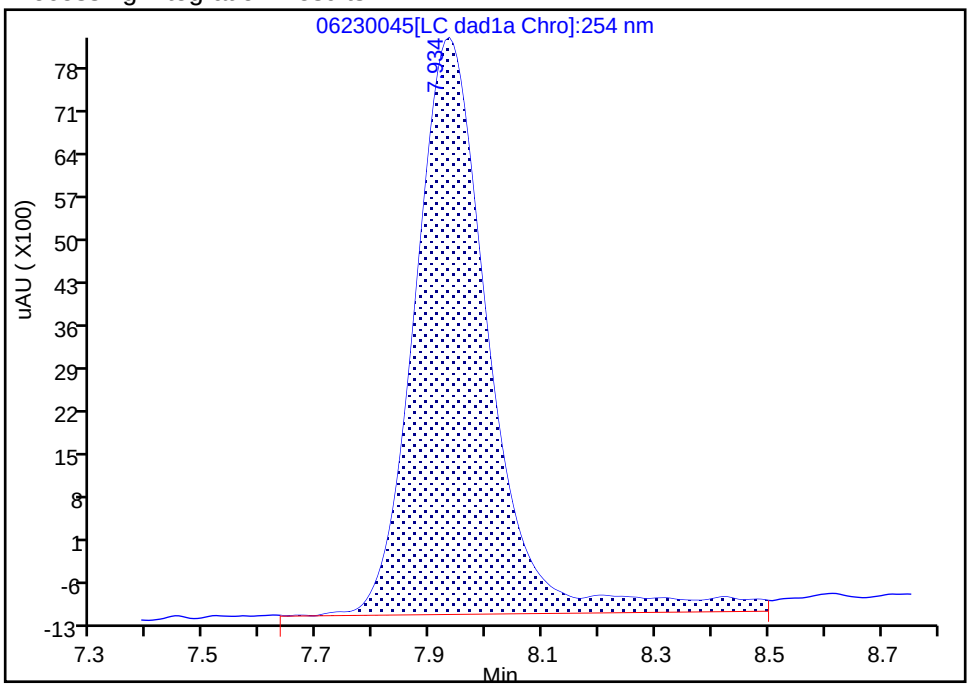
Data File:	\\chromfs\denver\chromdata\g2_luna\20200623-92679.b\06230045.d				
Injection Date:	24-Jun-2020 18:15:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

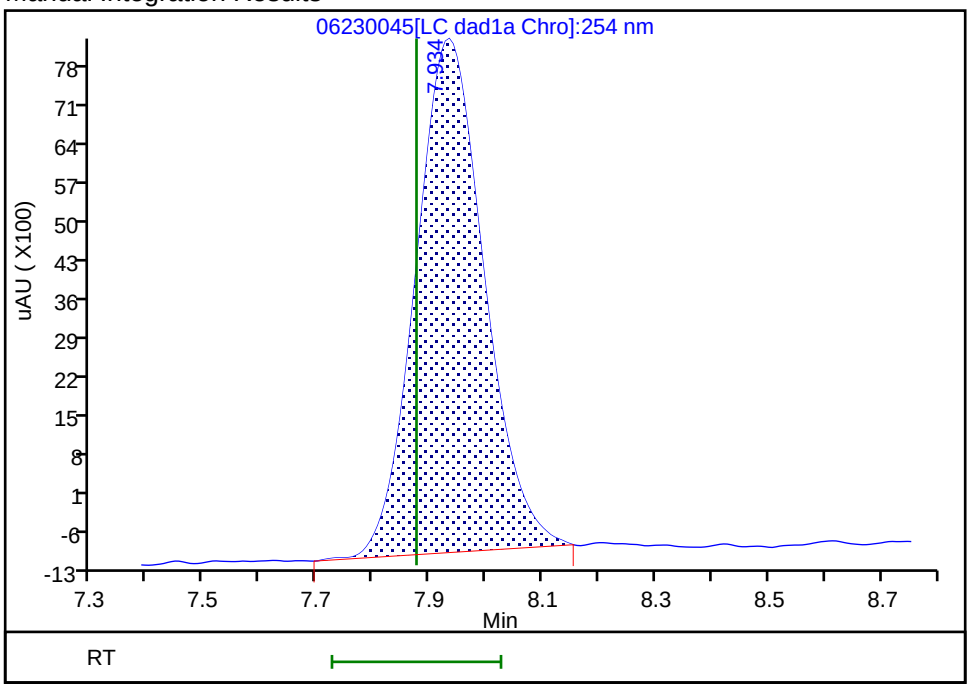
Processing Integration Results

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.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-500016/7 Calibration Date: 06/24/2020 21:56

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: 06240007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		191812		241	250	-3.7	15.0
Picric acid	Ave	193810	184068		237	250	-5.0	15.0
RDX	Ave	244360	234016		239	250	-4.2	15.0
Nitrobenzene	Ave	439227	432127		247	251	-1.6	15.0
1,3-Dinitrobenzene	Ave	674189	654355		243	251	-2.9	15.0
Nitroglycerin	Ave	126803	126306		2490	2500	-0.4	15.0
2-Nitrotoluene	Ave	272965	268260		246	250	-1.7	15.0
4-Nitrotoluene	Ave	240881	236719		246	251	-1.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	317502		230	250	-8.0	15.0
3-Nitrotoluene	Ave	298327	295560		248	250	-0.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	447135		241	251	-3.9	15.0
1,3,5-Trinitrobenzene	Ave	472451	459972		244	251	-2.6	15.0
2,6-Dinitrotoluene	Lin2		294554		240	251	-4.3	15.0
2,4-Dinitrotoluene	Ave	640113	608996		239	251	-4.9	15.0
Tetryl	Ave	368678	345134		235	251	-6.4	15.0
2,4,6-Trinitrotoluene	Lin1		394434		239	251	-4.9	15.0
PETN	Lin1		142447		2540	2500	1.7	15.0
1,2-Dinitrobenzene	Lin1		306284		270	250	7.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-500016/7 Calibration Date: 06/24/2020 21:56

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: 06240007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.15	7.00	7.30
Picric acid	8.47	8.32	8.62
RDX	9.36	9.21	9.51
Nitrobenzene	12.27	12.12	12.42
1,3-Dinitrobenzene	15.81	15.66	15.96
Nitroglycerin	16.05	15.90	16.20
2-Nitrotoluene	16.75	16.60	16.90
4-Nitrotoluene	17.03	16.88	17.18
4-Amino-2,6-dinitrotoluene	17.47	17.32	17.62
3-Nitrotoluene	17.96	17.81	18.11
2-Amino-4,6-dinitrotoluene	18.40	18.25	18.55
1,3,5-Trinitrobenzene	19.14	18.99	19.29
2,6-Dinitrotoluene	20.07	19.92	20.22
2,4-Dinitrotoluene	20.58	20.43	20.73
Tetryl	23.89	23.74	24.04
2,4,6-Trinitrotoluene	24.91	24.76	25.06
PETN	25.44	25.29	25.59
1,2-Dinitrobenzene	13.27	13.12	13.42

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 24-Jun-2020 21:56:16 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092719-007
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 16:18:59 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: CTX1025

First Level Reviewer: zhangji Date: 25-Jun-2020 16:58:34

	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	4.425	4.425	0.000	108258	0.2500	0.2522	
	2 2,4-diamino-6-nitrotoluene	1	4.938	4.938	0.000	69160	0.2500	0.2676	
	6 HMX	1	7.145	7.145	0.000	47953	0.2500	0.2408	
	5 2,4,6-Trinitrophenol	1	8.465	8.465	0.000	46017	0.2500	0.2374	
	8 RDX	1	9.358	9.358	0.000	58504	0.2500	0.2394	
	9 Nitrobenzene	1	12.265	12.265	0.000	108464	0.2510	0.2469	
$	10 1,2-Dinitrobenzene	1	13.271	13.271	0.000	76571	0.2500	0.2696	
	11 3,5-Dinitroaniline	1	15.205	15.205	0.000	121292	0.2500	0.2444	
	12 1,3-Dinitrobenzene	1	15.805	15.805	0.000	163916	0.2505	0.2431	
	13 Nitroglycerin	2	16.045	16.045	0.000	315765	2.50	2.49	
	14 o-Nitrotoluene	1	16.745	16.745	0.000	67065	0.2500	0.2457	M
	15 p-Nitrotoluene	1	17.031	17.031	0.000	59298	0.2505	0.2462	M
	16 4-Amino-2,6-dinitrotoluene	1	17.465	17.465	0.000	79455	0.2503	0.2301	M
	17 m-Nitrotoluene	1	17.958	17.958	0.000	73964	0.2503	0.2479	M
	18 2-Amino-4,6-dinitrotoluene	1	18.398	18.398	0.000	112231	0.2510	0.2412	M
	19 1,3,5-Trinitrobenzene	1	19.138	19.138	0.000	115223	0.2505	0.2439	M
	20 2,6-Dinitrotoluene	1	20.065	20.065	0.000	73933	0.2510	0.2403	M
	21 2,4-Dinitrotoluene	1	20.578	20.578	0.000	152858	0.2510	0.2388	M
	22 Tetryl	1	23.885	23.885	0.000	86456	0.2505	0.2345	
	23 2,4,6-Trinitrotoluene	1	24.905	24.905	0.000	99003	0.2510	0.2387	
	24 PETN	2	25.438	25.438	0.000	356118	2.50	2.54	

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

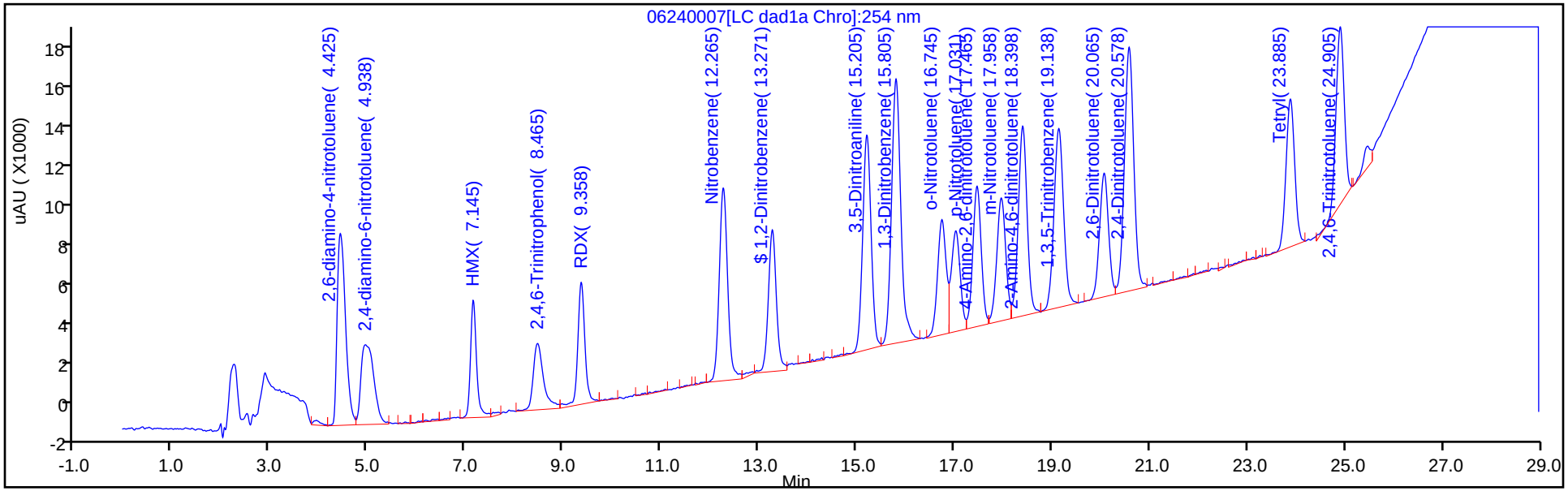
Report Date: 26-Jun-2020 16:18:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

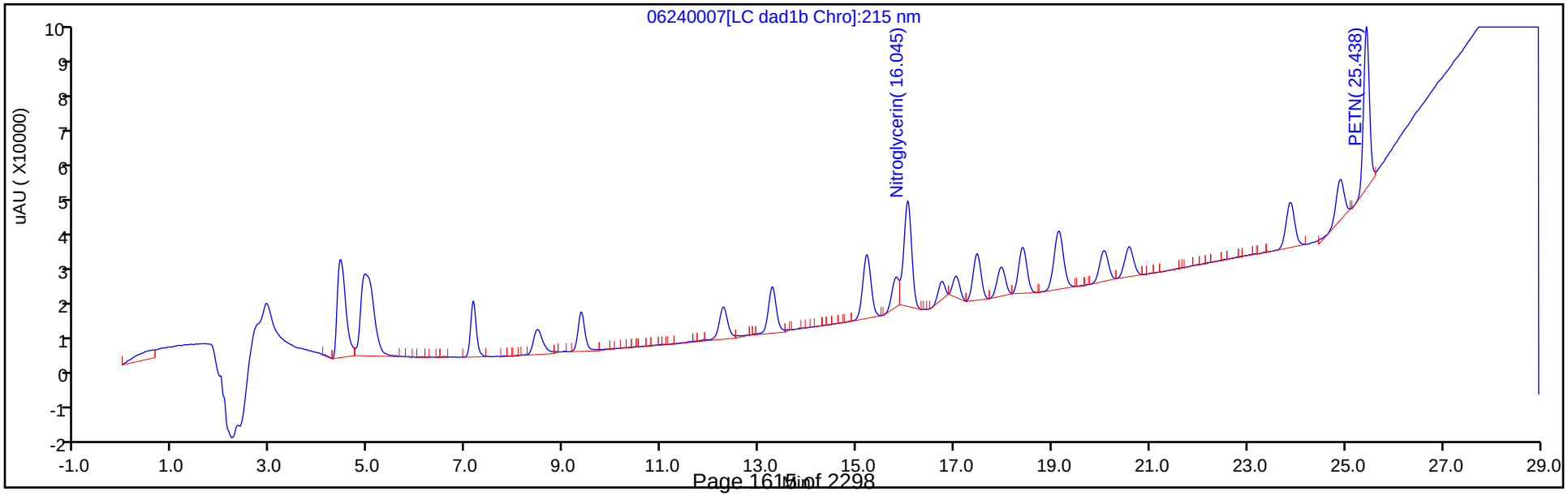
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d

Injection Date:	24-Jun-2020 21:56:16	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			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

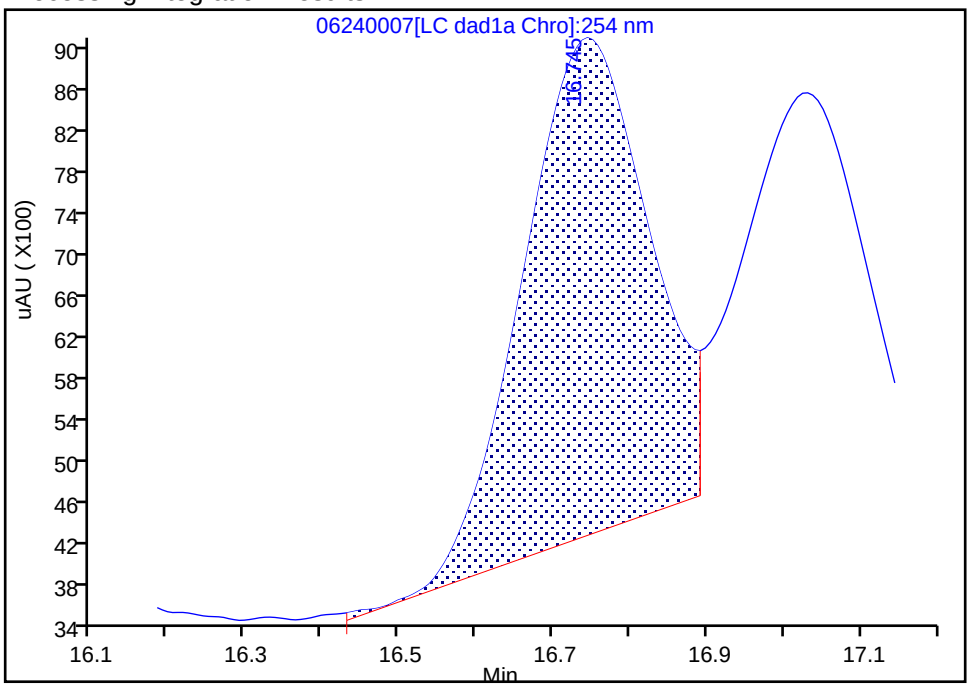
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d				
Injection Date:	24-Jun-2020 21:56:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

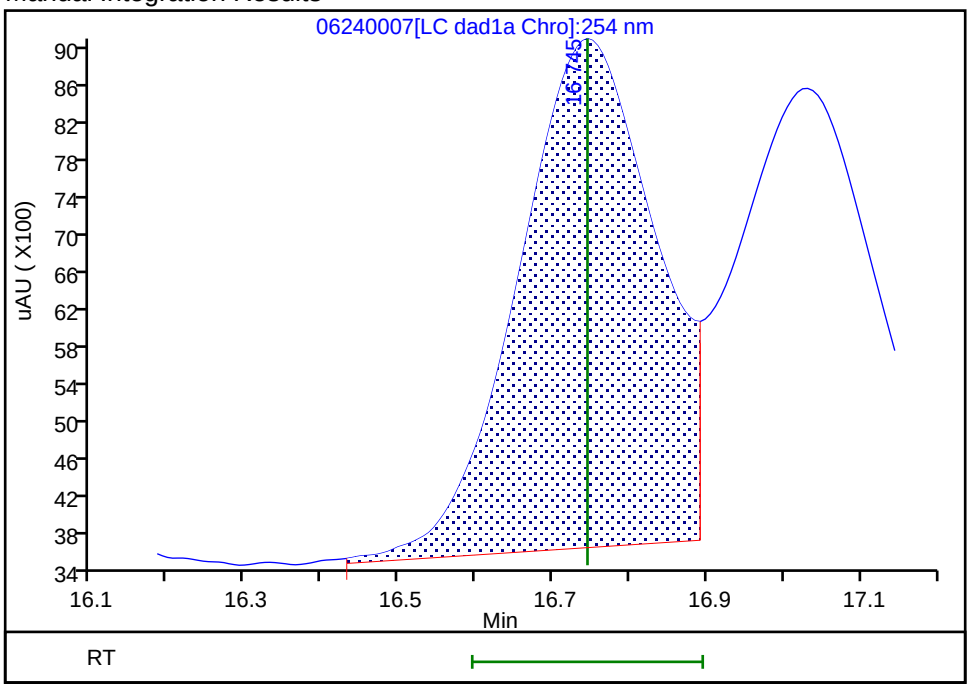
Processing Integration Results

RT: 16.74
Area: 54493
Amount: 0.199634
Amount Units: ug/ml



Manual Integration Results

RT: 16.74
Area: 67065
Amount: 0.245691
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

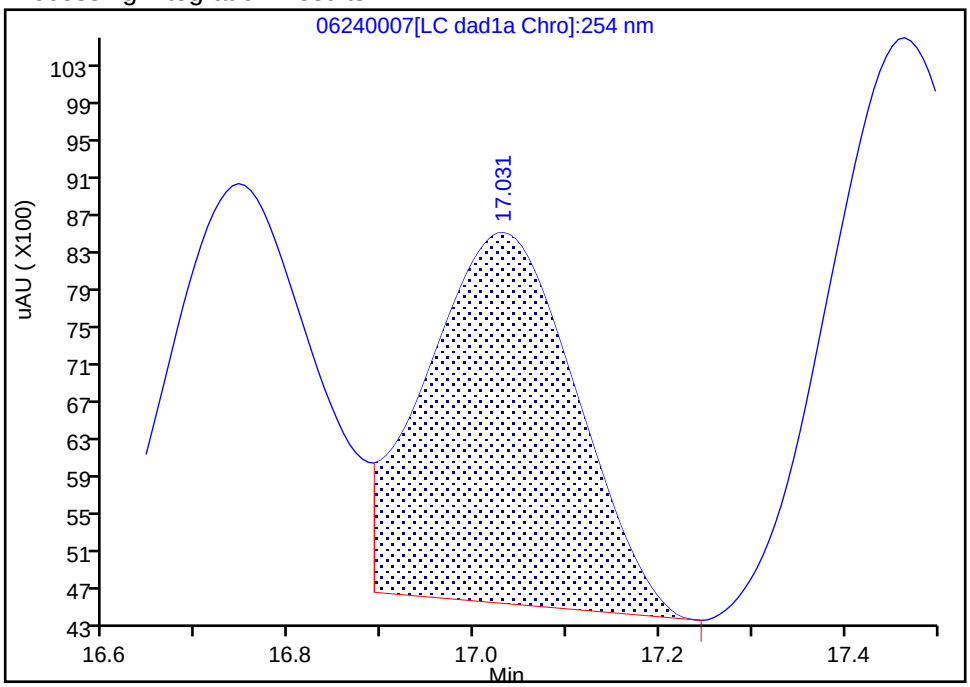
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d
Injection Date: 24-Jun-2020 21:56:16 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

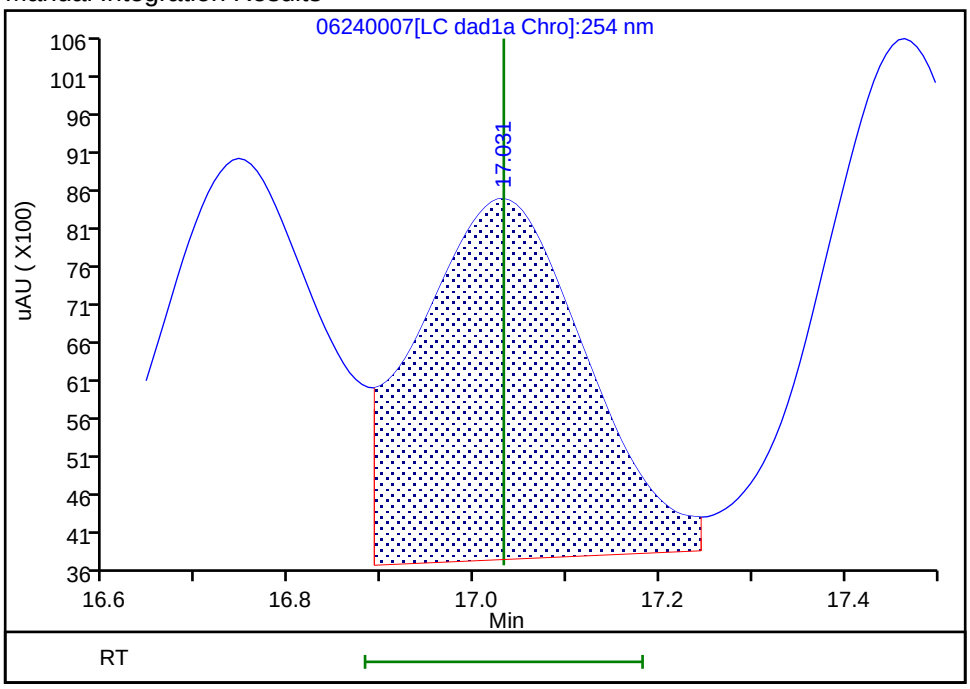
Processing Integration Results

RT: 17.03
Area: 44776
Amount: 0.185884
Amount Units: ug/ml



Manual Integration Results

RT: 17.03
Area: 59298
Amount: 0.246171
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

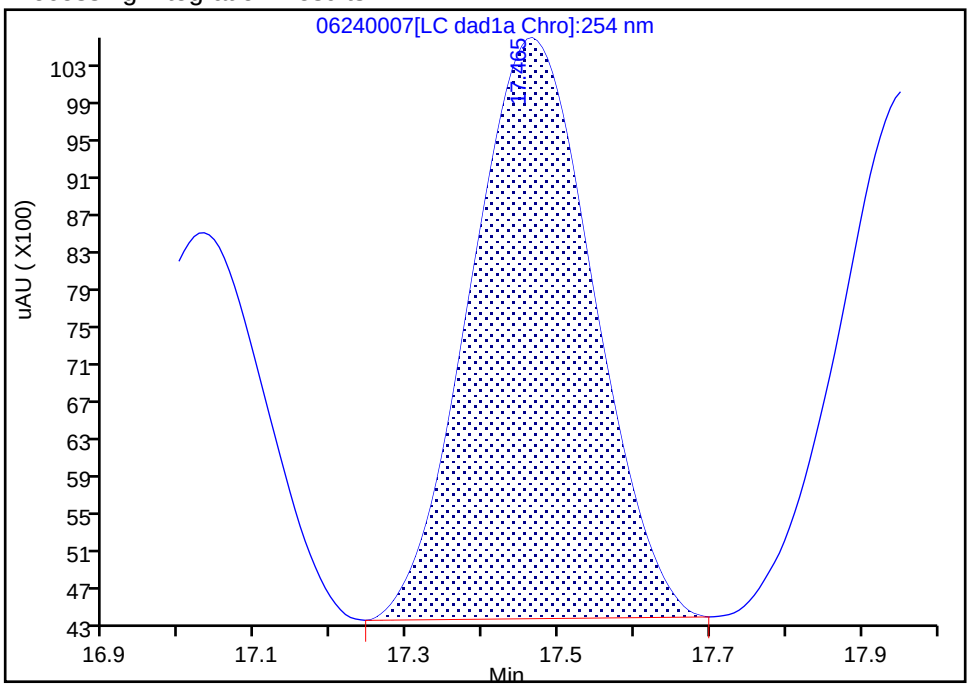
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d
Injection Date: 24-Jun-2020 21:56:16 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

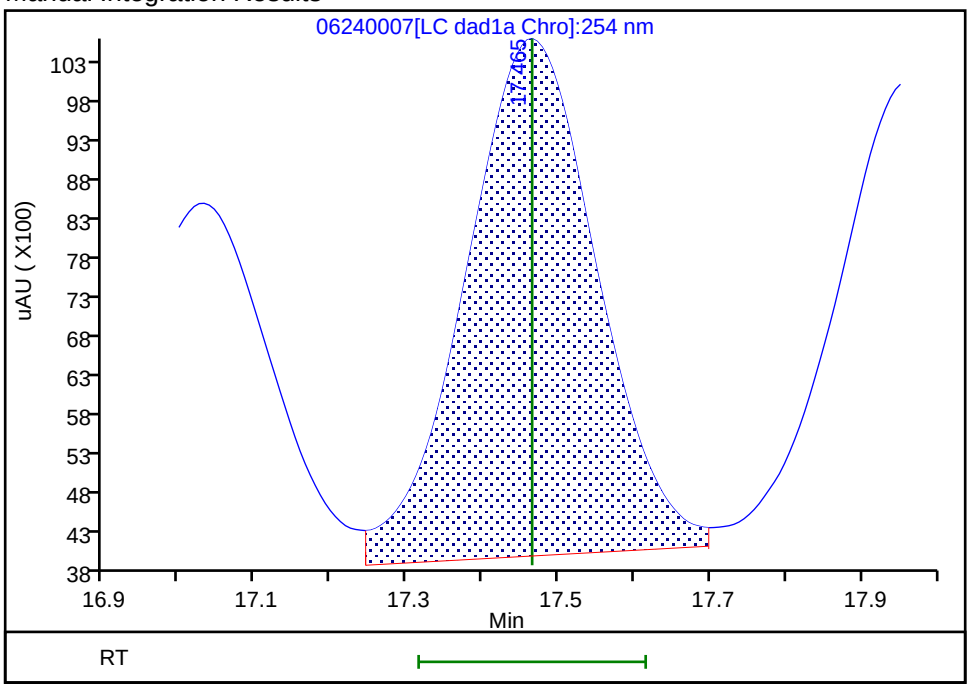
Processing Integration Results

RT: 17.46
Area: 70275
Amount: 0.203557
Amount Units: ug/ml



Manual Integration Results

RT: 17.46
Area: 79455
Amount: 0.230148
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

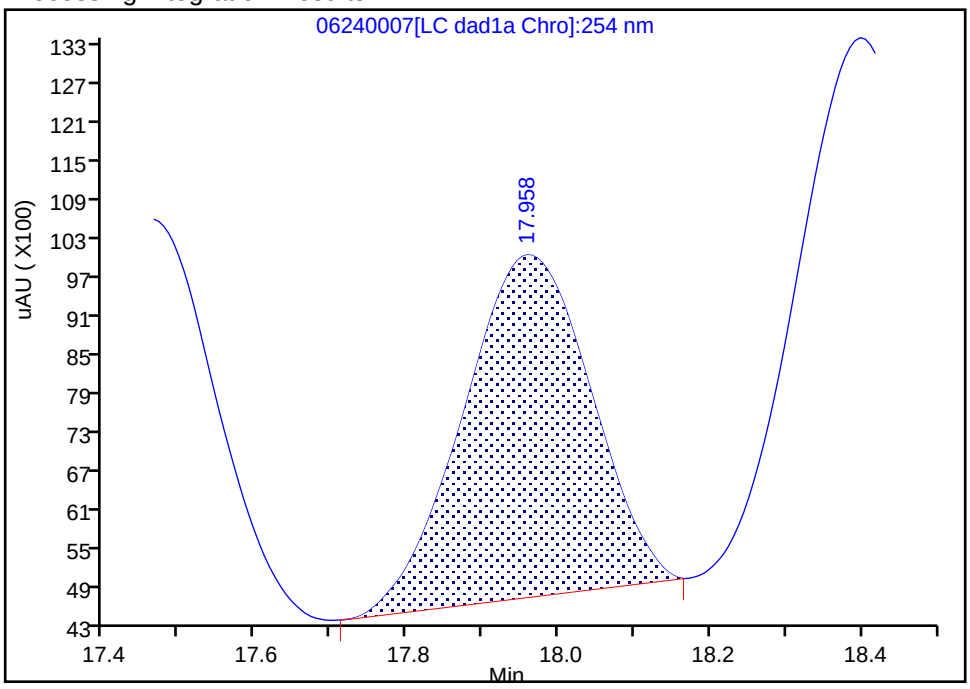
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d
Injection Date: 24-Jun-2020 21:56:16 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

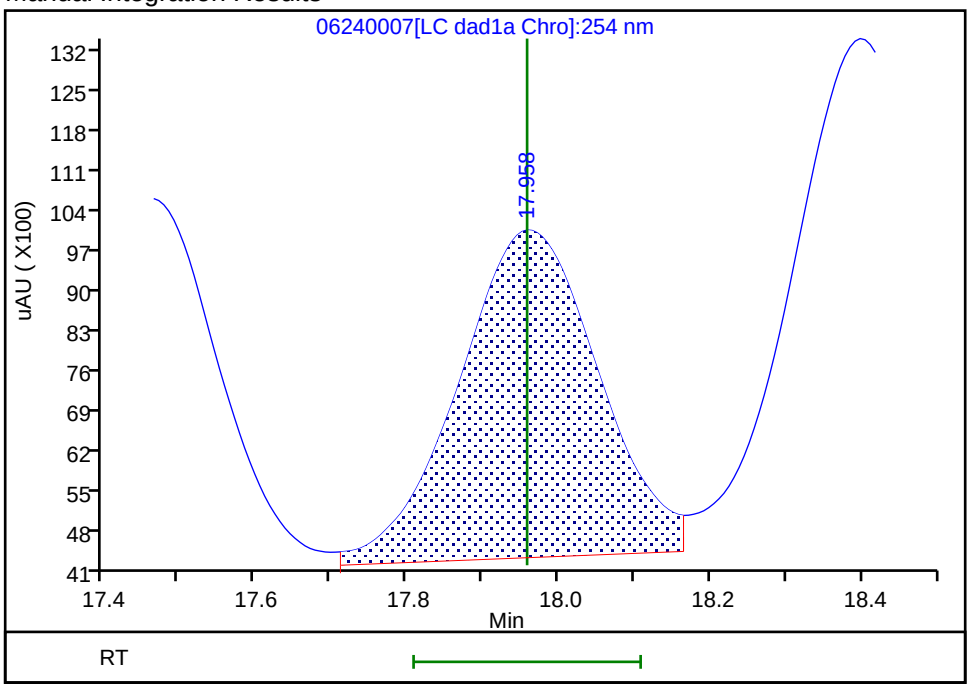
Processing Integration Results

RT: 17.96
Area: 62268
Amount: 0.208724
Amount Units: ug/ml



Manual Integration Results

RT: 17.96
Area: 73964
Amount: 0.247929
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

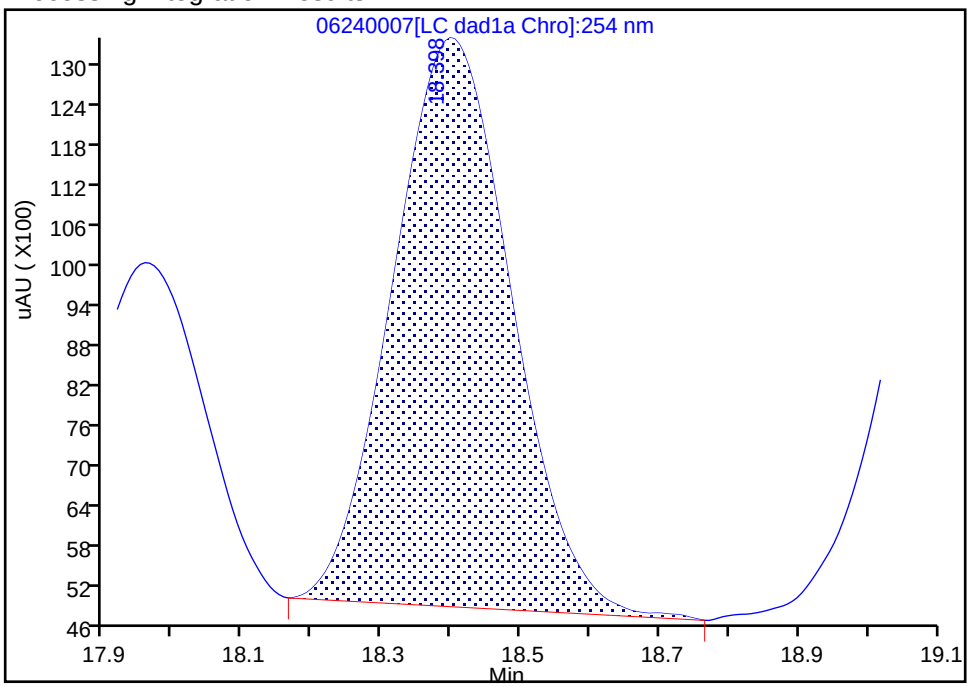
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d				
Injection Date:	24-Jun-2020 21:56:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

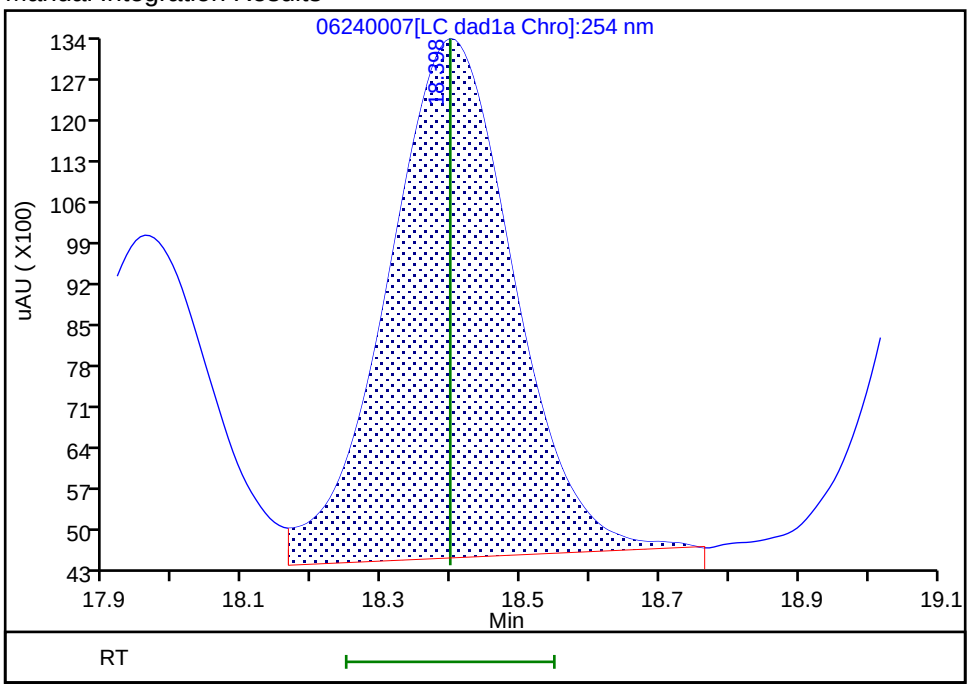
Processing Integration Results

RT: 18.40
Area: 101287
Amount: 0.217723
Amount Units: ug/ml



Manual Integration Results

RT: 18.40
Area: 112231
Amount: 0.241248
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

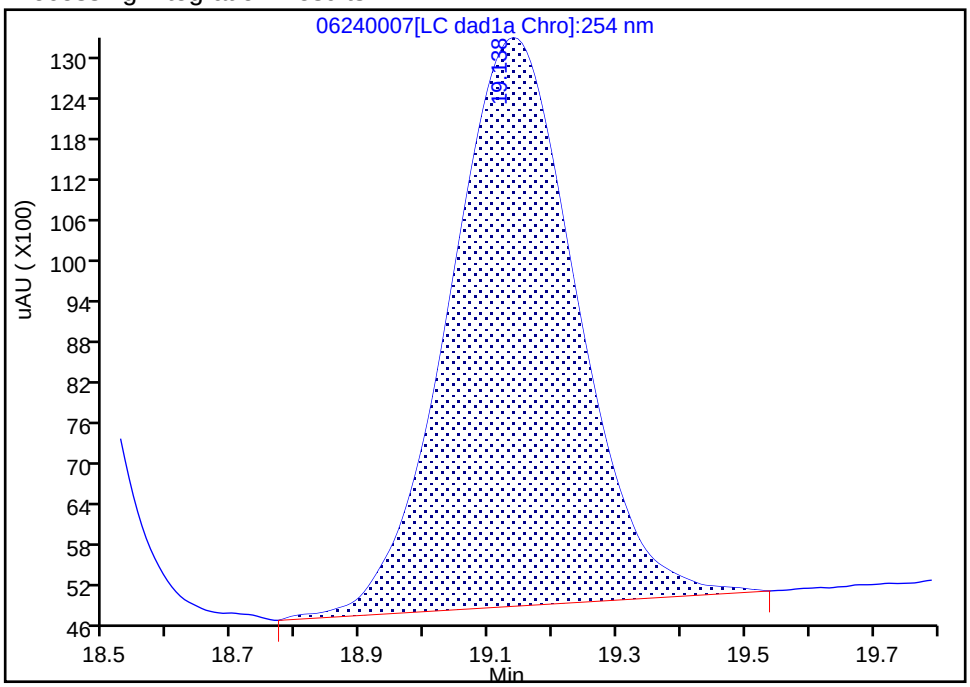
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d				
Injection Date:	24-Jun-2020 21:56:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

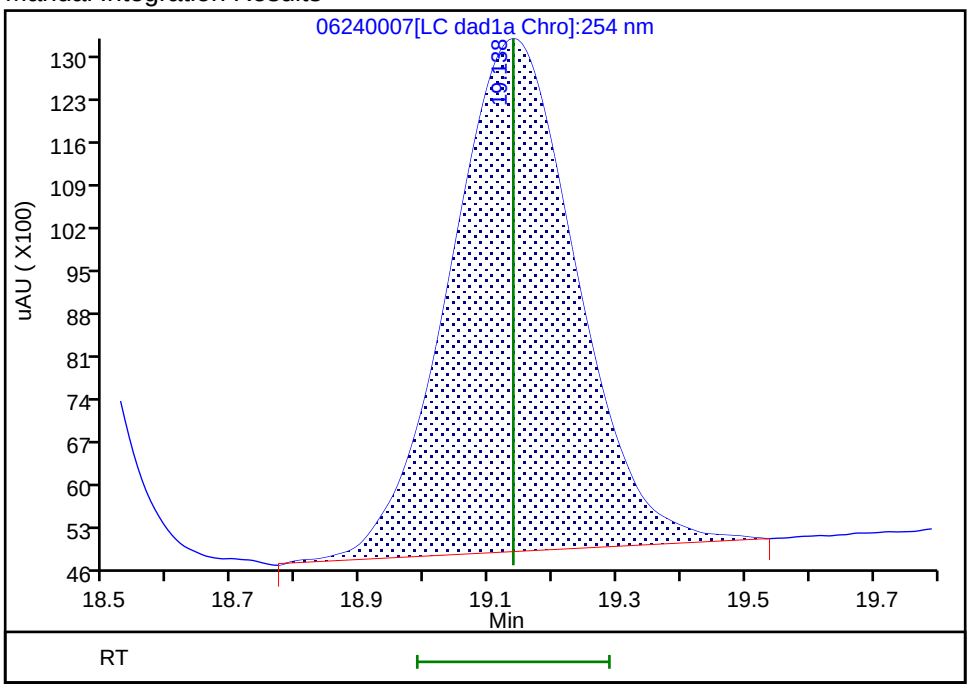
Processing Integration Results

RT: 19.14
Area: 115913
Amount: 0.245344
Amount Units: ug/ml



Manual Integration Results

RT: 19.14
Area: 115223
Amount: 0.243884
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

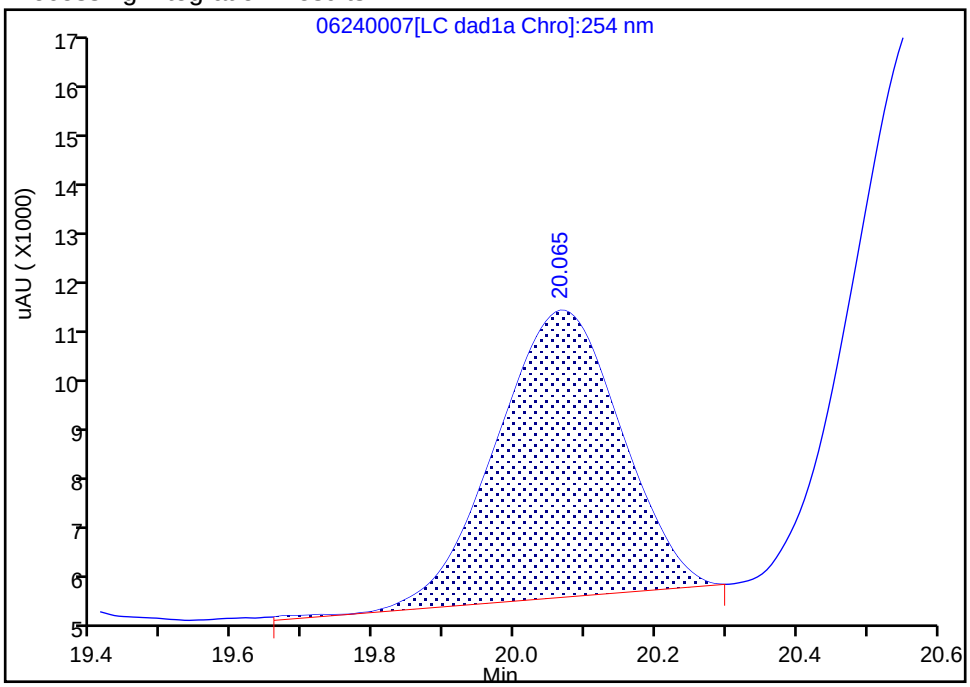
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d				
Injection Date:	24-Jun-2020 21:56:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

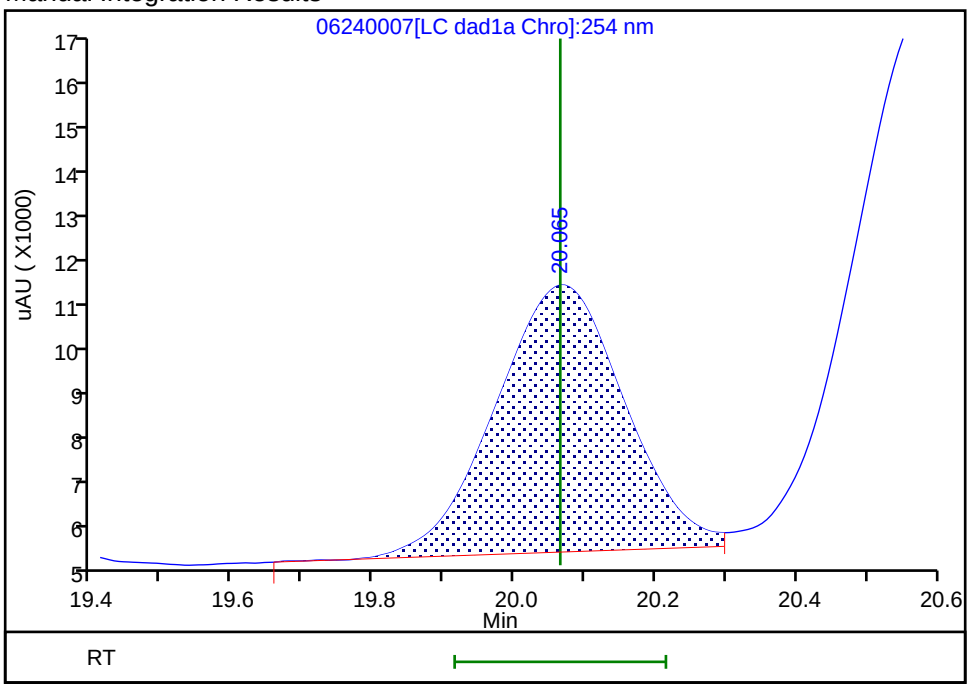
Processing Integration Results

RT: 20.06
Area: 69555
Amount: 0.225155
Amount Units: ug/ml



Manual Integration Results

RT: 20.06
Area: 73933
Amount: 0.240293
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

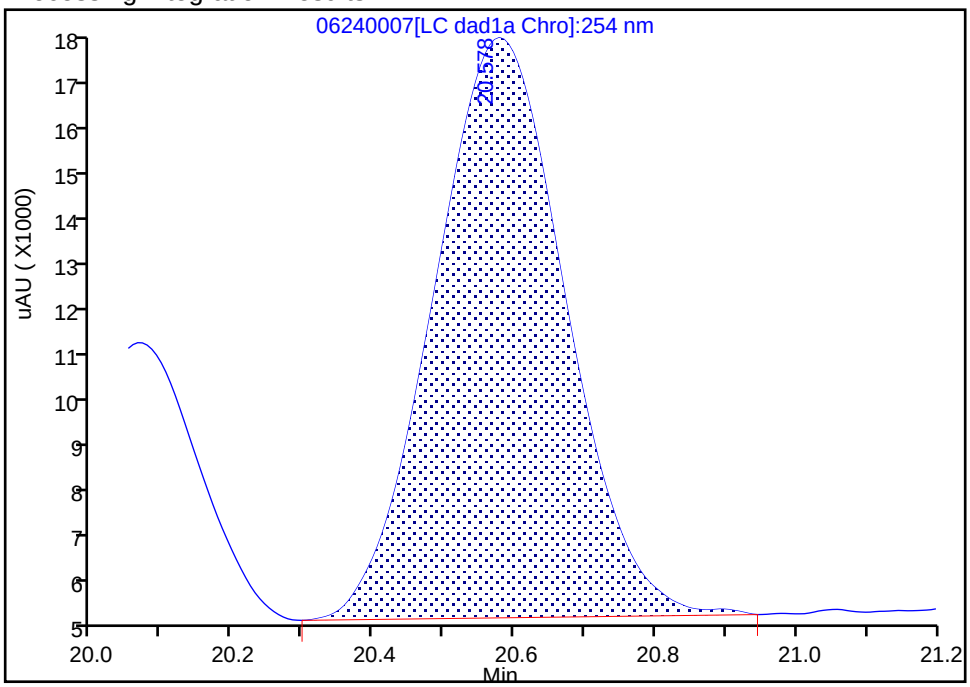
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240007.d
Injection Date: 24-Jun-2020 21:56:16 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

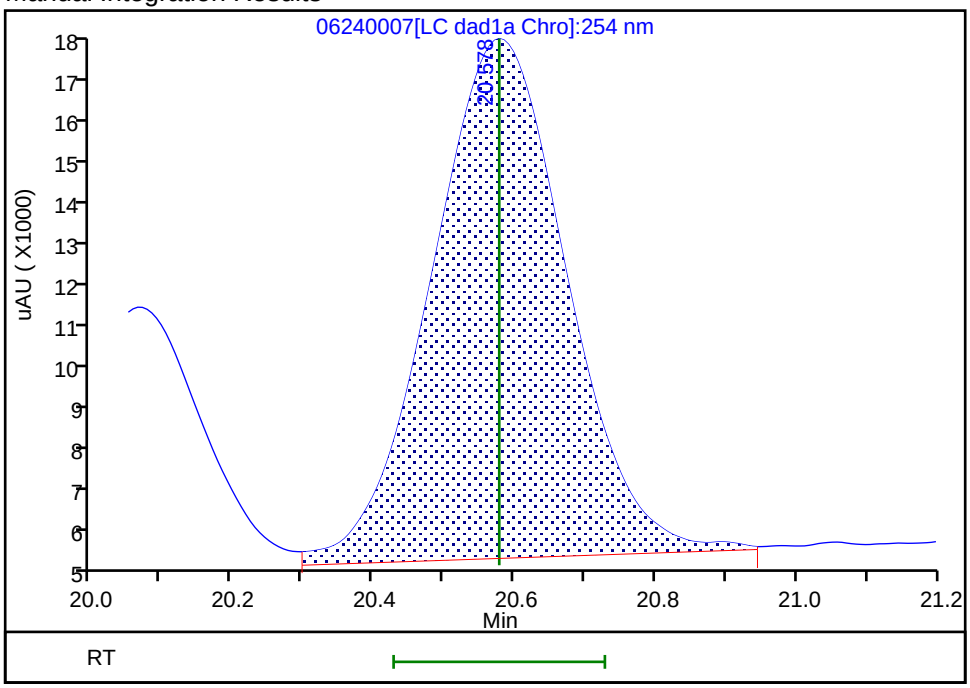
Processing Integration Results

RT: 20.58
Area: 145913
Amount: 0.227949
Amount Units: ug/ml



Manual Integration Results

RT: 20.58
Area: 152858
Amount: 0.238798
Amount Units: ug/ml



Reviewer: zhangji, 25-Jun-2020 16:58:31
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-500016/8 Calibration Date: 06/24/2020 22:31

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: 06240008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	409415		235	250	-6.1	15.0
DNX	Ave	321206	307728		240	250	-4.2	15.0
MNX	Lin2		293374		300	292	3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-500016/8 Calibration Date: 06/24/2020 22:31

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: 06240008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.53	5.38	5.68
DNX	6.37	6.22	6.52
MNX	7.93	7.78	8.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200624-92719.b\06240008.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	24-Jun-2020 22:31:19	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092719-008				
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 16:18:59	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:	CTX1025				
First Level Reviewer: zhangji		Date:	25-Jun-2020 17:11:37		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.532	5.532	0.000	102456	0.2503	0.2351	
4 DNX	1	6.372	6.372	0.000	77009	0.2503	0.2397	
7 MNX	1	7.926	7.926	0.000	85592	0.2918	0.3004	

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

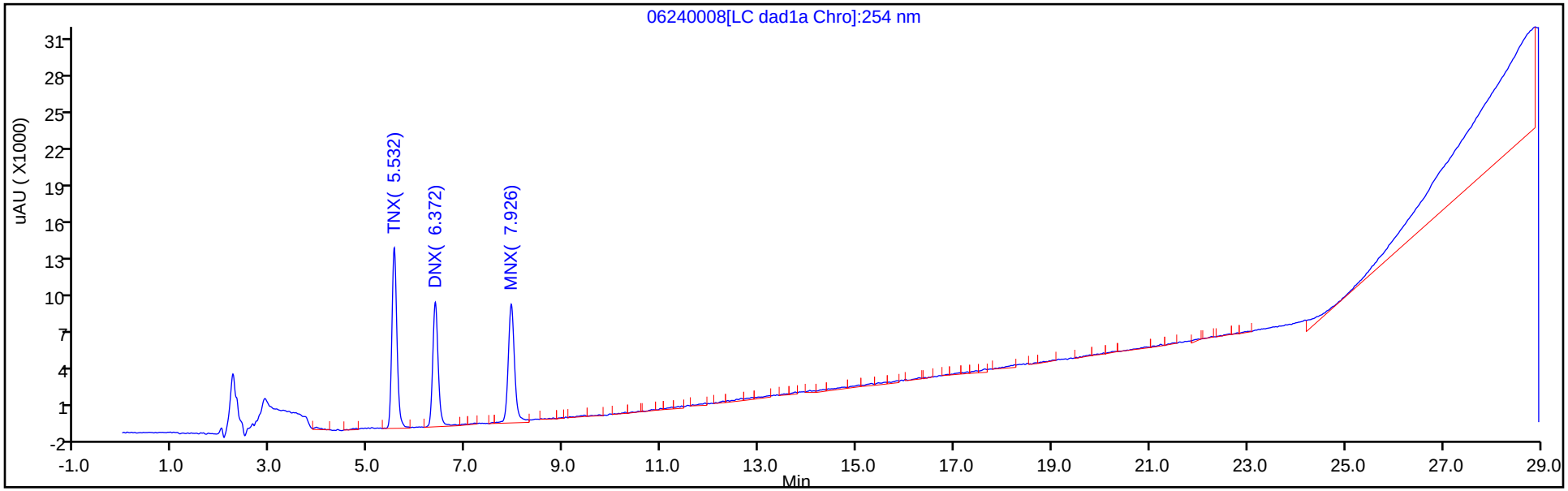
Report Date: 26-Jun-2020 16:18:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

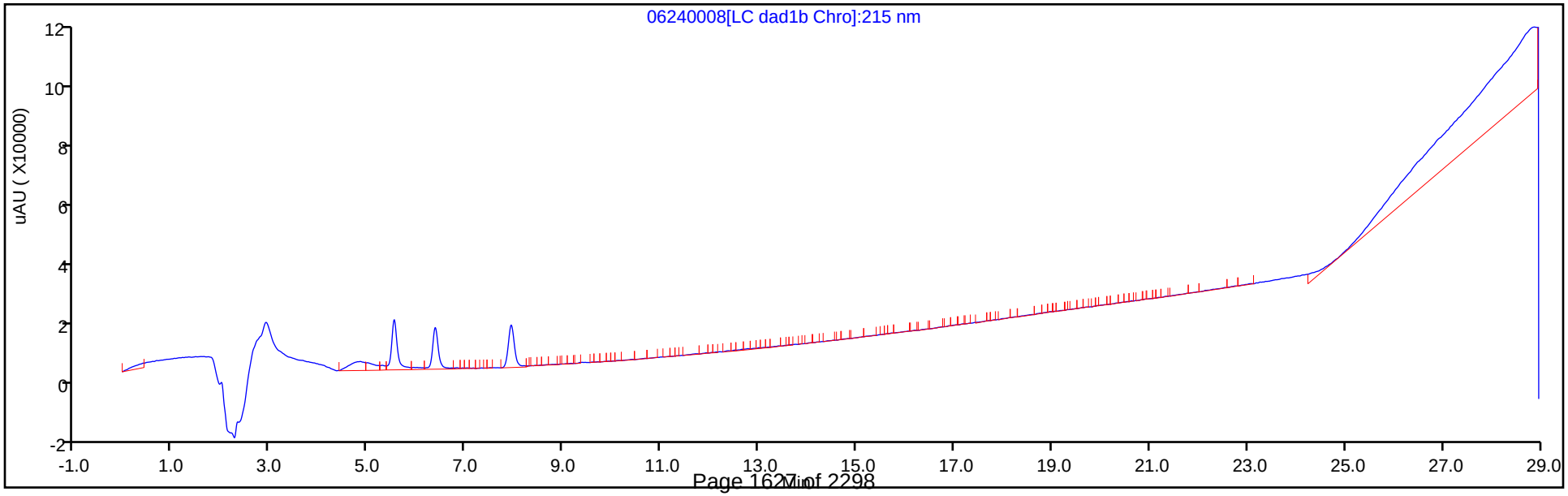
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240008.d

Injection Date:	24-Jun-2020 22:31:19	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	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.: 280-137609-1

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.: 280-137609-1

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

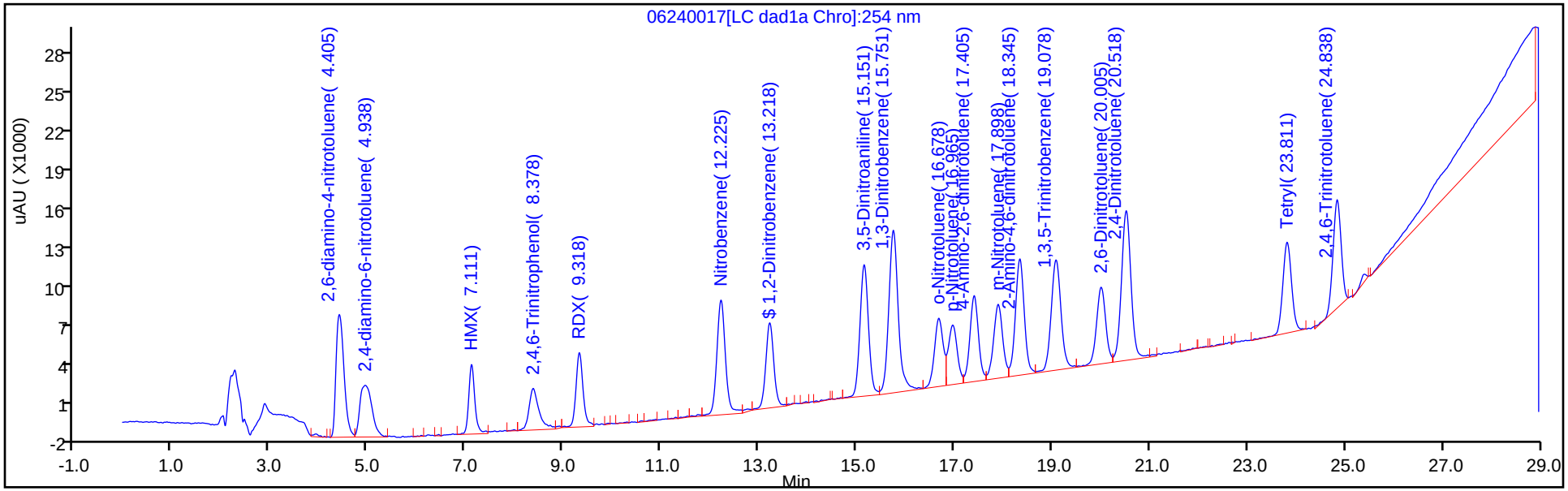
Report Date: 26-Jun-2020 16:19:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

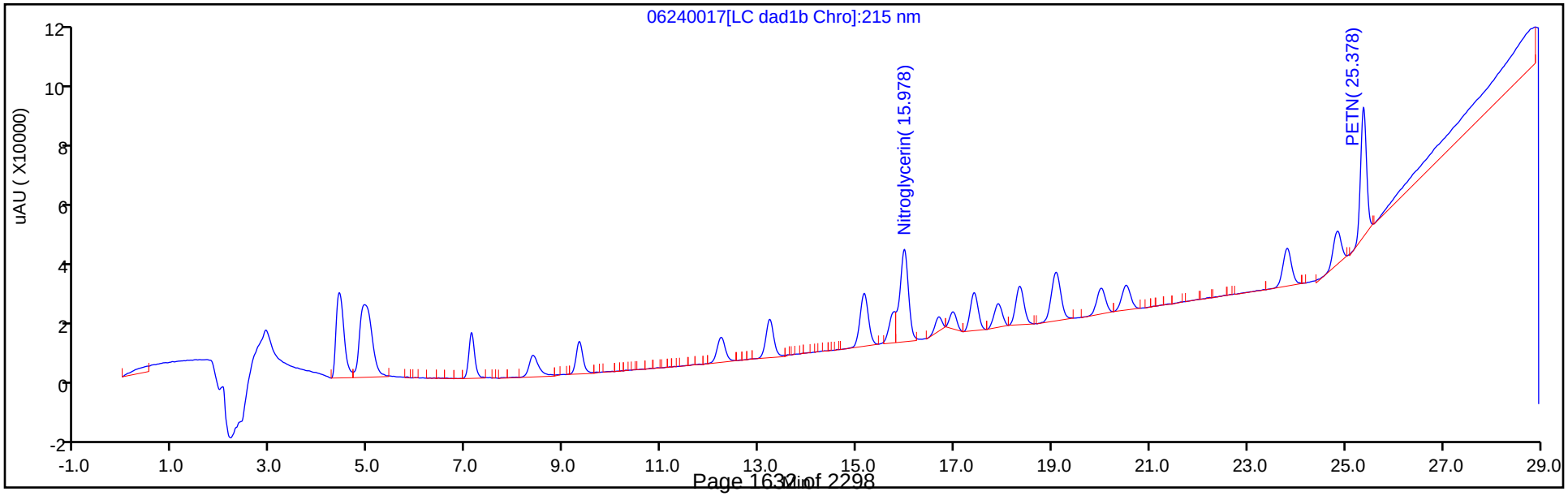
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d

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

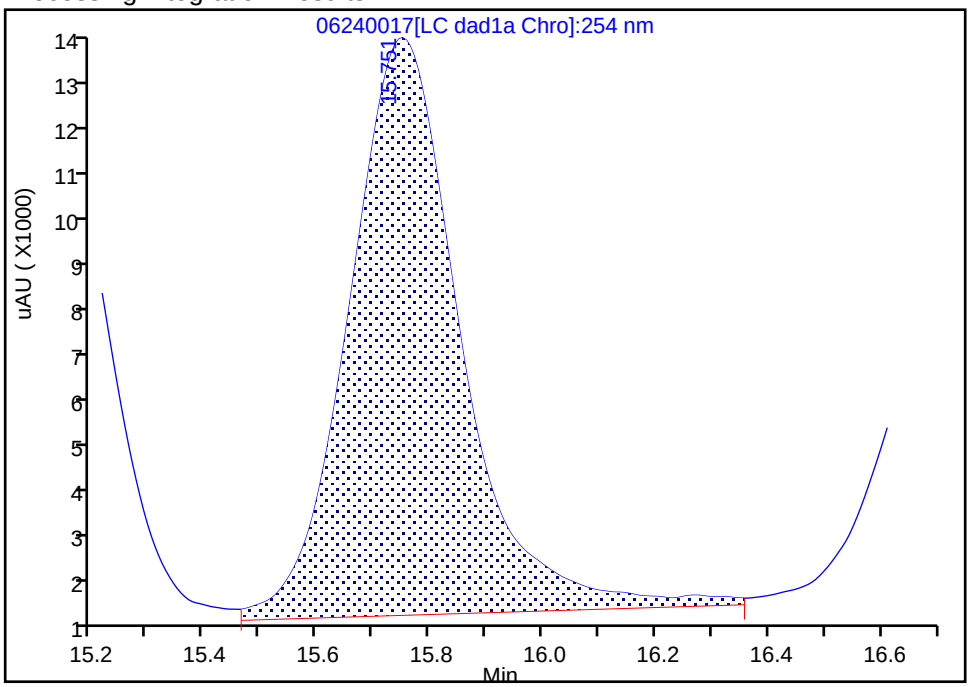
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

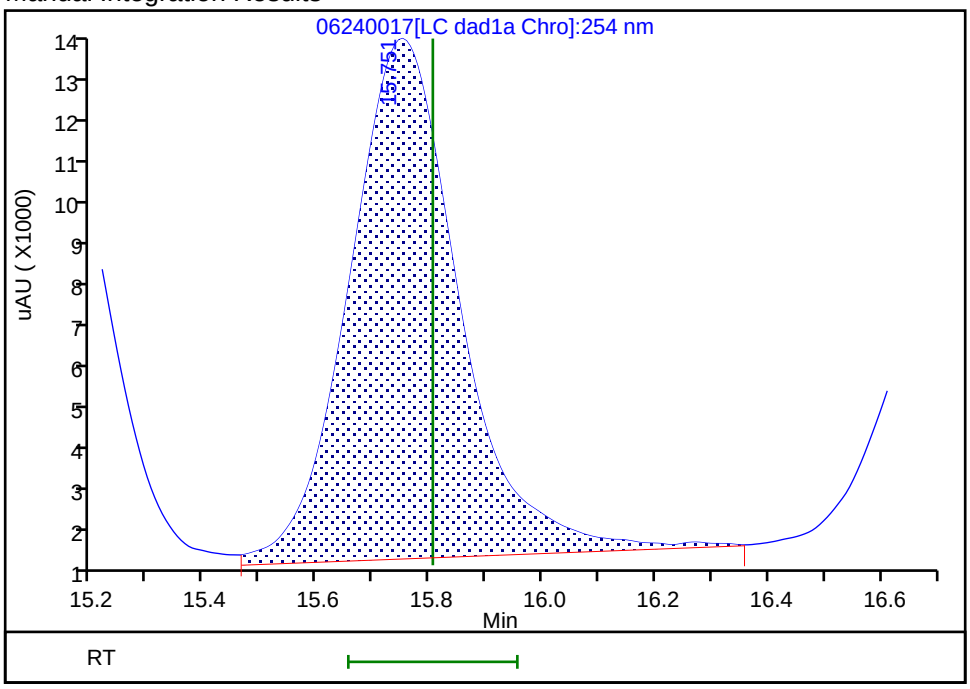
Processing Integration Results

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

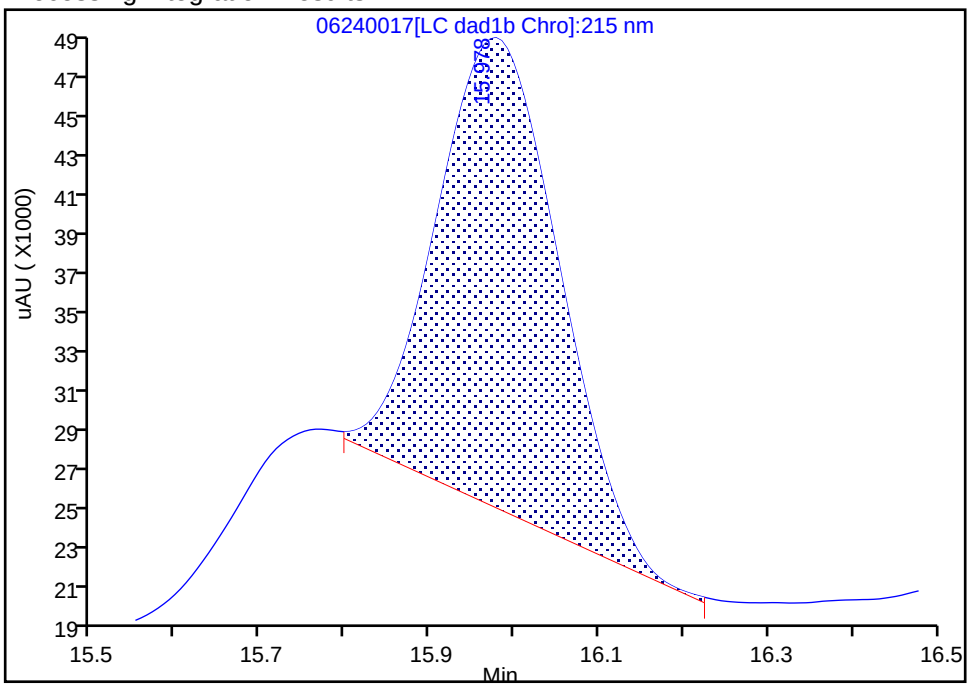
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

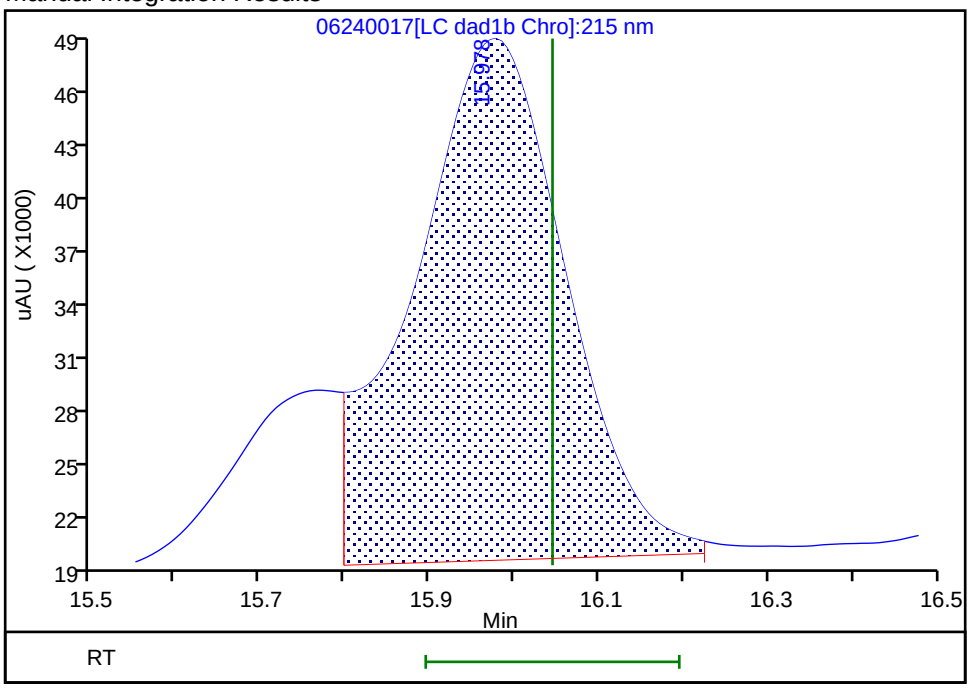
Processing Integration Results

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

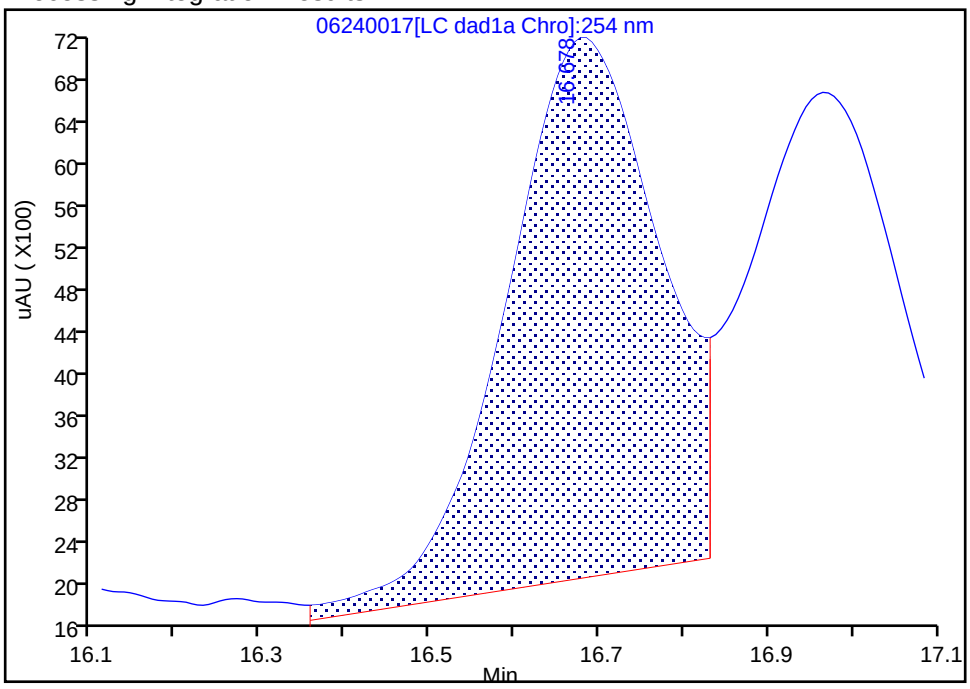
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

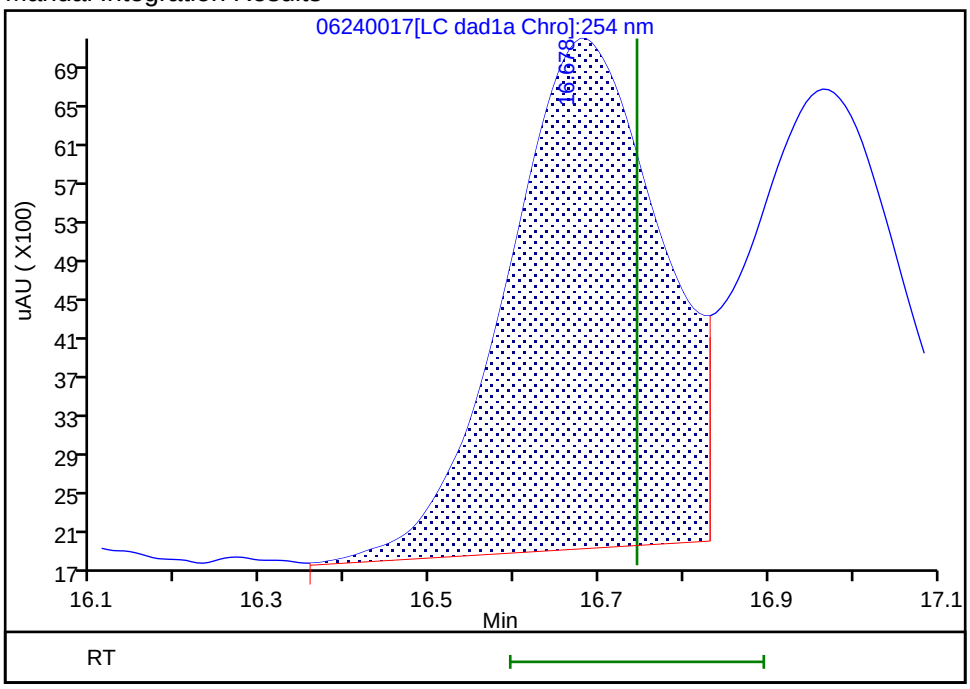
Processing Integration Results

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

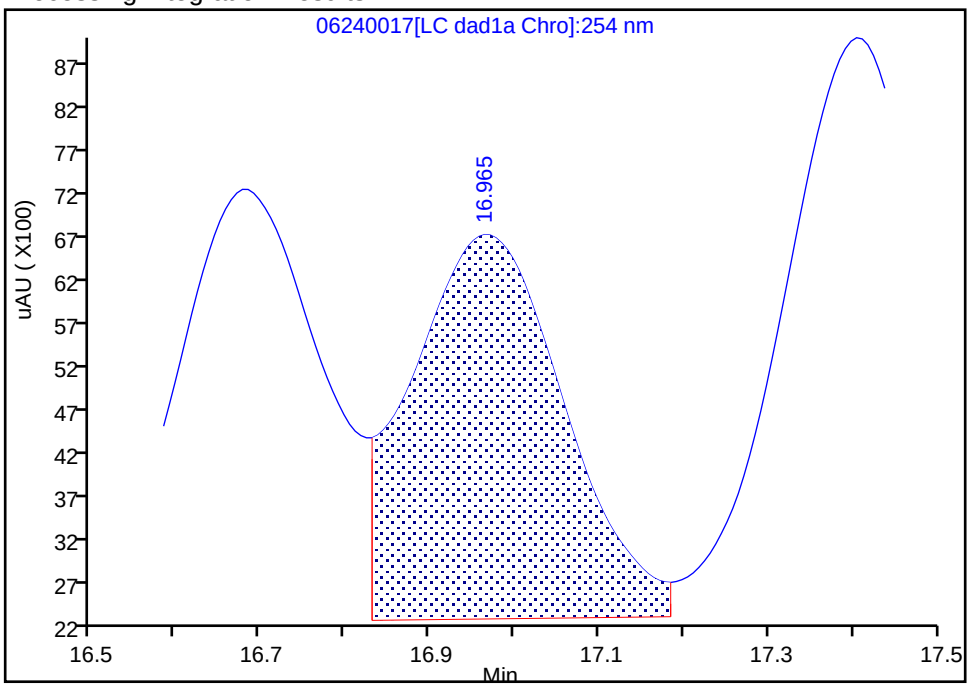
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

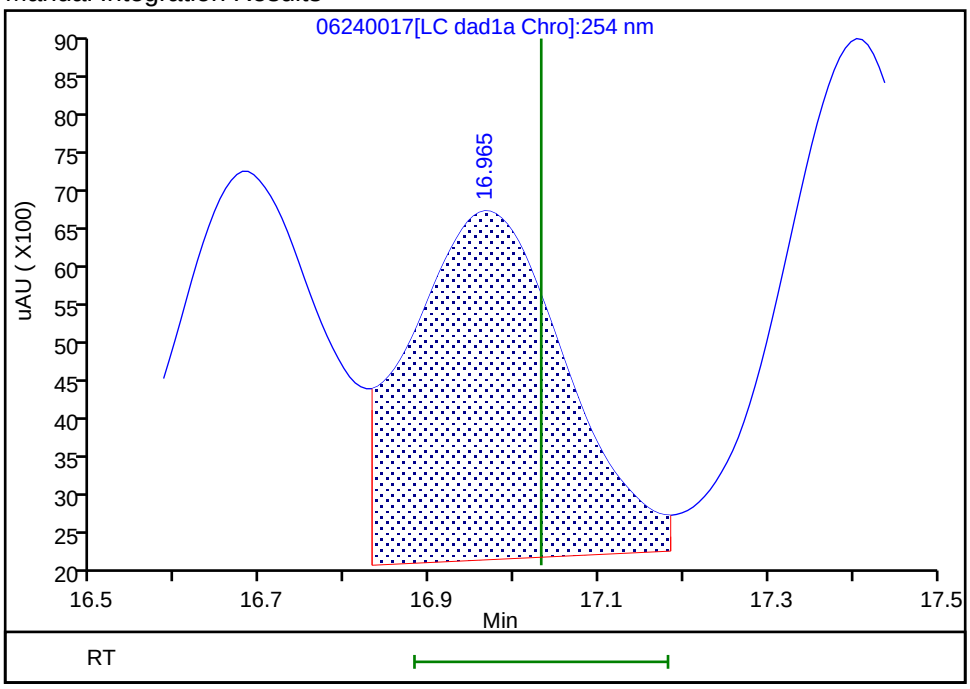
Processing Integration Results

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

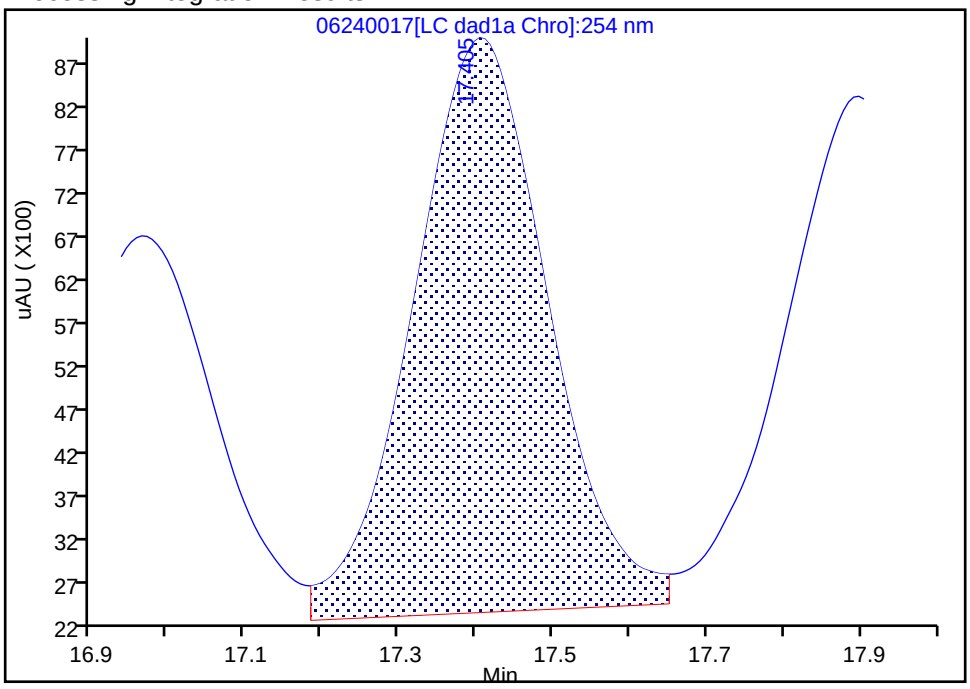
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

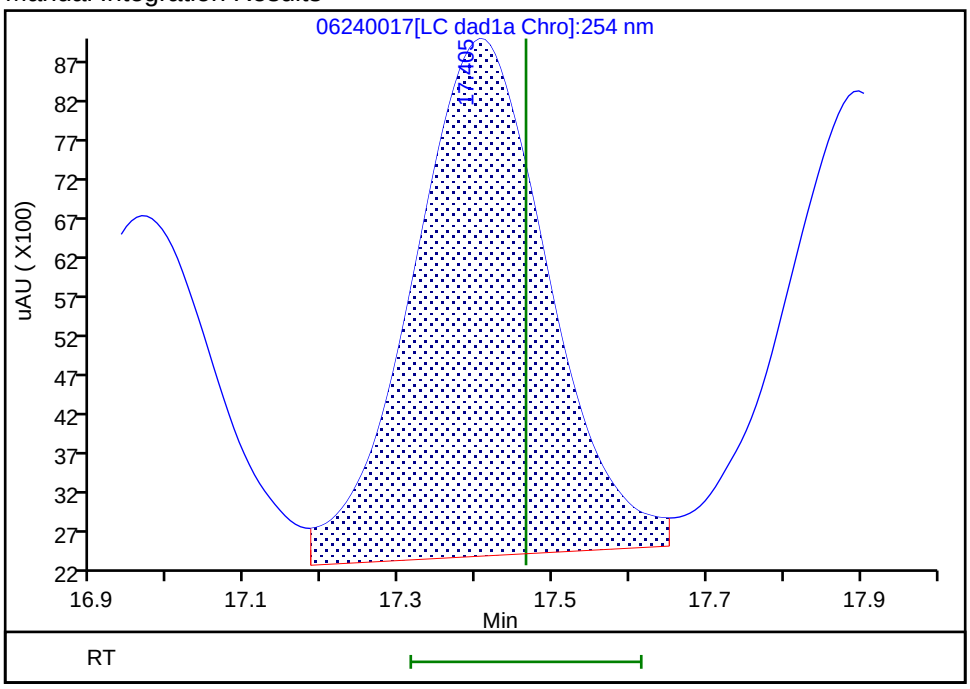
Processing Integration Results

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

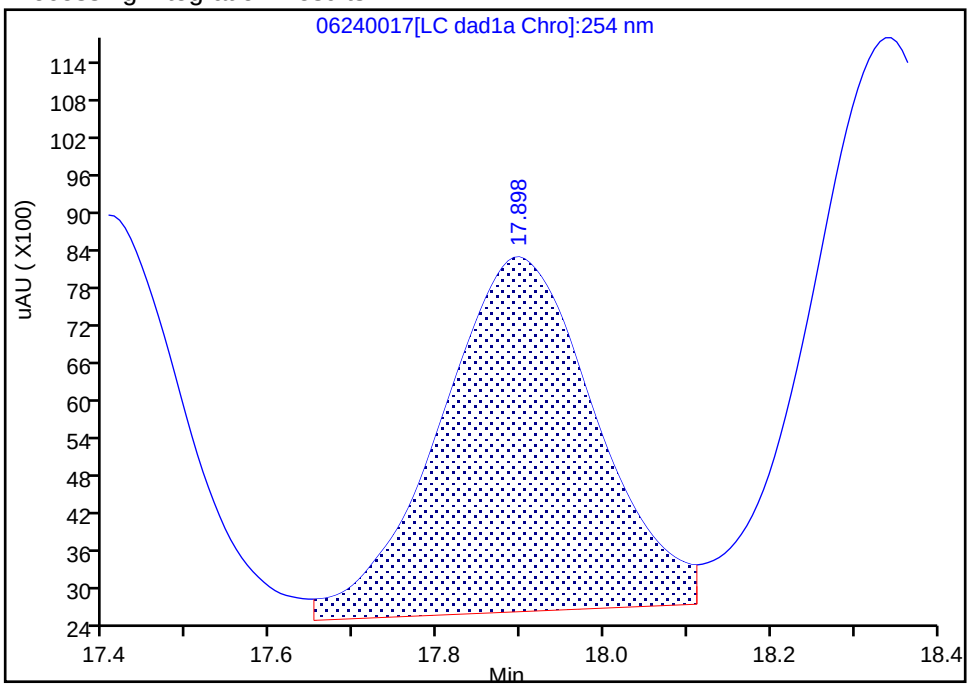
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

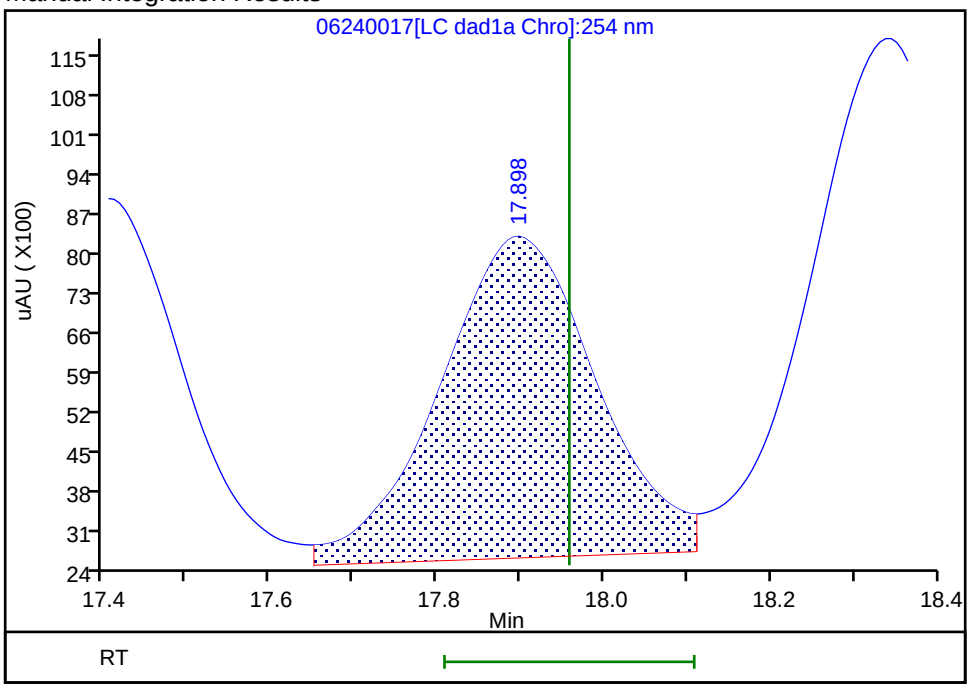
Processing Integration Results

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

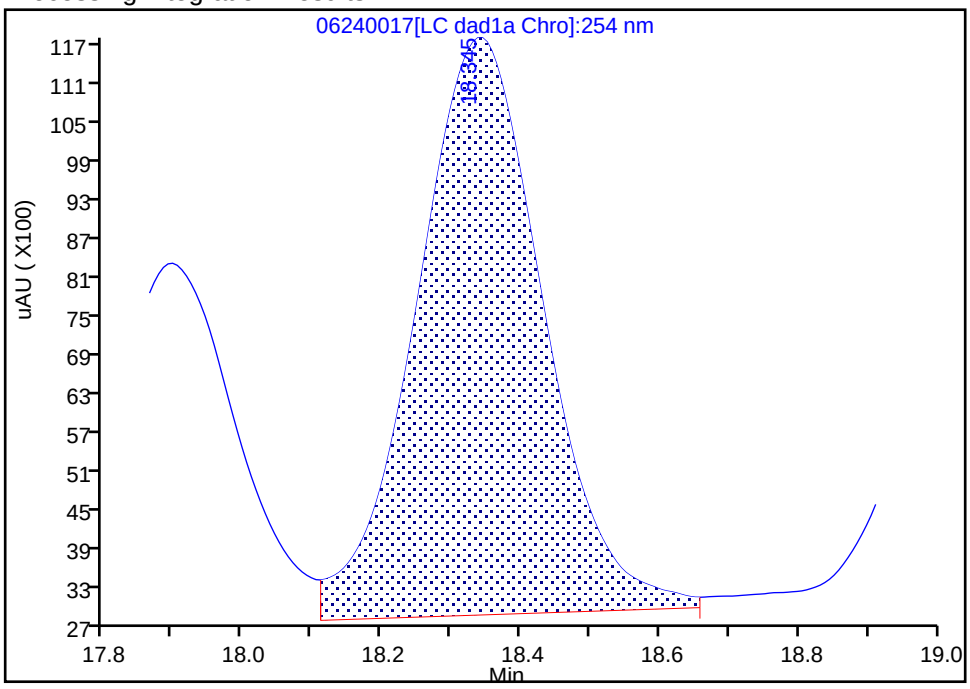
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d
Injection Date: 25-Jun-2020 03:46:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

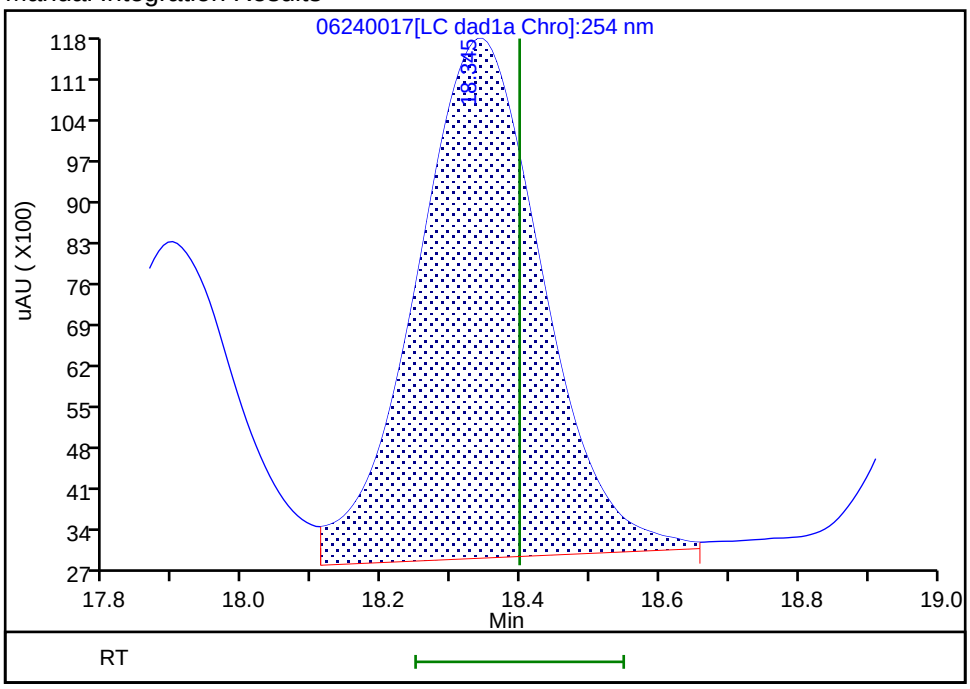
Processing Integration Results

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

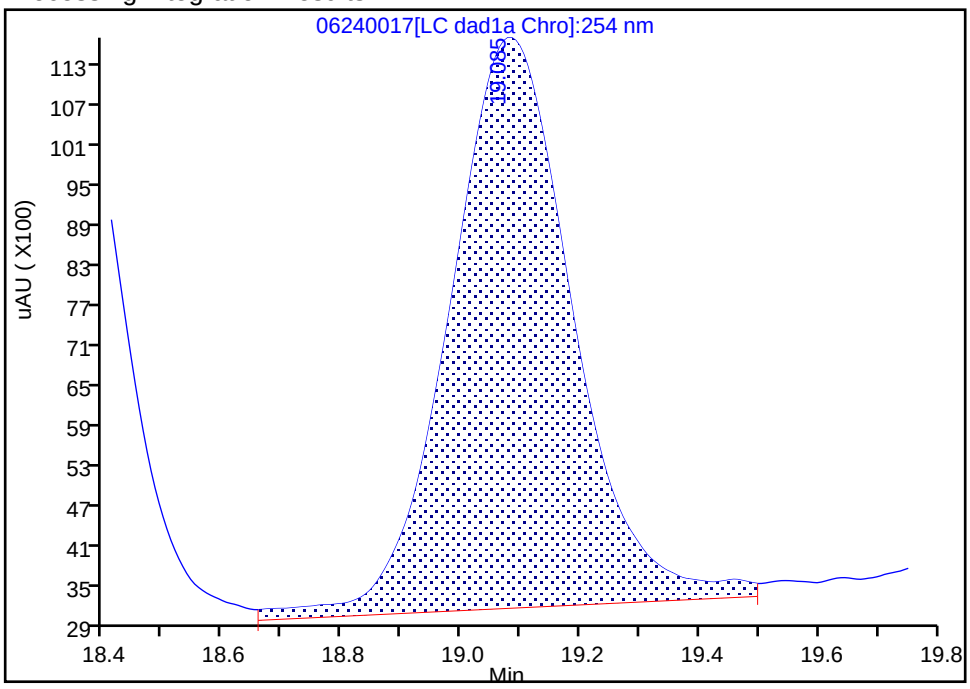
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

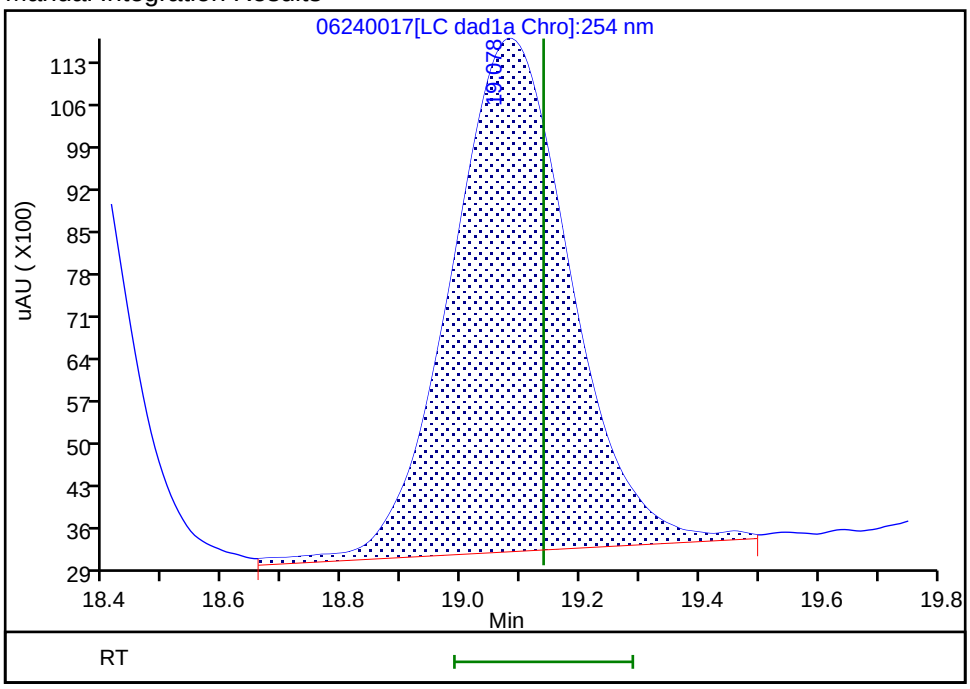
Processing Integration Results

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

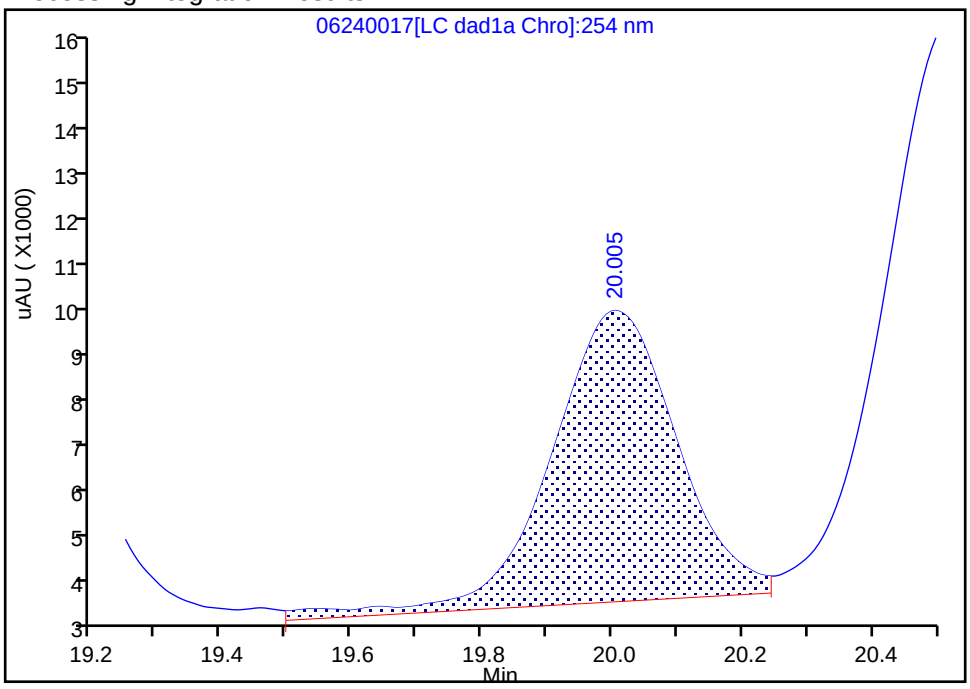
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

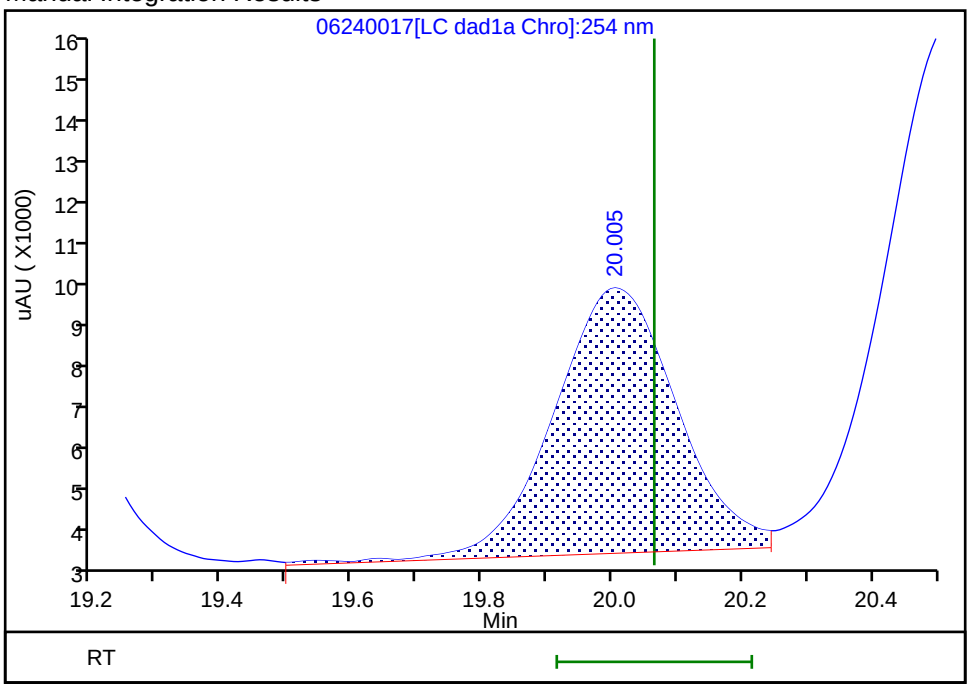
Processing Integration Results

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

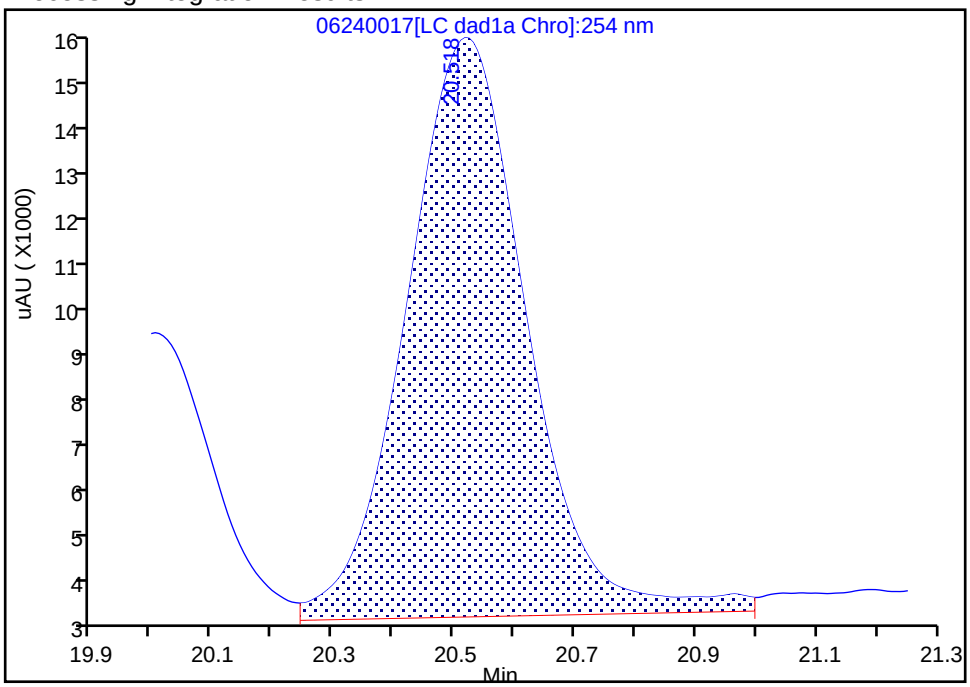
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240017.d				
Injection Date:	25-Jun-2020 03:46:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

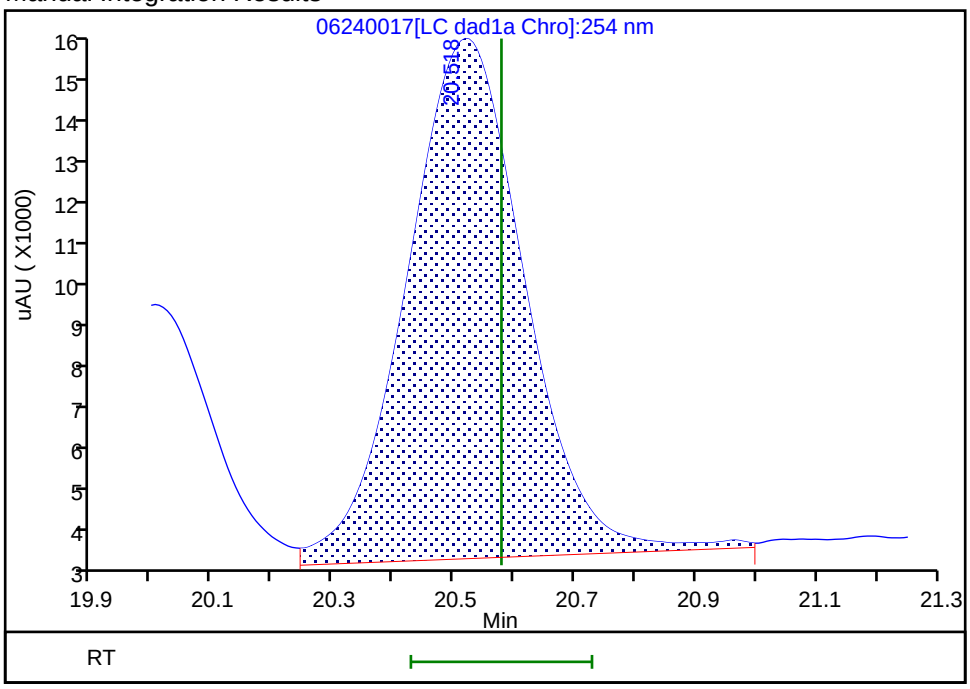
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

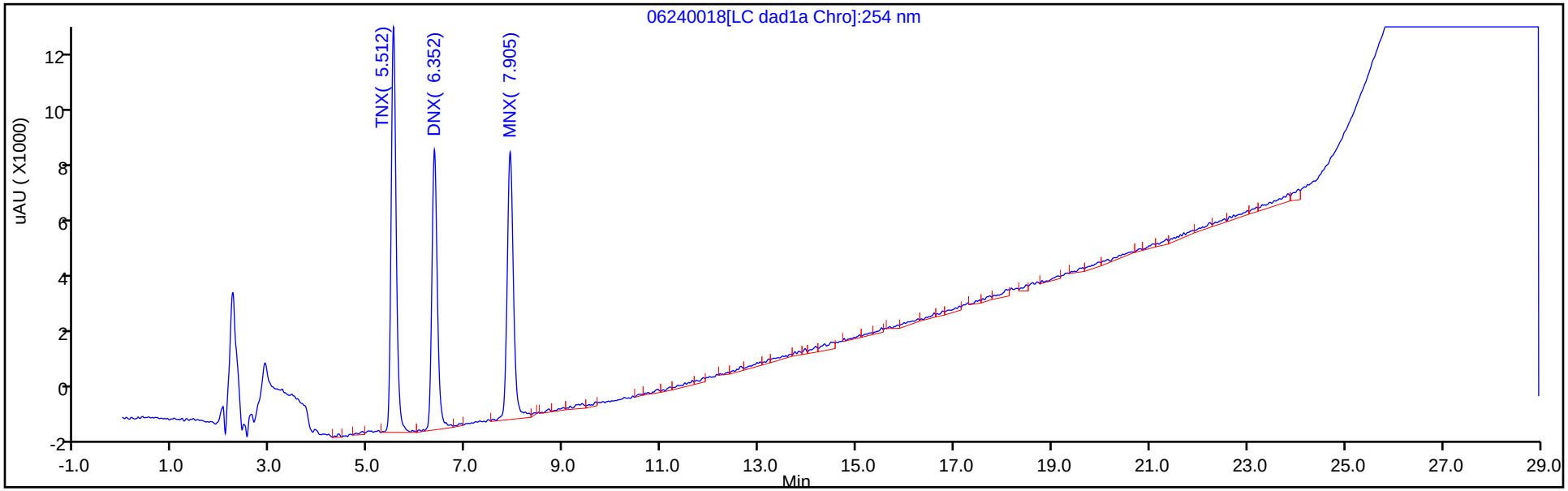
Report Date: 26-Jun-2020 16:19:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

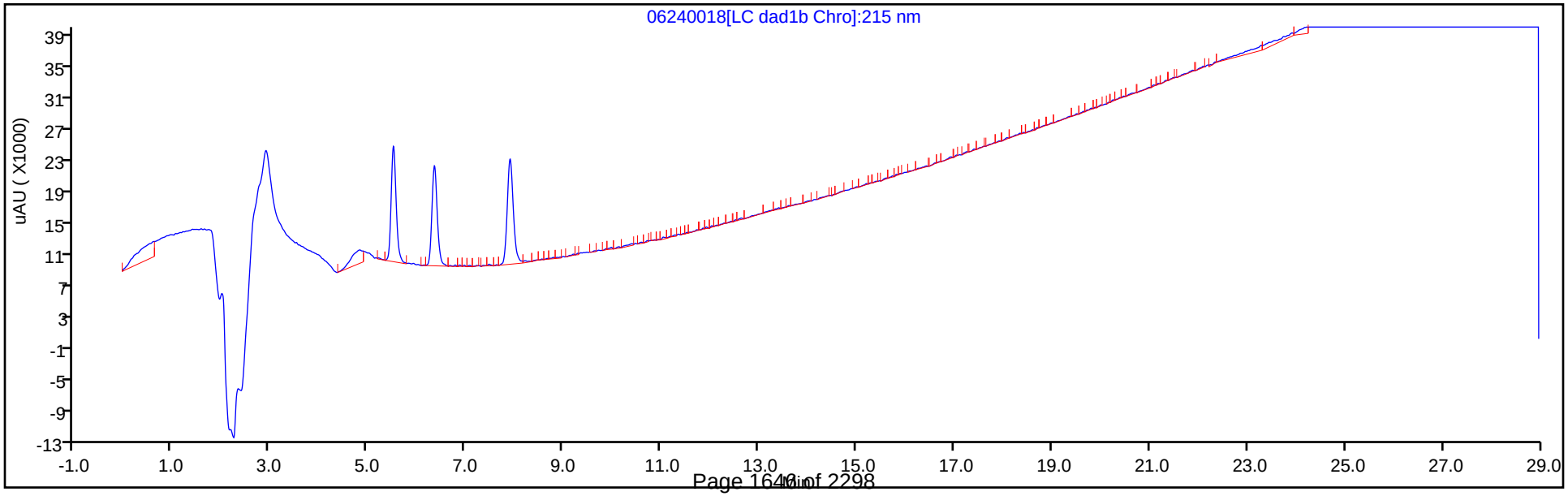
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240018.d

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.: 280-137609-1

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.: 280-137609-1

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

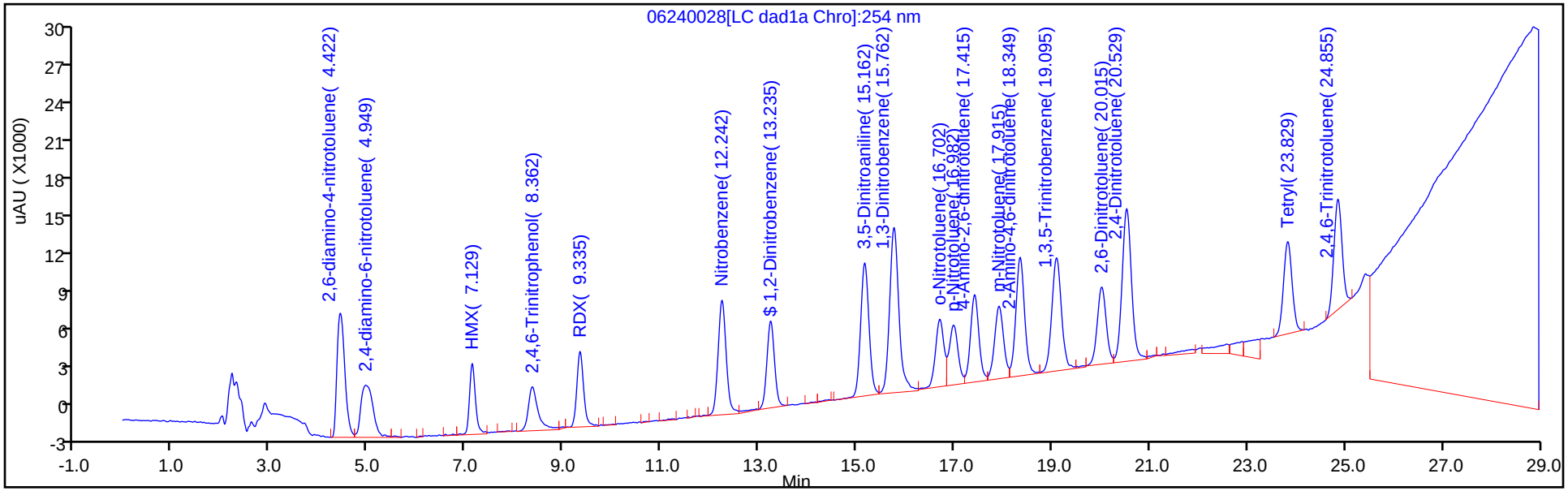
Report Date: 26-Jun-2020 16:19:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

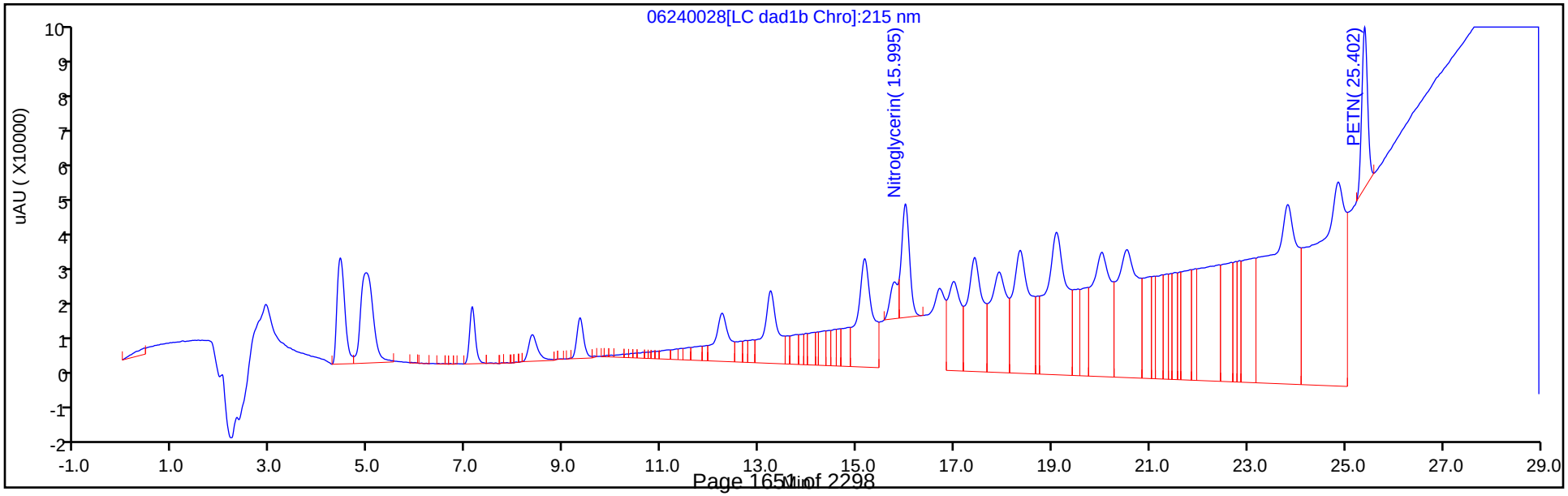
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d

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

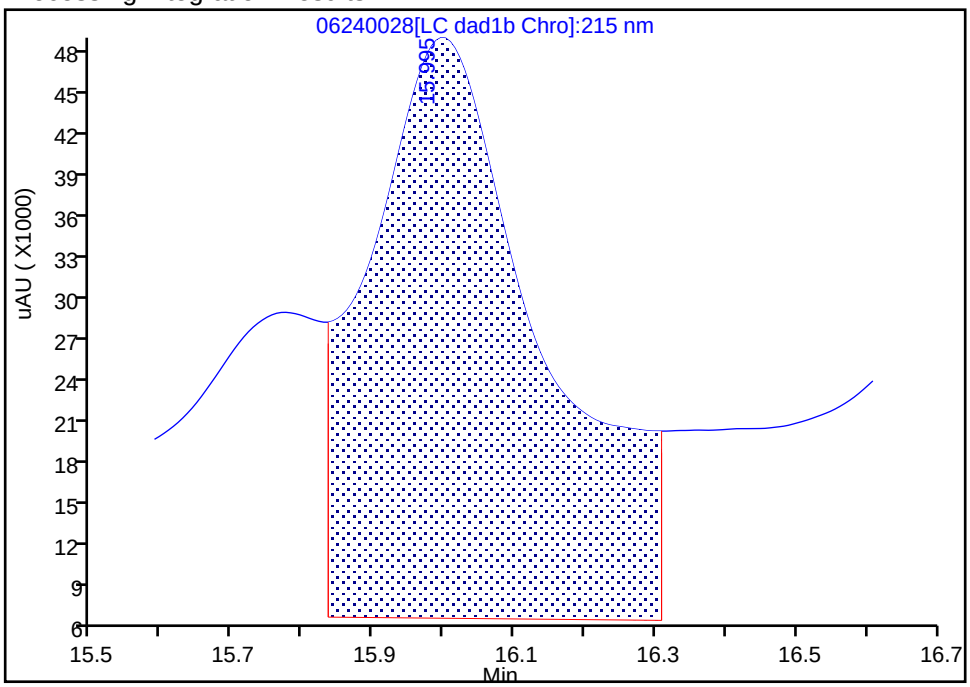
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

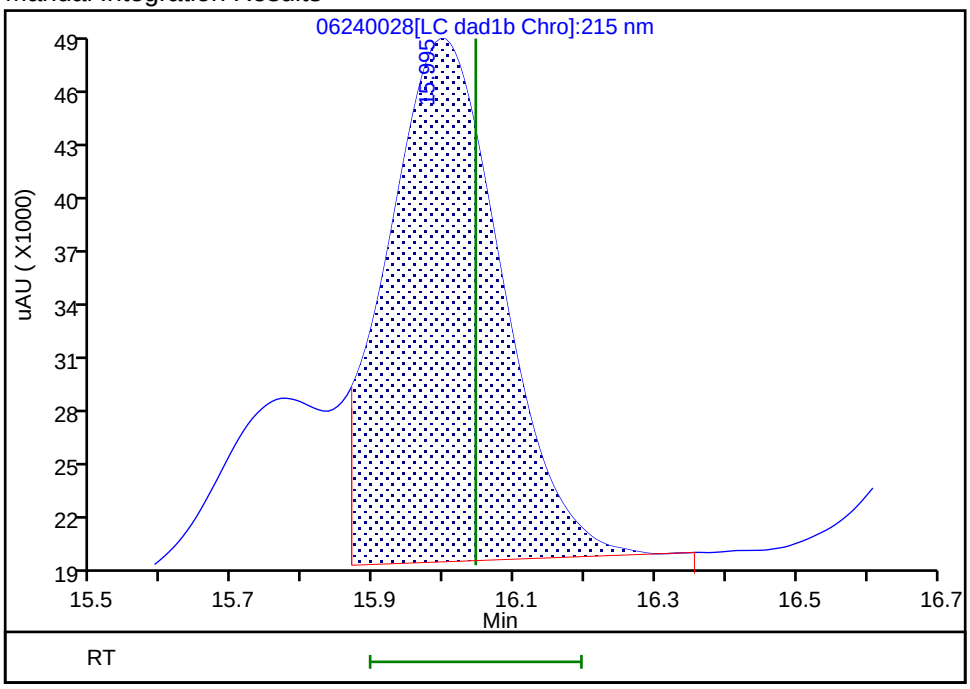
Processing Integration Results

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

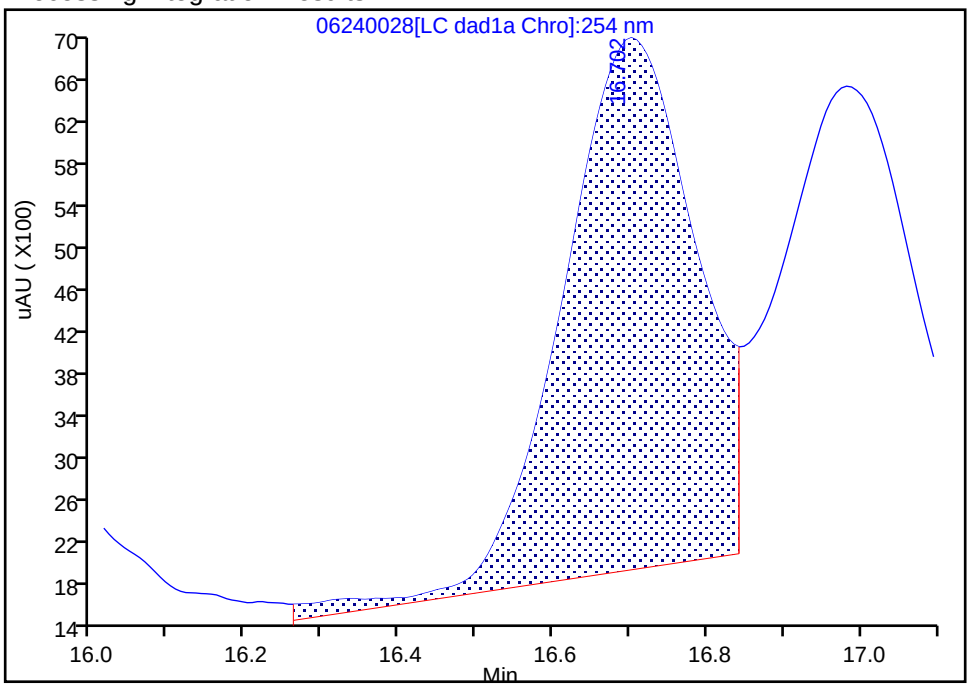
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

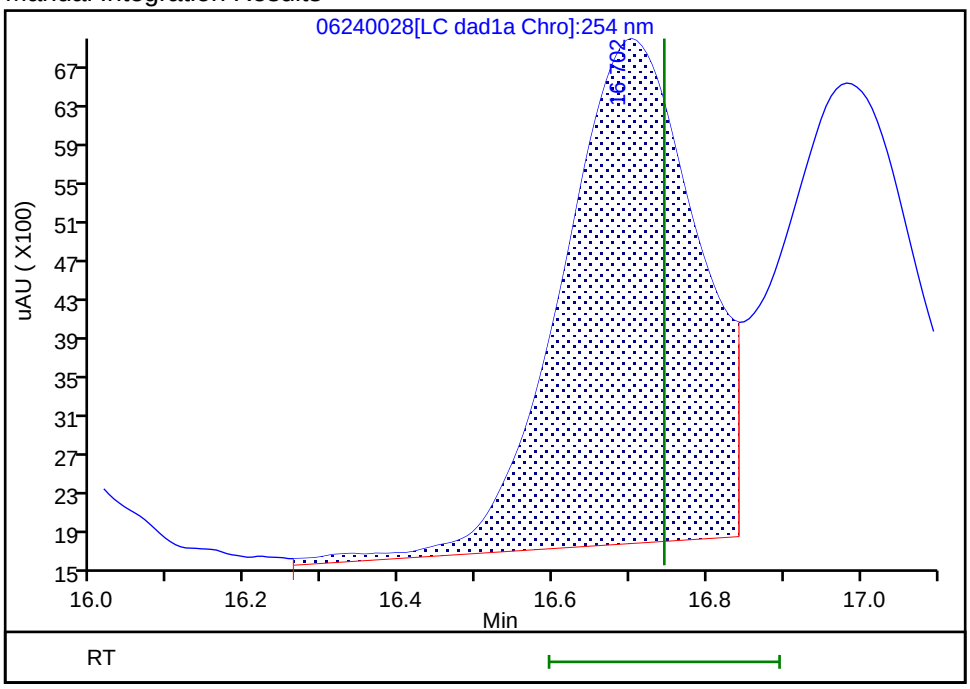
Processing Integration Results

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

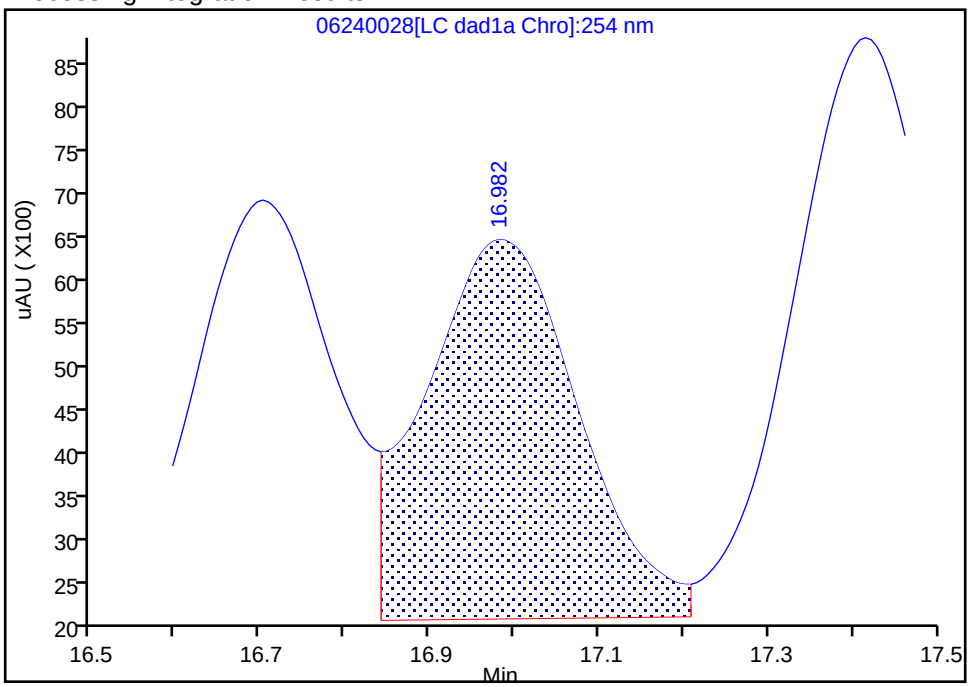
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

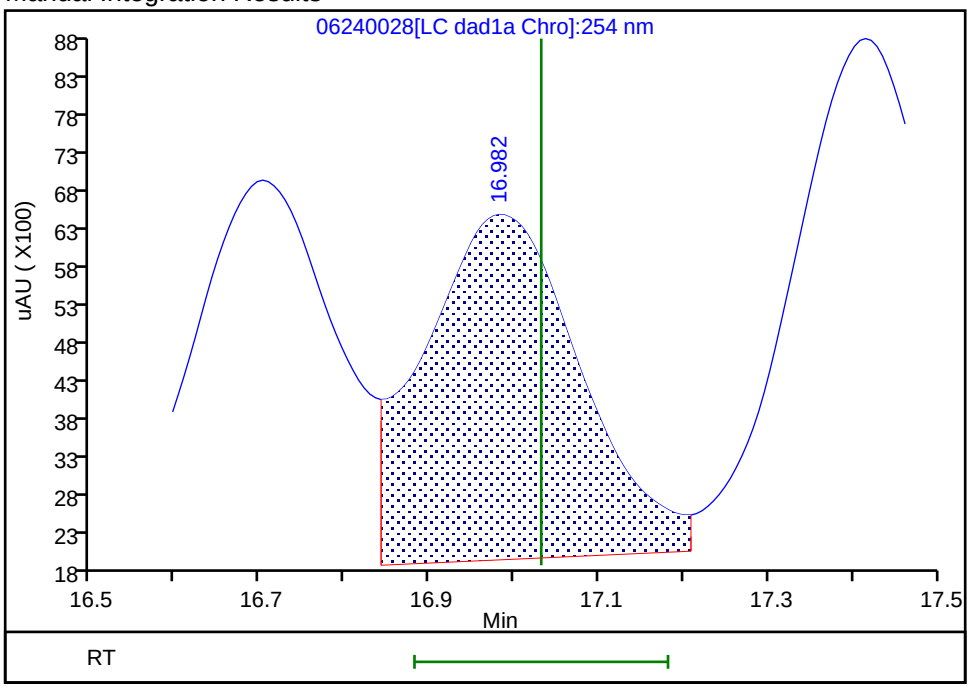
Processing Integration Results

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

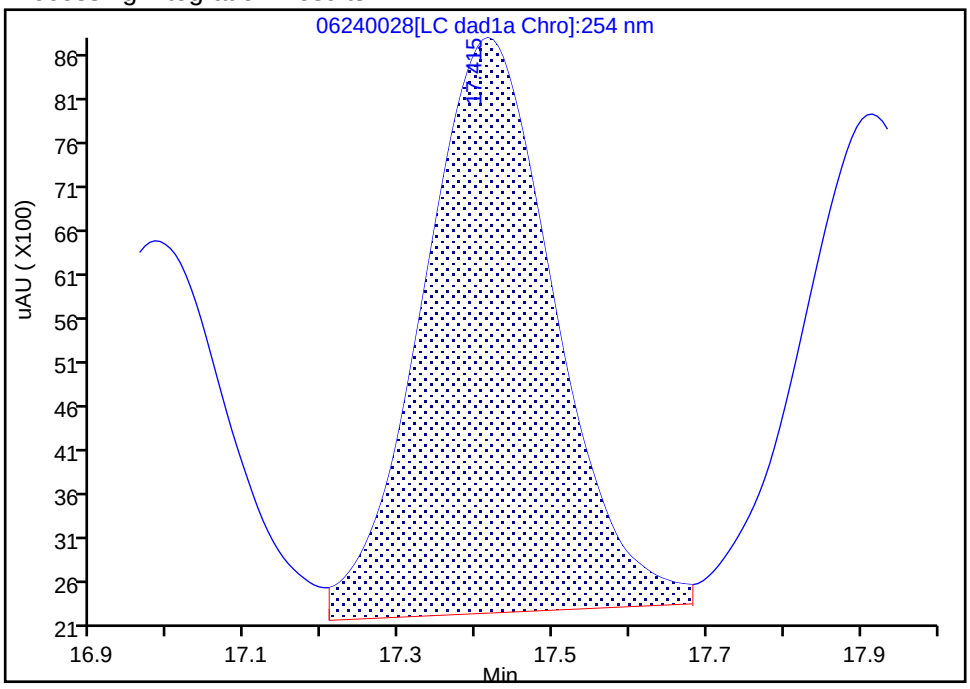
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

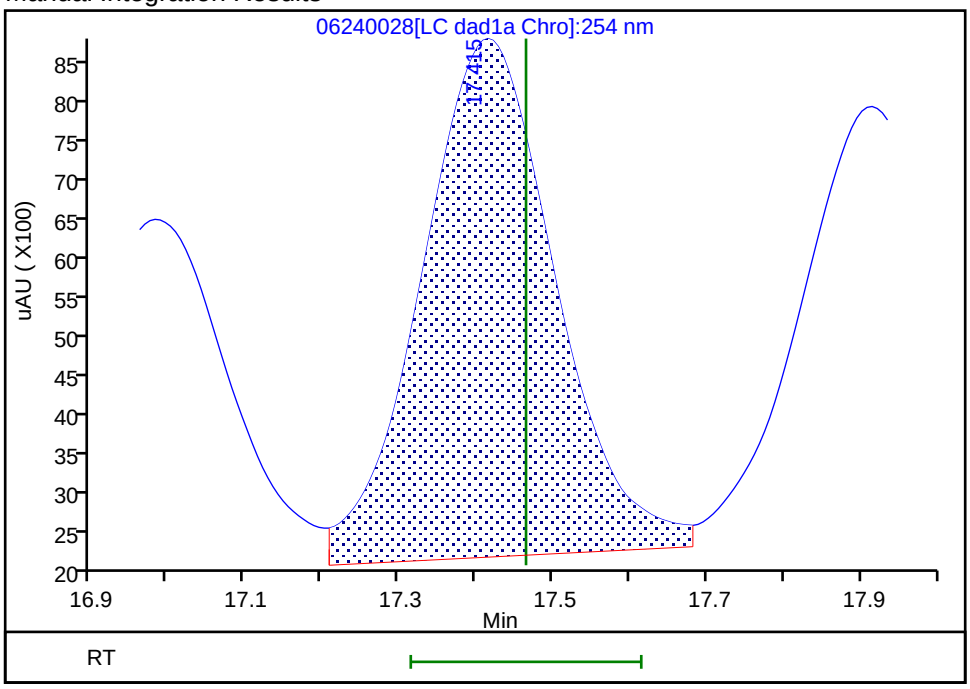
Processing Integration Results

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

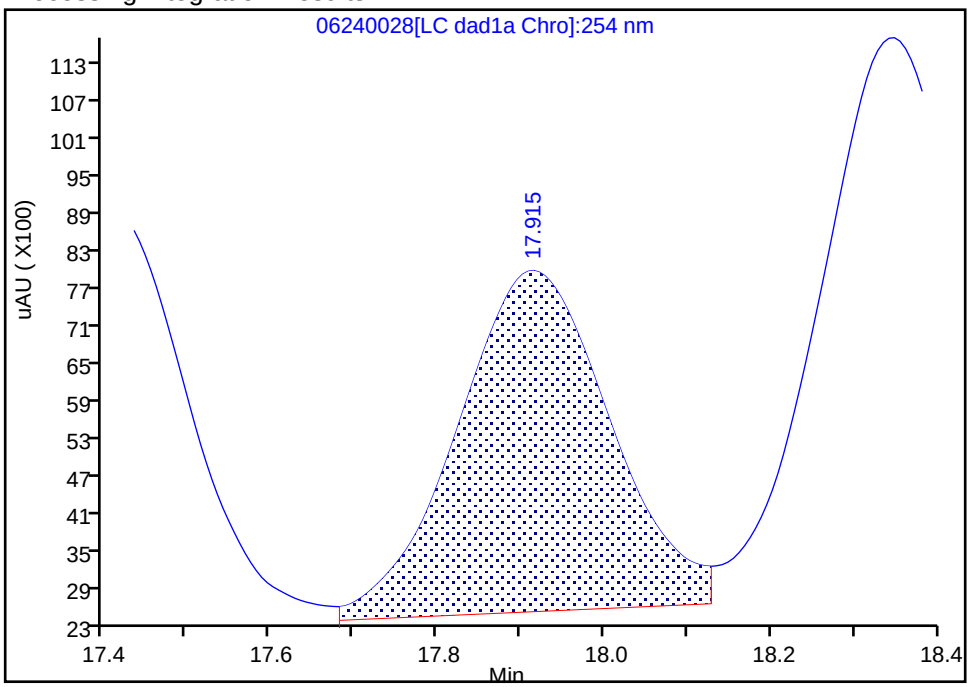
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

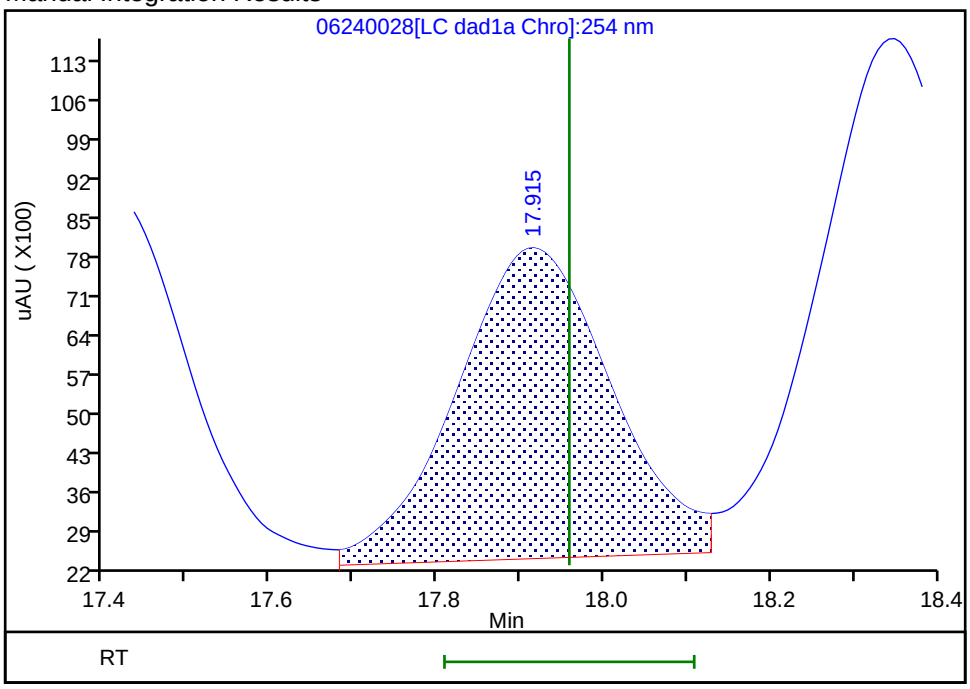
Processing Integration Results

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

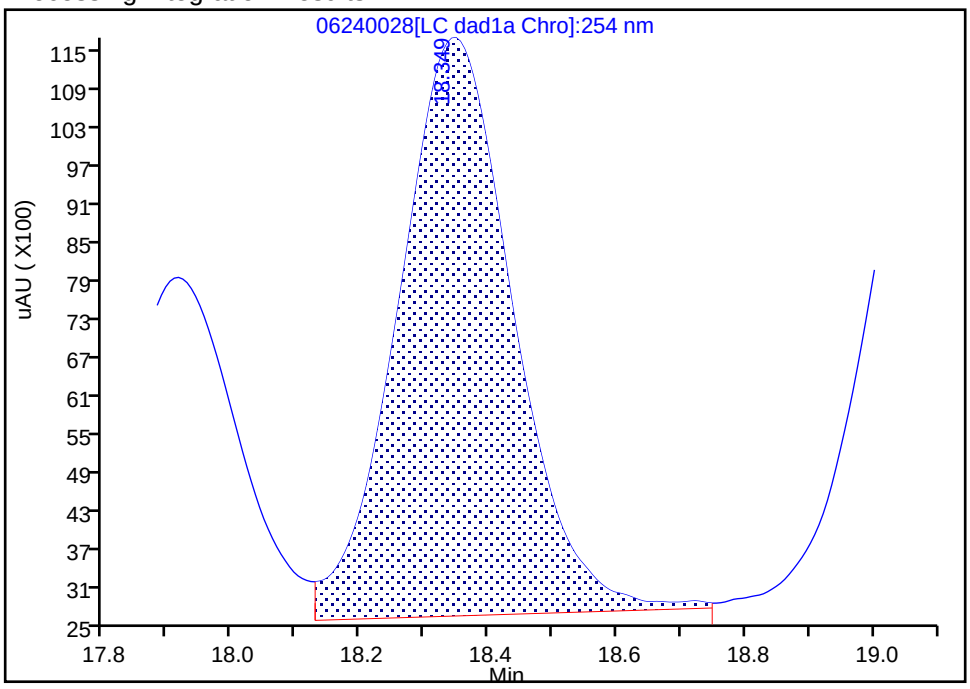
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

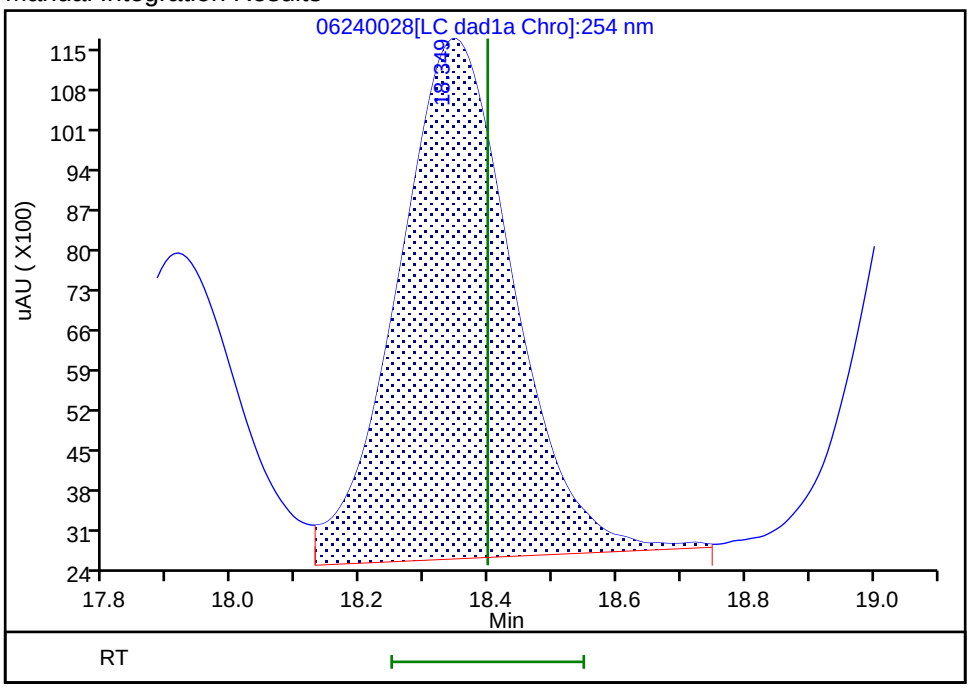
Processing Integration Results

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

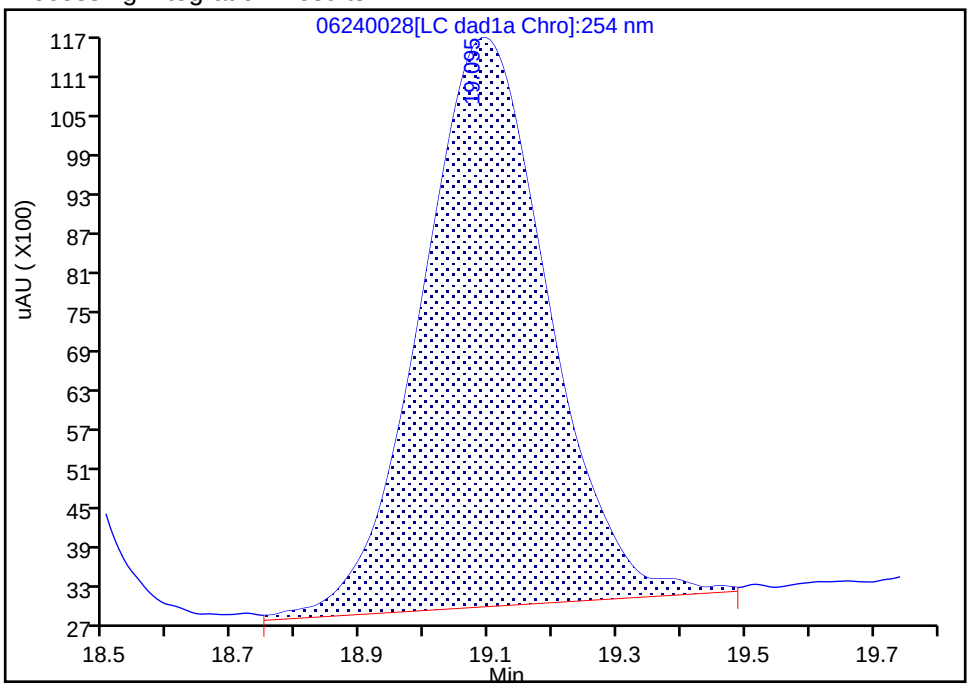
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

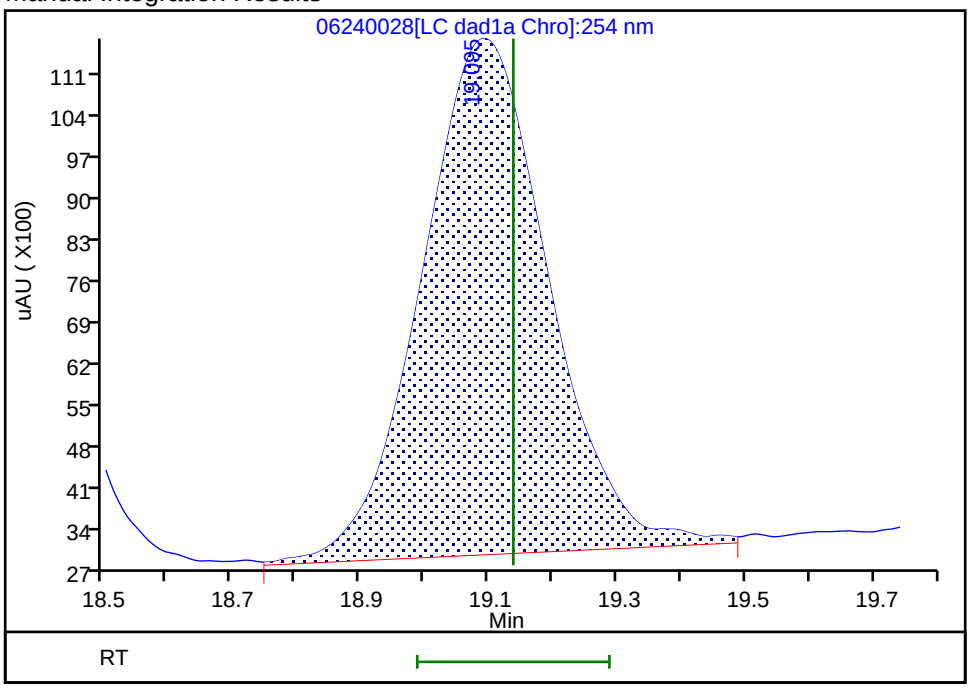
Processing Integration Results

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

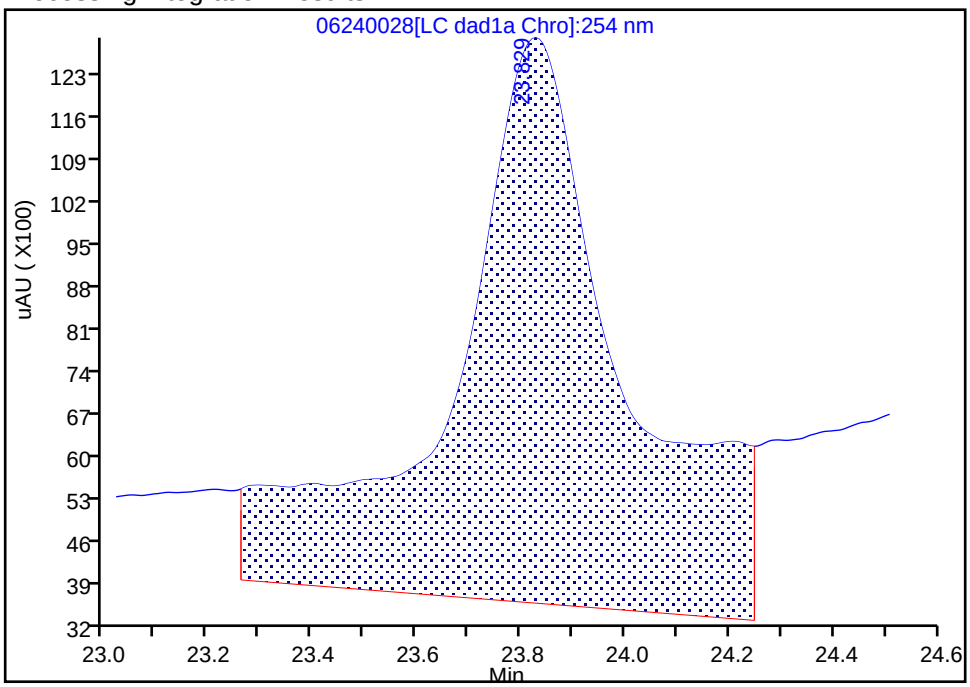
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

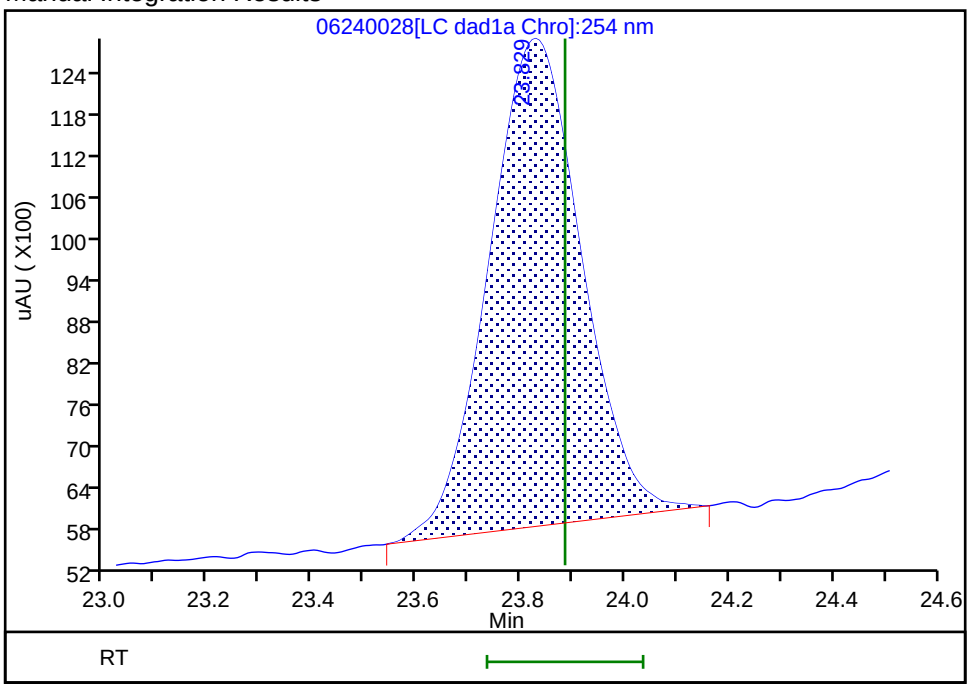
Processing Integration Results

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

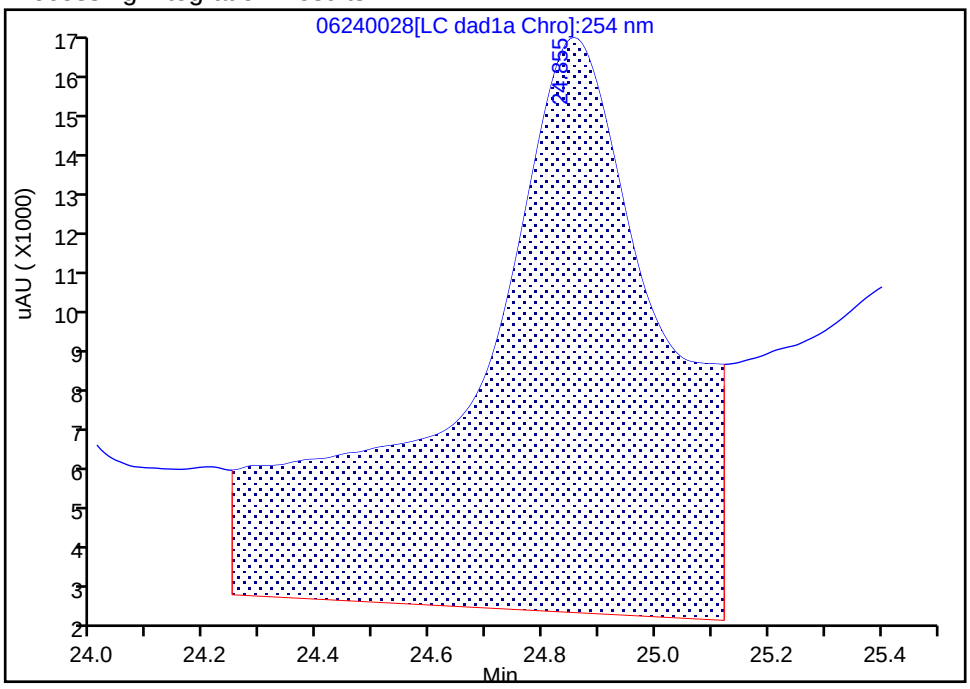
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d				
Injection Date:	25-Jun-2020 10:10:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

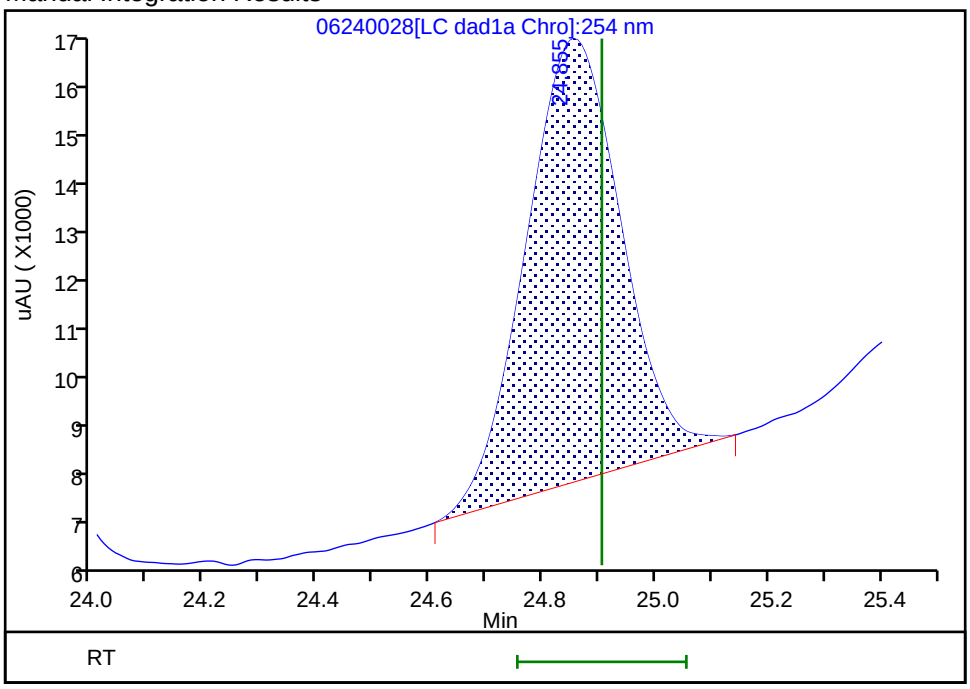
Processing Integration Results

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

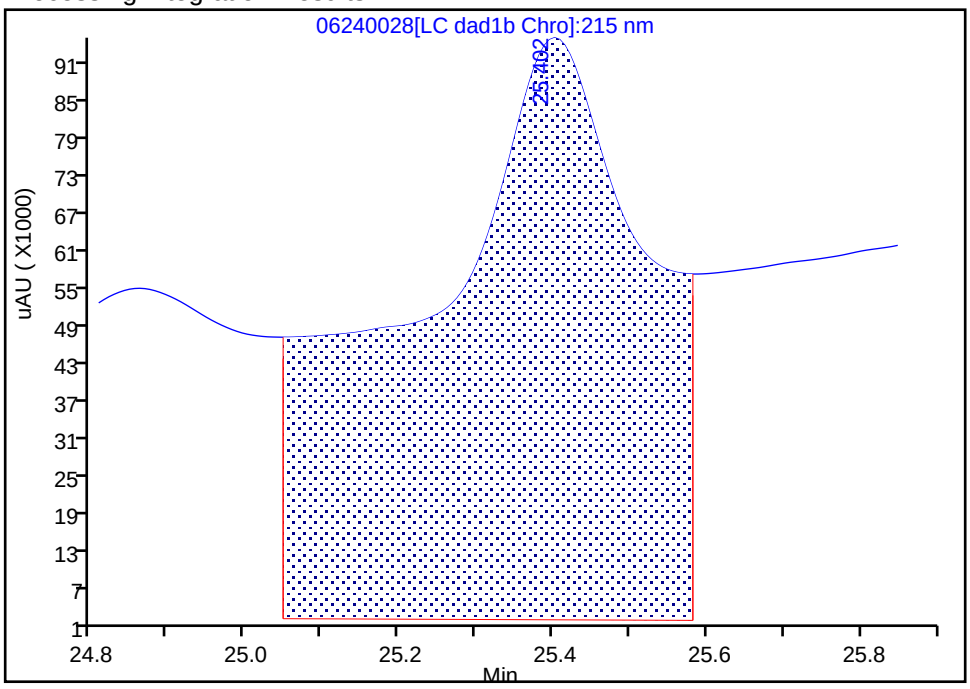
Data File: \\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240028.d
Injection Date: 25-Jun-2020 10:10:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

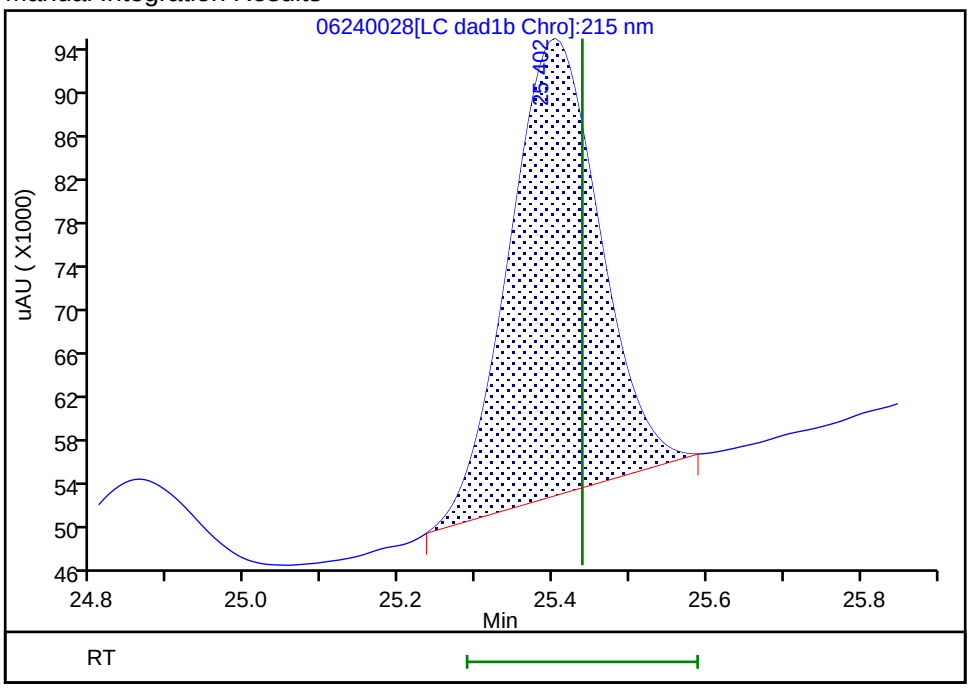
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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:

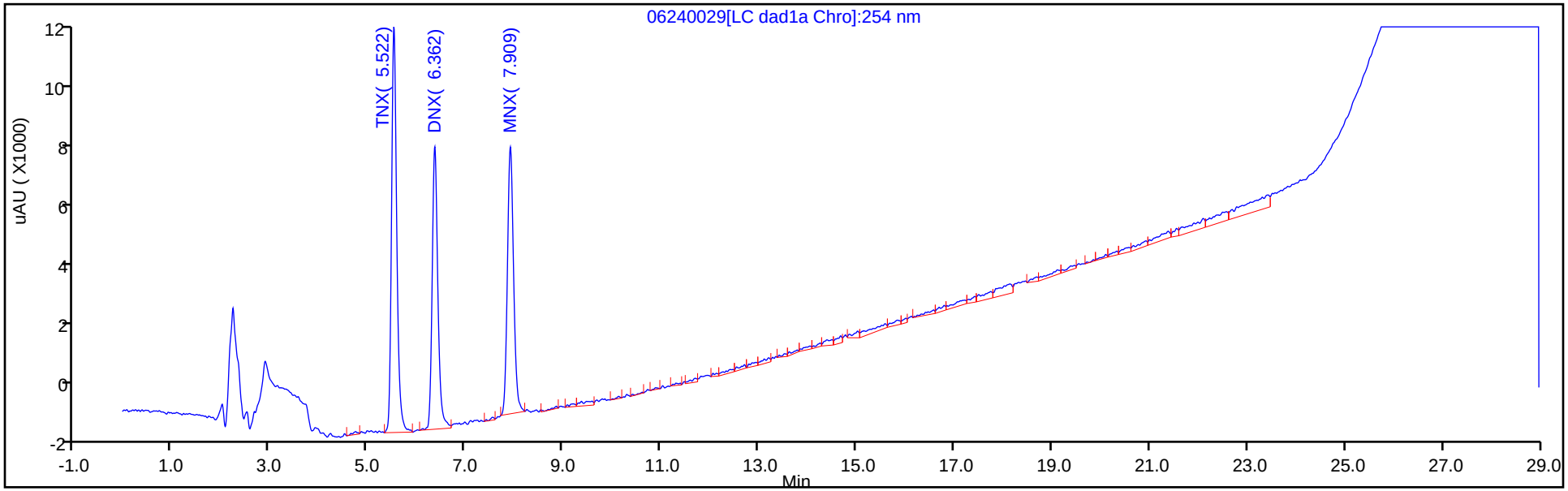
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 26-Jun-2020 16:19:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

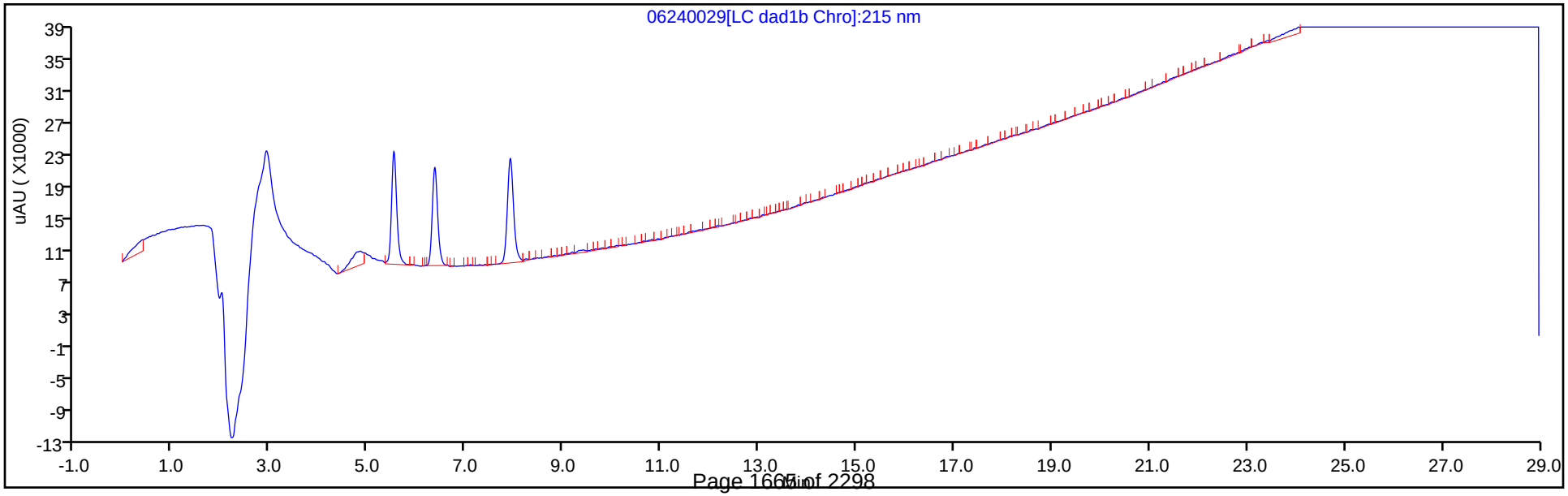
Eurofins TestAmerica, Denver

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

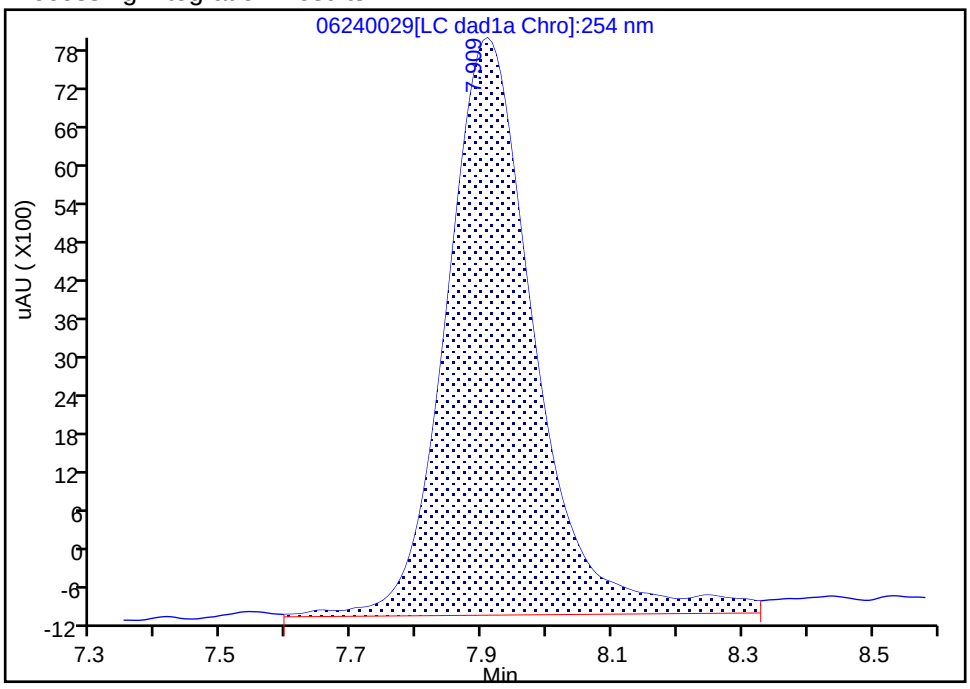
Data File:	\\chromfs\denver\chromdata\g2_luna\20200624-92719.b\06240029.d				
Injection Date:	25-Jun-2020 10:45:57	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

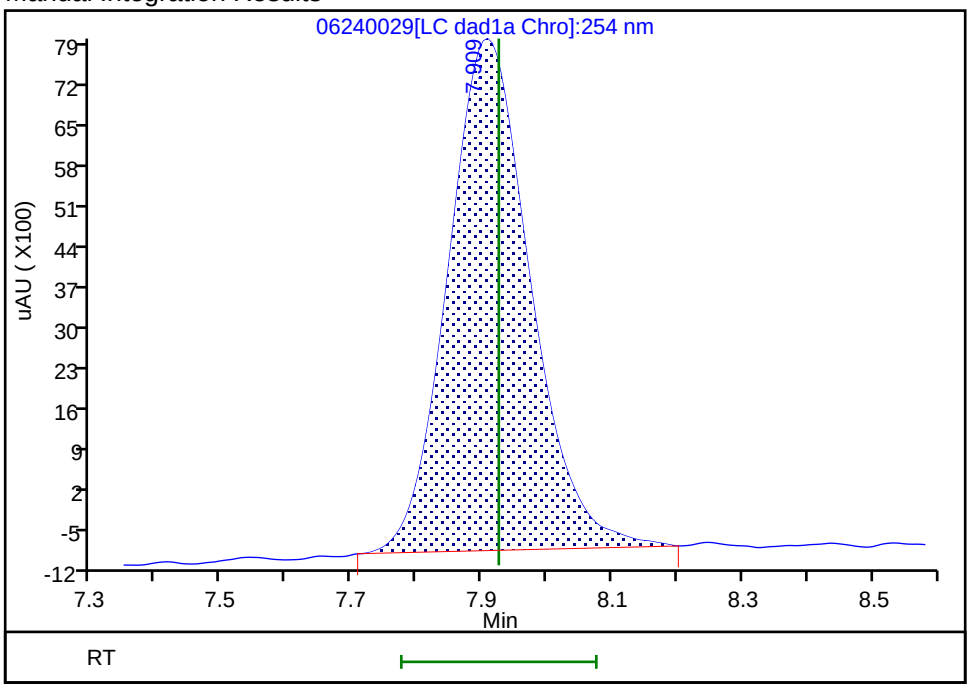
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

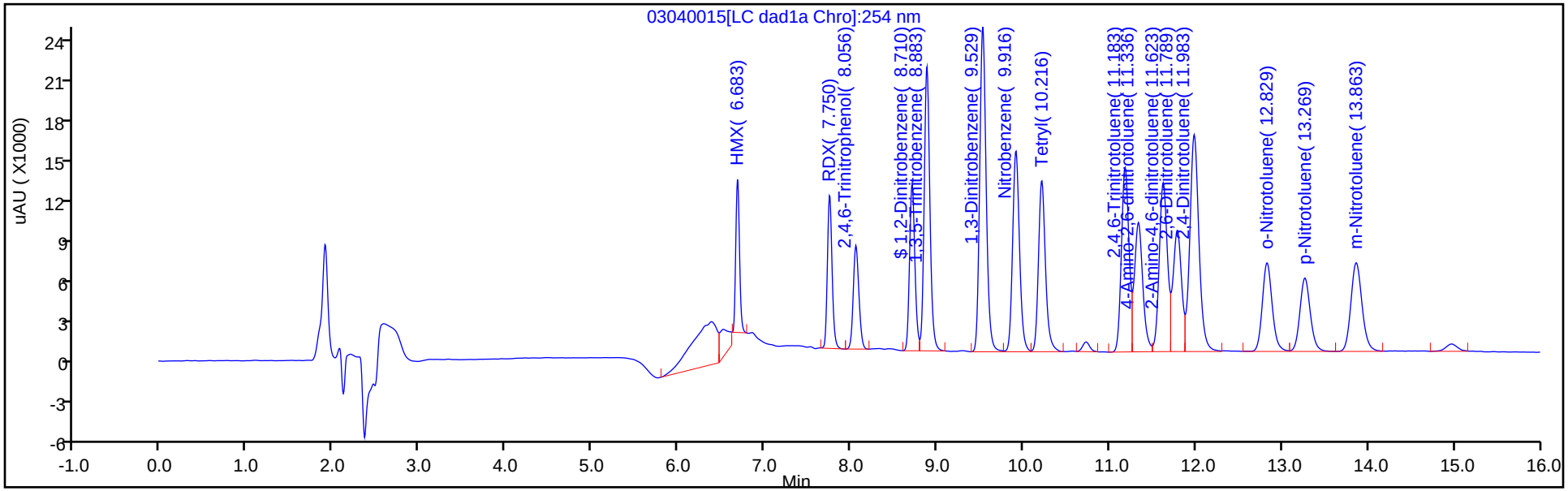
Report Date: 06-Mar-2020 10:25:10 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

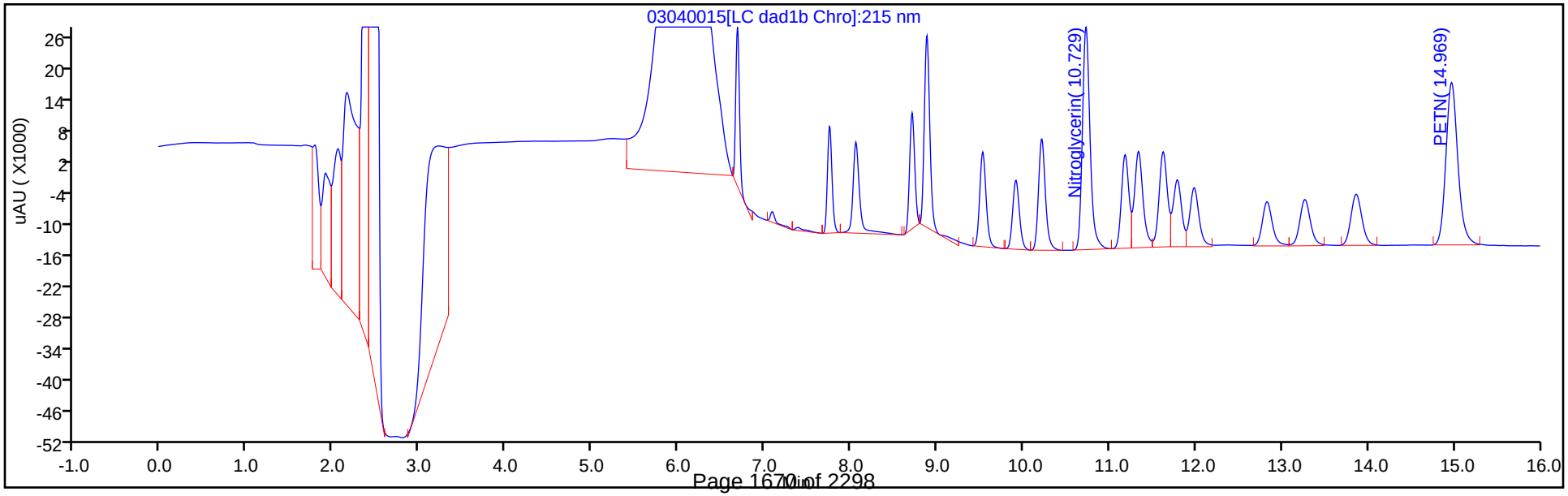
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040015.d

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

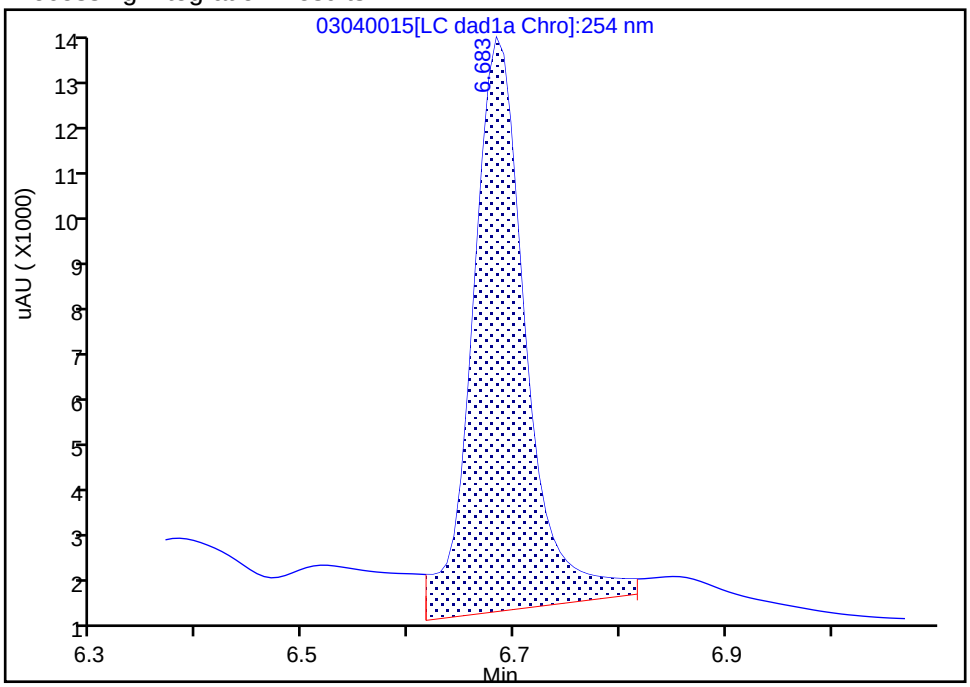
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040015.d				
Injection Date:	04-Mar-2020 17:10:41	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

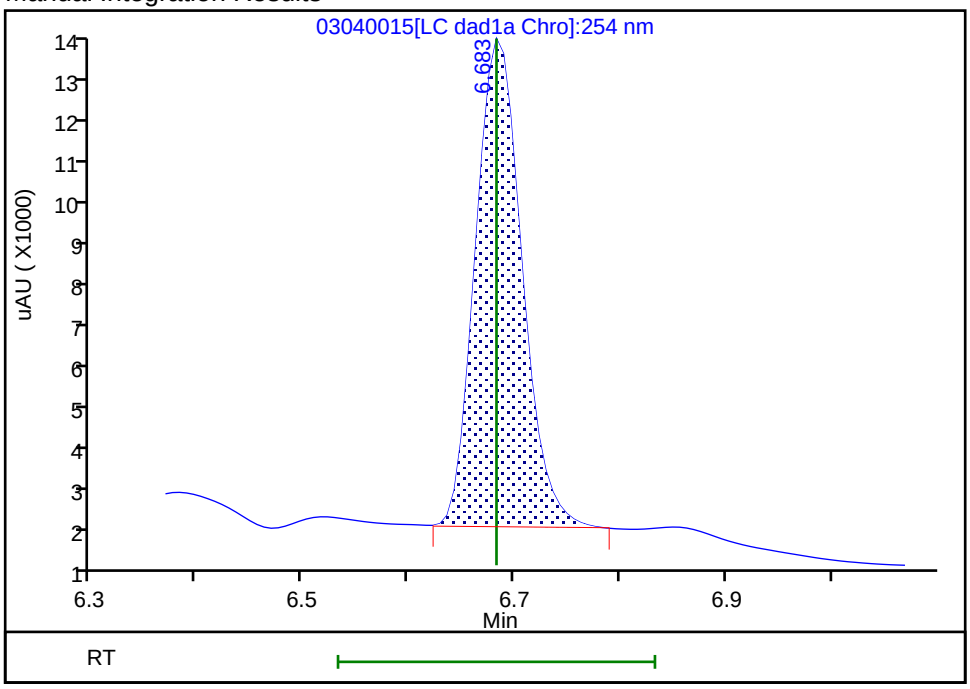
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

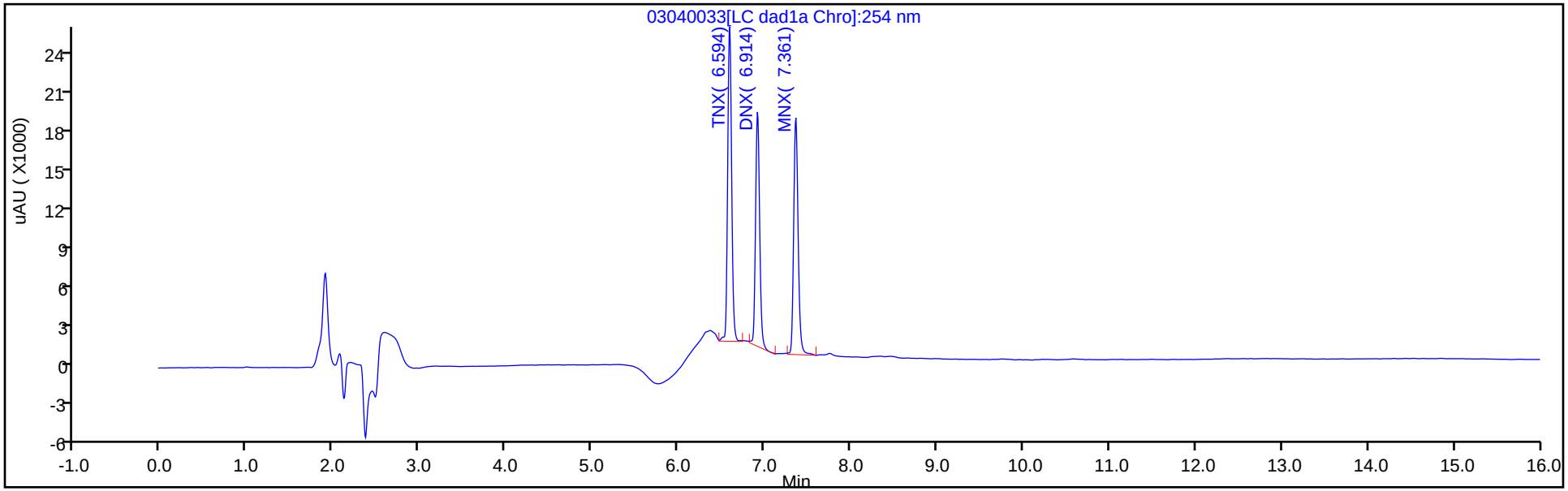
Report Date: 06-Mar-2020 10:25:29 Chrom Revision: 2.3 19-Feb-2020 16:45:46

Eurofins TestAmerica, Denver

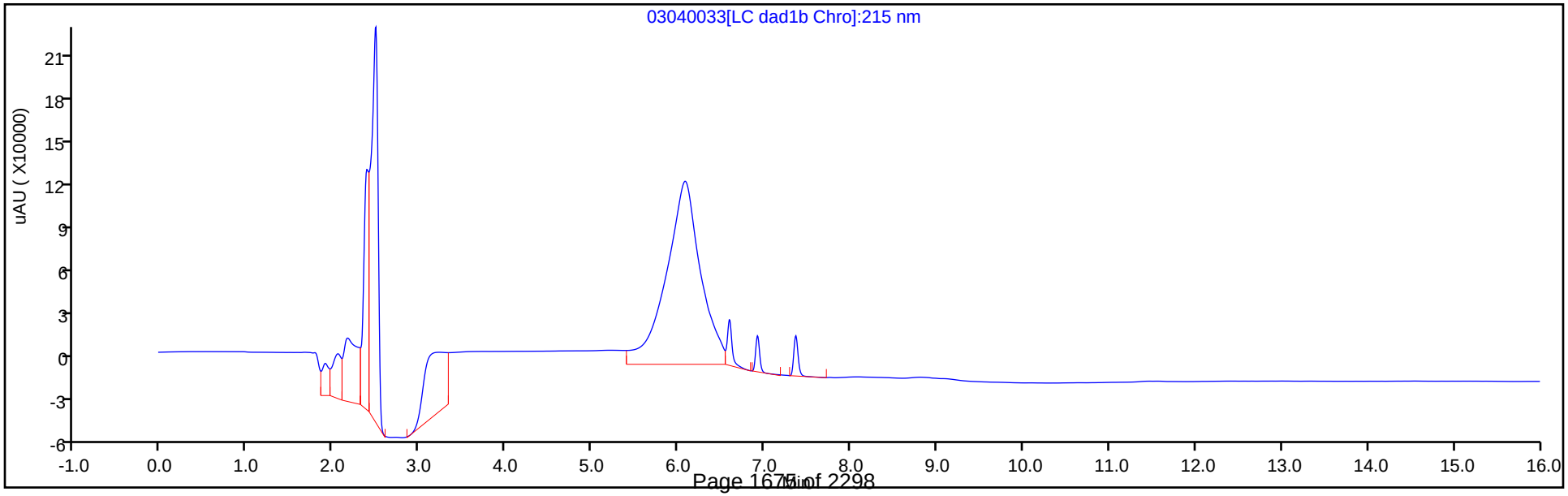
Data File: \\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d

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

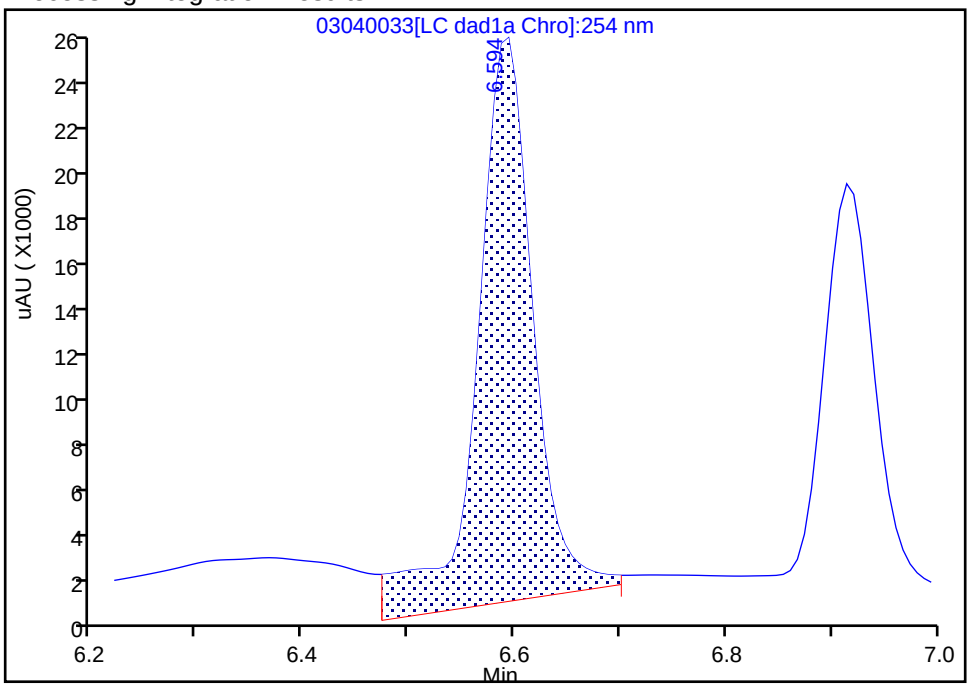
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

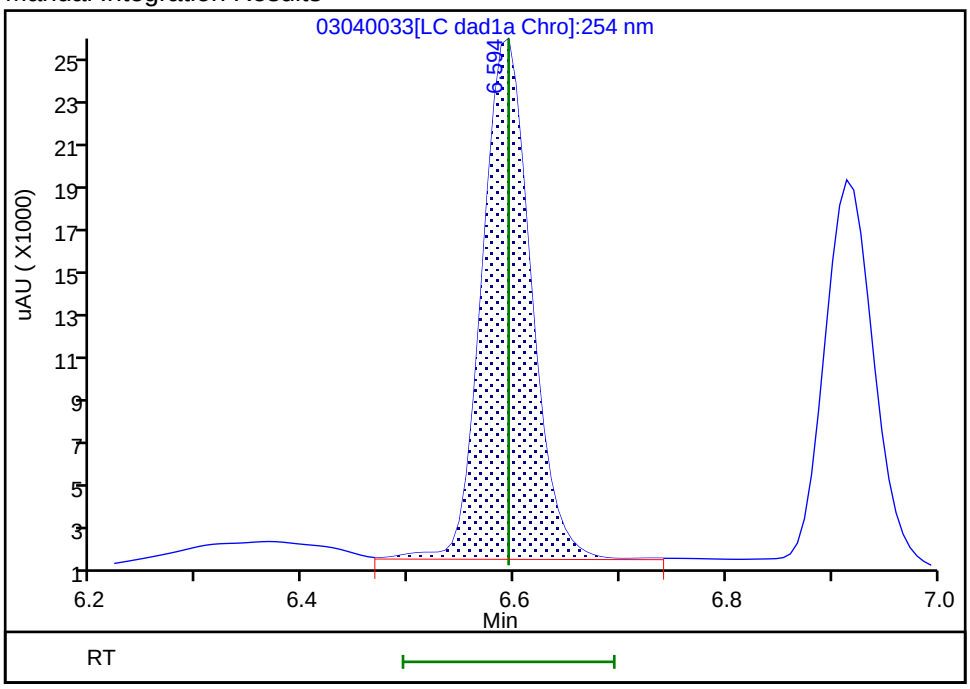
Processing Integration Results

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

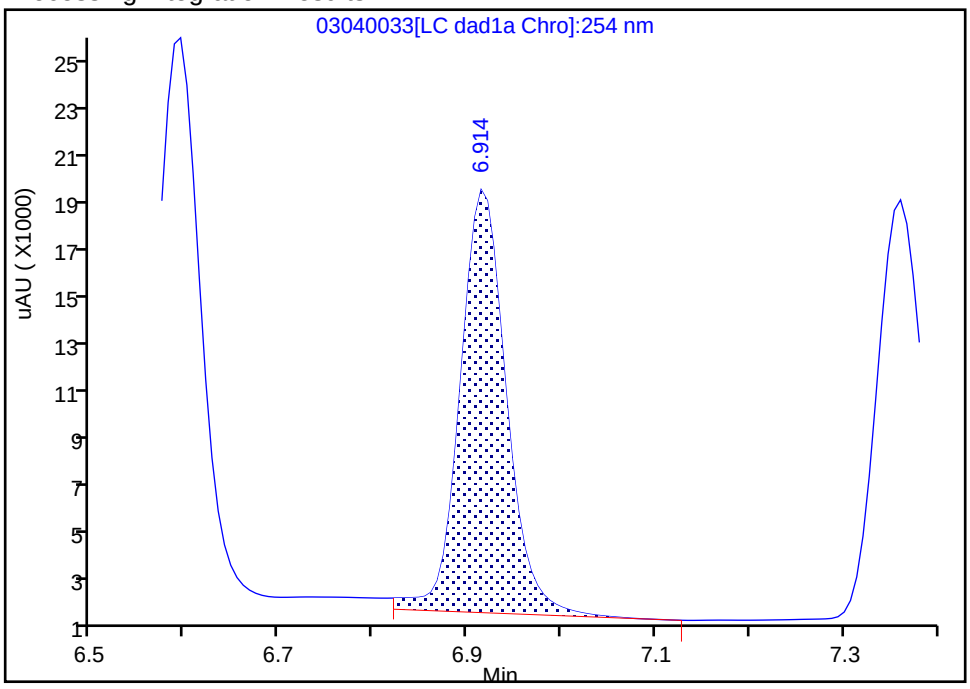
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

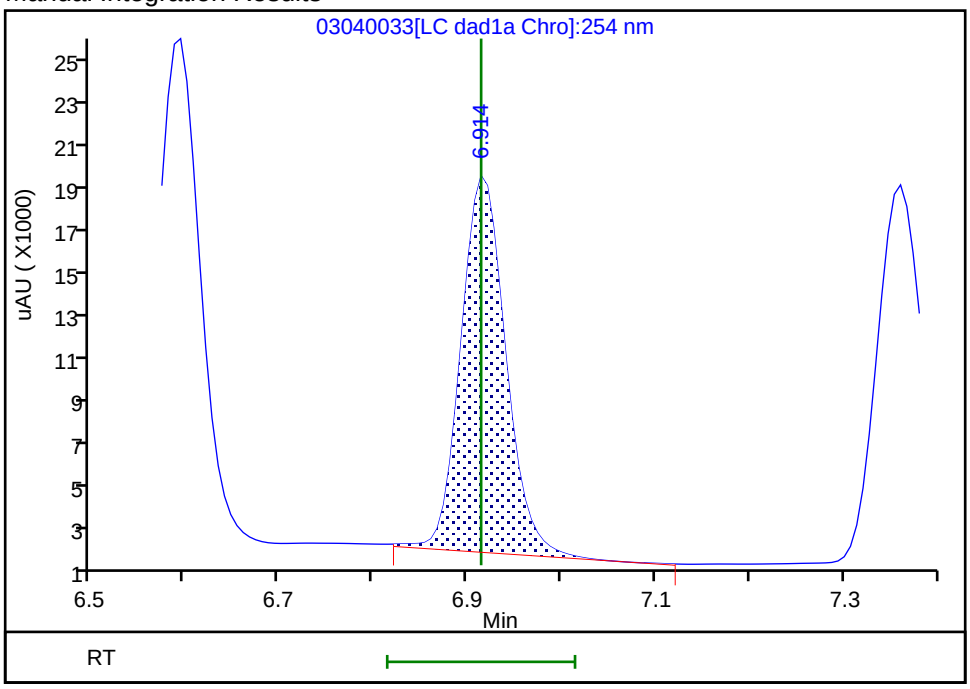
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

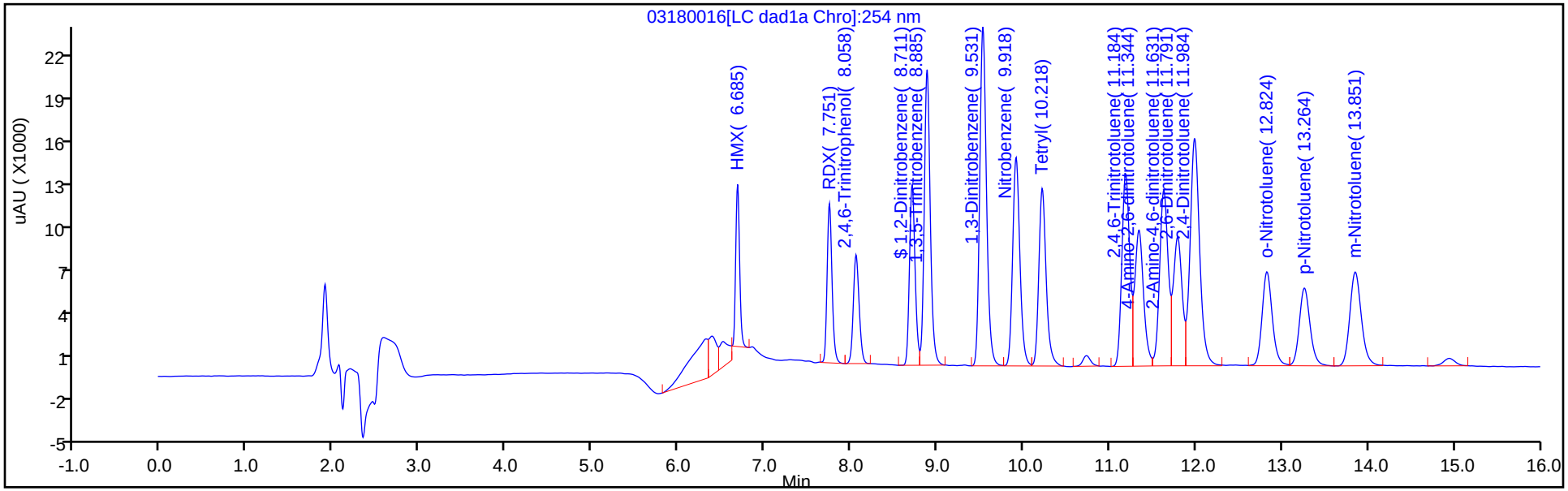
Report Date: 26-Mar-2020 15:45:47 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

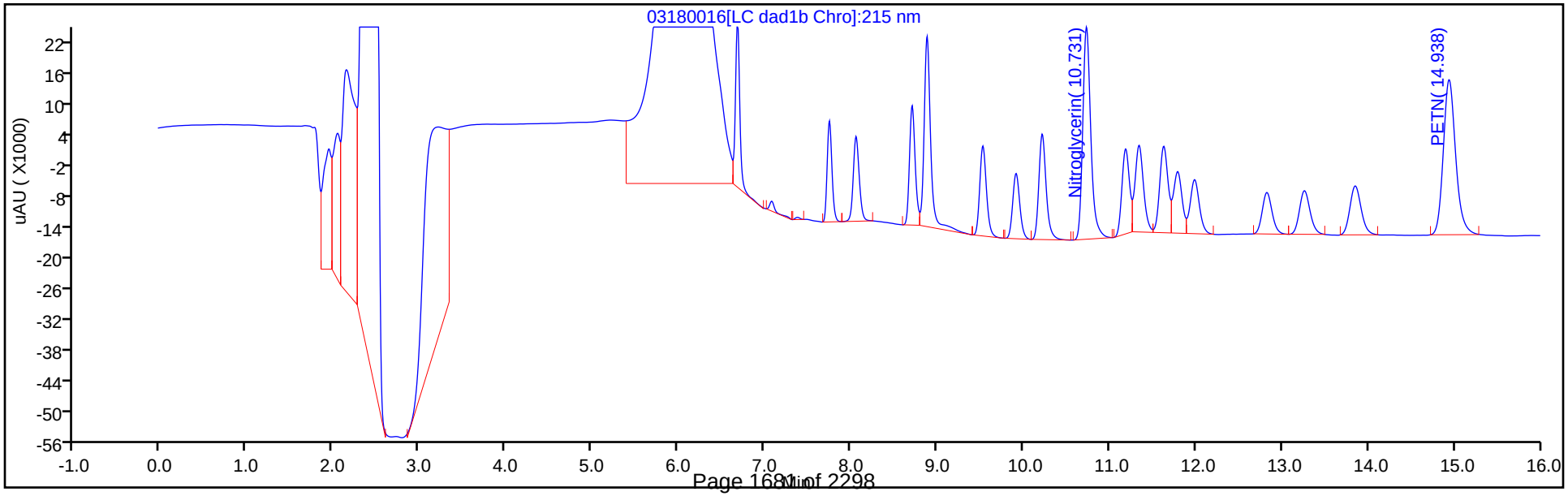
Data File: \\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180016.d

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

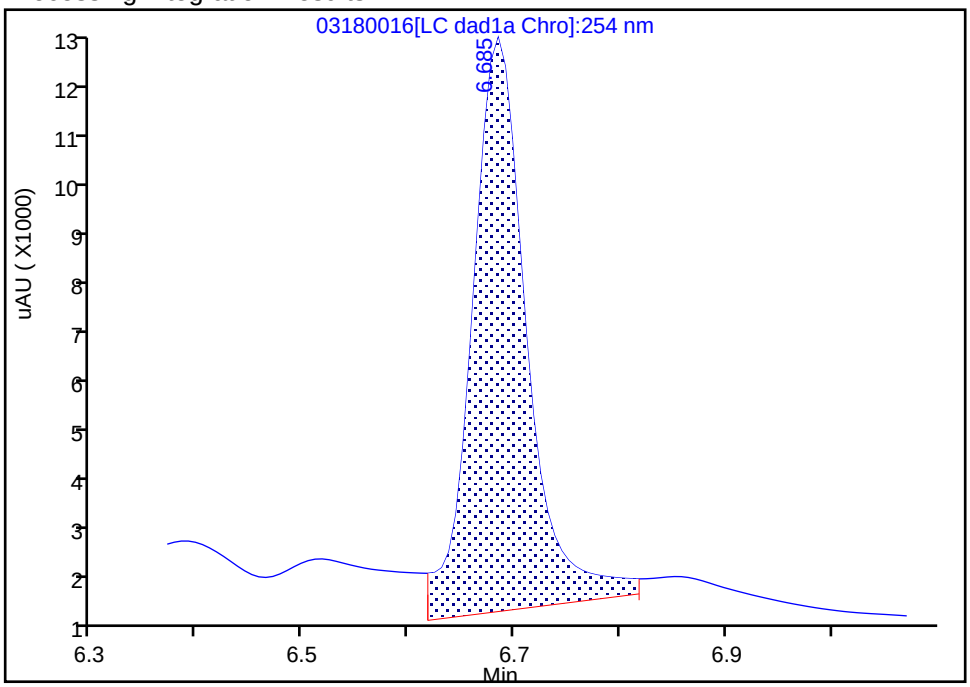
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180016.d				
Injection Date:	18-Mar-2020 15:02:22	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

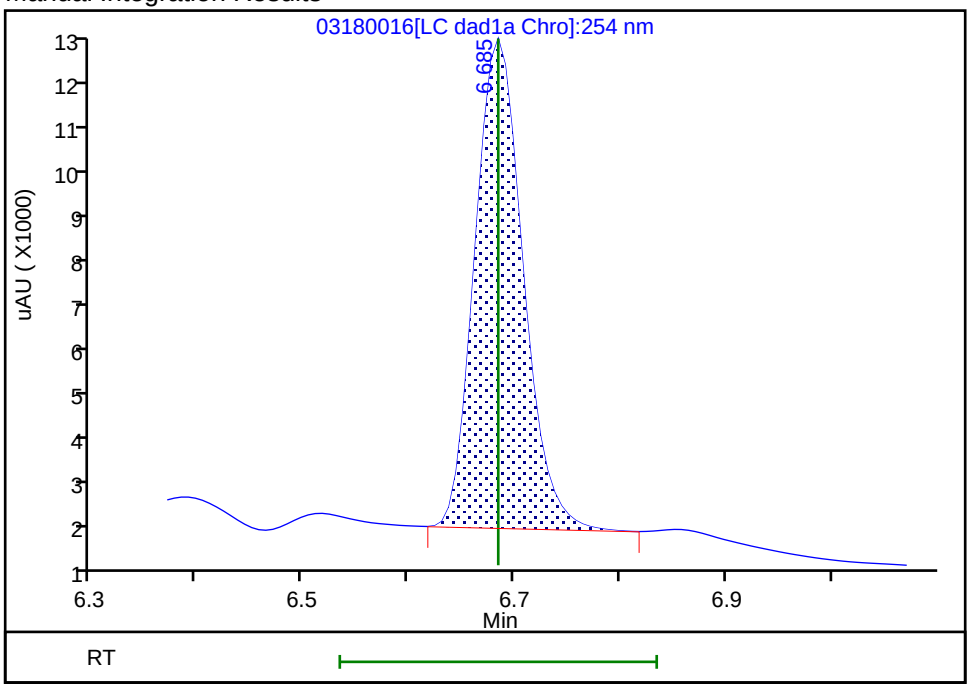
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

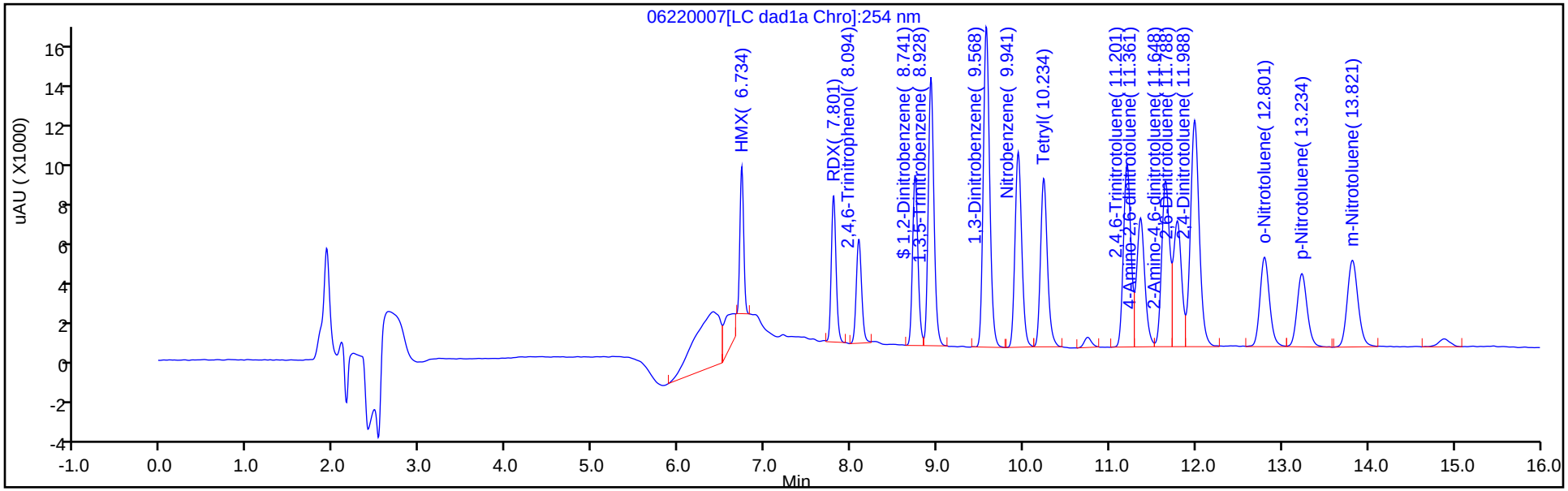
Report Date: 23-Jun-2020 15:17:54 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

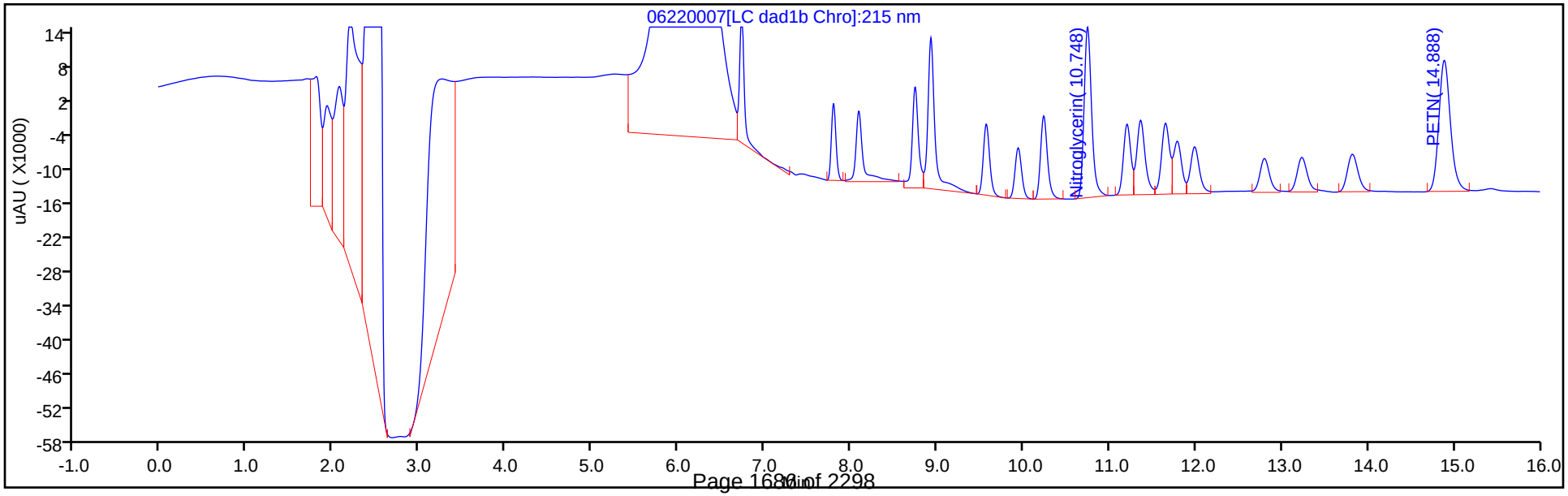
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220007.d

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

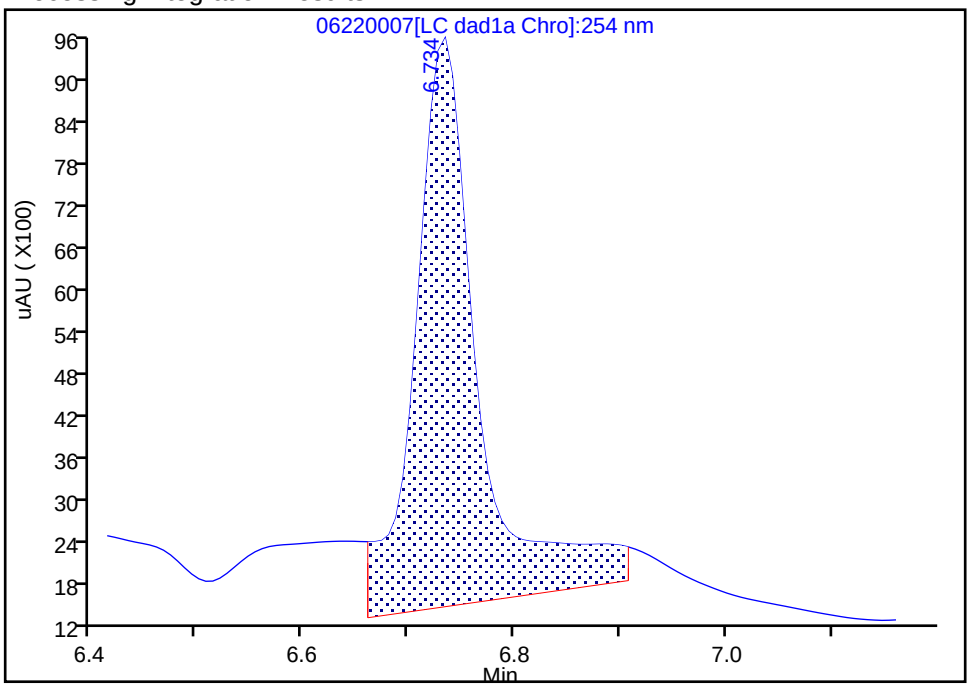
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220007.d				
Injection Date:	22-Jun-2020 14:07:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

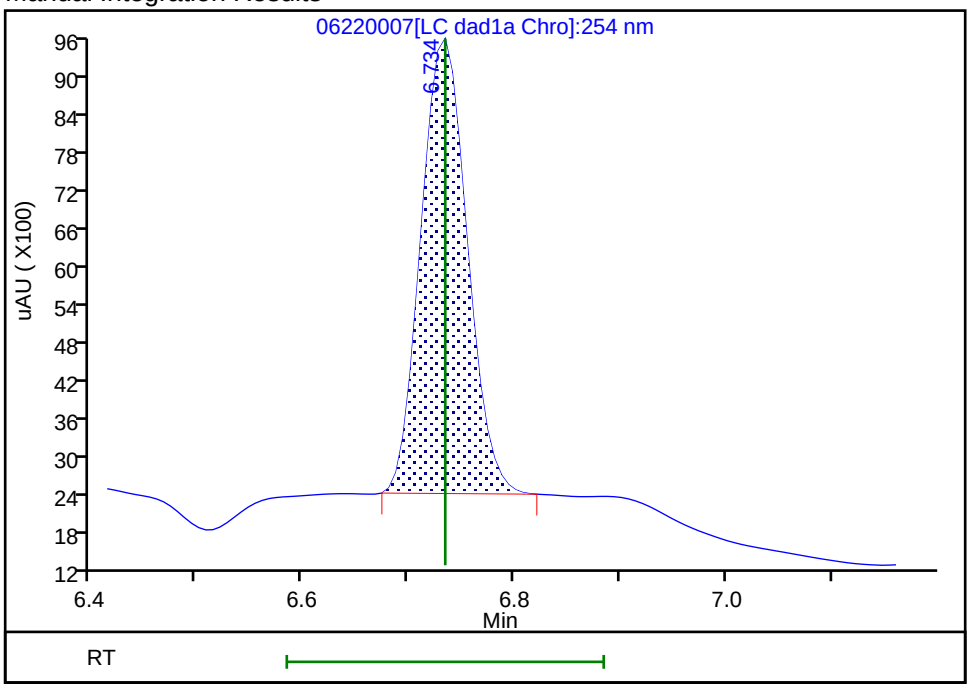
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

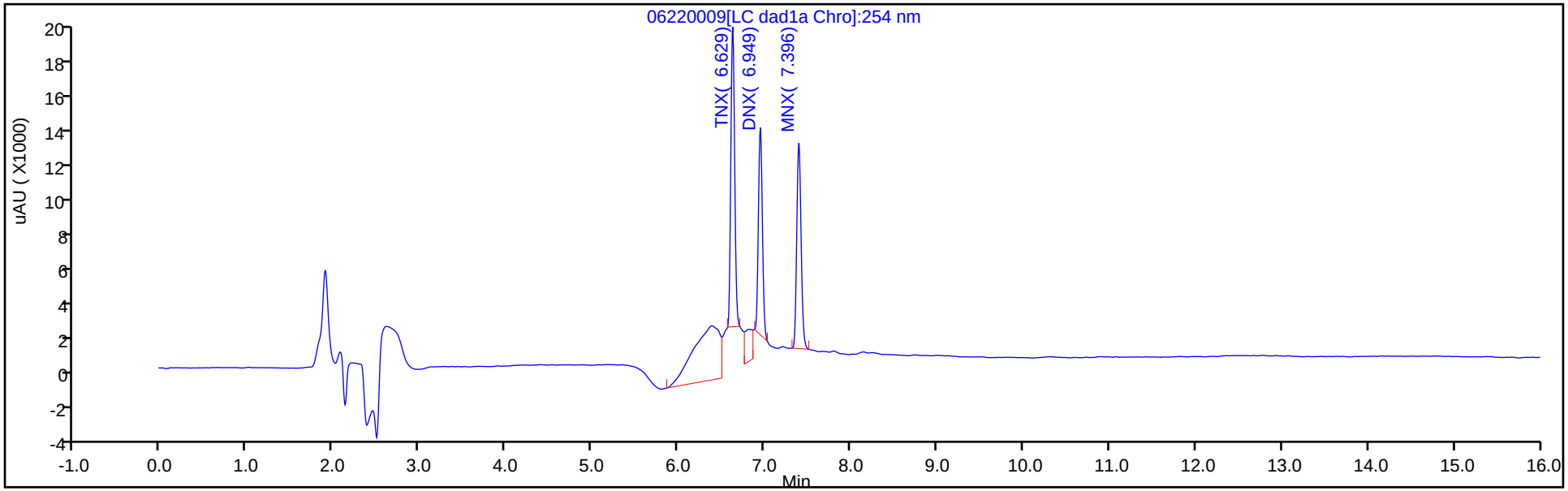
Report Date: 23-Jun-2020 15:17:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

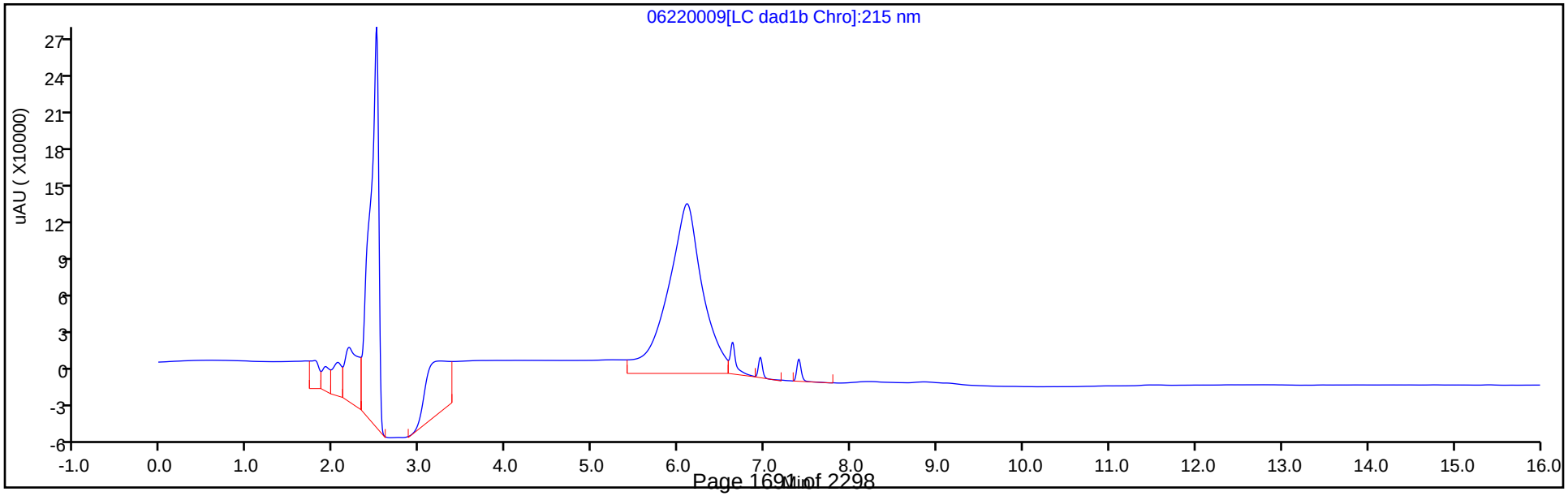
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d

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

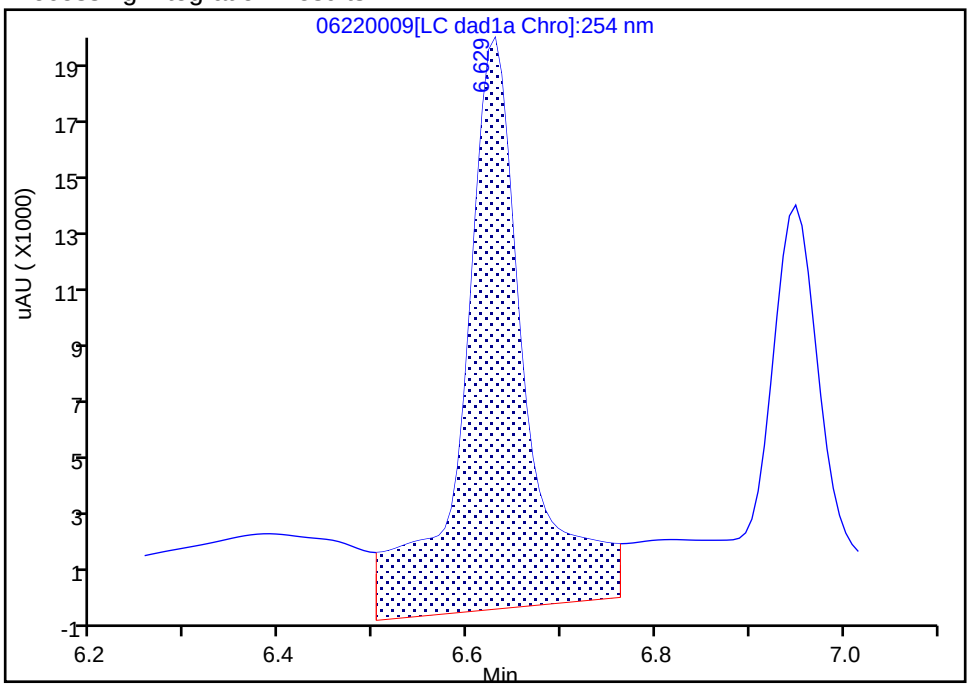
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d				
Injection Date:	22-Jun-2020 14:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

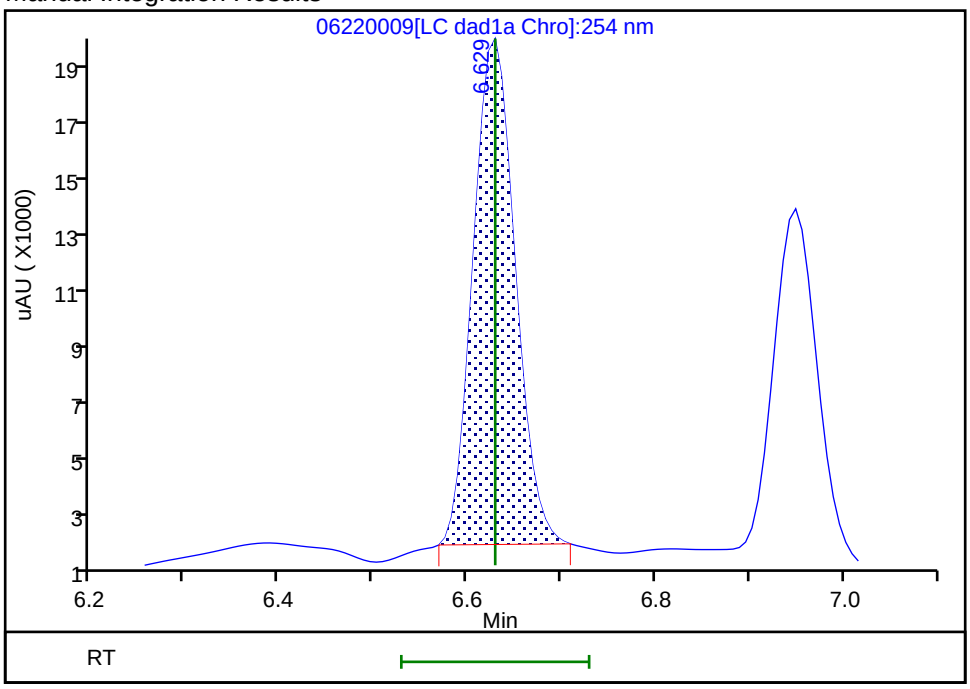
Processing Integration Results

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

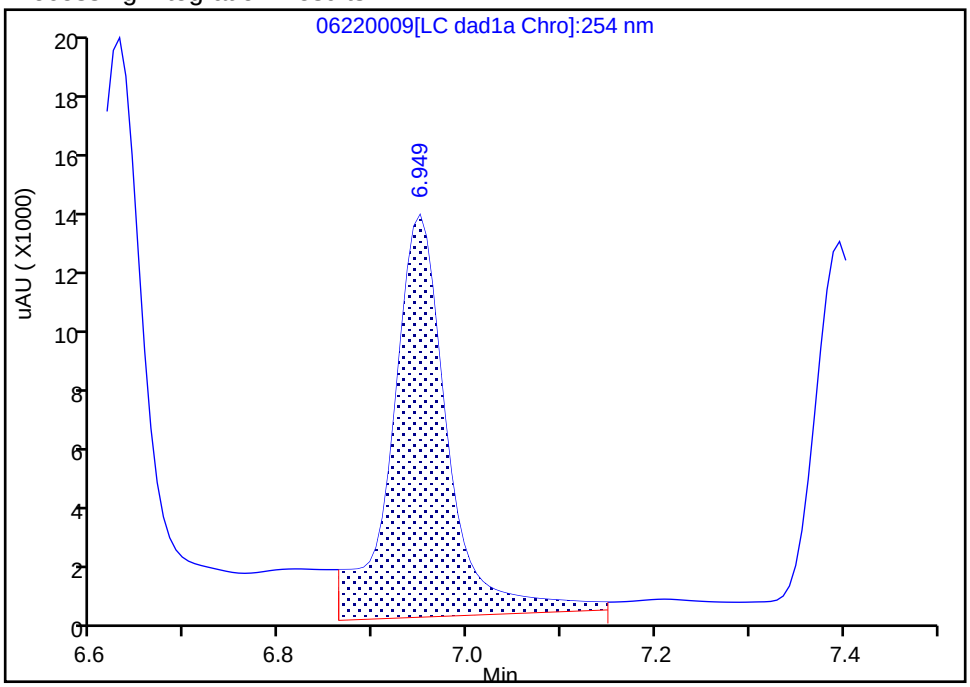
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d				
Injection Date:	22-Jun-2020 14:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

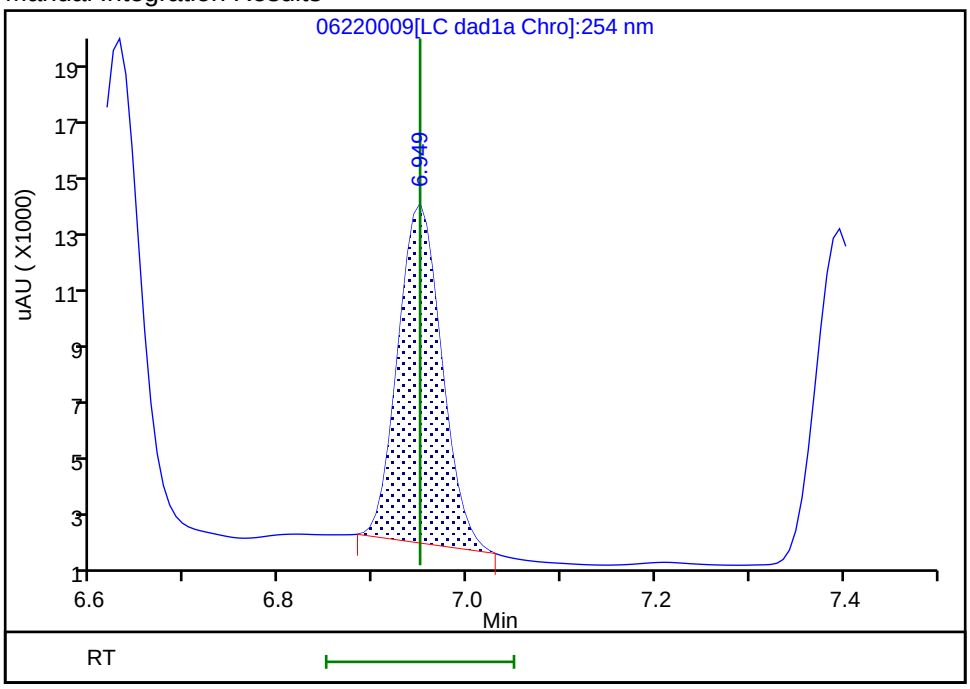
Processing Integration Results

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

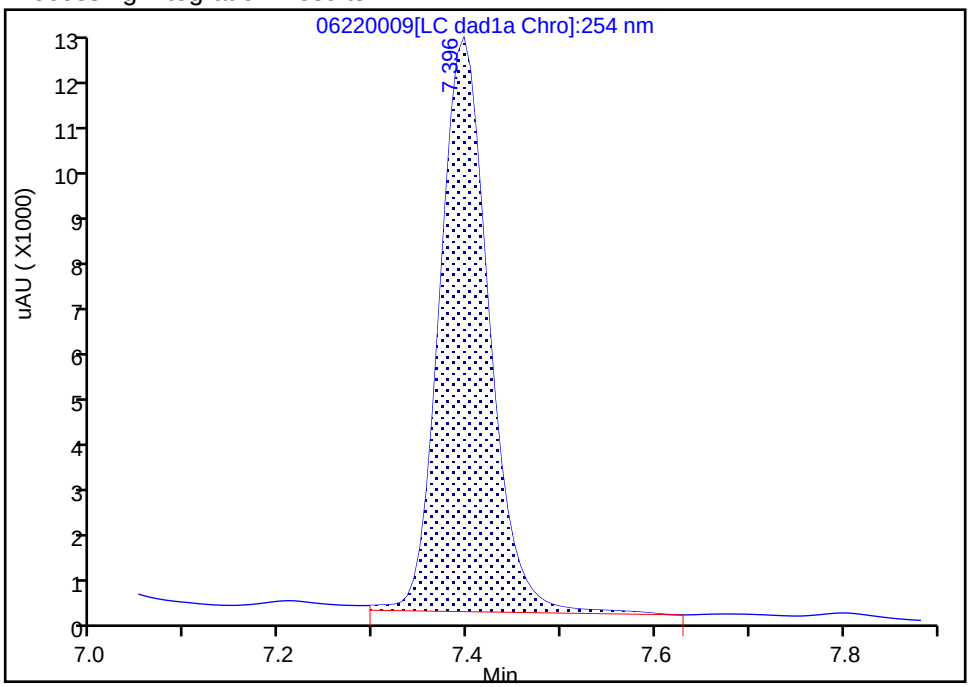
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220009.d				
Injection Date:	22-Jun-2020 14:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

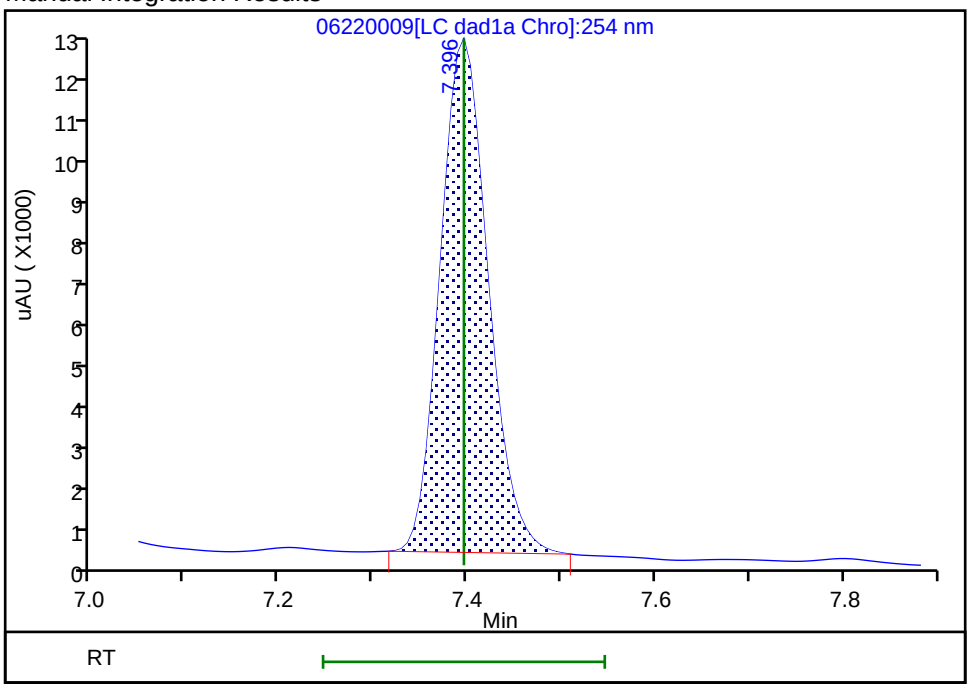
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

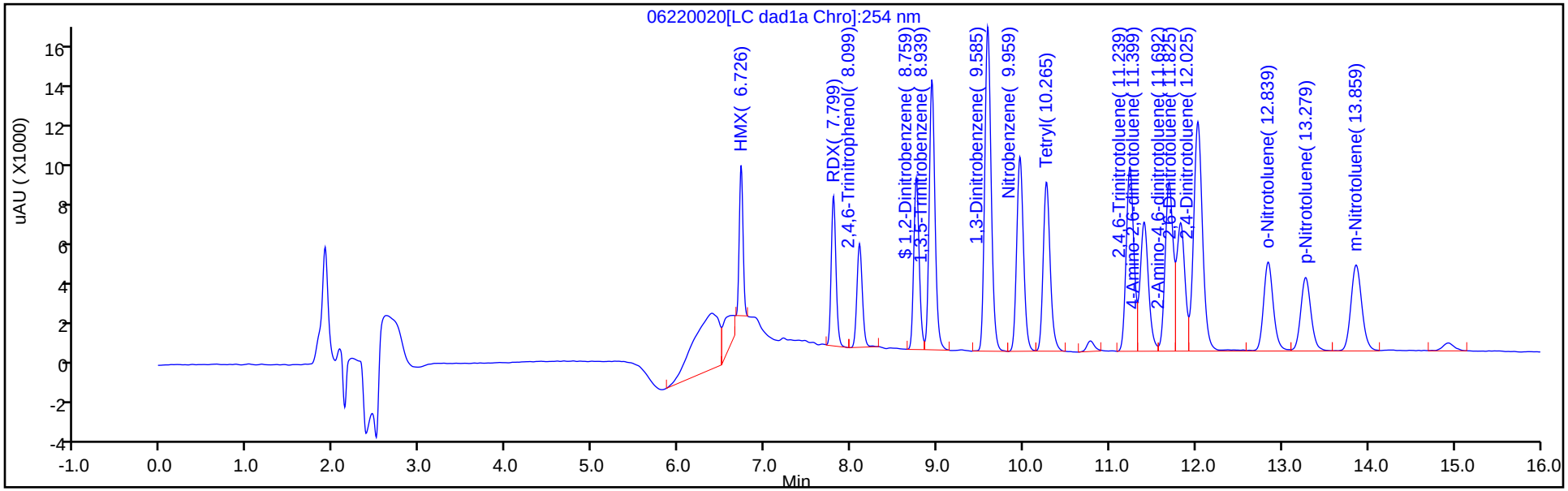
Report Date: 23-Jun-2020 15:18:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

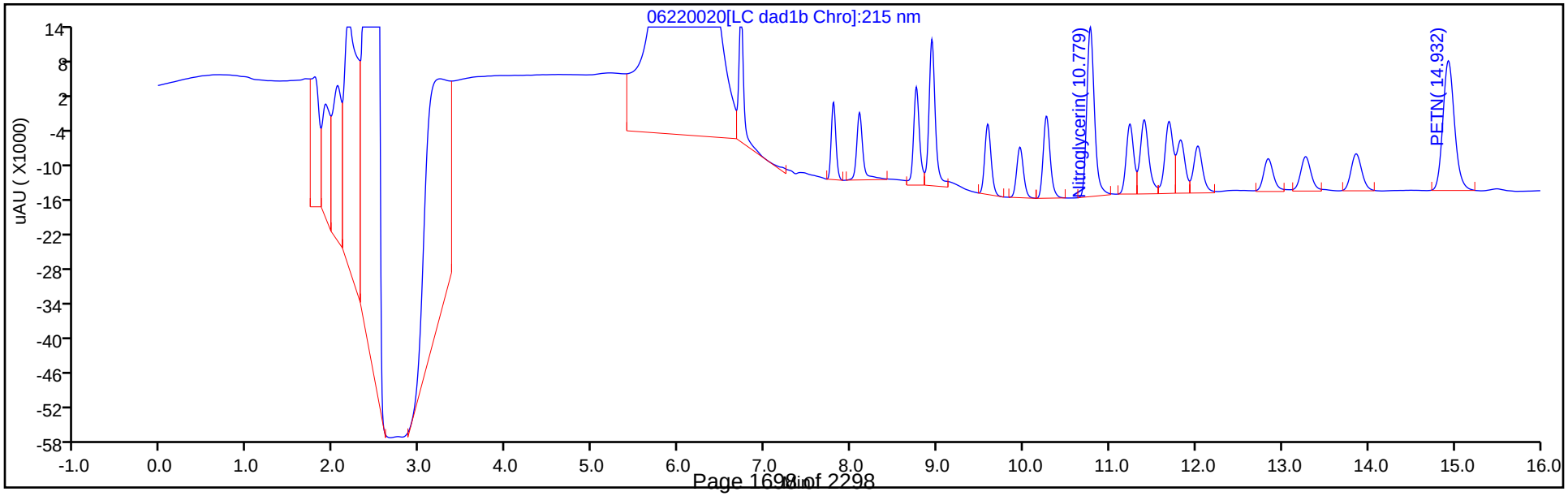
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220020.d

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

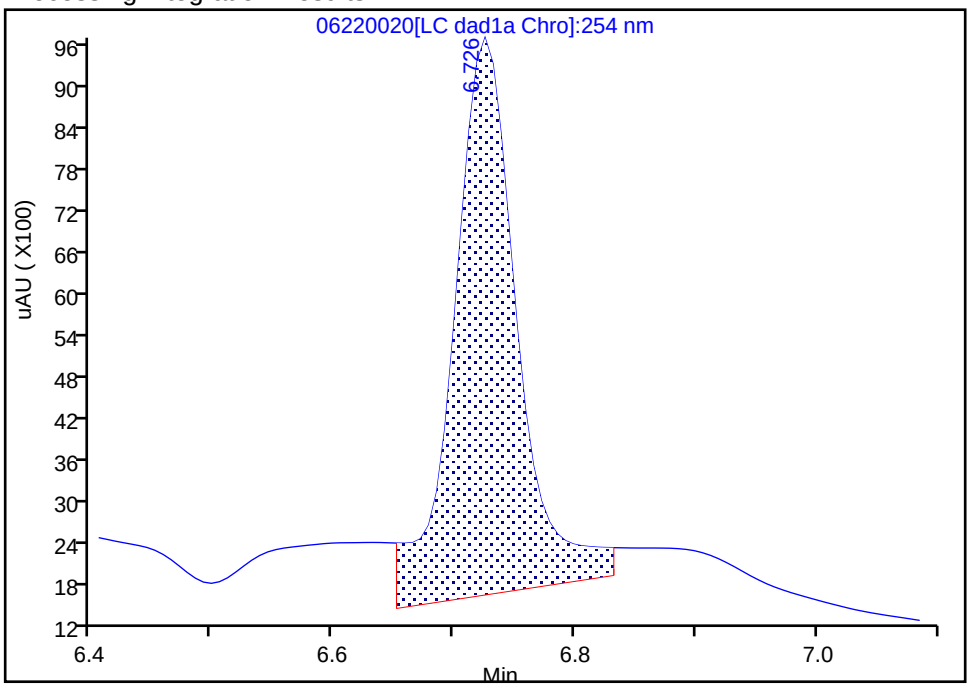
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220020.d				
Injection Date:	22-Jun-2020 19:05:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

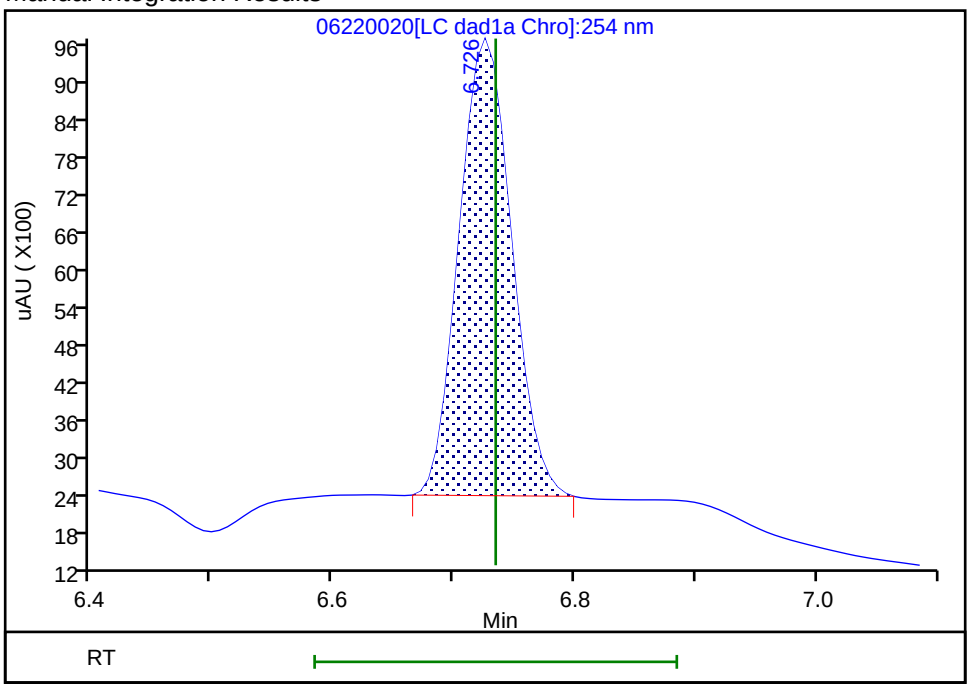
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

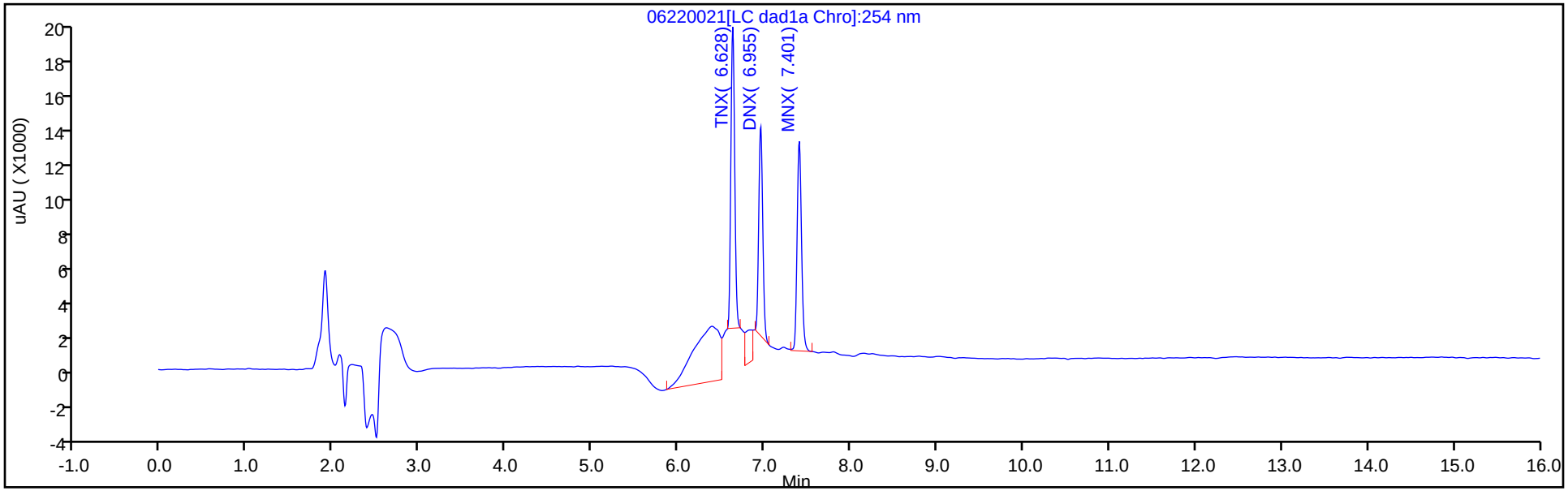
Report Date: 23-Jun-2020 15:18:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

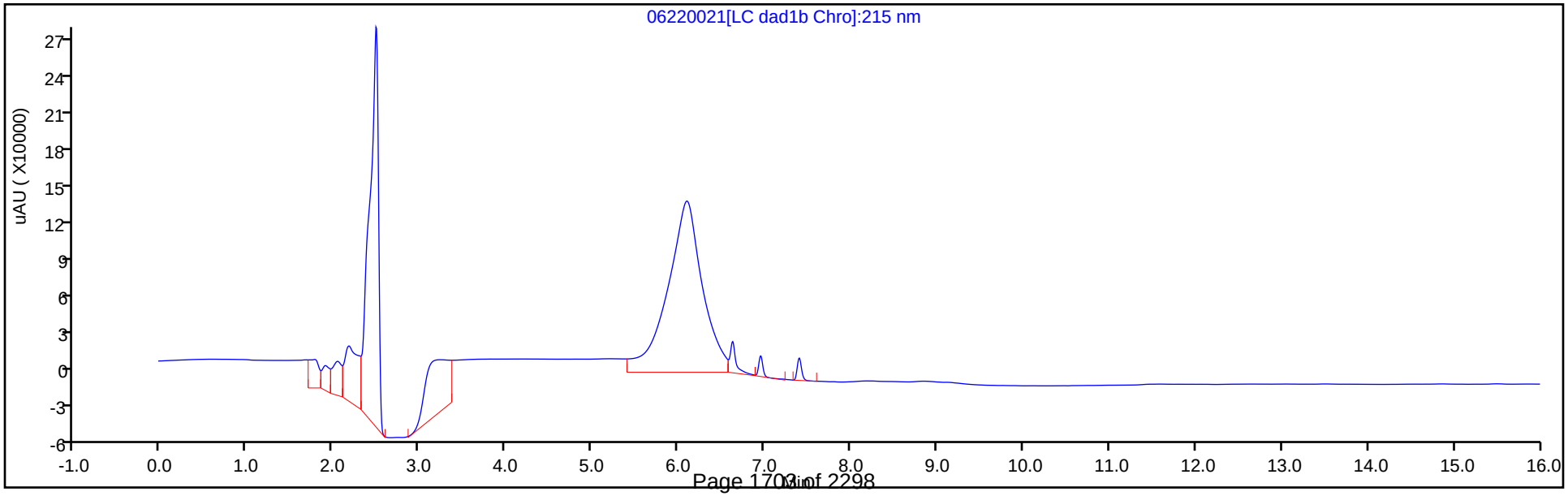
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220021.d

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

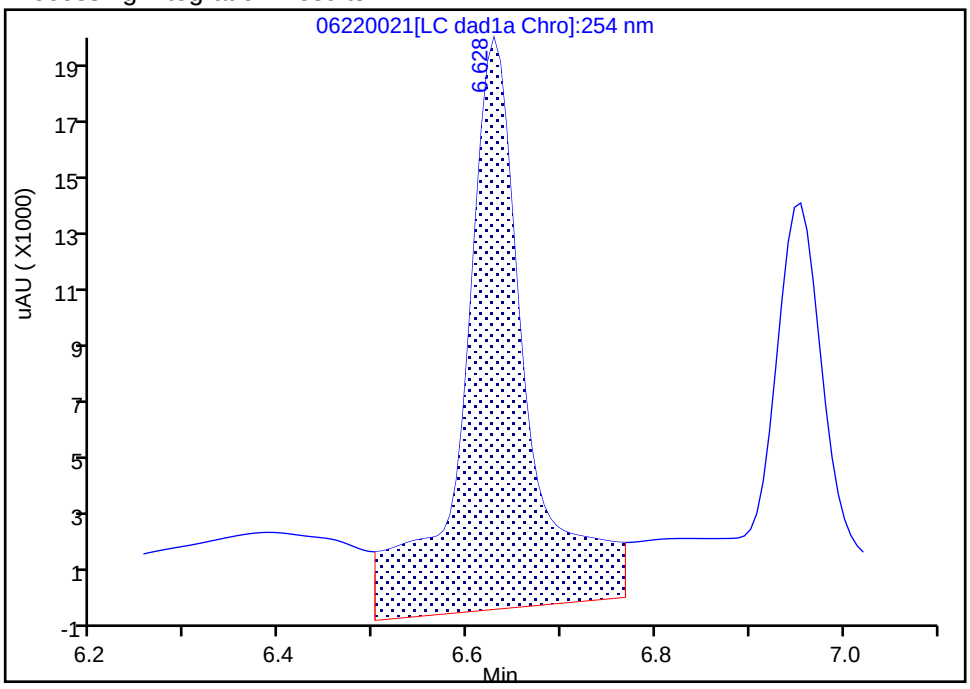
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220021.d				
Injection Date:	22-Jun-2020 19:28:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

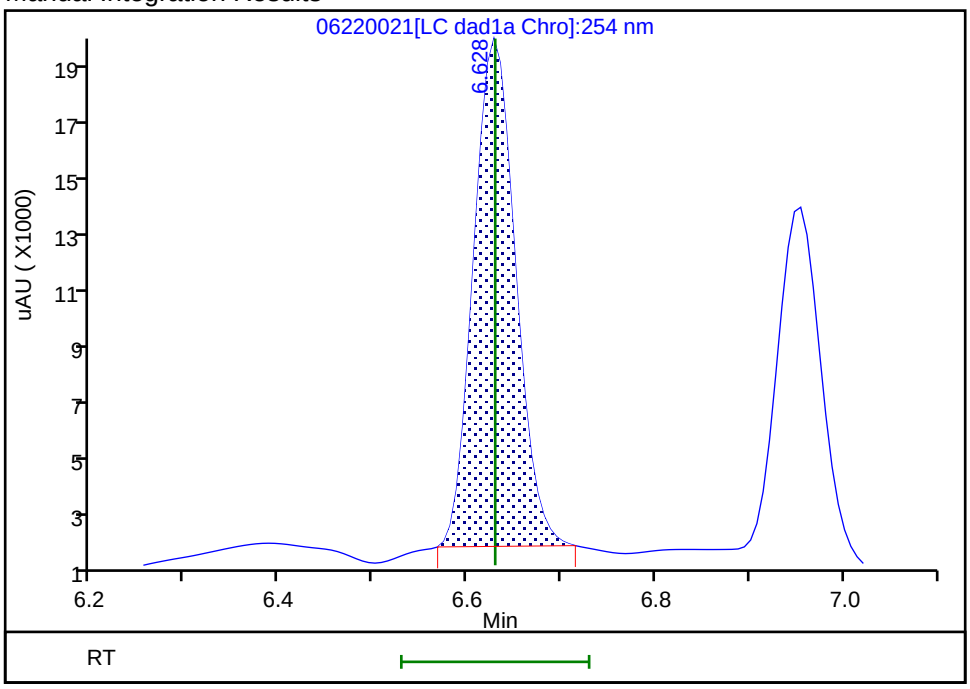
Processing Integration Results

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

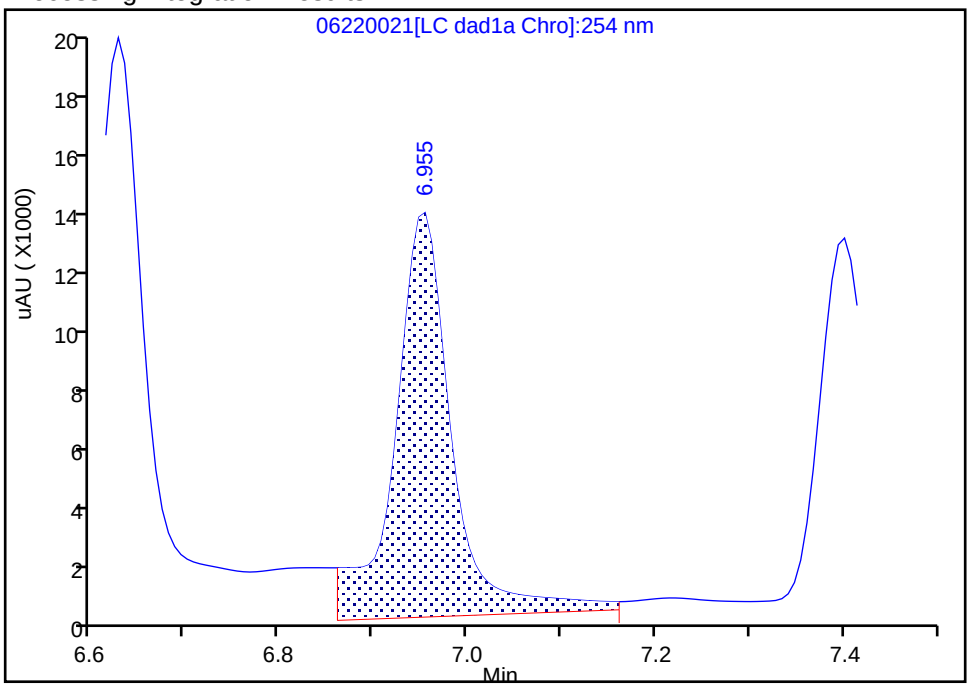
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220021.d				
Injection Date:	22-Jun-2020 19:28:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

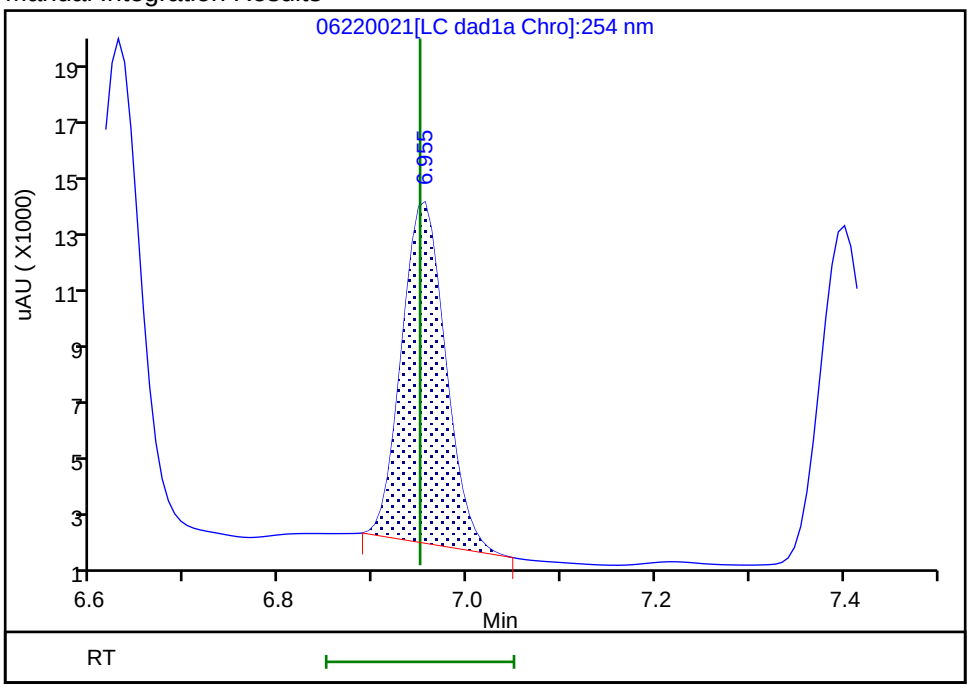
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

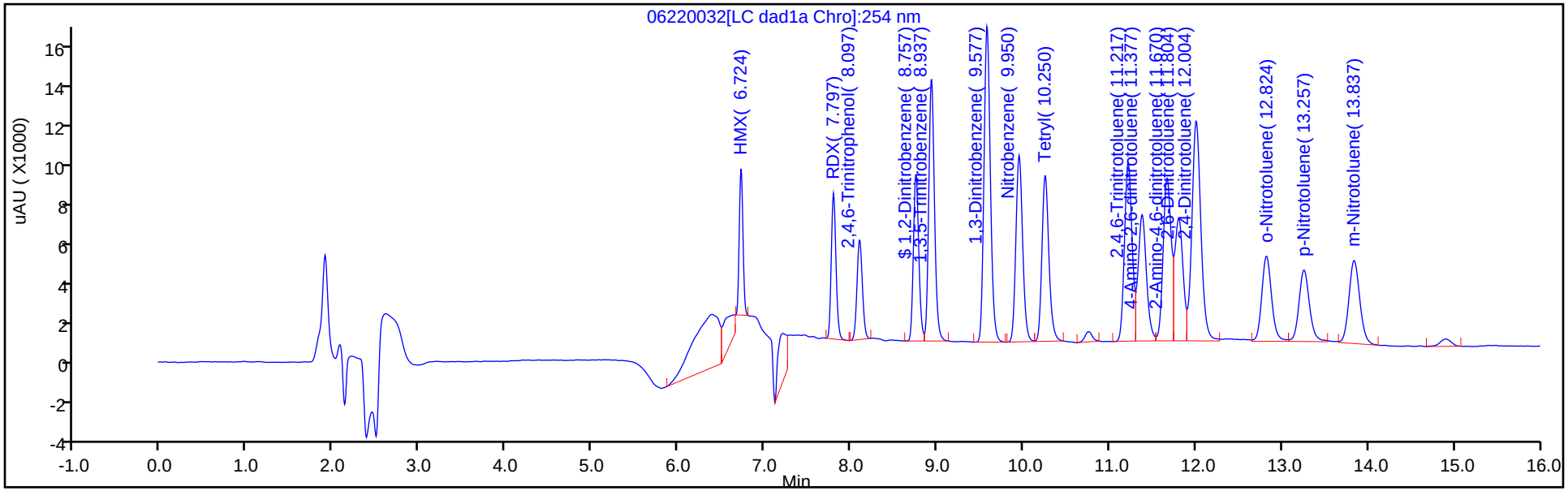
Report Date: 23-Jun-2020 15:18:05 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

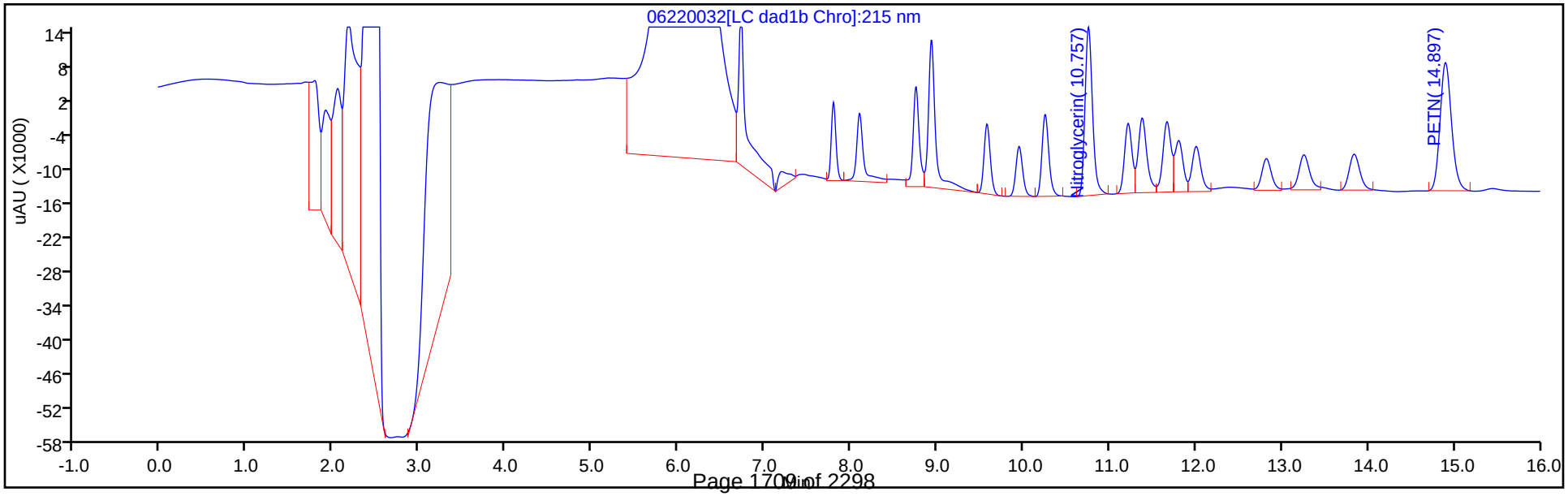
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220032.d

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

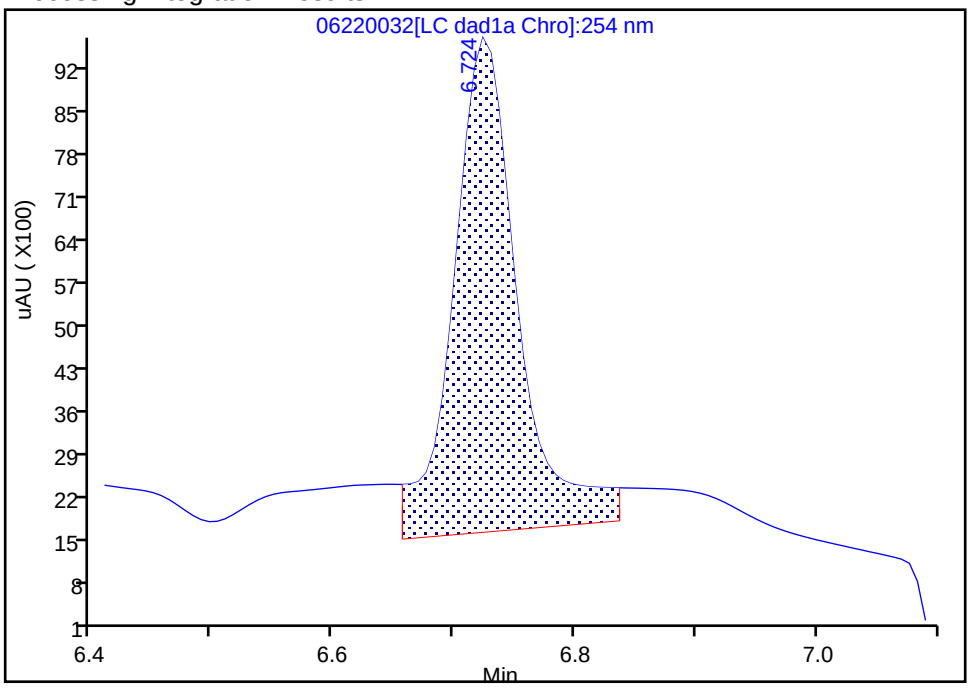
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220032.d				
Injection Date:	22-Jun-2020 23:41:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

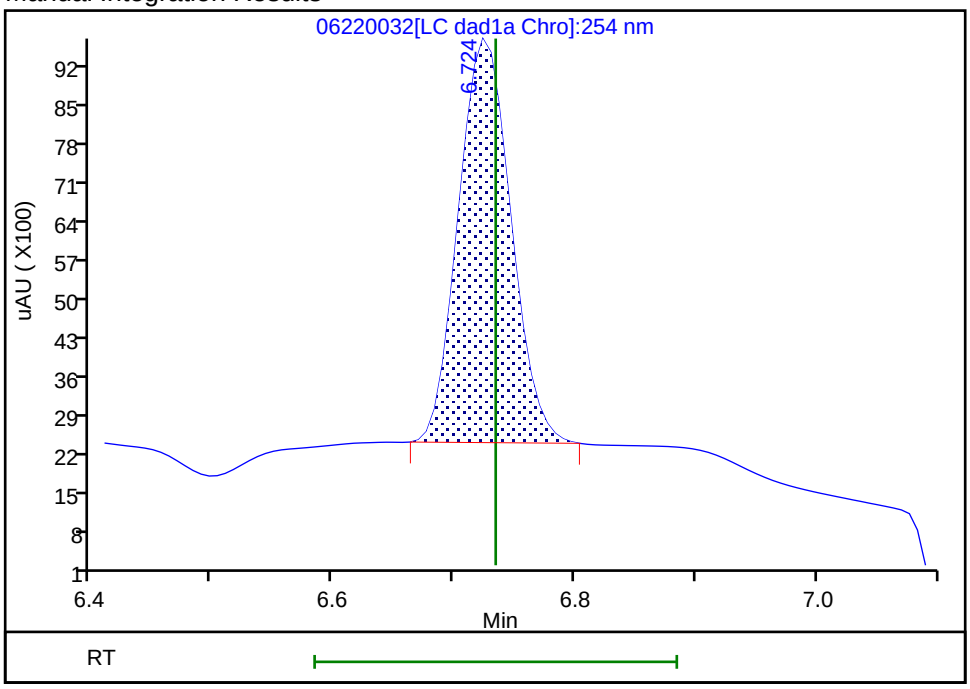
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

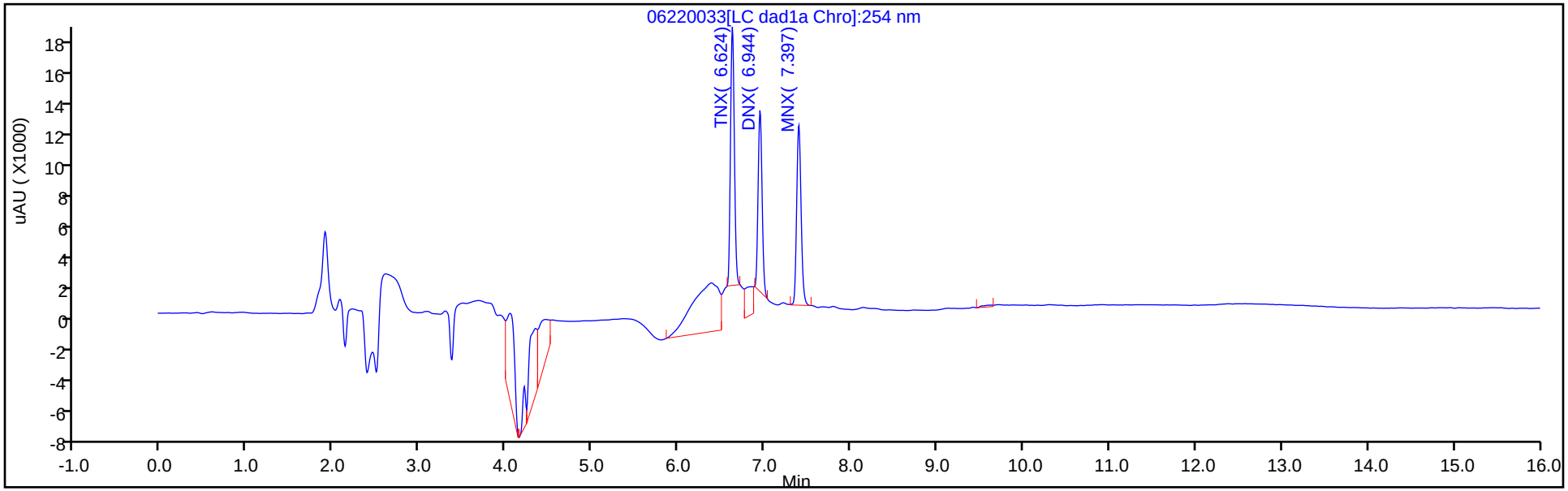
Report Date: 23-Jun-2020 15:18:06 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

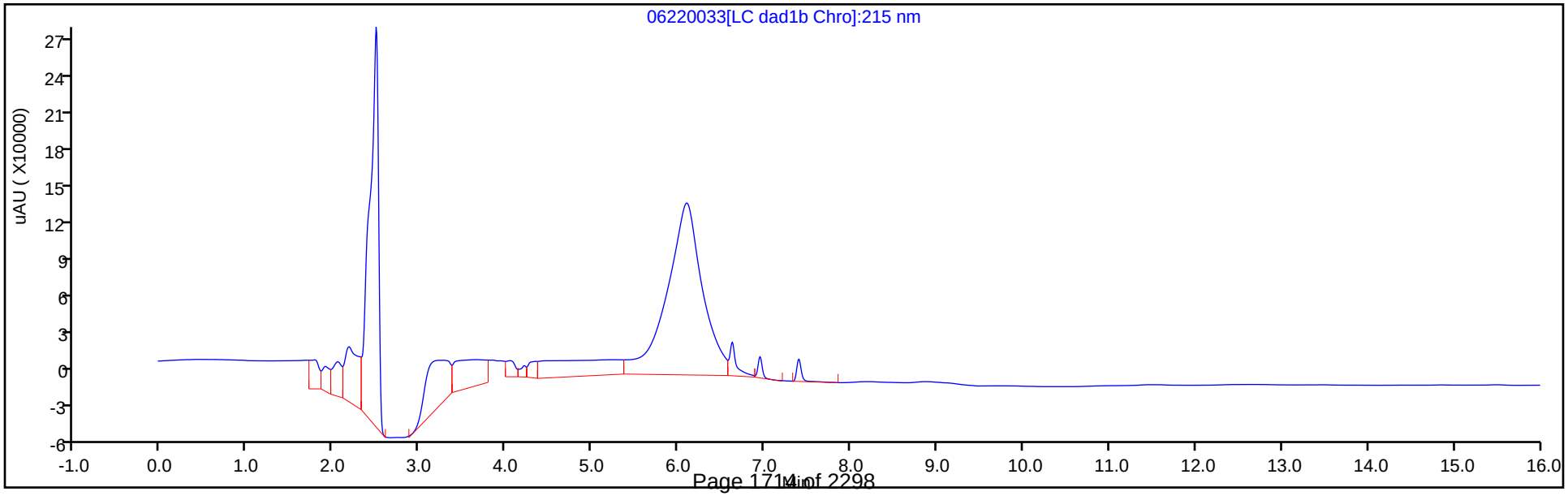
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220033.d

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

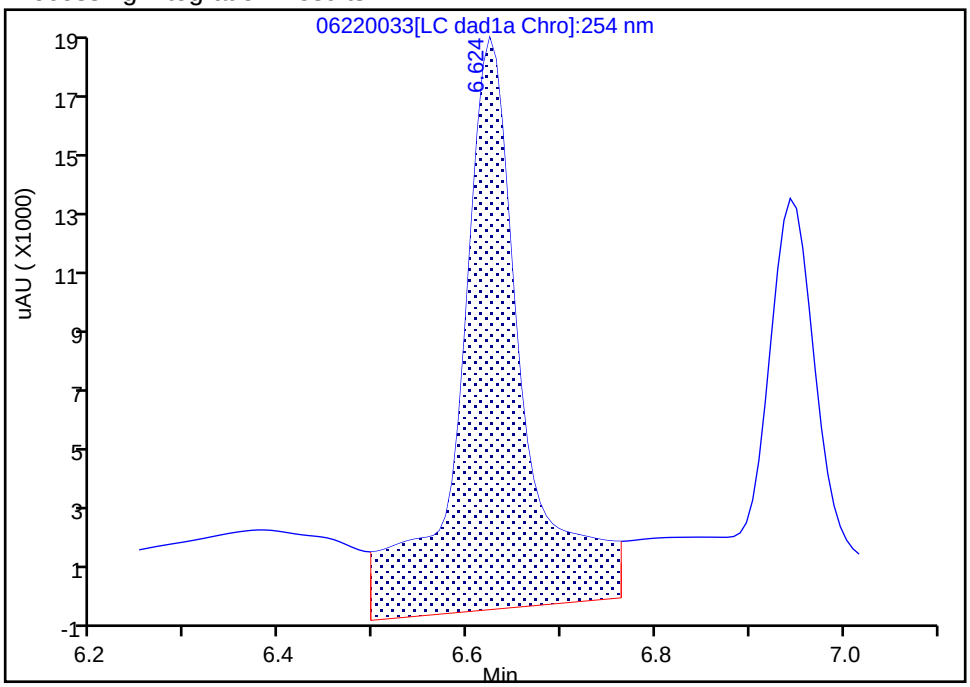
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220033.d				
Injection Date:	23-Jun-2020 00:04:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

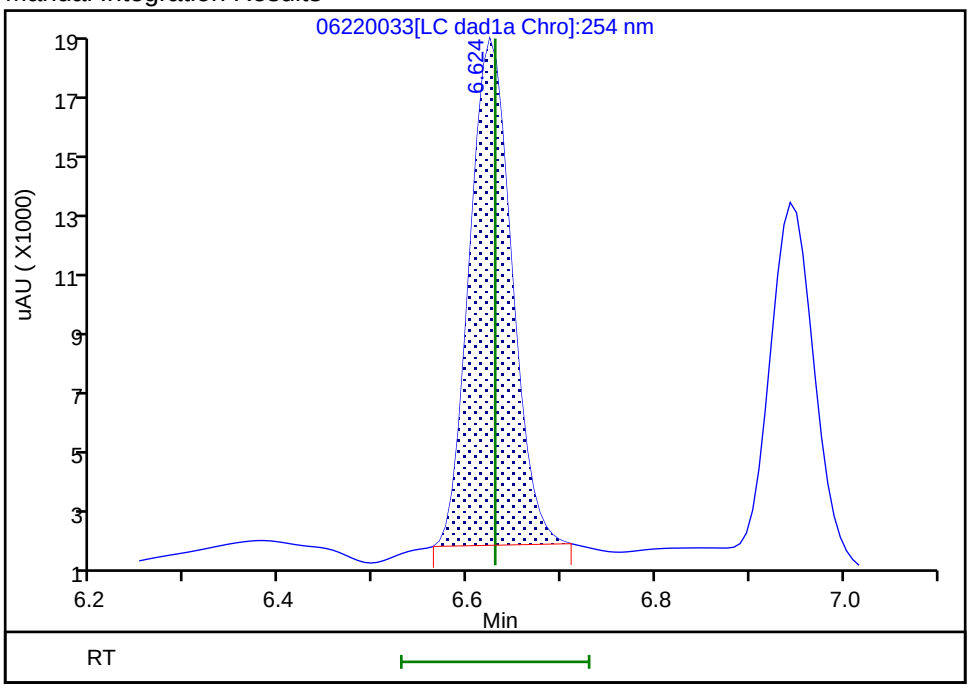
Processing Integration Results

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

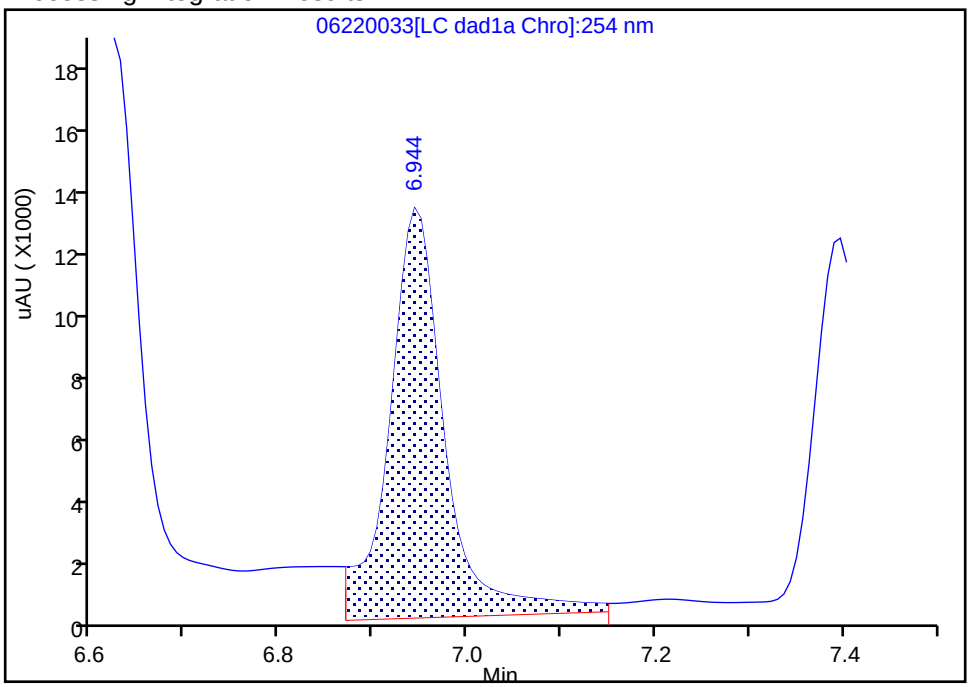
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220033.d				
Injection Date:	23-Jun-2020 00:04:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

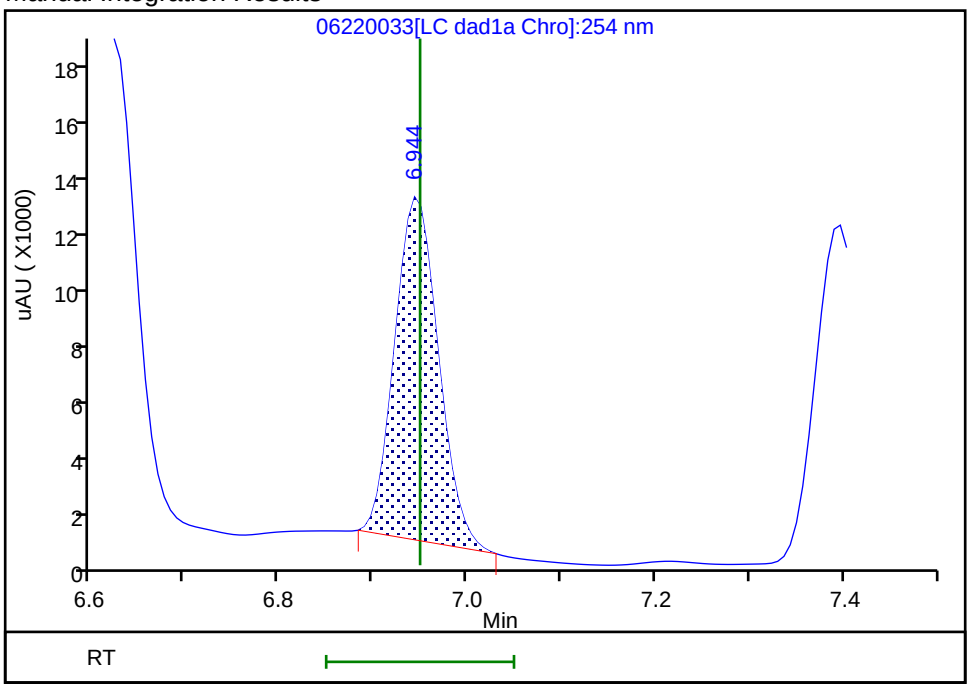
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

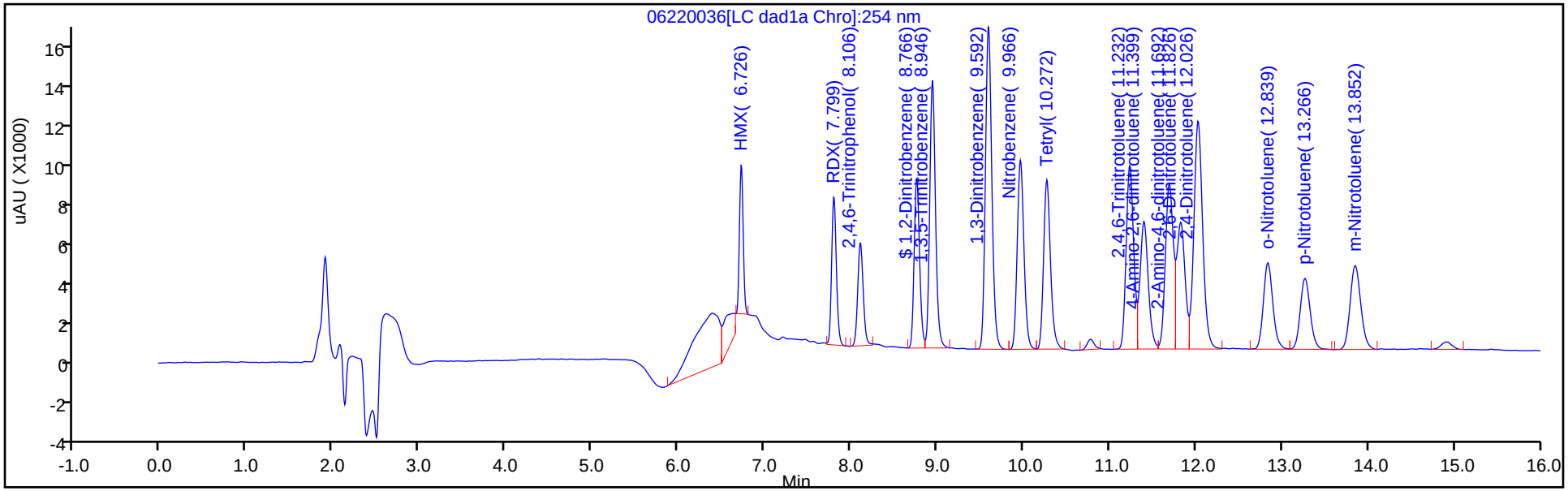
Report Date: 23-Jun-2020 15:18:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

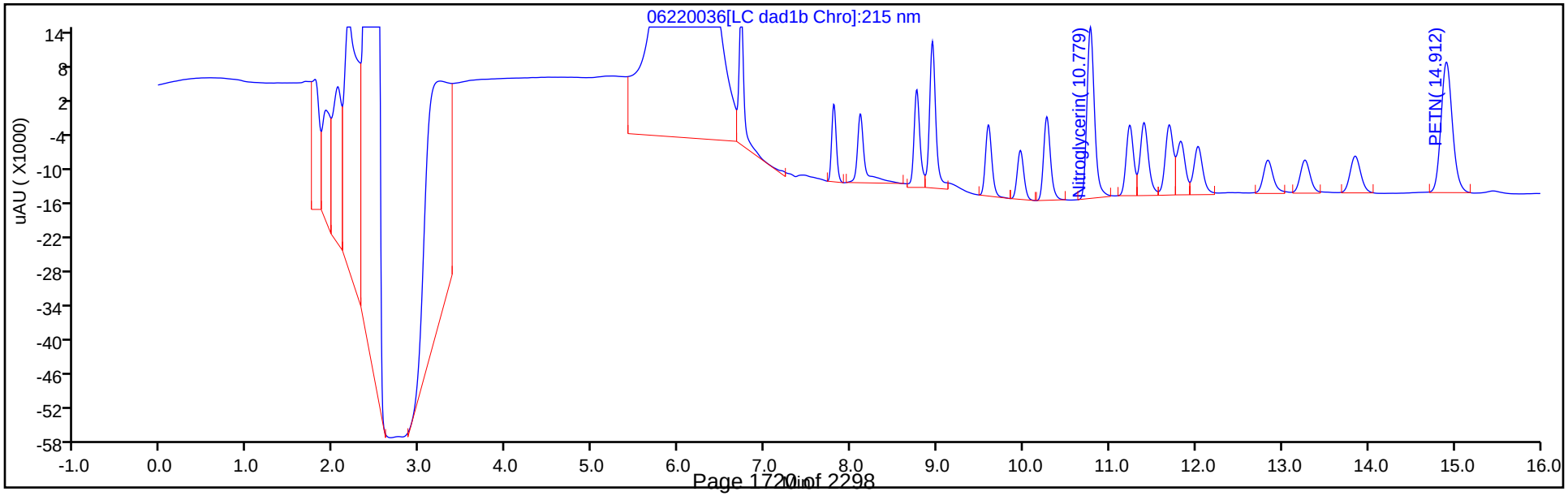
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220036.d

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

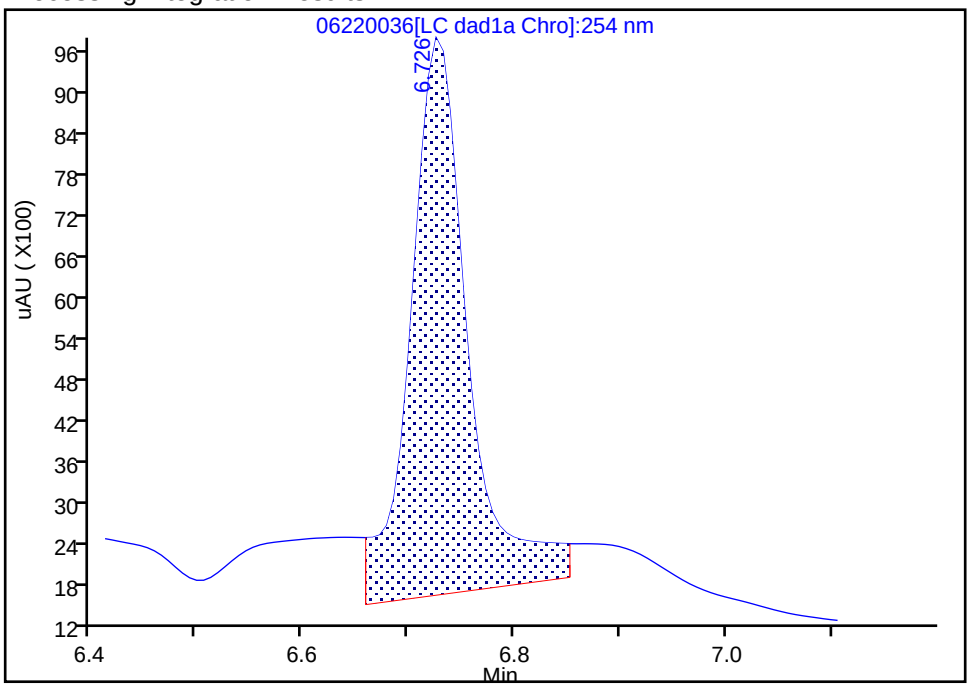
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220036.d				
Injection Date:	23-Jun-2020 01:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

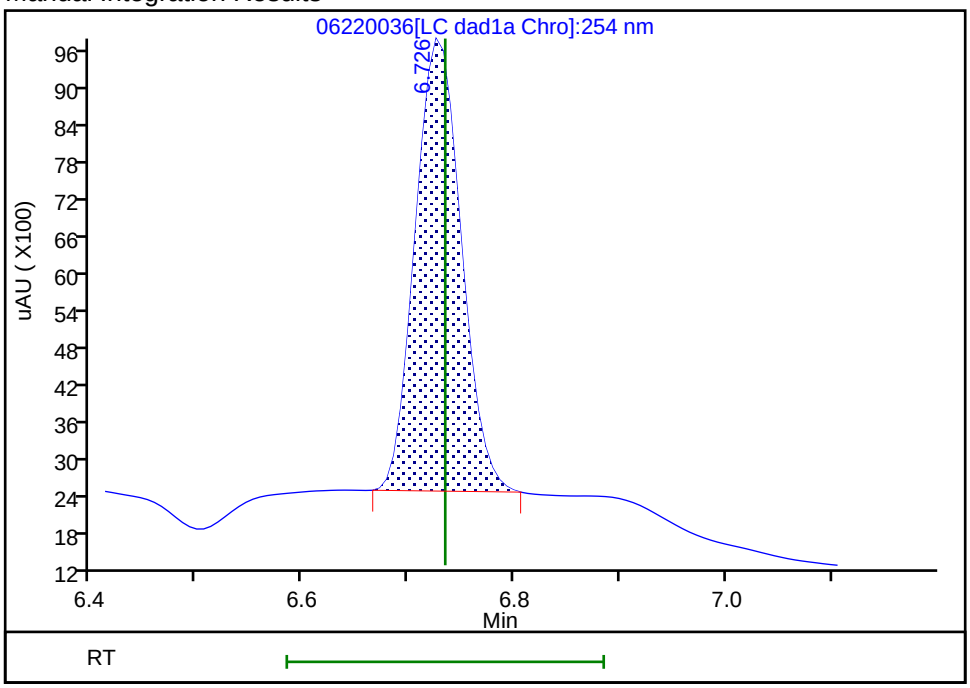
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

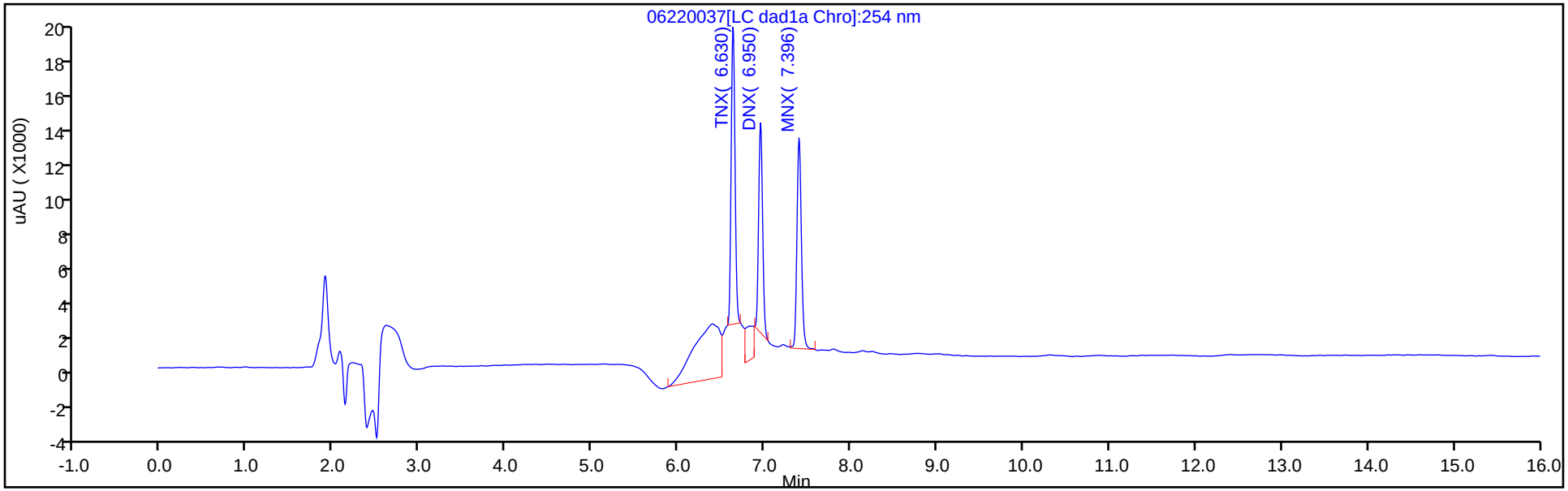
Report Date: 23-Jun-2020 15:18:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

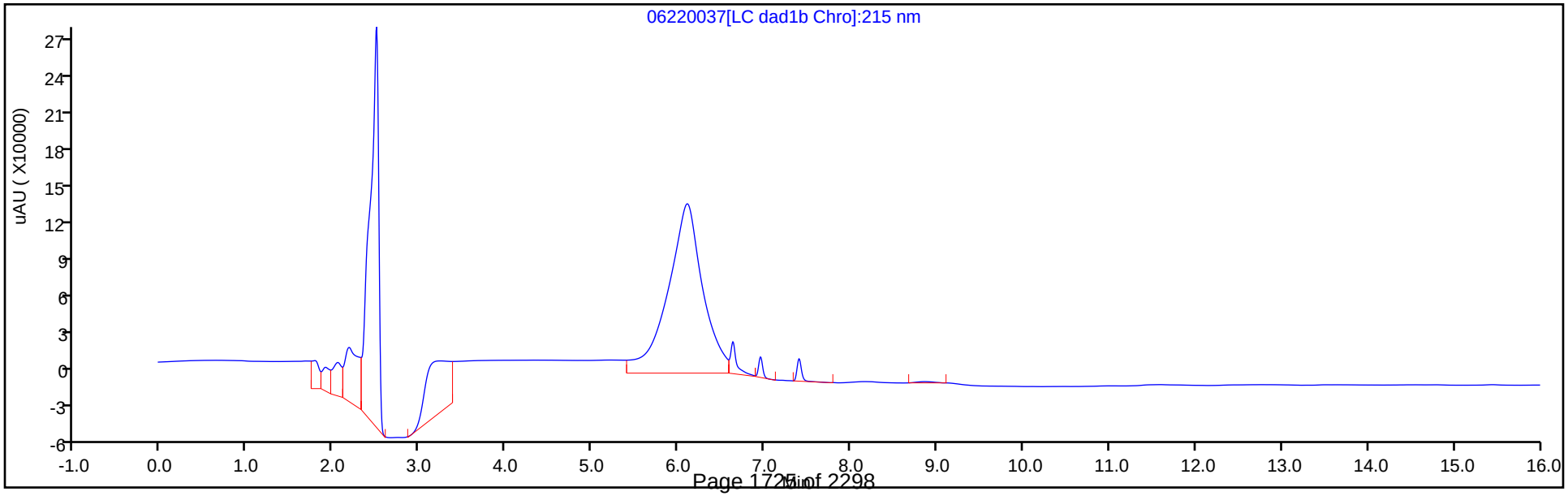
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220037.d

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

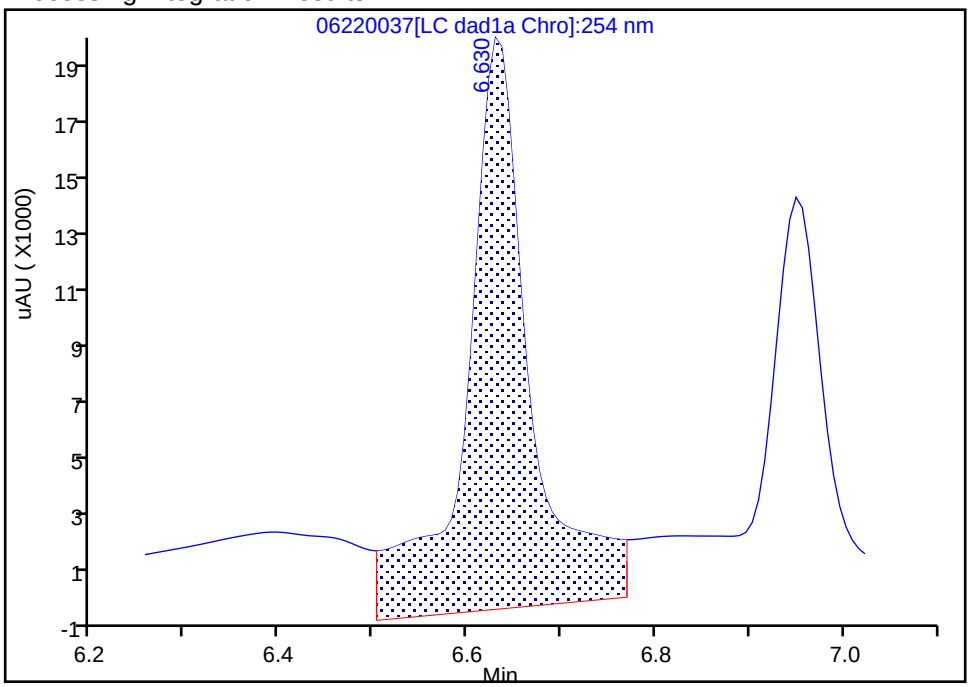
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220037.d				
Injection Date:	23-Jun-2020 01:37:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

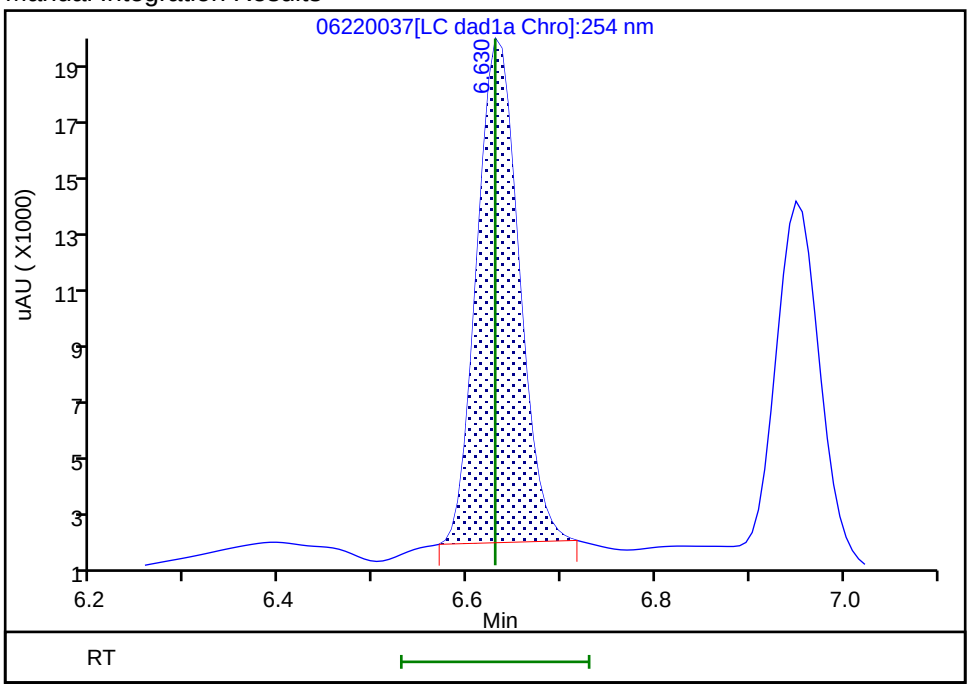
Processing Integration Results

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

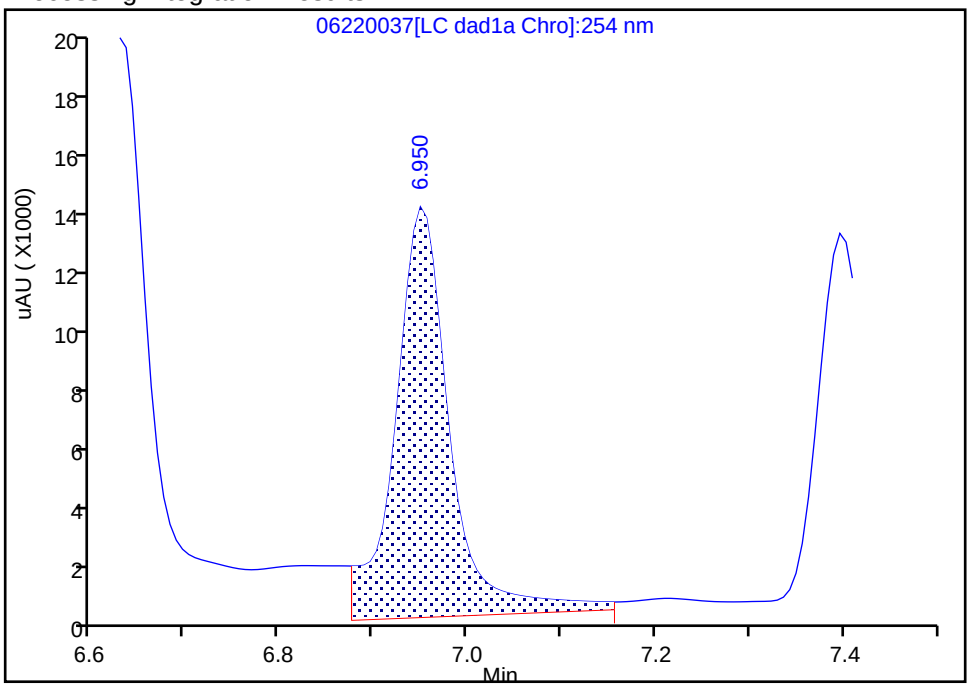
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220037.d				
Injection Date:	23-Jun-2020 01:37:01	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

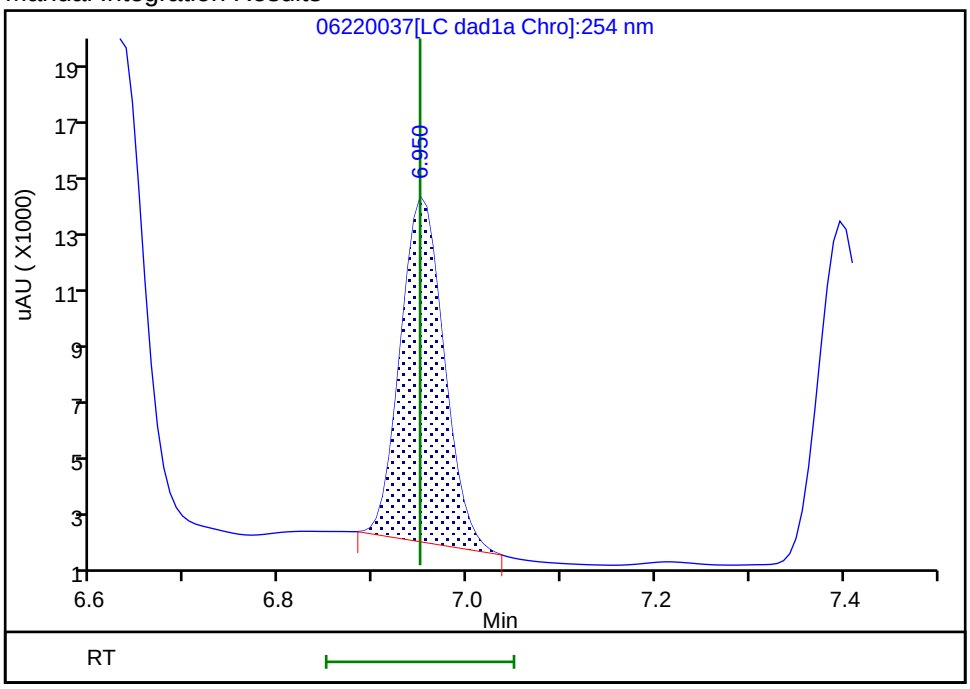
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

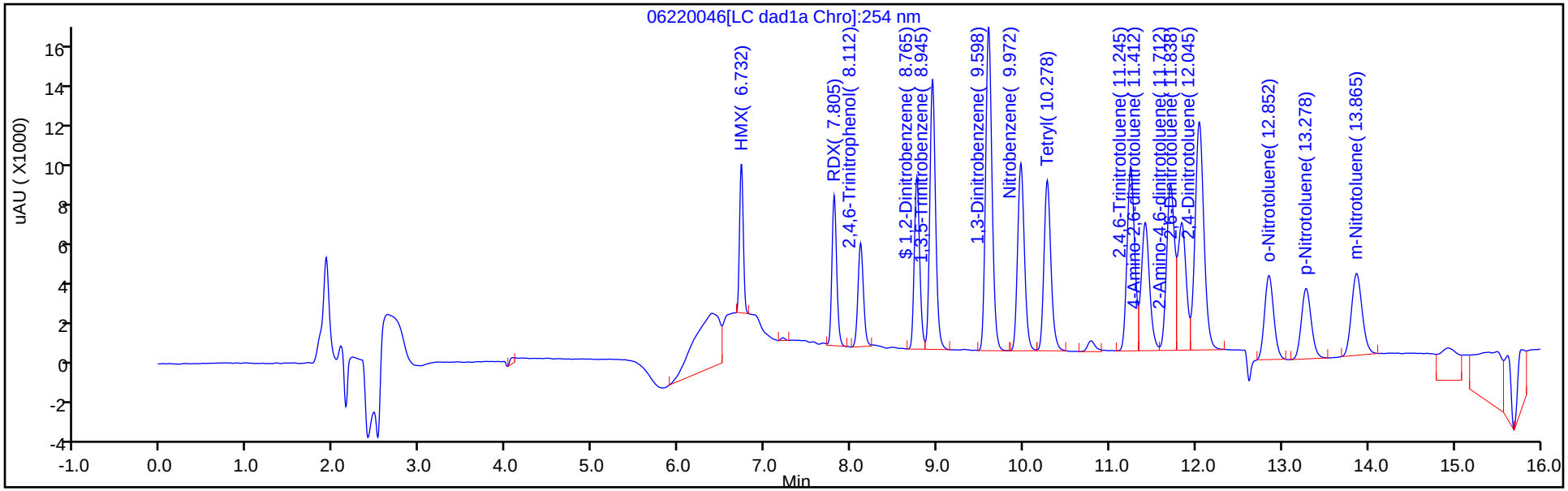
Report Date: 23-Jun-2020 16:15:30 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

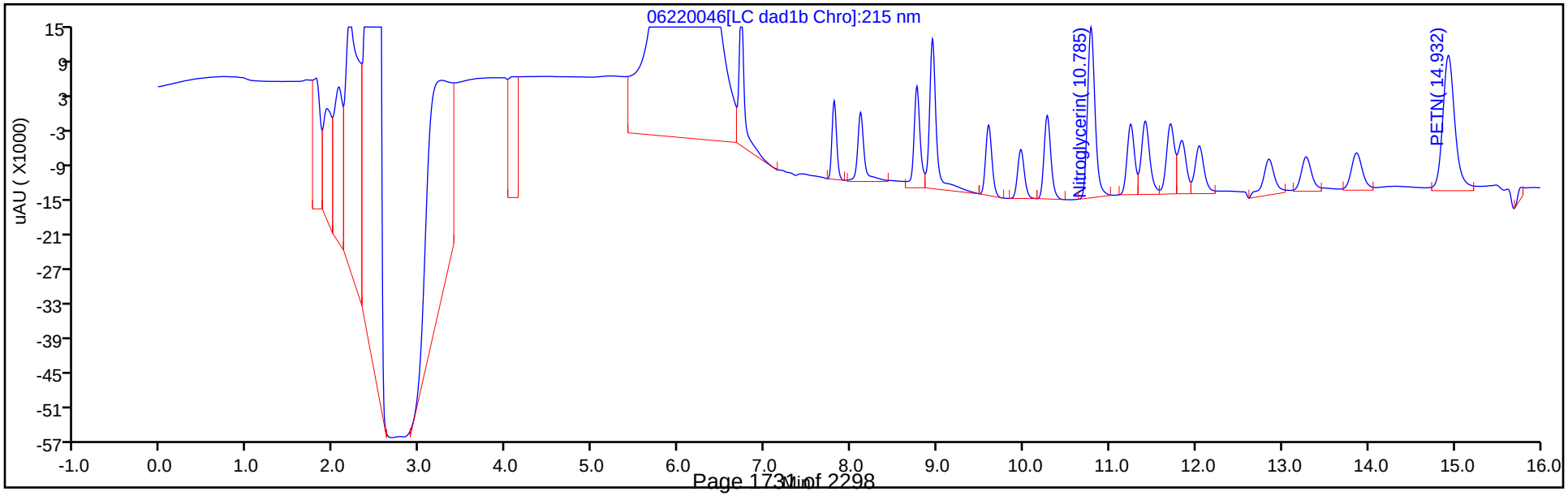
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d

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

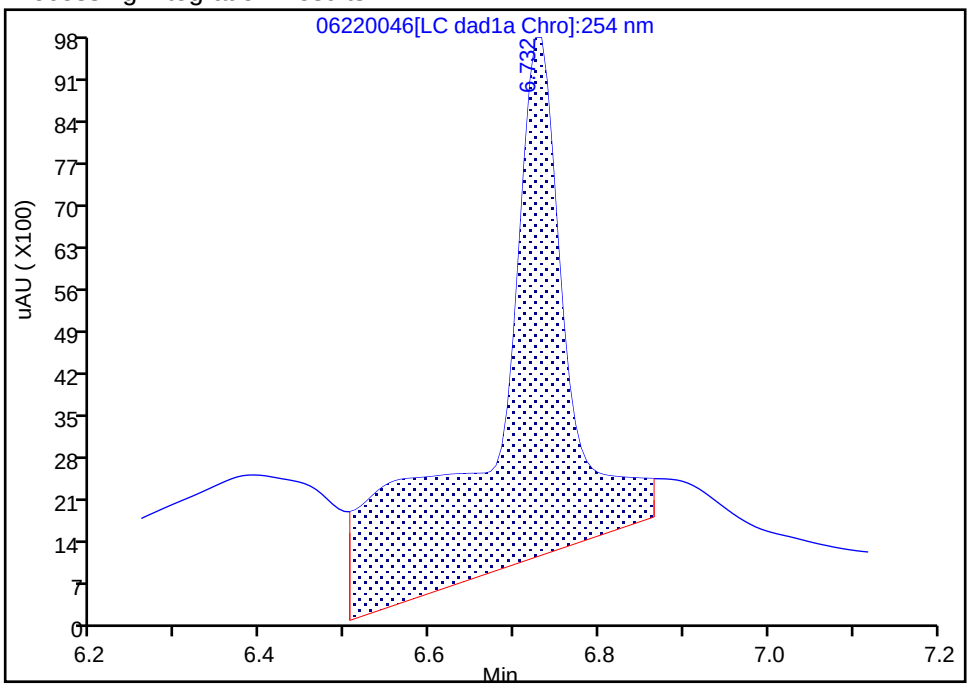
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

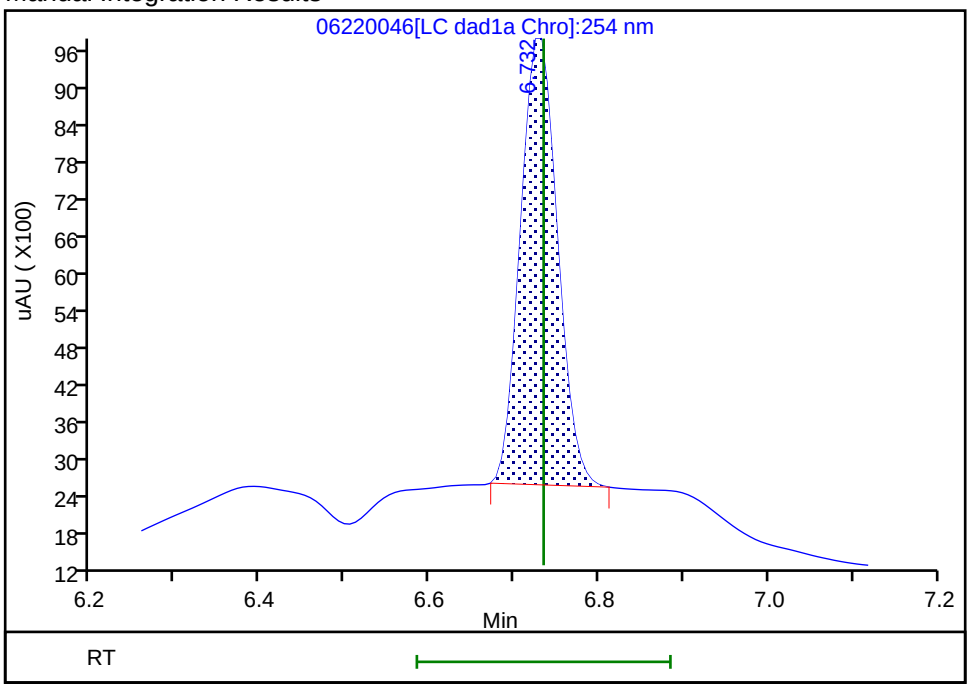
Processing Integration Results

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

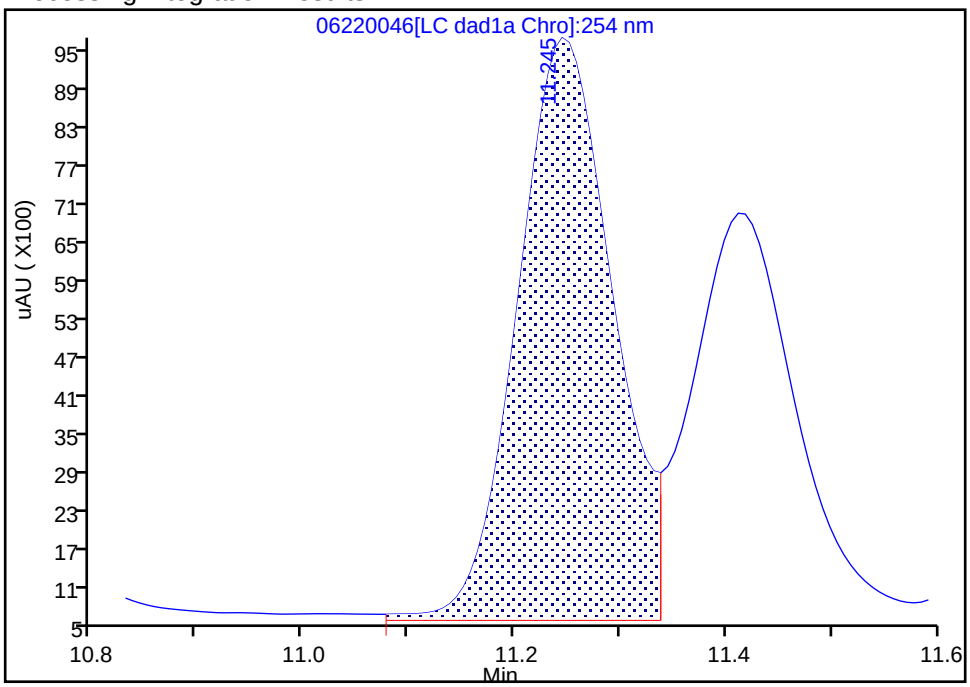
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

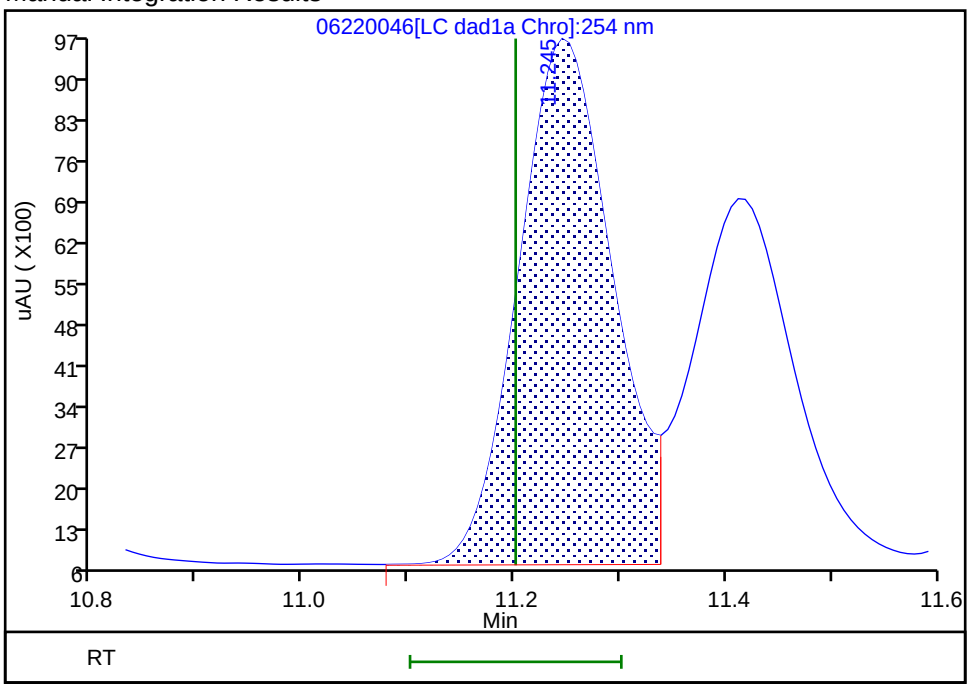
Processing Integration Results

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

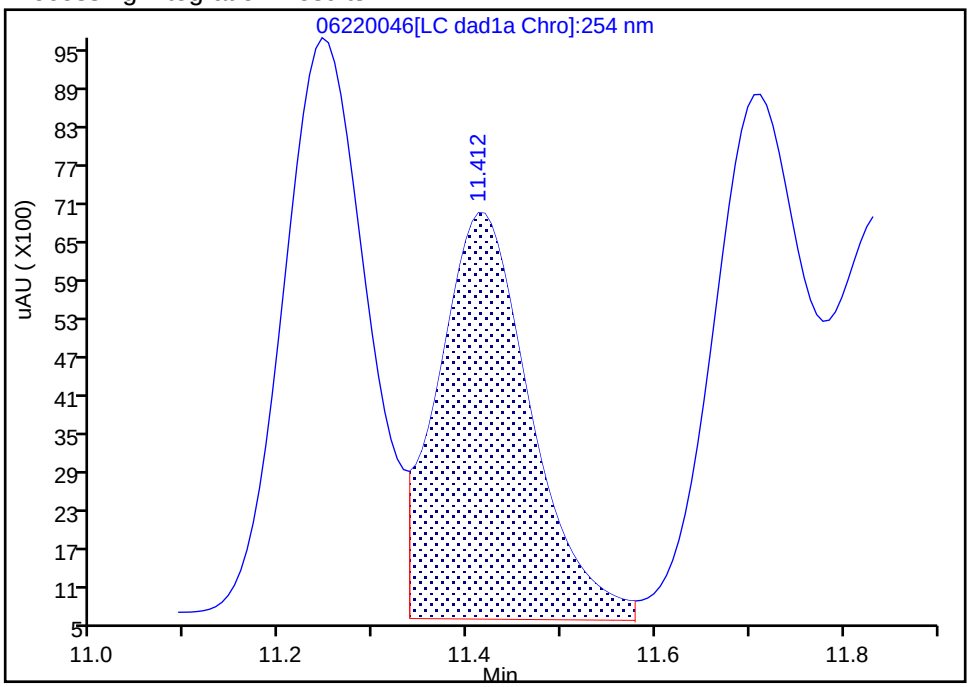
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

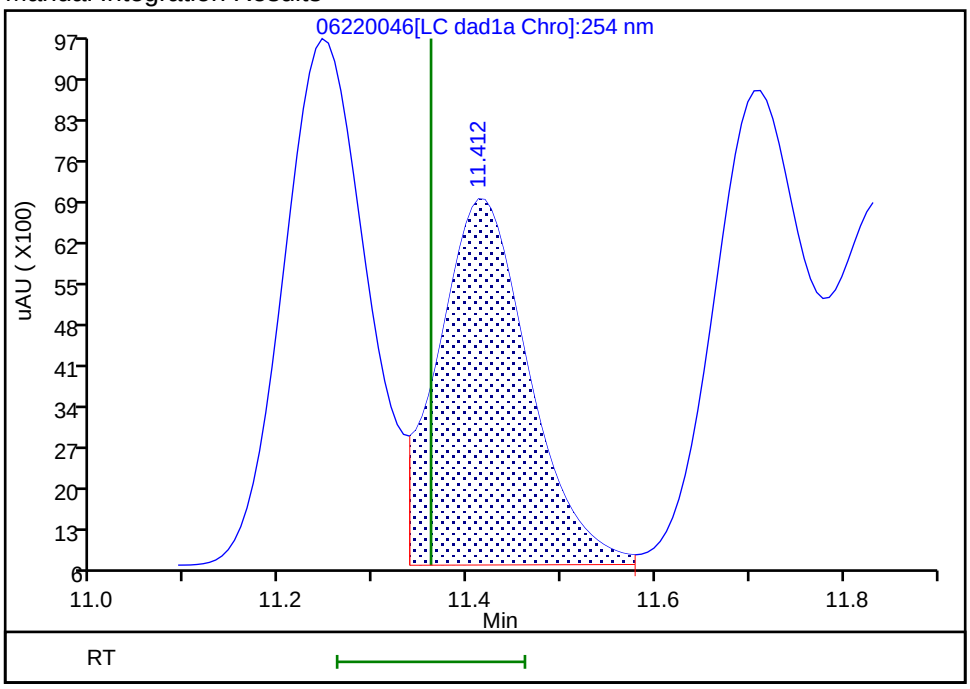
Processing Integration Results

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

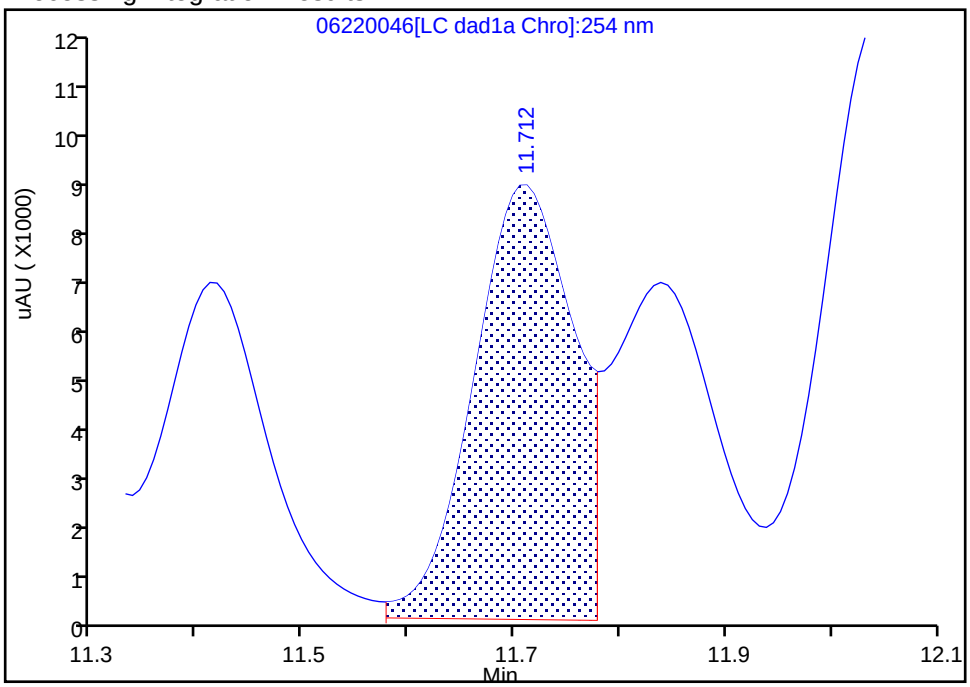
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

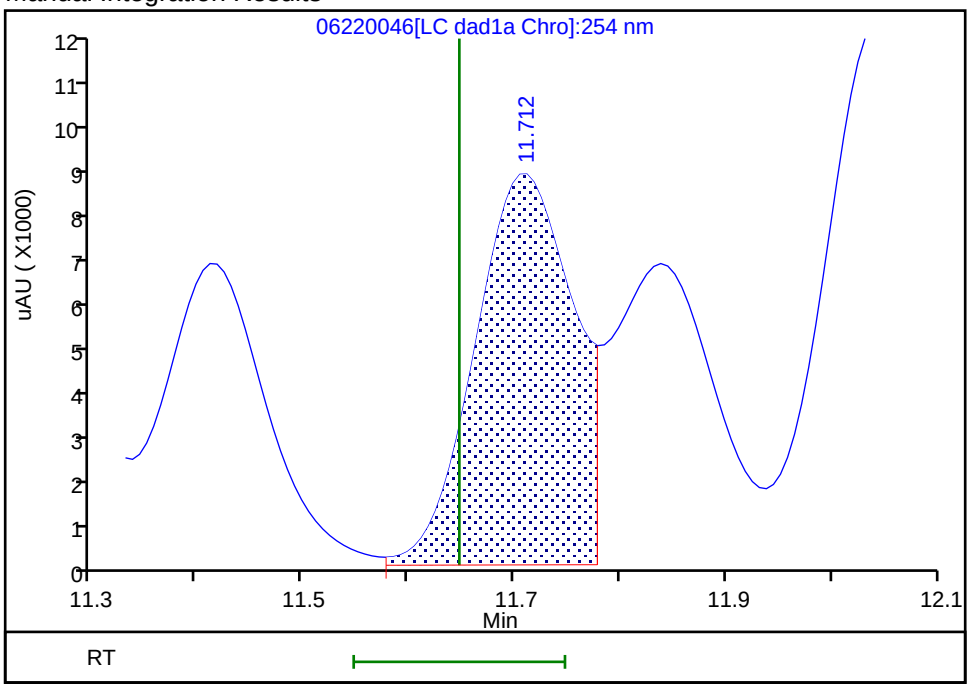
Processing Integration Results

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

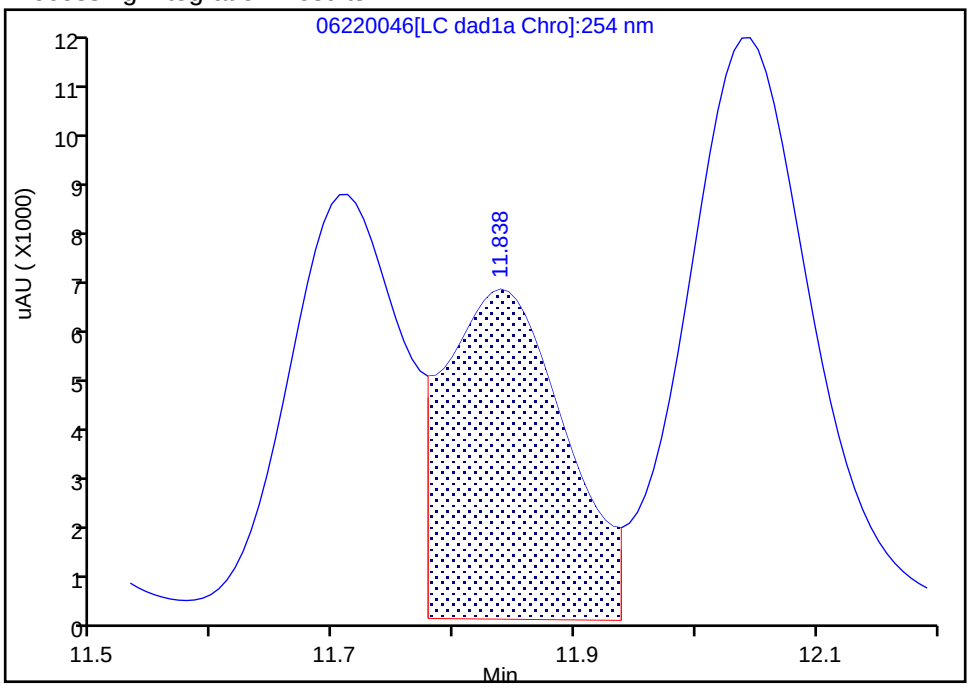
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

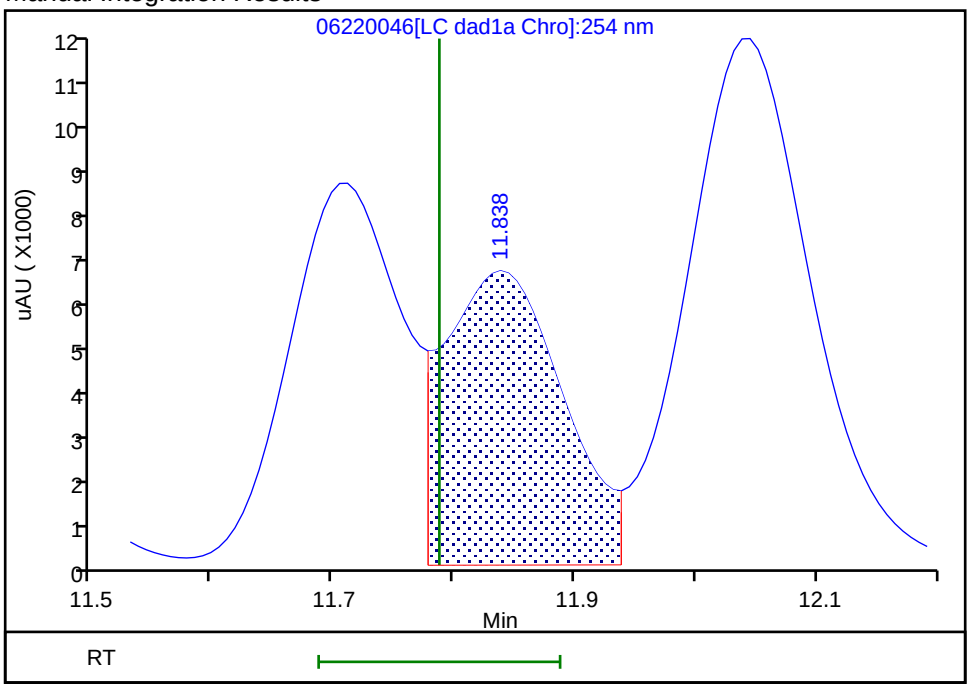
Processing Integration Results

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

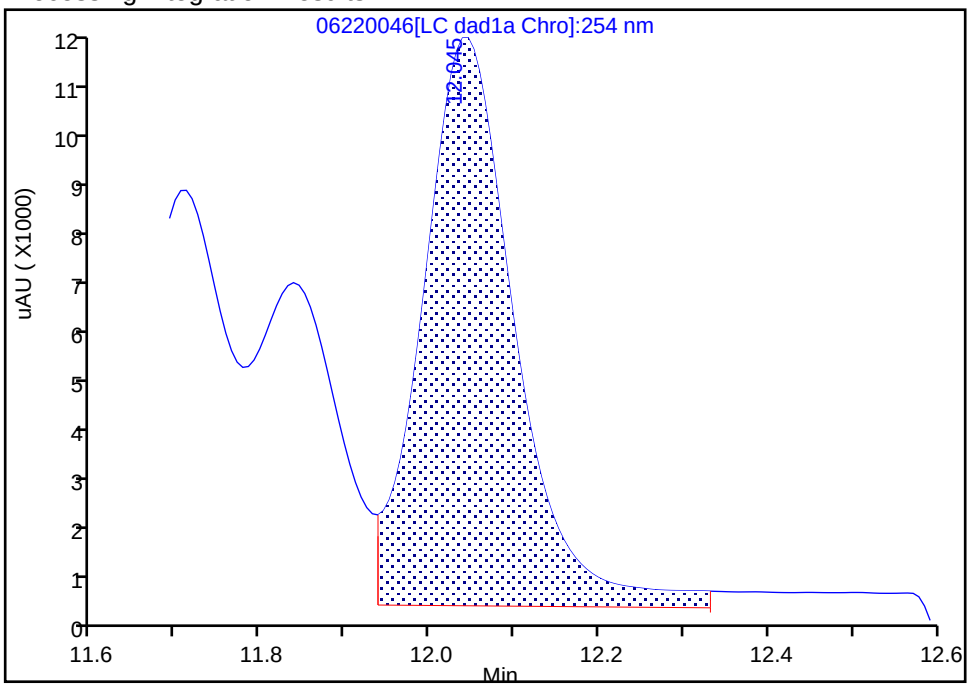
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

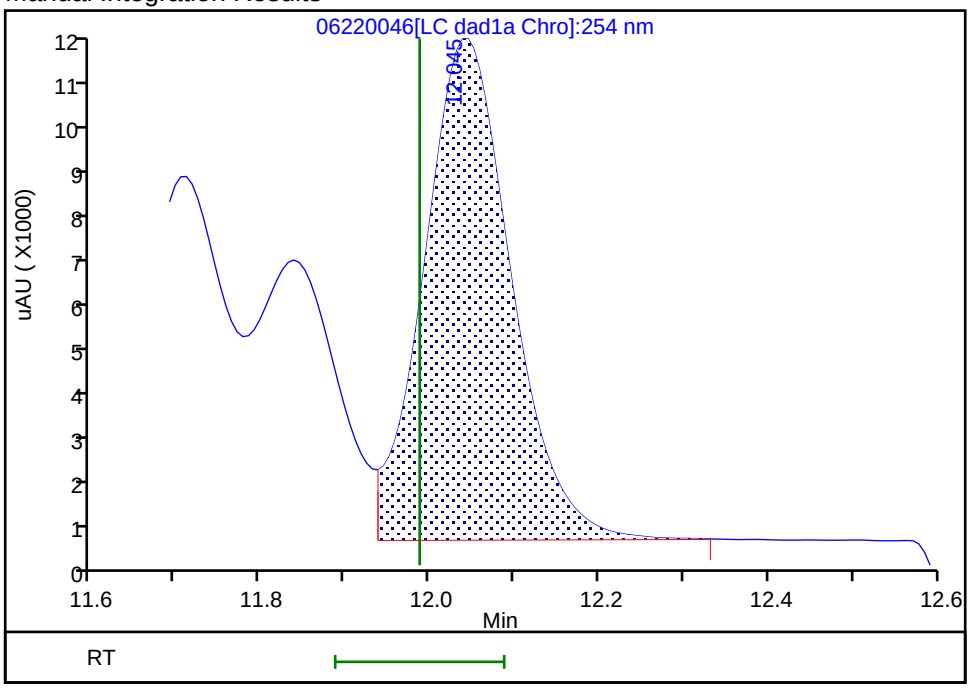
Processing Integration Results

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

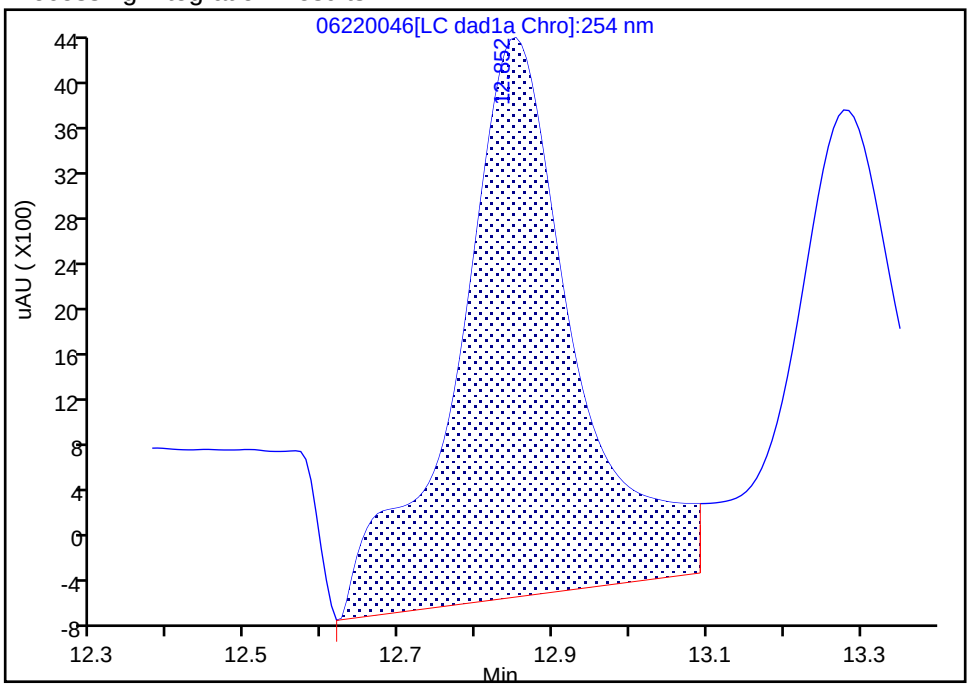
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

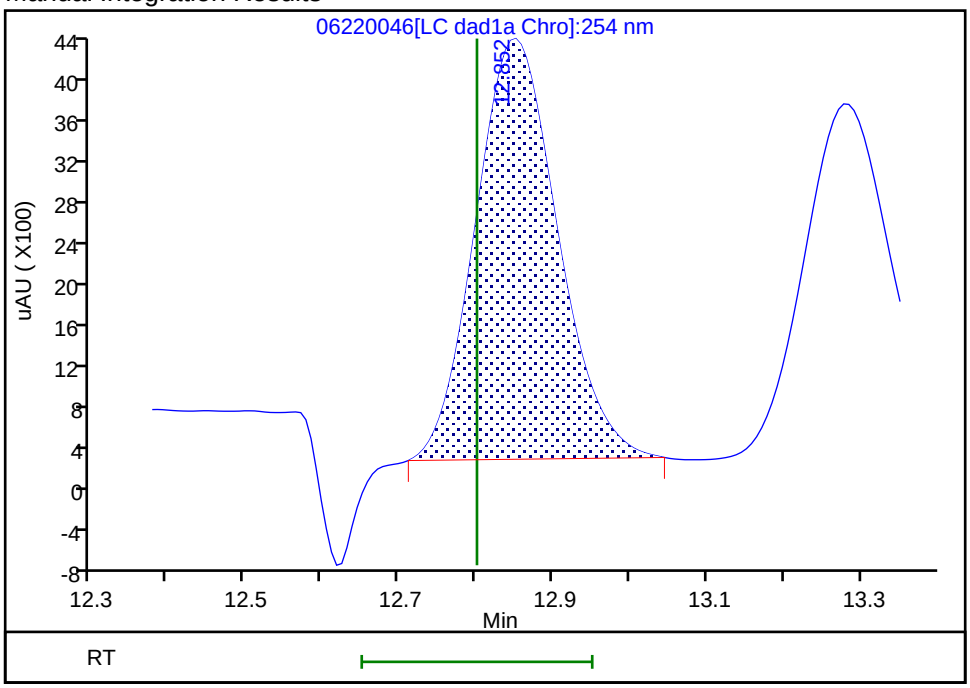
Processing Integration Results

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

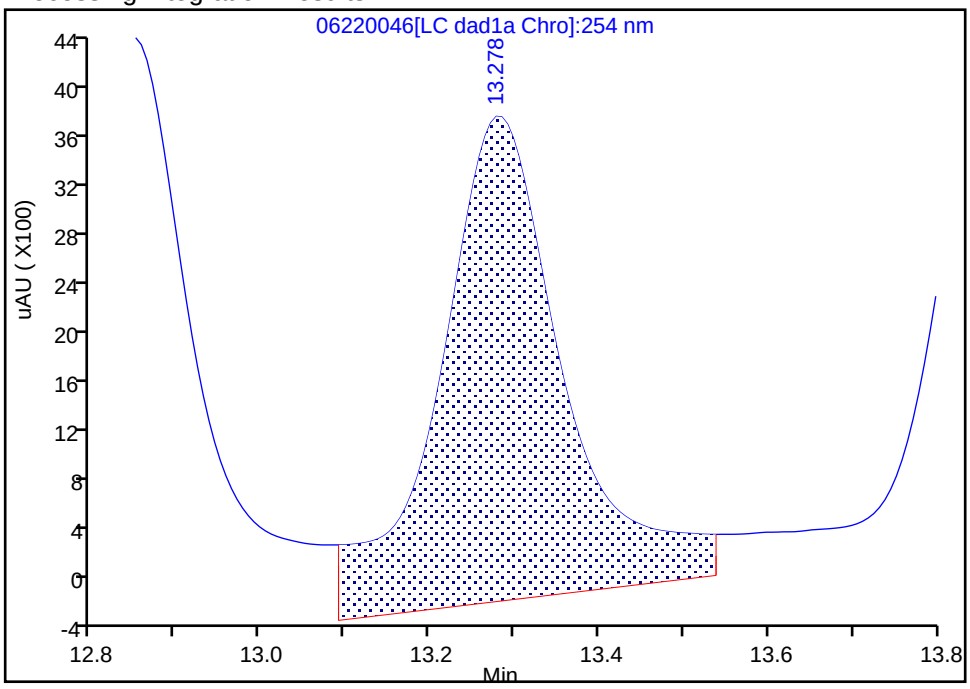
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

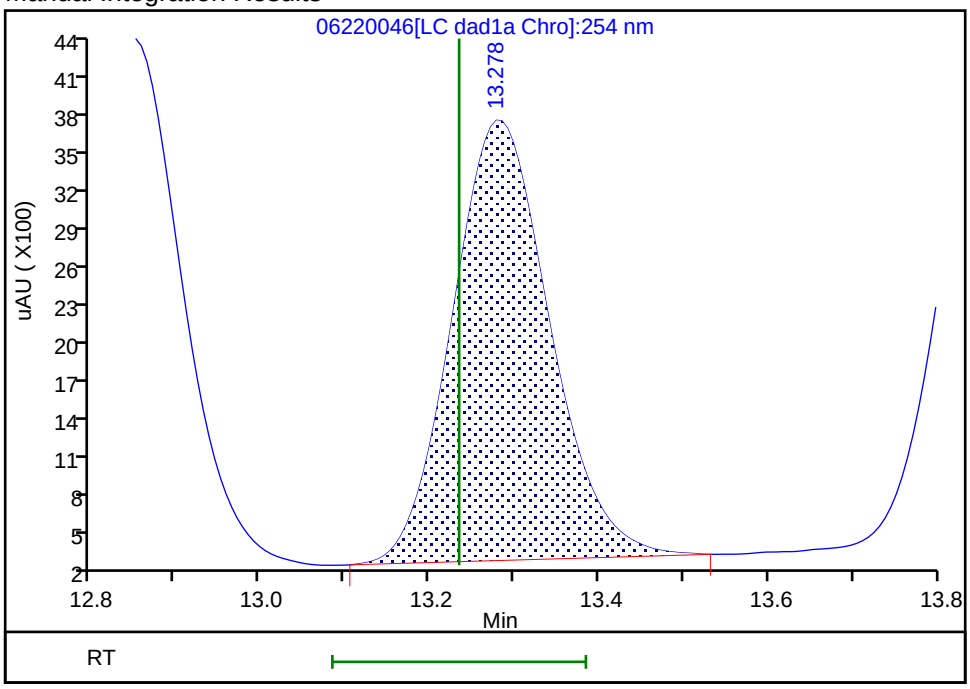
Processing Integration Results

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

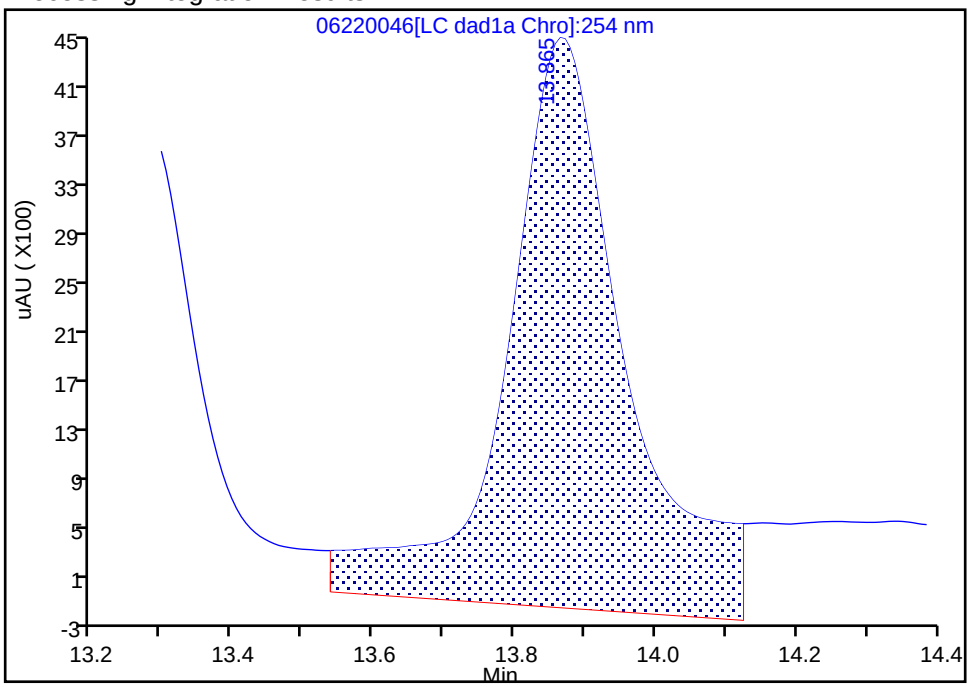
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220046.d				
Injection Date:	23-Jun-2020 05:04:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

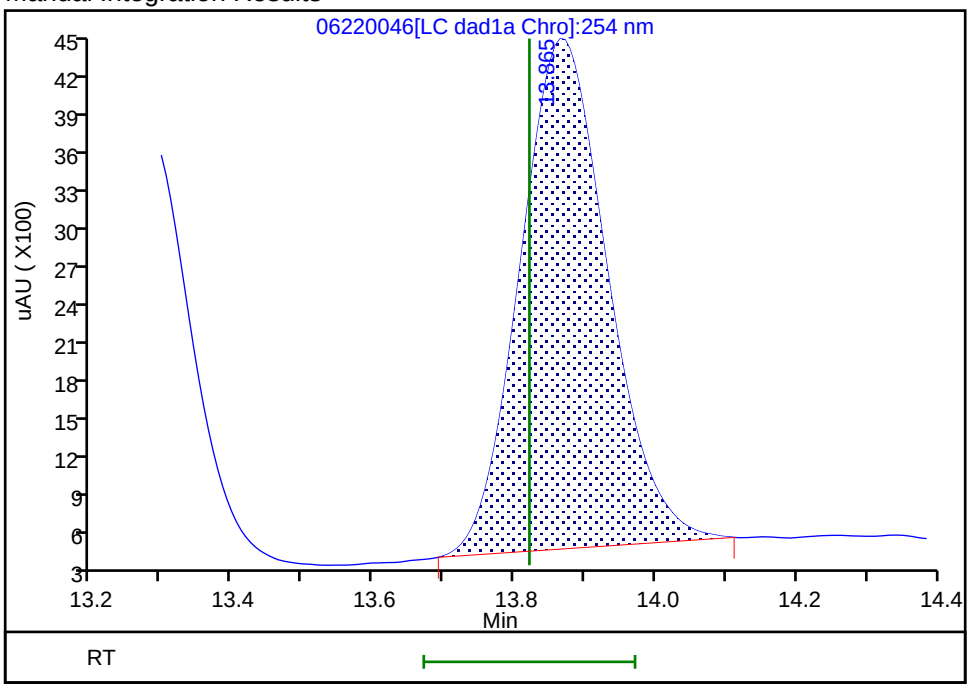
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

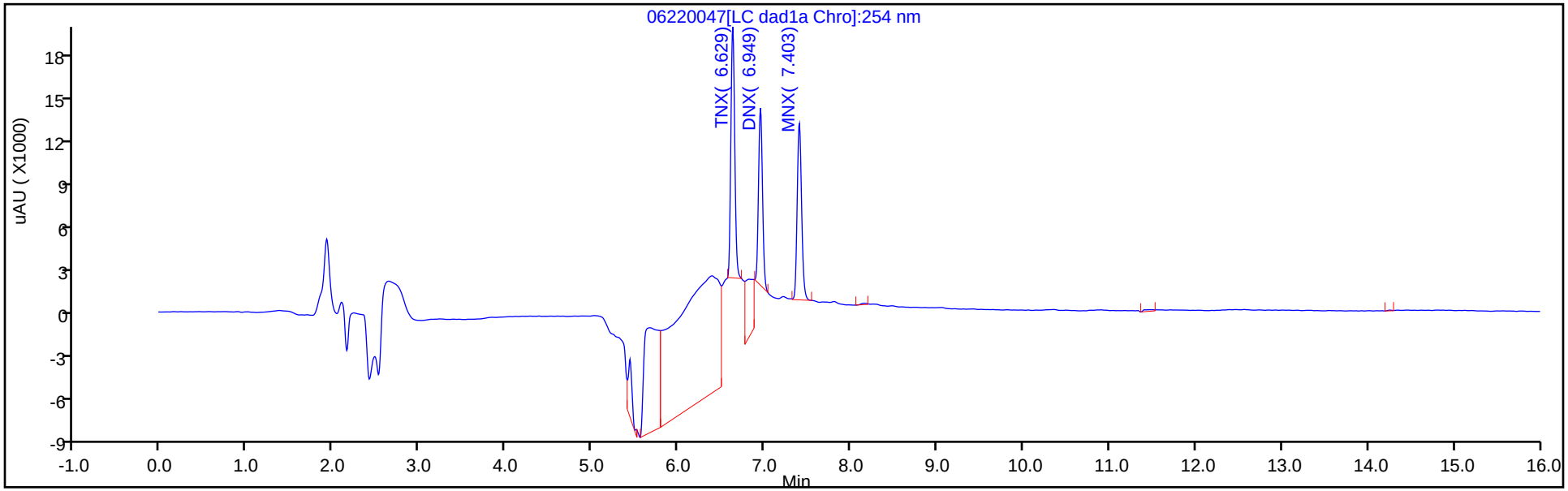
Report Date: 23-Jun-2020 15:18:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

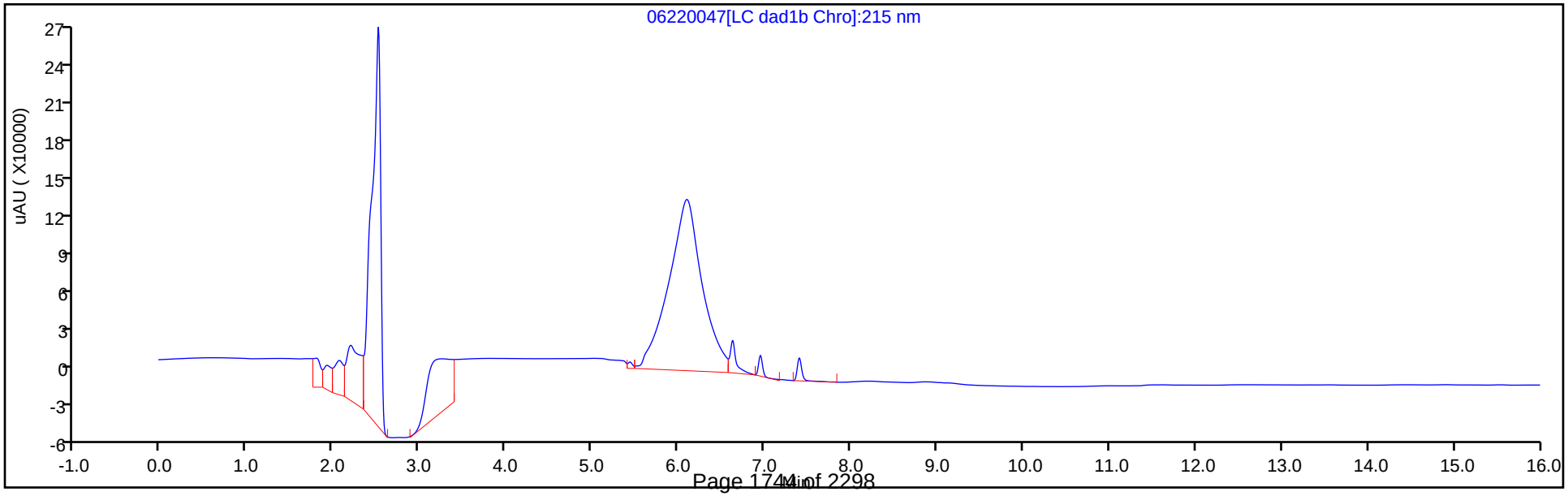
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220047.d

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

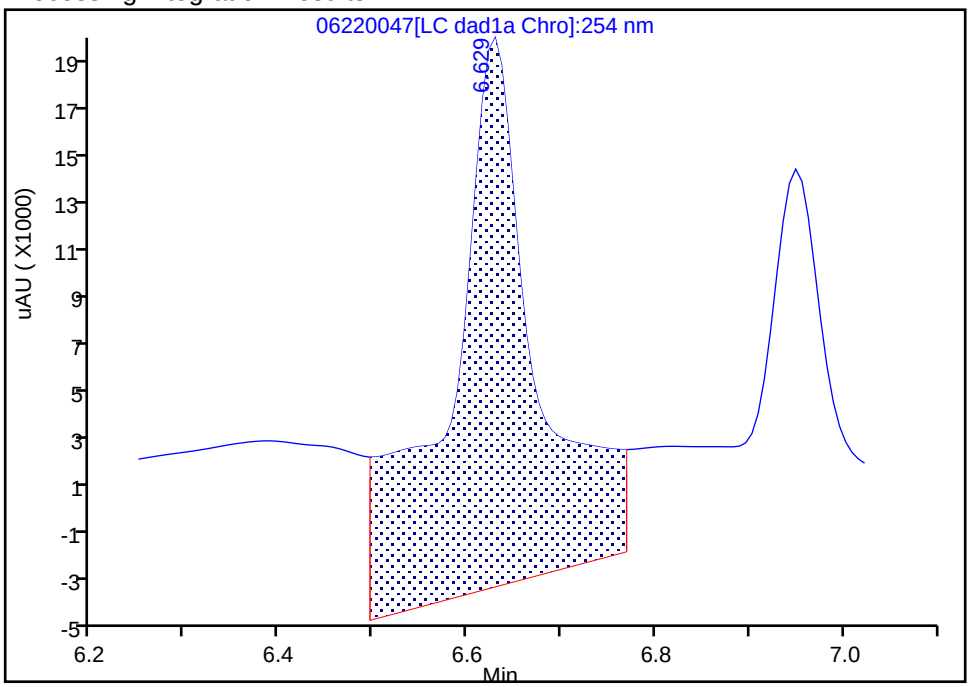
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220047.d				
Injection Date:	23-Jun-2020 05:27:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

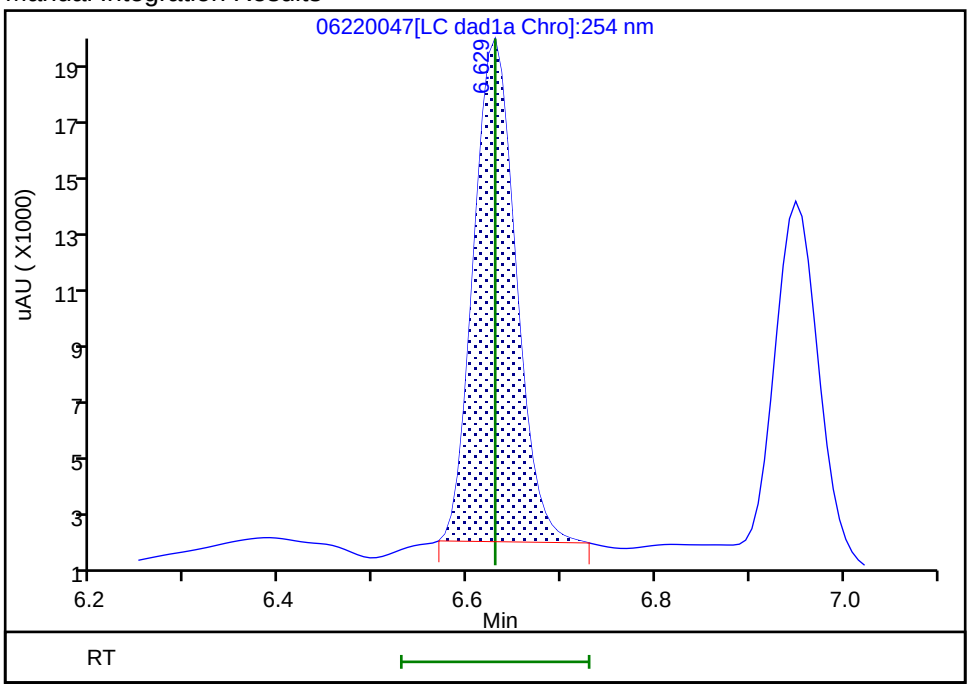
Processing Integration Results

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

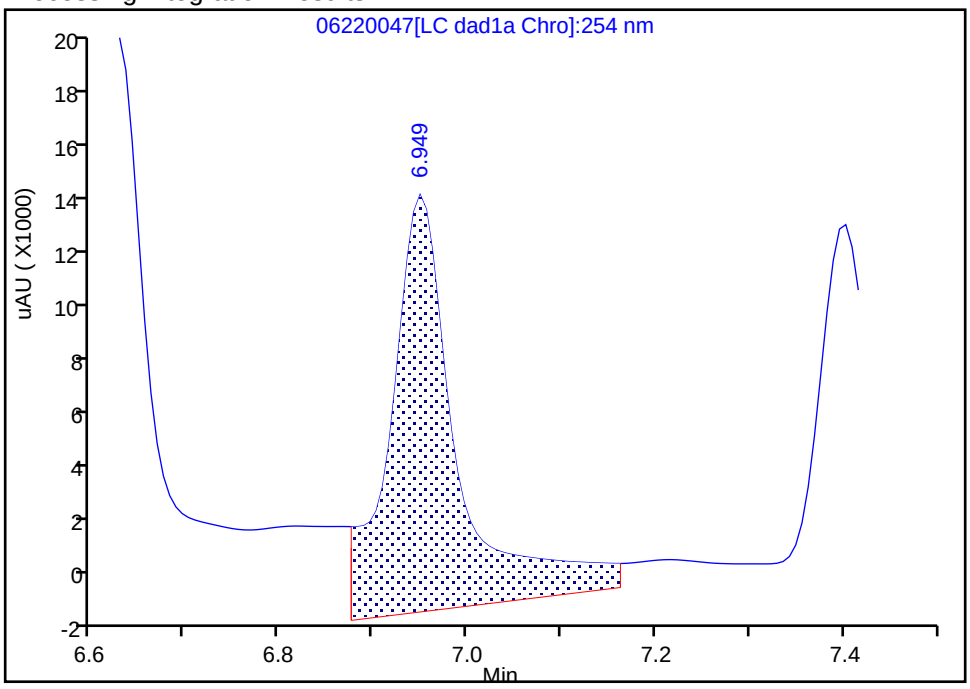
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220047.d				
Injection Date:	23-Jun-2020 05:27:04	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

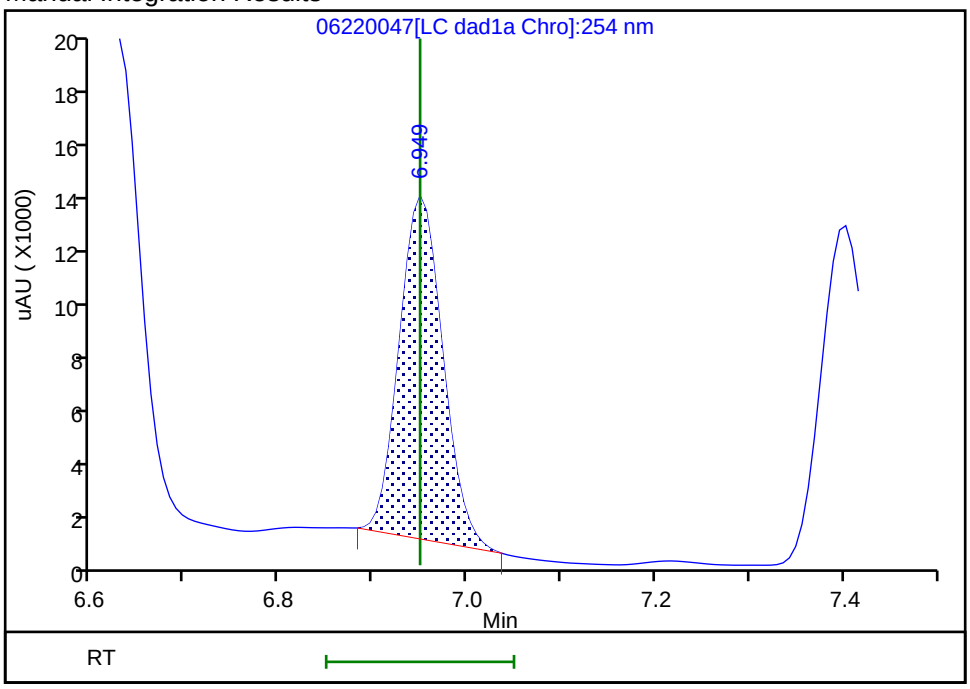
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

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

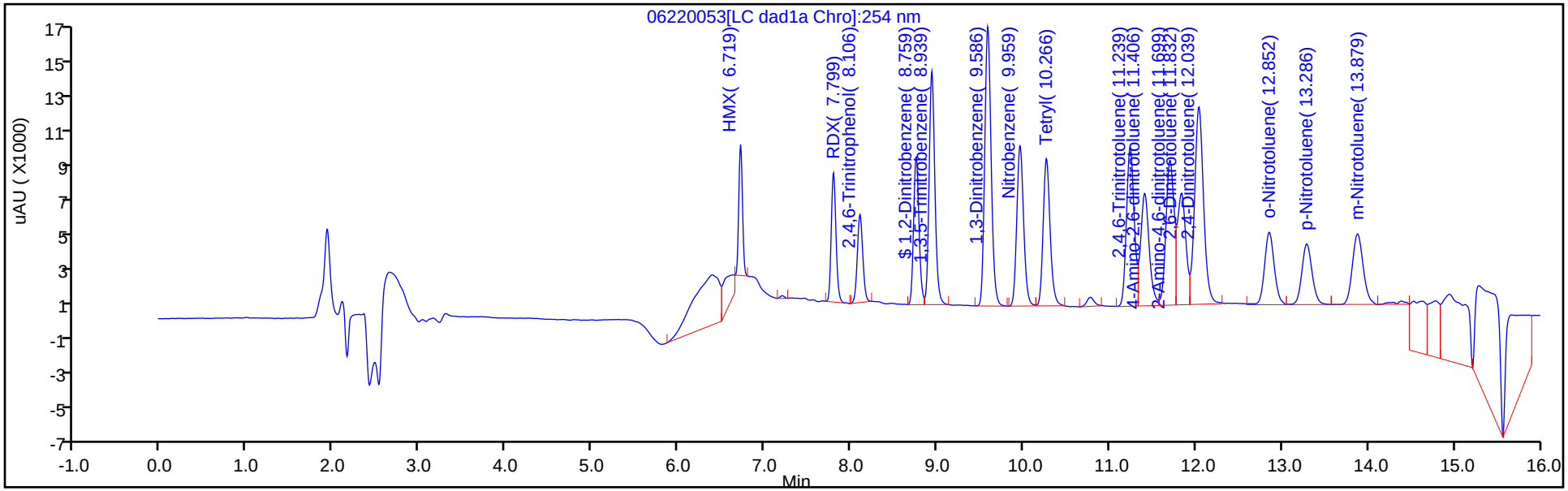
Report Date: 23-Jun-2020 15:18:15 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

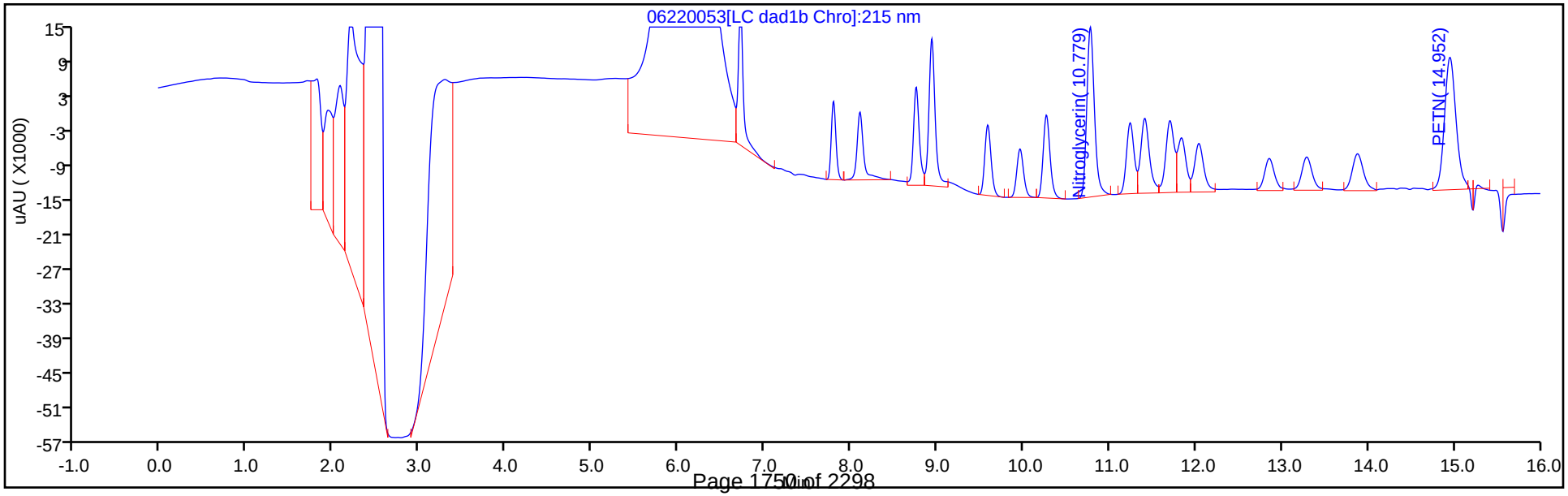
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d

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

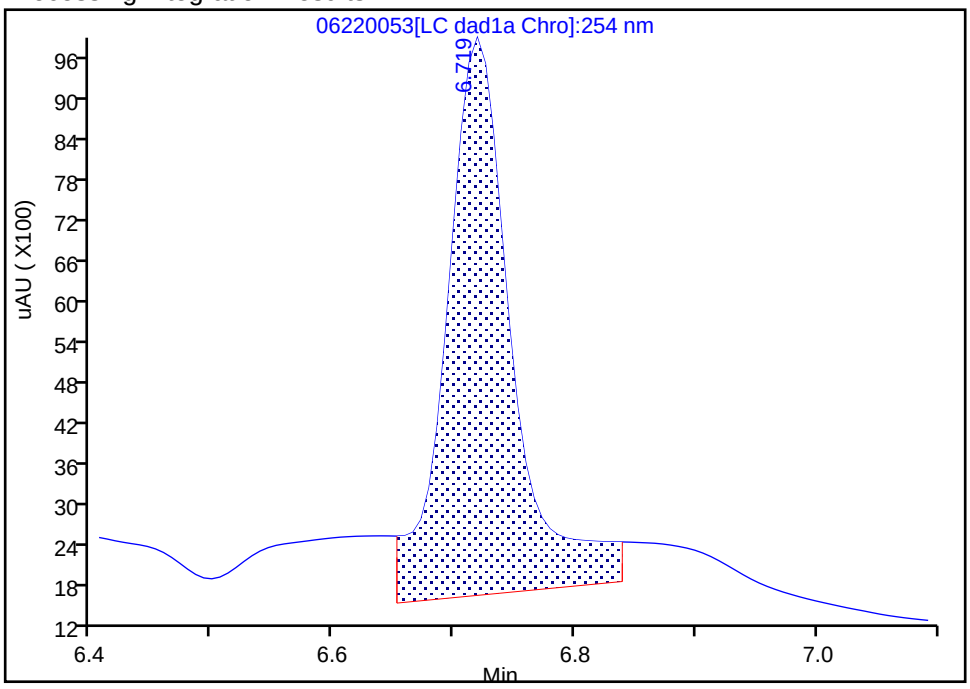
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

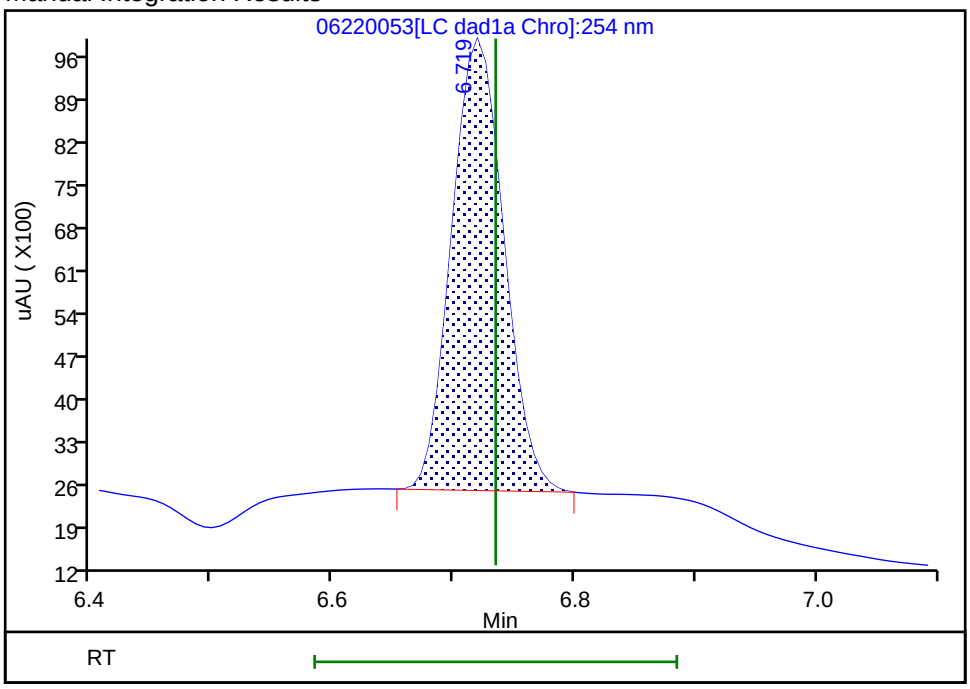
Processing Integration Results

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

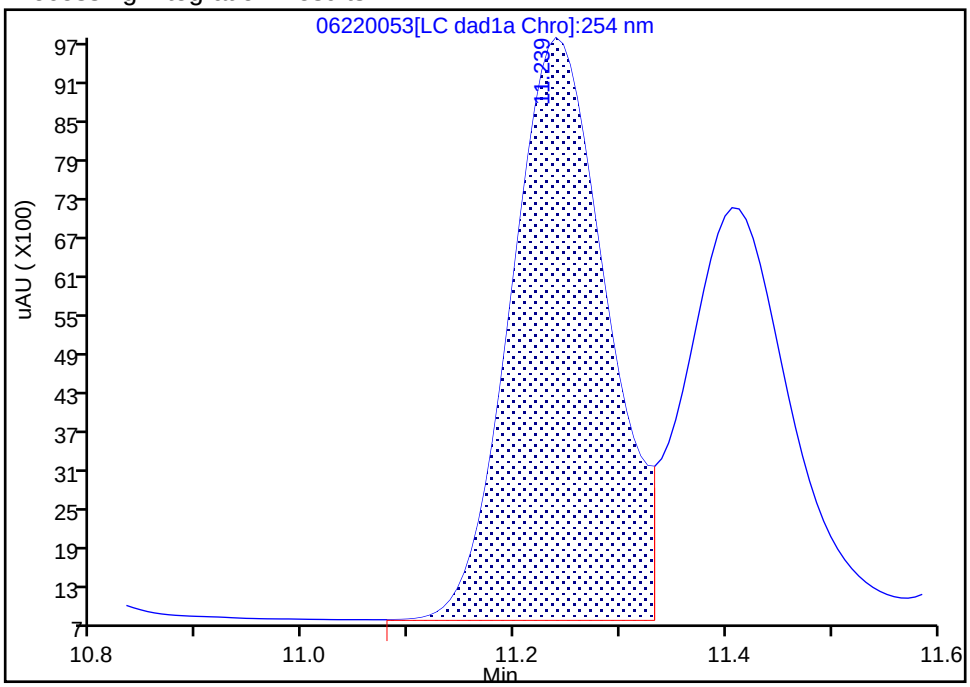
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

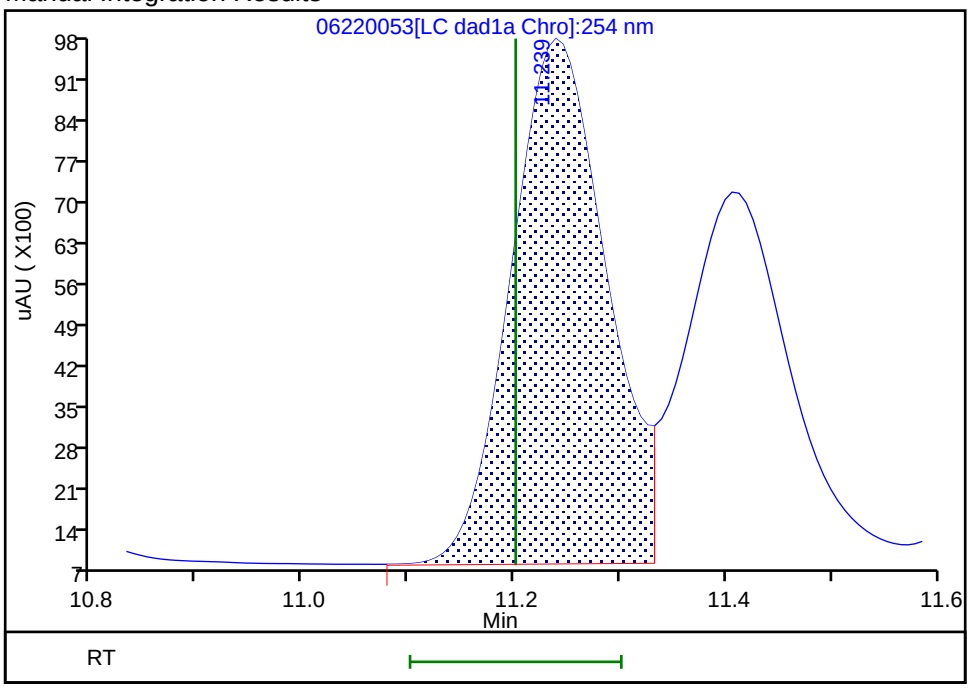
Processing Integration Results

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

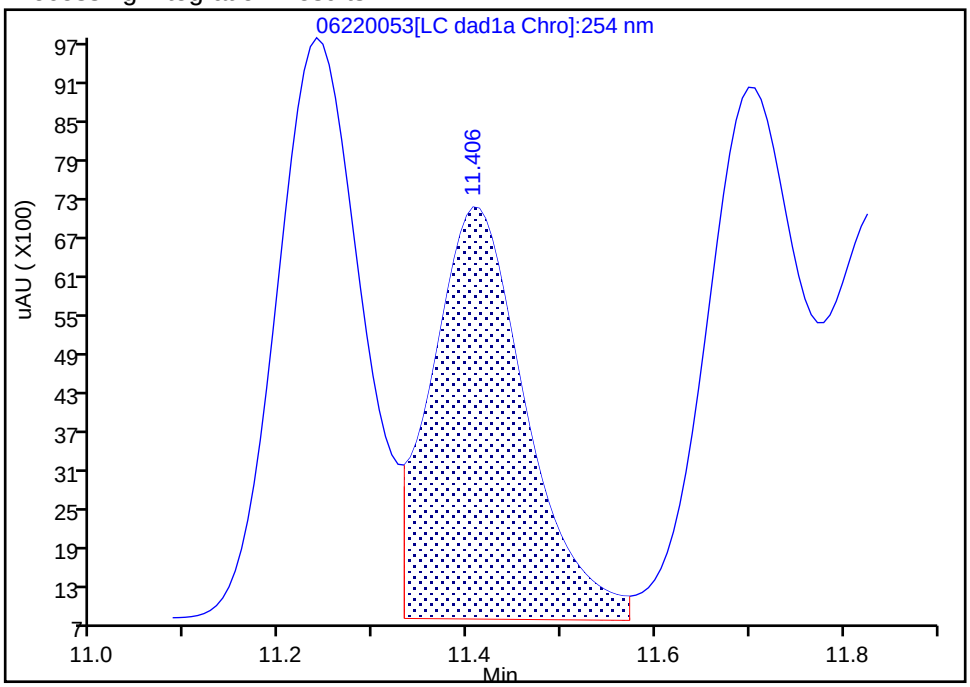
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

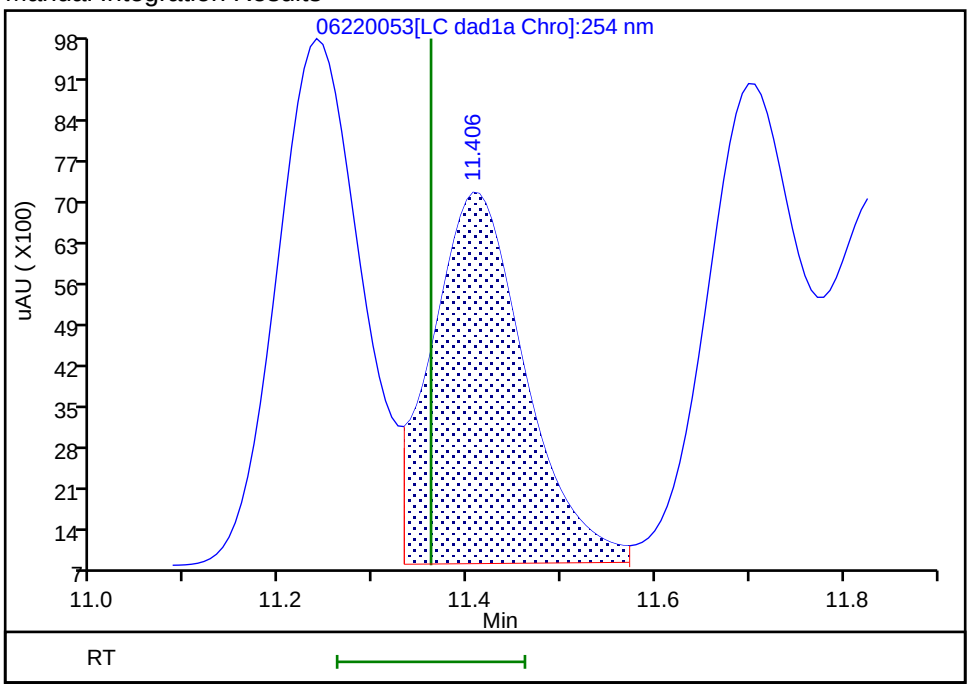
Processing Integration Results

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
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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

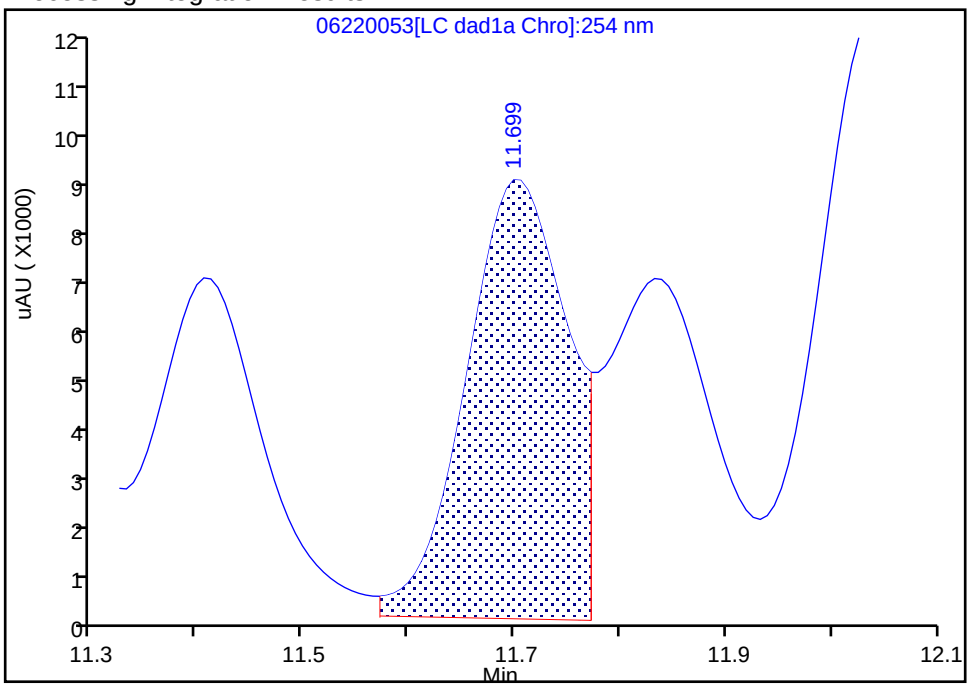
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

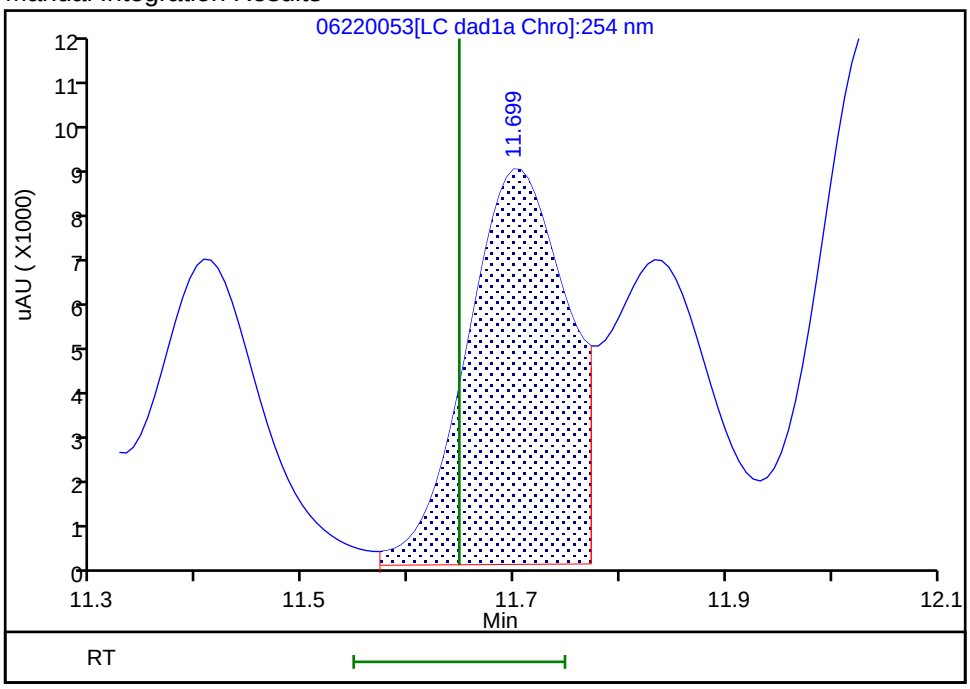
Processing Integration Results

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

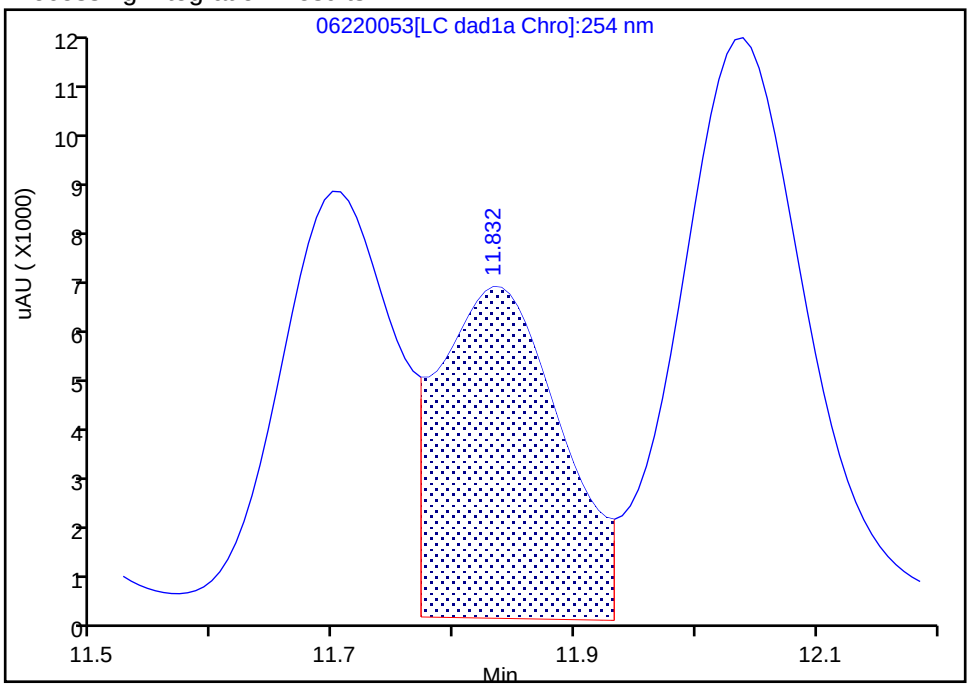
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

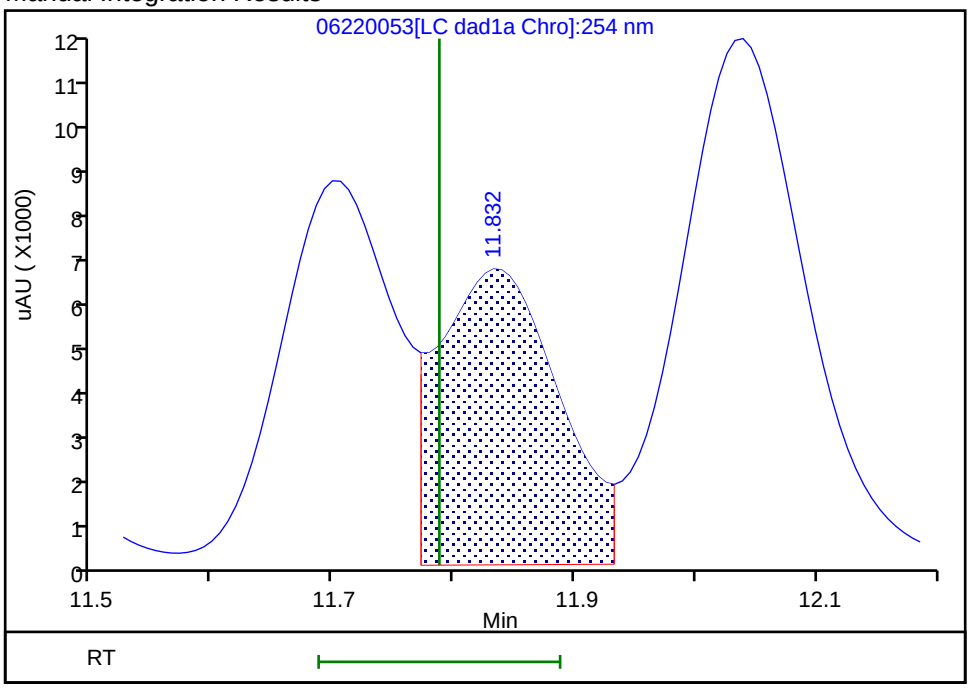
Processing Integration Results

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

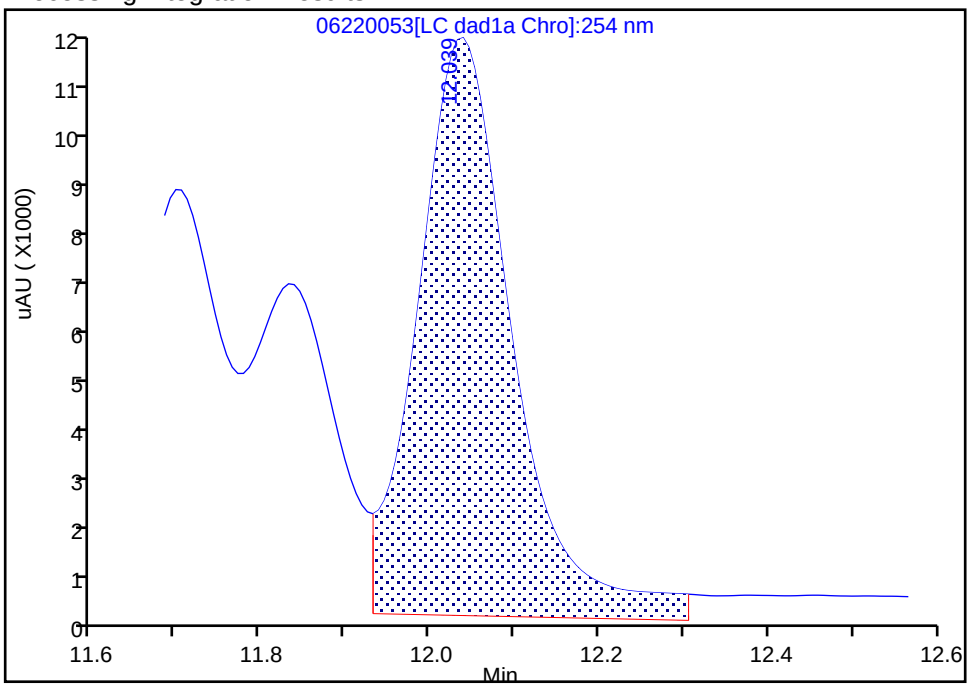
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

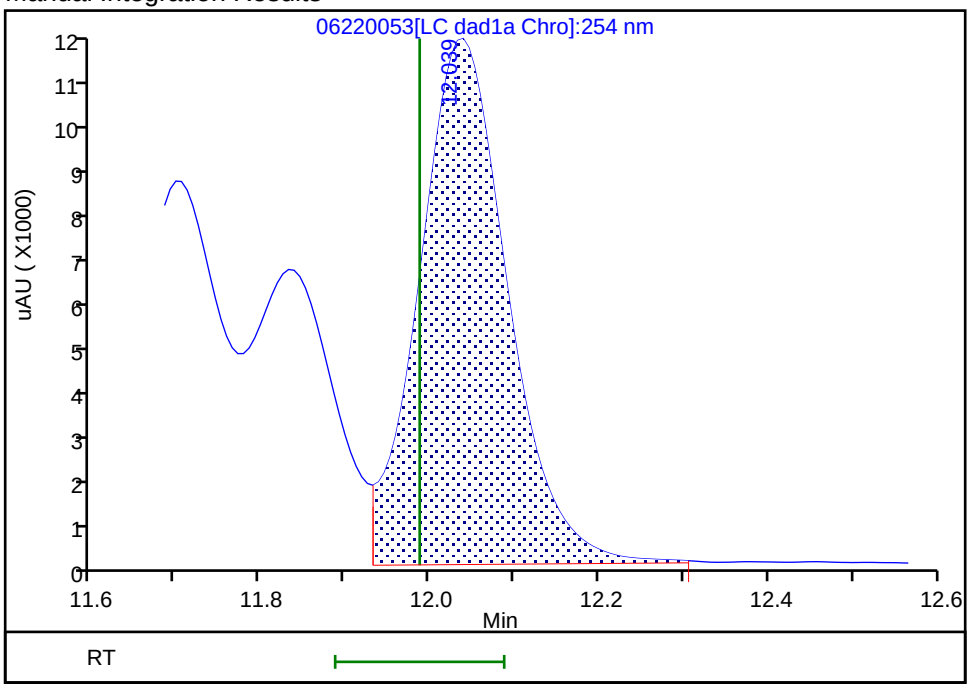
Processing Integration Results

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

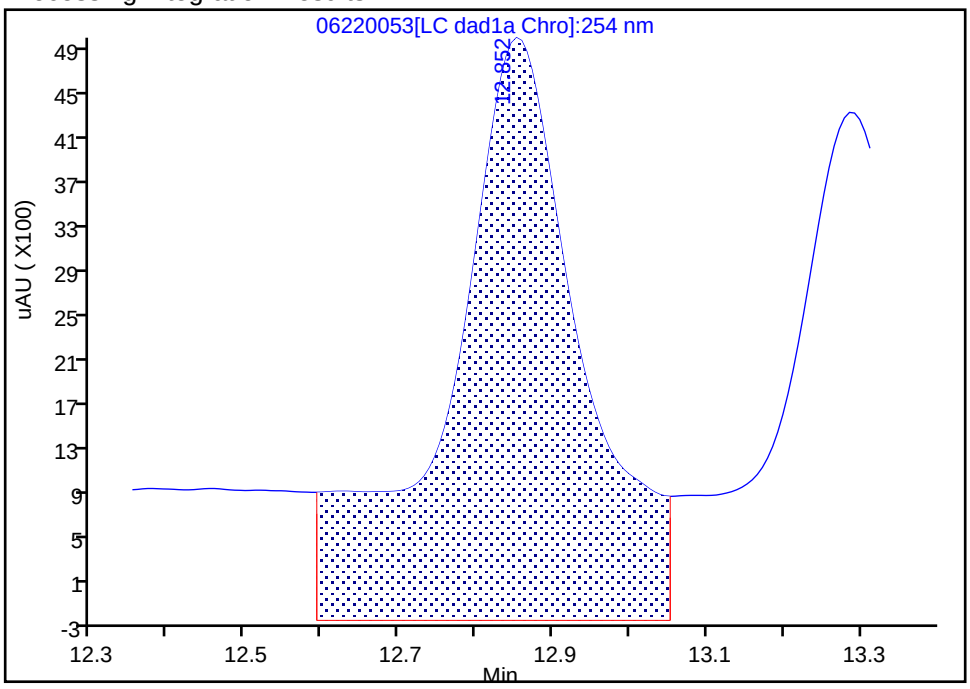
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

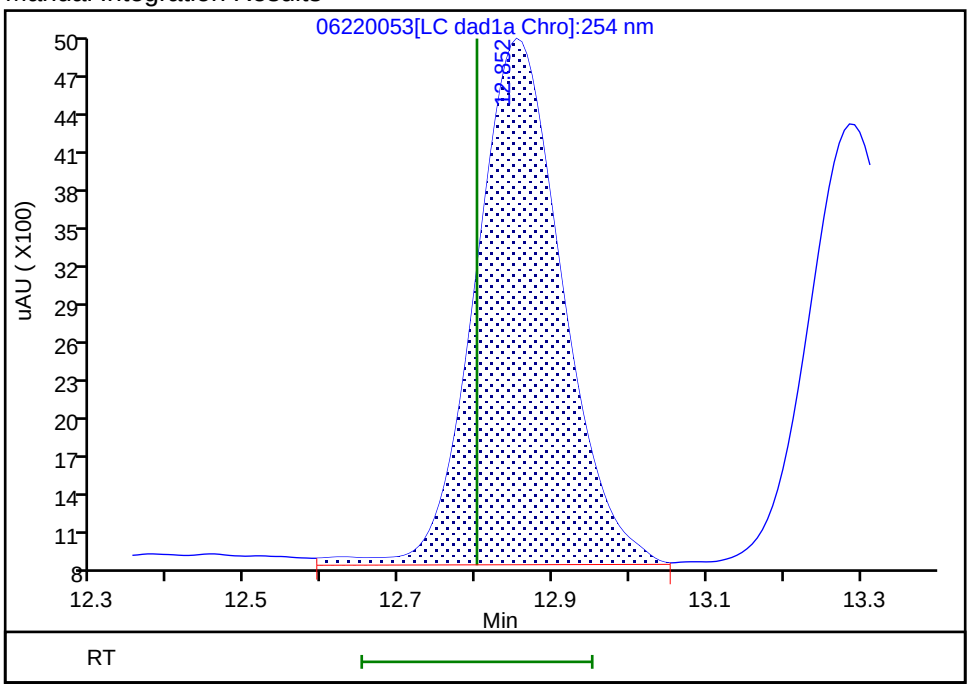
Processing Integration Results

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

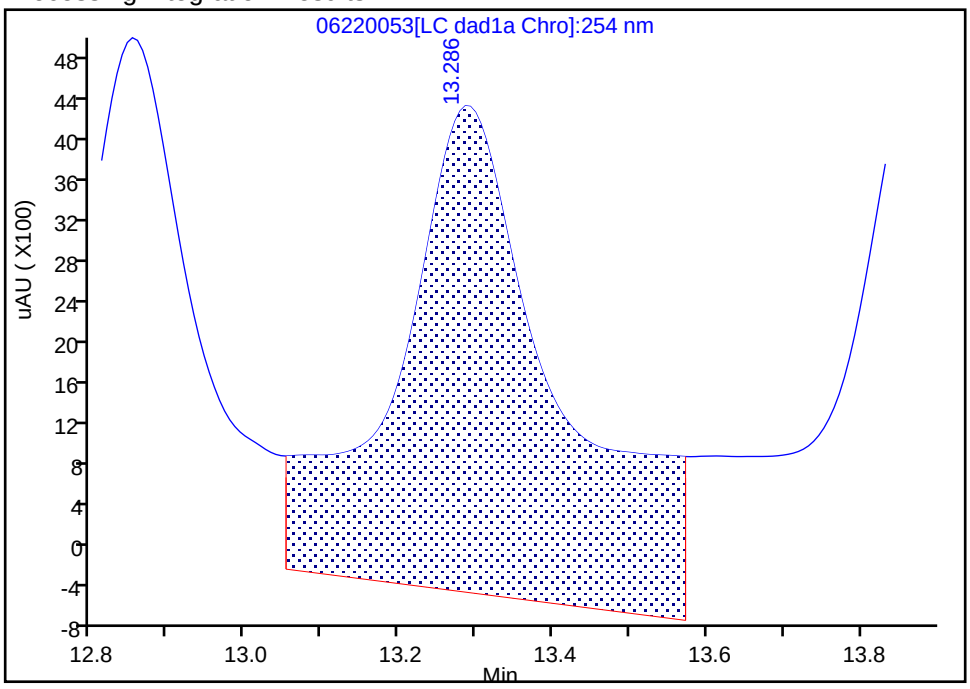
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

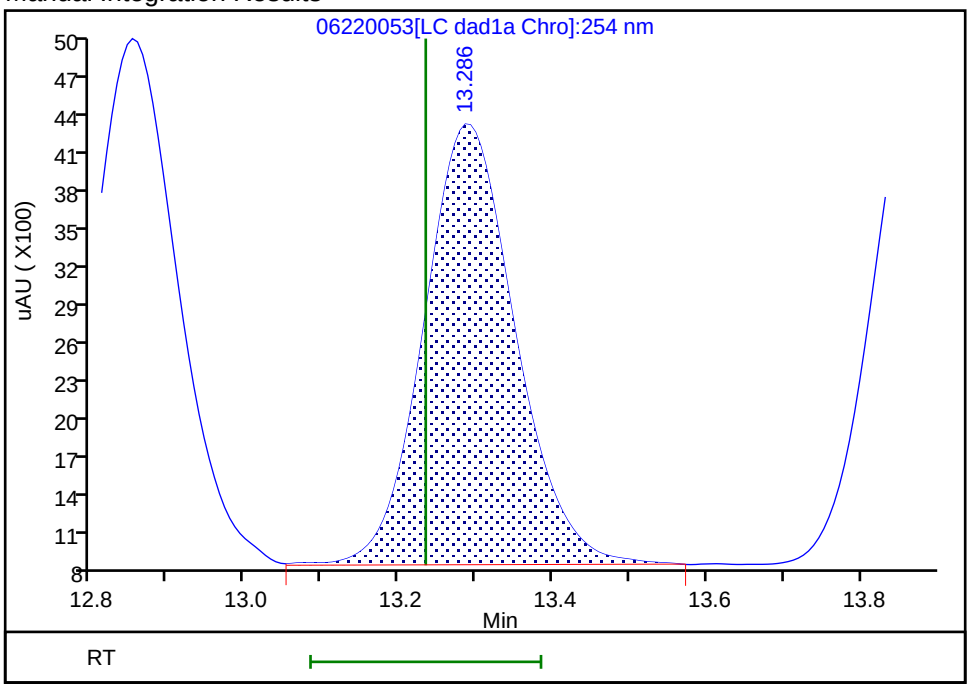
Processing Integration Results

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

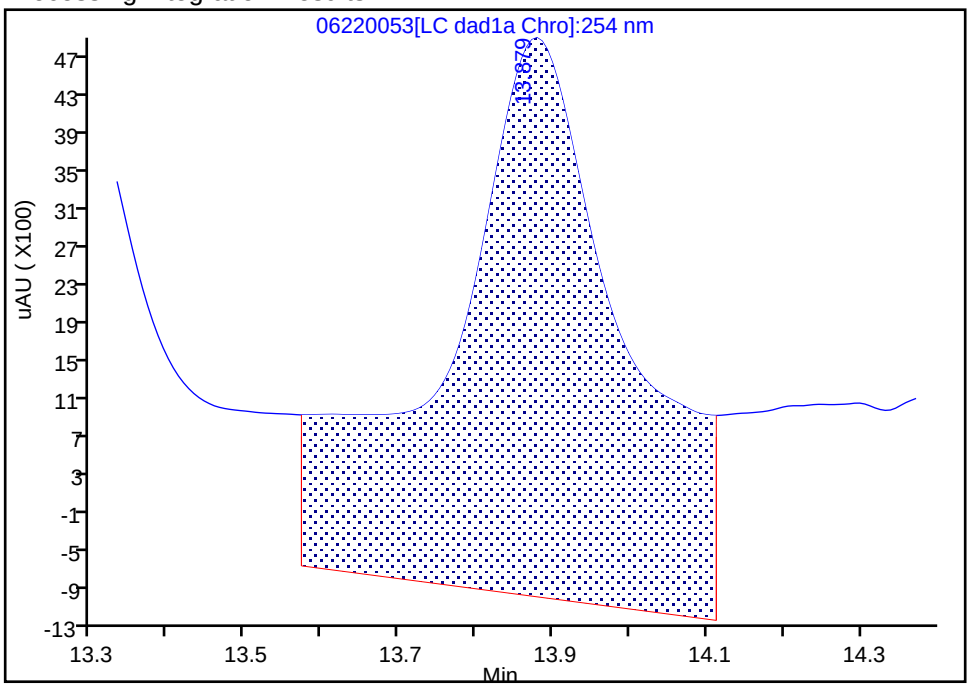
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d				
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

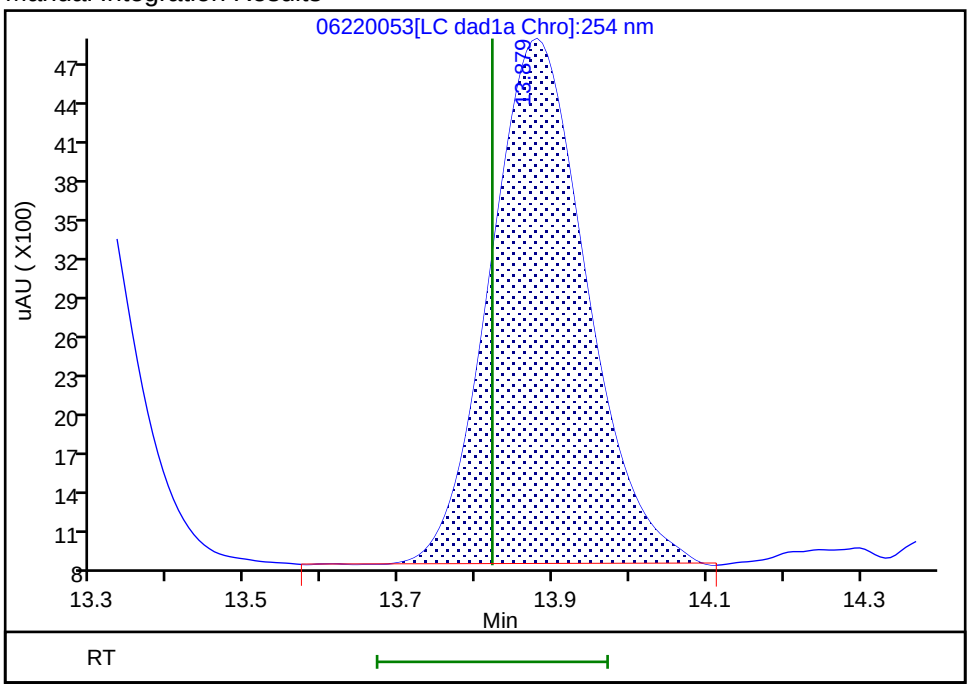
Processing Integration Results

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

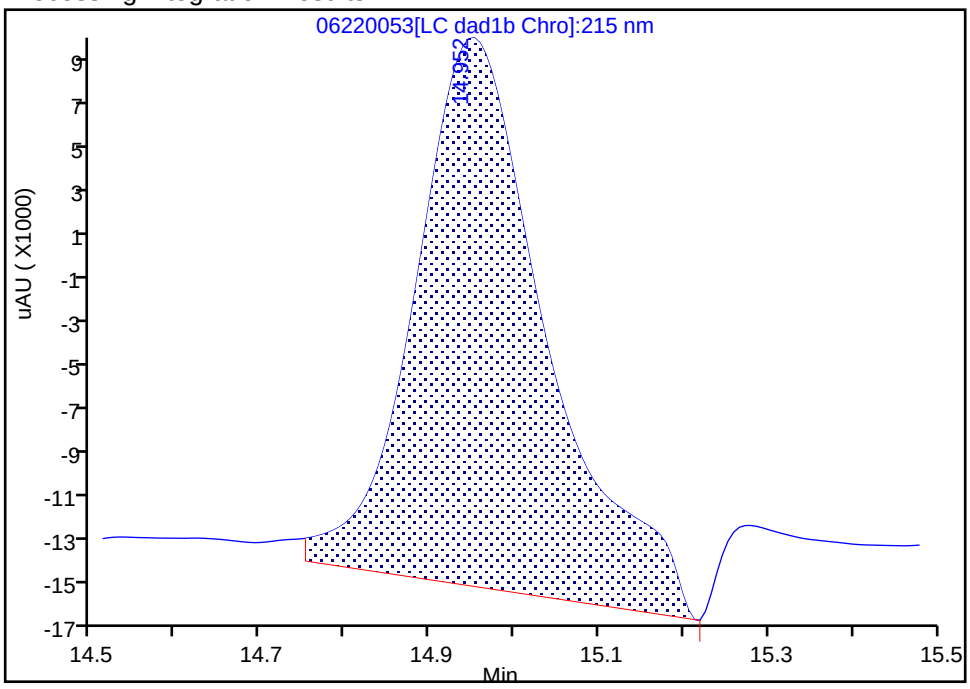
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220053.d		
Injection Date:	23-Jun-2020 07:45:13	Instrument ID:	CHHPLC_X3
Lims ID:	CCV INT		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	7 Worklist Smp#: 53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:		Detector	LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

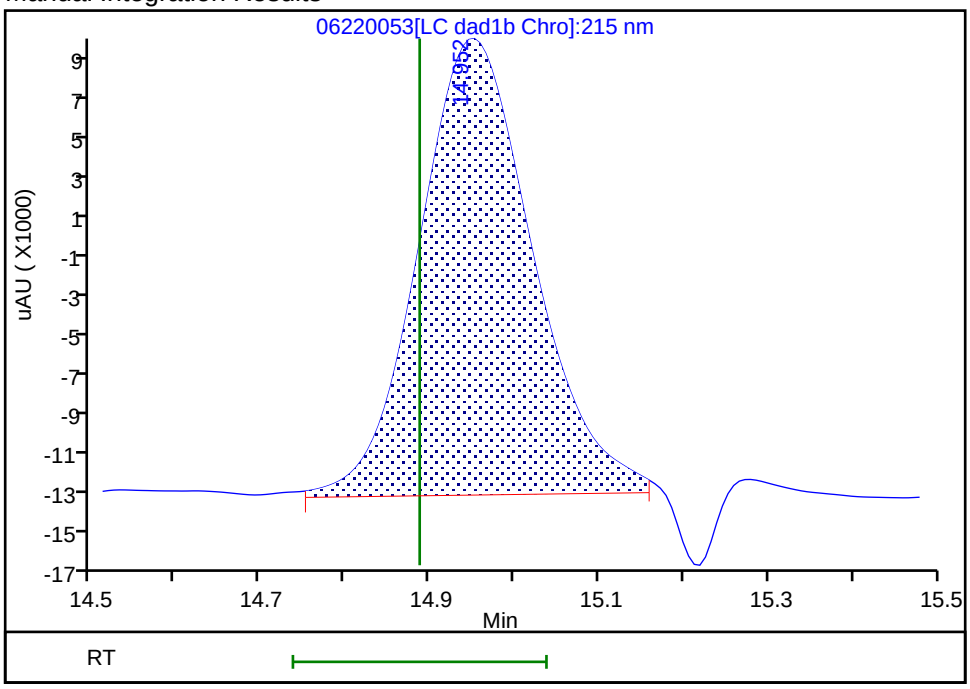
Processing Integration Results

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.: 280-137609-1

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.: 280-137609-1

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

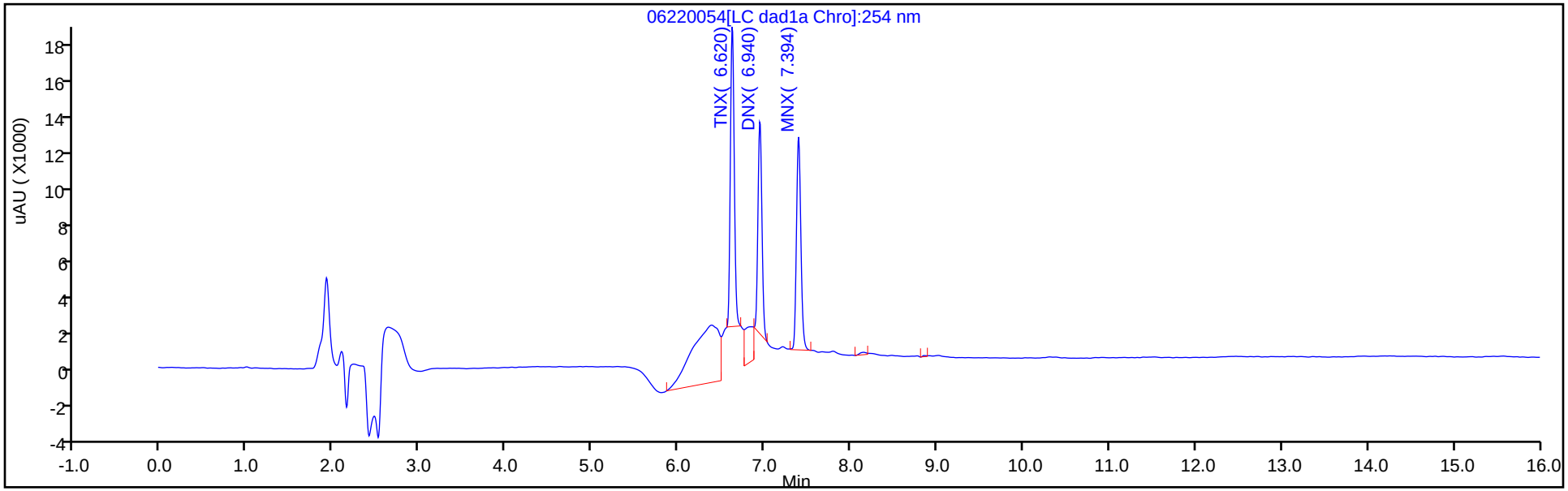
Report Date: 23-Jun-2020 15:18:15 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

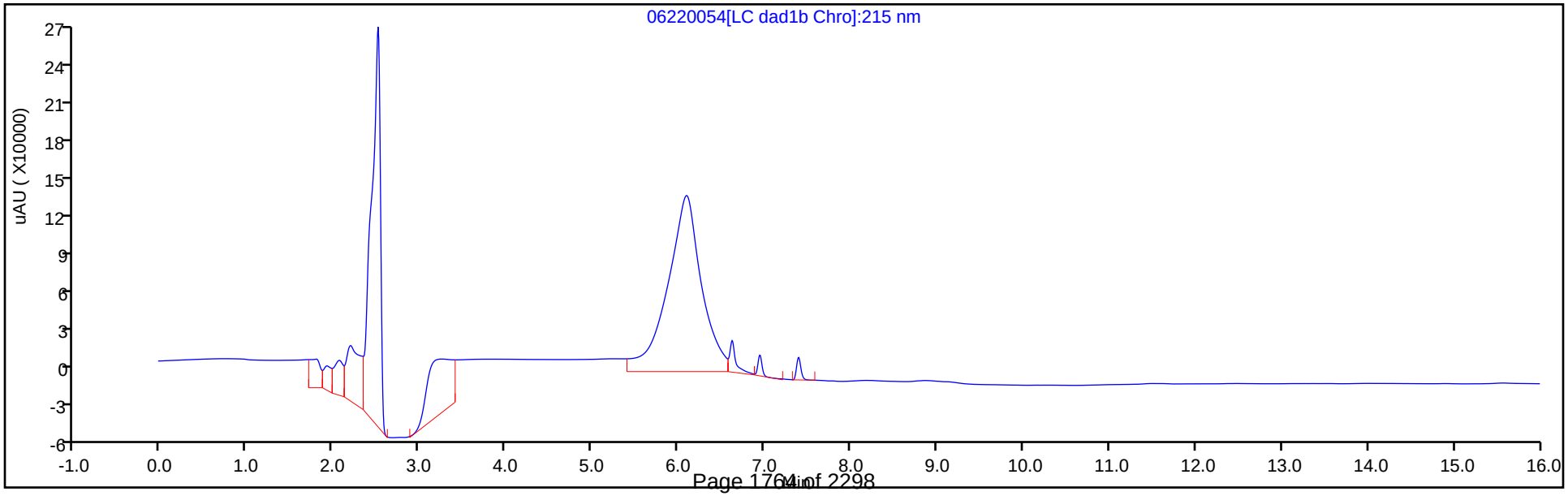
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220054.d

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

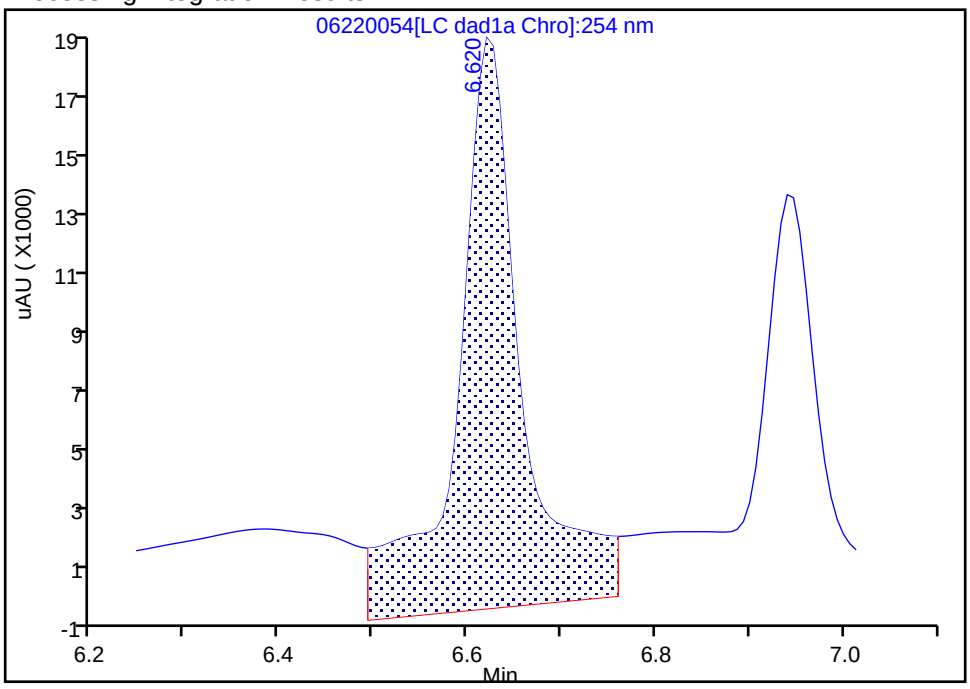
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220054.d				
Injection Date:	23-Jun-2020 08:08:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

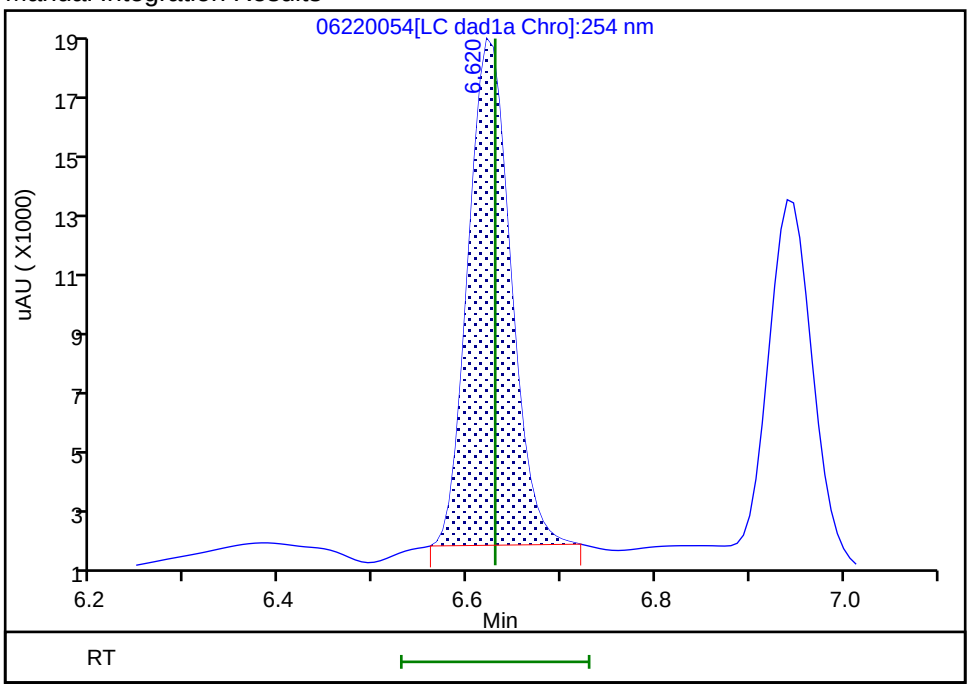
Processing Integration Results

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

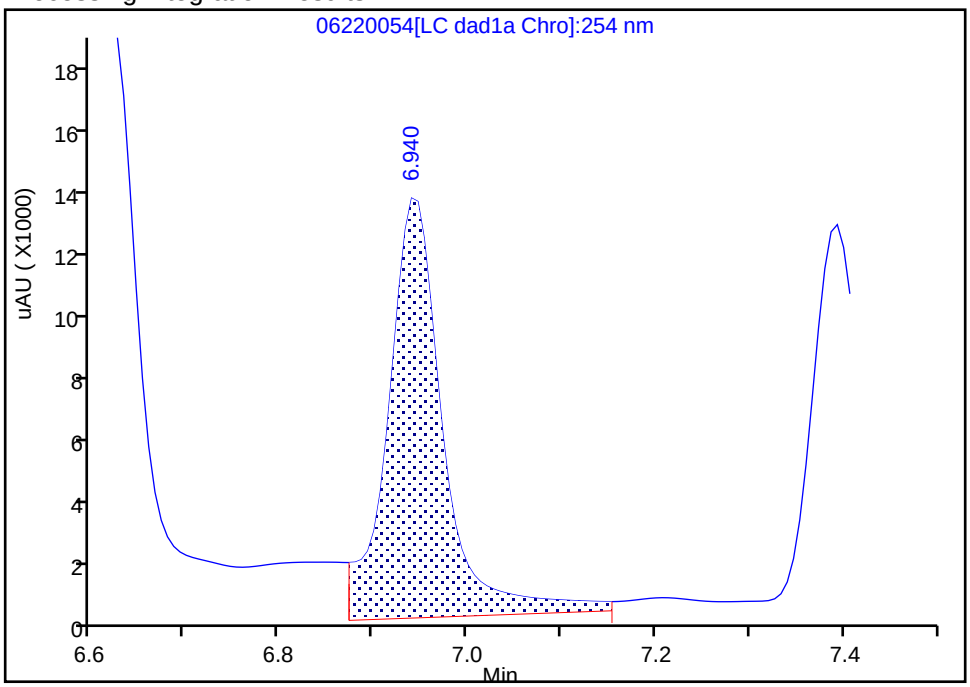
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220054.d				
Injection Date:	23-Jun-2020 08:08:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

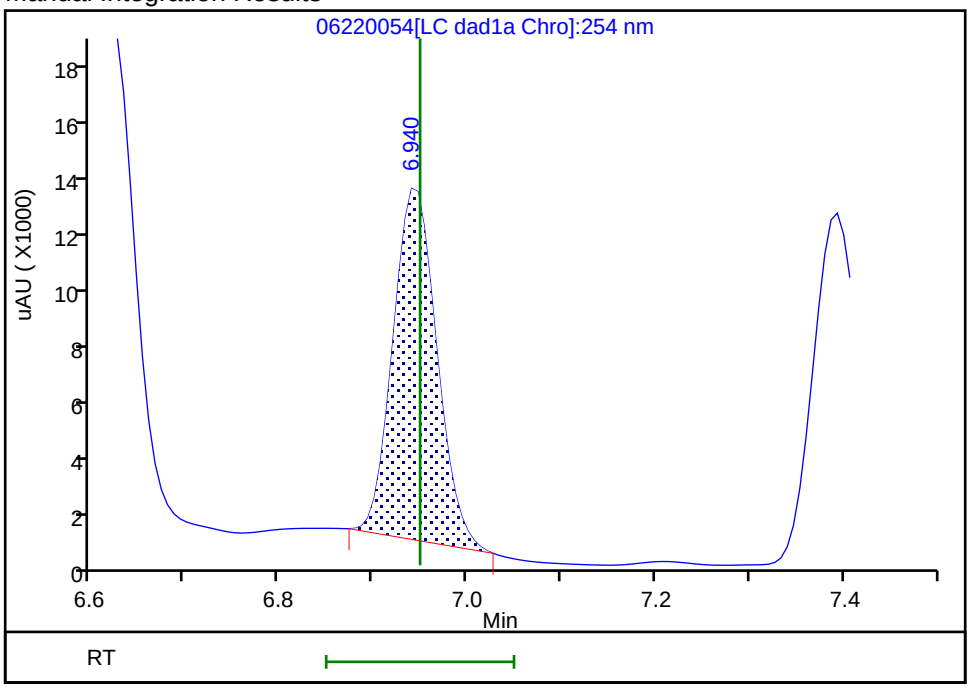
Processing Integration Results

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.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/7 Calibration Date: 06/23/2020 18:40

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: 06230007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	89936		262	250	4.6	15.0
RDX	Ave	116613	110776		237	250	-5.0	15.0
Picric acid	Ave	85131	85024		250	250	-0.1	15.0
1,3,5-Trinitrobenzene	Ave	230309	240914		262	251	4.6	15.0
1,3-Dinitrobenzene	Ave	306686	334172		273	251	9.0	15.0
Nitrobenzene	Ave	200403	213291		267	251	6.4	15.0
Tetryl	Ave	177032	181445		257	251	2.5	15.0
Nitroglycerin	Ave	68133	75878		2780	2500	11.4	15.0
2,4,6-Trinitrotoluene	Ave	204031	217259		267	251	6.5	15.0
4-Amino-2,6-dinitrotoluene	Lin2		167984		242	250	-3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	211797		262	251	4.4	15.0
2,6-Dinitrotoluene	Ave	149452	165247		278	251	10.6	15.0
2,4-Dinitrotoluene	Ave	303584	316502		262	251	4.3	15.0
2-Nitrotoluene	Ave	135051	137604		255	250	1.9	15.0
4-Nitrotoluene	Ave	113005	118687		263	251	5.0	15.0
3-Nitrotoluene	Ave	143029	149990		262	250	4.9	15.0
PETN	Ave	78605	85148		2710	2500	8.3	15.0
1,2-Dinitrobenzene	Ave	138212	145704		264	250	5.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/7 Calibration Date: 06/23/2020 18:40

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: 06230007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.57	6.87
RDX	7.79	7.64	7.94
Picric acid	8.09	7.94	8.24
1,3,5-Trinitrobenzene	8.92	8.77	9.07
1,3-Dinitrobenzene	9.57	9.42	9.72
Nitrobenzene	9.94	9.79	10.09
Tetryl	10.24	10.09	10.39
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	11.66	11.56	11.76
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	13.22	13.07	13.37
3-Nitrotoluene	13.80	13.65	13.95
PETN	14.84	14.69	14.99
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 18:40:33 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092681-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:10 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 20:02:44

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.723	6.723	0.000	22484	0.2500	0.2616	M
	7 RDX	1	7.790	7.790	0.000	27694	0.2500	0.2375	
	8 2,4,6-Trinitrophenol	1	8.090	8.090	0.000	21256	0.2500	0.2497	
$	9 1,2-Dinitrobenzene	1	8.736	8.736	0.000	36426	0.2500	0.2636	
	10 1,3,5-Trinitrobenzene	1	8.923	8.923	0.000	60349	0.2505	0.2620	
	11 1,3-Dinitrobenzene	1	9.570	9.570	0.000	83710	0.2505	0.2730	
	12 Nitrobenzene	1	9.943	9.943	0.000	53536	0.2510	0.2671	
	14 Tetryl	1	10.236	10.236	0.000	45452	0.2505	0.2567	
	15 Nitroglycerin	2	10.750	10.750	0.000	189694	2.50	2.78	
	16 2,4,6-Trinitrotoluene	1	11.203	11.203	0.000	54532	0.2510	0.2673	M
	17 4-Amino-2,6-dinitrotoluene	1	11.363	11.363	0.000	42038	0.2503	0.2422	M
	18 2-Amino-4,6-dinitrotoluene	1	11.656	11.656	0.000	53161	0.2510	0.2621	M
	19 2,6-Dinitrotoluene	1	11.790	11.790	0.000	41477	0.2510	0.2775	M
	20 2,4-Dinitrotoluene	1	11.990	11.990	0.000	79442	0.2510	0.2617	M
	21 o-Nitrotoluene	1	12.796	12.796	0.000	34401	0.2500	0.2547	M
	22 p-Nitrotoluene	1	13.223	13.223	0.000	29731	0.2505	0.2631	M
	23 m-Nitrotoluene	1	13.803	13.803	0.000	37535	0.2503	0.2624	M
	24 PETN	2	14.843	14.843	0.000	212870	2.50	2.71	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

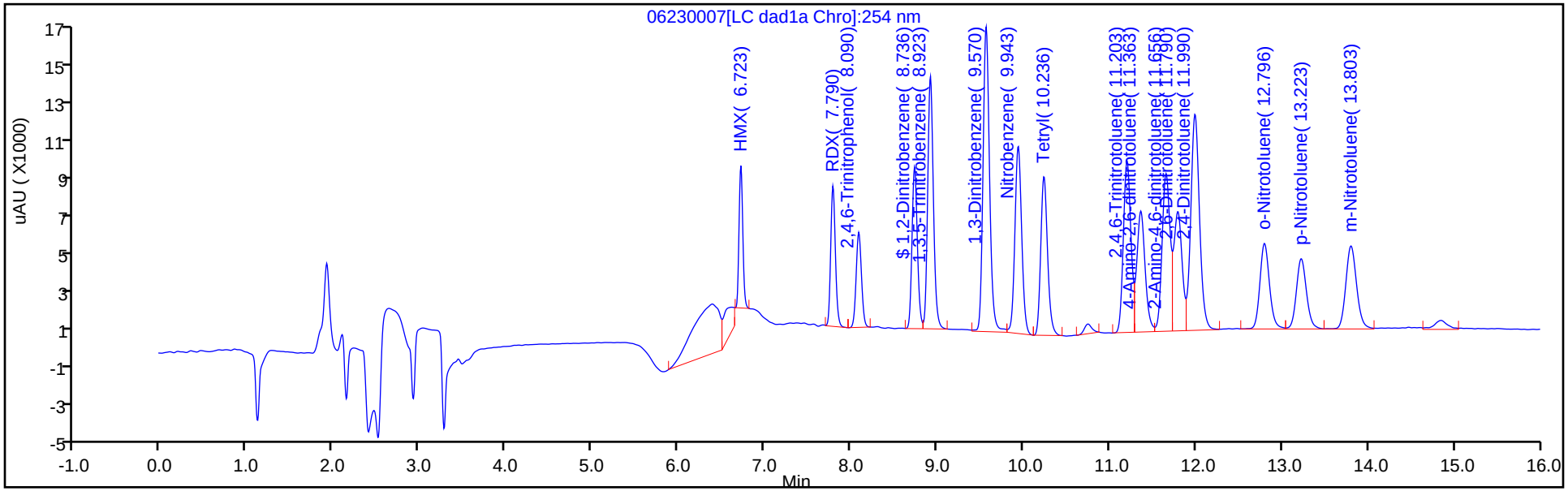
Report Date: 24-Jun-2020 16:26:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

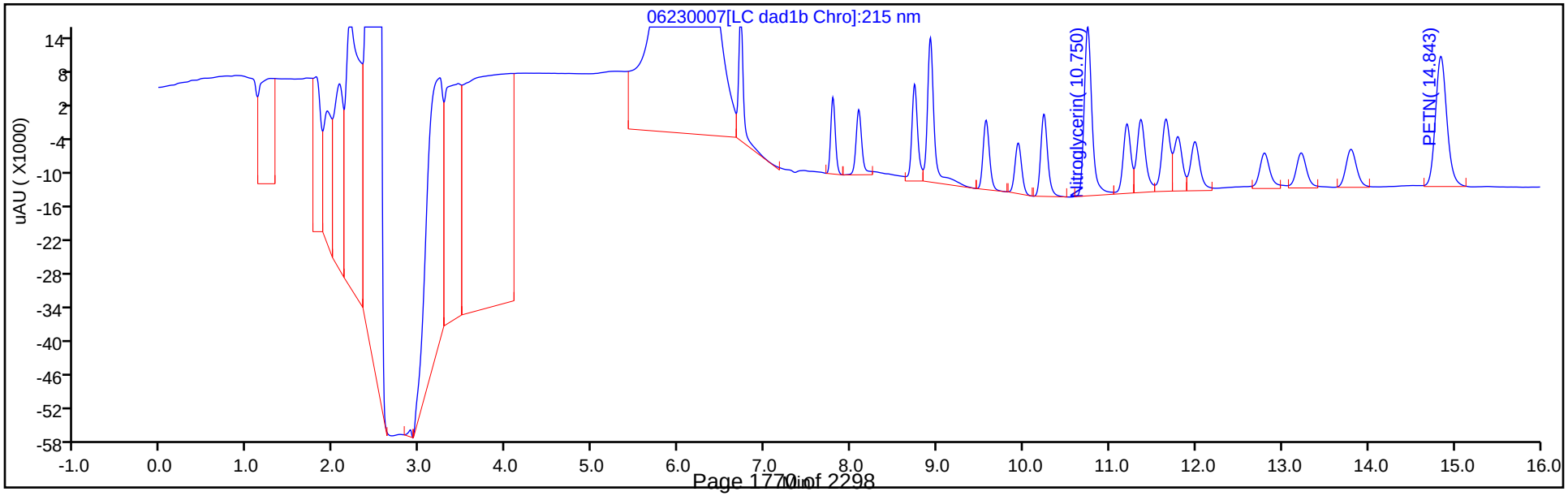
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d

Injection Date:	23-Jun-2020 18:40:33	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

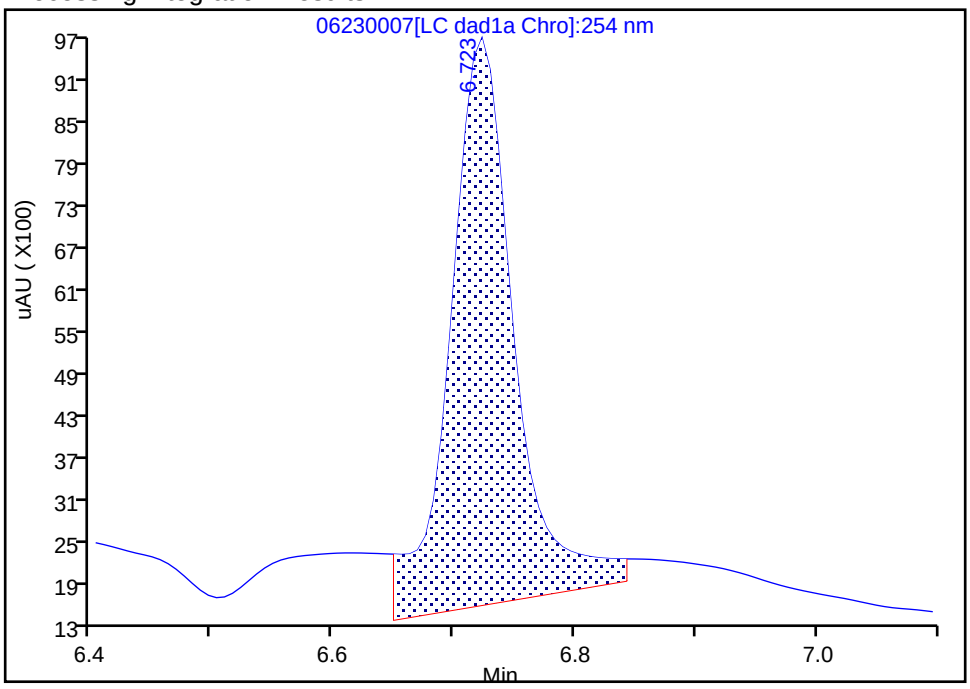
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

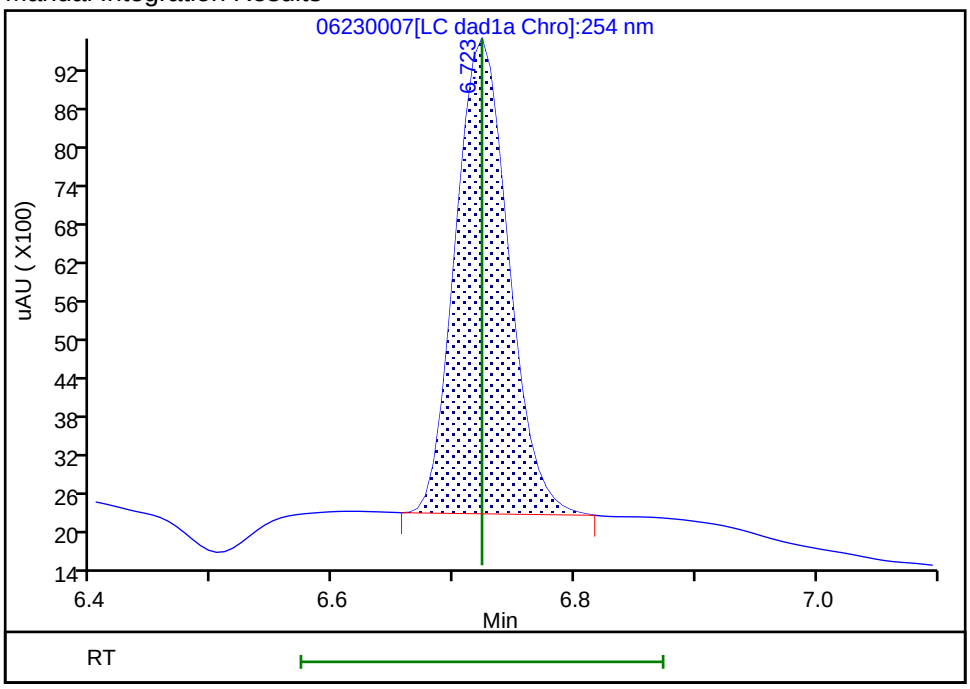
Processing Integration Results

RT: 6.72
Area: 29842
Amount: 0.347153
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 22484
Amount: 0.261557
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:01:50

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

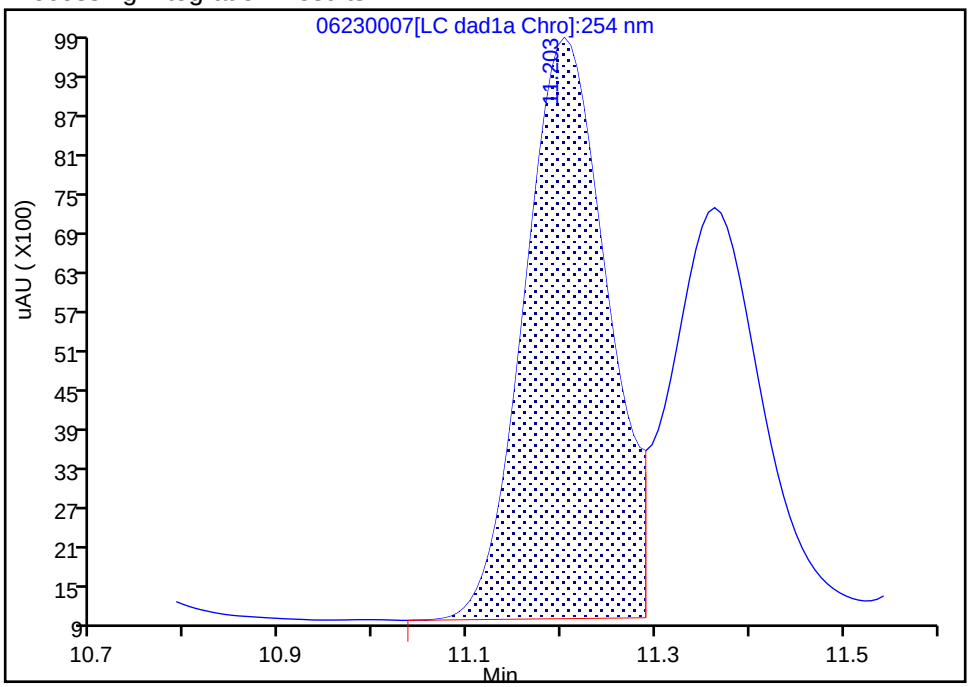
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

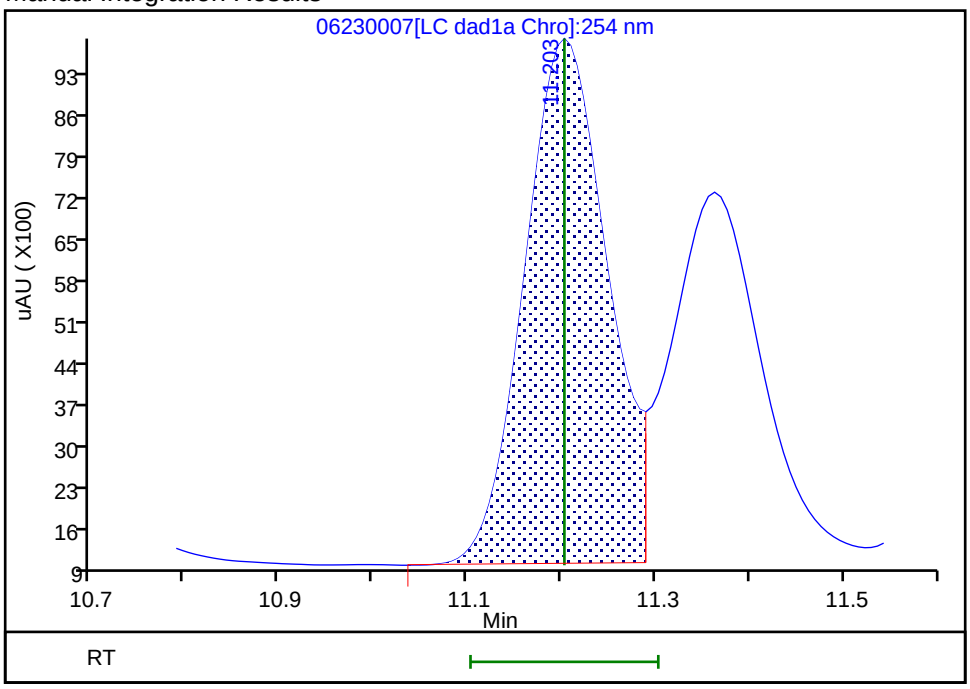
Processing Integration Results

RT: 11.20
Area: 54646
Amount: 0.267832
Amount Units: ug/mL



Manual Integration Results

RT: 11.20
Area: 54532
Amount: 0.267273
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

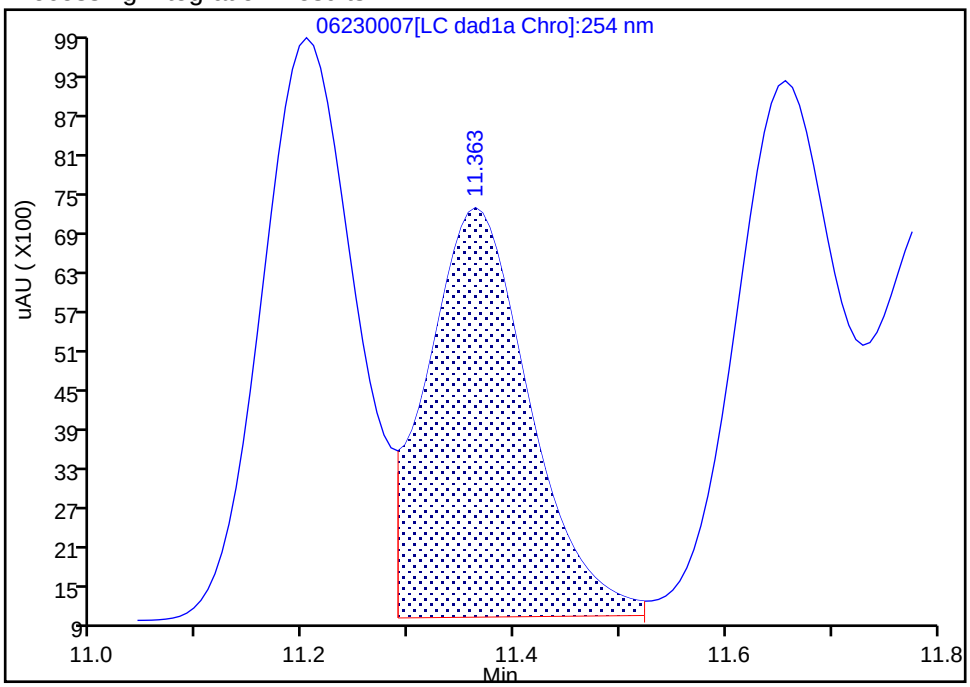
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

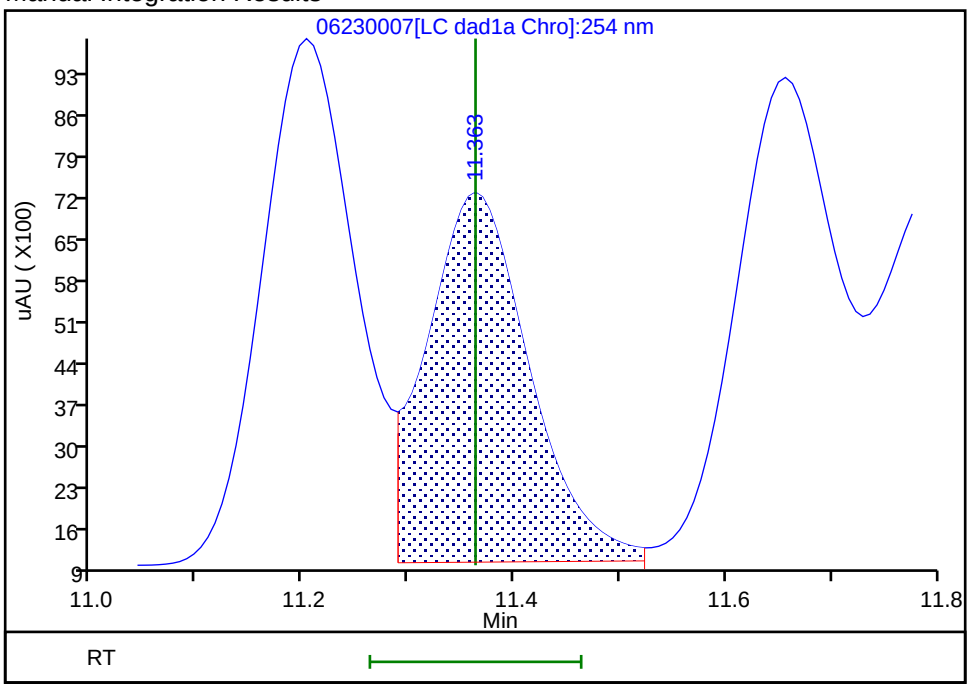
Processing Integration Results

RT: 11.36
Area: 42066
Amount: 0.242355
Amount Units: ug/mL



Manual Integration Results

RT: 11.36
Area: 42038
Amount: 0.242198
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

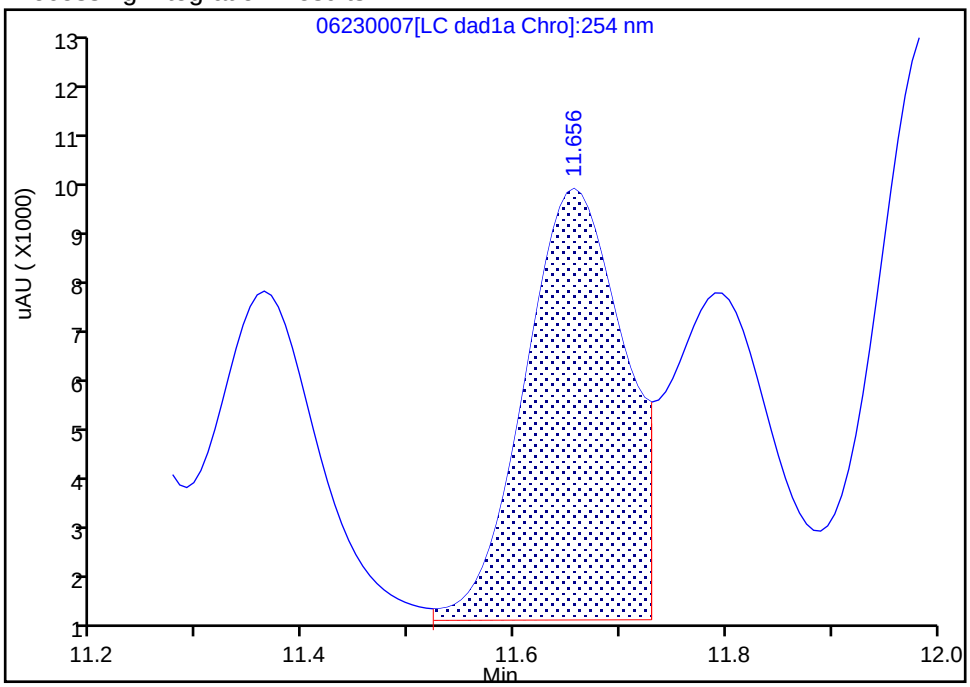
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

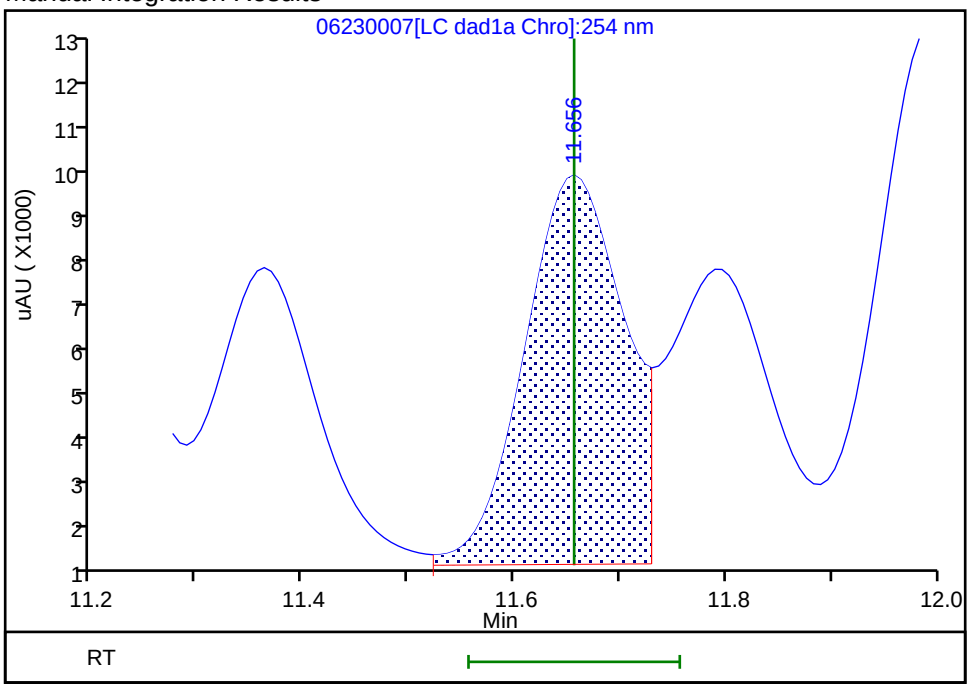
Processing Integration Results

RT: 11.66
Area: 53254
Amount: 0.262572
Amount Units: ug/mL



Manual Integration Results

RT: 11.66
Area: 53161
Amount: 0.262114
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

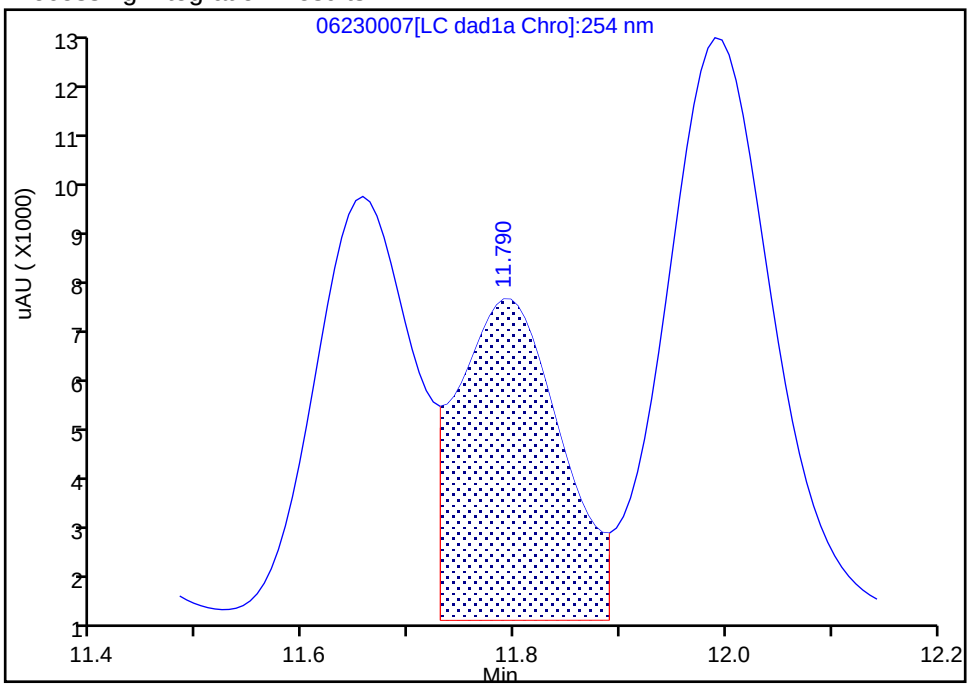
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

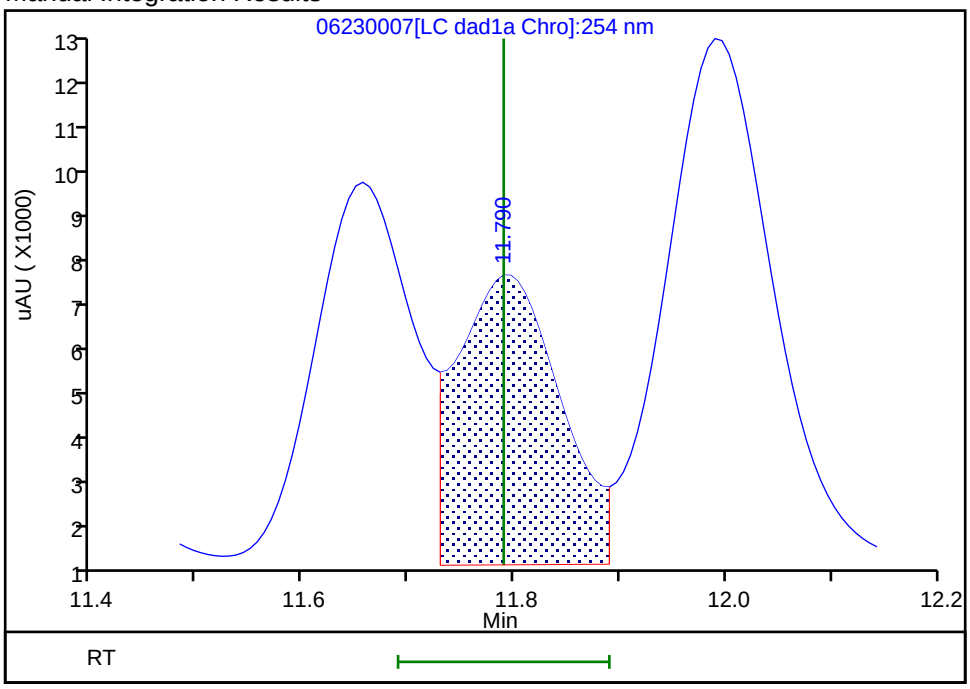
Processing Integration Results

RT: 11.79
Area: 41722
Amount: 0.279166
Amount Units: ug/mL



Manual Integration Results

RT: 11.79
Area: 41477
Amount: 0.277527
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

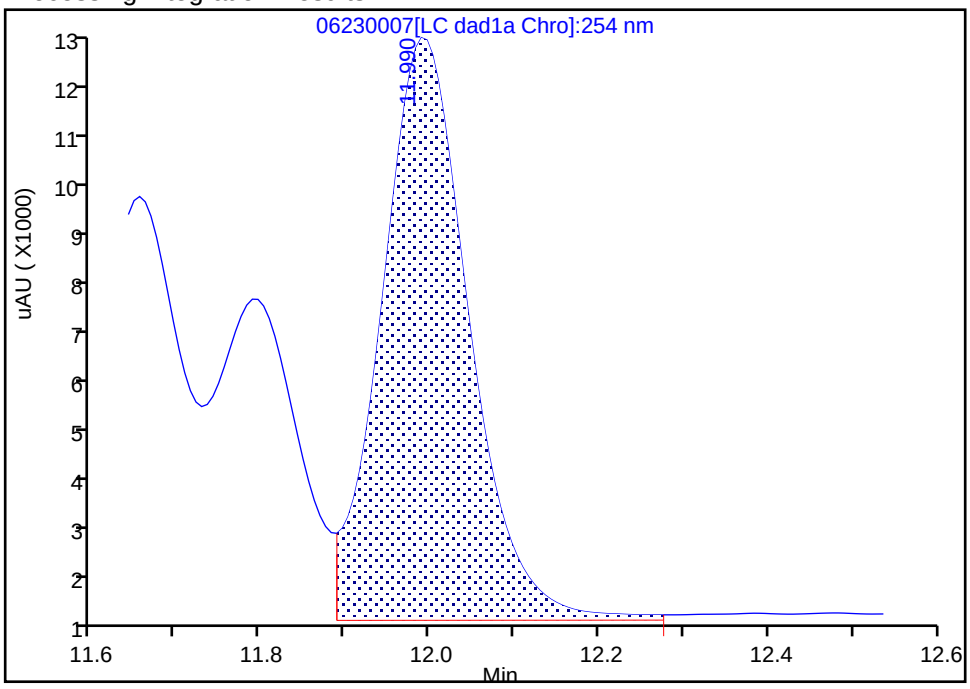
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

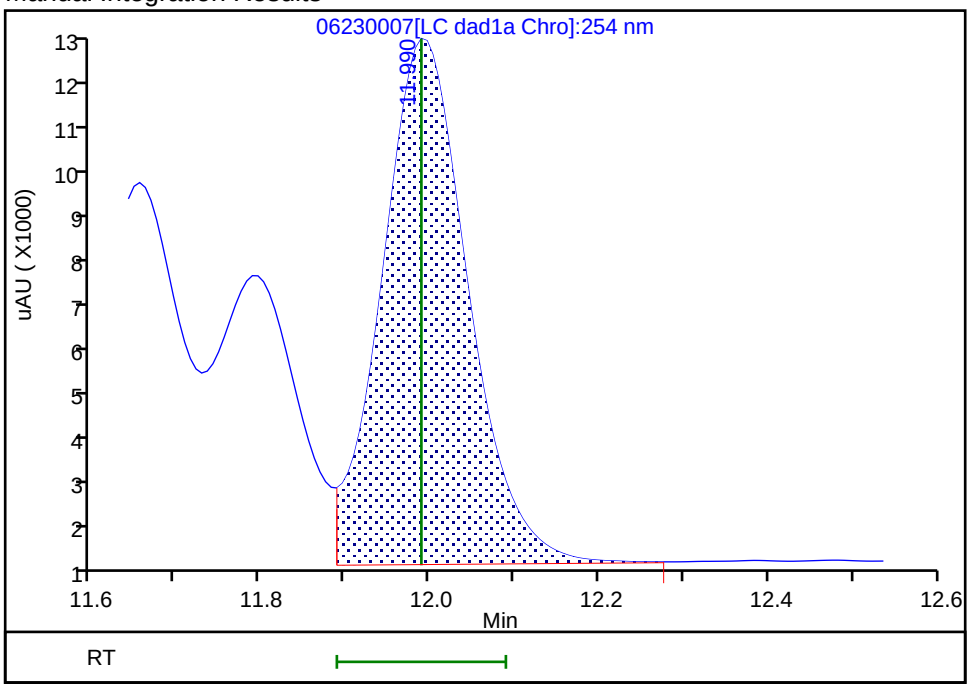
Processing Integration Results

RT: 11.99
Area: 80822
Amount: 0.266226
Amount Units: ug/mL



Manual Integration Results

RT: 11.99
Area: 79442
Amount: 0.261680
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

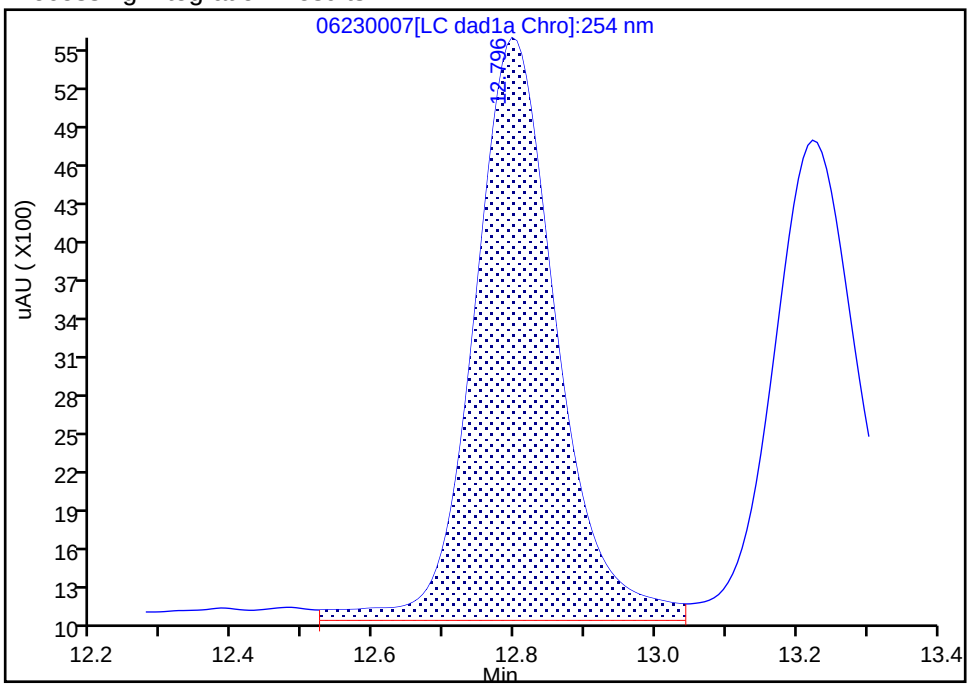
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

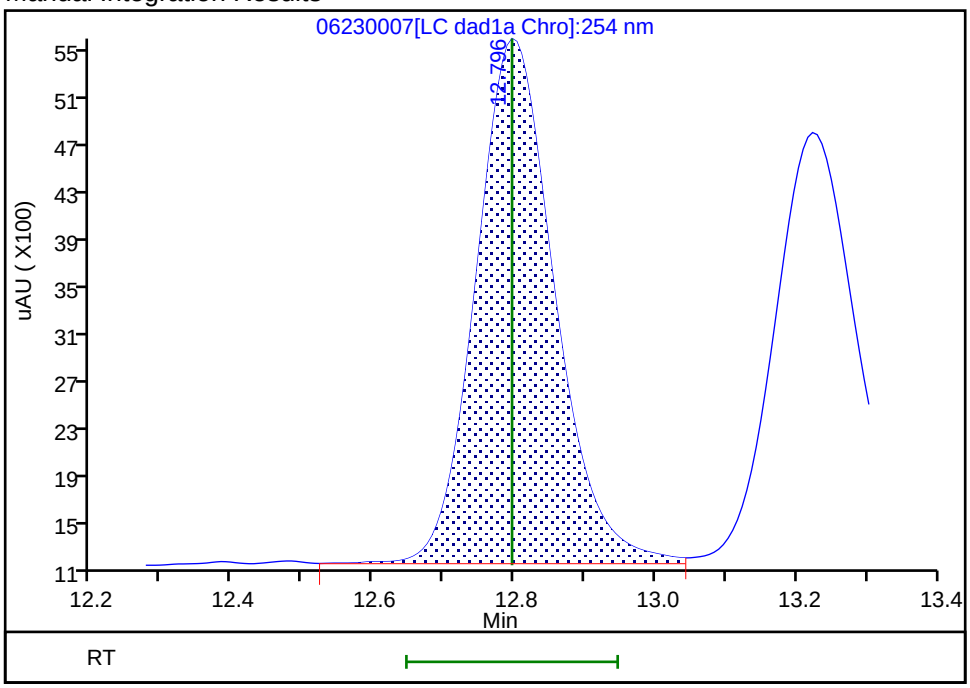
Processing Integration Results

RT: 12.80
Area: 36834
Amount: 0.272742
Amount Units: ug/mL



Manual Integration Results

RT: 12.80
Area: 34401
Amount: 0.254726
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:21
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

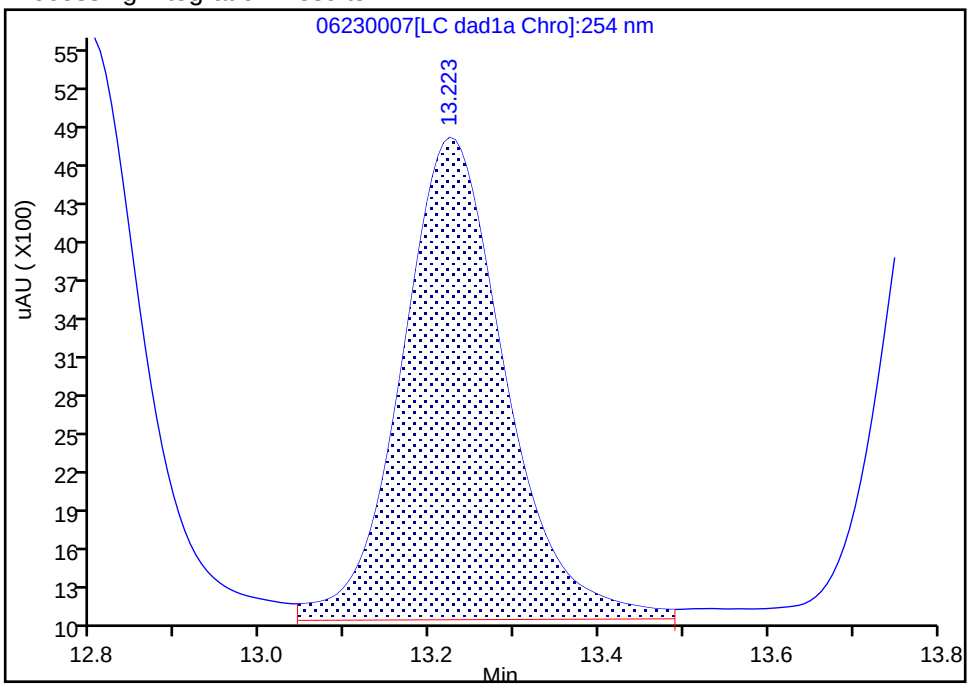
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d
Injection Date: 23-Jun-2020 18:40:33 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

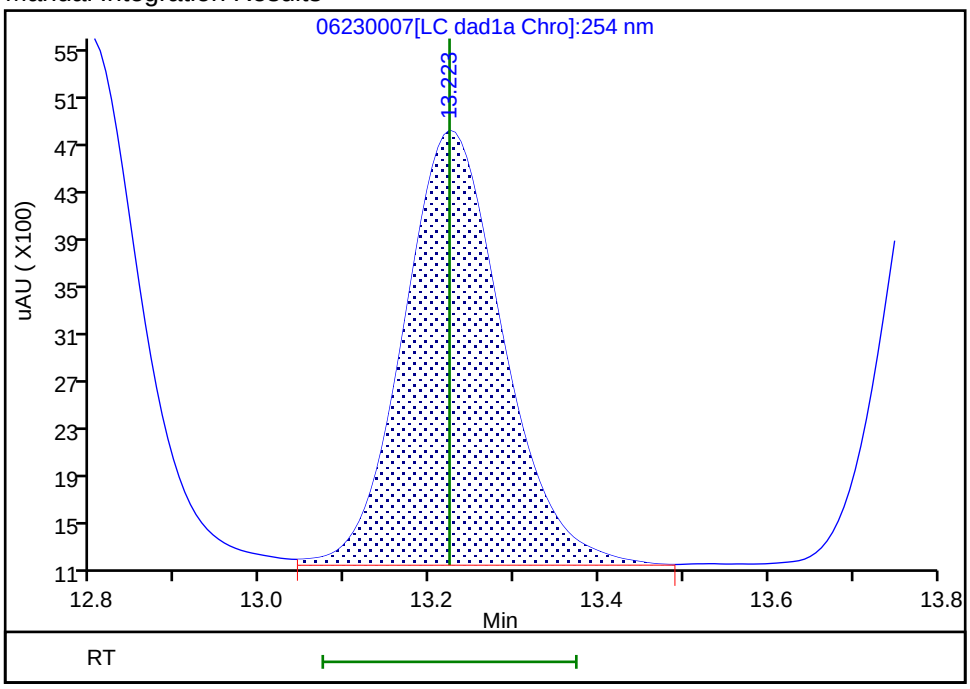
Processing Integration Results

RT: 13.22
Area: 31674
Amount: 0.280288
Amount Units: ug/mL



Manual Integration Results

RT: 13.22
Area: 29731
Amount: 0.263094
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:21
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

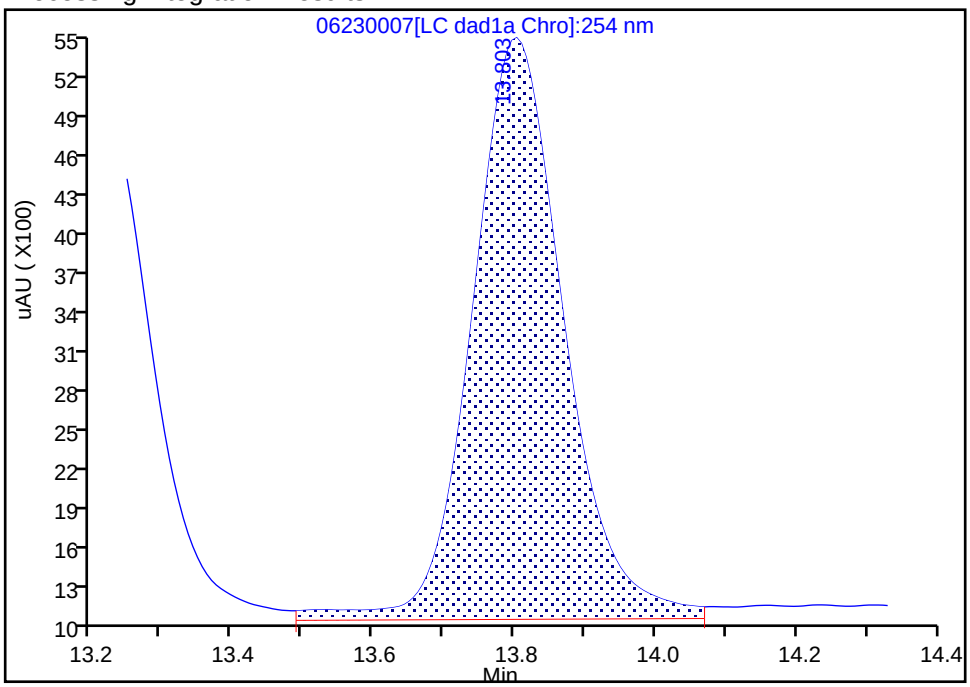
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230007.d				
Injection Date:	23-Jun-2020 18:40:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

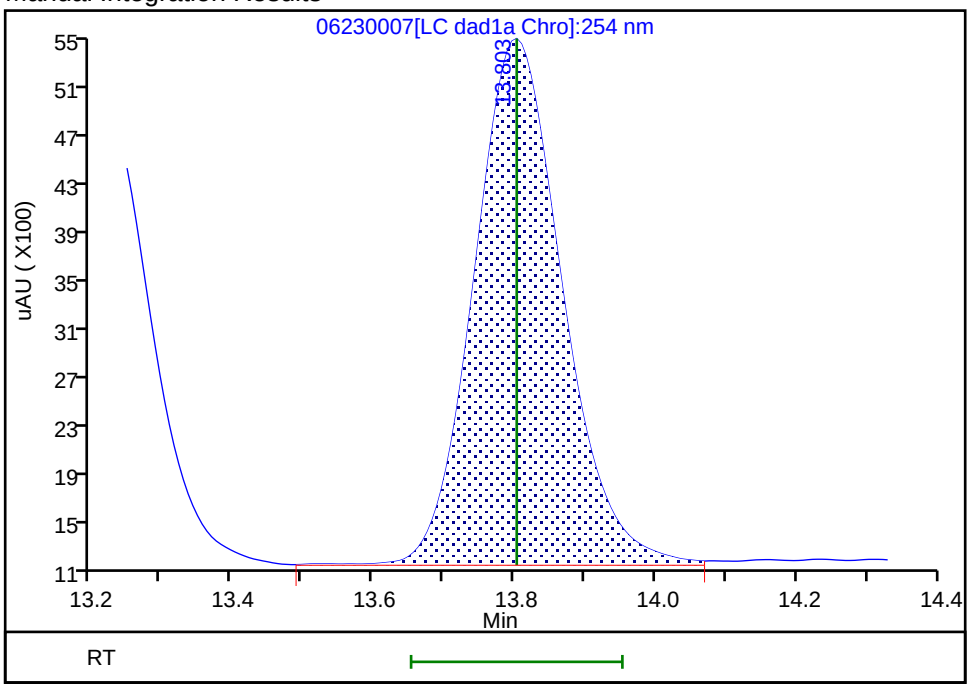
Processing Integration Results

RT: 13.80
Area: 39623
Amount: 0.277028
Amount Units: ug/mL



Manual Integration Results

RT: 13.80
Area: 37535
Amount: 0.262430
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:02:21

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/9 Calibration Date: 06/23/2020 19:26

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: 06230009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	214973		247	250	-1.2	15.0
DNX	Ave	152928	157171		257	250	2.8	15.0
MNX	Ave	158544	145981		269	292	-7.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/9 Calibration Date: 06/23/2020 19:26

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: 06230009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.63	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.39	7.24	7.54

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230009.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 19:26:32 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0092681-009
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:11 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 20:03:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.627	6.627	0.000	53797	0.2503	0.2472	M
5 DNX	1	6.947	6.947	0.000	39332	0.2503	0.2572	M
6 MNX	1	7.394	7.394	0.000	42590	0.2918	0.2686	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

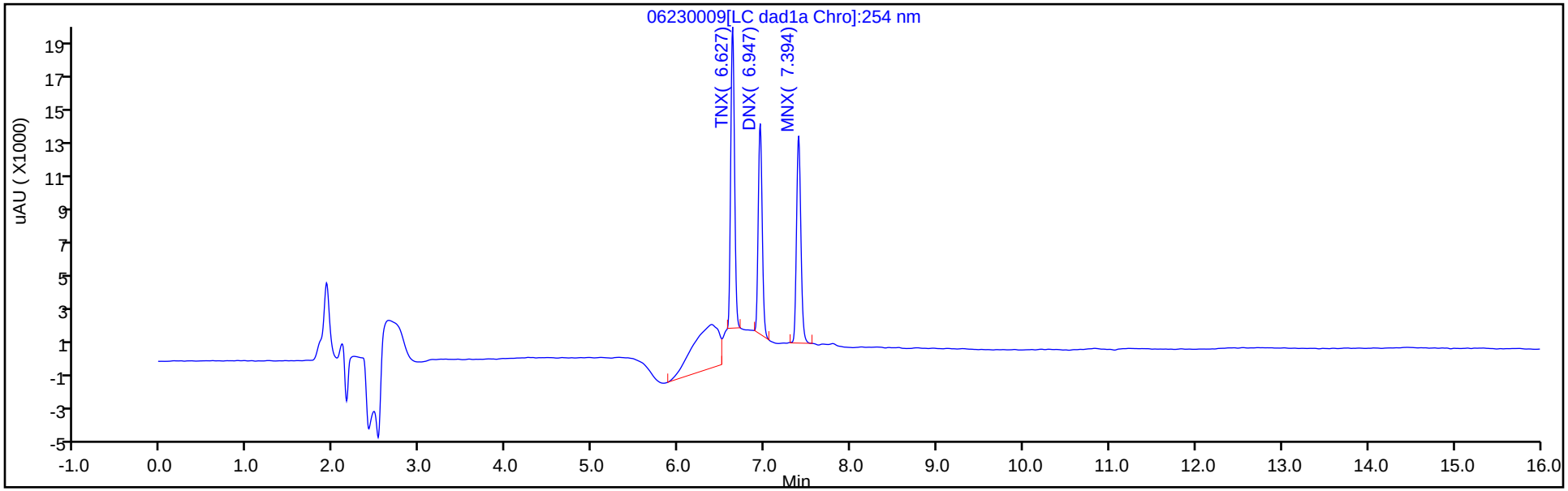
Report Date: 24-Jun-2020 16:26:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

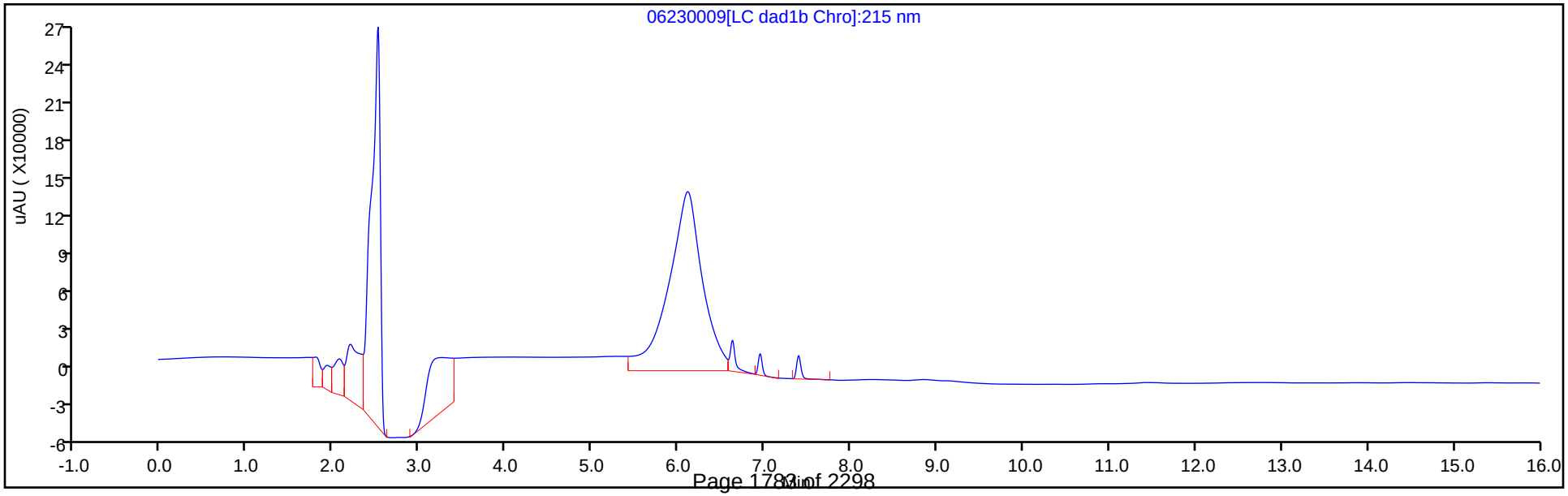
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230009.d

Injection Date:	23-Jun-2020 19:26:32	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

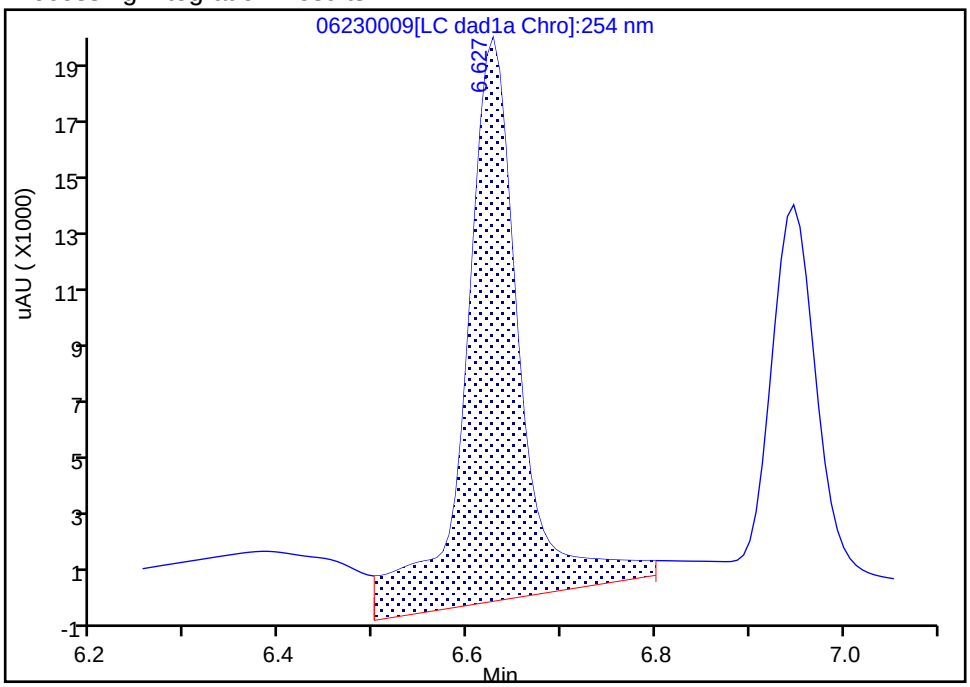
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230009.d				
Injection Date:	23-Jun-2020 19:26:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

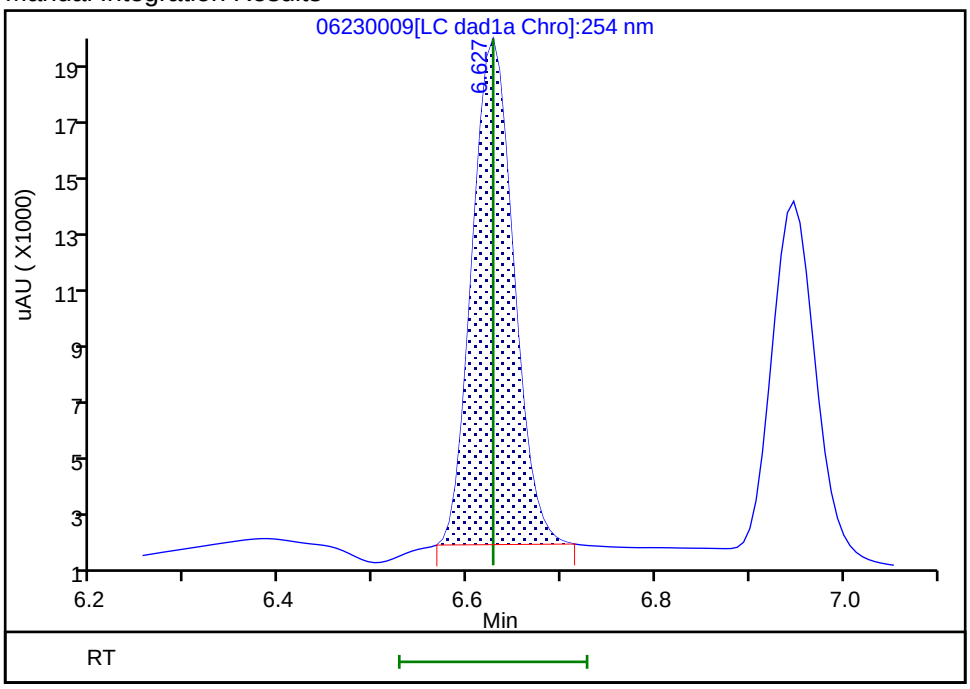
Processing Integration Results

RT: 6.63
Area: 76556
Amount: 0.351806
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 53797
Amount: 0.247219
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:03:15

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

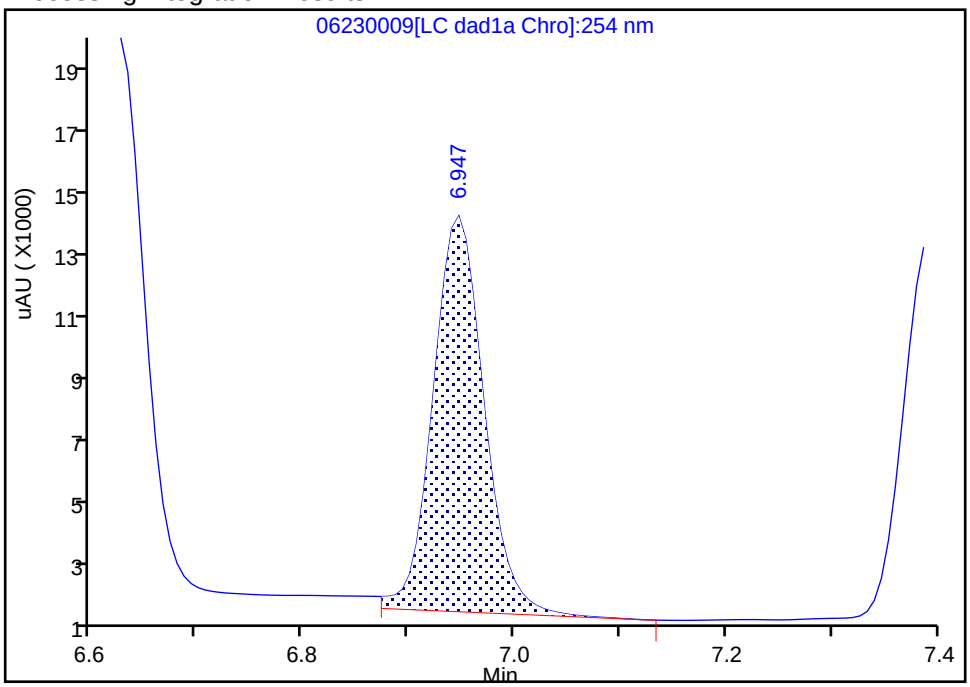
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230009.d				
Injection Date:	23-Jun-2020 19:26:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

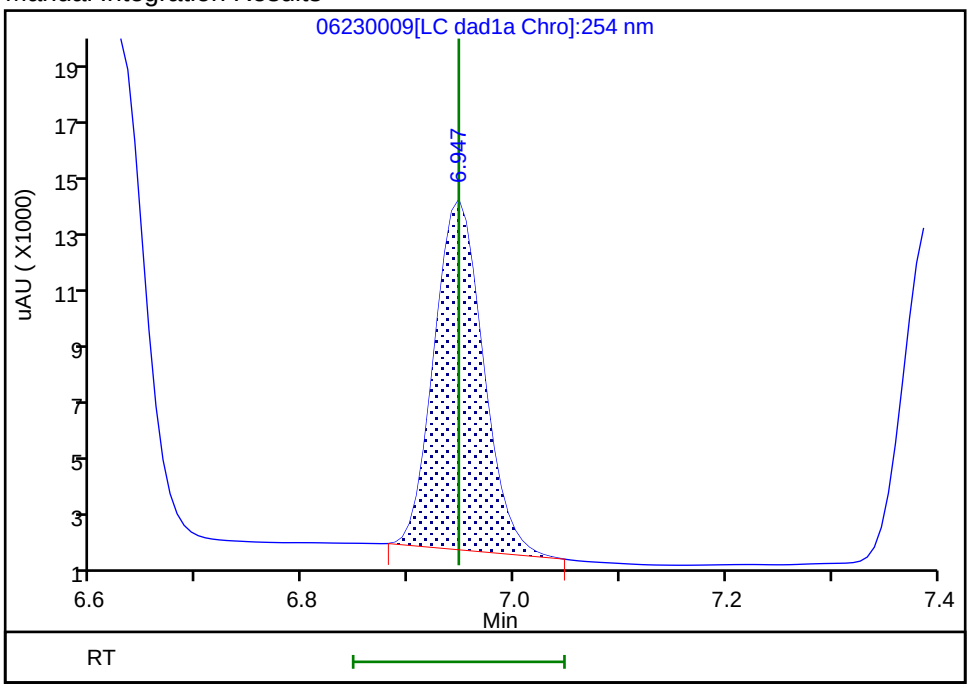
Processing Integration Results

RT: 6.95
Area: 41974
Amount: 0.274468
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 39332
Amount: 0.257192
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:03:19

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/15 Calibration Date: 06/23/2020 20:58

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: 06230015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	90336		263	250	5.1	15.0
RDX	Ave	116613	112052		240	250	-3.9	15.0
Picric acid	Ave	85131	86060		253	250	1.1	15.0
1,3,5-Trinitrobenzene	Ave	230309	241198		262	251	4.7	15.0
1,3-Dinitrobenzene	Ave	306686	325397		266	251	6.1	15.0
Nitrobenzene	Ave	200403	207777		260	251	3.7	15.0
Tetryl	Ave	177032	183721		260	251	3.8	15.0
Nitroglycerin	Ave	68133	72516		2660	2500	6.4	15.0
2,4,6-Trinitrotoluene	Ave	204031	215701		265	251	5.7	15.0
4-Amino-2,6-dinitrotoluene	Lin2		166945		241	250	-3.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	212211		263	251	4.6	15.0
2,6-Dinitrotoluene	Ave	149452	161155		271	251	7.8	15.0
2,4-Dinitrotoluene	Ave	303584	313641		259	251	3.3	15.0
2-Nitrotoluene	Ave	135051	136500		253	250	1.1	15.0
4-Nitrotoluene	Ave	113005	116255		258	251	2.9	15.0
3-Nitrotoluene	Ave	143029	148156		259	250	3.6	15.0
PETN	Ave	78605	84958		2700	2500	8.1	15.0
1,2-Dinitrobenzene	Ave	138212	145436		263	250	5.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/15 Calibration Date: 06/23/2020 20:58

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: 06230015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.57	6.87
RDX	7.78	7.64	7.94
Picric acid	8.08	7.94	8.24
1,3,5-Trinitrobenzene	8.91	8.77	9.07
1,3-Dinitrobenzene	9.55	9.42	9.72
Nitrobenzene	9.92	9.79	10.09
Tetryl	10.21	10.09	10.39
Nitroglycerin	10.72	10.60	10.90
2,4,6-Trinitrotoluene	11.17	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.32	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.61	11.56	11.76
2,6-Dinitrotoluene	11.75	11.69	11.89
2,4-Dinitrotoluene	11.95	11.89	12.09
2-Nitrotoluene	12.76	12.65	12.95
4-Nitrotoluene	13.19	13.07	13.37
3-Nitrotoluene	13.76	13.65	13.95
PETN	14.80	14.69	14.99
1,2-Dinitrobenzene	8.73	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230015.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 20:58:42 ALS Bottle#: 7 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092681-015
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:13 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 22:00:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.722	6.723	-0.001	22584	0.2500	0.2627	M
7 RDX	1	7.782	7.790	-0.008	28013	0.2500	0.2402	
8 2,4,6-Trinitrophenol	1	8.082	8.090	-0.008	21515	0.2500	0.2527	
$ 9 1,2-Dinitrobenzene	1	8.729	8.736	-0.007	36359	0.2500	0.2631	
10 1,3,5-Trinitrobenzene	1	8.909	8.923	-0.014	60420	0.2505	0.2623	
11 1,3-Dinitrobenzene	1	9.549	9.570	-0.021	81512	0.2505	0.2658	
12 Nitrobenzene	1	9.922	9.943	-0.021	52152	0.2510	0.2602	
14 Tetryl	1	10.209	10.236	-0.027	46022	0.2505	0.2600	
15 Nitroglycerin	2	10.715	10.750	-0.035	181290	2.50	2.66	
16 2,4,6-Trinitrotoluene	1	11.169	11.203	-0.034	54141	0.2510	0.2654	
17 4-Amino-2,6-dinitrotoluene	1	11.322	11.363	-0.041	41778	0.2503	0.2407	
18 2-Amino-4,6-dinitrotoluene	1	11.609	11.656	-0.047	53265	0.2510	0.2626	
19 2,6-Dinitrotoluene	1	11.749	11.790	-0.041	40450	0.2510	0.2707	
20 2,4-Dinitrotoluene	1	11.949	11.990	-0.041	78724	0.2510	0.2593	
21 o-Nitrotoluene	1	12.762	12.796	-0.034	34125	0.2500	0.2527	
22 p-Nitrotoluene	1	13.189	13.223	-0.034	29122	0.2505	0.2577	
23 m-Nitrotoluene	1	13.762	13.803	-0.041	37076	0.2503	0.2592	
24 PETN	2	14.802	14.843	-0.041	212396	2.50	2.70	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00061 Amount Added: 25.00 Units: uL

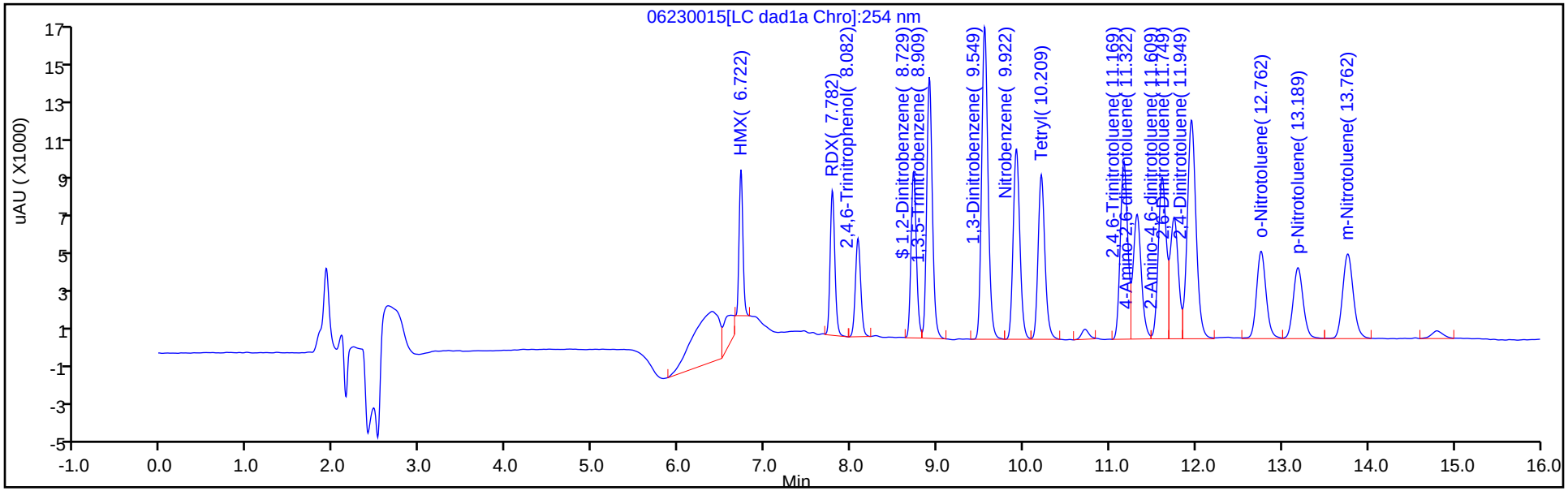
Report Date: 24-Jun-2020 16:26:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

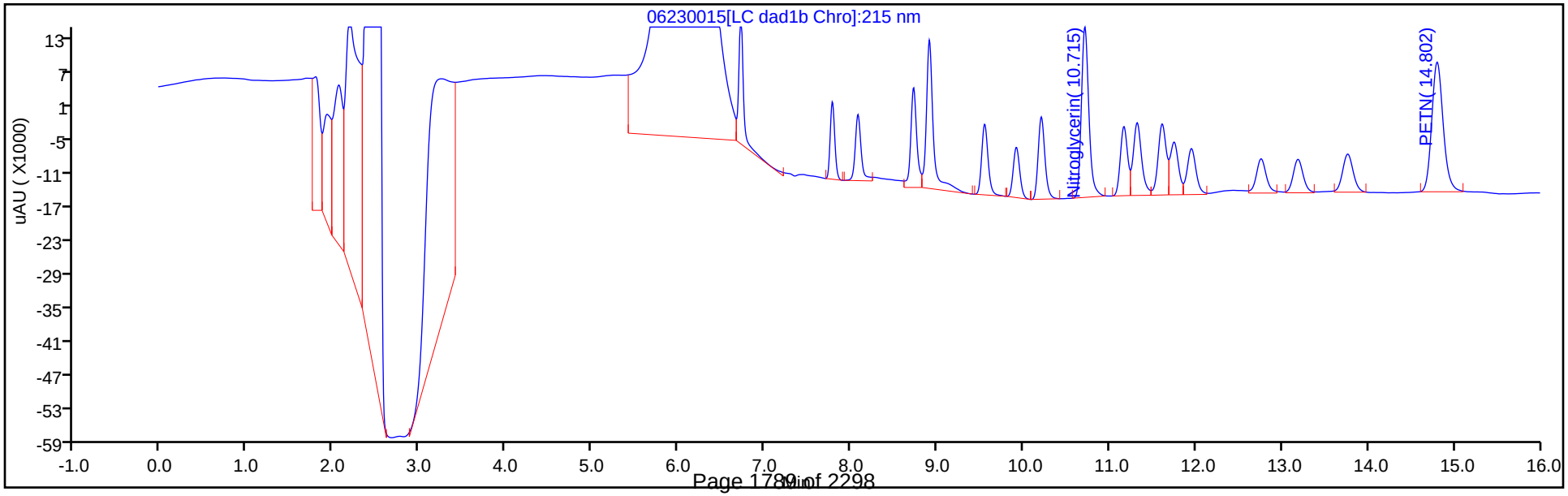
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230015.d

Injection Date:	23-Jun-2020 20:58:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	15
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

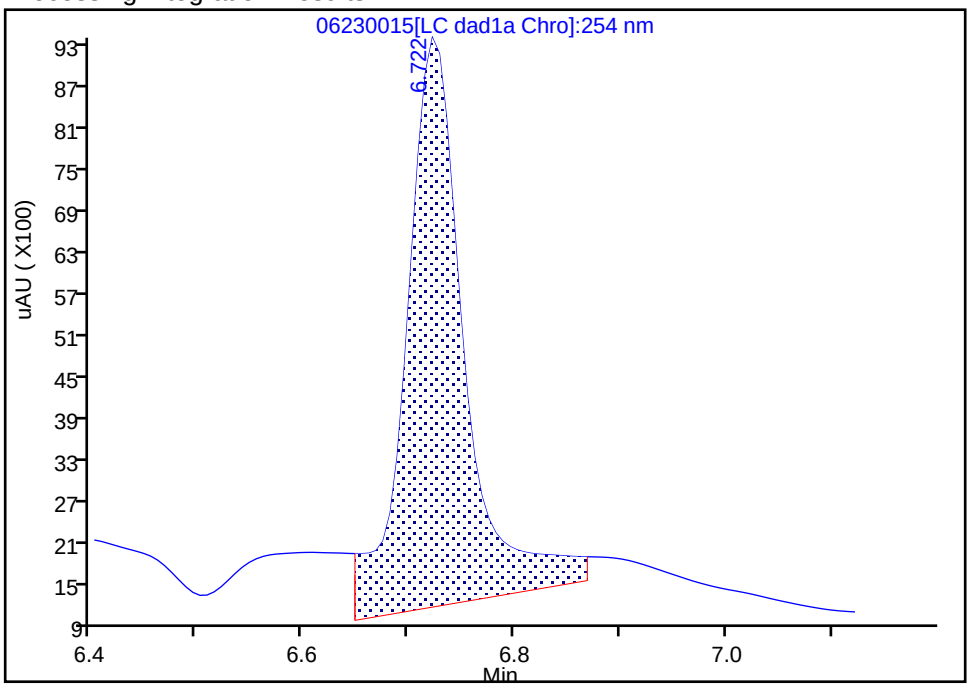
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230015.d				
Injection Date:	23-Jun-2020 20:58:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

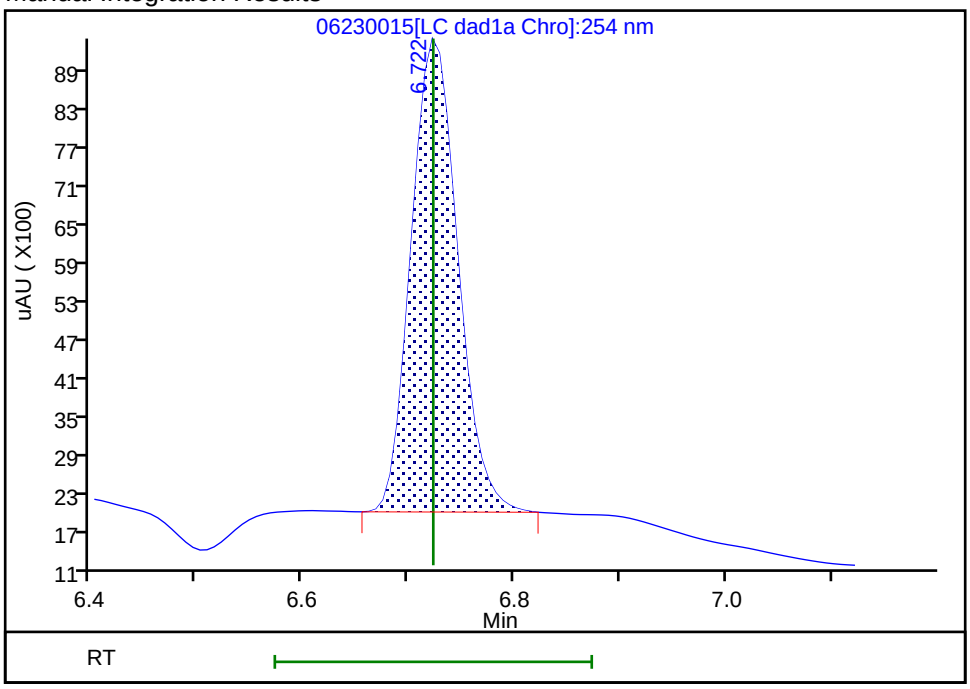
Processing Integration Results

RT: 6.72
Area: 31306
Amount: 0.364183
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 22584
Amount: 0.262720
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 21:34:11

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/16 Calibration Date: 06/23/2020 21:21

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: 06230016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	214649		247	250	-1.4	15.0
DNX	Ave	152928	157151		257	250	2.8	15.0
MNX	Ave	158544	146985		270	292	-7.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Lab Sample ID: CCV 280-499863/16 Calibration Date: 06/23/2020 21:21

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: 06230016.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.63	6.53	6.73
DNX	6.94	6.85	7.05
MNX	7.39	7.24	7.54

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230016.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 23-Jun-2020 21:21:45 ALS Bottle#: 9 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0092681-016
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:13 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 22:02:12

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	6.627	0.000	53716	0.2503	0.2468	M
5 DNX	1	6.940	6.947	-0.007	39327	0.2503	0.2572	M
6 MNX	1	7.387	7.394	-0.007	42883	0.2918	0.2705	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00006 Amount Added: 12.50 Units: uL

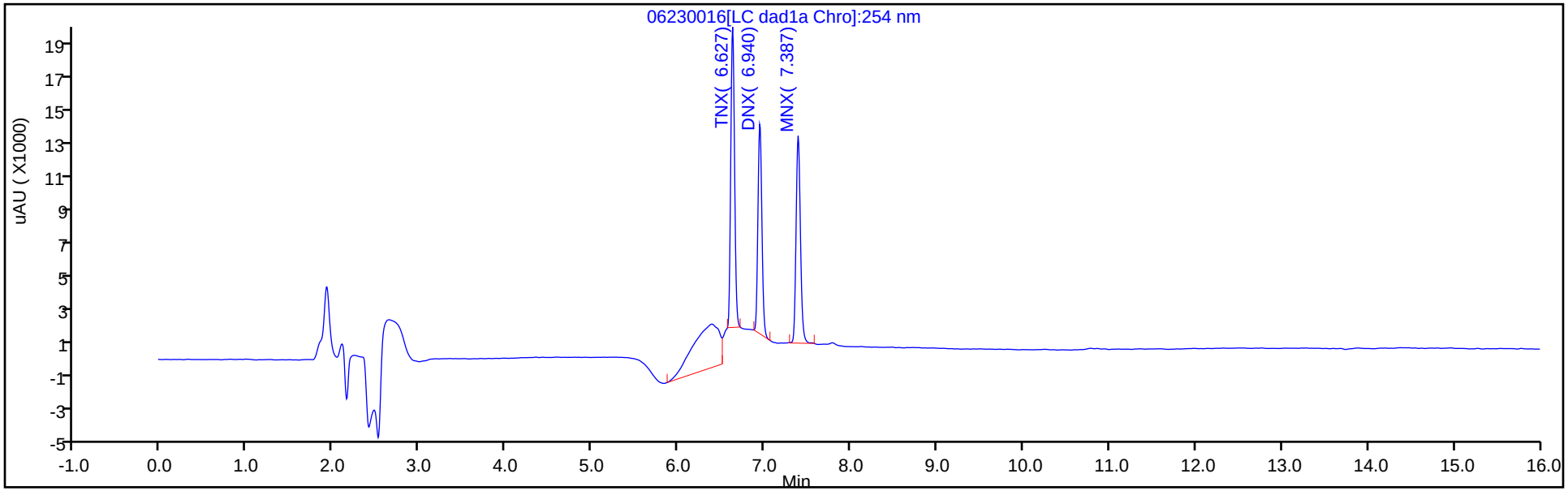
Report Date: 24-Jun-2020 16:26:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

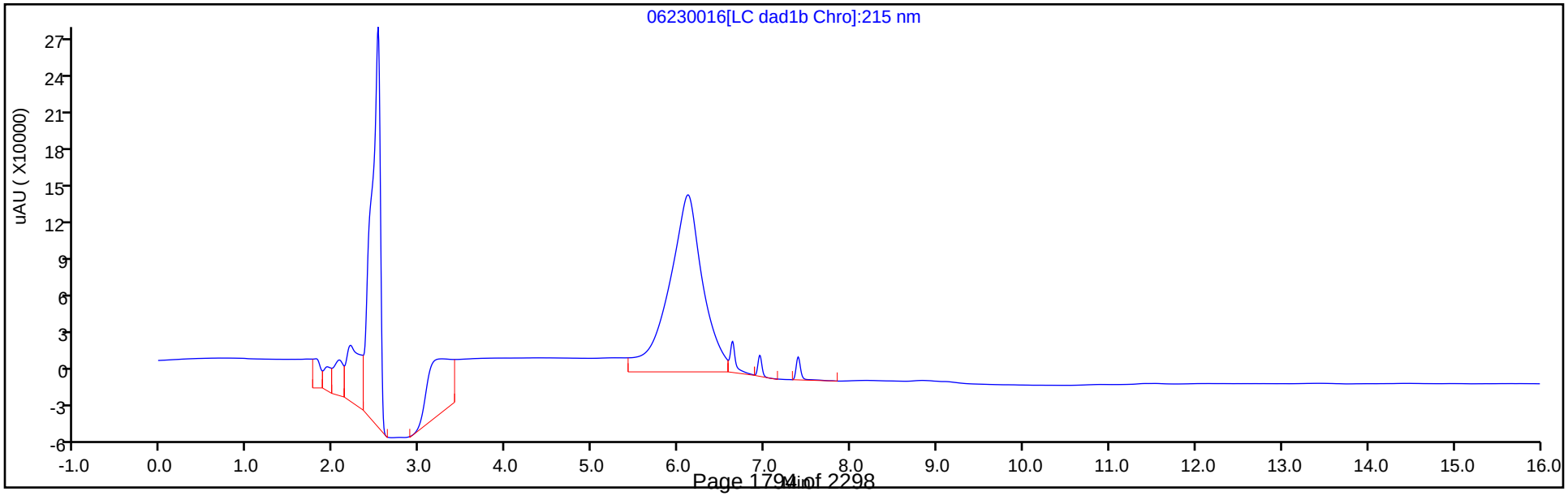
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230016.d

Injection Date:	23-Jun-2020 21:21:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	16
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

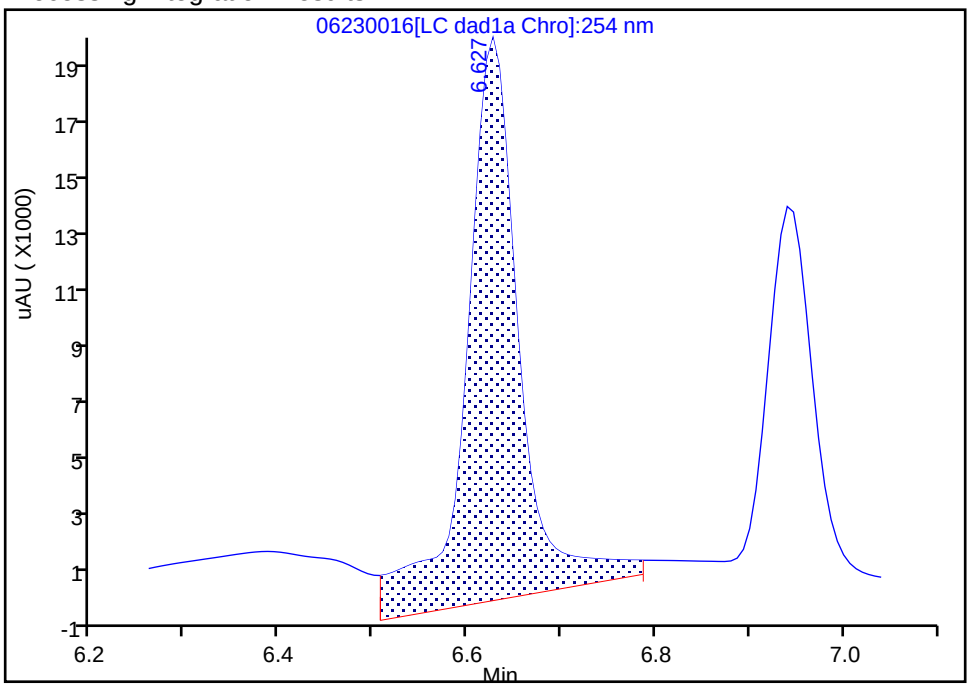
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230016.d				
Injection Date:	23-Jun-2020 21:21:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

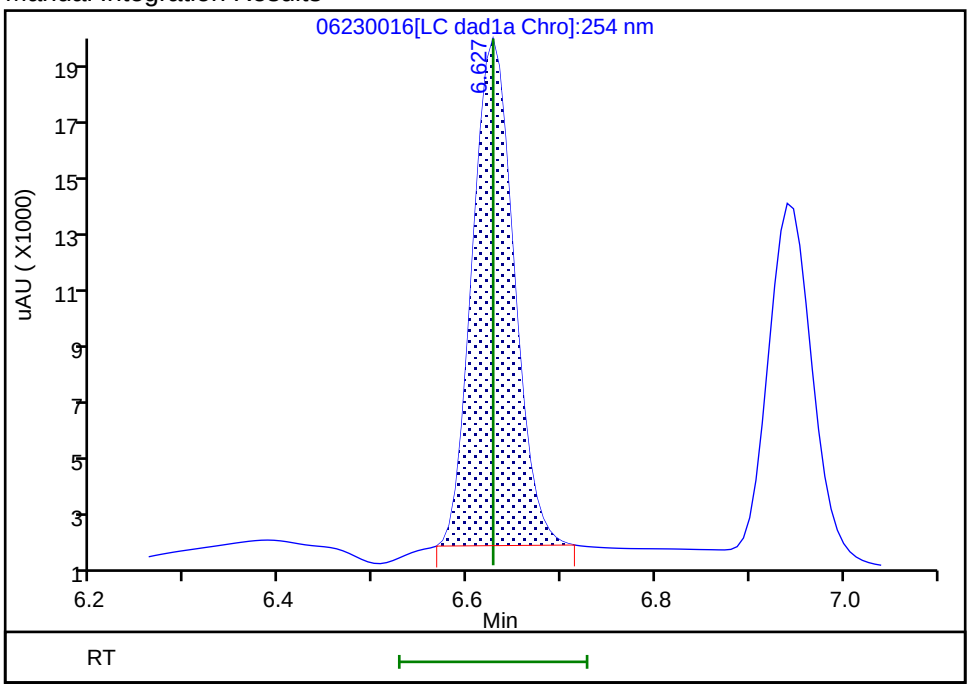
Processing Integration Results

RT: 6.63
Area: 75101
Amount: 0.345119
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 53716
Amount: 0.246847
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 22:01:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

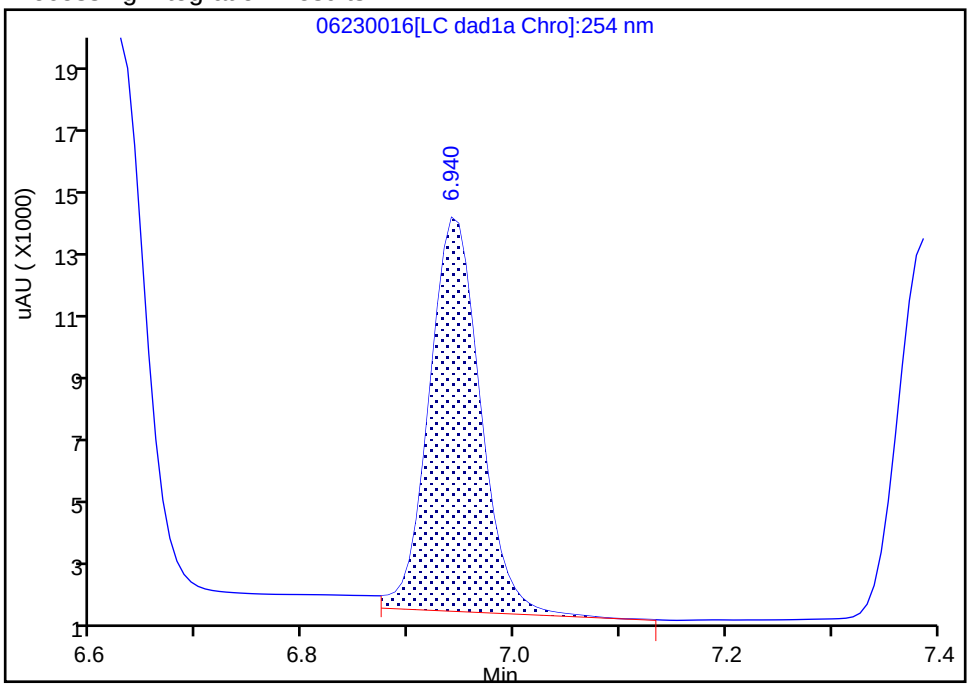
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230016.d				
Injection Date:	23-Jun-2020 21:21:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

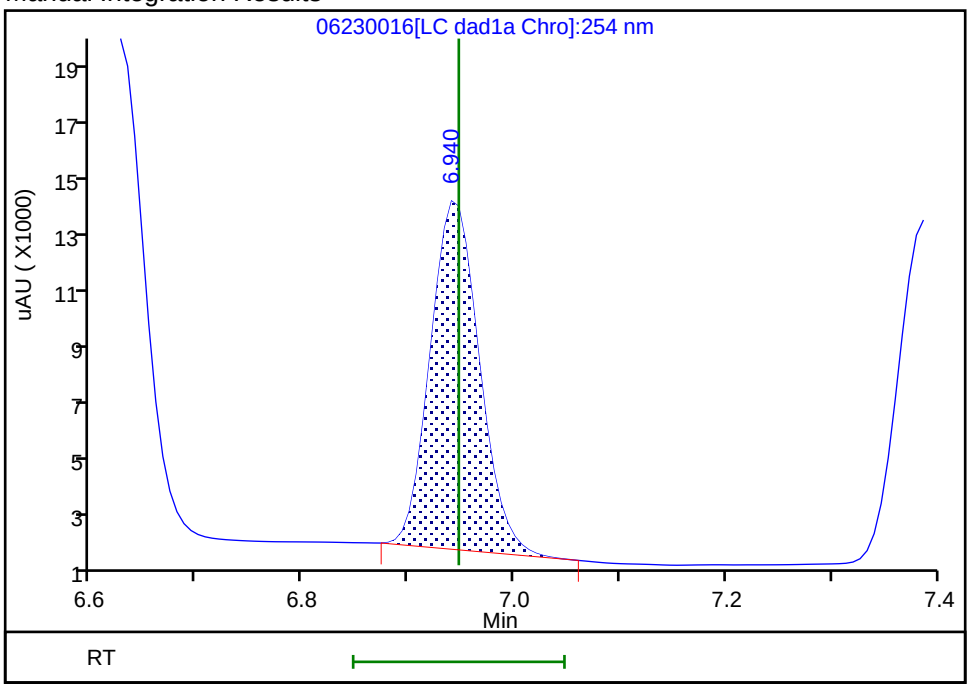
Processing Integration Results

RT: 6.94
Area: 41926
Amount: 0.274155
Amount Units: ug/mL



Manual Integration Results

RT: 6.94
Area: 39327
Amount: 0.257160
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 22:01:07

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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

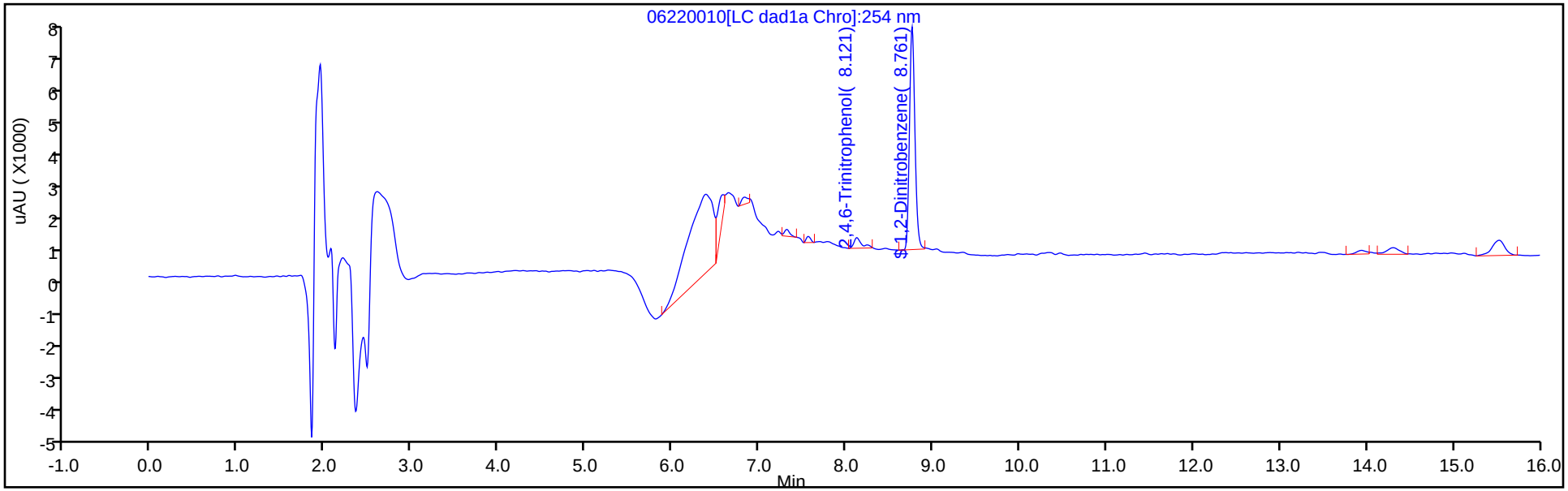
Report Date: 23-Jun-2020 15:17:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

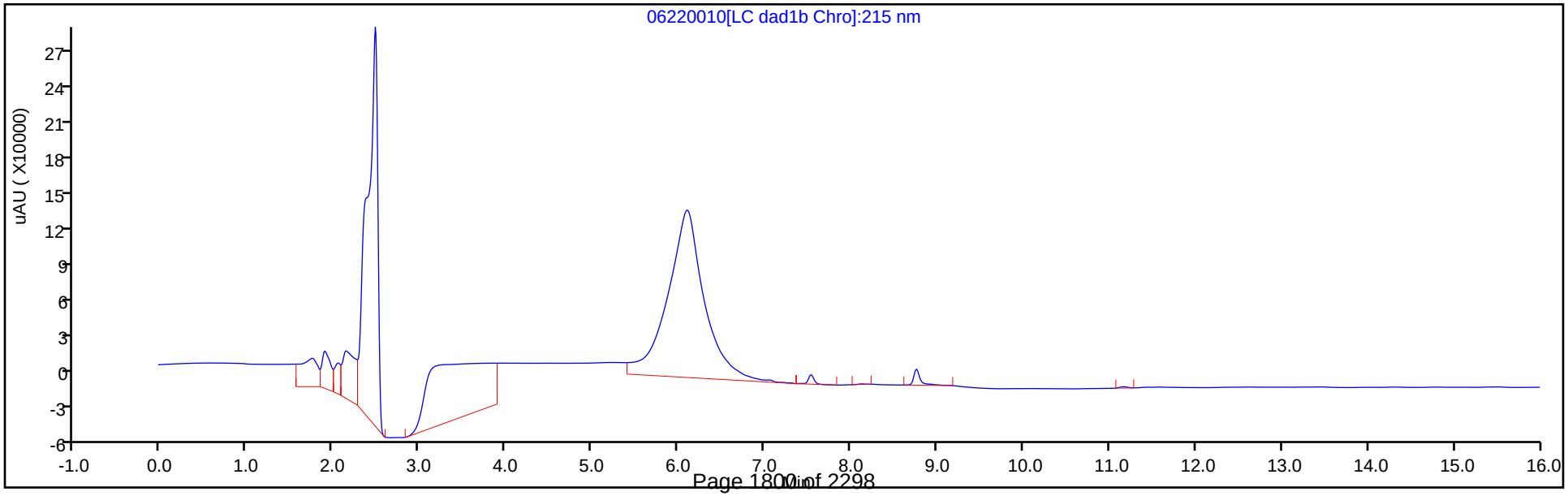
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220010.d

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

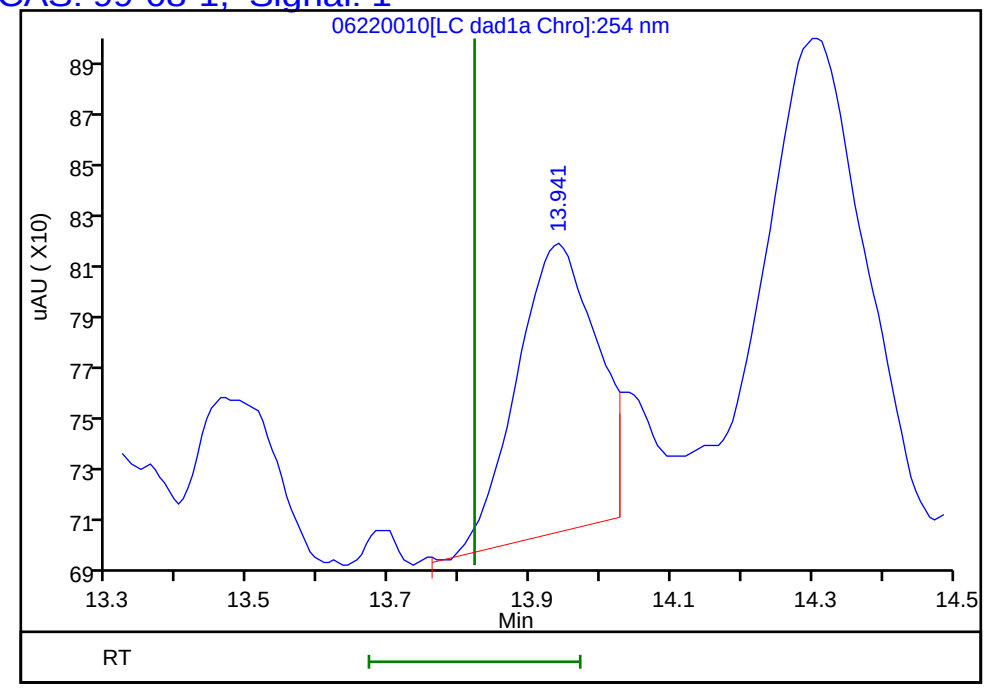
Eurofins TestAmerica, Denver

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

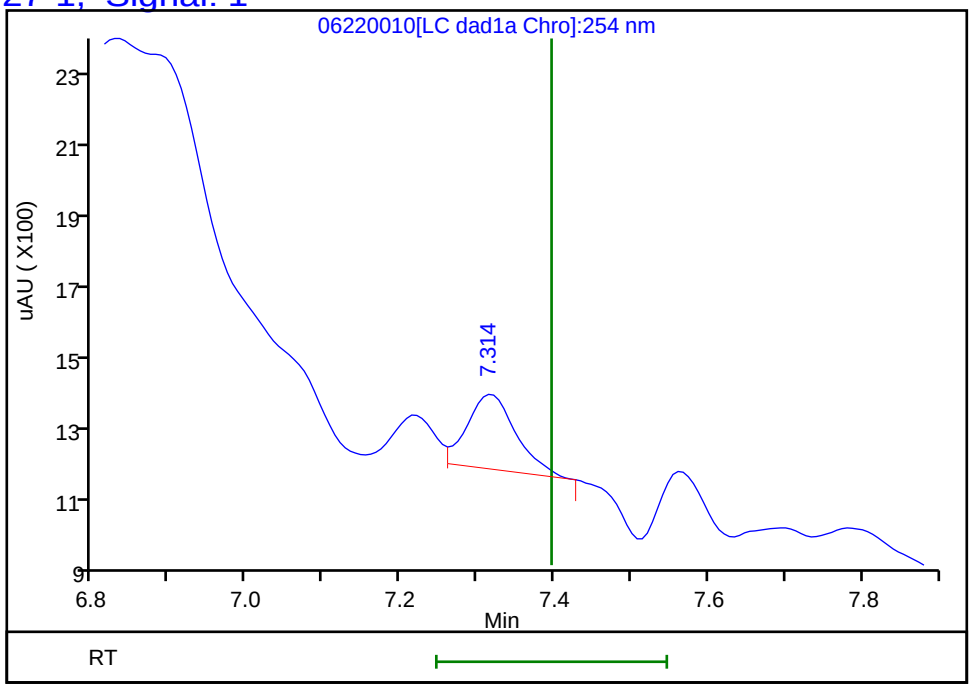
Eurofins TestAmerica, Denver

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.: 280-137609-1

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

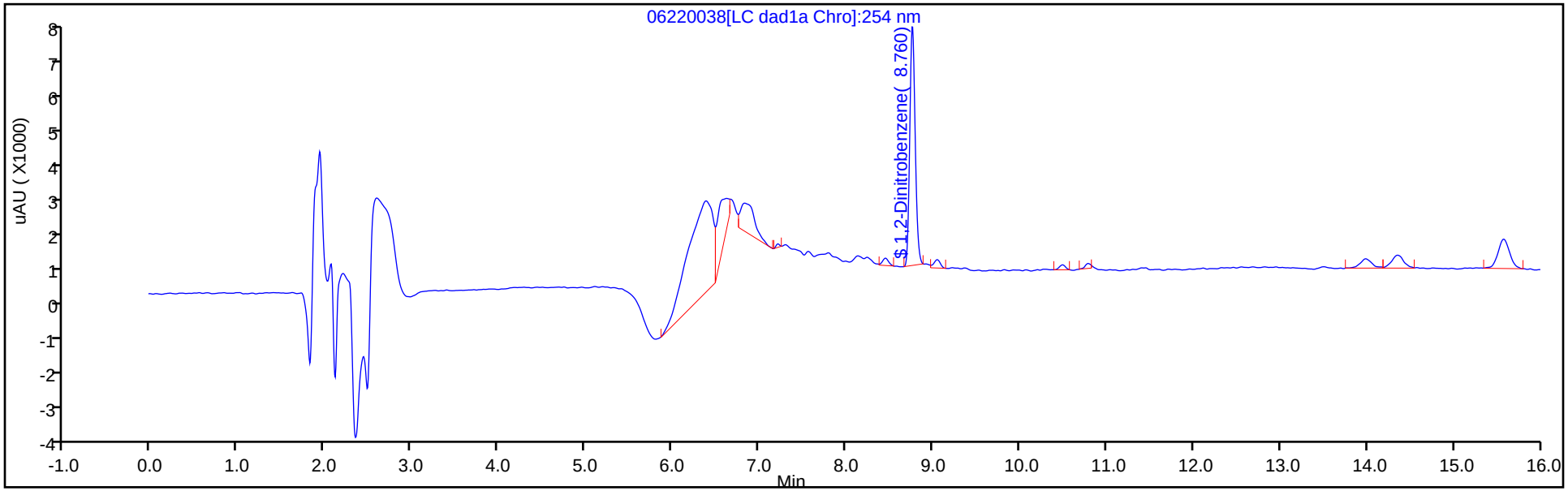
Report Date: 23-Jun-2020 15:18:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

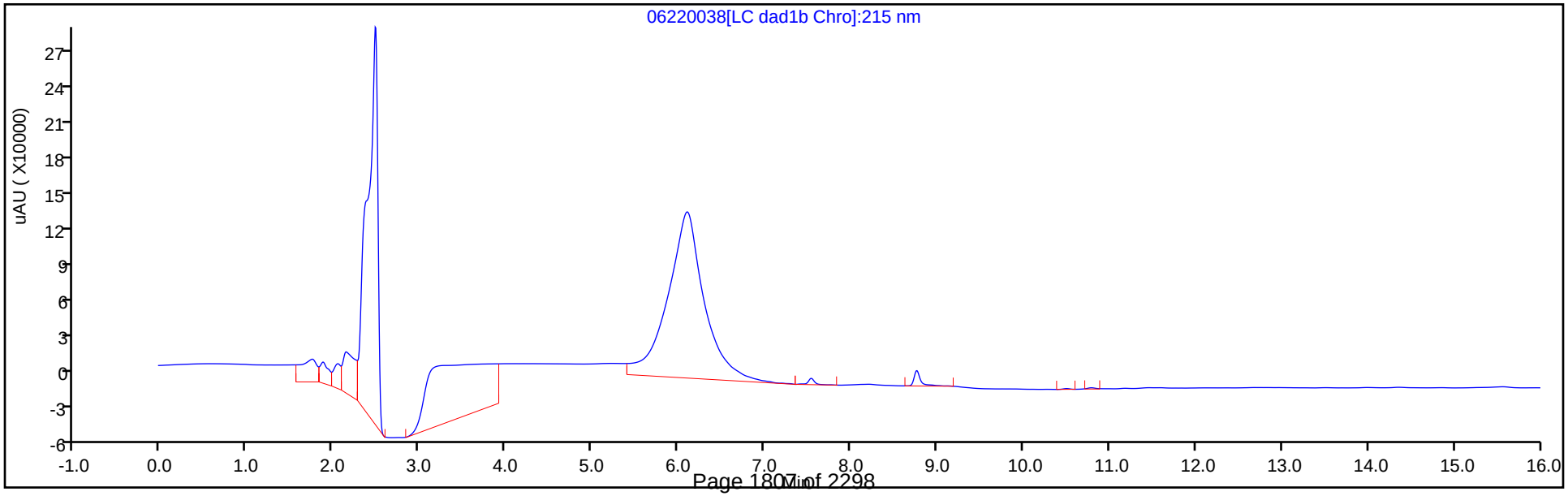
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220038.d

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

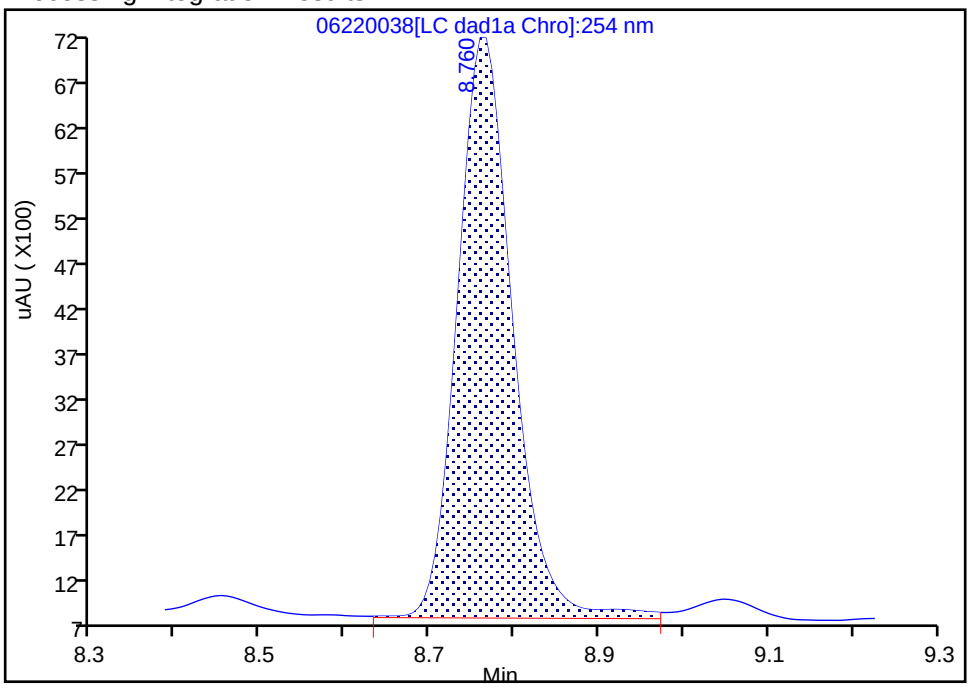
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220038.d				
Injection Date:	23-Jun-2020 02:00:01	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-499107/1-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	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

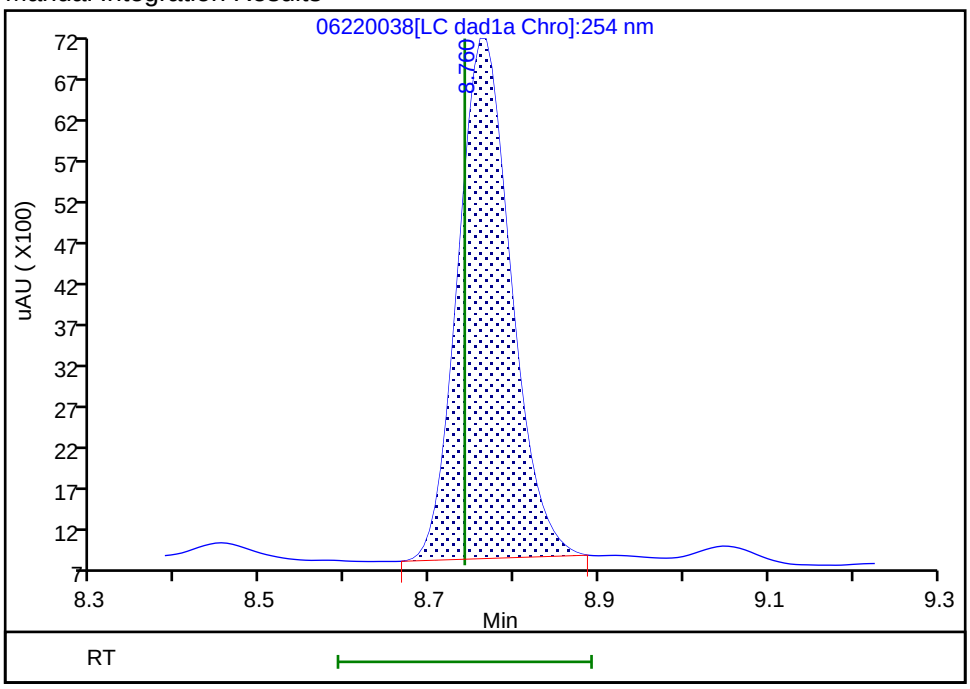
Processing Integration Results

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

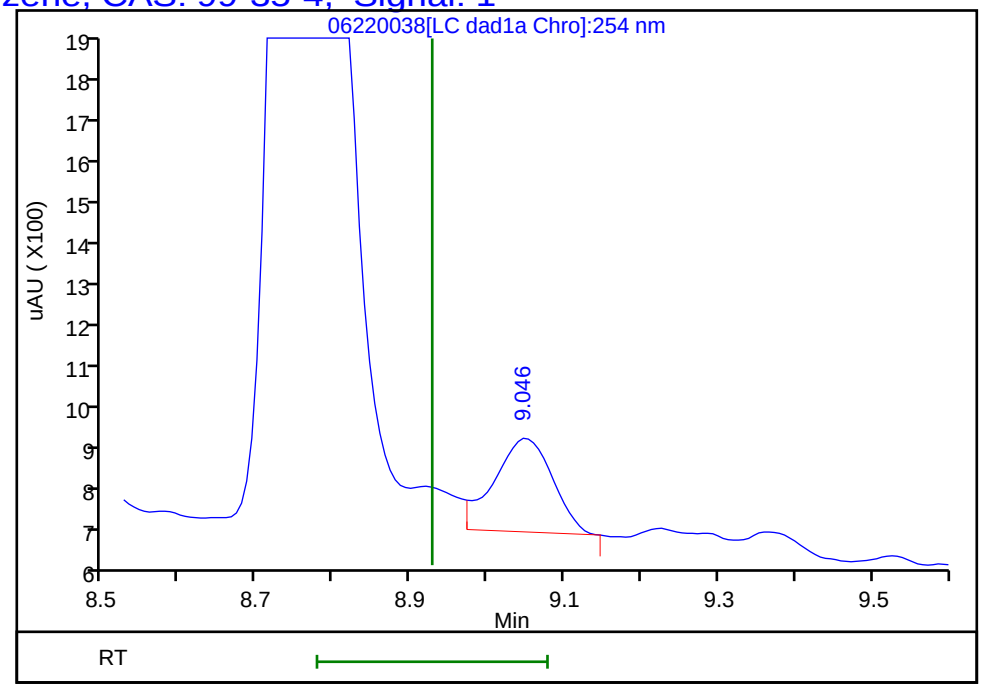
Eurofins TestAmerica, Denver

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.: 280-137609-1

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	

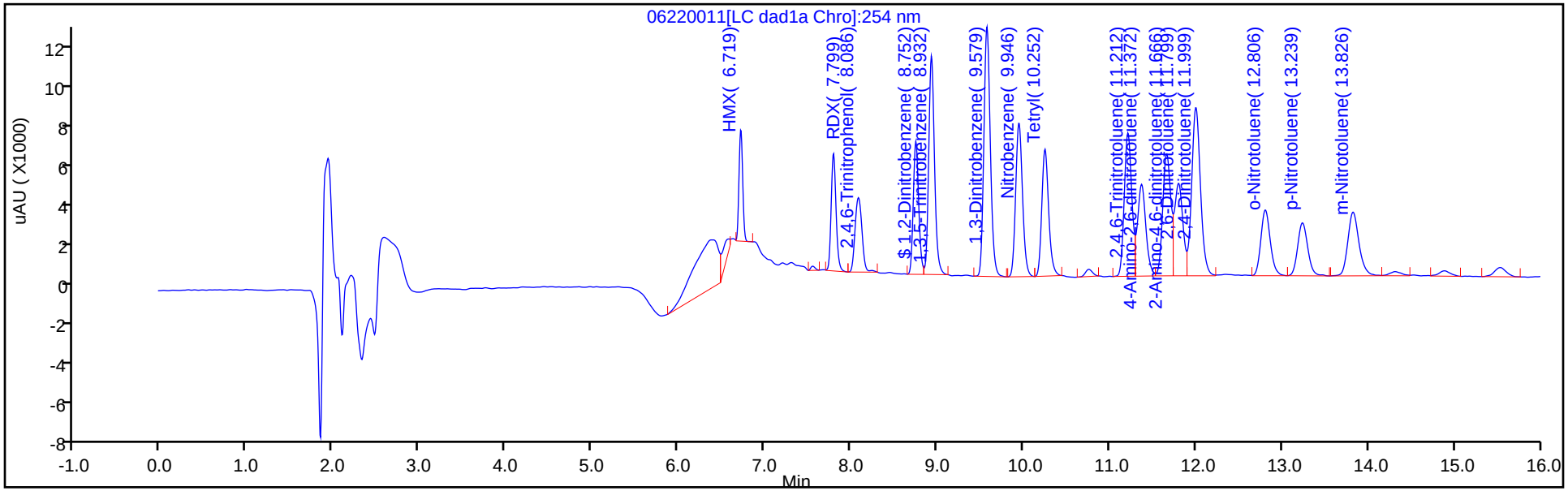
Report Date: 23-Jun-2020 15:17:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

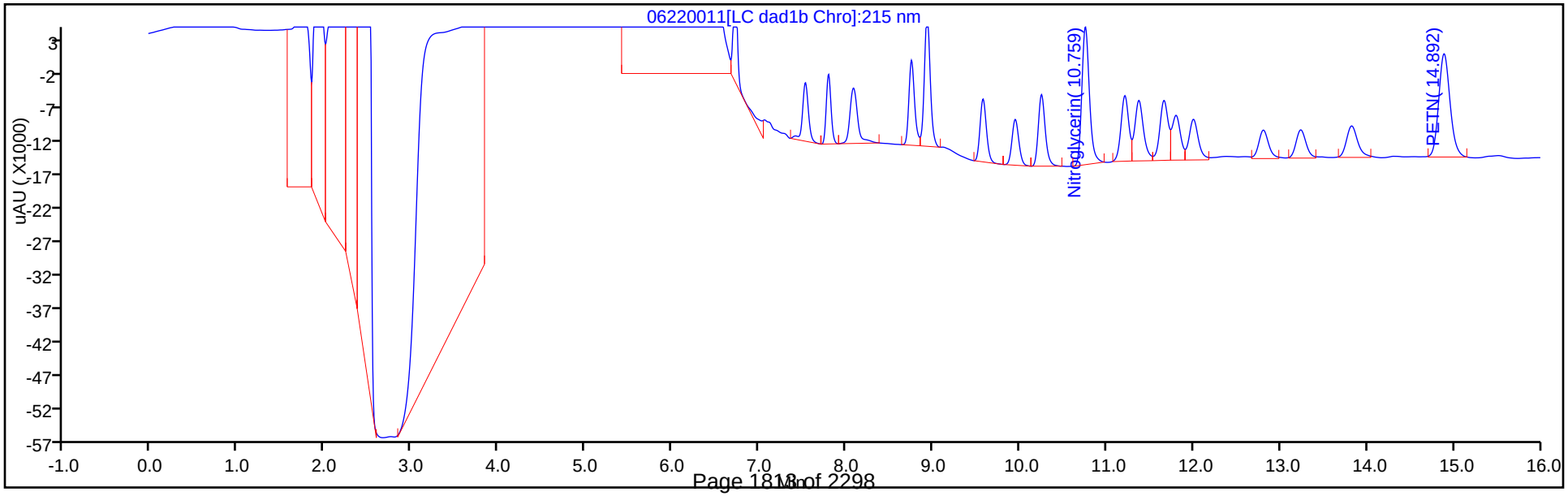
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220011.d

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.: 280-137609-1

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

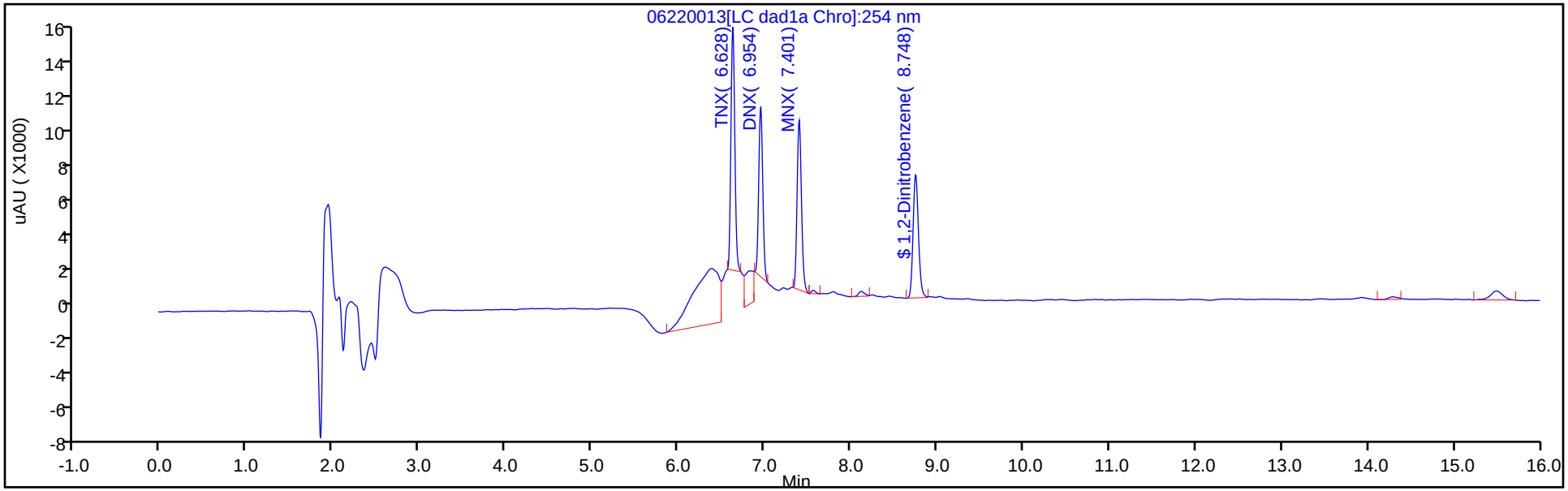
Report Date: 23-Jun-2020 15:17:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

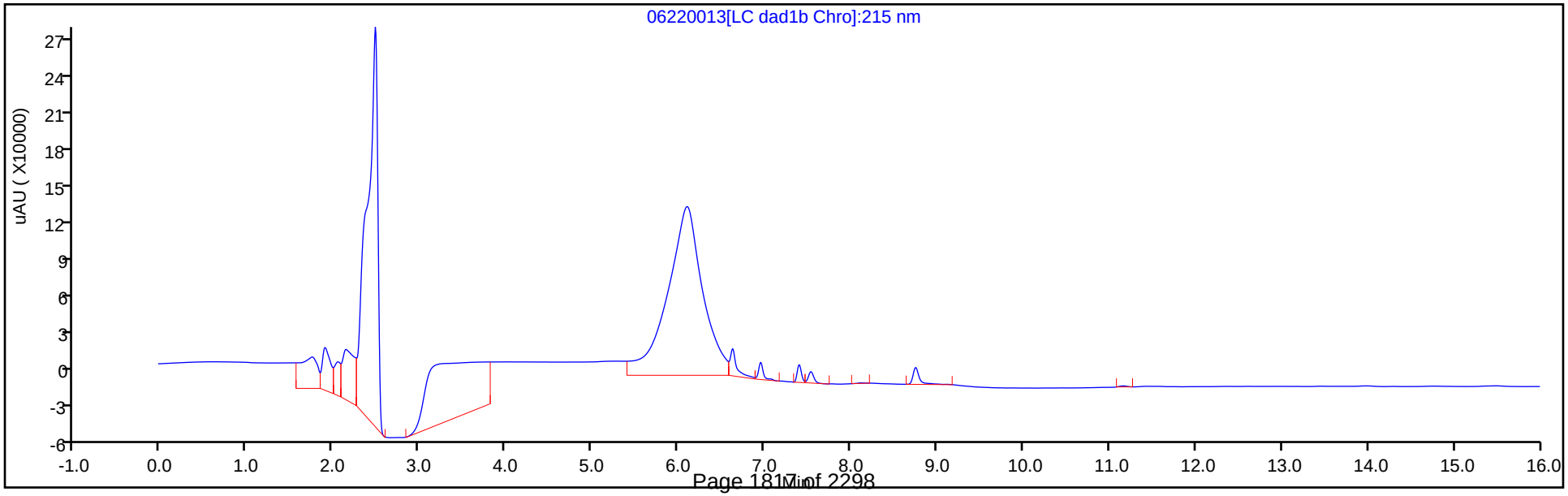
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220013.d

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

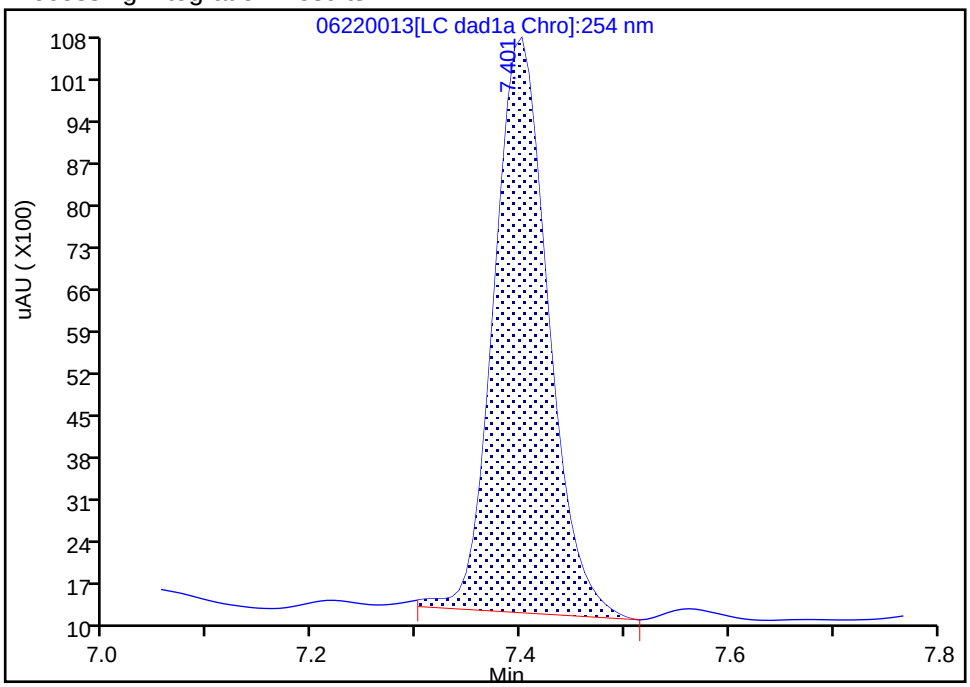
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220013.d				
Injection Date:	22-Jun-2020 16:25:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-499027/4-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

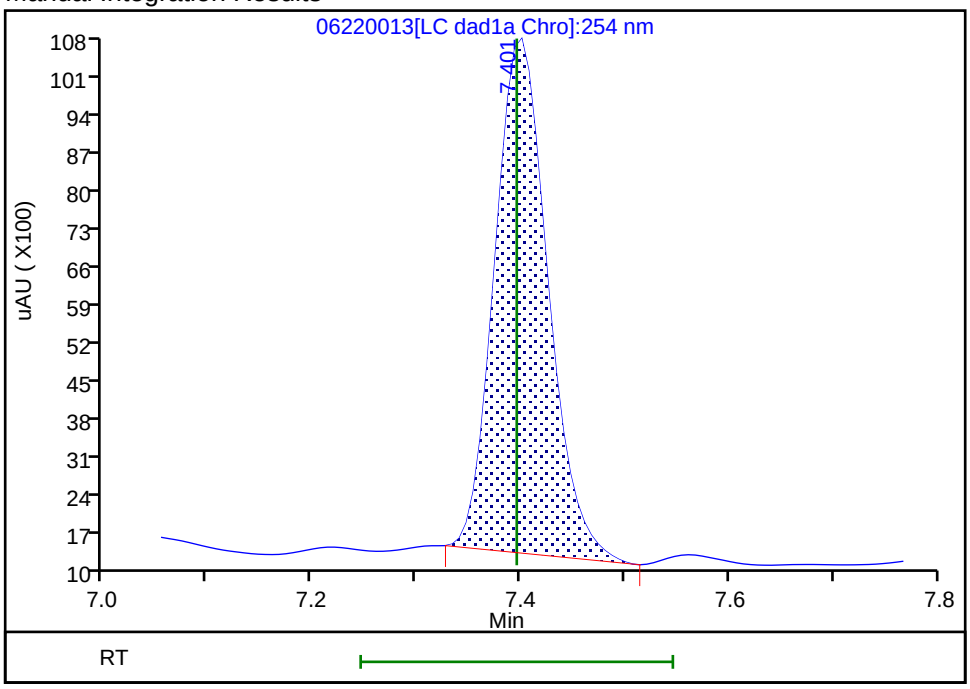
Processing Integration Results

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.: 280-137609-1

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	

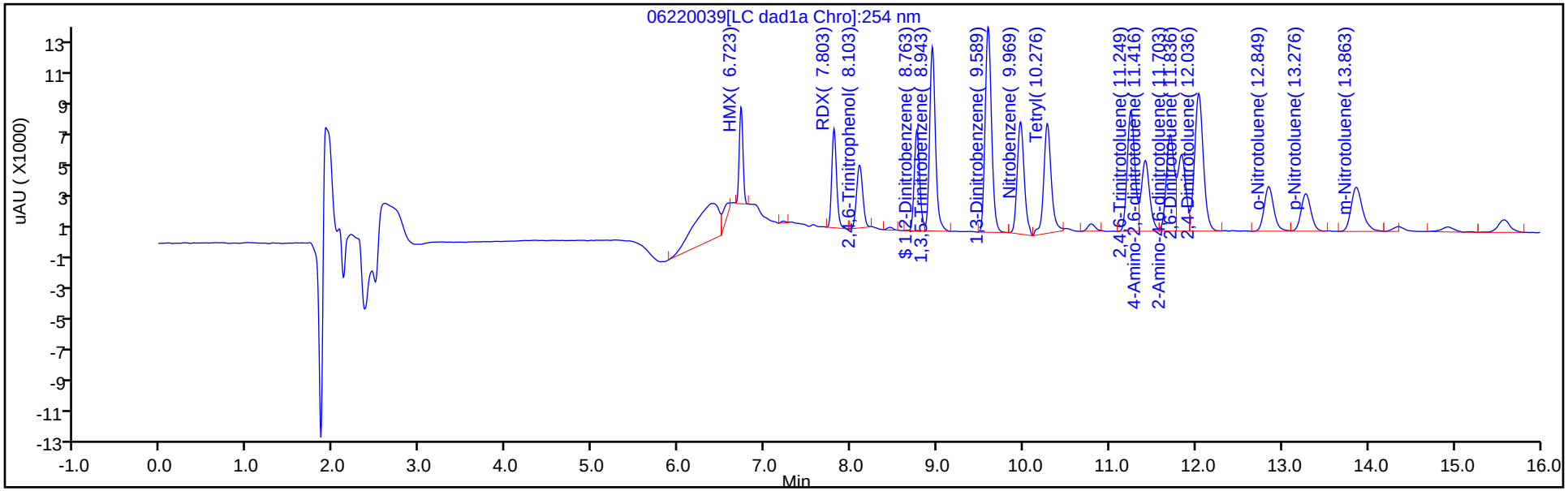
Report Date: 23-Jun-2020 15:18:08 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

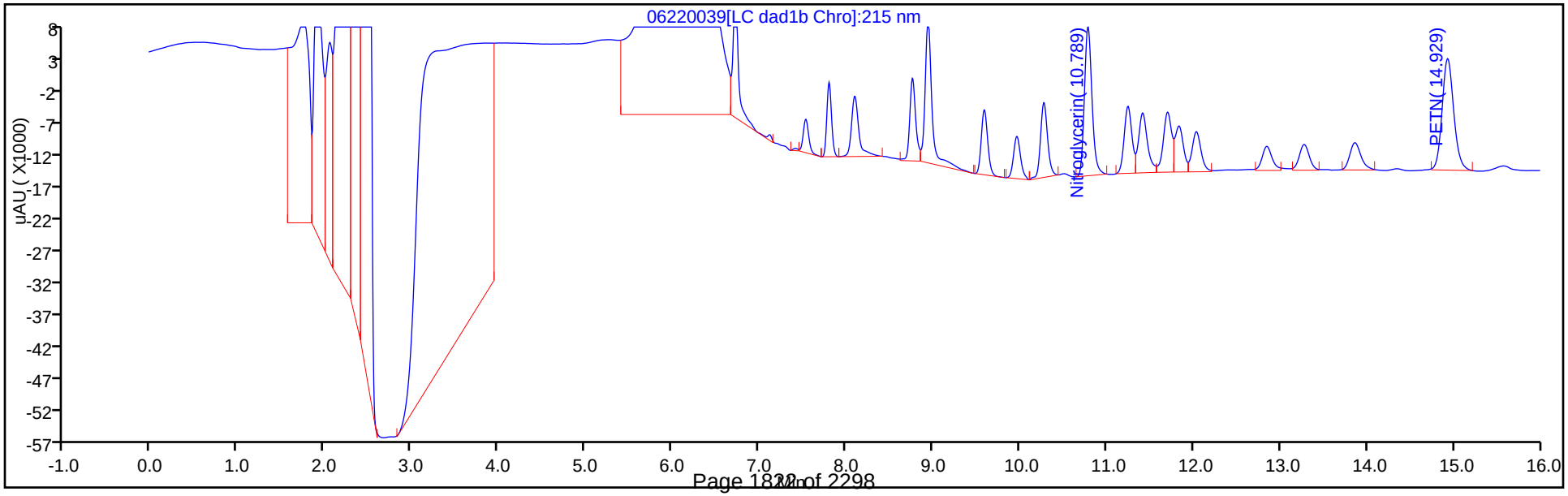
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220039.d

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.: 280-137609-1

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

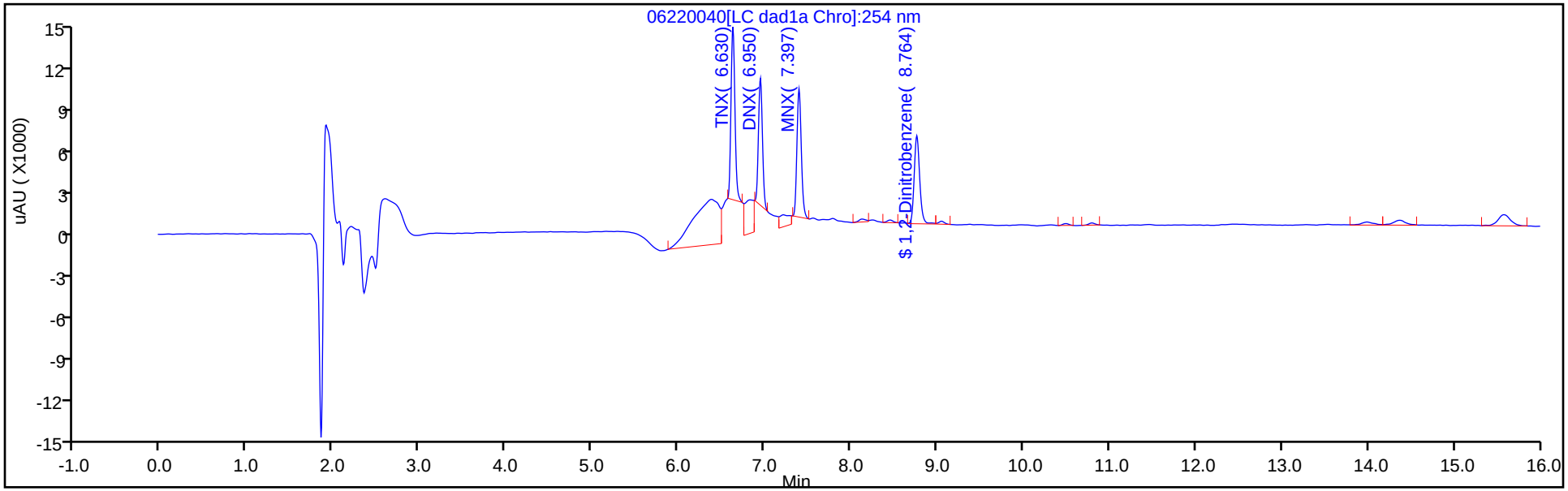
Report Date: 23-Jun-2020 15:18:09 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

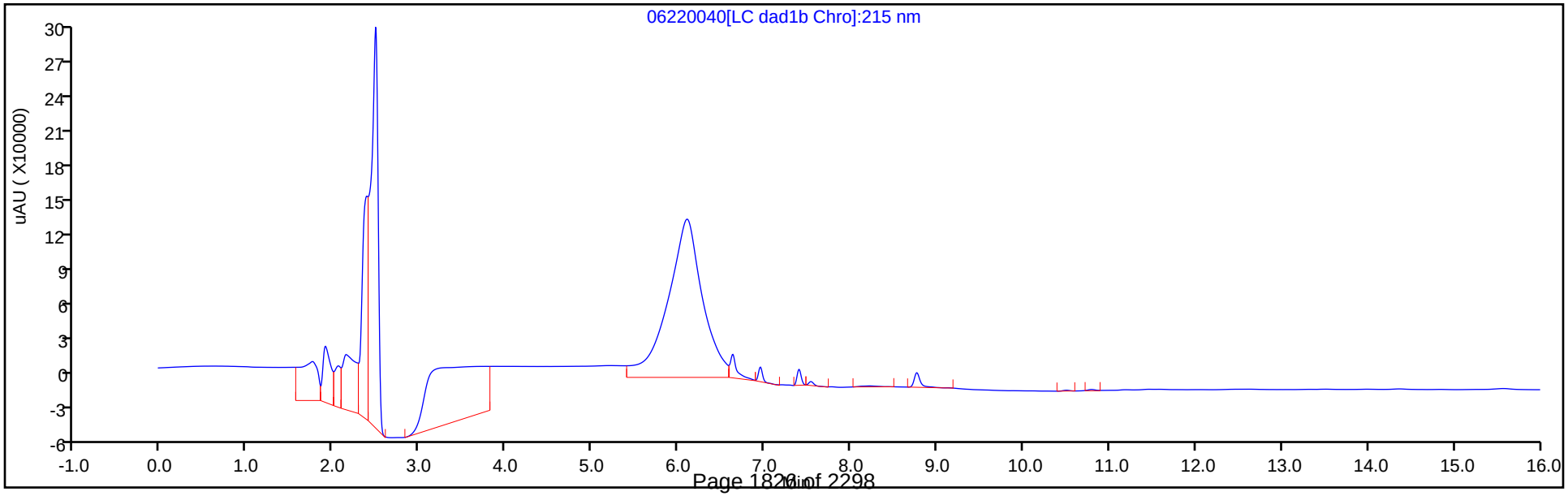
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220040.d

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

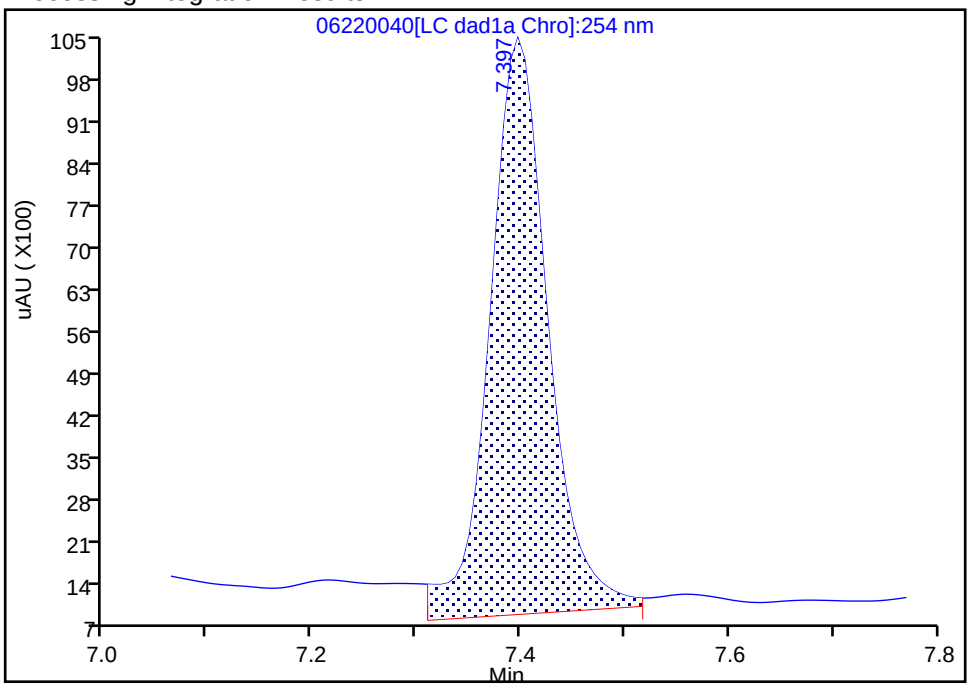
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220040.d				
Injection Date:	23-Jun-2020 02:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-499107/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

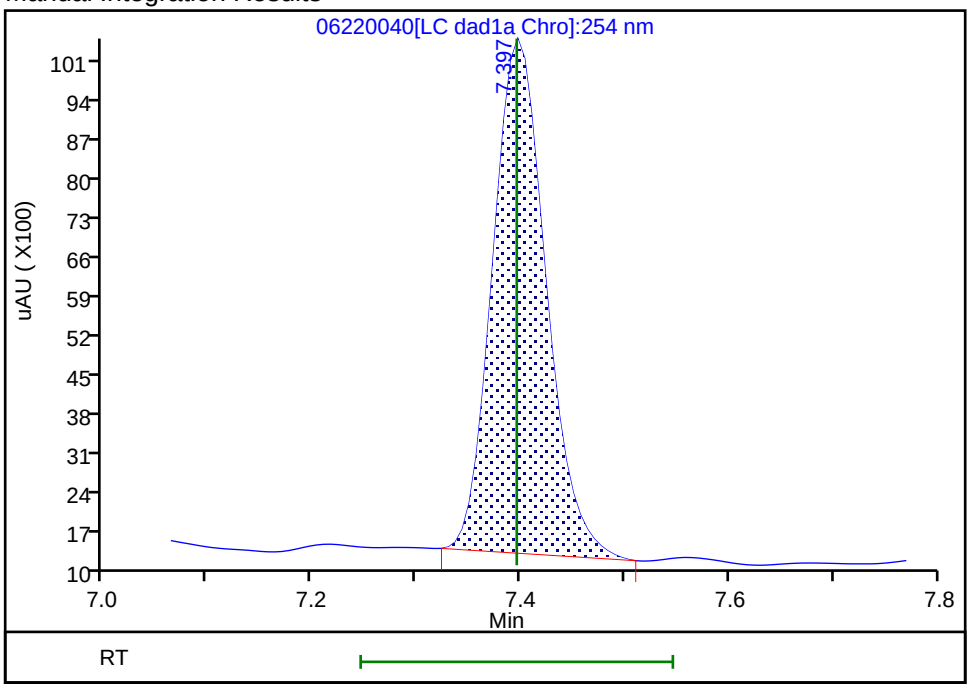
Processing Integration Results

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.: 280-137609-1

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

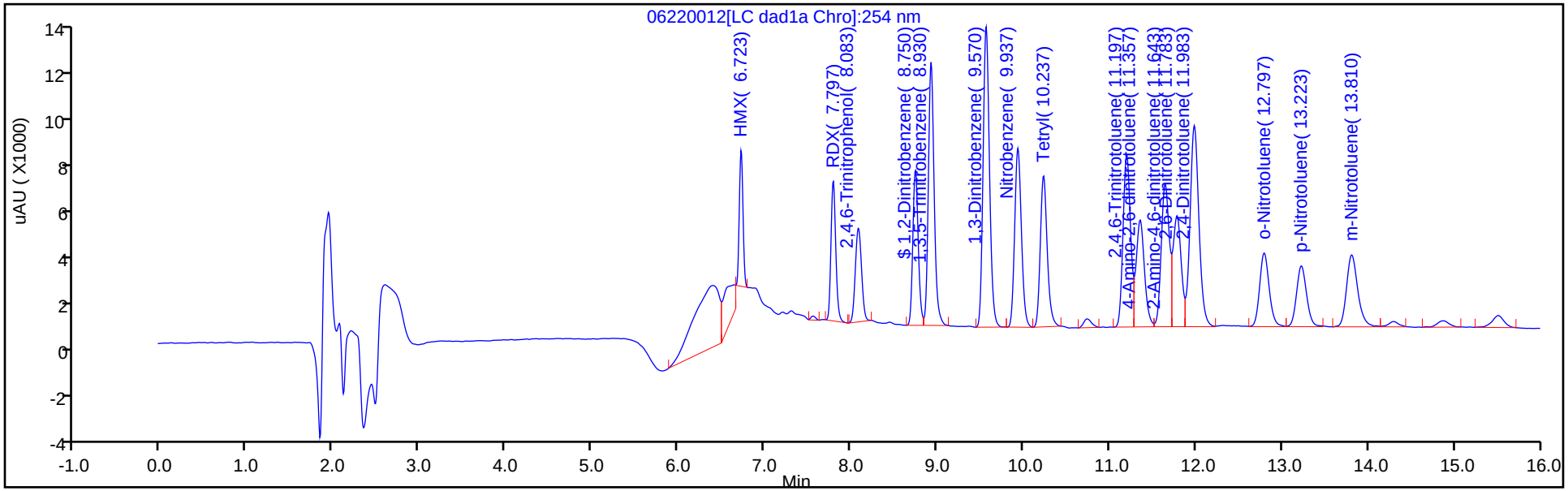
Report Date: 23-Jun-2020 16:07:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

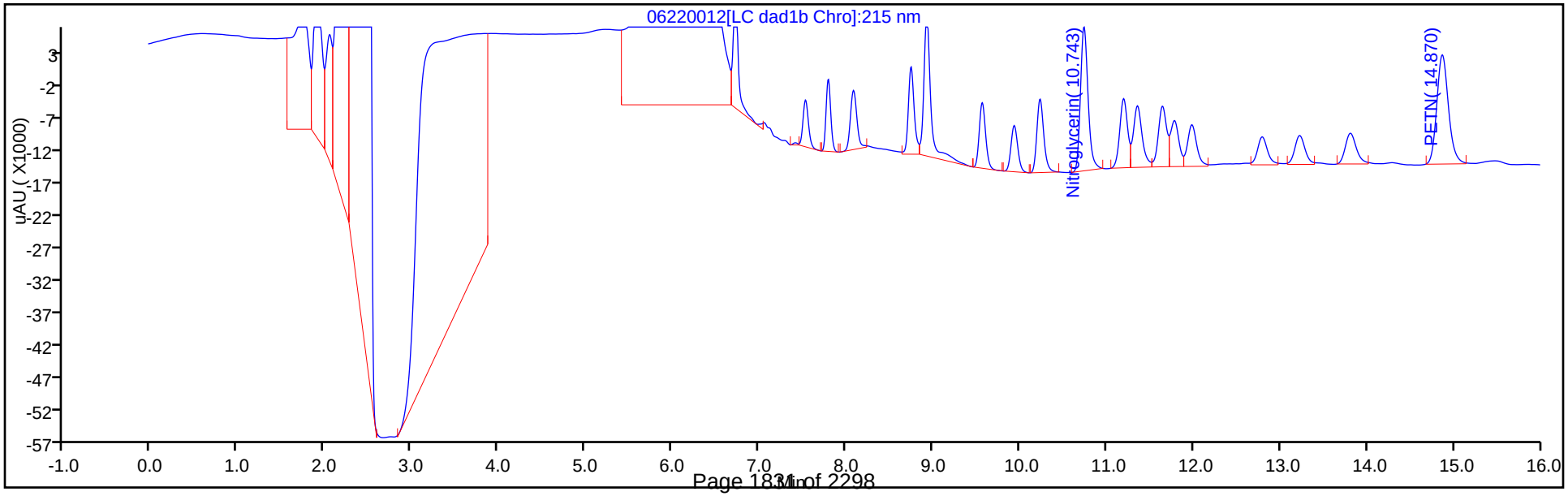
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220012.d

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

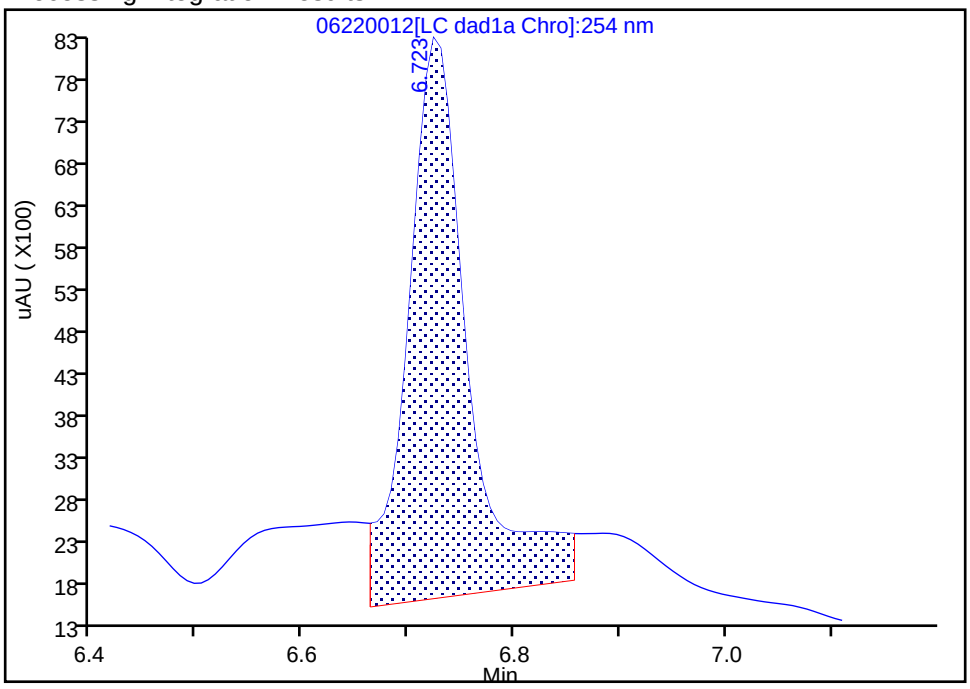
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220012.d				
Injection Date:	22-Jun-2020 16:02:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

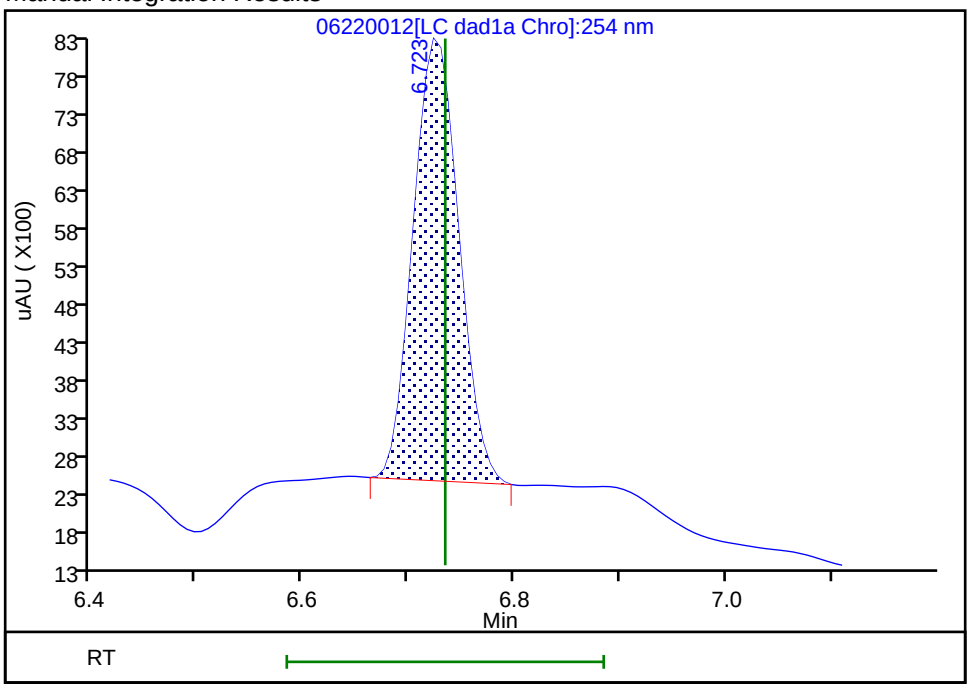
Processing Integration Results

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

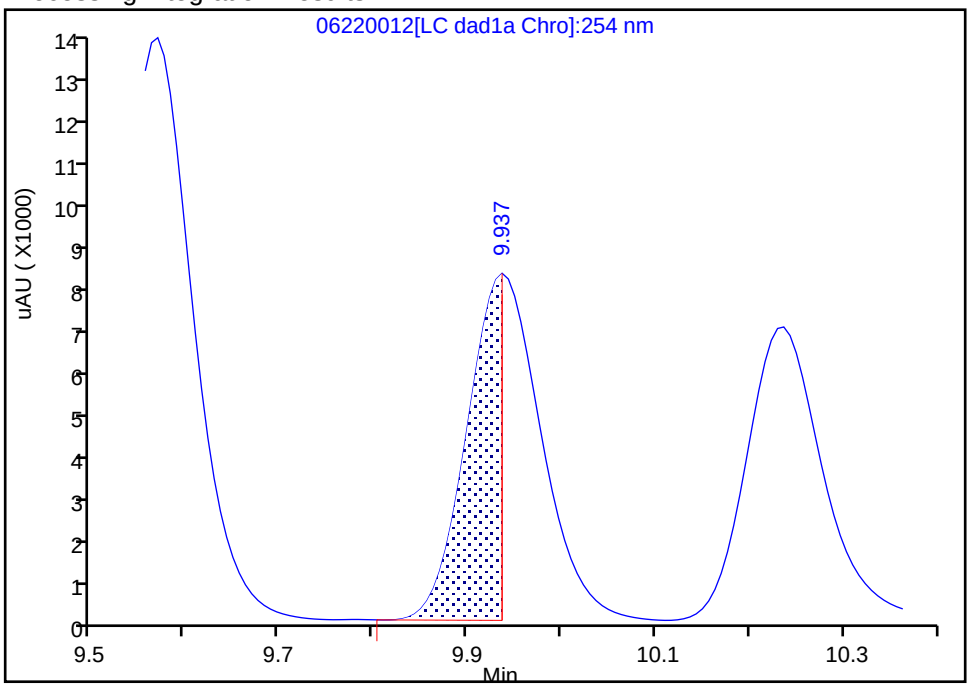
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220012.d				
Injection Date:	22-Jun-2020 16:02:03	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

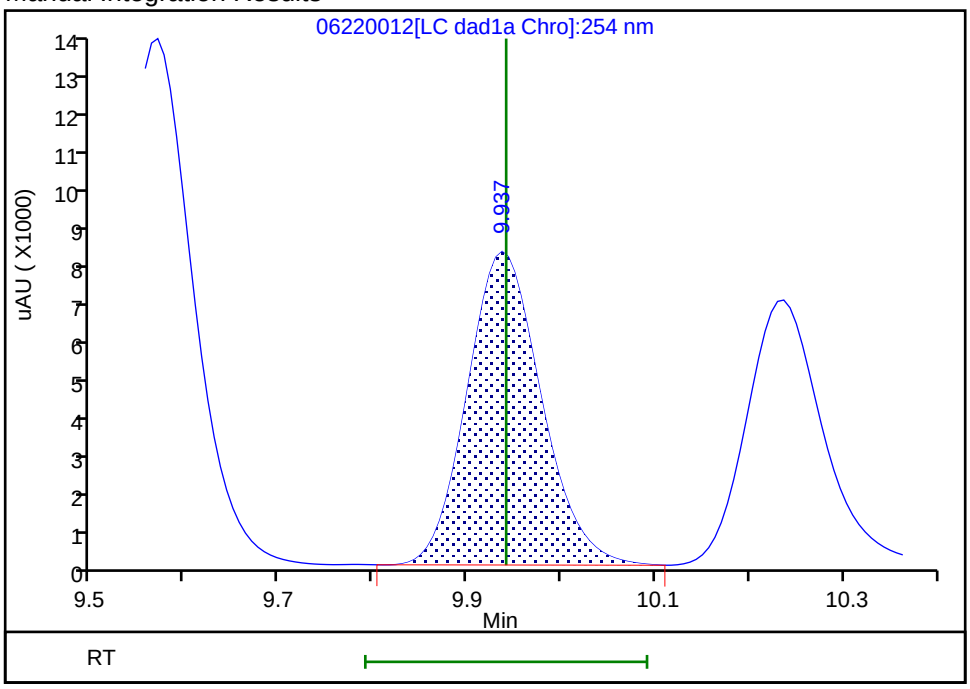
Processing Integration Results

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.: 280-137609-1

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

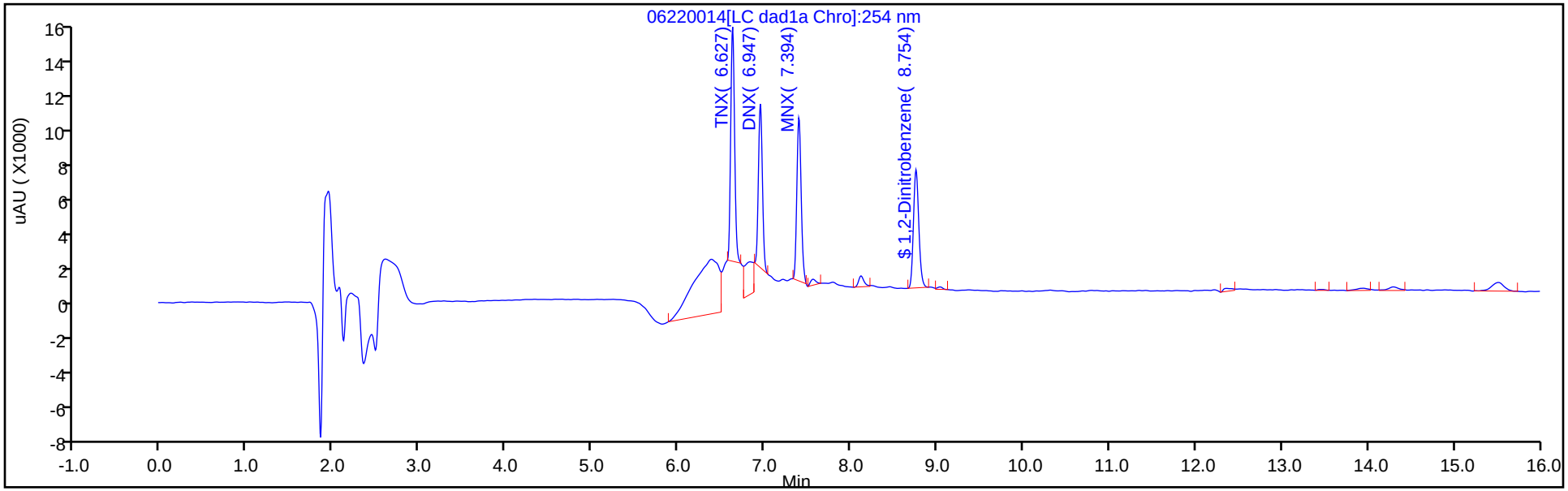
Report Date: 23-Jun-2020 15:17:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

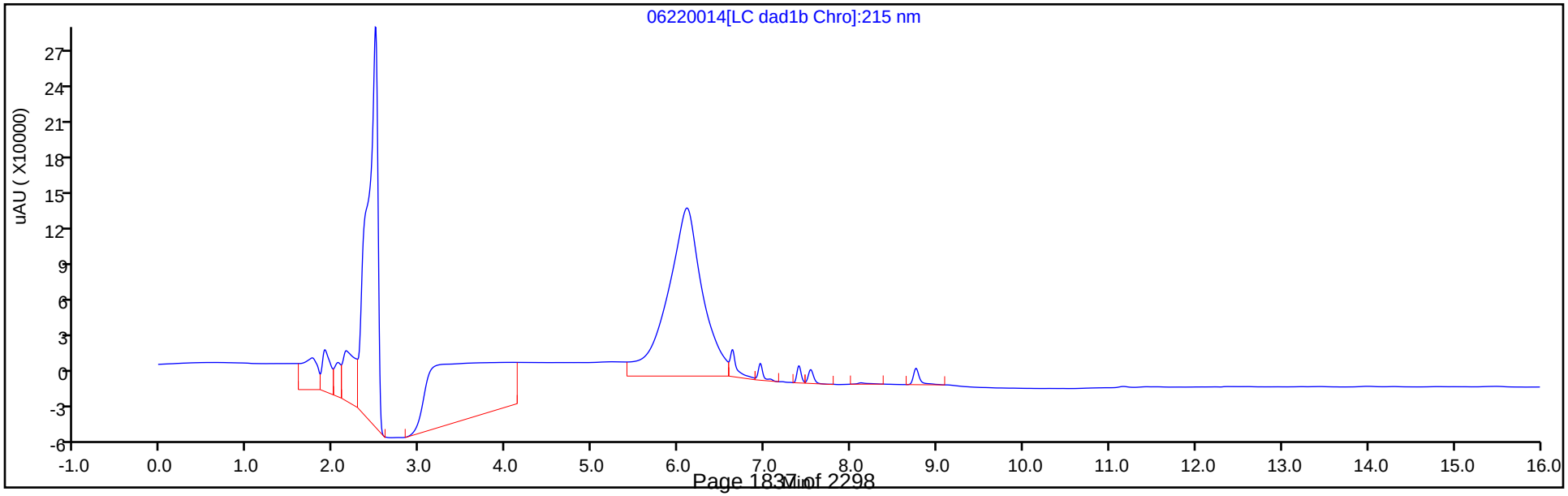
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220014.d

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

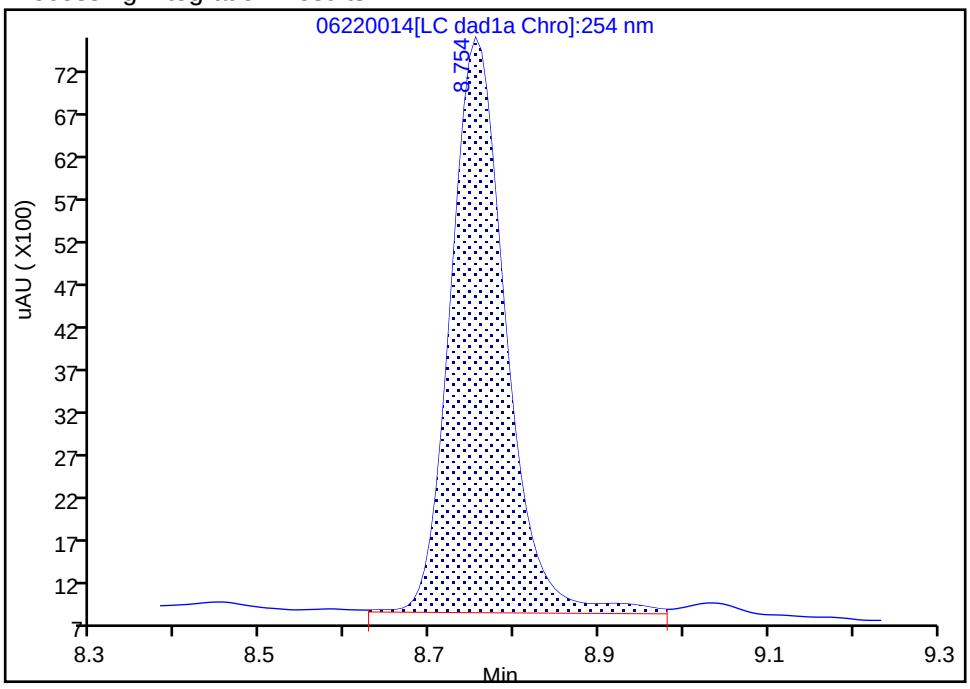
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220014.d				
Injection Date:	22-Jun-2020 16:48:01	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/5-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	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

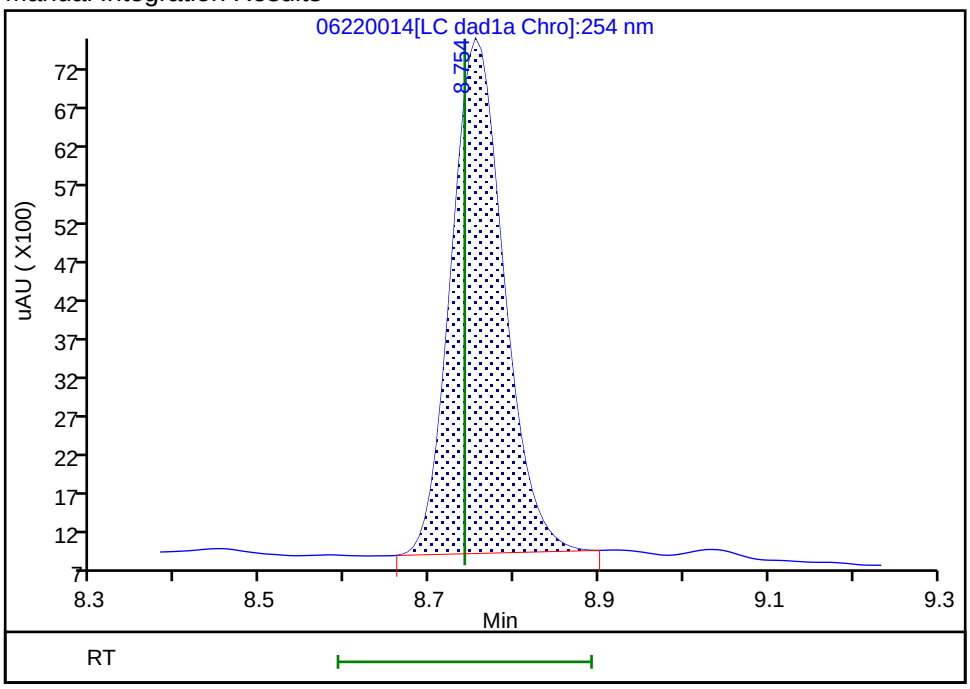
Processing Integration Results

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

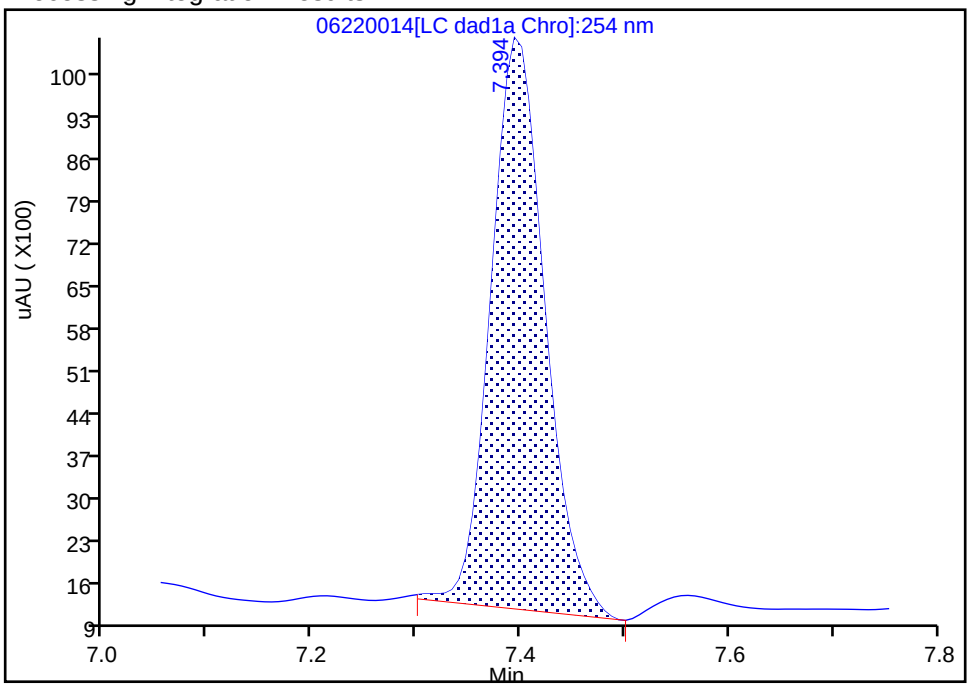
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220014.d				
Injection Date:	22-Jun-2020 16:48:01	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-499027/5-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

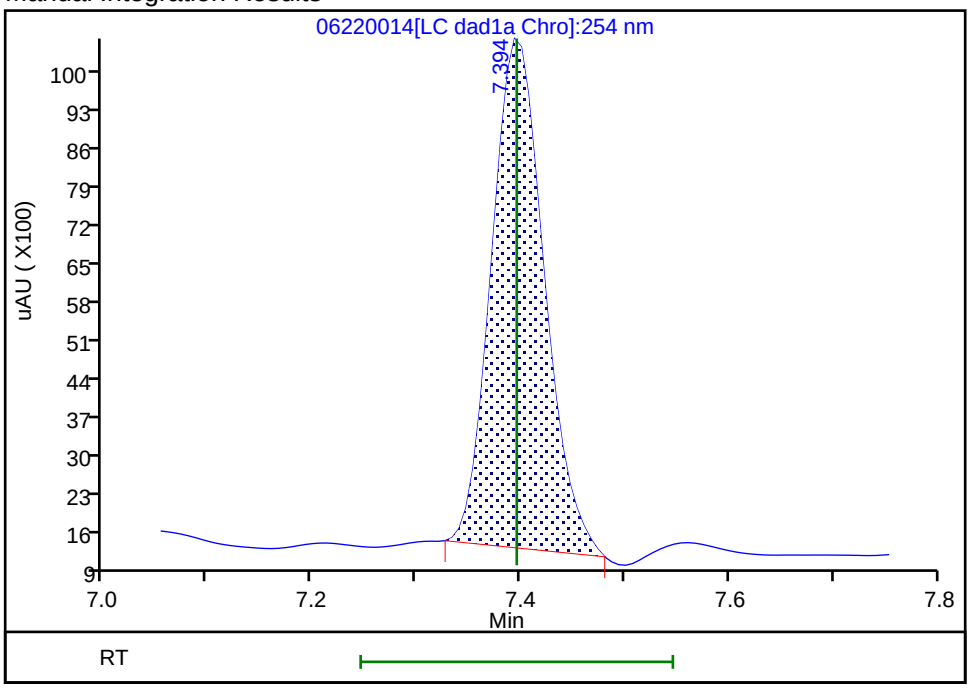
Processing Integration Results

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

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MS Lab Sample ID: 280-137609-1 MS

Matrix: Water Lab File ID: 06220042.D

Analysis Method: 8330A Date Collected: 06/11/2020 08:50

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 466.7(mL) Date Analyzed: 06/23/2020 03:32

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.50	M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	2.38		0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.48		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	2.16		0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	2.20		0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.15		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	1.75		0.22	0.21	0.092
99-08-1	3-Nitrotoluene	1.96		0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.95		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	1.87		0.44	0.43	0.11
2691-41-0	HMX	2.26	M	0.22	0.21	0.094
98-95-3	Nitrobenzene	2.21		0.22	0.21	0.097
121-82-4	RDX	2.15	M	0.22	0.21	0.055
479-45-8	Tetryl	2.00	M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220042.D
Lims ID: 280-137609-A-1-B MS
Client ID: PZ007-20A
Sample Type: MS
Inject. Date: 23-Jun-2020 03:32:04 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-1-B
Misc. Info.: 280-0092608-042
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 14:49:06

	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	M
	2 TNX	1		6.629				ND	
	3 HMX	1	6.719	6.734	-0.015	18110	0.2000	0.2107	M
	4 2,4-diamino-6-nitrotoluene	1		6.764				ND	
	5 DNX	1		6.949				ND	
	6 MNX	1		7.396				ND	
	7 RDX	1	7.799	7.801	-0.002	23373	0.2000	0.2004	M
	8 2,4,6-Trinitrophenol	1	8.079	8.094	-0.015	20462	0.2000	0.2404	M
$	9 1,2-Dinitrobenzene	1	8.753	8.741	0.012	27169	0.2000	0.1966	M
	10 1,3,5-Trinitrobenzene	1	8.939	8.928	0.011	53769	0.2000	0.2335	M
	11 1,3-Dinitrobenzene	1	9.586	9.568	0.018	68094	0.2000	0.2220	
	12 Nitrobenzene	1	9.966	9.941	0.025	41356	0.2000	0.2064	
	13 3,5-Dinitroaniline	1		10.204				ND	
	14 Tetryl	1	10.273	10.234	0.039	32970	0.2000	0.1862	M
	15 Nitroglycerin	2	10.773	10.748	0.025	142719	2.00	2.09	
	16 2,4,6-Trinitrotoluene	1	11.239	11.201	0.038	47271	0.2000	0.2317	
	17 4-Amino-2,6-dinitrotoluene	1	11.406	11.361	0.045	31262	0.2000	0.1818	
	18 2-Amino-4,6-dinitrotoluene	1	11.699	11.648	0.051	40682	0.2000	0.2006	
	19 2,6-Dinitrotoluene	1	11.833	11.788	0.045	30720	0.2000	0.2056	
	20 2,4-Dinitrotoluene	1	12.033	11.988	0.045	61307	0.2000	0.2019	
	21 o-Nitrotoluene	1	12.846	12.801	0.045	22032	0.2000	0.1631	
	22 p-Nitrotoluene	1	13.273	13.234	0.039	19735	0.2000	0.1746	
	23 m-Nitrotoluene	1	13.859	13.821	0.038	26189	0.2000	0.1831	
	24 PETN	2	14.926	14.888	0.038	159234	2.00	2.03	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

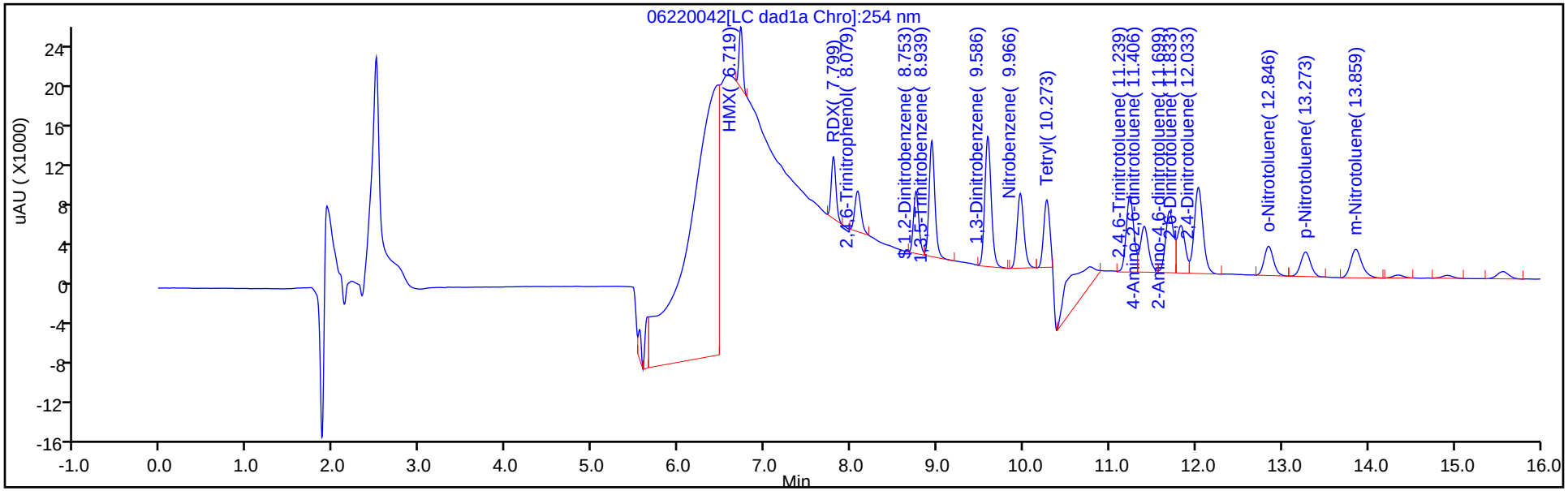
Report Date: 23-Jun-2020 15:18:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

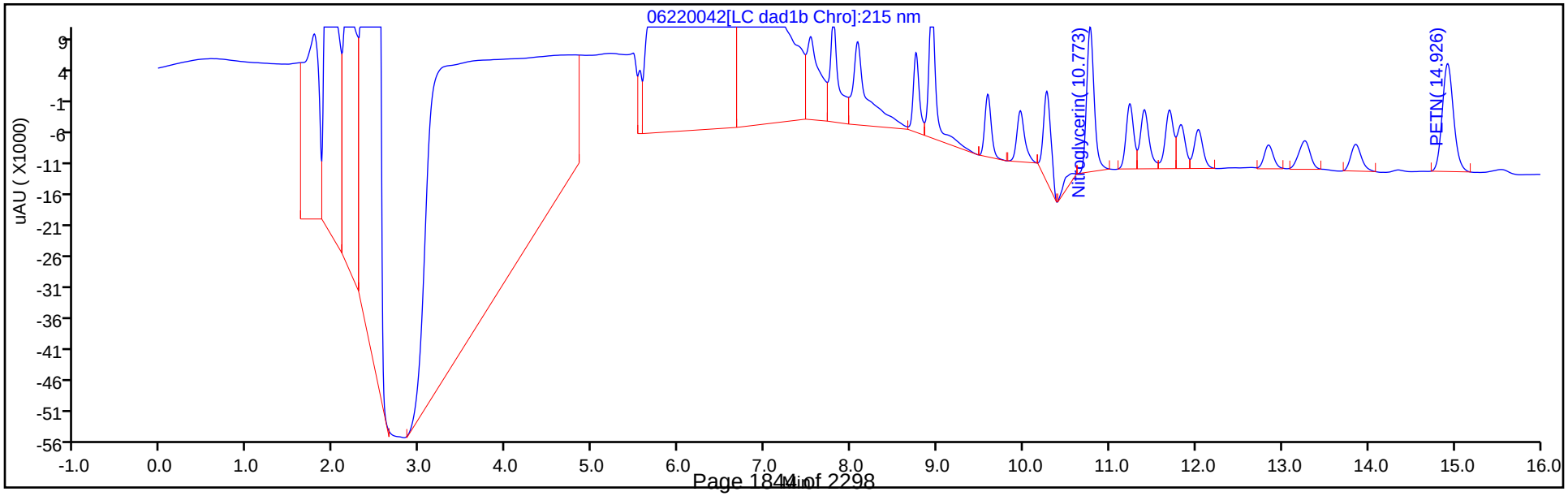
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220042.d

Injection Date:	23-Jun-2020 03:32:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-1-B MS			Worklist Smp#:	42
Client ID:	PZ007-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220042.D				
Lims ID:	280-137609-A-1-B MS				
Client ID:	PZ007-20A				
Sample Type:	MS				
Inject. Date:	23-Jun-2020 03:32:04	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-1-B				
Misc. Info.:	280-0092608-042				
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 14:49:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1966	98.29

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

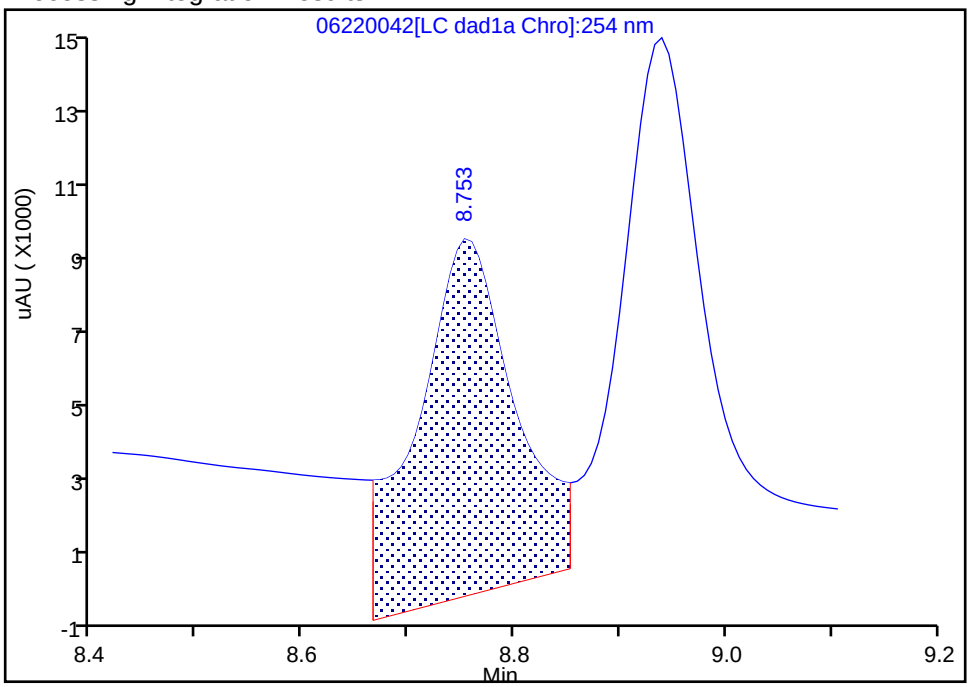
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220042.d				
Injection Date:	23-Jun-2020 03:32:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-B MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

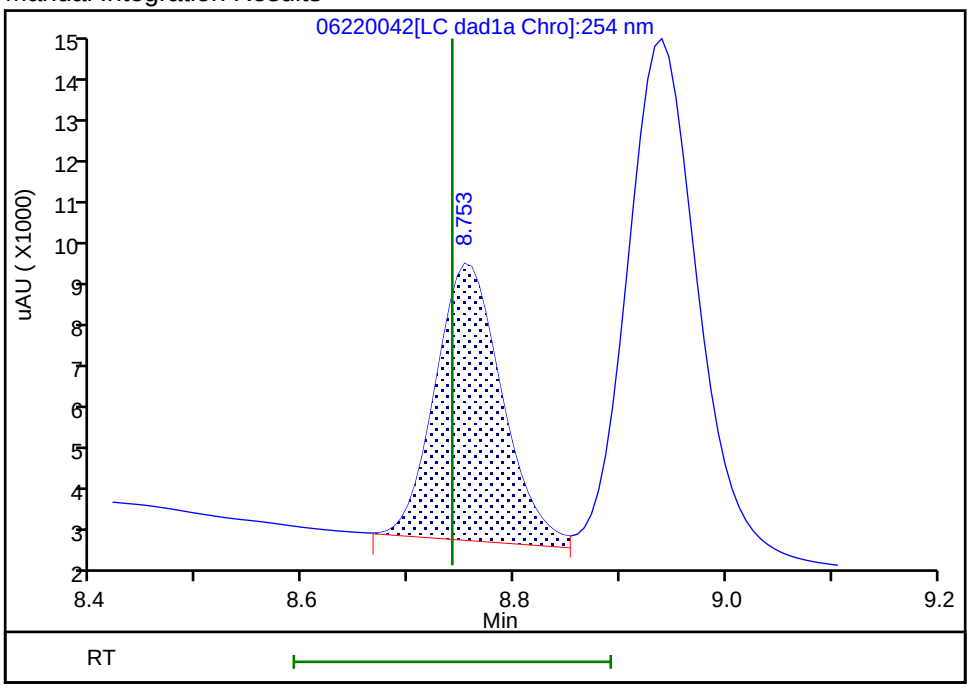
Processing Integration Results

RT: 8.75
Area: 57297
Amount: 0.414558
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 27169
Amount: 0.196575
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:48:49
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

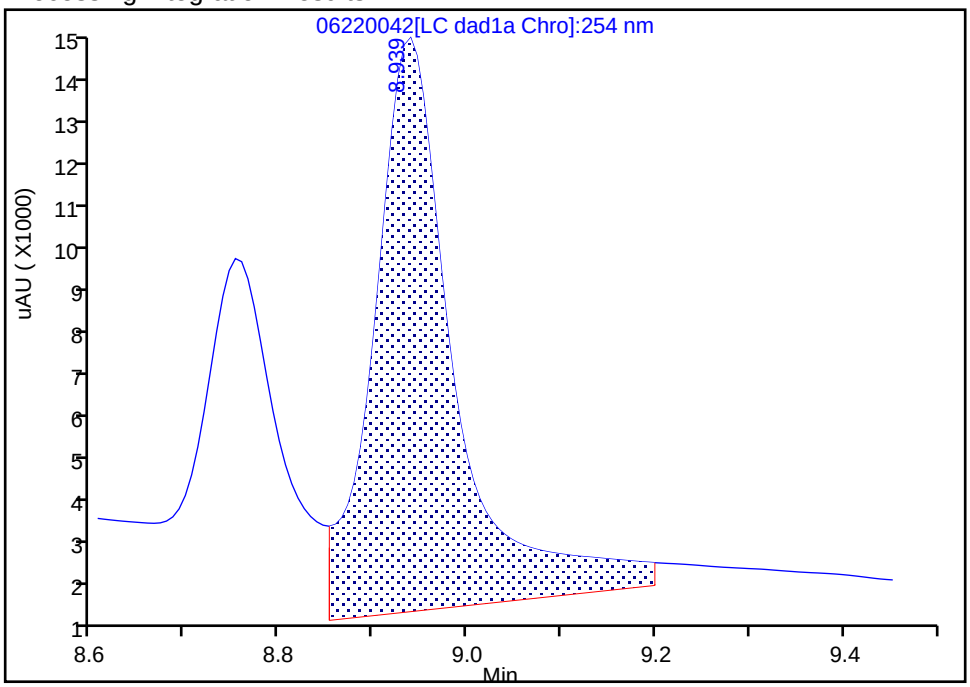
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220042.d				
Injection Date:	23-Jun-2020 03:32:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-B MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

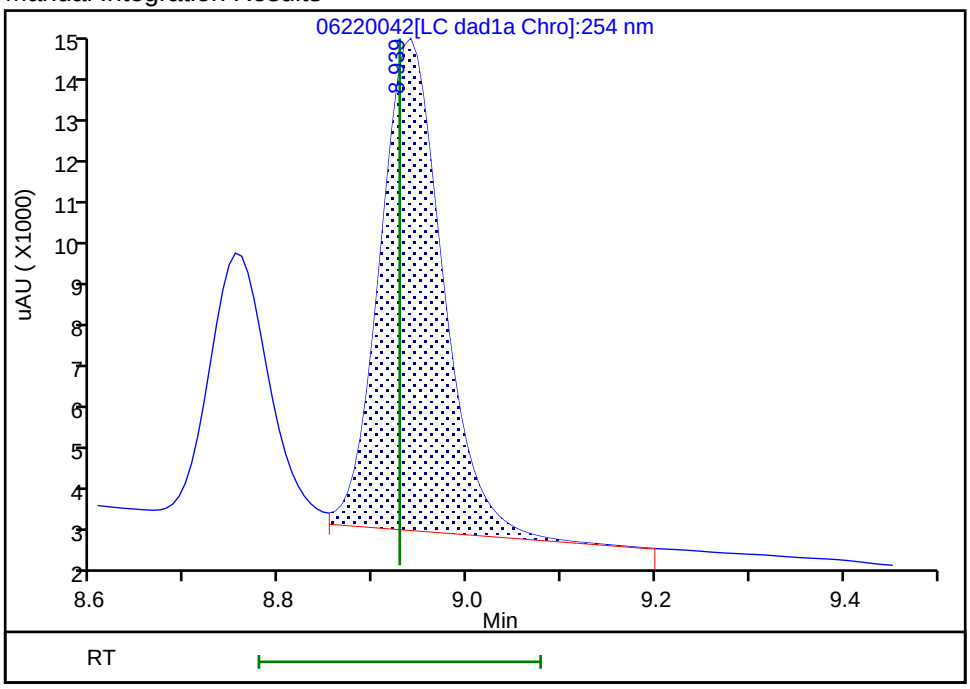
Processing Integration Results

RT: 8.94
Area: 78604
Amount: 0.341298
Amount Units: ug/mL



Manual Integration Results

RT: 8.94
Area: 53769
Amount: 0.233465
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:48:49

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

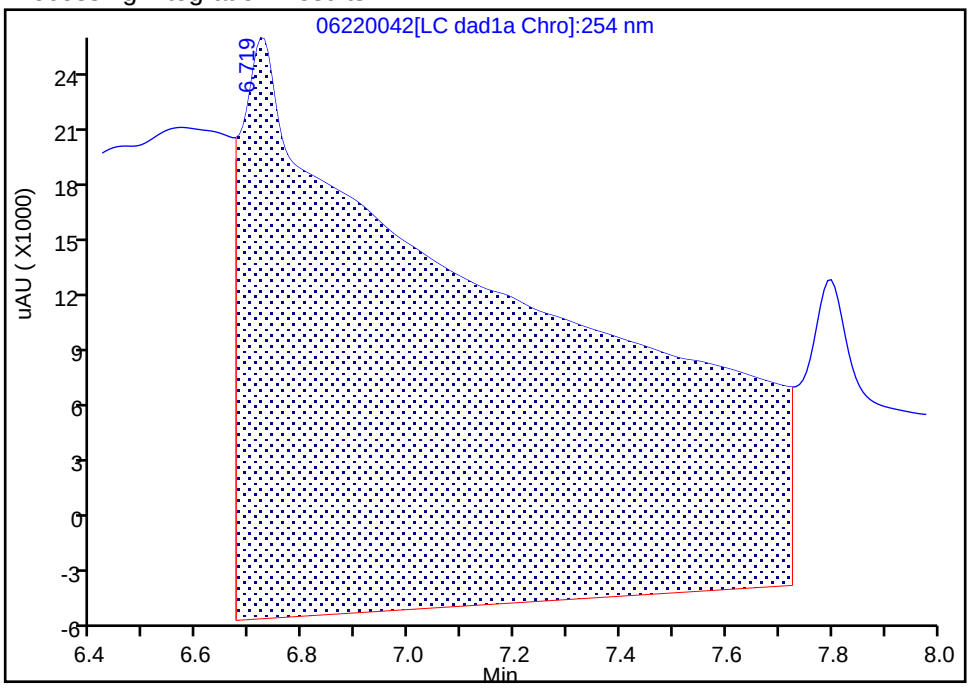
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220042.d				
Injection Date:	23-Jun-2020 03:32:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-B MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

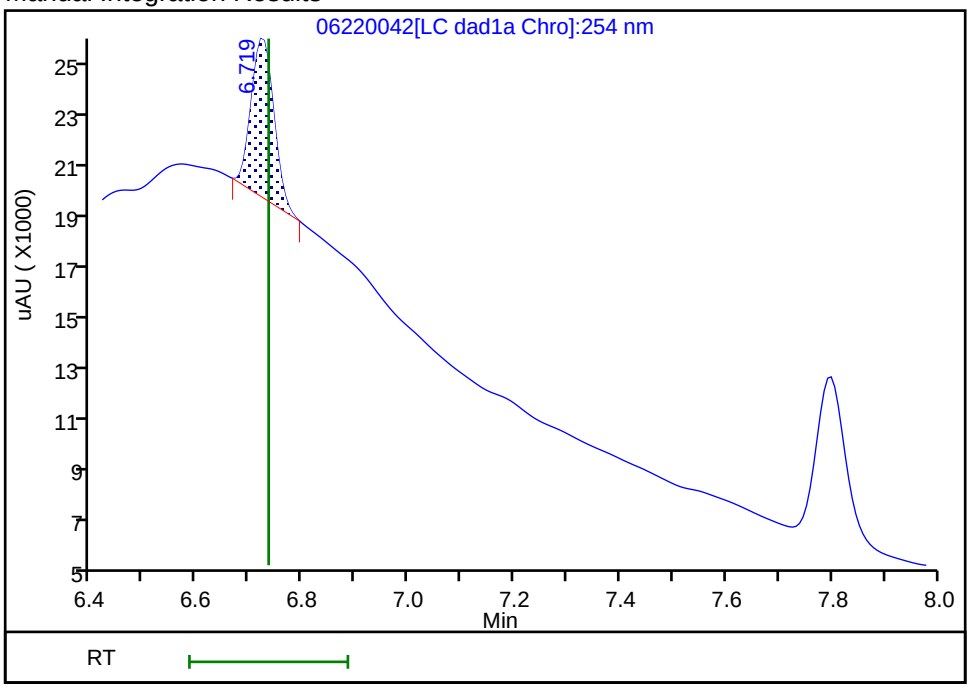
Processing Integration Results

RT: 6.72
Area: 1100714
Amount: 12.804633
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 18110
Amount: 0.210674
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:48:29
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

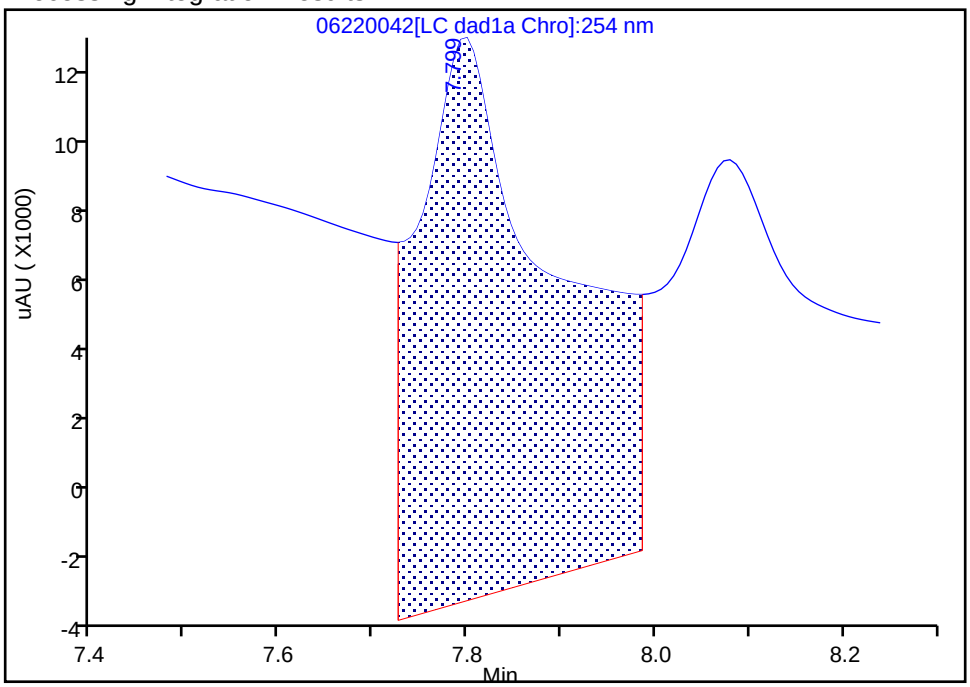
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220042.d				
Injection Date:	23-Jun-2020 03:32:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-B MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

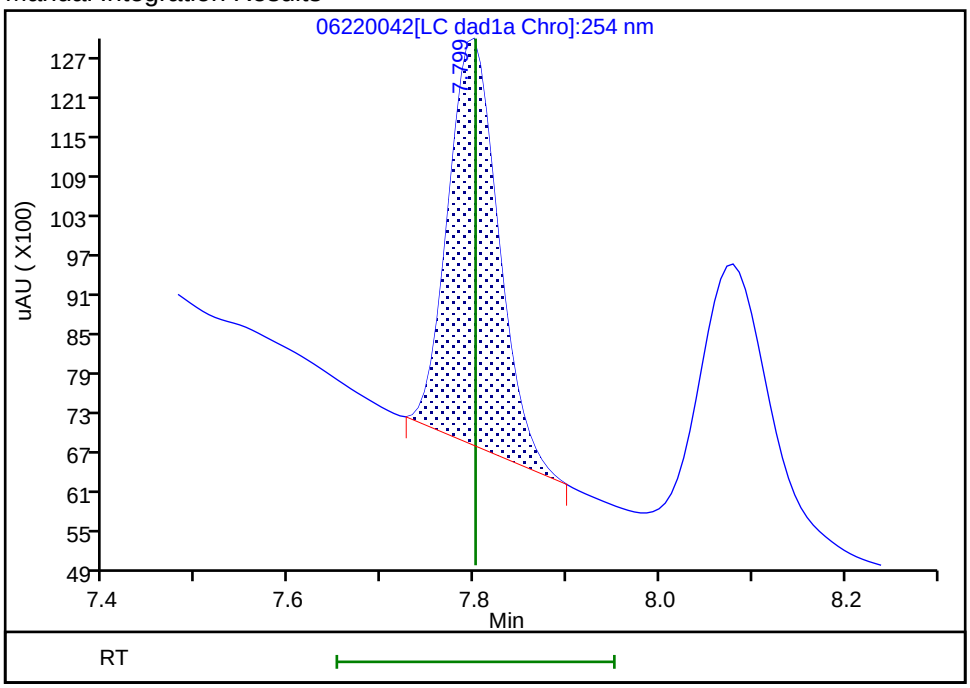
Processing Integration Results

RT: 7.80
Area: 161694
Amount: 1.386586
Amount Units: ug/mL



Manual Integration Results

RT: 7.80
Area: 23373
Amount: 0.200432
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:48:39

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

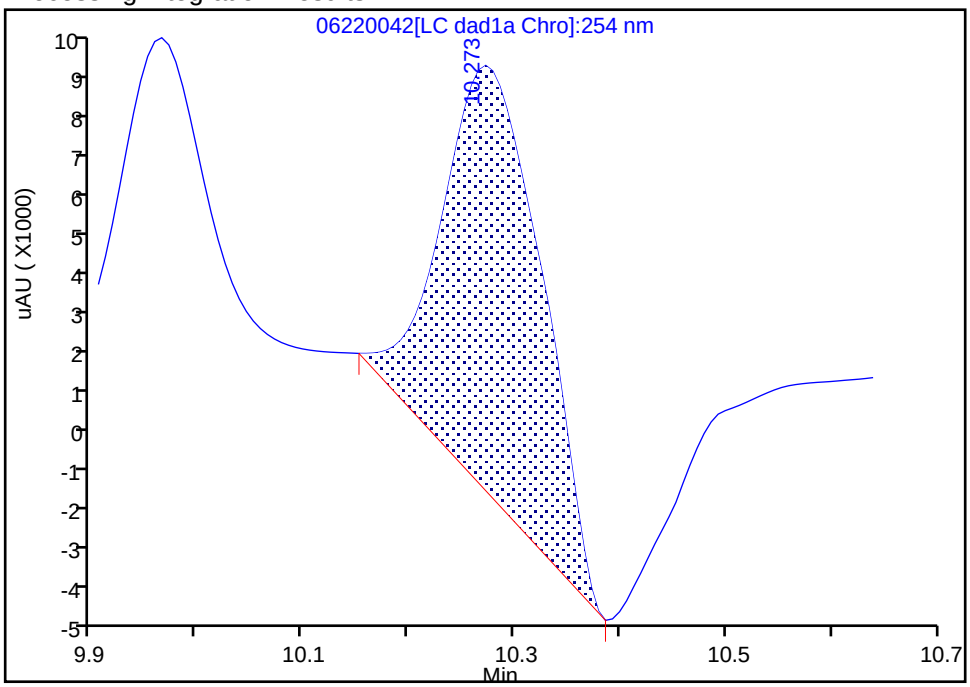
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220042.d				
Injection Date:	23-Jun-2020 03:32:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-B MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

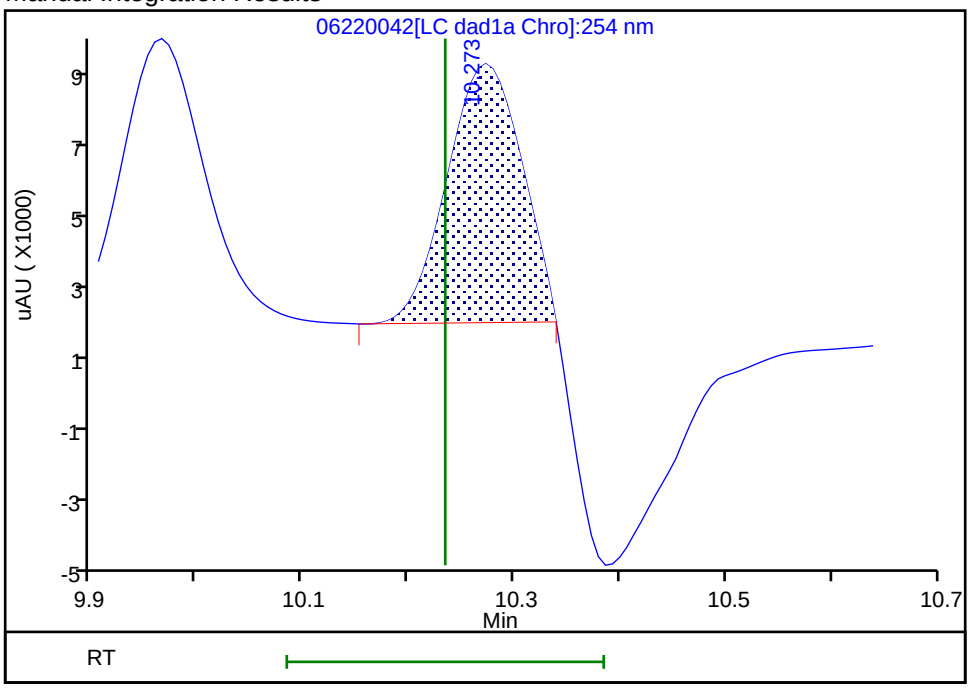
Processing Integration Results

RT: 10.27
Area: 66664
Amount: 0.376565
Amount Units: ug/mL



Manual Integration Results

RT: 10.27
Area: 32970
Amount: 0.186238
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:49:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MS Lab Sample ID: 280-137609-1 MS

Matrix: Water Lab File ID: 06220044.D

Analysis Method: 8330A Date Collected: 06/11/2020 08:50

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 460.2(mL) Date Analyzed: 06/23/2020 04:18

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.24	M	2.2	0.43	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220044.D
Lims ID: 280-137609-B-1-A MS
Client ID: PZ007-20A
Sample Type: MS
Inject. Date: 23-Jun-2020 04:18:03 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-B-1-A
Misc. Info.: 280-0092608-044
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 14:51:11

	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	6.630	6.629	0.001	40028	0.2002	0.1839	M
	3 HMX	1		6.734				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.764				ND	
	5 DNX	1	6.943	6.949	-0.006	29002	0.2002	0.1896	M
	6 MNX	1	7.397	7.396	0.001	32683	0.2334	0.2061	M
	7 RDX	1		7.801				ND	
	8 2,4,6-Trinitrophenol	1	8.123	8.094	0.029	1604		0.0188	M
$	9 1,2-Dinitrobenzene	1	8.763	8.741	0.022	27216	0.2000	0.1969	M
	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	U
	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

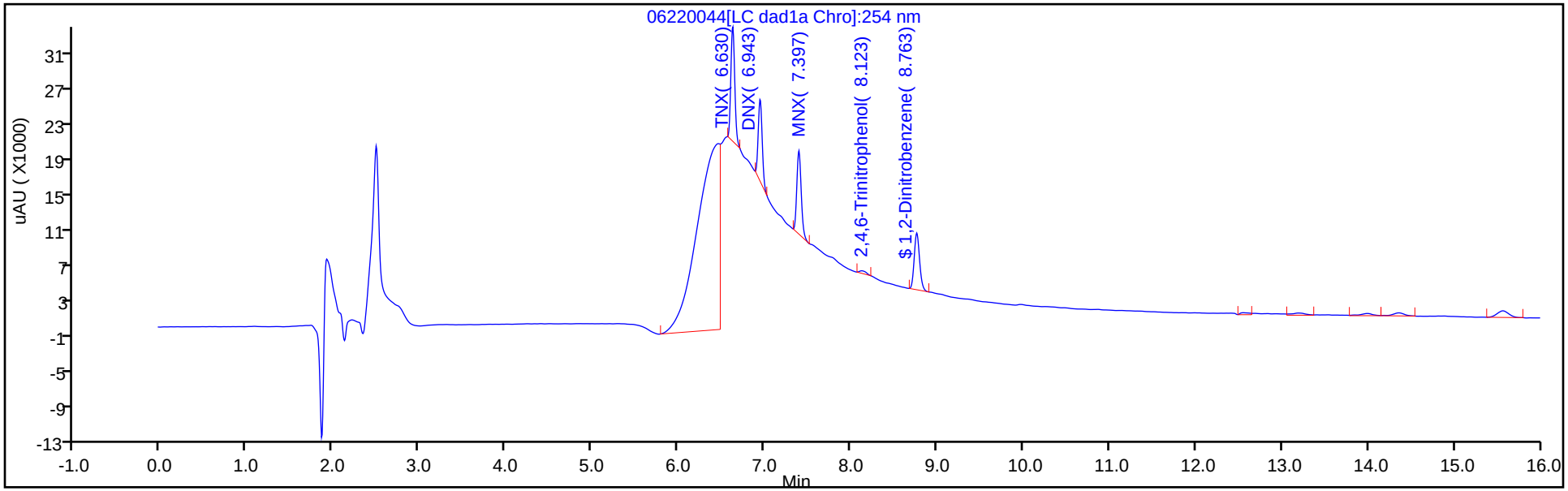
Report Date: 23-Jun-2020 15:18:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

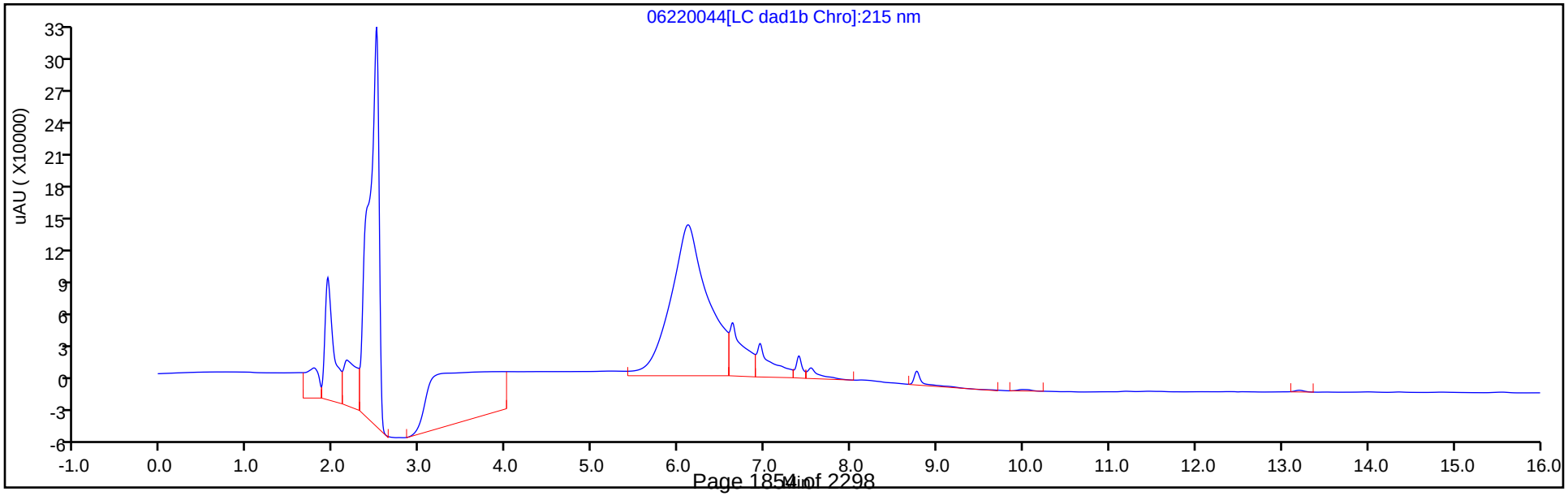
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220044.d

Injection Date:	23-Jun-2020 04:18:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-B-1-A MS			Worklist Smp#:	44
Client ID:	PZ007-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220044.D
Lims ID: 280-137609-B-1-A MS
Client ID: PZ007-20A
Sample Type: MS
Inject. Date: 23-Jun-2020 04:18:03 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-B-1-A
Misc. Info.: 280-0092608-044
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 14:51:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1969	98.46

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

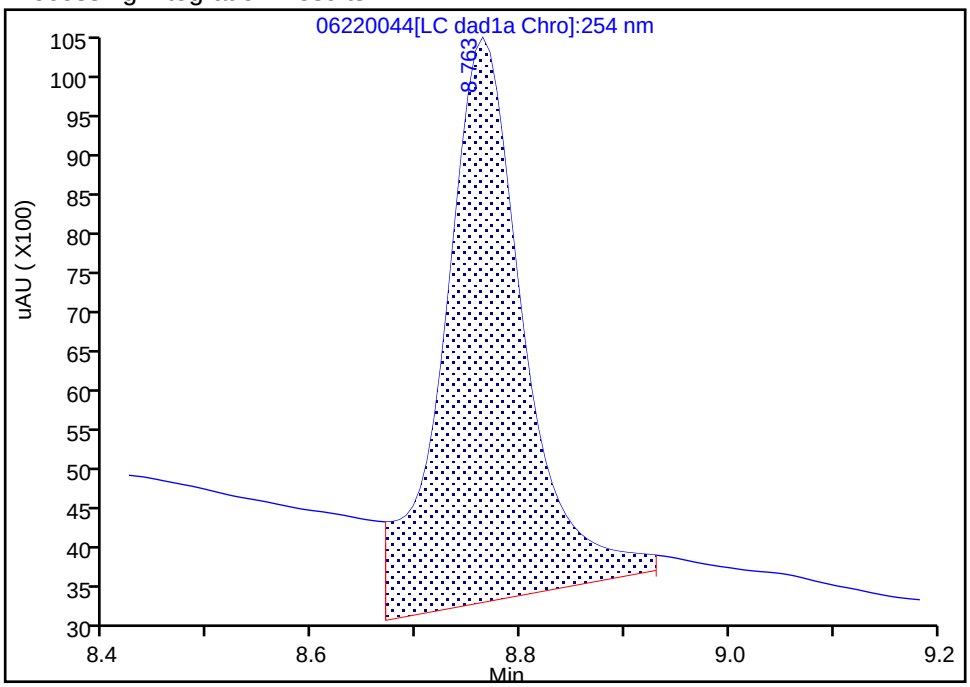
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220044.d				
Injection Date:	23-Jun-2020 04:18:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-1-A MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

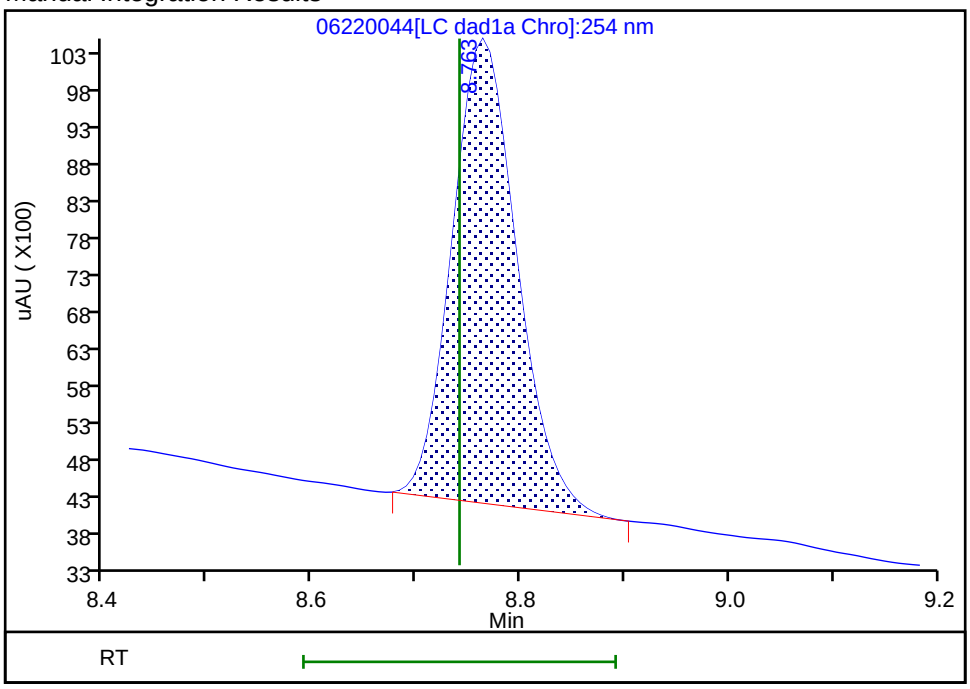
Processing Integration Results

RT: 8.76
Area: 38443
Amount: 0.278145
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 27216
Amount: 0.196915
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:51:05

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

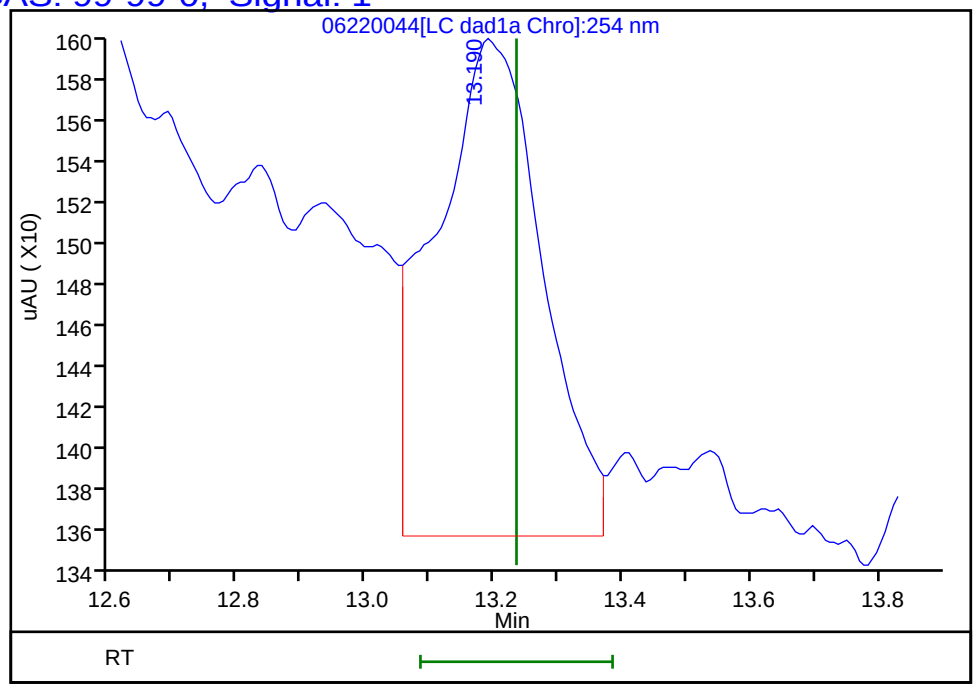
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220044.d
Injection Date: 23-Jun-2020 04:18:03 Instrument ID: CHHPLC_X3
Lims ID: 280-137609-B-1-A MS
Client ID: PZ007-20A
Operator ID: JZ ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.19
Response: 2772
Amount: 0.024530



Reviewer: zhangji, 23-Jun-2020 14:51:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

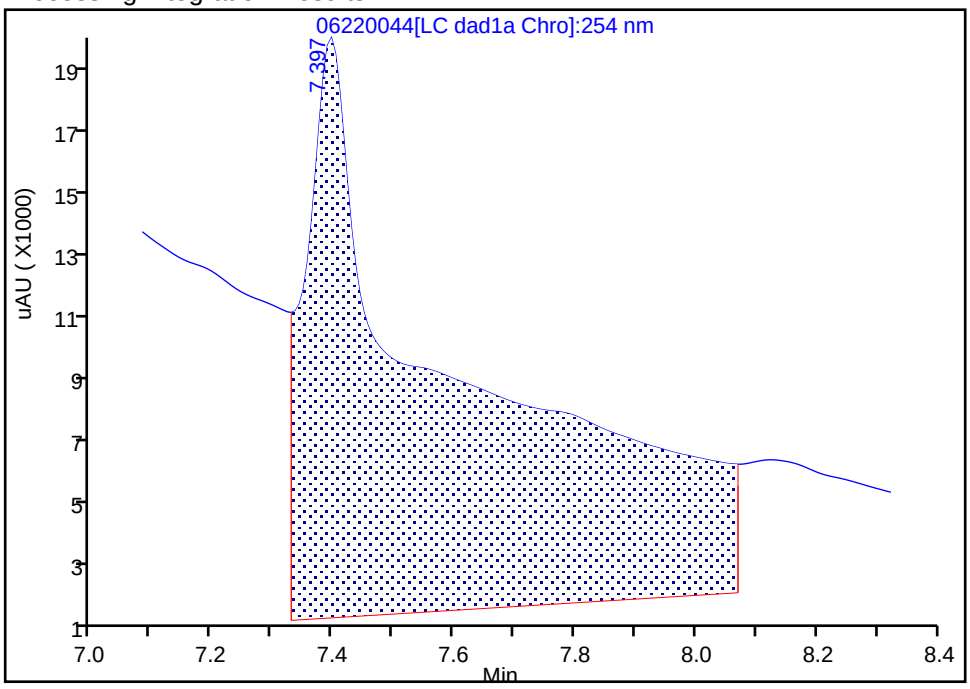
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220044.d				
Injection Date:	23-Jun-2020 04:18:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-1-A MS				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

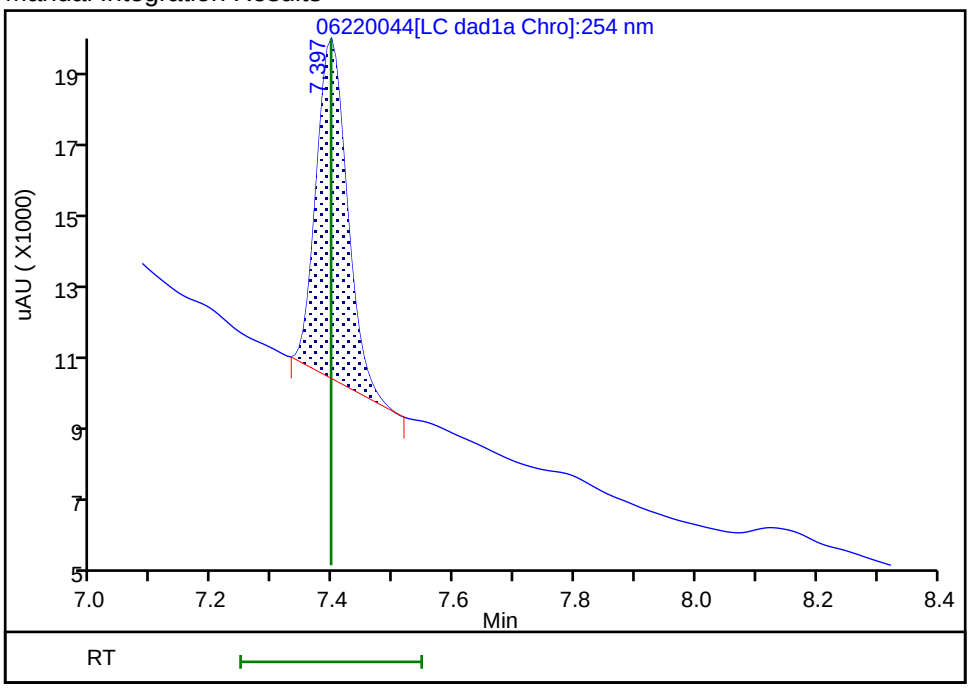
Processing Integration Results

RT: 7.40
Area: 324434
Amount: 2.046332
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 32683
Amount: 0.206144
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:50:51

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MS Lab Sample ID: 280-137609-9 MS

Matrix: Water Lab File ID: 06220049.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 457.1(mL) Date Analyzed: 06/23/2020 06:13

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.54	M	0.23	0.22	0.092
99-65-0	1,3-Dinitrobenzene	2.40	M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.50		0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	2.20		0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	2.29		0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	2.02		0.12	0.11	0.055
88-72-2	2-Nitrotoluene	1.80		0.23	0.22	0.094
99-08-1	3-Nitrotoluene	2.01		0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.50	J1	0.16	0.13	0.063
99-99-0	4-Nitrotoluene	1.88		0.45	0.44	0.11
2691-41-0	HMX	4.40	M	0.23	0.22	0.096
98-95-3	Nitrobenzene	2.26		0.23	0.22	0.10
479-45-8	Tetryl	2.27		0.12	0.11	0.035

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\06220049.D
Lims ID: 280-137609-A-9-A MS
Client ID: G0102-20A
Sample Type: MS
Inject. Date: 23-Jun-2020 06:13:08 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-9-A
Misc. Info.: 280-0092608-049
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 15:18:12 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 14:54:16

	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	U
2	TNX	1		6.629				ND	
3	HMX	1	6.727	6.734	-0.007	34583	0.2000	0.4023	M
4	2,4-diamino-6-nitrotoluene	1		6.764				ND	
5	DNX	1		6.949				ND	
6	MNX	1	7.401	7.396	0.005	16462		0.1038	M
7	RDX	1	7.807	7.801	0.006	417047	0.2000	3.58	EM
8	2,4,6-Trinitrophenol	1	8.087	8.094	-0.007	18883	0.2000	0.2218	M
$ 9	1,2-Dinitrobenzene	1	8.767	8.741	0.026	27534	0.2000	0.1992	M
10	1,3,5-Trinitrobenzene	1	8.947	8.928	0.019	53431	0.2000	0.2320	M
11	1,3-Dinitrobenzene	1	9.601	9.568	0.033	67350	0.2000	0.2196	M
12	Nitrobenzene	1	9.974	9.941	0.033	41372	0.2000	0.2064	
13	3,5-Dinitroaniline	1		10.204				ND	
14	Tetryl	1	10.281	10.234	0.047	36764	0.2000	0.2077	
15	Nitroglycerin	2	10.787	10.748	0.039	139614	2.00	2.05	
16	2,4,6-Trinitrotoluene	1	11.254	11.201	0.053	46552	0.2000	0.2282	
17	4-Amino-2,6-dinitrotoluene	1	11.427	11.361	0.066	23285	0.2000	0.1371	
18	2-Amino-4,6-dinitrotoluene	1	11.721	11.648	0.073	37397	0.2000	0.1844	
19	2,6-Dinitrotoluene	1	11.854	11.788	0.066	31238	0.2000	0.2090	
20	2,4-Dinitrotoluene	1	12.054	11.988	0.066	61110	0.2000	0.2013	
21	o-Nitrotoluene	1	12.867	12.801	0.066	22256	0.2000	0.1648	
22	p-Nitrotoluene	1	13.301	13.234	0.067	19463	0.2000	0.1722	
23	m-Nitrotoluene	1	13.894	13.821	0.073	26232	0.2000	0.1834	
24	PETN	2	14.954	14.888	0.066	159465	2.00	2.03	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated
U - Marked Undetected

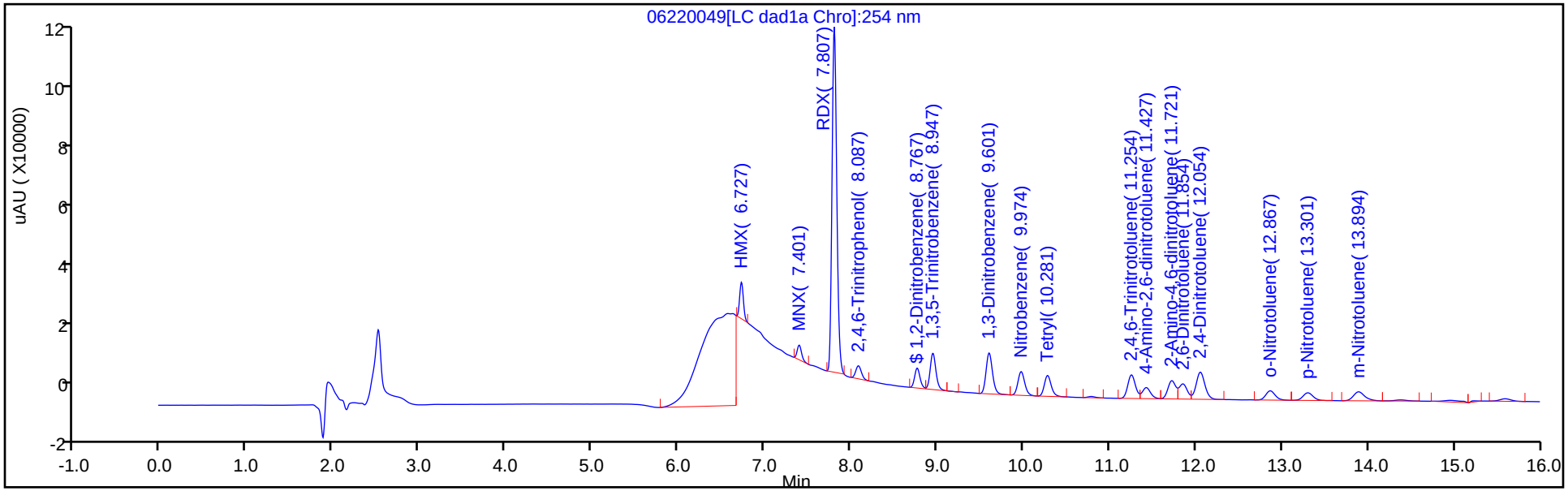
Report Date: 23-Jun-2020 15:18:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

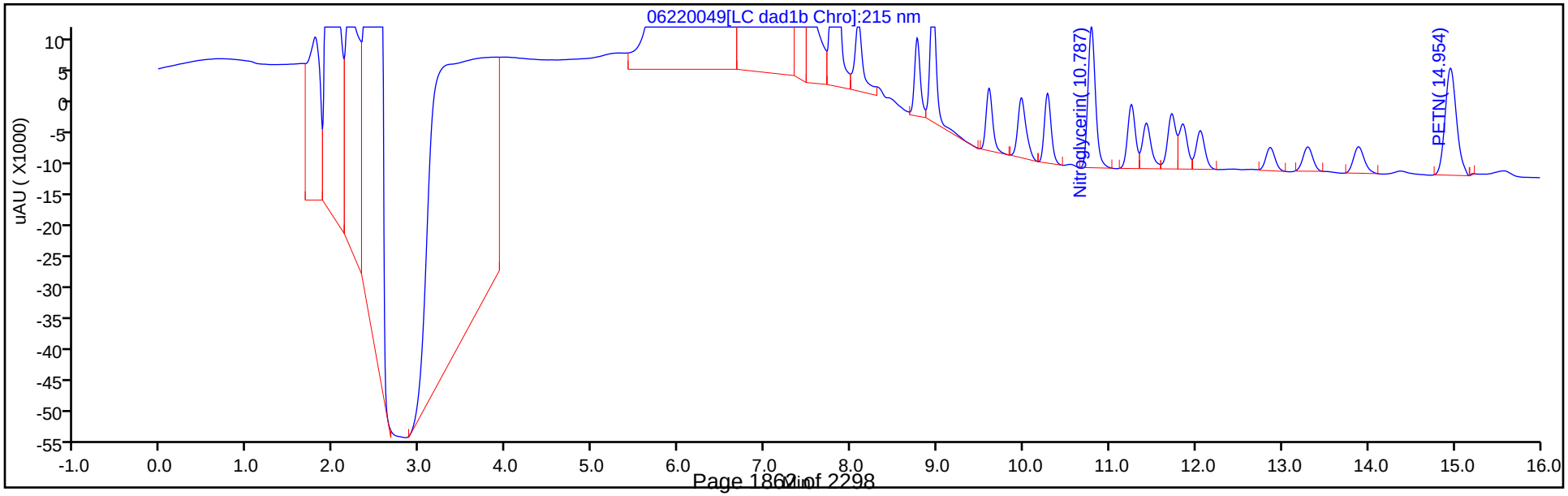
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d

Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-9-A MS			Worklist Smp#:	49
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220049.D				
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Sample Type:	MS				
Inject. Date:	23-Jun-2020 06:13:08	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-9-A				
Misc. Info.:	280-0092608-049				
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 15:18:12	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 14:54:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1992	99.61

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

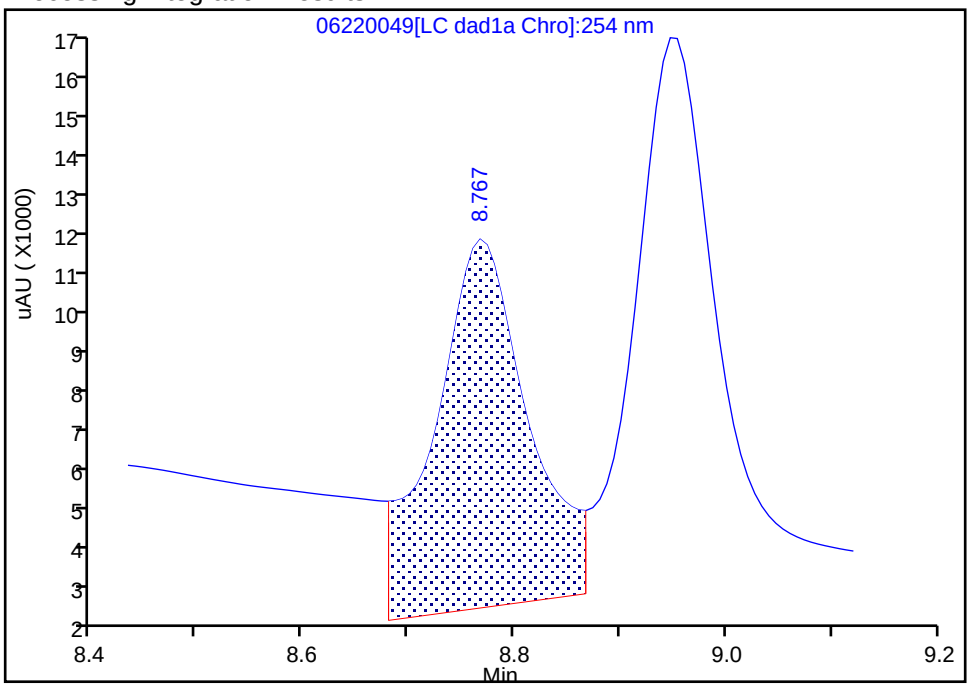
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d				
Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

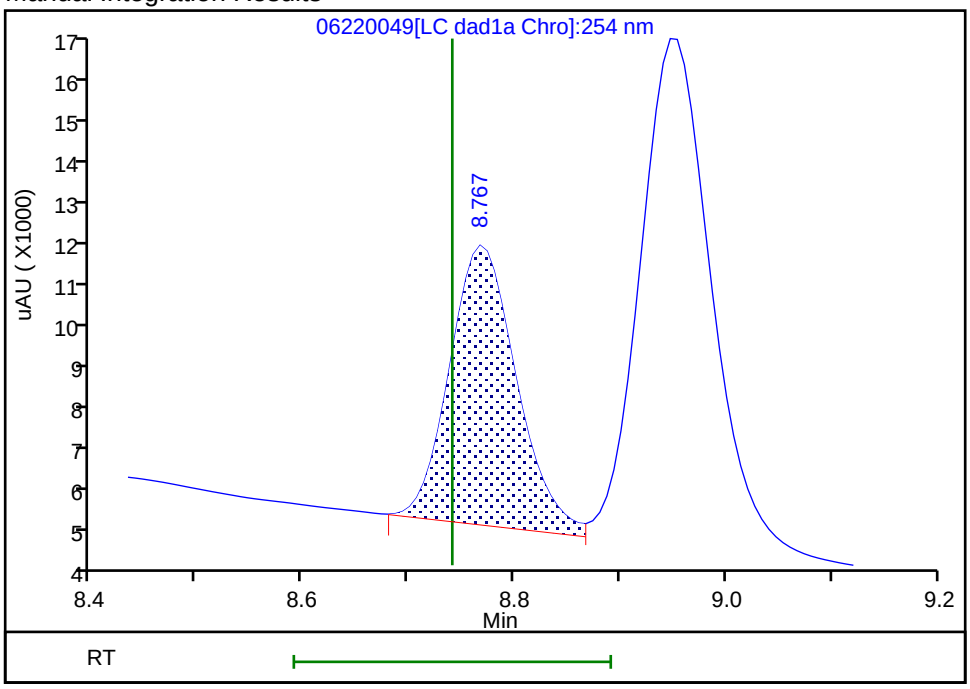
Processing Integration Results

RT: 8.77
Area: 51821
Amount: 0.374938
Amount Units: ug/mL



Manual Integration Results

RT: 8.77
Area: 27534
Amount: 0.199215
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:50
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

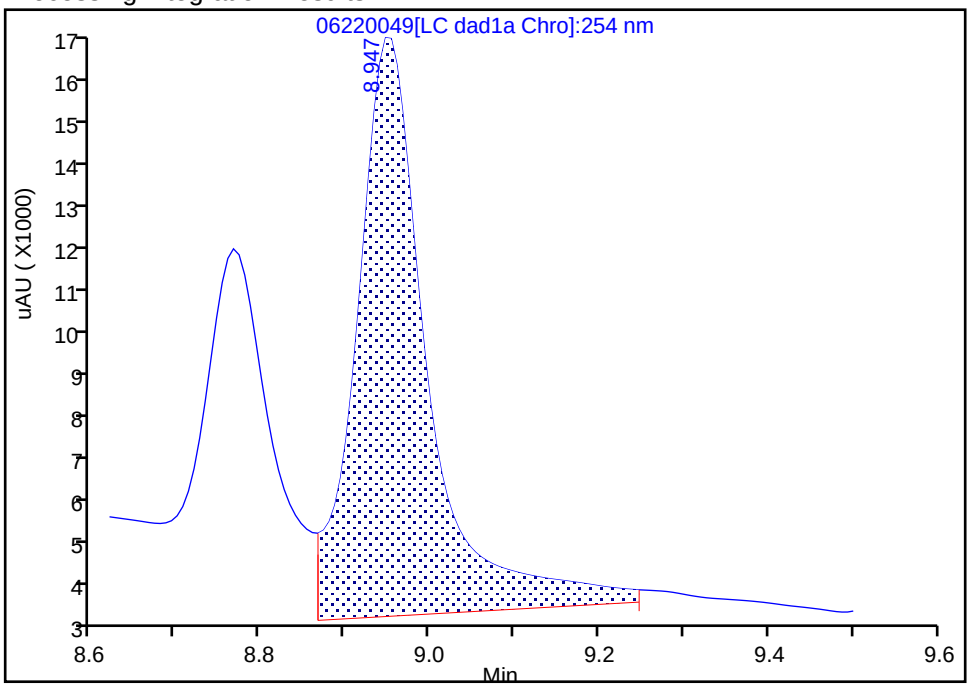
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d				
Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

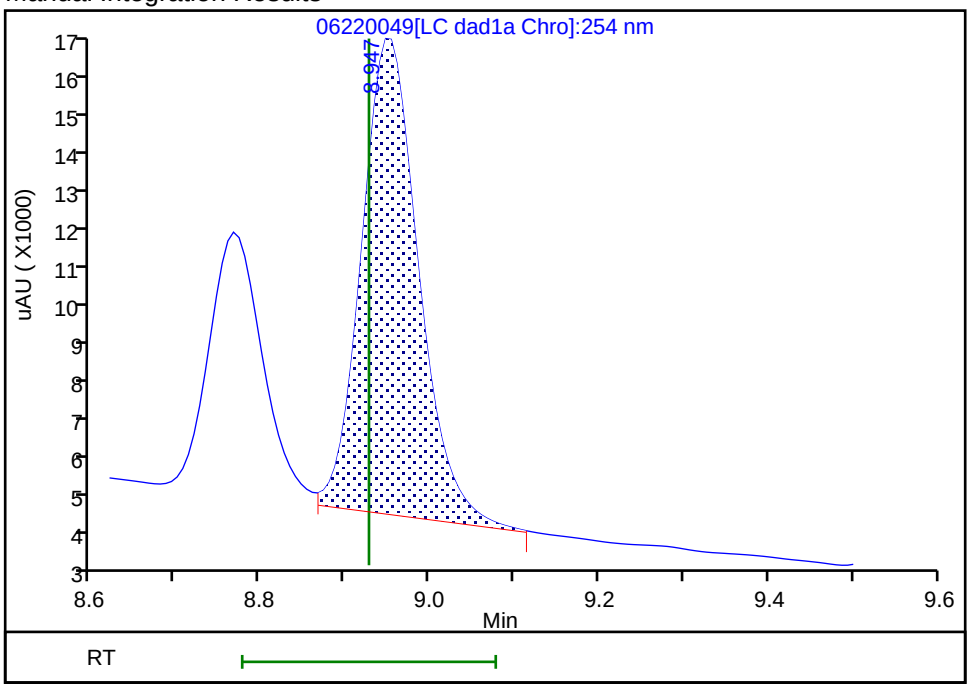
Processing Integration Results

RT: 8.95
Area: 74493
Amount: 0.323448
Amount Units: ug/mL



Manual Integration Results

RT: 8.95
Area: 53431
Amount: 0.231997
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:53

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

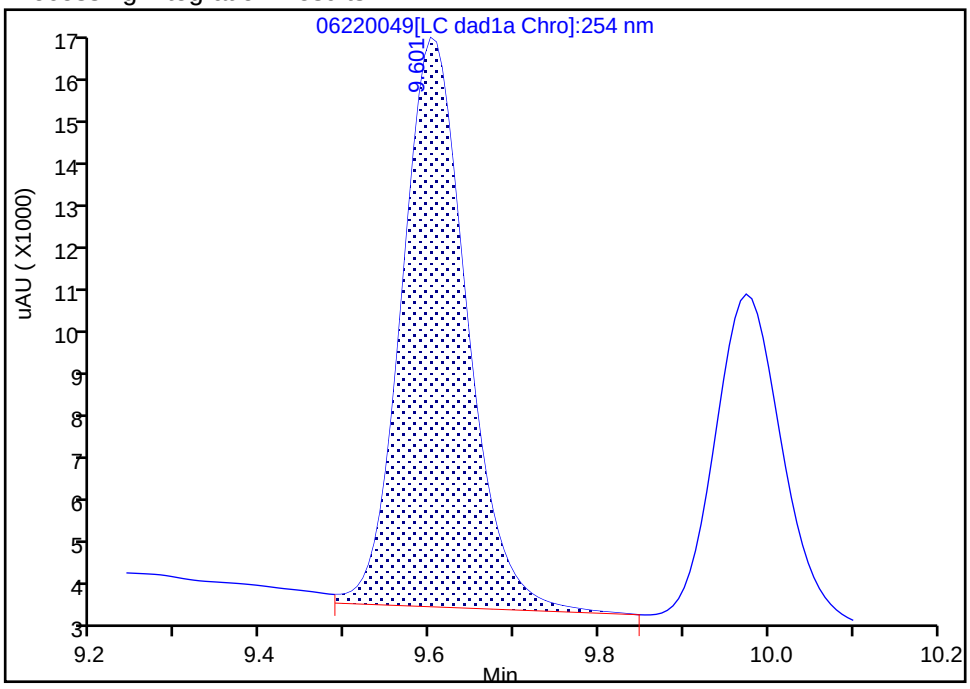
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d				
Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

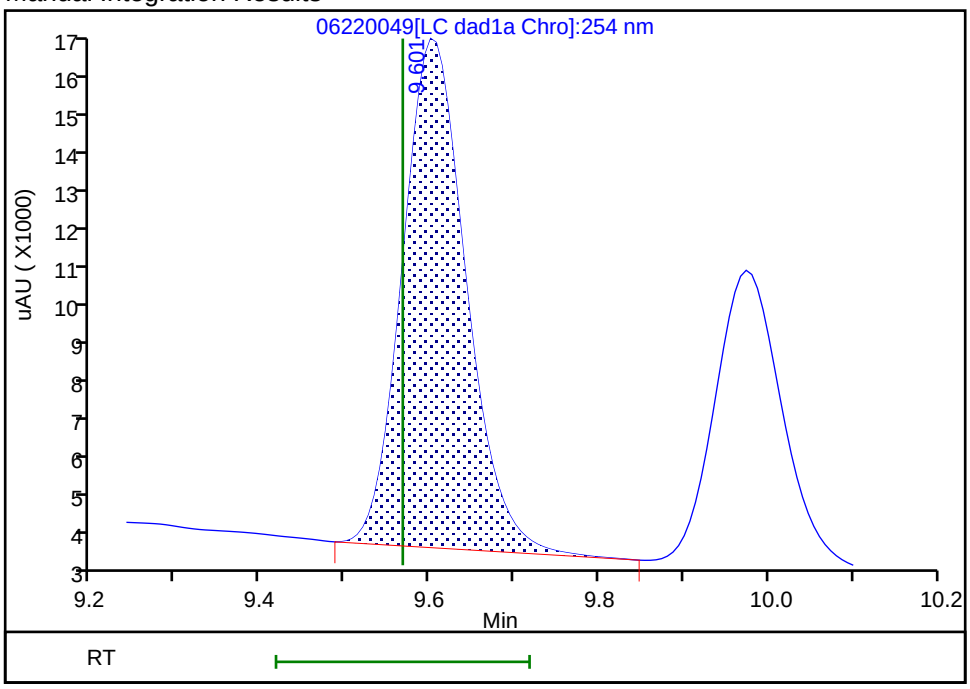
Processing Integration Results

RT: 9.60
Area: 69456
Amount: 0.226473
Amount Units: ug/mL



Manual Integration Results

RT: 9.60
Area: 67350
Amount: 0.219606
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:54:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

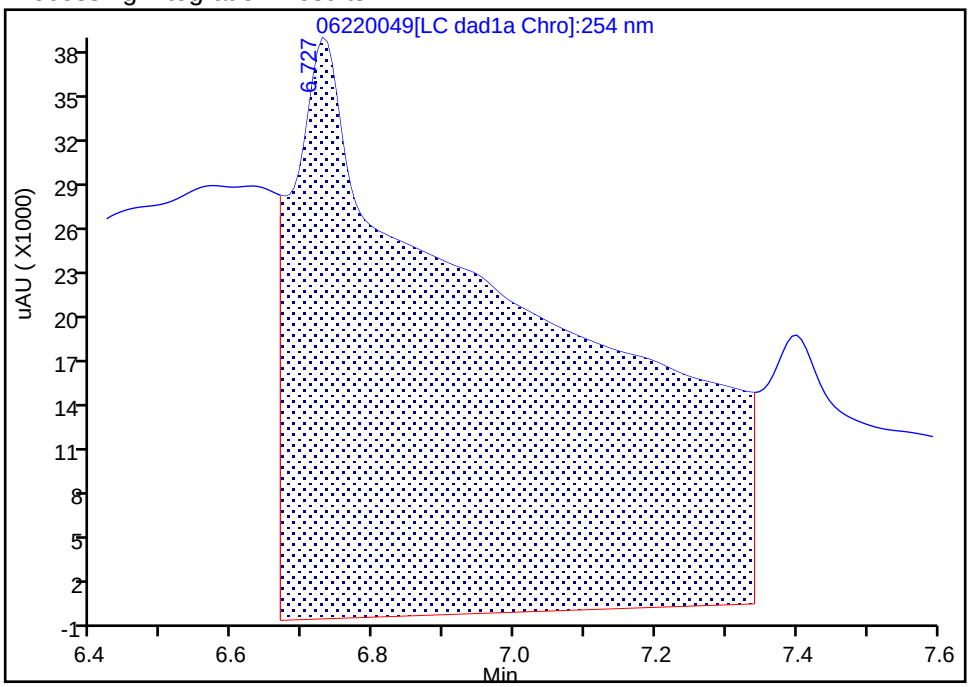
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d				
Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

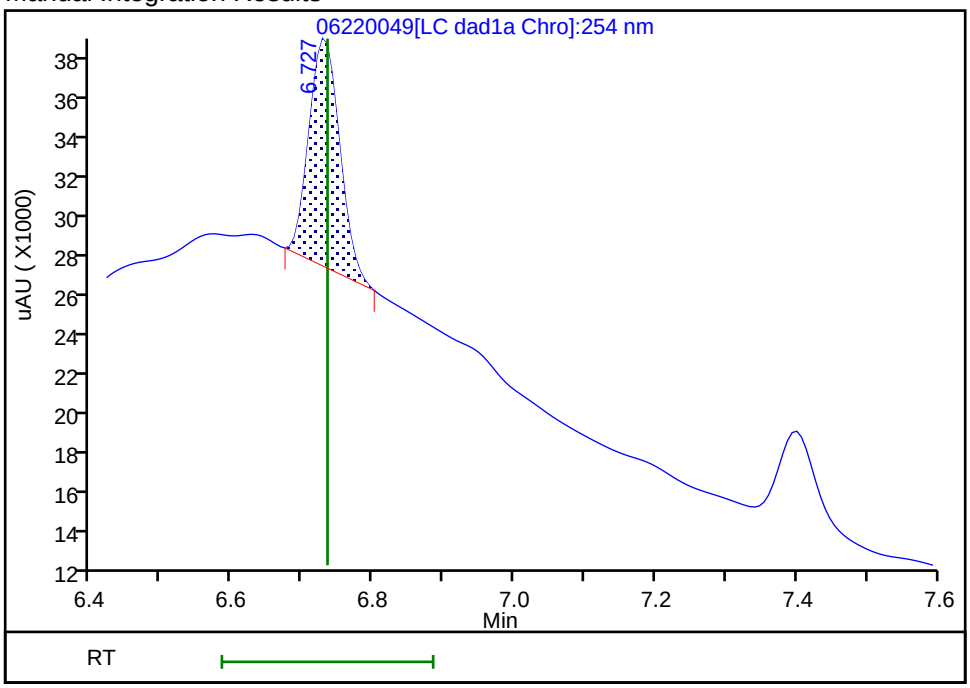
Processing Integration Results

RT: 6.73
Area: 874836
Amount: 10.176989
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 34583
Amount: 0.402305
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

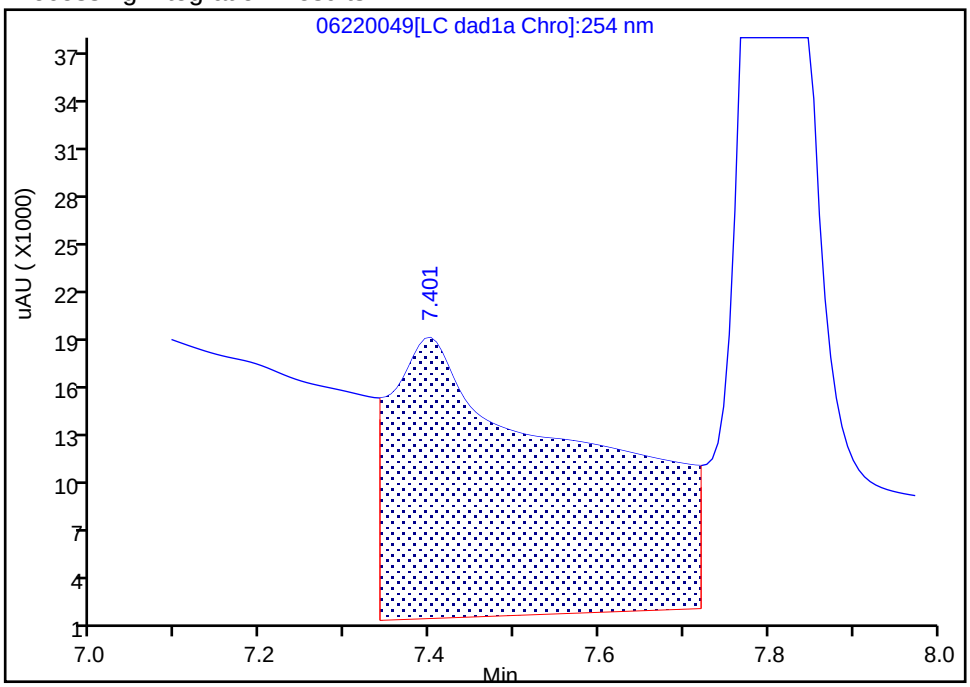
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d				
Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

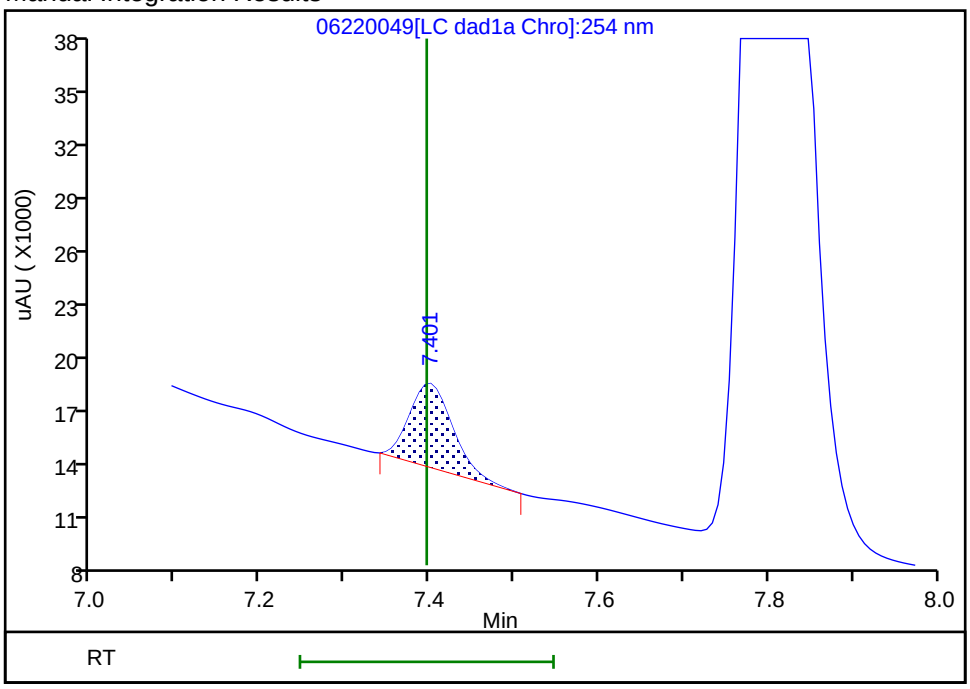
Processing Integration Results

RT: 7.40
Area: 275509
Amount: 1.737743
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 16462
Amount: 0.103832
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:29

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

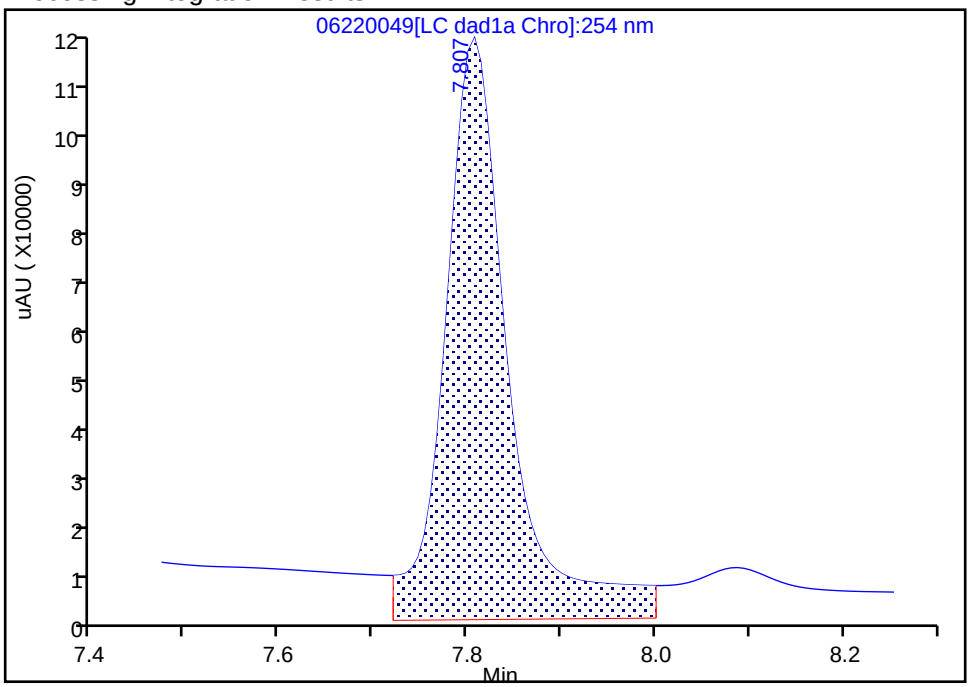
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220049.d				
Injection Date:	23-Jun-2020 06:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

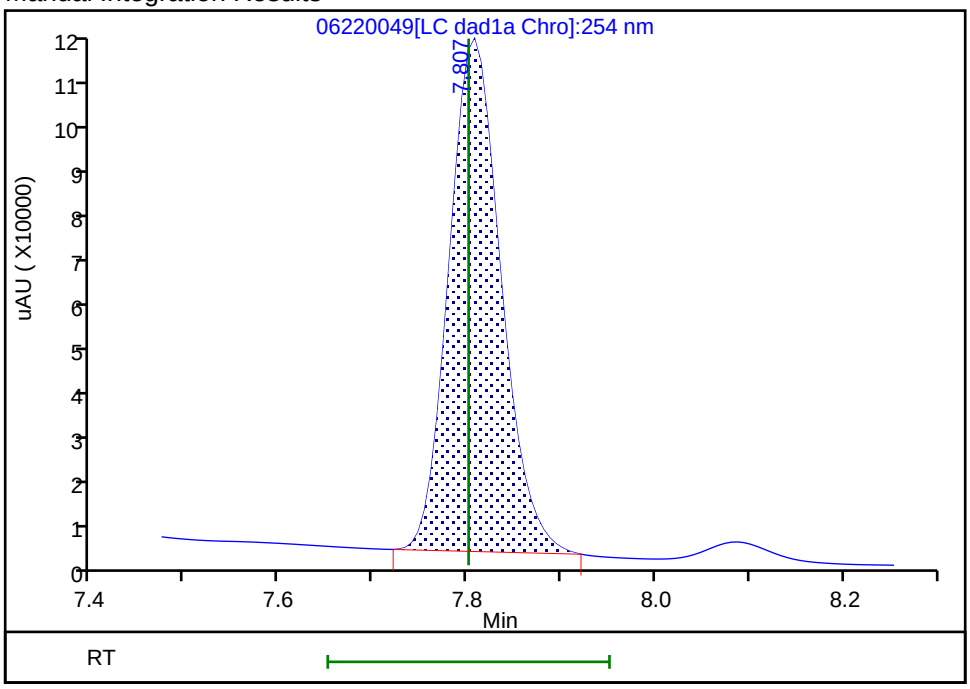
Processing Integration Results

RT: 7.81
Area: 550471
Amount: 4.720491
Amount Units: ug/mL



Manual Integration Results

RT: 7.81
Area: 417047
Amount: 3.576332
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:53:33

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MS Lab Sample ID: 280-137609-9 MS

Matrix: Water Lab File ID: 06220051.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 469.7(mL) Date Analyzed: 06/23/2020 06:59

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	3.34	M	2.1	0.43	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220051.D
Lims ID: 280-137609-B-9-A MS
Client ID: G0102-20A
Sample Type: MS
Inject. Date: 23-Jun-2020 06:59:10 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-B-9-A
Misc. Info.: 280-0092608-051
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 15:18:12 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 14:56:16

	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	6.626	6.629	-0.003	39789	0.2002	0.1828	M
	3 HMX	1	6.726	6.734	-0.008	18744		0.2180	M
	4 2,4-diamino-6-nitrotoluene	1		6.764				ND	
	5 DNX	1	6.953	6.949	0.004	29336	0.2002	0.1918	M
	6 MNX	1	7.400	7.396	0.004	49739	0.2334	0.3137	M
	7 RDX	1	7.806	7.801	0.005	425396		3.65	EM
	8 2,4,6-Trinitrophenol	1		8.094				ND	
$	9 1,2-Dinitrobenzene	1	8.780	8.741	0.039	26279	0.2000	0.1901	M
	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	
	24 PETN	2		14.888				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

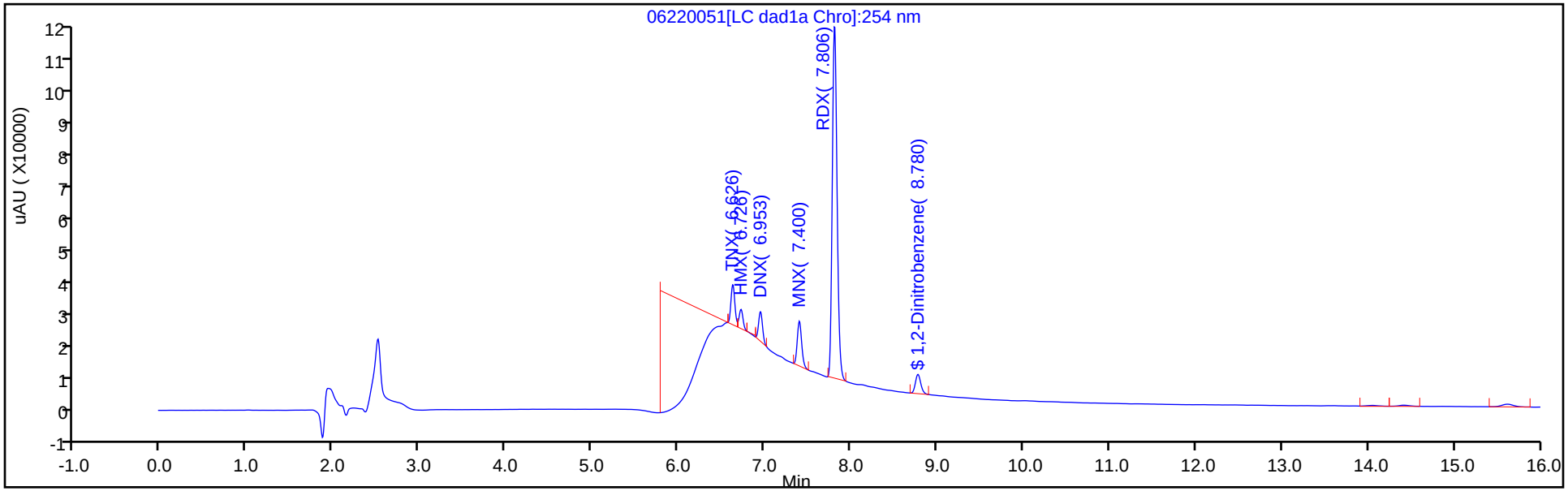
Report Date: 23-Jun-2020 15:18:14 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

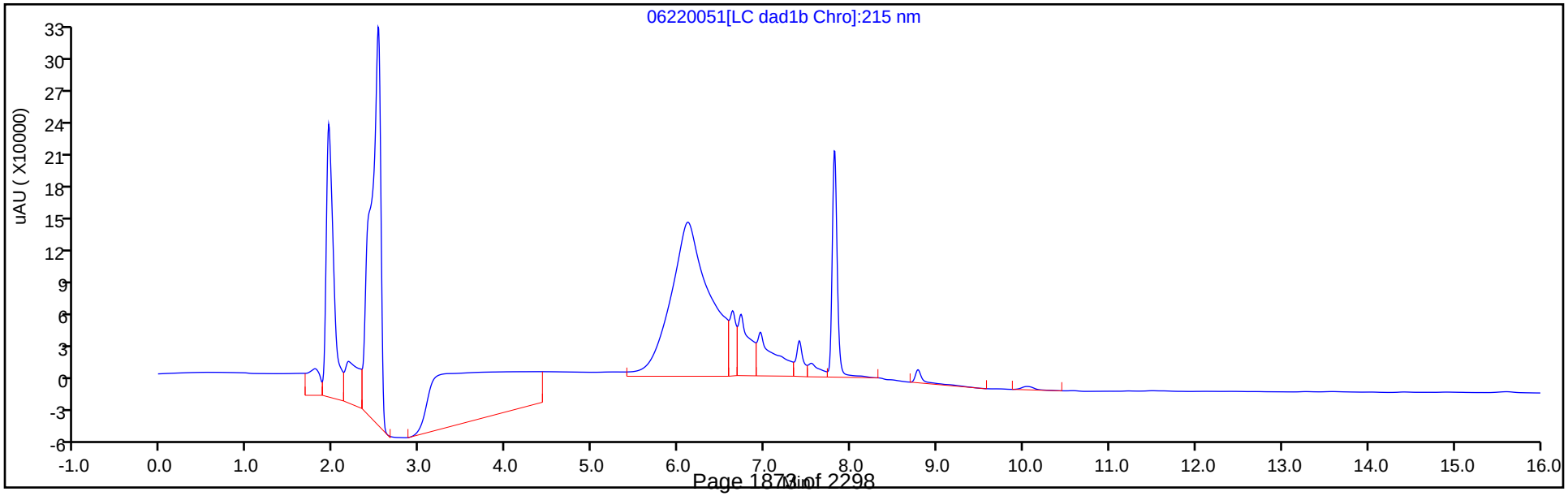
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220051.d

Injection Date:	23-Jun-2020 06:59:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-B-9-A MS			Worklist Smp#:	51
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220051.D				
Lims ID:	280-137609-B-9-A MS				
Client ID:	G0102-20A				
Sample Type:	MS				
Inject. Date:	23-Jun-2020 06:59:10	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-B-9-A				
Misc. Info.:	280-0092608-051				
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 15:18:12	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 14:56:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1901	95.07

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

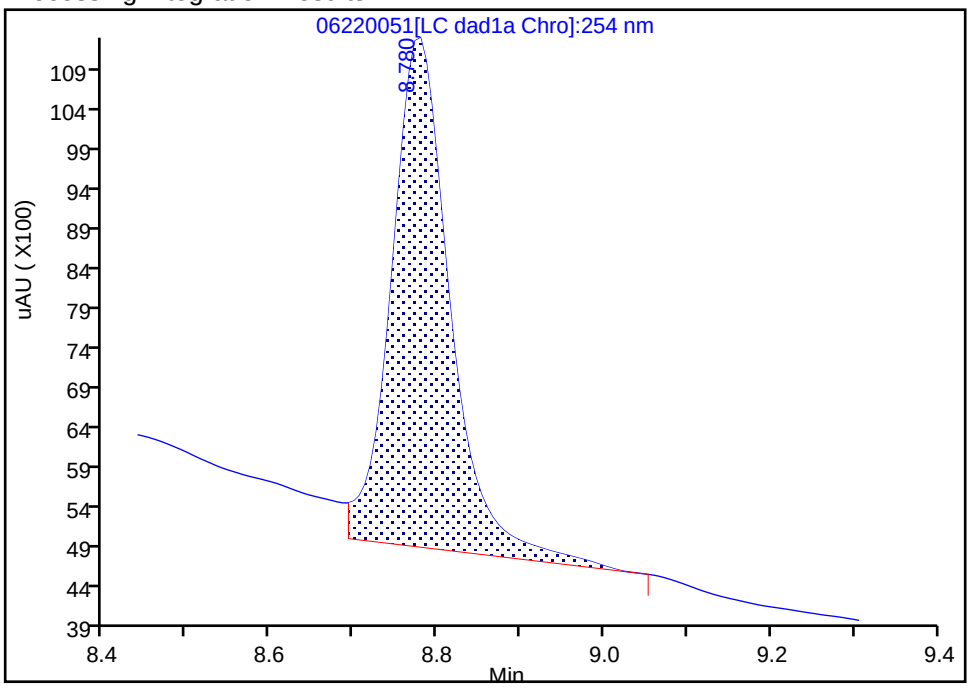
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220051.d				
Injection Date:	23-Jun-2020 06:59:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

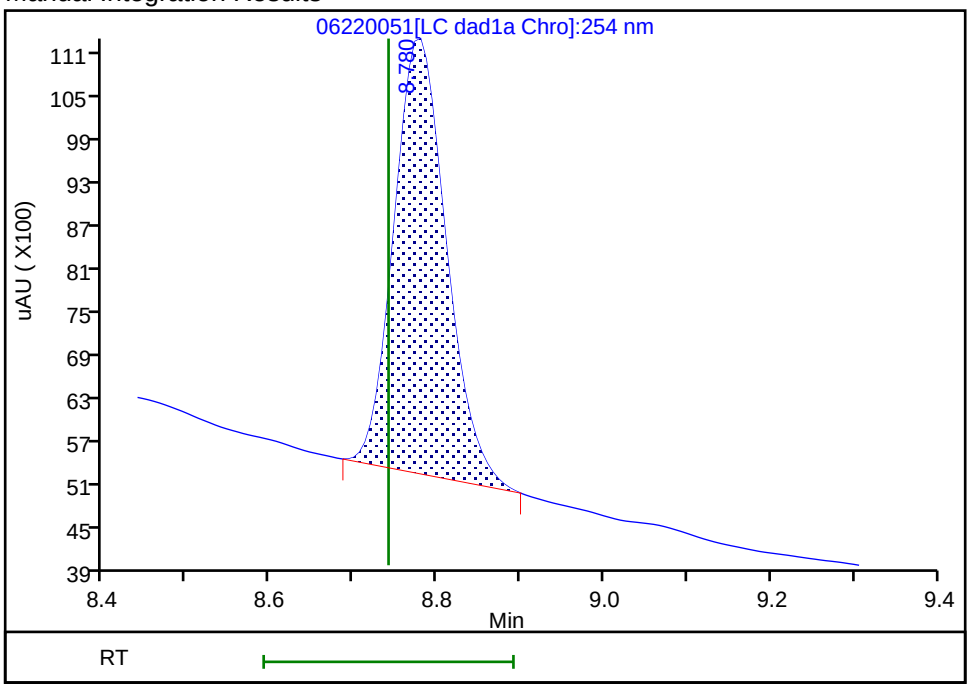
Processing Integration Results

RT: 8.78
Area: 31198
Amount: 0.225725
Amount Units: ug/mL



Manual Integration Results

RT: 8.78
Area: 26279
Amount: 0.190135
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:56:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

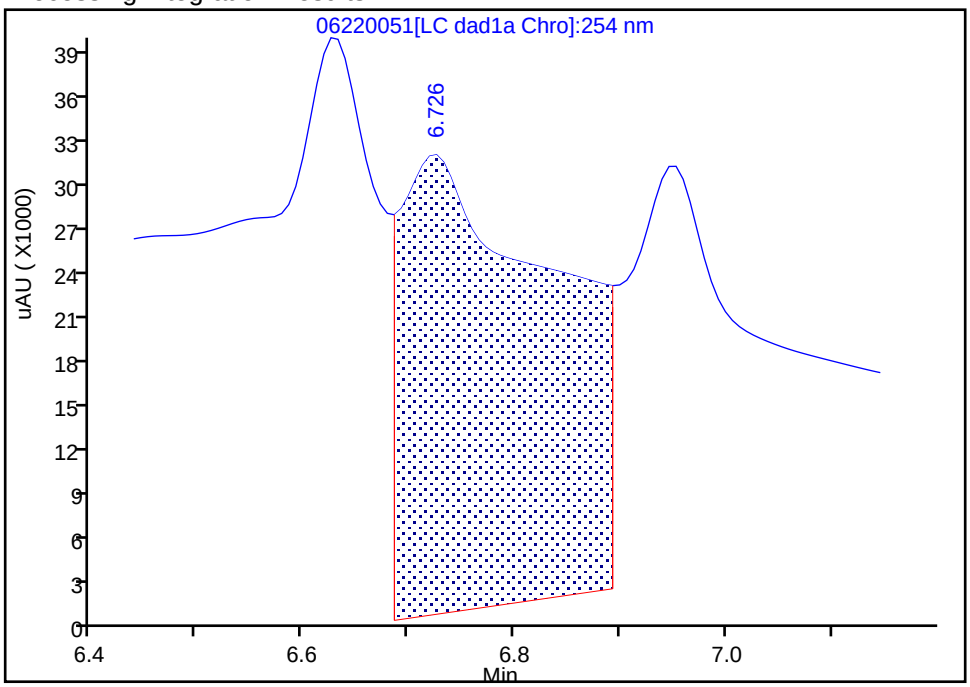
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220051.d				
Injection Date:	23-Jun-2020 06:59:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

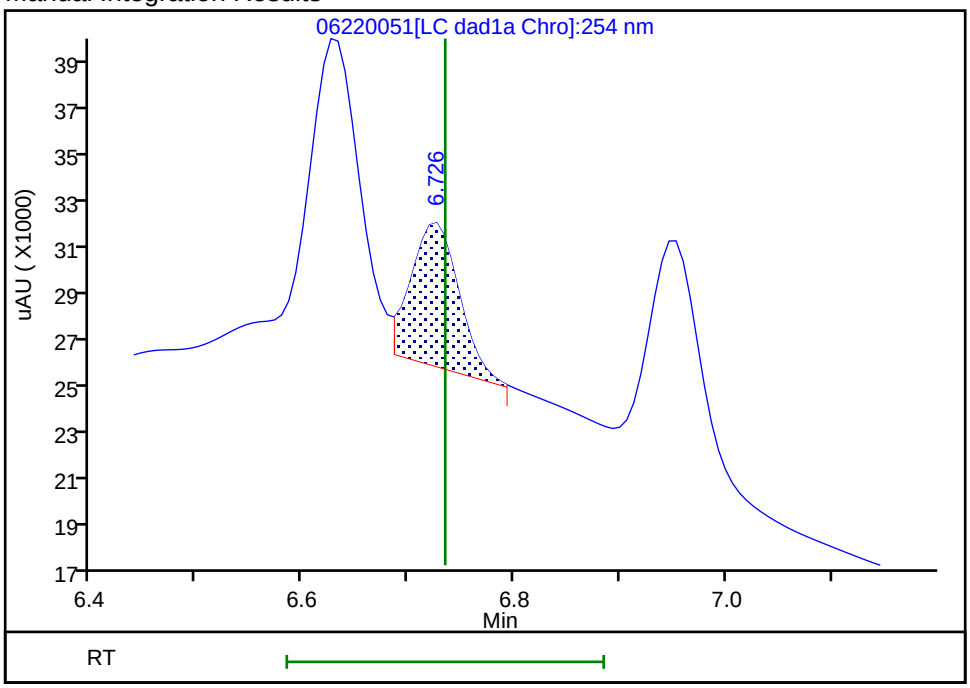
Processing Integration Results

RT: 6.73
Area: 298565
Amount: 3.473214
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 18744
Amount: 0.218049
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:55:45
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

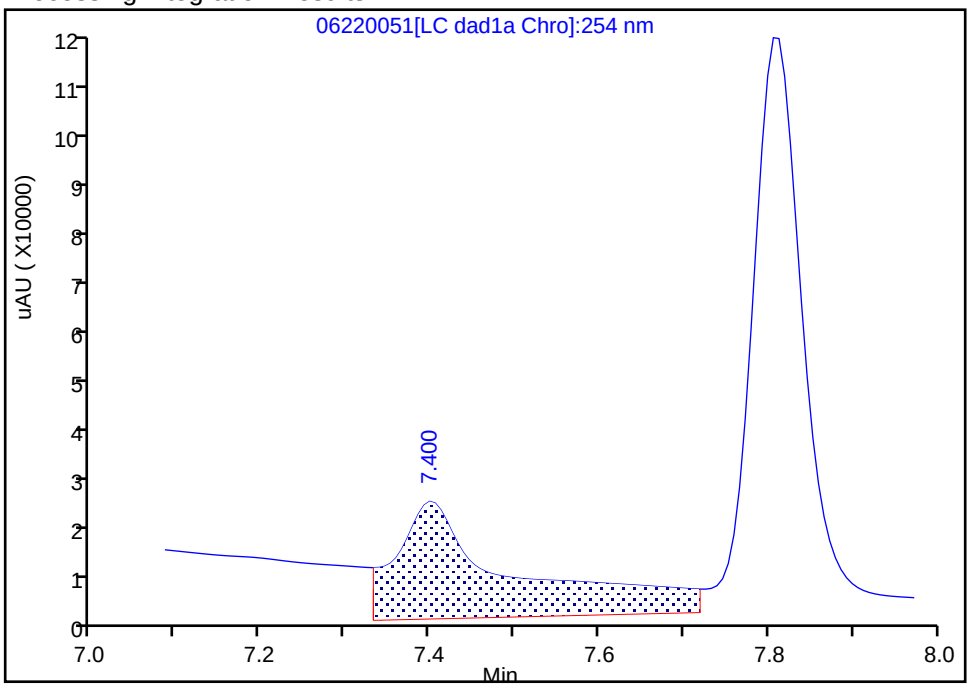
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220051.d				
Injection Date:	23-Jun-2020 06:59:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

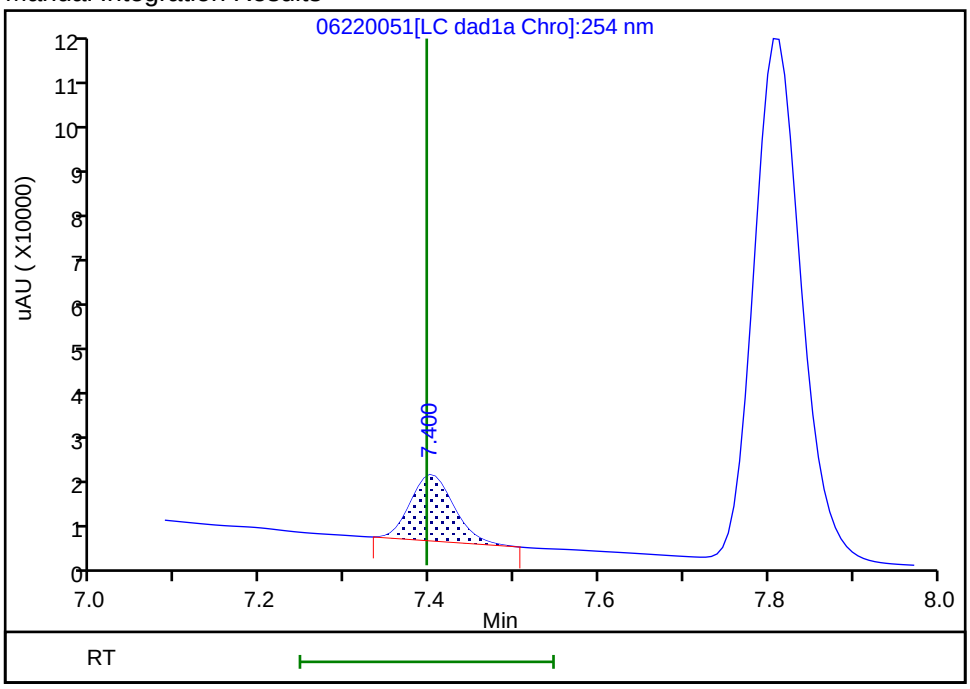
Processing Integration Results

RT: 7.40
Area: 222183
Amount: 1.401395
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 49739
Amount: 0.313723
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:56:00

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

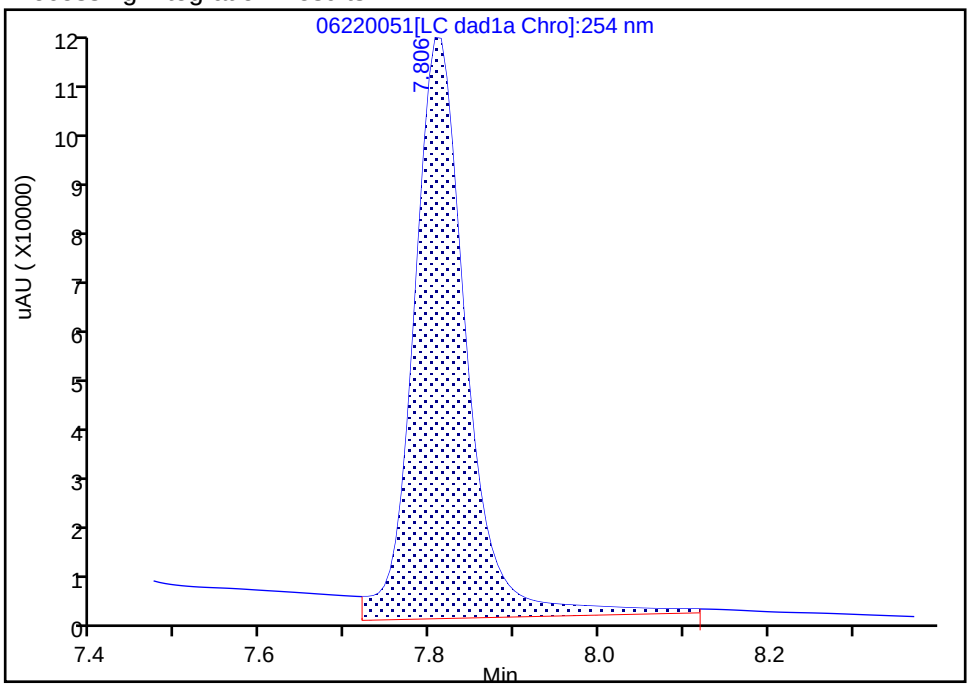
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220051.d				
Injection Date:	23-Jun-2020 06:59:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

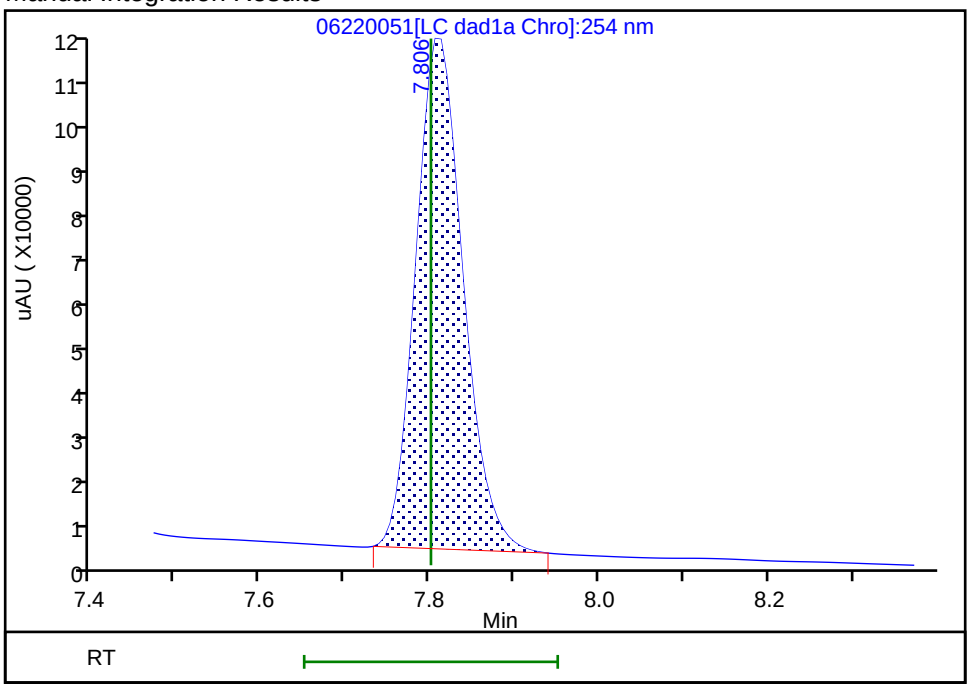
Processing Integration Results

RT: 7.81
Area: 489799
Amount: 4.200207
Amount Units: ug/mL



Manual Integration Results

RT: 7.81
Area: 425396
Amount: 3.647927
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:56:05

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MS DL Lab Sample ID: 280-137609-9 MS DL

Matrix: Water Lab File ID: 06230011.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 457.1(mL) Date Analyzed: 06/23/2020 20:12

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499863 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	39.7	D M 4	2.3	2.2	0.56

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	109	D	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230011.D
Lims ID: 280-137609-A-9-A MS
Client ID: G0102-20A
Sample Type: MS
Inject. Date: 23-Jun-2020 20:12:40 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 10.0000
Sample Info: 280-137609-A-9-A
Misc. Info.: 280-0092681-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:11 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 20:48:08

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1	2,6-diamino-4-nitrotoluene	1		6.576				ND	U
2	TNX	1		6.627				ND	
3	HMX	1	6.722	6.723	-0.001	3460	0.2000	0.0403	M
4	2,4-diamino-6-nitrotoluene	1		6.763				ND	
5	DNX	1		6.947				ND	
6	MNX	1	7.389	7.394	-0.005	1850		0.0117	M
7	RDX	1	7.789	7.790	-0.001	42281	0.2000	0.3626	M
8	2,4,6-Trinitrophenol	1	8.096	8.090	0.006	1821	0.2000	0.0214	
$ 9	1,2-Dinitrobenzene	1	8.736	8.736	0.000	3007	0.2000	0.0218	
10	1,3,5-Trinitrobenzene	1	8.922	8.923	-0.001	5227	0.2000	0.0227	
11	1,3-Dinitrobenzene	1	9.562	9.570	-0.008	6803	0.2000	0.0222	
12	Nitrobenzene	1	9.929	9.943	-0.014	4191	0.2000	0.0209	
13	3,5-Dinitroaniline	1		10.170				ND	
14	Tetryl	1	10.216	10.236	-0.020	3625	0.2000	0.0205	
15	Nitroglycerin	2	10.722	10.750	-0.028	12375	2.00	0.1816	
16	2,4,6-Trinitrotoluene	1	11.169	11.203	-0.034	4909	0.2000	0.0241	
17	4-Amino-2,6-dinitrotoluene	1	11.322	11.363	-0.041	2397	0.2000	0.0200	
18	2-Amino-4,6-dinitrotoluene	1	11.609	11.656	-0.047	3496	0.2000	0.0172	
19	2,6-Dinitrotoluene	1	11.749	11.790	-0.041	3130	0.2000	0.0209	
20	2,4-Dinitrotoluene	1	11.949	11.990	-0.041	5960	0.2000	0.0196	
21	o-Nitrotoluene	1	12.756	12.796	-0.040	2476	0.2000	0.0183	
22	p-Nitrotoluene	1	13.176	13.223	-0.047	2101	0.2000	0.0186	
23	m-Nitrotoluene	1	13.749	13.803	-0.054	2487	0.2000	0.0174	
24	PETN	2	14.789	14.843	-0.054	12328	2.00	0.1568	
25	Ammonium Picrate	1		0.000				ND	
26	Triamine Trinitrobenzene	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

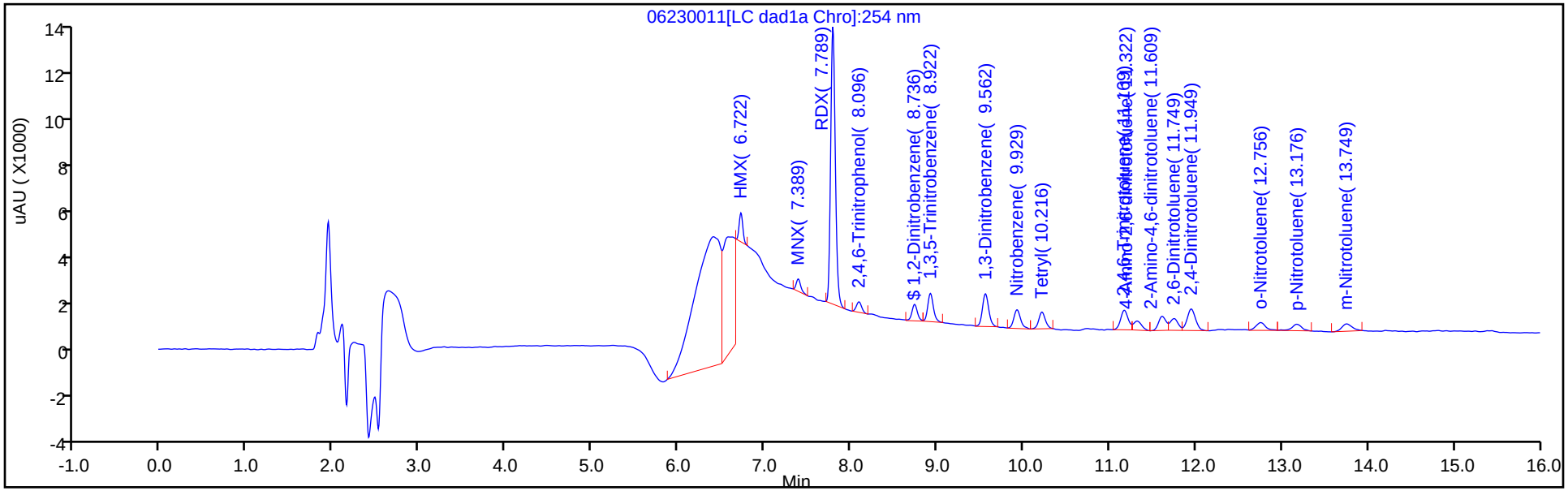
Report Date: 24-Jun-2020 16:26:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

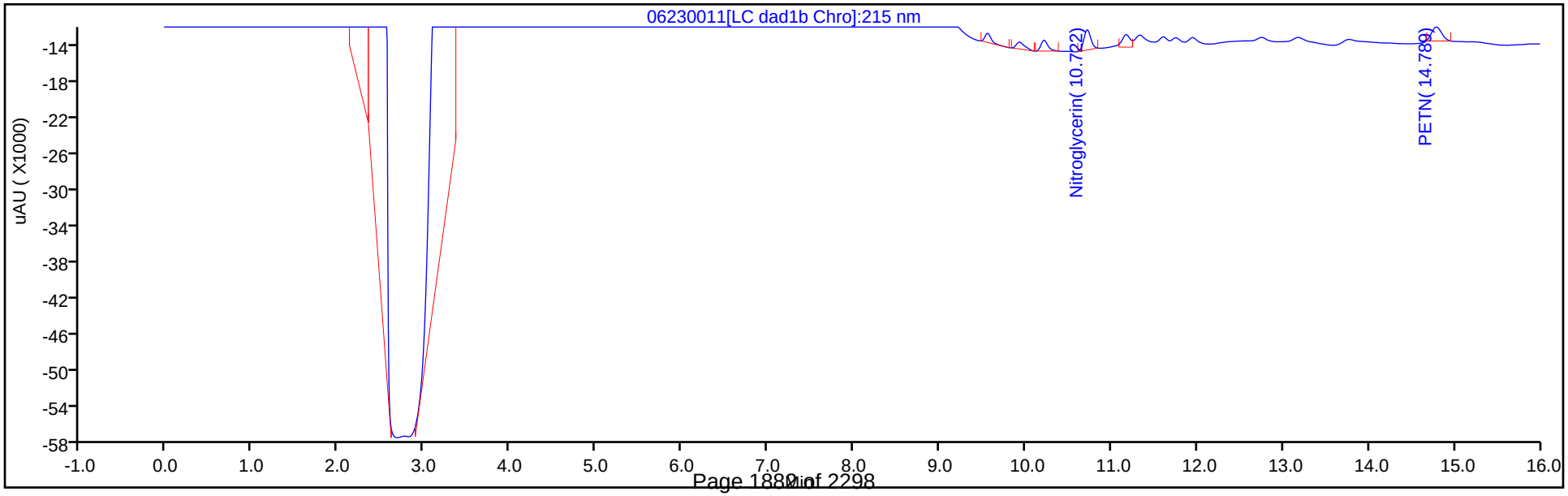
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230011.d

Injection Date:	23-Jun-2020 20:12:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-9-A MS			Worklist Smp#:	11
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	10.0000	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\20200623-92681.b\06230011.D				
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Sample Type:	MS				
Inject. Date:	23-Jun-2020 20:12:40	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-137609-A-9-A				
Misc. Info.:	280-0092681-011				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 16:26:11	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:	CTX1068				
First Level Reviewer: zhangji		Date:	23-Jun-2020 20:48:08		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0218	10.88

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

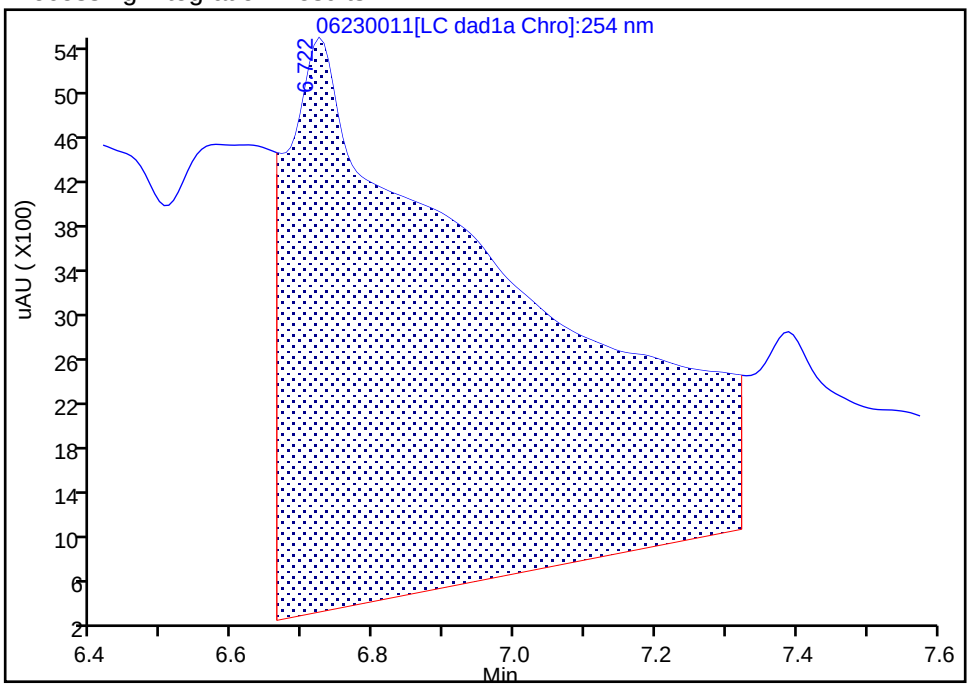
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230011.d				
Injection Date:	23-Jun-2020 20:12:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Method:	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

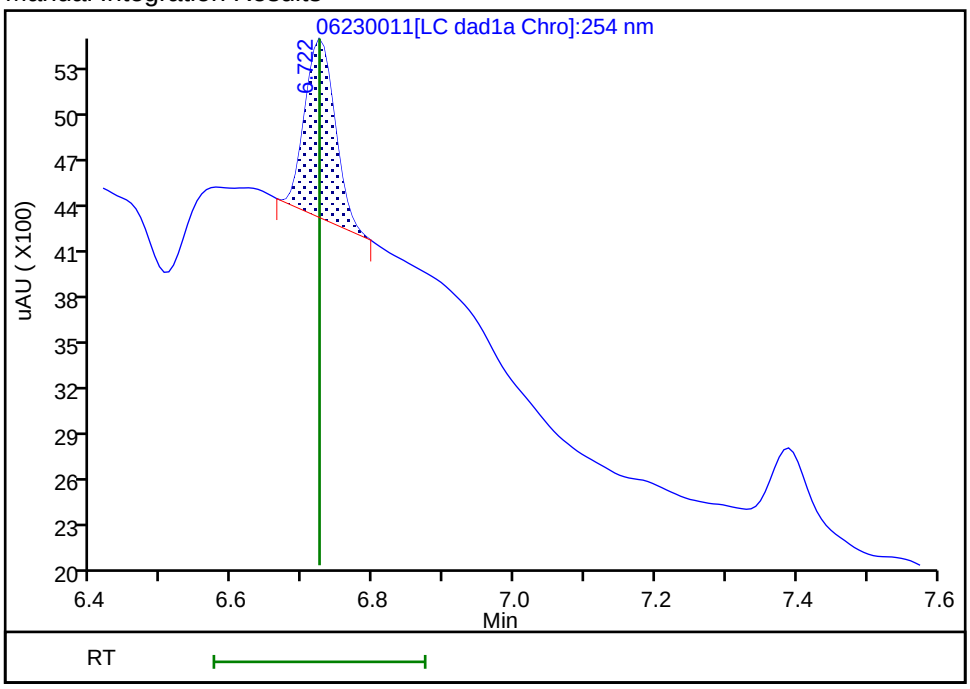
Processing Integration Results

RT: 6.72
Area: 112482
Amount: 1.308506
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 3460
Amount: 0.040250
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:47:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

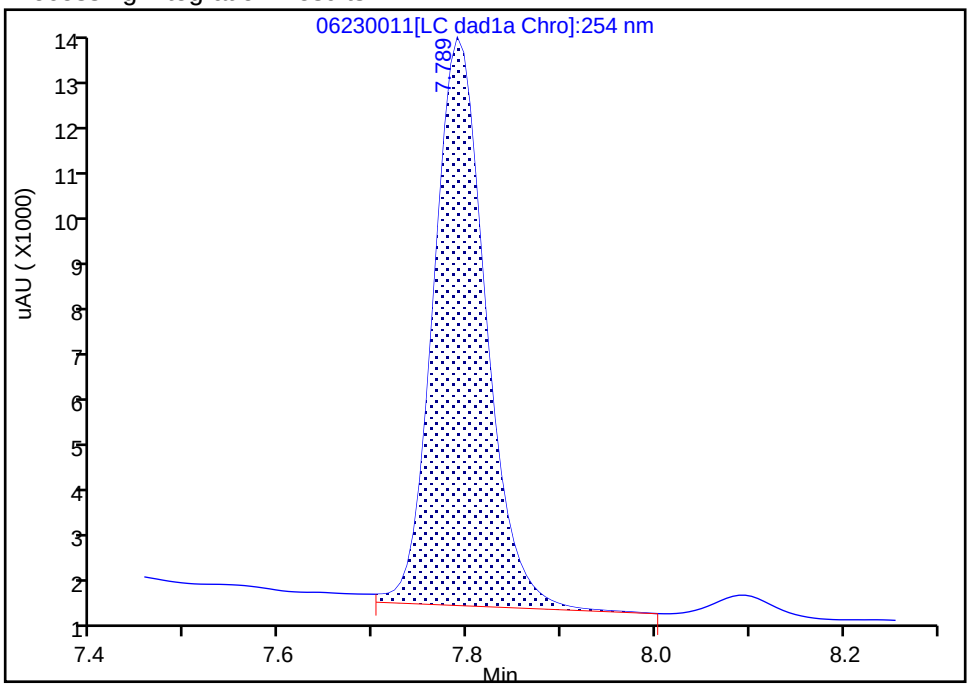
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230011.d				
Injection Date:	23-Jun-2020 20:12:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-A MS				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Method:	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

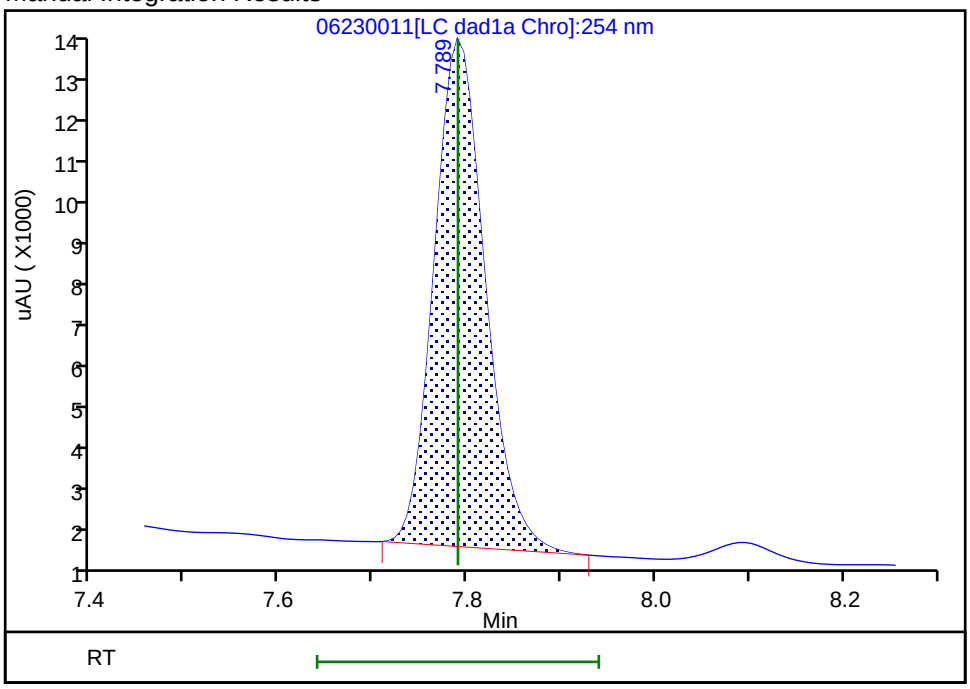
Processing Integration Results

RT: 7.79
Area: 43735
Amount: 0.375044
Amount Units: ug/mL



Manual Integration Results

RT: 7.79
Area: 42281
Amount: 0.362575
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 20:47:51

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MSD Lab Sample ID: 280-137609-1 MSD

Matrix: Water Lab File ID: 06220043.D

Analysis Method: 8330A Date Collected: 06/11/2020 08:50

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 468.4(mL) Date Analyzed: 06/23/2020 03:55

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.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.46	M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	2.38		0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	2.44		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	2.14		0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	2.17	M	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.10	M	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	1.70		0.22	0.21	0.091
99-08-1	3-Nitrotoluene	1.97		0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.90		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	1.90		0.44	0.43	0.11
2691-41-0	HMX	2.20	M	0.22	0.21	0.094
98-95-3	Nitrobenzene	2.19		0.22	0.21	0.097
121-82-4	RDX	3.02	J1	0.22	0.21	0.055
479-45-8	Tetryl	2.33		0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220043.D
Lims ID: 280-137609-A-1-C MSD
Client ID: PZ007-20A
Sample Type: MSD
Inject. Date: 23-Jun-2020 03:55:05 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-1-C
Misc. Info.: 280-0092608-043
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 14:50:30

	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	6.725	6.734	-0.009	17710	0.2000	0.2060	M
	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	7.805	7.801	0.004	33012	0.2000	0.2831	
	8 2,4,6-Trinitrophenol	1	8.085	8.094	-0.009	21159	0.2000	0.2485	M
$	9 1,2-Dinitrobenzene	1	8.765	8.741	0.024	27152	0.2000	0.1965	M
	10 1,3,5-Trinitrobenzene	1	8.945	8.928	0.017	53166	0.2000	0.2308	M
	11 1,3-Dinitrobenzene	1	9.591	9.568	0.023	68395	0.2000	0.2230	
	12 Nitrobenzene	1	9.964	9.941	0.023	41037	0.2000	0.2048	
	13 3,5-Dinitroaniline	1		10.204				ND	
	14 Tetryl	1	10.271	10.234	0.037	38667	0.2000	0.2184	
	15 Nitroglycerin	2	10.784	10.748	0.036	137190	2.00	2.01	
	16 2,4,6-Trinitrotoluene	1	11.244	11.201	0.043	46623	0.2000	0.2285	
	17 4-Amino-2,6-dinitrotoluene	1	11.411	11.361	0.050	30534	0.2000	0.1777	
	18 2-Amino-4,6-dinitrotoluene	1	11.704	11.648	0.056	39853	0.2000	0.1965	Ma
	19 2,6-Dinitrotoluene	1	11.831	11.788	0.043	30440	0.2000	0.2037	Ma
	20 2,4-Dinitrotoluene	1	12.038	11.988	0.050	60959	0.2000	0.2008	
	21 o-Nitrotoluene	1	12.851	12.801	0.050	21553	0.2000	0.1596	
	22 p-Nitrotoluene	1	13.291	13.234	0.057	20105	0.2000	0.1779	
	23 m-Nitrotoluene	1	13.884	13.821	0.063	26352	0.2000	0.1842	
	24 PETN	2	14.951	14.888	0.063	155898	2.00	1.98	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

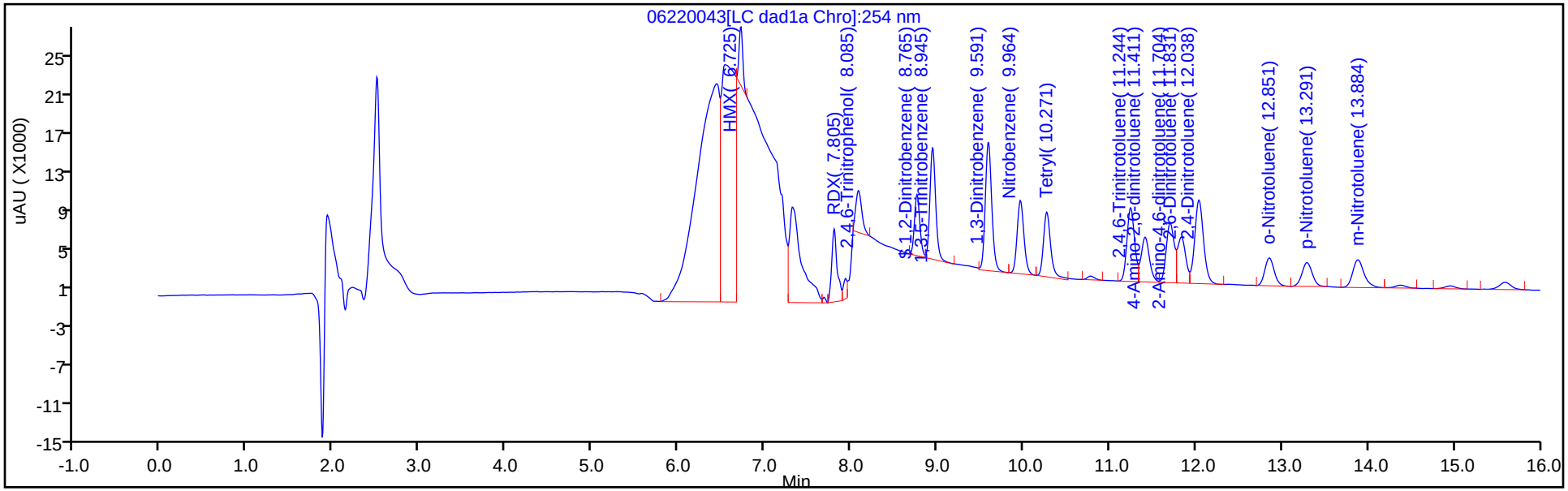
Report Date: 23-Jun-2020 15:18:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

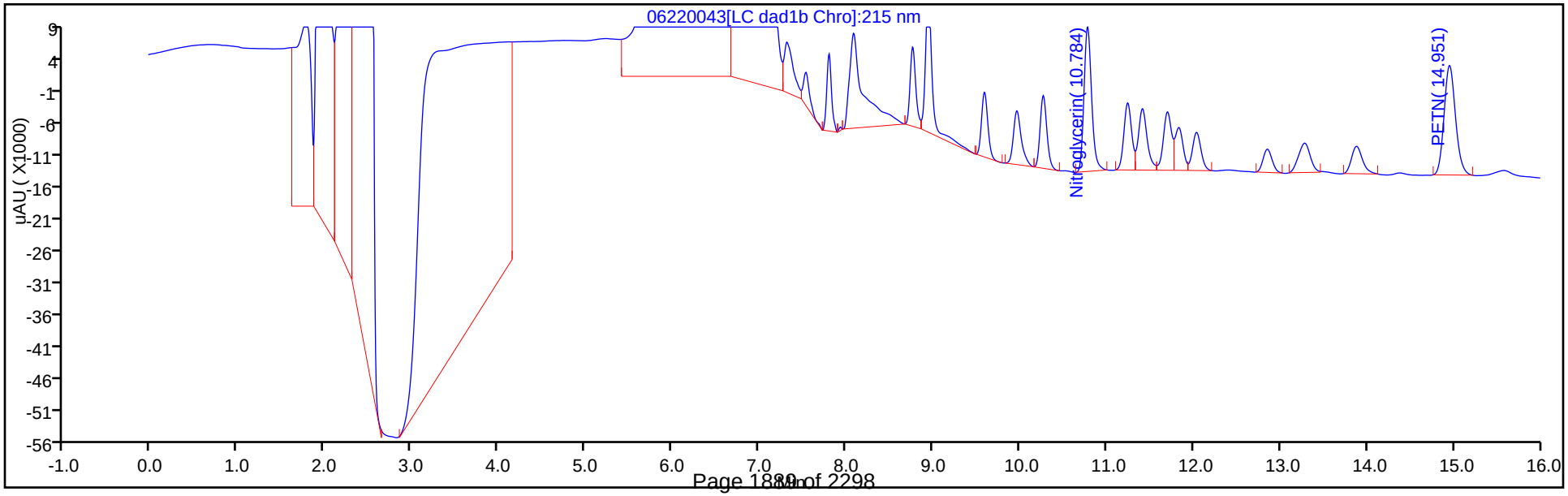
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d

Injection Date:	23-Jun-2020 03:55:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-1-C MSD			Worklist Smp#:	43
Client ID:	PZ007-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220043.D				
Lims ID:	280-137609-A-1-C MSD				
Client ID:	PZ007-20A				
Sample Type:	MSD				
Inject. Date:	23-Jun-2020 03:55:05	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-1-C				
Misc. Info.:	280-0092608-043				
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 14:50:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1965	98.23

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

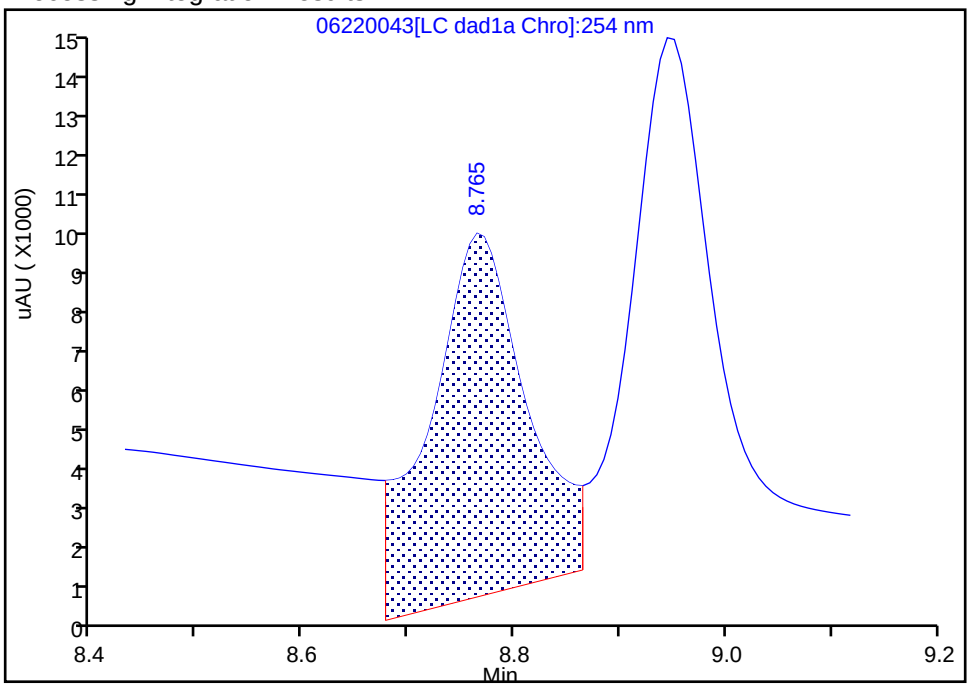
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d				
Injection Date:	23-Jun-2020 03:55:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-C MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

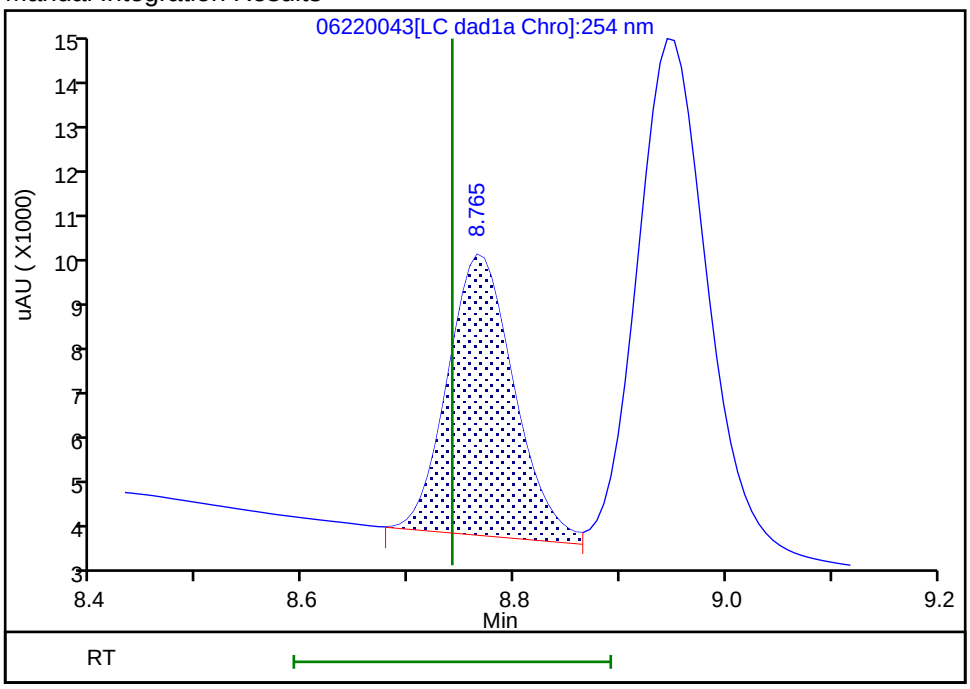
Processing Integration Results

RT: 8.76
Area: 56216
Amount: 0.406737
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 27152
Amount: 0.196452
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:49:39
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

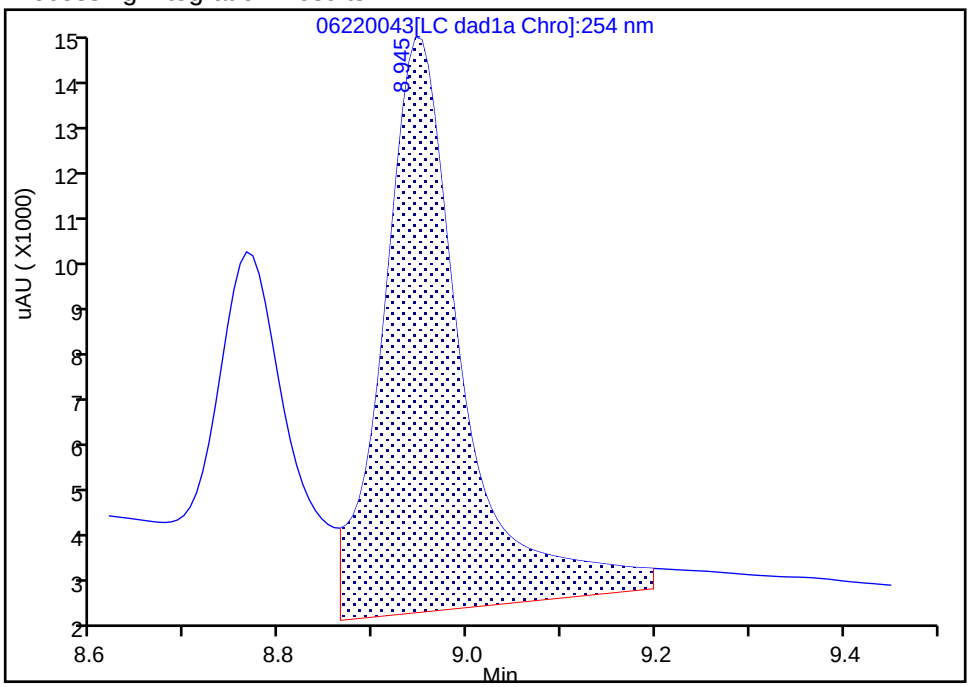
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d				
Injection Date:	23-Jun-2020 03:55:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-C MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

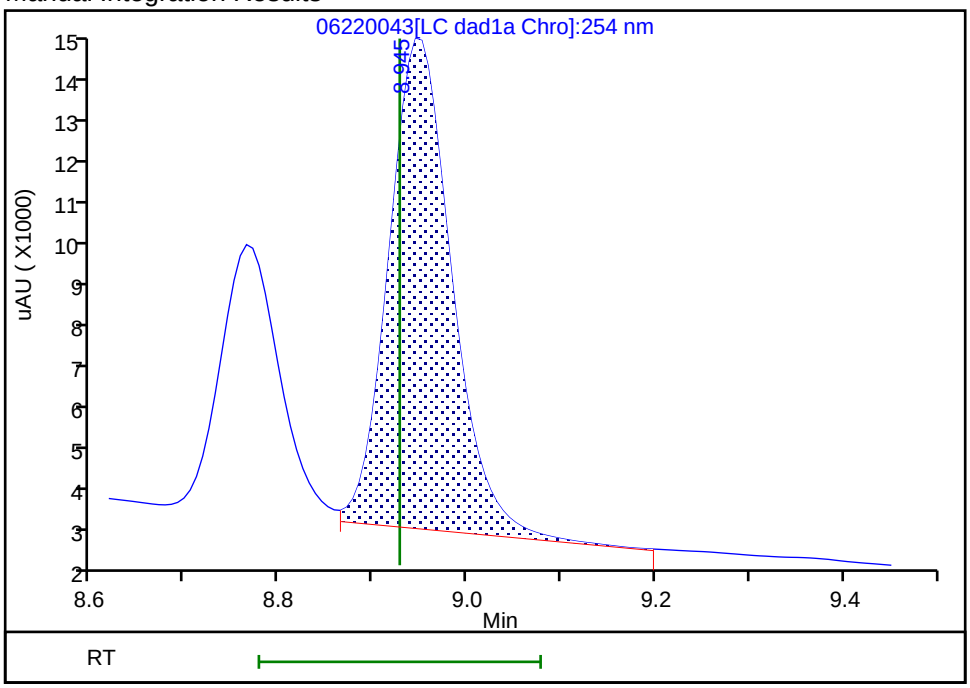
Processing Integration Results

RT: 8.94
Area: 75256
Amount: 0.326761
Amount Units: ug/mL



Manual Integration Results

RT: 8.94
Area: 53166
Amount: 0.230847
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:49:39
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

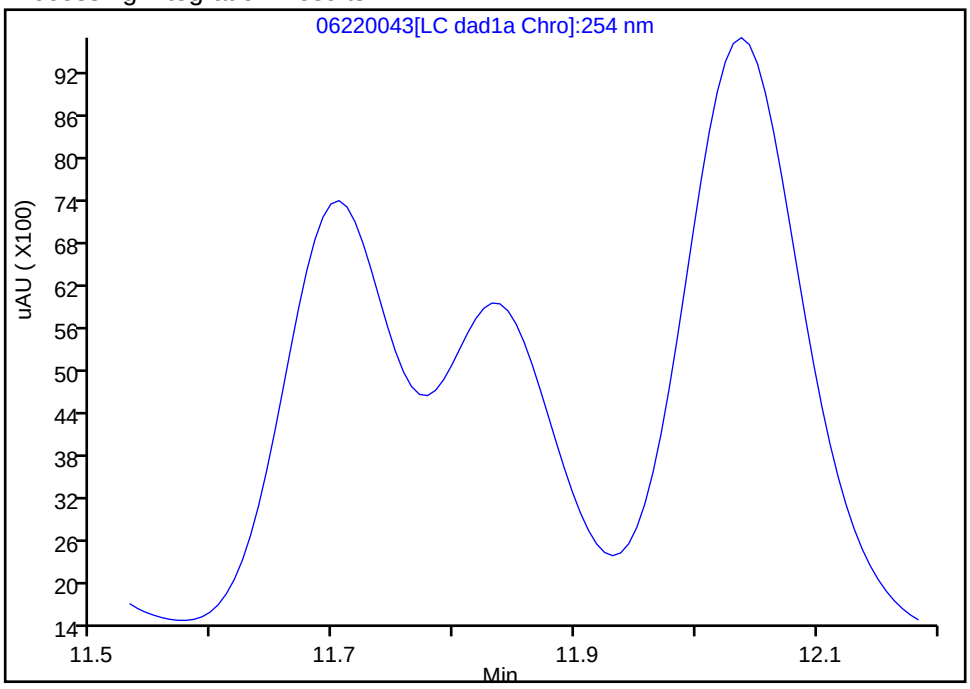
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d				
Injection Date:	23-Jun-2020 03:55:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-C MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

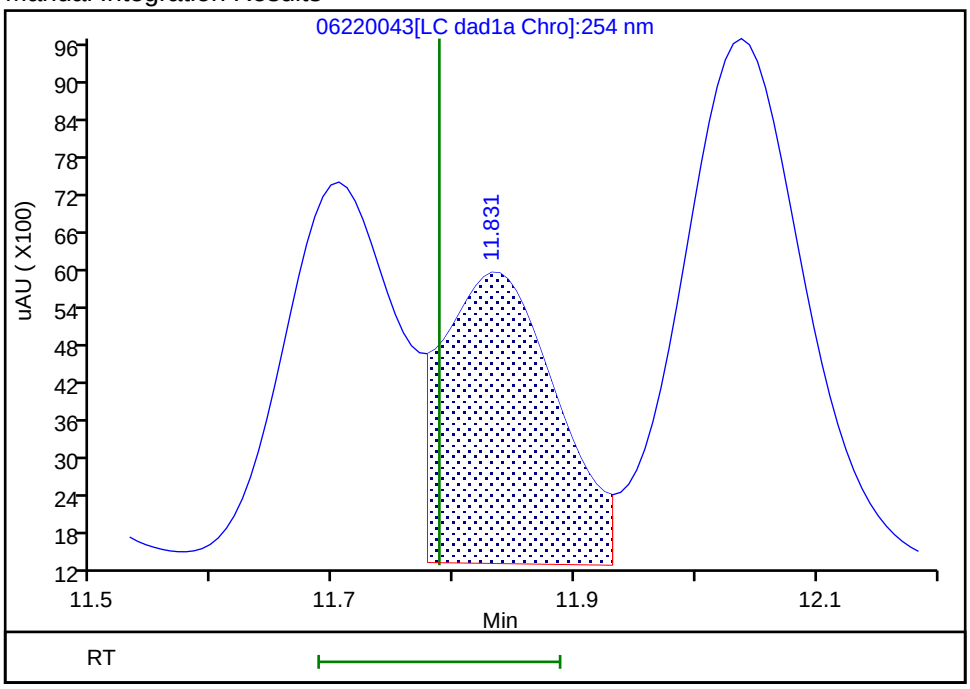
Not Detected
Expected RT: 11.79

Processing Integration Results



Manual Integration Results

RT: 11.83
Area: 30440
Amount: 0.203677
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:50:11
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

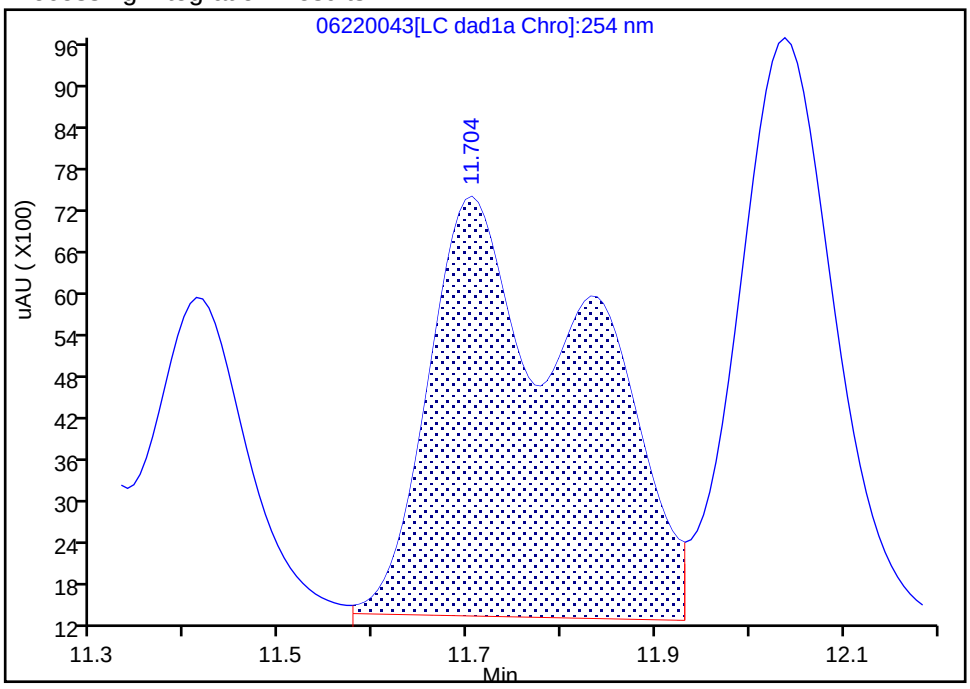
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d				
Injection Date:	23-Jun-2020 03:55:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-C MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

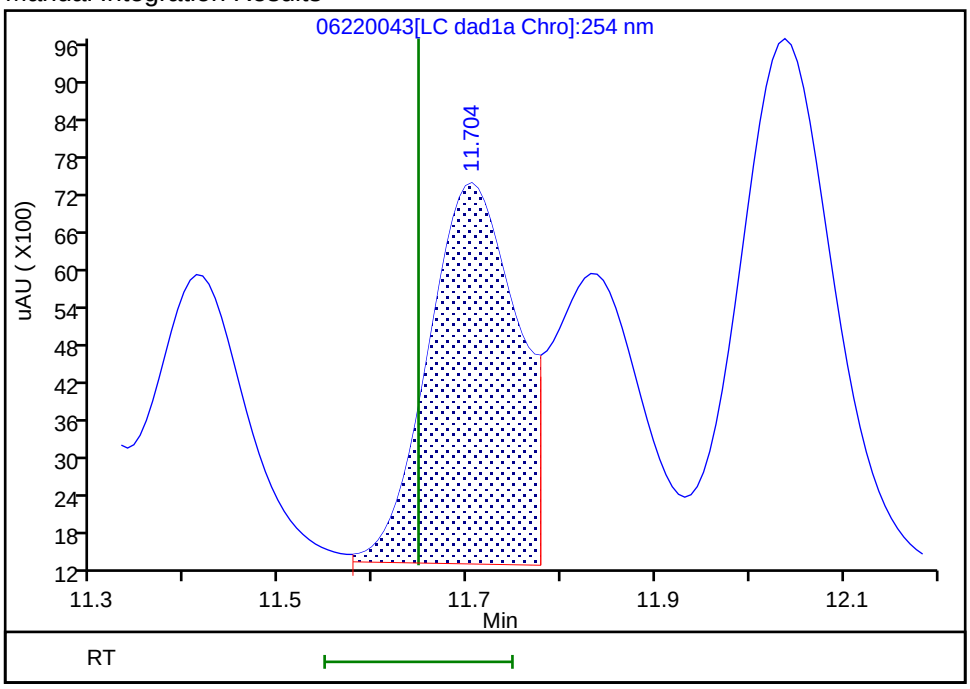
Processing Integration Results

RT: 11.70
Area: 70305
Amount: 0.346643
Amount Units: ug/mL



Manual Integration Results

RT: 11.70
Area: 39853
Amount: 0.196498
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:50:07

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

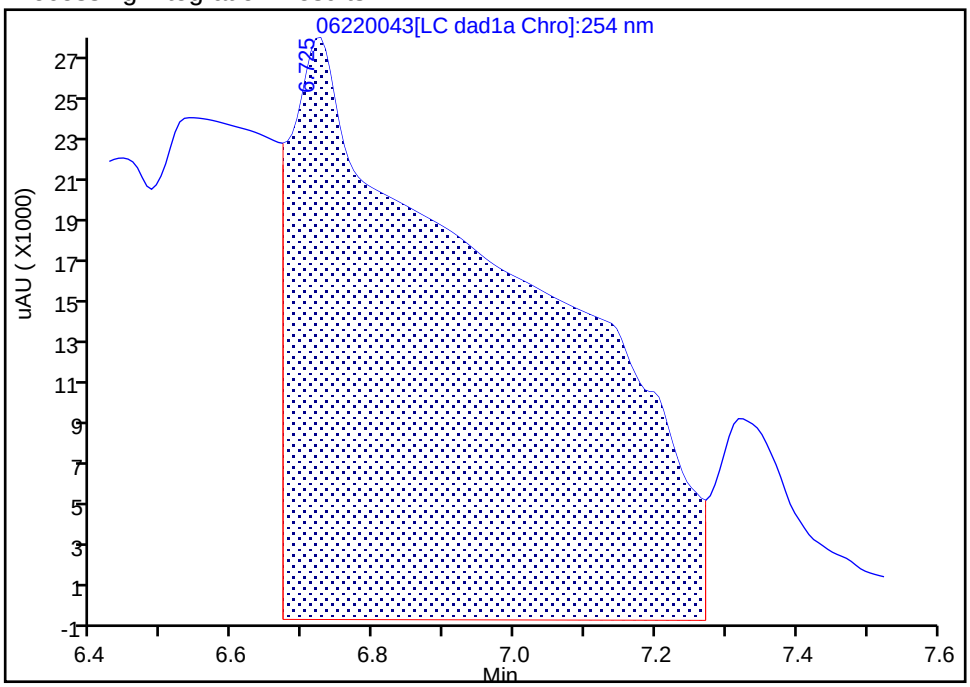
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d				
Injection Date:	23-Jun-2020 03:55:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-1-C MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

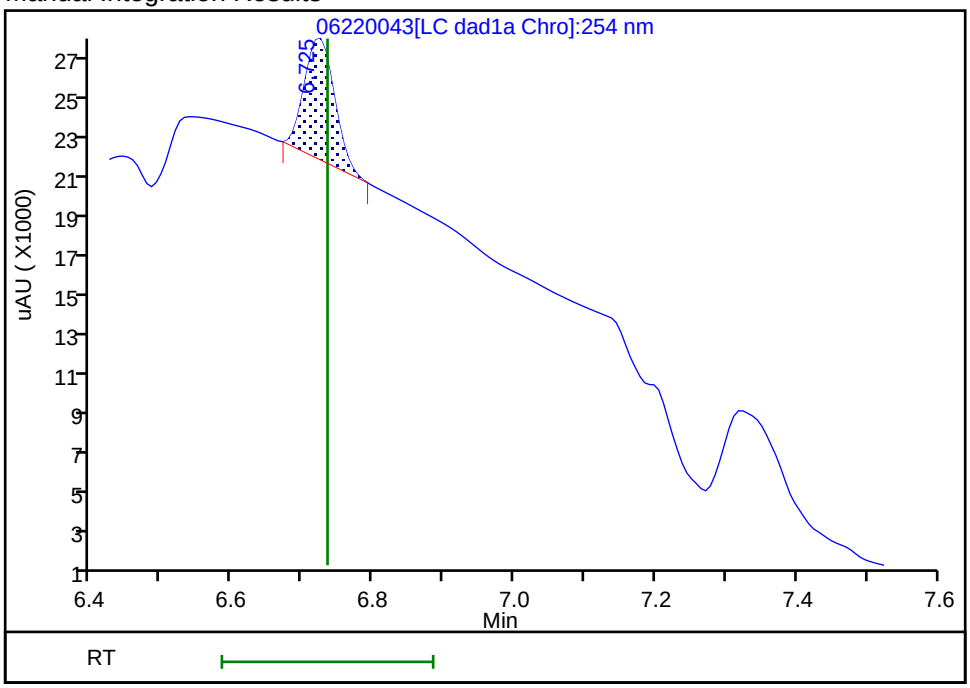
Processing Integration Results

RT: 6.72
Area: 617438
Amount: 7.182671
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 17710
Amount: 0.206021
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:49:16

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

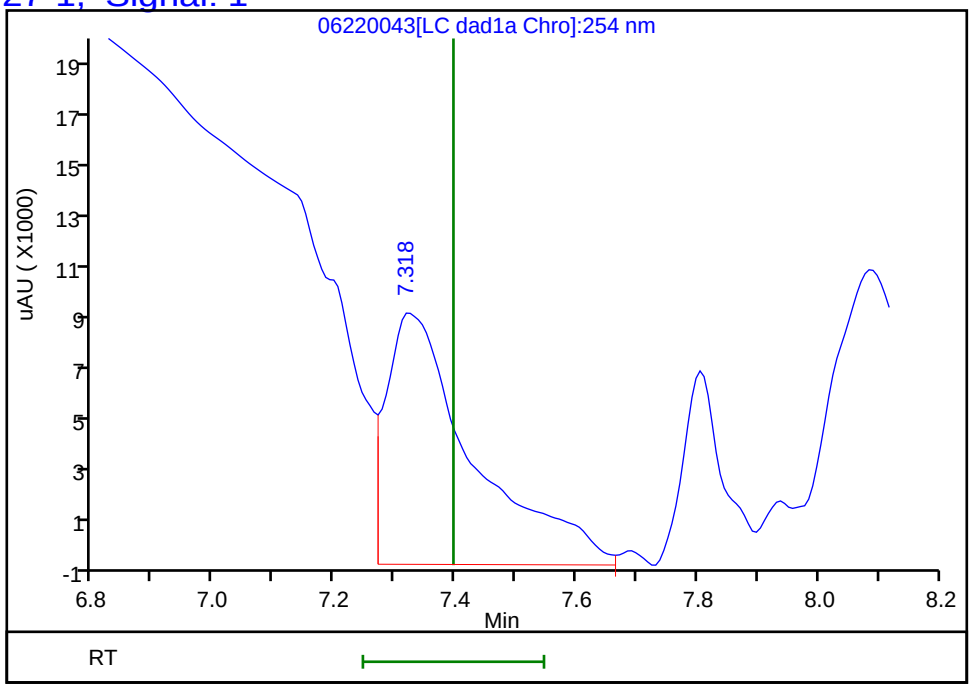
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220043.d
Injection Date: 23-Jun-2020 03:55:05 Instrument ID: CHHPLC_X3
Lims ID: 280-137609-A-1-C MSD
Client ID: PZ007-20A
Operator ID: JZ ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.32
Response: 96503
Amount: 0.608682



Reviewer: zhangji, 23-Jun-2020 14:50:30
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.: 280-137609-1

SDG No.:

Client Sample ID: PZ007-20A MSD Lab Sample ID: 280-137609-1 MSD

Matrix: Water Lab File ID: 06220045.D

Analysis Method: 8330A Date Collected: 06/11/2020 08:50

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 462.8(mL) Date Analyzed: 06/23/2020 04:41

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.18	J M	2.2	0.43	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220045.D
Lims ID: 280-137609-B-1-B MSD
Client ID: PZ007-20A
Sample Type: MSD
Inject. Date: 23-Jun-2020 04:41:02 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-B-1-B
Misc. Info.: 280-0092608-045
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 14:52:22

	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	6.630	6.629	0.001	40538	0.2002	0.1863	Ma
	3 HMX	1		6.734				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.764				ND	
	5 DNX	1	6.950	6.949	0.001	28909	0.2002	0.1890	Ma
	6 MNX	1	7.403	7.396	0.007	32026	0.2334	0.2020	Ma
	7 RDX	1		7.801				ND	
	8 2,4,6-Trinitrophenol	1	8.130	8.094	0.036	2504		0.0294	Ma
$	9 1,2-Dinitrobenzene	1	8.770	8.741	0.029	26143	0.2000	0.1892	M
	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	U
	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

a - User Assigned ID

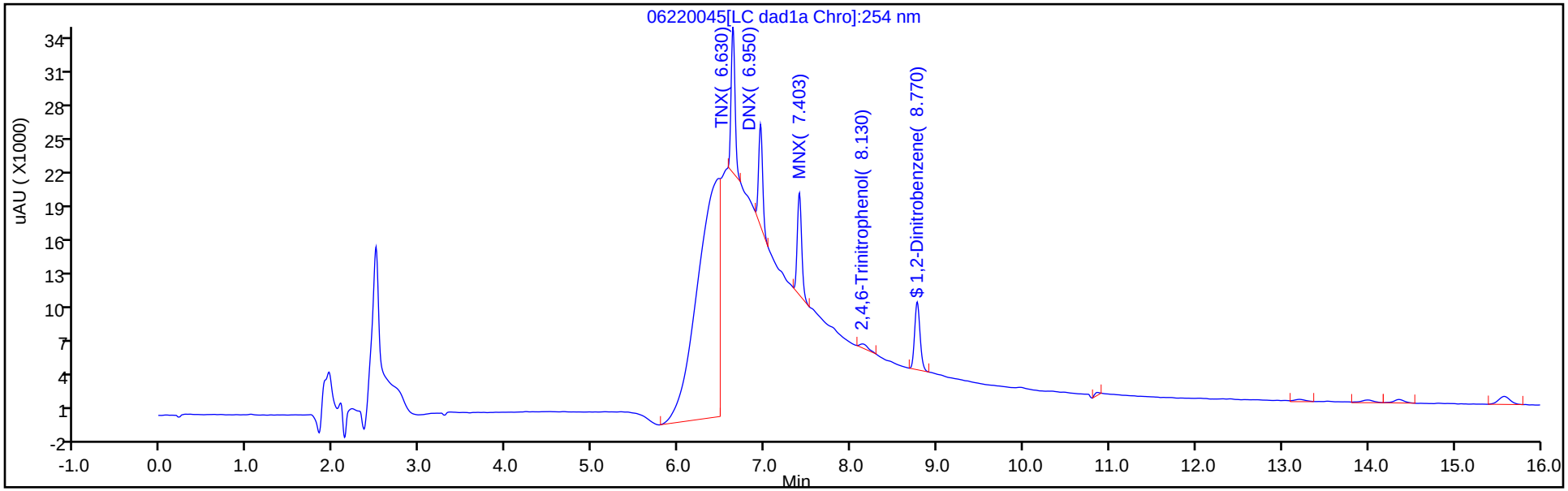
Report Date: 23-Jun-2020 15:18:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

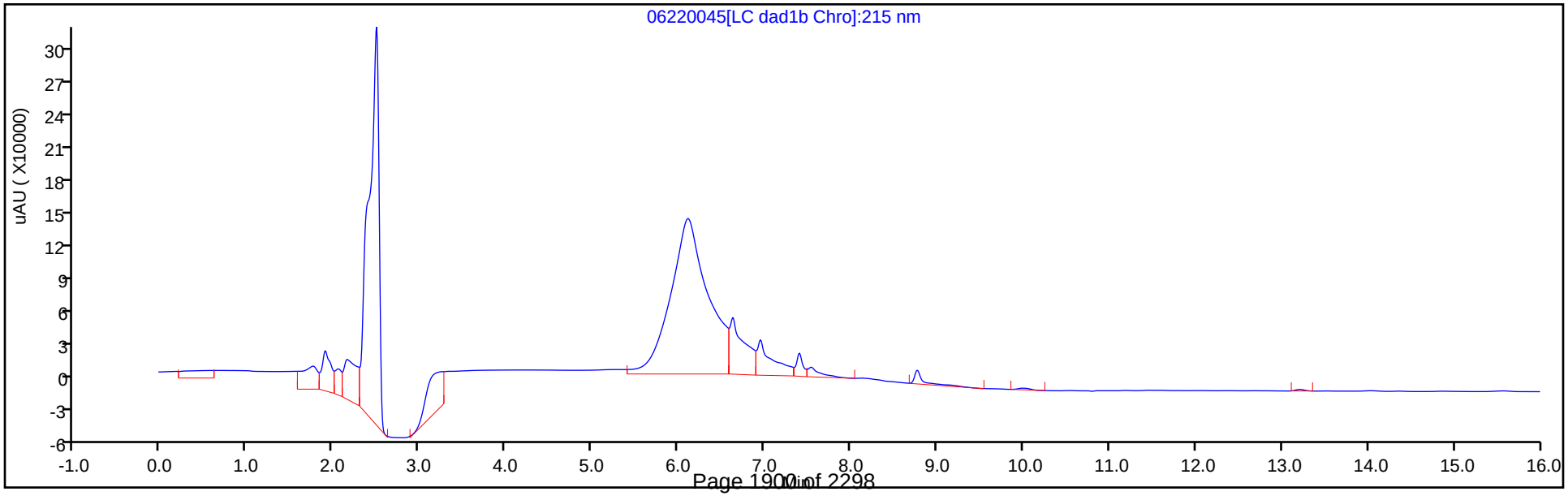
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220045.d

Injection Date:	23-Jun-2020 04:41:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-B-1-B MSD			Worklist Smp#:	45
Client ID:	PZ007-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220045.D				
Lims ID:	280-137609-B-1-B MSD				
Client ID:	PZ007-20A				
Sample Type:	MSD				
Inject. Date:	23-Jun-2020 04:41:02	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-B-1-B				
Misc. Info.:	280-0092608-045				
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 14:52:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1892	94.58

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

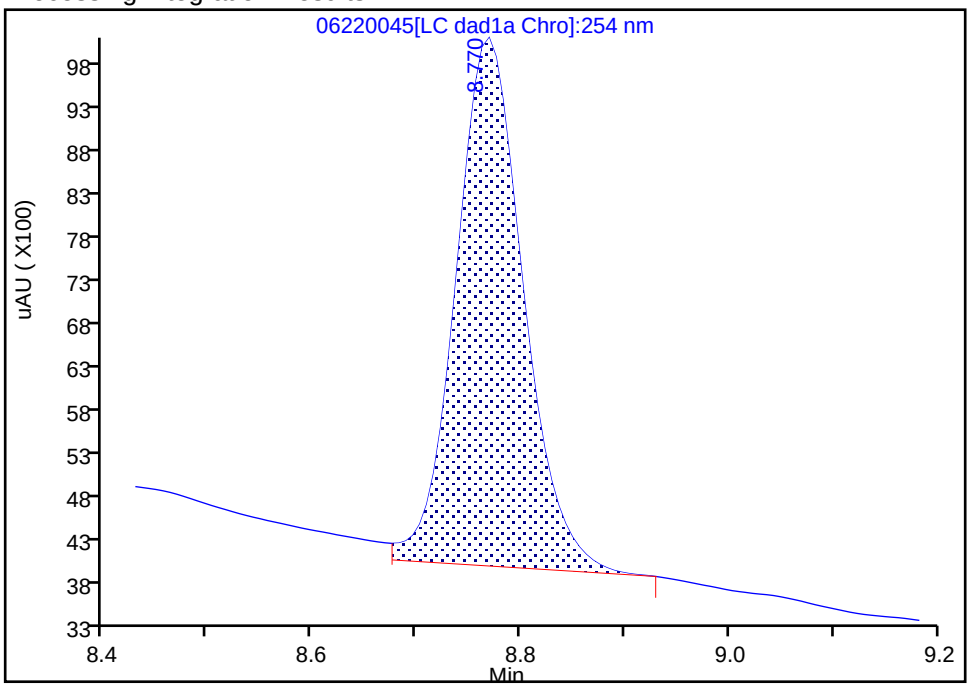
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220045.d				
Injection Date:	23-Jun-2020 04:41:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-1-B MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

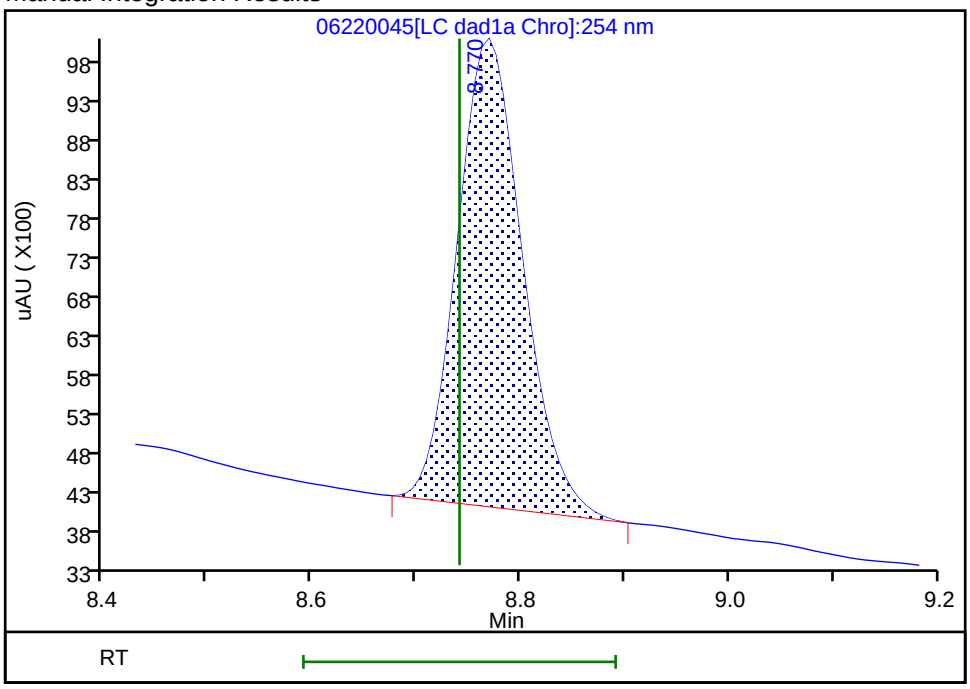
Processing Integration Results

RT: 8.77
Area: 27553
Amount: 0.199353
Amount Units: ug/mL



Manual Integration Results

RT: 8.77
Area: 26143
Amount: 0.189151
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:51:24

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

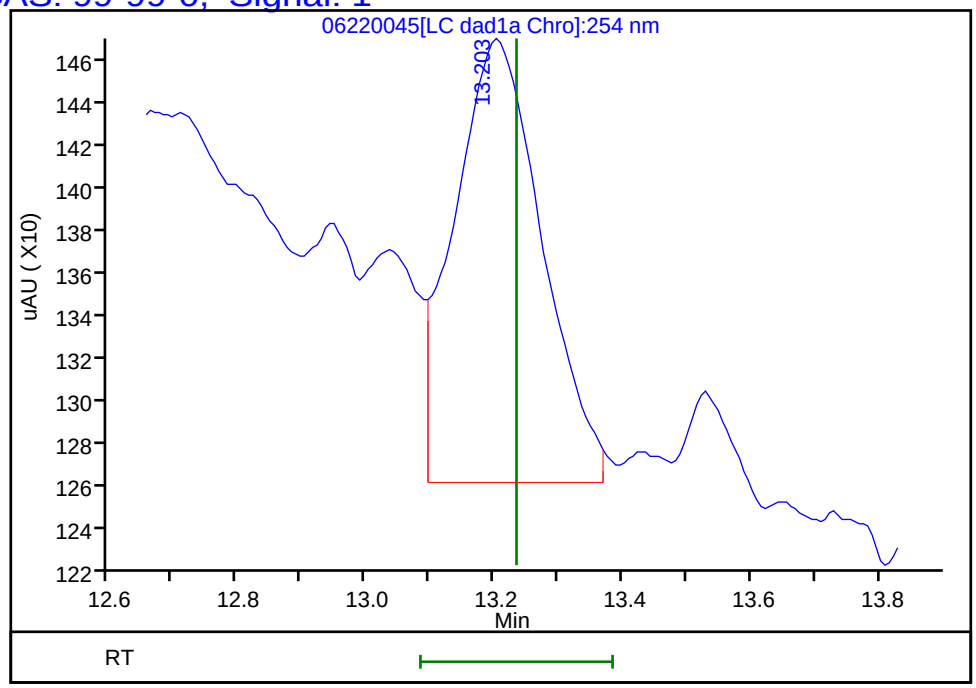
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220045.d
Injection Date: 23-Jun-2020 04:41:02 Instrument ID: CHHPLC_X3
Lims ID: 280-137609-B-1-B MSD
Client ID: PZ007-20A
Operator ID: JZ ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.20
Response: 1933
Amount: 0.017105



Reviewer: zhangji, 23-Jun-2020 14:52:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

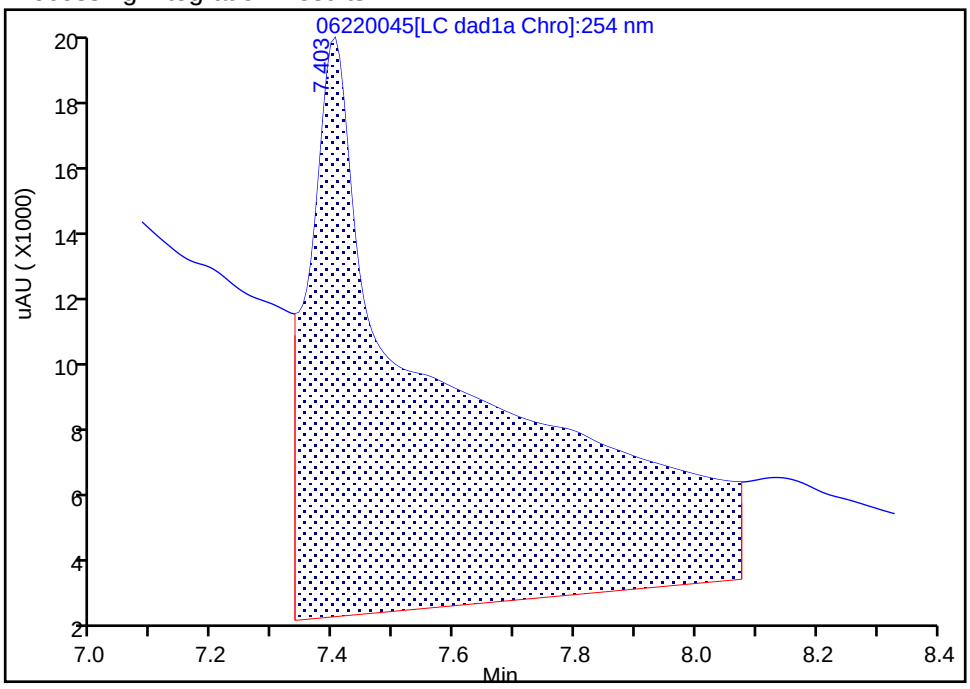
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220045.d				
Injection Date:	23-Jun-2020 04:41:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-1-B MSD				
Client ID:	PZ007-20A				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

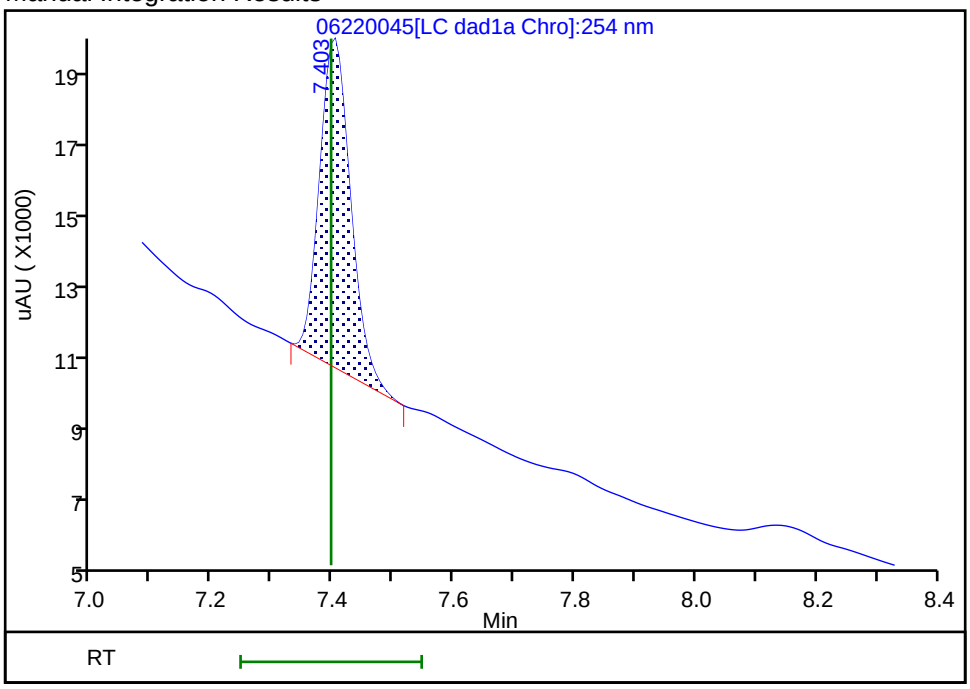
Processing Integration Results

RT: 7.40
Area: 287498
Amount: 1.813362
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 32026
Amount: 0.202000
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:51:55

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MSD Lab Sample ID: 280-137609-9 MSD

Matrix: Water Lab File ID: 06220050.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 467(mL) Date Analyzed: 06/23/2020 06:36

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.47	M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	2.33	M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.44		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	2.11		0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	2.26		0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	1.85		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	1.82		0.22	0.21	0.092
99-08-1	3-Nitrotoluene	1.97		0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.19	J1	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	1.83		0.44	0.43	0.11
2691-41-0	HMX	4.35	M	0.22	0.21	0.094
98-95-3	Nitrobenzene	2.22		0.22	0.21	0.097
479-45-8	Tetryl	2.22		0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220050.D
Lims ID: 280-137609-A-9-B MSD
Client ID: G0102-20A
Sample Type: MSD
Inject. Date: 23-Jun-2020 06:36:09 ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-A-9-B
Misc. Info.: 280-0092608-050
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 15:18:12 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 14:55:16

	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	U
2	TNX	1		6.629				ND	
3	HMX	1	6.731	6.734	-0.003	34896	0.2000	0.4059	M
4	2,4-diamino-6-nitrotoluene	1		6.764				ND	
5	DNX	1		6.949				ND	
6	MNX	1	7.404	7.396	0.008	16585		0.1046	M
7	RDX	1	7.811	7.801	0.010	421542	0.2000	3.61	EM
8	2,4,6-Trinitrophenol	1	8.091	8.094	-0.003	18762	0.2000	0.2204	M
$ 9	1,2-Dinitrobenzene	1	8.771	8.741	0.030	27345	0.2000	0.1978	M
10	1,3,5-Trinitrobenzene	1	8.951	8.928	0.023	53129	0.2000	0.2307	M
11	1,3-Dinitrobenzene	1	9.611	9.568	0.043	66754	0.2000	0.2177	M
12	Nitrobenzene	1	9.984	9.941	0.043	41558	0.2000	0.2074	
13	3,5-Dinitroaniline	1		10.204				ND	
14	Tetryl	1	10.291	10.234	0.057	36700	0.2000	0.2073	
15	Nitroglycerin	2	10.804	10.748	0.056	139039	2.00	2.04	
16	2,4,6-Trinitrotoluene	1	11.264	11.201	0.063	46512	0.2000	0.2280	
17	4-Amino-2,6-dinitrotoluene	1	11.431	11.361	0.070	18653	0.2000	0.1111	
18	2-Amino-4,6-dinitrotoluene	1	11.724	11.648	0.076	35003	0.2000	0.1726	
19	2,6-Dinitrotoluene	1	11.851	11.788	0.063	31506	0.2000	0.2108	
20	2,4-Dinitrotoluene	1	12.051	11.988	0.063	59757	0.2000	0.1968	
21	o-Nitrotoluene	1	12.864	12.801	0.063	22934	0.2000	0.1698	
22	p-Nitrotoluene	1	13.297	13.234	0.063	19266	0.2000	0.1705	
23	m-Nitrotoluene	1	13.891	13.821	0.070	26355	0.2000	0.1843	
24	PETN	2	14.957	14.888	0.069	157163	2.00	2.00	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated
U - Marked Undetected

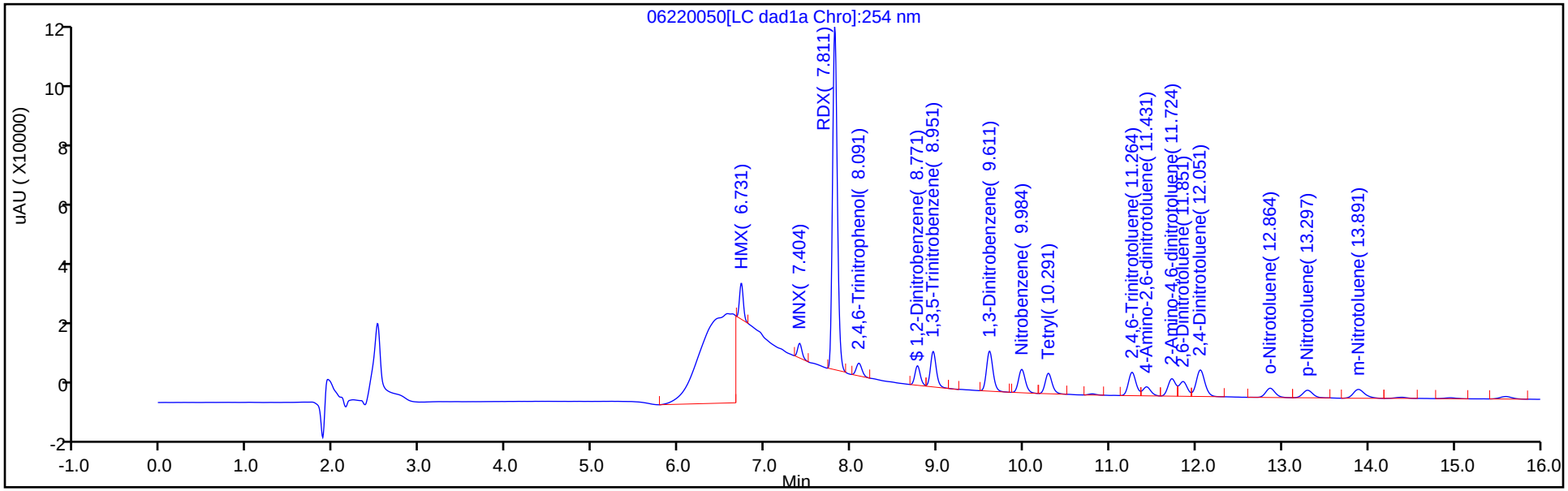
Report Date: 23-Jun-2020 15:18:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

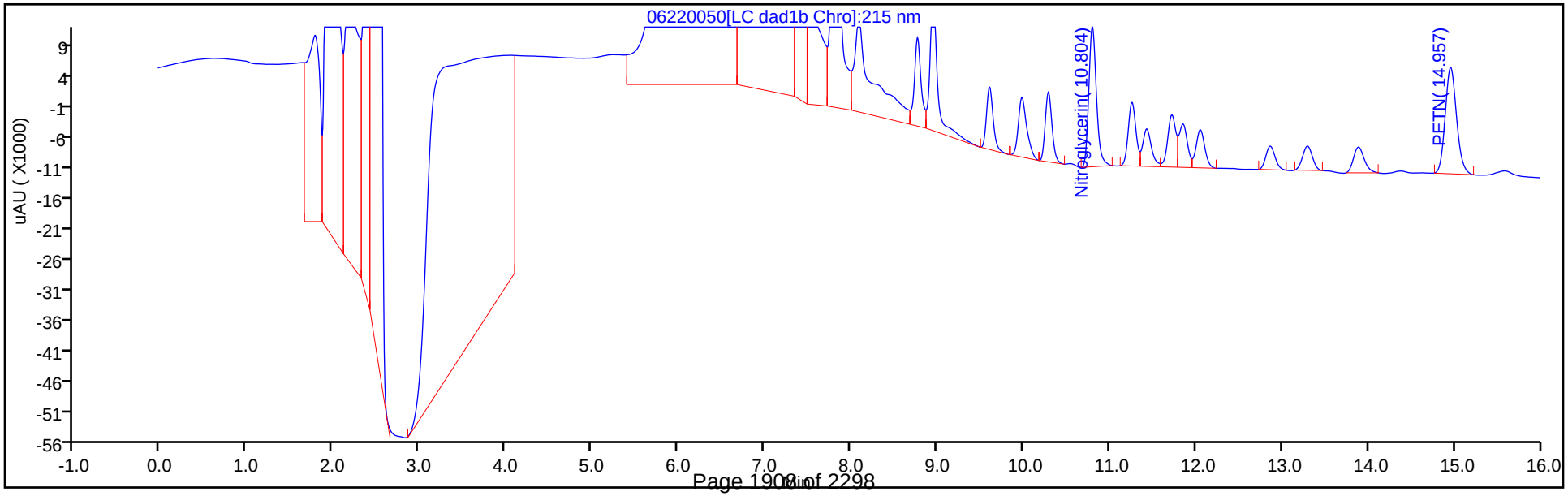
Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d

Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-9-B MSD			Worklist Smp#:	50
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220050.D				
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Sample Type:	MSD				
Inject. Date:	23-Jun-2020 06:36:09	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-A-9-B				
Misc. Info.:	280-0092608-050				
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 15:18:12	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 14:55:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1978	98.92

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

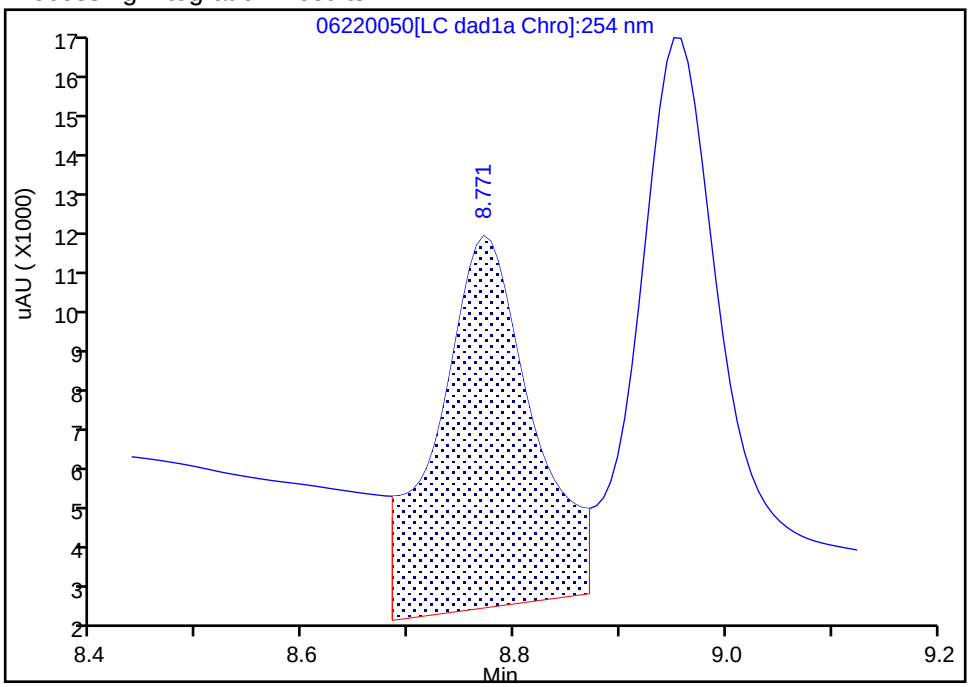
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d				
Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

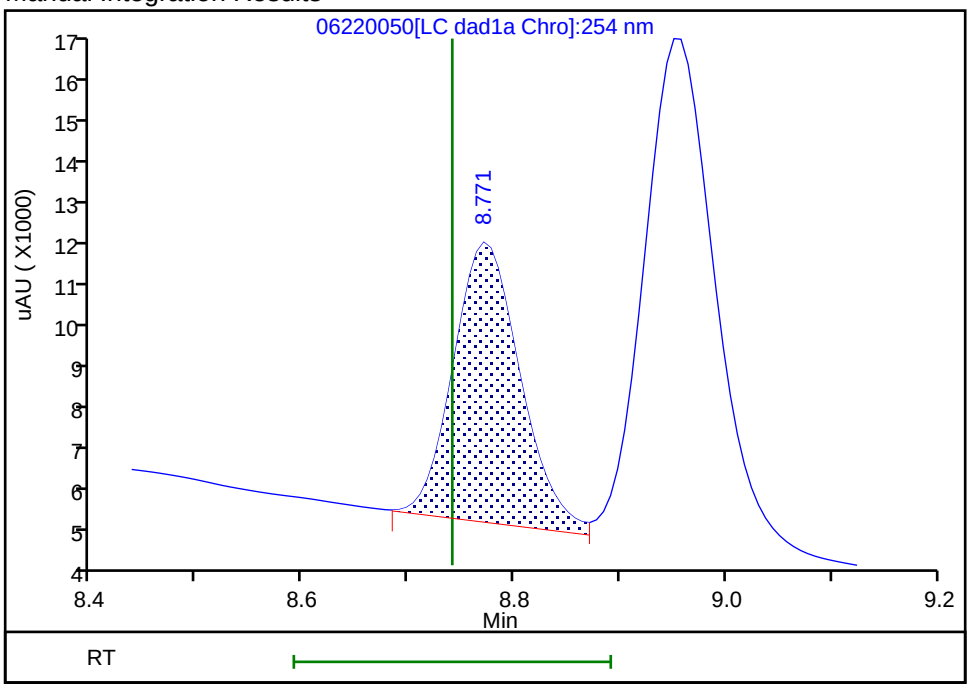
Processing Integration Results

RT: 8.77
Area: 52389
Amount: 0.379048
Amount Units: ug/mL



Manual Integration Results

RT: 8.77
Area: 27345
Amount: 0.197848
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:54:58
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

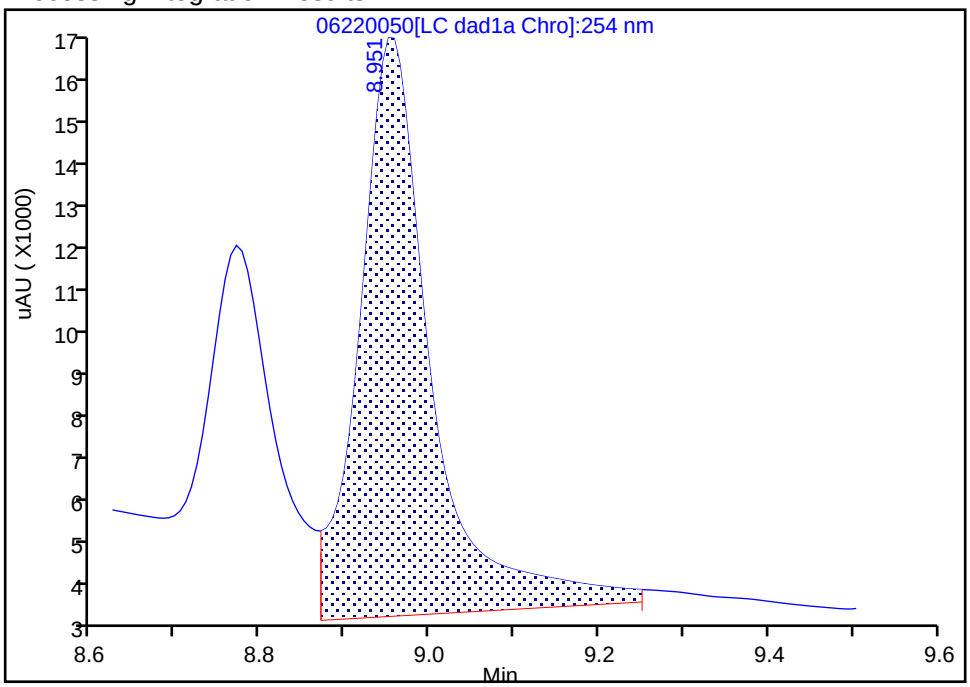
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d				
Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

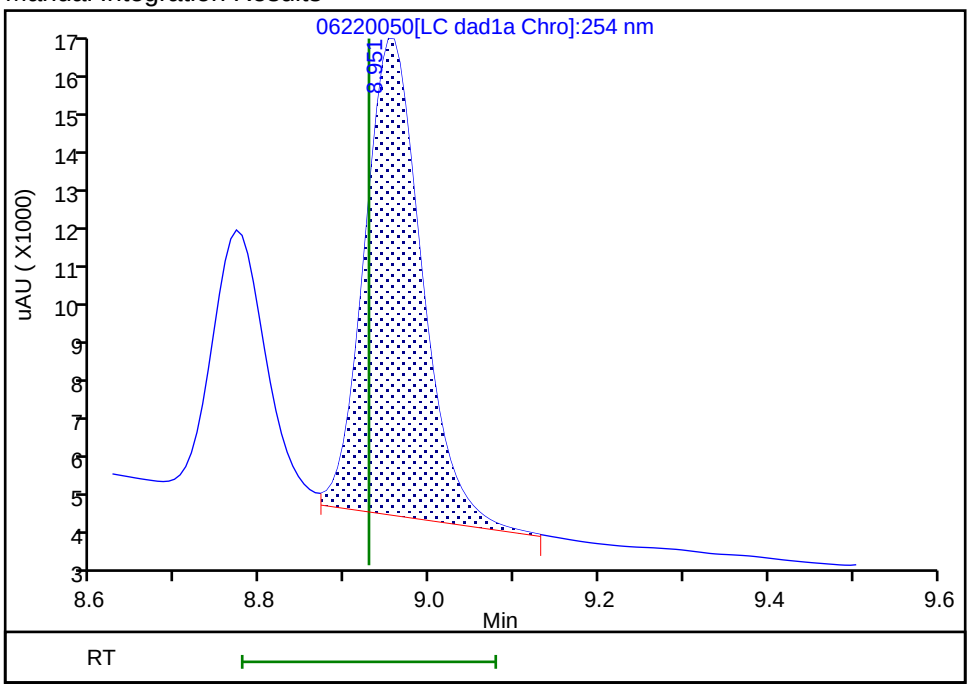
Processing Integration Results

RT: 8.95
Area: 74462
Amount: 0.323314
Amount Units: ug/mL



Manual Integration Results

RT: 8.95
Area: 53129
Amount: 0.230686
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:55:01

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

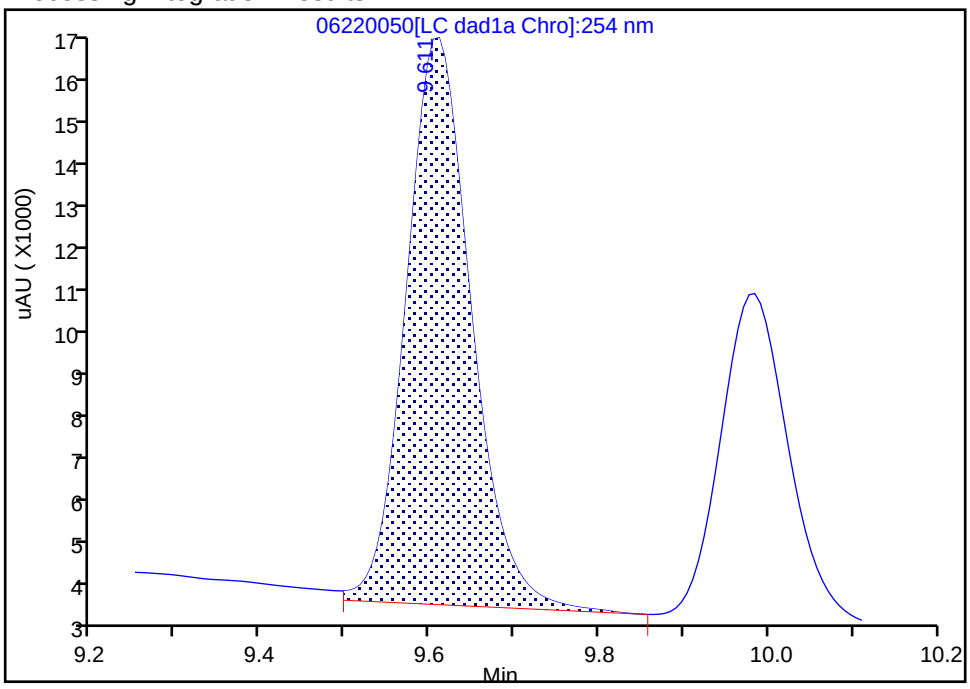
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d				
Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

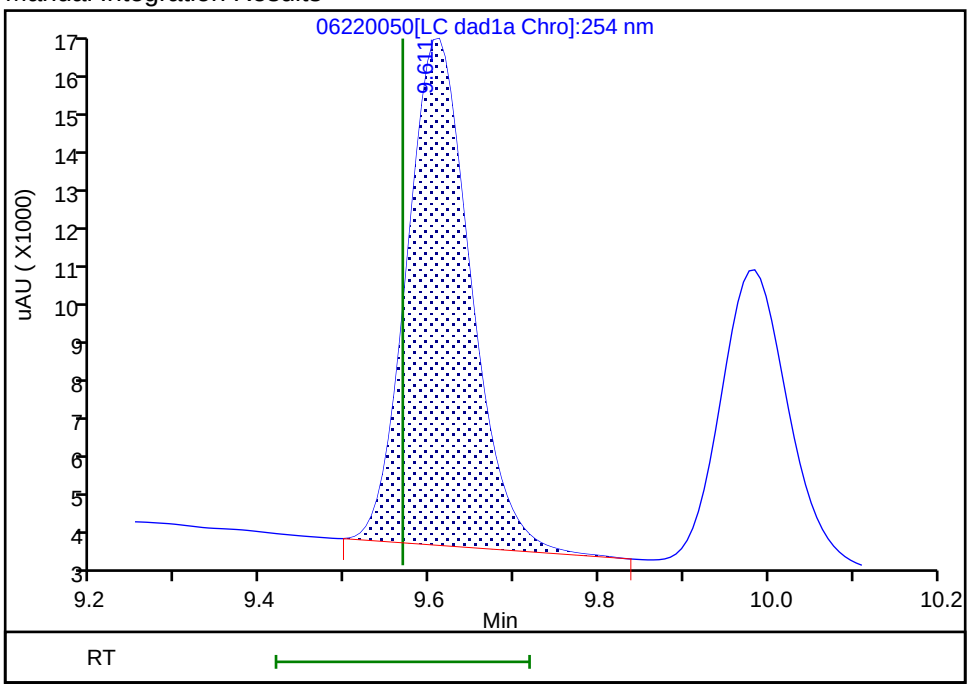
Processing Integration Results

RT: 9.61
Area: 68950
Amount: 0.224823
Amount Units: ug/mL



Manual Integration Results

RT: 9.61
Area: 66754
Amount: 0.217663
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:55:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

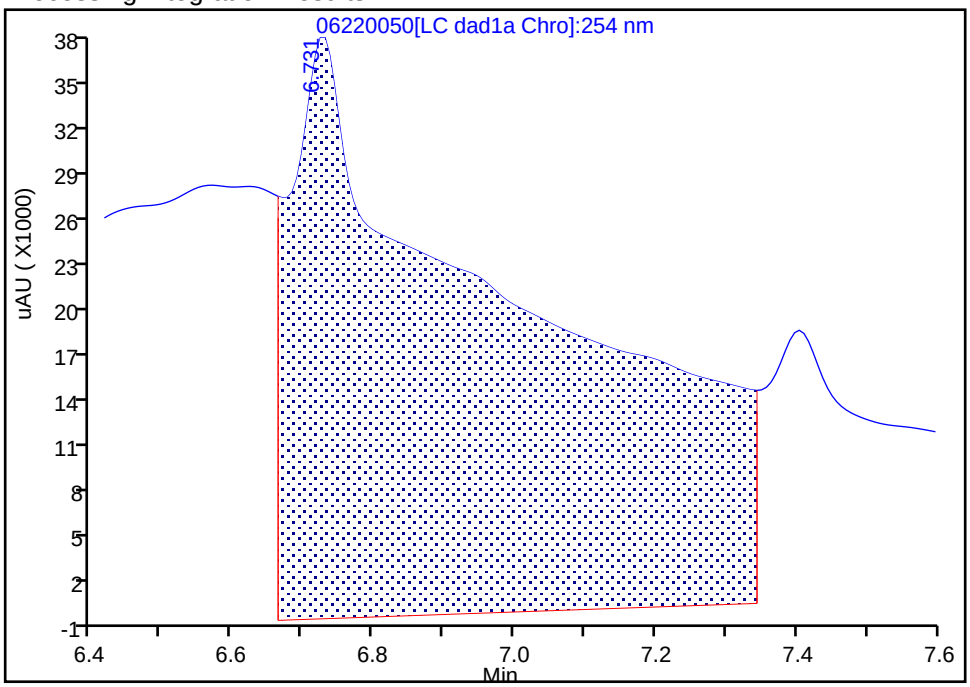
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d				
Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

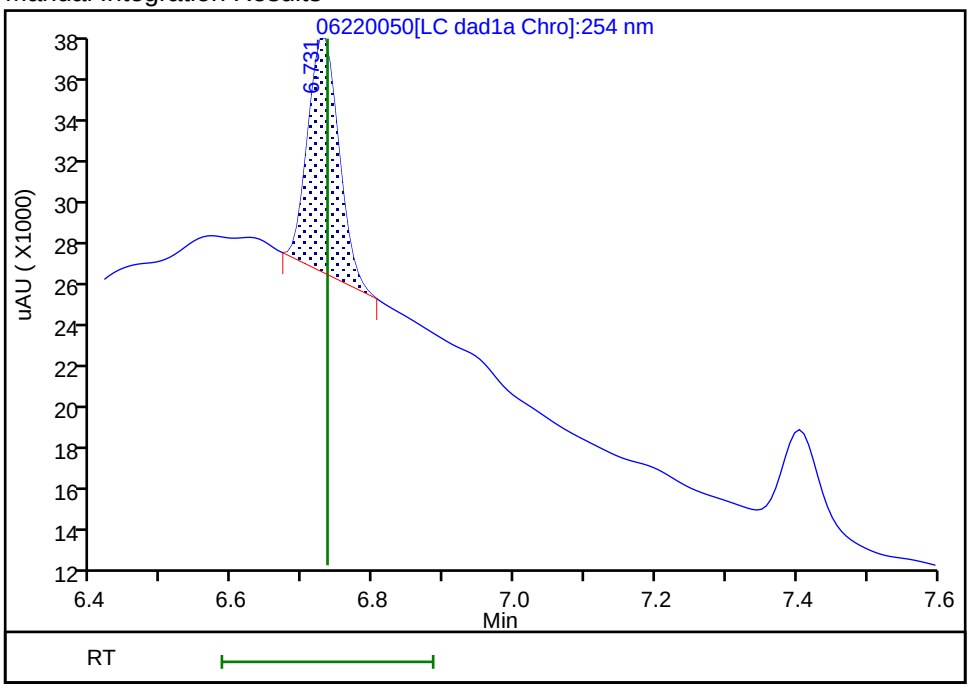
Processing Integration Results

RT: 6.73
Area: 865440
Amount: 10.067685
Amount Units: ug/mL



Manual Integration Results

RT: 6.73
Area: 34896
Amount: 0.405946
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:54:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

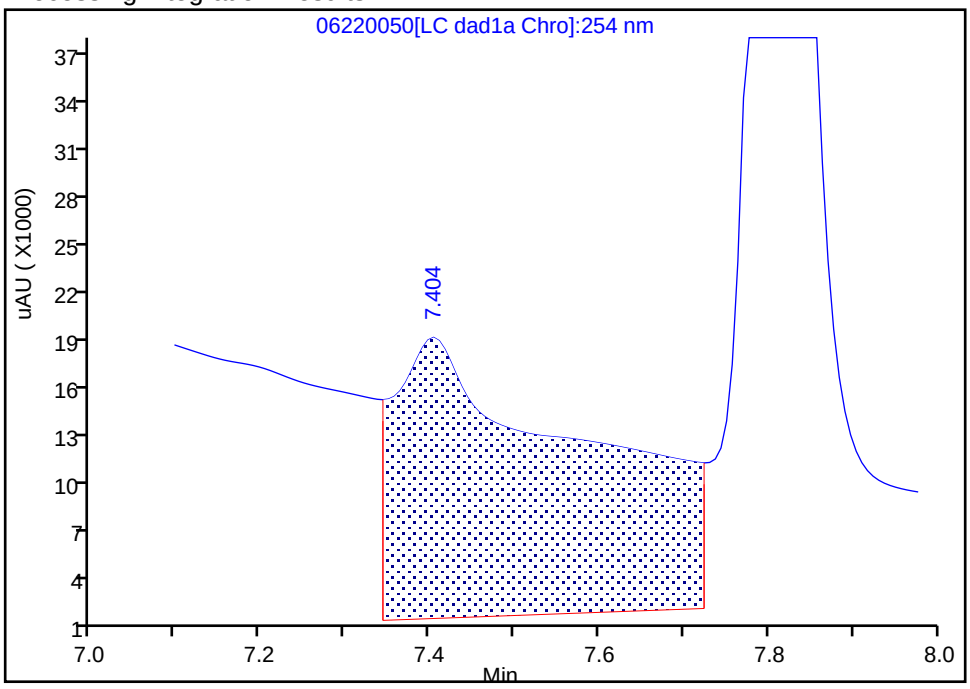
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d				
Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

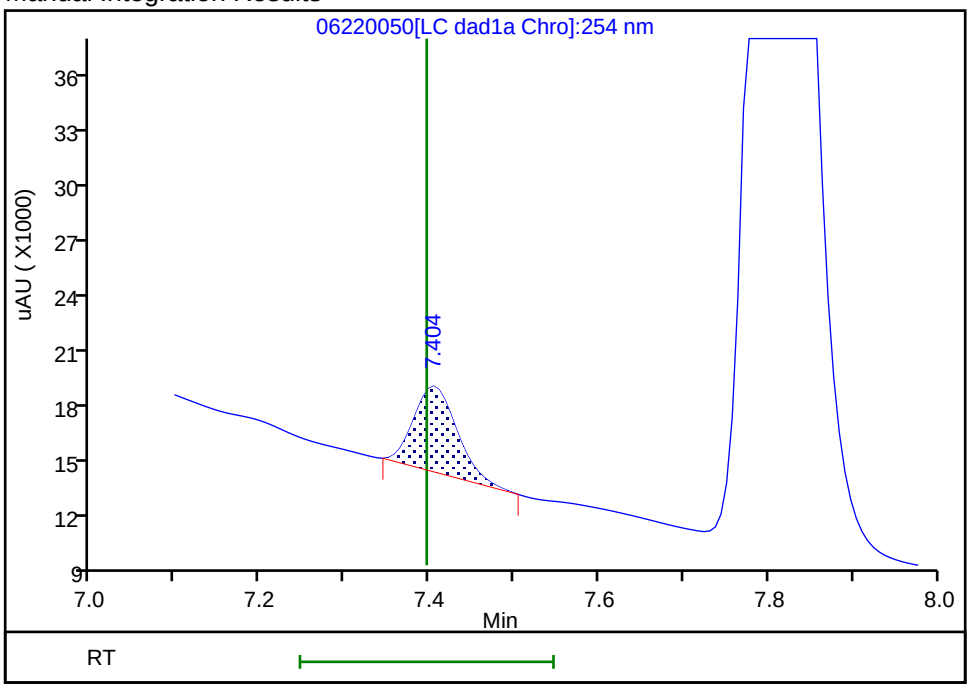
Processing Integration Results

RT: 7.40
Area: 276159
Amount: 1.741842
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 16585
Amount: 0.104608
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:54:34

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

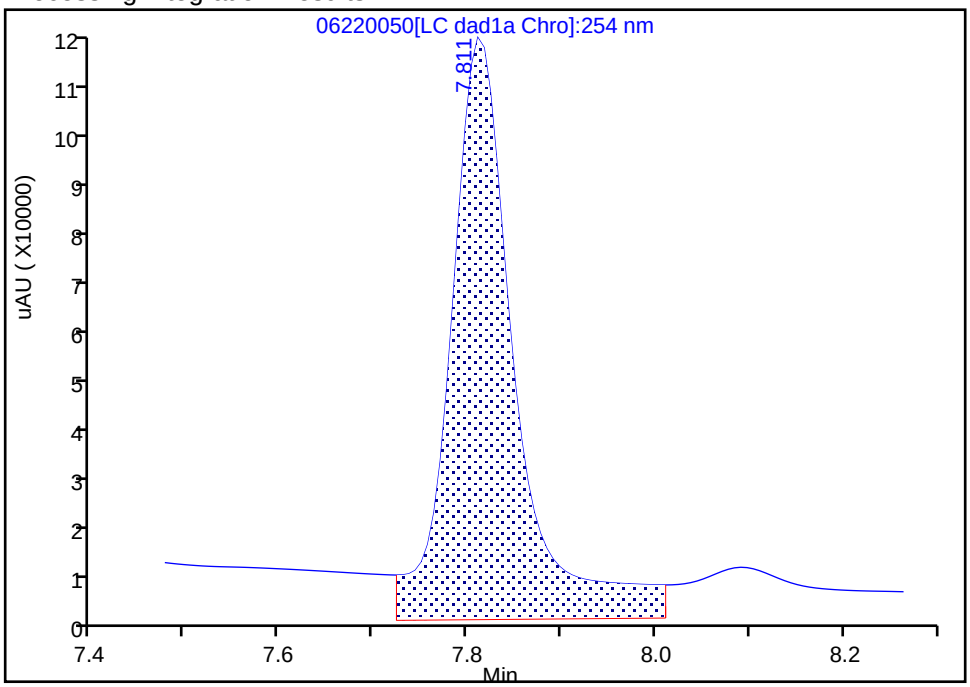
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220050.d				
Injection Date:	23-Jun-2020 06:36:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

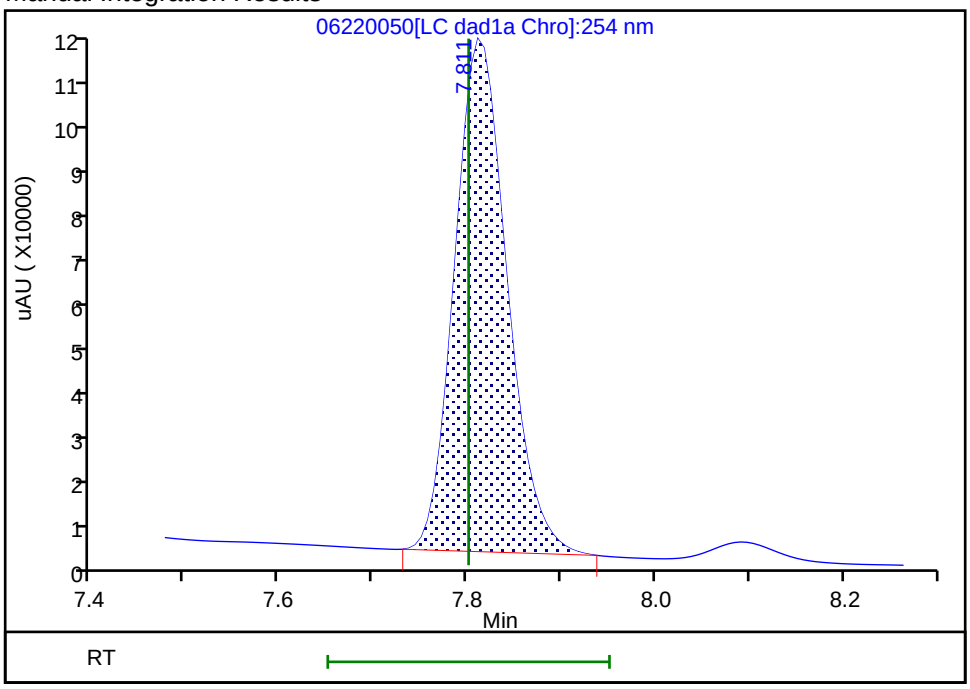
Processing Integration Results

RT: 7.81
Area: 559413
Amount: 4.797172
Amount Units: ug/mL



Manual Integration Results

RT: 7.81
Area: 421542
Amount: 3.614878
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:54:38

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MSD Lab Sample ID: 280-137609-9 MSD

Matrix: Water Lab File ID: 06220052.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 461.5(mL) Date Analyzed: 06/23/2020 07:22

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	3.41	M	2.2	0.43	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220052.D
Lims ID: 280-137609-B-9-B MSD
Client ID: G0102-20A
Sample Type: MSD
Inject. Date: 23-Jun-2020 07:22:10 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137609-B-9-B
Misc. Info.: 280-0092608-052
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 15:18:12 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 14:57:13

	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	6.630	6.629	0.001	41071	0.2002	0.1887	M
	3 HMX	1	6.723	6.734	-0.011	19934		0.2319	M
	4 2,4-diamino-6-nitrotoluene	1		6.764				ND	
	5 DNX	1	6.950	6.949	0.001	30328	0.2002	0.1983	M
	6 MNX	1	7.396	7.396	0.000	49935	0.2334	0.3150	M
	7 RDX	1	7.803	7.801	0.002	421895		3.62	EM
	8 2,4,6-Trinitrophenol	1		8.094				ND	
$	9 1,2-Dinitrobenzene	1	8.763	8.741	0.022	28013	0.2000	0.2027	M
	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	U
	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	U
	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

Processing Flags
E - Exceeded Maximum Amount

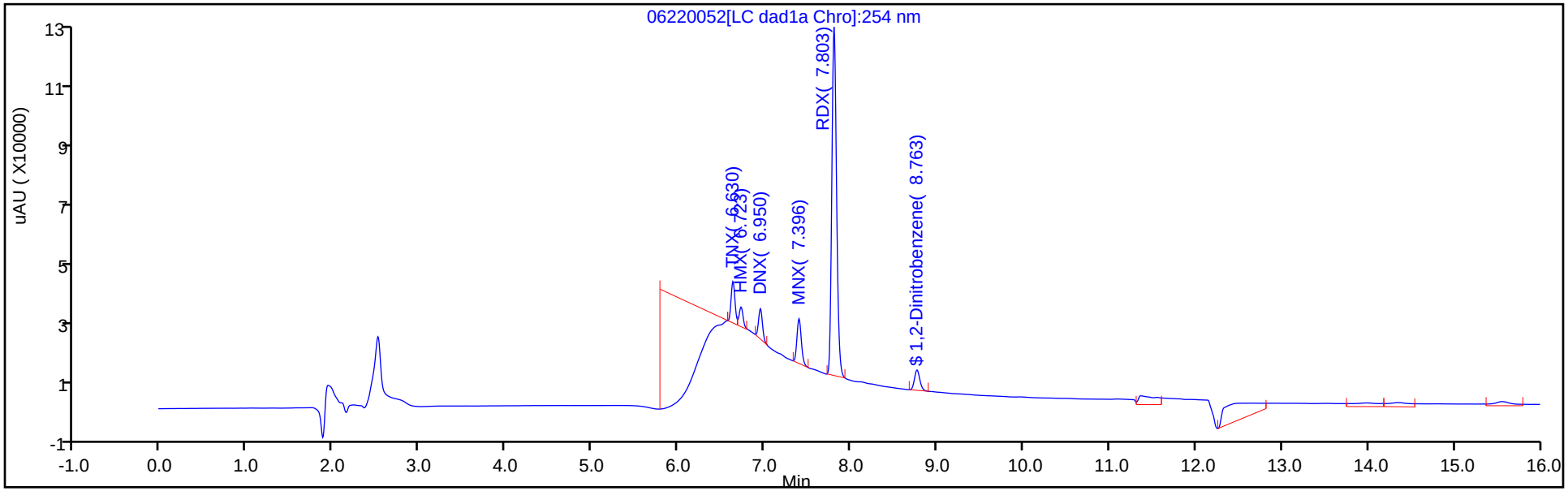
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Jun-2020 15:18:14 Chrom Revision: 2.3 21-Jun-2020 18:30:46

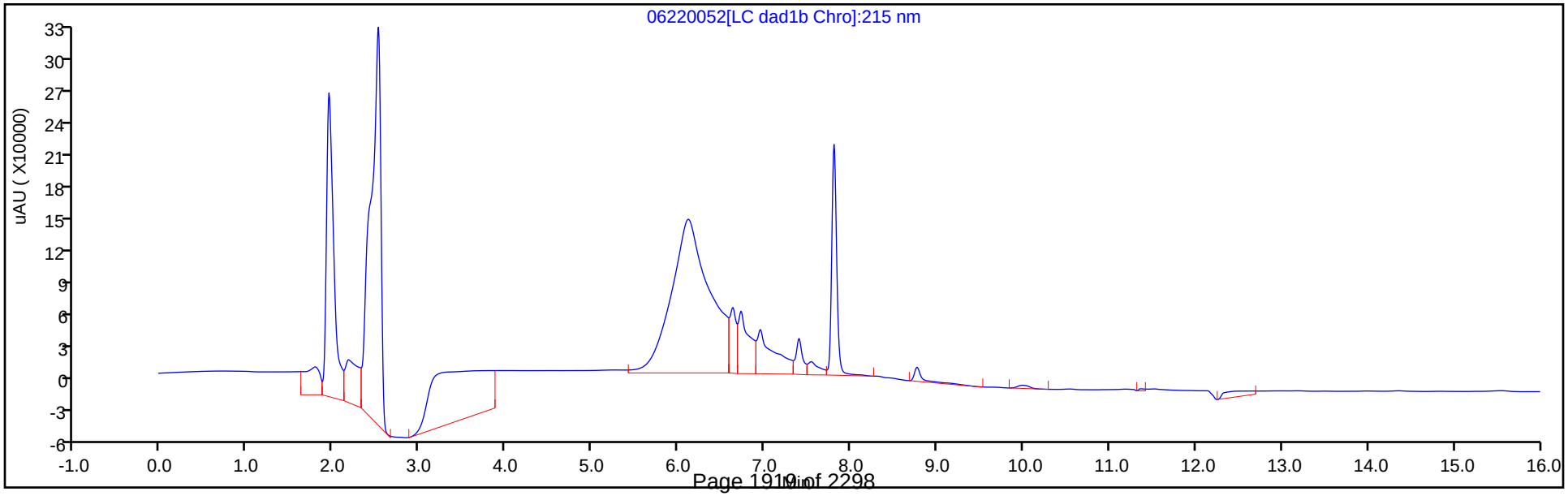
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d				
Injection Date:	23-Jun-2020 07:22:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-B-9-B MSD			Worklist Smp#:	52
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200620-92608.b\06220052.D				
Lims ID:	280-137609-B-9-B MSD				
Client ID:	G0102-20A				
Sample Type:	MSD				
Inject. Date:	23-Jun-2020 07:22:10	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137609-B-9-B				
Misc. Info.:	280-0092608-052				
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 15:18:12	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 14:57:13		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2027	101.34

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

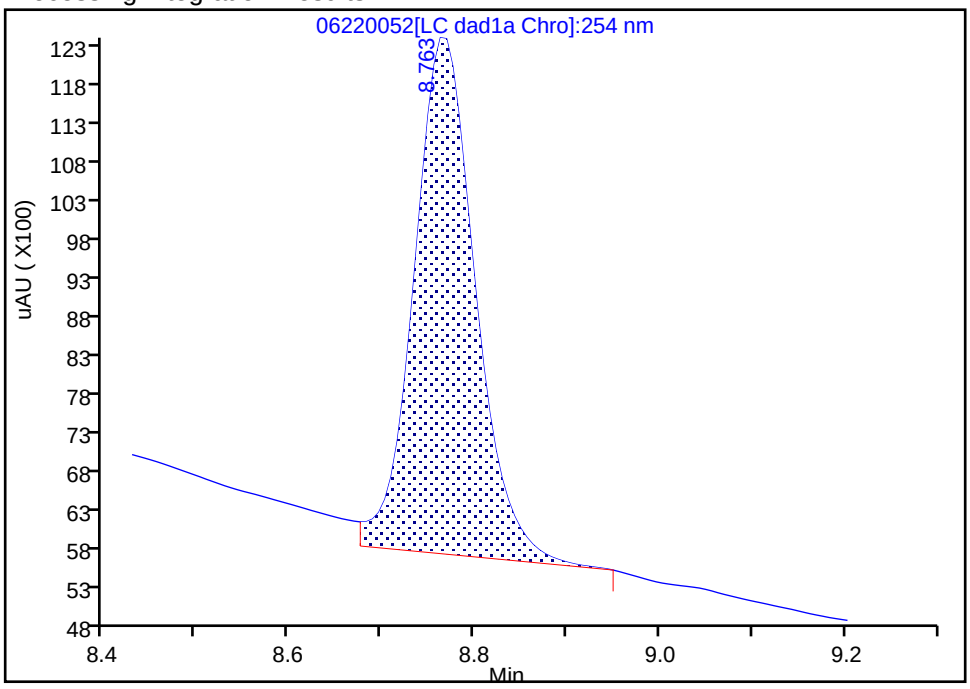
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d				
Injection Date:	23-Jun-2020 07:22:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

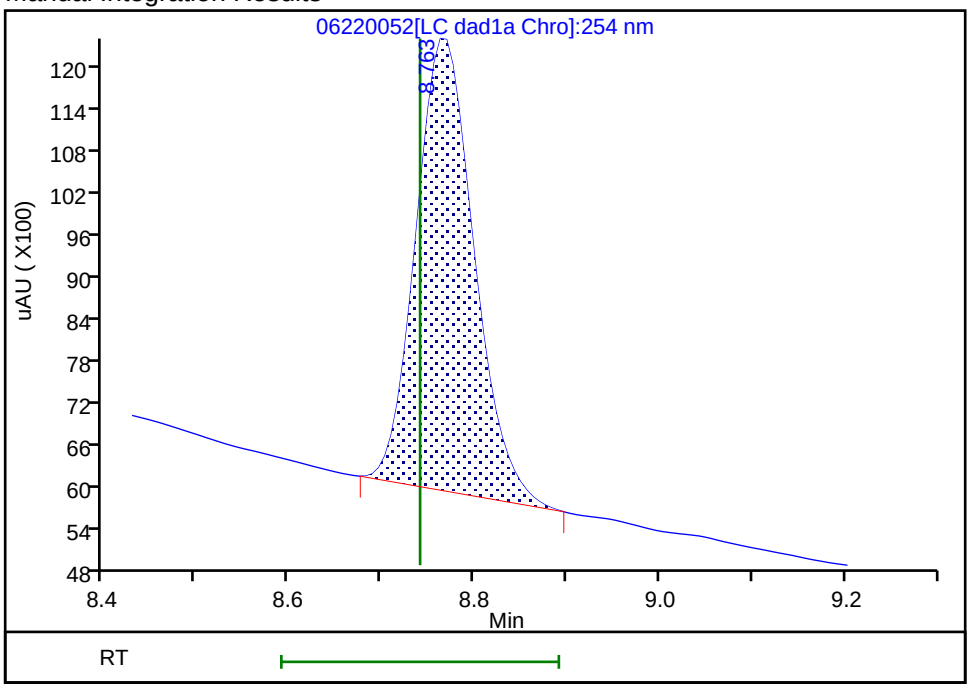
Processing Integration Results

RT: 8.76
Area: 30463
Amount: 0.220407
Amount Units: ug/mL



Manual Integration Results

RT: 8.76
Area: 28013
Amount: 0.202681
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:57:05

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

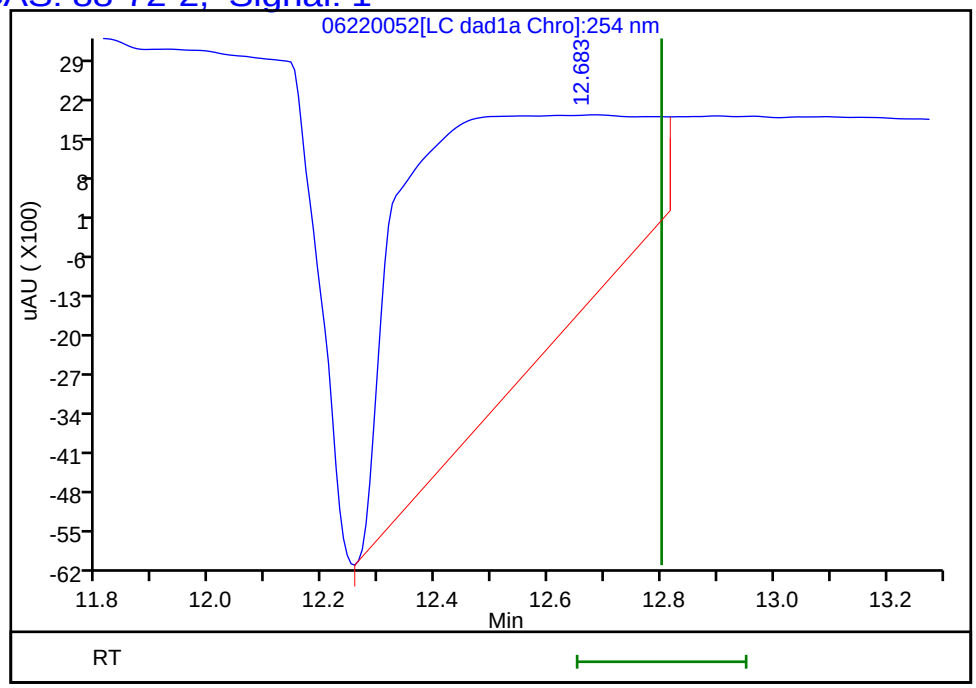
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d
Injection Date: 23-Jun-2020 07:22:10 Instrument ID: CHHPLC_X3
Lims ID: 280-137609-B-9-B MSD
Client ID: G0102-20A
Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.68
Response: 135931
Amount: 1.006517



Reviewer: zhangji, 23-Jun-2020 14:57:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

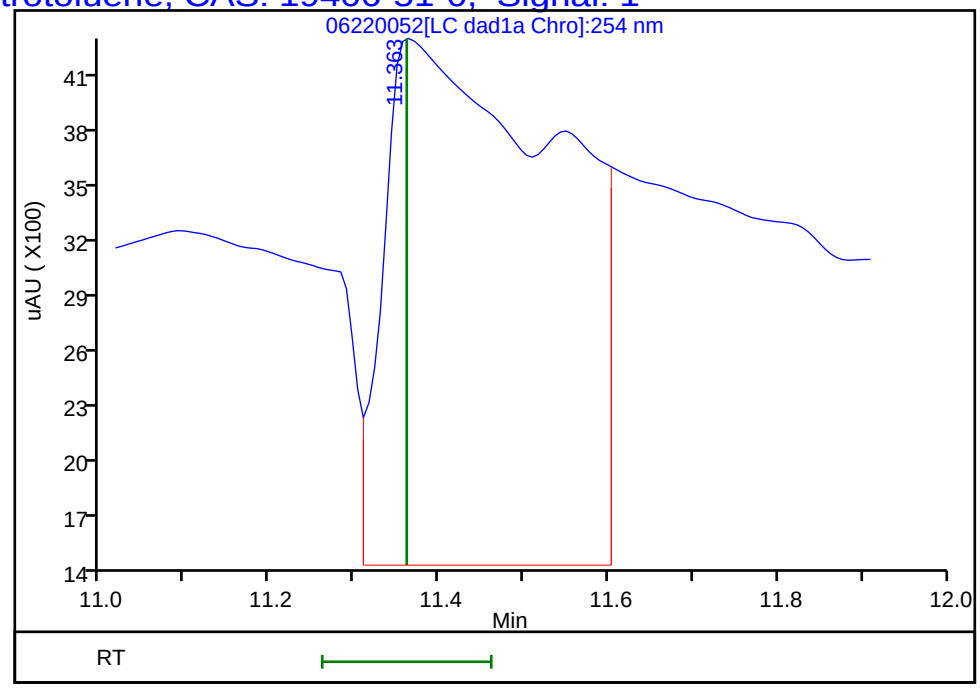
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d
Injection Date: 23-Jun-2020 07:22:10 Instrument ID: CHHPLC_X3
Lims ID: 280-137609-B-9-B MSD
Client ID: G0102-20A
Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.36
Response: 39362
Amount: 0.227196



Reviewer: zhangji, 23-Jun-2020 14:57:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

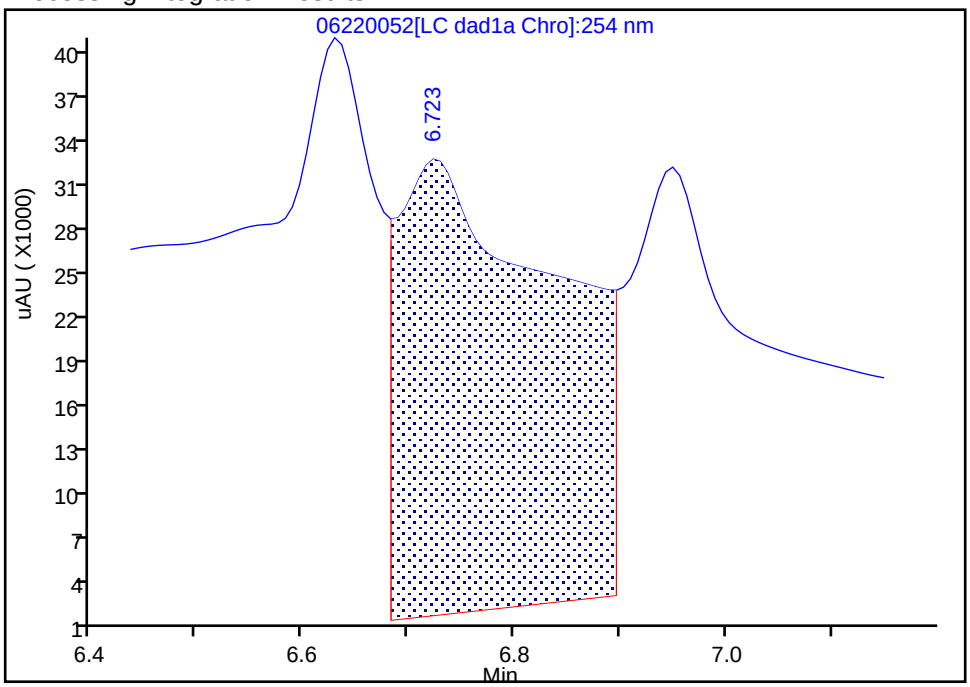
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d				
Injection Date:	23-Jun-2020 07:22:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

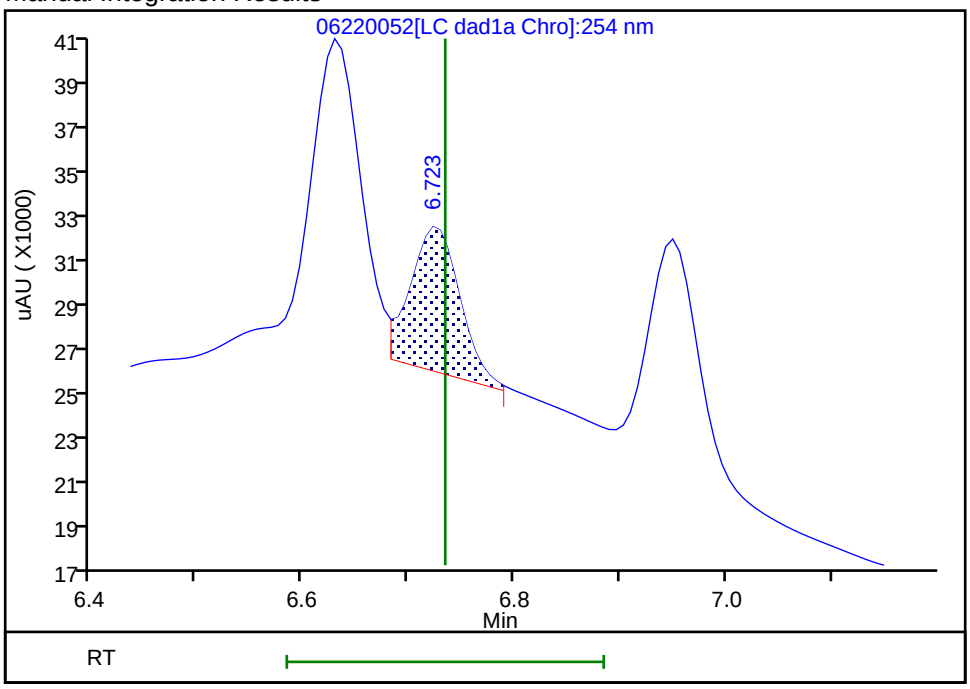
Processing Integration Results

RT: 6.72
Area: 309513
Amount: 3.600572
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 19934
Amount: 0.231893
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:56:44
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

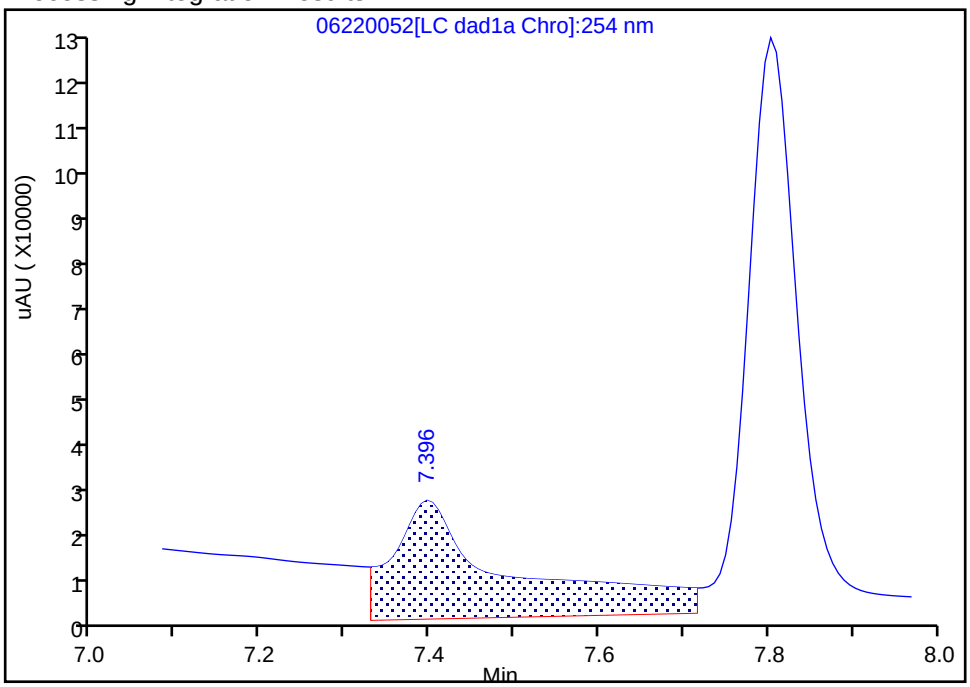
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d				
Injection Date:	23-Jun-2020 07:22:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

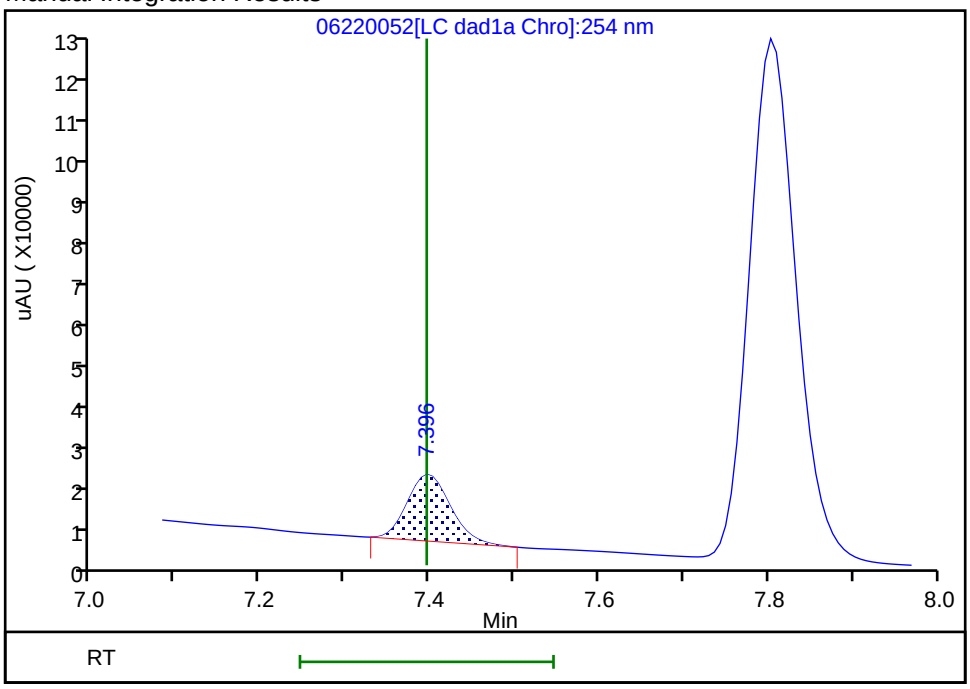
Processing Integration Results

RT: 7.40
Area: 228404
Amount: 1.440633
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 49935
Amount: 0.314959
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:56:56

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

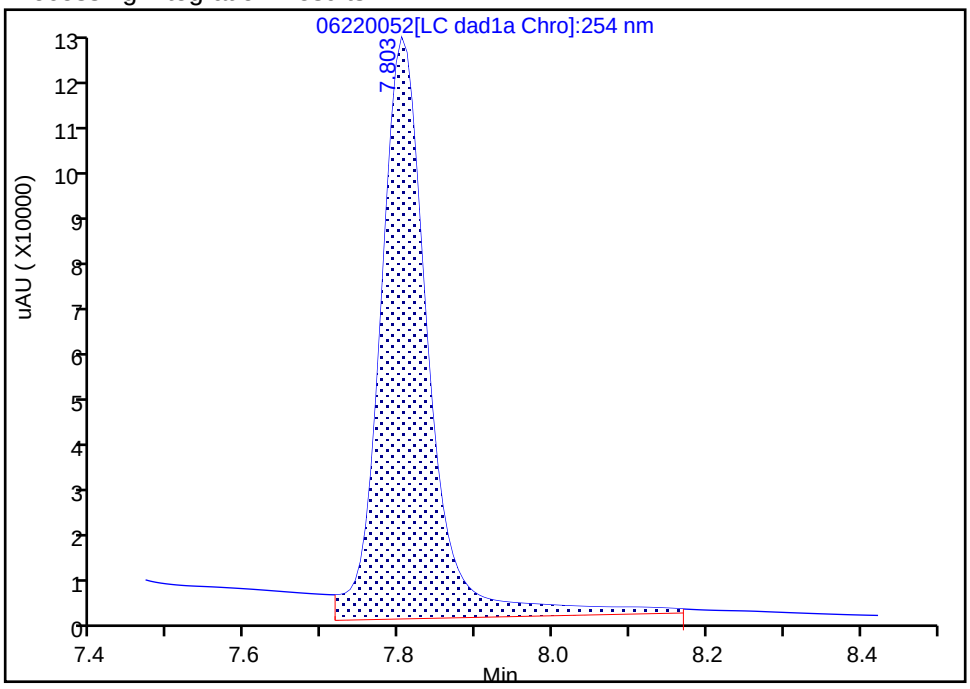
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200620-92608.b\06220052.d				
Injection Date:	23-Jun-2020 07:22:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-B-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

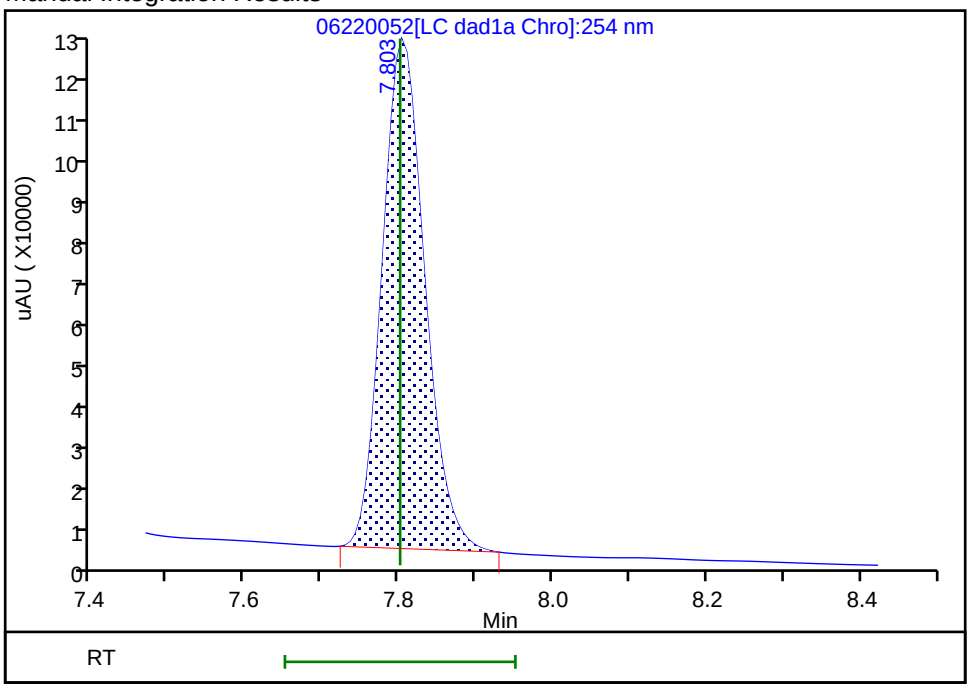
Processing Integration Results

RT: 7.80
Area: 499790
Amount: 4.285883
Amount Units: ug/mL



Manual Integration Results

RT: 7.80
Area: 421895
Amount: 3.617905
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 14:57:01

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Client Sample ID: G0102-20A MSD DL Lab Sample ID: 280-137609-9 MSD DL

Matrix: Water Lab File ID: 06230012.D

Analysis Method: 8330A Date Collected: 06/11/2020 15:15

Extraction Method: 3535 Date Extracted: 06/17/2020 17:11

Sample wt/vol: 467(mL) Date Analyzed: 06/23/2020 20:35

Con. Extract Vol.: 5(mL) Dilution Factor: 10

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 499863 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	41.4	D 4	2.2	2.1	0.55

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111	D	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\06230012.D
Lims ID: 280-137609-A-9-B MSD
Client ID: G0102-20A
Sample Type: MSD
Inject. Date: 23-Jun-2020 20:35:41 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 10.0000
Sample Info: 280-137609-A-9-B
Misc. Info.: 280-0092681-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2020 16:26:11 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: CTX1068

First Level Reviewer: zhangji Date: 23-Jun-2020 21:34:02

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1	2,6-diamino-4-nitrotoluene	1		6.576				ND	U
2	TNX	1		6.627				ND	
3	HMX	1	6.720	6.723	-0.003	3623	0.2000	0.0421	M
4	2,4-diamino-6-nitrotoluene	1		6.763				ND	
5	DNX	1		6.947				ND	
6	MNX	1	7.387	7.394	-0.007	2751		0.0174	
7	RDX	1	7.787	7.790	-0.003	45137	0.2000	0.3871	
8	2,4,6-Trinitrophenol	1	8.093	8.090	0.003	2005	0.2000	0.0236	
$ 9	1,2-Dinitrobenzene	1	8.733	8.736	-0.003	3064	0.2000	0.0222	
10	1,3,5-Trinitrobenzene	1	8.913	8.923	-0.010	5563	0.2000	0.0242	
11	1,3-Dinitrobenzene	1	9.553	9.570	-0.017	6891	0.2000	0.0225	
12	Nitrobenzene	1	9.920	9.943	-0.023	4686	0.2000	0.0234	
13	3,5-Dinitroaniline	1		10.170				ND	
14	Tetryl	1	10.207	10.236	-0.029	3698	0.2000	0.0209	
15	Nitroglycerin	2	10.713	10.750	-0.037	12794	2.00	0.1878	
16	2,4,6-Trinitrotoluene	1	11.173	11.203	-0.030	5080	0.2000	0.0249	
17	4-Amino-2,6-dinitrotoluene	1	11.327	11.363	-0.036	2290	0.2000	0.0194	
18	2-Amino-4,6-dinitrotoluene	1	11.613	11.656	-0.043	3814	0.2000	0.0188	M
19	2,6-Dinitrotoluene	1	11.747	11.790	-0.043	3260	0.2000	0.0218	Ma
20	2,4-Dinitrotoluene	1	11.953	11.990	-0.037	6054	0.2000	0.0199	
21	o-Nitrotoluene	1	12.760	12.796	-0.036	2686	0.2000	0.0199	
22	p-Nitrotoluene	1	13.187	13.223	-0.036	1785	0.2000	0.0158	
23	m-Nitrotoluene	1	13.767	13.803	-0.036	2899	0.2000	0.0203	
24	PETN	2	14.807	14.843	-0.036	17619	2.00	0.2241	M
25	Ammonium Picrate	1		0.000				ND	
26	Triamine Trinitrobenzene	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

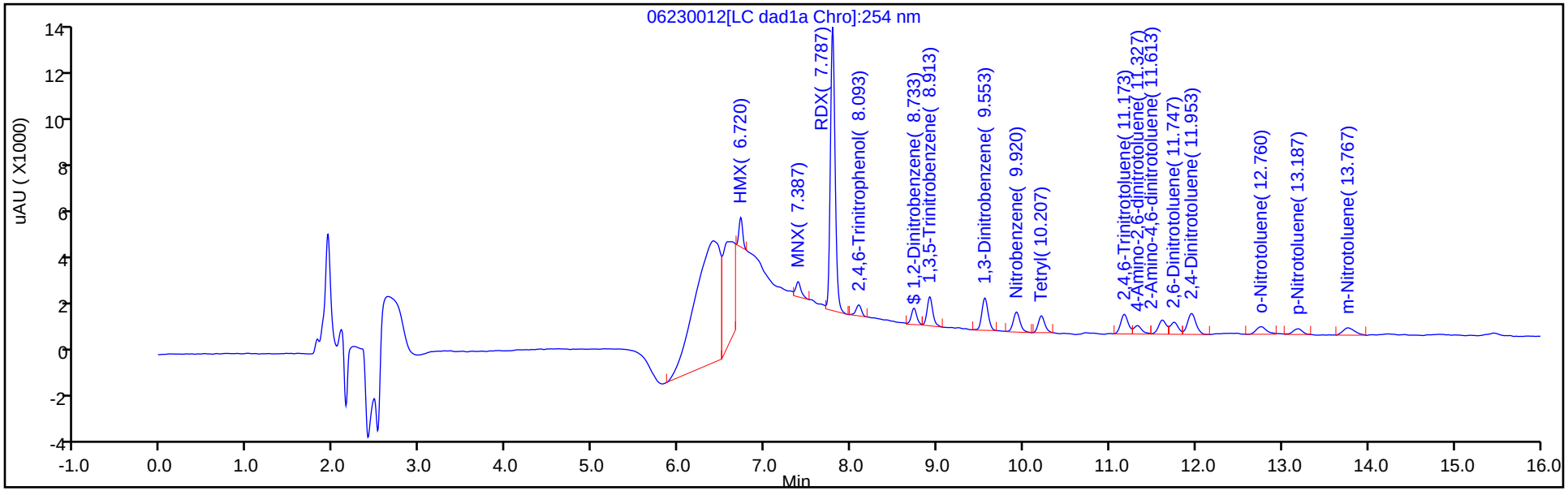
Report Date: 24-Jun-2020 16:26:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

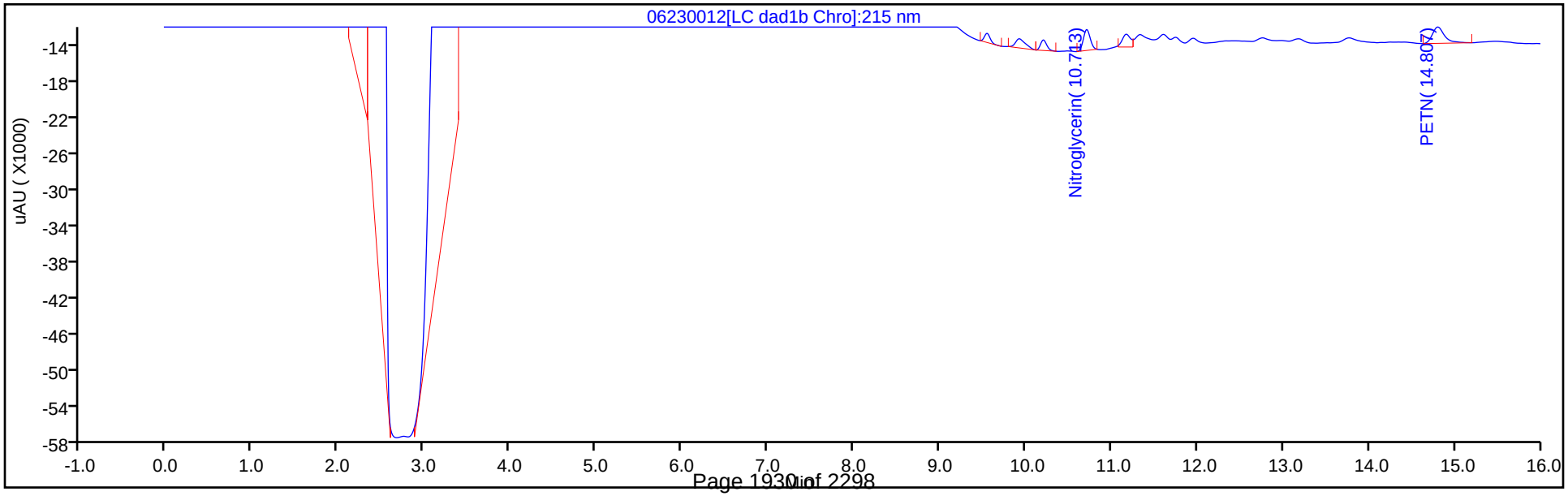
Data File: \\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230012.d

Injection Date:	23-Jun-2020 20:35:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137609-A-9-B MSD			Worklist Smp#:	12
Client ID:	G0102-20A				
Injection Vol:	100.0 ul	Dil. Factor:	10.0000	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\20200623-92681.b\06230012.D				
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Sample Type:	MSD				
Inject. Date:	23-Jun-2020 20:35:41	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-137609-A-9-B				
Misc. Info.:	280-0092681-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200623-92681.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2020 16:26:11	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:	CTX1068				
First Level Reviewer: zhangji		Date:	23-Jun-2020 21:34:02		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0222	11.08

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

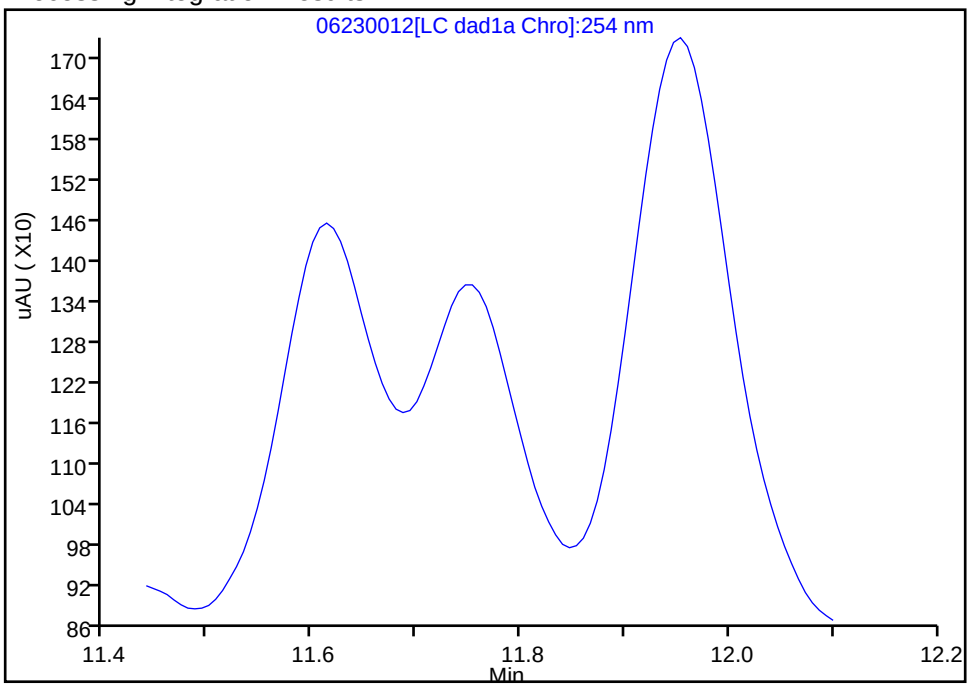
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230012.d				
Injection Date:	23-Jun-2020 20:35:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Method:	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

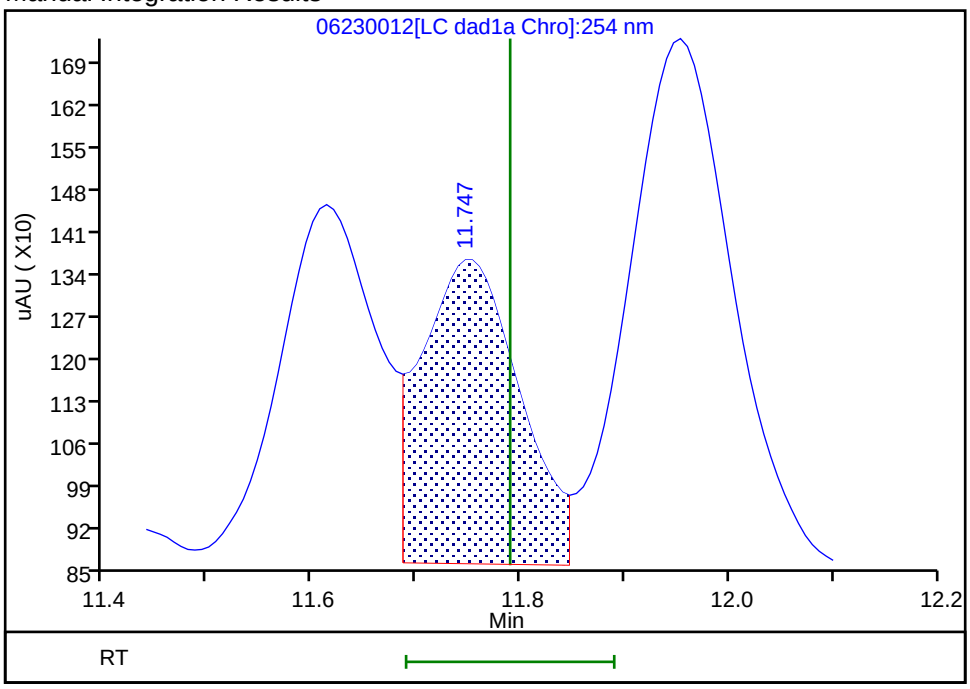
Not Detected
Expected RT: 11.79

Processing Integration Results



Manual Integration Results

RT: 11.75
Area: 3260
Amount: 0.021813
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 21:33:51
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

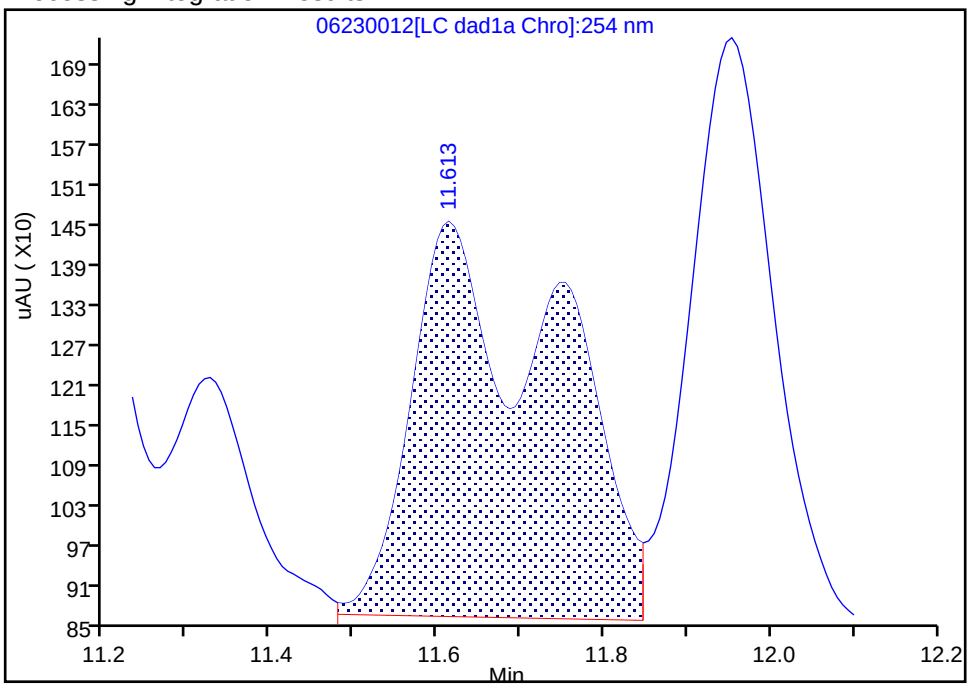
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230012.d				
Injection Date:	23-Jun-2020 20:35:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Method:	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

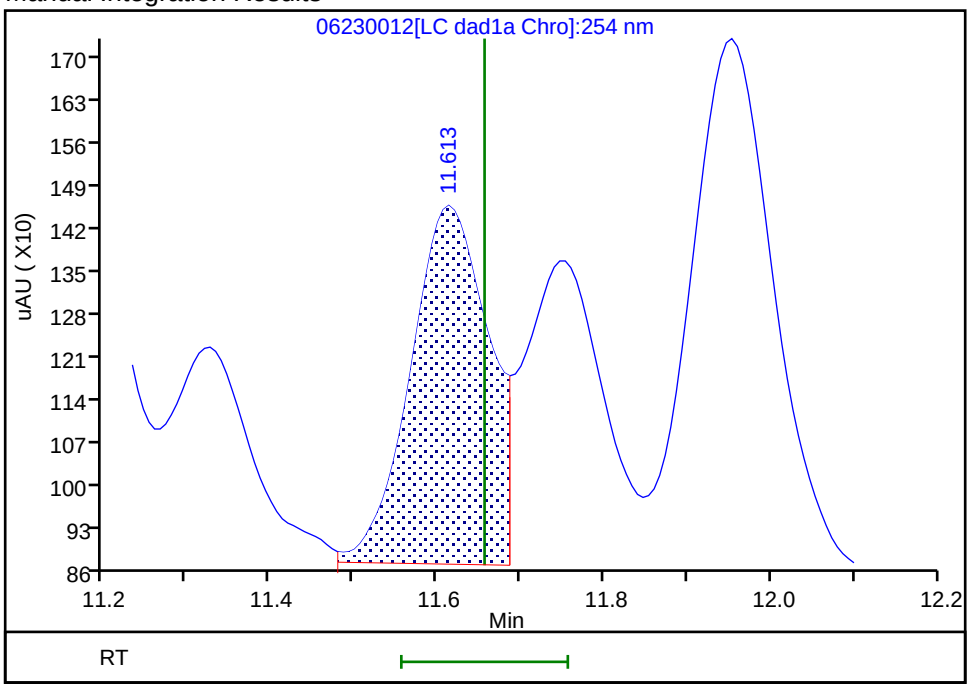
Processing Integration Results

RT: 11.61
Area: 7076
Amount: 0.034889
Amount Units: ug/mL



Manual Integration Results

RT: 11.61
Area: 3814
Amount: 0.018805
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 21:33:48
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

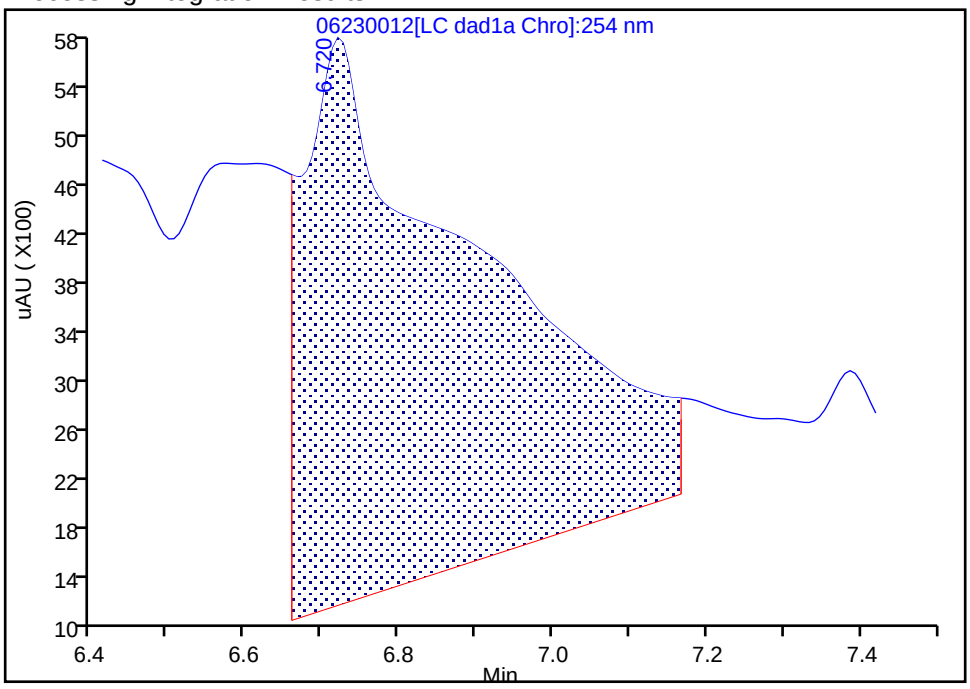
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200623-92681.b\06230012.d				
Injection Date:	23-Jun-2020 20:35:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137609-A-9-B MSD				
Client ID:	G0102-20A				
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	10.0000		
Method:	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

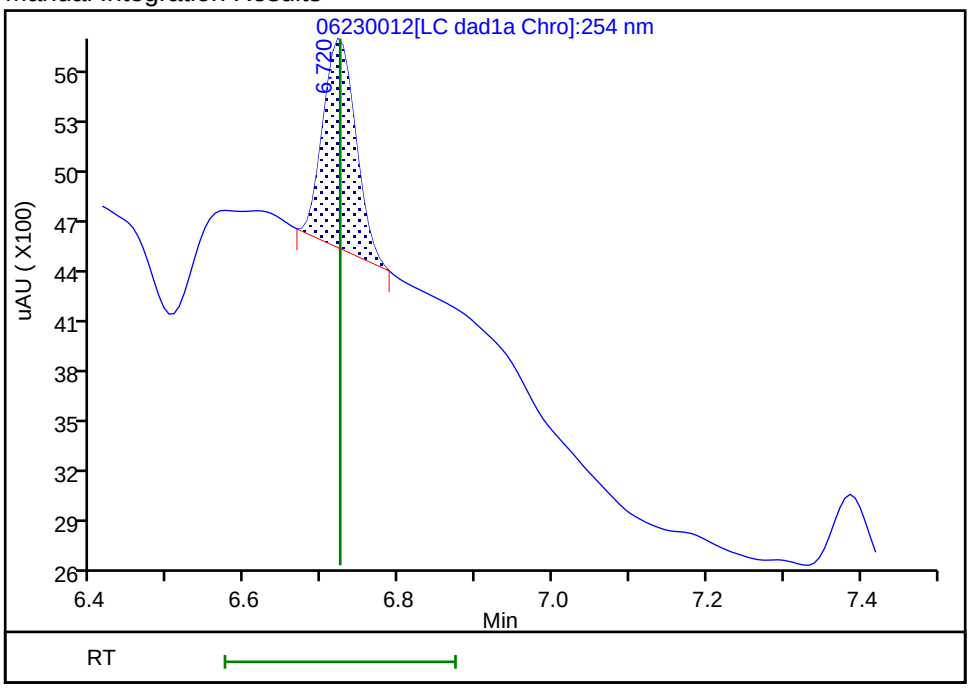
Processing Integration Results

RT: 6.72
Area: 72281
Amount: 0.840847
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 3623
Amount: 0.042146
Amount Units: ug/mL



Reviewer: zhangji, 23-Jun-2020 21:33:32
Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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.: 280-137609-1

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)
280-137609-2		06/22/2020 17:11	1	06220015.D	UltraCarb5uODS 4.6(mm)
280-137609-3		06/22/2020 17:34	1	06220016.D	UltraCarb5uODS 4.6(mm)
280-137609-4		06/22/2020 17:56	1	06220017.D	UltraCarb5uODS 4.6(mm)
280-137609-5		06/22/2020 18:19	1	06220018.D	UltraCarb5uODS 4.6(mm)
280-137609-6		06/22/2020 18:42	1	06220019.D	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)
280-137609-7		06/22/2020 19:51	1	06220022.D	UltraCarb5uODS 4.6(mm)
280-137609-8		06/22/2020 20:14	1	06220023.D	UltraCarb5uODS 4.6(mm)
280-137609-13		06/22/2020 20:37	1	06220024.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 21:00	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 21:23	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 21:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 22:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 22:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/22/2020 22:55	1		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.: 280-137609-1

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)
280-137609-1		06/23/2020 03:09	1	06220041.D	UltraCarb5uODS 4.6(mm)
280-137609-1 MS		06/23/2020 03:32	1	06220042.D	UltraCarb5uODS 4.6(mm)
280-137609-1 MSD		06/23/2020 03:55	1	06220043.D	UltraCarb5uODS 4.6(mm)
280-137609-1 MS		06/23/2020 04:18	1	06220044.D	UltraCarb5uODS 4.6(mm)
280-137609-1 MSD		06/23/2020 04:41	1	06220045.D	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)
280-137609-9		06/23/2020 05:50	1	06220048.D	UltraCarb5uODS 4.6(mm)
280-137609-9 MS		06/23/2020 06:13	1	06220049.D	UltraCarb5uODS 4.6(mm)
280-137609-9 MSD		06/23/2020 06:36	1	06220050.D	UltraCarb5uODS 4.6(mm)
280-137609-9 MS		06/23/2020 06:59	1	06220051.D	UltraCarb5uODS 4.6(mm)
280-137609-9 MSD		06/23/2020 07:22	1	06220052.D	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)
ZZZZZ		06/23/2020 08:31	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 08:54	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 09:17	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 09:40	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 10:03	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 10:26	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 10:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/23/2020 11:12	1		UltraCarb5uODS 4.6(mm)
CCV 280-499532/63		06/23/2020 11:35	1		UltraCarb5uODS 4.6(mm)
CCV 280-499532/64		06/23/2020 11:58	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	06230022.D	Luna-phenylhex 4.6(mm)
CCV 280-499860/23		06/24/2020 05:26	1	06230023.D	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)
280-137609-2		06/24/2020 08:56	1	06230029.D	Luna-phenylhex 4.6(mm)
280-137609-3		06/24/2020 09:31	1	06230030.D	Luna-phenylhex 4.6(mm)
280-137609-4		06/24/2020 10:06	1	06230031.D	Luna-phenylhex 4.6(mm)
280-137609-5		06/24/2020 10:41	1	06230032.D	Luna-phenylhex 4.6(mm)
280-137609-6		06/24/2020 11:16	1	06230033.D	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)
280-137609-8		06/24/2020 13:01	1	06230036.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 13:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 14:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 14:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/24/2020 15:20	1		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.: 280-137609-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/23/2020 18:40

Analysis Batch Number: 499863 End Date: 06/23/2020 21:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-499863/7		06/23/2020 18:40	1	06230007.D	UltraCarb5uODS 4.6(mm)
CCV 280-499863/8		06/23/2020 19:03	1		UltraCarb5uODS 4.6(mm)
CCV 280-499863/9		06/23/2020 19:26	1	06230009.D	UltraCarb5uODS 4.6(mm)
280-137609-9 DL		06/23/2020 19:49	10	06230010.D	UltraCarb5uODS 4.6(mm)
280-137609-9 MS DL		06/23/2020 20:12	10	06230011.D	UltraCarb5uODS 4.6(mm)
280-137609-9 MSD DL		06/23/2020 20:35	10	06230012.D	UltraCarb5uODS 4.6(mm)
CCV 280-499863/15		06/23/2020 20:58	1	06230015.D	UltraCarb5uODS 4.6(mm)
CCV 280-499863/16		06/23/2020 21:21	1	06230016.D	UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	06240007.D	Luna-phenylhex 4.6(mm)
CCV 280-500016/8		06/24/2020 22:31	1	06240008.D	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)
280-137609-9		06/25/2020 00:51	1	06240012.D	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)
280-137609-9 DL		06/25/2020 04:55	10	06240019.D	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)
ZZZZZ		06/25/2020 06:40	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 07:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 07:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 08:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 09:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/25/2020 09:34	1		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)

8330A

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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-2	PZ012-20A	3535, 8330A	T	725.8 g	257.9 g	467.9 mL	5 mL		
280-137609-A-3	G0105-20A	3535, 8330A	T	725.9 g	251.1 g	474.8 mL	5 mL		
280-137609-A-4	G0080-20A	3535, 8330A	T	732.8 g	253.8 g	479 mL	5 mL		
280-137609-A-5	PZ005-20A	3535, 8330A	T	732.4 g	250.5 g	481.9 mL	5 mL		
280-137609-A-6	NW052-20A	3535, 8330A	T	731.4 g	254.3 g	477.1 mL	5 mL		
280-137609-A-7	G0045-20A	3535, 8330A	T	725.4 g	250.6 g	474.8 mL	5 mL		
280-137609-A-8	G0017-20A	3535, 8330A	T	730.8 g	254.7 g	476.1 mL	5 mL		
280-137609-A-13	SOURCE 2020	3535, 8330A	T	725.8 g	247.5 g	478.3 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-2	PZ012-20A	3535, 8330A	T	0.1 mL					
280-137609-A-3	G0105-20A	3535, 8330A	T	0.1 mL					
280-137609-A-4	G0080-20A	3535, 8330A	T	0.1 mL					
280-137609-A-5	PZ005-20A	3535, 8330A	T	0.1 mL					
280-137609-A-6	NW052-20A	3535, 8330A	T	0.1 mL					
280-137609-A-7	G0045-20A	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.: 280-137609-1

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	8330Surrogate 00113	AnalysisComment				
280-137609-A-8	G0017-20A	3535, 8330A	T	0.1 mL					
280-137609-A-13	SOURCE 2020	3535, 8330A	T	0.1 mL					

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.: 280-137609-1

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-1	PZ007-20A	3535, 8330A	T	719.6 g	249.5 g	470.1 mL	5 mL		
280-137609-A-1 MS	PZ007-20A	3535, 8330A	T	717.0 g	250.3 g	466.7 mL	5 mL	0.1 mL	
280-137609-A-1 MSD	PZ007-20A	3535, 8330A	T	717.7 g	249.3 g	468.4 mL	5 mL	0.1 mL	
280-137609-B-1 MS	PZ007-20A	3535, 8330A	T	710.5 g	250.3 g	460.2 mL	5 mL		0.1 mL
280-137609-B-1 MSD	PZ007-20A	3535, 8330A	T	714.7 g	251.9 g	462.8 mL	5 mL		0.1 mL
280-137609-J-9	G0102-20A	3535, 8330A	T	702.0 g	248.1 g	453.9 mL	5 mL		
280-137609-A-9 MS	G0102-20A	3535, 8330A	T	705.8 g	248.7 g	457.1 mL	5 mL	0.1 mL	
280-137609-A-9 MSD	G0102-20A	3535, 8330A	T	715.1 g	248.1 g	467 mL	5 mL	0.1 mL	
280-137609-B-9 MS	G0102-20A	3535, 8330A	T	719.8 g	250.1 g	469.7 mL	5 mL		0.1 mL
280-137609-B-9 MSD	G0102-20A	3535, 8330A	T	716.8 g	255.3 g	461.5 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00115					
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-1	PZ007-20A	3535, 8330A	T	0.1 mL					
280-137609-A-1 MS	PZ007-20A	3535, 8330A	T	0.1 mL					
280-137609-A-1 MSD	PZ007-20A	3535, 8330A	T	0.1 mL					
280-137609-B-1 MS	PZ007-20A	3535, 8330A	T	0.1 mL					
280-137609-B-1 MSD	PZ007-20A	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.: 280-137609-1

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	8330Surrogate 00115					
280-137609-J-9	G0102-20A	3535, 8330A	T	0.1 mL					
280-137609-A-9 MS	G0102-20A	3535, 8330A	T	0.1 mL					
280-137609-A-9 MSD	G0102-20A	3535, 8330A	T	0.1 mL					
280-137609-B-9 MS	G0102-20A	3535, 8330A	T	0.1 mL					
280-137609-B-9 MSD	G0102-20A	3535, 8330A	T	0.1 mL					

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: 280-137609-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
PZ007-20A	280-137609-1
PZ012-20A	280-137609-2
G0105-20A	280-137609-3
G0080-20A	280-137609-4
PZ005-20A	280-137609-5
NW052-20A	280-137609-6
G0045-20A	280-137609-7
G0017-20A	280-137609-8
G0102-20A	280-137609-9
SHGW03-20A	280-137609-10
SHGW02-20A	280-137609-11
SHGW05-20A	280-137609-12

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ007-20A
Lab Sample ID: 280-137609-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 08:50
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.042	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	0.71	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	0.96	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U	J1	1	9034
Sulfate	580	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	410	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ007-20A
Lab Sample ID: 280-137609-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 08:50
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.1	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ012-20A
Lab Sample ID: 280-137609-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/10/2020 15:45
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.6	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.6	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.081	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	360	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	630	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ012-20A
Lab Sample ID: 280-137609-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/10/2020 15:45
Reporting Basis: WET
Date Received: 06/12/2020 09:00

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: G0105-20A
Lab Sample ID: 280-137609-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 13:35
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.94	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.7	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	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	1100	50	30	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	480	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0105-20A
Lab Sample ID: 280-137609-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 13:35
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.3	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0080-20A
Lab Sample ID: 280-137609-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 13:45
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.83	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.97	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	2.9	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	87	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	310	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0080-20A
Lab Sample ID: 280-137609-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 13:45
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.8	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ005-20A
Lab Sample ID: 280-137609-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 12:00
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.024	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	0.81	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	11	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	1400	50	30	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	620	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ005-20A
Lab Sample ID: 280-137609-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 12:00
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.9	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW052-20A
Lab Sample ID: 280-137609-6
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/10/2020 15:50
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.031	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.052	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.6	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	140	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	320	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW052-20A
Lab Sample ID: 280-137609-6
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/10/2020 15:50
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.6	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0045-20A
Lab Sample ID: 280-137609-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 12:10
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.4	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.3	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	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	1200	50	30	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	420	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0045-20A
Lab Sample ID: 280-137609-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 12:10
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.1	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0017-20A
Lab Sample ID: 280-137609-8
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 11:00
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.12	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		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	8.0	4.0	1.9	0.79	mg/L			1	9034
Sulfate	340	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	410	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0017-20A
Lab Sample ID: 280-137609-8
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 11:00
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.1	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0102-20A
Lab Sample ID: 280-137609-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 15:15
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.072	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	3.9	0.10	0.050	0.019	mg/L		J1	1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U	J1	1	9034
Sulfate	1100	50	30	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	430	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0102-20A
Lab Sample ID: 280-137609-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 15:15
Reporting Basis: WET
Date Received: 06/12/2020 09:00

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: SHGW03-20A
Lab Sample ID: 280-137609-10
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 10:15
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	1.9	0.10	0.050	0.019	mg/L			1	353.2
Sulfate	39	25	15	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	160	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW02-20A
Lab Sample ID: 280-137609-11
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 08:55
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.022	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfate	13	25	15	5.2	mg/L	J	D	5	9056A
Total Alkalinity as CaCO3	160	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW05-20A
Lab Sample ID: 280-137609-12
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137609-1
SDG ID.:
Matrix: Water
Date Sampled: 06/11/2020 08:00
Reporting Basis: WET
Date Received: 06/12/2020 09:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfate	12	25	15	5.2	mg/L	J	D	5	9056A
Total Alkalinity as CaCO3	160	10	10	3.1	mg/L			1	SM 2320B

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
14	ICVL	13:00	Ammonia	0.539	0.501	108	90-110		350.1 ICV_00407
15	ICV	13:02	Ammonia	2.53	2.51	101	90-110		350.1 ICV_00407
16	ICB	13:04	Ammonia	0.050				U	
32	CCVL	13:36	Ammonia	0.489	0.500	98	90-110		350.1 cal_00419
33	CCV	13:38	Ammonia	2.50	2.50	100	90-110		350.1 cal_00419
34	CCB	13:40	Ammonia	0.050				U	
48	CCVL	14:08	Ammonia	0.485	0.500	97	90-110		350.1 cal_00419
49	CCV	14:10	Ammonia	2.51	2.50	100	90-110		350.1 cal_00419
50	CCB	14:12	Ammonia	0.050				U	
64	CCVL	14:40	Ammonia	0.486	0.500	97	90-110		350.1 cal_00419
65	CCV	14:42	Ammonia	2.50	2.50	100	90-110		350.1 cal_00419
66	CCB	14:44	Ammonia	0.050				U	
96	CCVL	15:48	Ammonia	0.493	0.500	99	90-110		350.1 cal_00419
97	CCV	15:50	Ammonia	2.51	2.50	101	90-110		350.1 cal_00419
98	CCB	15:52	Ammonia	0.050				U	
103	CCVL	16:02	Ammonia	0.502	0.500	100	90-110		350.1 cal_00419
104	CCV	16:04	Ammonia	2.52	2.50	101	90-110		350.1 cal_00419
105	CCB	16:06	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.: 280-137609-1

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
13	ICV	16:10	Nitrogen, Total Kjeldahl	5.15	5.00	103	90-110		TKN ICV 25_00094
14	ICB	16:11	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	16:32	Nitrogen, Total Kjeldahl	4.99	5.00	100	90-110		TKN 25ppm_00809
32	CCB	16:34	Nitrogen, Total Kjeldahl	1.0				U	
49	CCV	16:55	Nitrogen, Total Kjeldahl	5.07	5.00	101	90-110		TKN 25ppm_00809
50	CCB	16:56	Nitrogen, Total Kjeldahl	1.0				U	
65	CCV	17:15	Nitrogen, Total Kjeldahl	5.17	5.00	103	90-110		TKN 25ppm_00809
66	CCB	17:16	Nitrogen, Total Kjeldahl	1.0				U	
129	CCV	18:35	Nitrogen, Total Kjeldahl	5.36	5.00	107	90-110		TKN 25ppm_00809
130	CCB	18:36	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.: 280-137609-1

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
17	ICV	16:35	Nitrate Nitrite as N	4.88	5.00	98	90-110		NXN ICV INT_00516
18	ICVL	16:37	Nitrate Nitrite as N	1.97	2.00	98	90-110		NXN ICV INT_00516
19	ICB	16:39	Nitrate Nitrite as N	0.050				U	
35	CCV	17:11	Nitrate Nitrite as N	5.01	5.00	100	90-110		NXN CAL INT_00535
36	CCVL	17:13	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00535
37	CCB	17:15	Nitrate Nitrite as N	0.050				U	
52	CCVL	17:45	Nitrate Nitrite as N	1.05	1.00	105	90-110		NXN CAL INT_00535
53	CCB	17:47	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.: 280-137609-1

SDG No.:

Analyst: JAP Batch Start Date: 06/03/2020

Reporting Units: mg/L Analytical Batch No.: 497185

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	11:46	Sulfate	80.6	80.0	101	90-110		IC SO4 ICV_00021
9	ICB	12:03	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.: 280-137609-1

SDG No.:

Analyst: JAP Batch Start Date: 06/25/2020

Reporting Units: mg/L Analytical Batch No.: 500081

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:35	Sulfate	98.4	100	98	90-110		IC LCS_01746
2	CCB	09:51	Sulfate	2.5				U	
17	CCV	19:29	Sulfate	98.1	100	98	90-110		IC LCS_01746
18	CCB	19:46	Sulfate	2.5				U	
29	CCV	22:46	Sulfate	97.8	100	98	90-110		IC LCS_01746
30	CCB	23:03	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.: 280-137609-1

SDG No.:

Analyst: JAP Batch Start Date: 06/29/2020

Reporting Units: mg/L Analytical Batch No.: 500465

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:54	Sulfate	97.2	100	97	90-110		IC LCS_01747
2	CCB	10:10	Sulfate	2.5				U	
17	CCV	17:31	Sulfate	98.4	100	98	90-110		IC LCS_01747
18	CCB	17:47	Sulfate	2.5				U	
29	CCV	20:48	Sulfate	98.5	100	99	90-110		IC LCS_01747
30	CCB	21:04	Sulfate	2.5				U	
41	CCV	00:05	Sulfate	98.9	100	99	90-110		IC LCS_01747
42	CCB	00:21	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.: 280-137609-1

SDG No.:

Analyst: SGB Batch Start Date: 06/26/2020

Reporting Units: mg/L Analytical Batch No.: 500423

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:25	Dissolved Organic Carbon - Quad	19.8	20.0	99	90-110		TOC ICV Std_00043
2	ICB	18:48	Dissolved Organic Carbon - Quad	1.0				U	
15	CCV	00:00	Dissolved Organic Carbon - Quad	25.9	25.0	104	90-110		TOC LCS Std_00048
16	CCB	00:27	Dissolved Organic Carbon - Quad	1.0				U	
27	CCV	05:03	Dissolved Organic Carbon - Quad	26.3	25.0	105	90-110		TOC LCS Std_00048
28	CCB	05:26	Dissolved Organic Carbon - Quad	1.0				U	
39	CCV	15:53	Dissolved Organic Carbon - Quad	26.3	25.0	105	90-110		TOC LCS Std_00048
40	CCB	16:15	Dissolved Organic Carbon - Quad	1.0				U	
51	CCV	20:46	Dissolved Organic Carbon - Quad	26.4	25.0	105	90-110		TOC LCS Std_00048
52	CCB	21:09	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.: 280-137609-1

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
28	CCV	12:58	Total Alkalinity as CaCO3	186	200	93	90-110		Alk daily lcs 00907
29	CCB	13:04	Total Alkalinity as CaCO3	10				U	
42	CCV	14:30	Total Alkalinity as CaCO3	183	200	92	90-110		Alk daily lcs 00907
43	CCB	14:35	Total Alkalinity as CaCO3	10				U	
55	CCV	15:56	Total Alkalinity as CaCO3	182	200	91	90-110		Alk daily lcs 00907
56	CCB	16:02	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.: 280-137609-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 498989 Date: 06/16/2020 13:10							
350.1	MB 280-498989/19	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 498989 Date: 06/16/2020 14:26							
350.1	MB 280-498989/57	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 499501 Date: 06/19/2020 16:14 Prep Batch: 499167 Date: 06/17/2020 16:38							
351.2	MB 280-499167/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 499501 Date: 06/19/2020 17:05 Prep Batch: 499167 Date: 06/17/2020 16:38							
351.2	MB 280-499167/28-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 499351 Date: 06/18/2020 16:45							
353.2	MB 280-499351/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 498939 Date: 06/16/2020 11:50 Prep Batch: 498938 Date: 06/16/2020 11:47							
9034	MB 280-498938/2-A	Sulfide	0.800	J	mg/L	4.0	1
Batch ID: 499241 Date: 06/18/2020 10:56 Prep Batch: 499239 Date: 06/18/2020 10:52							
9034	MB 280-499239/2-A	Sulfide	0.800	J	mg/L	4.0	1
Batch ID: 499302 Date: 06/18/2020 14:05 Prep Batch: 499255 Date: 06/18/2020 11:38							
9034	MB 280-499255/2-A	Sulfide	0.800	J	mg/L	4.0	1
Batch ID: 500081 Date: 06/25/2020 10:57							
9056A	MB 280-500081/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 500465 Date: 06/29/2020 11:15							
9056A	MB 280-500465/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 500423 Date: 06/26/2020 19:38							
9060A	MB 280-500262/2-A	Dissolved Organic Carbon - Quad	1.0	U	mg/L	1.0	1
Batch ID: 500423 Date: 06/27/2020 14:23							
9060A	MB 280-500262/28-A	Dissolved Organic Carbon - Quad	1.0	U	mg/L	1.0	1
Batch ID: 499040 Date: 06/16/2020 13:15							
SM 2320B	MB 280-499040/31	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.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 498989	Date: 06/16/2020 14:30										
350.1	280-137609-1	Ammonia	0.042	J	mg/L						
350.1	280-137609-1 MS	Ammonia	1.03		mg/L	1.00	99	90-110			
Batch ID: 498989	Date: 06/16/2020 15:06										
350.1	280-137609-9	Ammonia	0.072	J	mg/L						
350.1	280-137609-9 MS	Ammonia	1.06		mg/L	1.00	99	90-110			
Batch ID: 499501	Date: 06/19/2020 16:41	Prep Batch: 499167	Date: 06/17/2020 16:38								
351.2	280-137609-1	Nitrogen, Total Kjeldahl	0.71	J	mg/L						
351.2	280-137609-1 MS	Nitrogen, Total Kjeldahl	3.44		mg/L	3.00	91	90-110			
Batch ID: 499501	Date: 06/19/2020 17:10	Prep Batch: 499167	Date: 06/17/2020 16:38								
351.2	280-137609-9	Nitrogen, Total Kjeldahl	1.0	U	mg/L						
351.2	280-137609-9 MS	Nitrogen, Total Kjeldahl	2.93		mg/L	3.00	98	90-110			
Batch ID: 499351	Date: 06/18/2020 16:49										
353.2	280-137609-1	Nitrate Nitrite as N	0.96		mg/L						
353.2	280-137609-1 MS	Nitrate Nitrite as N	4.79		mg/L	4.00	96	90-110			
Batch ID: 499351	Date: 06/18/2020 17:25										
353.2	280-137609-9	Nitrate Nitrite as N	3.9		mg/L						J1
353.2	280-137609-9 MS	Nitrate Nitrite as N	7.04		mg/L	4.00	79	90-110			J1
Batch ID: 499241	Date: 06/18/2020 10:56	Prep Batch: 499239	Date: 06/18/2020 10:52								
9034	280-137609-1	Sulfide	1.9	U	mg/L						J1
9034	280-137609-1 MS	Sulfide	19.2		mg/L	22.2	87	44-110			
Batch ID: 499302	Date: 06/18/2020 14:05	Prep Batch: 499255	Date: 06/18/2020 11:38								
9034	280-137609-9	Sulfide	1.9	U	mg/L						J1
9034	280-137609-9 MS	Sulfide	11.2		mg/L	22.2	51	44-110			
Batch ID: 500081	Date: 06/25/2020 17:51										
9056A	280-137609-1	Sulfate	580		mg/L						D
9056A	280-137609-1 MS	Sulfate	840		mg/L	250	104	87-112			D
Batch ID: 500465	Date: 06/29/2020 22:59										
9056A	280-137609-9	Sulfate	1100		mg/L						D
9056A	280-137609-9 MS	Sulfate	1540		mg/L	500	97	87-112			D
Batch ID: 500423	Date: 06/27/2020 02:28										
9060A	280-137609-1	Dissolved Organic Carbon - Quad	3.1		mg/L						
9060A	280-137609-1 MS	Dissolved Organic Carbon - Quad	29.8		mg/L	25.0	107	88-112			
Batch ID: 500423	Date: 06/27/2020 15:30										
9060A	280-137609-9	Dissolved Organic Carbon - Quad	3.9		mg/L						

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

FORM V-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
9060A	280-137609-9 MS	Dissolved Organic Carbon - Quad	30.3		mg/L	25.0	105	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.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 498989	Date: 06/16/2020 14:32										
350.1	280-137609-1 MSD	Ammonia	1.04		mg/L	1.00	100	90-110	1	10	
Batch ID: 498989	Date: 06/16/2020 15:20										
350.1	280-137609-9 MSD	Ammonia	1.08		mg/L	1.00	101	90-110	2	10	
Batch ID: 499501	Date: 06/19/2020 16:42	Prep Batch: 499167			Date: 06/17/2020 16:38						
351.2	280-137609-1 MSD	Nitrogen, Total Kjeldahl	3.47		mg/L	3.00	92	90-110	1	25	
Batch ID: 499501	Date: 06/19/2020 17:11	Prep Batch: 499167			Date: 06/17/2020 16:38						
351.2	280-137609-9 MSD	Nitrogen, Total Kjeldahl	3.08		mg/L	3.00	103	90-110	5	25	
Batch ID: 499351	Date: 06/18/2020 16:51										
353.2	280-137609-1 MSD	Nitrate Nitrite as N	4.86		mg/L	4.00	98	90-110	1	10	
Batch ID: 499351	Date: 06/18/2020 17:27										
353.2	280-137609-9 MSD	Nitrate Nitrite as N	7.24		mg/L	4.00	84	90-110	3	10	J1
Batch ID: 499241	Date: 06/18/2020 10:56	Prep Batch: 499239			Date: 06/18/2020 10:52						
9034	280-137609-1 MSD	Sulfide	11.2		mg/L	22.2	51	44-110	53	20	J1
Batch ID: 499302	Date: 06/18/2020 14:05	Prep Batch: 499255			Date: 06/18/2020 11:38						
9034	280-137609-9 MSD	Sulfide	16.8		mg/L	22.2	76	44-110	40	20	J1
Batch ID: 500081	Date: 06/25/2020 18:07										
9056A	280-137609-1 MSD	Sulfate	831		mg/L	250	101	87-112	1	10	D
Batch ID: 500465	Date: 06/29/2020 23:16										
9056A	280-137609-9 MSD	Sulfate	1520		mg/L	500	93	87-112	1	10	D
Batch ID: 500423	Date: 06/27/2020 02:52										
9060A	280-137609-1 MSD	Dissolved Organic Carbon - Quad	29.7		mg/L	25.0	106	88-112	0	15	
Batch ID: 500423	Date: 06/27/2020 16:38										
9060A	280-137609-9 MSD	Dissolved Organic Carbon - Quad	30.2		mg/L	25.0	105	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.: 280-137609-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 500081 Date: 06/25/2020 17:34								
9056A	PZ007-20A	280-137609-1	Sulfate	580	mg/L			
9056A	PZ007-20A	280-137609-1 DU	Sulfate	572	mg/L	1	10	D
Batch ID: 500465 Date: 06/29/2020 22:43								
9056A	G0102-20A	280-137609-9	Sulfate	1100	mg/L			
9056A	G0102-20A	280-137609-9 DU	Sulfate	1060	mg/L	0.2	10	D

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.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 498989	Date: 06/16/2020 13:08										
						LCS Source: 350.1 cal_00419					
350.1	LCS 280-498989/18	Ammonia	2.46		mg/L	2.50	98	90-110			
Batch ID: 498989	Date: 06/16/2020 14:24										
						LCS Source: 350.1 cal_00419					
350.1	LCS 280-498989/56	Ammonia	2.47		mg/L	2.50	99	90-110			
Batch ID: 499501	Date: 06/19/2020 16:12	Prep Batch: 499167	Date: 06/17/2020 16:38								
						LCS Source: TKN 25ppm_00809					
351.2	LCS 280-499167/1-A	Nitrogen, Total Kjeldahl	6.10		mg/L	6.00	102	90-110			
Batch ID: 499501	Date: 06/19/2020 17:04	Prep Batch: 499167	Date: 06/17/2020 16:38								
						LCS Source: TKN 25ppm_00809					
351.2	LCS 280-499167/27-A	Nitrogen, Total Kjeldahl	6.50		mg/L	6.00	108	90-110			
Batch ID: 499351	Date: 06/18/2020 16:43										
						LCS Source: NXN CAL INT_00535					
353.2	LCS 280-499351/21	Nitrate Nitrite as N	4.87		mg/L	5.00	97	90-110			
Batch ID: 498939	Date: 06/16/2020 11:50	Prep Batch: 498938	Date: 06/16/2020 11:47								
						LCS Source: SFD ICV INT_01714					
9034	LCS 280-498938/1-A	Sulfide	19.2		mg/L	18.6	103	44-110			
Batch ID: 499241	Date: 06/18/2020 10:56	Prep Batch: 499239	Date: 06/18/2020 10:52								
						LCS Source: SFD CAL INT_01769					
9034	LCS 280-499239/1-A	Sulfide	12.0		mg/L	22.2	54	44-110			
Batch ID: 499302	Date: 06/18/2020 14:05	Prep Batch: 499255	Date: 06/18/2020 11:38								
						LCS Source: SFD CAL INT_01769					
9034	LCS 280-499255/1-A	Sulfide	20.0		mg/L	22.2	90	44-110			
Batch ID: 500081	Date: 06/25/2020 10:24										
						LCS Source: IC LCS_01746					
9056A	LCS 280-500081/4	Sulfate	98.0		mg/L	100	98	87-112	0	10	
Batch ID: 500465	Date: 06/29/2020 10:43										
						LCS Source: IC LCS_01747					
9056A	LCS 280-500465/4	Sulfate	97.4		mg/L	100	97	87-112	0	10	
Batch ID: 500423	Date: 06/26/2020 19:15										
						LCS Source: TOC LCS Std_00048					
9060A	LCS 280-500262/1-A	Dissolved Organic Carbon - Quad	25.5		mg/L	25.0	102	88-112			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 500423	Date: 06/27/2020 14:00										
						LCS Source: TOC LCS Std_00048					
9060A	LCS 280-500262/27-A	Dissolved Organic Carbon - Quad	26.4		mg/L	25.0	105	88-112			
Batch ID: 499040	Date: 06/16/2020 13:10										
						LCS Source: Alk daily lcs_00907					
SM 2320B	LCS 280-499040/30	Total Alkalinity as CaCO3	179		mg/L	200	90	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.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 500081	Date: 06/25/2020 10:40										
						LCSD Source: IC LCS_01746					
9056A	LCSD 280-500081/5	Sulfate	98.1		mg/L	100	98	87-112	0	10	
Batch ID: 500465	Date: 06/29/2020 10:59										
						LCSD Source: IC LCS_01747					
9056A	LCSD 280-500465/5	Sulfate	97.2		mg/L	100	97	87-112	0	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 500081	Date: 06/25/2020 10:07										
						LCS Source: IC CAL cl/so4_00316					
9056A	MRL 280-500081/3	Sulfate	4.94	J	mg/L	5.00	99	50-150			
Batch ID: 500465	Date: 06/29/2020 10:26										
						LCS Source: IC CAL cl/so4_00317					
9056A	MRL 280-500465/3	Sulfate	4.86	J	mg/L	5.00	97	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: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 DL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

Method: 351.2 DL Date: 02/03/2019 00:00

Prep Method: 351.2

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

Method: 351.2 XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 DL Date: 12/16/2011 09:50

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate Nitrite as N		0.1	0.019

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 XMDL Date: 05/16/2011 11:21

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.1	0.0191

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 DL Date: 03/28/2011 13:37

Prep Method: 9030B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		4	0.793

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 XMDL Date: 03/28/2011 13:37

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		4	0.793

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

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: 280-137609-1

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: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Alkalinity as CaCO3		10	3.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137609-1

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO3		10	3.08

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-499167/1-A	06/17/2020 16:38	499167		25	25
MB 280-499167/2-A	06/17/2020 16:38	499167		25	25
280-137609-1	06/17/2020 16:38	499167		25	25
280-137609-1 MS	06/17/2020 16:38	499167		25	25
280-137609-1 MSD	06/17/2020 16:38	499167		25	25
280-137609-2	06/17/2020 16:38	499167		25	25
280-137609-3	06/17/2020 16:38	499167		25	25
280-137609-4	06/17/2020 16:38	499167		25	25
280-137609-5	06/17/2020 16:38	499167		25	25
280-137609-6	06/17/2020 16:38	499167		25	25
LCS 280-499167/27-A	06/17/2020 16:38	499167		25	25
MB 280-499167/28-A	06/17/2020 16:38	499167		25	25
280-137609-9	06/17/2020 16:38	499167		25	25
280-137609-9 MS	06/17/2020 16:38	499167		25	25
280-137609-9 MSD	06/17/2020 16:38	499167		25	25
280-137609-7	06/17/2020 16:38	499167		25	25
280-137609-8	06/17/2020 16:38	499167		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-498938/1-A	06/16/2020 11:47	498938		50	50
MB 280-498938/2-A	06/16/2020 11:47	498938		50	50
280-137609-2	06/16/2020 11:47	498938		50	50
280-137609-6	06/16/2020 11:47	498938		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-499239/1-A	06/18/2020 10:52	499239		50	50
MB 280-499239/2-A	06/18/2020 10:52	499239		50	50
280-137609-1	06/18/2020 10:52	499239		50	50
280-137609-1 MS	06/18/2020 10:52	499239		50	50
280-137609-1 MSD	06/18/2020 10:52	499239		50	50
280-137609-5	06/18/2020 10:52	499239		50	50
280-137609-7	06/18/2020 10:52	499239		50	50
280-137609-8	06/18/2020 10:52	499239		50	50
280-137609-3	06/18/2020 10:52	499239		50	50
280-137609-4	06/18/2020 10:52	499239		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-499255/1-A	06/18/2020 11:38	499255		50	50
MB 280-499255/2-A	06/18/2020 11:38	499255		50	50
280-137609-9	06/18/2020 11:38	499255		50	50
280-137609-9 MS	06/18/2020 11:38	499255		50	50
280-137609-9 MSD	06/18/2020 11:38	499255		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		13:00	X																								
ICV 280-498989/15	1		13:02	X																								
ICB 280-498989/16	1		13:04	X																								
ZZZZZZ			13:06																									
LCS 280-498989/18	1	T	13:08	X																								
MB 280-498989/19	1	T	13:10	X																								
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	1		13:36	X																								
CCV 280-498989/33	1		13:38	X																								
CCB 280-498989/34	1		13:40	X																								
ZZZZZZ			13:42																									
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
ZZZZZZ			13:54																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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																									
280-137609-2	1	T	14:00	X																								
280-137609-3	1	T	14:02	X																								
RINSE 280-498989/46			14:04																									
ZZZZZZ			14:06																									
CCVL 280-498989/48	1		14:08	X																								
CCV 280-498989/49	1		14:10	X																								
CCB 280-498989/50	1		14:12	X																								
ZZZZZZ			14:14																									
280-137609-4	1	T	14:16	X																								
ZZZZZZ			14:18																									
280-137609-6	1	T	14:20	X																								
280-137609-7	1	T	14:22	X																								
LCS 280-498989/56	1	T	14:24	X																								
MB 280-498989/57	1	T	14:26	X																								
280-137609-1	1	T	14:28	X																								
280-137609-1 MS	1	T	14:30	X																								
280-137609-1 MSD	1	T	14:32	X																								
ZZZZZZ			14:34																									
RINSE 280-498989/62			14:36																									
ZZZZZZ			14:38																									
CCVL 280-498989/64	1		14:40	X																								
CCV 280-498989/65	1		14:42	X																								
CCB 280-498989/66	1		14:44	X																								
ZZZZZZ			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:50																									
ZZZZZZ			14:52																									
ZZZZZZ			14:54																									
ZZZZZZ			14:56																									
ZZZZZZ			14:58																									
ZZZZZZ			15:00																									
ZZZZZZ			15:02																									
280-137609-9	1	T	15:04	X																								
280-137609-9 MS	1	T	15:06	X																								
RINSE 280-498989/78			15:08																									
ZZZZZZ			15:10																									
CCVL 280-498989/80			15:12																									
CCV 280-498989/81			15:14																									
CCB 280-498989/82			15:16																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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																									
280-137609-9 MSD	1	T	15:20	X																								
ZZZZZZ			15:22																									
ZZZZZZ			15:24																									
ZZZZZZ			15:26																									
ZZZZZZ			15:28																									
ZZZZZZ			15:30																									
ZZZZZZ			15:32																									
ZZZZZZ			15:34																									
ZZZZZZ			15:36																									
280-137609-5	1	T	15:42	X																								
RINSE 280-498989/94			15:44																									
ZZZZZZ			15:46																									
CCVL 280-498989/96	1		15:48	X																								
CCV 280-498989/97	1		15:50	X																								
CCB 280-498989/98	1		15:52	X																								
ZZZZZZ			15:54																									
280-137609-8	1	T	15:56	X																								
RINSE 280-498989/101			15:58																									
ZZZZZZ			16:00																									
CCVL 280-498989/103	1		16:02	X																								
CCV 280-498989/104	1		16:04	X																								
CCB 280-498989/105	1		16:06	X																								
ZZZZZZ			16:08																									

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		16:10	X																								
ICB 280-498263/34-A	1		16:11	X																								
LCS 280-499167/1-A	1	T	16:12	X																								
MB 280-499167/2-A	1	T	16:14	X																								
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	1		16:32	X																								
CCB 280-498263/36-A	1		16:34	X																								
ZZZZZZ			16:35																									
ZZZZZZ			16:36																									
ZZZZZZ			16:37																									
ZZZZZZ			16:39																									
280-137609-1	1	T	16:40	X																								
280-137609-1 MS	1	T	16:41	X																								
280-137609-1 MSD	1	T	16:42	X																								
ZZZZZZ			16:44																									
ZZZZZZ			16:45																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	
280-137609-2	1	T	16:50	X
ZZZZZZ			16:51	
ZZZZZZ			16:52	
ZZZZZZ			16:54	
CCV 280-498263/35-A	1		16:55	X
CCB 280-498263/36-A	1		16:56	X
280-137609-3	1	T	16:57	X
280-137609-4	1	T	16:59	X
280-137609-5	1	T	17:00	X
280-137609-6	1	T	17:01	X
ZZZZZZ			17:02	
LCS 280-499167/27-A	1	T	17:04	X
MB 280-499167/28-A	1	T	17:05	X
280-137609-9	1	T	17:06	X
ZZZZZZ			17:07	
ZZZZZZ			17:09	
280-137609-9 MS	1	T	17:10	X
280-137609-9 MSD	1	T	17:11	X
ZZZZZZ			17:12	
ZZZZZZ			17:14	
CCV 280-498263/35-A	1		17:15	X
CCB 280-498263/36-A	1		17:16	X
ZZZZZZ			17:17	
ZZZZZZ			17:19	
ZZZZZZ			17:20	
ZZZZZZ			17:21	
ZZZZZZ			17:22	
ZZZZZZ			17:24	
ZZZZZZ			17:25	
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	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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			17:50																									
CCB 280-498263/36-A			17:51																									
ZZZZZZ			17:52																									
ZZZZZZ			17:54																									
ZZZZZZ			17:55																									
ZZZZZZ			17:56																									
ZZZZZZ			17:57																									
ZZZZZZ			17:59																									
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			18:15																									
CCB 280-498263/36-A			18:16																									
280-137609-7	1	T	18:17	X																								
280-137609-8	1	T	18:19	X																								
ZZZZZZ			18:20																									
ZZZZZZ			18:21																									
ZZZZZZ			18:22																									
ZZZZZZ			18:24																									
ZZZZZZ			18:25																									
ZZZZZZ			18:26																									
ZZZZZZ			18:27																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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			18:29																									
ZZZZZZ			18:30																									
ZZZZZZ			18:31																									
ZZZZZZ			18:32																									
ZZZZZZ			18:34																									
CCV 280-498263/35-A	1		18:35	X																								
CCB 280-498263/36-A	1		18:36	X																								
ZZZZZZ			18:37																									
ZZZZZZ			18:39																									
ZZZZZZ			18:40																									
ZZZZZZ			18:41																									
ZZZZZZ			18:42																									
ZZZZZZ			18:44																									
ZZZZZZ			18:45																									
ZZZZZZ			18:46																									
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			18:57																									
CCB 280-498263/36-A			18:59																									
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																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		16:35	X
ICVL 280-499351/18	1		16:37	X
ICB 280-499351/19	1		16:39	X
ZZZZZZ			16:41	
LCS 280-499351/21	1	T	16:43	X
MB 280-499351/22	1	T	16:45	X
280-137609-1	1	T	16:47	X
280-137609-1 MS	1	T	16:49	X
280-137609-1 MSD	1	T	16:51	X
280-137609-2	1	T	16:53	X
280-137609-3	1	T	16:55	X
280-137609-4	1	T	16:57	X
280-137609-5	2	T	16:59	X
280-137609-6	1	T	17:01	X
280-137609-7	1	T	17:03	X
280-137609-8	1	T	17:05	X
RINSE 280-499351/33			17:07	
ZZZZZZ			17:09	
CCV 280-499351/35	1		17:11	X
CCVL 280-499351/36	1		17:13	X
CCB 280-499351/37	1		17:15	X
ZZZZZZ			17:17	
280-137609-10	1	T	17:19	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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
280-137609-11	1	T	17:21	X
280-137609-9	1	T	17:23	X
280-137609-9 MS	1	T	17:25	X
280-137609-9 MSD	1	T	17:27	X
280-137609-12	1	T	17:29	X
ZZZZZZ			17:31	
ZZZZZZ			17:33	
ZZZZZZ			17:35	
ZZZZZZ			17:37	
RINSE 280-499351/49			17:39	
ZZZZZZ			17:41	
CCV 280-499351/51			17:43	
CCVL 280-499351/52	1		17:45	X
CCB 280-499351/53	1		17:47	X
ZZZZZZ			17:49	
ZZZZZZ			17:51	
ZZZZZZ			17:53	
ZZZZZZ			17:55	
ZZZZZZ			17:57	
ZZZZZZ			17:59	
ZZZZZZ			18:01	
ZZZZZZ			18:03	
ZZZZZZ			18:05	
ZZZZZZ			18:07	
ZZZZZZ			18:09	
RINSE 280-499351/65			18:11	
ZZZZZZ			18:13	
CCV 280-499351/67			18:15	
CCVL 280-499351/68			18:17	
CCB 280-499351/69			18:19	
ZZZZZZ			18:21	
ZZZZZZ			18:23	
ZZZZZZ			18:25	
ZZZZZZ			18:27	
ZZZZZZ			18:29	
ZZZZZZ			18:31	
ZZZZZZ			18:33	
ZZZZZZ			18:35	
ZZZZZZ			18:37	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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			18:47	
CCVL 280-499351/84			18:49	
CCB 280-499351/85			18:51	
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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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/16/2020 11:50 End Date: 06/16/2020 11:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-498938/1-A	1	T	11:50	X																								
MB 280-498938/2-A	1	T	11:50	X																								
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
280-137609-2	1	T	11:50	X																								
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
280-137609-6	1	T	11:50	X																								
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									
ZZZZZZ			11:50																									

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/18/2020 10:56 End Date: 06/18/2020 10:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-499239/1-A	1	T	10:56	X																								
MB 280-499239/2-A	1	T	10:56	X																								
280-137609-1	1	T	10:56	X																								
280-137609-1 MS	1	T	10:56	X																								
280-137609-1 MSD	1	T	10:56	X																								
280-137609-5	1	T	10:56	X																								
280-137609-7	1	T	10:56	X																								
280-137609-8	1	T	10:56	X																								
ZZZZZZ			10:56																									
ZZZZZZ			10:56																									
ZZZZZZ			10:56																									
ZZZZZZ			10:56																									
ZZZZZZ			10:56																									
ZZZZZZ			10:56																									
280-137609-3	1	T	10:56	X																								
280-137609-4	1	T	10:56	X																								
ZZZZZZ			10:56																									
ZZZZZZ			10:56																									

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/18/2020 14:05 End Date: 06/18/2020 14:05

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-499255/1-A	1	T	14:05	X																								
MB 280-499255/2-A	1	T	14:05	X																								
280-137609-9	1	T	14:05	X																								
280-137609-9 MS	1	T	14:05	X																								
280-137609-9 MSD	1	T	14:05	X																								
ZZZZZZ			14:05																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/03/2020 10:08 End Date: 06/03/2020 23:11

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-497185/2 IC	1		10:08	X																								
STD 280-497185/3 IC	1		10:24	X																								
STD 280-497185/4 IC	1		10:41	X																								
STD 280-497185/5 IC	1		10:57	X																								
STD 280-497185/6 IC	1		11:13	X																								
STD 280-497185/7 IC	1		11:30	X																								
ICV 280-497185/8	1		11:46	X																								
ICB 280-497185/9	1		12:03	X																								
ZZZZZZ			12:19																									
ZZZZZZ			12:36																									
ZZZZZZ			12:52																									
ZZZZZZ			13:08																									
ZZZZZZ			13:27																									
ZZZZZZ			13:43																									
ZZZZZZ			13:59																									
ZZZZZZ			14:16																									
ZZZZZZ			14:32																									
ZZZZZZ			14:49																									
ZZZZZZ			15:48																									
ZZZZZZ			16:04																									
ZZZZZZ			16:21																									
ZZZZZZ			16:37																									
CCV 280-497185/24			16:54																									
CCB 280-497185/25			17:10																									
ZZZZZZ			17:26																									
ZZZZZZ			17:43																									
ZZZZZZ			17:59																									
ZZZZZZ			18:16																									
ZZZZZZ			18:32																									
ZZZZZZ			18:48																									
ZZZZZZ			19:05																									
ZZZZZZ			19:21																									
ZZZZZZ			19:38																									
ZZZZZZ			19:54																									
CCV 280-497185/36			20:11																									
CCB 280-497185/37			20:27																									
ZZZZZZ			20:43																									
ZZZZZZ			21:00																									
ZZZZZZ			21:16																									
ZZZZZZ			21:33																									
ZZZZZZ			21:49																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/03/2020 10:08 End Date: 06/03/2020 23:11

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			22:06																									
ZZZZZZ			22:22																									
ZZZZZZ			22:38																									
CCV 280-497185/46			22:55																									
CCB 280-497185/47			23:11																									

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		09:35	X
CCB 280-500081/2	1		09:51	X
MRL 280-500081/3	1	T	10:07	X
LCS 280-500081/4	1	T	10:24	X
LCSD 280-500081/5	1	T	10:40	X
MB 280-500081/6	1	T	10:57	X
ZZZZZZ			16:46	
ZZZZZZ			17:02	
280-137609-1	5	T	17:18	X
280-137609-1 DU	5	T	17:34	X
280-137609-1 MS	5	T	17:51	X
280-137609-1 MSD	5	T	18:07	X
280-137609-2	5	T	18:24	X
ZZZZZZ			18:40	
280-137609-4	5	T	18:57	X
ZZZZZZ			19:13	
CCV 280-500081/17	1		19:29	X
CCB 280-500081/18	1		19:46	X
280-137609-6	5	T	20:02	X
ZZZZZZ			20:19	
280-137609-8	5	T	20:35	X
ZZZZZZ			20:51	
ZZZZZZ			21:08	
ZZZZZZ			21:24	
ZZZZZZ			21:41	
280-137609-10	5	T	21:57	X
280-137609-11	5	T	22:14	X
280-137609-12	5	T	22:30	X
CCV 280-500081/29	1		22:46	X
CCB 280-500081/30	1		23:03	X
ZZZZZZ			23:19	
ZZZZZZ			23:36	
ZZZZZZ			23:52	
ZZZZZZ			00:09	
ZZZZZZ			00:25	
ZZZZZZ			00:41	
ZZZZZZ			00:58	
ZZZZZZ			01:14	
ZZZZZZ			01:31	
ZZZZZZ			01:47	
CCV 280-500081/41			02:04	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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			02:20																									
ZZZZZZ			02:36																									
ZZZZZZ			02:53																									
ZZZZZZ			03:09																									
ZZZZZZ			03:26																									
CCV 280-500081/47			03:42																									
CCB 280-500081/48			03:59																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		09:54	X																								
CCB 280-500465/2	1		10:10	X																								
MRL 280-500465/3	1	T	10:26	X																								
LCS 280-500465/4	1	T	10:43	X																								
LCSD 280-500465/5	1	T	10:59	X																								
MB 280-500465/6	1	T	11:15	X																								
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	1		17:31	X																								
CCB 280-500465/18	1		17:47	X																								
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	1		20:48	X																								
CCB 280-500465/30	1		21:04	X																								
ZZZZZZ			21:21																									
280-137609-3	10	T	21:37	X																								
280-137609-5	10	T	21:54	X																								
280-137609-7	10	T	22:10	X																								
280-137609-9	10	T	22:26	X																								
280-137609-9 DU	10	T	22:43	X																								
280-137609-9 MS	10	T	22:59	X																								
280-137609-9 MSD	10	T	23:16	X																								
ZZZZZZ			23:32																									
ZZZZZZ			23:48																									
CCV 280-500465/41	1		00:05	X																								

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		00:21	X																								
ZZZZZZ			00:38																									
CCV 280-500465/44			00:54																									
CCB 280-500465/45			01:11																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		18:25	X																									
ICB 280-500423/2	1		18:48	X																									
LCS 280-500262/1-A	1	D	19:15	X																									
MB 280-500262/2-A	1	D	19:38	X																									
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	1		00:00	X																									
CCB 280-500423/16	1		00:27	X																									
ZZZZZZ			00:50																										
ZZZZZZ			01:21																										
ZZZZZZ			01:44																										
280-137609-1	1	D	02:06	X																									
280-137609-1 MS	1	D	02:28	X																									
280-137609-1 MSD	1	D	02:52	X																									
ZZZZZZ			03:19																										
ZZZZZZ			03:51																										
280-137609-2	1	D	04:13	X																									
280-137609-3	1	D	04:40	X																									
CCV 280-500423/27	1		05:03	X																									
CCB 280-500423/28	1		05:26	X																									
280-137609-4	1	D	05:48	X																									
280-137609-5	1	D	12:11	X																									
280-137609-6	1	D	12:43	X																									
280-137609-7	1	D	13:10	X																									
280-137609-8	1	D	13:33	X																									
LCS 280-500262/27-A	1	D	14:00	X																									
MB 280-500262/28-A	1	D	14:23	X																									
ZZZZZZ			14:45																										
280-137609-9	1	D	15:07	X																									
280-137609-9 MS	1	D	15:30	X																									
CCV 280-500423/39	1		15:53	X																									
CCB 280-500423/40	1		16:15	X																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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																									
280-137609-9 MSD	1	D	16:38	X																									
ZZZZZZ			17:01																										
ZZZZZZ			17:23																										
ZZZZZZ			17:45																										
ZZZZZZ			18:08																										
ZZZZZZ			18:30																										
ZZZZZZ			18:53																										
ZZZZZZ			19:15																										
ZZZZZZ			19:38																										
ZZZZZZ			20:00																										
CCV 280-500423/51	1		20:46	X																									
CCB 280-500423/52	1		21:09	X																									
ZZZZZZ			21:31																										
ZZZZZZ			21:54																										
ZZZZZZ			22:17																										
ZZZZZZ			22:41																										
ZZZZZZ			23:03																										
ZZZZZZ			23:26																										
ZZZZZZ			23:49																										
CCV 280-500423/60			00:12																										
CCB 280-500423/61			00:39																										

Prep Types:
D = Dissolved

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		12:58	X																								
CCB 280-499040/29	1		13:04	X																								
LCS 280-499040/30	1	T	13:10	X																								
MB 280-499040/31	1	T	13:15	X																								
ZZZZZZ			13:23																									
ZZZZZZ			13:30																									
ZZZZZZ			13:37																									
280-137609-1	1	T	13:44	X																								
280-137609-2	1	T	13:51	X																								
280-137609-3	1	T	13:57	X																								
280-137609-4	1	T	14:04	X																								
280-137609-5	1	T	14:11	X																								
280-137609-6	1	T	14:17	X																								
280-137609-7	1	T	14:23	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	1		14:30	X																								
CCB 280-499040/43	1		14:35	X																								
280-137609-8	1	T	14:42	X																								
280-137609-9	1	T	14:48	X																								
280-137609-10	1	T	14:54	X																								
280-137609-11	1	T	15:00	X																								
280-137609-12	1	T	15:05	X																								
ZZZZZZ			15:13																									
ZZZZZZ			15:21																									
ZZZZZZ			15:28																									
ZZZZZZ			15:34																									
ZZZZZZ			15:42																									
ZZZZZZ			15:50																									
CCV 280-499040/55	1		15:56	X																								
CCB 280-499040/56	1		16:02	X																								
ZZZZZZ			16:08																									
ZZZZZZ			16:13																									
ZZZZZZ			16:20																									
ZZZZZZ			16:27																									
ZZZZZZ			16:35																									
ZZZZZZ			16:42																									
ZZZZZZ			16:48																									
ZZZZZZ			16:56																									
ZZZZZZ			17:04																									
ZZZZZZ			17:11																									
ZZZZZZ			17:18																									
CCV 280-499040/68			17:25																									
CCB 280-499040/69			17:30																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	350.1 ICV 00407
ICVL 280-498989/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-498989/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-498989/16		350.1			10 mL	10 mL			
LCS 280-498989/18		350.1			100 mL	100 mL		2.5 mL	
MB 280-498989/19		350.1			10 mL	10 mL			
CCVL 280-498989/32		350.1			100 mL	100 mL		0.5 mL	
CCV 280-498989/33		350.1			100 mL	100 mL		2.5 mL	
CCB 280-498989/34		350.1			10 mL	10 mL			
280-137609-C-2	PZ012-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-3	G0105-20A	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-498989/48		350.1			100 mL	100 mL		0.5 mL	
CCV 280-498989/49		350.1			100 mL	100 mL		2.5 mL	
CCB 280-498989/50		350.1			10 mL	10 mL			
280-137609-C-4	G0080-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-6	NW052-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-7	G0045-20A	350.1	T	No	10 mL	10 mL	<2 SU		
LCS 280-498989/56		350.1			100 mL	100 mL		2.5 mL	
MB 280-498989/57		350.1			10 mL	10 mL			
280-137609-C-1	PZ007-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-C-1 MS	PZ007-20A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-137609-C-1 MSD	PZ007-20A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-498989/64		350.1			100 mL	100 mL		0.5 mL	
CCV 280-498989/65		350.1			100 mL	100 mL		2.5 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	350.1 ICV 00407
CCB 280-498989/66		350.1			10 mL	10 mL			
280-137609-L-9	G0102-20A	350.1	T	No	10 mL	10 mL	<2 SU		
280-137609-L-9 MS	G0102-20A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-137609-L-9 MSD	G0102-20A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-137609-C-5	PZ005-20A	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-498989/96		350.1			100 mL	100 mL		0.5 mL	
CCV 280-498989/97		350.1			100 mL	100 mL		2.5 mL	
CCB 280-498989/98		350.1			10 mL	10 mL			
280-137609-C-8	G0017-20A	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-498989/103		350.1			100 mL	100 mL		0.5 mL	
CCV 280-498989/104		350.1			100 mL	100 mL		2.5 mL	
CCB 280-498989/105		350.1			10 mL	10 mL			

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.: 280-137609-1

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	TKN ICV 25 00094		
ICV 280-498263/33		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-498263/34		351.2, 351.2		25 mL	25 mL				
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.: 280-137609-1

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		
LCS 280-499167/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-499167/2		351.2, 351.2			25 mL	25 mL			
280-137609-C-1	PZ007-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-1 MS	PZ007-20A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-137609-C-1 MSD	PZ007-20A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-137609-C-2	PZ012-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-3	G0105-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-4	G0080-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-5	PZ005-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-6	NW052-20A	351.2, 351.2	T	<2	25 mL	25 mL			
LCS 280-499167/27		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-499167/28		351.2, 351.2			25 mL	25 mL			
280-137609-L-9	G0102-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-L-9 MS	G0102-20A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-137609-L-9 MSD	G0102-20A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-137609-C-7	G0045-20A	351.2, 351.2	T	<2	25 mL	25 mL			
280-137609-C-8	G0017-20A	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

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.: 280-137609-1

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:

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.: 280-137609-1

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					
ICV 280-498263/33-A		351.2		4 mL					
ICB 280-498263/34-A		351.2		4 mL					
LCS 280-499167/1-A		351.2		4 mL					
MB 280-499167/2-A		351.2		4 mL					
CCV 280-498263/35-A		351.2		4 mL					
CCB 280-498263/36-A		351.2		4 mL					
280-137609-C-1-A	PZ007-20A	351.2	T	4 mL					
280-137609-C-1-B MS	PZ007-20A	351.2	T	4 mL					
280-137609-C-1-C MSD	PZ007-20A	351.2	T	4 mL					
280-137609-C-2-A	PZ012-20A	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-3-A	G0105-20A	351.2	T	4 mL					
280-137609-C-4-A	G0080-20A	351.2	T	4 mL					
280-137609-C-5-A	PZ005-20A	351.2	T	4 mL					
280-137609-C-6-A	NW052-20A	351.2	T	4 mL					
LCS 280-499167/27-A		351.2		4 mL					
MB 280-499167/28-A		351.2		4 mL					
280-137609-L-9-A	G0102-20A	351.2	T	4 mL					
280-137609-L-9-B MS	G0102-20A	351.2	T	4 mL					
280-137609-L-9-C MSD	G0102-20A	351.2	T	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.: 280-137609-1

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-7-A	G0045-20A	351.2	T	4 mL					
280-137609-C-8-A	G0017-20A	351.2	T	4 mL					
CCV 280-498263/35-A		351.2		4 mL					
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.: 280-137609-1

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	NXN ICV INT 00516		
ICV 280-499351/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-499351/18		353.2		100 mL	100 mL		2 mL		
ICB 280-499351/19		353.2		100 mL	100 mL				
LCS 280-499351/21		353.2		100 mL	100 mL	5 mL			
MB 280-499351/22		353.2		100 mL	100 mL				
280-137609-C-1	PZ007-20A	353.2	T	100 mL	100 mL				
280-137609-C-1 MS	PZ007-20A	353.2	T	5 mL	5 mL	0.2 mL			
280-137609-C-1 MSD	PZ007-20A	353.2	T	5 mL	5 mL	0.2 mL			
280-137609-C-2	PZ012-20A	353.2	T	100 mL	100 mL				
280-137609-C-3	G0105-20A	353.2	T	100 mL	100 mL				
280-137609-C-4	G0080-20A	353.2	T	100 mL	100 mL				
280-137609-C-5	PZ005-20A	353.2	T	100 mL	100 mL				
280-137609-C-6	NW052-20A	353.2	T	100 mL	100 mL				
280-137609-C-7	G0045-20A	353.2	T	100 mL	100 mL				
280-137609-C-8	G0017-20A	353.2	T	100 mL	100 mL				
CCV 280-499351/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-499351/36		353.2		100 mL	100 mL	1 mL			
CCB 280-499351/37		353.2		100 mL	100 mL				
280-137609-C-10	SHGW03-20A	353.2	T	100 mL	100 mL				
280-137609-A-11	SHGW02-20A	353.2	T	100 mL	100 mL				
280-137609-L-9	G0102-20A	353.2	T	100 mL	100 mL				
280-137609-L-9 MS	G0102-20A	353.2	T	5 mL	5 mL	0.2 mL			
280-137609-L-9 MSD	G0102-20A	353.2	T	5 mL	5 mL	0.2 mL			
280-137609-A-12	SHGW05-20A	353.2	T	100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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	NXN ICV INT 00516		
CCVL 280-499351/52		353.2		100 mL	100 mL	1 mL			
CCB 280-499351/53		353.2		100 mL	100 mL				

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.: 280-137609-1

SDG No.:

Batch Number: 498938 Batch Start Date: 06/16/20 11:46 Batch Analyst: David, Alexa 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 280-498938/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-498938/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-137609-E-2	PZ012-20A	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-137609-E-6	NW052-20A	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01714					
LCS 280-498938/1		9030B, 9034		1 mL					
MB 280-498938/2		9030B, 9034							
280-137609-E-2	PZ012-20A	9030B, 9034	T						
280-137609-E-6	NW052-20A	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.: 280-137609-1

SDG No.:

Batch Number: 498939 Batch Start Date: 06/16/20 11:50 Batch Analyst: David, Alexa A

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-498938/1-A		9034		0 mL	2.6 mL	5 mL	2.6 mL	50 mL	
MB 280-498938/2-A		9034		2.6 mL	3.5 mL	1 mL	0.9 mL	50 mL	
280-137609-E-2-A	PZ012-20A	9034	T	10.4 mL	11.4 mL	1 mL	1 mL	50 mL	
280-137609-E-6-A	NW052-20A	9034	T	18.6 mL	19.4 mL	1 mL	0.799999999999997 mL	50 mL	

Batch Notes	
Batch Comment	AD trained by SAH. Reviewed by BWH
Hydrochloric Acid ID	HClSol_00181
Iodine ID	Iod_00257
Normality of Iodine Solution	.025 N
Sodium Thiosulfate ID	NaThio_00166
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	StarchInd_00062
Normality of First Titrant	.025 N
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.: 280-137609-1

SDG No.:

Batch Number: 499239 Batch Start Date: 06/18/20 10:52 Batch Analyst: Hunter, Brandon W

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-499239/1		9030B, 9034		50 mL	50 mL	1			5 mL
MB 280-499239/2		9030B, 9034		50 mL	50 mL	2			5 mL
280-137609-E-1	PZ007-20A	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-137609-E-1 MS	PZ007-20A	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-137609-E-1 MSD	PZ007-20A	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-137609-E-5	PZ005-20A	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-137609-E-7	G0045-20A	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-137609-E-8	G0017-20A	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-137609-E-3	G0105-20A	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL
280-137609-E-4	G0080-20A	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 280-499239/1		9030B, 9034		1 mL					
MB 280-499239/2		9030B, 9034							
280-137609-E-1	PZ007-20A	9030B, 9034	T						
280-137609-E-1 MS	PZ007-20A	9030B, 9034	T	1 mL					
280-137609-E-1 MSD	PZ007-20A	9030B, 9034	T	1 mL					
280-137609-E-5	PZ005-20A	9030B, 9034	T						
280-137609-E-7	G0045-20A	9030B, 9034	T						
280-137609-E-8	G0017-20A	9030B, 9034	T						
280-137609-E-3	G0105-20A	9030B, 9034	T						
280-137609-E-4	G0080-20A	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.: 280-137609-1

SDG No.:

Batch Number: 499239 Batch Start Date: 06/18/20 10:52 Batch Analyst: Hunter, Brandon W

Batch Method: 9030B Batch End Date:

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.: 280-137609-1

SDG No.:

Batch Number: 499241 Batch Start Date: 06/18/20 10:56 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 280-499239/1-A		9034		0.00 mL	3.5 mL	5 mL	3.5 mL	50 mL	
MB 280-499239/2-A		9034		3.6 mL	4.5 mL	1 mL	0.9 mL	50 mL	
280-137609-E-1-A	PZ007-20A	9034	T	4.5 mL	5.5 mL	1 mL	1 mL	50 mL	
280-137609-E-1-B MS	PZ007-20A	9034	T	5.5 mL	8.1 mL	5 mL	2.6 mL	50 mL	
280-137609-E-1-C MSD	PZ007-20A	9034	T	8.1 mL	11.7 mL	5 mL	3.6 mL	50 mL	
280-137609-E-5-A	PZ005-20A	9034	T	11.7 mL	12.7 mL	1 mL	1 mL	50 mL	
280-137609-E-7-A	G0045-20A	9034	T	12.7 mL	13.6 mL	1 mL	0.9 mL	50 mL	
280-137609-E-8-A	G0017-20A	9034	T	13.6 mL	15.6 mL	3 mL	2 mL	50 mL	
280-137609-E-3-A	G0105-20A	9034	T	21.5 mL	22.4 mL	1 mL	0.899999999999999 mL	50 mL	
280-137609-E-4-A	G0080-20A	9034	T	22.4 mL	23.4 mL	1 mL	1 mL	50 mL	

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.: 280-137609-1

SDG No.:

Batch Number: 499255 Batch Start Date: 06/18/20 11:38 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 280-499255/1		9030B, 9034		50 mL	50 mL	14	>9 SU	<2 SU	5 mL
MB 280-499255/2		9030B, 9034		50 mL	50 mL	15	>9 SU	<2 SU	5 mL
280-137609-N-9	G0102-20A	9030B, 9034	T	50 mL	50 mL	16	>9 SU	<2 SU	5 mL
280-137609-E-9 MS	G0102-20A	9030B, 9034	T	50 mL	50 mL	17	>9 SU	<2 SU	5 mL
280-137609-E-9 MSD	G0102-20A	9030B, 9034	T	50 mL	50 mL	18	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01769					
LCS 280-499255/1		9030B, 9034		1 mL					
MB 280-499255/2		9030B, 9034							
280-137609-N-9	G0102-20A	9030B, 9034	T						
280-137609-E-9 MS	G0102-20A	9030B, 9034	T	1 mL					
280-137609-E-9 MSD	G0102-20A	9030B, 9034	T	1 mL					

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.: 280-137609-1

SDG No.:

Batch Number: 499302 Batch Start Date: 06/18/20 14:05 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 280-499255/1-A		9034		18.8 mL	21.3 mL	5 mL	2.5 mL	50 mL	
MB 280-499255/2-A		9034		21.3 mL	22.2 mL	1 mL	0.899999999999999 mL	50 mL	
280-137609-N-9-A	G0102-20A	9034	T	22.2 mL	23.2 mL	1 mL	1 mL	50 mL	
280-137609-E-9-B MS	G0102-20A	9034	T	2.0 mL	5.6 mL	5 mL	3.6 mL	50 mL	
280-137609-E-9-C MSD	G0102-20A	9034	T	5.6 mL	8.5 mL	5 mL	2.9 mL	50 mL	

Batch Notes	
Batch Comment	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.: 280-137609-1

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	IC CL ICV 00018	IC ICV 5 00272
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		
ICV 280-497185/8		9056A		5 mL	5 mL			0.4 mL	0.4 mL
ICB 280-497185/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00021					
STD 280-497185/2 IC		9056A							
STD 280-497185/3 IC		9056A							
STD 280-497185/4 IC		9056A							
STD 280-497185/5 IC		9056A							
STD 280-497185/6 IC		9056A							
STD 280-497185/7 IC		9056A							
ICV 280-497185/8		9056A		0.4 mL					
ICB 280-497185/9		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 497185 Batch Start Date: 06/03/20 10:08 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

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.: 280-137609-1

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 CAL cl/so4 00316	IC Cal low 00530	IC LCS 01746	ICMS/MSD WEEK 00654
CCV 280-500081/1		9056A		5 mL	5 mL			5 mL	
CCB 280-500081/2		9056A		5 mL	5 mL				
MRL 280-500081/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-500081/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-500081/5		9056A		5 mL	5 mL			5 mL	
MB 280-500081/6		9056A		5 mL	5 mL				
280-137609-F-1	PZ007-20A	9056A	T	5 mL	5 mL				
280-137609-F-1 DU	PZ007-20A	9056A	T	5 mL	5 mL				
280-137609-F-1 MS	PZ007-20A	9056A	T	5 mL	5 mL				0.05 mL
280-137609-F-1 MSD	PZ007-20A	9056A	T	5 mL	5 mL				0.05 mL
280-137609-F-2	PZ012-20A	9056A	T	5 mL	5 mL				
280-137609-F-3	G0105-20A	9056A	T	5 mL	5 mL				
280-137609-F-4	G0080-20A	9056A	T	5 mL	5 mL				
280-137609-F-5	PZ005-20A	9056A	T	5 mL	5 mL				
CCV 280-500081/17		9056A		5 mL	5 mL			5 mL	
CCB 280-500081/18		9056A		5 mL	5 mL				
280-137609-F-6	NW052-20A	9056A	T	5 mL	5 mL				
280-137609-F-7	G0045-20A	9056A	T	5 mL	5 mL				
280-137609-F-8	G0017-20A	9056A	T	5 mL	5 mL				
280-137609-O-9	G0102-20A	9056A	T	5 mL	5 mL				
280-137609-O-9 DU	G0102-20A	9056A	T	5 mL	5 mL				
280-137609-O-9 MS	G0102-20A	9056A	T	5 mL	5 mL				0.05 mL
280-137609-O-9 MSD	G0102-20A	9056A	T	5 mL	5 mL				0.05 mL
280-137609-D-10	SHGW03-20A	9056A	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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 CAL cl/so4 00316	IC Cal low 00530	IC LCS 01746	ICMS/MSD WEEK 00654
280-137609-B-11	SHGW02-20A	9056A	T	5 mL	5 mL				
280-137609-B-12	SHGW05-20A	9056A	T	5 mL	5 mL				
CCV 280-500081/29		9056A		5 mL	5 mL			5 mL	
CCB 280-500081/30		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.: 280-137609-1

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	IC CAL cl/so4 00317	IC Cal low 00531	IC LCS 01747	ICMS/MSD WEEK 00655
CCV 280-500465/1		9056A		5 mL	5 mL			5 mL	
CCB 280-500465/2		9056A		5 mL	5 mL				
MRL 280-500465/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-500465/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-500465/5		9056A		5 mL	5 mL			5 mL	
MB 280-500465/6		9056A		5 mL	5 mL				
CCV 280-500465/17		9056A		5 mL	5 mL			5 mL	
CCB 280-500465/18		9056A		5 mL	5 mL				
CCV 280-500465/29		9056A		5 mL	5 mL			5 mL	
CCB 280-500465/30		9056A		5 mL	5 mL				
280-137609-F-3	G0105-20A	9056A	T	5 mL	5 mL				
280-137609-F-5	PZ005-20A	9056A	T	5 mL	5 mL				
280-137609-F-7	G0045-20A	9056A	T	5 mL	5 mL				
280-137609-O-9	G0102-20A	9056A	T	5 mL	5 mL				
280-137609-O-9 DU	G0102-20A	9056A	T	5 mL	5 mL				
280-137609-O-9 MS	G0102-20A	9056A	T	5 mL	5 mL				0.05 mL
280-137609-O-9 MSD	G0102-20A	9056A	T	5 mL	5 mL				0.05 mL
CCV 280-500465/41		9056A		5 mL	5 mL			5 mL	
CCB 280-500465/42		9056A		5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

SDG No.:

Batch Number: 500465 Batch Start Date: 06/29/20 09:54 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

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.: 280-137609-1

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 ICV Std 00043	TOC LCS Std 00048	
ICV 280-500423/1		9060A		50 mL	50 mL	<2 SU	1 mL		
ICB 280-500423/2		9060A		20 mL	20 mL	<2 SU			
LCS 280-500262/1-A		9060A		200 mL	200 mL	<2 SU		5 mL	
MB 280-500262/2-A		9060A		20 mL	20 mL	<2 SU			
CCV 280-500423/15		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500423/16		9060A		20 mL	20 mL	<2 SU			
280-137609-D-1-A	PZ007-20A	9060A	D	20 mL	20 mL	6 SU			
280-137609-D-1-B MS	PZ007-20A	9060A	D	50 mL	50 mL	6 SU		1.25 mL	
280-137609-D-1-C MSD	PZ007-20A	9060A	D	50 mL	50 mL	6 SU		1.25 mL	
280-137609-D-2-A	PZ012-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-3-A	G0105-20A	9060A	D	20 mL	20 mL	7 SU			
CCV 280-500423/27		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500423/28		9060A		20 mL	20 mL	<2 SU			
280-137609-D-4-A	G0080-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-5-A	PZ005-20A	9060A	D	20 mL	20 mL	7 SU			
280-137609-D-6-A	NW052-20A	9060A	D	20 mL	20 mL	6 SU			
280-137609-D-7-A	G0045-20A	9060A	D	20 mL	20 mL	6 SU			
280-137609-D-8-A	G0017-20A	9060A	D	20 mL	20 mL	6 SU			
LCS 280-500262/27-A		9060A		200 mL	200 mL	<2 SU		5 mL	
MB 280-500262/28-A		9060A		20 mL	20 mL	<2 SU			
280-137609-M-9-A	G0102-20A	9060A	D	20 mL	20 mL	7 SU			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137609-1

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 ICV Std 00043	TOC LCS Std 00048	
280-137609-M-9-B MS	G0102-20A	9060A	D	50 mL	50 mL	7 SU		1.25 mL	
CCV 280-500423/39		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500423/40		9060A		20 mL	20 mL	<2 SU			
280-137609-M-9-C MSD	G0102-20A	9060A	D	50 mL	50 mL	7 SU		1.25 mL	
CCV 280-500423/51		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-500423/52		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.: 280-137609-1

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				
CCV 280-499040/28		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-499040/29		SM 2320B		InitialAmount is blank					
LCS 280-499040/30		SM 2320B		InitialAmount is blank	10 mL				
MB 280-499040/31		SM 2320B		InitialAmount is blank					
280-137609-F-1	PZ007-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-2	PZ012-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-3	G0105-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-4	G0080-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-5	PZ005-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-6	NW052-20A	SM 2320B	T	InitialAmount is blank					
280-137609-F-7	G0045-20A	SM 2320B	T	InitialAmount is blank					
CCV 280-499040/42		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-499040/43		SM 2320B		InitialAmount is blank					
280-137609-F-8	G0017-20A	SM 2320B	T	InitialAmount is blank					
280-137609-O-9	G0102-20A	SM 2320B	T	InitialAmount is blank					
280-137609-D-10	SHGW03-20A	SM 2320B	T	InitialAmount is blank					
280-137609-B-11	SHGW02-20A	SM 2320B	T	InitialAmount is blank					
280-137609-B-12	SHGW05-20A	SM 2320B	T	InitialAmount is blank					
CCV 280-499040/55		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-499040/56		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.: 280-137609-1

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				
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				
229	280-137609-c-16	U	1	10	1			L2	n
230	280-137609-c-17	U	1	10	1			L2	n
231	280-137609-c-18	U	1	1	1			L2	n
232	280-137609-c-19	U	1	1	1			L2	n
233	280-137609-c-20	U	1	10	1			L2	n
234	280-137609-c-21	U	1	5	1			L2	n
235	280-137609-c-22	U	1	1	1			L2	n
236	280-137609-c-23	U	1	1	1			L2	n
237	280-137609-l-9	U	1	1	1			L2	n
238	MS 280-137609-l-9	U	1	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				
239	MSD 280-137609-l-9	U	1	1	1	1		L2	n
240	280-137609-c-24	U	1	1	1			L2	n
241	280-137609-c-25	U	1	1	1			L2	n
242	280-137609-c-26	U	1	10	1			L2	n
243	280-137609-c-27	U	1	10	1			L2	n
244	280-137609-c-28	U	1	1	1			L2	n
245	280-137609-c-29	U	1	1	1			L2	n
246	280-137647-c-4	U	1	1	1			L2	n
247	280-137669-d-2	U	1	1	1			L2	n
248	280-137609-c-5	U	1	1	1			L2	n
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				
249	280-137609-c-8	U	1	1	1			L2	n
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				

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

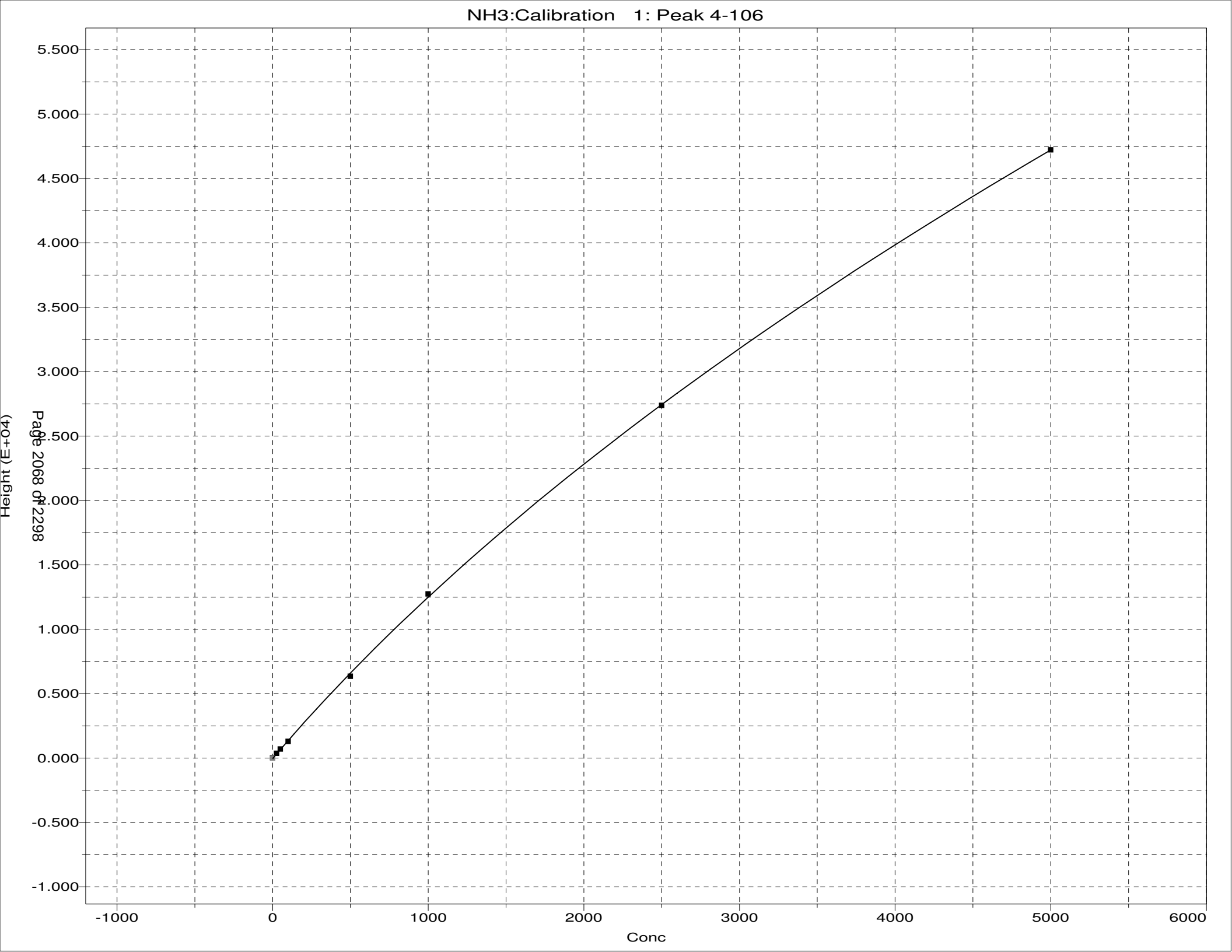
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	22.873283
*	Cal 25 ppb	25.000000	356.235229
*	Cal 50 ppb	50.000000	698.665649
*	Cal 100 ppb	100.000000	1286.739990
*	Cal 500 ppb	500.000000	6349.527832
*	Cal 1000 ppb	1000.000000	12743.179688
*	Cal 2500 ppb	2500.000000	27371.099609
*	Cal 5000 ppb	5000.000000	47224.644531

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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3.000
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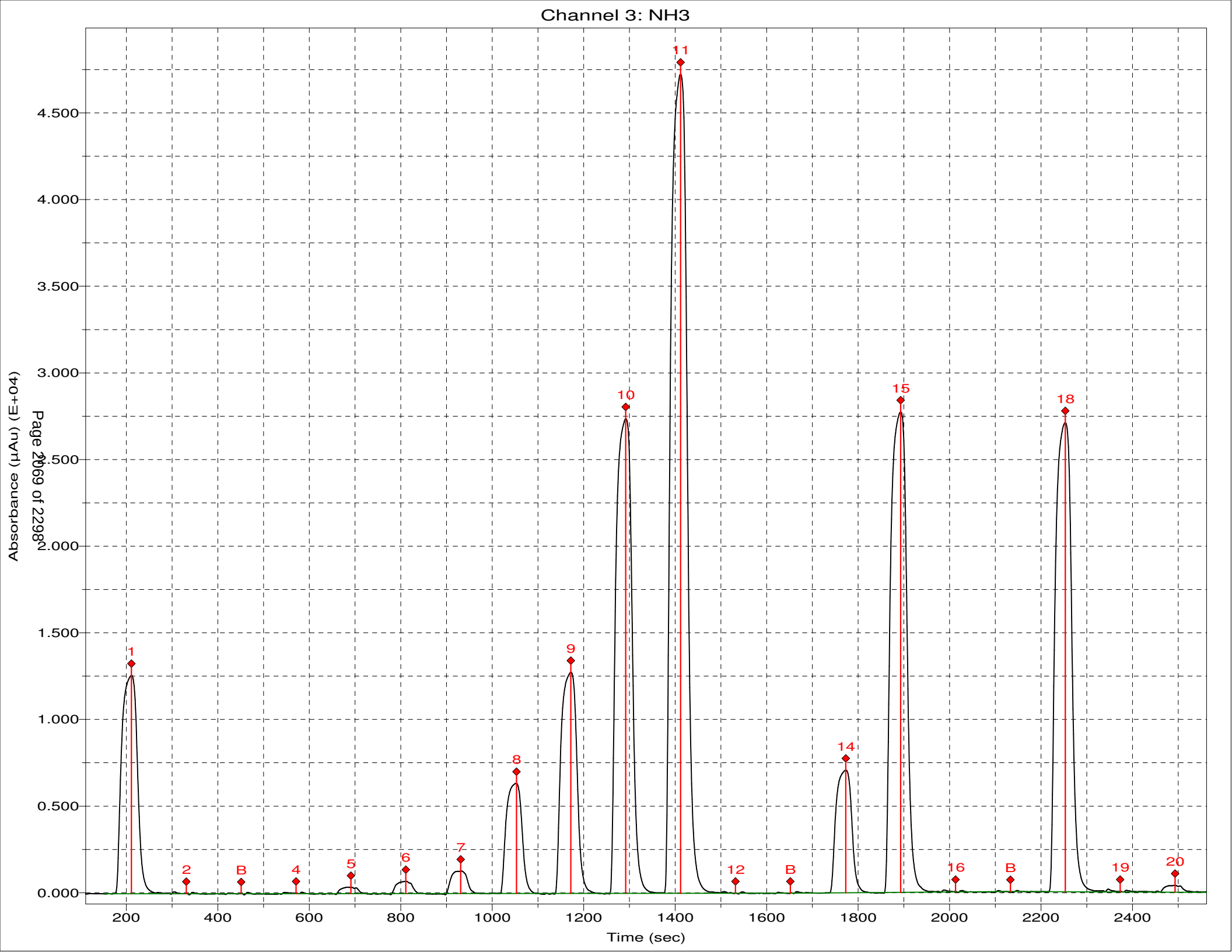
2000
3000
4000
5000
6000
Conc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Absorbance (µAu) (E+04)
Time (sec)
Page 2069 of 2298
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2.000
1.500
1.000
0.500
0.000
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
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B
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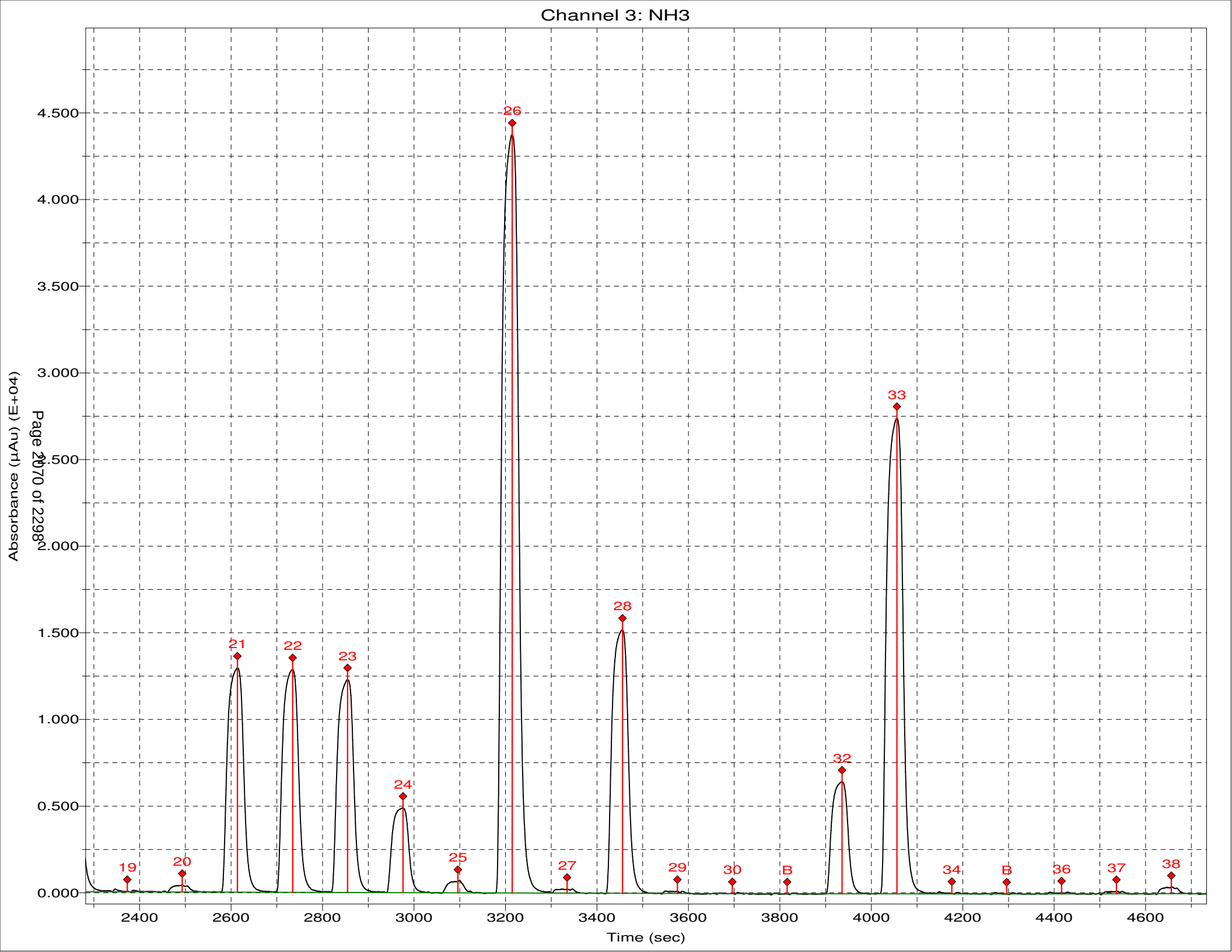
19
20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Absorbance (µAu) (E+04)
Time (sec)
Page 2070 of 2298
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2.000
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1.000
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2600
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3200
3400
3600
3800
4000
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4400
4600
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37
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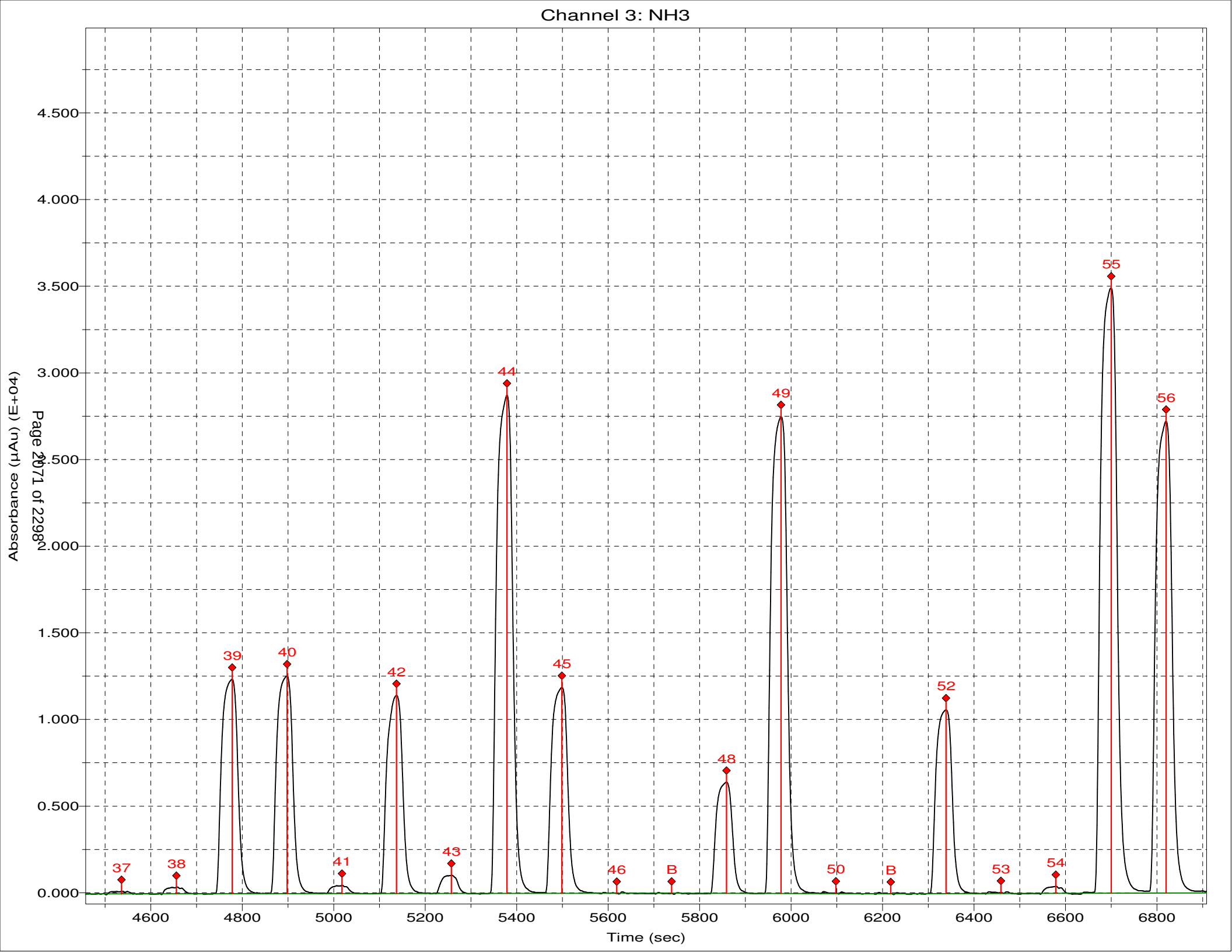
Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 2071 of 22982
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2.000
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1.000
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0.000
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4800
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5400
5600
5800
6000
6200
6400
6600
6800
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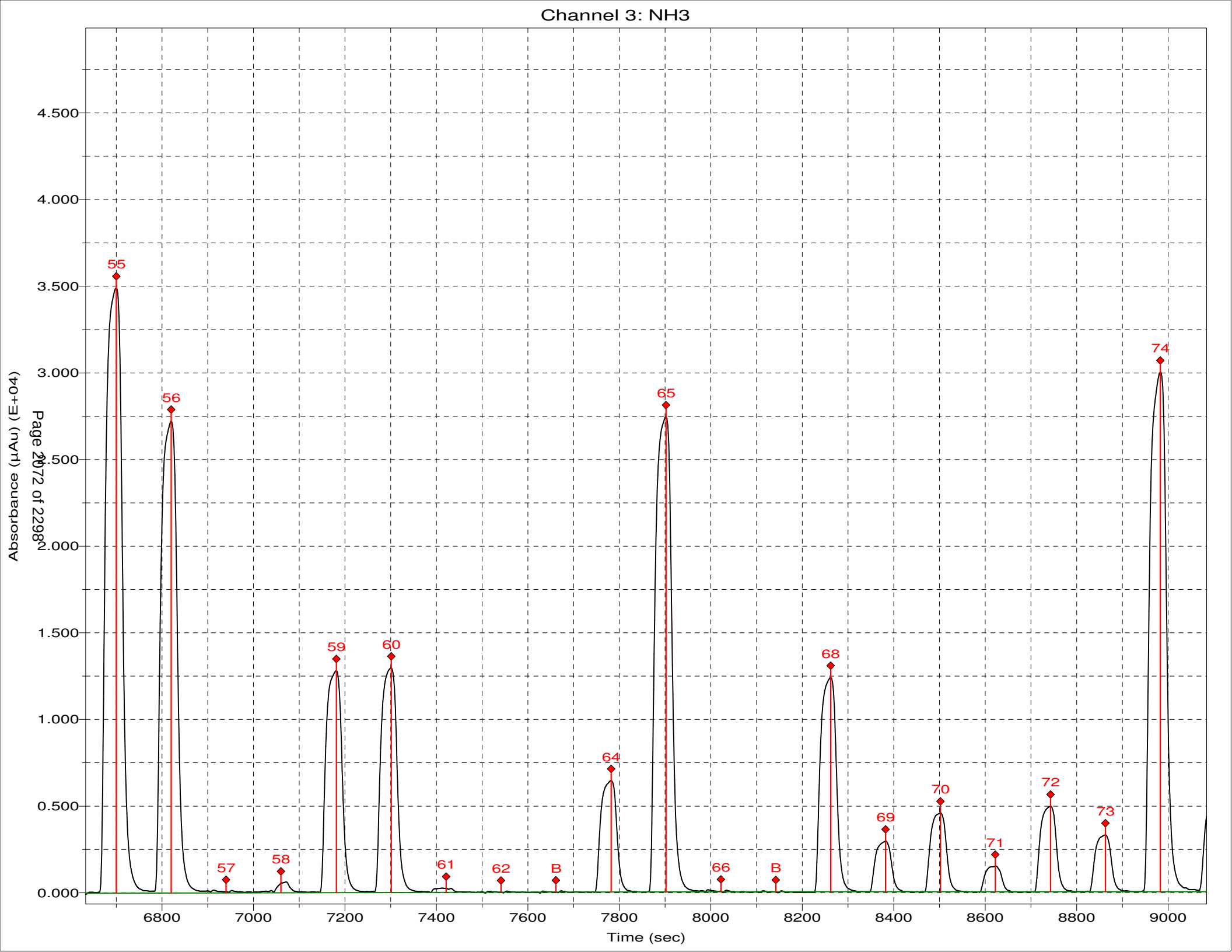
Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 2072 of 2298
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1.000
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7400
7600
7800
8000
8200
8400
8600
8800
9000
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66
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68
69
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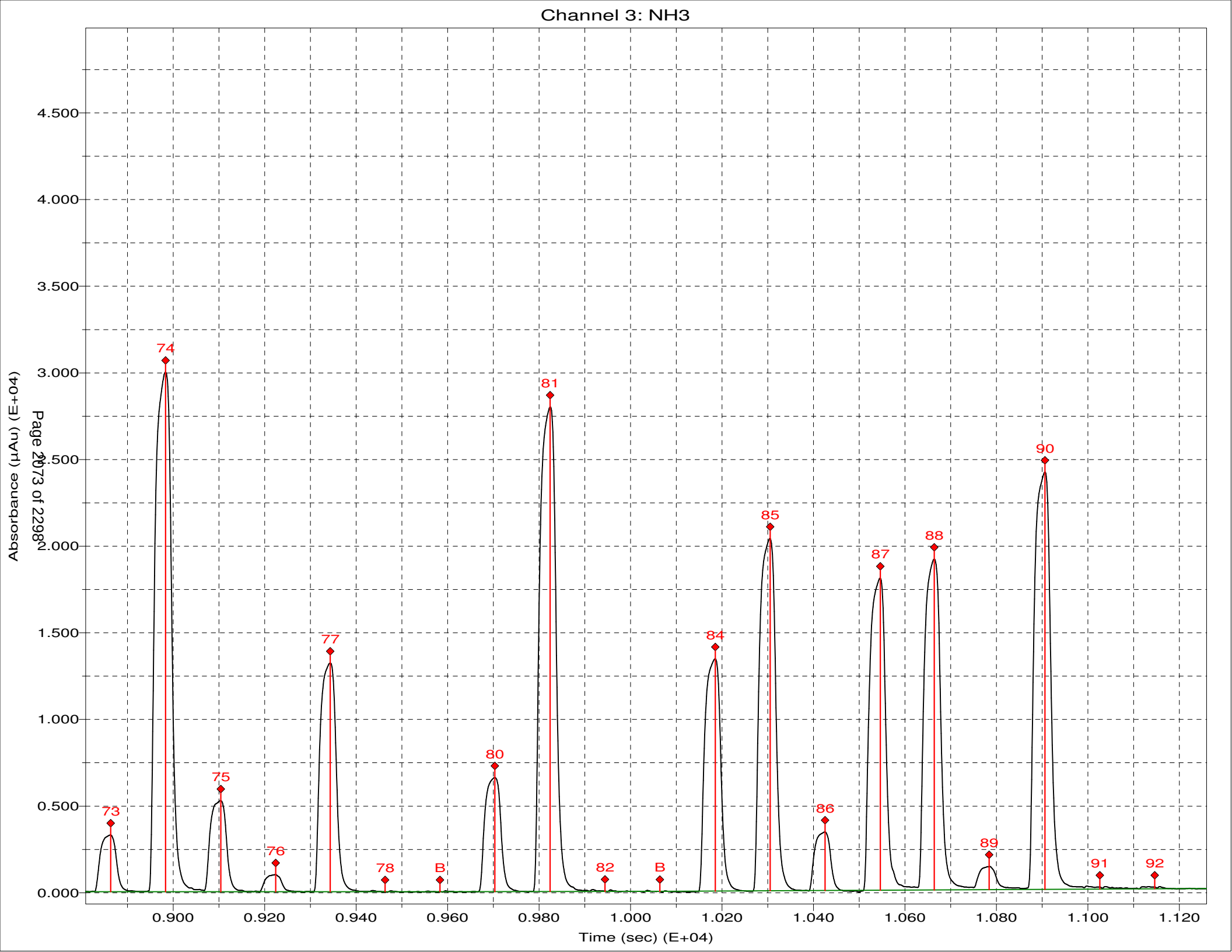
71
72
73
74


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
Page 2073 of 2298
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
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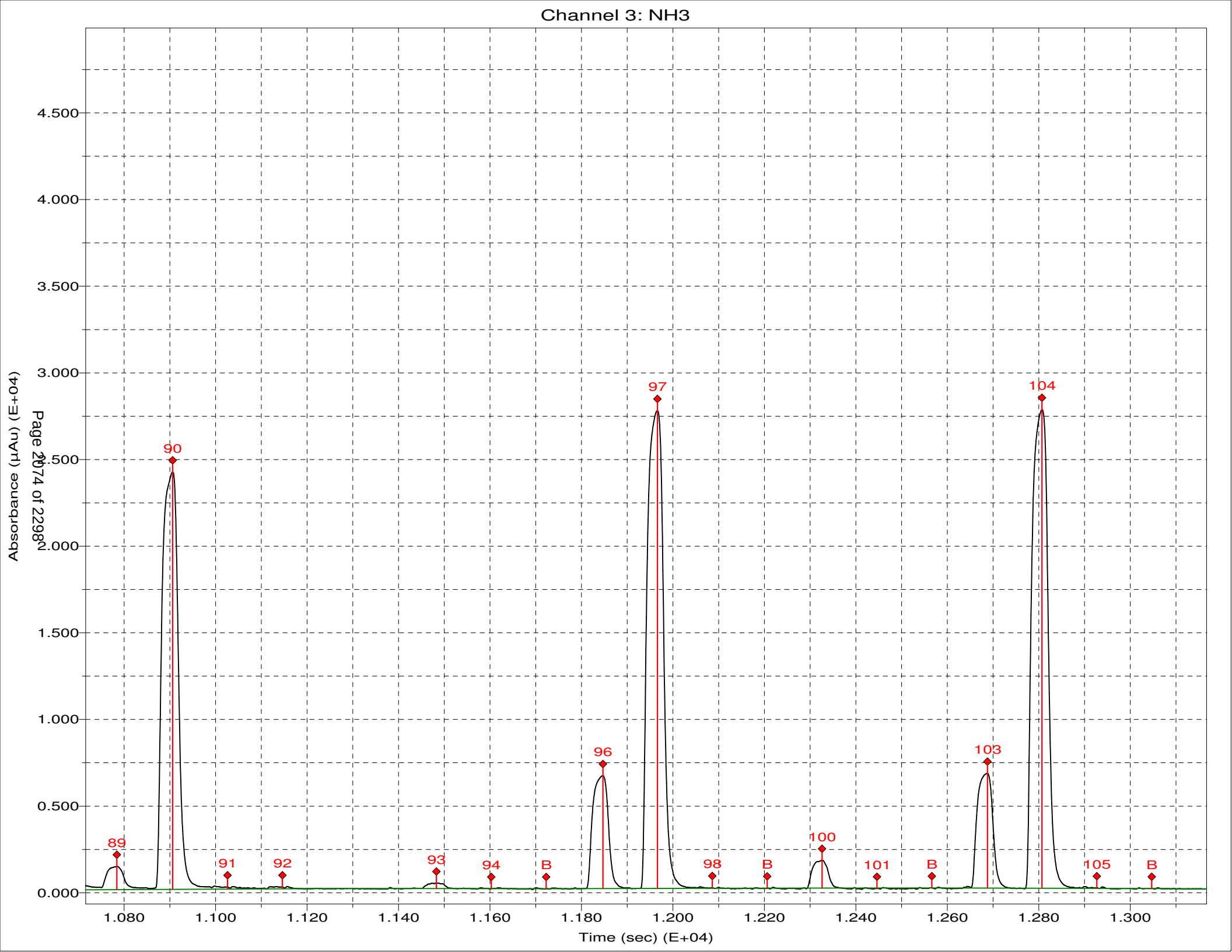
Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1.080
1.100
1.120
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
1.300
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B
103
104
105
B

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	TKN 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	Cor Ht	TKN 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
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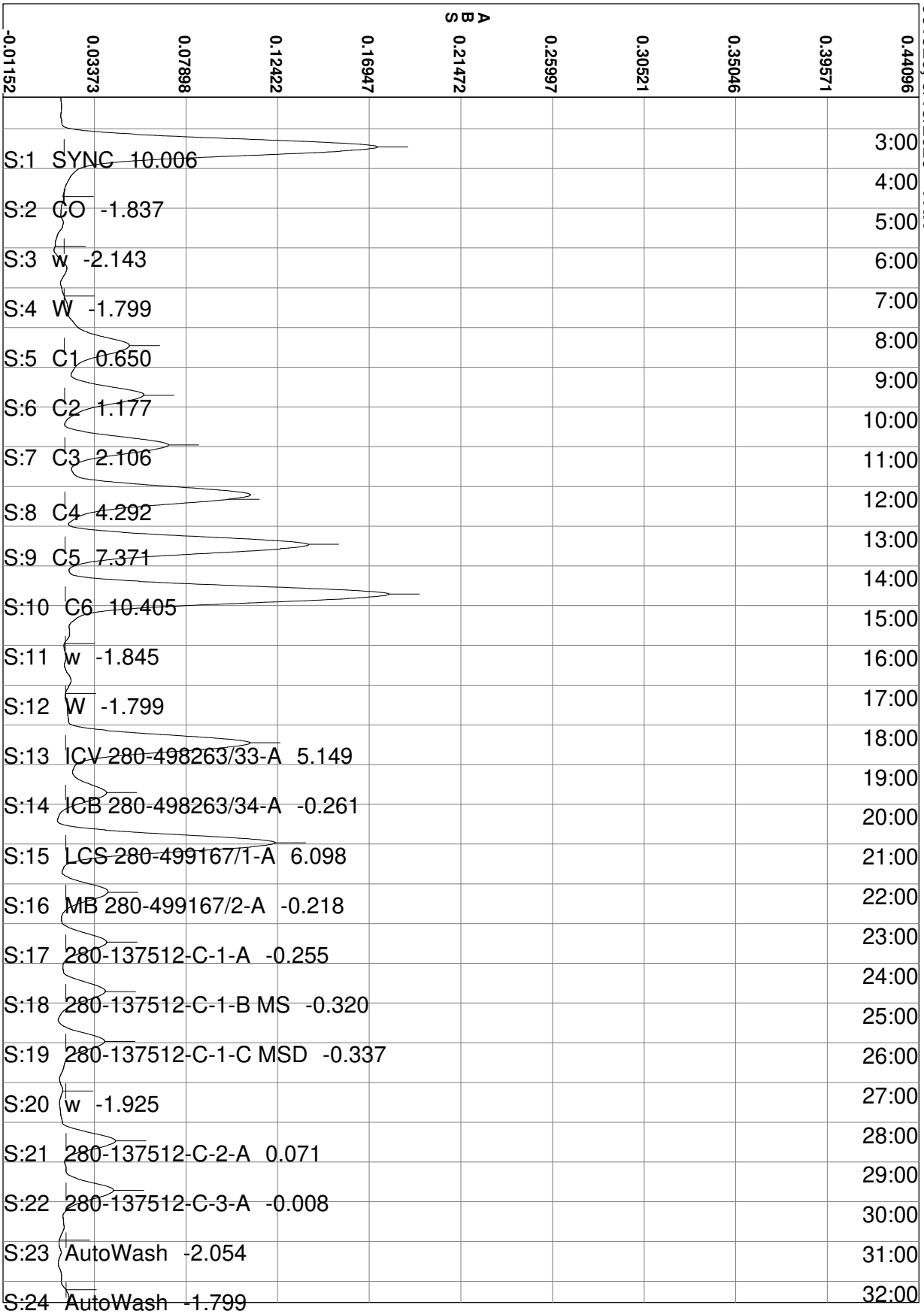
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0.35046
0.39571
0.44096
S:1 SYNC 10.006
S:2 CO -1.837
S:3 w -2.143
S:4 W -1.799
S:5 C1 0.650
S:6 C2 1.177
S:7 C3 2.106
S:8 C4 4.292
S:9 C5 7.371
S:10 C6 10.405
S:11 w -1.845
S:12 W -1.799
S:13 ICV 280-498263/33-A 5.149
S:14 ICB 280-498263/34-A -0.261
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
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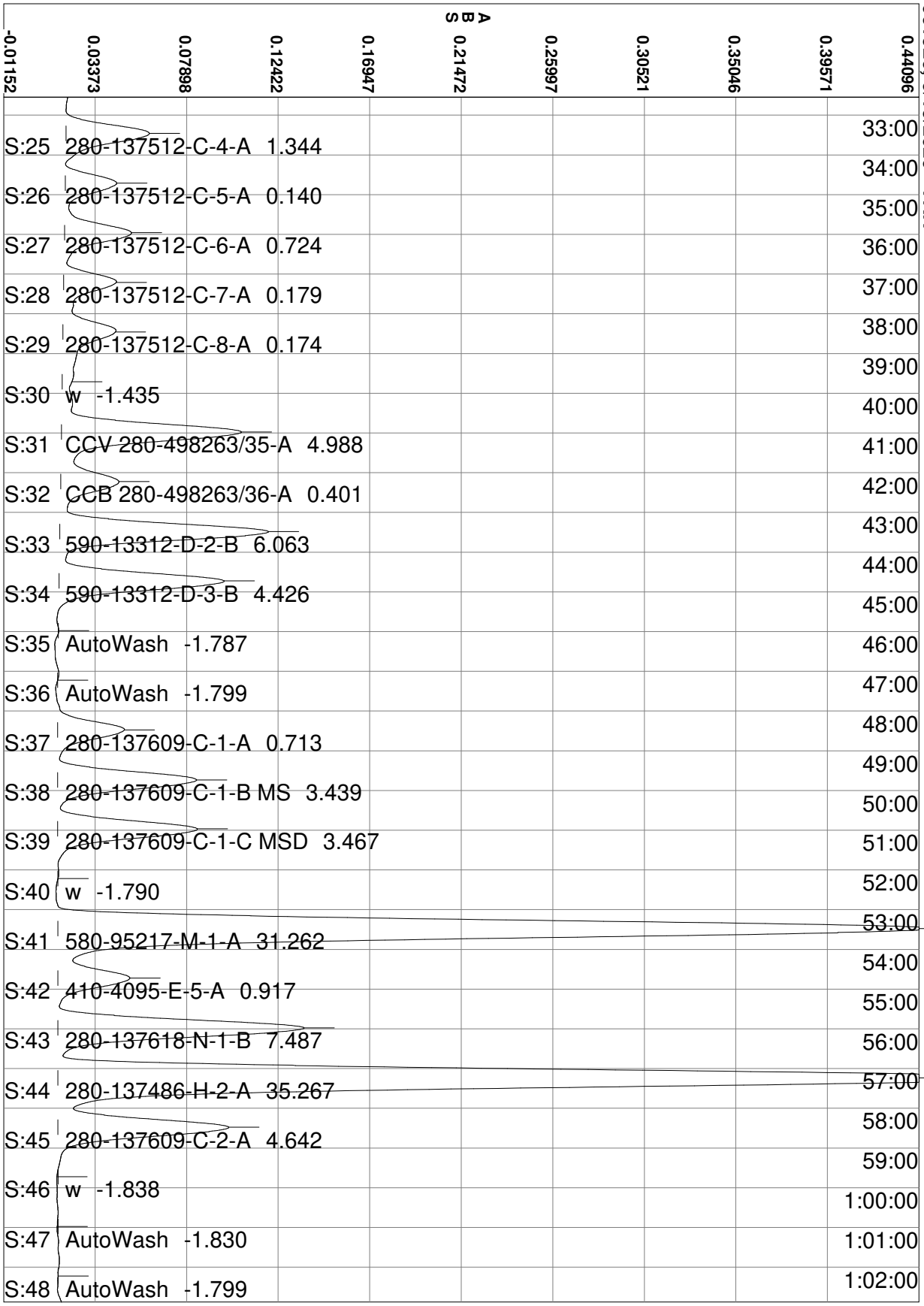
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0.39571
0.44096
S:25 280-137512-C-4-A 1.344
S:26 280-137512-C-5-A 0.140
S:27 280-137512-C-6-A 0.724
S:28 280-137512-C-7-A 0.179
S:29 280-137512-C-8-A 0.174
S:30 w -1.435
S:31 CCV 280-498263/35-A 4.988
S:32 CCB 280-498263/36-A 0.401
S:33 590-13312-D-2-B 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
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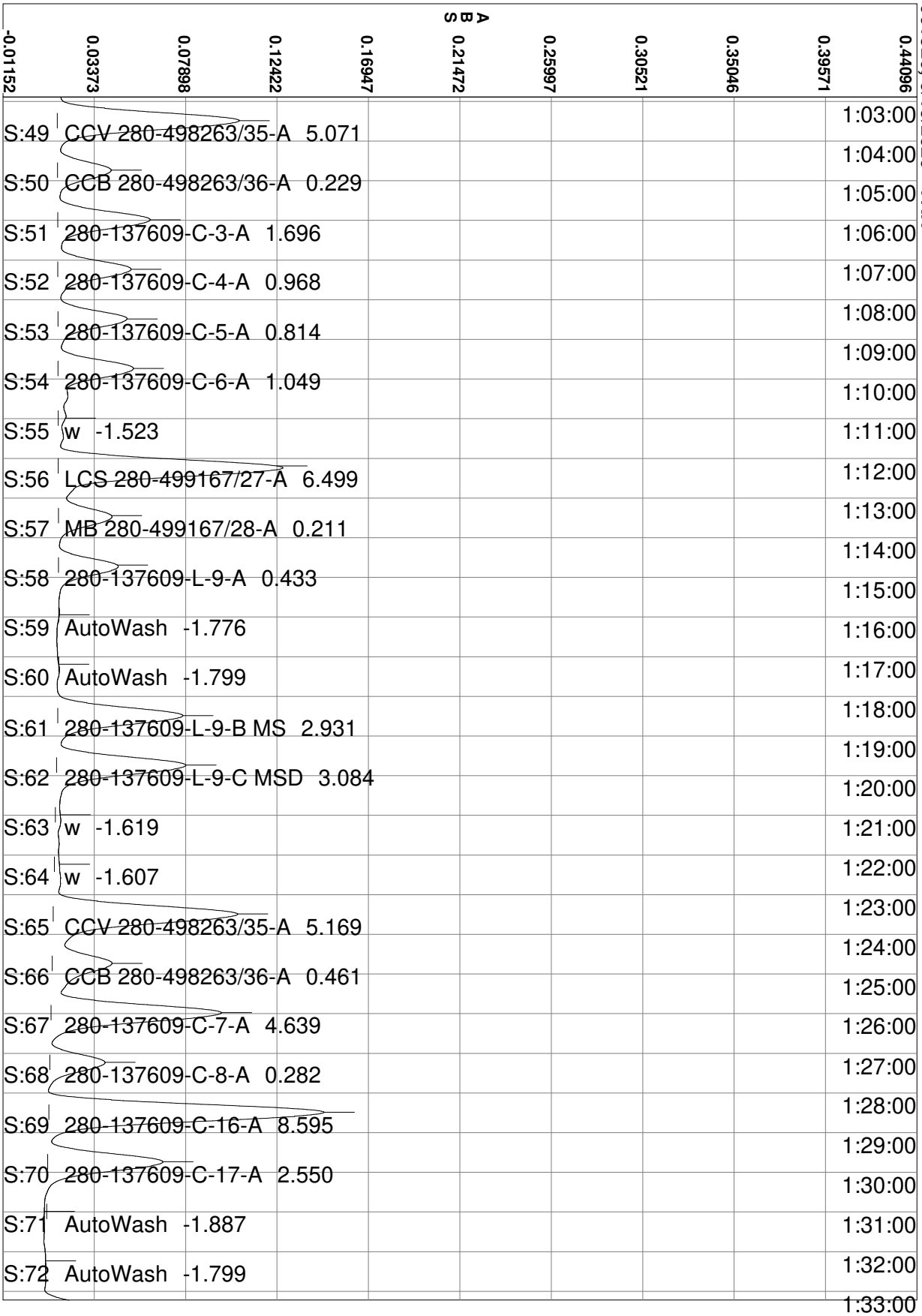
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S:49 CCV 280-498263/35-A 5.071
S:50 CCB 280-498263/36-A 0.229
S:51 280-137609-C-3-A 1.696
S:52 280-137609-C-4-A 0.968
S:53 280-137609-C-5-A 0.814
S:54 280-137609-C-6-A 1.049
S:55 w -1.523
S:56 LCS 280-499167/27-A 6.499
S:57 MB 280-499167/28-A 0.211
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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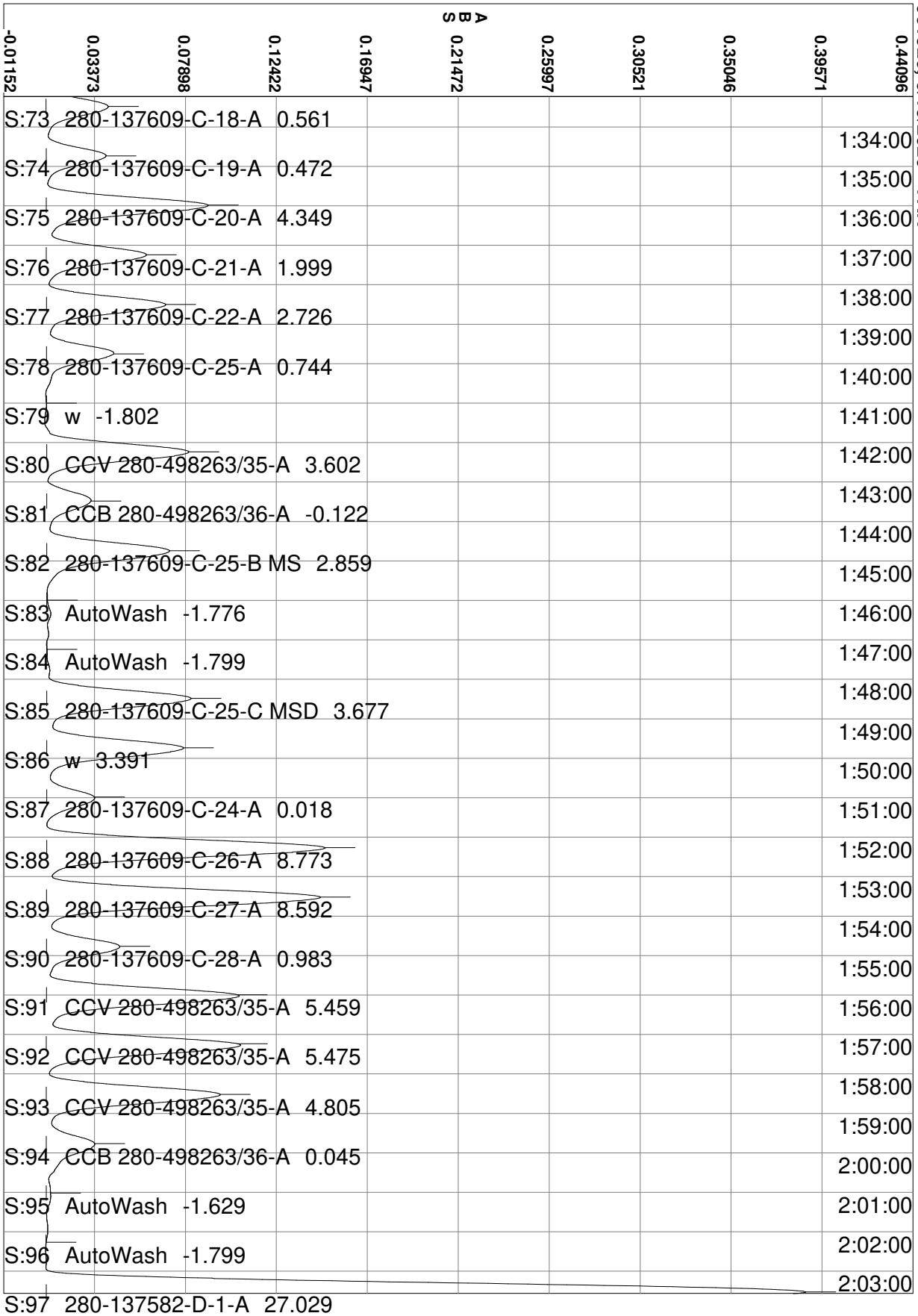
061920, 6/19/2020 - TKN
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0.21472
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0.30521
0.35046
0.39571
0.44096
S:73 280-137609-C-18-A 0.561
S:74 280-137609-C-19-A 0.472
S:75 280-137609-C-20-A 4.349
S:76 280-137609-C-21-A 1.999
S:77 280-137609-C-22-A 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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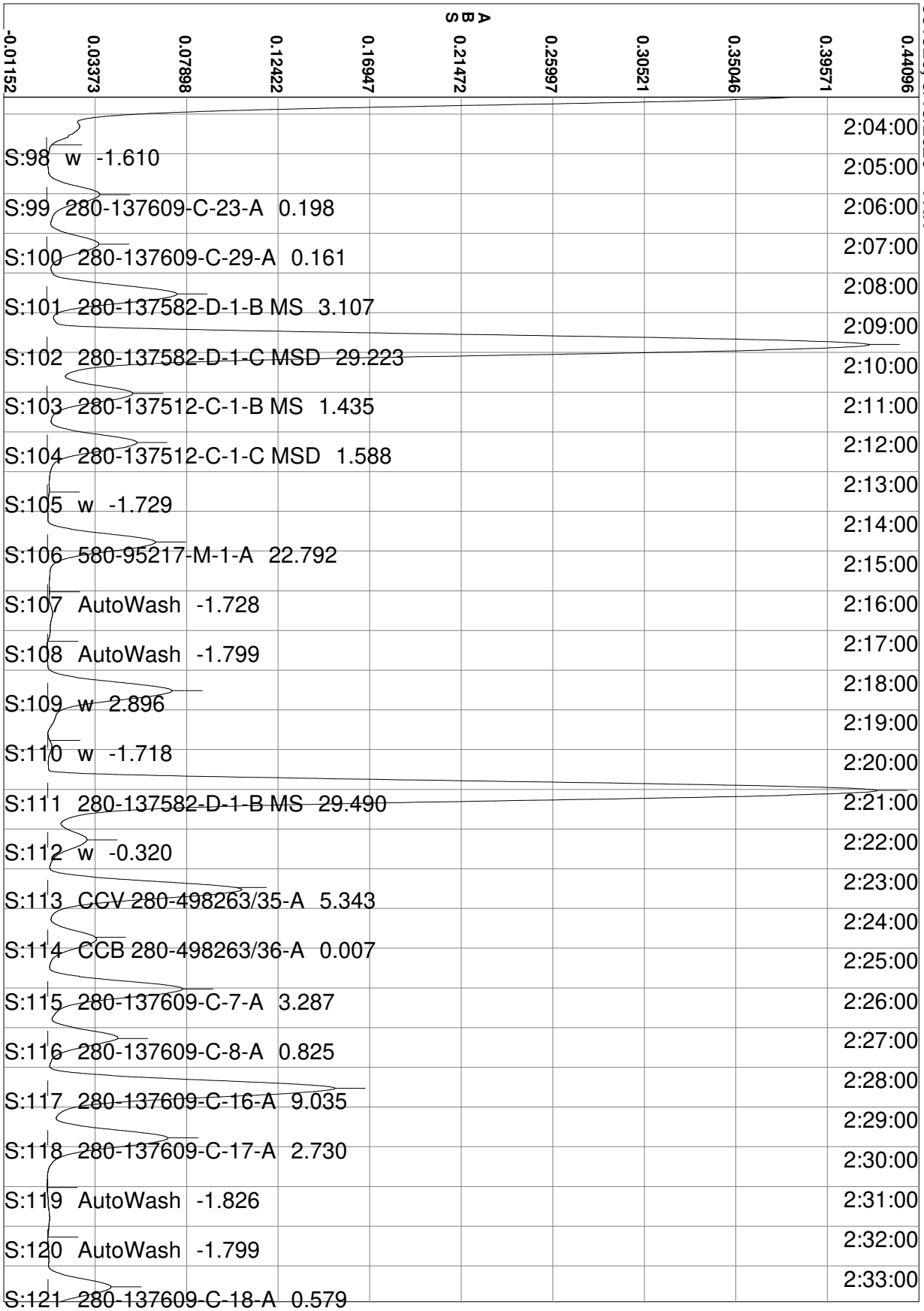
061920, 6/19/2020 - TKN
ABS
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0.35046
0.39571
0.44096
S:98 w -1.610
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S:100 280-137609-C-29-A 0.161
S:101 280-137582-D-1-B MS 3.107
S:102 280-137582-D-1-C MSD 29.223
S:103 280-137512-C-1-B MS 1.435
S:104 280-137512-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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061920, 6/19/2020 - TKN

ABS

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S:124 280-137609-C-21-A 2.100 2:36:00
S:125 280-137609-C-22-A 2.977 2:37:00
S:126 280-137609-C-25-A 0.833 2:38:00
S:127 w 16.222 2:39:00
S:128 w -0.447 2:40:00
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S:130 CCB 280-498263/36-A 0.146 2:42:00
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S:134 280-137609-C-25-C MSD 3.427 2:46:00
S:135 280-137609-C-24-A 2.086 2:47:00
S:136 280-137609-C-26-A 9.186 2:48:00
S:137 280-137609-C-27-A 9.111 2:49:00
S:138 280-137609-C-28-A 1.109 2:50:00
S:139 LCS 280-499167/50-A 6.150 2:51:00
S:140 MB 280-499167/51-A 0.180 2:52:00
S:141 280-137582-D-1-A 45.160 2:53:00
S:142 280-137582-D-1-B MS 50.586 2:54:00
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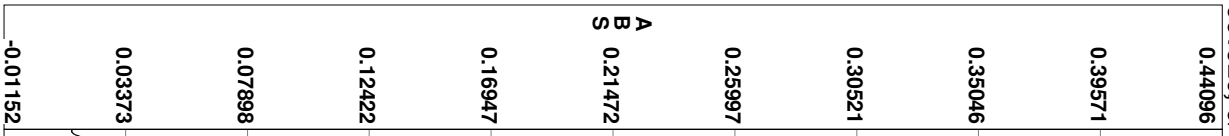

061920, 6/19/2020 - TKN

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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
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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
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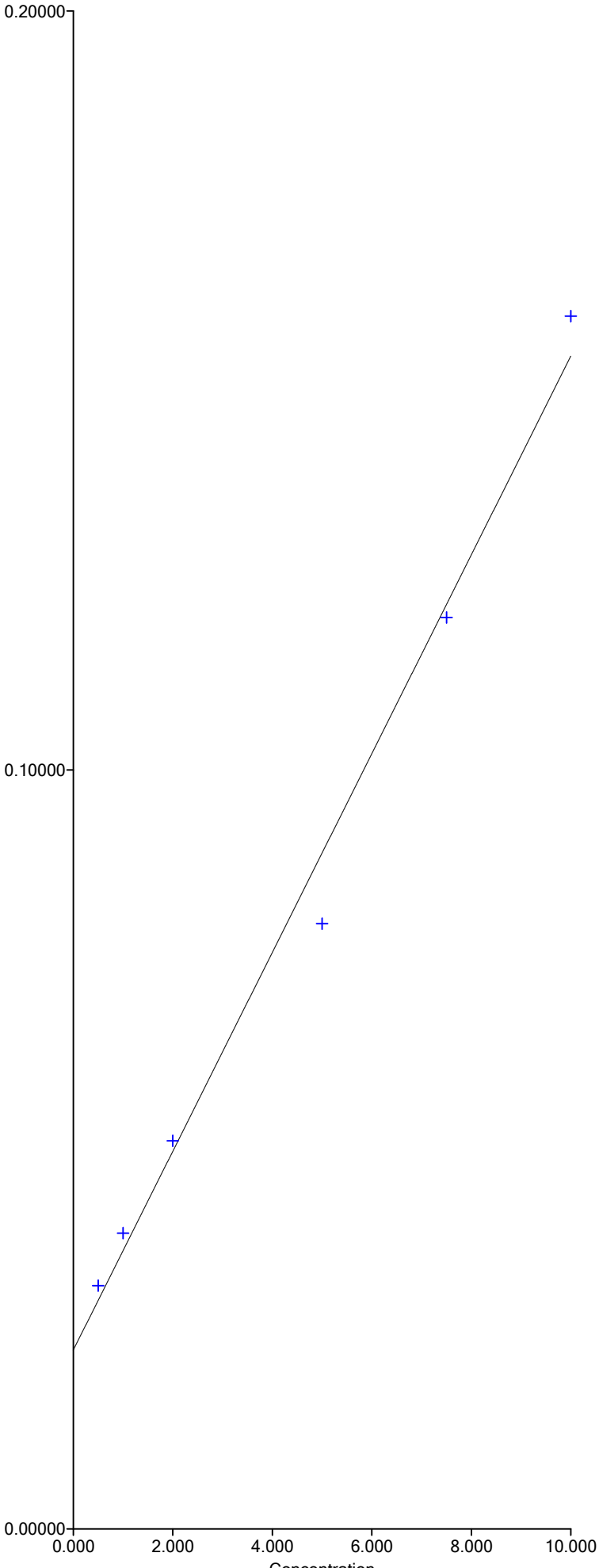
	3:34:00

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

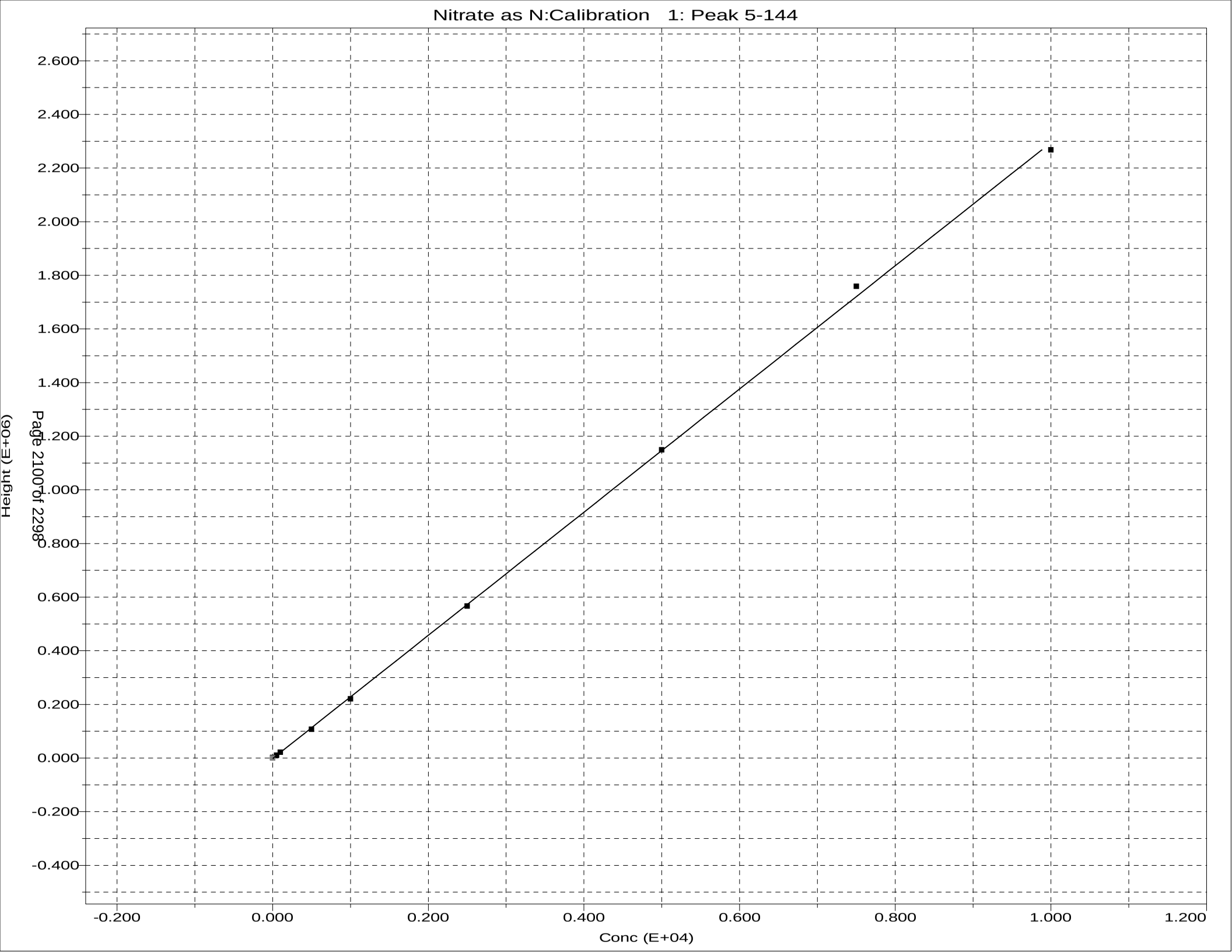
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	2068.520020
*	Cal 50.0 ppb	50.000000	10756.246094
*	Cal 100 ppb	100.000000	21526.656250
*	Cal 500 ppb	500.000000	107258.164062
*	Cal 1000 ppb	1000.000000	220808.671875
*	Cal 2500 ppb	2500.000000	566494.375000
*	Cal 5000 ppb	5000.000000	1148848.750000
*	Cal 7500 ppb	7500.000000	1758830.875000
*	Cal 10000 ppb	10000.000000	2267978.500000

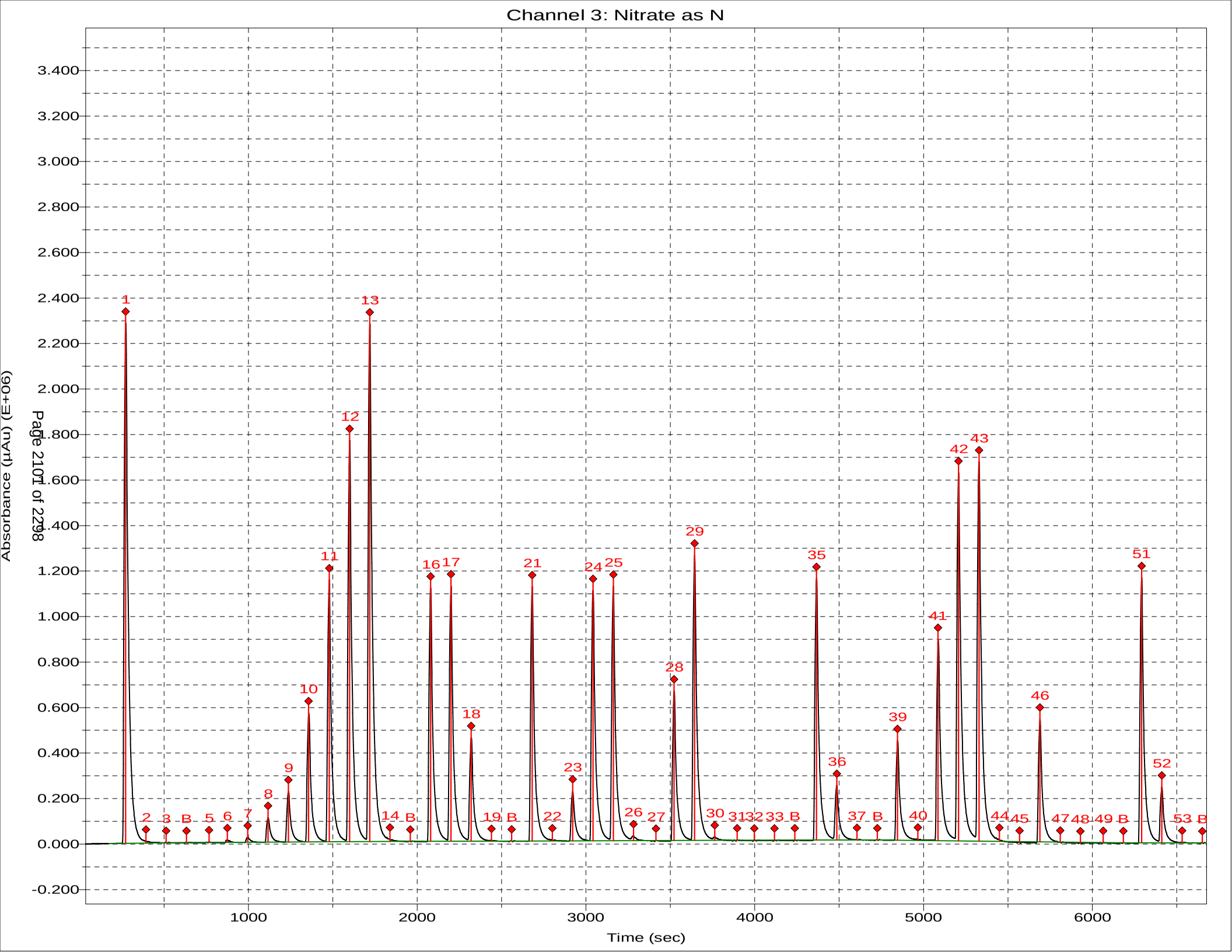
Calib Coef:
y=bx+a
a: (intercept) -1.8822e+03
b: 2.2970e+02

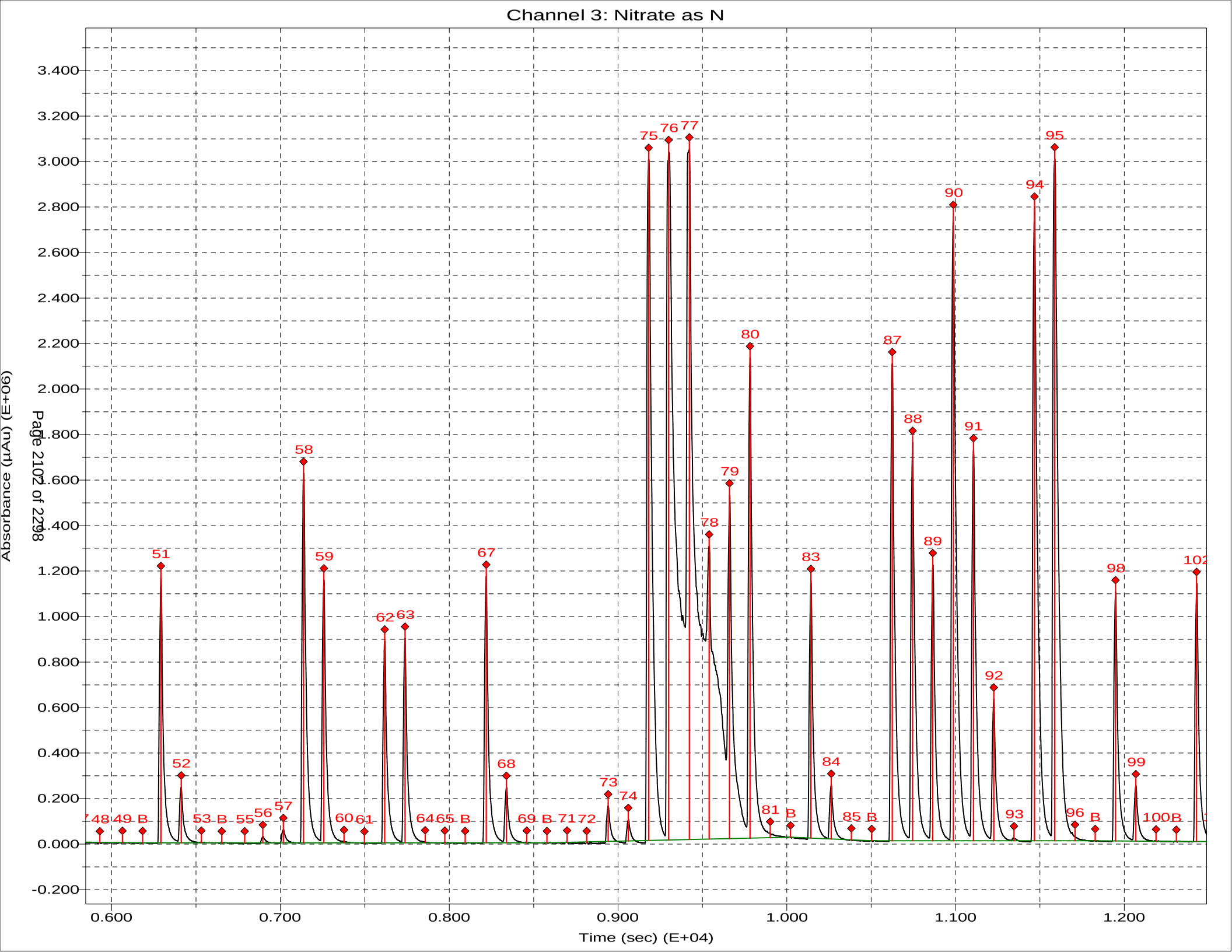
Corr Coef: 0.999800

Carryover: 0.36%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-144
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
Height (E+06)
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
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
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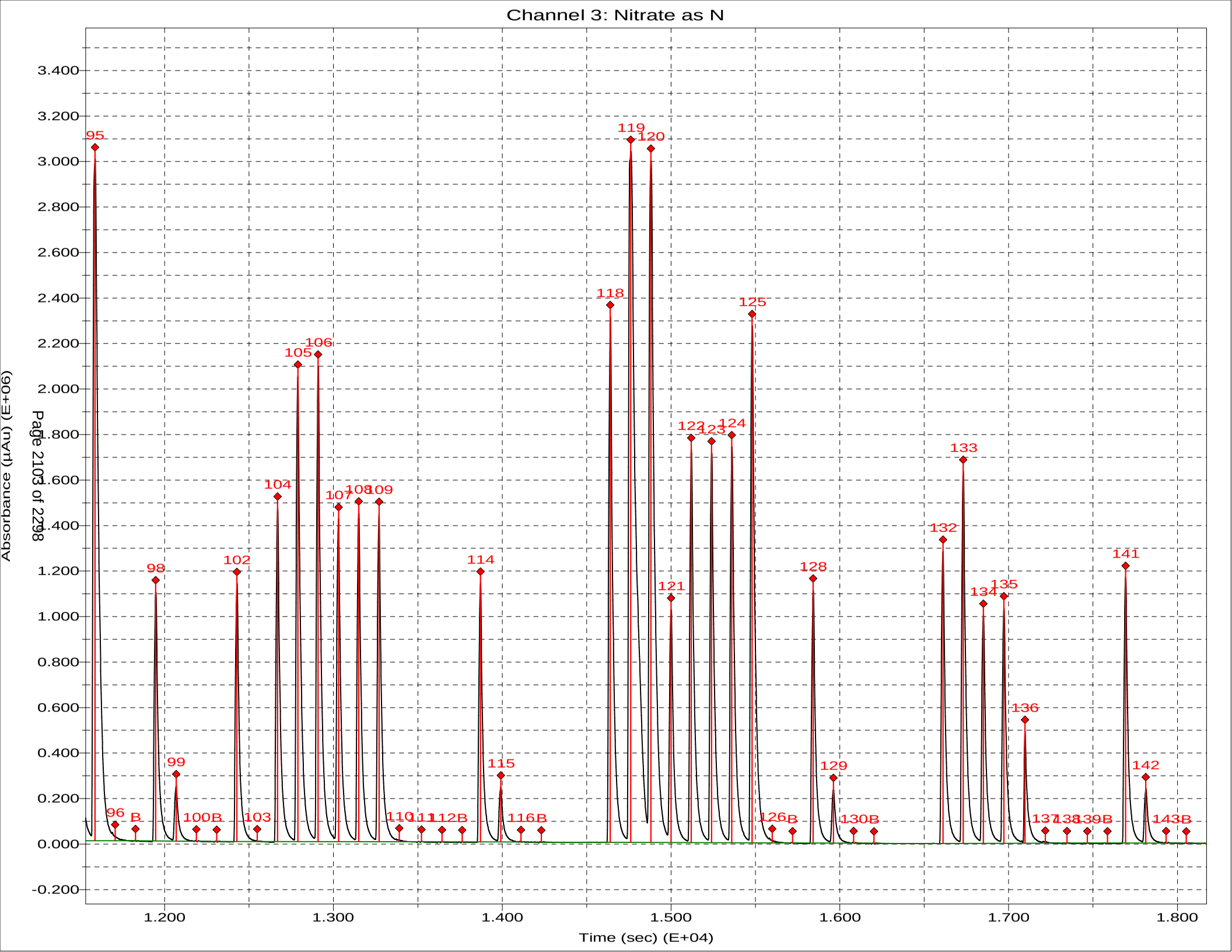
91
92
93
94
95
96
B
98
99
100
B
102


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 2103 of 2298
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:	AD	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:	1104
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:	936
Expiration Date:	9/8/2020

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	6.00	20	6.00	1120.000
CAL	5	6.00	12.40	20	6.40	1088.000

For SM4500 S2 D colorimetric

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.30	20	8.30	936.000
ICV	5	8.30	16.60	20	8.30	936.000

TALS Raw Data Report

Job Number: 280-137609-1
LIMS Batch: 498939
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-498938/1-A** Inj Date: 6/16/2020 11:50:00AM 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	103	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-498938/2-A** Inj Date: 6/16/2020 11:50:00AM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-137549-E-9-A** Inj Date: 6/16/2020 11:50:00AM 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: **280-137549-E-9-B MS** Inj Date: 6/16/2020 11:50:00AM 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	99	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 5 Lab ID: **280-137549-E-9-C MSD** Inj Date: 6/16/2020 11:50:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12.8 mg/L	mg/L	65	44 110	40	20
Sulfide as H2S		13.6 mg/L	mg/L				

RS# 6 Lab ID: **280-137609-E-2-A** Inj Date: 6/16/2020 11:50:00AM 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# 15 Lab ID: **280-137609-E-6-A** Inj Date: 6/16/2020 11:50:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		00000003 mg/L	1.7 J mg/L				
Sulfide		00000003 mg/L	1.6 J mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 498939	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: Alexa David **Date:** 06/18/20	**2310B** **2320B** **2340C** **4500 S2 F** **4500 SO3 B** **9030B/9034**	**Standard** **DoD** **QAPP** **Other**
Matrix (circle): **Water** **Solid**	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** **AT2** **AT3**

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		✓	If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	✓		✓	
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.	NA		✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

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	0.00	3.5
2	3.6	4.5
3	4.5	5.5
4	5.5	8.1
5	8.1	11.7
6	11.7	12.7
7	12.7	13.6
8 → 3mL Iodine	13.6	15.6
9	15.6	16.6
10	16.6	17.7
11	17.7	18.7
12	06/18/20 BWH ~~19.6~~ 18.7	19.6
13	19.6	20.6
14	20.6	21.5
15	21.5	22.4
16	22.4	23.4
17	23.4	24.4
18	0.00	1.0

TALS Raw Data Report

Job Number: 280-137589-1
LIMS Batch: 499241
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499239/1-A** Inj Date: 6/18/2020 10:56:00AM 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 280-499239/2-A** Inj Date: 6/18/2020 10:56:00AM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-137609-E-1-A** Inj Date: 6/18/2020 10:56:00AM 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# 4 Lab ID: **280-137609-E-1-B MS** Inj Date: 6/18/2020 10:56:00AM 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# 5 Lab ID: **280-137609-E-1-C MSD** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	51	44 110	53	20
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 10 Lab ID: **280-137589-F-1-A** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 11 Lab ID: **280-137589-F-2-A** Inj Date: 6/18/2020 10:56:00AM 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: **280-137589-F-3-A** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		099999968 mg/L	0.80 J mg/L				
Sulfide as H2S		099999966 mg/L	0.85 J mg/L				

RS# 13 Lab ID: **280-137589-F-4-A** Inj Date: 6/18/2020 10:56:00AM 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: **280-137589-F-5-A** Inj Date: 6/18/2020 10:56:00AM 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				

TALS Raw Data Report

Job Number: 280-137595-1
LIMS Batch: 499241
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499239/1-A** Inj Date: 6/18/2020 10:56:00AM 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 280-499239/2-A** Inj Date: 6/18/2020 10:56:00AM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-137609-E-1-A** Inj Date: 6/18/2020 10:56:00AM 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# 4 Lab ID: **280-137609-E-1-B MS** Inj Date: 6/18/2020 10:56:00AM 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# 5 Lab ID: **280-137609-E-1-C MSD** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	51	44 110	53	20
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 17 Lab ID: **280-137595-E-2-A** Inj Date: 6/18/2020 10:56:00AM 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: 280-137609-1
LIMS Batch: 499241
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499239/1-A** Inj Date: 6/18/2020 10:56:00AM 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 280-499239/2-A** Inj Date: 6/18/2020 10:56:00AM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-137609-E-1-A** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-137609-E-1-B MS** Inj Date: 6/18/2020 10:56:00AM 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# 5 Lab ID: **280-137609-E-1-C MSD** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	51	44 110	53	20
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 6 Lab ID: **280-137609-E-5-A** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 7 Lab ID: **280-137609-E-7-A** Inj Date: 6/18/2020 10:56:00AM 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# 8 Lab ID: **280-137609-E-8-A** Inj Date: 6/18/2020 10:56:00AM 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				

RS# 15 Lab ID: **280-137609-E-3-A** Inj Date: 6/18/2020 10:56:00AM 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# 16 Lab ID: **280-137609-E-4-A** Inj Date: 6/18/2020 10:56:00AM 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				

TALS Raw Data Report

Job Number: 280-137650-1
LIMS Batch: 499241
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499239/1-A** Inj Date: 6/18/2020 10:56:00AM 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 280-499239/2-A** Inj Date: 6/18/2020 10:56:00AM 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# 3 Lab ID: **280-137609-E-1-A** Inj Date: 6/18/2020 10:56:00AM 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# 4 Lab ID: **280-137609-E-1-B MS** Inj Date: 6/18/2020 10:56:00AM 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	ug/L	87	44 110		
Sulfide as H2S		20.4 mg/L	ug/L				

RS# 5 Lab ID: **280-137609-E-1-C MSD** Inj Date: 6/18/2020 10:56:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	ug/L	51	44 110	53	20
Sulfide as H2S		11.9 mg/L	ug/L				

RS# 9 Lab ID: **280-137650-M-3-A** Inj Date: 6/18/2020 10:56:00AM 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# 18 Lab ID: **280-137650-M-6-A** Inj Date: 6/18/2020 10:56:00AM 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				

Titration Data Review Checklist

LIMS Batch Number: 499241	Method (circle one):	QC Type (circle):
Analyst/1st Reviewer: BWH	2310B 2320B 2340C	(Standard) DoD QAPP Other
Date: 06/18/2020	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

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

~~Stir~~ 06/18/20 BWH

	Sample	Start	End	
	1	0.0	2.7	
	2	2.8	3.8	
	3	3.8	4.8	
	4	4.8	7.4	499276
	5	7.4	10.4	
	6	10.4	11.4	
	7	11.4	12.4	
	8	12.4	13.3	
	9	13.3	14.3	
	10	14.3	15.2	
	11	15.2	16.1	
	12 → 3mL Iodine	16.1	18.8	
	13 (LCS for H_2O samples)	18.8	21.3	
1	14	21.3	22.2	
2	15	22.2	23.2	499302
3	16	2.0	5.6	
4	17 BWH 06/18/20	5.6	8.5	
5	18 ~~extract~~ dark matrix	8.6	10.0	
6				

TALS Raw Data Report

Job Number: 280-137609-1
LIMS Batch: 499302
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499255/1-A** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	90	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499255/2-A** Inj Date: 6/18/2020 2:05:00PM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-137609-N-9-A** Inj Date: 6/18/2020 2:05:00PM 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-9-B MS** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	51	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **280-137609-E-9-C MSD** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	76	44 110	40	20
Sulfide as H2S		17.85 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-137618-1
LIMS Batch: 499302
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-499255/1-A** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	90	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-499255/2-A** Inj Date: 6/18/2020 2:05:00PM 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	mg/L				
Sulfide as H2S		0.85 mg/L	mg/L				

RS# 3 Lab ID: **280-137609-N-9-A** Inj Date: 6/18/2020 2:05:00PM 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-9-B MS** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	51	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **280-137609-E-9-C MSD** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	76	44 110	40	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-137618-P-1-A** Inj Date: 6/18/2020 2:05:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-3.2 mg/L	mg/L				
Sulfide as H2S		-3.4 mg/L	mg/L				

TestAmerica *Denver*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Titration Data Review Checklist

LIMS Batch Number: ~~499382~~ 499302 06/19/2020 BWM	Method (circle one):	QC Type (circle):
Analyst/1st Reviewer: BWM	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_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:

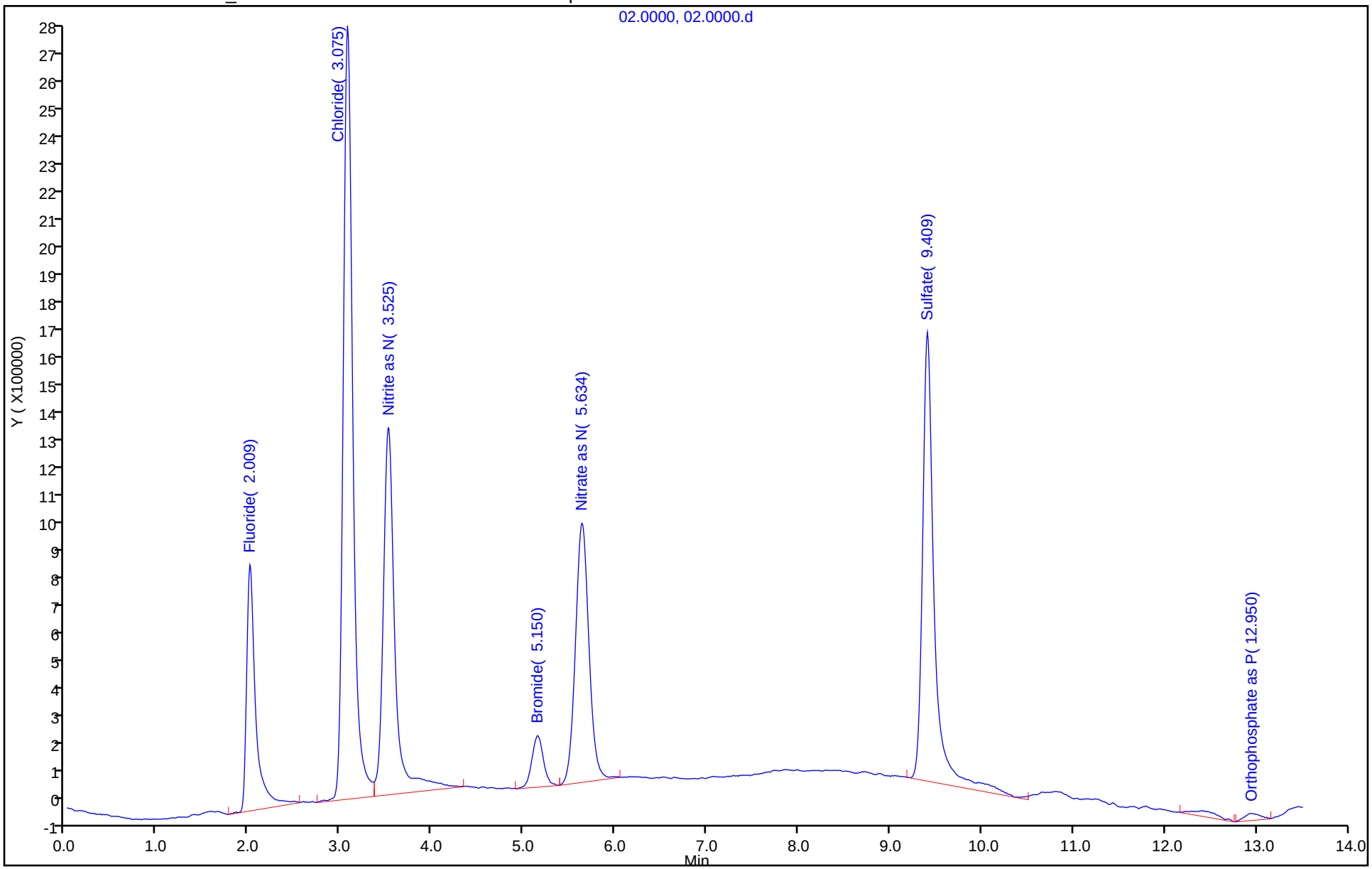
IC Cal low_00527 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00313 Amount Added: 0.02 Units: mL

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

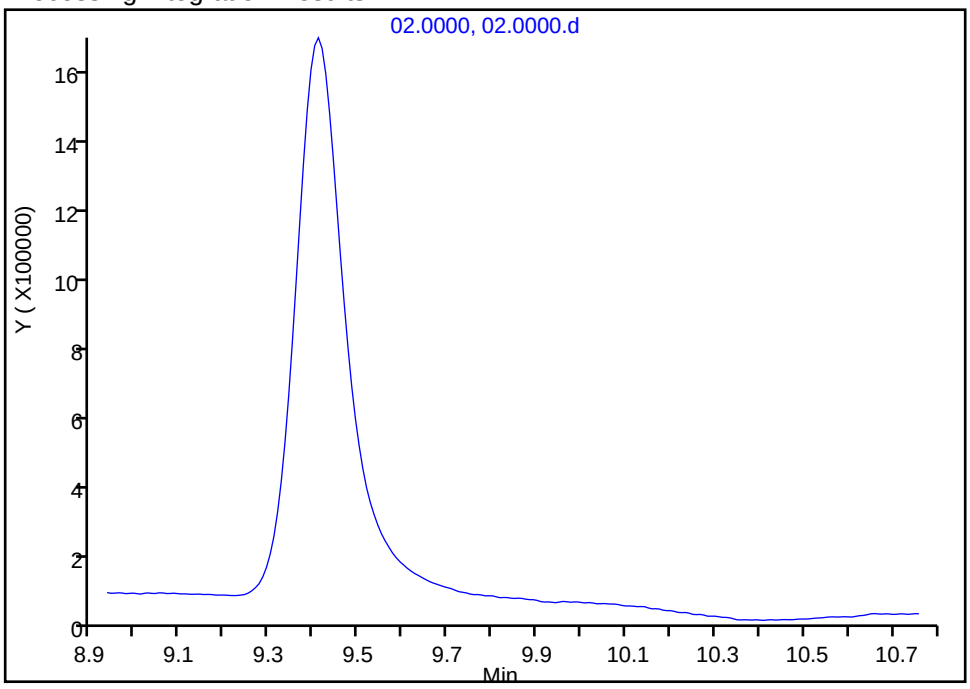
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\02.0000.d
Injection Date: 03-Jun-2020 10:08:00 Instrument ID: WC_IonChrom7
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

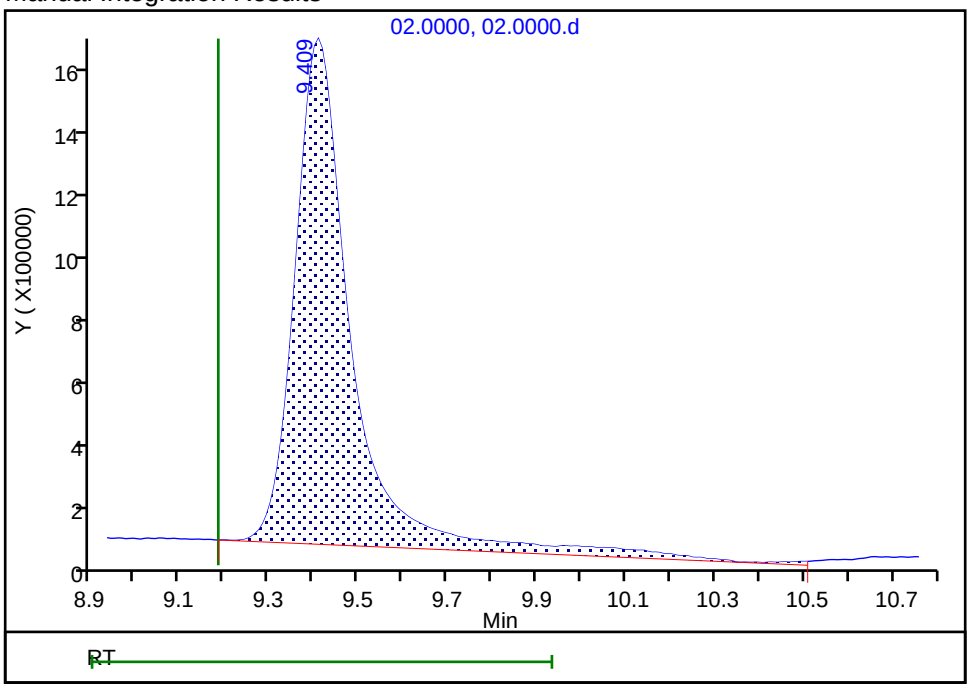
Not Detected
Expected RT: 9.18

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:

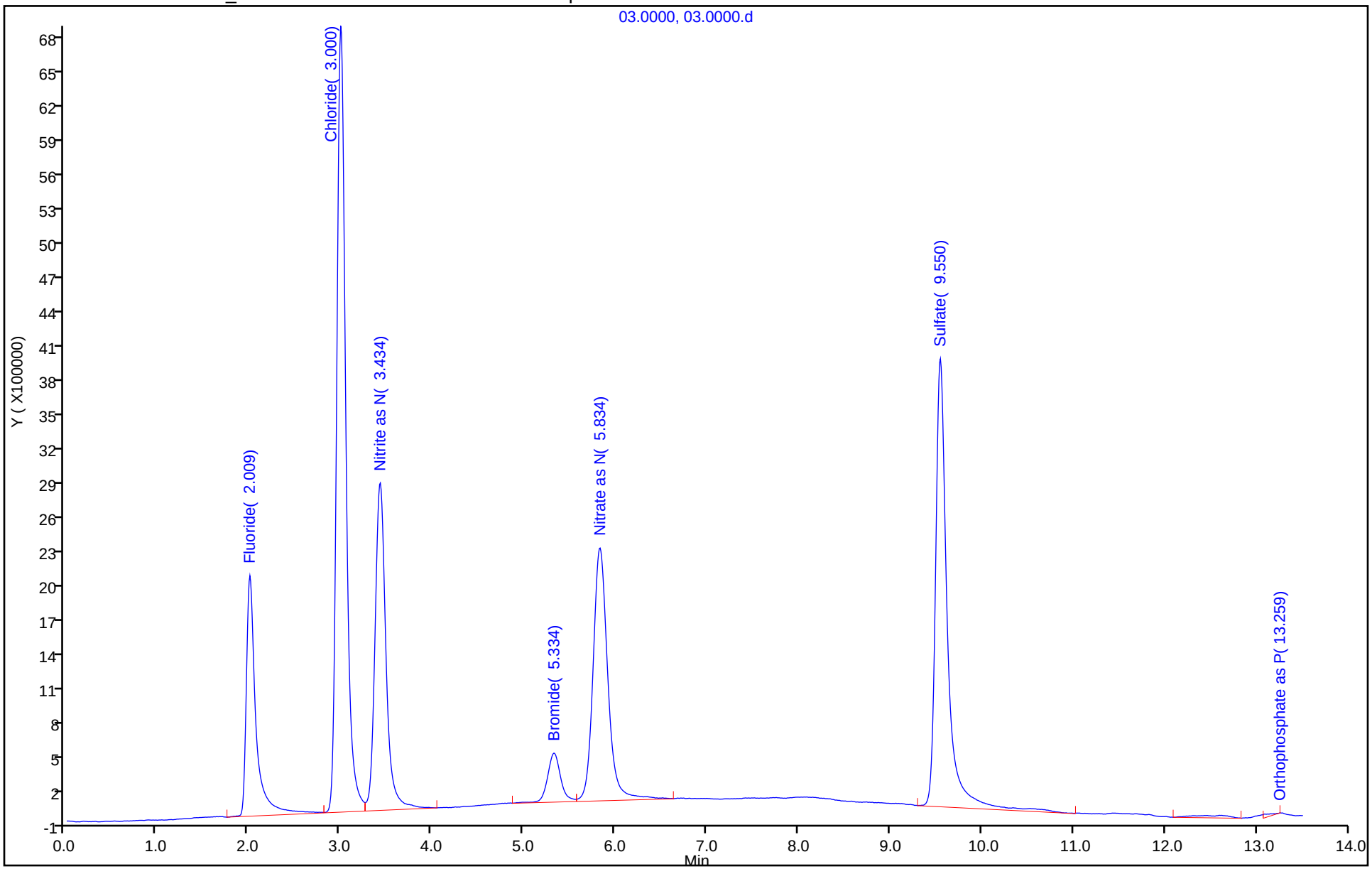
IC CAL cl/so4_00313 Amount Added: 0.05 Units: mL
IC Cal low_00527 Amount Added: 0.05 Units: mL

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

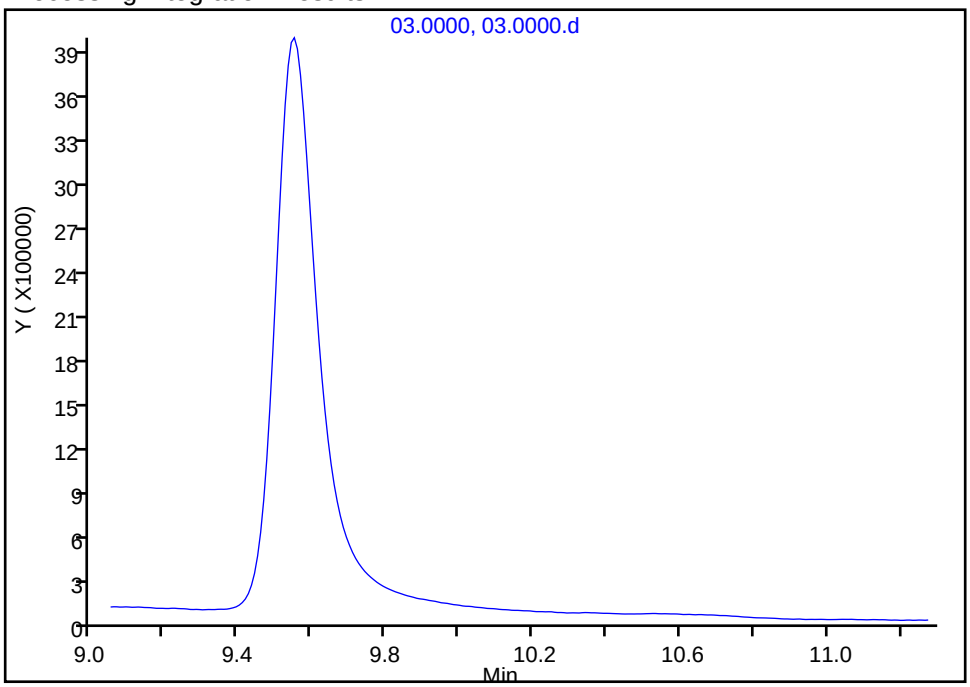
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\03.0000.d		
Injection Date:	03-Jun-2020 10:24:00	Instrument ID:	WC_IonChrom7
Lims ID:	std L2		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

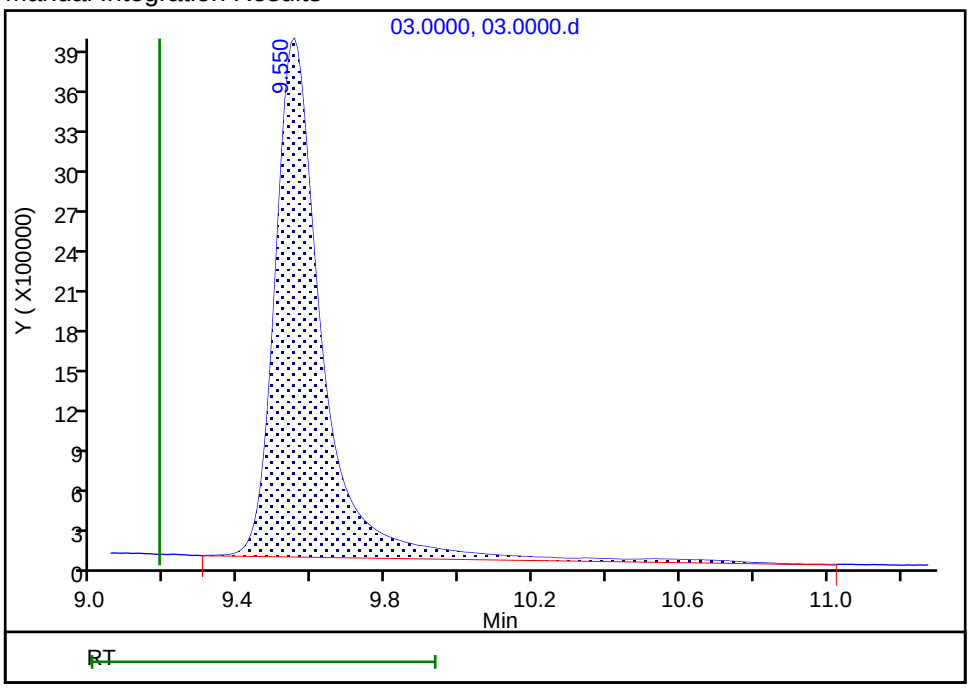
Not Detected
Expected RT: 9.18

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:

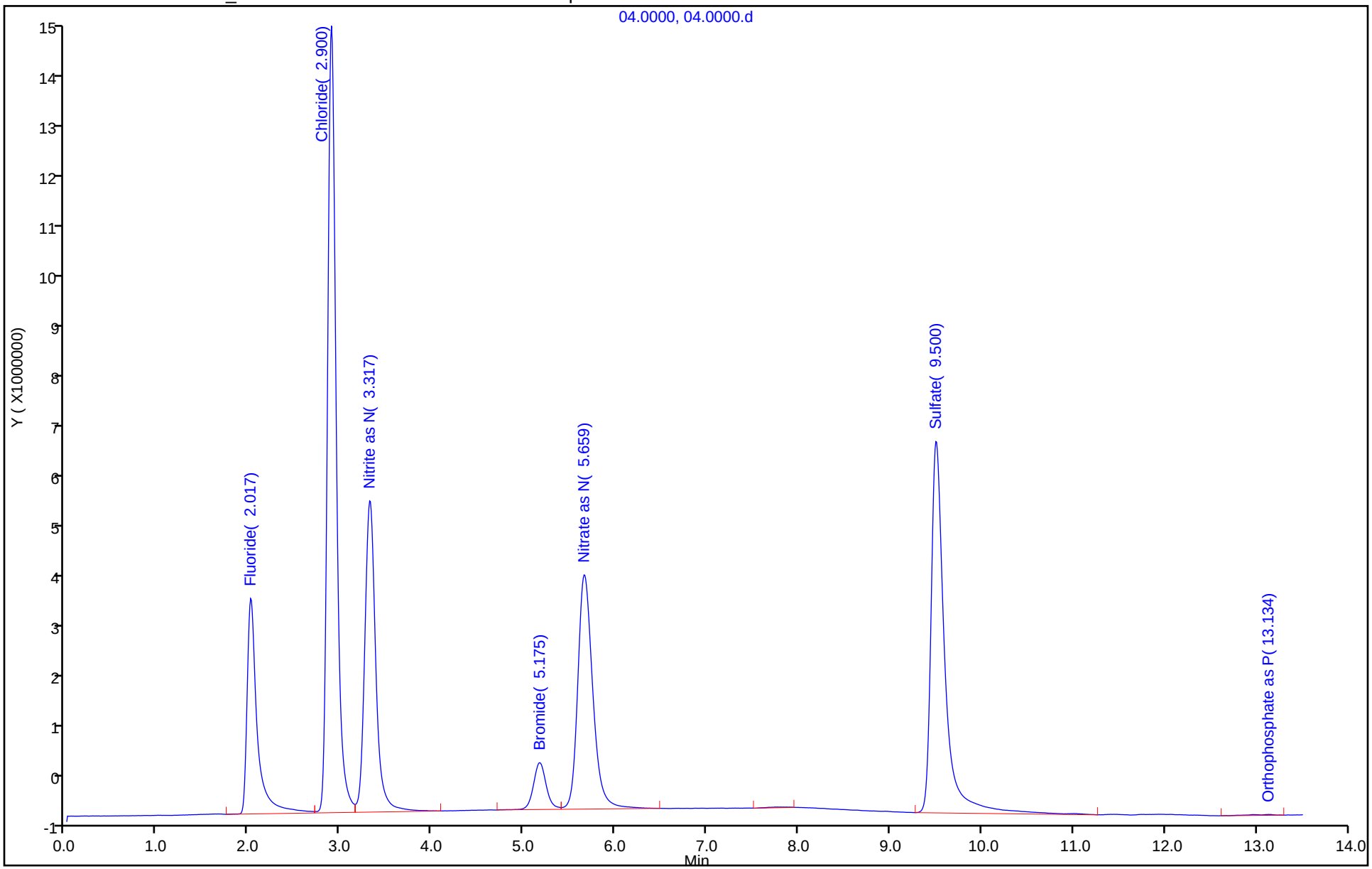
IC CAL cl/so4_00313 Amount Added: 0.10 Units: mL
IC Cal low_00527 Amount Added: 0.10 Units: mL

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

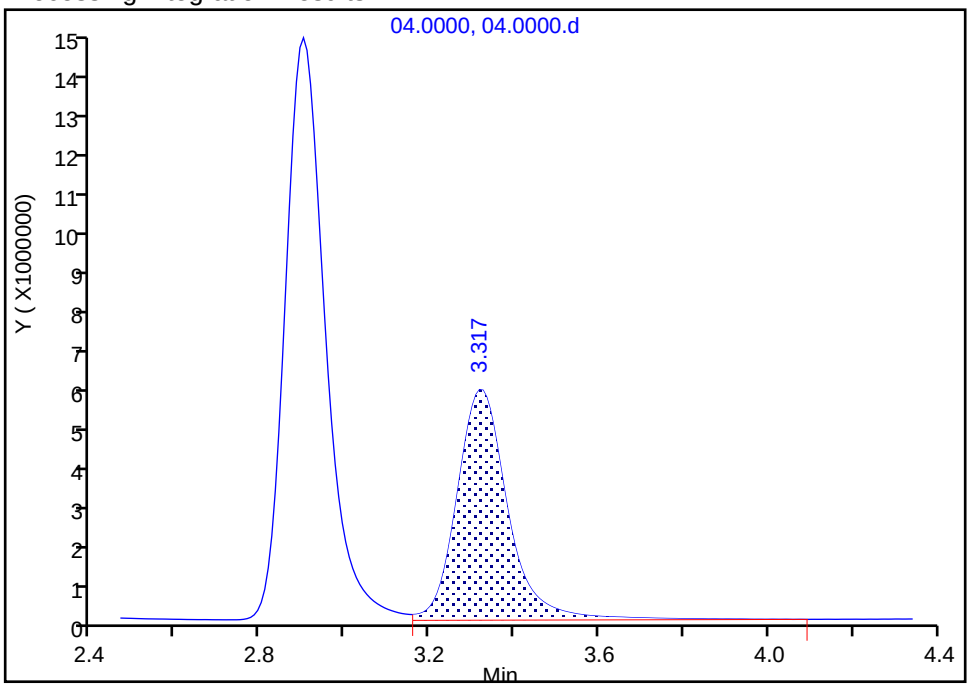
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d				
Injection Date:	03-Jun-2020 10:41:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

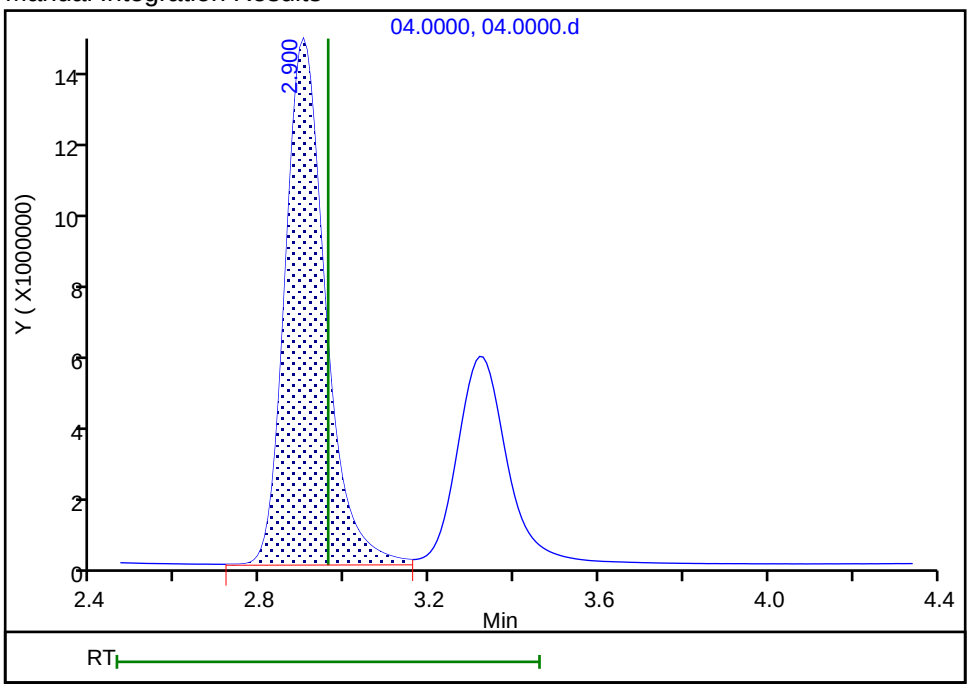
Processing Integration Results

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

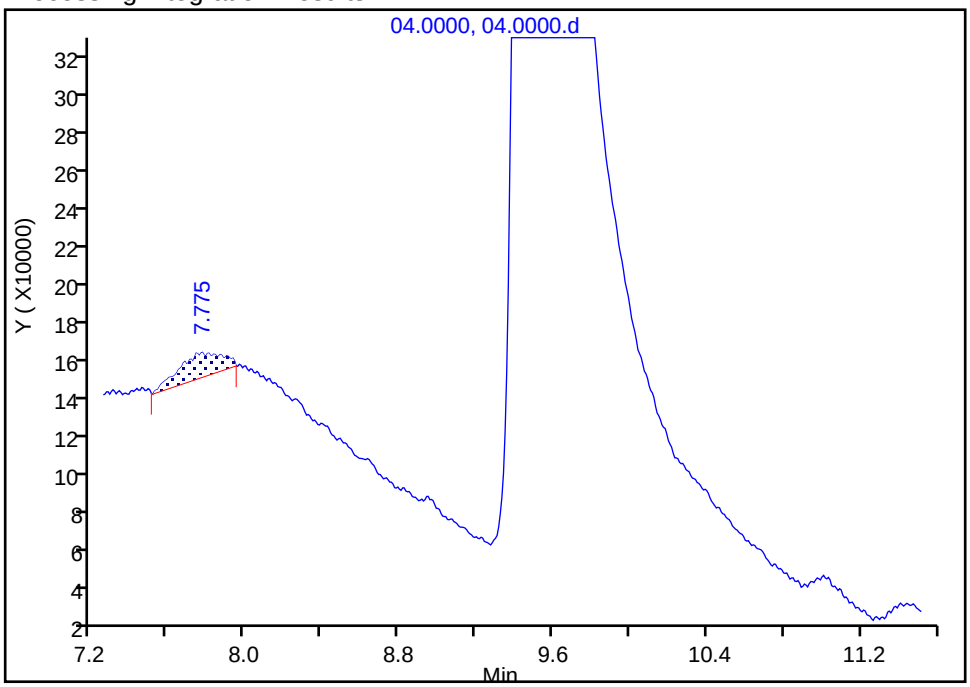
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\04.0000.d				
Injection Date:	03-Jun-2020 10:41:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

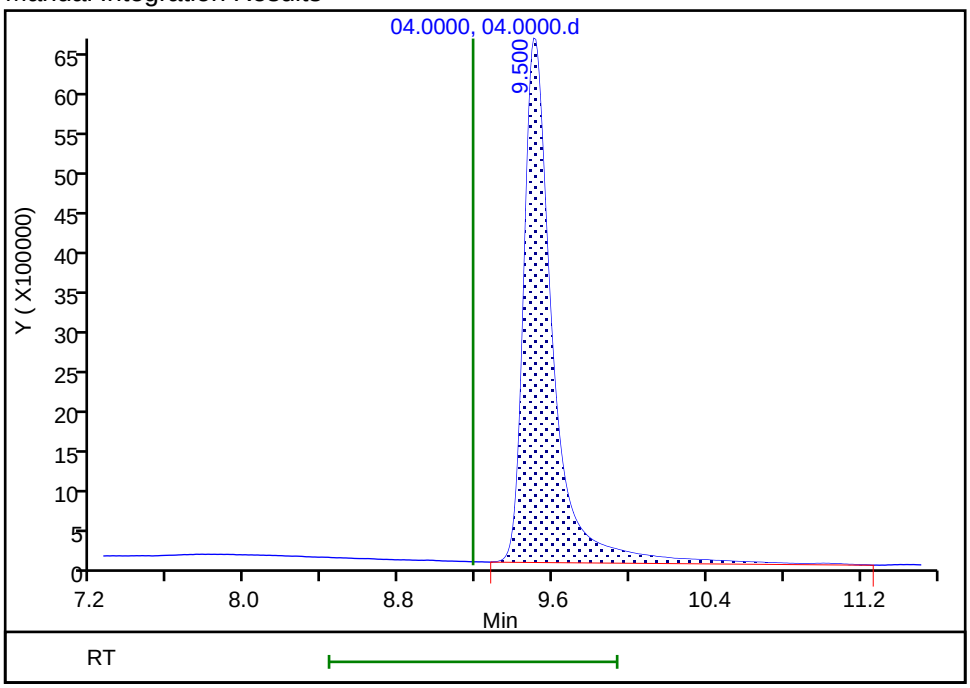
Processing Integration Results

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

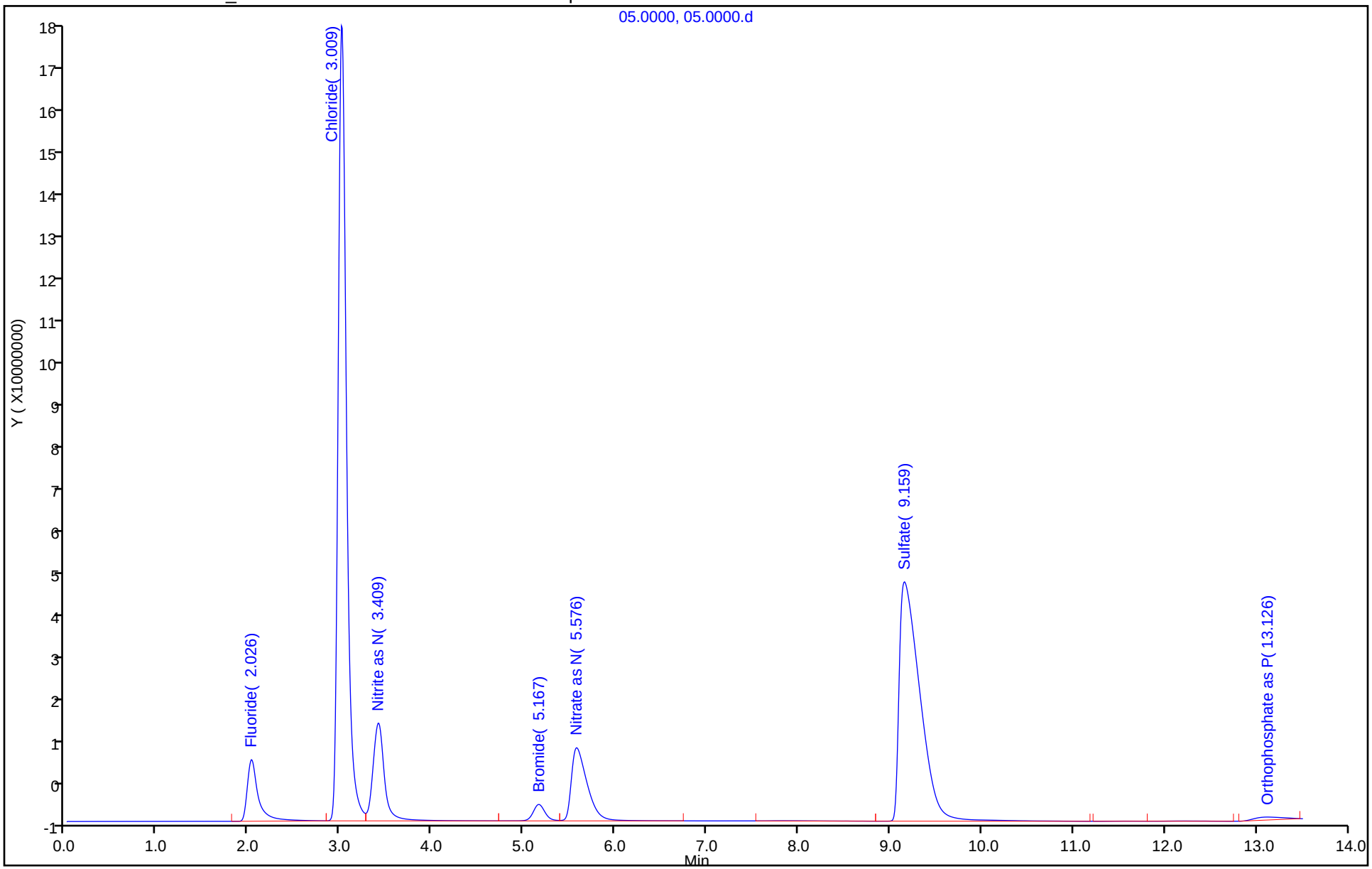
Reagents:

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		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

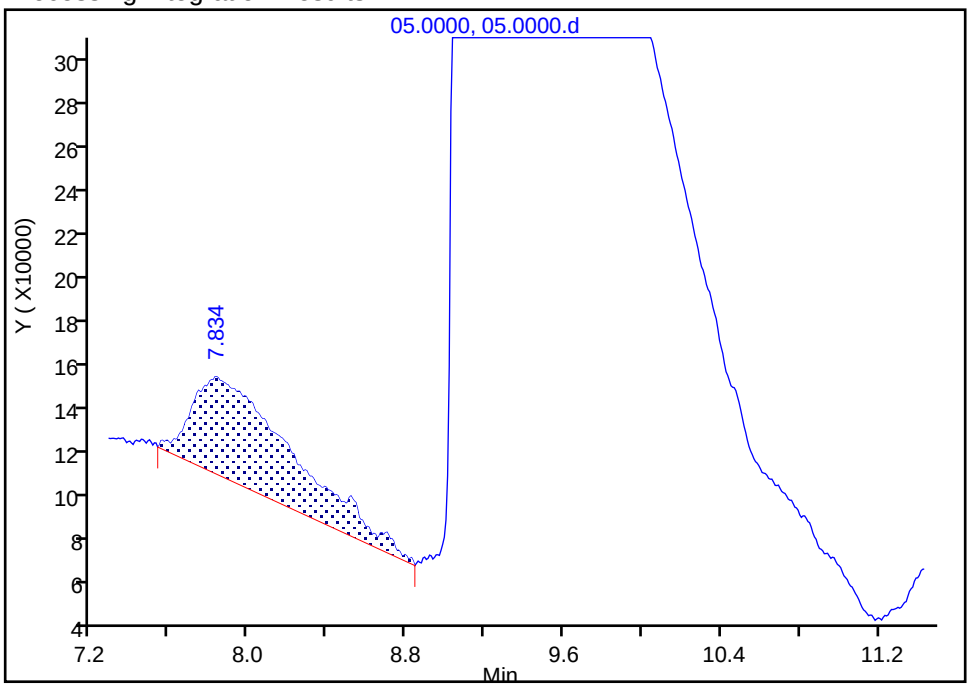
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\05.0000.d
Injection Date: 03-Jun-2020 10:57:00 Instrument ID: WC_IonChrom7
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

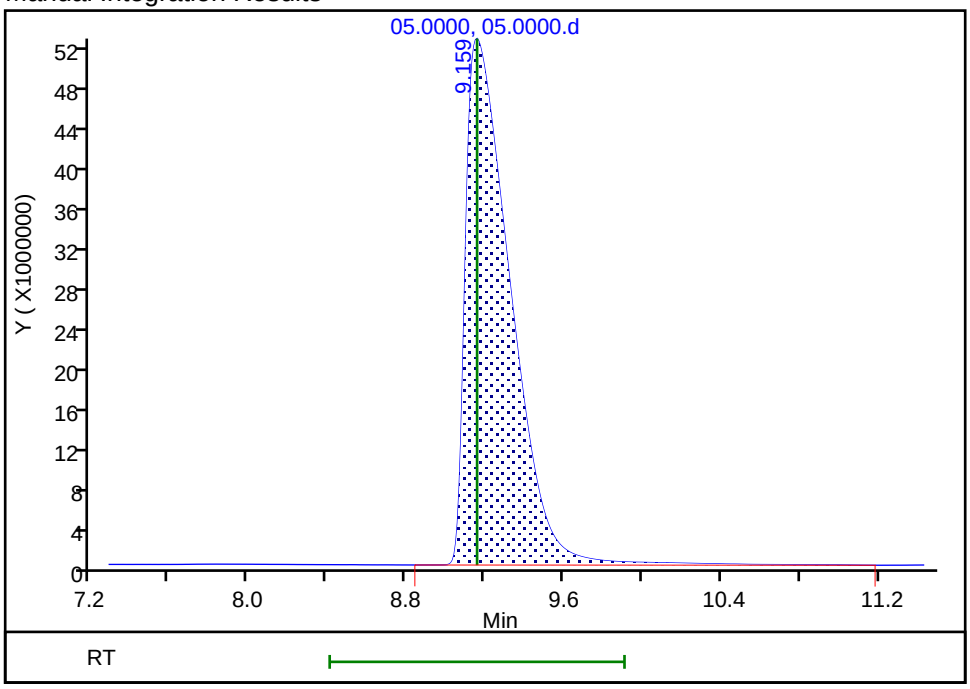
Processing Integration Results

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

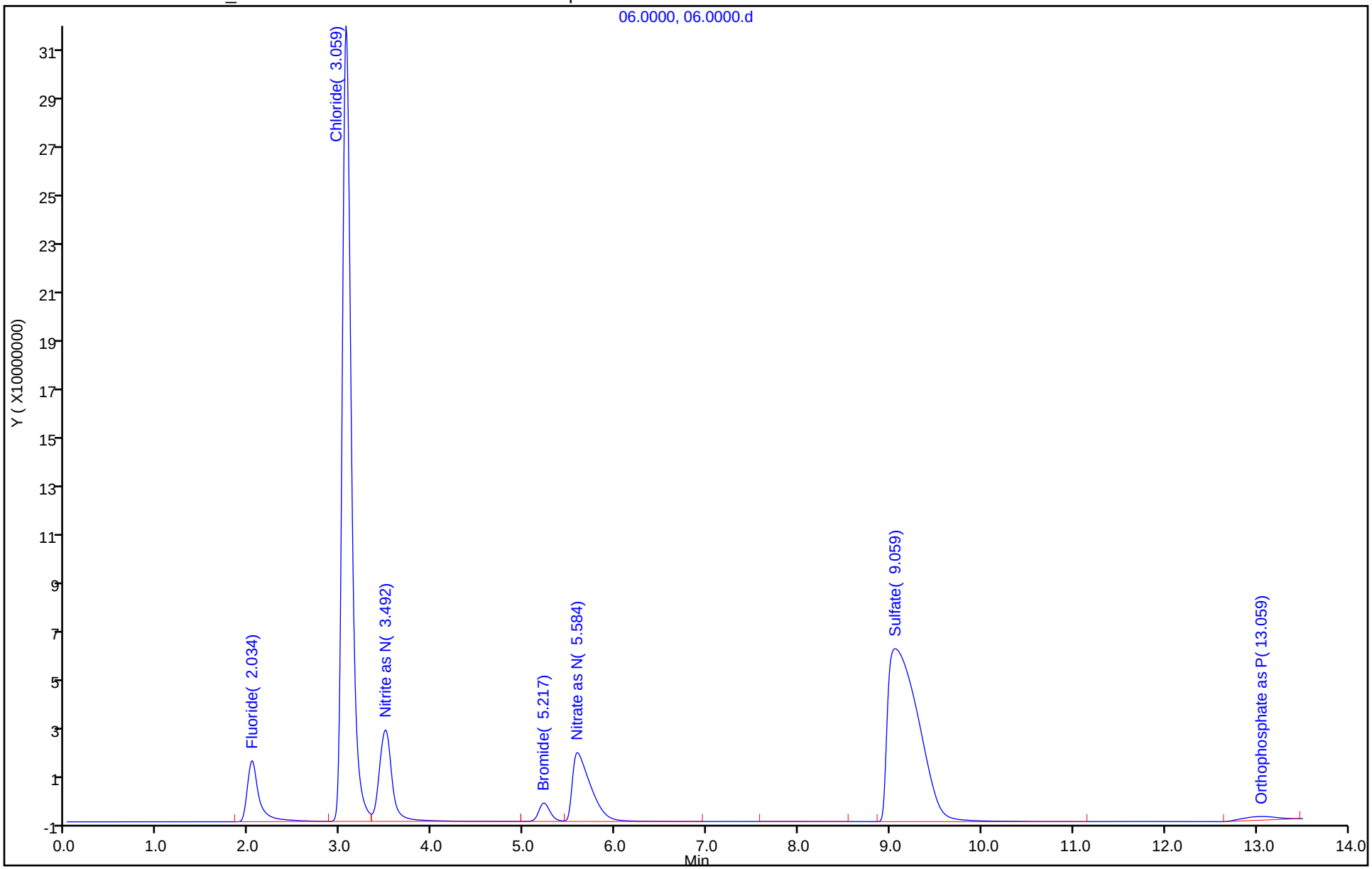
Reagents:

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

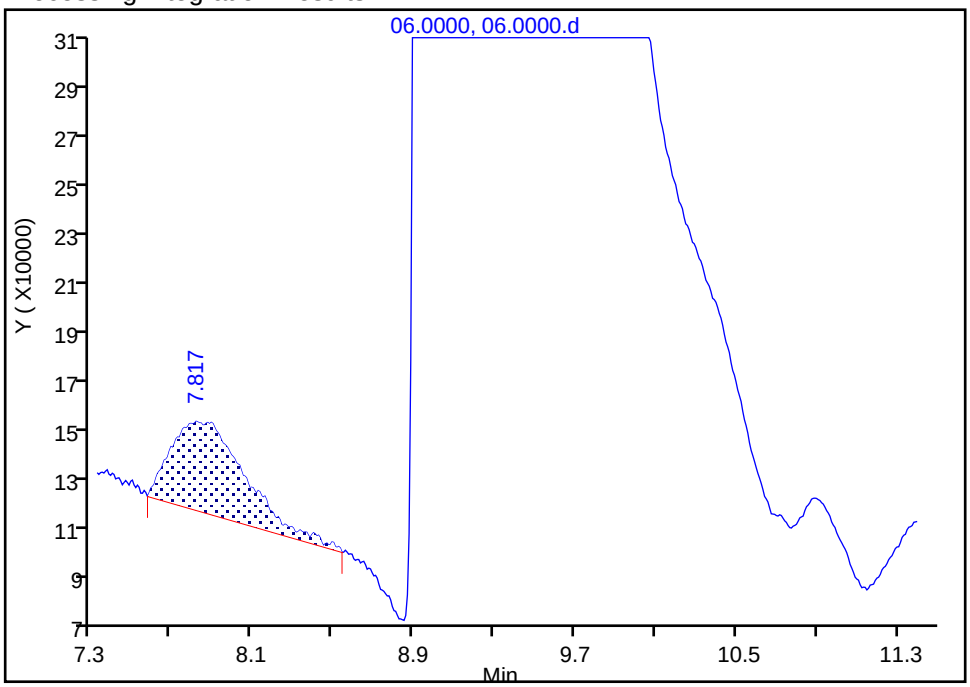
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\06.0000.d		
Injection Date:	03-Jun-2020 11:13:00	Instrument ID:	WC_IonChrom7
Lims ID:	std L5		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

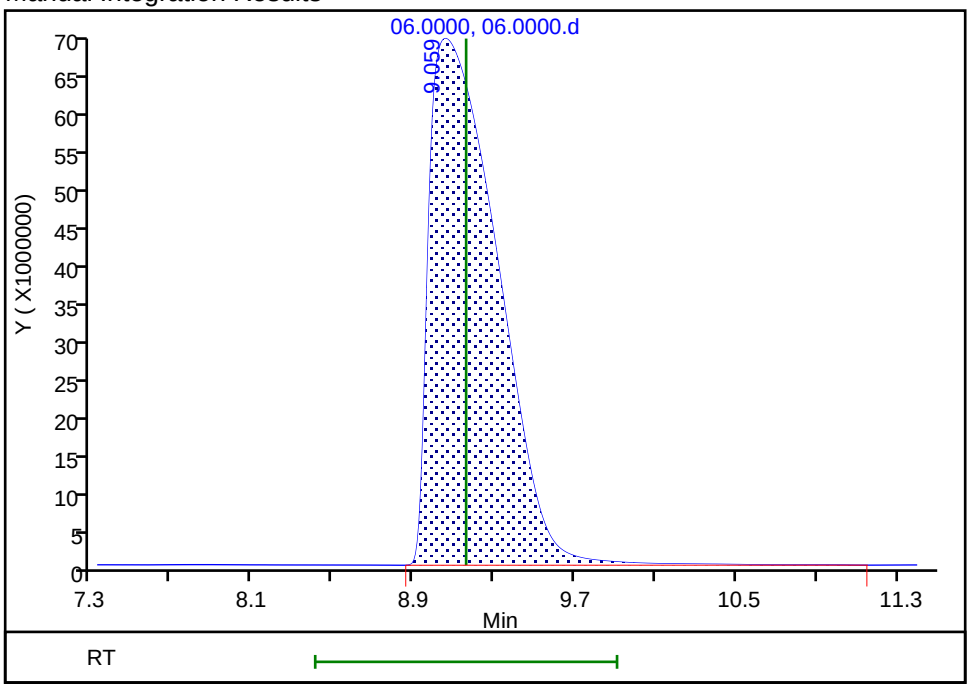
Processing Integration Results

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

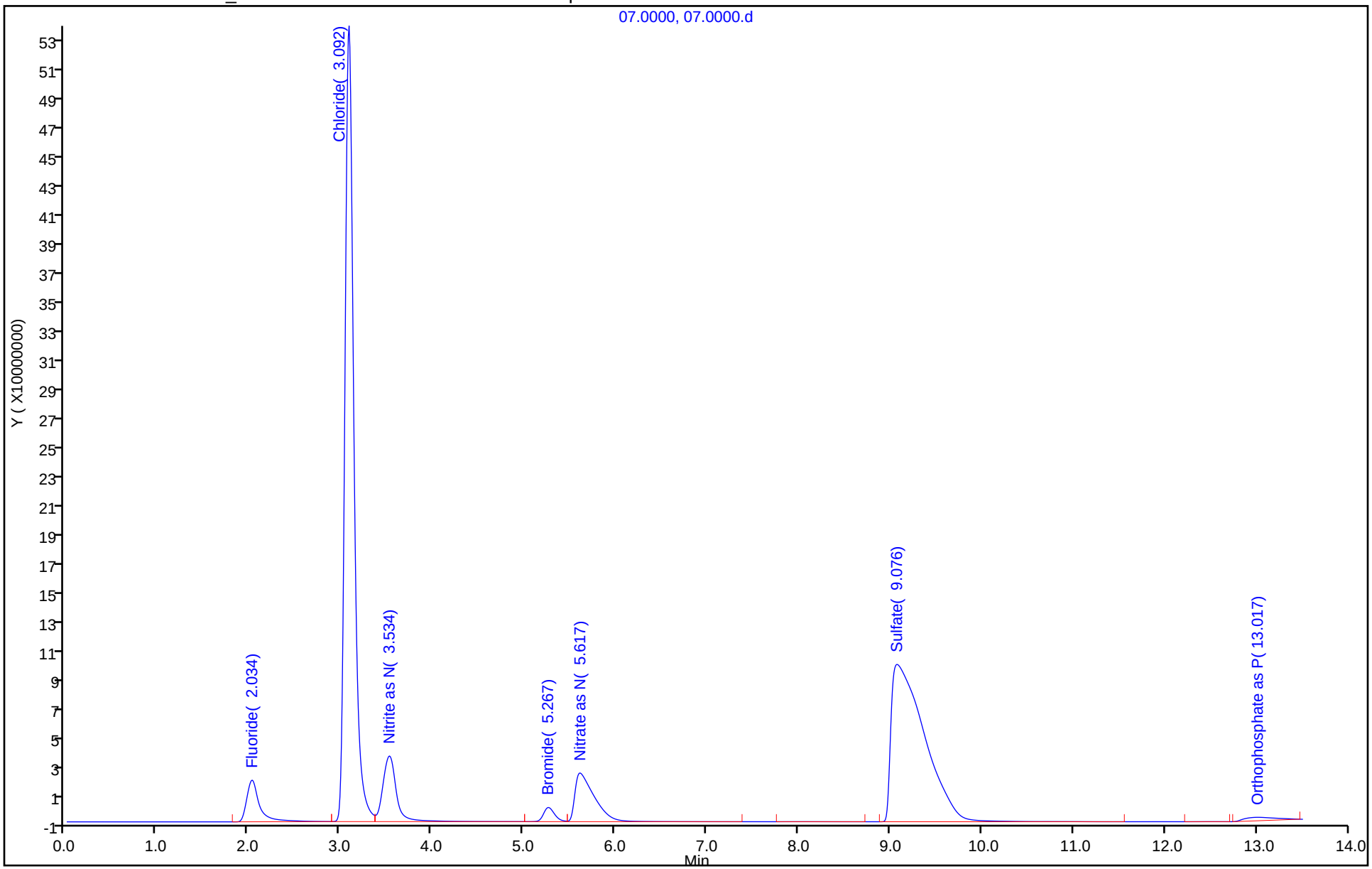
Reagents:

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

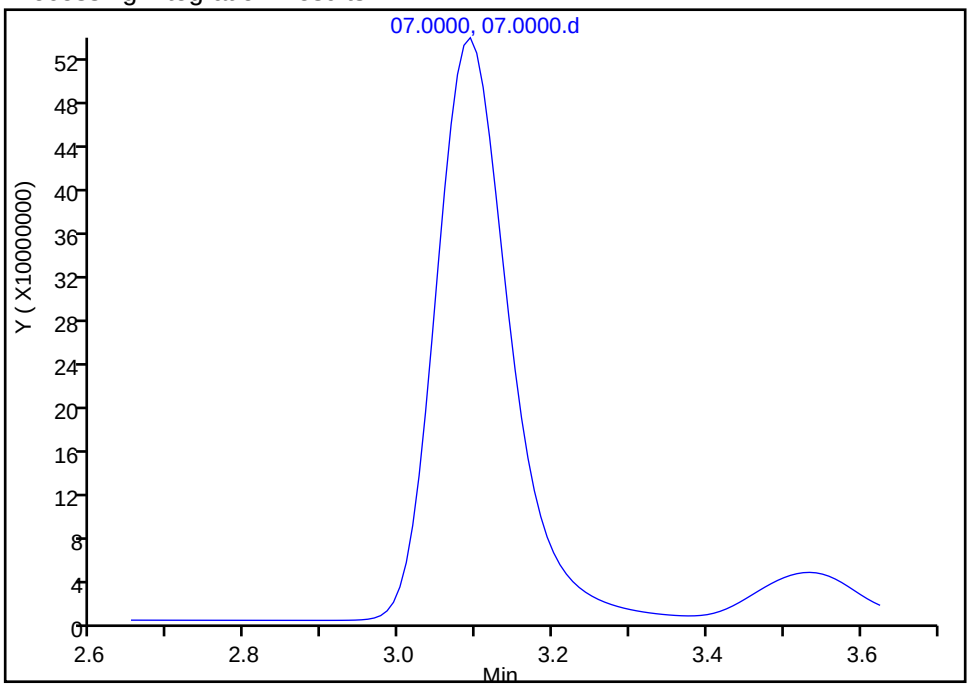
Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\07.0000.d
Injection Date: 03-Jun-2020 11:30:00 Instrument ID: WC_IonChrom7
Lims ID: std L6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: Anions_IC7 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

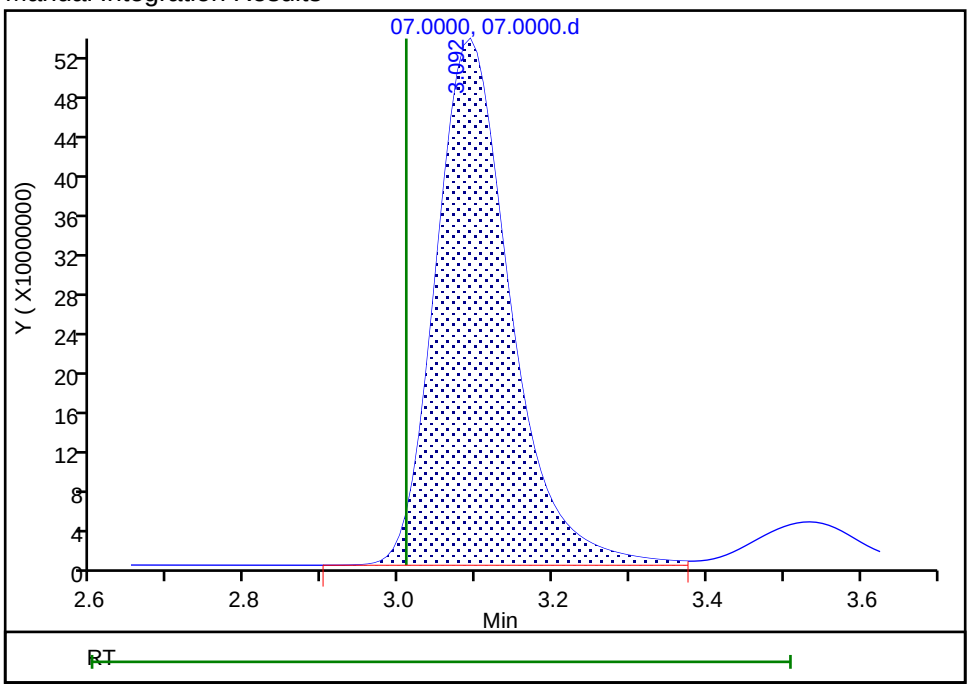
Not Detected
Expected RT: 3.01

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: 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\08.0000.d				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Jun-2020 11:46:00	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092063-008				
Misc. Info.:	8 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:					
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				

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	123589869	4.00	4.45	
2 Chloride	2.959	2.959	0.000	1469131323	80.0	80.5	
3 Nitrite as N	3.400	3.400	0.000	192603526	NC	NC	
4 Bromide	5.217	5.217	0.000	32419298	4.00	4.03	
5 Nitrate as N	5.625	5.625	0.000	192511943	NC	NC	
6 Sulfate	9.184	9.184	0.000	1090316764	80.0	80.6	
7 Orthophosphate as P	13.325	13.325	0.000	3527600	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

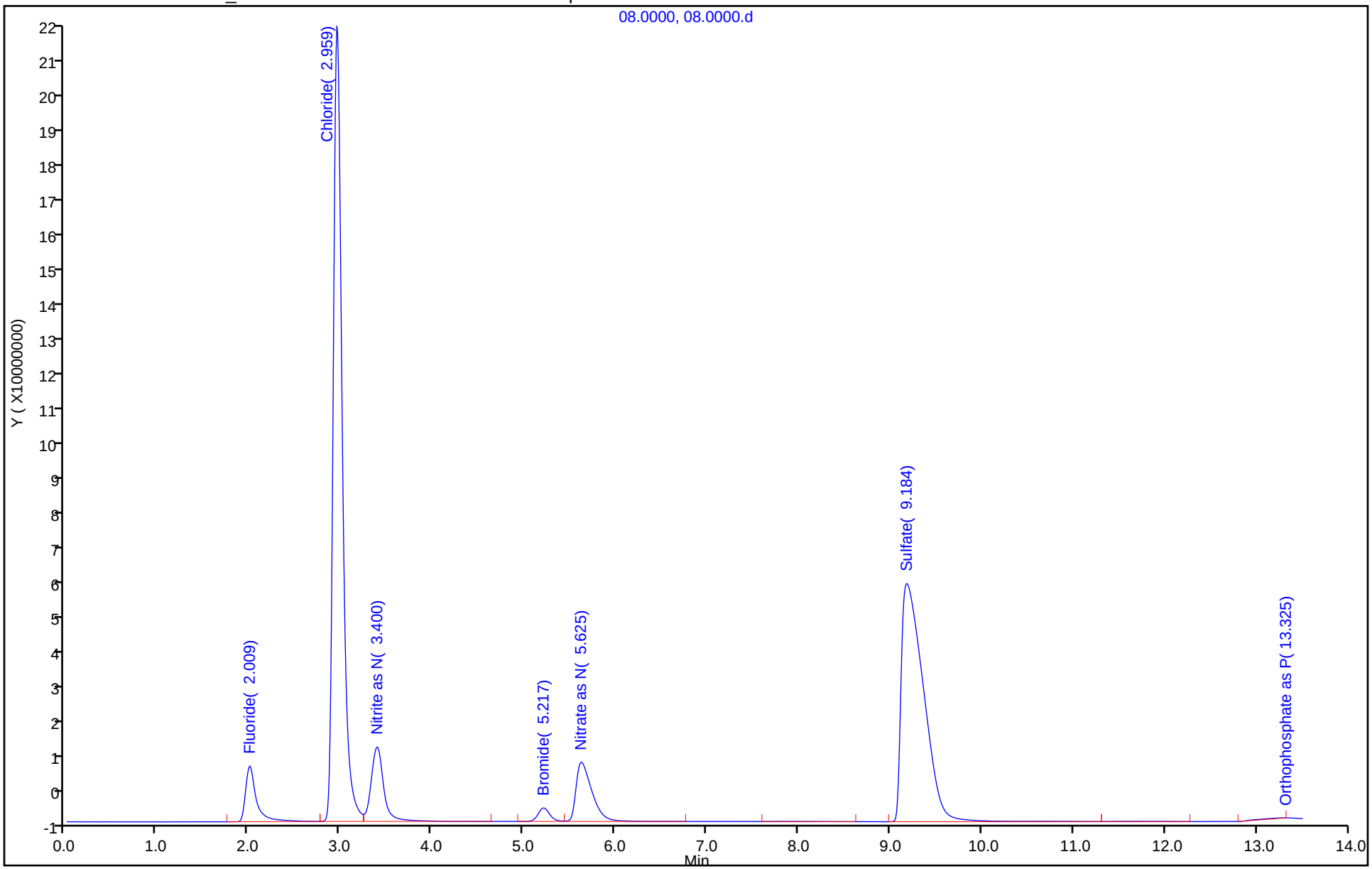
IC SO4 ICV_00021	Amount Added:	0.40	Units: mL
IC CL ICV_00018	Amount Added:	0.40	Units: mL
IC ICV 5_00272	Amount Added:	0.40	Units: mL

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\08.0000.d

Injection Date:	03-Jun-2020 11:46:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	icv			Worklist Smp#:	8
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\09.0000.d				
Lims ID:	icb				
Client ID:					
Sample Type:	ICB				
Inject. Date:	03-Jun-2020 12:03:00	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092063-009				
Misc. Info.:	9 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
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				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.009				ND	
2 Chloride	3.075	2.959	0.116	377091		-0.0646	
3 Nitrite as N	3.775	3.400	0.375	117856		NC	
4 Bromide		5.217				ND	
5 Nitrate as N		5.625				ND	
6 Sulfate		9.184				ND	
7 Orthophosphate as P		13.325				ND	

QC Flag Legend

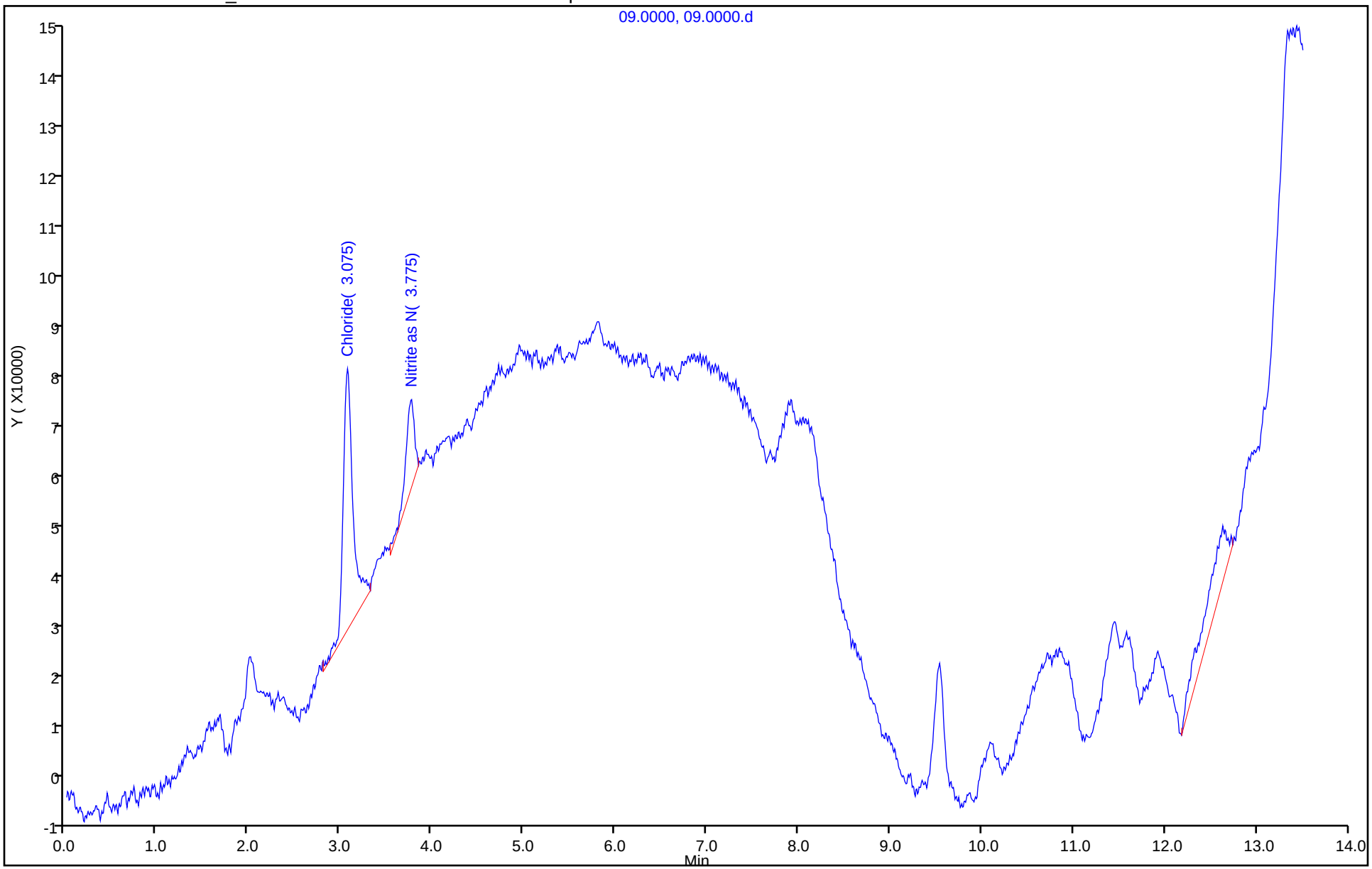
Processing Flags
NC - Not Calibrated

Report Date: 04-Jun-2020 08:47:00 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200603-92063.b\09.0000.d

Injection Date:	03-Jun-2020 12:03:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 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\01.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2020 09:35:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-001
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 08:34:50 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: 25-Jun-2020 11:46:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	134398014	5.00	4.84	M
2 Chloride	2.742	2.934	-0.192	1787165062	100.0	98.0	Ma
3 Nitrite as N	3.117	3.384	-0.267	250584141	NC	NC	Ma
4 Bromide	4.859	5.275	-0.416	39925393	5.00	4.97	a
5 Nitrate as N	5.300	5.692	-0.392	238076450	NC	NC	a
6 Sulfate	8.809	9.317	-0.508	1330471138	100.0	98.4	
7 Orthophosphate as P	13.017	13.175	-0.158	1351158	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

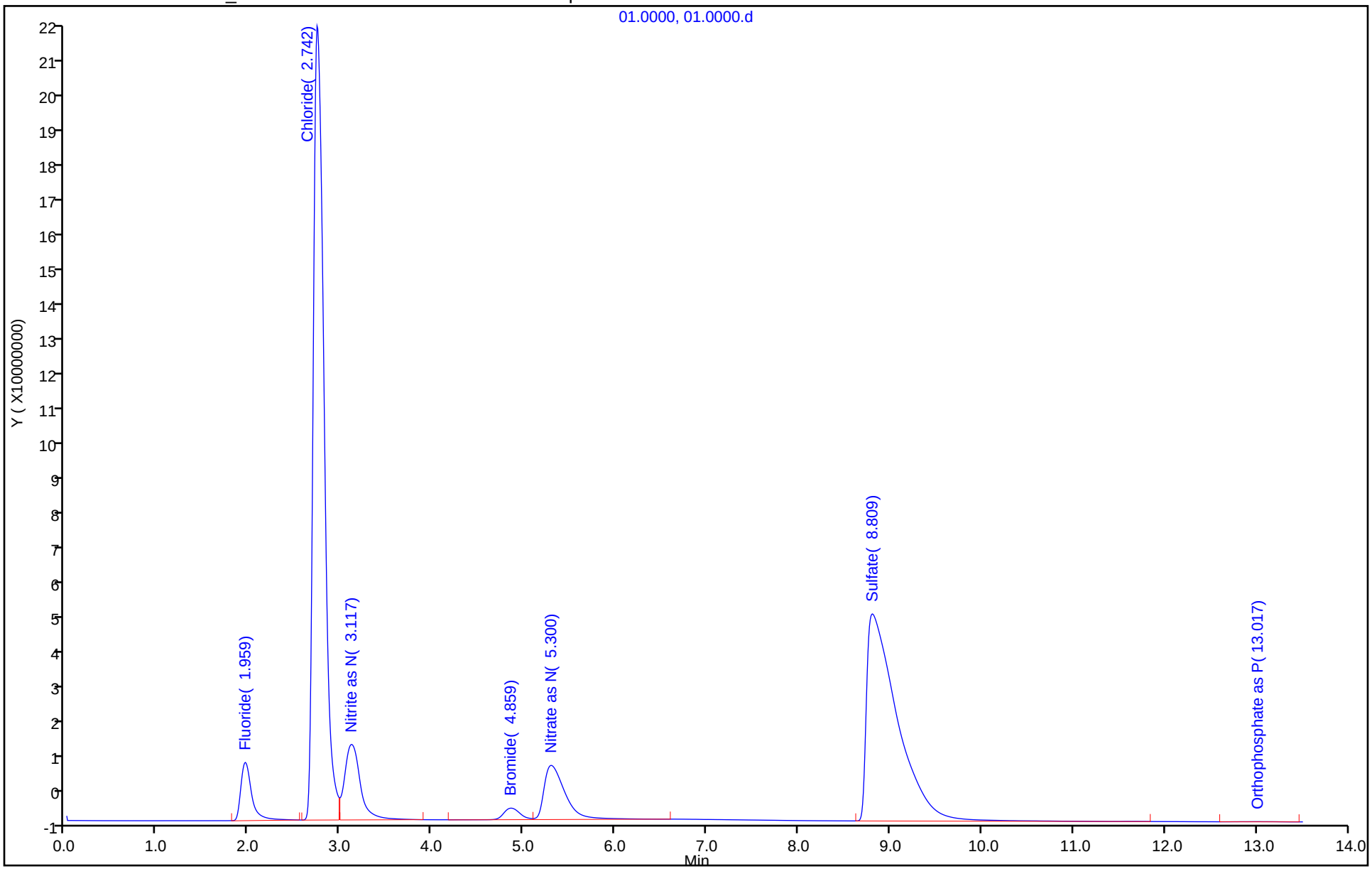
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:34:51 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\01.0000.d

Injection Date:	25-Jun-2020 09:35:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\02.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 25-Jun-2020 09:51:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-002
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 08:34:50 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	2.800	2.934	-0.134	1321645		-0.0128	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate	8.642	9.317	-0.675	711040		0.00002371	
7 Orthophosphate as P	13.225	13.175	0.050	271979		NC	

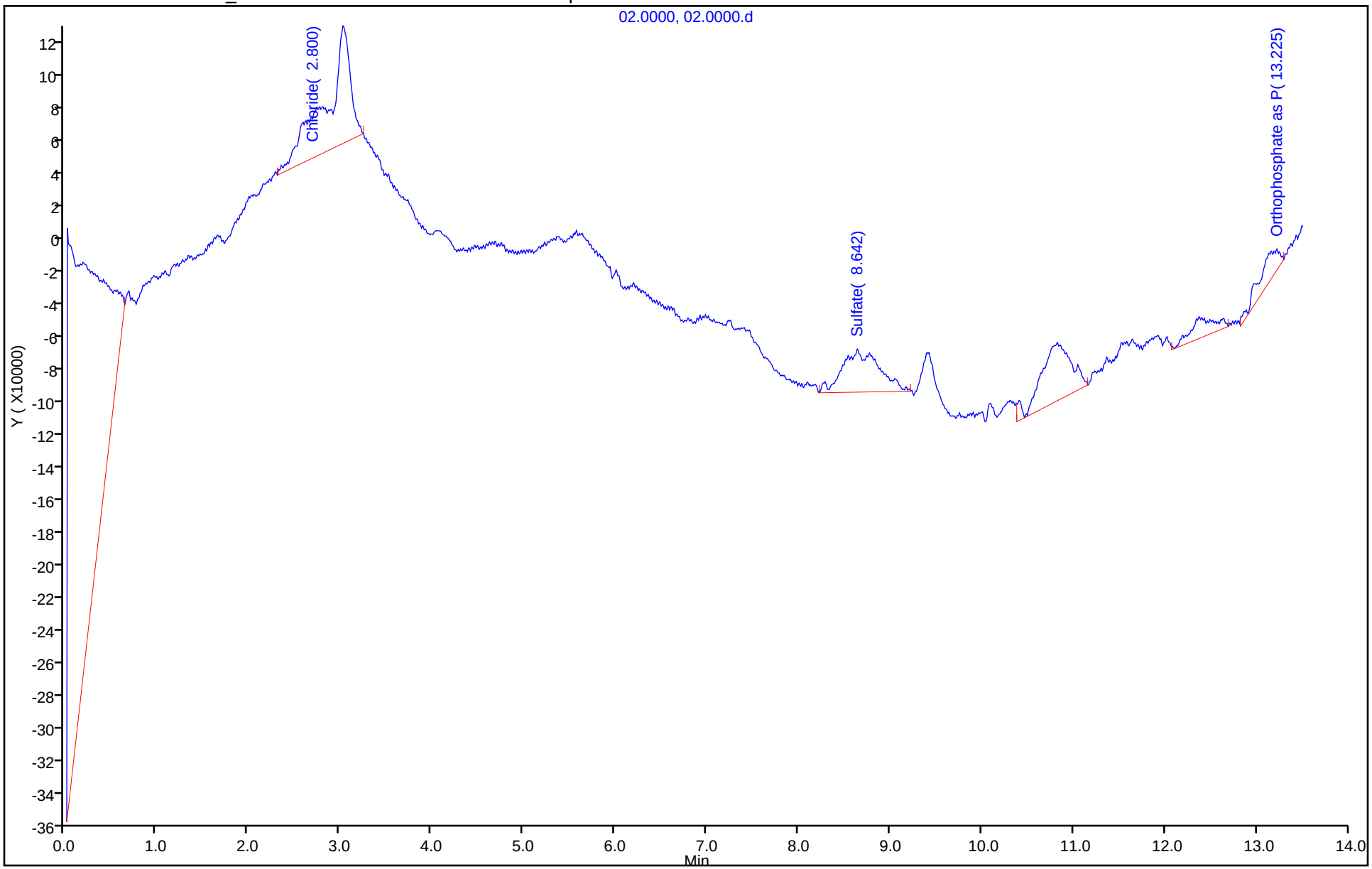
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:51 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\02.0000.d				
Injection Date:	25-Jun-2020 09:51:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\03.0000.d
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 25-Jun-2020 10:07:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-003
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 08:34:50 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	1.984	1.992	-0.008	14088632	0.5000	0.4778	
2 Chloride	2.942	2.934	0.008	93070461	5.00	5.02	
3 Nitrite as N	3.342	3.384	-0.042	23812374	NC	NC	
4 Bromide	5.184	5.275	-0.091	4291483	0.5000	0.5289	
5 Nitrate as N	5.692	5.692	0.000	23841680	NC	NC	
6 Sulfate	9.284	9.317	-0.033	67525035	5.00	4.94	
7 Orthophosphate as P	12.875	13.175	-0.300	147264	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

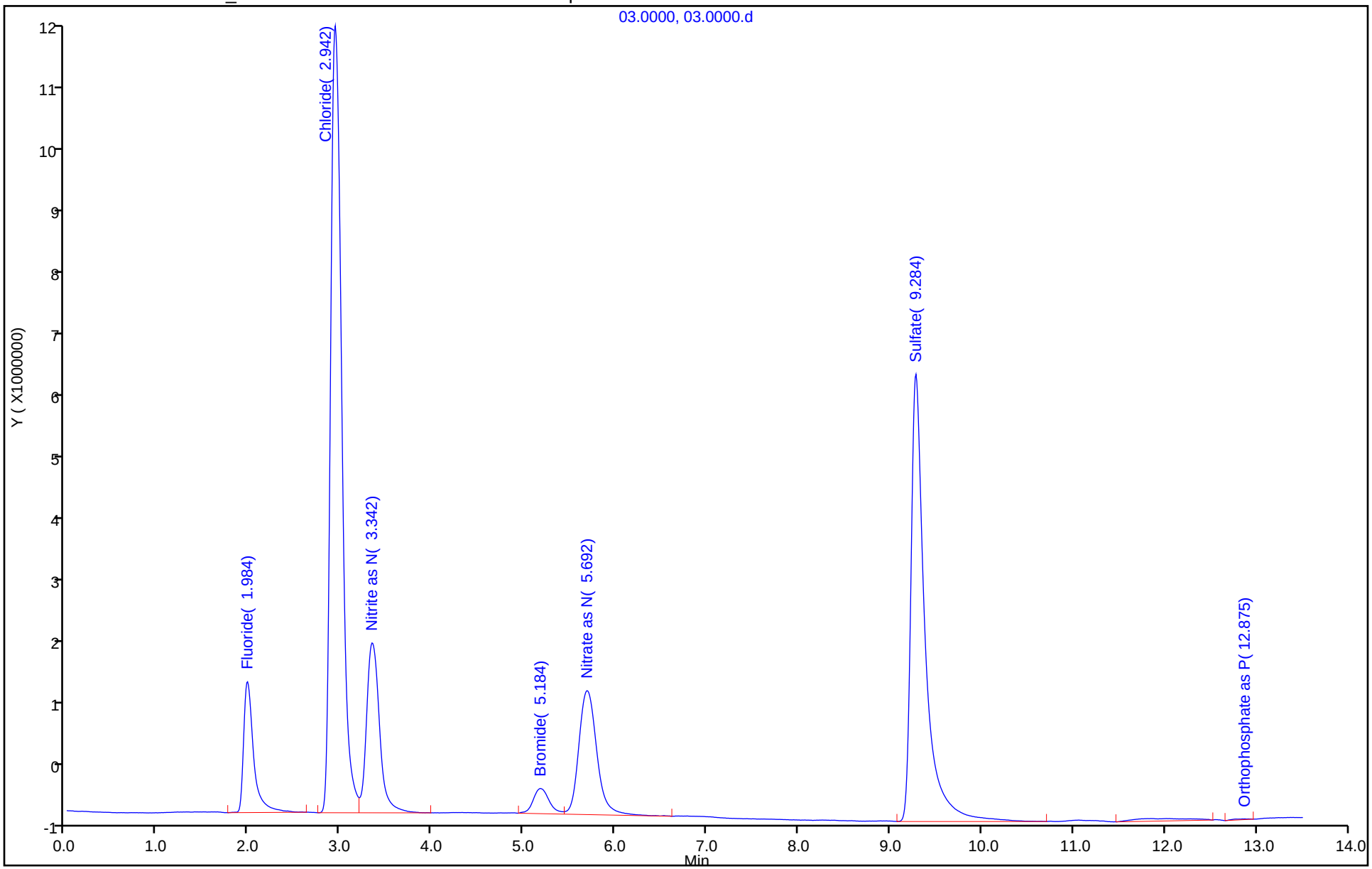
IC Cal low_00530 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00316 Amount Added: 0.10 Units: mL

Report Date: 26-Jun-2020 08:34:51 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\03.0000.d

Injection Date:	25-Jun-2020 10:07:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\04.0000.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-Jun-2020 10:24:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-004
Misc. Info.: 4 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 08:34:50 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	2.000	1.992	0.008	133488782	5.00	4.80	
2 Chloride	2.950	2.934	0.016	1787798557	100.0	98.0	
3 Nitrite as N	3.400	3.384	0.016	236219382	NC	NC	
4 Bromide	5.100	5.275	-0.175	37899159	5.00	4.71	
5 Nitrate as N	5.525	5.692	-0.167	230534379	NC	NC	
6 Sulfate	9.050	9.317	-0.267	1325182710	100.0	98.0	
7 Orthophosphate as P	13.025	13.175	-0.150	805168	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

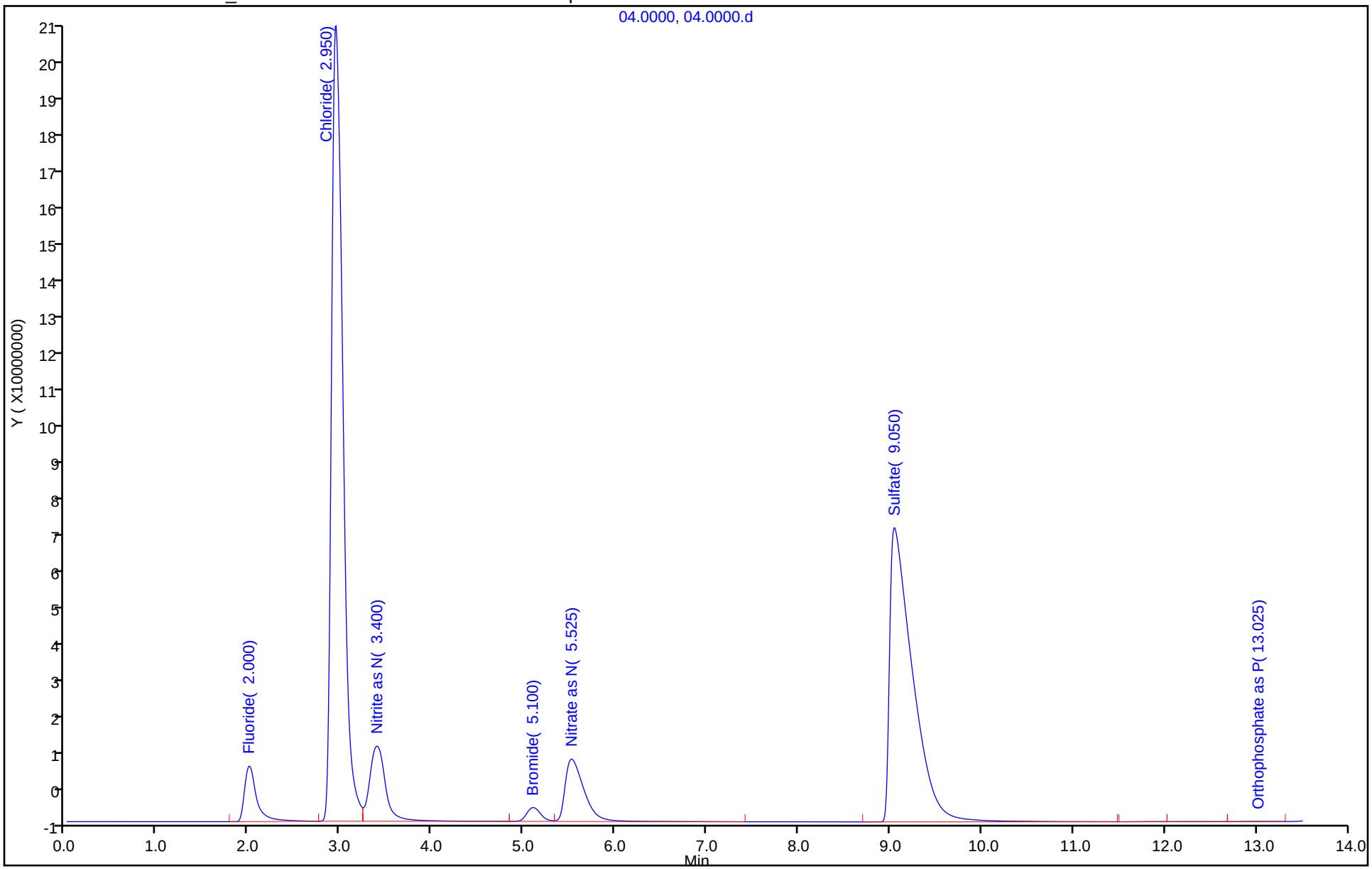
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:34:52 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\04.0000.d

Injection Date:	25-Jun-2020 10:24:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\05.0000.d
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 25-Jun-2020 10:40:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-005
Misc. Info.: 5 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 08:34:50 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	2.034	1.992	0.042	133431287	5.00	4.80	
2 Chloride	2.967	2.934	0.033	1792198339	100.0	98.3	
3 Nitrite as N	3.417	3.384	0.033	231878677	NC	NC	
4 Bromide	5.225	5.275	-0.050	37970882	5.00	4.72	
5 Nitrate as N	5.667	5.692	-0.025	230391093	NC	NC	
6 Sulfate	9.084	9.317	-0.233	1327021651	100.0	98.1	
7 Orthophosphate as P	12.959	13.175	-0.216	1351839	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

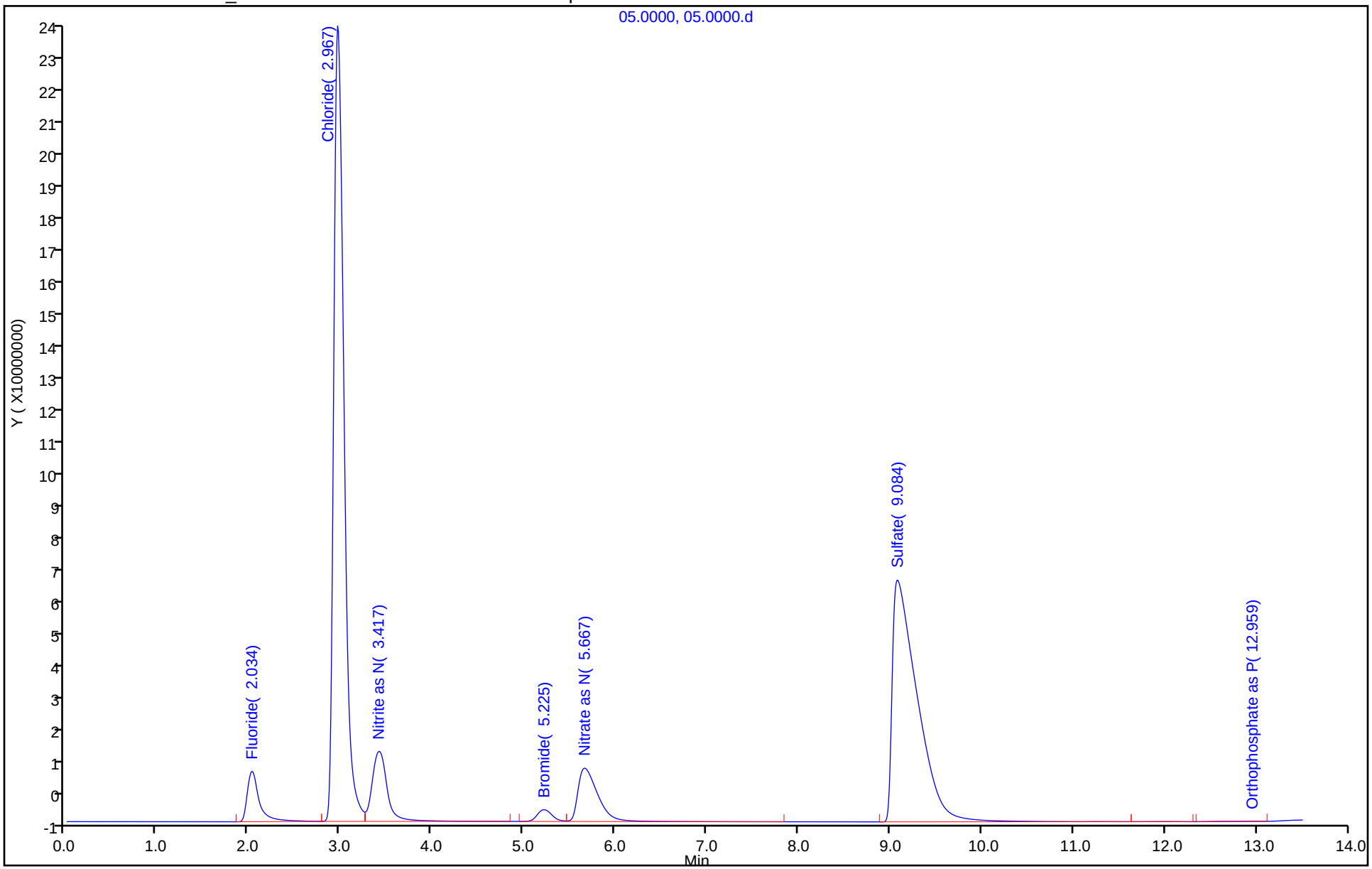
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:34:52 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\05.0000.d

Injection Date:	25-Jun-2020 10:40:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\06.0000.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 25-Jun-2020 10:57:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-006
Misc. Info.: 6 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 08:34:50 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

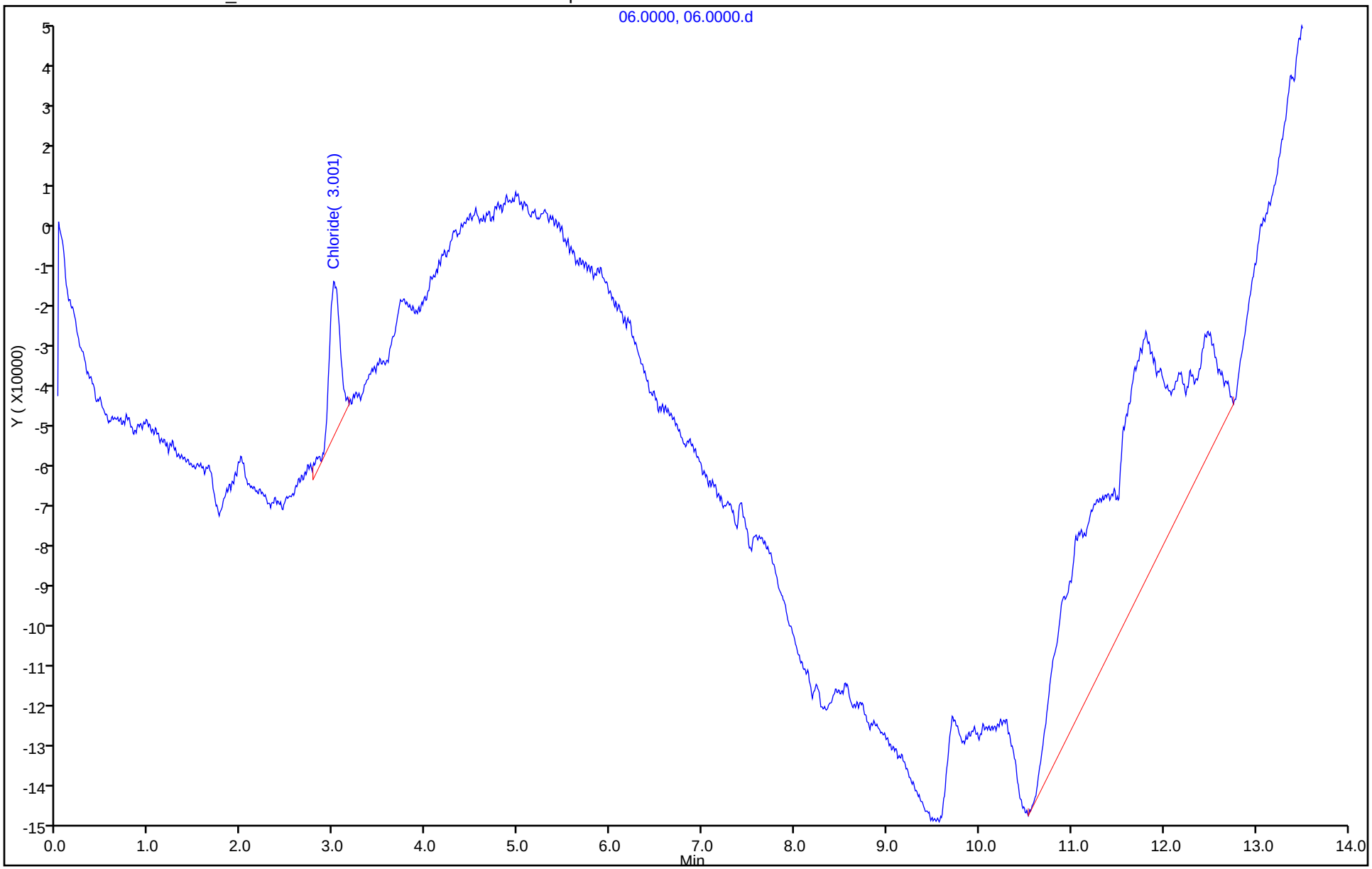
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.992				ND	
2 Chloride	3.001	2.934	0.067	294462		-0.0691	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate		9.317				ND	
7 Orthophosphate as P		13.175				ND	

Report Date: 26-Jun-2020 08:34:53 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\06.0000.d

Injection Date:	25-Jun-2020 10:57:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\09.0000.d
Lims ID: 280-137609-F-1
Client ID: PZ007-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 17:18:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-009
Misc. Info.: 21548 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 08:34:50 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 08:31:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.975	1.992	-0.017	1781739	0.0319	
2 Chloride	2.867	2.934	-0.067	181138404	9.85	
3 Nitrite as N		3.384			ND	
4 Bromide	5.050	5.275	-0.225	946486	0.1123	a
5 Nitrate as N	5.450	5.692	-0.242	11005732	NC	a
6 Sulfate	8.859	9.317	-0.458	1565615162	115.8	
7 Orthophosphate as P	13.209	13.175	0.034	632146	NC	

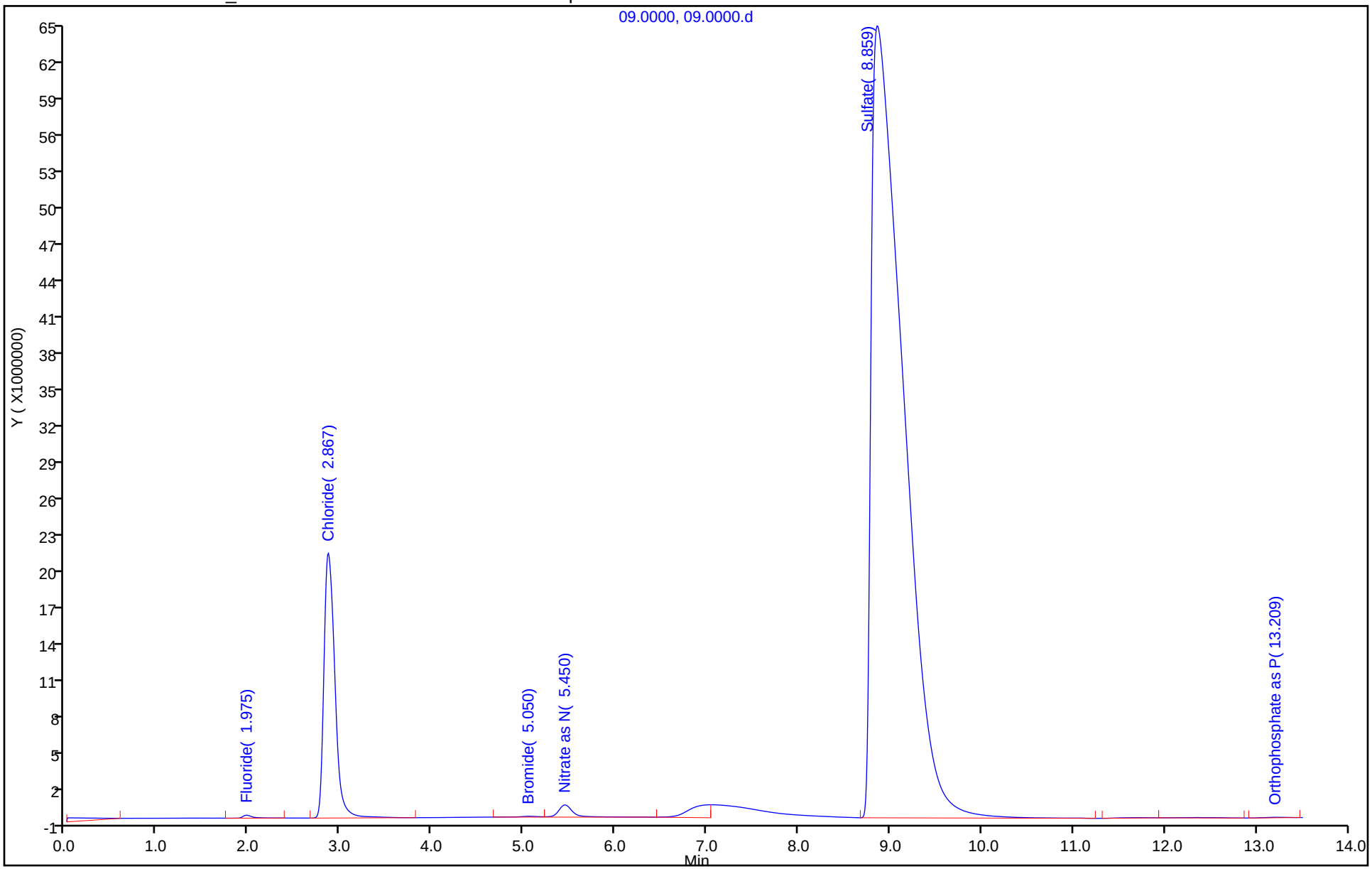
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 26-Jun-2020 08:34:53 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\09.0000.d				
Injection Date:	25-Jun-2020 17:18:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-1	Lab Sample ID:	280-137609-1	Worklist Smp#:	9
Client ID:	PZ007-20A				
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\10.0000.d
Lims ID: 280-137609-F-1 DU
Client ID:
Sample Type: DU
Inject. Date: 25-Jun-2020 17:34:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-010
Misc. Info.: 13914 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 08:34:50 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 08:32:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	1914758		0.0367	
2 Chloride	2.892	2.934	-0.042	178665329		9.72	
3 Nitrite as N		3.384				ND	
4 Bromide	4.917	5.275	-0.358	631095		0.0730	a
5 Nitrate as N	5.409	5.692	-0.283	9924128		NC	a
6 Sulfate	9.017	9.317	-0.300	1548113439		114.5	
7 Orthophosphate as P		13.175				ND	

QC Flag Legend

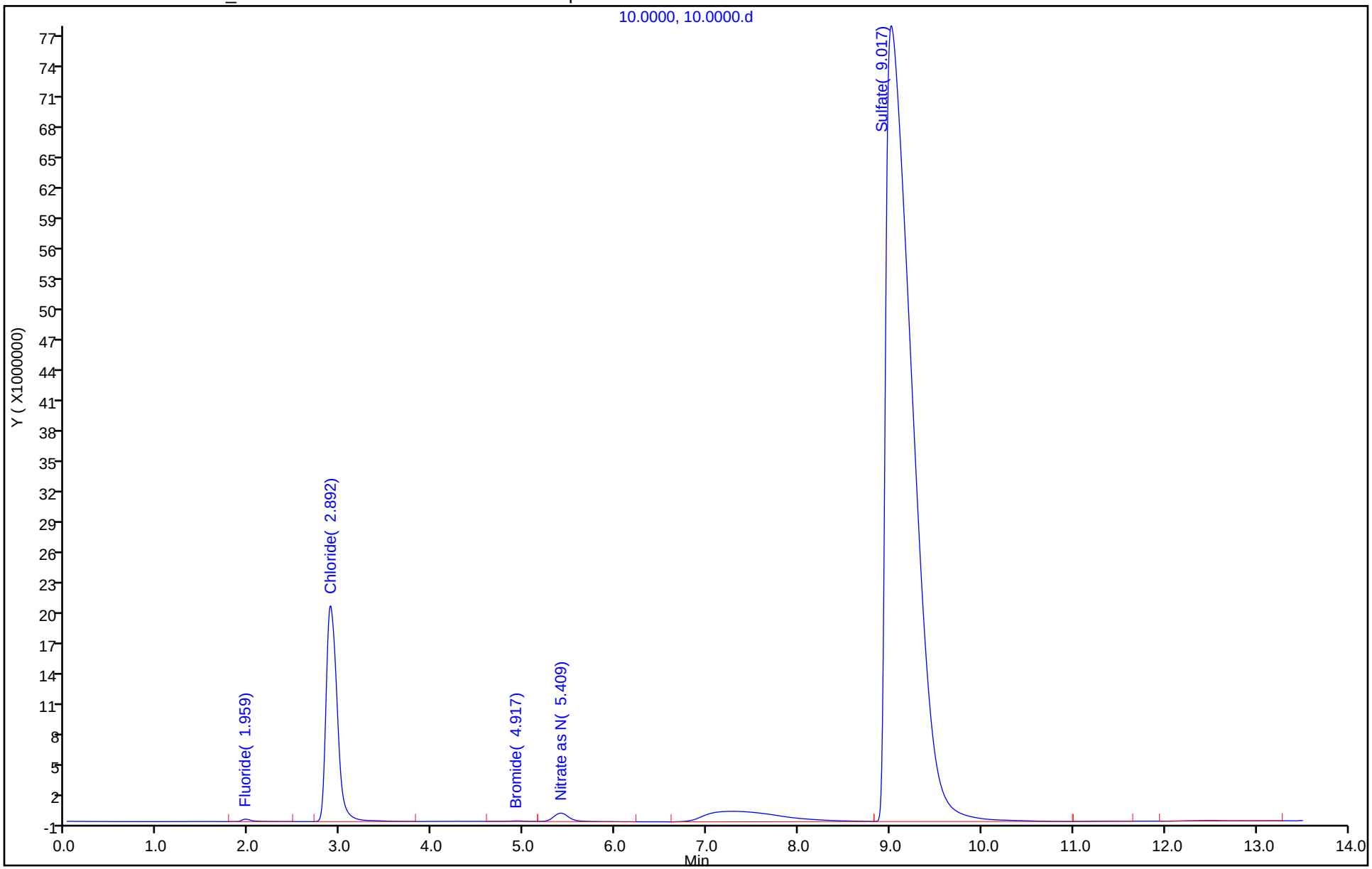
Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 26-Jun-2020 08:34:54 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\10.0000.d

Injection Date:	25-Jun-2020 17:34:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-1 DU			Worklist Smp#:	10
Client ID:					
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\11.0000.d
Lims ID: 280-137609-F-1 MS
Client ID: PZ007-20A
Sample Type: MS
Inject. Date: 25-Jun-2020 17:51:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-011
Misc. Info.: 31339 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 08:34:50 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 08:32:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	1.992	0.017	147906222	1.00	5.33	
2 Chloride	2.984	2.934	0.050	1170048510	10.0	64.1	
3 Nitrite as N	3.375	3.384	-0.009	240860598	NC	NC	
4 Bromide	5.067	5.275	-0.208	43963237	1.00	5.47	a
5 Nitrate as N	5.409	5.692	-0.283	267373146	NC	NC	a
6 Sulfate	8.784	9.317	-0.533	2270032307	10.0	167.9	
7 Orthophosphate as P	13.084	13.175	-0.091	476885	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

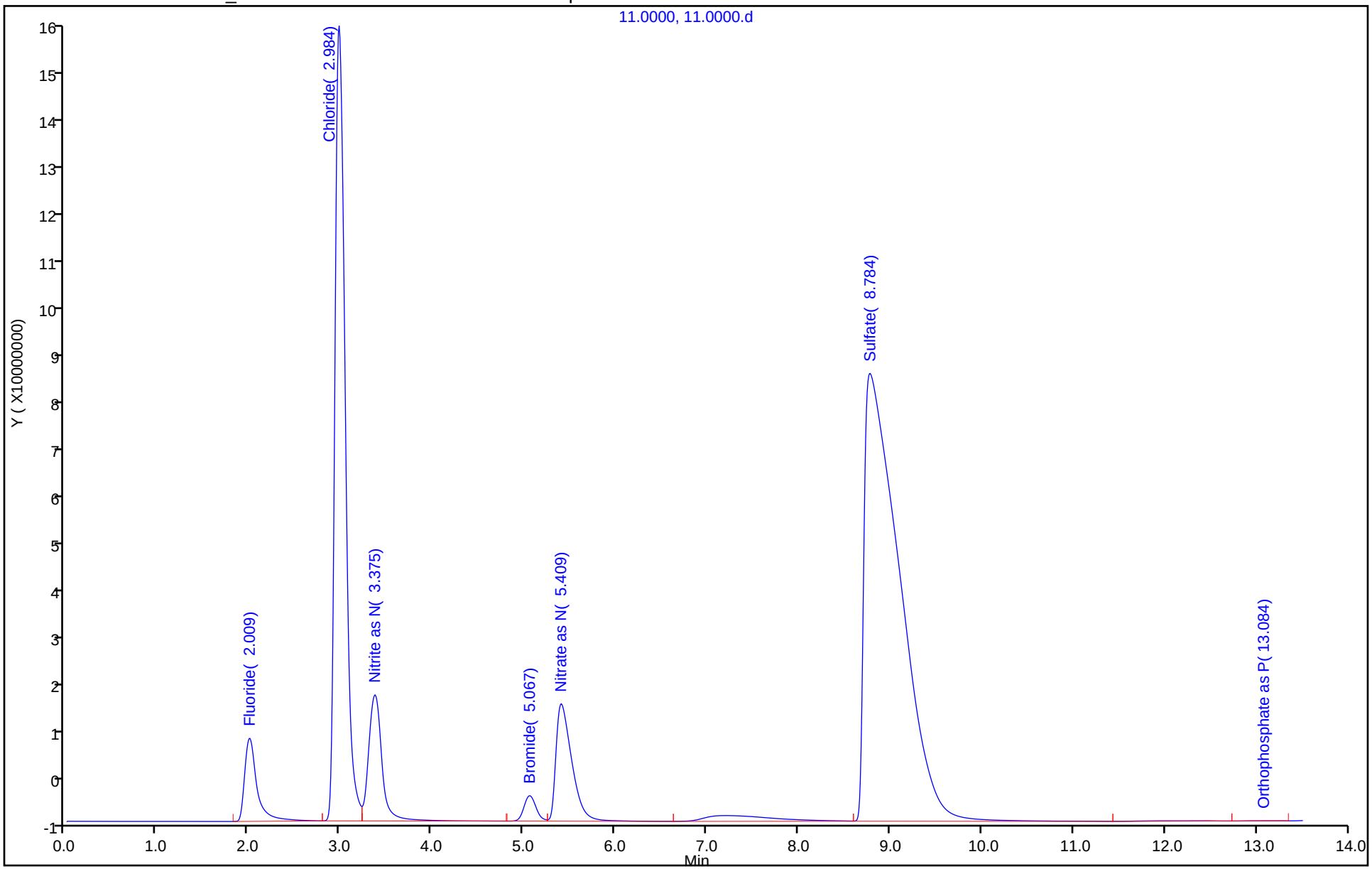
Reagents:

ICMS/MSD WEEK_00654 Amount Added: 0.05 Units: mL

Report Date: 26-Jun-2020 08:34:54 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\11.0000.d				
Injection Date:	25-Jun-2020 17:51:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-1 MS			Worklist Smp#:	11
Client ID:	PZ007-20A				
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\12.0000.d
Lims ID: 280-137609-F-1 MSD
Client ID: PZ007-20A
Sample Type: MSD
Inject. Date: 25-Jun-2020 18:07:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-012
Misc. Info.: 15449 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 08:34:50 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	2.009	1.992	0.017	148710503	1.00	5.36	
2 Chloride	3.000	2.934	0.066	1169863981	10.0	64.1	
3 Nitrite as N	3.450	3.384	0.066	242918792	NC	NC	
4 Bromide	5.334	5.275	0.059	44232878	1.00	5.50	
5 Nitrate as N	5.742	5.692	0.050	268107961	NC	NC	
6 Sulfate	8.975	9.317	-0.342	2247105417	10.0	166.2	
7 Orthophosphate as P	12.950	13.175	-0.225	193298	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

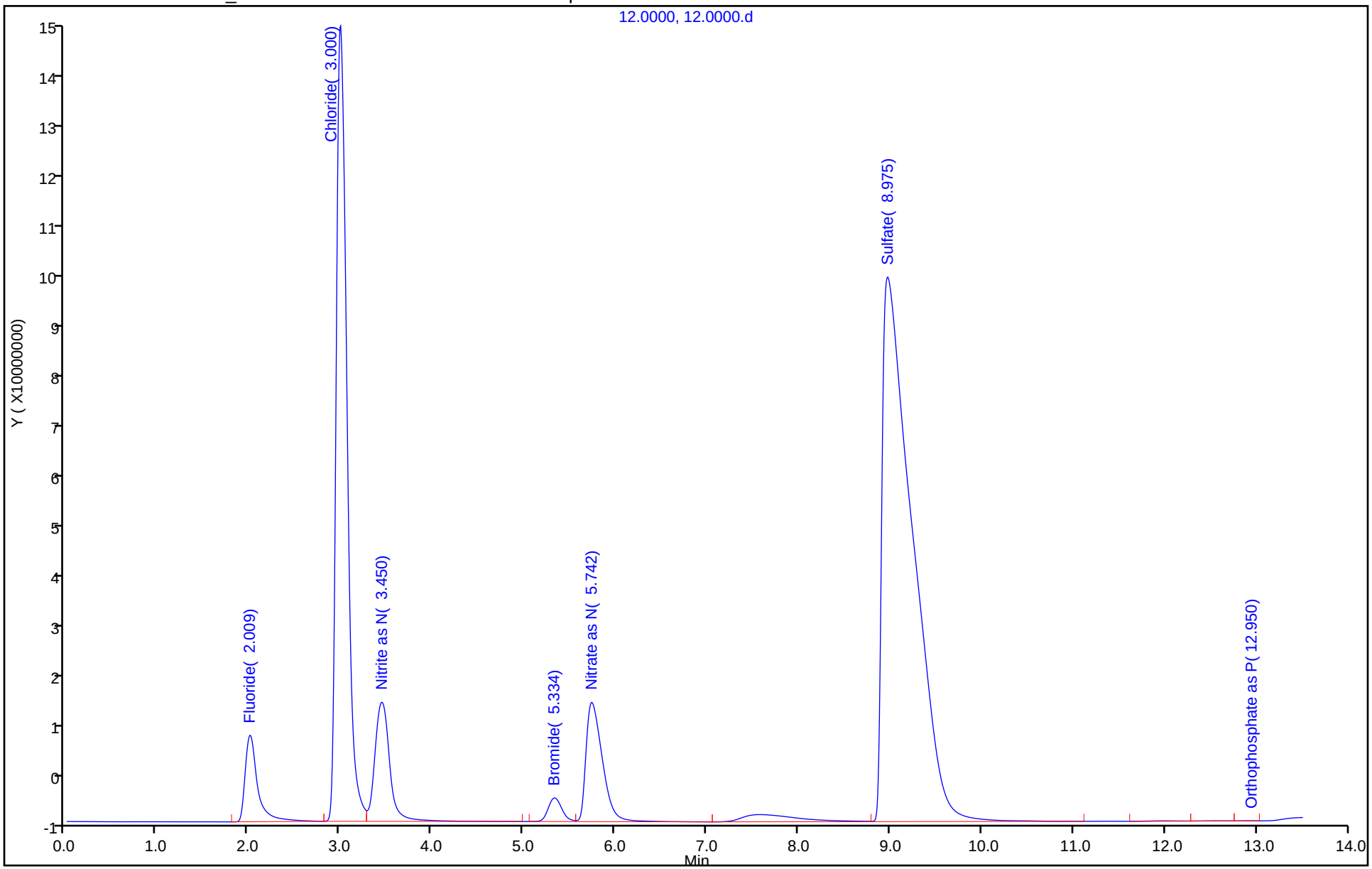
Reagents:

ICMS/MSD WEEK_00654 Amount Added: 0.05 Units: mL

Report Date: 26-Jun-2020 08:34:54 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\12.0000.d				
Injection Date:	25-Jun-2020 18:07:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-1 MSD			Worklist Smp#:	12
Client ID:	PZ007-20A				
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\13.0000.d
Lims ID: 280-137609-F-2
Client ID: PZ012-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 18:24:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-013
Misc. Info.: 8799 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 08:34:50 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	2104937	0.0436	
2 Chloride	2.925	2.934	-0.009	168303433	9.15	
3 Nitrite as N		3.384			ND	
4 Bromide	5.117	5.275	-0.158	880905	0.1041	
5 Nitrate as N	5.575	5.692	-0.117	925937	NC	
6 Sulfate	9.025	9.317	-0.292	981315056	72.6	
7 Orthophosphate as P	13.125	13.175	-0.050	579117	NC	

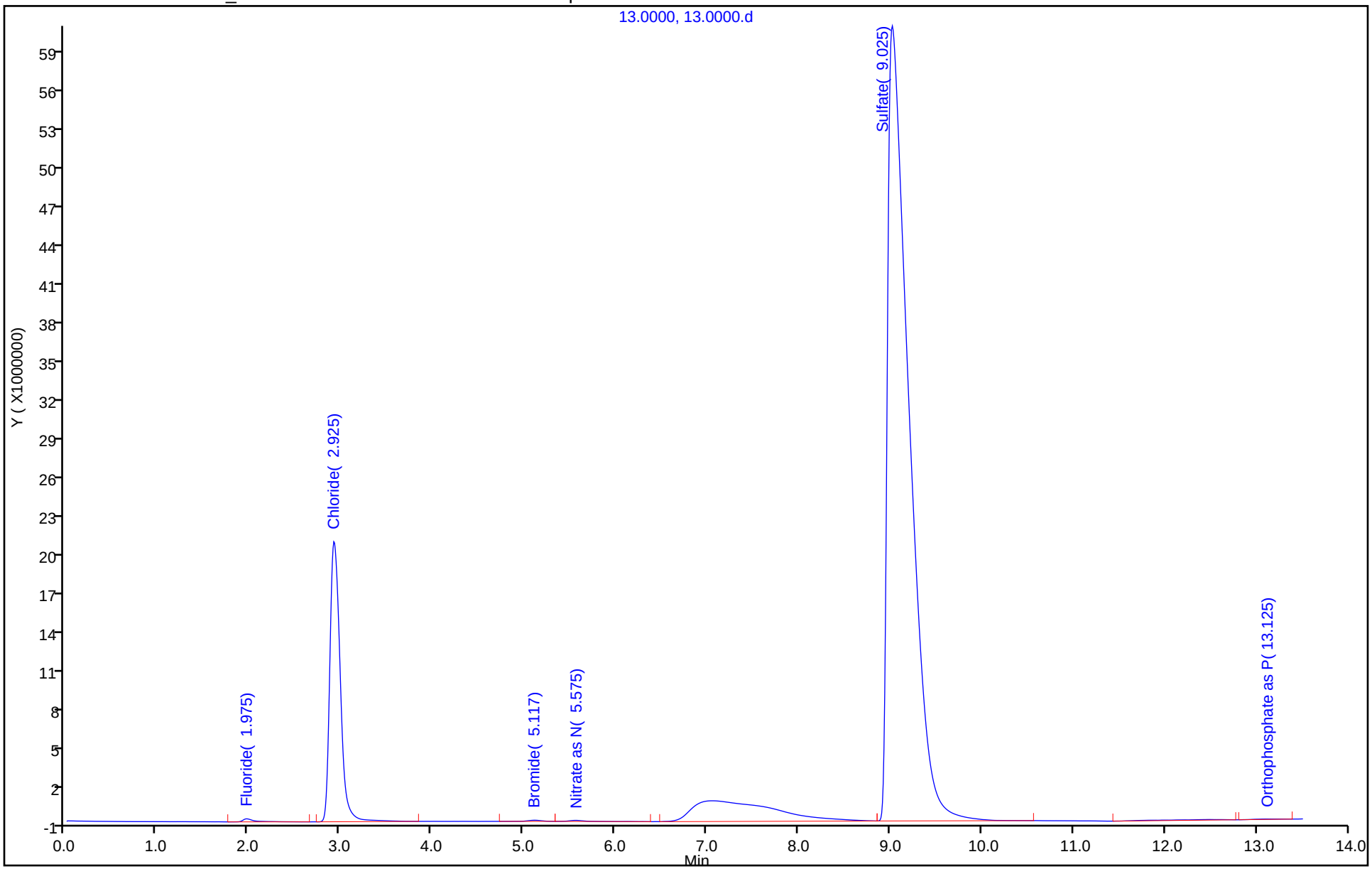
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\13.0000.d				
Injection Date:	25-Jun-2020 18:24:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-2	Lab Sample ID:	280-137609-2	Worklist Smp#:	13
Client ID:	PZ012-20A				
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\15.0000.d
Lims ID: 280-137609-F-4
Client ID: G0080-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 18:57:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-015
Misc. Info.: 27710 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 08:34:50 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	1.992	1.992	0.000	1687394	0.0285	
2 Chloride	3.026	2.934	0.092	72939140	3.92	
3 Nitrite as N		3.384			ND	
4 Bromide	5.284	5.275	0.009	373428	0.0409	
5 Nitrate as N	5.734	5.692	0.042	29625597	NC	
6 Sulfate	9.301	9.317	-0.016	236784246	17.5	
7 Orthophosphate as P	13.234	13.175	0.059	674302	NC	

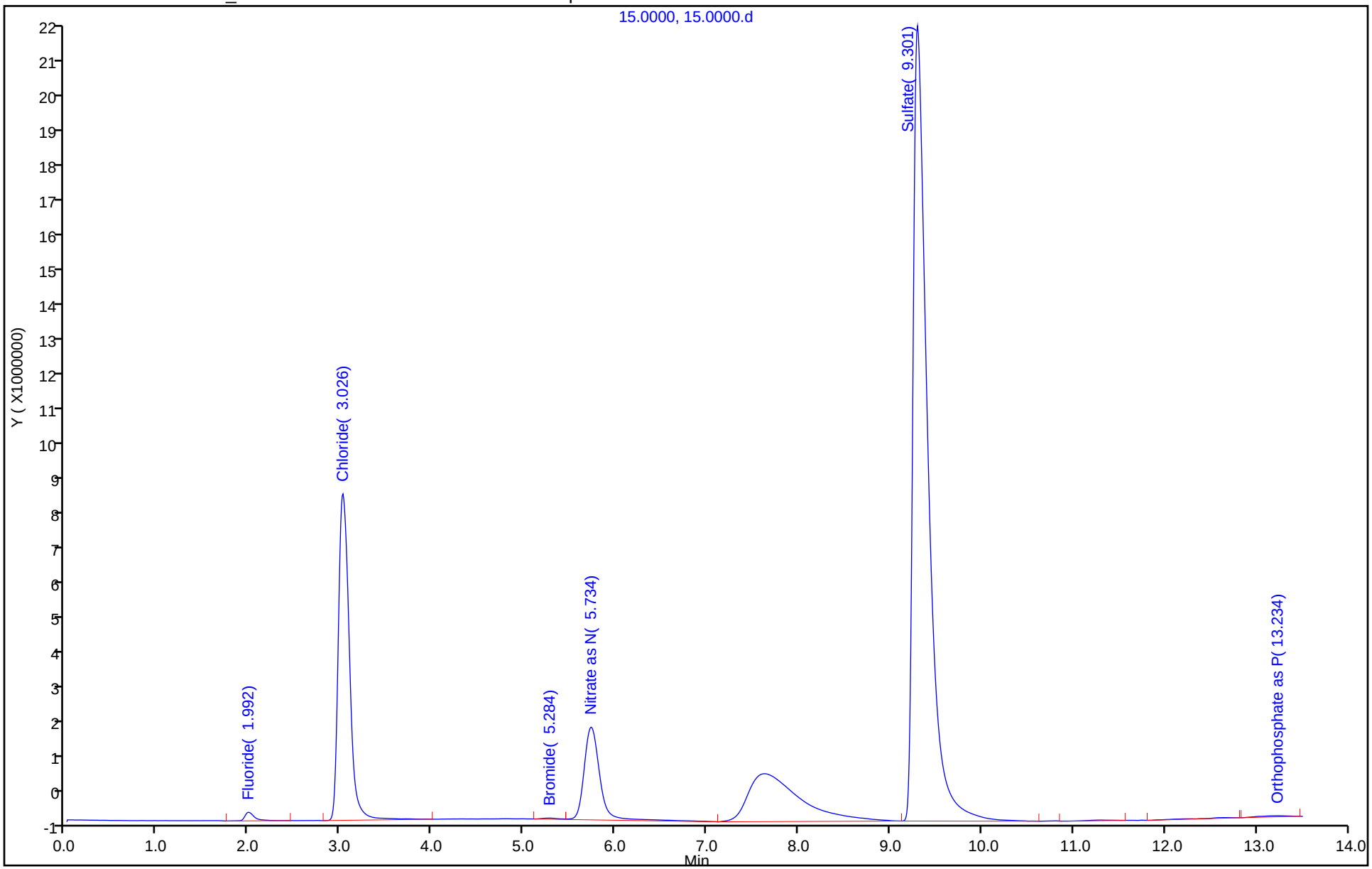
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:55 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\15.0000.d				
Injection Date:	25-Jun-2020 18:57:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-4	Lab Sample ID:	280-137609-4	Worklist Smp#:	15
Client ID:	G0080-20A				
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\17.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2020 19:29:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-017
Misc. Info.: 12816 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 08:34:55 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: jindaratc Date: 25-Jun-2020 20:20:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.000	1.992	0.008	134836446	5.00	4.85	
2 Chloride	2.850	2.934	-0.084	1786882477	100.0	98.0	
3 Nitrite as N	3.259	3.384	-0.125	240231308	NC	NC	
4 Bromide	5.025	5.275	-0.250	38746678	5.00	4.82	a
5 Nitrate as N	5.467	5.692	-0.225	235461364	NC	NC	a
6 Sulfate	8.850	9.317	-0.467	1326919397	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:

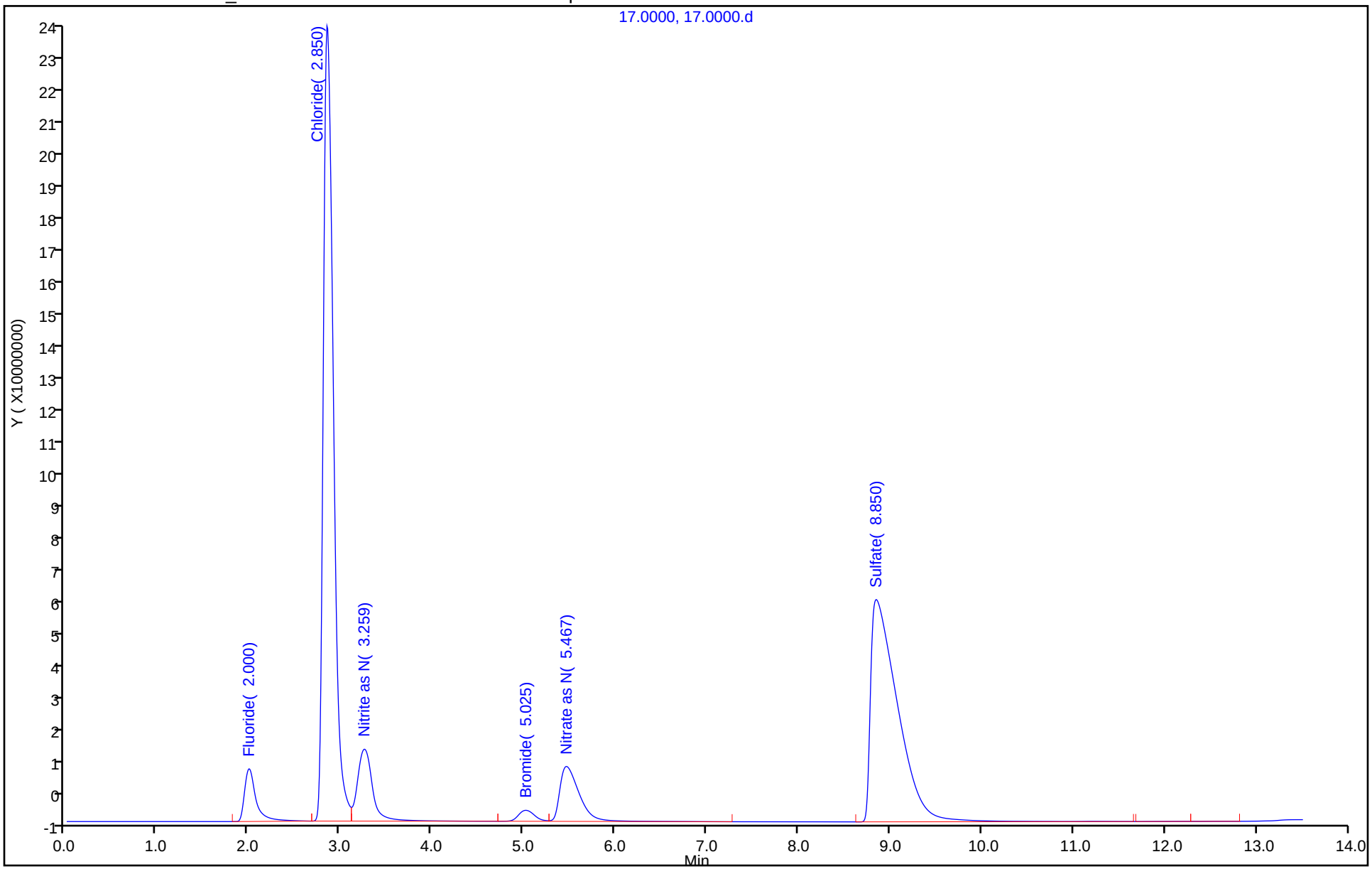
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:34:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\17.0000.d

Injection Date:	25-Jun-2020 19:29:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\18.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 25-Jun-2020 19:46:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-018
Misc. Info.: 32171 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 08:34:55 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

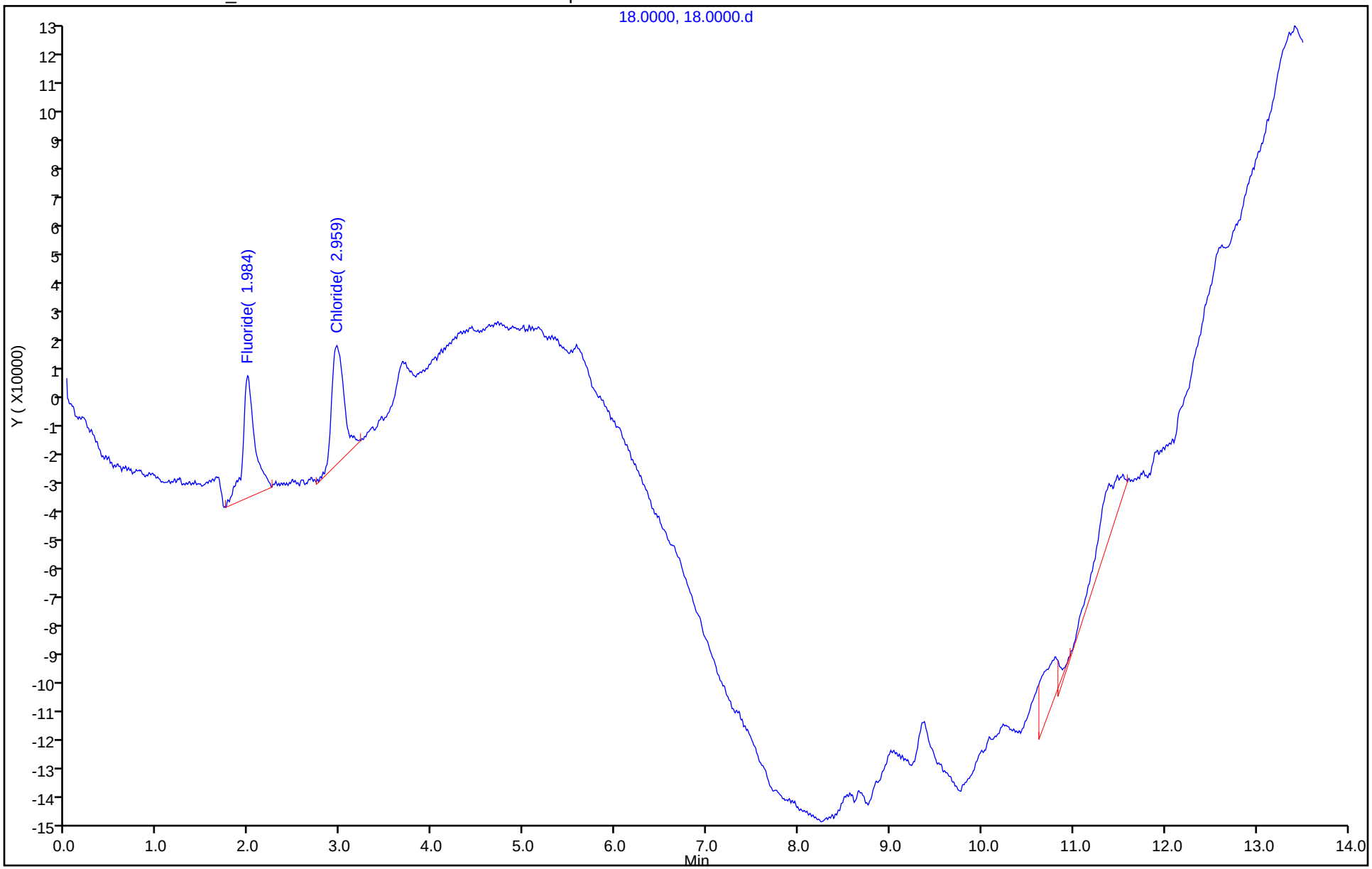
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.984	1.992	-0.008	388719		-0.0186	
2 Chloride	2.959	2.934	0.025	386769		-0.0641	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate		9.317				ND	
7 Orthophosphate as P		13.175				ND	

Report Date: 26-Jun-2020 08:34:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\18.0000.d

Injection Date:	25-Jun-2020 19:46:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\19.0000.d
Lims ID: 280-137609-F-6
Client ID: NW052-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 20:02:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-019
Misc. Info.: 14343 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 08:34:55 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 08:32:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.976	1.992	-0.016	820229	-0.002970	
2 Chloride	2.967	2.934	0.033	210887604	11.5	
3 Nitrite as N		3.384			ND	
4 Bromide	5.276	5.275	0.001	419981	0.0467	M
5 Nitrate as N	5.792	5.692	0.100	397239	NC	M
6 Sulfate	9.276	9.317	-0.041	370334956	27.3	
7 Orthophosphate as P	13.217	13.175	0.042	927053	NC	

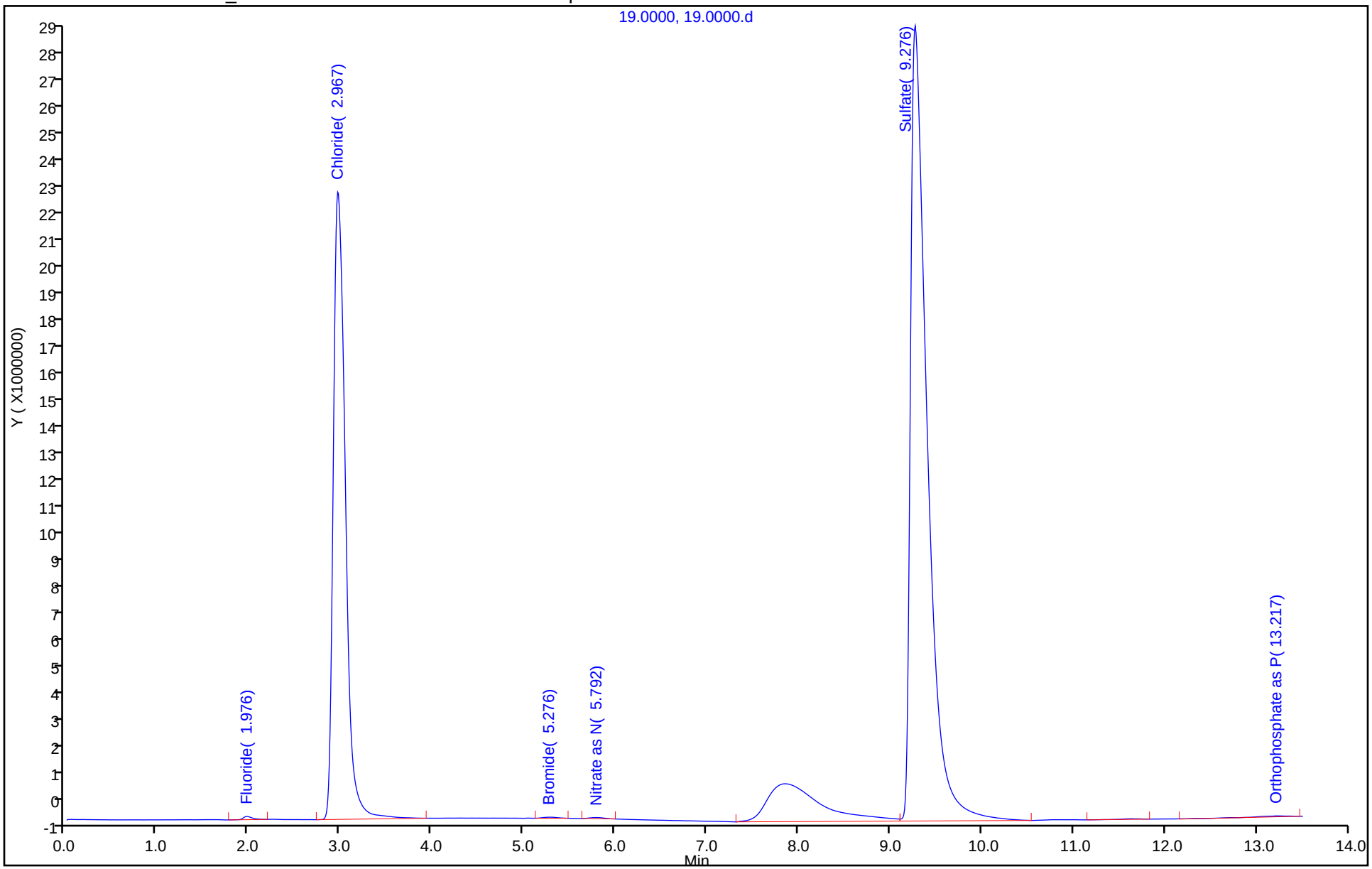
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 26-Jun-2020 08:34:56 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\19.0000.d				
Injection Date:	25-Jun-2020 20:02:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-6	Lab Sample ID:	280-137609-6	Worklist Smp#:	19
Client ID:	NW052-20A				
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\21.0000.d
Lims ID: 280-137609-F-8
Client ID: G0017-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 20:35:00 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-021
Misc. Info.: 27723 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 08:34:55 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

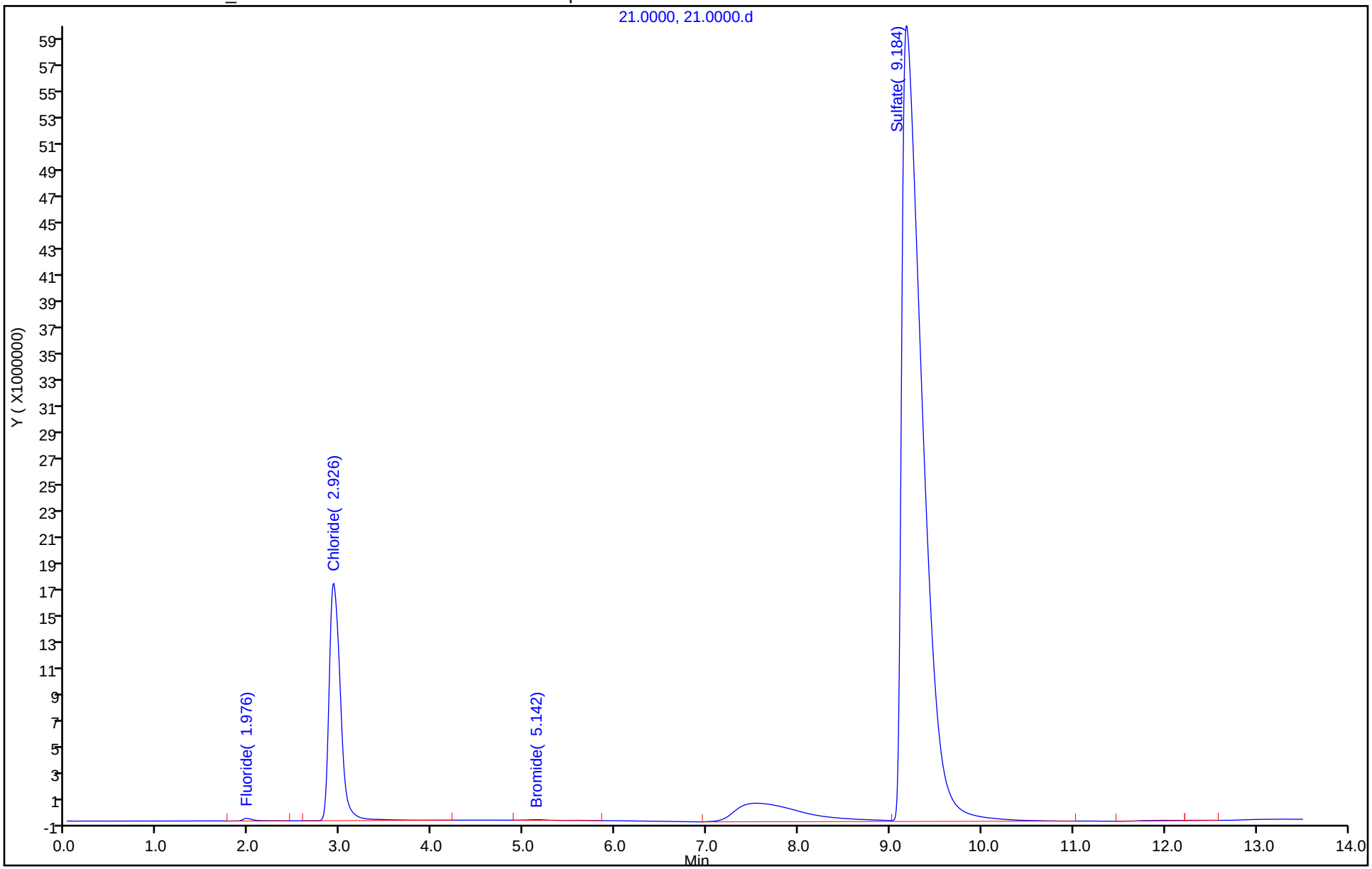
Column 1 : Det: 0005
Process Host: CTX1062

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.976	1.992	-0.016	1583653	0.0247	
2 Chloride	2.926	2.934	-0.008	152162031	8.26	
3 Nitrite as N		3.384			ND	
4 Bromide	5.142	5.275	-0.133	770633	0.0904	
5 Nitrate as N		5.692			ND	
6 Sulfate	9.184	9.317	-0.133	931750720	68.9	
7 Orthophosphate as P		13.175			ND	

Report Date: 26-Jun-2020 08:34:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\21.0000.d				
Injection Date:	25-Jun-2020 20:35:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-8	Lab Sample ID:	280-137609-8	Worklist Smp#:	21
Client ID:	G0017-20A				
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\26.0000.d
Lims ID: 280-137609-D-10
Client ID: SHGW03-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 21:57:00 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-026
Misc. Info.: 26228 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 08:34:55 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	1276626	0.0136	
2 Chloride	2.925	2.934	-0.009	33945483	1.78	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	
5 Nitrate as N	5.484	5.692	-0.208	20515842	NC	
6 Sulfate	9.142	9.317	-0.175	106793004	7.85	
7 Orthophosphate as P	13.350	13.175	0.175	533895	NC	

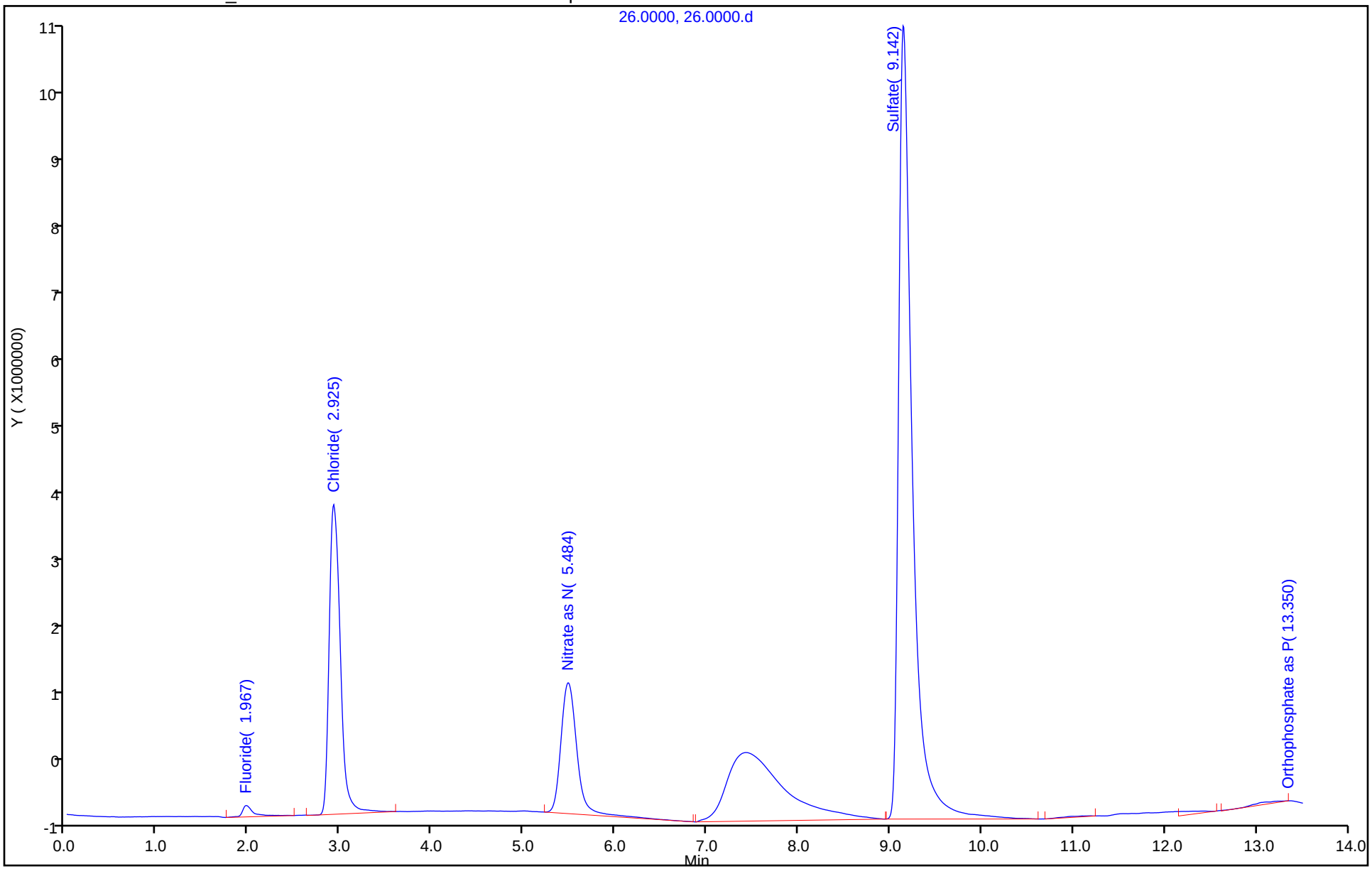
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\26.0000.d				
Injection Date:	25-Jun-2020 21:57:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-D-10	Lab Sample ID:	280-137609-10	Worklist Smp#:	26
Client ID:	SHGW03-20A				
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\27.0000.d
Lims ID: 280-137609-B-11
Client ID: SHGW02-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 22:14:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-027
Misc. Info.: 17805 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 08:34:55 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	2.142	1.992	0.150	85927833	3.08	
2 Chloride	2.967	2.934	0.033	121637957	6.59	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	
5 Nitrate as N		5.692			ND	
6 Sulfate	9.184	9.317	-0.133	35381255	2.57	
7 Orthophosphate as P	13.234	13.175	0.059	1672952	NC	

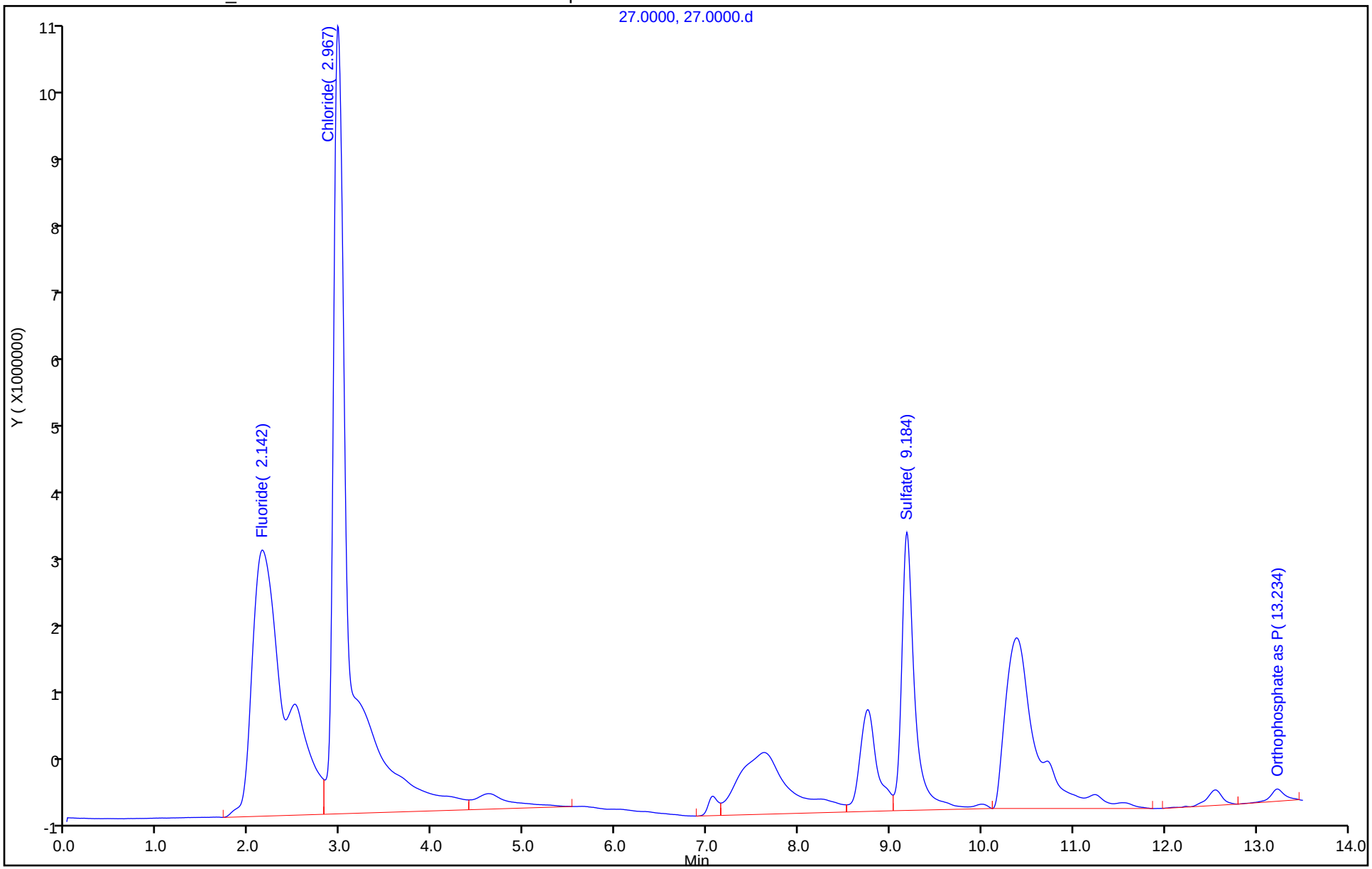
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\27.0000.d				
Injection Date:	25-Jun-2020 22:14:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-B-11	Lab Sample ID:	280-137609-11	Worklist Smp#:	27
Client ID:	SHGW02-20A				
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\28.0000.d
Lims ID: 280-137609-B-12
Client ID: SHGW05-20A
Sample Type: Client
Inject. Date: 25-Jun-2020 22:30:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 25.0 ul Dil. Factor: 5.0000
Sample Info: 280-0092742-028
Misc. Info.: 20905 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 08:34:55 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	2.142	1.992	0.150	86503410	3.10	
2 Chloride	3.001	2.934	0.067	124640020	6.75	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	
5 Nitrate as N		5.692			ND	
6 Sulfate	9.492	9.317	0.175	32753233	2.37	
7 Orthophosphate as P	13.276	13.175	0.101	89667	NC	

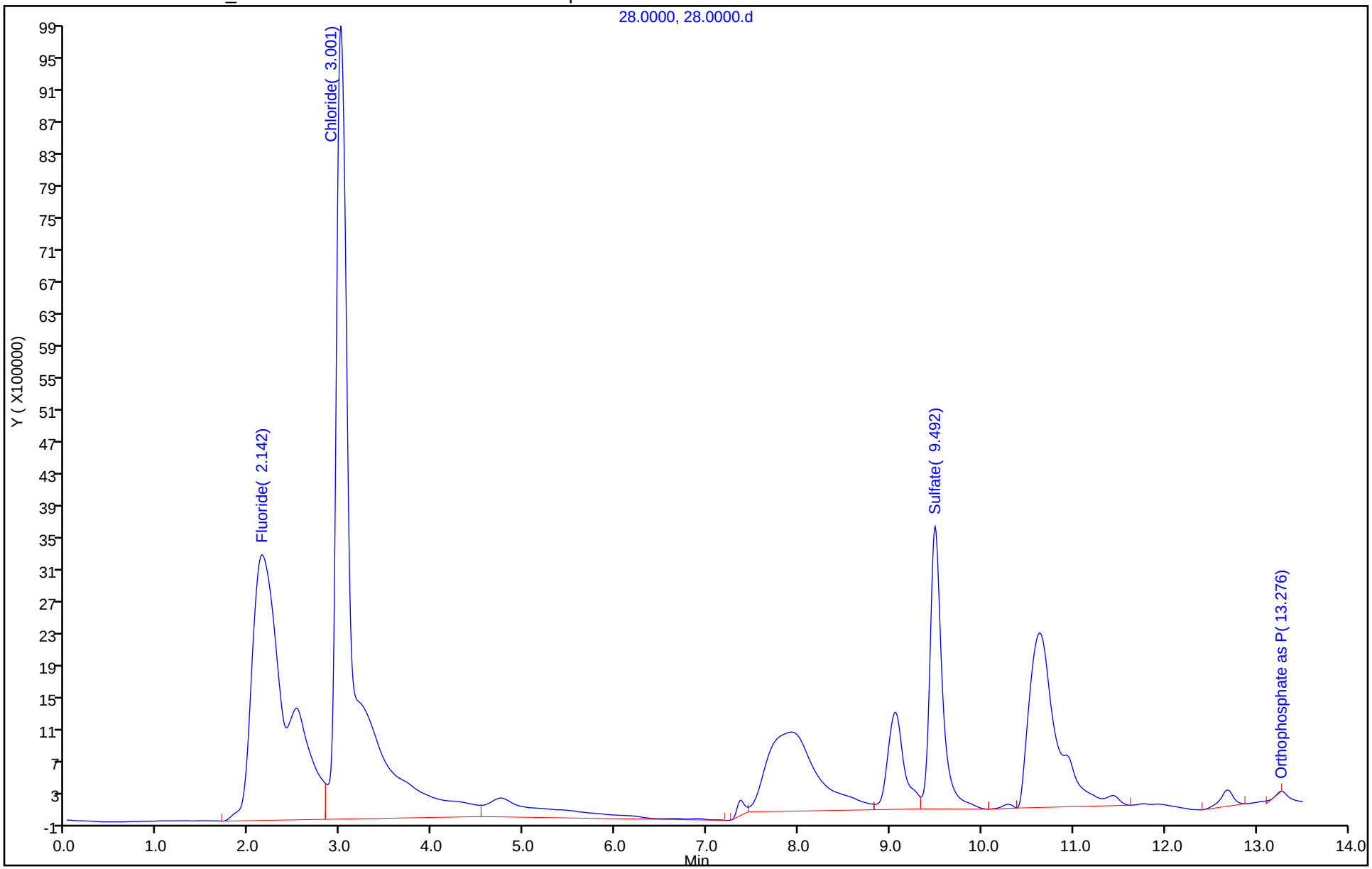
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\28.0000.d				
Injection Date:	25-Jun-2020 22:30:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-B-12	Lab Sample ID:	280-137609-12	Worklist Smp#:	28
Client ID:	SHGW05-20A				
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\29.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2020 22:46:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-029
Misc. Info.: 25423 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 08:34:59 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.000	1.992	0.008	135901882	5.00	4.89	
2 Chloride	2.925	2.934	-0.009	1784550708	100.0	97.8	
3 Nitrite as N	3.367	3.384	-0.017	241304744	NC	NC	
4 Bromide	5.209	5.275	-0.066	38224983	5.00	4.76	
5 Nitrate as N	5.642	5.692	-0.050	232194296	NC	NC	
6 Sulfate	9.134	9.317	-0.183	1321948411	100.0	97.8	
7 Orthophosphate as P		13.175			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

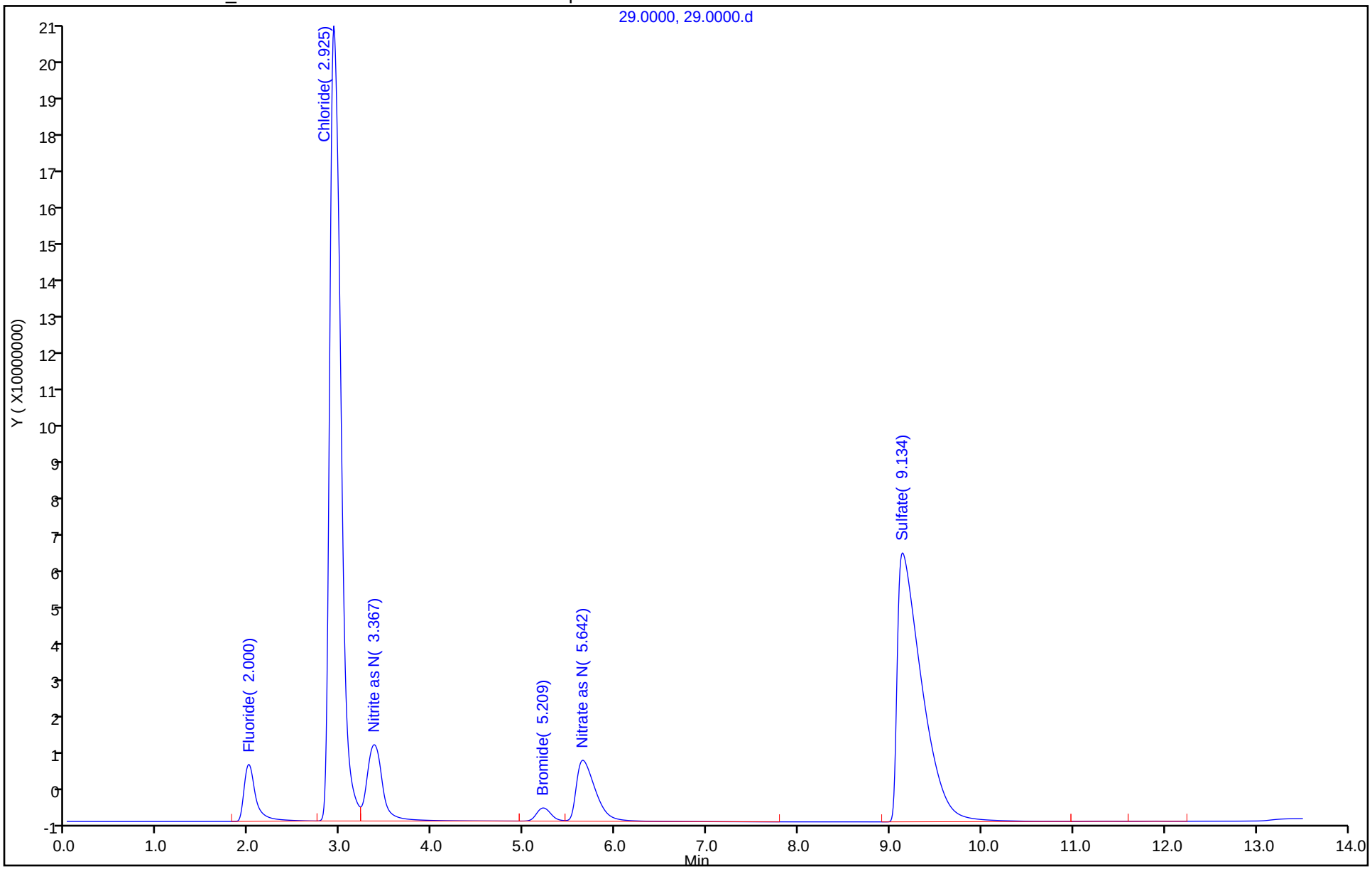
IC LCS_01746 Amount Added: 5.00 Units: mL

Report Date: 26-Jun-2020 08:34:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\29.0000.d

Injection Date:	25-Jun-2020 22:46:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	29
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\30.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 25-Jun-2020 23:03:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092742-030
Misc. Info.: 13787 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	1.992	0.025	82561		-0.0297	
2 Chloride	2.876	2.934	-0.058	166149		-0.0762	
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	13.292	13.175	0.117	348928		NC	

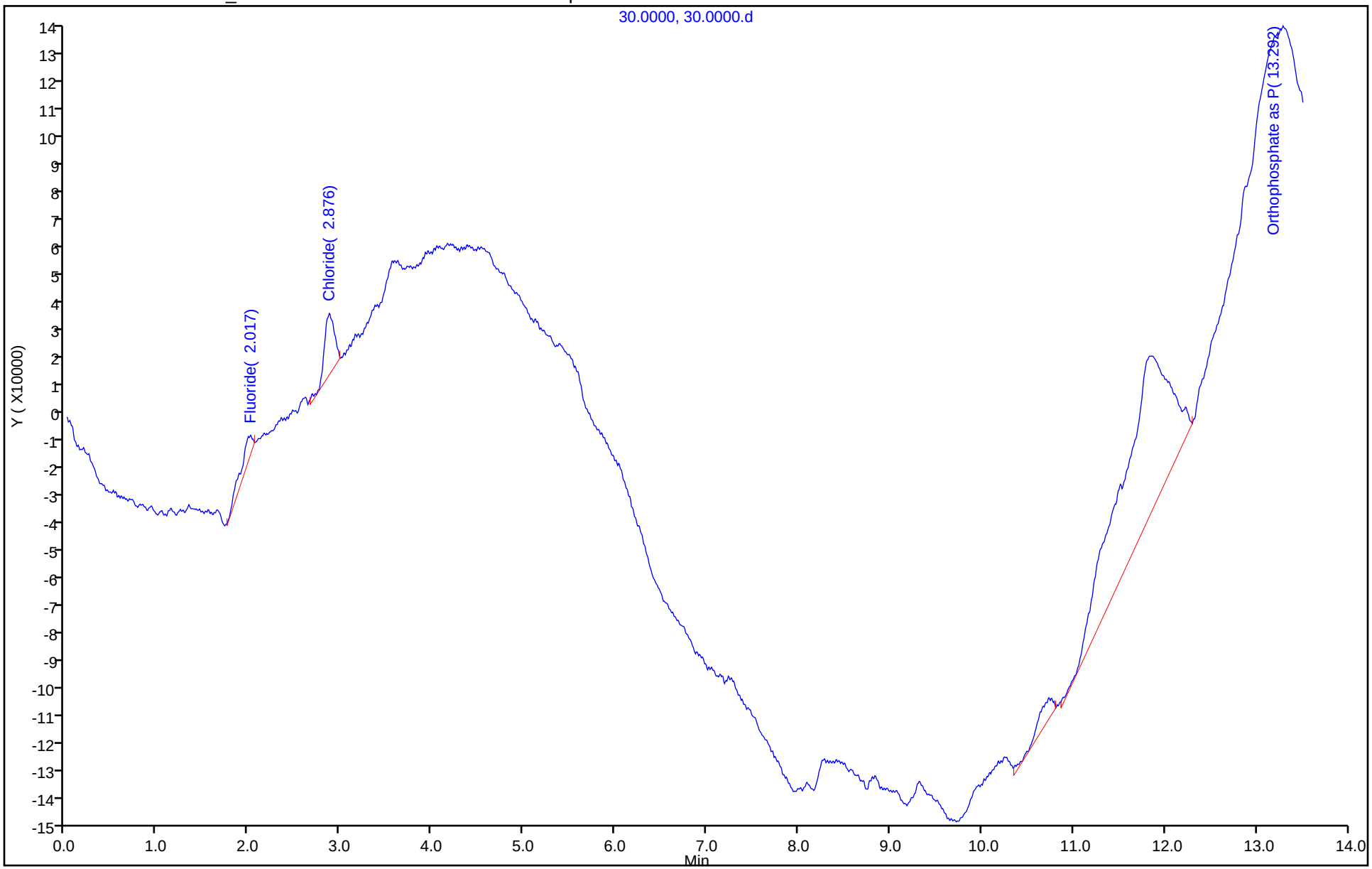
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 26-Jun-2020 08:34:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200625-92742.b\30.0000.d				
Injection Date:	25-Jun-2020 23:03:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	30
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~~ 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\01.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 09:54:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-001
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 30-Jun-2020 09:07:10 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

First Level Reviewer: pedrickj Date: 29-Jun-2020 11:07:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.975	1.992	-0.017	131286999	5.00	4.72	M
2 Chloride	2.792	2.934	-0.142	1779741448	100.0	97.6	M
3 Nitrite as N	3.175	3.384	-0.209	233681177	NC	NC	M
4 Bromide	4.734	5.275	-0.541	37986516	5.00	4.73	Ma
5 Nitrate as N	5.092	5.692	-0.600	228440204	NC	NC	Ma
6 Sulfate	8.675	9.317	-0.642	1314843911	100.0	97.2	
7 Orthophosphate as P	13.175	13.175	0.000	1738191	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

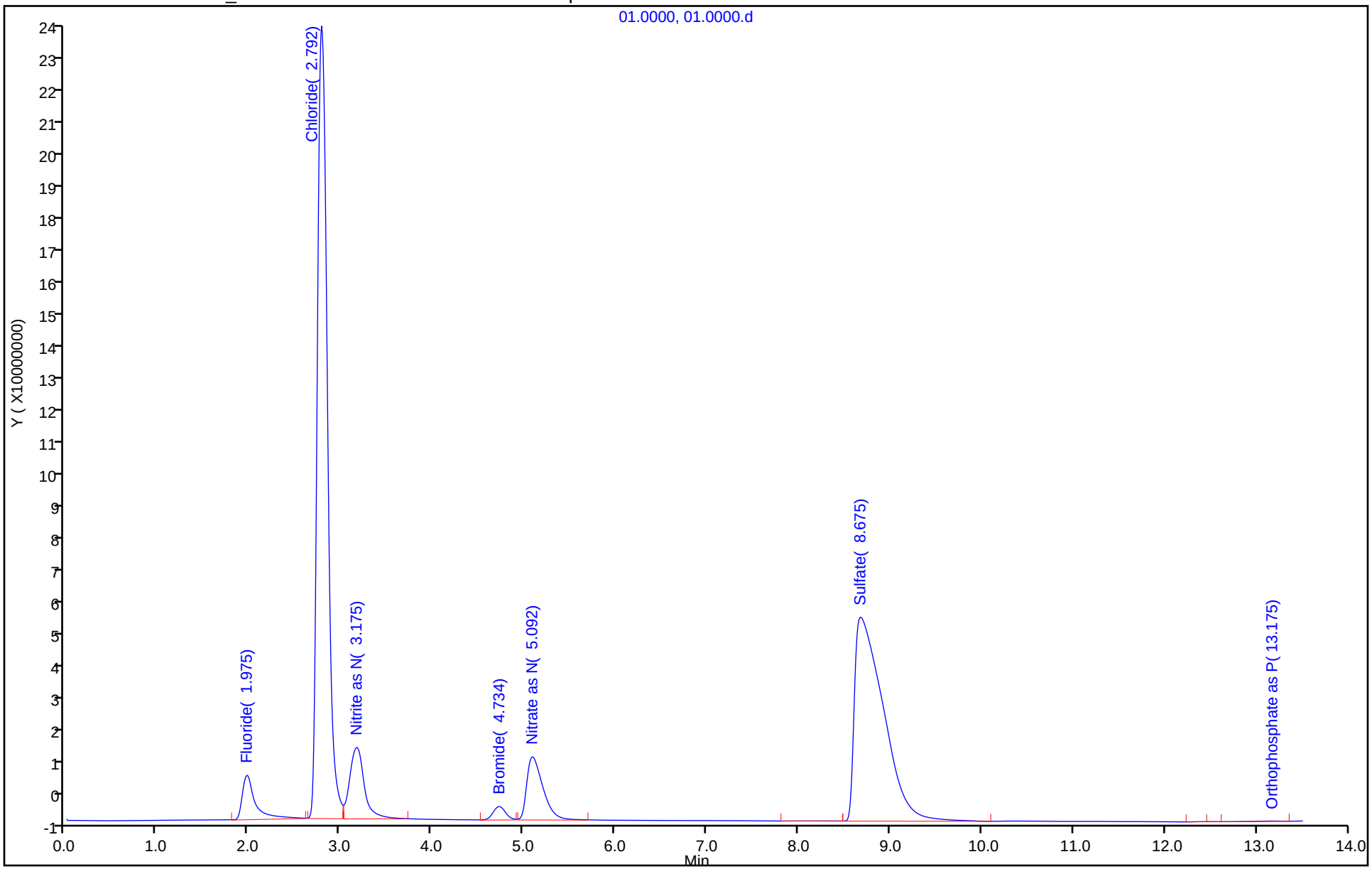
IC LCS_01747 Amount Added: 5.00 Units: mL

Report Date: 30-Jun-2020 09:07:10 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\01.0000.d

Injection Date:	29-Jun-2020 09:54:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\02.0000.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 29-Jun-2020 10:10:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-002
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 09:07:10 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.984	1.992	-0.008	442396		-0.0167	
2 Chloride	2.875	2.934	-0.059	130937		-0.0781	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate	9.342	9.317	0.025	1172725		0.0342	
7 Orthophosphate as P	12.917	13.175	-0.258	4525715		NC	

QC Flag Legend

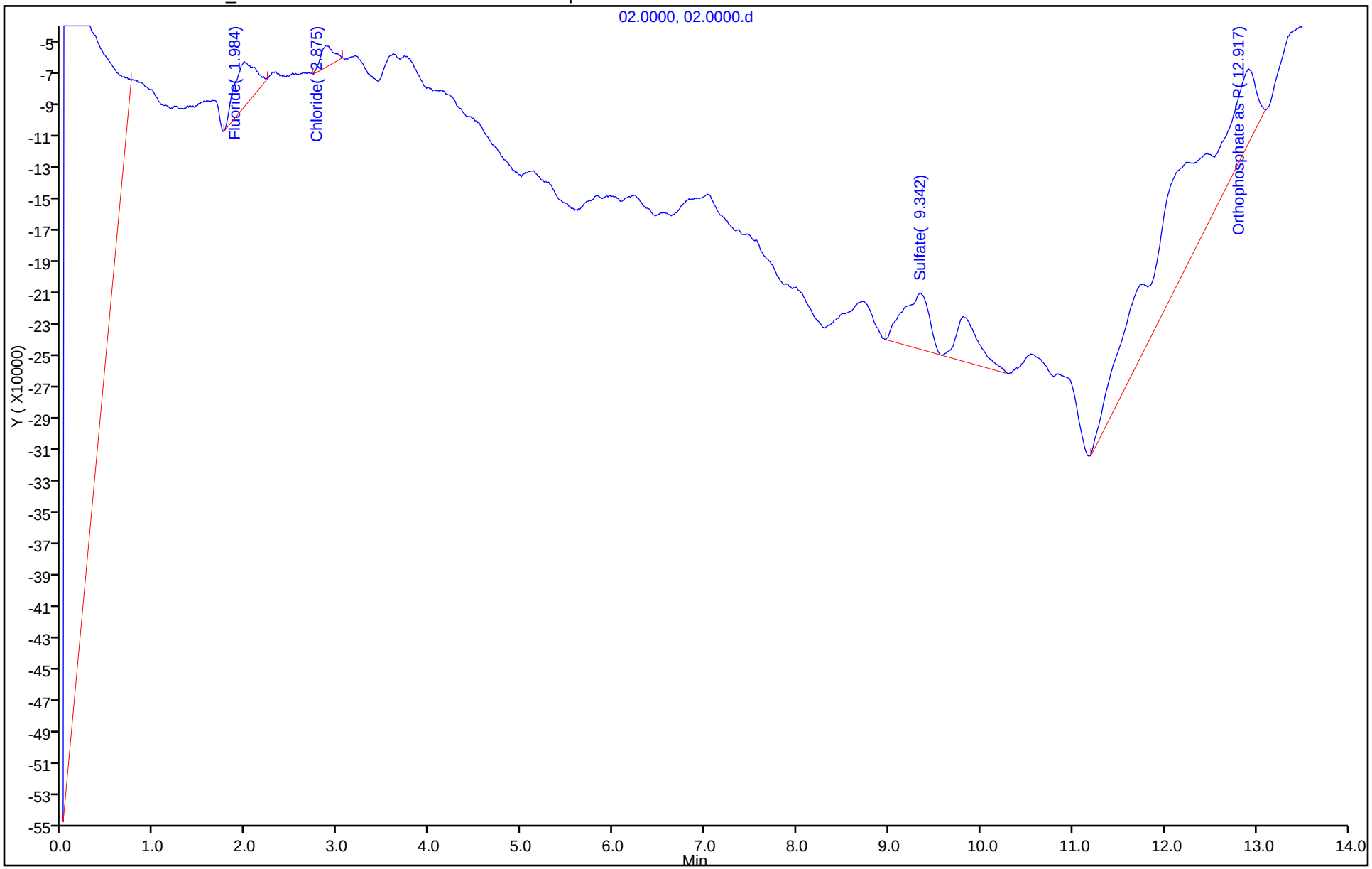
Processing Flags
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\02.0000.d

Injection Date:	29-Jun-2020 10:10:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\03.0000.d
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 29-Jun-2020 10:26:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-003
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 09:07:10 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

First Level Reviewer: pedrickj Date: 29-Jun-2020 11:07:40

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	14240527	0.5000	0.4833	
2 Chloride	2.909	2.934	-0.025	93667176	5.00	5.05	
3 Nitrite as N	3.267	3.384	-0.117	24001716	NC	NC	
4 Bromide	4.884	5.275	-0.391	3868255	0.5000	0.4762	a
5 Nitrate as N	5.342	5.692	-0.350	24725332	NC	NC	a
6 Sulfate	9.225	9.317	-0.092	66411935	5.00	4.86	
7 Orthophosphate as P	13.284	13.175	0.109	284236	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

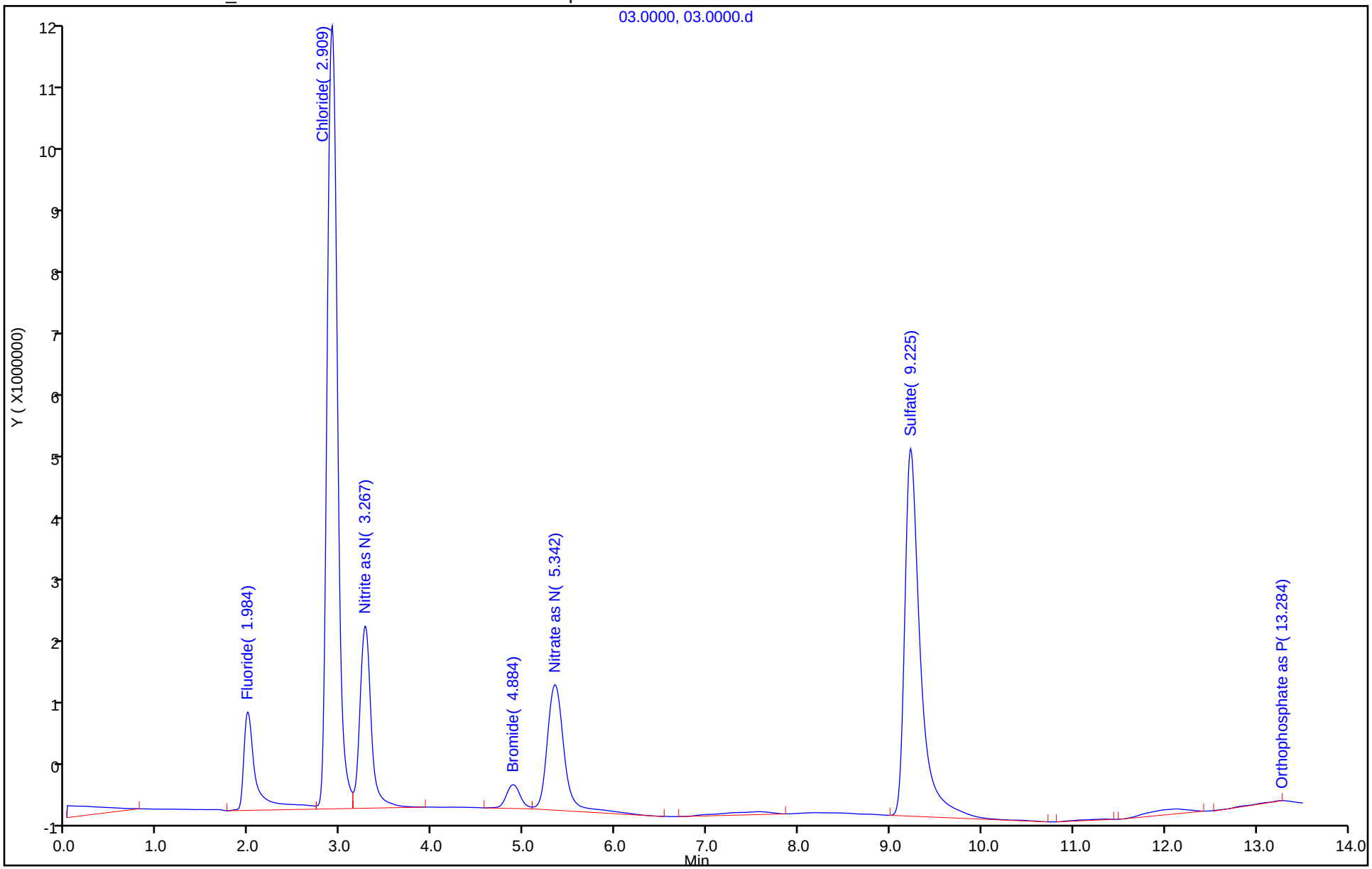
IC Cal low_00531 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00317 Amount Added: 0.10 Units: mL

Report Date: 30-Jun-2020 09:07:11 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\03.0000.d

Injection Date:	29-Jun-2020 10:26:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\04.0000.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 29-Jun-2020 10:43:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-004
Misc. Info.: 4 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 09:07:10 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	1.992	0.017	135933468	5.00	4.89	
2 Chloride	2.875	2.934	-0.059	1786339557	100.0	97.9	
3 Nitrite as N	3.334	3.384	-0.050	240684073	NC	NC	
4 Bromide	5.117	5.275	-0.158	40233972	5.00	5.01	
5 Nitrate as N	5.525	5.692	-0.167	231963652	NC	NC	
6 Sulfate	9.125	9.317	-0.192	1316905196	100.0	97.4	
7 Orthophosphate as P		13.175			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

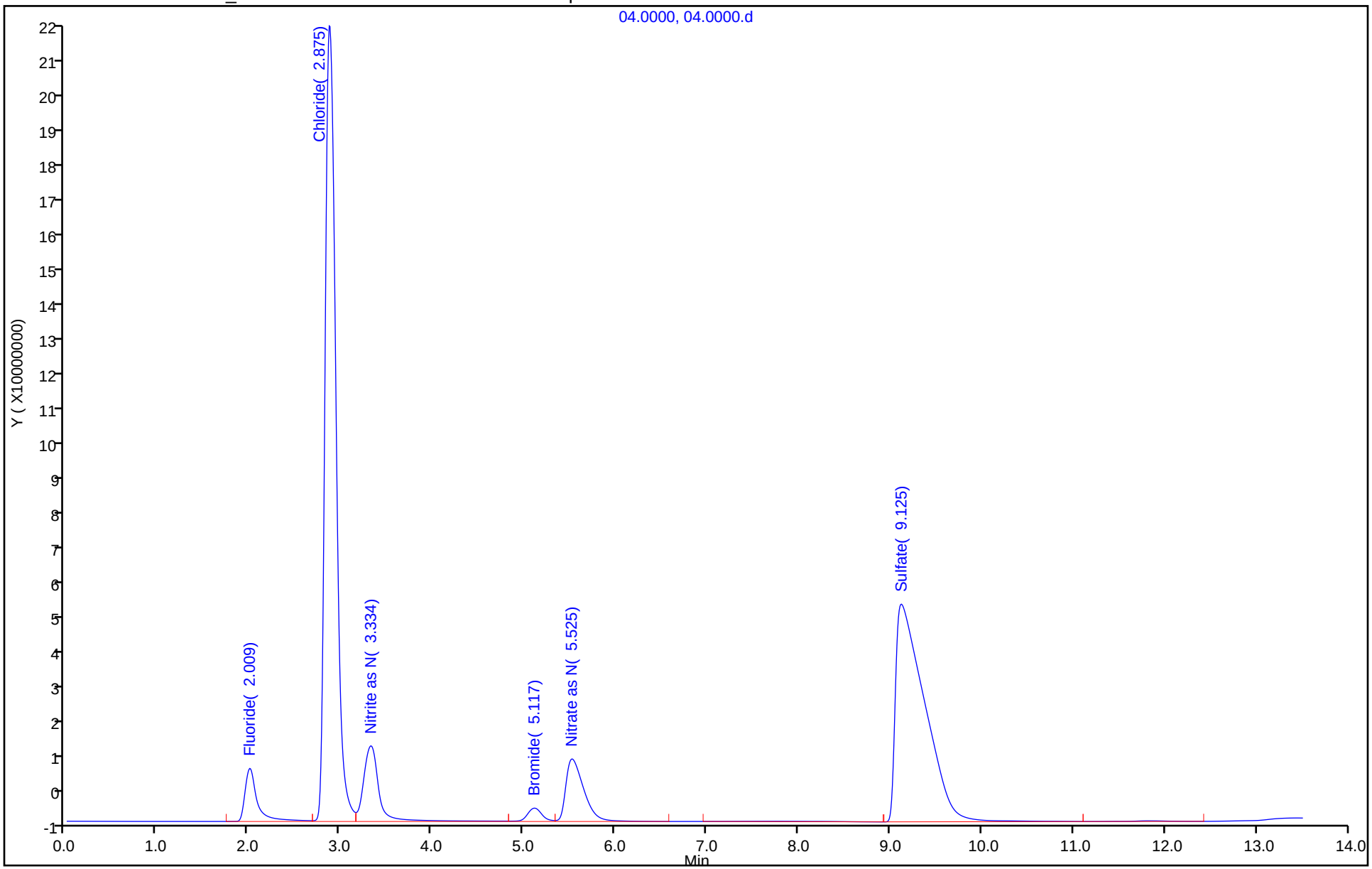
IC LCS_01747 Amount Added: 5.00 Units: mL

Report Date: 30-Jun-2020 09:07:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\04.0000.d

Injection Date:	29-Jun-2020 10:43:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\05.0000.d
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 29-Jun-2020 10:59:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-005
Misc. Info.: 5 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 09:07:10 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

First Level Reviewer: jindaratc Date: 29-Jun-2020 14:10:27

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	136999178	5.00	4.93	
2 Chloride	3.000	2.934	0.066	1787197035	100.0	98.0	
3 Nitrite as N	3.384	3.384	0.000	242447503	NC	NC	
4 Bromide	4.934	5.275	-0.341	40393693	5.00	5.03	a
5 Nitrate as N	5.325	5.692	-0.367	233964406	NC	NC	a
6 Sulfate	8.850	9.317	-0.467	1314808275	100.0	97.2	
7 Orthophosphate as P	13.267	13.175	0.092	1743310	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

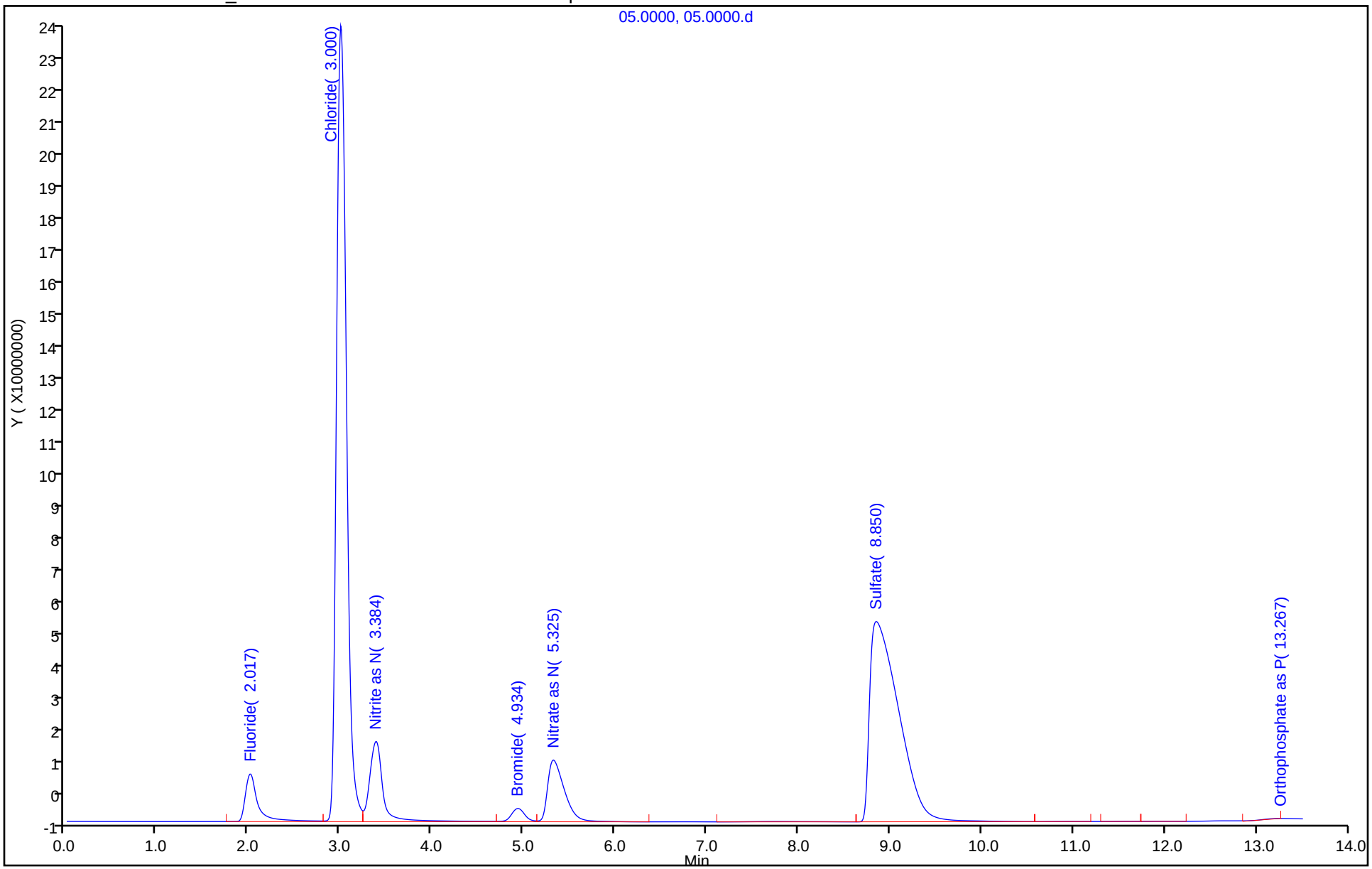
IC LCS_01747 Amount Added: 5.00 Units: mL

Report Date: 30-Jun-2020 09:07:12 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\05.0000.d

Injection Date:	29-Jun-2020 10:59:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\06.0000.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 29-Jun-2020 11:15:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-006
Misc. Info.: 6 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 09:07:10 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.042	1.992	0.050	380405		-0.0189	
2 Chloride		2.934				ND	
3 Nitrite as N	3.425	3.384	0.041	988194			NC
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate		9.317				ND	
7 Orthophosphate as P	13.050	13.175	-0.125	3147954			NC

QC Flag Legend

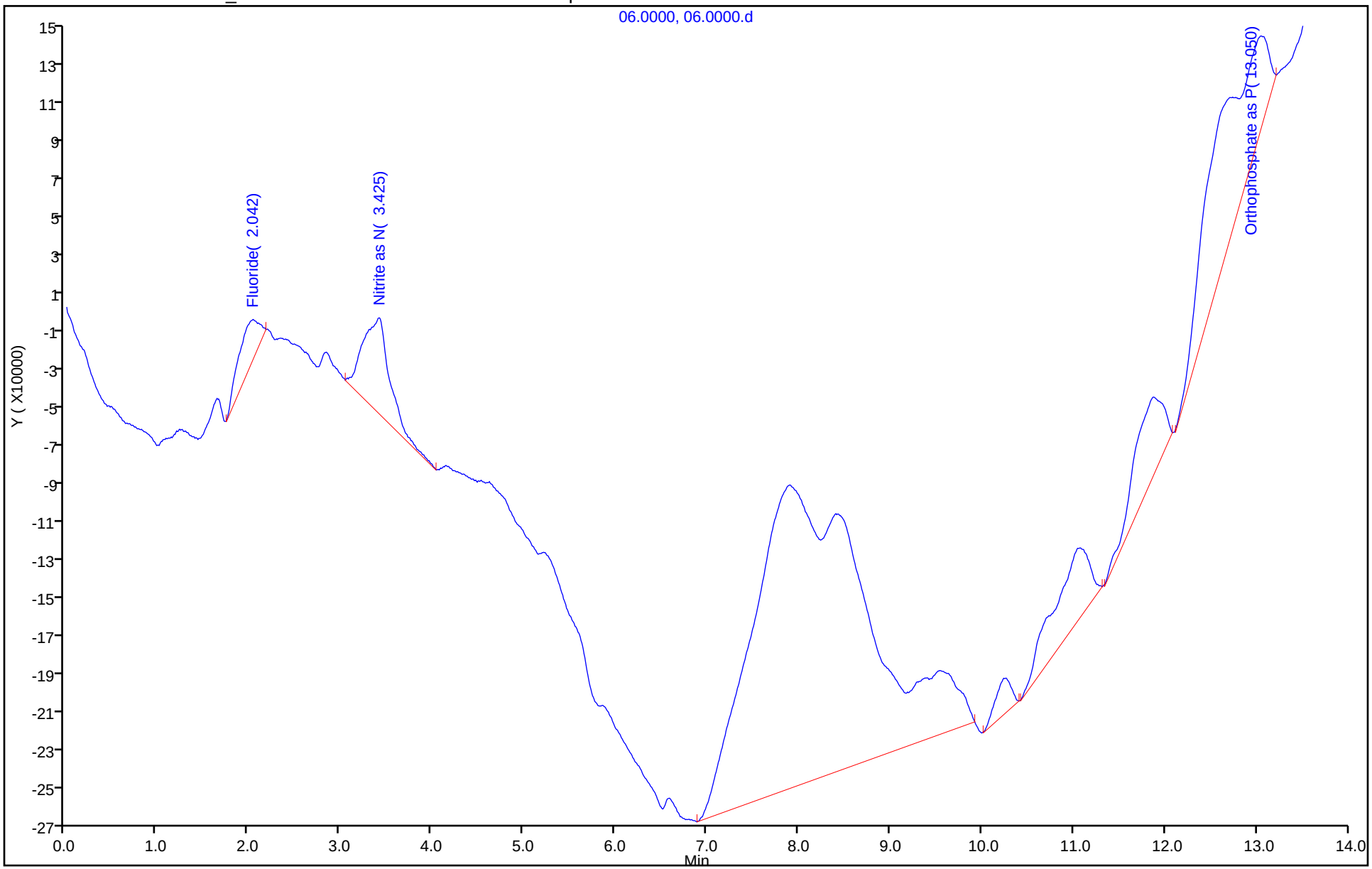
Processing Flags
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:13 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\06.0000.d

Injection Date:	29-Jun-2020 11:15:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\17.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 17:31:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-017
Misc. Info.: 13891 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 30-Jun-2020 09:07:16 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.001	1.992	0.009	134354398	5.00	4.84	
2 Chloride	2.892	2.934	-0.042	1801237508	100.0	98.8	
3 Nitrite as N	3.317	3.384	-0.067	233975252	NC	NC	
4 Bromide	5.084	5.275	-0.191	37617059	5.00	4.68	
5 Nitrate as N	5.492	5.692	-0.200	230718325	NC	NC	
6 Sulfate	9.076	9.317	-0.241	1329945564	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

Reagents:

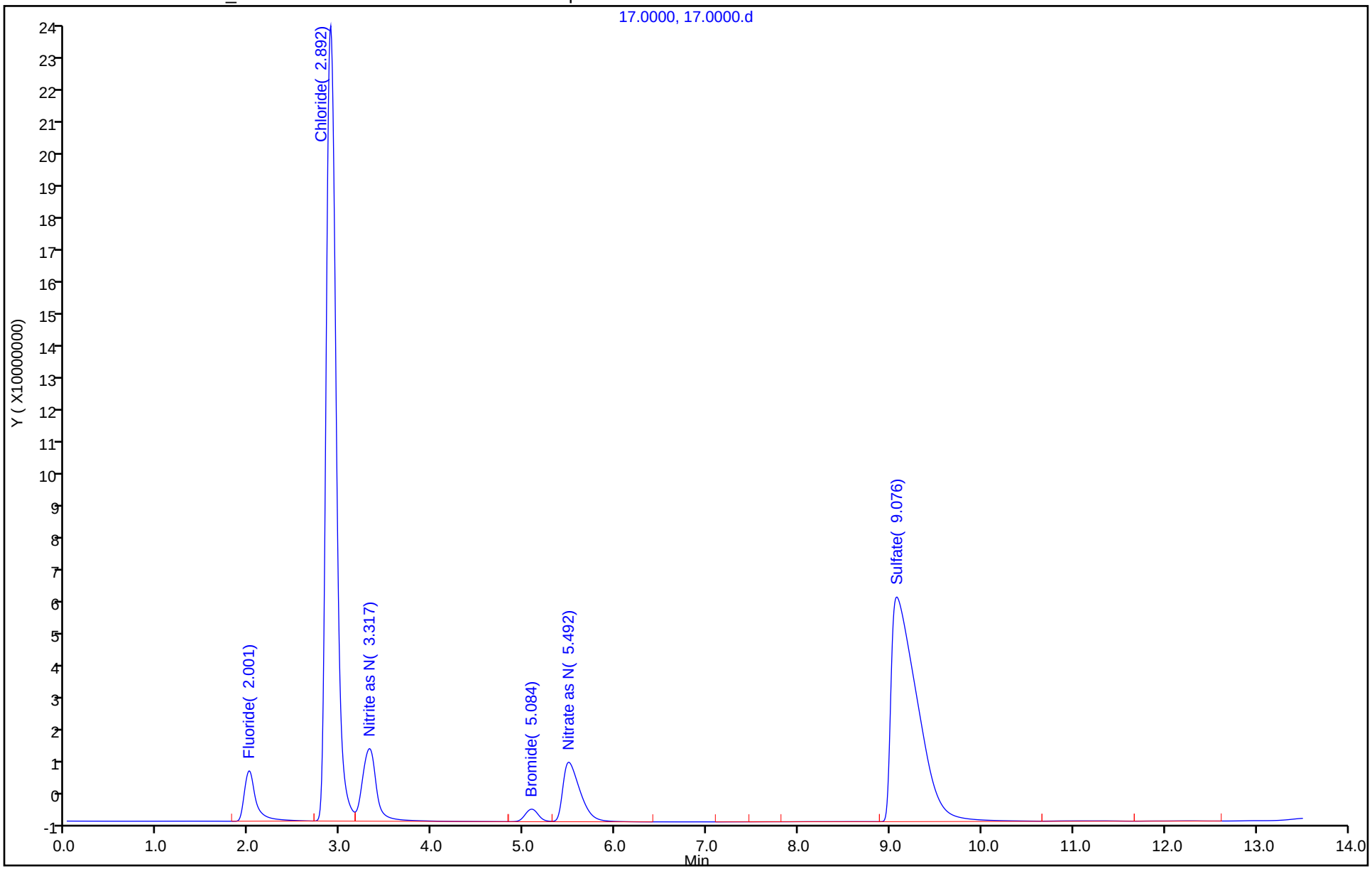
IC LCS_01747 Amount Added: 5.00 Units: mL

Report Date: 30-Jun-2020 09:07:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\17.0000.d

Injection Date:	29-Jun-2020 17:31:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\18.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	29-Jun-2020 17:47:00	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092862-018				
Misc. Info.:	1015 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 09:07:16	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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.992				ND	
2 Chloride		2.934				ND	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate	9.084	9.317	-0.233	953680		0.0180	
7 Orthophosphate as P	13.375	13.175	0.200	328445		NC	

QC Flag Legend

Processing Flags

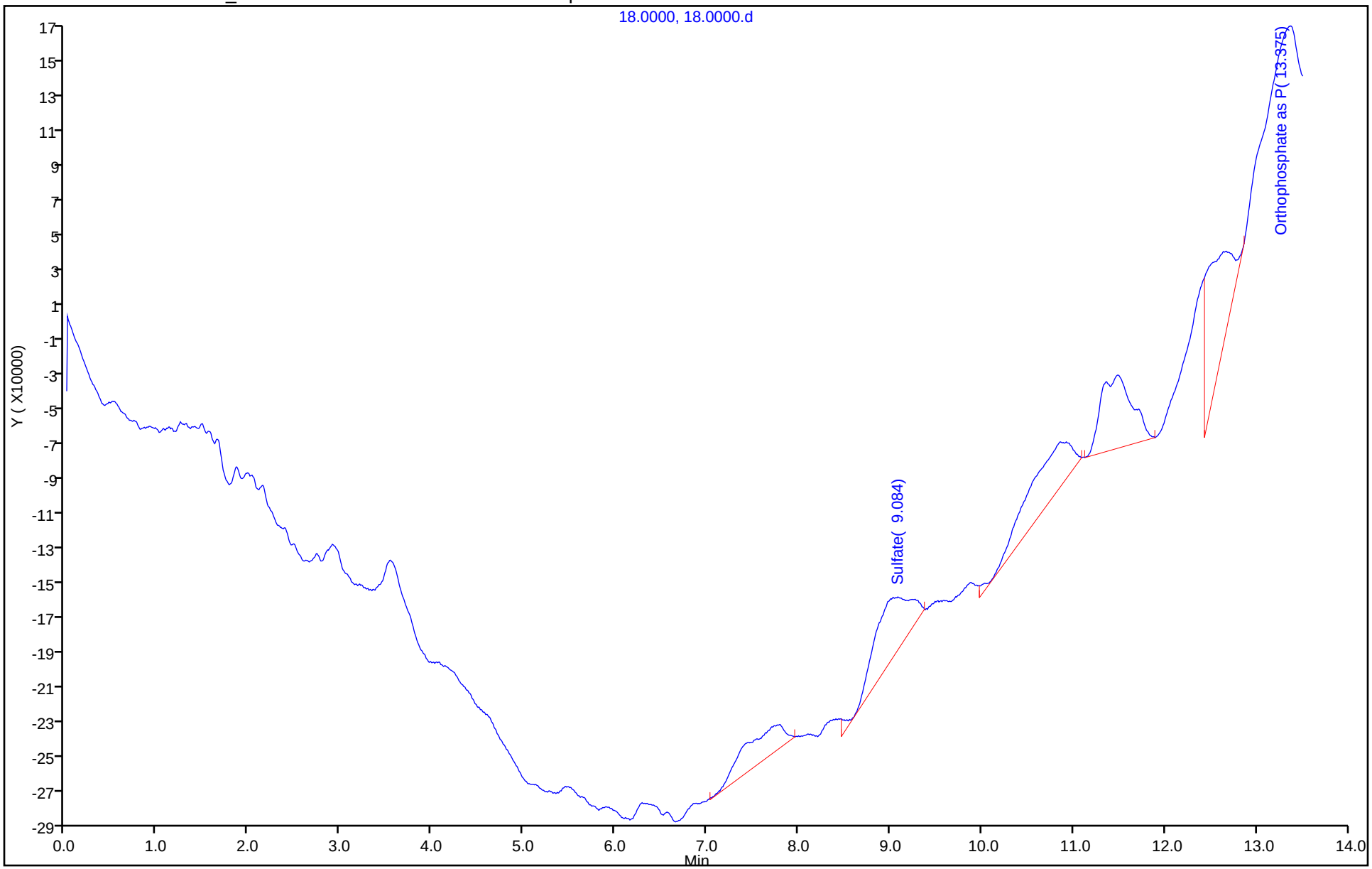
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\18.0000.d

Injection Date:	29-Jun-2020 17:47:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\29.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Jun-2020 20:48:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-029
Misc. Info.: 26723 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

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

First Level Reviewer: jindaratc Date: 29-Jun-2020 21:20:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	1.992	0.017	133932387	5.00	4.82	
2 Chloride	2.917	2.934	-0.017	1799715061	100.0	98.7	
3 Nitrite as N	3.317	3.384	-0.067	234796120	NC	NC	
4 Bromide	4.925	5.275	-0.350	37929600	5.00	4.72	a
5 Nitrate as N	5.317	5.692	-0.375	233065091	NC	NC	a
6 Sulfate	8.817	9.317	-0.500	1332329956	100.0	98.5	
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:

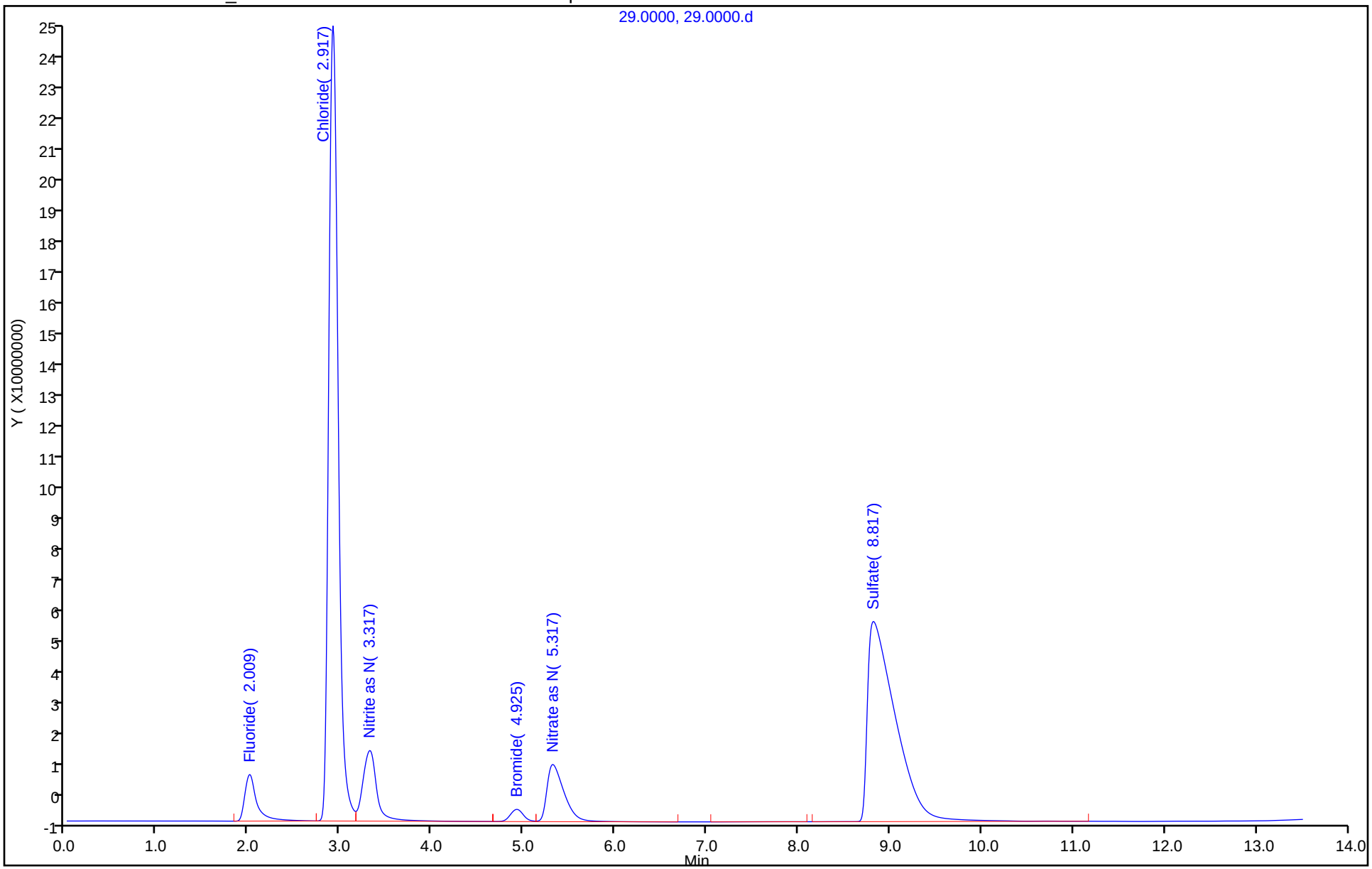
IC LCS_01747 Amount Added: 5.00 Units: mL

Report Date: 30-Jun-2020 09:07:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\29.0000.d

Injection Date:	29-Jun-2020 20:48:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	29
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\20200629-92862.b\30.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	29-Jun-2020 21:04:00	ALS Bottle#:	0	Worklist Smp#:	30
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092862-030				
Misc. Info.:	17846 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.992				ND	
2 Chloride		2.934				ND	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate	9.675	9.317	0.358	1411011		0.0518	
7 Orthophosphate as P	12.992	13.175	-0.183	824358		NC	

QC Flag Legend

Processing Flags

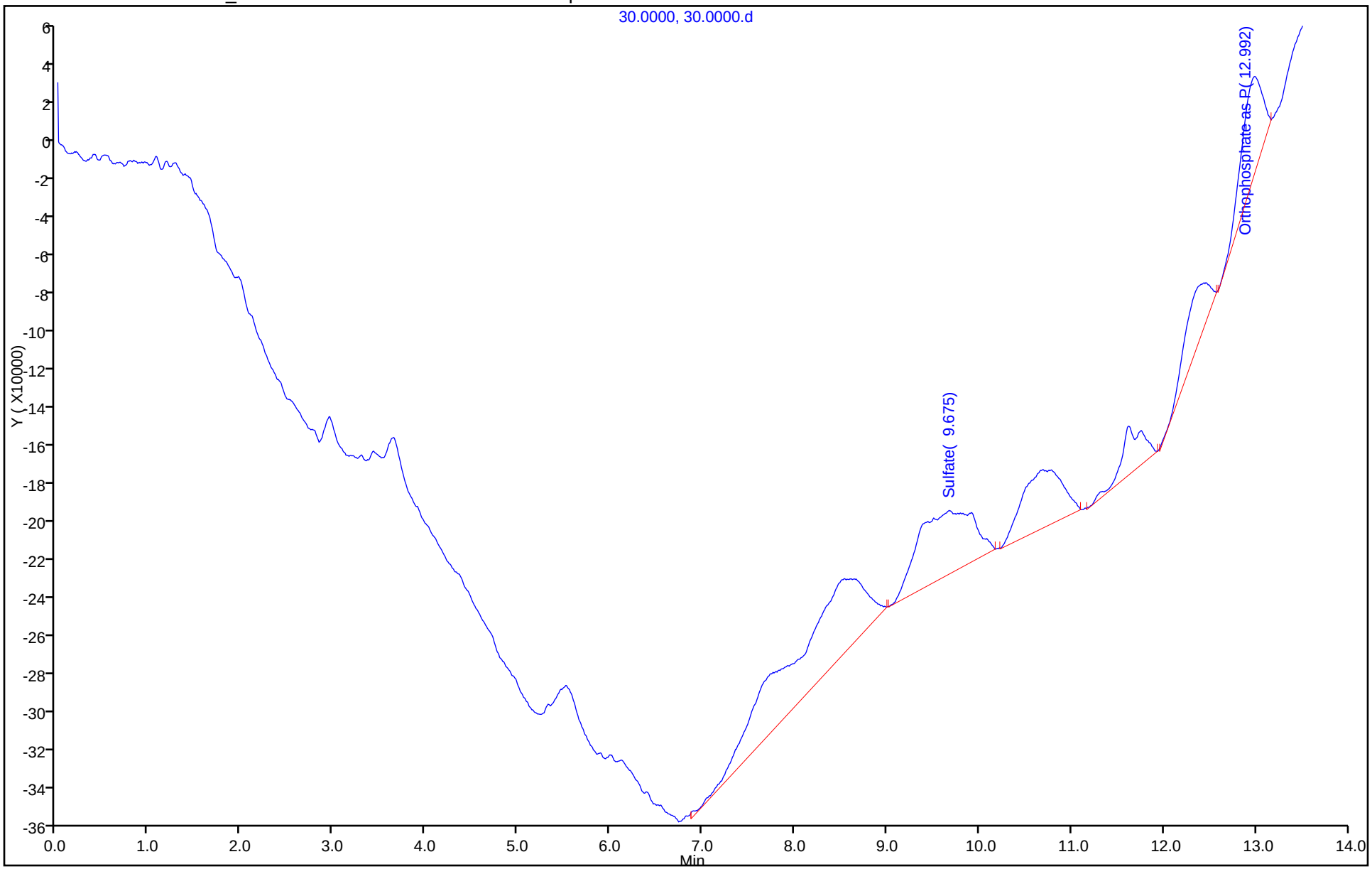
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:20 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\30.0000.d

Injection Date:	29-Jun-2020 21:04:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	30
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\20200629-92862.b\32.0000.d
Lims ID: 280-137609-F-3
Client ID: G0105-20A
Sample Type: Client
Inject. Date: 29-Jun-2020 21:37:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-032
Misc. Info.: 9928 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	1078437	0.006386	
2 Chloride	2.892	2.934	-0.042	131822460	7.15	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.784	9.317	-0.533	1422089411	105.2	
7 Orthophosphate as P	13.284	13.175	0.109	1716196	NC	

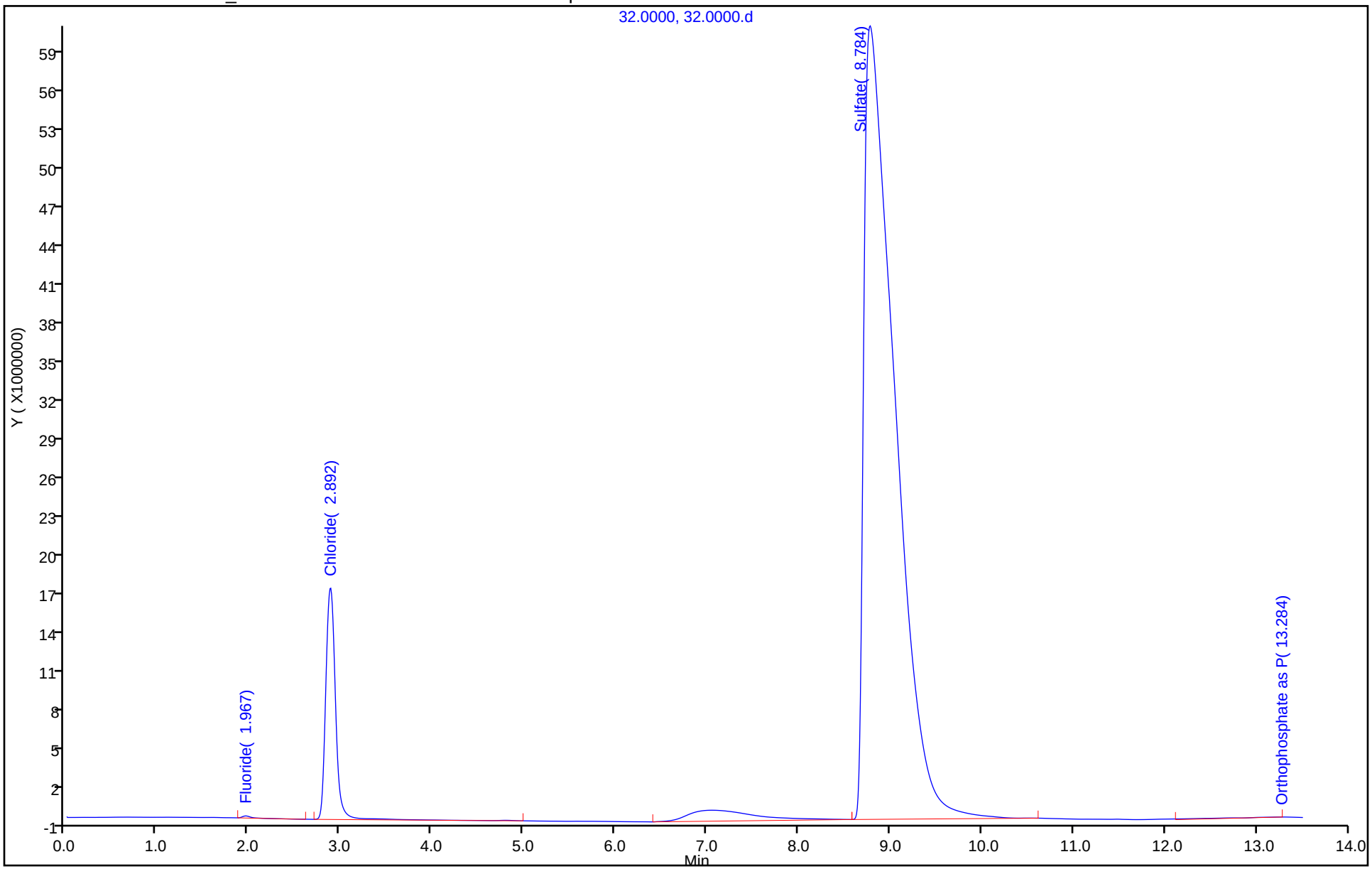
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:21 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\32.0000.d				
Injection Date:	29-Jun-2020 21:37:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-3	Lab Sample ID:	280-137609-3	Worklist Smp#:	32
Client ID:	G0105-20A				
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\33.0000.d
Lims ID: 280-137609-F-5
Client ID: PZ005-20A
Sample Type: Client
Inject. Date: 29-Jun-2020 21:54:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-033
Misc. Info.: 18018 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

First Level Reviewer: pedrickj Date: 30-Jun-2020 09:03:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	1027134	0.004527	
2 Chloride	2.875	2.934	-0.059	189341304	10.3	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	a
5 Nitrate as N	5.275	5.692	-0.417	53904401	NC	a
6 Sulfate	8.775	9.317	-0.542	1849480684	136.8	
7 Orthophosphate as P	13.092	13.175	-0.083	1709833	NC	

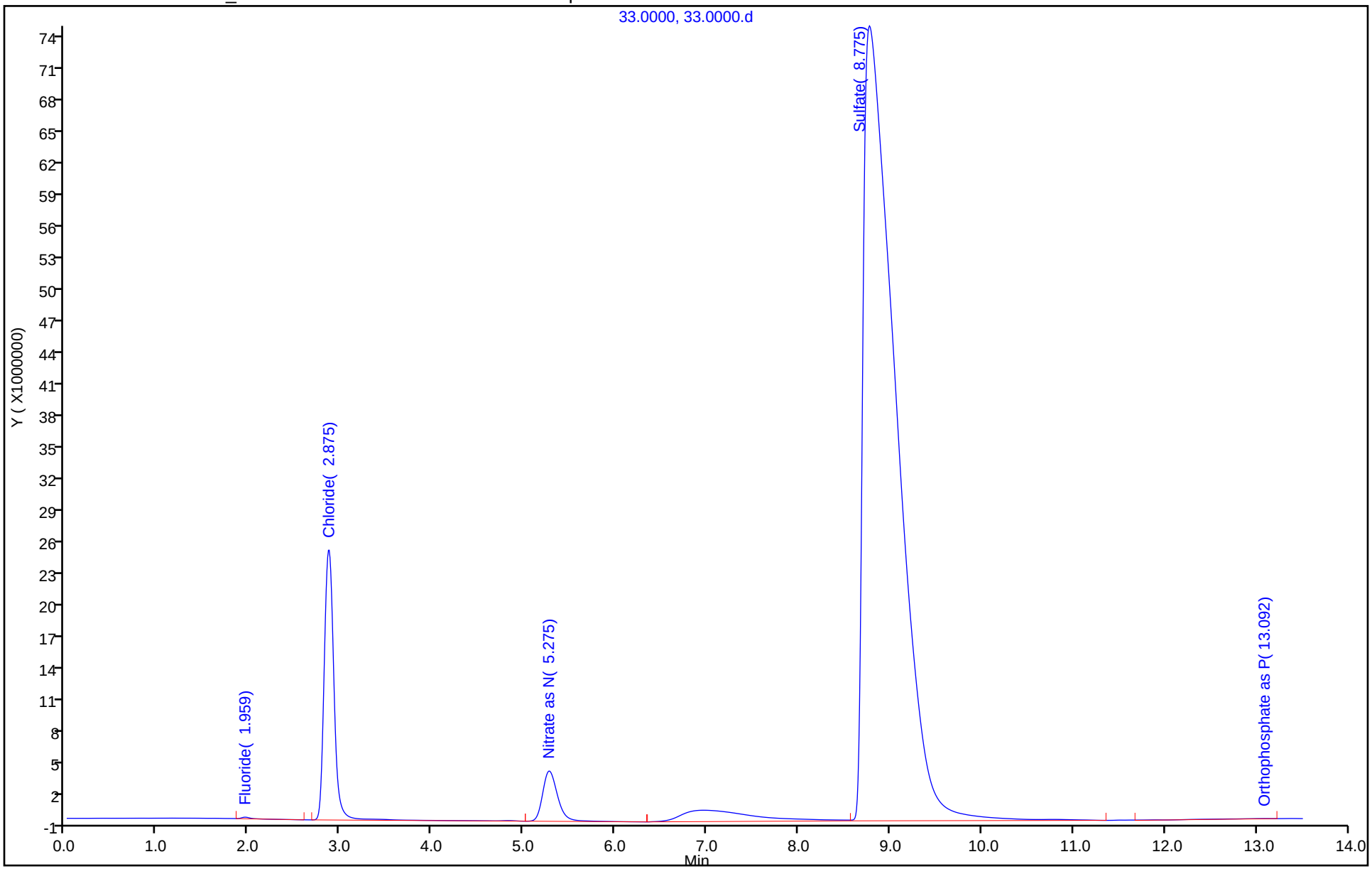
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 30-Jun-2020 09:07:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\33.0000.d				
Injection Date:	29-Jun-2020 21:54:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-5	Lab Sample ID:	280-137609-5	Worklist Smp#:	33
Client ID:	PZ005-20A				
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\34.0000.d
Lims ID: 280-137609-F-7
Client ID: G0045-20A
Sample Type: Client
Inject. Date: 29-Jun-2020 22:10:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-034
Misc. Info.: 11540 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	615682	-0.0104	
2 Chloride	2.859	2.934	-0.075	193974346	10.6	
3 Nitrite as N		3.384			ND	
4 Bromide		5.275			ND	
5 Nitrate as N		5.692			ND	
6 Sulfate	8.709	9.317	-0.608	1599150713	118.3	
7 Orthophosphate as P	13.125	13.175	-0.050	3448663	NC	

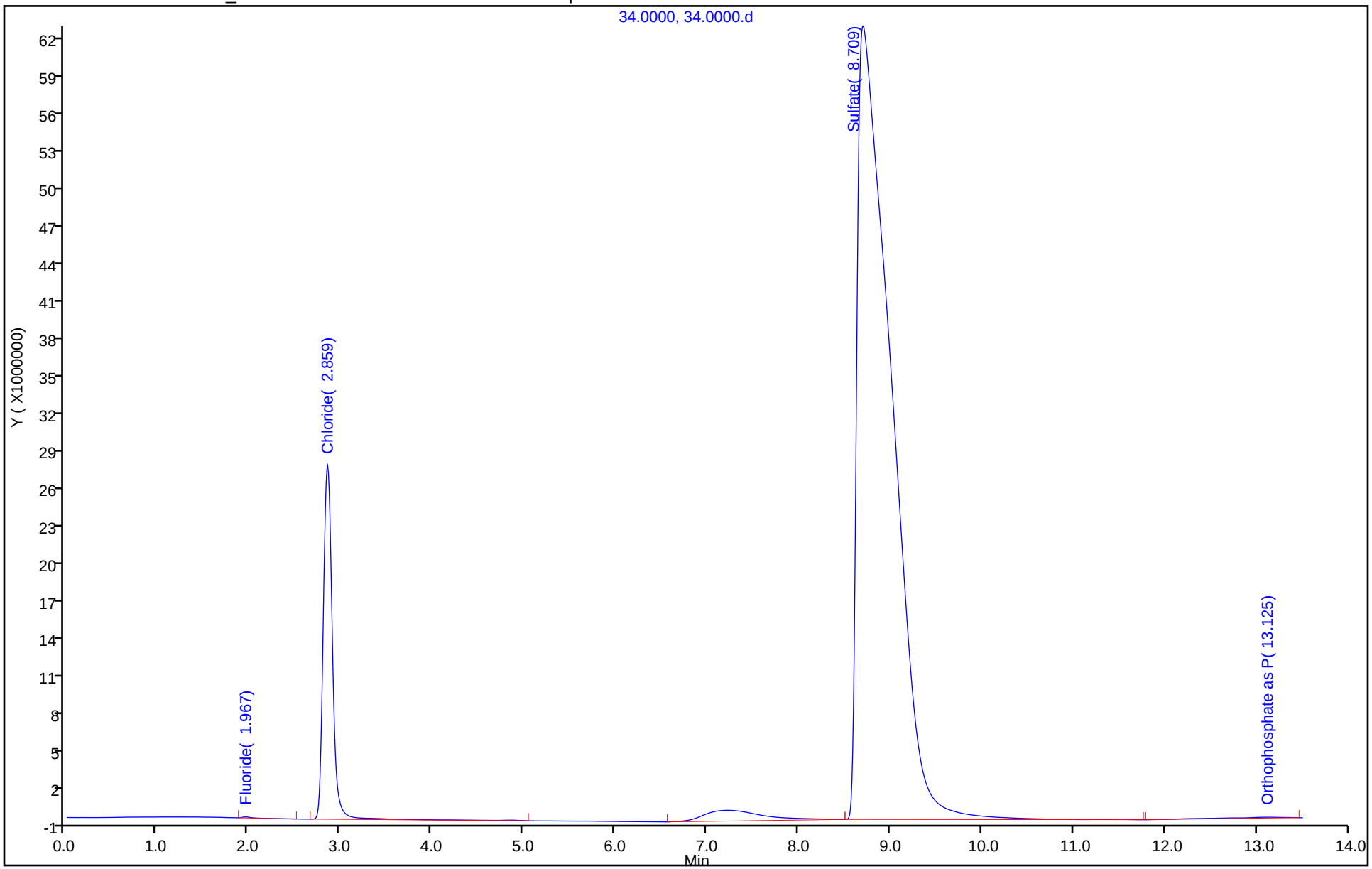
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\34.0000.d				
Injection Date:	29-Jun-2020 22:10:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-F-7	Lab Sample ID:	280-137609-7	Worklist Smp#:	34
Client ID:	G0045-20A				
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\35.0000.d
Lims ID: 280-137609-O-9
Client ID: G0102-20A
Sample Type: Client
Inject. Date: 29-Jun-2020 22:26:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-035
Misc. Info.: 19756 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

First Level Reviewer: pedrickj Date: 30-Jun-2020 09:03:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	750401	-0.005500	
2 Chloride	2.892	2.934	-0.042	112734866	6.10	
3 Nitrite as N		3.384			ND	
4 Bromide	4.884	5.275	-0.391	269928	0.0281	a
5 Nitrate as N	5.359	5.692	-0.333	18757593	NC	a
6 Sulfate	8.859	9.317	-0.458	1435854207	106.2	
7 Orthophosphate as P	13.025	13.175	-0.150	723431	NC	

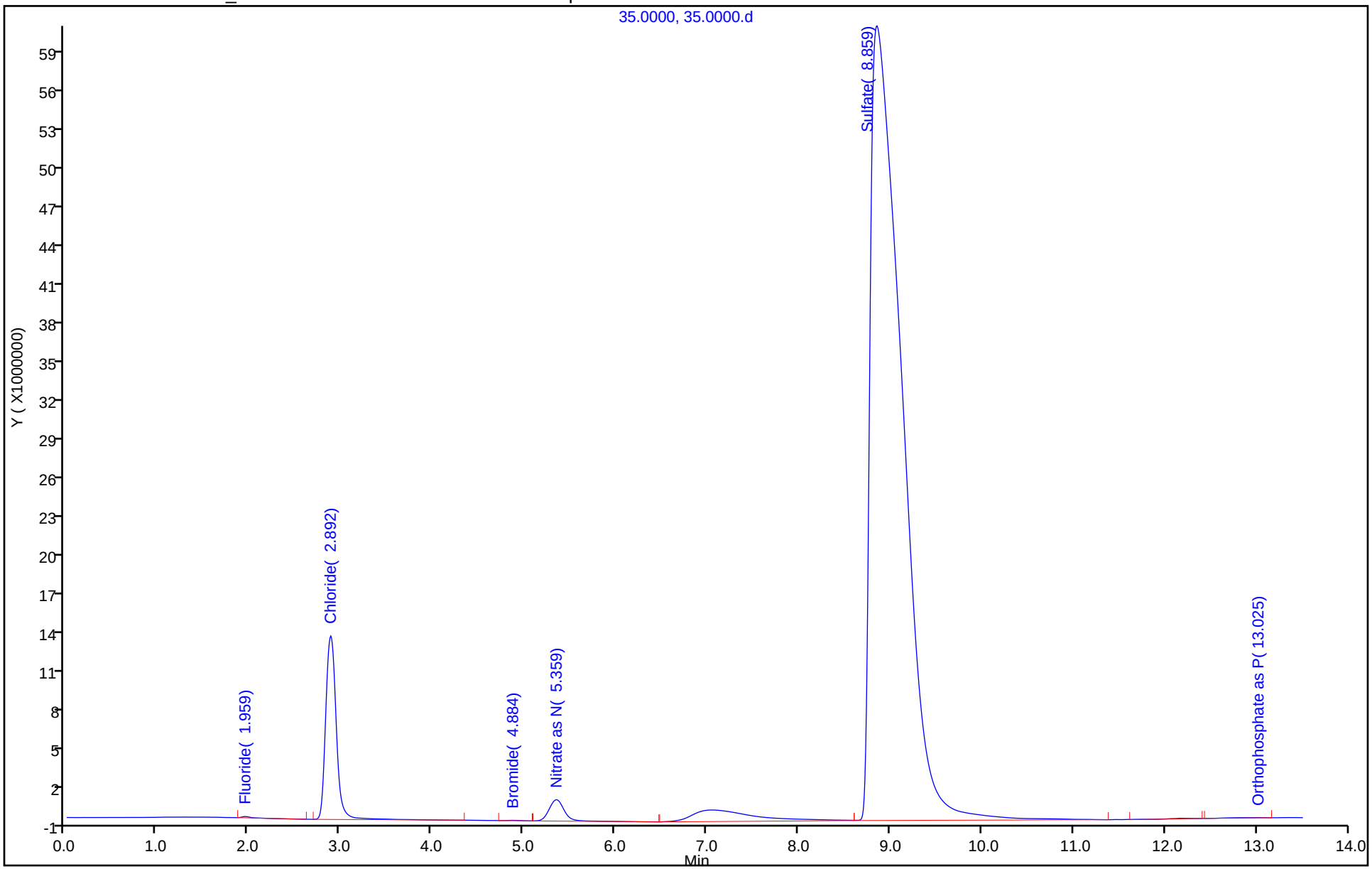
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 30-Jun-2020 09:07:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\35.0000.d				
Injection Date:	29-Jun-2020 22:26:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-O-9	Lab Sample ID:	280-137609-9	Worklist Smp#:	35
Client ID:	G0102-20A				
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\36.0000.d
Lims ID: 280-137609-O-9 DU
Client ID:
Sample Type: DU
Inject. Date: 29-Jun-2020 22:43:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-036
Misc. Info.: 16976 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

First Level Reviewer: pedrickj Date: 30-Jun-2020 09:03:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	1303587		0.0145	
2 Chloride	2.884	2.934	-0.050	111928327		6.06	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	a
5 Nitrate as N	5.459	5.692	-0.233	18996289		NC	a
6 Sulfate	8.909	9.317	-0.408	1433544691		106.0	
7 Orthophosphate as P	12.967	13.175	-0.208	2647351		NC	

QC Flag Legend

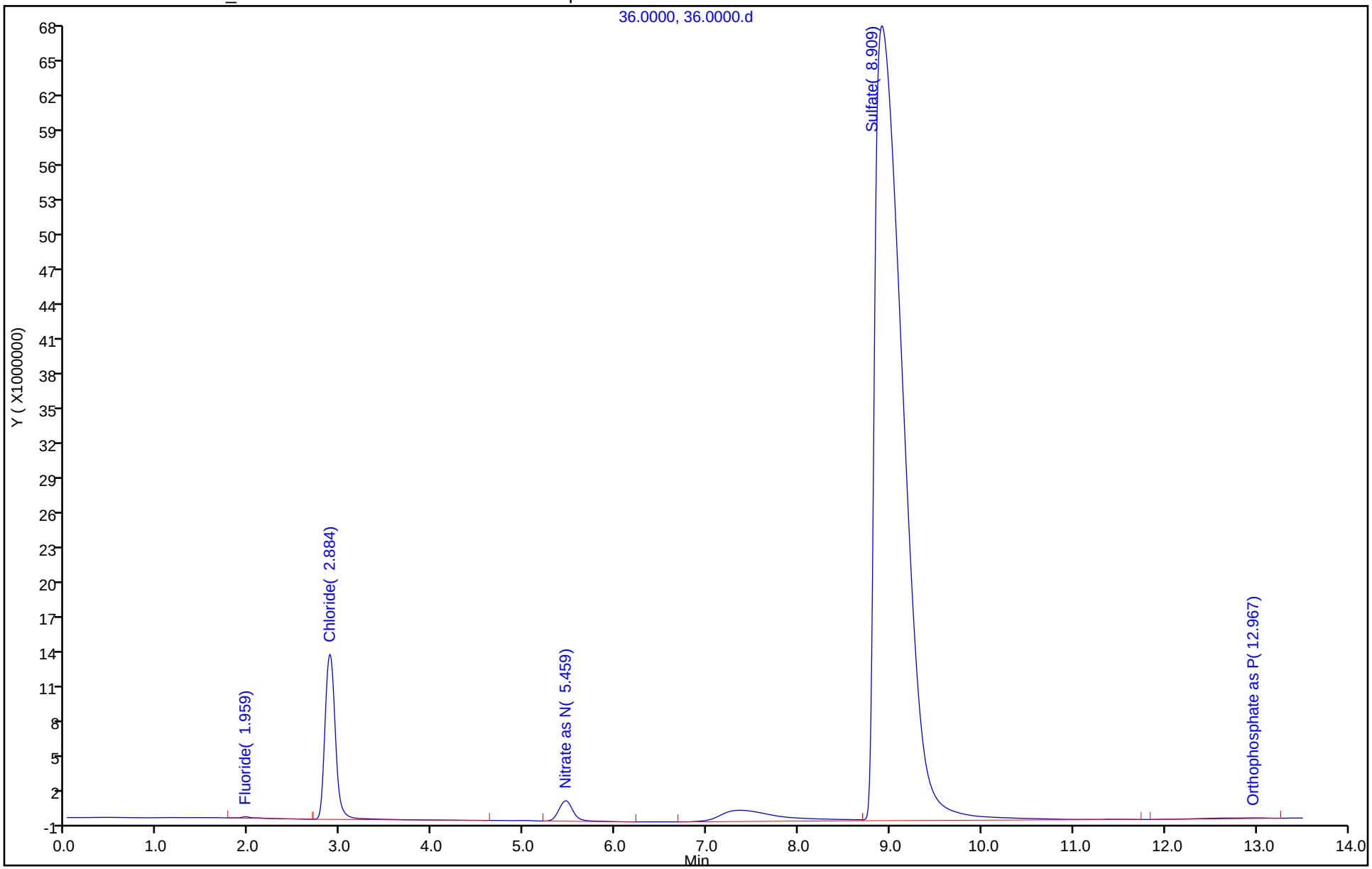
Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 30-Jun-2020 09:07:22 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\36.0000.d

Injection Date:	29-Jun-2020 22:43:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-O-9 DU			Worklist Smp#:	36
Client ID:					
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\37.0000.d
Lims ID: 280-137609-O-9 MS
Client ID: G0102-20A
Sample Type: MS
Inject. Date: 29-Jun-2020 22:59:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-037
Misc. Info.: 11468 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

First Level Reviewer: pedrickj Date: 30-Jun-2020 09:04:00

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	134796790	0.5000	4.85	
2 Chloride	2.834	2.934	-0.100	1046446099	5.00	57.3	
3 Nitrite as N	3.226	3.384	-0.158	227442254	NC	NC	
4 Bromide	4.859	5.275	-0.416	40577018	0.4999	5.05	a
5 Nitrate as N	5.217	5.692	-0.475	258206933	NC	NC	a
6 Sulfate	8.701	9.317	-0.616	2088642430	5.00	154.5	
7 Orthophosphate as P	13.009	13.175	-0.166	1026414	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

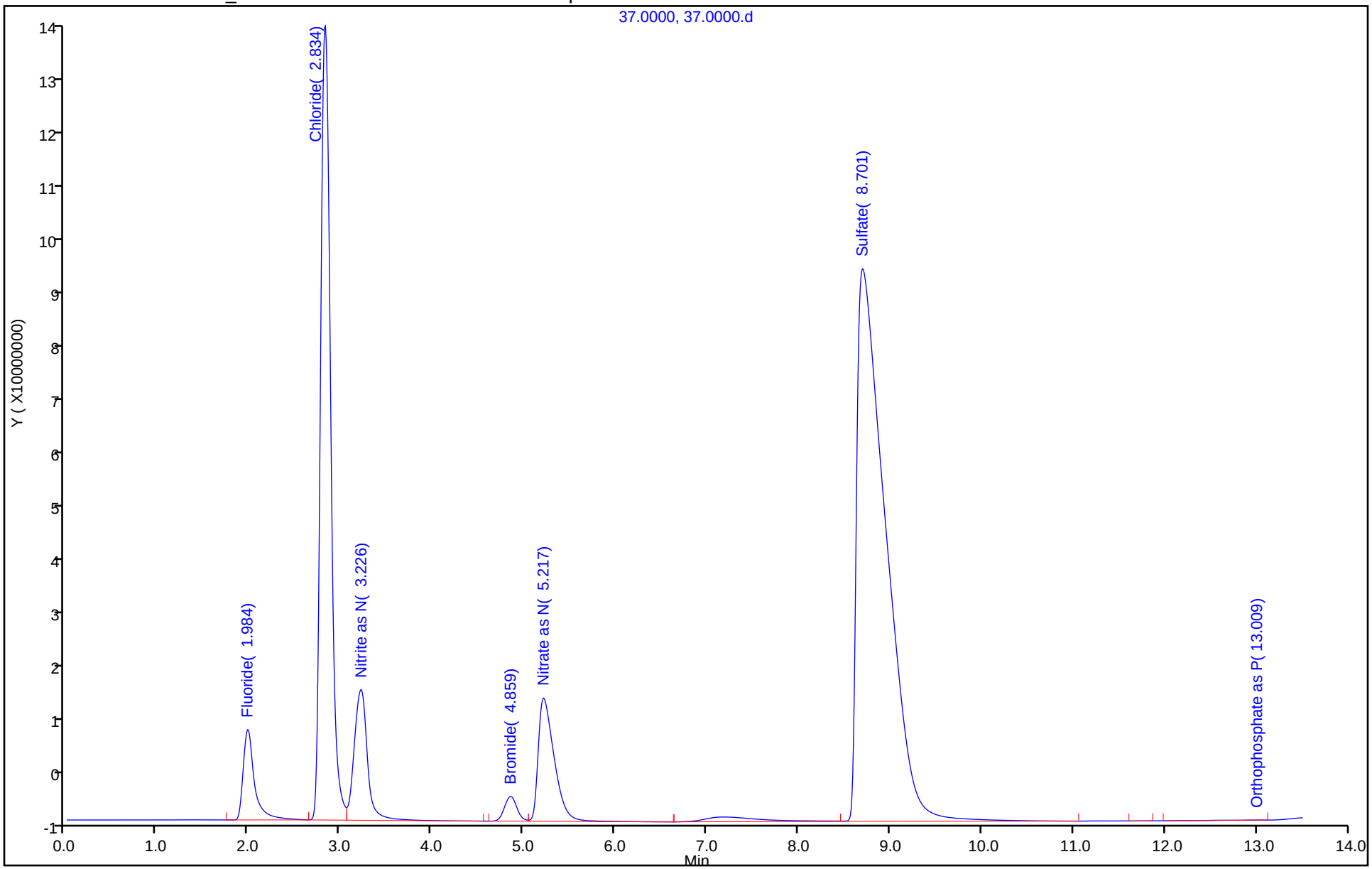
Reagents:

ICMS/MSD WEEK_00655 Amount Added: 0.05 Units: mL

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\37.0000.d				
Injection Date:	29-Jun-2020 22:59:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-O-9 MS			Worklist Smp#:	37
Client ID:	G0102-20A				
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\38.0000.d
Lims ID: 280-137609-O-9 MSD
Client ID: G0102-20A
Sample Type: MSD
Inject. Date: 29-Jun-2020 23:16:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Sample Info: 280-0092862-038
Misc. Info.: 28941 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

First Level Reviewer: pedrickj Date: 30-Jun-2020 09:04:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.992	1.992	0.000	134382325	0.5000	4.84	
2 Chloride	2.867	2.934	-0.067	1037913725	5.00	56.9	
3 Nitrite as N	3.267	3.384	-0.117	227214096	NC	NC	
4 Bromide	4.942	5.275	-0.333	40181327	0.4999	5.00	a
5 Nitrate as N	5.334	5.692	-0.358	255107109	NC	NC	a
6 Sulfate	8.675	9.317	-0.642	2061040273	5.00	152.5	
7 Orthophosphate as P	13.384	13.175	0.209	3182326	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

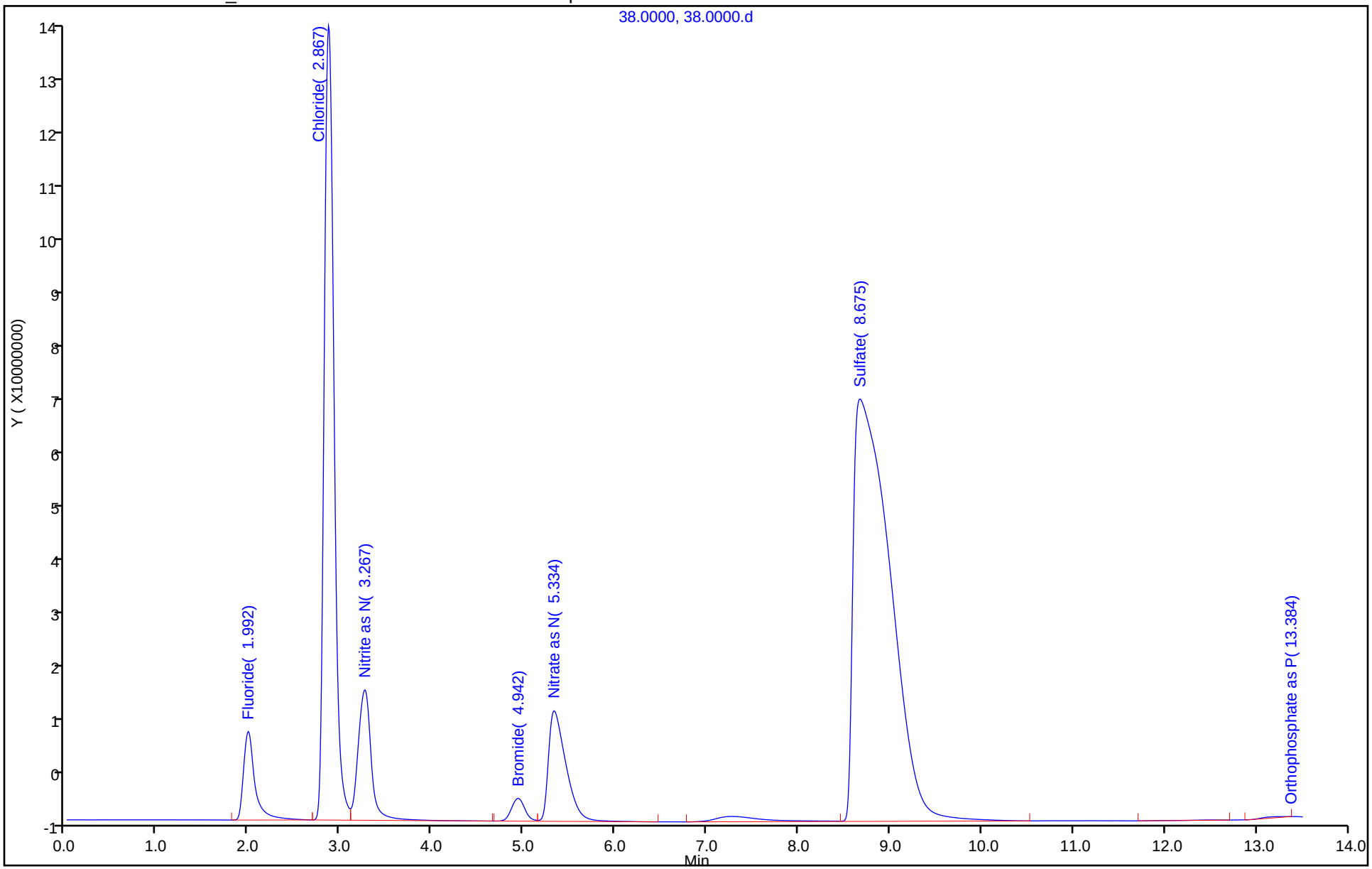
Reagents:

ICMS/MSD WEEK_00655 Amount Added: 0.05 Units: mL

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\38.0000.d				
Injection Date:	29-Jun-2020 23:16:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137609-O-9 MSD			Worklist Smp#:	38
Client ID:	G0102-20A				
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\41.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 30-Jun-2020 00:05:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0092862-041
Misc. Info.: 7445 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 30-Jun-2020 09:07:24 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

First Level Reviewer: pedrickj Date: 30-Jun-2020 09:06:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.000	1.992	0.008	135590132	5.00	4.88	
2 Chloride	2.909	2.934	-0.025	1803558304	100.0	98.9	
3 Nitrite as N	3.334	3.384	-0.050	234437872	NC	NC	
4 Bromide	5.017	5.275	-0.258	38332644	5.00	4.77	a
5 Nitrate as N	5.359	5.692	-0.333	233935127	NC	NC	a
6 Sulfate	8.925	9.317	-0.392	1337015551	100.0	98.9	
7 Orthophosphate as P	13.217	13.175	0.042	7223181	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

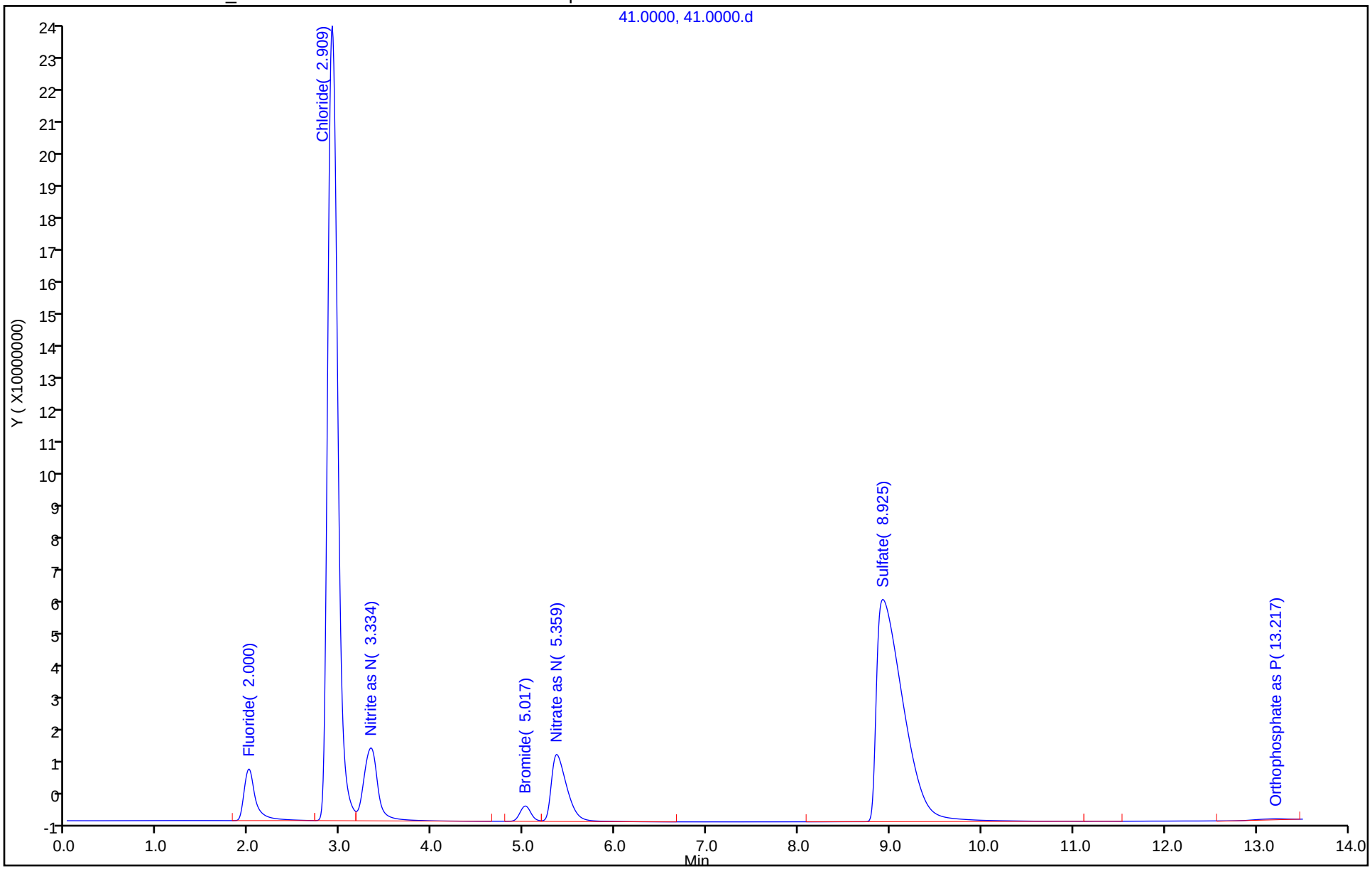
IC LCS_01747 Amount Added: 5.00 Units: mL

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\41.0000.d

Injection Date:	30-Jun-2020 00:05:00	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\20200629-92862.b\42.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	30-Jun-2020 00:21:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0092862-042				
Misc. Info.:	12559 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 09:07:24	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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.992				ND	
2 Chloride		2.934				ND	
3 Nitrite as N		3.384				ND	
4 Bromide		5.275				ND	
5 Nitrate as N		5.692				ND	
6 Sulfate	9.334	9.317	0.017	296422		-0.0307	
7 Orthophosphate as P	13.325	13.175	0.150	1565337		NC	

QC Flag Legend

Processing Flags

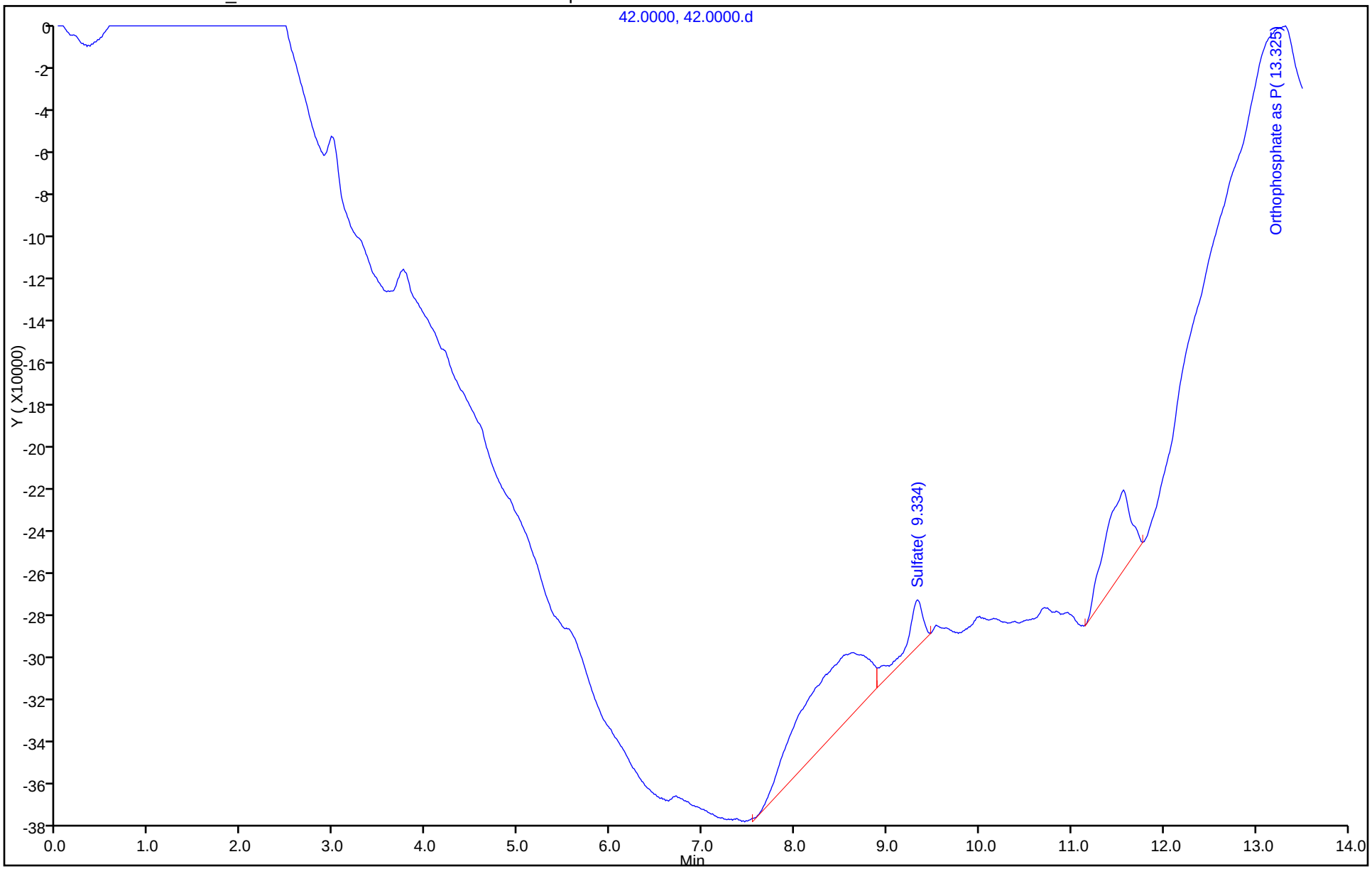
NC - Not Calibrated

Report Date: 30-Jun-2020 09:07:25 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200629-92862.b\42.0000.d

Injection Date:	30-Jun-2020 00:21:00	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		



~~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

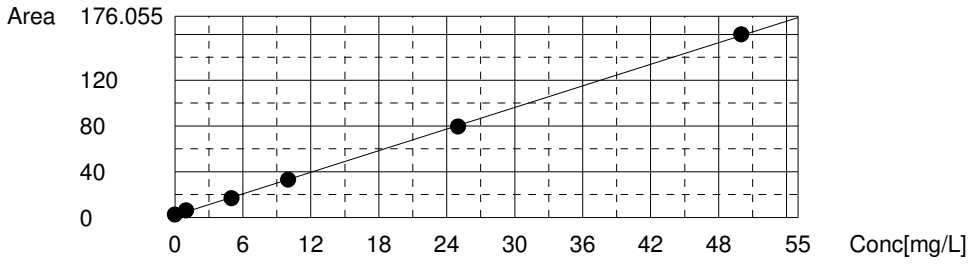
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 79.28
SD Area 0.4172
CV Area 0.53%
Vial 5

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

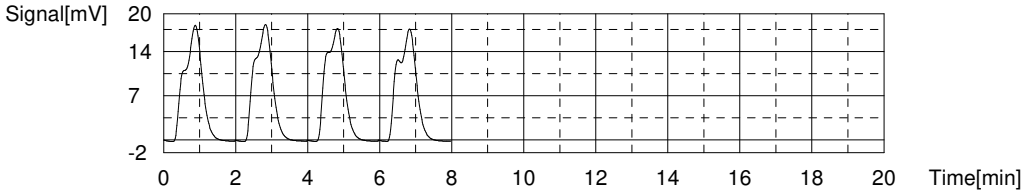
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.80mg/L

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

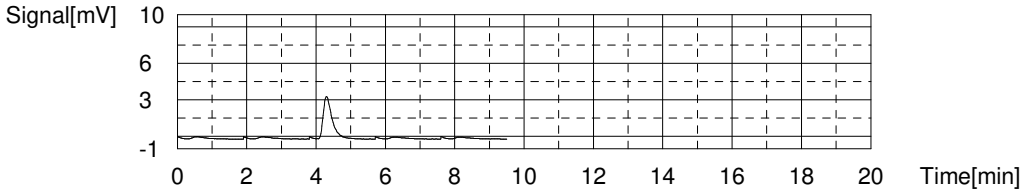
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4678mg/L

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

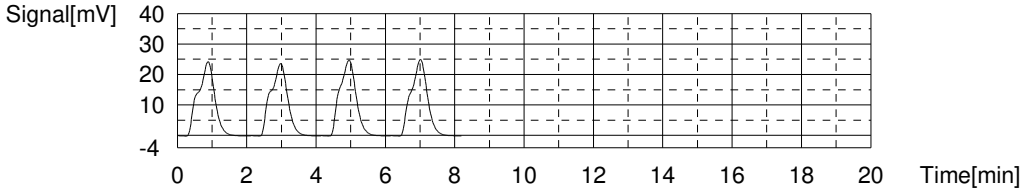
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.52mg/L

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

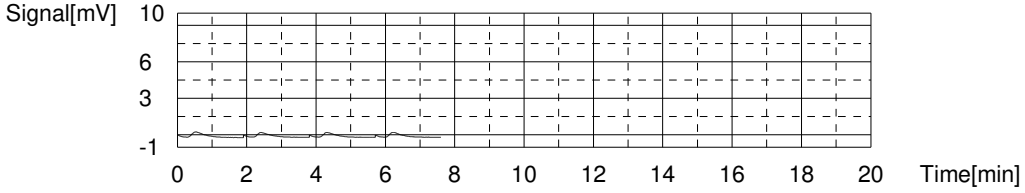
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.2855mg/L

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

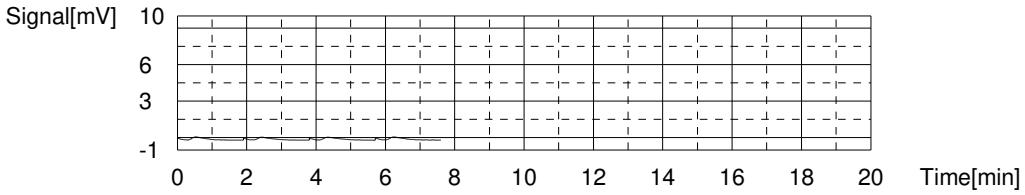
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4000mg/L

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

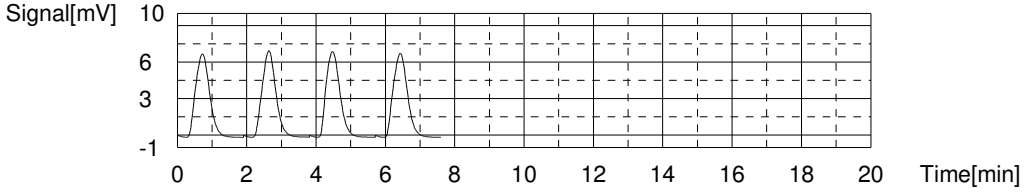
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.610mg/L

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

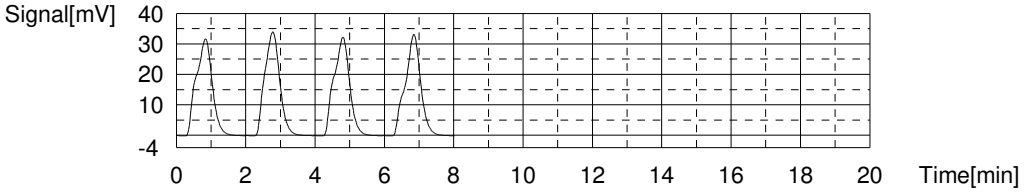
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.44mg/L

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

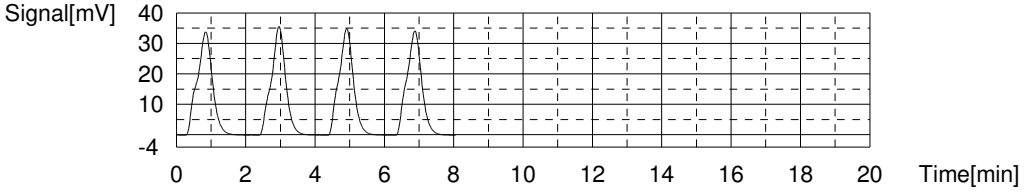
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.41mg/L

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

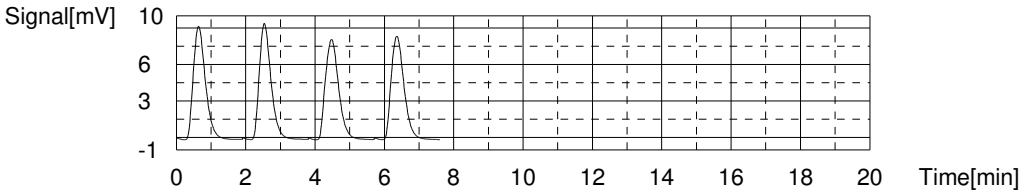
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.485mg/L

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

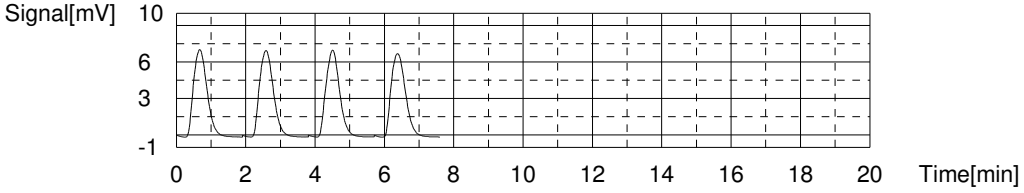
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.681mg/L

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

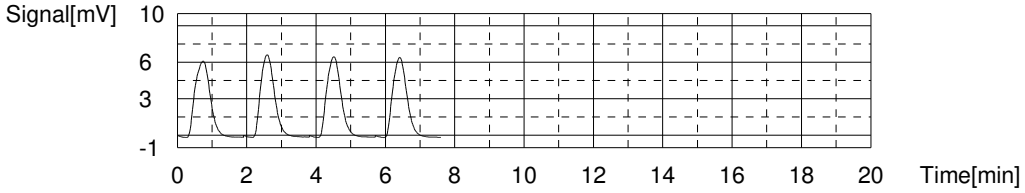
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.411mg/L

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

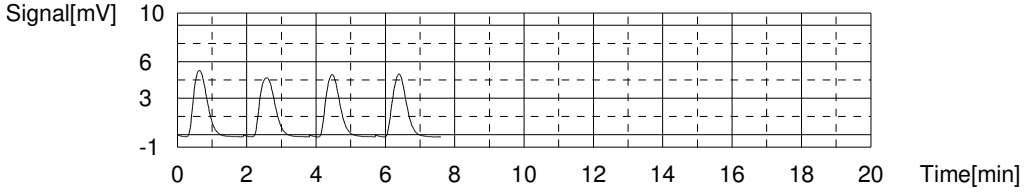
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.051mg/L

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

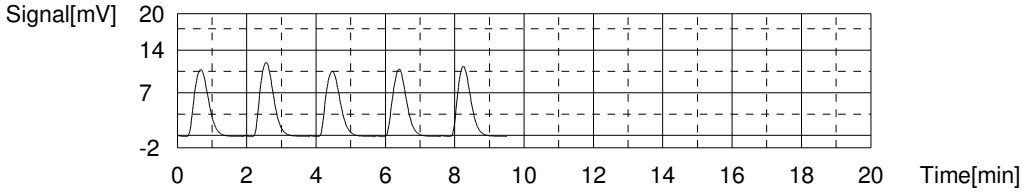
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.243mg/L

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

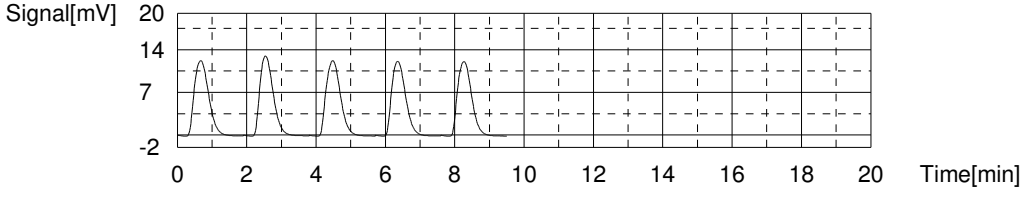
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.74mg/L

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

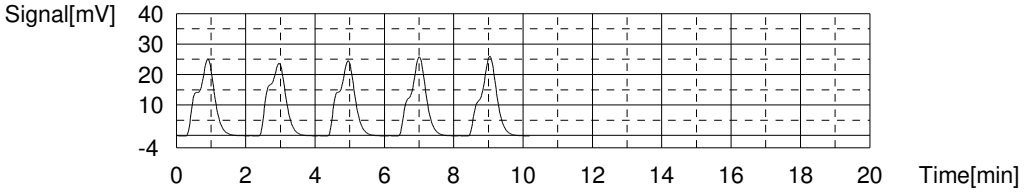
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.90mg/L

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

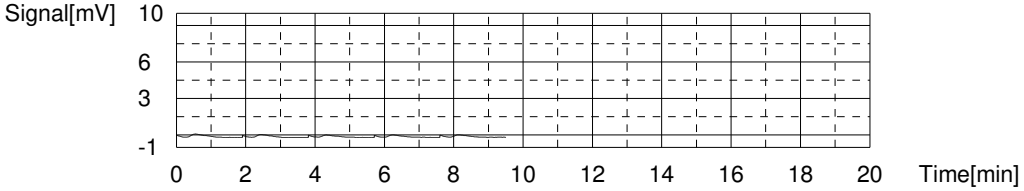
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4292mg/L

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

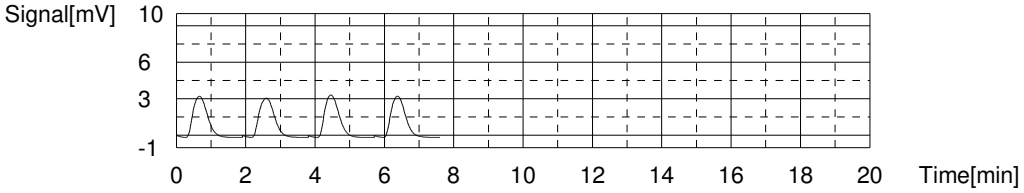
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.532mg/L

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

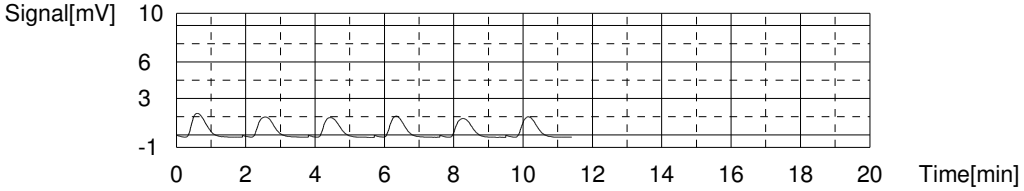
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9639mg/L

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

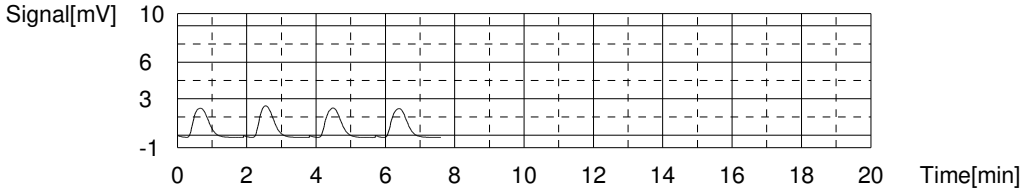
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.712mg/L

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

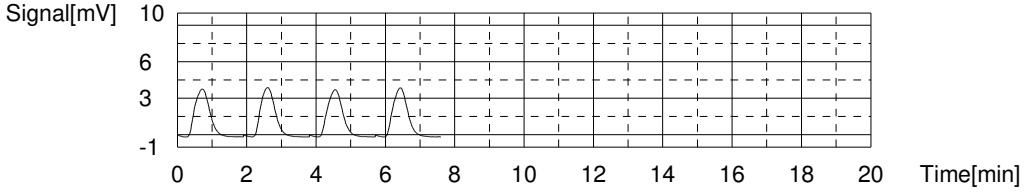
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.148mg/L

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

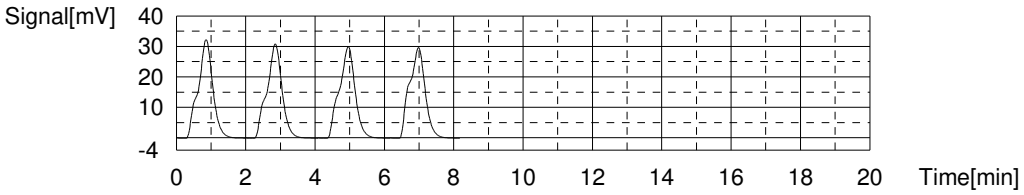
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.84mg/L

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

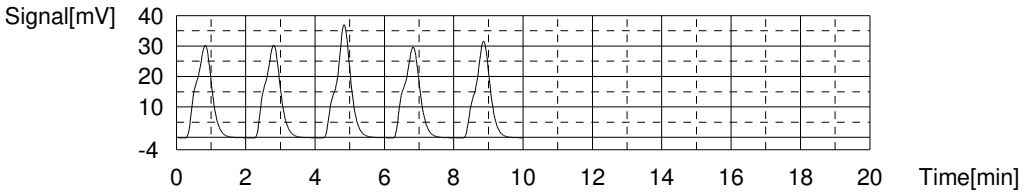
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.74mg/L

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

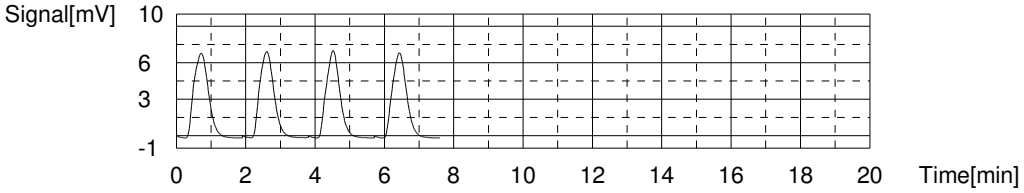
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.791mg/L

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

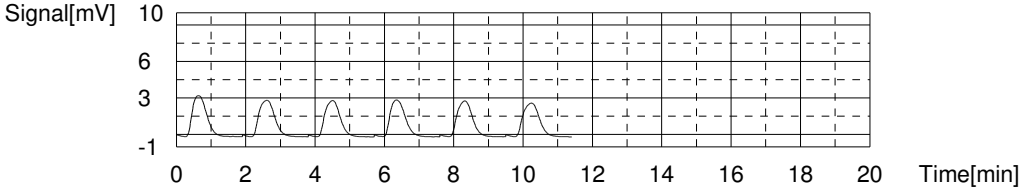
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.272mg/L

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

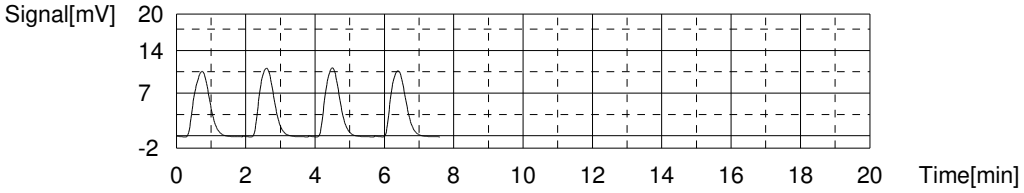
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.966mg/L

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

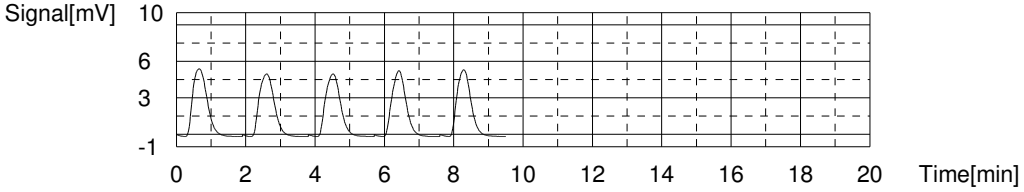
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.288mg/L

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

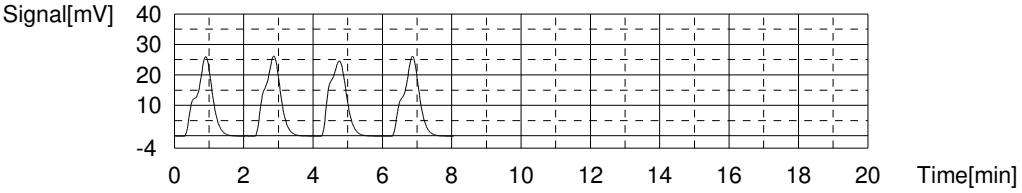
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.30mg/L

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

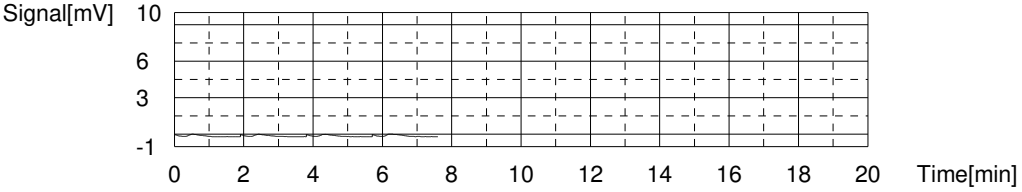
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4325mg/L

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

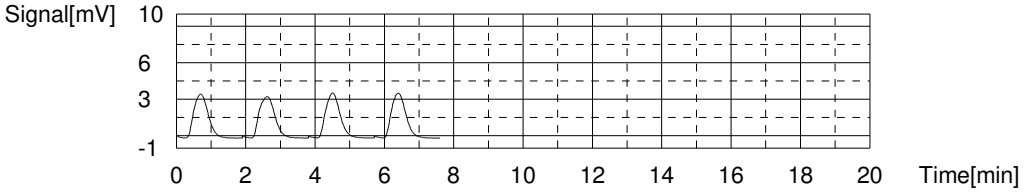
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.761mg/L

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

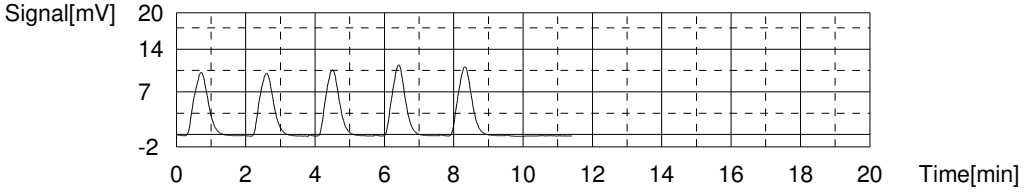
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.860mg/L

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

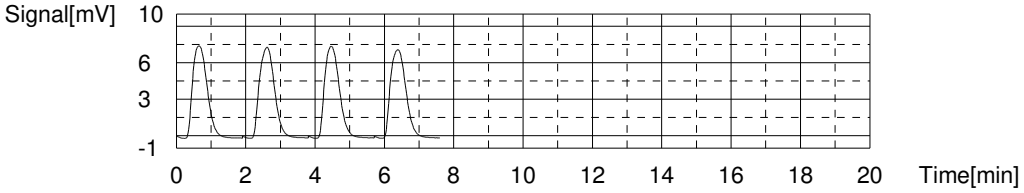
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.563mg/L

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

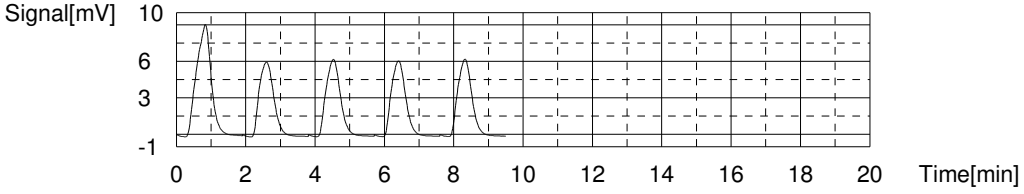
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.126mg/L

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

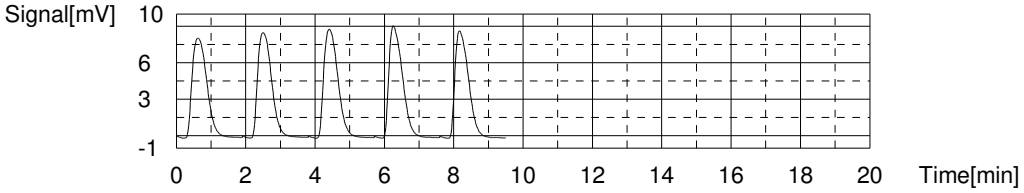
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.140mg/L

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

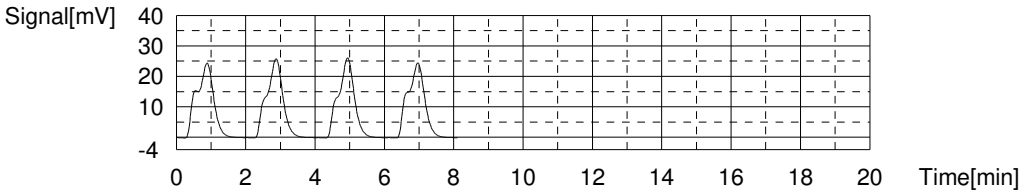
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.39mg/L

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

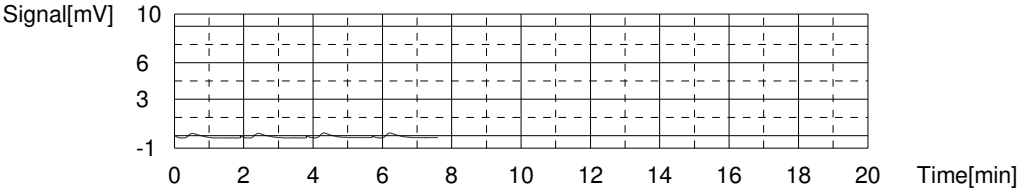
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.2912mg/L

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

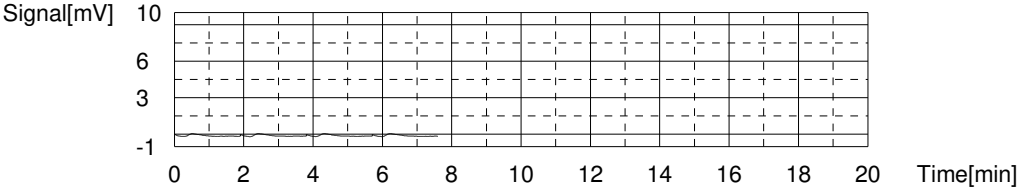
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.4030mg/L

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

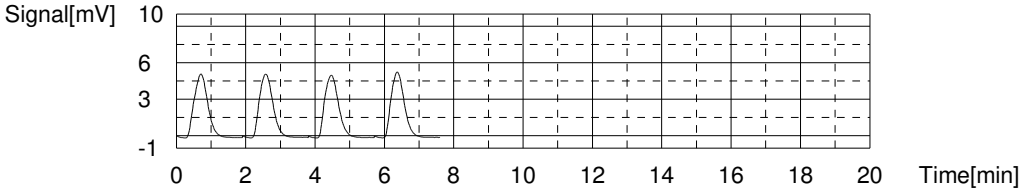
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.949mg/L

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

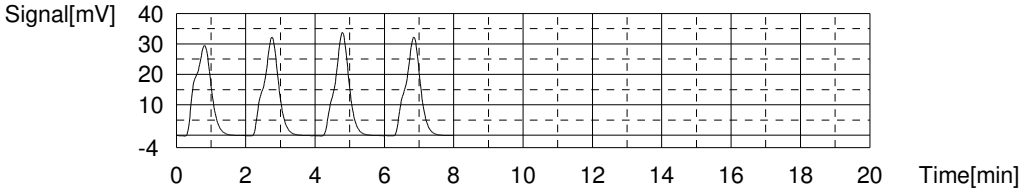
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.27mg/L

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

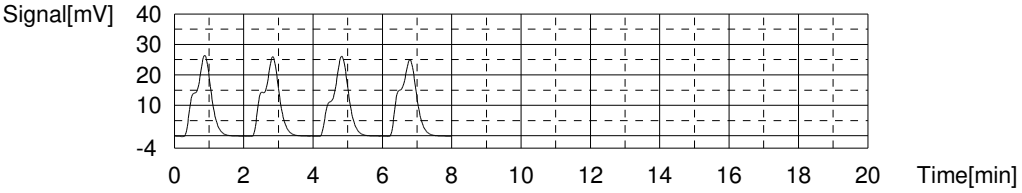
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.34mg/L

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

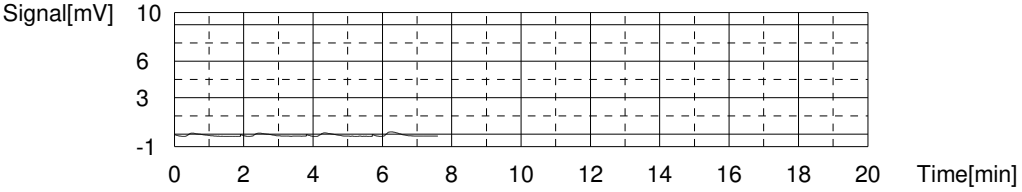
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3259mg/L

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

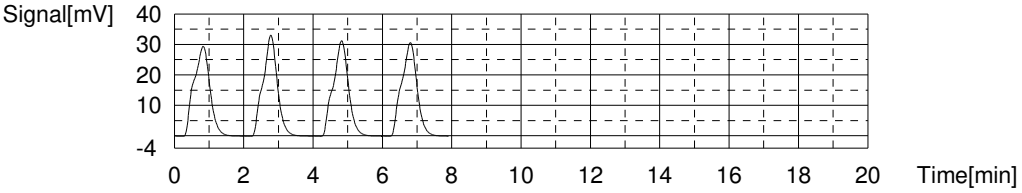
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.19mg/L

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

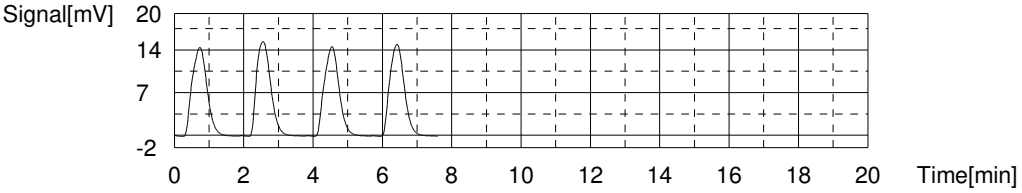
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.49mg/L

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

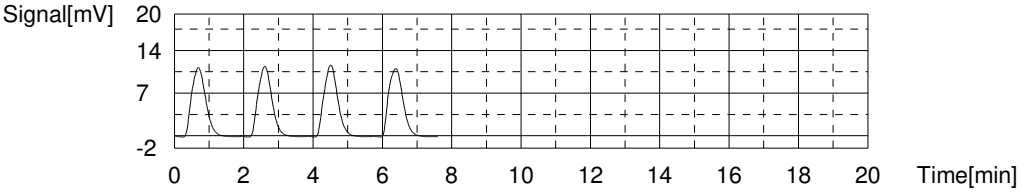
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.777mg/L

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

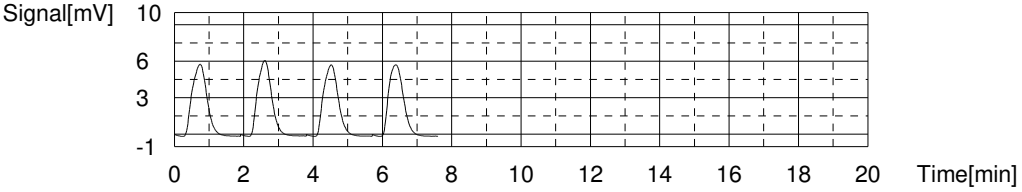
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.962mg/L

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

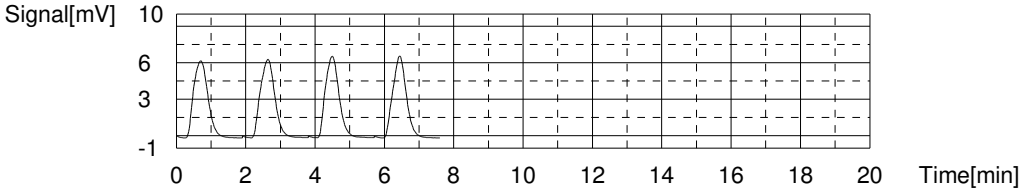
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.269mg/L

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

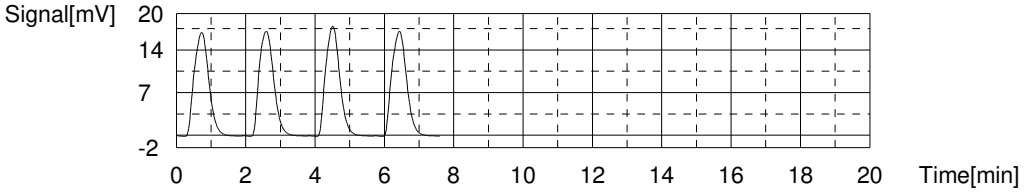
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.67mg/L

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

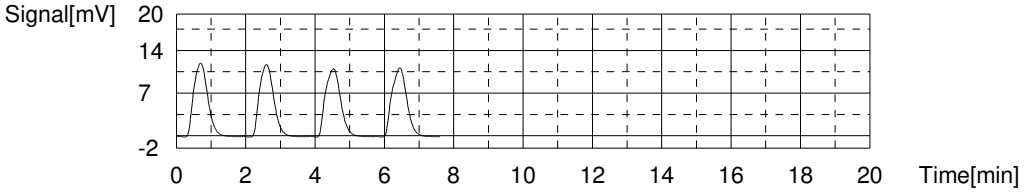
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.34mg/L

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

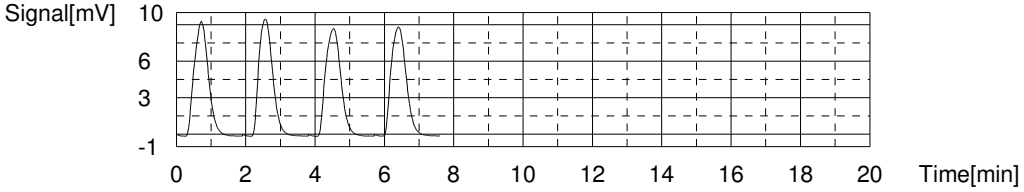
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.004mg/L

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

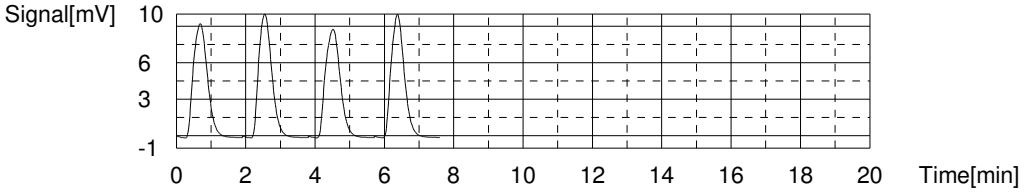
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.898mg/L

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

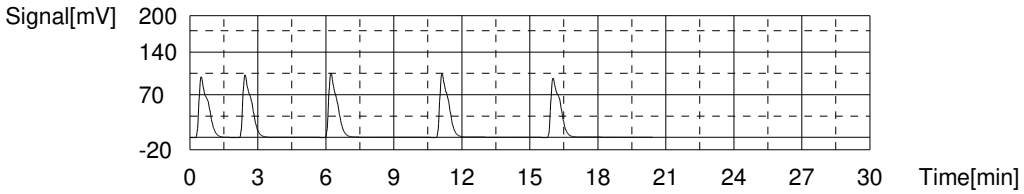
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:88.17mg/L

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

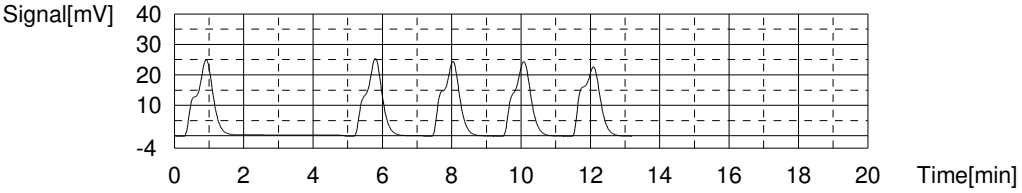
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.37mg/L

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

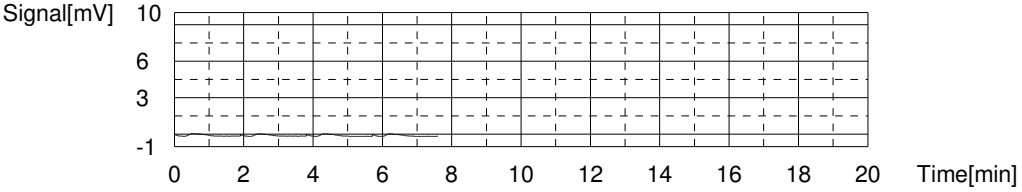
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3845mg/L

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

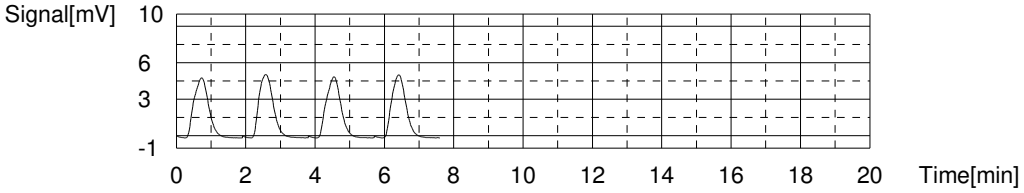
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.099mg/L

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

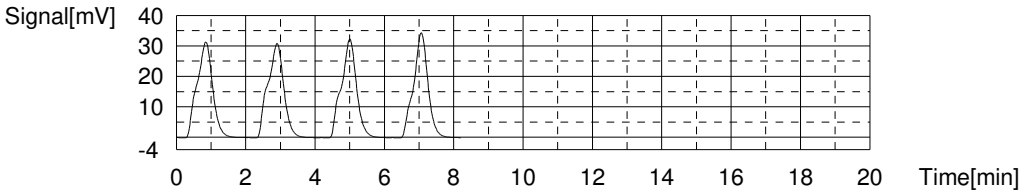
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.24mg/L

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

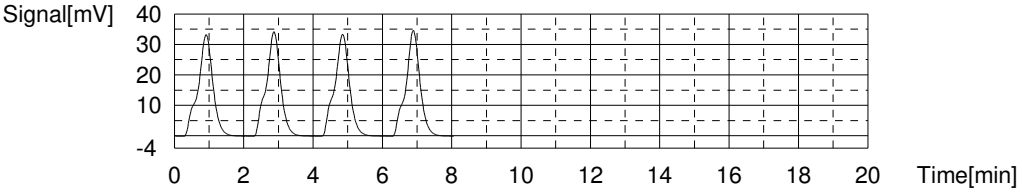
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.35mg/L

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

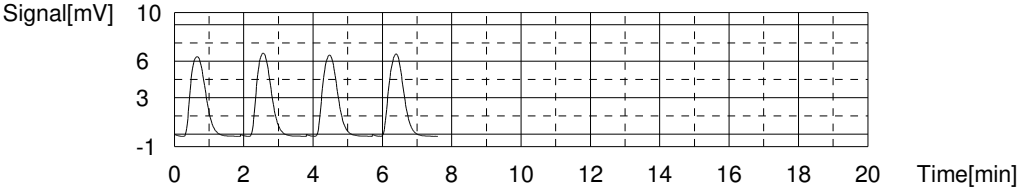
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	4.000	NPOC:22.83mg/L

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

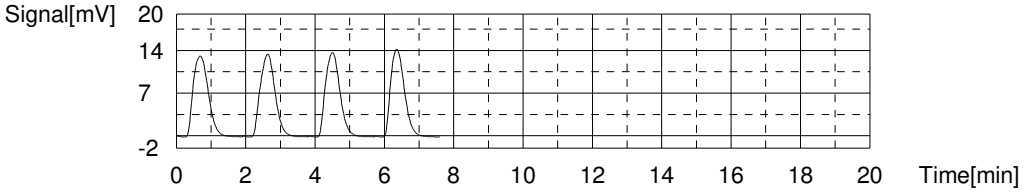
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:24.58mg/L

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

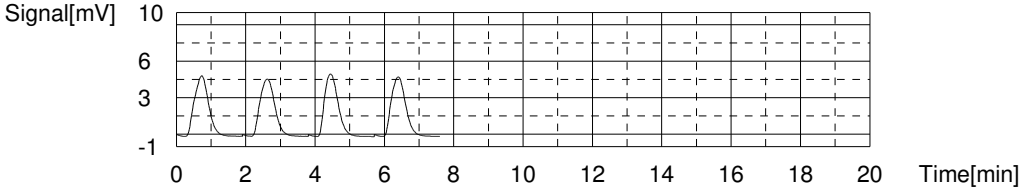
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.864mg/L

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

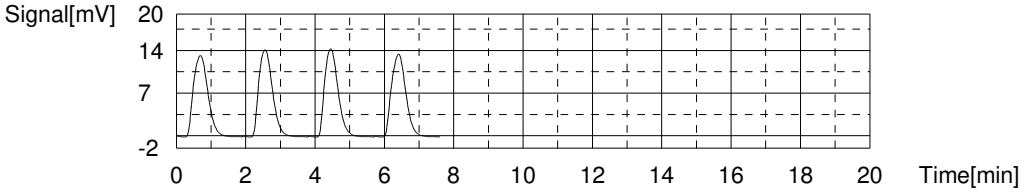
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.93mg/L

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

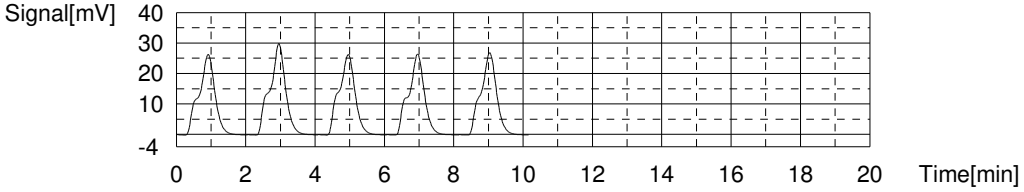
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.66mg/L

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

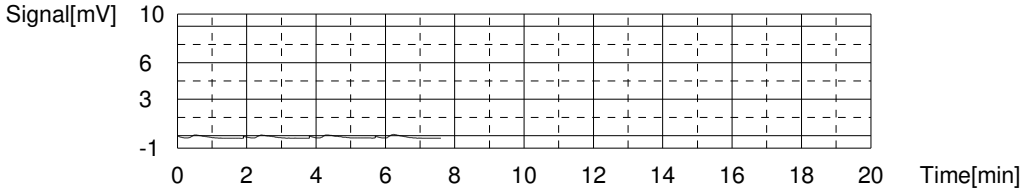
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.3695mg/L

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



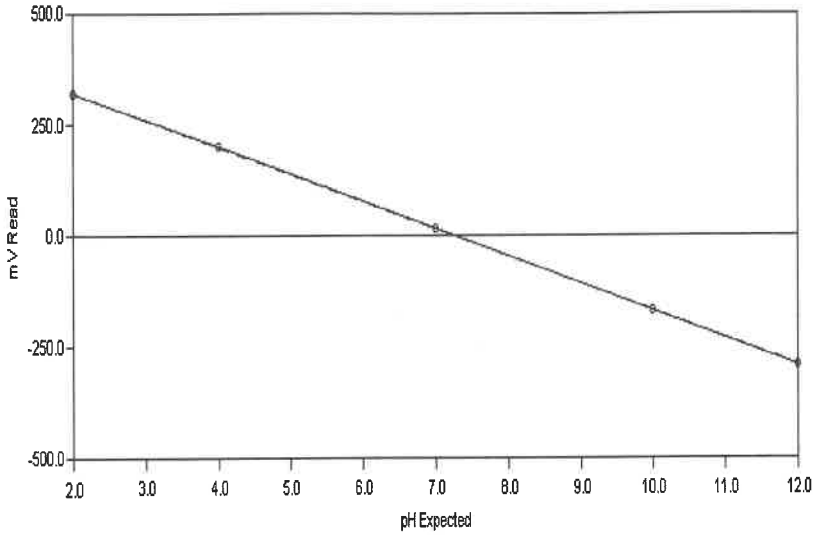
MANTECH

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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GENERAL RESULTS REPORT.SRW

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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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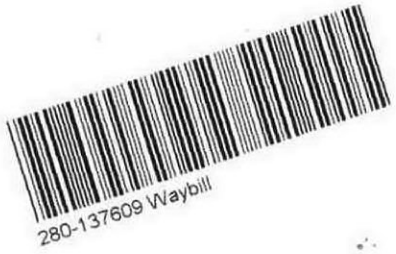

eurofins | Environment Testing
TestAmerica

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
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
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SHIP DATE: 22MAY20
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EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-99203

RMA:

FedEx Express

FedEx
TRK# 0221 1103 6129 1048

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PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN 2

Page 229 of 298

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ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

SHIP DATE: 22MAY20
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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 1059

FRI - 12 JUN 10:30A
PRIORITY OVERNIGHT

XH LAAA

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CO-US DEN

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ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

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 1037

FRI - 12 JUN 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
CO-US DEN

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ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

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 1060

FRI - 12 JUN 10:30A
PRIORITY OVERNIGHT

XH LAAA

80002
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#3676756 06/11 56BJ1/C7DD/FE4A

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Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-137609-1

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: 280-137609-1

Login Number: 137609

List Source: Eurofins TestAmerica, Denver

List Number: 2

Creator: Lubin, Julius C

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	